User Guide

English

Spire CXP6000 Color Server for Xerox DocuColor 6060, 5252, 2060, and 2045 Digital Color Presses

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Spire CXP6000 color server

version 4.0
User Guide

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Patents

This product is covered by one or more of the following U.S. patents:

RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	6,541,181
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	6,545,772
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	6,564,018
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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Environment Management System (EMS)

EMS Overview

Creo is committed to the Environment Management System (EMS). According to this policy, we are committed to keeping customers and service engineers informed about the principles of handling company products with an emphasis on environmental conservation.

The Triple-R principles are **reduce**, **reuse,** and **recycle**.

Any item that can be recycled should be recycled and any item that can be reused should be reused, to reduce the quantities of trash that cities must handle.

Recycling

Used items such as paper, plastic, electronic parts, and glass – should be sent for recycling.

Packaging Materials

Packaging materials should be kept at the customer's premises. For disposal, they should be sent to a plant for paper, carton, and wood recycling.

End of Product Life

When the product reaches its end of life, it should be sent for recycling to a recognized local company.

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8   Graphic Arts Workflow   377

1

Welcome

Welcome to the Spire CXP6000 Color Server User Guide

Welcome to your Spire CXP6000 color server User Guide. This user guide provides you with information about the Xerox DocuColor 6060 Digital Color Press and also refers to the following printers, Xerox DocuColor 5252, 2060, and 2045 Digital Color Presses.

The Spire CXP6000 color server is a powerful, comprehensive color server that provides high throughput and print predictability to digital workflows. In combination with the Xerox DocuColor 6060 Digital Color Press, the Spire CXP6000 color server effectively addresses the growth of on-demand printing needs and delivers the best output quality available.

Throughout this guide, we look forward to supporting you all the way from prepress to print.

This user guide will help you operate the Spire CXP6000 color server. It can also be used as a reference guide for questions or procedures. Study this user guide to take full advantage of the many unique and advanced features of the Spire CXP6000 color server.

This user guide is for Spire CXP6000 color server operators and system administrators. This guide explains how you can quickly and easily print from the Spire CXP6000 color server or from a client workstation. Step-by-step procedures are included for new and occasional Spire CXP6000 color server users. Detailed information is provided for users who require in-depth knowledge of the Spire CXP6000 color server.

Overview of Guide

Table 1: Guide Overview

Chapter	Contents	Description
Chapter 1	Welcome	This chapter introduces the guide and the Spire CXP6000 color server features and workflows.
Chapter 2	Getting Started	This chapter explains how to turn on the Spire CXP6000 color server and provides explanations about the Spire CXP6000 color server workspace and main windows.
Chapter 3	Working from a Client Workstation	This chapter explains how set up Windows® and Macintosh® client workstations and how to configure LPR printing. It also explains how to setup and configure Novell Directory Services.
Chapter 4	Basic Workflows	This chapter explains how to perform basic workflows in the Spire CXP6000 color server, such as importing and printing jobs, and how to set basic parameters in the Print Settings, Paper Stock and Print Quality Tab.
Chapter 5	Managing Jobs	This chapter explains how to manage jobs in the Queue Manager and in the Storage window. It also explains how to export jobs to an InSite server and how to use the Job Preview & Editor tool and the Thumbnail window. A section about managing disk space is also provided.
Chapter 6	Production Printing	This chapter provides the workflows for imposition, high resolution, PDF, and page exception (manual/ dynamic) print jobs. In addition it describes how to select finishing options and work with fonts.
Chapter 7	Color Workflow	This chapter explains how to work with color in the Spire CXP6000 color server, and includes calibration and RGB and CMYK workflows. It also explains how to adjust colors, and to use color tools and post-RIP controls.

Table 1: Guide Overview

Chapter	Contents	Description
Chapter 8	Graphic Arts Workflow	This chapter contains the graphic arts workflow, which includes importing and supporting Graphic Art Port (GAP) files, performing a pre-flight check, and the Creo® Network Graphic Production workflow.
Chapter 9	Variable Information Workflow	This chapter contains the procedure for printing variable information jobs, from managing the VI data to converting PostScript® files to VI by splitting the file into a booklet.
Chapter 10	System Administration	This chapter explains how to administrate your system using the Administration window utilities.

Overview of Spire CXP6000 Color Server

The Spire CXP6000 color server is an on-demand pre-press system that uses Creo Spire advanced pre-press technologies, to drive a Xerox DocuColor 6060 Digital Color Press.

As an optimal digital color solution for printers, the Spire CXP6000 color server enables you to print from Windows, Macintosh, and UNIX® client workstations. The Spire CXP6000 color server processes image files in page-description language (PDL) formats—for example, PostScript, PDF, and Variable Information—using RIP (Raster Image Processor) technology. The system converts image files into a suitable RTP (Ready-To-Print) format for direct, high-quality digital printing. The Spire CXP6000 color server also streamlines the printing process by allowing printing with preset workflows.

In combination with the Xerox DocuColor 6060 Digital Color Press, the Spire CXP6000 color server enables you to efficiently print flyers, brochures, pamphlets, dummy catalogs, short-run trials, and print-on-demand publications. When installed as a fast, network printer with the Spire CXP6000 color server, the Xerox DocuColor 6060 Digital Color Press prints up to 60 full-color A4 (210mm x 297mm) or Letter (8.5 inches x 11inches) pages per minute.

The Spire CXP6000 color server combines RIP functionalities, automation, control tools and special hardware development capabilities with PC architecture.
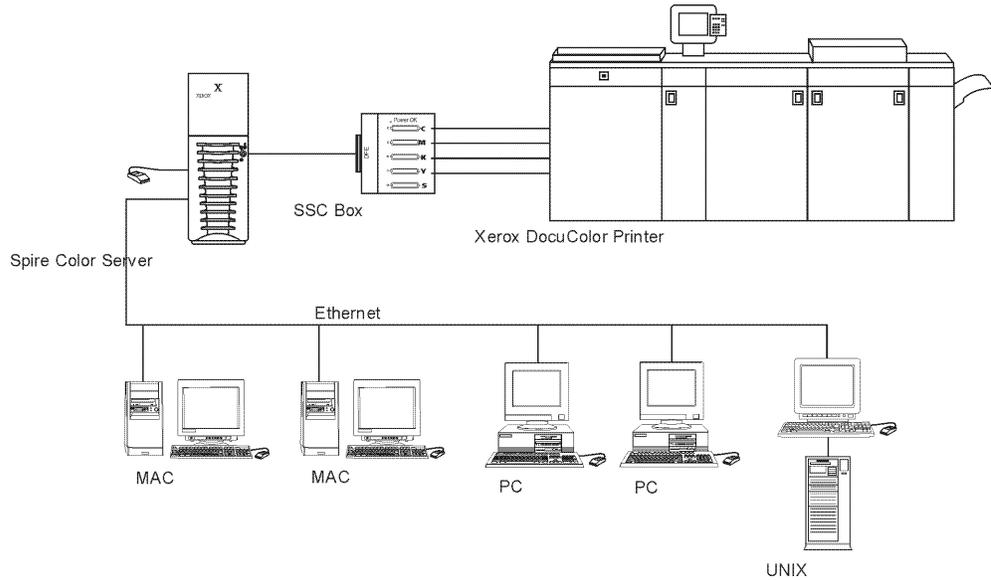
Spire CXP6000 color server for Xerox DocuColor 6060, 5252, 2060 and 2045 Digital Color Presses

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

Hardware and Software Components

The Spire CXP6000 color server is a dedicated Creo platform running in a Windows 2000 environment.

The Spire CXP6000 color server includes:

- Creo hardware, including the interface board

- Software, including:

  ❏ Creo Application Software

  ❏ Windows 2000 Professional Operating System

  ❏ Adobe® Acrobat® version 5.0

New Features

The new version of the Spire CXP6000 color server includes the following new features:

- **New GUI Design**
  The Spire CXP6000 color server graphic user interface has been updated to a new design with new icons and a new feel that is more-user-friendly. New features of the GUI include new options, such as user profiles and preference settings.

- **Security Features**
  New and improved security features in the Spire CXP6000 color server, include access control, and removable disk and disk wipe options.

- **Client Tools**
  The following have been added for client workstations:

  ❏ Font downloader for Windows fonts - The Spire CXP6000 color server provides a special hot folder for downloading fonts from a Windows client workstation. The hot folder is published in the Spire CXP6000 color server **D:\Hot Folders\HF_Fontdownloader.**

You can use the **HF_Fontdownloader** hot folder to install new or missing fonts to the Spire CXP6000 color server fonts dictionary. The fonts are installed when you drag them to the hot folder.

❑ XPIF support - The Spire CXP6000 color server can receive Xerox Programming Information Format (XPIF), and automatically convert this format to Spire CXP6000 color server job parameters.

❑ Job info – Remote users are able to add free text to the account, recipient and comments parameters from the Spire CXP6000 color server PPD file

❑ UNIX connectivity – The NFS server enables the user to mount the Spire shared/hot folder

- **Color and Quality Enhancements**
  The following color and quality enhancements have been added:

  ❑ Import RGB profiles – RGB source profiles can be imported via Profile Manager

  ❑ Destination profile – Mapping to destination profiles according to paper sets

- **Feature Enhancements**
  The following feature enhancements have been added:

  ❑ Dynamic page exceptions - More dynamic page exception commands within a job are supported, True Inserts within a job, Plex SPD commands, and Support XRX commands in PDF files. The **Preflight** parameter enables you to check if your file includes dynamic page exception commands.

  ❑ Image position on a page level - The image position tool enables you to shift an image on a specific page or range of pages.

  ❑ Pre-separated files - The Spire CXP6000 color server now supports pre-separated PostScript file and DCS file.These files are printed as composite files.

  ❑ APR enhancements - The HiRes Path dialog box now includes the **Search in the input folder** check box. The Spire CXP6000 color server first searches for high-resolution images in the same folder as the PDL file, and then in the **D:\Shared\High Res** folder.

Features

The Spire CXP6000 color server provides the following:

- **Creating jobs in RTP format**
  Using the Spire CXP6000 color server, RTP files can be created and stored on the Spire CXP6000 color server itself. This enables you to print RTP data at any time without further processing.

- **Powerful document printing capabilities**
  In combination with the Xerox DocuColor 6060 Digital Color Press, the Spire CXP6000 color server enables complete printing and processing of documents, including the production of covers and pages on different paper stocks.

- **Enhanced job editing**
  The Spire CXP6000 color server enables you to edit jobs, both pre- and post-RIP. Pre-RIP editing includes full Adobe Acrobat functionality including: deletion, extraction, rotating, adding, and cropping of pages. Post-RIP editing includes deleting job pages and merging pages from different jobs to a new job. This minimizes the need to re-RIP jobs.

- **RIP - Adobe Postscript Level III and Extreme Certified technologies**
  The Spire CXP6000 color server uses the industry-standard Adobe RIP, with enhancements for Continuous Tone and Linework. Data are processed separately as Continuous Tone and Vector Data layers for increased efficiency and merged during printing.

- **Ready-to-Print job preview and editing**
  The Spire CXP6000 color server enables you to preview RTP jobs up to pixel levels to see all job details and to verify job quality and content post-RIP. It is also possible to view a thumbnail list of job pages, or the actual raster pages.

- **Job management**
  The Spire CXP6000 color server enables you to monitor job progress during all stages of printing. Among other functions, you can promote, demote, delete, monitor the import process, and estimate when a job will be fully imported. You can also abort jobs during RIPing or printing, as well as archive and retrieve jobs.

- **Enhanced text and line art quality**
  You can choose superior text quality with the Creo proprietary algorithm. This function enhances the quality of diagonal lines,

borders, blends, and small text. The Creo anti-aliasing causes blends to appear smooth with no banding and diagonal lines to appear crisp without jagged edges (do not use this option with VI jobs).
You can choose superior image quality with the Creo proprietary smooth scale algorithm. This function improves the quality of images containing various resolutions (such as images taken from the Internet).

- **Trapping - FAF (Full Auto Frame)**
  The Spire CXP6000 color server uses the well-known Creo algorithm to trap job information easily. The FAF algorithm has been tailored for digital printing.

- **Imposition**
  The Spire CXP6000 color server offers a full suite of Imposition functions, based on the well-known Ultimate Imposition engine. On the Spire CXP6000 color server, imposition is robust with user-friendly operation. And only the Spire CXP6000 color server enables imposition of Variable Information jobs.

- **Color Management**
  The Spire CXP6000 color server has a number of color management tools and utilities that will help you to improve the quality of your jobs. The Spire CXP6000 color server enables you to modify color on-the-fly, even for images that have already been RIPped. This functionality includes application of brightness and contrast adjustments, as well as changes to image gradation and calibration.

- **Variable Information printing**
  The Spire CXP6000 color server enables processing of Creo Variable Print Specification and Xerox VIPP file formats and PPML for efficient VI (Variable Information) processing and printing. Repeated elements are RIPped once and cached, so there is no need to continually re-RIP them.
  The Spire CXP6000 color server also provides easy management of VI elements, including previewing, deleting and updating. The Spire CXP6000 color server also offers imposition for VI jobs, the only digital solution in the industry with this capability.

- **Creo workflow extenders**
  This is a set of Adobe Photoshop and QuarkXPress software plug-ins and extensions that facilitate printing with the Spire CXP6000 color

server. These extensions are located in the shared **Utilities** folder on the Spire CXP6000 color server or on CD #3 supplied with the Spire CXP6000 color server software kit.

Supported Formats

The Spire CXP6000 color server supports the following file formats:

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

Workflow

The Spire CXP6000 color server receives and processes files from the following client workstations:

- Macintosh – running Mac OS 9.x or later and Mac OS X (10.1 and later)
- Windows – running Windows 98, ME, Windows NT 4.0, 2000, and XP
- UNIX Workstations and Servers

The Spire CXP6000 color server basic workflow is as follows:

User activates Print in the DTP
application
(for example, Microsoft PowerPoint).

User selects one of the default Spire
color server virtual printers
(for example, ProcessPrint).

File is spooled to the Spire color server.

File begins processing according to settings
predefined in the file or for the selected
virtual printer.

After the job has completed processing, the
file is printed to the DocuColor printer, and
an RTP (Ready-to-Print) format of the job is
stored in the storage folder on the Spire
color server.

Data Flow

```
PDL ──▶┌──────────────┐      ┌──────────────────┐      ┌──────────────────┐
       │  Processing  │ ───▶ │ Decompress and   │ ───▶ │ Image Delivery   │
       │  Software    │      │ Page Assembly    │      │ (Printed Page)   │
       └──────────────┘      │ (Hardware)       │      └──────────────────┘
              │              └──────────────────┘
              ▼                        ▲
                      ┌──────────────┐ │
   RTP ────────────▶  │ Printer Disks│ ─────▶ RTP
                      └──────────────┘
```

The Spire CXP6000 color server Data Flow is as follows:

1. The input file arrives at the Spire CXP6000 color server from either a client workstation, local hard disk, or external media and is submitted to the Process queue.

2. The processing sub-system produces an RTP job from the **input** file.

3. The RTP job is stored on an image disk.

4. When printing starts, the RTP job elements on the disk are decompressed and merged to the correct location on the page. This is done using Creo hardware.

5. The image delivery sub-system converts the RTP information into the print engine format.

6. The image delivery sub-system transmits the page information to the print engine.

7. The page data is delivered to the Print Engine and the job is printed.

Spire CXP6000 Color Server Network Printers

For Macintosh and Windows networks, the Spire CXP6000 color server provides three default network printers, known also 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.

Note: The job (print) parameters set in the job (from the client) override the parameters set in the virtual printer.

The three default virtual printers are:

- **SpoolStore**
  Files are spooled directly to the Storage window and await operator processing. You can only import PDL files (such as: PS, PDF, VIPP, VPS) to the spool store, not RIPped - RTP files.

- **ProcessPrint**
  Files sent to this virtual printer are processed and printed directly to the Xerox DocuColor 6060 Digital Color Press via the Spire CXP6000 color server.

- **ProcessStore**
  Files sent to this virtual printer are automatically processed and stored in RTP format. After processing, the files are stored in the Storage window of the Spire CXP6000 color server until the print operator re-submits them for printing.

With printing workflows tailored to your job requirements, the Spire CXP6000 color server enables you to:

- Define new virtual printers

- Choose from which virtual printer to print

For information on defining and editing virtual printers, see *Managing Virtual Printers* on page 222.

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2

Getting Started

Turning On the Spire CXP6000 Color Server

1. Turn on the monitor.

2. Press the power button on the front panel of the Spire CXP6000 color server.

   The power indicator on the front panel lights up. The Windows operating system starts, and the Spire CXP6000 color server splash screen appears.
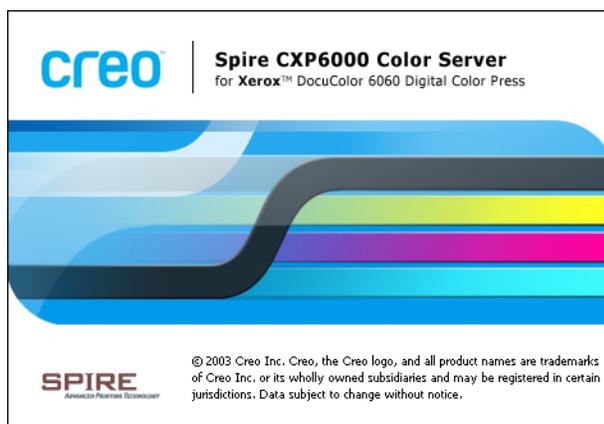
Notes:

- If the Spire CXP6000 color server workspace is already turned on, open the workspace from the **Start** menu. See *Opening the Workspace From the Start Menu* later in this chapter.

- By default, the **Auto Log On** check box is selected in the Settings window. This option enables you to open the workspace without having to go through the logon process each time. If you want to designate different access levels for each user, you need to set security settings in the Settings window. For more information about designating access levels, see *Security* on page 414.

- The title in the splash screen varies according to the printer you are using, Xerox DocuColor 6060 Digital Color Press, Xerox DocuColor 5252 Digital Color Press, or Xerox DocuColor 2060 and 2045 Digital Color Presses.

Opening the Workspace From the Start Menu

The Spire CXP6000 color server program group appears in the Windows **Start** menu.

➢ Select **Start>CXP6000>CXP6000**.
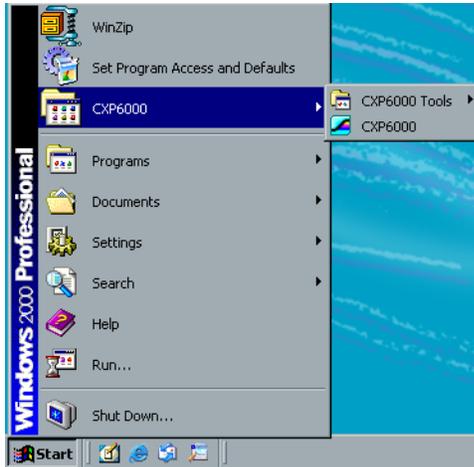
The Loading Drivers window appears and then the Spire CXP6000 color server workspace.

Note: The Spire CXP6000 color server includes a diagnostics utility that can check the hardware components of the system. Only service engineers should use this utility.

For more information about the diagnostics utility, see the *Spire CXP6000 Color Server Technical Manual.*

Logging On

By default, the **Auto Log On** check box is selected in the Settings window. This option enables you to open the workspace without having to go through the logon process each time. If you want each user to have to log on to the Spire CXP6000 color server, you need to clear the **Auto Log On** check box, and then assign each user an access level and password.

For more information about designating access levels, see *Security* on page 414.

The Login dialog box enables you to log on to the Spire CXP6000 color server with a designated access level and password. The system administrator assigns each user an access level, as follows:

- **Operator (default):** Enables the user to operate the Spire CXP6000 color server and configure the **Preferences** area in the Settings window.

- **Administrator:** Enables the user to access all features and settings in the Spire CXP6000 color server

- **Guest:** Enables the user to import a job through an existing virtual printer and view the workspace

Logging On as a Different User

If you are already working in the Spire CXP6000 color server workspace, you can change your access level—for example, if you are logged on as an operator and you need administrator privileges.

1. From the **Job** menu, select **Logon as a different user**.

2. In the **Access level** list, select a different access level.

3. If you want to log on as an administrator or operator, type your password.

    Note: If you want to log on as a guest, you do not need a password.

4. Click **Logon**.

    You are logged on with the new access level.

The Workspace

After you turn on the Spire CXP6000 color server, the workspace automatically appears.
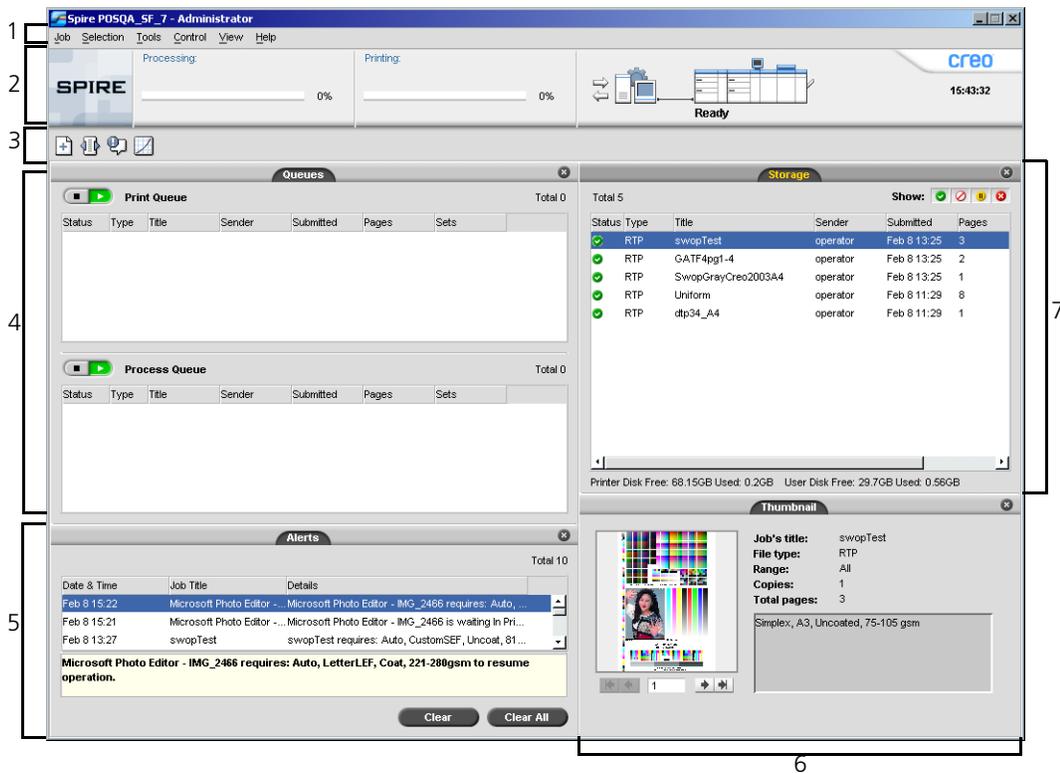
Table 2 describes the Spire CXP6000 color server workspace.

Table 2: Spire CXP6000 color server workspace

Item	Name	Description
1	**Menu Bar**	Consists of the **Job**, **Selection**, **Tools**, **Control, View,** and **Help** menus. Click a menu name to open the corresponding menu
2	**Status Panel**	Contains the logo **Pane**, **Processing** status area, and **Printing** status area, **server** icon, and **printer** icon
3	**Toolbar**	Consists of shortcut buttons for the Import window, Resource Center, Message Viewer, and Calibration window

Table 2: Spire CXP6000 color server workspace

Item	Name	Description
4	**Queues**	Consists of the **Process Queue**, which lists the files to be processed. After a file has been processed successfully, it moves either to the **Print Queue** (the upper area) or to the Storage window.
5	**Alerts**	Lists all of the alert messages that are generated during the workflow
6	**Thumbnail**	Displays a thumbnail view of a specific page in an RTP job that has finished processing.
7	**Storage**	The Storage window contains files that: • were successfully printed • were held, were aborted, or failed during processing or printing • were sent directly from the client workstation to the Storage window or were imported to the Storage window

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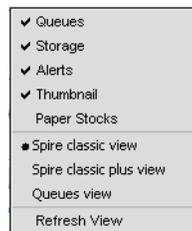
The **View** menu enables you to customize the workspace. From this menu, you can open and close the Queues window. The menu also provides the following view options:

- **Spire classic view:** Displays the status panel, toolbar, Storage window, Queues window, Thumbnail window, and Alerts window

- **Spire classic plus view:** Displays the status panel, toolbar, Paper Stocks window, Storage window, Queues window, Thumbnail window, and Alerts 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

Note: The CXP6000 Color Server always displays the workspace in the most recently selected view.

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 425.

Server icon   Printer icon

Calibration   reminder
indicator
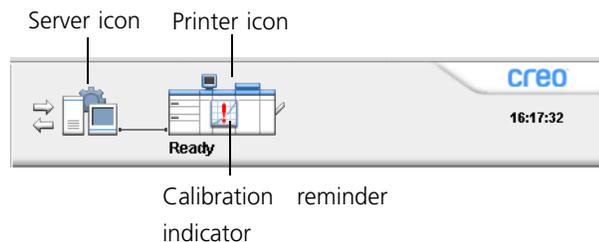
Note: The **printer** icon for the Xerox DocuColor 5252 Digital Color Press, Xerox DocuColor 2060 and 2045 Digital Color Presses displays three input trays.

The DFE Monitor

Click the **server** icon to open the DFE Monitor window. This window
displays information about disk space, network details, and the virtual
printers you have defined.

The **Disk Usage** tab shows how much space is available on the user disk and
printer disk.
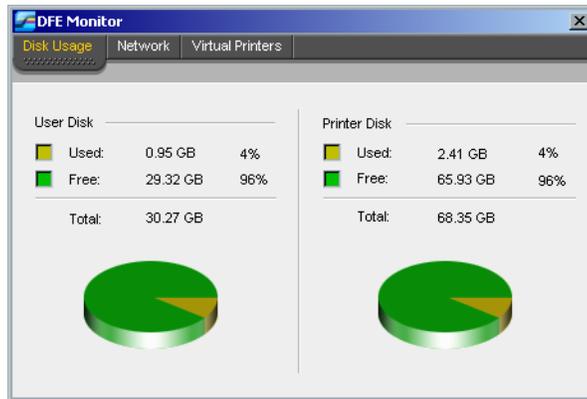
The **Network** tab provides information about the network.
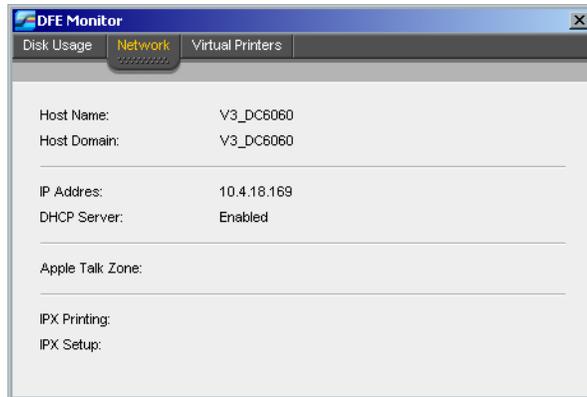
The **Virtual Printers** tab lists the virtual printers that you have defined.
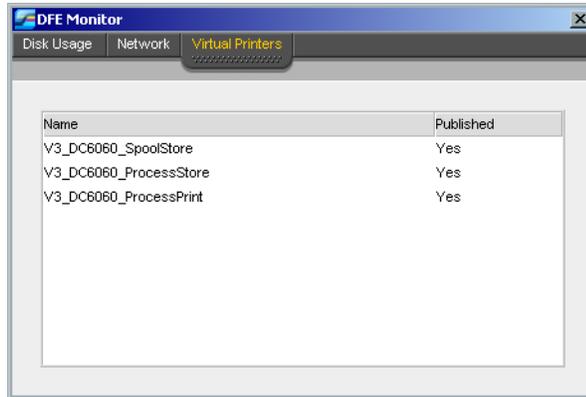
The Printer Monitor

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

The Printer Monitor window displays information about the size and type of paper in each tray, the connected devices, the available toner, and other aspects of the consumables.

The **Paper Stock** tab displays information about the paper in each tray and also shows whether the trays are ready for printing.
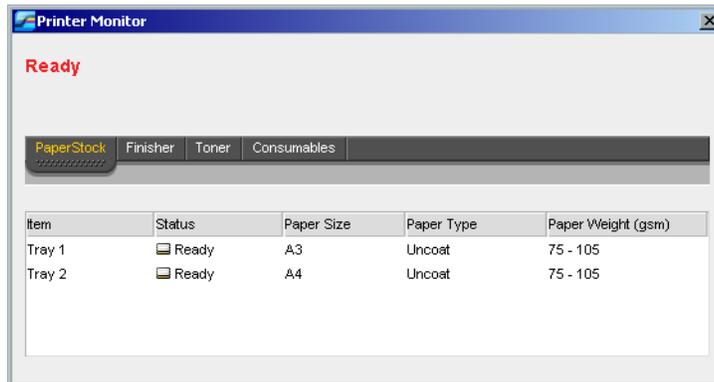
The **Finisher** tab displays information about finishing devices that are connected to the Xerox DocuColor 6060 Digital Color Press.
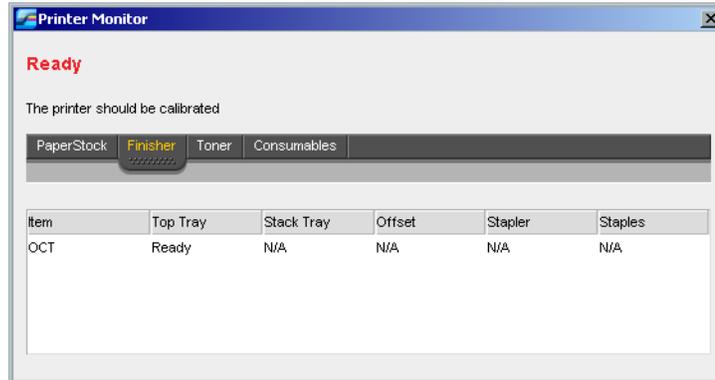
The **Toner** tab shows whether there is enough toner.
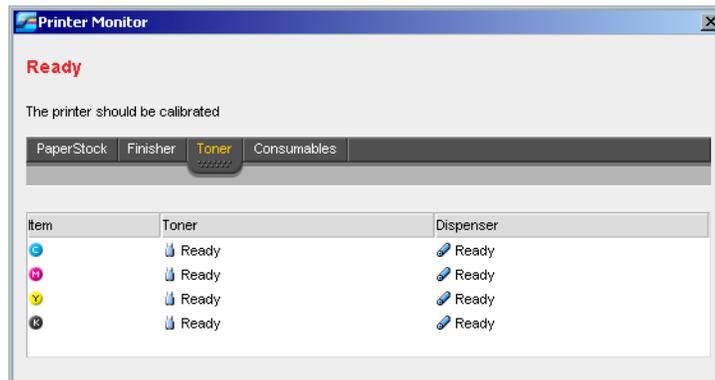
The **Consumables** tab displays the status of other refillables.
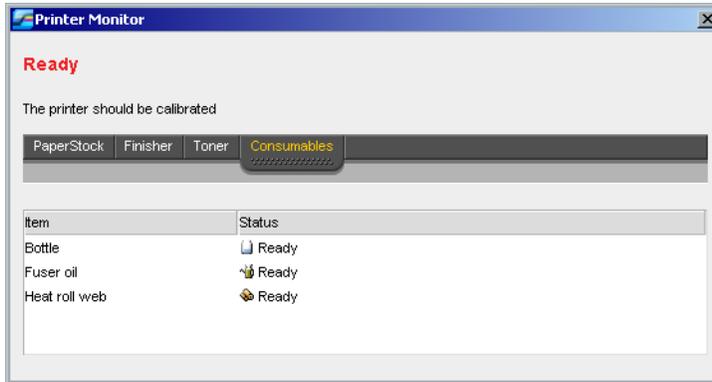
The Settings Window
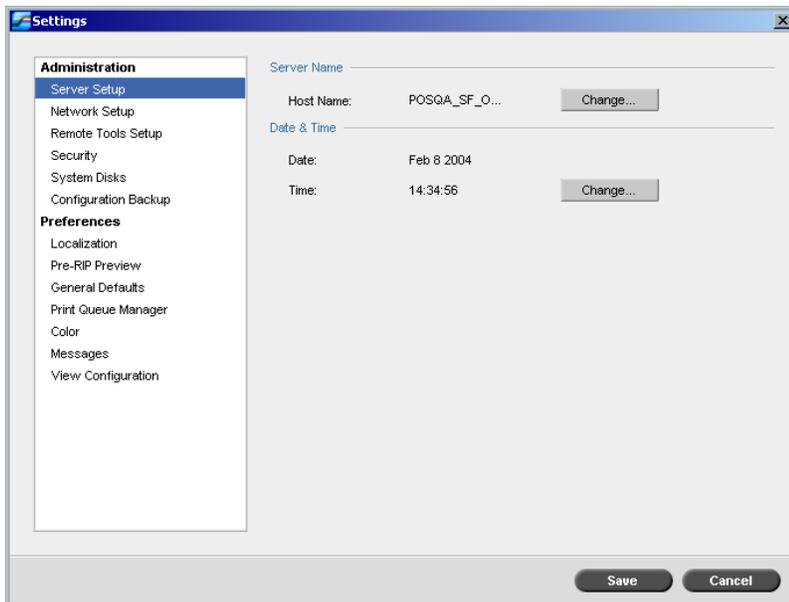
You can set all system preferences in the Settings window.

To open the Settings window:

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

The window is divided into two areas:

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

- **Preferences:** All users can view these settings, but only an administrator or operator can configure the settings.

Note: If you log on to the Spire CXP6000 color server as a guest, the Settings window is unavailable.

For more information about setting system preferences, see *Setting Up and Configuring the Spire CXP6000 Color Server* on page 404.

The Resource Center
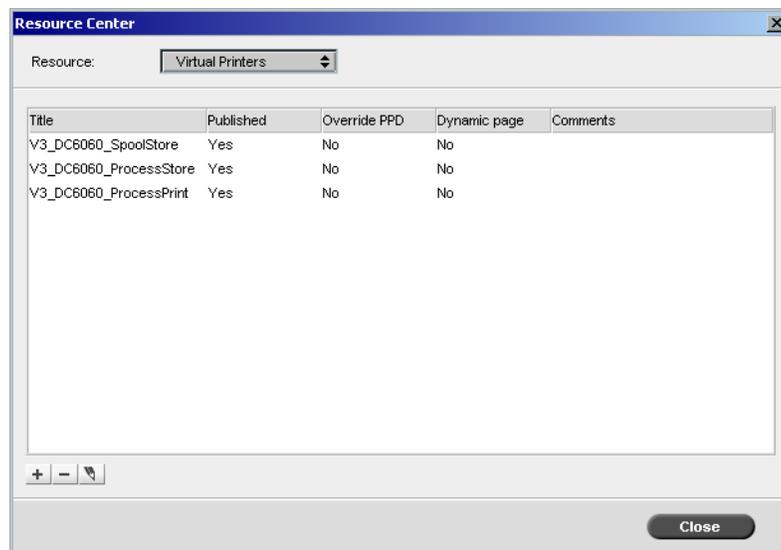
The Resource Center enables you to add, remove, and manage external resources for the Spire CXP6000 color server.

To open the Resource Center:

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

The Resource Center provides access to the following resources:

- Virtual Printers, see *Managing Virtual Printers* on page 222

- Fonts, see *Managing Fonts on the Spire CXP6000 Color Server* on page 306

- Imposition Templates, see *Imposition Templates* on page 244

- VI Elements, see *Managing VI Elements* on page 398

- Paper Sets, see *Managing Paper Sets* on page 170

- Profile Manager, see *Profile Manager* on page 358

The Job Parameters Window

The Spire CXP6000 color server enables you to edit imported 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 window.
Or:
Right-click a job in the Storage window, and from the menu select **Job Parameters.**
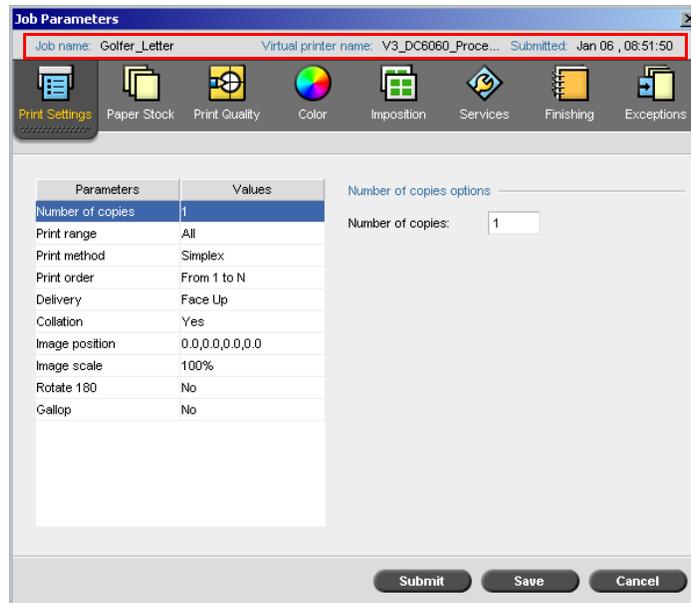
The Job Parameters window title bar displays the following information:

- The name of the job

- The time of submission

- The name of the virtual printer

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

Table 3: 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 159
Paper Stock	Set job parameters related to paper stock—for example, **Paper size** and **Paper set name**. See *The Paper Stock Tab* on page 169
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 178

Table 3: Description of tabs in the Jobs Parameters window

This tab	Enables you to
Color	Apply last minute color corrections, or set the output job to match other output devices. See *Color Workflow* on page 313
Imposition	Set job parameters related to positioning, folding, trimming, and binding of pages—for example, **Margins** and **Template**. See *The Imposition Tab* on page 233
Services	Set job parameters that will assist your job workflow—for example, **APR path** and **Preflight**. See *Creo APR* on page 255, *Preflight Check* on page 380, *Substituting Fonts* on page 311, *Applying VI Structure to Large Files (Split to Booklets)* on page 401, and *Job Deletion* on page 395
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 294
Exceptions	Define paper sets to include special exceptions in a job, and add inserts or interleaves. See *The Exceptions Tab* on page 270

The Help Menu

The **Help** menu enables you to access the online help, which is based on this user guide, and provides information about the current version of the Spire CXP6000 color server installed on your computer.

To open the About window:

➢ From the **Help** menu, select **About**.
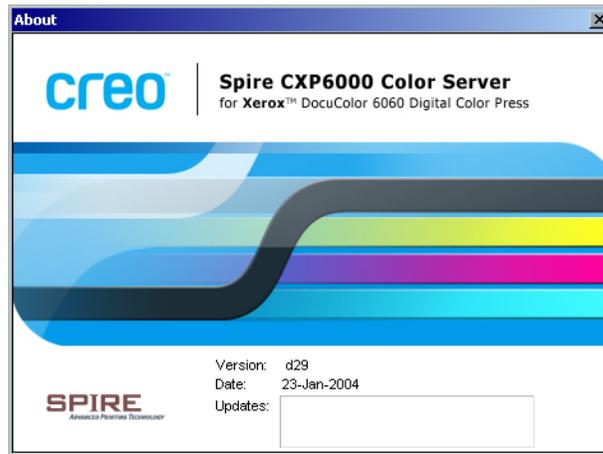
The About window displays the following information:

- Spire CXP6000 color server version number
- Date the version was installed
- Any updates that were installed on top of the version

Note: The title in the splash screen varies according to the printer you are using, Xerox DocuColor 6060 Digital Color Press, Xerox DocuColor 5252 Digital Color Press, or Xerox DocuColor 2060 and 2045 Digital Color Presses.

To open the online help:

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

Handling Conflicts

If there are conflicts in the Job Parameters window, the Conflict window displays the two parameters that conflict—for example, Transparency conflicts with duplex printing. You can't print your job until the conflict is resolved.

To resolve the conflict, select one of the following options:

- In the **Resolve Options** area, select a resolve option, and then click **Resolve**.

- Click **Cancel** to remove the value you selected for the last parameter.

Basic Job Workflow

The basic workflow in the Spire CXP6000 color server consists of three main stages:

1. Submitting a file from a client workstation, or importing and printing from the Spire CXP6000 color server, see *Submitting* on page 32

2. After a job is imported, the print engine starts to process the job, see *Processing* on page 33

3. The job is printed and stored in the Storage window for future use, see *Storage* on page 34

Submitting

There are two methods for submitting a file for printing:

- Submit a file from an application on your client workstation—for example, PDL formats that were created on client workstations that are not connected to the Spire CXP6000 color server, or files that are available only on external media.

- You can also import job files that reside locally on the Spire CXP6000 color server.

Printing From a Client Workstation

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

- Print the job via one of the Spire CXP6000 color server network (virtual) printers—for example, **ProcessPrint**.
  The job is spooled and then processed or printed (according to the selected job flow of the virtual printer). If you use this method, you can print from any application —for example, Microsoft Word— and use any file format from any client workstation (Windows, Macintosh, or UNIX).

- Drag the job to a hot folder.
  The job is spooled and processed or printed (according to the selected job flow of the corresponding virtual printer).

For more information about hot folders, see *Using Hot Folders* on page 86.

If you use the hot folder method, you can print most PDL files on the Spire CXP6000 color server— for example, PostScript, PDF, EPS, Variable Print Specification, and VIPP files.

Note: PDL jobs that are spooled to the Spire CXP6000 color server must have the appropriate file name extensions—for example, *.ps or *.pdf.

Importing and Printing From the Spire CXP6000 Color Server

You can import to the Spire CXP6000 color server any PDL file such as a PostScript or PDF file, that is located on any local or network drive —for example, a CD-ROM drive or a shared network drive.

Processing

After a job enters the Spire CXP6000 color server, it resides in the Queues window or the Storage window, depending on the job flow. The Queues window consists of two areas:

- The **Process Queue** lists the job currently being processed and all the jobs that are waiting to be processed.

- The **Print Queue** lists the job that is currently printing and all the jobs that were processed successfully and are waiting to be printed. The **Print Queue** also lists frozen jobs (jobs for which the specified paper stock is not available).

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

For more information about rush jobs, see *Running a Job Immediately* on page 199.

The top job in the queue is the currently running job, while all the others are waiting to run. The **Print Queue** and **Process Queue** areas show you the number of jobs and their status. You can change the order of jobs, suspend them, resume them, or view and edit the parameters.
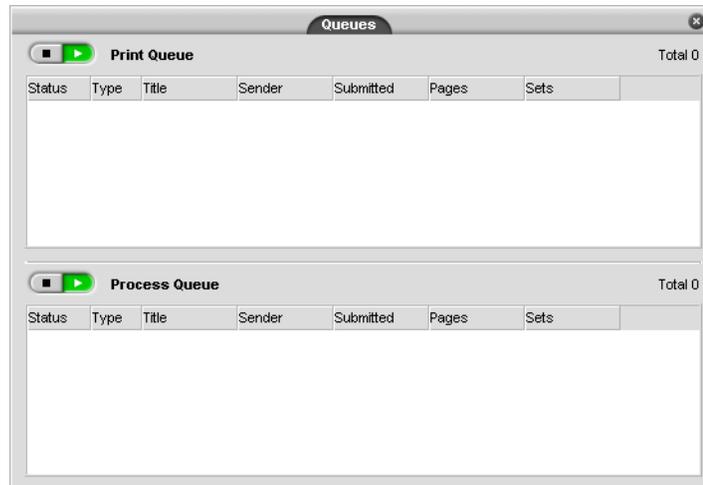
Note: If there are very short jobs in the **Print Queue**, several jobs may be running at the same time. The jobs marked as **running** are listed first and are printed in the order of the list.

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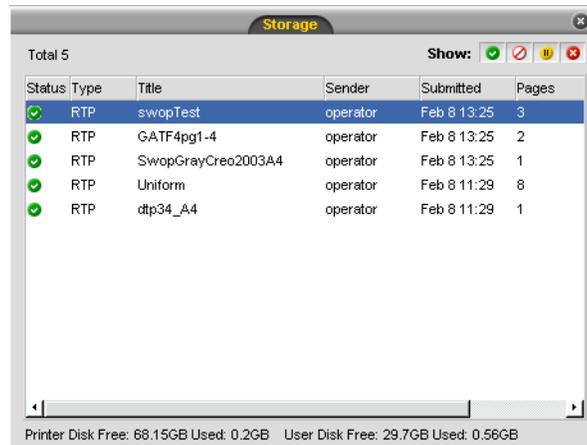
The Storage window is the main repository for jobs. It can contain:

- Completed jobs
- Jobs that were manually moved to the Storage window
- Jobs that were aborted during processing or printing
- Jobs that failed to complete processing or printing
- Jobs that were imported or spooled directly from a client workstation

For more information about the Storage window, see *Handling Jobs in the Storage Window* on page 202.

Resubmitting

You can easily reprint RTP jobs that are stored in the Storage window. Select the job you want to reprint and then submit it. The job is automatically placed in the **Print Queue**.

The Spire CXP6000 color server enables you to change job parameters and edit jobs prior to reprinting.

You can change job parameters in the Job Parameters window. Certain changes to the job parameters require you to re-RIP the job. The Spire CXP6000 color server automatically determines whether your file requires re-RIPing and places it in the appropriate queue when you submit it for reprinting.

For more information about resubmitting a job, see *Reprinting Jobs* on page 158.

You cannot re-RIP jobs that you edit in the Job Editor. When you save a job in the Job Editor, a new RTP file is created. No PDL file is associated with it. Therefore, parameters requiring re-RIPing can't be applied.

For more information about editing RTP jobs, see *Editing RTP Jobs* on page 213.

Turning Off the Spire CXP6000 Color Server

1. In the Spire CXP6000 color server workspace, from the **Job** menu, select **Exit**.
   Or:
   Click ☒ in the upper-right corner of the Spire CXP6000 color server workspace.
   The Spire CXP6000 color 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 Spire icon has disappeared from your taskbar.

   Taskbar with Spire icon   Taskbar without Spire 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 Spire CXP6000 color 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

Working From a Client Workstation

Default Network Printers

For Macintosh and Windows networks, the Spire CXP6000 color server provides three default network printers known as virtual printers, **ProcessPrint**, **ProcessStore** and **SpoolStore**.

Virtual printers contain preset workflows that are automatically applied to all print jobs processed with that virtual printer. Using virtual printers enables you to print jobs more efficiently.

Note: Unless you select the **Override PPD parameters** check box when you add a virtual printer, the job (print) parameters that are set in the job will override the parameters set in the virtual printer.

The Spire CXP6000 color server enables you to select from which virtual printer to print. It also allows you to define new virtual printers, with printing workflows tailored to your specific job requirements.

For more information about virtual printers, see *Managing Virtual Printers* on page 222 and *Spire CXP6000 Color Server Network Printers* on page 13.

An additional default network printer is provided for Macintosh networks.

FontDownLoader
This is a special network printer that you use with Macintosh client workstations to download fonts. The FontDownLoader enables you to send fonts to the Spire CXP6000 color server and use these fonts later in printed jobs. It is not possible to send files via the FontDownLoader, only fonts.

For more information about the Fontdownloader, see *Using the Fontdownloader for Macintosh Networks* on page 307.

Setting PPD File Parameters

You can set job parameters from a client workstation using the Spire CXP6000 color server PPD file or you can define a virtual printer with predefined PPD file settings.

To print a file from Windows, you first need to set up a Spire CXP6000 color server network printer with the appropriate PPD file. The PPD file contains all the parameters and paper stock definitions for the printer and enables you to print your file properly.

To use the Spire CXP6000 color server PPD file:

➢ In the Print window of your application, select print settings specific to printing to the Spire CXP6000 color server.

For more information about print settings, see *Printing From Windows* on page 65 and *Printing from a Macintosh* on page 76.

To define a virtual printer:

➢ Set job parameters when you create or edit a virtual printer. These settings become the printer's default options.

For more information about virtual printers, see *Adding a new printer* on page 223 and *Editing an Existing Printer* on page 225.

The following table lists the PPD file parameters and the printing options that can be selected from the Print window of an application.

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.

- The parameter settings that were last modified or applied are the settings that are applied to the job. However, the print settings defined in the job file override the settings of the virtual printer.

- Grayscale images created in RGB applications (such as PowerPoint) should be specified as monochrome or you should select **Gray RGB**>**Print grays using black toner** in the PPD file when you submit the job to the Spire CXP6000 color server. This selection ensures that grayscale images are counted as black and white instead of color in both the Spire CXP6000 color server and in the Xerox DocuColor 6060 Digital Color Press billing meters.

Table 4: PPD parameters

PPD Parameter	Printing Options
Print Method	**Simplex** prints single-sided pages (default). In **Duplex Head to Toe**, the image on the reverse side of the sheet is rotated 180 degrees. It is used for calendar-style hard copies and presentation-style copies (usually used with landscape jobs). In **Duplex Head to Head**, the head of the image appears at the top of the page on both sides of the sheet. It is used for normal book-style hard copies (usually used with portrait jobs).
Image orientation for imposition	**Landscape** specifies a landscape orientation for imposition. **Portrait** specifies a portrait orientation for imposition.
Reverse Print Order	**Yes** starts printing from the last page. **No** starts printing from the first page.
Face Up	**Face Up** delivers the pages face up on the printer. **Face Down** delivers the pages face down on the printer (when printing confidential documents).
Collation	**Yes** prints a complete copy of the job before the first page of the next copy is printed. **No** prints all the copies of each page before all the copies of the next page are printed.
Image Scale	Select **Fit to paper** for the image to fit the selected paper in the paper stock **100%** prints at 100% of the original size (default) Select an image scale by which to proportionally increase or decrease the image size, **50%, 150%, 200%, 250%, 300%, 350%, 400%**
Rotate 180	**Yes** (only relevant for the **Finisher Module** > **HCSS Staple Tray** option), modifies the stapling position by 180 degrees. For example, instead of stapling on the upper left-hand corner, you can staple on the lower right-hand corner. **No** ignores this method.
Paper set	**Undefined** uses the parameters from the **Paper Stock** tab **Paper sets 1-10** are the predefined paper sets available on the Spire CXP6000 color server
Type	Select **Paper** or **Transparency** as the media.

Table 4: PPD parameters

PPD Parameter	Printing Options
Weight	Select the required paper weight from the list. The following ranges are listed: **64-74**, **75-105**, **106-135**, **136-150**, **151-220** and **221-300** For example, **75-105** gsm prints on **75-105** gsm paper.
Coating	**Coated** prints on coated paper. **UnCoated** prints on uncoated paper.
Text and Line Quality	**High** provides superior text quality. This setting applies the Creo proprietary algorithm that enhances the quality of diagonal lines, borders, blends, and small text. The Creo anti-aliasing causes blends to appear smooth with no banding and diagonal lines to appear crisp without jagged edges. Do not use this option with VI jobs. **Normal** provides standard text quality.
Image Quality	**High** provides 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). **Normal** provides standard image quality and increased RIPing speed.
Trapping	**Yes** applies the Creo FAF (Full Auto Frame) algorithm to the job. Trapping solves misregistration between color separations in offset and digital printing. This occurs regardless of the printer device accuracy. This problem results in white lines around objects on top of a background (in a knock-out procedure) and also between adjacent colors. The FAF solution is to extract the element or background to create an overlap between them. Do not use this option with VI jobs. **No** does not begin image trapping while RIPing (this does not affect trapping incorporated by the authoring application). If trapping was applied in the authoring application, select **No**.

Table 4: PPD parameters

PPD Parameter	Printing Options
Black Overprint	**Yes** provides better printing quality (as in FAF) and a richer, deeper black with the underlying CMY values equal to those of the printed background. As a result, misregistrations are not visible. Black Overprint ensures that 100% black text prints cleanly within a tint or picture area. Occasionally, white lines may appear around black text and the text may appear less dense than required as a result of misregistration between color separations. With Black Overprint, the Pure Black Text / Graphics option is automatically activated and there are no knock-outs under the black text. However, a knock-out occurs when you print only the topmost color. This results in less color density and can cause misregistration if separations are not perfectly aligned. **No** leaves the job as is.
PS Overprint	PS Overprint offers the option to use the overprint, which exists in the PostScript file. It also determines whether the DTP application PS Overprint settings are honored in the RIP. Spire CXP6000 color server settings override PS Overprint commands from DTP applications. For example, if PS Overprint was set to **Yes** in a DTP application, selecting PS Overprint **No** in the Spire CXP6000 color server results in no overprinting. The Spire CXP6000 color server can not create PS Overprint that is not predefined in the file. Selecting PS Overprint **Yes** for a file that has not had overprinting defined in a DTP application does not result in overprinting. **Yes** (default) instructs the RIP to use the overprint information that exists in the input PostScript file. Also, if PS Overprint is applied in a DTP applications, it is implemented by the Spire CXP6000 color server. Background colors are not knocked out. For example, in the case of a yellow triangle overlapping a cyan circle, selecting **Yes** results in the overlapping area turning green. This is not seen on the screen, only in print. **No** ignores the overprint information that exists in the input PostScript file. Background colors are knocked out and only the top most color parts are seen on the screen in your DTP application. For example, in the case of a yellow triangle overlapping a cyan circle, selecting **No** results in the cyan background being knocked out, so only the yellow is printed.

Table 4: PPD parameters

PPD Parameter	Printing Options
Image Noise	**No** (default) applies no image noise to your job. **Noise 2-10** apply image noise. The higher the level, the smoother the vignettes appear.
Color Mode	**Grayscale** prints all pages using black (K) toner only. **Color** prints all pages using all CMYK toners. If you selected **Color**, select the **Print grays in black toner** option in the **Gray RGB** list to print RGB gray images using black toner only. If you want grayscale CMYK elements to be printed using black toner only, you need to select **Perceptual** as the rendering intent.
RGB Workflow	This option changes gamma values, thus producing more color depth for RGB images. To use the embedded CSA, select **Use Source CSA**. To replace use a Spire or Adobe CSA, select **Use Spire RGB 1.8, Use Spire RGB2.1**, **Use Spire RGB 2.4**, **Use sRGB**, or **Use Adobe RGB**.
Gray RGB	Select **Print grays using CMYK** to print grayscale CMYK elements using black toner only. Select **Print grays in black toner** to print RGB gray images using black toner only.
Rendering Intent for RGB	Rendering intent defines how colors are compressed from CIELAB values to printer color space. **Relative Colorimetric** provides an accurate general-purpose gamut mapping for all applications. The lowest density is mapped to white. **Absolute Colorimetric** preserves the substrate tint. **Saturated (presentation)** produces saturated colors that are suitable for office environment applications —for example, text documents and presentations. **Perceptual (photographic)** yields the most effective results on continuous tone and images. **Saturated (presentation)** and **Perceptual (photographic)** are the most effective rendering intent methods for RGB images.

Table 4: PPD parameters

PPD Parameter	Printing Options
CMYK Workflow	Select **Use Original CMYK values**, **Use Source CSA**, or select a CMYK emulation, **Printer's Default** (None), **Fogra Gloss Emulation**, **Fogra Matt Emulation**, **Fogra Uncoated**, **Euroscale**, **Gravure**, **Japan_Color**, **Offset**, **Match Print**, **iGen3** or **SWOP**. **Printer's Default** (None), applies Ink Saving (GCR) without emulation. In all cases, emulation applied in the original DTP application overrides the Spire CXP6000 color server settings.
Emulate Source Paper Tint	**Yes** to emulate also the original paper tint **No** This parameter is available only if you selected an emulation method.
Emulate RGB Elements	**No** **Yes** to emulate RGB colors according to the selected CMYK emulation method This parameter is available only if you selected an emulation method.
Preserve Pure Colors	**Yes** to emulate pure CMYK colors **No** This parameter is available only you selected an emulation method.
Rendering Intent for CMYK	Rendering intent defines how colors are compressed from CIELAB values to printer color space. **Relative Colorimetric** provides an accurate general-purpose gamut mapping for all applications. The lowest density is mapped to white. **Perceptual (photographic)** yields the most effective results on continuous tone and images. **Saturated (presentation)** produces saturated colors that are suitable for office environment applications (for example text documents and presentations). **Absolute Colorimetric** preserves the substrate tint. **Relative Colorimetric** and **Absolute Colorimetric** are the most effective rendering intent methods for CMYK images.
Use Spire Spot color dictionary	**Yes** to use the Spire spot color dictionary **No**

Table 4: PPD parameters

PPD Parameter	Printing Options
Destination profile	**Linked** uses the destination profile that was mapped to a paper color in the Resource Center>**Profile Manager** **DC6060_DC2000_GA** and **DC6060_DC2000_COM** are predefined destination profiles. The predefined ICC profiles for the Xerox DocuColor 5252 Digital Color Press are **SpireDC5252_COM** and **SpireDC5252_GA**.
Calibration	**Normal** prints using the normal calibration table. **Saturated** prints using the saturated calibration table. **None** prints without calibration, therefore, there is no balance between colors and gives no color calibration data.
Screening Method	**Automatic** applies two types of screens: • For CT, the system uses Dot type screen of 200 lpi. • For LW (text / line-art elements), the system uses Line type screen of 200 lpi. **Dot 150** applies Dot type screen of 150 lpi. **Dot 200** applies Dot type screen of 200 lpi. **Line 200** applies line type screen of 200 lpi. **Line 300** applies line type screen of 300 lpi. **Line 600** applies line type screen of 600 lpi.
Ink Saving (GCR)	**No** does not use GCR and uses default maximum toner settings. Use **Low, Medium**, or **High** to set the amount of CMY toners to be replaced by the black toner. **High** provides low ink coverage while saving on toner (this prevents the occasional peeling of ink and the curling effect that may occur when printing transparencies).
Brightness	Brightness settings can be applied to RTP jobs without reprocessing (re-RIPing the file). **Normal** keeps the current job setting and does not apply extra brightness. To apply brightness, select one of the range options: **Light (5%), Lighter (10%), Lightest (15%), Dark (5%), Darker (10%), Darkest (15%).**

Table 4: PPD parameters

PPD Parameter	Printing Options
Contrast	Contrast settings can be applied to RTP jobs without reprocessing (re-RIPing the file). **Normal** keeps the current job setting and does not apply extra contrast. To apply contrast, select **Less Contrast** or **More Contrast**.
Automatic Deletion	**Always, Never, Successful Only, Failed Only** On large VI jobs, which take up a large amount of the Spire CXP6000 color server's disk space, it is recommended (if you do not need to reprint the job) that you use the this option. Completed and failed jobs are automatically saved in the Storage window unless you select one of the **Job Deletion** options. **Always** removes all jobs after they are printed. **Never** does not delete any job after printing it. **Successful Only** continuously deletes pages once they have been successfully printed and thus sustains enough free disk space for the duration of the print run. Each successfully printed page of the job is immediately deleted while the rest of the job remains in the queue to print. **Failed only** removes failed jobs (while processing or printing) from the Spire CXP6000 color server.
APR	**Print with High Res** prints using high-resolution files. **Print with Low Res** prints using low-resolution files.
Job Flow	**Process Print** RIPs the PDL files and prints them, and then moves the files to the Storage window or deletes them in accordance with the deletion policy. **Process Store** RIPs the PDL files, and then moves them to the Storage window as RTP jobs. **Spool Store** copies the PDL files directly to the Storage window.
Split to booklets	Select the required number of pages (1-10) per booklet. **Printers Default** (No) does not split the job to booklets.

Table 4: PPD parameters

PPD Parameter	Printing Options
Admin Page	Admin Page includes general information about the job, including paper stock parameters (Admin Page can also apply to completed jobs that weren't successful). Admin page is printed in the same order as the job, before each set for face-down printing and after each set for face-up printing. **No** (default) does not print an admin page with the job. **Yes** prints an admin page.
Slip Sheet	**Yes** inserts a sheet offset from the job stock between jobs or copies of a job or at the end of uncollated stacks of pages. **No** does not insert any slip-sheets.
Finisher Module	To select the printed output's destination, select a finisher module from the list: **OCT** (Offset Catch Tray) prints to the output cache tray. If your printer is equipped with an HCS (High Capacity Stacker), select: **HCS/EHCS Top Tray** to print to the top tray **HCS/EHCS Stack Tray** to print to the stack tray, which is the internal tray For the Xerox DocuColor 5252, 2060, and 2045 Digital Color Presses, select the **Bypass Tray** option to print to the DFA. If your printer is equipped with an HCSS (High Capacity Stacker Stapler), select: **HCSS Top Tray** to print to the top tray **HCSS Stack Tray** to print to the stack tray (usually for many pages or copies). **HCSS Staple Stack** to print a document that is already stapled **DFA Profile 1** / **DFA Profile 2** / **DFA Profile 3** / **DFA Profile 4** / **DFA Profile 5** prints to the DFA (Document Finishing Architecture) device. Select the required profile according to the profile set in the Xerox DocuColor 6060 Digital Color Press.
Finisher Offset	**Yes** shifts the sheets when a new page number is delivered. For example, if you requested three copies of each page uncollated, the printing output sequence is as follows, Page1, Page1, Page1, Offset, Page2, Page2, Page2, Offset, and so on. **No** does not use this printing method.

Table 4: PPD parameters

PPD Parameter	Printing Options
Staple Options	**Landscape - Single TL** a single staple in the top left corner **Landscape - Single TR** a single staple in the top right corner **Landscape - Dual Right** two staples along the right side **Landscape - Dual Left** two staples along the left side **Landscape - Dual Top** two staples along the top **Portrait - Single TL** a single staple in the top left corner **Portrait - Single TR** a single staple in the top right corner **Portrait- Dual Right** two staples along the right side **Portrait - Dual Left** two staples along the left side **Portrait - Dual Top** two staples along the top
Spire Job Info	Enter free text in the following fields, **Account**, **Recipient**, **Comments**. Text that you add will automatically be copied to the **Job Info** parameter in the Job Parameters window.

Working From Windows Client Workstations

The Spire CXP6000 color server can print from a Windows client workstation that has one of the following operating systems:

- Windows 98, Windows ME

- Windows NT 4.0, Windows 2000, Windows XP

The following section describes how to define a Spire CXP6000 color server network printer for each of the supported operating systems.

Defining a Printer on Windows Client Workstations

You use the Windows Add Printer wizard to define the Spire CXP6000 color server network printers.

Note: When you add a new Spire CXP6000 color server network printer to a client workstation, there is no need to install the Spire CXP6000 color server PPD file and Adobe PostScript printer driver separately. They are installed automatically in the Windows Add Printer wizard.

Defining a Printer on Windows NT 4.0

To define a network printer using the Windows Add Printer wizard:

1. On your Windows desktop, click the **Start** button and select **Settings**>**Printers**.

2. Double-click the **Add Printer** icon.
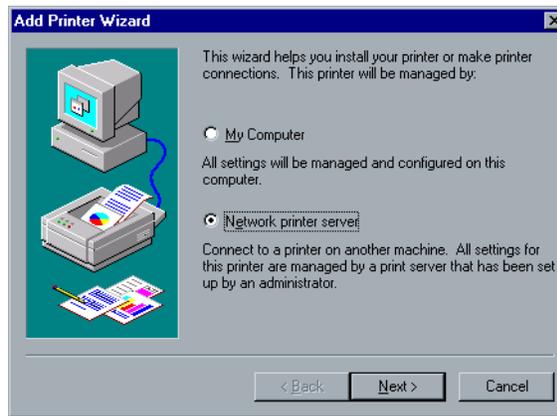
3. Select **Network printer server**, and then click **Next**.

4. In the network, locate the Spire CXP6000 color server and double-click the server name.

A list of the network printers is displayed.
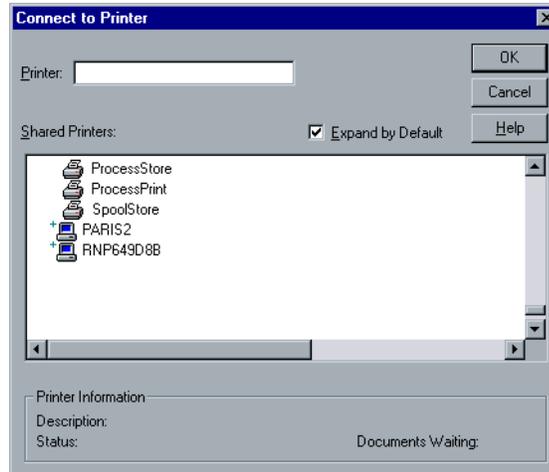
Note: The Spire CXP6000 color server is provided with three network printers, **ProcessPrint**, **ProcessStore** and **SpoolStore**.

5. Select one of the network printers—for example, **ProcessPrint**—and then click **OK**.

6. Select **Yes** if you want to set this printer as the default printer on your computer. Otherwise, select **No**.

7. Click **Next**.

8. Click **Finish** to complete the setup.
   The Spire CXP6000 color server network printer is now successfully installed.

To define a network printer using the network neighborhood:

1. Locate the required network printer.

2. Double-click the network printer icon.

3. In the message that appears, click **Yes** to setup the printer.

   The network printer is defined on your Windows client workstation.

4. From the **Printers** list, select the Spire CXP6000 color server, and then click **Next**.

Note: To install additional network printers, repeat the process.
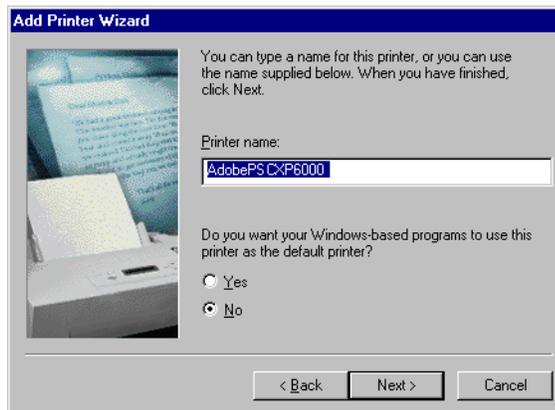
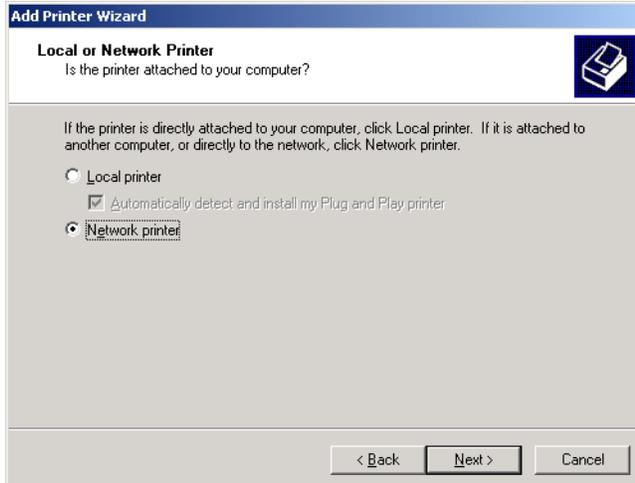## Defining a Printer - Windows 98

Note: When you add a new Spire CXP6000 color server network printer to a client workstation, there is no need to install the Spire CXP6000 color server PPD file and Adobe PostScript printer driver separately. They are installed automatically in the Windows Add Printer wizard.

To define a network printer using the Windows Add Printer wizard:

1. On your Windows desktop, click the **Start** button, and follow the path **Settings**>**Printers**.

2. Double-click the **Add Printer** icon.

   The Add Printer wizard appears.
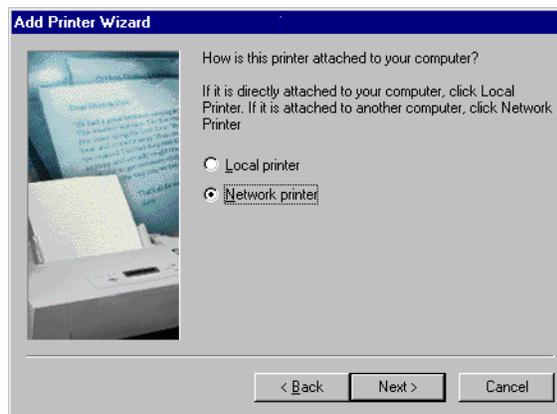
3. Click **Next**.

4. Select **Network printer**, and then click **Next**.
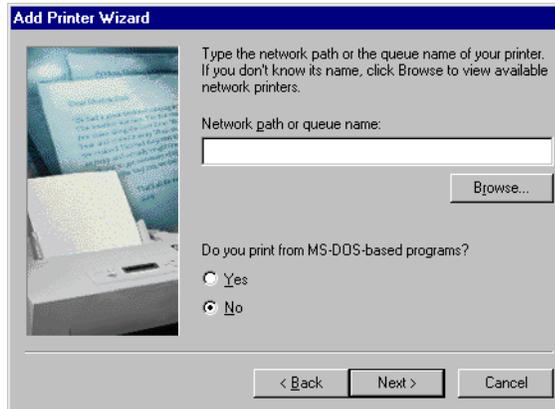
5. Type the network path or the queue name of your printer
    Or:
    If you don't know the exact name, click **Browse** to view the available network printers.

    a. Select one of the network printers—for example, **ProcessPrint**.

    b. Click **OK**.

6. Click **Next**.

7. Select **Yes** if you want to set this printer as the default printer on your computer. Otherwise, select **No**.

8. Click **Next**.

9. Select **Yes** to print a test page.

    The Spire CXP6000 color server network printer is now successfully installed.

10. Click **Finish** to complete the setup.

To define a network printer using the network neighborhood:

1. Browse to the required network printer.

2. Double-click the network printer icon.

    The Add Printer wizard appears and the network printer is defined on your Windows client workstation.

Note: To install additional network printers, repeat the process.

Defining a Printer - Windows 2000 and Windows ME

Note: When you add a new Spire CXP6000 color server network printer to a client workstation, there is no need to install the Spire CXP6000 color server PPD file and Adobe PostScript printer driver separately. They are installed automatically in the Windows Add Printer wizard.

To define a network printer using the Windows Add Printer wizard:

1. On your Windows desktop, click the **Start** button and follow the path **Settings**>**Printers**.
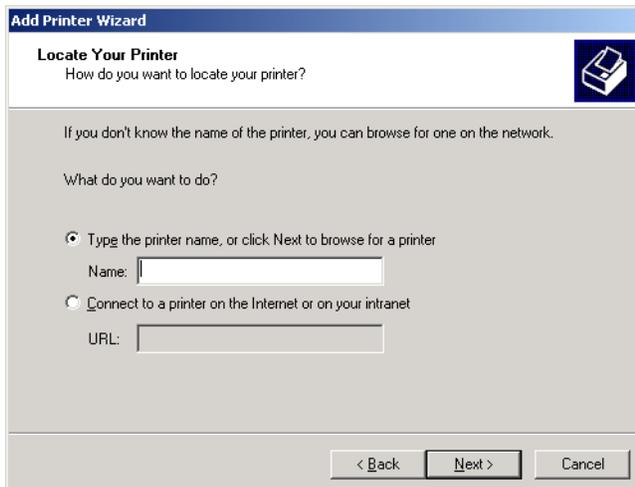
2. Double-click the **Add Printer** icon.

    The Add Printer wizard appears.

3.   Click Next.

4.   Select **Network printer.**

5.   Click **Next.**

6.   Select **Type the printer name, or click Next to browse for a printer.**

7. In the **Name** box, type the exact name of the printer.
    Or:
    Click **Next** to browse for a printer.

8. Select one of the network printers—for example, **ProcessPrint**.

9. Click **Next**.

10. Select **Yes** if you want to set this printer as the default printer on your
    computer. Otherwise, select **No**.

11. Click **Next**.

12. Click **Finish** to complete the setup.

    The Spire CXP6000 color server network printer is now successfully
    installed.

To define a network printer using the network neighborhood:

1. Locate the required network printer.

2. Double-click the network printer icon.

3. In the message that appears, click **Yes** to setup the printer.

    The network printer is defined on your Windows client workstation.

**Note:** To install additional network printers, repeat the process.

Defining a Printer - Windows XP

Note: When you add a new Spire CXP6000 color server network printer to a client workstation, there is no need to install the Spire CXP6000 color server PPD file and Adobe PostScript printer driver separately. They are installed automatically in the Windows Add Printer wizard.

To define a network printer using the Windows Add Printer wizard:

1. On your Windows desktop, click the **Start** button and select **Printers and Faxes.**
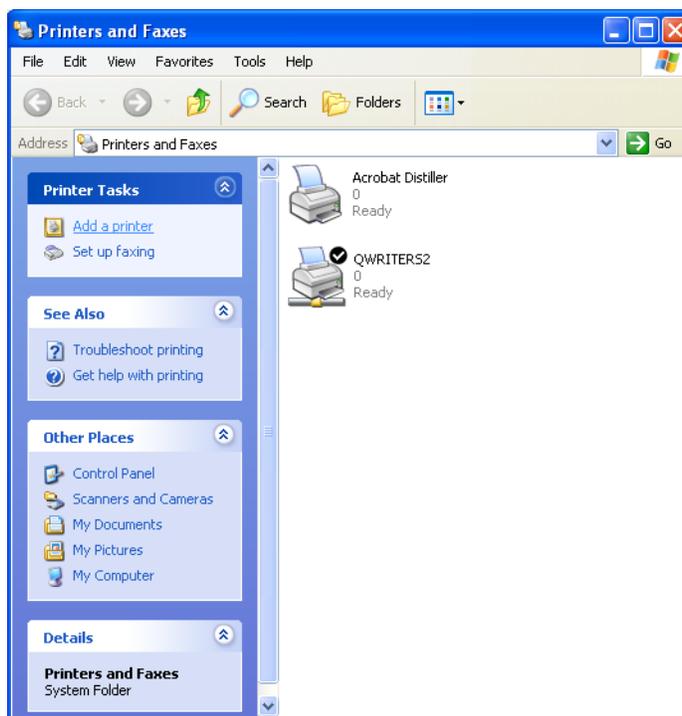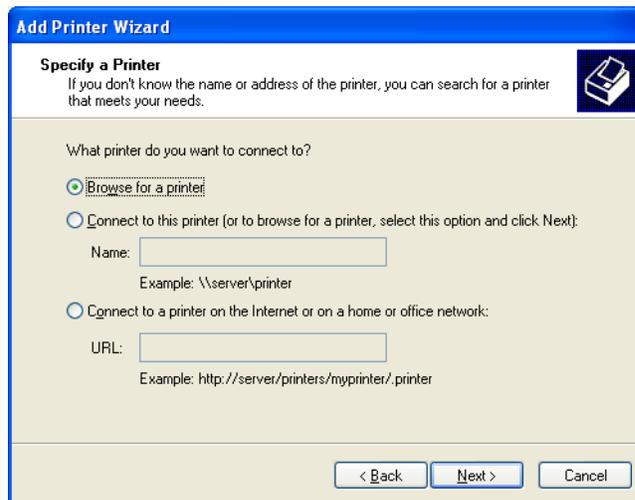

2. In the **Printer Tasks** area, select **Add a printer.**

    The Add Printer wizard appears.
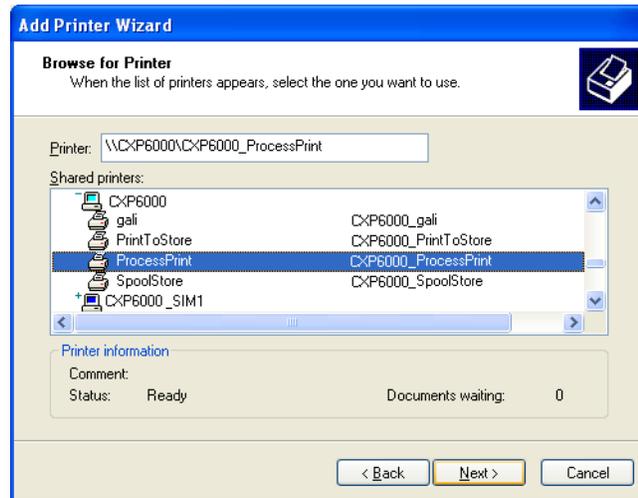
3. Click **Next.**

4. Select **A network printer, or a printer attached to another computer** and click **Next**.

5. Select **Browse for a printer,** and click **Next.**

6. Locate the Spire CXP6000 color server and double-click it to display the list of network printers.

7. Select the printer you wish to setup, and click **Next**.

8. Select **Yes** if you want to set this printer as the default printer on your computer. Otherwise, select **No**.

9. Click **Next**.

10. Click **Finish** to close the wizard.

    The Spire CXP6000 color server network printer is added to your printer list.

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

1. Locate the required network printer.

2. Double-click on the network printer icon.

    The network printer is defined on your Windows client workstation.

**Note:** To install additional network printers, repeat the process

Creating PostScript Files on Windows

The following procedures describe how to create PostScript files using the Spire CXP6000 color server from the client workstation. This is useful when you are not connected to the Spire CXP6000 color server and you need to distribute jobs for printing on the Spire CXP6000 color server remotely or on external media. These files can then be imported to the Spire CXP6000 color server for printing.

To create a PostScript File:

1. Open a job in your DTP application —for example, Microsoft Word— and from the **File** menu, select **Print**.
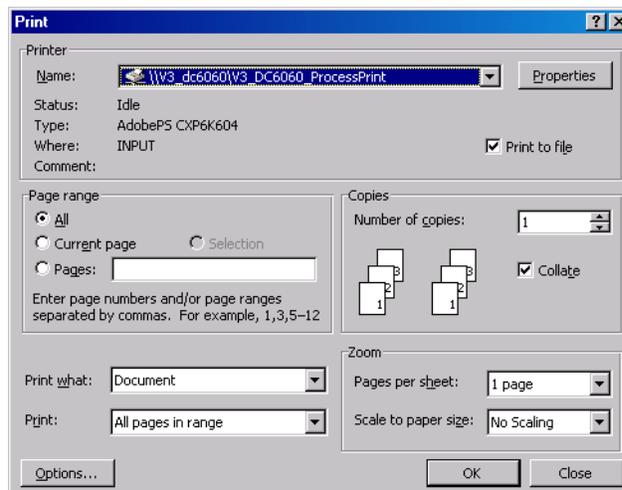
2. Select the **Print to File** check box.

3. Click **OK**.

    A PostScript file is created.
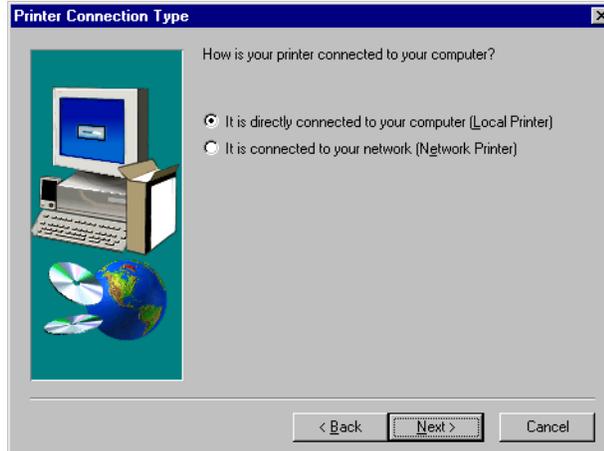
To define a print to file printer locally:

1. Start the Adobe PostScript Driver application (the application is available on CD#3 in the **Utilities** folder, or at Adobe's Web site at http://www.adobe.com/support/downloads/main.html).
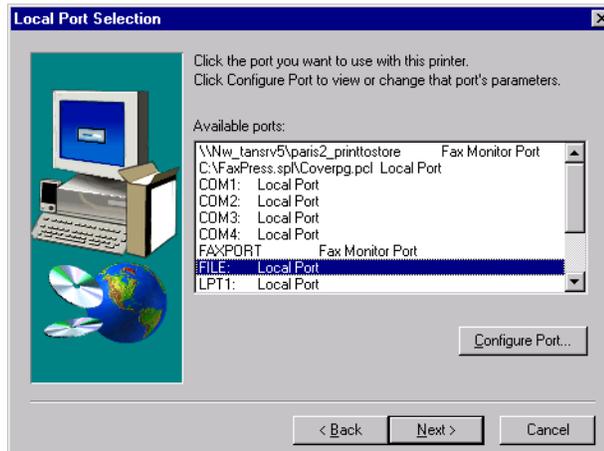
    The Welcome window appears.

2. Click **Next**.

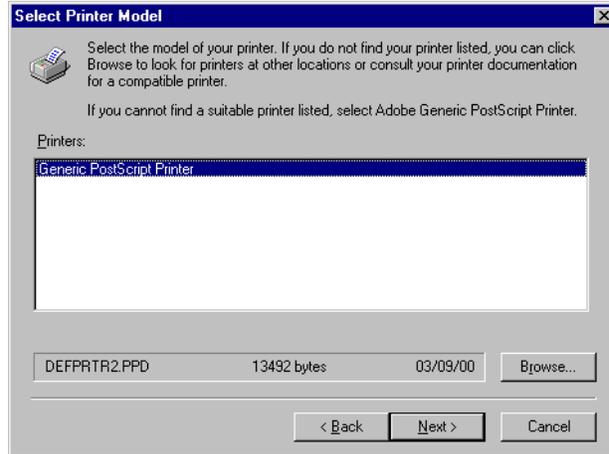   The End User Agreement window appears.

3. Read the license agreement and click **Accept.**

4. Select **It is directly connected to your computer (Local Printer)** and click **Next.**

5. In the **Available ports** list, select **File: Local Port** and click **Next**.

The next step is to configure the printer with the Spire CXP6000 color server PPD file. The Spire CXP6000 color server PPD file is located in a shared folder on the Spire CXP6000 color server.

Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.

6. Click **Browse**.
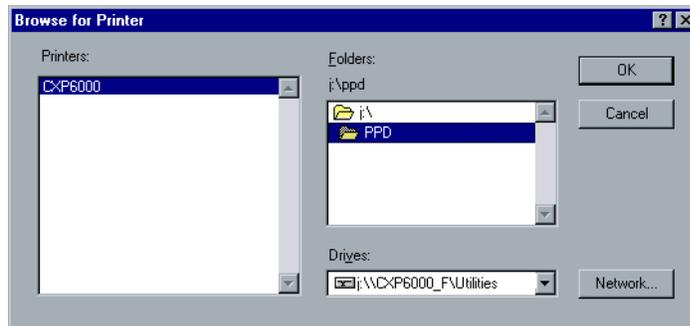
7. Click the **Network** button and browse to your Spire CXP6000 color server.

