



Splash G640 User Guide

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Introduction

This manual describes how to set up, install and configure the Splash G640 Color Server™ for Apple Mac OS and Microsoft Windows computers. The Splash G640 Color Server is a high-end Color Publishing Print Solution for use on Power Mac OS G4 platforms. Splash client software enables a Mac OS or Windows computers to send print jobs across an appropriate network to the Splash G640 Color 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 NT/2000/XP, AppleTalk, Unix, Novell, and Microsoft TCP/IP), see the manufacturer's documentation.

NOTE: The term “Splash G640” is used in this manual to refer to the Splash G640 Color Server. The term “Windows 9x” is used in this manual to represent Windows 95 and Windows 98.

About the documentation

This manual is part of the set of Splash G640 documentation, which includes the following manuals for users and system administrators:

Getting Started describes how to install the Splash hardware and software to print to the printer. Specifically it describes how to install and configure the hardware on the Splash G640 workstation. It explains how to install the Splash G640 software, client postscript drivers, and printer description files. It also explains how to configure the server preferences, print options, calibration and network settings.

The *User Guide* explains the basic configuration and administration of the Splash G640 Color Server supported platforms and network environments. It contains guidelines for setting up client workstations for AppleTalk, TCP/IP, LPR, Splash G640 SAMBA support for Hot Folders and Mac OS Drop Folder access. It also explains the server print features, functions and job management options.

NOTE: *Getting Started* ships with the Splash G640 as printed documentation. The *User Guide* is online documentation on the Splash G640 User Software CD.

Product features

The new and commonly used product features of the Splash G640 are described in the following list.

- **ColorTuner**—allows you to make 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. You can make color changes (RGB or CMYK) globally by adjusting either the overall intensity of a specific color or the highlights, midtones, or shadows. Direct color substitution mode changes 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 you to adjust the dominant color in an image. The Splash G640 enhancements include selecting Spot Colors for substitutions, limiting the selected area for color effects, and editing individual colors after global changes have been applied.
- **Screened Dmax**—allows you to obtain dot accurate and color accurate calibrated output for print jobs that use the Screened job option. In addition, it displays 100% fills as solids rather than screened areas. This provides an enhanced proofing capability for screened devices to produce the best screened color output.
- **Print Info**—allows you to print a customizable info strip for your jobs. The Print Info Strip includes information regarding the user, job, color and media type.
- **Set Builder**—allows you to select individual jobs and print them as a single set. You can select from the following options: Copies, Collate, Duplex, Staple, Rotate, Face-up, Output bin, and Reverse order.
- **TIFF-IT P1 and 8.8, PDF-X, CT-LW, and PSD native file formats**—allow direct handling of many pre-press jobs sent to the Drop Folders.
- **ColorCal**—allows you to select from a standard set of RGB and CMYK Color Profiles or create custom CMYK profiles to calibrate the printer to produce the most accurate CMYK and RGB color output possible. ColorCal also offers two unique calibration features: AutoGray and Splash Proof calibration. AutoGray adjusts the gray balance of the printer. Splash Proof uses a special set of selected print settings to output a specific proofing style.
- **Secure Access**—enables the server administrator to limit who is allowed to print to the server. It requires you to enter a user ID, password, and account number or any combination of these fields, prior to sending a job to the server.

- **Secure Printing**—allows you to password-protect a job from the your printer driver, so it can only be printed at the server print queues when the password is entered. Only you, as the owner of the job, have access to reprint the job from these print queues.
- **Duplex Alignment**—allows the server administrator to enter vertical and horizontal offsets which are applied to all duplex jobs. These offsets align the print margins for both sides of the duplexed job. Duplex Alignment also supports separate offset values for each tray.
- **Splash Imposition**—creates imposed documents from the print driver, PPD, or Job Option window at the server.
- **Spot Color Editor**—allows you to add and delete spot colors, as well as change the value output, for any particular spot color.
- **Hot Folders/Hot Download Folders**—allows you to create multiple Drop folders and Hot folders. You can then download graphics files directly from a Mac OS or Windows computer to the Splash G640 using specified job print options. The folders are standard Mac OS folders which are shared over the network. Windows and UNIX client systems are supported via SMB file sharing.
- **Composite Spotproof**—allows you to simulate PANTONE (including the newer 147 colors in both composite and separations), Toyo, DIC, and HKS spot color matching systems. You can also print spot tints (less than 100% of a specific spot color) accurately, since they are calculated from the actual spot color and are not a CMYK processed color.
- **Splash Intellicolor**—allows you to print jobs that contain mixed RGB format (TIFF, EPS) and mixed color space (CMYK, RGB, spot) elements without any complex and time-consuming adjustments.
- **Continual Print**—automatically processes and prints most files at printer speed. However, complex jobs with large bitmaps on each page may not print at printer speed.
- **Active Queue**—is a management tool that allows you greater flexibility for scheduling jobs.
- **CopyCal**—allows you to create color profiles that enable the printer to simulate the color output of any other color printer.
- **Acquire without Photoshop**—allows you to scan images at the Splash G640 without the requirement of additional applications, such as Adobe Photoshop.

- **Drag and Drop from Server Queues**—allows you to drag copies of spool files from the server queues to the Mac OS desktop.
- **GCR Preserving Profile**—retains the original Gray Component Replacement (GCR) values of the original file. This creates quality prints that more accurately represent 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.
- **Internet or Intranet Web Queue Manager**—enables remote users on any computer platform to view and control print jobs at the Splash G640.

NOTE: The Web Queue Manager requires a TCP/IP connection to the Splash server and Netscape Navigator 4 or later, or Microsoft Internet Explorer 4 or later web browser.

- **Translated server components**—in Brazilian Portuguese, French, Italian, German, and Spanish are included with the Splash G640. You can auto-switch the server language without having to restart the system, and separate installation is not required.
- **Import RGB, Output RGB and CMYK Profiles**—allows you to import color profiles to the Splash G640, providing better and more customizable color management.
- **Selectable Printer Screening**—takes advantage of the printer's ability to provide better proofing capabilities for some special workflows.

System requirements

To install the Splash G640 User Software on a Mac OS or Windows computer, the computer must be equipped with a built-in or external CD-ROM drive.

Mac OS

To print to the Splash G640, you need:

- Apple Power Mac OS computer or compatible.
- Mac OS 8.6 or later
- Networking software that provides a network connection between the Mac OS computer and the Splash server.

- CD-ROM or connection to the network for server client installers.
- A minimum of 50MB of free hard disk space.

NOTE: The Splash G640 is incompatible with client software from other versions of Splash equipment. You must install the Splash client software on all Mac OS computers that will print to the Splash G640.

Windows

To print to the Splash G640, you need:

- An IBM AT or PS/2 or 100% compatible computer with an Intel 80486 or higher processor, or similar processor.
- A minimum of 50MB of free hard disk space.
- Microsoft Windows 9x/Me, or Windows NT v4.0 or later, or Window 2000, Windows XP and their related software CDs or diskettes.
- At least 8MB of RAM for Windows 9x/Me, at least 16MB of RAM for Windows NT, or at least 32MB RAM for Windows 2000/XP.
- Network hardware that works with the built-in Windows drivers to connect your Windows computer to the print queue on the Splash G640.
- A CD-ROM drive or connection to a networked Splash G640 to download the Windows installers.

Windows Operating System Notes

Windows 9x/ME

- Print interface software provided: printer description file (PPD) and Adobe Custom PS.
- Supports all releases of Windows 9x/Me.
- Supports custom page sizes.

Windows NT/2000/XP

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

UNIX

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

Registration Card

To receive software upgrade notifications for the Splash G640, complete the pre-addressed registration card included with the Splash G640 and mail it to: Electronics For Imaging, Inc., 303 Velocity Way; Foster City, CA 94404.

Chapter 1: Network Setup

This chapter describes environments that typically include one or more network configurations. It describes how to setup and configure your network for printing to the Splash G640 from Mac OS or Windows computers. The Splash G640 also supports printing from Unix OS systems via LPR/LPD printing.

Network Setup for the Splash G640

The Splash G640 supports AppleTalk, AppleShare, Microsoft TCP/IP, Novell NetWare NDPS for TCP/IP or LPR Printing, Legacy support for NetWare Print Queue setup through PConsole, and third party spoolers for printing from Windows 9x computers.

Configuring the Splash G640 for File Sharing

The Splash G640 can be configured so that users at Mac OS computers can install the user software over the network. That way, the network administrator does not have to install user software on each user's computer. Windows users unable to connect to Apple File Sharing, must use the User Software CD provided with the Splash G640 to install the software or download the installers from the server via the World Wide Web. For informations, see "Downloading installers and files from the Web Queue Manager" on page 6-8.

NOTE: You must provide networking hardware and software for all computers that will print to the Splash G640. To connect the Splash G640 and user's computers to the network, see the network product's instructions.

TO SET UP SPLASH G640 FILE SHARING FOR MAC OS

1. Insert the Splash G640 User Software CD into the CD-ROM drive.
2. Locate the Splash Network Install folder on the User Software CD.
3. Drag the Splash Network Install folder to the server desktop.

4. **Choose System Preferences from the Apple menu, select the Sharing Control Panel, and then select File Sharing.**

NOTE: If the internal hard drive is named the same as the User Software CD (Splash G640), you cannot select File Sharing. In this case, eject the CD-ROM, and then turn on File Sharing.

5. **Click the Splash Network Install folder icon on the server desktop.**
6. **Choose Show Info from the File menu.**
7. **Choose Privileges from the Show Info submenu.**

The sharing options for the folder appears.

8. **To configure the Sharing options so any user on the network can access the folder, choose Read & Write from the Owner, Group, and Everyone menus.**
9. **Click Apply.**

All users on the network can now see the folders and files.

Configuring the Splash G640 for TCP/IP and LPR printing

This section describes how to configure the Splash G640 to receive print jobs from Windows computers on a TCP/IP or LPR network.

To configure the Splash G640 and Windows computers for TCP/IP printing, you must complete the following procedures:

- Connect the Splash G640 to the TCP/IP Network.
- Configure the Splash G640 for the TCP/IP Network.
- Enable TCP/IP printing.
- Set the Splash Enterprise Network TCP/IP Direct options.
- Configure Windows computers for TCP/IP printing.

Connecting the Splash G640 to the TCP/IP network

Connect the server's Local Area Network (LAN) card or Ethernet port to the network, if not already connected.

Configuring the Splash G640 to the TCP/IP network

The following procedure explains how to configure the Splash G640 to the TCP/IP network.

TO CONFIGURE THE SPLASH G640 TO THE TCP/IP NETWORK

1. Obtain an IP address and subnet mask, and a router address from your network administrator.
2. Choose Location Panels from the Apple menu on the Splash G640, and then choose Network Preferences.

The TCP/IP Control Panel appears.

3. Choose the local area network (LAN) card type or Built-in Ethernet for the Splash server's TCP/IP network from the Show menu.

Location: Automatic

Show: Built-in Ethernet

TCP/IP PPPoE AppleTalk Proxies

Configure: Using DHCP

IP Address: 10.10.83.30
(Provided by DHCP Server)

Subnet Mask: 255.255.252.0

Router: 10.10.80.1

DHCP Client ID:
(Optional)

Ethernet Address: 00:0a:27:e2:bb:f0

Domain Name Servers (Optional)

Search Domains (Optional)

Example: apple.com, earthlink.net

Click the lock to prevent further changes. Apply Now

4. **To configure the TCP/IP address manually, choose Manually from the Configure menu. To have a TCP/IP address automatically assigned from the network, choose Using DHCP.**

Assigning the Splash G640 a static TCP/IP address allows users to reliably locate the server on the network. If you want to set up the DHCP server to lock in your TCP/IP address, contact the network administrator.

5. **Enter the IP address for the Splash G640.**
6. **Enter a Subnet mask number, if required.**

NOTE: If the Subnet mask number is different than the default mask number, you can change it to match the one used on your network. Contact your network administrator.

7. **Enter the Router address (gateway address), if required.**

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 Return after entering each address.

8. **Enter a Name server address for your local DNS server on your network (optional).**
9. **Enter the search domain name that pertains to your DNS name; for example, design.corp.com (optional).**
10. **Close the Network control panel.**
11. **Click OK to confirm the new setup.**

Enabling TCP/IP printing from the Splash G640

The following procedure explains how to enable TCP/IP printing from the Splash G640.

TO ENABLE TCP/IP DIRECT PRINTING

1. **Start the Splash G640 application.**
2. **Choose Log In from the Server menu.**
3. **Enter the Administrator Password and click OK.**

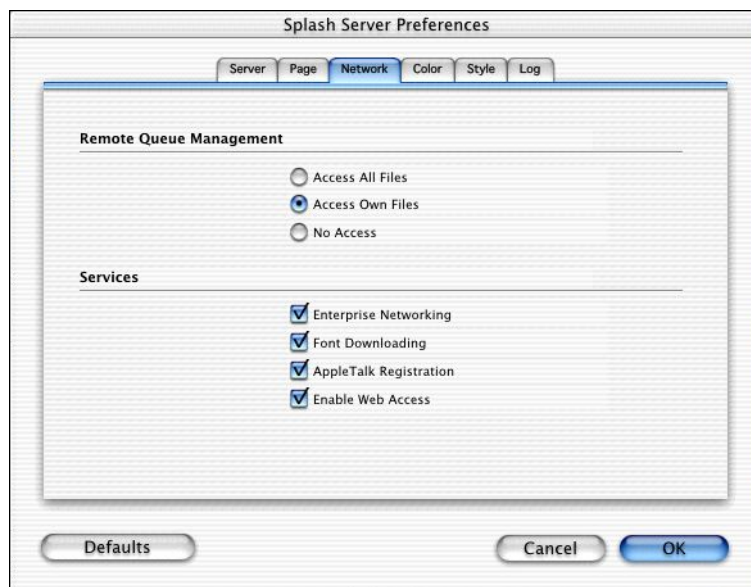
1

1-5 Network Setup for the Splash G640

4. Choose Preferences from the Server menu.

The Splash Server Preferences dialog box appears.

5. Click the Network tab.

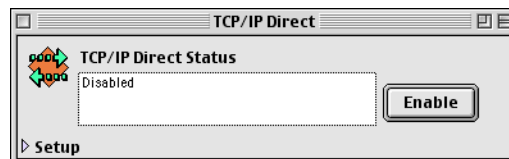


6. Select Enterprise Networking and click OK.

7. Click the Splash G640 server window to bring the server application to the foreground.

8. Choose Enterprise Networking from the Server menu.

The TCP/IP Direct dialog box appears.



9. Click Enable.

The Splash G640 is ready to receive network print jobs from TCP/IP clients.

Setting the Splash Enterprise Network TCP/IP Direct options

You can configure the Splash G640 to automatically extract the job 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.

You can select the following options in the TCP/IP Direct window:

- **Parse For Document Owner Name**—Document Owner name is extracted from each print job as it is received at the Splash G640. When this option is not selected, Enterprise Networking determines the owner name from the network connection.
- **Append UNIX Hostname to User Name**—Network host name is added to the owner name that appears in the print queue and job log at the Splash G640. For example, if the user, Jack, prints from the UNIX host, Santana, the owner name is Jack@Santana. When this option is not selected, the owner name is Jack.

NOTE: For most situations, do not select this option. This option is useful for UNIX environments where all users share the same user name, such as “root.”

- **Accept Jobs to Any Printer Name**—This option tells the server to accept any print job sent to the server's TCP/IP address and ignore the name of the printer specified.

NOTE: If you have another print spooler running on the Mac server or you want added print security, deselect this option.

Restricting TCP/IP printing

You can configure the Splash G640 to accept TCP/IP print jobs from only the computers specified in the Hosts.LPD file.

TO RESTRICT TCP/IP PRINTING

1. On the server hard disk, double-click the System folder.
2. Open the System:Extensions folder.
3. From the Extensions folder, open the Splash folder to access the Hosts.LPD file.

4. Edit the Hosts.LPD file.

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 G640.

Configuring Windows 2000/XP for TCP/IP printing

You can configure Windows 2000/XP computers to print to the Splash G640 via Enterprise Networks TCP/IP Direct Printing.

The Splash G640 accepts print jobs from the TCP/IP network on Windows 2000/XP or Novell NetWare NDPS LPR network. In addition, users on a TCP/IP network can print TIFF, TIFF-IT, EPS, PDF, PDF-X, CTLW, and PostScript files directly to the Splash G640 via Drop Folders or Hot Folders.

NOTE: To print over the TCP/IP network, your computer must have Splash software appropriate for your operating system installed, and must be connected to the Splash G640.

Windows 2000/XP computers are pre-configured with the Microsoft TCP/IP software installed. The following procedure describes how to configure Windows 2000/XP for TCP/IP printing to the Splash G640.

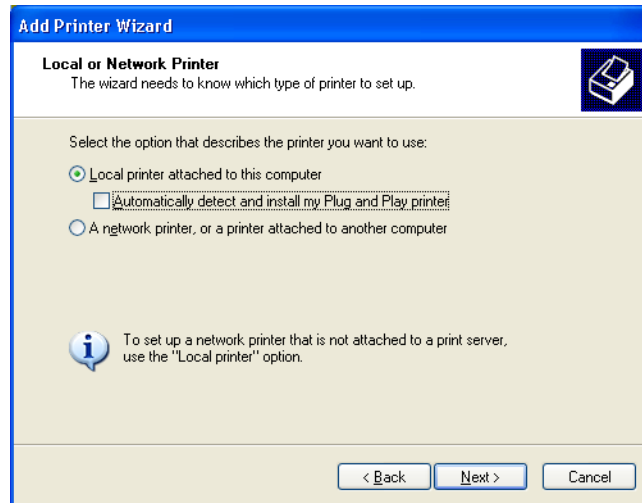
NOTE: The following procedure uses Windows XP screenshots.

TO CONFIGURE WINDOWS 2000/XP FOR TCP/IP PRINTING

- 1. Log on to Windows as Administrator.**
- 2. Click Start, choose Settings, and then choose Printer and Faxes.**
- 3. Double-click the Add Printer icon.**

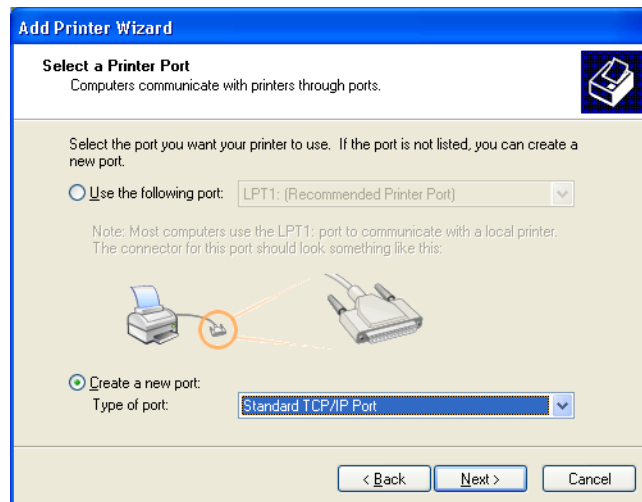
The Add Printer Wizard dialog box appears.

4. Click Next.



5. Select Local Printer attached to this computer, and deselect Automatically detect and install my plug and play printer.

6. Click Next.



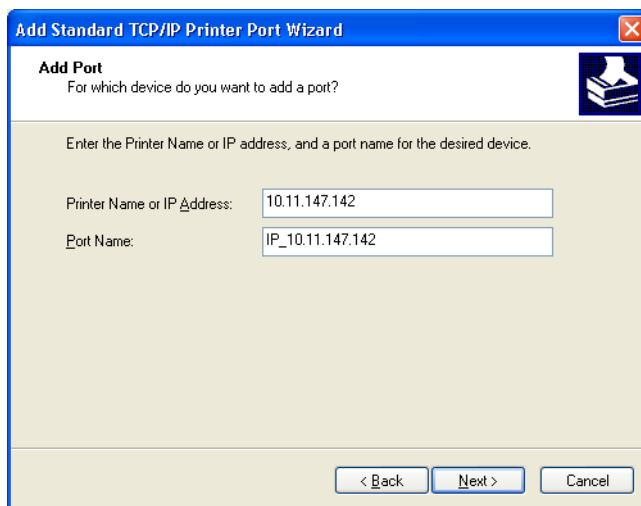
1

1-9 Configuring Windows 2000/XP for TCP/IP printing

7. **Select Create New Port, choose Standard TCP/IP Port from the Type of Port menu, and then click Next.**

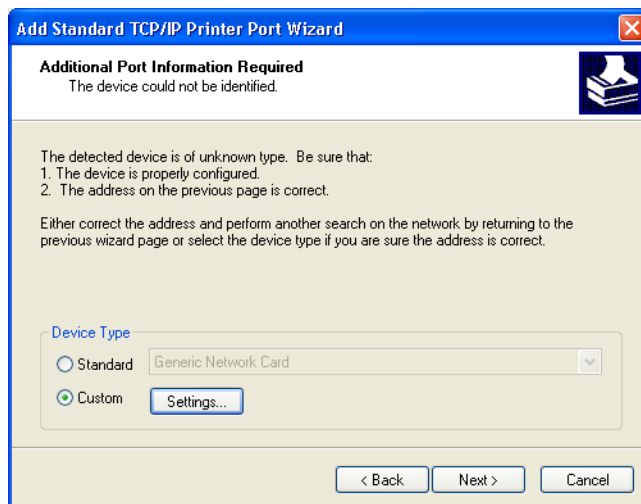
The Welcome to the Add Standard TCP/IP Printer Port Wizard dialog box appears.

8. **Click Next.**



The screenshot shows the 'Add Standard TCP/IP Printer Port Wizard' dialog box, specifically the 'Add Port' step. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Add Port' with a subtext 'For which device do you want to add a port?'. Below this, it says 'Enter the Printer Name or IP address, and a port name for the desired device.' There are two input fields: 'Printer Name or IP Address:' with the value '10.11.147.142' and 'Port Name:' with the value 'IP_10.11.147.142'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

9. **Enter the Printer Name or IP address and click Next.**



The screenshot shows the 'Add Standard TCP/IP Printer Port Wizard' dialog box, specifically the 'Additional Port Information Required' step. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Additional Port Information Required' with a subtext 'The device could not be identified.' Below this, it says 'The detected device is of unknown type. Be sure that:' followed by a list: '1. The device is properly configured.' and '2. The address on the previous page is correct.' It then says 'Either correct the address and perform another search on the network by returning to the previous wizard page or select the device type if you are sure the address is correct.' There is a 'Device Type' section with two radio buttons: 'Standard' (selected) and 'Custom'. The 'Standard' option has a dropdown menu showing 'Generic Network Card'. The 'Custom' option has a 'Settings...' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

10. Under **Device Type**, select **Custom** and click **Settings**.

Configure Standard TCP/IP Port Monitor

Port Settings

Port Name: IP_10.11.147.134

Printer Name or IP Address: 10.11.147.134

Protocol

☐ Raw ☒ LPR

Raw Settings

Port Number: 9100

LPR Settings

Queue Name:

☐ LPR Byte Counting Enabled

☐ SNMP Status Enabled

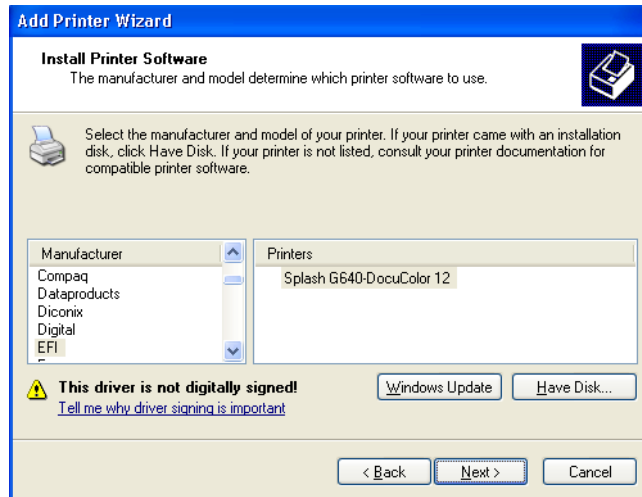
Community Name: public

SNMP Device Index: 1

OK Cancel

11. Under **Protocol**, click **LPR**.
12. Under **LPR Settings**, enter the printer name in the **Queue Name** field and click **OK**.
The **Additional Port Information Required** dialog box appears.
13. Click **Next**.
Completing the **Add Standard TCP/IP Printer Port Wizard** appears.

14. Click Finish.



15. If the Splash G640 PPD is listed, click Next.

NOTE: If the Splash G640 PPD is not listed, see the following procedure.

16. Select Keep Existing Driver in the dialog box that appears and click Next.

The Name Your Printer dialog box appears.

17. In the Name your Printer dialog box, click Next.

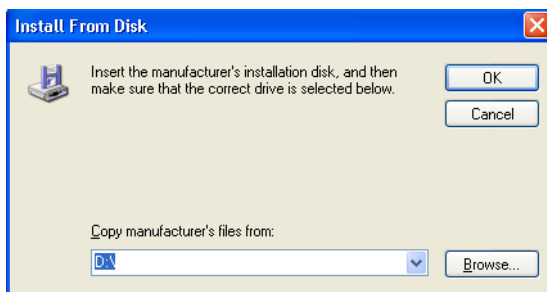
18. In the Printer Sharing dialog box, select Share or Do not Share.

If you selected Share, the Location and Comment dialog box appears. Enter the appropriate information for your job and click Next.

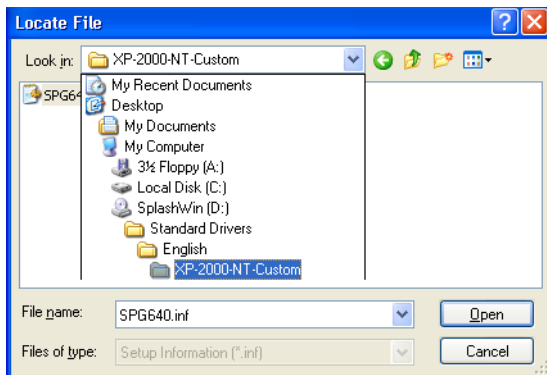
19. Click Next and then click Finish in the Print Test Page dialog box.

TO BROWSE FOR THE SPLASH G640 PPD

1. In the Install Printer Software dialog box (see step 15 in the previous procedure), click Have Disk.



2. Insert the Splash G640 User Software CD into the CD-ROM drive and click Browse.



3. Choose the appropriate PPD and click Open.
The Install From Disk dialog box appears, listing the PPD directory path.
4. Click OK and continue with the instructions starting with step 16 in the previous procedure.

Configuring Windows NT for TCP/IP Printing

This section describes how to configure a TCP/IP print queue for the Splash G640 on a computer running Microsoft Windows NT 4.0 or later. You can prepare the print queue on either a Windows NT server or a Windows NT computer.

Enabling the Microsoft TCP/IP Print Service for LPR Printing

TCP/IP print services must be enabled in the Network control panel before printing to the Splash G640 through TCP/IP.

NOTE: You must configure and enable TCP/IP at the Splash G640 before configuring an LPR print queue for the Splash G640 on Windows NT. If the Splash G640 is not identified as an LPD server on the network, Windows NT reports an error during print queue setup.

TO ENABLE TCP/IP FOR LPR PRINTING FROM WINDOWS NT

1. Click **Start**, choose **Settings**, and then choose **Control Panel**.
2. Double-click the **Network control panel**.
3. Click the **Services tab**.

If TCP/IP is already enabled (Microsoft TCP/IP Printing appears in the Network Services list), close the Network control panel.

If TCP/IP is not enabled, you must add it to the list of network services from your Windows NT CD.

4. Insert the **Windows NT CD** into the **CD-ROM drive** and click **Add**.
5. From the **Network Service list**, select **Microsoft TCP/IP Printing** and then click **OK**.
Windows NT displays a message, "Windows NT must copy TCP/IP printing configuration files from the Windows NT system CD."- 6. Enter the drive letter for your **CD-ROM drive** and click **Continue**.
- 7. When the files are copied, close the **Network control panel**.
- 8. Restart **Windows NT** to activate the new network service.

