Customer Tips

… for the user

Macintosh Printing and Xerox Multifunction Devices

Purpose

This document provides a basic understanding of Macintosh printing on OS 8x and 9x using three print models: LaserWriter, Xerox multifunction device, and application specific. For each print model, configuration and printing instructions are provided. This document does not address printing from OS X.

Key Terms

AppleTalk Zones

An AppleTalk zone is a logical group of nodes or networks. Zones are assigned according to a logical scheme such as organizational departments or physical locations. Breaking the network into several smaller zones has a number of benefits, that include reduction in time you spend to search for a resource on the network and in the amount of broadcast traffic on the network. The Xerox multifunction device installs itself on the default zone of the network segment. Use the Printer Utility or the Xerox multifunction device's local UI to install it in a zone other than the default.

Chooser

Use this desk accessory to select the printer and PPD files. If you use a custom driver, use the Chooser to configure the Xerox multifunction device's extended features so that they are available when you print.

LaserWriter Print Driver

Apple supplies the LaserWriter print driver and ships it with every OS version. It interacts with applications and PPD files to generate print-ready output files. It translates what the you see on the screen in the application to what the printer needs in a PostScript file to render the print job. Each version of Macintosh OS 8x or 9x typically comes with the latest version of the LaserWriter driver. You can also download the newest drivers from the Apple Web site (http://www.apple.com).

This document applies to these Xerox products:

x	WC Pro 32/40 Color
x	WC Pro 65/75/90
x	WC Pro 35/45/55
	WC M35/M45/M55
x	DC 555/545/535
x	DC 490/480/470/460
x	DC 440/432/425/420
x	DC 340/332
x	DC 265/255/240
x	DC 230/220
	DCCS 50

PostScript Printer Description File (PPD)

The PostScript Printer Description file is a platform-independent text file, which describes fonts, paper sizes, resolutions, capabilities, and other standard PostScript printer features. Each printer has unique PPD files that correspond to its unique features and functions. To ensure compatibility, always use the PPD provided by the printer manufacturer.

PrintingLib

Located in the extensions folder, a PrintingLib is a shared library used by multiple applications and system components. The PrintingLib is used by the desktop printing software and both the LaserWriter and Adobe print drivers. There are known incompatibilities when mixing and matching versions of the LaserWriter, Adobe print drivers and PrintingLibs. For more information on PrintingLib issues, see these documents located at: http://xerox.com/documentcentrefamily/tips:

- *Xerox DC 265/255/240 and 490/480/470/460 Macintosh Driver Information*

- *Xerox DC 340/332/230/220 and the 440/432/425/420 Macintosh Driver Information*

PageMaker PPD Files

Adobe provides a number of PPD files created by printer manufacturers on the PageMaker application disk. These PPD files are available exclusively to PageMaker print jobs using the PageMaker print subsystem (see the next section). These PPD files are not always the latest versions for a specific printer. You may need a PPD that is not included with PageMaker. If so, obtain the PPD file from the printer manufacturer. PPD files are typically included with the printer software or can be downloaded from the manufacturer's Web site. You may need to manually copy the PPD files into the Printer Descriptions folder. Consult the PageMaker documentation for more information regarding these files and how to install them.

PageMaker Print Subsystem

PageMaker provides its own print subsystem that takes full advantage of PageMaker's capabilities. This subsystem is embedded within PageMaker and uses the PPD files located in the Printer Descriptions folder rather than the driver and PPD file selected in the Chooser. Press the **Option** key while selecting [**File: Print**] to bypass the PageMaker print subsystem and use the driver and PPD selected in the Chooser.

LaserWriter Print Model

The LaserWriter driver is shipped with every version of the Mac OS 8x or 9x. It is a generic driver that has basic printing features and relies on a printer's PPD file to supply additional print features. Printer vendors supply PPD files, that you configure with the LaserWriter before printing (see "LaserWriter Configuration" below).

