Printing Guide

English

CXP6000 Color Server for DocuColor 2060/2045

version **3.0**

www.creo.com

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CXP6000 Color Server for DocuColor 2060/2045

version 3.0

Printing Guide

creo™

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Patents

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

RE37,376	5,283,140	5,517,359	5,699,740	5,969,872	6,134,393	6,283,589
4,456,924	5,291,273	5,519,852	5,708,736	5,973,801	6,136,509	6,295,076
4,500,919	5,323,248	5,526,143	5,713,287	5,986,819	6,137,580	6,299,572
4,558,302	5,325,217	5,532,728	5,742,743	5,995,475	6,147,789	6,318,266
4,743,091	5,339,176	5,561,691	5,764,374	5,996,499	6,158,345	6,340,817
4,992,864	5,343,059	5,568,595	5,764,381	5,998,067	6,159,659	6,352,816
5,049,901	5,355,446	5,576,754	5,771,794	6,003,442	6,164,637	6,353,216
5,079,721	5,359,451	5,579,115	5,785,309	6,014,471	6,180,325	6,366,339
5,081,617	5,359,458	5,592,309	5,802,034	6,016,752	6,181,362	6,371,026
5,103,407	5,367,360	5,594,556	5,813,346	6,031,932	6,181,439	6,377,739
5,111,308	5,384,648	5,600,448	5,818,498	6,043,865	6,186,068	6,387,597
5,113,249	5,384,899	5,608,822	5,854,883	6,060,208	6,189,452	6,396,422
5,122,871	5,412,491	5,615,282	5,861,904	6,063,528	6,191,882	6,396,618
5,124,547	5,412,737	5,625,766	5,861,992	6,063,546	6,204,874	6,407,849
5,132,723	5,420,702	5,636,330	5,875,288	6,072,518	6,208,369	6,414,755
5,150,225	5,420,722	5,649,220	5,894,342	6,090,529	6,214,276	6,422,801
5,153,769	5,459,505	5,650,076	5,900,981	6,096,461	6,217,965	6,435,091
5,155,782	5,473,733	5,652,804	5,934,196	6,098,544	6,252,522	
5,157,516	5,481,379	5,680,129	5,942,137	6,107,011	6,260,482	
5,208,818	5,488,906	5,691,823	5,946,426	6,112,663	6,266,080	
5,208,888	5,497,252	5,691,828	5,947,028	6,115,056	6,266,134	
5,247,174	5,508,828	5,696,393	5,958,647	6,121,996	6,267,054	
5,249,067	5,509,561	5,699,174	5,966,504	6,130,702	6,268,948	

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 municipalities must handle.

Recycling

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

Packaging Materials

Packaging materials will 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 company in each country.

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Contents

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Using This Guide

Printing Guide Purpose

This Printing Guide will help you operate the CXP6000 Color Server. It can also be used as a reference Guide for questions or procedures. Study this Printing Guide to take full advantage of the many unique and advanced features of the CXP6000 Color Server.

Who Should Use This Guide

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

Chapter Content and Description

Chapter	Contents	Description
Chapter 1	Welcome	Provides an introduction and product overview of the CXP6000 Color Server.
Chapter 2	Quick Tour	Includes powering up, powering down, and a presentation of the CXP6000 Color Server workspace.
Chapter 3	Printing and Setting Job Parameters	Explains how to print, set job parameters and monitor jobs from client workstations and from the CXP6000 Color Server. This chapter also details the several job parameters, and the Job Ticket report.
Chapter 4	Workflows & Tools	Describes the CXP6000 Color Server printing workflows: Imposition, VI, PDF, Color and High Resolution (APR and OPI). This chapter also provides information on the CXP6000 Color Server tools.
Chapter 5	Administrating the System	Explains how to administrate your system using the Administration window utilities.

Chapter	Contents	Description
Chapter 6	Managing Jobs	Provides details on handling jobs in the **Queue Manager** and in the **Storage Folder.** It also explains how to manage disk space by deleting jobs, and how to use the Thumbnail window and the Job Preview & Editor tool to preview and edit your jobs.
Chapter 7	System Messages	Describes the various alerts and error messages. This chapter also provides explanations about viewing messages in the Job History, Message Viewer, and Alerts windows.
Chapter 8	Job Accounting	Provides details about managing job accounting using the Accounting window.
Appendix A	Color Theory	Provides background information on color.

Conventions Used in This Guide

This section describes the fonts, terminology, and symbols used in this guide.

Fonts

Frutiger bold is used to refer to buttons and other items in a dialog box, file names, folders, menu names, and menu commands.

Minion Italic is used to refer to other chapters in the guide, book titles, and titles of other guides.

Frutiger is used for figure and table captions.

`Letter Gothic` is used for messages on your computer screen and for information that you must type.

SMALL CAPS is used for a key or key combination on your keyboard.

Terminology

Clear	Place the mouse pointer over the check box for the specified option, and click the left mouse button so that the X or check mark is removed from the check box.
Click	Place the mouse pointer over the specified option or button and press and release the left mouse button.
Double-click	Place the mouse pointer over the specified option or button and quickly press and release the left mouse button twice.
Drag	Hold down the left mouse button while moving the mouse and release the button.
Enter	Type the information and press the ENTER or RETURN key.
Point	Position the mouse pointer over a submenu or menu command. For example, point to the **File** menu.
Press	Press the specified key or key combination on your keyboard, for example, press CTRL+ALT+DEL.
Right-click	Place the mouse pointer over an area of the application window, and then press and release the right mouse button to display the shortcut menu. For more information about using shortcut menus, see your Windows documentation.
Select	Place the mouse pointer over the check box for the specified option, then click the left mouse button so that an X or check mark appears in the check box. Or: Place the mouse pointer over the specified box or button, and then click the left mouse button.
Type	Type the information. Do not press the ENTER or RETURN key.

Symbols

Attention: This symbol alerts you to things that may cause loss of data or damage to your computer hardware.

Important: This symbol tells you about things that may cause process delays or reduce functionality, reliability, or quality.

Note: A note provides additional information that you may need to consider.

Tip: This symbol draws attention to information that can help you perform a task more quickly or easily.

This symbol tells you that related information on the topic is available in the online help.

The reference symbol tells you that related information on the topic is available in another document or in another place in the guide.

This symbol indicates that you should perform a spot check to ensure equipment and / or software has been correctly installed and is in working order.

For More Information

Visit Creo at www.creo.com for documentation, training courses, downloads, and service and support contacts.

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1

Welcome

Welcome to the CXP6000 Color Server Printing Guide

Welcome to your CXP6000 Color Server Printing Guide.

The CXP6000 Color Server is a powerful, comprehensive color server providing high throughput and print predictability to digital workflows. In combination with the Xerox DocuColor 2060/2045 Printer, the 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.

Product Overview

The CXP6000 Color Server is an on-demand pre-press system that uses Creo Spire advanced pre-press technologies, to drive a Xerox DocuColor 2060/2045 Printer.

As an optimal digital color solution for printers, the CXP6000 Color Server enables you to print from PC, Macintosh, and UNIX client workstations. The CXP6000 Color Server processes image files in 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 CXP6000 Color Server also streamlines the printing process by allowing printing with preset workflows.

In combination with the Xerox DocuColor 2060/2045 Printer, the 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 CXP6000 Color Server, the Xerox DocuColor 2060/2045 Printer prints up to 60 full-color A4 (210mm x 297mm) or Letter (8.5 inches x 11 inches) pages per minute.

The CXP6000 Color Server combines RIP functionalities, automation, control tools and special hardware development capabilities with PC architecture.
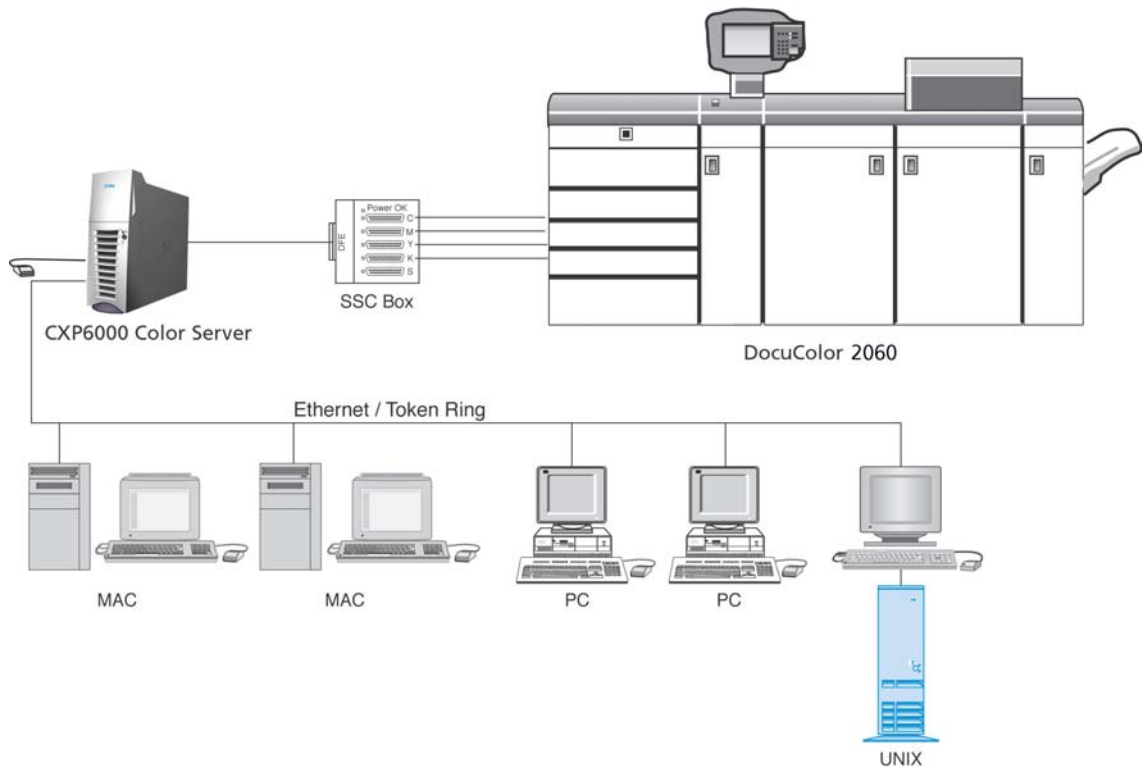
CXP6000 Color Server for Xerox DocuColor 2060/2045 Printer

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.

Composition

The CXP6000 Color Server is a dedicated Creo platform running in a Windows 2000 environment.

The CXP6000 Color Server includes:

- Creo hardware, including the interface board
- Software, including:
  - ❑ Creo Application Software
  - ❑ Windows 2000 Professional Operating System
  - ❑ The latest version of Adobe Acrobat
  - ❑ Ultimate InSpire Software

Features

The CXP6000 Color Server provides the following:

- **Creating jobs in RTP format**
  Using the CXP6000 Color Server, RTP files can be created and stored on the 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 2060/2045 Printer, the 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 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 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 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 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 – FAF (Full Auto Frame)**
  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**
  The 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 CXP6000 Color Server offers a full suite of Imposition functions, based on the well-known Ultimate Imposition engine. On the CXP6000 Color Server, imposition is robust with user-friendly operation. And only the CXP6000 Color Server enables imposition of Variable Information jobs.

- **Color Management**
  The CXP6000 Color Server has a number of color management tools and utilities that will help you to improve the quality of your jobs. The 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 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 CXP6000 Color Server also provides easy management of VI elements, including previewing, deleting and updating. The 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 Quark Express software plug-ins and extensions that facilitate printing with the CXP6000 Color Server. These extensions are located in the shared **Utilities** folder on the CXP6000 Color Server or on CD #3 supplied with the CXP6000 Color Server software kit.

The CXP6000 Color Server supports the following file formats:

- Post-script (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

Workflow

The CXP6000 Color Server receives and processes files from the following client workstations:

- Macintosh: running Mac OS 8.5.x or higher and Mac OS X (10.1 and higher).

- PC: running Windows 98 / ME / Windows NT 4.0 / 2000 / and XP

- UNIX Workstations and Servers

The CXP6000 Color Server basic workflow is as follows:

```
┌─────────────────────────────────┐
│ User activates Print in the DTP │
│ Application (For example, in    │
│ Microsoft PowerPoint)           │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│ User selects one of the default │
│ CXP6000 Color Server Virtual    │
│ Printers (for example ProcessPrint) │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│ The file is spooled to the      │
│ CXP6000 Color Server            │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│ The file processing begins      │
│ according to the settings       │
│ predefined in the file or for the │
│ selcted Virtual Printer         │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│ The job is stored in an RTP format │
│ in the Storage Folder of the    │
│ CXP6000 Color Server and is sent │
│ for printing (depending on the  │
│ selected Virtual Printer)       │
└─────────────────────────────────┘
```

Data Flow

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

The CXP6000 Color Server Data Flow is as follows:

1. The input file arrives at the 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.

CXP6000 Color Server Network Printers

For Macintosh and PC networks, the 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 Folder** 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 2060/2045 Printer via the 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 Folder** of the CXP6000 Color Server until the print operator re-submits them for printing.

With printing workflows tailored to your job requirements, the 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 *Virtual Printers* on page 261.

2

Quick Tour

Powering Up

To power up the CXP6000 Color Server:

1. Switch on the monitor.

2. Click the **Power** button on the front panel of the CXP6000 Color Server.
   The power LED on the front panel lights-up. The Windows 2000 System starts and the CXP6000 Color Server splash appears.

Note: If the CXP6000 Color Server is already powered up, open the workspace using the **Start** menu (as described on the following page).

CXP6000 Color Server in the Start Menu

The CXP6000 Color Server program group appears in the Windows **Start** menu.

To open the CXP6000 Color Server workspace:

➢ Click the **Start** button and follow the path **CXP6000>CXP6000**.
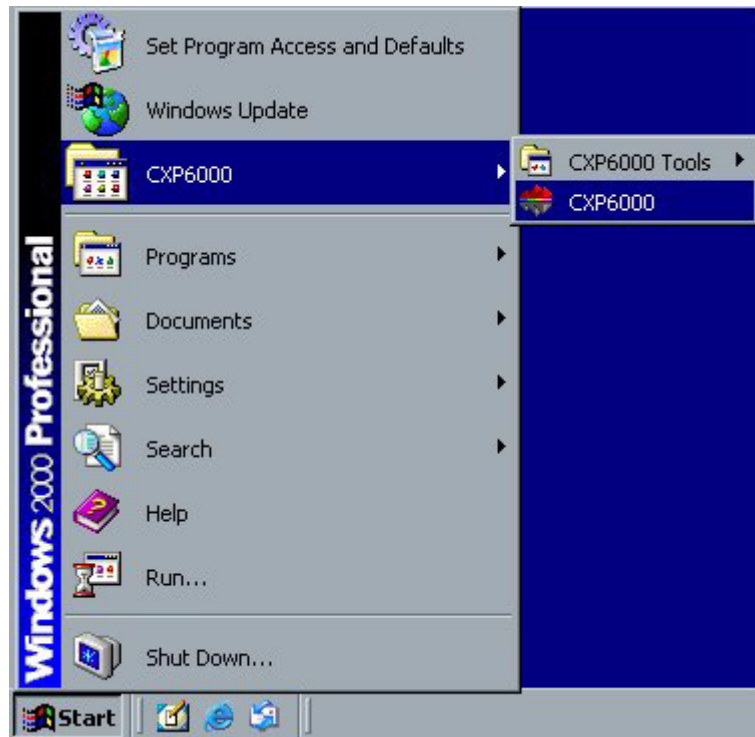
The Loading Drivers window appears followed by the CXP6000 Color Server workspace.

Note: The CXP6000 Color Server includes a diagnostics utility for checking the hardware components of the system. This application should only be started by a Service Engineer.

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

The CXP6000 Color Server Workspace

After the CXP6000 Color Server is powered up, the CXP6000 Color Server workspace automatically appears.

The workspace area items are described on the following page.

Item	Name	Description
1	**Menu Bar**	The **Menu** bar includes the **Job**, **Selection**, **Tools**, **Control** and **Help** menus. Click on a menu name to open the corresponding drop-down menu.
2	**Status Panel**	The **Status** panel includes the **Logo Pane**, **In Process** pane, **In Print** pane and the **Storage Folder** pane. In addition, the **DFE & Printer Animation** is displayed on the right.
3	**Pathways Panel**	The **Pathways** panel buttons enable you to open / close a workspace window.
4	**Queue Manager**	The lower area of the **Queue Manager** consists of the **In Process** queue, which lists the files to be processed. After a file has been processed successfully, it moves to the upper area - the **In Print** queue and waits to be printed, or the file moves to the **Storage Folder** for future printing (depending on the job flow). Failed jobs and jobs that cannot be successfully RIPped also move to the **Storage Folder**.
5	**Job Thumbnail**	The **Job Thumbnail** displays the thumbnail view of a specific page in an RTP job that has finished processing.
6	**Storage Folder**	The **Storage Folder** contains files that: • completed printing • were held, aborted or failed during processing or printing • were sent directly from the client to storage or were imported to the **Storage Folder**.

The DFE & Printer Animation

The **DFE & Printer Animation** is displayed on the right of the **Status** panel and presents an animation of the DFE and Printer in their current configuration. If for example an HCS is connected to the printer, an HCS representation will also appear in the printer animation. You may click the **Printer** or **DFE** animation to display related information.

DFE Animation   Printer Animation
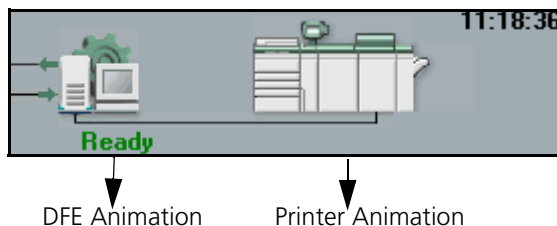
The DFE Monitor

Clicking the **DFE Animation** opens the DFE Monitor window. This window displays information regarding Disk space, Network details and connected Virtual Printers.

The Disk Usage Tab

The **Disk Usage** tab enables you to view of the free and used disk space details, in the User and Printer disks.
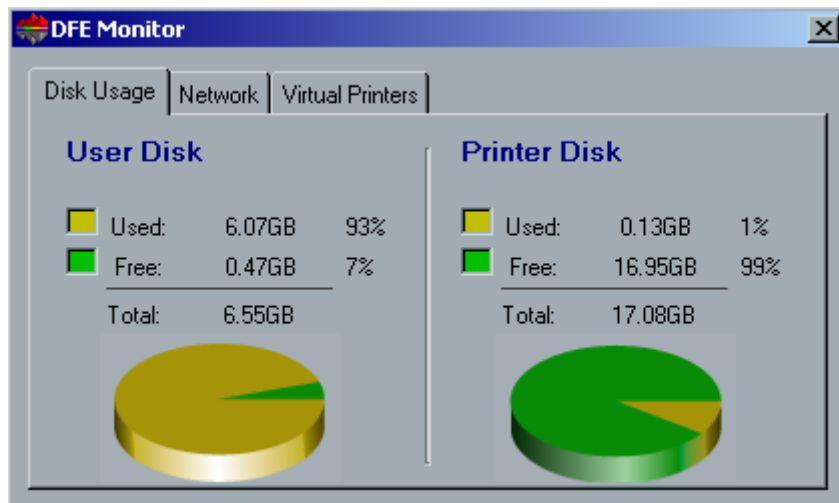
The Network Tab

The **Network** tab enables you to view the network details such as Host name, IP address, etc.
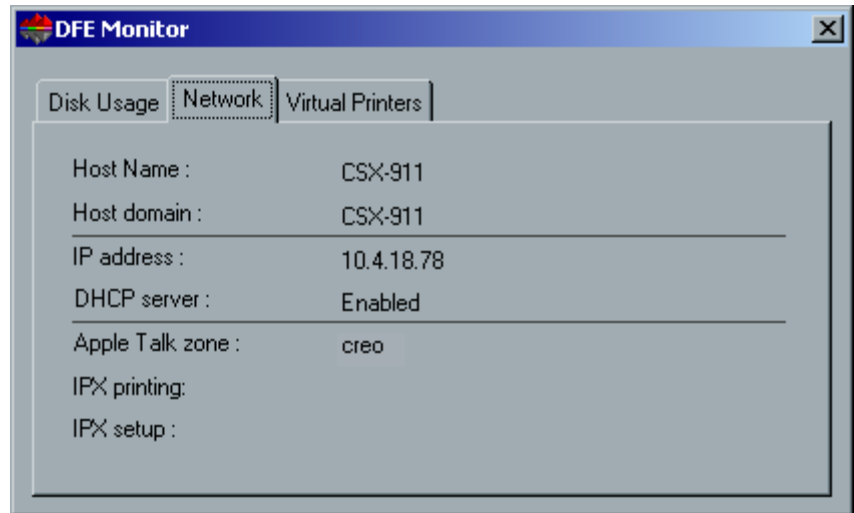
The Virtual Printers Tab

The **Virtual Printers** tab enables you to view the defined virtual printers and their published status.
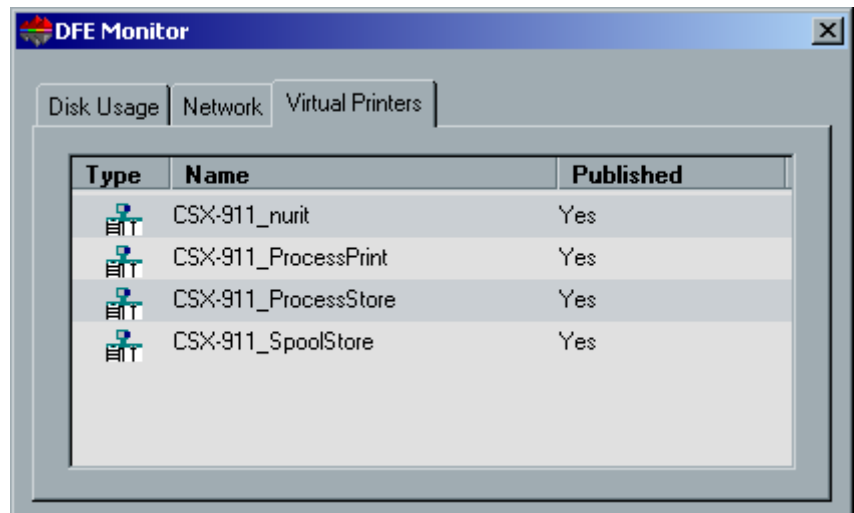
The Printer Monitor

Clicking the **Printer Animation**, opens the Printer Monitor window.

The Printer Monitor window enables you to view information related to the printer resources such as paper stock, connected devices, toner and other consumables status.

The Paper Stock Tab

The **Paper Stock** tab displays the details of the paper stock in each tray and also shows if this tray is ready or empty.
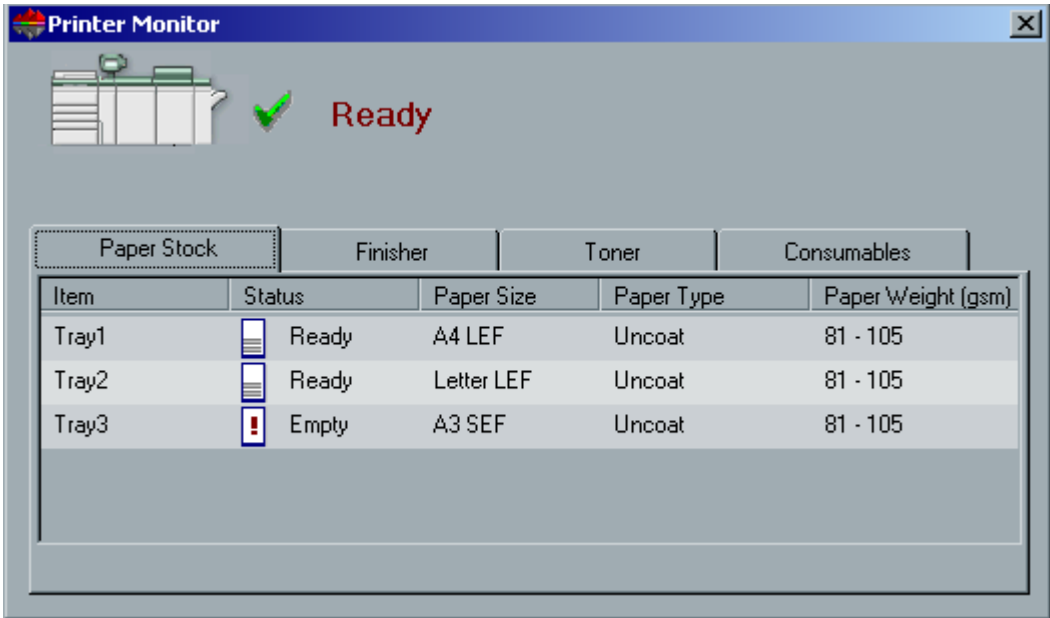
The Finisher Tab

The **Finisher** tab displays the details of connected finishing devices.

	Paper Stock	Finisher	Toner	Consumables		

Item	Top Tray	Stack Tray	Offset	Stapler	Staples
Finisher OCT	Ready	N/A	N/A	N/A	N/A
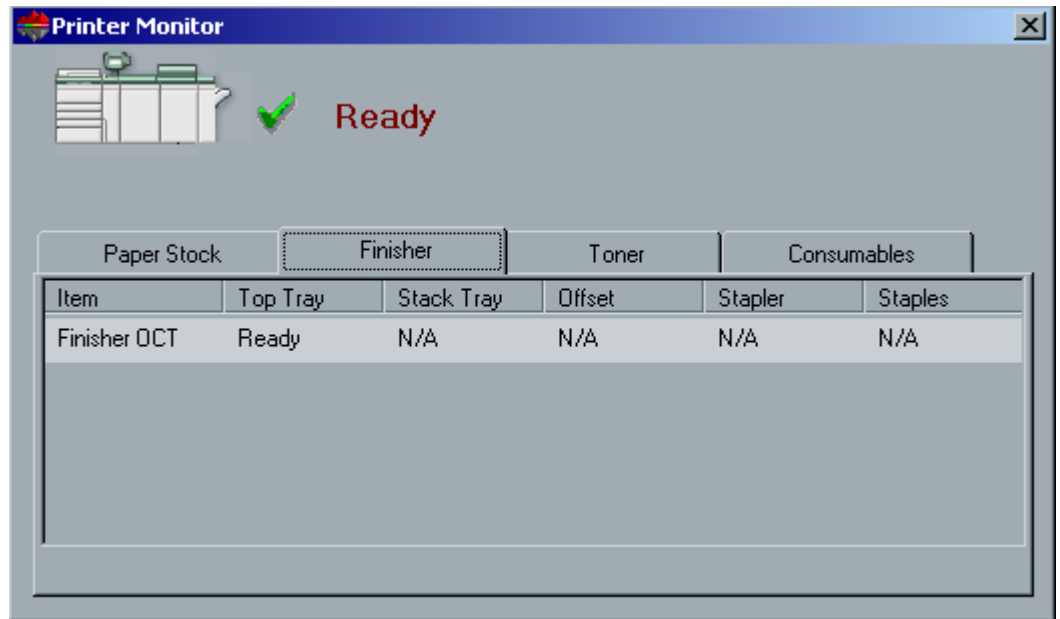
The Toner Tab

The **Toner** tab displays the CMYK toner availability.
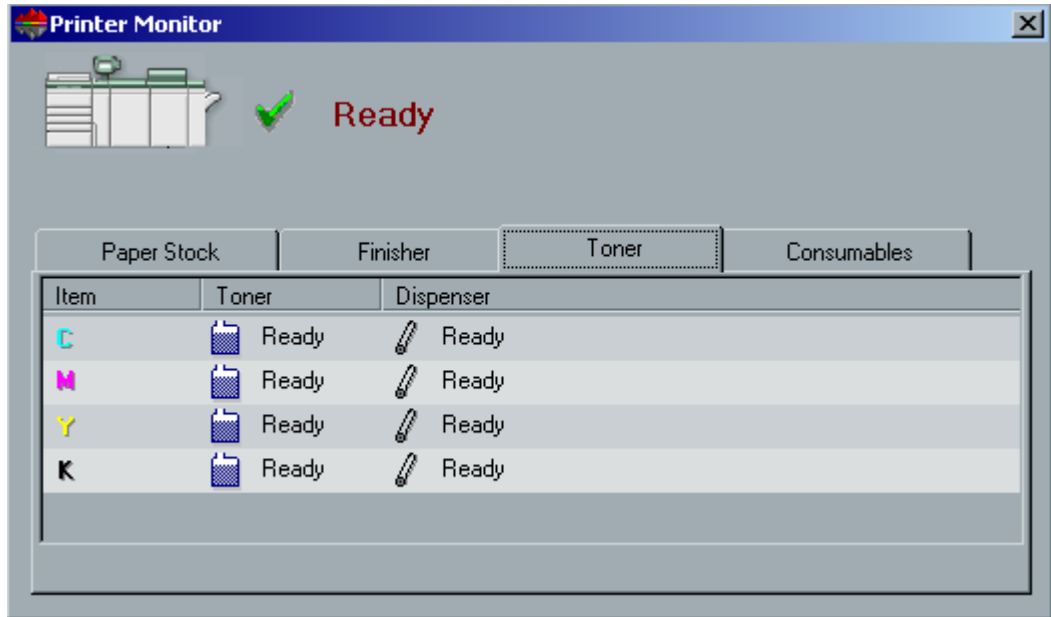
The Consumables Tab

The **Consumables** tab displays the status of other refillables.
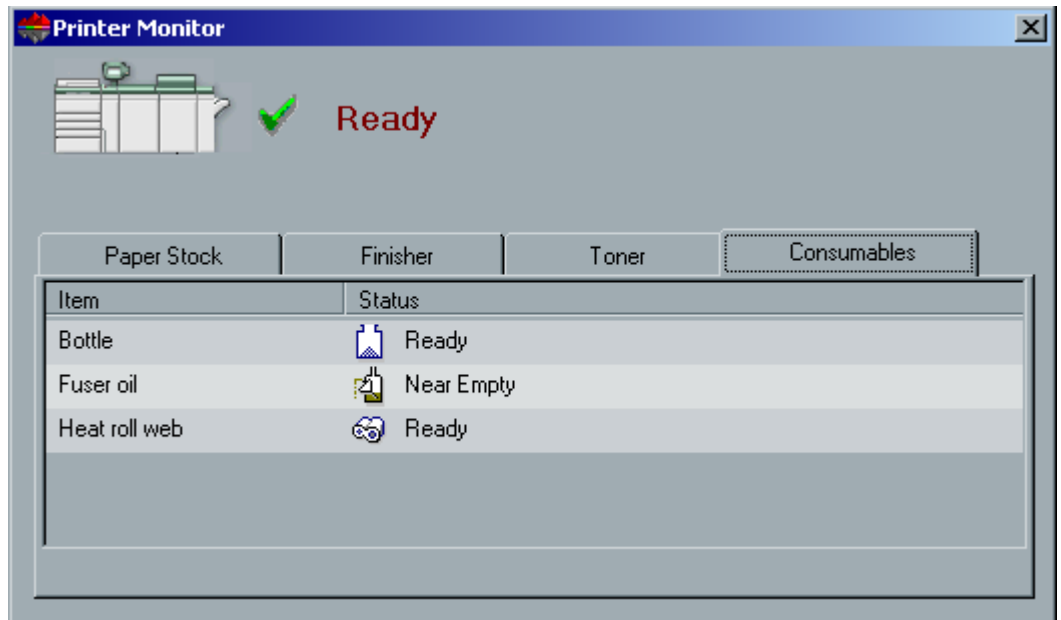
Shut Down and Power Off

To shut down and power off the CXP6000 Color Server:

1. In the CXP6000 Color Server workspace, from the **Job** menu select **Exit**.
    Or:
    Click ⊠ in the top right hand corner of the CXP6000 Color Server workspace.
    The CXP6000 Color Server workspace closes and you are returned to the Windows desktop.

    Note: If there are jobs that are being processed or printed a message will be displayed.

2. Verify that the Spire icon has disappeared from your taskbar.

    Taskbar without Spire logo   Taskbar without Spire logo

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

4. In the Shutdown window, select **Shut down**.

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

6. On the CXP6000 Color Server, click the **Power** button behind the front door.
    The power LED on the front panel goes off.

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

3

Printing and Setting Job Parameters

Introduction

This chapter explains how to print from client workstations (PC, Macintosh and Unix) and how to set job parameters using the PPD parameters. It also provides information about the Spire Web Center and how this web tool can be used to monitor your jobs in the CXP6000 Color Server queues, from your client workstation.

This chapter also explains how to import files to the CXP6000 Color Server for printing and set job parameters using the Job Parameters window.

In addition, detailed information is provided on the various job parameters and about the Job Ticket report.

Printing from Client Workstations

In order to print a job from a client workstation you may select one of the following methods:

- Print the job on one of the CXP6000 Color Server network (virtual) printers, for example ProcessPrint.
  The job will then be spooled and processed or printed (according to the selected job flow of the virtual printer). Using this method, you may print from any application (for example, Microsoft Word) using any file format, from any client workstation (PC, Macintosh and UNIX).

- Drag the job to a required hot folder.
  The job will then be spooled and processed / printed (according to the selected job flow of the corresponding virtual printer).

 For further information on hot folders, see *Using Hot Folders* on page 30.

Using this method, you may print most PDL (Page Description Language) files, for example, PostScript, PDF, EPS, VPS, VIPP are supported for print on the CXP6000 Color Server.

 Note: PDL jobs that are spooled to the CXP6000 Color Server, must have the appropriate name extensions, for example: *.ps or *.pdf.

Printing from a PC

To print from a PC:

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 CXP6000 Color Server network printer (for example, Spire_ProcessPrint).

For details on installing the CXP6000 Color Server network printers on client workstations see the *CXP6000 Color Server Installation Guide*.

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

Notes:

Any changes to the printer parameters override the parameters of the
selected virtual printer, unless the virtual printer was specified the
Override PPD Parameters options was selected.

Printer's Default indicates that the value is taken from settings of the
selected virtual printer on the CXP6000 Color Server.

5. Click **OK.**

6. Click **OK** in the Print window.
    The file is sent to the CXP6000 Color Server.

Printing from a Macintosh

To print from a Macintosh computer:

1. Open the file you would like to print, in the corresponding application (for example open a Word document in Microsoft Word).

2. From the **File** menu, select **Print**.
   The Print window appears.

```
                                                               Z2-8.7
Printer:  [ Color_ProcessPrint        ◆ ]    Destination: [ Printer  ◆ ]
┌[ General                      ◆ ]──────────────────────────────────┐
│                                                                     │
│              Copies: [1        ]   ☐ Collated                       │
│                                                                     │
│              Pages: ◉ All                                           │
│                     ○ From: [      ]   To: [      ]                 │
│                                                                     │
│       Paper Source: ◉ All pages from:  [ Auto Select          ◆ ]   │
│                     ○ First page from: [ Paper               ◆ ]    │
│                       Remaining from:  [ Paper               ◆ ]    │
│                                                                     │
└─────────────────────────────────────────────────────────────────────┘

[ Save Settings ]                          [ Cancel ] [[ Print ]]
```
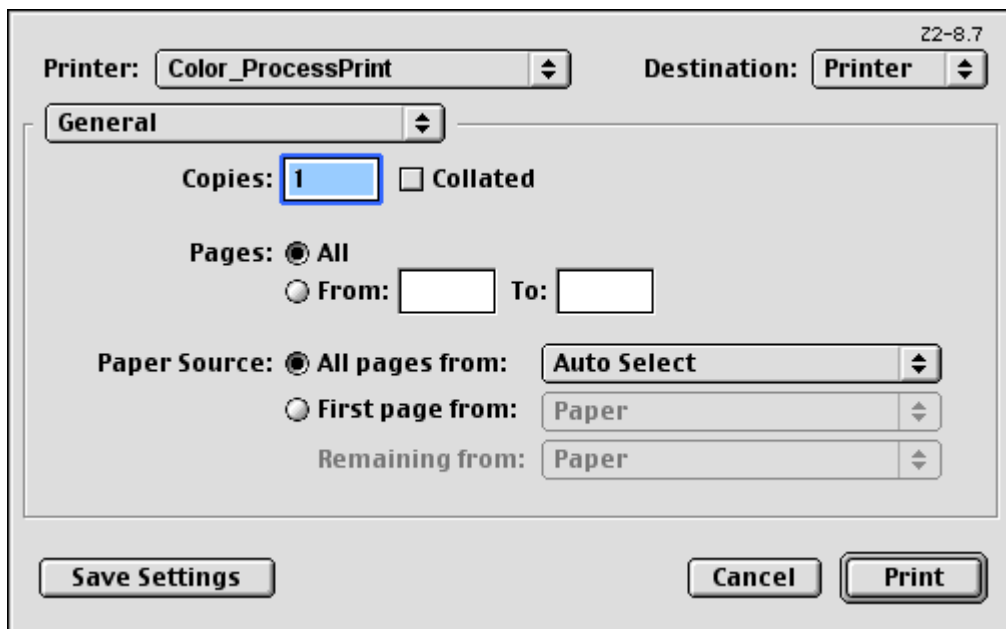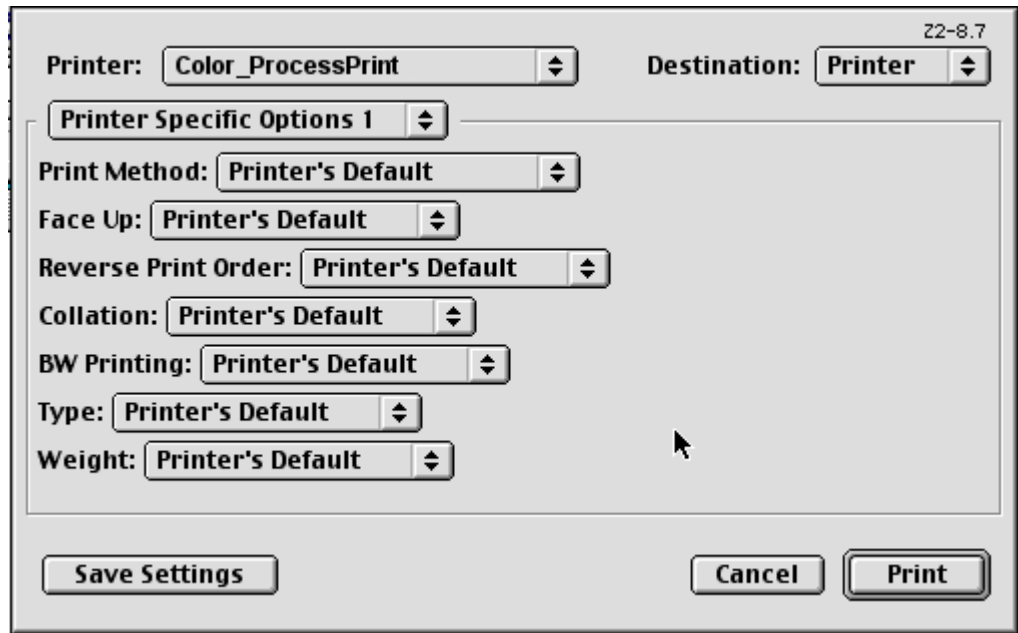
3. From the **Printer** list, select the required printer (for example, Color_ProcessPrint).

For details on installing the CXP6000 Color Server network printers on client workstations see the *CXP6000 Color Server Installation Guide*.

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:

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

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

6. After modifying the job settings, click **Print**.
    The file is sent to the CXP6000 Color Server.

Printing from a UNIX Client Workstation

To print from a UNIX client through LPR:

1. Type the following:

   ```
   <lpr><space><-S><space><server name><space>
   <-P><space><local UNIX printer name><space><PS file
   name>
   ```

   For example, to print frog.ps on a printer named ProcessPrint, type:
   `lpr -S OPAL4-P ProcessPrint frog.ps.`

   For details on installing the CXP6000 Color Server network printers on client workstations see the *CXP6000 Color Server Installation Guide*.

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

   Notes:

   Use alphanumeric and underscores for names. Names are case sensitive, for example ProcessPrint not processprint.

   UNIX does not require PPDs to print jobs.

Using Hot Folders

For every published CXP6000 Color Server network printer that is defined on a client workstation, a corresponding hot folder is automatically created in the CXP6000 Color Server **D:\Hot Folders** folder.

Each hot folder carries the virtual printer's name (HF_printer's name). See the following graphic.
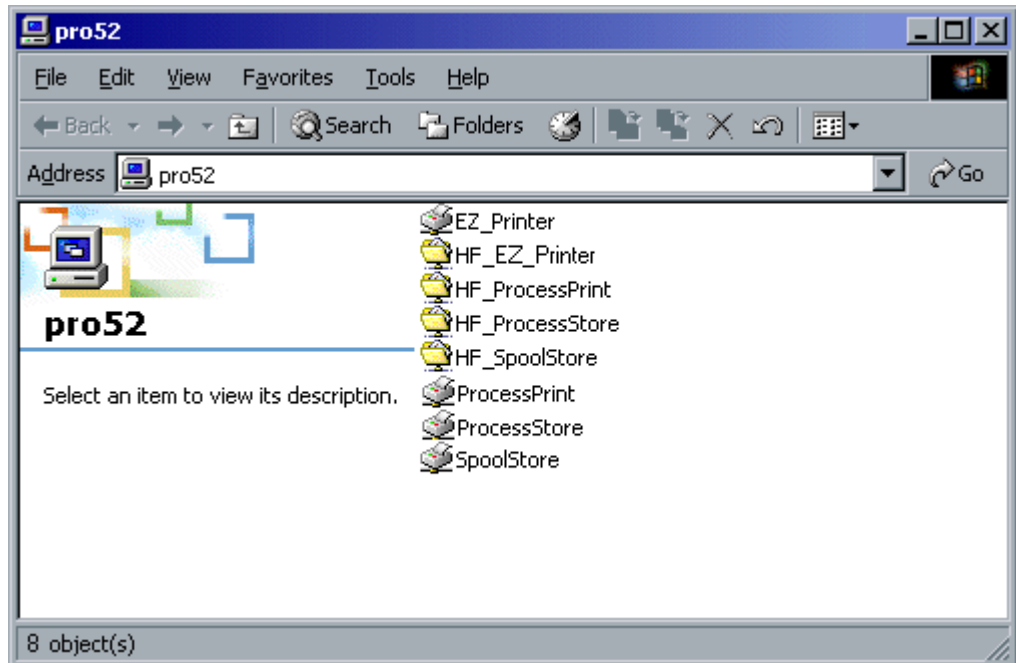
Use the hot folder to submit PDL jobs to the CXP6000 Color Server, by connecting from a client workstation to the CXP6000 Color Server over the network. When connection is established, drag and drop your jobs onto the required hot folder (according to the selected workflow).

Tip: You may 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 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 CXP6000 Color Server, it disappears from the hot folder and enters the CXP6000 Color Server **In Process** queue or **Storage Folder**, according to the selected workflow.

Note: If files are sent for printing through a hot folder while the CXP6000 Color Server application is down, whenever 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 files formats that are supported by the 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 CXP6000 Color Server and will remain in the hot folder.

Hot folders and Brisque / Prinergy jobs (GAP formats)

While using hot folders to print GAP format jobs, the process is automated and the job is converted to a PDF that is displayed in the CXP6000 Color Server queues. The PDF files can then be programmed and printed as any other PDF file.

For further information on supported GAP formats see *Printing PrePress Files - Graphic Art Port (GAP)* on page 248.

Using Hot Folders from Client Workstations

You may process and print files from any client workstation, using hot folders. Following are detailed explanations for printing using hot folders from a PC, from Macintosh O/S 9 and from Macintosh O/S X.

To print a job through a hot folder from a PC:

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

2. Browse to the location of your CXP6000 Color Server.

3. Double-click the CXP6000 Color Server.
   A list of all the shared folders and hot folders appears.
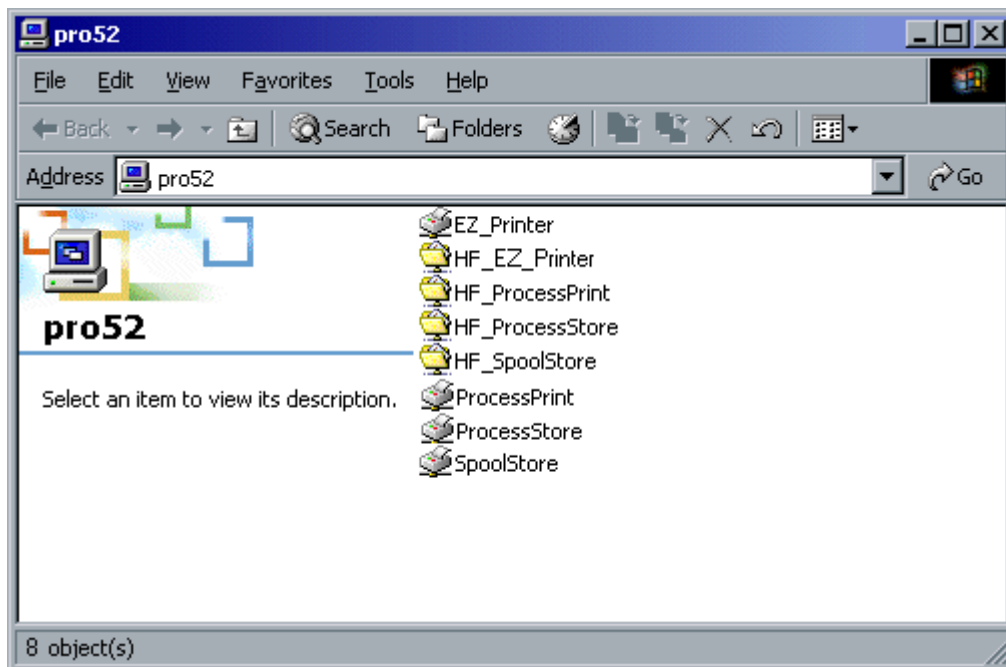
4. Double-click the required hot folder, for example **HF_ProcessPrint**.

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

5. You may now drag and drop 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 through a hot folder from Macintosh O/S 9:

1. Click the **Apple** menu and then select **Chooser**.
   The Chooser window appears.
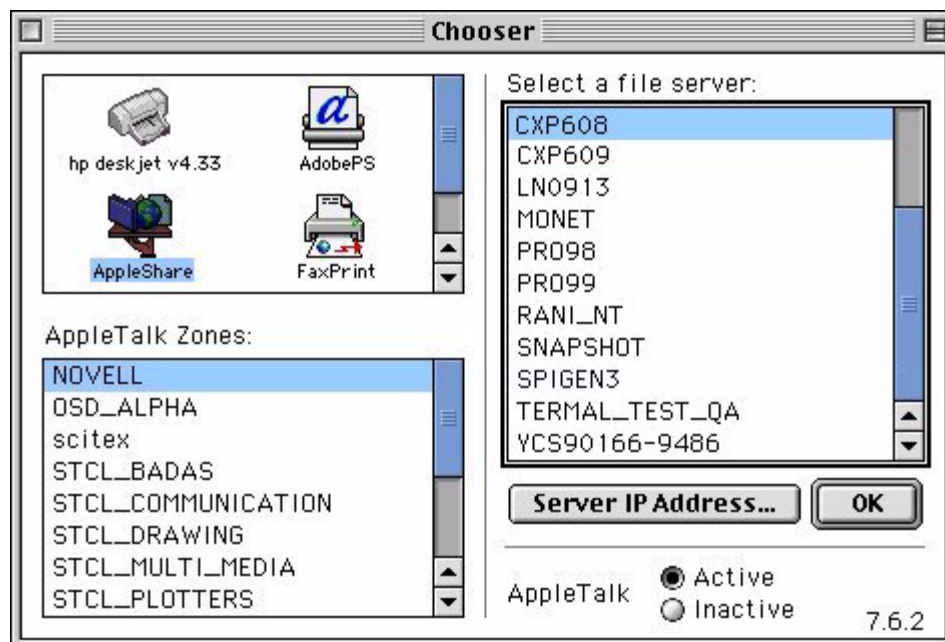
2. Browse the network to the CXP6000 Color Server, and click **OK**.
   The Login window appears.

3. Select **Guest** and click the **Connect** button.
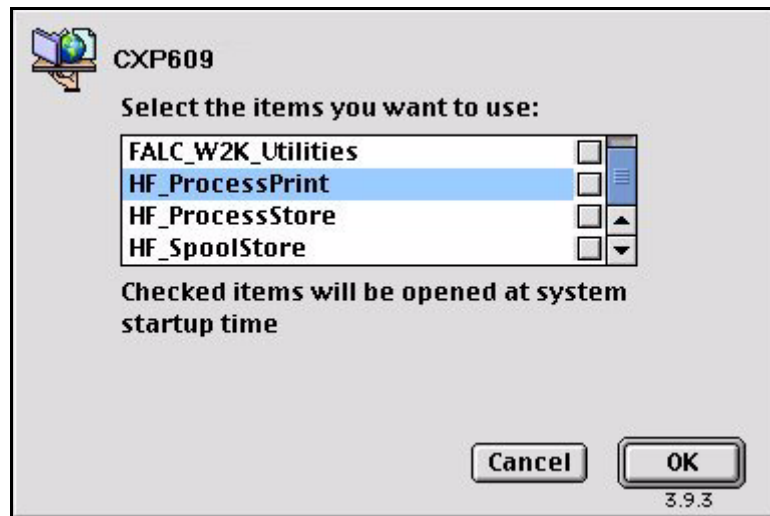
4. From the list, select the required hot folder, for example **HF_ProcessPrint**, and click **OK**.
   The hot folder icon appears on your desktop.

5. You may now drag and drop 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 through a hot folder from a Macintosh O/S X:

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

The Connect to Server window appears.
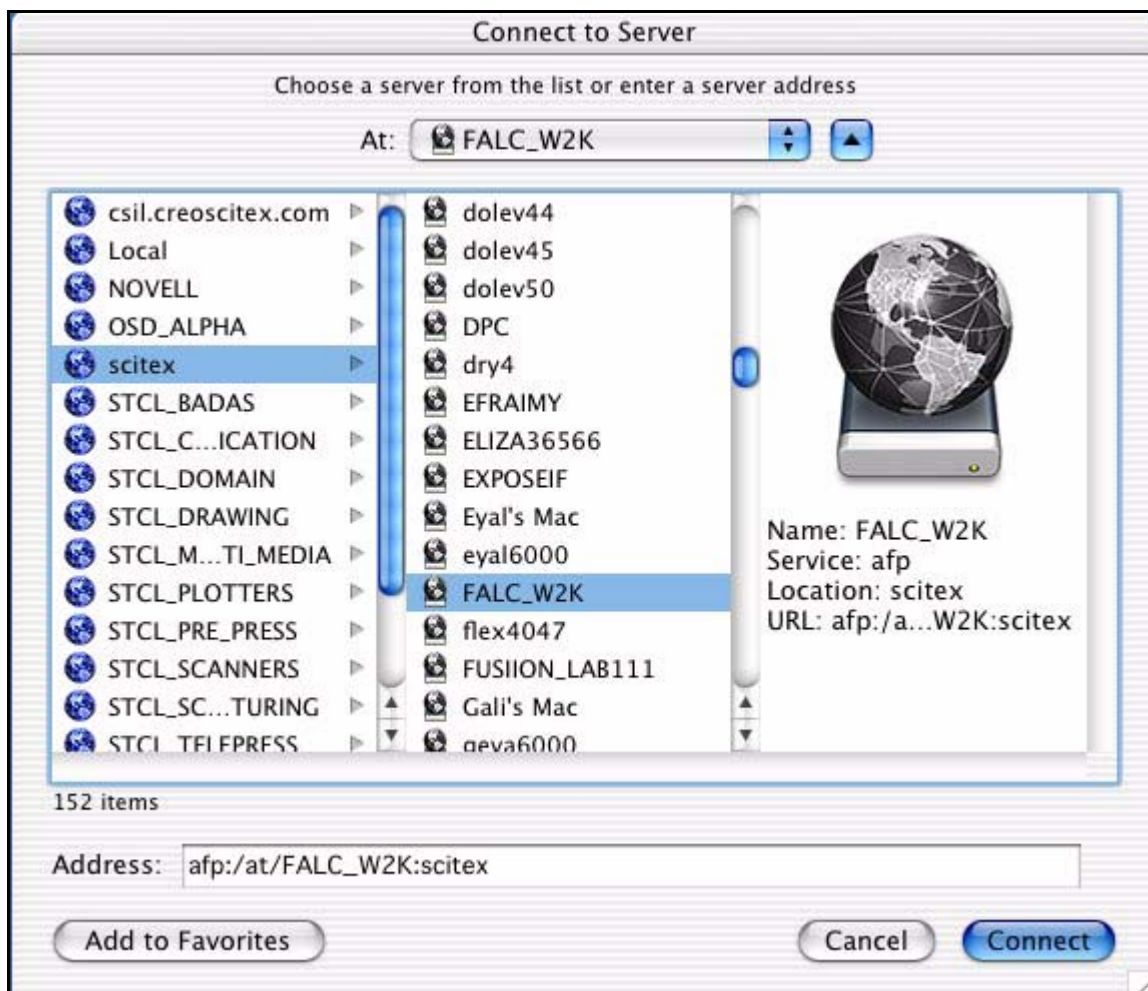
2. Browse the network to your CXP6000 Color Server and click the **Connect** button.

The Login window appears.

Connect to the file server "FALC_W2K" as:

○ Guest
○ Registered User

Options...   Cancel   Connect

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

FALC_W2K

Select the volumes you wish to mount

FALC_W2K_Shared
FALC_W2K_Utilities
HF_ProcessPrint
HF_ProcessStore
HF_SpoolStore

Character Set :   Western (Mac)

Cancel   OK

HF_ProcessPrint

4. From the list, select the required hot folder, for example
    HF_ProcessPrint, and click **OK**.
    The hot folder icon appears on your desktop.

5. You may now drag and drop 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.

Setting PPD Parameters from Client Workstations

Setting job parameters from a client workstation can be done through the CXP6000 Color Server PPD or by defining a virtual printer with predefined PPD settings.

By using the CXP6000 Color Server PPD:

➢ Through the Print window of your application, select print settings specific to printing to the CXP6000 Color Server.

**By defining a virtual printer:**

➢ Set job parameters when creating or editing a Virtual Printer. These settings become the **Printer's Default** options.

PPD Parameters

The following table lists the PPD (PostScript Printer Description) parameters and the printing options that can be selected from the Print window of an application.

Notes:

In the PPD file, the **Printer Default** option is presented for all PPD parameters. **Printer's Default** corresponds to the settings of the currently-selected virtual printer.

When setting or adjusting job parameters, the last-modified or applied parameter settings 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 submitted to the system with **BW Printing** selected in the PPD. This selection ensures that grayscale images are counted as black and white instead of color in both the CXP6000 Color Server and in the Xerox DocuColor 2060/2045 Printer billing meters.

PPD Parameter	Printing Options
Print Method	**Simplex** prints single-sided pages (Printer Default). In **Duplex Head to Toe**, the image on the reverse side of sheet is rotated 180 degrees. It 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 orientating for imposition. **Portrait** specifies a portrait orientation for imposition.
Face-Up	**Face Up** delivers the pages facing up on the printer. **Face Down** delivers the pages face-down on the printer (when printing confidential documents).
Reverse Print Order	**Yes** starts printing from the last page. **No** starts printing from the first page.
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.
Color Mode	**Grayscale** prints all pages using black (K) toner only. **Color** prints all pages using all CMYK toners. With **Color, Print grays using black toner** all grayscale RGB images are printed using black toner only. If you would like 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 CSA in the image, select **Use Source CSA**. To replace CSA with RGB, select: **Use Spire RGB 1.8, Use Spire RGB2.1**, **Use Spire RGB 2.4**, **Use sRGB**, or **Use Adobe RGB**.

PPD Parameter	Printing Options
Rendering Intent for RGB	Rendering Intent defines how colors are compressed from Lab 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 RI methods for RGB images.)
CMYK Workflow	Select whether to **Use Source CSA** or **Ignore Source CSA** for your CMYK image.
Rendering Intent for CMYK	Rendering Intent defines how colors are compressed from Lab 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 RI methods for CMYK images.)
Calibration	**Normal** prints using the normal LUT (Look-Up table, which is the calibration table name). **Saturated** prints using the saturated LUT. **None** prints without calibration, thus there is no balance between colors and gives no color calibration data.

PPD Parameter	Printing Options
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%).**
Contrast	Contrast settings can be applied to RTP jobs without re-processing (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**.
Type	Select **Paper** or **Transparency** as the media.
Weight	Select the required paper weight from the drop-down list. The following ranges are listed: **64-74**, **81-105**, **106-135**, **136-150**, **151-220** and **221-300** For example, **81-105** gs/ m prints on **81-105** gsm paper.
Coating	**Coated** prints on coated paper. **UnCoated** prints on uncoated paper.

PPD Parameter	Printing Options
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**.
Black Overprint	**Yes** provides better printing quality (as in FAF) and a richer, deeper black with the underlying CMY values equal to the 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.

PPD Parameter	Printing Options
PS Overprint	PS (PostScript) Overprint offers the option to use the overprint, which exists in the PS file. It also determines whether the DTP application PS Overprint settings are honored in the RIP. 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 CXP6000 Color Server results in no overprinting. The CXP6000 Color Server can not create PS Overprint that is not pre-defined 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 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.
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.
CMYK Emulation	Select a CMYK emulation: **Printer's Default** (None), **Fogra Gloss**, **Fogra Matt**, **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 CXP6000 Color Server settings.
Emulate Source Paper Tint	**Yes** to emulate the original paper tint **No** (default).

PPD Parameter	Printing Options
Automatic Deletion	**Always, Never, Successful Only, Failed Only** On large VI jobs, which take up a large amount of the 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 Folder** 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 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, then moves the files to the **Storage Folder** or deletes them in accordance with the deletion policy. **Process Store** RIPs the PDL files and moves them to the **Storage Folder** as RTP jobs. **Spool Store** copies the PDL files directly to the **Storage Folder**.
Admin Page	Admin Page includes general information about the job, including paper stock parameters (Admin page can also apply to non-successfully completed jobs). 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.

PPD Parameter	Printing Options
Finisher Module	Select a Finisher module from the drop-down list to select the printed output's destination: **OCT** (Offset Catch Tray) prints to the output cache tray. If your printer is equipped with an HCS (High Capacity Stacker), select: **HCS Top Tray** to print to the top tray. **HCS Stack Tray** to print to the stack tray, which is the internal tray. 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 / copies). **HCSS Staple Stack** to print an already stapled document.
Finisher Offset	**Yes** shifts the sheets when a new page number is delivered. For example, you requested 3 copies of each page uncollated. Thus 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.
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.
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.
Split to Booklets	Select the required number (1-10) of pages per booklet. **Printers Default** (No) does not split the job to booklets.

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: In order to be able to connect to the **Spire Web Center** from a client workstation, you must first enable the web connect service on the CXP6000 Color Server. This service is enabled through the Administration window, under **Preferences**> **Remote Tools Setup**.

For further information, see *Remote Tools Setup* on page 321.

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).

Important: If you would like to connect to the Spire 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 CXP6000 Color Server Web Center is displayed.
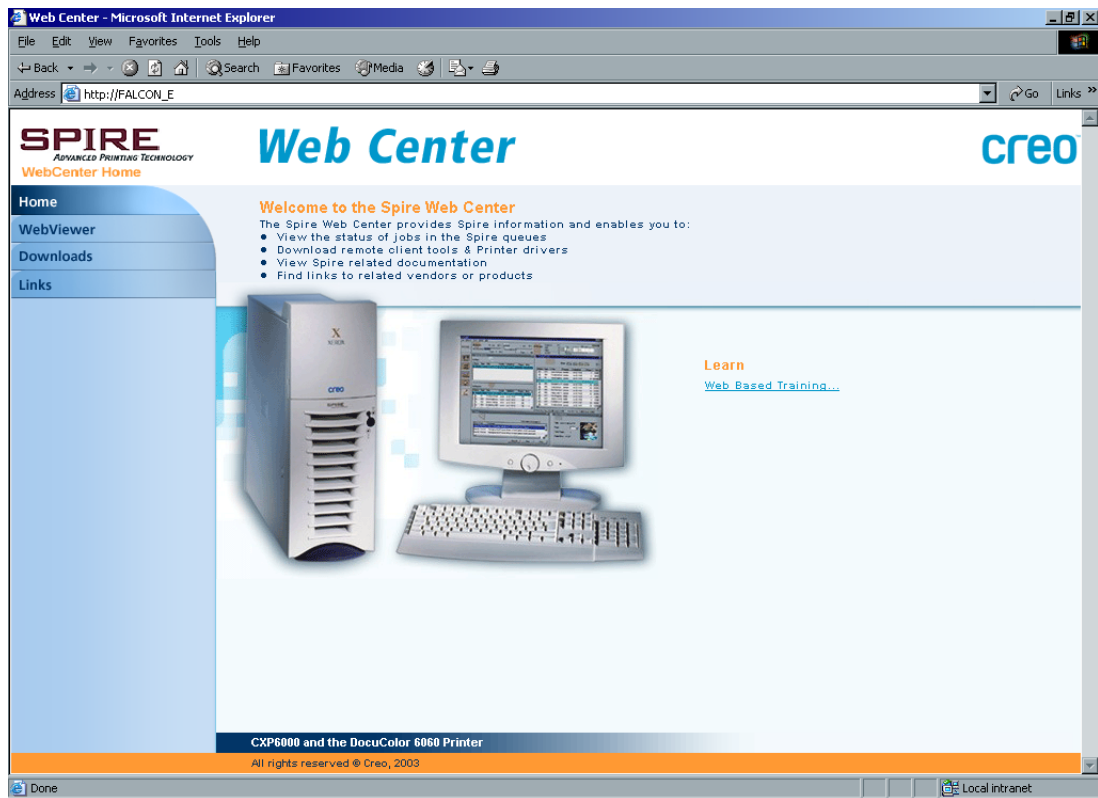
The Web Viewer

The Web Viewer page enables you to view the printer configuration and system information, to view the jobs that currently reside in the CXP6000 Color Server queues and **Storage Folder**, and to view the alerts that currently appear in the Alerts window. This information is significant when printing from client workstations since it enables you to monitor your jobs in the queues and act upon the viewed information.

The Queues tab

In the **Queues** tab you may view the jobs currently running in the CXP6000 Color Server **In Print** and **In Process** queues.
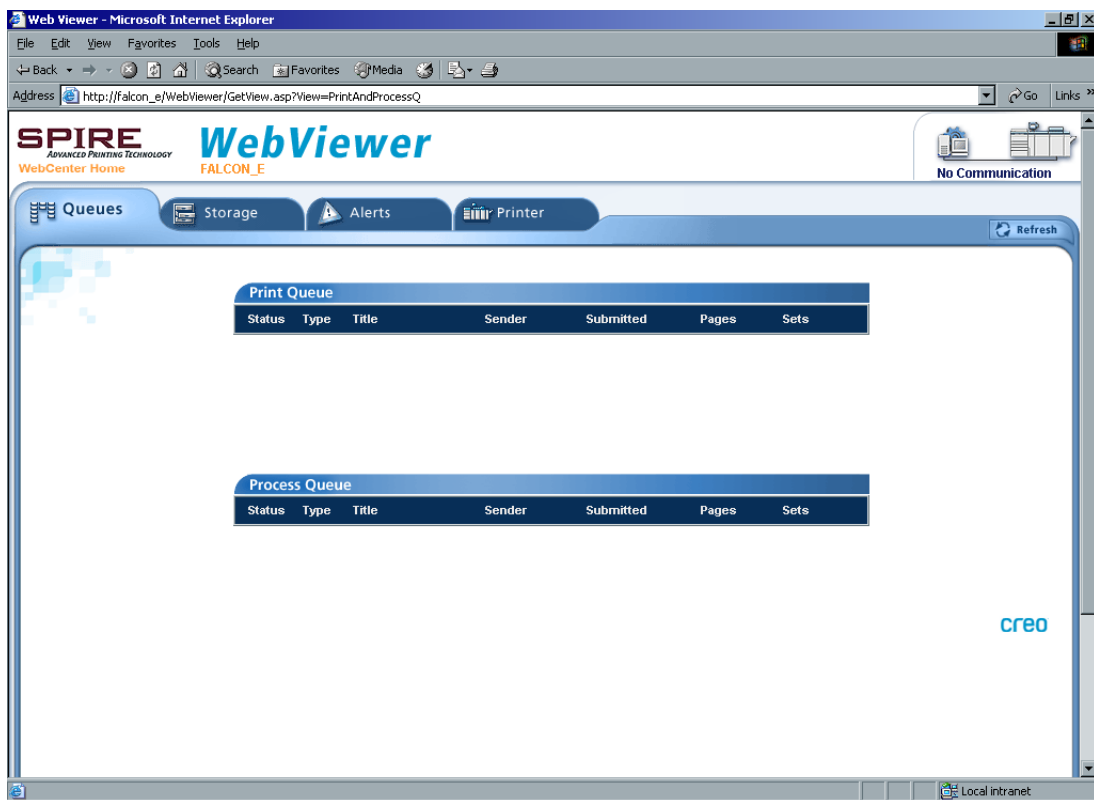
The Storage tab

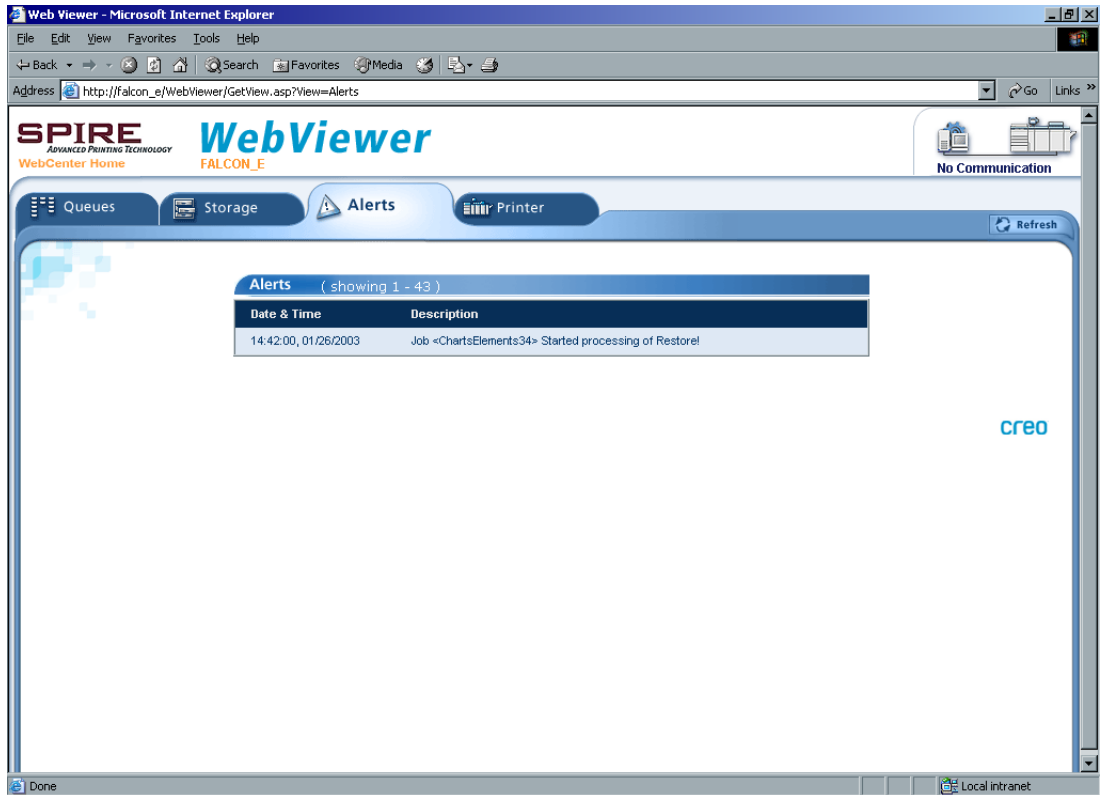In the **Storage** tab you may view the CXP6000 Color Server **Storage Folder** and the jobs that reside in this folder.

The Alerts tab

In the **Alerts** tab you may view the CXP6000 Color Server Alerts window messages. If for example a job you sent for printing from your client workstation has failed, you may view the message in the Alerts window, edit the job parameters (PPD) and resend it for processing and printing on the CXP6000 Color Server.

The Printer tab

In the **Printer** tab you may view the CXP6000 Color Server system information.
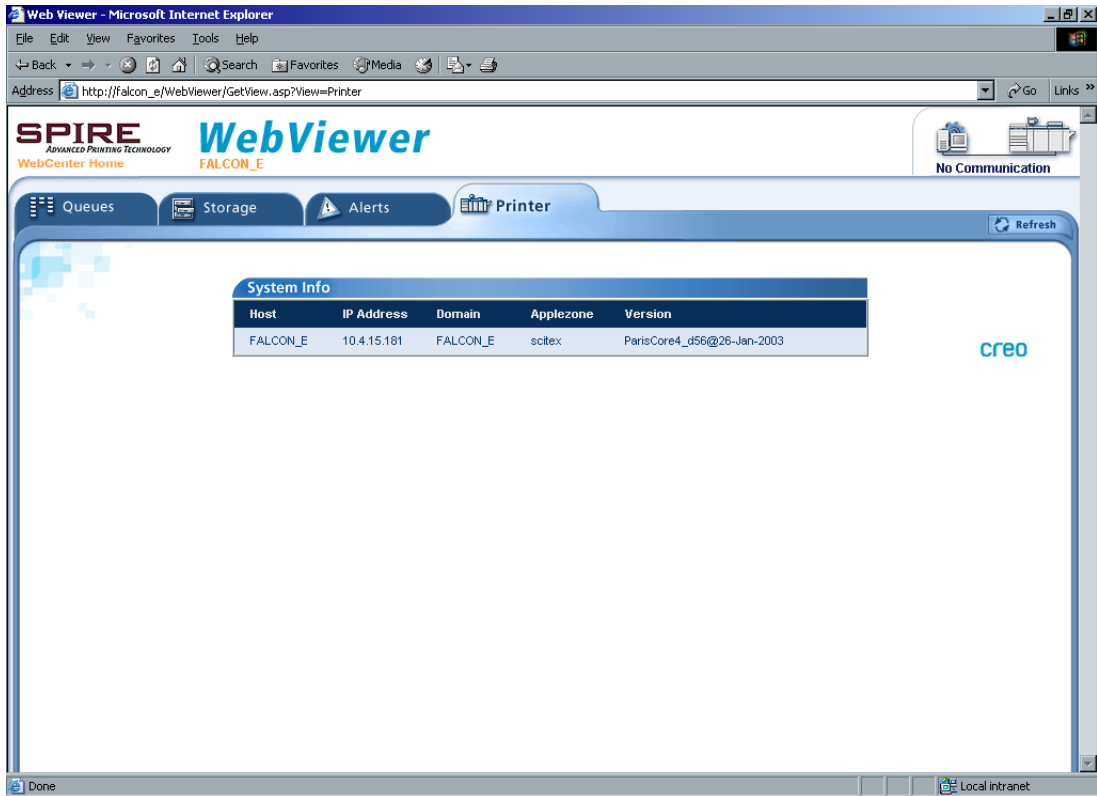
Downloads

The **Downloads** page enables you to access the CXP6000 Color Server **Utilities** folder and download available tools and files for PC and Macintosh client workstations, such as the Spire PPD.

Links

In the **Links** page, links to related vendors or products are available.
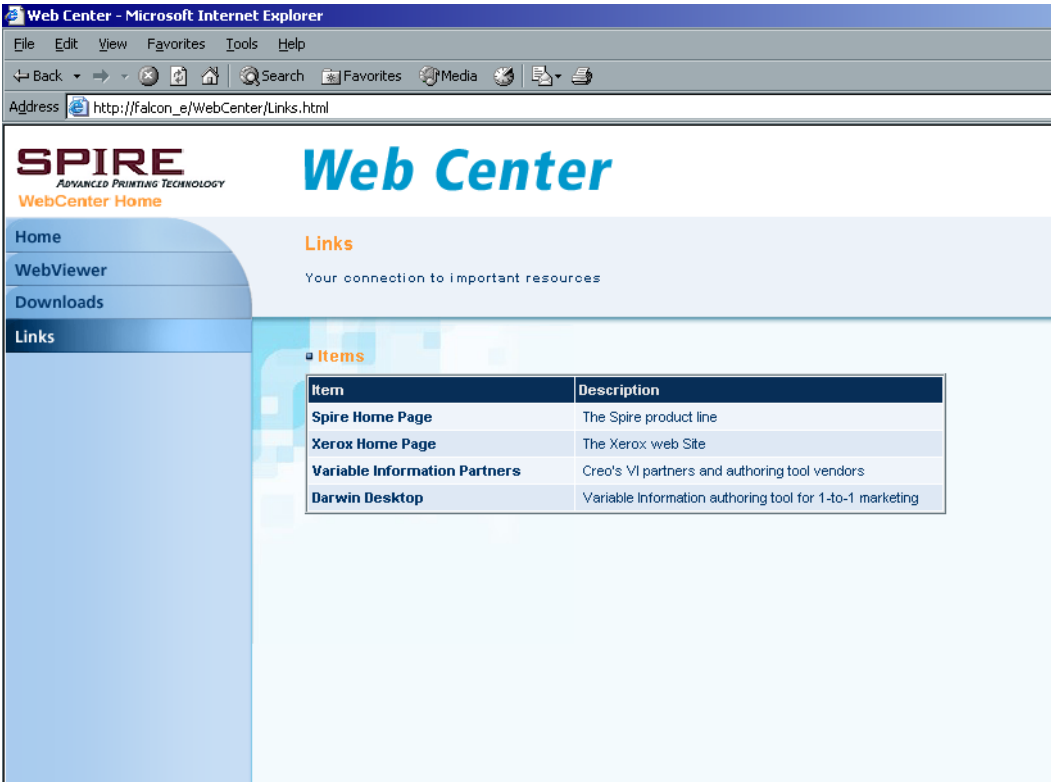
Printing from the CXP6000 Color Server

Importing Files

When PDL files are created on client workstations that are not connected to the CXP6000 Color Server, or if files are available only on external media (such as a CD-ROM), you can import files into the CXP6000 Color Server. It is also possible to import job files that reside locally on the CXP6000 Color Server.

To import files to the CXP6000 Color Server:

1. In the CXP6000 Color Server workspace, from the **Job** menu, select **Import Job**.
   The Import Job window appears.
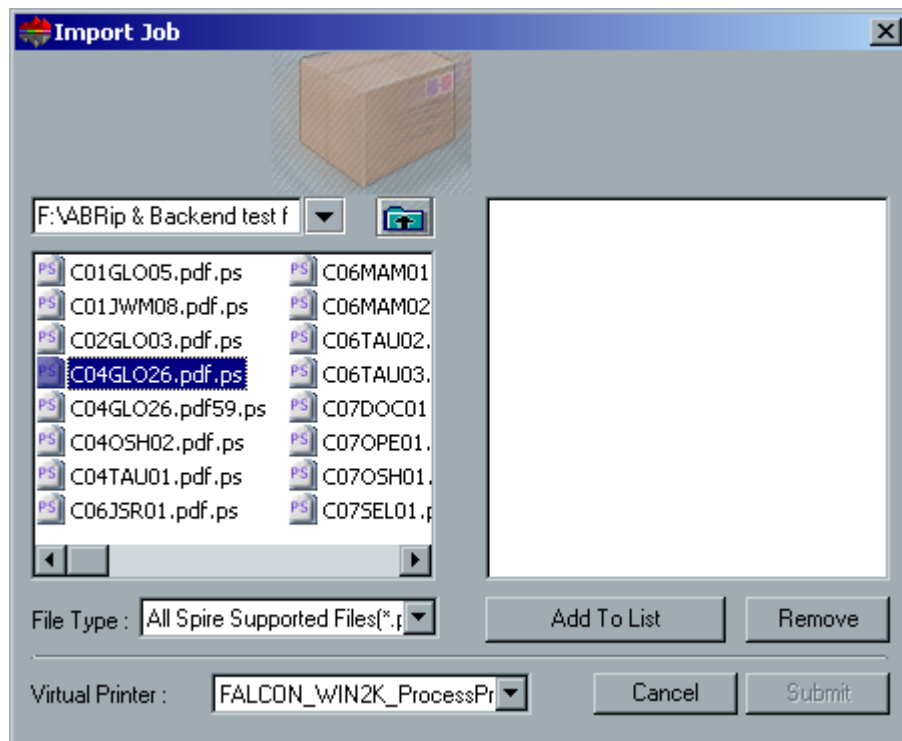
2. To access the required files, click the **up one level** button, or double-click on the file folders to go down the file tree.

3. Select the required files and click the **Add to List** button.
    Or:
    Drag the files to the right hand side of the Import Job window.

    Note: use SHIFT or CTRL to select several files or CTRL+A to select all the files. To add only one file, double-click on its name. If required, add the same file more than once.

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

    Notes:

    To remove files, select the required files in the right hand side of the Import Job window and click the **Remove** button.

    Use SHIFT or CTRL to select several files at once.

5. Click **Submit**.
    All files currently listed on the right hand side of the Import Job window are sent to the CXP6000 Color Server to be processed and printed as defined in the selected virtual printer.

To check the status of imported jobs:

1. Click on the arrow in the **DFE and Printer Animation**.
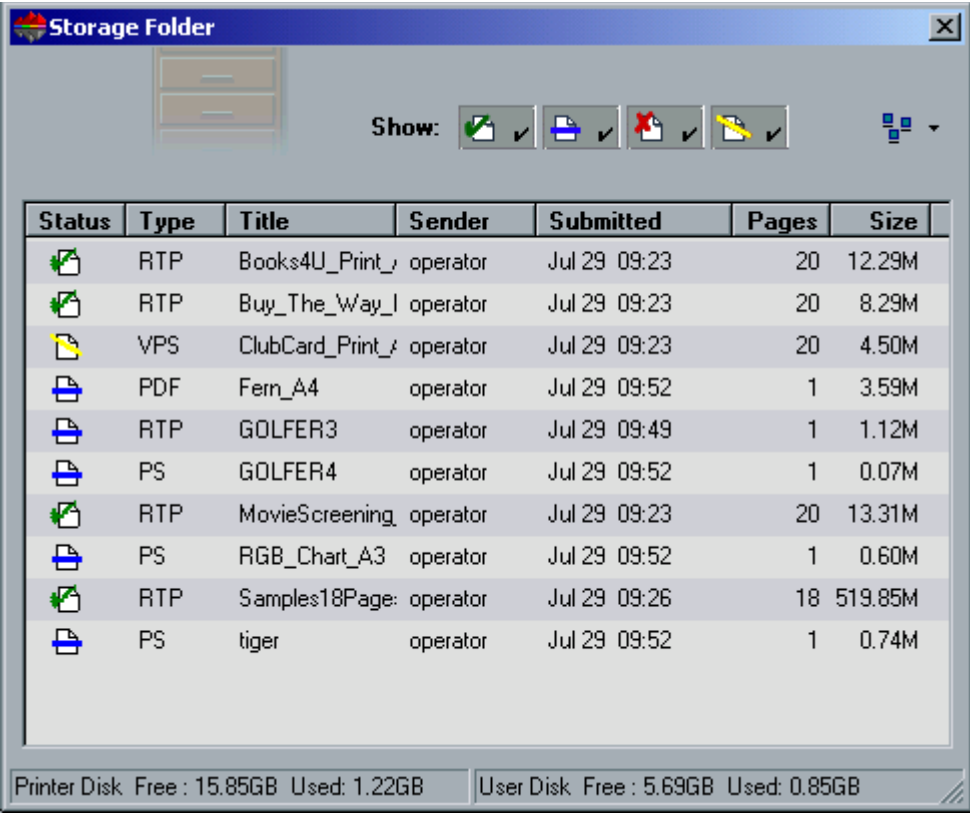
The Importing/Retrieving window appears.
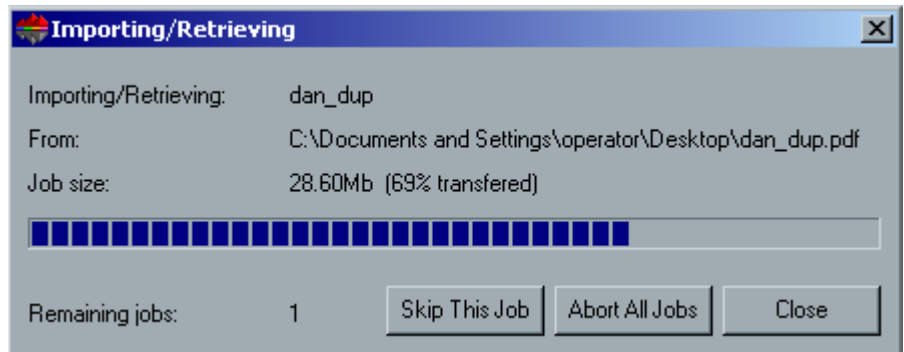
The Importing/Retrieving window indicates the name of the file being imported, its location and the job size. It also indicates the percentage of the job already transferred, both numerically and graphically.

