DC Tips

... for the user

Document Centre and Dazel Printing

Purpose

This document introduces the Dazel print environment and explains the print delivery systems and protocols the Document Centre supports. This document does not provide details of the Dazel operating environment or the many methods of printing to the Document Centre. Known limitations and product caveats are also discussed. Refer to the user manuals for each product for more complete information. We assume the person using this document has administrator level knowledge of the Dazel system.

Document Centre Software Level Requirements

Document Centre Model	Document Centre ESS Required
DC 440/432/420	ESS 2.2.6 or greater
DC 440/432/425 2001 Edition	ESS 3.0.5.4s or greater
DC 470/460	19.01.500 or greater
DC 480	19.01.020 or greater
490/480/470/460 2001 Edition	19.02.xxx or greater

Dazel Methodology

Dazel uses a distributed server model to deliver data to a wide range of networked devices in an enterprise. These devices can range from printers to terminals. Final delivery of documents to printers can occur using several protocols and formats. The TCP/IP enabled Document Centre supports LPD and "raw sockets" printing over TCP port 9100, two of the preferred Dazel printing methods. The Document Centre supports PostScript (PS) and Printer Control Language (PCL) printing languages. Filters created on the Dazel server reflect these languages.

Line Printer Daemon (LPD) Protocol

All Document Centres support the LPD protocol. A Document Centre with a network connection and TCP/IP with LPD enabled, does not report back status information to the print server although jobs successfully print.

This document applies to these Xerox products:

	DC 555/545/535
x	DC 490/480/470/460 ST
x	DC 440/432/425/420 ST
	DC 340/332 ST
	DC 265/255/240 ST/LP
	DC 230/220 ST/LP
	DCCS 50

Raw Sockets and Printer Job Language (PJL) over TCP Port 9100

The Document Centres listed in the software requirements table on the first page of this document, support PJL (the primary printing language of the Dazel system) using TCP port 9100. A Document Centre must have the required software level, TCP/IP and port 9100 enabled to receive and print jobs in this environment. Unlike the LPD, this method delivers print job status back to the server. The raw sockets over port 9100 delivery method is bi-directional.

Enabling Port 9100

You can enable port 9100 using the local user interface or through the Web client interface. The procedure for the local user interface varies somewhat depending on the series of your Document Centre. If you use the Web client user interface, the same procedure applies to both Document Centre series.

From the Local User Interface

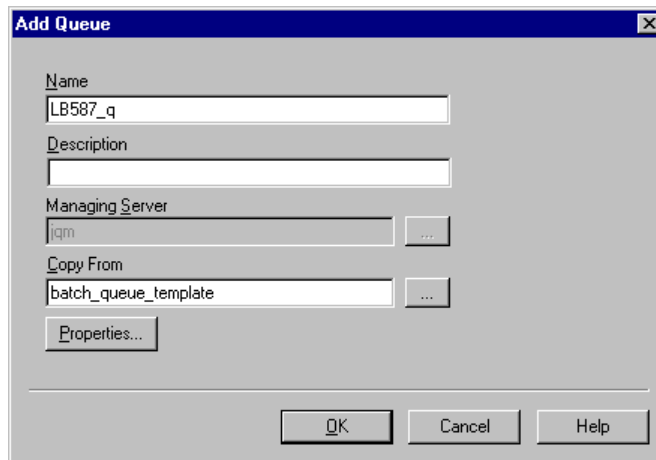| DC 420/425/432/440	DC 460/470/480/490
Enter the administration functions menu. 1. Press the **Access** button on the Document Centre UI. 2. Enter the user name #22222 and the password, then press **Enter**. 3. Press [**Print Setups**]. 4. Press [**Protocol Setups**]. 5. Press [**TCP/IP**]. 6. Press [**Additional Setups**]. 7. Press [**Port 9100**] then [**Enable**]. 8. Press [**LPD Enablement**] then [**Enable**]. 9. Press **Save** until the **Exit** button appears. Press **Exit** to initiate a Document Centre reboot.	Enter the administration functions menu. 1. Press the **Access** button on the machine UI. 2. Enter the user name 1111 and the password, then press **Enter**. 3. Press [**Connectivity and Network Setups**]. 4. Press [**Network Setups**]. 5. Press [**TCP/IP**]. 6. Press [**Port 9100 Printing**]. 7. Press [**Enable**], then **Save**. 8. Press [**TCP/IP Line Printer**]. 9. Press [**Enable**], then **Save**. 10. Press **Save** until the **Exit** button appears. Press **Exit** to initiate a Document Centre reboot.

From the Web Client User Interface

(DC 420/425/432/440 and DC 460/470/480/490)

1. Open a Web browser.
2. Enter the Document Centre IP address in the address bar and press **Go**.
3. When the Document Centre home page appears, click on the **Properties** link.
4. Select [**Connectivity**].
5. Select [**Protocols**].
6. Select [**Raw TCP/IP Printing**]. Ensure the **enabled** check box is checked.
7. Click **Apply New Settings** and enter the administrator login and password. A message appears indicating the machine requires a reboot for the changes to take effect.
8. Select [**LPR/LPD**]. Ensure **enabled** is checked and click **Apply New Settings**.
9. Access the **Status** tab and click **Reboot Machine** to make your changes take effect.

Dazel Server Configuration

Use Dazel Explorer to create a printer for the Document Centre.

