flexera

Software Vulnerability Manager (Cloud Edition)

User Guide

Legal Information

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1

Software Vulnerability Manager (Cloud Edition) Help Library

Flexera's Software Vulnerability Manager is a Vulnerability and Patch Management Software Solution that facilitates a customized Patch Management process. It combines Vulnerability Intelligence, Vulnerability Scanning, and Patch Creation with Patch Deployment Tool Integration to enable targeted, reliable, and cost-efficient Patch Management.

Vulnerability and Patch Management are critical components of any security infrastructure because it enables proactive detection and remediation of vulnerabilities before they are actively exploited, and your security compromised. With Software Vulnerability Manager, IT Operations and Security Teams are empowered to prevent vulnerability threats from both Microsoft and non-Microsoft (third-party) product vulnerabilities, covering Microsoft Windows, macOS, and Red Hat Enterprise Linux.

Software Vulnerability Manager integrates seamlessly with Microsoft® WSUS and System Center Configuration Manager.

Table 1-1 • Software Vulnerability Manager Cloud Edition Help Library

Topic	Content
Introduction	Provides an overview of Software Vulnerability Manager: • The Scan Process – How Does it Work? • Software Vulnerability Manager Software Vulnerability Management Life Cycle • System Requirements • System Architecture Overview

Table 1-1 • Software Vulnerability Manager Cloud Edition Help Library (cont.)

Topic	Content
Getting Started with Software Vulnerability Manager Cloud Edition	Provides details of how to perform the following tasks: ● Logging on to Software Vulnerability Manager Cloud Edition ● Opening a Support Case ● Download and Install the Software Vulnerability Manager Plug-in ● Download and Install the Software Vulnerability Manager Daemon ● Download and Install the System Center Plug-in ● Download and Install the Software Vulnerability Manager Patch Publisher ● Download and Install the Software Vulnerability Manager Client ToolKit ● Join Flexera's Customer Community
The Dashboard	Provides an overview of your hosts with the help of various "portlets". Portlets are a collection of components that graphically display key data and allow you to create profiles which can display a unique combination of portlets.
Agent Details	Provides details on the following: ● Agent Administrative Privileges ● Agent Data Collection ● Agent Thread Priority ● Agent Caching of Scan Rules

Table 1-1 • Software Vulnerability Manager Cloud Edition Help Library (cont.)

Topic	Content
Scanning	Provides details on the following: • Agent-based Scan – Requirements for Windows • Agent-based Scan – Requirements for macOS • Agent-based Scan – Requirements for Red Hat Enterprise Linux (RHEL) • Remote/Agent-less Scan – Requirements (Windows) • Remote Scanning Via Software Vulnerability Manager (Agent-less Scan) • System Center Inventory Import • Remote Scanning Via Agents • Software Vulnerability Manager Agent Command Line Options • Network Appliance Agents • Scanning Via Local Agents • Run Scan from System Center Configuration Manager (SCCM) • Scanning macOS • Scanning Red Hat Enterprise Linux (RHEL) • Filter Scan Results • Completed Scans • Inventory Assessment
Results	Provides details on the following: • Sites • Smart Groups • Host Smart Groups • Product Smart Groups • Advisory Smart Groups
Reporting	Provides details on the following: • Report Configuration • Smart Group Notifications • Activity Log Notifications • Database Access • Scheduled Exports

Table 1-1 • Software Vulnerability Manager Cloud Edition Help Library (cont.)

Topic	Content
Patching	Provides details on the following: • Flexera Package System (SPS) • Creating a Patch with the Flexera Software Package System (SPS) • The SPS Package Creation Wizard • Vendor Patch Module • Agent Deployment • Patch Deployment Status • Download Patch Publisher • Patch Publisher Connections • External Package Signing for Software Vulnerability Manager Client Toolkit • Add Proxy Settings • WSUS/System Center • Creating the WSUS-CSI GPO Manually • Deploying the Update Package Using WSUS • Deploying the Update Package Using System Center • Integrate SVM with WSUS/SCCM and Deploy a Patch • Patch Configuration • Patch Template • QuickPatch • Patch Automation • Intune Publishing • Workspace ONE Publishing
Administration	Provides details on the following: • Roles • User Management • Active Directory • IP Access Management (Requires the Software Vulnerability Manager Plug-in) • Password Policy Configuration

Table 1-1 • Software Vulnerability Manager Cloud Edition Help Library (cont.)

Topic	Content
Configuration	Provides details on the following: • Settings • Log Messages • Activity Log • Software Suggestions • Security
Appendix A - Partition Management	Provides an Introduction and details of Partition Management.
Appendix B - About Secunia Advisories	Explains Secunia Advisory terminology for: • CVSS (Common Vulnerability Scoring System) • CVE References • Where (Attack Vector) • Criticality (Severity Rating) • Impact (Consequence)
Appendix C - CSV Export File Cross-References	When you export data from the Software Vulnerability Manager user interface to a CSV file, some values may differ. Each data set in this appendix includes a cross-reference table to explain the different values between the user interface and CSV file.
Appendix D - Threat Intelligence	This appendix explains how the Software Vulnerability Manager Threat Intelligence module helps the enterprises to manage their resources and Patching Vulnerabilities more effectively.
Appendix E - Troubleshooting Techniques	This appendix explains the troubleshooting techniques of the Software Vulnerability Manager.

Product Support Resources

The following resources are available to assist you with using this product:

- Flexera Product Documentation
- Flexera Community
- Flexera Learning Center
- Flexera Support

Flexera Product Documentation

Help is available from the Software Vulnerability Manager interface help icon located at the top right of the screen or click fields labeled with a "(?)" to access the contextual help.

You can find documentation for all Flexera products on the Flexera Product Documentation site:

https://docs.flexera.com

Flexera Community

On the Flexera Community site, you can 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 Flexera's product solutions, you can access forums, blog posts, and knowledge base articles.

https://community.flexera.com

Flexera Learning Center

Flexera offers a variety of training courses—both instructor-led and online—to help you understand how to quickly get the most out of your Flexera products. The Flexera Learning Center offers free, self-guided, online training classes. You can also choose to participate in structured classroom training delivered as public classes. You can find a complete list of both online content and public instructor-led training in the Learning Center.

https://learn.flexera.com

Flexera Support

For customers who have purchased a maintenance contract for their product(s), you can submit a support case or check the status of an existing case by making selections on the **Get Support** menu of the Flexera Community.

https://community.flexera.com

Contact Us

Flexera is headquartered in Itasca, Illinois, and has offices worldwide. To contact us or to learn more about our products, visit our website at:

http://www.flexera.com

You can also follow us on social media:

- Twitter
- Facebook
- LinkedIn
- YouTube
- Instagram

2

Introduction

This chapter introduces the following topics:

- The Scan Process – How Does it Work?
- Software Vulnerability Manager Software Vulnerability Management Life Cycle
- System Requirements
- System Architecture Overview

The Scan Process – How Does it Work?

The first step in scanning a system is to collect specific metadata from primarily .EXE, .DLL, and .OCX files on the system being scanned. Metadata is generic non-sensitive text strings embedded in the binary files from the vendors of the products. This data is collected and then sent to our Secure Data Processing Cloud where it is processed and parsed.

The data is then matched against our File Signatures, which are rules that match the raw metadata to an actual product installation.

Part of this matching process also results in an exact version being extracted from the metadata. This means that after the initial parsing Software Vulnerability Manager knows exactly which products are on the system and their exact version – a precise inventory of software on the system.

The inventory of software is then compared against the unique Secunia Advisory and Vulnerability Database, which contains the most accurate and current Vulnerability Intelligence available.

The result is a precise inventory of products, their versions, the security state of each, along with a direct reference to any corresponding Secunia Advisory detailing the exact vulnerabilities and their Secunia assessed criticality and impact.

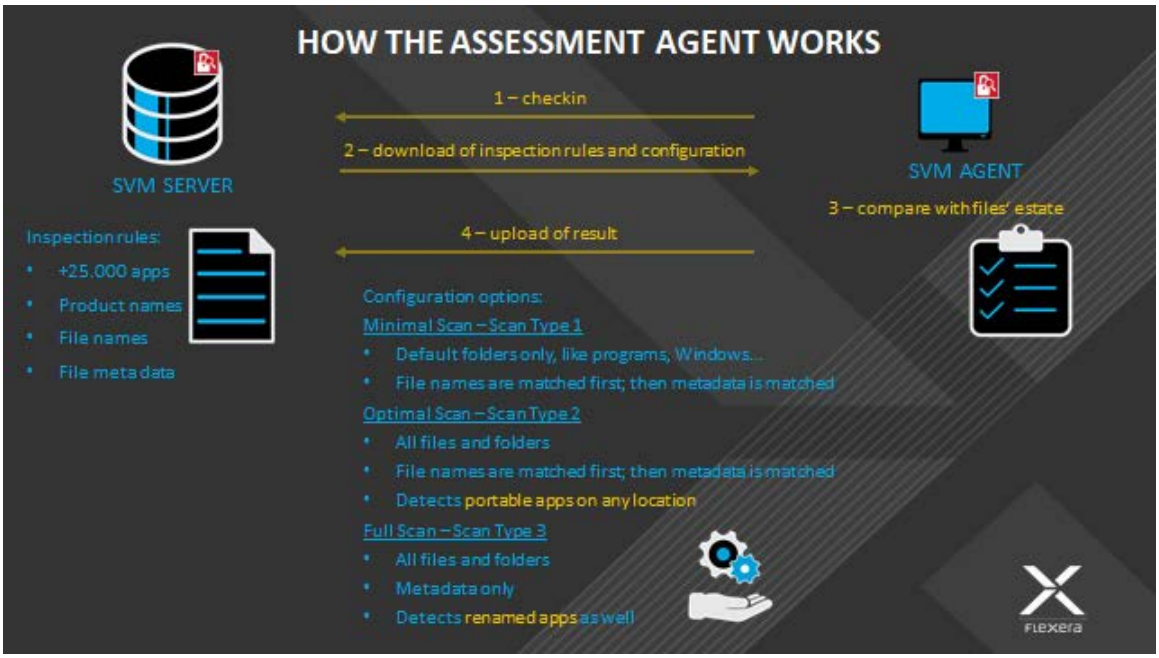
Since the scan process works by looking at the actual files on the system being scanned, the result is extremely reliable as a product cannot be installed on a system without the actual files required being present.

This in turn means that Software Vulnerability Manager rarely identifies false-positives, and you can use the results from Software Vulnerability Manager immediately without doing additional data mining.

Software Vulnerability Manager is flexible and scalable when it comes to scanning a corporate network and you can choose to use Agent, Agent-less, or a combination of both scanning methods in the same environment.

For further information about the different Software Vulnerability Manager scanning approaches, see Scanning.

The graphic below summarizes how the Software Vulnerability Manager Agent works and compares the three Scan Types.

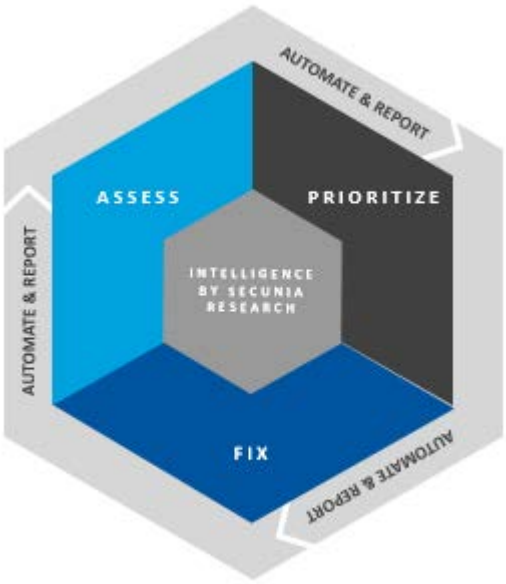


Software Vulnerability Manager Software Vulnerability Management Life Cycle

Software vulnerability management is a critical component of any security infrastructure because it enables proactive detection and remediation of security vulnerabilities.

A process to identify vulnerable products, including products not authorized in an organization's environment, paired with effective patch management is an absolute must to reduce the window of exposure and eliminate the root cause of a potential compromise.

Software Vulnerability Manager automates all steps of the software vulnerability management life cycle, allowing organizations to strengthen the security of their networks.



System Requirements

To use the Software Vulnerability Manager console, your system should meet the following requirements:

- Minimum resolution: 1280x1024
- All browsers supported (Microsoft Edge, Google Chrome, Mozilla Firefox).

  Note • *Active X plugin needs Microsoft Edge with IE mode. For more information, see Download and Install the Software Vulnerability Manager Plug-in.*

- Internet connection capable of connecting to https://svm.flexera.com
- The following addresses should be allow-listed in the Firewall/Proxy configuration:
  - New CRL distribution URLs:
    - http://*.amazontrust.com
    - http://s.ss2.us
  - If you require explicit URLs then allow below URLs:
    - http://crl.r2m02.amazontrust.com
    - http://crl.rootca1.amazontrust.com
    - http://crl.rootg2.amazontrust.com
    - http://s.ss2.us

    Software Vulnerability Manager uses Amazon Certificate Authority for TLS security certificates. Amazon can change their certificate revocation list - crl - occasionally.

Amazon root certificates are trusted by default by most common browsers, including Google Chrome, Microsoft Internet Explorer and Microsoft Edge, Mozilla Firefox, and Apple Safari.

For the latest certificate revocation lists and firewall rules, refer to Amazon ACM documentation.

- Product URLs:
  - https://csi7.secunia.com
  - https://agent.csi7.secunia.com
  - https://dl.csi7.secunia.com
  - https://*.secunia.com
  - https://*.flexera.com
- Timestamp URL:
  - http://timestamp.digicert.com

Note • *We recommend allowing domain name (timestamp.digicert.com).*

- First-Party cookie settings at least to Prompt (in Internet Explorer)
- Allow session cookies
- A PDF reader

Before starting Software Vulnerability Manager, the following should also be present:

- Permissions
- Software Vulnerability Manager with Scanning and Patching Capabilities

Permissions

To use the Software Vulnerability Manager console, the following permissions are required:

Table 2-1 • Permissions for Software Vulnerability Manager console

Permissions	Description
SCCM/WSUS	• **Connect and Select permissions—**You need connect and select permissions to the user (or service account) at the SQL Server Host of your System Center database. See Download and Install the Software Vulnerability Manager Daemon. ***Note*** • *This permission is optional if you are not using System Center.* • **WSUS Administrator Group privileges—**You will need WSUS Administrator Group (located locally on your WSUS Server). • **Domain Administrator privileges for Group Policy Object creation—** You may need Domain Administrator privileges for Group Policy Object creation. However, the Group Policy Object can be created manually. This is a one-time configuration, so the rights are not required on a permanent basis. ***Note*** • *This permission is optional.*
Intune	Connect and select permissions at Set up a Distribution Connection for Microsoft Intune.
Workspace ONE	Connect and select permissions at Set up a Distribution Connection for Workspace ONE.
Bigfix	Connect and select permissions at BigFix.

Software Vulnerability Manager with Scanning and Patching Capabilities

Task ***To successfully scan and create updates, the following should also be present when using Software Vulnerability Manager:***

1. Internet Explorer 11 or higher with Software Vulnerability Manager Plug-in installed (in order for Software Vulnerability Manager to connect to WSUS and to create packages successfully, Internet Explorer must be run as administrator in most cases - right-click and select Run as administrator).
2. In Internet Explorer **Tools > Internet options > Advanced**, ensure **Use TLS 1.2** are selected.
3. WSUS Administration Console matching your WSUS server's version.

4. Visual C++ Redistributable for Visual Studio 2012.
5. Microsoft .NET Framework runtime 4 or later.
6. If the WSUS Self-Signed Certificate is going to be used, and the user wishes to provision the certificate through the Patching > WSUS/System Center > Deployment function, Remote Registry service must be enabled on the clients.
7. Select the target hosts where the certificate is to be installed (CTRL+ mouse click for multiple selection), right-click and select Verify and Install Certificate.

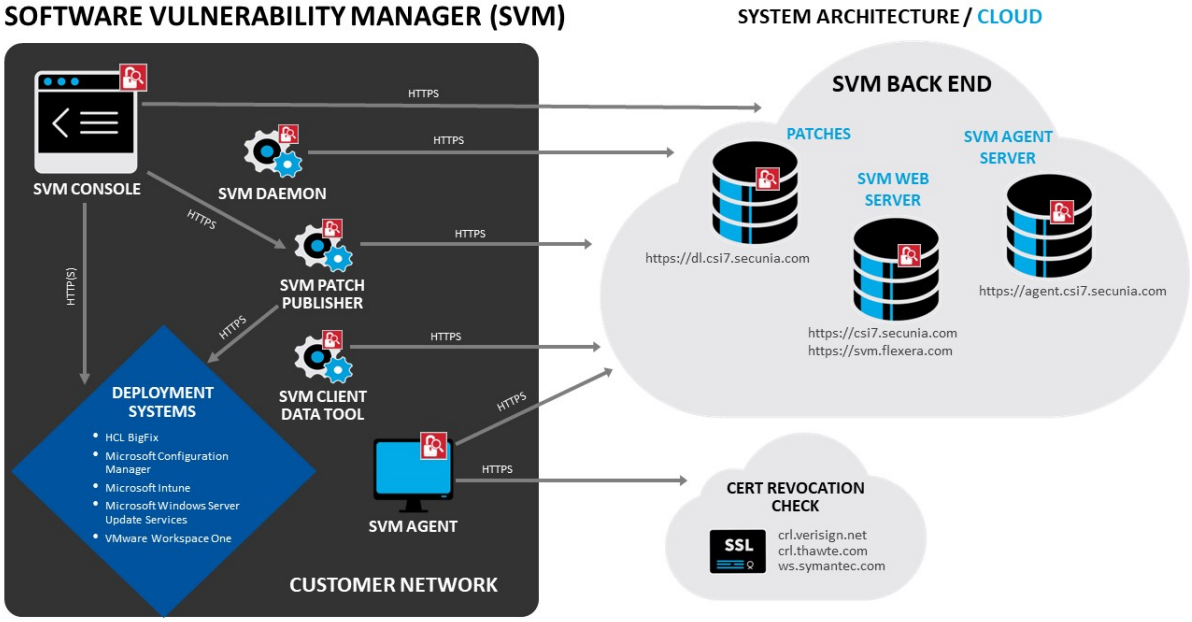
Note • *If your organization allows specific URL to access to the Internet, and you are having problems downloading or verifying a patch, ensure the CRLs are allowed; examine the logs to identify the download's source, and examine the certificate at that address for its CRL distribution points.*

Task ***To successfully run patching on Windows 8.1 and Server 2012 R2:***

1. On the Windows Server machine, from the Server Manager, go to Add Roles & Features > Features.
2. Select the Appropriate Installation Type (Role-Based & Feature Based as opposed to Remote Desktop Services Installation).
3. Select the local server as the Destination Server for the installation.
4. Click Next to bypass the Server Roles menu and go to the Features menu.
5. Within the Features menu, scroll down the list and find the Remote Server Administration Tools (RSAT).
6. Expand the RSAT feature menu and locate the Role Administration Tools list of features.
7. Expand the list and find Windows Server Update Services Tools.
8. Enable this feature and all additional sub-features listed underneath it (API and PowerShell cmdlets and User Interface Management Console).
9. Proceed to the end of the Add Roles & Features Wizard by clicking Next and then Install.
10. Restart Windows and launch Software Vulnerability Manager from a web browser (for example Internet Explorer).

System Architecture Overview

The following screenshots provide a visual overview of the Software Vulnerability Manager system architecture.


SOFTWARE VULNERABILITY MANAGER (SVM)
SYSTEM ARCHITECTURE / CLOUD
SVM CONSOLE
SVM DAEMON
SVM PATCH PUBLISHER
SVM CLIENT DATA TOOL
SVM AGENT
DEPLOYMENT SYSTEMS
HCL BigFix
Microsoft Configuration Manager
Microsoft Intune
Microsoft Windows Server Update Services
VMware Workspace One
CUSTOMER NETWORK
HTTPS
HTTP(S)
SVM BACK END
PATCHES
https://dl.csi7.secunia.com
SVM WEB SERVER
https://csi7.secunia.com
https://svm.flexera.com
SVM AGENT SERVER
https://agent.csi7.secunia.com
CERT REVOCATION CHECK
SSL
crl.verisign.net
crl.thawte.com
ws.symantec.com

3

Software Vulnerability Manager Quick Start Guide

This Quick Start guide walks you through setting up the key features of Software Vulnerability Manager:

- Login to Software Vulnerability Manager Cloud Edition
- Download and Install Software Vulnerability Manager Agent
- Performing a Scan
- Viewing Scan Results in Completed Scans
- Creating Smart Group Filters and Viewing Data
- Generating a Report
- Installing Patch Publisher and Configuring a Deployment System
- Publishing the Flexera Software Package System (SPS) and Vendor Patch Module Patches
- Automate Publishing of Patches

Login to Software Vulnerability Manager Cloud Edition

Software Vulnerability Manager is accessible via https://svm.flexera.com.

You will be prompted for authentication with your username/password.

For more information, see Logging on to Software Vulnerability Manager Cloud Edition.

To following topics related to SVM Login:

- Logging on to Software Vulnerability Manager Cloud Edition Using Single Sign-On

Download and Install Software Vulnerability Manager Agent

Use this page to download the signed and unsigned Agents (csia.exe).

Task ***To download and install Agent:***

1. In the Scanning > Scanning via Local Agents > Download Local Agent, Unsigned and Signed agents are available:
   - Unsigned Agents

     Download Unsigned Agents with Token
     - Microsoft Windows
     - macOS - 64bit
     - macOS - 32bit (ver. 7.6.0.7)
     - Red Hat Linux 9.x
     - Red Hat Linux 8.x
     - Red Hat Linux 7.x
     - Red Hat Linux 6.x
   - Signed Agents

     Download Signed Agents without Token
     - Microsoft Windows
     - macOS- 64bit
2. Click on csia.exe to install agent in Single Host mode. To install signed agent for Windows, download csia_token.ini and place it in the same folder where agent is saved.

Note • *To install signed agent for macOS, see Prepare Your Mac and Install the Mac Agent.*

Important • *Make sure that the Agent (csia.exe) is available in a local folder on the target PC before installing.*

For more information, see Download Local Agent.

Performing a Scan

Software Vulnerability Manager allows scanning of target hosts using the following approaches:

Single Host Agent-based scans are conducted by the Software Vulnerability Manager Agent that can be installed in different modes: Single Host mode, Network Appliance mode, or Command Line mode.

If you open SVM console in Microsoft Edge in IE mode, then alternatively you can scan the target hosts by launching a scan from the system where the Software Vulnerability Manager console is running. By using this approach, no software is installed in the target hosts. The scanning is performed using standard operating system services. This scan is also referred to as a "remote scan".

For more information, see Scanning.

Viewing Scan Results in Completed Scans

You can view a summary of the scans conducted. To do so, double-click or right click on an entry and then select View Scan Result.

For more information, see Completed Scans.

Creating Smart Group Filters and Viewing Data

Smart Groups are the medium by which a Software Vulnerability Manager user views scan results. You are able to see the hosts, products, and associated advisories that are available to you, based on your view of the network as configured by your administrator. Furthermore, you are able to create custom filtered views of each of these using a variety of predefined criteria. The All Hosts, All Products, and All Advisory default Smart Groups are created by Flexera and cannot be edited or deleted. They represent an unfiltered view for their respective content. Use the filters when creating additional Smart Groups to effectively customize the data you are most interested in, and want to see, create reports on, receive alerts and notifications about, and see dashboard portlet data on. Smart Groups are the basis by which most data in Software Vulnerability Manager are viewed, and can be used effectively to optimize your workflow.

Note • *Smart Groups are generated periodically, and the data you see is only as current as the last time the Smart Group was compiled. At any time, you can queue the recompilation of a Smart Group to get the most current data.*

Within the Smart Group grids, you can double-click to view/edit an existing group's configuration. Alternatively, right-click a Smart Group to view, edit, compile or delete the group.

In the Create/Edit grid, check for the smart groups which you want to compile and click on Queue For Compilation. The selected group will update within minutes to update the data and notifications for the group. You can also compile by right-click on any smart group and select Queue For Compilation.

Click Create New Smart Group to configure a new Smart Group. Click + and – to add or remove criteria.

Generating a Report

You can view a list of reports that have been configured and scheduled for generation. You can configure a new report by clicking Generate New Report or right-click an existing report to view, edit or delete it. The Software Vulnerability Manager reporting capabilities allow the user to schedule and fully customize the intended report.

For more information on configuring report, see Report Configuration.

Installing Patch Publisher and Configuring a Deployment System

SVM Patch Publisher enables you to configure connections to the SVM server and to the supported end point management systems. The tool polls SVM on a configured frequency to look for new patches resulting either from a manual publish or Patch Automation to publish patches to the specified end point management system.

To use SVM Patch Publisher, you must download and install Software Vulnerability Manager Patch Publisher Toolkit. To download this tool kit click here.

Upon installing the new tool, SVM Patch Publisher shortcut will be created on the desktop to launch the tool.

You can also download the latest version of Patch Publisher from the Software Vulnerability Manager console under Patching menu. For more information, see Download Patch Publisher.

This topic includes the following topics:

- Create Connections
- Distribution Systems
- Service Connections
- Grids

Also see,

- Download and Install the Software Vulnerability Manager Patch Publisher

Create Connections

To configure connections to the SVM server to the supported end point management systems. For more information, see SVM Connection.

The SVM Patch Publisher supports Single Sign-On for authentication to connect with the SVM. For more information see, Connect SVM in the SVM Patch Publisher.

Distribution Systems

You can define multiple named connections to Windows Server Update Services (WSUS), Microsoft Intune, VMWare Workspace ONE, and BigFix. For instructions on setting up a named connection to a distribution system, see Distribution Systems.

The WSUS Management tool is integrated with the SVM Patch publisher. To launch the WSUS Management Tool, click on the WSUS Management button in the ribbon of the SVM Patch Publisher. As a prerequisite, the successful launching of the WSUS Management Tool will require the WSUS Administration Console to be installed on the device.

To following topics are related to Windows Server Update Services (WSUS):

- WSUS/System Center
- Creating the WSUS-CSI GPO Manually
- Integrate SVM with WSUS/SCCM and Deploy a Patch

- Flexera WSUS Management Tool

Service Connections

The Service Connection view provides option to establish connection between SVM and AdminStudio. To configure the service connection, see Service Connections.

Grids

You can now publish SPS/ VPM patches to multiple end point management systems like WSUS, Microsoft Intune, VMWare Workspace ONE, and BigFix.

You can view the following grids in the Patch Publisher:

- The Flexera Package System (SPS) View
- Patch Template
- Agent Deployment
- Vendor Patch Module
- Bring Your Own Patch (BYOP)
- Patch Deployment Status
- Custom Scan Rules

The Flexera Package System (SPS) View

The Flexera Package System (SPS) page displays a list of products for which Software Vulnerability Manager can automatically create an Update/Uninstall/Custom package.

For more information, see Flexera Package System (SPS).

To publish SPS patches, right click on any SPS patch and select **Create Update Package** from the context menu and follow the steps as mentioned in Create Patch Wizard.

Patch Template

The Patch Template view displays the SPS patches that are saved as Patch Templates. This view also enables you to edit and publish templates to one of the configured endpoint management systems.

For more information, see Patch Template.

Right click on any SPS Template and select **Publish/Edit Template** from the context menu and follow the steps as mentioned in Create Patch Wizard.

Agent Deployment

Agent Deployment view gives summary of the Software Vulnerability Manager agents currently installed on the endpoints in the network. You can also create and publish the agent to the configured endpoint management system for deployment.

For more information, see Agent Deployment.

Vendor Patch Module

The Vendor Patch Module page displays a list of products for which Software Vulnerability Manager can automatically create an Update/Uninstall package and also provides the patch information.

For more information, see Vendor Patch Module.

To publish VPM patches, right click on any VPM patch and select **Create Update Package** from the context menu and follow the steps as mentioned in Create Patch Wizard.

Bring Your Own Patch (BYOP)

In the Bring Your Own Patch (BYOP) view of SVM Patch Publisher, you will be able to send a request to AdminStudio for creating patches for the products which are not covered by SPS and VPM patches. For more information, see Request Patch.

You can create and publish custom packages.

For more information, see Bring Your Own Patch (BYOP).

Patch Deployment Status

The Patch Deployment Status view displays the status and other details of the patches published to an endpoint management system.

For more information, see Patch Deployment Status.

Custom Scan Rules

Use the Custom Scan Rules page to create and maintain custom rules for scanning customer created programs, drivers, and plug-ins.

For more information, see Custom Scan Rules.

Publishing the Flexera Software Package System (SPS) and Vendor Patch Module Patches

This is a new and quick way for non-IE browsers to publish patches from SVM to an end-point management system with no dependency on ActiveX. QuickPatch publishes patches to end-point management system via Patch Publisher using defaults (no customizations).

To do so, right click on any SPS template or VPM patch and select **Publish with QuickPatch** from the context menu and follow the steps as mentioned in QuickPatch.

In the Patch Publisher:

- Flexera Software Package System (SPS)/ Vendor Patch Module Patches—Right click on any SPS/VPM patch and select **Create Update Package** from the context menu and follow the steps as mentioned in Create Patch Wizard.
- SPS Template—Right click on any SPS Template and select **Publish/Edit Template** from the context menu and follow the steps as mentioned in Create Patch Wizard.

Automate Publishing of Patches

In the Software Vulnerability Manager console, to automate publishing of patches, right click on any SPS template or VPM patch and select **Subscribe to Patch** from the context menu, and then follow the steps as mentioned in Patch Automation.

In the Patch Publisher, to automate publishing of patches, right click on any SPS template or VPM patch and select **Subscribe to Patch** from the context menu, and then follow the steps as mentioned in Subscribe Automatic Publishing of Patches.

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Getting Started with Software Vulnerability Manager Cloud Edition

Welcome to Flexera! Thank you for purchasing Software Vulnerability Manager Cloud Edition.

This help section walks you through the steps for getting started with Software Vulnerability Manager Cloud Edition:

- Logging on to Software Vulnerability Manager Cloud Edition
- Opening a Support Case
- Download and Install the Software Vulnerability Manager Plug-in
- Download and Install the Software Vulnerability Manager Daemon
- Download and Install the System Center Plug-in
- Download and Install the Software Vulnerability Manager Patch Publisher
- Download and Install the Software Vulnerability Manager Client ToolKit
- Join Flexera's Customer Community

Logging on to Software Vulnerability Manager Cloud Edition

Software Vulnerability Manager is accessible via https://svm.flexera.com.

You will be prompted for authentication with your username/password. Please use the credentials supplied by Flexera personnel. The initial password issued by Flexera is a one-time only password that must be changed upon the first login. The new password must contain a minimum of eight characters or comply with the criteria defined in your custom Password Policy Configuration.

Tip • *Once you have changed your password, please set up your Password Recovery Settings, so that you can recover the Root Admin password without having to open a support case to have the password reset.*

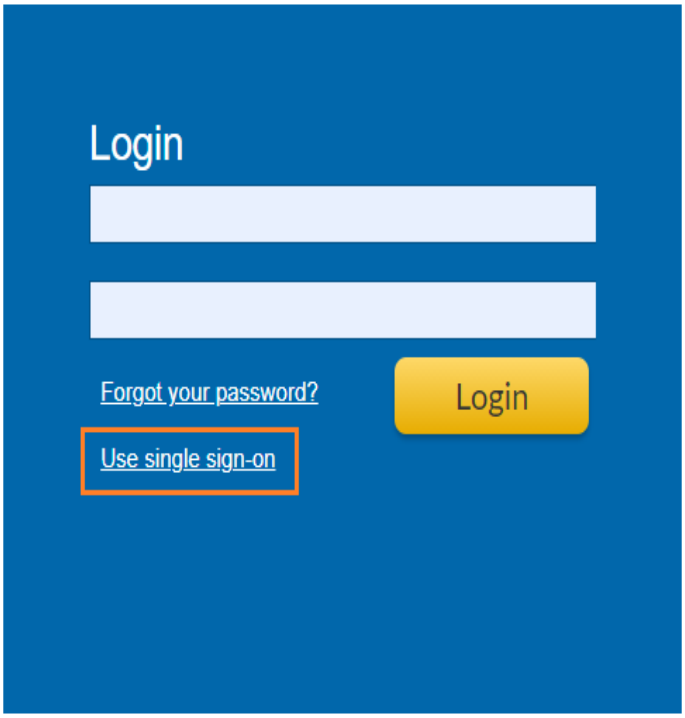
Important • *For security purposes, Software Vulnerability Manager has a session timeout that will log you off after 2 hours of inactivity.*

Logging on to Software Vulnerability Manager Cloud Edition Using Single Sign-On

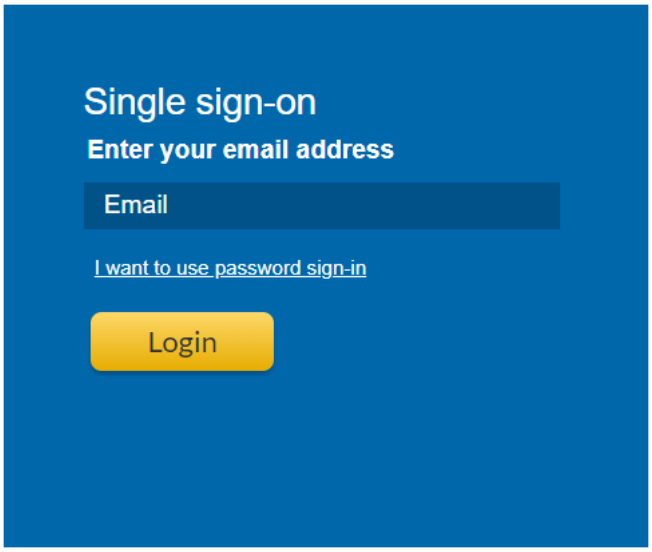
Perform the following steps to login to Software Vulnerability Manager using single sign-on for Azure SSO or Okta users.

Task ***To login to Software Vulnerability Manager using single sign-on:***

1. On the Login page, click **Use Single Sign-On**.



The **Single sign-on** login page prompts for authentication with your single sign-on email address.



2. Enter a valid email address and click **Login**.

   Once logged in, the Identity Provider page prompts for authentication with your username/password.

3. Enter your valid username and password, and then click **Sign In**.

   Upon successful login, Software Vulnerability Manager is accessible.