The Xerox multifunction device supplies a generic PPD for use with the LaserWriter and/or Adobe driver; however, it does not offer the full feature set that the Xerox multifunction device custom driver offers. Refer to the last column of the feature table (Table 1).

Figure 1 below illustrates how the driver, PPD file, and a standard application communicate in order to use the options selected with a LaserWriter.
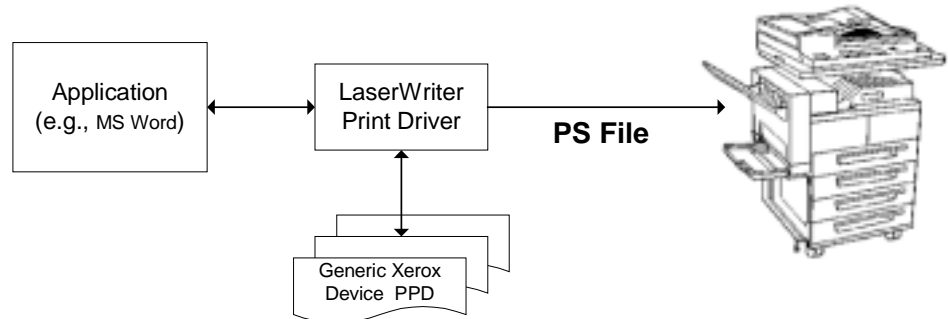

Figure 1: *LaserWriter Print Model*

LaserWriter Configuration

To link your Xerox multifunction device's generic PPD file to the LaserWriter driver and use this configuration as the default driver/PPD:

1. Open Chooser.

2. Select the AppleTalk zone in which the Xerox multifunction device resides.

3. Select the LaserWriter driver.

4. Select [**Create**].

5. Select the generic PPD file for the Xerox multifunction device.

6. Exit Chooser.

Applications will now use this driver/PPD combination when you select [**File: Print**].

LaserWriter Printing

1. From the application, select [**File: Print**]. The LaserWriter driver dialog box appears allowing you to select the desired options available in the PPD.

2. Select [**Print**] to send the document to the Xerox multifunction device.

The application sends the document to the driver, which applies the options selected in step 1 and interacts with the PPD file to generate a PostScript file. This PostScript file is sent to the Xerox multifunction device.

Xerox Multifunction Device Print Model

The Xerox multifunction device driver is based on the Adobe PostScript print driver, which Xerox customizes to provide access to extended features in conjunction with custom Xerox multifunction device PPD files.

The Xerox multifunction device has extended print features not typically found on other printers, such as Job Type, Accounting, Banner Page, fax, etc. Many of these features are not accessible from the LaserWriter or Adobe print driver and are only available from a custom Xerox multifunction device print driver.

Figure 2 below illustrates how the driver, PPD file, and the application communicate to use the options selected with the Xerox multifunction device print driver using the custom PPD with a standard Macintosh application.
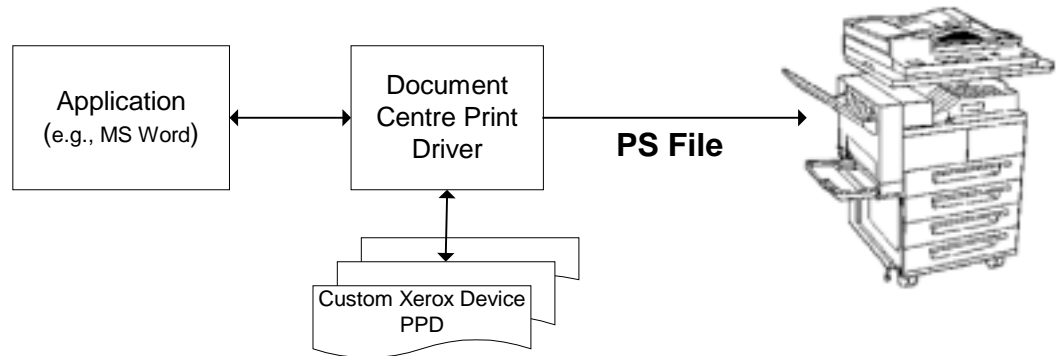

Figure 2: *Xerox multifunction device Print Model*

Xerox Multifunction Device Configuration

Use the following procedure to link the Xerox multifunction device's custom PPD file to the Xerox multifunction device driver and use this configuration as the default driver/PPD.