8. Locate the Spire CXP6000 color server, and double-click the server icon. Then, double-click the **Utilities** folder.

9. Click **OK**.

10. Double-click the **PPD** folder, and select the Spire CXP6000 color server PPD file name,
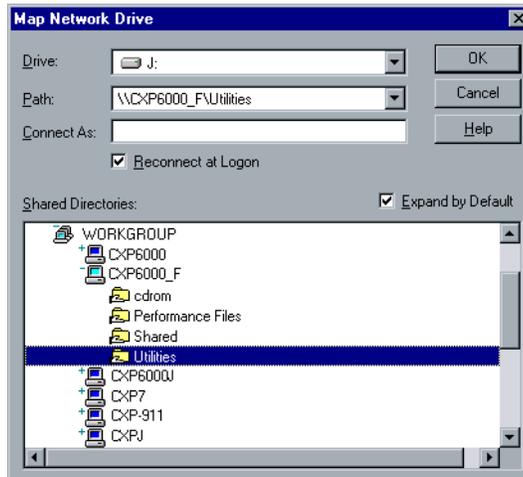
Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.
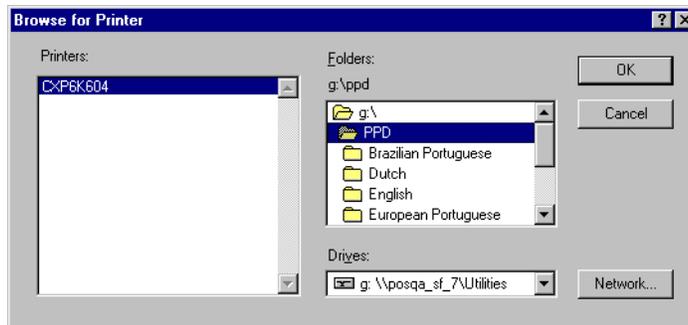
11. Click **OK**.
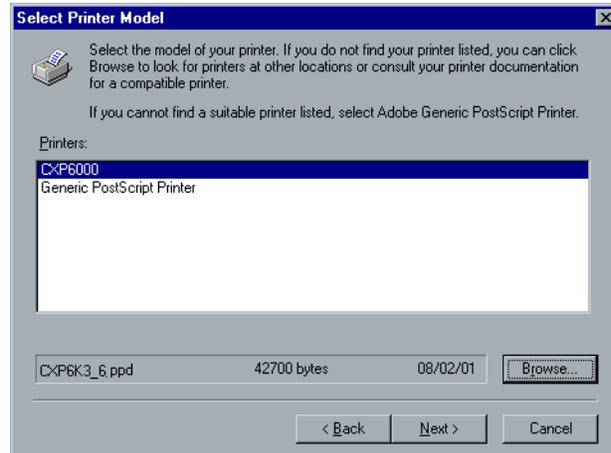
12. In the **Printers** list, select the Spire CXP6000 color server printer, and then click **Next**.

13. In the Sharing dialog box, select **Not Shared,** and then click **Next**.
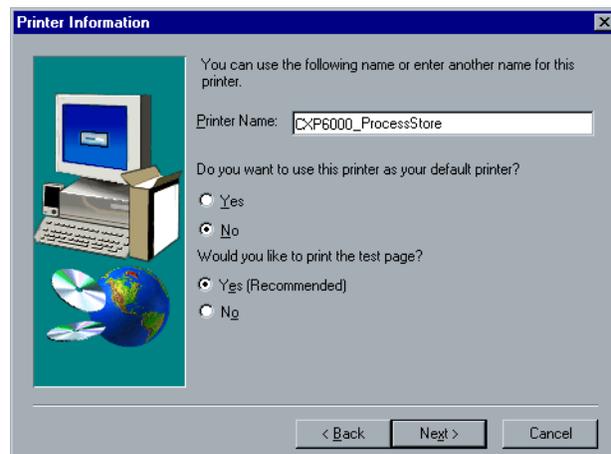
14. Type a name for the printer which you will be able to identify on the client workstation—for example **CXP6000_ProcessStore**.

15. Select **Yes (Recommended)** if you want to print a test page or select **No**, and then click **Next**.

16. Click **Install** to install the print to file printer with the Spire CXP6000 color server PPD file. When prompted to configure the printer, click **Yes**, and then click **Next**.

17. Select **Yes**.

18. Click **Next**.
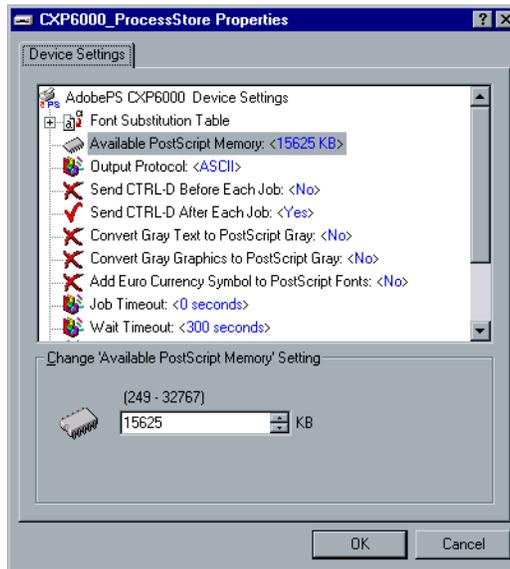
19. Configure the printer according to your specifications, and then click **OK**.

20. Click **Finish** to complete the setup.

    The printer appears in the Printers window.

    You are now ready to print *.ps and *.prn files. Once printed, these files can be imported and printed on the Spire CXP6000 color server.

Copying the PPD File from Windows

You need to use the Spire CXP6000 color server PPD file to create PostScript files to send to the Spire CXP6000 color server. Therefore, you should copy and distribute the Spire CXP6000 color server PPD file to the customer.

To copy the PPD file from the Spire CXP6000 color server for distribution on a disk or by e-mail:

1. On the Windows desktop, double-click the **Network Neighborhood** icon.

2. Locate and select the Spire CXP6000 color server station—for example, **V3_DC6060**.

3. Double-click the **Utilities** folder, and then double-click the **PPD** folder.

4. Double-click the folder for the desired language—for example, **English**.

5. Copy the PPD file to a disk or send it by e-mail to the customer.

Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.
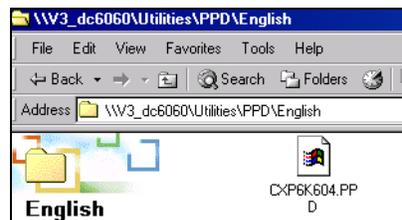
Printing From Windows

1. Open the file you would like to print in the corresponding application—for example, open a PDF file in Adobe Acrobat.

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

   The Print window appears.

3. From the **Name** list, select the required Spire CXP6000 color server
    network printer—for example, **Spire_ProcessPrint**.

    For more information about installing Spire CXP6000 color server network
    printers on client workstations, see *Working From Windows Client
    Workstations* on page 48.
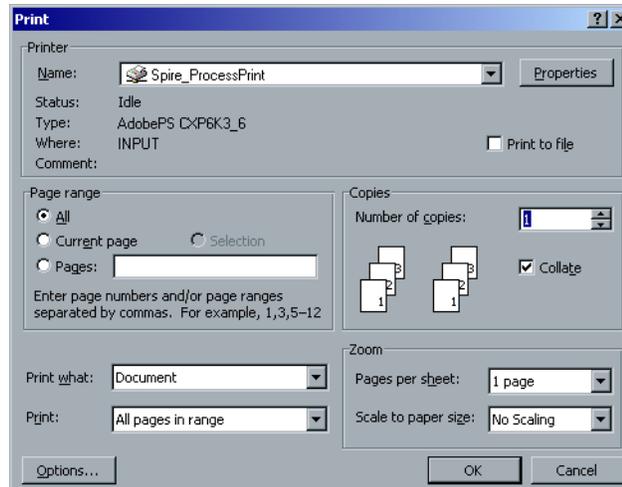
4. If required, click the **Properties** button and modify the job
    parameters.

    Notes:

    •   Unless the **Override PPD Parameters** option was selected in the
        virtual printer, any changes to the printer parameters override the
        parameters of the selected virtual printer.

    •   **Printer's Default** indicates that the value is taken from the settings of
        the selected virtual printer on the Spire CXP6000 color server.

5. Click **OK.**

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

    The file is sent to the Spire CXP6000 color server.

Working From Macintosh Client Workstations

This section describes how to define a Spire CXP6000 color server network printer for Macintosh client workstations. The CXP6000 Color Server can print to Macintosh client workstations running Mac OS 9 and Mac OS X (10.2).

You can also submit jobs using the CXP6000 Color Server virtual printers over a TCP/IP protocol. This connection enables a significantly higher spooling speed.

For more information about TCP/IP protocol, see *Spire Over TCP/IP* on page 110.

Defining a Printer on Macintosh Client Workstations

Copying the Spire CXP6000 color server PPD File for Mac OS 9

Before setting up a Spire CXP6000 color server network printer, you need to install the Spire CXP6000 color server PPD file on your Macintosh client workstation.

1. From the **Apple** menu, select **Chooser**.

2. Select **AppleShare**, and then locate the Spire CXP6000 color server on the network.
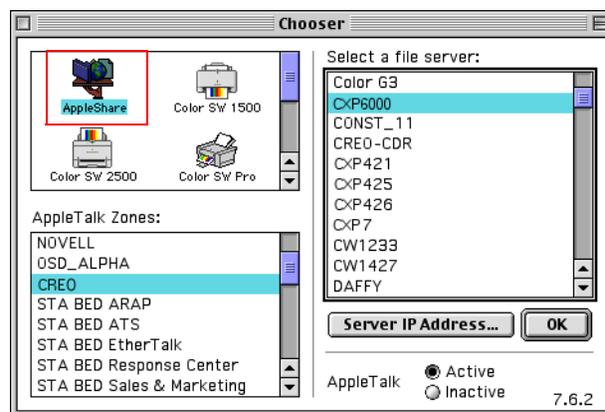
3. Click **OK**.

The Login window appears.

4. Select the **Guest** option, and then click **Connect**.

    The corresponding Spire CXP6000 color server window appears.
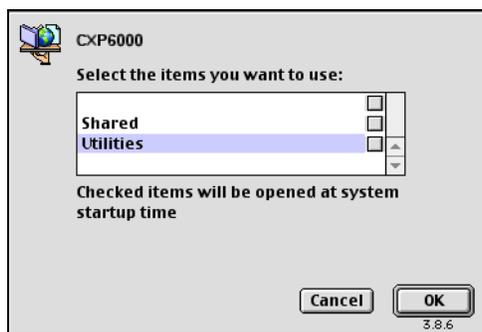
5. Select **Utilities**, and then click **OK**.

    Note: Do not select the **Utilities** check box. If you do, **Utilities** will mount with every reboot.

6. On the desktop, double-click the **Utilities** volume.

    The Utilities window appears.

7. Double-click the **PPD** folder, and then double-click the folder for the desired language—for example, **English**.
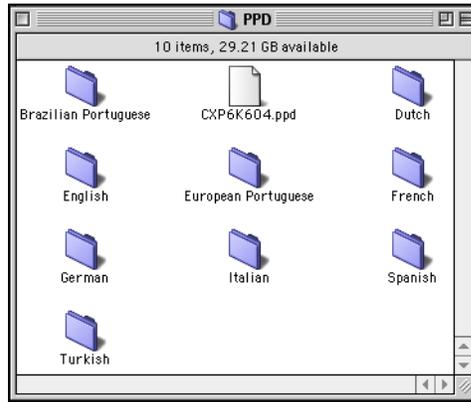
8. Copy the PPD file to the **System Folder**>**Extensions**>**Printer Descriptions** folder.

Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060, **CXP6K524** for Xerox DocuColor 5252, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Color Presses.

The Spire CXP6000 color server PPD file is now installed in the **Printer Descriptions** folder. It is ready to be configured with one of the Spire CXP6000 color server network printers.

Setting the Network Printer for Mac OS 9

1. Make sure that the Spire CXP6000 color server PPD file has been copied to the **Printer Descriptions** folder on your client workstation.

For more information about copying the PPD file, see *Copying the Spire CXP6000 color server PPD File for Mac OS 9* on page 67.

2. From the **Apple** menu, select **Chooser.**

3. Select **LaserWriter** and then locate the Spire CXP6000 color server on the network.
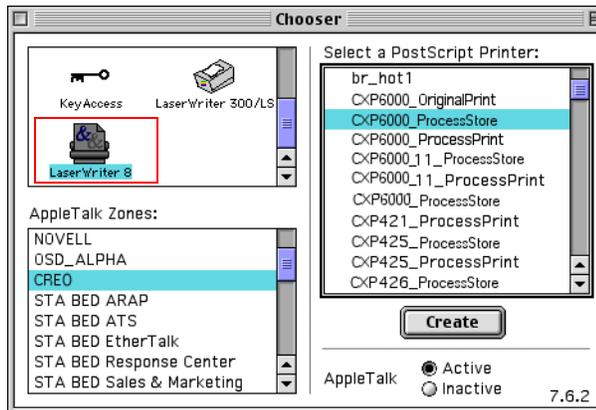
4. Select one of the Spire CXP6000 color server's network printers—for example, **CXP6000_ProcessStore**—and click **Create**.
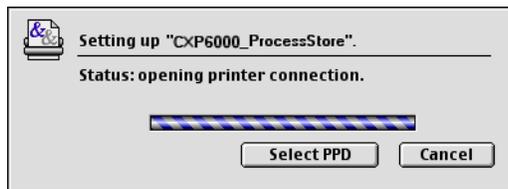
The system automatically locates the Spire CXP6000 color server PPD file and configures the printer as a Spire CXP6000 color server network printer.
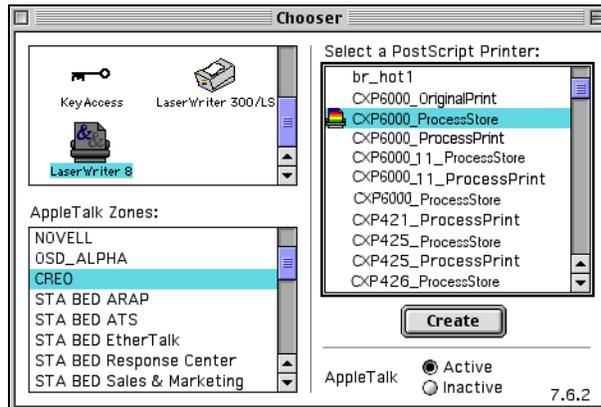
If you have the Desktop Printer Spooler extension enabled, a printer icon appears on the desktop.

Note: Use this icon when you want to download PostScript files to the Spire CXP6000 color server.

Copying the Spire CXP6000 Color Server PPD File for Mac OS X (10.2)

Before you define a network printer you need to install the Spire CXP6000 color server PPD file on your Macintosh client workstation.

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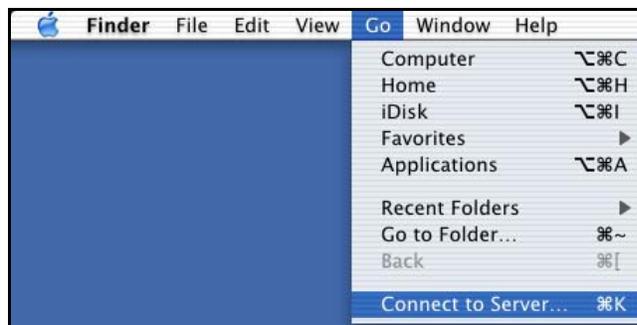
The Connect to Server window appears.

2. Locate the desired Spire CXP6000 color server, and then click
    Connect.

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

4. Select the **CXP6000_Utilities** folder, and then click **OK**.
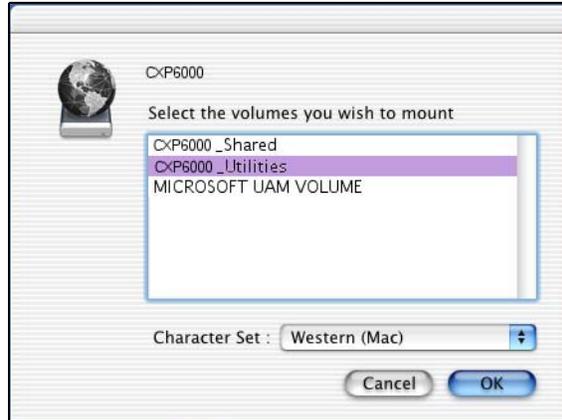
The **CXP6000_Utilities** folder is mounted on your desktop.

5. Double-click the **CXP6000_Utilities** folder on your desktop.

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

7. Copy the PPD file from the Spire CXP6000 color server to your Macintosh hard disk.
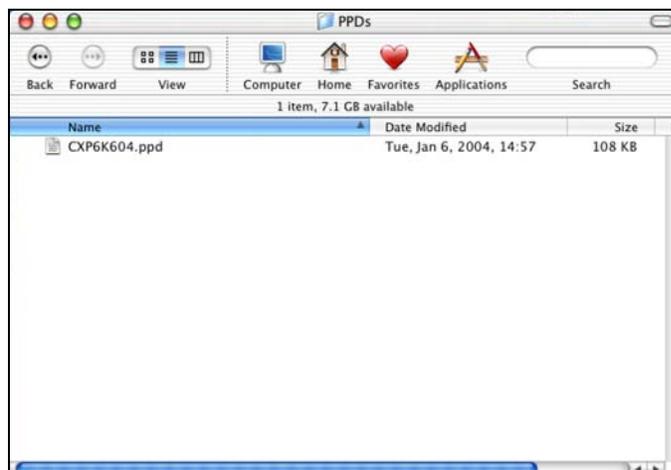
Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.

Tip: It is recommended that you copy the PPD file by dragging it from the Spire CXP6000 color server to the **Library**>**Printers>PPDs** folder on your Macintosh.

Setting the Network Printer for Mac OS X (10.2)

1. Copy the Spire CXP6000 color server PPD file to the **Library**>**Printers**>**PPDs** folder on your client workstation.

   For more information about copying the PPD file, see *Copying the Spire CXP6000 Color Server PPD File for Mac OS X (10.2)* on page 71.

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

3. Open the **Utilities** folder and double-click the **Print Center** icon.
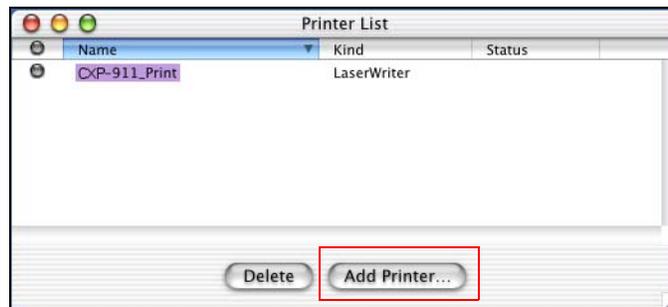
4. Click **Add Printer.**
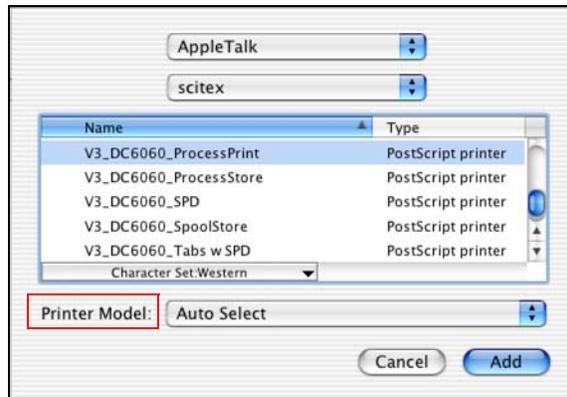
5. Select **AppleTalk** as the connection type, and then locate the Spire CXP6000 color server.

Note: If you would like to use the LPR protocol instead, see the procedure *Setting up an LPR Printer in Macintosh OS X (10.2)* on page 108.

6. In the **Printer Model** list, select **Other.**

7. Locate the folder to which you have copied the PPD file, and then select the file.

Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.
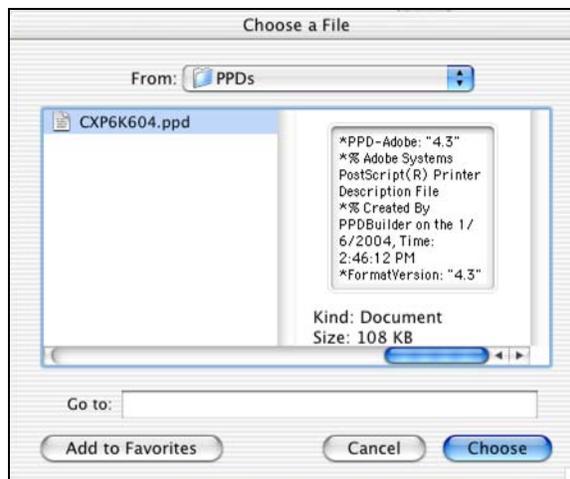
8. Click **Choose** to assign the PPD file to the selected Spire CXP6000 color server network printer.
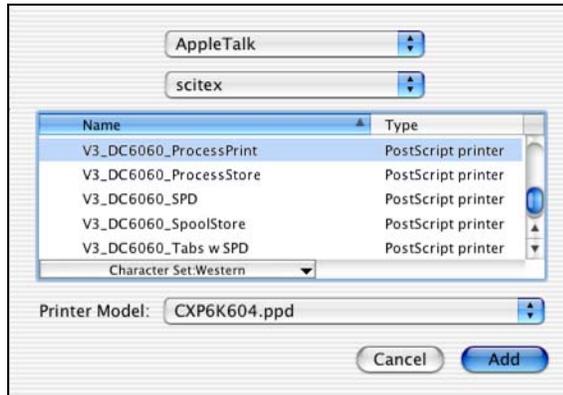
9. Click **Add** to add the new printer to the printer list.

Printing from a Macintosh

1. Open the file you would like to print, in the corresponding application—for example, open a Quark file.

2. From the **File** menu, select **Print**.
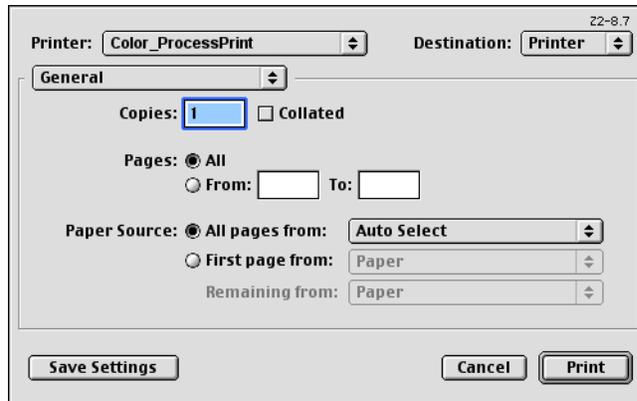
3. From the **Printer** list, select the required printer—for example,
    Color_ProcessPrint.

For more information about installing the Spire CXP6000 color server
network printers on client workstations, see *Copying the Spire CXP6000
color server PPD File for Mac OS 9* on page 67 and *Setting the Network
Printer for Mac OS X (10.2)* on page 74.

4. To set job parameters, click **General** and from the pop-up menu, select
    one of the **Printer Specific Options**.

    A window similar to the one shown below appears.
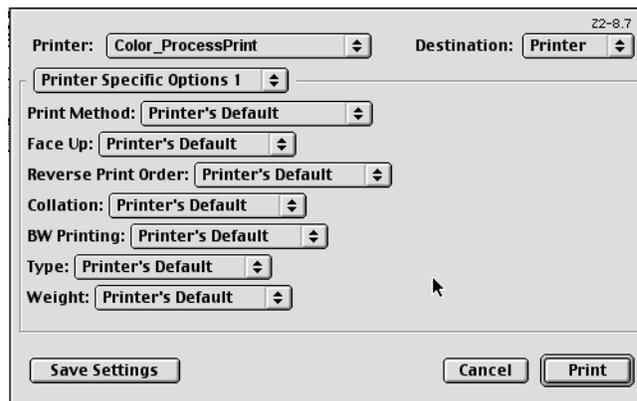
5. Adjust the printer options as required.

    Notes:

    • The **Printer's Default** option indicates that the value is taken from the
      virtual printer that is currently selected.

    • The PPD parameters are divided into five **Printer Specific Options** in
      the drop-down menu.

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

    The file is sent to the Spire CXP6000 color server.

Spire Web Center

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

The Spire web center enables you to:

• View the status of jobs in the Spire queues, the Alerts window in its
  current state, and the printer system information

• Download remote client tools, utility applications, color profiles, and
  print drivers

• View Spire related documentation, such as release notes, Spire guides,
  frequently asked questions and answers, and other troubleshooting
  information

• Find links to related vendors or products

To connect to the web center from a client workstation:

Important: To connect to the Spire Web Center from a client workstation, you
must first enable the web connect service on the Spire CXP6000 color server. To
enable this service, select the Settings window>**Administration**>**Remote
Tools Setup**.

For more information about setting up the web connect service, see *Remote
Tools Setup* on page 411.

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

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

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

Important: If you would like to connect to the Spire CXP6000 color server from a Macintosh client workstation, contact your system administrator to add the Spire name to the DNS. This is required since Windows name resolution protocols are not supported in Macintosh. The DNS addition is required when clients go through a main server on the network.

The Spire CXP6000 color server Web Center appears.
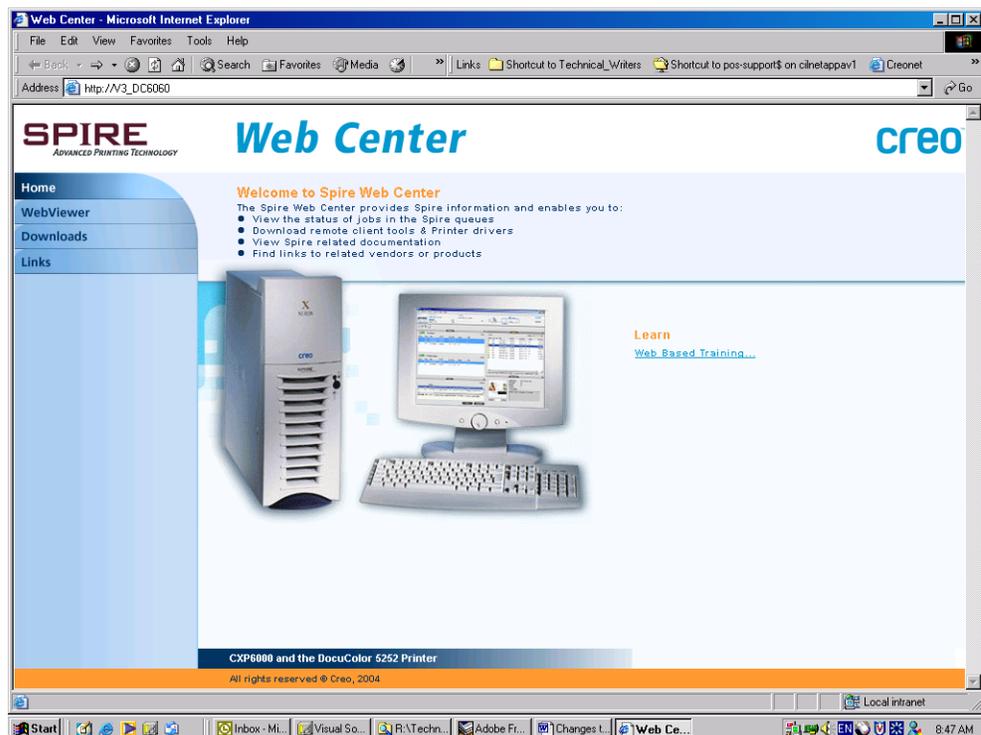
The Web Viewer

The Web Viewer page enables you to view the printer configuration and system information, the jobs that currently reside in the Spire CXP6000 color server Queues window and Storage window, and to view the alerts that currently appear in the Alerts 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.

The Queues tab

In the **Queues** tab you can view the jobs that are currently running in the Spire CXP6000 color server **Print Queue** and **Process Queue**.

The Storage tab

In the **Storage** tab you can view the Spire CXP6000 color server Storage window and the jobs that reside in this window.

The Alerts tab

In the **Alerts** tab you can view the Spire CXP6000 color server Alerts 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 Alerts window, edit the job parameters (PPD file), and then resend it for processing and printing on the Spire CXP6000 color server.
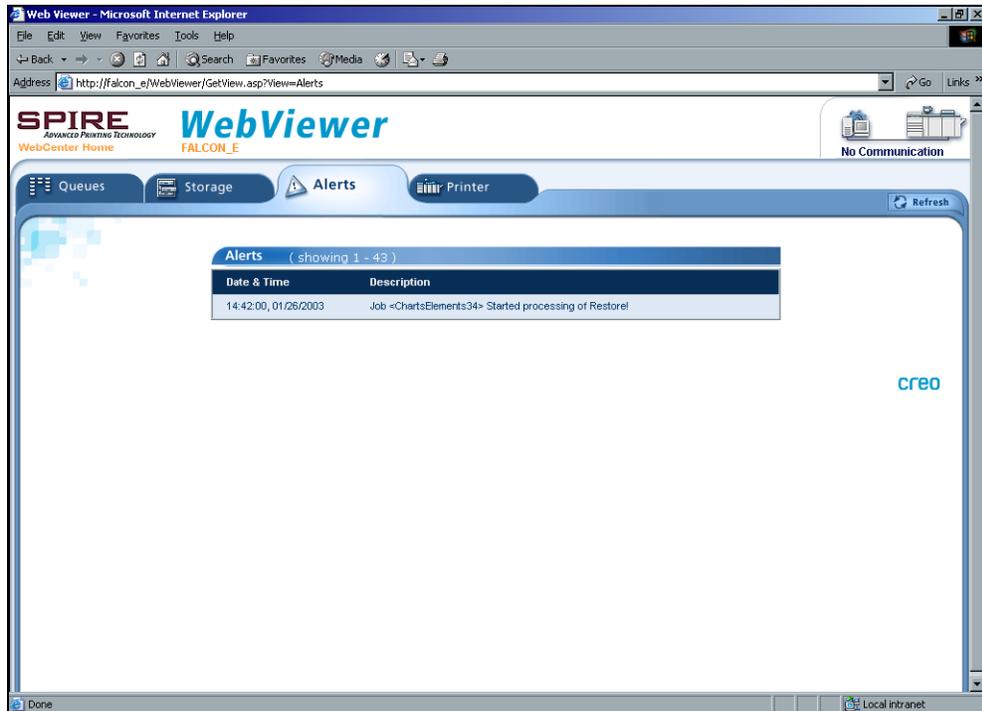
The Printer tab

In the **Printer** tab you can view the Spire CXP6000 color server system information.
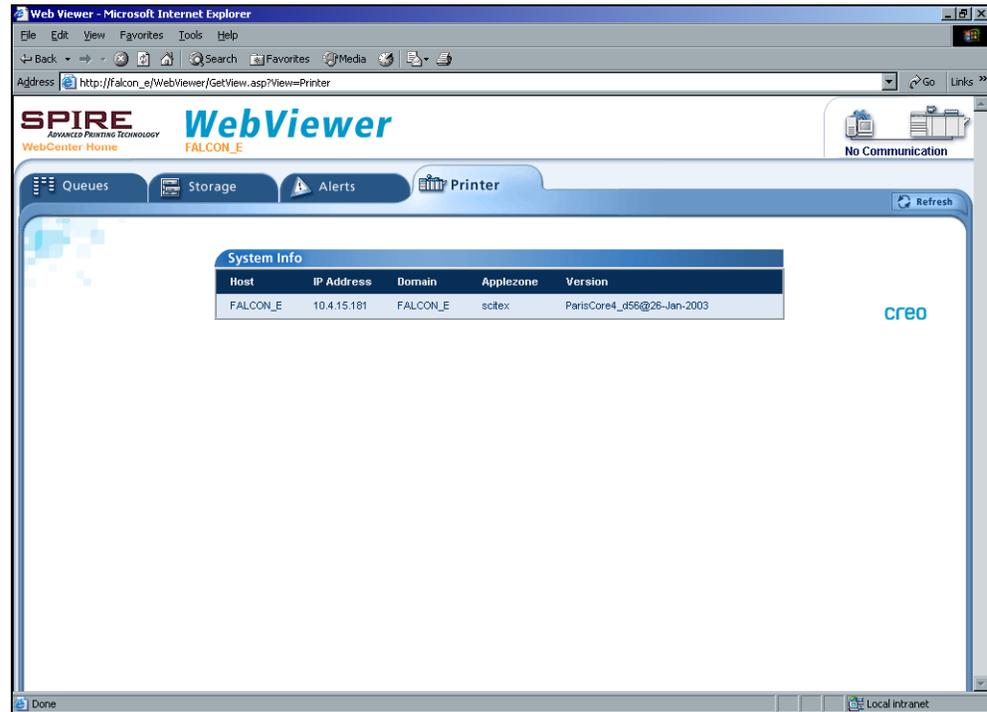
Web Viewer API

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

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

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

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

Downloads

The **Downloads** page enables you to access the Spire CXP6000 color server **Utilities** folder and download available tools and files for Windows and Macintosh client workstations—for example, the Spire CXP6000 color server PPD file.
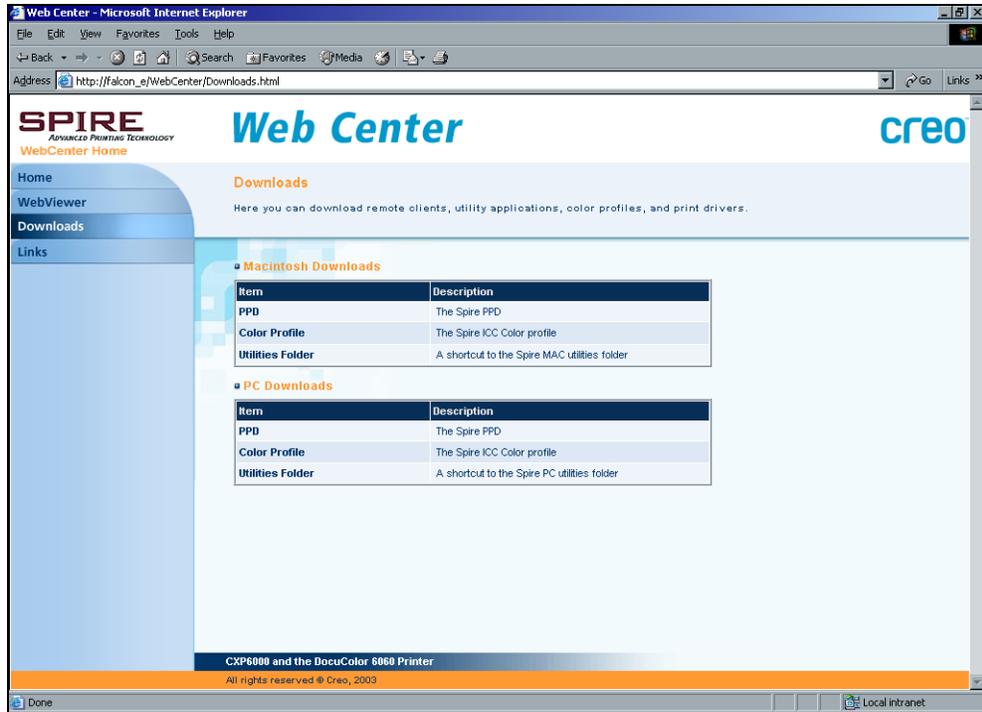
Links

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

Using Hot Folders

For every published Spire CXP6000 color server network printer that you define on a client workstation, a corresponding hot folder is automatically created in the Spire CXP6000 color server **D:\Hot Folders** folder. The Spire CXP6000 color server has three default hot folders, **HF_ProcessPrint**, **HF_ProcessStore**, and **HF_SpoolStore.** These hot folders correspond to the three default printers.

Each hot folder carries the virtual printer's name (HF_printer's name), see the following graphic.
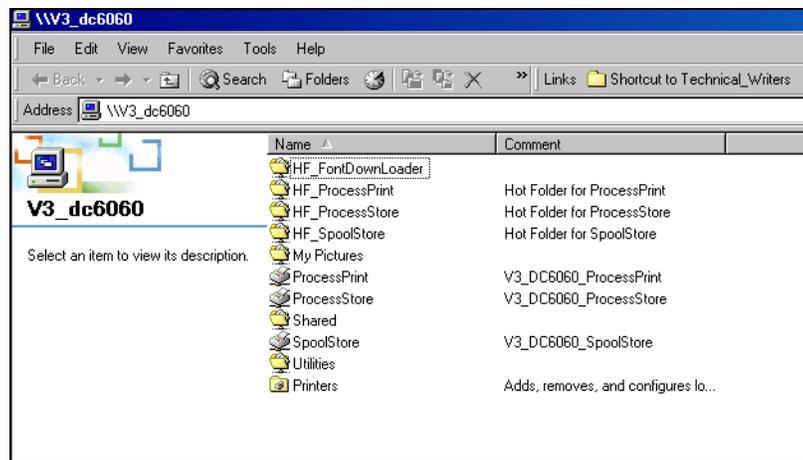
When you connect from a client workstation to the Spire CXP6000 color server over the network, you can use the hot folder to submit PDL jobs to the Spire CXP6000 color server. When you establish a connection, drag your jobs onto the required hot folder (according to the selected workflow).

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

Jobs that reside in the hot folder will automatically be submitted to the Spire CXP6000 color server through the corresponding virtual printer. Consequently, all of the virtual printer job parameters, inclusive of the workflow, will be applied to the job.

As soon as the job has been spooled to the Spire CXP6000 color server, it disappears from the hot folder and enters the Spire CXP6000 color server **Process Queue** or Storage window, according to the selected workflow.

Note: If you send files for printing through a hot folder while the Spire CXP6000 color server application is down, when the application restarts, the files that reside in hot folders will immediately be imported to the system.

Hot Folder File Formats

Hot folders may contain all PDL formats that are supported by the Spire CXP6000 color server, PS, PDF, EPS, PRN, VPS, VIPP, PPML, TIF, JPG and GAP.

Files with unsupported formats that are moved to a hot folder, will not be imported to the Spire CXP6000 color server and will remain in the hot folder.

Hot Folders and Brisque or Prinergy jobs (GAP Formats)

When you use hot folders to print GAP jobs, the process is automated and the job is converted to a PDF, which is displayed in the Spire CXP6000 color server queues. The PDF files can then be programmed and printed as any other PDF file.

For more information about supported GAP formats, see *Printing PrePress Files - GAP Files* on page 378.

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, Mac OS 9, and Macintosh OS X.

To print a job using a hot folder from Windows:

1. On your Windows desktop, double-click the **Network Neighborhood** icon.

2. Locate your Spire CXP6000 color server.

3. Double-click the Spire CXP6000 color server.

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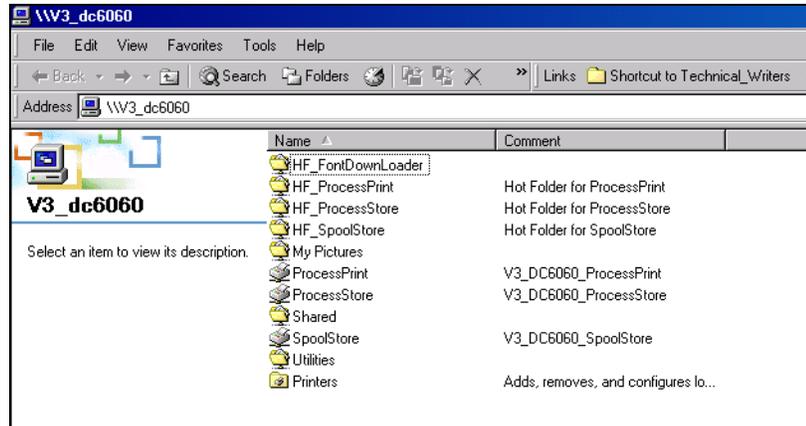
4. Double-click the required hot folder—for example, **HF_ProcessPrint**.

> **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 required 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 Macintosh OS 9:

1. Click the **Apple** menu, and then select **Chooser**.
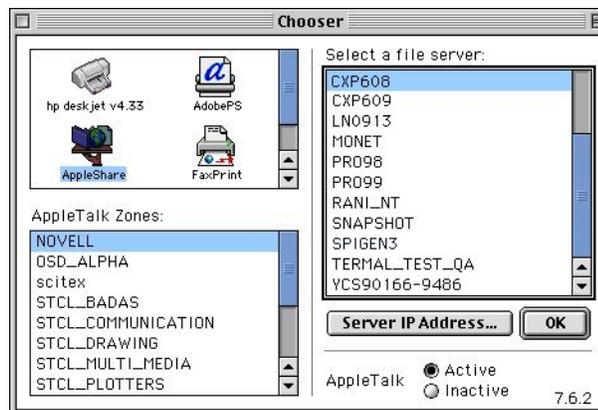
2. Locate the Spire CXP6000 color server on the network, and then click
    OK.

3. Select **Guest,** and then click **Connect**.
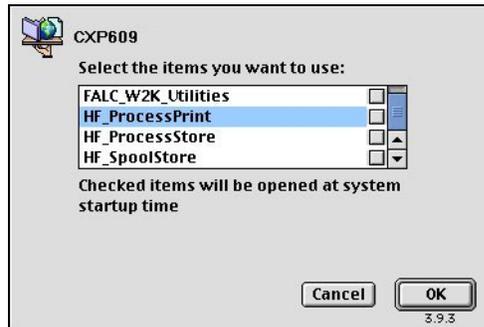
4. From the list, select the required hot folder—for example,
    HF_ProcessPrint—and then click **OK.**

    The hot folder icon appears on your desktop.You can now drag the
    required files to the hot folder icon. 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 Spire CXP6000 color server on the network, and click
    Connect.
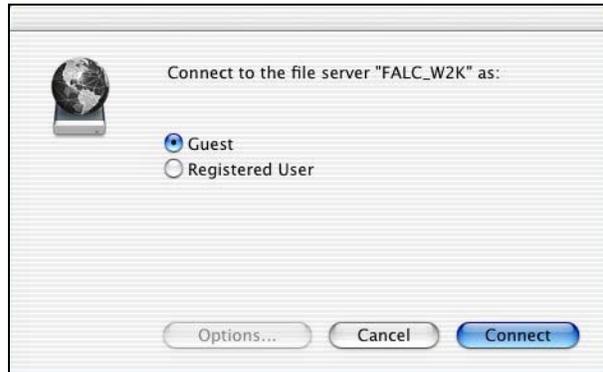
3. Select **Guest**, and then click **Connect**.

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

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

LPR Printing with the Spire CXP6000 Color Server

This section covers the procedures for setting up and configuring an LPR / TCP/IP printer from the following computers:

- Windows NT 4.0

- Windows 2000, Windows XP

- Windows NT, Windows 2000, Windows XP command Line

- Mac OS X (10.2)

- Mac OS 9 (using the Choose Spire Over IP utility)

- Linux

- AIX and UNIX command line

Setting up an LPR Printer in Windows NT 4.0

The following procedure describes how to configure an LPR printer in Windows NT 4.0 for printing to the Spire CXP6000 color server.

The following items must be installed and configured on a Windows NT 4.0 computer (server or client workstation version) before you begin:

1. TCP/IP protocol
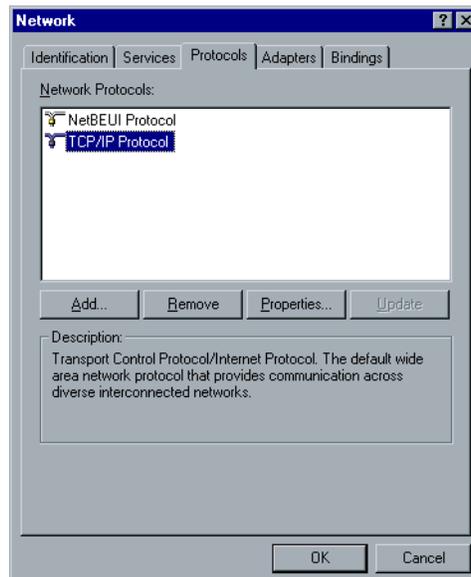
2.   Microsoft TCP/IP Printing service
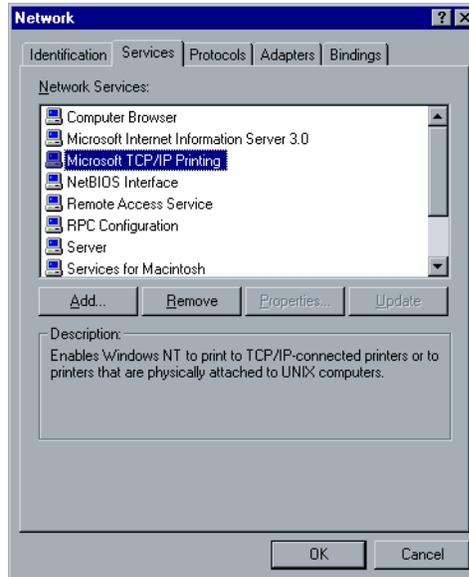
3.   Latest Adobe PostScript Printer Driver, you can install this from the Spire CXP6000 color server, **D:\utilties\Utilities\PC utilities**, or you can download the latest version free from http://www.adobe.com/support/downloads/main.html.

4.   Spire CXP6000 color server PPD file copied to your client workstation (the PPD file is located in the **D:\utilities\PPD** folder on the Spire CXP6000 color server).

To define an LPR Printer:

1.   From the **Start** menu on the Windows desktop, select **Settings**>**Printers**.

The Printers window appears.

2. From the **File** menu, select **Server Properties.**

3. Click the **Ports** tab, and then click **Add Port.**
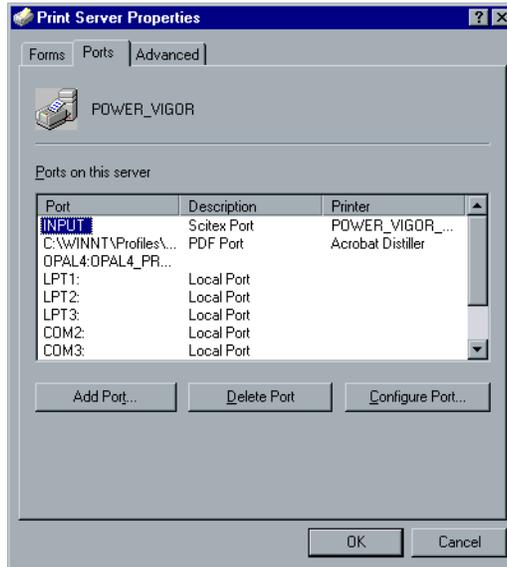
4. In the **Available Printer Ports** list, select **LPR Port**, and then click **New Port.**
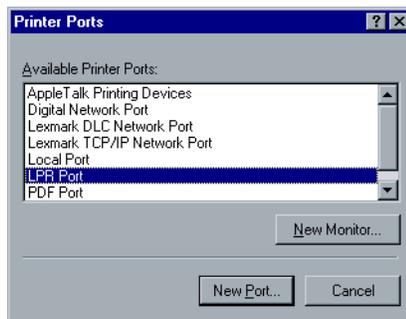
5. In the **Name or address of server providing lpd** box, type the exact
    name of the Spire CXP6000 color server (this box is case-sensitive)—
    for example, **OPAL5**.
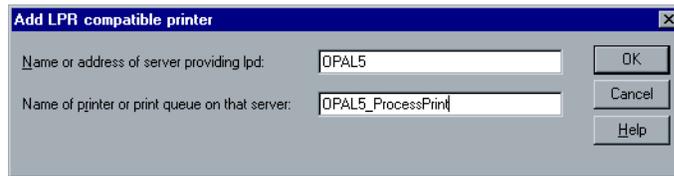
6. Type the exact name of the network printer from which you want to
    print. To view the exact name of the printer on the Spire CXP6000
    color server, select Resource Center>**Virtual Printers**. In this example
    the Printer name is **OPAL5_ProcessPrint**.

7. Click **OK**, and then close the Printer Ports window.

    The new LPR port is now defined on your computer.
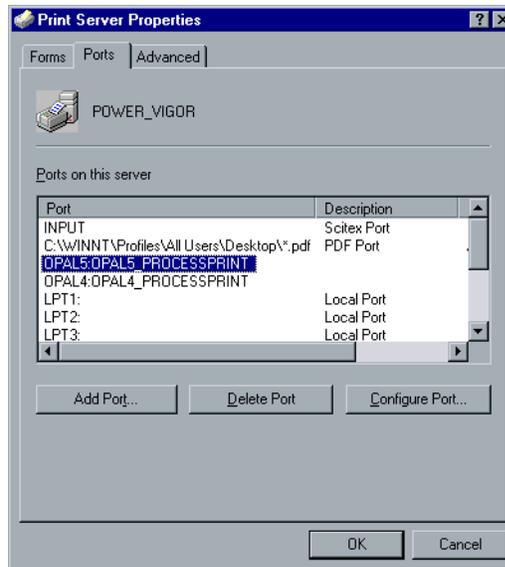
The next step is to define the LPR printer using the Adobe PostScript
Printer driver application, see the following procedure.

To define an LPR Printer using the Adobe PostScript Driver:

1. Start the Adobe PostScript Driver Application. You can install this from the Spire CXP6000 color server, **D:\utilties\Utilities\PC utilities**, or you can download the latest version free from http:// www.adobe.com/support/downloads/main.html.

2. In the Welcome window, click **Next**.

3. The End User License Agreement window appears, read the license agreement, and then click **Accept**.

4. Select **Install a new PostScript Printer**, and then click **Next**.

5. In the Printer Connection Type window, select **It is directly connected to your computer (Local Printer)**, and then click **Next**.

6. Select the LPR port you defined earlier—for example,
    OPAL5_ProcessPrint LPR—and then click **Next**.

    The next step is to configure the printer with the Spire CXP6000 color
    server PPD file. Make sure that you have copied this to your computer,
    or that you have access to the Spire CXP6000 color server on your
    network.

7. In the Select Printer Model window, click **Browse**.

    The Browse for Printer window appears.

8. Locate and select the Spire CXP6000 color server PPD file.

    Note: The Spire CXP6000 color server uses the following PPD file names,
    CXP6K604 for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for
    Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox
    DocuColor 2060 and 2045 Digital Color Presses.
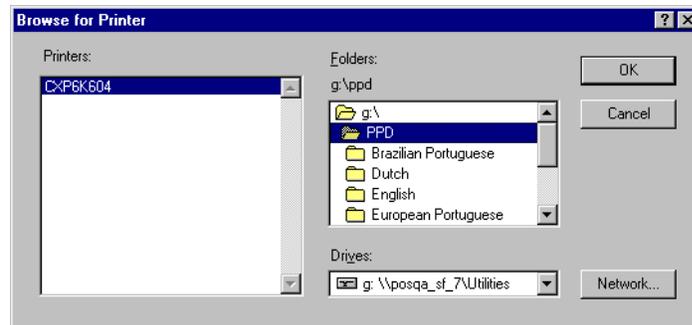
9. Click **OK**.

10. In the Select Printer Model window, select **CXP6K604**, and then click
    Next.

11. In the Sharing window, select **Not Shared**, and then click **Next**.
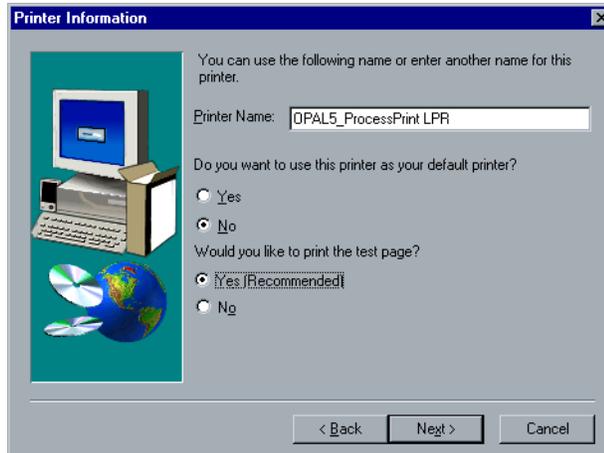
12. Type a name for the printer that you will be able to identify on your computer—for example, **OPAL5_ProcessPrint LPR**. You can also keep the original name of the printer.

13. To set this printer as the default printer on your computer, select **Yes**. Otherwise, select **No**.

14. Select **Yes (Recommended)** if you want to print a test page. Otherwise, select **No**.

15. Click **Next**.

16. In the Setup Information window, click **Install** to install the LPR printer with the Spire CXP6000 color server PPD file.

17. When prompted to configure the printer, click **Yes**.

18. Click **Next**.

19. In the Printer Configuration window, select **Yes** when prompted to configure the printer now.

20. Click **Next**.

The CXP6000 Properties window appears.

21. Configure the printer according to your specifications, and then click **OK**.

22. In the Setup Complete window, click **Finish** to complete the setup.

   The new LPR printer is now listed with your other printers on the Windows NT computer, and you are now ready to print to the Spire CXP6000 color server using the LPR.

Setting up an LPR Printer in Windows 2000 and Windows XP

The following procedure describes how to configure an LPR printer in Windows 2000 and Windows XP for printing to the Spire CXP6000 color server.

The following items must be installed and configured on the Windows 2000 and Windows XP computer before you begin:

1. TCP/IP protocol

2. Latest Adobe PostScript Printer Driver, you can install this from the Spire CXP6000 color server, **D:\utilties\Utilities\PC utilities,** or you can download the latest version free from http://www.adobe.com/support/downloads/main.html.

3. Spire CXP6000 color server PPD file copied to your client workstation (the PPD file is located on the Spire CXP6000 color server in the **D:\utilities\PPD** folder).

**To define an LPR Printer:**

1. From the **Start** menu on the Windows desktop, select **Settings**>**Printers**.

   The Printers window appears.

2. From the **File** menu, select **Server Properties**.

   The Print Server Properties window appears.

3. Click the **Ports** tab, and then click **Add Port**.
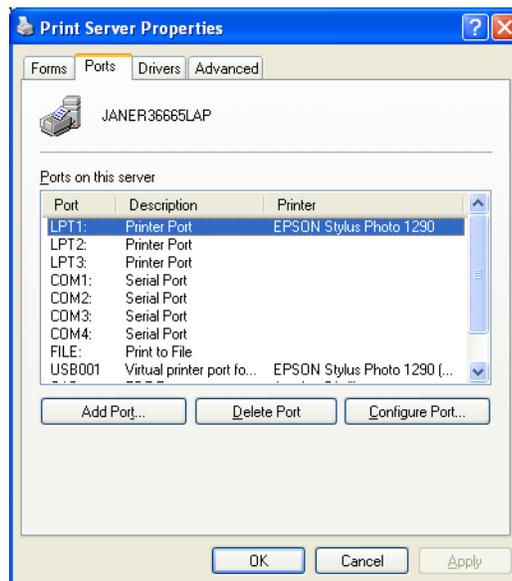
4. In the **Available Printer Ports** list, select **Standard TCP/IP Port**, and then click **New Port.**
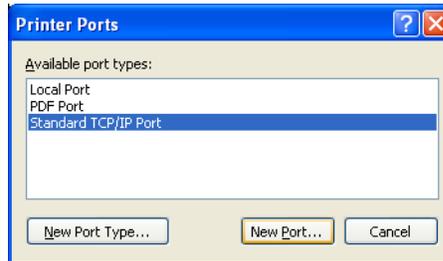
The Add Printer wizard screen appears.

5. Click **Next.**

    The **Add Port** screen appears.
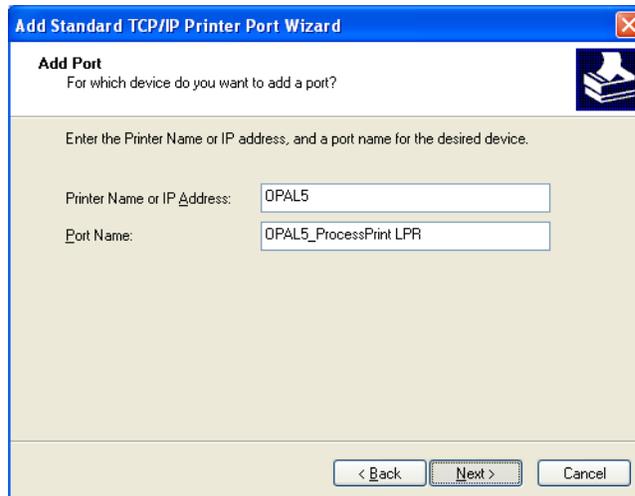
6. In the **Printer Name or IP Address** box, type the exact name of the Spire CXP6000 color server (this box is case-sensitive)—for example, **OPAL5.**

7. In the **Port Name** box, type a name for the printer that you will be able to identify on your computer—for example, **OPAL5ProcessPrint LPR.**

8. Click **Next.**

The **Additional Port Information Required** screen appears.
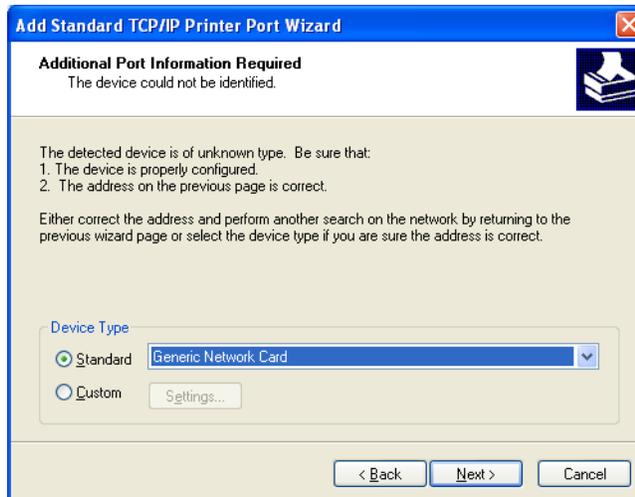
9. In the **Device Type** area, select **Custom**, and then click **Settings**.

    The **Configure Standard TCP/IP Port Monitor** screen appears.
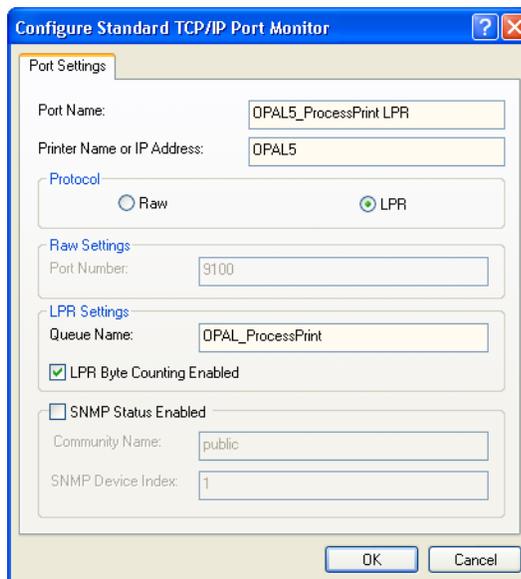
10. Select the following options:

- **Protocol:** Select **LPR**

- **LPR Settings:**

  - **Queue Name:** Type the exact name of the network printer you want to print to (you can view the exact name of the printer on the Spire CXP6000 color server under Resource Center>**Virtual Printers**). In this example the Printer name is **OPAL5_ProcessPrint**.

  - **LPR Byte Counting Enabled:** Select this check box

11. Click **OK**, and then click **Next**.

12. Click **Finish**.

13. In the Printer Ports window, click **Close**.

    The new Standard TCP/IP Printer Port is now defined on your computer.
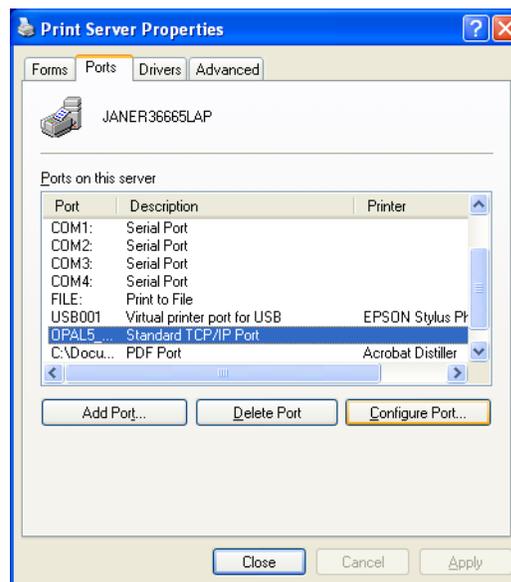
The next step is to define the TCP/IP Printer using the Adobe PostScript Printer Driver application, see the following procedure.

To define an LPR Printer using the Adobe PostScript Driver:

1. Start the Adobe PostScript Driver Application. You can install this from the Spire CXP6000 color server, **D:\utilties\Utilities\PC utilities,** or you can download the latest version free from http://www.adobe.com/support/downloads/main.html.

2. In the Welcome window, click **Next**.

3. The End User License Agreement window appears, read the license agreement, and then click **Accept**.

4. Select **Install a new PostScript Printer,** and then click **Next**.

5. In the Printer Connection Type window, select **It is directly connect to your computer (Local Printer)**, and then click **Next**.
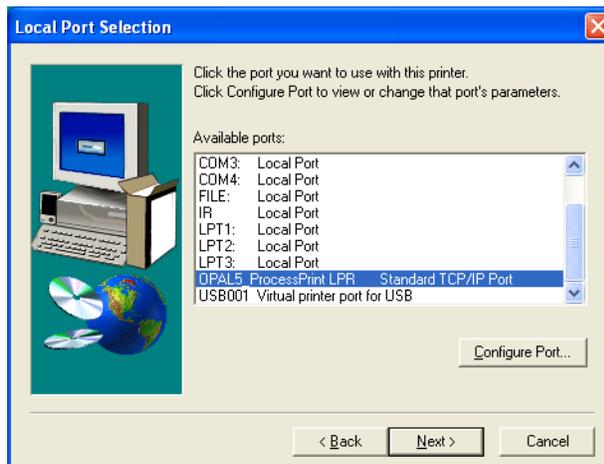
6. In the **Available ports** area, select the Standard TCP/IP port you defined earlier on—for example, **OPAL5_ProcessPrint LPR**—and then click **Next**.

    The next step is to configure the printer with the Spire CXP6000 color server PPD file. Make sure that you have copied this to your computer, or that you have access to the Spire CXP6000 color server on your network.

7. In the Select Printer Model dialog box, click **Browse**.

    The Browse for Printer dialog box appears.

8. Locate and select the Spire CXP6000 color server PPD file.

Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.
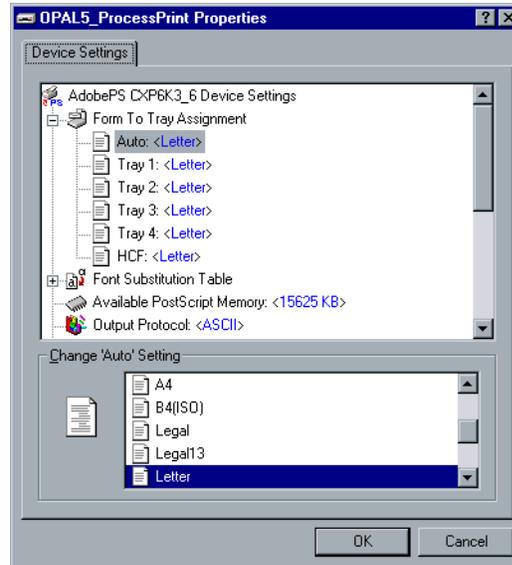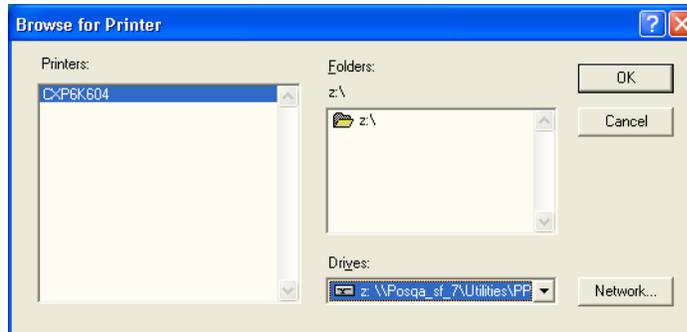

9. Click **OK**.

10. In the Select Printer Model window, select the **CXP6K604**, and then click **Next**.

11. In the Sharing window, select **Not Shared,** and then click **Next**.
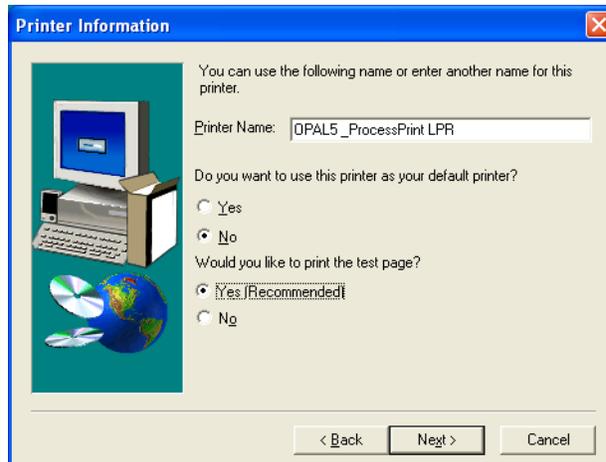
12. In the **Printer Name** box, type a name for the printer that you will be able to identify on your computer—for example, **OPAL5_ProcessPrint LPR**. You can also keep the original name of the printer.

13. Select **Yes,** if you want to set this printer as the default printer on your computer. Otherwise, select **No**.

14. Select **Yes (Recommended)** if you want to print a test page. Otherwise, select **No.**

15. Click **Next**.

16. In the Setup Information window, click **Install**.

    This installs the LPR printer with the Spire CXP6000 color server PPD file.

17. When prompted to configure the printer, click **Yes**.

18. Click **Next**.

19. In the Printer Configuration window, select **Yes** when prompted to configure the printer.

20. Click **Next**.

    The CXP6000 Properties window appears.
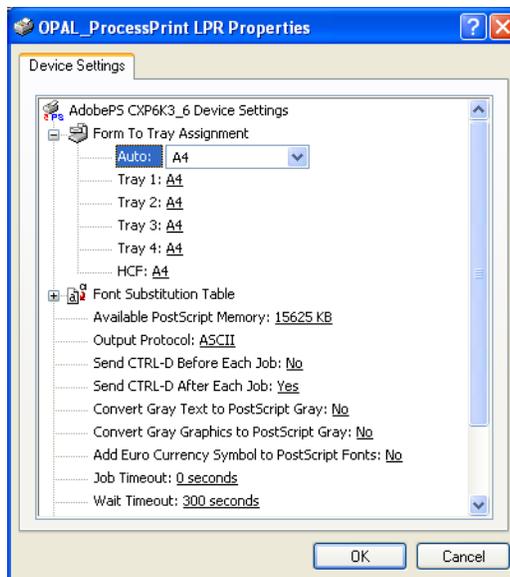
21. Configure the printer according to your specifications, and then click **OK**.

22. In the Setup Complete window, click **Finish** to complete the setup.

    The new LPR printer is now listed with your other printers on the Windows NT computer, and you are now ready to print to the Spire CXP6000 color server.

Windows NT, Windows 2000, Windows XP Command Line

You can also submit PostScript, PDF, or Variable Print Specification files for printing to the Spire CXP6000 color server using the following commands in the Windows command line. The following procedure is suitable for Windows NT, Windows 2000, or Windows XP.

Note: All PostScript files should be created using the Spire CXP6000 color server PPD file. The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.

1. From the **Start** menu, click **Run**.

2. Type `cmd`, and then click **OK**.

3. Locate the directory that contains the file(s) you want to print.

4. Type the following in the command line:
   ```
   lpr -S <server name> -P <virtual printer name> -ol
   <file name>
   ```
   and then press ENTER.
   For example:
   ```
   lpr -S OPAL3 -P OPAL3_ProcessPrint -ol brochure.ps
   ```

Note: All commands, server name, and printer name are case-sensitive.

Your file is printed to the Spire CXP6000 color server using the LPR command.

Setting up an LPR Printer in Macintosh OS X (10.2)

Note: Before you configure the LPR printer, make sure that you have installed the Spire CXP6000 color server PPD file on your Macintosh client workstation, see *Copying the Spire CXP6000 Color Server PPD File for Mac OS X (10.2)* on page 71.

Configuring an LPR Printer

1. Follow the procedure *Setting the Network Printer for Mac OS X (10.2)* on page 74 until step 5.

2. In the Printer List window, select **LPR Printers using IP** as the connection type.

3. In the **LPR Printer's Address** box, type the TCP/IP address or hostname of the Spire CXP6000 color server—for example, **10.4.18.169**.

4. Clear the **Use default queue on server** check box.

5. In the **Queue Name** box, type the full name of the Spire CXP6000 color server network printer—for example, **V3_DC6060_ProcessPrint**.

   Note: This box is case-sensitive.

6. In the **Printer Model** list, select **Other.**

7. Locate the folder to which you have copied the PPD file.

   Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.
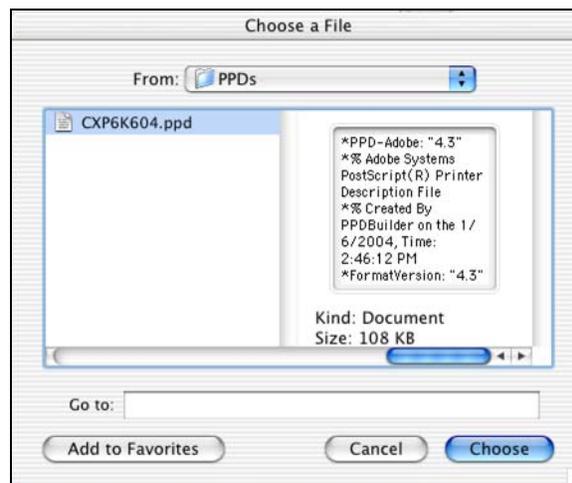
8. Click **Choose** to assign the **CXP6K604.ppd** file to the selected Spire CXP6000 color server network printer.

The following dialog box appears.

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

    The new printer is displayed in the Printer List window.
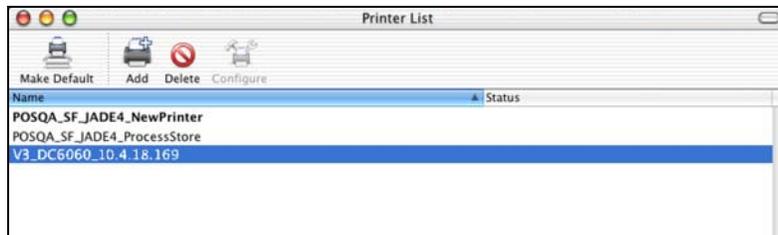
Using the Choose Spire Over IP Utility to set up an LPR Printer in Macintosh OS 9

Note: Before you set up a network printer, make sure that you have installed the Spire CXP6000 color server PPD file on your Macintosh client workstation, see *Copying the Spire CXP6000 color server PPD File for Mac OS 9* on page 67.

Spire Over TCP/IP

The Spire Over TCP/IP application enables you to submit jobs from a Macintosh client workstation using the Spire CXP6000 color server virtual printers over a TCP/IP protocol. This connection provides a significantly higher spooling speed.

Important: The TCP/IP settings on your Macintosh must match the Spire CXP6000 color server TCP/IP network settings.

To install this application, you need a Macintosh OS version 9.0 or later, with an installed LaserWriter application version 9.0 or later, or Adobe Photoshop 8.8 or later (available at http://www.adobe.com/support/downloads/main.html). If you do not have a compatible LaserWriter application installed, you can download this application from the Spire CXP6000 color server, **D:\Utilities\Mac utilities** folder.

To install the Choose Spire Over IP application:

1. On your Macintosh client workstation, from the **Apple** menu, select **Chooser**.
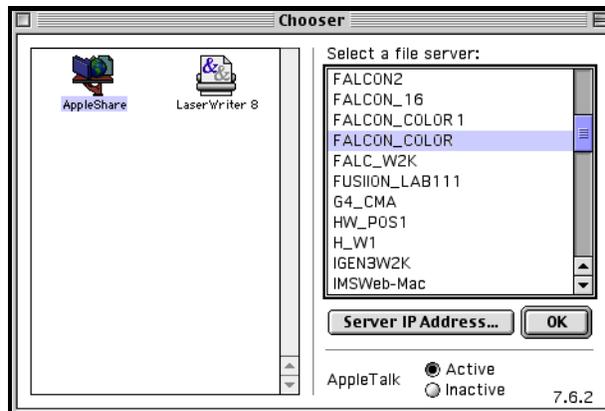
2. Select **AppleShare** and browse the network to the required Spire CXP6000 color server—for example, **Falcon_Color**—and then click **OK**.

    The Login dialog box appears.

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

    The corresponding Spire CXP6000 color server dialog box appears.
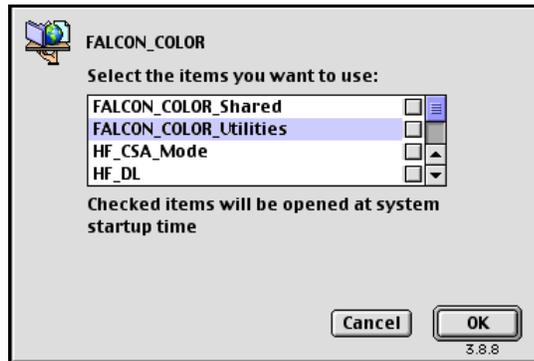
4. Select the **Utilities** folder and then click **OK**.

5. The **Utilities** folder icon appears on your desktop; double-click the
    icon to open the folder.
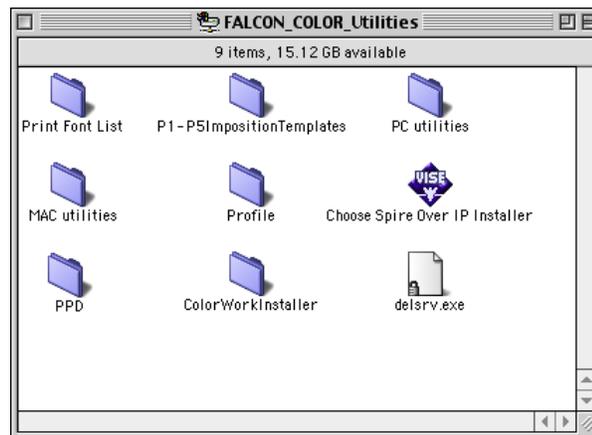
6. Double-click the **Choose Spire Over IP Installer** icon.
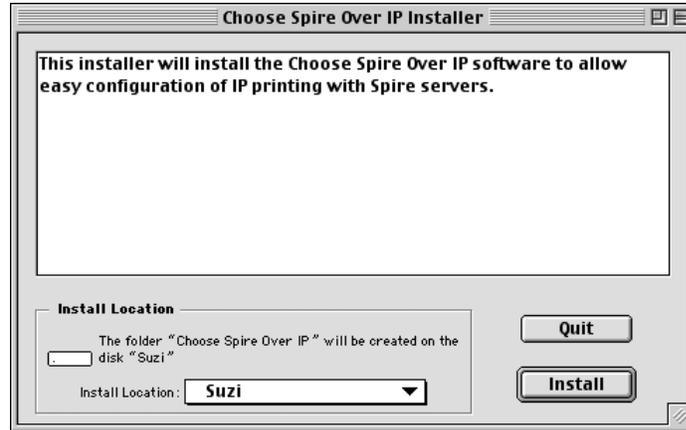
7. Click **Install**.

    After the installation is complete, a message appears.

8. Click **Quit**.

    The **Choose Spire Over IP** option is now added to the **Apple** menu.
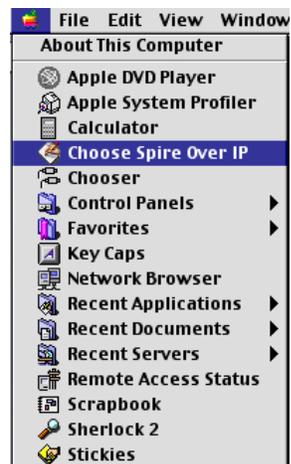
9. To create desktop printers for printing over IP, from the **Apple** menu, select **Choose Spire Over IP.**
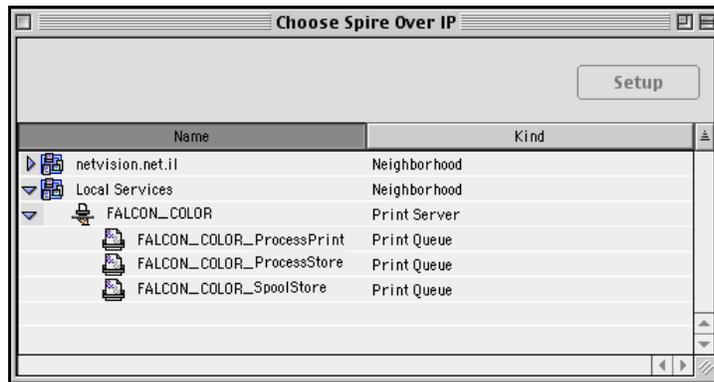
10. To view the print queues of the Spire CXP6000 color server, double-click **Local Services** and then double-click the Spire CXP6000 color server icon—for example, **FALCON_COLOR**.

11. To create a desktop printer for a specific print queue, select the print queue from the list—for example, **FALCON_COLOR_Process Print**—and then click the **Setup** button.
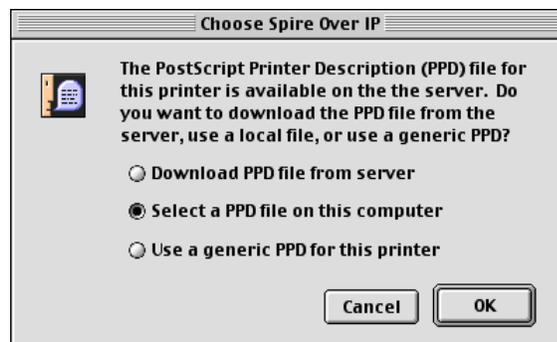
12. Select **Select a PPD file on this computer**, and then click **OK**.
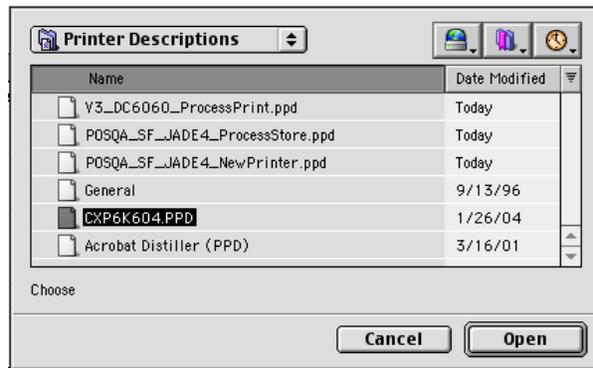
13. Locate the Spire CXP6000 color server PPD file that you copied to your computer in step 1, and then click **Open**.

Note: The Spire CXP6000 color server uses the following PPD file names, **CXP6K604** for Xerox DocuColor 6060 Digital Color Press, **CXP6K524** for Xerox DocuColor 5252 Digital Color Press, and **CXP6K204** for Xerox DocuColor 2060 and 2045 Digital Color Presses.
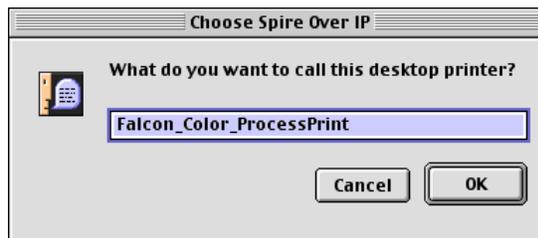
14. You can change the printer name if you want. Otherwise, click **OK**.

The desktop printer is created and configured and the following progress indicator appears.

When the printer is successfully created, the following message appears.
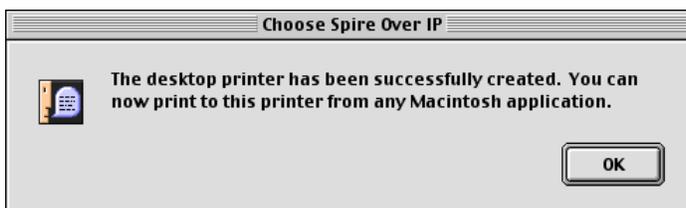
15. Click **OK**.

The printer icon appears on your desktop.

FALCON_COLOR_ProcessPrint

You can now print your jobs using this printer through a TCP/IP protocol.

Printing from Linux

The following procedure describes how to print from Linux to the Spire CXP6000 color server using the command line or by defining a printer using the Linux user interface (in this case Red Hat Linux).

Note: You do not need to use the Spire CXP6000 color server PPD file when you print from Linux.

Linux Command Line

1. Select **System Tools**>**Terminal Window** to open a Terminal window.

2. If your Linux computer is not configured with DHCP in the network settings, you will need to add the hostname and TCP/IP address of the Spire CXP6000 color server that you want to print. You add the hostname in the **/etc/hosts** file.

3. Locate the directory that contains your file(s), and then type the following command:

```
# lpr -P <virtual printer name>@<server name>
<filename>
```

For example:

```
# lpr -P OPAL3_ProcessPrint@opal3 letter.ps
```

Note: All commands and printer names are case-sensitive. The server name is the name defined in the /etc/hosts file or the registered name in the DNS server on your network (DHCP use).

4. Press ENTER.

Your file is printed to the CXP6000 Color Server.

Linux User Interface

The following procedure reflects Red Hat Linux version 8.0

1. Select **System Settings**>**Printing.**

2. Click **New** to setup a new LPR/LPD printer.

The Add A New Print Queue dialog box appears.

3. Click **Forward**.

The Set the Print Queue Name and Type dialog box appears.
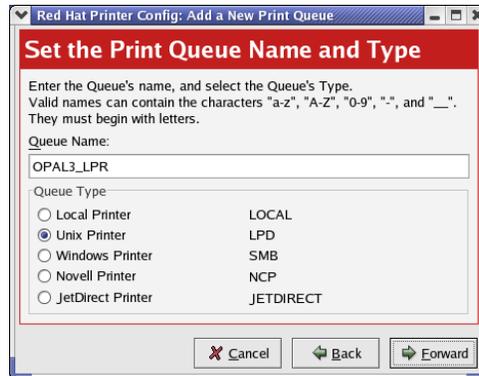
4. In the **Queue Name** box, type a name for the printer that you will be able to identify on your computer—for example, **OPAL3_LPR**.