Important • *For security purposes, Software Vulnerability Manager has a session timeout that will log you off after 2 hours of inactivity.*

Connect SVM in the SVM Patch Publisher

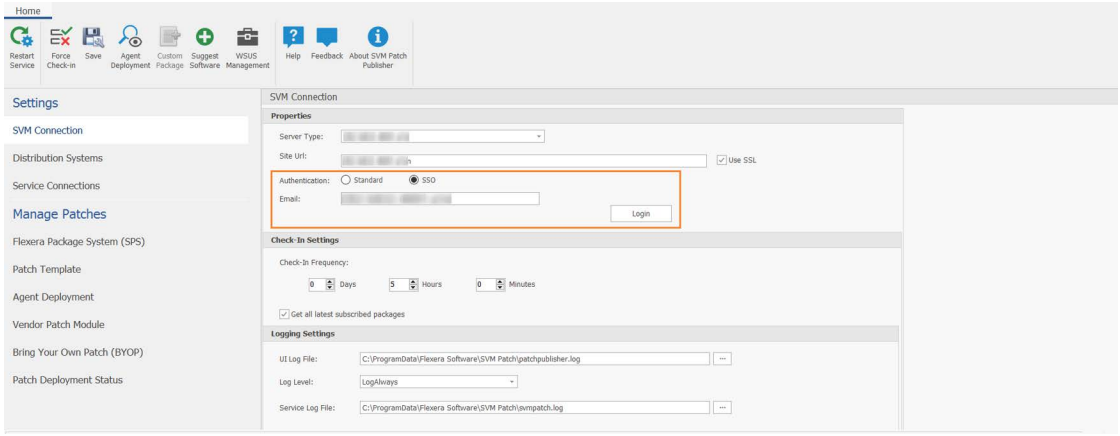
The SVM Patch Publisher supports Single Sign-On for authentication to connect with the SVM.

Task ***To connect SVM in SVM Patch Publisher:***

1. In the **SVM Patch Publisher > Settings** menu, click **SVM Connection** in the left pane.

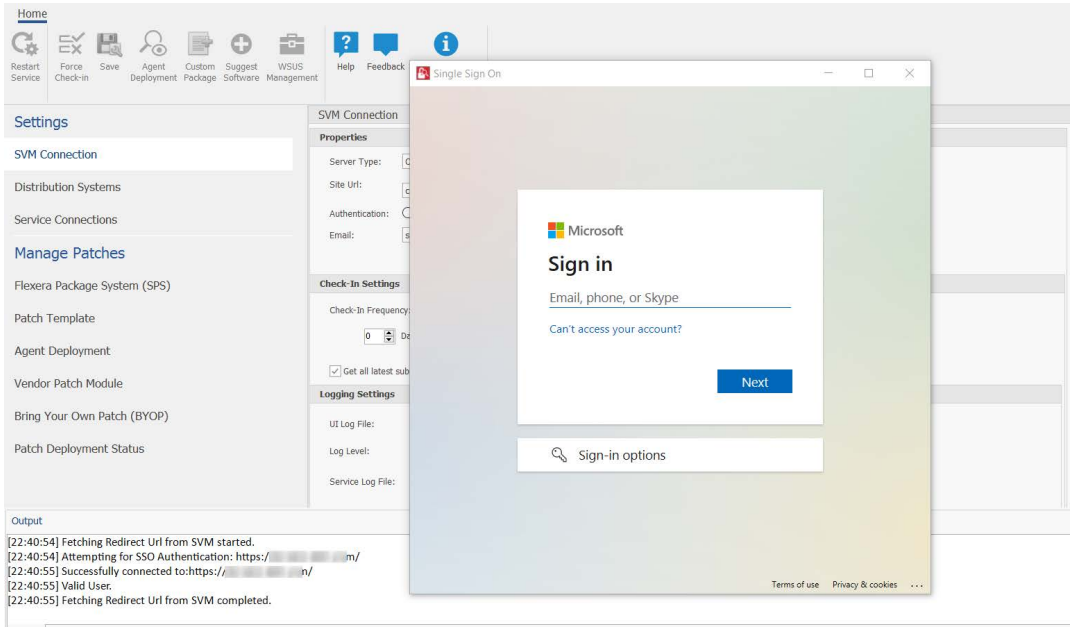
   The SVM Connection page appears.

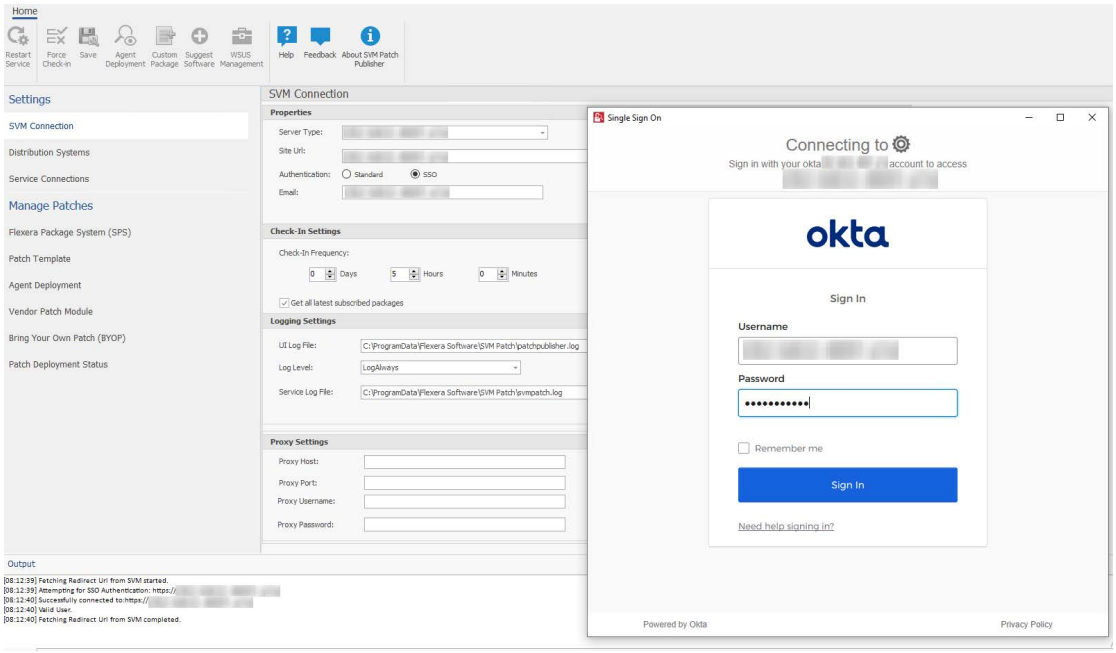
2. select the **SSO** option, provide your account name or official email address, and click the **Login** button.



3. Clicking on Login will automatically redirect you to the configured Identity Provider at your organization for login.

Enter your valid credentials.





4. Upon successful authentication, you will be connected to SVM in the Patch Publisher.
5. Click **Restart Service** ribbon for the change to take effect.

Opening a Support Case

If you have any questions or concerns regarding your Software Vulnerability Manager Cloud account, please open a support case.

To watch the video which explains how to open a support case via Flexera's Customer Community, click here.

Download and Install the Software Vulnerability Manager Plug-in

The first time you login to Software Vulnerability Manager, click the link on the bottom of the page and follow the on-screen instructions to download and install the Software Vulnerability Manager Plug-in to enable scanning and patching. Please note that the Plug-in is only compatible with Internet Explorer version 8 or later.

Software Vulnerability Manager Plug-in is installed locally and must be installed on the machine you are running the Software Vulnerability Manager console from. Once the Software Vulnerability Manager Plug-in has been installed the download link is removed from the page.

Task ***If Internet Explorer is blocking the ActiveX Plug-in, follow the steps below to allow it to load:***

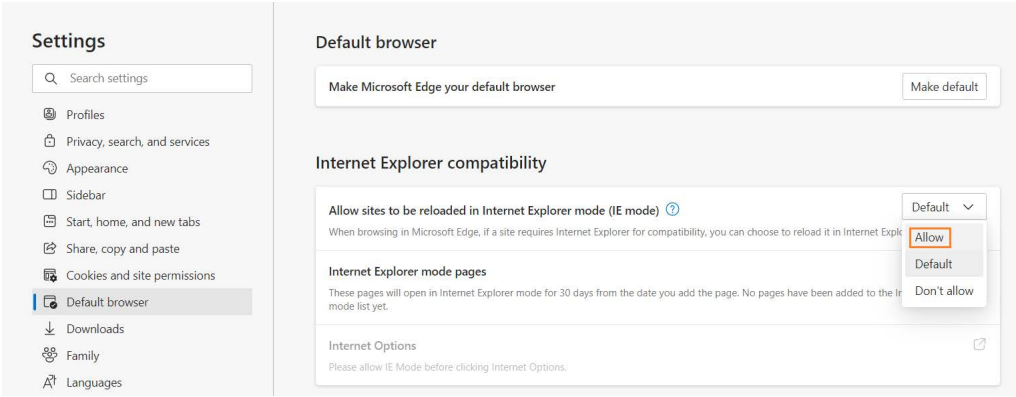
1. Open Internet Explorer's **Internet options.**
2. Go to the **Security** tab.

3. Select **Trusted Sites**.
4. Add your server's IP or host name to the Trusted Sites.
5. Go back to the Security tab and click **Custom level**.
6. Scroll down to Initialize and script ActiveX controls not marked as safe for scripting and change the setting from Disable to **Prompt** or **Enable**.

If you want to open Microsoft Edge in IE mode, perform the following steps:

Task ***To open Microsoft Edge in IE mode:***

1. In Microsoft Edge browser, click ellipses **...** button in top right corner, and then select **Settings** from the list.
2. In the Settings page, select **Default browser** from the left pane.
3. In the Default browser page, slide the **Allow sites to be reloaded in Internet Explorer mode (IE mode)** toggle to **Allow**.



4. Restart the browser.
5. Upon successful action, Internet Explorer mode is now enabled.
6. Launch csi7.secunia.com.
7. In top right corner, click ellipses **...** button, and then select **Reload in Internet Explorer Mode** from the list.

Download and Install the Software Vulnerability Manager Daemon

The Software Vulnerability Manager Daemon is a stand-alone executable that executes various schedules configured in the Software Vulnerability Manager console. It runs as a background service with no user interaction. To download the Daemon, click here.

The Daemon integrates a number of local data sources in your network with the Flexera Cloud. It should be deployed to a node in the network that has high availability (for example, the server running the System Center or SQL server).

Once deployed, the Daemon will regularly scan the following data sources, based on the configuration created in Software Vulnerability Manager:

- Active Directory
- Microsoft® System Center Configuration Manager ("System Center") Imports
- Scheduled Exports
- WSUS State Change

Important • *As the Daemon is connecting directly to the Flexera and System Center database servers unattended, Software Vulnerability Manager's System Center Inventory Import page should be configured to include System Center SQL Host, SQL Port and SQL Database connection details prior to the installation of the Daemon to enable the latter to start executing unattended schedules correctly and on time.*

To be able to pass authentication at the SQL server during an unattended scheduled Import, the Daemon has to be installed and configured with a user account that has been specifically assigned with Connect/Select permissions at the SQL Server Management Studio software prior to the installation of the Daemon.

When scheduled imports require it, the Daemon connects directly to the System Center database. This may block upgrades of System Center. Before upgrading System Center, make sure to stop the Daemon service, and start it again after the upgrade to System Center is complete.

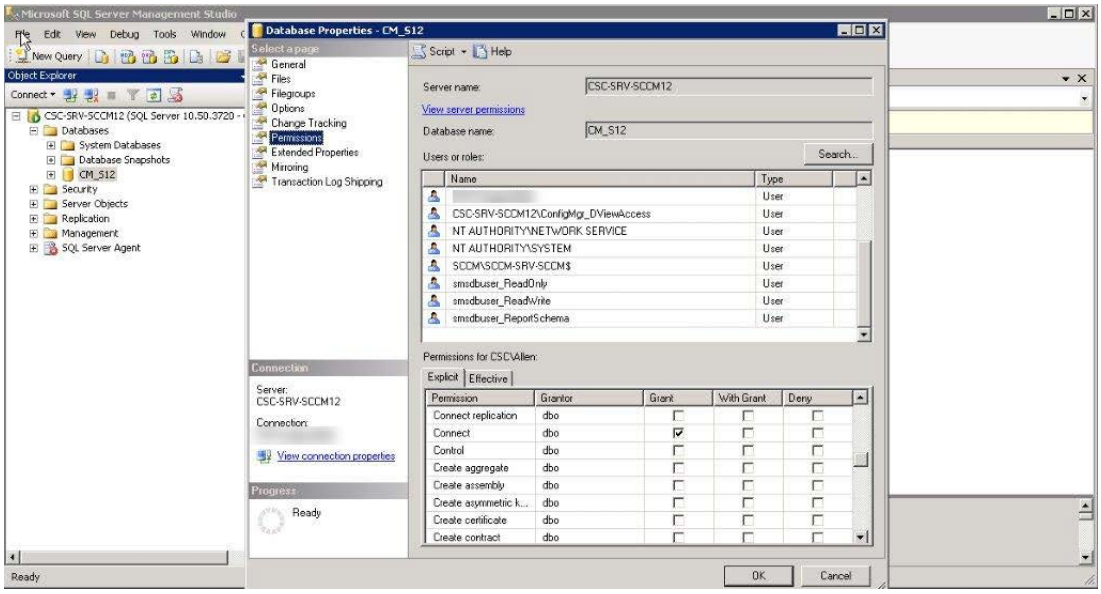
The Daemon should only be deployed once to avoid two instances competing to retrieve the schedules.

The user or service account that runs the Daemon must have:

- Run-as Service privileges
- Write permission on the location where the exports should be placed and log file written for scheduled CSV file output and log file creation
- Member of local WSUS group "WSUS Administrators"
- LDAP query privileges
- SQLDataReader privileges
- System Center Configuration Manager Read only Analyst privileges

Task ***To assign Connect and Select permissions to the user (or service account) that will be used to run the Daemon service:***

1. Open SQL Server Management Studio software at the SQL Server Host.
2. Expand Databases and find the name of your System Center database.
3. Right-click the database name and select **Properties**.
4. Enter the Permissions section from the left-hand side menu.
5. Find the account that will be used to install the Daemon and click on it.
6. While highlighted, review the **Explicit** permissions of the account below and find and select the **Connect** and **Select** check boxes.
7. Save the configuration and exit the SQL Server Management Studio.



Task ***To install the Daemon:***

1. Double-click the Daemon installer icon and follow the wizard instructions.

Important • *To run the Daemon service successfully note the followings:*

- *SVM 2019 Daemon does not require elevated permissions to run once the service has been setup, but it requires that the installation of it is performed by an account that is at least* ***Local Administrator*** *on the machine where the service is to be installed.*
- *The Daemon's service account must not be restricted by a GPO configuration the ability to logon to the server selected for installation of the Daemon. Such domain policy will prevent the Daemon to run as a service and would therefore prevent it to perform intended functionality.*

2. Accept the End User License Agreement and click **Next**.
3. Enter the Daemon Proxy Settings (host name, port, username and password), if required. The values in populated fields are fetched from the current user's Internet Explorer proxy settings. Click **Next**.
4. Enter the Username and Password of your Software Vulnerability Manager account and click **Install**.

Important • *The Daemon executes scheduled tasks configured in Software Vulnerability Manager. Therefore, the Software Vulnerability Manager user account used during the Daemon installation must be the same one which set up the scheduled tasks in Software Vulnerability Manager. It can be a user account or an administrator account in Software Vulnerability Manager.*

5. Enter the credentials for the user account (or service account) that was setup beforehand to grant access for the Daemon to the SQL Server Host. The user name must be entered in the <username>@<AD domain> format. Click **Next**.
6. Click **Finish** to close the Daemon setup.

For reference, the Daemon now outputs report to a user-configured path. This path is set when the Daemon is installed and there is a page in the installer to configure the path. The file created at that path gets the data and time appended to its name, so for example, if the user sets the name to all_hosts.csv in Software Vulnerability Manager, then the resulting file will actually be named all_hosts_2015-11-29_13-00_01.csv, or whatever the date and time were when the file was created.

Also note that, from Daemon version 2.0.0.6 onwards, if the user leaves the path empty when installing the Daemon, then exporting reports won't work at all. To fix this later, the user will have to reinstall the Daemon and set the path in the installer.

The Daemon uses the System Center SQL Database Settings that are specified in the Configure dialog. If those settings haven't yet been specified when the Daemon has been run, then it will check for them again in 10 minutes and every 10 minutes afterwards until it gets them.

The Daemon checks with Flexera every 10 minutes to download new schedules or fetch changes to existing schedules as long as it is not in the process of processing scans and the results are displayed in Software Vulnerability Manager Completed Scans page.

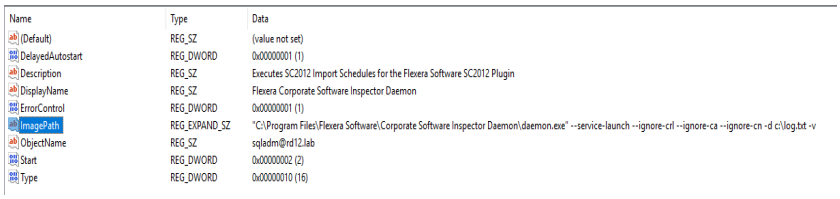
Task ***To disable the daemon security protocol using*** `(--ignore-crl, --ignore-ca, --ignore-cn)`***, choose one of the following options:***

1. Add the security options to the image path of Windows service in the location:

   `System->CurrentControlSet->Flexera Software Corporate Inspector Daemon->ImagePath`

   Example of an ImagePath value:

   `"C:\Program Files\Flexera Software\Corporate Software Inspector Daemon\daemon.exe" --service-launch --ignore-crl --ignore-ca --ignore-cn -d c:\log.txt –v`



Name	Type	Data
(Default)	REG_SZ	(value not set)
DelayedAutostart	REG_DWORD	0x00000001 (1)
Description	REG_SZ	Executes SC2012 Import Schedules for the Flexera Software SC2012 Plugin
DisplayName	REG_SZ	Flexera Corporate Software Inspector Daemon
ErrorControl	REG_DWORD	0x00000001 (1)
ImagePath	REG_EXPAND_SZ	"C:\Program Files\Flexera Software\Corporate Software Inspector Daemon\daemon.exe" --service-launch --ignore-crl --ignore-ca --ignore-cn -d c:\log.txt -v
ObjectName	REG_SZ	sqladm@rd12.lab
Start	REG_DWORD	0x00000002 (2)
Type	REG_DWORD	0x00000010 (16)

2. Add the following options to the Daemon registry key:

   ```
   [HKEY_CURRENT_USER\SOFTWARE\Secunia\Daemon]
   "IgnoreCRL"= dword:00000001

   "IgnoreUnknownCA"= dword:00000001

   "IgnoreInvalidCN"= dword:00000001
   ```

   The daemon will add the registry entries when you install it along with the security options as follows:

   `Daemon.exe -i --ignore-crl --ignore-ca --ignore-cn -R username:password`

Note • *If you configure the registry settings manually, restart the service for the change to take effect.*

Download and Install the System Center Plug-in

The System Center Plug-in should be installed on the same machine that the System Center Configuration Manager console is installed. You can use the Plug-in on the System Center Configuration Manager Server or on a client machine where the console is installed.

Download the installer from https://secuniaresearch.flexerasoftware.com/support/download/.

Double-click the installer icon and follow the wizard instructions.

Launch the System Center Configuration Manager console. The Plug-in can be found under the **Software Library > Flexera Software** folder.

Login with your Software Vulnerability Manager Account credentials (Username/Password).

The machine should have access to https://*.secunia.com.

Tip *• You can define the sorting of both lines and columns in any grid view to create the layout that best suits your needs. Click the right hand side of any of the column headings to view the available display options. The column's position can be modified by dragging and dropping the selected column to the desired position.*

Tip *• You can click **Export** in any grid view to save the displayed information as a CSV file. You can configure the file by hiding columns in the grids prior to export.*

Download and Install the Software Vulnerability Manager Patch Publisher

To ease SVM Patch Publisher, you must download and install Software Vulnerability Manager Patch Publisher Toolkit. To download this tool kit click here.

Upon installing the new tool, SVM Patch Publisher shortcut will be created on the desktop to launch the tool.

Prerequisites

The below prerequisites required to install Patch Publisher:

- OS Windows 10 or later
- Windows 2016 or later
- .Net framework version 4.7.2 or later

- RSAT should be enabled and needs to be installed only when you configure a connection to the Windows Server Update Services (WSUS).
- Architecture - 64 bit operating systems
- You can install in Local admin/domain admin
- OS Requirements (for WSUS Distribution System):
  - Install Patch Publisher in Windows Server 2016 or Windows 10, for Windows 2016 WSUS.
  - Install Patch Publisher in Windows Server 2019 or Windows 10, for Windows 2019 WSUS.
  - Install Patch Publisher in Windows Server 2022 or Windows 10, for Windows 2022 WSUS.

Related topics are:

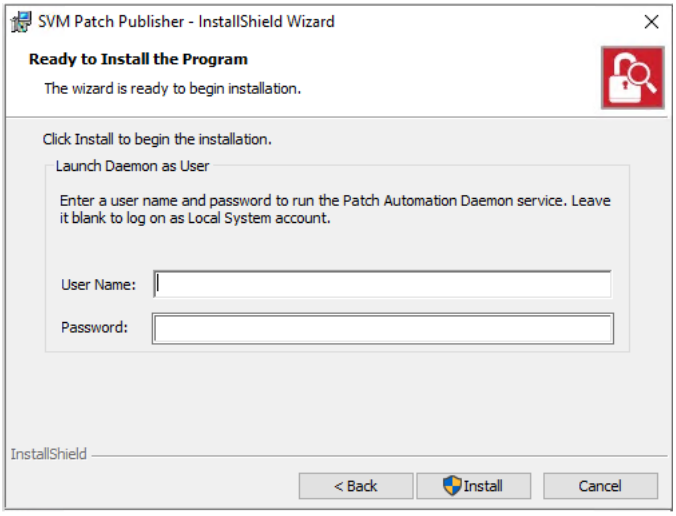
- Download and Install the SVM Patch Publisher
- SVM Patch Publisher

Download and Install the SVM Patch Publisher

To download and install the SVM Patch Publisher perform the following steps.

Task ***To Download and install:***

1. Download the Software Vulnerability Manager Patch Publisher from the SVM Patch Publisher Tool Kit.
2. Double click the set-up file, you will be prompted to enter credentials. Click **Install**.



3. On successful installation, click **Finish**. SVM Patch Publisher windows pane appears. For more information, see SVM Patch Publisher.
4. After installation, a shortcut for Software Vulnerability Manager Patch Publisher will be created on your desktop.

Note • *If you are migrating Patch Daemon to SVM Patch Publisher, make sure that the SVM Test connections and Distribution Connections are* ***Test & Saved****.*

Related topics are:

- SVM Patch Publisher

SVM Patch Publisher

SVM Patch Publisher inherits its current functionalities from the Patch Daemon. SVM Patch Publisher enables you to configure connections to the SVM server and to the supported end point management systems. The tool polls SVM on a configured frequency to look for new patches resulting either from a manual publish or Patch Automation to publish patches to the specified end point management system.

The following section describes how to access the Patch Publisher.

- Working with SVM Patch Publisher Interface
- Settings Menu
- Manage Patches Menu

Working with SVM Patch Publisher Interface

The SVM Patch Publisher interface has various UI elements. This section includes topics that explain how to perform basic tasks and the use of these elements.

- Toolbar in the SVM Patch Publisher
- Output/Progress windows in the SVM Patch Publisher

Toolbar in the SVM Patch Publisher

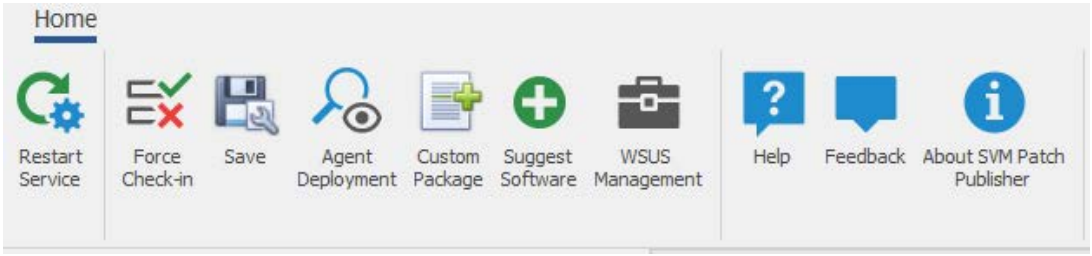
The SVM Patch Publisher has the following ribbon buttons:

Table 4-1 • SVM Patch Publisher / Ribbon Buttons

Buttons	Description
Restart Service	Click to restart the daemon service for the changes to take effect. Upon clicking this button, the state of the service is checked.
Force Check-In	Click and the pull the subscribed packages without waiting for the schedule time from the server for the Daemon service to execute.
Save	Click to save the changes to the settings file.
Agent Deployment	Click to create the agent package.
Custom Package	Click to create the custom package.

Table 4-1 • SVM Patch Publisher / Ribbon Buttons

Buttons	Description
Suggest Software	Used to request software application which are not available in the SVM. For more information, see Suggest Software.
WSUS Management	Click to launch the WSUS Management Tool and view the patches deployed. For more information, see Flexera WSUS Management Tool. ***Note*** • *Make sure that the WSUS Administration Console is installed for the successful launching of the WSUS Management Tool.*
Help	Click to open the SVM help library.
Feedback	Used to provide ideas and / or suggestions.
About SVM Patch Publisher	Click to launch the SVM Patch Publisher window and view the information about the tool.



Output/Progress windows in the SVM Patch Publisher

When you perform any tasks like save, force check-in, and restart service on subscribed packages, the Output Window appears at the bottom of the interface.

- Lists the Errors, Warnings, and other log messages that are generated while perform a task on subscribed package.
- Displays logs while performing functional testing of the subscribed package.

Settings Menu

In Settings menu, you can set SVM connection, add multiple distribution connections, and configure connections to the AdminStudio server where you can request packages from Patch Publisher to the AdminStudio.

This section includes the following topics:

- SVM Connection
- Distribution Systems
- Service Connections

SVM Connection

You can configure connections to the SVM server to the supported end point management systems. Perform the following steps to configure the SVM connections.

Task ***To configure SVM connection:***

1. On Settings menu, click **SVM Connection** in the left pane.

   The **SVM Connection** page appears.

2. To configure the SVM connection, enter the following information:

Field	Description
Server Type	Select one of the following Server Type: • Cloud • On-Prem
Site URL	Enter the URL for SVM Connection. When selecting the **Cloud** option under **Server Type**, the Site URL will be pre-populated as **svm.flexera.com**
Use SSL	Select the Use SSL Connection check box if your SVM Connection is configured to accept SSL connections.
Authentication	Select one of the following options: • **Standard—**If you select this option, enter the appropriate User Name and Password for the specific site URL. • **SSO—**If you select this option, provide your official email address, and clicking the **Login** button will automatically redirect you to the configured Identity Provider at your organization for login. For more information, see Connect SVM in the SVM Patch Publisher. You can establish a successful connection to the new URL (svm.flexera.com) using both Standard and SSO authentication.
Email	Enter valid email address for the authentication process. ***Note*** • *This filed populates only when you select **SSO** authentication type.*
Check-In Settings	Set the frequencies to pull the relevant packages from the server.
Get all latest subscribed packages	Select if you want to get latest subscribed packages.

Field	Description
Log Level	Set one of the Log levels: • LogAlways • Critical • Error • Warning • Informational • Verbose
Service Log File	You can edit the folder path to save the action logs of this Tool. By default, the folder path will be: `C:\ProgramData\Flexera Software\SVM Patch\svmpatch.log`
UI Log File	You can edit the folder path to save the action logs of this Tool. By default, the folder path will be: `C:\ProgramData\Flexera Software\SVM Patch\patchpublisher.log`
Proxy Settings	You can configure a proxy server using the proxy settings. For more information, see Configure SVM Patch Publisher Proxy Settings. ***Note*** • *This feature is currently supported for the SVM and Workspace ONE connections in the SVM Patch Publisher.*
Test & Save Connection	Click to test to see if the settings that you entered can be used to successfully connect to this SVM server. It restarts Patch Publisher service automatically for the changes to take effect.

3. On successful connection you will receive a Token in the Output Window.
4. With the following indicators, you will have clear visibility into the current state of the SVM connection at a glance.
   - Green Icon—Displayed when the SVM connection is active.
   - Red Icon—Displayed when the SVM connection is inactive or not yet configured.

Note • *If SSO is configured using the old UI, to use Patch Publisher with SSO:*

- *Change the server type to On-Prem*
- *Set the URL to csi7.secunia.com*
- *Ensure Use SSL is checked*

Configure SVM Patch Publisher Proxy Settings

To configure a proxy server in SVM Patch Publisher, perform the following steps.

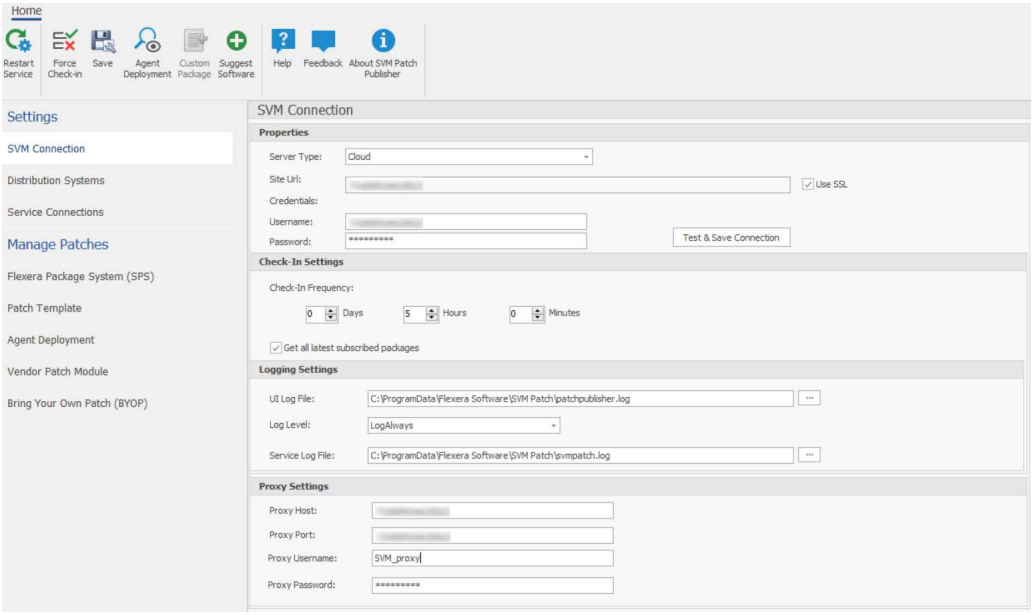
Task ***To configure a proxy server:***

1. On Settings menu, click **SVM Connection** in the left pane.

   The **SVM Connection** page appears.

2. Enter the Proxy Settings (**Proxy host**, **Proxy port**, **Proxy username**, and **Proxy password**) in the respective fields.

3. Click **Test &Save Connection** to see if the settings that you entered can be used to successfully connect to this SVM server.



4. Click **Restart Service** ribbon for the change to take effect.

Distribution Systems

You can define multiple named connections to Windows Server Update Services (WSUS), Microsoft Intune, VMWare Workspace ONE, and BigFix.

For instructions on setting up a named connection to a distribution system, see:

- Creating a New Distribution System Connection Setting
- Deleting an Existing Distribution Connection

Creating a New Distribution System Connection Setting

You can create a new named connection to the following Distribution Systems.

- Windows Server Update Services (WSUS)
- Microsoft Intune
- VMWare Workspace ONE

- BigFix
- Tanium

Windows Server Update Services (WSUS)

To create a new named connection to the Windows Server Update Services (WSUS) distribution system, perform the following steps:

Task ***To create a new named connection to the Windows Server Update Services (WSUS) distribution system:***

1. On **Settings** menu, click **Distribution Systems** in the left pane.

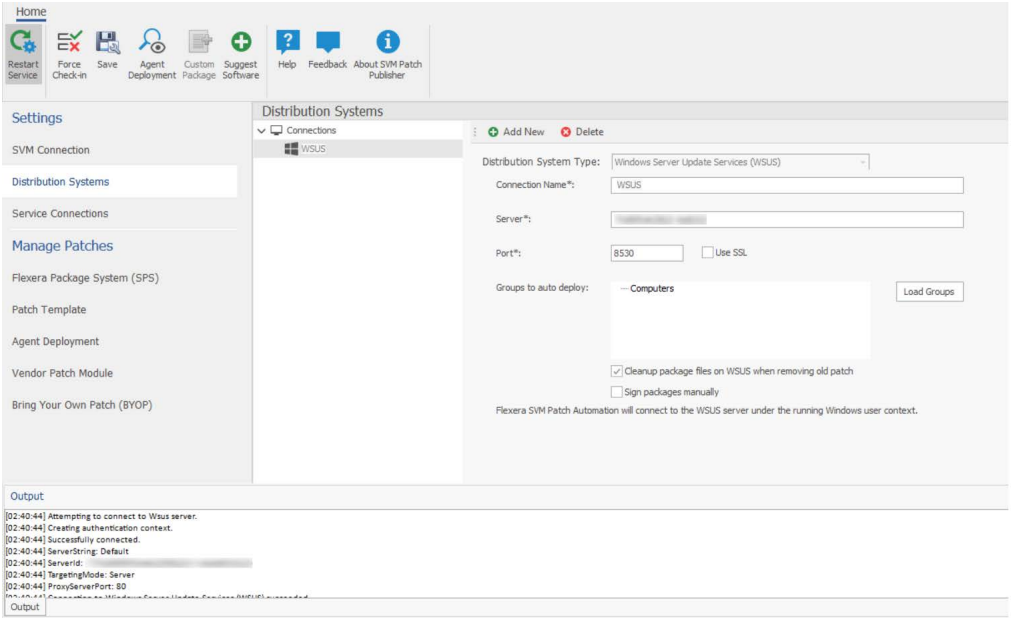
   The Distribution Systems pane appears.

2. Click **Add New**.

3. Use the following fields to add the Windows Server Update Services (WSUS) connection:

Field/Button	Description
Distribution System Type	Click the Distribution System Type drop down and select **Windows Server Update Services (WSUS)** from the list.
Connection Name	Enter the connection name.
Server	Enter the server details.
Port	Enter the port number.
Use SSL	Select the **Use SSL Connection** check box only if your WSUS is configured to accept SSL connections.
Load Groups	By clicking **Load Group** button, a list of computer groups will appear in the **Group to auto deploy** field.
Groups to auto deploy	Displays a list of computer groups configured in WSUS Server. Select the computer groups which you wanted to deploy the packages. ***Note*** • *Only displayed when* ***Load Groups*** *button is clicked.*
Cleanup packages files on WSUS when removing old patch	If you enable, old package will be removed during the publish. By default, this option will be unchecked.
Sign packages manually	Select **Sign package manually** check box to external package signing.

4. Click the **Test & Save Connection** button to ensure the settings you entered can be used to successfully connect to this service. It restarts Patch Publisher service automatically for the changes to take effect. You will receive a successful message in the Output Window.



5. On successful connection, the WSUS Distribution System is added to the connection.
6. Restart the SVM Patch Publisher so that the selected groups will be assigned for the end point deployments.

To following topics related to Windows Server Update Services (WSUS):

- WSUS/System Center
- Creating the WSUS-CSI GPO Manually
- Integrate SVM with WSUS/SCCM and Deploy a Patch
- Flexera WSUS Management Tool

Microsoft Intune

To create a new named connection to the Microsoft Intune distribution system, perform the following steps.