Configuring the Printer setup on the Windows NT for TCP/IP printing

Before connecting to the Splash G640 and creating a print queue that sends jobs to the server over the TCP/IP network, you must have the following items:

- TCP/IP address for the Splash G640
- Splash G640 User Software CD

TO CONFIGURE THE PRINTER FOR THE TCP/IP PRINTING FROM WINDOWS NT

1. Click Start, choose Settings, and then choose Printers.
2. Double-click the Add Printer icon.
3. From the Add Printer Wizard dialog box, choose My Computer and click Next.

A list of printer ports appears.

4. Select Create New Port, choose Standard TCP/IP Port from the Type of Port menu, and then click Next.
5. Enter the TCP/IP address for the Splash server and click OK.

NOTE: If the name entered does not match the Splash server name, select Accept Jobs From All Queues from the Enterprise Networking TCP/IP dialog box so the server can receive jobs properly.

The Splash G640 TCP/IP address appears as a new port in the list.

6. Select the Splash G640 TCP/IP port and click Next.
7. Click Have Disk.
8. Insert the Splash G640 User Software CD in the CD-ROM drive and click Browse.
9. Select the Splash file and click Open.
10. Click OK.
11. Select the Splash printer from the printers list and click Next.

Windows NT displays the following additional set up options for the print queue.

- If you want to change the name of the printer, type a new name in the text box. The name you enter appears in your applications and the Printer control panel.
- If you want the Splash G640 to be the default printer for your computer, choose Yes.

12. Click Next.

13. Choose Shared to allow other users to connect to the print queue to print to the Splash G640, and select the operating systems for the computers that will use the print queue from the list that appears.

If you do not choose Shared, this computer only uses the LPR port to print to the Splash server.

14. Click Next.

Windows NT prompts you to insert system software disks for the operating systems selected in the previous step.

15. Insert the diskettes or CDs and click OK.

When all files are copied, the Add Printer Wizard prompts you to print a test page.

16. Select Yes to print a test page, click Finish and then click OK.

17. Insert the Windows NT system software CD in your CD-ROM drive and click OK.

Windows copies the files necessary to configure the print queue. A test page prints to confirm that setup was successful.

18. Click Yes if the test page printed correctly.

The Splash G640 TCP/IP print queue appears as a shared printer in the Printers control panel.

Configuring Novell NDPS Printing

The Novell server must be setup and configured prior to installing and configuring the Novell NetWare Client.

NOTE: Use the latest NetWare service pack and Novell Gateway. For more information see your NetWare documentation.

The following procedures assume NDPS has been installed on your NetWare Server and is properly configured. There are three NetWare objects required to properly use NDPS for LPR printing to the Splash G640: an NDPS Broker, NDPS Manager, and a Printer Agent. The Broker is installed and runs when you first install NDPS. The Broker (only one allowed on the network) stores printer resources, such as drivers and banners. The NDPS Manager (only one is recommended) creates and manages Printer Agents. The Printer Agent (only one per printer is necessary) combines the functionality of legacy Print Servers, Queues and Printer Objects.

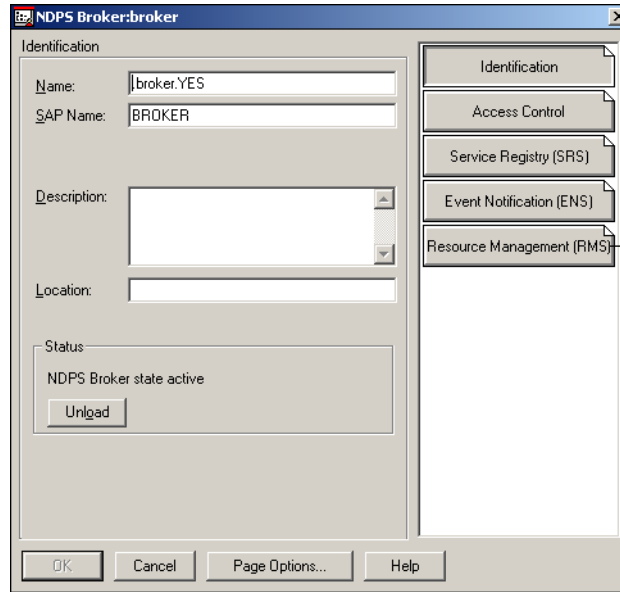
NOTE: It may not be necessary to create an NDPS Manager, as the Network Administrator probably already created one during the initial Novell NDPS setup. If you are unsure if an NDPS Manager has been created, or if it resides in a different context location, contact your Network Administrator.

NOTE: Windows 9x/Me printer description files for printing to the Splash G640 from Windows 9x/Me convert the output from the Windows applications to PostScript code. This software requires a Windows-to-Mac OS network bridge, such as Novell NetWare or Miramar MACLAN Connect.

TO ADD THE SPLASH G640 PPD TO THE NOVELL NETWARE NDPS BROKER

1. Log on to the Novell file server as an Administrator.
2. Start NetWare Admin32.exe.

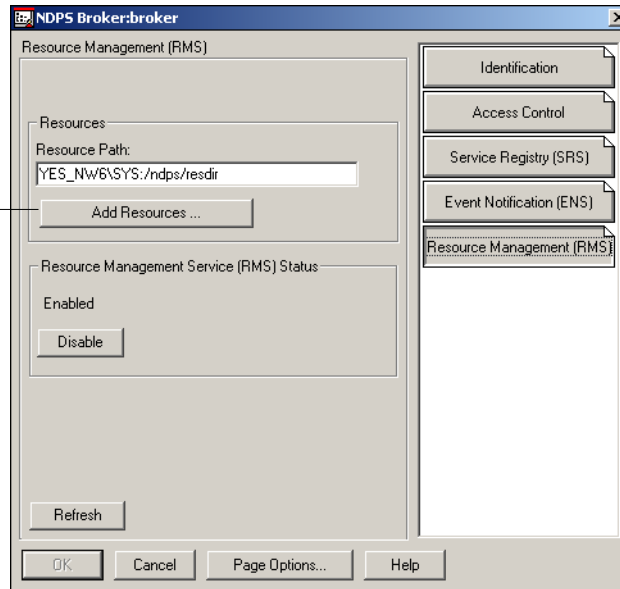
3. Double-click the Broker icon in the NetWare Admin window.
4. Click Resource Management (RMS).



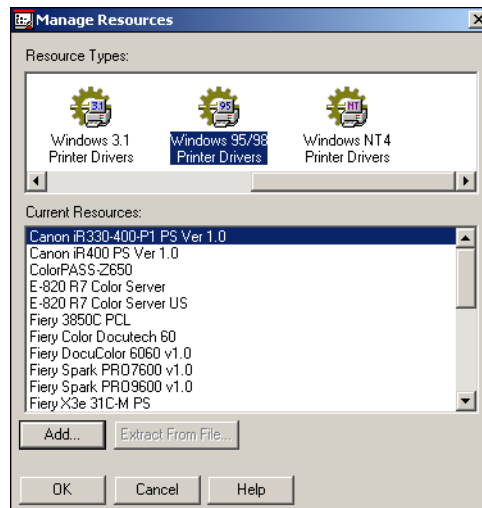
Click Resource Management
(RMS)

5. Click Add Resources.

Click Add Resources



6. From Resource Types, select the Windows operating system you want for the Splash Driver Installation.

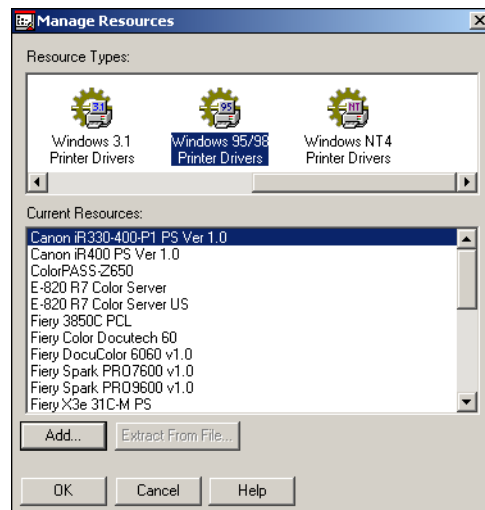


You can select more than one Windows operating system, but you must repeat the PPD installation for each.

If the Splash G640 driver has already been installed, it appears in the installed printer drivers listed in the Current Resources Section. If the Splash G640 driver is not listed, you must install it from the Splash G640 User Software CD. See the following procedure.

TO INSTALL THE SPLASH G640 PPD FROM THE SPLASH G640 USER SOFTWARE CD

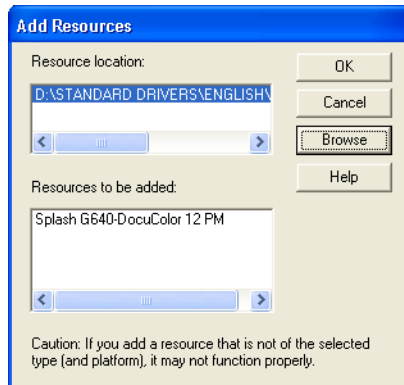
1. Insert the Splash G640 User Software CD into your CD-ROM drive.



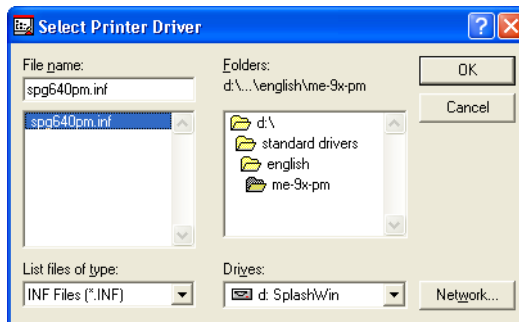
2. In the Manage Resources dialog box, click Add.

The Add Resources dialog box appears.

3. Click **Browse** in the **Add Resources** dialog box.



4. Browse to the CD-ROM drive, select the appropriate driver from the **Standard drivers** folder, and then click **OK**.



5. Verify the location of the file and click **OK**.

A warning message appears, informing you that the selected driver has not been approved or tested by Microsoft.

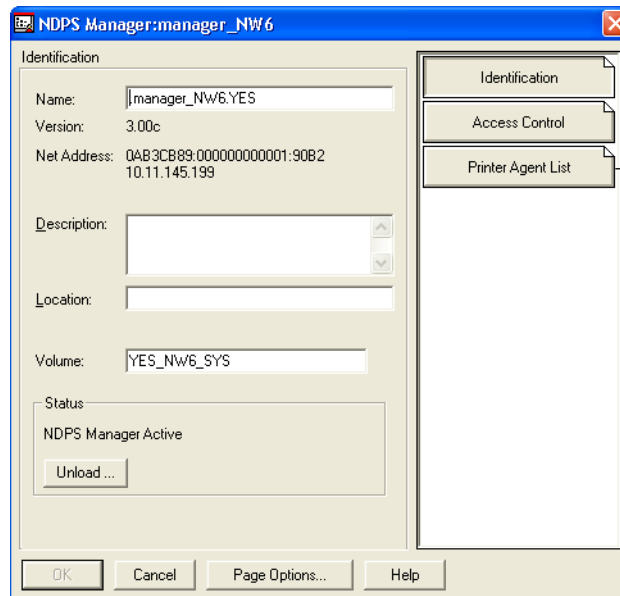
6. Click **Continue**.

The printer driver is copied to the Novell NDPS Server.

TO ADD A PRINTER AGENT TO THE NDPS MANAGER FOR NOVELL LPR PRINTING

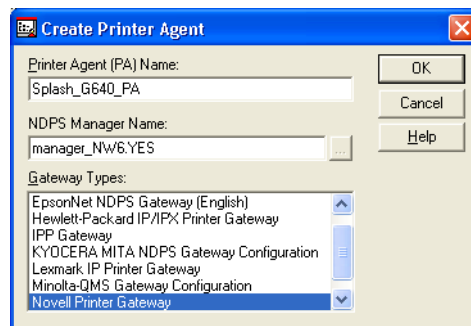
NOTE: The following procedure uses an NDPS Manager on a NetWare Client.

1. In the NetWare Admin dialog box, double-click the NDPS Manager.



Click Printer Agent List

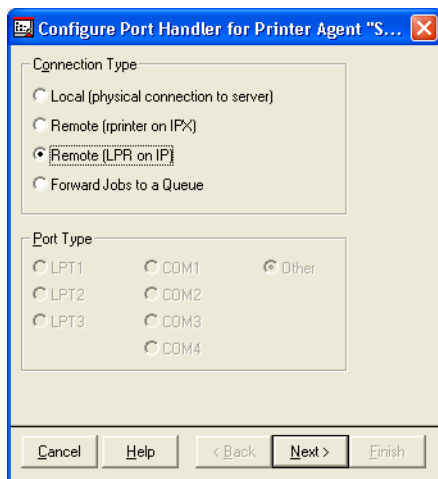
2. Click Printer Agent List.
3. Click New in the Printer Agent List dialog box.



4. **Enter a Printer Agent (PA) name and click OK.**

The Configure Novell for NDPS for Printer Access dialog box appears.

5. **Select None for the printer type and click OK.**



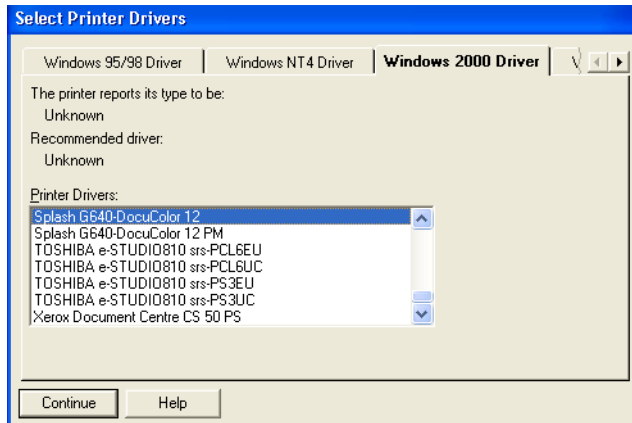
6. **Select Remote (LPR on IP) and click Next.**

A new user interface in the Configure Port Handler dialog box appears.

7. **Enter the Host TCP/IP address, Host Name or Printer Name in corresponding field.**

If Host Name is selected—The Splash G640 on Mac OS X must be properly configured to a DNS Server. For further information, contact your Network Administrator.

If Printer Name is selected—Enable the Splash Enterprise Network option to Accept Jobs To Any Printer Name. Also, the Printer Name entered here must match the name that appears in the Enterprise Network application.

8. Click Finish.**9. Select the appropriate Windows operating system tab, choose the Splash G640 PPD and then click Continue.**

The NDPS Information dialog box appears. It lists the current Splash G640 PPDs selected for the Windows operating systems for this NDPS LPR Printer Agent.

10. Click OK.

Configuring a Novell NetWare print queue

This section describes how to configure a Splash G640 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 in to the Novell server as a user with sufficient privileges (Admin or Supervisor) to create a print queue.**
2. **From the SYS:PUBLIC folder, double-click PCONSOLE.EXE.**
3. **Select Quick Setup.**

PCONSOLE prompts you for the following information about the print queue:

- Print Server name.
- Print Queue and Printer names.
- Print Queue volume.
- Banner type.

NOTE: The recommended setting is No Banner.

4. **Set the Printer Type field to UNIX Printer.**
This causes the host name and printer name fields to appear.
5. **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.**
6. **Enter a Printer Name when prompted.**
7. **Press Enter to complete setup and click Yes to save the new print queue settings.**

Chapter 2: Installing User Software on a Mac OS Computer

This chapter describes installing and configuring a Mac OS computer with the Splash G640 Client Drivers. It also describes setting the driver features for printing from Mac OS 9.x and Mac OS X computers.

NOTE: The installation of the different client drivers are similar for Mac OS 9.x and Mac OS X. Differences are noted in the following procedures.

Installing from the Splash G640 User Software CD

The following procedures describe how to install the Mac OS user software from the Splash G640 User Software CD. To install the software by File Sharing, see “Installing by file sharing to the Splash G640” on page 2-2.

TO INSTALL THE MAC OS X SOFTWARE FROM THE SPLASH G640 USER SOFTWARE CD

1. **Insert the Splash G640 User Software CD in the CD-ROM drive on your computer.**
2. **Double-click the desired Splash OS X Standard or Secure Access Client Installer icon in the Splash Network Install folder.**
3. **In the Splash OS X Client Driver dialog box, choose Easy Install or Custom Install from the Installer menu.**

NOTE: The Splash Client Install process is the same for Splash Custom, PM and Secure Access Drivers. However, there are differences when selecting the PPD options. The Secure Access PPD has an Info Tab option in the Printer Properties dialog box, which contains a field for the TCP/IP address of the Splash G640

4. **In the Authenticate dialog box, enter the Mac OS password and click OK.**
The Administrator Name default is the computer name; leave as is.
5. **If there is more than one hard drive on your computer, choose the hard drive where you want to install the software from the Install Location menu and click Install.**

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

6. Click Continue to perform more installations.
7. Click Quit to exit the Splash Installer.

For information on how to access and set up the Splash Client SA driver, see “Secure Access” on page 4-27

TO INSTALL THE MAC OS 9.X SOFTWARE FROM THE SPLASH G640 USER SOFTWARE CD

1. Insert the Splash G640 User Software CD in the CD-ROM drive on your computer.
2. Double-click the desired Splash OS 9.x Standard or Secure Access Client Installer icon in the Splash Network Install folder.
3. In the Splash OS 9.x Client Driver dialog box, choose Easy Install from the Installers menu.
4. If there is more than one hard drive on your computer, choose the hard drive where you want to install the software from the Install Location menu and click Install.

When installation is complete, you are prompted to Continue or Restart.

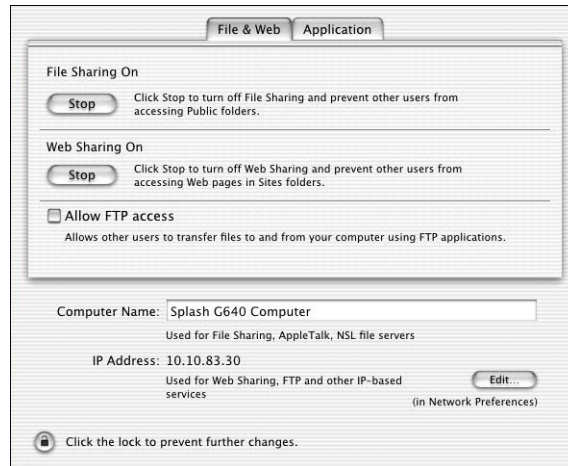
5. Click Continue to perform more installations.
6. Click Quit to exit the Splash Installer.

Installing by file sharing to the Splash G640

The following procedures describe how to configure the Splash G640 for Mac OS software installation by file sharing the Splash Network Install folder, and how to access that folder by connecting to File Sharing.

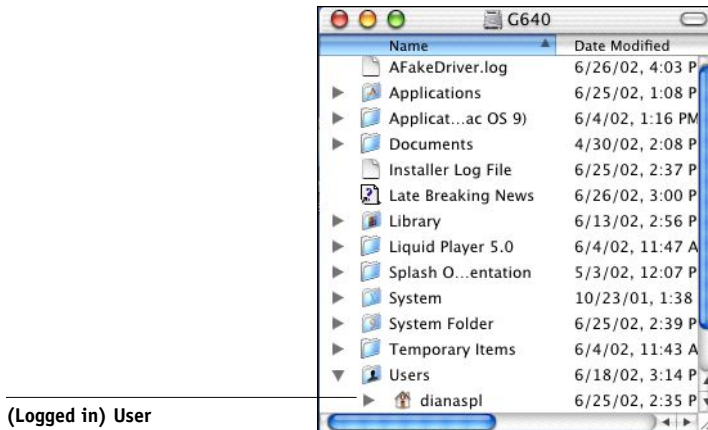
**TO CONFIGURE THE SPLASH G640 FOR MAC OS SOFTWARE
INSTALLATION BY FILE SHARING**

1. From the Apple menu on the Splash G640, choose System Preferences and double-click the Sharing folder.
2. In the Sharing dialog box, click Start under File Sharing On.



3. Close the Sharing dialog box.

4. On the server hard disk, browse to the Users folder and click the (logged in) User folder.



5. Press Command+I to Show Info.

The Public Info dialog box appears.



6. Choose Privileges from the General Information menu.
7. Set the Owner, Group and Everyone privileges to Read and Write, click Apply, and then close the Public Info dialog box.

NOTE: Keep the (logged in) User folder highlighted and easily accessible.

8. Insert the Splash G640 User Software CD into the CR-ROM drive on your computer, and select and drag the Splash Network Install folder from the CD to the (logged in) User folder in the Users folder on the server hard drive.
9. Select the Splash Network Install folder and press Command+I to Show Info.
The Splash Network Install dialog box appears
10. Select Privileges in the General Information menu.
11. Set the Owner, Group and Everyone privileges to Read and Write, click Apply, and then close the Splash Network Install Info dialog box.

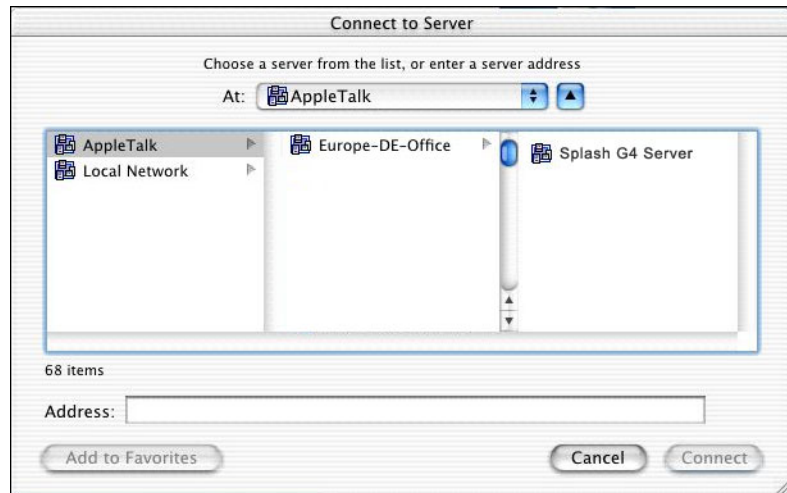


Mac OS users can now download and install Splash Client Installers through the Apple File Sharing network.

TO CONNECT TO FILE SHARING FOR ACCESS TO THE SPLASH NETWORK INSTALL FOLDER (MAC OS X)

1. From the Finders “GO” menu, choose **Connect to Server**.
2. In the **Connect to Server** dialog box, choose **AppleTalk** and then choose the appropriate **AppleTalk Zone** and the **Splash G640**.

The Splash G640 Mac OS computer name appears in the list of available shared systems.



NOTE: If there are no Appletalk Zones in your network configuration, choose *only* the Splash G640.

3. Click **Connect**.
4. In the **File Server Connect** dialog box, choose **Guest** and click **OK**.
5. Select the (logged in) **User** folder which contains the **Splash Network Install Folder** and click **OK**.

The Splash server and shared folders appear.

6. **Double-click the Splash Network Install folder.**

The Splash Network Installers folder opens on the desktop.

7. Double-click the desired Splash Client Installer icon.

The Easy Install dialog box appears.

8. From the Install Location menu, choose the hard drive where you want to install the software.

If there is more than one hard drive is on your computer, choose the hard drive that contains Mac OS X.

9. Click Install.

NOTE: The Splash G640 software is installed over the network from the server computer.

When installation is complete, you are prompted to Continue or Quit.

10. Click Continue to perform more installations.

11. Click Quit to exit the Splash Installer.

Repeat this installation procedure for each Mac OS X computer connected to the network.

TO CONNECT TO FILE SHARING FOR ACCESS TO THE SPLASH NETWORK INSTALL FOLDER (MAC OS 9.X)

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

2. In the Chooser dialog box, click the AppleShare icon and choose the appropriate AppleTalk Zone and the Splash G640.

The Splash G640 Mac OS computer name appears in the list of available shared systems.

NOTE: If there are no Appletalk Zones in your network configuration, choose *only* the Splash G640.

3. Click OK.

4. In the File Server Connect dialog box, choose Guest and click OK.

5. **Select the (logged in) User folder which contains the Splash Network Install Folder and click OK.**

The Splash server and shared folders appear.

6. **Double-click the Splash Network Install folder.**

The Splash Network Installers folder opens on the desktop.

7. **Double-click the desired Splash Client Installer icon.**

The Easy Install dialog box appears.

8. **From the Install Location menu, choose the hard drive where you want to install the software.**

If there is more than one hard drive is on your computer, choose the hard drive that contains Mac OS 9.x.

9. **Click Install.**

NOTE: The Splash G640 software is installed over the network from the server computer.

When installation is complete, you are prompted to Continue or Quit.

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

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

Repeat this installation procedure for each Mac OS X computer connected to the network.

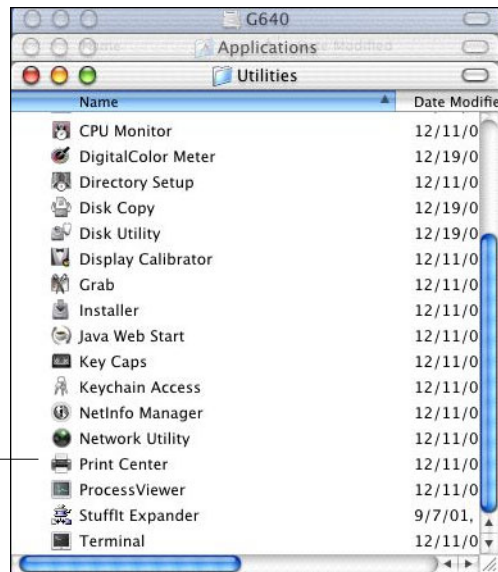
Setting up the Mac OS X computer

Before you can send print jobs to the printer, you must select the Splash G640 in the Mac OS Print Center. You can then send print jobs to the printer through the LaserWriter 8 printer driver provided with Mac OS System software.

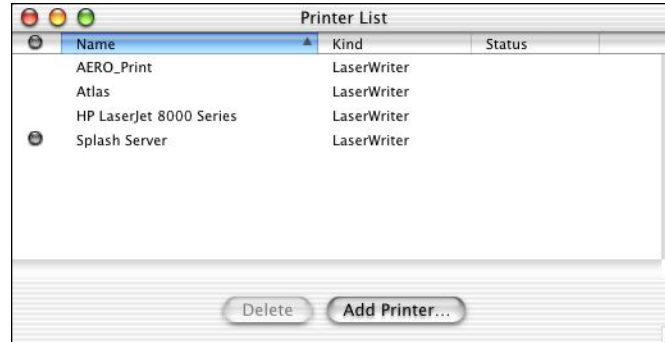
To CHOOSE THE PRINTER DRIVER

1. From the Mac OS X hard drive, select Applications:Utilities:Print Center.

Print Center Application



The Printer List dialog box appears.



2. Click Add Printer.
3. Choose AppleTalk or LPR Network Protocol, as configured in the Mac OS X Network Preferences Control Panel, from the dialog box that appears.
4. For AppleTalk, choose the Splash G640; the Printer Description File is automatically selected.

For LPR, enter the TCP/IP address of the Splash G640, select the Splash G640-DocuColor 12 PPD.

NOTE: , For LPR printing, you must have Enterprise Networking configured for TCP/IP.

5. Click Add.

The Splash G640 appears in the Printer List dialog box.