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.

The Storage Folder

Status	Type	Title	Sender	Submitted	Pages	Size
📂	RTP	Books4U_Print_/	operator	Jul 29 09:23	20	12.29M
📂	RTP	Buy_The_Way_I	operator	Jul 29 09:23	20	8.29M
📄	VPS	ClubCard_Print_/	operator	Jul 29 09:23	20	4.50M
🖨	PDF	Fern_A4	operator	Jul 29 09:52	1	3.59M
🖨	RTP	GOLFER3	operator	Jul 29 09:49	1	1.12M
🖨	PS	GOLFER4	operator	Jul 29 09:52	1	0.07M
📂	RTP	MovieScreening	operator	Jul 29 09:23	20	13.31M
🖨	PS	RGB_Chart_A3	operator	Jul 29 09:52	1	0.60M
📂	RTP	Samples18Page:	operator	Jul 29 09:26	18	519.85M
🖨	PS	tiger	operator	Jul 29 09:52	1	0.74M

Printer Disk Free : 15.85GB Used: 1.22GB   User Disk Free : 5.69GB Used: 0.85GB

RTP jobs are stored in, and reprinted from, the **Storage Folder.**

The **Storage Folder** also contains files that:

- Have completed printing
- Were aborted during processing or printing
- Failed to complete processing or printing
- Were imported or downloaded directly from a client workstation to the **Storage Folder.**
- The **Storage Folder** also holds PDL files (for example, PostScript files that were spooled directly to the **Storage Folder**).

For further details, see *Handling Jobs in the Storage Folder* on page 360.

Reprinting Files

RTP jobs that are stored in the **Storage Folder** can be easily reprinted. Select the job you want to reprint and submit it. It is automatically placed in the **In Print** queue.

The 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 re-RIPing of the job. The CXP6000 Color Server automatically determines if your file requires re-RIPing and places it in the appropriate queue when you submit it for reprinting.

Jobs edited using the Job Editor can not be re-RIPped. Once a job has been saved in the Job Editor, it is a new RTP file without an associated PDL file. Therefore, parameters requiring re-RIPing can not be applied.

For further details on editing RTP jobs, see *Editing RTP Jobs* on page 381.

Submitting an RTP Job Requiring no Changes

To submit an RTP job requiring no changes:

➢ Select the jobs in the **Storage Folder** and from the **Job** menu select **Submit**.
Or:
Right-click the jobs and from the menu select **Submit**.
The job/s are placed in the appropriate queue (**In Process** or **In Print** queue).

Note: Use SHIFT or CTRL to select several jobs.

Submitting a Job that Requires re-RIPing

To submit a job that requires re-RIPing:

1. Double-click the job to open the Job Parameters window.

2. Change the required parameter and click the **Submit** button.
   The CXP6000 Color Server automatically determines if your job needs to be re-RIPped and places it in the appropriate queue.

Setting Job Parameters on the CXP6000 Color Server

The CXP6000 Color Server enables you to view and edit all of the job parameters using the Job Parameters window.

Adjusting Job Parameters Post-RIP

Job Parameters can also be adjusted for jobs that have already been processed and which are being held in the **Storage Folder**. Re-RIP indication appears in the job ticket when you modify specific parameters that require the re-processing of the job.

Note: Jobs edited using **Job Preview & Editor** cannot be re-RIPped. Once a job has been saved in the **Job Preview & Editor** tool, it is a new RTP file without an associated PDL file. Therefore, parameters requiring re-RIPing cannot be applied.

Changes to the following job parameters require re-RIPing of the job:

Print Settings tab

- Changes to the **Image Scale** parameter.

Paper Stock tab

- In the **Size** parameter, changing the orientation from **LEF** to **SEF** and Vice versa.

- **Size** modifications that require changing the orientations due to print engine limitations.

- In the **Type** parameter, selecting the **Transparency** option.

Print Quality tab

- All **Print Quality** options require re-RIPing.

Color tab

- Changes to the **Color Mode** parameter.

- Changes to the **CMYK Workflow** parameter.

- Changes to the **Ink Saving (GCR)** parameter.

- Changes to the **RGB Workflow** parameter.

- Changes to the **CMYK Workflow** parameter.

Imposition tab

- Changes to the **Size** parameter when changing the orientation of the Trim size from Landscape to Portrait.

- Changes to the **Template** parameter when changing from non-rotated template to rotated.

Services tab

- In APR, when **High Res** is changed to **Low Res** (and vise-versa) and when settings are changed in the **APR Path** box.

- Changes to the **Compression** parameter.

- Changes to the **Preflight** parameter.

- Changes to the **Substitute Fonts** parameter.

- Changes to the **Split to Booklets** parameter.

Job Parameters Window

To open the Job Parameters window:

➢ Double-click a job in the **Storage Folder**.
  Or:
  Right-click the job in the **Storage Folder**, and from the menu select **Job Parameters.**
  The Job Parameters window appears.
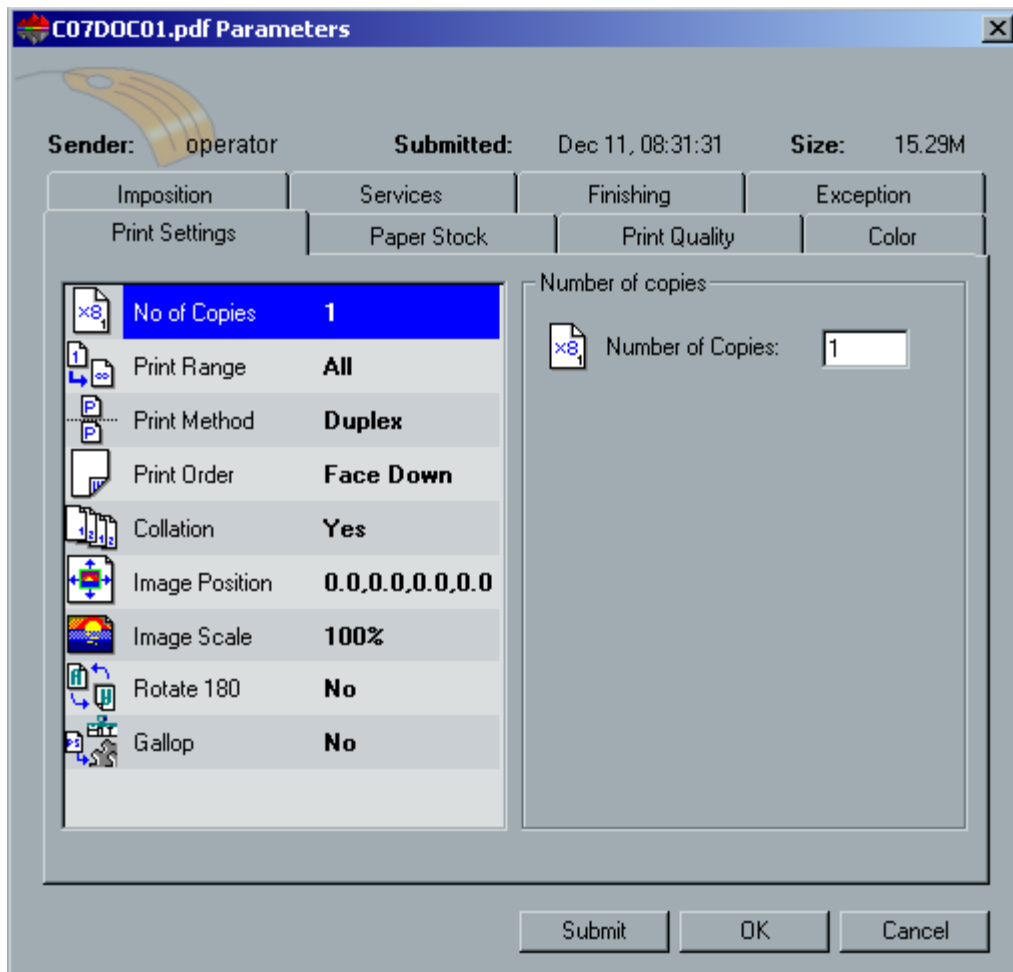
The Job Parameters window title bar shows the following:

- Sender's (originating workstation's) user ID
- Job submission date and time
- Job size

The Job Parameters window contains the following tabs:

- Print Settings
- Paper Stock
- Print Quality
- Color
- Imposition
- Services
- Finishing
- Exception

These tabs and their job parameters are detailed in the following sections.

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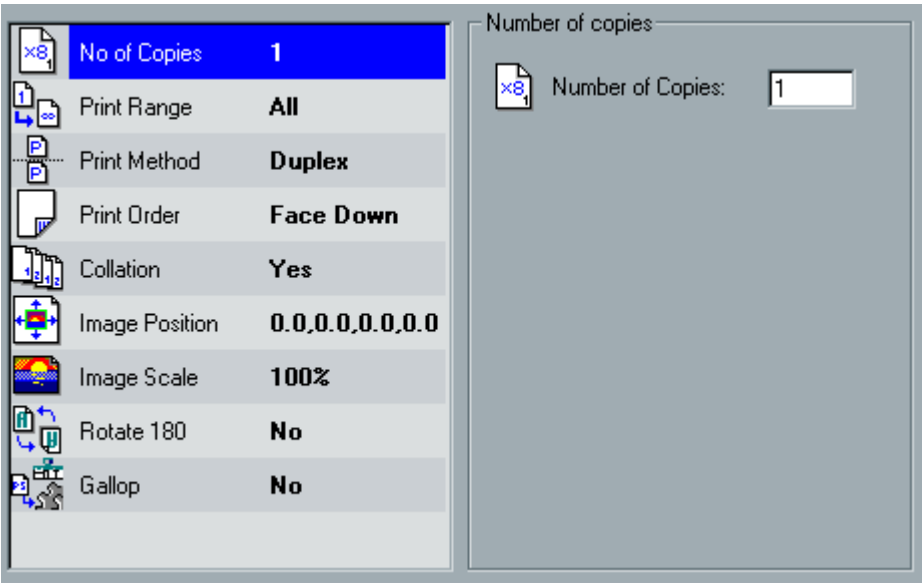
The **Print Settings** tab enables you to set print-related job parameters such as the print range, the number of copies you would like to print, the print method and order. In addition you may define the collation, the image position on the sheet, the image scale, set the gallop workflow if required,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

No. of Copies

×8	No of Copies	**1**
	Print Range	**All**
	Print Method	**Duplex**
	Print Order	**Face Down**
	Collation	**Yes**
	Image Position	**0.0,0.0,0.0,0.0**
	Image Scale	**100%**
	Rotate 180	**No**
	Gallop	**No**

Number of copies

×8 Number of Copies: 1

To set the number of copies:

➢ In the **Number of Copies** box, type the required number of copies to be printed.

Print Range

To set the print range, select one of the following options:

- Select **All** to print the entire job.

- Select **Odd Pages** to print all odd pages.

- Select **Even Pages** to print all even pages.

- Select **Pages** and specify the pages 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 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.

VI Print Range

If the printed job is a VI job, the **Print Range** display is as follows:
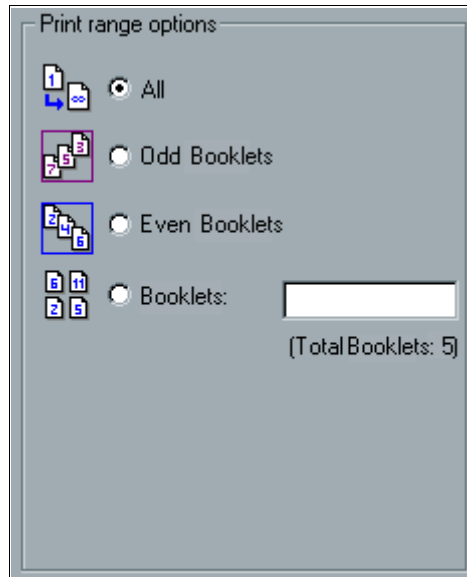
To set the print range for a VI job, select one of the following options:

- Select **All** to print all booklets.

- Select **Odd Booklets** to print all odd booklets.

- Select **Even Booklets** to print all even booklets.

- Select the **Booklets** option and type the specific booklets to print: you may type a range of booklets to be printed, and / or the number of individual booklets to be printed. For example "5-7, 10" will print booklets 5 through 7, and booklet 10.

Print Method

×8	No of Copies	**1**		
	Print Range	**All**		
	Print Method	**Simplex**		
	Print Order	**Face Up**		
	Collation	**Yes**		
	Image Position	**0.0,0.0,0.0,0.0**		
	Image Scale	**Fit To Paper**		
	Rotate 180	**No**		
	Gallop	**No**		

Print method options

P ⦿ Simplex

○ Duplex Head to Toe
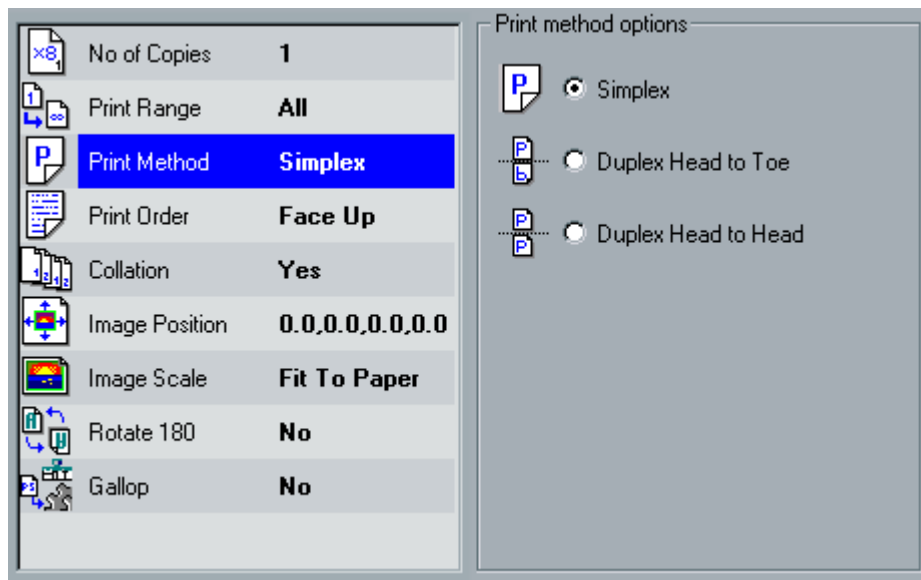
○ Duplex Head to Head

To set the print method, select one of the following options:

- To print single-sided pages, select **Simplex**.

- To print calendar-style hard copies, select **Duplex Head to Toe** (usually used with landscape jobs).
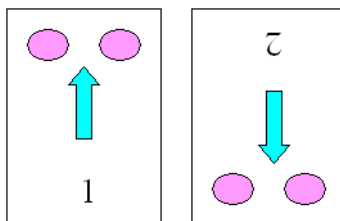
- To print normal book-style hard copies, select **Duplex Head to Head** (usually used with portrait jobs).
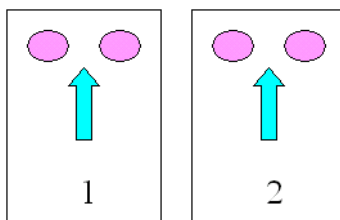
Print Order

×8	No of Copies	**1**
	Print Range	**All**
	Print Method	**Duplex**
	Print Order	**Face Down**
	Collation	**Yes**
	Image Position	**0.0,0.0,0.0,0.0**
	Image Scale	**Fit To Paper**
	Rotate 180	**No**
	Gallop	**No**

Print order options

☐ Reverse Print Order

Page orientation:

○ Face Up

◉ Face Down

To set the print order, select one of the following options:

- To deliver the pages facing down, select **Face Down.**

  Note: Use this option for example, when printing confidential documents.

- To deliver the pages facing up, select **Face Up.**

- To start printing from the last page, select **Reverse Print Order.**

  Note: When collating a document, selecting **Face Down** (or **Face Up** and **Reverse Print Order**) causes the set to be delivered in the correct order.

Collation
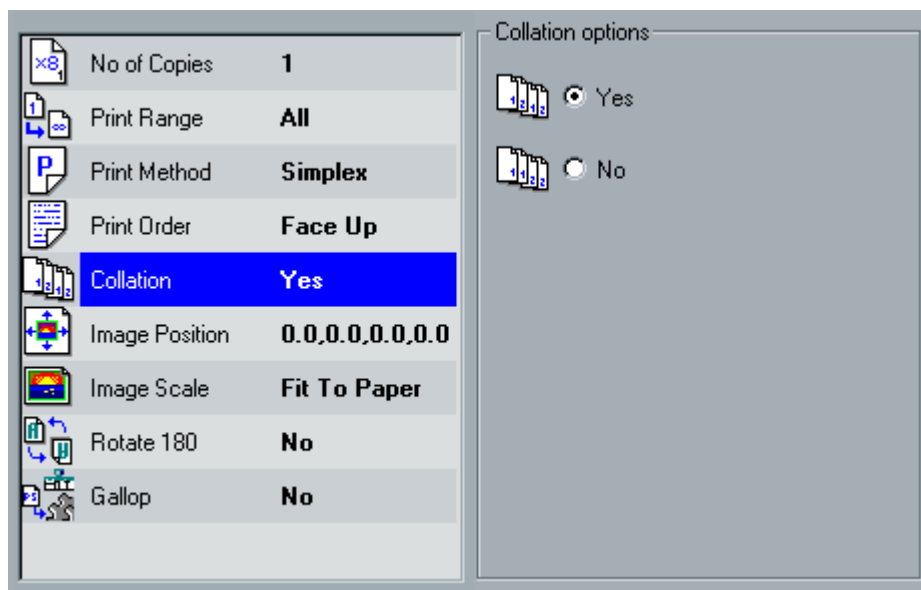
To print a complete copy of the job before the first page of the next copy is printed:

➢ From the **Collation options** select **Yes**.

To print all the copies of each page before all the copies of the next page are printed:

➢ From the **Collation options** select **No**.

Image Position
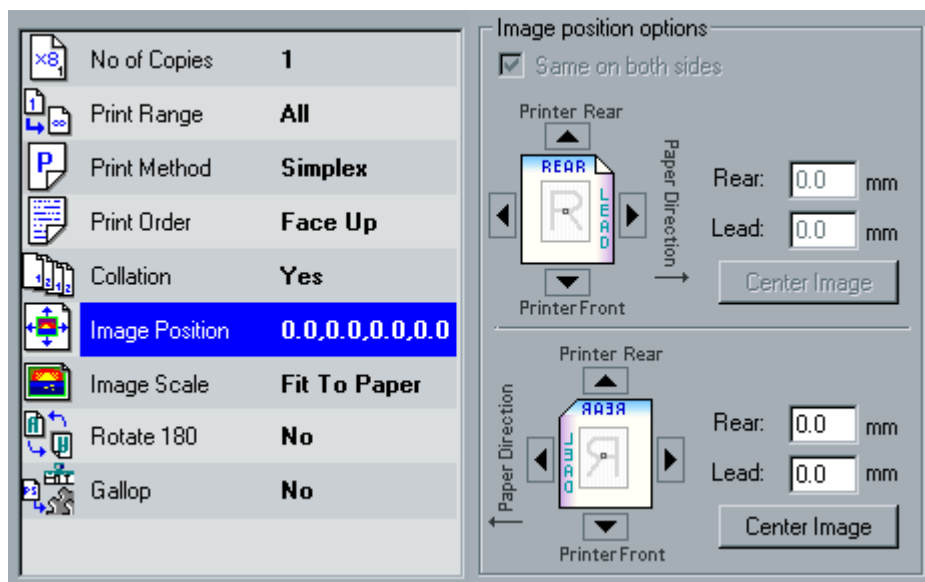
You can adjust the image positioning on the sheet's printed page (simplex or duplex).

This function uses the following terminology:

- **Lead** (or **Leading Edge**) the edge of a sheet at which printing begins.

- **Rear** (or **Rear Edge**) sheet's edge near the printer rear, where printing stops).

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 the **Same on both sides** check box, to shift the image on the sheet's second side (face down image) according to the previous shift on the sheet's first side (face up image).
  Set page offsets by clicking the directional arrows or by typing **Rear** and **Lead** values.

- Click the **Center Image** button to delete all values input in the numerator, setting each value back to "0".

- Clicking the arrows to shift the image of both sides. Or type values in the **Rear** and **Lead** boxes.

Clicking on the arrows changes the numerator values as following:

- 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 this option to move duplex page data away from the spine. This option is not available if the Print Method is **Simplex**.

Image Scale

×8	No of Copies	**1**
	Print Range	**All**
	Print Method	**Duplex**
	Print Order	**Face Down**
	Collation	**Yes**
	Image Position	**0.0,0.0,0.0,0.0**
	Image Scale	**100%**
	Rotate 180	**No**
	Gallop	**No**

Image scale options

- ○ 100%
- ○ Fit To Paper
- ○ Custom: [   ] %

The default value in the **Image Scale** parameter is 100% of the original file.

To proportionally enlarge or reduce the size of the job pages:

- Select **Fit to Paper** for the image to fit the selected paper in the paper stock.

- Select **Custom** and type the percent by which you would like to proportionally decrease / increase the image size.

Rotate 180°

			Rotate 180 options
×8	No of Copies	**1**	
	Print Range	**All**	🔘 No
P	Print Method	**Simplex**	
	Print Order	**Face Up**	⚪ Yes
	Collation	**Yes**	
	Image Position	**0.0,0.0,0.0,0.0**	
	Image Scale	**Fit To Paper**	
	Rotate 180	**No**	
	Gallop	**No**	

The **Rotate 180°** parameter enables you to rotate your job.

To rotate your job:

➢ From the **Rotate 180° options**, select **Yes**.

Gallop

			Gallop options
×8	No of Copies	**1**	☐ Yes
	Print Range	**All**	Print after: [ ] pages
P	Print Method	**Simplex**	
	Print Order	**Face Up**	◉ No
	Collation	**Yes**	
	Image Position	**0.0,0.0,0.0,0.0**	
	Image Scale	**Fit To Paper**	
	Rotate 180	**No**	
	Gallop	**No**	

The **Gallop** workflow enables you to begin printing a defined number of pages before the entire job has been RIPped. 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 few seconds only.

To set the gallop, select one of the following options:

- For small jobs, select **No.**
  The job will be RIPped completely before printing.

- For long run jobs, select **Yes** and indicate the number of pages to be RIPped before printing begins.

  Note: The default number of pages to be RIPped before printing begins is 50. For complicated jobs using numerous shared elements, you may increase/decrease this number.

The Paper Stock Tab

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

The 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 icon, its line appears in blue and a message appears in the Alerts window). Other jobs can print while jobs are in the frozen state.

Paper set name

To select the required paper set:

➢ From the **Name** list select the required paper set.
The selected paper set properties (**Paper Size**, **Type**, **Weight** and
Coating) are displayed in the corresponding parameters in the **Paper
Stock** tab.

Managing Paper Sets
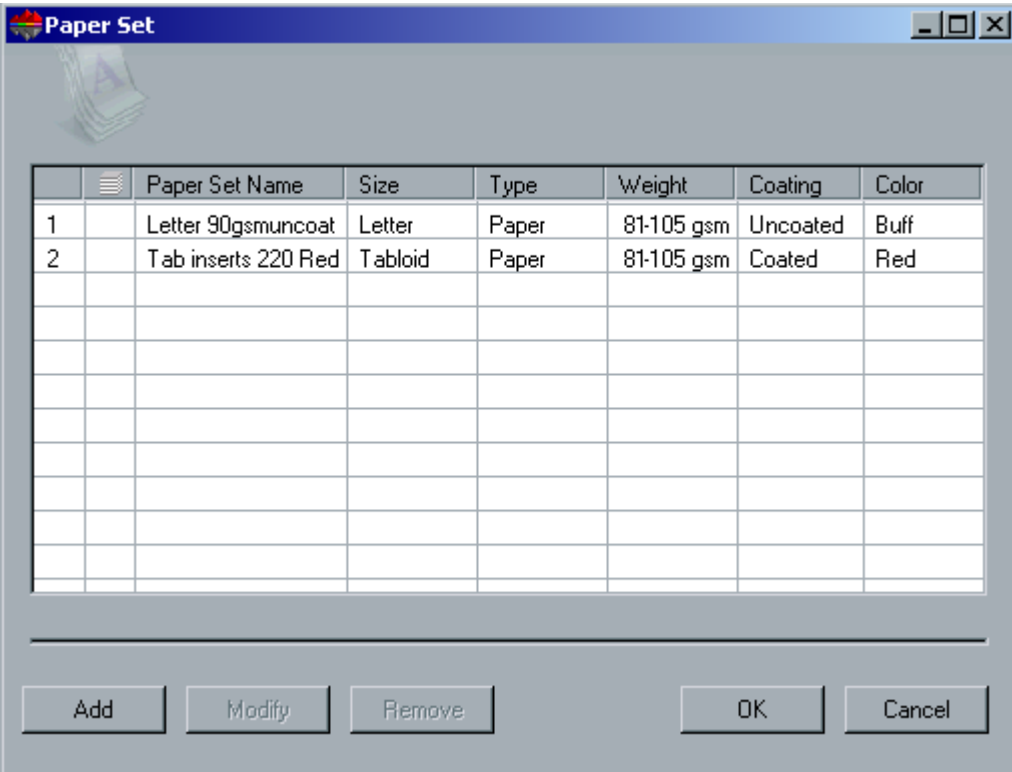
The CXP6000 Color Server is provided with predefined paper sets for your
convenience. These paper sets cannot be removed but they can be
modified. In addition, you may add, modify or remove custom paper sets
according to your requirements.

To add a new paper set:

1.   Under the **Name** list, click the **Paper Set List** button.

The Paper Set window appears.

		Paper Set Name	Size	Type	Weight	Coating	Color
1		Letter 90gsmuncoat	Letter	Paper	81-105 gsm	Uncoated	Buff
2		Tab inserts 220 Red	Tabloid	Paper	81-105 gsm	Coated	Red

Add   Modify   Remove   OK   Cancel

2. Click the **Add** button.

The Paper Set Properties window appears.
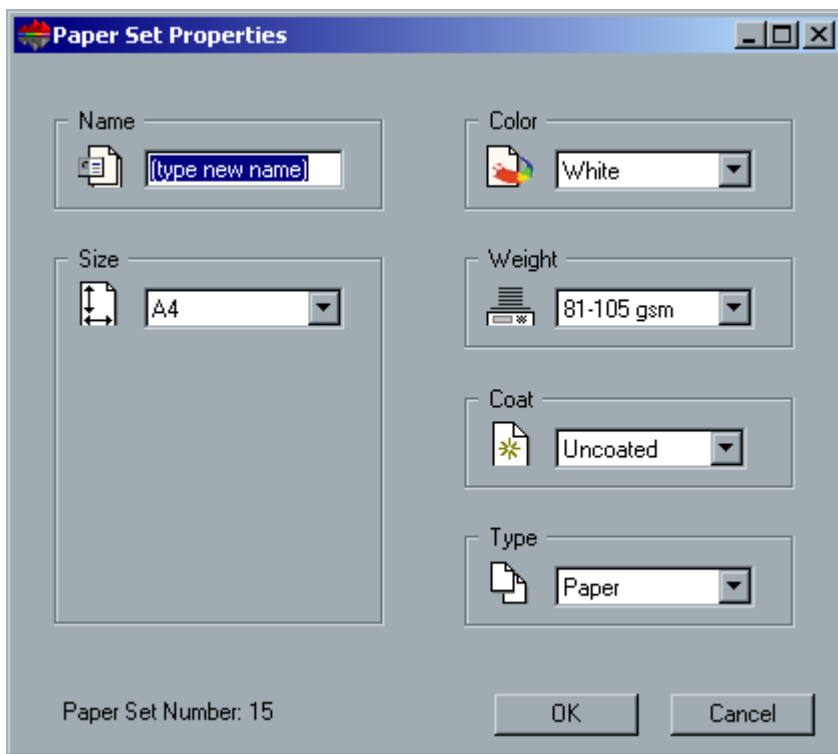
3. In the **Name** box, type a name for the new paper set. It is recommended that the name is as descriptive as possible for example: Letter90gsmuncoat.

4. From the **Size**, **Color**, **Weight**, **Coat** and **Type** lists, select the required properties for the new paper set.

5. Click **OK**.

To modify a paper set:

1. Click the **Paper Set List** button.
   The Paper Set window appears.

		Paper Set Name	Size	Type	Weight	Coating	Color
1		A4_Un_81_105	A4	Paper	81-105 gsm	Uncoated	White
2		A3_Un_81_105	A3	Paper	81-105 gsm	Uncoated	White
3		A4_Co_81_105	A4	Paper	81-105 gsm	Coated	White
4		A3_Co_81_105	A3	Paper	81-105gsm	Coated	White
5		A4_Transparency	A4	Transparenc	81-105gsm	Uncoated	Clear
6		Letter_Un_81_105	Letter	Paper	81-105gsm	Uncoated	White
7		Tabloid_Un_81_105	Tabloid	Paper	81-105gsm	Uncoated	White
8		Letter_Co_	Letter	Paper	81-105gsm	Coated	White
9		Tabloid_Co_	Tabloid	Paper	81-105gsm	Coated	White
10		Letter_Transparency	Letter	Transparenc	81-105gsm	Uncoated	Clear

Add   Modify   Remove   OK   Cancel

2. Select the paper set which you would like to modify.

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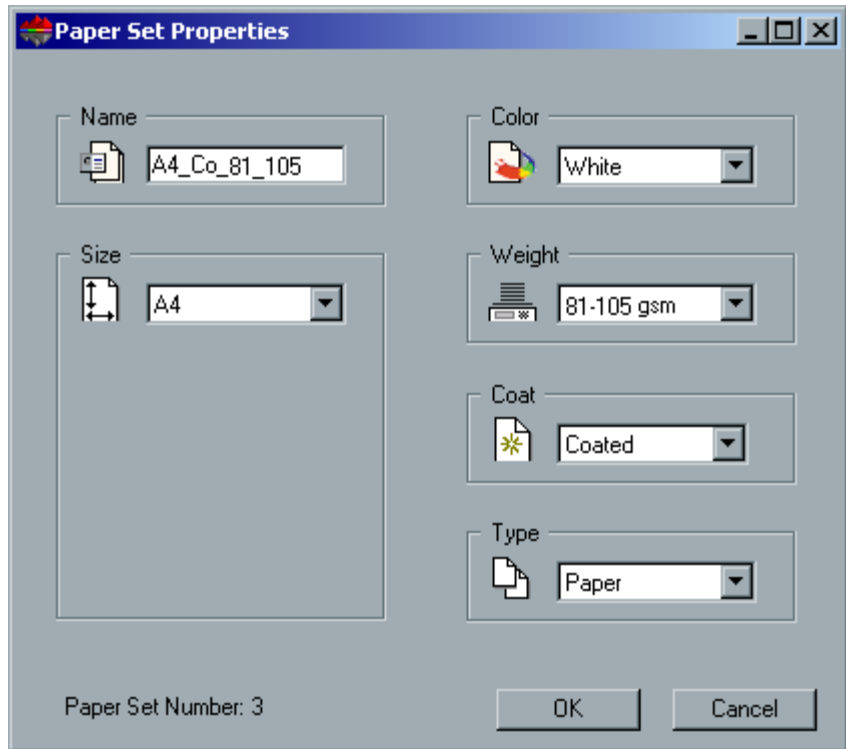
4. Modify the required properties of the paper set.

5. Click **OK**.

To delete a paper set:

1. Click the **Paper Set List** button.
    The Paper Set window appears.

		Paper Set Name	Size	Type	Weight	Coating	Color
1		A4_Un_81_105	A4	Paper	81-105 gsm	Uncoated	White
2		A3_Un_81_105	A3	Paper	81-105 gsm	Uncoated	White
3		A4_Co_81_105	A4	Paper	81-105 gsm	Coated	White
4		A3_Co_81_105	A3	Paper	81-105gsm	Coated	White
5		A4_Transparency	A4	Transparenc	81-105gsm	Uncoated	Clear
6		Letter_Un_81_105	Letter	Paper	81-105gsm	Uncoated	White
7		Tabloid_Un_81_105	Tabloid	Paper	81-105gsm	Uncoated	White
8		Letter_Co_	Letter	Paper	81-105gsm	Coated	White
9		Tabloid_Co_	Tabloid	Paper	81-105gsm	Coated	White
10		Letter_Transparency	Letter	Transparenc	81-105gsm	Uncoated	Clear

Add   Modify   Remove   OK   Cancel

2. Select the paper set which you would like to delete.

3. Click the **Remove** button.

4. Click **OK**.

Paper Size
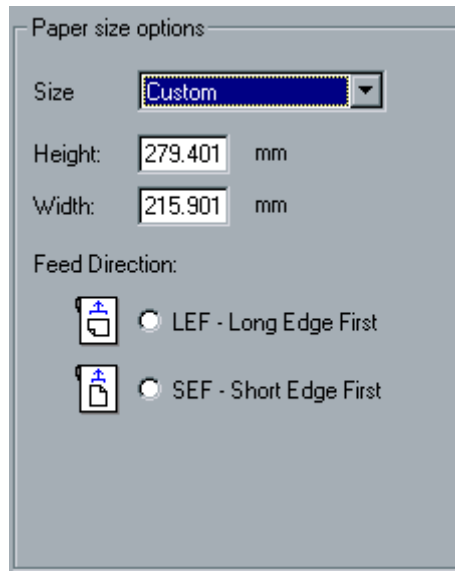
To select the paper size:

1.   From the **Size** list, select the required stock size.

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

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

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

Note: Units of measurement (mm or inches) reflect system configuration. They are chosen in the Administration window.

4. Select the required feed direction:

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

Type

To define the paper 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 would like 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 **Paper Set List** button and add a new paper set.

For further information see *Managing Paper Sets* on page 76.

Notes:
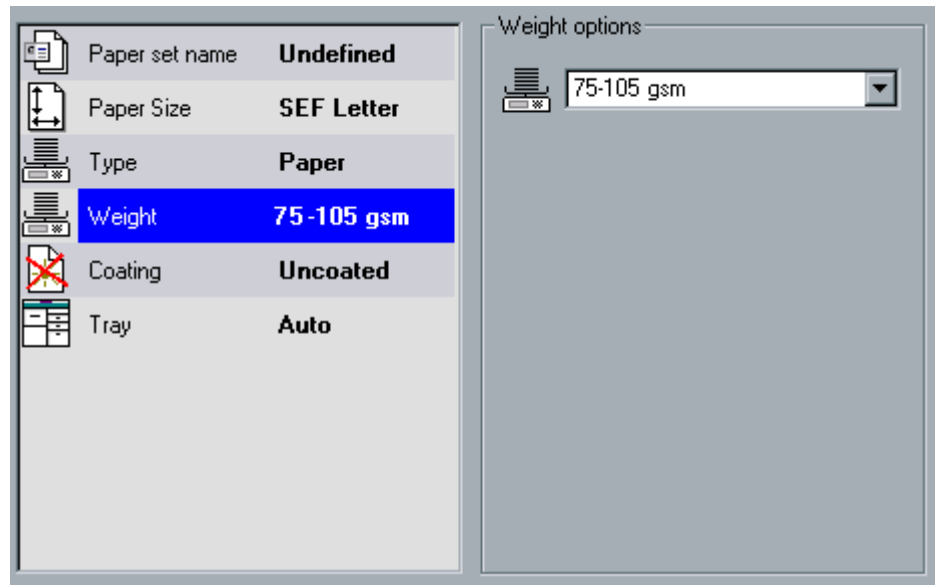
Slip-sheets and / or blank pages (interleave) in a transparency job are counted by the number of Sheets, not by the number of Pages, (rastered pages) reported on the Admin page.

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. From the **Tray** list, select the required tray
    Or:
    Select **Auto** for any tray with the available paper stock to be selected.

Weight

To select the required stock weight:

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

Coating
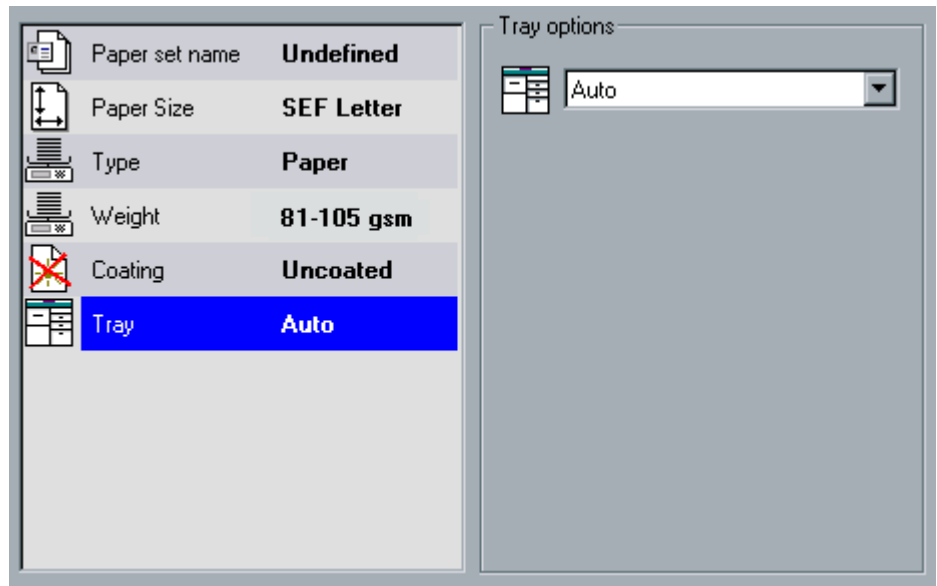
To specify the required coating:

➢ Select **Coated** to print on coated paper.
Or:
Select **Uncoated** to print on uncoated paper.

Tray

To select the required tray:

➢ Select **Auto** to select the required paper stock from all paper trays.
Or:
Select a specific tray from the **Tray options** list to print only from that paper tray.

Note: 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'.

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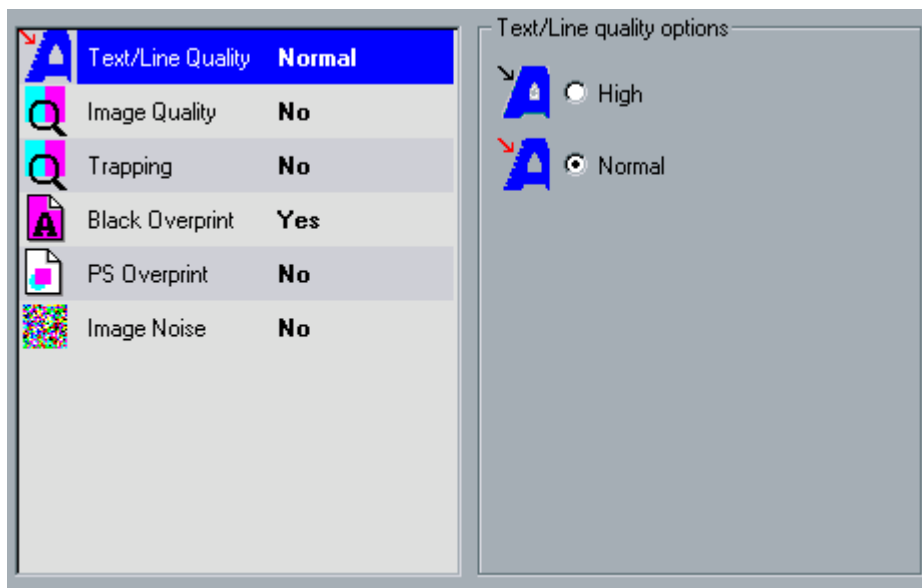
The **Print Quality** tab enables you to set print quality related job parameters and to improve the quality of printed jobs. These parameters include the possibility to enhance text/ line quality and image quality. In addition it enables you to apply the Creo FAF algorithm by setting trapping, to define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

Text / Line Quality
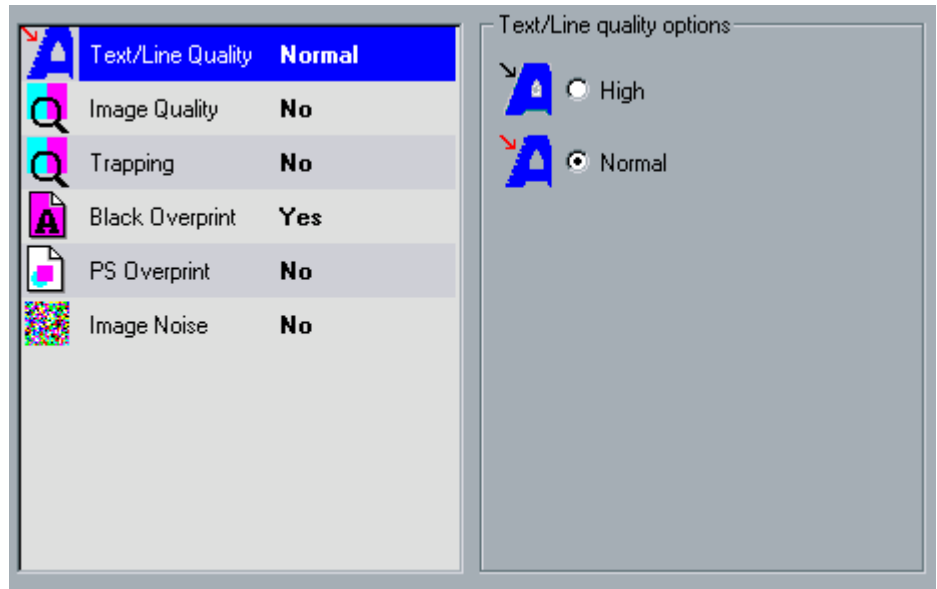
Text / Line Quality refers to the Creo anti-aliasing algorithm for superior text quality. Text / Line Quality and text and line-art elements are processed separately to produce optimal rendering of all the elements on a page. This option improves the text quality of diagonal lines, borders and blends, 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
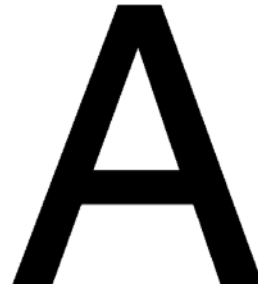
To set the text/line quality, select one of the following options:

- To provide superior text quality, from the **Text/Line quality options**, select **High.**

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

- To provide regular text quality, select **Normal.**

  Note: Selecting **Normal** increases the processing speed.

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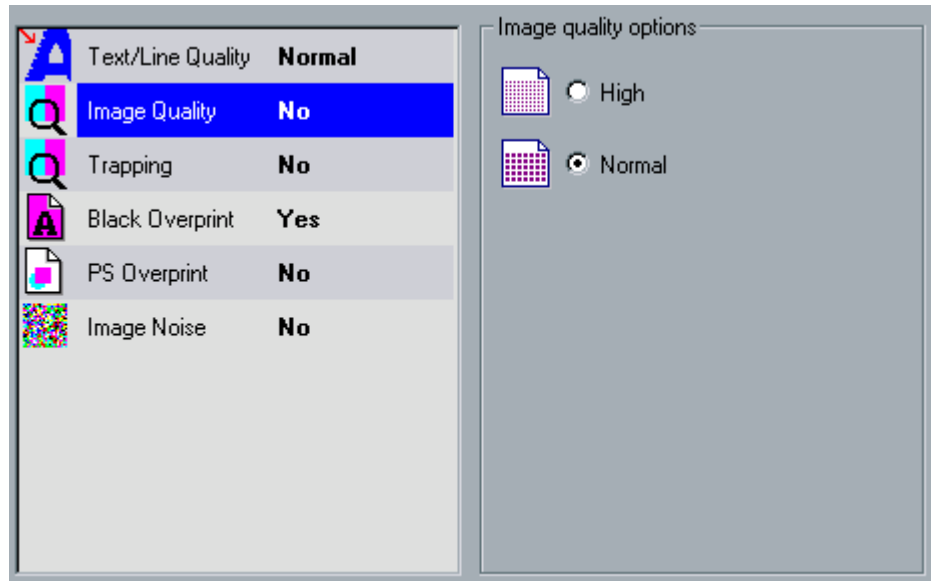
Image Quality refers to the ability to maintain the same detail and smoothness with different degrees of enlargement. This feature is especially useful when your PostScript file includes several images at different qualities (for example, images that were scanned at different resolutions, were rotated,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

To set the image quality, select one of the following:

- To improve the quality of images in a job, select **High**.

- To provide normal image quality (for jobs that do not require improved picture quality), select **Normal**.

   Note: Selecting **Normal** increases the processing speed.

Trapping

Trapping is a solution that solves mis-registration 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
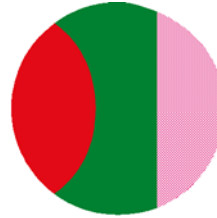
This function uses the following terminology:

- **Frame Thickness** refers to the thickness of Trapping. The thicker the frame, the less chance that white lines / 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 the trapping, select one of the following options:

- From the **Trapping options**, 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.

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

  b. 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.

- To not trap the job while RIPing, from the **Trapping options**, select **No.**

  Note: This does not affect trapping incorporated by DTP applications (for example, Photoshop). FAF should not be used with application based trapping. Therefore, if a PostScript file already contains trapping from the originating application, it is not necessary to use CXP6000 Color Server trapping. In this case, select **No**.

Black Overprint
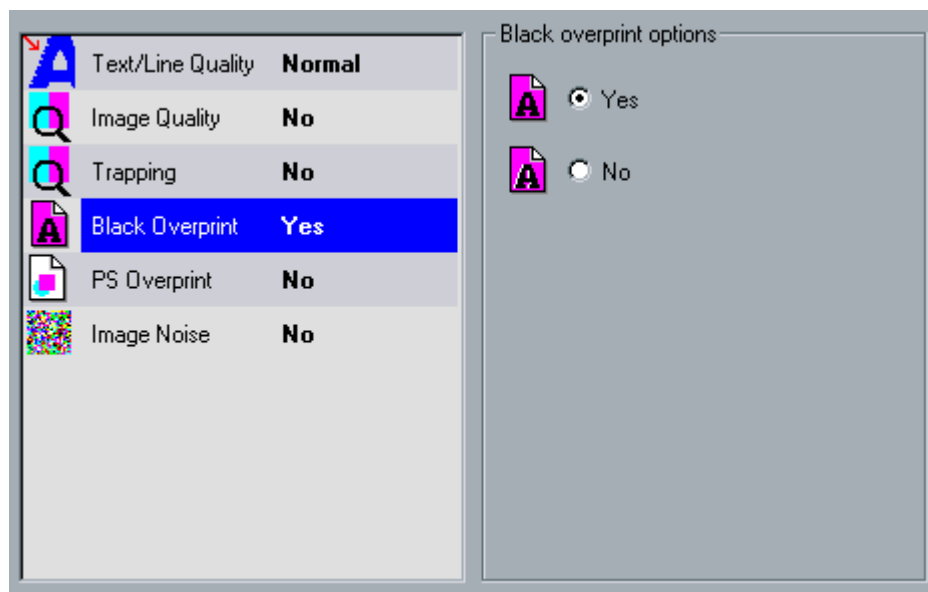
Occasionally, white lines may appear around black text. The text may appear less dense than required as a result of misregistration between color separations. **Black Overprint** is used to ensure that black text prints cleanly within a tint or picture area. The text appears in a richer, deeper black, 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 coated 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 set black overprint, select on the following options:

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

- To disable black overprint, from the **Black overprint options**, select **No** (Selecting **No** increases the processing speed).

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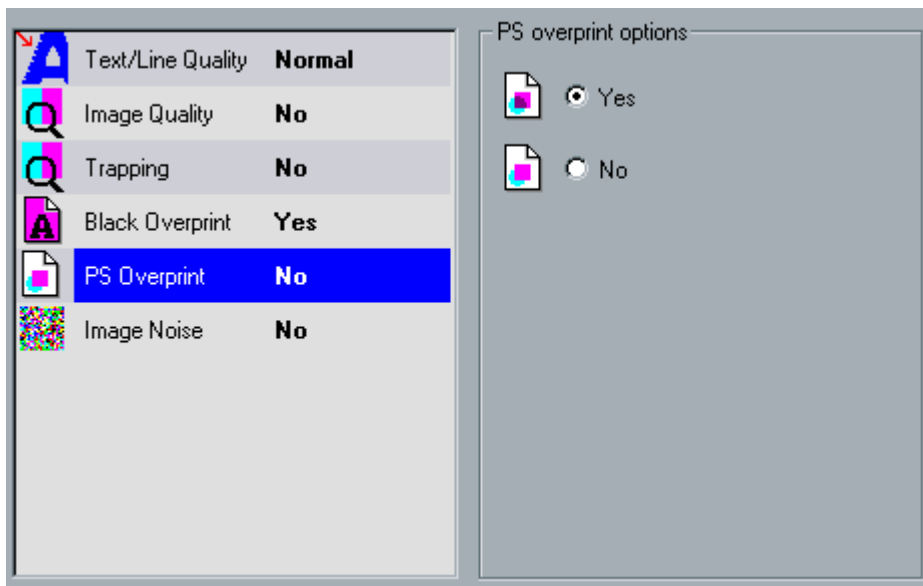
In the client authoring tools (for example QuarkXPress), you can select overprint options. **PS Overprint** offers the option to use the overprint, which exists in the PS file. It also determines whether the DTP application PS (PostScript) Overprint settings are honored in the RIP.

The CXP6000 Color Server settings override PS Overprint commands from DTP applications. For example, if PS Overprint has been set to **Yes** in a DTP application, selecting PS Overprint **No** in the CXP6000 Color Server results in no overprinting. The CXP6000 Color Server can not create PS Overprint that is not pre-defined in the file. Selecting PS Overprint **Yes** (default) for a file that has not had overprinting defined in a DTP application results in no overprinting.

If you choose to honor the PS overprint applied in a DTP application, it is implemented by the CXP6000 Color Server 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 override 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:

- To use the overprint information that exists in the input file, from the **PS Overprint options**, select **Yes**.

- To ignore the overprint information that exists in the input file, from the **PS Overprint options**, select **No**.

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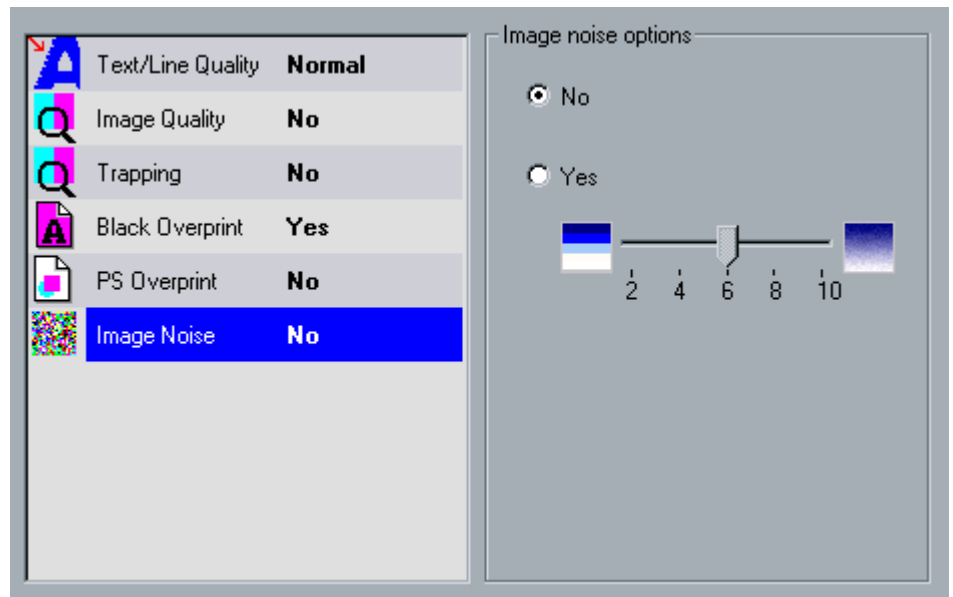
The **Image Noise** parameter, enables you to smoothen and blend vignettes of continuous tone (CT) images.

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

To set the image noise level:

1. From 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.

The Color Tab
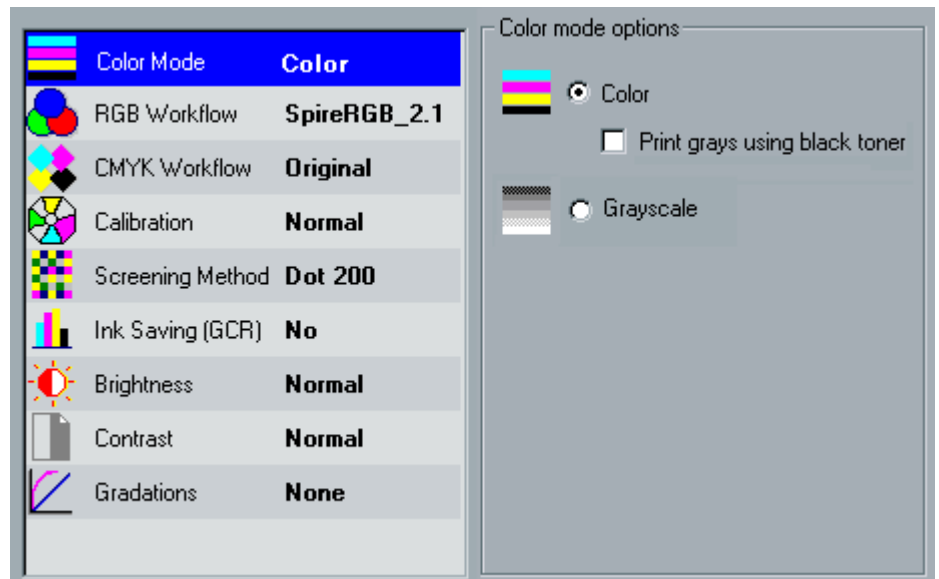
The **Color** tab enables you to apply last-minute color corrections, or to set the output job to match other output devices. Among the available options are: setting the color mode, setting the brightness or contrast, applying the gray component replacement (GCR), and selecting the screening method. In addition you may select the required gradation and calibration tables, and choose an RGB or CMYK Workflow.

Color Mode
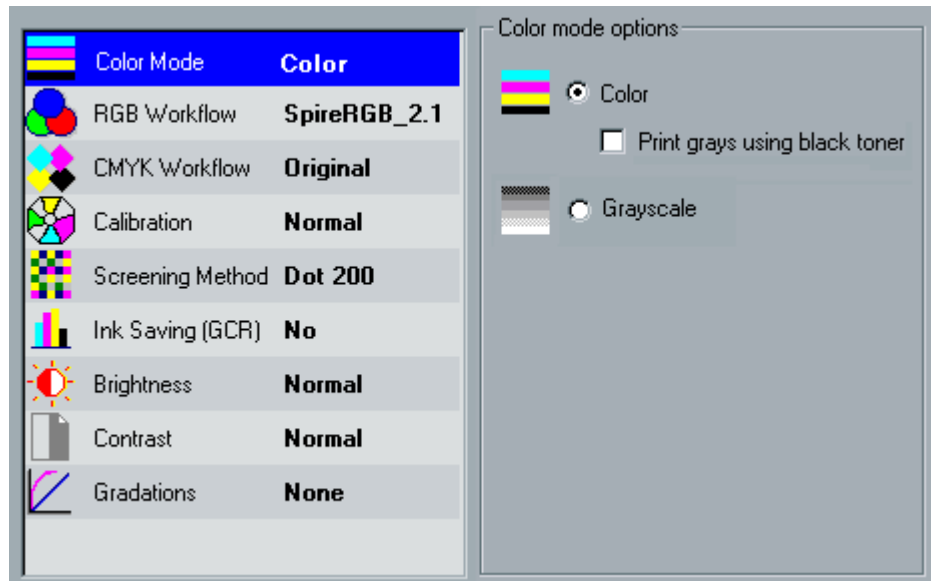
The **Color Mode** parameter enables you to print color jobs in black and white using the black toner only. When a color job is printed using the **Grayscale** option, the Cyan (C), Magenta (M), and Yellow (Y) separations are also printed in Black (K) toner, giving a dense appearance similar to the CMYK grayscale image.

While printing color jobs using the **Color** option, you may also select the **Print grays using black toner** check box, so that RGB gray images will be printed using black toner only (for gray CMYK elements to be printed using black toner only, you need to select **Perceptual** as the rendering intent). Use this option if you have a mixed document (containing some pages in color and some pages in grayscale only) or a mixed page (using both color and grayscale images / texts).

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,** you may select the **Print grays using black toner** check box, to print RGB gray images 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. This selection ensures that grayscale images are counted as B&W instead of Color in both the CXP6000 Color Server and in the Xerox DocuColor 2060/2045 Printer billing meters.

RGB Workflow

The **RGB Workflow** parameter enables you to select a profile for printing images defined with a profile set in the DTP application that supports ICC color management, and also specify the required rendering intent for RGB elements.

This function uses the following terminology:

- **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 / 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.
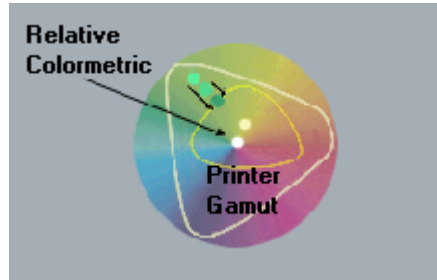
- **Absolute Colorimetric** - a rendering intent method similar to Relative Colorimetric except that it does not make adjustments according to the white point. In this method, colors that do not fit within the output color space are rendered at the extremes of the output color space. Colors that fall 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.
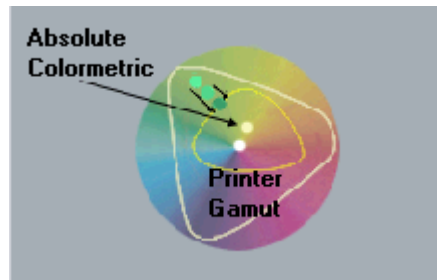
- **Saturated (presentation)** - a rendering intent method which scales all colors to the strongest saturation possible. The relative saturation is maintained from one color space to another.
  This rendering style option is optimal for artwork and graphs in presentations. In many cases, this style option can be used for mixed pages that contain both presentation graphics and photographs.
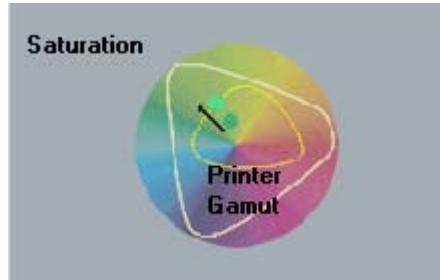
- **Perceptual (Photographic)** (default for RGB) - a rendering intent method which preserves the visual relationship among the colors as they are perceived by the human eye. In other words, all colors are proportionally scaled to fit the output gamut. All or most colors in the original are changed but 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.
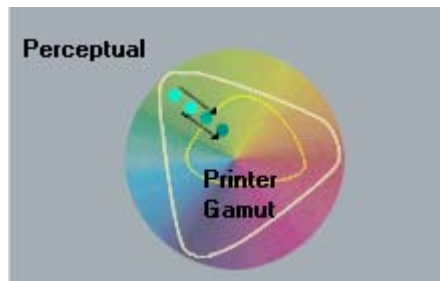
To select an RGB workflow, select one of the following options:

- To use the source CSA RGB profile, select **Use Source CSA profile** (uses the embedded CSA).

- To use a Spire source CSA RGB profile, select **Replace with** and select the required CSA from the list.

To set the rendering intent, select one of the following options:

- Select **Relative Colorimetric** when a color in the current color space is out of gamut in the target color space, so that it is mapped to the closest possible color within the gamut of the target color space, while colors that are in gamut are not affected. Relative Colorimetric rendering does not incorporate paper tint in the rendering.
  Only the colors that fall outside of the destination gamut are changed. This rendering can cause two colors, which appear different in the source color space, to be the same in the target color space.

- Select **Absolute Colorimetric** so that colors match exactly with no adjustment made for white point or black point that would alter the image's brightness. Absolute Colorimetric rendering does include paper tint in the rendering.
  Absolute Colorimetric is valuable for rendering "signature colors", those colors that are identified with a commercial product.

- Select **Saturated (presentation)** to reproduce the original image color saturation (vividness) when converting into the target device's color space.
  In this approach, the relative saturation of colors is maintained from gamut to gamut. This rendering is primarily designed for business graphics, where the exact relationship between colors (such as in a photographic image) is not as important as are bright saturated colors.

- Select **Perceptual (photographic)** to compress the total gamut from one device's color space into the gamut of another device's color space, when one or more colors in the original image is out of the gamut of the destination color space.
  This rendering preserves the visual relationship between colors by shrinking the entire color space and shifting all colors – including those that were in gamut.

CMYK Workflow
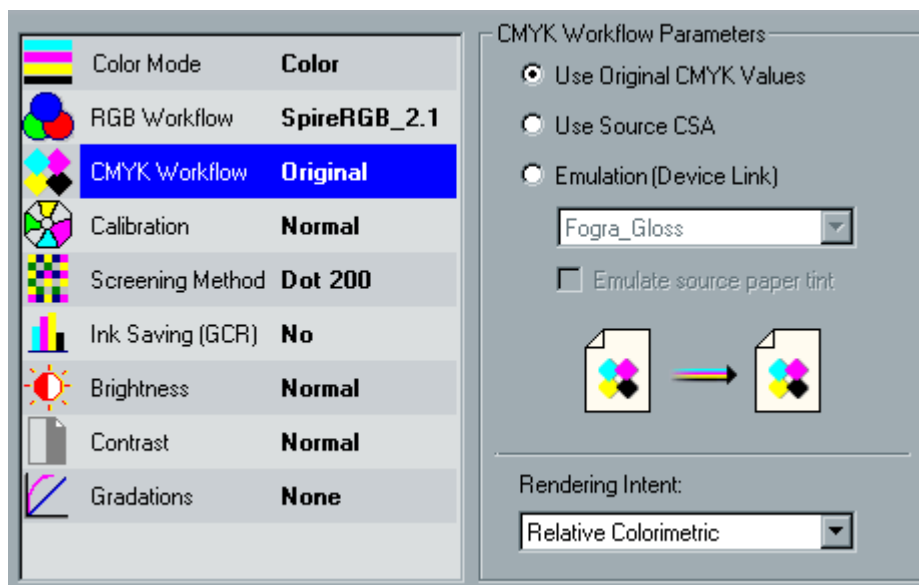
The **CMYK Workflow** is used to emulate various standards used in lithographic printing. These standards represent specific combinations of paper and ink, as well as popular proofing systems. It is also used to emulate other printing devices such as offset presses, or other digital printers. An example 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 CXP6000 Color Server supports two CMYK emulation methods: **Device Link** (default) and **CSA**. If you would like to emulate your CMYKs using the CSA method, change the CMYK emulation method in the Administration window, in the **Preferences** folder.

For further details, see *Color - Emulations* on page 307.

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 options** list. The default value for CMYK is **Relative Colorimetric**.

Note: If you select the **Device Link Emulation** profile, you cannot select a rendering intent since 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 a CMYK workflow, select one of the following options:

- To use the embedded CSA profile from the PS file, select **Use Source CSA**.

- To replace the source CSA with original CMYK values, select **Use Original CMYK values**.

- To use one of the Creo predefined CMYK emulation profiles, select **Emulation (Device Link)** and from the 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.

- To emulate also the original paper tint, select the **Emulate source paper tint** check box.

   Notes:

   The **Emulate source paper tint** check box is enabled only if you select the **Device Link** emulation profile.

   When the **Emulate source paper tint** check box is selected, the rendering intent that will be used is **Absolute Colorimetric**.

   If the job is simplex, only the front side will be printed using the tint emulation.

To set the rendering intent, select one of the following options:

Note: If you selected the **Device Link Emulation** profile, you cannot select a rendering intent since for each device link emulation profile a rendering intent is already defined.

- Select **Relative Colorimetric** when a color in the current color space is out of gamut in the target color space, so that it is mapped to the closest possible color within the gamut of the target color space, while colors that are in gamut are not affected. Relative Colorimetric rendering does not incorporate paper tint in the rendering.
  Only the colors that fall outside of the destination gamut are changed. This rendering can cause two colors, which appear different in the source color space, to be the same in the target color space.

- Select **Absolute Colorimetric** so that colors match exactly with no adjustment made for white point or black point that would alter the image's brightness. Absolute Colorimetric rendering does include paper tint in the rendering.
  Absolute Colorimetric is valuable for rendering "signature colors", those colors that are identified with a commercial product.

- Select **Saturated (presentation)** to reproduce the original image color saturation (vividness) when converting into the target device's color space.
  In this approach, the relative saturation of colors is maintained from gamut to gamut. This rendering is primarily designed for business graphics, where the exact relationship between colors (such as in a photographic image) is not as important as are bright saturated colors.

- Select **Perceptual (photographic)** to compress the total gamut from one device's color space into the gamut of another device's color space, when one or more colors in the original image is out of the gamut of the destination color space.
  This rendering preserves the visual relationship between colors by shrinking the entire color space and shifting all colors – including those that were in gamut.

Calibration
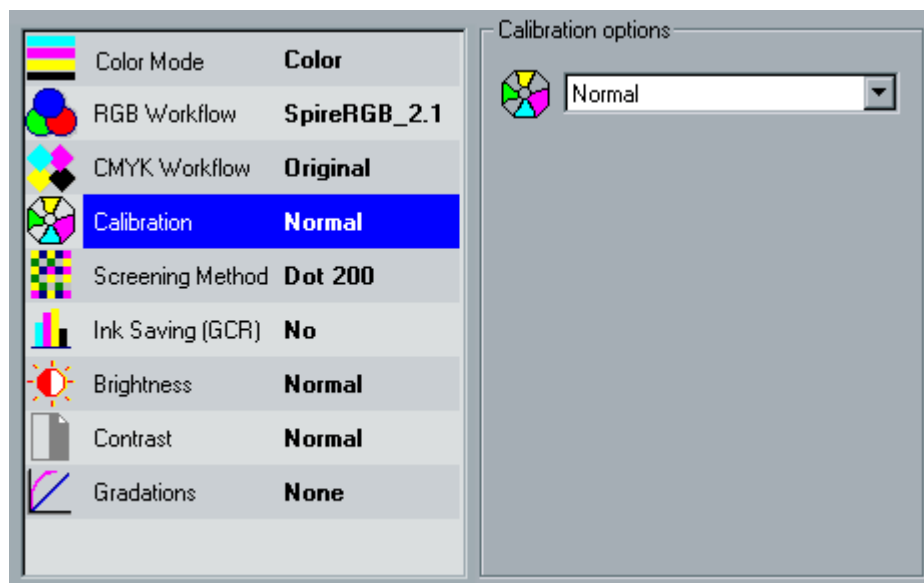
The purpose of color **Calibration** is to achieve a consistent level of color quality. The calibration process corrects printer colors by measuring a chart using a densitometer, which measures color density.

The 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 further information, see *The Calibration Tool* on page 213.

The **Calibration** parameter enables you to select the required calibration table for the job.

To select a calibration table for a job:

➢ Use the default calibration table **Normal**.
   Or:
   Select a calibration table from the **Calibration options** list.

Tip: For optimal printing performance, use the **Normal** (default) calibration setting (with **Medium** GCR).

Screening Method
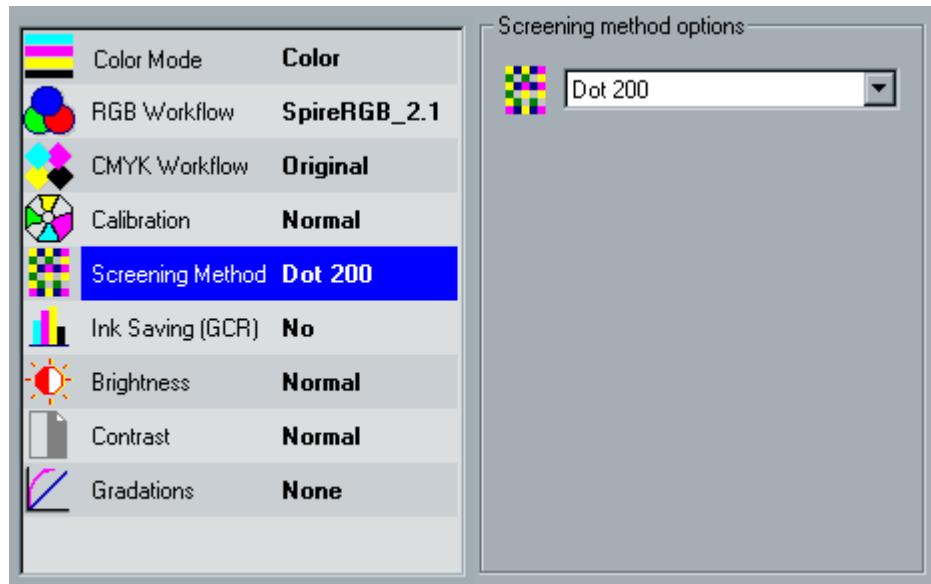
Screening Method converts CT (Continuous Tone) and LW (Line Work) images into information (halftone dots) that can be printed. The human eye "smooths out" this information, which seems visually consistent with the original picture. Thus, the more lines per inch, the more natural the image appears.

The CXP6000 Color Server supports Dot and Stochastic screening. Screening is achieved by printing dots or lines in an evenly-spaced pattern. The distance between screen dots is fixed and the dot size varies according to the required strength of color.

Using screens, printers can work with even amounts of toner and still produce a wide range of colors. The darker the color, the larger the dot. In this manner screens are used to give the appearance of different toner quantities printed in a certain area.

The 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 / 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 Chapter 5, Administrating the System, *Color - Automatic Screening Method* on page 309.

- **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:

➢ Select **Automatic**, to apply:

   ❑ For CT - dot type screen of 200 lpi.

   ❑ For LW (text / line-art elements) - line type screen of 200 lpi.

   Or:
   Select a specific **Screening Method** from the list: for CT images, use a **Dot** option and for LW images, use a **Line** option.

Ink Saving (GCR)
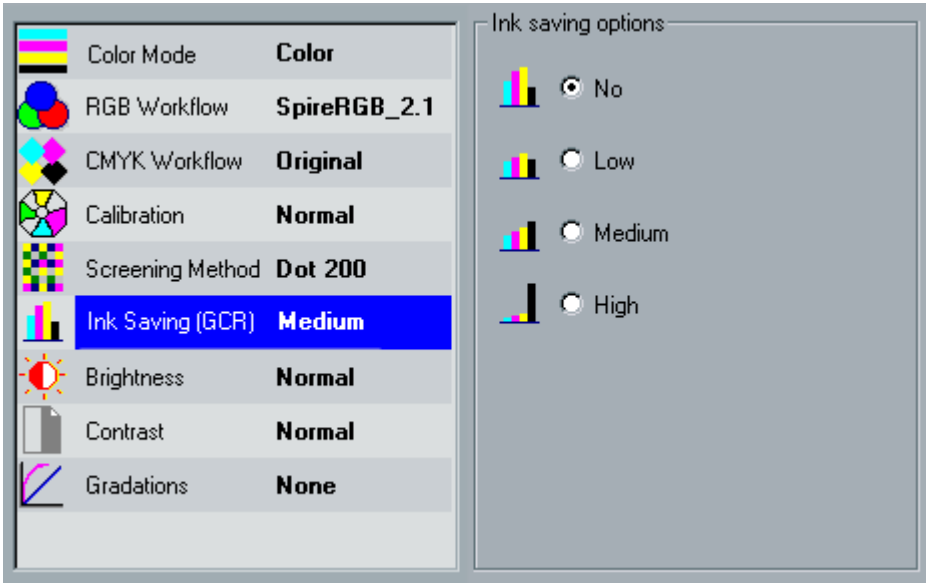
Ink Saving GCR (Gray Component Replacement) replaces grays (of a certain percentage of C, M and Y) with Black, which affects the gray component of all colors.

This replacement conserves ink or toner and 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
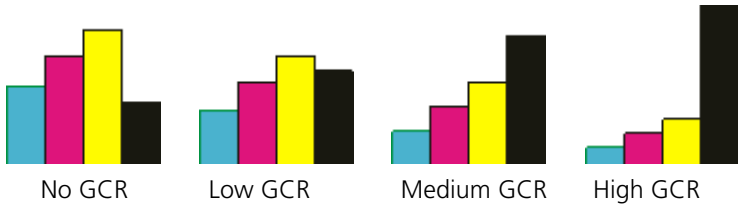
While the gray component of each color is replaced by black, there is no change in the color quality of the printed image.

To set the Ink Saving GCR, select one of the following options:

- To set the amount of CMY dry inks to be replaced by the black dry ink, from the **Ink Saving options**, select the required amount of CMY dry inks to be replaced by the black dry ink:

  ☐ **Low**

  ☐ **Medium**

  ☐ **High**

  Note: Use **High** to provide low ink coverage while saving on dry ink (this prevents the occasional peeling of ink and the "curling" effect that may occur when printing transparencies).

- To disable GCR and use maximum dry ink coverage, from the **Ink Saving options**, use the default option **No.**

Brightness
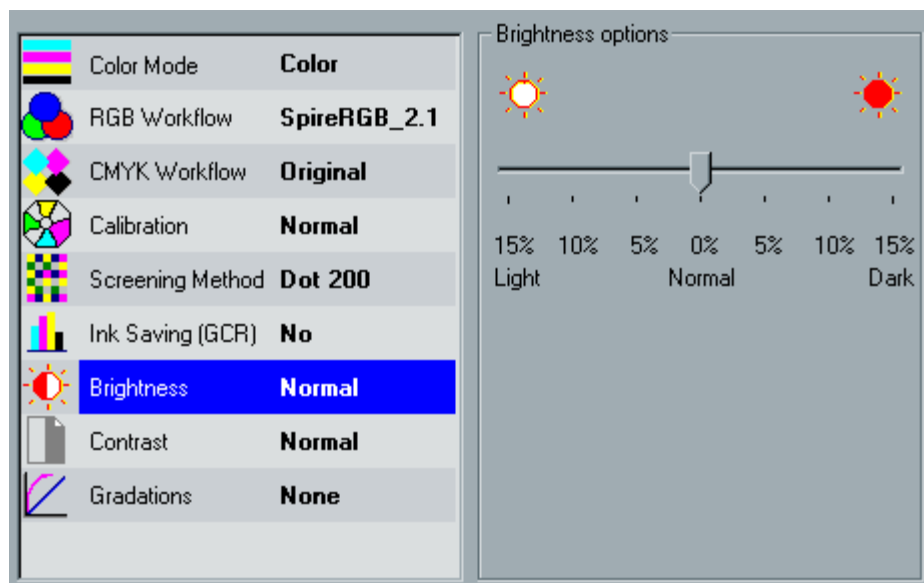
With **Brightness** you control how light or dark your image appears.

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 set the brightness, select one of the following:

- To apply no brightness, select **Normal**.

- 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%).

Contrast
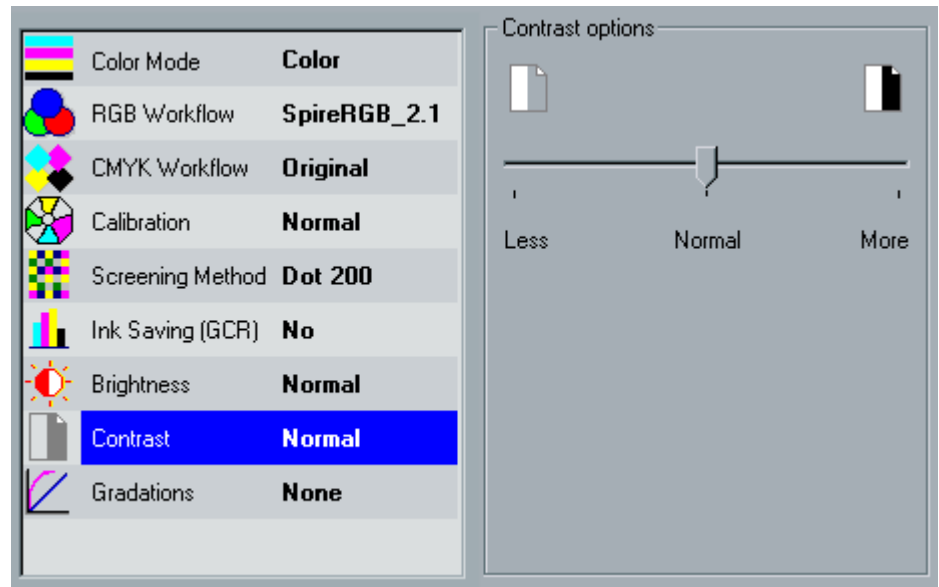
Contrast is the ratio between the light tones and the dark tones in an image. If you increase the contrast, highlights become lighter while shadows become darker.

Less   Normal   More

The **Contrast** parameter 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 set the contrast, select one of the following:

- To apply no contrast, from the **Contrast options**, select **Normal**.

- To select a contrast level for the print job, move the **Contrast options** slider to the required contrast level (the range starts from **Less** - which applies -10%, to **More** - which applies +10%).

Gradations

	Color Mode	**Color**
	RGB Workflow	**SpireRGB_2.1**
	CMYK Workflow	**Original**
	Calibration	**Normal**
	Screening Method	**Dot 200**
	Ink Saving (GCR)	**No**
	Brightness	**Normal**
	Contrast	**Normal**
	Gradations	**None**

Gradations options

None
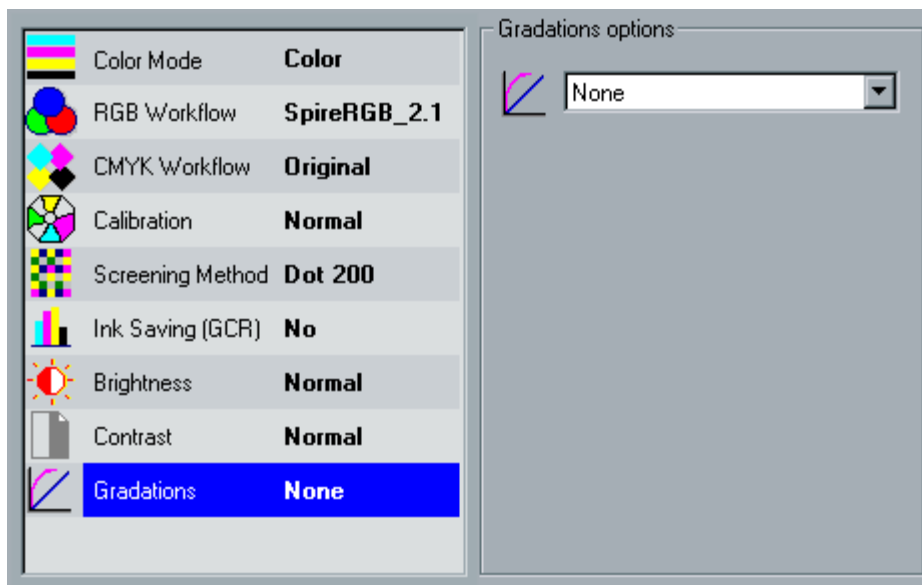
The **Gradations** parameter is used whenever it becomes necessary to perform tone corrections when printing a job. These changes in gradation can include brightness, contrast and color balance adjustments throughout the tone range of an entire image, or in specific tone ranges and do not require re-RIP of the job. The gradation tables you create using the CXP6000 Color Server Gradation tool are displayed in the **Color** tab and may be applied to print jobs.