1. Access the **Add Queue** dialog box and select [**batch_queue_template**] in the **Copy From** selection box.
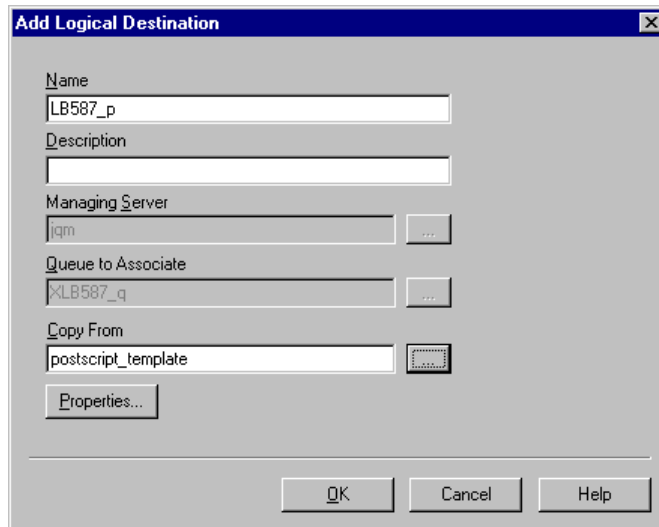

2. To add a printer device logical destination, access the **Add Logical Destination** dialog box:

   a. Select [**PostScript/PCL Printer**].

   b. In **Copy From**, select one of the following for a logical destination template:

      - postscript_template
      - postscript_duplex_template
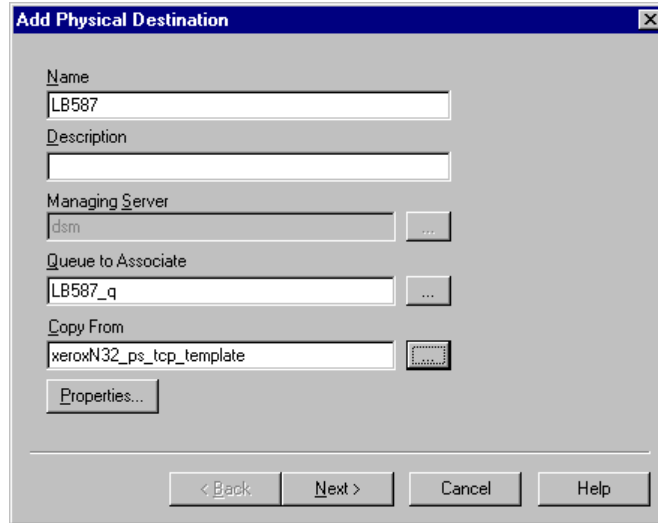   - pcl_template
      - pcl_duplex_template

3. To add a printer device, access the **Add Physical Destination** dialog box.

    a. Select [**Printer**] then [**PostScript**] or [**PCL**].

    b. Verify that the printer device queue you created appears in **Queue to Associate**.

4. In the **Copy From** field select one of the following:

    a. For a PS printer, select [**xeroxN32_ps_tcp_template**] for the physical destination template.

    b. For a PCL printer, select [**generic_PCL_parallel_template**] for the physical destination template.

5. In the **Connection Mode** dialog box, verify that TCP is the connection mode.

6. In the **Physical Connection Destination Mode** dialog box, enter the following:

- TCP as the connection mode

- 9100 as the TCP data port and the printer name (if resolvable at the server) or TCP/IP address as the TCP host

7. After you create the physical printer, configure the printer.

    a. Right-click on the physical printer icon under dsm in the Dazel Output Server Manager then select [**Properties**].

    b. Select the **Settings** tab, and change the Printer Model to pjl. Be sure to completely remove the checkmark in the [**Write Only Device**] checkbox, then select [**OK**].

    c. Before printing to the Document Centre, copy the logical printer into the Dazel Delivery Agent Destination Workspace Editor, then select [**Apply**].

Dazel Start Sheet Alteration

Unless you want each copy of a print job to have it's own Dazel banner page, you must alter the Dazel Start Sheet. Do the following steps:

1. On the Dazel server, use a text editor like Notepad to edit the full version of the Dazel Start sheet located in the usr/examples directory under the Dazel install directory.

   In the Start Sheet file, paste the following text after the first line:

   ```
   %%XRXbegin
   %%OID_ATT_START_SHEET OID_VAL_JOB_SHEET_USER
   %%XRXend
   ```

2. Save the file.

Product Caveats

Using a CentreWare Windows NT Printer Driver and the DC 420/432/440

- **Mulitiple copies:** Supported

- **Page size:** Supported with limitations imposed by specific applications.

- **Secure print:** Disable the Dazel banner sheet to allow a PostScript driver to support this feature. You are not required to disable the Dazel banner sheet to use this feature with a PCL driver.

- **Duplex, collated, uncollated, staple, Xerox banner sheet only, output bin, current page, range of pages, landscape/portrait orientation, and resolution:** All supported. Supports orientation with the same limitations as page size (an application specific limitation).

Dazel Driven Features for the DC 420/432/440

- **Copies:** Supported

- **Range of pages (from pages), number up (N-up printing) and scaling:** Supported in the PS driver, but not in the PCL driver.

- **Resolution:** Limited to 600 dpi for both languages.

- **Paper size and orientation:** Ignores the Dazel setting and uses the Xerox printer driver setting for both languages.

- **Output bin:** Always points to "main output bin" unless you use the Xerox driver.

- **Input tray:** Supported only when using the Xerox printer driver selection.

- **Start and end sheets:** Supported in both languages.

- **Separator pages:** Not supported.

- **Duplex/Tumble:** In the PCL driver, duplex defaults to simplex and the Xerox printer driver is required for duplex output. Tumble results in simplex pages printing tumbled, with the images rotated 180 degrees. In the PS driver, the default is simplex, and the Xerox printer driver is required for duplex.

Additional Information

The Xerox 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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