Splash G630
User Guide

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	EN 61000-4-3 Radiated Immunity: 3V/m, 80% AM, 1KHz Tone
	EN 61000-4-4 Electrical Fast Transient Burst
	EN 61000-4-6 Conducted Immunity: 3 V/rms, 80% modulation
	EN 61000-4-8 Magnetic Immunity
	EN 61000-4-11 Voltage Dips and interruptions

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Introduction

The Splash G630 Color Server is a complete color printing system for use on an Apple Power Macintosh platform. The G630 is fast, powerful, and accurate and is the ideal solution for printing color critical proofs and high-quality short runs. The Splash G630 Color Server is a FedEC-certified proofing system that is a benchmark for the graphic arts industry.

This *User Guide* describes how to set up the Splash G630 Color Server and install and use Splash client software on Macintosh and Windows-based computers. Splash client software enables a Macintosh- or Windows-based computer to send print jobs across an appropriate network to the Splash server, which processes the jobs and sends them to the printer. If you are unfamiliar with your platform's procedures for printing or integrating printers within the network environment (Windows 2000/NT, AppleTalk, Unix, and Novell), please refer to the manufacturer's documentation before attempting to use the Splash server.

Product Features

- **ColorTuner** quickly and easily makes color changes to any document (a single page or the entire document) at the server without having to reopen and edit the original file in the original application. Color changes can be made globally (RGB or CMYK) by adjusting either the overall intensity of a specific color or the highlights, midtones, or shadows. Direct color substitution mode will change the selected color for a single page of a document or the entire document to a new color. Smoothed color substitution changes all occurrences of a single color to another color, allowing the user to tweak the dominant color in an image.
- **Set Builder** selects individual jobs and/or documents and prints them as a single set. Production features can be applied including Copies, Collate, Duplex, Staple, Rotate, Face up, Output bin, and Reverse order.
- **Secure Access** enables the Splash server administrator to limit who is allowed to print to the server. It requires the client to enter a user ID, password, and account number or any combination of these fields, prior to sending a job to the server.
- **Splash Imposition** creates imposed documents from the print driver, PPD, or Job Option window at the server.
- **Spot Color Editor** provides the ability to edit the value output for any spot color. Spot colors may also be created and deleted. In addition, users can revert all spot colors to the original factory values.
- **Expanded imageable areas** are supported for 12x18 and SRA3 paper sizes.
- **Hot Folders/Hot Download Folders** enables the download of graphics files directly from the Macintosh client workstation to the Splash server, using specified job print options.
- **TIFF-IT 8.8 Support** adds spot color support to TIFF-IT P1, in addition to CMYK only.
- **Composite Spotproof** is an exclusive Splash feature which simulates Pantone (including the newer 147 colors in both composite and separations), Toyo, DIC, and HKS spot color matching systems. Spot tints (less than 100% of a specific spot color) can also be printed accurately since they are calculated from the actual spot color and are not a CMYK processed color.
- **Splash Intellicolor** allows the printing of documents that contain mixed RGB format (TIFF, EPS) elements and mixed color space (CMYK, RGB, spot) elements without any complex and time-consuming adjustments. The Splash server is the first PostScript server to separately color-correct RGB and CMYK formats within the same file.
- **Continual Print** automatically processes and prints most files at copier rated speeds. Complex jobs with large bitmaps on each page may not print at engine speed.
- **CopyCal** creates color profiles that enable the printer to simulate the color output of any other color printer.

- **Acquire without Photoshop** enables images to be easily scanned at the Splash server without the requirement of additional applications, such as Adobe Photoshop.
- **Two-up Imposition** imposes two letter/A4 pages on a single tabloid/12x18 or A3/SR3 page. The second image is rotated to create a straight edge for binding. Two-up Imposition is compatible with all job and page options except for Staple. When Two-up Imposition is selected, the setting for the Staple option is ignored. The default setting is Off.
- **Drag and Drop from Server Queues** supports dragging copies of spool files from the server queues to the Mac desktop.
- **GCR Preserving Profile** retains the original Gray Component Replacement (GCR) values of the original file. This creates better quality prints that represent more accurately the output of a press by replacing all neutral color areas with an appropriate amount of black, using only the minimum amount of cyan, magenta, and yellow. This option only affects color matching with new style 4D profiles. Old style profiles are automatically GCR preserving.
- **Auto Grayscale** overrides the color gray specified in the RGB color space with true single-pass black (using K colorant of CMYK) printing. This produces a true looking gray versus a "muddy" look of a CMY gray. This option works with both 1D and 4D CMYK profiles.
- **Internet or Intranet Web Print Queue Manager** enables remote clients on any computer platform to view and control print jobs at the Splash server. Requires a TCP/IP connection to the Splash server and Netscape Navigator 4 or later, or Microsoft Internet Explorer 4 or later web browser.
- **Mirror Image** printing flips pages about the vertical axis to reverse the images. This is perfect for transfer applications such as T-shirt transfers and window decals.
- **Profile Creator** supplies high-quality ICC CMYK profiles through a target which can be measured by using a spectrophotometer (not provided by Splash). This feature is appropriate for highly accurate profile creation required for prepress and press environments.
- **System ConfigurationReport** enables the system administrator to view all system parameters in a multipage report.
- **Thumbnails** can preview images of all pages of a document on the Splash server interface.
- **Translated server components** in Brazilian Portuguese, French, Italian, German, and Spanish are included with the Splash server.

Registration Card

To receive software upgrade notifications for your Splash server, complete the pre-addressed Splash server registration card and mail it to Electronics for Imaging, Inc.

Documentation

The online documentation on your Splash server computer offers information regarding the Splash G630 Color Server. For more information about the printer, refer to the manufacturer's documentation.

Chapter 1: Getting Started

What Connects Where

The Splash G630 Color Server does *not* require a qualified technician to unpack, assemble, and connect the hardware and software.

Setting Up the G630 Color Server

To set up your Splash G630 Color Server:

1. Open the G630 box.

2. Remove the sectioned cardboard tray containing the connection cables, power cords, Splash USB key, printed materials, mouse pad, and software CDs.

3. Connect one end of the printer cable to the printer. Connect the other end of the cable to the Splash G630 Color Server board located in the back of the Apple Macintosh computer.

4. Connect one end of the scan cable to the printer. Connect the other end of the cable to the Splash G630 Color Server board located in the back of the Apple Macintosh computer.

Note! *The Splash server supports scanning capability with the DC 12 CP, and calibration via an external scanner with the DC 12 LP. Install instructions for the external scanner are provided separately.*

5. Connect the power cables from the back of the printer and the back of the Apple Macintosh computer to an electrical outlet.

6. To install the Splash key, shut down the Apple Macintosh computer. Connect the small end of the Splash key to the **USB port** in the keyboard.

7. Start the computer.

8. The Splash server software operates only when the Splash key is connected to the USB port. To prevent unauthorized printing, remove the Splash key from the USB port.

The Splash server software locks until the Splash key is replaced. The Splash server will not operate without the Splash key.

You have completed hardware setup for your Splash G630 Color Server.

Quick Installation

Server System Requirements

The server software can be installed on any Apple Macintosh that meets the following requirements:

- Apple Blue G3 or G4 Power Macintosh Computer or later
- Mac OS 8.6 or later
- A minimum of 384MB of RAM
- A color display that supports a minimum resolution of 1024x768 pixels
- CD-ROM disk drive (for software installation)
- A minimum of 5 GB of free hard disk space

Installing the Splash Server Software

Performing an Easy Installation automatically installs all the files you need, including PostScript fonts.

1. Insert the **Splash CD** into the CD-ROM drive on your computer.

2. Open the **Splash Network Install** folder and double-click the **Splash G630 Installer** icon.

3. The Splash Installer welcome screen opens.

4. Click **Continue**. The Easy Install dialog box opens.

5. If more than one hard disk is on your system, select the intended hard drive for the software installation from the “Install Location” pull down menu.

Warning! ***Be sure that slash characters (“/”) do not appear in the hard disk name or any folder names in the path of the Splash folder. If a slash appears, the Splash server application will not start.***

6. Click the **Install** button, then follow the user instructions on the screen. Click **Restart** when you are prompted to restart your Macintosh.

Note! *The Splash Installer places an alias for the Splash server application in the Startup Items folder in the server Macintosh System Folder. This causes the Splash server application to launch automatically each time you start the Macintosh computer. The Installer also places aliases for the Splash server application and the Color Cal application in the server’s Apple Menu Items folder, and on the computer desktop.*

7. The Splash server software installation is complete.

Downloads Installer

The Downloads installer installs downloadable versions of the server installer and client installers for all platforms onto your Splash server. These files can be downloaded via the Splash Web interface to individual client workstations to perform client installs or to networked servers to provide network installation and installer backups.

To install the downloads

1. Launch the **Splash Downloads Installer** from the Splash Network Install folder.
2. Select **Install**.
3. Select **Quit** when the installation is finished.

The downloads are now available via the Splash Web interface.

Note! *It is not necessary to quit the Splash server before installing the downloads.*

Starting the Splash Server

The Splash server application starts automatically when the Splash server computer starts.

To start the Splash server for the first time:

1. Turn on the power for the color display.

2. The Splash server takes a moment to start and load its installed software. The Splash server application starts automatically, and initializes the PostScript interpreter used for printing. The Splash server window appears.

The Splash server is ready to work with the printer for color printing.

By default, the Splash server will print a startup page very time it launches.

Memory Size

The Splash server has adequate memory to function as a high-performance print server or workstation. Add memory to support Adobe Photoshop or other applications that will run on the server computer.

Application	MB minimum
Splash server	304.4
Enterprise Networking	1.5
ColorCal	3.1
Web Server	2
Mac Operating System	54
TIFF/IT	1.2
CopyCal	2.8

Application	MB minimum
Imposition	6.7
Spot Color Editor	2.1
Unused	6.3

Control Panel Settings

The Splash Server uses the unmodified set of control panels installed with OS 9.1. Certain default settings within these control panels must be modified for proper server performance:

- Set the display size settings in the Monitors control panel to at least 1024 x 768 or the server window will not display properly.
- Turn off the Indexing feature of Sherlock.
- Set the disk cache setting in the Memory control panel to 1 MB.
- Turn off the Virtual Memory option in the Memory control panel.

Chapter 2: Network Setup

This chapter describes first how to configure your network for printing to the Splash G630 server, and second how to configure the Splash server software for file sharing with client workstations.

Configuring a Network for Printing to the Splash Server

Printing from TCP/IP and Novell NetWare Clients

Your computer must have Splash software appropriate for your operating system installed, and must be connected to the Splash server in order to print over a TCP/IP or Novell NetWare network. All software needed for both TCP/IP and IPX printing is automatically installed with the Splash server software.

The Enterprise Networking software includes one control panel and four system extension files, which are automatically installed in the MacOS System Folder during Splash's software installation.

For IPX printing from Novell NetWare, the Splash server creates a native Novell IPX connection from the Splash server to the Novell server. NetWare Direct delivers print jobs from a print queue on the Novell NetWare server to the Splash server for processing. Once NetWare Direct is configured and activated, it operates automatically each time a Novell client prints to the designated queue on the Novell server. Splash NetWare Direct supports all Novell Ethernet frame types.

When TCP/IP Direct is enabled at the Splash server, the server becomes a network printer. The Splash server accepts LPR/LPD print jobs and jobs from TCP/IP print queues set up on Windows 2000/NT or Novell NetWare servers. In addition, clients on a TCP/IP network can print TIFF, EPS, PDF, and PostScript files directly to the Splash server.

Configuring a Novell Server for LPR Printing to the Splash Server

This section describes how to configure a Splash TCP/IP print queue on a Novell NetWare server. The PCONSOLE Quick Setup option creates a print queue object, a printer object, and a print server if one does not exist.

To set up a Novell NetWare print queue:

1. Log into the Novell server as a user with sufficient privileges to create a print queue (Admin or Supervisor).

2. Run **PCONSOLE.EXE** in **SYS:PUBLIC** (D:\PUBLIC) from the client workstation. The root directory name or drive may be different for your machine.

3. Select "**Quick Setup**". PCONSOLE prompts for information about the print queue.

4. Enter a Print Server name if prompted for one.

5. Enter Print Queue and Printer names.

6. Specify the print Queue volume.

7. Select the banner type (**No Banner** is the recommended setting).

8. Set the Printer Type field to **UNIX Printer**. This causes the host name and printer name fields to appear.

9. Enter the Host Name for the Splash server (configured with the TCP/IP control panel at the Splash server) or the static IP address for the server.

10. Enter a Printer Name when prompted. ("**SplashLPD**" is the recommended printer name.)

11. Press **Enter** to complete setup. PCONSOLE prompts you to save the new print queue settings. Click **Yes**.

Novell NetWare print queue setup for the Splash server is complete.

Configuring a Windows 2000/NT Server Print Queue

This section describes how to configure a TCP/IP print queue for the Splash server on a computer running Microsoft Windows NT 4.0 or later, or Windows 2000. You can prepare the Splash print queue on either a Windows NT server or a Windows NT workstation system.

Enabling the Microsoft TCP/IP Print Service for LPR Printing

Important! *Configure and enable TCP/IP Direct at the Splash server before configuring an LPR print queue for the Splash server on Windows 2000/NT. Windows 2000/NT will report an error during print queue setup if the Splash server is not identified as an LPD server on the network.*

TCP/IP print services must be enabled in the Network control panel before printing to the Splash server through TCP/IP.

1. Click the **Start** button and select **Settings**.

2. Click the **Control Panel** option from the Settings submenu.

3. Double-click the **Network** control panel.

4. Click the **Services** tab.

If "Microsoft TCP/IP Printing" appears in the Network Services list, this service is already enabled. Close the Network control panel, then go to "Configuring the Windows 2000/NT Client to Print Using TCP/IP" on this page.

If this service does not appear, add it to the list of network services.

5. Click **Add**. A list of available network services appears.

6. Select **Microsoft TCP/IP Printing** in the Network Service list, then click **OK**.

Windows 2000/NT displays a message. Windows 2000/NT must copy TCP/IP printing configuration files from the Windows 2000/NT system CD.

7. Enter the drive letter for your CD-ROM drive. Make sure the Windows 2000/NT system CD is in the CD-ROM drive and click **Continue**.

8. After setup is complete, close the Network control panel.

9. Restart Windows 2000/NT to enable the new network service.

Windows 2000/NT TCP/IP printing configuration is complete.

Configuring the Windows 2000/NT Client to Print Using TCP/IP

Before connecting to the Splash server and creating a print queue that sends jobs to the Splash server over the TCP/IP network, gather the following items:

- TCP/IP address for the Splash server
- Splash CD provided with the Splash server

Configure the Splash TCP/IP print queue as follows:

1. Click the **Start** button.

2. Select **Settings** and click on the **Printers** option from the Settings submenu.

3. Double click the **Add Printer** icon. The Windows 2000/NT Add Printer Wizard appears.

4. Select **My Computer** and click **Next**. A list of printer ports appears. Add an LPR port to support TCP/IP printing.

5. Enter the address for the Splash server. Enter the name of the Splash server that was entered in the Splash server preferences. Click **OK** to continue.

If the name entered does not match the Splash server name, mark the **Accept Jobs From All Queues** check box in the Enterprise Networking TCP/IP dialog so the server can receive jobs properly.

The Splash server TCP/IP address appears as a new port in the list.

6. Select the Splash TCP/IP port and click **Next**.

7. Click **Have Disk**.

8. Insert the Splash CD in the CD-ROM drive, then click **Browse**.

9. Select the file **Splash** and click **Open**.

10. Click **OK**. Windows 2000/NT prompts to select your Splash printer model.

11. Select the Splash printer from the printers list and click **Next**.

Windows 2000/NT displays more options for setting up the print queue.

- If you want to change the name for the copier/printer, type a new name in the text box. The name you enter becomes the name of the printer as it appears in your applications and in the Printer control panel.
- If you want the Splash Printer to be the default printer for your computer, choose **Yes**. Otherwise, choose **No**.

12. Click **Next** to continue.

13. Choose **Shared** to allow other Windows 2000/NT and Windows 95/98/ME clients to connect to this print queue for printing to the Splash server. If you do not choose Shared, this computer will only be able to use the LPR port to print to the Splash server.

If you choose Shared, select the operating systems for all computers that will use the print queue from the list.

14. Click **Next**.

Windows 2000/NT prompts to insert system software disks for the operating systems selected in the previous step. Insert the diskettes or CD's and click OK as directed by the Add Printer Wizard. When all files are copied, the Add Printer Wizard prompts to print a test page.

15. Select **Yes** to print a test page and click **Finish**.

16. Click **OK.**

17. Insert the Windows 2000/NT system software CD in your computer's CD-ROM drive then click **OK**.

Windows 2000/NT copies the files needed to configure the print queue. A test page prints at the printer to confirm that setup was successful. A message asks if the test printed correctly.

18. Click **Yes**. The Splash TCP/IP print queue appears as a shared printer in the Printers control panel.

The Splash TCP/IP print queue configuration is complete.

Configuring NetWare

Note! *The NetWare Direct setup window does not need to be open for NetWare Direct to run.*

Directory Service (NDS)

Enterprise Networking provides native support for NetWare 4.1 or later and IntranetWare NetWare Directory Services (NDS). This section describes how to create print queues on NDS and how to configure the Splash server to receive print jobs from NDS print queues.

Novell 4.x and IntranetWare servers include NetWare Directory Service (NDS) support. NDS is a naming scheme and database that allows organizing all servers and services in one large, hierarchical database.

NDS and the Splash server software can create a single print server object and assign virtual printers to that print server. Virtual printers can have one or more print queues associated with them. To change the printers or queues, change the Print Server assignment in the NDS database. Splash Enterprise Networking reads the NDS database for the print server information and services the specified queues. This allows controlling print queues associated with the Splash server without making adjustments at the Splash server.

Configuring an NDS Print Queue

To create an NDS print queue:

1. Run NWAdmin from the Novell or Intranet Server.

2. In the directory tree, find the container to place the printing objects.

3. Highlight that container and select **Print Services Quick Setup** from the Tools menu.

4. In the Print Services Quick Setup dialog box, enter a new print server name or browse the directory tree to select an existing print server. This name, with its full path (Fully Distinguished) is the name that will be used in the Novell NDS setup window in Enterprise Networking.

5. Enter a name for the printer you wish to create and the associated configuration information.

6. Enter a Print Queue name.

7. Click the **Browse** button to the right of the volume field to browse the directory tree for the volume where this print queue will be created, if it is not the default.

8. Click **Create** to create the objects and make all necessary assignments (Printer to print server, Queue to printer).

NetWare NDS Direct can now be setup at the Splash server, please see "Configuring NetWare NDS Direct at the Splash Server" on page 15.

NetWare Direct Notes

Novell File Server Does Not Appear During Setup

If a list of Novell file servers does not appear during NetWare Direct setup when you click the Browse button under Print Queue Info, specify the Novell server's Ethernet frame type in the Mac IPX control panel.

1. On the Splash server, open the Apple menu and select the **Control Panels**.

2. Choose the **Mac IPX** option from the **Control Panels** submenu. The Mac IPX control panel appears.

3. Double-click the **Ethernet** icon under IPX Interface. The Ethernet Access Configuration dialog box appears.

4. Deselect **Always Auto-Configure Frame Type**.

5. Select the option that matches the Novell file server Ethernet frame type.

6. Click **OK**.

Novell Network Number and Node Number Locations

The Novell network or node numbers for the Splash server appear in the Mac IPX control panel on the Splash server computer.

AppleTalk Network Protocol Changes

Changing the network protocol for the Splash server from Ethernet to Modem Port or Printer Port (LocalTalk) does not interfere with Splash NetWare Direct's ability to print jobs to the Splash server from Novell NetWare print queues. Novell Server print jobs resume downloading to the Splash server after the server is restarted.

Configuring the Splash Server

Configuring the Splash Server for Client File Sharing

The Splash server can be configured so that users at Macintosh client workstations can install the Splash client software over the network. This makes it easy for the network administrator who does not have to install client software at each client computer workstation. PC clients unable to connect to Apple File Sharing, such as Novell NetWare clients, must use the CD provided with the Splash server to install the Splash client software or download the installers from the server via the Web.

Note!

You must provide networking hardware and software for all client workstations that will print to the Splash server. Refer to the network product's instructions to connect the Splash server and client workstations to the network.

To configure the Splash server for client file sharing to Macintosh client workstations over Appletalk/ Appleshare:

1. Insert the **Splash CD** in the CD-ROM drive on the server.

2. Locate the **Splash Network Install** folder on the Splash CD.

3. Drag the **Splash Network Install** folder to the Splash server desktop.

4. In the Apple menu items pull down list, select the **Control Panel** and turn **File Sharing** on.

Note! *If the internal hard drive is named the same as the user software CD (Splash G630), then File Sharing cannot be turned on. Eject the CD, then turn on File Sharing.*

5. Select the **Splash Network Install** folder icon.

6. Choose **Get Info** from the **File** menu.

7. Choose **Sharing** from the **Get Info** submenu. The sharing options for the folder appears.

8. Configure the Sharing options so that any Guest can access the folder:

- To share the folder, select **Share this item and its contents**.
- To share the contents of the folder, select **Copy these privileges to all enclosed folders**.
- To prevent users from changing or deleting the shared items over the network, select **Can't move, rename, or delete this item** (locked).
- Configure the sharing privileges. Client workstations should be able to see the folders and files, but they should not be able to make changes.

Configuring the Splash Server for TCP/IP Direct Printing

This section describes the configuration process to allow the Splash server to receive print jobs from clients on a TCP/IP network.

There are four main steps outlined in this section to configure the Splash server for TCP/IP Direct Printing:

1. Connecting the Splash server to the TCP/IP network.

2. Configuring the Splash server for the TCP/IP Network.

3. Enabling TCP/IP Printing.

4. Setting TCP/IP Direct Options.

Connecting the Splash Server to the TCP/IP Network

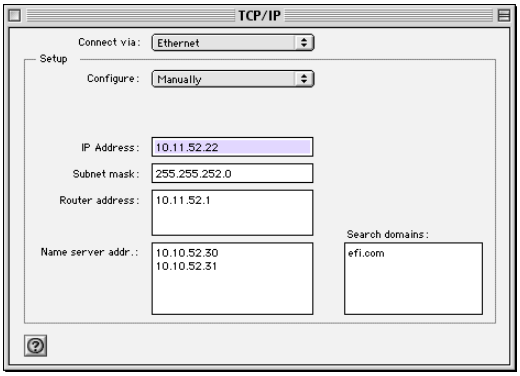
Connect the server's LAN card or Ethernet port to the network if not already connected.

Configuring the Splash Server for the TCP/IP Network

1. Obtain an IP address and subnet mask or router address from your network administrator.

2. On the Splash server, select the **Control Panels** in the Apple menu and select **TCP/IP** in the submenu. The TCP/IP control panel appears.

3. Choose the network connection type for the Splash server's TCP/IP network in the **Connect via** menu.



4. Select **Manually** in the **Configure** menu.

Note! *Assigning the Splash server a static Internet address allows clients to reliably locate the Splash server on the network. The DHCP option in the TCP/IP Control Panel at the Splash server can also be used to automatically assign an internet TCP/IP address from your network server.*

5. Enter the IP Address for the Splash server.

6. Enter a Subnet mask number if needed. A subnet mask provides additional address information for some networks.

7. Enter the Router address if needed. A network router maintains a list of IP addresses for two or more groups of network devices. The router then uses the list of addresses to direct network data to the appropriate location on the network. To enter two or more router addresses, press the **Return** key after entering each address.

8. Enter a Name server address for your local DNS server on your network

9. Enter the search domain name that pertains to your DNS name, for example, design.corp.com.

10. Close the TCP/IP control panel. A dialog box prompts to confirm the new setup.

11. Click **OK**.

The system can now enable TCP/IP printing for the Splash server.

Enabling TCP/IP Printing from the Splash Server Application

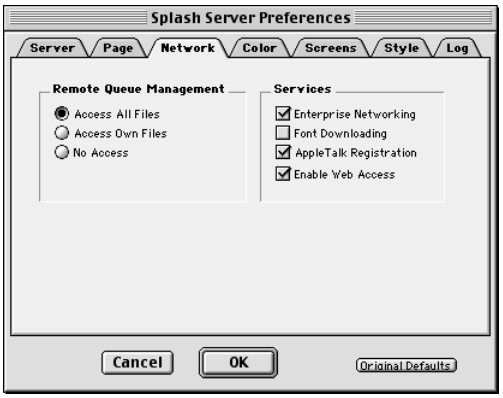
To enable TCP/IP direct printing:

1. Start the Splash server application.

2. Select **Log In** from the Server menu. Enter the Administrator Password and click **OK.**

3. Choose **Preferences** from the Server menu. The Splash Server Preferences appear.

4. Click **Network** at the top of the window to see Splash Network preferences.

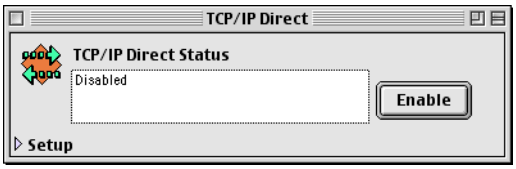


5. Select the **Enterprise Networking** check box, then click **OK.**

6. Click on the Splash server window to bring the Splash server application to the foreground.

7. Choose **Enterprise Networking** from the server menu.

The TCP/IP Direct window appears.



Note! *The NetWare Direct window appears also when Enterprise Networking is chosen. For information about how to use the NetWare Direct window to set up the Splash server for IPX printing, see "Configuring the Server for Novell NetWare Direct Printing (Bindery)" on page 13.*

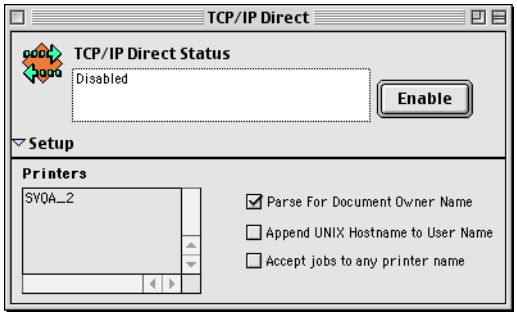
8. Click **Enable.**

The Splash server is ready to receive network print jobs from TCP/IP clients.

Setting TCP/IP Direct Options

The server can also be configured to automatically extract the document owner's name from a print job, append the UNIX host name, print to any printer listed in the Printers area, or print only to the printer specified in the Hosts.LPD file.

TCP/IP, IPX, and AppleTalk networking can all run simultaneously on the same cable or on different cables. For example, you can run the AppleTalk network and IPX networks on Ethernet at the same time.



If desired, select the following options in the TCP/IP Direct window:

- **Parse For Document Owner Name**

The Document Owner name is extracted from each print job as it is received at the Splash server. When this option is not selected, Enterprise Networking determines the user name from the network connection.

- **Append UNIX Hostname to User Name**

The network host name is added to the print job's owner name that appears in the print queue and job log at the Splash server. For example, when the user "Jack" prints from the UNIX host "Santana" the print job's owner name is "Jack@Santana." When this option is not selected, the print job's owner name is "Jack." For most situations, do not select this option.

Note! *This option is useful for UNIX environments where all users share the same user name, such as "root."*

- **Accept Jobs to Any Printer Name**

Prints to any printer listed in the Printers area of this window.

Restricting TCP/IP Printing to Specific Machines

The Splash server can be set up to accept TCP/IP print jobs from only the machines specified in the "Hosts.LPD" file.

Run Enterprise Networking to access this file. The "Hosts.LPD" is placed on the Hard drive.

1. From the hard drive, open the **System** folder.
2. From the **System** folder, open the **Extensions** folder.
3. From the **Extensions** folder, open the **Splash** folder to access the "Hosts.LPD" file.
4. You can edit the Hosts.LPD file with any text editor to enable TCP/IP printing from only specific host names, IP addresses, or ranges of IP addresses. This allows print access control at the individual, group, and subnet levels. Examples of how to assign host names are provided in the Hosts.LPD file on the Splash server.

Configuring the Server for Novell NetWare Direct Printing (Bindery)

This section describes how to configure the Splash server to receive print jobs from clients on an IPX network.

There are three main steps outlined in this section for configuring the Splash server for Novell NetWare Direct Printing (Bindery):

1. Configuring the Novell Server for LPR Printing to the Splash Server.
2. Configuring NetWare Direct on the Splash server.
3. Enabling NetWare Direct from the Splash Server Application.