For further information, see *The Gradation Tool* on page 201.

You can apply the default gradation table or another pre-configured gradation table to a job.

To select a gradation table for a job:

➢ Select **None** for no gradation table to be applied.
Or:
Select one of the defined gradation tables from the **Gradation options** list.

The Imposition Tab
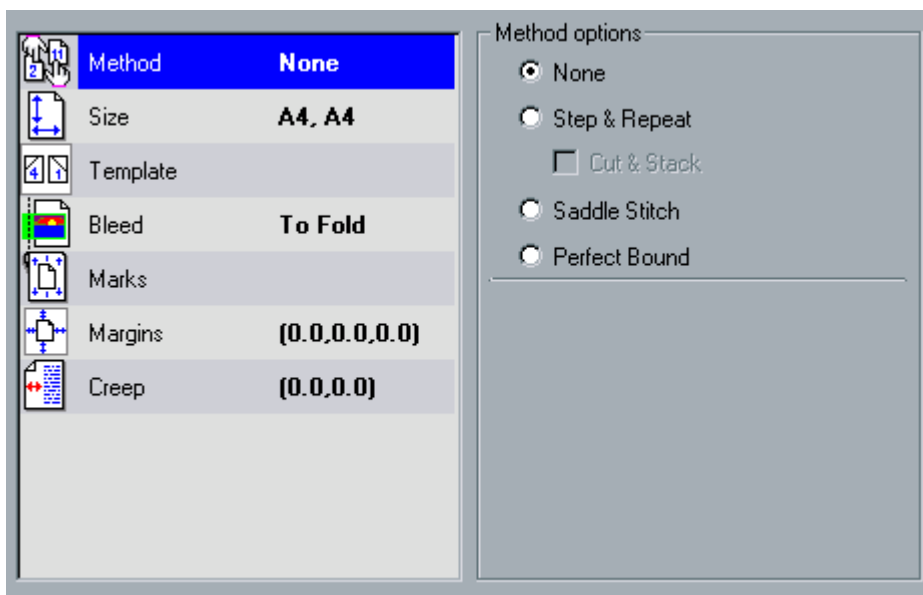
The **Imposition** tab is used to set job options related to positioning, folding, trimming and binding of pages.

Whenever possible, imposition settings should be defined before RIPing a job. Changing key imposition settings (for example, template settings) post RIP may require inefficient re-RIPing of jobs. The CXP6000 Color Server only re-RIPs an imposition job when required.

Note: If a job is printed using a Set Page Device virtual Printer, the **Imposition** tab is disabled.

After selecting the **Template** parameter, a dynamic thumbnail view appears on the lower right hand corner of the **Imposition** tab. It shows the effect of your parameter choices on the printed sheet. Parameter setting conflicts are indicated.

Note: The template option and the thumbnail view are not active if you select **None** as your imposition method.

For further details, see *The thumbnail viewer* on page 124.

The thumbnail viewer is used to receive an immediate feedback on the combination of the imposition parameters in the job. If you would like to see the imposed job preview, you may view your job in the Job Editor window, **Imposed sheets** tab.

For further details, see *The Imposed sheets tab* on page 373.

Method

The **Method** parameter specifies the finishing of printed sheets. It offers three types of binding: **Saddle Stitch**, **Perfect Bound**, and **Cut & Stack**, and one method that collects pages together on one sheet without binding: **Step & Repeat**.

After selecting a finishing method, a display icon of the method appears in the right lower right corner of the **Imposition** tab.

Note: When **None** is selected, all imposition job parameters are disabled, and the thumbnail viewer does not display an image.

The method options

- **Step & Repeat**

  Step & Repeat method is used for printing multiple copies of the same image so it fills up a larger sheet. This method is used mainly for printing business cards etc. (many business cards on one sheet).

  Note: It is possible to use specific Step & Repeat templates to print several different images on one sheet.
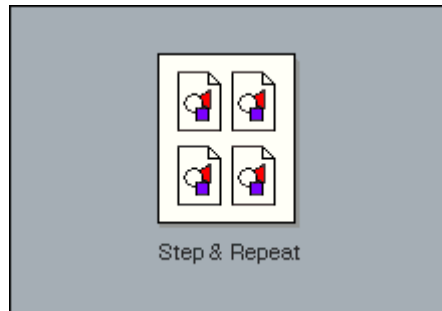
- **Cut & Stack**

  Within the Step & Repeat method, is the sub-option Cut & Stack. A
  job's pages, booklets (personalized set of any number of pages), or
  books are sorted in a Z-shape. In other words, each stack of pages is
  sorted in consecutive order. Thus, when stacks are piled one on top of
  another, the entire job is already sorted up or down.

  Notes:

  When using the **Step & Repeat** template for VI jobs, the system prints it in
  Z-Sorting mode. This mode enables imposed VI jobs to be sorted for **Cut &
  Stack** finishing.

  When using the **Step & Repeat** template with the **Cut & Stack sub-
  option,** the **Exceptions** tab is disabled.

  Cut & Stack
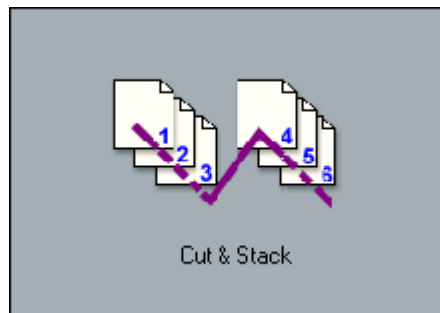
- **Saddle Stitch**

  Saddle Stitch is a book-finishing technique where the pages of a book
  are attached through stitching or stapling in the spine fold (for
  example, for brochures).

  Saddle Stich
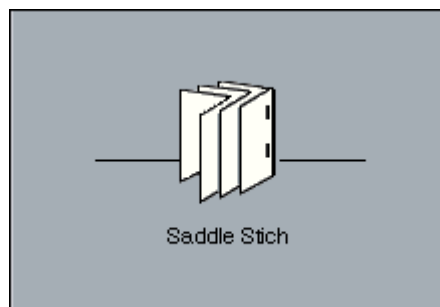
- **Perfect Bound**

  Perfect Bound is 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, for hardcover books).
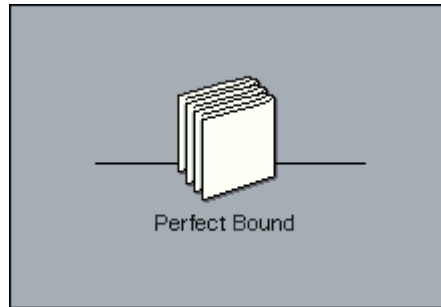
To select the optimal finishing method:

- For printing multiple copies of the same image so it fills up an entire sheet (for example, for business cards) - select **Step & Repeat**.
  For VI and PS jobs, - select **Cut & Stack** to enable Step & Repeat jobs, to be printed, cut, stacked and bound in the most efficient manner, while preserving the original sorting.

- For a book-finishing technique where the pages of a book are attached through stitching or stapling in the spine fold (for example, for brochures) - select **Saddle Stitch**.

- 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, for hardcover books) - select **Perfect Bound**.

Size

This function 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. Selecting a paper set using the **Page Attributes** parameter disables the **Paper Set** parameter in the **Paper Stock** tab.

- **Trim size** is the size of the finished, trimmed document.
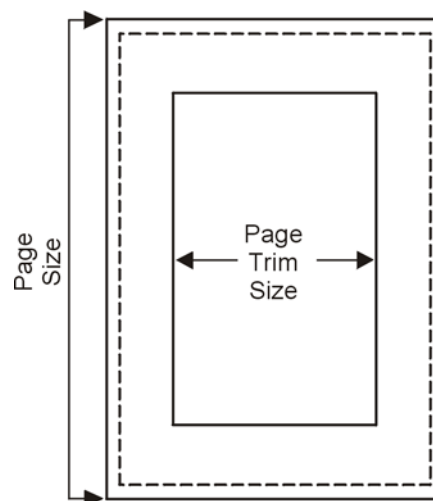
You can adjust your page size by adjusting the trim size.

Note: If you set 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 may be selected and the job may be cropped as a result.

To define the job attributes:

1. From the **For sheet size use paper set** list, select the required paper set.
   Or:
   Click the **Paper Set List** button and add a new paper set.

   For further information see *Managing Paper Sets* on page 76.

   The selected page size appears beneath the paper set.

2. Select the required trim size from the **Trim Size** list.

   Or:
   From the **Trim Size** list, select **Custom** to define a custom trim size and type the required Height in the **H** box, and the required Width in the **W** box.

Trim Size:	Custom ▼
	H: 0.0 W: 0.0 mm

3. Select the required **Orientation** for the trim size: **Landscape** or **Portrait**.

Template
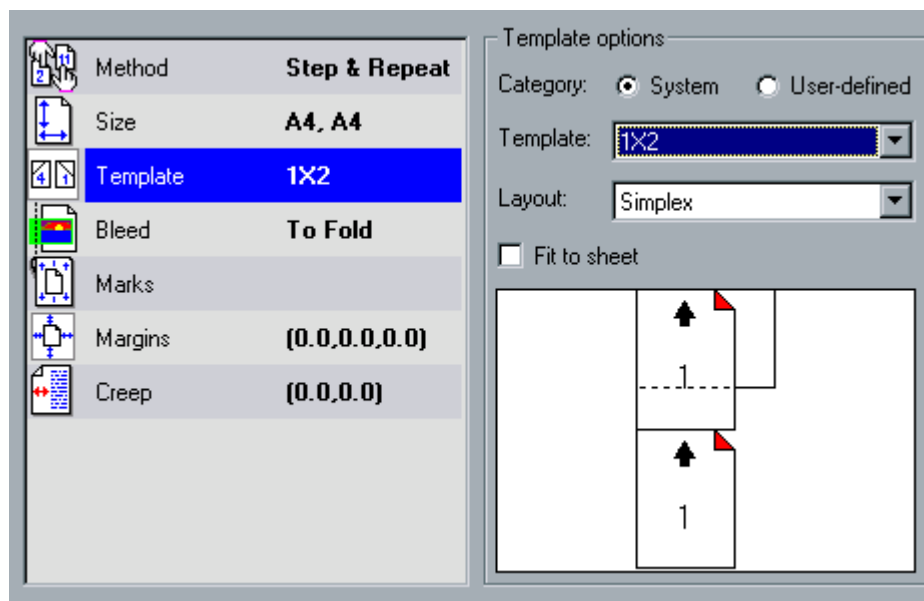
A **Template** is a set of parameters that determines how your finished sheet is printed.

The template includes:

- The number of columns and rows of pages on a sheet.

- Each pair's first number refers to columns and the second number refers to rows.

- Whether the sheet is printed on one side (Simplex) or on both sides (Duplex).

- The orientation (portrait or landscape) of the page.

Each Imposition method has its own specific template choices. For example, if you change your Imposition method from **Perfect bound** to **Step & Repeat**, your initially selected template no longer fits the new method.

The **Template** parameter enables you to choose the template you would like to use. The list of available template choices is determined by the selected finishing method.

For further details, see *Imposition Workflow* on page 192.

The thumbnail viewer

When setting the **Template** parameter, the thumbnail view continuously updates your selections for trim size, margins and sheet size.

Thumbnail arrows

The page orientation is indicated by the direction of the arrows (which point to the head of the page) and not by the orientation of the numbers.

- Green arrows - indicate that the template layout is rotated.
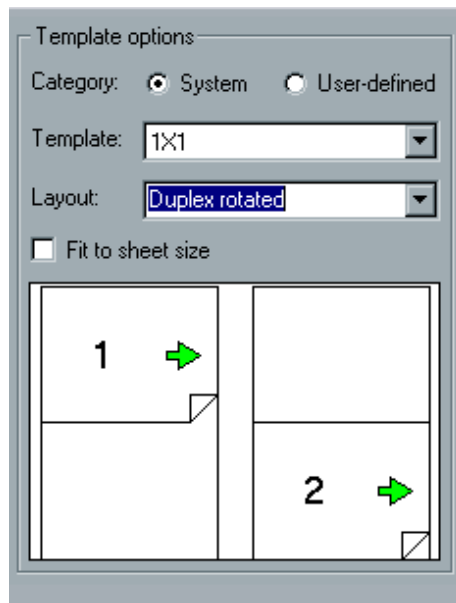
- Blue and black arrows - indicate the direction of the pages on the sheet: blue - head is down (appears only in duplex layout), black- head is up.
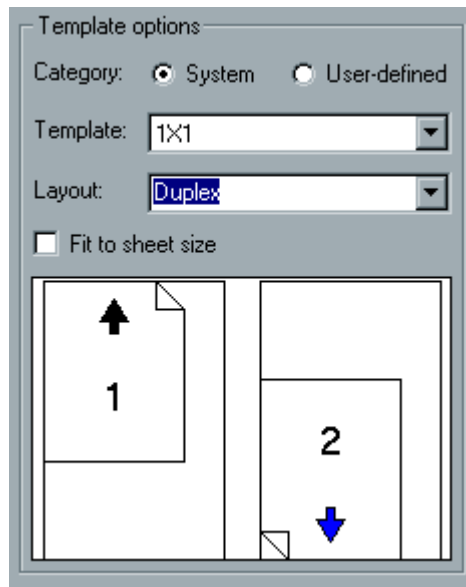
Conflicting parameters

Whenever there is any conflict in the imposition parameter settings, an indication to the conflict will appear in the thumbnail view.

• Red corners - indicate that the trim size is bigger than the sheet size.
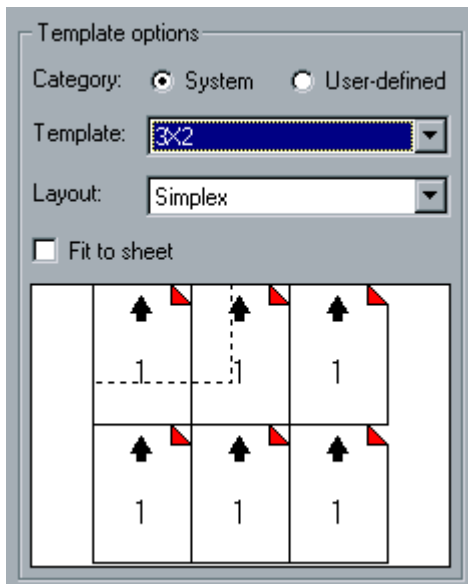
- Yellow corners - indicate unsuitable margin settings. For example if the minimum margin size is unsuitable.
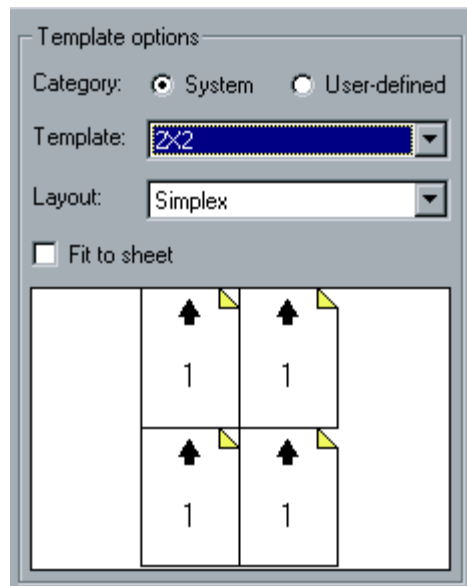
- Dotted line - conflicting trim size settings (for example, A3 trim for Step & Repeat 2x2 Duplex template) and template settings.
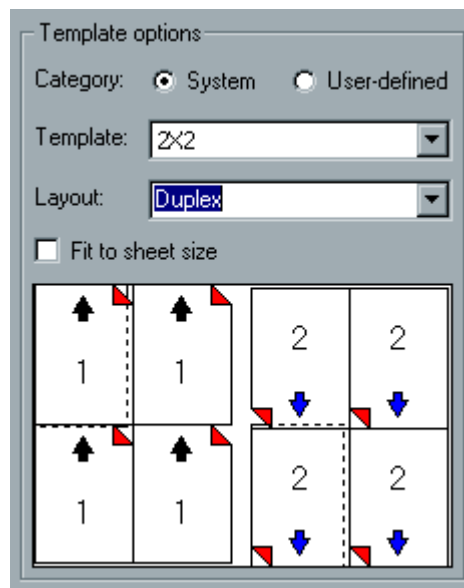
Collating Templates

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.

When choosing a template, you should account for other job parameters (for example paper **Trim Size**, **Bleed**, **Margin**, **Gutters** and **Paper Size**). Since some of these parameter settings may contradict, the **Template Thumbnail** enables you to visually check your job as it highlights such conflicts (in red).

Templates are also linked to the chosen imposition method. If you change your imposition method (for example from **Perfect Bound** to **Step & Repeat**), your initially selected template may no longer fit the new method. When required, the 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 CXP6000 Color Server imposition template.
   Or:
   Select **User-defined** to choose a user defined CXP6000 Color Server imposition template.

   For further information on User Defined templates, see *User Defined Imposition Template* on page 294.

2. From the **Template** list, select an available template.

3. From the **Layout** list, select the required layout (Duplex, Simplex, Rotated, Non-rotated.)

   Note: If you selected **User Defined** from the **Category** options, **Layout** is unavailable.

4. Select the **Fit to sheet** check box to proportionally increase or decrease the layout in order to fill the entire sheet size.

CXP6000 Color Server Predefined Imposition Templates

The CXP6000 Color Server is predefined with the following imposition templates:

Note: DUP refers to Duplex and SIM refers to Simplex.

Step & Repeat	Saddle Stitch	Perfect Bound	Cut & Stack
1x1 DUP HTH	1x2 HTT	1x2 HTT	1x1 DUP HTH
1x1 DUP HTH Rotated	1x2 HTT Rotated	1x2 HTT Rotated	1x1 DUP HTH Rotated
1x1 DUP HTT	2x1	2x1	1x1 DUP HTT
1x1 DUP HTT Rotated	2x1 Rotated	2x1 Rotated	1x1 DUP HTT Rotated
1x1 SIM	2x2	2x2	1x1 SIM
1x1 SIM Rotated	2x2 HTT	2x2 HTT	1x1 SIM Rotated
1x2 DUP HTH	2x2 Rotated	2x2 Rotated	1x2 DUP HTH
1x2 DUP HTH Rotated	2x2 HTT Rotated	2x2 HTT Rotated	1x2 DUP HTH Rotated
1x2 DUP HTT	4x2	4x2	1x2 DUP HTT
1x2 DUP HTT Rotated	4x2 Rotated	4x2 Rotated	1x2 DUP HTT Rotated
1x2 SIM			1x2 SIM
1x2 SIM Rotated			1x2 SIM Rotated
1x2 North South			1x2 North South
1x3 DUP HTH			1x3 DUP HTH
1x3 DUP HTH Rotated			1x3 DUP HTH Rotated
1x3 DUP HTT			1x3 DUP HTT
1x3 DUP HTT Rotated			1x3 DUP HTT Rotated
1X3 SIM			1X3 SIM
1X3 SIM Rotated			1X3 SIM Rotated

Step & Repeat	Saddle Stitch	Perfect Bound	Cut & Stack
2x1 DUP HTH			2x1 DUP HTH
2x1 DUP HTH Rotated			2x1 DUP HTH Rotated
2x1 DUP HTT			2x1 DUP HTT
2x1 DUP HTT Rotated			2x1 DUP HTT Rotated
2x1 SIM			2x1 SIM
2x1 SIM Rotated			2x1 SIM Rotated
2x1 North South			2x1 North South
2x2 DUP HTH			2x2 DUP HTH
2x2 DUP HTH Rotated			2x2 DUP HTH Rotated
2x2 DUP HTT			2x2 DUP HTT
2x2 DUP HTT Rotated			2x2 DUP HTT Rotated
2x2 SIM			2x2 SIM
2x2 SIM Rotated			2x2 SIM Rotated
2X5 DUP HTH			2X5 DUP HTH
2X5 DUP HTH Rotated			2X5 DUP HTH Rotated
2x5 DUP HTT			2x5 DUP HTT
2x5 DUP HTT Rotated			2x5 DUP HTT Rotated
2x5 SIM			2x5 SIM
2x5 SIM Rotated			2x5 SIM Rotated
3x1 DUP HTH			3x1 DUP HTH
3x1 DUP HTH Rotated			3x1 DUP HTH Rotated
3x1 DUP HTT			3x1 DUP HTT
3x1 DUP HTT Rotated			3x1 DUP HTT Rotated

Step & Repeat	Saddle Stitch	Perfect Bound	Cut & Stack
3x1 SIM			3x1 SIM
3x1 SIM Rotated			3x1 SIM Rotated
3x2 DUP HTH			3x2 DUP HTH
3x2 DUP HTH Rotated			3x2 DUP HTH Rotated
3x2 DUP HTT			3x2 DUP HTT
3x2 DUP HTT Rotated			3x2 DUP HTT Rotated
3x2 SIM			3x2 SIM
3x2 SIM Rotated			3x2 SIM Rotated
3x4 DUP HTH			3x4 DUP HTH
3x4 DUP HTH Rotated			3x4 DUP HTH Rotated
3x4 DUP HTT			3x4 DUP HTT
3x4 DUP HTT Rotated			3x4 DUP HTT Rotated
3x4 SIM			3x4 SIM
3x4 SIM Rotated			3x4 SIM Rotated
3x8 DUP HTH			3x8 DUP HTH
3x8 DUP HTH Rotated			3x8 DUP HTH Rotated
3x8 DUP HTT			3x8 DUP HTT
3x8 DUP HTT Rotated			3x8 DUP HTT Rotated
3x8 SIM			3x8 SIM
3x8 SIM Rotated			3x8 SIM Rotated
4x2 DUP HTH			4x2 DUP HTH
4x2 DUP HTH Rotated			4x2 DUP HTH Rotated
4x2 DUP HTT			4x2 DUP HTT

Step & Repeat	Saddle Stitch	Perfect Bound	Cut & Stack
4x2 DUP HTT Rotated			4x2 DUP HTT Rotated
4x2 SIM			4x2 SIM
4x2 SIM Rotated			4x2 SIM Rotated
4x3 DUP HTH			4x3 DUP HTH
4x3 DUP HTH Rotated			4x3 DUP HTH Rotated
4x3 DUP HTT			4x3 DUP HTT
4x3 DUP HTT Rotated			4x3 DUP HTT Rotated
4x3 SIM			4x3 SIM
4x3 SIM Rotated			4x3 SIM Rotated
4x4 HTH DUP			4x4 HTH DUP
4x4 DUP HTH Rotated			4x4 DUP HTH Rotated
4x4 HTT DUP			4x4 HTT DUP
4x4 DUP HTT Rotated			4x4 DUP HTT Rotated
4x4 SIM			4x4 SIM
4x4 SIM Rotated			4x4 SIM Rotated
5x2 DUP HTH			5x2 DUP HTH
5x2 DUP HTH Rotated			5x2 DUP HTH Rotated
5x2 DUP HTT			5x2 DUP HTT
5x2 DUP HTT Rotated			5x2 DUP HTT Rotated
5x2 SIM			5x2 SIM
5x2 SIM Rotated			5x2 SIM Rotated
5x5 DUP HTH			5x5 DUP HTH
5x5 DUP HTH Rotated			5x5 DUP HTH Rotated

Step & Repeat	Saddle Stitch	Perfect Bound	Cut & Stack
5x5 DUP HTT			5x5 DUP HTT
5x5 DUP HTT Rotated			5x5 DUP HTT Rotated
5x5 SIM			5x5 SIM
5x5 SIM Rotated			5x5 SIM Rotated
8x3 DUP HTH			8x3 DUP HTH
8x3 DUP HTH Rotated			8x3 DUP HTH Rotated
8x3 DUP HTT			8x3 DUP HTT
8x3 DUP HTT Rotated			8x3 DUP HTT Rotated
8x3 SIM			8x3 SIM
8x3 SIM Rotated			8x3 SIM Rotated

Bleed
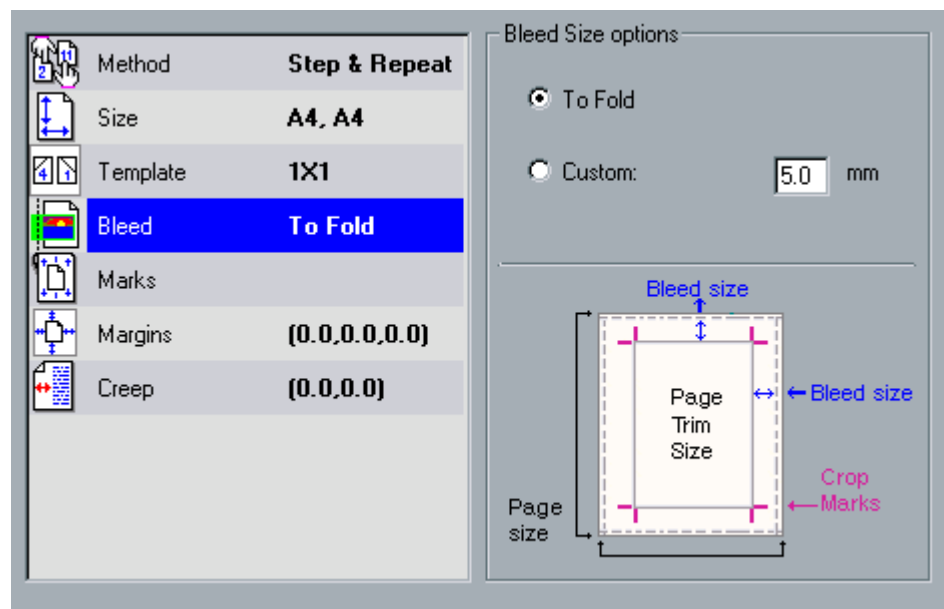
The **Bleed** parameter extends part of the printed page image beyond the trimming boundary.

This parameter enables you to avoid white edges after cutting and folding pages with elements adjacent to the edge of the page.
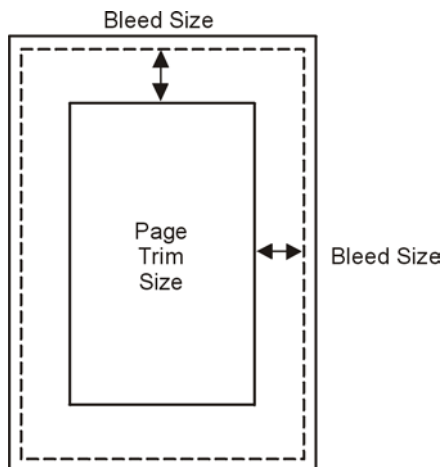
Note: Applying Bleed Size results in the bleed effect only when a file contains bleed applied in the originating DTP application.

To specify the required bleed:

➢ From the **Bleed Size options**, select **To Fold** in order to extend bleed to the sheet fold lines.
Or:
Select **Custom** and type the required bleed size in millimeters.

Notes:

You cannot extend the bleed size beyond the sheet fold lines. Bleed does not affect the position of crop.

A file incorporates bleed previously applied in a DTP application, applying bleed results in the bleed effect. If bleed has not been incorporated in the file, application of bleed on the CXP6000 Color Server does not create bleed.

Marks
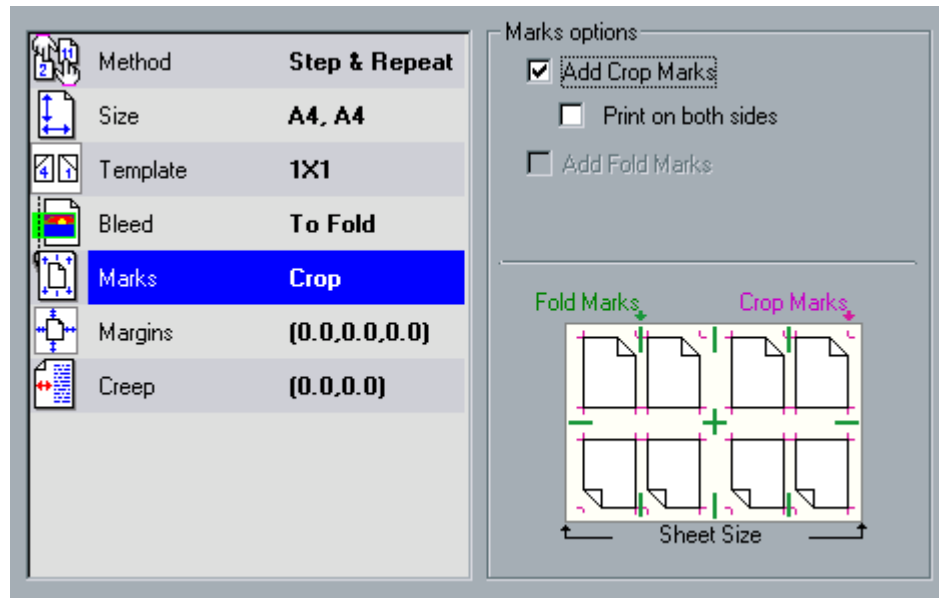
Marks are additional images printed on the sheet that help in the finishing process by noting where trimming and folding should occur.
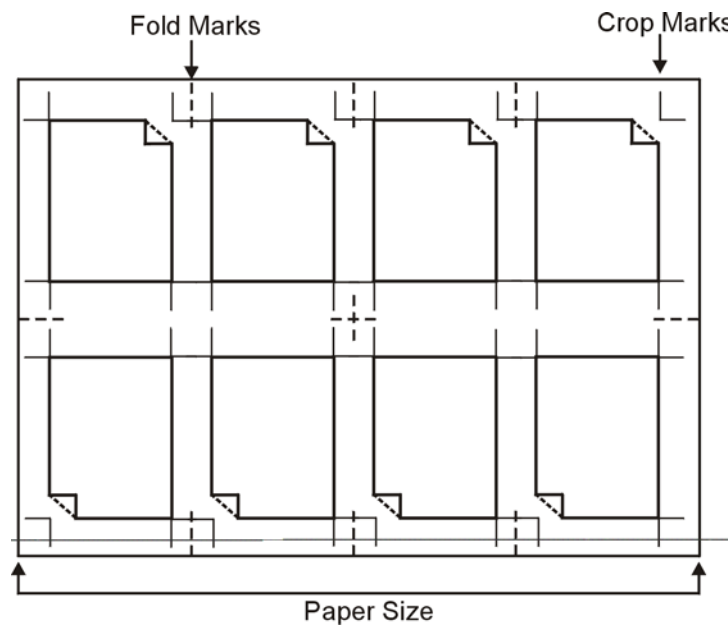
To add crop and/or fold marks:

1. If you would like the lines that indicate where the sheet should be cropped, to be printed on the sheet, select the **Add Crop Marks** check box. You may also select the **Print on both sides** check box if you would like the crop marks to be printed on both sides of the page.

2. If you would like the lines that indicate where the sheet should be folded are printed on the sheet, select the **Add Fold Marks** check box.

Notes:

Crop marks are placed according to **Trim Size** parameters. A minimum of 6mm is required for crop marks, and 10mm 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, ensure that enough space is left around your page in the PS file so that the page prints with crop marks.

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.

This function uses the following terminology:

- The **Spine Trim Size** is the space between adjacent pages on a printed sheet, which, when folded into a signature / booklet, enables grinding and perfect binding. Spine trim size is used 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.

- The **Minimum 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 only one gutter, or no gutter at all. (i.e., in two up, there is no gutter.) In these cases, the Minimum Gutter Size setting is ignored.

- The **Minimum Margin Size** is the distance between the outside edges of the sheet and the edges of the pages printed on the sheet. You can set the minimum margin size, but not the exact size, which is calculated by the CXP6000 Color Server in accordance with other imposition parameters.

To set the margins:

➢ In the **Margins options**, type the required margin sizes.

Note: Units of measurement (mm or inches) reflect system configuration. They are chosen in the Administration window.

Creep

When inserting signatures inside one another when binding saddle-stitched jobs, the signatures inserted last (in other words towards the center of the job) are the furthest away from the center of the publication. When the publication is trimmed down to its final size, the inward page sections drift outward (or are even clipped).

Creep compensates for this problem by moving the pages on inside signatures progressively closer to the fold (in other words the position of the final PostScript trimmed pages remains at a constant distance from the outside edge of the book, when in fact the margins closest to the spine are continually changing).

Note: It is recommended that you use a border around all documents when **Creep** is used.

This function uses the following terminology:

- **Total 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). If required, the CXP6000 Color Server can also set **Total Creep In** automatically based on paper stock weight.

  Note: The outside two pages and their backs are not moved (the value 0.0 is used).

- **Initial Creep Out** is useful for the cases you find that the page images get too close to the spine. This problem can be resolved by giving a value for Initial 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 **Total Creep In** value is applied.

To set the creep:

1. To select the amount of total creep in, type the required amount for **Total Creep In**.
   Or:
   Select **Auto** so that the CXP6000 Color Server will set the **Total Creep In** automatically based on paper stock weight.

2. To select the amount of initial creep out, type the required amount for **Initial Creep Out**.

   Note: Units of measurement (mm or inches) are set in the Administration window.

The Services Tab
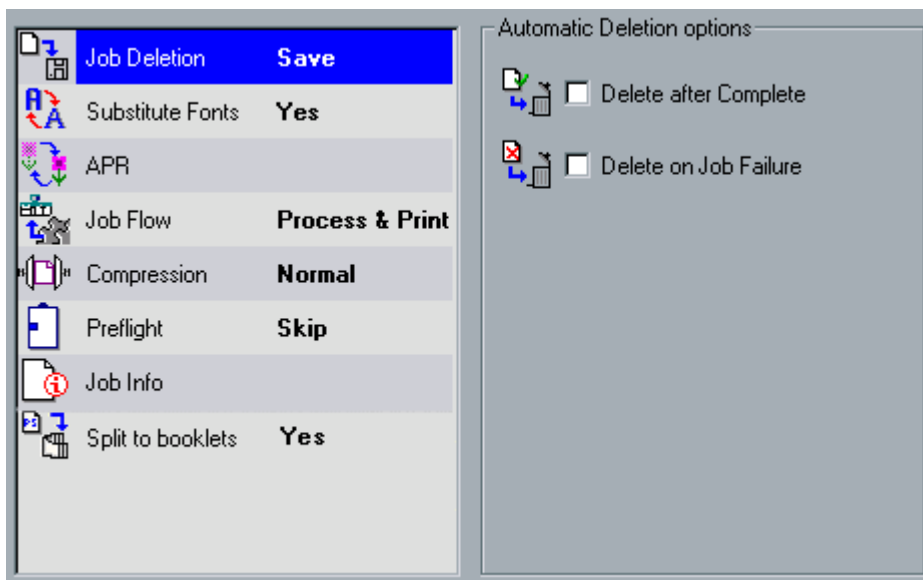
The **Services** tab enables you to set deletion policies for completed and failed jobs, to perform a preflight check on key components, to set font substitution preferences and to apply APR (Automatic Picture Replacement). In addition, you may set the job flow, the job info, select the required compression, or split a PostScript file into booklets.

Job Deletion
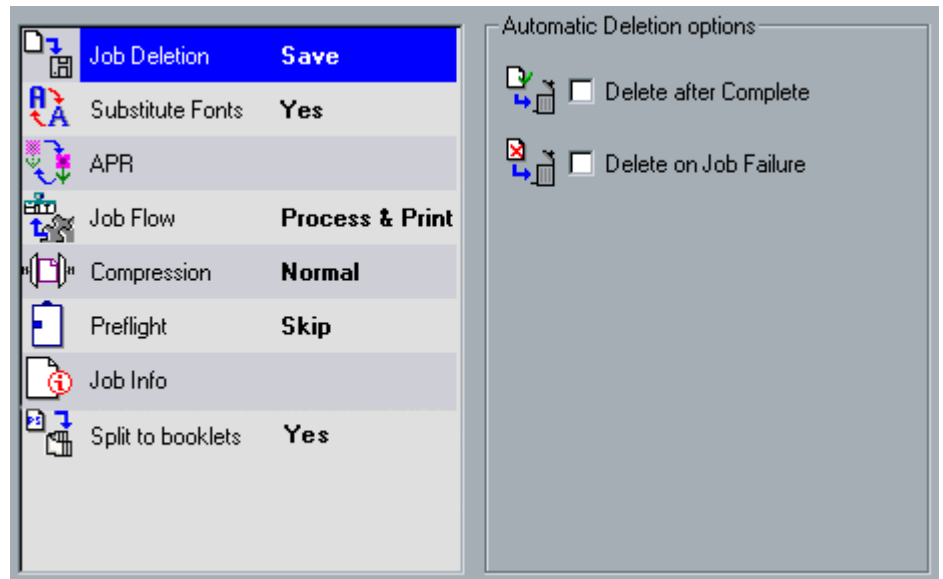
Job Deletion is initially set to **Save** which means that completed and failed jobs are automatically saved in the **Storage Folder** unless you select one of the **Job Deletion** check boxes.

On large VI jobs, which take up a large amount of the CXP6000 Color Server disk space, it is recommended that you use one the **Job Deletion** options if you do not need to reprint the job.

**Note:** When the SpoolStore virtual printer is selected, jobs remain in the **Storage Folder**.

To set a deletion policy for a job:

1.   Suspend the **In Process** queue and import your job.

2.   In the Job Parameters window, **Services** tab, click the **Job Deletion** parameter.

3.   Select **Delete after Complete** to remove jobs from the CXP6000 Color Server after they have been printed.
     Or / and:
     Select **Delete on Job Failure** to remove failed jobs (while processing or printing) from the CXP6000 Color Server.

4.   Resume the **In Process** queue to initiate job processing and printing.

Substitute Fonts
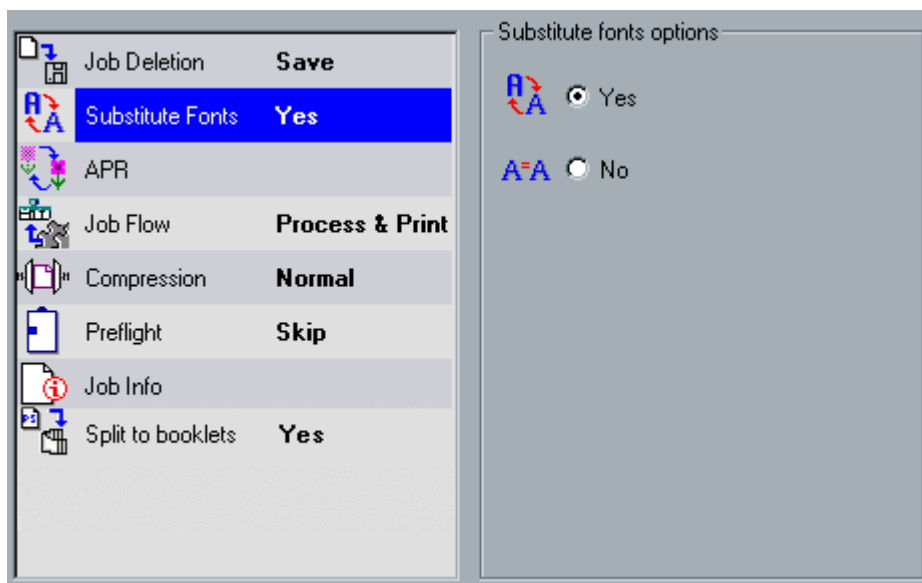
To define a substitute font policy:

➢ Select **No** to halt processing if the required font is missing.
Or:
Select **Yes** to substitute any missing font with the corresponding font set in the Administration window as the substitution font.
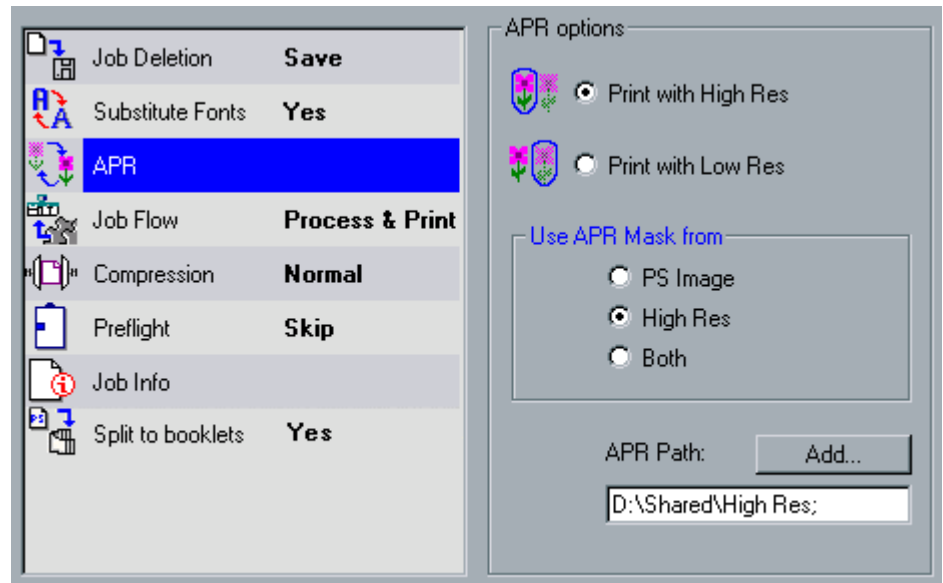
Note: When font substitution is performed, a message appears in the Job History window of the specific file.

For information on fonts and managing them, see *Fonts* on page 267.

APR

APR (Automatic Picture Replacement™) is a mechanism that enables you to work with low resolution images (for layout purposes); and automatically replace these images with their associated high resolution images during the RIP.

The CXP6000 Color Server is predefined with an APR path for placing the high resolution files. This path is **D:\Shared\High Res.**

Specify if you would like to print the job using low resolution files (for proofing purposes) or replace these with the corresponding high resolution files located in the high resolution path (APR path). You may also specify if you would like to use the APR masking (if such was applied) in the PS image, in the high resolution image or use only the masking data common to both the high resolution and the low resolution image files.

To set the APR options:

1. Select **Print with High Res** to replace low resolution images within your job with high resolution images (located in the specified APR path).
    Or:
    Select **Print with Low Res** to print the job with the existing low resolution images.

2. If you would like to use the masking data contained in the high
    resolution file (if such data exists), in the **Use APR Mask from** area,
    select **High Res**.
    Or:
    Select **PS Image** (low resolution) to use the masking data contained in
    the low resolution image file.
    Or:
    Select **Both** to use only the common masking data to both high and
    low resolution image files (i.e., if the images defined by the two sets of
   masking data overlap, then this overlapping area is RIPped).

    Note: If, for example, 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.

3. In the **APR Path** area, use the default path (set when installing the
    software) for the high resolution images.
    Or:
    Click the **Add** button to add additional paths for the high resolution
    images (or to change the order in which the paths are searched).

    The APR Editor window appears, indicating the default path (and
   other paths, if such were already defined).
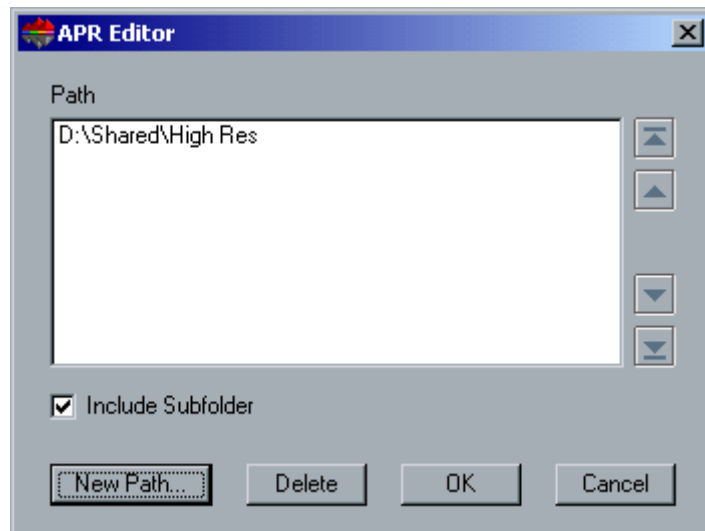
    Note: The order in which the paths are listed specifies the order of searching
    for the high resolution images.

4. Select the **Include Subfolder** check box to include all the subfolders of all the paths.

5. Click the **New Path** button and select the required path.

6. Select the arrow buttons to move a selected path up or down to the beginning or the end of the list.

7. If you would like to delete paths from the search, select a path and click the **Delete** button.

Note: When adding or deleting paths, you can select only one APR path each time.

Job Flow
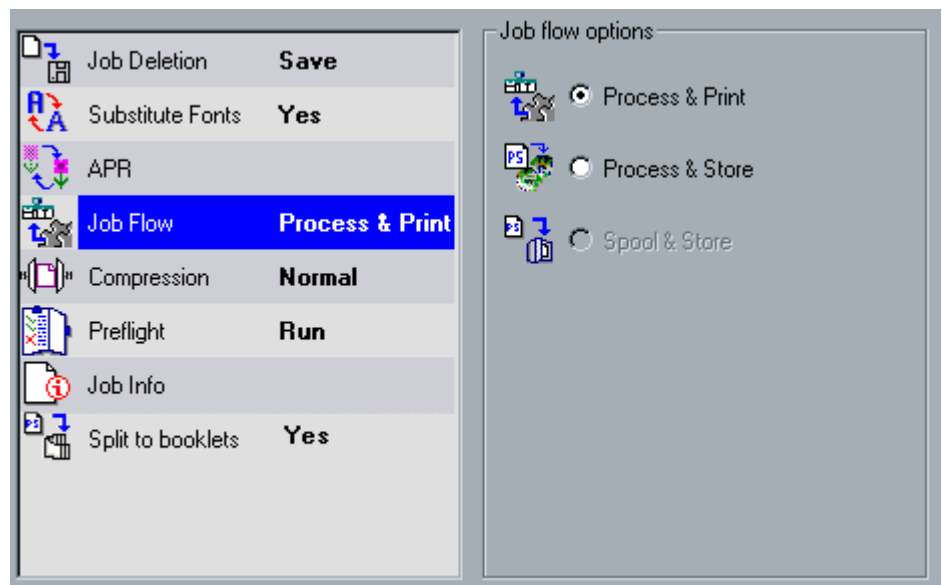
The **Job Flow** parameter enables the CXP6000 Color Server operator to specify a job flow for a job that is imported to the CXP6000 Color Server from the network or from the CXP6000 Color Server folders.

To select a job flow:

➢ Select **Process & Print** for the CXP6000 Color Server to RIP the PDL files, print them, and store them in the **Storage Folder** (unless the **Job Deletion** parameter is set to **Delete after Complete**).

For further details, see *Job Deletion* on page 141.

Or:
Select **Process & Store** to RIP the PDL files and move them to the **Storage Folder** as RTP jobs.

Note: The **Spool & Store** option (the CXP6000 Color Server places the PDL files directly into the **Storage Folder** without processing them) is disabled and can be defined only through the PPD parameters of the virtual printer.

Compression
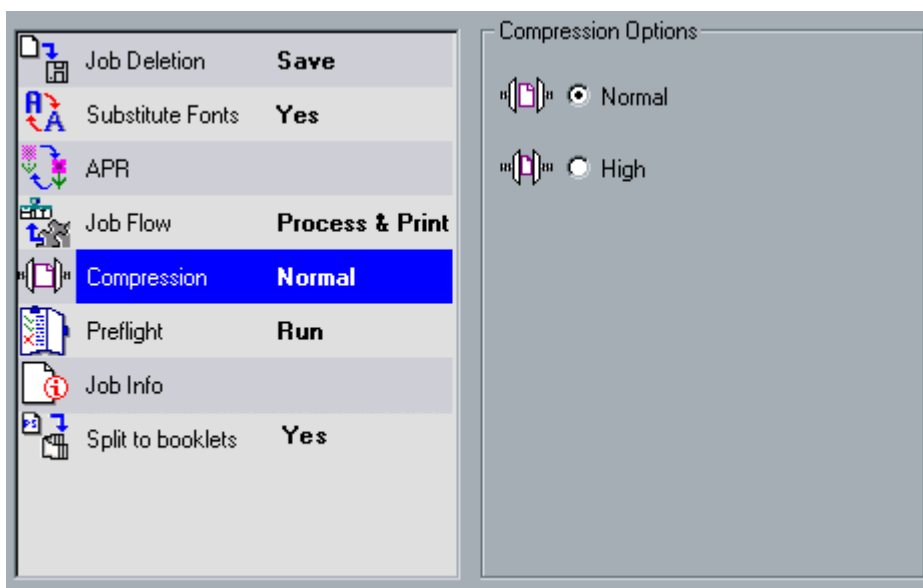
When printing particularly complex jobs, there may be cases where the jobs fail to print. In such cases, the following message may appear in the Alerts window: "Job failed in print. Please try to change paper feed direction or set compression to high level from services tab."

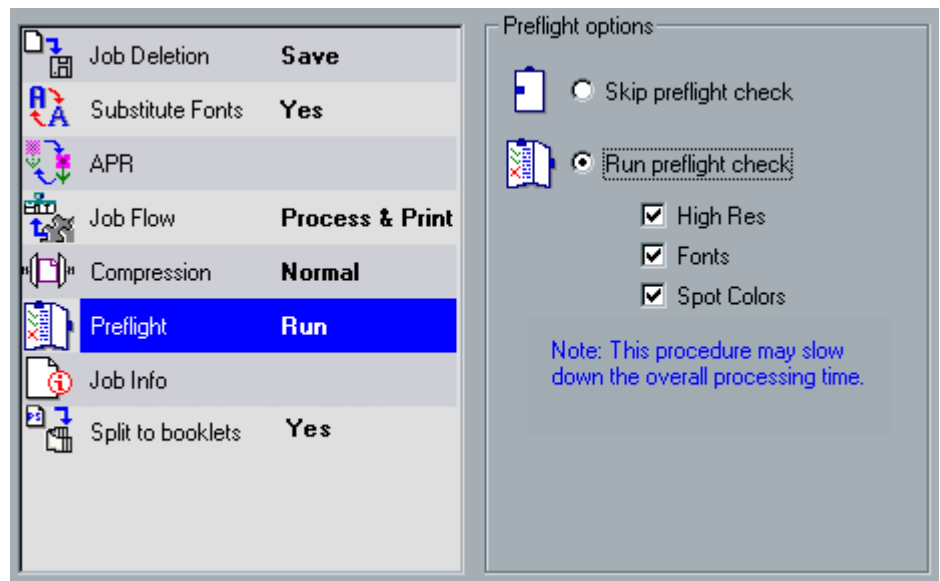If this message appears, use the compression option.

Note: When printing with compression, some job quality may be lost.

To set the compression:

➢ Select **Normal** to deactivate the compression process.
Or:
Select **High** to use compression. Also, select **High** if the above message appears.

Preflight

The **Preflight** parameter enables you to perform a preflight check concerning the status of key job components, before a job is sent for processing. This check results in the job Preflight report.

Note: In any case, if a job component is missing, the job will fail before RIPing, an alert message will appear and the information regarding missing components will appear in the Job History window.

To run a preflight check of job components:

➢ Select **Run preflight check** and select the check boxes of the key job components you wish 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 Folder**.

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 processing.

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.

The Preflight report is especially useful to detect missing job components, since it enables you to view the missing components all at once and consequently save inefficient processing time with constant error / failed messages.

If you run a preflight check, and all key components are found, the job is processed / 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 Folder** with the preflight report available for inspection.

Since the Preflight report lists all key job components (missing and found), you may 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 path/s.

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. In any case, when a Preflight report is produced, the date and time of the preflight check are indicated in the Job's History window.

To view the preflight report:

1. Right-click the job in the **Storage Folder**, and from the menu select **Preflight Report**.
    The Preflight report is displayed (if you have selected the **High Res** option in the preflight check, the high resolution report is displayed first).
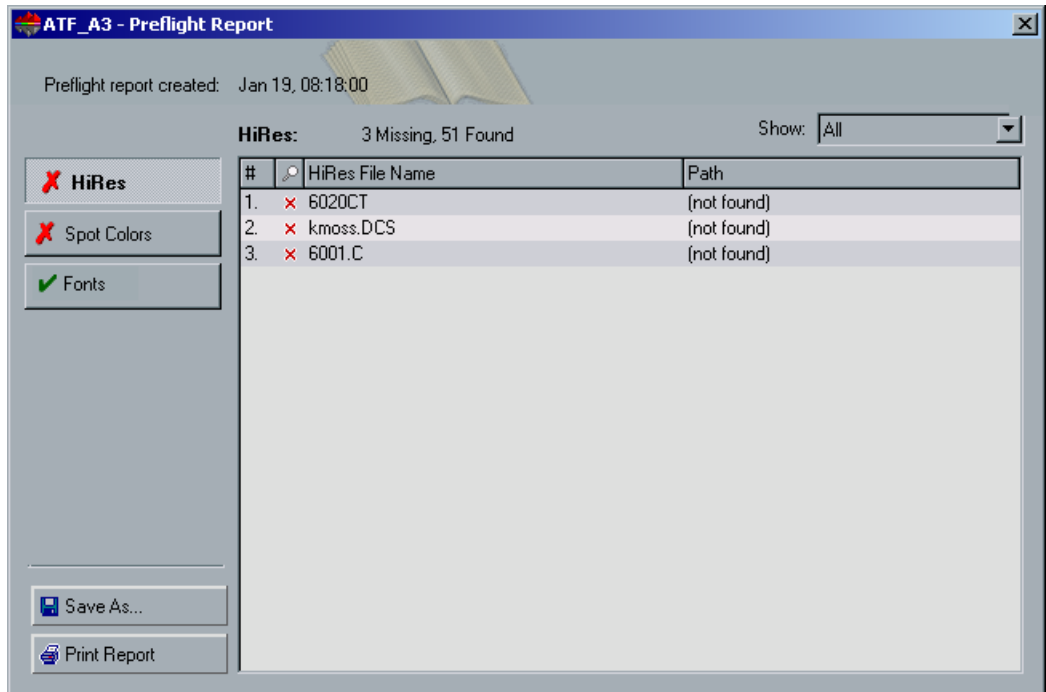
If there are missing key components in the job, this will be indicated by a "missing" icon on the **High Res**, **Spot Colors** and **Fonts** buttons.

If you did not select a key component option for the preflight check, a "closed eye" icon appears on the component button. This icon indicates that information for this category of key components is unavailable.
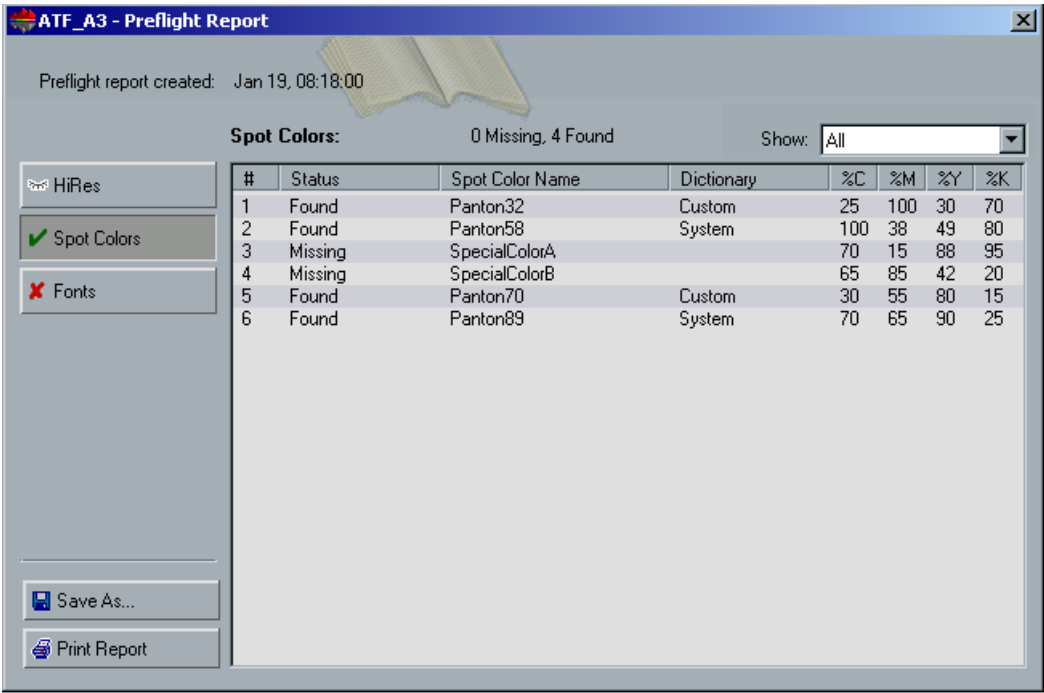
2. To display all high resolution files, from the **Show** list select **All**.
    Or:
    To display only the found high resolution files, from the **Show** list select **Found Only**.

Or:
To display only the missing high resolution files, from the **Show** list select **All Missing**.

3. Click the **Spot Colors** button.
The **Spot Colors** report is displayed.

The Spot Colors report displays the missing spot color names (spot colors which were not found in the Spot Color Dictionary) and the found **Spot Color** names (which were found in the Spot Color Dictionary). The **C/M/Y/K** columns display the spot color C/M/Y/K equivalences:

❒ If the status is **Missing** the C/M/Y/K equivalences are according to the original file.

❒ If the status is **Found** the C/M/Y/K equivalences are according to the Spire Spot Color Dictionary.

4. To display only the found spot colors files, from the **Show** list select **All Found**.
   Or:
   To display only the missing spot colors files, from the **Show** list select **All Missing**.

5. Click the **Fonts** button.
   The **Fonts** report is displayed.
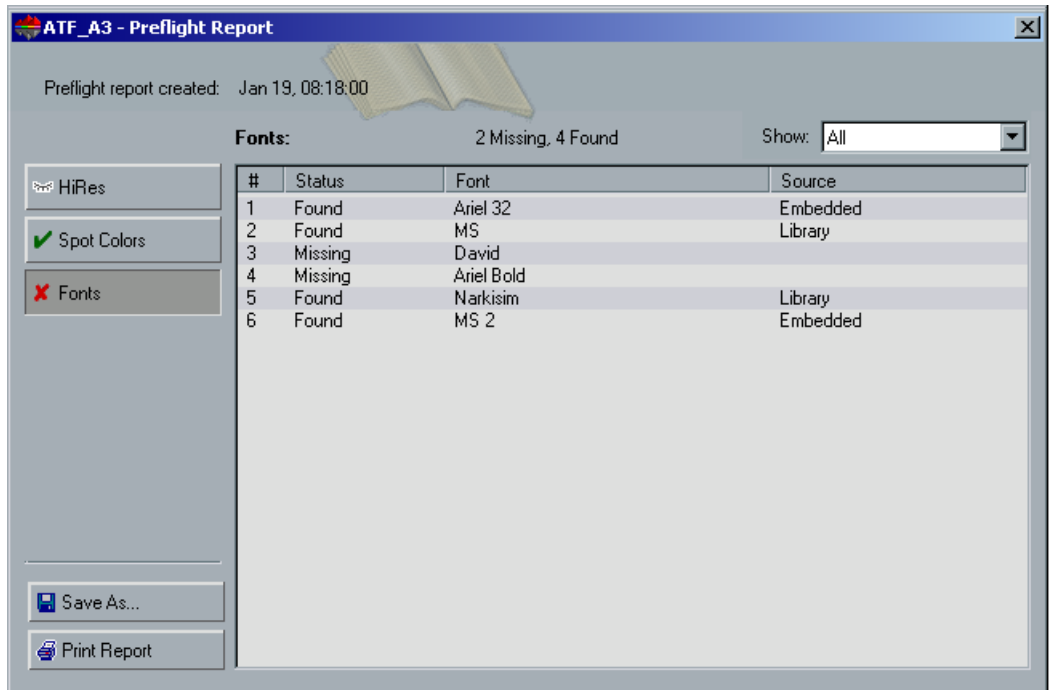
The Fonts report displays the name of the missing fonts (which are not embedded in the file and do not exist in the Spire Font library), and the found fonts.
The **Source** column indicates whether the font is embedded in the file or was found in the Spire Font Library.

6. To display only the found fonts, from the **Show** list select **Found Only**.
   Or:
   To display only the missing fonts, from the **Show** list select **Missing Only**.

7. To save the Preflight report, click the **Save As** button 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.

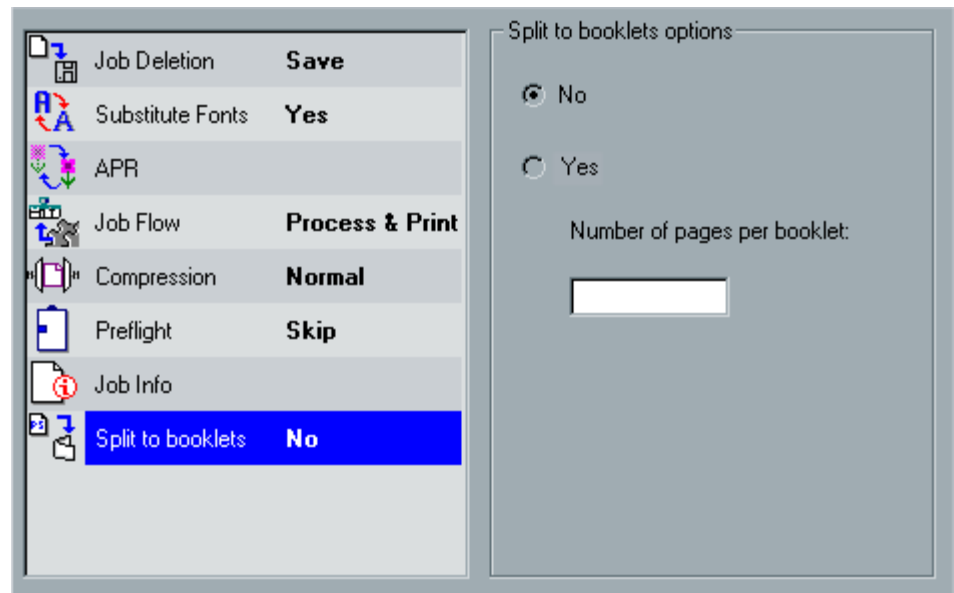8. To print the report, click the **Print Report** button.

Job Info

Job information entered in the **Job Info** parameter can be viewed in the Accounting window, in the Job Parameters window and on the Admin page. This information helps in tracking and assigning jobs. The information includes the job title, the sender name, account details, recipient and other job-related comments.

To assign job info:

1. Type a job name in the **Job Title** box. If a job is selected, the job title is displayed automatically.

2. Type the job sender name in the **Sender** box. If a job is selected, the sender's name is displayed automatically.

3. Type the name of the Job account in the **Account** box.

4. Type the name of the job recipient in the **Recipient** box.

5. Type free text (up to 80 characters) to be viewed as a comment in the **Job Comments** box.

Split to booklets

The **Split to booklets** parameter enables you to split a PostScript file (PS or PDF files) into booklets, and simulate the VI job structure. This feature is especially useful if you have a PostScript job that contains variable information. In this case, you will be able to manage your job more efficiently by setting the imposition per booklet, the stapling options per booklet, or use duplex printing per booklet, which will automatically insert blank pages if the number of pages per booklet is a odd number.

To split a job to booklets:

1. From the **Split to booklets options**, select **Yes**.

2. In the **Numbers of pages per booklet** box, type the required number of pages per booklet.

    Note: If the specified number of pages per booklet is not sufficient to produce complete booklets that each contain the same specified number (there is a remainder of pages), then the last pages will form the last booklet and will consequently contain less pages than specified.

The Finishing Tab
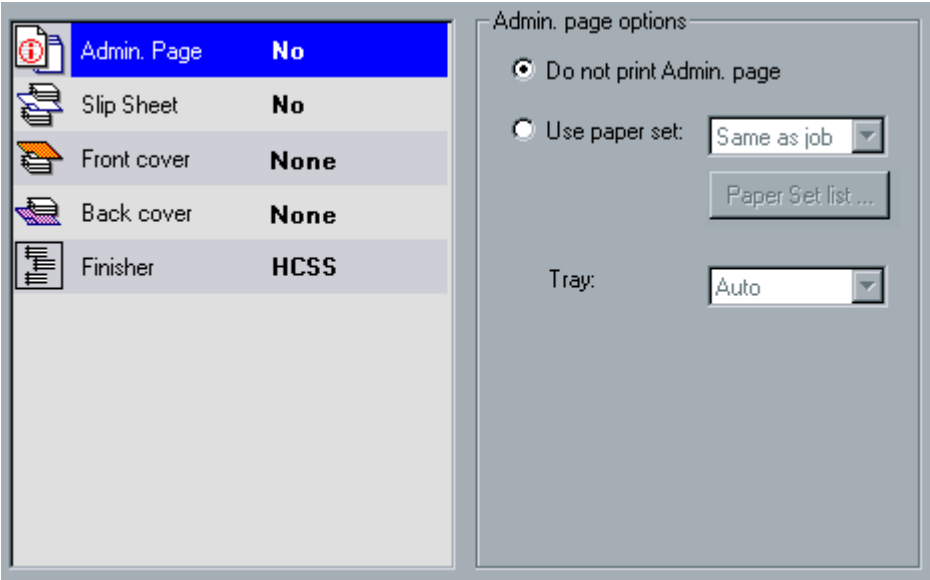
The **Finishing** tab enables you to define whether you would like to print an administration page, slip sheets, front and back cover pages and to define their paper stock and additional attributes. In addition, you may define the finisher options.

Admin Page

You may print an **Admin Page** with the job. The Admin page contains job-related information such as the job title, page size, number of pages / sets, and the sender name. In addition, PostScript errors will be specified, for example when using a substitute font or low resolution files (APR).

The 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.

To define the administration page attributes:

1. If you do not want an Admin page to be printed, in the **Admin page options**, use the default option, **Do not print Admin. page**.
    If you want an Admin page to be printed with the job, select **Use paper set** and select the required paper set from the list.
    Or:
    Click the **Paper Set List** button and add a new paper set.

    For further information see *Managing Paper Sets* on page 76.

2. From the **Tray** list, select the required tray
    Or:
    Select **Auto** for any tray with the available paper stock to be selected.

Slip Sheet

You may print **Slip Sheets** with the job and set the required paper set for the slip sheet to be printed on. 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 define the slip sheet attributes:

1. If you do not want slip sheets to be printed, from the **Slip sheet options**, use the default, **Do not print slip-sheet**.
   Or:
   If you would like to print slip sheets:

   a. From the **Slip sheet options**, select **Print slip-sheet.**

   b. If you would like to print a slip sheet after every set, select **Print skip-sheet every:** and in the **set/s** box type the required number; the default is one, which results in a slip sheet printed between each copy.

c. From the **Use paper set** list, select the required paper set for the slip sheets.
Or:
Click the **Paper Set List** button and add a new paper set.

 For further information see *Managing Paper Sets* on page 76.

Note: The slip-sheet size must be the same as the job. If the job is imposed, then the slip-sheet should be in the same size of the imposed sheet.

d. From the **Tray** list, select the required tray.
Or:
Select **Auto** for any tray with the available paper set to be selected.

Note: Slip-sheets and blank pages in a transparency job (interleaves) are not counted in the number of pages reported on the Admin page.

Front Cover

You may print a **Front cover** with the job and set the required paper set for the front cover to be printed on.

You may also print a blank front cover, or specify that the first page or first two pages of the job, will be printed as the front cover if duplexed.

To define the front cover attributes:

1. If you would like to print a front cover, select **Use paper set**, and select the required paper set from the list.
    Or:
    Click the **Paper Set List** button and add a new paper set.

For further information see *Managing Paper Sets* on page 76.

2. From the **Tray** list, select the required tray
    Or:
    Select **Auto** for any tray with the available paper stock to be selected.

3. If you would like to print a blank front cover, from the **Cover Printing** area, select **None**.

4. If you would like the first page of the job to be printed as the cover page, from the **Cover Printing** area, select **Print on Front Side**.

Note: A blank page will be automatically inserted between the cover page and the first page of the job so that both sides of the cover page are defined and the job starts on the next odd page.

5. If you would like the first two pages of the job to be printed as the cover page, from the **Cover Printing** area, select **Print on Both Sides**.

Back Cover

You may print a **Back cover** with the job and set the required paper set for the back cover to be printed on. You may print a blank back cover, or specify that the last page or last two pages of the job, will be printed as the back cover if duplexed.

To define the back cover attributes:

1. If you would like to print a back cover, select **Use paper set**, and select the required paper set from the list.
   Or:
   Click the **Paper Set List** button and add a new paper set.

   For further information see *Managing Paper Sets* on page 76.

2. From the **Tray** list, select the required tray
   Or:
   Select **Auto** for any tray with the available paper stock to be selected.

3. If you would like to print a blank back cover, from the **Cover Printing** area, select **None**.

4. If you would like the last page of the job to be printed as the back cover page, from the **Cover Printing** area, select **Print on Back Side**.

Note: A blank page is automatically inserted between the back cover page and the last page of the job so that both sides of the back cover page are defined.

5. If you would like the last two pages of the job to be printed as the back cover page, from the **Cover Printing** area, select **Print on Both Sides**.

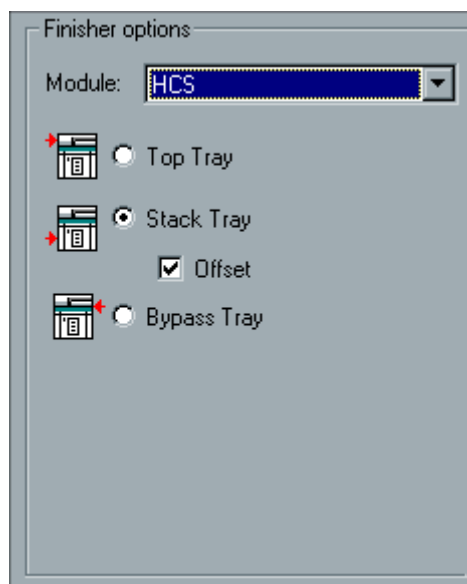## Finisher

To select a finishing option:

1. From the **Module** list, select the printed output's destination:

    - **HCS** (High Capacity Stacker) - If your printer is equipped with an HCS / EHCS.

    - **HCSS** (High Capacity Stacker Stapler) - If your printer is equipped with an HCSS.

    - **OCT** (Offset Catch Tray) (default).

    Notes:

    The finisher module must be connected to the CXP6000 Color Server.

    For PostScript files, available stapling methods depend on page orientation and size. For PDF files, stapling methods depend on page size.

2. If you selected **HCS** the **Finisher options** are displayed as follows:

    a. Select **Top Tray** to print to the top tray.
        Or:
        Select **Stack Tray** to print to the stack tray (the internal tray).

        Note: If two HCS devices are chained to the printer, two top trays, and two stack trays are enabled in the **Finisher options**. Also, an additional option is available: **Auto Stack Tray**. Select this option to automatically use the available stack tray.

b. Select the **Offset** check box if required:

- For collated jobs, each copy is offset from the next copy.

- For uncollated jobs (only if you requested more than one copy of each page), **Offset** shifts the sheets when a new page number is delivered. For example, you requested 3 copies of each page. Thus the printing output sequence is as follows: Page1, Page1, Page1, Offset, Page2, Page2, Page2, Offset, and so on.

3. If you selected **HCSS**:
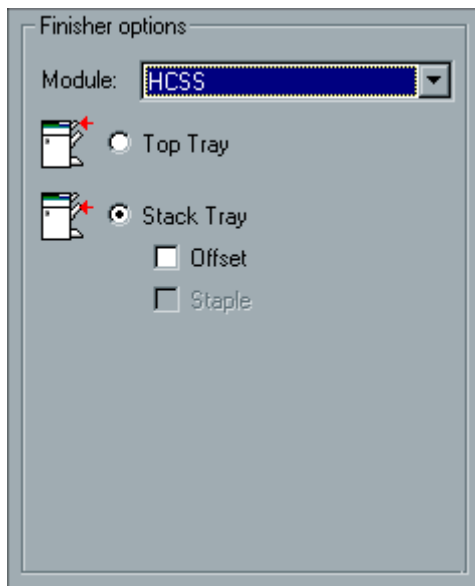
a. Select **Top Tray** to print to the top tray.
    Or:
    Select **Stack Tray** for printing to the Stack Tray (usually for many pages / copies).

b. Select the following parameters for **Stack Tray**:

- Use **Offset** for both collated and uncollated jobs.
  For uncollated jobs, if you requested more than one copy of a page, Offset shifts the sheets when a new page number is

delivered. For example, you requested 3 copies of each page. Thus the printing output sequence is as follows: Page1, Page1, Page1, Offset, Page2, Page2, Page2, Offset, and so on.

- Select **Staple** to select the required stapling method. Stapling icons automatically appear below. Select from these available stapling methods.

The Exception Tab

In the **Exception** tab, you may set different paper sets for special exceptions within a job and also add inserts (interleaves) if required.

Tip: You may also select different paper size than the job, and consequently print tabs For further details, see *Printing on tabs* on page 169.

Note: If a job is printed using a Set Page Device virtual printer, the **Exception** tab is disabled.

Settings exceptions for imposed jobs

You may set exceptions / inserts also for imposed jobs.

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).
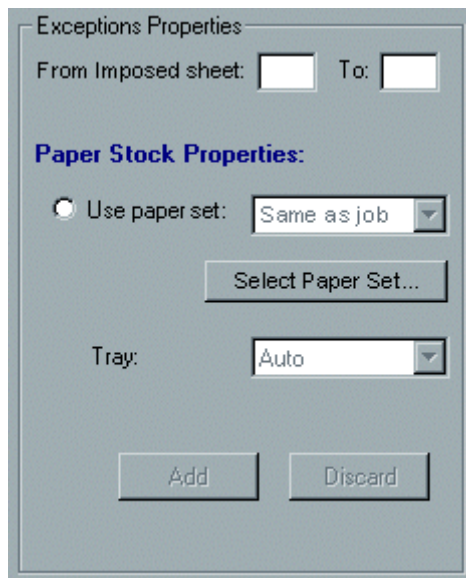
Notes:

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**.

If the job is an imposed job, the **Exception Properties** displays as follows:

This function uses the following terminology:

- **Exceptions**: special pages within the job for which you may want to assign different media stock in the Xerox DocuColor 2060/2045 Printer. For example, you may choose to assign a different paper stock for each chapter within a book. This process includes defining the required print range and assigning the required paper stock.

- **Inserts**: (used mainly for interleaves) blank pages of a selected media, that are assigned to the job after a specified number of pages. This process includes defining the number of inserted pages, their location in the printed job and assigning the required paper set.

For further information see *Paper Stock tab* on page 60.

Managing Exceptions

To add exceptions to a job:

1. In the **Exceptions** area click the **Add Exception** icon.
   A blue line appears in the **Exceptions** area.

2. In the **From page** and **To** page boxes, type the required page range for the exception. For imposed jobs, type the required values in the **From imposed sheet** box.

3. Under **Paper Stock Properties**, from the **Use paper set** list, select the required paper set.

   Note: The default paper stock properties are those specified for the job.

   Or:
   Click the **Paper Set List** button and add a new paper set.

   For further information see *Managing Paper Sets* on page 76.

4. From the **Tray** list, select the required tray
   Or:
   Select **Auto** for any tray with the available paper stock to be selected.

5. If it any time you would like to reset the **Paper Stock Properties** click the **Discard** button.

6. Click the **Add** button.
   The exception is added to the **Exceptions** area.

   Note: After the **Add** button is clicked, it is replaced by the **Apply** button which is used for editing exceptions. See the following procedure.

To edit exceptions:

1. From the **Exceptions** area, select the exception you would like to edit.
   The **Exception** tab displays the exception properties.

2. Edit the exception properties as required, you may change the exception range and / or the paper set.

3. Click the **Apply** button.
   The Exception properties are updated in the **Exception** area.

To remove exceptions:

1. Under **Exceptions** select the required exception.

2. Click the **Remove Exceptions** icon.
   The exception is removed from the list.

Managing Inserts:

To add inserts:

1. Under **Inserts Properties** click the **Add Insert** icon.
   A blue line appears in the **Inserts Properties** area and the tab displays as follows.

2. In the **After page** box, type the page number that will precede the insert, and in the **Quantity** box, specify the required number of inserts. For imposed jobs, type the required values in the **After imposed sheet** box.

3. Under **Paper Stock Properties**, from the **Use paper set** list, select the required paper set.

   Note: The default paper stock properties are those specified for the job.

Or:
Click the **Paper Set List** button and add a new paper set.

For further information see *Managing Paper Sets* on page 76.

4. From the **Tray** list, select the required tray
   Or:
   Select **Auto** for any tray with the available paper stock to be selected.

5. If you would like to reset the **Paper Stock Properties** click the **Discard** button.

6. Click the **Add** button.
   The insert is added to the **Insert Properties** area.

   Note: After the **Add** button is clicked, it is replaced by the **Apply** button which is used for editing exceptions. See the following procedure.

To edit inserts:

1. From the **Inserts Properties** area, select the insert you would like to edit.
   The **Exception** tab displays the insert properties.

2. Edit the insert properties as required, you may change:

   • The page / sheet number that precedes the insert, in the **After page** box.

   • The insert **Quantity.**

   • The insert paper set.

3. Click the **Apply** button.
   The insert properties are updated in the **Inserts Properties** area.

To remove inserts:

1. Under **Inserts Properties** select the required insert.

2. Click the **Remove Insert** icon.
   The insert is removed from the list.

Printing on tabs

Printed tabs are tabs that contain printed information, for example a chapter name.

In order to include printed tabs in a job, you need to plan ahead while preparing the job in the DTP application: you should specify a different page size for the tab pages.

If your DTP application does not enable you to specify different pages sizes within a job, you may also set margins within the job pages, and locate the tab content outside the margins, and the body content within the margins.

In any case, when the file is imported to the CXP6000 Color Server, you should select one paper size for the job, and then select a different paper set for the tabs using the **Exceptions** tab.

Note: The paper size is included in the **Paper Set**.

Following are two procedures for including printed tabs in a job. The first procedure should be followed if your DTP application supports multiple page sizes within a job (for example Microsoft Word). The second procedure should be followed if your DTP application does not support multiple page sizes within a job.

To print tabs if your DTP application supports multiple paper sizes in a job:

1. In the DTP application:

    a. Create a document and set the page size for the document body pages, for example 8.5x11.

    b. Set the page size of the tabs pages, for example 9x12.

2. Print the file to the CXP6000 Color Server using the Spool & Store workflow.

3. Double-click the job in the **Storage Folder.**
   The Job Parameters window appears.

4. In the **Paper Stock** tab select a paper set which contains the document body paper size, according to the above example, a paper size of 8.5x11 should be included in the paper set.

5. In the **Exceptions** tab:

    a. Select a paper set which contains the tab pages size, According to the above example, a paper size of 9x12 should be included in the paper set.

    b. Specify the pages number that should be printed as tabs.

To print tabs if your DTP application does not support multiple paper sizes in a job:

1. In the DTP application:

    a. Create a document and define the page size (for all the job) as required for the tabs. For example 9x12.

    b. Specify the margins for the document boundaries, for example 8.5x11.

    c. Locate the content that should be printed on the tab, outside the margins.

    d. Locate the body content inside the margins.

2. Print the file to the CXP6000 Color Server using the Spool & Store workflow.

3. Double-click the job in the **Storage Folder.**
    The Job Parameters window appears.

4. In the **Paper Stock** tab select a paper set which contains the document body paper size. According to the above example, a paper size of 8.5x11 should be included in the paper set.

5. In the **Exceptions** tab:

    a. Select a paper set, which contains the required tab size. According to the above example, a paper size of 9x12 should be included in the paper set.

    b. Specify the page numbers that should be printed as tabs.

