

Xerox Security Bulletin XRX12-011

Digital Signature of Software Upgrade Files

v1.1
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Background

The Xerox products listed below were shipped without the ability to accept software upgrade files with digital signatures. The ability to accept only software upgrade files with digital signatures has been added for the indicated products. In addition, the indicated products now include the software upgrade setting in the Configuration Report and have added the capability to enable/disable software upgrade via SNMP.

Firmware solutions that will now only accept software upgrades files with digital signatures have been provided¹. These solutions are designed to be installed by the customer. The firmware solutions can be accessed via the links below or via the links following this bulletin announcement on www.xerox.com/security:

- Phaser 3600: http://www.support.xerox.com/support/_all-products/file-download/enus.html?contentId=122549
- Phaser 4600/4620: <http://www.support.xerox.com/support/phaser-4600-4620/downloads/enza.html?operatingSystem=win7>
- WorkCentre 3550: <http://www.support.xerox.com/support/workcentre-3550/downloads/enza.html?operatingSystem=win7>

These firmware solutions are classified as **Moderate** updates.

Please follow the instructions starting on page 2 for each affected product to install these firmware solutions.

Applicability

This patch applies to network-connected versions² only of the following products:

Phaser [®]	WorkCentre [®]
3600	3550
4600	
4620	

¹ **NOTE:** For best security leave this control set to disabled after upgrading your software. The control must be set to enabled prior to doing a software upgrade.

² If the product is not connected to the network, it is not vulnerable and therefore no action is required.

Instructions (What must to be done if I have one of the affected products?)

Determine what actions, if any, need to be performed to prep the device for installation of the :

1. Determine the current Controller Firmware version on your device by printing a Configuration Page. To print a Configuration Page follow the instructions on Page 13 of this bulletin.
2. Determine if any action needs to be taken based on the Controller Firmware version listed on the Configuration Page for each device. This is done by following steps 3 through 6.
3. Determine the appropriate Installation Action Table to follow starting on page 3 by looking for your product number at the top of each chart, and matching it to your specific product.
4. Locate the Controller Firmware version in the chart that matches or falls within the listed Controller Firmware versions.
5. From the directions in the Installation Action Table for the affected product and Controller Firmware version determine what action , if any, have to be taken before the Controller Firmware version linked on page 1 can be installed.
6. Perform the indicated action to get your device ready to install the Controller Firmware.
7. Once your device is ready to install the Controller Firmware, follow the Firmware Installation Instructions starting on page 4 to install the Controller Firmware on the device.

Installation Action Tables

The following tables indicate what actions, if necessary, are needed before the indicated release can be installed on each affected device:

For Phaser 3600

	If Your Controller Firmware Version Is	Ready for Upgrade?	Next step:	Controller Firmware Version Will Now Show:
1	Less than 1.70.02.48	Yes	Upgrade to 1.70.02.48 (Note 1)	1.70.02.48
2	1.70.02.48 or Greater	N/A	None	1.70.02.48 or Greater

Note 1: Once controller firmware release 1.70.02.48 or greater is installed on the device, the device will only accept releases that are digitally signed. You will not be able to downgrade the device to any release less than 1.70.02.48.

For Phaser 4600/4620

	If Your Controller Firmware Version Is	Ready for Upgrade?	Next step:	Controller Firmware Version Will Now Show:
1	Less than 35.004.03.000	Yes	Upgrade to 35.004.03.000 (Note 1)	35.004.03.000
2	35.004.03.000 or Greater	N/A	None	35.004.03.000 or Greater

Note 1: Once controller firmware release 35.004.03.000 or greater is installed on the device, the device will only accept releases that are digitally signed. You will not be able to downgrade the device to any release less than 35.004.03.000.

For WorkCentre 3550

	If Your Controller Firmware Version Is	Ready for Upgrade?	Next step:	Controller Firmware Version Will Now Show:
1	Less than 25.003.02.000	Yes	Upgrade to 25.003.02.000 (Note 1)	25.003.02.000
2	25.003.02.000 or Greater	N/A	None	25.003.02.000 or Greater

Note 1: Once controller firmware release 25.003.02.000 or greater is installed on the device, the device will only accept releases that are digitally signed. You will not be able to downgrade the device to any release less than 25.003.02.000.

Firmware Installation Instructions

Phaser 3600

Before installing the firmware release, verify Software Upgrade is 'Enabled' as follows:

1. Access the web page of the device.
2. Go to Properties > Security > Upgrade Management
3. If Sys Admin credentials are set, key in when prompted. [Default state for Software Upgrade = disabled. The 'Enabled' check box is empty.]
4. Check the Enable box in order to allow software upgrades. A pop up will display "Your Selections have been modified successfully."