Configuring the Novell Server for LPR Printing to the Splash Server

For information on how to configure the Novell Server for LPR Printing to the Splash Server, please refer to "Configuring a Novell Server for LPR Printing to the Splash Server" on page 7.

Important! *The Novell server must be configured first before the Splash server can be configured for NetWare Direct.*

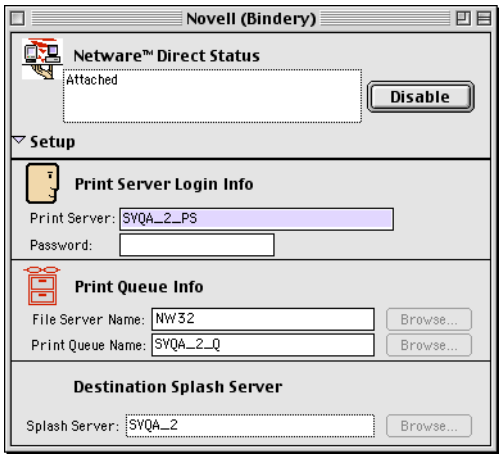
Configuring NetWare Direct on the Splash Server

The Enterprise Networking application connects NetWare Direct to the Novell NetWare server for delivering print jobs to the Splash server.

To configure NetWare Direct:

1. Start the Splash server software on the server computer.

2. Choose **Enterprise Networking** from the Server menu.



3. In the Print Server text box, type the name of the Novell print server you created for the Splash server. (“SPLASH” is the print server name recommended.)

4. Type the password for the print server (if one was assigned).

5. Under Print Queue Info, click the **Browse** button next to the File Server Name text box and select the name of the Novell NetWare file server where you created the Splash print queue.

6. Click **Browse** next to the Print Queue Name text box and select the Splash print queue. (“SPLASH_Q” is the print queue name recommended.)

7. Choose **Save** from the File menu to save the NetWare Direct connection document. The document is saved to the NetWare Direct folder inside the Splash Extras folder on the Splash server.

8. Give the document a name that describes the Novell print queue (for example: “SPLASH_Q on MARKETING server”).

9. Click **Connect**.

10. Close the NetWare Direct setup window.

Setup for NetWare Direct is complete.

Enabling NetWare Direct from the Splash Server Application

To enable NetWare Direct:

1. Open the Splash server application.

2. In the Server menu choose **Preferences**. The Preferences window opens.

3. Click **Network** at the top of the window to see Splash Network preferences.

4. Select the **Enterprise Networking** check box, then click **OK.** This launches and connects NetWare Direct when the Splash server application starts, and disconnects and closes NetWare Direct when the Server application is closed.

NetWare Direct runs in the background while the Server application is running. When a PC client workstation sends a print job to the Splash print queue on the Novell file server, NetWare Direct automatically opens and delivers the print job to the Splash server.

Note! *The NetWare Direct setup window does not need to be open for NetWare Direct to run.*

To deactivate NetWare Direct, select **Disable** and **Disconnect** from the Enterprise Networking dialog box in the Server Network Preferences. This will disable all Enterprise Networking.

Important! *If NetWare Direct is not configured and running, jobs sent to the designated Splash print queue on the Novell server are held at the Novell server. NetWare Direct must be running to process these jobs with the Splash server.*

Configuring NetWare NDS Direct at the Splash Server

In order to use NetWare NDS Direct, both NetWare and the Splash server need to be configured. To configure Netware for an NDS Print Queue, please refer to “Configuring an NDS Print Queue” on page 9.

Important! *NetWare must be configured for an NDS print queue before the Splash server can be configured for NetWare NDS Direct.*

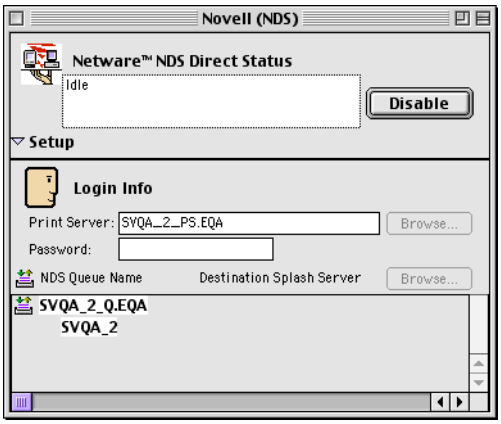
To configure NetWare NDS Direct at the Splash server:

1. Choose **Enterprise Networking** from the Server menu in the Splash server application.

An untitled Novell document appears.

2. In the Print Server text box, browse the Fully Distinguished name of the Novell print server you created for the Splash server. Type the password for the print server if one was assigned.

Click the **Browse** button next to the Print Server text box, and Enterprise Networking displays a list of print servers.



3. Select a print server and click **OK**.

4. Click the **Enable** button to enable NetWare NDS Direct. A list of printers appears at the bottom of the Novell document window.

The status area at the top of the document window shows the current queue checked. The queues are checked sequentially and any waiting jobs are pulled from the queues.

Splash NetWare NDS Direct setup is complete.

Chapter 3: Client Installation and Printing for the Macintosh

Macintosh Client System Requirements

- A Macintosh II and above, or a Power Macintosh computer.
- System 8.0 or later.
- Networking software that provides a network connection between the client Macintosh and the Splash server.
- CD-ROM or connection to the server for installations.
- A minimum of 50 MB of free hard disk space.

Important! *The Splash server is incompatible with client software from other versions of Splash equipment. Be sure to install the Splash client software on all Macintosh workstations that will print to the Splash server.*

Installing Macintosh Client Software from the Splash CD

To install the Macintosh Client Software with the Splash CD:

1. Insert the Splash CD in the CD-ROM drive on your computer.

2. Double-click the **Splash Client Installer** icon in the Splash Network Install folder. The Easy Install dialog box appears.

3. Select the intended hard drive for the software installation from the Install Location pull down menu, if more than one hard disk is on your client system.

4. Click **Install**.

When installation is complete, the client prompts to **Continue** or **Restart**.

5. Click **Continue** to perform more installations.

6. Click **Restart** to exit the Splash Installer and restart the computer.

Repeat this install procedure for each client Macintosh connected to the network.

Installing Macintosh Client Software by File Sharing to the Splash Server

To install the Splash client software by file sharing to the Splash server:

1. Select the **Chooser** from the Apple menu.

2. In the lower right corner of the Chooser window, click the **Active** button next to AppleTalk. If AppleTalk is not already active, a dialog box appears.

3. Click **OK.**

4. Click the **AppleShare** icon. A list of file servers and Appletalk zones appear.

5. In the **Chooser** window, select the appropriate AppleTalk Zone and the Splash server. You may not see any Appletalk Zones in your network configuration, in which case select ONLY the Splash server.

6. Click **OK.** The File Server Connect dialog appears.

7. Click **Guest**, then click **OK**. The Splash server folders appear.

8. Select the **Splash Network Install** folder, and click **OK**. The Splash Network Install folder appears on the desktop.

9. Double-click the **Splash Client Installer** icon. The Easy Install dialog box appears.

10. Select the intended hard drive for the software installation from the Install Location pull down menu, if more than one hard disk is on your client system.

11. Click **Install**. All Splash client software is installed over the network from the Splash server computer.

When installation is complete, the Splash server prompts to “Continue” or “Quit”.

12. Click **Continue** to perform more installations.

13. Click **Quit** to exit the Splash Installer.

Repeat this install procedure for each client Macintosh connected to the network.

Printer Driver Support

The Splash server supports printing from a variety of computer operating systems and network configurations. PPDs are provided in English, French, Italian, German, Spanish, and Brazilian Portuguese. Use the Custom Install feature of the client installer to select a language other than English.

Setting up the Macintosh Client

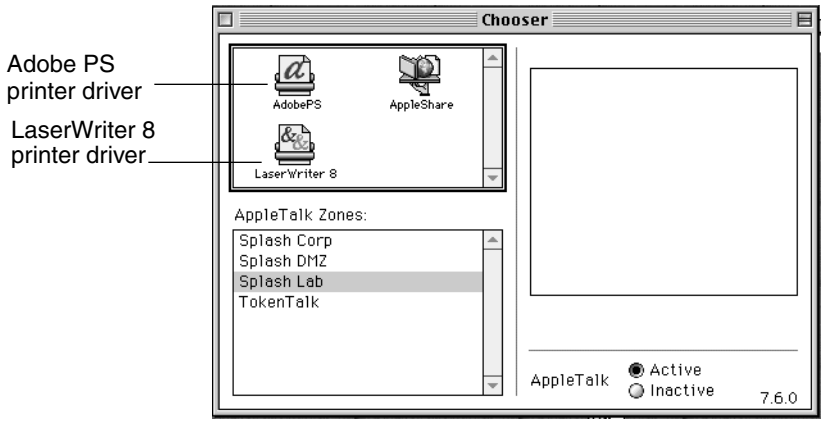
Before the Splash Macintosh Client can send print jobs to the printer, it must be chosen in the MacOS Chooser. The Splash Macintosh Client can then send print jobs to the printer through the LaserWriter 8 printer driver provided with MacOS System software or AdobePS 8.7.

Choosing the Adobe PS Printer Driver

1. Select **Chooser** from the Apple menu. The Chooser window appears.

2. Select the **Adobe PS** driver icon in the upper left window in the Chooser, select the correct AppleTalk Zone for the Splash server (if your network has zones), then select the Splash server printer in the list of printers that appears on the right.

3. Click **Create**. The Adobe PS driver automatically selects the appropriate PPD file.



Choosing the LaserWriter 8 Printer Driver

1. Select **Chooser** from the Apple menu. The Chooser window appears.

2. Select the **LaserWriter 8** driver icon in the upper left window in the Chooser, select the correct AppleTalk Zone for the Splash server (if your network has zones), then select the Splash server printer in the list of printers that appears on the right.

3. Click **Create**, then **Select PPD**. For the LaserWriter 8 driver, use the Splash G630-DocuColor 12 PM PPD.

The connection to the Splash server is complete. The Macintosh will continue to print to the Splash server until a different printer is selected.

Note! *To use the Direct TCP/IP Printing feature of Macintosh OS 9.1, use the LaserWriter 8 printer driver. For information about this feature, see the MacOS 9.1 documentation.*

The Splash server provides printer description files (PPDs) for applications that use the Apple LaserWriter 8 or AdobePS 8.7 printer drivers. The Splash PPDs allow selecting Splash print features when printing to the Splash server from Level 2 and Level 3 PostScript applications.

Do not use versions of the LaserWriter printer driver older than LaserWriter 8. Earlier versions of the LaserWriter printer driver will work with the Splash server, but they do not include the correct paper size information and do not allow special Splash printing features such as color correction.

Drop-Printing Files

The Splash server supports Acrobat PDF files, TIFF files, EPS files, TIFF-IT, and DCS 2.0 files, and files that are in PostScript format. These files can be printed to the Splash server from the server Macintosh computer or from any client with an AppleTalk or TCP/IP network connection to the server. Use Splash drop-printing instead of a PostScript file download utility to print PostScript files to the Splash server. For more information, see “Drop Printing Files” on page 47.

Chapter 4: Client Installation and Printing for Windows

Windows System Requirements

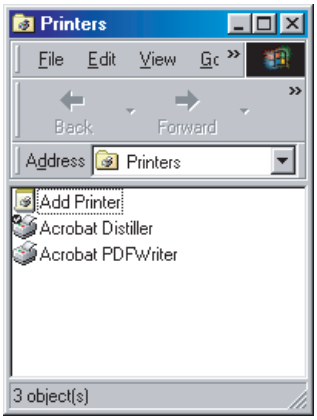
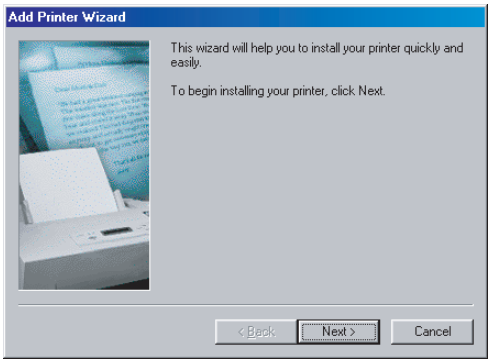
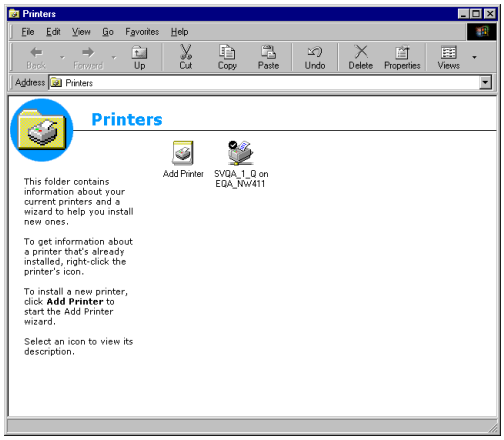
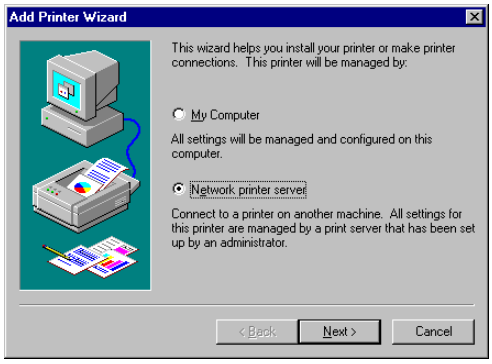
- An IBM AT or PS/2 or 100% compatible computer with an Intel 80486 or higher processor, or similar processor.
- A minimum of 50 MB of free hard disk space.
- At least 8 MB of RAM for Windows 98/ Millennium (Me), or at least 16 MB of RAM for Windows NT, or at least 32 MB RAM for Windows 2000.
- Microsoft Windows 98/Me, or Windows NT version 4.0 or later, or Windows 2000, and their related software CDs or diskettes.
- Network hardware that works with the built-in Windows drivers to connect your PC to the Splash print queue on the Novell or NT server.
- A CD-ROM drive or connection to a networked server for installations.

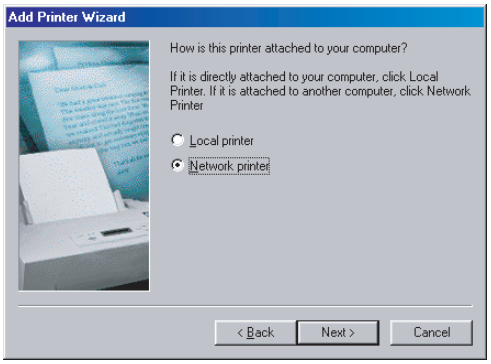
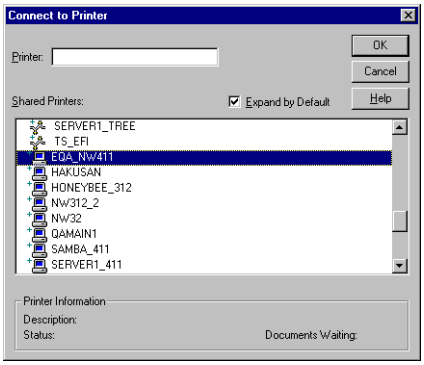
Installing the Microsoft Windows 98/Me and Windows NT/2000 Printer Description Files

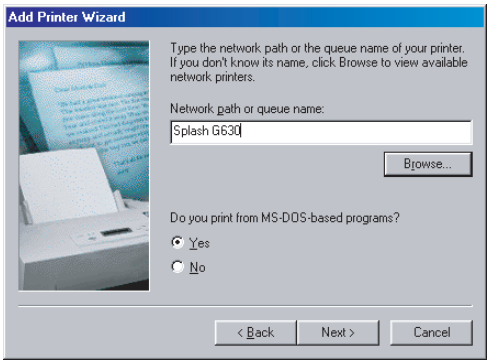
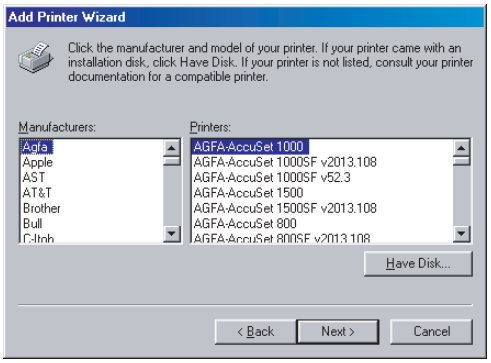
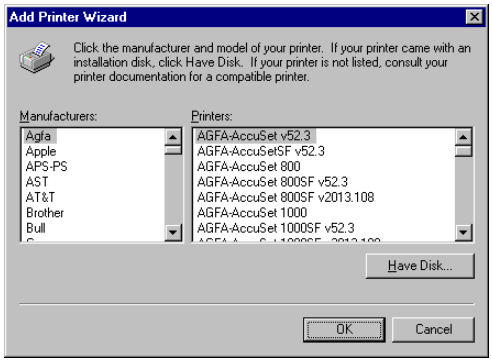
You can install the Microsoft Windows 98/Me and Windows NT/2000 printer description files for the G630 using the Add Printer Wizard included with your operating system.

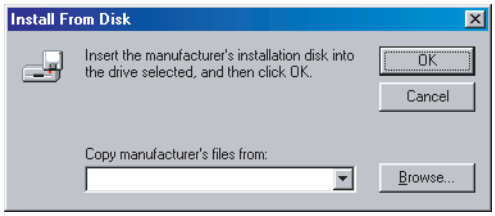
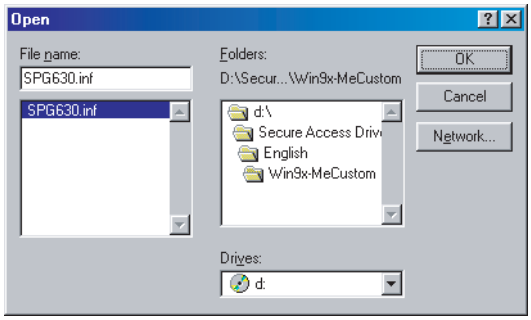
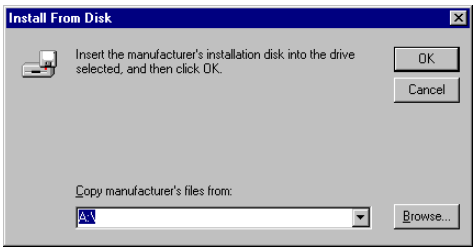
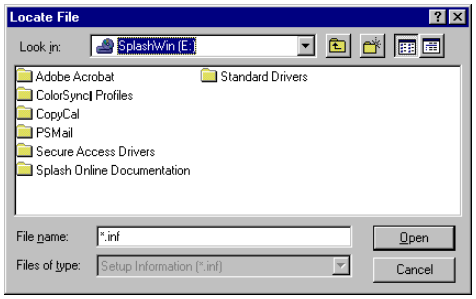
Close all other applications before installing the software.

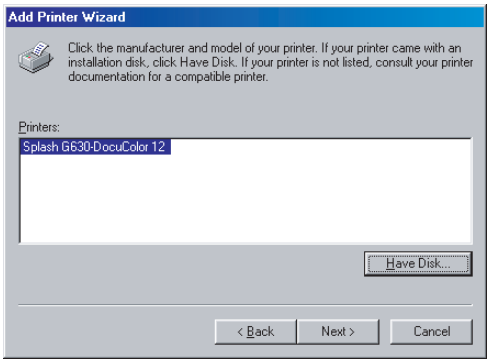
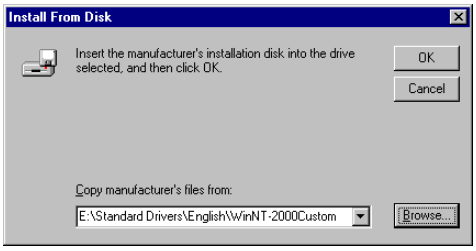
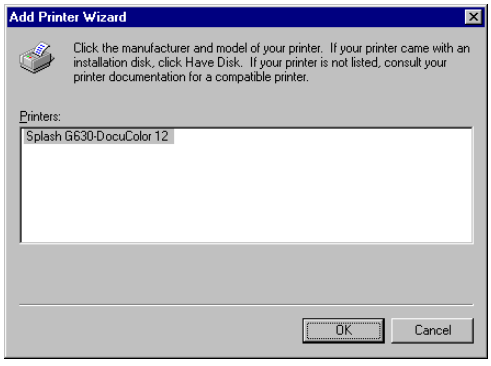
Windows 98/Me	Windows 2000/NT
Start Windows 98/Me.	**Note:** *The screeens shown below are for Windows NT. Differences between Windows NT and Windows 2000 are noted in the text.* Start Windows 2000/NT.
Place the Splash software installation disk in the CD-ROM drive.	Place the Splash software installation disk in the CD-ROM drive.

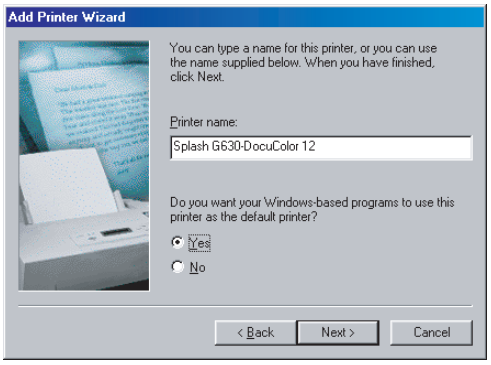
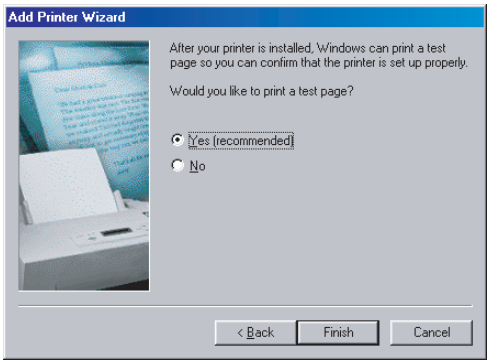
Windows 98/Me	Windows 2000/NT
Click the **Start** button, point to **Settings**, and then choose **Printers**. The Printers setup window opens.  Double-click **Add Printer**. The Windows 98/Me Add Printer Wizard appears.  Click **Next**.	Click the **Start** button, point to **Settings**, and then choose **Printers.** The Printers setup window opens.  Double-click **Add Printer**. The Windows 2000/NT Add Printer Wizard appears.  **WinNT users:** Select **Network printer server.** Click **Next**. **Win2000 users:** Click **Next**. Select **Network printer**. Click **Next**.

Windows 98/Me	Windows 2000/NT
The Add Printer Wizard prompts to select Local or Network printer connection.  Select **Network printer**. Click **Next**.	**WinNT users:** Select the Splash printer in the list of shared printers. Click **OK**.  **Win2000 users:** The Locate Your Printer window opens: Type the printer name or click **Next** to manually find your printer. Select **Next**. If this is a second install of the G630 Client install for windows 2000/NT, the Add Print Wizard will display the option to use this printer as your default printer. Select **yes** or **no**. Click **Next** and then click **Finish**. Otherwise, if this is the first time configuring the G630 Client install, proceed with the next step.

Windows 98/Me	Windows 2000/NT
The Add Printer Wizard prompts to type the network path for your printer. Type the path to the Splash print queue on your Novell NetWare server, or choose **Browse** to manually select the printer from the network.  If you print from MS-DOS based programs, select **Yes** otherwise select **No**. Click **Next**. The Add Printer Wizard prompts to select the manufacturer and model for your printer.  Click **Have Disk**.	**WinNT/Win2000 users:** The Connect To Printer window opens. The dialogue indicates there is not a suitable printer driver installed. Click **OK** to install the manufacturers files. The Add Printer Wizard prompts to select the printer's manufacturer and model.  Click **Have Disk**.

Windows 98/Me	Windows 2000/NT
 Click **Browse** to find the CD-ROM drive. 	 The Install From Disk dialog prompts to place the manufacturer's installation disk in the drive. Be sure that the Splash software installation disk is in the CD-ROM drive. Click **Browse** to find the CD-ROM drive. If drive A is default, click **Cancel** and proceed to next step. The Locate File dialog opens. 

Windows 98/Me	Windows 2000/NT
Select the CD-ROM drive. The folders are shown. To install Secure Access printing: • Select the **Secure Access Drivers** folder • Select the **English** folder • Select **Win9x-MeCustom**. To install the Standard Drivers: • Select the **Standard Drivers** folder • Select the **English** folder. • Select either **Win9x-MeCustom** or **Win9x-MePM**. Click **OK**. The path name of the folder appears in this window. Click **OK**.  The Printer Name appears. Click **Next**.	Select the CD-ROM drive. The folders are shown. To install Secure Access printing: • Select the **Secure Access Drivers** folder • Select the **English** folder • Select **Win9x-MeCustom**. To install the Standard Drivers: • Select the **Standard Drivers** folder • Select the **English** folder. • Select either **Win9x-MeCustom** or **Win9x-MePM**. Click **OK**. The Locate File dialog closes, revealing the Install From Disk dialog with the chosen path in the **Copy manufacturer's files from** field.  Click **OK**. The Add Printer Wizard prompts to select your printer. Select the **Splash...** printer. Click **OK.** 

Windows 98/Me	Windows 2000/NT
 The Add Printer Wizard displays the option to use this printer as the default printer. Select **yes** or **no**. Click **Next**. The Add Printer Wizard prompts you to print a test page when installation is complete.  Select **Yes** to print the test page, or select **No** to continue without printing the test page. Click **Finish**. The printer now appears in the Printers control panel. Installation is complete.	**Win2000 users:** The Microsoft Windows Explorer Digital Signature appears stating that this installation is not Microsoft certified. At the “Do you want to continue installation?” prompt, click **Yes**. **WinNT/Win2000 users:** The Add Printer Wizard displays the option to use this printer as the default printer. Select **Yes** or **No**. Click **Next**. Click **Finish**. The printer now appears in the Printers control panel. Installation is complete.

Important! ***I****f you recently installed Windows 98/Me over a Windows 3.1 installation that had an existing Splash Windows Client driver for Windows 3.1 installed, the older version may appear in the Printers folder in the Control Panel. Delete the older Splash Windows Client driver from the Printers folder.*

Windows 98/Me

- Print interface software provided: printer description file (PPD) and Adobe Custom PS.
- All releases of Windows 98 and Me are supported.
- Supports custom page sizes.

Windows 2000/NT

- Print interface software provided: printer description file (PPD) and Adobe Custom PS.
- Windows NT 4.0 or higher and Windows 2000 are supported.
- Supports custom page sizes.

UNIX

UNIX jobs received via TCP/IP direct use the default options selected.

Setting up the Windows 2000/NT Client

The instructions in this section apply to Windows 2000/NT Server and Workstation systems. Complete one of the following options for preparing the Windows PC to print to the Splash server before installing the Splash Windows 2000/NT client software.

- Connect to the Windows 2000/NT computer that serves as print spooler for the Splash server on the network.
- Connect to a Novell NetWare print spooler that is configured for printing to the Splash server.
- Configure the Windows 2000/NT system for direct printing to the Splash server over an AppleTalk network.
- Configure the Windows 2000/NT system for direct LPR printing to the Splash server over a TCP/IP network.

For instructions on setting up a Novell print queue for the Splash server, the system administrator should refer to the appropriate Novell NetWare documentation on setting up a Novell print queue for the Splash server. Also, refer to “Configuring the Windows 2000/NT Client to Print Using TCP/IP” on page 8 and “Configuring the Server for Novell NetWare Direct Printing (Bindery)” on page 13.

Preparing Windows 2000/NT to Print Over an AppleTalk Network

If a Splash print spooler is not available on the network, install the Splash Windows 2000/NT client software on your computer. Windows 2000/NT provides the software needed to print through the AppleTalk network. No AppleTalk bridge software is needed.

To install the Windows 2000/NT client software, use the Splash software installation disk provided with the Splash server. Before installing the Splash Windows 2000/NT client software, make a backup copy of the installation disk. Use the backup disk to perform the installation.

The Windows 2000/NT System disk is necessary to complete setup.

Chapter 5: Splash Print Options

This section describes the special print features of the Splash color server. The options described in this section are available when printing to the Splash server with the LaserWriter 8 or AdobePS drivers and the Splash printer description file.

Accessing Splash Print Job Options

From the Splash server, each of the print options described below is available in the job edit feature for jobs that are in the Splash server print queues. To access this feature, double-click on the job in the queue, or select the print job and then select the **Edit Job** option in the **Jobs** menu. The **Job Options** screens are shown in this chapter. For more detail on how to access the job edit feature at the Splash server, refer to “Viewing and Editing Job Print Options” on page 49.