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.
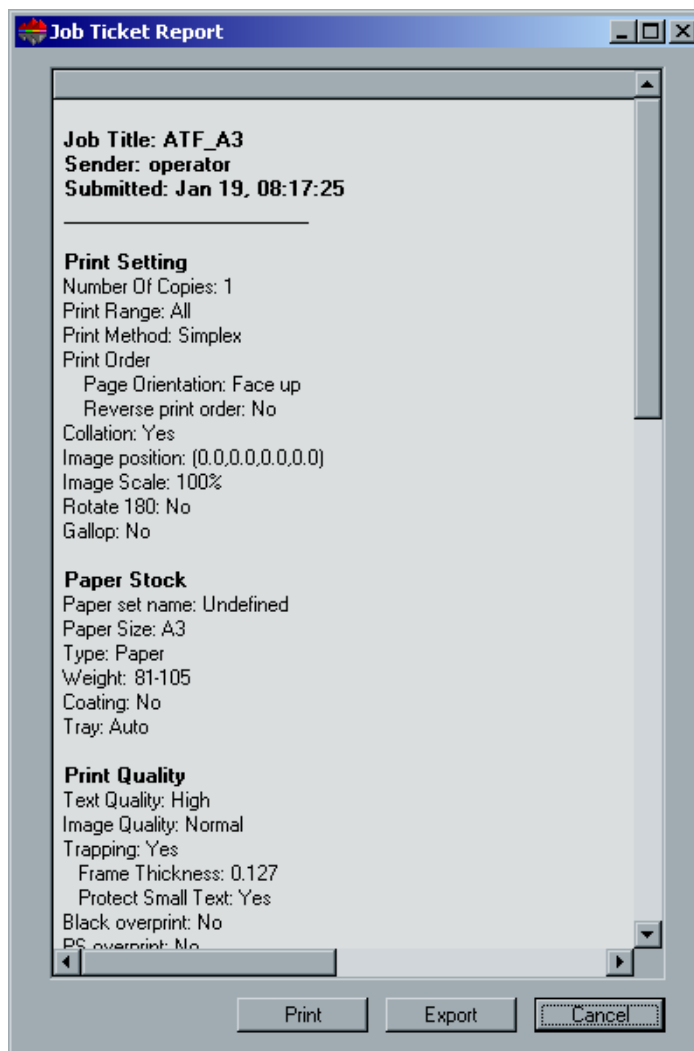
To display the job ticket report:

1. Right-click a job in the **Storage Folder**, and from the menu select **Job Ticket Report**.
    Or:
    Select a job in the **Storage Folder** and from the **Job** menu, select **Job Ticket Report**.
    The Job Ticket Report window appears.

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

4 Workflows & Tools

Introduction

This chapter describes the CXP6000 Color Server Printing Workflows:

- High Resolution (APR and OPI)
- VI (Variable Information)
- Imposition
- Color
- Job Batching
- PDF

In addition, information is provided on CXP6000 Color Server utilities: the Calibration tool, the Gradation tool, the Spot Color Editor and the GAP (Graphic Art Port).

High-Resolution (APR) Workflow

Working with high-resolution files during the design and page layout process can be a long and inefficient process. Processing and manipulating of 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.
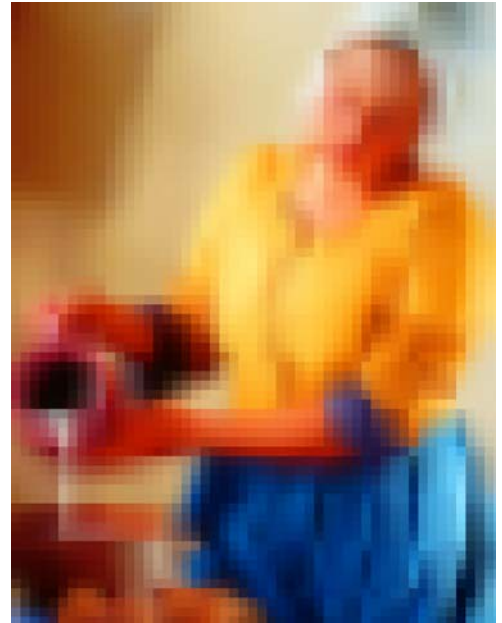
The CXP6000 Color Server provides APR (Automatic Picture Replacement) and supports OPI (Open Prepress Interface) image replacement workflows for replacing low-resolution files with high-resolution files during the RIP. APR and OPI workflows are accessed through the Job Parameters window **Services** tab.

For further details, see *APR* on page 143.

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

Use APR and OPI to:

- Minimize production time with faster image processing and working in DTP applications.

- Reduce the time to create PostScript files and to print.

- Decrease network traffic.

APR (Automatic Picture Replacement)

APR is a Creo-developed image replacement method for PostScript files. 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 CXP6000 Color Server checks it for APR instructions. It then searches for the external high-resolution file, performs the specified image replacement and RIPs the PostScript file.

OPI (Open Prepress Interface)

Like 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 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 CXP6000 Color Server supports the storage and replacement of high-resolution OPI files internally. However, PDL files from some DTP applications (such as Quark Express®) 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, the CXP6000 Color Server OPI image replacement is disabled by default, in order to ensure continuous printing.

The OPI options are specified in the Administration window under **Preferences**.

Note: For further information see *OPI* on page 316 for details.

APR and OPI File Formats

APR and OPI are functionally identical on the CXP6000 Color Server. APR low-resolution files have a *.e extension, while OPI low-resolution files have a *.lay extension. The APR and OPI workflows support Creo Continuous Tone, EPSF and TIFF high-resolution file formats.

You can use either the APR or OPI workflow, depending on your high-resolution file type.

Setting the High-Resolution File Path

If your high-resolution files are not located in the CXP6000 Color Server default folder, you must specify the APR path(s) in the Job Parameter window **Services** tab before printing.

Paths other than the default path are defined on a per-job basis, or set in the virtual printer. The order in which the paths are listed determines the order in which the CXP6000 Color Server searches for the high-resolution files.

You may specify paths on local hard drives, CD-ROM drives, and the floppy drive connected to the CXP6000 Color Server. Or you can specify paths on remote clients / file servers.

To set the high-resolution path:

1. Import or download your job to the **Storage Folder** in the CXP6000 Color Server workspace.

2. Double-click on the job in the CXP6000 Color Server workspace. The Job Parameters window appears.

3. Adjust the job parameters.

4. In the **Services** tab, click **APR**.

For further details, see *APR* on page 143.

5. In **APR Path** area, click the **Add** button. The APR Editor window appears, indicating the default path.
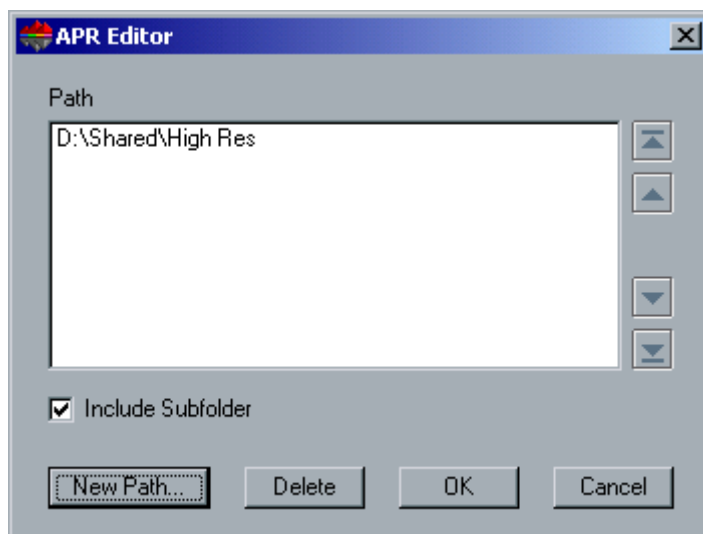
6. Select the default path or add additional paths to define the location of your high-resolution images.

7. You can perform the following functions in the APR Editor:

    •   Select **Include Subfolder** to include all the sub-folders of all the specified paths.

    •   Click **New Path** and locate a required path.

    •   Change the order of paths to change the order in which they are searched. Click the arrow buttons to move a path up, down, to the beginning of the search, or to the end of the list.

    •   Select one or several paths and click **Delete** to remove the path(s) from the search.

8. Set other high-resolution job parameters as required.

Preparing to Print Using APR or OPI

To prepare to print using APR or OPI:

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

    Note: PS Image (APR low-resolution) files can be created in Adobe Photoshop® using the PS Image Exporter Plug-In. The PS Image Exporter Plug-In can be installed from the CXP6000 Color Server Documentation and Utilities CD-ROM. Or download it from the Creo website at www.creo.com.

2. Export each image file as a low-resolution *.e file (in other words 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. Ensure that you have created or obtained the required image files.

    Notes:

    A PS 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. OPI low-resolution files have a "*.lay" extension.

3. Design the document in a DTP application using low-resolution files.

4. Perform detailed graphic work on the original high-resolution file. The low-resolution file is used for positioning, rotating, scaling and cropping only.

> **Note:** Once you have created the low-resolution file, do not change the name of the high-resolution file. This is the file name that the CXP6000 Color Server looks for.

5. Place the high-resolution files in a defined path on the CXP6000 Color Server. This is where the CXP6000 Color Server looks for them when it RIPs your jobs. Define the high-resolution path through the Job Parameters window for each job.

> **Notes:**
>
> The 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 APR or OPI

If your high-resolution files are located in the CXP6000 Color Server default folder (**D:\Shared\HighRes**), you can print APR or OPI jobs without adjusting APR settings.

> **Important:** OPI support is disabled by default. If you would like to enable the Spire OPI support, see *OPI* on page 316 for details.

Perform the following steps:

1. Print, download or import the job from the client workstation to the CXP6000 Color Server **Storage Folder.**
   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 CXP6000 Color Server default folder, specify the APR path(s), as described above.

2. Double-click on the job in the 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 CXP6000 Color Server and sent to the Xerox DocuColor 2060/2045 Printer for printing.

Organizing High-Resolution Files

The **High Res** utility in the Resource Manager enables you to organize your high-resolution files. High-resolution files are required for the APR and OPI workflows. You can add or delete high-resolution files. You can also copy high-resolution files from a local hard disk, from the network, or from external media (for example, CD-ROM, Jazz drive or floppy). There is a default shared folder set on the system dedicated to high-resolution files. The folder resides in **D:\Shared\HighRes**.

For further information see *High-Res* on page 281.

Sample Job: Printing a Brochure Using the APR Workflow

In this example, you can use 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 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. Place your high-resolution file milkmaid in the path: **D:\Shared\High Res**.

2. Print or download the brochure job from your client workstation to the CXP6000 Color Server.
   The job is processed on the CXP6000 Color Server and sent to the Xerox DocuColor 2060/2045 Printer for printing.

VI (Variable Information) Workflow

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 several pages, but the entire document is targeted at a specific individual or address.

All VI jobs are constructed as a collection of individually RIPped elements that may differ from booklet to booklet, including text, graphics, pictures and page backgrounds. Pages are assembled from the RIPped elements just before printing. On the CXP6000 Color Server each element - text, graphic, picture, or page background is RIPped only once, regardless if the element is used once, several times, or even in every page of the VI job. If it is used more than once, then it is cached for further usage. Static elements and repeating variable elements are cached for re-use in the job and between jobs. Each set of elements associated with a particular job is assigned a unique name. This name enables the re-use of cached elements between jobs. In-line variable elements that are used only once, usually text, are not cached.

VI jobs are sent to the CXP6000 Color Server in Creo Variable Print Specification or Xerox Variable data Intelligent Postscript Printware (VIPP) formats to be RIPped and printed. The CXP6000 Color Server can also process conventional PostScript files as VI jobs, although they are not truly VI documents.

The CXP6000 Color Server enables concurrent RIPing and printing of VI jobs known as Gallop. Large jobs do not have to be RIPped entirely to disk before printing. You can pre-define 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 CXP6000 Color Server. The Xerox DocuColor 2060/2045 Printer continues printing at its rated speed without interruption or slowing down until the job is finished.

VI jobs are created using VI authoring programs that support Variable Print Specification and Xerox VIPP formats. Most VI authoring programs can convert VI files to conventional PS files, which can also be processed by the 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 differing manner.

In VI Jobs, pre-RIPped re-usable elements are combined with inline elements during the RIP. Pages are assembled from the various elements at high speed on the CXP6000 Color Server as they are fed into the print engine.

The re-usable elements are stored in a cache folder (VI Elements folder). The CXP6000 Color Server only RIPs inline elements in subsequent jobs using the same re-usable elements. The cached re-usable elements are integrated into the job during the RIP.

In your VI authoring program (for example Creo Darwin), you can define several sub-jobs related to the same VI job, (for example different weekly runs, late additions or updates to a database). This is known as batch processing. The CXP6000 Color Server processes the first batch that arrives at the system, as described above. When processing following batches of the same job, the CXP6000 Color Server uses the already cached re-usable elements and adds new re-usable elements to the cache sub-folder. This saves the initial ramp-up time for processing and allow immediate processing at the rated printer speed.

For further information, see *Organizing VI Elements* on page 188.

Using Creo Variable Print Specification to Print a VI Job

To print a VI job:

1. Copy VI graphic elements to one of the defined APR folders on the CXP6000 Color Server.

   For further details, see *APR and OPI File Formats* on page 176.

2. Submit your job on the CXP6000 Color Server.
   Re-usable elements are identified, processed, and placed in the cache folder. They are ready for rapid assembly into pages and for multiple usage.
   Your VI job is processed and printed on the CXP6000 Color Server. The Xerox DocuColor 2060/2045 Printer 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 re-usable elements on-the-fly.

Once the job is completed, an RTP job is placed in the **Storage Folder**. This job is identified by the Variable Print Specification sub-job name. Booklet and Page descriptions, as well as inline elements, are embedded in the RTP job. All sub-job handling is done via this RTP job (for example adjusting Job Parameters).

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 completion of the job, allowing for reuse of RIPped 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 via the **Resource Manager**.

VI Document Formats

The desktop environment requires an authoring format to design, organize and generate VI documents. This format can be stand-alone covering all aspects of document design, data management, text capture, and so on. Or it can be an extension of an existing program that enables the creation of VI documents and VI jobs.

VIPP (2001) & PPML

The CXP6000 Color Server supports VIPP (2001) and PPML formats and the features related to them, for example:

- Efficient processing of VIPP (2001) & PPML jobs

- Management mechanism for VIPP (2001) and PPML reusable elements

- Importing of jobs in various VI formats to the CXP6000 Color Server

- Importing of VI elements to the CXP6000 Color Server and submitting them for pre-cache

- Viewing of VI elements in their structural hierarchy

Both PPML & VIPP2001 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.

Variable Print Specification, VIPP and PPML are displayed under matching tabs the Elements Viewer window.

In PPML there is an ability to have different jobs in one PPML file. Thus, the display in the navigation pane varies from the way Variable Print Specification & VIPP appears.

VIPP (Variable data Intelligent Postscript Printware)

The Variable data Intelligent Postscript Printware format was developed in 1993 by RX (Rank Xerox) Switzerland. The VIPP is PostScript based format that composes the VI pages during the processing stage. The VIPP is being used for various types of applications, but mostly for financial applications (which typically use the dynamic graph charting capability of VIPP) and for billing statements of banks, telephones, electricity, and so on.

In order to be able to utilize VIPP files on your CXP6000 Color Server, the VIPP software should be first installed on your system. This installation should be done by a service engineer. Contact your service provider for further information.

VIPP jobs are composed of the following four 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. Store the VIPP job files in these sub-folders as follows.

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 the VIPP job, import it (the *.DBF file) to the CXP6000 Color Server. The VIPP job is processed and printed.

PostScript Files

The CXP6000 Color Server can also process conventional Postscript files as VI jobs, although they are not truly VI documents. All page elements are re-RIPped for each page. This workflow is suitable for simple, very short run jobs. These jobs do not use a VI authoring tool at all. Instead, they use a mailmerge function in a MS Word® document or a MS Excel® spreadsheet.

Creo Variable Print Specification (VPS)

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, efficient data processing and storage prior to printing.

The following are Variable Print Specification job 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 CXP6000 Color Server, sub-jobs can be deleted, archived, or reprinted at any time. However, you can still maintain re-usable elements for future runs. Re-usable elements are cached elsewhere, so only the unique data, which is embedded in the job, is deleted.

- **Re-usable Elements**
  Self-contained graphical entities that can be line art, text, raster images or a combination of these types. Re-usable elements are represented in PostScript and can be stored as EPS files when appropriate. Re-usable elements include clipping and scaling instructions as well as the image data.

  Note: Grayscale TIFF and EPS images created in CMYK applications (such as PhotoShop) are counted correctly as **B&W** instead as **Color** in both the CXP6000 Color Server and the Xerox DocuColor 2060/2045 Printer billing meters.

  Re-usable elements can be used repeatedly in different pages, booklets and jobs. On the CXP6000 Color Server, all re-usable elements are processed once and cached as RTP elements for further re-use. They can then be re-used 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.
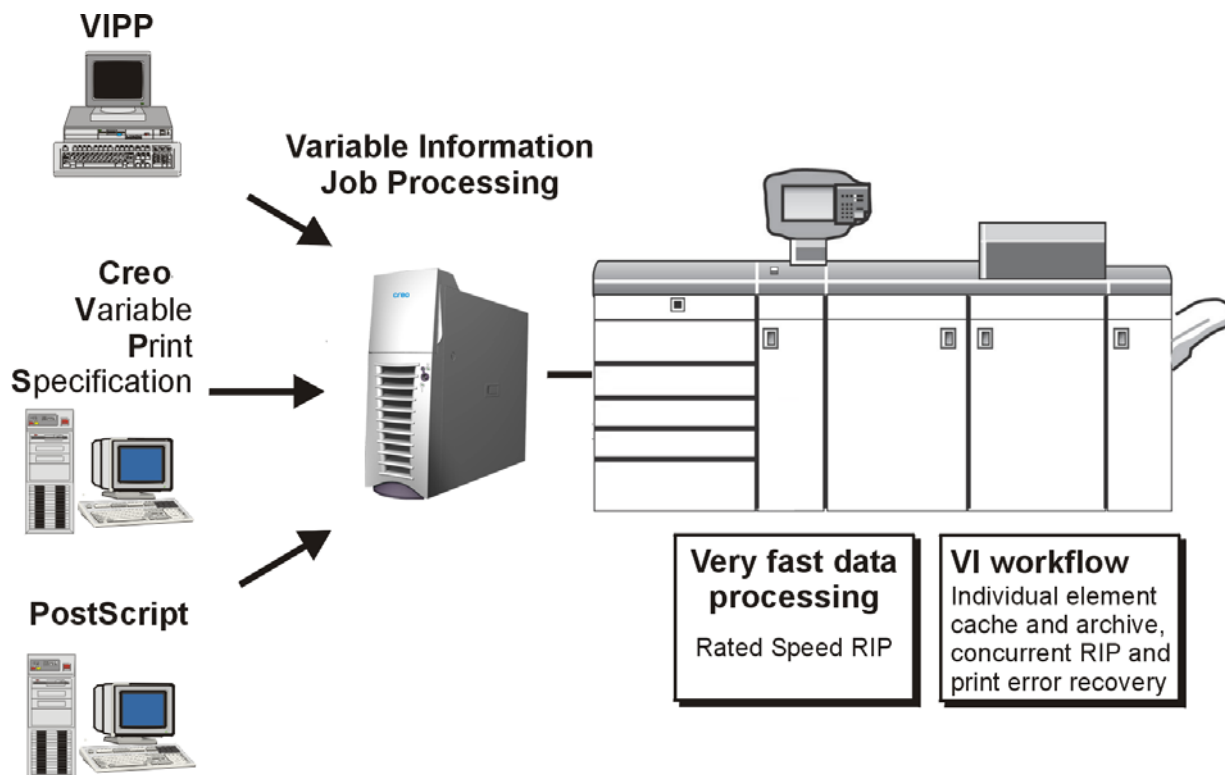
CXP6000 Color Server VI workflow

Organizing VI Elements

The **VI Elements** utility enables you to organize VI elements on your system. Jobs that include variable information require that VI elements (reusable elements) are stored in a specified location. This enables the CXP6000 Color Server to reuse these files when the job is printed for the first time and also for future jobs.

For further information see *VI Elements* on page 282.

CXP6000 Color Server Job Parameters and VI Jobs

You can adjust the job parameters of VI jobs via the Job Parameters window, just as with any other type of job.

Special considerations apply to VI jobs when adjusting some job parameters.

Imposition

When imposing VI jobs:

- Every booklet must have the same number of pages.

- In the **Step & Repeat** method, when printing 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.
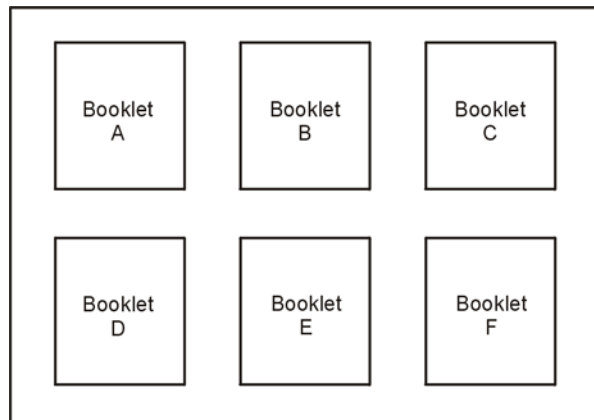
Single Page VI Job, 3x2

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.
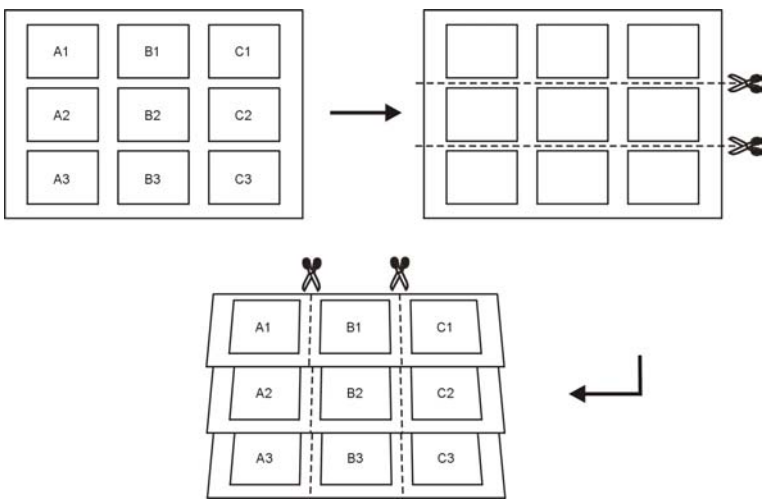
3 Page VI Job, 3x1, duplex, 3 pages per record

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 further details, see *The Imposition Tab* on page 116.

Gallop

The CXP6000 Color Server Gallop job parameter, located in the **Print Settings** tab, performs concurrent RIPing and printing of VI jobs. This results in reduced processing time.

For further information see *Gallop* on page 74.

Deleting Completed Jobs

On high-volume VI jobs, where disk space may be an issue, you can set the CXP6000 Color Server to continuously delete pages once they have been successfully printed. This action is carried through the **Services** tab in the Job Parameters window in order to cause the continuous deletion of pages once they have been successfully printed.

Notes:

This sustains enough free disk space for the duration of the print run and affects the sub-job only. Moreover, it disposes of inline elements only and not re-usable elements.

The Variable Print Specification file is also deleted.

Imposition Workflow

Imposition is the process of positioning page images on sheets of paper in the printer (or in a digital printing press) as part of the process of producing finished documents.

In addition to page images, various marks can be added to the sheets in order to aid the production process (marks that 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).

On the CXP6000 Color Server, the imposition parameters are set on the **Imposition** tab of the Job Parameters window.

Whenever possible, imposition settings should be defined before RIPing a job. Changing key imposition settings (for example template) post RIP may require inefficient re-RIPing of your job.

You can use a 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 further information on Virtual Printers, see *CXP6000 Color Server Network Printers* on page 10.

To submit jobs for Imposition on the CXP6000 Color Server:

1. Import the job to the CXP6000 Color Server.

2. Double-click on the job in the **Storage Folder** in the CXP6000 Color Server workspace.
   Or:
   Select a job in the **Storage Folder**, right-click and select **Job Parameters**.
   The Job Parameters window appears.

3. Select the **Imposition** tab in the Job Parameters window.

4. Adjust the required imposition parameters.

5. Click **Submit** to send your job to print.
   The job is processed on the CXP6000 Color Server and sent to the
   Xerox DocuColor 2060/2045 Printer for printing.

Editing Imposition Jobs

The RTP Job Editor window enables you to move pages within a job, delete
pages of a job, insert pages of another job, or merge two entire jobs. You
can use the RTP Job Editor with imposition jobs just as you would with
any other RTP job.

Note: Pre-Rip, jobs are edited using Adobe Acrobat. Post-Rip, only RTP jobs can
be edited. Any changes to a job in the RTP job editor that require re-RIPing causes
the job to fail, as there is no original PDL file to be re-RIPped.

When inserting or replacing 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 re-submit it to the CXP6000 Color Server. PDL files can be
rotated using Adobe Acrobat.

Or, submit a two-page job with the corrected page as the second page in
the job. In the **Print Settings** tab, set **Print Method** to be **Duplex Head to
Toe**. After processing, the second page is rotated 180° and can be used as
the replacing page in the Job Editor.

Color Workflow

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

Further details are provided in *The Color Tab* on page 97.

The tone compression tools and screening methods can be applied to your RTP jobs without requiring the CXP6000 Color Server to re-RIP the jobs. The color tools, however, should be applied prior to initial RIPing or your job will need to be re-RIPped.

CXP6000 Color Server Color Formats

The 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 CXP6000 Color Server:

1. Import the job to the CXP6000 Color Server workspace.

2. Double-click on the job in the **Storage Folder**.

3. Select the **Color** tab in the Job Parameters window.

4. Adjust the required color parameters.

5. Click **Submit** to send your job to print.
   The job is processed on the CXP6000 Color Server and sent to the Xerox DocuColor 2060/2045 Printer for printing.

For further details, see *Printing from the CXP6000 Color Server* on page 55.

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 **In 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 operation of job batching can be enabled or disabled in the **Print Queue Manager** utility in the **Preferences** folder, in the Administration window. This feature saves printing time, especially for a large number of short / small jobs.

Jobs that cannot be combined to one batch are:

- Collated and uncollated jobs.

- Jobs with different output trays.

- Offset and non Offset jobs.

- Jobs with different staple positions.

How job batching is set on the CXP6000 Color Server

1. The files arrive to the **In Print** queue.

2. The job is validated by the 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.

Enabling and disabling of job batching is specified in the Administration window under **Preferences**. See also *Print Queue Manager* on page 319.

PDF Workflow

While printing PDF jobs with repeated elements, you can significantly decrease processing time by applying the PDF workflow.

The PDF Workflow caches the repeated elements in the PDF once, and reuses them as much as required without repeated processing.

In order to apply the PDF workflow, you need to select **Enable PDF Optimization** in the Administration window (under **Preferences).**

In addition, the PostScript file needs to be distilled using the Adobe Acrobat Distiller application in order for the repeated elements to 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 CXP6000 Color Server.

To distill a PS file on the CXP6000 Color Server:

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

2. Browse the network to the CXP6000 Color Server, and paste the file to **D:\Shared**.

3. On the CXP6000 Color Server station, click the **Start** button and follow the path: **Programs > Acrobat Distiller.**

The Acrobat Distiller window appears.
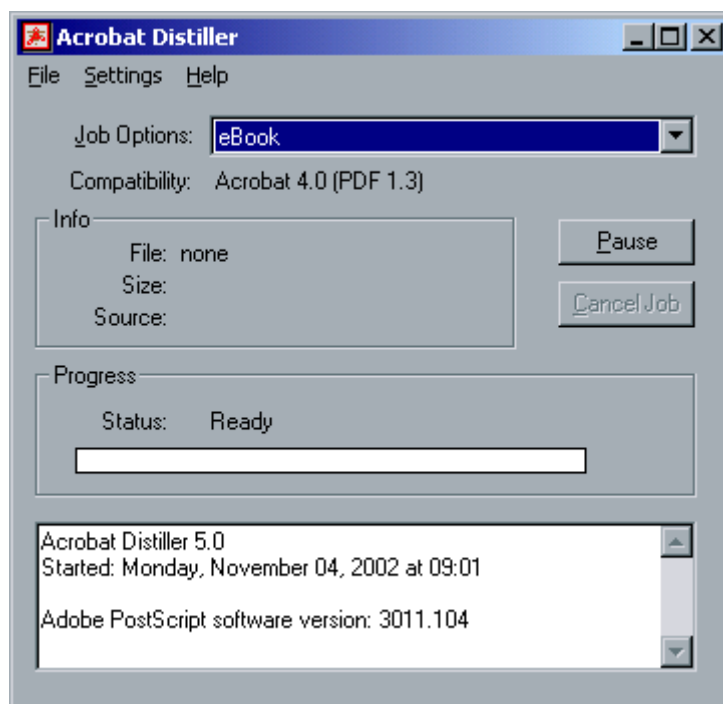
4. From the **Settings** menu, select **Job Options**.

The Job Options window appears.
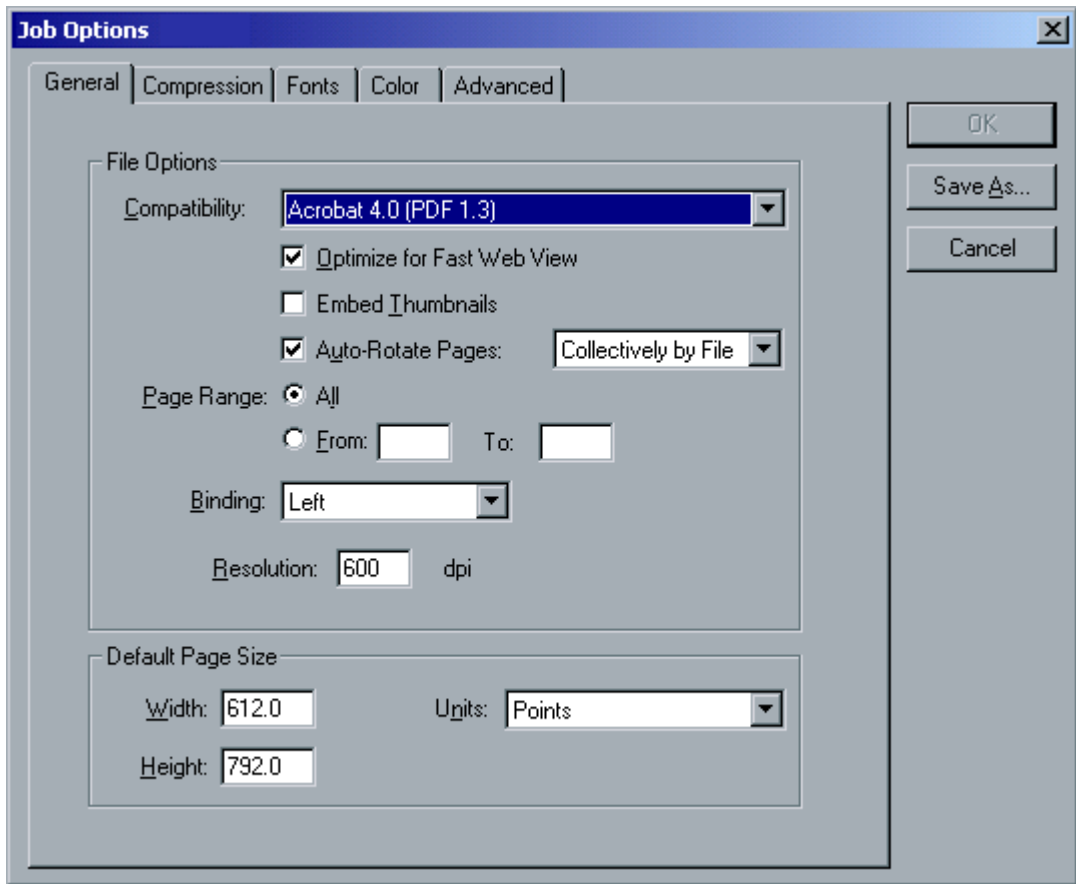
5. In the **General** tab, verify that **Optimize for Fast Web View** is selected
    and click **Cancel**. If this option is not selected select the **Optimize for
    Fast Web View** check box and click **OK.**

6. Click **OK**.

7. From the **File** menu select **Open**.
    The Acrobat Distiller - Open PostScript file window appears.

8. Browse to the required PS file and select it. Then, click **Open**.
    The Acrobat Distiller - Specify PDF File Name window name appears.

9. The default name is the PS file name. You can change it in the **File
    name** box.

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

11. Click **Save**.
    Your file is distilled and a PDF file is created.

12. In the CXP6000 Color Server application, from the **Job** menu, select **Import**.

13. Import the PDF file for printing.

> **Tip:** You may create a shortcut to the Acrobat Distiller on the CXP6000 Color Server desktop. This shortcut may be used to drag and drop and files onto the Acrobat Distiller for quick distilling. To create a shortcut, simply click the **Start** button on your Windows desktop, and follow the path **Programs > Acrobat Distiller**. Then, Right-click **Acrobat Distiller** and follow the path **Send To > Desktop (create shortcut).**

Export as PDF2Go

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

The system is capable of exporting jobs (both before and after processing), which are standard PDF files. 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.

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. Select a file in the **Storage Folder**, right-click, and from the menu
    select **Export as PDF2Go**.
    The PDF2Go window appears.
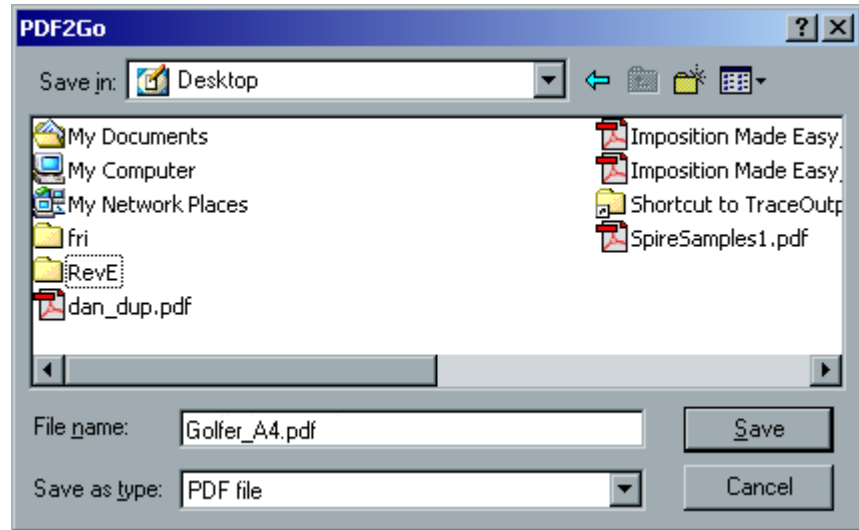
> **Note:** You can export every type of file, except for RTP jobs that were
> originally VI jobs.

2. Browse to the required location and click the **Save** button.
    The file is saved as a PDF under the job's name, in the selected
    location.

> **Note:** When exporting PDL files as PDF, the file is converted to PDF using the
> Acrobat distiller.

The Gradation Tool

It is sometimes 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 CXP6000 Color Server also enables you to visually check the effect of different gradation adjustments on RTP jobs prior to printing.

With 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 Window

The Gradation window 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 window:

1. From the **Tools** menu, select **Gradation**.
    The Gradation window appears.
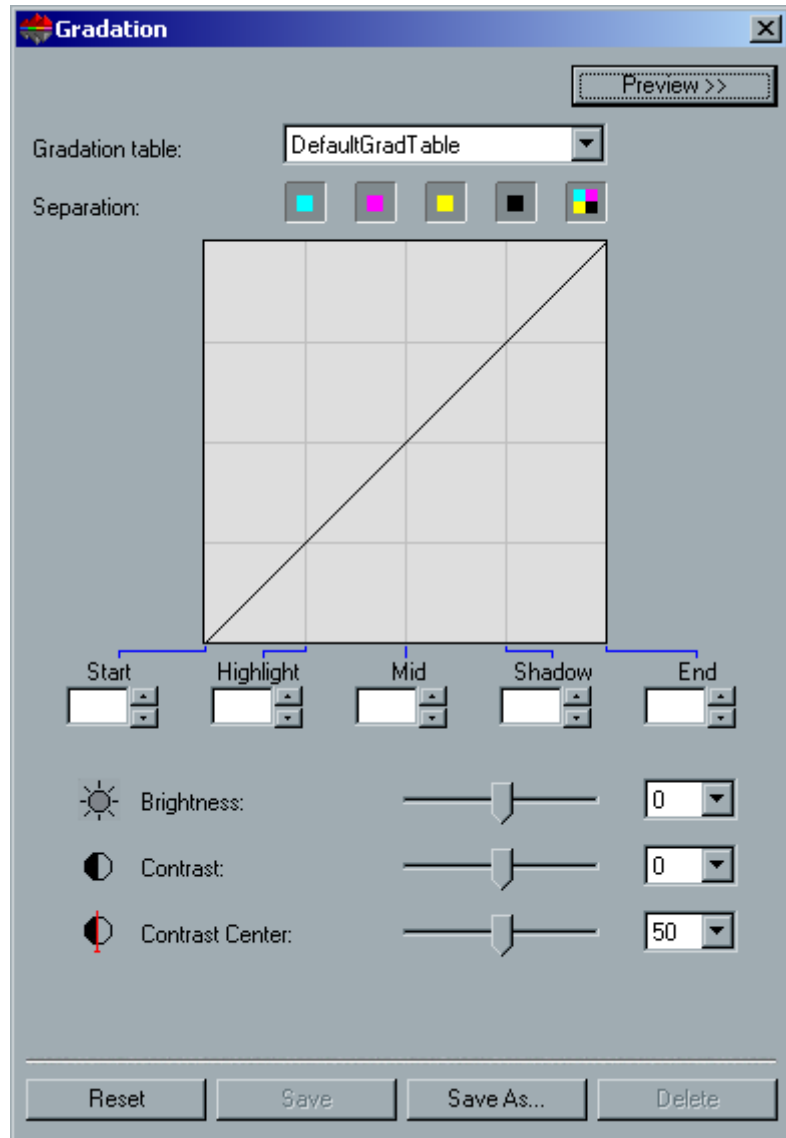
Preview Button

Clicking the **Preview** button in the Gradation window enables you 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 the **Preview** button to expand the Gradation window.
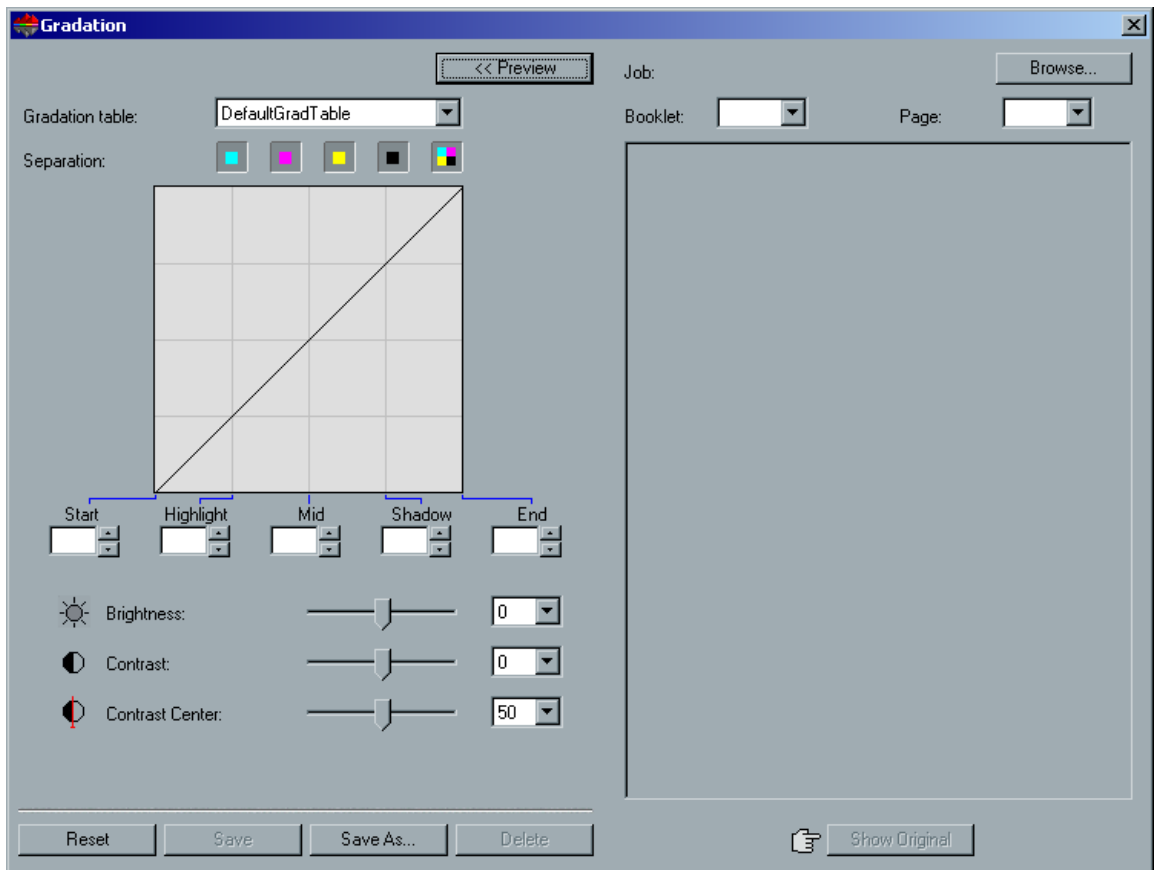
2. Click the **Browse** button to select a job for display in the Preview window.
    The RTP Jobs window appears.

Name	Pages	Size
MPI PARSE[0001..010]	10	40.02M
MPI PARSER Job(Unknow Name)[000	513	1699.45M

OK   Cancel
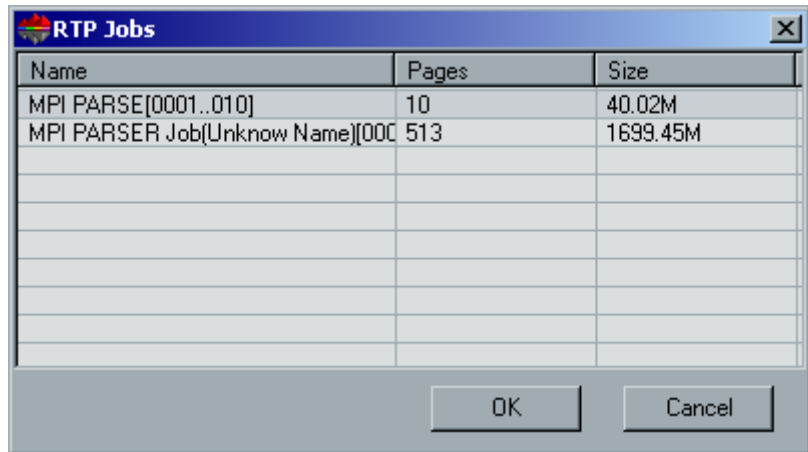
The displayed jobs are the RTP jobs listed in the **Storage Folder**.

3. Click on the RTP job you wish to modify.

4. Click **OK**.

The job appears in the Gradations window.

![Push pin icon]
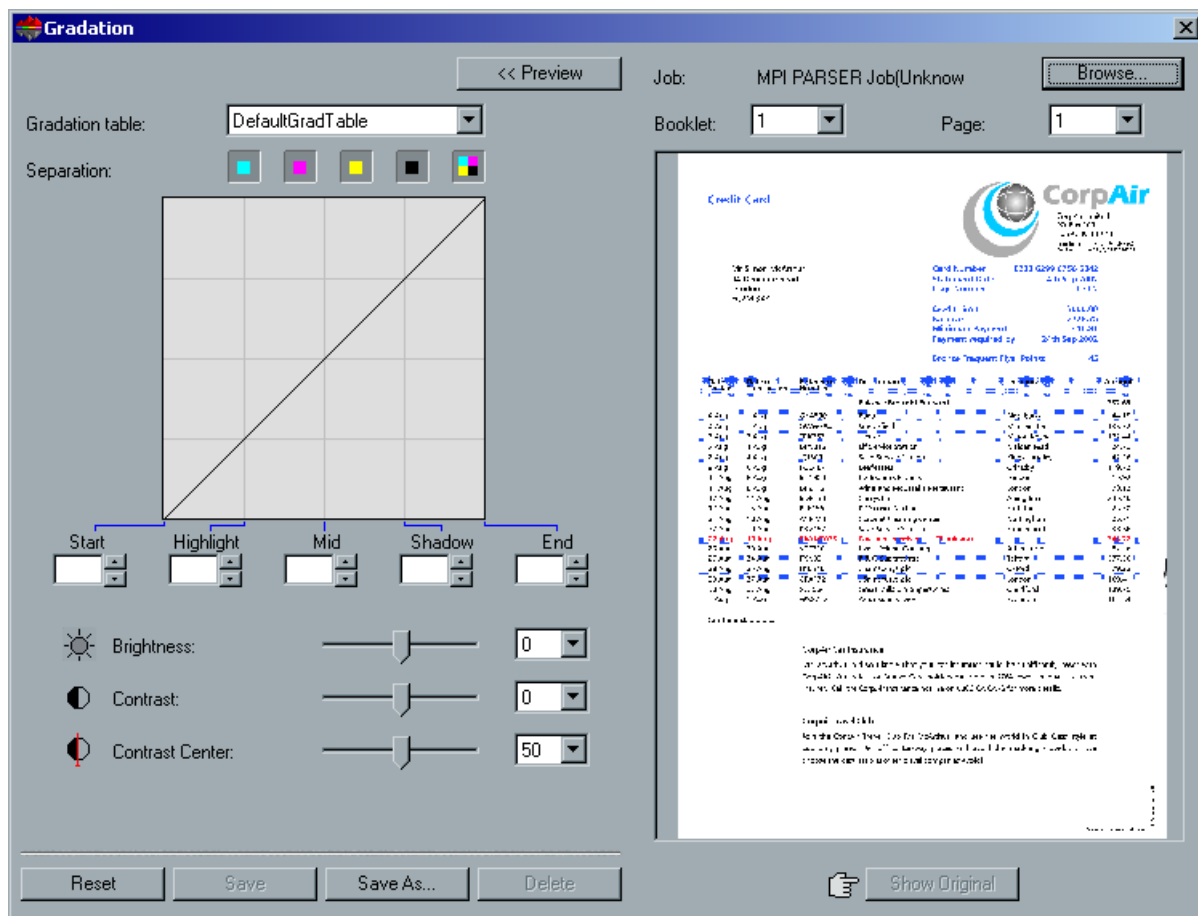
Notes:

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 the **Show Original** button (located at the bottom of the Gradation window) 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 window, 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 further details, see *Preview Button* on page 203.

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

CXP6000 Color Server gradation tables are represented visually in the Gradation window in the form of a graph:
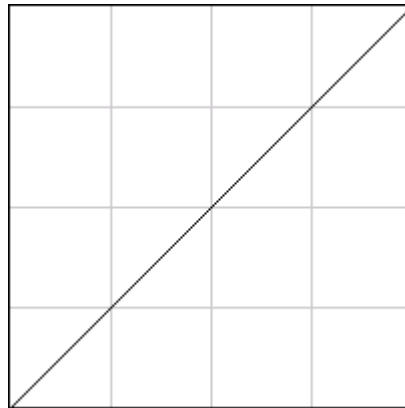
DefaultGradTable (Input equals Output)   Modified gradation graph
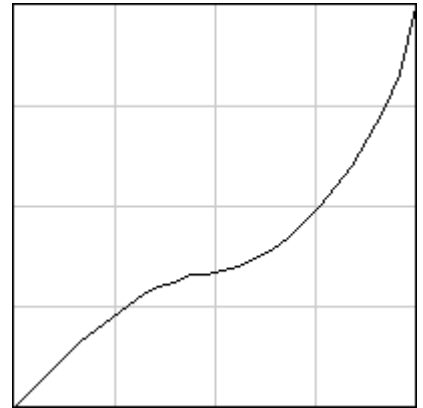
The horizontal axis represents the tone values of the image before gradation changes (input). The vertical axis represents the tone values of the image after gradation changes (output). All four separations (CMYK) are shown, but if they have identical curves, the graphs appear as if there is only one 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.
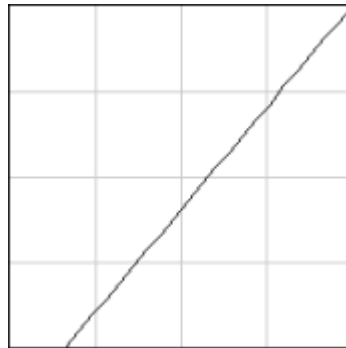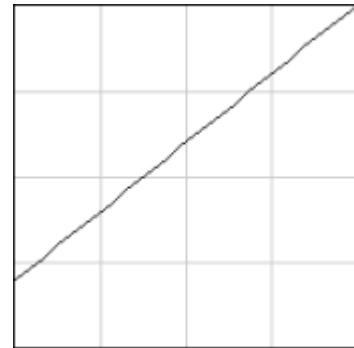
Start Point Low   Start Point High

- **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.
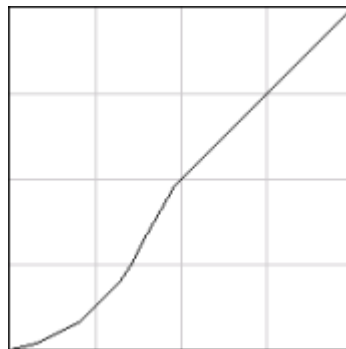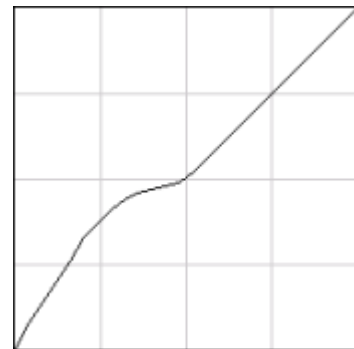
Highlight Low   Highlight High

- **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.
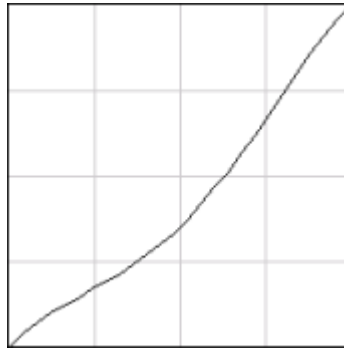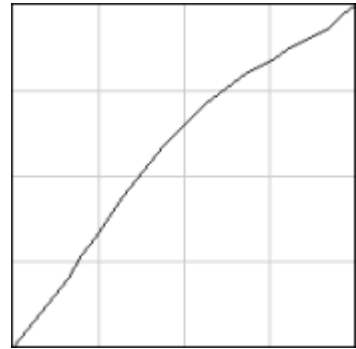
Mid Low   Mid High

- **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.
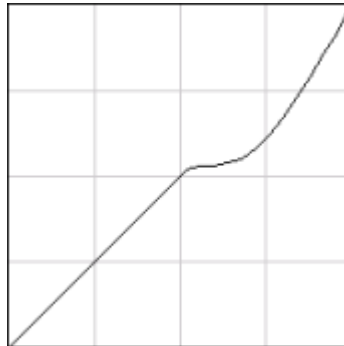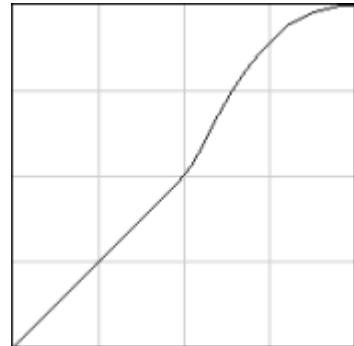
Shadow Low   Shadow High

- **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.
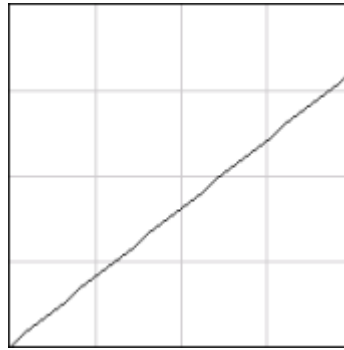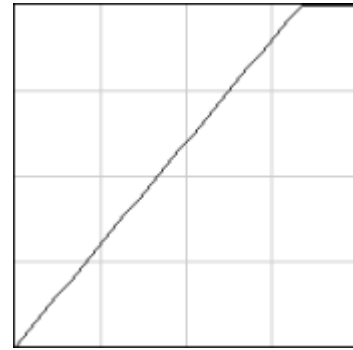
End Point Low   End Point High

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 window appears.
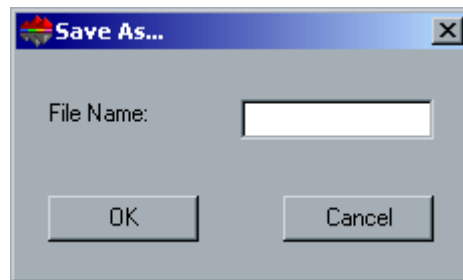
3. In the **File name** box, type the required name for the new gradation table.

4. Click **OK**.
   The gradation table is saved and added to the **Gradation table** list and to the Job Parameters Gradations list.

   For further information, see *Gradations* on page 114.

Exiting the Gradations Window

To exit the Gradations window:

➢ Close the Gradation window and return to the CXP6000 Color Server workspace.

The Calibration Tool

The purpose of color calibration is to achieve a consistent level of color quality. There are two calibration methods:

- **Target Calibration**
  This calibration method enables you to calibrate the Xerox DocuColor 2060/2045 Printer according to the following fixed density values:

  ❑ Cyan 1.6

  ❑ Magenta 1.597

  ❑ Yellow 1.017

  ❑ Black 1.8

  These density values specify the maximal density value that will be achieved by the Xerox DocuColor 2060/2045 Printer. The purpose of this color calibration method is to ensure that the same color quality is achieved for each Xerox DocuColor 2060/2045 Printer in use day after day.

- **Auto Adjusted Calibration**
  This calibration method enables you to calibrate the Xerox DocuColor 2060/2045 Printer according to a fixed percentage of the Xerox DocuColor 2060/2045 Printer maximal density. This is an automatic calibration method which is adjusted to the printers current state.

To specify the required calibration method, see *Color - Calibration Methods* on page 306.

Note: Access Calibration tables through **Tools > Calibration > Edit** (for the Edit Calibration window) and **Tools > Calibration > Info** (for the Density Graph window).

Connecting, Configuring and Calibrating the X-Rite DTP34 QuickCal 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 densitometric and dot data.

Before using the X-Rite DTP34 QuickCal Densitometer for the first time, perform the following:

- Familiarize yourself with the X-Rite DTP34 QuickCal Densitometer Operations Manual.

You may also select **Calibration** from the **Tools** menu and click the **DTP34 Tutorial - click and Learn** animation icon, to learn how to use the DTP34 QuickCal Densitometer correctly.

- Connect the X-Rite DTP34 QuickCal Densitometer.
- Calibrate the X-Rite DTP34 QuickCal Densitometer.

Connecting the X-Rite DTP34 QuickCal Densitometer to the CXP6000 Color Server

Mini-Din 8 Plug

SE108-94-02 Interface Cable

Power Input

PC Db9

SE108-DB9PA-01 (Optional)
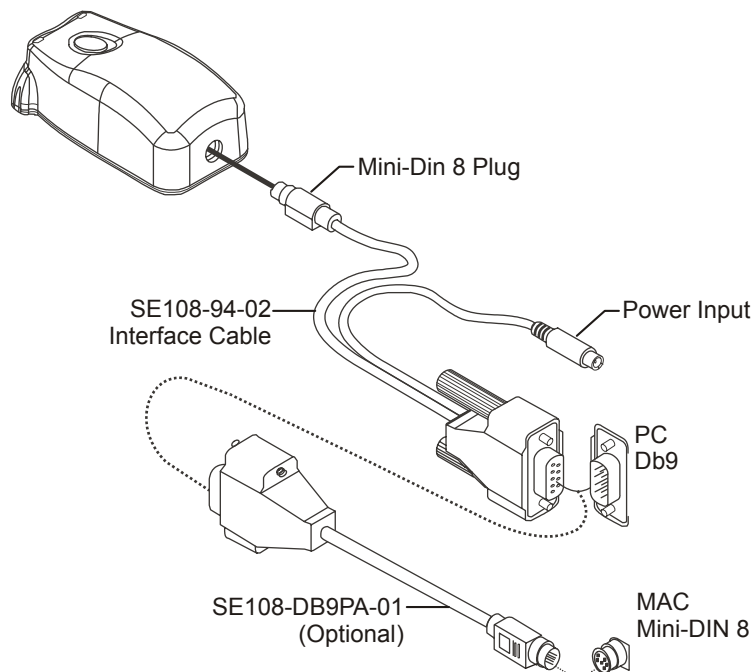
MAC Mini-DIN 8

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

The X-Rite DTP34 QuickCal Densitometer must be interfaced directly with one of the computer's serial ports.

Power is supplied to the X-Rite DTP34 QuickCal Densitometer when the Power Supply is plugged into the AC wall receptacle. The X-Rite DTP34 QuickCal Densitometer does not have an ON / OFF switch.

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 details on 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 smudgemarks. 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.
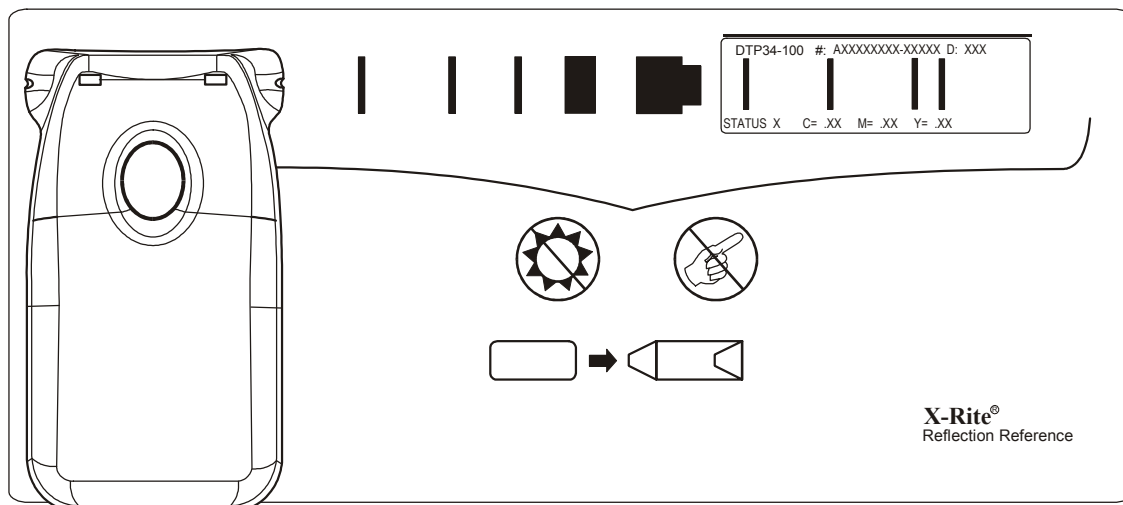
Quick Calibration

A quick calibration can be performed at any time. The only required action is to scan the reflection reference as you would with any other strip. A quick calibration should only be performed after a full calibration has been done. The instrument comes from the factory with a full calibration already stored.

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 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 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 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 away from light and heat.

Using the Printer Calibration Wizard with the X-Rite DTP34

The Calibration window enables you to create and edit calibration tables, either through an automatic process or by editing an existing calibration table. This Wizard guides you in the use of the X-Rite DTP34 to create calibration tables. saturated

The following calibration LUTs are provided:

- **None**- applies no calibration table on the job.

- **SpireNormal** - applies the factory default calibration table. Since this is a default LUT it cannot be overwritten.

- **SpireSaturated** - applies the factory default saturated calibration table. This LUT applies a darker calibration table in comparison to the **SpireNormal** LUT. Since this LUT is a default LUT it cannot be overwritten.

- **Normal** - initially the **Normal** LUT is identical to the **SpireNormal** LUT. This resemblance changes as soon as you calibrate your 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** LUT.

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

- **Saturated** - initially the **Normal** LUT is identical to the **SpireSaturated** LUT. This resemblance changes as soon as you calibrate your 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** LUT.

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

To open the Calibration window:

1. From the **Tools** menu, select **Calibration**
   The Calibration window appears.
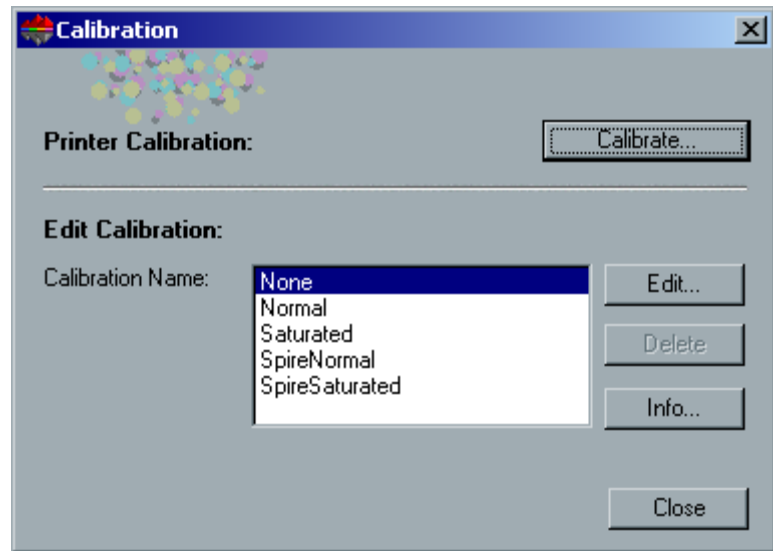
2. Click the **Calibrate** button to run the Printer Calibration Wizard. This Wizard guides you in the use of the X-Rite DTP34 to create calibration tables.
   Or:
   Select the calibration table from the **Calibration Name** list. Then select one of the following options:

   • Click **Edit** to edit the calibration table.

   • Click **Delete** to delete a calibration table.

   • Click **Info** for the Density Graph.

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

To calibrate using the Printer Calibration Wizard:

1. In the Calibration window, click **Calibrate**.
   The Color Calibration Wizard window appears at the Printing Start
   Point Chart window. The Color Calibration Wizard appears with the
   following message: "It is recommended to calibrate the DTP-34
   Densitometer at least once a day".

2. This step in the Color Calibration Wizard prints the Start Point
   Density calibration chart.
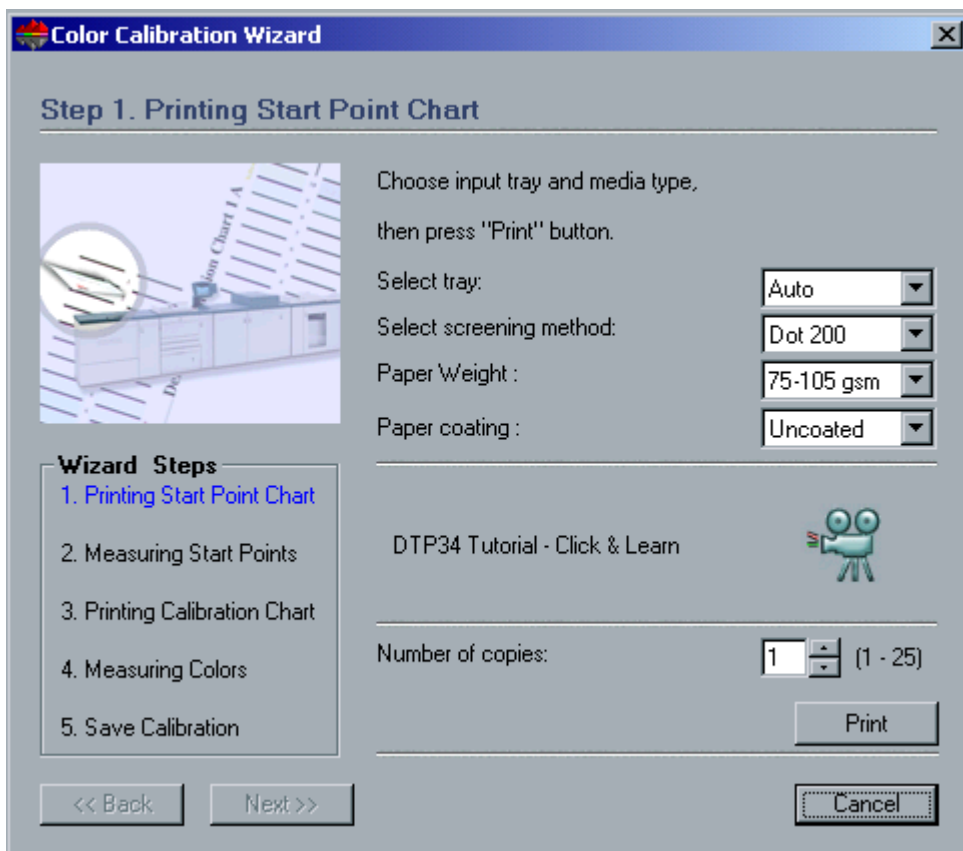
Note: Clicking the **DTP34 Tutorial - Click & Learn** icon displays an
animation of the calibration process. Click this icon to learn how to use the
DTP 34 QuickCal Densitometer correctly.

3. Select the required input tray from the **Select tray** list.
   The Wizard checks for Letter or A4 LEF paper. If a particular paper
   size / quality is required, select the relevant tray.

   Calibration charts can be printed on any paper size, including custom
   sizes. In case of small paper size (less than Letter / A4), each calibration
   chart is printed on two separate sheets. If a large size is selected, the
   calibration charts are printed close to the edge of the paper, allowing
   the operator to measure them without difficulty.
   When **Auto** is selected, the Wizard selects the first tray containing
   either letter or A4 paper. If the correct paper is not found, the
   following message appears.
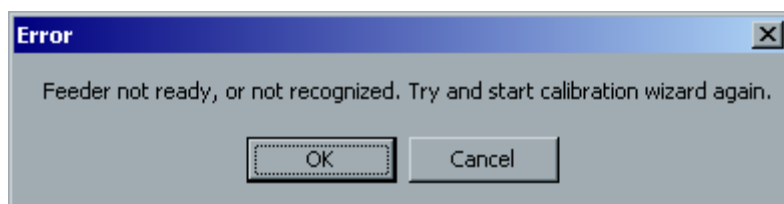
4. Refill the selected tray with the required paper and select the tray
   again from the list.

5. Select the required screening method from the **Select screening
   method** list.

6. Select the required **Paper Weight** from the list.

7. Select the required **Number of copies** from the list.

   Note: The Xerox DocuColor 2060/2045 Printer achieves its best marking
   performance after printing several initial pages, particularly following cold
   starts. Print the first calibration charts in multiple copies and use one of the
   last charts printed. Set and print up to 25 copies of the Start Point charts to
   reach the best color performance.

8. From the **Paper coating** options, select **Coated** or **Uncoated** paper
   stock.

9. Click the **Print** button.
   The Xerox DocuColor 2060/2045 Printer prints a Start Point Density
   calibration chart.

10. Collect the chart from the printer.
    Step 2 of the Color Calibration Wizard appears.
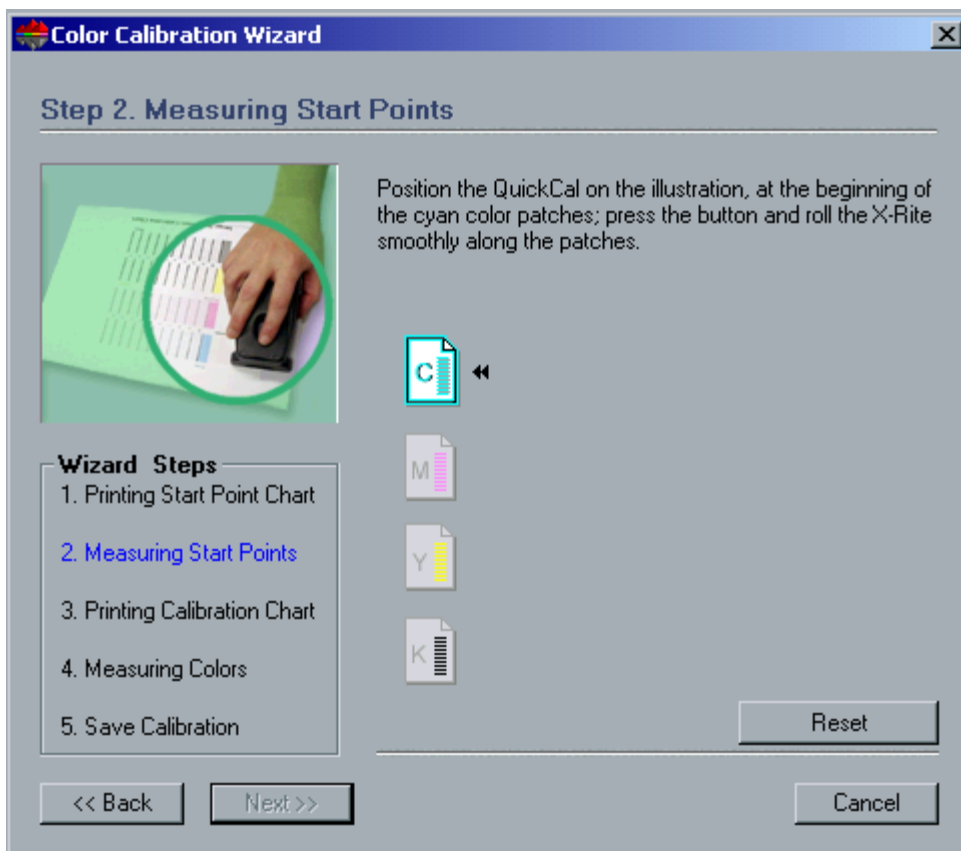
11. While pressing down the button on the X-Rite DTP34, align the X-Rite DTP34's head with the cyan arrow's tip. The arrow is to the left of the cyan column on the Image Density Calibration Curve. Its tip intersects the semi-dotted line.

12. Press the button on the X-Rite DTP34.

13. 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.
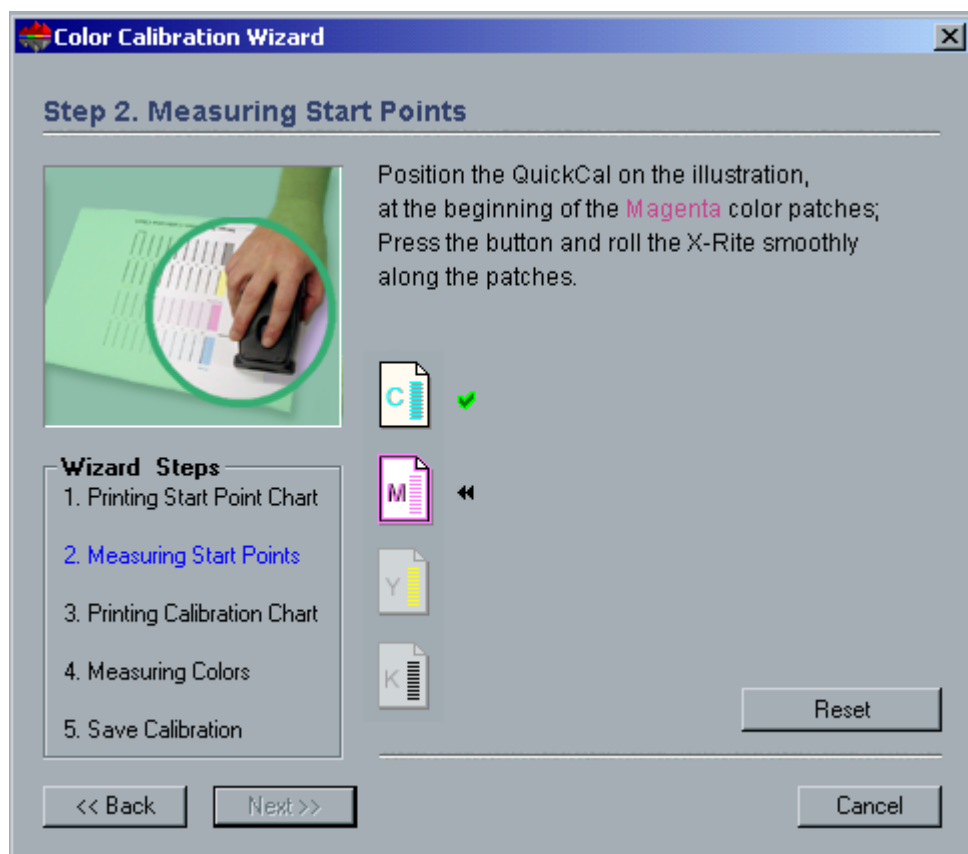
14. After each color sweep, wait for the check mark to appear over the appropriate icon and follow the instructions as listed.

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.
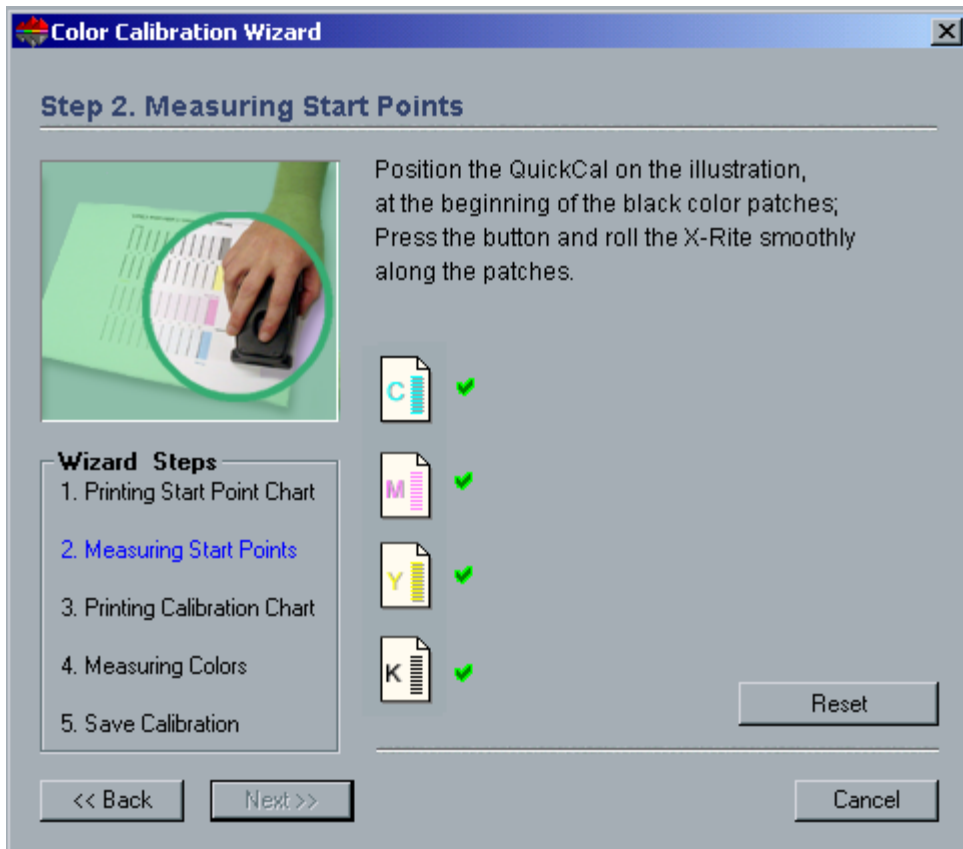
15. If at any stage the scanning has not been completed properly, click the **Reset** button and scan again.

16. If an error occurs during the scan, the following Error message appears.
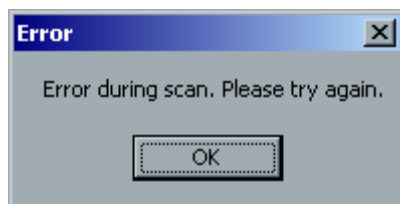
17. Click **OK** and re-scan the charts.

18. If at any time during your scan sequence, you would like to scan again, click the **Reset** button.
    Step 3 of the Color Calibration Wizard appears.
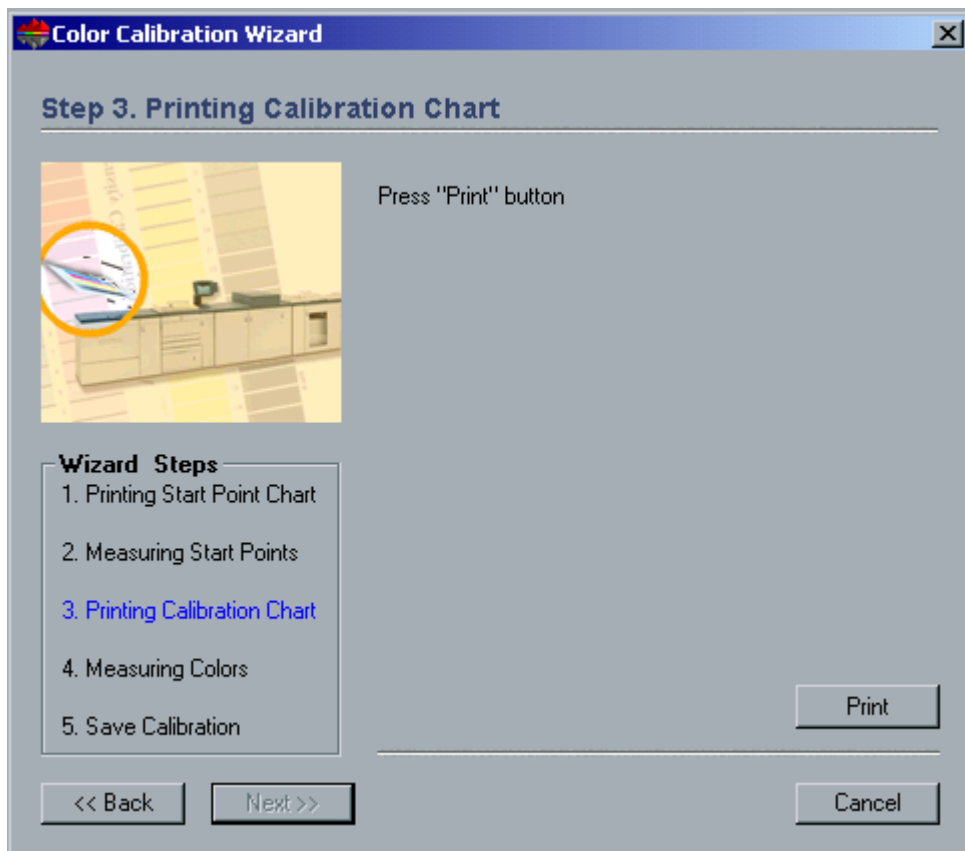
19. Click the **Print** button.

Note: If automatic screening has been selected in Step 1 of the Wizard, the Xerox DocuColor 2060/2045 Printer prints two charts, an Image Density calibration chart and a Text / Line Art chart. If any other screening method has been selected, only the Image Density calibration chart is printed.

20. Collect the chart(s) from the printer.
    Step 4 of the Color Calibration Wizard appears.
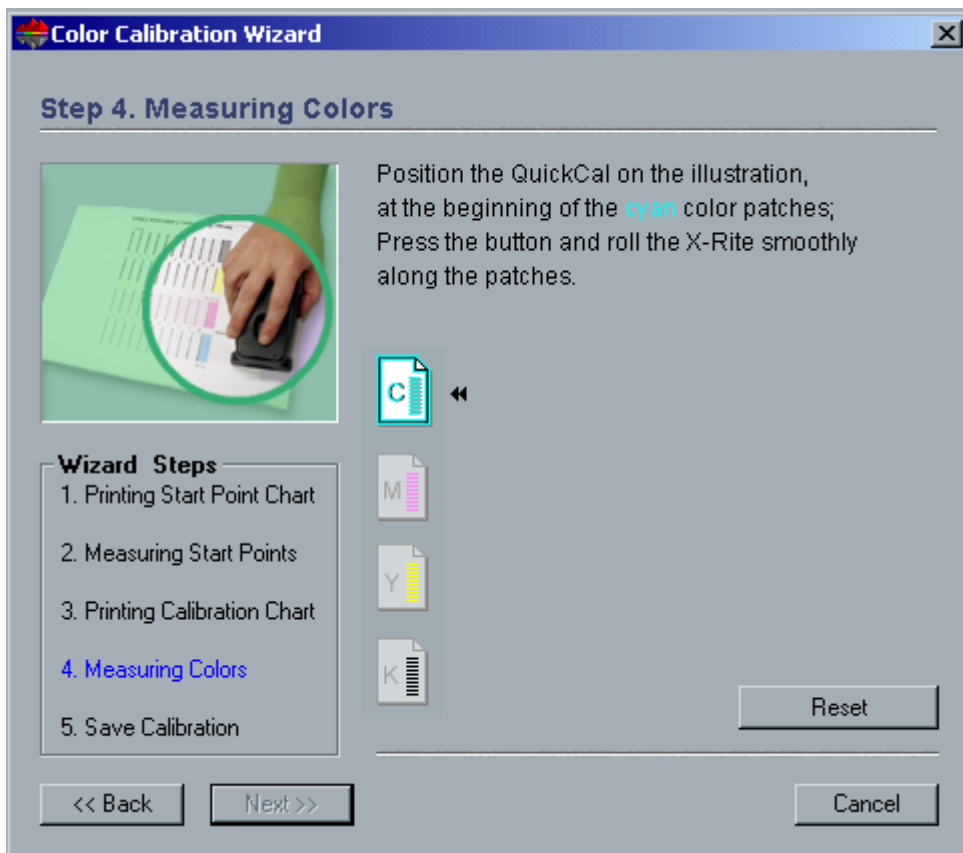
21. Position the X-Rite DTP34 over the Image Density calibration chart and follow the scan sequence as prompted.

