FlexNet Operations 2023 R1 SP1 On Premises Release Notes

February 2024

Introduction

This Release Notes document summarizes the enhancements delivered with FlexNet Operations 2023 R1 SP1 On Premises. The document includes the following information:

- Resources

- Security Fixes

- Features and Enhancements

- System Requirements

- Resolved Issues

- Known Issues

- Special Notes

- Legal Information

Note ▪ The latest version of the FlexNet Operations On-Premises documentation is 2023 R1. The documentation has not been updated for this service pack release.

Resources

These resources are available for more information about FlexNet Operations and other Revenera products:

- Revenera Resources

- FlexNet Operations Videos

Revenera Resources

The following resources can help you stay up to date with FlexNet Operations news and product knowledge:

- In addition to providing case management, the Revenera Community site can help you quickly find answers to your questions by searching content from other customers, product experts, and thought leaders. You can also post questions on discussion forums for experts to answer. For each of Revenera's product solutions, you can access forums, blog posts, and knowledge base articles. You can also access the Product and License Center from the Community's **Other Resources** menu to download Revenera products.

- You can find documentation for FlexNet Operations and all other Revenera products on the Revenera Product Documentation site.

- The Revenera Learning Center offers free, self-guided, online videos to help you quickly get the most out of your Revenera products. You can find a complete list of these training videos in the Learning Center.

- Customers who have purchased a maintenance contract for their product(s) can submit a support case or check the status of an existing case by making selections on the **Get Support** menu of the Revenera Community:

    https://community.revenera.com

FlexNet Operations Videos

These brief, informative videos walk you through the getting-started exercises found in the FlexNet Operations User Guide (online help or PDF version). We recommend that you first read the appropriate "Getting Started" section in the *User Guide* to gain an understanding of the concepts it covers, and then click the section title in the table below to view the video.

Guide	Topics
Getting Started with Entitlement Management	Creating an account, a user, a product, and an entitlement.
Getting Started with FlexNet Embedded Licensing	Setting up a publisher, identity, and a licensed product. Creating a device and activating its license. Creating and provisioning FlexNet Embedded license servers.
Getting Started with Electronic Software Delivery	Creating a producer and download packages, associating download packages with a product, creating files, associating files with download packages, and viewing and downloading files from the FlexNet Operations End-User Portal.
Getting Started with Usage Management	Creating a usage-based license model, a feature, a product, and an entitlement. Obtaining the license server URL to which the usage data is sent. Running a usage-capture client. Viewing usage information graphs and gauges.
Getting Started with FlexNet Publisher License File-Based Licensing	Activating and returning a certificate license.
Getting Started with Cloud Licensing Service	Creating a cloud-hosted license server.
Getting Started with FlexNet Customer Growth	Customer growth concepts and configuring notifications for expiring entitlements and expired entitlements.

Security Fixes

The following components have been updated in the FlexNet Operations On-Premises 2023 R1 SP1 release to address potential security issues:

- Log4j 2 has been updated from version 2.8.2 to 2.19.0 (CVE-2021-44228, CVE-2021-45046)

- Apache Struts2 has been updated from version 2.5.22 to 2.5.33 to address a potential remote code execution vulnerability. (CVE-2023-50164)

Features and Enhancements

The 2023 R1 SP1 release does not include any new features or enhancements.

System Requirements

Detailed system requirements for FlexNet Operations 2023 R1 SP1 On Premises include the following.

Requirement	Description
Supported Operating Systems	- Microsoft Windows Server 2022 - Microsoft Windows Server 2019 - Microsoft Windows Server 2016 - Red Hat Enterprise Linux 8.4 (64-bit) - Virtual appliance: Linux (64-bit) based on CentOS-7 ***Important** ▪ All Linux platforms must be Linux Standard Base (LSB) compliant.*
Supported databases	- SQL Server 2019 - SQL Server 2017

Requirement	Description
Servers	**Note ▪** *For best performance, availability, and reliability, install each FlexNet Operations component on a separate host.* **For Windows servers (each)** ● Dual core ● 8 GB of RAM for each component (FlexNet Operations, Cloud Licensing Service, Usage Analytics Service) ● Minimum of 10 GB free disk space **For Linux servers (each)** ● Dual core ● 8 GB of RAM for each component (FlexNet Operations, Cloud Licensing Service, Usage Analytics Service) ● Minimum of 10 GB free disk space ● Current directory (.) must be in the path of the user who starts the FlexNet Operations server **For Virtual Appliance** ● 8 GB of virtual RAM ● 8 GB of virtual disk space ● VMware requires about three times as much hard disk space at Open Virtualization Format package deployment time
Application server	WildFly version 8.2.0, with default configured heap space minimum of 4 GB and maximum of 8 GB
Message broker software	RabbitMQ version 3.10.6 (with Erlang/OTP v13.0.2 (25))
Supported Java development kits	● Oracle JDK 1.8 ● OpenJDK 1.8
Web browsers	● Microsoft Edge ● Mozilla Firefox 75.0 ● Google Chrome 80.0.3987.163