1. Open the Chooser.

2. Select the correct AppleTalk zone in which the Xerox multifunction device resides.

3. Select [**Xerox Custom Driver**].

4. Select the Xerox multifunction device.

5. Select [**Create**].

6. Select the custom PPD file for the Xerox multifunction device.

7. Select [**Set-up: Configure**] to configure all installed options for the Xerox multifunction device.

8. Exit the Chooser.

The Xerox multifunction device is now the default printer in the Chooser, and your application uses this combination when you select [**File: Print**].

Xerox Multifunction Device Printing

To print to the Xerox multifunction device from a standard Macintosh application:

1. Select [**File: Print**] from the application. The Xerox (Adobe) dialog box appears. Select the driver print options you wish to use.

2. Select [**Print**]. The application sends the job to the driver.

The application sends the document to the driver, which applies the options selected in step 1 and interacts with the PPD file to generate a PostScript file. This PostScript file is sent to the Xerox multifunction device.

NOTE: The DocuTech PPD offers the same features as the custom DC 240/255/265 or 490/480/470/460 PPD; however, it emulates the output of a DocuTech, specifically, resolution, margins and halftones. Typically, customer who have both a DC 240/255/265 or 490/480/470 and a DocuTech use the DocuTech PPD. The Xerox multifunction device is used to print proofs and a final version is generated by the DocuTech.

Application Specific Print Model

Certain specialized applications bypass the printer driver and generate their own PostScript code. For the purpose of this document, PageMaker is used as an example since it is the most prevalent of this type of application.

PageMaker provides its own print subsystem and inclides a number of PPD files created by various printer manufacturers on the application disk. The PageMaker application disk does not contain every PPD for every printer, but each printer vendor typically supplies a PPD that you can install and configure for use by PageMaker.

Figure 3 illustrates how PageMaker interacts with the PPD file to generates its own PostScript file, bypassing the LaserWriter or Xerox multifunction device print driver.
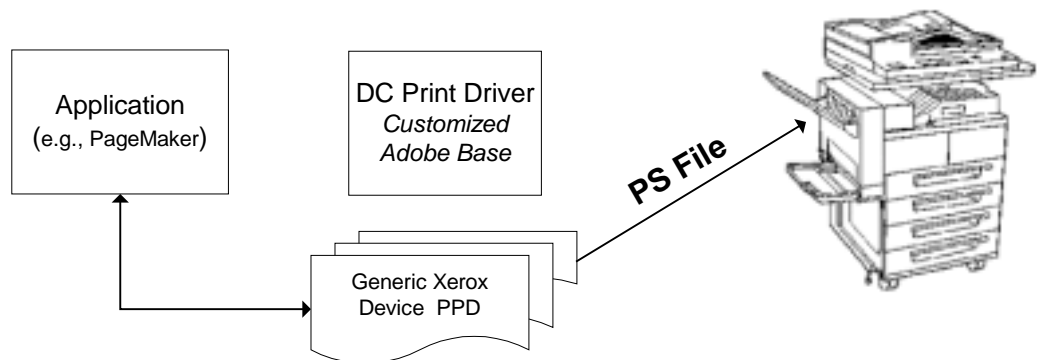

Figure 3: *Application Specific Print Model*

PageMaker Configuration

PageMaker references the PPD file in an active document, associates it with the document when it is printed and keeps it with the document when it is saved. If the document does not reference a PPD file, PageMaker uses a default PPD file. The default PPD file reference is saved in the `Ppds.cnf` file. If PageMaker cannot locate this file (because it was deleted or PageMaker was just installed) it uses the PPD file assigned to the default printer defined in the Chooser. If no PPD file is selected for the printer in the Chooser, PageMaker uses the first PPD in the alphabetical list.

