

Device Compatibility Pack Updates Customer Tip



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Overview

Device Compatibility Pack (DCP) updates provide our 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[®] or Mobile Express Driver[®]. This effectively is a means of updating the print driver without re-installing or breaking WHQL (Windows Hardware Qualification Lab) certification.

Users of the Global Print Driver[®] or Mobile Express Driver[®] would no longer be required to download and install new drivers when new devices are acquired. This document will serve as a guide to systems administrators for the process of obtaining and installing DCP updates for the Global Print Driver[®] and Mobile Express Driver[®] running on Microsoft Windows.

DCP Requirements

DCPs 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. In order to perform a DCP update the following requirements must be met.

- The account performing the DCP update must have administrative rights/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.
- In order for the Global Print Driver to recognize a DCP the archive must be from the same release as the Global Print Driver and it must also have a newer version. For Example:

Xerox® Global Print Driver version 5.347.n is only compatible with DCP 5.347.n+1 or 5.347.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.

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 in an attempt 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 Options tab in Printer Properties. If the update did not succeed 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 Printer and Faxes folder (Windows Vista, and Windows Server 2008) or the Devices and Printers folder (Windows 7, Windows 8/8.x, Windows 10, Windows Server 2008 R2, Windows Server 2013 R2, and Windows Server 2016).
- 2. Right-click on the Xerox[®] Global Print Driver[®] 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. Select 'Yes' to apply the DCP update to all Global Print Driver queues connected to the same printer, for example the a Xerox WorkCentre Pro 40C. Select 'No' to apply the DCP update only to the current print queue.



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

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.

Any client or server tasked with creating or upgrading Global Print Driver print queues will need the following key added to the registry:

HKEY_LOCAL_MACHINE\SOFTWARE\Xerox\PrinterDriver\V5.0\DeviceCompatibilityPack

A String Value called RepositoryUNCPath is placed in the key. This value reflects the full path to the DCP file share.

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)

3. Share the directory. (Important: A user performing DCP updates must have at least read permissions)



- 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.



Obtaining DCP File Share Files

All files required to setup the DCP file share are linked below. First download the Xerox_Product_Mapping.xml. Then download the product cab file for each product you want to update. Place these files in the path recorded in RepositoryUNCPath.

The Xerox Product Mapping XML file is compatible with all releases of the Xerox[®] Global Print Driver. If you are downloading a new DCP archive please download the latest Product Mapping file available at <u>Xerox Product Mapping.xml</u>.

DCPs compatible with Xerox[®] Global Print Driver 3.9, version 5.520.n

Xerox® WorkCentre® Pro C2128/C2636/C3545

Xerox[®] WorkCentre[®] Pro 32/40C

Xerox[®] WorkCentre[®] Pro 75/90

DCPs compatible with Xerox[®] Global Print Driver 3.8, version 5.496.7.n

Xerox® WorkCentre® Pro C2128/C2636/C3545 Xerox® WorkCentre® Pro 32/40C Xerox® WorkCentre® Pro 75/90 Xerox® Phaser 3330 Xerox® WorkCentre 3335/3345 Xerox® Phaser 6510

Xerox® WorkCentre 6515

DCPs compatible with Xerox[®] Global Print Driver 3.7, version 5.469.n

Xerox® WorkCentre® Pro C2128/C2636/C3545 Xerox® WorkCentre® Pro 32/40C Xerox® WorkCentre® Pro 75/90

DCPs compatible with Xerox[®] Global Print Driver 3.6, version 5.433.n

Xerox® WorkCentre® Pro C2128/C2636/C3545 Xerox® WorkCentre® Pro 32/40C Xerox® WorkCentre® Pro 75/90