To access these print options from a Macintosh client workstation using Adobe PS, select Print in the File menu. In the Print dialog box, select Splash Options from the pull-down menu of Printer Specific Options.

From a Macintosh client workstation using LaserWriter 8, select **General** from the pull down menu, and then select **Printer Specific Options 1**, **2**, **3, 4, 5**, or **6**.

In Windows 98/ME, these options are listed in the **Properties** dialog box under the **Device Options** tab. In Windows 2000/NT, these options are listed in the **Properties** dialog box under **Device Settings** tab.

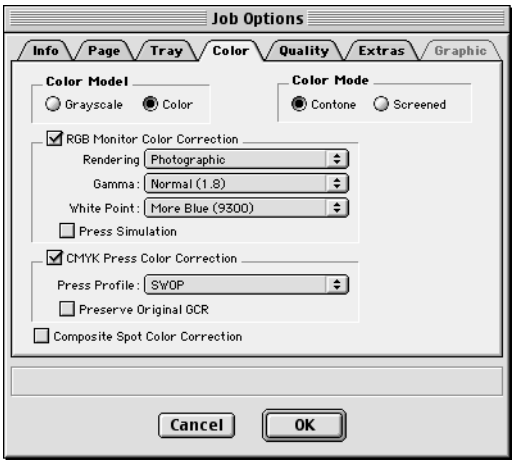
Splash Color Option Settings

Setting Splash Color Options

The Splash color options allow four-pass color printing or grayscale printing with contone or halftone screening and Splash color correction.

Color Model

Select **Grayscale** (1 pass) or **Color** (4 pass) printing as a Color Model for your output.Grayscale images produce similar results with either mode; however, images print faster in Grayscale mode than in Color mode.



Color Mode

This option switches printer output between **Contone** (full color) output and **Screened** output. When Screened is selected, the Splash server applies halftone screening to the color image. Although screened jobs process faster than contone jobs, their output quality often is lower.

The Screened method is configured at the Splash server. The default screening method is stochastic.

RGB Monitor Color Correction

The Splash server provides RGB color correction to simulate the colors on a monitor. Splash RGB color correction correctly color matches mixed RGB file formats independent of the application, platform, or printer driver. Users can separately configure a monitor gamma and a monitor White Point and can color correct either RGB or CMYK objects.

For applications and drivers that can color-correct through the PostScript CRD mechanism, the Splash server provides three CRDs, **Graphic**, **Photographic**, and **Presentation**, selectable at the printer driver. Additionally, the Splash server supports the accurate color correction of documents that contain both RGB and CMYK objects.

The user controls for RGB color correction are as follows:

- Enable **RGB Color Correction**
- **Rendering** style
- **Gamma**
- **White Point**

Splash RGB Monitor Color Correction gives simple-to-use, accurate, and consistent results for the following types of documents:

- Documents with mixed EPS and TIFF file types.
- Documents created with prepress applications such as QuarkXPress.
- Documents created with word processing applications such as Microsoft Word.

If RGB Color Correction is disabled at the printer driver and the application invokes a CRD for printing, the Splash server applies the default CRD (Photographic).

Enable RGB Color Correction

To apply Splash RGB color correction to the print job on a Macintosh or in Windows 2000/NT, enable **RGB Monitor Color Correction**, then select the appropriate RGB options from the pop-up menus.

To apply Splash RGB color correction to the print job in Windows 98/ME, select Enabled in the **RGB Monitor Color Correction** menu, then select the appropriate RGB options from the Rendering Style, Gamma, and White Point menus.

Note! *The default RGB Color Correction setting is Enabled.*

Press Simulation

Press Simulation constrains input RGB colors to the gamut of the selected CMYK press profile to provide better matching of RGB input to press output. This option works with either 1D or 4D CMYK press profiles. If CMYK is not selected, this option has no effect.

Rendering Style

Select a Rendering Style that describes how the document was created:

- Choose **Graphic** for documents that were primarily created with a computer graphics application. This option optimizes print jobs with highly saturated color and provides a good screen to print match.
- Choose **Photographic** to match the colors of scanned photographic images. This is the best option for proofing photographic material.
- Choose **Presentation** for documents that were created entirely with a computer graphics application. This option creates bright, close to pure versions of the primary colors, but provides a less accurate match to the screen and is less accurate for photographic images than Graphics.

.

Note! *The default Rendering Style is Photographic.*

Gamma

The **Gamma** and **White Point** options adjust Splash color correction to simulate the monitor used to view and work with the document. **Dark (2.2)** for Gamma, and **More Blue** for White Point satisfy most configuration requirements.

Gamma describes how a device reproduces tonal gradations. This setting applies to the input device and to the output device. This option lightens or darkens

the RGB content of a particular document to provide a more accurate match with the monitor. The Gamma options are as follows:

- **Lightest (1.0)**
- **Light (1.4)**
- **Normal (1.8)**
- **Dark (2.2) (default)**
- **Darkest (2.6)**

White Point

Splash RGB color correction provides three standard White Point options. The options simulate various lighting conditions for proofing color documents. Use these options to adjust the RGB content in a particular document relative to the White Point of the monitor. If flesh tones or red tones are too magenta, skies and other blues too cyan, and grass and greens too dark (almost bluish), change the White Point setting from Normal to More Blue. If flesh tones and reds are too yellow, blues too purple, and greens too yellow, change the White Point setting from Normal to More Yellow.

The White Point options are:

- **More Yellow (D50 Proofing)**
- **Normal (D65)**
- **More Blue (9300) (default)**

CMYK Press Color Correction

To apply Splash CMYK color correction to a print job on a Macintosh, WinNT or Win2000 client, select the **CMYK Press Color Correction** check box, then select the appropriate **CMYK Press Profile** from the pop-up menu options.

To apply Splash CMYK color correction to a Win98/Me client print job, select "Enabled" in the **CMYK Press Color Correction** menu, then select the appropriate **CMYK Press Profile**.

- **SWOP** simulates SWOP inks.
- **Euroscale** simulates Euroscale press inks.
- **Enhanced** prints vivid colors on your output. (This profile is not intended for printing press proofs.)

Custom1 through Custom10 are customizable CMYK Press Profile options set at the Splash server. Ask your Splash server administrator about the current settings for these options.

CMYK Press Profiles

The Splash server provides two standard CMYK press ink color correction profiles (SWOP and Euroscale) and ten custom CMYK profiles. All profiles are new style 4D profiles. The CMYK color correction profiles simulate commercial press inks in your output when you print CMYK documents to the Splash server. They work with CMYK Press Color Correction to automatically compensate for differences in press ink colors.

To apply color correction to a job, enable Splash CMYK Press Color Correction and select a color profile as described in the previous section. For instructions on setting new CMYK color correction profiles in the Splash Server, see "Color Profile Selection" on page 51.

Preserve Original GCR

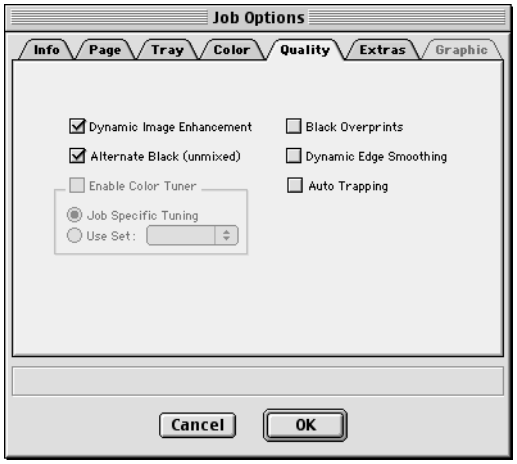
This option causes CMYK press color correction to be applied such that the original GCR settings of the CMYK data are preserved. This option only affects color matching with new style 4D profiles. Old style profiles are automatically GCR preserving.

Composite Spot Color Correction

The Splash server can simulate PANTONE, Toyo, HKS, or DIC spot colors and tints in documents.

To use this feature, select **Enable** in the Composite Spot Color Correction menu at the printer driver. The Splash server produces output that simulates the spot color on a printing press.

Splash Quality Options Settings

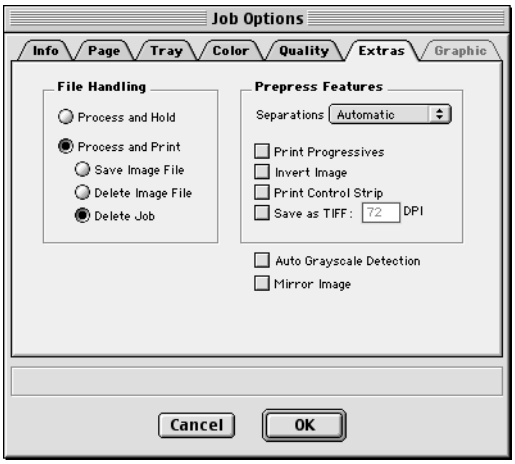


Text and Image Enhancement

The following Splash server features, when enabled, improve the printing of images, text, and line drawings.

- **Dynamic Image Enhancement** enhances low resolution images to create a smoother appearance.
- **Alternate Black (Unmixed)** substitutes a pure (C=M=Y=0, K=100) black for any (R=G=B) black in the document. This prevents ink buildup on the page and alleviates shadows created by misregistered mixed black.
- **Black Overprints** prevents the “halo” effect which occurs when black is printed on top of another color. Selecting this option tells the server to print with 100% black overprint with no knockout of underlying colors.
- **Dynamic Edge Smoothing** smooths fine lines by eliminating “jaggies.”
- **Auto Trapping** automatically traps text and graphics independently of their application.
- **Color Tuner** allows the user to edit and preview the output colors of RIP’ed pages on the server before a single page or an entire job is printed.

Splash Extra Options Settings



File Handling Spool Options

The Splash server provides several options for handling the PostScript spool file and image files created during printing. These options are available on a Splash client computer as well.

- **Process and Hold** sends the spool file directly to the Hold queue after the Splash server process it.
- **Process and Print and Save Image File** saves the spool and image file after printing the job. The job is transferred to the Hold queue with the message “PostScript spool file saved as requested.”
- **Process and Print and Delete Image File** automatically deletes the image file after printing the job. The spool file is saved.
- **Process and Print and Delete Job** automatically deletes the image and spool file after printing the job.
- **Preflight and Hold** process and screens the job for errors and then sends the job to the Hold queue.

Saving the image file will save time when the same file must be re-printed, but does not have to be reRIPped.

Prepress Features

Separations

- **Separations** re-composites the individual pages produced by applications that support separations printing back into a single color page so a proof can be viewed. This feature allows trapping to be visible.

Page layout applications such as PageMaker and Quark XPress can print pages with a single color isolated from the whole image. These are copied on film image setters so each page is converted to one or more (usually four) output grayscale “pages.” Separations printed on a printer that does not have a special separation feature will produce one grayscale page per color on the original page.

The Splash server can re-composite these individual pages back into multi-color pages to produce a proof equivalent to the proof produced from the films by conventional means. The primary benefit of separation is to show overprinted objects with proper colors and to make trapping visible.

The Splash **Separation** print option prints a composite page from applications that support separation printing.

- Select **Automatic** to apply the Splash Separation feature to all your separation print jobs. This default option supports CMYK plates plus any number of plates in PANTONE, Toyo, HKS, or DIC if these press colors are supported by your separation application. This option supports separation generated by any application. With this option selected, the Splash server supports the full range of PANTONE, Toyo, HKS, or DIC colors and tints.

Note! *Splash Separation does not accurately represent traps or overprints composed of a PANTONE, Toyo, HKS, or DIC color.*

Note! *Due to limitations in PageMaker and Quark XPress, RGB graphics are converted to CMYK and therefore look similar. RGB images are converted to grayscale and appear as gray in the output.*

Single Page AutoSeps processes any separation job as a single page job. All color plates will be combined together, including spot color. This allows printing spot color separations from Macromedia Freehand and Deneba Canvas. If a multi-page separation job is sent with this option selected, the pages will overlay, resulting in bad output.

- **Print Progressives** prints up to four separate sheets for a print job. This allows you to examine the result of each color pass for a four-color document.

  Configure this print option at the Splash server to specify which color passes print on each sheet. This allows examining the result of each color pass for a four-color document.

- Select **None** to disable the Splash separation feature.

The remaining separation options, **Quark XPress 3.0 Style**, **Quark XPress 4.0 Style**, **PageMaker Style**, **FreeHand Style**, and **Canvas Style** use a separation technique from an earlier version of the Splash server software. These options require that the separation job be made up of exactly four process-color plates. These options do not support additional spot color plates. If problems occur in the output when printing separations with Automatic selected, convert the colors in the document to four process plates, then select the separation option that matches your application.

Separation Notes

- The Splash Separation print feature supports printing high-resolution DCS (Desktop Color Separation) files. To print a high-resolution proof of a DCS file, activate the separation feature in your application and in the Splash driver print options dialog box.
- Do not choose the Cover Page option in your application’s print dialog box when printing a separation job to the Splash server. The cover page is interpreted as a color plate, which causes unexpected results in the separation job. This problem does not occur when the Print Cover Page option is active for the Splash server application.
- For best results, do not use the separation options to print files with spot colors. Always choose **Automatic**.
- If a separation document contains one or more spot colors, any spot colors not known by the system will be printed as black, or as grayscale for tints. The job will neither fail nor produce an error message. If the spool file “print and save”

option is selected for the job, the spool file at the Splash server will show the message “Document printed, but unknown spot color: NAME. Run Preflight report for more details.” NAME is the name of the unknown spot color.

- If you use a multi-dimensional CMYK color correction profile with a separation file, any black areas including those created with CMY inks will print using mainly black (K) toner. To produce output closer to the original CMYK values for the purpose of retaining trapping, select a one-dimensional CMYK color correction profile for the job or activate GCR Preserving in the Splash Server Preferences.
- When the Automatic separation option is selected for a print job, the Splash RIP While Receive feature is disabled for the job. Disable this option only if you are printing a separation job.

Note! *For best results when creating press proofs using progressives, select one of the Splash one-dimensional CMYK Press Color Correction profiles for the print job. Ask your Splash system administrator for information about the current CMYK profile settings. See “CMYK Press Color Correction” on page 31 for more information about CMYK Color Correction profiles.*

- **Invert Image** inverts the CMYK data. When using RGB colors, the Color Invert Image option inverts the selected color to its opposite. For many of the colors, this will result in the color black.
- **Print Control Strip** prints a set of color control patches on the edge of the output when Enable is selected in the **Print Control Strip** menu. Configure this print option to print either color patches or an EPS file or both.

Note! *The control strip image will overwrite the job image if it occupies the same part of the page in the output.*

- **Save As TIFF** saves a rasterized 72,300, or 600 dpi TIFF file. The TIFF file is placed in the TIFF Folder within the Splash Folder on the Splash server computer. To activate this feature, choose a resolution from the pop-up menu.

When Save As TIFF is selected, files are not printed, but are instead saved as files in the TIFF Folder within the Splash Folder on the Splash server Macintosh. The TIFF Folder is configured for network access. This setup allows users at a client computer to retrieve TIFF files from the TIFF Folder on the Splash server and to delete TIFF files from the folder once they have been copied to the client system.

Note! *Save As TIFF can be enabled or disabled in the Server Job Edit window and in the Splash Web Queue Manager. If the option is enabled, you can enter a resolution value between 3 and 600 dpi.*

The TIFF file is placed in the TIFF Folder within the Splash Folder on the Splash server computer. To activate this feature, select a resolution from the **Save As TIFF** menu.

- **Auto Grayscale Detection** checks each page for color before printing. If it detects no color on the page, the copier prints in single-pass grayscale mode, which speeds printing for multi-page documents that contain few color pages. Disable this feature for maximum performance when printing documents that have color on every page. When active, this feature adds approximately one-half second to the printing of each color page.

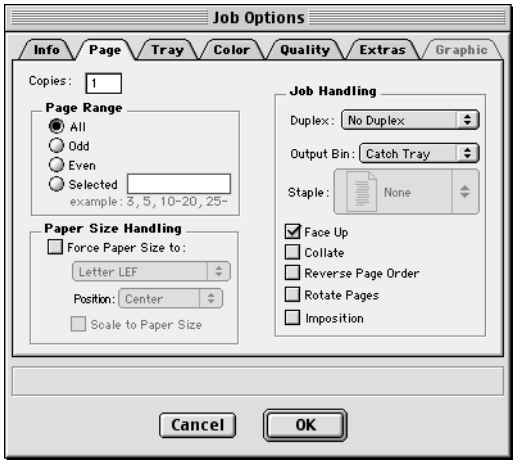
This feature is active when the Color Model is set to Color. The log file indicates the number of pages within the document that were printed in grayscale mode on the copier as a result.

Note! *For fastest printing of an entirely black and white document, set the Color Model to Grayscale for the print job.*

- **Mirror Image** inverts the scanned artwork target to match the final transferred piece. Use Mirror Image for heat transfer paper used for adhering color output to non-standard media such as rice paper, rag paper, or T-shirts.

Splash server copies the file to the server's hard disk before printing. For TIFF and EPS files, the Splash server creates a reference to the file for printing. This allows printing a large TIFF or EPS file from an external drive without first copying the file to the Splash server's hard disk.

Page Setting Options



These options tells the printer which pages of your job to print, how many copies, and how to sort or collate the printed job. You can also rotate pages from here and select Imposition options. **Job Handling** options include printing documents in reverse-order documents, and choice of which Output Bin is used.

Copies and Page Range

Copies allows you to specify the number of copies of a job that you want to print.

Page Range options include:

- **All** pages of a job
- The **Odd** numbered pages of a job
- The **Even** numbered pages of a job
- **Selected** pages of a job, for example, pages 3-5, or pages 4, 8, 10

Paper Size Handling

This feature allows you to print a job on a specific paper size. The options include:

- **Force Paper Size** forces a job spooled at the server to print to the size selected from the drop-down menu.
- **Scale to Paper Size** will scale the image to fit the selected paper size. Clipping will not occur because the imageable are of one page size is scaled to the imageable area of the other.
- **Position** allows you to specify where the image is positioned on the page when the page size is forced. Options include:
- **Center** (default)
- **Top, Left**
- **Top, Right**
- **Bottom, Left**
- **Bottom, Right**

Duplex Printing

The duplex printing options are:

- **No Duplex**
- **Duplex Short Edge Binding** prints double-sided sheets that will be bound on a short edge of the document. The second side of each sheet is rotated for correct final orientation.
- **Duplex Long Edge Binding** prints double-sided sheets that will be bound on a long edge of the document.

Automatic Duplex Printing

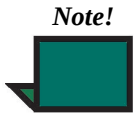
Use the Duplex options to set up automatic duplex printing from Trays 1 to 4 and Tray 6. This specifies that the job will be printed as two-sided output. The Duplex Alignment offsets will be applied to the second side of each page.

Manual Duplex Printing

Use the Duplex options to set up manual duplex printing from Tray 5. This specifies that the output is to be printed as two-sided output.

To print using manual duplex, place the specific number of sheets to be printed into Tray 5. The server pauses after printing the first page and displays a

message with instructions to place the page in the paper or bypass tray in preparation for printing the next page. The second page is printed on the back of the first.



For long documents, avoid the automatic duplex printing process by performing the following steps.

1. Send the print job to the Splash server with the "Print and Hold" spool option selected.

2. Print only the odd pages for the job using the Splash Job Editor.

3. Place the printed odd pages in the paper tray in preparation for printing the even pages. Make sure that the orientation is appropriate for your printer.

4. Print the even pages for the job using the Splash Job editor. The Duplex Alignment offsets on the Splash server are applied to the even pages.

Stapling

If the optional finisher is connected to the copier, the user can select one of the **Staple** options to staple the final output at the finisher. As with other collated multi-set (multi-copy) jobs, multi-set stapled jobs will offset each set from each other. If the server cover page option is enabled, the cover page will be printed face up offset from the last printed, stapled set. The cover page cannot be printed face up if sent to the stapler.

The Staple pull-down menu contains the following options:

- **None**
- **One corner, portrait**
- **One corner, landscape**
- **Dual portrait**
- **Dual landscape**

Jobs which have a stapling option selected must RIP all pages before starting to print.

Jobs for which Staple is selected will automatically be collated. All stapled jobs will be printed face down, regardless of user selection.

Stapled jobs should normally be sent in forward order. Because some applications or application extensions output pages in reverse order only, the reverse page order selection is not disabled. The custom driver will de-select reverse page order when a Staple option is selected, but it can be re-enabled.

Related Job Settings for Proper Output

For proper staple position, jobs of various orientations and page sizes must use the matching staple position and rotation settings. The Splash server does not sense the paper orientation and page orientation settings to determine the proper settings to use for staple position and rotation.

Paper Orientation	Page Orientation	Staple Position	Rotate
LEF	Portrait	Front Corner	Off
LEF	Landscape	Rear Corner	On
SEF	Portrait	Rear Corner	Off
SEF	Landscape	Front Corner	On
LEF	Portrait	Both Corners	Off
LEF	Landscape	Both Corners	Off
SEF	Portrait	Both Corners	Off
SEF	Landscape	Both Corners	On

Staple Error Handling

Jobs that exceed the 50-page stapling limit (100 sides duplex) will print without stapling. The job will fail after printing with a message stating that the job exceeded the number of pages that can be stapled. When the copier runs out of staples in the middle of a job, the server stops processing and a dialog appears stating that the copier is out of staples. The Splash server waits for staples to be added and a dialog box displays the amount of time before the job transfers to the Error queue and displays an E (error) code in the Server Status windows.

Face-Up Printing

Prints the job to the paper tray with a face-up orientation. This option is ignored when the Duplex option is selected for the job.

Collating

Select the **Collate** check box to print complete sets of a job. The first complete set prints, then the second complete set prints, and so on. Sending collated copies displays the “Set” message in the status window. Sending uncollated copies displays the “Copy” message in the status window.

When Use Mailbox is selected, the Splash server delivers all copies, each atop the previous, into the selected mailbox bin.

Note!

*Selecting the **Collate** option with the **Printer Driver Cover Page** option prints multiple copies of the cover page. Use the Splash Cover Page Server Preferences to print a single cover page for a collated job.*

Note!

Be sure to disable the collate option in the applications before printing to the Splash server. Some applications provide a collate option that appears in the Print dialog box. Since many applications activate the collate option as a default setting, always inspect this option in the Print dialog box before printing.

Reverse Page Order

- Select the Reverse Page Order check box to print starting with the last page of the document. Collated documents that are sent to the top bin of the copier are delivered face-up with page one on top.
- If your application provides reverse order printing (sometimes called “reverse order” or “back-to-front” printing), select the application’s option instead of the Splash print driver option. Some applications do not support the Reverse Page Order option.
- Print jobs with Reverse Page Order selected do not use the Splash RIP While Receive feature.

Rotate Pages

The function rotates all pages of the job by 180 degrees. Use Rotate Pages when stapling landscape documents that are rotated incorrectly by the creating application. The known applications are PowerPoint and Quark XPress. The default for this function is Off.

Imposition

Imposition is a feature that rearranges the printing page order of documents to output booklets and in some cases uses paper more efficiently for printing multiple copies of small documents.

Booklet Options—Saddle Stitch and Perfect Bound

Saddle Stitch and Perfect Bound both print two pages of a document together on a single larger sheet. These pages can then be folded section by section to form booklets. The two options differ in the number of pages printed in each section. For Perfect Bound, four original document pages are printed in a single section, which means that each output sheet is folded separately. For Saddle Stitch, the number of pages in a section is selectable and usually multiple output sheets are folded together.

Perfect Bound imposition is done for printing that will be folded, cut, and glued along its back spine into a cover or binding. Most large trade books and larger magazines use this technique. Perfect Bound publications are so called because they open fully and lie flat. Saddle Stitched imposition is done for printing that will be stapled or stitched with thread through the center or into the spine. Saddle Stitched products do not open fully or lie flat.

Paper Use Options—Step and Repeat and 2-up Imposition

Step and Repeat and 2-up Imposition both print multiple copies of a single page on the same output page. Step and Repeat prints as many copies as will fit of a document on the selected output page size. Step and Repeat is compatible with duplexing, but not collation. 2-up Imposition will print only 2 copies of a page on the output page size. It is compatible with duplexing and can be printed collated.

Selecting Options

In the job options at the client or server, enable the Imposition checkbox. The imposition options will appear.

1. Select the imposition type.

2. For Saddle Stitch, select the Section Size.

3. Select the Output Paper Size to pick what size paper to use to print the job.

4. For Saddle Stitch, Perfect Bound, and 2-up, enable or disable Crop Marks. Step and Repeat jobs are always printed with Crop Marks on.

Determining a Valid Output Paper Size

For proper results with Saddle Stitch, Perfect Bound, and 2-up, the output paper size must be at least twice as large as the original page size defined for printing. For example, for a Letter page, select Tabloid, 12x18, or SRA3. For A4, select A3, 12x18, or SRA3.

To allow room for crop marks, select a page size that is more than twice as large as the original. For a Letter or A4 page, select 12x18 or SRA3.

Printing Crop Marks

For Step and Repeat, Crop Marks are always printed and the size of the crop marks is taken into account when determining how to fit the most possible copies onto the page.

When other options are selected, Crop Marks print if there is room for them on the page. The imposed pages print centered on the output sheet. If there is additional room to place full or partial crop marks, the crop marks are added.

Determining the Original Page Size

For 2-up, the original page size used is always the one selected in Page Setup or the equivalent when printing. Application registration marks should be turned off.

For Step and Repeat, Saddle Stitch, and Perfect Bound, the original page size is determined in the following way. If registration marks or crop marks are not enabled in the application when printing, or if the application does not support registration marks or crop marks, the original page size is the one selected in Page Setup. If registration marks or crop marks are enabled in the application, the original page size is the size of the document itself, which in many applications can be different from the page size selected in Page Setup.

Setting Application Crop Marks

For Step and Repeat, Saddle Stitch, and Perfect Bound, registration marks should be enabled from the app if possible. In general the imposition software recognizes the input page size more precisely when the application generates crop marks and for Step and Repeat, increases the number of copies printed on a single sheet.

Application registrations marks are not drawn when printing with Step and Repeat, Saddle Stitch, and Perfect Bound. Use the Crop Marks option instead.

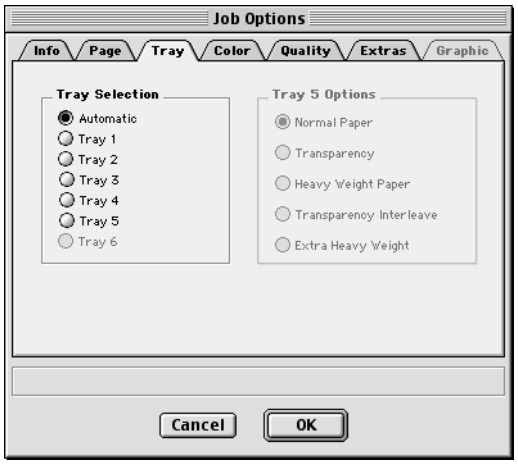
Saddle Stitch and Perfect Bound and Landscape Documents

Landscape documents bind along the short edge of the document, which means that two Letter sized pages do not fit on a single output page. Landscape documents can be imposed using Saddle Stitch and Perfect Bound, but the height of the original must be less than half the height of the output page size.

Section Size

Section size defines the number of pages to print in a Saddle-Stitch section. This feature is enabled only when Saddle-Stitch is selected.

Tray Setting Options



- Select **Automatic** to have the printer search for the tray that contains the paper size specified in the Page Settings dialog box.
- Select **Tray 1**, **Tray 2**, **Tray 3, Tray 4,** or **Tray 6** to choose a specific tray; for example, to print on letterhead or colored paper installed in a single tray.
- Select **Tray 5** to print on the paper or transparency film loaded in the Bypass (manual feed) tray.

Tray 5 Options

To print from Tray 5 from a Macintosh, select Tray 5 under Tray Selection, then select Tray 5 option. To print from Tray 5 from Windows, select Tray 5 in the Paper tab in the Printers Properties dialog box (see page 39), then specify the type of paper loaded in Tray 5 in the Device tab.

- **Extra Heavy Weight Paper** (between 163 and 250 gsm) is the default for Tray 5.
- Select **Normal** to print on recommended paper (16 to 24 pound).
- Select **Transparency** to print on 60 to 105 gsm transparencies with a white leading edge. The only page sizes you can use with the Tray 5 option are A4 LEF (A4L) or Letter LEF (LetterL), depending on the copier configuration.
- Select **Heavy Weight Paper** to print on paper that is heavier than 24 pound (between 105 and 163 gsm).
- Select **Transparency Interleave** to print a transparency with a blank white piece of paper between transparencies.

