# Xerox Device Compatibility Packs Customer Tip



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### Preface

A Device Compatibility Pack (DCP) is a compressed file archive containing product specific data including device images, driver constraints, device capabilities, etc.

Xerox print drivers rely on DCPs and their contents to know how to print to specific products. The Xerox<sup>®</sup> Global Print Driver<sup>®</sup> will install one DCP for each product it supports. To add support for a new product, the product's DCP must be installed. A printing device which the Global Print Driver does not have a DCP for is considered an unsupported model and will default to Basic mode.

Device Compatibility Pack updates provide Xerox customers a means of acquiring product data (e.g., device capabilities, constraints, images, etc.), for a new device without having to download and install a new Global Print Driver. This document will serve as a guide to systems administrators and peer-to-peer clients in the process of obtaining and installing DCP updates for the Global Print Driver.

Other Tips about Xerox<sup>®</sup> multifunction devices are available at the following URL: http://www.office.xerox.com/support/dctips/dctips.html

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### **DCP** Requirements

DCP archives can be downloaded over the Internet from xerox.com or, if Internet access is not available, they can also be downloaded from a Windows file share. For instructions on how to set up the file share see the DCP File Share section below. To perform a DCP update the following requirements must be met.

- The account performing the DCP update must have administrative permissions.
- Clients and print servers must have access to either the Internet or a local area network.
- Print queues must connect to the printer through a TCP/IP port and bidirectional communication must be enabled.
- The Global Print Driver must be the current general release on Xerox.com for the DCP to be operational. The general release is available at: <a href="http://www.support.xerox.com/support/global-printer-driver/downloads/">http://www.support.xerox.com/support/globalprinter-driver/downloads/</a>
- For the Global Print Driver to recognize a DCP archive the archive must be from the same release as the Global Print Driver and it must also have a newer version.

For Example: Xerox<sup>®</sup> Global Print Driver version 5.520.n is only compatible with DCP 5.520.n+1 or 5.520.n.1

**Note:** Installing a DCP will not change the version of the Global Print Driver and therefore WHQL certification will remain intact.

# Performing a DCP Update

DCP updates are automatically invoked when creating a print queue with the Xerox Installer, or the Add Printer Wizard. They can also be invoked post-installation with the **Xerox Update** button found in Printer Properties – Administration.

#### Automatic DCP Updates

When a print queue is created with the 5.347.n or higher Global Print Driver it will communicate with the target printer to determine the model. If the Global Print Driver connects to a device, it doesn't recognize, a DCP update is automatically invoked. The driver will check either Xerox.com or the DCP file share for a compatible DCP archive. Automatic DCP updates will occur in the following scenarios.

- When an administrator creates a Global Print Driver queue with the Add Printer Wizard.
- When a print queue is created with the Xerox Installer.
- When an administrator switches a print queue to the latest version of the Global Print Driver.
- When an administrator switches a Global Print Driver queue to a new TCP/IP port.

**Caution:** The Global Print Driver will not prompt the administrator if an automatic DCP update fails. To see if the update was successful check the Global Print Driver configuration setting on the Administration tab in Printer Properties. If the update failed the driver will be in **Basic Printing Mode**.

#### Manual DCP Updates

DCP updates can be performed in the Global Print Driver by an administrator at any time with the **Xerox Update** button found in Printer Properties.

#### Manual Update Instructions

- 1. Open the Devices and Printers folder.
- 2. Right-click on the Global Print Driver<sup>®</sup> queue and select Printer Properties.
- 3. Select the Administration tab.
- 4. Select the **Xerox Update** button.
- 5. The driver will ask if you would like to apply the update to any similar print queues.

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6. Select **Yes** to apply the DCP update to all Global Print Driver queues connected to the same printer. Select **No** to apply the DCP update only to the current print queue.



- 7. Select OK to exit the driver and apply changes.
- 8. Now right-click on the Global Print Driver queue and select Printer Properties.
- 9. Select the Administration tab.
- 10. Verify that the driver displays the correct printer model in Configuration.
- 11. Select OK to close Printer Properties.

The updated print queue(s) will now have full functionality.

**Note:** If no DCP was available the Global Print Driver will display a message, **No Update Found**. The print queue will continue to work with basic functionality.

### The DCP File Share

If Internet access is not available a system administrator can create a Windows file share and place all required DCP files in it.

Once a DCP file share is set up it becomes the default way to perform DCP updates and DCP archives will no longer be downloaded from xerox.com. The DCP file share should be set up before installing or upgrading to the latest Xerox<sup>®</sup> Global Print Driver.

To use a DCP file share any PC that performs updates must be given the path to it. This is done by adding a key to each PC's registry.

HKEY\_LOCAL\_MACHINE\SOFTWARE\Xerox\PrinterDriver\V5.0\DeviceCompatibilityPack

A String Value called **RepositoryUNCPath** is placed in the key that contains the full path to the DCP file share. Any client or server tasked with creating or upgrading Global Print Driver print queues will need this key.

**Caution:** Before proceeding with these changes we highly recommend that the registry be backed up and the changes be tested in each unique environment prior to rollout. Xerox Corporation is not responsible for any changes you may make to your operating system.