Setting up the Mac OS 9.x computer

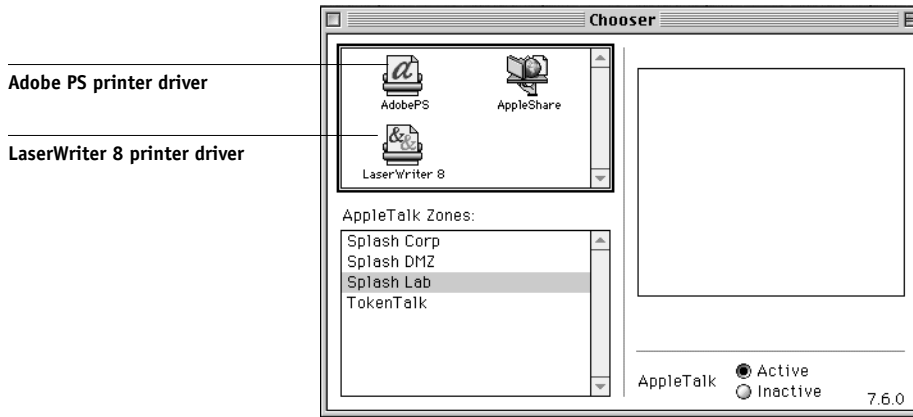
Before you can send print jobs to the printer, you must select the Splash G640 in the Mac OS Chooser. You can then send print jobs to the printer through the LaserWriter 8 printer driver provided with Mac OS System software or AdobePS 8.8.

The Splash G640 provides printer description files (PPDs) for applications that use the Apple LaserWriter 8 or AdobePS 8.8 printer drivers. The Splash PPDs allow selecting Splash print features when printing to the Splash G640 from Level 2 and Level 3 PostScript applications.

TO CHOOSE THE ADOBE PS PRINTER DRIVER

1. From the Apple menu, select Chooser.
2. In the Chooser dialog box, click the Adobe PS driver icon, choose the correct AppleTalk Zone for the Splash G640 (if your network has zones), and then select the Splash G640 printer in the list of printers.
3. Click Create.

The Adobe PS driver automatically selects the appropriate PPD file.



TO CHOOSE THE LASERWRITER 8 PRINTER DRIVER

1. Select Chooser from the Apple menu.
- The Chooser window appears.
2. In the Chooser dialog box, click the LaserWriter 8 icon, choose the correct AppleTalk Zone for the Splash G640 (if your network has zones), and then select the Splash G640 printer in the list of printers.
 3. Click Create and Select PPD.
 4. Choose the Splash G640-DocuColor 12 PM from the list of PPDs.

The connection to the Splash G640 is complete. Your jobs will print to the Splash G640 until you select a different printer.

NOTE: To use the Direct TCP/IP Printing feature of Mac OS 9.1, use the LaserWriter 8 printer driver. For information about this feature, see the Mac OS 9.1 documentation.

NOTE: 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 G640, 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 G640 supports PDF, TIFF, EPS, TIFF-IT, PDF-X, CT-LW, PSD and DCS 2.0 files, and files that are in PostScript format. You can print these files to the Splash G640 from any computer 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 G640.

The TIFF-IT, PDF-X, CT/LW and PSD file formats work in conjunction with a file converter that automatically converts the file from current format to postscript format.

Chapter 3: Installing User Software on a Windows Computer

This chapter describes how to install the Microsoft Windows 9x/Me and Windows NT/2000/XP Secure Access and Standard PPDs (Postscript printer description files) for the G640 using the Add Printer Wizard included with your operating system.

NOTE: Before installing the software, close all other applications.

To access the Secure Access and Standard drivers, you can download them from the internet using TCP/IP LPR or the Web Queue Manager Downloader. For information, see “Downloading installers and files from the Web Queue Manager” on page 6-8 and “Configuring the Splash G640 for TCP/IP and LPR printing” on page 1-2. Also, you can install the drivers from the Splash G640 User Software CD.

NOTE: The Splash Client Install process is the same for Splash Custom, PM and Secure Access Drivers. However, there are differences when selecting the PPD options. The Secure Access PPD has an Info Tab option in the Printer Properties dialog box, which contains a field for the TCP/IP address of the Splash G640

Setting up printing to the Splash G640

To set up the Splash G640 as your printer, you must install the printer drivers for the Windows environments and the corresponding PPDs. This section describes how to install the Windows Custom, PM and Secure Access drivers. The install instructions are similar for all Windows environments. Any significant differences are noted in the following procedure.

NOTE: The following procedure uses Windows 98 illustrations.

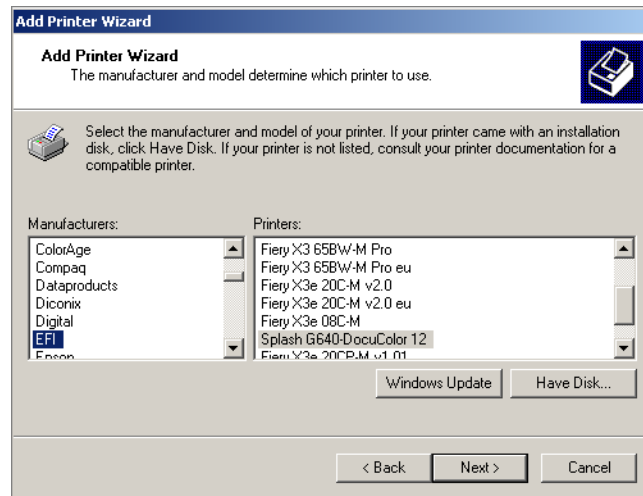
TO INSTALL THE SPLASH G640 PRINTER DRIVERS

1. Insert the Splash G640 User Software CD into the CD-ROM drive on your computer.
2. Click Start, choose Settings, and then choose Printers to display the Printers window.
3. Double-click the Add Printer icon and click Next.

4. Specify whether you are printer using a Local printer and click Next.

This procedure describes installing a printer locally. You can modify the connection later, according to your network type.

5. In the dialog box displaying lists of manufacturers and printers, click Have Disk.



6. Type the name of the CD-ROM drive (for example D:\) and click Browse.



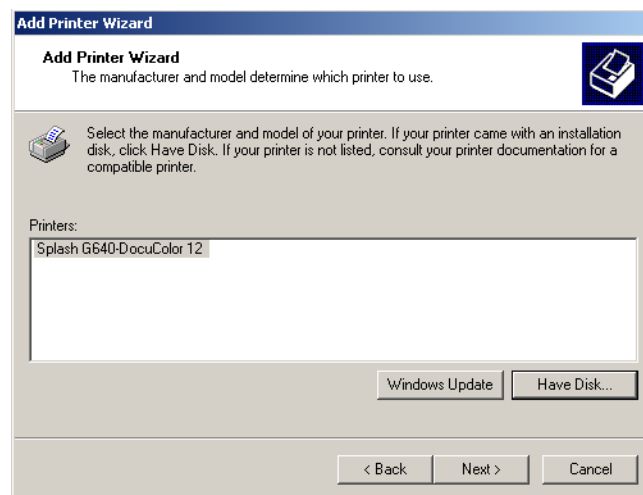
7. Browse to either the Standard or Secure Access Drivers folder, select the language you want, and then select the appropriate Custom or PM Driver folder for your Windows environment.

8. Click OK.

The path is copied to the Install From Disk dialog box

**9. Verify that the path is correct and click OK.**

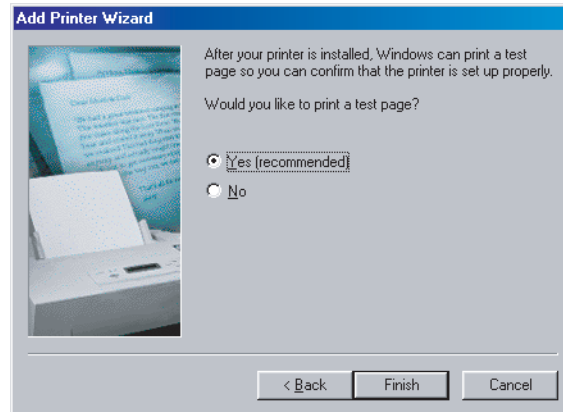
Windows 2000 and XP: If other Splash PPD's are installed, choose Keep or Replace existing driver.

10. In the Printers box, select the Splash G640 and click Next.**11. Windows 9x/ME and NT: If you want the Splash G640 to be the default printer, select Yes; if not, select No.**

Windows 2000 and XP: Choose whether you want to share the printer.

12. Click Next.

13. Choose whether you want to print a test page and click **Finish**.



NOTE: Windows 2000 and XP: The Digital Signature NOT FOUND window may appear, indicating that the printer driver does not have a Microsoft digital signature; however, printing to the Splash G640 is processed correctly. Click Continue Anyway.

The printer now appears in the Printers control panel. Installation is complete.

NOTE: If you recently installed Windows 9x/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.

Chapter 4: Print Options

This chapter describes the Splash G640 print options. These options are available when printing to the Splash G640 with the LaserWriter 8 or AdobePS drivers and the corresponding Splash G640 printer description file.

Accessing the Print options

Mac OS X: Choose Print from the File menu, and then choose Splash Features from the Printers menu.

Mac OS 9.x: Using the Adobe PS printer driver, choose Print from the File menu. In the Print dialog box, choose Splash Options from Printer Specific Options menu.

Using the LaserWriter 8 printer driver, choose Print from the File menu. In the Print dialog box, choose General and then choose Printer Specific Options 1, 2, 3, 4, 5, or 6.

Windows: Click Start > Settings > Printers. Select the Splash G640 and choose Properties from the File menu. Click the Device Options tab (Windows 9x/Me) or the Device Settings tab (Windows NT/2000/XP).

File Handling

The Splash G640 provides several options for handling the PostScript spool file and image files created during printing. These options are available on a user computer, as well.



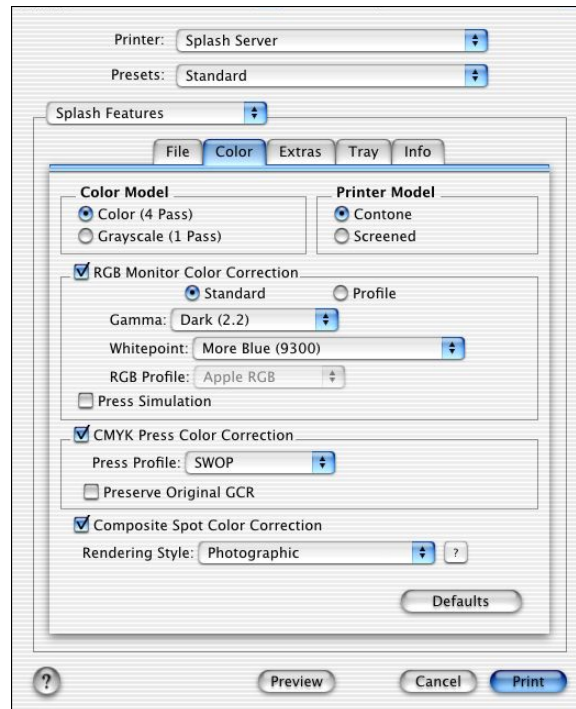
- **Process and Hold** sends the spool file directly to the Hold queue after the Splash server processes it.
- **Process and Print and Save Image File** saves the spool and image files after printing the job. The job is transferred to the Hold queue with the message: PostScript spool file saved as requested.
- **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 files after printing the job.

- **Preflight and Hold** processes and screens the job for errors and then sends the job to the Hold queue.
- **Send and Hold** sends the job file directly to the Hold queue, without processing.

Saving the image file saves time when the same file must be reprinted, but does not have to be reRIPped.

Color Options

The Splash G640 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), for Color Model. Grayscale images produce similar results with either model; however, the Grayscale model images print faster than in Color mode.

Printer Model

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. Screened jobs process faster than Contone jobs, but the output quality is often lower.

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

RGB Monitor Color Correction

RGB Monitor Color Correction simulates colors on a monitor. It can accurately color match mixed RGB file formats independent of the application, platform, or print driver.

For applications and drivers that color-correct through the PostScript CRD, the Splash G640 provides five CRDs: Graphic, Photographic, Presentation, Spot, and Paper Simulation (selectable from the client printer driver). The server also supports the accurate color correction of documents that contain both RGB and CMYK objects.

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

RGB Monitor Color Correction controls

Select the RGB Monitor Color Correction check box to Enable RGB Monitor Color Correction.

The following options become available:

- **Standard**—Gamma (default), Dark 2.2, White Point, More Blue 9300
- **Profile**—Apple RGB (default), Adobe RGB, RGB 9300, RGB D50, RGB D65, sRGB.
- **Press Simulation**

Enable RGB Monitor Color Correction

To apply RGB Monitor Color Correction to a print job, enable RGB Monitor Color Correction, and then select the appropriate RGB options.

NOTE: The default RGB Monitor Color Correction setting is Enabled, using the Standard Gamma and White Point settings.

Gamma

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

Gamma describes how a device reproduces tonal gradations. This setting applies to the input and 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

The White Point simulates various lighting conditions for proofing color documents. Use 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 as follows:

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

RGB Profiles

You can set RGB Monitor Color Correction using RGB profiles. sRGB is the standard profile installed at the server, and unless other profiles are installed, this is the only profile you can select. If other RGB profiles are imported, you can also select them at the server.

The RGB Profiles are as follows:

- Apple RGB (default)
- Adobe RGB, RGB 9300
- RGB D50
- RGB D65
- sRGB.

NOTE: At you computer, the *only* profile you can select is sRGB.

WARNING: If a CopyCal profile is selected as the CMYK Press Profile, the RGB color matching associated with the CopyCal profile is used instead of the RGB color matching selections.

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 color correction is not enabled, this option has no effect.

CMYK Press Color Correction

To apply CMYK press color correction to a print job, select the CMYK Press Color Correction check box, and then select the appropriate CMYK Press Profile from the following menu options:

- **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.)

NOTE: Win98/Me users only—To apply CMYK Press color correction to a print job, select Enabled in the CMYK Press Color Correction menu, and then select the appropriate CMYK Press Profile

Custom1 through Custom10 are customizable CMYK Press Profile options set at the Splash G640. For information about the current settings, contact your server administrator or see “Profile Loader” on page 5-19.

CMYK Press Profiles

The Splash G640 provides three standard CMYK press ink color correction profiles (SWOP, Euroscale and Enhanced) and ten custom CMYK profiles. The CMYK color correction profiles simulate commercial press inks in your output when you print CMYK documents to the Splash G640. The profiles work with CMYK Press Color Correction to automatically compensate for differences in press ink colors.

To apply color correction to a job, enable CMYK Press Color Correction and select a color profile as described in the previous section.

Preserve Original GCR

Preserve Original GCR causes CMYK press color correction to be applied so 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 G640 can simulate PANTONE, Toyo, HKS, or DIC spot colors and tints in documents.

To enable this feature, select Composite Spot Color Correction in the Color tab of the printer driver options. The Splash G640 produces output that simulates the spot color on a printing press.

Rendering Style

To choose a Rendering Style option, select the Rendering Style menu in the Color tab of the printer driver options.

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

- **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.
- **Photographic**—Matches the colors of scanned photographic images. Use this option for proofing photographic material.
- **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.
- **Paper Simulation**—Matches the RGB input to press output, to accommodate off-white Whitepoint settings or paper.
- **Spot**—For documents containing spot colors, or to lighten the RGB color output.

NOTE: The default Rendering Style is Photographic.

Extras Options

The following Splash G640 options, 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 (CMY=0, K=100) black for any (RGB=0) black in the document. This prevents ink buildup on the page and alleviates shadows created by misregistered mixed black.
- **Dynamic Edge Smoothing** smooths fine lines.
- **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.

- **Auto Trapping** automatically traps text and graphics independently of their application.
- **Splash Proof** provides a single step for selecting a combination of print options to output to specific proofing style options. The default print options that automatically override the Print Driver and Splash Server Preference options are: 200 Round Dot copier screening, Tray 5, Heavyweight paper and Continuous Tone Printing.
- **Production Printing** allows a job to RIP and Print at a faster pace than normal, with no effect on text quality, but a slight decrease in output quality of images.
- **Auto Grayscale Detection** allows for faster printing of jobs that do not contain color images.
- **Mirror Image** flips page about vertical axis.

Prepress Features

The following section describes the options available in the Prepress Features box of the Extras tab.

Separations

Using Separations, page layout applications, such as PageMaker and QuarkXPress, can print pages with a single color isolated from the whole image. These pages are then 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 G640 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 Separations print option prints a composite page from applications that support separation printing.

- **Automatic** applies separation to all of 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: 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.

- **Automatic Single Page** 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.

NOTE: If a multi-page separation job is sent with this option selected, the pages will overlay resulting in bad output.

- **Disabled** disables Separations and prints plates as grayscale pages.

NOTE: The remaining Separations options: QuarkXPress 3.0 Style, QuarkXPress 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.

Print Progressives

With Print Progressives selected, the Splash G640 prints up to four separate sheets for a print job. You can configure this print option to specify which color passes print on each sheet. This allows you to examine the result of each color pass for a four-color document.

NOTE: For best results when creating press proofs using Print Progressives, select one of the one-dimensional CMYK Press Color Correction profiles for the print job. For information about the current CMYK profile settings, contact your server administrator. For more information about CMYK Color Correction profiles, see “CMYK Press Color Correction” on page 4-7.

Invert Image

Select Invert Image to invert the CMYK data. When using RGB colors, the 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

Select Print Control Strip to print a set of color control patches on the edge of the output. You can configure this print option to print either color patches or an EPS file or both.

NOTE: The Control Strip image may overwrite the job image if it occupies the same part of the page in the output.

Print Info Strip

Print Info Strip provides the ability to print a customizable info strip on jobs. The default information on the info strip includes user, job, color and media type. The customizable options become available by selecting Customize Print Info from the Server menu.

NOTE: The Print Info Strip image may overwrite the job image if it occupies the same part of the page in the output.

Save As TIFF

Save as TIFF saves a rasterized image file or an up to 600 dpi TIFF file. The TIFF file is placed in the TIFF folder within the Splash folder on the server computer. The TIFF folder is configured for network access. This setup allows you, at your computer, to retrieve TIFF files from the server and delete TIFF files from the folder once they have been copied to the your system.

To activate this feature, choose a resolution from the DPI menu. You can enter a resolution value between 3 and 600 dpi.

NOTE: Save As TIFF can be enabled or disabled in the Server Job Edit window and in the Web Queue Manager. For more information about the Web Queue Manager, see Chapter 6.

The Splash G640 copies files to the server's hard disk before printing. For TIFF and EPS files, the 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 G640 hard disk.

Auto Grayscale Detection

Select Auto Grayscale Detection to check each page for color before printing. If no color is detected on the page, the printer prints in single-pass grayscale mode, which speeds printing for multi-page documents that contain few color pages.

NOTE: If you are printing jobs that have color on every page, deselect this option. When active, Auto Gray Detection adds approximately one-half second to the printing of each color page.

This option is active when the Color Model is set to Color. The log file indicates the number of pages within a job that were printed in grayscale mode.

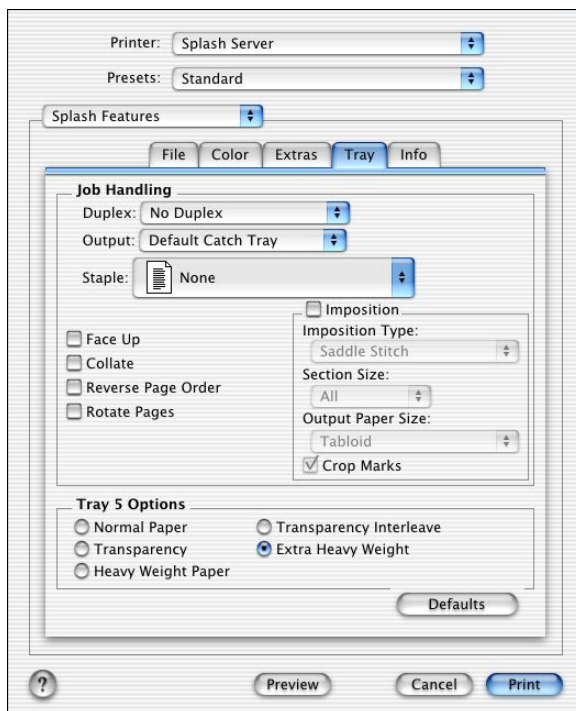
NOTE: For fastest printing of an entirely black and white document, set the Color Model to Grayscale for the print job.

Mirror Image

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.

Tray Options

The Tray Settings allow you to select various Job Handling options including, Reverse Page Order, Imposition, Staple, Duplex, and choice Output Bin.



Duplex

The Duplex printing options are as follows:

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

Automatic duplex printing

Use the Duplex options to set up automatic duplex printing from Trays 1–4 and Tray 6. This specifies that the job print double-sided output. The Duplex Alignment offsets are applied to the second side of each page.

Manual duplex printing

Use the Duplex options to set up manual duplex printing from Tray 5 for manual-fed jobs. This specifies that the job print as two-sided output.

To avoid automatic duplex printing when you print longer jobs, use the following procedure.

TO PRINT USING MANUAL DUPLEX

1. **Send the print job to the Splash G640 with the “Print and Hold” spool option selected.**
2. **From the Job Editor, specify to print only the odd-numbered pages.**
3. **Place the printed odd-numbered pages in Tray 5 in preparation for printing the even-numbered pages. Verify that the orientation is appropriate for your printer.**
4. **From the Job editor, specify to print only the even numbered pages.**

The Duplex Alignment offsets on the Splash G640 are applied to the even-numbered pages.

Staple

If the optional finisher is connected to the printer, you 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 offset each set from the other. If the server Cover Page option is enabled, the cover page prints face up offset from the last printed, stapled set.

The Staple options are as follows:

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

- **Dual portrait**
- **Dual landscape**

With a stapling option selected, jobs must RIP all pages before starting to print. Also, stapled jobs are automatically collated. All stapled jobs print face down, regardless of your selection.

NOTE: Send stapled jobs to the printer in forward order. The custom driver will de-select Reverse Page Order when a Staple option is selected. However, you can re-enable Reverse Page Order for those applications that output pages in reverse order only.

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 G640 does not auto-detect the paper orientation and page orientation settings to determine the proper settings to use for staple position and rotation. For more information, see the following table.

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

Stapled output from Microsoft applications on Windows

When printing landscape documents from Microsoft Word, PowerPoint, or Excel from Windows 9x, Windows NT, or Windows 2000, you must select either the Microsoft Rotate print option or the Splash G640 Rotate print option in order to receive output with the staples in the proper position. The Rotate option is not necessary when printing from Microsoft applications on a Mac OS computer.

Staple Error Handling

Jobs that exceed the 50-page stapling limit (100 sides duplex) print without stapling. The job fails after printing with a message stating that the job exceeded the number of pages that can be stapled. When the printer runs out of staples in the middle of a job, the server stops processing and a dialog box appears stating that the printer is out of staples. The Splash G640 waits for staples to be added and a dialog box displays the amount of time allowed before the job transfers to the Error queue. If the job does transfer to the Error queue, an E (error) code in the Server Status windows.

Face-Up

The Face-Up option prints the job with a face-up orientation.

NOTE: When a Duplex option is selected for the job, this option has no effect.

Collate

Select the Collate check box to print copies of a complete job, one after another. Sending collated jobs displays the “Set” message in the server status window. Sending uncollated copies displays the “Copy” message in the server status window.

When Use Mailbox is selected in the Tray tab, the Splash G640 delivers all of the collated copies 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.

Reverse Page Order

Select Reverse Page Order to print starting with the last page of the document.

NOTE: 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 Splash Reverse Page Order option.

Rotate Pages

The Rotate Pages option rotates all pages of a job by 180 degrees. Select this option when stapling landscape jobs that are rotated incorrectly by the creating application, such as PowerPoint and Quark XPress.

Imposition

Select Imposition to rearranges the printing page order of a job to output booklets. In some cases, this feature uses paper more efficiently for printing multiple copies of small documents.

Imposition Type—Saddle Stitch, Perfect Bound and Signature

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

Select Perfect Bound to print jobs that will be folded, cut, and glued along the back spine into a cover or binding. Most large trade books and larger magazines use this technique. Select Saddle Stitch to print jobs that will be stapled or stitched with thread through the center or into the spine.

The Signature imposition type prints two pages of the job, in order, on a single-sided tabloid sheet. This is always 2-up. Pages 1 and 2 print on the first tabloid sheet and pages 3 and 4 print on a second tabloid page. If Duplex is selected, pages 3 and 4 print on the back side of the first sheet. Odd-numbered jobs print the last page with a blank opposite it.

Scale To Fit

Scale To fit option becomes available when an Imposition Type is selected (Saddle-Stitch, Perfect Bound, or Signature). This option allows you to scale the imageable output to fit on the selected page size. Scaling preserves the aspect ratio, so the output page may not be completely filled.

Paper Use Options—Step and Repeat and 2-Up

Select Step and Repeat or 2-UP Imposition to print multiple copies of a single page on the same output page. Step and Repeat prints as many copies of the page as will fit on the selected output page size. It supports duplexing but not collation. 2-Up Imposition prints two copies of the page on the selected output page size. It is compatible with duplexing and collation.

Output Paper Size

For proper results with Saddle Stitch, Perfect Bound, and Signature, 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, 12 x 18, or SRA3. For A4, select A3, 12x18, or SRA3.

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 only 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.

If you select Crop Marks, choose a page size that is more than twice as large as the original page size defined for printing. For a Letter or A4 page, select 12x18 or SRA3.

Determining the Original Page Size

For 2-Up or Signature imposition, the original page size used is always the one selected in Page Setup (or the equivalent) when printing. Turn off the application registration marks or crop marks.

For Step and Repeat, Saddle Stitch, Signature, and Perfect Bound imposition, if the application registration marks or crop marks are not enabled 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 the application registration marks or crop marks are enabled, 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 registration marks

For Step and Repeat, Saddle Stitch, and Perfect Bound, enable registration marks or crop marks from the application, whenever possible. In general, the imposition software recognizes the input page size more precisely when the application generates the registration marks. For Step and Repeat, using the application registration marks or crop marks increases the number of copies printed on a single sheet.

NOTE: If job errors due to the output not fitting on the paper size selected, enable Crop Marks in the Tray tab of the Splash G640 driver options.

Using Saddle Stitch and Perfect Bound with landscape documents

Landscape documents bind along the short edge of the document so two letter-sized pages cannot fit on a single output page. You can impose landscape documents using Saddle Stitch and Perfect Bound, but the height of the original must be less than half the height of the output page size, or the Scale To Fit option must be selected.

Section size

Section size defines the number of pages to print in a Saddle-Stitch layout. This feature is enabled only when Saddle-Stitch is selected. The Section Size menu include the following options:

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

Tray 5

You can print on non-standard paper or transparency film using Tray 5. You can select from the following paper type options for Tray 5:

- **Normal**—standard paper (16 to 24 gsm).
- **Transparency**—60 to 105 gsm transparencies with a white leading edge.
- **Heavy Weight Paper**—paper that is heavier than 24 pound (between 105 and 163 gsm).
- **Transparency Interleave**—transparency with a blank white piece of paper between transparencies.
- **Extra Heavy Weight Paper (default)**—paper between 163 and 250 gsm

NOTE: When paper or transparencies are inserted into Tray 5, the printer defaults to its Paper Type (Bypass) mode. Press the Clear All button on the printer after inserting the paper or transparencies to return immediately to the print mode.

NOTE: Only Face Up printing is allowed from Tray 5. Other selections have no effect.

Printer output tray maintenance

Though you can configure the Splash G640 to print up to 9999 copies, the output tray holds a maximum of 500 pages. If more than 500 copies are specified, empty the output tray during printing so the total number of copies in the tray never exceeds 500.

Paper type support from trays

The following table lists the paper types supported for each output tray.

Tray	Paper Type	Supported Sizes
Tray 1	Normal	Letter/A4, B5
Trays 2, 3, 4	Normal Heavy Weight	All All
Tray 6 (HCF)	Normal Heavy Weight	A4 LEF, Letter LEF
Tray 5	Normal Heavy Weight Extra Heavy Transparency Transparency Interleave	All except Postcard All except Postcard All A4 LEF, Letter LEF, A3 A4 LEF, Letter LEF

Paper type restrictions

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

The interleave sheet for transparency interleave is pulled from Tray 1.

Printing to heavy weight paper

You can print to heavy weight paper from Trays 2, 3, 4, and 6. The paper must be properly configured in the printer user interface in tools mode. The Splash G640 does not provide a user interface to specify that heavy weight paper is present these trays.