Task ***To create a new named connection to the Microsoft Intune distribution system:***

1. On **Settings** menu, click **Distribution Systems** in the left pane.

   The Distribution Systems pane appears.
2. Click **Add New**.
3. Use the following fields to add the Microsoft Intune connection:

Field	Description
Distribution System Type	Click the Distribution System Type drop down and select **Microsoft Intune** from the list.
Connection Name	Enter name of the connection.

Field	Description
Application (client) ID	Enter the registered application (client) id. For more information on generating Application (client) Id, see App Registration.
Directory (tenant) ID	Enter the registered directory (tenant) id. For more information on generating Directory (tenant) Id, see App Registration.
Client Secret	Enter client secret. For more information on generating Client Secret, see Create Client Secret.
App Category	Enter the application category.
Assignment Groups	This field is visible only in the previous version (v7.XX.XXXX) of the Patch Publisher and cannot be edited.

4. Click the **Test & Save Connection** button to ensure the settings you entered can be used to successfully connect to this service. It restarts Patch Publisher service automatically for the changes to take effect. You will receive a successful message in the Output Window.
5. On successful connection, the Microsoft Intune Distribution System is added to the connections.
6. Click **Restart Service** ribbon for the change to take effect.

To following topics related to Microsoft Intune:

- Intune Publishing

VMWare Workspace ONE

To create a new named connection to the VMWare Workspace ONE distribution system, perform the following steps:

Task ***To create a new named connection to the VMWare Workspace ONE distribution system:***

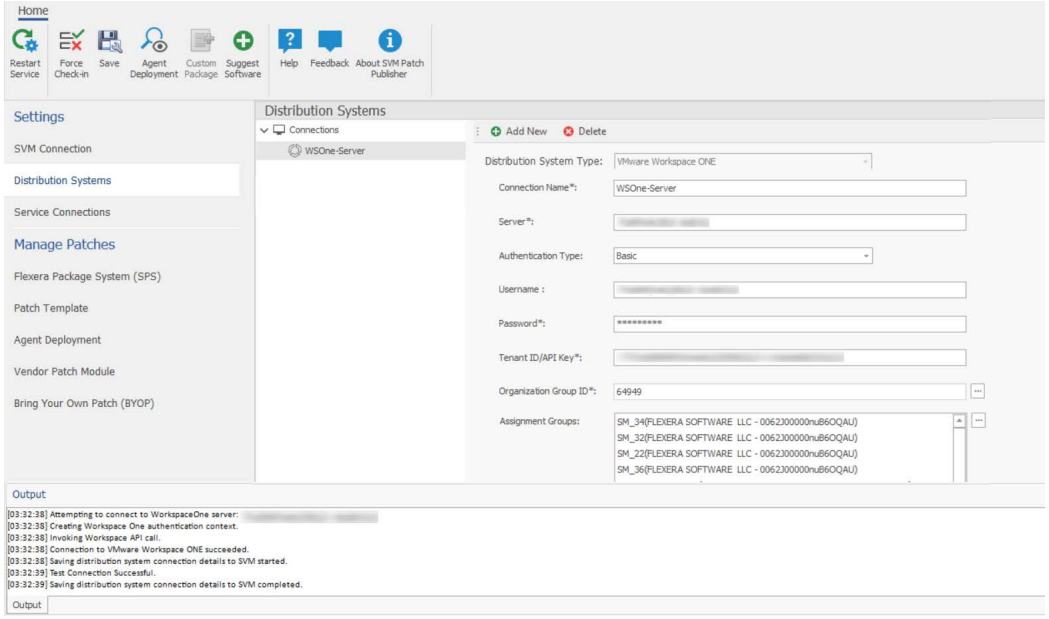
1. On **Settings** menu, click **Distribution Systems** in the left pane.

   The Distribution Systems pane appears.
2. Click **Add New**.
3. Use the following fields to add the VMWare Workspace ONE connection:

Field	Description
Distribution System Type	Click the Distribution System Type drop down and select **VMWare Workspace ONE** from the list.
Connection Name	Enter connection name.
Server	Enter the server details.

Field	Description
Authentication Type	Select one of the authentication types: • Basic - If you select this authentication type, then enter the valid credentials of the VMWare Workspace ONE. • Certificate - If you select this option, you can select the registered certificate. For more information, see Basic or Certificate Authentication Type.
Thumbprint	Choose required certification for the authentication. ***Note*** • *This field appears only when you select Authentication Type as Certificate.*
Tenant ID/API Key	Enter the registered tenant id. For more information, see Create Tenant ID / API Key.
Organization Group ID	Choose the required organization group id.
Assignment Groups	Choose a group or multiple groups and make assignments for end point deployments. For more details, see VMWare Workspace ONE Assignment Groups.
Hide Notification	By default, this option remains unselected. • If selected, notifications will be hidden, reducing unnecessary alerts for the selected Workspace ONE patches. • If unselected, users will continue to receive notifications related to the selected Workspace ONE patches.

4. Click the **Test & Save Connection** button to ensure the settings you entered can be used to successfully connect to this service. It restarts Patch Publisher service automatically for the changes to take effect. You will receive a successful message in the Output Window.



5. On successful connection, the VMWare Workspace ONE Distribution System is added to the connection.

6. Click **Restart Service** ribbon for the change to take effect.

To following topics related to Microsoft Intune:

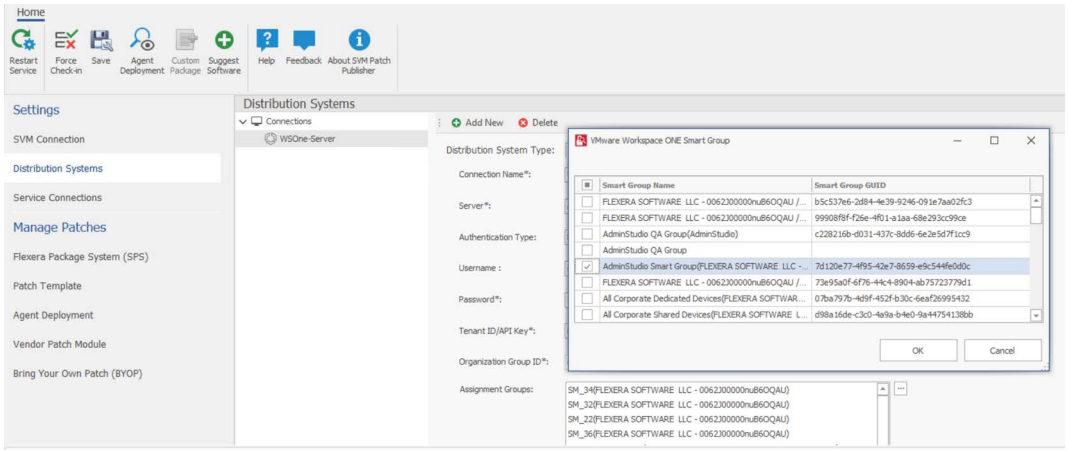
- Workspace ONE Publishing

VMWare Workspace ONE Assignment Groups

To make assignments for end point deployments in the SVM Patch Publisher for Workspace ONE publishing, perform the following steps.

Task ***To make assignments for end point deployments in the SVM Patch Publisher:***

1. In Assignment Groups (optional) field, click ellipsis icon. The **VMWare Workspace ONE Smart Group** window appears. Select the desired groups from the list and then click **Ok**.



Note • *Make sure that the Assignment Groups are selected before restating the service.*

2. Click **Restart Service** ribbon for the change to take effect.
3. The selected groups will be assigned for the end point deployments.

BigFix

To create a new named connection to the BigFix distribution system, perform the following steps.

Task ***To create a new named connection to the BigFix distribution system:***

1. On **Settings** menu, click **Distribution Systems** in the left pane.

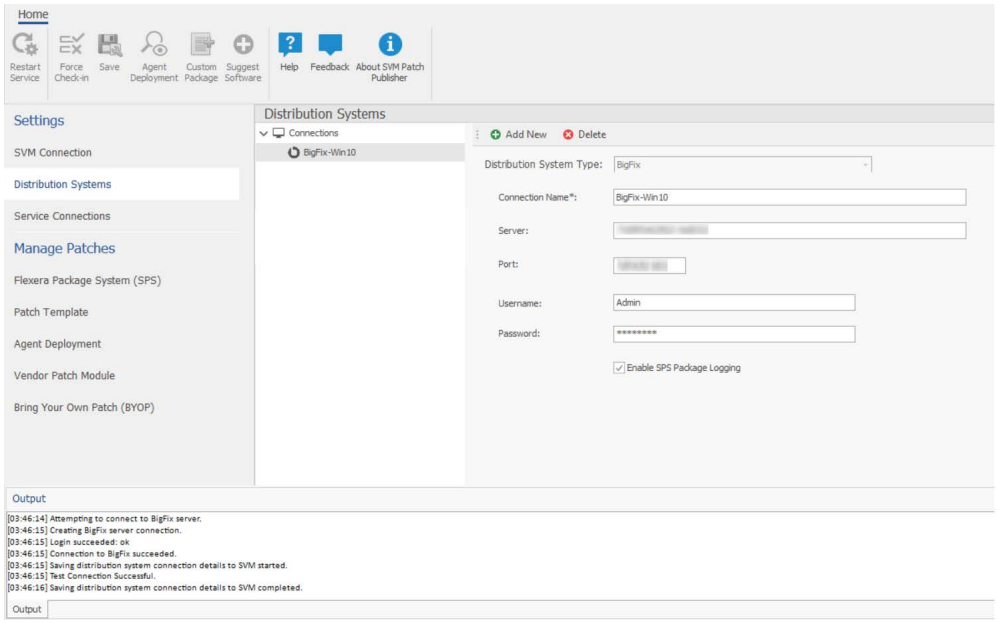
   The Distribution Systems pane appears.

2. Click **Add New**.

3. Use the following fields to add the BigFix connection:

Field/Button	Description
Distribution System Type	Click the Distribution System Type drop down and select **BigFix** from the list.
Connection Name	Enter the connection name.
Server	Enter the server details.
Port	Enter the port number.
Username	Enter valid username.
Password	Enter the password.
Enable SPS Package Logging	If you select this check box, logging will be available for the end user. `%ProgramData%\BigFix\Flexera`

4. Click the **Test & Save Connection** button to ensure the settings you entered can be used to successfully connect to this service. It restarts Patch Publisher service automatically for the changes to take effect. You will receive a successful message in the Output Window.



5. On successful connection, the **BigFix** is added to the connection.
6. Restart the SVM Patch Publisher so that the selected connection will be available.

Tanium

To create a new named connection to the Tanium distribution system, perform the following steps.

Task ***To create a new named connection to the Tanium distribution system:***

1. On **Settings** menu, click **Distribution Systems** in the left pane.

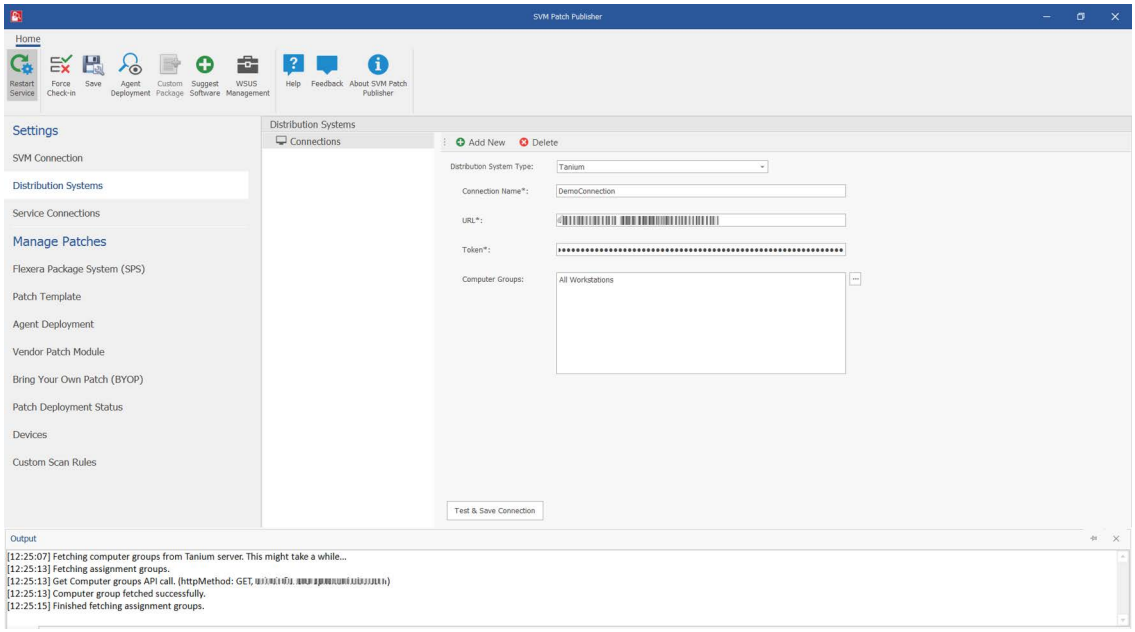
   The Distribution Systems pane appears.

2. Click **Add New**.

3. Use the following fields to add the Tanium connection:

Field	Description
Distribution System Type	Click the Distribution System Type drop down and select **Tanium** from the list.
Connection Name	Enter name of the connection.
URL	Enter a valid URL provided from the Tanium.
Token	Enter the valid token. For more information on generating API Token, see Create an API Token.
Computer Group	In Computer Groups (optional) field, click ellipsis icon. The Tanium Computer Groups window appears. Select the desired groups from the list and then click **Ok**.

4. Click the **Test & Save Connection** button to ensure the settings you entered can be used to successfully connect to this service. Patch Publisher service restarts automatically for the changes to take effect. You will receive a successful message in the Output Window.



5. On successful connection, the Tanium Distribution System is added to the connections.

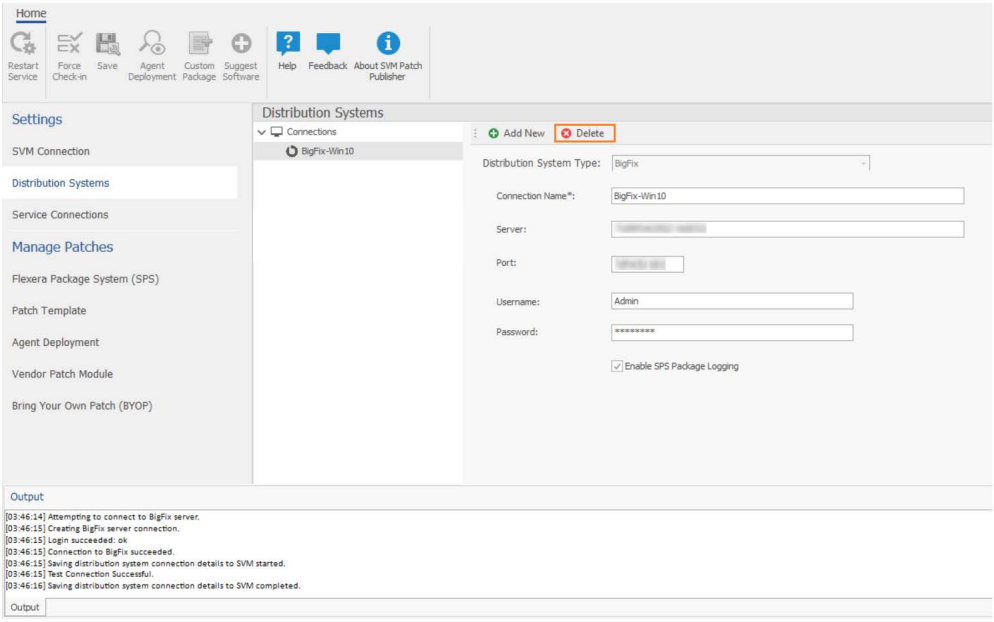
6. Click **Restart Service** ribbon for the change to take effect.

Deleting an Existing Distribution Connection

To delete an existing Distribution Connection, perform the following steps.

Task ***To delete a connection:***

1. On the **Settings** menu, click **Distribution Systems**. The list of connections appears under the **Connections** pane.
2. Select required connection form the list and click **Delete**.



3. Click **Yes** and confirm to proceed the changes.
4. Upon confirming, the selected connection will be removed from the Connections pane.

Service Connections

You can configure connections to the AdminStudio server where you can request packages from Patch Publisher to the AdminStudio.

Prerequisite:

AdminStudio service connection requires the following prerequisites:

- SQL server Authentication should be done from AdminStudio.
  - Modify the changes in the shared file:

    %ProgramFiles(x86)%\AdminStudio\2024\Common\AdminStudioHost.exe.config

- Insert one of the following in the [ConnectionString] section of the Shared file, depending upon the authentication type you are using:

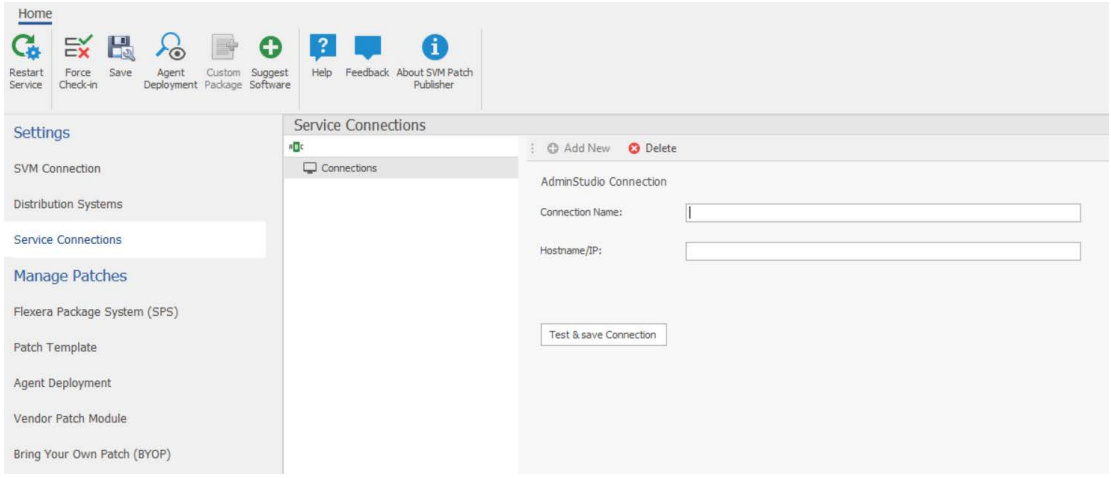
Authentication Type	Entry
Windows Authentication	<connectionStrings> <clear/> <add name="WebServiceCatalog" connectionString="Data Source=svm2018-WIN10C.svm2019.test;User ID=svm2019\Administrator;Initial Catalog=SVM2019;Integrated Security=SSPI;"/> </connectionStrings>
Server Authentication	<connectionStrings> <clear/> <add name="WebServiceCatalog" connectionString="Data Source=10.75.205.198;User ID=sa;Initial Catalog=SVM2;Password=Flexera!;"/> </connectionStrings>

To configure the AdminStudio service connection, perform the following steps.

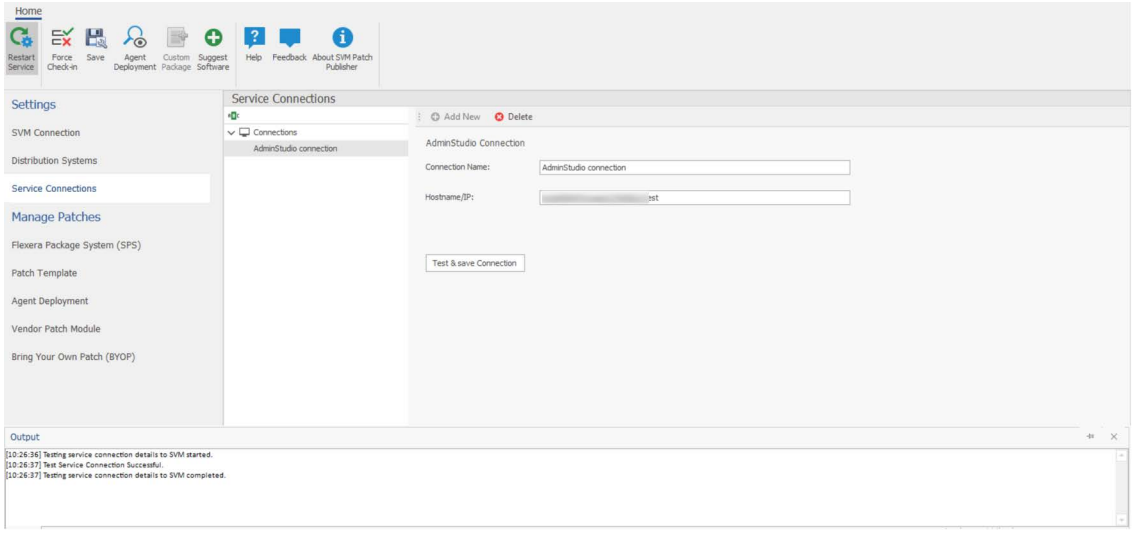
Task ***To configure the AdminStudio service connection:***

1. On **Settings** menu, click **Service Connections** in the left pane.

   The **Service Connections** page appears.



2. Enter valid connection name.
3. Enter valid Host name or IP address of the AdminStudio.
4. Click the **Test & Save Connection** button to ensure the settings you entered can be used to successfully connect to this service. You will receive a successful message in the Output Window.



5. On successful connection, the AdminStudio service connection is added to the connections.
6. Click **Restart Service** ribbon for the change to take effect.

Manage Patches Menu

You can now publish SPS/ VPM patches to multiple end point management systems like WSUS, Microsoft Intune, VMWare Workspace ONE, and BigFix.

To publish patches, it will be necessary to configure SVM Connection and Distribution Connections. For more information, see SVM Connection and Distribution Systems.

The following views have been added under the Manage Patches menu:

- Flexera Package System (SPS)
- Patch Template
- Agent Deployment
- Vendor Patch Module
- Bring Your Own Patch (BYOP)
- Patch Deployment Status
- Devices
- Custom Scan Rules

Flexera Package System (SPS)

The Flexera Package System (SPS) page displays a list of products for which Software Vulnerability Manager can automatically create an Update/Uninstall package.

In the **Search Type** field, you can now search for SPS patches either by Product or CVE. You can also enter keywords in the **Find** box to find the matching entries in the grid.

Click the **Configure View** button to configure the product display criteria. For more information, see Configure Product Display Criteria for Flexera Package System (SPS) View.

Click **Export** button in any grid view to save the displayed information as a CSV file.

The Flexera Package System (SPS) page includes the following properties:

Table 4-2 • Flexera Package System (SPS) page Properties

Property	Description
Product	Specifies the product name.
Patched Version	Specifies the version of the product.
Vendor	Specifies the vendor name of the product.
Architecture	Specifies the architecture of the product.
SAID	By clicking on any **SAID**, a popup appears with the CVE, CVSS scores, affected software's, and other advisory details. • Clicking **CVE Reference** link navigates to the cve.mitre.org website for cybersecurity vulnerabilities information. • Clicking **Secunia Advisory Details** links navigates to external Websites for additional details.
Criticality	Specifies severity of a Secunia Advisory (SAID). It displays the color code depending upon the severity of a Secunia Advisory (SAID). For more information, see Criticality (Severity Rating).
Threat Score	Specifies the Threat Score information for the out of the box patches listed. For more information, see Criteria for the Threat Score Calculation.
Detected	Displays the number of minutes/hours/days/months of how long ago the vulnerabilities were detected in a scan.
Advisory Published	Specifies the advisory published date.
Insecure	Specifies the count of the insecured products.
End-Of-Life	Specifies End-Of-Life Products.
Secure	Specifies the count of secured product.
Total	Specifies the total count of the product.
Hosts	Specifies the count of the host.

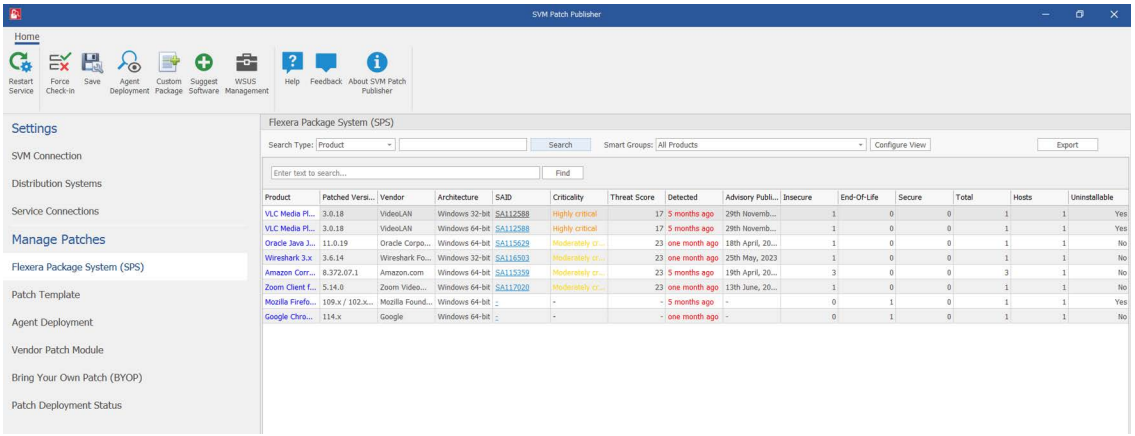
Table 4-2 • Flexera Package System (SPS) page Properties

Property	Description
Uninstallable	If Uninstallable column is listed as **Yes**, then it is eligible for creating an uninstall package. If Uninstallable column is listed as **No**, then you must customize the execution flow script to successfully uninstall the product. This can be done by selecting the Edit Package Content check box in the Package Configuration panel. For more information, see Create Uninstall Package.

The following color codes are used in the Flexera Package System (SPS) products list:

Table 4-3 • Flexera Package System (SPS) products list color code

Criticality	Color code
Extremely critical	Red color
Highly critical	Orange color
Moderately critical	Yellow color
less critical	Light Green color
Not critical	Green color



The Flexera Package System (SPS) view provides further information regarding:

- Create Update Package
- Create Uninstall Package
- Create Custom Package

Create Update Package

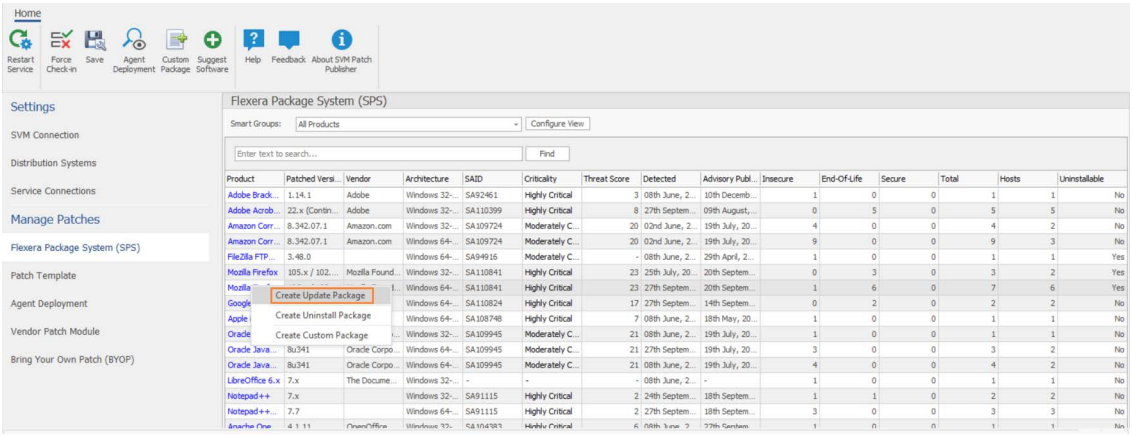
To create update package, perform the following steps:

Task ***To create update package:***

1. On **Manage Patches** menu, click **Flexera Package System (SPS)** in the left pane.

   The **Flexera Package System (SPS)** page appears.

2. Right click on a desired package and select **Create Update Package** from the context menu.



   The **Create Update Package Wizard** appears.

   Follow the steps as specified in the Create Patch Wizard.

3. On successful action, package and wizard data will be saved.

4. On check-in, the saved package will be published to the specified end point management system.

Create Uninstall Package

Any Products that are listed as **Yes** in the Uninstallable column are eligible for creating an uninstall package.

For Products listed as **No** in the Uninstallable column you must customize the execution flow script to successfully uninstall the product. This can be done by selecting the Edit Package Content check box in the Package Configuration panel.

Note • *Uninstall packages can be created only for SPS packages.*

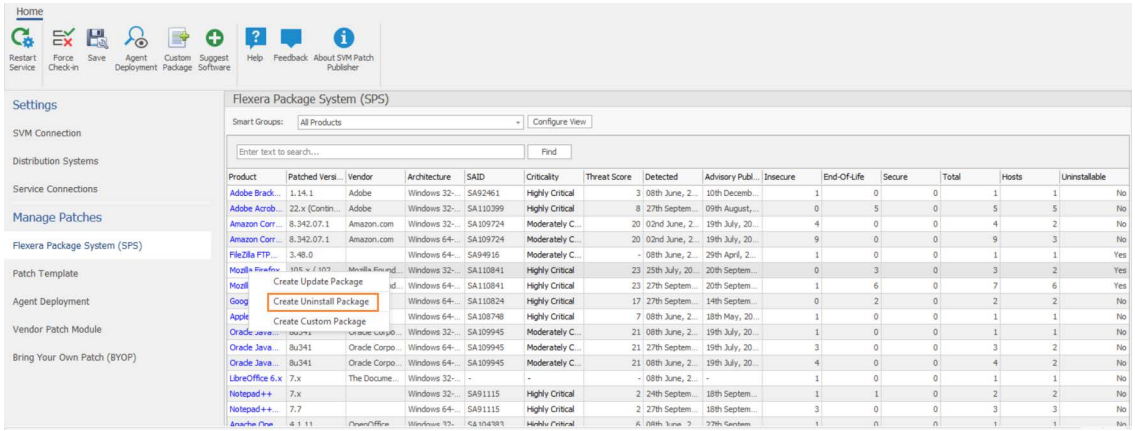
To create uninstall package, perform the following steps:

Task ***To create uninstall package:***

1. On **Manage Patches** menu, click **Flexera Package System (SPS)** in the left pane.

   The **Flexera Package System (SPS)** page appears.

2. Right click on a desired package and select **Create Uninstall Package** from the context menu.



The **Create Uninstall Package Wizard** appears.

Follow the steps as specified in the Create Patch Wizard.

3. On successful action, uninstall packages will be created.

Create Custom Package

You can create a new custom package for SPS patches. While creating a custom package, you need to add a download file link and then update the script in the Package Content panel.

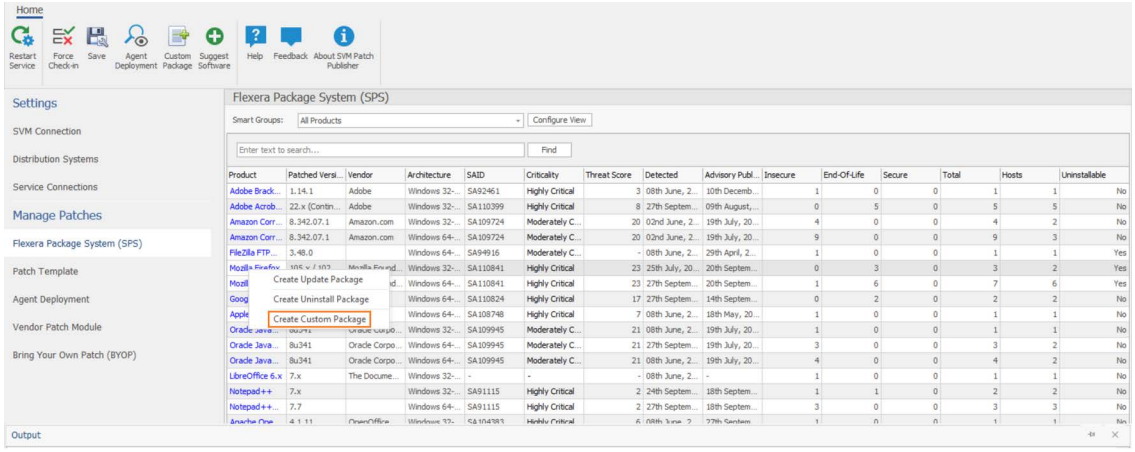
To create custom package, perform the following steps:

Task ***To create custom package:***

1. On **Manage Patches** menu, click **Flexera Package System (SPS)** in the left pane.

   The **Flexera Package System (SPS)** page appears.

2. Right click on a desired package and select **Create Custom Package** from the context menu.



The **Create Custom Package Wizard** appears.

Follow the steps as specified in the Create Patch Wizard.

3. On successful action, custom packages will be created.

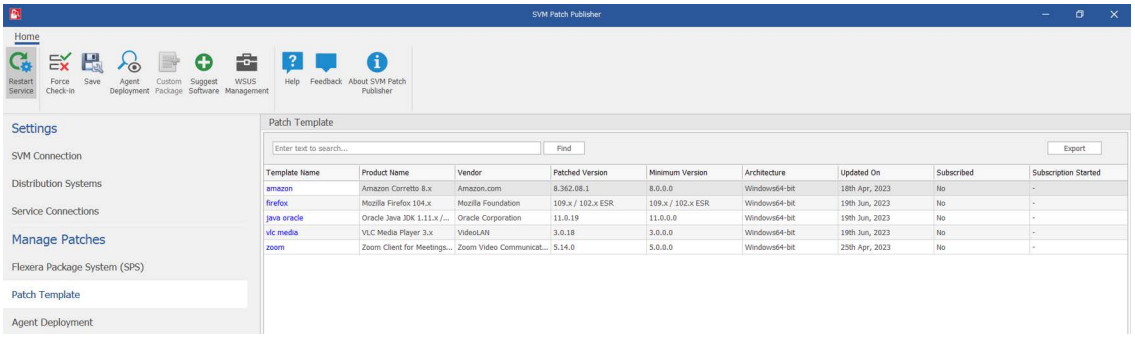
Patch Template

The Patch Template view displays the SPS patches that are saved as Patch Templates. This view also enables you to edit and publish templates to one of the configured endpoint management systems.

Click **Export** button in any grid view to save the displayed information as a CSV file.

