Xerox Security Bulletin XRX19-025
Xerox® FreeFlow® Print Server v7 / Solaris® 11

Supports: Xerox Nuvera® PSIP 14.0/14.1 Printer Products

Deliverable: July 2019 Security Patch Cluster
Includes: Java 7 Update 231 and Firefox 52.9.0 Patches
Bulletin Date: September 2, 2019

1.0 Background

Oracle® delivers quarterly Critical Patch Updates (CPU) to address US-CERT-announced Security vulnerabilities and deliver reliability improvements for the Solaris® Operating System platform. Oracle® does not provide these patches to the public but authorize vendors like Xerox® to deliver them to customers with an active FreeFlow® Print Server Support Contracts (FSMA). Customers who may have an Oracle® Support Contract for their non-FreeFlow® Print Server / Solaris® Servers should not install patches not prepared/delivered by Xerox®. Installing non-authorized patches for the FreeFlow® Print Server software violates Oracle® agreements, can render the platform inoperable, and result in downtime and/or a lengthy re-installation service call.

This bulletin announces the availability of the following:

1. **July 2019 Security Patch Cluster**
    - Supersedes April 2019 Security Patch Cluster.
    - October 2017 Security Patch Cluster install is prerequisite.
    - October 2018 Security Patch Cluster install is prerequisite.
2. **Java 7 Update 231 Software**
    - Supersedes Java 7 Update 221 software.
3. **Firefox 52.9.0 Software**
    - Same version delivered with April 2019 Security Patch Cluster.

Caveat: If the October 2017 Security Patch Cluster (or newer version) is not installed, inserting a USB drive into the USB port on the FreeFlow® Print Server will result in a keyboard and mouse freeze up, and make them inoperable. The October 2017 Security Patch Cluster (or newer version) includes patches to fix this issue. If the October 2017 Security Patch Cluster (or newer version) is not installed, we recommend transferring the Security Patch Cluster files to the FreeFlow® Print Server hard disk over an SFTP connection and installing from the hard disk. This method can be used to overcome the USB issues.

See US-CERT Common Vulnerability Exposures (CVE) patches installed with Solaris® 11.3 OS Upgrade that are remediated in the table below:

Solaris® 11.3 Included Security Patch Remediated US-CERT CVE's					
CVE-2013-6370	CVE-2015-1819	CVE-2015-2729	CVE-2015-2737	CVE-2015-2922	CVE-2016-0414
CVE-2013-6371	CVE-2015-2721	CVE-2015-2730	CVE-2015-2738	CVE-2015-2923	CVE-2016-0416
CVE-2014-2653	CVE-2015-2722	CVE-2015-2731	CVE-2015-2739	CVE-2015-3900	CVE-2016-0418
CVE-2014-3564	CVE-2015-2724	CVE-2015-2733	CVE-2015-2740	CVE-2015-4020	CVE-2016-0419
CVE-2014-3566	CVE-2015-2725	CVE-2015-2734	CVE-2015-2741	CVE-2015-4920	CVE-2016-0426
CVE-2014-3634	CVE-2015-2726	CVE-2015-2735	CVE-2015-2742	CVE-2015-5600	CVE-2016-0431
CVE-2014-3683	CVE-2015-2728	CVE-2015-2736	CVE-2015-2743	CVE-2016-0403	CVE-2017-10003

See US-CERT Common Vulnerability Exposures (CVE) list for the July 2019 Security Patch Cluster below:

July 2019 Security Patch Cluster Remediated US-CERT CVE's					
CVE-2018-17456	CVE-2018-18311	CVE-2018-18312	CVE-2018-18313	CVE-2018-18314	CVE-2018-19486
CVE-2019-5597	CVE-2019-9636				

See the US-CERT Common Vulnerability Exposures (CVE) list for Java 7 Update 231 software remediate in table below:

Java 7 Update 231 Software Remediated US-CERT CVE's					
CVE-2019-7317	CVE-2019-2762	CVE-2019-2769	CVE-2019-2745	CVE-2019-2816	CVE-2019-2766

See the US-CERT Common Vulnerability Exposures (CVE) list for the Firefox v52.9.0 Software below:

Firefox v52.9.0 Software Remediated US-CERT CVE's					
CVE-2018-12359	CVE-2018-12364	CVE-2018-5150	CVE-2018-5157	CVE-2018-5174	CVE-2018-6126
CVE-2018-12360	CVE-2018-12365	CVE-2018-5154	CVE-2018-5158	CVE-2018-5178	
CVE-2018-12362	CVE-2018-12366	CVE-2018-5155	CVE-2018-5159	CVE-2018-5183	
CVE-2018-12363	CVE-2018-12368	CVE-2018-5156	CVE-2018-5168	CVE-2018-5188	

Note: Xerox® recommends that customers evaluate their security needs periodically and if they need Security patches to address the above CVE issues, schedule an activity with their Xerox Service team to install this announced Security Patch Cluster. The FreeFlow® Print Server application supported on Solaris® 11 is not yet supported for install from the Update Manager UI.

2.0 Applicability

The customer can schedule a Xerox Service or Analyst representative to deliver and install the Security Patch Cluster from USB/DVD media or the hard disk on the FreeFlow® Print Server platform. A customer can work with the Xerox CSE/Analyst to install the quarterly Security Patch Clusters if they have the expertise. The Xerox CSE/Analyst would be required to provide the Security Patch Cluster deliverables if they agree to allow their customer install.

