

Customer Tips

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... for the user

Printing to a Document Centre or WorkCentre Pro from Macintosh OS X 10.2.x

Purpose

This document describes how to print from Apple's OS X 10.2.x (Jaguar) to the Xerox Document Centre (DC) and WorkCentre (WC Pro) products. This document targets users with experience using a Macintosh operating system, in particular the OS X 10.2.x operating system. Xerox only supports printing in an environment with OS X 10.2.x or higher.

Note: See the section "Native Printing from Macintosh OS X 10.2.x," for details about print requirements

Current Document Centre and WorkCentre Software Available for Macintosh OS X 10.2.x

Xerox provides PPDs for the OS X 10.2.x operating system for the multifunction products indicated in the product box, some with limited functionality.

At this time, native AppleTalk Auto Setup for printing from OS X 10.2.x to the DCCS50 (Document Centre Color Series 50) and the DC 555/545/535 is not available. For these multifunction devices, you can manually select and setup AppleTalk printing or configure generic PPDs using LPR over TCP/IP. Functionality is limited. Contact your local support center for further information.

Xerox provides Document Centre and WorkCentre Macintosh custom drivers for OS 7.1 to OS 9.x environments. Full support is available when you print from OS 7.1 to OS 9.x using Document Centre or WorkCentre Macintosh custom drivers, however if you use these same drivers to print in OS X 10.2 Classic mode they are not supported.

Note: Xerox conducted tests in the OS X 10.2.x environment with Document Centre and WorkCentre Macintosh custom OS 9.x drivers in Classic mode. This environment is fairly stable but not supported.

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
x	DCCS 50

DC 4xx/5xx Mac OS X 10.2 PPD Features Table

The following table shows the features available when you use the Document Centre PPDs to print to a Document Centre in a Macintosh OS 10.2.x environment.

Caveats are indicated for some features where appropriate.

Printing Features	DC 440/ 432/425/420 PPD 1.2.0 on OS X 10.2x	DC 490/ 480/470/460 PPD 1.3.2 on OS X 10.2.x	DC 555/545/535 PPD 1.1.1 on OS X 10.2.x
Copy count	Yes	Yes	Yes
Collation	Yes	Yes	Yes
N-up	Yes	Yes	Yes
Duplex	Yes	Yes	Yes
Paper Tray Selection	Yes ¹	Yes	Yes
Choice of Resolution	Yes; 400x400 & 600x600 dpi	Yes; 600x600x1, 600x600x2, 1200x1200x1, & 1800x1800x1	Yes; 600x600x1, 600x600x2, 1200x1200x1, & 1800x1800x1
Paper Type	Yes	Yes	Yes
Paper Color	Yes	Yes	Yes
Output Bin	Yes, Top Tray, Finisher & Mailboxes.	Yes, Top Tray or Finisher.	Yes, Booklet Maker Bin, Lower Stacker, Sid Output Stacker, Top Output, Upper Stacker
Staple	Yes, 1 staple	Yes, 1 and 2 staple	Yes, 1 or 2 staple (depends on finisher)
Request Offset	No	Yes	Yes
Draft Mode	No	Yes	Yes
Transparency Separators	No	No	No
Banner Sheet	Yes	Yes	Yes
Covers (Front/Back)	No	No	No
Booklet	No	No	No
Tray Switching (Apple Feature)	No	No	No
Fold Options	N/A	Yes	No
Accounting	Yes	Yes	Yes
Job Type (Sample/Secure/DelayPrint/Fax/Delay Fax)	No	No	No
Image Quality	No	Yes	Yes
Hole Punch	No	No	Yes (Optional)

¹ In the Print Center, if you select **Printers>Show>Installable Options** then select the envelope tray, other trays may become unavailable (grayed out). To avoid this issue, deselect the envelope tray when you are not using it. Apple's development is currently addressing this Macintosh OS issue.

WC Pro Mac OS X 10.2 PPD Features Table

The following table shows the features available when you use the WorkCentre PPDs to print to a WorkCentre Pro in a Macintosh OS X 10.2.x environment.

Caveats are indicated for some features where appropriate.