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

Although the printer allows heavy weight paper to go to the offset Catch tray, jobs processed from the Splash G640 that use heavy weight paper always go to the simple Catch tray of the finisher.

Providing user information

The Custom Splash G640 driver allows adding identification information to print jobs from the Info tab. This feature is not available when using other print drivers.

NOTE: Owner, Password, Comment, and Account Number are optional text fields.

Owner and Password

Enter the job owner and a password. The text entered here appears in the Job Information dialog box for the spool file at the Splash G640. If no name is entered, the job includes the network identification name of your computer.

Platform	Note
Mac OS	The maximum number of characters for the Owner field is 24. The maximum of characters for the Password field is 8.
Windows 9x	This feature is available with the Custom driver only. It is not available when printing to the Splash G640 with the Windows printer driver. If you do not enter your name, the job includes the network identification name for your computer. The maximum number of characters for the Owner field is 23. The maximum of characters for the Password field is 7.
Windows NT/2000/XP	This feature is available with the Custom driver only. It is not available when you print to the Splash G640 with the Windows printer driver. If you do not enter your name, the job includes the network identification name for your computer from the sharing control panel. The maximum number of characters for the Owner field is 23. The maximum of characters for the Password field is 7.

Comment

Enter any additional information about the print job.

Platform	Note
Mac OS	The maximum number of characters for this field is 255.
Windows 9x	The maximum number of characters for this field is 255.
Windows NT/2000/XP	The maximum number of characters for this field is 255

Account Number

Enter any account number associated with the print job.

Platform	Note
Mac OS	The maximum number of characters for this field is 32.
Windows 9x	The maximum number of characters for this field is 32.
Windows NT/2000/XP	The maximum number of characters for this field is 32.

Secure Printing

You can use Secure Printing to password-protect your jobs. This security feature can only be implemented from the Mac OS or Windows printer driver, and can only be printed at the Splash G640 when a password is entered.

In order for the job to be password-protected, you must provide a password for the job at the time it is printed. If a job sent to the Splash G640 is password-protected, the job will not be RIPped until you enter a password at the server.

NOTE: The following procedure uses Mac OS X illustrations.

TO SET SECURE PRINTING FROM MACOS OR WINDOWS

1. Start the print process for the job.
2. In the Print dialog box, choose **Splash Features** from the Copies and Pages menu, and click the **Info** tab.

The Document Information dialog box appears.

The screenshot shows a 'Document Information' dialog box. At the top, there are two dropdown menus: 'Printer:' set to 'Splash Server' and 'Presets:' set to 'Standard'. Below these is a 'Splash Features' dropdown menu. The main area of the dialog has five tabs: 'File', 'Color', 'Extras', 'Tray', and 'Info'. The 'Info' tab is selected. Inside the 'Info' tab, there are several input fields: 'Owner:' (a single-line text box), 'Password:' (a single-line text box), 'Comment:' (a multi-line text box), 'Account Number:' (a single-line text box), and 'Server IP Address:' (a single-line text box). Below these fields is a 'Secure Printing Password:' label next to an 'Enable...' button. At the bottom right of the dialog is a 'Defaults' button. At the very bottom of the window, there are four buttons: a help button (question mark), 'Preview', 'Cancel', and 'Print'.

3. Click Enable.

The Secure Printing dialog box appears.

A dialog box titled "Secure Printing" with a light gray background. It contains the text "Enter Secure Printing password." followed by two input fields. The first is labeled "Password:" and the second is labeled "Verify password:". At the bottom, there are two buttons: "Cancel" and "OK".

Secure Printing

Enter Secure Printing password.

Password:

Verify password:

Cancel OK

4. Enter a Secure Print Password, verify the password, and then click Ok.

The document is now password-protected, and the job will go to the Error queue at the Splash G640.

TO ACTIVATE A PASSWORD-PROTECTED JOB AT THE SPLASH G640**1. Double-click the password-protected job in the Error queue.**A dialog box titled "Job Options" with a light gray background. It has a tabbed interface with tabs for "Info", "Page", "Tray", "Color", "Quality", "Extras", and "Graphic". The "Info" tab is selected. The "Info" tab contains the following text: "Filename: Splash Spool 8", "File Size: 2.1MB", "Document: Splash G640 Startup Page.ps", "Application: Electronics For Imaging", "Account:", "Total Pages: 1", and "Received at: 9:28 AM on Wed, Jun 26, 2002". Below this is a "Comments" section with a text area. At the bottom, there is a "Status" section with the text "Canceled earlier, use 'Remove Hold' to process this job." and two buttons: "Edit Doc Info..." and "Preflight Report...". At the very bottom of the dialog are "Cancel" and "OK" buttons.

Job Options

Info Page Tray Color Quality Extras Graphic

Filename: Splash Spool 8
File Size: 2.1MB
Document: Splash G640 Startup Page.ps
Application: Electronics For Imaging
Account:
Total Pages: 1
Received at: 9:28 AM on Wed, Jun 26, 2002

Comments

Status
Canceled earlier, use 'Remove Hold' to process this job.

Edit Doc Info...
Preflight Report...

Cancel OK

2. Click Edit Doc Info.A dialog box titled "Document Information" with a light gray background. It contains several input fields: "Document:" with a text box containing "Splash G640 Startup Page.ps", "User ID:" with an empty text box, "Password:" with an empty text box, "Account:" with an empty text box, and "Comment:" with a larger empty text box. At the bottom, there are two buttons: "Cancel" and "OK".**3. Enter the document password as it was assigned at the Mac OS or Windows computer and click OK.**

If you entered the password correctly, you can now select the job and drag it to the Active queue.

Secure Printing Notes

The Secure Printing password field can contain a maximum of 8 printable characters.

If a Secure Printing spool file is saved and sent to the Hold queue, the password is not saved and must be re-entered when you resend the job to the Active queue.

A Secure Printing job cannot be previewed or be part of a document set.

If an incorrect password is entered at the Splash G640, the job is sent to the Error queue when you try to print it.

Secure Access

Secure Access enables a system administrator to limit who can print to the Splash G640 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.

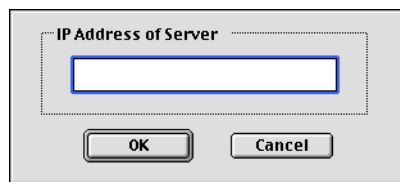
Secure Access accounts are established and managed at the Splash G640. You are prompted for the required information at your computer. Validation of the information, if required, is performed by the Splash G640 and if the information is not correct, you are prompted to correct the information before you can print the job.

Using Secure Access

When Secure Access is configured at the Splash G640, you must install the Secure Access printer driver on your Mac OS or Windows computer. For information, see Chapters 2 and 3.

Printing

Printing using the Secure Access driver is exactly the same as printing with the standard driver, except that the driver prompts you for the Secure Access information. When the first job is sent to a particular printer, the Secure Access driver prompts you for the IP address of the Splash G640. For this information, contact your system administrator.



With each additional job sent to the printer, the Secure Access driver prompts for the required information (User ID, Password, Account Number) as set up at the Splash G640. If the information entered is incorrect, the driver prompts you to re-enter the correct information, specifying the first incorrect entry, along with the error message set up at the server. This continues until you enter the correct information or click Cancel. Once correct information is entered, the job prints as with the standard driver.

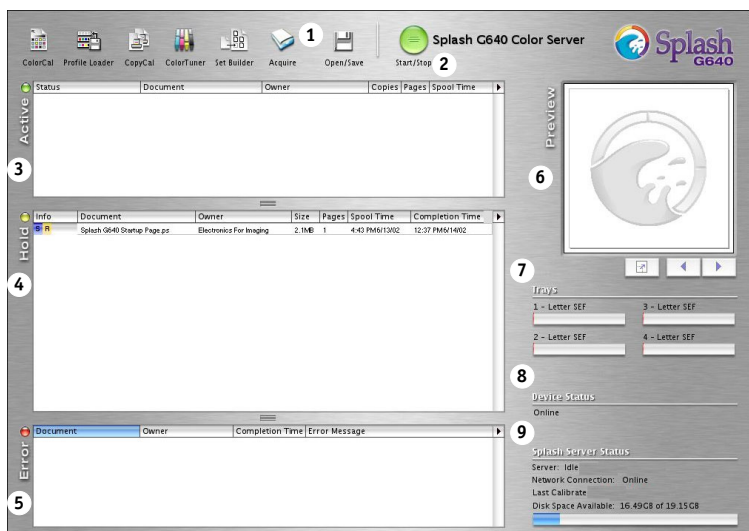
For more information on Secure Access, see “Secure Access” on page 5-62.

Chapter 5: Using the Splash G640 Server

This chapter provides an introduction to the Splash G640 graphical user interface. You can view the Splash G640 main window in two modes: full-screen mode and reduced screen mode. In full-screen mode, the window is not resizable. In reduced screen mode, fewer column headers appear in the print queues, and neither the available hard disk space nor tray capacity is displayed, but you can resize and reposition the window.

The Splash G640 interface (full-screen mode)

When you start the Splash G640 application, the main window appears in full-screen mode. The main window displays information on managing print queues, administering server functions, and controlling the jobs in the print queues.



- 1 Splash G640 toolbar
- 2 Start/Stop button
- 3 Active queue
- 4 Hold queue
- 5 Error queue
- 6 Preview window
- 7 Trays
- 8 Device Status
- 9 Splash Server Status

The following sections describe each component in the Splash G640 interface.

Main menus

When you initially start the Splash G640, the following top-level menus appear: Apple, Splash Server, File, Edit, Server, and Jobs.

NOTE: If you log in as server administrator, the actual commands in each menu differ from those that appear when you first start the server.

Print queues

The print queues in the main window display the Active, Hold, or Error status of all spooled jobs.

- **Active queue**—displays the currently processing print job and jobs awaiting automatic processing.
- **Hold queue**—lists print jobs that the server has processed and jobs queued to Process and Hold or Process and Save. To print a job from this queue, press Command+R or drag the job to the Active queue.
- **Error queue**—lists print jobs that failed to print, either partially or completely.

To resize a print queue, click the tab that separates it from another queue and drag up or down.

NOTE: You cannot resize a queue to hide another queue.

Print queue column headings

The column headings in the print queues can be repositioned, resized, added, or deleted. To resize or reposition a column heading in the Active, Hold, or Error queues, click the column heading and drag right or left.

To add a column heading, Option-click an existing column heading and choose from the commands in the menu that appears. To delete a column heading, Option-click the column heading and choose Empty.

The column headings in the print queues are:

- **Document**—lists the title of the job being sent to the server.
- **Spool Time**—indicates what time the job was spooled/received.
- **Completion Time**—indicates the last time the server completed a job activity.
- **Owner**—lists the computer Name/User ID.
- **Status**—indicates whether the server is receiving, printing, preflighting, or has encountered a job error.
- **Copies**—lists the number of copies requested.
- **Pages**—indicates the number of pages in the job.
- **Size**—lists the full size of the RIPped job.
- **Spool Name**—assigns a spool number or file name to the job.
- **Application**—indicates the application in which the document was created.
- **Job**—assigns a number to the job.
- **Comment**—displays any relevant comments on the job.
- **Account**—displays the account from which the job came.
- **Error Message**—explains why a job was sent to the Error queue.
- **Info (Basic)**—displays a job status info symbol that indicates if the job has been sent, is being sent, is being received, has a preflight report, contains saved images, or has been color tuned.
- **Info (Detailed)**—displays all job info symbols that apply, with a colored background that indicates job progress.

Info field (Basic and Detailed)

When the Splash G640 main window is in full-screen mode, the leftmost column in the Hold queue acts as a job information field. The Info field includes two options: Info (Basic) or Info (Detailed). To toggle from one option to the other, Option-click the Info column heading, and choose Info (Basic) or Info (Detailed) from the menu that appears. Info (Basic) displays a symbol that indicates the job's print status. Info (Detailed) displays the symbol, but adds a color background to indicate job progress. If a job is moved to the Active or Error queues, the Info field is no longer displayed,

but is available. In the Active queue, the Rip and Print status of a job is available in the Status field. When a job moves to the Error queue, the reason the job failed to print appears in the Error Message field.

The Info (Basic) symbols and descriptions are:

- I = Has Saved Rasters (Image)
- T = Will Apply Color Tuning When Run (Tuning)
- P = Has Preflight Report
- R = RIPped (previously processed)
- S = Receiving From Network (Spooling)
- Blank = Fully Received, Not Processed

The Info (Detailed) displays five columns of color icons that indicate the progress of a job.

- I = Saved Raster, will print without re-RIPping and its symbol is Red
- T = Applies Color Tuning When Run, symbol is Purple
- P = Preflight Report, symbol is Charcoal Gray
- R = RIPped (previously processed), symbol is Yellow
- S = Spooling (receiving from network), symbol is Blue if received, half-filled blue if receiving

NOTE: More than one Info field can be displayed at a time.

For Info Basic jobs for which more than one status condition applies, the field displayed first is true. For example, for a job with saved rasters and a preflight report, “I” would be displayed in the Info field.

Preview window

The Preview window displays thumbnails of the job selected in the Active, Hold or Error queues.

Start/Stop button

Start/Stop allows you 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.

Toolbar

The Splash G640 toolbar allows you convenient access to frequently used applications and features.



In full-screen mode, the toolbar includes the following:

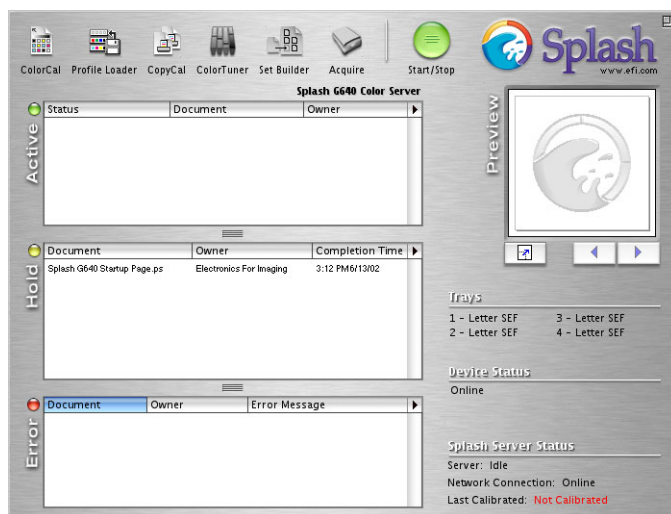
- **ColorCal**—allows you to perform color calibration.
- **Profile Loader**—allows you to quickly and easily add ICC profiles.
- **CopyCal**—allows you to create color profiles that simulate the output of any color printer.
- **ColorTuner**—allows you to edit the color output of a RIPped job before all the copies are printed.
- **Set Builder**—allows you to combine several jobs, printing them as a single, collated document.
- **Acquire**—allows you to scan jobs directly from the server, without using Adobe Photoshop. A separate Photoshop plug-in is provided to allow you to scan with Photoshop.
- **Open/Save**—opens the Open/Save dialog box, where you can open dropped files and save spooled files.

Job status indicators

- **Device Status**—displays the status of the printer.
- **Splash Server Status**—displays network activity, server status (Idle, Stopped, or Processing), the date of the last calibration, and available hard disk space.
- **Trays**—indicates which paper trays are installed and the paper sizes they accommodate.

The Splash G640 interface (reduced screen mode)

In reduced screen mode, the Splash G640 main window displays print queue management information and print server tools.



NOTE: In reduced screen mode, the Splash G640 toolbar displays the same applications and features as in full-screen mode, with the exception of the Open/Save feature. Open/Save is unavailable in reduced screen mode.

For descriptions of each of the applications and features in the reduced mode toolbar, see the previous section on the Splash G640 main window (full-screen mode).

Starting the application

To begin working with the Splash G640 application, double-click the Splash G640 icon located in the Applications: Splash folder.

If you need to stop a print job in the Active queue, press Start/Stop or choose Stop Processing from the Server menu; to resume printing, press Start/Stop or choose Start Processing from the Server menu.

To quit the Splash G640 application, return to the main window and press Command+Q, or choose Quit Splash Server from the Splash Server menu.

To control client printing to the Splash G640, you can configure the server to Spool and Hold all incoming print jobs, allowing the server administrator to review jobs and determine job priorities.

Using the Print Job Queue menu

To access a job's Print Job Queue menu, click a job in any print queue, and then click the arrow button on the upper-right side of the queue. The following commands are available in the Print Job Queue menu:

NOTE: Keyboard shortcuts appear in parentheses.

- **Select All**—selects all jobs in the queue. (Command+A)
- **Edit Job**—opens the Job Print Options menu for the selected job. (Command+E)
- **Delete Job**—deletes the selected job. (Command+K)
- **Hold**—sends the job to the Hold queue. This option is only available if the job is in the Active queue. (Command+H)
- **Remove Hold**—sends the job to the Active Queue. This option is only available if the job is in the Hold queue. (Command+R)
- **Preflight**—screens job for errors and sends it to the Hold queue. (Command+F)
- **Color Tuner**—provides an easy way to edit the color output of RIPped pages of a job, before it finishes printing all copies of a job. (Command+T)

- **Show Preflight**—opens the Preflight Results dialog box. The job must be preflighted or this option is unavailable.
- **Apply Defaults**—applies the current defaults that have been set at the server.
- **Clear Color Tuner**—removes all color changes from a selected job. (Command+A)

Selecting jobs

To select a job in one of the print queues, click it. To select multiple jobs, click one job, press Shift, and click multiple jobs in the queue. Press Command as you click jobs to select only the jobs you click.

If a selected job has a preview image, it appears in the Preview window of the Splash G640 main window.

Moving jobs

To move a job to the Hold queue, select the job in the Active or Error queue and choose Hold from the Jobs menu, or press Command+H. You can also drag the file to the Hold queue.

To resume processing of a job in the Hold queue, drag the job to the Active queue, choose Remove Hold from the Jobs menu, or press Command+R while the job is selected.

Deleting jobs

To delete a job from the Hold or Error queues, select the job and press Delete. A dialog box prompts you to confirm this action. If image files are saved, you are asked whether you want to delete the entire job, or just the saved image. To delete a job that is currently processing in the Active queue, select the job, drag it to the Hold queue, and choose Delete Job from the Jobs menu.

You can also delete jobs by dragging them to the Trash icon on your Mac OS desktop. Jobs in the Active queue cannot be dragged to the Trash.

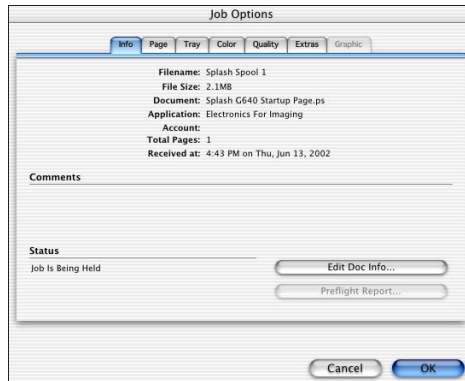
WARNING: If you select multiple jobs to be deleted and some have saved rasters while others do not, a dialog box prompts you to delete the job or the rasters, as described previously. If you choose to delete raster files, the server deletes the raster files from those jobs with raster files, and leaves the other files unchanged.

Viewing and editing job options

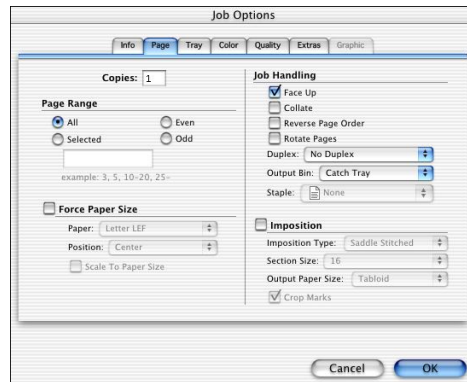
The Job Options dialog box allows you to view the options for jobs in the Active, Hold, or Error queues and revise them. To open the Job Options dialog box, double-click the job in the queue, or select the job and choose Edit Job from the Jobs menu.

The following tabs in the Job Options dialog box allow you to edit job options:

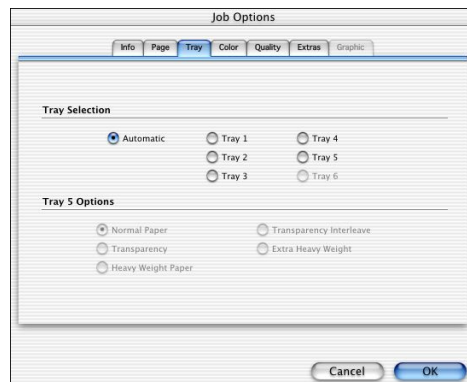
Info—displays job details: Filename, File Size, Document, Application, Account, Total Pages, date and time received, Comments, Status, Edit Doc Info, and Preflight Report.



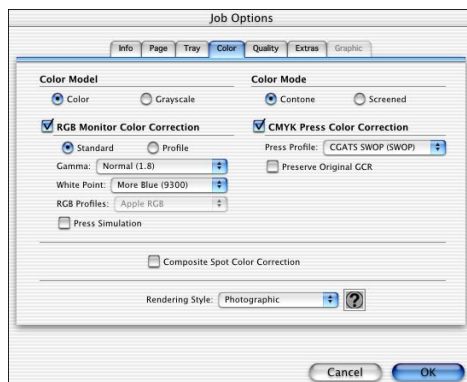
Page—displays job handling options: Face Up, Collate, Reverse Page Order, Rotate Pages, Duplex, Output Bin, Staple, Page Range, Force Paper Size, Paper, Position, Scale to Paper Size, Imposition, Imposition Type, Section Size, Output Page Size, and Crop Marks.



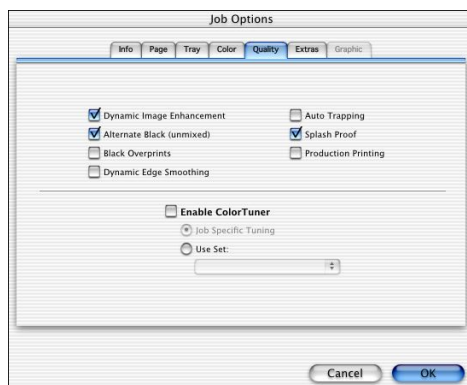
Tray—displays job handling options: Tray Selection (Automatic or specify Tray 1-5). If you select Tray 5, additional options include Normal Paper, Transparency, Heavy Weight Paper, Transparency Interleave, and Extra Heavy Weight.



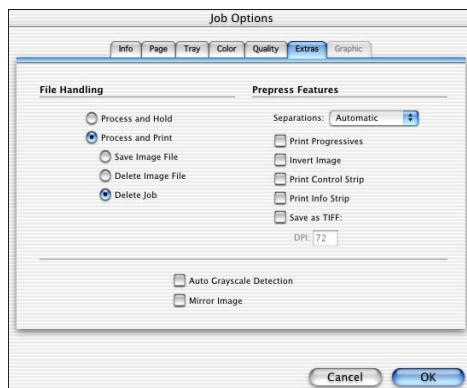
Color—displays settings for Color Model, Color Mode, RGB Monitor Color Correction, CMYK Press Color Correction, Composite Spot Color Correction, Rendering Style, and Rendering Style Definition Table.



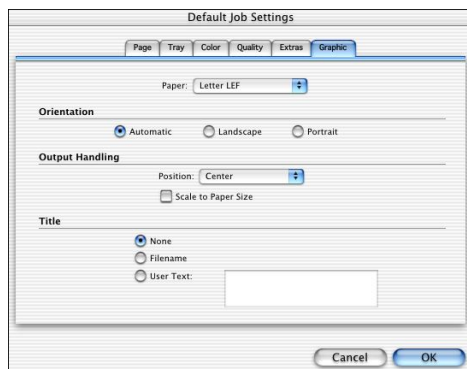
Quality—allows you to set Dynamic Image Enhancement, Alternate Black, Black Overprints, Dynamic Edge Smoothing, Auto Trapping, Splash Proof, Production Printing, Enable Color Tuner, Job Specific Tuning (if Color Tuner is running), and Use Set.



Extras—displays settings for File Handling: Process and Hold or Process and Print (Save Image File, Delete Image File, and Delete Job), and Prepress Features: Separations, Print Progressives, Invert Image, Print Control Strip, Print Info Strip, and Save as TIFF.



Graphic—tab becomes available when printing graphic files (EPS or TIFF) and Adobe PostScript files. The Job Options include Paper, Orientation (Automatic, Landscape, or Portrait), Output Handling (Position and Scale to Paper Size), Title (None, Filename, and User Text field).



Select any of the preceding tabs to edit the job options before a job prints. For example, to change the number of copies or to scale a job, click the Page tab in the Job Options dialog box. For more information about job options, see Chapter 4.

Setting default job settings

This feature allows the server administrator to set default print options for jobs not sent with a Splash PPD. The settings include all color correction and printing modes, as well as paper types. The Default Job Settings dialog box appears when the server administrator chooses Edit Defaults from the Jobs menu.

NOTE: You must be logged on as administrator to modify the default job settings, otherwise the option is unavailable.

The interface is similar to the Job Options dialog box. The number of copies and page range options are not available in Default Job Settings tabs. However, an additional tab allows the server administrator to set default options for graphics files that are downloaded for direct printing to the server. These options appear when you click the Graphic tab.

Editing default job settings

The following procedure explains how to edit default job settings.

TO CUSTOMIZE DEFAULT JOB SETTINGS

- 1. Choose Edit Defaults from the Jobs menu.**

The Default Job Settings dialog box appears.

- 2. Click the Page, Tray, Color, Quality, Extras, and Graphic tabs, and set the required print options.**

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

The Splash G640 applies the default print options in the following situations:

- To graphics files (EPS, TIFF, TIFF/IT, CT/LW, PSD, PDF and PDF-X formats) or PostScript files that are placed in the Drop folder or dragged to the Active or Hold queues.
- To graphics files received from a client on a TCP/IP network.

NOTE: Job defaults set at the Splash G640 do not affect defaults at the printer driver. When you select Printer Default in the printer driver interface, the factory default is applied, rather than the server default.

Job defaults for PostScript printing

The job defaults are set at the Splash G640. For jobs that are not sent to a printer with a Splash PPD, default printer options are applied. Job defaults are applied to jobs from the following sources:

- Jobs from UNIX clients
- Mac OS jobs using non-Splash PPDs
- Windows NT 4.0/2000/XP and Windows 95/98 jobs using non-Splash PPDs

Job defaults for graphics files

The job defaults for graphics files 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 or Portrait)
- Image Title (None, File Name, or Specified Text)

Managing raster files

Raster files can be saved using the File Handling job options—Process and Hold, Process and Print, or Save Image File. Jobs with saved raster files can be reprinted without reRIPping, 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, you are warned that this causes the raster files associated with the job to be deleted. You then confirm or cancel the edits.

Options that require reRIPping include the following:

- Page—Page Range, Duplex, Force Paper Size, Scaling, Rotate, Staple, and Imposition options (if Imposition: Step and Repeat selected, Number of Copies).
- Tray—Tray Selection, Paper Type Selection.
- Color—All options

- Quality—All options
- Extras—Process and Hold, Separations, Single Page Separations, Progressives, Invert Image, Auto Grayscale Detect, Print Control Strip, Save as TIFF, Mirror Image, and Print Info Strip.

Editing server preferences does not cause jobs to be reRIPped.

Delete raster files by selecting the job and choosing Delete Job from the Jobs menu, or by pressing Delete. If any of the files selected have raster files, a dialog box prompts you to cancel, delete the image file only, or delete the entire job. No option to delete spool files only is provided. You can also delete raster files by dragging the spool file to the Trash icon on your Mac OS desktop. In such cases, both spool and raster files are deleted with no warning message.

RIP-While-Print

Automatic RIP-While-Print reduces print wait time by ensuring that the server is never idle while jobs are present. RIP-While-Print tracks all print jobs, including jobs that are in transit to the Splash G640, and directs Adobe CPSI (Configurable PostScript Interpreter) processing of jobs, where the currently processing job has highest priority.