This view provides further information regarding:

- Publish/Edit Template
- Subscribe to Patch
- Delete Template
- Edit Subscription (Patch Publisher)
- Pause Subscription (Patch Publisher)
- Resume Subscription (Patch Publisher)



Publish/Edit Template

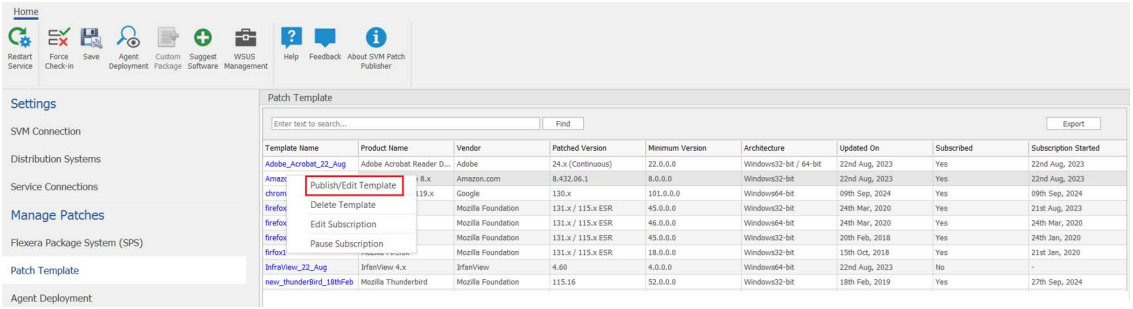
To edit and publish Patch Template, perform the following steps:

Task ***To edit or publish Patch Template:***

1. On **Manage Patches** menu, click **Patch Template** in the left pane.

   The **Patch Template** page appears.

2. Right click on a desired template and select **Publish/Edit Template** from the context menu.



The **Create Template Package Wizard** appears.

3. Follow the steps as specified in the Create Patch Wizard.

Subscribe to Patch

Use this page to publish SPS patches automatically. To subscribe automatic publishing of patches, see Subscribe Automatic Publishing of Patches.

To Unsubscribe Automatic Publishing of the Patches, see Unsubscribe Automatic Publishing of the Patches.

To edit subscribed patches, see Edit Subscription (Patch Publisher).

To pause subscribed patches, see Pause Subscription (Patch Publisher).

To resume paused patches, see Resume Subscription (Patch Publisher).

Delete Template

To delete a Patch Template, perform the following steps.

Task ***To delete Patch Template:***

1. On **Manage Patches** menu, click **Patch Template** in the left pane.

   The **Patch Template** page appears.

2. Right click on desired Patch Template and select **Delete Template** from the context menu.
3. Click **OK** and agree the confirmation dialog that appears.
4. Upon confirmation, the selected template will be removed from the Patch Template grid.

Agent Deployment

Agent Deployment view gives summary of the Software Vulnerability Manager agents currently installed on the endpoints in the network. You can also create and publish the agent to the configured endpoint management system for deployment.

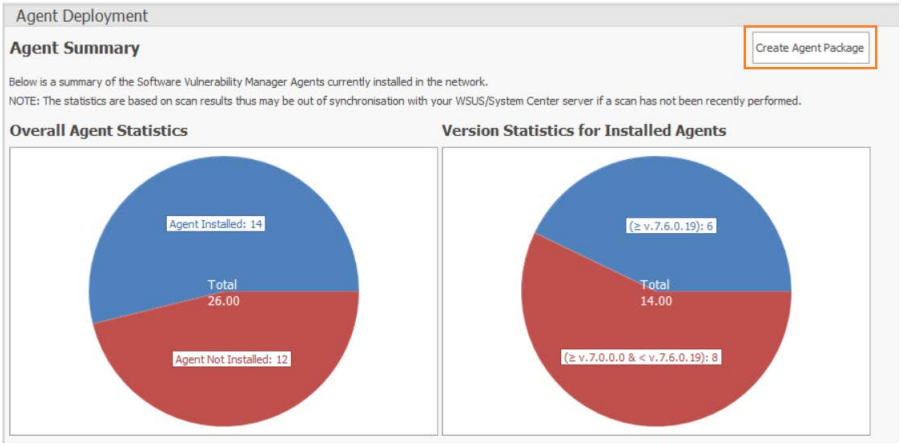
To create an Agent package, perform the following steps:

Task ***To create Agent package:***

1. On **Manage Patches** menu, click **Agent Deployment** in the left pane.

   The **Agent Deployment** page appears.

2. Click **Create Agent Package**.



   The **Create Agent Package Wizard** appears.

3. Follow the steps as specified in the Create Patch Wizard.

Vendor Patch Module

The Vendor Patch Module page displays a list of products for which Software Vulnerability Manager can automatically create an Update/Uninstall package and also provides the patch information.

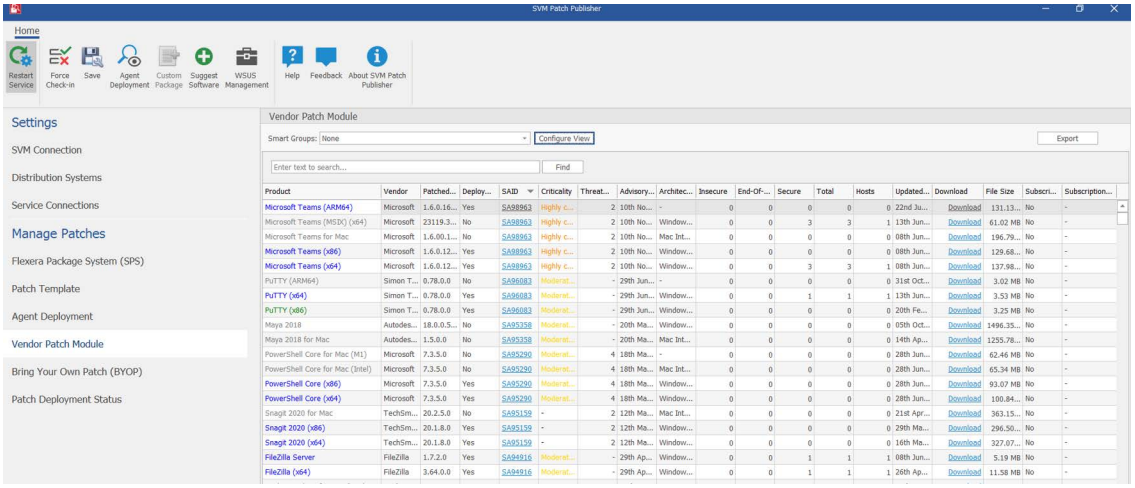
Click the Configure View button to configure the product display criteria. For more information, see Configure Product Display Criteria for Vendor Patch Module View.

Clicking on the **Download** link in the VPM grid will download the patch.

Click **Export** button in any grid view to save the displayed information as a CSV file.

This view provides further information regarding:

- Create Update Package
- Patch Information
- Subscribe to Patch
- Edit Subscription (Patch Publisher)
- Pause Subscription (Patch Publisher)
- Resume Subscription (Patch Publisher)
- Publishing Mac Packages to Microsoft Intune



Create Update Package

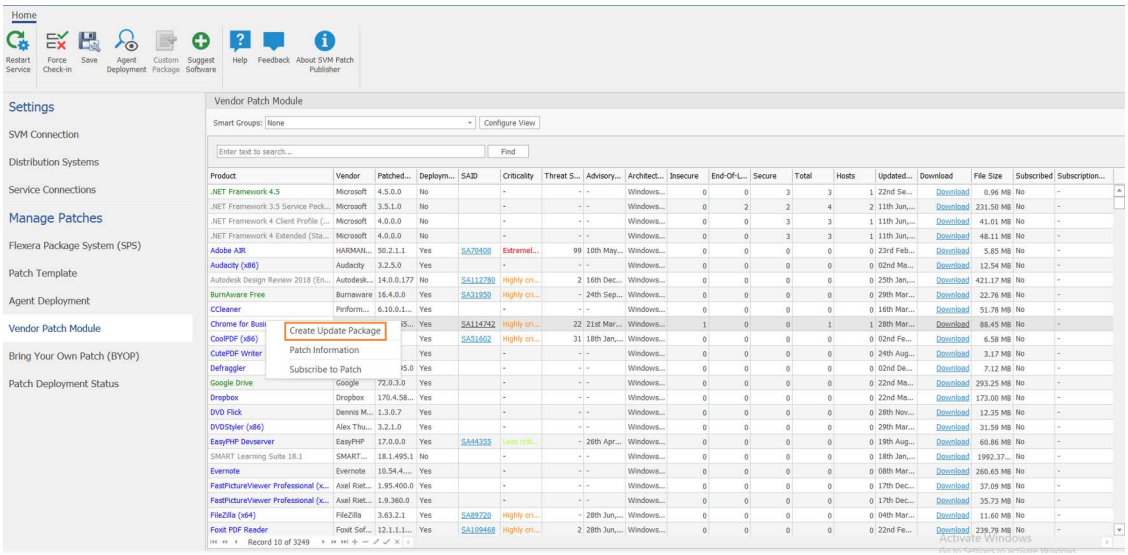
To create update package, perform the following steps:

Task ***To create update package:***

1. On **Manage Patches** menu, click **Vendor Patch Module** in the left pane.

   The **Vendor Patch Module** page appears.

2. Right click on a desired package and select **Create Update Package** from the context menu.



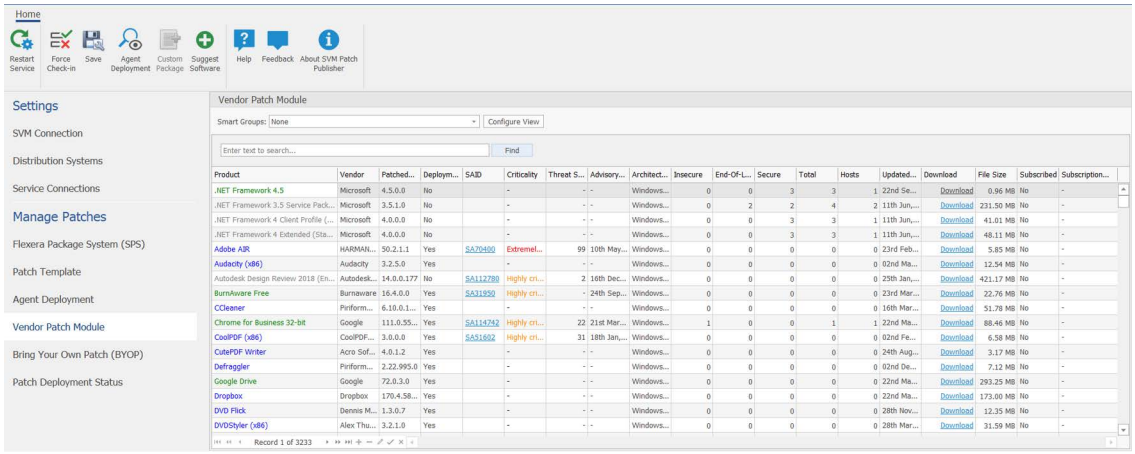
   The **Create Patch Wizard** appears.

3. Follow the steps as specified in the Create Patch Wizard.

4. On successful action, package and wizard data will be saved.

5. On check-in, the saved package will be published to the specified end point management system.

6. The patches that are published to a configured endpoint management system will be displayed in green color.



Patch Information

To view patch information, perform the following steps:

Task ***To view patch information:***

1. On **Manage Patches** menu, click **Vendor Patch Module** in the left pane.

   The **Vendor Patch Module** page appears.

2. Right click on a desired package and select **Patch Information** from the context menu.

   The patch information dialog box appears.

3. The Patch Information dialog box displays the patch information, Silent, and Uninstall parameters.

4. The **Extracted Filename** text displays the file path of the installer after the compressed package has been extracted. This text is available only for compressed packages in VPM.

Subscribe to Patch

Use this page to publish VPM patches automatically. To subscribe automatic publishing of patches, see Subscribe Automatic Publishing of Patches.

To Unsubscribe Automatic Publishing of the Patches, see Unsubscribe Automatic Publishing of the Patches.

Publishing Mac Packages to Microsoft Intune

Use this page to publish Mac packages (.pkg type) to the Microsoft Intune deployment system.

Note • *Currently Mac packages are published to Microsoft Intune only through* ***SVM Patch Publisher > Vendor Patch Module > Create Update Package****.*

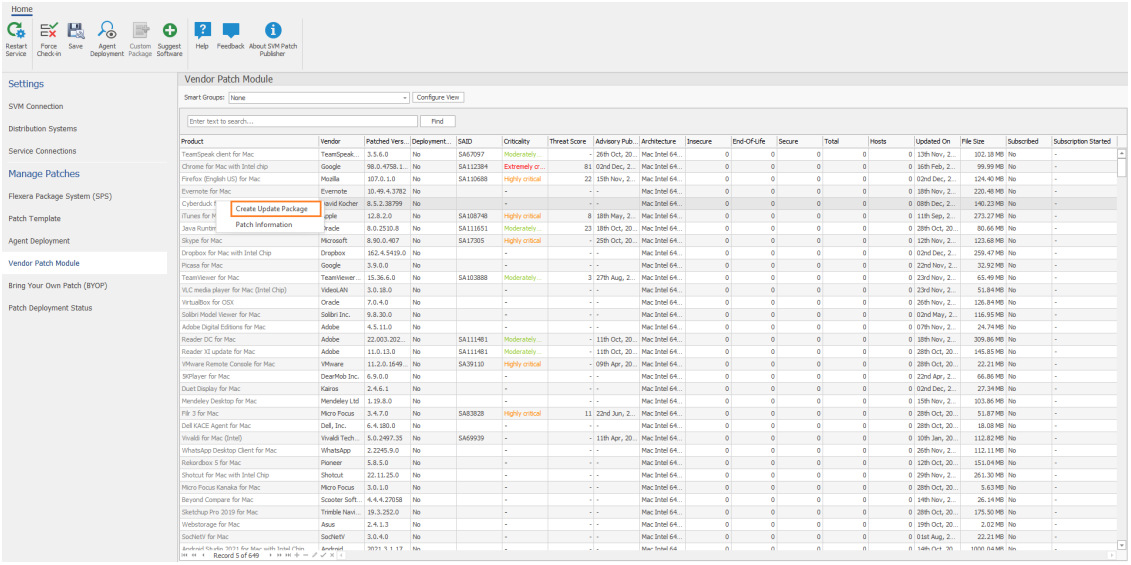
To publish Mac packages (.pkg type) to Microsoft Intune, perform the following steps:

Task ***To publish Mac packages to Microsoft Intune:***

1. On **Manage Patches** menu, click **Vendor Patch Module** in the left pane.

   The **Vendor Patch Module page** appears.

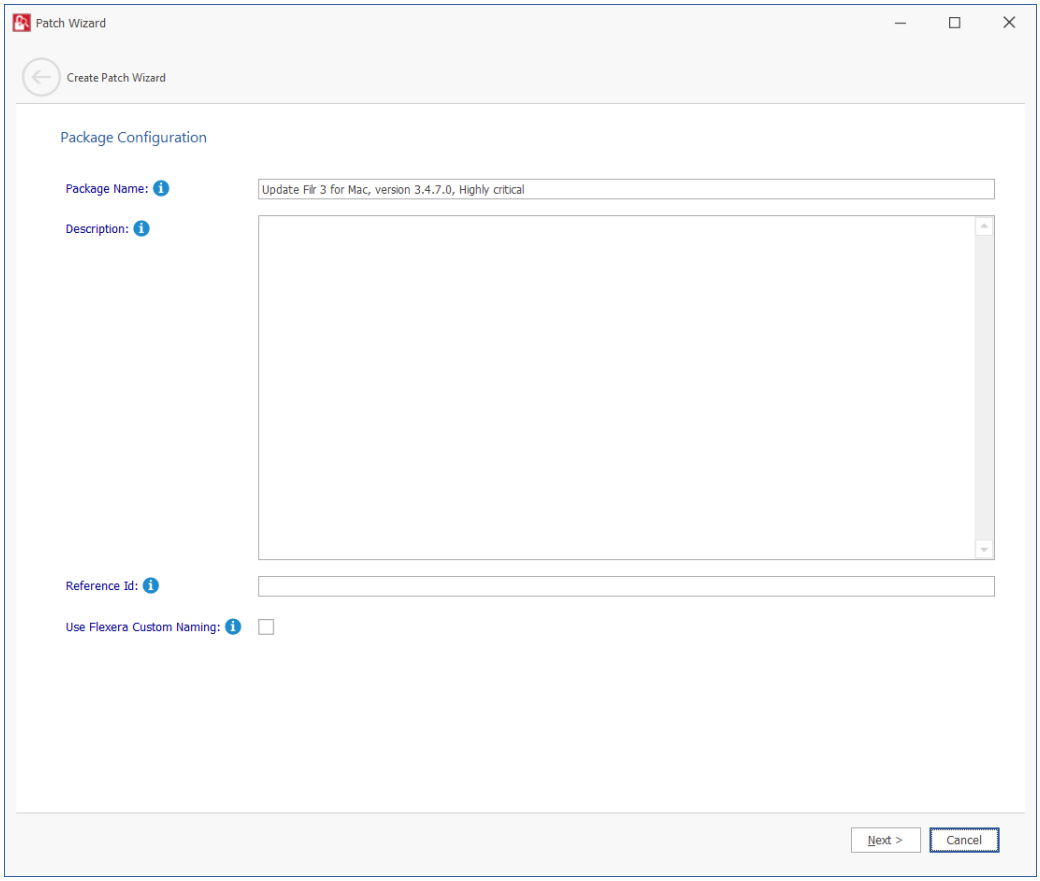
2. Right click on a desired Mac package (pkg type) and select **Create Update Package** from the context menu.



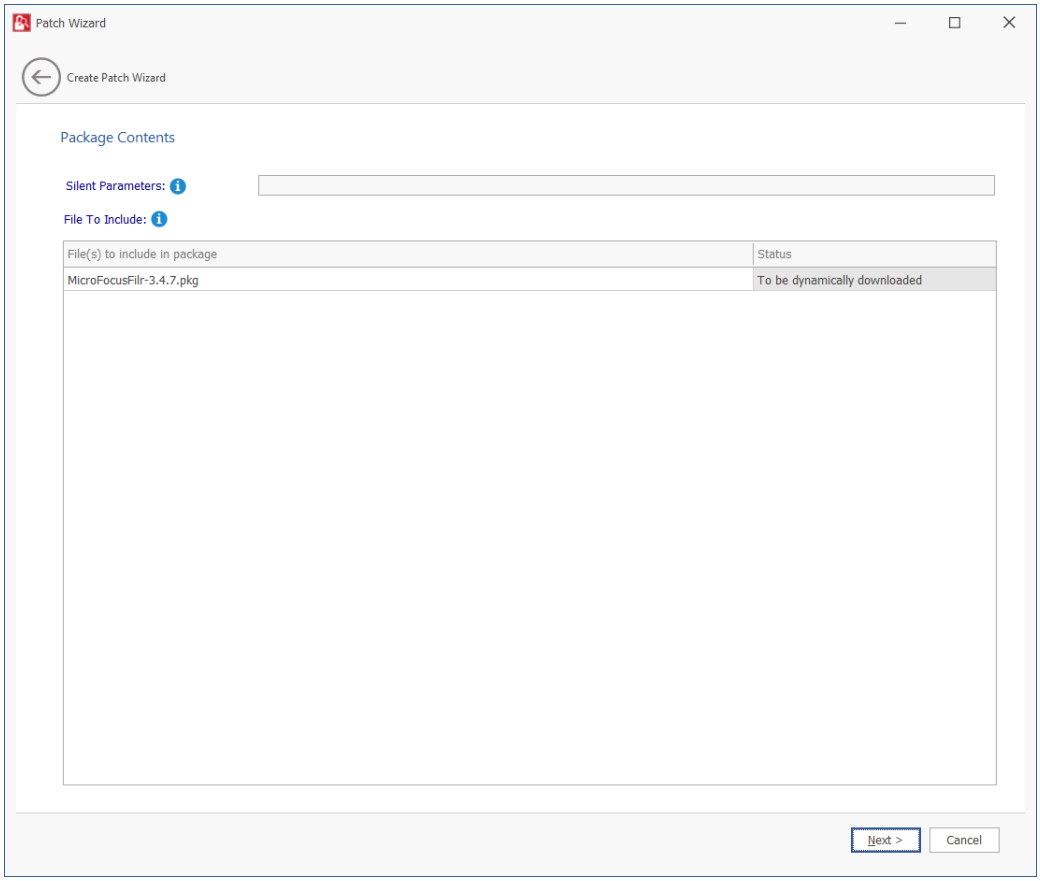
   The Create Patch Wizard appears.

3. The **Create Patch Wizard** includes the following panels:

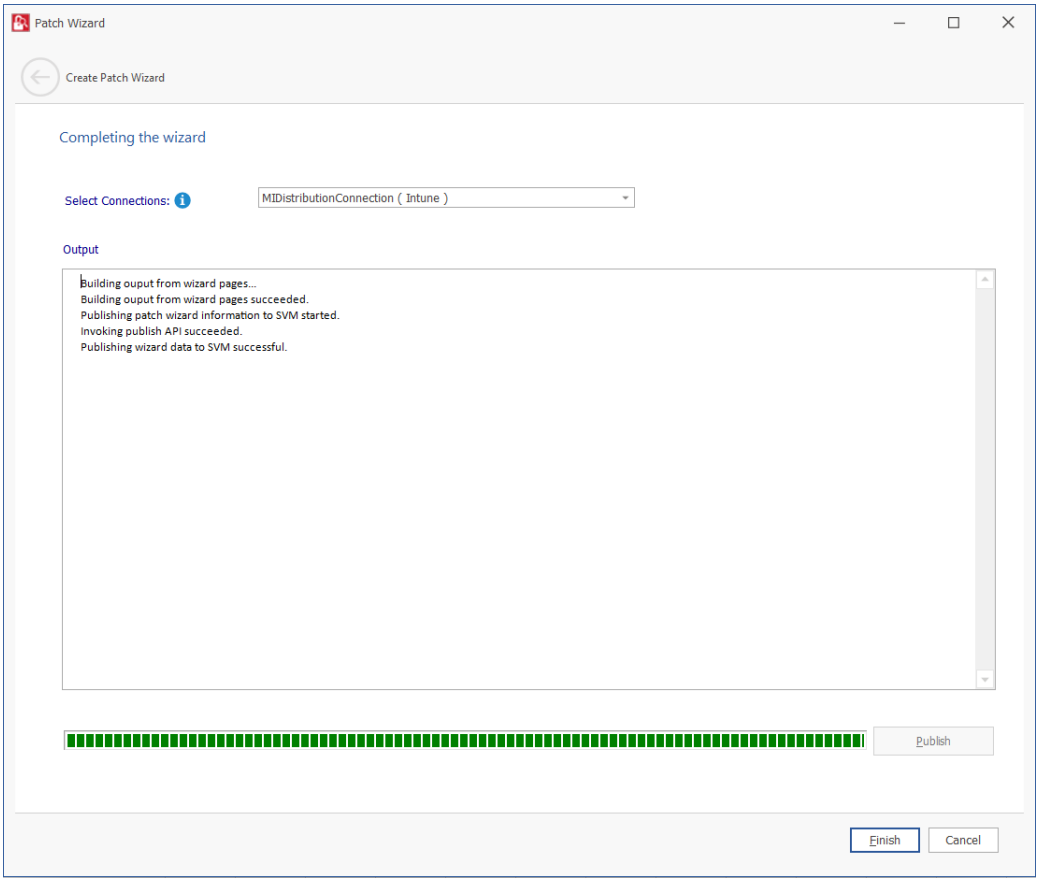
   a. Package Configuration Panel—On **Package Configuration** panel, no action is required. You can only check **Use Flexera Custom Naming** (Optional). Click **Next**.



b. Package Contents Panel—On **Package Contents** panel, no action is required. Click **Next**.



c. Completing the wizard Panel—On **Completing the wizard** panel, select the required connection, publish, and then click **Finish** to publish the selected package to the specified end point management system (Microsoft Intune).



4. On successful action, package and wizard data will be saved.
5. On check-in, the saved package will be published to the specified end point management system (Microsoft Intune).

Note • *If the **Deployment Ready** status is **Yes**, then the package can be subscribed.*

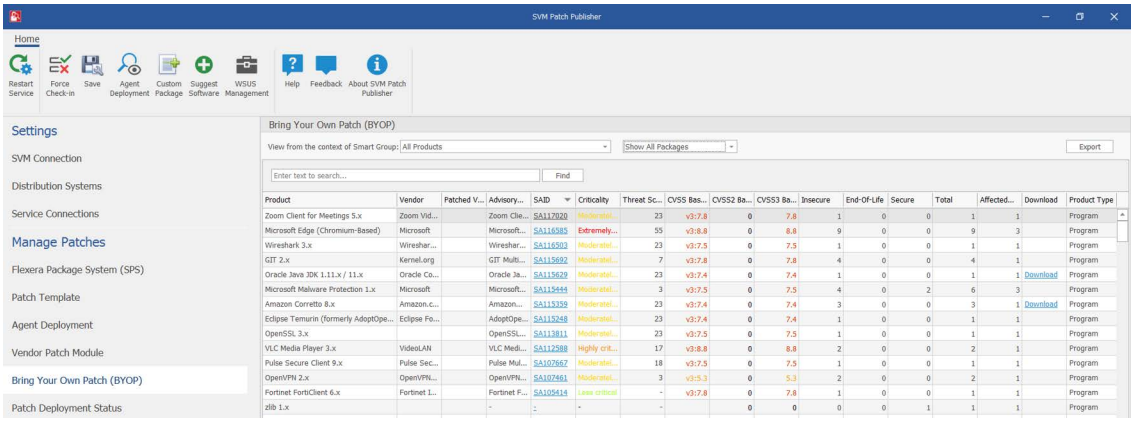
Bring Your Own Patch (BYOP)

In this section, you can create and publish custom packages. You can also request packages from Patch Publisher to AdminStudio.

Click **Export** button in any grid view to save the displayed information as a CSV file.

This section includes the following topics:

- Create Custom Package
- Request Patch



Create Custom Package

In this section you can create and publish custom package. Perform the following steps, to create and publish custom package.

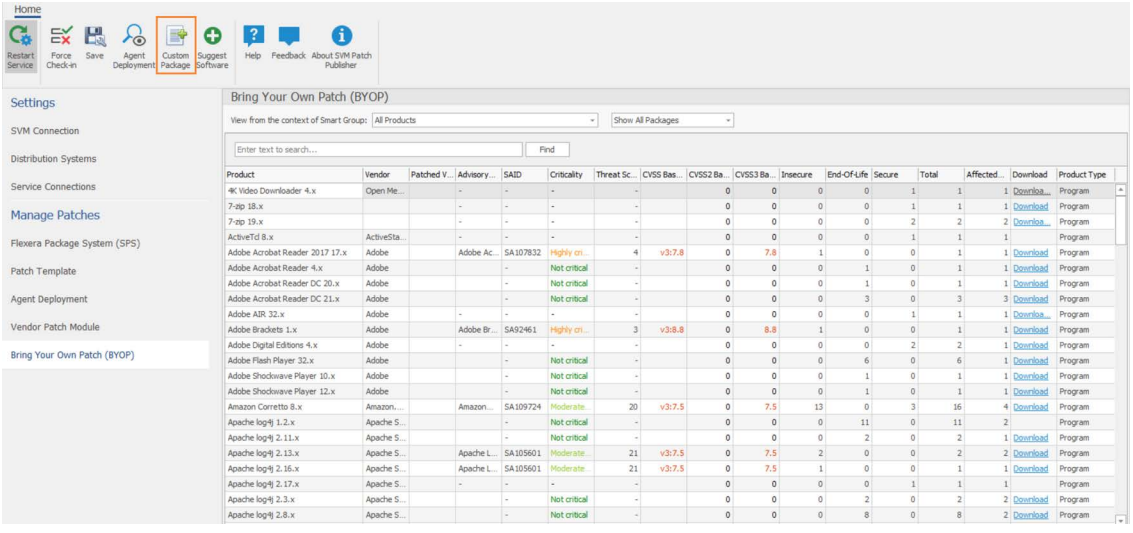
Task ***To create and publish custom package:***

1. On **Manage Patches** menu, click **Bring Your Own Patch (BYOP)** in the left pane.

   The **Bring Your Own Patch (BYOP)** page appears.

2. Click the **Custom Package** in the toolbar. The **Create Custom Package Wizard** appears.

   Note • *The Custom Package button gets enabled for the Flexera Package System (SPS) and Bring Your Own Patch (BYOP) views.*



3. Follow the steps as specified in the Create Patch Wizard.

4. Clicking on the **Download** link in the grid will download the patch.

Request Patch

In this section, you will be able to send a request to AdminStudio for creating patches for the products which are not covered by SPS and VPM patches. To send a request, perform the following steps.

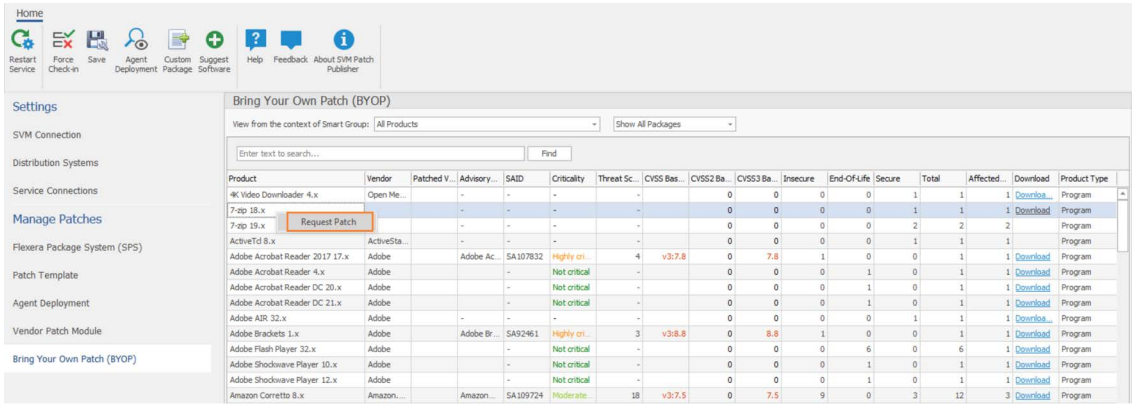
Task ***To send a request:***

1. On **Manage Patches** menu, click **Bring Your Own Patch (BYOP)** in the left pane.

   The Bring Your Own Patch (BYOP) page appears.

2. Right click on a desired package and select **Request Patch** from the context menu.

   The Request Patch dialog box appears.



Note • *Make sure that the AdminStudio Service Connection has been configured. For more information, see Service Connections.*

3. Click priority drop down and set the required priority value.

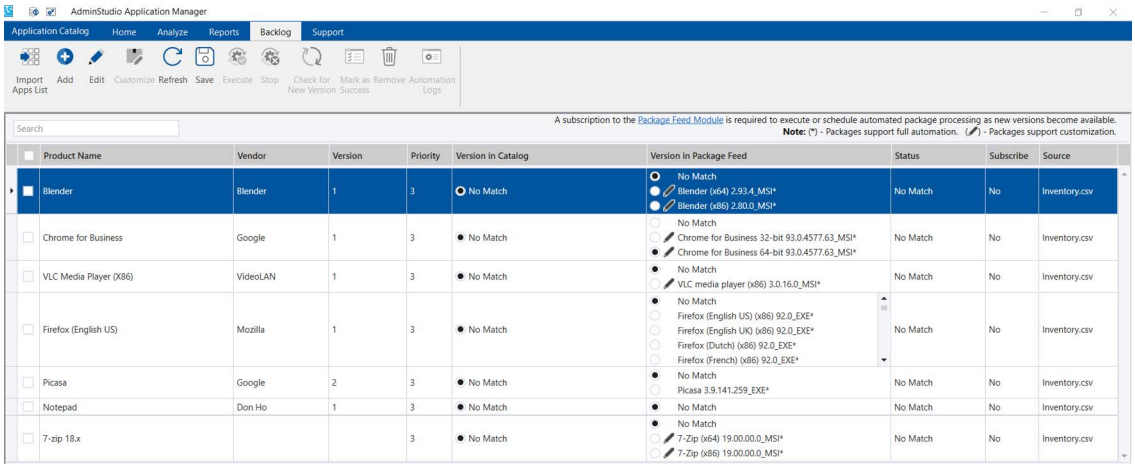
Note • *If the value of Priority is empty or invalid, then the default value will be used as a Priority. The default value of the Priority will be 3.*

4. Click **Submit**.

5. Click **OK** and agree the confirmation dialog which appears.

6. Upon successful action, packages are sent to the AdminStudio.

7. Packages which are send to the AdminStudio can be seen under Backlog tab. You can now manage a simple backlog of packaging requests directly within AdminStudio.



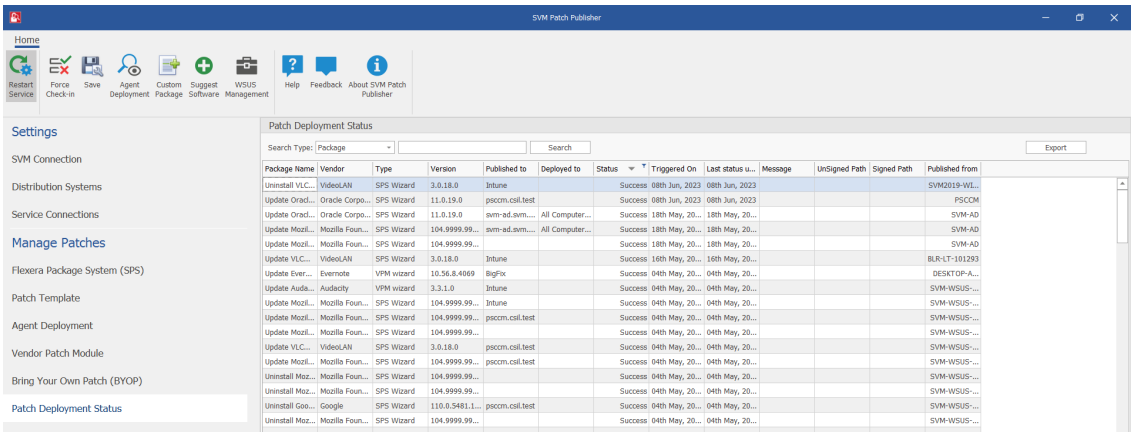
Patch Deployment Status

The **Patch Deployment Status** view displays the status and other details of the patches published to an endpoint management system.

Click **Export** button in any grid view to save the displayed information as a CSV file.

This view provides further information regarding:

- Manage Assignments
- Delete



Manage Assignments

You can add or edit assignments for deployed patches based on their specific status, ensuring a streamlined patch management process.

Task ***To add or edit deployed patches:***

1. On Manage Patches menu, click **Patch Deployment Status** in the left pane

   The Patch Deployment Status page appears.

2. Right click on a desired deployed patch and select **Manage Assignments** from the context menu.

   The Manage Assignments panel appears.

3. Add or edit the Required, Available, and Uninstall assignment details for the selected patch. For more details, see Manage Assignments Panel.

The Manage Assignments and Delete options are available in the context menu based on the status of the patch:

Table 4-4 • Context Menu options based on Status of the Patch

Status of Patch	Manage Assignments	Delete
Added to Queue	Yes	Yes
In Progress	No	No
Pending Deployment	Yes	No
Success	Yes	No
Failed	No	Yes
Waiting for signature	No (not a status for Intune, so it doest not apply)	No
Signed	No (not a status for Intune, so it doest not apply)	No
Added to Queue + Valid App ID	Yes	No
Failed + Valid App ID	Yes	No

Delete

To delete deployed patches based on their specific status, perform the following steps.

Task ***To delete a deployed patch:***

1. On **Manage Patches** menu, click **Patch Deployment Status** in the left pane.

   The Patch Deployment Status page appears.