5. Click **Forward**.

    The Configure a Unix Print Queue dialog box appears.
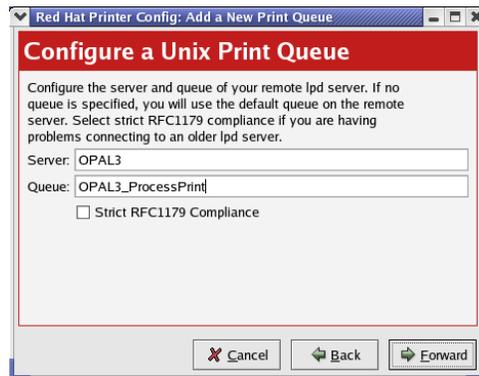
6. In the **Server** box, type the Spire CXP6000 color server name—for example, **OPAL3**.

7. In the **Queue** box, type the exact name of the network printer you wish to print to—for example, **OPAL3_ProcessPrint.**

    Note: To view the exact name of the printer on the Spire CXP6000 color server, select Resource Center>**Virtual Printers**.

8. Click **Forward**.

9. In the Select a Print Driver screen, select **PostScript Printer**, and then click **Forward**.

The Finish, and Create the New Print Queue screen appears.

10. Click **Apply.**

11. In the Red Hat Printer Config dialog box, click **Apply.**
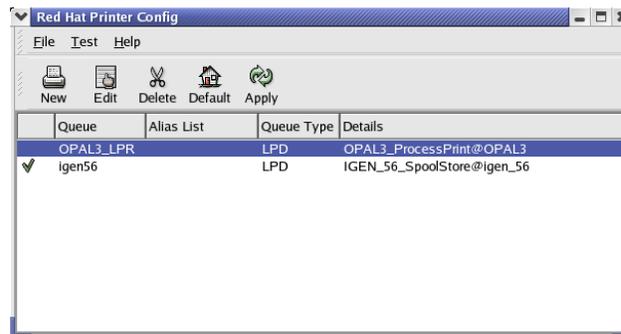
12. When prompted, click **OK**.

The new LPR/LPD printer is now listed with your other printers on the Linux computer and you can print to the Spire CXP6000 color server.

Defining a Printer on UNIX Client Workstations

AIX and UNIX Command Line

To define an AIX 4.2.1 printer for printing through LPR:

1. On your UNIX workstation—for example, **AIX 4.2.1**—type SMIT and
    follow the sequence,
    Print Spooling>**Add a Print Queue**>**remote**>**Standard processing.**

2. In **Name of QUEUE to add**, type the name of the print queue to be
    used on your UNIX client .

    Note: Use a logical name to recognize the remote printer.

3. In **HOSTNAME of remote server**, type the hostname of the remote
    server where the printer is defined—for example, **CXP6000**.

4. In **Name of QUEUE on remote server**, type the exact name of the print
    queue defined on the remote server—for example, **ProcessPrint**.

    Note: Verify that the printer name defined on the remote server contains no
    more than 20 characters. Unix is case sensitive.

5. Click **OK**.

Printing from a UNIX Client Workstation

To print from a UNIX client through LPR:

1. Type the following:
    ```
    <lpr><space><-P><space><local UNIX printer
    name><space><PS file name>
    ```
    For example, to print **frog**.ps on a printer named ProcessPrint, type:
    ```
    lpr -P ProcessPrint frog.ps.
    ```

2. Press ENTER.
    The PostScript file is downloaded to the printer. All settings are taken
    from the remote printer on the Spire CXP6000 color server.

    Note: Use alphanumeric and underscores for names. Names are case
    sensitive—for example, ProcessPrint not processprint. UNIX does not require
    PPD files to print jobs.

UNIX Connectivity

This section describes how to install and configure Microsoft Windows Services for UNIX (SFU) version 3.0 on a workstation running Windows 2000 or Windows XP.

Windows SFU version 3.0 adds UNIX NFS (Network File System) protocol compatibility to a Windows workstation. This compatability enables UNIX platforms to mount the workstation's volume.

Installing the SFU 3.0 Software

This procedure describes how to install the Microsoft SFU 3.0 software.

To install the SFU 3.0 software:

1. Insert the Windows Services for UNIX CD-ROM in the computer's CD-ROM drive.

    Note: If the installation program does not start automatically when the Windows Services for UNIX compact disc is inserted into the CD-ROM drive, open the CD-ROM drive in Windows Explorer, and then double-click the Setup.exe program.

2. In the Windows Services for UNIX Wizard window, click **Next**.

3. Click in the **User name** box, and type your name.

    Note: If the name of your organization does not appear in the **Organization** text box, type the name.

4. In the **CD Key** boxes, type the product key number that is located on the back of the CD-ROM's case, and then click **Next**.

5. Read the End User License Agreement carefully. If you accept the terms of the agreement, click **I accept the terms of the License Agreement**, and then click **Next** to continue installation.

    Note: If you click **I do not accept the License Agreement**, the installation terminates.

6. Click **Customized Installation**, and then click **Next**.

7. Click the icon that appears next to each component that you want to install. Under each component, select the items you want to include in the installation.
    Select only the following:

    - **Server for NFS**
    - **Authentication tools for NFS>Server for NFS Authentication**
    - **Authentication tools for NFS>User Name Mapping.**

    When you have finished specifying all the components to install, click **Next**.
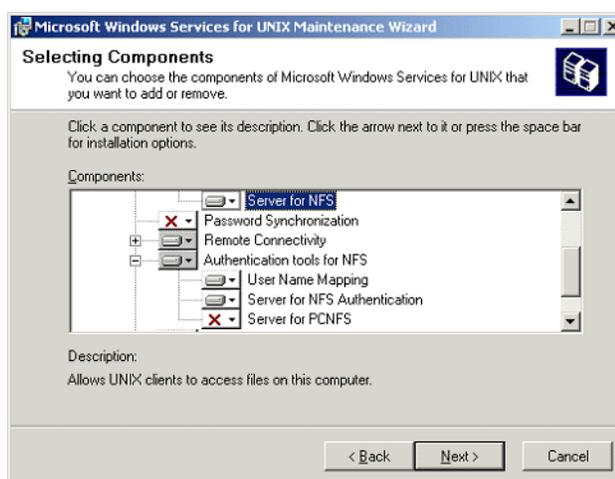
8. Click **Next.**

    A dialog box appears stating that low-level **security settings** need changing.

9. Click **Next.**

10. In the User Name Mapping dialog box, type the system name of the computer on which you are installing SFU. Then click **Next**.

    Note: NFS components will not work unless you specify the name of the User Name Mapping server.

11. Click in the **Installation location** text box, and type the full path of the directory where you want to install Windows Services for UNIX. Then click **Next**.

Note: The path you specify can contain only alphanumeric characters and the underscore (_) character.

12. Start the Component Services application and configure the **Server for NFS** service that setup disabled for starting-up automatically.

    a. Click the Windows **Start** button and select **Control Panel**.

    b. Double-click the **Administrative Tools** icon.

    c. Double-click the **Component Services** icon.

13. Restart the computer.

Note: After you have installed Services for UNIX 3.0, you can add or remove additional program components whenever you choose by inserting the SFU 3.o CD-ROM.

Increasing NFS Performance Using the Windows Registry

The Windows Services for UNIX 3.0 application disables disk write caching in the Windows registry by default (caching=**0**).

When write chaching is enabled, the speed of NFS file write operations is increased. You can expect NFS file write performance to be in the range of 5-7 MB/second.

You can download a special registry file that automatically enables write caching.

To enable write caching automatically in the Windows registry:

Download the **sfu_better_performance.reg** file from the following TechPlanet location, http://techplanet.creo.com/pos/entry_production/nav/index.htm, and then run the file.

Note: For detailed information about the Windows Registry, visit Microsoft support at http://support.microsoft.com/default.aspx?scid=kb;EN-US;256986.

Creating a File-name Translation File

Windows Services for Unix 3.0 lets you import a special text file that translates UNIX-specific text characters into characters that are recognized by Windows NTFS.

The most problematic UNIX character that is not recognized by NTFS is the colon character (**:)**. The Helios application uses colon characters to store Macintosh file name descriptions so that UNIX recognizes them. Other UNIX characters that are not residencies by NTFS are the asterisk (*****) and the question-mark (**?**) characters.

You can download the **trans.txt** translation text file to import into SFU.

To download the translation text file and import it into SFU:

1. From the TechPlanet location http://techplanet.creo.com/pos/entry_production/nav/index.htm, right-click the **trans.txt** file, and select **Save Target As**.

2. Navigate to the desired Windows folder in which to save the **trans.txt** file, and then click **Save**.

3. Click on the Windows **Start** button, and select **Programs**>**Windows Services for UNIX**>**Services for UNIX Administartion**. The SFU 3.0 application starts.

4. In the navigation pane, select the **Server for NFS** icon.

5. In the **File name handling** area, select the **Translate file names** check box.

6. Click **Browse**, and navigate to the directory location where the downloaded **trans.txt** file is located.

7. Click **Open**.

8. Click **Apply**.

    The translation file is imported.

Configuring NFS Server Settings with SFU

The Windows Services for Unix 3.0 application lets you configure the settings required for the Server for NFS.

To configure NFS server settings:

1. Click on the Windows **Start** button, and select **Programs**>**Windows Services for UNIX**>**Services for UNIX Administration**.

    The SFU 3.0 application starts.

2. In the navigation pane, select the **Server for NFS** icon.

3. In the **Server for NFS on local computer** pane, select the **Server Settings** tab.

4. Configure the Server for NFS using the same settings that are shown in the figure below:
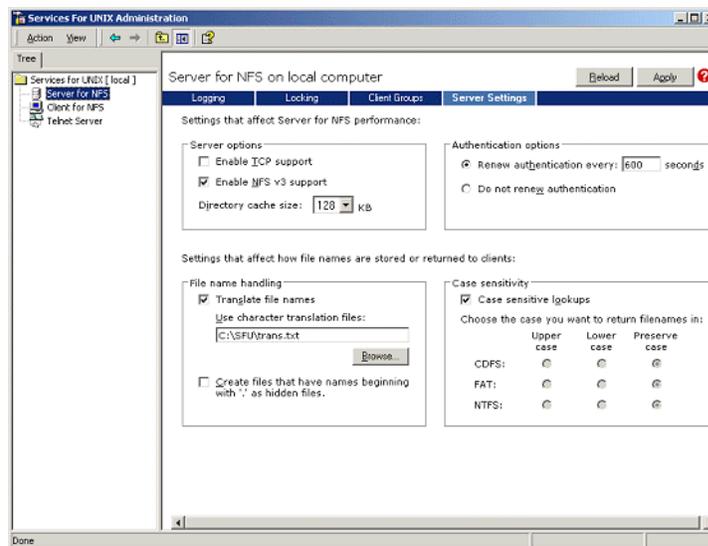
5. Click **Apply.**

6. In the navigation pane, right-click the **Server for NFS** icon, and select **Stop.**

7. In the navigation pane, right-click the **Server for NFS** icon, and select **Start.**

Setting Up Windows SFU for Brisque

Configuring Windows User-Name Mapping

Before you configure user-name mapping in the SFU application, copy the UNIX user name and group name files from Brisque to your Windows workstation via FTP (File Transfer Protocol). You will import these files later into the SFU application to map existing Brisque users and groups to Windows users and groups.

To copy Brisque user and group files:

1. Click the Windows **Start** button and select **Run**.

   The Run dialog box appears.

2. In the **Run** text box, type cmd and click **OK**.

   A command line prompt window appears.

3. At the command line prompt, type ftp <Brisque IP address>, and press ENTER. For example, type ftp 192.9.100.1, and press ENTER.

4. At the **User** prompt, type root, and press ENTER.

5. At the **Password** prompt, type ripro, and press ENTER.

6. At the **ftp** prompt, type six command as follows:

   - Type lcd c:\SFU, and press ENTER.

   - Type cd /etc, and press ENTER.

   - Type ascii, and press ENTER.

   - Type get passwd, and press ENTER.

   - Type get group, and press ENTER.

   - Type quit, and press ENTER.

To map user-names:

1. Click the Windows **Start** button, and select **Programs**>**Windows Services for UNIX**>**Services for UNIX Administration**.

   The SFU 3.0 application starts.

2. In the **Tree** navigation pane, double-click the **Services for UNIX [local]**icon.

    The Welcome pane appears.

3. Click the **Settings** tab.

4. In the **User Name Mapping Server** area, check that the name displayed in the **Computer name** text box is the same as the name of the local Windows system being used.
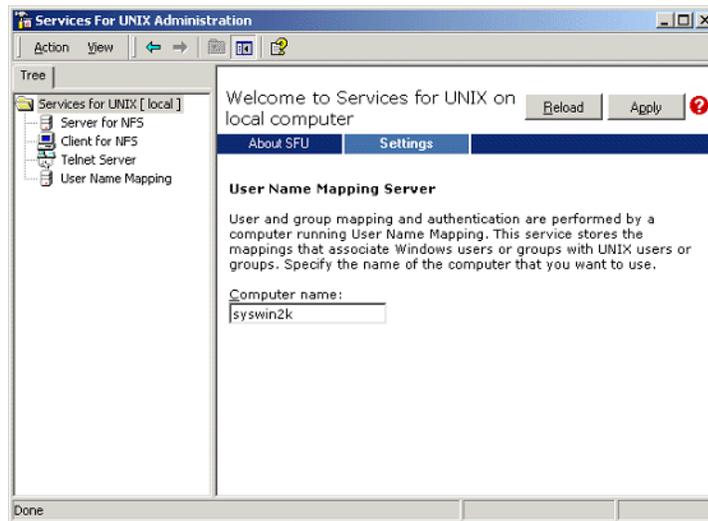
5. In the **Tree** navigation pane, select the **User Name Mapping** icon. The **Configuration tab** options appears in the adjacent pane.

6. Select the **Personal Computer Network File System (PCNFS)** option.
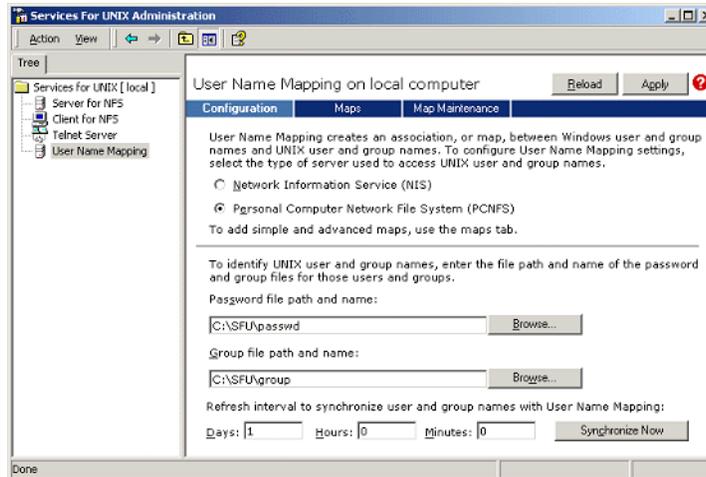
7. In the **Password file path and name** box, click **Browse** and select the password file that you copied from Brisque via FTP. Then click **Open**.

8. In the **Group file path and name** text box, click **Browse** and select the group file that you copied from Brisque via FTP. Then click **Open**.

9. From the menu bar at the top of the pane, select the **Maps** tab.

    The **Maps** options appear, listing Windows and UNIX users.

10. Click the **Show User Maps** link. The Maps pane lists the Windows and UNIX users. This link changes its name to Hide User Maps.
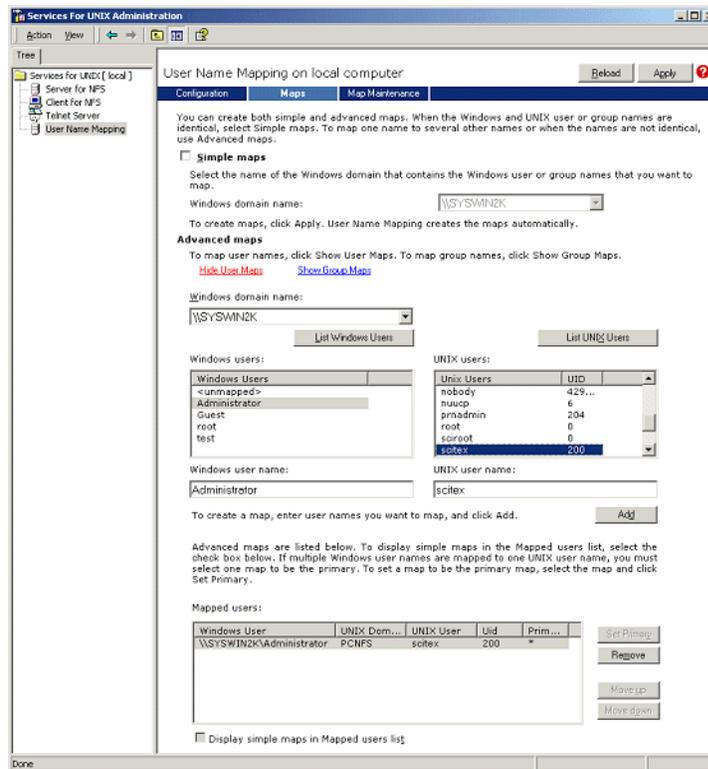
11. Click in the **Windows users** list, and select **Administrator**.

12. Click in the **UNIX users** list, and select **scitex**.

13. Click **Add**.

    A dialog box appears.

14. Click **OK**.

    The mapping appears in the Mapped users list area. A message appears: `Are you sure you want to set advanced mapping for this account?`

15. Click **Yes**.

16. Click the **Show Group Maps** link. This link changes its name to **Hide Group Maps**. The Maps pane lists the Windows and UNIX groups.

17. Click **Apply.**
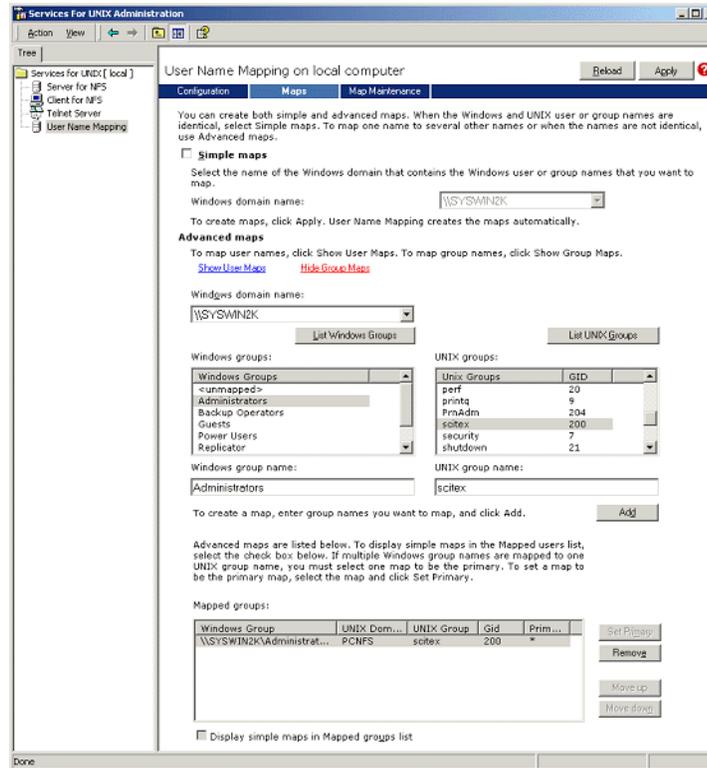
18. Click in the **Windows group** list area, and select **Administrators**.

19. Click in the **UNIX groups** list area, and select **scitex**.

20. Click **Add**. A dialog box appears.

21. Click **OK.**

    The mapping appears in the **Mapped groups** list area.

22. Click **Apply**.

Sharing an NFS Folder or Entire NFS Volume

Before Brisque can mount individual Windows 2000 folders or the entire Windows 2000 volume, the desired folders or entire volume must be shared as an NFS volume.

To share an NFS folder or entire NFS volume:

1. Start **Windows Explorer** or my **My Computer.**

2. Right-click the desired folder or volume and select **Properties**. Or:
   Right-click the icon that represents the disk's volume and select **Properties**.

   The NFS Share Properties dialog box appears.

3. Select the **NFS Sharing** tab.
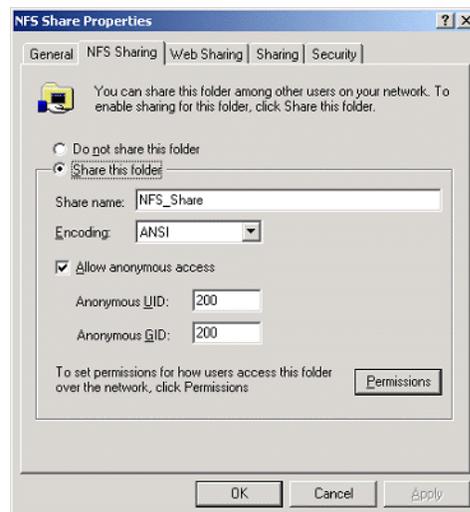
4. Select the **Share this folder** option.

   Note: You can either share the entire drive or you can share a single folder.

5. Select the **Allow anonymous access** check box.

6. Click in the **Anonymous UID** text box, and type 200.

7. Click in the **Anonymous GID** text box, and type 200.

8. Click the **Permissions** button.

    The NFS Share Permissions dialog box appears.
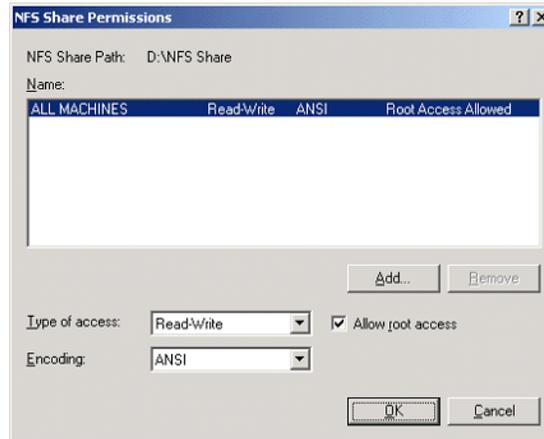
9. Click the **Type of access** list box, and select **Read-Write**.

10. Select the **Allow root access** check box.

11. Click **OK**.

    The shared folder appears in the Windows Explorer or My Computer window with a distinctive icon.
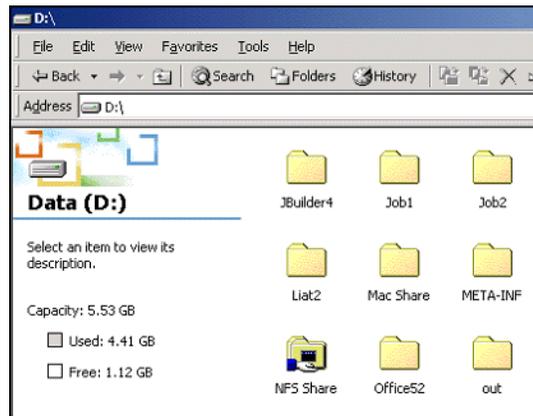
Checking that NFS Is Started and Will Run Automatically at Startup

1. From the Windows desktop, right-click the **My Computer** icon and select **Manage**.

   The Computer Management application window appears.

2. In the navigation pane, select the **Services and Applications** icon.

3. Select the **Services** icon.

   A list of services that are currently running is displayed in the adjacent pane.

4. From the list of services, select the **Server for NFS** icon. If the **Server for NFS** service is listed, the service is running.
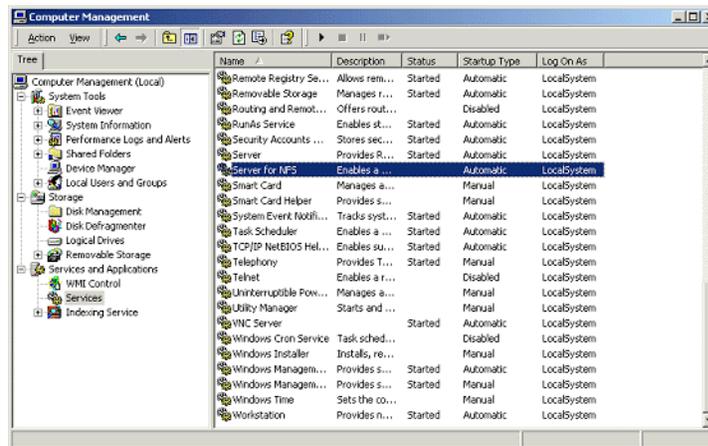
Note: To start or stop the service or change the service's settings, double-click anywhere in the **Server for NFS** row.

Brisque Workstation Installation and Configuration Procedures

The following procedures describe the installation and configuration procedures that are necessary to enable Brisque to mount and use a Windows 2000 volume.

Adding the Windows System as a Brisque Host

This procedure describes how you add the Windows 2000 computer as a Brisque host by editing the /etc/hosts file.

To add the Windows system as a Brisque host:

1. From the Brisque Launch Pad, open the **Services** panel, and double click the **Terminal** icon.

    The Password dialog box is displayed.

2. Click in the **User** text box, and type root.

3. Click in the **Password** text box, and type ripro.

4. Click **OK**.

    A terminal window appears.

5. At the command line prompt, type smit hosts.

    The System Management Interface Tool dialog box appears.
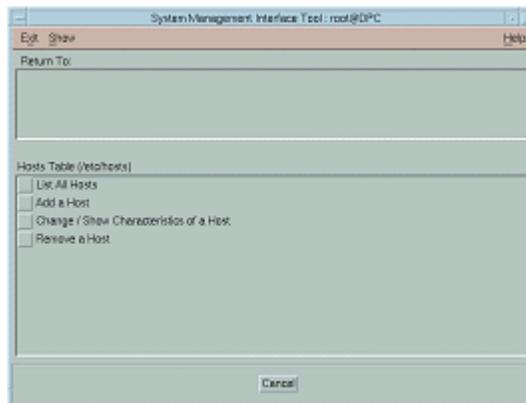
6. Select **Add a Host**.

The Add a Host Name dialog box appears.
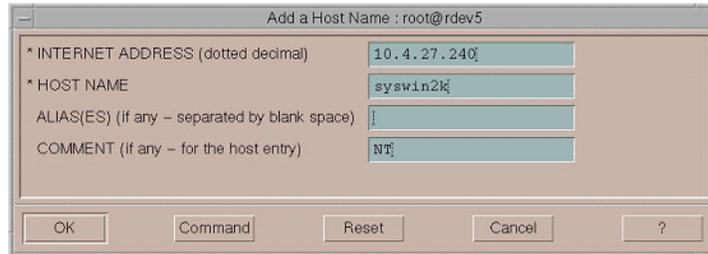
7. Click in the **INTERNET ADDRESS (dotted decimal)** text box, and type the IP address of the Windows 2000 workstation.

8. Click in the **HOST NAME** text box, and type the host name of the Windows 2000 workstation.

9. Click in the **COMMENT** text box, and type NT.

10. Click **OK**.

11. From the **Exit** menu, click **Exit**.

Mounting the Windows NFS Volume

This procedure describes how you mount the Windows 2000 volume on Brisque.

To mount the Windows NFS volume:

1. From the Brisque Launch Pad, open the **File Manager** panel and double-click the **MountPro** icon. The Devices & Remote Stations dialog box appears, and lists any volumes that are already mounted on Brisque.

2. Click the **Mount** button.

The Mount dialog box appears.
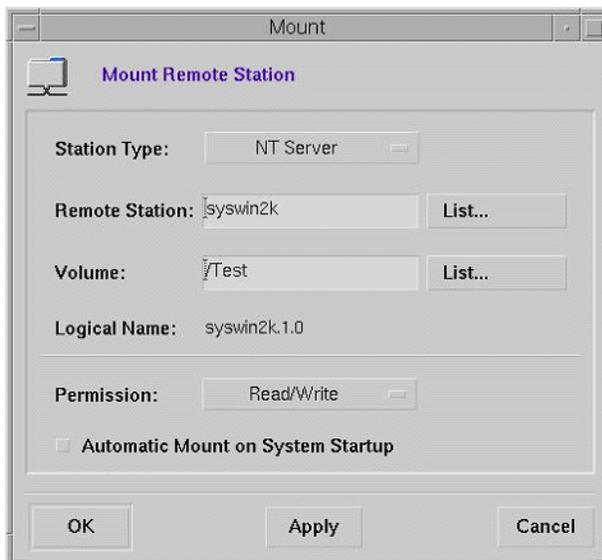
3. From the **Station Type** list box, select NT Server.

    Note: This step is only required if you are running Brisque version 3.x and Brisque version 4.0. Brisqueversion 4.1 automatically inserts the station type, using the information configured in the **/etc/hosts** file.

4. Click in the **Remote Station** text box and type the host name of the Windows 2000 workstation to mount.
    Or:
    Click **List** and select the desired host name of the workstation to mount.

5. Click in the **Volume** text box, and type the name of the Windows 2000 volume to mount.
    Or:
    Click **List** and select the desired volume to mount.

    Note: If you are running Brisque version 3.x or Brisque version 4.0, the volume is listed with the syntax **host.x.y**, which is the same naming convention used by Windows. For example, syswin2k.1.0. If you are running Brisque version 4.1, the volume is listed using the syntax **volume.x.y**. For example, test.1.0.

6. From the **Permission** list, select **Read/Write.**

7. Click **OK.**

Sending a Sample Job, Page or File to the Windows NFS Volume

This procedure describes how to send a sample job, page or file to the mounted Windows 2000 NFS volume. If you complete this procedure successfully, this confirms that the Windows NFS volume is mounted correctly.

1. From the Brisque File Manager, right click on Brisque job, page or file, and select **Send**.

   The Send Job dialog box appears.
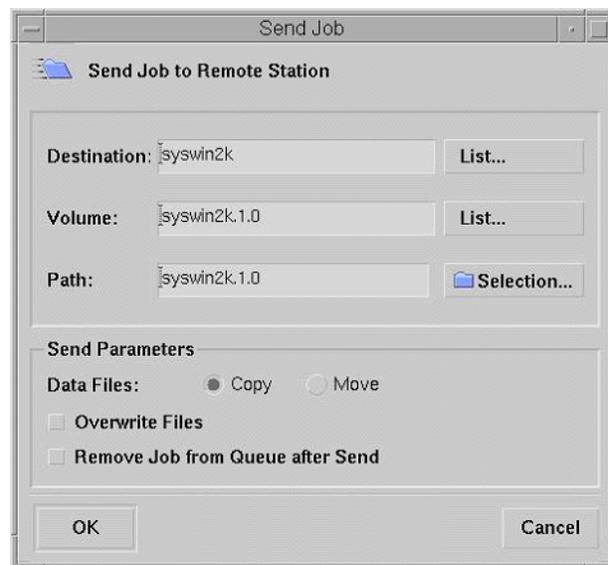
2. Click in the **Destination** text box and type the host name of the Windows 2000 workstation.
   Or:
   Click **List** and select the host name of the workstation.

3. Click in the **Volume** text box and type the name of the Windows 2000 volume.
   Or:
   Click **List** and select the volume name of the workstation

4. Click in the **Path** text box and type the path name of the Windows 2000 folder or volume.
    Or:
    Click **List** and select the folder or volume name.

Note: In Brisque version 4.1, there is an option named **Do not send .srsc directory**. The .srsc directory is required if you are running Helios, and is also required if you intend to copy the files you sent from the Windows 2000 workstation.

Configuring and Setting up NDS

This section describes how to configure the connection between a Novell Directory Services (NDS) Server and the Spire CXP6000 color server, in a Novell working environment.

Important: The Novell client should also be installed in the Spire CXP6000 color server since it is not installed by default.

To configure this connection:

Note: The following procedures should be performed on a Windows client workstation running the Novell Client, and configured by the Novell Administrator to access the NWAdmin program.

1. Create the NDS Print Server "nwprintserver" in the NDS.

2. Create an NDS Printer object in the NDS.

3. Create all print queues using the following format,<hostname_VirtualPrinterName> in the NDS.

4. Verify the connection information.

5. Configure the IPX Printing parameters: Tree and Context, using the Spire CXP6000 color server Settings window (**Network Setup/IPX Printing**) in the Spire CXP6000 color server.

6. Install the printer drivers on a Novell Client.

To perform these procedures, you need:

- Administrative permissions assigned by the Novell administrator

- The user name and password for access to the NDS Server

- An account in the appropriate NDS Tree and Context with permissions to create objects

- The full Context (location in the NDS Tree) where you will be creating the Print Server, Printer and Print Queues

- Background and know-how of NDS Server

Defining NDS Printer Queues in the NDS Tree

Using the Novell NetWare Administrator Application

Perform the following procedures to create the Print Server, Printer and Print Queues, using the NetWare Admin application:

1. Define the NDS Print Server, Printer, and Print Queue in the NDS Tree,

   For more information about defining NDS printers, see *To define an NDS print server:* on page 141, *To define an NDS printer:* on page 142, and *To define the NDS print queues:* on page 143.

2. Assign the printer to the Print Server and the Print Queues to the printer.

   For more information about assigning print servers and print queues, see *To assign a printer name to nwprintserver print server:* on page 146, and *To assign a print queue to the printer:* on page 148.

3. Check the print layout to verify the connections and perform a test print.

   For more information about verifying NDS connections, see *To verify the new NDS layout:* on page 150.

   Important: Perform these procedures in the specified order.

To open the Netware Administrator Application:

➢ Open the Netware Administrator Application (provided by your Novell Administrator).

The NetWare Administrator window appears and displays the NDS window. The following example shows the existing Trees, Queues and other Novell connections.
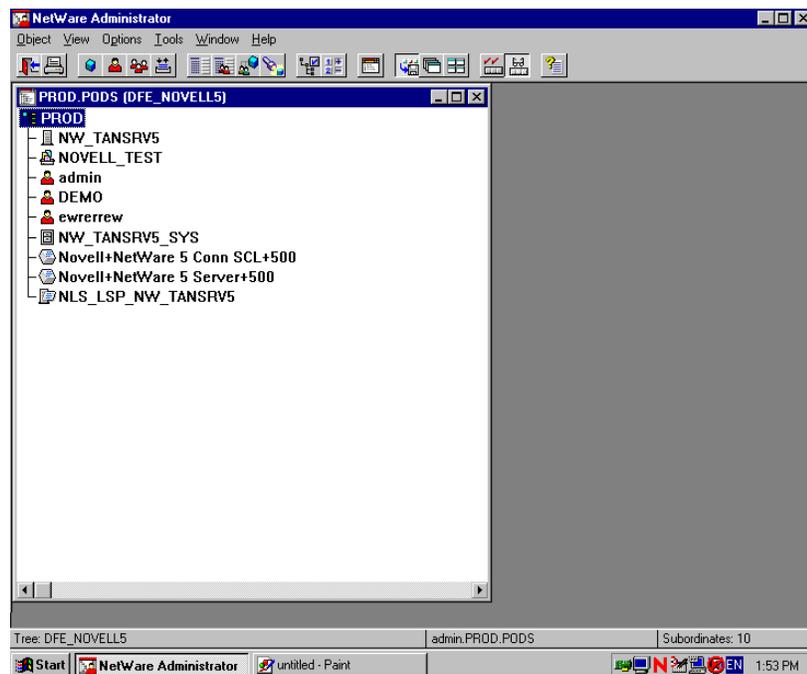
To define an NDS print server:

Note: Before performing the following procedure, check the Novell Server window and if the **nwprintserver** already exists, proceed to the next procedure *To define an NDS printer:* on page 142.

1. From the NDS window, select the required Context.

2. From the **Object** menu, select **Create.**

   The New Object dialog box appears.
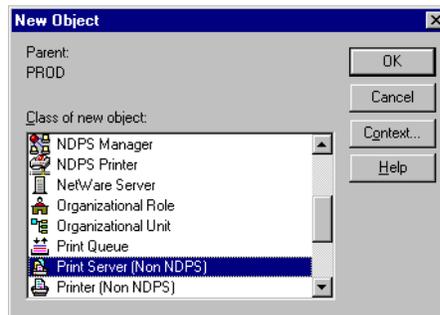
3. In the **Class of new object** list, select **Print Server.**

   Note: In Novell NDS version 5.0 and later, the words **Non NDPS** also appear.

4. Click **OK.**

   The Create Print Server dialog box appears.
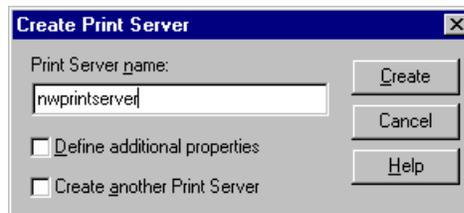
5. In the **Print Server name** box, type nwprintserver.

   Notes:
   - It is important that you only use this server name, in lower case.
   - Do not define a password for the Print Server.

6. Click **Create**.

The NDS nwprintserver printer is created and appears in the NDS window.
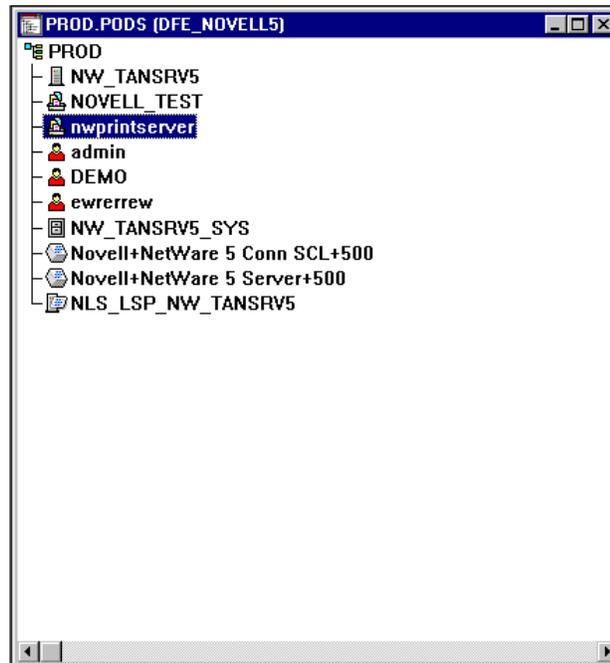
To define an NDS printer:

1. From the **Object** menu, select **Create**.

The New Object dialog box appears.
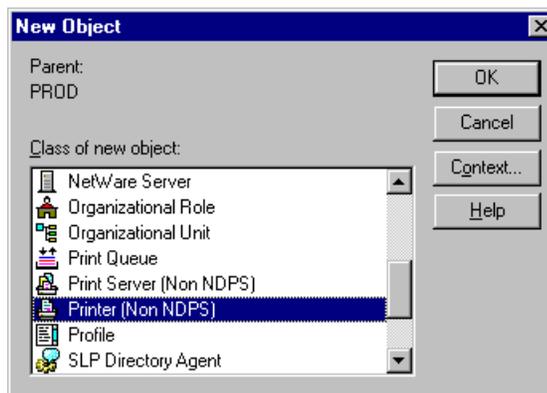
2. From the **Class of new object** list, select **Printer.**

Note: In Novell version 5.0 NDS and later, the words **Non NDPS** also appear.

3. Click **OK.**

The Create Printer dialog box appears.

4. In the **Printer name** box, type any printer name— for example, **Spire_Printer.**

5. Click **Create.**

The printer name is added to the NDS window.

To define the NDS print queues:

Notes:

- Both <hostname_ProcessPrint> and <hostname_ProcessStore> queues should be defined.

- Prior to performing this procedure, verify that in the Spire CXP6000 color server, both network printers <hostname_ProcessPrint> and <hostname_ProcessStore> are present.

- Both virtual printers <hostname_ProcessPrint> and <hostname_ProcessStore> should not be deleted from the Spire CXP6000 color server.

1. From the **Object** menu, select **Create.**

The New Object dialog box appears.
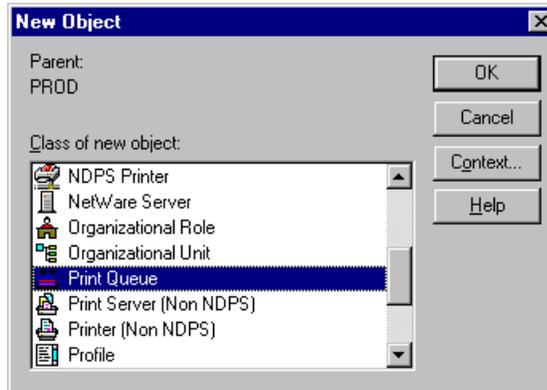
2. In the **Class Of New Object** list, select **Print Queue**.

3. Click **OK**.
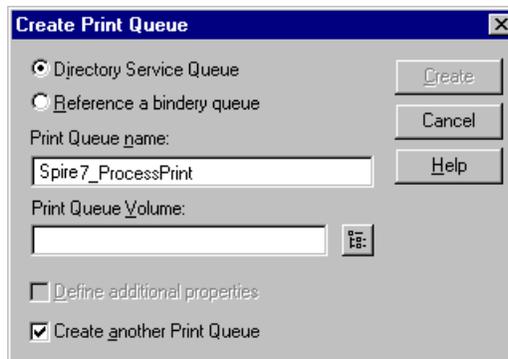
4. Verify that **Directory Service Queue** is selected.

5. In the **Print Queue name** box, type the exact (case sensitive) virtual printer name: <hostname_ProcessPrint>—for example— **Spire7_ProcessPrint**.

6. Select the **Create another Print Queue** check box.
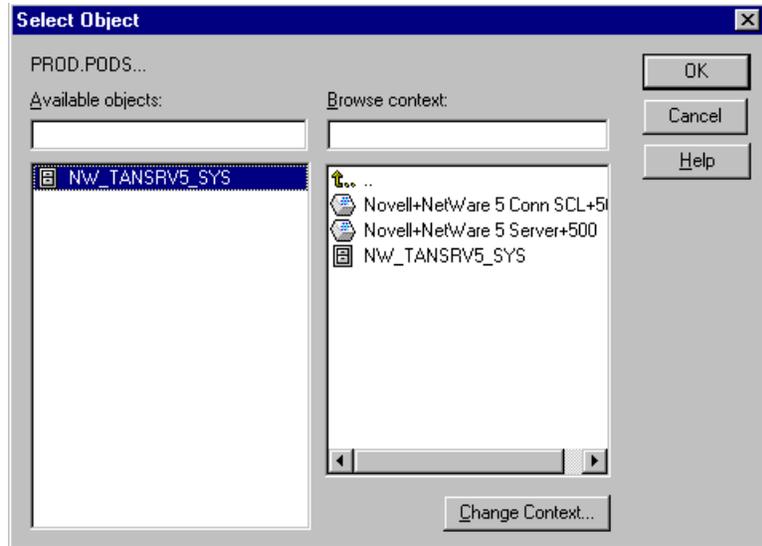
7. Click the **Print Queue Volume** icon.

Select Object

PROD.PODS...

Available objects:

NW_TANSRV5_SYS

Browse context:

↑.. ..
Novell+NetWare 5 Conn SCL+5(
Novell+NetWare 5 Server+500
NW_TANSRV5_SYS

OK

Cancel

Help

Change Context...

8. Select any existing volume.

9. Click **OK**.

The print queue volume name appears in the **Print Queue Volume** box.

Create Print Queue

○ Directory Service Queue
○ Reference a bindery queue

Print Queue name:

Spire7_ProcessPrint

Print Queue Volume:

NW_TANSRV5_SYS.PROD.PODS

☐ Define additional properties
☑ Create another Print Queue

Create

Cancel

Help
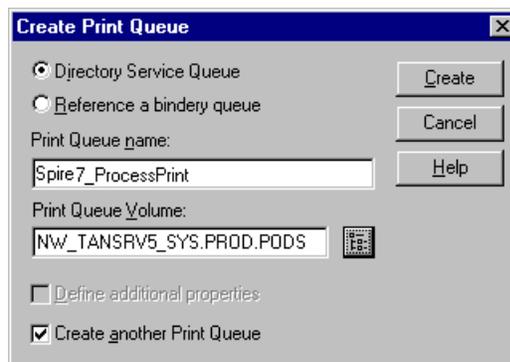
10. Click **Create**.

The print queue is now added to the NDS window along with the nwprintserver and the printer name (Spire_Printer).

Note: Notice that the Create Print Queue dialog box reappears so that you can define the second print queue.

11. In the Create Print Queue dialog box, verify that **Directory Service queue** is selected.

12. Clear the **Create another Print Queue** check box.

13. In the **Print Queue name** box, type the exact (case sensitive) second virtual printer name: <hostname_ProcessStore>—for example— **Spire7_ProcessStore**.

14. Click the **Print Queue Volume** icon.

    The Select Object dialog box appears.

15. Select any existing volume.

16. Click **OK**.

    The print queue volume name appears in the **Print Queue Volume** box.

17. Click **Create**.

    Both queues now appear in the NDS window.

```
┌─────────────────────────────────────────────┐
│ ▣ PROD.PODS (DFE_NOVELL5)        _ □ ✕       │
│ ▥ PROD                                        │
│  ├ ▤ NW_TANSRV5                               │
│  ├ ▤ Spire_Printer                            │
│  ├ ▤ NOVELL_TEST                              │
│  ├ ▤ nwprintserver                            │
│  ├ ▥ Spire7_ProcessStore                      │
│  ├ ▥ Spire7_ProcessPrint                      │
│  ├ ▤ admin                                    │
│  ├ ▤ DEMO                                     │
│  ├ ▤ ewrerrew                                 │
│  ├ ▣ NW_TANSRV5_SYS                           │
│  ├ ▣ Novell+NetWare 5 Conn SCL+500            │
│  ├ ▣ Novell+NetWare 5 Server+500              │
│  └ ▣ NLS_LSP_NW_TANSRV5                        │
│                                               │
│ ◄                                      ►      │
└─────────────────────────────────────────────┘
```
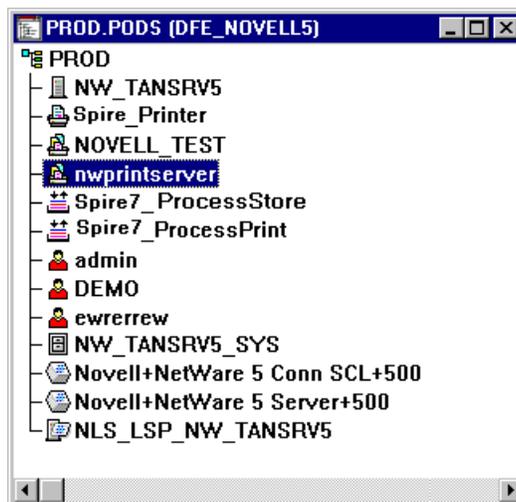
To assign a printer name to nwprintserver print server:

1. In the NDS window, double-click **nwprintserver**.

   The Print Server dialog box appears.

2. Click **Assignments** to open the **Assignments** tab.
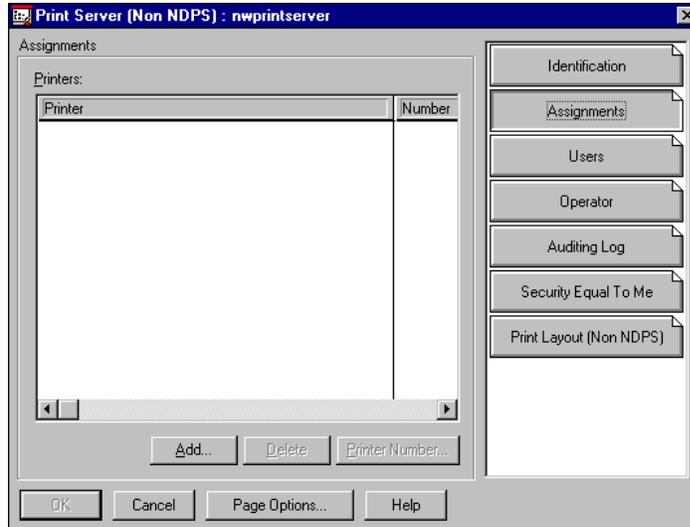
3. Click **Add**.

   The Select Object dialog box appears.
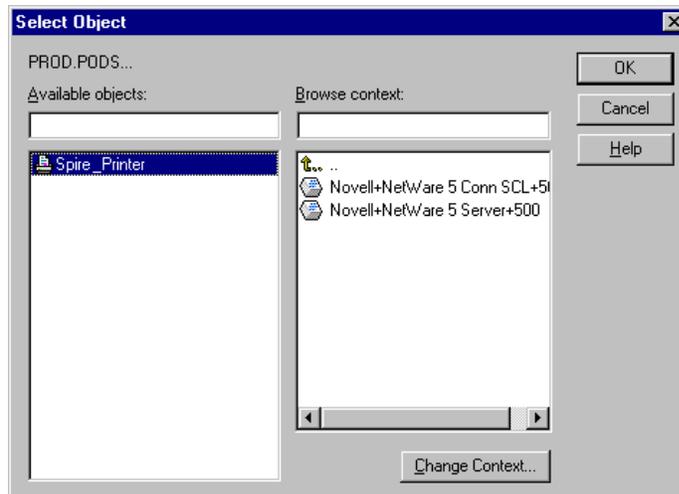
4. From the printers, select the printer name you have defined—for example, **Spire_Printer**—and then click **OK**.

The printer appears in the **Printers** list.
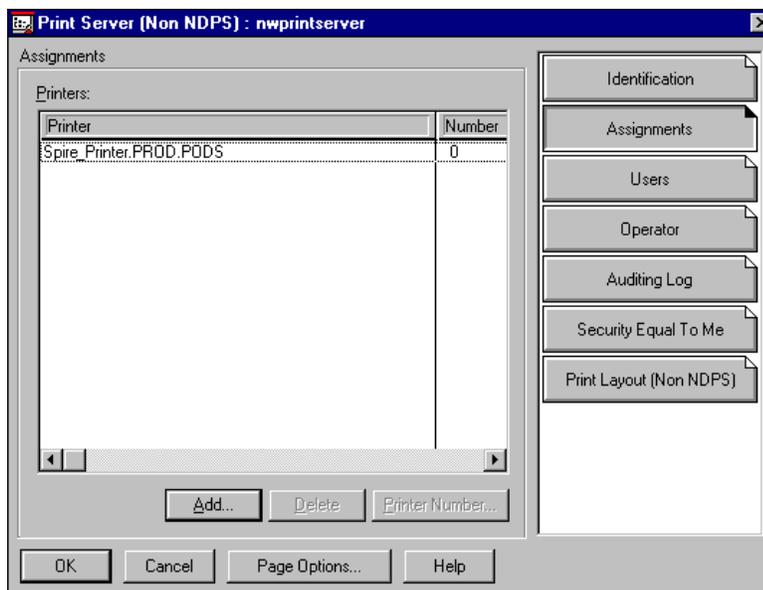
5. Click **OK**.

To assign a print queue to the printer:

1. In the NDS window, double-click the printer name you have
    defined—for example, **Spire_Printer**.

    The Printer dialog box appears.

2. Click **Assignments** to open the **Assignments** tab.
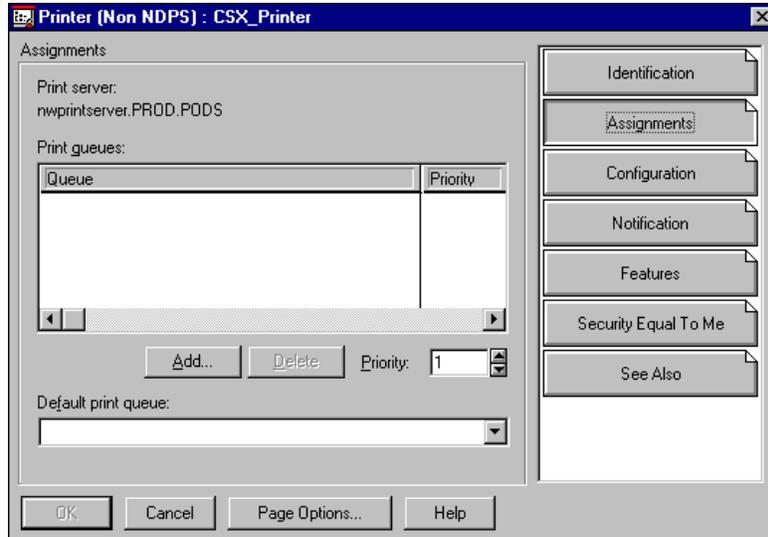
3. Click **Add.**

    The Select Object dialog box appears.
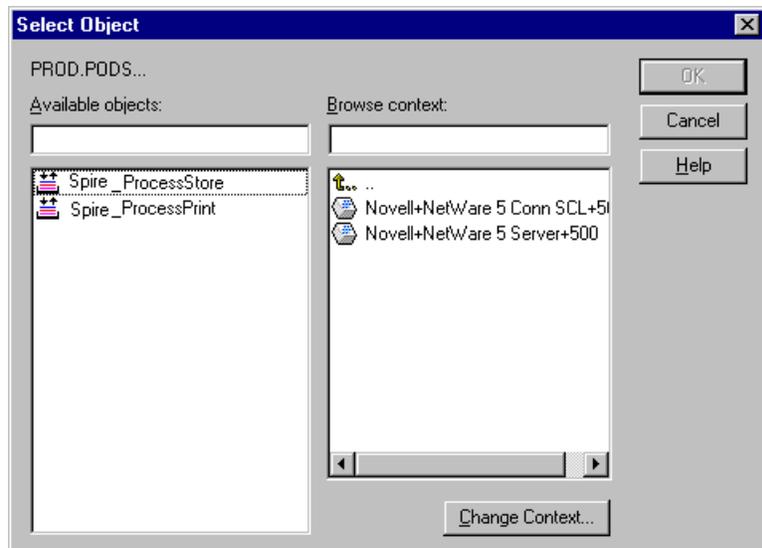
4. Select the queue name <hostname_ProcessStore> you have defined, and click **OK.**

5. Click **Add** and select <hostname_ProcessPrint>.

    Both printer queues now appear in the **Print queues** list.
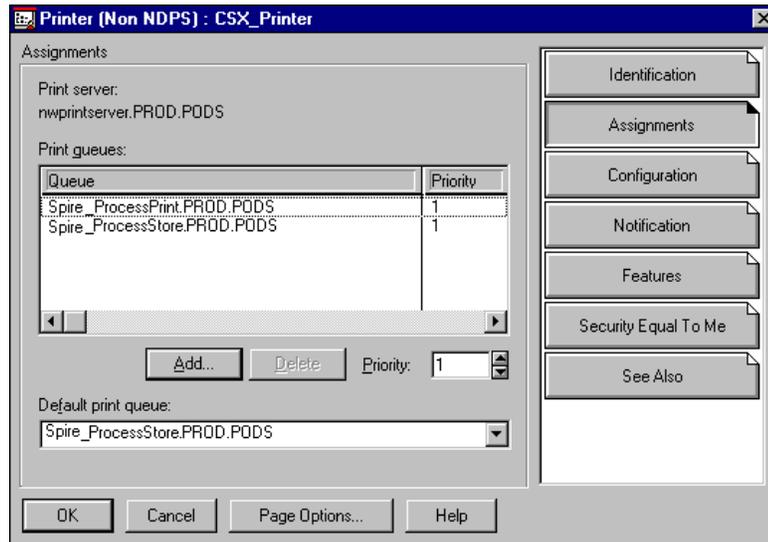
6. Click **OK**.

To verify the new NDS layout:

1. In the NDS window, double-click **nwprintserver**.

    The Print Server dialog box appears.

2. Select the **Print Layout** tab.
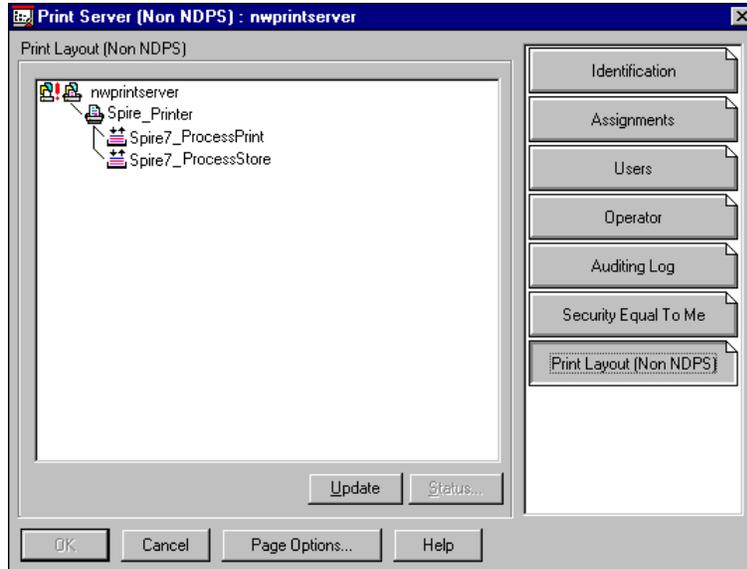
3. Verify that the nwprintserver server, the printer, and queues are displayed as shown in the above example.

4. Click **Cancel**.

Using the NDS PConsole

The Spire CXP6000 color server virtual printers can be defined as NDS printer queues at the NDS Server, using the NDS PConsole. This procedure includes the following stages:

1. In the Spire CXP6000 color server, verify that the two virtual printers <hostname_ProcessPrint> and <hostname_ProcessStore> are present.

2. In the NDS PConsole:

    • Create the Novell NDS Print Server "nwprintserver".

    Notes:

    • It is important to use only this server name, in lower case.

    • In any case, do not define a password for the Print Server.

- Create the NDS printer object.
- Create the NDS print queues <hostname_ProcessPrint> and <hostname_ProcessStore>.

3. In the Spire CXP6000 color server:

- Configure the IPX Printing parameters: Tree and Context (the exact tree name and the full context path name) in the Spire CXP6000 color server Settings window, see *Configuring IPX Printing* on page 152.
- Restart the Spire CXP6000 color server application.

4. Install the Novell Printer Queue on the Novell Client.

Configuring IPX Printing

Note: You do not need to define the context and tree if they were defined in the Novell configuration process.

To setup the Spire CXP6000 color server IPX parameter:

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

   The Settings window appears.

2. Under **Administration**, select **Network Setup**.
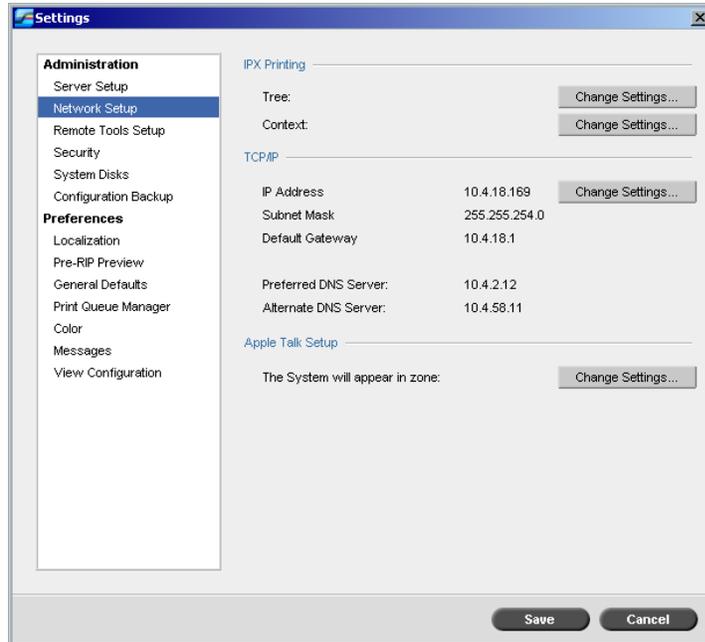
3. In the **IPX Printing** area, click **Change Settings** next to the **Tree** parameter.
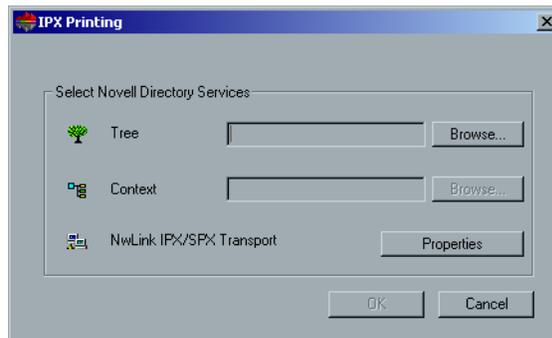
4. Type the exact **Tree** parameter and the full containers path of the **Context** parameter, in their respective boxes. You can also click **Browse** and browse to the required **Tree** and **Path.**

5. Click **OK.**

6. Restart the Spire CXP6000 color server application.

Installing the Printer Drivers on a Novell Client Using the Adobe PS Application

1. Use the Adobe PostScript application with the Spire CXP6000 color server PPD file (provided in the Spire CXP6000 color server, **Utility** folder).

2. In the Adobe PostScript Wizard, verify that you have selected the Novell printer queue from the NetWare Network, and not the Spire CXP6000 color server virtual printers. See the following example.
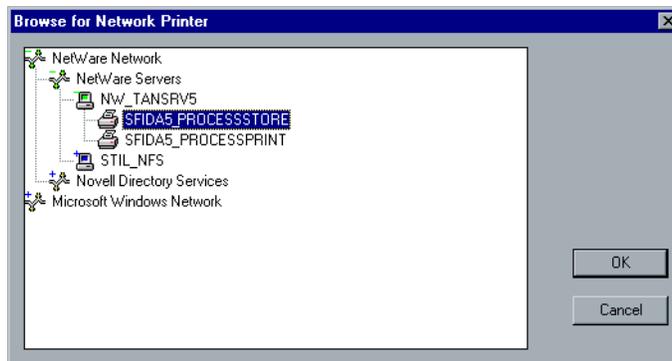
The following screen shows the Printers window after installing the Novell printer queue.

Note: The Novell printer has the NDS name as an extension—for example, **NW_TANSRV5**.
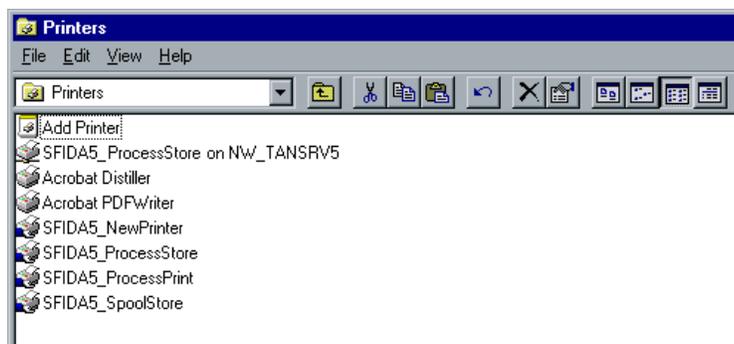
3. Perform a test print using the installed Novell NetWare printer.

4

Basic Workflows

Importing and Printing Jobs

You import jobs for printing in the following situations:

- When a page-description language (PDL) file is created on a client workstation that is not connected to the Spire CXP6000 color server

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

- When the required file resides locally on the Spire CXP6000 color server

Importing Files

To import files to the Spire CXP6000 color server:

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

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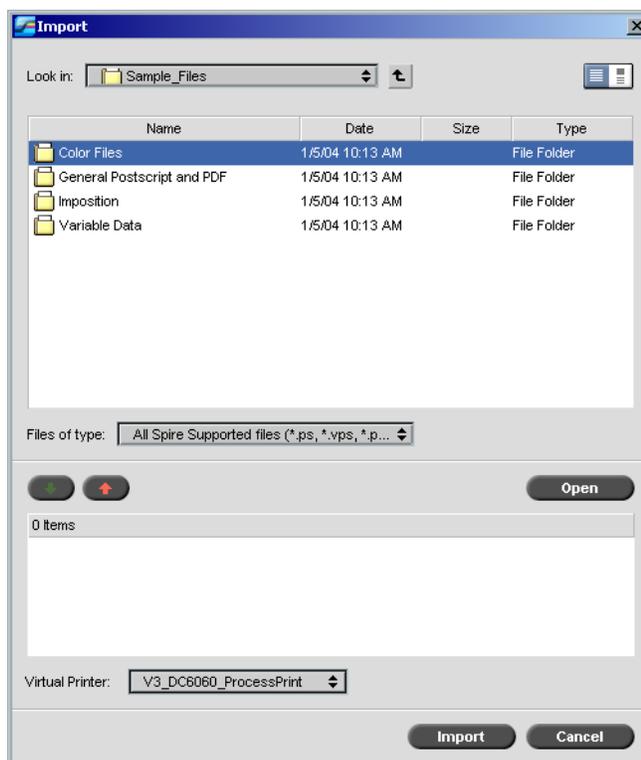
2. To access the required files, click the **up one level** button, or double-click on the file folders to go down the file tree.

3. In the upper list in the Import window, select the required files and click the **add** button.

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

The file(s) appear in the lower list.

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

> **Notes:**
> - To remove files, select the required files in the lower list in the Import Job window and click the **remove** button.
> - Use SHIFT or CTRL to select several files at once.

5. Click **Import**.

All files currently listed on the lower list are sent to the Spire CXP6000 color server to be processed and printed as defined in the selected virtual printer.

To check the status of imported jobs:

1. Click the **Server** icon arrow.

The Importing/Retrieving window appears.

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

2. Select one of the following options:

    - Click **Skip This Job** to stop importing the current file and import the next job in the import queue.

    - Click **Abort All Jobs** to stop importing all the files.

    - Click **Close** to close the Importing/Retrieving window.

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 appropriate queue (**Process Queue** or **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 required parameter and click **Submit**.

The Spire CXP6000 color server automatically determines if your job needs to be re-RIPped and places it in the appropriate queue.

Basic Settings

Basic settings are set in the Job Parameters window.

For more information about opening the Job Parameters window, see *The Job Parameters Window* on page 27.

The following tabs in the Job Parameters window are used in the basic workflows:

- **Print Settings** tab
- **Paper Stock** tab
- **Print Quality** tab

The Print Settings Tab

The **Print Settings** tab enables you to set print-related job parameters such as the print range, the number of copies you would like to print, the print method and order. In addition you may define the collation, the image position on the sheet, the image scale, set the gallop workflow if required, or rotate your job.

No. of Copies
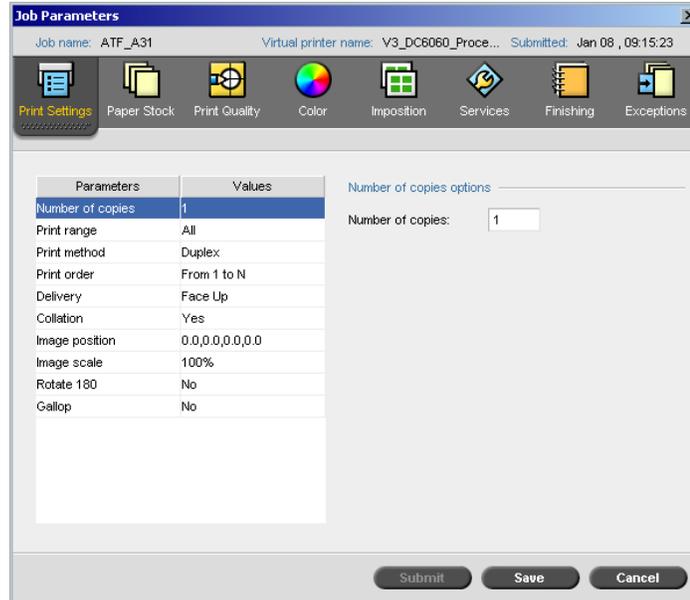
> ➤ Enter the **Number of Copies** to be printed.

Print Range
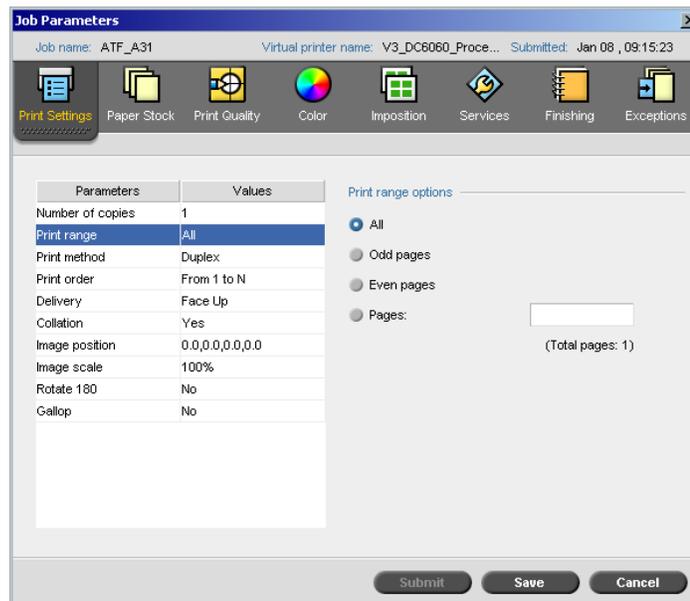
If the printed job is a VI job, the **Print Range** display is as follows:
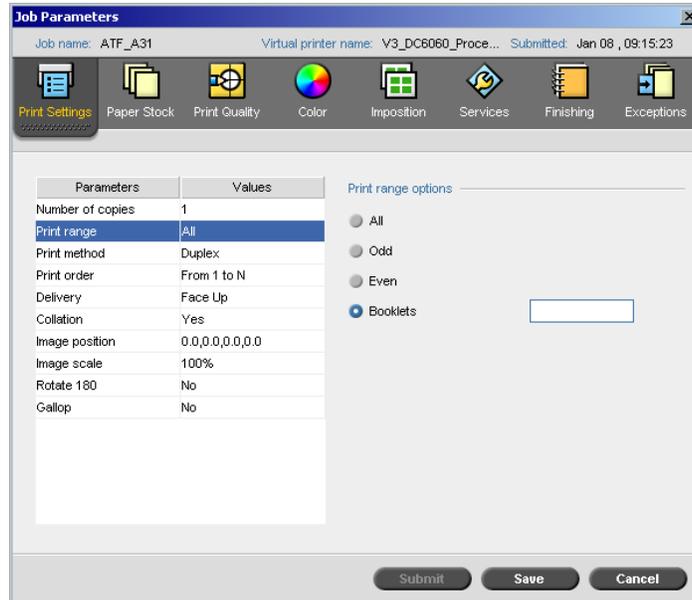
➢ Select the desired **Print range**.

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 required pages, you should type the required imposed sheets.

Print Method
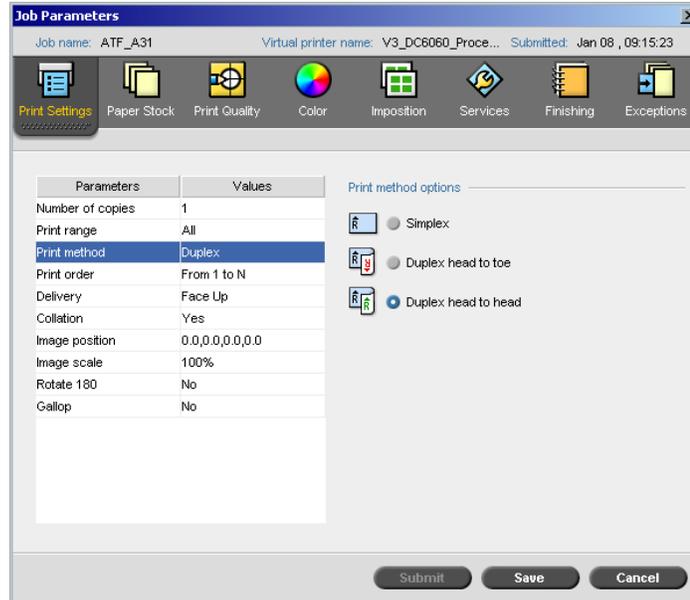
➤ Select the **Print method** to one of the following:

❐ **Simplex:** for single-sided printing

❐ **Duplex Head to Toe:** for calendar-style hard copies (usually used with landscape jobs)
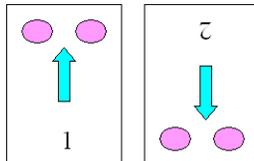
❐ **Duplex Head to Head:** for printing book-style hard copies (usually used with portrait jobs)
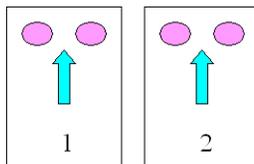
Print Order
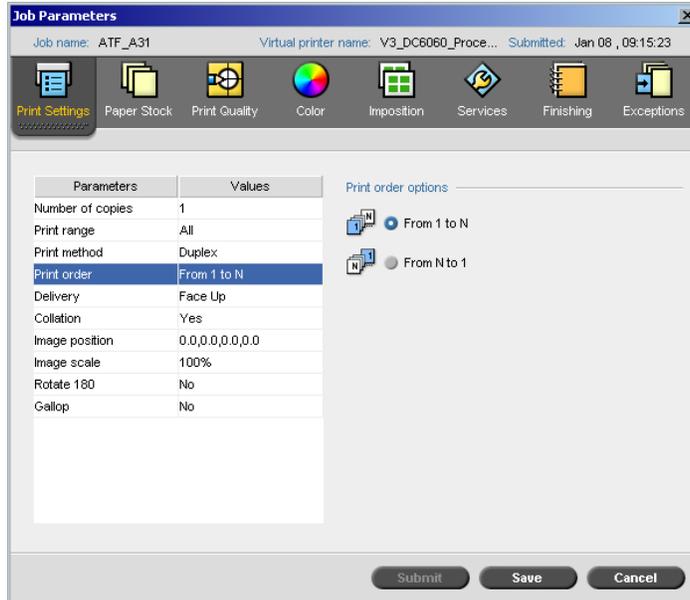
> ➢ Set the print order to **From 1 to N** (front to back) or **From N to 1** (back to front).

Delivery
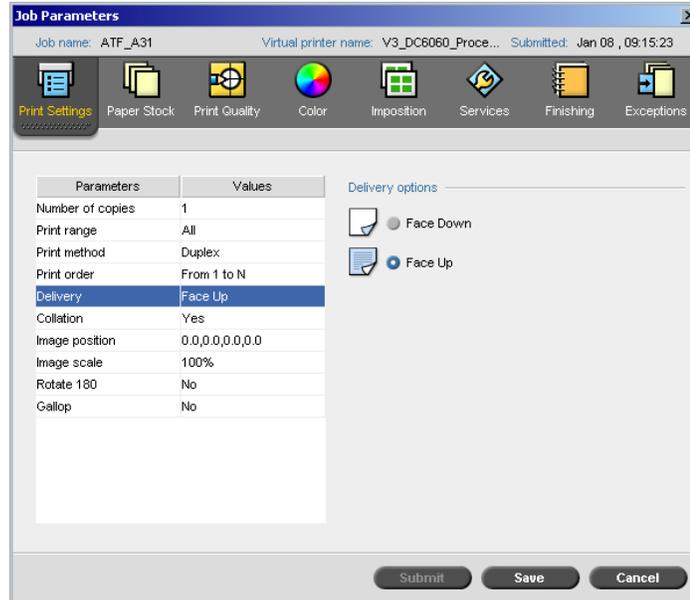
> ➢ Select **Face Up** or **Face Down** as the delivery option.

Tip: Use **Face Down** when printing confidential documents.

Note: When you collate a document, select **Face Down** (or **Face Up** and **From N to 1** in the **Print order** parameter) to print the set in the correct order.

Collation
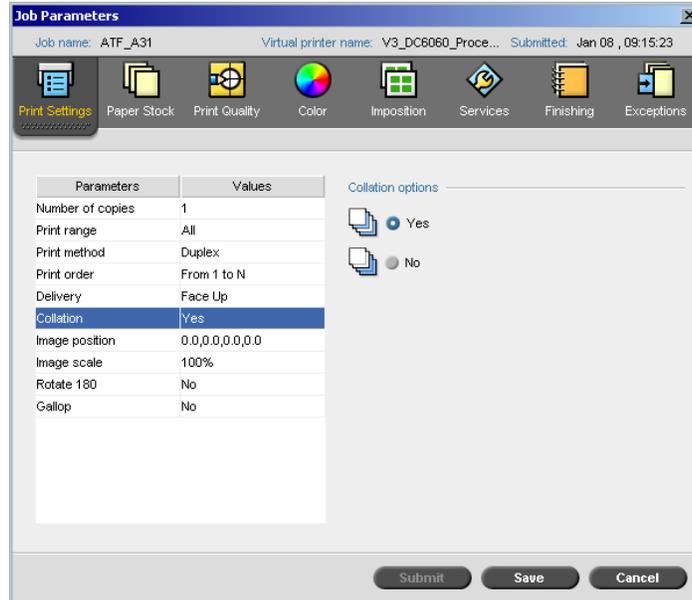
➢ Select the **Collation** option:

  ❑ **Yes:** prints a complete copy of the job before the first page of the next copy is printed

  ❑ **No:** prints all copies of each page before going on to the next page

For example, if you have a 20 page job and you select **Yes**, all 20 pages will be printed before the next copy of the job is printed. If you select **No**, 20 copies of page one will be printed before going on to print 20 copies of page two, and so on.

Image Position
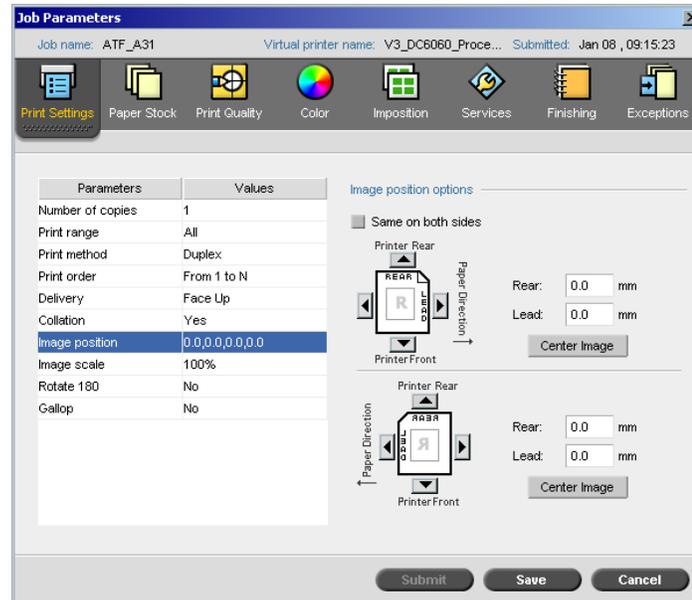
This option enables you to adjust the image positioning on the sheet's printed page (simplex or duplex).

This function uses the following terminology:

- **Rear:** the sheet's edge near the printer rear, where printing stops
- **Lead:** 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.

To adjust the image positioning in duplex printing, do one of the following:

- Select **Same on both sides** to shift the image on the sheet's second side (face down image) according to the shift on the sheet's first side (face up image).

- Click **Center Image** to set the **Rear** and **Lead** values to **0**.

- Set page offsets by clicking the directional arrows or by entering **Rear** and **Lead** values.

  Click the arrows to change the numerator values as follows:

  ❑ Positive (negative) values for shift toward (away from) the leading edge

  ❑ Top (bottom) arrows for positive (negative) values toward (away from) the rear edge

Note: Use the arrows to move duplex page data away from the spine. (Duplex printing only).

Image Scale
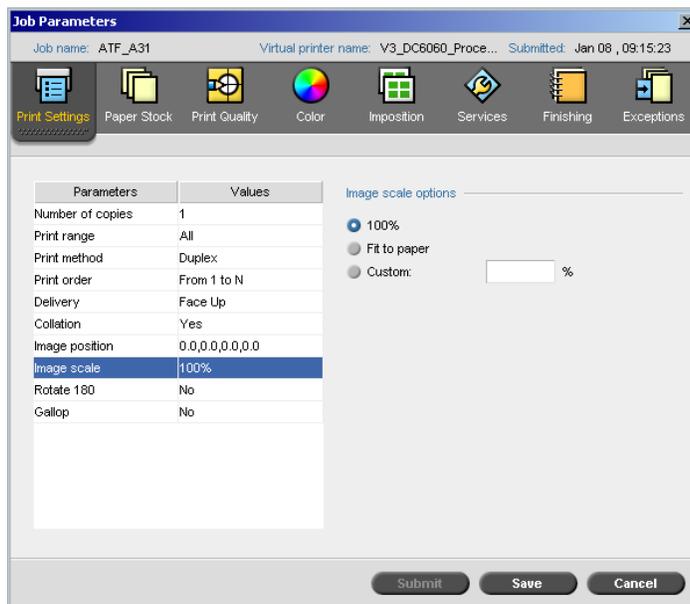
➢ Select the desired **Image scale** option:

  ❑ **100%:** prints at 100% of the original size (default)

  ❑ **Fit to Paper:** for the image to fit the selected paper in the paper stock

  ❑ **Custom:** select **Custom** and enter the percent by which you would like to proportionally decrease/increase the image size

Rotate 180°
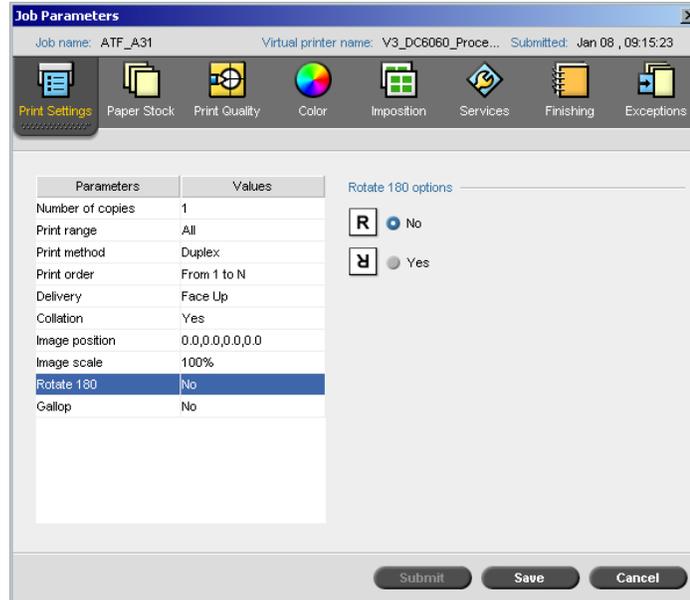
> ➢ To rotate your job by 180°, select **Yes**.

Gallop
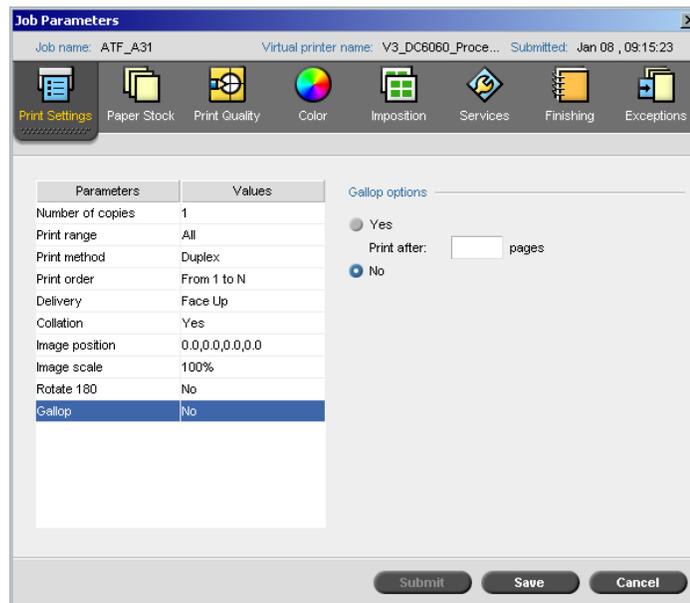
The **Gallop** function enables you to begin printing a defined number of pages before the entire job has been RIPed. This enables you to print and RIP concurrently.

