1.0 Background

Oracle® delivers quarterly Critical Patch Updates (CPU) to address US-CERT Security vulnerabilities and reliability improvements for the Solaris Operating System. Oracle® does provide patches to the public but authorize vendors like Xerox® to deliver if there is an active FreeFlow® Print Server Support Contracts (FSMA). Customers that have an Oracle® Support Contract for their non-FreeFlow® Print Server Solaris Servers should only install patches prepared/delivered by Xerox®. Installing non-authorized patches for the FreeFlow® Print Server software violates Oracle® agreements, and 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 the April 2019 Security Patch Cluster
2. Java 7 Update 231 Software
   - Supersedes Java 7 Update 221 Software

Notice: The July 2019 Security Patch Cluster includes patches to mitigate the Meltdown and Spectre vulnerabilities. These vulnerabilities are not mitigated by the Solaris 10 OS patches alone. It is required to install a BIOS firmware update specific to the Xerox printer product and Digital Front End (DFE) platform (E.g., Dell model). Failure to install the Dell BIOS firmware will leave the FreeFlow® Print Server and Xerox printer product susceptible to breach of sensitive information using Meltdown and Spectre vulnerabilities. Dell does not deliver BIOS firmware to mitigate Meltdown and Spectre for PC platforms considered EOL (End of Life).

See US-CERT Common Vulnerability Exposures (CVE) the July 2019 Security Patch Cluster remediate in table below:

<table>
<thead>
<tr>
<th>July 2019 Security Patch Cluster Remediated US-CERT CVE's</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Java 7 Update 231 Software Remediated US-CERT CVE's</th>
</tr>
</thead>
</table>

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. Alternatively, the customer can install the Security Patch Cluster using the Update Manager UI from the Xerox® FreeFlow® Print Server Platform.
2.0 Applicability

Xerox® offers the Security Patch Update delivery available over the network from a Xerox server using an application called FreeFlow® Print Server Update Manager. The use of FreeFlow® Print Server Update Manager (GUI-based application) makes it simple for a customer to install Security patch updates.

The Update Manager delivery of the Security Patch Cluster provides the ability to install Security patches on top of a pre-installed FreeFlow® Print Server software release. The advantage of this network install method is the “ease of deliver and install” from a Xerox patch server over the Internet. This easy install method gives a FreeFlow® Print Server customer the option to manage quarterly Security Patch Cluster install without need for support from Xerox service. This empowers the customer to have the option of installing patch updates as soon as they become available, and not need to rely on the Xerox Service team. Many customers do not want the responsibility of installing the quarterly Security Patch Update or they are not comfortable providing a network tunnel to the Xerox® communication server that stores Security patches. In this case, the media install method (i.e., USB/DVD) is the best option under those circumstances.

This Security patch deliverable has been tested on the FreeFlow® Print Server 93.10.04A, 73.G2.55 (EPC products), 73.H3.72 and 73.I4.44A (Nuvera products), and 73.11.51B (All other products) software releases. We have not tested the July 2019 Security Patch Cluster on all earlier FreeFlow® Print Server 7.3/9.3 releases, but there should not be any problems on these releases. It is always good practice to create a System Backup before installing the Security patches.

This Security patch deliverable has been tested on the FreeFlow® Print Server 93.10.04A software release. We have not tested the July 2019 Security Patch Cluster on all earlier FreeFlow® Print Server 9.3 releases, but there should not be any problems on these releases. It is always good practice to create a System Backup before installing the Security patches.