#### Setting up a DCP File Share

- 1. Download the required files, see the **Obtaining DCP File Share Files** section below.
- 2. Place the following items into either a local or network directory.
  - a. <product>.cab (a .cab file is needed for each product that requires an update)
  - b. Xerox\_Product\_Mapping.xml (only one file is needed for all products)

Important: A user performing DCP updates must have at least read permissions.

3. Share the directory.

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To create the registry key:

- 4. Open the Registry Editor and add the following key: HKEY LOCAL MACHINE\SOFTWARE\Xerox\PrinterDriver\V5.0\DeviceCompatibilityPack
- 5. Inside the key create a new String Value and name it RepositoryUNCPath
- 6. Modify the key with the full path to the DCP file share.

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Oracle	New S	tring Value	
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#### **Obtaining DCP File Share Files**

All files required to setup the DCP file share are listed below.

- First download the latest Product Mapping file available at Xerox\_Product\_Mapping.xml
- Then download the product cab file for each product you want to update.
- Place these files in the directory recorded in RepositoryUNCPath.

**Note:** The Xerox Product Mapping XML file is compatible with all releases of the Xerox<sup>®</sup> Global Print Driver.

DCPs compatible with Xerox® Global Print Driver 4.0, version 5.548.n

Xerox® EC7836/EC7856 Multifunction Printer

DCPs compatible with Xerox<sup>®</sup> Global Print Driver 3.9, version 5.520.n

Xerox® VersaLink B600/B610, B605/B615 Printer Xerox® VersaLink C500/C600 Printer, C505/C605 Color Multifunction Printer Xerox® VersaLink B7025/B7030/B7035 Multifunction Printer Xerox® VersaLink C7000/C7020/7025/7030 Color Multifunction Printer Xerox® AltaLink B8045/B8055/B8065/B8075/B8090 Multifunction Printer Xerox® AltaLink C8030/C8035/C8045/C8055/C8070 Color Multifunction Printer

DCPs compatible with Xerox<sup>®</sup> Global Print Driver 3.8, version 5.496.7.n

Xerox<sup>®</sup> Phaser 3330 Printer Xerox<sup>®</sup> WorkCentre 3335/3345 Multifunction Printer Xerox<sup>®</sup> Phaser 6510 Printer Xerox<sup>®</sup> WorkCentre 6515 Multifunction Printer DCPs compatible with Xerox<sup>®</sup> Global Print Driver 3.5, version 5.404.n

Xerox<sup>®</sup> Color 800i/1000i Press

DCPs compatible with Xerox<sup>®</sup> Global Print Driver 3.4, version 5.377.n

Xerox<sup>®</sup> Color C60/C70 Printer

Xerox<sup>®</sup> Color C60/C70 FreeFlow<sup>®</sup> Print Server

Xerox<sup>®</sup> ColorQube<sup>®</sup> 8580/8880 Printer

Xerox<sup>®</sup> WorkCentre<sup>®</sup> 3655 Multifunction Printer

Xerox<sup>®</sup> WorkCentre<sup>®</sup> 4265 Multifunction Printer

Xerox® WorkCentre® 6655 Color Multifunction Printer

DCPs compatible with Xerox® Global Print Driver 3.3, version 5.347.n

Xerox<sup>®</sup> Phaser<sup>®</sup> 4622 Printer

DCPs compatible with Xerox® Global Print Driver 3.2, version 5.303.n

Xerox<sup>®</sup> Color 550/560/570 Production Printer Xerox<sup>®</sup> Color 550/560/570 Xerox<sup>®</sup> FreeFlow<sup>®</sup> Print Server Fuji Xerox<sup>®</sup> Color 550/560/570 Production Printer Xerox<sup>®</sup> D136 Copier/Printer Xerox<sup>®</sup> D136 Copier/Printer Xerox<sup>®</sup> FreeFlow<sup>®</sup> Print Server Xerox<sup>®</sup> Color 8250 Production Printer Xerox<sup>®</sup> Phaser<sup>®</sup> 3610 Printer Xerox<sup>®</sup> WorkCentre<sup>®</sup> 3615 Multifunction Printer

# **DCP Troubleshooting**

#### Print Queue Troubleshooting

If a Global Print Driver queue still opens in basic print mode after a DCP update has been applied, you may need to perform the DCP update again.

Caution: Closing Windows applications may be required to complete the following steps.

- 1. Right-click on the Xerox<sup>®</sup> Global Print Driver queue and select Printer Properties.
- 2. Select the Administration tab.
- 3. If the driver still displays **Basic Printing Mode**, then the DCP update was not successfully applied to the queue.
  - a. Try the Xerox Update button again.
  - b. If the update does not work, then refer to either the Connectivity Troubleshooting or if you are using a DCP file share, then review the File Share Troubleshooting section.
- 7. If the driver displays the correct printer model in Configuration select OK to close Printer Properties and finish applying the DCP update.

#### Connectivity Troubleshooting

The Global Print Driver must have bi-directional communication enabled so it can detect the printer model and download the correct DCP. Ensure that the Global Print Driver is using a standard TCP/IP port connecting it to the correct printer.