2. Right click on a desired deployed patch and select **Delete** from the context menu.

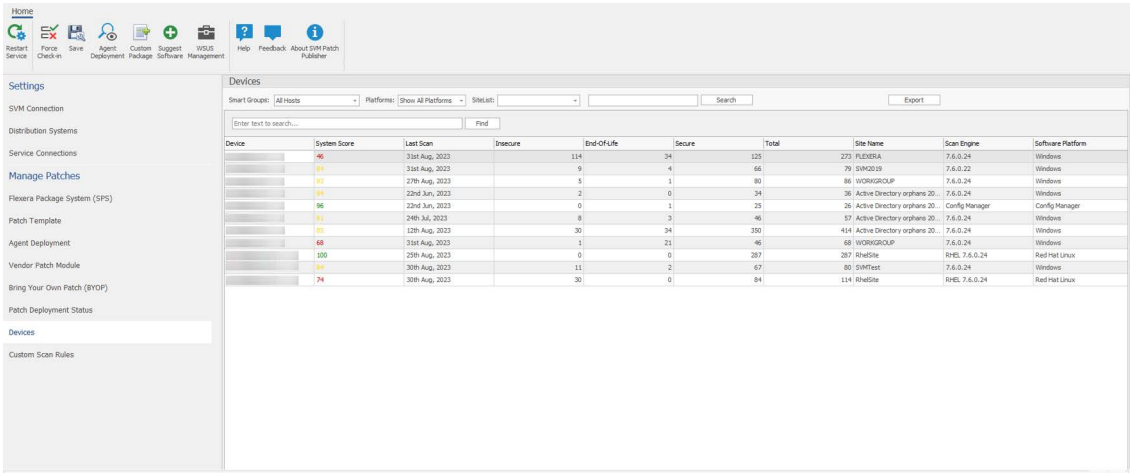
3. Click **Yes** and confirm to proceed the changes.
4. Upon confirming, the selected patch will be removed.

Devices

Use the **Devices** page to view the reports related to devices/hosts in Patch Publisher. Use Filters to filter the devices based on Smart Groups/Platforms/SiteList criteria.

In the **Search** field, you can now search for devices/hosts. You can also enter keywords in the **Find** box to find the matching entries in the grid.

Click **Export** button in any grid view to save the displayed information as a CSV file.



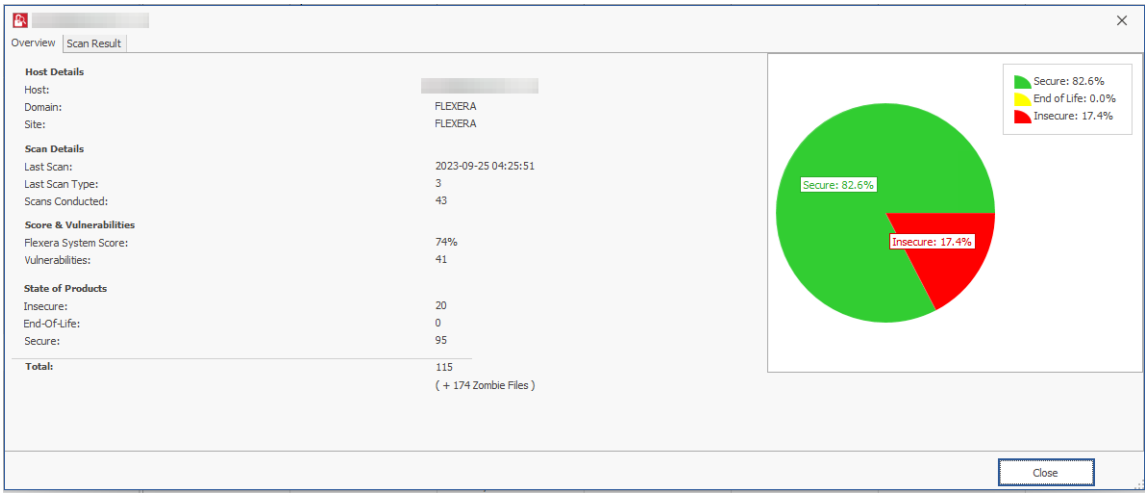
View Scan Result for Hosts/Devices

Use this page to view a summary of the scans conducted for the hosts/devices based on the Host Smart Group that is selected from the Smart Groups drop-down in the Devices view grid. Right click on selected device and choose **View Scan Result** from the context menu. A popup appear with details of the scan result for the selected host/device with the following tabs:

- Overview
- Scan Results

Overview

Use this page to view the overview information of the Scan results.



Scan Results

Use this page to view the detailed information of the scan result for the selected host/device.

Custom Scan Rules

Use the Custom Scan Rules page to create and maintain custom rules for scanning customer created programs, drivers, and plug-ins.

To add a new Custom Scan Rule, perform the following steps:

Task ***To add a new Custom Scan Rule:***

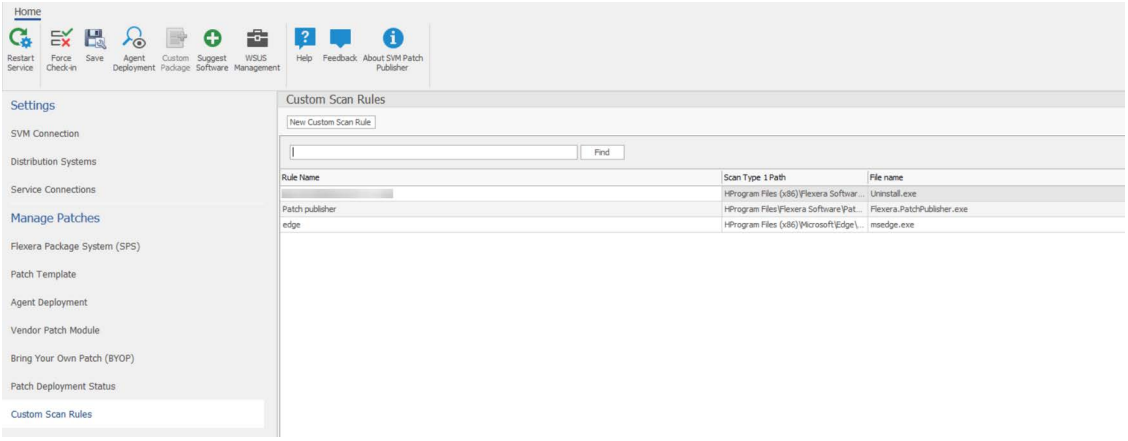
1. On **Manage Patches** menu, click **Custom Scan Rules** in the left pane.

   The Custom Scan Rules page appears.

2. Click **New Custom Scan Rule** button.

   The Custom Scan Rule dialog box appears.

3. Enter a Name for the rule.
4. Enter Filename to scan. Click **Browse** to search for the file you want to add to the rule.
5. After entering the details, click **Save** button.
6. Upon successful action, new Custom Scan Rule displays in the grid.



7. Right-click on the desired rule in the grid to edit or delete the rule.
8. Enter keywords in the **Find** box to find the matching rules in the grid.
9. Click **Export** button to save the displayed information as a CSV file.

Create Patch Wizard

The **Create Patch Wizard** is opened by clicking **Create Update Package** from the context menu of the selected patch.

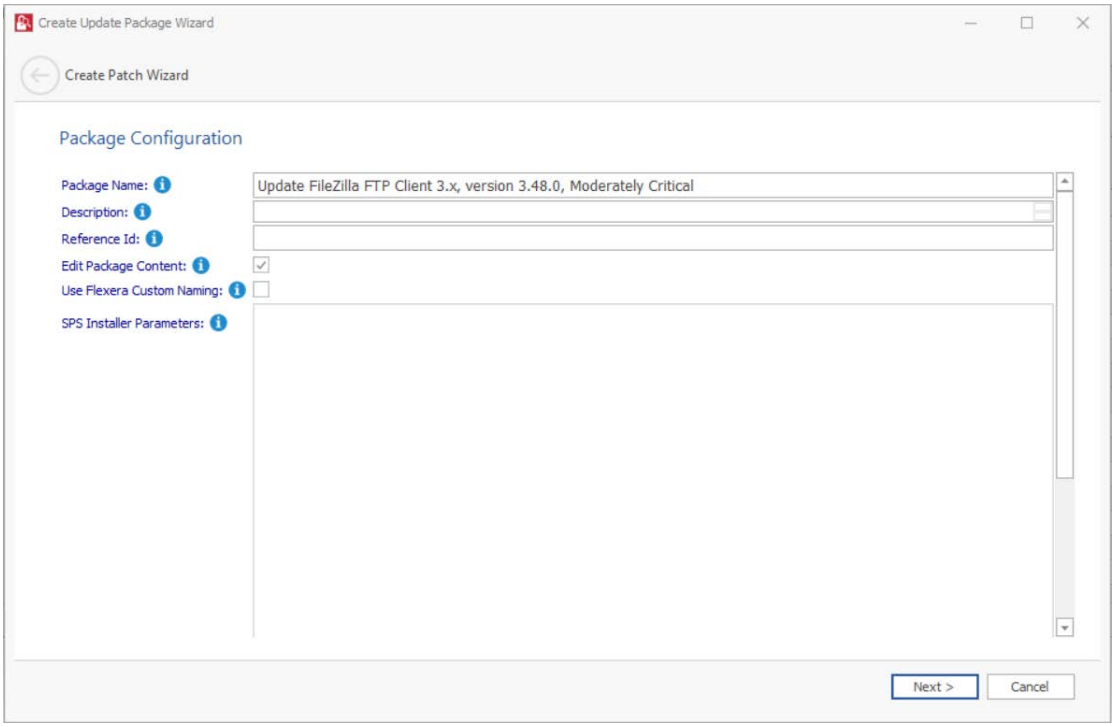
The **Create Patch Wizard** includes the following panels:

- Package Configuration Panel
- Package Contents Panel
- Applicability Criteria - Paths Panel
- Applicability Criteria - Rules Panel
- Connection Details Panel
- Manage Assignments Panel
- Completing the wizard Panel

Package Configuration Panel

On **Package Configuration** panel, no action is required. You should only check **Edit Package Content** (Optional), if you want to view/edit the Package Contents.

Click **Next** button.



The Package Configuration panel includes the following properties:

Table 4-5 • Create Patch Wizard / Package Configuration Panel

Property	Description
Package Name	By default the name of the package will be displayed. If required, you can edit.
Description	Enter description of the package.
Reference Id	Enter the reference Id to the package.
Edit Package Content	If you select this check box, you will get an option to view/edit the package contents in the Package Contents panel.
Use Flexera Custom Naming	If you select this check box, this will set the vendor attribute of the package to Flexera and strip the product version from the product name. Choose this option to overcome limitations in the number of categories that can be published in the SCCM.

Table 4-5 • Create Patch Wizard / Package Configuration Panel

Property	Description

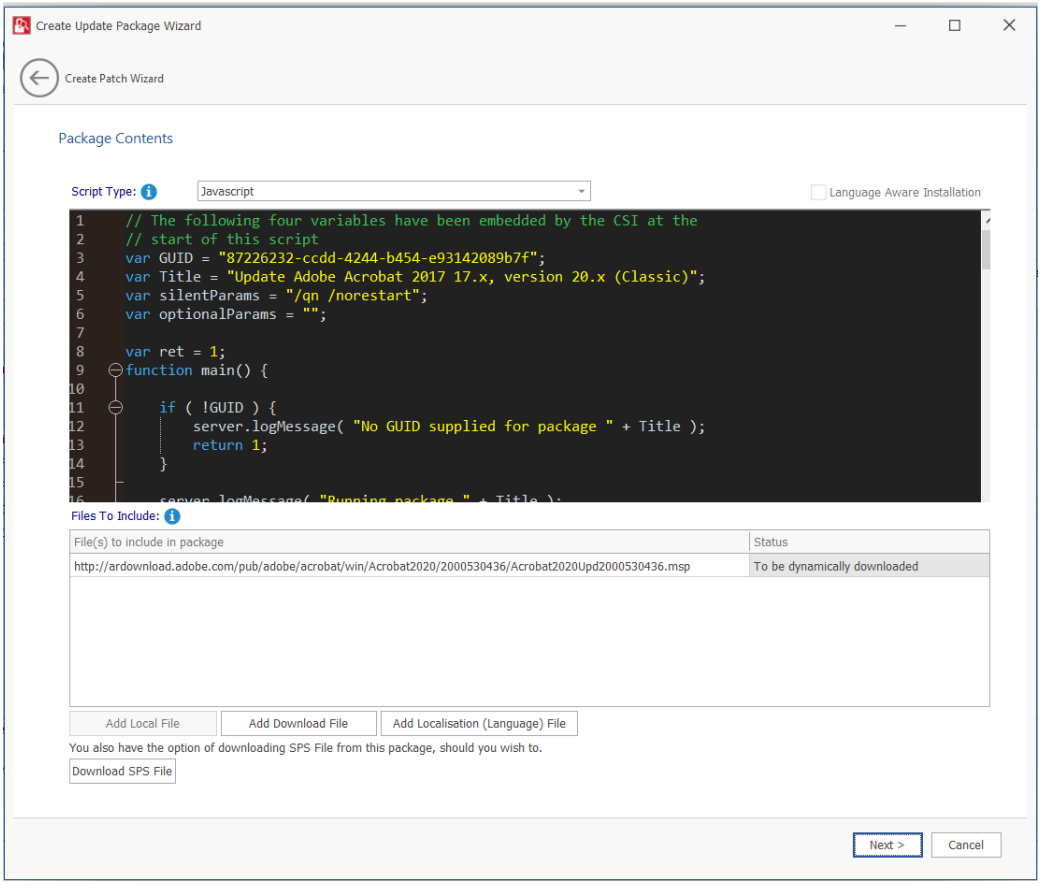
SPS Installer Parameters	Configure the following parameters if you want to pass to the installer. This set of options are unique to this product.
	• Select Installer—Select one of the following options:
	  ◦ Attempt to select automatically
	  ◦ Install Stable version
	  ◦ Install ESR version
	• Clean Install Option—Select one of the following options:
	  ◦ None
	  ◦ Perform clean install
	• Install/Update Options—Select the required options. Multiple options can be selected.

Package Contents Panel

This **Package Contents** panel appears only when you check **Edit Package Content** option in the Package Configuration Panel. No action is required, if required you can edit the contents.

Click **Next** button.

Note • *This panel is not available in VPM patches.*



The **Package Contents** panel includes the following properties:

Table 4-6 • Create Patch Wizard / Package Contents Panel

Property	Description
Script Type	View/edit the execution flow and script type for this package. Select one of the following Script Type: • Javascript • PowerShell • VBScript
Language Aware Installation	The Language Aware Installation option is applicable only for the patches that support multiple languages. When **Language Aware Installation** is checked for a patch, the same language patch will be installed on an endpoint as that of the currently installed version of the product on that endpoint.

Table 4-6 • Create Patch Wizard / Package Contents Panel

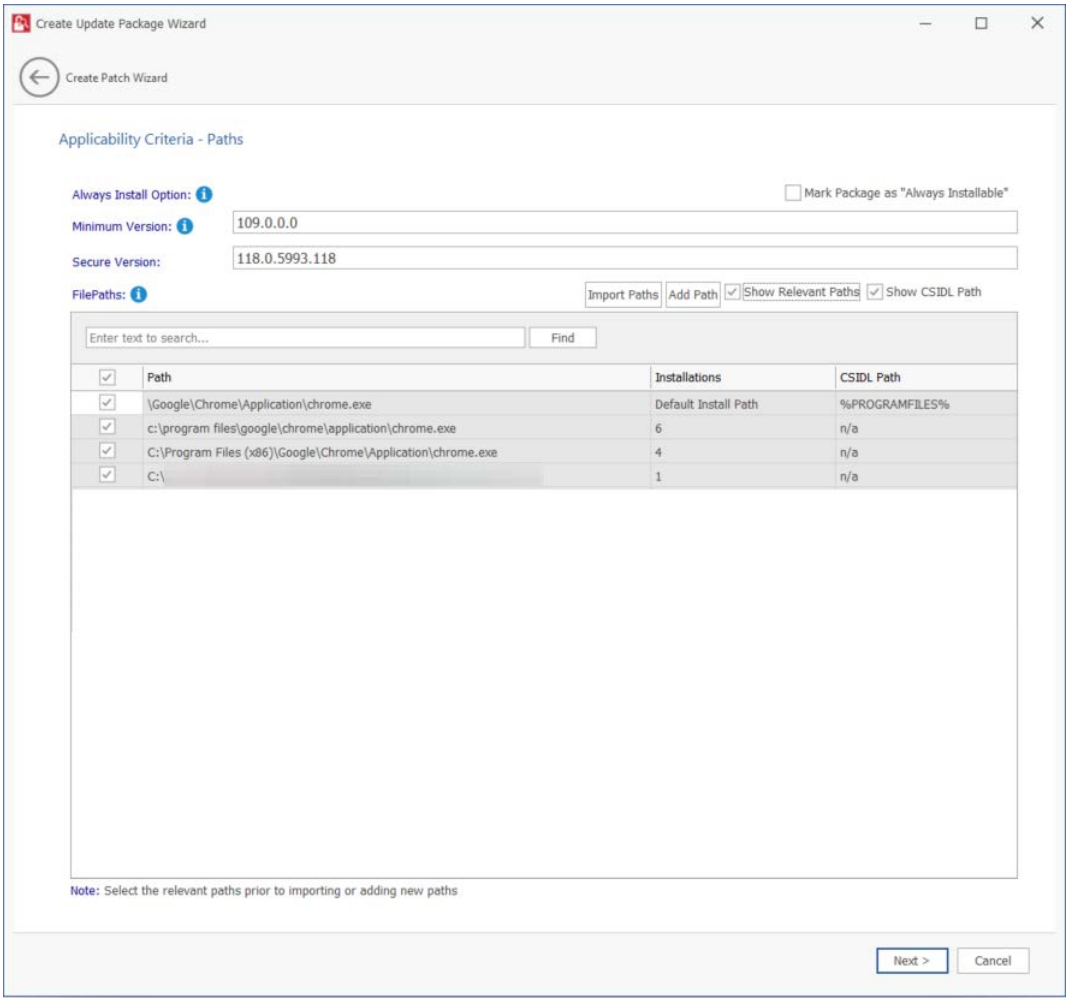
Property	Description
Files To Include	You are also able to change the files that are included in the SPS package, which can either be local files or links to be dynamically downloaded upon publishing of the package. You need to update the script accordingly. Click on the Add Local File button and select the required file that you want to add for the selected path from the local/shared folders.
Download SPS File	The **Download SPS File** button is used to download the SPS file for the patch that is being published. By clicking on the button, the SPS file for the patch will be downloaded. Upon downloading the SPS file, the file path link will be displayed in the **SPS File Location** field.

Applicability Criteria - Paths Panel

On Applicability Criteria - Paths panel, no action is required. If required, you can select the paths/locations to which this package should be applied.

You can edit the Minimum Version. The edited values of the Minimum Version will be applied for the patching to the specified end point system.

Click **Next** button.



The **Applicability Criteria - Paths** panel includes the following properties:

Table 4-7 • Create Patch Wizard / Applicability Criteria - Paths Panel

Property	Description
Always Install Option	For packages that should not have any paths for applicability, select the **Mark Package as "Always Installable"** check box to ignore all paths.
Minimum Version Option	Update the older products.
Secure Version	Update to the secure version.
FilePaths	Select the file path where the application should be installed.

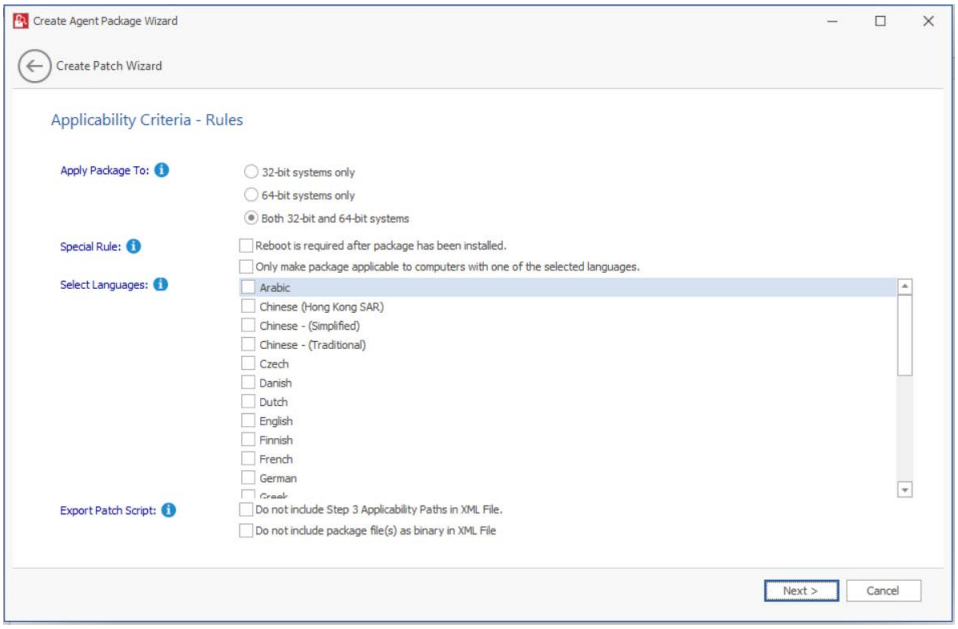
Table 4-7 • Create Patch Wizard / Applicability Criteria - Paths Panel

Property	Description
Import Paths	Click **Import Path** and select a local CSV file which contains multiple file paths. You can now import multiple file paths at once using a CSV file. ***Note*** *• This option is available in Flexera Package System (SPS), Patch Template, and Agent Deployment views.*
Add Path	Click to add path and the CSIDL values for a package. ***Note*** *• This button is available in Flexera Package System (SPS), Patch Template, and Agent Deployment views.* *You can use applicability criteria (**%USERPROFILE%**, **%APPDATA%**, and **%LOCALAPPDATA%**) as the CSIDL Path.*
Show Relevant Paths	By default, this check box will be selected and display relevant EOL/Insecure file paths with one or more installations of the selected package.
Show CSIDL Path	• If you select this check box, CSIDL path will be shown in the CSIDL Path column. • If you un-select the check box then CSIDL Path column will not display in the grid.
Find	Enter keywords in the **Find** box to find the matching entries in the grid.

Applicability Criteria - Rules Panel

On Applicability Criteria - Rules panel, no action is required. If required, you can specify the rules.

Click **Next** button.



The **Applicability Criteria - Rules** panel includes the following properties:

Table 4-8 • Create Patch Wizard / Applicability Criteria - Rules Panel

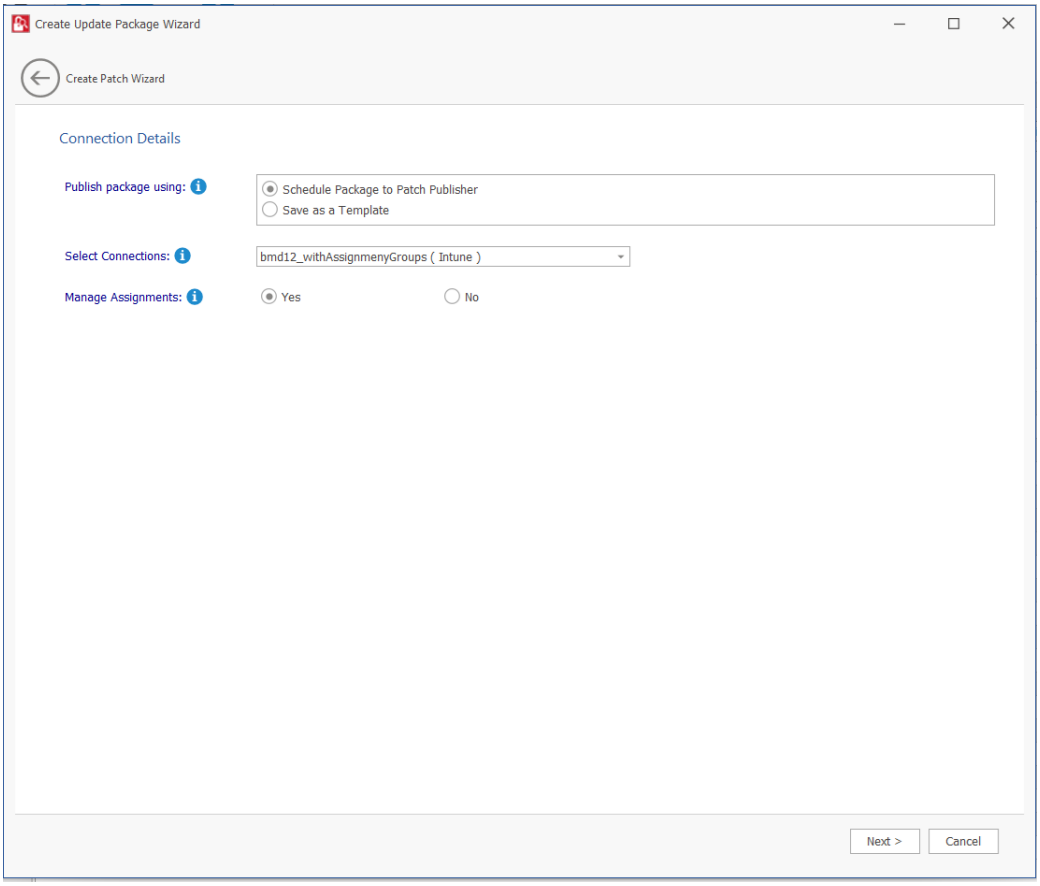
Property	Description
Apply Package To	Select one of the required package limit: • 32-bit system only • 64-bit system only • Both 32-bit and 64-bit systems
Select Languages	Select the desired language to configure your package.
Special Rule	Check this option, if a reboot is required after the package has been installed.
Export Patch Script	The two options (Do not include Step 3 Applicability Paths in XML File and Do not include the package file(s) as binary in XML File) are taken into consideration only when exporting the package to the File System (Export), otherwise the selection will be disregarded.

Connection Details Panel

Important • *The Connection Details panel is available only for Intune publishing.*

On the **Connection Details** panel, select the required Intune connection(s) that you would like to publish.

Click the **Next** button.



The **Connection Details** panel includes the following properties:

Table 4-9 • Create Patch Wizard / Connection Details Panel

Property	Description
Publish Package Using	Select one of the following option: • **Schedule Package to Patch Publisher—** If you select this option, the package will be published through the Patch Publisher. • **Save as Template—** If you select this option, the package will be saved as a Patch Template.

Table 4-9 • Create Patch Wizard / Connection Details Panel

Property	Description
Select Connections	Select required connections: • WSUS • Intune • Workspace ONE • BigFix • Tanium ***Note*** • *You can select multiple connections to publish.*
Manage Assignments	Select one of the following option: • **Yes —**If you select this option, you can manage the assignments of the selected Intune connection for publishing patches. • **No —**If you want to publish patches without adding assignments.

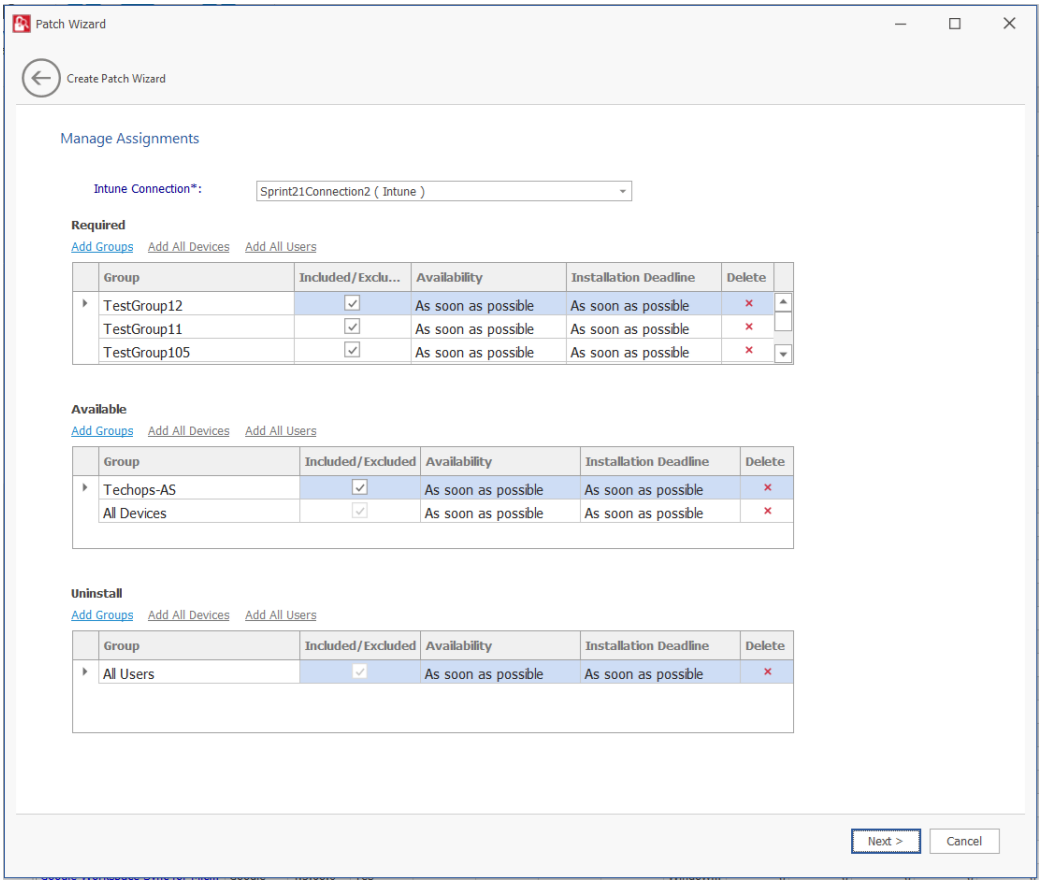
Manage Assignments Panel

Important • *The Connection Details panel is available only for Intune publishing.*

This **Manage Assignments** panel appears only when you check **Manage Assignments** as **Yes** in the **Connection Details** panel.

Add the required, available, and uninstall assignment details for the selected Intune connection(s).

Click the **Next** button.



The **Manage Assignments** panel includes the following properties:

Table 4-10 • Create Patch Wizard / Manage Assignments Panel

Property	Description
Intune Connection	Click on the **Intune Connection** drop down and select the configured Intune connections from the list.

Table 4-10 • Create Patch Wizard / Manage Assignments Panel

Property	Description

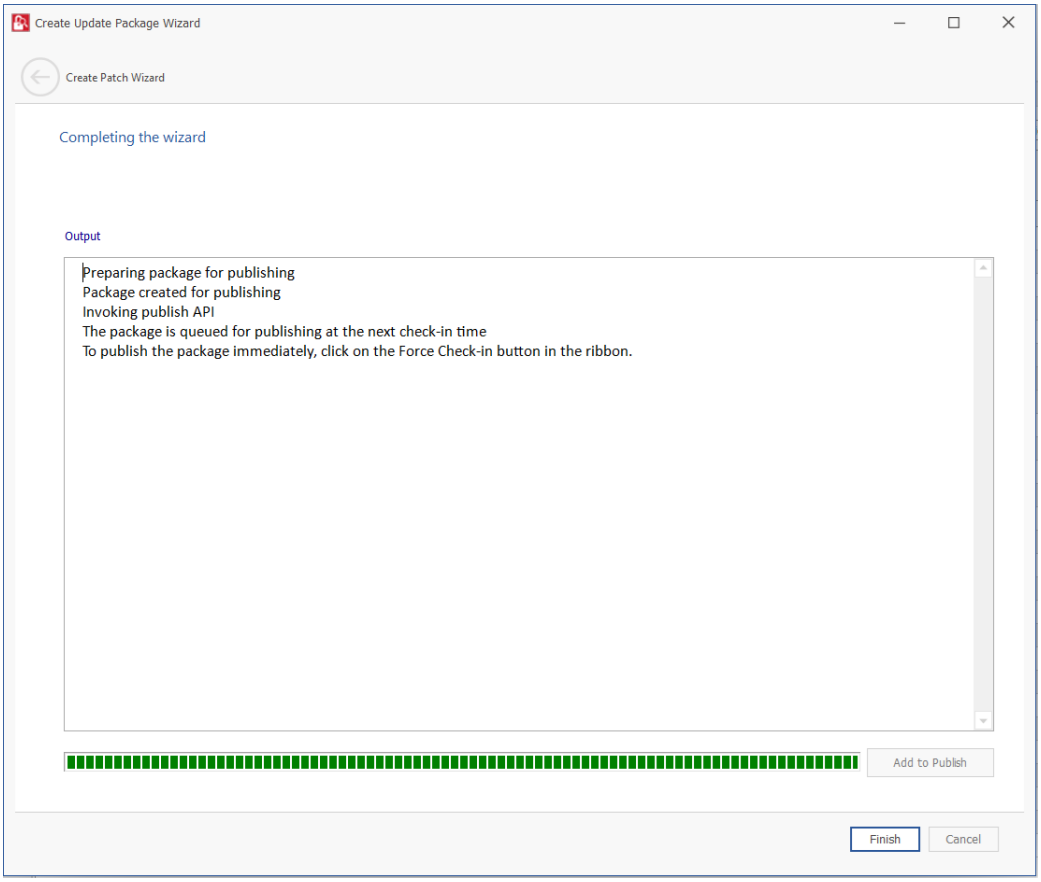
Required
Available
Uninstall
	Configure the following details:
	• **Add Groups**
	  • Click on **Add Groups**, and the Intune Assignment Groups dialog box will appear.
	  • Select the required group from the list or enter keywords in the **Search Text** box, and then click **Search** button to display matching entries in the grid.
	  • Select the desired group(s) from the list.
	
	Note *• You can select multiple groups.*
	  • Click the **Next** button to proceed to the next page and the **Previous** button to go back to the previous page.
	  • After selecting the required groups, click **OK** and exit the dialog box.
	  • You can include or exclude the selected groups by clicking the **Included / Excluded** check box.
	  • To remove a selected group, click the delete icon in the **Delete** column.
	• **Add All Devices**
	  • Click on **Add All Devices** to include all available devices.
	  • To remove added devices, click the delete icon in the **Delete** column.
	
	Note *• If **All Devices** is already selected, the hyperlink will be disabled from all the sections (Available, Required, and Uninstall). The option will only be enabled again once you delete the selected **All Devices**.*
	• **Add All Users**
	  • Click on **Add All Users** to include all available users.
	  • To remove added users, click the delete icon in the **Delete** column.
	
	Note *• If **All Users** is already selected, the hyperlink will be disabled from all the sections (Available, Required, and Uninstall). The option will only be enabled again once you delete the selected **All Users**.*

Completing the wizard Panel

On the **Completing the wizard** panel, Add to publish, and then click **Finish**.

The **Output** section displays the results of the published package.

On successful action, package and wizard data will be saved. On Force check-in, the saved package will be published to the specified end point management system.