The printer defaults to its Paper Type (Bypass) mode when paper or transparencies are inserted into Tray 5. Push the yellow Clear All button on the printer after inserting the paper or transparencies to return immediately to the print mode.

Tray 5 Restrictions

Only Face-up printing is allowed from Tray 5. Other user selections are ignored.

Paper and Tray Handling Notes

Printing to MailBox

If the optional Mailbox is attached to the printer, select a mailbox bin to send a job to a specific bin or select Catch Tray to send the job to the catch tray. When the check box is not selected, the Splash server stacks all output pages, each atop the previous, in the bin on top of the copier.

Changing the Paper Size in a Tray

Before changing a paper size in a paper tray, choose Stop Processing on the Splash server to avoid misprinting an active job. After inserting a different size cassette, choose Continue Processing to resume printing. Refer to the printer manual for complete instructions on how to change the paper size.

When paper or transparencies are inserted into the Bypass tray, the printer defaults to its Paper Type (Bypass) mode. Press the yellow Clear All button on the printer after inserting the paper or transparencies to return immediately to print mode.

LEF Paper Substitution

When Auto Tray Select is chosen and the SEF paper size is unavailable, the Splash server substitutes the corresponding LEF paper size. Conversely, the Splash server substitutes the corresponding SEF paper for unavailable LEF paper sizes. In either case, the job prints with incorrect margins and the image may be clipped.

Correcting Out of Paper Errors

After a job is activated, the Splash server waits for paper to be added if there is no paper in the tray. A dialog box displays the amount of time before the job transfers to the Error queue and displays an E (error) code in the Server Status windows.

The amount of time the Splash server waits before transferring the job to the Error queue is configured in the Splash server.

Print jobs are transferred to the Error queue in the following situations:

- the paper size specified in the Page Setup dialog box is not available in the tray specified in the Splash Print dialog box.
- no tray is set for the correct size chosen in the Automatic tray selection in the Print dialog box.

To print the job successfully, correct the error condition, then drag the job from the Error queue to the Active queue in the Splash server window.

Printer Output Tray Maintenance

Though the Splash server can be set to print up to 9999 copies, the output tray holds a maximum of 500 pages. Empty the output tray during printing if more than 500 copies are specified so that the total number of copies in the tray never exceeds 500.

Paper Type Support From Trays

Tray	Paper Type	Supported Sizes
Tray 1	Normal	Letter/A4
Trays 2, 3, 4	Normal Heavy Weight	All All
Tray 6 (HCF)	Normal Heavy Weight	All All
Tray 5	Normal Heavy Weight Extra Heavy Transparency Transparency Interleave	All except Post-card All except Post-card All A4 LEF, Letter LEF, A3 A4 LEF, Letter LEF

Tray 5 Restrictions

Only Face-Up printing is allowed from Tray 5. User selections are ignored.

Paper Type Restrictions

Transparency and transparency interleave print to the catch tray only, not to the mailbox bins or Finisher.

Paper Type Restrictions

Transparency and transparency interleave print to the catch tray only, not to the mailbox bins or Finisher.

The interleave sheet for transparency interleave is pulled from Tray 1. If the contents of Tray 1 do not match the size of the transparency, no interleave sheet is fed.

Heavy Weight Paper from Trays 2, 3, 4, and 6

Heavy weight (thick) paper must be properly configured in the copier user interface in tools mode. The Splash server will not provide user interface to specify that heavy weight paper is present in a tray.

Tray chaining is not allowed when printing heavy weight paper from Trays 2, 3, 4, and 6.

Printing on heavy weight paper from trays is enabled in the Force Tray mechanism. Select a tray which contains heavy weight paper. Jobs using Auto Tray Selection will not print on heavy weight paper.

Auto Tray Selection jobs will fail if no tray containing the correct size of normal paper can be found.

Printing to Heavy Weight Paper

Although the copier allows heavy weight paper to go to the offset catch tray, jobs from the Splash server that use heavy weight paper always go to the simple catch tray.

Printing to Transparencies

Jobs from the Splash server that use transparencies always go to the catch tray.

Providing User Information

The custom Splash driver allows adding identification information to print jobs. This feature is not available when using other print drivers.

Document Owner and Password

These optional text fields allow entering a document owner's name and password. The text entered here appears in the job information dialog box for the spool file at the Splash server. If no name is entered, the job includes the Macintosh's network identification name from the Sharing Setup control panel. Contact your Splash system administrator to learn what information you need to provide in these fields.

Platform	Note
Macintosh	The maximum number of characters for the Owner field is 24. The maximum for the Password field is 8 characters.
Windows 98	This feature is available with the custom driver only. It is not available when printing to the Splash server with the Windows Printer driver. If you do not enter your name, the job includes the network identification name for your computer. Contact your Splash system administrator to learn what information you need to provide in these fields. The maximum number of characters for the Owner field is 23. The maximum for the Password field is 7 characters.
Windows 2000/NT	This feature is available with the custom driver only. It is not available when you print to the Splash server with the Windows printer driver. If you do not enter your name, the job includes the network identification name for your PC from the sharing control panel. Contact your Splash system administrator to learn what information you need to provide in these fields. The maximum number of characters for the Owner field is 23. The maximum for the Password field is 7 characters.

Document Comment

This is an optional text field for any additional information about the print job. Contact your Splash system administrator to learn what information you need to provide in this field.

Platform	Note
Macintosh	The maximum number of characters for this field is 255.

Platform	Note
Windows 98	The maximum number of characters for this field is 99.
Windows 2000/NT	The maximum number of characters for this field is 99.

Account Number

This is an optional text field for any account number associated with the print job. Contact your Splash system administrator to learn what information you need to provide in this field.

Platform	Note
Macintosh	The maximum number of characters for this field is 32.
Windows 98	The maximum number of characters for this field is 31.
Windows 2000/NT	The maximum number of characters for this field is 31.

Secure Access

Secure Access enables a system administrator to limit who can print to the Splash server by defining combinations of user names, passwords, and account numbers which must be entered and verified before jobs print. Secure Access can also be used without verification to improve job logging by requiring user names and account numbers to be entered in order to print.

Secure Access accounts are established and managed at the server. Users are prompted for the required input at their workstation. Validation of the information, if required, is performed by the server and if the information is not valid, the user is prompted to correct the information at his workstation before the job prints.

Using Secure Access at the Client Workstation

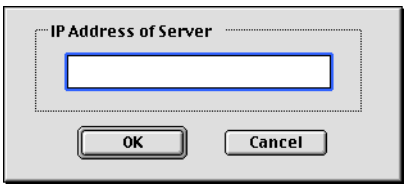
Installation

When Secure Access is configured at the Splash server, users must install the Secure Access print driver provided with the Splash server. To install, see “Installing Macintosh Client Software from the Splash CD” on page 17 and “Installing the Microsoft Windows 98/Me and Windows NT/2000 Printer Description Files” on page 21.

Printing

Printing using the Secure Access driver is exactly the same as printing with the standard driver except that the driver will prompt for Secure Access information. Other job options work exactly the same.

On the first print to a particular printer, the Secure Access driver will prompt for the IP address of the server. This should be obtained from the system administrator.



On every print, the Secure Access driver will prompt for the required information as set up at the Splash

server. If the information entered is not correct, the driver will prompt to re-enter the correct information, specifying what entry was first found to be wrong, along with the error message set up at the server. This continues until correct information is entered or Cancel is selected. Once correct information is entered, the job prints as with the standard driver.

For more information on Secure Access, see“Secure Access” on page 66.

Secure Access Notes

Correcting Jobs That Error

Jobs that error can be edited at the server to correct the required fields. To edit the jobs, select "Edit Job" from the menu or double-click on the job, then select the "Edit Doc Info" button on the Info pane. The server does not validate the information entered in the "Edit Doc Info" window until the job is released from hold.

Printing with the Standard Driver

Any job printed from the standard driver to a server with Secure Access enabled will error at the server unless the UserID, Password, and Account Number are entered in the Info window of the print driver. Jobs that error can be edited and printed at the server.

Printing with the PageMaker PPD

Any job printed using the Splash PageMaker PPD or any non-Splash print driver to a server with Secure Access enabled will error at the server. Jobs that error can be edited and printed at the server.

Entering an invalid IP address

If an IP address that doesn’t match a Splash server is entered in the Secure Access driver, the driver will display an error message and prompt for a new IP address. The Secure Access driver will not allow printing until a valid IP address is entered.

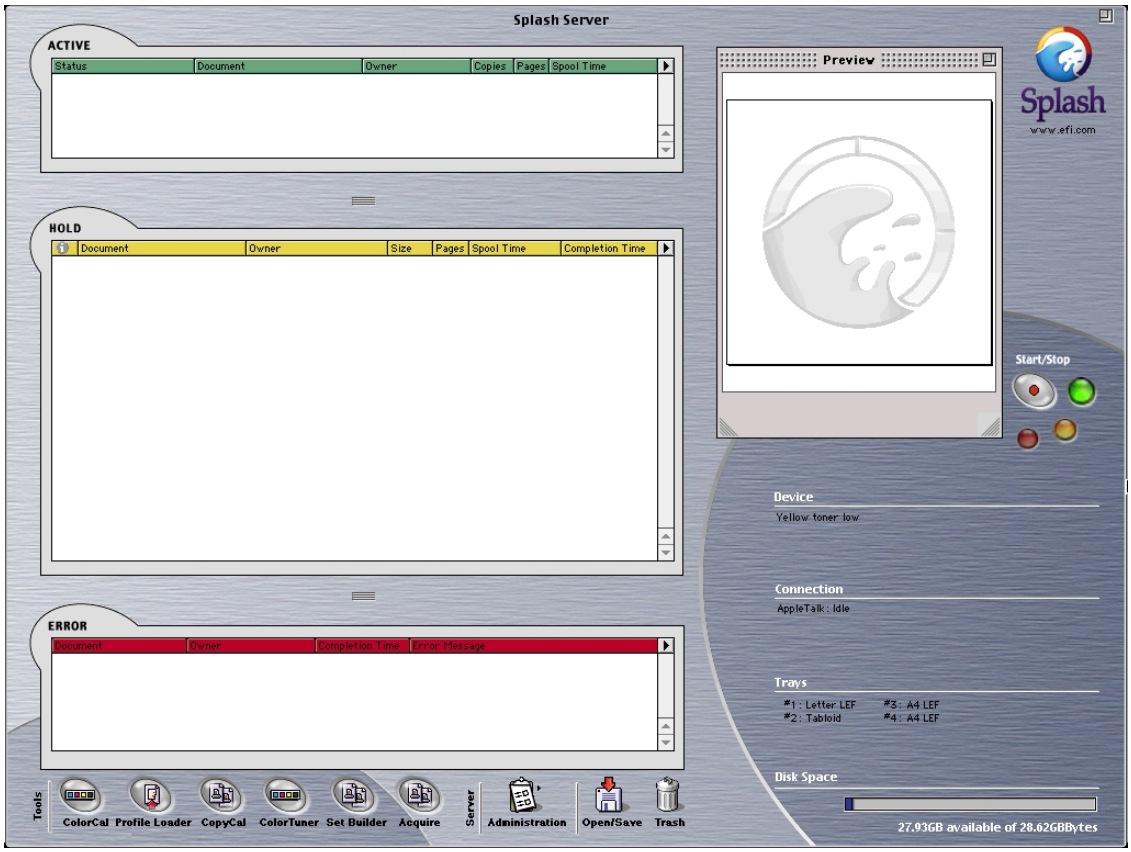
Chapter 6: Using the Splash Server

The Splash Server's Main Window

This section describes the server application user interface elements. The server's full-screen main window is not resizable, but the user can select to view the reduced main window, which offers as much information about the processing queues, but has less functionality than the full-screen main window.

The Full Screen Main Window Features

When the Splash server application starts, the Splash main window appears. The full screen main window displays print queue management information, server administration, and functions for controlling the jobs in the queues.



Job Queues

- The **Active** status area shows the currently processing print job, plus jobs waiting to automatically begin processing.
- The **Hold** queue lists print jobs that the server has processed, and are set to Process and Hold or Process and Save. To print a job from this queue, drag it to the **Active** queue or click on the command key + the "R" key.
- The **Error** queue lists print jobs that fail to print, either partially or completely.

Preview and Stop and Start Buttons

- The **Preview** window shows thumbnails of the job selected in any of the three Job Queues.
- The **Stop** and **Start** buttons, to the right of the **Preview** windows, allow the user to stop and start processing files. These actions are global, stopping all print jobs currently on the server, or allowing the server to begin processing.

Server Options on Full Screen

- The **Server** area to the right of the Tools area in the Splash server full screen main window has the following buttons.
- The **Open/Save** button launches the Open/Save window where dropped files can be opened and spooled files can be saved.
- The **Administration** allows server preferences to be set.
- The **Trash** button allows quick removal of a print job from any queue by dragging it from its queue and dropping it onto this icon.

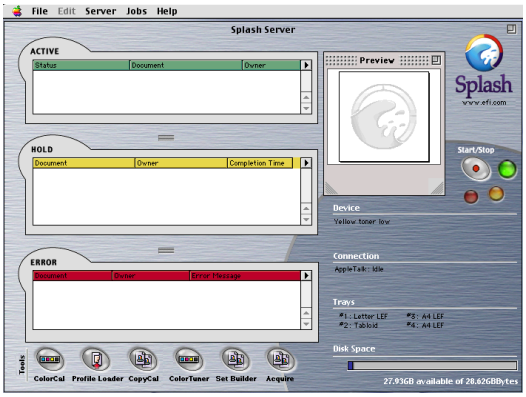
Tools Options on Full Screen

- The **Tools** area in the lower left corner of the Splash server main window has two buttons: ColorCal and Profile Loader.
- The **ColorCal** button launches Splash's color calibration function.
- The **Profile Loader** provides a quick and easy way to add ICC Profiles to the Splash server.
- The **CopyCal** application is used to create color profiles to simulate the output of any color printer.
- The **ColorTuner** option provides an easy way to edit the color output of RIPped pages of a job, before it finishes printing all copies of a job.
- The **Set Builder** combines several jobs together, to print as a single collated document.
- **Splash Acquire** allows users to scan jobs directly from the server without using Photoshop. There is a Photoshop plug-in as well that allows scanning with Photoshop, if Photoshop is installed.

Splash Server and Job Printing Status

- **Device** shows the status of the printer.
- **Connection** shows network activity per Enterprise Networking application.
- **Trays** shows what trays are installed and what paper sizes they hold.
- **Disk Space** shows the available disk space on the computer.

The Reduced Screen Main Window Features



The Splash server's reduced screen main window displays print queue management information and print server tools.

The reduced screen main window displays the following:

- **Active** status area
- **Hold** queue
- **Error** queue
- **Preview** window
- **Device** status area
- **Connection** status
- **Start/Stop** buttons
- **Disk Space** status area
- **Tools** area

- **ColorCal** button
- **Profile Loader** button
- **CopyCal** button
- **Color** Tuner button
- **Set Builder** button
- **Acquire** button

For descriptions of each of these areas and functions, refer to the previous section on the Full Screen Main window.

Drop Printing Files

The Splash server prints Acrobat PDF files, TIFF files, EPS files, TIFF-IT and DCS 2.0 files, and files that are in PostScript format. These files can be printed to the Splash server from the server Power Macintosh or from any client with an AppleTalk or TCP/IP network connection to the server. Use Splash drop-printing instead of a PostScript file download utility to print PostScript files to the Splash server.

There are three ways to drop-print files to the Splash server:

- Drag PDF, TIFF, PostScript, and EPS, and DCS 2.0 files to the Splash server **Active** queue or **Hold** queue.

For PostScript, DCS 2.0, and PDF files, the Splash server copies the file to the server's hard disk before printing. For TIFF and EPS files, the Splash server creates a reference to the file for printing. This allows printing a large TIFF or EPS file from an external drive without first copying the file to the Splash server's hard disk.

- Drag PDF, TIFF, PostScript, EPS, and DCS 2.0 files to the **Drop** folder in the Splash folder.
- Drag TIFF-IT files to the TIFF-IT input folder in the Splash Extras folder.

Important! *If you save a spool file when you drop-print a TIFF or EPS file that is not located on the server's hard disk, the Splash server cannot print the spool file if the original TIFF or EPS file is moved.*

All files copied to the Drop folder are copied to the Splash server hard disk.

If the file cannot be printed, it is moved to the Unprintable Files folder within the Splash folder. The Unprintable Files folder is automatically created by the Splash server when it receives a file it cannot print.

The Drop folder is configured for network sharing. This folder must remain in the Splash folder to operate correctly with the Splash server application. For easy network access, an alias for the Drop folder is located on the Splash server desktop.

If you drop-print a PostScript file that was created with the Splash client software, the Splash server uses the print options selected at the printer driver for the job. If the PostScript file was not created with the Splash client software, the Splash server applies the default print options to the job.

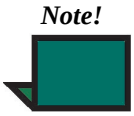
To apply specific options to all jobs, create a Hot Folder (see "Hot Folders" on page 63).

The Splash server automatically applies default print options such as page size and orientation to TIFF or EPS files dragged to the Splash Active or Hold queues. If you prefer to set print options manually for files dragged to the Hold queue, disable the Splash Server Preference that controls this feature. If you disable this preference, a dialog box with print options appears for each TIFF or EPS file dragged to the Hold queue.

Main Window Functions

Print Job Queues

Print job queues show either **Active**, **Hold**, or **Error** status for all jobs spooled at the server. Resize the print queues vertically by dragging the resize tabs between the queues up or down. A queue cannot be resized to hide another queue.



Note! *An* **S** *next to a job in a queue indicates that it has been sent to the Splash server, but has not been RIPped yet. A* **P** *indicates that a Preflight report is available for the job. An* **R** *indicates that the job is being received. If there is no letter next to the job, it has been RIPped, but no Preflight report is available. An* ***I*** *next to a job in a queue indicates that it has saved images.*

Pull-down Menu Options

Click on a job in any queue, and then Click the arrow on the top right side of the job queue to open the Print Job Queue pull-down menu.

The following options are available in the Print Job Queue pull-down menu:

- **Select All** selects all jobs in the queue.
- **Edit Job** opens up the Job Print Options menu for the selected job.
- **Delete Job** deletes the selected job.
- **Hold** is only available if the job is in the Active Queue. This option sends the job to the Hold Queue.
- **Remove Hold** is only available if the job is in the Hold Queue. This option sends the job to the Active Queue.
- **Preflight** screens job for errors and sends it to the Hold Queue.
- The **ColorTuner** option provides an easy way to edit the color output of RIPped pages of a job, before it finishes printing all copies of a job.
- **Show Preflight** opens Preflight Results window. The print job must be preflighted or this option is unavailable.
- **Apply Defaults** applies the current defaults that have been set at the server.

Column Headings

Column headings in the full and reduced screen print queues can be repositioned, resized, added, or deleted independently of one another. To resize or reposition a column heading in the **Active**, **Hold**, or **Error** queue, click on the column heading and drag it to the right or left.

To add a column heading in the **Active**, **Hold**, or **Error** queue, Option-click on the column heading area and select from the list of column headings in the pop-up menu. To delete a column heading, Option-click on the column heading and select **empty** from the pop-up menu.

An explanation of the column headings that are in the reduced and full screen window are as follows:

- **Document—**Lists the title of the job being sent to the Splash server.
- **Spool Time**—Indicates what time the job was completed.
- **Completion Time**—Indicates the last time a server completed a job.
- **Owner**—Lists the computer Name.
- **Status**—Indicates whether the job is being received, printed, preflighted or errored.
- **Copies**—Lists the number of copies requested to print.
- **Pages—**Indicates how many pages are in the job.
- **Size**—Lists the full size of the RIPped job.
- **Spool Name**—Assigns a name to the spool job.
- **Application**—Names the application with which the document was created.
- **Job**—Assigns a number to the job.
- **Comment**—Shows any relevant comments on the job.
- **Account**—Shows the account from which the job came.
- **Error Message**—Explains why a job was sent to the error queue.
- **Info**—Indicates if the job has been sent, is being received, has a preflight report, or has saved images.

Selecting Jobs

To select a print job in one of the queues, click on it. To select multiple jobs, click on a job, then hold down the Shift key and click on multiple jobs in the queue. Hold down Command as you click jobs to select only the jobs you click.

If a selected print job has a preview image it appears on the upper right side of the Splash server window.

Moving Jobs

Selecting a job and selecting the **Hold** menu option, command-H, or dragging the file to the hold queue moves the job to the hold queue. Using the menu option or command-H, the job moves to the bottom of the hold queue.

Dragging a job to a specific queue places the file in the queue at the place where it was dragged. to resume processing on a job in the Hold queue, either drag the job to the Active queue, select **Remove Hold** from the Jobs menu, or select command-R with the job selected.

Deleting Jobs

To delete a job from the Hold or Error queue, select it, then press the **Delete** key. A dialog box asks you to confirm this action. If image files are saved, the dialog asks if you want to delete the entire job, or just the saved image. To delete a job that is currently processing in the Active queue, click on the job, drag the job to the hold queue, and delete it.

Jobs can also be deleted by dragging them to the trash on the Toolbar or to the Trash icon on the Macintosh desktop. Jobs in the Active queue cannot be dragged to the Trash icon.

Warning! ***If multiple jobs are selected to be deleted and some have saved rasters and others do not, a dialog will prompt to delete the job or rasters as described above. Selecting to delete raster files will cause the server to delete the raster files from those jobs with raster files and leave the other files unchanged.***

Viewing and Editing Job Print Options

Print options can be viewed and edited at the Splash server by accessing the job info window. To open the job info window, double-click on the job in the queue, or select the job and then select **Edit Job** from the **Jobs** menu or the queue pull-down menu.

The job info window allows a user at the server to view options selected for a job and to revise the job option selections. For information on the meaning of specific print options, refer to Chapter 5: Splash Print Options.

The following panes are included in the Job Info Window:

- **Info**—Displays job details; name, size, type, time of the job, status and comments.
- **Page**—Shows settings for page range, paper size handling, and job handling.
- **Tray**—Shows tray selections and media options.
- **Color**—Shows settings for color model, color mode, RGB Color Correction, CMYK Press Color Correction, and Composite Spot Color Correction.
- **Quality**—Shows settings for the Rendering Resolution, Image Enhancement, Alternate Black, Black Overprints, auto trapping and ColorTuning.
- **Extras**—Shows settings for File Handling and Prepress features.
- **Graphic—**Contains additional job print options for printing graphic files, (i.e., EPS and TIFF) and PostScript files.

Select any of these panes to change the print options for the job before it prints. For example, change the number of copies to print, the separation between copies, and the scaling features of the job by selecting the **Page** window within the **Job Info** window.

Choose **Original Defaults** to apply a custom set of default print options to the job. See “Setting Default Print Options” on page 54. After selecting the print options for the job, click **OK** to close the job info window.

The Splash server application will not let you edit a job in the Active queue.

Job Preview

Jobs processed (RIPped) at the Splash server include a preview image of the job. The Preview Thumbnail is a Splash Server Preferences Option. The preview shows in the Preview box when a job in a queue is selected. The preview will not show if a job has not been RIPped. The page number of the current preview appears at the bottom center of the Preview window if first page or all pages are selected in the Preview Thumbnail options.

Click the arrow buttons below the preview image to see the next or previous preview pages. Click the left arrow while the first RIPped page for the job is displayed to display the last RIPped page of the job in the user interface. Click the right arrow while the last RIPped page of the job is displayed to show the first RIPped page of the job. The preview image cannot be changed for a job that is RIPping.

Drag the Preview box by the title bar to move it anywhere within the Splash server window. The preview window can be resized to any size.

Job Error Checking (Preflight)

The Splash server can check a job for errors before it prints. the Splash server's Preflight feature examines print jobs for potential problems such as:

- PostScript errors
- missing fonts and font substitution

To screen a print job for potential errors, select the job in the Splash server window, then choose **Preflight** from the **Jobs** menu. The job moves temporarily to the Active queue for preflight processing.

When preflight processing is complete, select the job in the hold queue and choose **Show Preflight** from the **Jobs** menu. the Preflight Results window appears. You can also double-click on the job in the hold queue and click the **Preflight Report** button from within the **Info Tab** window options. The Preflight Results window appears.

The **Print** button in the Preflight Results window prints a hard copy of the report at the printer.

Splash Preflight Notes

When you use Splash Preflight with a job in the Hold queue, the Splash server examines the job for errors. When inspection is complete, the job moves to the bottom of the hold queue.

If you use Splash Preflight with a job in the Error queue the job is preflighted and moves to the bottom of the Hold queue.

Starting and Stopping Processing

Buttons to the right of the Preview box stop and start processing.

- Click the large oval gray button with the red center to stop processing the job currently on the server.
- Click the small round green button in the center of the oval gray button to resume processing.
- Client computers can send print jobs to the Splash server while the server processing is stopped; jobs sent via print and save or print and delete are spooled to the Server's startup disk and appear in the Splash server **Active** queue.
- If a print job is listed in the Active queue when server processing is halted, the server stops all jobs at the first convenient point and leaves them in the Active queue. The job order is unchanged by this option.

Toolbar

The Toolbar provides quick access to the following Splash utilities:

- ColorCal
- Profile Loader
- CopyCal
- Color Tuner
- Set Builder
- Acquire

Splash Server Functions

ColorCal

ColorCal is an automated color calibration system. Frequent and regular calibration using ColorCal keeps your Splash server's output predictably accurate. For detailed information about maintaining consistent color output, see Chapter 8.

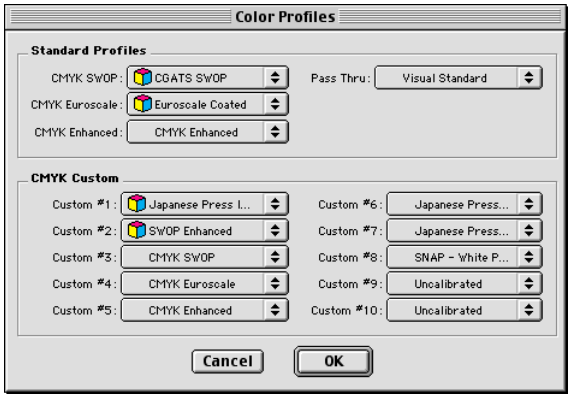
CopyCal

CopyCal is a standalone application that creates profiles that allow the Splash server to emulate the output of any color printer. For detailed information about using CopyCal, see Chapter 8: Calibration.

Color Profile Selection

The Splash server interface allows an administrator to set the CMYK color correction profiles. The Splash server provides a large number of standard CMYK 4D color profiles. These profiles may either be GCR preserving or not based on a server preference. These profiles may also be used as the basis for creating new custom profiles using the ColorCal Expert Mode tools.

To change the CMYK color correction profiles, choose **Color Profiles** from the Server menu in the Splash server application. The Color Profiles dialog box appears.



4D CMYK Profiles

- Enterprise CMYK
- Euroscale Coated
- Euroscale Enhanced
- Japanese Press Enhanced
- Japanese Press Inks
- SWOP Coated
- SWOP Enhanced
- Type D Enhanced
- Type D Inks
- Corel "RGB"
- CGATS SWOP
- FEDEC
- Fogramat

Old Style CMYK Profiles

- CMYK Enhanced
- CMYK Euroscale
- CMYK SWOP
- Japanese Press Enhanced
- Japanese Press Inks
- SNAP-recycled paper
- SNAP-white paper
- SWOP Enhanced
- Visual Standard
- Uncalibrated

Note! *The default SWOP profile for G630 is CGATS SWOP. For G620, the default was SWOP Coated. To make SWOP the same as in G620, set the SWOP profile to SWOP Coated.*

ColorTuner

ColorTuner allows the user to edit the output color of RIPped pages before printing all copies of the job.The feature can be used to make minimal corrections not provided by color profile selection and calibration, and also to make significant changes to the color content of the page.

ColorTuner displays a large thumbnail to allow the user to select color changes, and a smaller onscreen preview to provide limited feedback on the effect of the changes. The preview is intended to show the relative color change being applied and not intended as a proof of the final color. The only proof is the printed page.