A tool is available that enables identification of the currently installed FreeFlow® Print Server software release, Security Patch Cluster, and Java Software version. Run this tool after the Security Patch Cluster install to validate successful install. Example output from this script for the FreeFlow® Print Server v9 software release is as following:

<table>
<thead>
<tr>
<th>Solaris OS Version</th>
<th>10 Update 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFPS Release Version</td>
<td>7.0_SP-3_73.14.44A</td>
</tr>
<tr>
<td>FFPS Patch Cluster</td>
<td>July 2019</td>
</tr>
<tr>
<td>Java Version</td>
<td>Java 7 Update 231</td>
</tr>
<tr>
<td>Spectre Variant #1</td>
<td>Installed</td>
</tr>
<tr>
<td>Spectre Variant #2</td>
<td>Not Installed</td>
</tr>
<tr>
<td>Meltdown Variant #3</td>
<td>Installed</td>
</tr>
</tbody>
</table>

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

1. Xerox Nuvera® 100/120 Digital Coper/Printer
2. Xerox Nuvera® 100/120/144 Digital Production System
3. Xerox Nuvera® 100/120/144/157 EA Digital Production System
4. Xerox Nuvera® 200/288/314 EA Perfecting Production System
5. Xerox Nuvera® 400/120/144 MX Digital Production System
6. Xerox Nuvera® 200/288 MX Perfecting Production System
7. Xerox® DocuPrint® 100/115/135/155/180 MX Enterprise Printing System
8. Xerox® DocuTech® 6128/6155/6180 Production Publisher
9. Xerox® DocuTech® 128/155/180 Highlight Color Production Publisher
10. Xerox® DocuColor® 8080 Presses
11. Xerox® Digital Printer 4112/4127 Enterprise Printing System
12. Xerox® Digital 4590/4595 Copier/Printer
The July 2019 Security Patch Cluster is available for the FreeFlow® Print Server v9 release running on the Xerox® printer products below:

1. Xerox® iGen®4
2. Xerox® iGen®4 Diamond Edition®
3. Xerox® iGen®150 Press
4. Xerox® Versant® 80/180/2100 Presses
5. Xerox® Color 800/100 Presses
6. Xerox® Color 800i/1000i Presses
7. Xerox® Color Press J75/C75 Presses
8. Xerox® Color Press 560/570 Production Printer
9. Xerox® Brenva® HD Production Inkjet Press
10. Xerox® Impika® Compact Inkjet Press
11. Xerox® CiPress® 325/500 Production Inkjet System
12. Xerox® D95/110/125/136 Copier/Printer
13. Xerox® Color 8250 Production Press

3.0 Patch Install

Xerox® strives to deliver Security Patch Clusters 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 or use Update Manager to install as the System Administrator. The Update Manager is a GUI tool on the FreeFlow® Print Server platform used to check for Security patches, download and install Security patches. The customer can install a quarterly Security Patch Cluster using the Update Manager UI, or schedule Xerox Service to perform the install.

Once the Security patches are ready for customer delivery, they are available from the Xerox communication server. Procedures are available for the Customer or Xerox Service for using the Update Manager GUI to download and install the Security patches over the Internet. The Update Manager UI has a ‘Check for Updates’ button that can be selected to retrieve and list patch updates available from the Xerox communication server. When this option is selected the latest Security Patch Cluster should be listed (E.g., July 2019 Security Patch Cluster for FFPS v9.3) as available for download and install. The Update Manager UI includes mouse selectable buttons to download and then install the patches.

Xerox® uploads the Security Patch Cluster to a Xerox patch server that is available on the Internet outside of the Xerox® Corporate network once the deliverable has been tested and approved. Once in place on the Xerox server, a CSE/Analyst or the customer can use FreeFlow® Print Server Update Manager UI to download and install on the FreeFlow® Print Server platform.

The customer proxy information is required to be setup on the FreeFlow® Print Server platform so it can access to the Security Patch Update over the Internet. The FreeFlow® Print Server platform initiates a “secure” communication session with the Xerox communication server using HTTP over the TLS 1.0 protocol (HTTPS on port 443) using an RSA 2048-bit certificate, SHA2 hash and AES 256-bit stream encryption algorithms. This connection ensures authentication of the FreeFlow® Print Server platform for the Xerox server, and sets up encrypted communication of the patch data. The Xerox server does not initiate or have access to the FreeFlow® Print Server platform behind the customer firewall. The Xerox server and FreeFlow® Print Server platform both authenticate each other before making a connection between the two end points, and patch data transfer.
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.