Requirement	Description
FlexNet licensing module	• FlexNet Publisher Toolkit 11.12.0 or later • FlexNet Embedded Toolkit 2015 R2 or later 📋 *Note ▪ FlexNet Operations supports these FlexNet Embedded host ID types: ETHERNET, INTERNET, INTERNET_6, FLEXID9, FLEXID10, STRING, USER, VM_UUID, EXTENDED, PUBLISHER_DEFINED, and CONTAINER_ID.*
Vendor certificate generator	The current versions of the VCG kit are 12.11.0 and 16.2.2.0. These VCGs were tested with the following compilers: • Windows—Visual Studio 2010 Professional Edition • Linux—gcc 4.1.2 (RHEL 5.0) • Linux—gcc 4.4.4 (RHEL 6.0) 📋 *Note ▪ The 12.11.0 VCG is built with FlexNet Publisher 11.11.1 and shares the same minimum C compiler requirements on each supported platform. (See the FlexNet Publisher 11.11.1 release notes for C/C++ compiler support.)*
Supported upgrade paths	You can upgrade from the following previous FlexNet Operations versions to the current version: • 2018 R1 • 2020 R1.1 • 2021 R1 • 2022 R1
LDAP directory server	Windows 2012 Active Directory
High Speed File Upload	If you intend to use the **High Speed Upload** option to upload files, the following plug-in is required: Aspera Connect 3.10.0 or later

Resolved Issues

No issues have been resolved in the FlexNet Operations On Premises 2023 R1 SP1 release.

Known Issues

The following describes known issues in the current FlexNet Operations release.

FNO-69069: Accessing "Trusted Activation Requests" Page Without Adequate Permission Via URL

Viewing the **Trusted Activation Requests** page requires the permission "Trusted Activation Requests". When users who do not have the permission "Trusted Activation Requests" attempt to navigate to the page via **Administer** > **Trusted Activation Requests**, access is denied.

However, users without the permission "Trusted Activation Requests" can still erroneously access the **Trusted Activation Requests** page when navigating directly to the page via its URL. Revenera aims to address this issue in a future release.

SWM-15690: Producer Portal Accepting Incorrect Email Format

It is possible to create a user in the Producer Portal and provide an invalid email address of the format abcd@ef (that is, an email address consisting of a recipient name, @ symbol and domain name but without top-level domain).

FNO-69338: Navigation in Package Products Pages Skipping Review Features Page

When the user navigates through the Package Products pages (under **Products** > **Features**) using the **Next** button at the bottom of each page, the Review Features and Review Feature Bundles pages are erroneously skipped.

As a workaround, users who want to review the features and feature bundles that they just added can click the **Review Features** and **Review Feature Bundles** links, respectively, in the Packaging Guide section at the bottom of the page to access the Review Features page.

FNO-68962: Invalid Characters in Device ID Causing Issues

When the FlexNet Embedded toolkit creates a device ID that contains an invalid character, an error occurs.

The following control characters are not allowed in device names or the device ID:

^B ^D ^E ^G ^N ^O ^P ^Q ^R ^S ^T ^U ^W ^X ^Y ^[^\ ^]

SWM-10701: Search Functionality in End-User Portal Erroneously Displays Download Link

In the End-User Portal, users who should be denied access to a file based on their geographical location are able to display the download link for a restricted file when searching for the file name (using the Search function with the **Files** option on the **Download Search** page). However, users are not able to download the restricted file.

SWM-6755: Attempts to Export All Entitlements From End-User Portal Unsuccessful

An attempt by a producer user to export all entitlements from the End-User Portal can fail.

SWM-8779: Feature Names With "SERVER" Truncated in Trusted Storage

Feature names containing the string "SERVER" are truncated when the features are activated in trusted storage.

FNO-66018: Errors in UI Updated for Download Package Selection Across Multiple Pages

In 2021.09, the **Download Packages** window was updated to allow package selection across multiple pages. The following errors currently exist for the updated UI.