If you are not using a DCP file share verify the PC has Internet access. Ensure the PC is configured with the correct proxy settings. If internet access is not available, you will need to setup a DCP file share.

#### File Share Troubleshooting

If updates from a DCP file share are not working, check the status of the file share.

- Browse to the file share and check the permissions of the share. The account performing DCP updates must have at least read access to the directory.
- Compare the version of the Xerox<sup>®</sup> Global Print Driver<sup>®</sup> to the version of the product cab file.
  - Right click on the print queue and select printer properties.
  - From the Configuration tab select the 'About' box. The About box contains the print driver version. For example, the 3.9 Xerox<sup>®</sup> Global Print Driver<sup>®</sup> has a version of 5.520.6.0.
  - Check the version of the product cab files. The version number is contained within the cab's filename. For example: NSRF\_3.9\_5.520.12.1.cab has a version number 5.520.12.1.
  - Now compare the two version numbers. The product cab's version must be from the same release and newer than the driver. In this example, the driver and product cab are from the same release, 5.520.n. The product cab also has a newer version, 5.520.12.1. This satisfies the requirements.
- Download the latest Xerox product mapping XML file and place it in the file share.

- Check the registry key:
  - Start regedit.exe and open the registry of the client or server tasked with performing the DCP update.
  - Verify the DeviceCompatibilityPack key exists.
  - Next verify that the RepositoryUNCPath string has the correct path to the file share.

If none of these troubleshooting steps put the Global Print Driver in the correct configuration contact Xerox Support. You can reach Xerox Customer Support at <a href="http://www.xerox.com">http://www.xerox.com</a> or by calling Xerox Support in your country.

### **DCP Updates in Network Environments**

This section describes how to enable DCP updates in common network printing environments.

#### Point and Print DCP Updates

In a Point and Print environment an administrator must perform DCP updates on a print server. The server will then "push" the update to client PCs that are connected to the print queue. The next time a user accesses the driver it will automatically install the new DCP content on the client's hard disk. Clients cannot and do not need to update their own print queues.

- If you plan to use a DCP file share, ensure that the print server's registry includes the DeviceCompatibilityPack registry key and can access the file share.
- For remote DCP updates the client performing the update must also have access to the DCP file share.



### Citrix XenApp DCP Updates

Citrix XenApp enables users to connect to hosted desktops and applications. Citrix can create two different types of print queues for users in a hosted session: auto-created print queues and session print queues. Auto-created print queues are redirected from printers the user has installed on their client. Session printers are redirected from print queues installed on a print server.

- For auto-created print queues administrators must perform the DCP update on client print queues.
- For session print queues administrators must perform the DCP update on print server queues.
- For both auto-created and session print queues Citrix XenApp servers must also have access to DCP files. Either through the Internet or a DCP file share.





#### **Citrix Session Print Queues**

Once Citrix creates a print queue in a hosted session Citrix will cache printer information on the server. Ensure DCP updates are applied before users connect to a Citrix hosted session. DCP updates performed after the user has logged out of their first session will not be applied to any future sessions.

**Caution:** DCP updates cannot be performed while in a hosted session. Print queues inside a hosted session exist only for that session. When a user logs out Citrix automatically deletes these print queues.

**Note:** The Global Print Driver must be added to the Citrix server. Citrix will use this driver to create redirected print queues in hosted sessions.

### Microsoft Failover Cluster DCP Updates

A clustered Windows print server is a group of independent computers called nodes working together to provide a print server on a quorum. If a single node were to fail, the quorum will be transferred to the next node in the sequence.

In a Failover Cluster environment DCP updates are performed on Global Print Driver print queues in the quorum. Use Failover Cluster Administrator to access print queues on the quorum and perform the DCP update.

**Note:** In a Failover Cluster environment DCP updates from Xerox.com are not supported. DCP updates can only be applied using a DCP file share.

In a Failover Cluster environment, the administrator must add the DeviceCompatibilityPack registry key to the following PCs for DCP updates to properly transfer to the next node during a failover event.

- Each node in the clustered print server so that each is aware of the path to the file share.
- Any client used to manage the clustered print server and invoke DCP updates on the quorum.

#### Microsoft IPP Printer Connection DCP Updates

Microsoft Internet Printing Protocol (IPP) enables administrators to connect to an IPP print queue through an HTTP port. DCP updates will not propagate through an HTTP port, therefore administrators must perform the DCP update on both the print server and all clients.

 If you plan to use a DCP file share, ensure that the print server and all clients registry includes the DeviceCompatibilityPack key and can access the file share.





#### Microsoft Terminal Services DCP Updates

Microsoft Terminal Services allows users to redirect their print queues to a remote desktop or application using Terminal Services Easy Print. DCP updates should be performed by administrators on clients or print servers before users connect to hosted resources. In this environment DCP updates applied to the user's print queues will be redirected to the remote session.

• If you plan to use a DCP file share in a Microsoft terminal environment, ensure that each client has the DeviceCompatibilityPack registry key and can access the file share.

**Caution:** DCP updates cannot be performed while a remote session is active.