A beep sounds when the scan is complete. A check mark appears over the cyan icon and instructions appear for scanning of the next column (magenta).
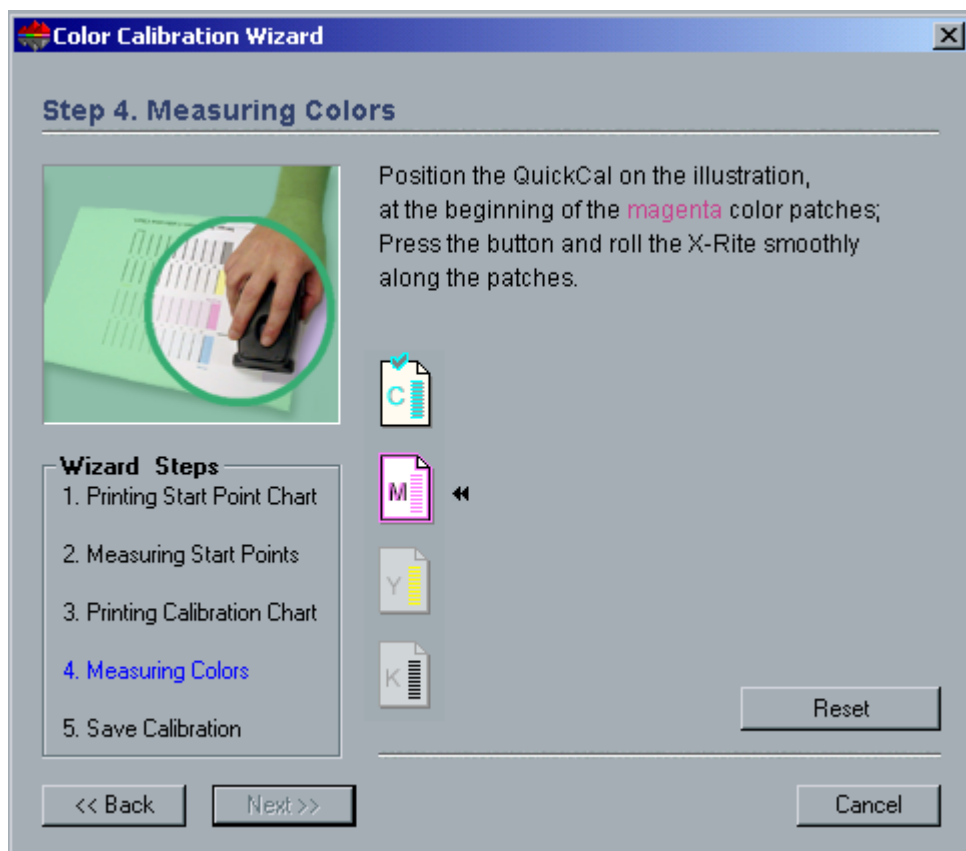
22. After each scan, wait for the check mark to appear over the appropriate icon and follow the instructions as listed.

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

23. When all of the separation columns have been successfully measured, a check mark appears above all icons.
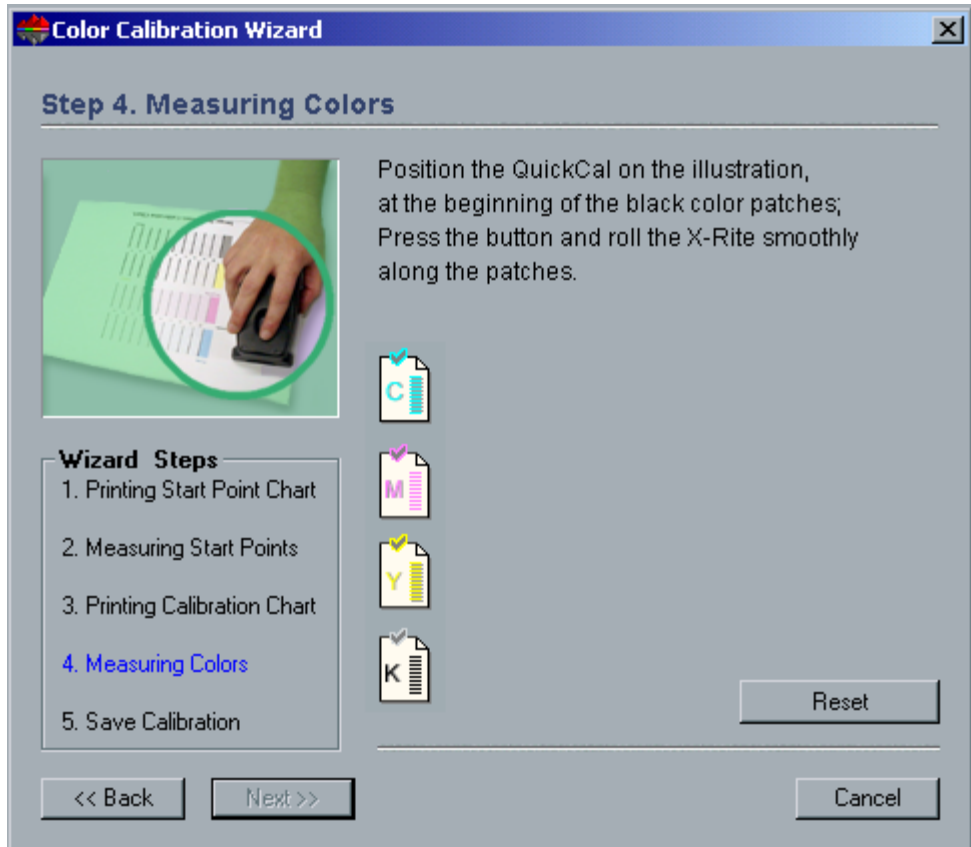
24. If in Step 1 of the Wizard, you have selected **Auto** from the **Select screening method** list, you are now required to sweep the Text / Line Art. Follow the same scan sequence. Begin each chart with the cyan column.

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 above all icons.
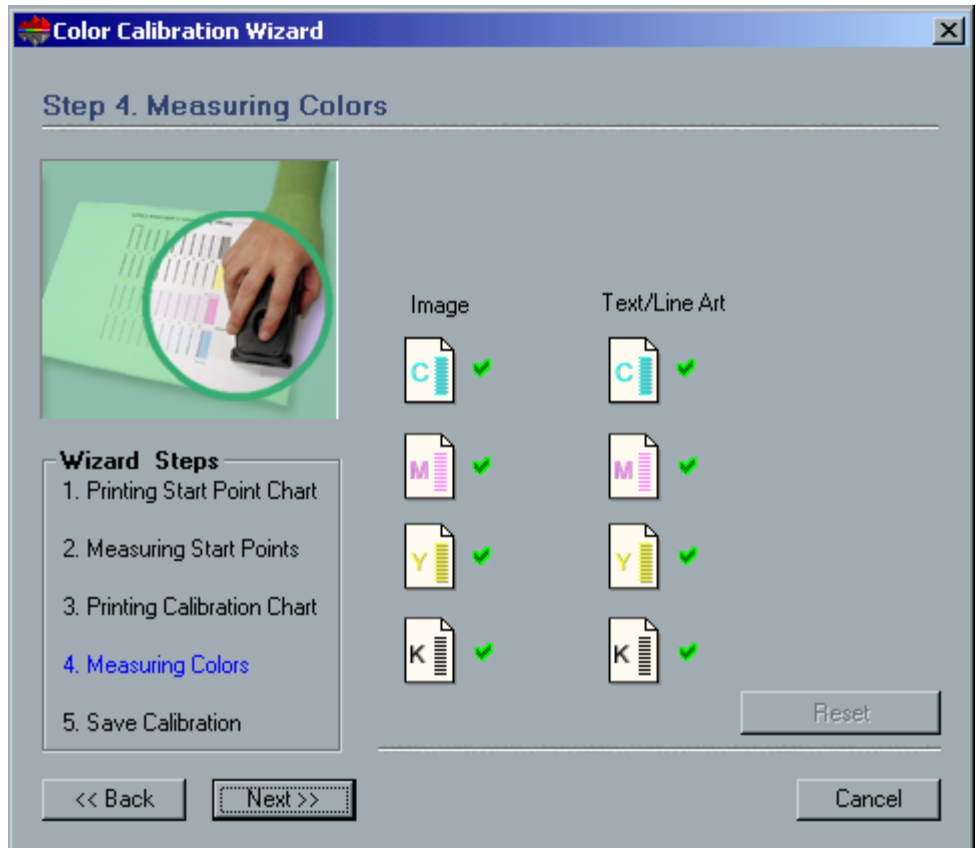
Note: If at any stage the scanning has not been completed properly, click
Reset and scan again.

Step 5 of the Color Calibration Wizard appears.
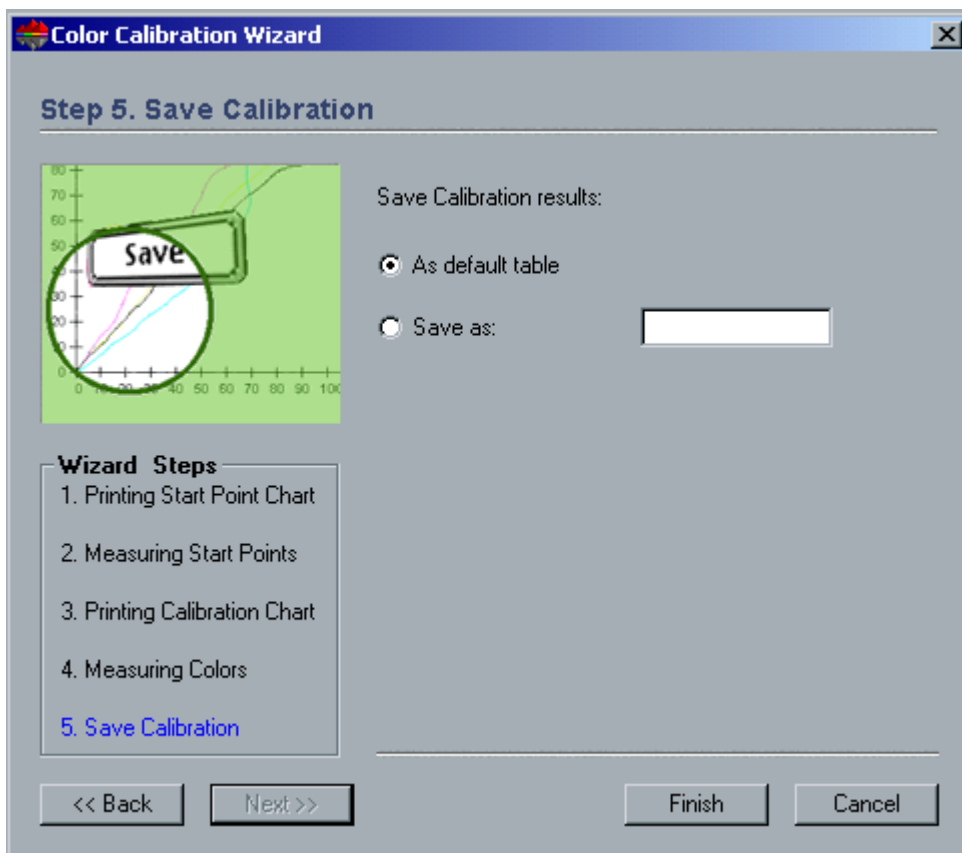
25. Select **Save as** and select the required name for the calibration table.
    Type your own or select one from the list.
    Or:
    Select **As default table.**
    The calibration table is saved as **Normal**.

26. Click **Finish**.

    The calibration table is saved.

    The CXP6000 Color Server actually saves your calibration table twice, as **Normal** and as **Saturated**:

    - **Normal**
      The table is balanced throughout the entire range.

    - **Saturated**
      The table is balanced through 80% of the tone range. From 80% onwards, all separations are balanced independently. Each separation is calibrated to the maximum density the printer can produce.

      For example, if a calibration table is saved with the name "New", it is saved both as "New" and as "NewSat".

Editing Calibration Tables

To edit a calibration table:

1. In the Calibration window, under **Calibration Name**, select the table to edit. Then click the **Edit** button.
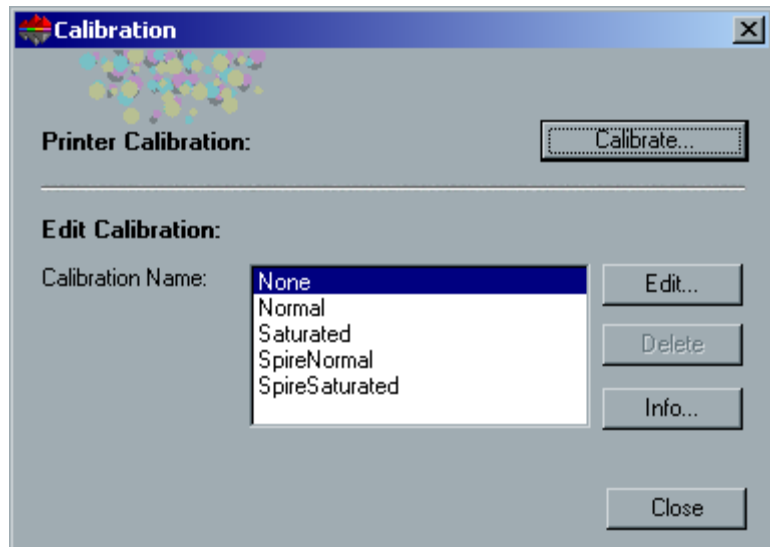
The Edit Calibration window appears.
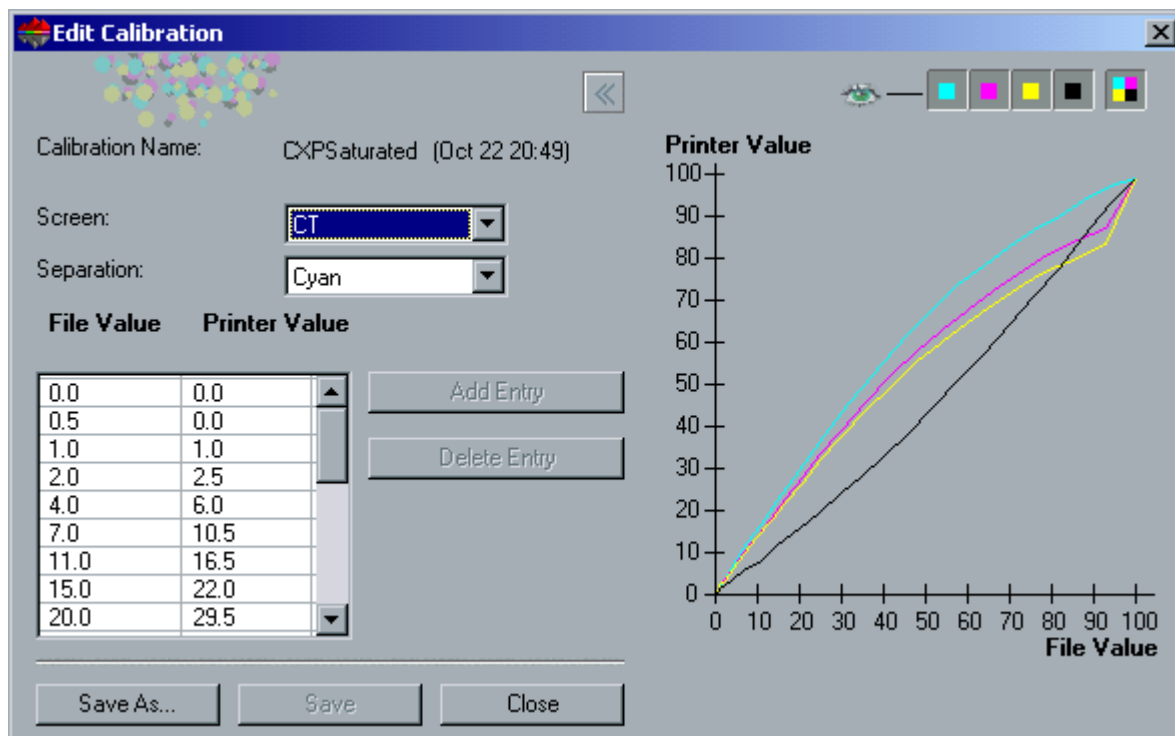
Screen

In Step 1. Printing Start Point Chart of the Color Calibration Wizard screen, select a screening method. Upon choosing the **Automatic** screening method, in Step 2. Measuring Start Points you receive information for both CT (on the left) and LW. Any other screening method yields only CT information.

Separation

The **Separation** list is used to select the separations to be edited for a particular calibration table.

1. Select an individual separation to edit from the **Separation** list.

2. Change the separation parameters by adjusting file and printer values in the Value table. Changes to calibration tables are immediately presented as changes to the calibration graph.

Value Table

File Value	Printer Value	
0.0	0.0	
0.5	5.0	
21.5	14.0	
41.0	26.5	
61.0	39.5	
80.5	52.0	
100.0	70.0	

The Value table lists the tone values of the image. The **File Value** column lists the tone values in the image file. The **Printer Value** column lists the tone values of the image that are sent to the printer.

The **File Value** and **Printer Value** columns provide the x and y coordinates from which the calibration graph is drawn.
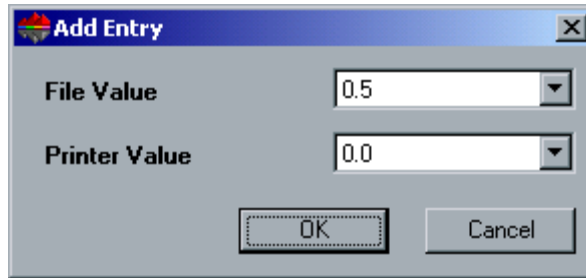
Editing Calibration Value Tables

To add an entry to the value table:

1. Highlight a row in the value table that you wish to add a value after.

File Value	Printer Value	
0.0	0.0	
0.5	5.0	
21.5	14.0	
41.0	26.5	
61.0	39.5	
80.5	52.0	
100.0	70.0	

2. Click the **Add Entry** button.
    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.
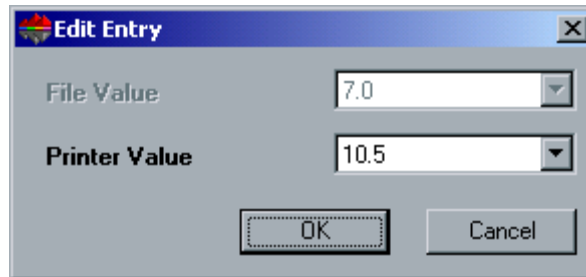
    Note: Your changes to calibration tables are immediately presented as
    changes to the calibration graph.

To change an existing value table:

1. Highlight a row in the value table that you wish to add a value after.

2. Double-click on the row.
   The Edit Entry dialog box appears.

3. Adjust the **File** and **Printer** values as required by clicking on the arrow buttons.

4. Click **OK**.
   The value table is updated and the calibration graph is adjusted.

   Note: Your changes to calibration tables are immediately presented as changes to the calibration graph.

To delete an entry from the value table:

1. In the value table, highlight the entry to be deleted.

File Value	Printer Value	
0.0	0.0	
0.5	5.0	
21.5	14.0	
41.0	26.5	
61.0	39.5	
80.5	52.0	
100.0	70.0	

2. Click the **Delete Entry** button.
   The entry is removed.

   Note: Your changes to calibration tables are immediately presented as changes to the calibration graph.

Calibration Graph

CXP6000 Color Server calibration tables are represented visually in the Edit Calibration dialog box in the form of a graph.
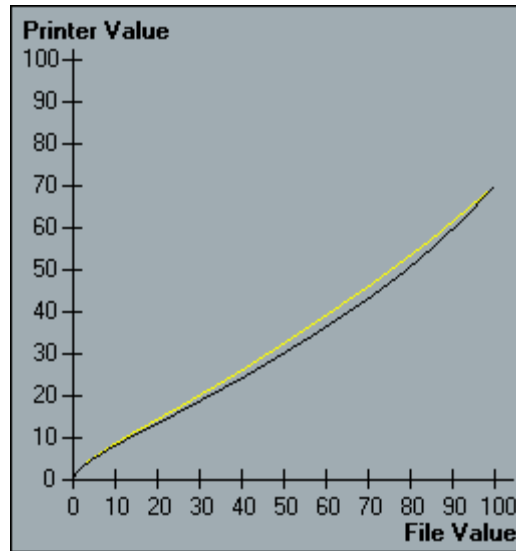
Calibration graph showing separations

The horizontal axis represents the tone values of the image in the image file. The vertical axis represents the tone values of the image that are sent to the printer. Upon opening the Edit Calibration dialog box, all four separations (CMYK) are shown. If the four separations have identical curves, the calibration graph appears as if there is only one curve.

    ➢ To open or hide the calibration graph, click the arrow button.

Viewing Separations

You can view one, all, or any combination of separations. The Edit Calibration dialog box appears with all separations selected.

It is possible to view one or more separations and adjust the values of other separations. The separations that you adjust are do not have to be those that you have chosen to view in the Edit Calibration dialog box.

To view one or several separations:

1. Click the clear button to clear all separations.
   The separations are cleared.

2. Click the individual separations you wish to view (for example, select the cyan separation only).

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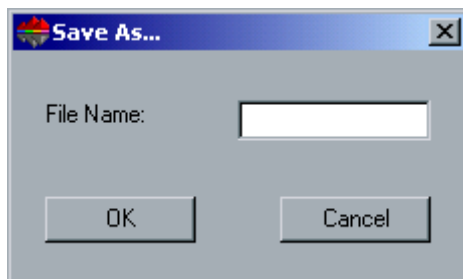
3. In the **File Name** box, type the new calibration table name.

   Note: You can not overwrite the default calibration tables, Spire Normal and Spire Saturated.

4. Click **OK**.
   The calibration table is saved with the new name.

   Note: Access Calibration tables through **Tools > Calibration > Edit** (for the Edit Calibration dialog box) and **Tools > Calibration > Info** (for the Density Graph window).

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

Backing Up Calibration Tables

To back up a calibration table:

1. Browse to the **ColorCalibrationDB** folder, following the path **C:\CXP6000\General\ColorCalibration\ColorCalibrationDB**.
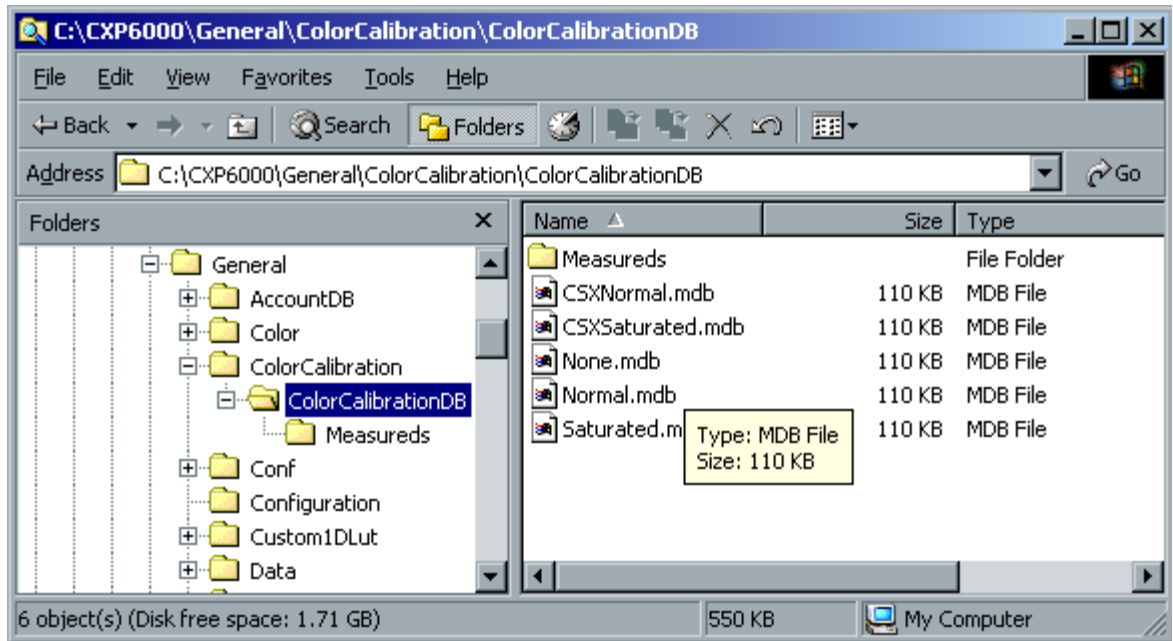
2. Open the **ColorCalibrationDB** folder.
3. Copy the required calibration table files to your backup location.

Color Density Information

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.
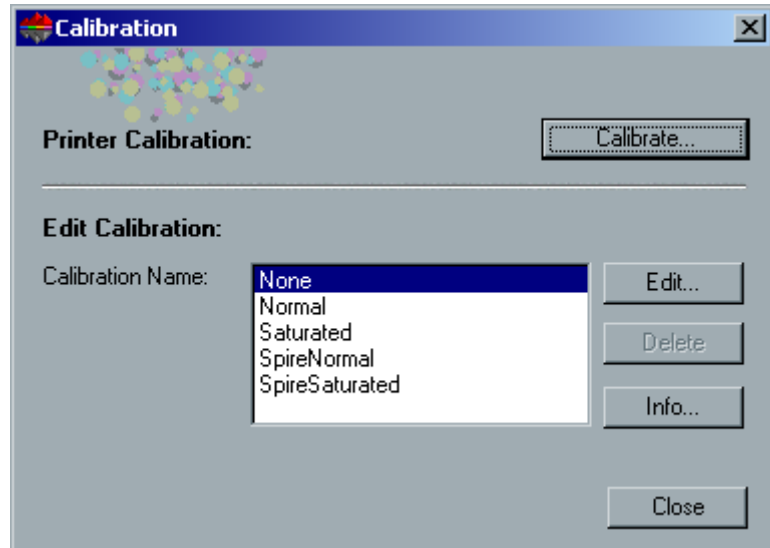
2. Click the **Info** button.

The Density Graph appears. Upon saving the calibration, its results are also saved as graphic data and displayed in the Density Graph.
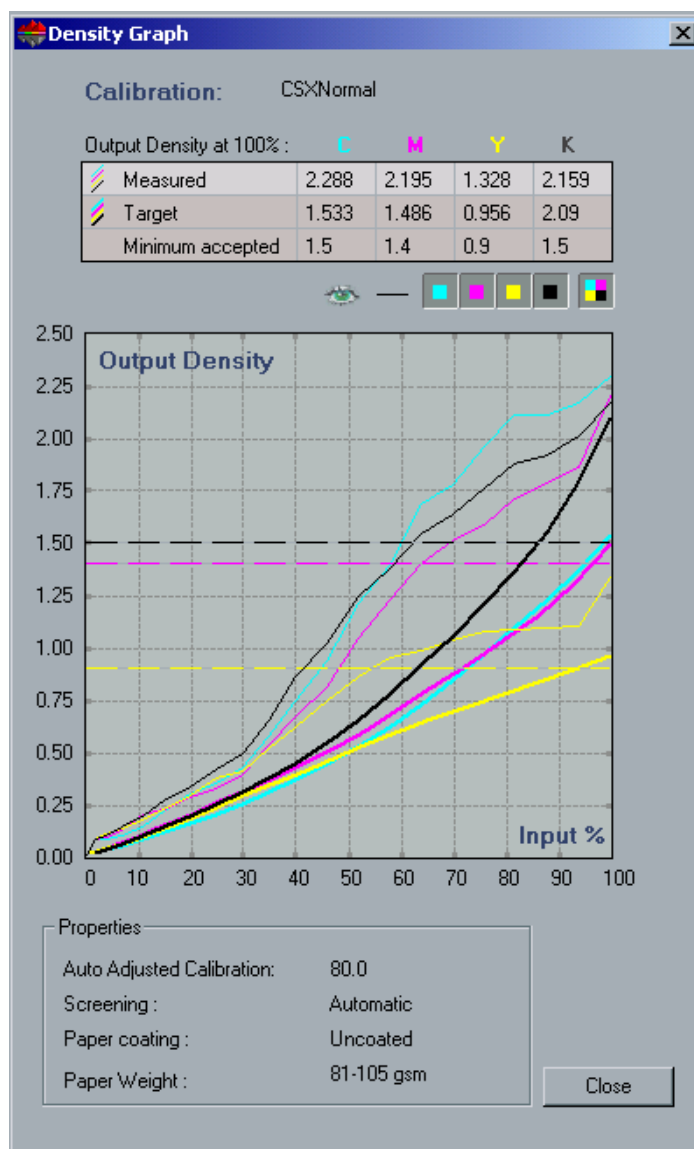
Calibration graph showing Cyan, Magenta, Yellow and Black separations.