Gallop reduces the amount of time required to RIP and print a job and is especially useful for long runs such as VI jobs. When combined with a deletion policy, Gallop enables you to free printer disk space.

Gallop is not recommended for relatively small jobs, since the benefit of engaging the process is marginal, and the total production time will be shortened by only a few seconds.

To set the gallop:

➢ Select **Yes** and enter the number of pages to RIP before starting to print.

> **Note:** The default number of pages to be RIPed before printing is 50. For complicated jobs using numerous shared elements, you can increase or decrease this number.

The Paper Stock Tab

The **Paper Stock** tab enables you to set paper stock-related job parameters.

The Spire CXP6000 color server uses multiple paper stock parameters such as paper size, type, weight and coating to specify the paper stock. You may either select each parameter separately or select a complete paper set which already includes all parameters.

If the selected paper set is unavailable, the current job is frozen until the appropriate set is available (the job receives a **frozen** status indicator, its line appears in blue and a message appears in the Alerts window). Other jobs can print while jobs are held.

Paper Set Name
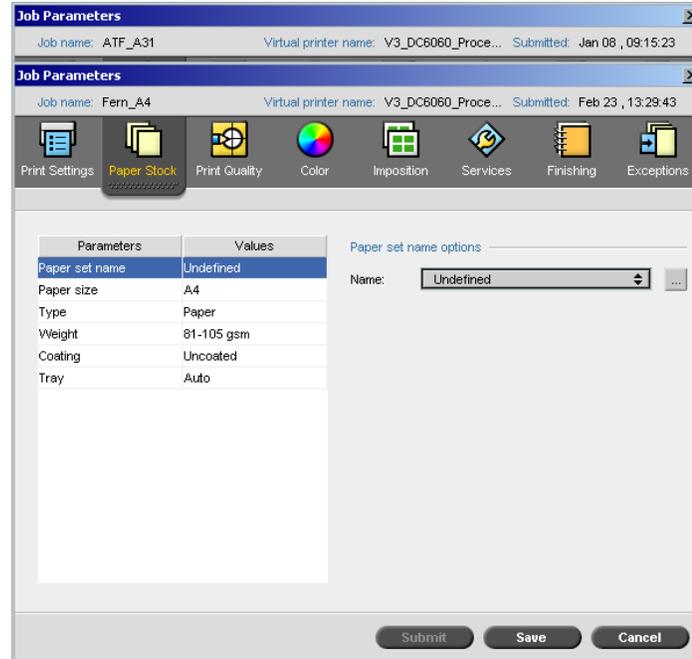
To set the required paper set:

➢ Select the required paper set from the **Name** list. If required, a paper set can be added (see *Managing Paper Sets* on page 170).

The selected paper set values (**Paper Size**, **Type**, **Weight** and **Coating**) appear in the corresponding parameters in the **Paper Stock** tab.

Managing Paper Sets

The Spire CXP6000 color server is provided with predefined paper sets for your convenience. These paper sets cannot be removed but they can be modified. In addition, you can add, modify or remove custom paper sets according to your requirements.

To add a new paper set:

1. Click the **browse** button.

The Paper Set window opens.
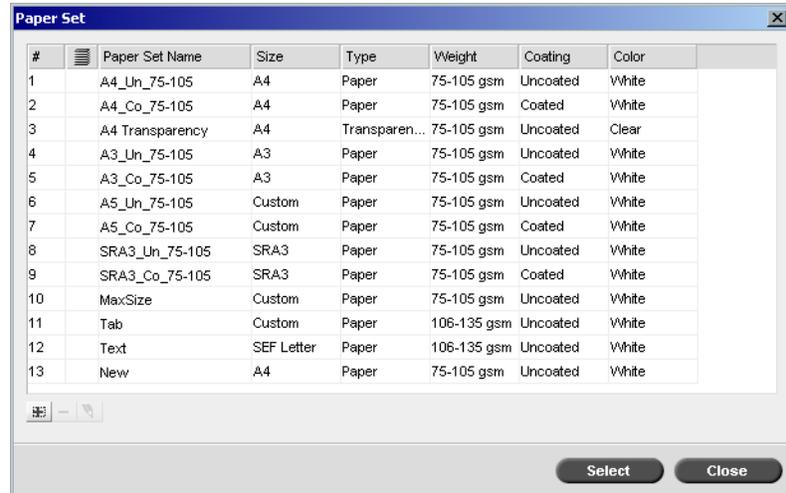
2. Click the **Add** button.

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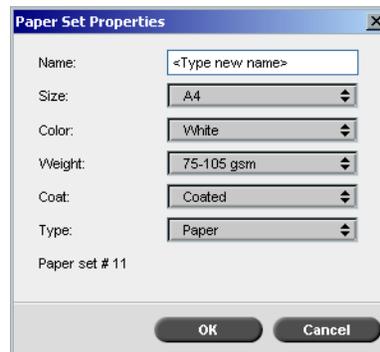
3. Enter the following parameters:

    ☐ **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
       required properties for the new paper set.

4. Click **OK**.

To modify a paper set:

1. In the Paper Set window, select the paper set you would like to modify.

2. Click the **Edit** icon.

    The Paper Set Properties window appears.

3. Modify the required properties of the paper set.

4. Click **OK**.

To delete a paper set:

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

2. Click the **Remove** icon.

    The Paper Set is deleted.

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

Paper Size

1. Select the required stock size from the **Size** list.

For a custom paper size setting, select **Custom** from the list.

The **Paper size options** are displayed as follows:

2. Type the required **Height** and **Width.**

Note: Units of measurement (mm or inches) reflect system configuration. They are chosen in the Settings window (see *Localization* on page 421).

3. Select the required **Feed Direction:**

- **LEF** (Long Edge Feed)
- **SEF** (Short Edge Feed)

Type
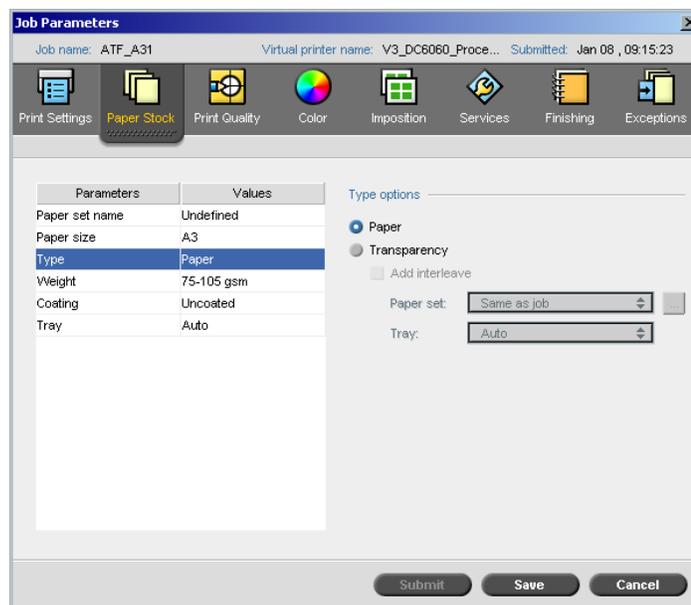
1. Select **Paper** to print on paper.
    Or:
    Select **Transparency** if the stock type is **Transparency.**

2. Select the **Add Interleave** check box if you want to insert a blank page between transparencies.

3. To customize the interleave, select the required paper set from the list.
    Or:
    Use the default **Same as job**.
    Or:
    Click the **browse** button and add a new paper set.
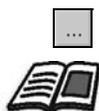
    For more information about adding a paper set, see *Managing Paper Sets* on page 170.

    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, then the interleave is the size of the imposition sheet and is inserted between each sheet (not each slide).

4. In the **Tray** list, select the required tray:

- **Tray 1**: Load the specific stock in this tray

- **Tray 2**: Load the specific stock in this tray

- **Auto**: Any tray with the specific paper stock will be used

Note: If you are using the Xerox DocuColor 5252 Digital Color Press, or Xerox DocuColor 2060 and 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

Weight

➢ From the **Weight** list, select the required stock weight.

Note: If you are using the Xerox DocuColor 5252 Digital Color Press, the paperweight ranges are, 64-80 gsm, 81-105 gsm (default),106-135 gsm, 136-150 gsm, 151-220 gsm, 221-280 gsm.

Coating
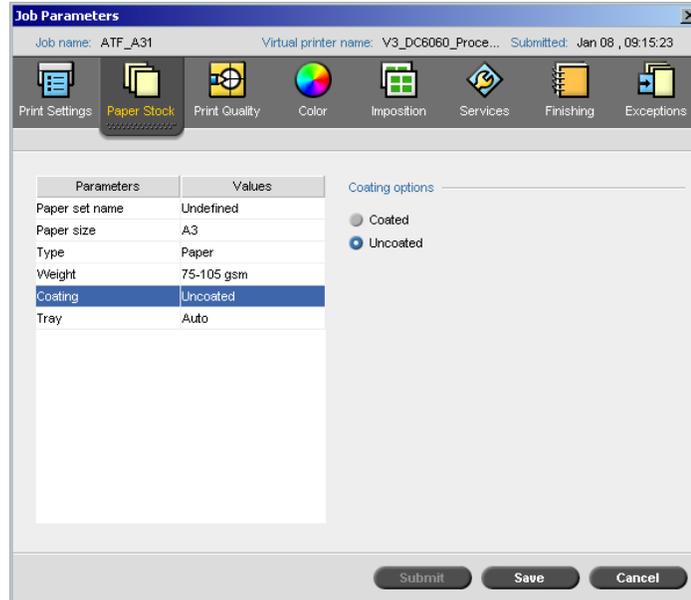
> ➢ Select **Coated** to print on coated paper.

Tray
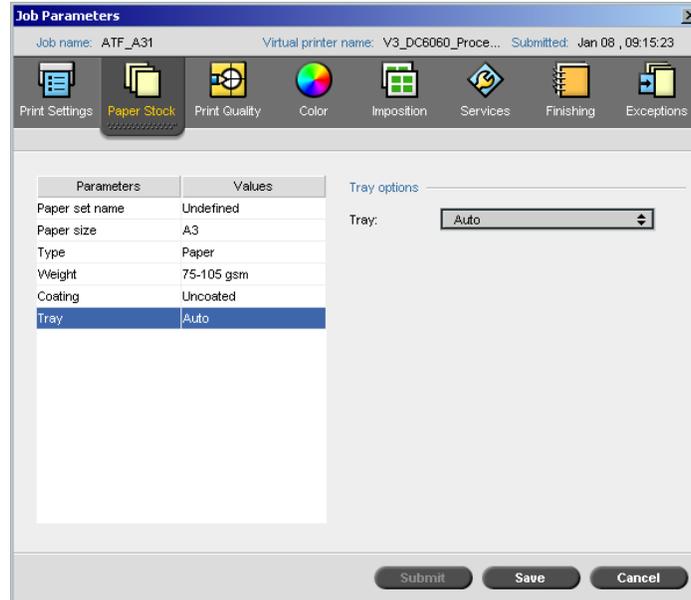
> In the **Tray** list, select the required tray:

- **Tray 1**: Load the specific stock in this tray

- **Tray 2**: Load the specific stock in this tray

- **Auto**: Any tray with the specific paper stock will be 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 becomes 'Frozen'.

- If you are using the Xerox DocuColor 5252 Digital Color Press, or Xerox DocuColor 2060 and 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

The Print Quality Tab

The **Print Quality** tab enables you to set print quality related job parameters and to improve the quality of printed jobs. These parameters include the possibility to enhance text/ line quality and image quality. In addition it enables you to apply the Creo FAF algorithm by setting trapping, to define the black overprint, to use or ignore the overprint information by setting the PS overprint, and set the image noise level.

Text / Line Quality
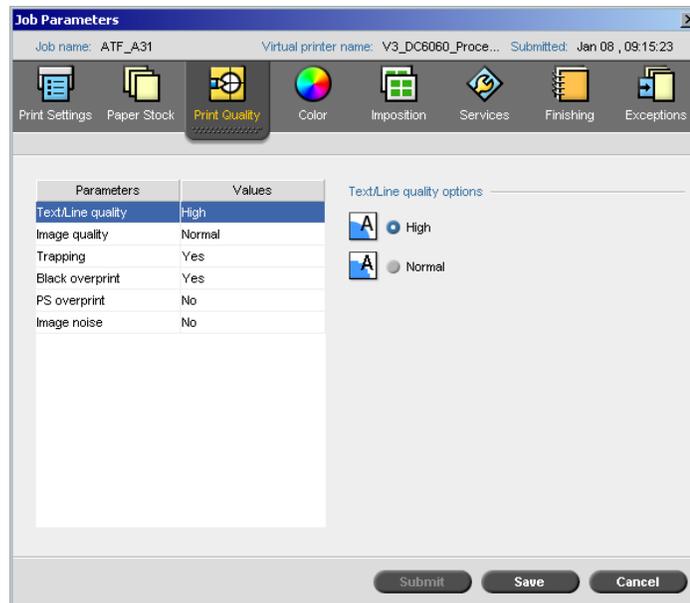
Text/Line Quality refers to the Creo anti-aliasing algorithm for superior text quality. Text/Line Quality and text and line-art elements are processed separately to produce optimal rendering of all the elements on a page. This option improves the text quality of diagonal lines, borders and blends, causes blends to appear smooth with no banding and displays crisp diagonal lines without (or with minimal) jaggies (rough edges) that are the result of the limited resolution of the print engine.

Normal (with jaggies)   High

➤ To set the text/line quality, select one of the following options:

❑ **High** to provide superior text quality

Notes:

- Anti-aliasing is used to avoid or minimize jaggies - rough edges which are the result of the limited resolution of the original file.

- If you select the **High** option, the processing speed is decreased.

❑ **Normal** (default) to provide regular text quality

Image Quality
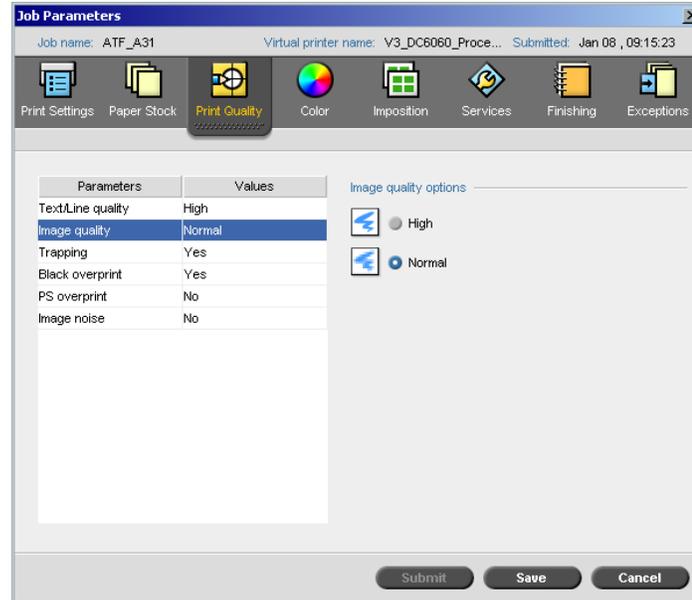
Image quality refers to the ability to maintain the same detail and smoothness with different degrees of enlargement. This feature is especially useful when your PostScript file includes several images at different qualities (for example, images that were scanned at different resolutions, were rotated, or downloaded from the internet).

➢ To select the image quality, select one of the following options:

❒ **High** to improve the quality of images in a job

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)

Trapping
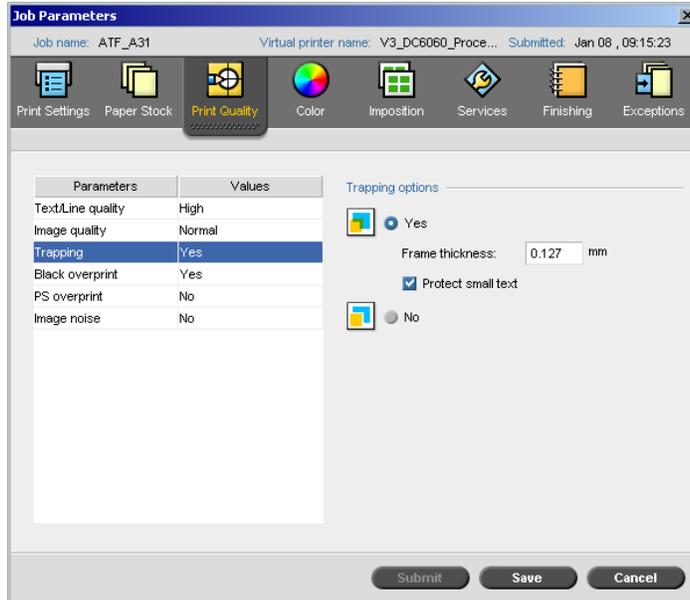
Trapping is a solution that solves misregistration between color separations in both offset and digital printing. This occurs no matter the accuracy of the printing device, and results in white lines around objects on top of a background (in a knock-out procedure) and also between adjacent colors. The solution is to extract the element and/or the background in order to create an overlap between them.

See the following illustration for the trapping's effect:

Printed without Trapping   Printed with Trapping
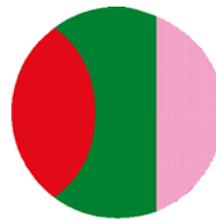
This function uses the following terminology:

- **Frame Thickness** refers to the thickness of trapping. The thicker the frame, the less chance that white areas appear between images.

- **Protect Small Text** is an option you may apply for small or complex images, since thicker frames can decrease quality by hiding parts of an image. Selecting this option will protect any text smaller or equal to 12 pt by not framing it while applying the FAF algorithm.

➢ To set trapping, select **Yes**.

Note: When **Yes** is selected, the **Frame Thickness** and **Protect Small Text** options are activated. These options cannot be selected through the PPD.

❒ In the **Frame Thickness** box, select the default (0.08) for the thickness of the trapping frame, or type the required value.

❒ Select the **Protect Small Text** check box so that any text that is smaller or equal to 12 pt. is not framed during FAF.
Or:
Clear this option to frame all text elements during FAF.

Note: Selecting **No** does not affect trapping incorporated by DTP applications (for example, Photoshop). FAF should not be used with application based trapping. In a PostScript file that already contains trapping from the originating application, it is not necessary to use Spire CXP6000 color server trapping.

Black Overprint
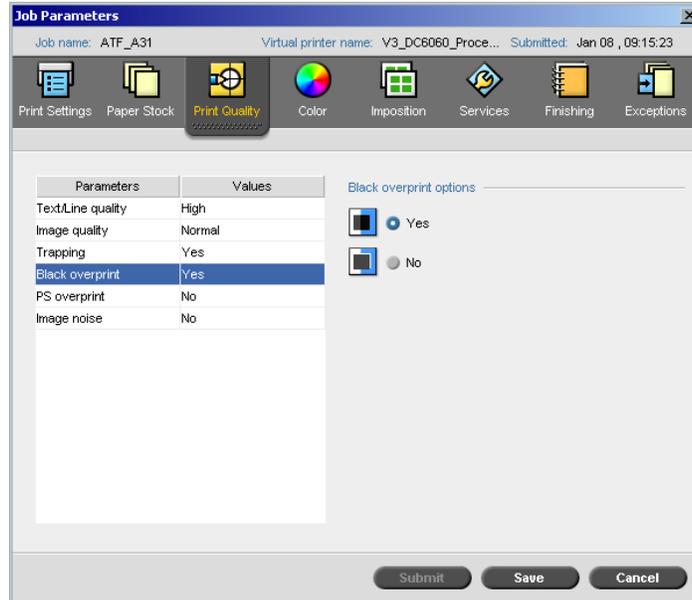
Occasionally, white lines may appear around black text. The text may appear less dense than required as a result of misregistration between color separations. **Black Overprint** is used to ensure that black text prints cleanly within a tint or picture area. The text appears in a richer, deeper black, with the underlying CMY values equal to those of the printed background.

A knock-out occurs when you print only the topmost color. This results in lesser color density and can cause misregistration if separations are not perfectly aligned. When Black Overprint is active, there are no knock-outs under the black text. Black Overprint prints text over colored backgrounds rather than knocking out the background first. As a result, misregistrations are not visible. It is therefore recommended to use Black Overprint in order to ensure best results when printing black text and graphics.

➢ To enable black overprint, from the **Black overprint options**, select **Yes** (**Black Overprint** applies only to 100% black).

   Note: Selecting **No** increases the processing speed.

PS Overprint
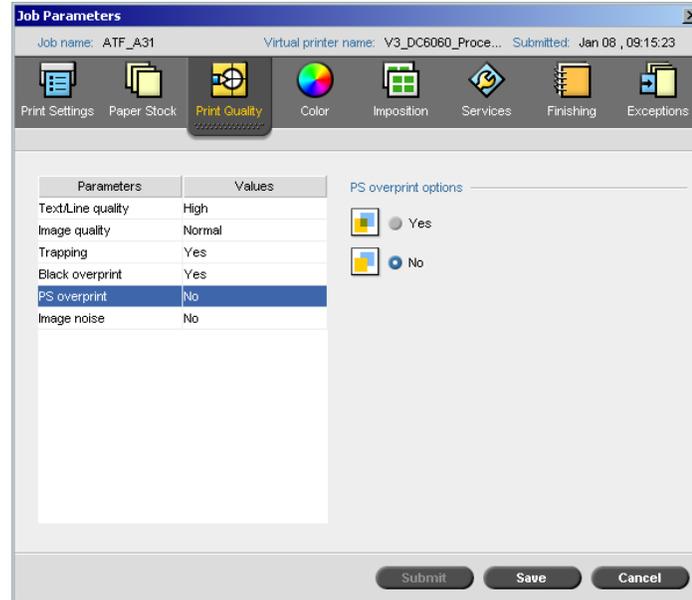
In the client authoring tools (for example QuarkXPress®), you can select overprint options. **PS Overprint** offers the option to use the overprint, which exists in the PostScript file. It also determines whether the DTP application PS Overprint settings are honored in the RIP.

The Spire CXP6000 color server settings override PS Overprint commands from DTP applications. For example, if you set the PS Overprint option to **Yes** in a DTP application, and in the Spire CXP6000 color server set the PS Overprint option to **No**, the result is no overprinting. The Spire CXP6000 color server can't create PS Overprint that is not pre-defined in the file. If you select the **Yes** option (default) for a file that has not had overprinting defined in a DTP application, the result is no overprinting.

If you choose to keep the PS overprint that was applied in a DTP application, the Spire CXP6000 color server implements the overprinting and background colors are not knocked out. For example, in the case of a yellow triangle overlapping a cyan circle, selecting **Yes** results in the overlapping area turning green. This is not seen on the screen, only in print.

Note: The above is true for files with PS Overprint **Yes** already selected in the DTP application.

If you choose to ignore the PS overprint information that exists in the input PostScript file, background colors are knocked out and only the top most color parts are seen on the screen in your DTP application.
For example, in the case of a yellow triangle overlapping a cyan circle, selecting **No** results in the cyan background being knocked out, so only the yellow is printed.

To set the PS overprint, select one of the following options:

- Select **Yes** to use the overprint information that exists in the input file.

- Select **No** to ignore the overprint information that exists in the input file.

Image Noise
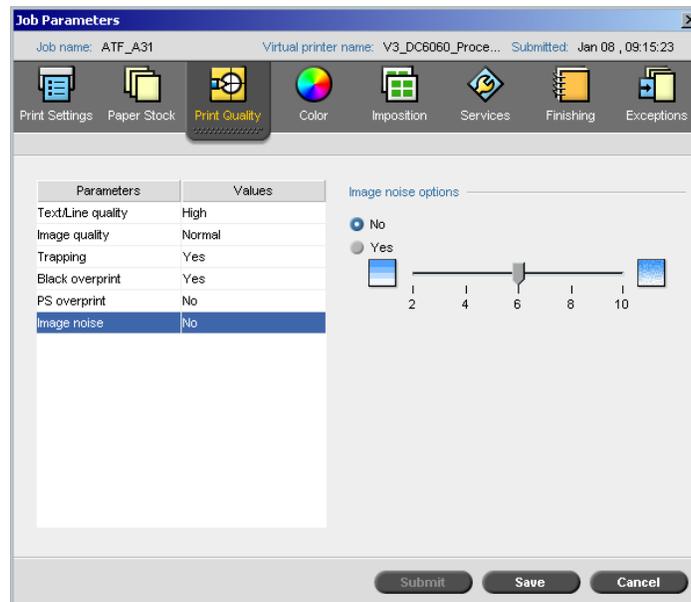
The **Image Noise** parameter, enables you to smooth and blend vignettes of continuous tone (CT) images.

By default the **Image Noise** parameter is disabled.

To set the image noise level:

1. In the **Image noise options**, select **Yes**.

2. Change the image noise level (if required) by moving the slider; the higher the level, the smoother the vignettes appear.

5

Managing Jobs

Overview

This chapter explains the various operations that can be performed from the Spire CXP6000 color server queues, and in the Storage window. It also provides information on managing jobs and disk space.

The Job Editor tool is also explained in this chapter. This tool is provided to enable you to view the previews of your jobs and edit RTP jobs if required.

This chapter also explains Job Accounting, managing virtual printers and the **Job Flow** parameter in the Settings window Job Parameters Services tab.

Managing the Job Queues

Setting Queue Preferences

After entering the Spire CXP6000 color server, jobs reside in the Queues window (which includes both the **Process Queue** and **Print Queue**) or in the Storage window (depending on the selected job flow).

The **Process Queue** lists all the jobs that are waiting to be processed and the job currently being processed.

The **Print Queue** lists all the jobs that were processed successfully and are waiting to be printed, and the currently printing job. The **Print Queue** also lists **Frozen** jobs (jobs for which the appropriate paper stock is not available—for example, the correct paper type, paper size or paper weight is missing.

Each queue holds jobs in the order they entered it (unless a **Rush** job "interrupts" the submission order).

For more information about rush jobs, see *Running a Job Immediately* on page 199.

At any time, you may view information regarding the number and status of the jobs in the queues, reorder the jobs or suspend/resume the queue.

After startup, the Queues window is displayed. The Queues window consists of the **Process Queue** and the **Print Queue**.
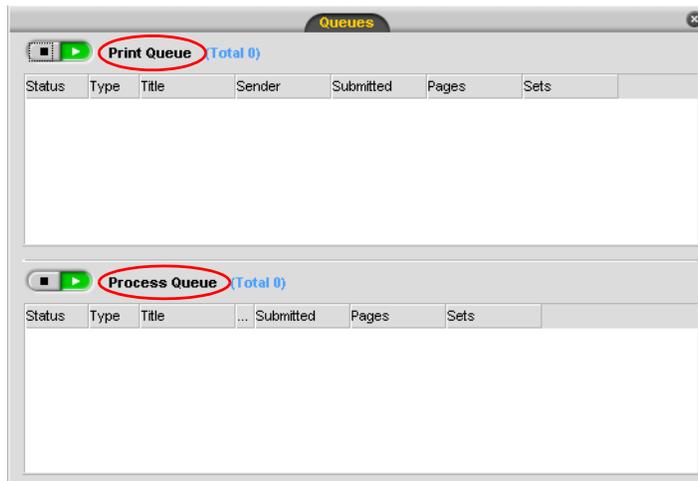
Each queue holds jobs in the order they entered it. The top job in the queue is the **Running** job, while all others are **Waiting** jobs.

Note: In the **Print Queue**, in cases of very short jobs, several jobs may be **Running**. The jobs in the **Running** state are listed first and printed in the order they are listed.

If required, you can change the order of **Waiting** jobs in the queues or view/ edit the parameters of a job.

To close the Queues window:

➢ Click the **Close** button on the window's title.

To display the Queue window:

➢ From the **View** menu, select **Queues**.

The Queues Window

After submitting PDL files (or re-submitting PDL jobs), the **Process Queue** lists the files to be processed.
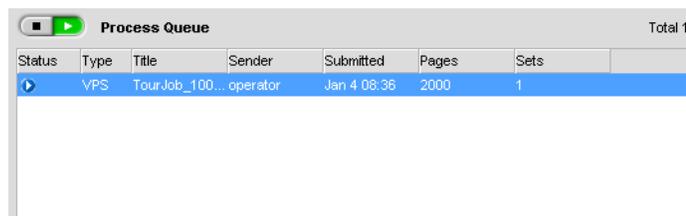
Once a file has been processed successfully, it moves to the **Print Queue** and waits to be printed or to the Storage window (depending on the current job flow or virtual printer).
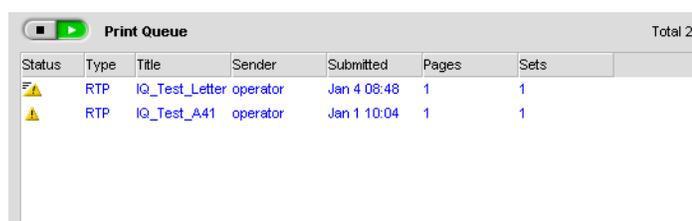
For more information about operations on the jobs residing in the **Queue Manager**, see *Handling Jobs in the Queues* on page 195.

The Queues window lists informations about the jobs that are being processed. Status indicators indicate the status of each job. Table 5 describes the status indicators used in both the **Process Queue** and **Print Queue.**

Table 5: Process Queue and Print Queue status indicators

Status indicator	Indicates the
	Job is running
	Job is frozen and held in the **Print Queue.** If a job is frozen, it indicates that the appropriate paper stock is not available— for example, the correct paper type, paper size, or paper weight.
	Job is waiting

Table 5: Process Queue and Print Queue status indicators

Status indicator	Indicates the
	Rush job
	Rush job is frozen
	Rush job is waiting

For more information about rush jobs, see *Running a Job Immediately* on page 199.

Right-click the column headings row to select which columns you want to view.

Table 6: Process Queue and Print Queue column descriptions

Column name	Indicates the
Type	File format of the PDL job—for example, PS, PDF, VPS
Title	Name of the file to be printed. If you submit a file whose name already exists in the Spire CXP6000 color server, a sequential number is automatically added to the file name—for example, submitting a file called LOBSTER while such a file already exists renames it to LOBSTER1.
Sender	User name of the system from which this file originated
Submitted	Date and time this job was first submitted to the Spire CXP6000 color server
Pages	Number of pages to be processed in a PDF job. If the DTP application supported it, the number of pages is indicated for other PDL jobs.
Sets	Number of copies to be printed

Table 6: Process Queue and Print Queue column descriptions

Column name	Indicates the
Paper set/Stock name	Paper set name or stock name.
Media Size	Paper size
Media Weight	Paper weight
Media Type	Paper type
Media Coat	Paper coating
File Size	File size of the job
Account	Account name taken from the **Job info** parameter
Job Info	Job info type
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

Queues Status Panel Information

The **Processing** and **Printing** status areas indicate the following:

- The current number of jobs in the respective queue—for example, 1.
- If a job is currently processed/printed, the name of the job and a process indicator are displayed.

Note: In the **Processing** status area, the total number of pages is indicated for PDF jobs. If the DTP application supported it, the number of pages is indicated for other PDL jobs.

Job Batching Workflow

The job batching workflow streams several jobs into a single batch to prevent the printer from cycling down between jobs. Every job that enters the **Print Queue** is checked whether it can be streamed to the previous job.

- If a job can be streamed to the previous job, the job's icon is changed to a running state and it prints without a cycle down.

- A job that cannot be streamed to the previous job prints after the print engine cycles down. Jobs that follow this type of job can be streamed to it. The job batching operation can be enabled or disabled in the **Print Queue Manager** utility in the **Preferences** parameter, in the Settings window. This feature saves printing time, especially for a large number of short/small jobs.

The following job types cannot be combined to one batch:

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

How job batching is set in the Spire CXP6000 Color Server

1. The files arrive to the **Print Queue**.

2. The job is validated by the Spire CXP6000 color server. If it is fit for streaming to the current batch, the job is added to the batched list and runs as a batched job (without cycle down). If it is not fit for the current batch, it remains on the waiting list and is not run as a batched job (its icon remains the waiting icon).

3. Merged files are automatically batched with the upper jobs on the queue.

4. If the waiting list order changed and the previous job was not merged, then the job at the top of the waiting list is checked.

Note: You set job batching in the Settings window under **Preferences**>**Print Queue Manager**.

For more information about job batching, see *Print Queue Manager* on page 424.

Reordering Jobs in the Queues

Rearranging a queue enables you to set a new processing or printing order.

You can do the following:

*   Promote a job
*   Promote a job to top of the queue
*   Demote a job
*   Demote a job to the bottom of the queue

Note: All actions are valid for a single job only.

To reorder a job in the Queues window:

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

❑ **Promote:** To move the selected job one step up in the queue.

❑ **Promote to top:** To move the selected job to the top of the queue.

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

❑ **Demote:** To move the selected job one step down in the queue.

❑ **Demote to bottom:** To move the selected job to the bottom of the queue.

Suspending and Resuming Queues

If required, you can stop a queue (that is, rendering it temporarily inactive) and then later continue its operation. To do so, use the **Suspend/Resume** button.

Resume mode   Suspend mode

The Suspend/Resume button

To suspend a queue:

➤ Click the **suspend** button.

The button switches to suspend mode. Processing/printing stops after the current job has finished running.

To resume a queue:

➤ Click the **resume** button.

The button switches to resume mode. The top job in the queue starts processing/printing.

Handling Jobs in the Queues

You can perform the following tasks from the **Process Queue** and the **Print Queue**:

- Abort a running job
- Move waiting jobs to the Storage window
- Delete jobs
- View and modify the parameters of a job
- View the job history (open the Job History window)
- Run a waiting job immediately

Note: You can perform the above mentioned activities (except for **Abort**), only if the job is waiting in the queue. If the job is active, other selections are not available.

Details about the above actions are provided in the following sections.

Aborting a Running Job

To stop processing/printing a running job:

➢ Right-click the required running job in the **Process Queue** or the **Print Queue**, and from the menu select **Abort**.
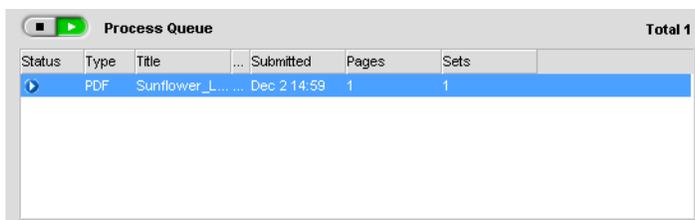
The job is removed from the queue to the Storage window, and the Alerts window is updated.

The **Aborted** status is assigned to the job and the next job in the queue starts running.
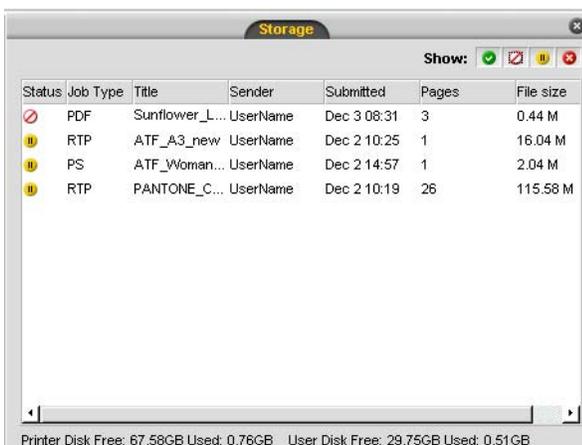
Note: To return a job to the proper queue, right-click the job(s) in the Storage window and from the **Job** menu select **Submit**.

Moving Waiting Jobs to the Storage Window

To postpone processing/printing of one or several waiting jobs, you can use the **Move to storage** option.

To move waiting jobs to storage:

1. Select one or several jobs in the **Process Queue** or **Print Queue**.

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

Note: If you have selected several jobs, from the **Job** menu select **Move to storage**.

The job(s) are removed from the **Process** or **Print Queue** to the Storage window.

The **Held** status is assigned to the job(s).

Note: To return jobs to their original queue(s), right-click the job, and from the menu select **Submit**.

Deleting Jobs

You can delete one job, or select several jobs to be deleted and delete them at once.

To delete a job:

1. Right-click the required job (or select as many jobs as you want to delete) in the Queues window or Storage window, and from the **Job** menu select **Delete**.

   The following message appears.
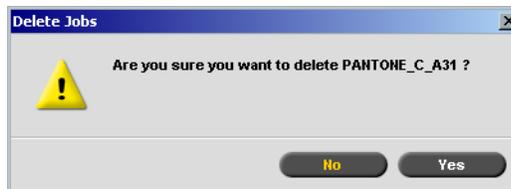
2. Click **Yes**.

   The selected job(s) is removed from the **Print Queue** or **Process Queue**.

   Note: Once a job is deleted, it needs to be re-submitted for processing and printing. To temporarily remove jobs from a queue, use **Move to Storage** (see *Moving Waiting Jobs to the Storage Window* on page 197).

Viewing and Editing the Job Parameters

To view/edit the job parameters:

➢ Right-click the required job in the Queues or Storage window, and from the menu, select **Job Parameters**.
   Or:
   Double-click the required job in the Queues or Storage window.

   The Job Parameters window appears.

   Notes:

   • In the Queues window, you can only edit waiting jobs (not running). You may also suspend the queue for editing by clicking the **suspend** button.

   • If the changes were applied in the **Print Queue**, and applying them requires re-RIPing of the job, the job will be automatically placed in the **Process Queue**.

Running a Job Immediately

You can select a job in the Storage window, or in the **Print Queue** or **Process Queue** and process/print it with top priority.

If the **Rush** job requires processing while another job is being processed, the currently processed job will preserve its **Running** job status, but its processing will be paused, while the rush job takes priority and is processed. After the rush job has finished processing and is moved to the **Print Queue**, the paused job continues its processing.

If the rush job enters the **Print Queue** while another job is being printed, the currently printing job will preserve its **Running** job status, but its printing will be paused, while the rush job takes priority and is printed.

Note: The currently running job will finish printing the current page (both sides), or current set (depending on stapling options).

After the rush job has finished printing, the paused job will automatically continue printing.

Note: You can only assign one job at a time as rush jobs. 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 job with top priority (as a rush job):

➢ Right-click the job in the Queues or Storage window, and from the menu select **Run Immediately**.

The job will be assigned to the top of the appropriate queue with a **Rush** icon, to be handled immediately.

Managing the Storage Window

The Storage window can contain jobs that:

- Completed printing

- Were moved to the Storage window (or **Aborted**) during processing (or printing)

- Failed to complete processing or printing

- Retrieved jobs

- Were imported or downloaded directly from the client to the Storage window (that is, using the **Spool & Store** workflow)

To close the Storage window:

➢ Click the **Close** button on the window's title.

To open the Storage window:

➢ From the **View** menu, select **Storage**.

The Storage window appears. Initially, it contains no jobs.

At any time, you can view information regarding the number and status of the jobs in the Storage window, and sort or filter the list of jobs. After startup, the Storage window is displayed by default.

Status	Job Type	Title	Sender	Submitted	Pages	File size
	RTP	PANTONE_C...	UserName	Dec 2 10:26	2	8.64 M
	RTP	PANTONE_C...	UserName	Dec 2 10:25	26	115.59 M
	PDF	Color_Flowc...	UserName	Dec 3 08:31	3	0.44 M
	RTP	ATF_A3_new	UserName	Dec 2 10:25	1	16.04 M
	PS	ATF_Woman...	UserName	Dec 2 14:57	1	2.04 M
	RTP	PANTONE_C...	UserName	Dec 2 10:19	26	115.58 M

Printer Disk Free: 67.58GB Used: 0.76GB   User Disk Free: 29.75GB Used: 0.51GB

Discarding RTP Data

The RTP data can be discarded if required. This is typically done in one of the following cases:

- You need to re-RIP a file
- You want to archive a job without the RTP data
- You want to edit tabs

To discard RTP data:

➢ 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.

Filtering the List

Each job in the Storage window is assigned one of the following statuses:

Table 7: Storage window status indicators

Icon	Status	Indicates that
☑	**Completed**	The job completed printing.
⏸	**Held**	The job was moved from the Queues window to the Storage window by the operator, or automatically by the current Job Flow or Virtual Printer.
✖	**Failed**	The job failed to complete processing or printing.
⊘	**Aborted**	The job was aborted by the operator when it was Running in the Queues window.

Show: ☑ ⊘ ⏸ ✖   By default, the Storage window lists jobs of all statuses (all status indicators are selected).

By selecting one or more status types you can filter the list in order to view only jobs of the selected status indicator(s).

To filter the list:

➤ Click any status indicator(s)—for example, the **Completed** and **Held** to remove jobs of that status from the list.

The list updates accordingly.

Note: If you click all the status indicators, no jobs are listed.

Handling Jobs in the Storage Window

In the **Storage** window you can perform the following actions:

- Submit a job. See *Submitting Jobs* on page 203.

- Run a job immediately (rush job). See *Running a Job Immediately* on page 199.

- Preview and edit a job, using the **Job Preview &Editor**. See *Job Editor* on page 207.

- View and modify the parameters of a job. See *Viewing and Editing the Job Parameters* on page 198.

- Archive a job. See *Archiving and Retrieving Jobs* on page 204.

- Duplicate a job. See *Duplicating Jobs* on page 203.

- Delete a job. See *Deleting Jobs* on page 198.

- View the job's history (in the Job History window). See *Viewing the Job History* on page 207.

- Export as PDF2Go. See *Export as PDF2Go* on page 267.

- View the Job Ticket Report. See *Job Ticket Report* on page 228.

- View the Preflight report. See *Preflight Report* on page 381.

- Export a job as InSite. See *Export as Creo Synapse InSite Job* on page 385.

Submitting Jobs

➢ Right-click the required job, and from the menu select **Submit**.
Or:
Drag the job(s) from the Storage window into the appropriate queue.
Or:
In the Job Parameters window, click **Submit**.

RTP Jobs are submitted to the **Print Queue**; all other jobs are submitted to the **Process Queue**.

Duplicating Jobs

1. Right-click a job and from the menu select **Duplicate**.

   The following message appears.
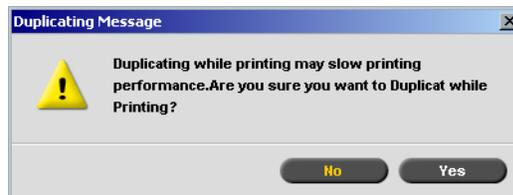
2. Click **Yes** to continue.

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

   Notes:
   - Duplicating an RTP job creates an original PDL version of the job.
   - You can't duplicate an RTP job that was modified in the Job Editor since it contains RTP data only.

Archiving and Retrieving Jobs

In order to maintain free disk space, it is recommended that you backup jobs and their related files to an external server, and then delete them from the Storage window.

This backup process is called archive. The archived jobs and their related files can later on be retrieved for further usage.

Archiving and Retrieving VI Jobs

If a job includes VI elements, these should also be archived and retrieved with the job.

➢ To archive and retrieve VI elements, select Resource Center>**Cached VI Elements**.

➢ To archive/retrieve a VI job, first archive/retrieve the VI elements.

You can also set a default archiving path. Once the path is set, and **Archive** is selected from the **Job** menu, the Archive window browser will be directed to the predefined path. This path is set in the Settings window under **Preferences**>**General Defaults**.

For more information about archiving VI elements, see *Managing VI Elements* on page 398 for details.

To archive a job to an external server:

1. In the Storage window, right-click the job you would like to archive, and from the menu select **Archive**.

The Open window appears.
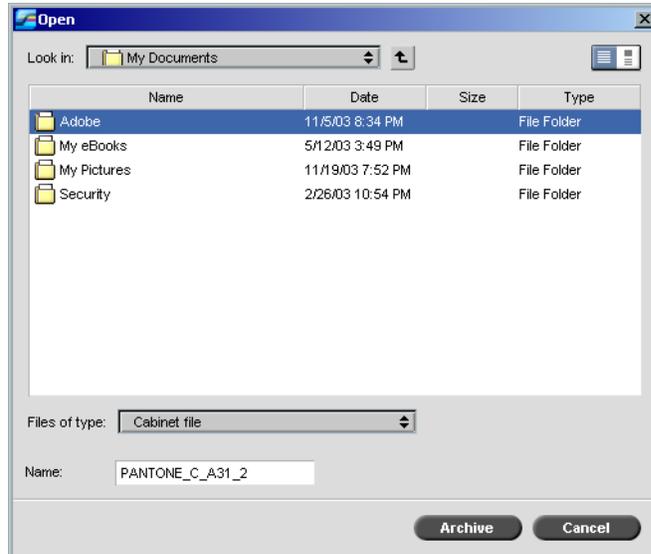
2. Locate the required folder, and then click **Archive**.

3. A cabinet file (compressed ZIP) that contains all 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 its Job Parameters and Job History windows.

    - When retrieved, the archived job retains the original job name, not the name assigned when archived.

    In the **Alerts** window verify that a completed processing of archive message appears.

4. You can now delete the job from the Storage window.

To retrieve an archived job:

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

The Open window appears.
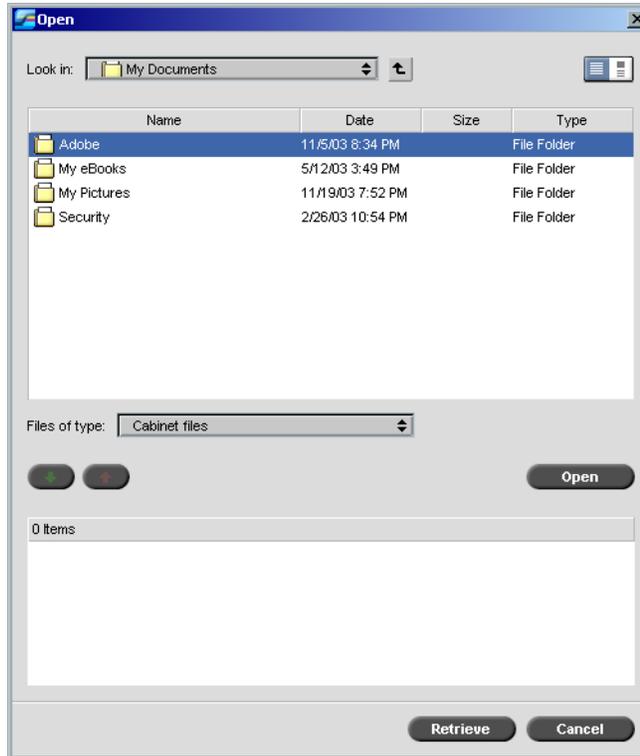
2. Locate the archived job, select the related cabinet file, and click **Open**.

   Note: Find the job using the archived job name.

   The selected job appears at the top of the list in the Storage window. It is assigned the status (that is, **Completed**, **Failed**, **Held**, or **Aborted**) it had when it was stored.

   Notes:

   - If required, you can select more than one job to retrieve from archive.
   - The files related to the job (for example, PDL) are also retrieved.
   - The Job Parameters and Job History windows related to the job prevail.
   - The cabinet file is not deleted from its location.

3. In the Alerts window, verify that a completed processing of restore message appears.

Viewing the Job History

> ➢ Right-click the required job in the Queues window or Storage window, and from the menu select **Job History**.

The Job History window appears.

Job Editor

The **Job Editor** tool enables you to preview an RTP job for inspection before printing. If required, you can delete, move or add pages to a job using this tool. While you navigate to the various pages of a job, you can view the job thumbnails, or, in the case of an imposed job, you can view the actual imposed sheets, including the number of pages on each sheet, their orientation, crop marks and fold marks.

To open the job editor:

> ➢ Right-click any RTP job in the Storage window, and from the menu 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 display other pages of the current job:

The **First Page** button - click this button to preview the first page of the job.

The **Previous Page** button - click this button to preview the previously viewed page.

The **Next Page** button - click this button to preview the following page.

The **Last Page** button - click this button to preview the last page of the job.

Note: If the first page of a booklet is accessed, navigation continues to the previous booklet. If the last page of a booklet is accessed, navigation continues to the next booklet.

Preview Buttons

By default, when you open the Job Editor, the first page of the job is displayed (in **Fit to page** mode). The **Preview** buttons enable you to switch the display mode of the page:

The **Max details** button - click this button to magnify the required area in the preview to maximum details. After magnifying, click the preview to return to its previous view. You can then magnify a different area in the preview. If you navigate to another page, the view returns to **Actual Size**.

The **Actual size** button - click this button to view a preview of the job in its actual size. If you navigate to another page, the view retains the **Actual Size** mode.

Note: If the page is larger than the display, use the horizontal and vertical scroll bars.

The **Fit to page** button - click this button to preview full pages. If you navigate to another page, the view retains the **Fit to page** mode.

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 in the Job Editor.

The Booklets tab

The **Booklets** tab (default for non-imposed RTP jobs) displays the booklet(s) included in this job and the names/numbers of the pages within each booklet.

To display a page in booklets view:

➢ Double-click the name of a page on the **Booklets** tab to display it.

The page is displayed (and its number in the booklet list is highlighted).
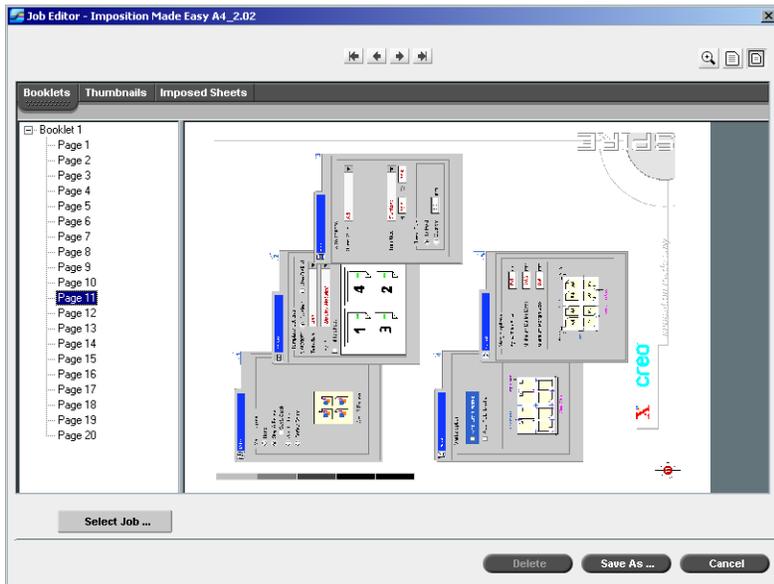
The Thumbnails tab

The **Thumbnails** tab displays the thumbnails of the selected booklet.

To display a job in thumbnails view:

1. Select the **Thumbnails** tab.

    A small and approximate version of the job appears.

2. Use the scroll bar, as required, to view all of the pages.
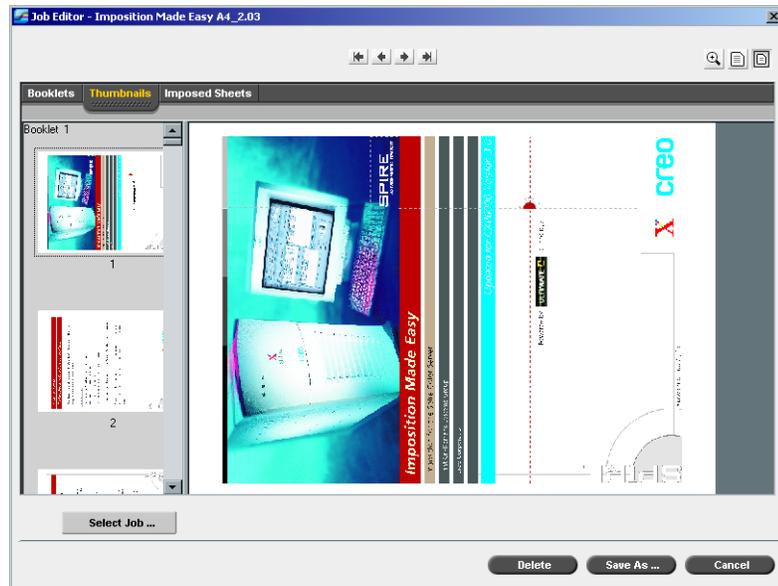
3. Use the vertical scroll bar to view additional thumbnails.

4. If required, resize the thumbnail area to view thumbnails side by side (use the horizontal scroll bar to view additional thumbnails). Then double-click the thumbnail of the page you wish to display.

   The page is displayed.

The Imposed Sheets Tab

The **Imposed sheets** tab is available only for imposed RTP jobs. This tab displays the imposed sheets along with the number of pages on each sheet and was designed to enable you to view and check your imposition parameters. Therefore, you cannot edit the imposed job using the **Imposed sheets** tab. To edit imposed jobs, use the **Thumbnails** or **Booklets** tabs, and then return to the **Imposed sheets** tab to view the updated imposed layout.

The following example shows the **Imposed Sheet** tab displaying an imposed job. You can view the number of imposed sheets in the job and the number of pages on each sheet.
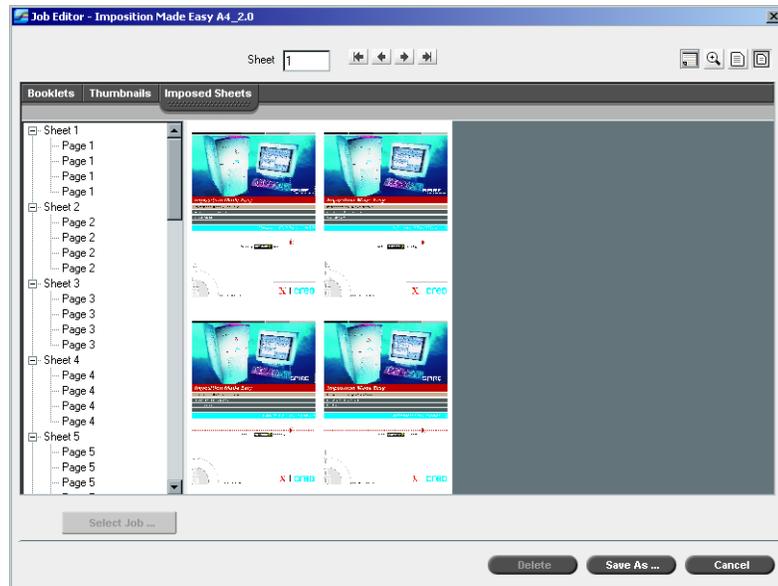
Notes:

- In VI jobs, the booklet number appears in addition to the page 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 job in the Imposed sheet view:

1. Select the **Thumbnails** or **Booklets** tab.

2. Select the required page/thumbnail.

3. Select the **Imposed sheets** tab.

   The imposed job appears.

4. If you would like to view the job imposition details, click the **Show Info** button. A pop-up window appears displaying the imposition parameters such as the sheet size, trim size, imposition template/method, margins, gutters and spine trim size.

The related imposition information appears.
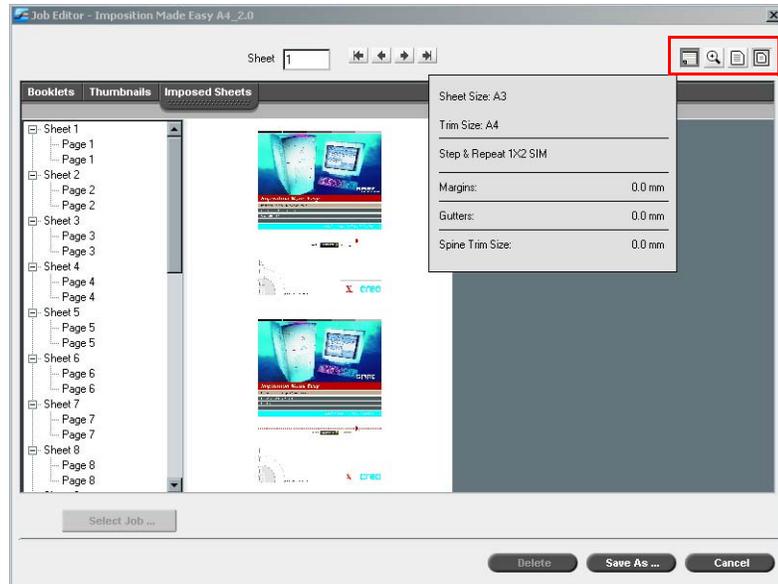
5. To close the imposition information, click the **Show Info** button again.

6. If you want to edit the job, select the **Booklets** or **Thumbnails** tab.

For more information about editing RTP jobs, see *Editing RTP Jobs* on page 213.

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 RTP Jobs

You can edit RTP jobs in the following ways:

- Move pages within the job
- Delete pages from the job
- Insert pages from another job
- Merge entire jobs

Moving Pages Within a Job

If required, you can change page positions within the job (for example, switch pages 2 and 3).

To move pages within a job:

1. Click on the page you would like to move.
2. Drag the page to the target location.

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

The moved page is inserted in the required location, and the page numbers update accordingly.

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

Deleting Pages From the Job

1. Click on the page you would like to delete.

2. Click **Delete**.

    The page is deleted and the page numbers update accordingly.

Merging Jobs

You can copy a page from a job into the job to be edited or copy all the
pages from a job and append them to the job to be edited.

To merge jobs:

1. In the Job Editor window, open the job that appears first in the merged
    job.

2. Click **Select Job.**

    The RTP Jobs window appears.
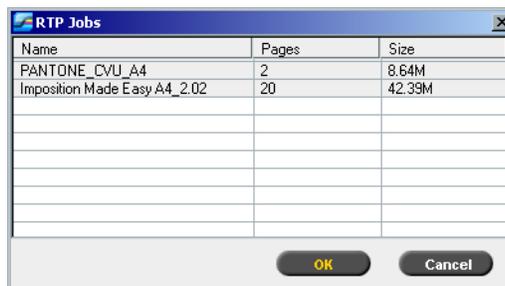
Note: Only RTP jobs of which the page size and orientation are identical to
that of the job to be edited are displayed.

3. Select the job that you want to merge.

4. Click **OK.**

The Thumbnails display area splits in two, and the thumbnails of the second job are displayed below those of the job you are editing.
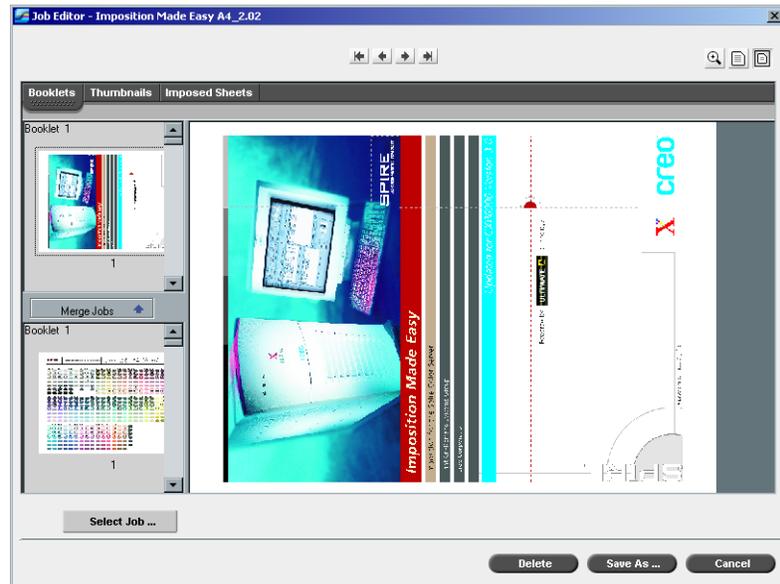
Copying a Page From a Second Job

Once the thumbnails of the second job are displayed, you can copy a page insert it into the first job.

To copy a page from the second job:

1. From the second job, select the page you wish to copy.

2. Drag the page to the required location in the first job to be edited.

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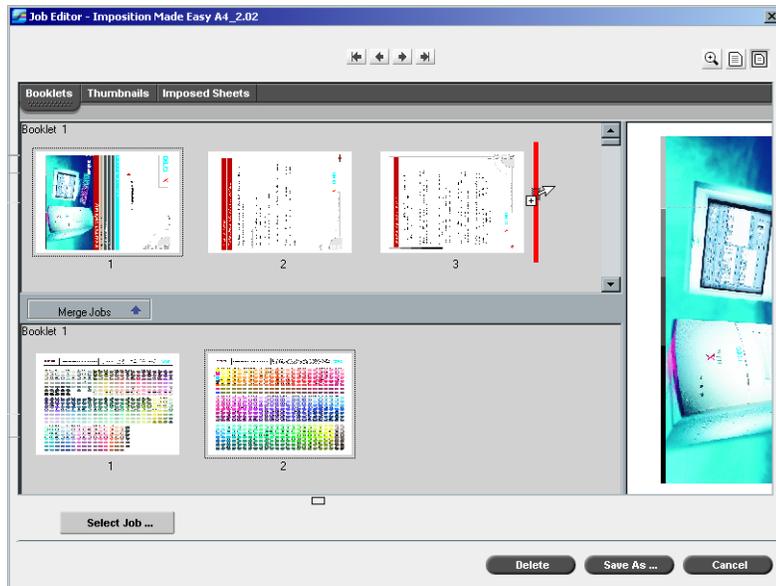
The copied page is inserted in the required location, and the page numbers update accordingly.

Copying All the Pages of the Second Job

If required, you may copy all pages of the second job and insert them at the end of the first job.

To copy all the pages of the other job:

➢ Once the thumbnails of the second job are displayed, click the **Merge Jobs** button.

All the pages of the second job are inserted at the end of the first job.

Saving the Edited Job

1. In the Job Editor window, click **Save As**.

   The following window appears.
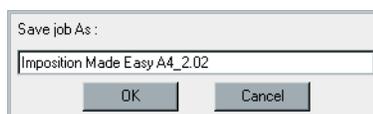
2. Type a new name for the job.
   Or:
   Leave the indicated name to overwrite the job.

3. Click **OK**.

   The file is saved in the Storage window, and the Job Editor window closes.

   Note: Jobs edited using Job Editor can not be re-RIPed. Once a job has been saved in the Job Editor, it is a new RTP file without an associated PDL file. For such jobs, parameters requiring re-RIPing can not be applied.

Job Accounting

To enable billing, the Accounting feature offers information related to all the jobs that printed successfully via the Spire CXP6000 color server as a tab delimited file. If required, you may filter, sort or print the list, or export the report into a spreadsheet application—for example, Microsoft Excel— where you can manipulate the data as required.

Viewing the Accounting Information

➢ At any stage of work, from the **Tools** menu select **Accounting**.

The Accounting Viewer window appears, listing information related to all the jobs that printed successfully via the Spire CXP6000 color server.

Each row in the Accounting report contains information related to a specific job.

Notes:

- To see additional columns, use the horizontal scroll bar.

- By default, all the jobs that were handled during the past 3 months are listed. 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 required.

The columns indicate the following information.

Table 8: Description of columns in the Accounting Viewer

Column name	Indicates the
Job Title	Original name of the file related to this job (that is, without the extension)
Sender	User name of the system from which this job originated
Submitted	Date and time the job was first submitted into the Spire CXP6000 color server

Table 8: Description of columns in the Accounting Viewer

Column name	Indicates the
Started Printing	Date and time on which the job first started printing
Processing Time	Total time during which the job was processed
Printing Time	Total time during which the job was printed
Job Size	Job size in MB
Paper Size	Size of the media set for the job—for example, Letter, A3, A4
Paper Weight	Paper weight in gs/m
Coating	Paper stock coating status (Coated or Uncoated)
Sets	Actual number of printed copies
Job B/W Pages	Number of black-and-white pages in the original PDL file
Inserts	Number of pages inserts
Job Color Pages	Number of color pages in the original PDL file
Total Pages Printed	Number of pages that were printed
Purged B/W	Number of B/W pages that were already in the paper path, and were cleared due to job abort, or paper jam
Purged Color	Number of color pages that were already in the paper path, and were cleared due to job abort, or paper jam

Table 8: Description of columns in the Accounting Viewer

Column name	Indicates the
Page Exceptions	Existence of exceptions in the job (Yes/ No)
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 Spire CXP6000 color server Accounting window. Also, all jobs that were handled during the past 56 days are listed in the Spire CXP6000 color server Message Viewer. You can specify how long information remains before being overwritten.

To change the Accounting/Message Viewer log setup, see *Messages* on page 428.

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 required.

2. Click **Export**.

The Export Accounting window appears.
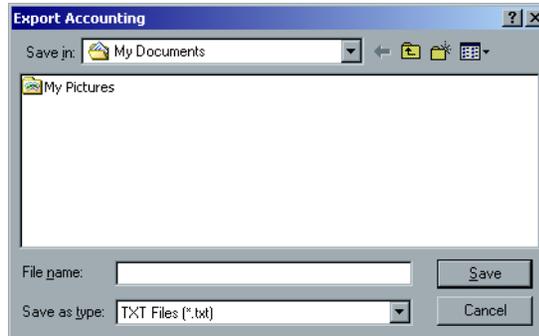
3. Locate the folder in which to save the report.

4. Click **Save**.

    The log is saved as a Tab delimited text file in the specified location.

    Notes:

    - The log includes all the columns (even those that were hidden), listed in the original order and sorting.

    - To export specific rows, select them before clicking **Export.** The exported log will include only these rows.

    - The exported data is not deleted from the Accounting report on the Spire CXP6000 color server (that is, it will still be displayed in the Job Accounting window).

5. If required, open the *.txt file in a text editor or in a spreadsheet application—for example, Microsoft Excel—and manipulate the data.

You can print the Accounting information (filtered and sorted) to any connected printer.

To print the accounting log:

1. Filter and sort the report as required.

    Note: To print specific rows, select the required rows now. The printed report will include only these rows.

2. Click **Print List**.

The Print window appears.
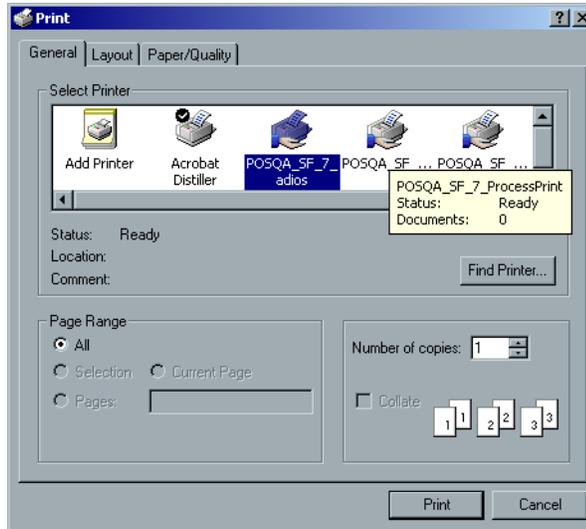
3. Set the printing options as required and click **OK.**

   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.

Managing Virtual Printers

A **virtual printer** is a printer published on the network with specific parameters set for processing and printing on the Spire CXP6000 color server. The Spire CXP6000 color server contains a mechanism that automatically installs the published virtual printers on your client workstation with the PPD and suitable printer driver.

The Spire CXP6000 color server is predefined with three virtual printers:

- **ProcessPrint**
  Files sent to this printer are automatically processed and printed to the printer through the Spire CXP6000 color server.

- **ProcessStore**
  Files sent to this printer are automatically processed and stored in the Storage window of the Spire CXP6000 color server. You can later submit the jobs to be printed, or change the parameters of a job and resubmit it for processing.

- **SpoolStore**
  Files sent to this printer are automatically stored in the Spire CXP6000 color server's Storage window until the print operator submits them for processing and printing.

If a job that is sent from the client, or downloaded to a particular virtual printer, contains preset parameters from the PPD, these options overwrite the parameters set in the virtual printer for that job. The **Printer Default** options defined in the PPD use the default parameters set for that particular 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 required paper sets (up to 4 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**.
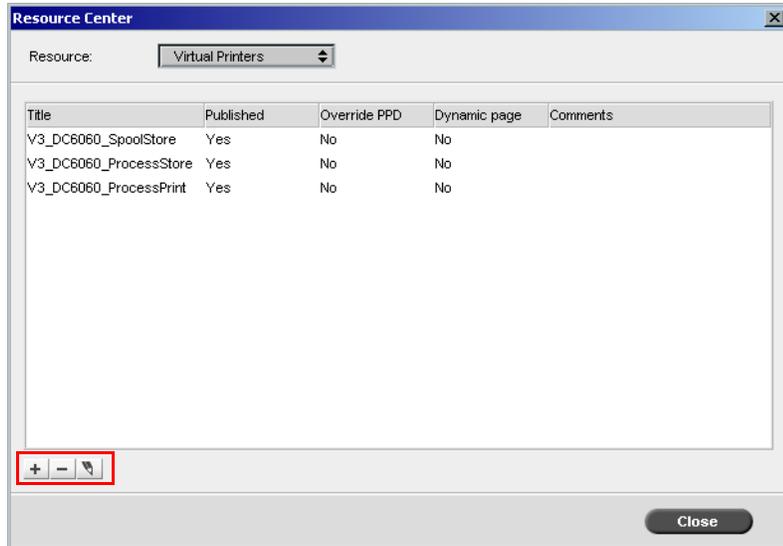
3. Click the **Add** button.

    The Add New Virtual Printer dialog box appears.
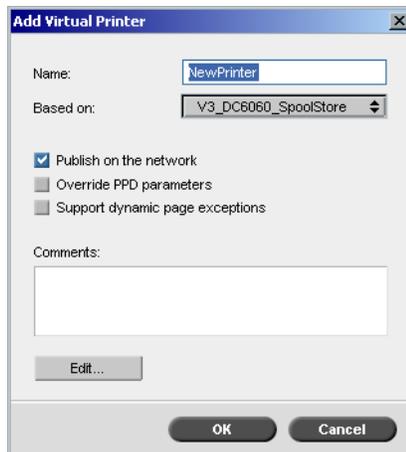
4. In the **Name** box, type a name for the new printer you want to add.
    Or:
    From the **Based on** list, may select an existing printer with similar
    settings.

5. In the **Comments** box, type any comment regarding the virtual printer
    parameters (optional).

6. 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.

7. Select the **Override PPD parameters** check box if you would like the Virtual Printer settings to override the PPD parameter selection.

8. 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 284.

9. Edit the Job Parameters of your new virtual printer.

> For more information about editing printer settings, see *Editing an Existing Printer* on page 225.

> **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.

10. 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 **Edit**.

2. Click **Edit.**

   The Job Parameters window appears.

3. Select the required 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.
   Or:
   Right-click the printer and select **Remove**.
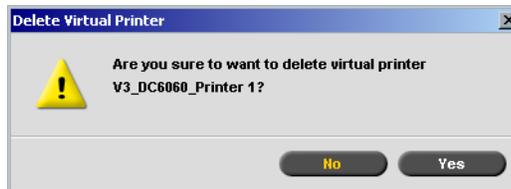
2. In the message that appears, click **Yes** to delete the designated printer.

Job Flow

The **Job Flow** parameter in the Job Parameters window **Services** tab enables the Spire CXP6000 color server operator to specify a job flow for a job that is imported to the Spire CXP6000 color server from the network or from the Spire CXP6000 color server folders.
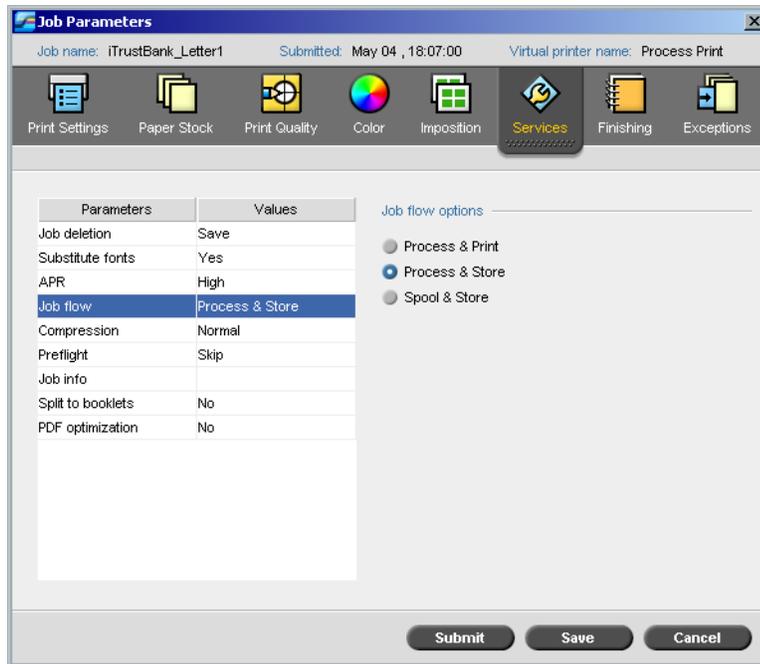
1. In the Job Parameters window **Services** tab, select the **Job flow** parameter.

2. Select the desired job flow option:

   ❑ **Process & Print**: to set the Spire CXP6000 color server to RIP the PDL files, print them, and store them in the **Storage** window (unless the **Job Deletion** parameter is set to **Delete after Complete**)

   ❑ **Process & Store**: to RIP the PDL files and move them to the **Storage** window as RTP jobs

   Note: The **Spool & Store** option (the Spire CXP6000 color server places the PDL files directly into the **Storage** window without processing them) is disabled and can be defined only through the PPD parameters of the virtual printer.

3. Click **Save**.

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 complete job parameters on a single sheet and may be exported or printed as a hard copy.

This feature is useful for:

- Updating the Hot-Line service on Job Ticket Report data when a question arises.

- Retaining job parameters when the same job is planned to be re-printed in the future.

- Providing the client / customer a follow-up tool regarding printed Job Parameter information.

To display the job ticket report:

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

    The Job Ticket Report window appears.
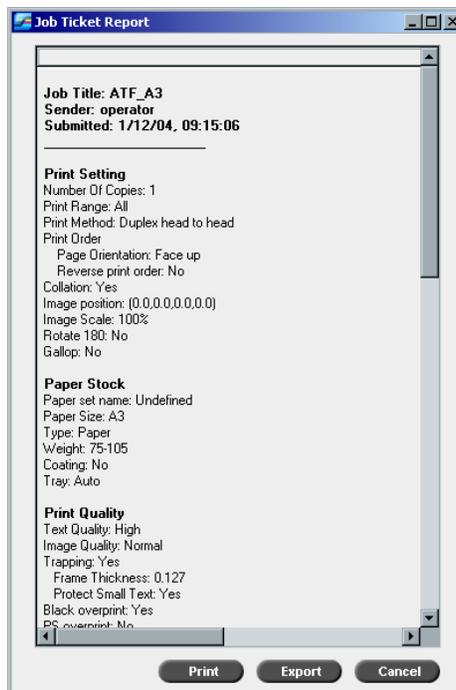
2.   You can export or print the report by clicking **Print** or **Export**.

The Job Ticket Report is exported as a text file.

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6

Production Printing

Imposition Workflow

Imposition is the process of positioning page images on sheets of paper in the printer or in a digital printing press. It is part of the process of producing finished documents.

In addition to page images, you can add various marks to the sheets to aid the production process. These marks show where the paper should be folded or trimmed.

Imposition does not affect the content of the individual page but rather the placement of the pages on a press sheet. Imposition is a combination of content and layout. The content is the pages that should be printed and the layout is the location of the page on the sheet and the printing marks, crop marks and fold marks.

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 Spire CXP6000 color server, imposition parameters are set in the **Imposition** tab, and page exceptions are set in the **Exceptions** tab.

For more information about the **Imposition** tab and the **Exception** tab, see *The Imposition Tab* on page 233, and *Setting Exceptions for Imposed Jobs* on page 274.

You can use a Spire CXP6000 color server virtual printer to predefine your 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 the printer.

For more information about virtual printers, see *Spire CXP6000 Color Server Network Printers* on page 13, and *Managing Virtual Printers* on page 222.

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, see *Dynamic Page Exceptions* on page 284.

Imposition Method

The **Imposition Method** parameter specifies how printed sheets are finished. You to choose a method according to the finished format that you need.

➢ In the **Imposition method options** area, select one of the following options:

❑ **None:** This is the default option. If you select **None**, the imposition parameters are unavailable and the thumbnail viewer does not display an image.

❑ **Step & Repeat:** Use this option for printing multiple copies of the same image so it fills up a larger sheet. This method is used mainly for printing business cards.
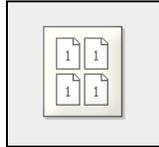
Notes:

- When you use the **Step & Repeat** template for VI jobs, the system prints the job in Z-Sorting mode. This mode enables imposed VI jobs to be sorted for **Cut & Stack** finishing.

- It is possible to use specific **Step & Repeat** templates to print several different images on one sheet.

❑ **Cut & Stack:** Use this option to enable **Step & Repeat** jobs to be printed, cut, stacked and bound in the most efficient manner, while preserving the original sorting. A job's pages, booklets, or books are sorted in a Z-shape. In other words, each stack of pages is sorted in consecutive order. When stacks are piled one on top of another, the entire job is already sorted up or down.
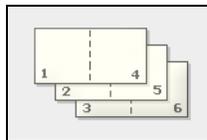
Note: When you use the **Step & Repeat** template with the **Cut & Stack** sub-option**,** the **Exceptions** tab is unavailable.

❒ **Saddle Stitch:** Use this option for a book-finishing technique where the pages of a book are attached through stitching or stapling in the spine fold —for example, brochures.
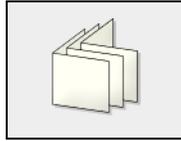
❒ **Perfect Bound:** Use this option for a book-finishing technique where the pages of a book are attached through trimming of the spine fold, roughening the edges of the gathered pages and gluing them together —for example, hardcover books.

Sizes

The **Sizes** parameter uses the following terminology:

- **Paper set** defines the paper stock attributes (paper size, type, weight and coating) on which the imposed job will be printed. The Spire CXP6000 color server enables you to define all the paper stock settings of an imposed job on the **Imposition** tab with no need to switch to the **Paper Stock** tab and define the paper stock settings there.

- **Trim size** is the size of the finished, trimmed document.
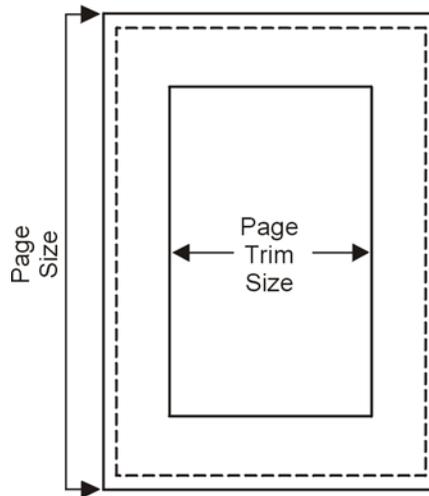
You can adjust your page size by adjusting the trim size.

Note: If you set the trim size to be smaller than the page size set in the DTP application, some of the data is cropped. Setting a larger trim size results in a larger border on the printed page.

- **Orientation** specifies the orientation, **Portrait** or **Landscape**, for the trim size. If the wrong orientation is specified, an unsuitable template might be selected and the job might be cropped as a result.

To set the size options:

1. In the **For sheet size use paper set** list, select the required 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 170.

2. In the **Trim Size** list, select the required trim size. If you select **Custom**, define a custom trim size and type the required Height in the **H** box, and the required Width in the **W** box.

3. Select the required **Orientation** for the trim size.

Template

The **Template** parameter includes a list of available templates and their layout options. Each imposition method has its own specific template choices. For example, if you change your imposition method from **Perfect bound** to **Step & Repeat**, the template you initially selected no longer fits the new method. When required, the Spire CXP6000 color server automatically substitutes a suitable template for your new method and notifies you that the change has been made.

To select a template:

1. From the **Category** options, select **System** to choose a predefined Spire CXP6000 color server imposition template.
    Or:
    Select **User-defined** to choose a user defined Spire CXP6000 color server imposition template.

    For more information about user defined templates, see *Imposition Templates* on page 244.

2. In the **Template** list, select an available template.

3. In the **Layout** list, select the required layout.

    Note: If you select the **User Defined** option, **Layout** is unavailable.

4. Select the **Fit to sheet** check box to proportionally increase or decrease the layout.

Previewing the Template Layout

When you choose a template, you need to account for other job parameters—for example, **Trim Size**, **Bleed**, **Margin**, **Gutters**, and **Paper Size**. In the **Template Options** area, you can preview the template layout of your job and check your imposition settings. For example, green arrows indicate that the template layout is rotated, and blue and black arrows indicate the direction of the pages on the sheet. The sequence of pages is indicated by the page numbers.
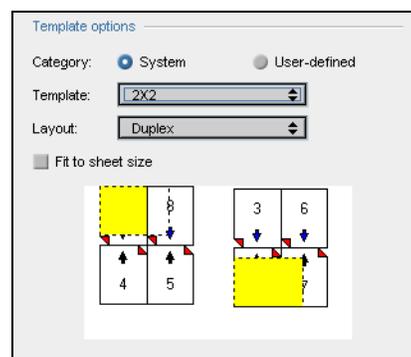
If the parameters conflict, you will see where the conflicts exist when you preview the template layout:

- Red corners indicate that the trim size is bigger than the sheet size.

- Yellow corners indicate unsuitable margin settings—for example, if the margin size is unsuitable.

- Dotted lines indicate conflicting trim size settings —for example, A3 trim for Step & Repeat 2x2 Duplex template— and template settings.

    Note: You can preview the imposed job in the Job Editor window, **Imposed sheets** tab, see *Viewing Pages in the Job Editor* on page 208.