To change the default PPD file in PageMaker, version 5.0 and later:

1. Create a new document.
2. Select [**File: Print**].
3. In the [**PPD**] box, select the generic PPD file for the Xerox multifunction device.
4. Hold down <**Shift**> while selecting [**Print**] to save the selected PPD as the default.

PageMaker Printing

PageMaker applies the options you select from the PPD file and generates the PostScript file using its own print subsystem. The native PageMaker print subsystem combined with the Xerox multifunction device's generic PPD does not provide access to all of the extended features available.

Use the following procedure to set up and configure PageMaker to print using the Xerox multifunction device's custom driver (bypassing PageMaker's print subsystem). The

Xerox multifunction device custom driver provides access to all of the extended features available on the Xerox multifunction device.

NOTE: Ensure that the Xerox multifunction device is set up and configured as your default printer in the Chooser before performing the steps below.

1. Press <**Option**> and select [**File: Print**].

2. Select [**Set-up**].

3. Select <**OK**>.

4. Select [**Xerox Options**]. In the dialog box that appears, select options available from the PPD selected in the Chooser.

5. Select [**Print**] to send the document to the Xerox multifunction device.

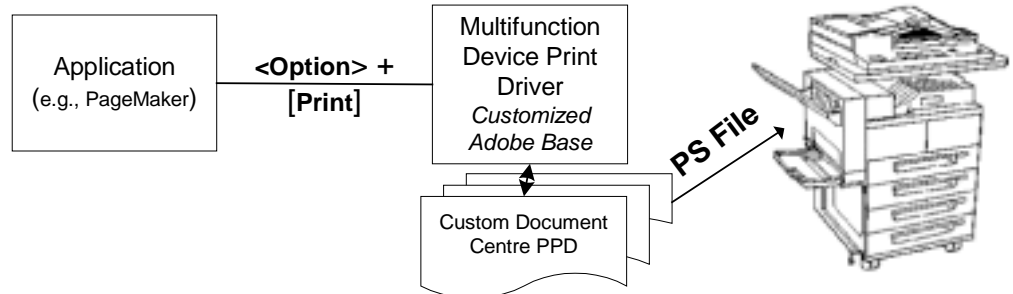Figure 4 illustrates how the PPD bypasses the PageMaker print subsystem.

Figure 4: *Bypassing the PageMaker Pint Subsystem*

References

This document describes the different ways to print in a Macintosh environment with the Xerox multifunction device, using the LaserWriter driver, the Xerox custom multifunction device print driver, or using an application print sub-system. For additional details and information on specific issues with the Xerox multifunction device in a Macintosh environment, refer to following documents:

- *Macintosh Xerox DC 220/230/332/340 and 440/432/425/420 Driver Information* (dc00cc0150*)*

- *Macintosh Xerox DC 265/255/240 and 490/480/470/460 Driver Information* (dc00cc0135*)*

- *Macintosh Xerox DC 555/545/535 and WorkCentre Pro Driver Information* (dc03cc0316 – available soon)

- *Printing to a Document Centre from Macintosh OS X* (dc02cc0309)

Additional Information

Xerox Customer Service welcomes feedback on all documentation - send feedback via e-mail to: USA.DSSC.Doc.Feedback@mc.usa.xerox.com.

You can reach Xerox Customer Support at 1-800-821-2797 (USA),
TTY 1-800-855-2880 or at http://www.xerox.com.

Other Tips about Xerox multifunction devices are available at the following URL:
http://www.xerox.com/DocumentCentreFamily/Tips.

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