ColorTuning a Print Job

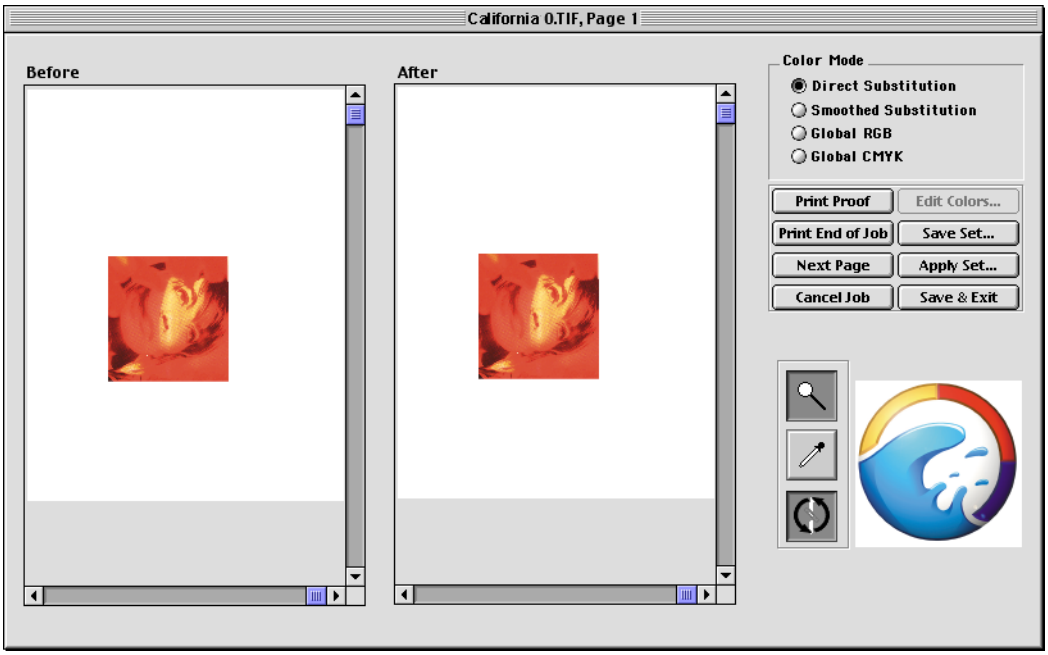
Select the RIP and Tune menu in the Jobs menu on the Splash server. When the RIP and Tune option is selected, the following job options are used regardless of the edited job settings:

- 1 copy
- Uncollated
- No staple
- No duplex

- Forward page order
- No cover page
- Contone
- Save as TIFF Off
- Auto Black Detect Off
- Progressives Off

Selecting RIP and Tune for a job discards any previous ColorTuner information for the job.

After each page is RIPped, the ColorTuner window opens. This presents a thumbnail of the page, a color preview, and all the tuning controls.The user can select the tuning desired, and subsequent jobs will print in that mode until the user changes it. Only one type of color tuning may be applied to each page. Changes are viewed in the After preview and proofed by selecting **Print Proof** to print a page with the changes applied.



The user selects one of four color adjustment modes. Only one mode may be used per page, but different modes may be used on different pages in a job. Once a mode is selected and changes are made, the other three modes are disabled for that page unless the changes are deleted or reverted.

The four color adjustment modes are:

- Direct color substitution
- Smoothed color substitution
- RGB Global color changes
- CYMK Global color changes

These modes are described in more detail starting on page 53.

After tuning each page, the user can choose the following:

- **Next Page** the next page is RIPped and the tuning process is repeated. The next page automatically displays with the changes from the previous page.The page can be reverted to its RIPped form by clicking the Revert button on the Global Color Adjustment pane, if the currently selected color mode is Global RGB or Global CMYK. If the currently selected color mode is Direct Substitution or Smoothed Substitution, click the Edit Colors button and delete the color substitutions from the list from the Color Substitutions dialog box.
- **Print End of Job** prints a copy of the remain pages with tuning applied, then returns the job to the queue.
- **Cancel** deletes all tuning for a job and returns it to the hold queue.

- **Save and Exit** saves color tuner changes on the job and returns it to the hold queue without printing any pages.
- **Save Set** saves the tuning changes as a named ColorTuner set.This set can then be selected in the job options dialog for other jobs.It is not necessary to select this in the job options nor will the job options show this set name. This option is only enabled when color changes have been made on the job.
- **Apply Set** selects a Color tuner set and applies it to the job. The page can then be accepted as is or further edits can then be applied to the page. Option is only enabled on the first page when no color changes have been made or all color changes have been deleted or reverted.
- **Edit Colors** brings up a dialog box which presents a list of the colors that have been edited on the page. Changes can be modified or deleted. This option is only available in direct or smooth substitution mode when colors have been edited on the page.

Other ColorTuner controls are:

- Rotate 180: rotates page 180 degrees so that page can be viewed in a more convenient way
- Zoom: click in the image to zoom in, option-click to zoom out. Allows ten levels of zoom.
- Scroll bars: standard scrolling tools appear when zoomed in past the minimum resolution.
- Color picker: click in preview image to select color.

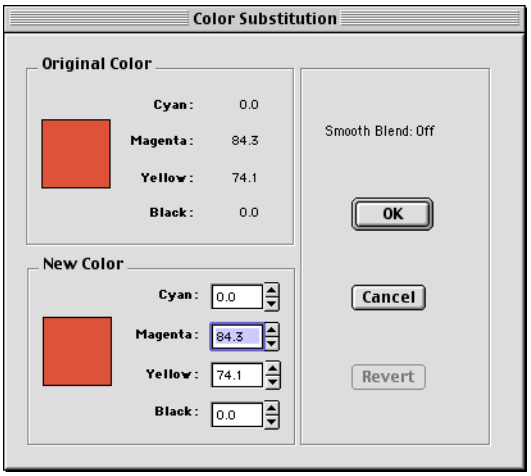
Note!

If a job is selected to RIP and Tune while other jobs are printing, the first page of the job will be RIPped and tuned while other jobs are printing, but the first tuned page cannot be printed until previous jobs finish printing.

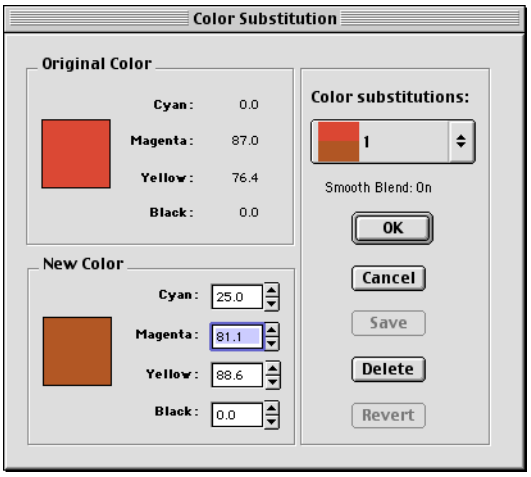
Direct Color Substitution

Direct color substitution changes all occurrences of any single color to any other color, without constraints. This is primarily intended to allow significant color changes to solid color areas. Artifacts can and will appear if the color change is significant (for instance, from red to blue or from 100% red to 50% red) and if the color occurs in areas other than the solid color area to be changed.

To define color changes, pick a color using a zoom tool to focus on an area of the page in the Before preview, then select an individual color with the eye dropper tool. Once the color is selected, the CMYK percentages display and can be modified. The After preview reflects each change as it is entered. Up to 31 colors can be selected and changed.



Any color change can be modified by selecting Edit Colors. As shown below, both the original color and the new color are shown, and values can be changed. The dialog box below has the smoothed color substitution feature selected.



Smoothed Color Substitution

Smoothed color substitution changes a single color to another color. All colors within a range in CMYK space around the selected color are changed to prevent discontinuities. This function is designed to allow

users to adjust a dominant color in the image, such as one endpoint of a background gradient, but the range of color changes are limited to prevent discontinuities.

Colors are selected and modified as described in “Direct Color Substitution” on page 53.

RGB Global Color Changes

Global color changes allow users to manipulate the individual RGB curves to affect all color output on the page.The curve manipulation controls provide the same functions as the ColorCal expert mode.

CMYK Global Color Changes

Global color changes allow users to manipulate the individual CMYK curves to affect all color output on the page.The curve manipulation controls provide the same functions as the ColorCal expert mode.

Starting and Stopping the Server Application

An alias for the Splash server application is located in the Startup Items folder in the Macintosh System Folder. This starts the Splash server application each time the server computer is started. If desired, drag the Splash server alias to another location on the computer. In addition, aliases for the Splash server application and ColorCal utility are located in the server’s Apple menu items and Splash server desktop.

To prevent client computers from printing to the Splash server, quit the Splash server application. To do this, choose Quit from the File menu within the server application. When you quit the server application, users (including a user working on the server) cannot choose the Splash Printer as a print destination.

Double-click the Splash server application icon, or restart the Macintosh to start the server application and resume processing and printing jobs to the printer.

To control client printing to the Splash server, the server can be configured to spool and hold all incoming print jobs. This allows a Splash administrator to review jobs and determine which jobs to print.

Default Job Settings

This function allows the administrator to set default print options for jobs not sent with a Splash PPD. These settings include all color correction and printing modes, as well as paper types. The job defaults editor interface appears when the administrator chooses the Edit Defaults command in the Jobs menu.

Note! *Note that the administrator must be logged on as administrator to modify the Default Job Settings, otherwise the option is not available.*

The interface is similar to the job editor interface. The number of copies and page range options are not available. An additional panel of options allows the administrator to set default options for graphics files that are downloaded for direct printing to the server. These options appear when the Graphic button is selected. The button Original Defaults resets all print options to their original factory settings.

The following panes are included in the Default Job Settings Options:

- **Info**
- **Page**
- **Tray**
- **Color**
- **Quality**
- **Extras**

Setting Default Print Options

To create a custom set of page setup and print option defaults, begin with either of these first two steps:

1. With the reduced main window open, Choose **Edit Defaults** from the **Jobs** menu at the top of the screen or

2. With the full screen main window, click the **Administration** icon pull up menu in the server window. Select the **Job Defaults** option to create a custom set of page setup and print option defaults.

3. Click the **Page**, **Color**, **Quality**, **Extras**, **Graphic**, and **Layout** buttons to select default print options.

4. **Graphic** default options are applied when you drop-print TIFFand EPS files to the Splash server.

5. If you click **Original Defaults**, the Splash server resets all print options to match the factory defaults.

6. Click **OK** to save your custom set of print defaults.

The Splash server applies the default print options in the following situations:

- The Splash server automatically applies default print options to graphics files (EPS, TIFF, and PDF formats) that are placed in the Drop Folder.
- The Splash server automatically applies default print options to graphics files that are dragged to the Active or Hold queues in the Splash server window.
- If the Splash server receives a graphics file from a client on a TCP/IP network, the server automatically applies default print options to the job.
- When you place a PostScript file in the Drop Folder, Waiting queue, or Hold queue, the Splash server applies the default print options only if the file was not created with the Splash client printer driver.

Note! *Job defaults set at the Splash server do not affect defaults at the printer driver. When a client user selects "Printer Default" in the printer driver interface, the factory default is applied rather than the server default.*

Job Defaults for PostScript Printing

For jobs that are not sent to a printer with a Splash PPD, a default set of Splash printer options are applied.

Job defaults are applied to jobs from the following sources:

- Jobs from UNIX clients
- Macintosh jobs using non-Splash PPDs
- Windows 2000/NT and Win95/98 jobs using non-Splash PPDs

The job defaults are set at the Splash server.

Job Defaults for Graphics Files

Splash server defaults are applied to graphics files. The defaults are those used for PostScript files, in addition to the following:

- Paper size
- Center image on paper
- Scale image to fit paper size
- Image orientation (landscape/portrait)
- Image title (none, file name, or specified text)

RIP-While-Print

The Splash server has an automatic RIP-While-Print function. Automatic RIP-While-Print reduces print wait time by ensuring that the CPSI is never idle while print jobs are present.

RIP While Print tracks all print jobs including jobs that are in transit to the Splash server, and directs CPSI processing of jobs where the currently processing job has highest priority and is completed first.

RIP-While-Receive

The Splash server has an automatic RIP While Receive function. Automatic RIP While Receive reduces print wait time by ensuring that the CPSI is never idle while print jobs are present. RIP While Receive tracks all print jobs including jobs that are in transit to the Splash server, and directs CPSI processing of jobs as follows:

- The currently processing job has highest priority and is completed first.
- Completely spooled jobs are processed next. If there are two or more completely spooled jobs waiting, the jobs are processed in the order they were finished being received by the Splash server, regardless of the size of the job.
- If no completely spooled jobs are waiting, RIP While Receive begins CPSI processing on a job as it is being received by the Splash server. If two or more jobs are in transit to the Splash server, the job that began transmitting to the server first is processed. All other jobs in transit are automatically spooled.

If an error occurs, the job is returned to the queue when spooling finishes. The job is restarted when the error is corrected. It is not necessary to resend the job from the client.

RIP-Across-Jobs

The Splash server will automatically begin to RIP a second job as soon as the first finishes RIP'ing, without waiting for the first job to finish printing.

Instant Reprint

Instant Reprint allows RIPped files to print repeatedly without RIPping the job for each repetition. Jobs with an "I" shown in a print queue information column will print without re-RIP'ing.

Note! *There is no explicit user control for this feature.*

Raster File Management

Raster files can be saved using either the **Process and Hold** or **Process and Print, and Save Image File)** raster file job options. Jobs with saved raster files can be reprinted without re-RIPping, with respect to certain server preferences and job options. Calibration does not require reRIPping. When a job is edited in such a way as to require reRIPping, the user is warned that this will cause the raster files associated with the job to be deleted. The user is then able to confirm or cancel the change.

The options that require reRIPping are as follows:

- Page Pane—the Page Range, Scaling, Rotate, and Imposition options
- Color Pane—all options
- Quality Pane—all options
- Extras pane—all options

Changing server preferences will not cause jobs to be reRIPped. When options are changed, however, a dialog tells the user that the changes will not affect stored bitmaps.

Raster files are deleted by selecting the job and selecting Delete under the Jobs menu or by clicking the Delete key on the keyboard. If any of the files selected have raster files, the dialog prompts the user to either cancel, delete both the spool and raster files, or delete the raster files only. No option to delete spool files only is provided. Raster files can also be deleted by dragging the spool file to the trash on the Macintosh desktop. In such cases, both spool and raster files are deleted with no warning to the user.

Splash Server Preferences

The Splash Server Preferences user interface allows an administrator to configure the Splash server.

Seven separate panes are included in the Preferences window:

- **Server**—Includes various job processing preferences and settings for the Server Name.
- **Page**—Includes settings for printing cover pages, mapping jobs, and creating previews.
- **Network**—Shows settings for enabling Enterprise networking, Appletalk Registration, and Font Downloading.
- **Color**—Includes various options for color printing.
- **Screens**—Allows settings for different types of screens.
- **Style**—Sets style preferences for each of the three print queues.
- **Job Log**—Displays settings for starting, storing, and viewing a job log file.

Accessing the Preferences Window

You can customize the Splash server's appearance and configure job processing options with the Preferences command. To view and change Splash server preferences:

1. From the **Server** menu or **Administration** icon, select **Login.** The Login window appears.
2. Enter the Administrator Password, or leave the field blank if there is no password.
3. Click **OK**.
4. Choose **Preferences** from the Server menu or from the **Administration** icon. The Splash Server Preferences dialog appear.

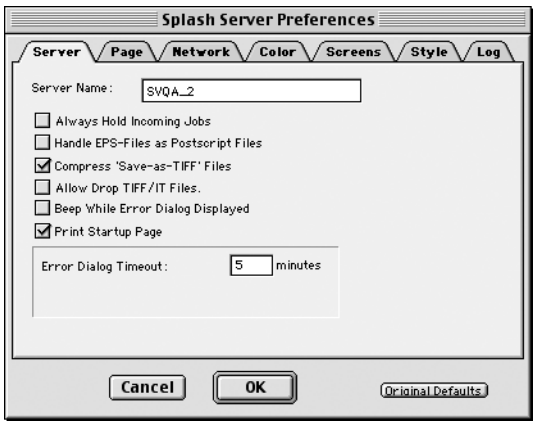
Click any button at the top of the dialog box to see more server preferences. The preferences are

described in the sections that follow. Click **OK** to apply changes to the Splash server.

Important! *Do not modify server preferences when printing is in progress at the server. Doing so could cause unexpected results in the printed output.*

Setting the Server Preferences

In the **Preferences** window, click on **Server** to open the server preferences window. The server preferences window gives access to the settings described below.



Naming the Server

The Server name appears to remote clients who connect to the Splash server over an AppleTalk network. “Splash Server” is the default name for the Splash server. You must change the name of the server if you have more than one Splash server connected to the same network zone.

To change the server name, type a unique name in the **Server Name** field. Give the Splash server a name that clearly indicates that it is a color printer. If you assign a duplicate name, an error message appears, prompting to enter a different name. The maximum number of characters for the server name is 31.

Job Processing Preferences

Splash Server Preferences provides the following options for processing print jobs:

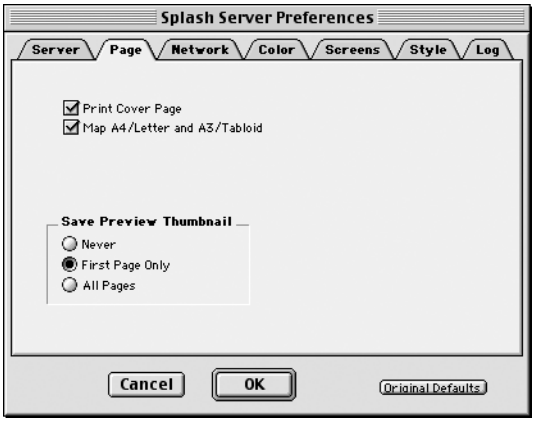
- Select the **Always Hold Incoming Jobs** check box to place a temporary hold on all print jobs received by the Splash server. Incoming jobs go to the bottom of the Hold queue and do not RIP or print. This allows a server administrator to review all jobs before they print.

Note! *When this server preference is selected, each print job received by the server must be dragged from the Hold queue to the Waiting queue to print.*

- Select **Handle EPS Files as PostScript Files** to interpret EPS files as PostScript. In general, you should not select this. It should be used in cases where a PostScript file with an EPS header cannot be interpreted properly. For example, if a blank page is printed when you drop-print an EPS file.
- **Error Timeout** specifies how long server processing waits when an error occurs during a print job. If the error condition is not corrected within the time limit specified, the server transfers the job to the Error queue. Increase or decrease the time-out by minute increments. The minimum is one minute. If the Error Timeout is set to zero minutes, no error occurs.

Setting Page Preferences

Click Page at the top of the Preferences window to view page options for the Splash server.



- Select the **Print Cover Page** checkbox to print a standard cover page to the top output tray as the final page for jobs that print from any tray.

Cover page information includes the following:

- date and time printed
- print job owner’s name

- job name
- number of pages printed

No cover page is printed for the following:

- the Server Job Log
- print jobs that contain an error and are transferred to the Error queue
- print jobs that use the Save as TIFF print driver option
- print jobs that use the Progressives print driver option
- print jobs that use the Separations print driver option

When the “Print Cover Page” option is selected, the cover page that prints for each job includes a “Pages Printed” field. This field reports the number of sheets printed for the job. Note that for Duplex jobs, “Pages Printed” reports half the total number of page images printed (two page images are printed for each sheet).

- The **Map A4/Letter and A3/Tabloid** server preference is useful for frequent printing on Letter and Tabloid paper sizes with occasional A4 or A3 jobs, or vice versa. If this checkbox is selected and no A4 paper is loaded at the printer, the A4 job is automatically converted to print on Letter paper. If A4 paper is loaded, the Letter job is automatically converted to print on A4.

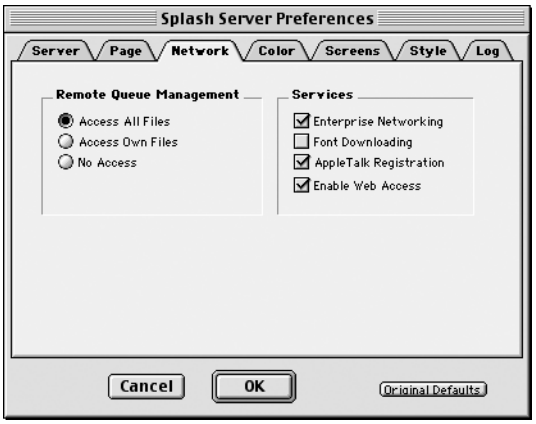
If Tabloid paper is loaded, jobs with A3 paper selected print on Tabloid paper. If A3 paper is loaded, jobs with Tabloid paper selected print on A3 paper. In each case, the job is scaled proportionally to fit the paper size and the image is centered on the page to prevent clipping. After the job prints, a spool file for the job appears in the Error queue with a message to indicate that the paper size for the job was converted.

- Select an option for **Save Preview Thumbnail** to specify whether to generate a preview image (thumbnail) for a job when it is processed at the server. The preview for each page takes approximately 50K of space on the disk. The preview displays on the Splash server when the job is selected and while the job is being printed. Preview images can be viewed at any time by selecting the job and using the arrow keys to page through the thumbnails.

Options for saving previews are as follows: Never; First Page Only; All Pages

Setting Network Preferences

Click **Network** at the top of the Preferences window to view network printing and queue management options for the Splash server.



Enterprise Networking

When **Enterprise Networking** is enabled, the Splash server can receive print jobs from clients on TCP/IP and IPX networks in addition to AppleTalk clients. The Splash server can maintain all three network connections simultaneously.

AppleTalk Registration

Select AppleTalk to register the Splash server name on Apple Talk. If it is not selected, remote users can not print to the Splash server. Use this option to temporarily restrict access to the Splash server and print a job directly from the server.

Font Downloading

Select this option to enable font downloading to the server from a Macintosh client workstation.

While font downloading is taking place, the server cannot process print jobs. If the server is processing a job when font downloading begins, Splash Server Preferences delays the font downloading until the current job has completely processed. To avoid confusion, click **Stop** in the Splash server window to halt print processing before font downloading begins.

Note! *When Font Downloading is enabled, a new printer option appears in the AppleTalk Chooser. The new Printer option is for downloading fonts only. To avoid confusion for clients who are attempting to print to the Splash server, disable Font Downloading in the Splash Server Preferences after downloading fonts to the Splash server.*

Adding Fonts to the Splash Server

The Splash server provides 136 Roman PostScript fonts and two multi master fonts. Print jobs that use the PostScript fonts provided with the Splash server print faster because these fonts are resident at the printer and are not downloaded with the print job. If you frequently use fonts that were not provided with the Splash server, you can download these fonts to the Splash server to speed up printing.

Any PostScript font download utility can manage fonts on the Splash server. Splash software provides a simple font download utility. The utility is located in the Splash Utilities folder on the Splash server hard disk. You can download fonts to the Splash server from any AppleTalk client.

Downloading Fonts to the Splash Server

This section describes how to use the Apple Printer Utility provided in the Utilities folder on the Splash server. Other font download utilities work with the Splash server. The steps for downloading fonts are the same for the Splash server or for a client computer.

To download fonts with the Apple Printer Utility:

1. Install the fonts on the Splash server or client Macintosh as directed by the font manufacturer.

2. Launch the Apple Printer Utility.

3. Select the printer from the list of printers, then select the **Open Printer** button.

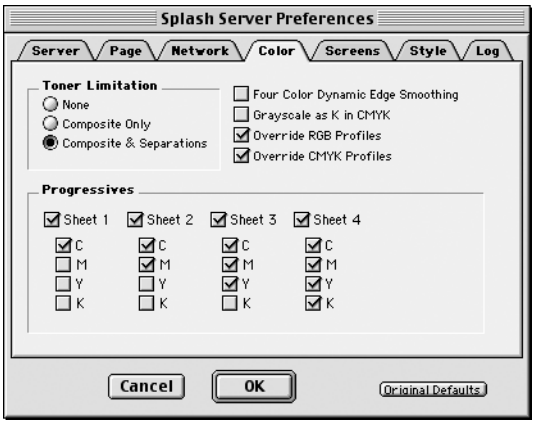
4. Select the **Fonts triangle** and then select the **Add** button.

5. Select the font to download and select the **Add** button. Repeat to select all fonts to download.

Select the **Send** button.

Setting Color Preferences

Click **Color** in Splash Server Preferences to see the Splash server's color options.



Splash Toner Limitation prevents flaking in dense color areas of the job output by automatically limiting the maximum amount of toner applied to the paper.

- Select Composite and Separations to protect all print jobs from toner flaking.
- Select Composite Only to speed processing for your separation jobs.
- Select None to disable the Toner Limitation feature.

For best results when using the Splash Toner Limitation feature, enable Splash CMYK color correction for all documents with CMYK data.

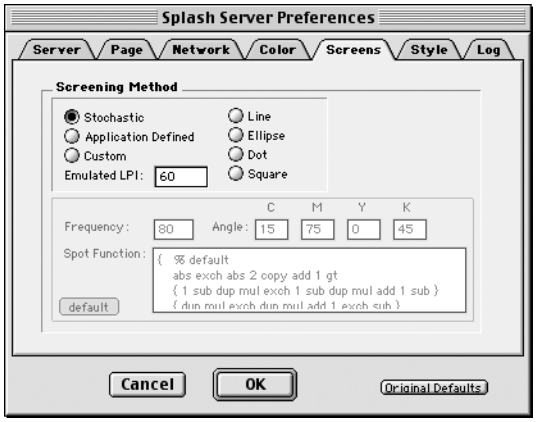
- Select **Four Color Dynamic Edge Smoothing** to apply smoothing to all four color panes. When turned off, smoothing is applied to one color (black) only.
- **Progressives** gives the user the option of printing up to four separate color passes per page. This feature allows examining the results of progressively adding color to output.

Select the number of sheets to print in the Progressives box, then select the number of colors to print on each sheet. In the printer driver choose Print Progressives before printing the document.

- When **Override RGB Profiles** and **Override CMYK Profiles** are set to the default of On, Splash RGB and CMYK job settings are used respectively.

Setting Server Screening Preferences

Click **Screens** in Splash Server Preferences to see Splash's screening options.



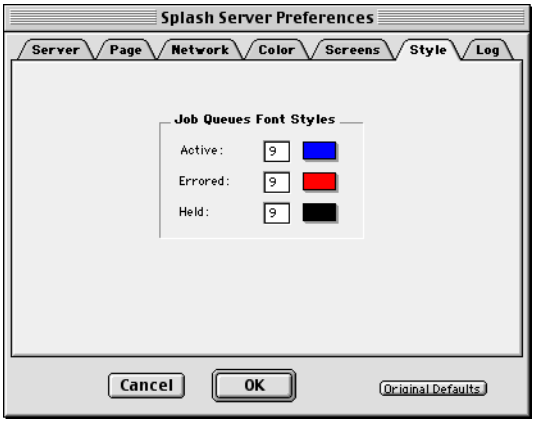
Screening is applied to print jobs that are not printed in continuous tone (contone) at the printer.

Screens provides several options:

- **Stochastic** is the default Splash server screening method. This method uses random dot placement to prevent moiré patterns in the final output.
- **Application Defined** allows an application such as QuarkXPress to control screening for the print job.
- **Emulated LPI** sets the screen ruling (lines per inch). For most purposes this is set to 200. The minimum value is 16 the maximum is 400.
- **Line**, **Ellipse**, **Dot**, and **Square** allows specifying the shape of the dots.
- **Custom** allows designing a custom screen. This option overrides application screening when it is selected.
- Set the Frequency to 25 or less for smooth gradients. If set to a number above 25 it may cause banding in printed gradients. The minimum value is 16.
- Set the screen Angle for each color pass. For best results, position the screens so that the dots form a symmetrical pattern. Incorrect screening angles result in a moiré pattern in the final output.
- The Spot Function defines the shape of the screen dot. The default is round. Click Default to return to a round dot.

Setting Server Style Preferences

Select **Style** in the Server **Preferences** window to set other Splash style options.



Set the color and size for text in each of the Splash server printer queues. To set the color in a specific print queue:

1. Click the color swatch to the right of the printer queue. The Apple color picker appears.
2. Use the slider at the bottom to adjust brightness.
3. Click in the color circle to select a color or define a specific color with the text boxes on the right.
4. Click **OK** to choose the color and return to the Splash Preferences dialog box.

Configuration Report

The Configuration Report feature allows the user to print the saved Splash, ColorCal, and Enterprise Networking preferences. This option is only available when the user logs in as Server Administrator. When the Splash server is in main screen mode, select Print Configuration Page in the Administration menu. In partial screen mode, the option is found on the File menu.

The Splash Config Report is a PostScript file that is sent to the Drop Folder and is printed in normal order from the Active Queue.