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 2060/2045 Printer 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 - >".
```

The Spot Color Editor

Individual job pages can contain continuous tone (CT), line work (LW), and Spot color elements. The 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 CXP6000 Color Server supports HKS & Pantone 2000 Spot colors.

Note: Spot (for example Pantone) colors are not effected by CMYK emulation. A spot color has the same appearance with any selected CMYK emulation.

If you would like to disable the application of the Spot Color Editor, see *Color - Spire Spot Color Dictionary* on page 305 for details.

To edit an existing pantone color:

1. From the **Tools** menu, select **Spot Color Editor.**
   The Spot Color Editor window appears with the CXP6000 Color Server's entire collection of colors listed.
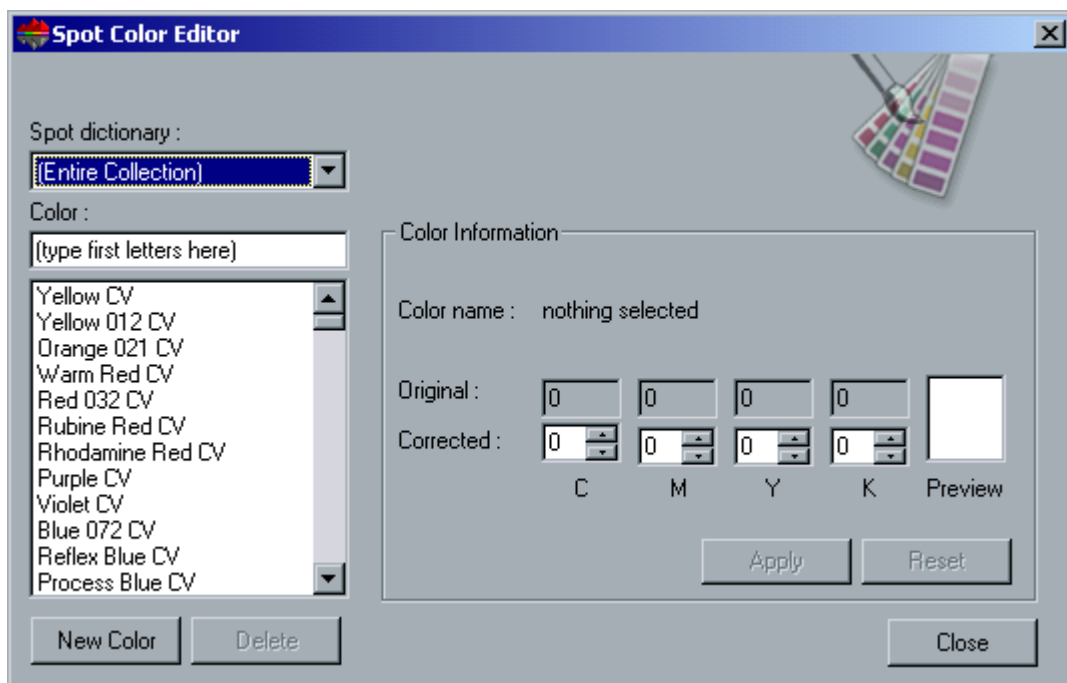
2. Search for a particular color under **Color.**

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 will not 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.
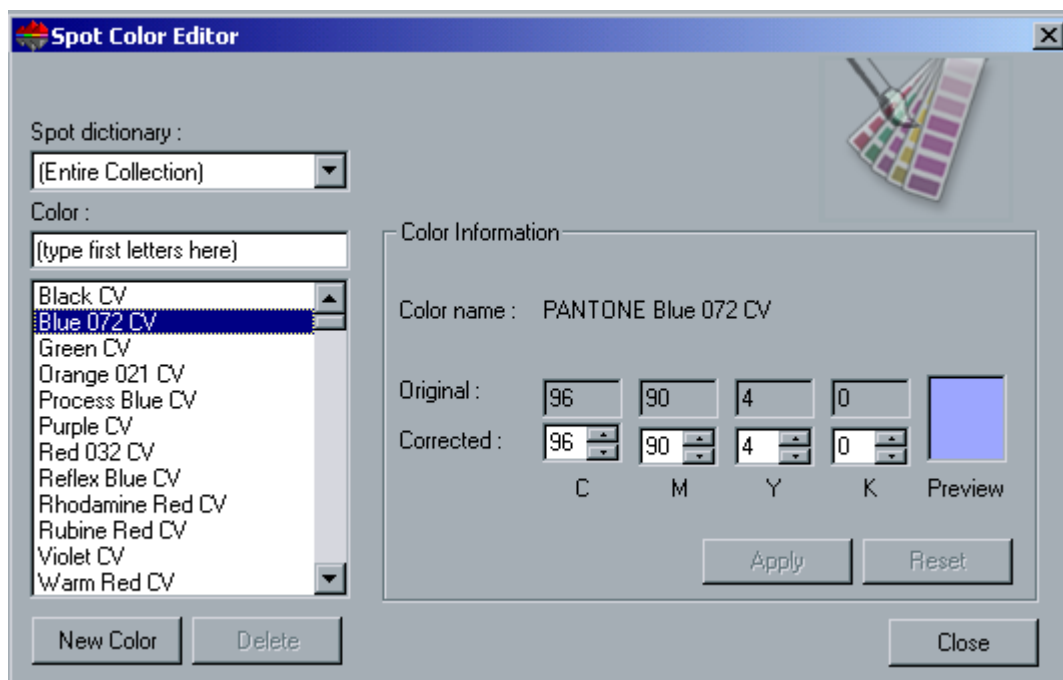
5. Change the CMYK values as required.

6. Click the **Apply** button.
The new color is added to the Custom color dictionary.
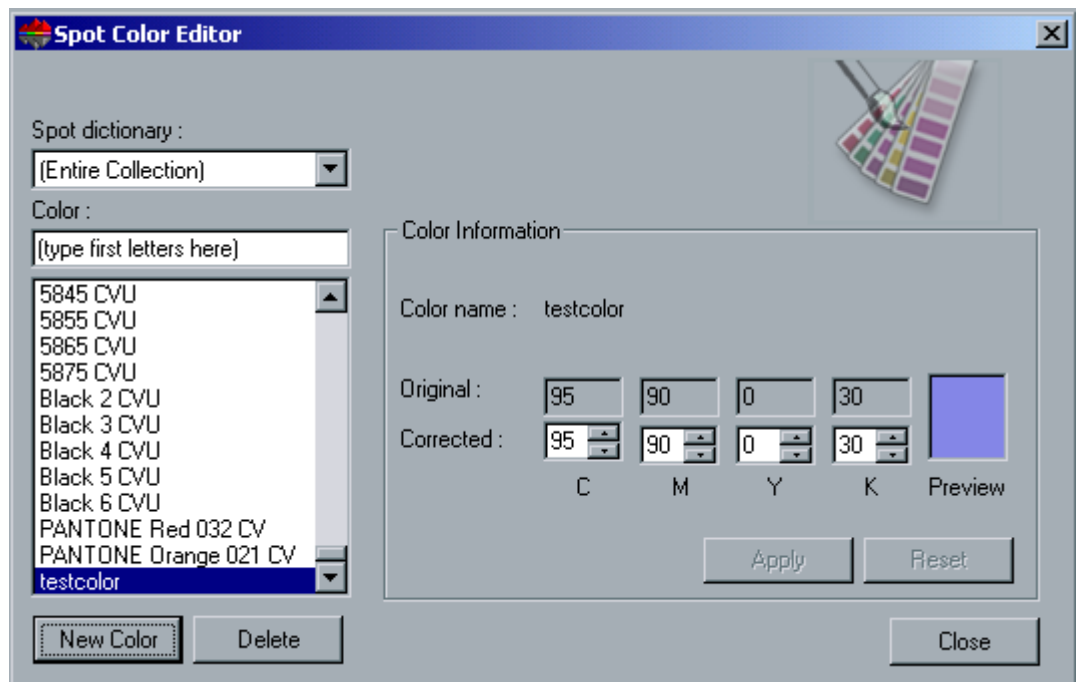
7. If the color name was already modified and is in the custom dictionary, the following message appears.
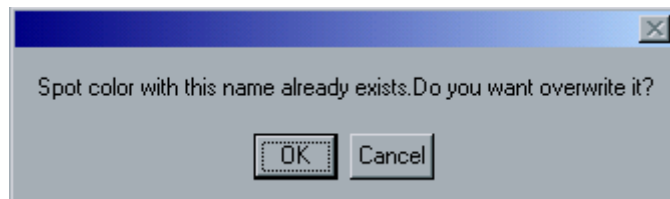
8. Click **OK** to overwrite the color name.

To create a new spot color:

1. In the Spot Color Editor window, click the **New Color** button.
   The New Spot Color dialog box appears.
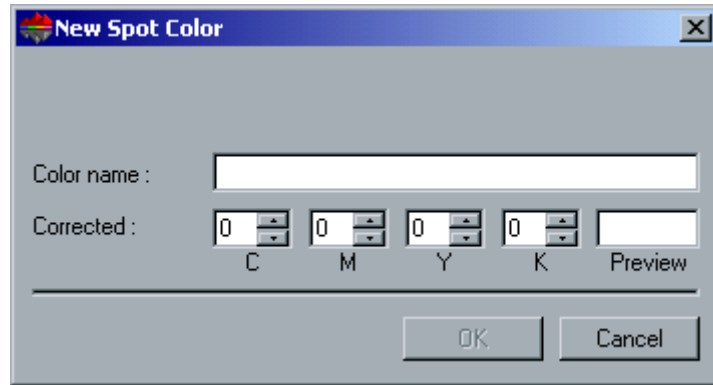
2. Type the new color name as it exists in the PS file.

   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.
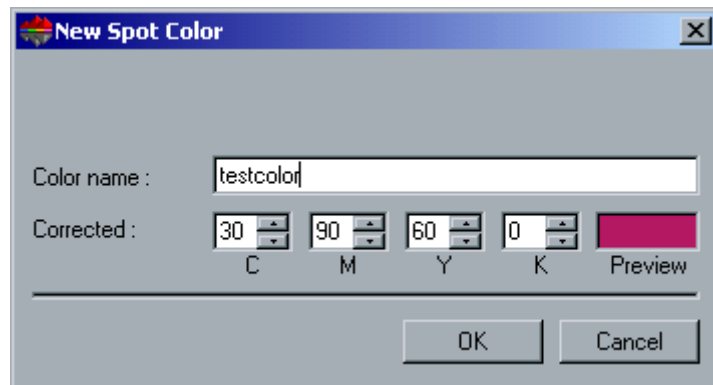
4. Click **OK**.
   The new color is added to the Custom dictionary.

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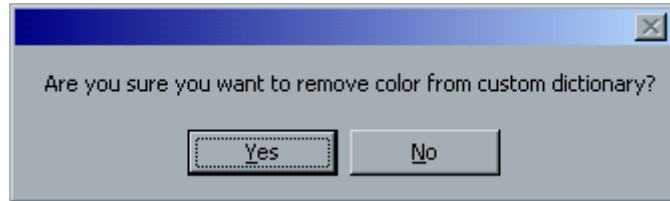
4. Click **Yes** to delete the color.

Printing PrePress Files - Graphic Art Port (GAP)

The GAP is a port through which you can import various file formats used in the Graphic Arts industry. GAP files are already rasterized. The CXP6000 Color Server needs only to prepare the files for printing, which means adjusting the file resolution and rotation.

Importing GAP Files

During the import of the assigned job file, the file is converted to a PDF that is displayed in the CXP6000 Color Server queues. The PDF can be programmed and printed as any other PDF file.

Note: To print a specific page, import the assigned file of the specific page.

Supporting Graphic Arts Port (GAP) Files

The CXP6000 Color Server can import and convert the following file types:

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

Note: The CXP6000 Color Server supports GAP files that are in composite format only.

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 Ticket operations.

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 CXP6000 Color Server, first import the FP file. During import, the file is converted to a PDF, which is displayed in the CXP6000 Color Server queues. The PDF can be programmed and printed as any other PDF file.

CT, LW, TIFF

The components of a Brisque Job and TIFF IT, which are: CT, LW and TIFF, can be imported and printed separately to the 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 CXP6000 Color Server, import the assigned file of the job.

- To print a specific page, import the assigned file of the specific page.

    Note: The CXP6000 Color Server does not support Spot colors (for example Pantone) as part of the incoming job. In other words, the system does not consume Brisque jobs, which contain colors other than C, M, Y, and K.

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5

Administrating the System

The Administration Window

The CXP6000 Color Server Administration window contains several utilities that enable you to manage your system.

To open the Administration window:

➢ Click the **Admin** button on the **Pathways** panel.
Or:
From the **Tools** menu, select **Administration**.
The Administration window appears.
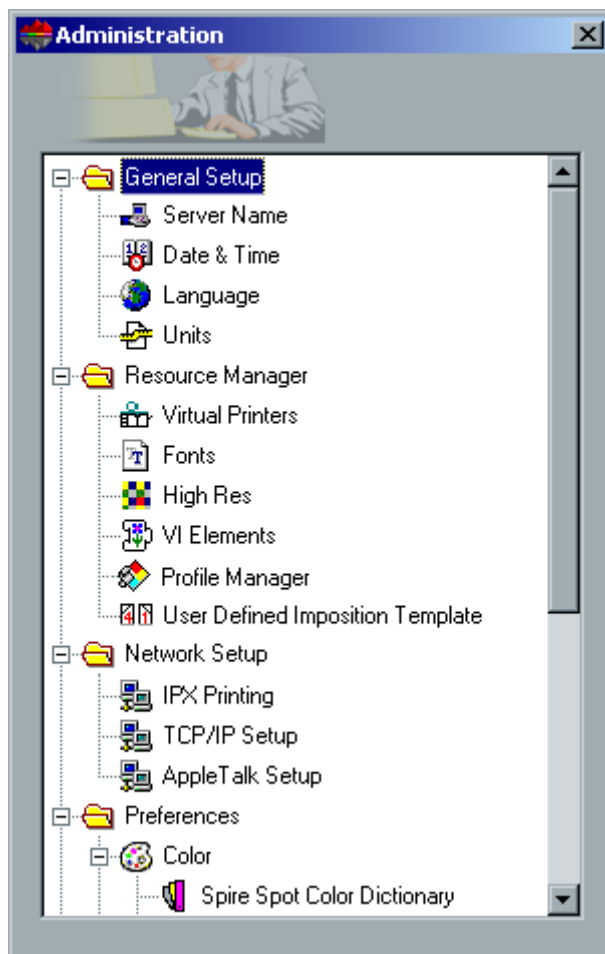
General Setup

The **General Setup** utility enables you to change the system parameters, such as the hostname of your CXP6000 Color Server, the system's date and time, the user interface language and units of measurement.

To open the General Setup utilities:

1. Open the Administration window and double-click **General Setup** to expand the folder.
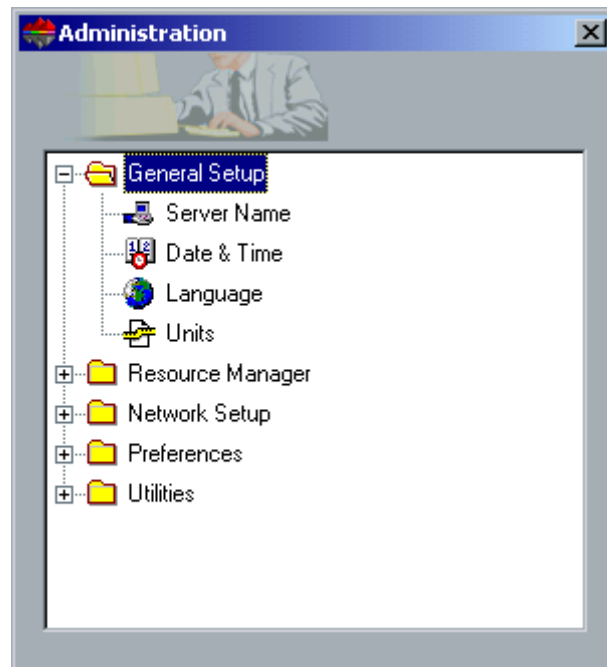
Changing the Server Name

1. In the **General Setup** folder, double-click **Server Name.**
   The System Properties window appears.
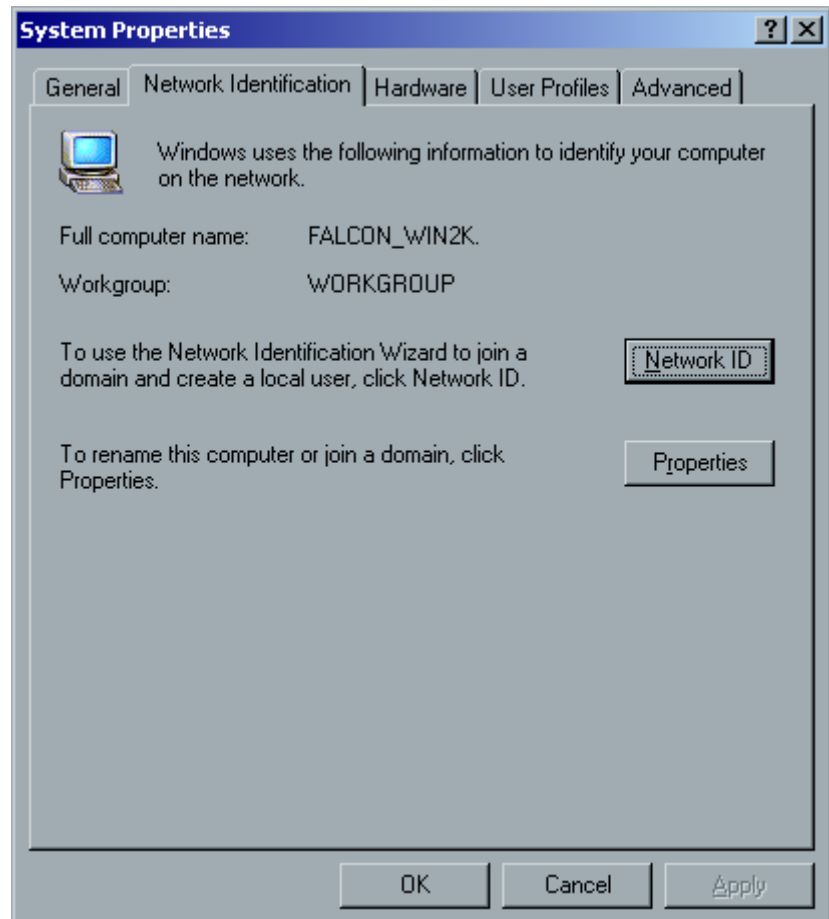
2. In the **Network Identification** tab, click the **Properties** button.
   The Identification Changes window appears.
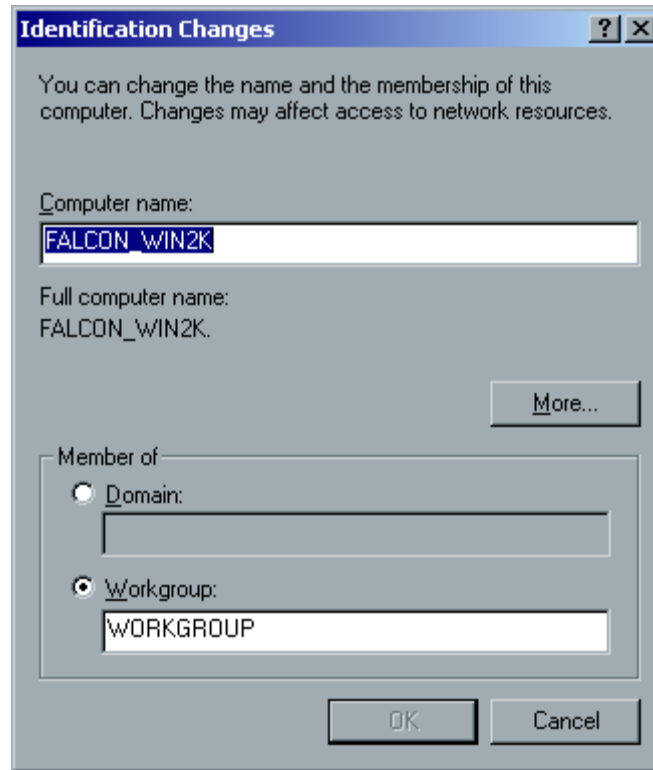
3. In the **Computer Name** box, type a new name for the computer.

4. 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 instructed to.

   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.

5. Click **OK**.

6. Click **OK** also in the System Properties window.
   The system prompts you to reboot your computer for the new settings to take effect.

7. Click **No** if you want to change other system parameters or click **Yes** and reboot your computer.

Changing the Date & Time

To change the system date and time:

1. In the **General Setup** folder, double-click **Date & Time**.
    The Date/Time Properties window appears.
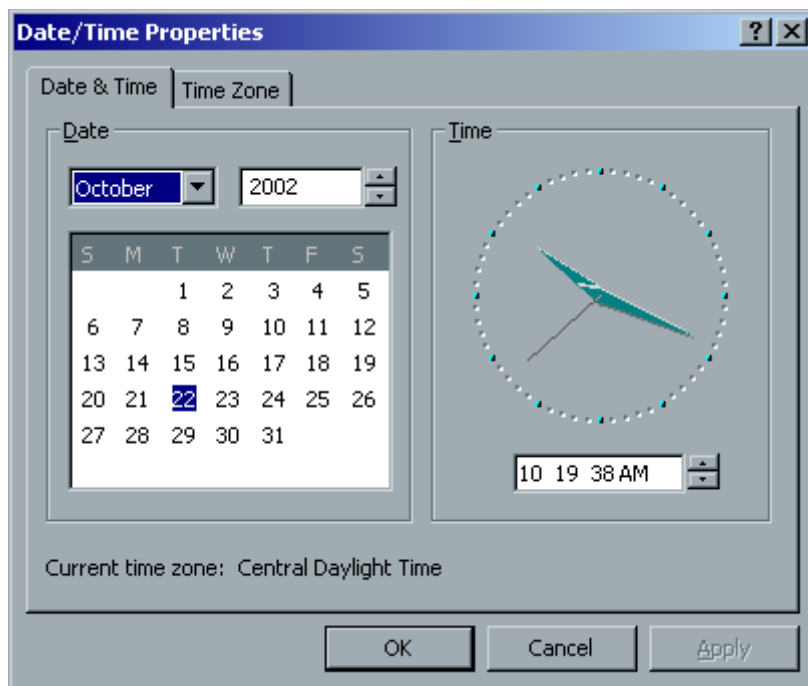
2. In the **Date & Time** tab, select your local time settings.

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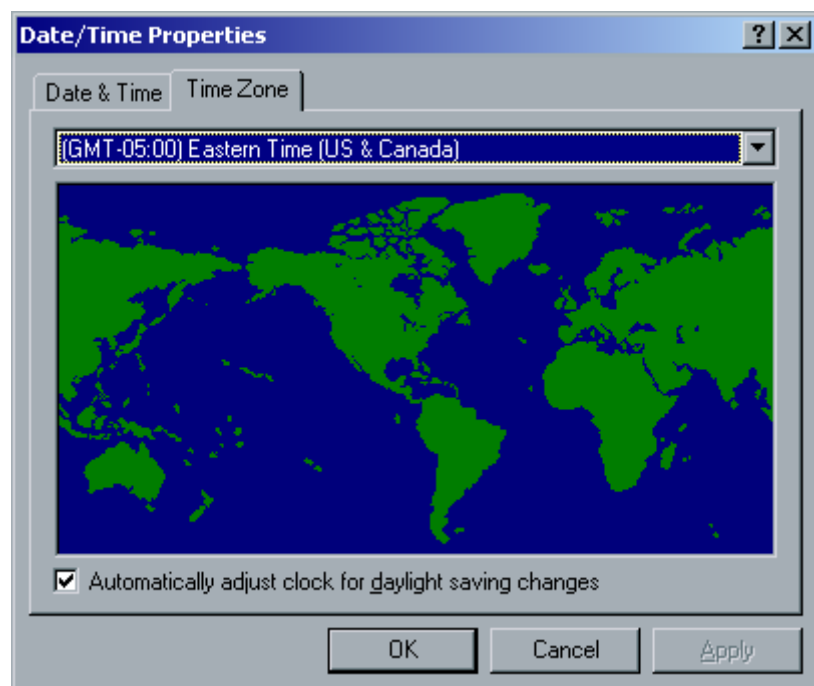
4. Click **OK**.

Selecting the User Interface Language

To select the user interface language:

1. In the **General Setup** folder, double-click **Language**.
   The Language window appears.
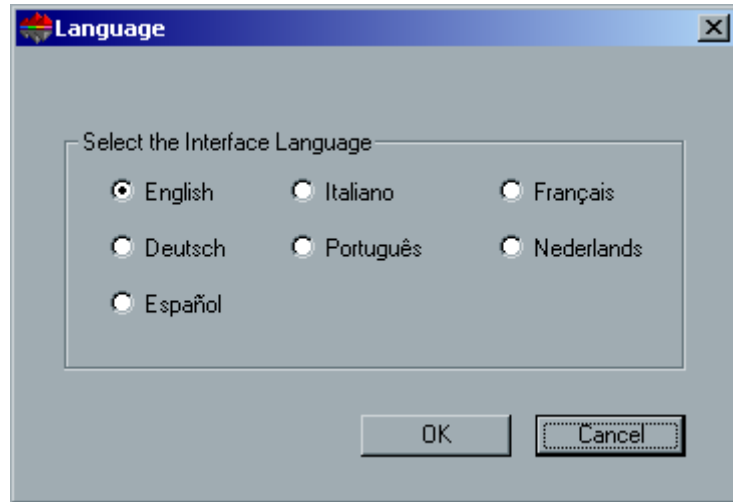
2. Select the interface language you would like to use, and click **OK**.
   The system prompts you to reboot your computer for the new settings
   to take effect.

Setting the Default Unit of Measurement

To set the default unit of measurement:

1. In the **General Setup** folder, double-click **Units**.
   The Units window appears.
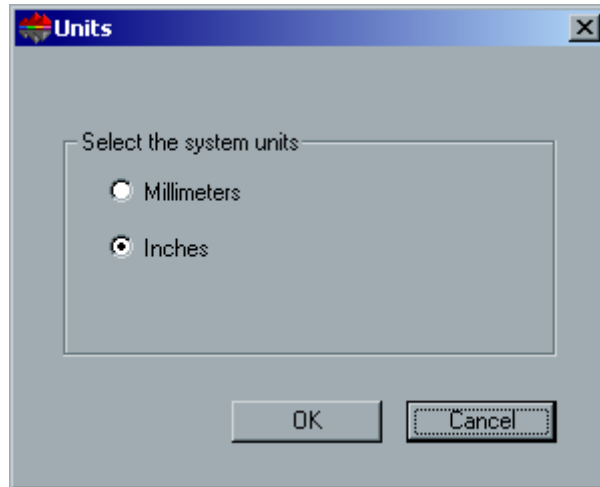
2. Select the required system measurement unit and click **OK**.

Resource Manager

The **Resource Manager** utility enables you to manage the virtual printers, add and delete fonts, manage the high-res files used for APR and manage your VI elements. In addition, you can manage ICC profiles, using the **Profile Manager** and import user defined imposition templates.

To open the Resource Manager utilities:

➢ In the Administration window, double-click **Resource Manager** to expand the folder.
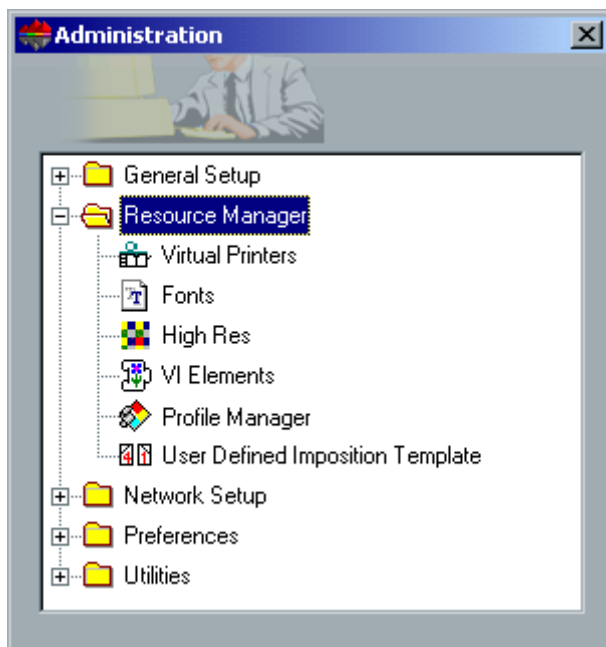
Virtual Printers

A **Virtual Printer** is a printer published on the network with specific parameters set for processing and printing on the CXP6000 Color Server. The 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 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 CXP6000 Color Server.

- **ProcessStore**
  Files sent to this printer are automatically processed and stored in the **Storage Folder** of the 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 CXP6000 Color Server's **Storage Folder** 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 may specify if this printer is published on the network and if the virtual printer parameters will override the PPD parameters.

In addition, based on predefined paper sets, you may 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.

Note: If a job is printed using a dynamic page exceptions virtual Printer, the **Exception** and **Imposition** tabs in the job parameters window will be disabled.

To add a new printer:

1. In the **Resource Manager** folder, double-click **Virtual Printers**. The Virtual Printers window appears.

Type	Title	Published	Override PPD	dynamic pag...	Comments
	FALCON_WIN2K_over	Yes	No	No	
	FALCON_WIN2K_ProcessPri	Yes	No	No	
	FALCON_WIN2K_ProcessStc	Yes	No	No	
	FALCON_WIN2K_SpoolStore	Yes	No	No	
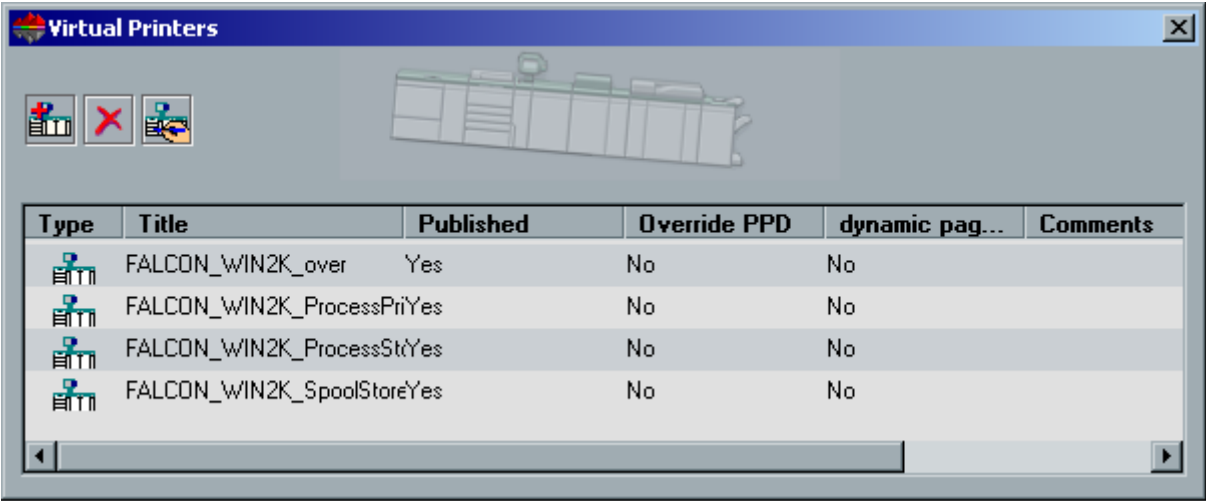
2. Click the **Add New Virtual Printer** button.

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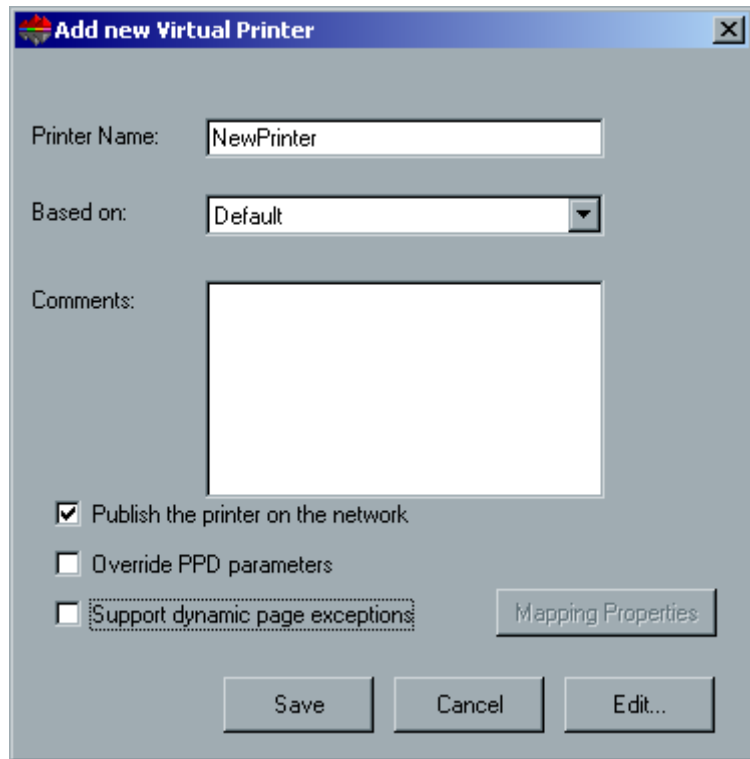
3. In the **Printer Name** box, type a name for the new printer you want to add.

4. From the **Based on** list you 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.g

8. If you would like this printer to support dynamic page exceptions:

   a. Select the **Support dynamic page exceptions** check box.

   b. Click the **Mapping Properties** button.
      The Paper Set Mapping window appears.
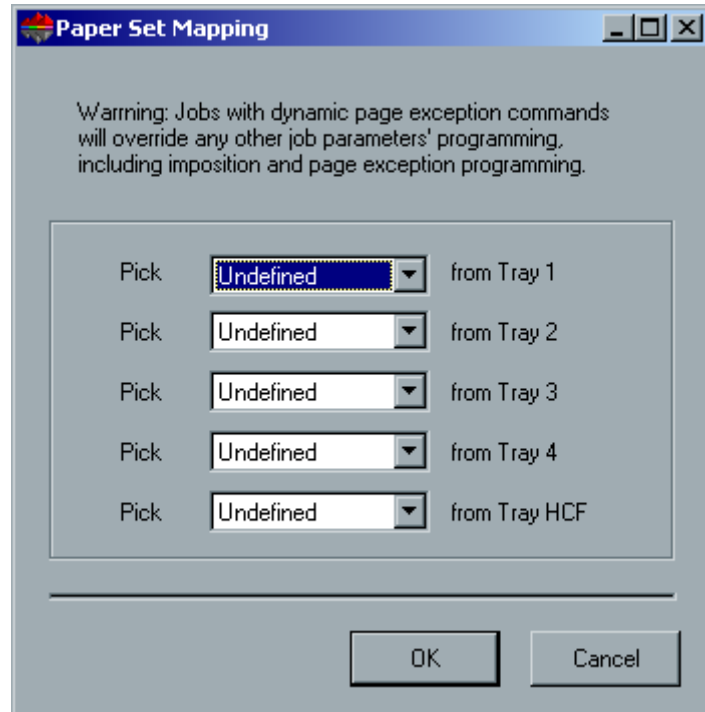
   c. For each tray, select the required paper set, that corresponds to the set page device commands. If a high capacity feeder is installed you may select a paper set also for the HCF tray.

   d. Click **OK**.

9. Edit the Job Parameters of your new virtual printer.

   Refer to *Editing an Existing Printer* on page 265.

   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 the **Save** button in the Add New Virtual Printer dialog box.
    The new printer appears in the **Printer** list.

Editing an Existing Printer
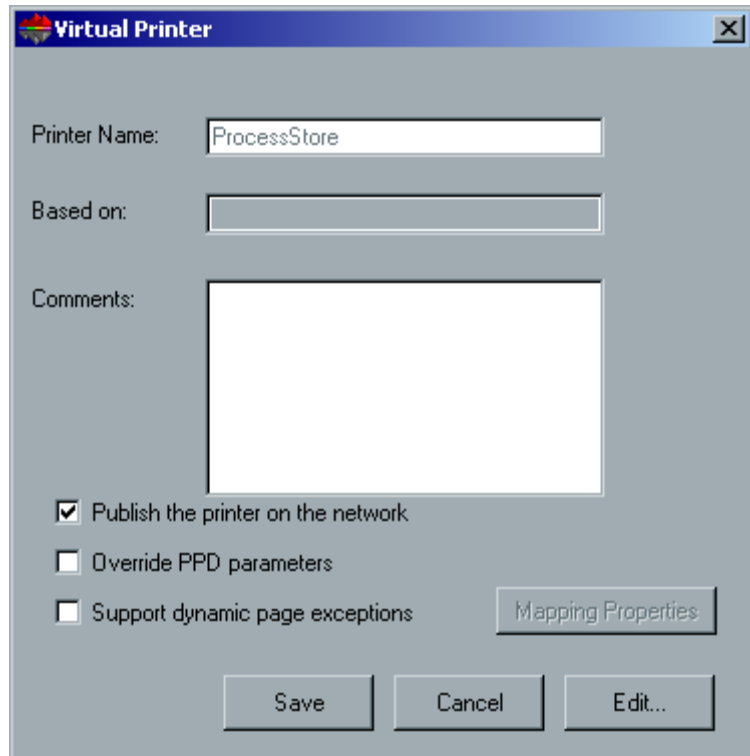
To edit an existing printer:

1. In the Virtual Printers window, select a printer from the list and click the **Edit Virtual Printer** button.
   Or:
   Right-click one of the existing printers and select **Edit Virtual Printer**.
   The Virtual Printer dialog box appears.

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 Virtual Printer dialog box.

5. Click **Save** to save the new settings.

Deleting an Existing Printer

To delete an existing printer:

1. In the Virtual Printers window, select a printer from the list and click the **Delete Virtual Printer** button.
   Or:
   Right-click one of the existing printers and select **Delete Virtual Printer**.
   The Delete Logical Printers message appears.

Delete Logical Printers	$\times$
Are you sure you want to delete 41810CIL_NewPrinter?	
	Yes No
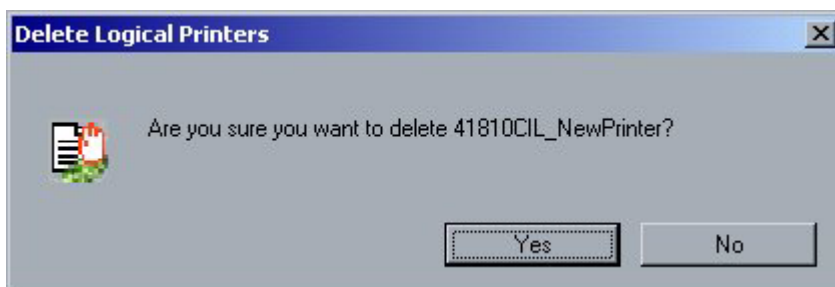
2. Click **Yes** to delete the designated printer.

   Note: Do not delete default printers (ProcessPrint, ProcessStore, SpoolStore).

Fonts

This section lists all the fonts available on the CXP6000 Color Server. It also explains how to manage fonts on the CXP6000 Color Server using the **Fonts** utility in the **Resource Manager**. In addition, a step-to-step procedure explains how to use the Fontdownloader driver for downloading fonts from Macintosh client workstations.

Font list

The following standard fonts are available on the CXP6000 Color Server:

- 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
- 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
- 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
- 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

The following standard Kanji fonts are available on the CXP6000 Color Server Japanese version:

- 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 CXP6000 Color Server

To manage fonts on the CXP6000 Color Server:

1. In the **Resource Manager** folder, double-click **Fonts**.
   The Fonts Handler window appears.
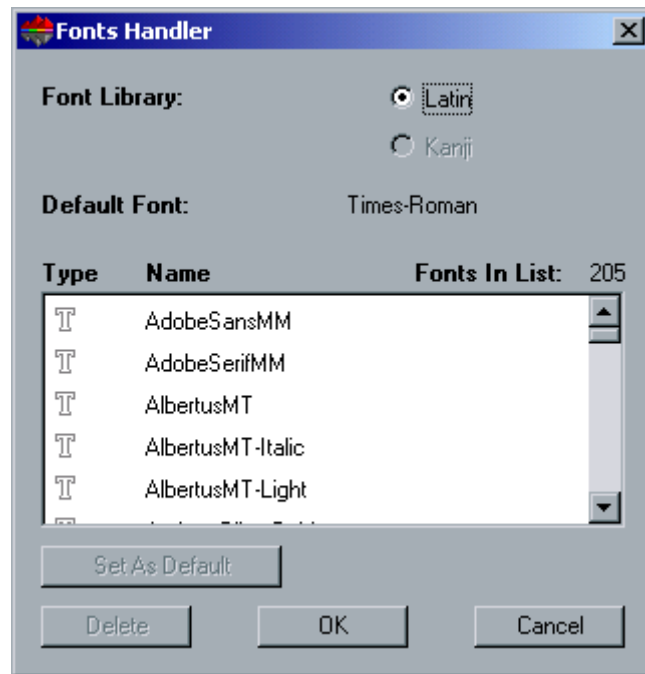
2. To set the default font, select a font from the font list, and click the **Set As Default** button.

3. To delete a font, select the font you want to delete, and click **Delete**.

4. Click **OK**.

5. To add new fonts to the CXP6000 Color Server, copy the new font/s to the **C:\CXP6000\General\RIP\Font** folder.

Using the Fontdownloader Driver

The Fontdownloader is a driver provided for Macintosh networks to enable Macintosh clients to download fonts. The Fontdownloader functions as a communications port, sending messages between the fontdownloader program and the CXP6000 Color Server. It is not possible to send files through the Fontdownloader, only fonts.

To download fonts using the Fontdownloader driver (Mac OS 8.X-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).

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

2. Select **AppleShare** and browse the network to where the CXP6000 Color Server is configured.

3. Select the CXP6000 Color Server (for example CXP6000) and click **OK**.
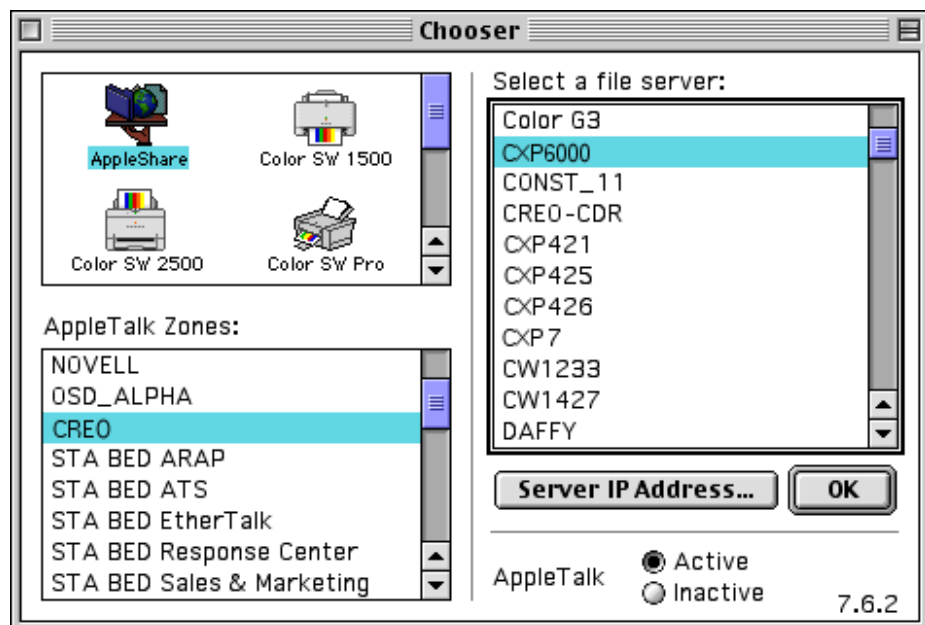
The Login window appears.

4. Log in as **Guest** and click the **Connect** button.
    The corresponding CXP6000 Color Server window appears.
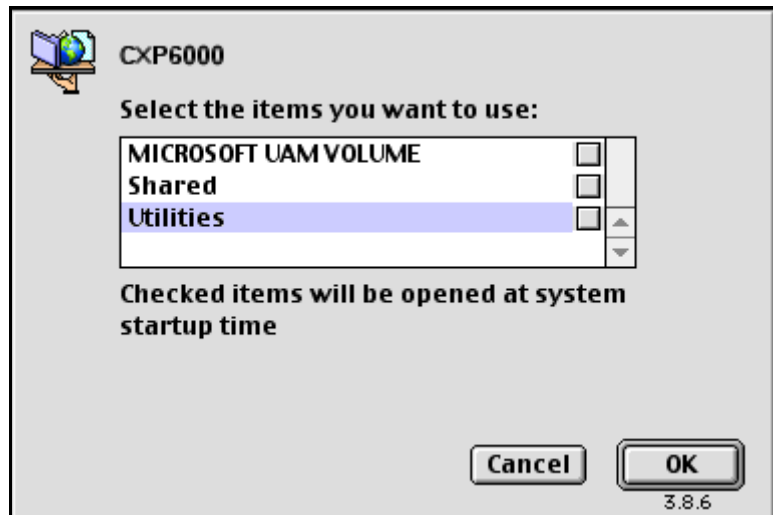
5. Select the **Utilities** folder and click **OK**.

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

6. Double-click the **Adobe Downloader 5.0.5** folder.
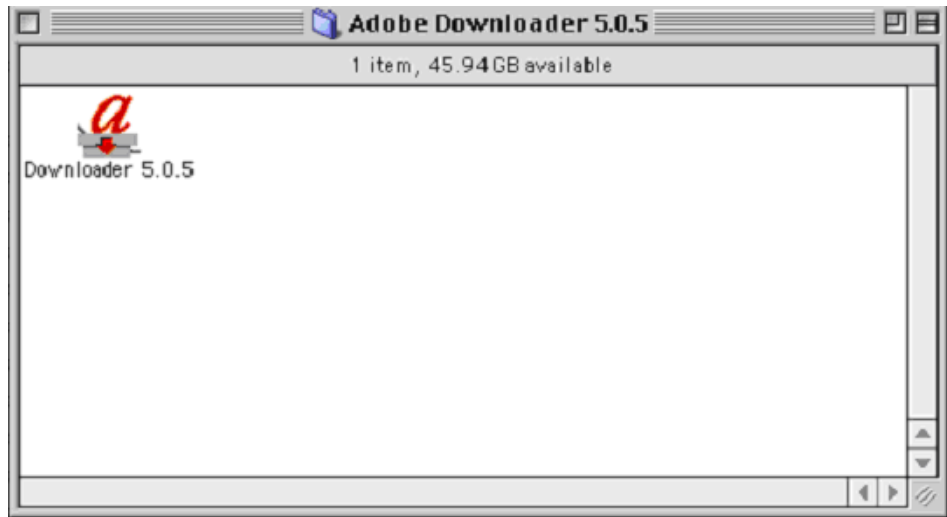
7. Copy the **Adobe Downloader 5.0.5** to your desktop.

8. From the **Apple** menu, select Chooser.
   The Chooser window appears.
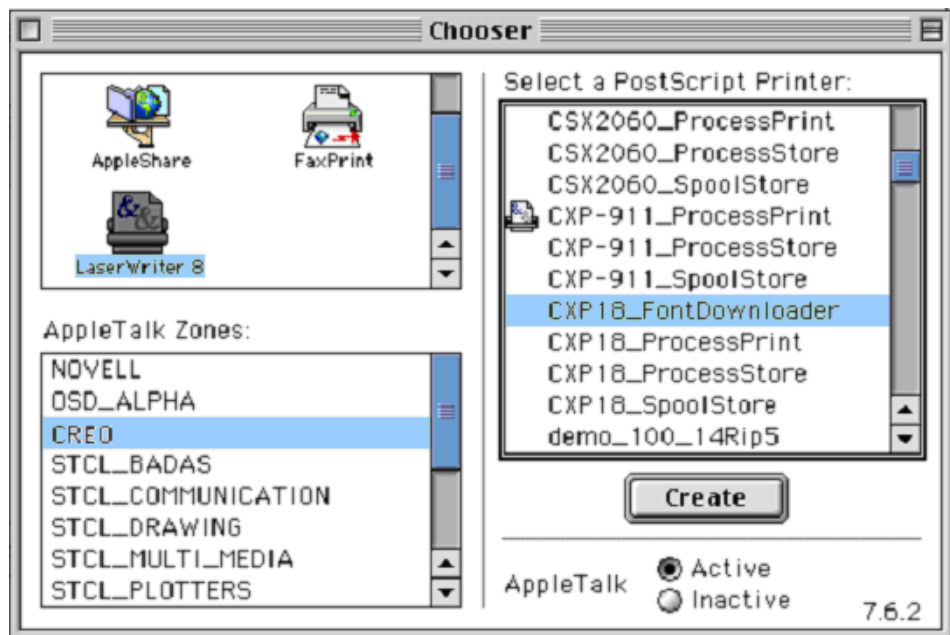
9. Select LaserWriter (8.x) and select the required fontdownloader.

10. Click **Create.**

11. Double-click the **Downloader 5.05** on your desktop.

12. From the **File** menu select **Download Fonts.**
    The following window appears.
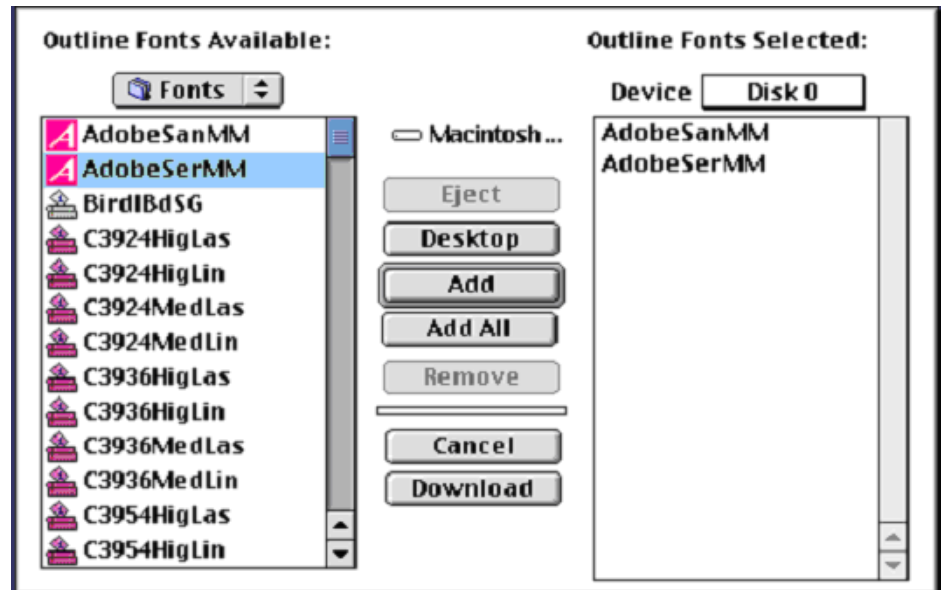
13. In the font area select the required font directory.

14. Verify that **Disk 0** is the selected device.

15. Add all the required PS fonts and click the **Download** button.

    While downloading the following message appears.
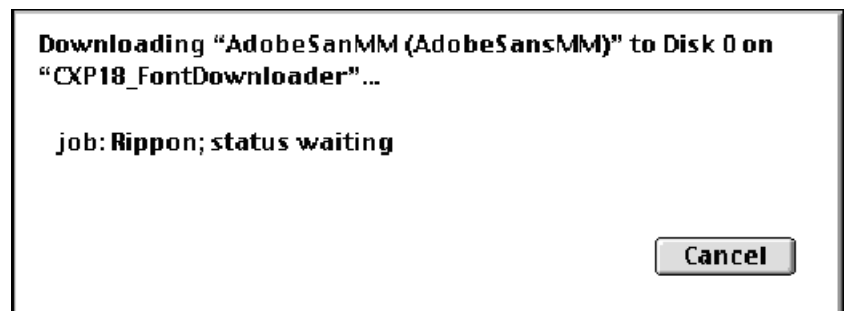
At the end of the download, the following message appears.

The download was successful.

OK

16. Click **OK**.

High-Res

The **High-Res** utility enables you to organize your high-resolution files. You can add or delete files, copy files from a local hard disk, from the network, or from an external media (for example, CD-ROM or floppy). The default shared folder dedicated to high-res files resides in **D:\Shared\HighRes**.

To organize your high-res files:

1. In the **Resource Manager** folder, double-click **Hi-Res**.
   Windows Explorer displays the contents of your **High-Res** folder.
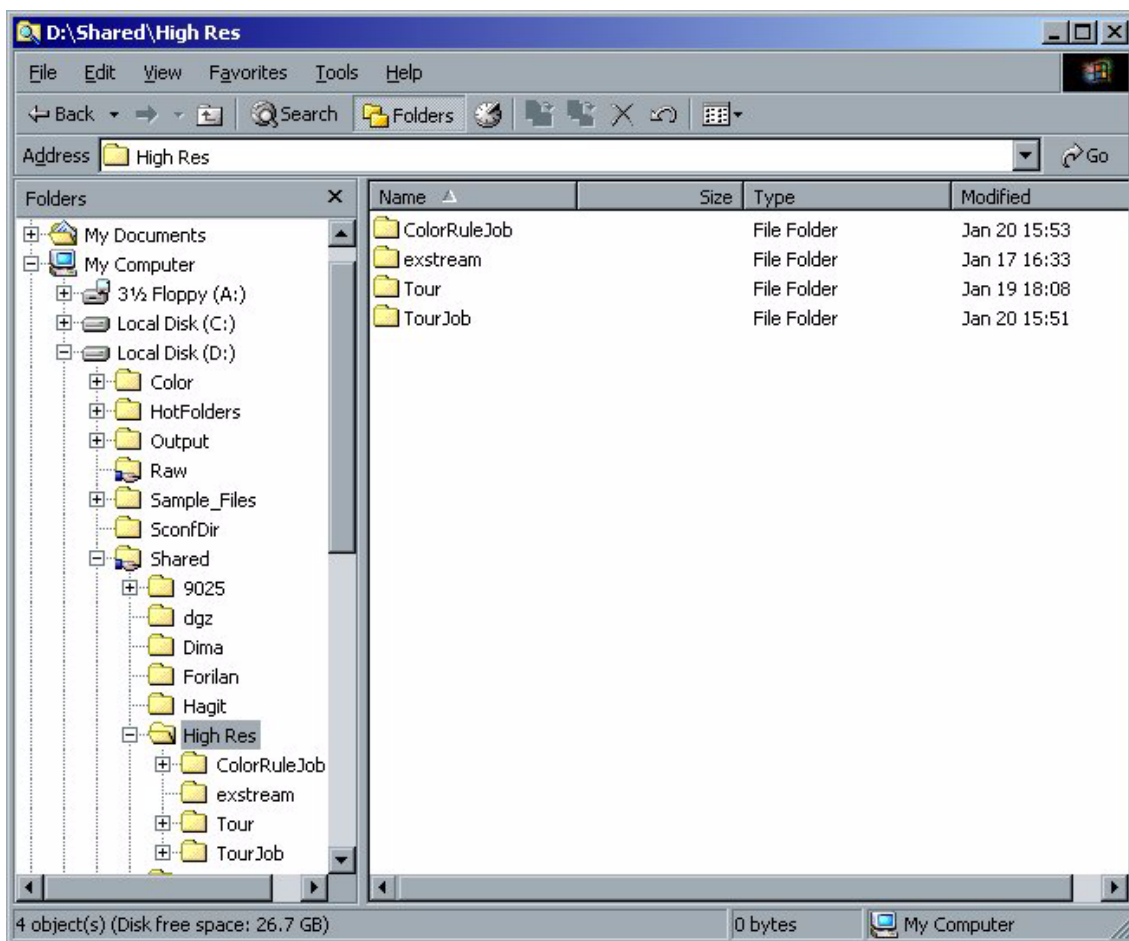
2. You can add files to the High-Res folder; delete files from it, and copy files from external media.

VI Elements

The **VI Elements** (Variable Information) utility enables you to organize VI elements on your system.

To open the VI elements Viewer window:

➢ In the **Resource Manager** folder, double-click **VI Elements**.
The Elements Viewer window appears.
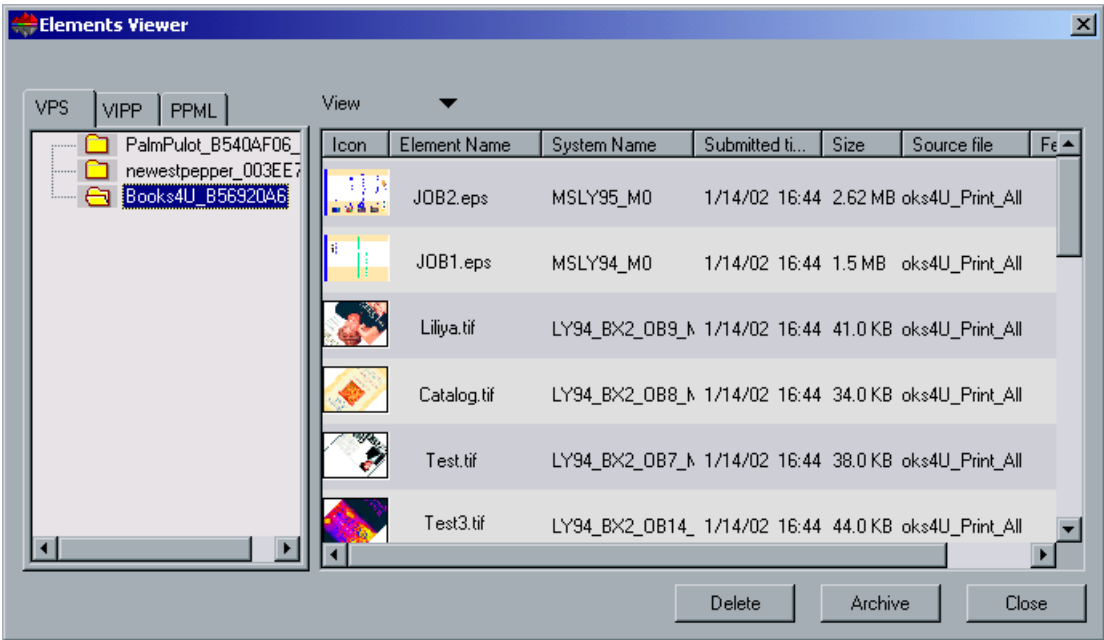
Your VI jobs are displayed on the left pane. The right pane lists the elements associated with your jobs, and a thumbnail of a selected element.

To delete VI elements:

➢ Select the elements you want to delete, and click **Delete**.

To archive your VI elements for future use:

1. Click the **Archive** button.
   The Save As window appears.

Save As	? ×

Save in: Gui

Images	JobTicketEditor.zip	Rumba
AccountDBUtils.zip	JobTicketEditor_modal_last.zip	Vigor.ba
Administration.zip	JobTicketEditor_VER.zip	
ConfigurationApplication.exe	JobTicketEditor_version26.zip	
JavaCore.zip	JobTicketEditorNoModal.zip	
JavaQueueIF.zip	ProcessPrintQueueGui.exe	

File name: ilan2_B4351784   Save

Save as type: Cancel
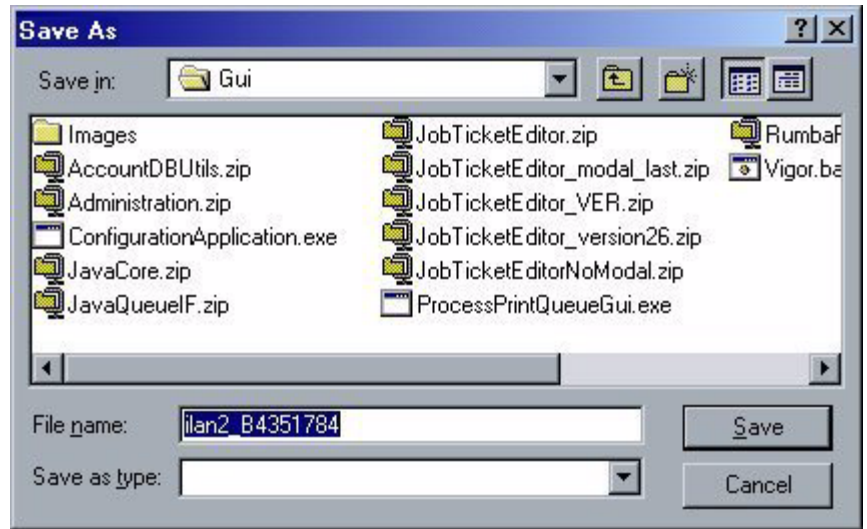
2. Choose the required archive location for the VI elements, and click
   Save.

To retrieve VI elements from archive:

1. From the **Job** menu, select **Retrieve from Archive**.
    The Retrieve window appears.
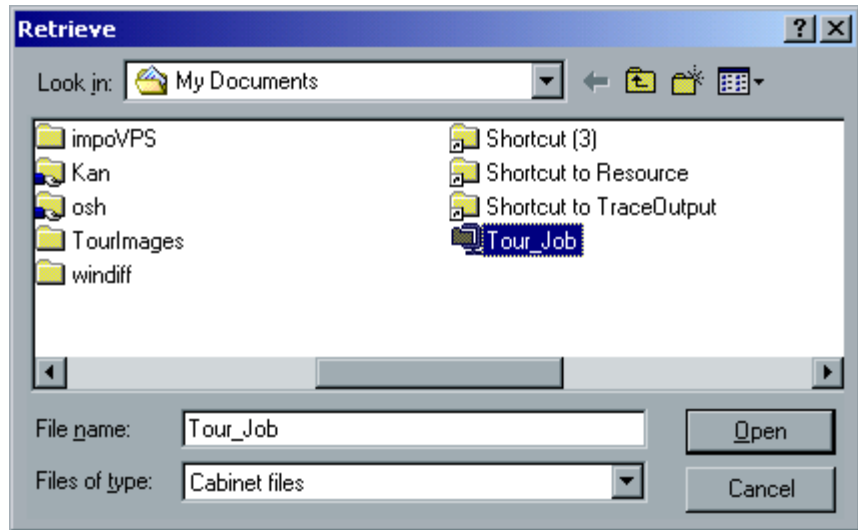
2. Double-click the folder where your VI elements have been archived.
    Or:
    Select the folder and click the **Open** button.
    The archived VI elements are retrieved.

    Note: The archived job name is replaced by the original job name when the job is retrieved.

Profile Manager

The Profile **Manager** utility enables you to manage source and destination ICC profiles of various devices and add them to the CXP6000 Color Server profile manager.

The source ICC profiles are displayed in the **Emulation** list in the Job Parameters window, in the **Color** tab, **CMYK Workflow** parameter.

To choose the transformation method (CSA or Device Link), see *Color - Emulations* on page 307.

Managing Device Link Profiles

You may import source and destination ICC profiles and map ICC profiles to specific paper colors. You may also delete profiles.

To import a source ICC profile using the device link method:

1. In the **Resource Manager** folder, double-click **Profile Manager**. The Profile Manager window appears.
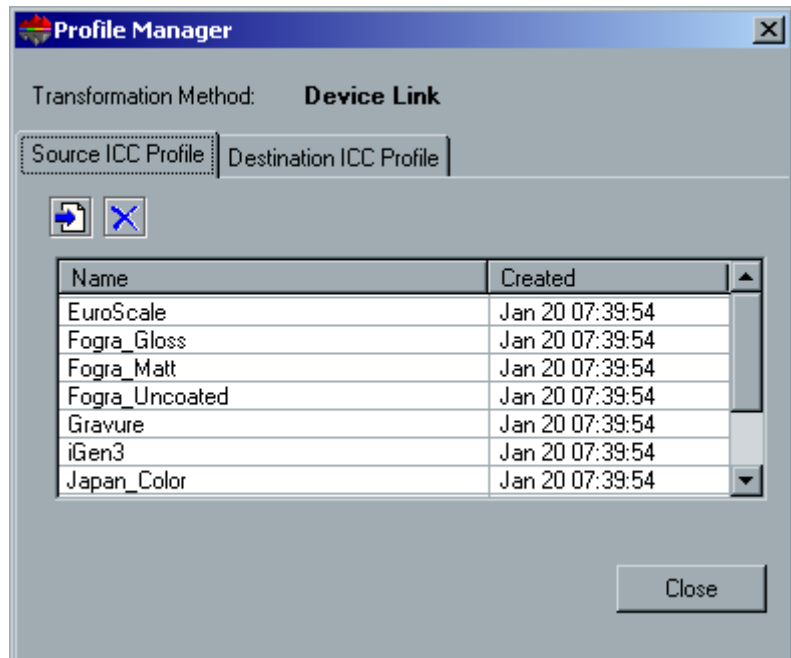
The **Source ICC Profile** tab appears first, and the predefined source ICC profiles are displayed.

2. Click the **Import** button.
    The Import Source ICC Profile dialog box appears.
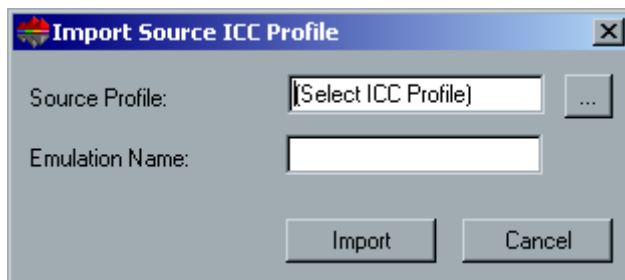
3. In the **Source profile** area, click the browse button, browse to the
    required source profile, select it and click **Open**.
    The new emulation name is displayed in the **Emulation name** box; if
    you would like to change the name you may do so.

4. Click the **Import** button.

5. Click **Close** in the Profile Manager window.
    The new source ICC profile is added to the **Emulation (Device Link)**
    list in the Job Parameters window, in the **CMYK Workflow** parameter.

To import a destination ICC profile using the device link method:

1.   In the **Resource Manager** folder, double-click **Profile Manager**.
     The Profile Manager window appears.
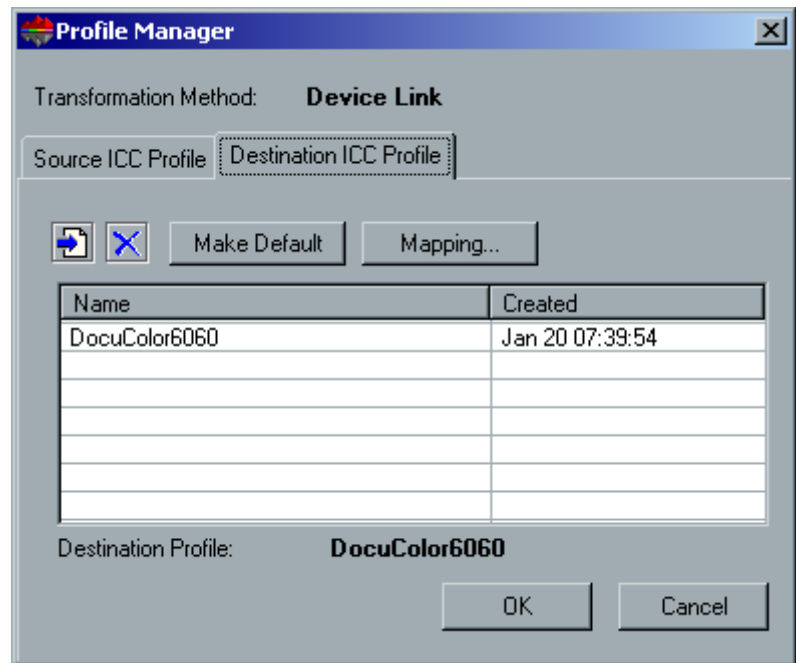
2.   Select the **Destination ICC Profile** tab.
     The predefined ICC profiles are displayed.

3.   Click the **Import** button.
     The Import Destination ICC Profile window appears.
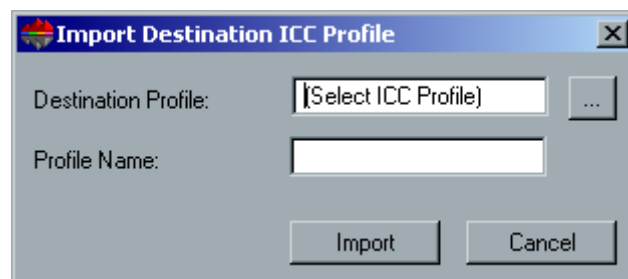
4.   In the **Destination profile** area, click the browse button. Then, browse
     and select the required source profile, and click **Open**.
     The new emulation name is displayed in the **Emulation name** box; if
     you would like to change the name you may do so.

5. Click the **Import** button.

6. Click **Close** in the Profile Manager window.

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

8. To map ICC profiles to specific paper colors:

    a. Click the **Mapping** button.
        The Media Color Mapping window appears.
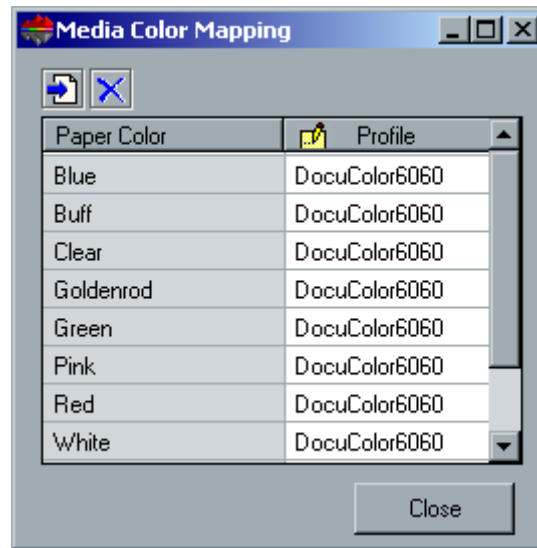
    b. For each paper color select the required profile.

    c. Click **OK.**

        Notes:

        1. The default profile for each color is white.

        2. You may also add and remove custom paper colors.

9. Click **Close** in the Profile Manager window.
    The new destination ICC profile is added to the **Destination ICC Profile** list.

To delete an ICC Profile using the device link method:

1. In the **Resource Manager** folder, double-click **Profile Manager**. The Profile Manager window appears.
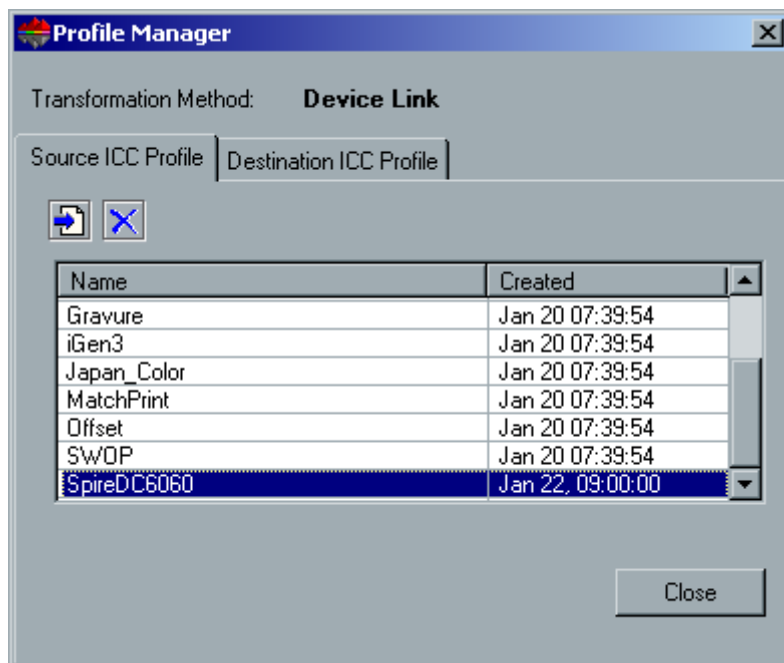
2. Select the profile you would like to delete.

    Note: You cannot delete predefined ICC profiles.

3. Click the **Delete** button. The following message appears.
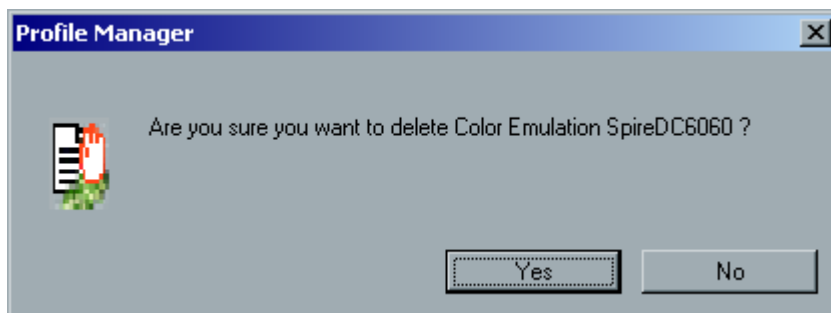
4. Click **Yes**.
    The profile is deleted from the ICC Profile list.

5. Click **Close** in the Profile Manager window.

Managing CSA Emulation Profiles

You may import, rename and delete CSA Emulation profiles.

To import a source ICC profile using the CSA Emulation method:

1. In the **Resource Manager** folder, double-click **Profile Manager**.
    The Profile Manager window appears.
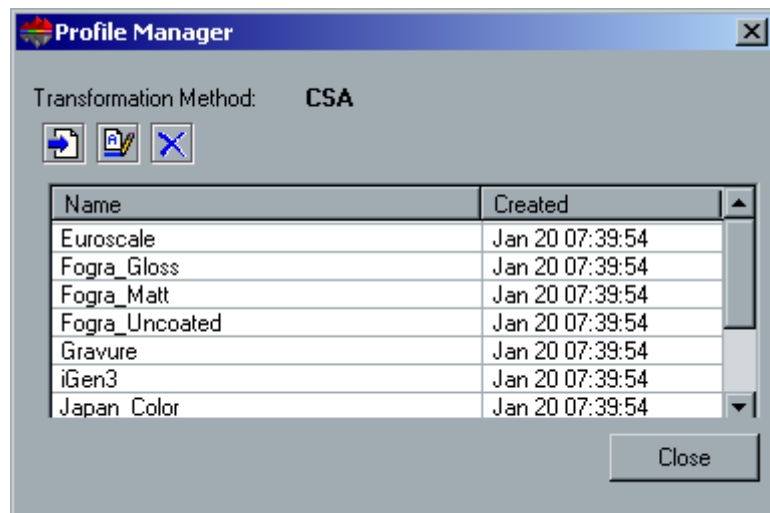
2. Click the **Import** button.
    The Import CSA Emulation window appears.
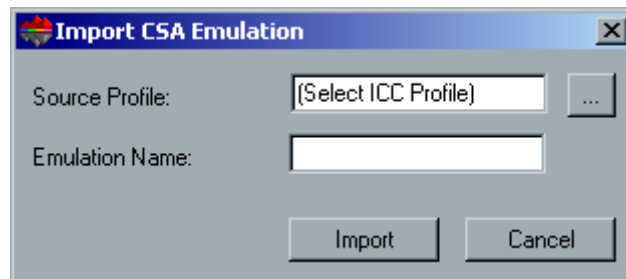
3. In the **Source profile** area, click the browse button. Then, browse and
   select the required source profile. Click **Open**.
   The new emulation name is displayed in the **Emulation name** box; if
   you would like to change the name you may do so.

4. Click the **Import** button.
   Click **Close** in the Profile Manager window.
   The new CSA Emulation is added to the **Emulation (CSA)** list, in the
   Job Parameters window, in the **CMYK Workflow** parameter.

To rename a CSA ICC profile:

1. In the **Resource Manager** folder, double-click **Profile Manager**.
   The Profile Manager window appears.
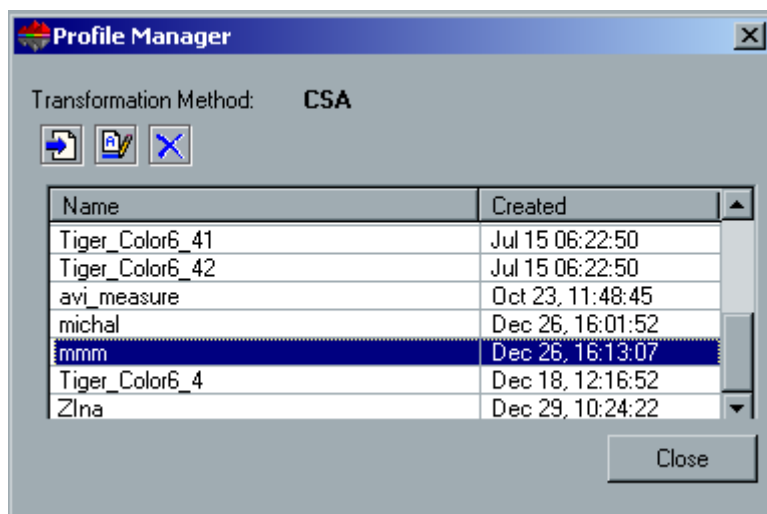
2. Select the ICC Profile you would like to rename.

   Note: You cannot rename predefined ICC profiles.

3. Click the **Rename** button.
The Rename dialog box appears.
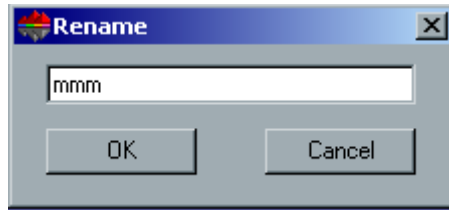
4. Type in a new name for the ICC Profile, and click **OK**.
The profile with the new name is listed in the **Emulation** list, in the Job Parameters window, in the **CMYK Workflow** parameter.

5. Click **Close** in the Profile Manager window.

To delete an ICC Profile using the CSA Emulation method:

1. In the **Resource Manager** folder, double-click **Profile Manager**.
The Profile Manager window appears.

2. Select the profile you would like to delete.

Note: You cannot delete predefined ICC profiles.

3. Click the **Delete** button.
   The following message appears.

Profile Manager	✕

Are you sure you want to delete Color Emulation SpireDC6060 ?

[Yes]   [No]
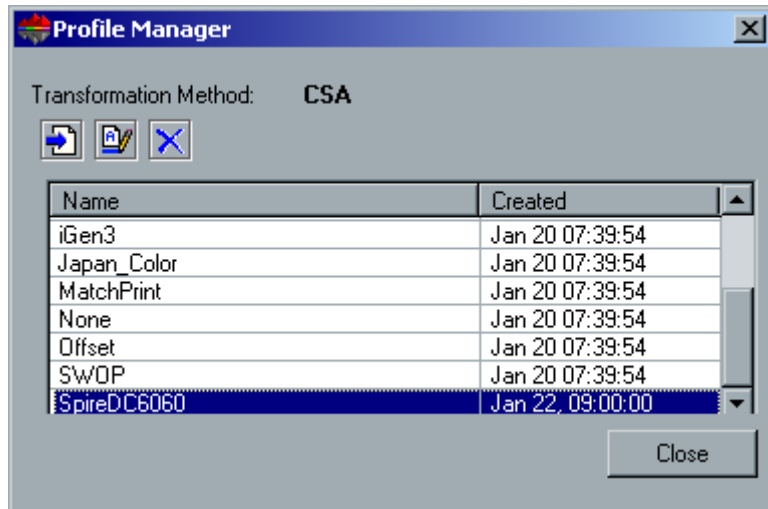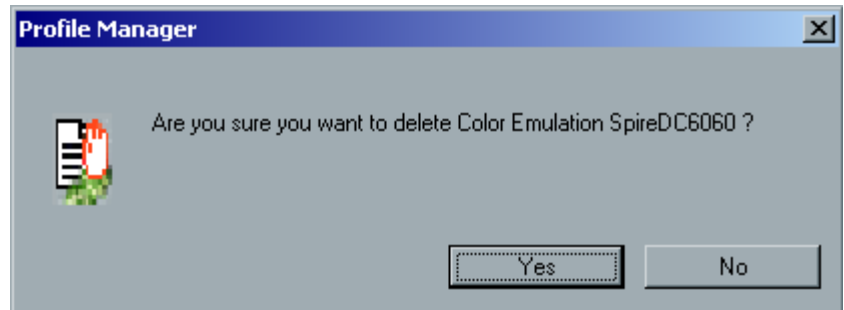
4. Click **Yes**.
   The profile is deleted from the profile list.

5. Click **Close** in the Profile Manager window.

User Defined Imposition Template

The **User Defined Imposition Template** utility enables you to import and manage, user defined imposition templates (created in a stand-alone application such as Ultimate Software) in the CXP6000 Color Server.

Importing User Defined Imposition Templates

To import a user defined imposition template:

1. In the **Resource Manager** folder, double-click **User Defined Imposition Template**.
   The Template Manager window appears.
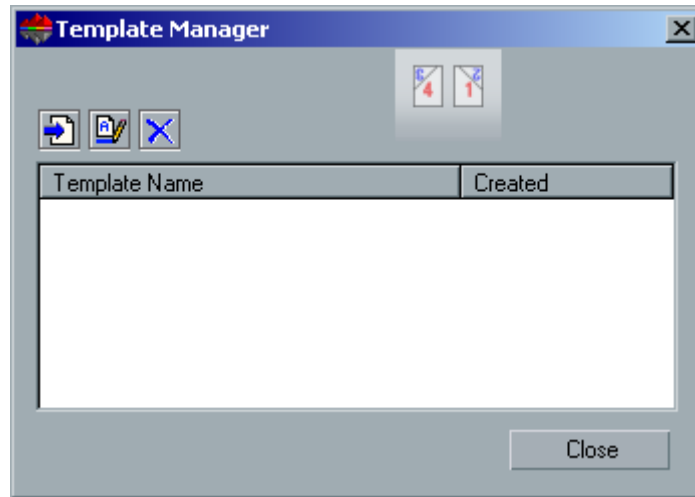
2. Click the **Import Template** button.

The Import Template window appears.

Import Template   ? ✕

Look in: 🗀 My Documents ▼ ← 🗂 📂 ⊞▼

🗀 Adobe
🖼 My Pictures
🗀 My Received Files
🗀 My Webs

File name: [   ]   Import

Files of type: [Template Files   ▼]   Cancel
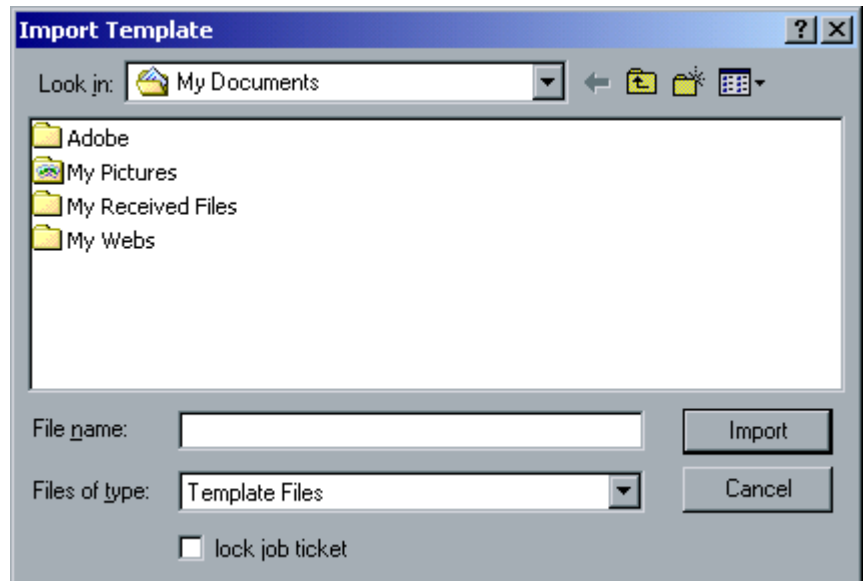
☐ lock job ticket

3. Browse to the location of the user defined template and click the **Import** button.

4. Select the **lock job ticket** check box if you would like the template to be locked so that no imposition parameters may be applied (in the Job Parameters window).

5. Repeat the above procedure to add additional user defined imposition templates.

Renaming a User Defined Imposition Template

To rename an existing user defined imposition template:

1. In the Template Manager window, select a user defined imposition template from the list and click the **Rename** button.
Or:
Right-click a user defined imposition template you want to rename and from the menu select **Rename**.
The user defined imposition template name becomes active.

2. Type a new name for the user defined imposition template.

3. Click outside the name box of the user defined template.
   The user defined imposition template with the new name is listed in
   the user defined imposition template list.

Deleting a User Defined Imposition Template

To delete an existing user defined imposition template:

➢ In the Template Manager window, select a user defined imposition
  template from the list and click the **Delete** button.
  Or:
  Right-click a user defined imposition template you want to delete and
  from the menu select **Delete**.
  The selected user defined imposition template is deleted.

Network Setup

The **Network Setup** utility enables you to change settings in the IPX, TCP/IP and Apple Talk.

Note: Before changing the network settings, consult your System Administrator.

To open the Network Setup utilities:

➢ In the Administration window, double-click **Network Setup** to expand the folder.
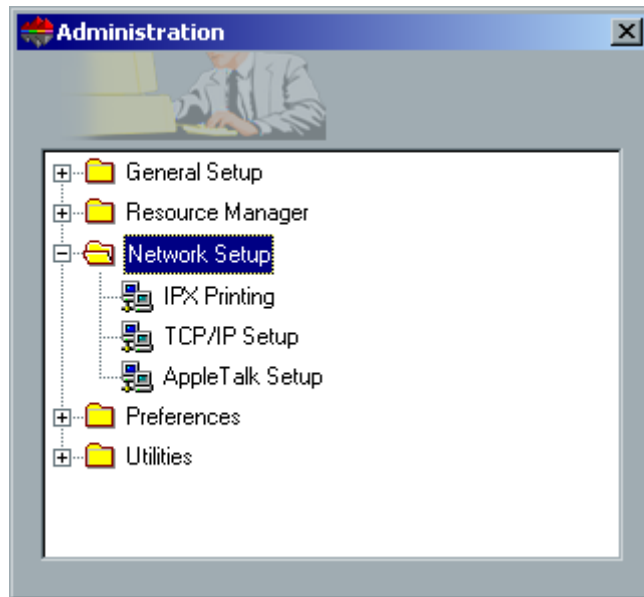
IPX Printing

IPX Printing enables the 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 setup the CXP6000 Color Server IPX parameter:

1. In the **Network Setup** folder, double click **IPX Printing**.
   The IPX Printing dialog box appears.
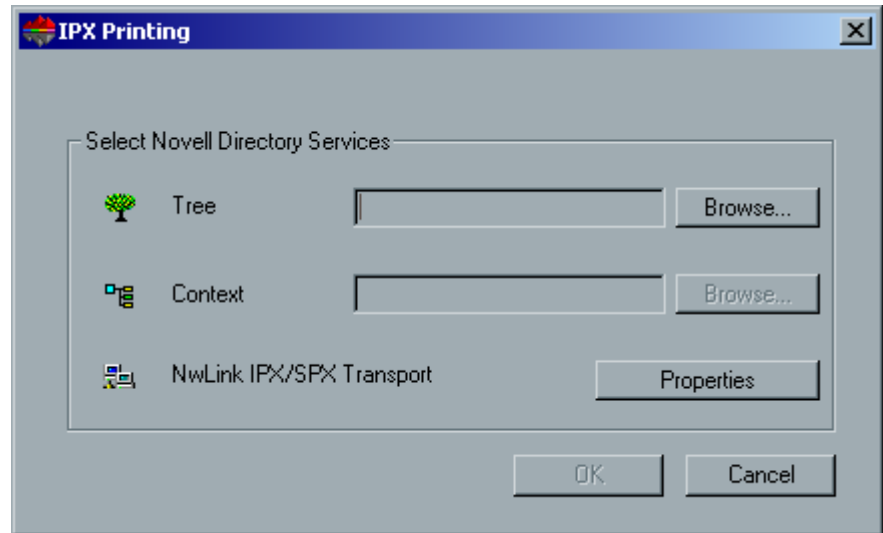
2. Type the exact **Tree** parameter and the full containers path of the **Context** parameter, in their respective boxes. You may also click the **Browse** button and browse to the required **Tree** and **Path**.

3. Click the **Properties** button.

The Local Area Connection Properties window appears, followed by the NWLink IPX/SPX Properties window.
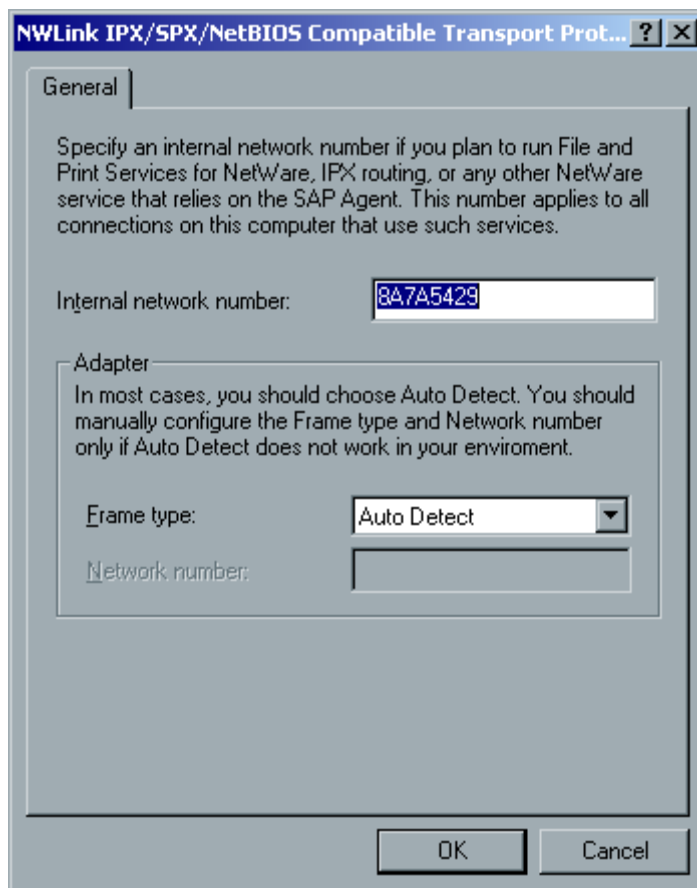
4. To change the frame type, select a frame type from the **Frame type** list, then click **OK**.

5. Click **OK** also 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.

Note: Using this procedure requires further setup by the network administrator. Refer to Novell NDS - Setup and Configuration in the *CXP6000 Color Server Installation Guide*.

TCP/IP Setup
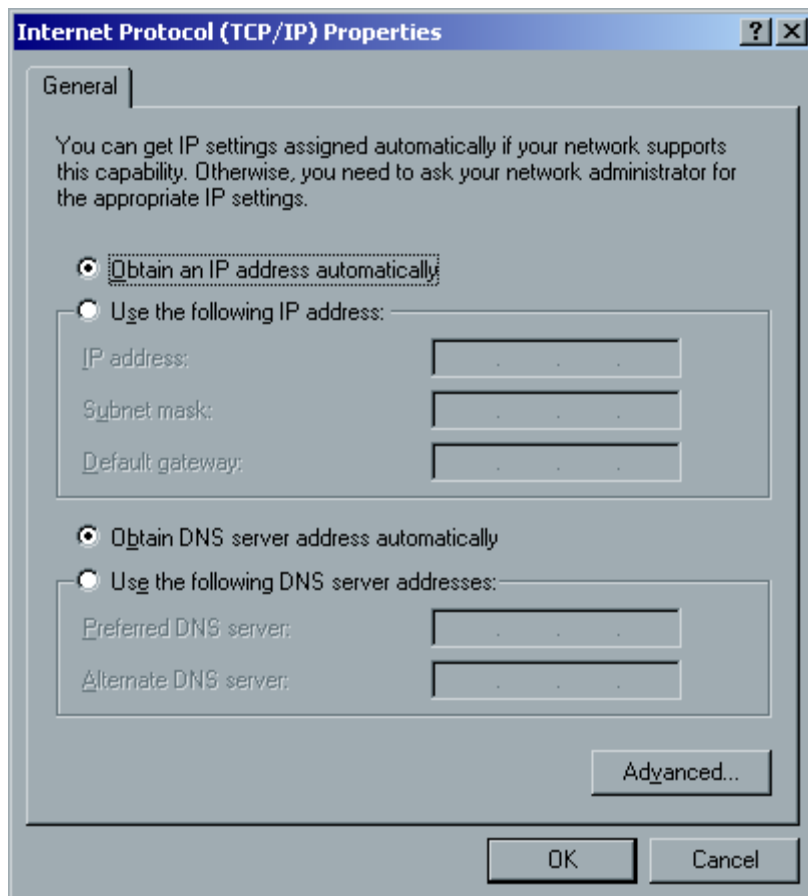
The CXP6000 Color Server is predefined with a default IP address. The TCP/IP option enables you to change this IP address and other TCP/IP settings.

Note: Before changing the network settings, consult your System Administrator.

To change the TCP/IP network settings:

1. In the **Network Setup** folder, double-click **TCP/IP Setup.**
   The Local Area Connection Properties window appears, followed by the Internet Protocol (TCP/IP) Properties window.

2. Change the IP Address by selecting **Obtain an IP address automatically** or select **Use the following IP address** and type the required address.

3. 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.

AppleTalk Setup

The **AppleTalk Setup** utility enables you to change the AppleTalk zone in which your CXP6000 Color Server is located.

To change the AppleTalk network settings:

1. In the **Network Setup** folder, double-click **AppleTalk Setup**.
    The AppleTalk Protocol Properties window appears.
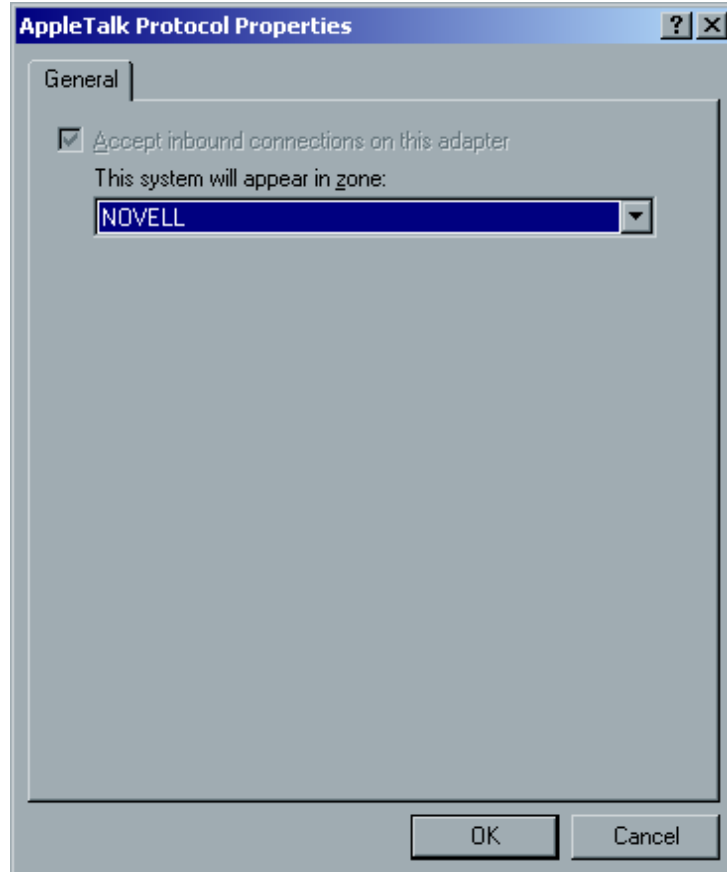
2. From the zone list, select the AppleTalk zone for your computer, and click **OK**.

Preferences

The **Preferences** utility enables you to change several settings such as the log file generated by the Accounting and Message Viewer applications and the System disks threshold. You may define the appearance of alert messages and pre-RIP preview and set the default archiving path and paper size.

You may also specify the required calibration method, the spot color dictionary usage, the automatic screening method, the emulation method, or just specify the general color conversion tables in use. You may also use the **Preferences** utility to enable / disable OPI, job batching and PDF optimization and also set the remote tools connection options and the **In Print** queue manager settings.

To open the Preferences utilities:

➢ In the Administration window, double-click **Preferences** to expand the folder.
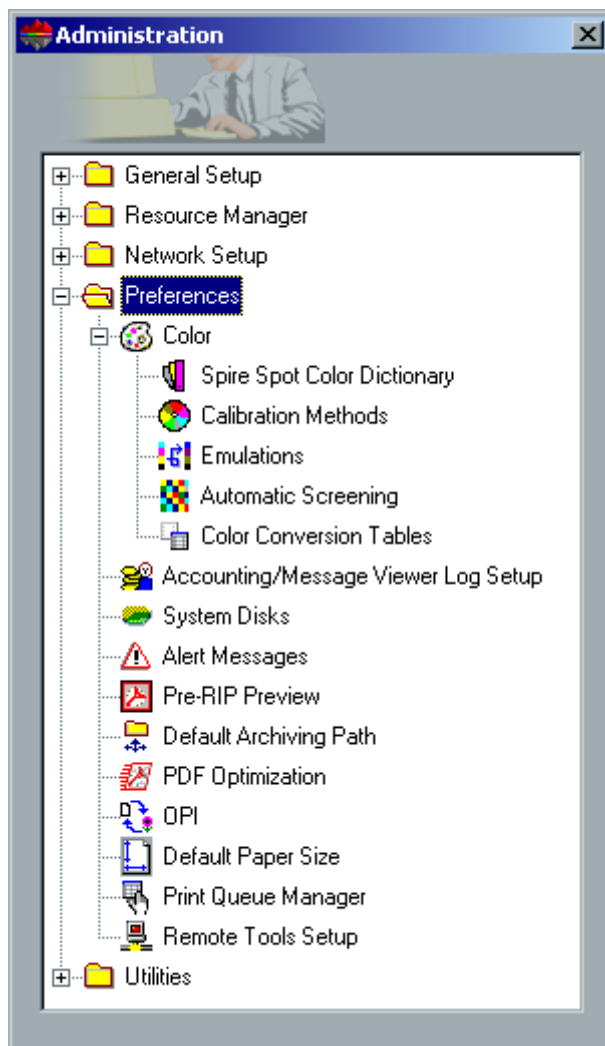
Color - Spire Spot Color Dictionary

By default the **Spire Spot Color Dictionary** is applied, which means that spot colors are printed using the custom (or pre-defined) values that appear in the spot dictionary. You may also disable the usage of the Spot Color Dictionary and print spot colors using the default CMYK values that each spot is delivered with.

To disable the application of the Spot Color Editor:

1. In the **Preferences** folder, double-click **Color** to expand the folder, then double-click **Spire Spot Color Dictionary**.
    The Spot Color Dictionary window appears.
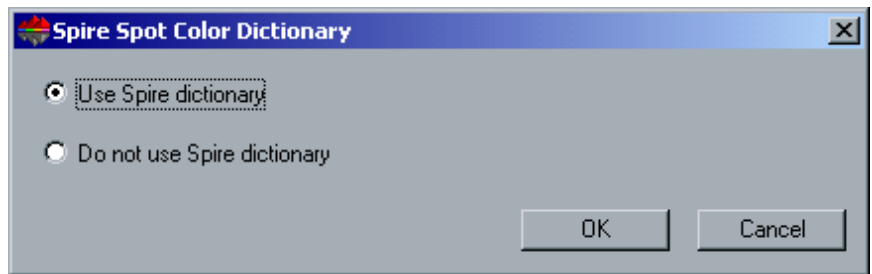
2. Select **Do not use Spire dictionary**.

3. Click **OK**.

Color - Calibration Methods

There are two calibration methods:

- **Target Calibration**
  This calibration method enables you to calibrate the Xerox DocuColor 2060/2045 Printer according to the following fixed density values:

  - ❏ Cyan 1.6d

  - ❏ Magenta 1.597

  - ❏ Yellow 1.017

  - ❏ Black 1.8

  These density values specify the maximal density value that will be achieved by the Xerox DocuColor 2060/2045 Printer. The purpose of this color calibration method is to ensure that the same color quality is achieved for each Xerox DocuColor 2060/2045 Printer in use day after day.

- **Auto Adjusted Calibration**
  This calibration method enables you to calibrate the Xerox DocuColor 2060/2045 Printer according to a fixed percentage of the Xerox DocuColor 2060/2045 Printer maximal density. This is an automatic calibration method which is adjusted to the printers current state.

To specify the calibration method:

1. In the **Preferences** folder, double-click **Color** to expand the folder, then double-click **Calibration Methods**.
   The Calibration Methods window appears.
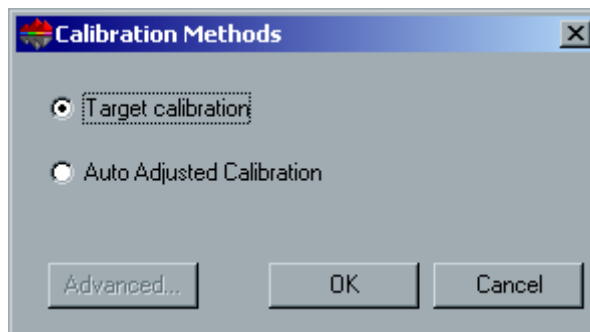
2. Select the required calibration method, **Target calibration** or **Auto Adjusted Calibration**.

3. If you selected Auto Adjusted Calibration and you would like to change the default settings, click the **Advanced** button. The Auto Adjusted Calibration window appears.
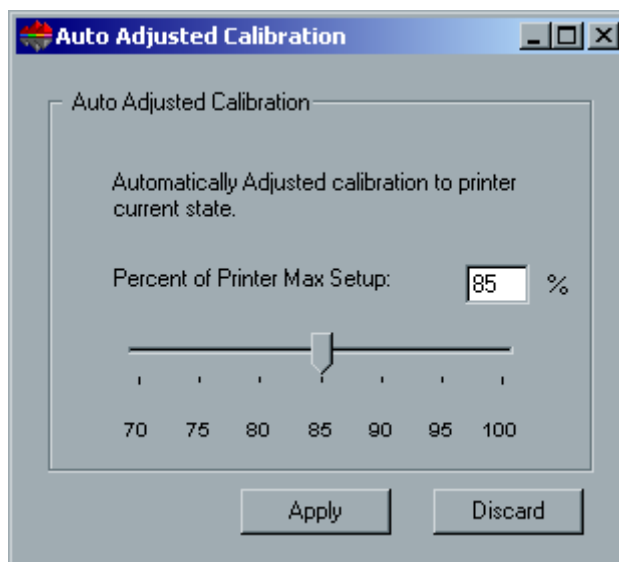
Change the **Percent of Printer Max Setup** density if required, by moving the slider, or by typing a percentage value in the corresponding box. Then click **Apply.**

Note: The default percentage value is 85%.

4. Click **OK** in the **Calibration Methods** window.

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

Color - Emulations

Using this utility, you may 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.

In addition, you may specify to emulate RGB elements (in addition to the CMYK emulations) and to preserve pure CMYK colors (colors that are 100% Magenta / Cyan / Yellow / Black).

To specify the emulation method:

1. In the **Preferences** folder, double-click **Color** to expand the folder, then double-click **Emulations**.
    The Emulations window appears.
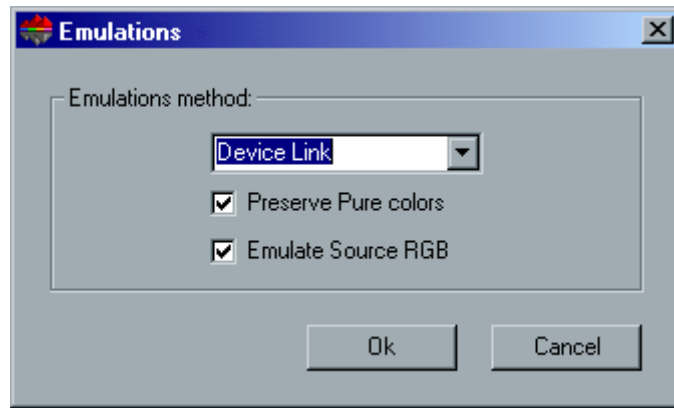
2. Select the required emulation method from the list.

3. If you selected **Device Link** as your emulation method:

    *   The **Preserve pure colors** check box is selected by default. For pure CMYK colors to be emulated (and not preserved) clear the check box.

    *   The **Emulate RGB Elements** check box is selected by default, so that RGB colors are emulated according to the selected CMYK emulation method. If you do not want RGB elements to be emulated, clear the check box.

4. Click **OK**.

Color - Automatic Screening Method

The CXP6000 Color Server supports Dot and Stochastic screening. When printing a job from the CXP6000 Color Server, you may select the required screening method or choose **Automatic** from the **Color** tab of the Job Parameters 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 **Preferences** folder, double-click **Color** to expand the folder, then double-click **Automatic Screening**.
   The Automatic Screening Method window appears.
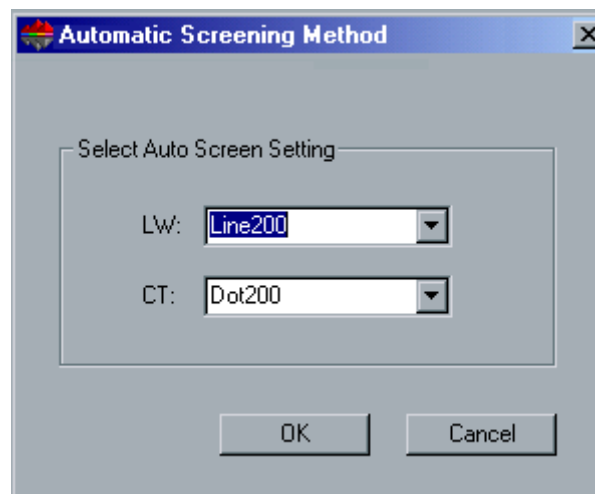
2. Select the required Auto screen settings for LW from the **LW** list.

3. Select the required Auto screen settings for CT from the **CT** list.

4. Click **OK**.
   You are prompted to restart the application for the new settings to take effect.

Color - Color Conversion Tables

The **Color Conversion Tables** utility enables you to select the set of color conversion tables used for your jobs.

Important: The **In Process** queue needs to be closed while changing the color tables set.

To select the color conversion tables:

1. In the **Preferences** folder, double-click **Color** to expand the folder, then double-click **Color Conversion Tables.**
   The Color Conversion Tables window appears.
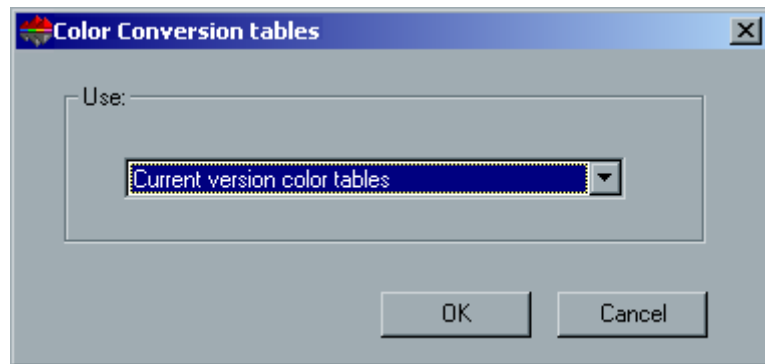
2. By default the current version color tables are selected. To apply the previous version color tables, select **Previous version color tables**.
   The following message appears.
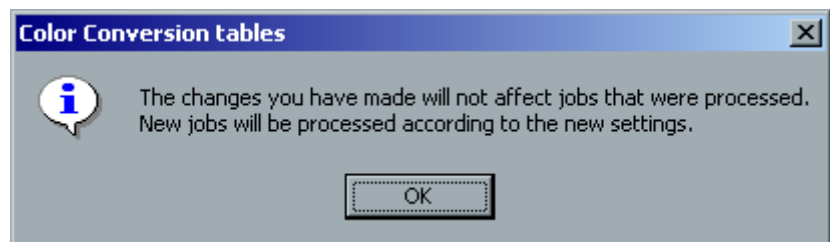
3. Click **OK**.

Accounting/Message Viewer Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the CXP6000 Color Server Accounting window, and all the jobs that were handled during the past 90 days are listed in the CXP6000 Color Server Message Viewer. This utility enables you to specify different values for how long information remains before being overwritten.

To setup the accounting/message viewer:

1. In the **Preferences** folder, double-click **Accounting/Message Viewer Log Setup**.
   The Accounting/Message Viewer Log Setup window appears.
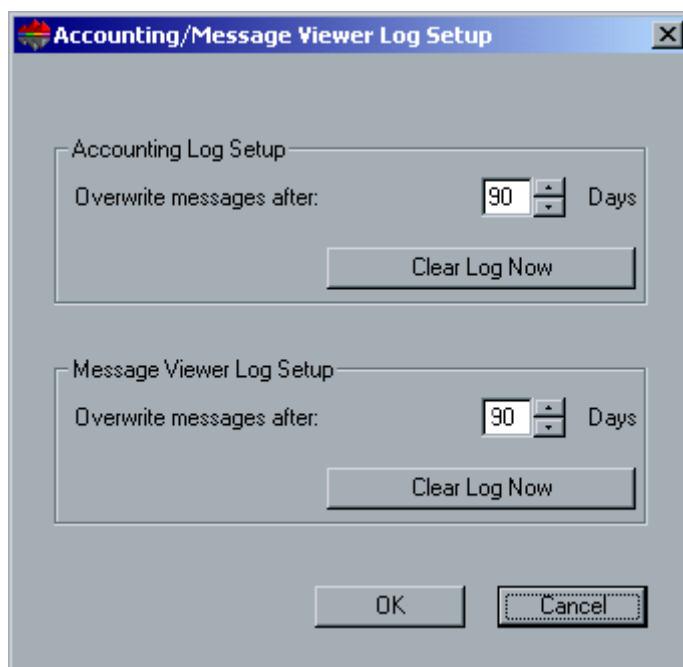
2. In the **Accounting Log Setup** area, and in the **Message Viewer Log Setup** areas, type the required values.

3. To remove all the existing information from the windows, whenever desired, click the **Clear Log Now** button.

   Note: For additional details, refer to *Job Accounting* on page 405.

4. Click **OK** to confirm the changes you made.

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 **Preferences** folder, double-click **System Disks**.
    The System Disks window appears.
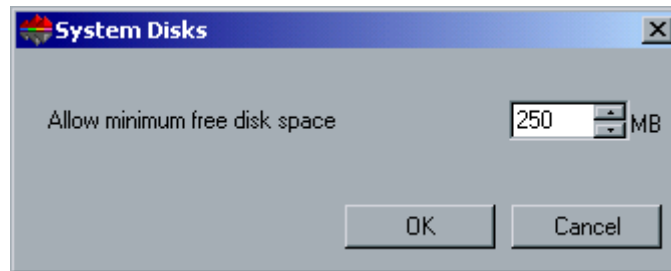
2. Set the minimum free disk space required for RIP.

3. Click **OK**.

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 alert window settings:

1. In the **Preferences** folder, double-click **Alert Messages**.
   The Alert Messages window appears.
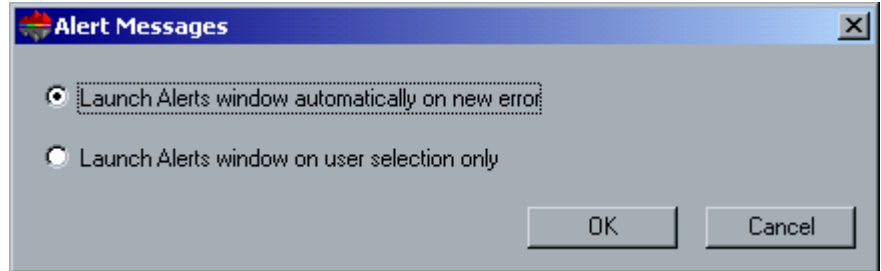
2. If you would like the Alerts window to appear whenever an error occurs, select **Launch Alerts window automatically on new error** (default).
   If you would like to open the Alerts window upon selection only, select **Launch Alerts window on user selection only**.

3. Click **OK** to confirm your choice.

Pre-RIP Preview

To define the Pre-RIP preview:

1. In the **Preferences** folder, double-click **Pre-RIP Preview.**
    The Pre-RIP Preview window appears.
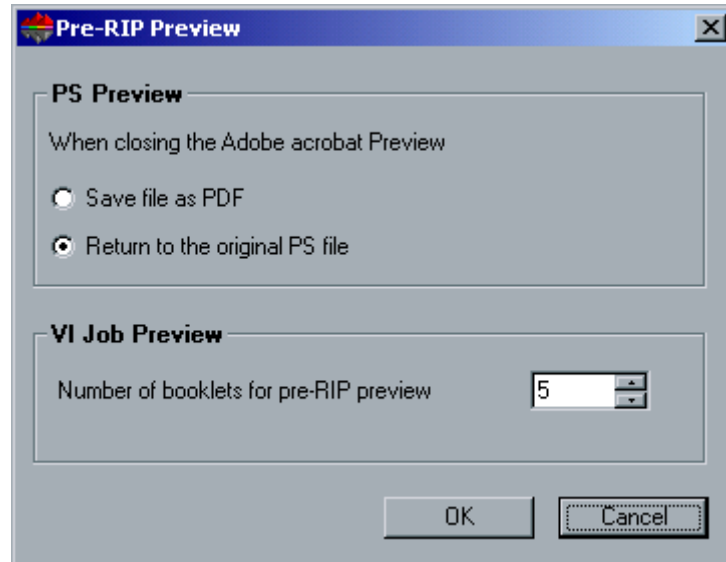
2. In the **PS Preview** area, specify your choice:

    *   If you would like to save the file as PDF - select the first choice.

    *   If you would like to return to the original PS file, select the second option.

3. In the **VI Job Preview** area, select the required number of booklets for pre-RIP preview.

Default Archiving Path

The **Default Archiving Path** utility enables you to select a default path for archiving jobs. Once the path is set, and **Archive** is selected from the **job** menu, the archive window browser will be directed to the predefined path.

To define the default archiving path:

1. In the **Preferences folder**, double-click **Default Archiving Path**.
   The Archiving Path window appears.
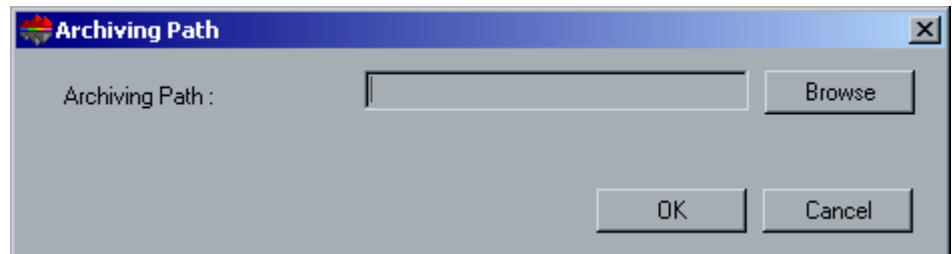
2. Click the **Browse** button.
   The Browse window appears.