Margins
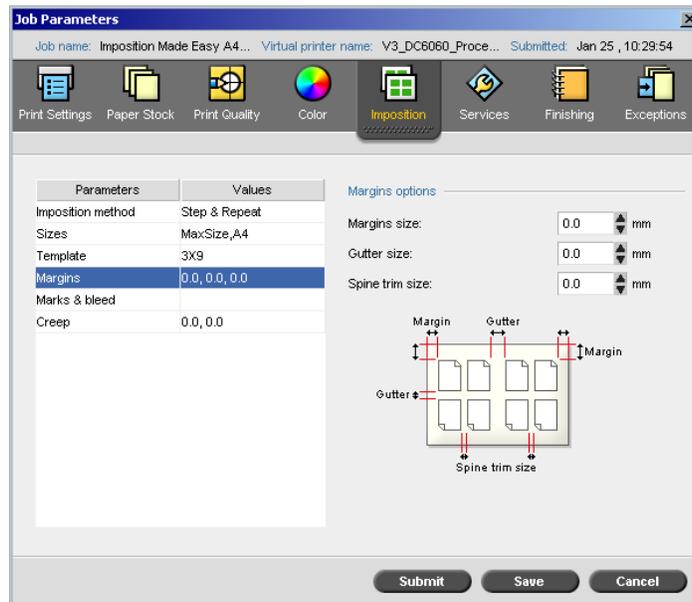
The **Margins** parameter enables you to adjust the spaces between the outside edges of pages and the edges of the sheet on which they are printed. Margin settings should suit finishing equipment and requirements. Confirm binding parameters with your binder when planning your sheet.

The **Margins** parameter uses the following terminology:

- The **Margins size** is the distance between the outside edges of the sheet and the edges of the pages printed on the sheet. The value that you set is not the exact distance. The Spire CXP6000 color server calculates the exact distance in accordance with other imposition parameters.

- The **Gutter size** is the inside space between pairs of pages on a sheet. When folded into a signature / booklet, the gutter allows space for trimming.

  Note: For specific sheet templates, there may be no gutter at all or only one gutter—for example, in two up, there is no gutter. In these cases, the gutter size setting is ignored.

- The **Spine trim size** is the space between adjacent pages on a printed sheet. When the sheet is folded into a signature / booklet, this space allows you to roughen the edges for perfect binding.

  Note: You use spine trim size with the perfect bound method only. If the saddle stitch method is used, this value is set to zero and the pages are printed side by side without any space between them.

To set the margins:

➢ In the **Margins options** area, type the required margin sizes.

  Note: Units of measurement (mm or inches) reflect system configuration and are selected in the Settings window, see *Localization* on page 421.

Marks & bleed
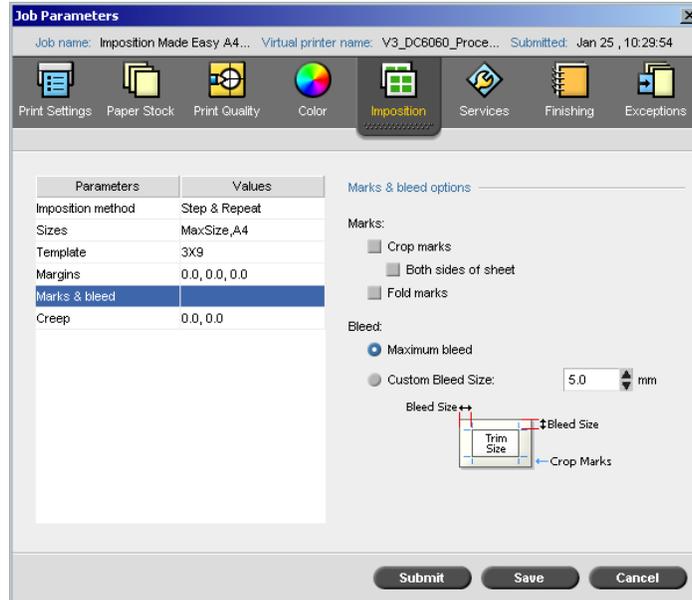
The **Marks & bleed** parameter enables you to mark where trimming and folding should occur.

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 an 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 the 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 the lines that indicate where the sheet should be folded, select the **Fold Marks** check box.

Note:

- 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 application, 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 application, 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:** Use this option to extend the bleed to the sheet fold lines.

b.   **Custom bleed size:** Type the required bleed size in millimeters.

Note:

- 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 application in order for the Spire CXP6000 color server to be able to apply the bleed options.

Creep
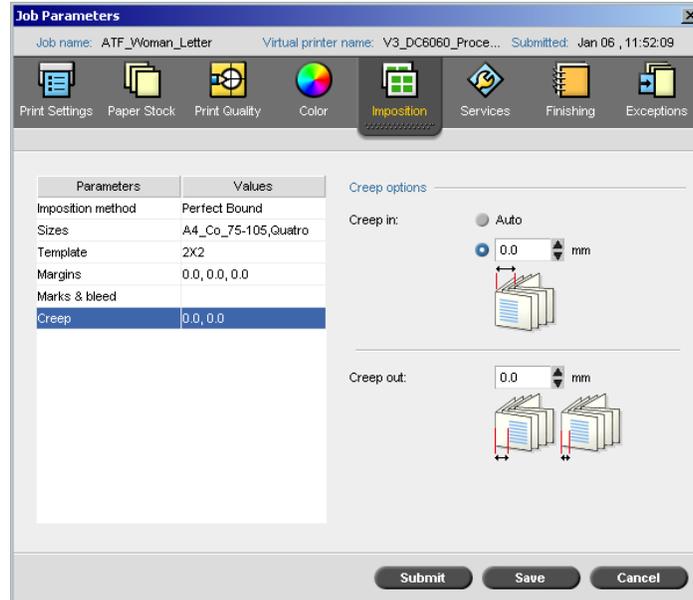
Creep is a common problem in saddle-stitch jobs When signatures are inserted inside one another, the signatures inserted last are the farthest from the center of the booklet. As a result, the outer edges of the inner pages creep past the outer pages.

Note: 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 towards 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 in** based on paper stock weight
    Or:
    Type the required amount for **Creep in**.

2. In the **Creep out** area, type the required amount.

    Note: Units of measurement (mm or inches) are set in the Settings window, see *Localization* on page 421.

Imposition Templates

There are three types of templates you can use in the Spire CXP6000 color server:

- Collating templates, see *Collating Templates* on page 245

- Predefined imposition templates, see *Spire CXP6000 Color Server Predefined Imposition Templates* on page 245

- User defined imposition templates, see *User Defined Imposition Templates* on page 251

Collating Templates

The step & repeat method contains a subset of templates called collating templates. Collating templates are used when jobs with different page images are used to fill up a larger sheet. Unlike regular step & repeat, where the same images are printed several times on a sheet, with collating templates, several images are printed on the same sheet. Collated templates are used for one-time job print runs and are of the form P1-P2-P3, indicating the job pages to be printed on a sheet.

Spire CXP6000 Color Server Predefined Imposition Templates

The Spire CXP6000 color server uses the following predefined imposition templates.

Note: DUP refers to Duplex and SIM refers to Simplex.

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
1×1 DUP HTH	1×1 DUP HTH	1×2 HTT	1×2 HTT
1×1 DUP HTH Rotated	1×1 DUP HTH Rotated	1×2 HTT Rotated	1×2 HTT Rotated
1×1 DUP HTT	1×1 DUP HTT	2×1	2×1
1×1 DUP HTT Rotated	1×1 DUP HTT Rotated	2×1 Rotated	2×1 Rotated
1×1 SIM	1×1 SIM	2×2	2×2
1×1 SIM Rotated	1×1 SIM Rotated	2×2 HTT	2×2 HTT
1×2 DUP HTH	1×2 DUP HTH	2×2 Rotated	2×2 Rotated
1×2 DUP HTH Rotated	1×2 DUP HTH Rotated	2×2 HTT Rotated	2×2 HTT Rotated
1×2 DUP HTT	1×2 DUP HTT	4×2	4×2
1×2 DUP HTT Rotated	1×2 DUP HTT Rotated	4×2 Rotated	4×2 Rotated
1×2 SIM	1×2 SIM		
1×2 SIM Rotated	1×2 SIM Rotated		

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
1×2 North South	1×2 North South		
1×3 DUP HTH	1×3 DUP HTH		
1×3 DUP HTH Rotated	1×3 DUP HTH Rotated		
1×3 DUP HTT	1×3 DUP HTT		
1×3 DUP HTT Rotated	1×3 DUP HTT Rotated		
1×3 SIM	1×3 SIM		
1×3 SIM Rotated	1×3 SIM Rotated		
2×1 DUP HTH	2×1 DUP HTH		
2×1 DUP HTH Rotated	2×1 DUP HTH Rotated		
2×1 DUP HTT	2×1 DUP HTT		
2×1 DUP HTT Rotated	2×1 DUP HTT Rotated		
2×1 SIM	2×1 SIM		
2×1 SIM Rotated	2×1 SIM Rotated		
2×1 North South	2×1 North South		
2×2 DUP HTH	2×2 DUP HTH		
2×2 DUP HTH Rotated	2×2 DUP HTH Rotated		
2×2 DUP HTT	2×2 DUP HTT		
2×2 DUP HTT Rotated	2×2 DUP HTT Rotated		
2×2 SIM	2×2 SIM		
2×2 SIM Rotated	2×2 SIM Rotated		
2×4 SIM	2×4 SIM		
2×4 SIM Rotated	2×4 SIM Rotated		

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
2×4 DUP	2×4 DUP		
2×4 DUP Rotated	2×4 DUP Rotated		
2×5 DUP HTH	2×5 DUP HTH		
2×5 DUP HTH Rotated	2×5 DUP HTH Rotated		
2×5 DUP HTT	2×5 DUP HTT		
2×5 DUP HTT Rotated	2×5 DUP HTT Rotated		
2×5 SIM	2×5 SIM		
2×5 SIM Rotated	2×5 SIM Rotated		
3×1 DUP HTH	3×1 DUP HTH		
3×1 DUP HTH Rotated	3×1 DUP HTH Rotated		
3×1 DUP HTT	3×1 DUP HTT		
3×1 DUP HTT Rotated	3×1 DUP HTT Rotated		
3×1 SIM	3×1 SIM		
3×1 SIM Rotated	3×1 SIM Rotated		
3v2 DUP HTH	3×2 DUP HTH		
3×2 DUP HTH Rotated	3×2 DUP HTH Rotated		
3×2 DUP HTT	3×2 DUP HTT		
3×2 DUP HTT Rotated	3×2 DUP HTT Rotated		
3×2 SIM	3×2 SIM		
3×2 SIM Rotated	3×2 SIM Rotated		
3×3 SIM	3×3 SIM		
3×3 SIM Rotated	3×3 SIM Rotated		

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
3×3 DUP	3×3 DUP		
3×3 DUP Rotated	3×3 DUP Rotated		
3×4 DUP HTH	3×4 DUP HTH		
3×4 DUP HTH Rotated	3×4 DUP HTH Rotated		
3×4 DUP HTT	3×4 DUP HTT		
3×4 DUP HTT Rotated	3×4 DUP HTT Rotated		
3×4 SIM	3×4 SIM		
3×4 SIM Rotated	3×4 SIM Rotated		
3×8 DUP HTH	3×8 DUP HTH		
3×8 DUP HTH Rotated	3×8 DUP HTH Rotated		
3×8 DUP HTT	3×8 DUP HTT		
3×8 DUP HTT Rotated	3×8 DUP HTT Rotated		
3×8 SIM	3×8 SIM		
3×8 SIM Rotated	3×8 SIM Rotated		
3×9 SIM	3×9 SIM		
3×9 SIM Rotated	3×9 SIM Rotated		
3×9 DUP	3×9 DUP		
3×9 DUP Rotated	3×9 DUP Rotated		
4×2 DUP HTH	4×2 DUP HTH		
4×2 DUP HTH Rotated	4×2 DUP HTH Rotated		
4×2 DUP HTT	4×2 DUP HTT		
4×2 DUP HTT Rotated	4×2 DUP HTT Rotated		

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
4×2 SIM	4×2 SIM		
4×2 SIM Rotated	4×2 SIM Rotated		
4×3 DUP HTH	4×3 DUP HTH		
4×3 DUP HTH Rotated	4×3 DUP HTH Rotated		
4×3 DUP HTT	4×3 DUP HTT		
4×3 DUP HTT Rotated	4×3 DUP HTT Rotated		
4×3 SIM	4×3 SIM		
4×3 SIM Rotated	4×3 SIM Rotated		
4×4 HTH DUP	4v4 HTH DUP		
4×4 DUP HTH Rotated	4×4 DUP HTH Rotated		
4×4 HTT DUP	4×4 HTT DUP		
4×4 DUP HTT Rotated	4×4 DUP HTT Rotated		
4×4 SIM	4×4 SIM		
4×4 SIM Rotated	4x4 SIM Rotated		
4×5 SIM	4×5 SIM		
4×5 SIM Rotated	4×5 SIM Rotated		
4×5 DUP	4×5 DUP		
4×5 DUP Rotated	4×5 DUP Rotated		
5×2 DUP HTH	5×2 DUP HTH		
5×2 DUP HTH Rotated	5×2 DUP HTH Rotated		
5×2 DUP HTT	5×2 DUP HTT		
5x2 DUP HTT Rotated	5×2 DUP HTT Rotated		

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
5×2 SIM	5×2 SIM		
5×2 SIM Rotated	5×2 SIM Rotated		
5×4 SIM	5×4 SIM		
5×4 SIM Rotated	5×4 SIM Rotated		
5×4 DUP	5×4 DUP		
5×4 DUP Rotated	5×4 DUP Rotated		
5×5 DUP HTH	5×5 DUP HTH		
5×5 DUP HTH Rotated	5×5 DUP HTH Rotated		
5×5 DUP HTT	5×5 DUP HTT		
5×5 DUP HTT Rotated	5×5 DUP HTT Rotated		
5×5 SIM	5×5 SIM		
5×5 SIM Rotated	5×5 SIM Rotated		
5×6 SIM	5×6 SIM		
5×6 SIM Rotated	5×6 SIM Rotated		
5×6 DUP	5×6 DUP		
5×6 DUP Rotated	5×6 DUP Rotated		
6×5 SIM	6×5 SIM		
6×5 SIM Rotated	6×5 SIM Rotated		
6×5 DUP	6×5 DUP		
6×5 DUP Rotated	6×5 DUP Rotated		
8×3 DUP HTH	8×3 DUP HTH		
8×3 DUP HTH Rotated	8×3 DUP HTH Rotated		

Table 9: Predefined imposition templates

Step & Repeat	Cut & Stack	Saddle Stitch	Perfect Bound
8×3 DUP HTT	8×3 DUP HTT		
8×3 DUP HTT Rotated	8×3 DUP HTT Rotated		
8×3 SIM	8×3 SIM		
8×3 SIM Rotated	8×3 SIM Rotated		
9×3 SIM	9×3 SIM		
9×3 SIM Rotated	9×3 SIM Rotated		
9×3 DUP	9×3 DUP		
9×3 DUP Rotated	9×3 DUP Rotated		

User Defined Imposition Templates

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

To import a user defined imposition template:

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

2. In the **Resource** list, select **Imposition Templates**.
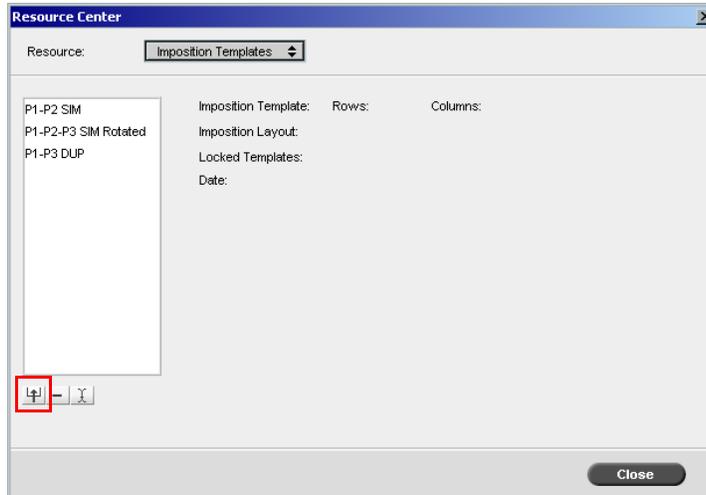
3. Click **Import.**
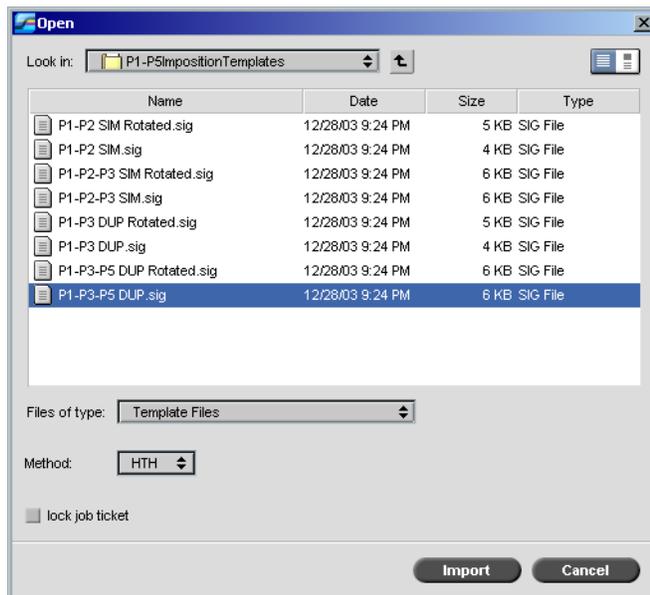
4. In the Open dialog box, locate the user defined template you want to import.

5. If you want to lock the template, select the **lock job ticket** check box.

   Note: If the template is locked, you cannot set imposition parameters in the Job Parameters window.

6. Click **Import.**

To rename a user defined imposition template:

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

2. In the **Resource** list, select **Imposition Templates**.

3. Select a user defined imposition template from the list, and click **Rename**.
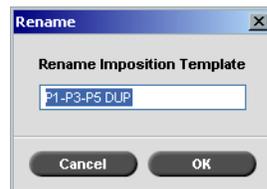
4. Type a new name for the user defined imposition template.

5. Click **OK**.

   The renamed user defined imposition template appears in the imposition template list.

To delete a user defined imposition template:

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

2. In the **Resource** list, select **Imposition Templates**.

3. Select a user defined imposition template from the list, and click **Remove**.

Editing Imposition Jobs

The Job Editor enables you to inspect the layout of your imposed RTP job. You can move pages within a job, delete pages in a job, insert pages of another job, or merge two entire jobs.

Note: You can use Adobe Acrobat to edit pre-Rip jobs. For post-Rip jobs, you can only edit RTP files. If you make changes to a job in the Job Editor and the job requires re-RIPing, the job will fail because there is no original PDL file to re-RIP.

When you insert or replace pages, the new page should have the same size and orientation attributes as the old page.

To replace a page that is rotated 180°, rotate the page in the DTP application and resubmit it to the Spire CXP6000 color server. You can use Adobe Acrobat to rotate PDL files.

For more information about the Job Editor, see *Editing RTP Jobs* on page 213.

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 Spire CXP6000 color 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
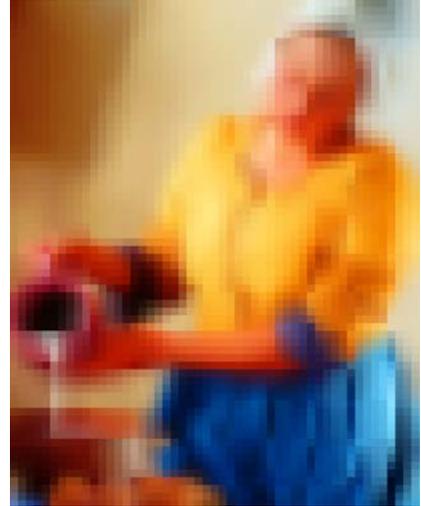
Creo APR

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 Spire CXP6000 color 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.

Setting APR Options

1. In the Job Parameters window, click the **Services** tab, and then select
    the **APR** parameter.
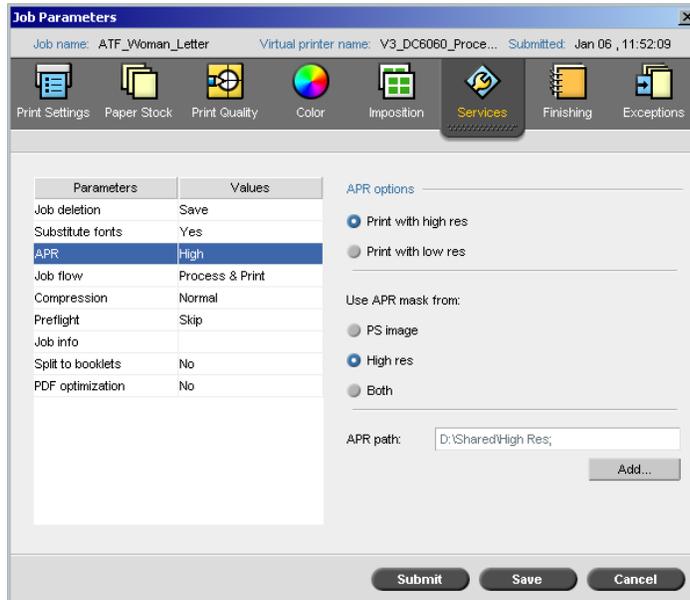
2. In the **APR options** area, select one of the following options:

    - **Print with high res:** Use this option to replace low-resolution
      images in your job with high-resolution images that are located in
      a specified APR path.

    - **Print with low res:** Use this option to print the job with the
      existing low-resolution images—for example, for proofing
      purposes.

3. In the **Use APR mask from** area, select one of the following options:

- **PostScript image:** Use this option to use the masking data contained in the low-resolution image file.

- **High res:** Use this option to use the masking data contained in the high-resolution image file.

- **Both:** Use this option to use the masking data that is common in both high-resolution and low-resolution image files—for example, if the images defined by the two sets of masking data overlap, the overlapping area is RIPed.

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

Setting a High-Resolution Path

There are two default paths in which the Spire CXP6000 color server searches for high-resolution images:

- **Search in the input folder:** The Spire CXP6000 color server first searches for high-resolution images in the same folder as the PDL file.

- **D:\Shared\High Res:** If you want to save your high-resolution files in this folder, copy the files to **D:\Shared\High Res**.

You can also add a new high-resolution path, and then edit, or delete the path.

Paths other than the default paths are defined on a per-job basis, or set in the virtual printer. You can specify paths on local hard drives, CD-ROM drives, and the floppy drive connected to the Spire CXP6000 color server. You can also specify paths on remote clients or file servers.

To add a high-resolution path:

1. Under the **APR path** box, click **Add**.
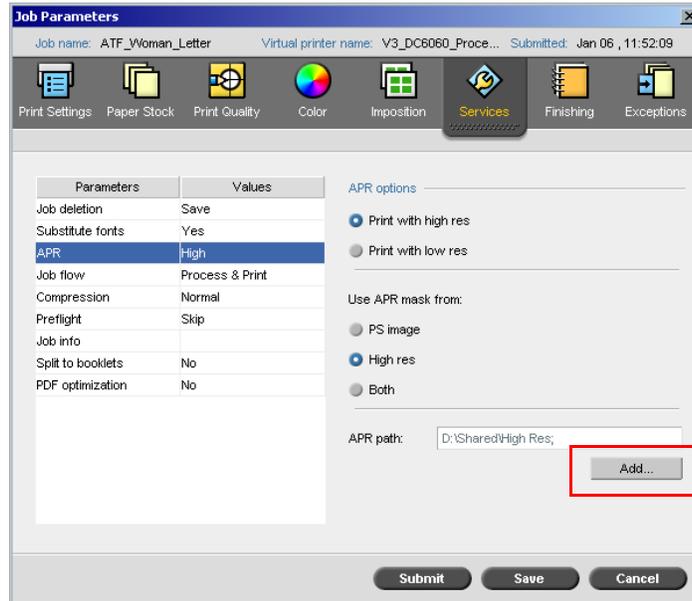
The HiResPath dialog box appears.
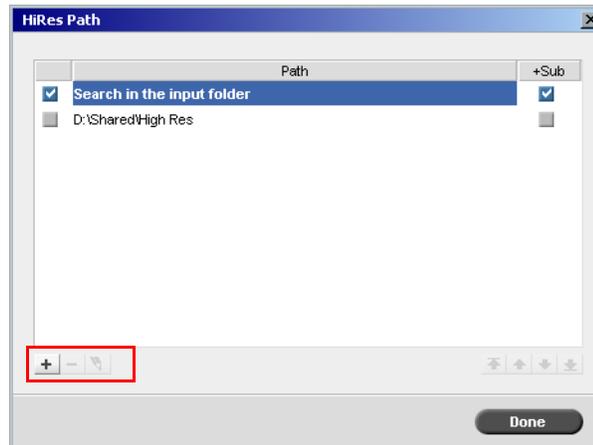
1. Click **Add**.

    The Open dialog box appears.

2. Locate your high-resolution images, and then click **Select**.

    The new path is displayed in the HiResPath dialog box.

3. To promote or demote a selected APR path, use the arrow buttons.

    Note: The order in which the APR paths are listed is the order in which the Spire CXP6000 color server searches for the high-resolution images.

To modify a high-resolution path:

1. In the HiResPath dialog box, select the path you want to modify.

2. Click **Edit**.

    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 **Remove**.

    The selected path is deleted.

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 Spire CXP6000 color server checks it for OPI instructions. It then searches for the external high-resolution file, performs the specified image replacement and RIPs the PostScript file.

Many OPI systems use remote storage of high-resolution files. The Spire CXP6000 color server supports the storage and replacement of high-resolution OPI files internally. However, PDL files from some DTP applications (such as QuarkXPress) may contain these instructions ("comments") by default, although the high-resolution files are unavailable and have been embedded in the job. In this case, the job will

not be processed and an error message will appear. Therefore, to ensure continuous printing, the Spire CXP6000 color server OPI image replacement is unavailable by default.

To select OPI support:

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

    The Settings window appears.

2. Under **Preferences**, select **General Defaults**.
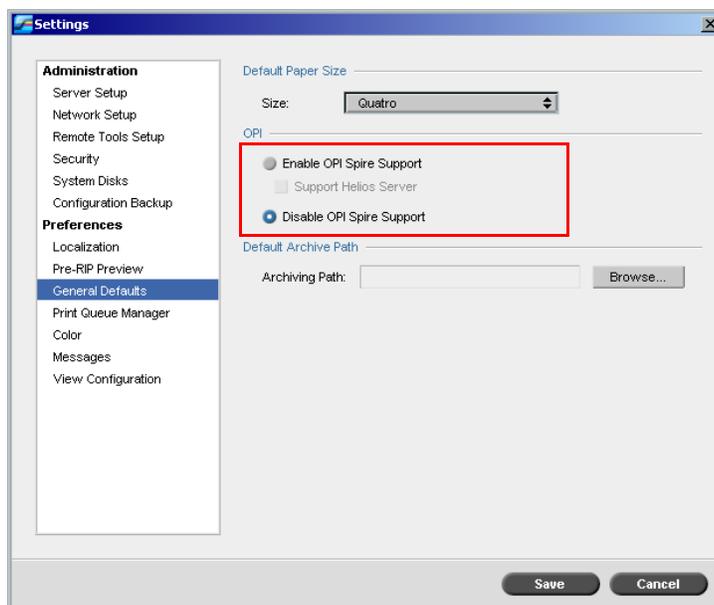
3. In the **OPI** area, select **Enable OPI Spire Support**.

    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 Spire CXP6000 color server. Creo APR low-resolution files have an *.eps extension in Windows and an *.e extension on the Macintosh, while OPI low-resolution files have a *.lay extension. The Creo APR and OPI workflows support Creo Continuous

Tone, EPSF, Jpeg, PDF, DCS1, DCS2 and TIFF high-resolution file formats. You can use either the Creo APR or OPI workflow, depending on your high-resolution file type.

Preparing to Print Using Creo APR or OPI

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

   Note: You can use the PS Image Exporter Plug-In in Adobe Photoshop to create Photoshop Image (APR low-resolution) files. You can either install the PS Image Exporter Plug-In from the *Spire CXP6000 color server Documentation and Utilities* CD-ROM, or download it from the Creo website at https://ecentral.creo.com/ecentral/self_support/downloads.asp.

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 applications or can be provided by a print service bureau. Make sure that you have created or obtained the required 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 a DTP application, use low-resolution files.

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

   Note: Once you create the low-resolution file, do not change the name of the high-resolution file. This is the file name for which the Spire CXP6000 color server searches.

5. Place the high-resolution files in a defined path on the Spire CXP6000 color server. This Spire CXP6000 color server looks for this path when it RIPs your jobs. Define the high-resolution path through the Job Parameters window for each job.

Notes:

- The Spire CXP6000 color server default HiRes folder used for APR and OPI is **D:\Shared\HiRes**.

- Paths other than the default path are defined on a per-job basis. You can define the APR path to any connected server or disk.

Printing with Creo APR or OPI

If your high-resolution files are located in the Spire CXP6000 color server default folder (**D:\Shared\HighRes**), you can print APR or OPI jobs without adjusting APR settings.

Important: OPI support is unavailable by default. If you would like to select the Spire OPI support, see *To select OPI support:* on page 260.

Perform the following steps:

1. Print, download, or import the job from the client workstation to the Spire CXP6000 color server Storage window.

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

    Note: If your high-resolution files are not located in the Spire CXP6000 color server default folder, specify the APR path(s), see *To add a high-resolution path:* on page 258.

2. Double-click the job in the Spire CXP6000 color server workspace.

3. Select the **Print Quality** tab in the Job Parameters window.

4. Adjust the job parameters.

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

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

6.   Click **Submit**.

The job is processed on the Spire CXP6000 color server and sent to the Xerox DocuColor 6060 Digital Color Press for printing.

Sample Job: Printing a Brochure Using the Creo APR Workflow

In this example, you can use Creo APR to print a brochure that contains a high-resolution file.
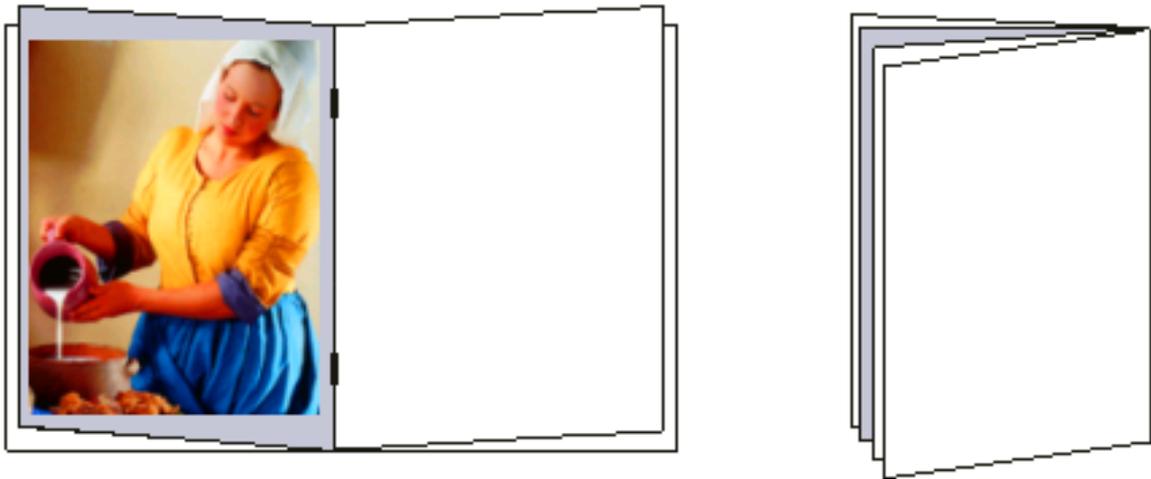
Brochure

The picture used in the sample brochure is a high-resolution file called milkmaid. In this example, it is assumed that you already created the low-resolution file milkmaid.e and that your brochure has already been designed in a DTP application using milkmaid.e.

Note: On the Spire CXP6000 color server, the APR workflow is functionally identical to the OPI workflow, so while the high-resolution image used in this example has a *.e extension, if it was an OPI image, it would have a alternative extension, such as *.lay.

To print a brochure using the APR workflow:

1. The Spire CXP6000 color server first searches for high-resolution images in the same folder as the PDL file.
    Or:
    Place your high-resolution file milkmaid in the path:
    D:\Shared\High Res.

2. Print or import the brochure job from your client workstation to the Spire CXP6000 color server.

    The job is processed on the Spire CXP6000 color server and then sent to the Xerox DocuColor 6060 Digital Color Press for printing.

PDF Workflow

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

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

To select PDF optimization:

In the Job Parameters window, click the **Services** tab, and then select the **PDF optimization** parameter.
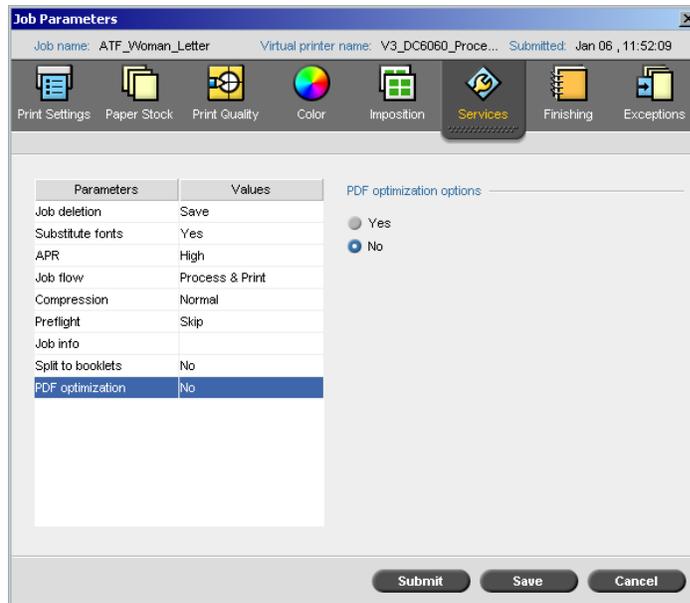
3. In the **PDF optimization options** area, select **Yes**.

    In addition, you need to use the Adobe Acrobat Distiller application to
    distill the PostScript file. Distilling the file ensures that the repeated
   elements will be marked as repeated in the PDF file.

    Important: Verify that in your Acrobat Distiller settings, **Optimize for Fast
    Web View** is selected (in Acrobat 4.0 the corresponding option is **Optimize
    PDF**).

    If you do not have the Adobe Acrobat Distiller application installed on
    your client workstation, you may use the Adobe Acrobat Distiller 5.0
    application located on the Spire CXP6000 color server.
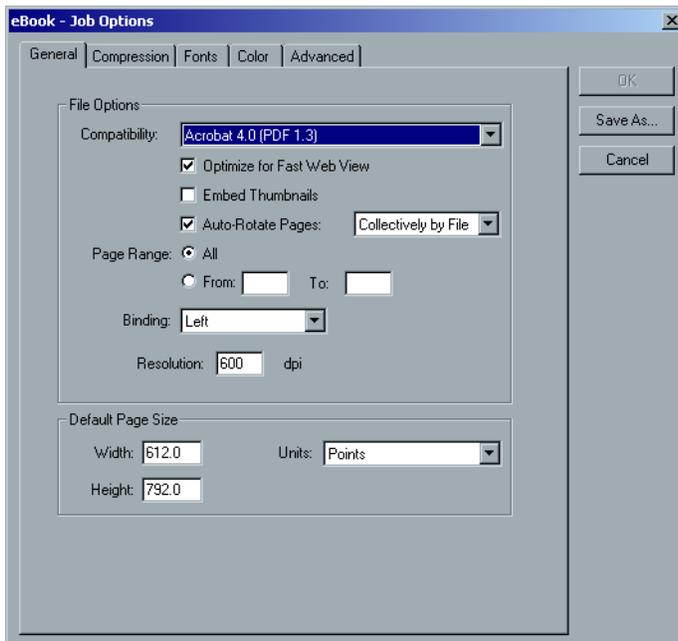
To distill a PostScript file on the Spire CXP6000 color server:

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

2. Locate the Spire CXP6000 color server on the network, and paste the
    file to **D:\Shared**.

3. On the Spire CXP6000 color server station, click the **Start** button and
    select **Programs**>**Acrobat Distiller.**
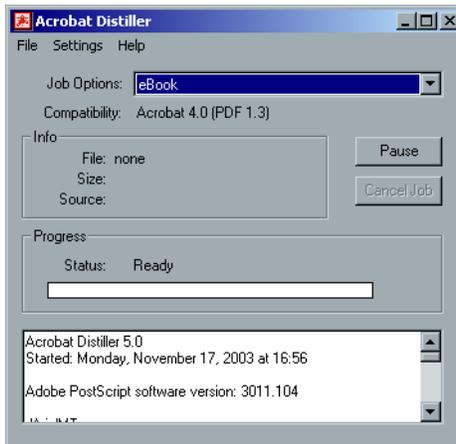
4. From the **Settings** menu, select **Job Options**.

5. In the **General** tab, verify that **Optimize for Fast Web View** is selected
    and click **Cancel**. If this option is not selected, select the **Optimize for
    Fast Web View** check box, and click **OK.**

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

   The Acrobat Distiller - Open PostScript file dialog box appears.

7. Locate the required PostScript file, and then click **Open**.

   The Acrobat Distiller - Specify PDF File Name dialog box appears.

8. The default name is the PostScript file name. You can change it in the **File name** box.

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

10. Click **Save**.

    Your file is distilled and a PDF file is created.

11. In the Spire CXP6000 color server application, from the **Job** menu, select **Import**.

    You can import the PDF file for printing.

Tip: You can create a shortcut to the Acrobat Distiller on the Spire CXP6000 color server desktop. This shortcut can be used to drag files onto the Acrobat Distiller for quick distilling. To create a shortcut, click the **Start** button on your Windows desktop, and follow the path **Programs**>**Acrobat Distiller**. Right-click **Acrobat Distiller** and follow the path **Send To**>**Desktop (create shortcut).**

Export as PDF2Go

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

The Spire CXP6000 color server is capable of exporting jobs that are standard PDF files, both before and 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 top-right server-printer animation of the workspace.

To export as PDF2Go:

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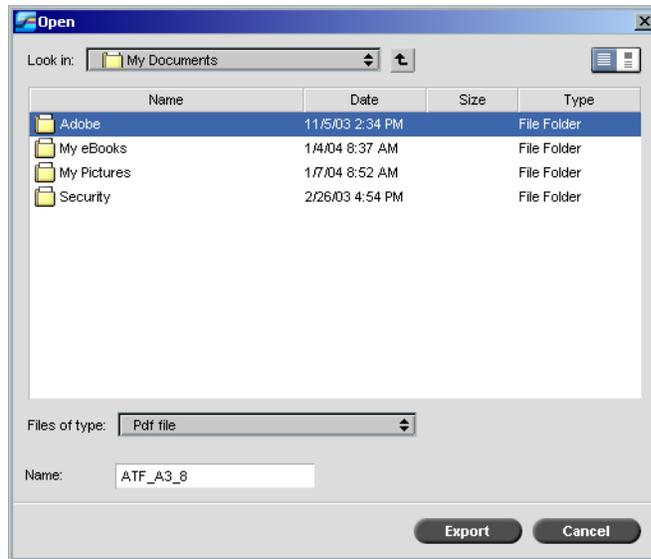

2. Select the **Print Optimized** option to generate a high-resolution PDF file in 300dpi.

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

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

3. Click **OK**.

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

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

   Note: When you export PDL files as PDF, the file is converted to PDF using the Acrobat distiller.
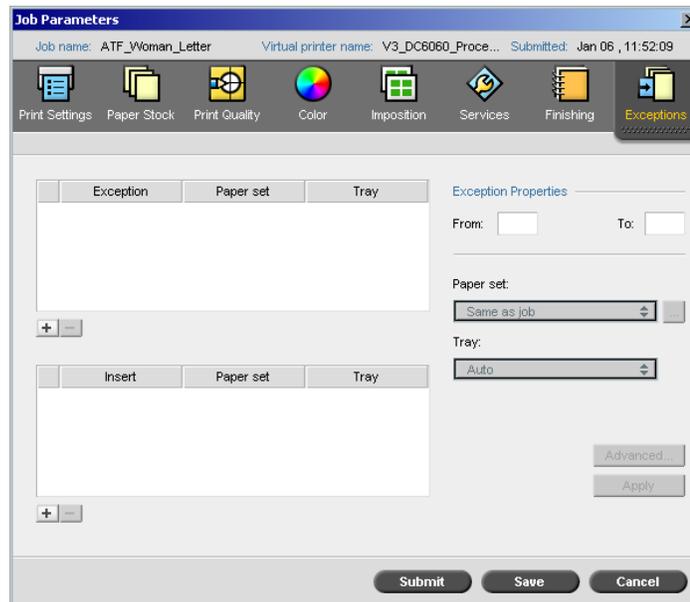
Page Exceptions

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

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

- **I**nserts 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 *The Paper Stock Tab* on page 169.

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 284.

Managing Exceptions

You can add and delete exceptions in the **Exceptions** tab.

To add exceptions to a job:

1. In the **Exception** area, click the **Add** button.

Exception area

2. In the **From** and **To** boxes, type the required page range for the exception. For example, if you want to print a page divider on heavy paper, in the **From** box, type **15** and in the **To** box, type **15**.

3. In the **Paper set** list, select the required paper set. If you need to add a new paper set, click the **browse** button.

For information about adding a paper set, see *Managing Paper Sets* on page 170.

Note: The default paper stock properties are those specified for the job.

4. In the **Tray** list, select the required tray:

    - **Tray 1:** Load the specific stock in this tray.

    - **Tray 2:** Load the specific stock in this tray.

    - **Auto**: Any tray with the specific paper stock will be used.

    Note: If you are using either the Xerox DocuColor 5252 Digital Color Press, or Xerox DocuColor 2060 and 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

5. To set image position options:

    a. Click **Advanced**.
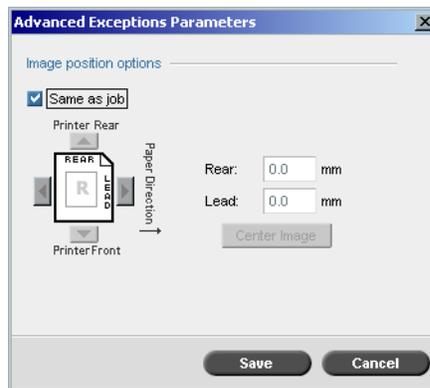
    b. Clear the **Same as job** check box.

    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.
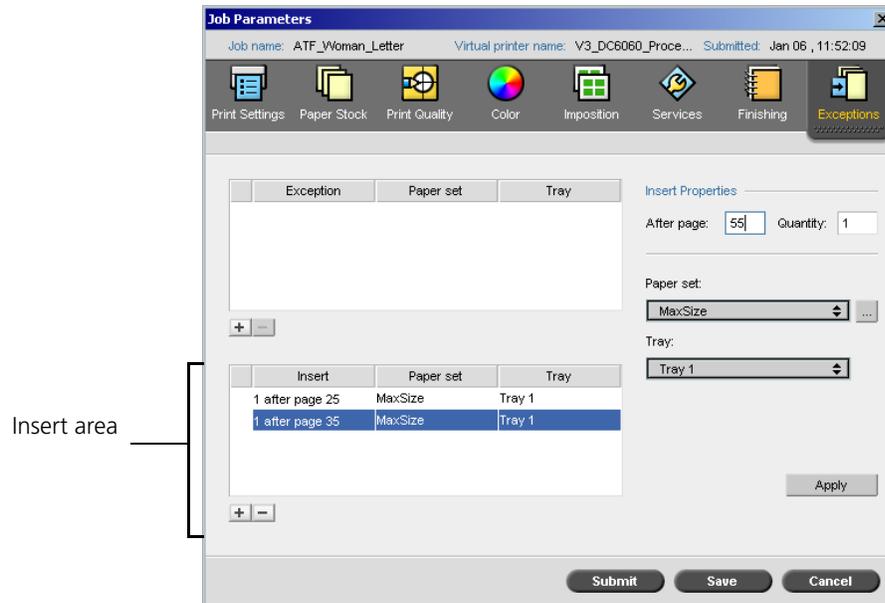
To delete an exception:

1. In the **Exception** area, select the required exception.

2. Click the **Remove** button.

3. In the message that appears, click **Yes**.

Managing Inserts

To add an insert:

1. In the **Insert** area, click the **Add** button.

Insert area

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 required paper set. If you need to add a new paper set, click the **browse** button.

Note: The default paper stock properties are those specified for the job.

For information about adding a paper set, see *Managing Paper Sets* on page 170.

5. In the **Tray** list, select the required tray:

- **Tray 1:**The specific paper stock should be loaded in this tray.
- **Tray 2:** The specific paper stock should be loaded in this tray.
- **Auto**: Any tray with the specific paper stock will be used.

Note: If you are using either the Xerox DocuColor 5252 Digital Color Press, or Xerox DocuColor 2060 and 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

6. Click **Apply**.

The insert is added to the **Insert** area.

To remove an insert:

1. In the **Insert** area, select the required insert.

2. Click the **Remove** button.

3. In the message that appears, click **Yes**.

Using Page Exception Workflows

Setting Exceptions for Imposed Jobs

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

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

Notes:

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

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

Printing on Tabs

The Spire CXP6000 color 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 284.

Note: The Xerox DocuColor 5252, 2060, and 2045 Digital Color Presses also support 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 Microsoft Word.

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

Xerox DocuColor 6060 Digital Color Press 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)

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, on the tray controls you should set all media weight to **106-135gsm** to avoid the automatic image quality adjustment that occurs when printing on different stock weight ranges.

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.

    This example uses **9 × 11 custom size tabs (SEF).** Use the tab stock **Xerox P/N #3R4405** - in forward order for the tab pages. The job prints face up.

Important: If you are using a Xerox DocuColor 5252, 2060 or 2045 Digital Color Press, load the tab stock in Tray 3.

Notes:

- It is essential that you 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 are duplex printed, which requires that the tab stock be positioned so that both the left and right sides of the media are straight sides going into the engine.

The tab on the left hand side is the top tab.

Custom button

Access Panel

You program the custom size for any job through the Xerox DocuColor 6060 Digital Color Press 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

In the Printer Monitor window, you can view the paper sets that are loaded in the paper tray.

For more information about the Printer Monitor window, see *The Printer Monitor* on page 23.
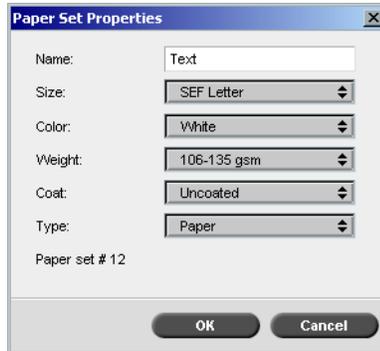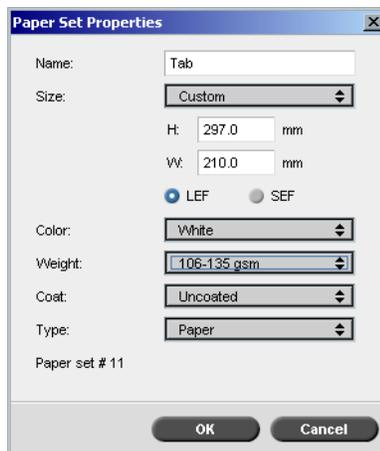
To create paper sets:

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, set the **Paper set name** to **Text**.
   Or:
   Set the following parameters:

   - **Paper set name: Undefined**

   - **Paper size: SEF Letter**
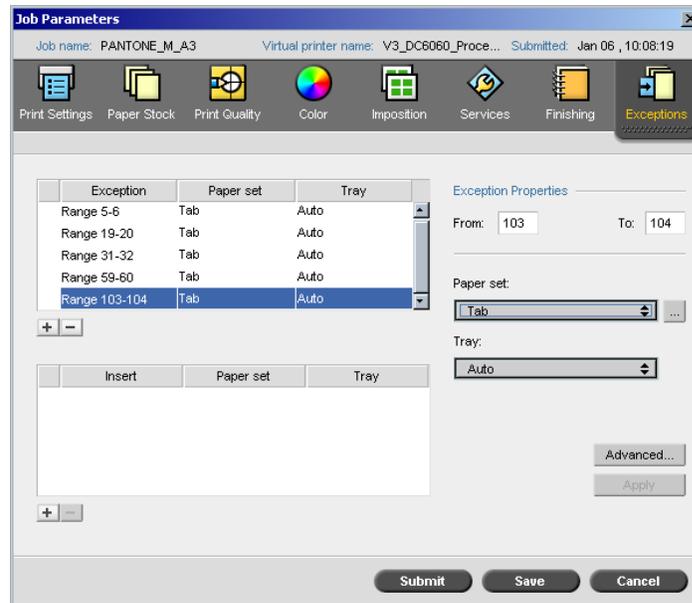
   - **Weight: 106-135 gsm**

3. On the **Exceptions** tab, click **Add** and use Table 10 to add page
   exceptions:

Table 10: Sample Page Exceptions

Pages	Use Paper Set	Tray
5 -6	Tab	Auto
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 required, 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_Templ
  ate_Using_Graphics&Xcntry=USA&Xlang=en_US

- Xerox DocuColor Specialty Guide for 6060: The *DocuColor Specialty Guide for 6060* can be downloaded from the following Web site:
  http://www.xerox-techsupport.com/dc2000/DC6060/
  DC6060_home.htm

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 Spire CXP6000 color server identifies the dynamic page exception commands and maps them to the selected paper sets. The printer then uses the required paper sets for the job.

The Spire CXP6000 color server supports dynamic page exceptions for the following file formats:

- PostScript
- Variable Print Specification
- VIPP
- PDF

Setting the Spire CXP6000 Color Server for Dynamic Page Exceptions

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

1. Create a file with embedded setpagedevice commands on your client workstation.

   For more information about adding dynamic page exception commands, see page 285 - page 293.

2. Select Resource Center>**Paper Sets** and create the paper sets that you need to print your file.

3. Create a dedicated virtual printer that supports dynamic page exception commands, and then map specific paper sets in the **Exceptions** tab.

   For more information about adding a new virtual printer and mapping specific paper sets, see *Creating a Dedicated Virtual Printer* on page 290.

4. Import the file into the Spire CXP6000 color server via the dedicated virtual printer, and submit the job for printing.

When the job is RIPed, the dynamic page exception commands are identified and mapped to the selected paper sets. The required 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, you can perform a preflight check before the job is sent to print, see *Preflight Check* on page 380.

Adding Dynamic Page Exceptions in PostScript and Variable Print Specification Formats

The Spire CXP6000 color server accepts Adobe "red book" command keys to dynamically change the media at a page level. Dynamic page exceptions are set through the standard PostScript setpagedevice command and embedded in the PostScript file. In the setpagedevice command, the media selection category honors four keys:

- /MediaType - paper set name (string)

- /MediaColor - paper set color (string)

- /MediaWeight - paper set weight range (number)

- /MediaPosition - tray number (integer)

The following example shows the MediaColor key:

```
%%
<< /MediaColor (red) >> setpagedevice
612 0 translate
90 rotate
/Times-Roman ISOfindfont 12 scalefont
90 203 moveto
gsave
0 0 0 SetRGB
(ASSET ALLOCATION SUMMARY) show
grestore
showpage
%%
<< /MediaColor (white) >> setpagedevice
%%
%%
```

Adding Dynamic Page Exceptions in PDF

There are three XRX comments that are defined in the *Xerox Manual for Job Ticket Programming Guide* and that are involved in defining dynamic page exceptions. The Spire CXP6000 color server reads these three comments.

The comments are **XRXbegin** and **XRXend**, which encapsulate the XRX block, and **XRXpageExceptions**, which defines the page exceptions attributes.

- **%XRXbegin: <ureal>**

  This comment indicates the beginning of the XRX comment block. You can write any number as a value. The Spire CXP6000 color server checks the comment's existence and not the value.

  Example:**%XRXbegin:** 100.0300

- **%XRXend**

  This comment indicates the end of the XRX comments block.

- **%XRXpageExceptions: <cardinal> <cardinal> <cardinal> <cardinal>**

  {<word>/<multiword>} <word> {<word>/<multiword>} <cardinal> <cardinal>

  This comment indicates that specified pages will be printed on a media

identified by the accompanying record values. You may include multiple page exception records in one job ticket and the values may be the same as the main stock.

- **Range:** The first <cardinal> and the second <cardinal> denote the beginning and the ending page number of the exception range. The first <cardinal> must be less than or equal to the second <cardinal>.

  Note: Exception ranges can't overlap if the PDF contains multiple %XRXpageExceptions: comments.

- **Size (not supported):** The third <cardinal> and the fourth <cardinal> specify the x dimension value and the y dimension value, respectively, of the page exception media. The values must be in millimeters.

  Note: The Spire CXP6000 color server doesn't read these numbers.

- **Color:** The first {<word>/<multiword>} specifies the color of the page exception media. The value can be one of the standard defined colors or a custom "user–defined" color. The entered value matches the paper stock color for the Spire CXP6000 color server.

- **Opaque (not supported):** The second <word> specifies the opaqueness of the page exception media. Valid values are: transparency and opaque.

- **Finish (not supported):** The third {<word>/<multiword>} specifies the preprocessed finish of the page exception media. The value can be one of the standard defined finishes or a custom "user–defined" finish.

- **Holes (not supported):** The fifth <cardinal> specifies the inline hole count. This is the number of holes in a predrilled page with positioning and alignment typical of a punch binding pattern. Since allowable values are either 0, to indicate no holes, or 3, this is not intended to identify a media with an arbitrary number of holes in arbitrary locations, such as a printed novelty application.

- **Ordered count (not supported):** The sixth <cardinal> specifies the ordered count. This is the number of possible media instances, in an identifiable and sequenced collection of media, that will be repeated within the insert. For example, this value is the number of tab positions when tabs are to be inserted. Ordered count can be any integer in the range of 0 (zero), to indicate no ordered count, to 100.

Example

```
%XRXbegin: 002.00.00
%XRXdocumentPaperColors: white
%XRXpageExceptions: 7 8 216 279 red opaque acmep_ing 0 12 75
%XRXpageExceptions: 35 36 216 279 red opaque acmep_ing 0 12 75
%XRXpageExceptions: 41 42 216 279 blue opaque acmep_ing 0 12 75
%XRXpageExceptions: 49 50 216 279 red opaque acmep_ing 012 75
%XRXpageExceptions: 59 60 216 279 red opaque acmep_ing 012 75
%XRXend
%PDF-1.3
:
```

Adding Dynamic Page Exceptions in VIPP Format

Dynamic page exceptions are supported through SETMEDIA and are defined in the *Xerox VIPP Reference Manual*.

- The SETMEDIA command sets the media requirement. In the syntax example, SETMEDIA sets MediaType, MediaColor, and MediaWeight as the current media type requirements for subsequent pages.

  The Spire CXP6000 color server mapping is similar to the mapping of PostScript and Variable Print Specification file formats.

  ❑ The MediaType value is mapped to the paper stock name.

  ❑ The MediaColor is mapped to the paper stock color.

  ❑ The MediaWeight is mapped to the paper stock weight.

  For more information about PostScript and Variable Print Specification formats, see *Adding Dynamic Page Exceptions in PostScript and Variable Print Specification Formats* on page 285

- When any of the media attributes are specified as null, those attributes are ignored in the following media selections. This example ignores MediaColor.

  ```
  (Drilled:null:100) SETMEDIA
  ```

- When any of the media attributes such as type, color, or weight are omitted, the last specification or the default value for that attribute remains in effect. The trailing ":" may be omitted as shown in this example.

  ```
  (Plain::) SETMEDIA
  ```

```
(Plain:) SETMEDIA
(Plain) SETMEDI
```

Example

```
!PS-Adobe-2.0
:
%Page1
:
%SPD Type Drilled, Color blue, Weight 98)
(Drilled:blue:98) SETMEDIA
:
% Page 3
%SPD Type Cover, Color yellow, Weight 105)
:
(Cover:yellow:105) SETMEDIA
:
% Page 5
%SPD Type Transparency, Color Clear, Weight 125)
:
(Transparency:Clear:125) SETMEDIA
```
```
:
```

The following is the SETMEDIA definition:

```
%!PS-Adobe-3.0
%%Title: newVItest_US.dbm
XGFdict /STARTBOOKLET known { STARTBOOKLET } { } ifelse
%Page1 Front Side
%SPD Type Drilled, Color blue, Weight 98)
```
(Drilled:blue:98) SETMEDIA
```
(1_newVItest_US.ps) CACHE SETFORM 0 NL
%% Run the PostScript master form
% (Text) Box # 4 (Front Page: 1) Xpos: 223.972 Ypos: 368.679 Width:
370.028 Height: 45.366
% Page 3 Front Side
%SPD Type Cover, Color yellow, Weight 105)
```
(Cover:yellow:105) SETMEDIA
```
(1_newVItest_US.ps) CACHE SETFORM 0 NL %% Run the PostScript master
form
% (Picture) Box #1 (Page: 3) Xpos: 226.355 Ypos: 634.648 Width:
358.263 Height: 254.99 % Page 5 Front Side
```

```
% Page 5 Front Side
%SPD Type Standard, Color goldenrod, Weight 108)
```
(Standard:goldenrod:108) SETMEDIA
```
(1_newVItest_US.ps) CACHE SETFORM 0 NL %% Run the PostScript master
form
% (Picture) Box #1 (Page: 3) Xpos: 226.355 Ypos: 634.648 Width:
358.263 Height: 254.99
```

Printing Tabs Using the Dynamic Page Exceptions Workflow

The Spire CXP6000 color server supports the option to print tabs using the dynamic page exceptions workflow. This workflow enables you to handle many jobs with different settings without having to manually set page exceptions in the Job Parameters window for each job—for example, if you want to print 100 separate booklets that all use the same stock types, but each booklet has a different number of pages and the tabs are inserted in different places in each booklet.

Perform the following steps to set up the workflow:

1. Load the stock types in the trays, see *Loading the Paper Stock* on page 276.

2. Program the job through the Xerox DocuColor 6060 Digital Color Press Access Panel, see *Access Panel* on page 278.

3. Create paper sets, see *Creating Paper Sets* on page 279.

4. Create a dedicated printer and map the paper sets in the **Exceptions** tab, see *Creating a Dedicated Virtual Printer* on page 290.

5. Import all the PDF files via the dedicated virtual printer, and then submit the job for printing. The files are processed and printed using the page exceptions that were coded in the files.

Creating a Dedicated Virtual Printer

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

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

3. Click **Add**.

The Add Virtual Printer dialog box appears.
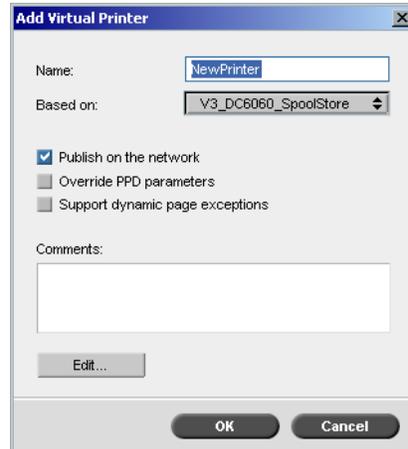
4. In the **Name** box, enter a printer name.

5. Select the **Support dynamic page exceptions** check box.

6. Click **Edit**.

    The Job Parameters window appears with the **Print Settings** tab selected.

7. On the **Print Settings** tab, set the following parameters:

    - **Print Method: Duplex head to head**

    - **Delivery: Face Up**

    - **Rotate 180: Yes**

8. On the **Paper Stock** tab, set the **Paper set name** to **Text.**
    Or:
    Set the following parameters:

    - **Paper set name: Undefined**

    - **Paper size: SEF Letter**

    - **Weight: 106-135gsm**

9. On the **Finishing** tab, set the following parameters:

    - **Admin page**: Select the **Print Admin. page** check box, and in the **Paper set** list, select **Admin sheet**

    - **Tray: Tray 3**

10. On the **Exceptions** tab, perform the following steps to map the paper set names to the individual trays:

- In the **Paper Set** column, select the paper set names that you created—for example, **Text** and **Tab**.

- In the **Exception Type** column, select **Exception**.

Note: If you are adding a blank page, select **Insert** in the **Exception Type** column.

- Click **Save**.
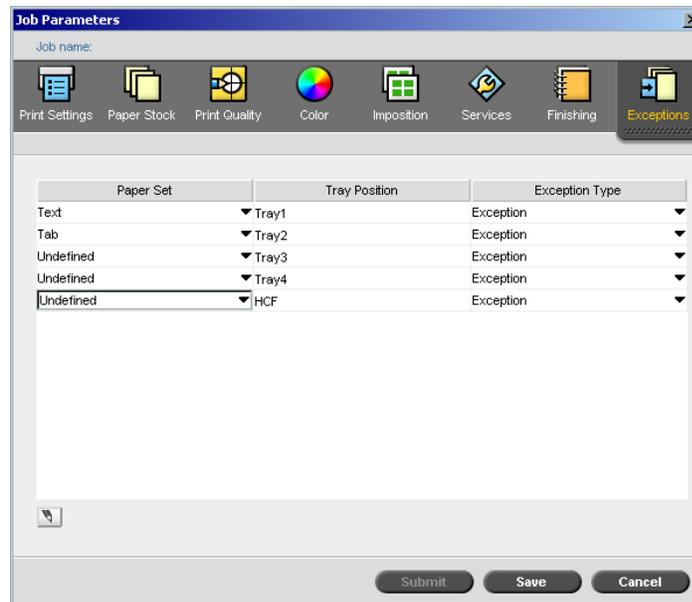
Note: If you are using a Xerox DocuColor 5252 Digital Color Press, the HCF tray is unavailable.

11. In the Edit Virtual Printer dialog box, click **OK**.

12. In the Resource Center, click **Close**.

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 page exceptions and imposition. In addition, the paper stock selection is limited to the assigned stocks and not the entire database.

* When you create the dedicated virtual printer, you should define the paper feed direction for the paper sets in the job. All paper sets that are used in a dynamic page exceptions job must be in the same paper feed direction. Make sure you do not select the **Best Fit** option.

For information about defining the paper feed direction, see *The Paper Stock Tab* on page 169.

The Finishing Tab

The **Finishing** tab enables to select various options to finalize your printed documents.

Admin. Page
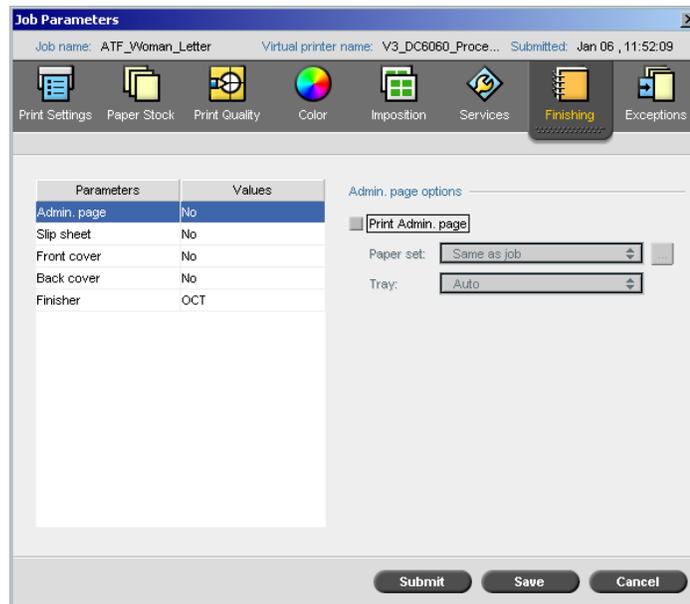
The Administration page contains job-related information such as the job title, page size, number of pages or sets, and the sender name.

The Administration page is printed in the same order as the job, for face-down printing the page is printed before each set and for face-up printing the page is printed after each set.

Note: If you change the options in the **Admin page** parameter, the job needs to be re-RIPed.

To print an admin. page:

1. Select the **Print Admin page** check box.

2. In the **Paper set** list, select the required 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 170.

3. In the **Tray** list, select the required tray:

    *   **Tray 1**: The specific paper stock should be loaded in this tray.

    *   **Tray 2**: The specific paper stock should be loaded in this tray.

    *   **Auto**: Any tray with the specific paper stock will be used.

    Note: If you are using the Xerox DocuColor 5252, 2060, or 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

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 uncollated, 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 required 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 170.

3. In the **Tray** list, select the required tray:

    - **Tray 1**: The specific paper stock should be loaded in this tray.

    - **Tray 2**: The specific paper stock should be loaded in this tray.

    - **Auto**: Any tray with the specific paper stock will be used.

    Note: If you are using the Xerox DocuColor 5252, 2060, or 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

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
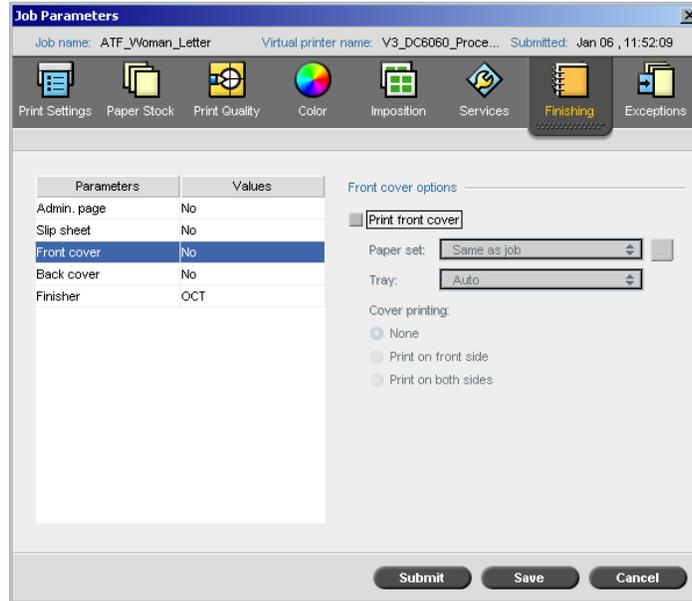
By default, your job is printed without a front cover. However, you can choose to print a front cover, and you can also select a different paper set.

To print a front cover:

1. Select the **Print front cover** check box.

2. In the **Paper set** list, select the required 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 170.

3. In the **Tray** list, select the required tray:

    *   **Tray 1**: The specific paper stock should be loaded in this tray.

    *   **Tray 2**: The specific paper stock should be loaded in this tray.

    *   **Auto**: Any tray with the specific paper stock will be used.

    Note: If you are using the Xerox DocuColor 5252, 2060, or 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

4.   In the **Cover printing** area, select one of the following options:

a.   **None:** Use this option to print a blank front cover.

Note: A blank page will automatically be 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.

b.   **Print on front side:** Use this option to print the first page of the job as the cover page.

c.   **Print on both sides:** Use this option 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. However, you can choose to print a back cover, and you can also select a different paper set.

To print a back cover:

1. Select the **Print back cover** check box.

2. In the **Paper set** list, select the required 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 170.

3. In the **Tray** list, select the required tray:

    *   **Tray 1**: The specific paper stock should be loaded in this tray.

    *   **Tray 2**: The specific paper stock should be loaded in this tray.

    *   **Auto**: Any tray with the specific paper stock will be used.

    > **Note:** If you are using the Xerox DocuColor 5252, 2060, or 2045 Digital Color Presses, you can select **Tray 3** in the **Tray** list.

4. In the **Cover printing** area, select one of the following options:

    a. **None:** Use this option 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.

    b. **Print on back side:** Use this option to print the last page of the job as the back cover.

    c. **Print on both sides:** Use this option to print the last two pages of the job as the back cover.

Finisher
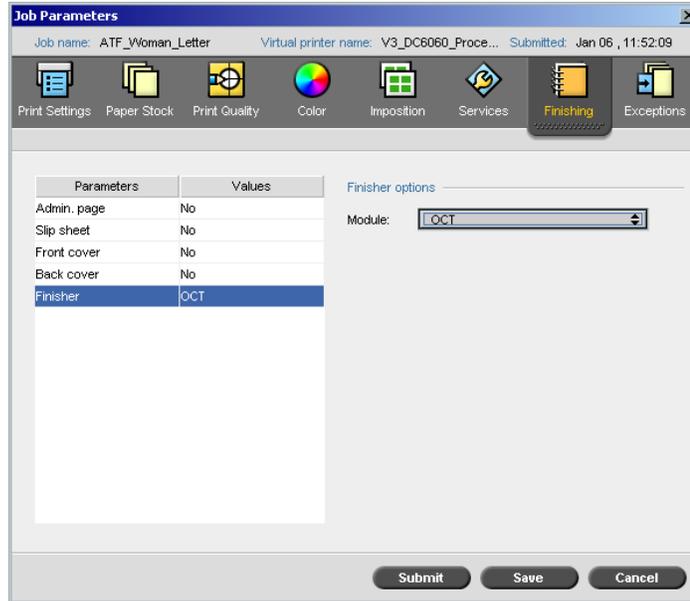
The **Finisher** parameter enables you to select the destination of the printed output.

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): This is the default option.

❑ **HCS/EHCS** (High Capacity Stacker or Enhanced High Capacity Stacker)

Note: If you are using the Xerox DocuColor 5252, 2060, or 2045 Digital Color Presses, the finisher option is **HCS**.

❑ **HCSS** (High Capacity Stacker Stapler)

a. Choose a tray option.

Note: If two HCS devices are chained to the printer, two top trays and two stack trays are available in the **Finisher options**. Also, an additional option is available, **Auto Stack Tray**. Select this option to automatically use the available stack tray. This chaining configuration is available only for the Xerox DocuColor 6060 Digital Color Press.

b. If you select the **Stack Tray** option, select the **Offset** check box for the following types of jobs:

- Collated: Each copy is offset from the next copy.

- Uncollated: If you need more than one copy of each page, offset shifts the sheets when a new page number is delivered. For example, if you request three copies of each page, the printing output sequence is as follows: Page1, Page1, Page1, Offset, Page2, Page2, Page2, Offset, and so on.

Note: If you are using the Xerox DocuColor 5252, 2060, or 2045 Digital Color Presses, you can also select the **Bypass Tray** option.

❑ **DFA** (Document Finishing Architecture)
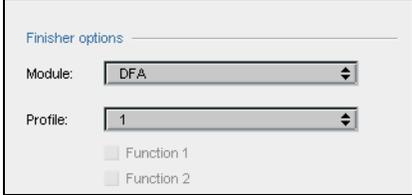
   a. Select the required **Profile** from the list (according to the profile set
       in the printer you are using).

   b. Select the required **Function** (according to the profile set in the
       printer you are using).

   Note: If you are using the Xerox DocuColor 5252, 2060, or 2045
   Digital Color Presses, select the **Bypass Tray** option to print to the DFA.

Fonts

This section lists all the fonts available on the Spire CXP6000 color server,
and explains how to work in the **Fonts** area of the Resource Center.

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

In addition, you can download Windows fonts from a client workstation to
the Spire CXP6000 color server. This is done by dragging the fonts to the
HF_Fontdownloader hot folder.

Font List

Table 11 lists the standard fonts that are available on the Spire CXP6000
color server.

Table 11: Standard fonts

AdobeSansMM	AdobeSerifMM	AlbertusMT
AlbertusMT-Italic	AlbertusMT-Light	AntiqueOlive-Bold
AntiqueOlive-Compact	AntiqueOlive-Italic	AntiqueOlive-Roman
Apple-Chancery	Apple-ChanceryCE	Arial-BoldItalicMT
Arial-BoldMT	Arial-ItalicMT	ArialCE
ArialCE-Bold	ArialCE-BoldItalic	ArialCE-Italic

Table 11: Standard fonts

ArialMT	AvantGarde-Book	AvantGarde-BookOblique
AvantGarde-Demi	AvantGarde-DemiOblique	AvantGardeCE-Book
AvantGardeCE-BookOblique	AvantGardeCE-Demi	AvantGardeCE-DemiOblique
Bodoni	Bodoni-Bold	Bodoni-BoldItalic
Bodoni-Italic	Bodoni-Poster	Bodoni-PosterCompressed
Bookman-Demi	Bookman-DemiItalic	Bookman-Light
Bookman-LightItalic	BookmanCE-Demi	BookmanCE-DemiItalic
BookmanCE-Light	BookmanCE-LightItalic	Carta
Chicago	ChicagoCE	Clarendon
Clarendon-Bold	Clarendon-Light	CooperBlack
CooperBlack-Italic	Copperplate-ThirtyThreeBC	Copperplate-ThirtyTwoBC
Coronet-Regular	CoronetCE-Regular	Courier
Courier-Bold	Courier-BoldOblique	Courier-Oblique
CourierCE	CourierCE-Bold	CourierCE-BoldOblique
CourierCE-Oblique	EuroMono-Bold	EuroMono-BoldItalic
EuroMono-Italic	EuroMono-Regular	EuroSans-Bold
EuroSans-BoldItalic	EuroSans-Italic	EuroSans-Regular
EuroSerif-Bold	EuroSerif-BoldItalic	EuroSerif-Italic
EuroSerif-Regular	Eurostile	Eurostile-Bold
Eurostile-BoldExtendedTwo	Eurostile-ExtendedTwo	Geneva
GenevaCE	GillSans	GillSans-Bold
GillSans-BoldCondensed	GillSans-BoldItalic	GillSans-Condensed
GillSans-ExtraBold	GillSans-Italic	GillSans-Light
GillSans-LightItalic	Goudy	Goudy-Bold
Goudy-BoldItalic	Goudy-ExtraBold	Goudy-Italic
Helvetica	Helvetica-Bold	Helvetica-BoldOblique
Helvetica-Condensed	Helvetica-Condensed-Bold	Helvetica-Condensed-BoldObl
Helvetica-Condensed-Oblique	Helvetica-Narrow	Helvetica-Narrow-Bold
Helvetica-Narrow-BoldOblique	Helvetica-Narrow-Oblique	Helvetica-Oblique

Table 11: Standard fonts

HelveticaCE	HelveticaCE-Bold	HelveticaCE-BoldOblique
HelveticaCE-Cond	HelveticaCE-CondBold	HelveticaCE-CondBoldObl
HelveticaCE-CondObl	HelveticaCE-Narrow	HelveticaCE-NarrowBold
HelveticaCE-NarrowBoldOblique	HelveticaCE-NarrowOblique	HelveticaCE-Oblique
HoeflerText-Black	HoeflerText-BlackItalic	HoeflerText-Italic
HoeflerText-Ornaments	HoeflerText-Regular	HoeflerTextCE-Black
HoeflerTextCE-BlackItalic	HoeflerTextCE-Italic	HoeflerTextCE-Regular
JoannaMT	JoannaMT-Bold	JoannaMT-BoldItalic
JoannaMT-Italic	LetterGothic	LetterGothic-Bold
LetterGothic-BoldSlanted	LetterGothic-Slanted	LubalinGraph-Book
LubalinGraph-BookOblique	LubalinGraph-Demi	LubalinGraph-DemiOblique
Marigold	Monaco	MonacoCE
MonaLisa-Recut	NewCenturySchlbk-Bold	NewCenturySchlbk-BoldItalic
NewCenturySchlbk-Italic	NewCenturySchlbk-Roman	NewCenturySchlbkCE-Bold
NewCenturySchlbkCE-BoldItalic	NewCenturySchlbkCE-Italic	NewCenturySchlbkCE-Roman
NewYork	NewYorkCE	Optima
Optima-Bold	Optima-BoldItalic	Optima-Italic
Oxford	Palatino-Bold	Palatino-BoldItalic
Palatino-Italic	Palatino-Roman	PalatinoCE-Bold
PalatinoCE-BoldItalic	PalatinoCE-Italic	PalatinoCE-Roman
StempelGaramond-Bold	StempelGaramond-BoldItalic	StempelGaramond-Italic
StempelGaramond-Roman	Symbol	Tekton
Times-Bold	Times-BoldItalic	Times-Italic
Times-Roman	TimesCE-Bold	TimesCE-BoldItalic
TimesCE-Italic	TimesCE-Roman	TimesNewRomanCE
TimesNewRomanCE-Bold	TimesNewRomanCE-BoldItalic	TimesNewRomanCE-Italic

Table 11: Standard fonts

TimesNewRomanPS-BoldItalicMT	TimesNewRomanPS-BoldMT	TimesNewRomanPS-ItalicMT
TimesNewRomanPSMT	Univers	Univers-Bold
Univers-BoldExt	Univers-BoldExtObl	Univers-BoldOblique
Univers-Condensed	Univers-CondensedBold	Univers-CondensedBoldOblique
Univers-CondensedOblique	Univers-Extended	Univers-ExtendedObl
Univers-Light	Univers-LightOblique	Univers-Oblique
Wingdings-Regular	ZapfChancery-MediumItalic	ZapfChanceryCE-MediumItalic
ZapfDingbats		

Table 12 lists the standard Kanji fonts that are available on the Spire CXP6000 color server Japanese version:

Table 12: Kanji fonts

FotoMinA101-Bold	FutoGoB101-Bold	GothicBBB - Medium
Jun101-Ligh	MidashiMin-MA31	MidashiGo-MB31
Ryumin-Light	ShinGo - Bold	ShinGo - Light
ShinGo - Medium	ShinGo - Ultra	ShinseiKai - CBSK1

Managing Fonts on the Spire CXP6000 Color Server

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

2. In the **Resource** list, select **Fonts**.
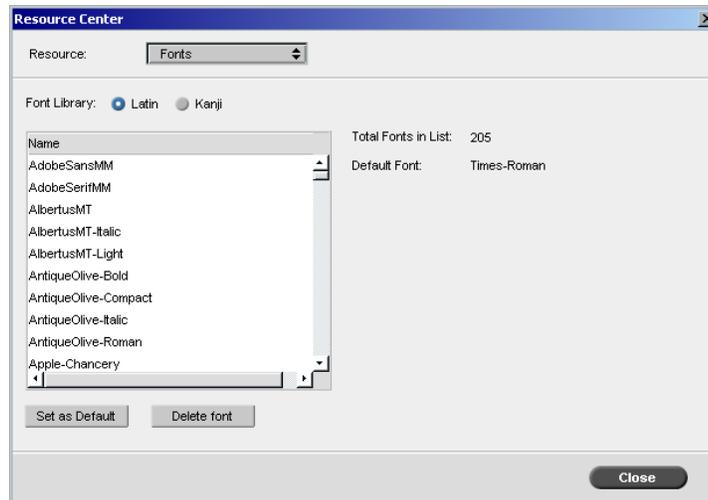
3. Choose a **Font Library** option. The default option is **Latin**.

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**.

Note: To add new fonts to the Spire CXP6000 color server, copy the new fonts to the **C:\CXP6000\General\RIP\Font** folder.

Downloading Fonts

Using the Fontdownloader for Macintosh Networks

The Fontdownloader is a driver provided for Macintosh networks and enables you to download fonts from a Macintosh client workstation. The Fontdownloader functions as a communications port and sends messages between the Fontdownloader program and the Spire CXP6000 color server. You cannot send files through the Fontdownloader, only fonts.

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

Note: Mac OS 10.X users that want to download fonts need to use a previous Mac OS version—for example, Mac OS 9.X. It is recommended that you embed the fonts in the file.

1. From the **Apple** menu, select **Chooser.**

2. Select **AppleShare** and browse the network to where the Spire CXP6000 color server is configured.

3. Select the Spire CXP6000 color server—for example, **CXP6000**—and then click **OK**.
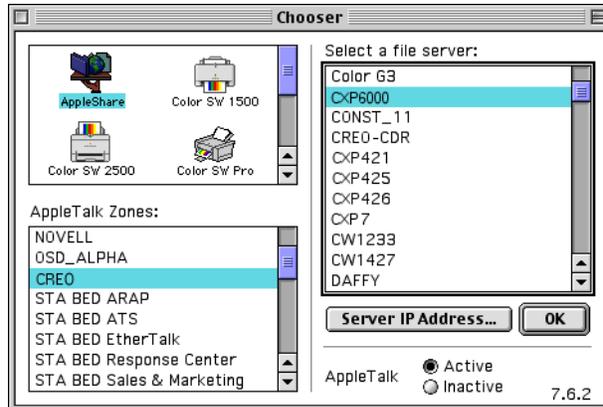
The Login dialog box appears.

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

The corresponding Spire CXP6000 color server window appears.
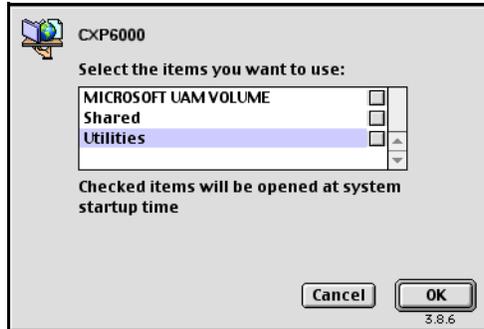
5. Select the **Utilities** folder, and then click **OK**.

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

6. Double-click the **Adobe Downloader 5.0.5** folder.
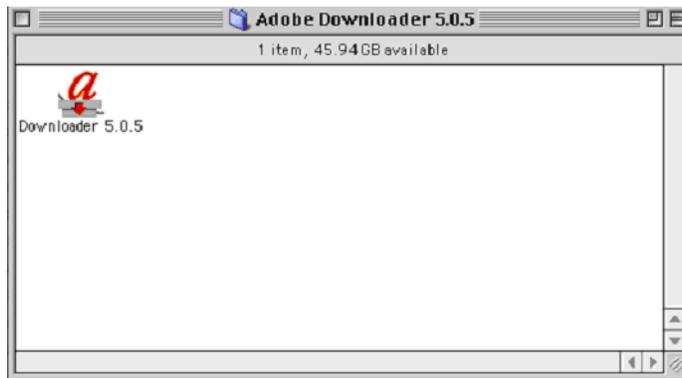
7. Copy the **Adobe Downloader 5.0.5** to your desktop.

8. From the **Apple** menu, select Chooser.

The Chooser window appears.
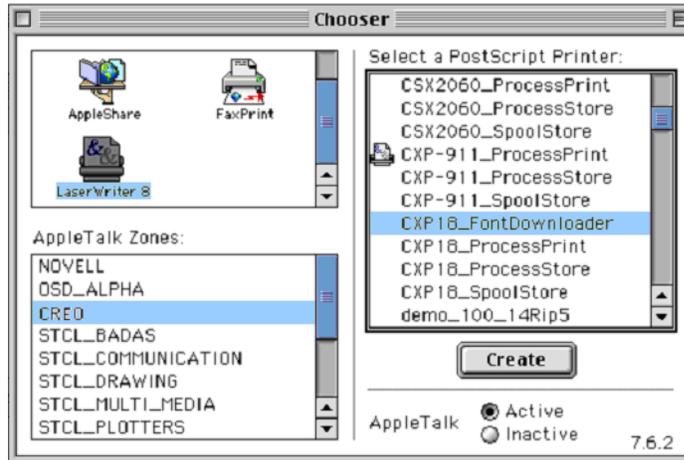
9. Select LaserWriter (8.x) and select the required fontdownloader.