RIP-While-Receive

Automatic RIP-While-Receive reduces print wait time by ensuring that the server is never idle while print jobs are present. RIP-While-Receive tracks all print jobs, including jobs that are in transit to the Splash G640, and directs CPSI processing. The currently processing job has highest priority and is completed first, regardless of whether another job has been spooled completely.

If an error occurs, a job is moved to the Error queue when spooling finishes. The job can be restarted when the error is corrected. It is not necessary to resend the job from the client.

RIP-Across-Jobs

The Splash G640 automatically begins RIPing a second job as soon as the first job finishes RIPing. It does not wait 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 the Print queue Info field print without reRIPping.

NOTE: No explicit user control is available for this feature.

Previewing jobs

Jobs RIPPed at the Splash G640 include a preview image of the first page of the job. If a job has not been RIPPed, the preview is unavailable.

TO ENABLE PREVIEW THUMBNAILS

- 1. Choose Server Preferences from the Server menu.**

The Splash Server Preferences dialog box appears.

- 2. Click the Page tab.**

- 3. In the Save Preview Thumbnail area, select Never, First Page Only, or All Pages.**

- If First Page Only or All Pages is selected, click the arrow directly below the preview image to see the next or previous preview pages.
- To display the last RIPPed page of the job, click the left arrow while the first RIPPed page for the job is displayed.
- To show the first RIPPed page of the job, click the right arrow while the last RIPPed page of the job is displayed.

NOTE: You cannot edit the preview image for a job that is RIPPing.

The Preview window is a fixed size and is not movable from within the main window. However, clicking the arrow button to the left of the Preview window allows you to open a new Preview window that is not attached to the main window. You can move and resize the new Preview window. The Preview window also displays the page number of the thumbnail image.

Checking job errors (preflight)

The Preflight feature allows you to examine jobs before they print for potential problems, such as:

- PostScript errors
- Missing fonts and font substitution

TO SCREEN A JOB FOR POTENTIAL ERRORS

1. **Select the job in the print queue and choose Preflight from the Jobs menu.**

The job is moved to the Active queue for preflight processing, then moved back to the Hold queue when processing is complete.

2. **Double-click the job or choose Show Preflight from the Jobs menu.**

The Preflight Results dialog box appears.

3. **Click Print to print a hard copy.**

Active queue job management

Reorder jobs in the Active queue by dragging them to a new position within the queue. Moving jobs in the Active queue allows you to reschedule jobs for RIPping or printing without putting them on Hold.

Reordering jobs in the Active queue does not affect the current state of the job. Once a job begins printing or RIPping, it continues to do so until it finishes printing or RIPping or is placed on Hold.

When the currently RIPping job finishes, the job in the Active queue that is Pending (highest in the queue) begins RIPping. When this job finishes printing, whatever job is in the Active queue continues processing or moves to the Print Pending stage and is printed next.

Starting and stopping job processing

The Start/Stop button is located at the top center of the main window (see page 5-1).



- To stop processing a job currently on the server, click Start/Stop when it is in its “green” state.
- To resume processing, click Start/Stop when it is in its “red” state.

Client workstations can send print jobs to the Splash G640 while processing is stopped; jobs sent via Print and Save or Print and Delete are spooled to the startup disk and appear in the 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 logical stopping point, and leaves them in the Active queue. Job order is not affected by this option.

Splash G640 applications and features

ColorCal

ColorCal is an automated color calibration system. Frequent and regular calibration using ColorCal ensures that your server output is accurate and predictable. For detailed information about maintaining consistent color output, see Chapter 7.

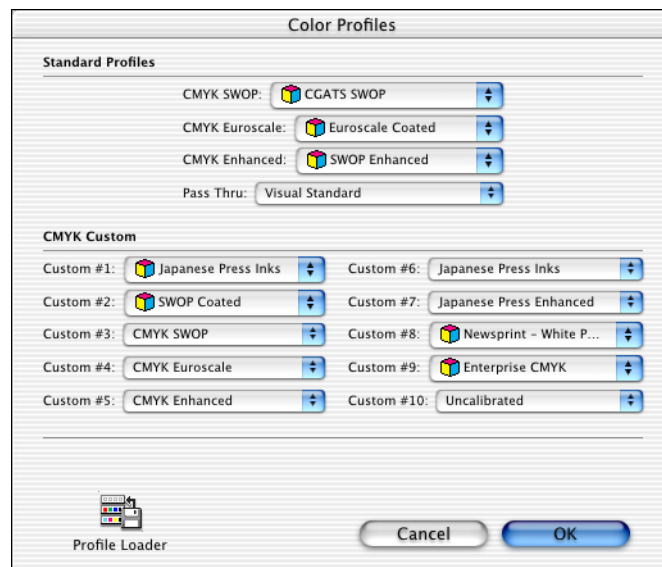
CopyCal

CopyCal is a stand-alone application that creates profiles that allow the Splash G640 to emulate the output of any color printer. For detailed information about using CopyCal, see Chapter 7.

Profile Loader

The Splash G640 interface allows the server administrator to set CMYK color correction profiles. The Splash G640 provides a large number of standard CMYK color profiles. These profiles may be GCR preserving, or may not be based on a server preference. You can use these profiles as the basis for creating new custom profiles using the ColorCal Expert Mode tools.

To edit CMYK color correction profiles, choose Color Profiles from the Server menu. The Color Profiles dialog box appears.



CMYK Profiles

- Enterprise CMYK
- Euroscale Coated
- Euroscale Enhanced
- Japanese Press Enhanced
- Japanese Press Inks
- Newsprint Recycled Paper

- Newsprint White Paper
- SWOP Coated
- SWOP Enhanced
- Type D Enhanced
- Type D Inks
- Corel “RGB”
- CGATS SWOP
- Euro-Simulation
- Fogamat

Old Style CMYK Profiles

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

Active CMYK Custom Profiles Defaults

Standard Profiles Defaults:

- CMYK SWOP, default: CGATS SWOP
- CMYK Euroscale, default: Euroscale Coated
- CMYK Enhanced, default: SWOP Enhanced
- Pass Thru, default: Visual Standard

CMYK Custom Profiles:

- Custom 1, default: Japanese Press Inks (New Style)
- Custom 2, default: SWOP Coated
- Custom 3, default: CMYK SWOP
- Custom 4, default: CMYK Euroscale
- Custom 5, default: CMYK Enhanced
- Custom 6, default: Japanese Press Inks (Old Style)
- Custom 7, default: Japanese Press Enhanced (Old Style)
- Custom 8, default: Newsprint - White Paper
- Custom 9, default: Enterprise CMYK
- Custom 10, default: Uncalibrated

ColorTuner

The ColorTuner application allows you to edit the output color of RIPPed pages before printing all the copies of a job. You can use ColorTuner to make minimal corrections not remedied by color profile selection and calibration, or to make significant changes to the color content of a page.

ColorTuner displays “before” and “after” thumbnails, which allow you to select color changes. The thumbnails also provide limited feedback on the effect of your changes. This preview is intended to show the relative color change being applied and is not intended as a proof of the final color. The only proof is the printed page.

TO EDIT COLORS USING COLORTUNER

1. **Choose ColorTuner from the Jobs menu, click the ColorTuner icon in the toolbar, press Apple +T, or select a job and choose ColorTuner from the arrow menu that appears when you click the column header.**

When you start the ColorTuner application, the following job options are available, 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 Grayscale Off
- Progressives Off

NOTE: Starting ColorTuner for a job overrides any previous ColorTuner information.

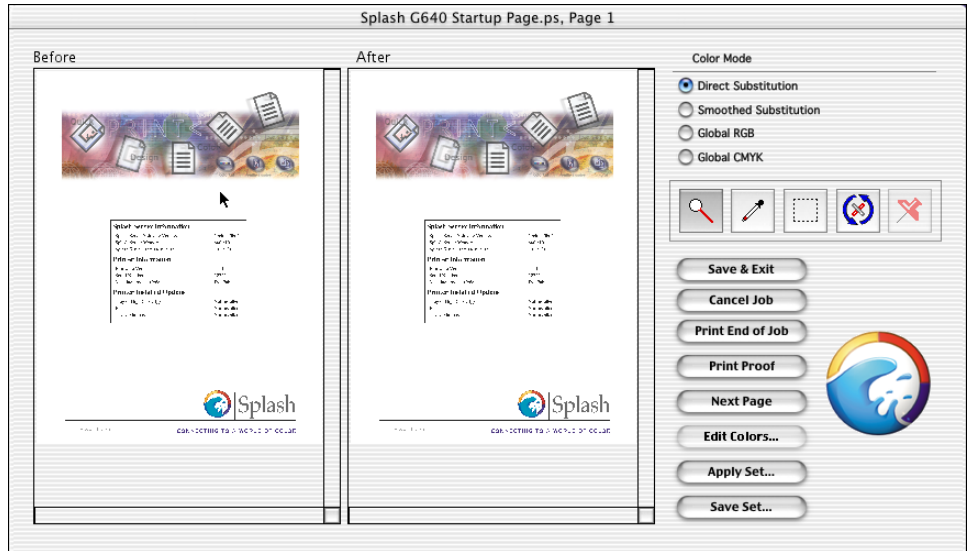
2. **After each page is RIPPed, the ColorTuner dialog box appears.**

The dialog box includes a thumbnail of the page, a color preview, and all the tuning controls.

3. **Select the desired color tuning, and subsequent jobs print in that mode until you edit the color tuning settings.**

NOTE: You can apply only one type of color tuning to each page.

4. View the changed settings in the After thumbnail, and then click **Print Proof** to print a proof page.



After tuning each page, click the following:

- **Edit Colors**—opens a list of 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.
- **Apply Set**—selects a ColorTuner set and applies it to the job. The page can then be accepted as is or you can apply further edits to the page. This option is selected on the first page only, when no color changes have been made or all color changes have been deleted or reverted.
- **Print Proof**—allows you to print a copy of the currently displayed page in the Preview area, with all ColorTuner color corrections applied.
- **Save Set**—saves color tuning changes as a named ColorTuner set. You can then select this set in the Job Options dialog box for other jobs. This option is only available when color changes have been made on the job.

- **Next Page**—RIPs the next page and repeats the tuning process. The next page automatically displays the changes from the previous page. The page can be reverted to its RIPped form by clicking Revert in the Global Color Adjustment dialog box, 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 Edit Colors and delete the color substitutions from the list in the Color Substitutions dialog box.
- **Print End of Job**—prints a copy of the current page with color tuning applied, then returns the job to the Hold queue.
- **Cancel Job**—deletes all color tuning for a job and returns it to the Hold queue. If a custom set has been saved, it is not lost when you click Cancel Job.
- **Save and Exit**—saves the color tuner edits and returns a job to the Hold queue without printing any pages.

Other ColorTuner controls are:

- **Zoom**—click the image to zoom in; Option-click to zoom out. Allows 10 levels of zoom.
- **Color Picker**—click the preview image to select a color. The CMYK Color Substitution dialog box appears, allowing you to modify the color.
- **Marquee**—allows you to drag your mouse over an area in the preview image to select the area you want to color tune. This defines a rectangular area in which you can apply color edits.
- **Rotate 180**—click to rotate the Before and After thumbnails.
- **Scroll bars**—standard scrolling tools.

NOTE: If you select a job for color tuning while other jobs are printing, the first page of the job will be RIPped and color tuned while other jobs are printing, but the first color-tuned page cannot be printed until the previous job finishes printing.

Adjusting color in the ColorTuner application

This section describes the color modes in ColorTuner: Direct Substitution, Smoothed Substitution, Global RGB, and Global CMYK.

NOTE: In Direct Substitution and Smoothed Substitution modes, an additional option—Spot Color Changes—is available.

Direct Substitution

Direct substitution changes all occurrences of a single color to any other color, without constraints. This mode is designed 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 DEFINE COLOR CHANGES IN DIRECT SUBSTITUTION MODE

1. Use the Zoom tool to enlarge an area of the page in the “after” thumbnail.

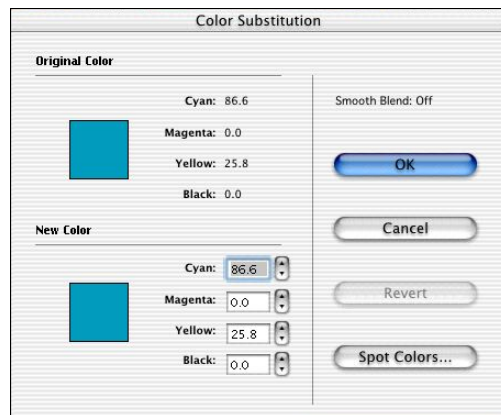
2. Select a color with the Color Picker tool.

Once you select the color, the corresponding CMYK percentages appear.

3. Type the desired percentages in the CMYK fields.

Your edits are reflected in real time in the After thumbnail.

NOTE: You can select and edit a maximum of 32 colors.



If you need to modify a color substitution, click Edit Colors in the ColorTuner dialog box. As shown in the preceding illustration, CMYK percentages are displayed for both the Original Color and the New Color. You can edit these values as required.

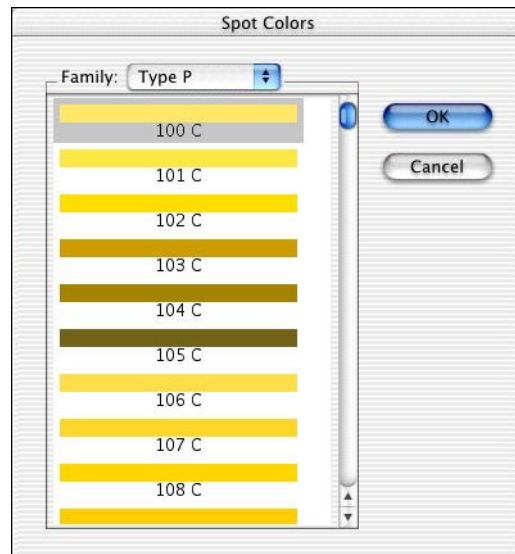
TO EDIT A PANTONE SPOT COLOR

1. **Using the Zoom tool, select a PANTONE color in the Before or After thumbnails.**

Once you select the color, the CMYK percentages are displayed.

2. **Click Spot Color.**

The Spot Colors dialog box appears.



3. **Select the PANTONE color and click OK.**

The New Color dialog box appears, displaying the PANTONE color name below the preview image and the CMYK values of the PANTONE color.

4. **Modify the CMYK values.**

The PANTONE Spot Color changes to a CMYK color and the PANTONE name disappears.

Smoothed Substitution

Smoothed Substitution allows you to change a color to another color. In this color mode, all colors within a range in CMYK space around the color you select are changed. This feature allows you to adjust a dominant color in the image, such as one endpoint of a background gradient, while limiting the range of color changes, to prevent discontinuities.

Global RGB

Global RGB allows you to manipulate the individual RGB curves to affect all color output on the page. The curve manipulation controls perform the same functions as the ColorCal expert mode.

Global CMYK

Global CMYK allows you to manipulate the individual CMYK curves to affect all color output on the page. The curve manipulation controls perform the same functions as the ColorCal expert mode.

Color Substitution with Global Color Changes

Color Substitution with Global Color Changes allows you to edit individual colors after global changes have been applied.

Setting up server preferences

The Splash Server Preferences dialog box allows the server administrator to configure the Splash G640. The dialog box is configured with the following tabs:

- **Server Name**—includes file converters, job processing preferences, and the Server Name field.
- **Page**—allows you to choose settings for printing cover pages, mapping jobs, and creating previews.
- **Network**—displays Enterprise Networking, Appletalk Registration, Font Downloading, and Enable Web Access settings.
- **Color**—includes various options for color printing.
- **Style**—sets style preferences for each of the print queues.
- **Log**—displays settings for starting, storing, and viewing a job log file.

Viewing and editing job preferences

You can customize the Splash G640's appearance and control job processing options by editing the server preferences.

TO VIEW AND EDIT SPLASH G640 PREFERENCES

1. **Choose Login from the Server menu.**

The Login dialog box appears.

2. **Type the administrator password, if one is required, or leave this field blank.**

NOTE: To reset the administrator password, choose Login from the Server menu and click Change. Enter the old password, if any; then enter and verify the new password.

3. **Click OK.**

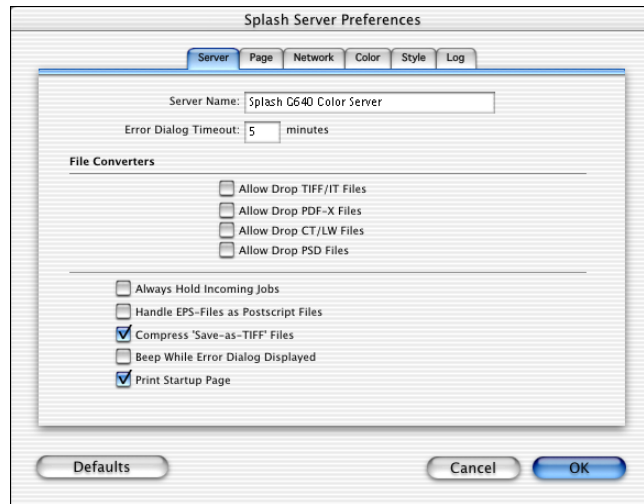
4. **Choose Server Preferences from the Server menu.**

The Splash Server Preferences dialog box appears.

WARNING: If printing is in progress at the server, do *not* modify server preferences. Doing so may cause unexpected results in the printed output.

Setting Server preferences

The options on the Server tab in the Splash Server Preferences dialog box allow you to define the Server Name and set file converter and job processing preferences.



Assigning a server name

The name you type in the Server Name field is visible to remote clients who connect to the Splash G640 over an AppleTalk network. “Splash Server” is the default name. You must assign a different name if you connect more than one server to the same network, in order for both to appear on the network.

To change the server name, type a unique name in the Server Name field. Give the Splash G640 a name that clearly indicates that it is a color printer. If you assign a duplicate name, an error message appears, prompting you to enter a different name. The maximum number of characters allowed is 31 characters.

Setting the Error Dialog Timeout preference

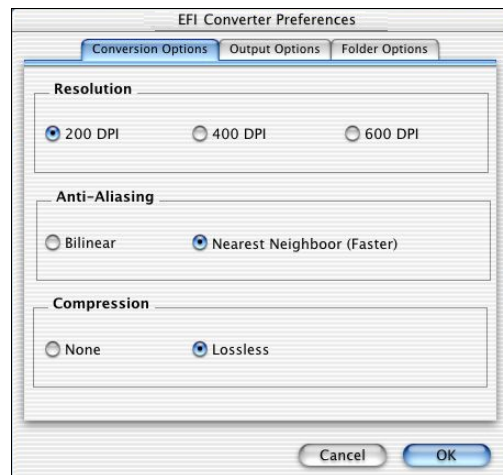
Type an increment of time of a minimum of one minute in Error Dialog Timeout to specify how long processing is delayed at the server when a printing error occurs. If the error is not corrected within this time limit, the job moves to the Error queue. Increase or decrease the Error Dialog Timeout setting by one-minute increments.

Setting File Converter preferences

You can select the following options in the File Converters area of the Server tab in the Splash Server Preferences dialog box:

- Allow Drop TIFF/IT Files
- Allow Drop PDF-X Files
- Allow Drop CT/LW Files
- Allow Drop PSD Files

The File Converter preferences for these file formats self-start when you start the server, and are sent to the Mac OS X Dock Control Panel.



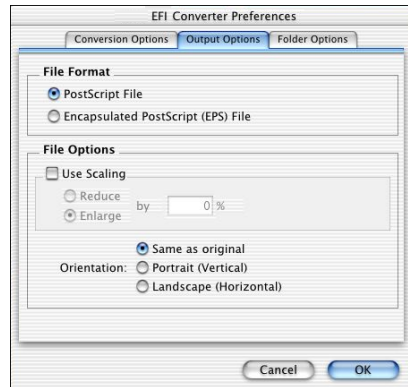
The tabs in the EFI Converter Preferences dialog box allow you to specify options to define Conversion Options, Output Options, or Folder Options, as follows:

Conversion Options

- Resolution—200, 400, or 600 dpi
- Anti-Aliasing—Bilinear or Nearest Neighbor
- Compression—None or Lossless

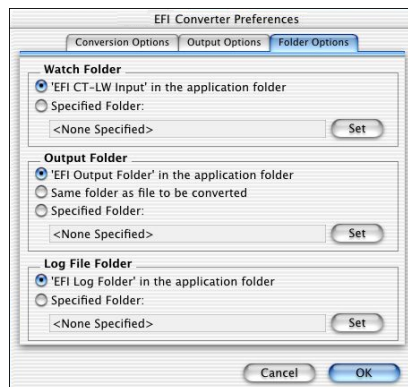
Output Options

- File Format—PostScript File or Encapsulated PostScript (EPS) file
- File Options—Use Scaling (Reduce or Enlarge by __%) and Orientation (Same as original, Portrait (Vertical), and Landscape (Horizontal))



Folder Options

- Watch Folder—EFI CT-LW, PSD, PDF-X, or TIFF/IT Input in the application folder or Specified folder.
- Output Folder—'EFI Output Folder' in the Application Folder, Same folder as file to be converted, or Specified Folder.
- Log File Folder—'EFI Output Folder' in the application folder or Specified Folder



Setting additional server preferences

Additional settings in the Splash Server Preferences dialog box allow you to set job processing preferences, as follows:

- **Always Hold Incoming Jobs**—places a temporary hold on all print jobs received while an error message is displayed on-screen. Incoming jobs go to the bottom of the Hold queue and are not RIPPed or printed. This allows the server administrator to review all jobs before they print.

NOTE: When this option is selected, you must drag a print job from the Hold queue to the Active queue to print it.

- **Handle EPS Files as PostScript Files**—allows the server to interpret EPS files as PostScript. In general, you should clear this option. Select this option 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.
- **Compress 'Save-as-TIFF' Files**—compresses TIFF files for faster processing.
- **Beep While Error Dialog Displayed**—alerts the server to “beep” every 10 seconds when an error message is displayed. The 10-second interval cannot be changed. If you close the dialog box or the dialog box times out, the beep stops.
- **Print Startup Page**—selecting this preference prompts the server to print a startup page that displays a recognizable color pattern and basic printer and server configuration information.

The presence or absence of a high-capacity feeder is not indicated on the startup page because of limitations in the Splash G640. The Splash Startup Page prints from Tray 1 by default, and is deleted after printing.

Drop-printing files

The Splash G640 prints Acrobat PDF, TIFF, EPS, TIFF/IT, PDF-X, CT-LW, PSD, DCS 2.0, and PostScript Level 1, 2, and 3 files. You can print to the Splash G640 from the server or from any client workstation with an AppleTalk or TCP/IP network connection. Drop-printing is preferable to using a PostScript file download utility to print PostScript files.

The Splash G640 supports the importing of any of the data file formats previously mentioned. The TIFF/IT, PDF-X, CT/LW and PSD formats use a file converter that self-starts when the Splash G640 is started, (assuming the Server preference for the appropriate file type is selected).

Supported Graphic file formats are EPS, Monochrome EPS, DuoTone EPS, TriTone EPS, QuadTone EPS, RGB EPS, Index EPS, LAB EPS, CMYK EPS, Grayscale EPS, Black and White EPS, TIFF, Black and White TIFF, RGB TIFF, Index TIFF, Grayscale TIFF, and CMYK TIFF.

Drop-printing large files

When printing PostScript, DCS 2.0, and PDF files, the server copies the file to the hard disk before printing. For TIFF and EPS files, the Splash G640 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 G640 hard disk.

Drop-printing using Drop folders

The following Drop folder options allow you to drop-print files.

NOTE: If a spooled file is not located on the server hard disk, the Splash G640 cannot print it until the original file has been copied to the hard disk.

- Drop folder—handles direct processing of PostScript, PDF, TIFF, PDF-X, CT/LW, EPS, DCS 2.0, and Photoshop files as they are sent to or dragged to the Drop folder. File Converter preferences allow you to select a specific Drop folder and change the job options to reflect all jobs sent to that Drop folder.
- PDF Drop folder—the Splash G640 supports PDF files created by applications with Print-To-PDF capability. PDF files that are password protected in Adobe Acrobat can also be printed. To do so, enter the password in the PDF Password field of the Edit Doc Info pane in the Job Options dialog box.
- TIFF/IT Drop folder—Direct Processing is supported for TIFF/IT files sent to the Splash:TIFF/IT Drop folder. TIFF/IT files version P1 and P1 8.8 are supported, assuming all three forks of the file (FP, CT, and LW) are provided. The three forks can be provided in any order. By default, the output PostScript file is placed in the Drop folder for processing. However, a preference in the EFI TIFF/IT Converter allows you to select a different output folder. This allows the creation of a Hot Folder for TIFF/IT files.

WARNING: TIFF/IT, CT-LW, PSD, or PDF-X files may produce processing errors if they are dragged to the Splash G640 queues or placed in the Drop folder. The FP and LW files will be moved to the Unprintable Files folder; the CT file will process but print incorrectly.

Hot Folders—this feature allows you to create multiple hot folders and apply a particular set of job print options to any Postscript, TIFF, EPS, PDF, or DCS 2.0 file placed in a particular hot folder.

Create and delete hot folders by choosing Hot Folders from the Server menu. Any number of hot folders can be created with no limitation other than available hard disk space. Folders are not automatically shared when created; you must enable file sharing.

Hot folders co-exist with Drop folders. Drop folders ensure compatibility for previous releases and allow you to avoid forcing a set of job options on dropped jobs. PC and MacOS download applications for the Drop folder are automatically created when you start the server.

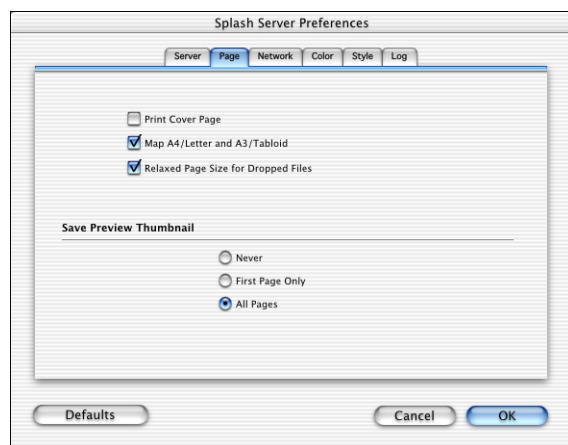
NOTE: All files copied to the Drop folder are copied to the server hard disk. If a file cannot be printed, it is moved to the Splash:Unprintable Files folder. The Unprintable Files folder is automatically created by the server when it receives a file that fails to print.

If you drop-print a PostScript file that was created with Splash G640 software, the server uses the print options selected at the printer driver for the job. If the PostScript file was not created with Splash G640 software, the server applies default print options. To apply specific options to all jobs, create a hot folder (see “Hot Folders” on page 5-53).

The Splash G640 automatically applies default print options such as Page Size and Orientation to TIFF or EPS files dragged to the Active or Hold queues.

Setting Page preferences

The options on the Page tab in the Splash Server Preferences dialog box allow you to set Page preferences, including the following:



Print Cover Page—prints a standard cover page to the top output tray as the first page for jobs that print from any tray.

Cover pages include the date and time printed, job owner's name, job name, and number of pages. Cover pages are not printed for the following:

- 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 you select the Print Cover Page option, the printed cover page 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 pages printed (two *pages* are printed for each *sheet*).

Map A4/Letter and A3/Tabloid—useful for frequent printing on Letter and Tabloid paper sizes with occasional A4 or A3 jobs, or vice versa. If this option is selected and no A4 paper is loaded at the printer, an A4 job is automatically converted to print on Letter paper; if A4 paper is loaded, a Letter size job is 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 indicating that the paper size for the job was converted.

Save Preview Thumbnail—allows you to specify Never, First Page Only, or All Pages to generate a thumbnail for a job. The preview of each page takes approximately 50K of hard disk space. You can view Preview images at any time by selecting the job and using the arrow keys to scroll through the thumbnails.