Printing Features	WCP 32/40 Color PPD on OS X 10.2.x	WCP 35/45/55 PPD on OS X 10.2.x	WCP 65/75/90 PPD on OS X 10.2.x
Copy count	Yes	Yes	Yes
Collation	Yes	Yes	Yes
N-up	Yes	Yes	Yes
Duplex	Yes	Yes	Yes
Paper Tray Selection	Yes	Yes	Yes
Choice of Resolution	Yes, 600x600, 1200x1200, 1800x1800 dpi	Yes, 600x600, 1200x1200, 1800x1800 dpi	Yes; 600x600, 1200x1200, 1800x1800 dpi
Paper Type	Yes	Yes	Yes
Paper Color	Yes	Yes	Yes
Output Bin	Yes, Side Output, Top Output, Stacker, Upper Tray, Lower Tray, Booklet Maker Bin	Yes, Side Output, Top Output, Stacker, Upper Tray, Lower Tray, Booklet Maker Bin	Yes, Main Tray, Top Tray
Staple	Yes, 1 staple, 2 staple, multiple staples	Yes, 1 and 2 staple, multiple staples	Yes, 1 staple, 2 staple
Request Offset	Yes	Yes	Yes
Draft Mode	Yes	Yes	Yes
Transparency Separators	No	No	No
Banner Sheet	Yes	Yes	Yes
Covers (Front/Back)	No	No	No
Booklet	Yes	Yes	Yes
Tray Switching (Apple Feature)	No	No	No
Fold Options	Yes, Hole Punch, Booklet Fold, Booklet Fold + Staple	Yes, Hole Punch, Booklet Fold, Booklet Fold + Staple	Yes, C-Tri, Z-Tri, Booklet Fold, Booklet Fold + Staple
Accounting	Yes	Yes	Yes
Job Type (Sample/Secure/DelayPrint/Fax/Delay Fax)	No	No	No
Image Quality	Yes	Yes	Yes
Hole Punch	Yes	Yes	No
Watermark	Yes	Yes	Yes

Installing and Configuring a Custom Macintosh Driver Using OS X 10.2 Classic Mode

To perform the safest DC or WCP custom Macintosh driver installation, access OS 9.x (also referred to as Classic mode) from OS X 10.2.x. To do so, use the following procedure. Your OS X 10.2.x installation is not affected.

1. In OS X 10.2.x, select the **Apple** menu, and then select **System Preferences**.
2. Select **Startup Disk**.
3. Select **Select the System Folder to use for Starting up your computer** then select the **OS 9** system folder.
4. Click **Restart**. Your Macintosh restarts using the OS 9 version contained in OS X 10.2.x.
5. Install the desired Xerox DC or WC custom Macintosh driver and configure it in **Chooser**.
6. Close **Chooser**.
7. Select the **Apple** menu, then select **Control Panels>Startup Disk**.
8. Select **Hard drive disk**, then select the **OS 10.x** system folder.
9. Click **Restart**.
10. Your Macintosh restarts in OS X 10.2.x.

When you launch a native OS 9 application, Classic Mode loads automatically. When you select **File>Print** in the native OS 9 application, the Xerox custom Macintosh printer driver that you configured in the OS 9 **Chooser** becomes available with all the extended features.

Note: The Xerox custom Macintosh driver is not native to OS X 10.2.x. If you launch a native OS X 10.2.x application, the only printers available are those configured in the OS X 10.2.x Print Center.

Native Printing from Macintosh OS X 10.2.x

The following information applies to native printing using AppleTalk in OS X 10.2.x:

- DC 440/432/425/420 with ESS versions later than 3.2.6s and DC 490/480/470/460 with ESS versions later than 19.05.026 support Auto Setup and printing using AppleTalk in OS X 10.2.x.

OS X 10.2.x tries to communicate with the printer to find out what PPD to use. The ESS versions prior to the ones mentioned above for the 4xx family do not support this query. The query fails and generates a -9621 error. As a workaround, you can select the PPD for AppleTalk manually.

- All versions of the DC 555/545/535 and the DCCS 50 support printing using AppleTalk in OS X 10.2.x, but do not support Auto Setup of the PPD. The Print Center generates a message that it cannot find the correct PPD and you must manually select the correct PPD.
- All versions of the WCP family support Auto Setup and printing using AppleTalk in OS X 10.2.x.

To print in an OS X 10.2.x environment, customer support recommends that you use either the generic PPDs available on www.xerox.com or the Macintosh OS X 10.2 PPDs designed for the DC and WCP products. We do not recommend you use the custom PPDs developed for the custom OS 9.x drivers with the OS X 10.2.x drivers. If you find that this configuration works for you, use it at your own risk. Xerox does not support this configuration if issues occur.

