Xerox Document Centre

DC Tips ... for the user

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PostScript 3 Compatibility with Document Centres

Purpose

This document describes some features, known issues, and workarounds related to PostScript Language Level 3 (PS3) and how they apply to Document Centres.

PostScript 3 Features

PS3 includes powerful features to accurately convert images and text as they appear on your screen to printed material. Newer Xerox Document Centres now support PS3. The "Driver Compatibility" section contains details about the level of PostScript each Document Centre supports.

PS3 is based on PostScript Language Level 2 (PS2) with the addition of new device-related features.

The following list includes examples of the new PS3 features relevant to Document Centres:

- **New Font Set:** The number of fonts available using Document Centre PS3 interpreters has changed. The table on page 2 indicates the number of fonts installed at the time of manufacture for each Document Centre.
- Smooth Shading: It is now possible to apply a color that varies smoothly over the
 object or region painted. Most applications do not use this feature. The feature allows
 applications to generate radial, axial, and arbitrary shading blends in a small amount
 of PostScript code.
- Masked Images: A sampled image can be clipped by a mask as it is painted. The
 mask can be represented explicitly or encoded with a color key in the image data, to
 allow the background to show through parts of the image. This new feature may sort
 out problems caused by complex clipping paths on images but could also cause
 some backward compatibility issues if applications rely on availability of masked
 images.
- Device Setup: There are many additional page device parameters to control media selection, finishing options, and other features. Any device can now produce arbitrary separations, even in a monochrome printing system (which can only mark one color at a time).

This document pertains to these Xerox products:

	DCCS 50
x	DC 230/220 ST/LP
x	DC 265/255/240 ST/LP
x	DC 340/332 ST
x	DC 440/432/425/420 ST
x	DC 490/480/470/460 ST

- Compression Technology: PS3 interpreters now include compression technology
 that better handles Macintosh and Windows applications. Document Centres with a
 PS3 interpreter process jobs from applications that generate their own PS code (for
 example, PageMaker and Quark) at a much faster rate as compared to the
 Document Centres with PS2 interpreters.
- Color Consistency: PS3 greatly improves document color consistency for both printing and viewing on the Internet.

PS Fonts

The table below indicates the PostScript version each Document Centre supports and the number of fonts available.

Document Centre	PS Version and Number of Fonts		
DC 340/332/230/220 ST/LP	PS2 with 35 fonts		
DC 440/432/425/420 ST	PS3 with 138 fonts – 2001 Edition and after		
	PS3 with 178 fonts – before 2001 Edition		
DC 555/545/535 ST	PS3 with 138 fonts		
DC 265/255/240 ST	PS3 with 178 fonts		
DC 490/480/470/460 ST	PS3 with 138 fonts – 2001 Edition and after		
	PS3 with 178 fonts – before 2001 Edition		
DCCS50	PS3 with 183 fonts		

Driver Compatibility

A Document Centre that includes a PS3 interpreter supports PS2 (but not vice versa). The following chart lists the PostScript level interpreter installed in each Document Centre during manufacturing.

NOTE: To view a list of drivers (including PS3 drivers) for each Document Centre, use the Drivers link on the home page of Xerox.com to access a product search page. Perform a search for your product name.

The following list shows the version of CentreWare that introduced PS3 drivers:

DC 265/255/240 ST: CentreWare 5.1

DC 440/432/425/420 ST: CentreWare 5.2

DCCS50: CentreWare 2.1

DC 555/545/535: CentreWare 5.4

Document Centre	PS2 Interpreter	PS3 Interpreter	CenterWare Version Introducing PS3 Drivers
DC 340/332/230/220 ST/LP	All versions	N/A	N/A
DC 265/255/240 ST	System version 5.x only	System version 6.x only	CentreWare 5.1
DC 440/432/425/420 ST	N/A	All versions	CentreWare 5.2
DC 490/480/470/460 ST	N/A	All versions	CentreWare 5.2
DC 555/545/535 ST	N/A	All versions	CentreWare 5.4
DCCS50	N/A	All versions	CentreWare 2.1

Known Font Substitution Issues and Workarounds

What can the customer expect when dealing with jobs or devices that support PS3? All jobs created by PS2 print drivers should work on a PS3 device. Most jobs created by PS3 print drivers work on a PS2 device.

Problems may occur when you create a document that includes PS3 device fonts and attempt to print it on a PS2 device. If the PS2 device does not include a font used in the document it may substitute Courier or another font. The format may change, including page breaks, and cause the document to look completely different.

To avoid font substitution issues, select PS2 drivers to print documents sent to a PS2 device and PS3 drivers to print documents sent to a PS3 device. To determine the fonts included on a Document Centre PS3 interpreter, see the section "Printing a Resident Font List," later in this document.

Because of a Windows graphic device interface (GDI) limitation, font substitution may occur when you print from some applications in a Windows NT environment using the Document Centre PS3 drivers. Using the Adobe PS3 driver and the Document Centre generic PPD may resolve these issues. Refer to http://www.adobe.com to download the Adobe PS driver for Windows NT to use with the generic PS3 PPD designed to your Document Centre.

Printing Resident Font Lists

Use the instructions in one of the following sections to print your Document Centre's font list:

DCCS50 (only using the Web UI)

- 1. Open your Web browser.
- Enter the Document Centre's IP address.
- 3. Select the [Print] link.
- 4. Select [Reports].
- 5. For Report Type select [Font List (PostScript)].
- 6. Select [Print].
- 7. Close the Web browser.

DC 340/332/230/220 and 440/432/425/420 (using the Document Centre UI)

- 1. Press [Machine Status].
- 2. Press the [Reports and Counters] tab.
- 3. Select [Print Reports] and [PostScript Font List].
- 4. Press [Start].
- 5. Select [Exit].

DC 340/332/230/220 and DC 440/432/425/420 (using the Web UI)

- 1. Open the Web browser.
- 2. Enter the Document Centre IP address.
- 3. Select the [Maintenance] tab.
- 4. Ensure that the radio button next to **Font Listing** is selected.
- 5. Select [File>Print] from the browser menu.

DC 265/255/240 and DC 490/480/470/460 (using the Web UI):

- 1. Open the Web browser.
- 2. Enter the Document Centre IP address.
- 3. Select the [Maintenance] tab.
- 4. Ensure the radio button next to **Font Listing** is selected.
- 5. Select [File>Print] from the browser menu.

DC 555/545/535 (only using the Web UI):

- 1. Open the Web browser.
- 2. Enter the Document Centre IP address.
- 3. Select the [Maintenance] tab.
- 4. Ensure the radio button **Printer Fonts** is selected.
- 5. Use the **Samples** pull-down menu to select **Only PostScript Fonts**.
- 6. Select [File>Print] from the browser menu.

PDF Printing and PS3

Adobe Acrobat Distiller 4.0 optimizes the PDF files it creates to print using Adobe PS3 devices. Acrobat viewers can print these files using either PS2 or PS3 devices. If a file optimized for a PS3 device prints using a PS2 device, output may appear different than expected because of changes in Adobe's Acrobat viewers.

NOTE: For more information about Adobe PostScript Level 3 go to http://www.adobe.com.

Additional Information

Xerox's Document Centre Technical Support Operations welcomes feedback on all DC Tips documentation - send feedback via e-mail to: USA.DSSC.Doc.Feedback@mc.usa.xerox.com.

Other DC Tips are available at the following URL: http://www.xerox.com/DocumentCentreFamily/Tips.

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