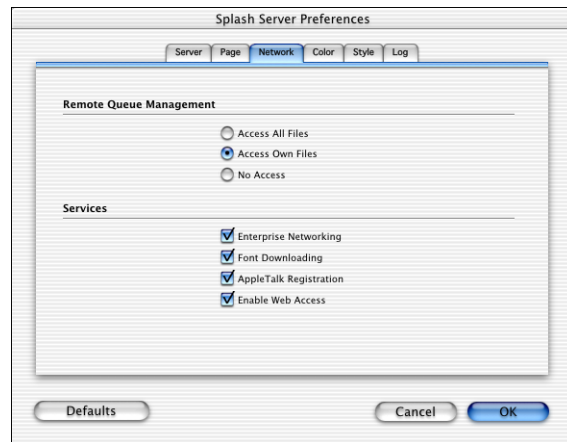
Relaxed Page Size for Dropped Files—provides a method of printing dropped PDF, TIFF/IT, PDF-X, CT/LW, and Photoshop files to any standard page size installed at the printer, to fit the original page size rather than requiring an exact page size match or use of the Forced Page Size option.

If you select this preference, the job prints centered on the page, but is not scaled to fit the page size. Many dropped PDF, TIFF/IT, PDF-X, CT/LW, and Photoshop files are not exact matches for standard page sizes and produce printing errors. For example, many PDF creators subtract margins when creating the PDF page size, resulting in a page request for 8.2 x 10.7 or similar paper size. If this option is selected, and an exact match for the requested page size is not available, the job prints on the first page size loaded on the printer that is large enough to fit the job. If none of the available page sizes are large enough, the job prompts a Page Size error message.

NOTE: Dropped Postscript, EPS, and DCS 2.0 files are not affected by this option.

Setting Network preferences

The options on the Network tab in the Splash Server Preferences dialog box allow you to set network printing and queue management options.



Setting Remote Queue Management preferences

For further information on setting the Remote Queue Management options, see “Controlling Remote Queue Management privileges” on page 6-4.

Setting Services preferences

The Services preferences Splash Server Preferences dialog box allow you to set the Enterprise Networking, Font Downloading, AppleTalk Registration, and Enable Web Access options, as follows.

Enterprise Networking

With Enterprise Networking selected, the Splash G640 can receive print jobs from clients on TCP/IP networks, in addition to clients on an AppleTalk network. The Splash G640 maintains both network connections simultaneously.

Font Downloading

This feature allows you to download the most frequently used PostScript fonts. The downloaded fonts become resident on the server, eliminating the necessity of sending fonts with each job, and significantly speeding up processing time. Fonts can be downloaded from the Splash G640 or from AppleTalk client workstations.

The Splash G640 cannot process print jobs while font downloading is in process. If the server is processing a job, choose Stop Processing from the Server menu or click Start/Stop.

Before you can download fonts to the Splash G640, you must first enable font downloading.

TO ENABLE FONT DOWNLOADING AT THE SERVER

1. **Choose Server Preferences from the Server menu.**
2. **Click the Network Tab in the Splash Server Preferences dialog box.**
The Splash Network Preference dialog box appears.
3. **Select the Font Downloading option.**
4. **Click OK.**

The Splash G640 is now ready for font downloading.

Adding fonts to the Splash G640

The Splash G640 provides 136 Roman PostScript fonts and two multi master fonts. Print jobs that use the PostScript fonts provided with the Splash G640 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 G640, download these fonts to speed up printing.

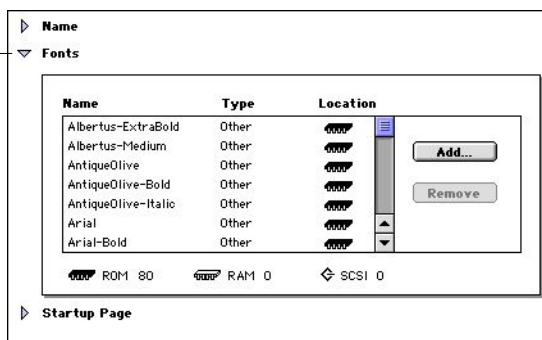
Downloading fonts with the Apple Printer Utility

Download fonts using the Apple Printer Utility provided in the Utilities folder on the server hard disk or on the User Software CD, or with any PostScript font download utility. The steps for downloading fonts to the Splash G640 from any AppleTalk client are the same for downloading fonts from the server.

TO DOWNLOAD FONTS WITH THE APPLE PRINTER UTILITY

1. Stop all file processing at the Splash G640.
2. Install the fonts as directed by the font manufacturer, to a location that is easily accessible by the Apple Printer Utility.
3. Double-click the Apple Printer Utility icon.
4. Select the printer from the list of available printers and click Open Printer.
5. Select the Fonts triangle and click Add.

Fonts triangle



6. Select a font and click Add. Repeat to select all the fonts you want to download.
7. Click Send.
8. When downloading is complete, resume processing jobs.

AppleTalk Registration

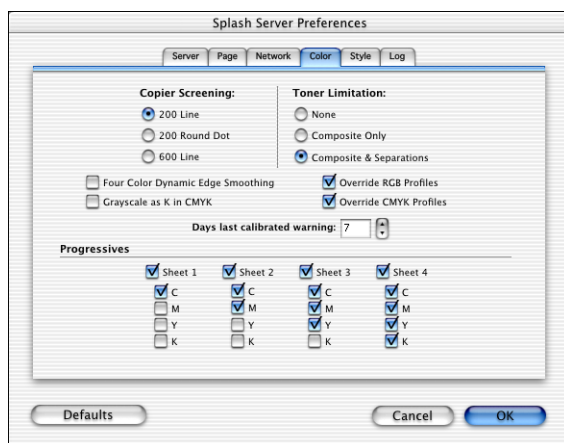
Select the AppleTalk Registration option to register the Splash G640 name on the AppleTalk network. If this option is cleared, remote users are unable to print to the Splash G640. Select this option to temporarily restrict access and print a job directly from the server.

Enable Web Access

For more information on this option, see “Enabling web access” on page 6-3 for further information.

Setting Color preferences

The options on the Color tab in the Splash Server Preferences dialog box allow you to set the Print preferences.



Copier Screening—includes the following copier screening options:

- **200 Line (default)**—200 lpi are placed on the page in a line format; this was the default setting on the Splash G630.
- **200 Round Dot**—200 lpi are placed on the page in a round dot format; useful in proofing environments.
- **600 Line**—necessary for printing documents with very thin lines. This option is not recommended for normal printing because the quality of color reproduction in this mode is not as good as the other two modes.

NOTE: We highly recommend that you recalibrate all profile sets after changing the Copier Screening setting. This option is ignored when the Screened job option is selected. Screened jobs are always printed using 600 lpi.

Toner Limitation—prevents flaking in dense color areas of the job output by automatically limiting the maximum amount of toner applied to the paper. To protect all print jobs from toner flaking, select Composite and Separations; to speed processing of separation jobs, select Composite Only; to disable the Toner Limitation feature, select None.

NOTE: For best results when using the Toner Limitation feature, select CMYK color correction for all documents with CMYK data.

Four Color Dynamic Edge Smoothing—applies smoothing to all four color panes. When turned off, smoothing is applied to one color (black) only.

Gray As K in CMYK—color corrects the black channel as CMYK black versus RGB black.

Override RGB Profiles—sets job to Splash RGB job settings. When Override RGB Profiles is set to the default of On, Splash RGB job settings are used respectively.

Override CMYK Profiles—sets job to Splash RGB job settings. When Override CMYK Profiles is set to the default of On, Splash CMYK job settings are used.

NOTE: If the Override RGB Profiles or Override CMYK Profiles options are cleared, the server uses the RGB/CMYK profile information directly from the file.

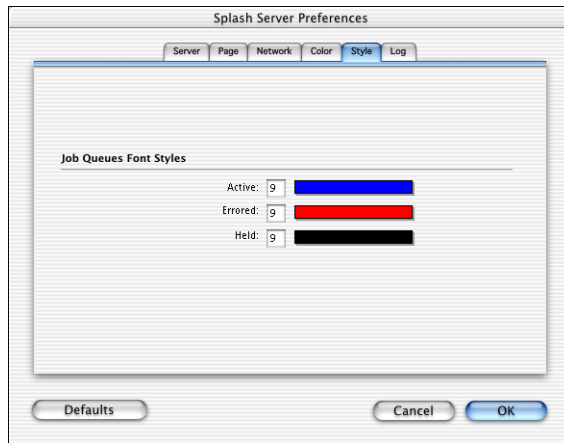
Progressives—allows you to print up to four separate color passes per page. This feature allows examining the result of progressively adding color to output.

NOTE: Select the number of sheets to print (Sheets 1-4), and then select the number of colors to print on each sheet (C, M, Y, or K). Choose Print Progressives in the printer driver before printing jobs.

Days Last Calibrated Warning—allows you to select a specific number of days from the last calibration date to remind you to recalibrate the printer. When the time set in Days Last Calibrated Warning expires, the date and time listed in the Last Calibrated area of the Splash G640 main window is displayed in red.

Setting Style preferences

The options on the Style tab in the Splash Server Preferences dialog box allow you to set the color and size of the text that appears in each of the print queues.



Setting and reading a log file

The Splash log file, located in the Splash folder, records information about each print job. If you quit the Splash G640 application restart the server, the log file automatically starts recording as soon as you restart the application. 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. **Choose Preferences from the Server menu.**

The Splash Server Preferences dialog box appears.

2. **Click the Log tab.**

The Job Log File dialog box appears.

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

4. Type a name for the log file.

The default name is “Splash.log.”

5. In Delete Log Entries, specify how long the Splash G640 should maintain the current print log file.

The options to delete the job log are: Delete Never, Delete after “x” Days, and Delete after “x” Number 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 you to sort job information by customer or date, and can add a subtotal for each customer. Choose Print to print all entries in the job log, or only those entries added since the last job log printed.

Reading the log file

The log file automatically groups print jobs by user and contains the following information about each job:

- **User Name**—displays the network identity of the client that sent the job to the server.
- **Document Name**—displays the name of the file sent.
- **Print Date**—indicates the date that the job was sent.
- **Pages**—displays the number of original document pages or tiles printed.
- **Status**—indicates whether a job was completed, deleted, or held.
- **Start Time**—displays the time that the server started processing the job.
- **Copies Printed**—indicates the total number of copies printed for job. For example, printing 5 copies of a two-page job would be logged as 10 copies printed.
- **Elapsed Time**—displays the total time (in seconds) required to print the job. Elapsed Time starts with the time the job begins to be received at the server, and ends at the time printing is completed.

- **Process Time**—displays the amount of time (in seconds) that the server spent processing (RIPping) the job.
- **Color Model**—indicates whether a job was printed in grayscale or color.
- **Manual Feed**—indicates whether the bypass tray was used instead of an automatic feed tray.
- **Duplex**—indicates whether the job was printed as double-sided output using the Manual Duplex feature.
- **Paper Type**—displays the type of paper used for a job printed to the bypass tray.
- **Page Size**—displays the page size on which a job was printed.
- **Pages Rendered**—displays the number of pages in the document.
- **Color Pages Printed**—displays the total number of pages printed in color.
- **Black Pages Printed**—displays the number of pages that were printed using black ink only.
- **Cover Page**—indicates if a cover page was printed for a job.
- **Job Comment**—displays any information entered in the Document Comment field at the printer driver.
- **Account Number**—displays the account number associated with the file (if available).

Using the Configuration Report

The Configuration Report feature allows you to print the saved ColorCal and Enterprise Networking preferences. This option is only available when you log in as server administrator and choose Print Configuration Page from the File menu.

The Configuration Report is a PostScript file that is sent to the Drop folder. The Configuration Page always prints out of Tray 1 by default, unless Tray 6 is attached and contains the same paper size as Tray 1.

NOTE: All options set to factory default are displayed in black text; any option that is not a factory default setting is displayed in blue text. The file name is “Splash Config Report.ps.”

The information on the Configuration Page includes:

- Server
- Page
- Network
- Color
- Style
- Log
- Print Job Log
- Duplex Alignment
- Default Job Settings - Page
- Default Job Settings - Tray
- Default Job Settings - Color
- Default Job Settings - Quality
- Default Job Settings - Extras
- Default Job Settings - Graphic
- Color Profiles
- Color Profile Sets
- ColorCal Options
- Secure Access - Security Settings
- Secure Access - Client Error Message
- Screening Preferences
- Customize Print Info
- TCP/IP Direct
- Output Profiles

Duplex alignment

Duplex Alignment allows the server administrator to set vertical and horizontal print offsets that result in accurate alignment of print margins and crop marks from the first side of a page to the second side of page. Duplex Alignment now supports the configuration of individual offsets for each tray. The server administrator can send duplex jobs in automatic duplex mode to any tray or manually send duplex jobs to Tray 5.

To use this feature, choose Duplex Alignment from the File Menu. The options are: Duplex Alignment Tray menu, Long or Short Edge Binding, Feed and Cross Direction (enter offset numbers in these two fields), and Paper Size (shown automatically per tray settings), as well as the Test Job, Verify Job, Update, and Cancel buttons.

Duplex alignment features

The following features in the Duplex Alignment dialog box allow you to configure and print duplex jobs:

- **Test Pattern**—helps you determine the offset values needed to properly align both sides of a duplex job. To determine the values, select a tray and a binding edge, and then click Test Job. A test pattern is printed using the offset values of “0” pixels for both the vertical and horizontal offsets. The test pattern contains instructions for determining the correct offset values.
- **Verification Pattern**—displays the effects of the entered offset values. After you enter the horizontal and vertical offset values, verify the results by clicking Verify Job. The verification target prints, using the offset values that you entered. Review the printed target. If it is not properly aligned, adjust the values.

NOTE: To update the offset values without printing a verification target, select the appropriate tray and binding edge and click Update.

- **Specify Offsets**—the minimum Offset Value is -999; the maximum is +999. If you enter an offset that would cause a particular page size to print the margins outside the print area, the margin is automatically changed to zero. For example, the left margin is -50 pixels. If you enter a value of -100 for the opposite margin (which would cause the margin to be -50), the margin is changed to zero for the duplexed job. The Duplex Alignment setting remains -100. If no offset value is entered for a tray, the default alignment offset value is set to zero.

WARNING: If the Duplex Alignment on the printer is extremely out of alignment, the test pattern target may produce a false match and the verify target will not line up at 0, 0. To fix this, adjust the offsets manually until the verify target lines up at 0, 0.

- **Specify Tray**—provides the ability to align each tray separately.

Tray chaining is supported. When a duplexed job automatically changes trays when a tray runs out of paper, the alignment offset values for the new tray are automatically used. However, in order for duplex alignment and tray chaining to work properly, you should align all trays individually, for most accurate results. Otherwise, you should at least align one paper tray and set each tray containing the same paper size with the same offset values as the aligned tray. This produces a better alignment result than not entering any information in the offset value fields.

Insert a single sheet of paper when printing to Tray 5. After Side 1 of the sheet prints, a dialog box appears, warning that the printer is out of paper. Place the same sheet in Tray 5 again to print Side 2 of the duplex job. Keep in mind that there can only be one set of offset values for Tray 5. If you are printing multiple page sizes from Tray 5, it is best to perform Duplex Alignment for each new page size and paper type.

Performing color correction

The Splash G640 has built-in color correction capabilities that allow you to match the colors of the image on your computer monitor 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 outside 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.

NOTE: Most business application documents contain only RGB data. Turn off CMYK color correction when you print these documents.

CMYK color correction

CMYK color correction on the Splash G640 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 contain 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. 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 G640 instead of by the application, you can color-correct any print job using a pre-press application such as QuarkXPress, or an 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. To produce the closest possible color correction, use a monitor 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.

Spot Color Editor

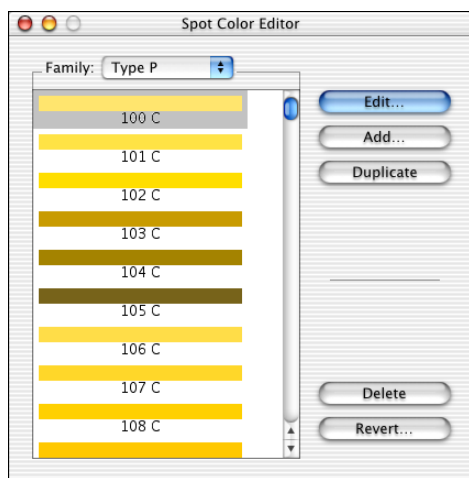
This feature allows you to edit the output of existing spot colors and add new spot colors, ensuring that the spot colors produced by the server match those of particular offset presses. The Spot Color Editor can also substitute patterns for spot colors, enabling you to use special effects like metallic textures for selected colors.

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

TO EDIT A SPOT COLOR

- 1. Choose Spot Color Editor from the Server menu.**

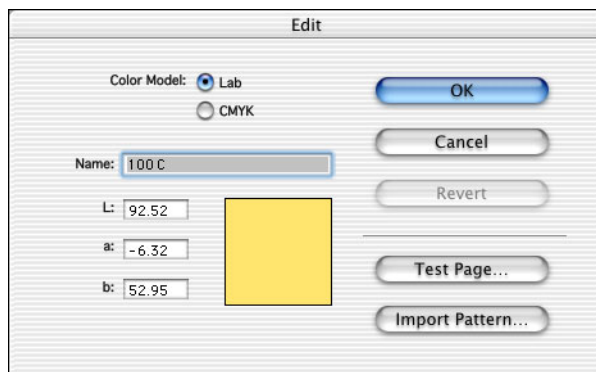
The Spot Color Editor dialog box appears.



- 2. Choose a spot color family from the Family menu.**
- 3. Double-click a spot color within the family, or select the color and click Edit.**

The Edit dialog box appears.

4. Choose a color model and edit the values in the CMYK and L*a*b* fields, click Test Page, or click Import Pattern to substitute an EPS pattern for a spot color.



In general, edit spot colors with care. No constraints are imposed on the changes that you make, so editing the original values of a color or substituting an EPS that looks very different from the original color may result in significant changes in the output of your file.

Editing CMYK values

Editing the CMYK values can provide a more intuitive means of editing colors than directly editing L*a*b* values. Verify results by printing the test page and examining the middle patch. The test page prints with the corresponding L*a*b* values shown, not the CMYK values.

Editing by importing a pattern

Import Pattern 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" x 2". The pattern is mirrored and repeated across areas larger than the EPS.

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

Changing the name of a spot color

To change the name of a spot color, select the color, click Edit, and type a new name. The new name must match the name used in the application that defines the spot color. Changing the name of a factory spot color should be done with caution.

Adding a spot color

To add a spot color, select the spot color family for the new color and click Add. Type a name for the color and enter L*a*b* or CMYK values in the corresponding fields, or import an EPS pattern. When you are finished defining the color, select OK. To adjust the color, follow the instructions for editing spot colors.

Duplicating a spot color

To duplicate a spot color, select the color and click Duplicate. The Spot Color Editor creates a copy of the color, appending the suffix “.copy” to the end of the name. You can then edit the name and values of the new spot color.

Reverting changes

Once you click 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 clicking Revert. To revert just a selected color, select the Selected Color option in the Revert dialog box; to revert the entire family, select Selected Family. Reverting the entire spot color family changes any edited spot colors back to their original values and deletes any new colors you added to the family, so use caution when reverting the entire family.

Print Info

The Splash Print Info Strip feature allows you to print an information strip on a job. The information is printed on the top or bottom of the page, depending on the location selected by the server administrator, and is printed on every page of the job.

To configure Print Info, choose Customize Print Info from the Server menu. The Print Info dialog appears. The following options allow you to customize the information:

- Page Handling
- Crop Marks

- Info Strip Location
- Print Preferences

NOTE: To enable Print Info Strip from a client workstation, select the Print Info option in the Extras pane in the Job Options dialog box.

Page Handling—allows you to use the Promote Page Size option to print the job on the next largest paper size available. Although the job is printed centered on the page, it is not scaled to the new paper size. If Tray 5 is selected and there is no paper available (or large enough) in Trays 1-4, the job prints to the Tray 5 page size.

Crop Marks—prints crop marks around the original images paper size of the job. If the Invert option is selected and there is no room on the page to print the crop marks outwardly, the cropmarks will be drawn into the page.

Info Strip Location—allows you to set the location in which the Print Info Strip prints (top or bottom of page).

Print Preferences—defaults are User Name, Job Name, Job Comment, Control Strip, and Date and Time of RIP. Other options you can customize are Server Name, Original Page Size, Page Number of Total Pages, Spool File Size, and Color Correction Settings.

NOTE: If you do not select options in Print Preferences, no blank placeholder is printed on the page. Only selected preferences are printed.

Use the Job Comment field to enter any information not covered by the other Print Preference options.

Hot Folders

Hot Folders allows you to create multiple Drop folders, each with an assigned set of print options that are applied to all jobs placed in the folder. This allows you to easily control print options and process a series of jobs with common printer driver options.

For any job placed in a Hot Folder, the options associated with the Hot Folder override any options included in the job. A job created with the Splash printer driver might specify Duplex, Long Edge Bind, but if it is dropped into a folder for which Duplex is set to None, the job will not print as Duplex.

Configuring the Splash G640 for Hot Folders

Hot Folders are created in the Splash:Hot Folders folder. Folders may be shared via AppleTalk for Mac OS clients and via SMB for Windows clients. Hot Folders do not replace existing Drop folders.

TO CONFIGURE THE SPLASH G640 FOR HOT FOLDERS

- 1. Select Hot Folders from the Server menu.**

The Option Sets dialog box appears.

- 2. Click New in the Option Sets menu.**

The Option Sets Name dialog box appears, prompting you to name the Hot Folder.

- 3. Enter a name for the Hot Folder.**

This name is the name the client will select at the client workstation.

- 4. Click OK.**

The Default Job Settings dialog box appears, allowing you to configure printer driver options for the Hot Folder.

- 5. Click OK.**

Hot Folders driver options

The following options allow you to edit the printer driver options for Hot Folders:

Edit—allows you to edit the printer driver options of existing Hot Folders.

Rename—allows you to change the name of a Hot Folder.

Delete—allows you to select individual Hot Folders and delete them.

Editing Hot Folders

To edit the driver options for a previously created Hot Folder, choose Hot Folders from the Server menu. Select the Hot Folder you want to edit from the list of Hot Folders that appears. The Job Options dialog box appears, allowing you to change the options.

If the options for a Hot Folder are being edited, the exact set of options that is applied is dependent on when the job finishes copying to the Hot Folder and when the editing is completed. Jobs placed in a Hot Folder before the editing starts use the old options; jobs placed in the folder after the editing is completed use the new options. If a job is placed in the folder while editing is in progress, an undefined set of options is attached.

Renaming Hot Folders

The maximum number of characters in the Rename field is 31. If you have not created any Hot Folders, the Rename option is unavailable.

Deleting Hot Folders

To Delete a job, open the Hot Folders Option Sets dialog box. If a user tries to remove a Hot Folder from the Splash folder or drag it to the Trash icon, it is not deleted.

The Hot Folders feature does not work with TIFF/IT or PDF-X files. Any such files placed in a Hot Folder will be moved to the Unprintable Files folder.

WARNING: As part of the removal process of the Splash G640 Installer, Hot Folders are deleted.

Configuring Hot Folders for file sharing

To publish a Hot Folder on the network for client users, use the following instructions.

TO CONFIGURE HOT FOLDERS FOR FILE SHARING

1. **Open the Splash:Applications folder.**
2. **Select the Hot Folder and press Command + I.**
The Show Info dialog box appears.
3. **Set the file sharing Privileges option to Read and Write for the Owner, Group, and Everyone menus.**
4. **Click Apply.**

Users at client workstations can view Hot Folders, but they should not be able to make changes to the folder or files. For further information about configuring the server for file sharing, see “Installing by file sharing to the Splash G640” on page 2-2.

Configuring Hot Folders for SMB file sharing

The Samba feature allows a user of a Windows system to view a Mac OS system. Use the following procedure to configure Splash G640 client workstations for SMB file sharing.

TO CONFIGURE SAMBA FOR FILE SHARING

1. **Open the Splash:Splash Extras:Samba folder.**
2. **Double-click the Samba.pkg file.**
3. **Click the lock feature and enter the administrator password.**
4. **Follow the Samba installation instructions, and then quit the Installer.**
5. **Start the Samba Server Config Tool application.**
If an error dialog box appears, indicating Samba is not yet ready for use, click OK.
If necessary, click the lock feature again and re-enter the administrator password.
6. **Click Edit to modify the current configuration settings, and then click OK.**

Global pane:

- If the Server Name field appears dimmed, click New.
- Change the Server Name to the name you want viewable on the network.
- Change the Workgroup entry to the *exact* name of your Windows workgroup.
- Change the Comment entry.

Security pane:

- Set the Security Type to User.
- Change Guest Account to the user currently logged in, typically the same as the Admin account.
- Select the Map unknown user to Guest option.
- Select the Encrypt Passwords option.

Shares pane:

- In the Name field, enter the name of the shared volume you want visible when users log in.
- Click Edit to select the shared folder.
WARNING: Users have Write access to this folder, so select the appropriate drop folder, typically the Hot Folder or Drop folder.
- Select the Writable option.
- Select the Guest Access option.

7. **Click Close (red button).**
8. **Choose Save Changes.**
9. **Quit the application.**
10. **Choose Restart from the Apple menu.**

The next time the client workstation is started, the shared volume you created appears in the workgroup on the Windows network. You may need to refresh the monitor to see the shared volume name.

WARNING: A common error in configuration is to enter the Workgroup name incorrectly. If it does not match your Workgroup name, the shared volume will not be visible. If the volume does not appear after you restart, check your Workgroup name, then follow the previous steps to verify and correct the name.

Set Builder

The Set Builder feature allows you to gather a series of documents and collate them as a single document set. You can then print the set using a standard set of finishing options, such as Copies, Output Bin, Collate, Staple, Rotate, Duplex Face-Up, and Reverse Page Order. Set Builder combines documents from multiple applications and platforms, freeing you from piecing documents together into a single application at the client workstation.

The Set Builder user interface is list-based, allowing you to easily add individual jobs to a document set and set the order of the jobs within the document.

The Set Builder main window displays available jobs in the Hold queue. For jobs in the Available jobs list, you have the option to Add, Duplicate, or Edit the print job options. When jobs are added to the document set, jobs queue from the Available jobs list.

The options in the Document Set Options dialog box allow you to set Job Handling options globally (for example, Staple, Duplex, Insert Blank Pages, Face Up). Click Edit Doc Info to edit information such as the Document Title, User ID, Password, and Account.

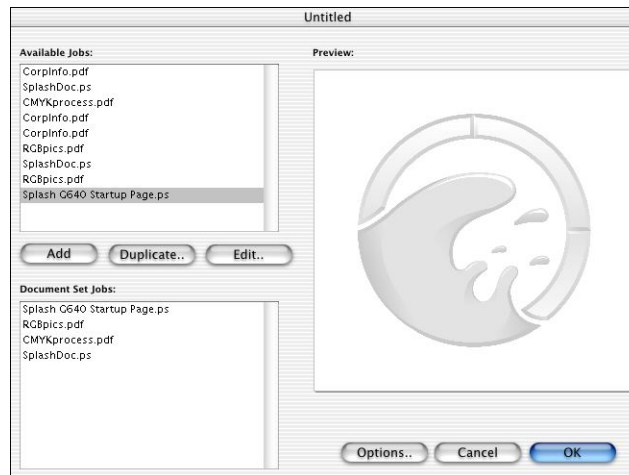
Printing a document set with Set Builder

The following procedure allows you to create and print a document set with Set Builder.

TO CREATE A DOCUMENT SET WITH SET BUILDER

1. **Choose Document Set:New Set from the File menu, or click the Set Builder icon in the toolbar.**

The Document Set dialog box appears.