CentreWare Internet Services (CWIS) Procedure for upgrading firmware on a Phaser 3600 printer:

1. Copy the Phaser 3600 firmware file to your computer. If the file is in a .zip format, unzip the file.
2. Open Internet Explorer or other Browser application. Type in the IP address of the Phaser 3600 to be upgraded
3. (example: "http://<ip.address.of.device>"). Press the Enter key to connect to the printer.
4. Select the Print tab. Select File Download under Print options (left side of screen).
5. Within the "File Download" screen, select "Browse" to access the location on your computer where you have
6. placed the firmware file. Select the file and Enter.
7. Select the blue button below the filename window to begin the file download to the printer. A "pop-up" window
8. will be displayed showing the file download status.
9. Once the file has been downloaded to the printer, the screen will show "End of Download". Select OK to close
10. the message window.
11. The firmware file will be installed on the printer.
12. You may print a Configuration Page to confirm the new firmware file version has been installed. To do this from
13. the browser window select "Print -> Print Configuration Pages", select "Printer Configuration Page" then the blue
14. button. Please refer to the "Firmware Version" title on the printed configuration page.
15. You can now close the CWIS window.

Phaser 4600/4620

Before installing the firmware release, verify Software Upgrade is 'Enabled' as follows:

1. Access the web page of the device.
2. Go to Properties > Maintenance > Upgrade Management
3. If Sys Admin credentials are set, key in when prompted. [Default state for Software Upgrade = disabled. The 'Enabled' check box is empty.]
4. Check the Enable box in order to allow software upgrades. A pop up will display "Your Selections have been modified successfully."

Manual Upgrade Using CentreWare Internet Services

1. Open the web browser from your Workstation.
2. Enter the *IP Address* of the machine in the Address bar and select **[Enter]**.
3. Click on the **[Properties]** tab.
4. Click on the Maintenance arrow on the left side bar and select Firmware Upgrade.
5. Click **[Browse]**.
6. Locate and select the software upgrade file obtained earlier. The firmware file will have an extension **.hd**. Note 1: Please use ASCII characters only in file path.
7. Click **[Install Software]**.

Note: Software Installation will begin several minutes after the software file has been submitted to the machine. Once Installation has begun all Internet Services from this machine will be lost, including this Web User Interface. The installation progress can be monitored from the Local UI.

WorkCentre 3550

Before installing the firmware release, verify Software Upgrade is 'Enabled' as follows:

1. Access the web page of the device.
2. Go to Properties > Security > Upgrade Management
3. If Sys Admin credentials are set, key in when prompted. [Default state for Software Upgrade = disabled. The 'Enabled' check box is empty.]
4. Check the Enable box in order to allow software upgrades. A pop up will display "Your Selections have been modified successfully."

There are 2 methods for upgrading the software on the machine as follows:

Manual Upgrade Using CentreWare Internet Services

If your machine is connected to the network, it is possible to upgrade the firmware through CentreWare Internet Services. The machine will need to be configured for TCP/IP and HTTP.

Determining whether your machine has a network connection

1. Press the **<Machine Status>** button on the Control Panel.
2. Press the **Up/Down** arrow buttons to highlight **[Information Pages]** and press **<OK>**.
3. Press the **Up/Down** arrow buttons to highlight **[System Configuration]** and press **<OK>**.
4. The **Print** message displays; press the **Left/Right** arrow buttons to highlight **[Yes]** and press **<OK>**. The Configuration Report will print and the machine will go back to ready mode.
5. Reference the printed report. Look under the **Network Setup** Section, **TCP/IP Settings**. Verify there is an IP address listed and **TCP/IP Enabled = Enabled**. If so, then the machine has a valid network connection.

Procedure

1. Open the web browser from your Workstation and enter the *IP Address* of the machine in the Address bar.
2. Press **[Enter]**.
3. Click on the **[Print]** tab. The **Printer Configuration Pages** page displays.
4. In the **Print** area, click on the **[File Download]** link. The **File Download** page displays.
5. In the **File Download** area:
 - a. Click **[Browse]**.
 - b. Locate and select the software upgrade **[.hd]**.
 - c. Click **[Open]**.
6. Click on the blue button to send the file to the machine.

The file will be sent to the printer and will disable the printing functionality. The web browser will become inactive and you will not be able to access the machine via this method until the upgrade has completed and the machine has rebooted. The upgrade should take no longer than 30 minutes.

Once the machine has completed the upgrade it will reboot automatically. The Configuration Report will print if enabled. Check the Configuration Report to verify that the software has changed.

Manual Upgrade Using a USB Flash Drive

You may also upgrade your machine by connecting a USB flash drive to the USB port at the front of the machine. This method is typically utilized if your machine does not have a network connection or if a local machine upgrade is preferred.

Procedure

1. Insert a USB flash drive into the USB memory port at the front of the machine.
2. Press the **Up/Down** arrow buttons to highlight **[Print from USB]** and press **<OK>**. The machine will automatically detect the USB memory device and read the data stored on it.
3. Press the **Up/Down** arrow buttons until the Upgrade **[.hd]** file you want is highlighted and press **<OK>**.
If you see **+** in front of the folder name, there are one or more files or folders in the selected folder. If you select a folder, press the **Up/Down** arrow buttons until the file you want is highlighted and press **<OK>**.
4. Press the green **<Start>** button on the front panel to send the file to the machine and start the upgrade process.
5. The User Interface will indicate the status of the upgrade and the machine will reboot once the upgrade is completed.

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Note: A Configuration Report will be printed after the machine has rebooted successfully. Check the Configuration Report to verify that the software has changed.

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