- Incorrect error message for EULA license on Review & Resolve page

- Search string not properly clearing

- No option to return to full (unfiltered) Download Package list when "failed validation" message displays

- Failed validation error displayed for search results

- Pagination control fields not showing correct information

- Inappropriate message displayed for already downloaded packages

Incorrect error message for EULA license on Review & Resolve page

When you attempt to download packages that fail validation, the following message is displayed: "Some of the selected packages failed validation. You need to review and resolve the validation errors." Then, on the **Failed Packages** window that is displayed if you click the "review and resolve" link in the message, the error for an unaccepted EULA incorrectly shows the following:

 "EULA has not been accepted. To accept EULA, click on the Download package ID."

Instead of "click on the Download Package ID", the message should instruct the user to "…click 'I Agree'".

Search string not properly clearing

After you filter the package list on the **Download Packages** window, the message "Results for Download package name: <name>" is appropriately displayed. However, if you then click the **Clear** link at the end of message, the search string used to filter the package list remains, the list remains filtered (even if you move to the next page), and the "Results for the Download package name…" message is still displayed. You must manually delete the search string and click **Search** to clear the filter.

No option to return to full (unfiltered) Download Package list when "failed validation" message displays

If the "failed validation" message is displayed after you attempt to download packages from a filtered list on the **Download Packages** window, no mechanism exists to clear the filter to display all packages. You must manually delete the search field contents and click **Search**.

Failed validation error displayed for search results

After searching for and attempting to download a package containing an unaccepted EULA, the expected message "Some of the selected packages failed validation..." is displayed on the **Download Packages** window. However, if you then search for a package that does not contain an EULA (but do not attempt to download the package), you received the "failed validation" message instead of the correct message describing the filter results: "Results for Download package name: <name>".

Pagination control fields not showing correct information

The pagination control fields on the **Download Packages** window are not displaying the correct totals for a filtered list of packages.

Inappropriate message displayed for already downloaded packages

When you select an entitlement line item whose packages have already been downloaded, the **Download Packages** window is displayed with incorrect message "Files sent for download. Please monitor the download manager pop up". The message should be removed altogether or displayed only as package files are being sent to the Download Manager (before the actual **Download Manager** window is displayed).

SWM-7952: Not All Applicable Download Links Available on "List Downloads" Page in End-User Portal

When end-users are logged in with an activation ID for an entitlement line item that is associated with multiple products, the **Downloads** page (accessed from **Downloads > List Downloads**) in the End-User Portal does not always show links to all applicable product downloads.

SWM-7786: SHA2 Checksum Value of Previous File Shown

If a user has provided a file's expected SHA2 checksum value for an upload and the file image is subsequently deleted, the **Upload File** page, when opened again, might show the SHA2 checksum value of the previously loaded file image.

FNO-65909: Download Files Not Visible For Self-registered And Trial Users

Download files might not be visible in the End-User Portal for self-registered users and those users registered through the "Try Before You Buy" registration.

FNO-61266: Translation Issues with Localization

Per a previous enhancement in 2020 R3 to add more language support for End-User Portal localization, certain strings—such as alerts and validation messages—are not being translated properly when localization is in effect. These issues will be addressed in an upcoming release.

Special Notes

This section contains special information pertaining to FlexNet Operations.

Plug-in Upgrade Needed for High-Speed File Uploads

If you intend to use the high-speed upload option to upload files, upgrade the Aspera plug-in to Aspera Connect 3.10.0 or later.

Best Practice for Uploading New File Versions for Software Delivery

The following practice helps to prevent the delivery of "stale" file content to your customers.

When you upload a new version of a file (or package) whose previous version exists in the Software Delivery system, best practice is to give the new file version a unique name, different from the name of the existing file version. (For example, use a version number in the file name.) Try to avoid uploading a file using the same name as the existing file so that the existing file is overwritten.

If you must upload a new file using the same name as the existing file, delete the existing file and wait 10-15 minutes before uploading the new version. This process will reduce the probability of re-caching the old content.

Handling UI Conflicts When Using a Custom CSS for the End-User Portal

When you use your own CSS to customize the look of the End-User Portal, sometimes your custom CSS code conflicts with existing Revenera CSS code that is used to define certain buttons, pages, and other UI elements. When conflicts occur, handle each case individually, determining the basis of the conflict and adjusting the custom CSS as needed. If you require assistance, contact Revenera Technical Support (see Revenera Resources).

Legal Information

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