10. Click **Create**.

11. Double-click the **Downloader 5.05** on your desktop.

12. On the **File** menu, select **Download Fonts**.
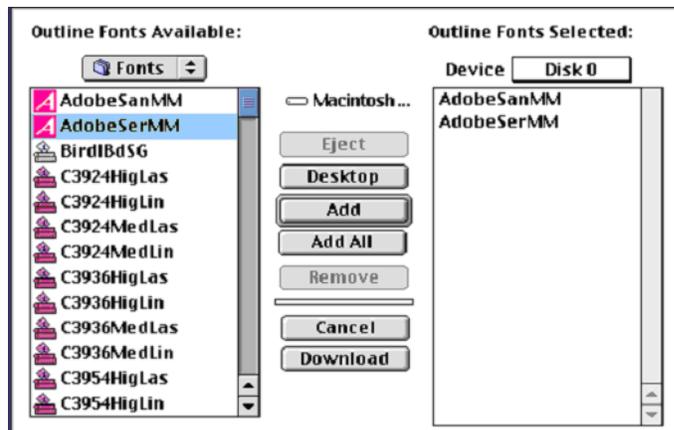
13. In the font area, select the required font directory.

14. Verify that **Disk 0** is the selected device.

15. Add all the required PostScript fonts and click the **Download** button.

Using the Fontdownloader Hot Folder for Windows
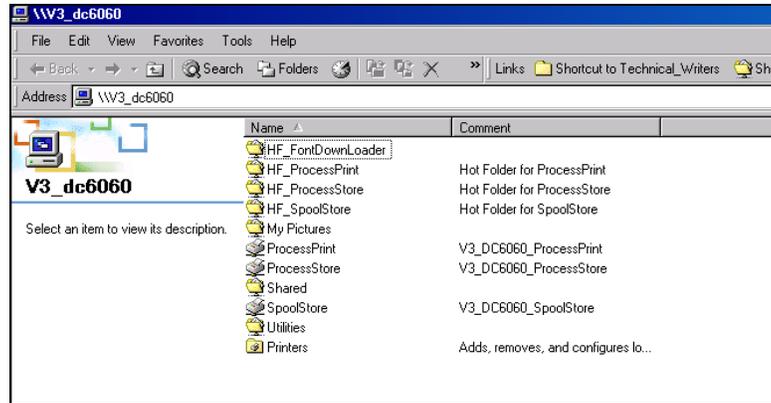
You can use the **HF_Fontdownloader** hot folder to install new or missing fonts to the Spire CXP6000 color server fonts dictionary. The hot folder is located with the other hot folders on your client workstation and can be used with the following operating systems:

- Windows 2000

- Windows NT

- Windows XP

For more information about hot folders, see *Using Hot Folders* on page 86.

Substituting Fonts
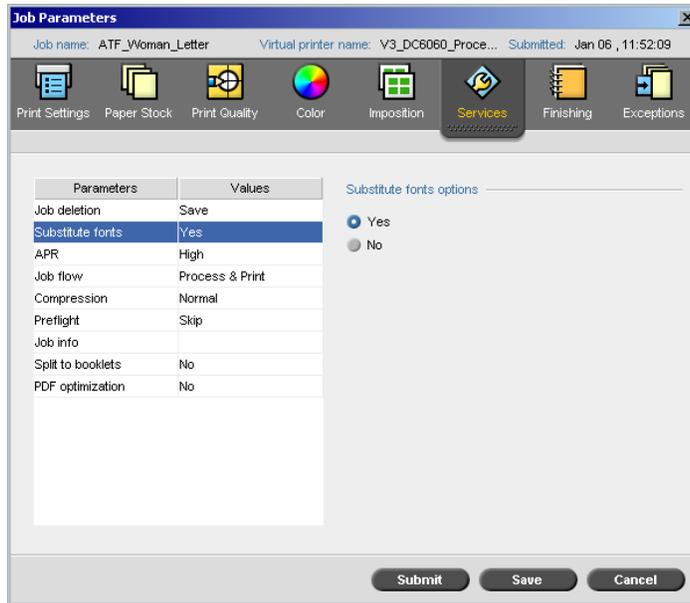
The Substitute Fonts parameter enables you to set font substitution preferences.

➢ Select a **Substitute fonts** option:

❐ **Yes:** Use this option to substitute a missing font with the default font that is set in the Settings window.

Note: If a font is substituted, a message appears in the Job History window.

❐ **No:** Use this option if the required font is missing and you want to stop processing the job.

For more information about managing fonts, see *Managing Fonts on the Spire CXP6000 Color Server* on page 306.

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7

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 can perform a daily calibration to compensate for these factors.

The calibration process corrects the printer colors by measuring their density and creating calibration look-up tables. The Spire CXP6000 color server uses the data in these tables to compensate for the differences between the actual, measured density level and the target level, the target density.

You should perform calibration in the following instances:

- When you use a new paper stock

- When you use a different screening method

- At least once every eight hour shift for every combination of paper stock and screening method used

- When prints show "color casts"

- After machine maintenance or hardware changes—for example, replacing a "charge corona"

- On drastic ambient changes (temperature and humidity)

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

Tip: You can set a reminder to remind you to calibrate the Xerox DocuColor 6060 Digital Color Press. For more information, see *Calibration Reminder* on page 427.

Guidelines for Successful Calibration

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

- Ensure that your X-RiteColor® DTP34 QuickCal Densitometer is connected properly

- Ensure that your X-RiteColor DTP34 QuickCal Densitometer is calibrated. You should calibrate the device at least once a week, or whenever the power to the device is interrupted. Use the manufacturer calibration chart supplied with the device. After you finish calibrating the device, make sure you store the chart in the designated envelope.

For more information about the DTP34 Densitometer, see *Calibrating the DTP34 Densitometer* on page 316.

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

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

- Prepare the calibration pad to measure the calibration charts. If a calibration pad is not available, set a white media, at least 200 gsm, or two sheets of lighter paper, on the surface. Read the calibration chart on this surface.

- Set the Spire CXP6000 color server emulation method to the method you will use to print the customer job (CSA or Device Link).

The Calibration Process

The calibration process consists of the following steps:

1. Calibrate the densitometer, see *Calibrating the DTP34 Densitometer* on page 316.

2. Load the paper set you are going to use for printing in the Xerox DocuColor 6060 Digital Color Press.

3. In the Spire CXP6000 color server application, from the **Tools** menu, select **Calibration**, see *Calibrating the Spire CXP6000 Color Server* on page 322.

4. Click **Calibrate** to run the Color Calibration Wizard, and to create a calibration table.

5. Follow the Color Calibration Wizard steps.

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

6. When you measure the two calibration charts, place them on the surface you prepared—for example, on top of the white paper.

7. When the calibration is complete, print the job using the calibration table, see *Printing the Job with the Calibration Table* on page 339.

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

Calibrating the DTP34 Densitometer

The calibration process involves printing a CMYK chart, measuring the density of the CMYK strips, and calibrating them to a required target. This process is achieved using the DTP34 Quickcal Densitometer.

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

Perform the following steps before first time use of the X-Rite DTP34 QuickCal Densitometer:

• Familiarize yourself with the *X-Rite DTP34 QuickCal Densitometer Operations Manual.*

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

• Connect the X-Rite DTP34 QuickCal Densitometer.

• Calibrate the X-Rite DTP34 QuickCal Densitometer.

Connecting the X-Rite DTP34 QuickCal Densitometer to the Spire CXP6000 color server
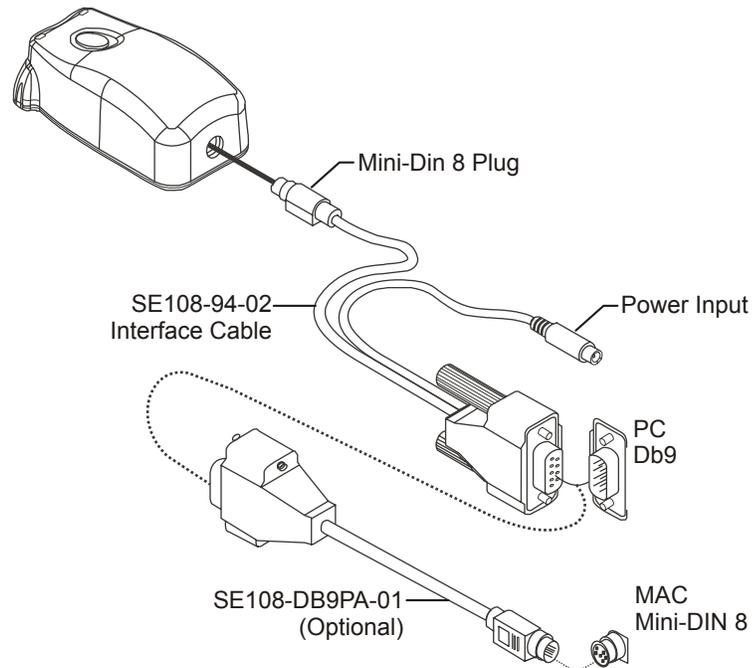
Note: Verify that the Mini-Din 8 Plug is firmly seated, and that you hear a click sound. The connector is spring loaded and must be properly seated.

Before calibrating the DTP34 QuickCal Densitometer, make sure that:

- The X-Rite DTP34 QuickCal Densitometer must be interfaced directly with one of the computer's serial ports.

- The power supply is plugged into an AC wall outlet and connected to the DTP34 QuickCal Densitometer communication cable.

Configuring the X-Rite DTP34 QuickCal Densitometer

The LED indicates a variety of instrument operation conditions, such as calibration mode and operation.

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

Calibrating the X-Rite DTP34 QuickCal Densitometer

Frequency of Calibration

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

Positioning the Instrument on the Calibration Reference

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

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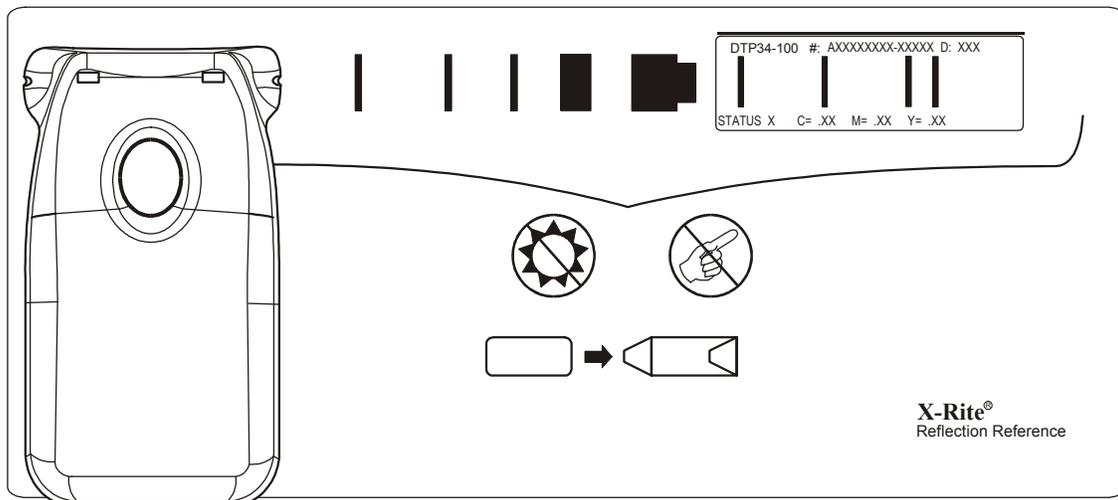
Quick Calibration

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

1. Position the X-Rite DTP34 QuickCal Densitometer on the reference as previously mentioned.

2. Press and click the button and scan the reference to the opposite end. Release the button. The LED should indicate green if the calibration was successful. If calibration fails (fast flashing amber LED), verify that the strip is clean and re-read.

3. Place the reflection reference in its protective envelope, and store the envelope away from light and heat.

Full Calibration

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

1. To manually invoke the calibration mode, click and hold the **Instrument** button for a minimum of three seconds. The LED slowly flashes amber when calibration is initiated.

2. Press and hold the button (if not previously held) and scan the reference to the opposite end. Release the button. The LED should indicate green if the calibration was successful. If calibration fails, (fast flashing amber LED), verify the strip is clean and re-read.

3. Place the reflection reference in its protective envelope, and store the envelope away from light and heat.

Color Calibration Methods

The Spire CXP6000 color server provides you with two color calibration methods:

- **Target Calibration**
  This calibration method enables you to calibrate the Xerox DocuColor 6060 Digital Color Press according to the following fixed, predefined density values:

Table 13: Fixed density values for uncoated paper

Toner	Density value
Cyan	1.7
Magenta	1.27
Yellow	0.82
Black	1.8

Table 14: Fixed density values for coated paper

Toner	Density value
Cyan	1.9
Magenta	1.44
Yellow	0.87
Black	1.9

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

- **Auto Adjusted Calibration**
  This calibration method enables you to calibrate the Xerox DocuColor 6060 Digital Color Press according to the printer's performance capabilities.
  With this method, you can set the maximum density of the printed output by selecting the desired percentage level. The higher the

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

The default setting for the color calibration method of the Spire CXP6000 color server is target calibration. You can change the setting, if necessary, before calibrating the Spire CXP6000 color server.

To specify the calibration method:

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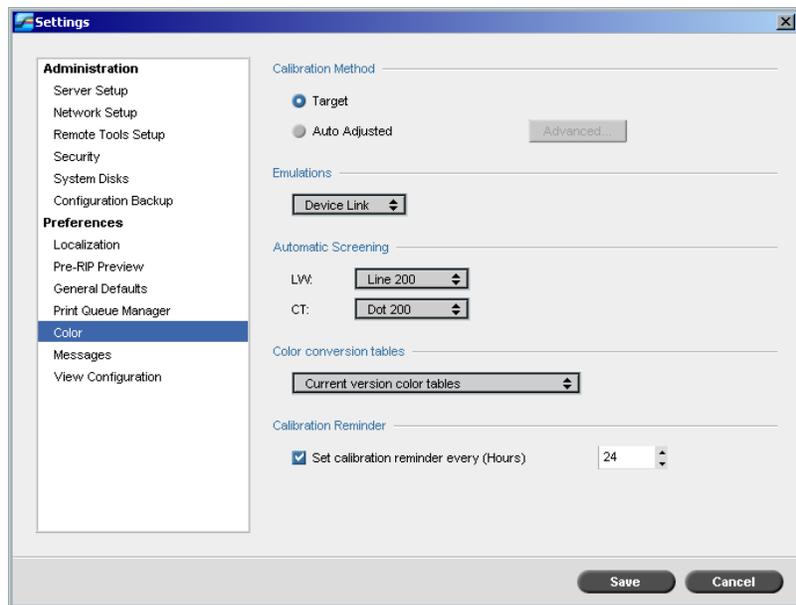
2. In the **Calibration Method** area, select the required calibration method, **Target** or **Auto Adjusted**.

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

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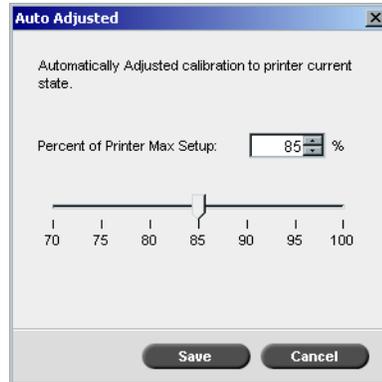
4. Change the **Percent of Printer Max Setup** density if required, by
    moving the slider, or by typing a percentage value in the
    corresponding box.

    Note: The default percentage value is 85%.

5. Click **Save.**

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

Calibrating the Spire CXP6000 Color Server

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

The Color Calibration Wizard analyzes the measurements and creates
calibration tables. Using these tables, the Spire CXP6000 color server
compensates for the difference between the printer's performance and the
desired values.

The following calibration look up tables are provided:

*   **None:** Applies no calibration table to the job.

*   **SpireNormal:** Applies the factory default calibration table. Since this is
    a default look up table it cannot be overwritten.

- **SpireSaturated:** Applies the factory default saturated calibration table. This look up table applies a darker calibration table in comparison to the **SpireNormal** look up table. Since this look up table is a default table it cannot be overwritten.

- **Normal:** Initially the **Normal** look up table is identical to the **SpireNormal** look up table. This resemblance changes as soon as you calibrate your Spire CXP6000 color server, and at the end of the calibration process choose to save your calibration table as default. As a result, your calibration table is saved as the **Normal** look up table.

- **Saturated:** Initially the **Normal** look up table is identical to the **SpireSaturated** look up table. This resemblance changes as soon as you calibrate your Spire CXP6000 color server, and at the end of the calibration process choose to save your calibration table as default. As a result, your calibration table is saved as the **Saturated** look up table.

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

To open the Calibration window:

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

    The Calibration window appears.
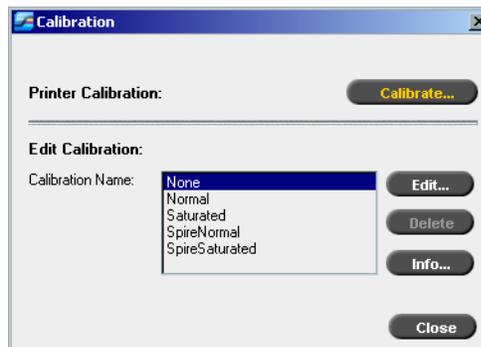
The following options are available:

- Click **Calibrate** to run the Color Calibration Wizard. This wizard guides you in the use of the X-Rite DTP34 to create calibration tables, see *Creating a Calibration Table* on page 324.

- 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 332.

  ❐ Click **Delete** to delete the calibration table.

  ❐ Click **Info** for the Density Graph, see *Reading Color Density Data* on page 337.

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

Creating a Calibration Table

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

   The first step in the wizard is **Printing Start Point Chart**. This step enables you to detect the point where you start to see toner on the paper. Before printing the start point chart, you need to set the following parameters according to the values of your job:

   - Tray
   - Screening method
   - Media type
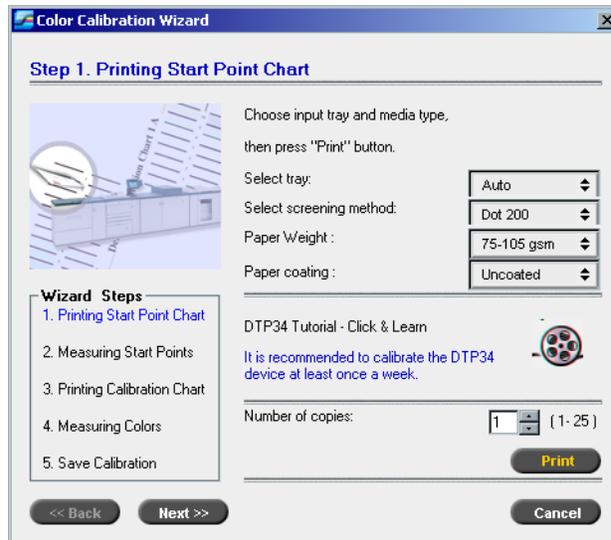
Note: Click the **DTP34 Tutorial - Click & Learn** icon to display an animation of the measurement process and to learn how to use the DTP 34 QuickCal Densitometer correctly.

2.   Select the required input tray from the **Select tray** list.

    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. Just ensure that the required paper is in one of the trays, and then select that tray in the wizard.

3.   Select the required screening method from the **Select screening method** list.

4.   Select the required **Paper Weight** from the list.

5.   From the **Paper coating** options, select **Coated** or **Uncoated** paper stock.

6.   Set the number of copies you need by typing the number or using the arrows next to the box to select the number.

7.   Click **Print**.

    The Xerox DocuColor 6060 Digital Color Press prints a Start Point Density calibration chart.

8. Collect the chart from the printer.

   Step 2 of the Color Calibration Wizard appears. In this step you scan the start point chart so that the wizard can measure each separation and find the point at which the toner appears on the paper.
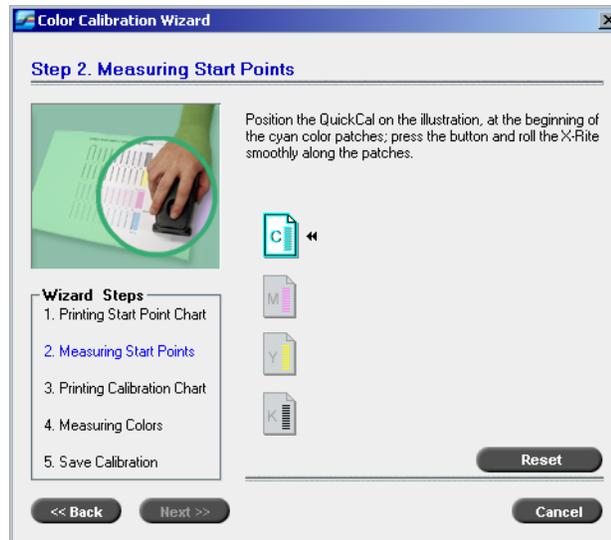
9. While pressing down the button on the X-Rite DTP34, align the X-Rite DTP34's head with the cyan arrow's tip. The arrow is to the left of the cyan column on the Image Density Calibration Curve. Its tip intersects the semi-dotted line.

10. Press the button on the X-Rite DTP34.

11. Sweep the X-Rite DTP34 over the cyan column.

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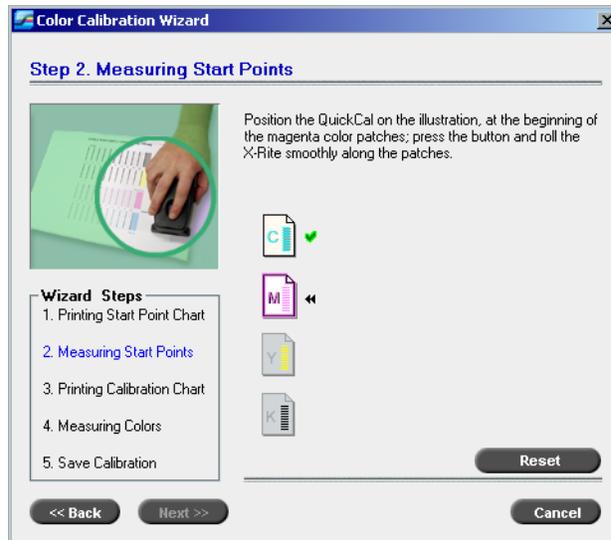
12. After each color sweep, wait for the check mark to appear over the appropriate icon and follow the instructions as listed.

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

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

Notes:

- If at any stage the scanning has not been completed properly, click **Reset** and scan again.

- If an error occurs while you are scanning the chart, an alert message appears. Click **OK** and re-scan the charts.

Step 3 of the Color Calibration Wizard appears.
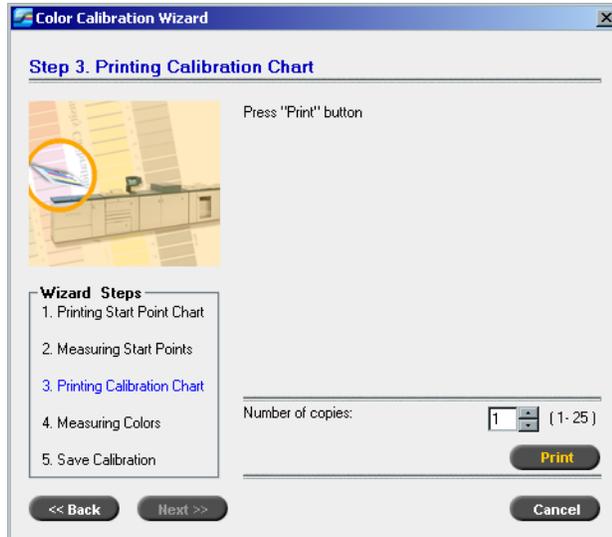
13. Click **Print**.

   Note: If you selected automatic screening in Step 1 of the wizard, the Xerox DocuColor 6060 Digital Color Press prints two charts, an **Image Density Calibration Chart** and a **Text/Line Art Chart**. If you selected any other screening method, only the **Image Density Calibration Chart** is printed.

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

Step 4 of the Color Calibration Wizard appears.
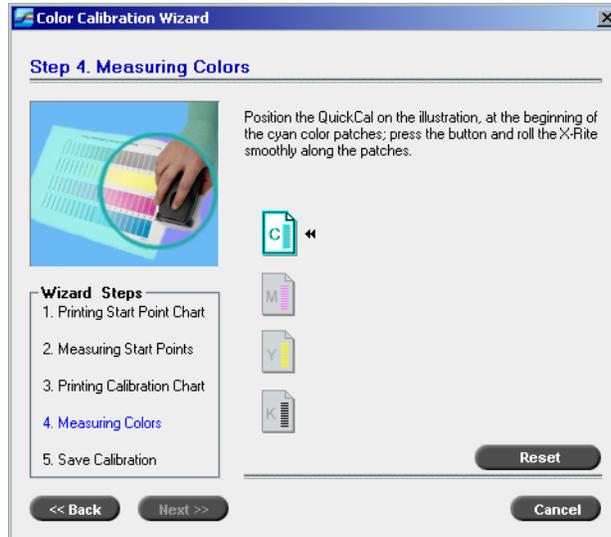
Note: If at any stage the scanning has not been completed properly, click **Reset** and scan again.

15. Position the X-Rite DTP34 over the **Image Density Calibration Chart** and follow the scan sequence as prompted.

    A beep sounds when the scan is complete. A check mark appears next to the cyan icon and instructions appear for scanning of the next column (magenta).
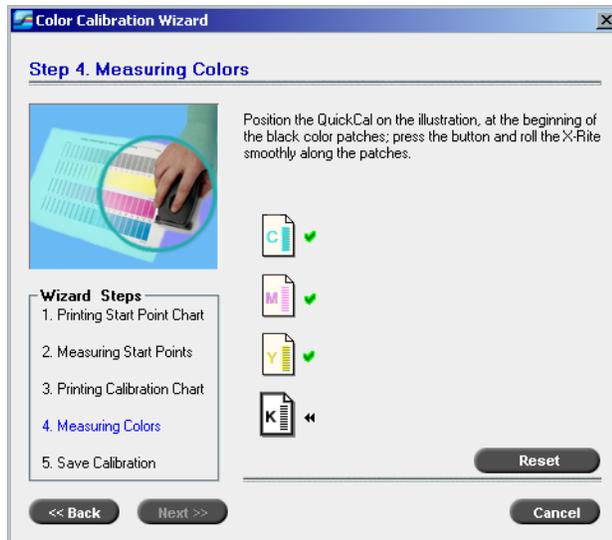
16. After each scan, wait for the check mark to appear next to the appropriate icon and follow the instructions as listed.

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

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

17. If in Step 1 of the wizard, you selected **Auto** from the **Select screening method** list, you are now required to sweep the **Text/Line Art Chart**. Follow the same scan sequence. Begin each chart with the cyan column.

Note: After the LW Density black separation is scanned and the beep is heard, it can take several seconds until the check mark appears in the box.
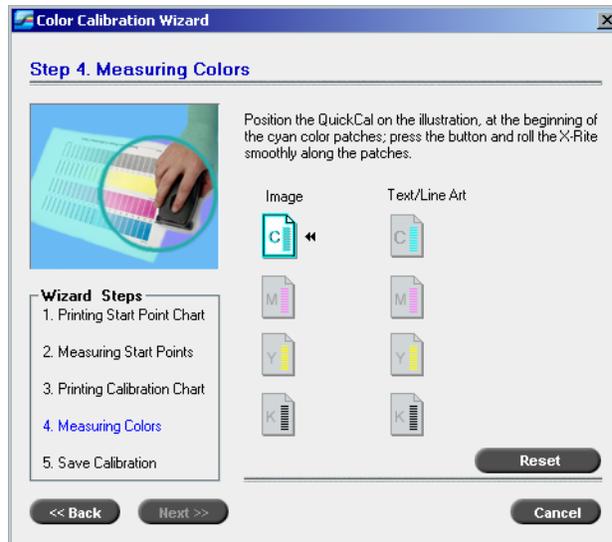
When all of the Text/Line Art separation columns have been successfully measured, a check mark appears next to all icons.

Note: If at any stage the scanning has not been completed properly, click **Reset** and scan again.

Step 5 of the Color Calibration Wizard appears.
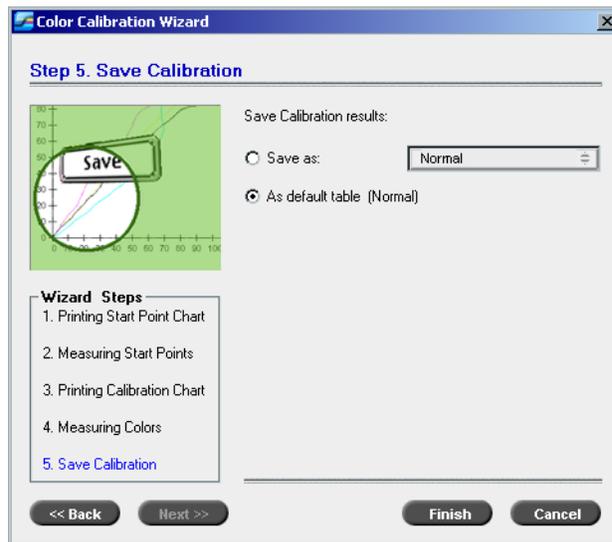
18. Select **Save as** and select the required name for the calibration table. Type your own or select one from the list.
Or:
Select **As default table** to save the calibration table as **Normal**.

    If you choose the **As default table** option, the Spire CXP6000 color server automatically overwrites the existing **Normal** and **Saturated** calibration tables.

19. Click **Finish**.

    Regardless of the option you choose, 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 Tuesday23.sat.

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.
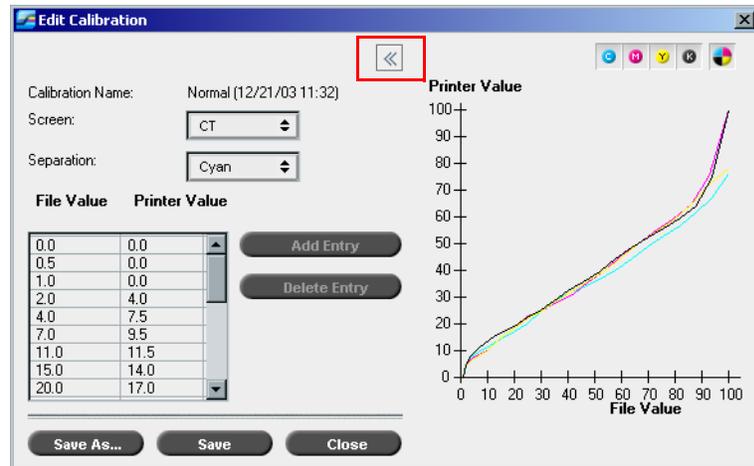
Screen

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.

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.

Editing Calibration Value Tables

To add an entry to the value table:

1. Highlight a row in the value table. The new entry row will appear below this row.

2. Click **Add Entry.**

    The Add Entry dialog box appears.

3. Select the required values from the **File** and **Printer** lists.

4. Click **OK.**

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

To change an existing value table:

1. Highlight a row and double-click on the row you want to edit.

    The Edit Entry dialog box appears.

2. Adjust the **File Value** and **Printer Value** as required by clicking on the arrow buttons.

3. 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.

Calibration Graph

The graph shows the values from your calibration table.
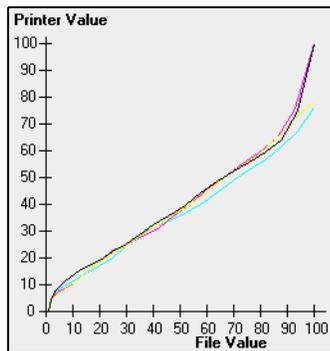
Calibration graph showing separations

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

During printing, the Spire CXP6000 color server automatically replaces the CMYK values in the RTP file with new values that compensate for the printer's current performance level.

➢ To open or hide the calibration graph, click the arrow button in the Edit Calibration dialog box.

Viewing Separations

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.

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 required.

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 required.

2. Click **Save As**.

    The Save As dialog box appears.

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

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

4. Click **OK**.

    The calibration table is saved with the new name.

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

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

Backing Up Calibration Tables

1. Locate the **ColorCalibrationDB** folder, following the path
   C:\CXP6000\General\ColorCalibration\ColorCalibrationDB.
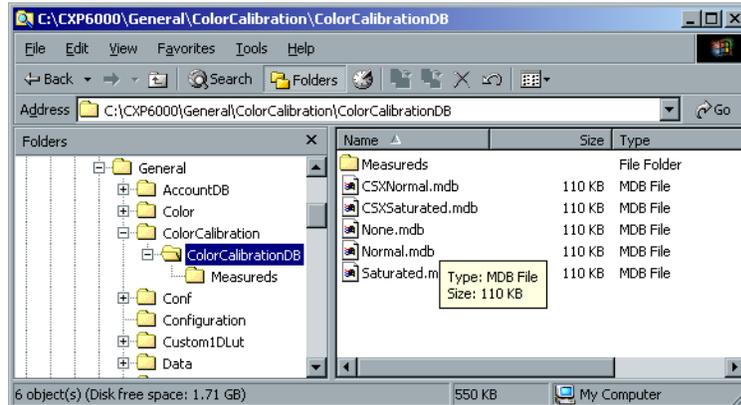
2. Open the **ColorCalibrationDB** folder.

3. Copy the required 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.
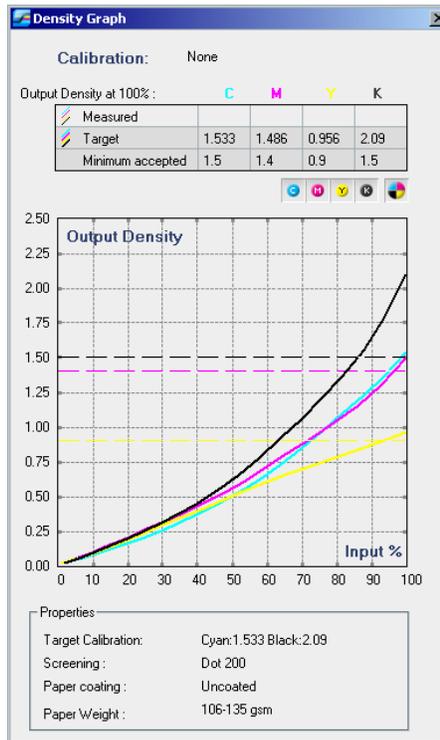
Calibration graph showing Cyan, Magenta, Yellow and Black separations.

The Density Graph contains the following data:

- Calibration name

- Measured D-Max values for each separation

- Target D-Max values for each separation

- Minimum accepted density values for each separation (Xerox values)

- View options: filtering by color - select which colors are shown/hidden

- Calibration curves (target and measured) for each separation

  ❒ Target is displayed as bold lines

  ❒ Measured is displayed as thin lines

- Index - emphasizes the difference between target lines and measured lines

• Properties: paperweight, screening, paper coating

Note: When the density of the Xerox DocuColor 6060 Digital Color Press is lower than 80% of the target density, the following message appears:
```
"Attention: Below standard D-Max value(s) measured for
<cyan, magenta, yellow, black>. Standard (Minimum):
<C - 1.5>, <M - 1.4>, <Y - 0.9>, <K - 1.5>
Measured: <C - >, <M - >, <Y - >, <K - >".
```

Printing the Job with the Calibration Table

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

To print the reference job:

1. In the Spire CXP6000 color server workspace, suspend the **Process Queue**.

2. Import the job.

3. Double-click the job to open the Job Parameters window.

4. In the **Paper Stock** tab, select the desired paper stock.

5. On the **Color** tab, select the calibration you created for the particular stock from which you printed.

For more information about the Color tab, see *Default Color Flow* on page 340.

6. In the **Color** tab, select the screening method you used for the selected calibration.

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

The tone compression tools and screening methods, **Gradation**, **Brightness**, **Contrast**, and **Calibration**, can be applied to your RTP jobs without requiring the Spire CXP6000 color server to re-RIP the jobs. The color tools, **Destination**, **Rendering Intent**, **Emulation**, **RGB Workflow**, and **Spot Color Editor**, should be applied prior to initial RIPing or your job will need to be re-RIPed.

The Spire CXP6000 color server accepts the following color formats:

- RGB

- CMYK

- L a* b*

- Spot Color

- Greyscale

- Duotone

To submit jobs for color adjustment on the Spire CXP6000 color server:

1. Import the job to the Spire CXP6000 color server workspace.

2. Double-click on 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 required color parameters (see the relevant parameter in the **Color** tab).

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

   The job is processed on the Spire CXP6000 color server and sent to the
   Xerox DocuColor 6060 Digital Color Press for printing.

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

For more information about submitting jobs to the Spire CXP6000 color server,
see *Importing and Printing Jobs* on page 156.

Color Workflow Terminology

This section defines the terms used in the RGB and CMYK workflow.

*   **CSA (Color Space Array)** is the spectrum of specific variants of a color
    model with a specific gamut or color range. For example, within the
    color model RGB, there are numerous color spaces, such as Apple
    RGB, sRGB, and Adobe RGB. While each of these define color by the
    same three axes (R, G, and B), they differ in gamut and other
    specifications. CSA is comprised of a three-dimensional geometric
    representation of colors that can be seen or generated using a certain
    color model and are quantitatively measured. Source CSA is to be used
    only under the assumption that the upstream color workflow was
    managed and monitored. Otherwise it should be replaced with a Creo
    profile, which is the default.

*   **CSA Profiles:** There are three CSA profiles with gammas of 1.8, 2.1 and
    2.4. The higher the gamma, the darker the RGB appears. This
    workflow should be used when you have images from different
    sources, such as digital cameras, Internet, and scanners and you want
    the images to have the common RGB color spaces.
    Other possible CSA profiles are sRGB and Adobe RGB.

*   **Rendering Intent:** All printers, monitors and scanners have a gamut or
    range of colors that they can output (or view in the case of a scanner).
    If a color needs to be output and is outside the gamut of the output
    device, it must be mapped or approximated to some other color, which
    exists within the gamut. Rendering Intent enables you to compress
    out-of-gamut colors into the color capability of the press you are using.
    You can set any rendering intent value for **RGB** elements by selecting
    the required from the **Rendering intent options** list. The default value
    for RGB is **Perceptual (photographic).** The default value for CMYK is
    Relative Colorimetric.

There are several methods that can be used when translating colors from one color space to another. These methods are called Rendering Intents because they are optimized for various uses. When working with ICC profiles, it is important that you select the Rendering Intent that best preserves the important aspects of the image. Each rendering method specifies a CRD for color conversions. You can modify the rendering method to control the appearance of images, such as prints from office applications or RGB photographs from Photoshop.

- **Relative Colorimetric:** a rendering intent method in which colors that fall within the output color space remain the same. Only colors that fall outside are changed to the closest possible color within the output color space.

  When using this method, some closely related colors in the input color space can be mapped to a single color in the output color space. This reduces the number of colors in the image.
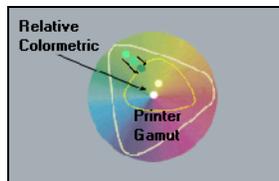
- **Absolute Colorimetric:** a rendering intent method similar to Relative Colorimetric except that it does not make adjustments according to the white point. In this method, colors that do not fit within the output color space are rendered at the extremes of the output color space. Colors that fall inside the output color space are matched very accurately.

  This method is valuable for representing "signature colors". Colors that are highly identified with a commercial product such as the cyan in the Creo logo.
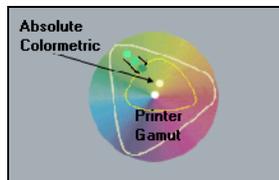
- **Saturated (presentation)** - a rendering intent method which scales all colors to the strongest saturation possible. The relative saturation is maintained from one color space to another.

This rendering style option is optimal for artwork and graphs in presentations. In many cases, this style option can be used for mixed pages that contain both presentation graphics and photographs.
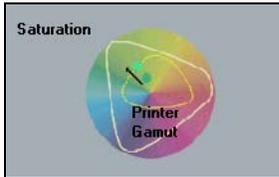
- **Perceptual (Photographic)** (default for RGB) - a rendering intent method which preserves the visual relationship among the colors as they are perceived by the human eye. In other words, all colors are proportionally scaled to fit the output gamut. All or most colors in the original are changed but the relationship between them does not change.

  This method is recommended when working with realistic images such as photographs, including scans and images from stock photography CDs.
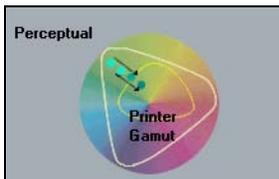
Color Mode
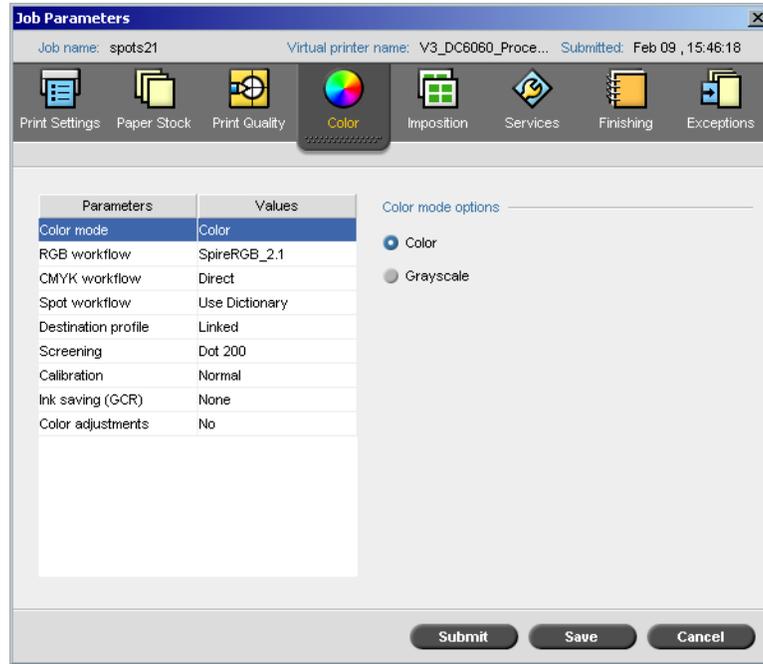
The **Color Mode** parameter enables you to print color jobs in black and white using the black toner only. When a color job is printed using the **Grayscale** option, the Cyan (C), Magenta (M), and Yellow (Y) separations are also printed in Black (K) toner, giving a dense appearance similar to the CMYK grayscale image.

Note: When you print color jobs using the **Color** option, you can also select the **Print grays using black toner** check box in the **RGB Workflow** parameter, so that RGB gray text and graphics will be printed using black toner only.

For more information about the **Print grays using black toner** check box, see *RGB Workflow* on page 345.

To set the color mode:

1. Select **Grayscale** to print the job as black and white using Black (K) toner only.
    Or:
    Select **Color** to print the job in color using CMYK.

2. If you have selected **Color**, select the **Print grays using black toner** check box in the **RGB Workflow** parameter, to print RGB gray text and graphics using black toner only.

Note: Grayscale images created in RGB applications, such as PowerPoint, should be specified as Monochrome or submitted to the system with **Grayscale** selected in the PPD file. This selection ensures that grayscale images are counted as black and white instead of color in both the Spire CXP6000 color server and in the Xerox DocuColor 6060 Digital Color Press billing meters.

RGB Workflow
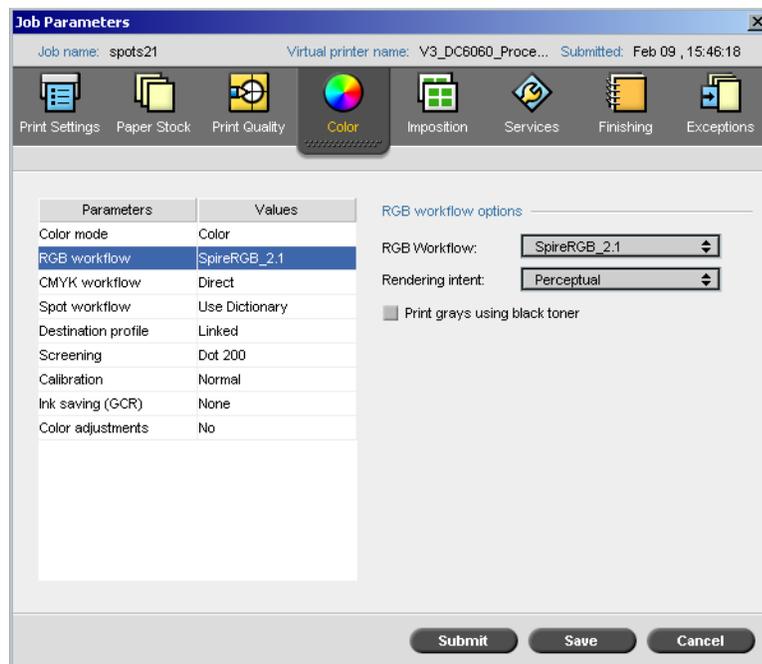
The **RGB Workflow** parameter enables you to select a RGB profile and apply it to RGB elements in your job. You can use predefined profiles, or to achieve better color results, import your own custom profile via the **Profile Manager.**

For more information about importing RGB profiles, see *Profile Manager* on page 358.

To set the RGB workflow options:

1. In the **RGB Workflow** list, select the required RGB source profile:

    *   To use the embedded 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 required option

    For more information about choosing the correct rendering intent, see *To set the RGB workflow options:* on page 346.

3. Select the **Print grays using black toner** check box if you want RGB gray text and graphics to be printed with black toner only.

    Note: The **Print grays using black toner** check box not only affects R=G=B values, but may also cause slightly different values (R+/-4=B+/-4=G+/-4) to produce gray.

CMYK Workflow
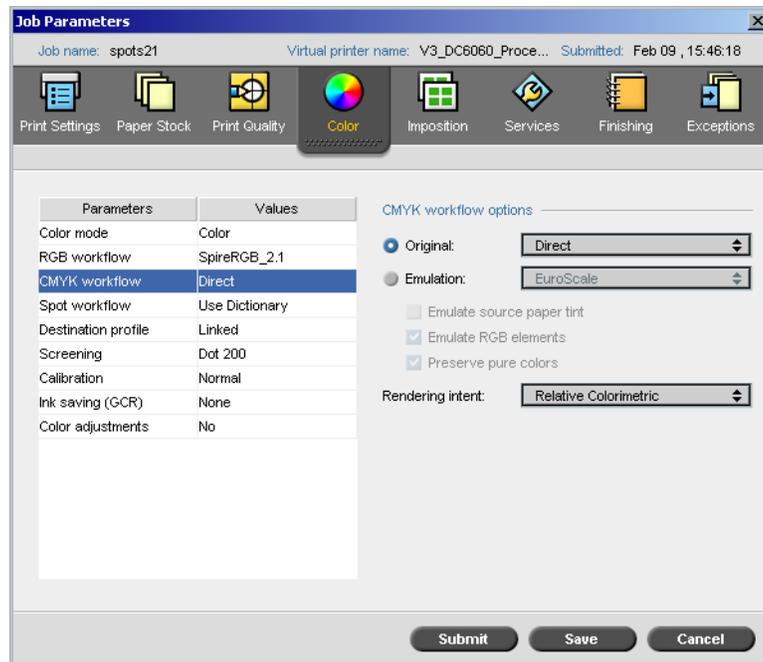
The **CMYK workflow** is used to emulate various standards used in lithographic printing. These standards represent specific combinations of paper and ink, as well as popular proofing systems. It is also used to emulate other printing devices such as offset presses, or other digital printers. An example 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 before the job actually goes to offset printing.

Note: RGB colors are not affected by the CMYK workflow.

The Spire CXP6000 color server supports two CMYK emulation methods, **Device Link** (default) and **CSA**. If you would like to use the CSA method, select **Tools**>**Settings**>**Color** and change the emulation method.

For more information about choosing an emulation method, see *Emulations* on page 426.

The **CMYK workflow** parameter is also used to specify the required rendering intent for CMYK elements. All printers, monitors, and scanners have a gamut or range of colors that they can output (or view in the case of a scanner). If a color needs to be output and is outside the gamut of the output device, it must be mapped or approximated to some other color, which exists within the gamut.

Rendering Intent enables you to compress out-of-gamut colors into the color capability of the press you are using. You can set any rendering intent value for **CMYK** elements by selecting the required from the **Rendering intent** list. The default value for CMYK is **Relative Colorimetric**.

Note: If you select the **Device Link** emulation profile, you cannot select a rendering intent because for each device link emulation profile a rendering intent is already defined.

In addition, you may also select to emulate the paper tint and adjust the white point value of the used paper stock. For example, if you want to simulate pink paper stock while using white paper stock, you may use the corresponding emulation profile and select the **Emulate source paper tint** check box. The result will be that in addition to the job emulation, the paper tint will be also emulated and will have a pink shade.

To select CMYK workflow options:

1. In the **Original** list, select one of the following options:

    *   **Direct:** This is the default CMYK workflow. The CMYK elements are printed without any color transformation.

    *   **Use Source CSA:** Uses the embedded CSA from the PostScript file.

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

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

    *   Select the **Emulate source paper tint** check box to emulate the original paper tint.

        Notes:
        *   The **Emulate source paper tint** check box is available only if you select **Device Link** as the emulation method.
        *   When the **Emulate source paper tint** check box is selected, **Absolute Colorimetric** will be used as the rendering method.
        *   If the job is simplex, only the front side will be printed using the tint emulation.

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

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

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

    For more information about choosing the correct rendering intent, see *To set the RGB workflow options:* on page 346.

    Note: If you selected **Device Link** as the emulation method, you cannot select a rendering intent because for each device link emulation a rendering intent is already defined.

Spot Workflow
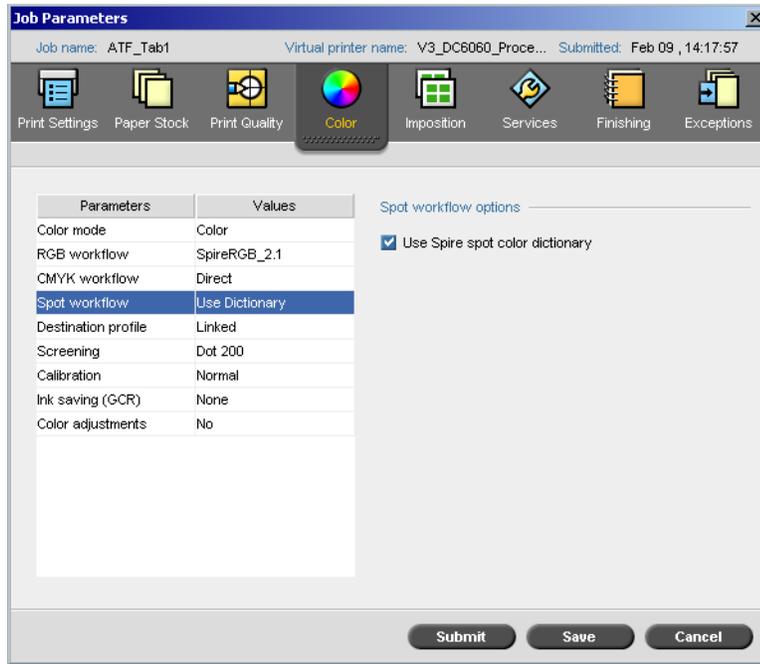
By default, the Spire CXP6000 color server looks in the spot color dictionary for the correct value each time there is a spot color with a recognized name.

To ignore the spot color dictionary:

➢ In the **Spot workflow options** area, clear the **Use Spire spot color dictionary** check box.

For more information about the Spire spot color dictionary, see *Spot Color Editor and Workflow* on page 363.

Destination Profile
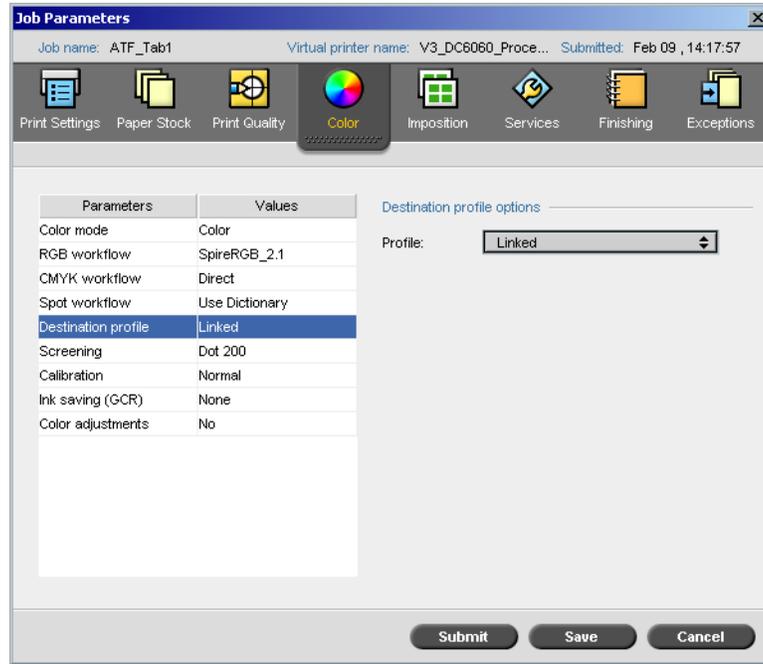
The **Destination profile** parameter enables you to select a custom or predefined destination profile. After you import a custom destination profile via the **Profile Manager**, it is displayed in the **Profile** list. There are two predefined Spire CXP6000 color server profiles, **DC6060_DC2000.COM and DC6060_DC2000.GA.** If you map, or link, a profile to a specific paper color, the same profile will always be used for that paper set.

For more information about destination profiles, see *Profile Manager* on page 358.

Note: The predefined profiles for the Xerox DocuColor 2060 and 2045 Digital Color Presses are DC6060_DC2000.COM and DC6060_DC2000.GA.The predefined profiles for the Xerox DocuColor 5252 are DC_5252.GA and DC_5252.COM.

To set the destination profile:

➢ In the **Profile** list, select the required profile.

Screening
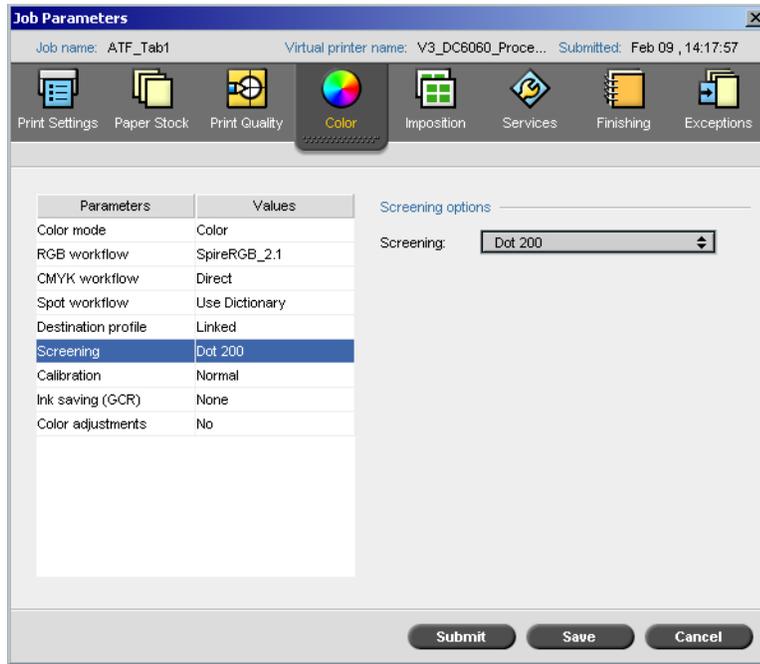
Screening converts CT (Continuous Tone) and LW (Line Work) images into information (halftone dots) that can be printed. The human eye "smooths out" this information, which seems visually consistent with the original picture. Thus, the more lines per inch, the more natural the image appears.

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.

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.

The Spire CXP6000 color server supports six types of screening:

- **Automatic** applies two types of screens:
  For CT, the system uses dot type screen of 200 lpi.
  For LW (text and line-art elements), the system uses line type screen of 200 lpi.

Automatic screening results in the printing of text and graphic shapes at Continuous Tone. Automatic screening is the recommended screening mode.

Note: To change the **Automatic** screening values, see *Automatic Screening* on page 426.

- **Dot 150** applies Dot type screen of 150 lpi. The screen of each separation is printed at a different angle.

- **Dot 200** applies Dot type screen of 200 lpi. The screen of each separation is printed at a different angle.

- **Line 200** applies Line type screen of 200 lpi. The screen of each separation is printed at a different angle.

- **Line 300** applies Line type screen of 300 lpi. All separations are printed at 90 degrees screen angle.

- **Line 600** applies Line type screen of 600 lpi. All separations are printed at 90 degrees screen angle.

To select a screening method:

➢ In the **Screening** list, select the required option. For CT images, use a dot option, and for LW images, use a line option. If you select the **Automatic** option, **Dot 200** will be used for CT images and **Line 200** will be used for LW images.

Calibration
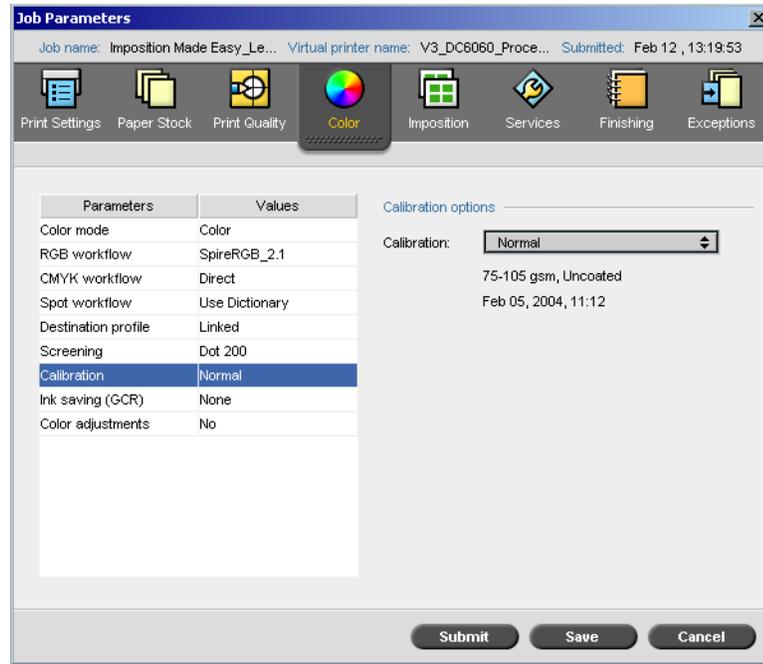
The purpose of color calibration is to achieve a consistent level of color quality. The calibration process corrects printer colors by measuring a chart using a densitometer, which measures color density.

The Spire CXP6000 color server Calibration tool enables you to create and edit calibration tables, either through an automatic process or by editing an existing calibration table. The available calibration options are **Normal**, **Saturated** and **None**.

For more information about calibration tables, see *Calibration* on page 314.

The **Calibration** parameter enables you to select the required 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** (default) calibration setting (with **Medium** GCR).

Ink Saving (GCR)
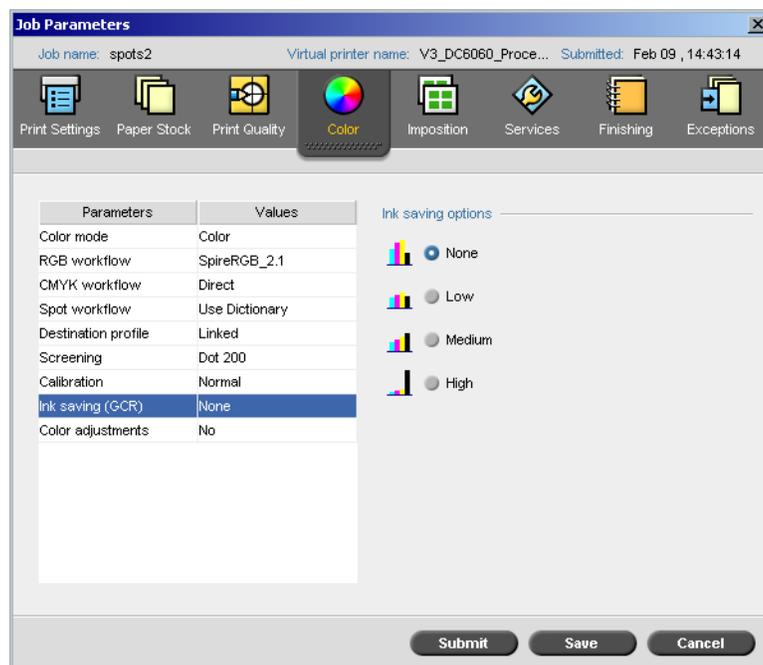
The **Ink Saving GCR** (Gray Component Replacement) parameter enables you to conserve toner by replacing the gray component (CMY) of pixels with black toner.

The gray component replacement also prevents the consequences of excessive toner buildup, such as flaking and cracking, or the "curling" effect that may occur when printing transparencies.

No GCR   Low GCR   Medium GCR   High GCR
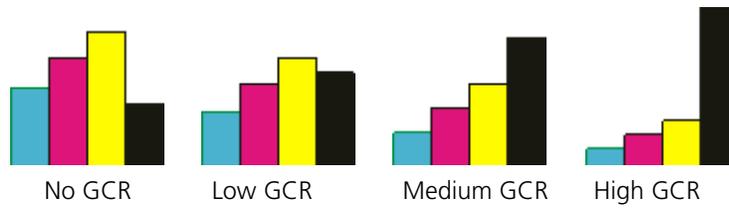
While the gray component of each color is replaced by black, there is no change in the color quality of the printed image.

To set the Ink Saving GCR, select one of the following options:

- **None:** When this option is selected, no GCR is performed on the file and the printer applies maximum dry ink coverage

- Select the required amount of CMY dry inks to be replaced by the black dry ink:

    ❏ **Low**

    ❏ **Medium**

    ❏ **High**

Note: Use the **High** option to provide minimum ink coverage and thus save on toner. This site also prevents curling effects.

Color Adjustments
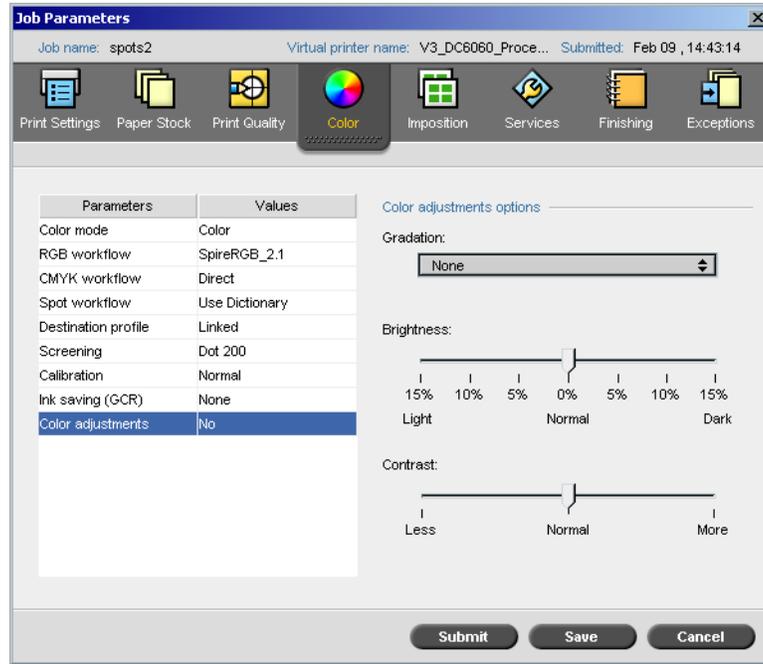
Gradation

The **Gradation** option contains a list of gradation tables that were created by the Spire CXP6000 color server's **Gradation** tool. Each gradation table contains specific settings for brightness, contrast and color balance.

When you select your predefined gradation table, your job is adjusted according to the specific table's settings.

For more information about creating gradation tables, see *Gradation Tool* on page 366.

To select a gradation table:

➢ 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

By changing the **Brightness** setting, you can control how light or dark your output will appear.

| Lighter | Normal | Darker |

Brightness is generally used to make last-minute adjustments to the print job after proofing.

Note: Changing the brightness level for an RTP job, does not require re-RIPing of the job.

➢ To select a brightness level for a job, move the **Brightness** slider to the required brightness level (the range starts from **Light**, which applies -15%, to **Dark**, which applies +15%).

Note: When you set the brightness level to **Normal**, no change is applied.

Contrast

Adjusting the **Contrast** option enables you to control the difference between the light tones and the dark tones in your image.

| Less | Normal | More |

The **Contrast** option is generally used to make last-minute adjustments to the print job after proofing.

Note: Changing the contrast level for an RTP job, does not require re-RIPing of the job.

➢ To select a contrast level for the print job, move the **Contrast** slider to the required contrast level (the range starts from **Less** - which applies - 10%, to **More** - which applies +10%).

Note: When you set the slider to **Normal**, no change is applied.

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 345 and *CMYK Workflow* on page 346.

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 350.

After you import a destination profile, you can use the Media Color Mapping dialog box to map the profile to a paper color. The profile is linked to the paper color and the Spire CXP6000 color server will automatically select the correct profile for your job. This is useful—for example, in jobs that have mixed paper types. Select Linked from **Color**>**Destination profile**.

Managing Device Link Profiles

To import a source ICC profile:

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

   The Resource Center opens.

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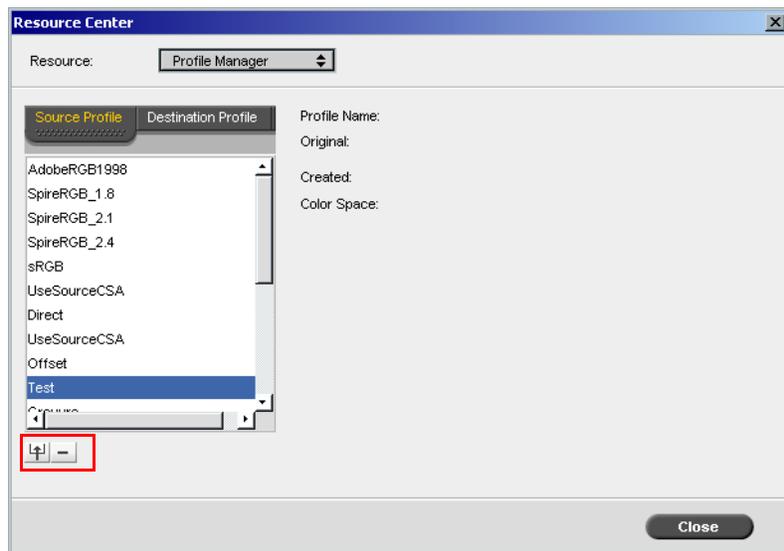
   The **Source Profile** tab appears, and the predefined source ICC profiles are displayed.

3. Click **Import**.

The Import Source ICC Profile dialog box appears.

4. In the **Source profile** area, click the **browse** button. Locate and select the required 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.

5. Click **Import**.

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

To import a destination ICC profile:

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

   The predefined ICC profiles are displayed.

   Note: The predefined ICC profiles for the Xerox DocuColor 5252 Digital Color Press are **SpireDC5252_COM** and **SpireDC5252_GA**.
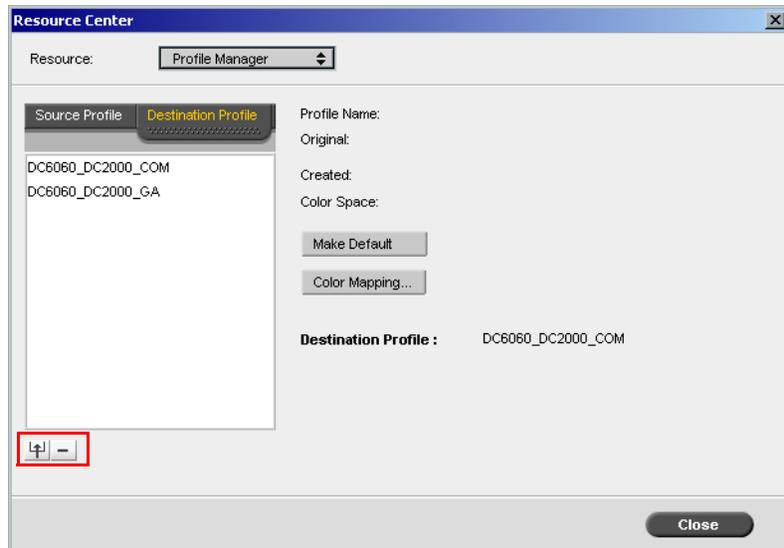
2. Click **Import**.

   The Import Destination ICC Profile dialog box appears.

3. In the **Destination profile** area, click the **browse** button. Locate the required 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.
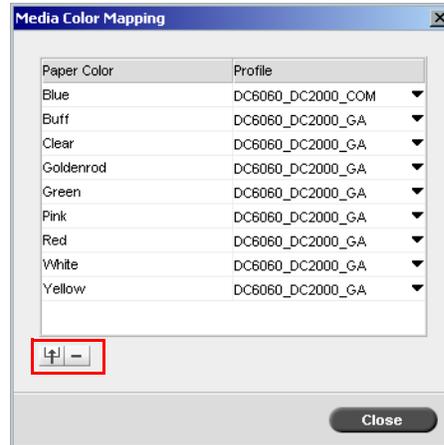
b. In the **Profile** column, select the required profile for each paper color.

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

> **Note:** If you don't map a destination profile to a paper color, the Spire CXP6000 color server uses the default profile, which is for white paper.
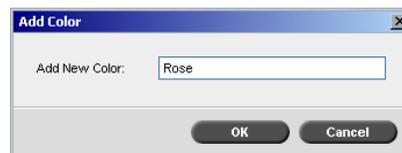
d. In the **Add New Color** box, type the name of the new color, and then click **OK**.

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

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

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

To delete an ICC Profile:

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

    Note: You cannot delete predefined ICC profiles.

2. Click the **delete** button.

    The profile is deleted from the profile list.

Spot Color Editor and Workflow

Individual job pages can contain continuous tone (CT), line work (LW), and spot color elements. The Spire CXP6000 color server Spot Color Editor enables the editing of CMYK values of every spot color in the **Spot dictionary.** You can edit these values without affecting the CT or LW page elements. It also enables you to create custom spot colors and to define fixed CMYK values for those spot colors. The Spire CXP6000 color server supports HKS and PANTONE 2000 Spot colors.

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

For more information about the Spot Color Editor, see *Spot Workflow* on page 349.

To edit an existing PANTONE color:

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

    The Spot Color Editor window appears with the Spire CXP6000 color server's entire collection of colors listed.
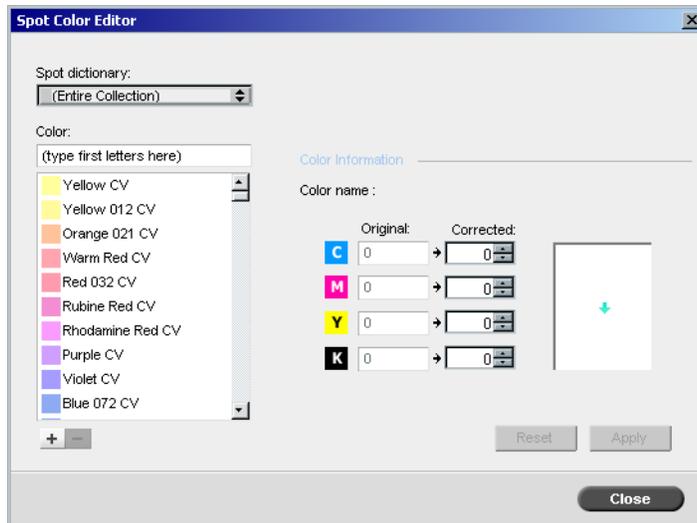
2. Search for a particular color under **Color.**

    Note: Under **Color**, you cannot perform an exact query. This input stream only reads one character. For example, you want "Cool Grey 4" and type "Cool". As soon as you type "C", the cursor only moves to "Cool Grey 1" and does continue to a more specific selection.

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

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

4. Highlight the required color.

    The color's CMYK values and a color preview appear in the right hand side of the Spot Color Editor window.

5. Change the CMYK values as required.

6. Click **Apply.**

    The new color is added to the Custom color dictionary.

To create a new spot color:

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

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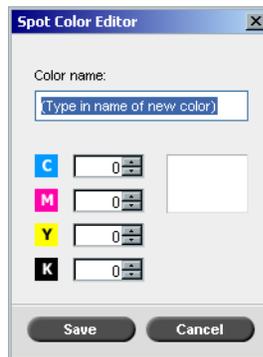
2. Type the new color name as it exists in the PostScript file.

    Note: The Spot color names are case sensitive and should match the name as it appears in the DTP application.

3. Adjust the CMYK values as required.

4. Click **OK**.

    The new 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, highlight the color you wish to delete.

3. Click **Delete**.

    The following message appears.

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

Gradation Tool

Sometimes it is necessary to perform tone corrections when printing a job. These changes in gradation can include brightness, contrast and color balance adjustments throughout the tone range of an entire image, or in specific tone ranges.

Gradation tables you create using the Gradation tool are added to the Gradations list in the **Color** tab and may be applied to print jobs. The Spire CXP6000 color server also enables you to visually check the effect of different gradation adjustments on RTP jobs prior to printing.

With Spire CXP6000 color server Gradation, 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 can not overwrite the default gradation table, **DefaultGradTable**.

The Gradation Dialog Box

The Gradation dialog box 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 dialog box:

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

The Gradation dialog box appears.
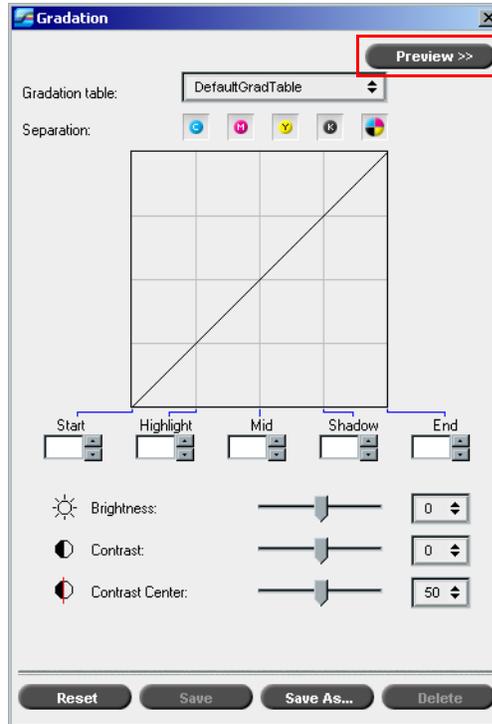
Preview

Click **Preview** to view how a page from a specific RTP job changes with changing Gradation tables or Gradation adjustments.

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 view gradation adjustments:

1. Click **Preview** to expand the Gradation dialog box.
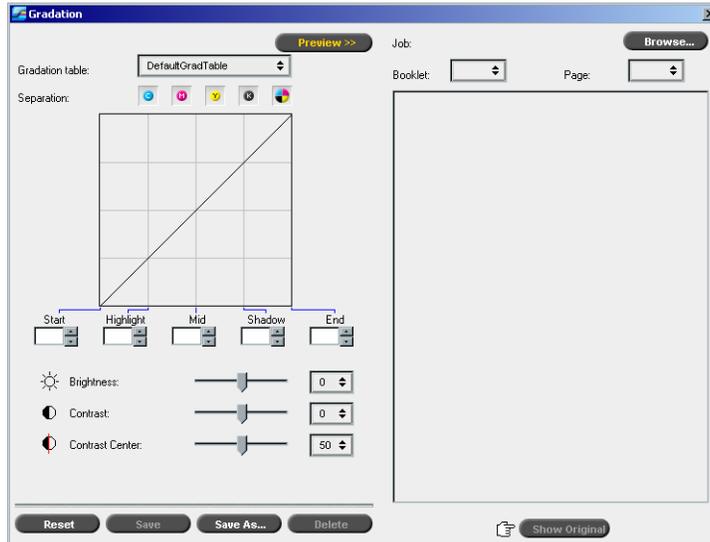
2. Click **Browse** to select a job for display in the Preview window.

    The RTP Jobs window appears.

    The displayed jobs are the RTP jobs listed in the Storage window.

3. Click on the RTP job you wish to modify.

4. Click **OK**.

The job appears in the Gradation dialog box.
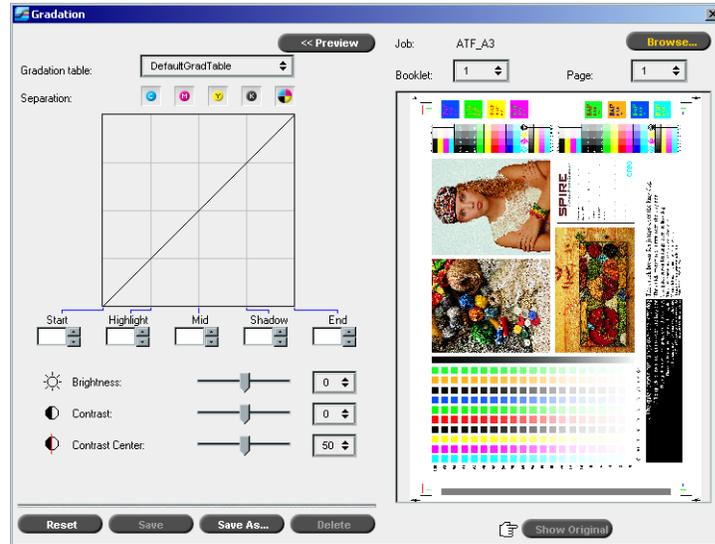
Notes:

- The job name is listed at the top of the Preview viewer.
- Click **Browse** at any time to select a different RTP job on which to view the effects of gradation table changes.

5. Click **Show Original** (located at the bottom of the Gradation dialog box) to toggle back and forth between edited and unedited gradation table views.

6. To view the effects of your gradation table changes on a different page of the RTP job, select the **Page** or **Booklet** you wish to view from their lists at the top of the Preview window.

   The selected page appears.

Gradation Table Box

Upon opening the Gradation dialog box, the default gradation table **DefaultGradTable** is selected.

This table consists of a 45° gradation curve, with Brightness and Contrast set to 0, Contrast Center set to 50 and all color separations selected.

If you have previously created or edited gradation tables, select the required gradation table from the **Gradation table** list.
For viewing and editing purposes, the preconfigured settings of the selected gradation table are immediately applied to the RTP job on which you are working.

For more information about each preview button and the display modes, see *Preview Buttons* on page 208.

Separation Field

The **Separation** field is used to select the separations to be edited for a particular gradation table. You can select one, all, or any combination of separations. Selecting a specific separation and a specific gradation control enables you to change the color balance for a specific tonal range.

The Gradations window appears with all separations selected.

This tools enables simultaneous editing of all separations.

To edit one, or several separations:

1. Click this button to clear all separations.

2. Click the individual separations you wish to edit—for example, select the cyan separation only.

3. Change the separation parameters using the Gradation controls.

    Your changes to gradation tables are immediately presented as changes to the gradation graph.

Gradation Graph

Spire CXP6000 color server gradation tables are represented visually in the Gradation dialog box in the form of a graph:
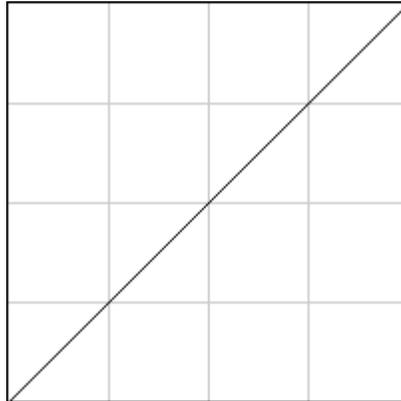
DefaultGradTable (Input equals Output)　　Modified gradation graph
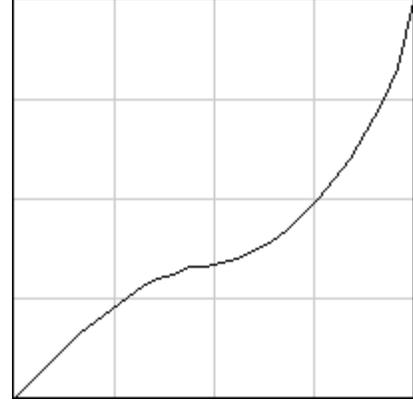
The horizontal axis represents the tone values of the image before gradation changes (input). The vertical axis represents the tone values of the image after gradation changes (output). All four separations (CMYK) are shown, but if they have identical curves, the graphs appear as if there is only one curve.

Gradation Controls

The gradation controls are used to adjust brightness in specific tone ranges.

Click the arrow buttons to increase or decrease the graph value of the active separation(s) for a specified section of the graph.

If only one separation is active, the gradation values are listed, ranging from -50 to 50. If more than one separation is active, no gradation values are listed.

Changes to gradation tables are immediately presented as changes to the gradation graph.