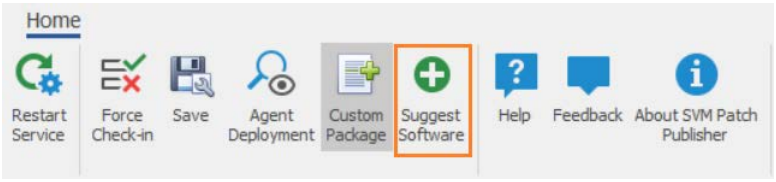
Suggest Software

You can use the Suggest Software to suggest a software that is not detected by SVM.

To specify SVM Suggest Software, perform the following steps.

Task ***To specify SVM Suggest Software:***

1. In the SVM Patch Publisher ribbon, click **Suggest Software** button.

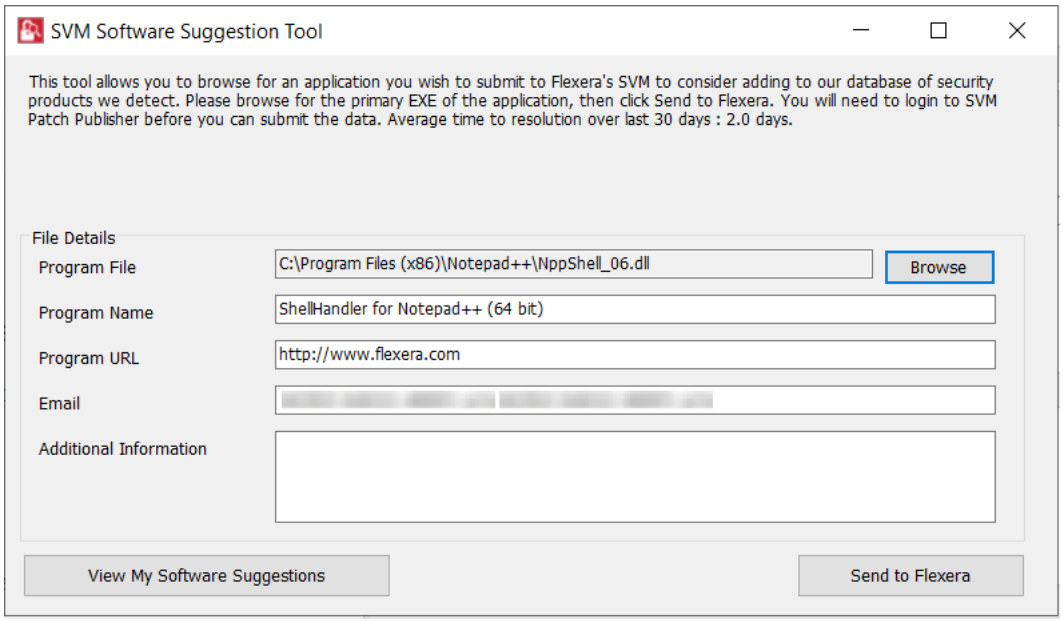


The SVM Software Suggestion Tool window appears.

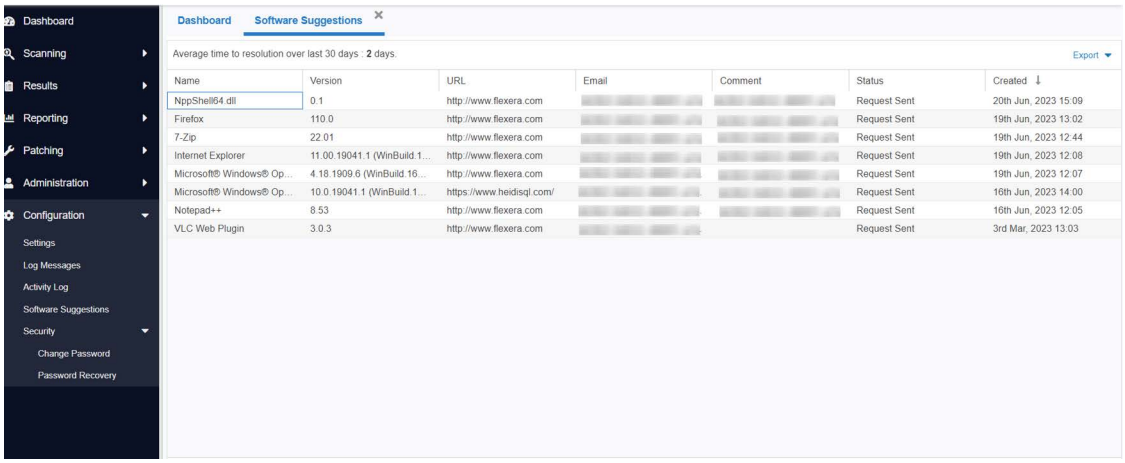
2. The SVM Software Suggestion Tool window includes the following properties:

Property	Description
Program File	Click browse and select file from the preferred location. ***Note*** • *Users should suggest the main file of the installed software.*
Program Name	Program name auto-populates with respect to the selected program file. Modify the name (If required).
Program URL	Specify the program URL.
Email Address	Specify valid email addresses. ***Note*** • *Multiple email addresses can be added. Use a semi-colon or comma to separate multiple e-mail addresses.*
Additional Information	Add additional information (if required).

3. After entering the above details, click **Send to Flexera** button.



4. Upon successful action, the details of the suggested software will be displayed in SVM new web interface under **Configuration > Software Suggestions**.



5. By clicking on the **View My Software Suggestions** button in the SVM Software Suggestion Tool window, it navigates to the new **SVM web interface > Configuration > Software Suggestions** page where the details of the software suggestion will be displayed.

Configure Product Display Criteria for Vendor Patch Module View

You can configure the Vendor Patch Module views to display patches based on the criteria selected in the Configure View dialog.

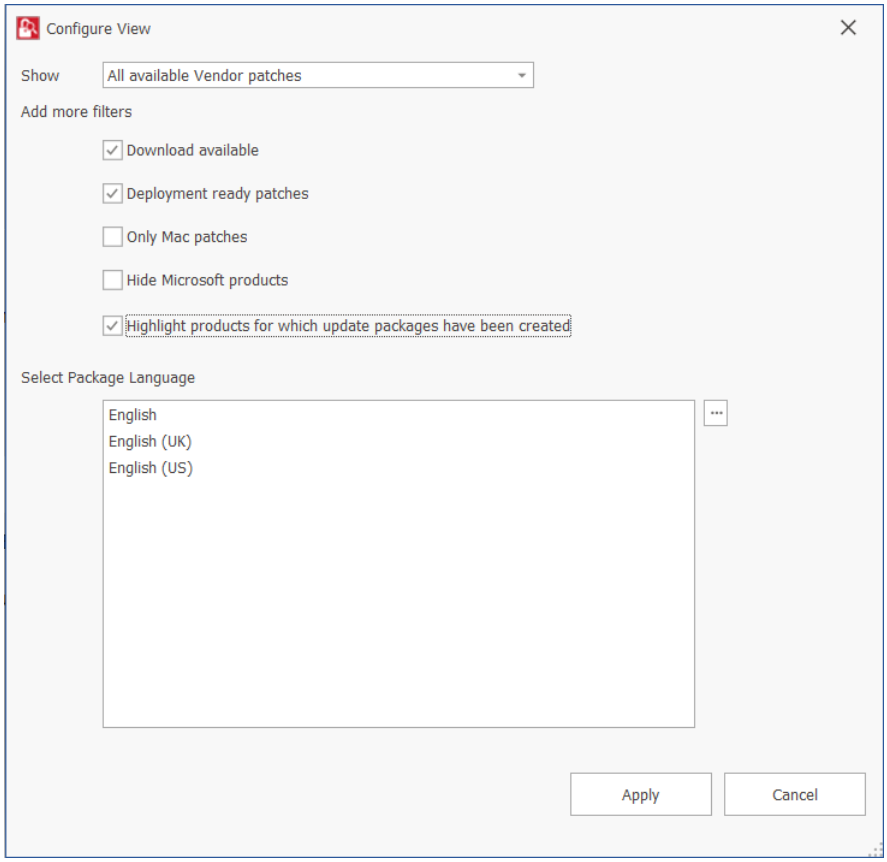
To define a criteria, perform the following steps:

Task ***To define a criteria:***

1. On **Manage Patches** menu, click **Vendor Patch Module** in the left pane.

   The **Vendor Patch Module** page appears.

2. Click on the **Configure View**. The **Configure View** dialog box appears.



3. The following display criteria are available.

Drop down	Options
Show	Select one of the following options: • **All available Vendor patches**—Displays all the list of out of the box patches available in the module. (Default) • **Only those Detected in my environment**—Displays a list of out of the box patches available for applications which are already installed in the user environment. • **Only those Not detected in my environment**—Displays a list of out of the box patches available for other applications which are not deployed in the user environment.

Drop down	Options
Add more filters	Select one or more following check boxes to add more criteria defined in the Show drop down: • **Download available**—Displays a list of out of the box patches available to download. • **Deployment ready patches**—Displays a list of deployable out of the box patches which have no missing details. These patches are highlighted in Blue color in the products list and have a high rate of success in mass deployment. • **Only Mac patches**—Displays a list of out of the box patches for macOS, you can easily download them for deployment in your Mac management solution of choice. • **Hide Microsoft products**—Hides only a list of out of the box patches provided by the vendor Microsoft. • **Highlight products for which packages have been created**—Displays a list of products in Green color for which packages have been created successfully.
Select Package Language	You can target specific languages. You are also able to change the default selected language and select new package languages. To do so, click ellipses (**...**) button, select the desired language in the **Select Package Language** dialog box, and then click **OK** button. By default, the following package language is selected: • English • English (UK) • English (US)

4. After selecting the details, click **Apply** to display the selected criteria.

Configure Product Display Criteria for Flexera Package System (SPS) View

You can configure the Flexera Package System (SPS) view to display patches based on the criteria selected in the Configure View dialog.

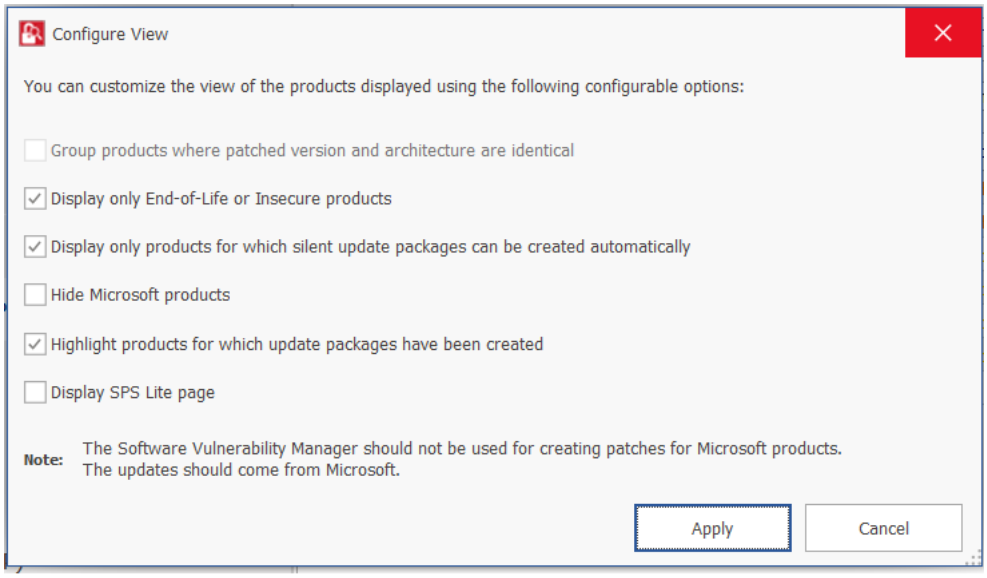
To define a criteria, perform the following steps:

Task ***To define a criteria:***

1. On **Manage Patches** menu, click **Flexera Package System (SPS)** in the left pane.

   The **Flexera Package System (SPS)** page appears.

2. Click on the **Configure View**. The **Configure View** dialog box appears.



3. The following display criteria are available:

Option	Description
When the Group products where patched version and architecture are identical	The SPS page rows will be grouped by the product, architecture, and the patch required to update them to a secure version.
Display only End-Of-Life or Insecure Products	Displays a list of End-Of-Life or Insecure Products.
Display only products for which silent update packages can be created automatically	Display only products for which silent update packages can be created automatically.
Hide Microsoft products	Hides only a list of out of the box patches provided by the Microsoft.
Highlight products for which packages have been created	Displays a list of products in Green color for which packages have been created successfully.
Display SPS Lite Page	Displays list of only SPS lite pages.

4. After selecting the details, click **Apply** to display the selected criteria.

Subscribe Automatic Publishing of Patches

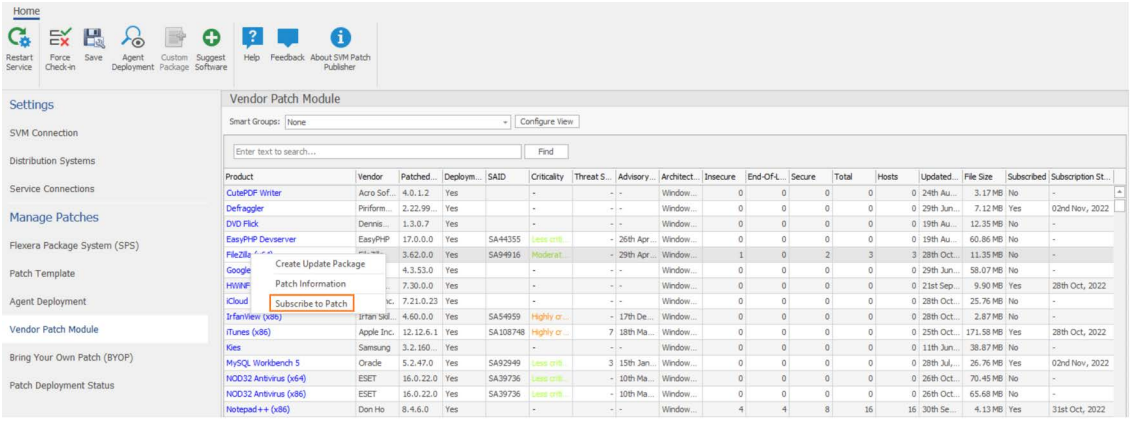
Use this page to subscribe to SPS and VPM patches for automatic publishing.

Task ***To subscribe to SPS and VPM patches for automatic publishing:***

1. Right click on any SPS template or VPM patch.

   To use this option, navigate to **Manage Patches >> Vendor Patch Module** or **Manage Patches >> Patch Template**.

2. Select **Subscribe to Patch** option from the context menu.



   The **Configure Subscription** dialog box appears.

3. Click **Select connection** drop down and select required connections from the list.

Note • *You can select multiple connections to publish.*

To make assignments for end point deployments for Intune publishing, click **Manage Assignments**. The Manage Assignments dialog box appears.

Note • *The Edit Assignments button is available only for Intune publishing.*

In the **Connection** field, the default connection will be pre-selected. If required, choose the desired configured connection from the drop down list.

In the **Required** section, you can add the following:

- Add Groups
  - Click **Add Groups**. The Intune Assignment Groups dialog box appears.
  - Select the required group from the list or enter keywords in the **Search Text** box, and then click **Search** button to display matching entries in the grid.
  - Select the desired group(s) from the list.

Note • *You can select multiple groups.*

  - Click the **Next** button to proceed to the next page and the **Previous** button to go back to the previous page.

- After selecting the required groups, click **OK** and exit the dialog box.
- To remove a selected group, click the delete icon in the **Delete** column.

- Add All Devices
  - Click **Add All Devices** to include all available devices.
  - To remove added devices, click the delete icon in the **Delete** column.

***Note** • If **Add All Devices** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Devices**.*

- Add All Users
  - Click **Add All Users** to include all available users.
  - To remove added users, click the delete icon in the **Delete** column.

***Note** • If **Add All Users** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Users**.*

After adding the details, click **Save** and exist the dialog box.

4. Define the following:

   Either one of the below preferences can be defined:

   - **Always publish a new patch when a new version is available—**Publishes when new version of the patch is available.
   - **Only publish a new patch when any of the following are true:** Publishes when any one of the defined preferences are met.
     - SAID CVSS score is greater than
     - Criticality is greater than

       Extremely Critical

       Highly Critical

       Moderately Critical

       Less Critical

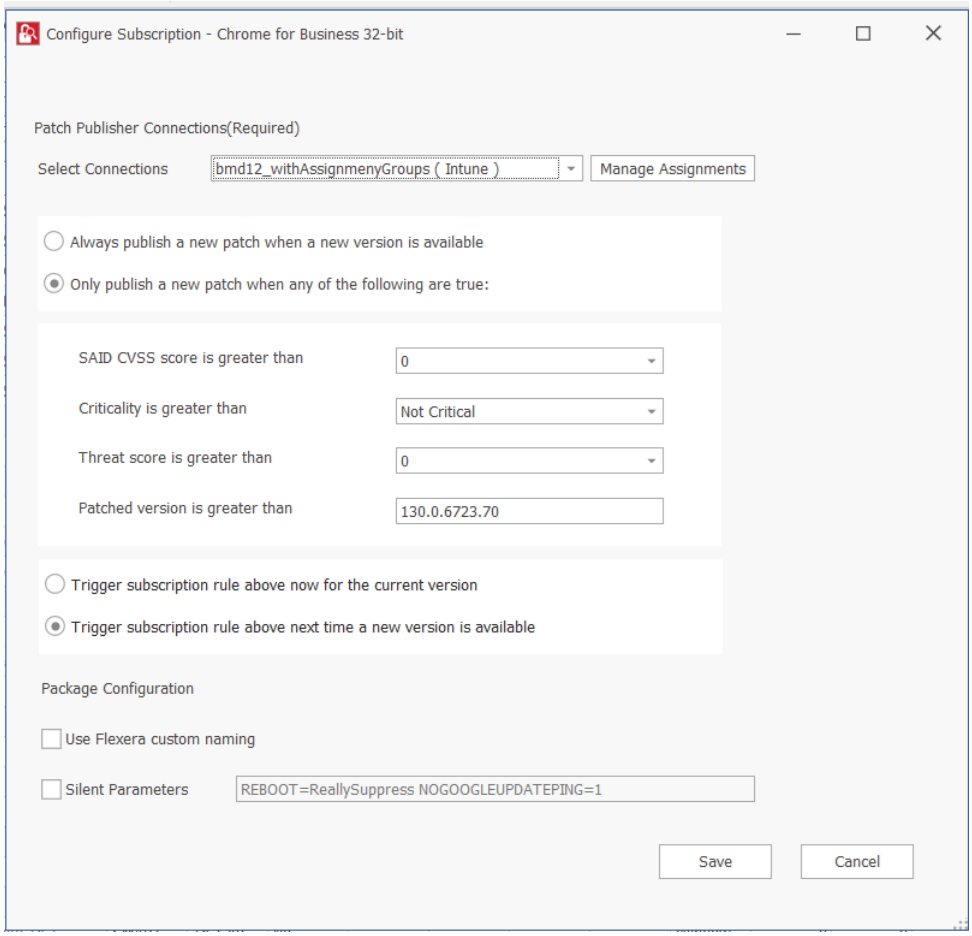
       Not Critical
     - Threat score is greater than
     - **Patched version greater than—**By default current version of a patch will be displayed

   Either one of these options must be selected to define the deployment schedule based on the above preferences:

   - **Trigger subscription rule above now for the current version—**Publishes the package right away
   - **Trigger subscription rule above next time a new version is available—**Start publishes the package when newer version is available

Either one of these options must be selected for package configure:

- **Use Flexera custom naming—**Saves as a Flexera custom name
- **Silent Parameters—**Saves custom silent parameters for VPM subscription



5. After selecting, click **Save** button.
6. Click **OK** and agree the confirmation dialog that appears.
7. Upon successful action, the **Subscribe** column will be changed to **Yes**, and the **Subscription Started** column will be updated as per the subscription started date.

Unsubscribe Automatic Publishing of the Patches

Use this page to unsubscribe automatic publishing of the patches.

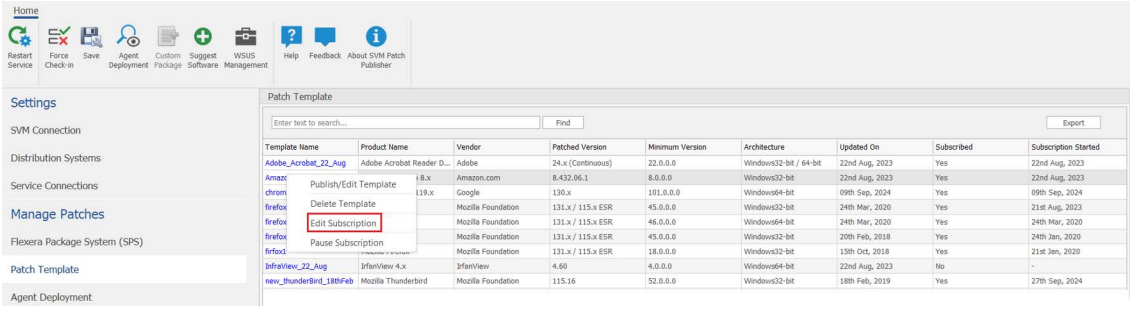
Task ***To Unsubscribe:***

1. Right click on any subscribed SPS template or VPM patch.

   To use this option, navigate to **Manage Patches >> Vendor Patch Module** or **Manage Patches >> Patch Template**.

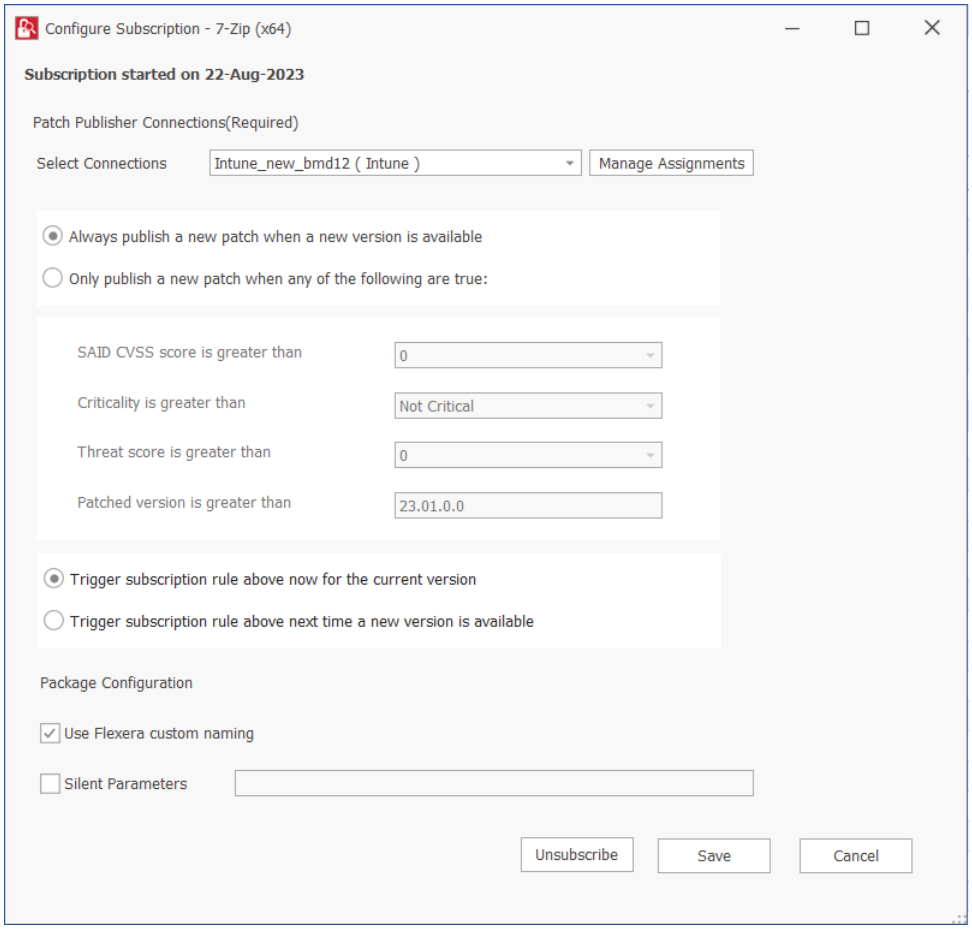
Note • *Make sure that the patches are subscribed as explained in Subscribe Automatic Publishing of Patches.*

2. Select **Edit Subscription** option from the context menu.



The Configure Subscription dialog box appears.

3. On **Configure Subscription** dialog box, click **Unsubscribe** button.



4. Click **OK** and agree the confirmation dialog that appears.

5. Upon successful action, the **Subscribe** column will be changed to **No**, and the **Subscription Started** column will be empty.

Edit Subscription (Patch Publisher)

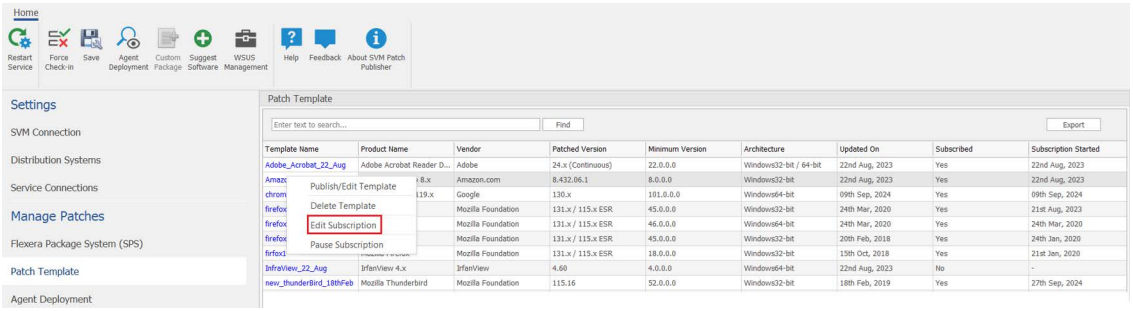
Use this page to edit subscribed patches.

Task ***To edit subscribed patches:***

1. Right click on any subscribed SPS template or VPM patch.

   To use this option, navigate to **Manage Patches >> Vendor Patch Module** or **Manage Patches >> Patch Template**.

2. Select **Edit Subscription** option from the context menu to edit the configured preferences.



   The Configure Subscription dialog box appears.

3. Modify as necessary and click **Save**.
4. Click **OK** and agree the confirmation dialog that appears.
5. Upon successful action, the modifications are updated.
6. Click **Cancel** to close the Configure Subscription dialog box without saving your changes.

Pause Subscription (Patch Publisher)

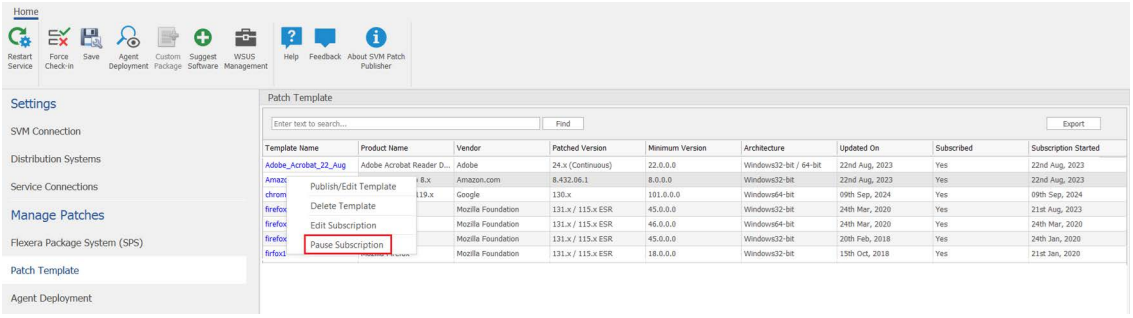
Use this page to pause the patches you have subscribed to.

Task ***To pause subscription:***

1. Right click on any subscribed SPS template or VPM patch.

   To use this option, navigate to **Manage Patches >> Vendor Patch Module** or **Manage Patches >> Patch Template**.

2. Select **Pause Subscription** option from the context menu.



3. Click **OK** and agree the confirmation dialog that appears.
4. Upon successful action, the **Subscribe** column will be changed to **Paused**.

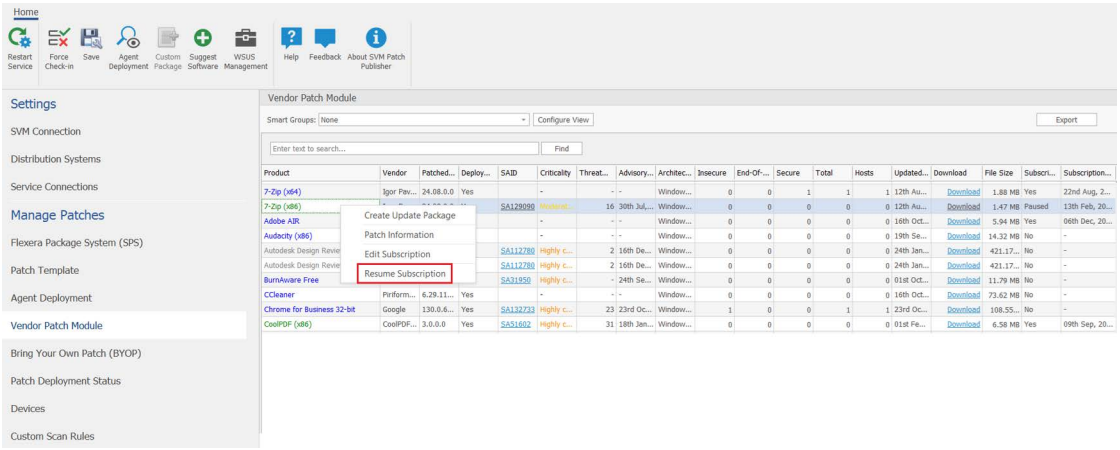
Resume Subscription (Patch Publisher)

Use this page to resume the patches you have paused.

Task ***To resume subscription:***

1. Right click on any paused SPS template or VPM patch.

   To use this option, navigate to **Manage Patches >> Vendor Patch Module** or **Manage Patches >> Patch Template**.
2. Select **Resume Subscription** option from the context menu.



3. Click **OK** and agree the confirmation dialog that appears.
4. Upon successful action, the **Subscribe** column will be changed to **Yes**.

Setting Up a Distribution Connection for Tanium

To obtain the required credentials to set up a distribution connection for Tanium, perform the following process:

- Create an API Token

Create an API Token

To obtain an API Token, perform the following steps:

Task ***To obtain an API Token:***

1. Log in to Tanium using the obtained credentials.
2. Once logged in, from the list of available services, choose **Administration > Permissions > API Tokens**.

   The API Tokens dialog box appears on the right pane.
3. Click **New API Token**. The Create API Token dialog box appears. Enter the below details to configure the token settings:

Field	Description
Notes	Enter a description for the token.
Expiration	Enter the expiration interval in days. You can also select the required days by clicking Move Up and Move Down arrows.
Persona	Select the Default from the drop down to which the token is bound.
Trusted IP addresses	Enter the valid IP address. Enter multiple IP addresses separated by commas or new lines to separate each address.

4. After entering the above fields, click **Create** button.
5. Upon successful action, a newly created API token details will be listed in the **API Tokens** page.
6. Copy the token to your clipboard for the future reference.
7. Click **Close** button to exit the dialog box.
8. To view the token details, select the required token in the grid and then click **View Token**.

Download and Install the Software Vulnerability Manager Client ToolKit

To ease patch automation and WSUS management you must download and install **Software Vulnerability Manager Client ToolKit**. To download this tool kit, click here.

On successful installation of Software Vulnerability Manager Client ToolKit, below tools will get installed and their respective shortcuts will be created in your desktop.

- Flexera SVM Patch Configuration
- Flexera WSUS Management Tool
- Flexera SVM Client Data Tool

Note • *The latest version of the SVM Client Toolkit does not consist of Flexera SVM Patch Configuration.*

Important • *You must install* ***Software Vulnerability Manager Patch Client ToolKit*** *to utilize the Vendor Patch Module and SPS Automation, see Automating Patch Deployment and Patch Automation.*

Prerequisites

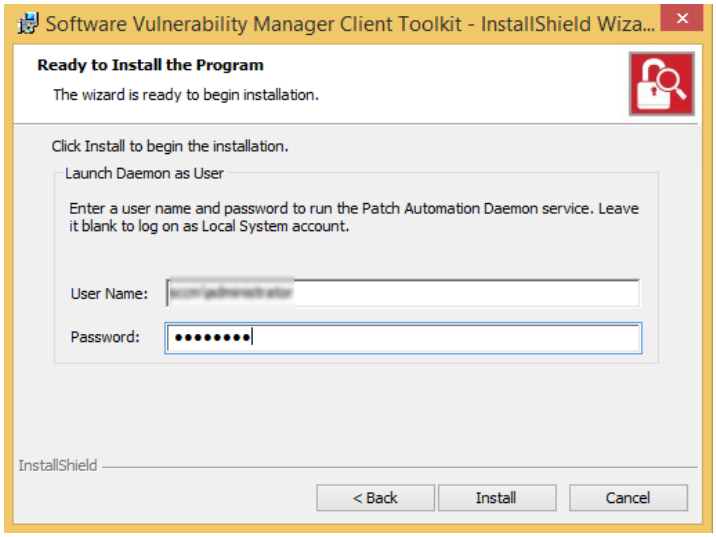
The below prerequisites are required:

- 64 Bit Operating System. Windows 7 +
- Windows Server Update Services (WSUS) administrative console (RSAT) needs to be installed. You need to install the administrator tools version that corresponds to your WSUS server.
- Access Privileges to run the Daemon as a service.
- Access Privileges to makes changes to the WSUS server.
- Internet Connection – SSL/TCP to a SVM server.
- .Net Framework 4.6.1 or above.
- OS Requirements:
  - Install Software Vulnerability Manager Client ToolKit in Windows Server 2012 or Windows 8, for Windows 2012 WSUS.
  - Install Software Vulnerability Manager Client ToolKit in Windows Server 2016 or Windows 10, for Windows 2016 WSUS.
  - Install Software Vulnerability Manager Client ToolKit in Windows Server 2019 or Windows 10, for Windows 2019 WSUS.
- Install both the Software Vulnerability Manager Client ToolKit and WSUS in the same domain.

Task ***To download and install the tool kit follow the below steps***

1. Download the Software Vulnerability Manager Patch Configuration Tool from the SVM Tool Kit. Save it in your desired folder path.
2. Double click the set-up file, welcome wizard appears. Click Next.

3. You will be prompted to enter your system credentials. Click **Install**.



Tip • *On successful installation, one shortcut for* ***Flexera Software Vulnerability Manager Patch Configuration*** *and one shortcut for* ***Flexera WSUS Management Tool*** *will get created in your desktop.*

4. On successful installation, click Finish. **Flexera SVM Patch Configuration** windows pane appears, see Flexera SVM Patch Configuration.