CAUTION: Hardware damage can occur if all the following coincide:

- Macintosh OS 10.1 or earlier platform
- DC 490/480/470/460 with a Multi-Function Finisher (MFF)
- The following Macintosh OS 10.1 printer driver options selected:
 - create booklet (called booklet fold in the PPD)
 - staple
 - collate
 - multiple copies

The PPD that Xerox provides for the DC 490/480/470/460 also includes a collate option. If you use the collate option in the Print Center instead of the collate feature in the DC 490/480/470/460 PPD, the Document Centre receives an incorrect string of code that it interprets as a booklet fold/staple job of one copy instead of spooling the separate copies. Multiple copies of the booklet are stapled together as one. Hardware damage could occur if the Document Centre attempts to staple more than 20 sheets (the stapled sheet maximum).

Xerox recommends that you upgrade to OS 10.2.x, which corrects this issue.

If you have an MFF installed on your DC 490/480/470/460, DO NOT use the OS 10.1 printer driver booklet fold option. Upgrade the operating system to OS 10.2.x to use the booklet fold option.

Additionally, the collate feature may not work as expected for any Document Centre OS X 10.2.x PPD in OS 10.1. This issue is fixed in OS.10.2 and above.

Using AppleTalk to Print from OS X 10.2.x

To use AppleTalk to print AppleTalk from OS X 10.2.x, follow the instructions below.

1. Download the latest driver from Xerox.com appropriate for your DC or WCP. The download contains an installer package.
2. Follow the instructions for the installer package. The installer package only works on OS 10.2.x and above. When you encounter the Authorization screen "You need an Administrative password to install the software," do the following:
 - a. Click the padlock button at the bottom left-hand side of window. An authentication window appears.
 - b. Enter the correct administrative username and password.
 - c. Continue following instructions to complete the install.
3. Ensure that your multifunction device has AppleTalk printing enabled.
4. To access the Print Center, open the hard drive icon and select the **Applications** icon then the **Utilities** folder.
5. Double click on the **Print Center** icon.
6. Click **Add Printer**.
7. In the top pulldown, ensure that AppleTalk is selected.
8. The second pulldown displays the zone. If you don't see the zone you want, click the pulldown and select **AppleTalk** network. Browse to find the desired AppleTalk zone.
9. A list of available printers in the selected zone appears. Select the desired printer and click **Add**. The printer appears bolded in the Printer List to indicate it as the default printer.

Note: Check that **Auto Select** is displayed in the **Print Model** pulldown so that the correct PPD automatically configures with the printer.

10. Close the Print Center.

Notes and Caveats for Document Centre and WorkCentre Pro Printing Using OS 10.2.x

The following notes and caveats are the result of Xerox testing in OS X 10.2.x. Please check Apple's release notes for more information on any developments regarding printing with OS X 10.2.x.

- Xerox Document Centre PPDs are bundled with the first release of OS 10.2. The PPDs are for the DC 340/332/230/220, 265/255/240, 440/432/425/420 and 490/480/470/460 but not the DC 555/545/535. These PPDs are valid but you may wish to use the most current versions available for all DCs and WCPs on Xerox.com.
- To view options installed in the Print Center, select **Printer>Show Info**, then **Installable Options** from the pull-down menu.
- A JCL tab on the Printer Features menu allows you to turn off the banner sheet.
- DC 340/332/230/220only. You can select accounting as an option on the JCL tab, but a pop-up window to enter User ID or Client ID does not appear. The PPD/Print Center automatically sends the Document Centre the information "genericppd" for both User ID and Client ID. You cannot enter any information manually. This is by design and works as intended. You can manually edit the user ID and password. See the section "Modifying a PPD for Accounting" for more information.
- When you add a printer to the OS X 10.2.x Print Center, the default printer is bolded and the other printers in the list appear gray. This differs from the Print Center in 10.1 where the default printer was identified by a dot on its left.
- If you select the envelope tray in Installable Options, other trays may become unavailable (grayed out). For a workaround, select **Printer>Show Info**, then **Installable Options** from the pull-down menu and deselect the envelope tray when it's not in use. Apple's development is currently addressing this Macintosh OS issue.