The gradation controls

- **Start**
  Moves the point of origin of the gradation graph at the highlight end along the horizontal or vertical axis. This affects the image file from 0% dot to 100% dot, where the greatest change is at 0% dot.
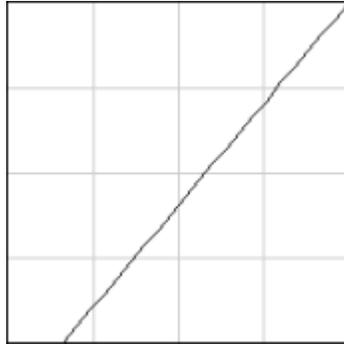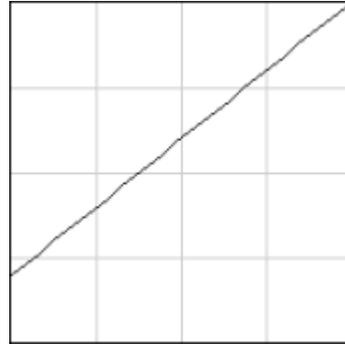
Start Point Low	Start Point High

- **Highlight**
  Changes brightness mainly in the highlights. This affects the image file from 0% dot to 50% dot, where the greatest change is at 25% dot.
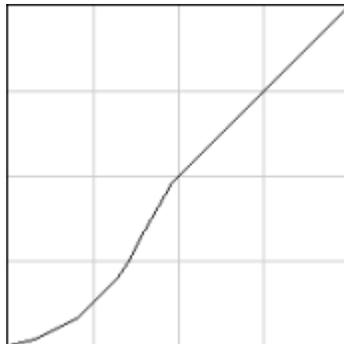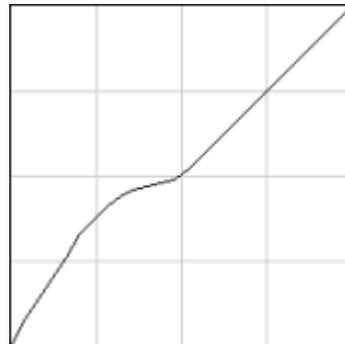
Highlight Low	Highlight High

- **Mid**
  Changes brightness mainly in the midtones. This affects the image file from 15% dot to 85% dot, where the greatest change is at 50% dot.
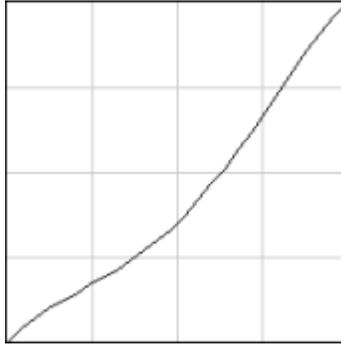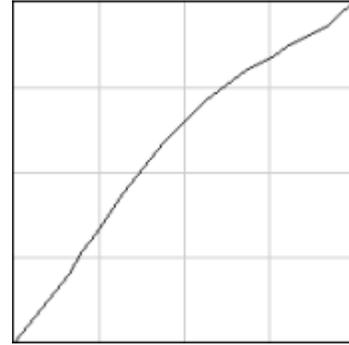
Mid Low   Mid High

- **Shadow**
  Changes brightness mainly in the shadows. This affects the image file from 50% dot to 100% dot, where the greatest change is at 75% dot.
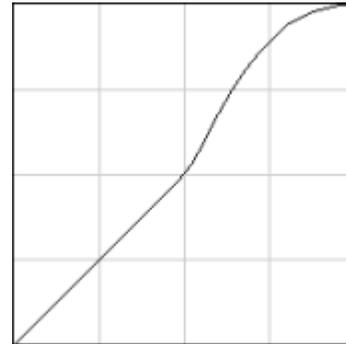
Shadow Low   Shadow High

- **End**
  Moves the endpoint of the gradation graph at the shadow end along the horizontal or vertical axis. This affects the image file from 0% dot to 100% dot, where the greatest change is at 100% dot.
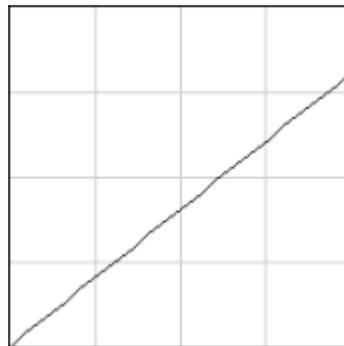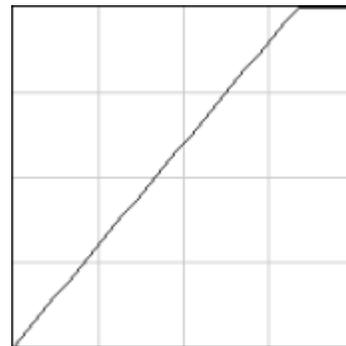
End Point Low   End Point High

Brightness and Contrast Slider Controls

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

Brightness

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

➢ Move the **Brightness** slider to the right to increase brightness or to the left to decrease brightness.
  Or:
  Click the arrow button to select a value from the drop-down list.

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).
Or:
Click the arrow button to select a value from the drop-down list.

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.
Or:
Set the **Contrast Center** slider to the right to enhance contrast in highlights, or to the left to enhance contrast in shadows.
Or:
Click the arrow button to increase or decrease the Contrast Center value. The Contrast Center value appears to right of the Contrast Center 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. This option enables 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, **Save** and **Delete** also become active.

The gradation organization options

➢ Click **Reset** to reset all Gradation window settings.

  The gradation curve is reset to a 45° line.

➢ Click **Delete** to delete the selected gradation table.

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

➢ Click **Save** to save the specified gradation settings.

➢ Click **Save As** to create new gradation tables by saving existing gradation tables with new names.

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

To create a new gradation table:

1. In the Gradations window, modify your gradation table as required.

2. Click **Save As**.

  The Save As dialog box appears.

3. In the **File name** box, type the required name for the new gradation table.

4. Click **OK**.

  The gradation table is saved and added to the **Gradation table** list and to the Job Parameters Gradations list.

  For more information about gradation tables, see *Gradation* on page 356.

8

Graphic Arts Workflow

Printing PrePress Files - GAP Files

The Graphic Art Port (GAP) is a port through which you can import various file formats used in the Graphic Arts industry. GAP files are already rasterized. The Spire CXP6000 color server only needs to prepare the files for printing, which means adjusting the file resolution and rotation.

Importing GAP Files

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

Note: While the assigned job file is imported, the file is converted to a PDF file that is displayed in the Spire CXP6000 color server queues. The PDF file can be programmed and printed as any other PDF file.

Supporting GAP Files

The Spire CXP6000 color server can import and convert the following file types:

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

Note: The Spire CXP6000 color server supports the following GAP file formats, pre-separated and composite.

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

GAP File Structure

TIFF IT

A TIFF IT file has 3 components:

- CT.TIF

- LW.TIF

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

To import a TIFF IT file to the Spire CXP6000 color server, first import the FP file. During import, the file is converted to a PDF, which is displayed in the Spire CXP6000 color server queues. The PDF can be programmed and printed as any other PDF file.

Note: Make sure that in the Spire CXP6000 color server Import window, **Gap files** is selected in the **Files of type** box.

CT, LW, TIFF

The components of a Brisque job and TIFF IT, are, CT, LW and TIFF, and can be imported and printed separately to the Spire CXP6000 color server.

Rasterized Brisque Jobs

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

- To import a Brisque job to the Spire CXP6000 color server, import the assigned file of the job.

- To print a specific page, import the assigned file of the specific page.

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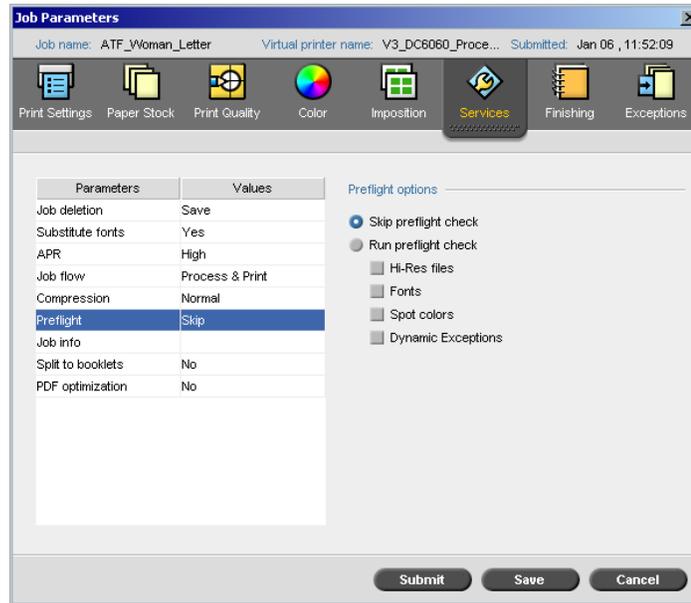
The **Preflight** parameter enables you to check the status of key job components before the job is sent for printing.

Note: You can only run a preflight check on PostScript jobs.

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

- High-resolution images or the wrong links to the high-resolution images folder

- Missing fonts

- Spot colors that are not defined in the Spire CXP6000 color server spot color dictionary

- Dynamic exception commands for a file that was submitted via a dynamic page exceptions virtual printer

Note: If a job component is missing, the job will fail before it is RIPed and an alert message will appear. Information about missing components will appear 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 need to 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 on 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 all at once in the Preflight Report dialog box. You can review the report and handle the missing components and thus save inefficient printing time with constant error or failed messages.

If you run a preflight check, and all key components are found, the job is processed and printed according to the job flow you have 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 choose to 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.
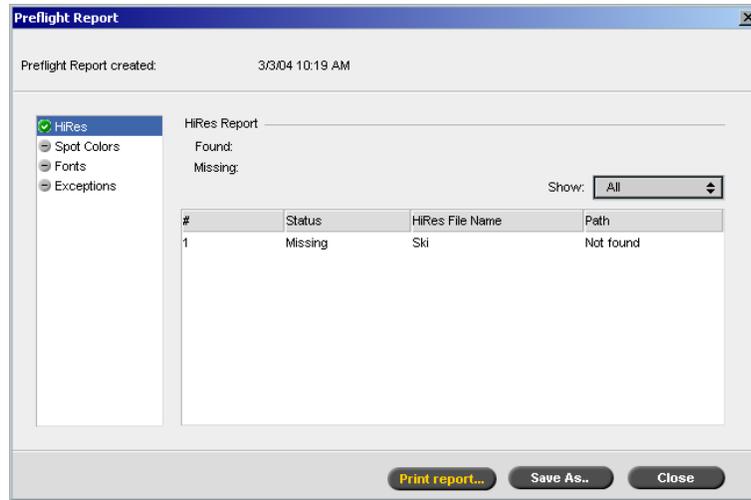
If there are key components in the job not found, this will be indicated
by the **missing** indicator next to the **HiRes**, **Spot Colors**, and **Fonts**
report options.

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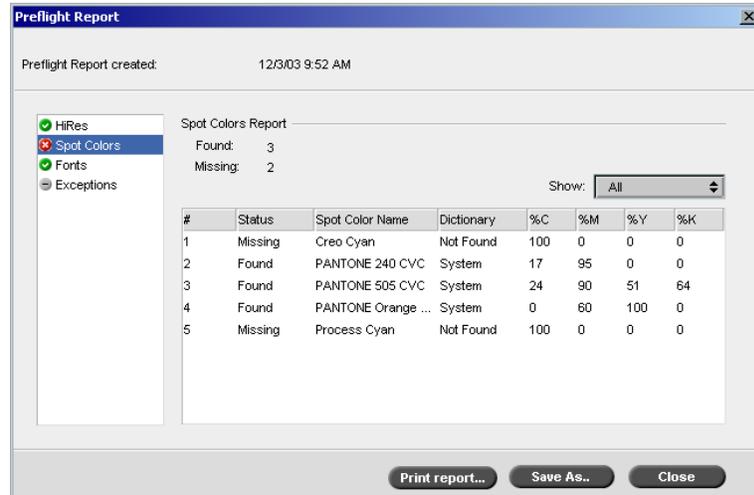
The **Spot Colors Report** area displays the missing spot color names (spot colors which were not found in the spot color dictionary) and the found spot color names (spot colors which were found in the spot color dictionary). The **C,M,Y,K** columns display the spot color CMYK equivalences:

❒ If the status is **missing** the Spire CXP6000 color server used the original CMYK values that are embedded in the PS file to emulate the required spot color.

❒ If the status is **found** the Spire CXP6000 color server used the CMYK values that are in the spot color dictionary.

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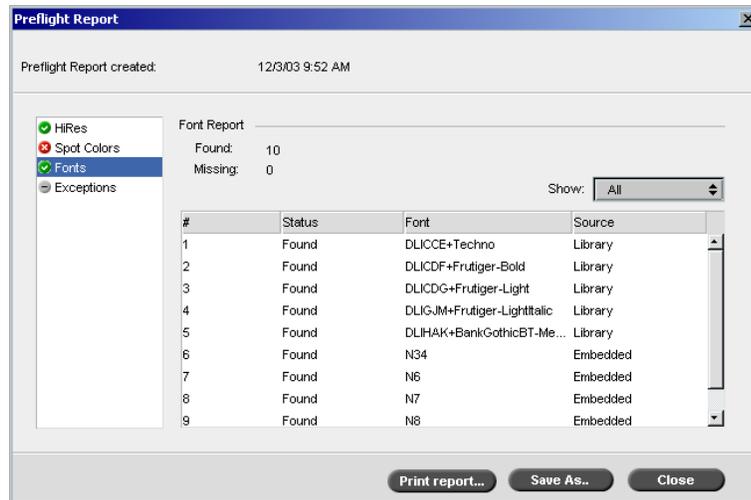
The **Font Report** area displays the name of the missing fonts that are not embedded in the file and do not exist in the **Font Library** and also the found fonts.

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

5. Click the **Dynamic Exceptions** report option.
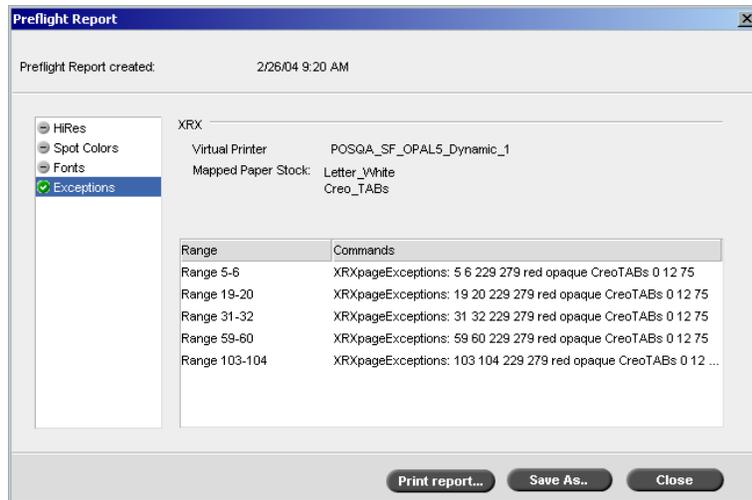
The **Dynamic Exceptions** area displays the dynamic page exception commands found in the file.

For more information about dynamic page exceptions, see *Dynamic Page Exceptions* on page 284.

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

Tip: If more than one preflight check is run on a job, the latest preflight report overrides the previous. If required you may save the report for future usage.

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

Export as Creo Synapse InSite Job

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

If your site includes a Creo Synapse InSite server, exporting your job as InSite from the Spire CXP6000 color server allows you and your customers to proof online with geographically dispersed users simultaneously, append annotations or comments, and approve or reject pages over the World Wide Web using a standard browser.

After the RTP job is created on the Spire CXP6000 color server, it can be exported as InSite from the Storage window. When the customer logs on (using their unique username and password), they see the status of their jobs, view a thumbnail of all pages in each job, and quickly identify which pages require further corrections. The customer can measure color density, make annotated comments, and approve pages. The online proofing cycle is shortened and accurate, and consequently, the need for reprints is reduced.

To export as InSite:

1. Select the required job in the Spire CXP6000 color server Storage window.

2. Right-click the job, and from the menu select **Export as InSite Job**.

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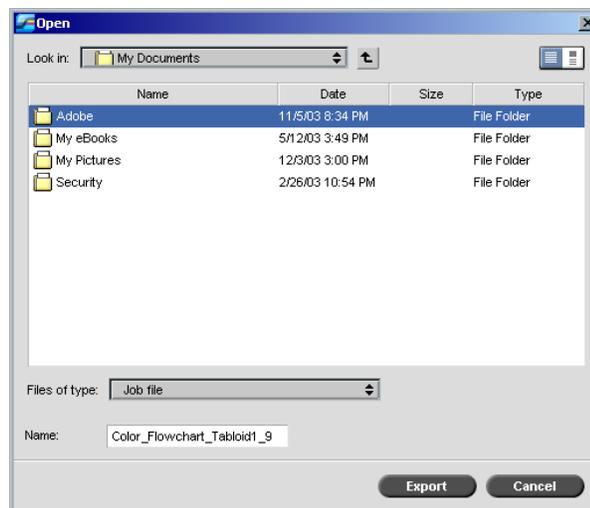
3. Locate the file in which you want to export the job, and then click **Export**.

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

9

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 several pages, but the entire document is targeted at a specific individual or address. For example, a booklet can be either a single-page gas bill or a multipage 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 are used only once for a specific individual or purpose. An individual's name is an example of a unique element.

* Reusable VI elements can be used more than once in different pages, booklets, or jobs. A company logo is an example of a reusable element.

On the Spire CXP6000 color server, each element, text, graphic, picture, or page background is RIPed only once, even if the element is used once, several times, or in every page of the VI job. If it is used more than once, then it is cached, or stored, for further use. You can manage these elements in the Resource Center under 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 398.

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 an RTP format.

VI Document Formats

VI jobs are created using VI authoring programs that support Variable Print Specification and VIPP formats. Most VI authoring programs can convert VI files to conventional PS files, which can also be processed by the Spire CXP6000 color server, although less efficiently than Variable Print Specification and VIPP files. Each authoring program creates VI code that instructs the RIP where to place the VI elements and each authoring program 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 program that enables the creation of VI documents and VI jobs.

The Spire CXP6000 color server can process VI jobs that are in one of the following file formats:

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

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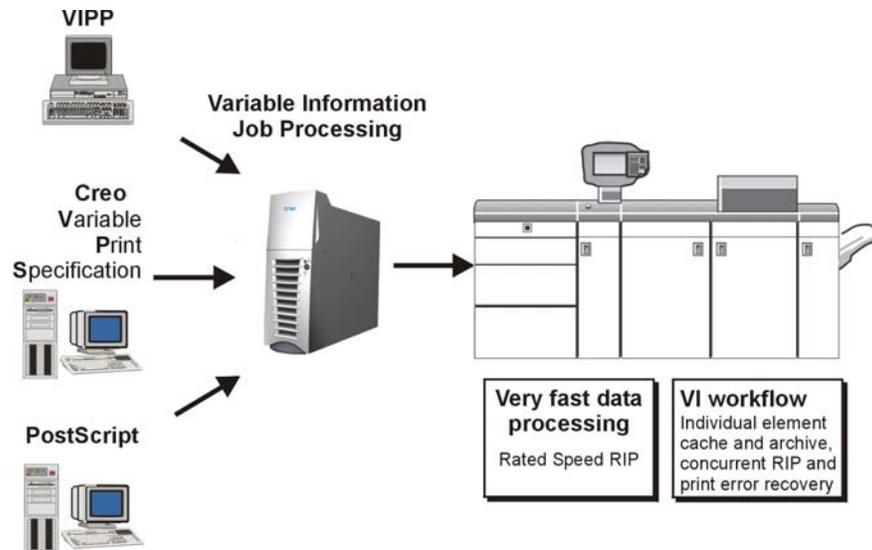
Creo Variable Print Specification

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

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

A Variable Print Specification job consists of the following components:

- **Booklet**
  A personalized copy of a document within a single print run where pages and/or elements within a page may vary from booklet to booklet.

- **Sub-job**
  All copies of a particular document—for example, book, brochure, or flyer—within a single print run. On the Spire CXP6000 color server, sub-jobs can be deleted, archived, or reprinted at any time. However,

you can still maintain reusable elements for future runs. Reusable elements are cached elsewhere, so only the unique data, which is embedded in the job, is deleted.

- **Reusable Elements**
  Self-contained graphical entities that can be line art, text, raster images or a combination of these types. Reusable elements are represented in PostScript and can be stored as EPS files when appropriate. Reusable elements include clipping and scaling instructions as well as the image data.

  Note: Grayscale TIFF and EPS images that are created in CMYK applications (such as PhotoShop) are counted correctly as **B&W** instead as **Color** in both the Spire CXP6000 color server and the Xerox DocuColor 6060 Digital Color Press billing meters.

  Reusable elements can be used repeatedly in different pages, booklets and jobs. On the Spire CXP6000 color server, all reusable elements are processed once and cached as RTP elements for further use. They can then 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

The VIPP format was developed in 1993 by Xerox. The VIPP is a PostScript-based format that merges the VI pages during the processing stage. The VIPP is used mostly for financial applications, which typically employ the dynamic graph charting capability of VIPP, and for bank statements, telephone bills, and electric bills.

Note: To use VIPP files on your Spire CXP6000 color server, you first need to install the VIPP software on your system. This installation should be done by a service engineer. Contact your service provider for more information.

VIPP jobs are composed of the following four files:

Table 15: VIPP files

File Name	File Description
File.PS	The PostScript Master Form, which holds all of the fixed elements from the original document.
File.JDT	The Job Descriptor Ticket, which holds header and setup information for the job.
File.DBM	The Database Master, which holds the VIPP coding.
File.DBF	The Database File, which holds all the ASCII data to be merged. It should contain 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 16 lists in which sub-folders you should store VIPP job files.

Table 16: VIPP sub-folders

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

To print a VIPP job:

➢ Import the *.DBF file to the Spire CXP6000 color server.

The VIPP job is processed and printed.

VIPP 2001 and PPML

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

The Spire CXP6000 color server supports VIPP 2001 and PPML formats. Some of the features that are included enable you to:

- Process VIPP 2001 and PPML jobs efficiently

- Manage VIPP 2001 and PPML reusable elements

- Import jobs in various VI formats to the Spire CXP6000 color server

- Import VI elements to the Spire CXP6000 color server and submit them for pre-cache

- View VI elements in their structural hierarchy

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

In PPML there is an ability to store different jobs in one PPML file. Thus, the display in the navigation pane varies from the way Variable Print Specification and VIPP appears.

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 at all. Instead, they use a mailmerge function in a Microsoft Word document or a Microsoft Excel spreadsheet.

Using Creo Variable Print Specification to Print a VI Job

The Spire CXP6000 color server first searches for high-resolution files in the input folder that contains the PDL file, and then in the predefined APR path—**D:\Shared\High Res**. The Spire CXP6000 color server will look for VI images in these locations when it RIPs the job.

Note: You can also define a custom path to any connected server or disk. For more information about adding an APR path, see *Setting a High-Resolution Path* on page 257.

To print a VI job:

1. Copy VI graphic elements to one of the defined APR folders on the Spire CXP6000 color server.

2. Submit your job to the Spire CXP6000 color server.

    For more information about how to import files, see *Importing Files* on page 156.

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 Spire CXP6000 color server. The Xerox DocuColor 6060 Digital Color Press prints RTP booklets at full engine speed working uninterrupted from the printer disk. Booklets are compiled concurrently while the printer prints. As pages are sent to the print engine, they are assembled from the various inline and reusable elements on-the-fly.

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

Notes:

*   If an element is to be used more than once but with different clipping or scaling parameters, it is treated as a new page element and processed again.

*   The cache is kept intact until the job is completed. This enables you to reuse RIPed elements anywhere in the job. Elements may remain in the cache for subsequent jobs. You can also archive job elements.

*   Deleting a job does not delete the cached job sub-folder. This must be done manually in the Resource Center.

Useful VI Print Options

Gallop

The **Gallop** parameter on the **Print Settings** tab enables the Spire CXP6000 color server to RIP and print VI jobs concurrently. Large jobs do not have to be RIPed entirely to disk before printing. You can predefine the number of pages to be processed before the engine starts to print. As soon as these pages are processed, printing starts while the rest of the job is streamlined through the Spire CXP6000 color server. The Xerox DocuColor 6060 Digital Color Press continues printing at its rated speed without interruption or slowing down until the job is finished.

For more information about setting the **Gallop** option, see *Gallop* on page 168.

Job Deletion
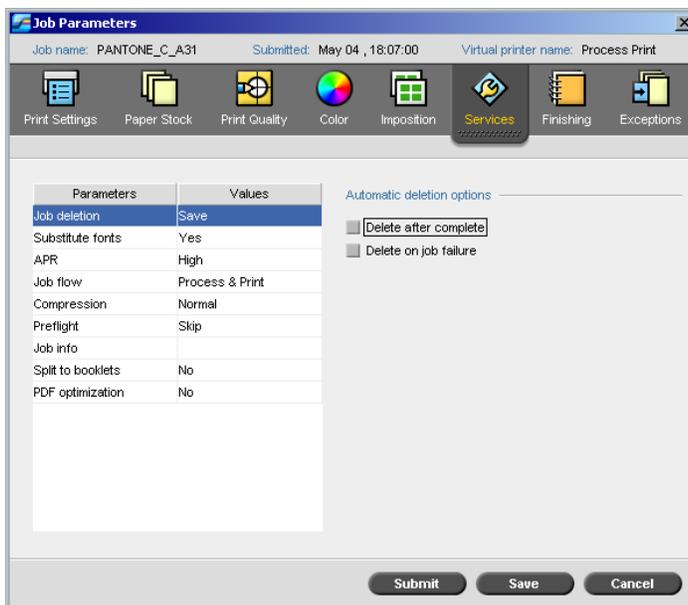
When you are printing a large VI job that takes up a substantial amount of the Spire CXP6000 color server disk space, it is recommended that you use the **Job Deletion** parameter.

When you select this parameter, the Spire CXP6000 color server deletes each page on the fly once it has been successfully printed. In this way, the Spire CXP6000 color server maintains enough free disk space for the duration of the print run. Reusable elements are not deleted.

Notes:

- This option sustains enough free disk space for the duration of the print run and only affects the sub-job.

- The Variable Print Specification file is also deleted.

To set a deletion policy:

1. Suspend the **Process Queue** and import your job.

2. Double-click your job to open the Job Parameters window.

3. Select the **Services** tab.

4. In the **Automatic deletion options** area, select one of the following options:

    - To remove pages or jobs from the Spire CXP6000 color server after printing is completed, select **Delete after complete**.

    - To remove failed jobs while processing or printing from the Spire CXP6000 color server, select **Delete on job failure**.

5. Click **Submit**.

6. Select the **resume** button to resume the **Process Queue** and start the processing of your job.

Imposition

When you impose VI jobs:

- Every booklet must have the same number of pages

- When you use the **Step & Repeat** method to print a single page booklet, the VI job does not print the same image repeatedly. Several booklets are printed on the same sheet and each record is printed on the sheet once.
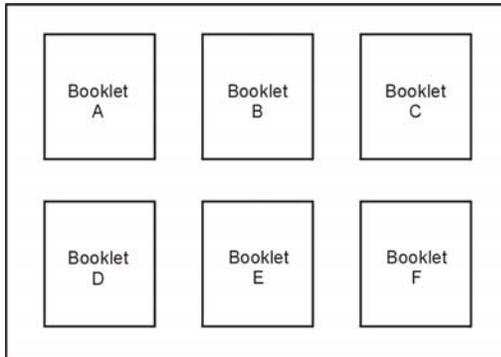
For a booklet with several pages, the pages are printed in order along the length of the sheet. The next booklet is printed beside the first. After the sheets are cut, the booklets are aligned with their pages in the proper order.
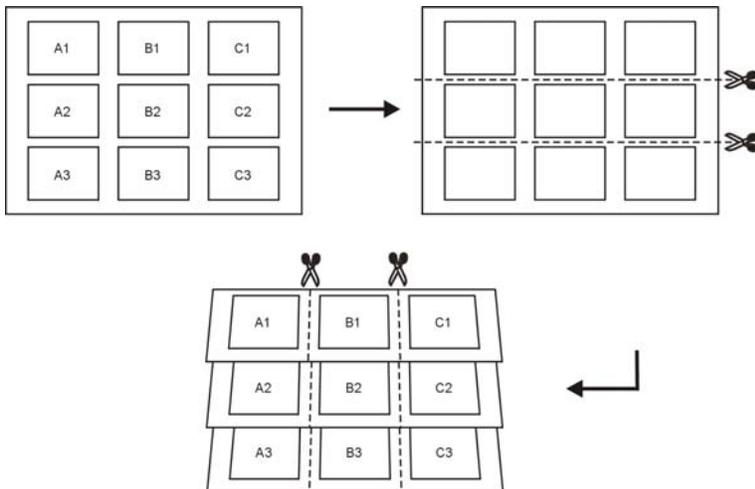
Note: The above example uses the step and repeat method. There are no special considerations for VI jobs using saddle stitch and perfect bound methods.

For more information about setting Imposition parameters, see *The Imposition Tab* on page 233.

Managing VI Elements

When the Spire CXP6000 color server processes your VI job, it stores the reusable VI elements in a specific location. When the job is printed, the RIP engine looks for the VI elements in that locations and reuses the elements when necessary. The VI elements can also be reused in future jobs.

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

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

Deleting VI Elements

VI elements that are no longer in use take up valuable disk space on the Spire CXP6000 color server. To free up disk space, you can delete the VI elements you no longer need.

1. On the toolbar, click Resource Center.

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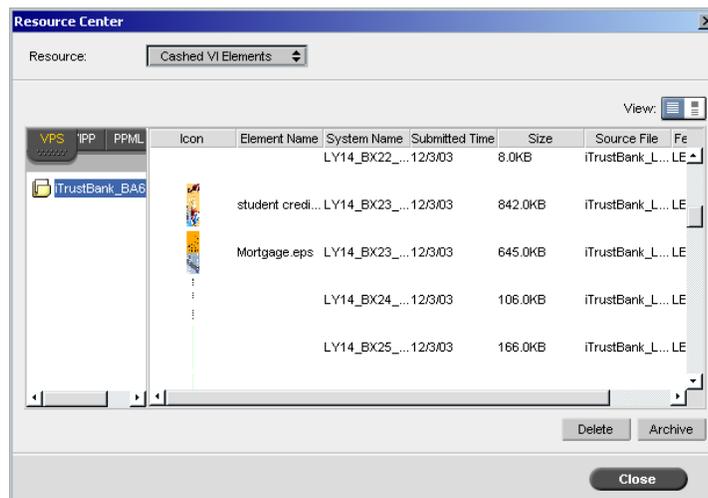
Your VI jobs are listed in the left pane. In the right pane, you can see all of the VI elements that are associated with your job. In addition, a thumbnail viewer lets you check elements visually.

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

Note: You can also delete the entire folder.

Archiving VI Elements

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

1. On the toolbar, click Resource Center.

1. In the **Resource** list, select **Cached VI Elements**.

2. Select the VI folder in which to archive, and then click **Archive**.

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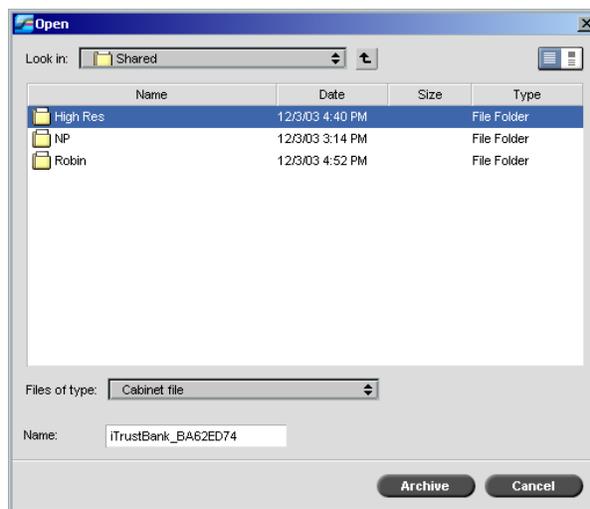
3. Find the location in which to archive your VI elements, and then click **Archive**.

Retrieving VI Elements

When you need to reprint your job, you can retrieve the VI elements from the archive.

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

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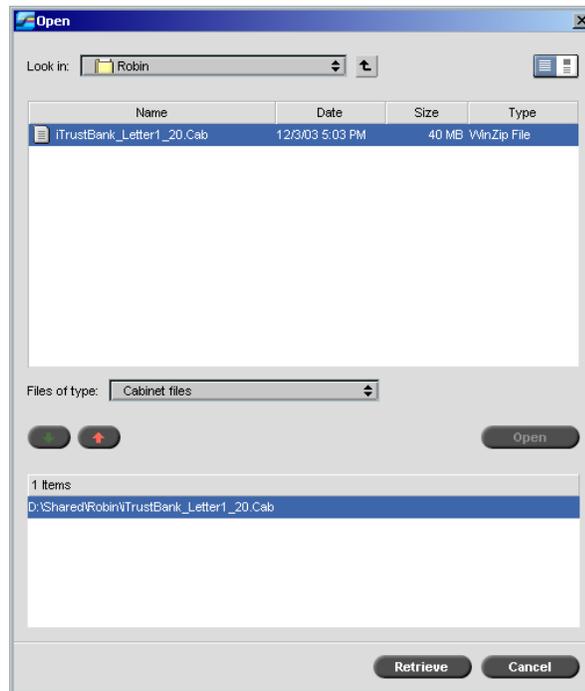
2. Select the folder in which your VI elements are archived.

3. Select the required file and then click the **add** button.

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

4. Click **Retrieve**.

   The Spire CXP6000 color server retrieves the archived VI elements and displays them at the end of the file list in the Cached VI elements dialog box.

Applying VI Structure to Large Files (Split to Booklets)
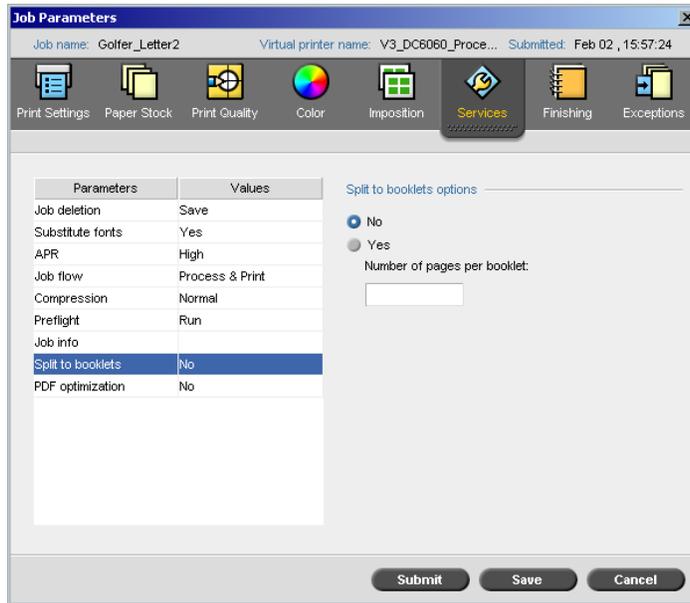
The **Split to booklets** parameter enables you to split a PostScript, PDF, or large VI job that does not have a booklet structure into booklets.

Note: A VI job that doesn't have a booklet structure can be split to booklets using this feature. Unexpected results might occur when you use this option for VI jobs that already have a booklet structure.

If you split a VI, PostScript, or PDF job into booklets, you can simulate the VI job structure. If your VI, PostScript, or PDF job contains variable information, setting the imposition method per booklet, the stapling options per booklet, and using duplex printing per booklet is a more efficient way to manage your job. Duplex printing will automatically insert blank pages if the number of pages per booklet is an odd number.

To split a job to booklets:

1. In the **Split to booklets options** area, select **Yes**.

2. In the **Number of pages per booklet** box, type the required 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 then specified.

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10

System Administration

Setting Up and Configuring the Spire CXP6000 Color Server

Basic system configuration and settings are defined in the Spire CXP6000 color server Settings window. The Settings window contains items that enable you to manage your system.

To open the Settings window:

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

The Settings window appears. The settings are divided into two lists: **Administration** and **Preferences**. Both lists are explained in the following sections.

Administration items can be viewed by users of all levels, but are only available to users of Administrator level. **Preferences** items can be viewed by all user levels, but are only available to users of Administrator and Operator user levels. All items in the Settings window are view only to Guest users.

Server Setup

Set the server's name and the current date and time in **Server Setup**.
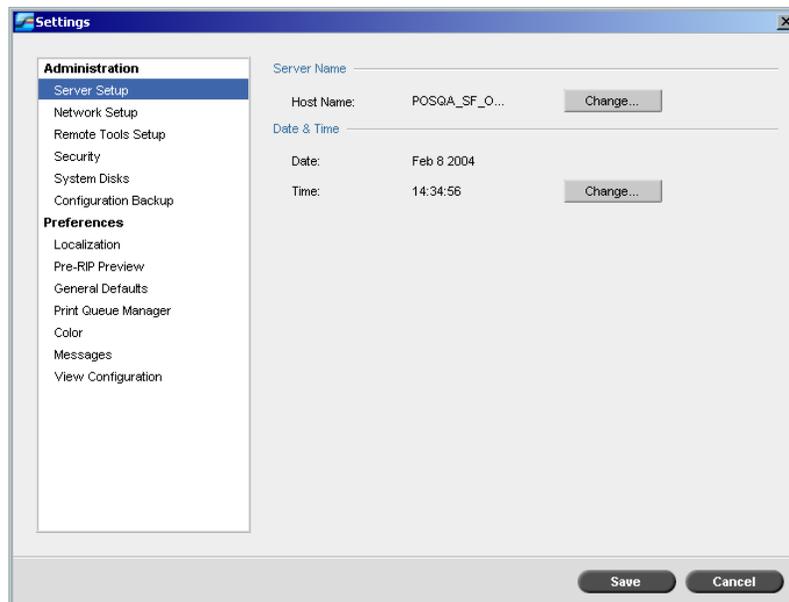
Changing the Server Name

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

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

   The System Properties dialog box appears.
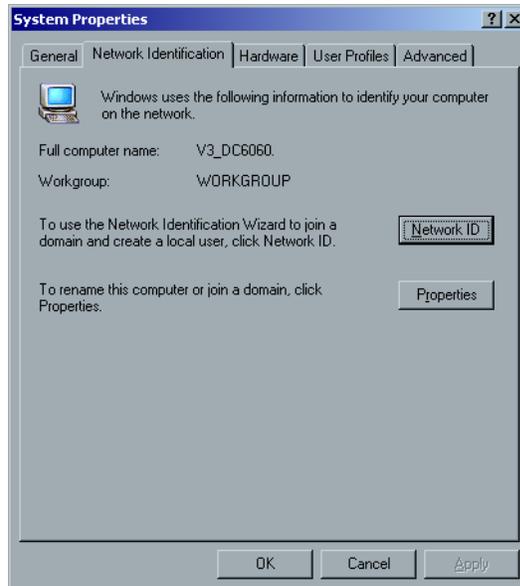
3. In the Network Identification tab, click **Properties**.

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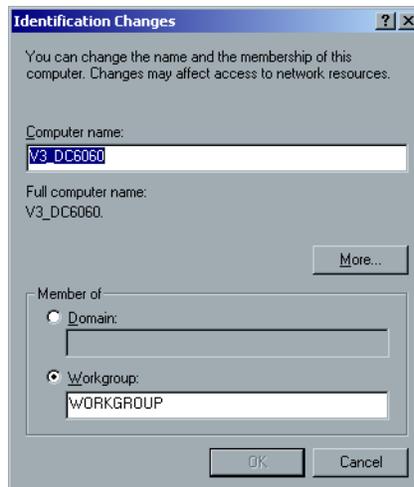
4. In the **Computer Name** box, type a new name for the computer.

5. If you want to change the **Workgroup** or the **Domain** in which your computer appears, select the required 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 will be required to type the password for the domain account. If the password is unavailable, the computer will be locked.

6. Click **OK**.

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

    The system prompts you to reboot your computer for the new settings to take effect.

8. Click **No** if you want to change other system parameters, or click **Yes** and reboot your computer.

Changing the Date and Time

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

2. In the **Date & Time** area, click **Change**.

    The Date/Time Properties dialog box appears.
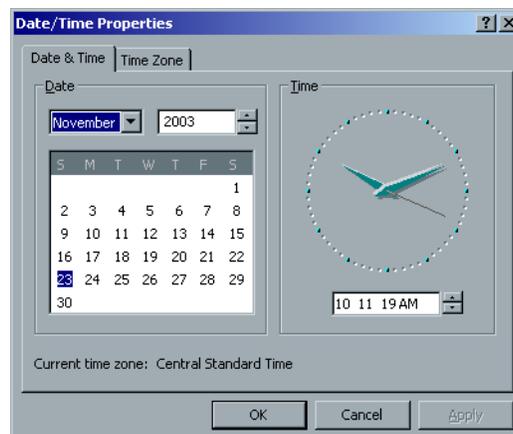
3. In the **Date & Time** tab, select your local time settings.

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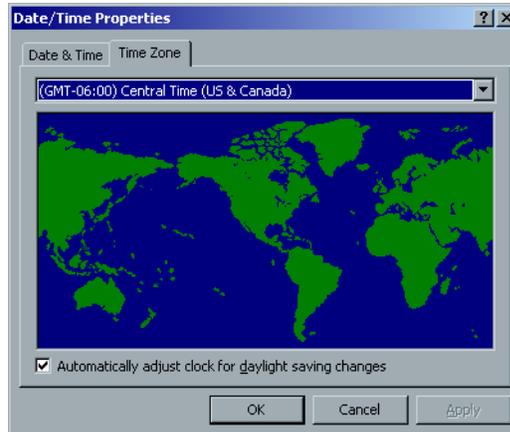
5. Click **OK**.

Network Setup

The **IPX Printing** settings, **TCP/IP** settings and the **Apple Talk Setup** settings are set in the **Network Setup** parameter.
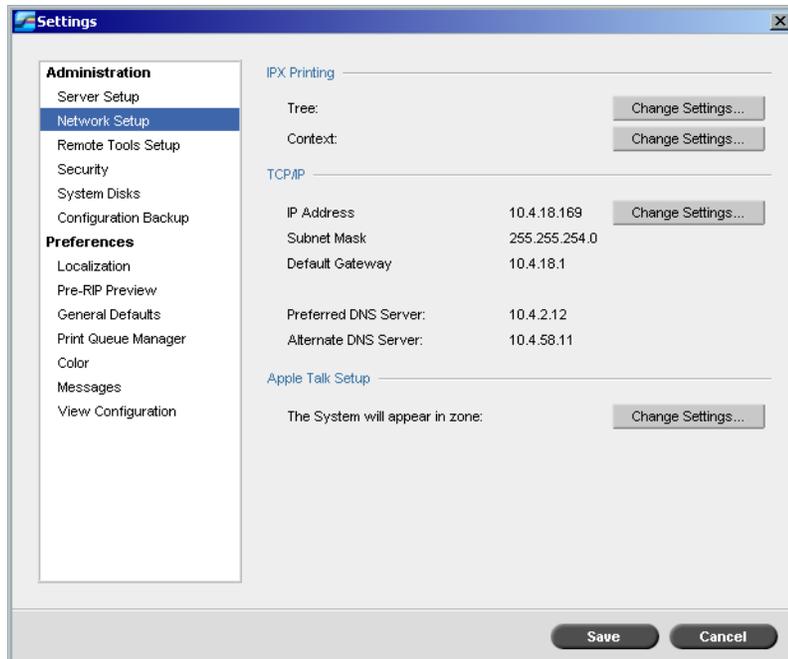
IPX Printing

IPX Printing enables the Spire CXP6000 color server to act as a job server for the Novell queue. A job server checks each assigned queue at a specified interval, taking care of jobs on a first-in, first-out basis. Once a job is processed, its associated file is deleted from the queue directory.

To set the Spire CXP6000 color server IPX parameter:

1. In the Settings window, select **Administration**>**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.
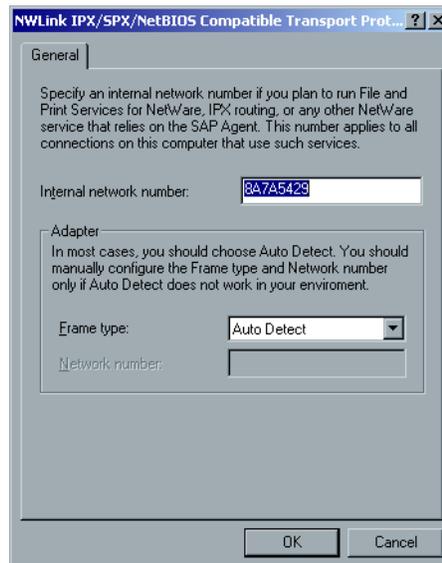
3. To change the frame type, select a frame type from the **Frame type** list, then click **OK**.

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 reboot.

   Note: Using this procedure requires further setup by the network administrator.

TCP/IP Setup

The Spire CXP6000 color server is predefined with a default IP address. The TCP/IP option enables you to change this IP address and other TCP/IP settings.

Note: Before changing the network settings, consult your System Administrator.

To change the TCP/IP network settings:

1. In the Settings window, select **Administration**>**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.
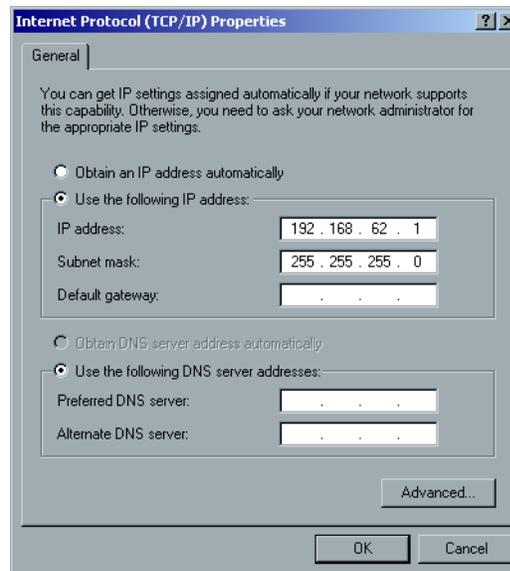
3. Change the IP Address by selecting **Obtain an IP address automatically**.
   Or:
   Select **Use the following IP address** and type the required address—for example, **IP address:192.168.62.1** and **Subnet mask:255.255.255.0**.

4. Click **OK.**

5. Click **OK** in the Local Area Connection Properties window.

    You are prompted to restart your computer.

6. Click **No** if you need to make more changes, or **Yes** to reboot.

Apple Talk Setup

The **AppleTalk Setup** utility enables you to change the AppleTalk zone in which your Spire CXP6000 color server is located.

To change the Apple Talk network settings:

1. In the Settings window, select **Administration**>**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.
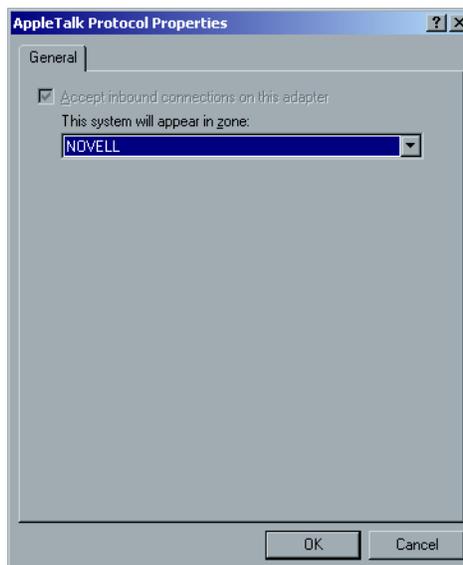
3. From the zone list, select the required AppleTalk zone for your computer, and click **OK**.

Remote Tools Setup

The **Remote Tools Setup** includes setup for the **Remote Admin** tool and enables the connection of clients to the Spire CXP6000 color server over the network using the **Spire Web Center**.

Remote Admin

The **Remote Admin** utility enables the System Administrator to connect, view, operate and perform administration actions on the Spire CXP6000 color server from his client workstation. While this remote connection and operation takes place, the regular operation of the Spire CXP6000 color 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.
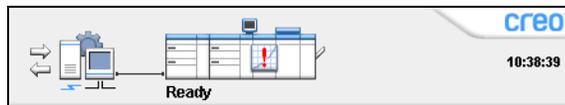
To secure the remote connection, a password should be assigned by the System Administrator.

Note: This tool is designed for the exclusive usage of the System Administrator. Clients who would like to connect to the Spire CXP6000 color server from their workstations may do so by using the **Spire Web Center**, which enables you to view and monitor your jobs in the Spire CXP6000 color server queues.

For more information about viewing and monitoring your jobs from a client workstation, see *Spire Web Center* on page 78.

The remote admin setup process includes the following stages:

1. On the Spire CXP6000 color server:
   The remote admin service is enabled and a password is assigned.

2. On the System Administrator's station:
   The client program is downloaded and launched.

To enable the remote admin service and set a password:

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

2. In the **Remote Tools Setup** area, select **Enable RemoteAdmin Service**.
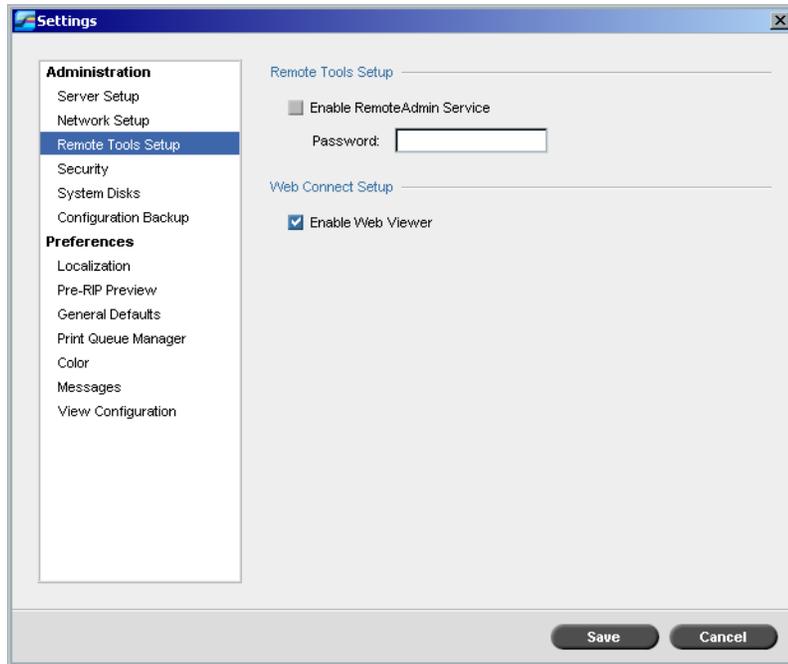
3. In the **Password** box, type a password.

    Note: This password will be used later on to connect to the Remote Admin application from the System Administrator workstation.

To download and launch the Remote Admin Client application:

1. From the System Administrator workstation, connect to the required Spire CXP6000 color server, and from the **Utilities** folder (related to your computer type, Windows or Macintosh) double-click **SpireRemoteAdmin.exe**.

    Tip: You can also download the application from the **Spire Web Center** under **Downloads**.

When the installation is complete, the Login window appears.
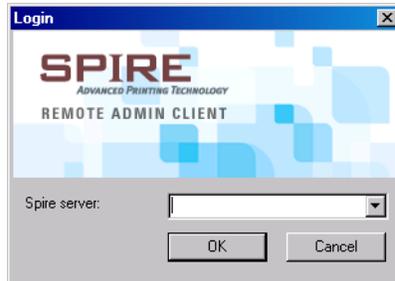
2. From the **Spire Server** list, select the required Spire CXP6000 color server.

3. Click **OK**.

   The next Login window appears.
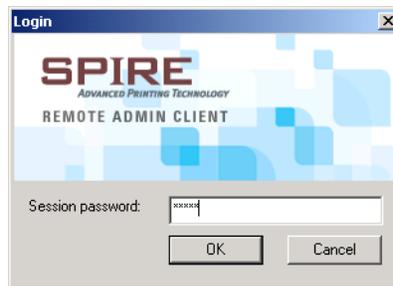
4. In the **Session password** box, type the password you have previously created in the Remote Tools Setup window.

5. Click **OK**.

   The Spire CXP6000 color server workspace appears on your screen and you can perform any required action.

Web Connect Setup

The **Web Connect Setup** enables clients to connect to the Spire CXP6000 color server over the network by using the **Spire Web Center**. This possibility is disabled by default.

For more information about viewing and monitoring your jobs from a client workstation, see *Spire Web Center* on page 78.

To enable web connections:

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

2. In the **Web Connect Setup** area, select **Enable Web Viewer**.

Security

The user **Passwords** and **Disk Wipe** settings are set in **Security**.
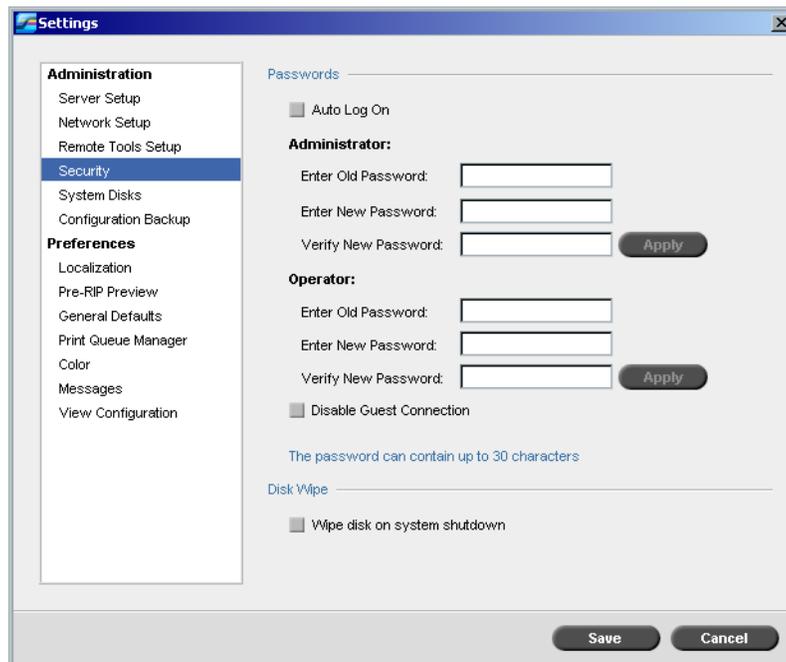
User Passwords

To set Password settings:

1. In the Settings window, select **Administration**>**Security**.

2. Select **Auto Log On** to enable users to log on automatically.

3. Select **Disable Guest Connection** to prevent Guest users from accessing the Spire CXP6000 color server.

To change Administrator/Operator passwords:

1. In the Settings window, select **Administration**>**Security**.

2. In the Administrator/Operator area, enter the old password.

3. Enter the new password.

4. Verify the new password.

5. Click **Apply** and **Save** in the Settings window.

    The password is changed and the Settings window closes.

Disk Wipe

Usually when you delete a file, the file's dictionary entry is removed but data still remains on the disk. The **Disk Wipe** utility enables you to clear previously deleted files. The utility eliminates the contents of your deleted files by scanning all of the empty sectors on the disk and replacing them with zeros. Nonempty sectors are left untouched. This feature enables you to work in a more secure environment. If there is a system shutdown, the disk wipe operation can begin immediately.

To operate the Spire Disk Wipe utility:

1. In the Settings window, select **Administration**>**Security**.

2. To enable the disk wipe feature, select **Wipe disk on system shutdown**.

3. Exit the Spire Color Server application.

4. On the Windows desktop, double-click **My Computer**, and then select **D:\Utilities\PC Utilities\Disk Wipe**.

5. To install the utility, double-click the **Disk Wipe** installer icon.

    The **Disk Wipe** utility icon appears on the Spire CXP6000 color server desktop.

6. Double-click the **Disk Wipe** utility icon.

The **Disk Wipe** utility appears.
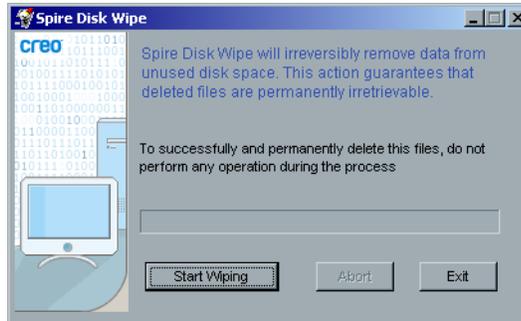
7. To start the disk wipe operation, click **Start Wiping**.

    A progress bar appears while the disk wipe operation permanently deletes files.

8. Close the Disk Wipe application when the operation finishes.

Notes:

- The disk wipe operation does not function well when the Norton Utilities application is installed. Before you activate the **Disk Wipe** utility, make sure that Norton Utilities is not installed on the Spire CXP6000 color server.

- In rare cases, the process of deleting files from the Storage window is not completed—for example, the system shuts down before the deletion process is completed. In these cases, parts of the deleted files still reside in the **D\:Output** folder. Therefore, it is recommended that before you start the disk wipe operation, check the **D\:Output** folder to ensure that all the relevant files were deleted.

- The **Disk Wipe** utility affects the user disk and printer disk.

- Do not operate the **Disk Wipe** utility while another application is running.

- The supported language is English.

System Disks

When the Printer or User Disks reach a pre-defined threshold (default is 250 MB), RIP is suspended and the system provides a warning message. The RIP will resume automatically only after disk space is available.

To set the system disks threshold:

1. In the Settings window, select **Administration**>**System Disks**.

2. In the **System Disks** area, set the minimum free disk space required for RIP.
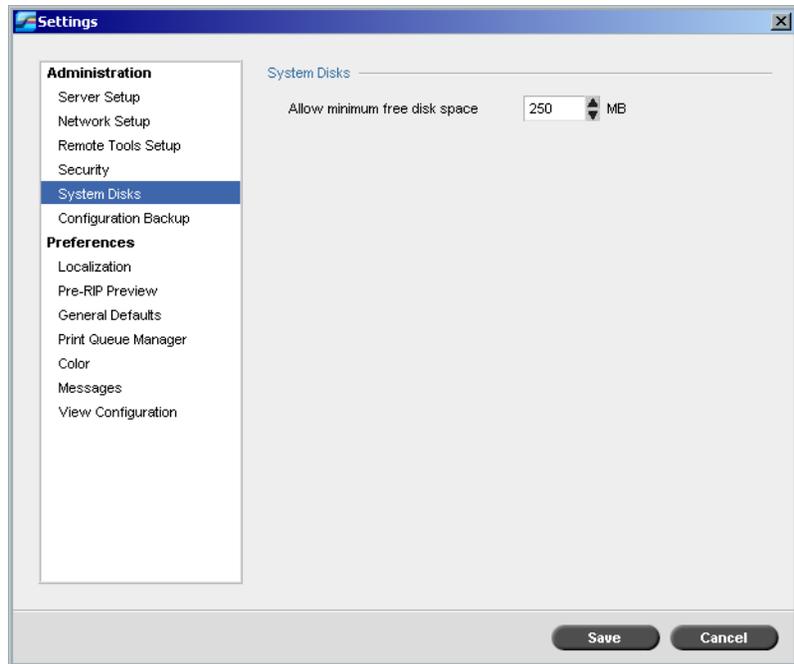
Backing up the Configuration

The **Configuration Backup** item enables you to backup your Spire CXP6000 color server configuration to a local hard disk, to a network drive or to an external media—for example, an external zip drive—connected to the Spire CXP6000 color server.
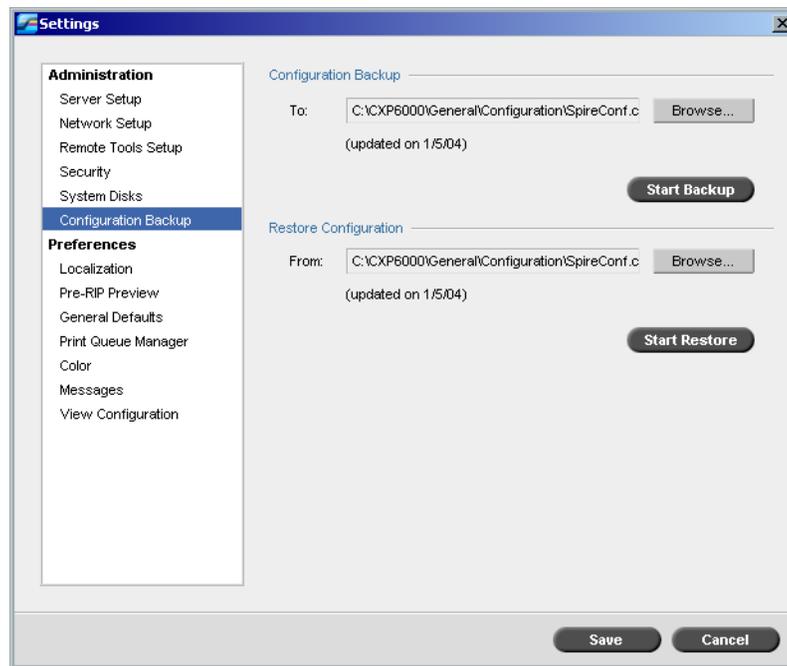
Configuration Backup

To backup the configuration of your Spire CXP6000 color server:

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

2. In the **Configuration Backup** area, click **Browse**.

The Save window appears.
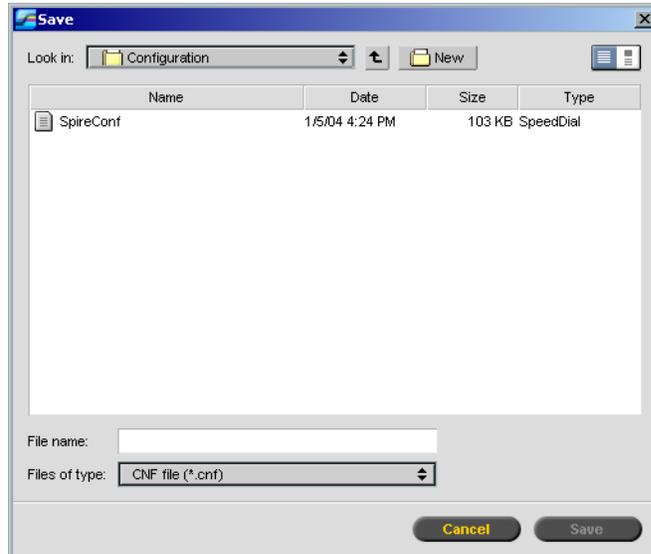
3. Browse to the required directory path for the backup.

Note: You can also backup 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:/CXP6000/General/Configuration**.

Configuration Restore

To restore the configuration of your Spire CXP6000 color server:

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

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

Notes:

*   The configuration files name will always be: "SpireConf.Cab" (Cabinet file.)

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

The Restore Configuration window appears.

4. Select the categories 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 etc.

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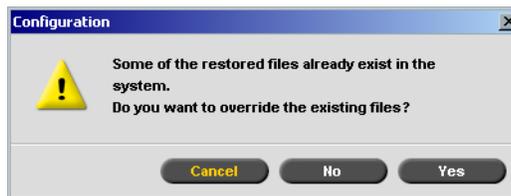
5. Click **Yes** if you would like the restored files to replace the current ones. Click **No** if you do not want the restored files to replace the existing files.

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

Localization

The **Localization** measurements and the **Language** are set in the **Localization** parameter.
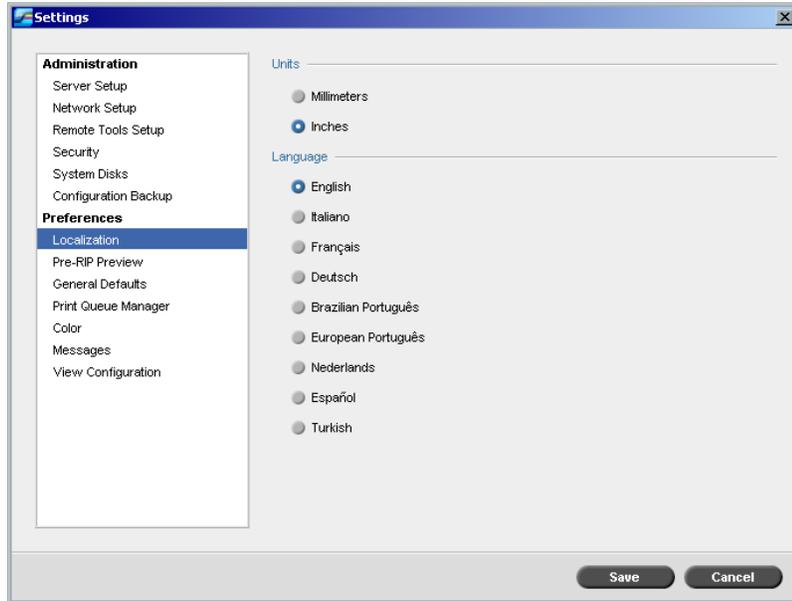
Setting the Localization Measurement

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

2. In the **Localization** area, select **Millimeters** or **Inches**, as required.

Setting the Language

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

2. In the **Language** area, select the language, as required.

Note: If you switch to another language, you need to restart the Spire CXP6000 color server application.

Pre-RIP Preview

1. In the Settings window, select **Preferences**>**Pre-RIP Preview**.
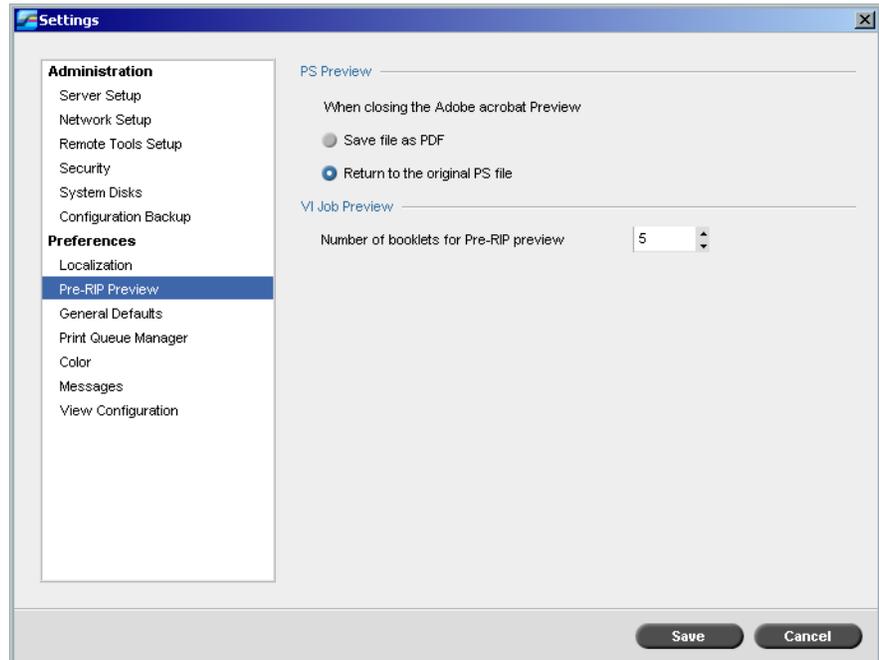
2. In the **PS Preview** area, select your choice:

    *   **Save as PDF**: to save the file as PDF

    *   **Return to original PS file**: to return to the original PS file

3. In the **VI Job Preview** area, select the required number of booklets for pre-RIP preview.

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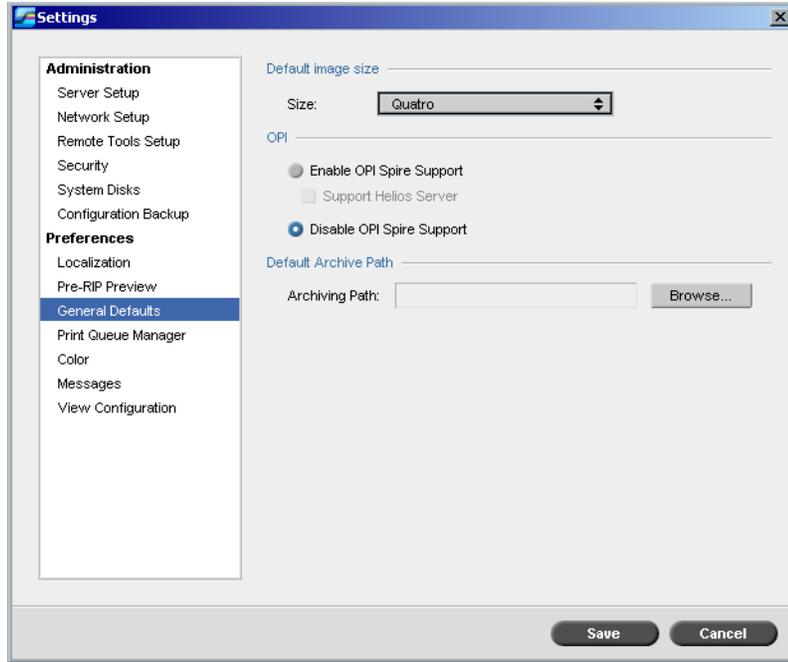
1. In the Settings window, select **Preferences**>**General Defaults**.

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

3. Select the required **OPI** setting.

For more information about setting the OPI, see *OPI* on page 259.

4. Select the **Default Archive Path**.

For more information on the default archive path, see *Archiving and Retrieving Jobs* on page 204.

Print Queue Manager

The **Job Batching** and **Held Jobs Policy** options are set in the **Print Queue Manager** parameter.

The Job Batching utility enables you to print several jobs with the same settings in a batch, one after the other without the cycle down, and consequently save production time.
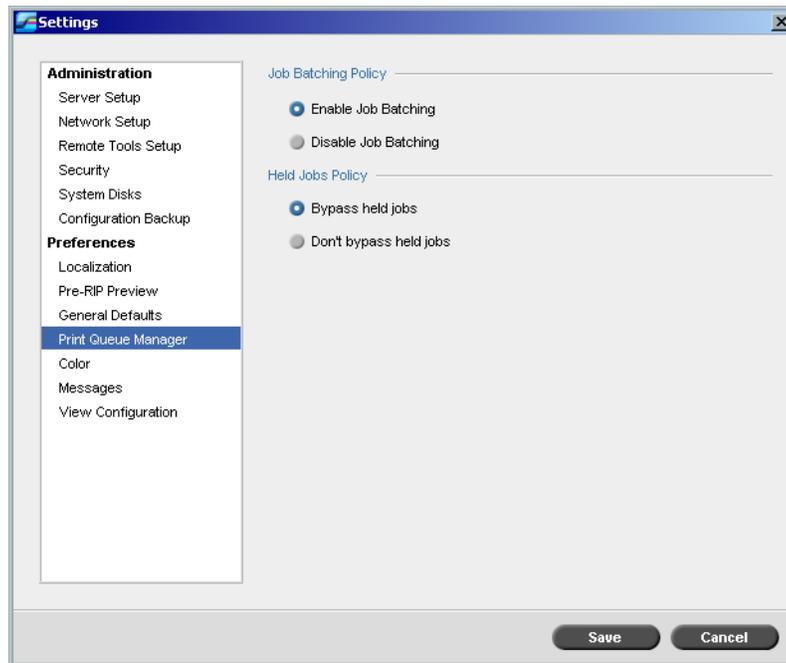
To set the required job batching option:

1. In the Settings window, select **Preferences**>**Print Queue Manager**.

2. Select **Enable Job Batching** to print jobs with the same page parameters, one after the other without the cycle down.

   Or:
   Select **Disable Job Batching** to disable the printing of jobs with the same page orientation, one after the other, and enable cycle down.

For more information about job batching, see *Job Batching Workflow* on page 193.

To set the required held jobs option:

➢ In the **Held Jobs Policy** area, select **Bypass held jobs**, to bypass frozen
jobs in the **In Print** queue.
Or:
Select **Don't Bypass held jobs** to stop the printing from the queue
when a job is assigned a frozen status.

Color

The **Calibration Method**, **Emulations**, **Automatic Screening, Color
conversion tables,** and **Calibration Reminder** settings are set in **Color**.
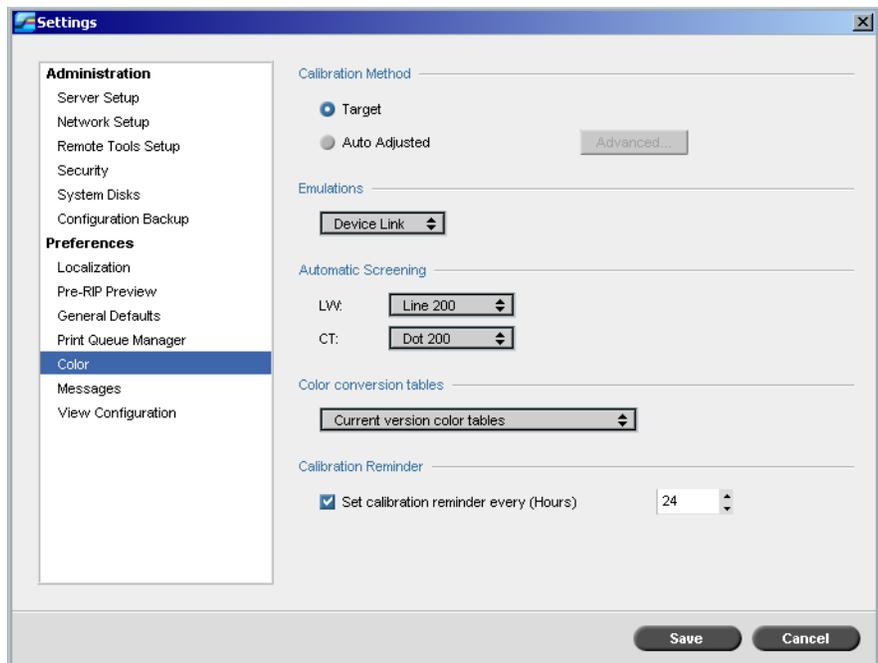
Calibration

For more information on setting the calibration method, see *Color Calibration
Methods* on page 320.

Emulations

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

- Device Link (default)

- CSA

Note: The emulation profiles that are displayed in the Job Parameters window are related to the chosen emulation method.

To specify the emulation method:

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

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

Automatic Screening

The Spire CXP6000 color server supports Dot and Stochastic screening. When you print a job from the Spire CXP6000 color server, select the required screening method or choose **Automatic** in the **Color** parameter of the Settings window. By default, **Automatic** applies two types of screens:

- **For CT (Continuous Tone):**
  The system uses Dot type screen of Dot 200.

- **For text / line-art elements - LW (Line Work):**
  The system uses Line type screen of Line 200.

To change the values of the automatic screening method:

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

2. In the **Automatic Screening** area, select the required Auto screen settings for LW from the **LW** list.

3. Select the required Auto screen settings for CT from the **CT** list.

    You are prompted to restart the application for the new settings to take effect.

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 needs to be closed while changing the color tables set.

To select the color conversion tables:

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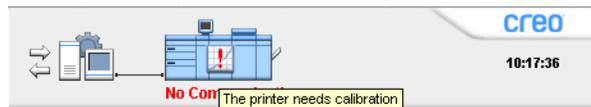
Messages

The **Alert Messages**, **Accounting Log Setup**, and **Message Viewer Log Setup** settings are set in **Messages**.
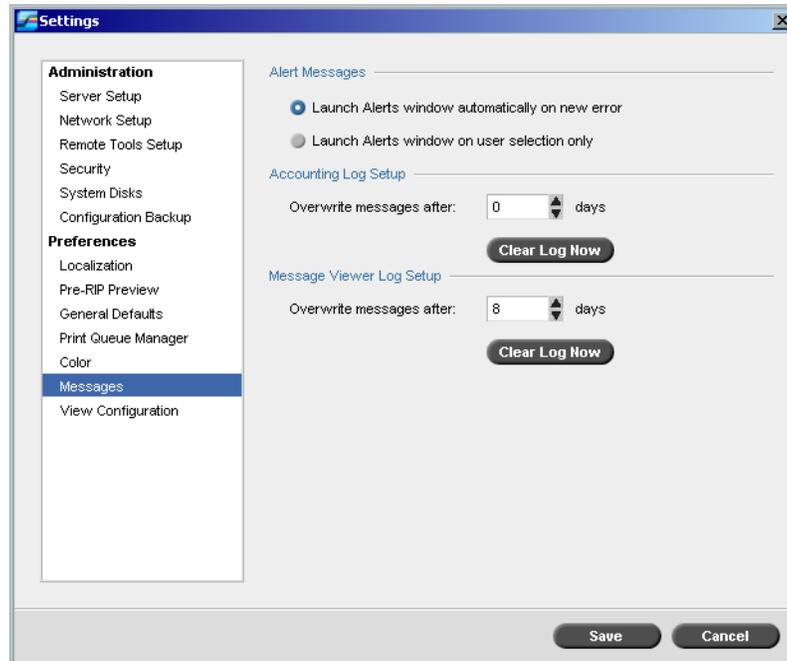
Alert Messages

The **Alert Messages** utility enables you to select whether the Alerts window will open automatically, or not, when an error occurs.

To set the Alerts window settings:

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

2. In the **Alert Messages** area, select **Launch Alerts window automatically on new error** (default).

    If you would like to open the Alerts window upon selection only, select **Launch Alerts window on user selection only.**

Accounting Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the Spire CXP6000 color server Accounting window. This utility enables you to specify different values for how long information remains before being overwritten.

To setup the accounting log:

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

2. In the **Accounting Log Setup** area, select the required value to **Overwrite messages after**.

3. To remove all the existing information from the windows, whenever desired, click **Clear Log Now**.

Note: For more information about the Accounting window, see *Job Accounting* on page 217.

Message Viewer Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the Spire CXP6000 color server Message Viewer. This utility enables you to specify different values for how long information remains before being overwritten.

To setup the message viewer log:

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

2. In the **Message Viewer Log Setup** area, select the required value to **Overwrite messages after**.

3. To remove all the existing information from the windows, whenever desired, click **Clear Log Now**.

Note: For more information about the Message Viewer, see *Job Accounting* on page 217.

View Configuration

The **View Configuration** utility enables you to view the configuration of your Spire CXP6000 color server and to print it to any printer on the network connected to your Spire CXP6000 color server. In addition you can save the configuration in the network or export it to an external media as a text file.

To view the configuration:

1. In the Settings window, select **Preferences**>**View Configuration**.
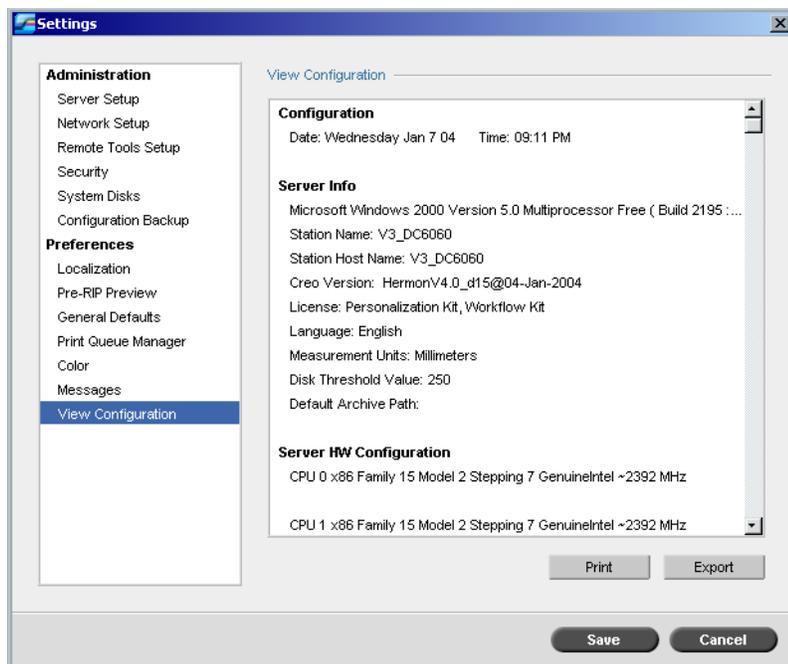
2. Click **Print** to print the configuration.

    The Print window appears.

3. From the **Printer** list, select one of the defined printers and click **OK**.

4. If you would like to save the configuration click **Export**.

The Save window appears.
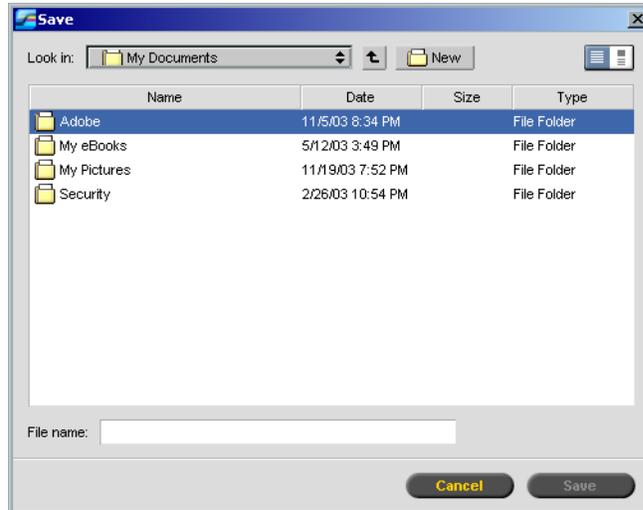
5. Locate the required folder, and click **Save**.

System Messages

While jobs are being handled by the Spire CXP6000 color server, various messages are emitted. You can view the messages of each job in the Job History window, of the entire session in the Message Viewer window, or just the error messages within the Alerts window.

The Alerts Window

By default, the Alerts window is open in the Spire CXP6000 color server workspace. Any time the system emits an **Error** type message, the message appears in the Alerts window. The Alerts window lists all the error messages that were generated during the workflow (the total number of messages is also indicated).

Note: You can specify whether you would like the Alert window to launch automatically on a new error, or upon user selection only. To set the preferred option, see *Alert Messages* on page 428.

➢ From the **View** menu, select **Alerts**.

The Alerts window appears, listing all the **Error** messages that were generated during the workflow.
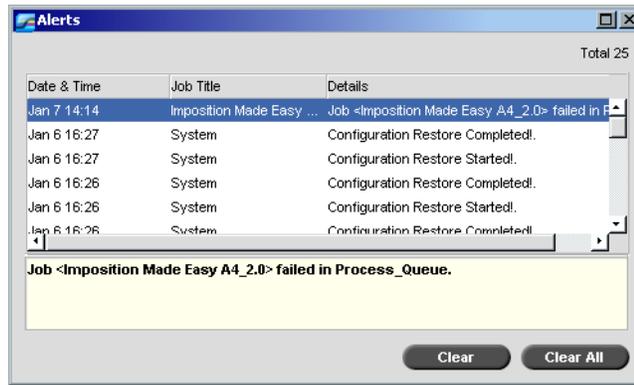
Note: By default, new messages are shown at the top of the list. For each message, the origin of the message is indicated, and a task that will solve the problem is suggested.

To delete messages from the Alerts window:

➢ Select the message(s) you want to delete and click **Clear.**
  Or:
  Click the **Clear All** button to remove all messages.

Note: Cleared messages are not removed from the Message Viewer or from related Job History windows.

System Disks Threshold Message

When the Printer or User Disks reach a pre-defined threshold (usually of 256 MB), RIP is suspended and the system provides a warning message. The RIP resumes automatically only after disk space is available. In this case, you may increase the System Disk threshold.

For more information about setting the system disks threshold, see *System Disks* on page 416.

Job History

To view the job history:

➢ Right-click a job in the Queues window or in the Storage window, and from the menu select **Job History**.
Or:
Select a job and from the **Job** menu select **Job History**.