Flexera SVM Patch Configuration

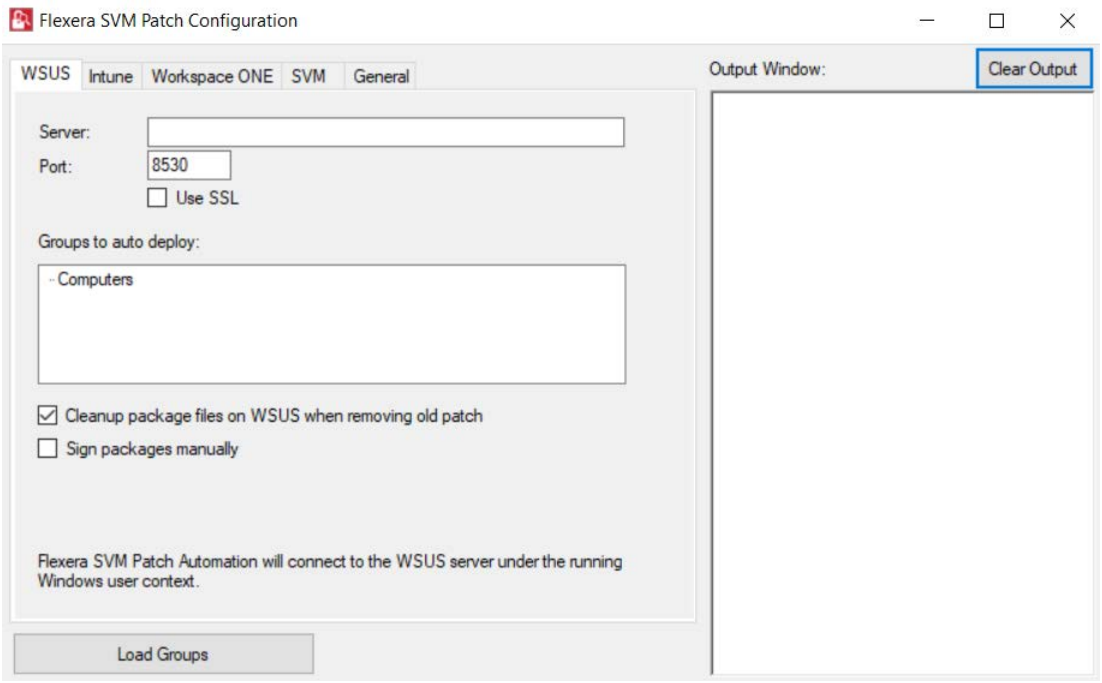
Flexera Software Vulnerability Manager Patch Configuration integrates Software Vulnerability Manager application with the configured WSUS server to achieve the automation for subscribed packages.

On successful installation of Software Vulnerability Manager Client ToolKit, a shortcut with a name **Flexera SVM Patch Configuration** will get created.

Note • *You will get 400 error message when the SVM Token has expired. To re-generate the token, follow the steps as mentioned below in the SVM Connections (point 12 and 13).*

Task ***To use Flexera Software Vulnerability Manager Patch Configuration follow the below steps:***

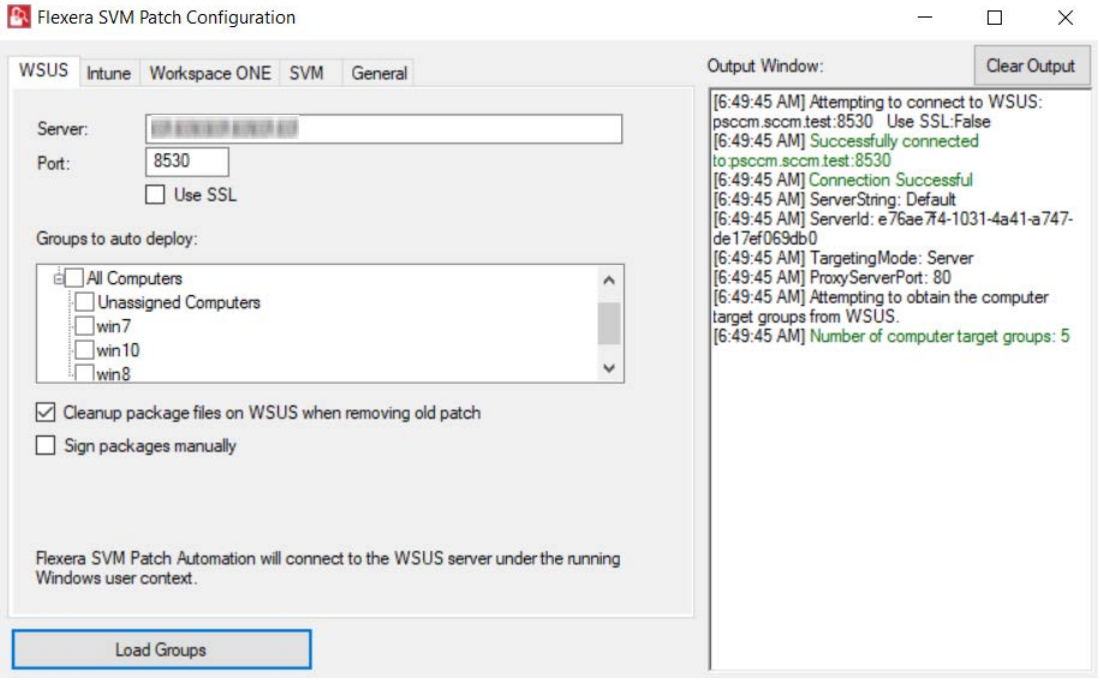
1. Double click on the shortcut created on your desktop, **Flexera SVM Patch Configuration** windows pane appears.
2. It consists of five tabs:
   - WSUS tab
   - Intune tab
   - Workspace ONE tab
   - SVM tab
   - General tab



3. In **WSUS Connection** tab, enter the WSUS server details and the port number, click **Load Groups**.
4. In **Groups to auto deploy**, you can see the list of computer groups configured in WSUS Server.

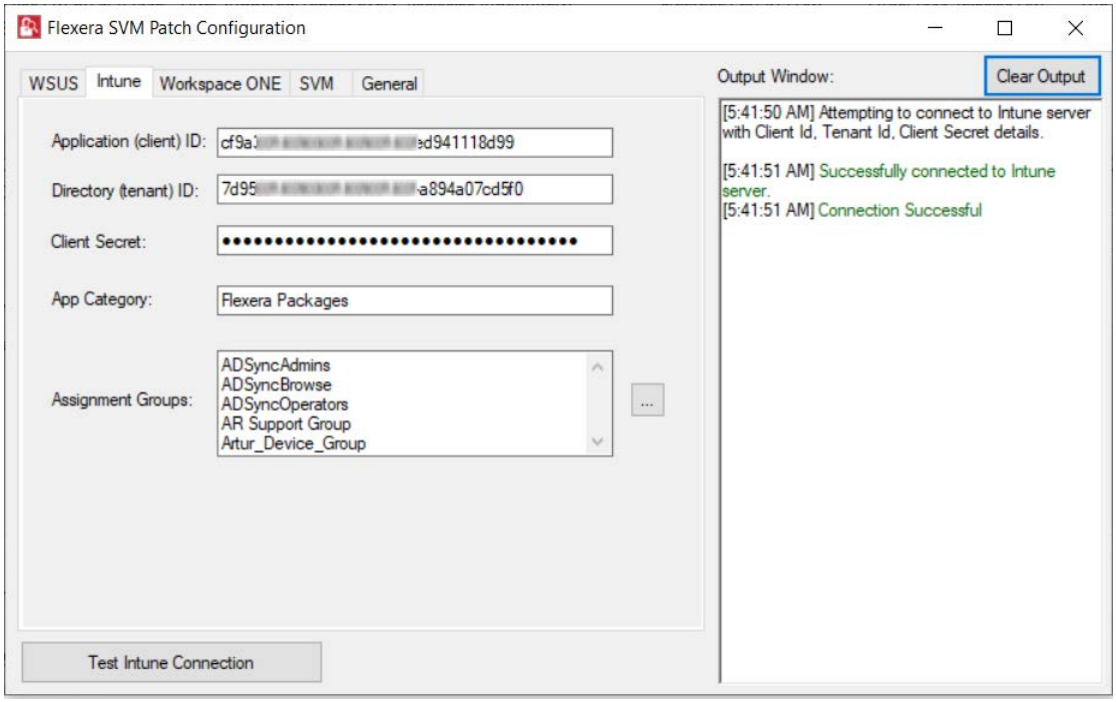
5. Select the computer groups which you wanted to deploy the packages. To know more about a package publishing, see Automating Patch Deployment.

6. To external package signing, select **Sign package manually** option.



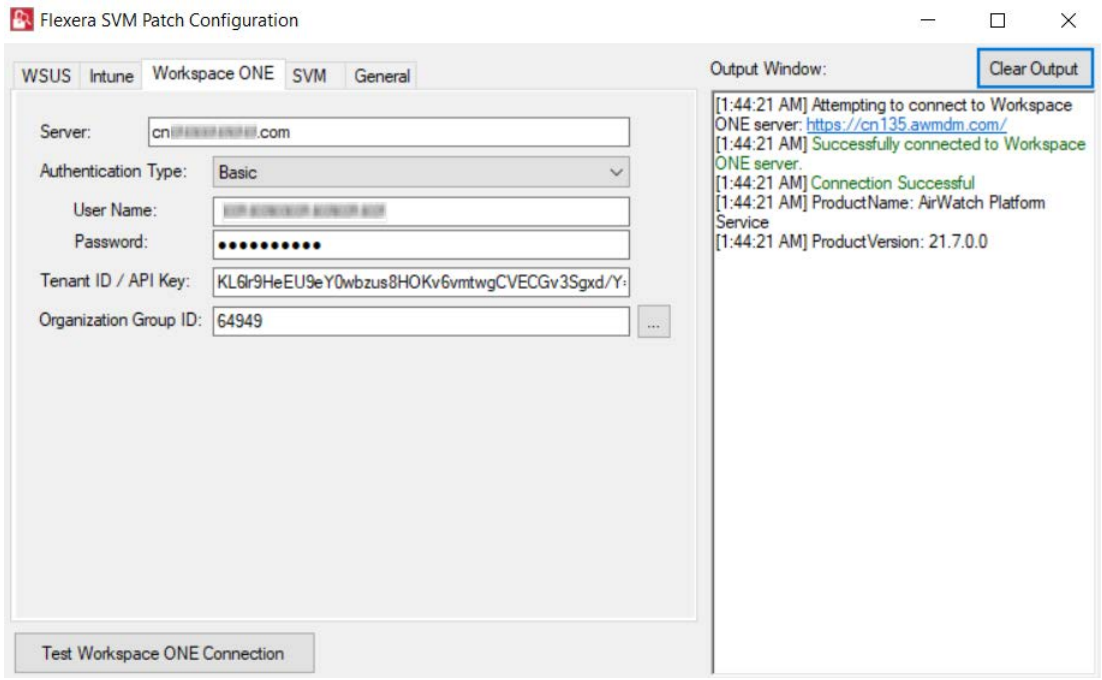
7. In **Intune Connection** tab, you will be prompted to enter your Intune credentials like Application (Client) ID, Directory (tenant), Client Secret. To know more details on configure Intune credentials, see Set up a Distribution Connection for Microsoft Intune.

8. Click **Test Intune Connection** button, on successful connection you will receive a successful message in the Output Window.



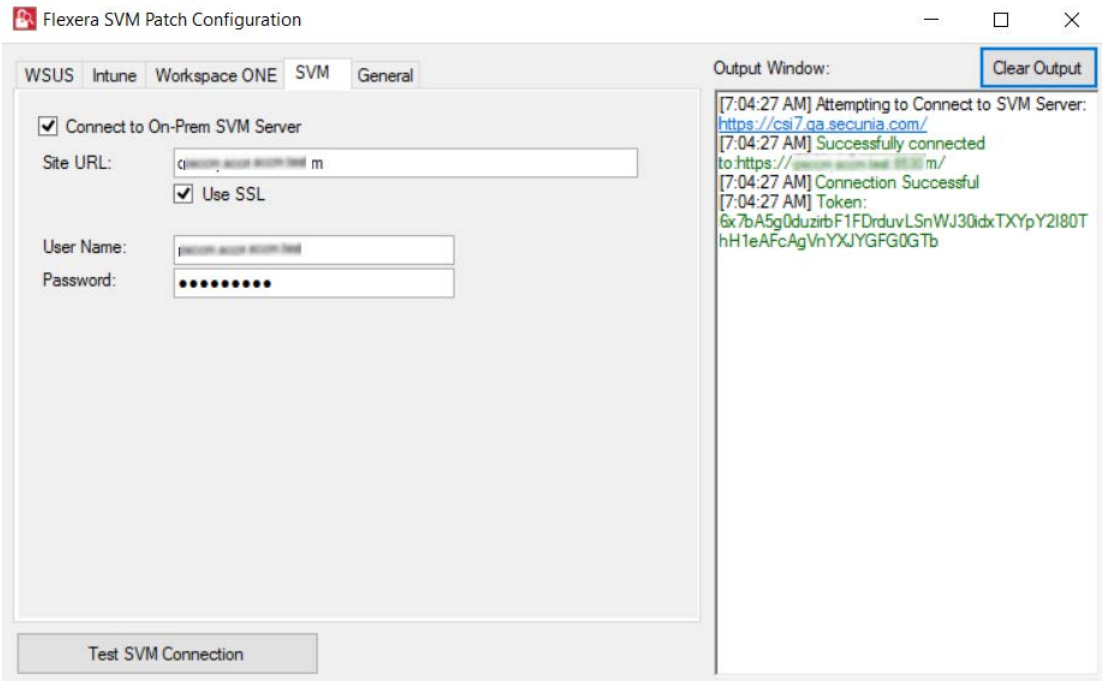
9. In Workspace ONE tab, you will be prompted to enter the valid Workspace ONE connection details like Server name, Authentication Type, Tenant ID/API Key, and selecting Organization Group ID. To know more details on configuration, see Set up a Distribution Connection for Workspace ONE.

10. Click **Test Workspace ONE Connection** button, on successful connection you will receive a successful message in the Output Window.



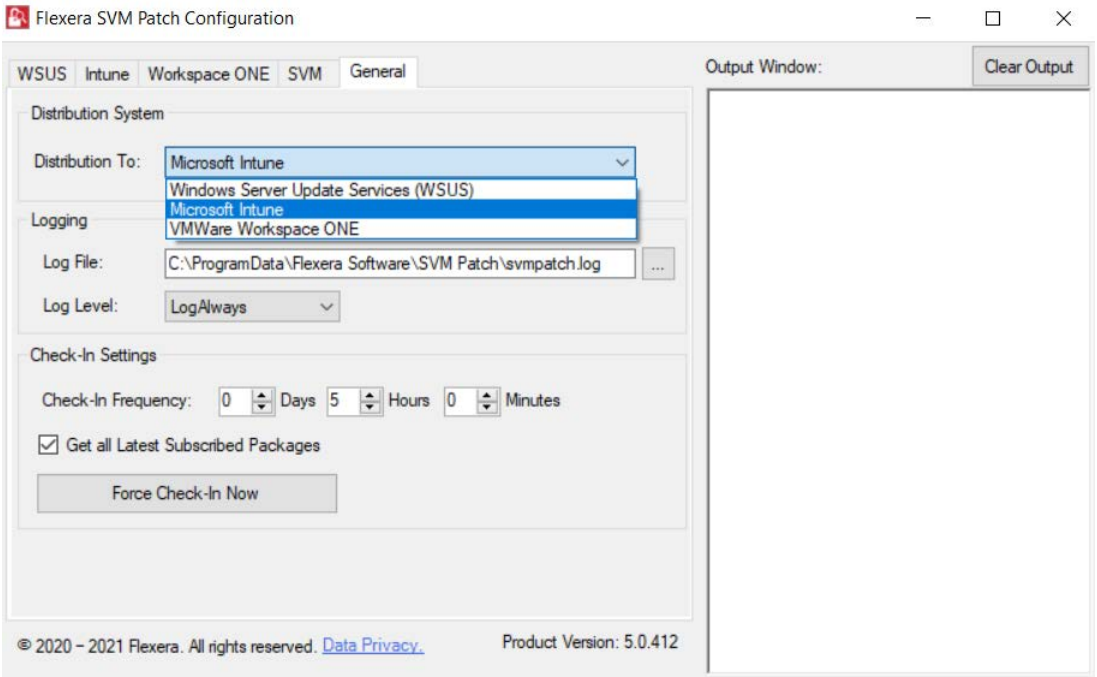
11. In SVM Connection tab, you will be prompted to enter your Software Vulnerability Manager Cloud credentials.

12. Click **Test SVM Connection** button, on successful connection you will receive a Token in the Output Window.



13. In the General tab, you can set any one of the below distribution systems.

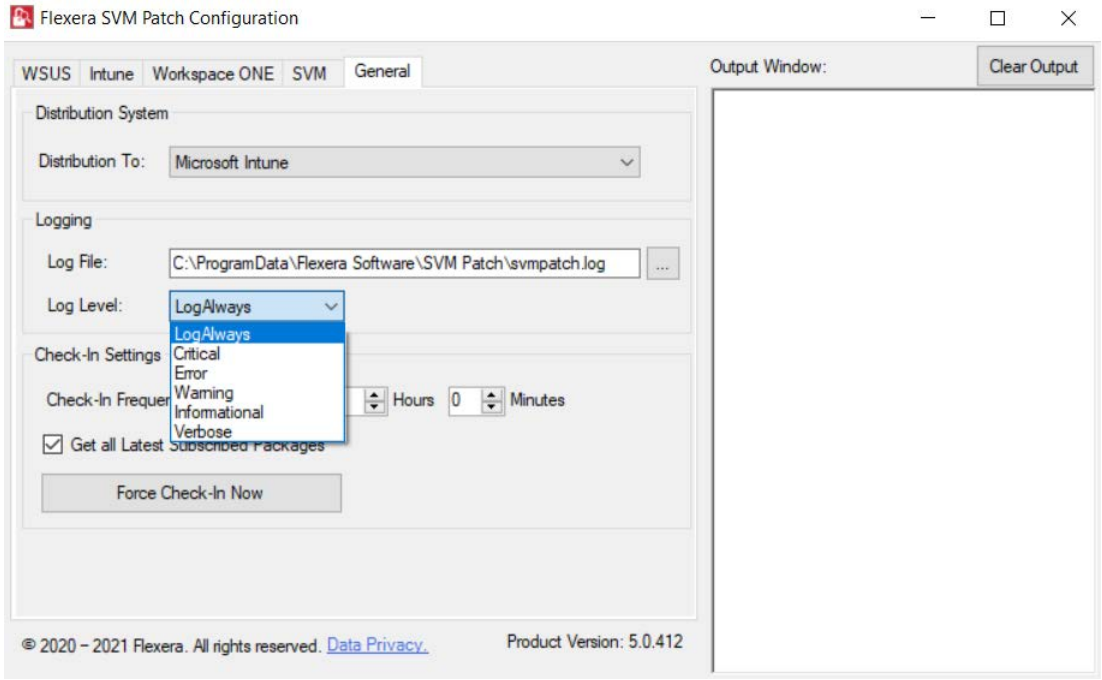
- Windows Server Update Services (WSUS)
- Microsoft Intune
- VMWare Workspace ONE



14. You can edit the folder path to save the action logs of this Tool. By default, the folder path will be **C:\ProgramData\Flexera Software\SVM Patch\svmpatch.log**.

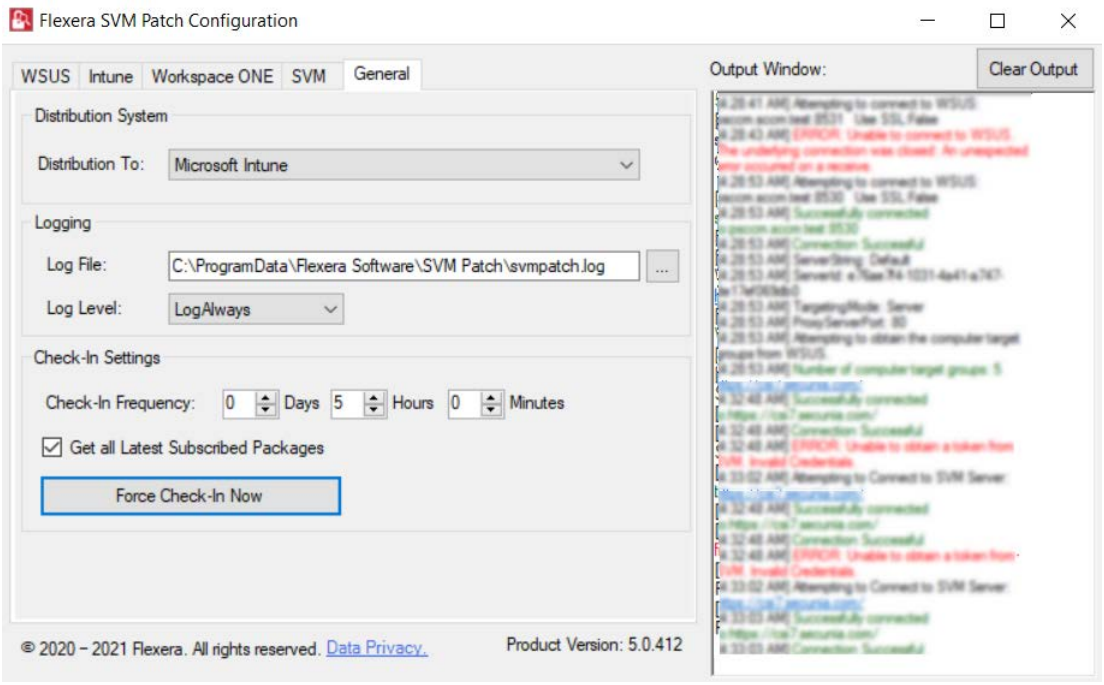
15. You can set any one of the below preferences to save the log files:

    - LogAlways
    - Critical
    - Error
    - Warning
    - Informational
    - Verbose



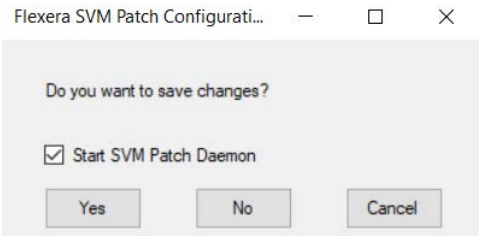
Note • *The Log times will be in UTC format.*

16. In **Check-In Settings**, you can set the frequencies to pull the relevant packages from the server.



Note • ***Force Check-In Now*** *button can be used to pull relevant packages immediately.*

17. Click check box button if you want to get all latest subscribed packages.
18. To run the services, click close button. You will be prompted to enable **Start SVM Patch Daemon** in the closing window. Click **Yes** to restart the Patch Daemon for the change to take effect.



Note • *If any changes added in the Workspace ONE tab or SVM tab, then make sure that Test Connection to be done and then Restart the Patch Daemon for the changes to take effect.*

Flexera WSUS Management Tool

Flexera WSUS Management Tool allows you to manage the packages and configuration settings of WSUS.

On successful installation of Software Vulnerability Manager Patch Configuration Tool, along with the Software Vulnerability Manager Patch Configuration Tool shortcut, one shortcut for **Flexera WSUS Management Tool** will get created in your desktop.

It consists of two tabs:

- Patching Information
- Configuration

Patching Information

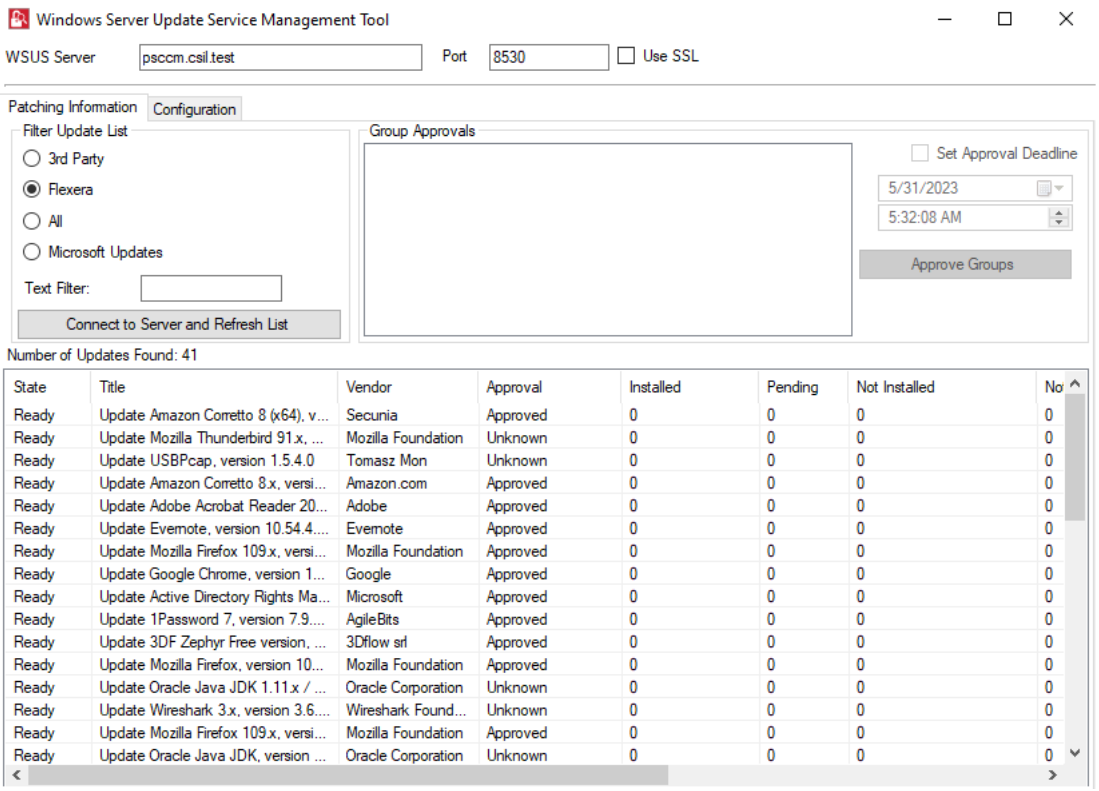
Patching Information tab prompts you to connect to the WSUS server to view the packages, based on the selected filter option, either 3rd party, Microsoft updates, or both. It also allows you to approve, delete, decline the selected patches and select a computer group where you want to deploy these approved patches, at the set deadline.

It consists of three sections:

- Filter Update List
- Group Approvals
- Set Approval Deadline

Task ***To use WSUS Management Tool follow the below steps:***

1. Double click on the shortcut **Flexera WSUS Management Tool** in your desktop, **Windows Server Update Service Management Tool** home page opens.



2. In the **Filter Update List**, you can either select 3rd Party Patches, Flexera, Microsoft Updates, and All. You can enter the patch name or vendor name in the **Text Filter** box to fetch a quick patch list.

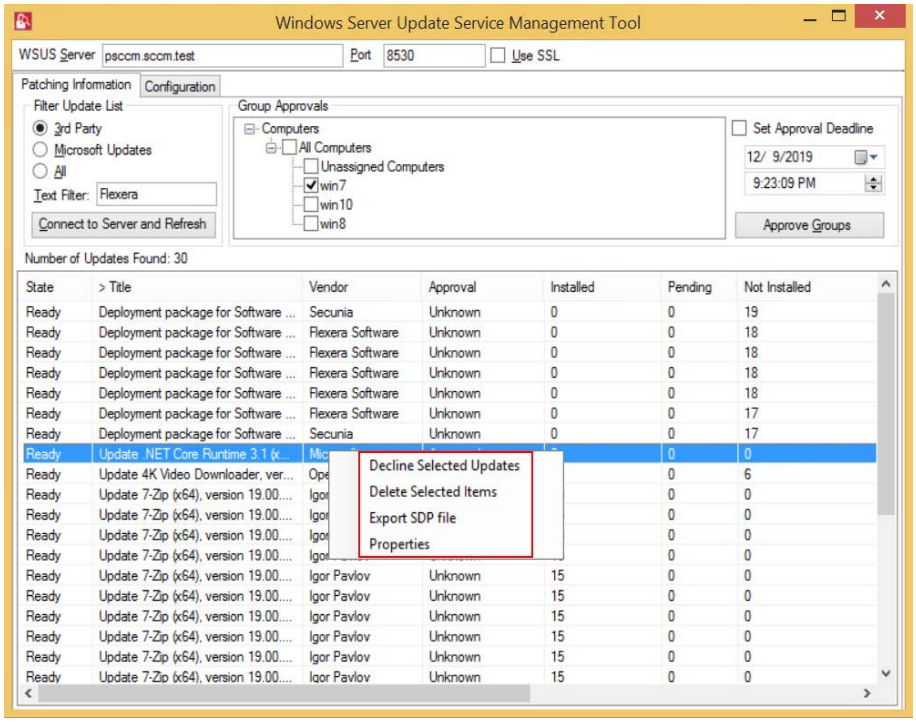
3. Click **Connect to Server and Refresh**, list of patches based on the selected **Filter Update List** appears.

Note • *If you select the **Flexera** filter option and click the **Connect to Server and Refresh List** button, you will see the list of patches published to the WSUS from the SVM Patch Publisher/SVM console.*

4. Right click on a patch, you can perform a below function:

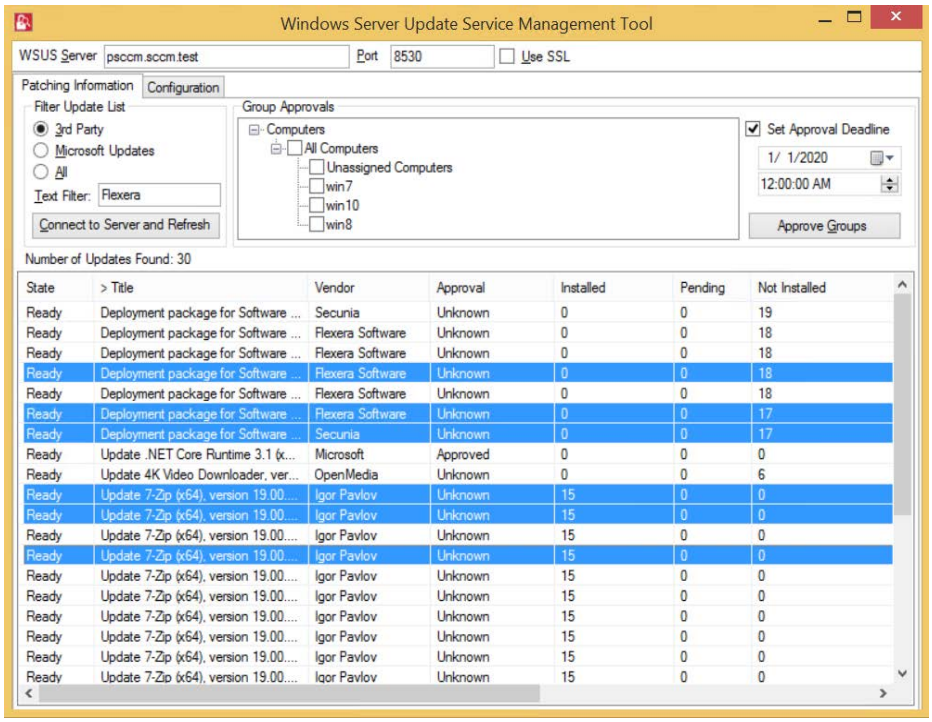
   - Decline Selected Updates
   - Delete Selected Items
   - Export SDP file
   - Properties

5. In **Group Approval** section, you can select a desired computer group from the WSUS server.



6. Select the **Set Approval Deadline**, you can set the date and time to deploy the approved patches.

Tip • *WSUS management tool allows you to Approve, Decline, and Delete multiple patches at the same time.*



7. To approve the selected patches, click **Approve Groups**. You can see the **Approved** status from the **Approval** Column.

Configuration

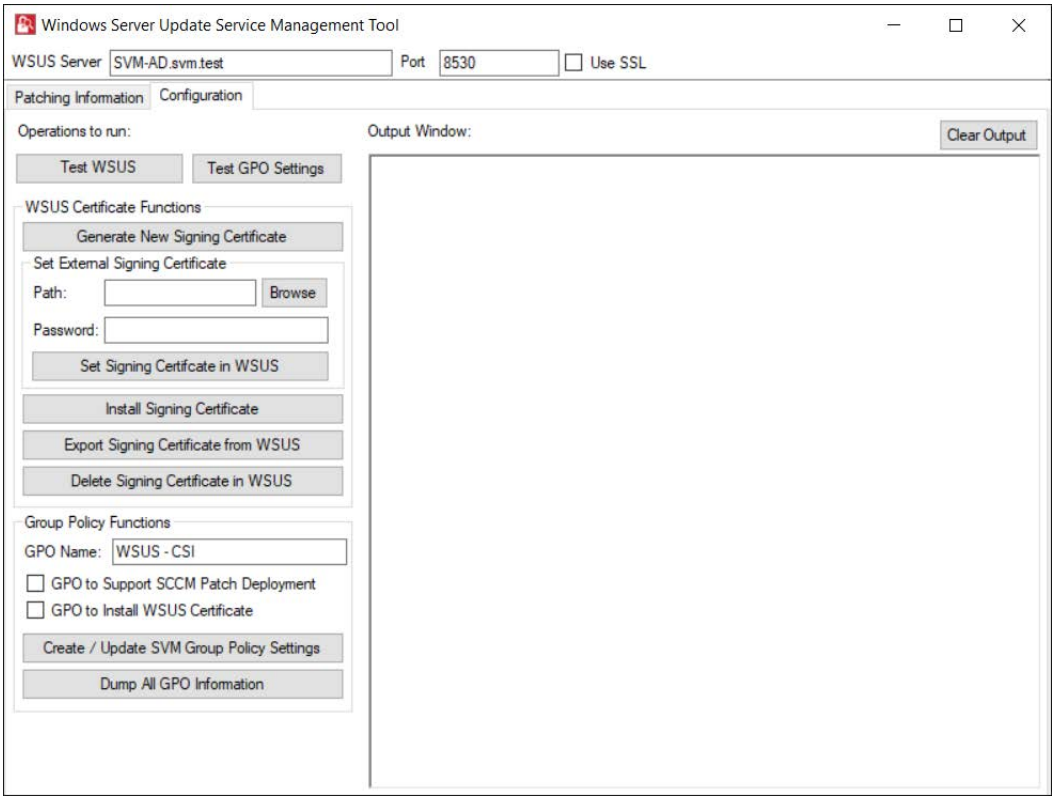
In Configuration tab, you can perform the below WSUS configuration actions:

Table 4-11 • WSUS configuration Actions

Field/Button	Description
Test WSUS	Click **Test WSUS** button, on successful connection you will receive a successful message in the Output Window.
Test GPO Settings	Click **Test GPO Settings** button, you will receive a group policy information in the Output Window.
Generate New Signing Certificate	Click **Generate New Signing Certificate** button to generate a new self sign certificate. Upon generating, click **Install Signing Certificate** button.
Set External Signing Certificate	(Optional) If you have an external certificate, then enter the path or browse and select the path from the preferred location, and then enter the valid certificate password. ***Note*** • *You can select either **Generate New Signing Certificate** or **Set External Signing Certificate** option.*
Set Signing Certificate in WSUS	After entering the **Set External Signing Certificate** details, click **Set Signing Certificate in WSUS** button, and then click **Install Signing Certificate** button. On successful signing you will receive a successful message in the Output Window.
Install Signing Certificate	Click **Install Signing Certificate** button, on successful certificate installation you will receive a successful message in the Output Window. You can see the installed certificate in Trusted Root Certification Authority and Trusted Publishers stores.
Export Signing Certificate from WSUS	Click **Export Signing Certificate from WSUS** button, you can export signing certificate from WSUS server to the local drive.
Delete Signing Certificate in WSUS	Click **Delete Signing Certificate in WSUS** button and confirm the popup to delete the signing certificate.
GPO Name	Enter the valid group policy name.
GPO to Support SCCM Patch Deployment	If you select this check box, use the WSUS Server specified in Software Vulnerability Manager.
GPO to install WSUS Certificate	If you select this check box, you can create your own Group Policy to distribute the WSUS Signing Certificate. For more information, see Creating the WSUS-CSI GPO Manually. If this check box is not selected, then existing Windows Updates GPOs must be edited in accordance with Setting Up Clients to Access WSUS.