The July 2019 Security Patch Cluster is available for the FreeFlow® Print Server v7 release on the Solaris® 11.3 OS for the Xerox® printer products below:

1. Nuvera® 100/120/144/157 EA Digital Production System
2. Nuvera® 200/288/314 EA Perfecting Production System
3. Nuvera® 100/120/144 MX Digital Production System
4. Nuvera® 200/288 MX Perfecting Production System

This Security patch deliverable has been tested on the FreeFlow® Print Server 73.I1.10.11 software release. We have not tested the July 2019 Security Patch Cluster on all earlier FreeFlow® Print Server 7.3 releases, but there should not be any problems on these releases.

It is a prerequisite to install the October 2017 and October 2018 Security Patch Clusters on the FreeFlow® Print Server platform before installing the July 2019 Security Patch Cluster. A patch version script is provided to assist with identification of the current Security Patch Cluster version installed and other version information (E.g., Solaris® OS, Firefox, etc.). If the script output illustrates that the October 2018 Security Patch Cluster (or newer version) is installed the prerequisite is satisfied.

The October 2017 and October 2018 Security Patch Clusters are too large to be supported by Update Manager. These larger deliverables can be transported to the customer location on DVD/USB media, or a laptop computer hard drive, and installed from a directory location on the FreeFlow Print Server platform. As a result of their large size, we deliver the October 2017 and October 2018 Security Patch Clusters as three-part ZIP files. They can be transferred to the FreeFlow Print Server over the network using SFTP or copied from DVD media to prepare for install. The July 2019 Security Patch Cluster is small enough for install using the Update Manager UI. However, the FreeFlow® Print Server application supported on Solaris® 11 is not yet supported for install from the Update Manager UI.

The Xerox Customer Service Engineer (CSE)/Analyst uses a tool that enables identification of the currently installed Solaris® OS version, FreeFlow® Print Server software version, Security Patch Cluster version, Java Software version. This tool can be initially run to determine if the prerequisite October 2018 Security Patch Cluster is currently installed. Example output from this script for the FreeFlow® Print Server v9 software is as follows:

Solaris® OS Version:	11.3
FFPS Release Version	7.0_SP-3_(73.I4.44A.11.86)
FFPS Patch Cluster	July 2019
Java Version	Java 7 Update 231
Base Repository	Installed
Firefox Version	52.9.0
Spectre Variant #1	Installed
Meltdown Variant #3	Installed
Spectre Variant #2	Not Installed

The above versions are the correct information after installing the July 2019 Security Patch Cluster.

3.0 Patch Install

Xerox® strives to deliver critical Security patch updates in a timely manner. The customer process to obtain Security Patch Cluster updates (delivered on a quarterly basis) is to contact the Xerox hotline support number. Xerox Service or an analyst can install the Patch Cluster using a script utility that will support install from USB/DVD media, or from the hard disk on the FreeFlow® Print Server platform.

The Security Patch Cluster deliverables are available on a secure FTP site once they are ready for customer delivery. The Xerox CSE/Analyst can download and prepare for the install by writing the Security patch update into a known directory on the FreeFlow® Print Server platform, or on DVD/USB media. Delivery of the Security Patch Cluster includes an ISO and ZIP archive file for convenience. Once the patch cluster has been prepared on media, run the provided install script to perform the install. The install script accepts an argument that identifies the media that contains a copy of the FreeFlow® Print Server Security Patch Cluster. (e.g., # installSecPatches.sh [disk | usb | dvd]).

Delivery of the July 2019 Security Patch Cluster includes a ZIP and ISO image file. The ISO image file can be written to DVD media to transport and install on the FreeFlow® Print Server platform. The ZIP file can be copied to a well-defined location on the FreeFlow® Print Server hard drive to prepare for install. Once the patch cluster has been prepared on the hard disk, a script is run to perform the install. Alternatively, the July 2019 Security Patch Cluster can be installed from USB/DVD media.

Note: The install of this Security Patch Cluster can fail if the archive file containing the software is corrupted from when downloading the deliverables from the SFTP site, copying them to USB media or uploading them to the hard drive on the FreeFlow® Print Server platform over a network connection. The table below illustrate file size on Windows®, file size on Solaris® and checksum on Solaris® for the July 2019 Security Patch Cluster files.

July 2019 Security Patch Cluster Files

Security Patch File	Windows® Size (K-bytes)	Solaris® Size (bytes)	Solaris® Checksum
Jul2019AndJava7Update231Patches_v7S11.zip	1,958,456	2,005,098,814	22956 3916209
Jul2019AndJava7Update231Patches_v7S11.iso	1,958,105	2005458944	51335 3916912

Verify integrity of the Security Patch files from the FreeFlow® Print Server hard drive by comparing it to the original archive file size checksum with the actual checksum of these files on the platform. Change directory to the location of the Security Patch Cluster file and use the UNIX 'sum' command to output the check sum numbers of each ZIP file (E.g., '**sum Jul2019AndJava7Update231Patches_v7S11.zip**'). The output of the '**sum**' command should match the checksum in the above table.

4.0 Disclaimer

The information provided in this Xerox® Product Response is provided "as is" without warranty of any kind. Xerox® Corporation disclaims all warranties, either express or implied, including the warranties of merchantability and fitness for a particular purpose. In no event shall Xerox® Corporation be liable for any damages whatsoever resulting from user's use or disregard of the information provided in this Xerox® Product Response including direct, indirect, incidental, consequential, loss of business profits or special damages, even if Xerox® Corporation has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of liability for consequential damages so the foregoing limitation may not apply.