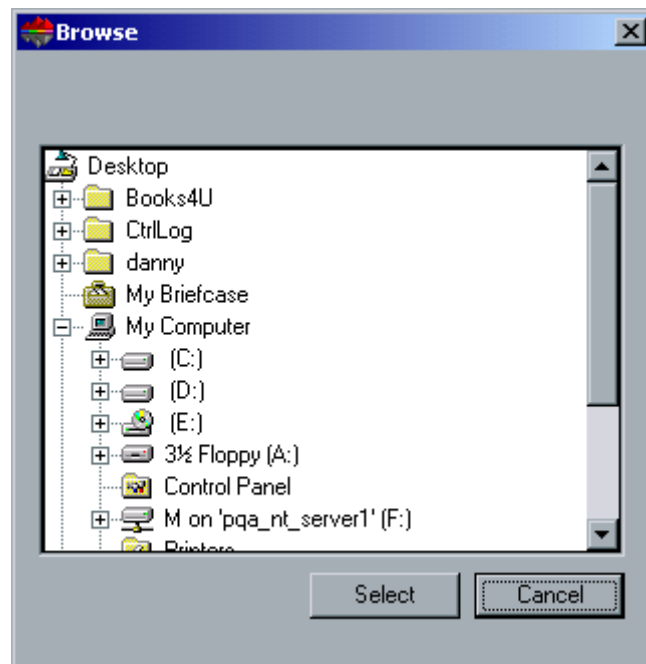
3. Browse to the required archiving location for your job (s) and click **Select**.

PDF Optimization

The **PDF Optimization** utility optimizes the RIP process of PDF files with repeated elements (which are marked as repeated in the PDF file) and consequently decreases the processing time significantly.

To enable PDF Optimization:

1. In the **Preferences** folder, double-click **PDF Optimization**. The PDF Optimization window appears.
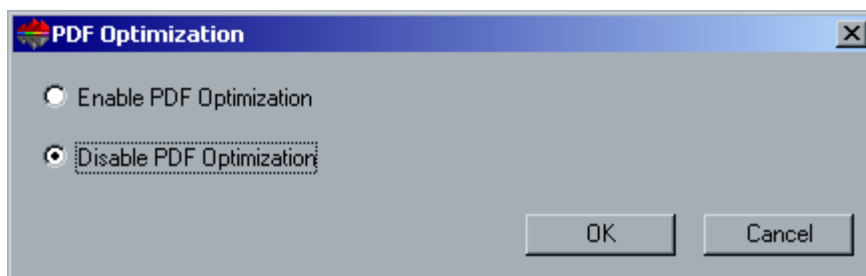
2. Select **Enable PDF Optimization** if you would like to optimize the RIP of PDF files.

3. Click **OK**.

OPI

OPI (Open Prepress Interface) 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. These instructions specify the type, size, position, rotation, cropping and location of the high-resolution images.

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, the CXP6000 Color Server OPI image replacement is disabled by default, in order to ensure continuous printing. If you would like to enable the OPI support, follow the next procedure.

To enable the Spire OPI support:

1. In the **Preferences** folder, double-click **OPI**.
   The OPI window appears.
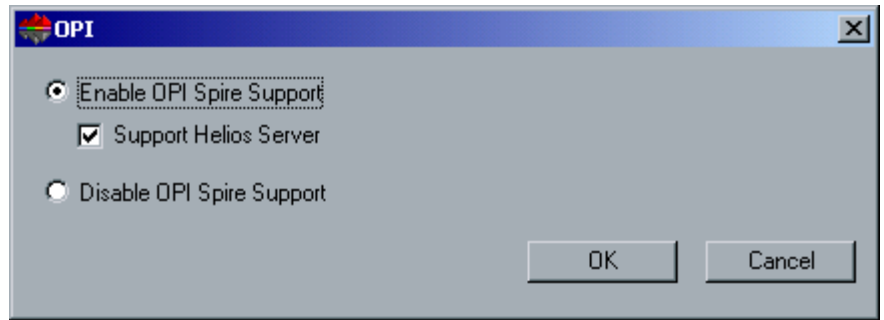
2. Select **Enable OPI Spire Support.**

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

3. Click **OK.**

Default Paper Size

When a PDL file does not contain any page size information (usually set by the PPD), the RIP uses a pre-defined default size. This default size is defined according to the unit of measurement you have selected during the first time configuration. If your choice was millimeters your default size is A3. If your choice was inches your default size is Tabloid.

You may change the default paper size, and provide better control of the default RIP size.

To set the default paper size:

1.   In the **Preferences** folder, double-click **Default Paper Size**.
     The Default Paper Size window appears.
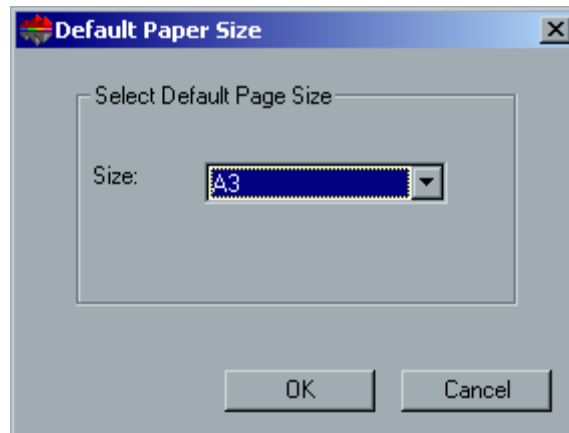
2.   From the **Size** list, select the required page size, then click **OK**.
     The following message appears.

3.   Click **OK**.

Print Queue Manager

The **Print Queue Manager** enables you to define the **In Print** queue policies. You may select a job batching policy, and a held (frozen) job policy.

To set the In Print queue policies:

1. In the **Preferences** folder, double-click **Print Queue Manager**. The Print Queue Manager window appears.
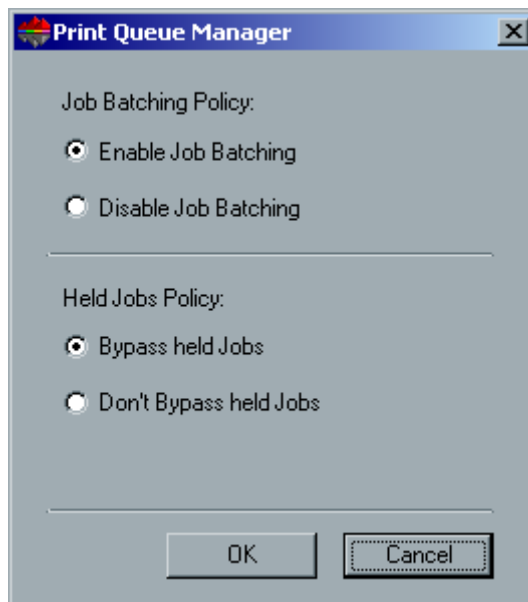
2. In the **Job Batching Policy** area, select **Enable Job Batching** to print jobs with the same page parameters, one after the other without the cycle down.

    Note: The Job Batching utility enables you to print several jobs in a batch, one after the other without the cycle down, and consequently save production time.

    For further details, see *Job Batching Workflow* on page 195.

    Or:
    Select **Disable Job Batching** to disable the printing of jobs with the same page orientation, one after the other, and enable cycle down.

3.   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.
     The following message appears below the **Held Jobs Policy** area.
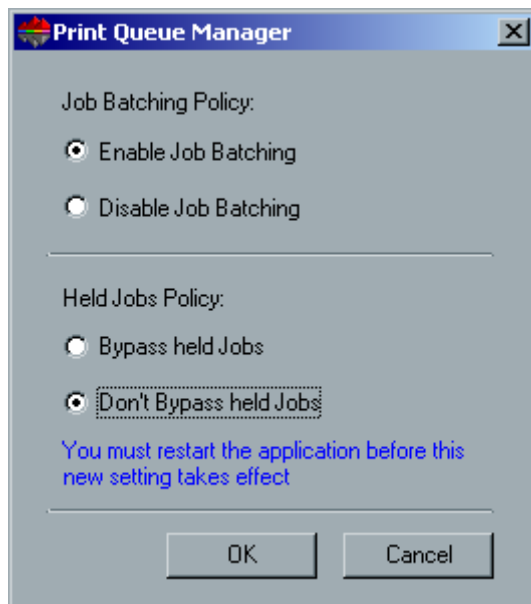
4.   Click **OK**.

Remote Tools Setup

The **Remote Tools Setup** includes setup for the **Remote Admin** tool and enables the connection of clients to the 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 CXP6000 Color Server from his client workstation. While this remote connection and operation takes place, the regular operation of the 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.

Following is a graphic of the **DFE and Printer Animation** as it is presented when the remote session is active.

In order 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 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 CXP6000 Color Server queues.

For further details, see *Spire Web Center* on page 47.

The remote admin setup process includes the following stages:

1. On the CXP6000 Color Server:
   The remote admin service is enabled and a password is assigned.

2. On the System Administrator:
   The client program is downloaded and launched.

To enable the remote admin service and set a password:

1. On the CXP6000 Color Server, in the **Preferences** folder, double-click **Remote Admin**.
   The Remote Tools Setup window appears.
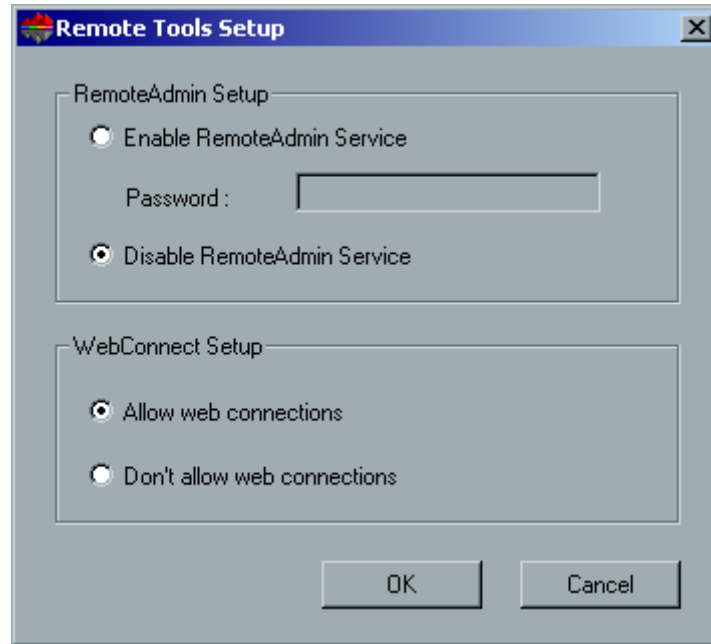
2. From the **Remote Admin Setup** area, select **Enable Remote Admin Service**.

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.

4. Click **OK**.

To download and launch the Remote Admin Client application:

1. From the System Administrator workstation, connect to the required CXP6000 Color Server, and from the **Utilities** folder (related to your computer type, PC or Macintosh) double-click **RemoteAdminClient.exe**.

Tip: You may also download the application from the **Spire Web Center** under **Downloads**.

When the instillation is complete, the Login window appears.
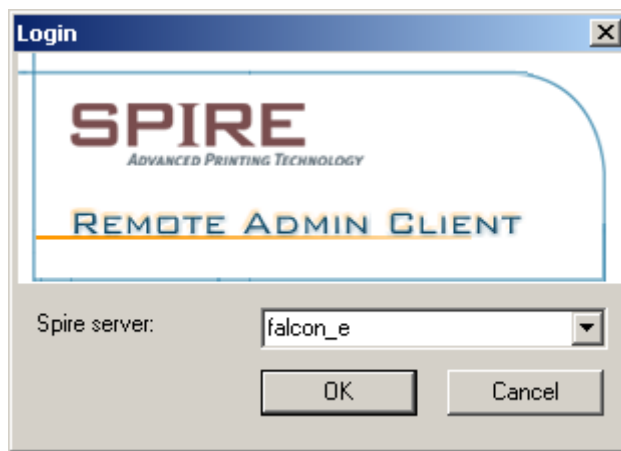
2. From the **Spire Server** list, select the required CXP6000 Color Server.

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 CXP6000 Color Server workspace appears on your screen.

6. You may now perform any required action.

Web Connect Setup

The **Web Connect Setup** enables clients to connect to the CXP6000 Color Server over the network by using the **Spire Web Center**. This possibility is disabled by default.

For further details, see *Spire Web Center* on page 47.

To enable web connections:

1. On the CXP6000 Color Server, in the **Preferences** folder, double-click **Remote Tools Setup**.
    The Remote Tools Setup window appears.
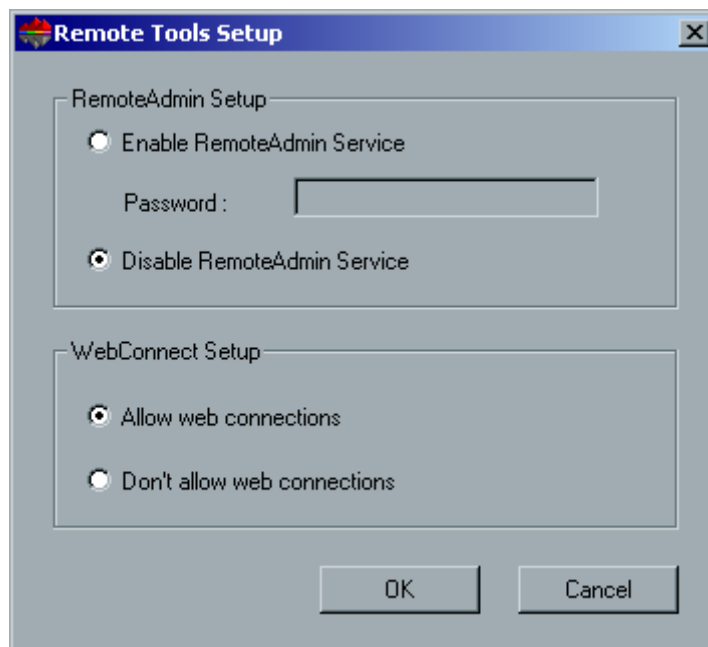
2. From the **Web Connect Setup** area, select **Allow web connections**.

3. Click **OK**.

Utilities

These utilities enable you to view and back up the configuration of your CXP6000 Color Server.

To open the system Utilities:

➢ In the Administration window, double-click **Utilities** to expand the folder.
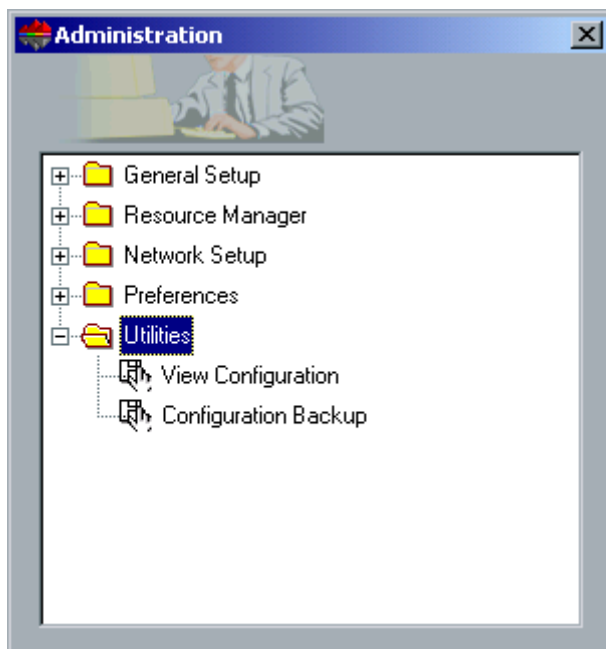
View Configuration

The **View Configuration** utility enables you to view the configuration of your CXP6000 Color Server and to print it to any printer on the network connected to your CXP6000 Color Server. In addition you may save the configuration in the network or export it to an external media.

To view the configuration:

1. In the **Utilities** folder, double-click **View Configuration**.
   The View Configuration window appears.
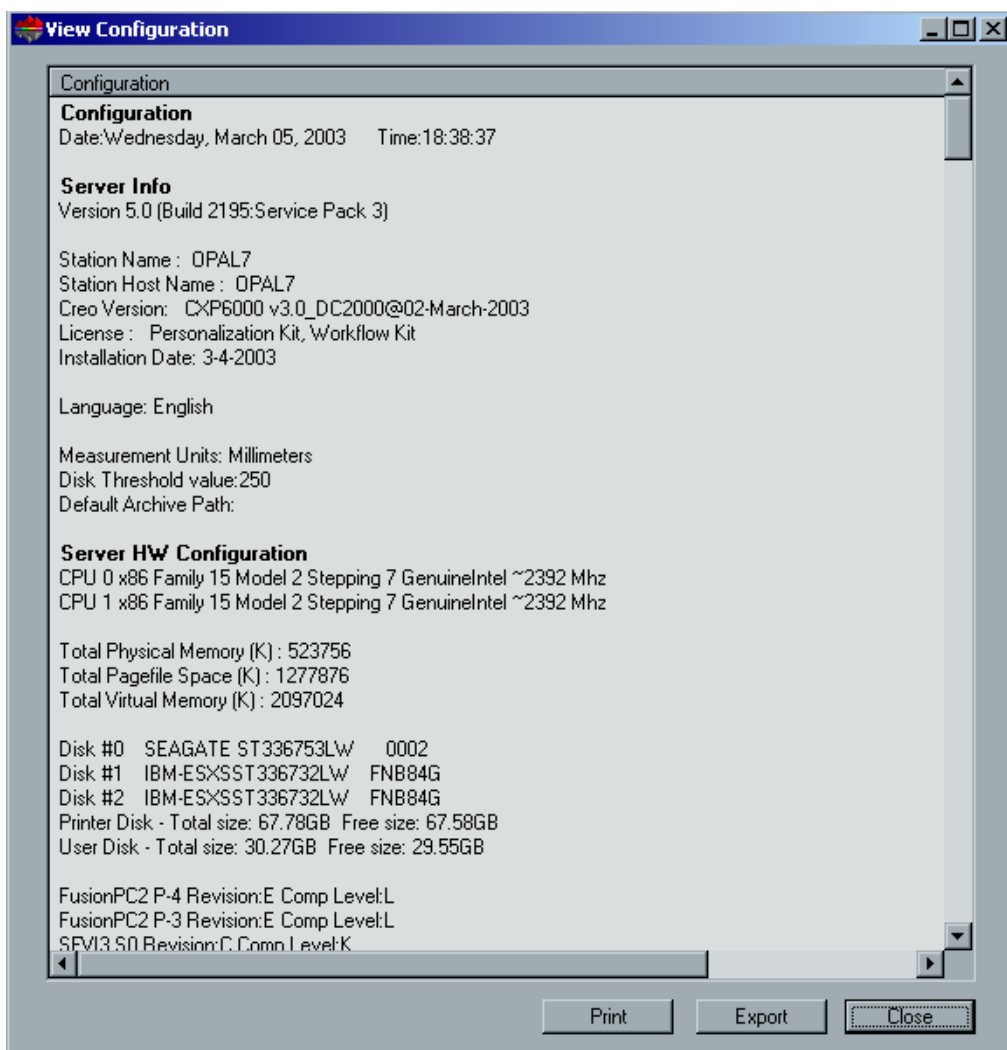
2. Click **Print** to print the configuration.
   The Print window appears.

3. From the **Printer** list, select one of the defined printers and click **OK**.

4. If you would like to save the configuration click the **Export** button.
   The Save As window appears.
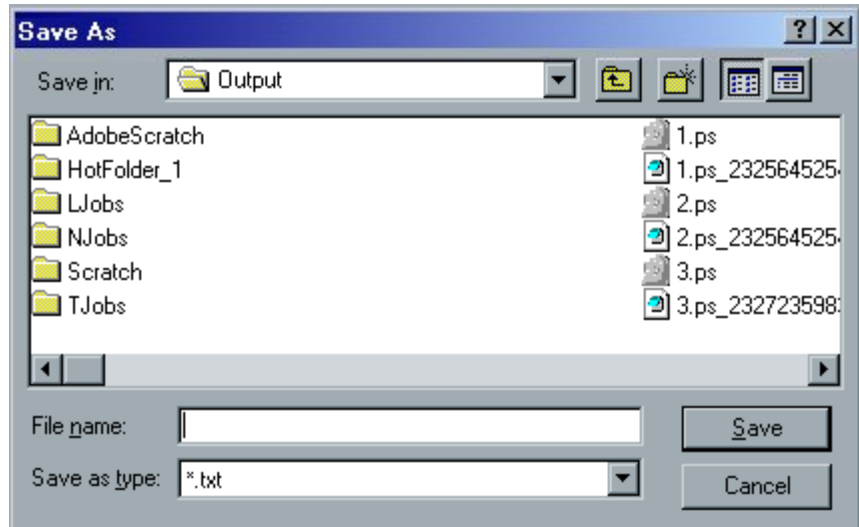
5. Browse to the required location and click the **Save** button.

6. Click **Close** to close the View Configuration window.

Configuration Backup and Restore

The **Configuration Backup** utility enables you to backup your CXP6000 Color Server configuration to a local hard disk, to a network drive or to an external media (such as a CD-ROM drive), connected to the CXP6000 Color Server.

Configuration Backup

To backup the configuration of your CXP6000 Color Server:

1. In the **Utilities** folder, double-click **Configuration Backup**.
   The Configuration Backup window appears.
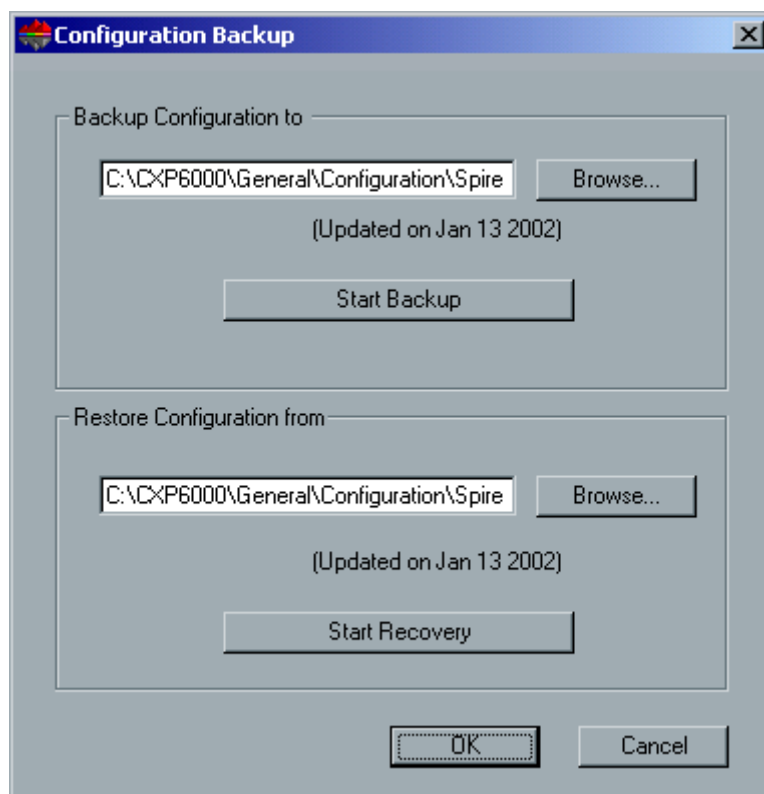
2. In the **Backup Configuration to** area, the default location for the backup configuration (**C:/CXP6000/General/Configuration**) appears. If you would like to specify a different path, click the **Browse** button and browse to a different directory path for the backup.

> **Note:** You may also backup to an external media.

3. Click the **Start Backup** button.

> **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 CXP6000 Color Server:

1. In the **Restore Configuration from** area, the default configuration location is displayed.(**C:/CXP6000/General/Configuration**). If you would like to select a different path, click the **Browse** button and browse to a different directory path for the restore.

> **Note:** The configuration files name will always be: "SpireConf.Cab" (Cabinet file.)

> **Note:** You may also restore the configuration from an external media.

2. Click **Start Recovery.**

The Restore Configuration window appears.
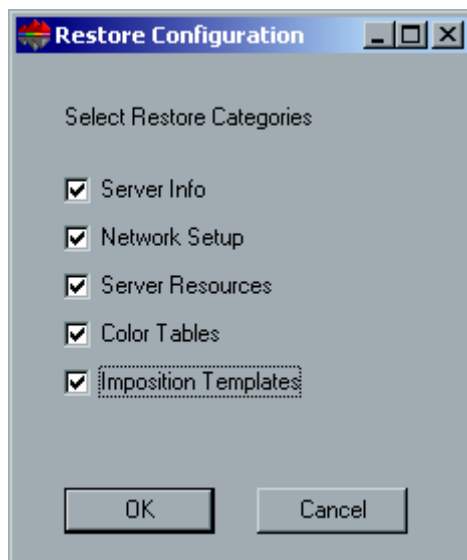
3. By default, all categories are selected. If you do not want to restore certain categories, clear the selections.

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.

4. Click **OK**.
   The following message appears.
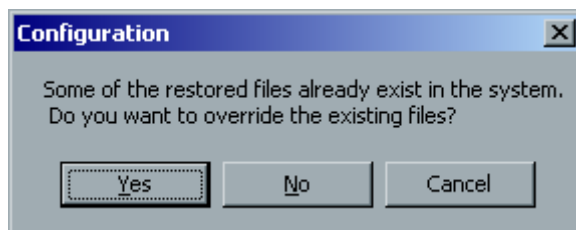
5. Click **Yes** if you would like the restored files to replace the current ones. Click **No** if you do not want the restored files to replace the existing files.

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

6. When the process is complete, click **OK** to close the Configuration Backup window.

6

Managing Jobs

Overview

This chapter explains the various operations that can be performed from the CXP6000 Color Server queues, and in the **Storage Folder**. It also provides information on managing jobs and disk space.

The **Job Preview & 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.

Queue Manager

After entering the CXP6000 Color Server, jobs reside in the **Queue Manager** (which includes both the **In Process** and **In Print** queues) or in the **Storage Folder** (depending on the selected job flow).

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

The **In Print** queue lists all the jobs that were processed successfully and are waiting to be printed, and the currently printing job. The **In 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).

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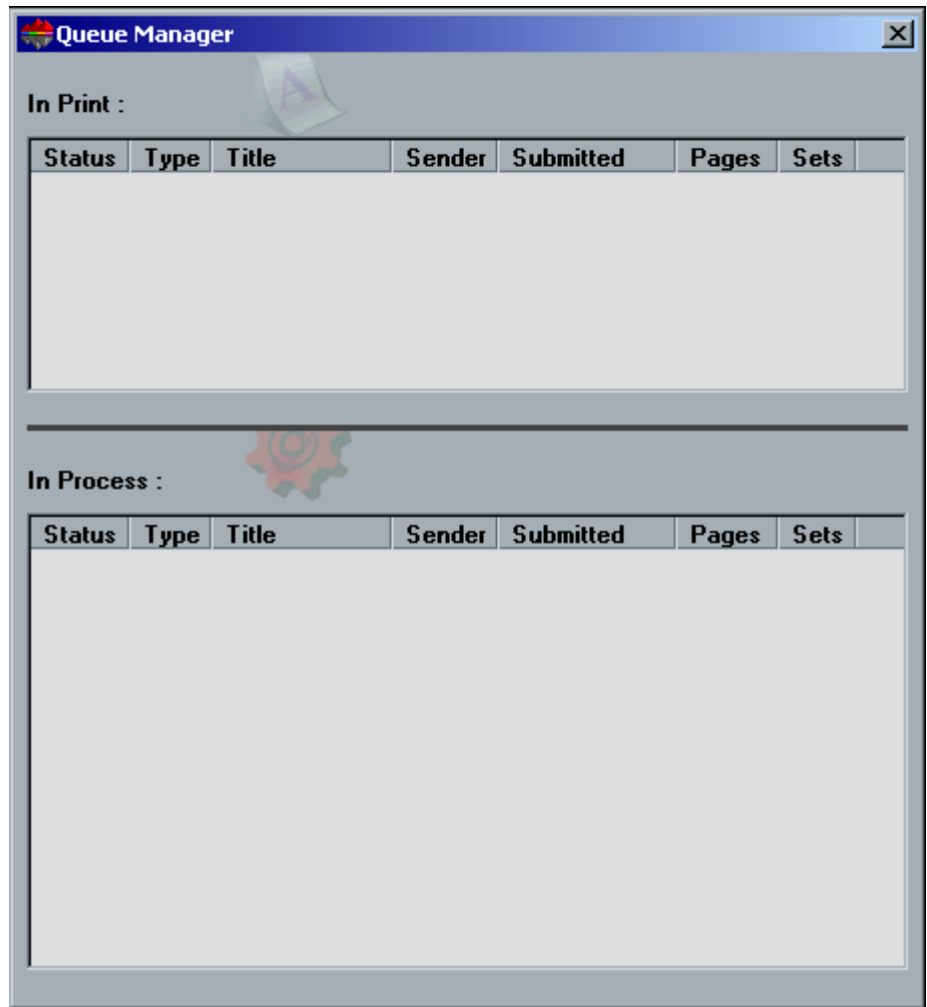
Each queue holds jobs in the order they entered it. The top job in the queue is the **Running** job, while all others are **Waiting** jobs.

Note: In the **In 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 Queue Manager:

➢ Click the **Queue** button on the **Pathways** panel.
   Or:
   Click the **Close** button on the window's title.

To display the Queue Manager:

➢ From the **Tools** menu, select **Queue Manager**.
   Or:
   Click the **Queue** button on the **Pathways** panel.

The In Process Queue

After submitting PDL files (or re-submitting PDL jobs), the **In Process** queue lists the files to be processed.

Status	Type	Title	Sender	Submitted	Pages	Sets
📄	PS	frog	94906	21/02/00 19:42	1	1
📄	PS	LOBSTER	94906	21/02/00 19:42	1	1
📄	PS	LOBSTER1	94906	21/02/00 19:42	1	1
📄	PS	tiger2	94906	21/02/00 19:42	1	1

Status icons

   indicates a **Running** job

   indicates a **Waiting** job

   Indicates a **Rush** job

Type Column

Indicates the file format of the PDL job (for example, PS, PDF, VPS)

Title Column

Indicates the name of the file to be printed.

Note: Submitting a file whose name already exists in the CXP6000 Color Server automatically adds a sequential number to the file name (for example, submitting a file called LOBSTER while such a file already exists renames it to LOBSTER1).

Sender Column

Indicates the user name of the system from which this file originated.

Submitted Column

Indicates the date and time this job was first submitted to the CXP6000 Color Server.

Pages Column

Indicates the number of pages to be processed in a PDF job.

Note: If the DTP application supported it, the number of pages is indicated for other PDL jobs.

Sets Column

Indicates the number of copies to be printed.

The In Print Queue

Once a file has been processed successfully, it moves to the **In Print** queue and waits to be printed or to the **Storage Folder** (depending on the current job flow or virtual printer).

Status	Type	Title	Sender	Submitted	Pages	Sets
	RTP	LOBSTER1	94906	21/02/00 17:23	2	1
	RTP	tiger	94906	21/02/00 17:07	1	1
	RTP	GOLFER	94906	21/02/00 17:07	1	1
	RTP	frog	94906	21/02/00 17:07	2	1

Status icons

Indicates a **Running** job.

Indicates a **Waiting** job.

Indicates a **Frozen** job.

Note: A **Frozen** job is a job for which the appropriate paper stock is not available, for example, the correct paper type, paper size or paper weight is not available.

Indicates a **Rush** job

Indicates a **Frozen Rush** job

For further information about rush jobs, see *Running a Job Immediately* on page 347.

Type Column

Indicates RTP (Ready To Print).

Title Column

Indicates the name of the PDL file (that is, without the extension).

Sender Column

Indicates the user name of the system from which this file originated.

Submitted Column

Indicates the date and time this job was first submitted into the CXP6000 Color Server.

Pages Column

Indicates the number of pages to be printed.

Sets Column

Indicates the number of copies to be printed.

For further details on operations on the jobs residing in the **Queue Manager**, see *Handling Jobs in Queues* on page 341.

Status Panel Information

The **In Process** and **In Print** panes 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 (for example, frog1) and a process indicator are displayed. If no job is processed/printed, it displays "No jobs running".

- The number of pages already processed/printed (for example, 1) and the total number of pages in the job (for example, 11).

   Note: On the **In Process** pane, 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.

- If you click the arrow, a pop-up menu appears. Selecting **Time** from the menu enables you to view the amount of time (in minutes) that passed since the job started running will also be indicated.
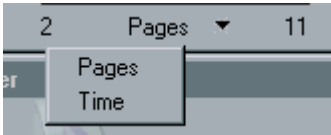
Reordering Jobs in Queues

Rearranging a queue enables you to set a new processing or printing order.

You may 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 jobs in queues:

1. Right-click a job in the **In Process** or **In Print** queue, and select the required option from the menu.
   Or:
   From the **Job** menu, select the required option from the **Reorder Jobs** options.

   Note: You may also drag the job to the required place.

2. Select one of the following options:

   - To move the selected job one step up in the queue, select **Promote**.
   - To move the selected job to the top of the queue, select **Promote to top.**

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

   - To move the selected job one step down in the queue, select **Demote**.
   - To move the selected job to the bottom of the queue, select **Demote to bottom**.

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 or select an option from the **Control** menu.

Resume mode   Suspend mode

The Suspend/Resume button

To suspend a queue:

➢ Select the red square in the **Suspend/Resume** button
The button switches to **Suspend** mode.
Processing/printing stops after the current job has finished running.

To resume a queue:

➢ Select the green arrow of the **Suspend/Resume** button.
The button switches to **Resume** mode.
The top job in the queue starts processing/printing.

Handling Jobs in Queues

You may do the following from the **In Process** and **In Print** queues:

- Abort a running job

- Move waiting jobs to the **Storage Folder**

- 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.

To select more than one job:

➢ To select all the jobs in the active window, choose **Select All** from the **Selection** menu (or press CTRL+A).
    To select any item, and clear any selected item, choose **Invert selection** from the **Selection** menu.
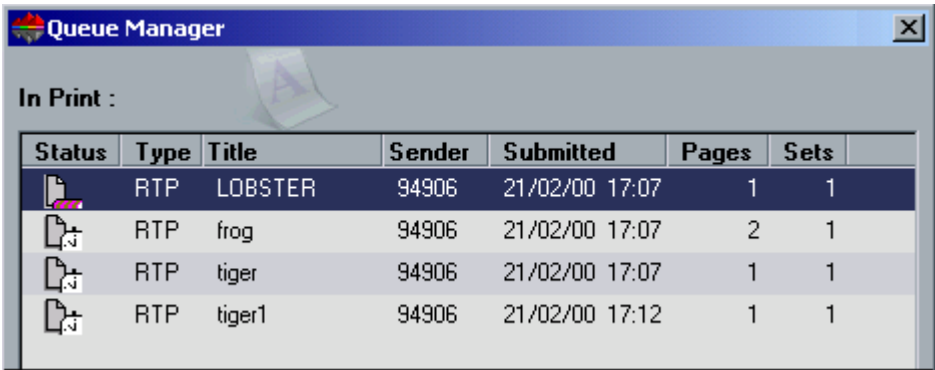
Note: Some actions may be performed also by dragging the job(s) from a queue to the **Storage Folder**, or vice versa.

Aborting a Running Job

To stop processing/printing a running job:

1. Select the required running job in the **In Process** or **In Print** queue.
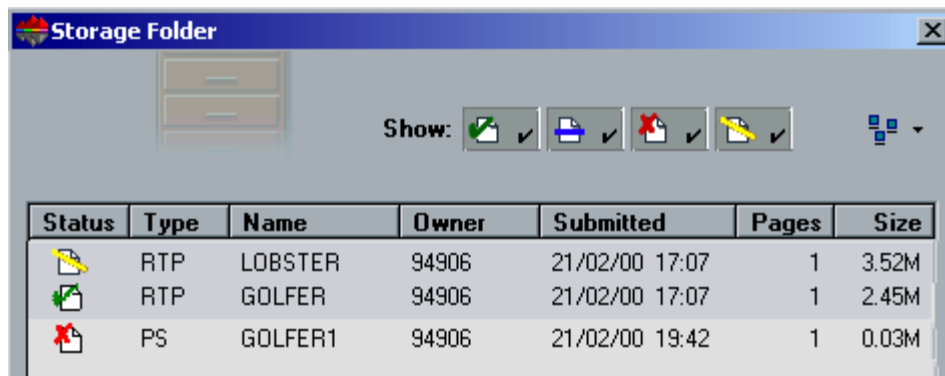
	Queue Manager						
In Print :							

Status	Type	Title	Sender	Submitted	Pages	Sets
	RTP	LOBSTER	94906	21/02/00 17:07	1	1
	RTP	frog	94906	21/02/00 17:07	2	1
	RTP	tiger	94906	21/02/00 17:07	1	1
	RTP	tiger1	94906	21/02/00 17:12	1	1

2. From the **Job** menu, select **Abort**.
    Or:
    Right-click the job, and from the menu select **Abort**.
    The job is removed from the queue to the **Storage Folder**.

The **Aborted** status is assigned to the job and the next job in the queue starts running.
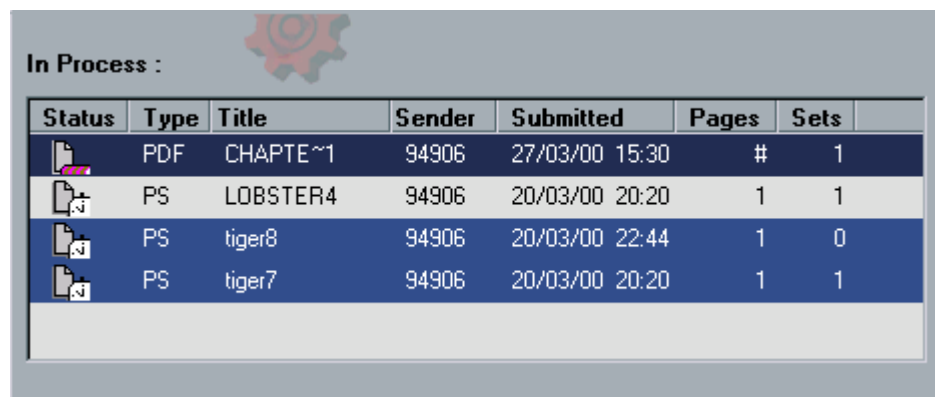
Note: To return a job to the proper queue, right-click the job(s) in the **Storage Folder** and from the menu select **Submit**.

Moving Waiting Jobs to Storage

To postpone processing/printing of one or several **Waiting** jobs, you may use the **Move to storage** option.

To move waiting jobs to storage:

1. Select one or several jobs in the **In Process** or **In Print** queue.

2. Right-click the job, and from the menu select **Move to storage**.
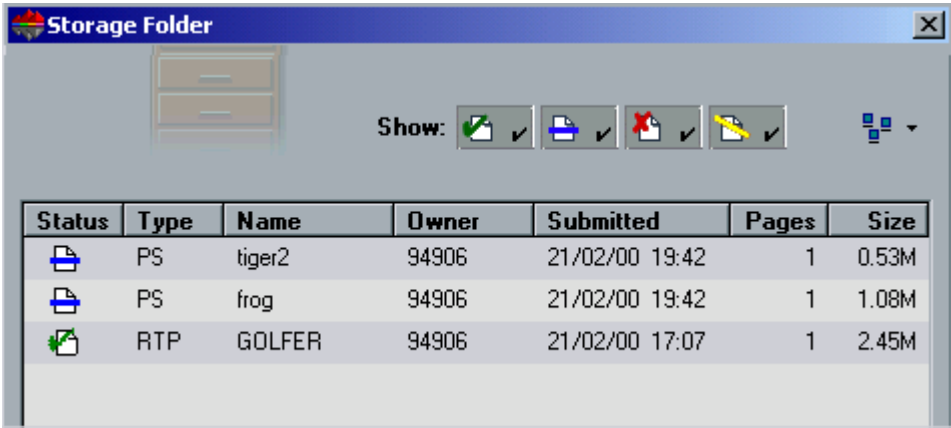
Note: If you have selected several jobs, from the **Job** menu select **Move to storage**.

Or:
Drag the job(s) from the queue into the **Storage Folder**.
The job(s) are removed from the **In Process** or **In Print** queue to the **Storage Folder**.

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** (or drag the jobs to the relevant queue).

Deleting Jobs

You may delete one job, or select several jobs to be deleted and delete them at once.

To delete one job:

1. Right-click the required job in the **Queue Manager** or **Storage Folder**, and from the menu select **Delete**.
    Or:
    Press DEL on your keyboard.
    The following message appears.
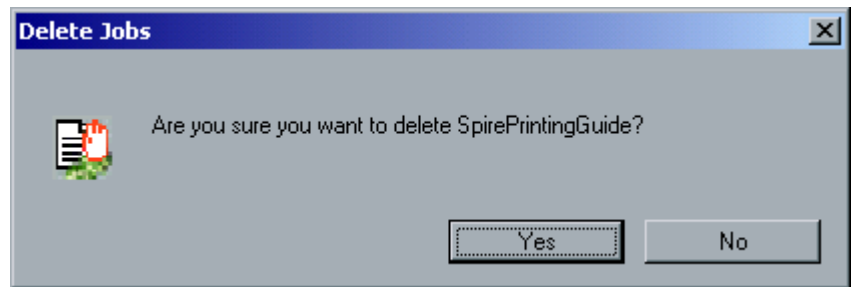
Note: When you select a job to be deleted, the system indicates its name.

2. Click **Yes**.
    The selected job is removed from the **In Print** or **In 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 Storage* on page 343).

To delete several jobs:

1. Select the required jobs in the **Queue Manager** or **Storage Folder**, and from the **Job** menu select **Delete**.
    The following message appears.
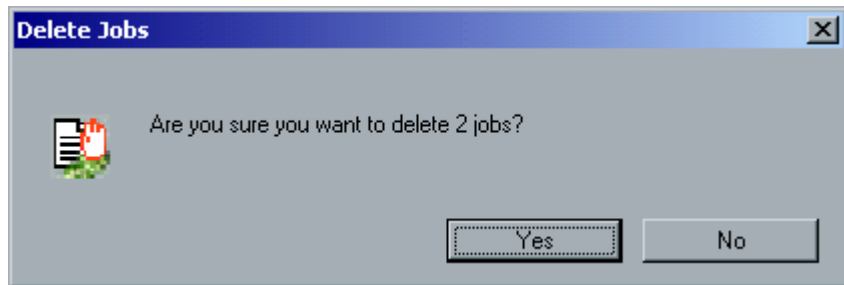
Note: When you select several jobs to be deleted, the system indicates the number of jobs you are deleting.

2. Click **Yes**.
    The selected jobs are removed.

Note: Once a job is deleted, it needs to be re-submitted for processing and printing. To temporarily remove jobs from a queue, select **Move to Storage** (see *Moving Waiting Jobs to Storage* on page 343).

Viewing and Editing the Job Parameters

To view / edit the job parameters:

1. Right-click the required job in the **Queue Manager** or **Storage Folder**, and from the menu, select **Job Parameters**.
    The Job Parameters window appears.

2. You may now edit the job parameters as required.

Notes:

In the **Queue Manager**, you may edit only **Waiting** jobs (not **Running**). You may also suspend the queue for editing by clicking the **Suspend / Resume** button.

If the changes were applied in the **In Print** queue, and applying them requires re-RIPing of the job, the job will be automatically placed in the **In Process** queue.

For further details on the Job Parameters window and job parameters, see *Setting Job Parameters on the CXP6000 Color Server* on page 60.

Viewing the Job History

To view the job history:

➢ Right-click the required job in the **Queue Manager** or **Storage Folder**, and from the menu select **Job History**.
The Job History window appears.

For further details on the Job History window, see *Job History* on page 396.

Running a Job Immediately

You may select a job in the **Storage Folder,** or in one of the **Queue Manager** queues 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 **In Print** queue, the paused job continues its processing.

If the rush job enters the **In 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 printed 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 **Queue Manager** or **Storage Folder**, 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.

The **Storage Folder** appears, initially, it contains no jobs.

At any time, you may view information regarding the number and status of the jobs in the **Storage Folder**, sort and filter the list of jobs, or switch view modes. After startup, the **Storage Folder** is displayed by default.

Status	Type	Title	Sender	Submitted	Pages	Size
🖨	RTP	A6 4 pages, port	operator	4/17/00 17:16	4	2.79M
🖨	RTP	GOLFER	operator	4/17/00 18:10	1	1.74M
📄	RTP	New_Jenny_Cra	operator	4/17/00 18:11	200	13.73M
📂	RTP	A6 4 pages, port	operator	4/17/00 17:16	4	2.80M
🖨	PS	Oldsmobile-witho	operator	4/17/00 18:31	#	7.09M
🖨	PS	Oldsmobile-witho	operator	4/17/00 18:33	#	7.09M
📄	PS	Oldsmobile-witho	operator	4/17/00 18:29	#	7.09M

Printer Disk Free : 33.72GB Used : 0.16GB   User Disk Free : 3.91GB Used : 4.56GB

Status Panel Information

The **In Storage** pane indicates the number of jobs of each status currently residing in the **Storage Folder**.

In Storage	Completed	2
	Held	4
	Failed	3
	Aborted	1
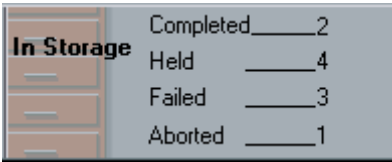
Filtering the List

Each job in the **Storage Folder** is assigned one of the following statuses:

Icon	Status	Indicates that
	Completed	The job completed printing.
	Held	The job was moved from the **Queue Manager** to the **Storage Folder** 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 **Queue Manager**.

By default, the **Storage Folder** lists jobs of all statuses (all status buttons are selected).

Note: The check mark emphasizes that jobs of this status appear in the list.

You may filter the list in order to list only jobs of one or several statuses, while not listing jobs of other statuses.

To filter the list:

➢ Click any status button (for example the **Completed** status) that contains a check mark to remove jobs of that status from the list.
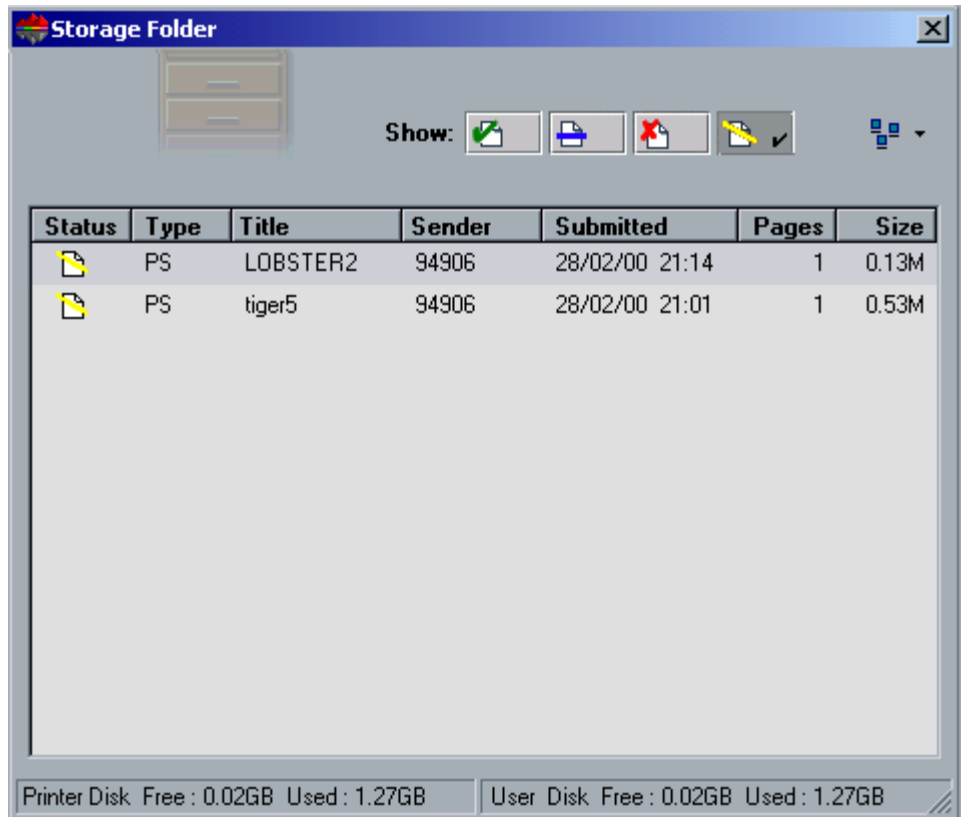
The list updates accordingly.
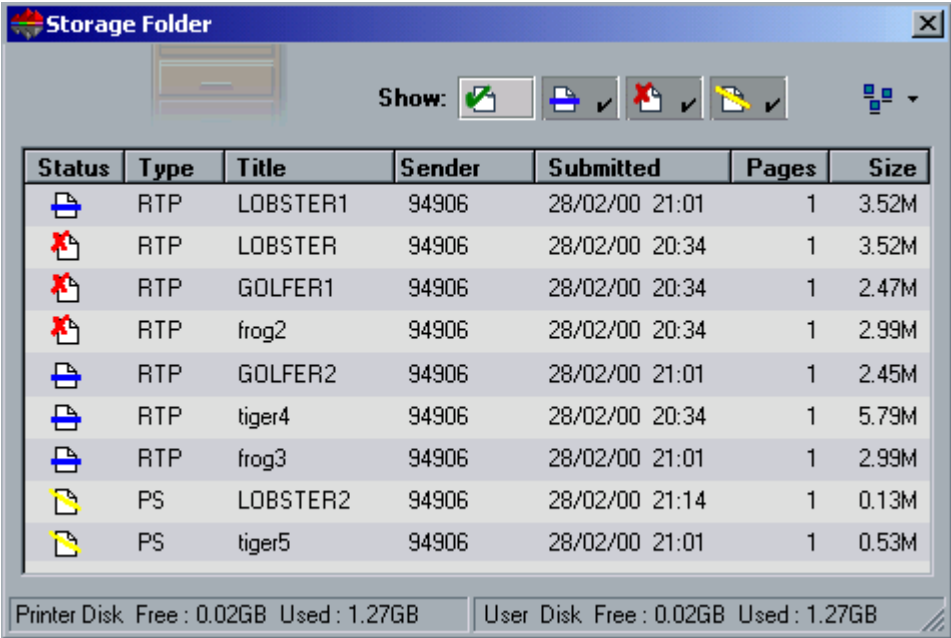
Storage Folder with no **Completed** jobs listed.

Select any status button in order to list such jobs (for example, the following lists **Held** jobs only).
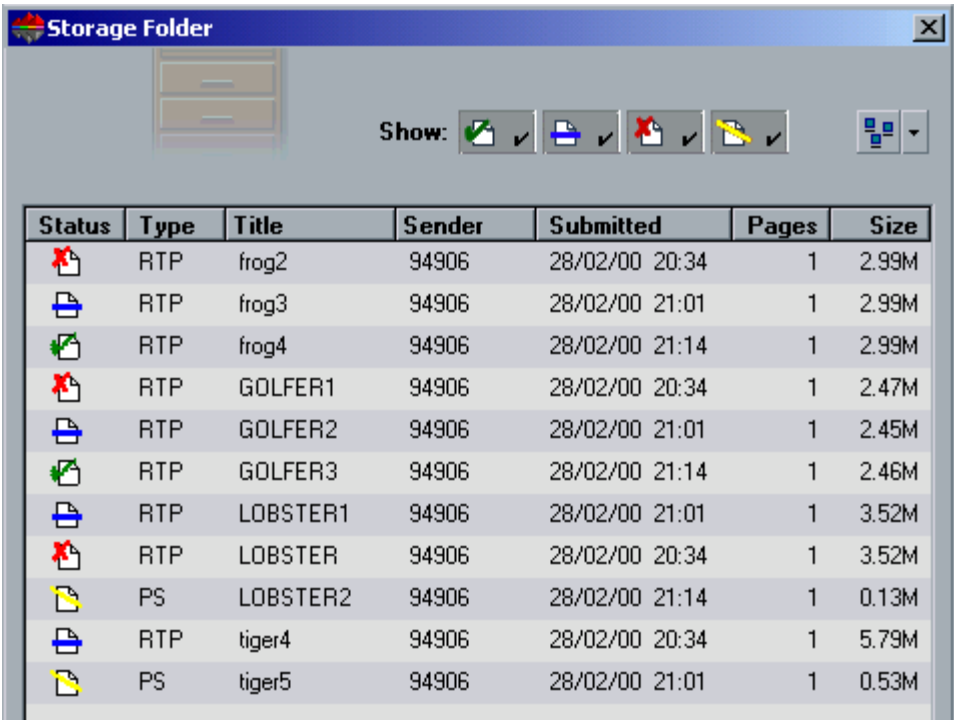
Note: If all the button selections are cleared, no jobs are listed.

Switching List View Modes

By default, the jobs are listed in the **Storage Folder** along with various details, but you may choose to view the jobs as **Large Icons**, **Small Icons**, a **List**, or a list with **Details**.

The Details View

This view is the default view mode.

Note: Sorting and resizing of columns is relevant for this mode only.

To switch to another view mode:

1. Click the **View** drop-down icon.

2. Select the required view mode from the list.
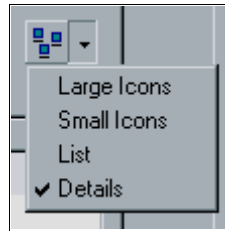
The list updates according to the selected view mode.

The Large Icons View

In the **Large Icons** view, the icons are listed from the bottom right corner to the top left corner.

The Small Icons View

In the **Small Icons** view, the icons are listed from the bottom right corner to the top left corner.
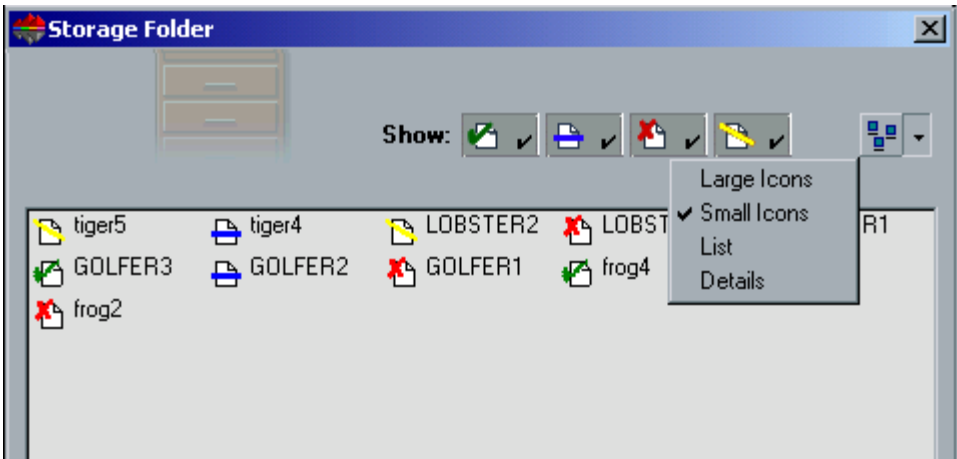
The List View

In the **List** view, icons are listed from the bottom left corner to the top right corner.
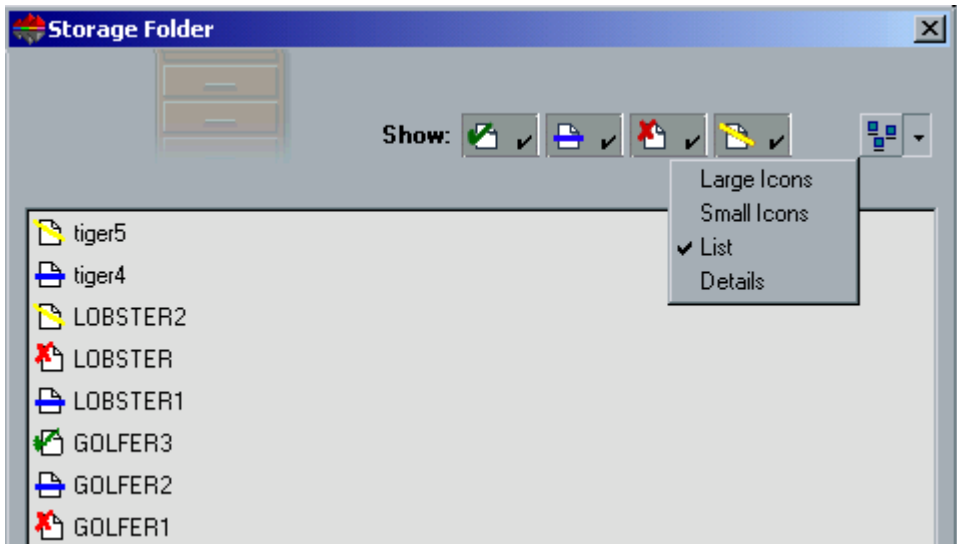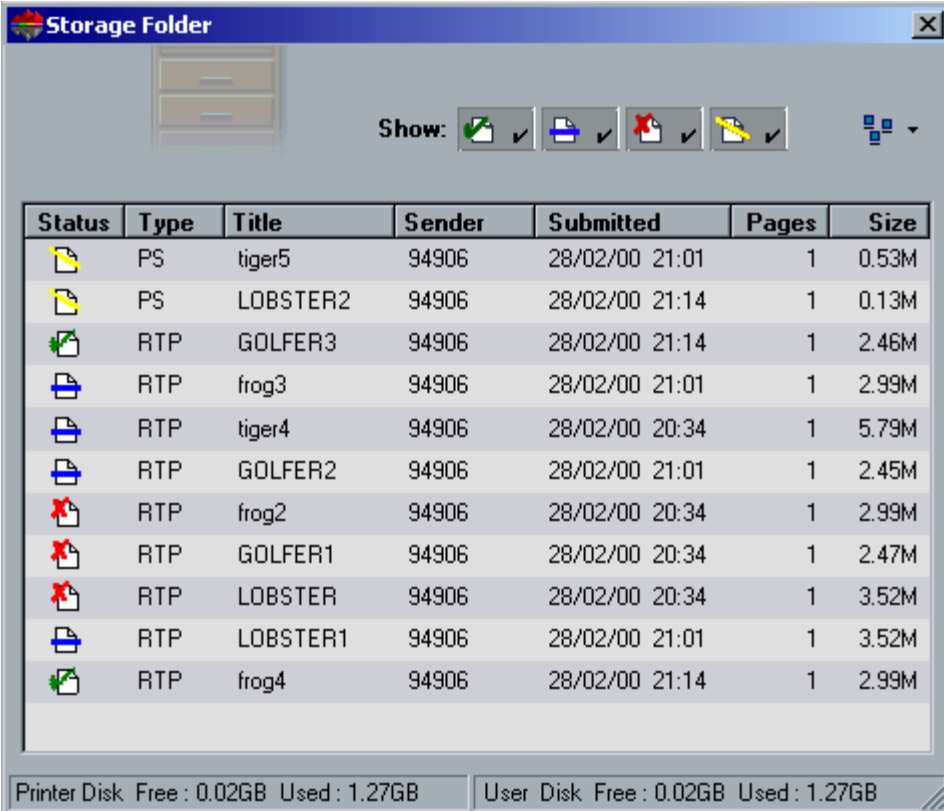
Sorting the List

When the jobs are listed using the **Details** view mode, you may sort the list by its column headers.

By default, the list is sorted by the order the jobs entered the **Storage Folder**.

To sort the Details list:

1. To sort by one of the column headers (for example, **Type**), click the header once for ascending order.

2.   Click again for descending order.

Note: After sorting, new jobs arrive at the top.

Resizing Columns

In the **Details** view mode, the Status, **Type**, **Title**, **Sender**, **Submitted**, **Pages**, and **Size** columns appear in the **Storage Folder** by default. If required, you may resize columns (or even minimize columns so they are not viewed at all).

To resize the columns:

1. Click the cursor on the right border of the required column (for example, **Sender**).
   The cursor switches shape.
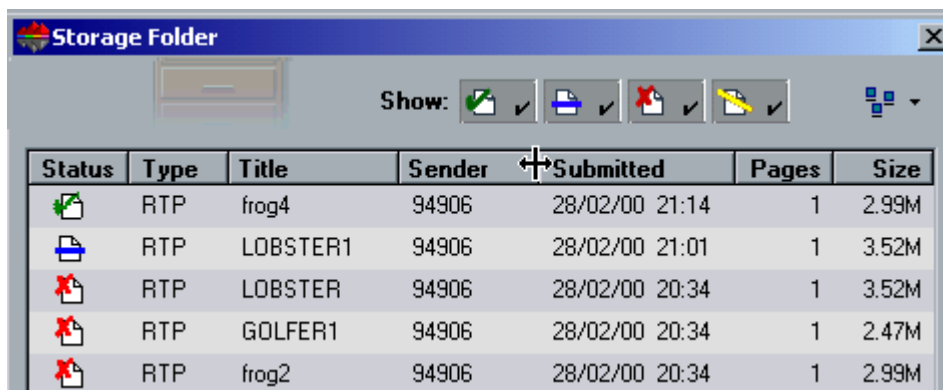
2. Drag the cursor to the right to enlarge the size of the column, or to the left to decrease the size of the column. In the following case, the column was minimized so it will not be viewed at all. To retrieve the column, drag the cursor to the right.
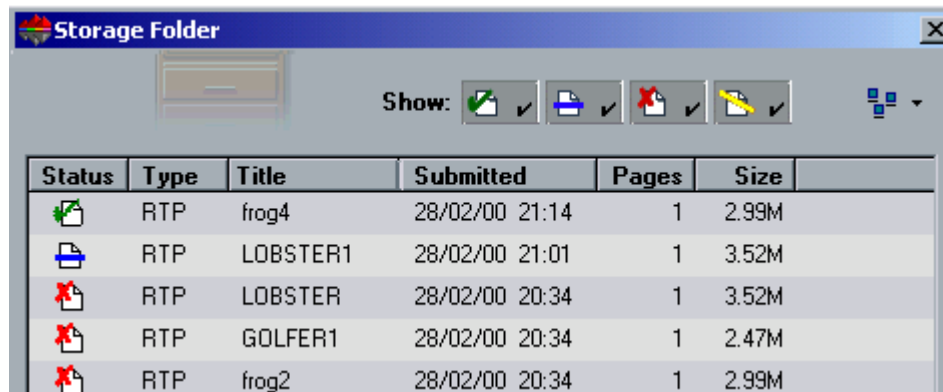
Handling Jobs in the Storage Folder

In the **Storage Folder** you may preform the following actions:

Note: If a cross-reference is not provided, the details are provided in this section.

- Submit a job.
- Run a job immediately (rush job).

- Preview and edit a job, using the **Job Preview &Editor**

- View and modify the parameters of a job

- Archive a job (retrieve is also explained in this section)
- Duplicate a job
- Delete a job

- View the job's history (open the Job History window)

- Export as PDF2Go

- View the Job Ticket Report

- View the Preflight report

   See *Preflight Report* on page 148.

- Export a job as InSite

   See *Export as InSite Job* on page 365.

Submitting Jobs

To submit a job for printing:

➢ Right-click the required job, and from the menu select **Submit**.
   Or:
   Drag the job(s) from the **Storage Folder** and drop them into the
   appropriate queue.
   RTP Jobs are submitted to the **In Print** queue; all other jobs are
   submitted to the **In Process** queue.

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 Folder**.

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. The archive and retrieve of VI elements is performed through
the VI Elements utility in the Administration window.

To archive/ retrieve a VI job, first archive/ retrieve the VI elements.

You may 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 Administration
window under preferences.

See *VI Elements* on page 282 for details. Then, archive/ retrieve the job as
explained in this section.

To archive a job to an external server:

1. In the **Storage Folder**, right-click the job you would like to archive, and from the menu select **Archive**.
The Archive job window appears.
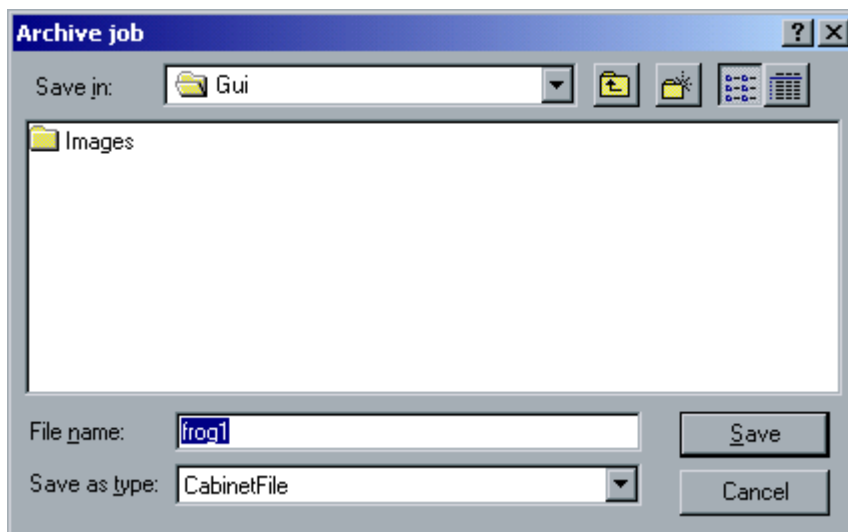
2. Browse to the required location, and click the **Save** button.
A cabinet file (compressed ZIP) that contains all files related to the archived job is created at the selected location.

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.

3. Click the **Alerts** button on the **Pathways** panel to open the Alerts window, and verify that a `completed processing of archive` message appears.

4. You may now delete the job.

To retrieve an archived job:

1. From the **Job** menu, select **Retrieve from Archive**.
    The Retrieve window appears.
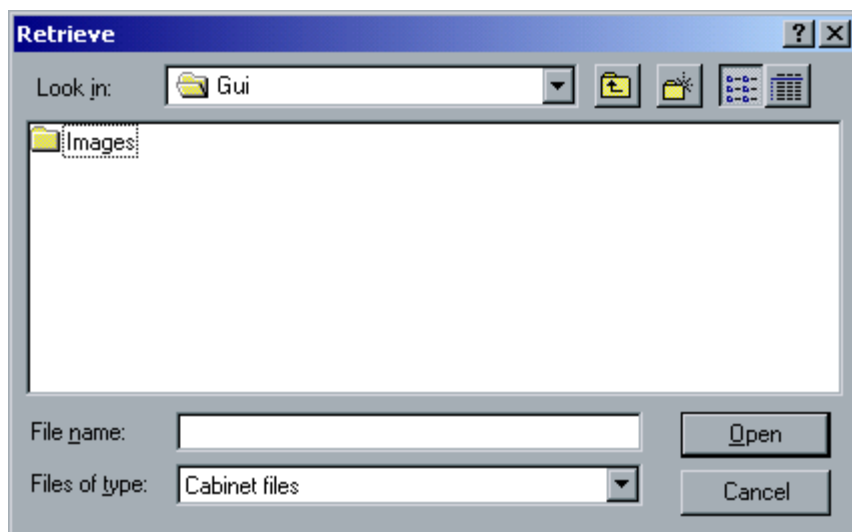
2. Browse to the location of the archived job, select the related cabinet file, and click the **Open** button.

    Note: Find the job using the archived job name.

    The selected job appears at the top of the list in the **Storage Folder**. It is assigned the status (that is, **Completed**, **Failed**, **Held**, or **Aborted**) it had when it was stored.

    Notes:

    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. Click the **Alerts** button on the **Pathways** panel to open the Alerts window, and verify that a `completed processing of restore` message appears.

Duplicating Jobs

To copy a selected job in the Storage Folder:

1. Right-click a job and from the menu select **Duplicate**.
   The following message appears.
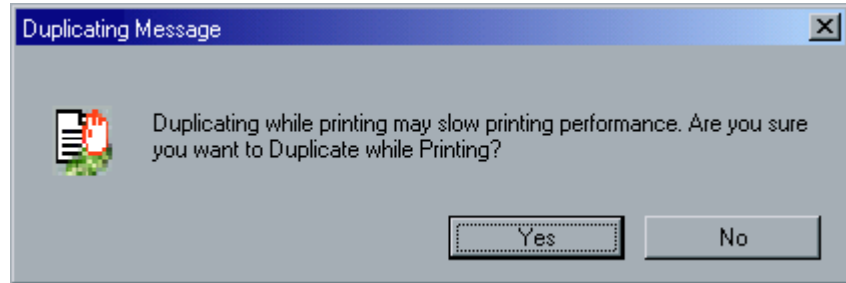
2. Click **Yes** to continue.
   The selected file is duplicated, and is given the name of the original
   job followed by "_dup".

   Notes:

   Duplicating an RTP job creates a new PDF version of the job.

   You cannot duplicate an RTP job that was modified in the Job Preview &
   Editor since it contains RTP data only.

Export as InSite Job

Creo Synapse InSite™ provides an Internet-based communication between you and your customers and enables remote proofing and approval.

If your site includes a Creo Synapse InSite™ server, exporting your job as InSite from the 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 CXP6000 Color Server, it can be exported as InSite from the **Storage Folder**. 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. This is enabled due to the customers ability to 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 CXP6000 Color Server **Storage Folder**.

2. Right-click the job and from the menu, select **Export as InSite Job**. The InSite window appears.
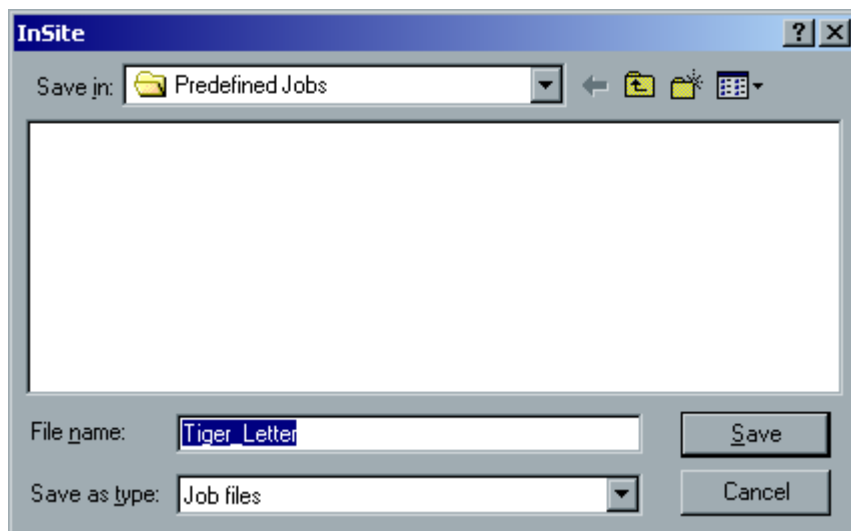
3. Browse to the required location and click **Save**.
    A Brisque job is created in the selected location.

4. You may now register the files on the InSite server and start the
    approval cycle.

Managing Disk Space

The Printer disk (or Image Disk) holds the processed RTP files of a job.

The User disk (or Spool Disk) holds the submitted PDL files, Hi-Res images, and pre-cached VI elements.

You cannot directly access these disks from within the CXP6000 Color Server, but you may manage them by deleting one or several jobs.

Note: Do not store files on the desktop. This causes the system disk to fill up and disable the RIP.

The bottom status bar indicates the **Used** and **Free disk space** on both Printer and User disks.

| Printer Disk Free : 33.72GB Used : 0.16GB | User Disk Free : 3.91GB Used : 4.56GB |

Whenever the Printer disk reaches a predefined storage capacity threshold, the RIP / Gallop process is temporarily suspended and a system warning message appears. In this case, free disk space as explained below. The RIP process will be resumed automatically as soon as free disk space is available.

To free disk space:

1. Archive jobs.

    See *Archiving and Retrieving Jobs* on page 361.

2. Delete jobs until sufficient disk space is available.

    See *Deleting Jobs* on page 345.

Notes:

When a job is deleted, its related PDL files are also deleted.

The VI job elements are not deleted with the file, they need to be deleted in the Element Viewer window.

3. Format the Image disks periodically if the drives become fragmented in order to maintain enough space in the image drives.

Important: After three days of running and deleting VI jobs, it is recommended to run the three minute Format Image Disks procedure. This process removes any remaining file fragments and deletes all resident jobs in the **Storage Folder**.

To format the image disks:

1. Delete all jobs in the CXP6000 Color Server **Storage Folder**.

2. Exit the CXP6000 Color Server Application.

3. On your Windows desktop, click the **Start** button and follow the path: **CXP6000/CXP6000 Tools/Format Image Disks.**

4. Follow the on-screen prompts.

For more information on formatting image disks, see the *CXP6000 Color Server Installation Guide*.

Thumbnail Window

The Job Thumbnail window enables you to view a small image representation (thumbnail) of RTP jobs, to help you identify them before printing. It also indicates the job's title, the file type, the print range, the number of copies you have specified to print the job, the sequential number of the current displayed page, and additional details regarding imposition, paper stock and orientation. This enables you to view some of the job parameters while previewing the job.

After startup, the **Job Thumbnail** window is displayed.

To close the Job Thumbnail:
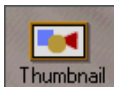
➢ Clear the **Job Thumbnail** selection in the **Job** menu.
Or:
Click the **Thumbnail** button on the **Pathways** panel.

To open the Thumbnail:

➢ From the **Job** menu select **Job Thumbnail**.
Or:
Click the **Thumbnail** button on the **Pathways** panel.
The Thumbnail window is displayed.

To use the Job Thumbnail window:

1. While the **Job Thumbnail** window is open, select an RTP job. The **Thumbnail** of the job is displayed.
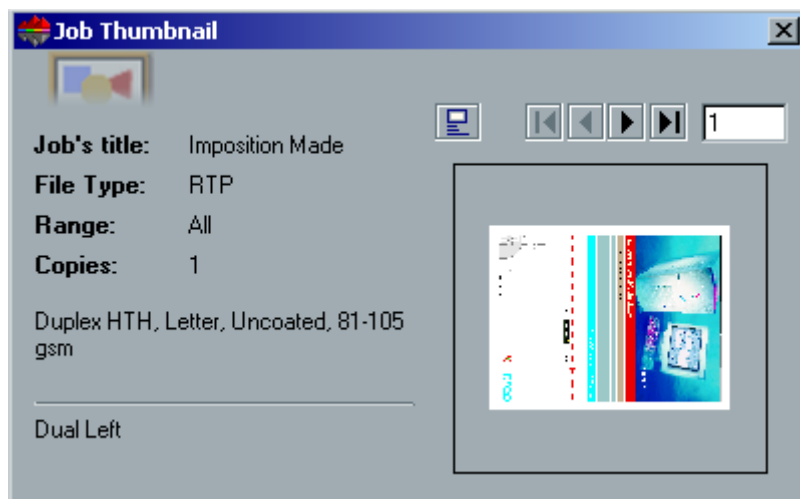
If you selected a non-RTP job, the thumbnail view is empty.
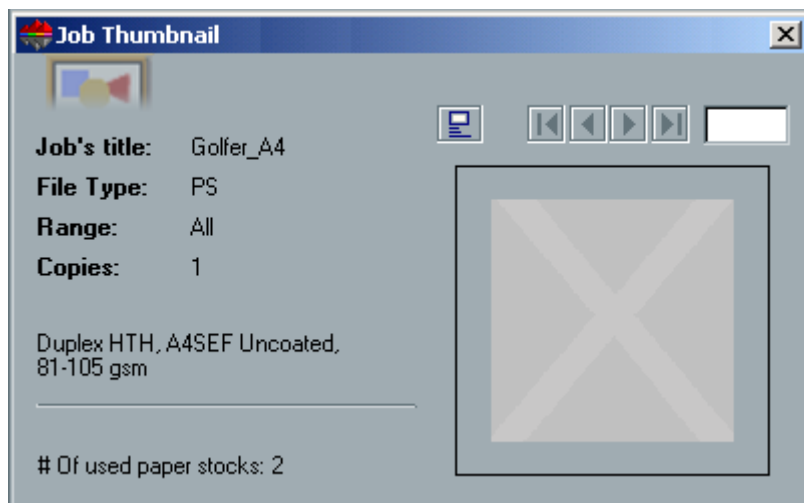
2. Use the navigation buttons to move to the first, last, next or previous page.
    Or:
    Type the required page number in the page box.
    The view area updates accordingly.

    Note: VI jobs only display static job elements.

3. If you would like to change the orientation of the Thumbnail window, click the **Display** button.
    The window orientation is changed.

    Job Thumbnail

    Job's title: Imposition Made

    File Type: RTP

    Range: All

    Copies: 1

    Duplex HTH, Letter, Uncoated, 81-105 gsm

    Dual Left
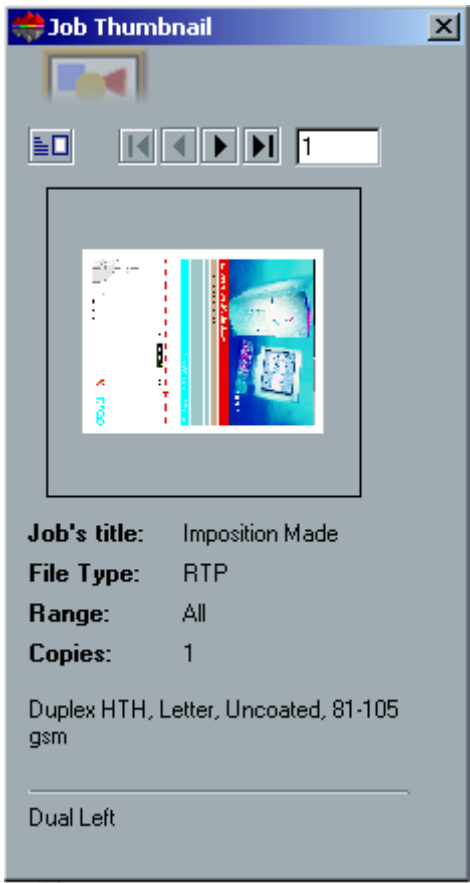
Job Preview & Editor

The **Job Preview & Editor** tool enables you to preview an RTP job for close inspection before printing. If required, you may also delete, move or add pages to a job using this tool. While you are navigating to the various pages of a job, you may view the job thumbnails, or, in case of an imposed job, you may 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 Folder**, and from the menu select **Job Preview&Editor**.
The Job Editor window appears, displaying the first page of the selected job.
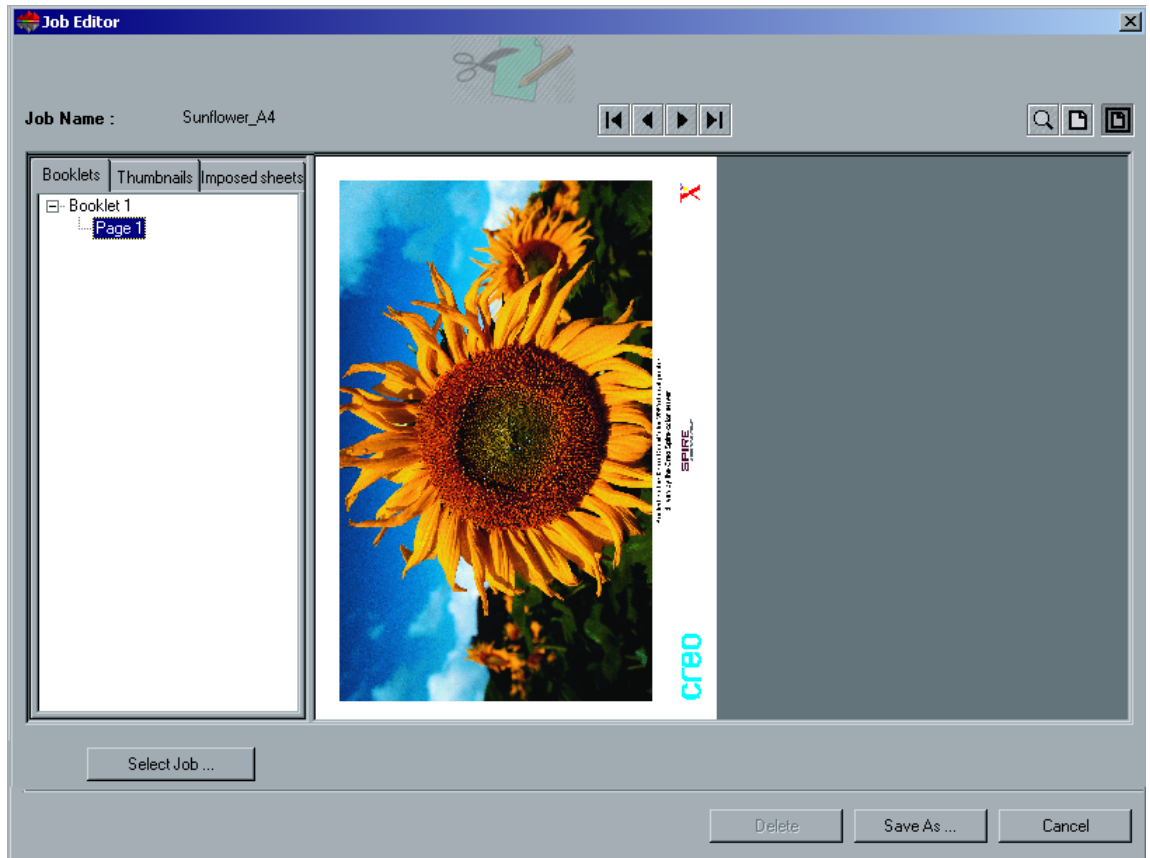
The Job Editor Tabs

The Job Editor tabs displayed on the left pane of the Job Editor window, enable you to switch between views:

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.

The following example displays the **Booklets** tab of a VI job that includes several booklets (each booklet represents a complete set of the job that contains the personalized information for that set).
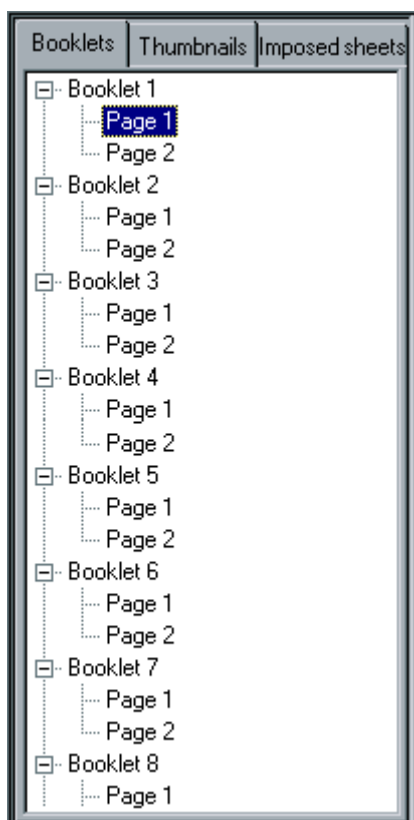
The Thumbnails tab

The **Thumbnails** tab displays the thumbnails of the selected booklet.

The following example shows the **Thumbnails** tab displaying a VI job that includes several booklets. The pages in each booklet are listed under the number of the booklet.

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.

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 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.
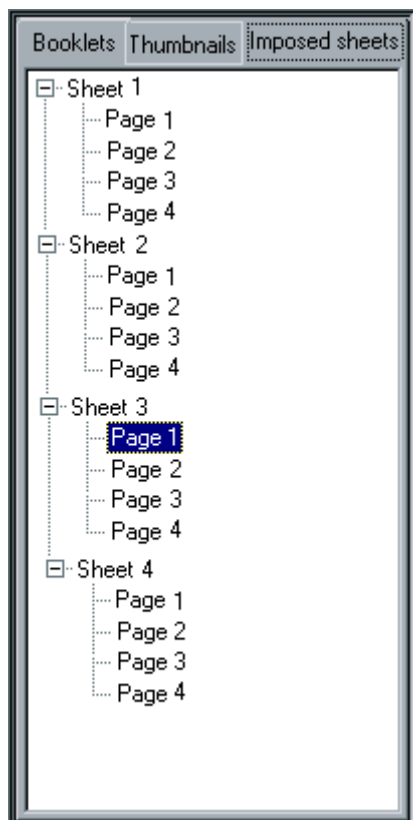
Notes:

In case of a VI job, the booklet number appears in addition to the page number. For example: Booklet 1 Page 15.

In case of a duplex job, each sheet is displayed twice, once for Side A, and once for Side B. For example: Sheet 1 Side A.

The Job Editor Buttons

The 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.

The 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 may 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

To display a page in booklets view:

➢ Double-click the name of a page on the **Booklets** tab. (for example, Page 2) to display it.