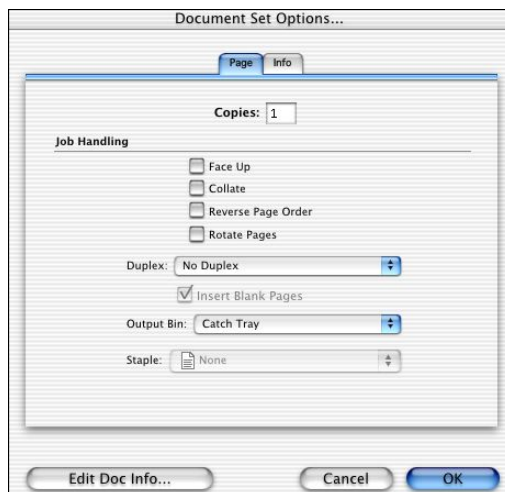
2. **Select a job from the Available Jobs list and click Add.**

The job moves to the Document Set Jobs list.

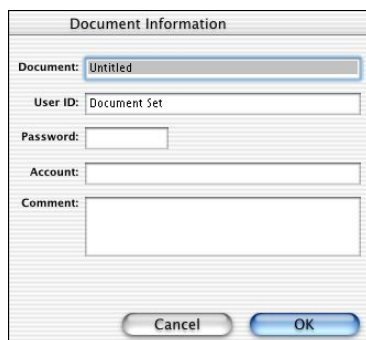
NOTE: When you select a job in the Document Set Jobs list, the Add button changes to Remove, allowing you to delete the job.

3. **Reorder the jobs by dragging them up or down in the Document Set Jobs list.**
4. **Click Options.**

The Options dialog box appears, allowing you to select the finishing options for this document set.



5. Click **Edit Doc Info** to edit the Document and User ID fields.



NOTE: If Secure Access is selected at the server, you need to type information in the Password and Account fields. When the document set is printed, this information is applied to every job that is part of the set.

6. Click **OK**.

Your document set now appears in the Hold queue, with the status *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 changes to *Printing*, and the set begins to print.

Setting finishing options

Certain finishing options, such as the number of copies printed and the output tray used, are applied to the entire document set. These finishing options override the equivalent settings in the Edit Job dialog box, and include the following:

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

Setting other Set Builder features

- **Remove**—removes a job from the list of jobs in the Document Set Jobs list.
- **Duplicate**—duplicates a selected job in the list of Available Jobs. Clicking Duplicate automatically opens the Job Options dialog box for the new job. Click Edit Doc Info in the Info pane of the Job Options dialog box to change the Name, User ID, Password, Account, or Comment fields.
- **Edit**—opens the Job Options dialog box. Edit the job print options here, or double-click the job in the Available Jobs list.
- **Preview**—displays the previews for any selected job in Available Jobs or Document Set Jobs.

Using Set Builder tips

Duplex and odd-length jobs

When you select Duplex printing for a document set, the total number of pages in any component job in the document set is “padded” so it has an even number of images (sides). Use the Insert Blank Pages option to add a page to the end of a job.

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

Insert Blank Pages

When you select the Duplex option in the Document Set dialog box, this feature adds a blank page to the job in the document set. If you select a job in the Document Set Jobs list, the blank page is inserted before the selected job. If Insert Blank Pages is not selected, for example, printing two single-page, one-sided jobs results in a single duplex sheet.

Previews

The Preview window only previews jobs that have been RIPped. The arrow keys move from page to page within a job, but do not cross from job to job, even in the Document Set Jobs list. To see the entire preview of a document set, select the first job in the Document Set Jobs list and click the right arrow. Scroll through the job until the page number stops incrementing. Select a second job and repeat until you have scrolled through the entire document set.

For the most accurate previews, set Save Preview Thumbnail to All Pages in the Page pane of the Server preferences dialog box.

Errors in Set Builder document sets

If an error occurs in any component of a document set, the entire document set fails to print. To reprint the document set, correct the error and re-release the document set.

Secure Access

Secure Access allows the server administrator to limit who can print to the Splash G640 by defining combinations of user names, passwords, and account numbers that must be entered and verified before a job prints. You can also use Secure Access without the verification feature to improve job logging, by requiring user names and account numbers before a job is printed.

Secure Access accounts are established and managed at the server. You are prompted for the required information at their workstation. Validation of the information, if required, is performed by the server. If the information is not valid, users are prompted to re-enter the correct information before the job prints.

TO START SECURE ACCESS

1. **Log in as the server administrator and choose Secure Access from the Server menu.**
2. **Choose Security Settings, Users, Accounts, or Client Error Message from the Secure Access menu.**

The Security Settings dialog box appears.

3. **Select the required options and select Verify to indicate which are to be verified.**



The selectable options are UserID, Password, and Account Number. If you select Password, you must select UserID, and both must be verified. Otherwise, you can select any combination of these fields and verification settings.

When the Verify option is cleared, the server processes any job for which the selected information is not blank. The UserID and Account Number are output to the job log file.

NOTE: Files placed in the Drop folder or a Hot Folder, or dragged to one of the print queues, always produce an error when Secure Access is selected, unless you have also selected Exempt Drop Folder. If this option is selected, files dropped on the server print, regardless of the other Secure Access settings.

TO MANAGE USER ACCOUNTS

1. Choose Users from the Secure Access menu.

The Secure Access - Users dialog box appears,

2. Select a user name from the list and click Add, Delete, or Edit.

Add allows the server administrator to add a new user.

3. Click Edit or double-click a user to change the name or password, if required.

The maximum characters allowed in the User ID field is 24; in the Password field the maximum is 8 characters. An unlimited number of users can be added to the Secure Access list. However, if you try to enter a duplicate User ID, a warning dialog box appears, asking if you want to override an existing user.

4. To remove a user from the list, select the user name and click Delete.

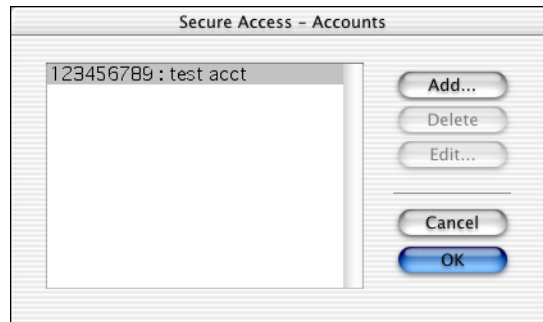


TO MANAGE ACCOUNT NUMBERS**1. Choose Accounts from the Secure Access menu.**

The Secure Access - Accounts dialog box appears.

2. Double-click the account name in the list and click Add, Delete, or Edit to change the name or description.

The maximum number of characters allowed in the Account field is 32; in the Description field the maximum is 100.

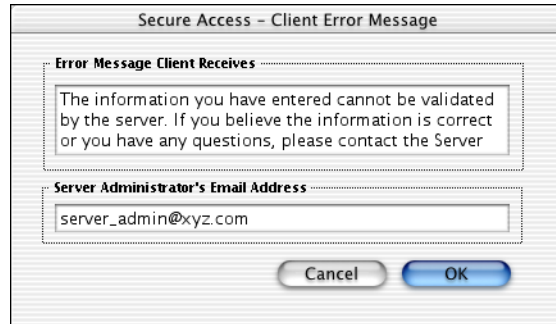


The account description allows you to provide more information about the account than can be stored in the account name. The account description is not required and is not used elsewhere by Secure Access.

NOTE: All Account names must consist solely of alphanumeric characters.

Secure Access client error messages

When a user incorrectly enters Secure Access information at a client workstation, the Splash G640 returns an error message at the workstation. This error message should be edited to provide specific contact information for users of a particular server. The maximum number of characters allowed in the Error Message and E-mail Address fields is 255 characters.



Using Secure Access at client workstations

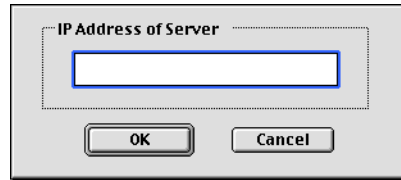
When Secure Access is configured at the Splash G640, users must install the Secure Access print driver provided with the server. For detailed installation instructions, see Chapters 2 and 3.

Printing with Secure Access

Printing using the Secure Access printer driver is exactly the same as printing with the standard driver, except that the driver prompts you for Secure Access information. Other job options work exactly the same.

On the first print to a particular printer driver, the Secure Access printer driver prompts you for the IP address of the server. Consult the server administrator for the IP address.





On every print, the Secure Access printer driver prompts you for the information set up at the Splash G640. If the information you enter is not correct, the printer driver prompts you to re-enter the correct information, specifying what entry was first found to be incorrect, along with the error message set up at the server. The prompt stays on-screen until you enter the correct information or click Cancel. Once you enter the correct information, the job prints as it would with the standard printer driver.

Splash color correction for Mac OS

Splash ICC (ColorSync) Profiles

The Splash G640 provides color profiles for Apple's ColorSync color management software. The Splash ColorSync color profiles are located in the Splash:Splash Extras:ColorSync folder. These profiles enable ColorSync to print to the Splash G640.

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

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

For further instructions on using ColorSync, see your ColorSync documentation.

Chapter 6: Using the Web Queue Manager

This chapter explains how to configure the Splash G640 to allow remote users to connect to the server. The Web Queue Manager installed with the Splash G640 server software allows remote users on a TCP/IP network to view and control print jobs at the Splash Server.

With Web Queue Manager, you can perform the following functions:

- Review the status of print jobs sent to the Splash G640
- Hold print jobs
- Release held print jobs
- Review and change print options for a job in the print queue

Preparing the Web Queue Manager

To prepare the Web Queue Manager to use with the Splash G640, you must configure the server to run on a TCP/IP network and enable the Web Queue Manager option. For more information, see “Configuring the Splash G640 for TCP/IP and LPR printing” on page 1-2.

The Web Queue Manager uses Apple’s Web Sharing software. To use the Web Queue Manager, you 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. For the Web address (URL) for the Web Queue Manager, contact your network administrator.

Configuring the Web Queue Manager

To configure the Web Queue Manager for use with the Splash G640, you must complete the following steps:

- Configure the TCP/IP control panel
- Enable Web Sharing in the Mac OS X System Preferences
- Enable web access in the Splash G640 application preferences

Configuring the TCP/IP Control Panel

Use the TCP/IP Control Panel to create an Internet address for the Splash G640. Assign the Splash G640 a static Internet address so remote can reliably locate the Web Queue Manager on the network.

NOTE: Before configuring the TCP/IP control panel, obtain a static Internet address and subnet mask number, if required, from your network administrator.

To configure the TCP/IP control panel to create an Internet address for the Splash G640, see “To configure the Splash G640 to the TCP/IP network” on page 1-3.

Enabling Web Sharing

The following procedure describes how to enable Web Sharing for the Splash G640.

TO ENABLE WEB SHARING FOR THE SPLASH G640

1. From the Apple menu, choose **System Preferences:Sharing Control Panel** and turn on **Web Sharing**.



2. Click **Start** under **Web Sharing**.

The Web Sharing On title appears and the Start button changes to a Stop button.

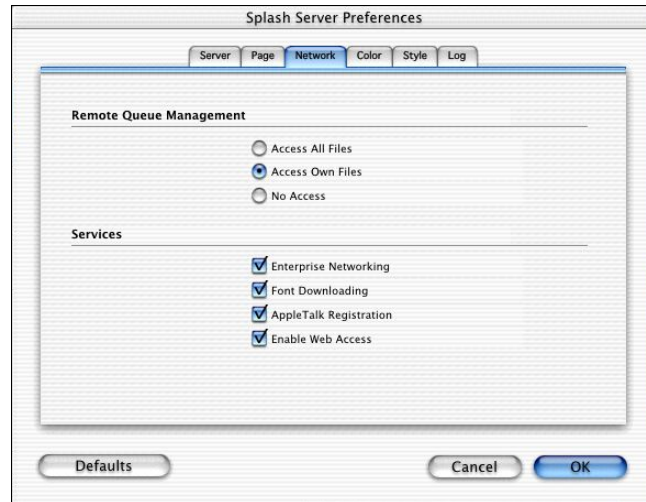
3. Close the Sharing control panel.

Enabling web access

The following procedure describes how to enable web access at the Splash G640

TO ENABLE WEB ACCESS AT THE SPLASH G640

1. **Start the Splash G640 application and log in as the server administrator.**
2. **Select Server Preferences from the Server menu.**
The Splash Server Preferences dialog box appears.
3. **Click the Network tab and select Enable Web Access.**



4. **Click OK.**
5. **Provide the Internet address for the Web Queue Manager to users.**

The Web Queue Manager is enabled. Remote users 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 G640.

NOTE: The server administrator is usually also the Web Queue Manager Administrator. The server administrator sets privileges for remote users to edit print jobs in the Splash print queues with the Web Queue Manager. The administrator name and password is activated when you log in to the Splash Server Preferences.

If you log in as the server administrator, you can change all Splash Server Preferences from the Web Queue Manager.

Controlling Remote Queue Management privileges

The Remote Queue Management options in the Network Preferences dialog box control the ability to change or delete jobs in the Splash print queue.

TO CONFIGURE THE REMOTE QUEUE MANAGEMENT OPTION

1. **From the Splash G640 application, choose Preferences from the Server menu.**
2. **Click Network in the Server Preferences.**
3. **Select a Remote Queue Management option.**

The options are as follows:

- **Access All Files**—users 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**—users 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**—Clients can view information for print jobs, but they cannot perform any queue management functions.

4. **Click OK.**

Using the Web Queue Manager

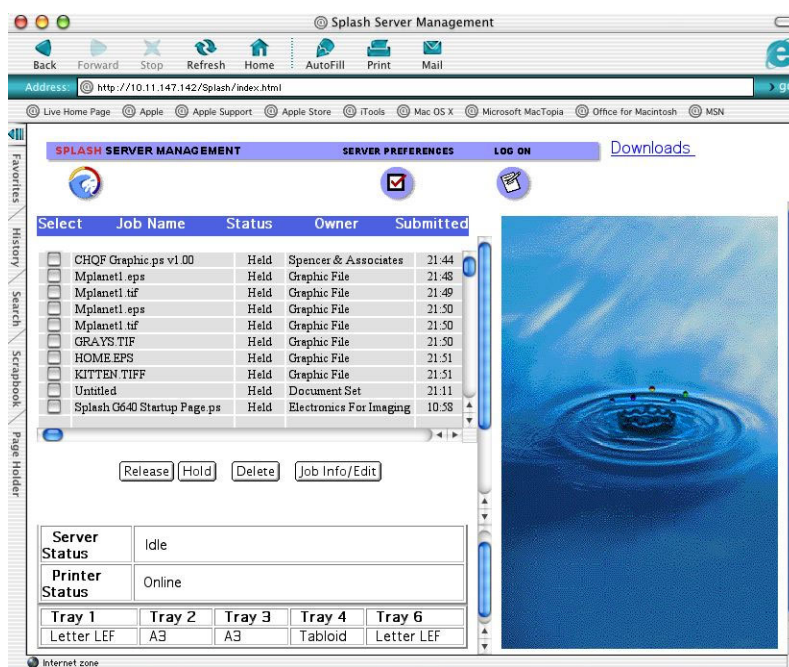
The following procedure describes how to manage jobs remotely using the Web Queue Manager.

TO USE THE WEB QUEUE MANAGER

1. Start your web browser application (Netscape Navigator or Microsoft Internet Explorer).
2. In the Web browser, enter the Web address for the Splash G640.

For this information, contact your server administrator.

The Web Queue Manager appears in the browser application window.



A list of jobs waiting to print at the Splash G640 appears, along with information about the printer and any errors that might have occur at the printer.

3. To view the Server preferences set for the Splash G640, click the Server Preferences icon.

Click to view Server Preferences

Select to view job information

Server Preferences

Select	Job Name	Status	Owner	Submitted
<input type="checkbox"/>	CHOF Graphic ps v1.00	Held	Spencer & Associates	21:44
<input type="checkbox"/>	Mplanet1 eps	Held	Graphic File	21:48
<input type="checkbox"/>	Mplanet1 tif	Held	Graphic File	21:49
<input type="checkbox"/>	Mplanet1 eps	Held	Graphic File	21:50
<input type="checkbox"/>	Mplanet1 tif	Held	Graphic File	21:50
<input type="checkbox"/>	GRAYS.TIF	Held	Graphic File	21:50
<input type="checkbox"/>	HOME.RPS	Held	Graphic File	21:51
<input type="checkbox"/>	KITTEN.TIFF	Held	Graphic File	21:51
<input type="checkbox"/>	Untitled	Held	Document Set	21:11
<input type="checkbox"/>	Splash G640 Startup Page.ps	Held	Electronics For Imaging	10:58

Release Hold Delete Job Info/Edit

Server Status: Idle
Printer: Online

NOTE: If you are logged on the server administrator, you can also change the Server Preferences from this window.

4. To view information for a job, select the check box to the left of the job and click Job Info/Edit.
5. If the job has already been RIPPed, click Preview in the Job Information pane to view a preview image of the first page of the job.

The Splash G640 must be configured to support the Preview feature. For more information, see “Previewing jobs” on page 5-16.

Managing jobs in the print queue

If the Splash G640 is configured to allow you to manage print jobs in the queue, you can use the Web Queue Manager to place jobs on hold, edit, print, or delete them.

TO MANAGE PRINT JOBS FROM THE WEB QUEUE MANAGER

1. **Click the Log on icon, enter your user name and password, and then click Register.**

A confirmation message appears listing 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 to the printer, enter the name that appears in the Owner column of the job list.

2. **Select the job and use the command buttons that appear under the job list to manage jobs in the Splash queues.**

- **Release**—takes the job off hold.
- **Hold**—places a job on hold.
- **Delete**—cancels a print job.
- **Job Info/Edit**—shows the current job information.

For more information, see the following procedure.

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

NOTE: If the Splash G640 is configured to limit remote print queue management, the Web Queue Manager displays a message that you can not access the selected job.

TO EDIT THE PRINT OPTIONS FOR A JOB LISTED IN THE WEB QUEUE MANAGER

1. To view or change the print options for a job, select the checkbox to the left of the job, click Job Info/Edit, and then click the Edit button that appears below the job information.

The current print options for the job appear.

Job Option links are located under each of the following tabs: Doc Info, Pages, Tray, Color, Quality, and Extras. For more information about these options, see Chapter 4.

2. Select the print options you want, click Submit, and then click Save Settings to confirm changes.

Downloading installers and files from the Web Queue Manager

You can use the Web Queue Manager to download installers and other files from the Splash G640.

TO DOWNLOAD INSTALLERS FROM THE SPLASH G640

1. From the Web Queue Management screen, click the Downloads link.

A list of the Splash G640 downloadable files links is displayed.

[ColorTunerSets Folder](#)
[CopyCal Target](#)
[ColorSync Profiles](#)
[PhotoShop Separation Tables](#)
[TIFF Folder](#)
[DC 12 CP Scans](#)
[Splash Online Documentation](#)
[Splash Installer Downloads](#)

2. Click the Splash Installer Downloads link.
3. Select an installer to download.

NOTE: The installers are encoded appropriately for the platform on which they will be used. If you are downloading the Mac OS installers to a Windows computer 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.

NOTE: If you do not have other media available to restore your Splash G640 software, download the installers to a server to retain a backup copy.

To download other files from the Splash G640, click a link listed in the Splash G640 downloadable files list.

Chapter 7: Calibration

The color output on any color printer changes over time, producing inconsistent color from day to day, or even hour to hour. ColorCal adjusts these changes, keeping output consistent. ColorCal also offers calibration methods, such as AutoGray to improve the gray balance of the calibrated printer, Splash Proof to calibrate using specific settings configured by the Splash Proof Job Options, and Screened Dmax for users printing “screened” image job files. The Dmax feature provides an enhanced proofing capability for optimizing the color output of screened images.

The ColorCal application is located in the Splash Calibration folder in the Splash Utilities folder on the Splash server.

Advantages of using ColorCal are as follows:

- Requires no special color knowledge or the use of a densitometer.
- Automatically adjusts gray balance in addition to accurate linearization.
- Uses three times more color patches, with over six times the resolution in critical regions to provide results more accurate than competitive solutions.
- Includes an option that randomizes placement of the patches on the calibration target to minimize the effects of print density variations on a page.
- Allows calibration on heavy stock papers.
- CMYK and RGB color correction is accurate once calibration is complete.
- 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 necessary.

Setting ColorCal Options

The following sections describe the ColorCal options in detail.

Setting the Verify Against Profile

You can change the calibrated profile ColorCal uses to create the Desired Density lines during verification. For example, if you use this profile frequently for printing, set the verification profile to CMYK SWOP.

NOTE: Changing the Verify Against Profile to something other than Visual Standard causes the CMYK patches on the right side of the Verify Against Target not to accurately match the black patches.

TO SET THE VERIFY AGAINST PROFILE

1. **From the ColorCal application, choose ColorCal Options from the Splash menu.**

The Default and Custom CMYK profiles appear.

2. **Choose a profile in the Verify Against menu.**

NOTE: You can choose any calibrated CMYK profile, Custom profile, or Pass Through (standard output) profile for verification.

3. **Click OK.**

NOTE: In general, set the Pass Through profile to Visual Standard, the default setting. This selection produces the most visually smooth output.

Calibrating the printer

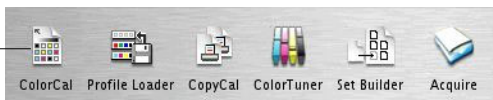
This section describes how to calibrate the printer with ColorCal. For best color printing results, recalibrate the printer at least once daily. Recalibrate several times a day during heavy use. ColorCal runs only on the Splash G640.

TO CALIBRATE THE PRINTER WITH COLORCAL

1. **With the printer running, double-click the ColorCal icon in the toolbar of the Splash G640 main window.**

NOTE: If using ColorCal for the first time, or if the printer has recently been serviced, we recommend you calibrate the scanner.

Click ColorCal

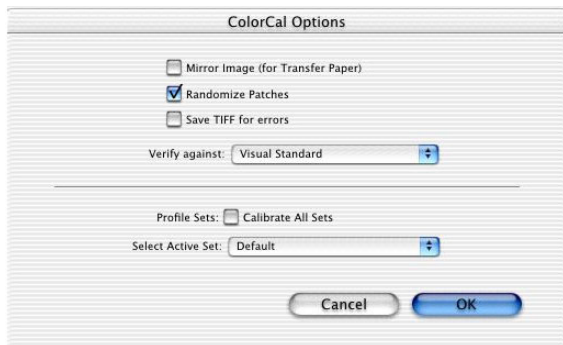


NOTE: You can start the Splash G640 application during calibration; however, you should stop all processing.

2. **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.**



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.

NOTE: If a calibration fails, select Save TIFF for Errors to help technical support determine the cause.

5. **Select an option in the Verify against menu to use a specific profile when printing the verify target.**
6. **Click OK.**

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

7. **Examine the target for printing defects and if any appear, such as creased paper or uneven or flaking toner, click Reprint to print a new calibration target.**
8. **When the calibration target prints successfully, click Continue.**

ColorCal prompts you to place the target on the scanner glass.

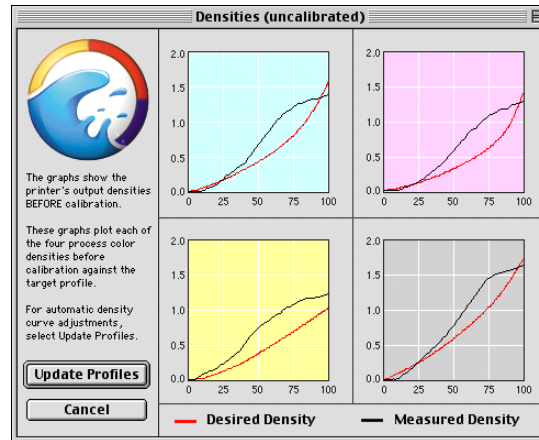
9. **Place the Kodak Gray Scale target (provided with the Splash G640) and the printed target face-down on the scanner glass.**

NOTE: 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. To order a replacement Gray Scale target, contact Xerox Customer Support.

10. **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 from the Verify Against menu in the ColorCal Options dialog box. 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%.

11. **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 you can use any color profile immediately without repeating color calibration.

When profile updating is complete a message appears.

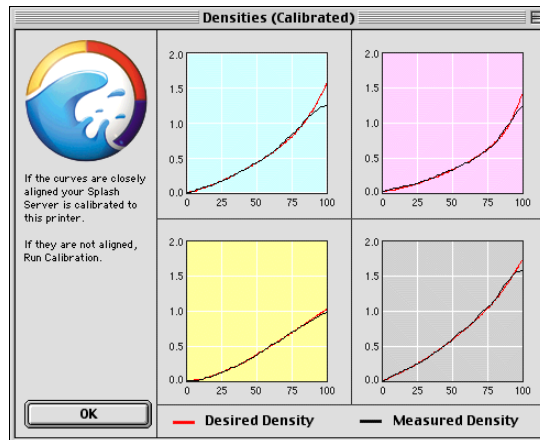
12. **Click Verify to check calibration results for the printer or click Done to return to the ColorCal main window.**

Color calibration is complete. After running calibration, you can select any of the standard color profiles included with ColorCal for consistent, accurate color. 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. See the previous procedure and 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 following example shows that measured output closely matches desired color performance. Recalibration is not necessary.



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

The printer may require servicing if the measured curve does not closely correspond to the target curve during the verify process immediately after calibrating. ColorCal cannot operate properly if the printer is printing unevenly or if the scanner is not accurately calibrated. To verify whether the printer is accurately calibrated, set the active **Pass Through** profile to **Uncalibrated** in ColorCal and print the full area on a page with **C = 40%**, **M = 40%**, and **Y = 40%** color mix, with **Color Correction** disabled in the Splash G640 print driver. Examine the printed page to see if the output is an even gray with little variation. Significant variation indicates that the printer requires servicing; contact your printer manufacturer representative.

AutoGray

AutoGray is an additional calibration performed to improve the gray balance of the calibrated printer. AutoGray is similar to Calibrate Scanner that it prints and then scans a target and uses the information from the scan to automatically adjust the calibrated profile to improve gray balance. You can run AutoGray without preliminary configuration.

NOTE: 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 default, choose Reset AutoGray in the ColorCal menu.

After calibrating using ColorCal, use the following procedure to calibrate AutoGray

TO CALIBRATE AUTOGRAY

1. **Click AutoGray in the Splash menu.**

2. **Select a paper source for the AutoGray calibration target.**

The paper size can be 8.5x11, A4, or larger. Only page sizes large enough to fit the ColorCal target are listed.

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.

3. **Click OK.**

ColorCal prints a calibration target on the printer. The target shows the currently calibrated printer performance minus any adjustments made as a result of previously running AutoGray.

4. **Examine the target for printing defects and if any appear, such as creased paper or uneven or flaking toner, click Reprint to print a new calibration target.**
5. **When the calibration target prints successfully, click Continue.**

ColorCal prompts to place the target on the scanner glass.

6. **Place the Kodak Gray Scale target (provided with the Splash G640) and the printed target face-down on the scanner glass.**

NOTE: 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. To order a replacement Gray Scale target, contact Xerox Customer Support.

7. **Position the target with the short edge of the paper along the left side of the scanner glass.**

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.

8. **Click Scan.**

ColorCal scans the target and determines current gray balance based on the acquired image.

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

If you clicked Verify, 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.

Calibrate Splash Proof

Splash Proof calibration is used in conjunction with the Splash Proof Job Options feature at the server. Splash Proof is similar to Calibrate Scanner that it prints and then scans a target and uses the information from the scan to automatically adjust the calibrated profile to improve the color output of the printer.

The calibration process is the same for Splash Proof as AutoGray and ColorCal. However, you do not have to select a paper tray with Splash Proof. It always prints to Tray 5.

TO CALIBRATE SPLASH PROOF

1. **Click Splash Proof in the Splash menu.**
2. **Choose a paper size (normal, heavy weight, or extra heavy) for the Splash Proof calibration target from the menu that appears and feed that paper size through the bypass tray.**
3. **Click OK.**

ColorCal prints a calibration target on the printer. The target shows the currently calibrated printer performance minus any adjustments made as a result of previously running AutoGray.