Printing LPR over TCP/IP from OS X 10.2.x

If you setup any multifunction device with this configuration, functionality is limited to **basic printing**. That is, you can only select basic features such as number of copies, duplex, stapling, paper tray selections, and type of paper. PPD features that you are able to configure in the OS 9.x Chooser are not available in the OS X 10.2.x Print Center software. Such features as fax, secure print, and sample print are not available using the OS X PPD

LPR over TCP/IP allows you to select the appropriate generic PPD for your multifunction device. If necessary, you can copy the PPD to the client running OS X 10.2.x in the directory: /Library/Printers/PPDs/Contents/Resources/<language code>.lproj. See "Using AppleTalk to Print from OS X 10.2" earlier in this document for more details about the installer package.

When you make a manual selection, the following PPD languages are available:

<u>Language:</u>	<u>ISO code:</u>
Brazilian Portuguese	pt_BR
Danish	a
Dutch	nl
English	en
Finnish	fi
French	fr
German	de
Italian	it
Norwegian	no
Portuguese	pt
Swedish	sv

To set up an OS X 10.2.x printer to use LPR

1. Access the directory [hard drive]/Applications/Utilities and double-click the **Print Center** application icon, click **Add Printer** and select **LPR Printers using IP** from the **Directory Services** drop-down menu.
2. Enter the IP address of the multifunction device. Make sure to clear the **Use Default Queue** box and enter lower-case **lp** for the queue name.

Typically, when setting up LPR printers, the queue name "lp" is used. OS X 10.2 does not allow multiple queues named "lp." At this time, only DC 4xx and 5xx products allow you to use queue names other than "lp." In an environment with 2xx, 3xx and 4xx products, give the 4xx products queue names other than "lp." When setting up the LPR printers, select **Use default queue on printer** to avoid the problem of multiple lp queues.

3. Click on the Printer Model listing and select the appropriate generic PPD for your multifunction device, then press the **Add** button.

Note: Select the PPD carefully. If you make a mistake, delete the printer and then add it again. To verify the current PPD, check the print summary box when printing.

After you set up the printer, it becomes the default (bolded). When printing from any application (for instance, Acrobat Reader) this printer is automatically selected. You can select any other printer configured in the Print Center from the drop down list next to the default printer.

Modifying a PPD for Accounting (applies only to DC 340/332/230/220 and DCCS 50)

You can manually modify the OS X 10.2.x generic PPD for the DC 340/332/230/220 and DCCS 50 so that the user ID and client ID are customized. The default values for user ID and client ID are GENERICPPD. There are some important caveats to keep in mind should you decide to modify the PPD.

- Xerox does not support issues caused by modified PPDs. Xerox only supports issues with PPDs that retain the default settings included in the PPD's official release.
- There can only be one PPD present on the workstation at a time. If there are multiple users on one workstation, the default or modified user ID and password applies to all user of the workstation.

How to modify the PPD

1. After the PPD is installed you can find it in this location:
/Library/Printers/PPDs/Contents/Resources/<language code> (English – en.lproj)
directory. The PPD may be zipped with a “.gz” extension. Double-click on the file and it expands into the directory as a .PPD file.

Note: You may have to download Stuffit Expander for Mac OS X 10.2.x in order to expand the .gz file. To download Stuffit Expander's free trial version go to <http://www.aladdinsys.com> and click on downloads.

2. Double click on the .PPD file and the application TextEdit automatically opens the file.
3. Scroll down and look for the following section in the PPD:

```
*%                               Generic Accounting

*JCLOpenUI *JCLAccounting/Accounting: Boolean
*OrderDependency: 10.2 JCLSetup *JCLAccounting
*DefaultJCLAccounting: False
*JCLAccounting True/Enabled: "@PJL COMMENT
OID ATT ACCOUNTING INFORMATION
<22>GENERICPPD | 042GENERICPPD<22><0A>"
*JCLAccounting False/Disabled: ""
*JCLCloseUI: *JCLAccounting
```

3. The bolded line of code above is the line to modify. Keep in mind that the text GENERICPPD is the only text you want to change. For example, to use the the user name ThomasT and the password Tom123, the modified would look like:

```
<22>ThomasT | 042Tom123<22><0A>"
```
4. After modifying the PPD, save the file and overwrite the existing PPD.
5. To make the changes in the PPD take affect, open the Print Center and delete the printer that currently uses the PPD you modified. Close the Print Center. Re-open the Print Center and configure the printer again with the modified PPD. The changes are in affect and the user name ThomasT and password Tom123 pass as accounting information to the server.

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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