The page is displayed (and its number in the booklet list is highlighted).

.
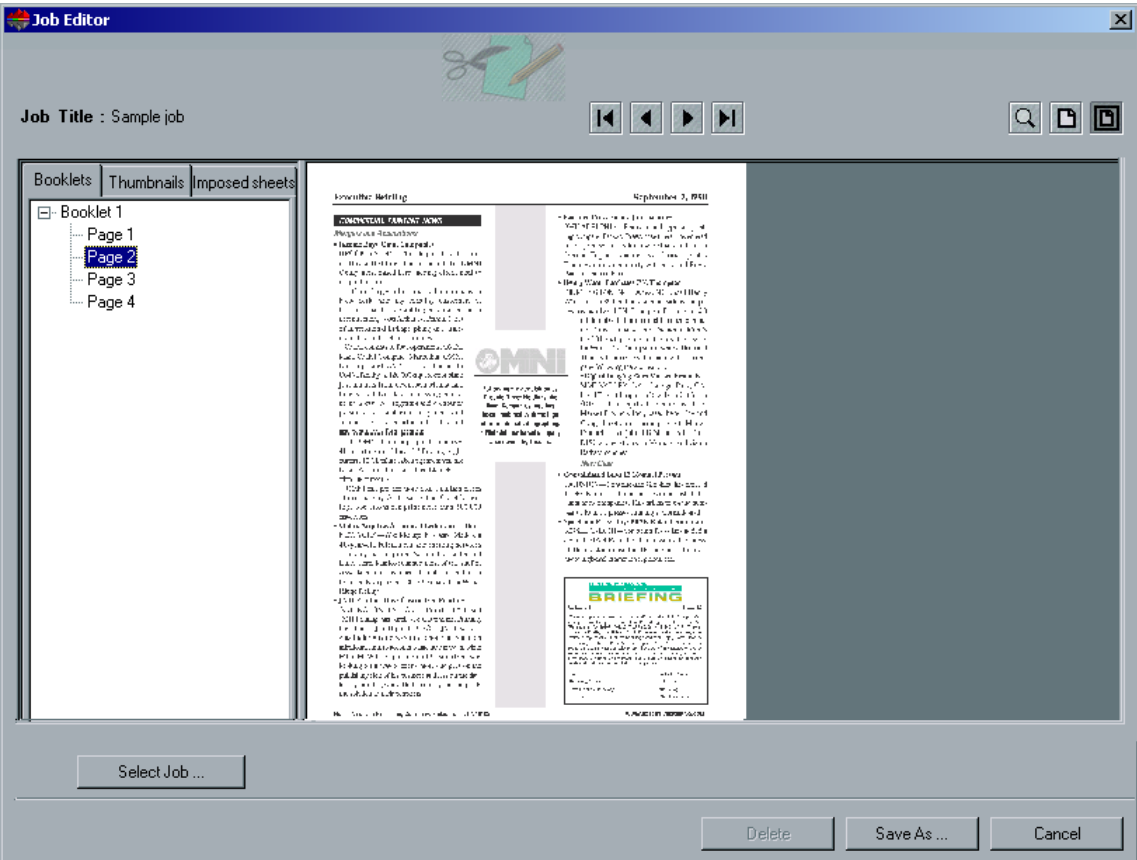
To display a job in thumbnails view:

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.
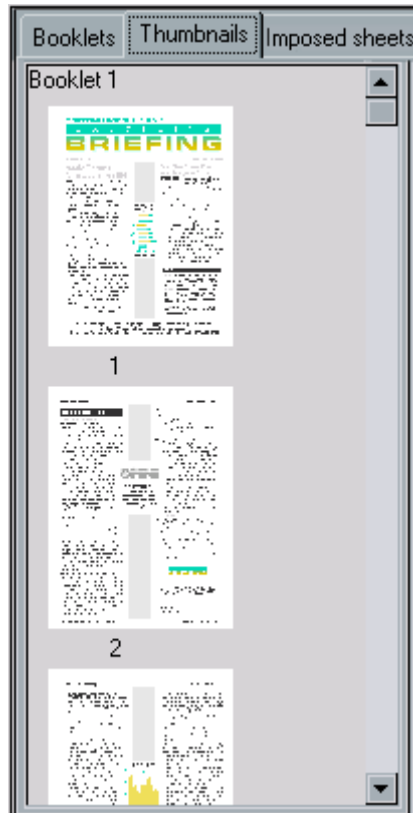
3. Use the vertical scroll bar to view additional thumbnails.

4. If required, resize the thumbnail area to view thumbnails side by side (you may then 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 (and the number below its thumbnail becomes highlighted).
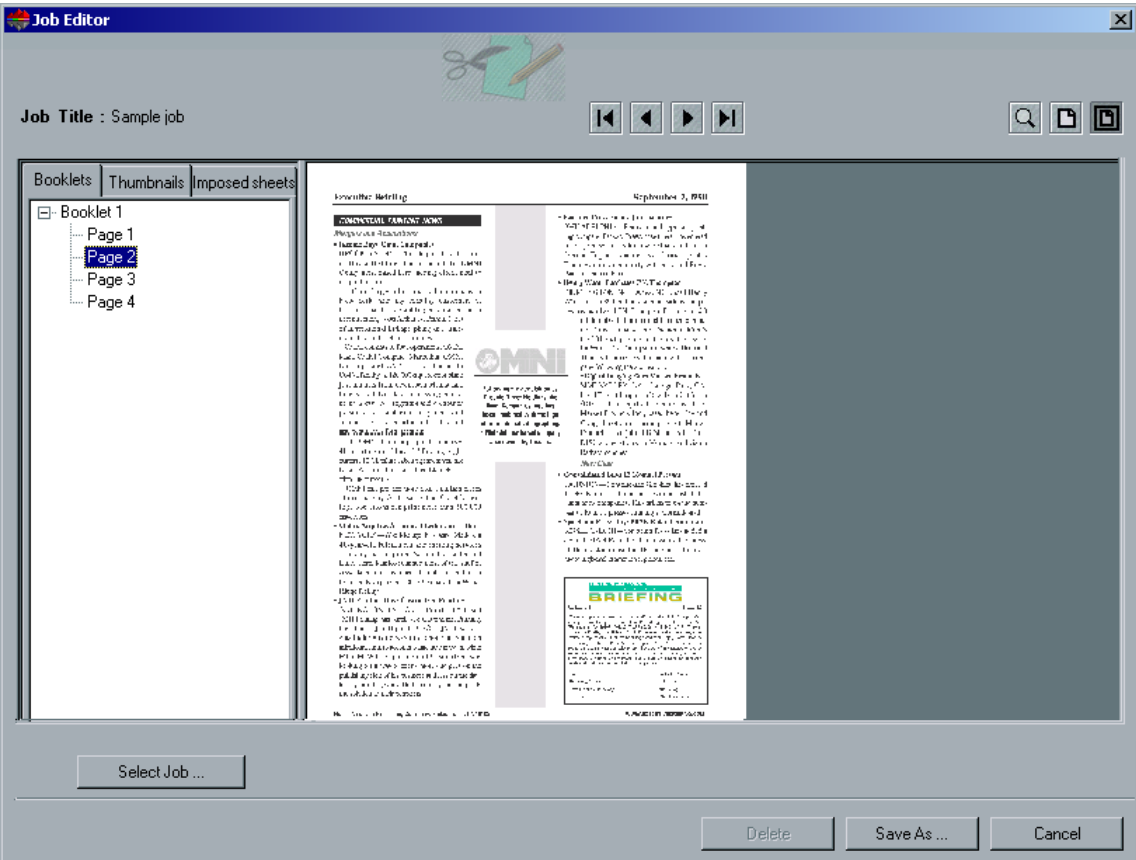
To display a job in the Imposed sheet view:

1. Select the **Thumbnails** or **Booklets** tab.

2. Select the required page / thumbnail.

3. Select the **Imposed sheets** tab.
   The imposed job appears.
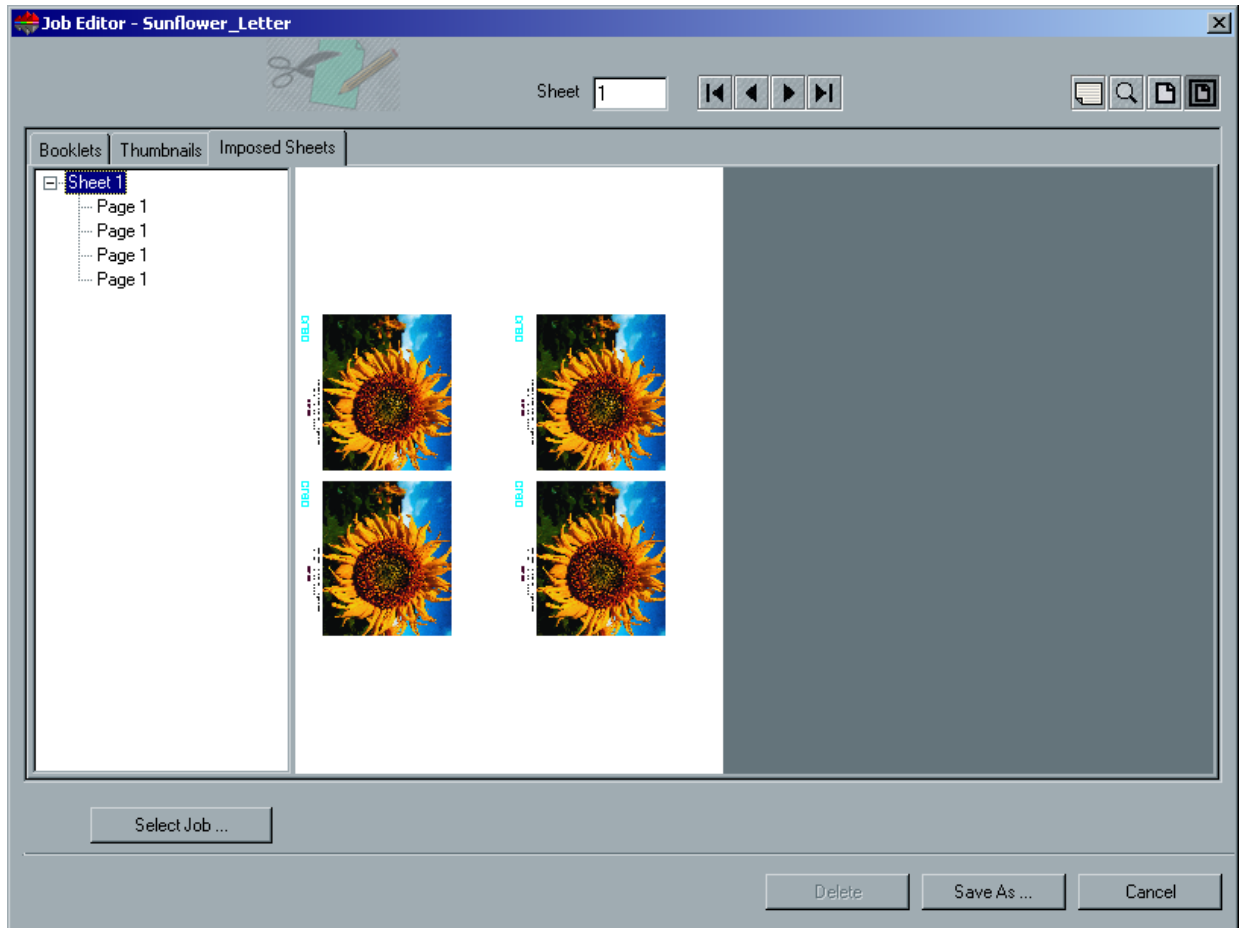
4. If you would like to view the imposition settings of the job, click the **Info** button.
    The related imposition information appears.
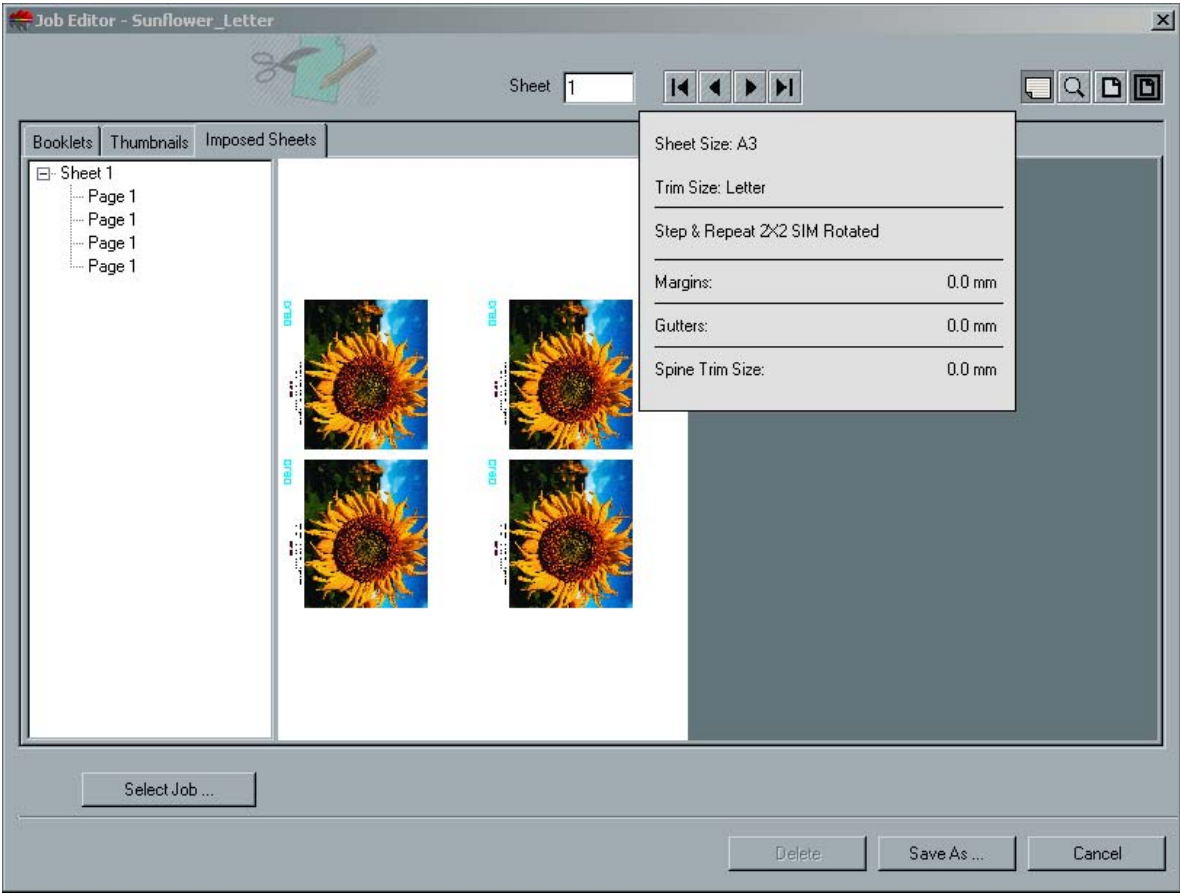
5. To close the imposition information, click the **Info** button again.

6. If you would like to edit the job, select the **Booklets** or **Thumbnails** tab and edit the job as required.

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.

See *Editing RTP Jobs* on page 381.

Editing RTP Jobs

You may perform the following:

- 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 may move a page to another location within the job (for example, switching the locations of pages 2 and 3).

To move pages within a job:

1. Click on the page you would like to move (for example, page #3).

2. Drag the page to a target location between two adjacent pages.

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

original order   new order
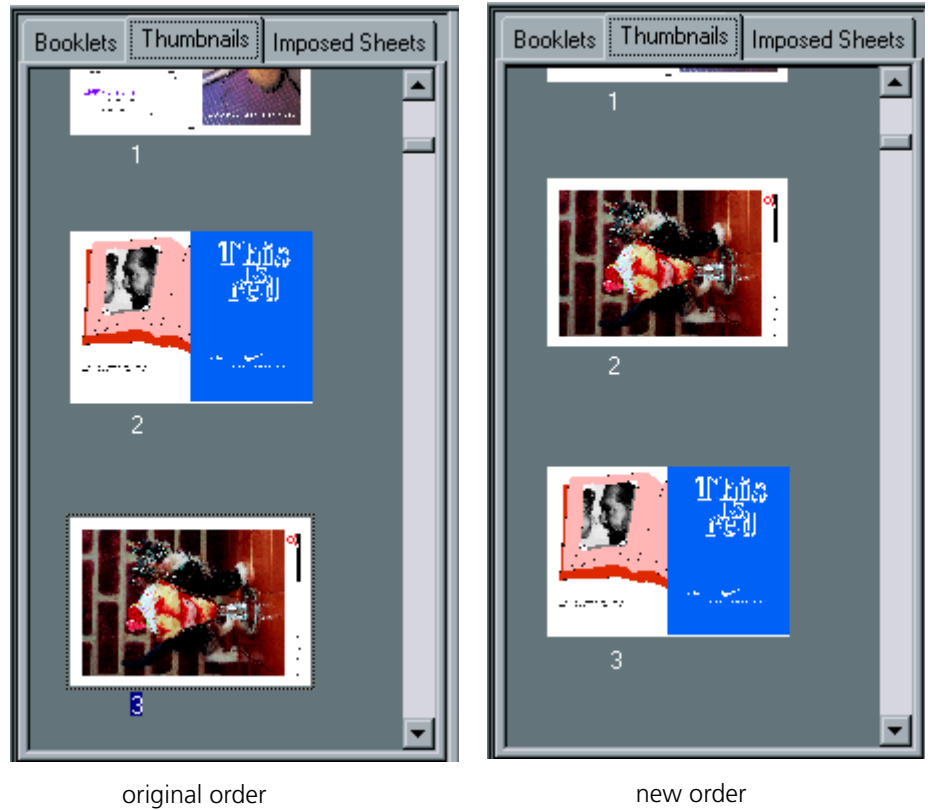
The moved page is inserted in the required location, and the page numbers update accordingly.

Deleting Pages from the Job

To delete a page from a job:
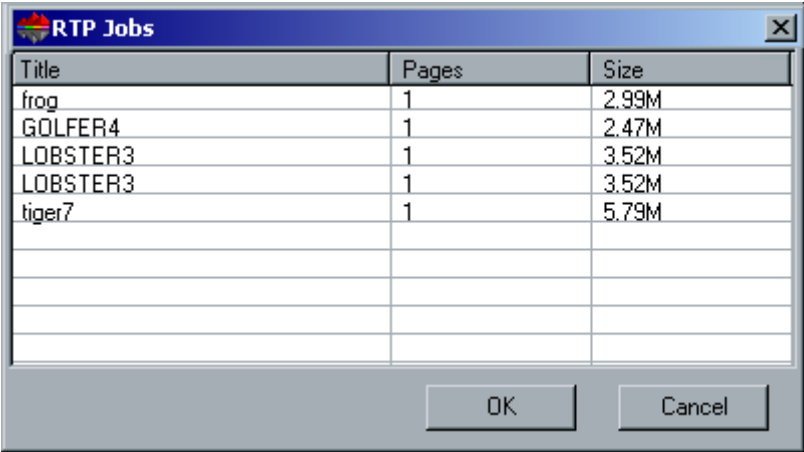
1. Click on the page you would like to delete.

2. Click the **Delete Page** button or press DEL.
    The page is deleted and the page numbers update accordingly.

Merging Jobs

You may copy a page from a job into the job to be edited or you may 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 the **Select Job** button.
   The RTP Jobs window appears.

Title	Pages	Size
frog	1	2.99M
GOLFER4	1	2.47M
LOBSTER3	1	3.52M
LOBSTER3	1	3.52M
tiger7	1	5.79M

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 with the job selected in step 1 from which you want to copy one or several pages.

4. Click **OK**.

job to be edited
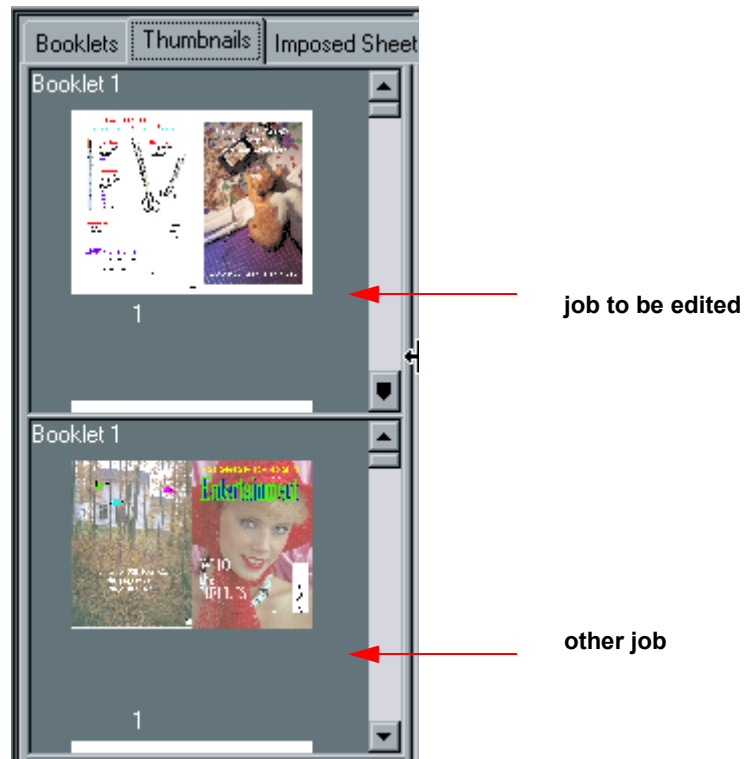
other job

The Thumbnails display area splits in two, and the thumbnails of the other job are displayed below those of the job to be edited.

5. Click the **Close Job** button to close the job in the lower **Thumbnails** pane.

Copying a page from a second job

Once the thumbnails of the second job are displayed, you may copy a page from this job and insert it into the first job.

To copy a page from the second job:

1. Select the page that you wish to copy (for example, page #2).
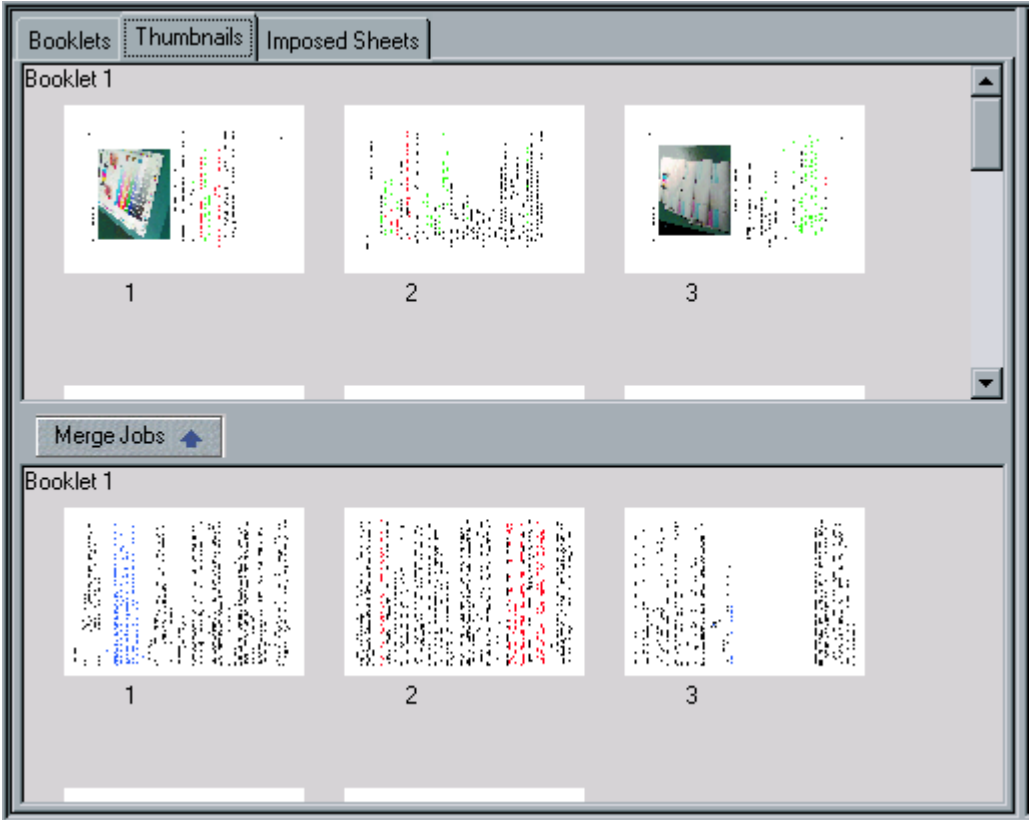
2. Drag the page to the required location in the first job to be edited.

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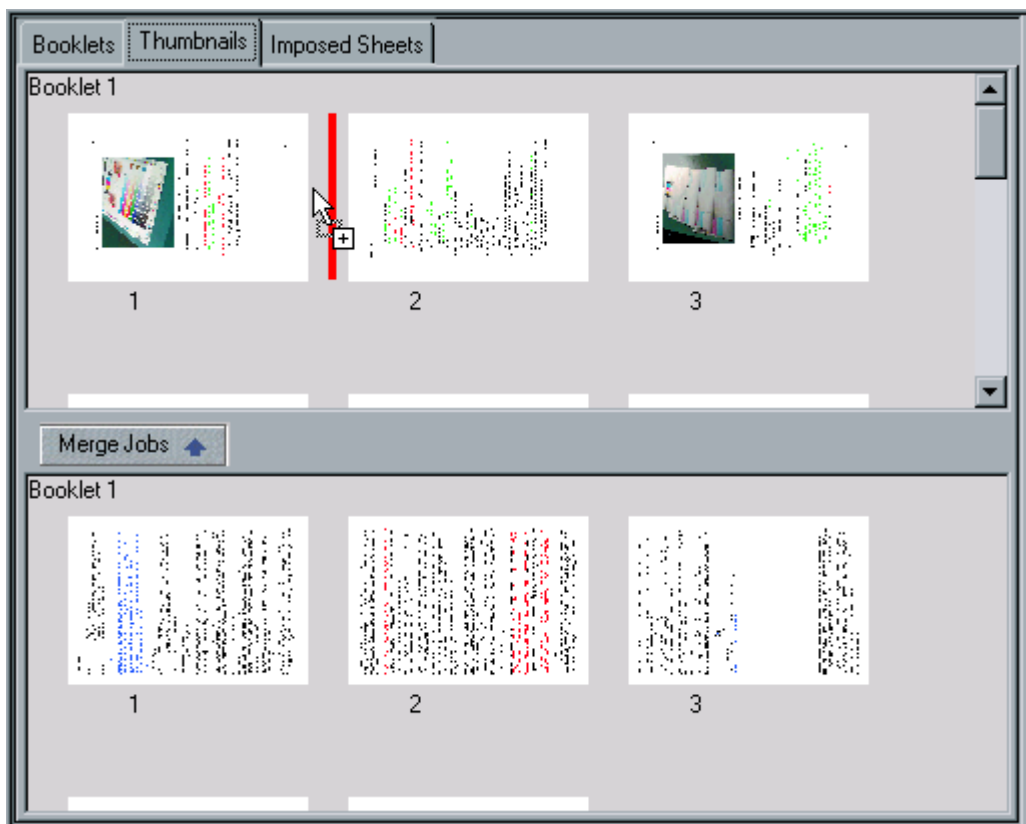
The copied page is inserted in the required location, and the page numbers update accordingly.

Copying all the pages of the other Job

If required, you may copy all pages of the second job and insert them after the pages of the first job.

To copy all the pages of the other job:

1. Once the thumbnails of the second job are displayed, click the **Merge Jobs** button.
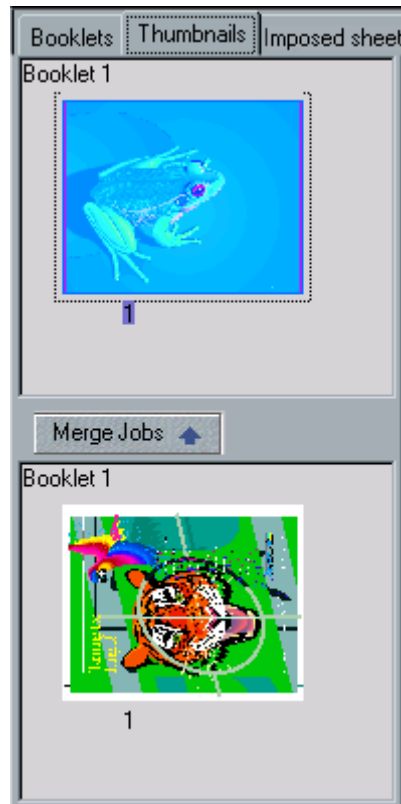
All the pages of the second job are inserted at the end of the first job.

2. Click the **Close Job** button to view the job to be edited only.
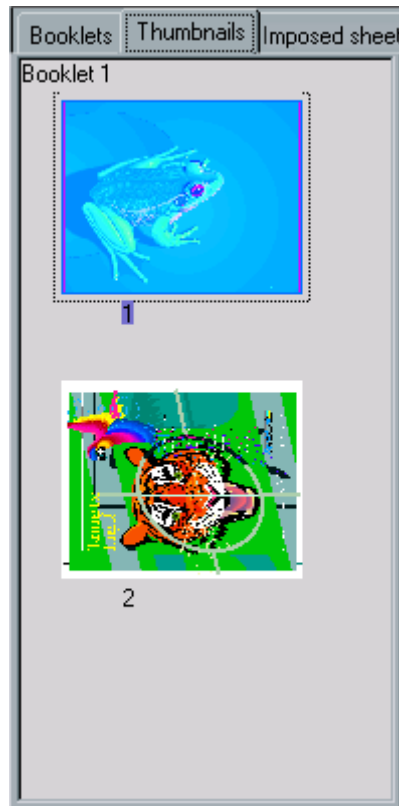
Saving the Edited Job

After editing an RTP job, you save the modified job.

To save an edited job:

1. Click the **Save As** button.
   The following window appears.
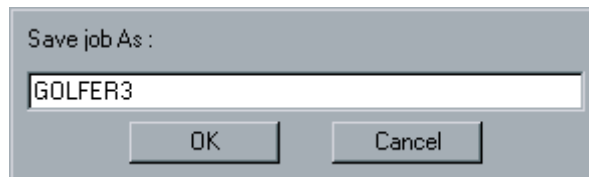
2. Type a new name for the job.
    Or:
    Leave the indicated name to overwrite the job.

3. Click **OK**.
    The file is saved in the **Storage Folder**, and the Job Editor window closes.

    Note: Jobs edited using Job Editor can not be re-RIPped. 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.

Previewing and Editing PDL Jobs

You may preview a PDL job to closely inspect it before processing.

To preview a PDL job:

1. In the **Storage Folder,** right-click a PDL job.

2. From the menu, select **Job Preview & Editor**.
   The file opens as a PDF in Adobe Acrobat.
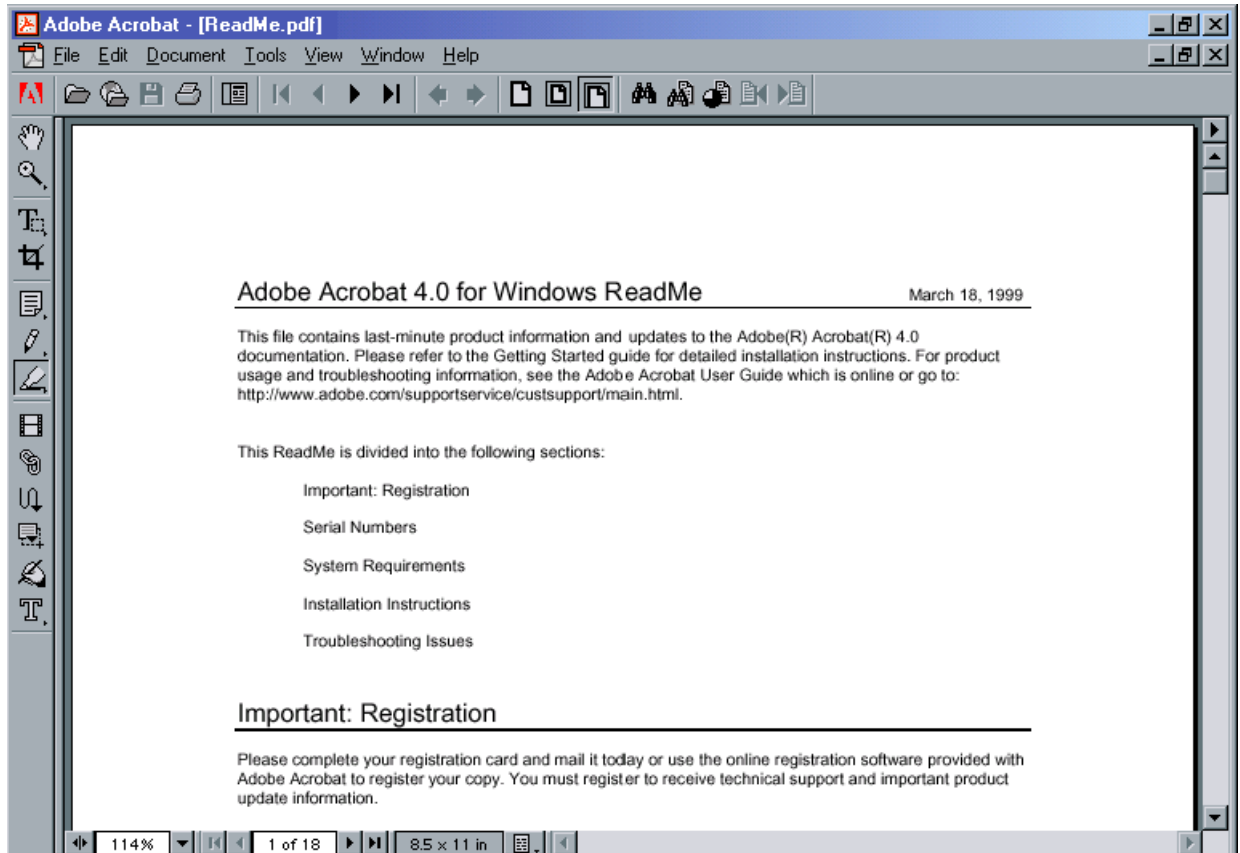
3. Modify the file as required.

4. Save the file and exit Adobe Acrobat.

   Note: The modified PDL is converted into a PDF that will require re-processing.

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System Messages

Overview

While jobs are being handled by the CXP6000 Color Server, various messages are emitted. You may 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

Any time the system emits an **Error** type message, the Alerts window appears, listing all the error messages that were generated during the workflow (the total number of messages is also indicated).

You may 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 313.

➢ From the **Tools** menu, select **Alerts**.
Or:
Click the **Alerts** button on the **Pathways** panel.
The Alerts window appears, listing all the **Error** messages that were generated during the workflow.

Alerts		✕
	Total number of messages: 8	

Date & Time	Message
Jul 19, 1:18:16 PM	Job <Face Gallery> in Queue <Print_Queue> requires the following resources: <UNCOAT_81-105gsm_W2970_H2100>
Jul 18, 10:24:52 PM	Cannot Restore <C:\lobster.cab>
Jul 18, 10:15:28 PM	Disk <C:> is full. Back-up and delete some jobs
Jul 18, 5:53:15 PM	Job <Face Gallery> in Queue <Print_Queue> requires the following resources: <UNCOAT_81-105gsm_W2970_H2100>
Jul 18, 5:12:26 PM	Job <Face Gallery> in Queue <Print_Queue> requires the following resources: <UNCOAT_81-105gsm_W2970_H2100>
Jul 18, 4:20:53 PM	Job <GOLFER1> in Queue <Print_Queue> requires the following resources: <UNCOAT_81-105gsm_W2970_H2100>
Jul 18, 4:20:16 PM	Job <Face Gallery> in Queue <Print_Queue> requires the following resources: <UNCOAT_81-105gsm_W2970_H2100>
Jul 18, 3:54:50 PM	Job <Face Gallery> in Queue <Print_Queue> requires the following resources: <UNCOAT_81-105gsm_W2970_H2100>

Clear All   Clear   Close

Note: By default, the list is sorted to show new messages 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:

1. Select the irrelevant message(s) and click the **Clear** button**.**
   Or:
   Click the **Clear All** button to remove all messages.

   Note: Cleared messages are not removed from the Message Viewer or related Job History windows.

2. Click the **Close** button to close the Alerts window.

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 further details on setting the system disks threshold see *System Disks* on page 312.

Job History

To view the job history:

➢ Right-click a job in the **Queue Manager** or in the **Storage Folder**, and from the menu select **Job History**.
Or:
Select a job and from the **Job** menu select **Job History**.
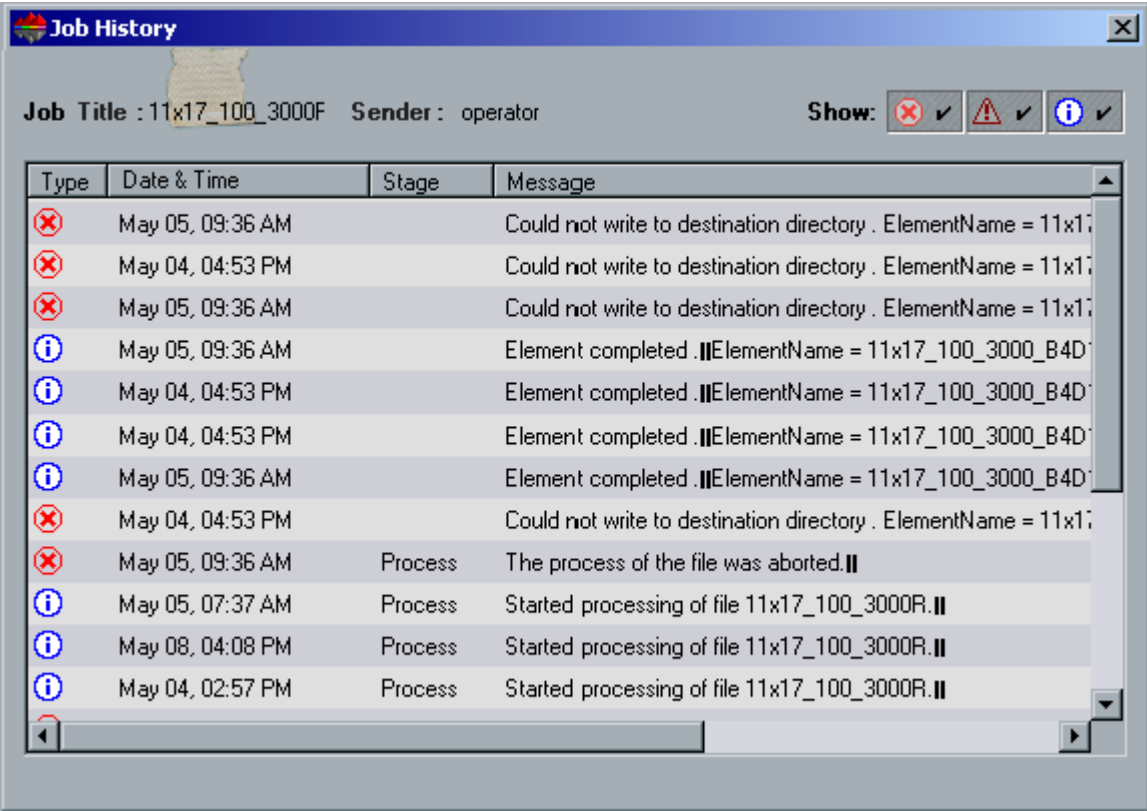The Job History window appears, listing all the messages that were generated during the workflow of the selected job.
The Job History window indicates the job title and the sender name (the user name of the system from which the job originated).

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.
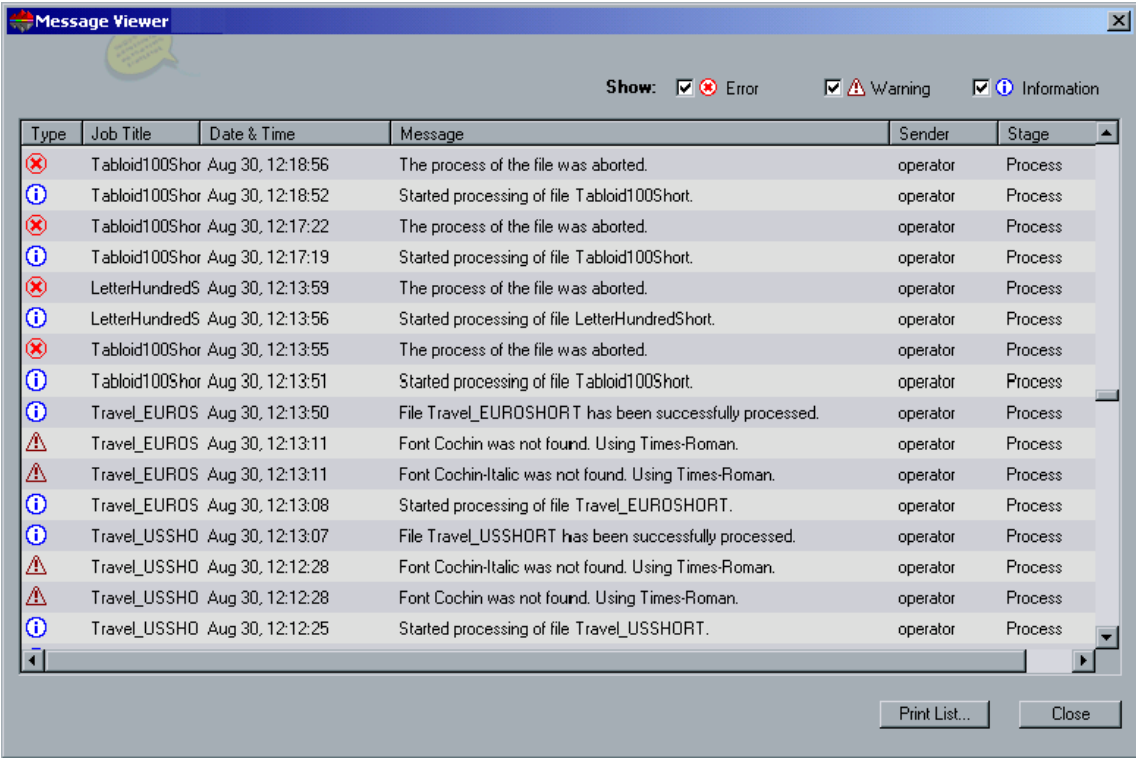
The Message Viewer

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.

To view messages related to a specific job, see *Job History* on page 396.

Type	Job Title	Date & Time	Message	Sender	Stage
⊗	Tabloid100Shor	Aug 30, 12:18:56	The process of the file was aborted.	operator	Process
ⓘ	Tabloid100Shor	Aug 30, 12:18:52	Started processing of file Tabloid100Short.	operator	Process
⊗	Tabloid100Shor	Aug 30, 12:17:22	The process of the file was aborted.	operator	Process
ⓘ	Tabloid100Shor	Aug 30, 12:17:19	Started processing of file Tabloid100Short.	operator	Process
⊗	LetterHundredS	Aug 30, 12:13:59	The process of the file was aborted.	operator	Process
ⓘ	LetterHundredS	Aug 30, 12:13:56	Started processing of file LetterHundredShort.	operator	Process
⊗	Tabloid100Shor	Aug 30, 12:13:55	The process of the file was aborted.	operator	Process
ⓘ	Tabloid100Shor	Aug 30, 12:13:51	Started processing of file Tabloid100Short.	operator	Process
ⓘ	Travel_EUROS	Aug 30, 12:13:50	File Travel_EUROSHORT has been successfully processed.	operator	Process
⚠	Travel_EUROS	Aug 30, 12:13:11	Font Cochin was not found. Using Times-Roman.	operator	Process
⚠	Travel_EUROS	Aug 30, 12:13:11	Font Cochin-Italic was not found. Using Times-Roman.	operator	Process
ⓘ	Travel_EUROS	Aug 30, 12:13:08	Started processing of file Travel_EUROSHORT.	operator	Process
ⓘ	Travel_USSHO	Aug 30, 12:13:07	File Travel_USSHORT has been successfully processed.	operator	Process
⚠	Travel_USSHO	Aug 30, 12:12:28	Font Cochin-Italic was not found. Using Times-Roman.	operator	Process
⚠	Travel_USSHO	Aug 30, 12:12:28	Font Cochin was not found. Using Times-Roman.	operator	Process
ⓘ	Travel_USSHO	Aug 30, 12:12:25	Started processing of file Travel_USSHORT.	operator	Process

Message Viewer — Show: ☑ ⊗ Error   ☑ ⚠ Warning   ☑ ⓘ Information

Print List...   Close

By default, all the jobs that were handled during the last 3 months (90
days) are listed.

The default may be changed in the Administration window under
Preferences. For further details see *Accounting/Message Viewer Log
Setup* on page 311.

Managing Messages

You may 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.

Reordering Columns

If required, you may change the current order of the columns.

To change the order of the columns:

➢ Click the cursor on a column (for example, **Stage**) and without releasing the mouse button, drag the column to the left or to the right to the required location (for example, place the **Stage** column after the **Date/Time** column).

Resizing Columns

If required, you may resize columns (or even minimize columns so they are not viewed at all).

To change the size of the columns:

1. Click the cursor on the right border of the required column (for example, **Sender**).
   The cursor switches shape.

2. Drag the cursor to the right to enlarge the size of the column, or to the left to decrease (or to minimize the column so it will not be viewed at all).

3. To bring the column back into view, drag the cursor to the right.

Filtering the Messages by Type

Each message in the Message Viewer and Job History windows is assigned one of the following types / icon.

By default, all message types are listed in the Message Viewer (check marks appear next to the icons).

Note: The check mark emphasizes that messages of this type, appear in the list. If all the buttons are cleared from default selection, no messages are listed.

You may filter the list in order to view only messages of certain types. Click any message type button (for example, **Error**) to remove the check mark, in order not to list such messages.

The list updates accordingly (in the example below, **Error** messages are not listed).
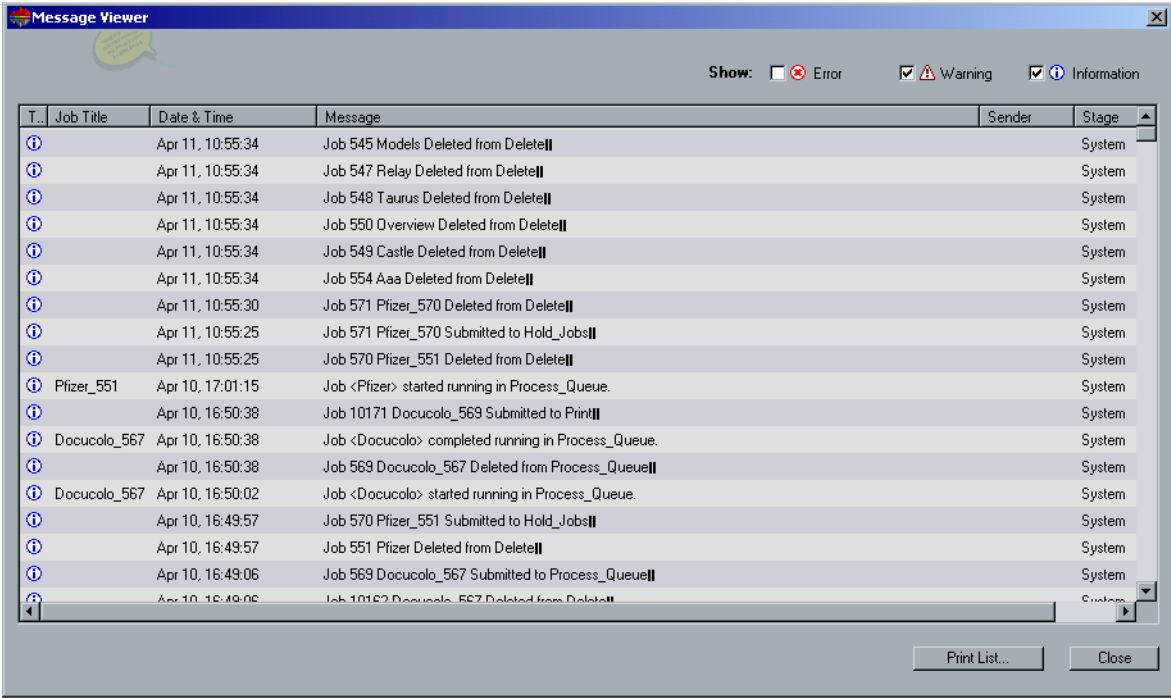
Sorting the Message List

By default, the list is sorted by the date at which the messages were created (in descending order).

To sort the list by one of its column headers:

1. Click the required header once.

2. Click again to switch the order.

Printing the Message List

You may 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 the **Print List** button.
    The Print window is displayed.
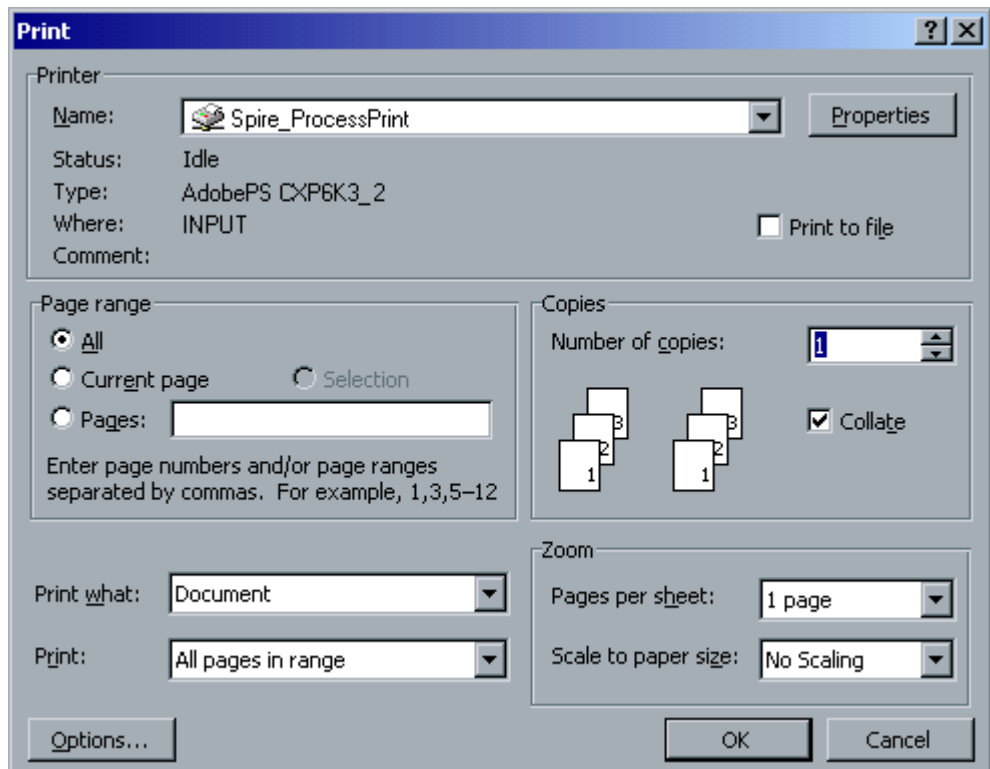
3. Set the printing options as required and click **OK**.

Pop-up messages

Pop-up messages appear during normal operations with the CXP6000 Color Server. These messages may appear to confirm an action (for example, upon changing an imposition method), warn of a lack of printer resources (for example, if a specific paper stock is missing), or warn of a possible problem with a procedure.

The following are examples of pop-up messages.
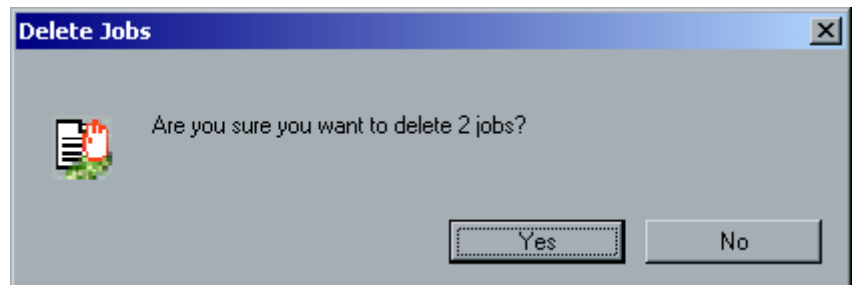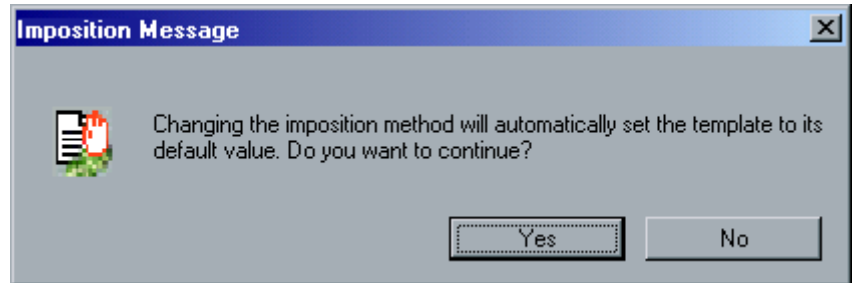
When a pop-up message appears:

1. Read the pop-up message.

2. Take action as requested by the pop-up message (for example, confirm a procedure or replace printer resources).

3. Continue with normal CXP6000 Color Server operations.

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Job Accounting

Handling Job Accounting

To enable billing, the Accounting feature offers information related to all the jobs that printed successfully via the 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

To view the accounting information:

➢ At any stage of work, from the **Tools** menu select **Accounting**.
The Account Viewer window appears, listing information related to all the jobs that printed successfully via the CXP6000 Color Server.

Job Title	Sender	Submitted	Started Printing	Process...	Printing ...	Job Size	Paper Size	Sets
4ofir	operator	Oct 20, 15:17:31	Oct 20, 17:43:38	00:45	01:25	147.64 M	A3	1
Enc_Tour_Job	operator	Oct 20, 15:17:37	Oct 20, 17:41:57	00:19	01:40	18.93 M	Letter	1
creotest	operator	Oct 20, 15:50:48	Oct 20, 17:41:56	00:04	01:16	18.9 M	Letter	1
Enc_Corporate	operator	Oct 20, 15:17:36	Oct 20, 17:41:55	00:09	00:58	18.61 M	Letter	1
PalmPilot_Job_4	operator	Oct 20, 15:17:34	Oct 20, 17:35:10	00:37	06:08	41.24 M	Letter	1
Xerox_Car_Print_All	operator	Oct 20, 15:17:35	Oct 20, 17:33:19	01:58	07:16	91.11 M	A3	1
Tour big images	operator	Oct 20, 15:17:35	Oct 20, 17:32:19	01:59	06:37	146.66 M	A3	1
MovieScreening_4.01	operator	Oct 20, 15:17:34	Oct 20, 17:32:18	00:08	04:47	9.42 M	A3	1
512pages	operator	Oct 20, 15:17:33	Oct 20, 17:32:08	00:53	03:50	105.79 M	A3	1
ClubCard_Print_All4.0	operator	Oct 20, 15:17:33	Oct 20, 17:32:06	03:02	03:03	11.16 M	A3	1
Zeneca_REP_10	operator	Oct 20, 15:17:35	Oct 20, 17:32:01	02:38	02:00	40.57 M	A3	1
Books4U_Print_All_4.0	operator	Oct 20, 15:17:32	Oct 20, 17:27:56	02:11	04:05	15.73 M	A3	1
Memo Style4	Guest	Oct 20, 10:41:44	Oct 20, 10:43:14	00:03	01:11	3.62 M	A4	1
Backroads_lan_Print_All_	operator	Oct 17, 19:09:18	Oct 17, 19:32:06	00:14	00:48	306.96 M	A3	1
sample_Girls	operator	Oct 17, 18:47:25	Oct 17, 19:01:03	00:19	02:46	63.15 M	A3	1
Backroads_lan_Print_All	operator	Oct 17, 18:06:28	Oct 17, 19:00:10	09:11	01:58	879.77 M	A3	1
SpireSamples	operator	Oct 16, 15:49:23	Oct 17, 18:57:53	00:52	02:16	573.68 M	Letter	1
I_04_1_a	operator	Oct 17, 18:39:54	Oct 17, 18:52:50	07:02	04:45	627.26 M	A3	5

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 Administration window, under **Preferences**, you may specify how long information remains before being overwritten. In addition, you may remove all the information from the window whenever required.

The columns indicate the following information.

Job Title	The original name of the file related to this job (that is, without the extension).
Sender	The user name of the system from which this job originated.
Submitted	The date and time the job was first submitted into the CXP6000 Color Server.
Started Printing	The date and time on which the job first started printing.
Processing Time	The total time during which the job was processed.
Printing Time	The total time during which the job was printed.
Job Size	The job size in MB.
Paper Size	The size of the media set for the job (for example, Letter, A3, A4).
Paper Weight	The paper weight in gs/m.
Coating	The paper stock coating status (Coated or Uncoated).
Sets	The actual number of printed copies.
Job B/W Pages	The number of black-and-white pages in the original PDL file.

Job Color Pages	The number of color pages in the original PDL file.
Total Pages Printed	The number of pages that were printed.
Purged B/W	The number of B/W pages that were already in the paper path, and were cleared due to job abort, or paper jam.
Purged Color	The number of color pages that were already in the paper path, and were cleared due to job abort, or paper jam.
Page Exceptions	The existence of exceptions in the job (Yes/ No).
Account	[optional] A string of text, if such was entered in Job Parameters.
Recipient	[optional] A string of text, if such was entered in Job Parameters.
Job Comments	[optional] A string of text, if such was entered in Job Parameters.

Managing the Accounting Information

Reordering Columns

If required, you may change the current order of the columns. The following figure shows the default order (that is, **Sender** followed by **Submitted**).

Job Title	Sender	Submitted
Ilan_12	Operator	Mar. 22, 08:47 PM
tiger_11	Operator	Mar. 22, 05:18 PM
tiger_4	Operator	Mar. 22, 05:18 PM
QPS_ALL_157	Operator	Mar. 22, 04:05 PM
AAABROCH_152	Operator	Mar. 22, 04:02 PM
TRAVEL_151	Operator	Mar. 22, 04:02 PM
OVERVIEW_150	Operator	Mar. 22, 04:02 PM
NU07P65_149	Operator	Mar. 22, 04:01 PM
C3_AUOI_148	Operator	Mar. 22, 04:01 PM
C2_A_147	Operator	Mar. 22, 04:01 PM

To reorder the columns:

➢ Click the cursor on a column (for example, **Sender**) and, without releasing the mouse button, drag the column to the required location (for example, to place the Sender column after the **Submitted** column).

Job Title	Submitted	Sender
Ilan_12	Mar. 22, 08:47 PM	Operator
tiger_11	Mar. 22, 05:18 PM	Operator
tiger_4	Mar. 22, 05:18 PM	Operator
QPS_ALL_157	Mar. 22, 04:05 PM	Operator
AAABROCH_152	Mar. 22, 04:02 PM	Operator
TRAVEL_151	Mar. 22, 04:02 PM	Operator
OVERVIEW_150	Mar. 22, 04:02 PM	Operator
NU07P65_149	Mar. 22, 04:01 PM	Operator
C3_AUOI_148	Mar. 22, 04:01 PM	Operator
C2_A_147	Mar. 22, 04:01 PM	Operator

Resizing Columns

If required, you may resize columns (or even minimize columns to hide them altogether).

To resize columns:

1. Click the cursor on the right border of the required column (for example, Submitted). The cursor switches shape.

Job Title	Sender	Submitted	Started Printing
Hppy Birthday__499	Operator	Mar. 27, 01:35 PM	Mar. 27, 01:36 PM
POOLHALL_493	Operator	Mar. 27, 01:17 PM	Mar. 27, 01:29 PM
C7_RELAY_489	Operator	Mar. 27, 01:09 PM	Mar. 27, 01:10 PM
SPOTS1_89	Operator	Mar. 26, 01:00 PM	Mar. 26, 01:27 PM
QPS_ALL1_88	Operator	Mar. 26, 00:59 PM	Mar. 26, 01:24 PM
NR01QX34_87	Operator	Mar. 26, 00:59 PM	Mar. 26, 01:21 PM
CATALOG_86	Operator	Mar. 26, 00:58 PM	Mar. 26, 01:14 PM

2. Drag the cursor to the right to enlarge the size of the column, or to the left to decrease (or to minimize the column to hide it altogether. To retrieve the column, drag the cursor to the right).
   The following figure shows the list after hiding the Submitted column.

Job Title	Sender	Started Printing
Hppy Birthday__499	Operator	Mar. 27, 01:36 PM
POOLHALL_493	Operator	Mar. 27, 01:29 PM
C7_RELAY_489	Operator	Mar. 27, 01:10 PM
SPOTS1_89	Operator	Mar. 26, 01:27 PM
QPS_ALL1_88	Operator	Mar. 26, 01:24 PM
NR01QX34_87	Operator	Mar. 26, 01:21 PM
CATALOG_86	Operator	Mar. 26, 01:14 PM

3. To re-display a hidden column, place the cursor on the location of its original left border and drag to the right until the full column is re-displayed.

Filtering the Information by Date

By default, the information that was gathered in the past three months is displayed. You may filter the list to show all the information gathered, or only information that was gathered within specific dates.

To filter the list:

1. In the Accounting Viewer window, select the **From** option.

2. Click the arrow to the right of the **From** or **To** date box.

3. Select the required date from the calendar that appears.
   The list updates accordingly.
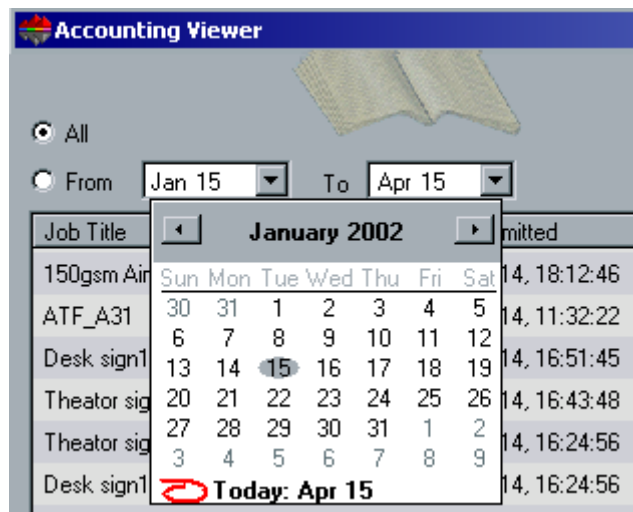
Sorting the Information

By default, the list is sorted by the date the jobs were submitted (the latest dates appear first).

Job Title	Sender	Submitted	Started Printing	
Hppy Birthday__499	Operator	Mar. 27, 01:35 PM	Mar. 27, 01:36 PM	
POOLHALL_493	Operator	Mar. 27, 01:17 PM	Mar. 27, 01:29 PM	
C7_RELAY_489	Operator	Mar. 27, 01:09 PM	Mar. 27, 01:10 PM	
SPOTS1_89	Operator	Mar. 26, 01:00 PM	Mar. 26, 01:27 PM	
QPS_ALL1_88	Operator	Mar. 26, 00:59 PM	Mar. 26, 01:24 PM	
NR01QX34_87	Operator	Mar. 26, 00:59 PM	Mar. 26, 01:21 PM	
CATALOG_86	Operator	Mar. 26, 00:58 PM	Mar. 26, 01:14 PM	
CACTUS_85	Operator	Mar. 26, 00:58 PM	Mar. 26, 01:08 PM	
C9TOMATO1_84	Operator	Mar. 26, 00:58 PM	Mar. 26, 01:07 PM	
AAABROCH1_83	Operator	Mar. 26, 00:58 PM	Mar. 26, 01:05 PM	
TRAVEL1_82	Operator	Mar. 26, 00:57 PM	Mar. 26, 01:02 PM	
C2_A1_78	Operator	Mar. 26, 00:57 PM	Mar. 26, 00:58 PM	
TAURUS1_77	Operator	Mar. 26, 00:38 PM	Mar. 26, 00:49 PM	
DOCUCOLO1_74	Operator	Mar. 26, 00:36 PM	Mar. 26, 00:41 PM	
C7_RELAY2_72	Operator	Mar. 26, 00:35 PM	Mar. 26, 00:37 PM	
TAURUS1_71	Operator	Mar. 26, 00:08 PM	Mar. 26, 00:18 PM	

You may reverse the order or sort the information in the report by another information column.

To sort using a different column:

1. Click another column header (for example, **Sender**) to sort the list by that column (in ascending order).

2. Click the column header again to sort by descending order.

   Note: Depending on the type of information, the sorting is alphabetical or numerical.

Accounting / Message Viewer Log Setup

By default, all the jobs that were handled during the past 90 days are listed in the CXP6000 Color Server Accounting window. Also, all jobs that were handled during the past 56 days are listed in the CXP6000 Color Server Message Viewer. You may specify how long information remains before being overwritten.

To change the Accounting / Message Viewer log setup, see *Accounting/Message Viewer Log Setup* on page 311.

Exporting the Accounting Report

You may save the Accounting information to an ASCII Tab delimited file.

To export the accounting information:

1. Filter the information as required.

2. Click the **Export** button.
   The Export Accounting window appears.
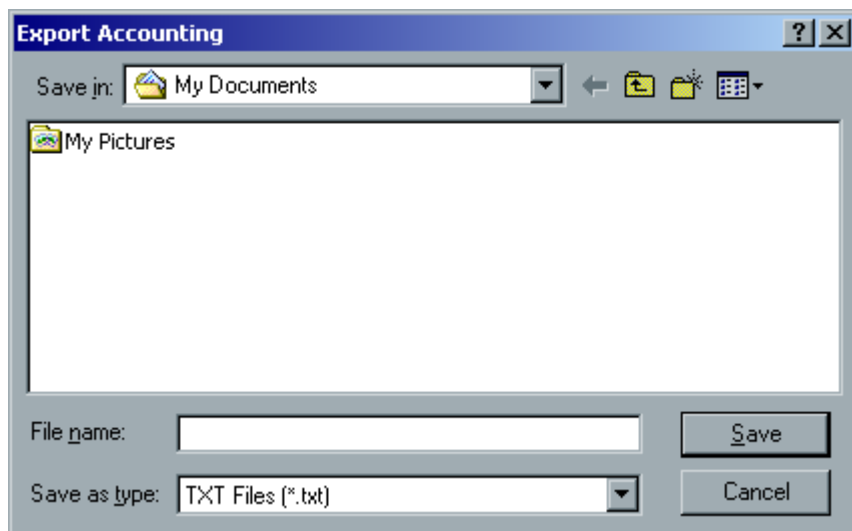
3. Browse to the location in which to save the report.

4. Click **OK**.
   The report is saved as a Tab delimited text file in the specified location.

   Notes:

   The report 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 report will include only these rows.

   The exported data is not deleted from the Accounting report on the 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.

Printing the Accounting Report

You may print the Accounting information (filtered and sorted) to any connected printer.

To print the accounting report:

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 the **Print List** button.

The Print window appears.
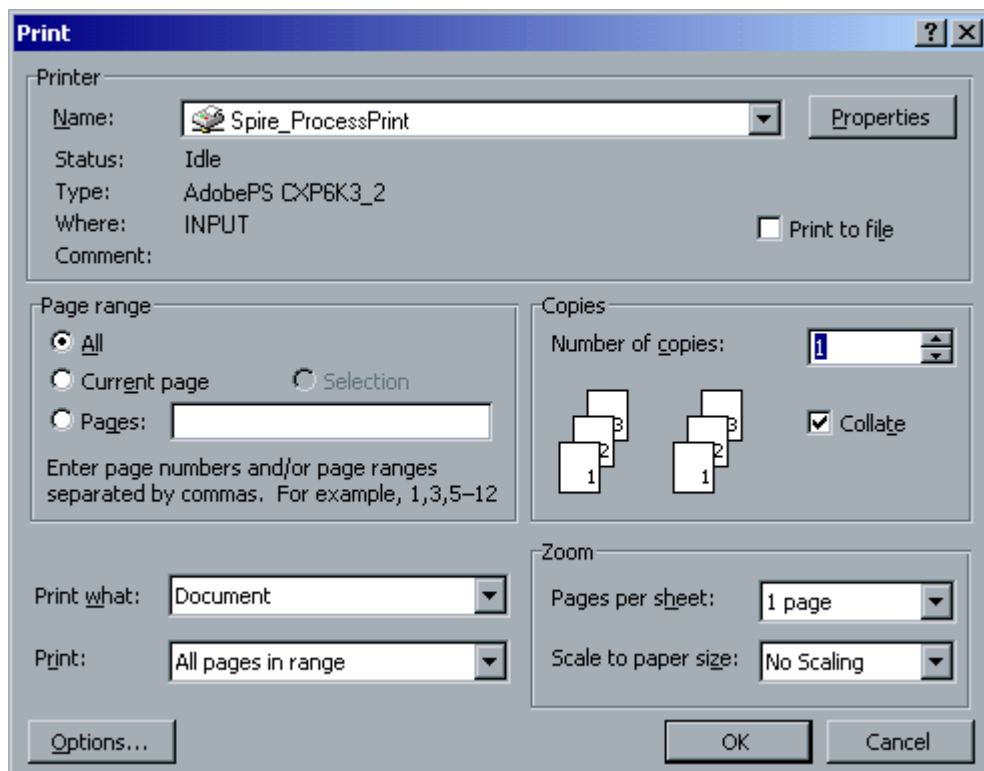
3. From the Printer **Name** list, select the required printer.

4. Set the printing options as required and click **OK.**
   The data is printed according to the current filtering and sorting.

Notes:

To fit as many columns as possible onto 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.

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A   Color Theory

Color Theory

Color is a visual sensation involving light, an object, the human eye and the brain. Each person perceives color differently due to their eyes ability to see colors correctly, and their own societal and emotional backgrounds. Thus colors will be seen differently due to physiological and psychological differences.

To learn about the process of color reproduction, it is necessary to understand basic color theory and concepts of light.

Light

Light is a form of energy that includes radio waves, x-rays, ultraviolet and infrared light. The human eye is sensitive to a range of this energy between the ultra violet and the infrared called the Visible Spectrum.
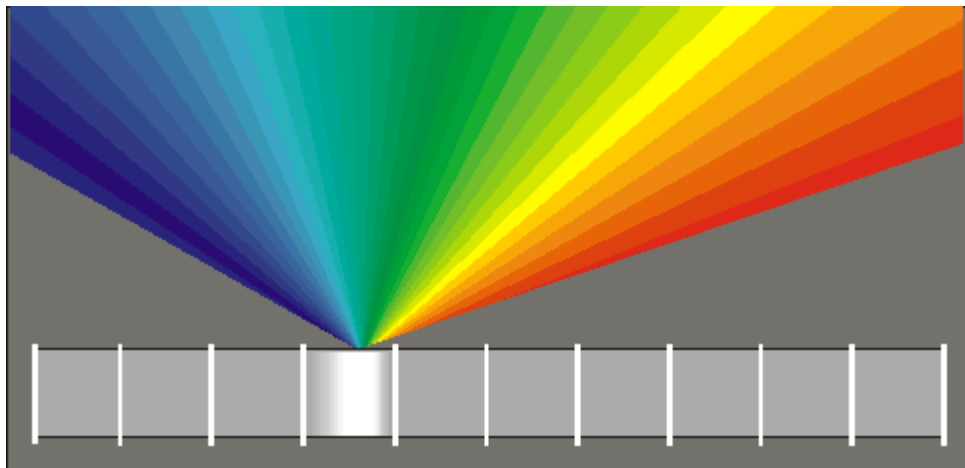
The colors in the Visible Spectrum can be described by their wavelength. The spectrum is measured in nanometers (nm): a nanometer is a billionth of a meter. Technically, visible light ranges from approximately 380nm to 760nm. However, the human eye is relatively insensitive to light below 400 nm and longer than 700 nm.

Visible Spectrum

The visible light spectrum can be broken into three predominant bands of color. These bands are red, green and blue and are called the primary colors of light.
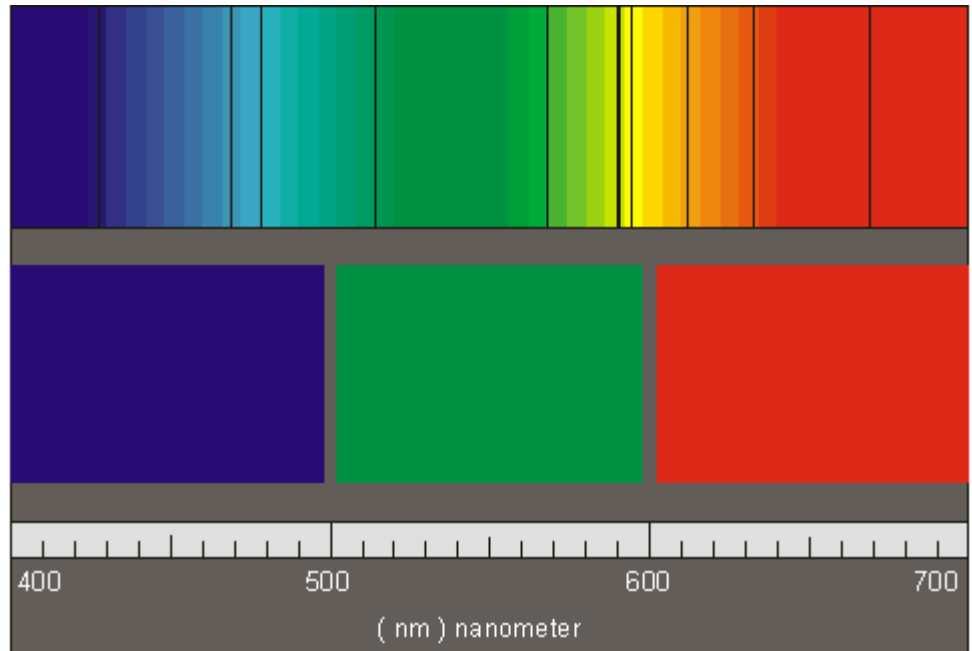
Light Behavior

The way that light waves travel depends on the objects they come in contact with. Light waves can be reflected, absorbed, or they can be transmitted through an object.

How light waves react will be determined by the object they hit. Colors which are reflected, absorbed or transmitted determine the color of the object.

The Perception, Physiology and Psychology of Color

Color as a Sensation

Seeing color is a sensation, like hearing or taste. There is no absolute color that is inherently seen the same way by every person. Nor is every person's vision the same.

Everyone will agree that ripe tomatoes are red (in season). However, a group of people probably won't agree on which tomato is the reddest, or how a group of tomatoes should be ranked in terms of their redness. Beyond the physiological factors that impact our vision, there are psychological factors as well.

How the Eye Sees Color

The retina, which is considered to be part of the brain, is a complex nerve structure containing light-sensitive receptors that are responsible for translating incoming light into nerve impulses. Because of their physical appearance, these receptors are known as rods and cones.

From the retina, the information from the rods and cones travels along the optic nerve to the brain. What the brain sees is the experience of the viewer and the condition of the rods and cones on his retina. There are three types of cones, generally referred to as red, green and blue sensitive cones. If some of these cones are defective, or missing, the viewer's interpretation of some colors will be affected, and color blindness may result.

Rods help us see at night time or at low levels of light. The rods cannot detect color, only varying levels of black, gray, and white.

Other Factors Affecting How The Eye Sees Color

There are a number of other circumstantial and environmental factors, which impact how the eye perceives light and color. They include:

- Color Temperature (Light Intensity)
- Metamerism
- Surrounding Color

Color Temperature

The intensity of the surrounding light changes the perceived color of any object.

Color temperature is a way of measuring the intensity of light radiating from a light source and a measure of the relative intensity of all wavelengths in the visible spectrum. It is measured by comparison to a specific metal contained in a black box and heated to a specific temperature. The unit used to measure color temperature is Kelvins.

Light Source	Color Temperature (Kelvins)
Clear blue sky	12,000 to 27,000
Overcast sky	7,000
Daylight fluorescent lamp	6,500
Blue flash lamp	6,000
White flame carbon arc	5,000
Sunlight	4,300 to 6,500
Clear flash lamp	3,600
Gas filled tungsten	3,200 to 2,865
Tungsten lamp	2,400 to 2,700

The standard color temperature for viewing color reproductions is 5,000 Kelvins. Viewing booths suitable for evaluating color must be set to this standard to ensure correct lighting conditions.

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.

Surrounding Color

The color surrounding an object can affect how the actual color of the object is perceived. If a green circle is surrounded by light green, it will appear lighter than if it is surrounded by dark blue.

Circle surrounded by Blue   **Circle surrounded by Green**   **Original Circle**
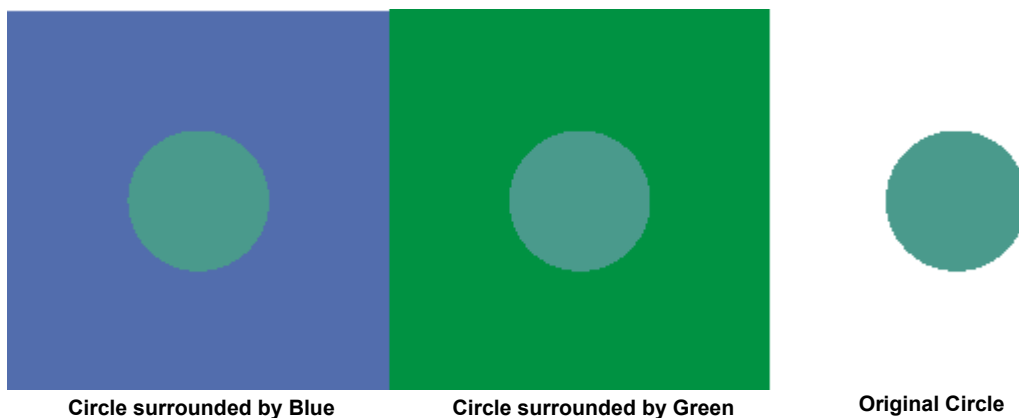
Additive Color

White Light

White light is the sum of Red, Green, and Blue light. This is known as additive color. When equal parts of each of the primary colors are added together, white light is created.

The absence of all three colors will produce Black.

When two primary colors of light are added together, a secondary color, brighter than either of its components, is created. Note the following combinations:

Figure 1: Red + Green = Yellow

Figure 2: Red + Blue = Magenta

Figure 3: Blue + Green = Cyan

Combining Red, Green, and Blue in unequal proportions makes new colors. The proportions themselves will determine the color. From these three colors, the entire visual spectrum can be created.

Additive color involves the manipulation of a light source or multiple light sources to control color. A television monitor, for example, uses additive color.

Red, Green and Blue inks cannot be used for full color reproduction, however, since the objective of such color reproduction is to control Red, Green and Blue light. Printing Red, Green and Blue is therefore controlled by printing with Cyan, Magenta, Yellow and Black.

Subtractive Color

Printed color begins with white paper illuminated by white light. All the color and all the light we can see in the image must first exist in the illuminated paper. Take away the light, or print on black paper (with transparent inks) and you will see nothing.

To build a color image, all we can do is selectively subtract some of the light.

When we print with a Red ink, we see it as Red because it absorbs Blue and Green light and reflects only Red. In other words, red ink absorbs or subtracts two thirds of the visible spectrum and reflects one third. The same can be said for Blue and Green. They each absorb two thirds of the visible spectrum and reflect one third.

The effect of overprinting any equal combination of two of these colors is to absorb all three components of light and produce Black.

Start	Color 1	Color 2	Color 3
White	Red	Green	Black
RGB	-G-B	-R-B	-R-G-B
White	Green	Blue	Black
RGB	-R-B	-R-G	-R-G-B
White	Blue	Red	Black
RGB	-R-G	-G-B	-R-G-B
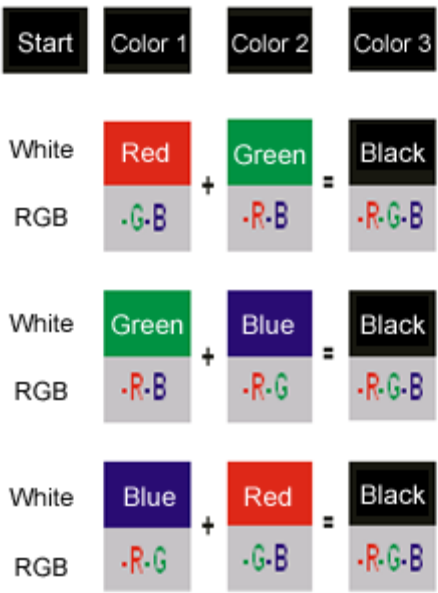
In the printing process we use colored inks that each reflect not one third, but two thirds of the visible spectrum. These special inks correspond to the secondary colors of light; namely Cyan, Magenta, and Yellow.

Since each color absorbs one third of the visible spectrum, it takes all three inks to make Black. Overprinting any two of these colors will produce Red, Green, or Blue.
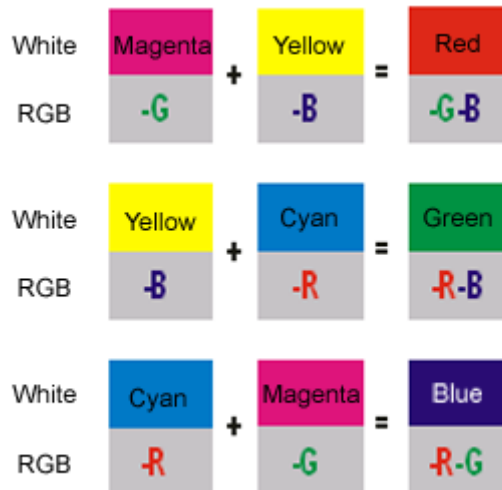
By overprinting selected amounts of Cyan, Magenta, and Yellow, the widest range of colors within the limitations of paper and ink can be achieved.

Pigments

Most of the colors we see in the world can be reproduced using dyes or pigments. When applied to color reproduction, subtractive color also deals with pigments and filtering.

Pigments must be incorporated into a binder to be attached to the substrate, as in a paint film attached to the wall of a house. As in paints, xerographic pigments are substances that possess different sensitivities to light. These sensitivities have the ability to absorb only portions of white light while reflecting back others.

The combination of the lights action on the pigment in an object, combined with how the eye reacts to the reflected light, determines how the color of the object is perceived.

Color Reproduction

In color reproduction, pigmented transparent inks (Cyan, Magenta, and Yellow) are used for printing. These inks are called process colors. A transparent printing ink is made to absorb one component of white light and transmit the other two. Hence, the term transparent. The paper, or substrate, then reflects the transmitted colors back to the eye.
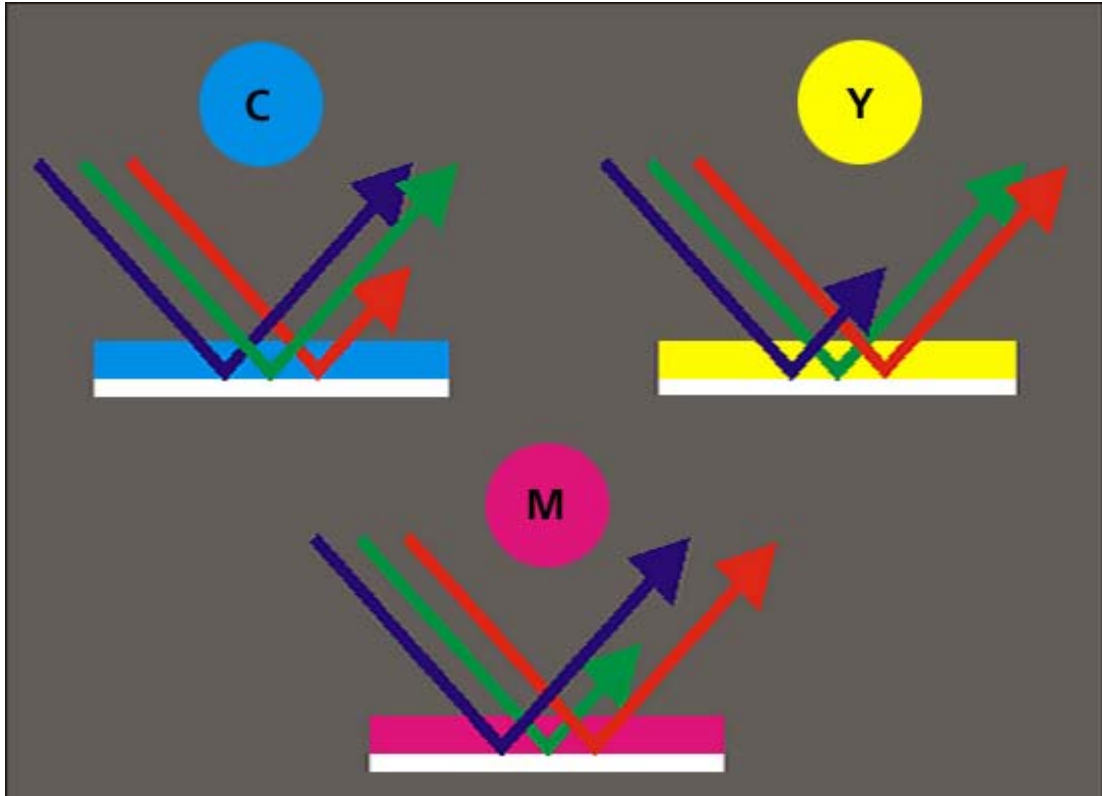
Cyan ink absorbs only Red light, so it appears Blue-Green. Magenta ink absorbs only Green light and appears Bluish-Red. Yellow ink absorbs Blue light.

Inks as Filters

It is important to note that inks act like color filters. A filter transmits its own color and absorbs the rest. Since the inks are transparent, it is the paper that reflects back the colored light minus the components that the inks filter out.

Color Absorption and Reflection

In theory, when each of the process colors - Cyan, Magenta, and Yellow - are overprinted, absorbing all the visible light reflected from the paper, the result is Black.

In reality, solid layers of all three printing inks do not absorb all the available light and a Brown color is produced. This is because of impurities in process inks. Cyan ink not only absorbs Red as it should, but also absorbs some Green and Blue light.

The Magenta ink should absorb only Green light. It also absorbs some Blue and Red. Yellow ink is nearly ideal.
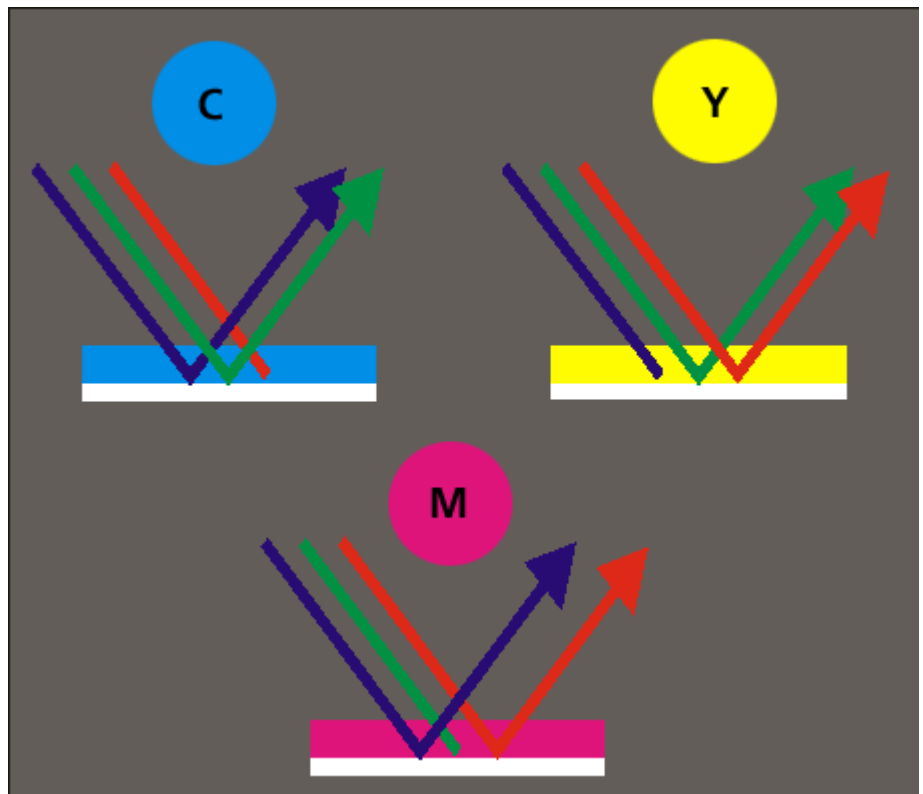
To overcome this problem, Black ink is also used. When Black ink is added to the reproduction, it will add detail and enhance contrast, making the dark areas appear darker and the light areas appear lighter.

Color Separation

The process of translating a color photograph or transparency into its Cyan, Magenta, Yellow and Black components is called color separation.

The principle of color separation is similar in both photographic and electronic scanning processes. Each process utilizes the concepts of additive and subtractive color for filtering the individual components of white light.

The photographic process consists of illuminating the original copy with white light and then separating it into three images by placing Red, Green, Blue filters in between the copy and the film.

- A Red filter is used to generate the Cyan separation.
- A Green filter is used to generate the Magenta separation.
- A Blue filter is used to generate the Yellow separation.

The Black separation is made from a combination of the other three colors.
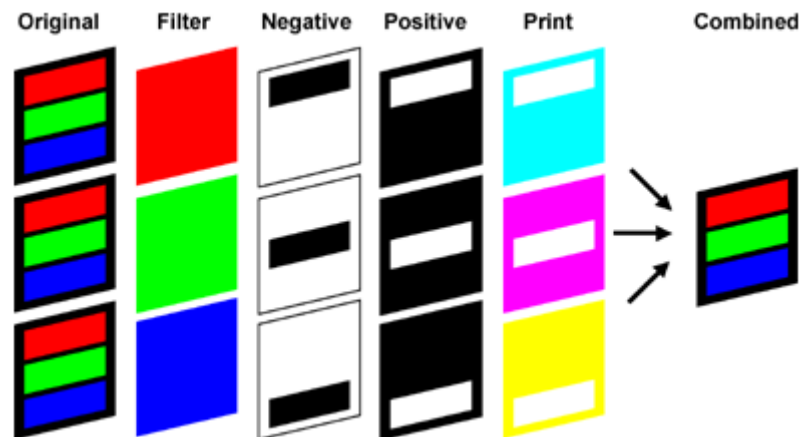
Photographic Separation

When light passes through the Red filter, it exposes all areas of the negative film (converting them to Black) where the Red component of the White light appears in the copy.

The negative film is then converted into a positive film. Since positive is the reversal of a negative, the black portions of the positive film now correspond to the areas in the image where Red is absent. The positive film, therefore, becomes the Cyan separation since Cyan is the absence of Red.

This same procedure is used to produce the Magenta and Yellow separation films.

CMYK

The printing industry generally refers to the four process color separations as CMYK where:

- C is for Cyan.
- M is for Magenta.
- Y is for Yellow.
- K is used for Black, to distinguish it from Blue.

However, Creo sometimes uses CMYB where black is designated by the letter "B". In the image assembly process, one of the four separation films is used as a master or "key" to which the other three separations are placed in register. Traditionally, the "key" color is black. This is why the letter "K" is used for black.

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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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