4. **Examine the target for printing defects and if any appear, such as creased paper or uneven or flaking toner, click Reprint to print a new calibration target.**
5. **When the calibration target prints successfully, click Continue.**

ColorCal prompts you to place the target on the scanner surface for scanning.

6. **Place the Kodak Gray Scale target (provided with the Splash G640) and the printed target face-down on the scanner glass.**

NOTE: 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. To order a replacement Gray Scale target, contact Xerox Customer Support.

7. **Click Scan.**

ColorCal scans the target and determines current color performance based on the acquired image.

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

Screened Dmax

This section describes how to calibrate your printer with Screened Dmax and to activate and use with a Screen Preference File. This feature provides an enhanced proofing capability for screened devices. Screened Dmax also provides the ability to output print jobs that have the Screened job option settings, with the best calibrated output and show 100% fills as solids, rather than screened areas.

NOTE: Although, calibrating the screened data is recommended when using Splash Screened options, it is not required. Screened Dmax runs only on the Splash G640, and is off by default.

To calibrate with Screened Dmax, you must first enable an Active Screen Preference in the Screening Preferences Dialog.

Enabling Screening Preferences adds the ability to save and select multiple Screened Dmax calibration and screen preference settings. You can save, link, and switch between different Calibration, Output Profiles and Screened Preferences.

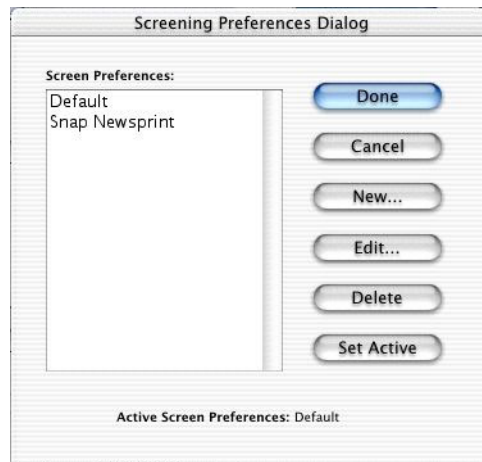
Setting Screening Preferences

Creating a Screening Preference allows you to set and change between the most common screening styles using a single selection, rather than having to access multiple dialog boxes.

TO SET AN ACTIVE SCREENING PREFERENCE

1. From the Splash G640, choose Login from the Server menu and then choose Screening Preferences.

Select Screening Preferences from the server pull-down menu. The Screening Preferences dialog box appears.



2. Specify a Screen Preference and choose one of the following options:

Done—exits the dialog box and saves the settings shown on the currently selected Active Screen file.

Cancel—exits the dialog box without changing the Active Screen file.

New—displays the Screening Preferences dialog box with “New Prefs” as the default screen preference name.

Edit—prompts you to select a Screen Preference file if none is selected. Otherwise, it displays the Screen Preferences dialog box listing all the screened data values saved in the currently selected file.

Delete—prompts you to select a Screen Preference file if none is selected. Otherwise, it displays the message, “Are you sure you want to delete the selected screen preferences?”. If you choose Yes and this is the Active Screen Preference file, another message appears, “Cannot delete default or active screen preferences.”

Set Active—prompts you to select a Screen Preference file if none is selected. Otherwise, it sets the highlighted screen preference file from the list as the screen setting, updates Active Screen Preferences static to text and displays the “recalibrate screened data...” dialog message.

Setting the Screen Preferences

This section describes the Screen Preferences settings and how to use them. Screening is applied to print jobs that are not printed in continuous tone (contone) at the printer.

Screen Preferences

Screen Preferences Name: Snap Newsprint

Frequency: 85 Angle: C 15 M 75 Y 0 K 45

Screening Method: ☐ Stochastic ☐ Application Defined
☐ Square ☐ Line ☐ Ellipse ☐ Dot
☒ Custom

Spot Function: { % dot
abs exch abs
2 copy add 1 gt
{ 1 csh dun mul exch 1 csh dun mul add 1 csh

Reset

☒ Use Screened Dmax: Absolute Dmax: C 0.77 M 0.70 Y 0.76 K 0.83
☒ Paper Simulation: Paper Density: C 0.05 M 0.08 Y 0.17 K 0.19

Output Profiles

Paper, Screened: DC12 1bit (Splash) +
OHP, Screened: DC12 1bit OHP (Splash) +
Extra Heavy Weight, Screened: DC12 1bit EHW (Splash) +

Default Save As... Cancel OK

The Screen Preferences window provides the following screening options:

- **Screen Preferences Name**—lists the current preference name (the default name is New Prefs.) This field will accommodate a maximum of 31 characters and is disabled when editing a saved screen preference.
- **Frequency**—can be set to 25 or less for smooth gradients. The minimum value recommended is 16. If you set Frequency to a value less than 16, you may see a decrease in the screened output quality and banding in the printed gradients.
- **Angle**—position the screened C, M, Y, and K dots to form a symmetrical pattern. The default values are C: 15, M: 75, Y: 0 and K: 45. Incorrect screening angles result in a moiré pattern in the final output.

NOTE: When the Screening method is set for Stochastic or Application Defined, Angle is disabled.

- **Screening Method**—offers the following different screening method options:

Stochastic uses random dot placement to prevent moiré patterns in the final output. This is the default Screening Method.

Application Defined allows an application, such as QuarkXPress, to control screening for the print job.

Line, Ellipse, Dot, and Square allows you to specify the shape of the dots.

Custom allows you to design a custom screen. When Custom is selected, it automatically enables the Spot Function window and the Reset Button. This option overrides Application Defined and Stochastic screening.

Spot Function defines the shape of the screen dot. The default is a round dot. The Reset button resets the Spot Function to the default.

- **Use Screen Dmax** —turns on/off Screened Dmax, and the Absolute Dmax C, M, Y, and K edit controls. Default is on and enables the Paper Simulation option.

If Use Screen Dmax is selected, it enables the Absolute Dmax value edit controls. The Absolute Dmax values represents the maximum output density of the target press on the target paper. Default values are C: .77, M: .70, Y: .76, and K: .83.

- **Paper Simulation**—represents the density of paper white for the target paper.

If Paper Simulation is selected, it enables the Paper Density C, M, Y, and K value edit controls. Default values are C: .05, M: .08, Y: .17, and K: .19.

Output Profiles—displays all of the output profiles in Dmax preferences located in the Splash Color Data folder: Output Profiles folder: The defaults are as follows:

For Paper, Screened: “DC12 1 bit (Splash)”

For OHP, Screened: “DC12 1 bit OHP (Splash)”

For Extra Heavy Weight, Screened: “DC12 1 bit EHW (Splash)”

NOTE: For best results with Screen Dmax enabled, select the “DC12 (1bit Dmax) Profile” for Paper and OHP. For Extra Heavy Weight, select “DC12 EHW 1 bit Newsprint Dmax Profile”.

After you have selected the screening preferences you want, click one of the following buttons:

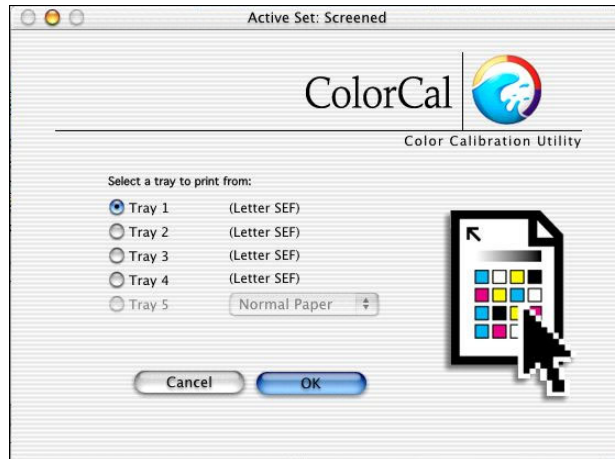
- **Default**—restores all original default screen preferences.
- **Save As**—prompts you to enter a file name and saves the current screen preferences to this named file. Save as is disabled when creating a new preference file.
- **Cancel**—exits the Screen Preferences dialog box without saving any changes.
- **OK**—saves all current screen preferences and exits the Screen Preferences dialog box. If the screen setting name is already in use, a message appears asking if you want to overwrite the current settings. If you choose Yes, the new Screen Preference file is added to the list.

Calibrating with Screened Dmax

This section describes how to calibrate screened data using the Splash Screened Dmax calibration feature. The process for calibrating Screened Dmax is similar to other calibrations.

TO CALIBRATE WITH SCREENED DMAX

1. **Double-click the ColorCal icon in the toolbar of the Splash G640 main window**
The Splash ColorCal dialog appears.
2. **Select Calibrate Dmax from the Splash menu.**



3. **Select a paper tray for page size desired and click OK.**
ColorCal prints a calibration target on the printer.
4. **Examine the target for printing defects, and if any appear, such as creased paper or uneven or flaking toner, click Reprint.**
5. **When the calibration target prints successfully, click Continue.**
ColorCal prompts you to place the target on the scanner glass.

6. **Place the Kodak Gray Scale target (provided with the Splash G640) and the printed target face-down on the scanner glass.**

NOTE: 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. To order a replacement Gray Scale target, contact Xerox Customer Support.

7. **Click Scan.**

ColorCal scans the target and determines current screened color performance based on the acquired image.

8. **Click OK.**

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

When profile updating is complete, a verify message appears.

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

Screened calibration is complete.

Editing custom color profiles (Expert Mode)

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, and then modify the new profile. 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

1. Select Be an Expert in the Splash ColorCal window.

Color curve palette

Click to edit control points

Click to enter percentages and densities

Locked color profile

0	0.0	55	55.0
5	5.0	60	60.0
10	10.0	65	65.0
15	15.0	70	70.0
20	20.0	75	75.0
25	25.0	80	80.0
30	30.0	85	85.0
35	35.0	90	90.0
40	40.0	95	95.0
45	45.0	100	100.0
50	50.0		

2. Select a color profile to edit from the Color profile menu.

NOTE: Factory installed profiles cannot be edited. ColorCal automatically prompts you to save with a new name any factory installed profile selected.

3. Select Highlights, Midtones, or Shadows to adjust a portion of the curve, or Overall to adjust the entire curve.
4. Select a color curve to edit from the floating color curve palette.
The four color curves and the Master curve are selectable.
5. Move the slider to adjust the gain.

6. Repeat steps 3 and 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.

7. Click Save to overwrite the existing profile or Save As to create a new profile.

NOTE: When factory installed profiles are selected, Save is disabled.

8. Click OK.

NOTE: If you click OK before saving a profile, ColorCal prompts you to save changes or cancel. The new profile is automatically calibrated to the last time calibration was run.

NOTE: Revert restores the previously saved profile.

TO EDIT USING CONTROL POINT EDITING

1. Select a color profile to edit from the Color Profile menu.

NOTE: Factory installed profiles cannot be edited. ColorCal automatically prompts you 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.

NOTE: If the master curve is selected, the Edit Control Points button is disabled.

3. Click Edit Control Points.

4. 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.**

NOTE: When factory installed profiles are selected, Save is disabled.

6. **Select OK.**

NOTE: If you click OK before saving a profile, ColorCal prompts you to save changes or cancel. The new profile is automatically calibrated to the last time calibration was run.

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 can match only the shape of the curve on output, not the exact numbers entered.

TO EDIT PERCENTAGES

1. **Select a color profile to edit from the Color Profile menu.**
2. **Select a color curve to edit from the floating color curve palette.**

NOTE: If the master curve is selected, the Edit Table button is disabled.

3. **Click Edit Table.**

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.**

NOTE: When factory installed profiles are selected, Save is disabled.

- 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. **Click OK.**

NOTE: If you click OK before saving a profile, ColorCal prompts you to save changes or cancel. The new profile is automatically calibrated to the last time calibration was run.

Creating Color Profile Sets

Color Profile Sets created using multiple calibrations can be saved with unique names. You can select each named profile 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 Splash menu.**
2. **Click Add.**
3. **Enter a name for the profile set.**
4. **When calibrating the printer, choose the name of the profile set to calibrate from the ColorCal Options dialog box.**

See “Verifying Printer Color Accuracy” on page 7-6.

TO SPECIFY CALIBRATION FROM DIFFERENT SETS TO PAPER TRAYS

1. **Choose Color Profile Sets from the Server menu.**
2. **For each tray, choose the profile set to use.**
3. **Click OK.**

CopyCal

CopyCal is a standalone application that creates profiles that allow the Splash G640 to emulate the output of any color printer. CopyCal is launched from the server. CopyCal and the server application can run at the same time. The printer must be running during the entire calibration procedure.

CopyCal Profiles

CopyCal profiles are profiles that combine CMYK and RGB color correction into a single selection. Choosing a CopyCal profile in the CMYK profile list overrides any RGB color correction setting for that job.

CopyCal Calibration

The following procedure describes how to calibrate the printer using CopyCal.

NOTE: CopyCal can detect if it is attached to a printer with a built-in scanner or one which uses an external scanner.

TO CALIBRATE USING COPYCAL

1. **With the printer running, double-click the CopyCal icon on the Splash server full screen.**

Click CopyCal



The CopyCal interface appears.

2. **Print the CopyCal targets from Acrobat to the selected printer via the standard print driver for that printer.**

You can print the targets from a Mac OS or Windows computer. The targets are numbered page 2 to page 4.

3. **Click Calibrate in the main calibration window.**

CopyCal prints a reference target, which is labeled #1.

4. **Place 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.**

5. **Click Scan.**

CopyCal scans the target and determines current color performance based on the acquired image.

NOTE: 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 4 and 5 for targets 2, 3, and 4.**

7. **When prompted, name the profile and save it.**

You can now select the CopyCal profile created as a custom CMYK profile. If the profile already exists, CopyCal prompts you to replace the profile. If you do not want to overwrite the existing profile, click Cancel.

Chapter 8: Using Acquire

The Acquire feature enables the Splash G640 to operate as a high-resolution color scanner. Acquire allows you to 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 G640.

NOTE: Acquire operates on Mac OS computers only.

Scanning an image with Acquire

TO SCAN AN IMAGE WITH ACQUIRE

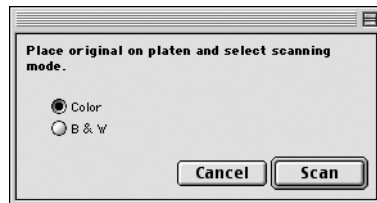
1. Click **Acquire** in the toolbar in the **Splash G640** main window.

The Acquire dialog box appears (untitled).

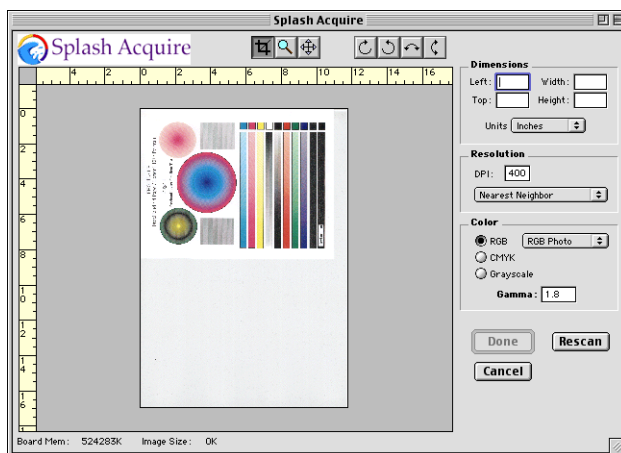
2. Place the image you want to scan on the upper-left corner of the printer glass.

You are prompted to select a scanning mode.

3. Select **Color** or **B&W** and click **Scan**.



After a short pause, the copier scans the image, and a preview of the image appears in the preview area of the Splash Acquire dialog box.



NOTE: Acquire will not scan while the server is processing. Click Start/Stop in the Splash G640 main window before using Acquire.

Color options

The Acquire Color options allow you to convert scanned images to RGB, CMYK, or Grayscale. If you select RGB or CMYK, the server applies color correction to the scanned image when the file is saved. The preview image in the Splash Acquire dialog box automatically reflects the result when you apply a Color option.

RGB color correction

In RGB color mode, you can apply the following RGB color correction types:

- **RGB Photo**—for scanned photographs
- **RGB Copy**—for precise matching of a photocopy

CMYK color correction

When you apply CMYK color correction to a scanned image, the Splash G640 adjusts the colors in the image to match the ColorCal Pass Through Visual Standard profile.

Gamma

Gamma controls the manner in which a device reproduces tonal gradations. For most purposes, the default setting (1.8) is adequate. Gamma 1.8 simulates tonal gradations as perceived by the human eye. Gamma applies to Color and Grayscale scans.

Edit the value in the Gamma field to lighten or darken a file. The preview image in the Splash Acquire dialog box updates automatically as you edit the Gamma field.

Cropping a scanned image

The buttons above the scan preview window allow you to select an area of the scanned image to save as a file.



- **Crop** changes the pointer on your computer desktop to a crosshair, allowing you to select a portion of the preview image. Double-click the Crop tool to select the entire preview image.
- **Zoom** changes the pointer to a magnifying glass. Click anywhere on the preview image to see a magnified view. 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 area of the Splash Acquire dialog box.
- **Move** moves your view of a magnified preview image.

The amount of time required to open an image increases with the size of the selected area. Select only the portion of the image you want 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

1. To maintain the aspect ratio of the selection area, hold down the Shift key as you drag the crosshair across a scanned image.
2. To select an area centered on the pointer, hold down the Option key as you drag the crosshair.
3. To maintain the aspect ratio of a selection area that is centered on the pointer, press Shift-Option as you drag the crosshair.

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 CHANGE THE DIMENSIONS OF A SCANNED IMAGE

1. Choose a unit of measure (centimeters or inches) from the Units menu.
2. Enter values in the Width and Height fields.

The marquee changes to match the dimensions entered. To move the marquee, drag it or type new values in the Top and Left fields.

To move the marquee manually, place the pointer within the marquee and drag it to a different location within the preview area

TO CHOOSE THE RESOLUTION OF A SCAN

1. In the Resolution field, enter the desired DPI.

The default setting for Resolution depends on the memory configuration of your computer, and the size of the scanned image. The usable resolution is limited by the memory and hard disk space available on the server.

The plug-in uses interpolation to adjust the resolution for the image if the Resolution setting is changed from its default setting (see Step 3).

2. Choose a unit of measure from the Units menu.

3. If the default resolution of the image is changed, choose an interpolation option (Nearest Neighbor, Bicubic, or Bilinear.

- **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.
- **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.
- **Bilinear** interpolation produces quality and speed that is balanced between the two other options.

Conserving hard disk space

To reduce the amount of hard disk space required by the scan, select a smaller area or choose a lower scanning resolution.

Choosing an orientation

If the preview image does not appear in the desired orientation, rotate the image by clicking the Orientation buttons directly above the preview area of the Splash Acquire dialog box.



Saving a scan

When you click Done, a Save dialog box appears. Select the location in which you want to save your scan and name the file. The scan is saved as a TIFF graphic file, which you can open in other graphics applications for manipulation and modification.

Acquire Plug-In for Photoshop

An Acquire plug-in for Adobe Photoshop 7.0 or later is provided. The plug-in does not work on client workstations. You must install Adobe Photoshop or Adobe Photoshop LE in order to use the plug-in for Photoshop.

NOTE: Adobe Photoshop is not provided with the Splash G640.

Installing the plug-in

The Splash Acquire plug-in is located in the Splash folder on the server. To locate the plug-in, open the Splash Extras:Photoshop Plug-in folder. 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 server to scan the image on the 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.

NOTE: The options in the Photoshop Acquire scan window are the same as in Splash Acquire.

Preparing the scan

If the server is currently processing or printing a job, wait until it has completed these tasks before scanning. When the plug-in is scanning an image at 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. To prevent this error, make sure you stop all processing at the Splash G640 before scanning.

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 in the upper-left corner of the printer glass.**
3. **Choose Import from the File menu, and then choose Splash Acquire.**

The Splash Acquire Setup dialog box appears.

NOTE: The Splash plug-in module must be in the proper location to appear in this submenu.

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, and a preview image appears in the preview area of the Splash Acquire dialog box.

Checking the required disk space

Acquire will determine if the amount of space available on the Adobe Photoshop scratch hard disk(s) will accommodate the scanned image.

- 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. Choose Preferences from the Adobe Photoshop File menu, 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 a scanned image to Adobe Photoshop

TO TRANSFER THE SCANNED IMAGE TO ADOBE PHOTOSHOP

1. **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 documentation included with your copy of Adobe Photoshop.

Acquire without Photoshop

Acquire also offers you the option of scanning from the printer and saving a TIFF file *without* using Photoshop. The procedure is very similar to using Photoshop.

TO SCAN WITHOUT PHOTOSHOP

1. **Click Acquire on the Splash G640 toolbar or choose Acquire from the File menu.**
2. **Position the image you want to scan in the upper-left corner of the printer glass.**
3. **Choose Import: Splash Import from the File menu.**

The Splash Acquire Setup dialog box appears.

4. **Select Color or B&W for the scanned image and select a sharpness setting, if required.**

5. Click Scan.

After a short pause, the scanner scans the page. The scan is saved and a preview of the image appears in the Acquire dialog box.

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

Acquire without Photoshop looks and acts like Acquire with Photoshop. For more details on these options, or for information on whether or not you use Photoshop, see Chapter 8.



Appendix A: Troubleshooting

This appendix provides troubleshooting tips and notes and explains some common problems you may encounter when setting up and connecting the Splash G640.

General Troubleshooting Tips

The following table lists some of the problems you may encounter when setting up the Splash G640.

If this happens	Try this
The Splash G640 application does not work or the printer prints unacceptable output.	<ul style="list-style-type: none">• Make sure the printer cable is functioning properly. If the printer cable is faulty, replace it with a new cable
The server is installed and connected, but does not start when the power key on the keyboard is pressed.	<ul style="list-style-type: none">• Properly connect the power cables for the Splash G640 to live, grounded AC outlets.• Properly connect the keyboard, and secure all cable connections. If a different Mac OS keyboard and cable are available, try substituting them for the units provided with the Splash G640.
The server starts with the start-up tone, but there is no image on the monitor.	<ul style="list-style-type: none">• Connect the power cable for the display to a live, grounded AC outlet.• Connect both ends of the display cable.• Turn on the monitor (green power indicator light on the front panel).• Increase the brightness and contrast with the knobs on the front.• If a different Mac OS-compatible monitor is available, try substituting it; the monitor may be faulty.
The server starts, but the keyboard and/or mouse do not work.	<ul style="list-style-type: none">• Connect the keyboard, and secure all cable connections. If a different Mac OS keyboard and cable are available, try substituting them if securing the connections does not work.• Connect the mouse to the keyboard. If a different Mac OS mouse is available, try substituting it for the mouse.
The server starts, but the Splash G640 application reports that there is a problem.	<ul style="list-style-type: none">• The Splash G640 application requires that several system extension files be present. If one or more is missing, reinstall the Splash G640 software from the User Software CD.

Separation

- 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.
- When printing a separation job to the Splash server, do not choose the Cover Page option in your application's print dialog box. 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 application specific or 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 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.

Paper and tray handling

Printing to MailBox

If the optional Mailbox is attached to the printer, an additional Output Bin menu will appear in the Page Tab of the driver options or Job Handling section of a job in the hold queue. You can select mailbox bin 1 through 10 to send a job to a specific bin, or select Catch Tray to send the job to stack all output pages in the Catch Tray of the printer.

Changing the paper size in a tray

To avoid misprinting an active job, choose Stop Processing on the Splash G640 before changing a paper size in a paper tray. After inserting a different size cassette, choose Continue Processing to resume printing. For complete instructions on how to change the paper size, see the printer documentation.

LEF Paper Substitution

If you choose Automatic as your output tray and the SEF paper size is unavailable, the Splash G640 substitutes the corresponding LEF paper size. Conversely, the Splash G640 substitutes the corresponding SEF paper for unavailable LEF paper sizes.

Correcting out of paper errors

When a job is processing and if there is no paper in the specified output tray, the Splash G640 waits for paper to be added. A dialog box displays the amount of time allowed before the job transfers to the Error queue and displays an E (error) code in the Server Status window.

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

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

- Paper size specified in the Page Setup dialog box is not available in the tray specified in the Print dialog box.
- No tray is set for the specified paper size for 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 server window.

Secure Access

Correcting Jobs That Error

You can edit jobs that error at the Splash G640 to correct the required fields. To edit the jobs, select Edit Job from the menu or double-click on the job and click the Edit Doc Info button on the Info tab. The Splash G640 does not validate the information entered in the Edit Doc Info dialog box until the job is released from the Hold queue.

Printing with the Standard driver

Any job printed from the Standard driver to the server with Secure Access enabled will error at the server unless the required information is entered in the Info pane of the printer 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 you enter an IP address that does not match the server in the Secure Access driver, the driver will display an error message and prompt you for a new IP address. The Secure Access driver will not allow printing until a valid IP address is entered, even if the Secure Access option is disabled at the server.

Splash color correction

If you use QuarkXPress, you must disable EFICOLOR before you can print with Splash RGB color correction. To do this, remove the “EfiColor Processor” file from the Mac OS System folder or “EfiColor XTension” from the QuarkXPress folder.

NOTE: Disabling EFICOLOR correction in the QuarkXPress application is *not* sufficient. QuarkXPress 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.

Splash G640 server

Running other applications on the Splash G640

Before using other applications on the Splash G640 computer, click Start/Stop. If the Splash G640 is running, other applications operate at reduced performance levels. When processing is finished, you can resume sending jobs to the printer.

Applications can print directly to the printer from the Splash G640 computer (local printing). When you have finished using other applications, exit these applications and click Start/Stop to continue processing the job. Any jobs sent to the server will then begin to print.

Print Job Name

When you select the LaserWriter 8 driver cover page Before Document option for a print job, the job name that appears in the print queue is “Cover Page.” In the Document Name field of the log file, the name of the job is “Cover Page”.

Job Processing

The Splash G640 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 sometimes reports that ink limitation is being applied when this feature is not active. Disregard these messages.

Occasionally, a job fails and invokes the message “Driver reported an error.” To determine the cause of the error, run Splash Preflight for the print job.

The contents of the User Name and Document Name fields are as follows:

Platform	User name source	Document name source
Mac OS 8.6 and earlier	Owner name in the Sharing Setup Control Panel	Name of the file being printed
Mac OS 8.5 and later	Owner Name in the File Sharing Control Panel	Name of the file being printed

Platform	User name source	Document name source
Mac OS X	Current User network log-on Name	Name of the file being printed
Windows 9x/Me through an NT queue	NT log-on name	Name of the file being printed
Windows 9x/Me via MacLAN	MacLAN shared name	Name of the file being printed
Windows NT/2000/XP	NT network log-on name	Name of the file being printed
UNIX	The UNIX log-on name. If the “append host name” option is selected in the OS, then this is the UNIX login name concatenated with the host name	The disk file name

Server Disk Full

If the Splash G640 hard disk becomes full, a print job sent from a client appears in the Error queue with an “half S” 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.

Installer

If you use the Splash Installer to remove the Splash G640 software from the server, the Installer may display a message that reports the software removal was unsuccessful. This error message appears when spool files or TIFF files are present in the Spool Folder or TIFF Folder when you attempt to remove the software. Despite the fact that the error messages appears, the application was successfully removed from the hard disk.

Job Previews

The preview image for a print job may disappear when an error dialog box displays at the Splash G640.

Occasionally the Splash G640 fails to show the correct preview image for a job that has not been processed (RIPped) or a job in the Error queue.

PostScript errors in jobs that print successfully

In rare cases, a job prints correctly, yet is routed back to a Splash G640 queue with a PostScript error. If this occurs, delete the job from the queue.

Web Queue Manager

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 selection 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 selection is erased when the frame is refreshed.

Acquire

Improving RGB Scans

To improve the quality of RGB scans created with the Acquire plug-in, use the Image Levels control in Adobe Photoshop. Choose Adjust from the Image menu, and then choose Levels. The Image Levels dialog box 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 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.

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