The items output are

- Server Preferences
- Job Edit Defaults
- Color Profiles and Color Profile Sets
- ColorCal Preferences
- Enterprise Networking settings and preferences

The job will always print out of Tray 1 by default.

Starting a Job Log File

The Splash log file records information about each print job. If you quit the Splash server application, or if the server Macintosh restarts, the log file automatically starts recording as soon as the Server application starts up again. The log file is located in the Splash folder. If you move the log file out of the Splash folder, the server automatically begins a new log file. The default name for the log file is “Splash.log”.

To start a log file:

1. In the Splash server application, choose Preferences from the Server menu. The Splash Server Preferences appears.

2. Click **Job Log** in the Splash Server Preferences. The Job Log File options appear.

3. Select the **Enable Job Logging** check box to create a server log file and to begin recording jobs in the log.

4. Type a name for the log file. The default name is “Splash.log.”

5. Select a button under **Delete Log Entries** to specify how long the Splash server should maintain the current print log file. The options to delete the job log are: delete never, delete after “x” amount of days, and delete after “x” amount of jobs.

6. Click **OK**.

The log file is saved every time a print job is completed. You can view the log file in any application that reads text files, or you can import the log file into a spreadsheet application for billing purposes.

The Print Job Log options allows sorting job information by customer or by date, and can add

subtotal information for each customer.It can print all entries in the job log, or only the entries added since the last job log printed. Select a paper source for the job log then click Print.

Reading the Job Log File

The Log File automatically groups print jobs by user and contains the following information for each job:

- **User Name** shows the network identity of the client that sent the job to the printer.
- **Document Name** shows the name of the file sent to the printer.
- **Print Date** indicates the date that the job was sent to the printer.
- **Pages** shows the number of original document pages or tiles printed.
- **Status** shows whether the job was completed, or, for example, deleted or placed on hold.
- **Start Time** shows the time that the Splash server started processing the job.
- **Copies Printed** shows the total number of copies printed for job. Printing five copies of a two-page job would log as 10 copies printed.
- **Elapsed Time** shows the total time in seconds required to print the job.This starts from the time the job begins to be received at the server, and ends at the time printing completes at the copier.
- **Process Time** shows the amount of time the CPSI spent processing (RIPping) the job, in seconds.
- **Color Model** shows whether the job was printed in grayscale or color.
- **Manual Feed** shows whether the bypass tray was used in the job instead of an automatic feed tray.
- **Duplex** shows whether the job was printed as double-sided output using the Manual Duplex feature.
- **Paper Type** shows the type of paper used for a job printed to the bypass tray.
- **Page Size** shows the page size on which the job was printed.
- **Pages Rendered** shows the number of pages in the document.
- **Color Pages Printed** shows the number of pages printed in color. See Job Log Notes.
- **Black Pages Printed** shows the number of pages that used black ink only.

- **Cover Page** shows if a cover page was printed for the job. See Job Log Notes.
- **Job Comment** shows information entered in the Document Comment field at the printer driver.
- **Account Number** shows the account number associated with the file (if available).

Splash Color Correction

The Splash server has built-in color correction capabilities to match the colors of the image on the display screen to process inks used on commercial printing presses. You can disable Splash color correction and use a third-party color management system to correct screen-to-print or process ink-to-print jobs. Using a third-party color management system will increase processing time.

Note the following for best results with Splash Color Correction:

- When both RGB and CMYK color correction are applied to a print job, RGB colors in the document are mapped into the gamut of the CMYK color profile. RGB colors within the CMYK profile color gamut will match the RGB monitor settings (gamma and whitepoint), but RGB colors outside the CMYK profile color gamut may desaturate and hues may shift.
- If the document contains no CMYK data, or if the RGB colors are primarily out of the CMYK profile color gamut, turn off Splash CMYK color correction in the printer driver. If CMYK color correction is applied to these files, the RGB colors will be restricted to the CMYK profile color gamut and saturated colors may desaturate and hues may shift.

Important! *Most business application documents contain only RGB data. CMYK color correction normally should be turned off for printing these documents.*

CMYK Color Correction

CMYK color correction on the Splash server is optimized for matching mixed press ink colors. Splash CMYK color correction automatically compensates for differences between press ink colors to accurately simulate the selected press ink profile.

Mixed RGB-CMYK Color Correction

Documents that use both RGB and CMYK graphics are a special problem for color proofing. Correcting color for one type of graphic affects the quality of the other. Now, however, Splash mixed RGB/CMYK color correction produces accurate, consistent color for both.

TIFF and EPS Color Correction

Splash Color Correction eliminates the color variation that occurs in documents printed as PostScript files instead of as hard copy, and produces the same RGB color results for both TIFF and EPS files. Since color correction is applied by the Splash server instead of by the application, any print job can be color-corrected, whether using a pre-press application such as Quark XPress, or a less complex application such as Microsoft Word.

Monitor Calibration and RGB Color Correction

Two “identical” but uncalibrated monitors may display an image differently enough to exceed the ability of a color correction application to closely match them. In addition, the colors on a printed page are affected by the light reflecting off the ink and by the particular shade of white in the paper. An uncalibrated display cannot produce the significant benefits that your color correction application offers. Display calibrators can standardize colors on displays and compensate for different lighting conditions and whitepoints.

To produce the closest possible color correction, use a display calibrator to compensate for the variations of your individual monitor, the lighting conditions in your office, and the whitepoint of your paper.

The Splash ColorCal application can calibrate each of the color correction settings. ColorCal gives consistent color printing over time, making RGB output match a calibrated monitor, and CMYK output match Press standards.

Splash Color Correction Notes

- If you use Quark XPress, you must disable EFICOLOR before you can print with Splash RGB color correction. To do this, remove either the

"EfiColor Processor" file from the MacOS System folder, or the "EfiColor XTension" from the Quark XPress application folder.

Important! *Disabling EFICOLOR correction in the Quark XPress application is not sufficient. Quark XPress converts all RGB data to CMYK using EFICOLOR color correction, even if EFICOLOR is disabled in the application. You must remove one of the two EFICOLOR files to prevent EFICOLOR from interfering with Splash Color Correction.*

Hot Folders

Hot Folders is a feature that allows users to create multiple drop folders, each with an assigned set of options that are applied to all jobs placed in that drop folder. This allows users to easily control feature selection and print series of jobs with common options.

For any job placed in a hot folder, the options associated with that hot folder override any Splash options included in the job. A job created with the Splash driver might specify Duplex, Long Edge Bind, but if it is placed into a folder which has the Duplex setting set to None, the job will not print as duplex. The jobs will be placed in the Active queue and will process and print unless the Hold All Incoming Jobs server preference is selected.

Hot Folders are created in the Hot Folders folder inside the Splash Folder.

Select Hot Folders from the Administration menu on the Splash main screen, or from the Server menu on the Splash server partial screen.

A dialog box will appear asking you to name the hot folder. The job options dialog will then appear, allowing you to configure the options for the Hot Folder. Selecting OK creates the Hot Folder.

To edit the options selected for a previously created hot folder, select the Edit Hot Folder menu option. A list of hot folders will appear, allowing you to select one to edit. The job options dialog will then appear, allowing you to change the options.

If the options for a hot folder are being edited, the exact set of options which is applied depends on the timing of when the job finishes moving or copying to the hot folder and when the editing is completed.

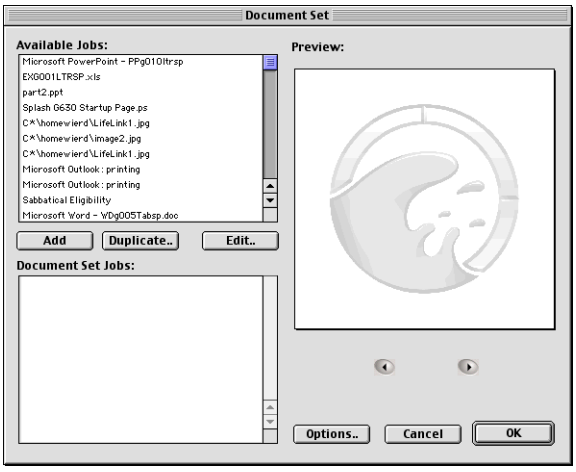
Jobs placed in the folder before the editing starts will use the old options. Jobs placed in the folder after the editing is completed will use the new options. Nothing is guaranteed for jobs placed in the folder while editing is occurring other than that the server should not crash and the job will process with some set of options attached.

The Hot Folders feature does not work with TIFF-IT files or PDF-X files. TIFF-IT or PDF-X files placed in the hot folders will be placed in the Unprintable Files folder.

Set Builder

Set Builder gathers a series of documents and print them as a single document set, applying the standard finishing options, such as collation and stapling, to the complete set rather than the individual documents. Set Builder can combine documents from multiple applications and platforms at the RIP instead of forcing you to piece them all together into a single app at the client.

Set Builder provides a simple list-based interface to add individual jobs to a document set and to set the order of those jobs within the document.



To create a document set:

1. Select the Set Builder button or New Set from the server menus.

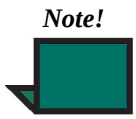
2. Add a job to the set by selecting the job in the Available Jobs list and clicking the Add button.

3. Add all jobs that are part of the set.

4. Set the order of the jobs by dragging the jobs in the Document Set Jobs window.

5. Set the finishing options for the set by selecting the Options… button and selecting the desired finishing options.

6. While in the Options dialog, set the job name and owner by selecting the Edit Doc Info button and changing the Document and User ID fields.



Note! *If Secure Access is enabled at the server, you will also need to fill in the Password and Account fields if those are required. When the set is printed, this info will be applied to every job that is part of the set.*

7. Select OK three times to return to the main server screen. Your document set will now appear in the list of jobs in the Hold queue.

Setting Finishing Options

Certain finishing options, such as the number of copies to print and what output tray to use are applied to the entire document set. These finishing options override the equivalent settings in the Edit Job dialog.

These options are

- **Copies**
- **Duplex**
- **Output Bin**
- **Staple**
- **Face Up**
- **Collate**
- **Reverse Order**
- **Rotate Pages**

Other Document Set Functions

Remove—removes a job from the list of jobs in the Document Set Jobs list

Duplicate—duplicates a job in the list of Available Jobs. This also prompts to set job options for the new job. Select Edit Doc Info in the Info pane to change the name of the job. Select other options to change how the job will RIP.

Edit—set job options to RIP the job. This is equivalent to selecting Edit Job in the main server window. Job options can also be accessed by double-clicking the job in the Available Jobs or Document Set Jobs windows.

Preview—shows the previews for any selected job in the Available Jobs list or the Document Set Jobs window.

Printing a Document Set

To print a Document Set, release the document set from the Hold queue. If the jobs which are part of the document set need to RIP, they will release into the Active queue behind the document set itself. The document set will have a status of Assembling. The components of the document set will RIP and save image files, but not print. When the components have all RIPped, the document set status will change to printing and the set will begin to print.

Document Set Tips and Tricks

Duplex and Odd-Length Jobs

When Duplex is selected for a document set, any component job of the document set will be padded out to an even number of images (sides), if necessary, by adding a blank side to the end of the job.

For example, a document set composed of a five-page job, a four-page job, and a three-page job, will print seven sheets, with the back sides of the third sheet and the seventh sheet being blank.

Previews

The document set preview window can only show previews of jobs that have already been RIPped. The arrow keys move from page to page within a job, but will not cross from job to job, even in the Document Set Jobs window. To see the complete preview for a document set, select the first job in the Document Set Jobs window, then select the right arrow to move through the job until the page number stops incrementing. Then select the second job and repeat until you have scrolled through the entire job.

For best previews, set the Save Preview Thumbnail to All Pages on the Page pane of the server preferences.

Document Errors

If any component of the document set errors, the document set will not print and will instead error. To print the document set, correct the error shown by the component job and re-release the document set.

Acquire without Photoshop

With Acquire, you can scan from the copier and save a TIFF file without using Photoshop. The Splash procedure is very similar to using Photoshop.

1. Select the Acquire button on the tool bar or the Acquire menu option on the File menu.

- If you are using Photoshop, open the Photoshop application.

2. Place the print to scan on the scanner in the upper-left corner of the glass area.

3. From the File menu, select Import and drag to choose Splash Import from the submenu. The Splash Acquire setup dialog box appears.

4. Select Color or B&W for the scan image and select a sharpness setting if desired.

5. Click Scan. After a short pause, the scanner scans the image. The scan is saved, then preview of the image appears in the Acquire window.

Acquire offers a number of options for manipulating the image:

- RGB Color Correction
- CMYK Color Correction
- Gamma
- Cropping Tools
- Sizing and placement tools
- Resolution settings
- Interpolation

Splash Acquire without Photoshop looks and acts like Splash Acquire with Photoshop. For more details on these options in both Splash Acquire with and without Photoshop, see Chapter 9.

Spot Color Editor

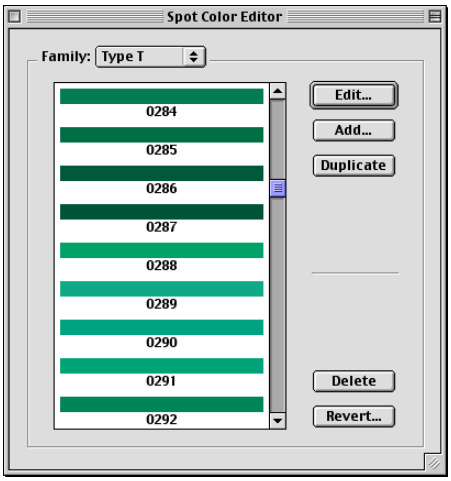
The Spot Color Editor feature can change the output for existing spot colors and can add new spot colors to the Splash server. This tailors the spot color reproduction of the Splash server to better match particular presses.

The Spot Color Editor can also substitute patterns for spot colors. This enables special effects like producing metallic textures for selected colors.

For best results when editing or adding spot colors, make sure the printer is calibrated before editing colors.

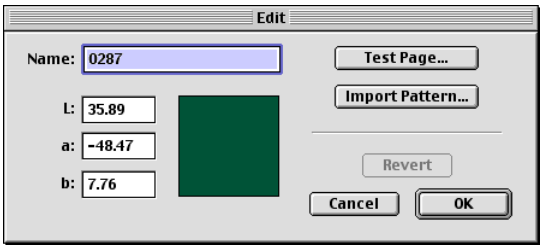
Invoking the Editor

The Spot Color Editor is launched from the Spot Color Editor menu on the Splash server.



Editing a Spot Color

To edit a spot color, select the spot color family, select the spot color within the family, and select edit or double-click the color. Spot colors can be edited three ways—by directly changing the L*a*b* values, by printing a test page, or by selecting an EPS pattern to use in place of the spot color.



In general, spot colors should be edited with care. No constraints are imposed on the changes that are made,

so making significant changes to the original values of a color or substituting an EPS that looks very different from the original color will result in significant changes to the output of files that use these colors.

*Editing the L*a*b* Values*

The L*a*b* values can be edited directly and set to any desired legal value. Results can be verified by printing the test page and examining the middle patch.

Editing by Printing a Test Page

The "Test Page" button prints a test page that includes the original color and a large number of variations close to the color. Examine the test page to determine which patch most closely matches the desired output, enter the number of that patch in the Test Page dialog, and select OK. The L*a*b* value of the selected patch will show in the Edit dialog. Select OK to accept the change or print another test page to make further changes.

If the desired color appears to lie between two patches, it may be necessary to select one patch in the test page dialog and then adjust the L*a*b* numbers directly to match the desired output more exactly. The L*a*b* value of each patch is printed on the test page.

Editing by Importing a Pattern

The "Import Pattern…" button allows you to select an EPS to output instead of the original spot color. This is useful in creating special effects such as metallic textures.

The size of the EPS is limited to 2" by 2". The pattern will be mirrored and repeated across areas larger than the EPS.

To change a spot color back from a pattern to L*a*b* values or to change the pattern EPS selected, first remove the current pattern, then make the desired change.

Changing the Name of a Spot Color

To change the name of a spot color, select the color, select Edit, and change the name. The new name needs to match the name used in the application which defines the spot color. Changing the name of a factory spot color should therefore be done with caution.

Adding a Spot Color

To add a spot color, select the spot color family for the new color, then select the Add button. Enter a name for the color and L*a*b* values for the color or select an EPS pattern to import. If you are finished defining the color, select OK. If you wish to adjust the color, follow the instructions for editing spot colors.

Duplicating a Spot Color

To duplicate a spot color, select the Duplicate button. The Spot Color Editor will create a copy of the color appending the word Copy to the end of the name. The name and values of the new spot color can then be edited to the desired values.

Reverting Changes

Once you select OK when editing or adding a spot color, the spot color is updated. The Spot Color Editor allows you to revert changed colors back to the original factory settings by using the Revert button. If you want to revert just a selected color, select the Selected Color option in the Revert dialog. If you want to revert the entire family, select Selected Family. Reverting the entire spot color family will change any edited spot colors back to their original values and will also delete any new colors that have been added to the family, so reverting the entire family should be done with caution.

Secure Access

Secure Access enables a system administrator to limit who can print to the Splash server by defining combinations of user names, passwords, and account numbers which must be entered and verified before jobs print. Secure Access can also be used without verification to improve job logging by requiring user names and account numbers to be entered in order to print.

Secure Access accounts are established and managed at the server. Users are prompted for the required input at their workstation. Validation of the information, if required, is performed by the server and if the information is not valid, the user is prompted to correct the information at his workstation before the job prints.

Enabling Secure Access at the Server

Enable Secure Access in the Secure Access Security Settings dialog box and then select which fields are required and which required fields should be verified.

The selectable fields are UserID, Password, and Account. If Password is enabled, UserID must be enabled and both must be verified. Otherwise any combination of these fields and verification settings can be selected.

When verification for a feature is off, the server will process any job for which the selected information is not blank. The UserID and Account are output to the job log.

Exempt Dropped Jobs

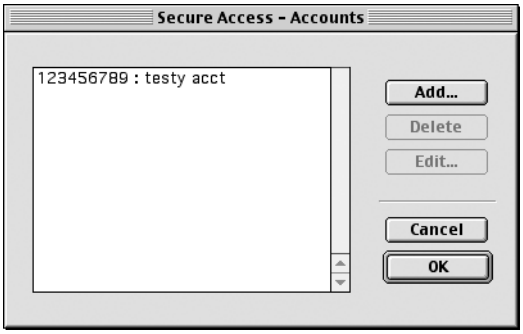
Files placed in the Drop Folder, in a Hot Folder, or dragged to one of the server queues will always error when Secure Access is enabled unless the Exempt Drop Folder jobs option is selected. If this option is enabled, files dropped on the server will print regardless of other Secure Access settings.

Managing User Accounts

User accounts are managed by selecting the Users menu under Secure Access, then using the Add, Delete, and Edit commands. Use Edit or double-click on a user to change the name or password if needed after creating the user.

Managing Accounts

Account numbers are managed by selecting the Accounts menu under Secure Access, then using the Add, Delete, and Edit commands. Use Edit or double-click on the account to change the name or description if needed after the account is created.



The account description is text information that can be used to provide more information about the account than can be stored in the account name. The account description is not required and is not used elsewhere by Secure Access.

All Account names must consist solely of alphanumeric characters.

Client Error Message

When a user incorrectly enters the required Secure Access information at his workstation, the server will return an error message to be displayed at the workstation. This error message should be edited to provide specific contact information for users of a particular server.

Using Secure Access at the Client Workstation

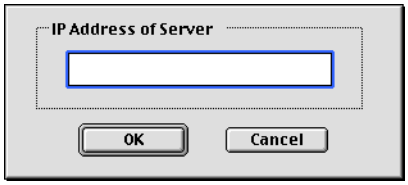
Installation

When Secure Access is configured at the Splash server, users must install the Secure Access print driver provided with the Splash server. To install, see Chapters 3 and 4.

Printing

Printing using the Secure Access driver is exactly the same as printing with the standard driver except that the driver will prompt for Secure Access information. Other job options work exactly the same.

On the first print to a particular printer, the Secure Access driver will prompt for the IP address of the server. This should be obtained from the system administrator.



On every print, the Secure Access driver will prompt for the required information as set up at the Splash server. If the information entered is not correct, the driver will prompt to re-enter the correct information, specifying what entry was first found to be wrong, along with the error message set up at the server. This continues until correct information is entered or Cancel is selected. Once correct information is entered, the job prints as with the standard driver.

Secure Access Notes

Correcting Jobs That Error

Jobs that error can be edited at the server to correct the required fields. To edit the jobs, select Edit Job from the menu or double-click on the job, then select the Edit Doc Info button on the Info pane. The server does not validate the information entered in the Edit Doc Info window until the job is released from hold.

Printing with the Standard Driver

Any job printed from the standard driver to a server with Secure Access enabled will error at the server unless the UserID, Password, and Account Number are entered in the Info window of the print driver. Jobs that error can be edited and printed at the server.

Printing with the PageMaker PPD

Any job printed using the Splash PageMaker PPD or any non-Splash print driver to a server with Secure Access enabled will error at the server. Jobs that error can be edited and printed at the server.

Entering an invalid IP address

If an IP address that doesn't match a Splash server is entered in the Secure Access driver, the driver will display an error message and prompt for a new IP address. The Secure Access driver will not allow printing until a valid IP address is entered.

All UserIDs must consist solely of alphanumeric characters. Passwords must consist solely of alphanumeric characters.

If a user is deleted, jobs with that UserID will no longer print even if they are already spooled at the server unless verification of UserIDs is disabled.

Splash Server Notes

Increasing the Print Queue Capacity

The Splash server application memory configuration allows up to 200 jobs in the print queues, all queues combined. When this limit is exceeded, NetWare, Drop Folder, and TCP/IP jobs will be received but not displayed or processed by the server.

To increase the number of jobs the server application can manage in the print queues, allocate additional system memory to the Splash server application. Print jobs each take about 10K of memory, so to manage an additional 100 jobs in the print queues, for example, you must increase memory for the Splash server application by 1MB.

To allocate additional memory to the Splash server application:

1. Quit the Splash server application.

2. Click the Splash server icon to select it, then choose Get Info from the File menu in the MacOS Finder. The Splash server Info dialog box appears.

3. Under “Memory Requirements” increase both the “Minimum Size” and the “Preferred Size” amounts, then close the Info dialog box.

4. Open the Splash server application to resume print job processing.

When the Splash server runs out of system memory it stops receiving jobs and may report PostScript errors for processing jobs.

Running Other Applications on the Splash Server

Before using other applications on the Splash server computer, click the **Stop** button in the Splash server window. If the Splash server is running, other applications operate at reduced performance levels. When processing is stopped, you can still send jobs to the printer.

Applications can print directly to the printer from the Splash server computer (local printing). When you have finished using other applications, exit these applications and click Go to continue Splash print processing. Any jobs sent to the server will then begin to print.

Print Job Name Notes

When the LaserWriter 8 driver cover page Before Document option is selected for a print job, the job name that appears in the Splash server print queue for the job is “Cover Page”. In the Document Name field of the Job Log the name of the job is “Cover Page”.

Job Processing Notes

The Splash server occasionally reports during job processing that color correction is being applied to a job for which color correction was not selected. This message is incorrect. Similarly, the server will sometimes report that ink limitation is being applied when this feature is not active. Disregard these messages.

Occasionally, a print job will fail and invoke the message “Driver reported an error.” To determine the cause of the error, run Splash Preflight for the print job or drag the job to the Waiting queue.

The contents of the User Name and Document Name fields are determined in the following ways:

Platform	User Name Source	Document Name Source
MacOS 8.5 and later	Owner Name in the File Sharing Control Panel	name of the file being printed
MacOS 8.1 and earlier	Owner Name in the Sharing Setup Control Panel	name of the file being printed
Windows 98/ME through an NT queue	NT logon name	name of the file being printed

Platform	User Name Source	Document Name Source
Windows 98/ME via MacLAN	MacLAN shared name	name of the file being printed
Windows 2000/NT	NT logon name	name of the file being printed
UNIX	The UNIX login name. If the “append host name” option is selected in the OS, then this is the UNIX login name concat-enated with the host name	the disk file name

Switching Network Protocols for the Splash Server

Before you switch network protocols, for example from EtherTalk to LocalTalk, quit the Splash server application to avoid disrupting EtherTalk connections. If you do not do this, the Splash server application can freeze when the network protocol is switched. You must restart the Splash server and open the server application to resume printing.

Disabling EtherTalk

To disable EtherTalk on the Splash server, point to Control Panels in the Apple menu, then drag to choose the AppleTalk control panel. Choose “Printer Port” or “Modem Port” in the Connect via menu to switch the AppleTalk network from EtherTalk to LocalTalk. This does not interfere with the ability to print to the Splash server from Novell print queues with Splash NetWare Direct. Print jobs will resume downloading to the Splash server from Novell NetWare print queues after the Splash server is restarted.

Server Disk Full

If the Splash server hard disk becomes full, a print job sent from a client will appear in the Error queue with an “R” to indicate that it is being received by the server. At the client computer, a message stating that the server hard disk is full appears. When the job is canceled at the client, the job disappears from the Error queue at the server.

Servers With Many Fonts Installed

If you add a large number of after market fonts to your Splash server, you may need to increase memory for the server application to start up correctly. To increase memory for the server application, refer to “Increasing the Print Queue Capacity” on page 69.

Installer Notes

If you use the Splash Installer to remove the Splash software from the server computer, the Installer may show a message that reports the software removal was unsuccessful. This message appears when spool files or TIFF files are present in the Spool Folder or TIFF Folder when you attempt to remove the Splash software. However, the Splash server application was successfully removed from the computer's hard disk.

Job Previews Notes

The preview image for a print job may disappear when an error dialog box displays at the Splash server.

Occasionally the Splash server will not show the correct preview image for a job that has not been processed (RIPped) or a job in the Error queue.

PostScript Error Reported for a Successful Print Job

In rare cases, a job will print correctly, and then be routed back into the Server queue with a PostScript error. Delete the job from the Server queue.

Font Downloading Notes

Disk Space Limitations

Fonts that you download to the Splash server take up disk space. If you have limited hard disk space, limit the number of fonts you download.

Splash Color Correction for Macintosh

Splash ICC (ColorSync) Profiles

The Splash server provides color profiles for Apple’s ColorSync color management software. ColorSync can print to the Splash server using these profiles.

Disable Splash Color Correction in the print driver before printing with ColorSync color management software.

The Splash ColorSync profiles are located in the ColorSync™ folder within the Splash Extras folder in the Splash folder on the Splash server. See the ColorSync documentation for instructions on how to use ColorSync.

For best results with ColorSync, set the Splash Pass Through profile to Visual Standard with the Splash ColorCal application.

Chapter 7: The Web Queue Manager

The Web Queue Manager installed with your Splash server software allows clients on a TCP/IP network to view and control print jobs at the Splash Server. The Web Queue Manager uses Apple's Web Sharing software. To use the Web Queue Manager, client computers must have an established Intranet or Internet connection, plus Netscape Navigator version 4.0 or later installed, or Microsoft Internet Explorer version 4.0 or later installed.

The Web Queue Manager provides the following functions:

- Review the status of print jobs sent to the Splash server
- Hold print jobs to prevent printing
- Release held print jobs
- Move print jobs up or down in the print queue
- Review and change print options for a job in the print queue

This chapter explains how to set up the Splash server to allow remote clients systems to connect to the Splash server.

Preparing the Web Queue Manager

- Configure the Splash server computer to run on a TCP/IP network and enable the Web Queue Manager option. See "Configuring the Splash Server for TCP/IP Direct Printing" on page 11.
- Connect the computer to a TCP/IP network. Contact your network administrator for help.
- Install Netscape Navigator v4.0 or later or Microsoft Internet Explorer v4.0 or later on your computer.

Contact your network administrator for help configuring your computer to use the local Intranet or Internet service. Your administrator should provide the Web address (URL) for the Web Queue Manager.

Configuring the Web Queue Manager

Configuring the Web Queue Manager involves the following two steps:

1. Configuring the MacOS TCP/IP control panel

2. Enabling Web access in the Splash Server application preferences

Configuring the TCP/IP Control Panel

Use the TCP/IP control panel to create an Internet address for the Splash server. Assign the Splash server a static Internet address so clients can reliably locate the Web Queue Manager on the network.

Note! *If your Splash server has TCP/IP printing enabled, the MacOS TCP/IP control panel is already configured for the Web Queue Manager. Continue reading "Enabling Web Access at the Splash Server" on page 74.*

Before beginning, have all address information available. Obtain a static Internet address and subnet mask number, if needed, from your network administrator.