The Job History window appears, listing all the messages that were generated during the workflow of the selected job.
The Job History window indicates the job title and the sender name (the user name of the system from which the job originated).
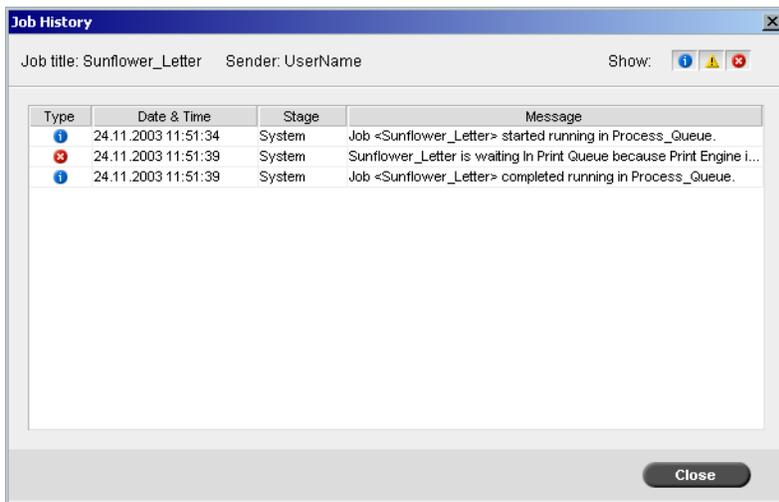
Message Information

For each message, the following information is indicated by default:

• An icon denoting the type of message (Error, Warning, or Information)

• The date and time on which the message was emitted (the time stamp)

• The stage in the workflow (for example, Print or Process)

• The message text

You may filter the messages by type, and/or sort the list by one of the column headers.

The Message Viewer

To open the Message Viewer:

➢ At any stage of work, from the **Tools** menu, select **Message Viewer.**

The Message Viewer window appears, listing all the messages that were generated during the workflow.

For more information about viewing messages related to a specific job, see *Job History* on page 433.
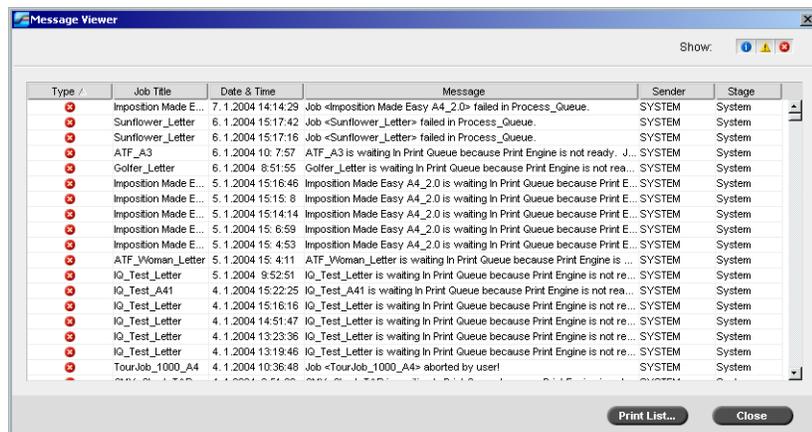
By default, all the jobs that were handled during the last 3 months (90 days) are listed.

The default may be changed in the Settings window under **Messages**. For more information about changing the default setting, see *Messages* on page 428.

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 required, 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 Alerts 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 is presented in the Message Viewer (as it is currently filtered and sorted).

To print the message list:

1. Filter and sort the list as required (the data is printed according to the current filtering and sorting).

2. Click **Print List**.

The Print window is displayed.
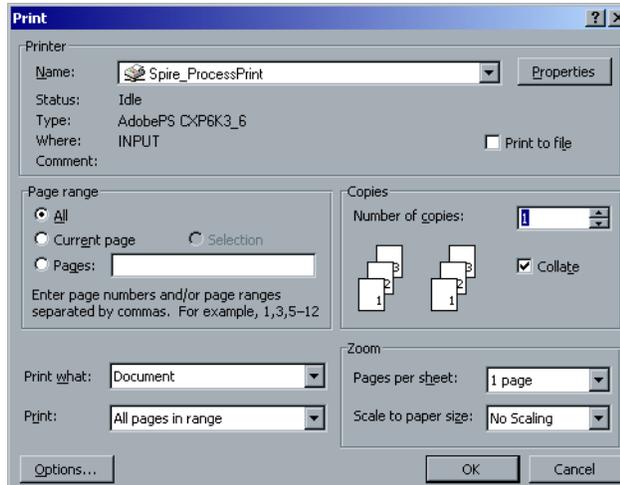
3. Set the printing options as required, and then click **OK**.

Reinstalling the System

This section describes the two methods of reinstalling your Spire CXP6000 color server software by complete overwrite or by system partition. It describes how to install the Windows 2000 Professional operating system, the Creo Software application, and to configure the system using the Configuration Wizard.

This section also describes how to back up and restore the Creo system partition, and the Job List database.

Notes:

System Partition Overwrite should be performed when the Windows 2000 Professional operating system is corrupt and needs to be reinstalled.

Complete Overwrite should be performed only when installing a new operating system.

If you are installing a new operating system, or you are replacing any SCSI hard disk, you must first perform low-level formatting (see the *Spire CXP6000 color server Technical Manual*).

Preloaded Software

The Spire CXP6000 color server is delivered to the customer site preloaded with the following software and configuration:

- Windows 2000 Professional
- MS Service Pack 4.0
- Internet Explorer 6.0
- Spire CXP6000 Color Server version 4.0 for the DocuColor 6060
- Adobe Acrobat 5.0
- Ultimate InSpire Software
- Network Parameters (hostname, IP address, network services and protocols)

Disk Configuration

The following table outlines the Spire CXP6000 color server disk configuration:

Disk 0	C: Windows 2000 Professional software Creo application	D: Spool files Shared files Output directory files Apr high res files
Disk 1	Image storage	
Disk 2	Image storage	

Reinstalling Overview

It may, however, become necessary, for example after a system crash, to reinstall the system at the customer's site.

The reinstallation is mostly unattended. User interaction is needed only for entering the OS license number and the computer hostname, for rebooting the computer when requested, for inserting the final application CD-ROM and for the Configuration Wizard.

The reinstallation of the system requires two CD-ROMs:

One CD-ROM #1:

- CD-ROM #1 (Windows 2000 Professional Fast Install)

One of the following CD-ROM #2s (depending on the printer type)

- CD-ROM #2A (Spire CXP6000 Color Server version 4.0 for the DocuColor 6060 Application Software)

- CD-ROM #2B (Spire CXP6000 Color Server version 4.0 for the DocuColor 2060/2045 Application Software)

- CD-ROM #2C (Spire CXP6000 Color Server version 4.0 for the DocuColor 5252 Digital Color Press Application Software)

Two Methods of Reinstalling the System

- **Creo Software Complete Overwrite Installation**:
  This procedure replaces the entire system disk, operating system partition, Creo application, and user partition (partitions C: and D:). A complete overwrite should be performed only when you are upgrading the operating system.

  Note: This option deletes all the files stored on disks C: and D:. Make sure to back up any important customer files before selecting this option. **Back up the files to the local disk, and then back up the files to an external device or to a network (you cannot back up directly to an external device or network).**

- **Creo Software Preservation Installation** (System Partition Overwrite): This procedure replaces only the operating system partition (C:). You should perform System Partition Overwrite when the Windows 2000 Professional operating system is corrupt and needs to be reinstalled.

Back Up and Restore

These procedures can be performed at any time you want to backup and restore your Creo system partition, and backup and restore your job list database.

Notes:

- To enable the restoration of customer settings and job data, we recommend that you back up the Spire CXP6000 color server configuration and other information, before loading the operating system, see *Backing Up and Restoring the Creo System Partition* on page 474 and *Backing Up and Restoring the Job List Database* on page 476.

- **Once you have backed up all the required information to your local disk, back up this information to an external device or to a network (you cannot back up directly to an external device or network).**

- Determine whether VIPP or any other Xerox/Creo supported application is loaded on the Spire CXP6000 color server. Such applications have to be reloaded after the reinstallation is completed.

Reinstalling the Operating System

Before reinstalling, ensure that:

- all external SCSI devices are disconnected from the Spire CXP6000 color server.

- the following information is available

  - CD-ROM software pack

  - Computer name (for example, CXP1)

  - TCP/IP information

  - Windows 2000 Professional OEM product ID number

  - Gateway, WINS address, and DNS information

  - Required AppleTalk zone

  - IPX information

    For more details, refer to the *Xerox Installation and Planning Guide*.

Backing Up the Job List Database

If you want to back up the Job List Database, proceed to *Backing Up the Job List Database* on page 476.

Reinstalling the Windows 2000 Professional Operating System

1. If your Spire Color Server is on, and the Spire workspace is open:

   a. Exit the workspace.

   b. Place CD-ROM #1 (Windows 2000 Fast Install), into the CD/DVD-ROM drive.

   c. On the Windows desktop, follow the path,
      Start>Shut Down>Restart>OK.
      Wait until the PC DOS 7.1 Startup Menu appears.

   If your Spire Color Server is off:

   a. Press the Power On/Off button on the front panel.

   b. As soon as power is applied, place CD-ROM #1 (Windows 2000 Fast Install), into the CD/DVD-ROM drive.
      Wait until the PC DOS 7.1 Startup Menu appears.

2. When the PC DOS Start Up Menu appears, the following choices are available:

   - Creo Software Complete Overwrite Installation

   - Creo Software Preservation Installation (System Partition Overwrite)

   - Backup Creo System Partition

   - Restore Creo System Partition

   - DOS prompt

3. Use the arrows to select **Creo Software Complete Overwrite Installation** and press ENTER.

> **Note:** If the Norton Ghost® License Agreement Warning appears, select **OK** to mark the drives as usable by Norton Ghost.
> The warning will only appear if you have installed a new SCSI hard disk.
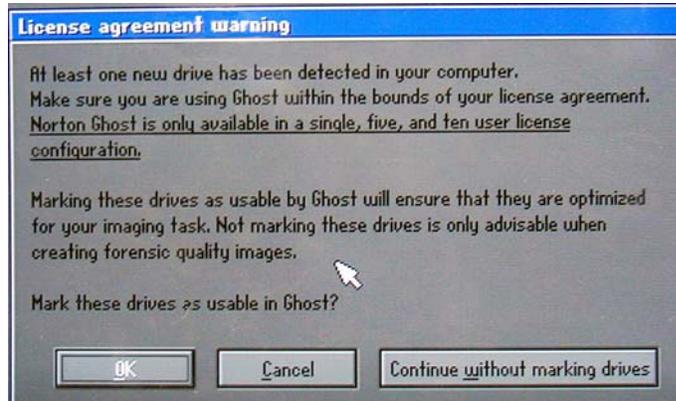
The system starts copying the files.
After a few minutes, you are prompted to remove the CD-ROM from the DVD-ROM drive and reboot.

4. Press CTRL+ALT+DEL to reboot.
   The system copies files and reboots a few times.

5. When the Windows 2000 Professional Setup screen appears type the 25-digit Product Key, that comes with the Windows 2000 Professional manual, and click **Next**.

6. In the Computer Name and Administrator Password screen, type the name for the Spire CXP6000 color server, for example CXP6000_1.

> **Important:**
> In the administrator name and password area, use the default settings.
>
> If required, you can change the administrator name and password, but only at the end of the installation process (see *If you want to change the administrator name and password:* on page 472, or *If you want to change the user password:* on page 473).

7. Click **Next**.
   The installation process begins.

8. At the end of the installation, the system reboots a number of times. You are asked to insert the application software CD-ROM. Insert CD-ROM #2A, #2B, or #2C, depending on your printer type, into the DVD-ROM drive.

9. Proceed to *Reinstalling the Creo Application Software*.

Reinstalling the Creo Application Software

1. Select the correct CD-ROM #2 for your printer type.

2. Insert the CD-ROM into the DVD-ROM drive and close the DVD-ROM drive.

3. In the SPIRE application splash screen that appears, click **Start**. The Adobe Acrobat setup begins.

4. After the Adobe Acrobat setup is complete, the Spire CXP6000 color server installation starts.

5. When the License Agreement window opens, click **Yes** to continue the Spire CXP6000 color server installation.

6. When the installation is complete, remove CD-ROM #2 from the DVD-ROM drive.

7. The system restarts automatically. Proceed to *Disk Striping* on page 443.

Disk Striping

Once the Spire CXP6000 color server reboots, the Wrong Disk Configuration message appears. This message indicates that the disks need to be striped.

Initial Disk Striping Procedure

1. Click **OK.**

The Disk Management window appears.
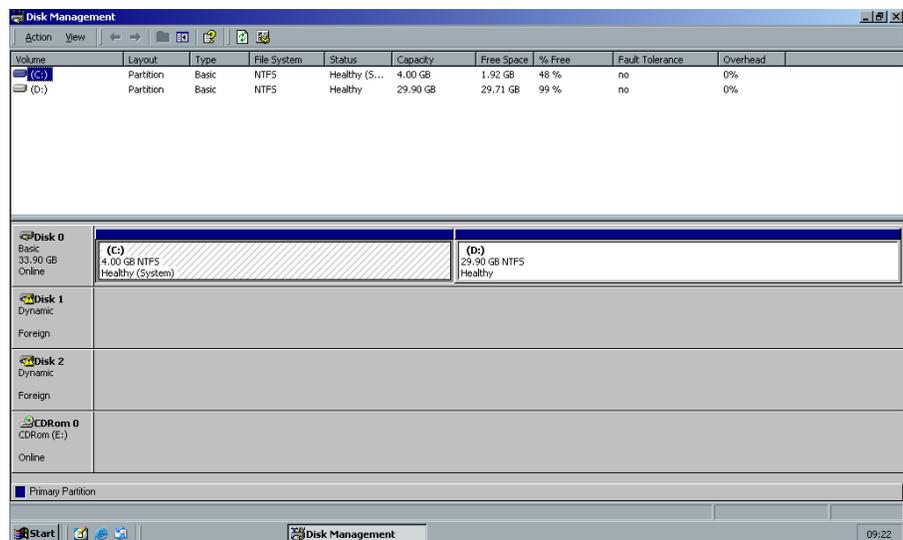
2. Maximize the window.

Establishing the Correct Disk Striping Procedure

1. In the Disk Management window, verify that Disk 1 and Disk 2 are labelled **Dynamic**. Perform the procedure: *Striping Dynamic Disks* on page 445.

2. If you have replaced a disk or low-level formatted any disk, the disk will be labelled **Unknown**. Once you have low-level formatted both disks (a required procedure, see the *Spire CXP6000 color server Technical Manual*), both disks will be labelled **Unknown**. Perform the procedure: *Striping Unknown Disks* on page 449.
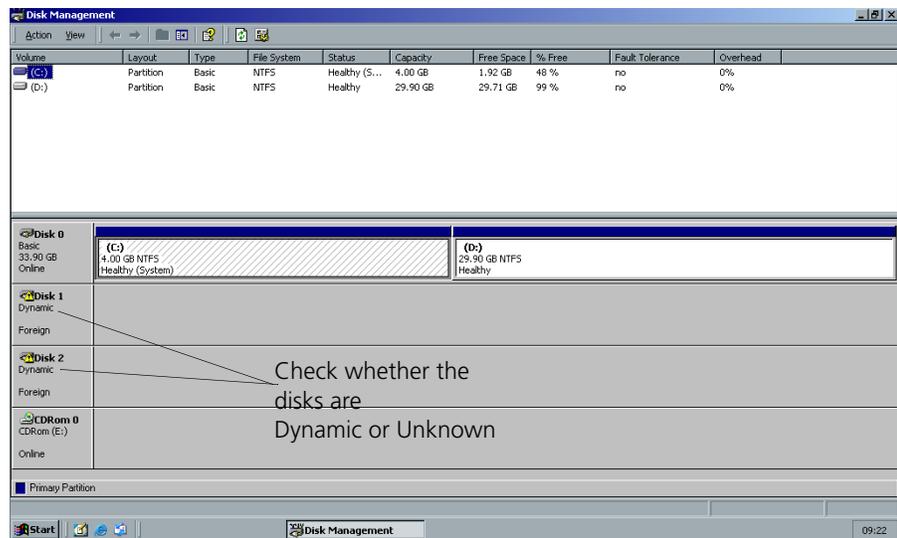
Striping Dynamic Disks

1. Position the mouse pointer in the area where the disk is designated
    Dynamic.
    Right-click and select **Import Foreign Disk.**

    Foreign disks are any hard disks that were recognized as dynamic disks from
    a previous installation.

The following window appears.
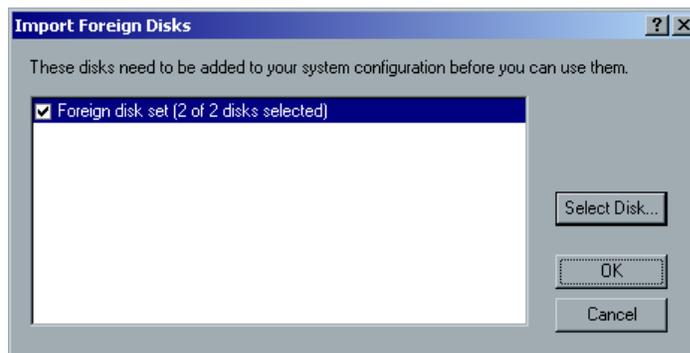
2. Verify that **Foreign disk set (2 of 2 disks selected)** is selected, and click
    OK.

The following window appears.

3. Click **OK.**
    The Dynamic disks are striped as shown in the following window.

4. Position the mouse pointer in the white area to the right of the first disk
   and right-click.
   Select **Change Drive Letter and Path.**
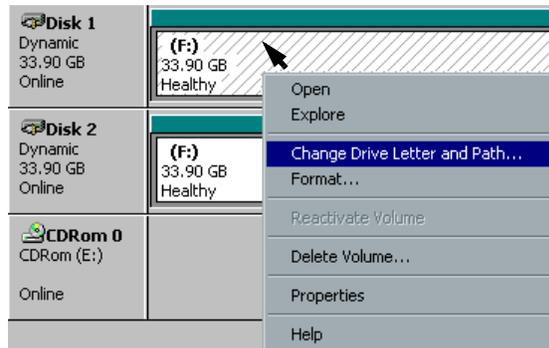
The following window appears.
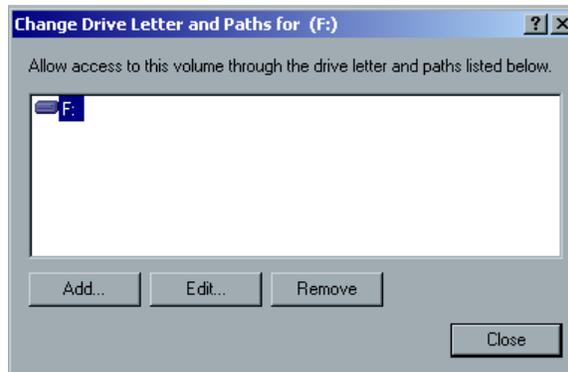
5. The drive letter is preselected.
   Click **Remove**.

The following Confirm message appears.
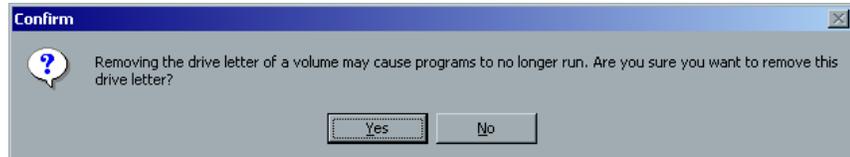
6. Click **Yes**.

7. Confirm that the Disk Management window appears as illustrated in the following window, which shows that the drive letters have been removed.
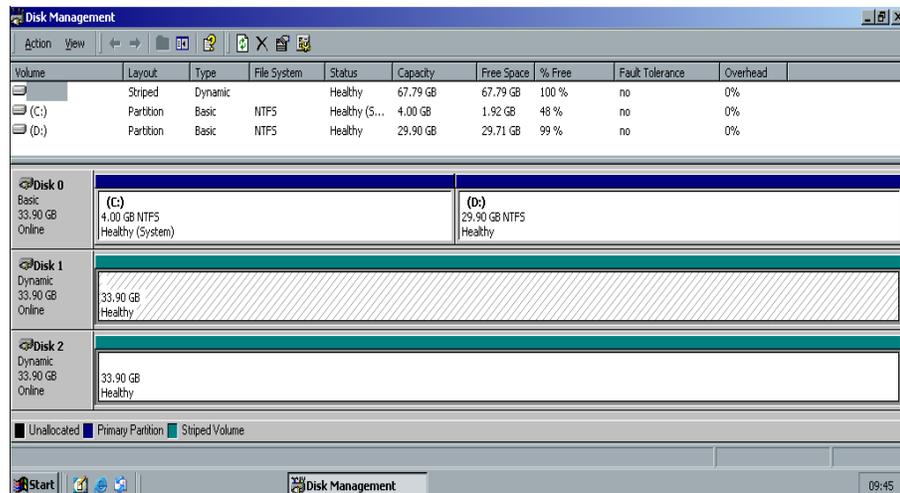
8. Close the Disk Management window.

9. The Image Disks File System is not Formatted message appears. Click **OK**.

10. You have completed *Disk Striping*.

   • If configuration recovery information is available, proceed to *The Configuration Wizard (If Backup Available)* on page 456.

   • If there is no backup and the system configuration must be done manually, proceed to *The Configuration Wizard (If Recovery Fails or is Unavailable)* on page 461.

Striping Unknown Disks

Perform the following procedures if you:

* Have replaced an image disk (low-level format both disks)

* Have low-level formatted one image disk (low-level format both disks)

Important: When you replace an image disk or low-level formatted one disk, you must low-level format both image disks, before you perform the *Striping Unknown Disks* procedure.

Allocating a Write Signature

1. Position the mouse pointer in the area where the disk is designated **Unknown**.
   Right-click and select **Write Signature.**
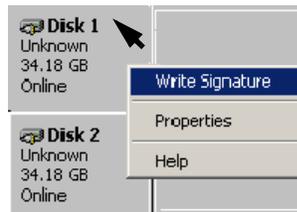
The following window appears.
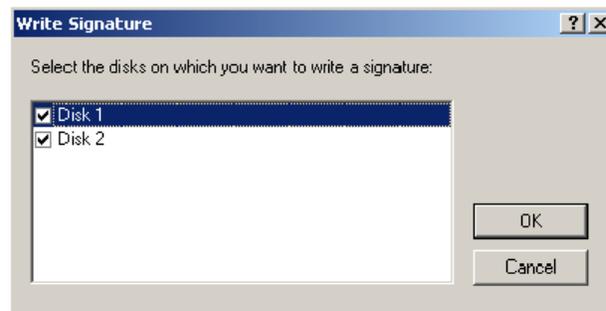
2. Check the **Disk 1** and **Disk 2** check boxes, and click **OK.**

Upgrading to Dynamic Disk

1. In the Computer Management screen, **Disk 1** and **Disk 2** are now both designated **Basic**.
   Position the mouse pointer in the area where the first disk is designated **Basic**.
   Right-click and select **Upgrade to Dynamic Disk.**

The following window appears.
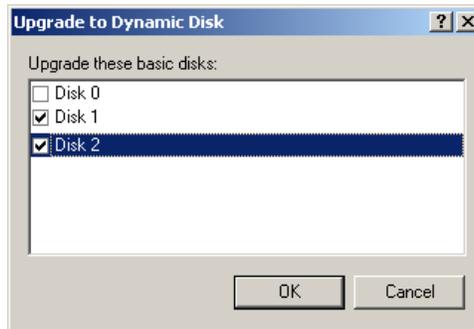
2. Check the **Disk 1** and **Disk 2** check boxes and click **OK**.
   Disks 1 and 2 are image disks and Disk 0 remains a system disk.

   Note: Do not select Disk 0. Upgrading Disk 0 will remove all the information stored on this disk.

3. In the Computer Management window, Disk 1 and Disk 2 are now both designated **Dynamic**.

Creating a Striped Volume

1. Position the mouse pointer in the cross-hatched area to the right of the first disk.

   Right-click and select **Create Volume**.

   The Create Volume Wizard appears.

2. Click **Next**.

The following window appears.
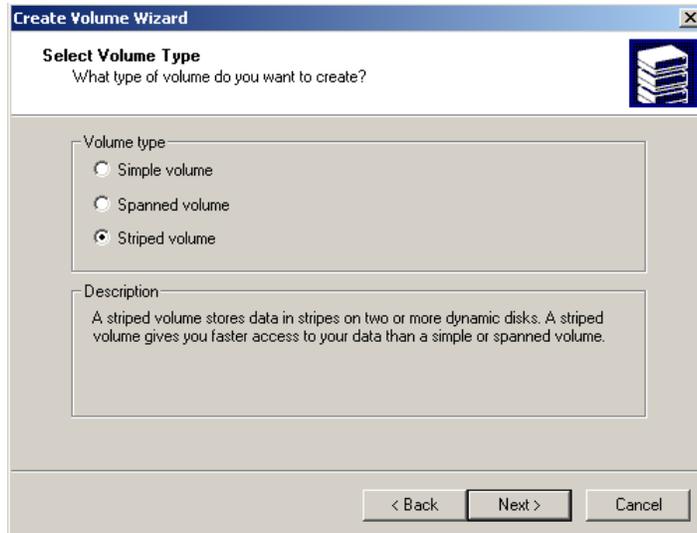
3. Select **Striped volume** and click **Next**.

    The following window appears.
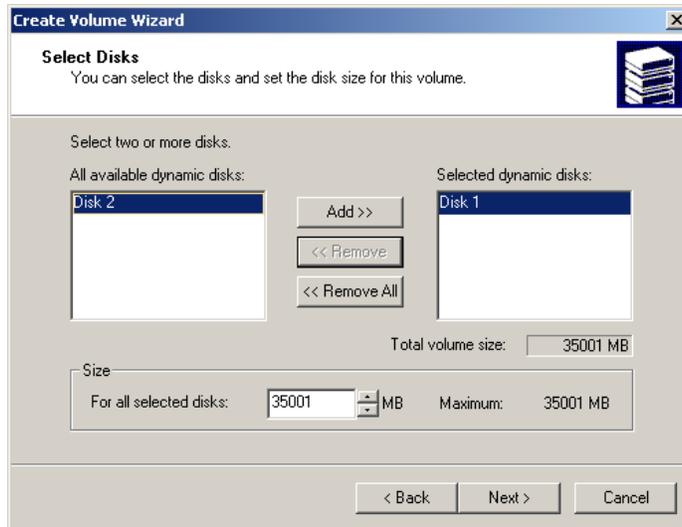
4. Select **Disk 2** and click **Add.**
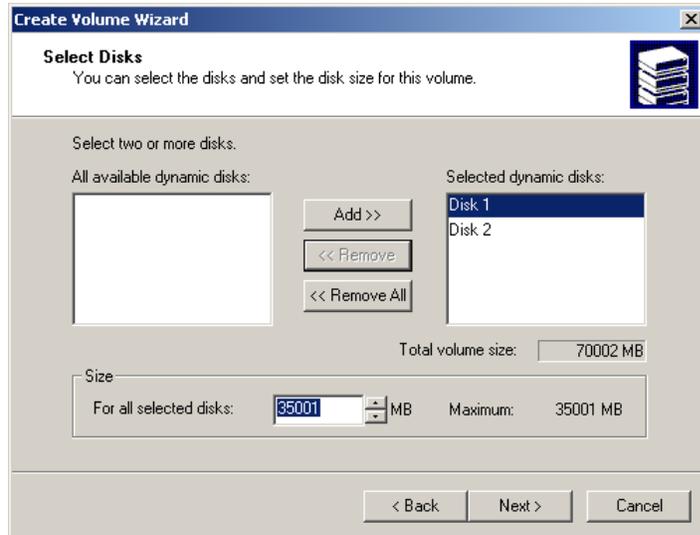
5. Disk 1 and 2 are listed under **Selected dynamic disks.** The **Total volume size** has increased from 35001 MB to 70002 MB. Click **Next.**

The following window appears.
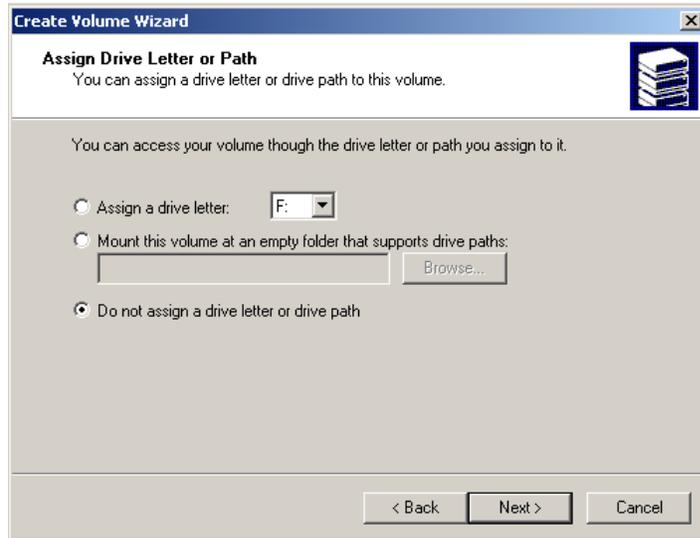
6. Select **Do not assign a drive letter or drive path.**
    Click **Next.**
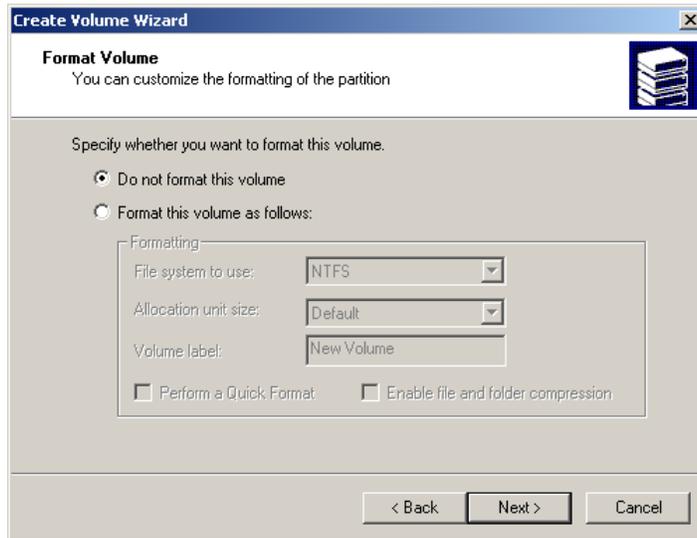
7. Select **Do not format this volume** and click **Next.**

    The following window appears.

8. To complete the Create Volume Wizard, click **Finish**.

Confirming the Disk Striping

After you click Finish, the following window appears.
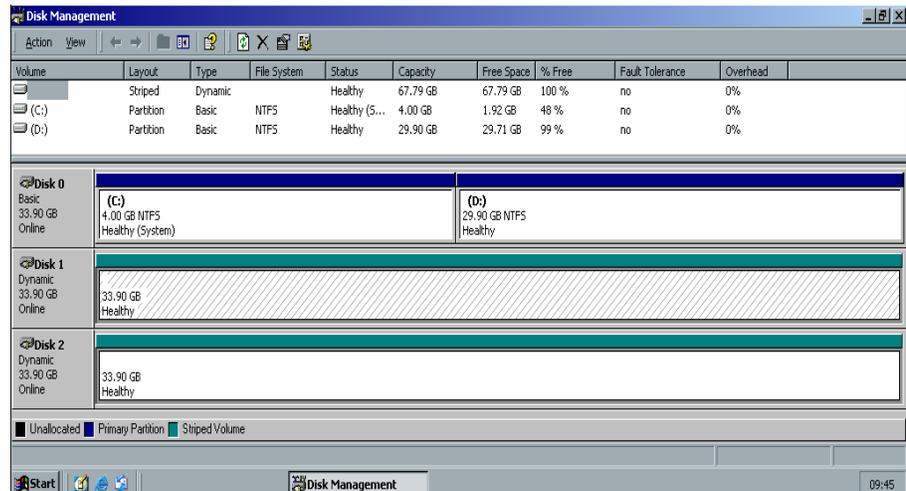
1. Confirm that the Disk Management window appears as illustrated in the previous window, and verify that the drive letters have been removed.

2. Close the Disk Management window.

3. The Image Disks File System is not Formatted message appears. Click **OK**.

4. To make sure that the changes take effect, restart the Spire CXP6000 color server. On the Windows desktop, follow the path: **Start>Shut Down>Restart>OK**. You have completed *Disk Striping*.

5. After the computer restarts, the Configuration Wizard appears.

   • If configuration recovery information is available, proceed to *The Configuration Wizard (If Backup Available)* on page 456.

   • If there is no backup and the system configuration must be done manually, proceed to *The Configuration Wizard (If Recovery Fails or is Unavailable)* on page 461.

The Configuration Wizard (If Backup Available)

The Spire CXP6000 color server Configuration Wizard automatically appears after the installation is complete. Follow the steps of the wizard to complete the Spire CXP6000 color server configuration recovery.

Note: If you received the message `Error in default configuration`, click **OK**, and go to step 2 in *Restoring the Configuration* on page 456.

Restoring the Configuration
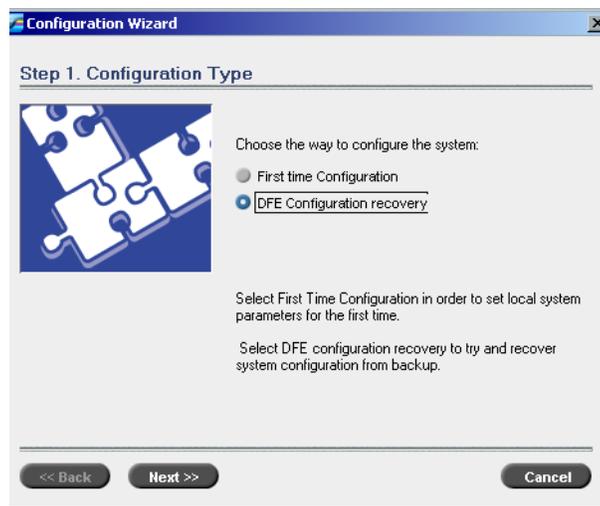
1. Select **DFE Configuration recovery** and click **Next**.

The following dialog box appears.
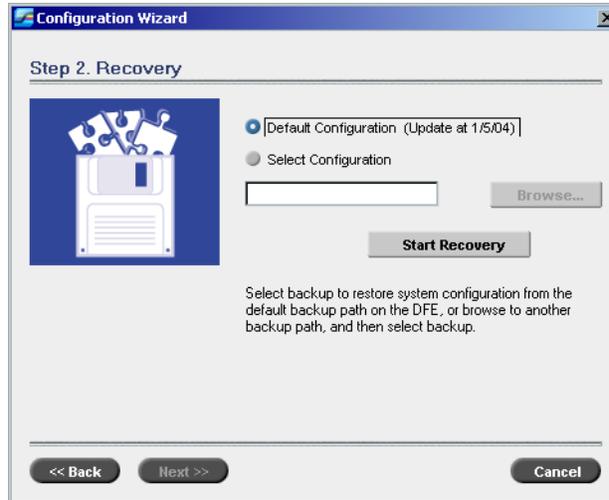
2. If you would like to restore the default configuration, select **Default Configuration**.

3. If you received the message `Error in default configuration`, or if you want to use a different configuration file than the default, choose **Select Configuration** and click **Browse**.

4. Locate the required configuration file and then click **OK**.

5. Click the **Start Recovery** button.
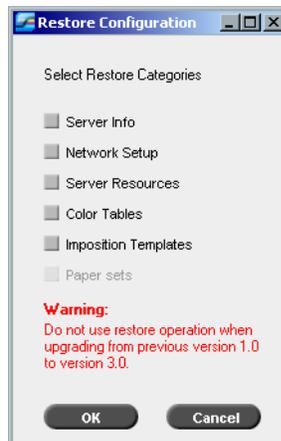
6. By default, no categories are selected. Select the categories you want to restore.

    Note: When restoring the configuration all the custom tables/sets will be added to the system (for example, imported user-defined imposition templates, new virtual printers, and downloaded fonts).

7. Click **OK**.
    The following message appears.

Configuration	⊠
⚠️	Some of the restored files already exist in the system. Do you want to override the existing files?
	Cancel No Yes
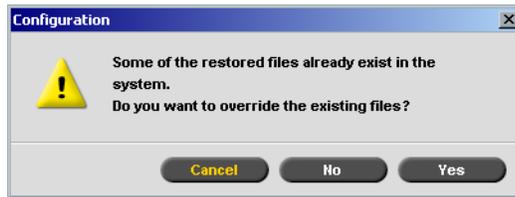
8. Click **Yes**.
    After the recovery is complete, the following confirmation message appears.

Configuration	⊠
Restore Completed. Changes Will take effect after restart.
OK

9. Click **OK**.

10. Click **Next** in Step 2 Recovery window.
    The View Configuration window appears.

```
View Configuration                                                    _ □ ×

 Configuration                                                            ▲
 Configuration
 Date:Monday, January 05, 2004      Time:10:26:50

 Server Info
 Version 5.0 (Build 2195:Service Pack 4)

 Station Name :  V3_DC6060
 Station Host Name :  V3_DC6060
 Creo Version:   HermonV4.0_d15@04-Jan-2004
 License :   Personalization Kit, Workflow Kit
 Installation Date: 1-5-2004

 Language: English

 Measurement Units: Millimeters
 Disk Threshold value:250
 Default Archive Path:

 Server HW Configuration
 CPU 0 x86 Family 15 Model 2 Stepping 7 GenuineIntel ~2392 Mhz
 CPU 1 x86 Family 15 Model 2 Stepping 7 GenuineIntel ~2392 Mhz

 Total Physical Memory (K) : 523756
 Total Pagefile Space (K) : 1277572
 Total Virtual Memory (K) : 2097024

 Disk #0    SEAGATE ST336753LW      0003
 Disk #1    SEAGATE ST336753LW      0005
 Disk #2    SEAGATE ST336753LW      0003
 Printer Disk - Total size: 68.35GB  Free size: 66.01GB
 User Disk - Total size: 30.27GB  Free size: 29.34GB

 Network Setup
 Network Interface Card:  Broadcom NetXtreme Gigabit Ethernet         ▼

                                        Print      Export      Close
```

11. Click **Close.**

The following window appears.

12. Click **Finish**.
    The Spire CXP6000 color server application workspace appears on your screen.

    To make sure that any you made changes take effect, restart the computer.

13. Close all open applications, and on the Windows desktop, click **Start>Shut Down>Restart>OK**.

14. If you want to change the administrator name and password, or only the user password, proceed to *If you want to change the administrator name and password:* on page 472, or *If you want to change the user password:* on page 473.

The Configuration Wizard (If Recovery Fails or is Unavailable)

If there is no backup configuration in your system, you need to perform the following steps to configure your system.

Choosing the Configuration Type

The Spire CXP6000 color server Configuration Wizard automatically appears the first time you turn on the Spire CXP6000 color server.
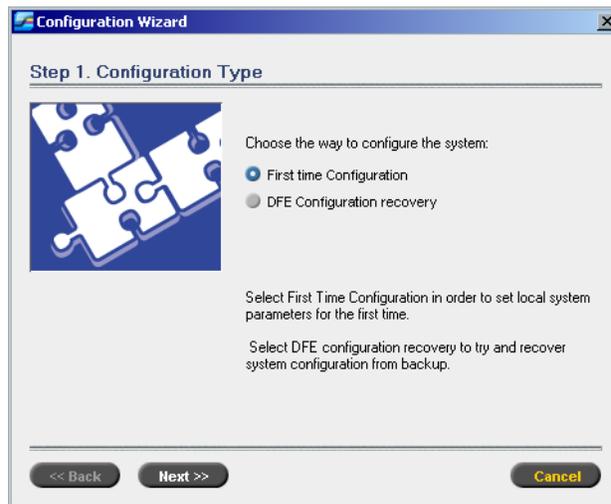
➢ Verify that **First Time Configuration** is selected and click **Next**.

Setting the Language
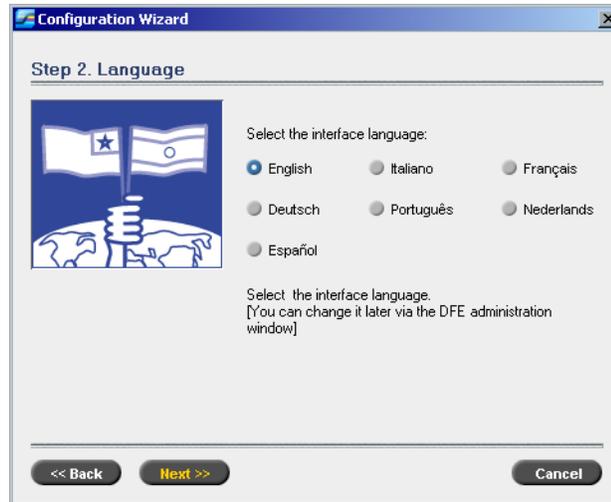
➢ Select the required interface language, and click **Next**.

Configuring the Host Name

The Spire CXP6000 color server contains a default Computer Name (Hostname) set from the factory. Check with your System Administrator if the computer's name needs to be changed.

Note: The Hostname is taken from the computer name you typed during the Windows 2000 Professional Fast Installation, see *Reinstalling the Operating System* on page 439.
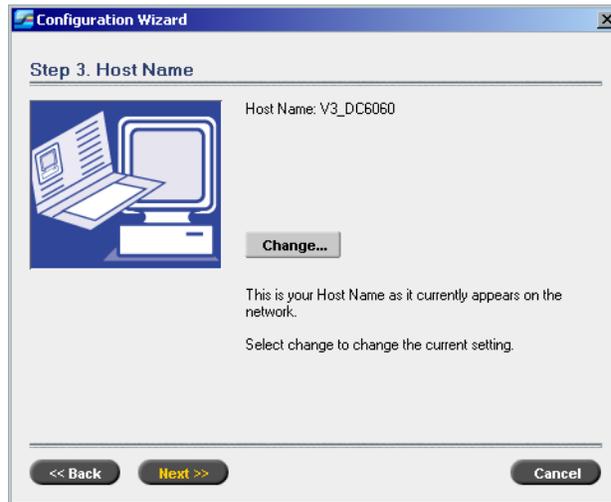
1. Verify that the correct host name is displayed and click **Next**. Otherwise, click the **Change** button.

The System Properties dialog box appears.
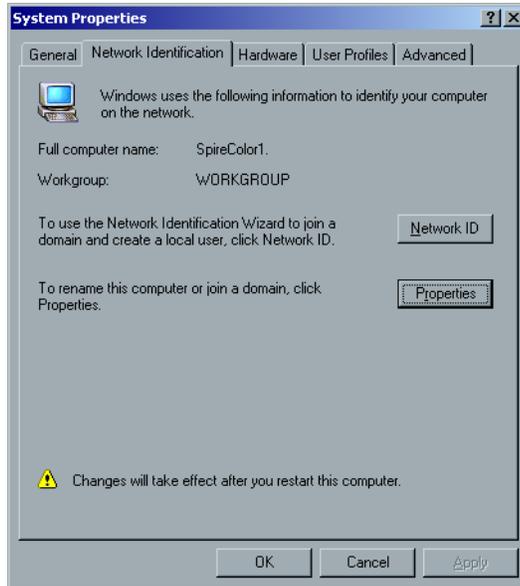
2. Click the **Properties** button.
    The Identification Changes window appears.
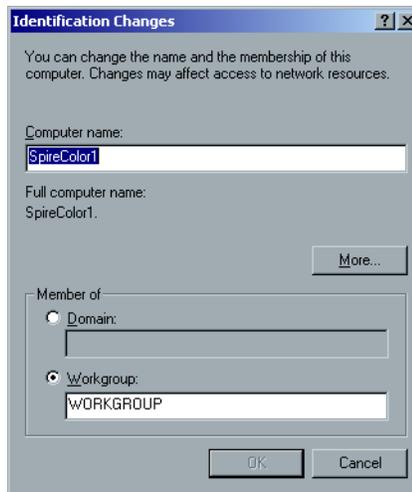
3. In the **Computer name** area, type the new name for the computer. If you would like to change the **Workgroup** or the **Domain** in which your computer appears, type the new name in the corresponding area and click **OK**.

   Note: Do not change the Workgroup or Domain unless instructed. If you are changing the Domain/Workgroup, verify that you have the user name and password for the Domain/ Workgroup.

   A message appears to inform you that changes will take effect only after restarting the computer.

4. Click **OK**.

5. In the System Properties dialog box, click **OK**.

6. Click **Next** to continue.

   Note: When prompted to restart your computer, click **No**, since you will be prompted at the end of the Configuration Wizard to restart your system.

Setting the Date and Time
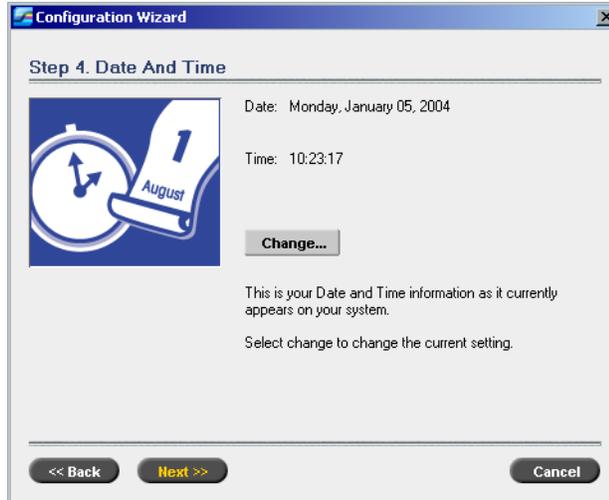
1. Check that the Date and Time are set correctly and click **Next**. Otherwise, click **Change**.
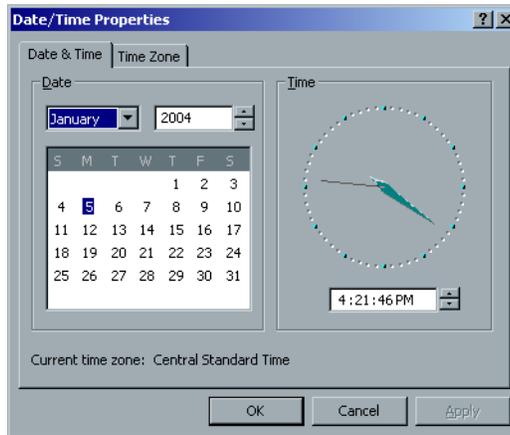
2. Set the Date and Time correctly.

3. Select **Time Zone.**
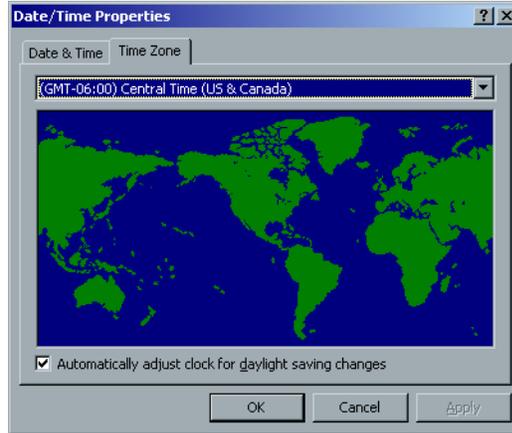
4. Set the Time Zone, click **OK.**

5. Click **Next.**

Setting the Default Measurement Units
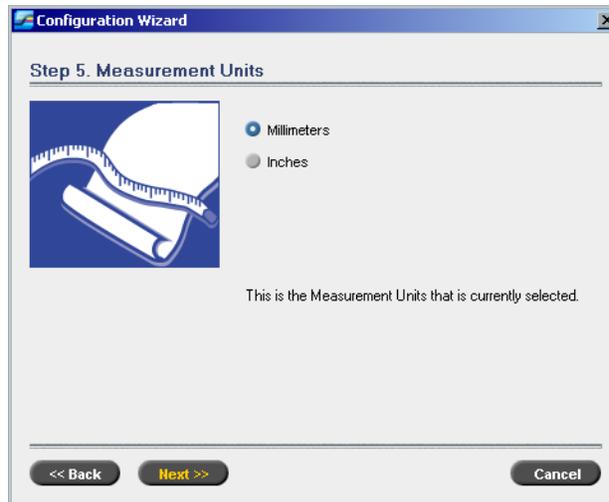
➢ Select the default measurement unit you require, and click **Next.**

Configuring the IP Address
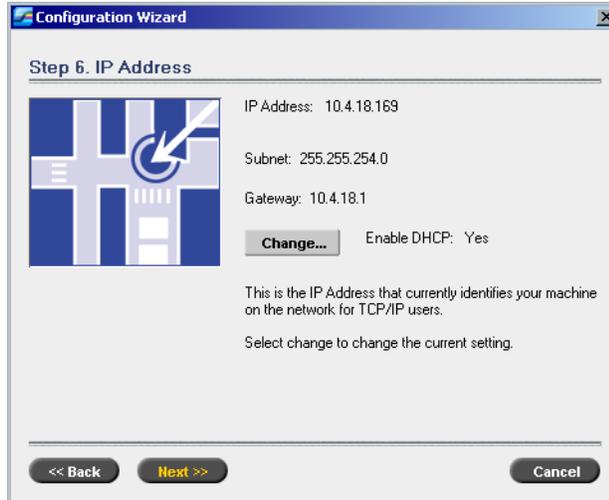
1. The Spire CXP6000 color server is set to DHCP server configuration. Click **Next** to continue.

2. If you would like to specify a specific IP address, click the **Change** button.

   The Local Area Connection Properties dialog box appears, followed by the Internet Protocol (TCP/IP) Properties dialog box.
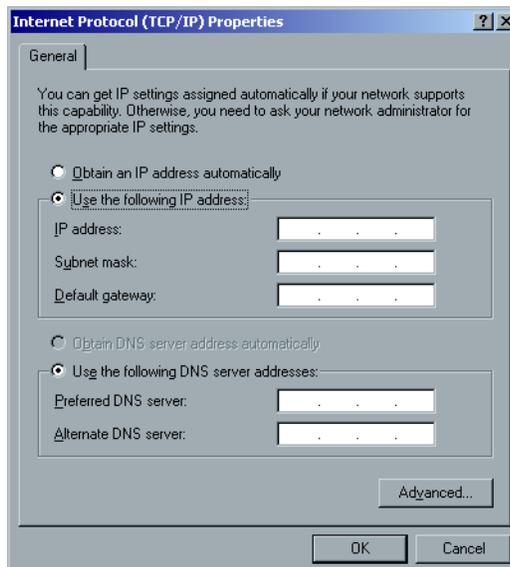
3. Select **Use the following IP address** and type the **IP address**, **Subnet mask** and **Default gateway** in their corresponding boxes.

For more details on how to get the IP or DHCP (also subnet mask and default gateway) information, refer to the *Xerox Installation and Planning Guide*.

4. Click **OK**.

5. In the Local Area Connection Properties dialog box, click **OK**.

6. Click **Next**.

Configuring the Apple Talk Zone

This option enables you to change the AppleTalk network zone that your Spire CXP6000 color server will appear in.

Note: This option only applies to networks that contain Macintosh computers.
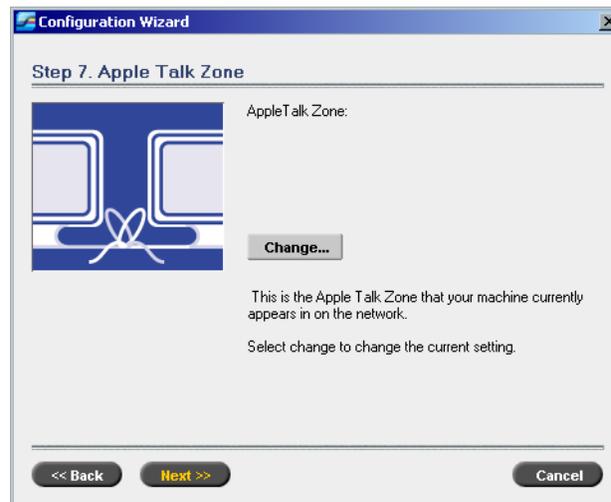
1. Click the **Change** button.

The Local Area Connection Properties dialog box appears, followed by the AppleTalk Protocol Properties dialog box.
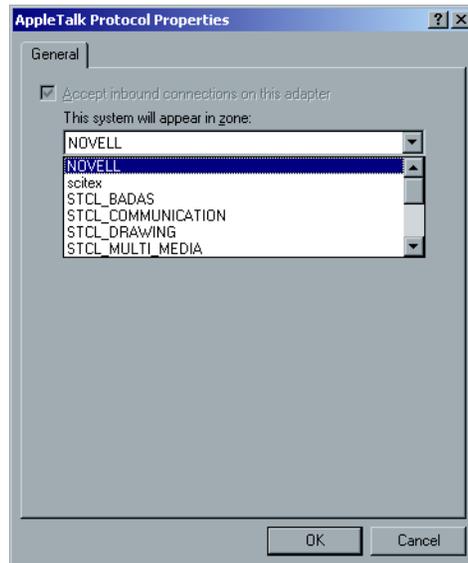
2. Select the required zone from the list and click **OK**.

3. In the Local Area Connection Properties dialog box, click **OK**.

4. Click **Next**.

Completing the Configuration

After the configuration is complete, the View Configuration window appears.
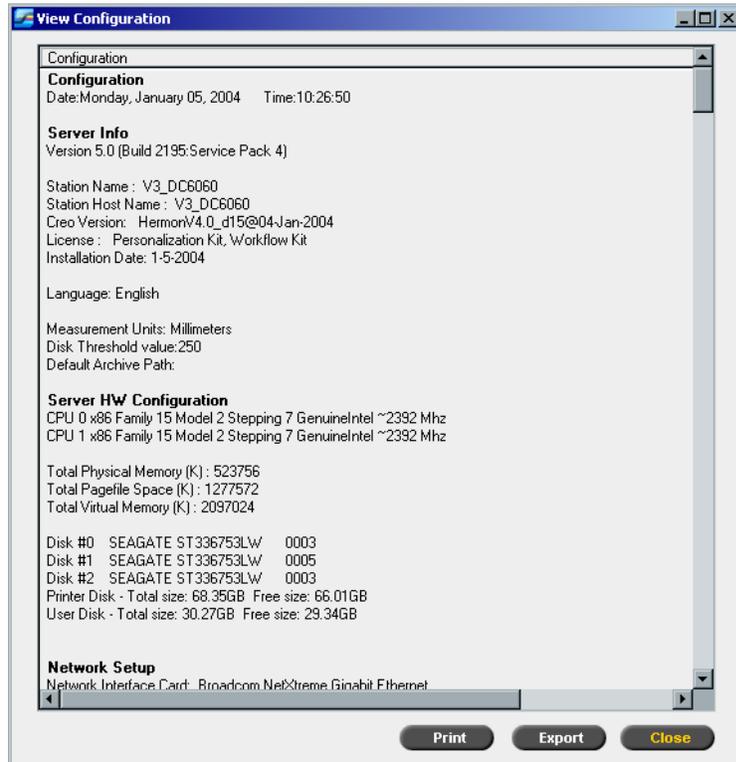
1.   Click **Close**.

The following window appears.
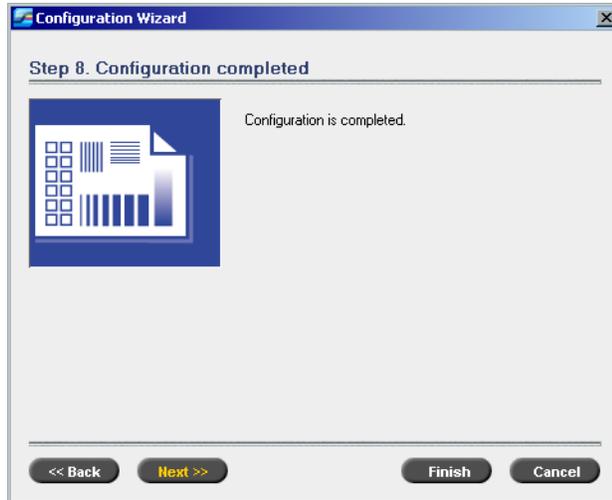
2. Click **Finish** to complete the First-time setup.
    When the backup is complete, the following message appears.
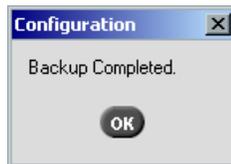
3. Click **OK.**
    The Spire CXP6000 color server workspace appears on your screen.

4. If you want to change the administrator name and password:

    a. On the Windows desktop, right-click **My Computer** and select
        Manage.

    b. Expand the Local Users and Groups tree, and select **Users**.

    c. Select **Administrator**. Right-click and select **Properties**.

    d. Type the Full name and click **OK**.

    e. Select **Administrator**. Right-click and select **Password**.

    f. Type and confirm the new password and click **OK**.

5. If you want to change the user password:

   a. Press CTRL+ALT+DELETE.

   b. In the Windows Security window, click **Change Password**.

   c. Type the old and new password and confirm the new password.

   d. Click **OK**.

6. If you have a Novell network running IPX protocol, proceed to *Installing and Configuring Novell Client for Spire*.

Installing and Configuring Novell Client for Spire

Refer to the *Spire CXP6000 color server Technical Manual*.

Backing Up the Creo System Partition

If you want to back up the Creo system partition, proceed to *Backing Up the Creo System Partition* on page 474, and then to *Configuring the McAfee VirusScan* in the *Spire CXP6000 color server Technical Manual*.

Backing Up the Job List Database

If you want to back up the Job List Database, proceed to *Backing Up the Job List Database* on page 476, and then to *Configuring the McAfee VirusScan* in the *Spire CXP6000 color server Technical Manual*.

Configuring the McAfee VirusScan

Refer to *Configuring the McAfee VirusScan* in the *Spire CXP6000 color server Technical Manual*.

Backing Up and Restoring the Creo System Partition

The following procedures can be performed at any time you want to backup and restore your Creo system partition.

When you backup your Creo system partition, Norton Ghost copies the files on partition C: to an image file on partition D:.

If you want to restore the information from the image file on partition D: back to partition C:, any current jobs on partition C: will be lost. We therefore recommend that you backup any important current jobs using the procedures described in *Backing Up and Restoring the Job List Database* on page 476.

Backing Up the Creo System Partition

Note: If you are already logged on your system and the Spire CXP6000 color server workspace is open, exit the workspace and proceed to step 4.

1. Turn on your computer.

2. Place CD-ROM #1 (Windows 2000 Fast Install) in the DVD-ROM drive.

3. Restart the computer.

4. If you are already logged on to your system, on the Windows desktop, follow the path **Start>Shutdown>Restart.**

5. Wait until the **PC DOS Start Up Menu** appears. The following choices are available:

    * Creo Software Complete Overwrite Installation

    * Creo Software Preservation Installation (System Partition Overwrite)

    * Backup Creo System Partition

    * Restore Creo System Partition

    * DOS prompt

6. Use the keyboard arrows to select **Backup Creo System Partition**, and press ENTER. The Norton Ghost window appears and the files on partition C: are copied to an image file on partition D:. The process takes about three minutes to complete.

7. A message appears instructing you to remove the CD-ROM from the DVD-ROM drive and restart the computer.
Remove the CD-ROM and press CTRL+ALT+DELETE to restart the computer.
You have completed *Backing Up the Creo System Partition*.

> **Tip:** If you want to copy this file to an external device, it is located on D:\Backup\SYSPART.GHO.

Restoring the Creo System Partition

Before restoring the Creo system partition, we recommend that you backup any important jobs, using the procedure described in *Backing Up and Restoring the Job List Database* on page 476.

> **Note:** If you are already logged on your system and the Spire CXP6000 color server workspace is open, exit the workspace and proceed to step 4.

1. Turn on your computer.

2. Place CD-ROM #1 (Windows 2000 Fast Install) in the DVD-ROM drive.

3. Restart the computer.

4. If you are already logged on to your system, on the Windows desktop, follow the path **Start>Shutdown>Restart**.

5. Wait until the **PC DOS Start Up Menu** appears.
The following choices are available:

   - Creo Software Complete Overwrite Installation

   - Creo Software Preservation Installation (System Partition Overwrite)

   - Backup Creo System Partition

   - Restore Creo System Partition

   - DOS prompt

6. Use the keyboard arrows to select **Restore Creo System Partition**.

7. Press ENTER.
The system takes about one minute to respond, and then the following message appears.
`The restore process is irreversible and overwrites all`

```
information on the system partition.
To save job and other resource information use the
Backup_Joblist.bat script.
Continue and restore system partition??
Yes/No
```

8. If you press N (No), the following message appears.
   ```
   Please remove the CD-ROM and floppy from the drive and
   press CTRL+ALT+DELETE to reboot the computer.
   ```

9. If you press Y (Yes), the Norton Ghost window appears, and the files on partition D: are restored to partition C:.

10. When the process is complete, the following message appears.
    ```
    Please remove the CD-ROM and floppy from the drive and
    press CTRL+ALT+DELETE to reboot the computer.
    ```

11. Remove the CD-ROM from the DVD-ROM drive, and press CTRL+ALT+DELETE to reboot.
    You have completed *Restoring the Creo System Partition*.

Backing Up and Restoring the Job List Database

The following procedures can be performed at any time you want to backup and restore your job list database.

Backing Up the Job List Database

Note: If you are already logged on your system and the Spire CXP6000 color server workspace is open, exit the workspace and proceed to step 3.

1. Turn on your computer.

2. Exit the Spire application.

3. On the Windows desktop, double-click **My Computer**, and follow the path, **D:>Backup>Scripts**.

4. In the D:\Backup\Scripts window, double-click **Backup_Joblist.bat**.
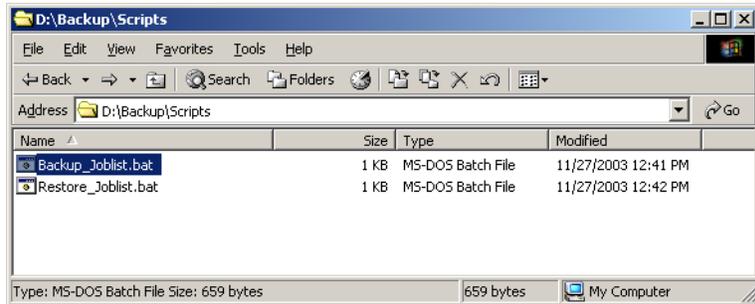
5. When the backup is complete, the following message appears.
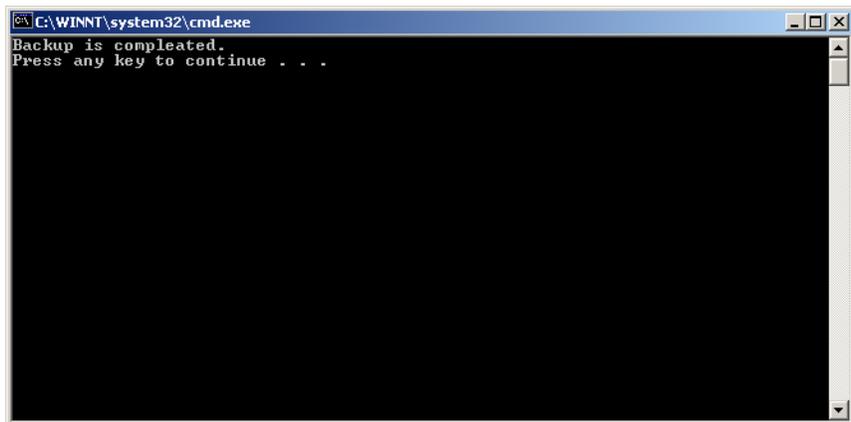
6. Press any key to continue.
   You have completed *Backing Up the Job List Database*.

Restoring the Job List Database

Note: If you are already logged on your system and the Spire CXP6000 color server workspace is open, exit the workspace and proceed to step 3.

1. Turn on your computer.

2. Exit the Spire application.

3. On the Windows desktop, double-click **My Computer**, and follow the path, **D:>Backup>Scripts**.

4. In the D:\Backup\Scripts window, double-click **Restore_Joblist.bat**.
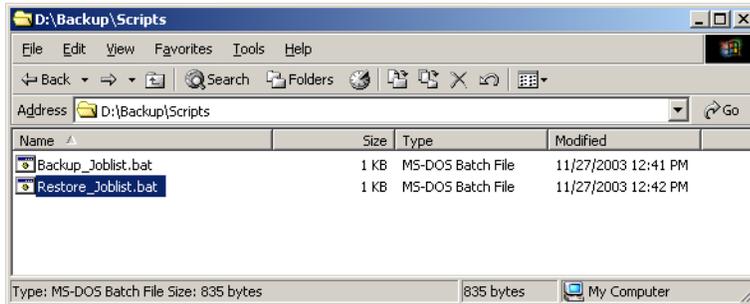
The following message appears.
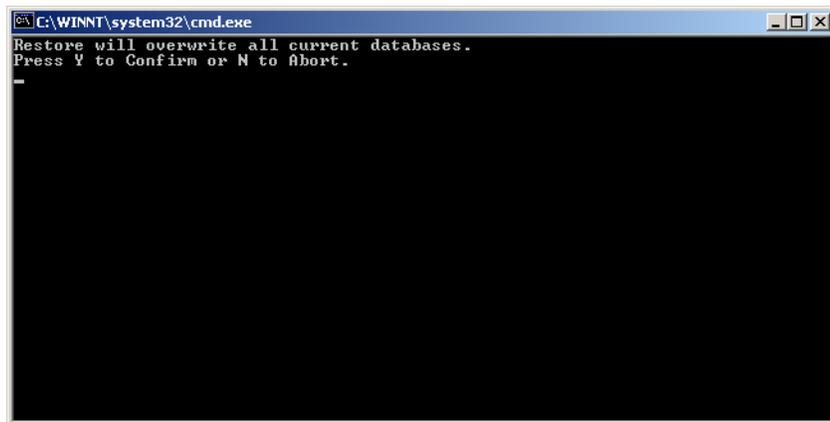
5. Press Y to continue.

The following window appears.
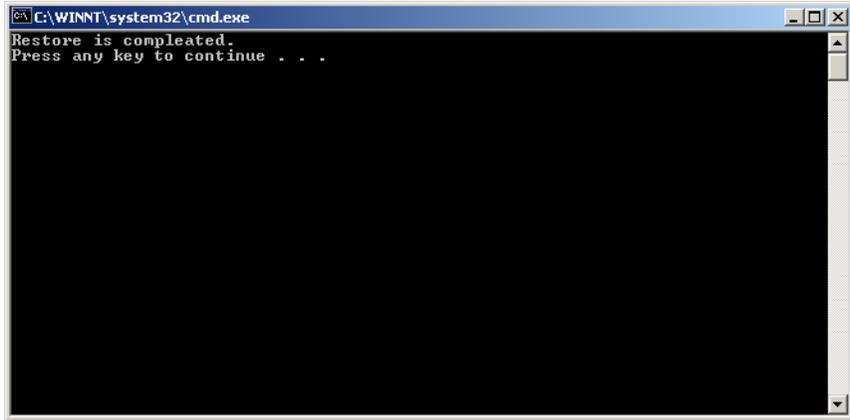
6. Press any key to continue.
    You have completed *Restoring the Job List Database*.

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Glossary

24 bit/3 byte image   An image can be either RGB or CMY and each of the three colors uses 1 byte or 8 bits of data. Since 3 bytes equals 24 bits, these images are also known as 24 bit images. This system is used for high quality video imaging and scanning. For process color printing, a fourth color (black) is added for optimum effect. See also *digital data*.

32 bit/4 byte image   An image that uses 8 bits each for CMYK pixels, or 8 bits for each RGB pixel and 8 pixels for a mask layer or other future use. Since 4 byte 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. See also *digital data*.

4 color printing   Color reproduction method used to create full color output by overlaying cyan, magenta, yellow and black inks.

8 bit/1 byte image   An image limited to 256 tones of one color or 256 different colors. Since 1 byte contains 8 bits and each bit has two choices, 1 byte equals 28 choices or 256 possibilities. See also *digital data*.

Additive color model   Color system in which the picture is composed of the combination of Red (R), Green (G) and Blue (B) light transmitted by the original subject. Effective for monitors and TV's but not for print. Scanners normally first scan in RGB and it is converted into CMYK for printing. See also RGB, CMYK, process colors, subtractive color model.

Amplitude Modulation   Halftone screening, as opposed to FM screening, has dots of variable size with equal spacing between dot centers.

Anti-Aliasing   A step effect in which angled lines or curved edges of elements in an electronic image look broken or jagged, as a result of producing it in a grid format. Increasing resolution can reduce this effect or using a technique called anti-aliasing where the edges are softened.

APR	Creo's Automatic Picture Replacement workflow. In this workflow, two versions of a file are created - a high-resolution file and a low-resolution file called PSImage. The latter is used for positioning and manipulation within a DTP application. The low-resolution file is replaced automatically by the high-resolution version during the RIP process. See also *PSImage*.
Binding	The process by which pages of a book or other publication are attached to one another.
Bit	Abbreviation of binary digits. The smallest unit of information used to store information in a computer. Bits are expressed as a binary notation, that is, in ones and zeros.
Bitmap graphics	An image composed of individual pixels. The color value and position of each pixel are individually described in bits and bytes of computer memory. It is called a bitmap because it is effectively a map of bits. See also *Raster file*.
Bleed	An extra amount of printed image, which extends beyond the trim edge of the sheet or page.
Booklet	VI jobs are composed of booklets, which are personalized copies of a document. A booklet can consist of several pages, but the entire document is targeted at a specific individual or address. VI jobs include elements that may differ from booklet to booklet, including text, graphics, pictures and page backgrounds.
Butt	To join without overlapping or space between.
Byte	A grouping of 8 bits of stored information, giving 256 levels of data. Each byte represents a value or character such as a letter or a number. In a color system, a byte can describe one out of 256 distinct shades.
CIE	Abbreviation for Commission Internationale d'Eclairage. This body was created for the study of illumination problems. CIE color coordinates specify proportions of the three additive colors required to produce any hue and are used for comparative color measurement.
CMYK	The process colors - Cyan, Magenta, Yellow and Black. See also color separations, process color, and subtractive color model.
Color gamut	The range of colors possible with any color system.

Color separations	Separate films are prepared for each of the process printing inks - cyan, magenta, yellow and black. These films are used to prepare the printing plates for printing on press. See also *CMYK*.
Composite mode	In composite mode, the data required to separate a page into its CMYK components is all contained within one single (composite) file. Brisque or PS/M then separates the file into CMYK as part of the conversion process. This processing mode is the fastest and most efficient in the majority of cases. Regarding exceptions see pre-separated mode.
Creep	The effect of middle pages of a folded signature extending slightly beyond outside pages, compensated by shingling. See also *Shingling*.
Crop	To eliminate portions of an illustration or photography so the remainder is more clear, interesting or able to fit the layout.
CT	Abbreviation for continuous tone. Color or black and white photographic images with tones that change gradually from dark to light (unlike the abrupt changes in linework).
DCS	Abbreviation for Desktop Color Separation, an EPS format containing 5 files. Four of the files contain the color information for each of the CMYK colors and the fifth is a low-resolution composite file for use in electronic page layout. See also *OPI*.
Degradé	A gradual blend or transition between colors. Also known as vignette or graduated blend (vector drawing).
Digital front end system	In electronic publishing, this is the workstation or group of workstations containing the applications software for preparing pages of type and graphics. In prepress, this is 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% to a solid ink density at 100%. The size of a single dot is stated in a percentage of the area it occupies.
DTP	Abbreviation for Desktop Publishing. The process of page production using personal computers, off-the-shelf software and an output device such as a printer or imagesetter. Usually, these components form a system that is driven by a device-independent page description language such as PostScript.
EPS	Abbreviation for Encapsulated PostScript, a graphic file format used to transfer PostScript, graphic files from one program to another. It includes both a low-resolution preview and the high resolution PostScript image description. On the Macintosh, the preview is in PICT format, on the PC it is in TIFF format. Also known as EPSF.
Finishing stage	Stage following the press process, which may include procedures such as laminating, perforating and varnishing.
Font	A complete assortment of letters, numbers, punctuation marks, characters etc. of a given design and size.
Frame	A color overlap created intentionally at a color border so as to minimize the effects of misregistration. Also known as trap or grip. See also *Trapping*.
Frequency modulated screens	A method of creating halftones where the spots are all the same size, but the frequency or number of dot changes in a given area. There are more dots in a dark area and fewer in a light area.
Frozen job	A job for which the appropriate paper stock is not available, for example, the correct paper type, paper size or paper weight.
GCR	Abbreviation for Gray Component Replacement. Method for reducing the CMY amounts that produce the gray component in a color, without changing the color hue.
Graduated blend	See *Degradé*.
Gravure printing	A printing method in which the image is engraved through a screen below the surface of a cylinder. The ink is transferred to paper when pressed to the cylinder. Gravure is used for very long print runs and on many substrates.

Gray component	The amounts of CMY in a color, which result in neutral gray, based on the lowest separation value of the color. See also *GCR*.
Grayscale	A scale of gray tones from white to black. Digitally, grayscale images have up to 256 different levels of gray. See also 8 bit images.
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.
Highlights	The whitest portions of the original or reproduction that have no color cast. The highlight dot is ranged in the reproduction from the smallest printable dot to approximately 25%. See also *Midtones* and *Shadows*.
HSL	Abbreviation of Hue, Saturation and Lightness. This is a color model, which specifies a color by its wavelength (Hue), chroma or purity of the color (Saturation) and value of its brightness (Lightness).
Image area	Portion of a negative or plate corresponding to inking on paper. The portion of paper on which ink appears.
Imposition	The arranging of pages in a press form to ensure the correct order after the printed sheet is folded, bound and trimmed.
Ink jet proof	A proof of a digital image printed by using jets that squirt minuscule drops of ink. Ink jet proofers can print onto a variety of surfaces.
Job Flow	Job flow refers to the job parameter settings of selected virtual printers that are automatically applied to all jobs printed using that virtual printer. These settings determine how a sent or imported file is processed. For example, a file sent to a virtual printer with a Process & Print job flow will be RIPped, printed and stored in the Storage Folder. A file sent to a Process & Store job flow virtual printer will be RIPped and stored, without printing.
LEF	A printer page orientation, where pages are delivered long edge first.
Laserwriter driver	A part of the Macintosh system software which generates PostScript instructions from an application file when the Print command is activated.

Look-up table (LUT)	A two or three-dimensional array of values stored for specified input-output relationships. When one input value is known, the system can automatically determine the correct output value. For example, the system can find the needed dot size for a given set of printing conditions based on the stored gray level; color setups can be saved in color tables (color transformation tables) which are one of the many kinds of LUTs.
Linework	Linework graphics are characterized by sharply defined lines and very clear transitions from one color to another. Linework is stored in the computer as a series of geometric (vector) drawing instructions.
Metamerism	Metamerism occurs when two colors match under one light source, but appear different under another light source. 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 the shadows. In the reproduction, midtones are printed with dot areas between approximately 40% or 60%. See also *Highlights* and *Shadows*.
Misregistration	A situation common during printing where one or more of the color separations is slightly misaligned with regard to the others on press. Misregistration shows up as white gaps or tinted overlaps at the borders of color pairs. Colors containing such files are trapped to compensate for this possibility. On Continous Tone images, misregistration can lead to blurring. See also *Overprinting* and *Trapping*.
Moiré	An interference pattern caused by differences in halftone screen angles or rulings. In process color printing, screen angles are selected to minimize this pattern. If the angles are not correct, a pattern that distracts the eye from the picture may be produced.
Newton's rings	Small concentric circles that can appear on film when two surfaces are closed together but not in perfect contact.

OPI	Abbreviation of Open Prepress Interface. A prepress convention established by Aldus Corps. OPI refers to tags or place holders in source PostScript that point to TIFF or EPS images that have not been embedded in the PostScript. These images reside in other locations and are merged with the PostScript file when processed. Normally used for performing high res/low res image substitution (alternative to Creo APR).
Output resolution	The number of laser dots per unit of linear measurement (millimeter, inch etc.) on film or paper.
Output tone curve	A graph showing the relationship of original input densities and the corresponding dot percentages on film.
Overprint	A technique, which overlaps colored elements to eliminate the appearance of gaps between elements caused by misregistration of the various separations during printing. For example, black text is normally set to overprint. See also trapping and misregistration.
PDL	Printer Description Language files (for example, PostScript, PDF, EPS, VPS, VIPP). The CXP6000 Color Server processes image files in PDL formats, converting them into a suitable Ready-To-Print format for direct, high-quality printing.
PICT	A Macintosh file format for bitmaps and vector graphics.
Pixels	Contraction of Picture Element. The smallest element of a digital image.
PostScript®	A programming and page description language that has become industry standard for electronic publishing. It is used to describe the entire page, including both text graphics and images. PostScript is completely independent of the printing device. Developed by Adobe Systems, Inc.™
Prepress	Generic term used to describe the processes involved in preparing images for printing. Includes the input, edit and output stages.
Printer description files	PPDs (PostScript Printer Definition), and PDFs (Printer Definition Files). These files are used by the Macintosh applications to prepare page and documents for specific output devices.
Process colors	The four ink colors used to reproduce full color images - cyan, magenta, yellow and black.

PSImage	A low-resolution EPS file used in the Creo APR workflow. This file is used for positioning in page layout. Changes made to this file will be applied to the high-resolution file, which automatically replaces it shortly before exposure. See also *APR*.
Quartertone	The tone area of an image influencing highlight detail and with density values between the white point and midtone. Typically, printed with a dot area near 25%. See also *Highlight*, *Midtone*, *Shadow*.
Raster file	A file of data that was scanned, processed or output sequentially, bit by bit and line by line. Also known as a bitmap.
Rasterization	The translation of vector information into bitmap information. Bitmaps may also require a new rasterization to comply with the screening parameters (dot shape, dot size) of the imagesetter that will expose them on film. See also *RIP* and *RIPing*.
Register	Fitting of two or more printing images or plates in exact alignment with each other.
Register marks	Crosses or other targets applied to original copy prior to printing. Used for positioning films in register or for register of two or more colors in process printing.
Resolution	The number of pixels, points or dots per unit of linear measurement. For example, pixels per millimeter on a video display, number of dots per inch or millimeter on film or paper.
	The resolution of an image is usually set the same vertically and horizontally. For example, a square millimeter with a resolution of 12 contains 144 pixels. The higher the resolution, the more image detail is recorded and the larger the digital file size.
RGB	Abbreviation for the additive primaries Red, Green and Blue. They are used in video monitors, scanning, and other uses where the light is direct and not reflected. The component colors are the three predominant colors in the visible light spectrum detected by the human eye. Combining these 3 colors together creates white light.
RIP	Abbreviation for Raster Image Processor. This is a software program or hardware device that converts vector information into pixel information to be imaged on an output file. This output file is imaged based on commands from the page description language.

RIPing	The process of rastering or converting bitmaps and vector graphics into raster images suitable to the screening parameters of the output device. Files are RIPed prior to exposure or plotting.
Saturated color	A color where the high and medium values approach 100%. In a saturated clean color, the values of the wanted colors are near 100% and the value of the unwanted color is near 0%. For example, when the color is red, 5% cyan, 90% magenta, 80% yellow is more saturated than 30% cyan, 90% magenta, 80% yellow.
Saturation	The strength of a color.
Screen angle	The angle of rows of halftone dots represented in degrees. During output of films for reproduction, the dot arrangement of each separation film is placed at a distinct and different angle to the other separations. See also *Moiré*.
Screen rulings	The number of rows of printing dots per inch on a halftone film. A 150lpi-screen ruling provides much better quality than 65lpi.
SEF	A printer page orientation, where pages are delivered short end first.
Shadows	The darkest part of an image (original and reproduction) having densities near to maximum density. In the reproduction, shadows are printed with dot areas between 80% and 100% See also *Highlights* and *Midtones*.
Shingling	A procedure that moves the image area of a page toward the direction specified, usually towards the binding, in order to compensate for creep.
Signature	Sheet of printed pages which when folded becomes part of the publication.
Solid	The point in the picture printed with a dot area of 100%. See also highlights, midtones and shadows.
Spectrophotometer	Spectrophotometer (X-Rite DTP41), which is a 24 band color measurement instrument that reports densitometric, colorimetric and spectral data.

Spot color	An additional separation (fifth, or more) that is used with special inks to achieve difficult color combinations, such as gold, or chocolate brown. Spot color is sometimes used by graphic artists to define special corporate colors, for example, for company logos. On the CXP6000 Color Server, spot colors are tanslated into CMYK values using a dictionary, that can be edited to adjust 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.
Stochastic screening	A method of creating frequency-modulated halftones that depends on the number of laser dots in a given area rather than the size of the laser dots in a given area. The dots are randomly placed and very small. Areas with a higher dot percent have more spots exposed in that area and those with a low dot percent have fewer spots. Stochastic screening is used to eliminate moiré and improve picture detail and sharpness in high-end color printing.
Subtractive color model	A color process in which the red, green and blue components of the original subject are reproduced as three super-imposed images in the complementary (subtractive) colors of cyan, magenta and yellow respectively. See also *CMYK*, *Process colors*, *Additive color model*.
Three quartertone	Tone area of an image influencing the shadow detail and with density values between the Midtone and the Dark Point. Typically printed with a dot area near 75%.
Three quartertone	Tone area of an image influencing the shadow detail and with density values between the Midtone and the Dark Point. Typically printed with a dot area near 75%.
Tone compression	The reduction of the density range of an original to the density range achievable in the reproduction.
Tone reproduction curve	A graph showing the density of each point of the original and its corresponding density on the reproduction.
Trapping	Creating and overlap (spread) or an underlap (choke) between colors that adjoin each other to hide misregistration during printing. Trapping is sometimes referred to as spreads and chokes, or fatties and skinnies.

UCR	Abbreviation of Undercolor Removal. This is a method for reducing the CMY content in neutral gray shadow areas of a reproduction and replacing them with black. As a result, the reproduction appears normal but less process color inks are used. See also *GCR*.
Unsaturated color	A color whose highest value is less than approximately 80%. In an unsaturated, dirty color, the difference in the values of the wanted colors and the unwanted color is relatively low.
	For example, when the color is red, 30% cyan, 80% magenta, 70% yellow is more unsaturated than 0% cyan, 90% magenta, 80% yellow.
Variable Information (VI)	Variable information (VI) jobs are jobs in which the printed materials are individualized for specific recipients or purposes. These materials can include bills, targeted advertising and direct mailings.
Vector drawing	The geometric system used to define lines and curves in many computer graphics most often used for line drawings.
Vignette	See *Degradé*.
Virtual Printer	For Macintosh and PC networks, the CXP6000 Color Server provides three default network printers, known as virtual printers. Virtual printers contain preset workflows that are automatically applied to all print jobs processed with that virtual printer.
White point	The whitest neutral area of an original or reproduction that contains detail and is reproduced with the smallest printable dot (typically 3% to 5%).

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