DCPs compatible with Xerox[®] Global Print Driver 3.5, version 5.404.n

Xerox® Color 800i/1000i Press

Xerox® WorkCentre® Pro C2128/C2636/C3545

Xerox[®] WorkCentre[®] Pro 32/40C

Xerox[®] WorkCentre[®] Pro 75/90

DCPs compatible with Xerox[®] Global Print Driver 3.4, version 5.377.n

Xerox[®] Color C60/C70

Xerox[®] Color C60/C70 FreeFlow® Print Server

Xerox[®] ColorQube[®] 8580/8880

Xerox® WorkCentre® Pro C2128/C2636/C3545

Xerox[®] WorkCentre[®] Pro 32/40C

Xerox[®] WorkCentre[®] Pro 75/90

Xerox[®] WorkCentre[®] 3655

Xerox[®] WorkCentre[®] 4265

Xerox® WorkCentre® 6655

DCPs compatible with Xerox [®] Global Print Driver 3.3, version 5.347.n
Xerox [®] WorkCentre [®] Pro C2128/C2636/C3545
Xerox [®] WorkCentre [®] Pro 32/40C
Xerox [®] WorkCentre [®] Pro 75/90
Xerox® Phaser® 4622
DCPs compatible with Xerox [®] Global Print Driver 3.2, version 5.303.n
Xerox [®] WorkCentre [®] Pro C2128/C2636/C3545
Xerox [®] WorkCentre [®] Pro 32/40C
Xerox [®] WorkCentre [®] Pro 75/90
Xerox [®] Color 550/560/570 Printer
Xerox [®] Color 550/560/570 Xerox [®] FreeFlow [®] Print Server
<u>Fuji Xerox® Color 550/560/570</u>
Xerox [®] D136 Copier/Printer
Xerox [®] D136 Copier/Printer Xerox [®] FreeFlow [®] Print Server
Xerox [®] Color 8250 Production Printer
Xerox [®] Phaser [®] 3610
Xerox [®] WorkCentre [®] 3615

DCP Troubleshooting

When an administrator creates a print queue using the latest version of the Global Print Driver it may go into 'Basic Printing Mode'.

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 open Printer Properties and select 'OK' to finish applying the update.

Caution: Closing applications may be required in order to complete the following steps successfully.

- 1. Right-click on the Xerox[®] Global Print Driver queue and select Printer Properties.
- 2. Select the Administration tab.
- 3. Verify that the driver displays the correct printer model in Configuration.
- 4. If the correct model is displayed select OK to close Printer Properties and finish applying the DCP update.
- 5. If the driver still displays 'Basic Printing Mode' in configuration then the DCP update was not applied to the queue. Try the 'Xerox Update' button again. See the Connectivity Troubleshooting section to check for connectivity issues. If you are using a DCP file share then review the File Share Troubleshooting section.

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 and bi-directional communication is enabled.

If you are not using a DCP file share check and see if 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 you are using a DCP file share first 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.
- Check the version of the Xerox[®] Global Print Driver[®] you are trying to install.
 - 1. Right click on the print queue and select printer properties.
 - 2. From the Configuration tab select the 'About' box.
 - 3. Check the version of the product cab files. The version number is contained within the cab's filename. For example: WMOH_3.3_5.347.6.1.cab has a version number 5.347.6.1.
 - 4. 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, 5.347.n. The product cab also has a newer version, 5.347.6.<u>1</u>. This satisfies the requirements.
- Download the latest Xerox product mapping XML file and place it in the file share.
- 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 steps puts the Global Print Driver in the correct configuration contact Xerox Support.

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.

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 Client (User) Citrix Server Client (Admin) DCP File Share Citrix Session Print Queues

Citrix Auto-Created Print Queues



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 in order 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 users to connect to print queues through a web browser. In this environment administrators apply DCP updates on print servers similar to a point and print environment.

• 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.

Microsoft IPP allows administrators or power users to connect to an IPP print queue through an HTTP port. DCP updates will not propagate through an HTTP port. A DCP update performed on the printer server will not propagate to these users. Administrators and power users who use HTTP ports must perform DCP updates on their own clients.



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.

Novell iPrint DCP Updates

Novell iPrint lets clients connect to print queues through a web browser. In an iPrint environment DCP updates must be performed on each client PC.

• If you plan to use a DCP file share with Novell iPrint queues ensure that each client has the DeviceCompatibilityPack registry key and can access the file share.

In order for DCP updates to work in a Novell iPrint environment:

• Windows clients must have the Novell iPrint client version 5.52 or greater installed.



• Users performing the DCP update must have administrative privileges on the client PC.

Additional Information

You can reach Xerox Customer Support at <u>http://www.xerox.com</u> or by calling Xerox Support in your country.

Xerox Customer Support welcomes feedback on all documentation - send feedback via e-mail to: <u>USA.DSSC.Doc.Feedback@xerox.com</u>.

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