To configure an Internet address for the Splash Server:

1. At the Splash server, point to Control Panels in the Apple menu, then select TCP/IP in the submenu.

The TCP/IP control panel appears.

2. Choose the network connection type for the Splash server's TCP/IP network in the Connect via menu.

3. Select Manually in the Configure menu.

4. Enter the IP Address for the Splash server.

5. Enter a Subnet mask number if needed.A subnet mask provides additional address information for some networks.

6. Enter the Router address if needed. A network router maintains a list of IP addresses for two or more groups of network devices. The router then uses the list of addresses to direct network data to the appropriate location on the network. To enter two or more router addresses, press the Return key after you enter each address.

7. Enter a Name server address for the DN server on your network (for example, design.corp.com).

8. Close the TCP/IP control panel.A dialog box prompts to confirm the new setup.

9. Click OK.

Configuration is complete.You are ready to enable web access at the Splash Server.

Enabling Web Access at the Splash Server

1. Start the Splash server application, then choose Preferences from the Server menu. The Splash server Preferences dialog box appears.

2. Click Network at the top of the Preferences dialog box.

3. Under Web Access, select the Enable Web Access checkbox.

4. Type an Administrator Name and Password into the text boxes provided.

The Administrator name and password allow a Splash administrator to remotely edit any print jobs in the Splash print queues with the Web Queue Manager. The administrator name and password override the Remote Queue Management setting.

When a user logs in as the Administrator, they can change all Splash Server Preferences from the Web Queue Manager.

5. Click OK.

The Web Queue Manager is enabled. Clients on a TCP/IP network with Netscape Navigator or Microsoft Explorer installed can connect to the Web Queue Manager to remotely view and manage print jobs on the Splash Server.

6. Provide the Internet address for the Web Queue Manager to clients so they can connect to the Splash server over the Internet or an Intranet. This address will include the IP address for the Splash server or the name of the hard disk drive and includes the names of the folders where the Web Queue Manager utility resides. For example, where the name of the Splash server hard disk drive is G630, the address would be:

http://G630/Splash Folder/Splash Extras/Web

The Web Sharing dialog box appears. Select the Splash folder within the Web folder that resides inside the System Extension folder. From there, select default.html as the home page.

7. Go to the Edit Menu and select Preferences. When the dialog box appears, click the Options tab and confirm that Allow Aliases to open … is selected. Confirm that Allow guests … is selected.

Controlling Remote Queue Management Privileges

The Remote Queue Management options in the Network Preferences dialog box control a client's ability to change or delete jobs in the Splash print queue.This option affects clients who use the Web Queue Manager.

To set the Remote Queue Management option:

1. In the Splash server application, choose Preferences from the Server menu.

2. Click Network in the Server Preferences.

3. Select a Remote Queue Management option.

The options are:

- Access All Files means that client computers can put any job on hold, delete any job, change its position in the queue, and change print options for any job.
- Access Own Files means clients can hold, delete, edit, or change the position in the print queue for their own jobs.Clients must log on to make changes to the print queue.

- No Access means clients can view information for print jobs, but they cannot perform any queue management functions.

4. Click OK.

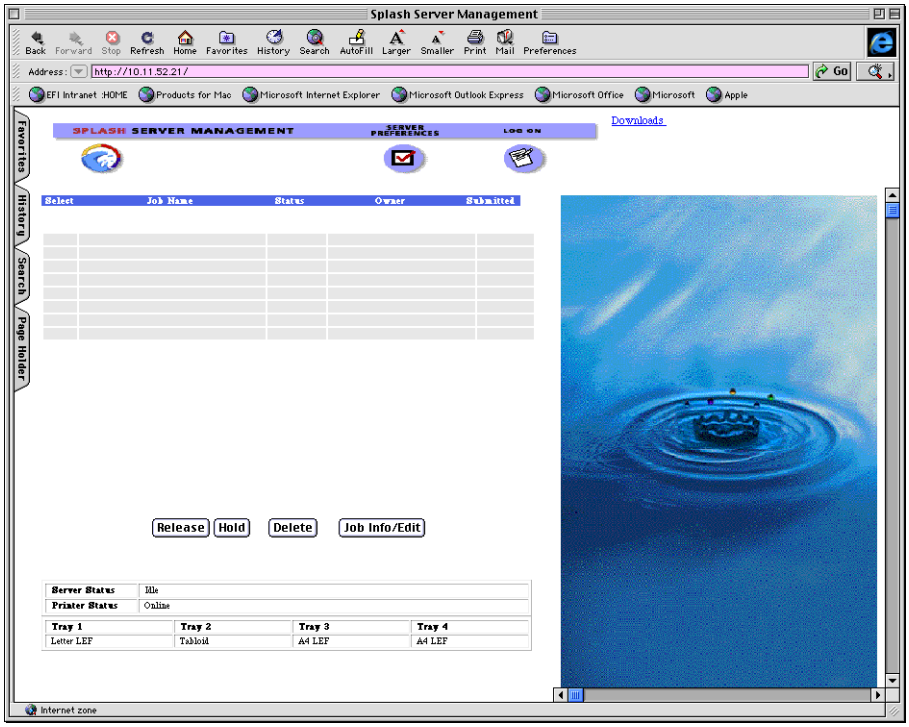
Using the Web Queue Manager

1. Open the Web browser application (Netscape Navigator or Microsoft Internet Explorer).

2. In the Web browser, enter the Web address for the Splash server. Contact your Splash administrator for this information.

The Web Queue Manager appears in the browser application window.

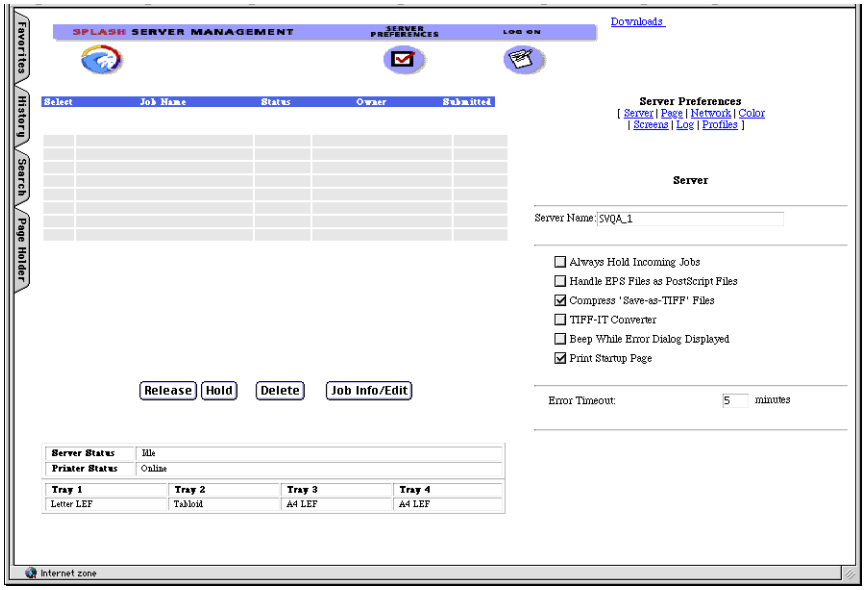
A list of jobs waiting to print at the Splash server



appears on the left in the Web Queue Manager. Information about the printer appears at the bottom. If an error occurs at the printer, that information displays here.

3. Click Server Preferences to view the default server preferences set for the Splash server. Users

logged on as the Administrator can also change preferences from this screen.



4. To view information for a print job, select the checkbox to the left of the job in the list, then click the Job Info button below the job list. Information for the selected print job appears on the right in the Web Queue Manager.

Splash provides information for each job selected.

5. If the job has already been RIPped, click the Preview button in the Job Information screen to view a preview image of the first page of the job, if the Splash server is configured to support this feature.

Managing Print Jobs in the Queue

If the Splash server is configured to allow client computers to manage print jobs in the queue, use the Web Queue Manager to place jobs on hold, delete them, or move jobs up and down in the queue.

Use the command buttons that appear under the print job list to manage jobs in the Splash queues.

- To place a hold on a job, select the checkbox to the left of the job, then click the Hold button below the print job list. To take the job off hold, select it, then click the Release button.
- To cancel a print job, select it, then click the Delete button.

The job list updates to show the revised Splash server queue information.

If the Splash server is configured to limit remote print queue management, the Web Queue Manager prompts for a logon ID and password when jobs in the print queue are changed.

Enter your user name and password, then click Register to complete logon. A message appears on the right to confirm your logon.The confirmation message shows which jobs you have permission to manage with the Web Queue Manager.

Note!

If you did not provide a user name and password when you originally sent the job, enter the Owner name that appears next to your print jobs in the Web Queue Manager job list.

Editing Print Jobs in the Queue

To view and change the print options for a job listed in the Web Queue Manager, select the checkbox to the left of the job, click the Job Info

button, then click the Edit button that appears below the job information. The current print options for the job appear.

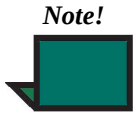
Click Pages, Tray, Color, Quality, and Extras at the top of the editor to view and select Splash print options for the job.

With print options selected, click Submit at the top of the editor, then click Save Settings to confirm changes.

Downloads

Downloading installers from the Splash server

1. Select the Downloads link in the Splash Web interface.
2. Select the Installers folder.
3. Select an installer to download.



Note! *The installers are encoded in a fashion appropriate for the platform on which they will be used, whether Mac or PC. If you are downloading the Mac installers to a PC or vice-versa, make sure your browser is set to not delete the encoded file as the decoding process can cause corruption if run on the wrong platform.*

Downloading other files from the Splash server

1. Select the Downloads link in the Splash Web interface.
2. Select the folder containing the files.
3. Select the file to download.

Note! *If you do not have other media available to restore your Splash software, download the installers to a server to retain a backup copy.*

Publishing Files for Download

The set of files that can be downloaded is easily expanded by placing an alias to the file or folder in the Downloads folder within the Splash folder within the Web folder within the Splash Extras folder in the Splash Folder. Once the alias is in place, the file or folder will be seen in the Downloads UI in the Splash Web interface.

Notes

Use the Back button on your browser to go up a level from a lower directory.

Web Queue Manager Notes

Job Selection Checkmarks Disappear

If you click to select a job in the Print Queue frame and do not invoke a command such as Edit Job or Job Info, the checkmark disappears. This occurs because the server updates the Print Queue every so often. If no command is sent to the server, the server cannot tell that the job is selected at the client, so the checkmark is erased when the frame is refreshed.

Chapter 8: Calibration

In any color copier/printer, color output changes over time, producing inconsistent color from day to day, or even hour to hour. Splash ColorCal adjusts these changes, keeping output consistent.

Advantages of using Splash ColorCal are as follows:

- Splash ColorCal requires no special color knowledge and does not require the use of a densitometer.
- Splash ColorCal is more accurate than other calibration solutions because it automatically adjusts gray balance in addition to accurate linearization.
- Splash ColorCal uses three times more color patches, with over six times the resolution in critical regions to provide results more accurate than competitive solutions.
- Splash ColorCal includes an option that randomizes placement of the patches on the calibration target to minimize the effects of print density variations on a page.
- Splash ColorCal allows calibration on heavy stock papers.
- Splash CMYK and RGB color correction is usable once calibration is complete.
- ColorCal's advanced features can create and save custom color profiles. Profiles of multiple calibrations can be saved for use with specific printing conditions and print media.
- Calibration takes only a few minutes, so the printer's color output can be tested and recalibrated as often as needed.

The ColorCal application is located in the Splash Calibration folder in the Splash Utilities folder on the Splash server. The Splash Calibration folder can be moved anywhere on the Splash server hard disk. A folder containing the ColorCal profiles is in the Preferences folder within the System folder. See "Managing the Profiles Folders" on page 85 for notes about moving Splash color profiles to other folders.

Setting ColorCal Options

Setting the Verify Against Profile

If desired, change the calibrated profile Splash ColorCal uses to create the Desired Density lines during verification.

For example, set the verification profile to CMYK SWOP if you use this profile frequently for printing.

1. In the Splash ColorCal application, choose **ColorCal Options** from the Splash menu. The Default and Custom CMYK profiles appear.

2. Choose a profile in the Verify Against pop-up menu. You can choose any calibrated CMYK profile, custom profile, or Pass Through (standard output) profile for verification.

3. Click **OK**.

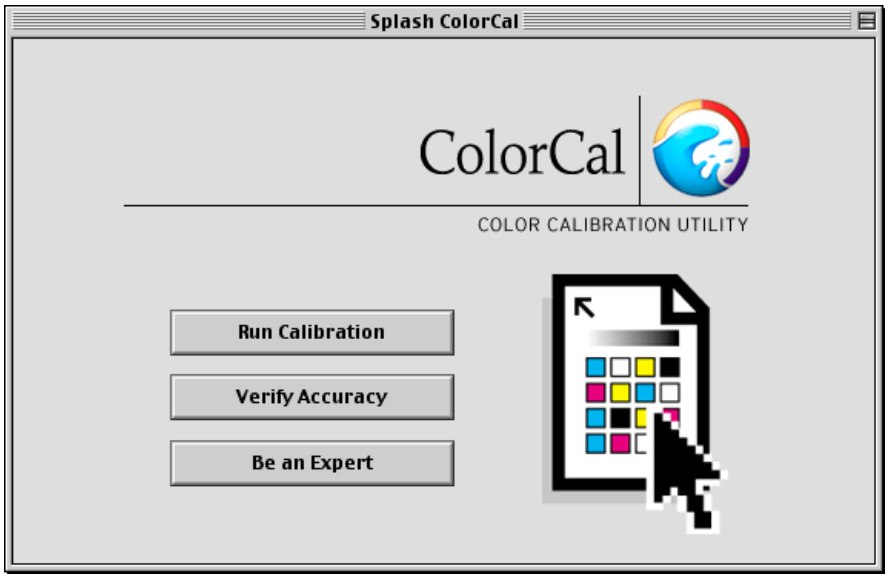
For most purposes the Pass Through profile should be set to **Visual Standard**, the default setting. This selection produces the most visually smooth output.

Calibrating the Printer

This section describes how to calibrate your copier/printer with Splash ColorCal. For best color printing results, recalibrate the printer at least once daily. Recalibrate several times a day during heavy use. ColorCal runs only on the Splash server.

Calibrate with Splash ColorCal as follows:

1. With the printer running, double-click the **ColorCal** icon in the ColorCal folder on the Server. The Splash server application can be running during calibration.

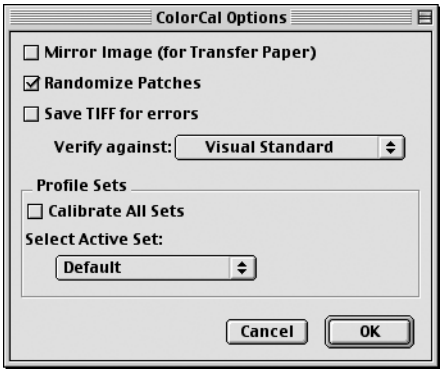


Note! *Even though the Splash server can be running, all processing should be stopped.*

2. If using ColorCal for the first time, or if the printer has recently been serviced, choose **Calibrate Scanner** from the Splash menu.

Calibrate Scanner adjusts the printer to compensate for scanning differences that could affect calibration quality. This command affects ColorCal operation only. It does not affect the scanning capability of the printer for other scanning operations.

3. Choose **ColorCal Options** from the Splash menu. A dialog box appears.



4. Select **Mirror Image** to calibrate to heat transfer paper used for adhering color output to non-standard media such as rice paper, rag paper, or T-shirts. To produce consistent color output, use the original artwork for the calibration target and activate the **Mirror Image** option before calibrating. This inverts the scanned artwork “target” to match the final transferred piece.

5. If a calibration fails, select **Save TIFF for Errors** to help technical support determine the cause in case a calibration fails.

6. Select an option in the **Verify Against** menu to use a specific profile when printing the verify target.

7. Click **OK**.

Note! *The paper in Tray 5 must use the SEF orientation.*

ColorCal prints a calibration target on the printer. The target shows uncalibrated printer performance, even if the printer was recently calibrated.

8. ColorCal prompts to examine the target for printing defects.

9. If printing defects such as creased paper or uneven or flaking toner appear on the target, click **Reprint** to produce a new target on the printer.

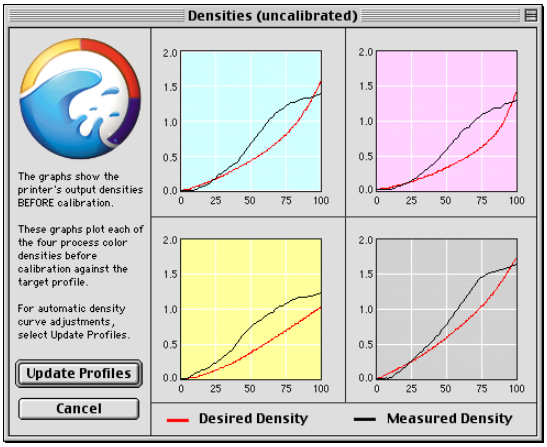
10. When an acceptable Calibration target prints, click **Continue**. ColorCal prompts to place the target on the scanner surface for scanning.

11. Place the Kodak Gray Scale target (provided with Splash ColorCal) and the printed target face-down on the scanner glass.

Important! *Handle the Gray Scale target by the edges to avoid smudging the patches. Keep the target in its protective sleeve when it is not being used. Replace the target if the patches become damaged. Contact Xerox Customer Support to order a replacement Gray Scale target.*

Note! *Be sure to use the Gray Scale target for this step to produce the most accurate scanning results. If the Gray Scale target is not present during calibration, ColorCal uses default information to set grayscale densities.*

12. Click **Scan**. ColorCal scans the target and determines current color performance based on the acquired image. When this process finishes, ColorCal displays a graphic representation of color performance for the printer.



The **Desired Density** lines represent accurate CMYK printing for the current CMYK color profile selected in the **Verify Against** pop-up menu in the ColorCal Options dialog box (see page 80). The **Measured Density** lines show actual uncalibrated printer performance as measured from the scanned target.

Note! *The vertical axis for each color curve is in units of Status-T less the paper density. The horizontal axis is represented as dot percentage from 0% to 100%.*

13. Click **Update Profiles** to have ColorCal adjust color output to match the **Desired Density** levels for your color profiles.

ColorCal updates all profiles at the same time, even custom ones, so any color profile can be used immediately without repeating color calibration.

When profile updating is complete a message appears.

14. Click **Verify** to check calibration results for the printer or click **Done** to return to the ColorCal main window.

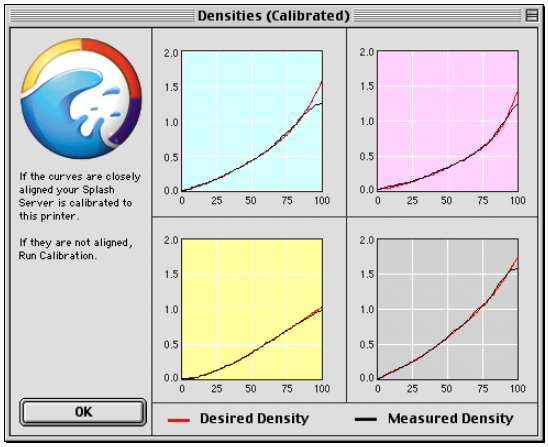
Color calibration is complete. After running calibration, select any of the standard color profiles included with ColorCal for consistent, accurate color.

If printer use is heavy, use Splash ColorCal throughout the day to keep track of color printing performance and recalibrate as needed. To exit ColorCal, choose **Quit** from the File menu.

Verifying Printer Color Accuracy

To verify the accuracy of the calibration, or to determine the amount of change since the last calibration, click **Verify Accuracy** in the ColorCal main window or click **Verify** in the dialog box that appears when calibration is complete. Follow the same steps used to initially calibrate the printer.

When the verification process finishes, ColorCal displays the color performance results. Compare the **Desired Density** lines with **Measured Density** lines to determine color printing accuracy. The example below shows that measured output closely matches desired color performance. Recalibration is not needed.



If the Measured Density levels do not match Desired Density levels, calibrate the printer again.

The printer may need servicing if the measured curve does not closely correspond to the target curve during the verify process immediately after calibrating. Splash ColorCal cannot operate properly if the copier/printer is printing unevenly or if the scanner is not accurately calibrated. To verify whether the scanner is accurately calibrated, set the active Pass Through profile to **Uncalibrated** in ColorCal, then print out the full area on a page with 40% C, 40% M, and 40% Y color mix, with Splash Color Correction disabled in the Splash print driver. Examine the printed page to see if the output is an even gray with little variation. Significant variation indicates that the printer needs to be serviced. If the printer needs servicing, contact your printer manufacturer representative.

AutoGray

AutoGray is a secondary calibration performed to improve the gray balance of the calibrated printer. AutoGray is a Splash menu option similar to Calibrate Scanner that prints and then scans a target and uses the information from the scan to automatically adjust the calibrated profile to improve gray balance.AutoGray can be run without preliminary configuration.

If a printer has not been calibrated, AutoGray is disabled.For greatest accuracy, calibrate AutoGray following every color calibration.

To remove the current AutoGray calibration and reset AutoGray to the factory default, select Reset AutoGray in the ColorCal menu.

After calibrating using ColorCal, calibrate AutoGray as follows:

1. Close the copier platen cover
2. Click AutoGray in the Splash menu.
3. Select a paper source for the AutoGray calibration target.The paper size can be 8.5"x11", A4, or larger. Only page sizes large enough to fit the ColorCal target are listed.

4. If Tray 5/Manual Feed is selected, choose a paper size from the menu that appears and feed that paper size through the bypass tray. Select either normal, heavy weight, or extra heavy paper.

5. ColorCal prints an AutoGray target on the printer.The target always shows the currently calibrated printer performance minus any adjustments made as a result of previously running AutoGray.

6. ColorCal prompts the user to examine the target for printing defects.

7. If printing defects such as creased paper or uneven or flaking toner appear on the target, click Reprint to produce a new target on the printer.

8. When an acceptable Calibration target prints, click Continue. ColorCal prompts to place the target on the scanner glass.

9. Place the Kodak Gray Scale target and the printed target face-down on the scanner surface. Match the arrow on the target with the arrow on the back of the copier platen glass.Position the target with the short edge of the paper along the left side of the copier platen. The Gray Scale target must cover the grayscale patches in the upper-left corner of the ColorCal target. To do this, place the Gray Scale target face-down on the glass first, then place the ColorCal target face-down on top of the Gray Scale target.

10. Click Scan. ColorCal scans the Target and determines current gray balance based on the acquired image.

11. Click Verify to check calibration results for the printer or click Done to return to ColorCal.

For the Verify pass, ColorCal prints an AutoGray target which has had the gray balance adjusted.

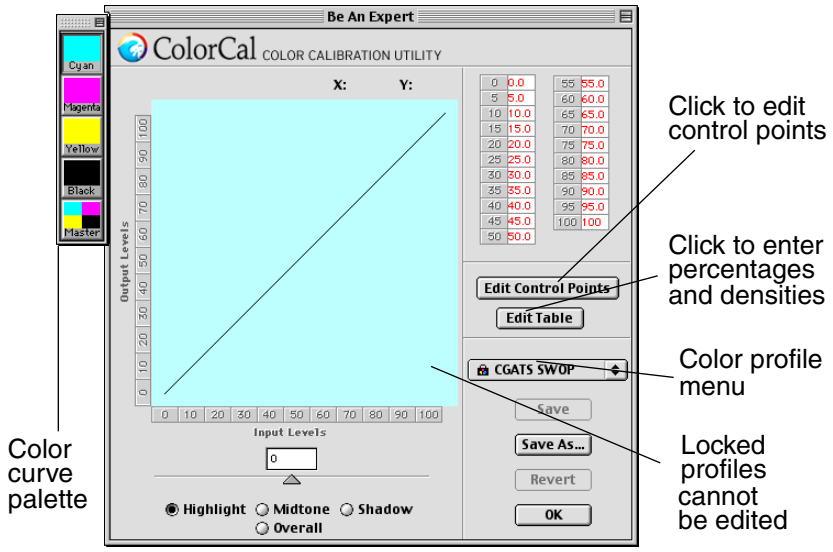
The CMY ramp and the K ramp on the right side of the target should match closely.

Editing Custom Color Profiles (Expert Mode)

Splash ColorCal provides expert-level tools for creating custom (user-defined) CMYK profiles or modifying the calibrated CMYK profiles provided with ColorCal. Only the calibrated CMYK profiles can be edited. To create a new profile, save an existing profile under a new name then modify the new profile. Splash ColorCal provides the following methods of editing profiles

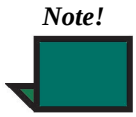
- Control point editing.
- Adjusting gain in Shadows, Midtones, and Highlights.
- Entering percentages for new-style profiles, or densities for old-style profiles.

To edit a color profile, select **Be an Expert** in the Splash ColorCal window. The Splash ColorCal edit window appears.



Editing Curve Gains

1. Select a color profile to edit from the Color profile popup menu.



Note! *Factory installed profiles cannot be edited. ColorCal automatically prompts to save with a new name any factory installed profile selected.*

2. Select **Highlights**, **Midtones**, or **Shadows** at the bottom of the window to adjust a portion of the curve, or **Overall** to adjust the entire curve.

3. Select a color curve to edit from the floating color curve palette. The four color curves and the Master curve are selectable.

4. Move the slider to adjust the gain.

5. Repeat Step 3 and Step 4 until all adjustments to all curves are complete. Each color's cumulative changes show in its own channel and in the master channel display.

6. Select **Save** to overwrite the existing profile or **Save As…** to create a new profile.

- The **Save** option is disabled when factory profiles are selected because factory profiles are not editable.
- When using **Save As…**, enter a profile name for the new profile and then click **Save**.
- The new profile name appears in the list of color profiles in the Set Active Profile dialog box. Note that the new profile is automatically calibrated to the last time calibration was run as it is created.

7. Select **OK**. Selecting OK before saving a profile causes ColorCal to prompt to save changes or cancel. The new profile is automatically calibrated to the last time calibration was run as it is created.

Note! *A single level of **Undo** is supported which removes the last change applied. The **Revert** button restores the profile to the last saved state.*

Control Point Editing

1. Select a color profile to edit from the color profile popup menu.

Note! *Factory installed profiles cannot be edited. ColorCal automatically prompts to save with a new name any factory installed profile selected.*

2. Select a color curve to edit from the floating CMYK color curve palette. If the Master curve is selected, the **Edit Control Points** button is disabled.

3. Select the **Edit Control Points** button.

4. To edit, drag the curve points with the mouse pointer. Output Percentage (0% to 100%) and Input Percentage (0% to 100%) update instantly on the right as a curve point is moved.

- To add a curve point, click anywhere along the curve. ColorCal allows a maximum of 32 control points for an individual color curve.
- To remove a curve point, drag it over another point on the color curve.
- A single level of **Undo** is supported which removes the last change to a control point.
- To undo all changes to the curve, click **Revert**.

Note! *The color curves created with the Expert Edit controls are similar to those used in Adobe Photoshop, but cannot be directly exchanged with curves created in Adobe Photoshop.*

5. Select **Save** to overwrite the existing profile or **Save As…** to create a new profile.

- The **Save** option is disabled when factory profiles are selected because factory profiles are not editable.
- When using **Save As…**, enter a profile name for the new profile and then click **Save**.
- The new profile name appears in the list of color profiles in the Set Active Profile dialog box. Note that the new profile is automatically calibrated to the last time calibration was run as it is created.

6. Select **OK**. ColorCal prompts to save changes or cancel if OK is selected before saving a profile. Note that the new profile is automatically calibrated to the last time calibration was run as it is created.

Editing Percentages

ColorCal creates custom color profiles by editing curve definition percentages. This feature allows easy and accurate curve definition using information derived from other sources. ColorCal is able to match only the shape of the curve on output, not the exact numbers entered.

1. Select a color profile to edit from the popup menu.

2. Select a color curve to edit from the floating color curve palette. The **Edit Table** button is disabled when the Master curve is selected.

3. Select the **Edit Table** button. The edit table dialog appears with the current output values for each input percentage displayed.

4. Enter new values for any and all levels. If an out of range value is entered, it is corrected immediately to the nearest in range value. For new-style, the range is 0.0 to 100.0. The edit table dialog does not accept negative numbers.

Note! *Undo is not supported in the edit table dialog box.*

5. Select **OK** to save the changes or **Cancel** to discard all changes.

6. Select **Save** to overwrite the existing profile or **Save As…** to create a new profile.

- The **Save** option is disabled when factory profiles are selected because factory profiles are not editable.
- When using **Save As…**, enter a profile name for the new profile and then click **Save**.
- The new profile name appears in the list of color profiles in the Set Active Profile dialog box. Note that the new profile is automatically calibrated to the last time calibration was run as it is created.

7. Select **OK**. ColorCal prompts to save changes or cancel if OK is selected before saving a profile.

Creating Color Profile Sets

Color Profile Sets created using multiple calibrations can be saved with unique names. Each named profile can be selected to use with a particular paper tray. The same profile can be used for multiple trays.

To create a profile set:

1. Choose **Edit Color Profile Sets** from the ColorCal menu.

2. Click **Add**.

3. Enter a name for the profile set.

4. When calibrating the copier/printer, choose the name of the profile set to calibrate from the ColorCal Options dialog box. Follow the instructions described in “Calibrating the Printer” on page 79.

To specify calibration from different sets to paper trays:

1. Choose **Color Profile Sets** from the Splash server’s Server menu.

2. For each tray, choose the profile set to use.

3. Click **OK**.

Managing the Profiles Folders

Splash color profiles are located in the “Splash Color Data” folder in the Preferences folder within the System folder. This folder contains three profiles folders.

To delete a color profile, be sure it is not selected in the Set Active Profiles dialog box then remove the file from the Old Style Profiles folder or Calibration Sources folder.

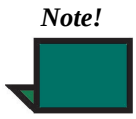
CopyCal

CopyCal is a standalone application that creates profiles that allow the Splash server to emulate the output of any color printer. CopyCal is launched from the Splash server. CopyCal and the Splash server application can run at the same time. The printer must be running during the entire calibration procedure.

CopyCal Profiles

CopyCal profiles are a special class of profile that combine CMYK and RGB color correction into a single selection.electing a CopyCal profile in the CMYK profile list overrides any RGB color correction setting for that job. No CopyCal profiles are provided at Install.

CopyCal Calibration



Upon startup, CopyCal senses if it is attached to a DC 12 CP with a built-in scanner or a DC 12 LP which uses an external scanner.

Calibrate with Splash CopyCal as follows:

1. With the printer running, double-click the **CopyCal** icon on the Splash server main screen. The CopyCal interface appears.

2. Print the CopyCal targets from Acrobat to the selected printer via the standard print driver for that printer. The targets may be printed from any Mac or Windows client computer. The targets are numbered 2 to 4.

3. Click Calibrate in the main calibration window. CopyCal prints a reference target, which is labeled #1.

4. Place the Kodak Gray Scale target and the CopyCal target #1 face-down on the scanner surface. Match the arrow on the target with the arrow on the back of the scanner platen glass, and orient the target with the short edge of the paper along the left side of the scanner platen.

If the wrong target is placed on the glass, a CopyCal error message appears, stating that it cannot find registration marks. Before proceeding, re-start the procedure.

5. Click Scan. CopyCal scans the target and determines current color performance based on the acquired image.

If the wrong target was placed on the glass, a CopyCal error message appears, stating that it could not find registration marks. Before proceeding, restart the CopyCal procedure.

6. Repeat Steps 5 and 6 for targets 2, 3, and 4.

7. A prompt appears, asking for a profile name. Name the profile and save it. The CopyCal profile created can now be selected as a custom CMYK profile. If the profile already exists, CopyCal prompts to replace the profile. Cancelling allows the user to select a new name.

Chapter 9: Scanning with Acquire

Splash Acquire

The Splash Acquire feature enables the DC 12 CP to operate as a high-resolution color scanner. Acquire can scan printed images in CMYK, RGB, or Grayscale.There are no network transfer delays during scanning operations, because images are scanned directly from the Splash server.

Splash Acquire operates on Splash server Macintosh computers only.

Preparing the Scan

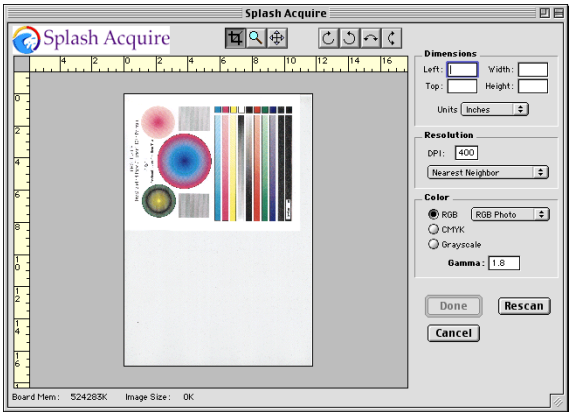
Click on the **Acquire** button on the Splash server main screen window, or select Acquire from the File menu on the reduced Splash server window.

Place the image to be scanned on the printer, in the upper-left corner of the glass area.

Note! *The Splash server cannot carry on processing while it is performing a scan. When you launch Acquire, you will be asked if you want to stop processing.*

The Splash server prompts you to select Color or B&W. After you have made your selection, click **Scan**.

After a short pause, the printer scans the image. A preview of the image appears in the scan area of the Acquire window.



Color Options

The Color Options convert the scanned image to RGB or CMYK color, or grayscale. If you select RGB or CMYK color, Splash server lets you apply color correction to the scanned image when the file is saved to disk. The preview image in the Acquire window updates instantly to show the result when you apply a Color option.

RGB Color Correction

These RGB color correction types can be applied In RGB color mode:

- RGB Photo is for scanned photographs.
- RGB Copy is for exactly matching a photocopy.

CMYK Color Correction

When CMYK color correction is applied to the scanned image, Splash server adjusts colors in the image to match the Splash ColorCal Pass Through Uncalibrated profile.

Gamma

Gamma describes how a device reproduces tonal gradations. For most purposes, the default setting (1.8) is best. Gamma 1.8 simulates tonal gradations as perceived by the human eye.

Edit the Gamma text box to lighten or darken the file. Gamma applies to color and grayscale scans. The scan preview updates automatically as the Gamma setting changes.

Cropping the Scan

The buttons above the scan preview window select an area of the scanned image to save as a file.

- The Crop tool changes the pointer to a crosshair. This selects a portion of the preview image. Double-click the Crop tool to select the entire preview image.
- The Zoom tool changes the pointer to a magnifying glass. Click anywhere on the preview image to see a magnified view of the scan preview. Hold down the Option key as you click to make the preview image smaller. Double-click the Zoom tool to fit the preview image exactly in the preview window area.
- The Move tool moves your view of a magnified preview image.

The amount of time needed to open the image increases with the size of the selected area. Select only the portion of the image you wish to save. Drag the crosshair across the scanned image to draw a marquee (dashed rectangle) around the desired portion of the image:

To constrain the selection area:

- Hold down the Shift key as you drag the crosshair to maintain the aspect ratio of the selection area.
- Hold down the Option key as you drag the crosshair to select an area centered on the pointer.
- Hold down the Shift-Option keys as you drag the crosshair to maintain the aspect ratio of a selection area that is centered on the pointer.

To change the size of the marquee, drag the marquee “handles” at each corner of the selection, or enter new values in the Width and Height boxes.

To use the Width and Height boxes:

1. Choose the unit of measure (centimeters or inches) from the Units menu.

2. Enter values in the Width and Height boxes. The marquee changes to match the dimensions entered.

To move the marquee, either drag it or enter values in the Top and Left boxes.

To move the marquee manually, place the pointer within the marquee and drag it to a different location within the scan area:

3. To move the marquee numerically, enter new values in the Top and Left boxes.

Choosing the Scanning Resolution

1. In the Resolution box, enter the resolution.

The default setting for Resolution depends on the memory configuration for the computer, and the size of the scanned image. The usable resolution is limited by the memory and disk space available on the Server computer.

The plug-in uses interpolation to adjust resolution for the image if the Resolution is changed from its default setting. See Step 3.

2. Choose a unit of measure from the Units menu. This selection applies to the size and position measurements, as well as to the resolution entered.

3. If the default resolution of the image in Step 1 is changed, choose an interpolation option from the pop-up menu.

- Bicubic interpolation offers the highest-quality reproduction for images with gradual changes of color, such as photographs. However, it is the slowest method of interpolation because it requires the greatest amount of processing.
- Nearest Neighbor (the default setting) is the fastest method of interpolation, and it can be the best method for graphic art with well-defined boundaries between elements. This is the best selection for most images. However, gradual changes of color can appear jagged on images printed using this interpolation.
- Bilinear interpolation produces quality and speed that is balanced between the two other options.

Checking the Required Disk Space

The amount of Splash frame buffer memory available for your Splash server model appears at the bottom of the Acquire window.

If the required space is greater than the available space, reduce the size of the scan.

- To reduce the amount of space required by the scan, select a smaller area to transfer to Adobe Photoshop, or choose a lower scanning resolution.

Choosing an Orientation

If the preview image does not appear in the desired orientation, use the Orientation buttons to rotate the image.

To choose an orientation, click one of the orientation buttons. Acquire rotates the preview image in the window.

Saving the Scan

After clicking **Done**, a Save dialog box appears. Select the location where you want to save your scan and name the file. Acquire saves the scan as a TIFF graphic file, which can then be opened in other graphics applications for manipulation and modification.

Splash Acquire Plug-In for Photoshop

The Splash server provides plug-in software for Adobe Photoshop 4.0 or later to be used with either the DC 12 CP, or with a separate scanner attached to the DC 12 LP.

The plug-in does not operate on client workstations. Adobe Photoshop is not provided with the Splash server. Adobe Photoshop or Adobe Photoshop LE must be installed on the Splash server in order to use the Splash Acquire plug-in for Photoshop.

Installation

The Splash Acquire plug-in is located in the Splash folder on the Splash server. Open the Splash Extras folder, then open the Photoshop Plug-in folder to find the Splash Acquire plug-in. To install the plug-in, copy or move it to the folder where the other Adobe Photoshop plug-ins are located.

The plug-in adds the command, Splash Acquire to the Acquire submenu in Adobe Photoshop. The Splash Acquire command prompts the Splash server to scan the image on the DC 12 printer platen.You can apply color correction to the scanned image, crop, rotate, and set the resolution for the image, then save it as an Adobe Photoshop file.

Preparing the Scan

If you have added system memory to your Splash server, it is not necessary to close the Splash server application before you scan with the Splash plug-in. If the Server is currently processing or printing a job, wait until the Server has completed these tasks before scanning with the Splash plug-in. When the plug-in is scanning an image with the printer, the Server cannot print to that device. An error message appears at the server if a job is printed while the plug-in is scanning.

Splash servers provide enough memory to run the Splash server application only. To use Adobe Photoshop or other applications on the server computer, add memory to support those applications.

To scan an image with the Splash plug-in:

1. Start the Adobe Photoshop application at the Splash server.

2. Place the image to be scanned on the printer, in the upper-left corner of the glass area.

3. On the File menu, point to Import to choose Splash Import from the submenu. The Splash plug-in module must be in the proper location to appear in this submenu.

The Splash server setup dialog box appears.

4. Choose Color or B&W (black and white) for the scan image.

5. Click Scan.

The scan is saved to the built-in memory on the Splash card, then a preview of the image appears in the scan area of the Acquire window.

Options

The options in the Photoshop Acquire scan window are the same as in Splash Acquire.

Checking the Required Disk Space

The amount of Splash frame buffer memory available for your Splash server model appears at the bottom of the Acquire window. Acquire also determines if the amount of space available on the Adobe Photoshop scratch hard disk(s) will accommodate the scanned image.

If the required space is greater than the available space, either reduce the size of the scan or choose a scratch disk with more available space.

- To reduce the amount of space required by the scan, select a smaller area to transfer to Adobe Photoshop, or choose a lower scanning resolution.
- To choose a scratch disk with more available space, click Cancel. From the Adobe Photoshop File menu, choose Preferences and drag to select Scratch Disks. Choose a primary and or secondary scratch disk that has more space available, then quit and restart Adobe Photoshop.

Transferring the Image to Adobe Photoshop

1. To transfer the scanned image to Adobe Photoshop, click Done. A progress bar indicates that the image is being transferred.

2. The image appears in a new untitled Adobe Photoshop window.

3. Use the Adobe Photoshop tools to work with the image and to save it to your hard disk. For instructions, see the manuals included with Adobe Photoshop.

Splash Acquire Notes

Improving RGB Scans

To improve the quality of RGB scans created with the Splash server plug-in, use the Image Levels control in Adobe Photoshop. In the Image menu, point to the Adjust submenu, then select the Levels command. The Image Levels control window appears.

Drag the left and right Input level sliders so they are below the lowest and highest points shown in the Levels histogram. Optionally, adjust the middle slider until the image looks best.

For an exact match to the colors in the original image, apply the Unsharp Mask filter in Adobe Photoshop after you scan the image and before you print. Use the filter parameters: 120,2,1 for a 400 pi scan, or 200,1,1 for a 200 pi scan.

Chapter 10: Application Notes

Windows General Notes

Windows Driver Notes

Accidentally Printing EPS Files

If a printer driver is configured to print EPS on a printer rather than to a file, a warning message states that EPS should not be output to a port. The job prints correctly within the application, then the printer stays in a waiting mode until either another job is sent, or until a time-out error occurs. To avoid this error, print the EPS format to a file rather than on a printer.

Images Print With Limited Color

Images based on RLE-4 and RLE-8 compression print with limited halftoning effects. Typically, shades of gray or color print as either black or white. There is no known workaround.

Printing Gradient Fills

Documents that contain radial fills require extra time for the Splash server to process and print.

Text or Fill Patterns Over TIFF May Not Print Correctly

Text and fill patterns that overlay a TIFF image may not print. Avoid overlaying a TIFF image with text or fill patterns in Windows documents.

Windows General Notes

Blank Page

Some applications print a blank page when a Splash print job is cancelled.

Windows Network Notes

"Print PostScript error information" Check box

Remove the check from the "Print PostScript error information" check box in the Windows PostScript Printer Properties window before printing to the Splash server.

Novell NetWare Notes

When a client is configured to print to the Splash server with Novell NetWare, clear the Banner Page option with Novell's User's Tools on the client computer. If the Banner Page option is selected, the Splash server will not receive some Splash Windows driver feature selections.

Jobs printed to the Splash server with Novell NetWare are spooled by both the Splash server and by the Novell bridge. This results in slower printing. If Windows Print Manager is enabled, the job is triple spooled—once on the Windows client, once on the Novell server, and once on the Splash server.

Windows Application Notes

MacroMedia FreeHand Notes

For best results printing to the Splash server, upgrade to FreeHand version 7 or later. Earlier versions of this application may produce problems when printing to the Splash server.

Before printing to the Splash server from MacroMedia FreeHand, select the Splash PPD in the FreeHand Print dialog box. A Browse window appears in the FreeHand Print dialog box. Use the Browse window to select the Splash PPD from the Windows System directory. If you experience problems printing from FreeHand, copy the Splash

PPD to the PPDs directory within the FreeHand application directory.

If two-up or four-up printing is selected for a FreeHand document, the job prints the page borders only. The page contents do not print on the two-up or four-up job.

Windows 98 Notes

Canceling a Print Job

If you cancel a print job, the Splash server generates a blank page with some applications.

Note! *The default setting for this option is on. Uncheck this option in the Printer Properties window.*

Interaction With the Printers' Control Panel

Some setting changes made in the Windows Printers Control Panel, such as Set as Default Printer, Remove, and Connect, take effect only after the Printers Control Panel is closed.

Windows 98 Network Notes

PC MACLAN Connect Notes

If you connect to the Splash server from Windows 98 using Miramar System's PC MACLAN Connect software, most applications require setting the printer data format to Pure Binary Data in the Windows 98 Printer Properties PostScript tab. For Microsoft Office applications (Word, Excel, PowerPoint), set the printer data format to ASCII data, disable PostScript error reporting, and disable Sending CTRL+D after the print job to print files correctly.

To set up printing for all applications except Microsoft Office applications, install the Splash Client Software as described in Chapter 4.

After Splash server setup is complete:

1. Open the **Start** menu, point to **Settings** then choose **Printers** from the submenu that appears. The Printer control panel appears.

2. Double-click the **Splash Server Printer** icon in the Printer control panel. The Splash print queue opens.

3. Choose **Properties** from the Printer menu in the Splash print queue window. The Printer Properties appear.

4. Click the **PostScript** tab. The PostScript options appear.

5. Click the **Advanced** button. The Advanced PostScript options appear.

6. Under **Data Format**, select **Pure Binary Data** then click **OK**.

7. Click **OK** to close the Printer Properties dialog box.

Setup for printing from most applications to the Splash server over PC MACLAN Connect is complete.

To configure printing for Microsoft Office applications:

1. Double-click the **Splash Server Printer** icon in the Printer control panel. The Splash print queue window opens.

2. Choose **Properties** from the Printer menu in the Splash print queue window. The Printer Properties dialog box appears.

3. Click the **PostScript** tab. The PostScript options appear.

4. Click to clear the **Print PostScript error information** check box.

5. Click the **Advanced** button.

6. Under **Data Format**, select **ASCII data**.

7. Click to clear **Send CTRL+D before job** then click **OK**.

8. Click **OK** to close the Printer Properties dialog box.

Setup for printing from Microsoft Office applications to the Splash server over PC MACLAN Connect is complete.

Windows 98 Application Notes

MacroMedia FreeHand

When printing to the Splash server from FreeHand 7 on a PC running Windows 95/98, do not select the Use PPD check box in the print dialog box. When this check box is selected, the Splash print options are not sent with the print job.

If you print a FreeHand document from Windows 95/98, and specify a paper size that is not available at the copier, the job does not print and does not report an error. To successfully print the FreeHand file, select the Process and Hold spool file option. A spool file for the job appears in the Hold queue. Double-click the spool file and select the Force Paper Size To option to print the job to a paper size that is available at the printer. After the job prints successfully, delete it from the Hold queue.

FreeHand documents saved as PostScript files do not print correctly when they are placed in the Splash Drop Folder or dragged onto the Server queues. The file prints as a blank page or does not print at all.

Windows 2000/NT Notes

Windows 2000/NT Application Notes

Adobe PageMaker Notes

In PageMaker 6.0, RGB colors may not be created and printed as expected. Upgrade to PageMaker 6.5 to ensure RGB color matching between the monitor and print output.

Appendix A

Troubleshooting

This section contains troubleshooting tips, and explains some common problems that may be encountered when setting up and connecting the Splash server.

Problem: The Server application does not work or the printer produces abnormal prints.

Solution:

- The problem may be in the cable that connects to the printer. Replace the printer cable with a new cable.

Problem: The Splash server is installed and connected, but does not start when the power key on the keyboard is pressed.

Solutions:

- Properly connect the power cables for the Splash server to live, grounded AC outlets.
- Properly connect the keyboard and Splash Key, and secure all cable connections. If a different Macintosh keyboard and cable are available, try substituting them for the units provided with the Splash server.

Problem: The Splash server starts with the start-up tone, but there is no image on the display.

Solutions:

- Connect the power cable for the display to a live, grounded AC outlet.
- Connect both ends of the display cable.
- Turn on the display (green power indicator light on the front panel of the display).
- Increase the brightness and contrast with the knobs on the front of the display.
- If a different Macintosh-compatible display is available, try substituting it for the display if the display seems faulty.

Problem: The Splash server starts, but the keyboard and/or mouse do not work.

Solutions:

- Connect the keyboard and Splash Key, and secure all cable connections. If a different Macintosh keyboard and cable are available, try substituting them if securing the connections doesn't work.
- Connect the mouse to the keyboard. If a different Macintosh mouse is available, try substituting it for the mouse.

Problem: The Splash server starts, but the Splash server application reports that there is a problem.

Solutions:

- The Splash server application requires that several system extension files be present in the Extensions folder within the System Folder, or the server application will not open. A different error message appears for each required Splash extension file that is missing.
- To solve the problem, locate the missing extension file and move it back into the Extensions folder within the System Folder, or re-install the Splash server software.

NetWare Direct Notes

Novell File Server Does Not Appear During Setup

If a list of Novell file servers does not appear during NetWare Direct setup when you click the Browse button under Print Queue Info, specify the Novell server's Ethernet frame type in the Mac IPX control panel.

1. On the Splash server, open the Apple menu and select the **Control Panels**.
2. Choose the **Mac IPX** option from the Control Panels submenu. The Mac IPX control panel appears.
3. Double-click the **Ethernet** icon under IPX Interface. The Ethernet Access Configuration dialog box appears.
4. Deselect **Always Auto-Configure Frame Type**.
5. Select the option that matches the Novell file server Ethernet frame type.
6. Click **OK**.

Novell Network Number and Node Number Locations

The Novell network or node numbers for the Splash server appear in the Mac IPX control panel on the Splash server computer.

AppleTalk Network Protocol Changes

Changing the network protocol for the Splash server from Ethernet to Modem Port or Printer Port (LocalTalk) does not interfere with Splash NetWare Direct's ability to print jobs to the Splash server from Novell NetWare print queues. Novell Server print jobs resume downloading to the Splash server after the Server is restarted.

Print Queue Connections

Enterprise Networking is configured to support up to three Novell NetWare print queue connections and four TCP/IP connections to the Splash server. Allocate 100K additional memory to the Splash server computer for each additional IPX and TCP/IP print queue connection.

Job Status Notes

Print jobs received at the Splash server via IPX do not display an "R" in the Splash server window.

Glossary

Glossary entries are sorted alphabetically and categorically.

Color Correction: built-in capability to match the colors of the image on the display screen (the computer's monitor) to process inks used on commercial printing presses. Splash color correction can be disabled to use a third-party color management system to correct screen-to-print or process ink-to-print jobs.

Color: **CMYK color correction** provides highly accurate press ink matching. Splash CMYK color correction automatically compensates for differences between press ink colors to produce the closest possible match to press inks in the printer output.

Color: **Custom ICC color output profiles** for use with Apple's ColorSync™3.0 printer color management software enables the Splash server to support multiple platforms and multiple CMS capabilities.

Color: **Mixed file color correction support** prints many "problem" files with no adjustment. The Splash server is the first PostScript server to separately color-correct RGB and CMYK color types for a file.

Color: **RGB color correction** enables each client workstation to match printed output to its specific monitor. The powerful RGB color correction can correct problem files properly and show true blue colors without any purple shift**.**

Color: **Splash ColorCal Software**: see ColorCal.

ColorCal: calibrates for consistent, accurate color, regardless of changes in the printer's color output that occur over time or because of changes in the environment. Splash ColorCal requires no special color knowledge and does not require calibration with a densitometer. Splash ColorCal helps create and use CMYK color profiles.

ColorSync: see Splash ICC ColorSync Profiles.

Documentation: see Splash Online Documentation.

Drivers: **Macintosh Printer drivers** for local and network printing convert the output from your client computer applications to PostScript code.

Drivers: **Windows 2000/NT printer drivers** for network printing from a personal computer running Microsoft Windows 2000/NT, and **Windows 95/98/ME printer description files** for printing to the Splash server from Windows 95/98 convert the output from your Windows applications to PostScript code. *This software requires a PC-to-Macintosh network bridge such as Novell NetWare or Miramar MACLAN Connect, or a TCP/IP network connection, to print from a Windows 95/98 or Windows 2000/NT client workstation.*

Drivers: **Translated Client Drivers** in Brazilian Portuguese, French, Italian, German, and Spanish are included with the Splash server software CD.

Drop-print: the method of sending a file to the Splash server for printing by dragging its icon into the Drop Folder or into the Splash Hold or Active queue in the Splash Jobs Queue Manager. Also used as drop-printed, drop-printing, drop-prints.

Grayscale: Standard gray tones, ranging from black to white.

Instant Reprint: allows the Splash server to reprint a job that has already been processed and RIPped without having to reRIP the job. Instant Reprint is accomplished by selecting Print and Save Image File in your Job Edit options at the Splash server or at the Splash client driver spool options.

Key: see Splash Key.

Novell NetWare: a network through which the Splash G630 can send print jobs.

Online Documentation: see Splash Online Documentation.

PDF: Adobe Software's proprietary Portable Document Format that produces compact WYSIWYG copies of files, maintaining machine-readable text, formatting and graphics.

Preflight: Splash's proprietary pre-printing error identification function. Preflight examines print jobs for potential problems such as PostScript errors, missing fonts and font substitution, and incorrect or unavailable paper size.

Printing: **136 Adobe Roman fonts and 2 Multiple Master fonts** are included.

Printing: **Adobe PostScript Level 2 and Level 3 support** for automatic decompression of embedded JPEG files prior to printing significantly reduces transfer time when printing JPEG files over a network.

Printing: **Adobe PostScript™ CPSI RIP software** (Configurable PostScript Interpreter Raster Image Processor) converts Level 1, Level 2, and Level 3 PostScript code into a pixel-by-pixel page description that the printer uses to print an image. The Splash server can operate with virtually all commercially available Macintosh hardware and software applications built on the open platform Macintosh architecture, including color management systems and media input devices.

Printing: **Continual Print** automatically processes and prints almost all files at printer rated speeds. Long jobs with large bitmaps on each page may not print at printer speed. Performance will degrade gracefully with the length and complexity of the job.

Printing: **Direct IPX printing** provides an easy way for computers connected to a Novell NetWare server to print to the Splash server, without installing AppleTalk connection software. The Splash server creates a native Novell IPX connection from the Splash server to the Novell server. Once configured and activated, it automatically sends print jobs to the Splash server when a Novell client computer prints to the Splash print queue on the Novell NetWare server. Splash IPX printing is simple to configure and it supports all Novell Ethernet frame types.

Printing: **Drag and Drop from Server Queues** supports dragging copies of spool files from the server queues to the Mac desktop.

Printing: **Invert Image** inverts the CMYK output.

Printing: **Job Ticketing** for Macintosh clients allows identification or job information to be entered in a comment field. Comments entered at the printer driver can be viewed at the Splash server and in the server's printing log.

Printing: **Mirror Image printing** flips pages about the vertical axis. This is useful in printing to transfer paper.

Printing: **Job Preflighting** screens spooled jobs at the Splash server and sends to the server's "Hold" queue. The job will be screened for PostScript errors, font substitution/missing font, correct paper not available, all color models used and lists types of images in file.

Printing: **RIP Across Jobs** automatically begins to RIP a second job as soon as the first is RIPped, without waiting for the first job to finish printing.

Printing: **RIP-While-Print** RIPs a file in the active queue while a job is printing, reducing processing time.

Printing: **Save as TIFF or TIFF-IT** can send a file to the Splash server and display a bitmap of the processed file at the Splash server in the "TIFF folder" and "TIFF-IT Drop folder". Combined with separation support, this enables designers to view overprint and trapping during the design process, without needing to retrieve it from the copier/printer.

Printing: **Selectable full-color, screened, or high-speed grayscale printing** for various page image sizes is included.

Printing: **Spool File Handling Options** manages the printing process of the postscript spool file and image file to the Splash server.

Printing: **TCP/IP Direct Printing** enables UNIX-style LPD/LPR printing to Splash over a TCP/IP network.

Printing: **Thumbnails** display preview images of all pages of a document on the Splash server interface.

Queue: one of three fields in the Splash Server Main Window that display the jobs waiting to print, in the order they will be presented for processing. The Splash server queues are **Active**, **Hold** and **Error**.

RIP Across Jobs: automatically begins to RIP a second job as soon as the first is RIPped, without waiting for the first job to finish printing.

RIP: raster image processor, or raster image processing. The software/hardware process of calculating the bit maps of images and instructing printing devices to create the image. Also used for RIPping, RIPped, RIPs.

RIP-While-Print: RIPs files in the print queue continuously, reducing processing time.

Splash ICC ColorSync Profiles: color profiles that enable the Splash server to print using Apple's ColorSync color management software.

Splash Key: a short cable with one connection, which connects the keyboard to the Splash G630's USB port. Removing the Splash Key from the server prevents unauthorized use of the Splash server software and provides maximum security by locking the Splash server application.

Splash Server Application: uses true Adobe PostScript CPSI software, (Configurable PostScript Interpreter) to convert Level 1, Level 2, and Level 3 PostScript code into a pixel-by-pixel page description that the printer uses to print an image. The Splash server can operate with the G3 and G4 Macintosh hardware and software applications built on the open platform Macintosh architecture, including color management systems and media input devices.

Splash Server User Interface: the collection of interactive screens that enable users to view and manipulate Splash G630 options.

TCP/IP: a network transfer protocol, through which the Splash G630 Server can send print jobs from Novell NetWare or Windows 2000/NT servers, without using AppleTalk bridge software.

USB port: The outlet on the Splash G630's CPU designed to accommodate the Splash Key, which accommodates the keyboard connector.

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