Table 4-11 • WSUS configuration Actions

Field/Button	Description
Create / Update SVM Group Policy Settings	If you are creating the Software Vulnerability Manager WSUS Group Policy for the first time, then click **Create / Update SVM Group Policy Settings** button.
Dump All GPO Information	Click **Dump All GPO Information** button, you will receive all dumped GPO information in the Output Window.



To following topics related to Windows Server Update Services (WSUS):

- WSUS/System Center
- Creating the WSUS-CSI GPO Manually
- Integrate SVM with WSUS/SCCM and Deploy a Patch
- Setting Up Clients to Access WSUS

Flexera SVM Client Data Tool

Flexera SVM Client Data Tool will allow you to pull and store your SVM data in a Microsoft SQL database to keep for as long as you wish.

On successful installation of Software Vulnerability Manager Client ToolKit, a new shortcut **SVM Client Data** tool will get created in your desktop.

To pull data, perform the following process:

- Create Database Connection
- Add Account
- Configure Logs Directory
- Sync Data

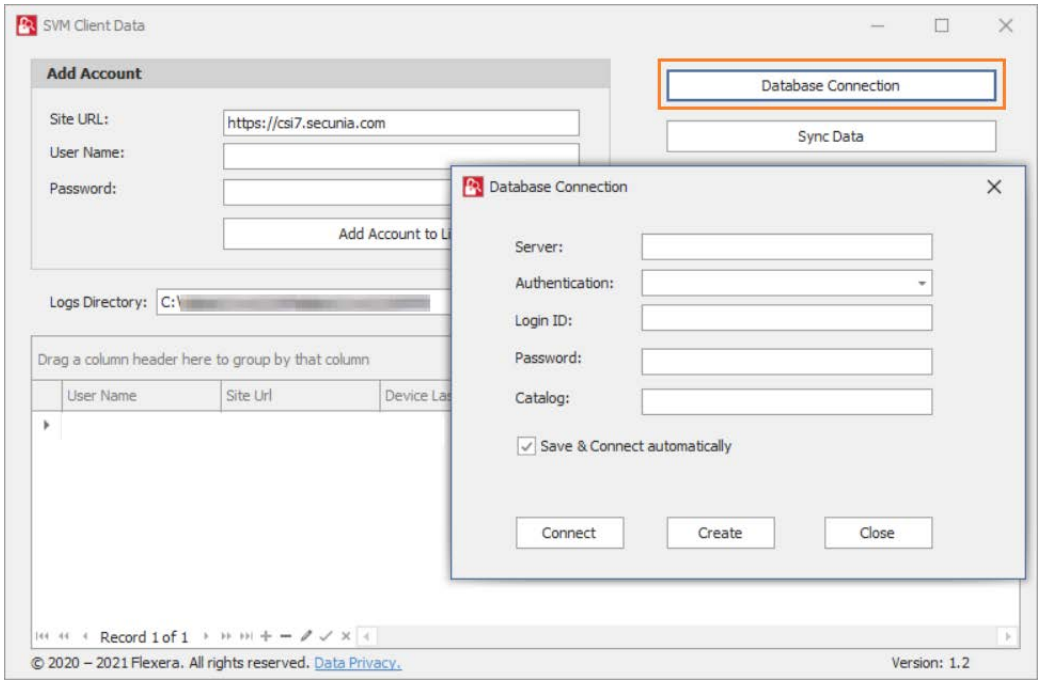
Alongside the SVM Client Data Tool, PowerBI templates have been included. With these Power BI templates, you can generate trend reports for the existing data. For more information on generating reports, see Generating Data Trend Reports.

Create Database Connection

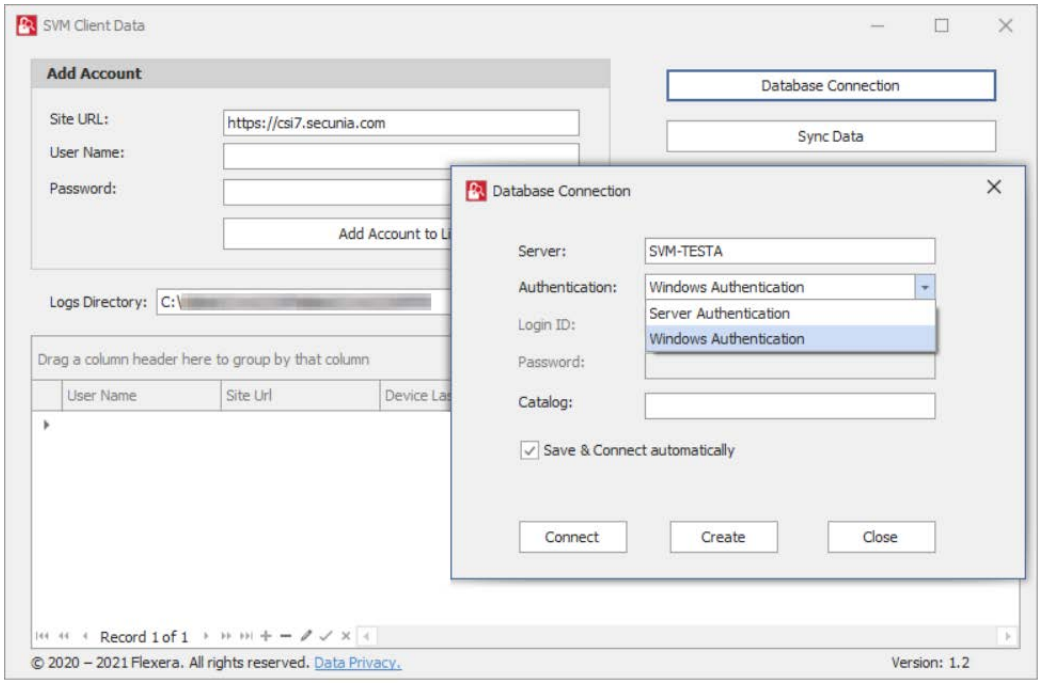
To create a Database connection in Client Data Tool, perform the following steps.

Task ***To create a Database connection:***

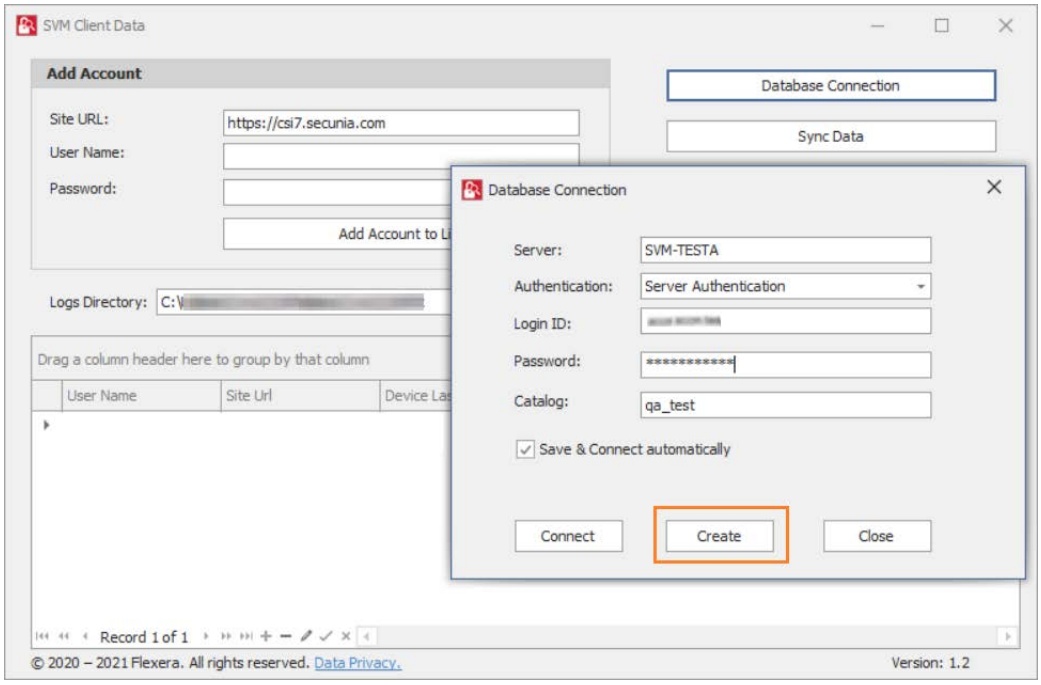
1. Double click on the shortcut created on your desktop, **Flexera SVM Client Data** windows pane appears.
2. Click **Database Connection** button. The Database Connection window appears.



3. In **Server** field, enter SQL Server name.
4. In **Authentication** field, you can select authentication type as either **Server Authentication** or **Windows Authentication**.



5. If you select **Server Authentication**, then enter Login ID and Password.
6. In **Catalog** field, enter the catalog name.
7. After entering the details, click **Create** button.



8. Upon successful action, Database created in the Microsoft SQL Server.
9. Once Database created, you can **Connect** to the Database.

Add Account

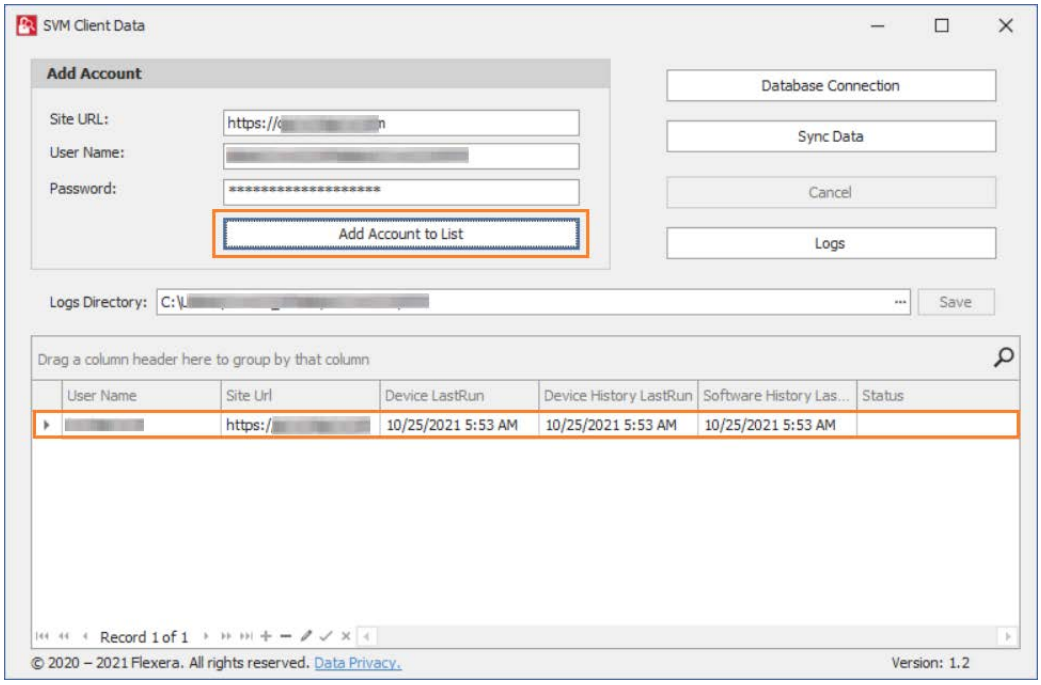
To add account in Client Data Tool, perform the following steps.

Note • *Make sure that the Database is connected. For more information, see Create Database Connection.*

Task ***To add account:***

1. In Add Account, by default **Site URL** will be displayed
2. Enter the User Name and Password, and click **Add Account to List** button.

   Added account will then be listed in the below section.

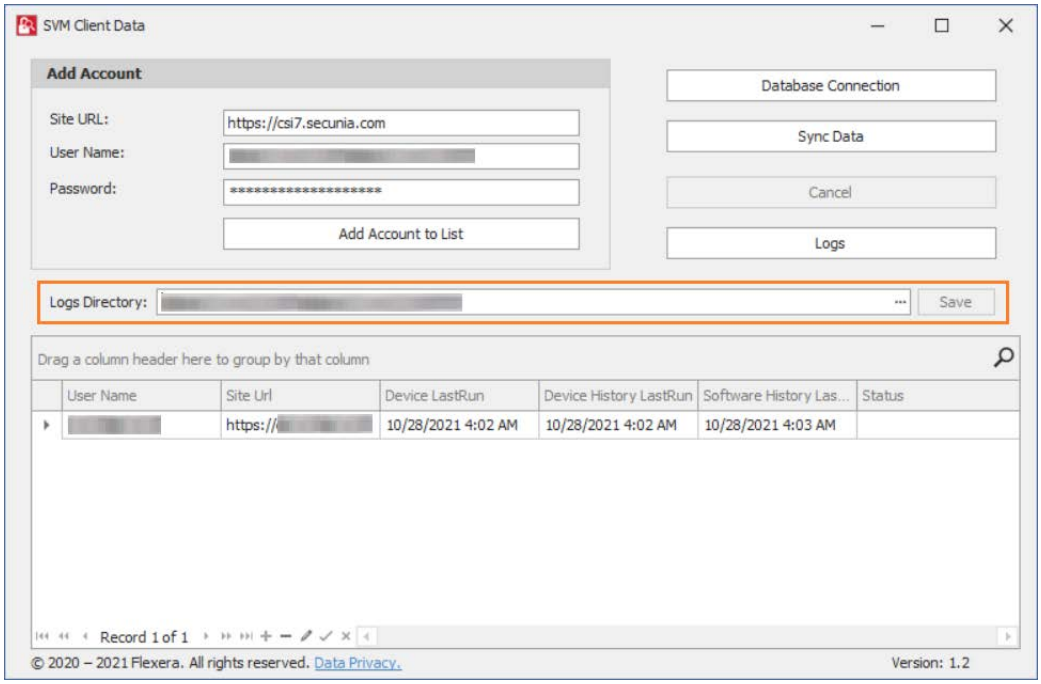


Configure Logs Directory

To configure logs directory, perform the following steps.

Task ***To configure Logs directory:***

1. In **Logs Directory** field, enter desired path in the text box or click ... icon and select the path that you want to save the log files generated.
2. Click **Save** button to take effect.



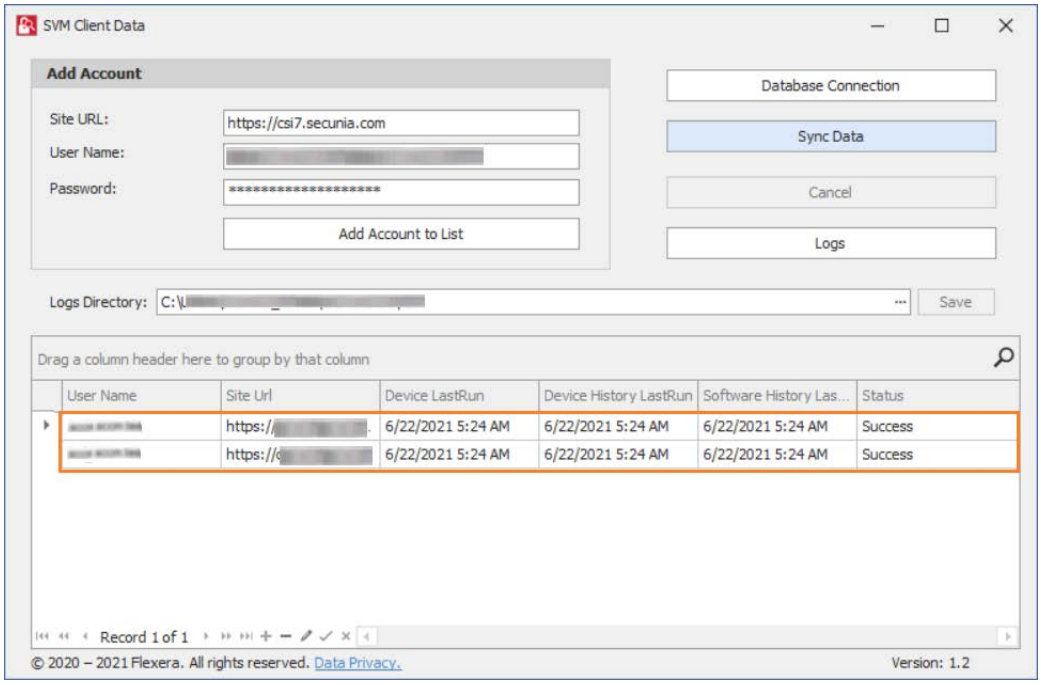
Sync Data

To pull data to Microsoft SQL server, perform the following steps.

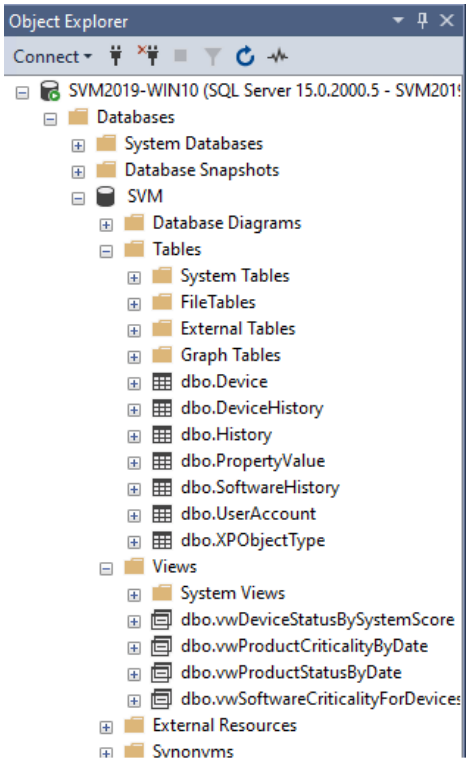
Note • *Make sure that the Database is connected and SVM account is added. For more information, see Create Database Connection and Add Account.*

Task ***To pull data to Microsoft SQL server:***

1. In Client Data Tool, click **Database Connection** and connect to the database server. for more information, see Create Database Connection.
2. If required, you can add multiple SVM accounts. For more details on adding the account, see Add Account.
3. If required, you can configure the log directory where the log files are getting generated. For more details, see Configure Logs Directory.
4. Click the **Sync Data** button. It starts pulling data to the Database.
5. Upon successful action, sync details will display in the below section.



6. Sync data will be available in tables and views.



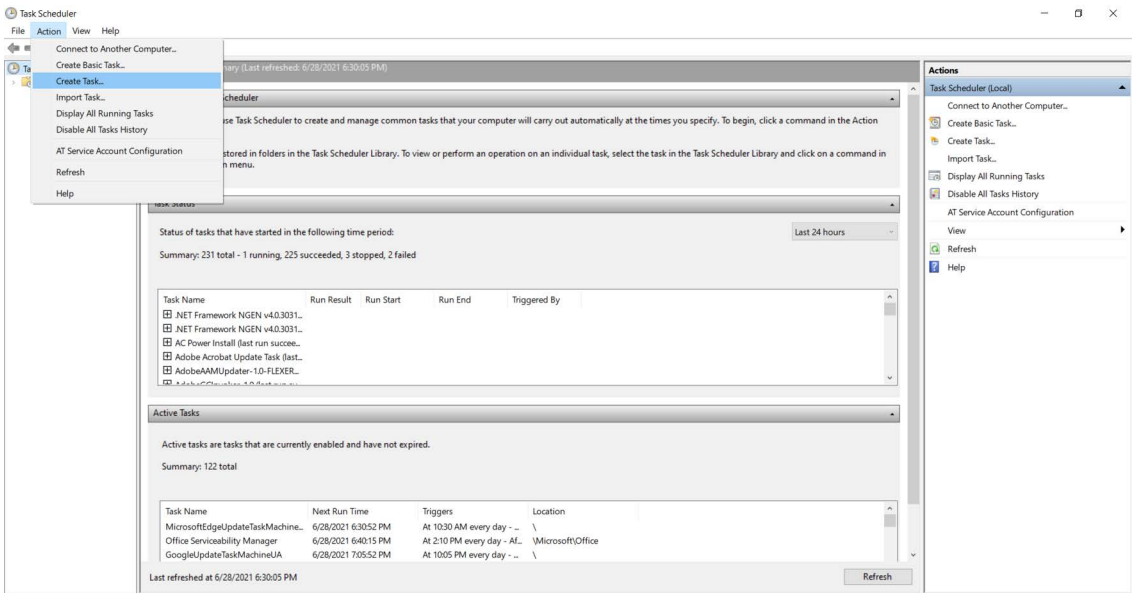
7. You can manually sync data or you can schedule automation for the data sync. To schedule automation, see Schedule Automation for Sync data.

Schedule Automation for Sync data

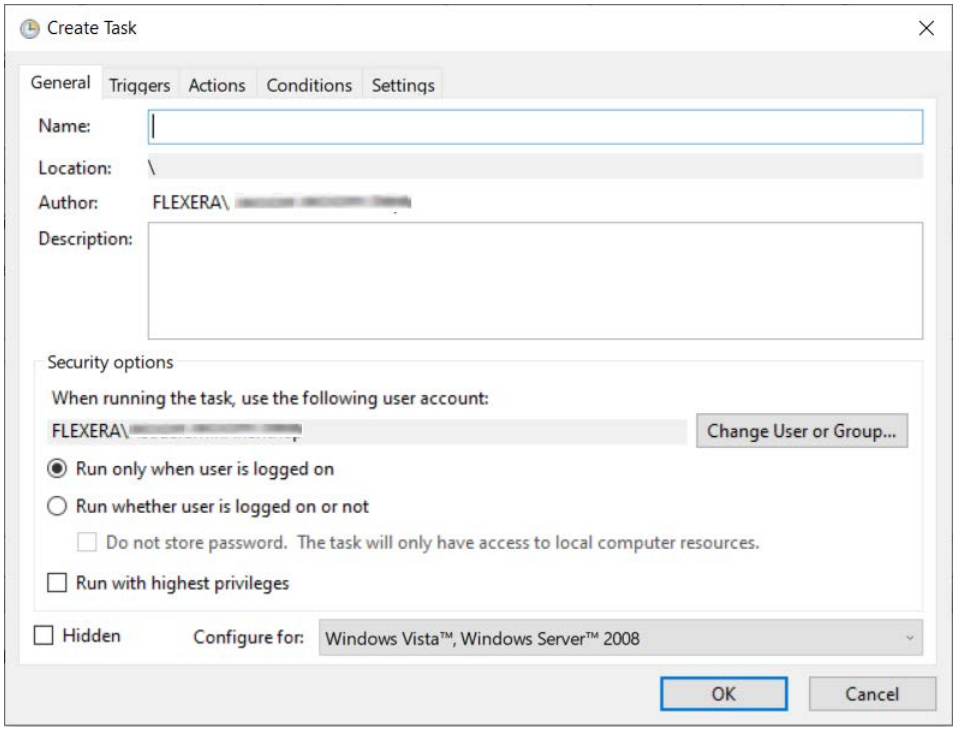
To schedule automation for sync data, perform the following steps.

Task ***To schedule automation for Sync data:***

1. Type Task Scheduler in the Windows **Start** menu and click on **Task Scheduler** to launch task scheduler.
2. On the **Actions** tab menu, select **Create Task** option. The **Crete Task** dialog box appears.

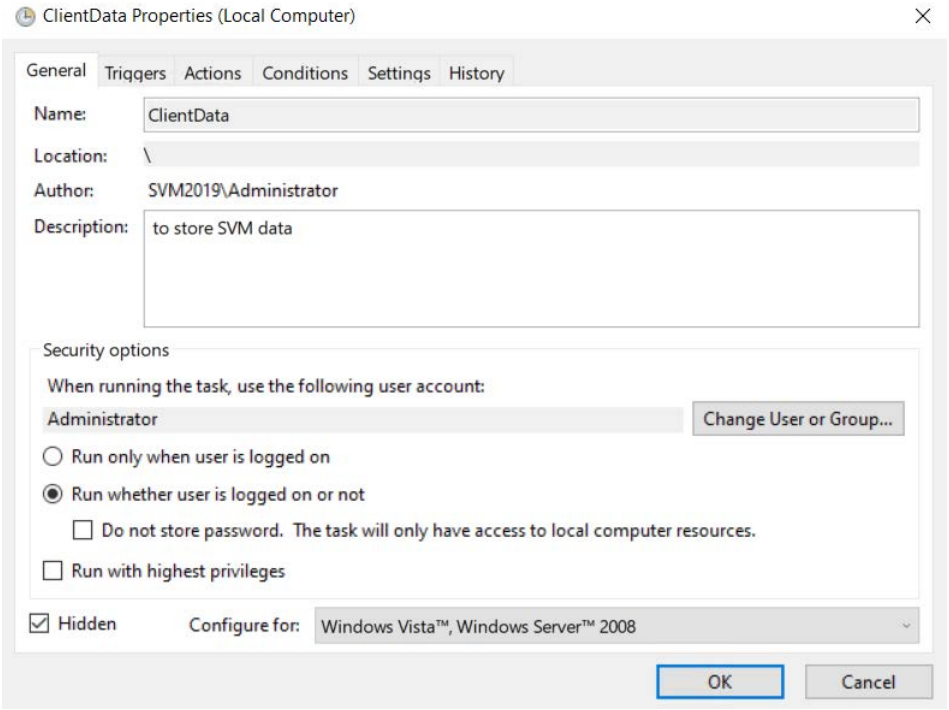


3. It consists of five tabs:
   - General
   - Triggers
   - Actions
   - Conditions
   - Settings



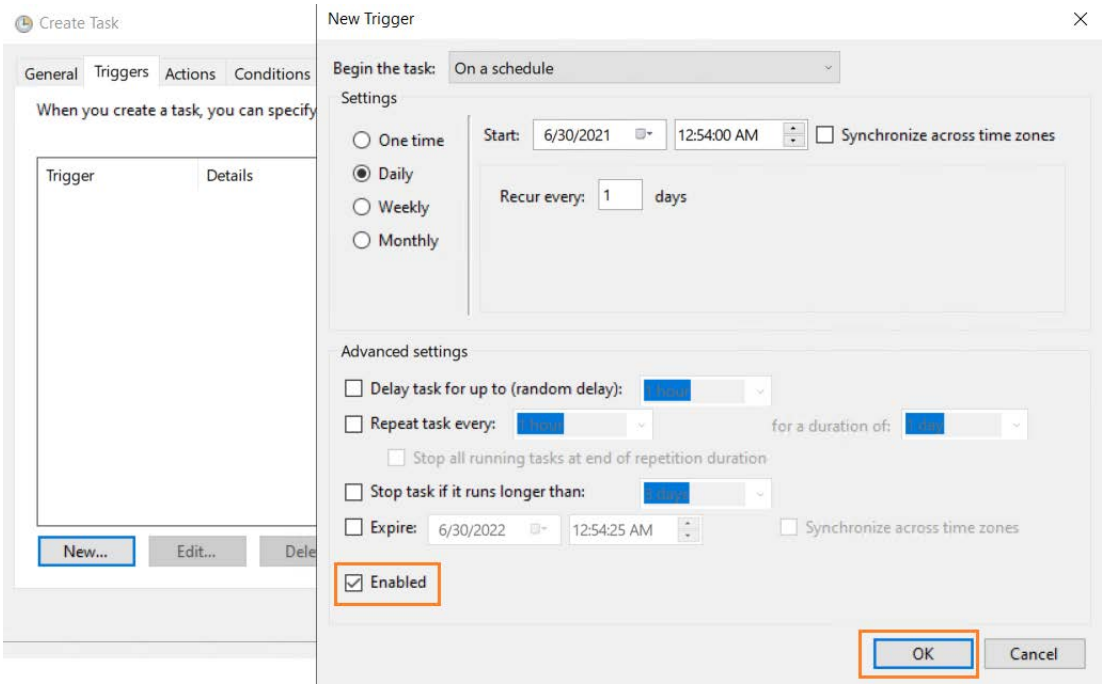
4. In **General** tab.

   - In Name field, enter the task name.
   - In Description field, enter description for the task.
   - In **Security options** section, you can configure which administrator account can run the task.
   - Select the **Run whether user is logged on or not** option.
   - Select the **Run with highest privileges** option, If the task requires the highest privileges.
   - Select the **Hidden** option, If you want to hide the task.
   - The **Configure for** settings are changed only when you are required to use a different compatibility option.
   - Click **Ok** button.



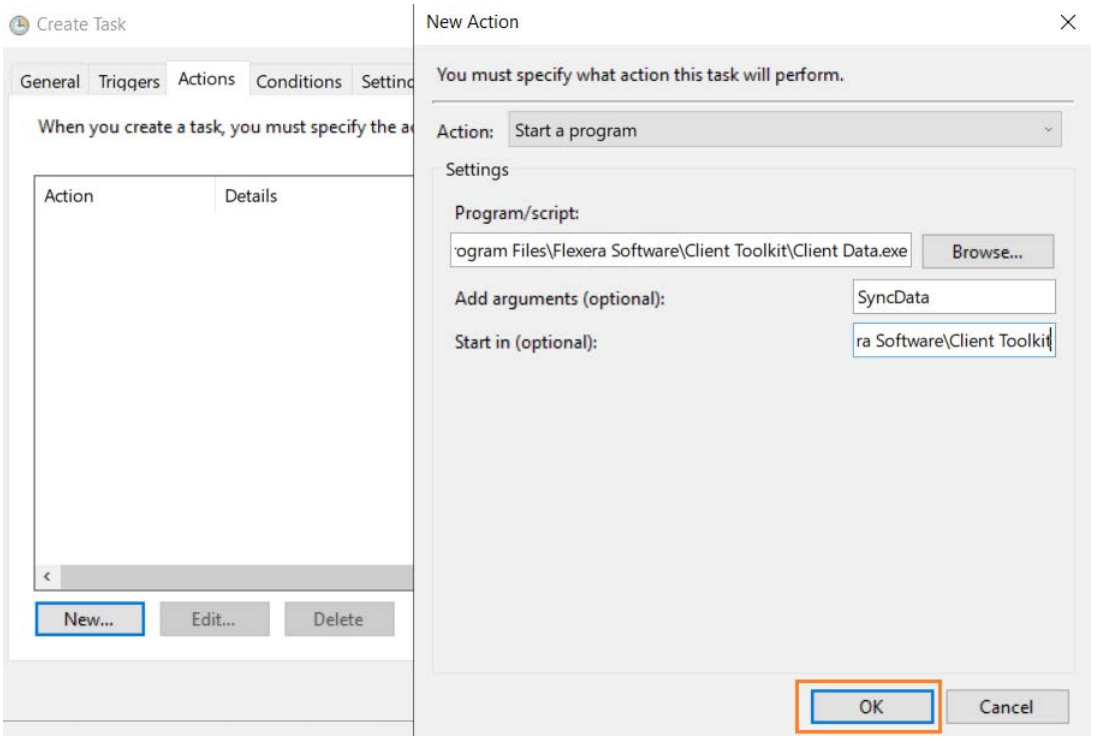
5. In Triggers tab.

   - Click the **New** button. The **New Trigger** dialog box appears.
   - Click the **Begin the task** drop-down and select one of the triggers from the list.
   - Select Daily, Start date and time, and then enable the settings. Click **Ok** to schedule the task.



6. In the **Action** tab.

- Click the **New** button. The New Action dialog box appears.
- Click the **Action** drop-down and select one of the actions from the list.
- Under the **Settings** section, in the **Program/script** field, specify the path for the application (SVMClientData.exe).
- In the **Add arguments (optional)** field, you can specify Sync Data.
- In the **Start in (option)** field, specify the installation folder of the SVMClientData.exe
- After selecting the above fields, click the **Ok** button.



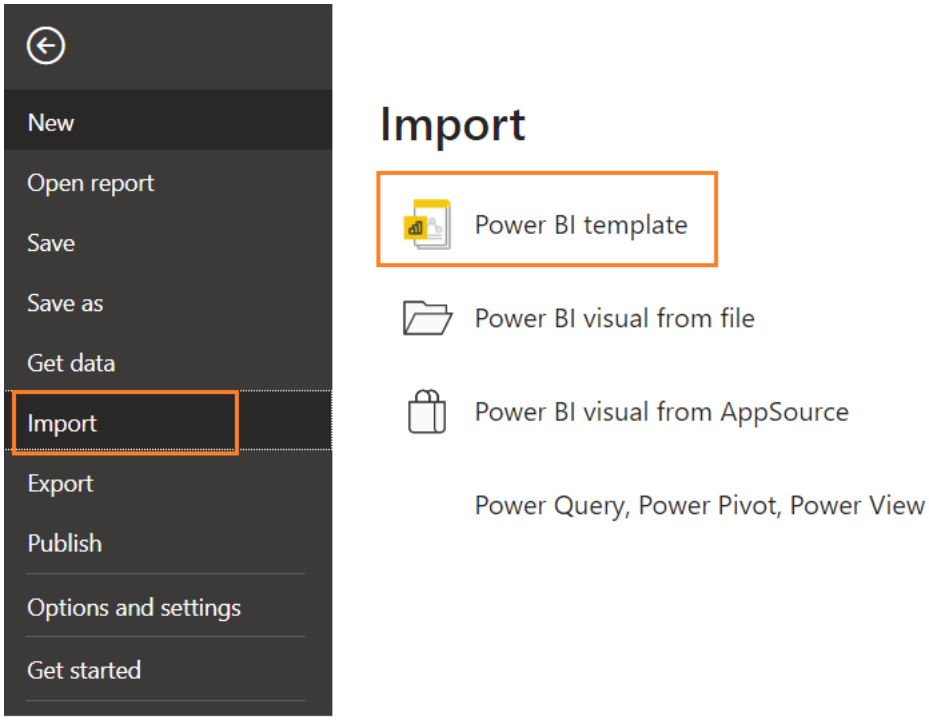
7. After completing the steps, authenticate with your account credentials, and then the task will run automatically on schedule or event using the specified settings.

Generating Data Trend Reports

With the Power BI templates you can generate a trend reports for the existing data. To generate a data trend reports, perform the following steps.

Task ***To generate Data Trend Reports:***

1. Download Power BI Desktop (https://powerbi.microsoft.com/en-us/downloads/).
2. Open the Power BI Desktop.
3. Click on the **File** menu, select **Import**, and select **Power BI Template**.



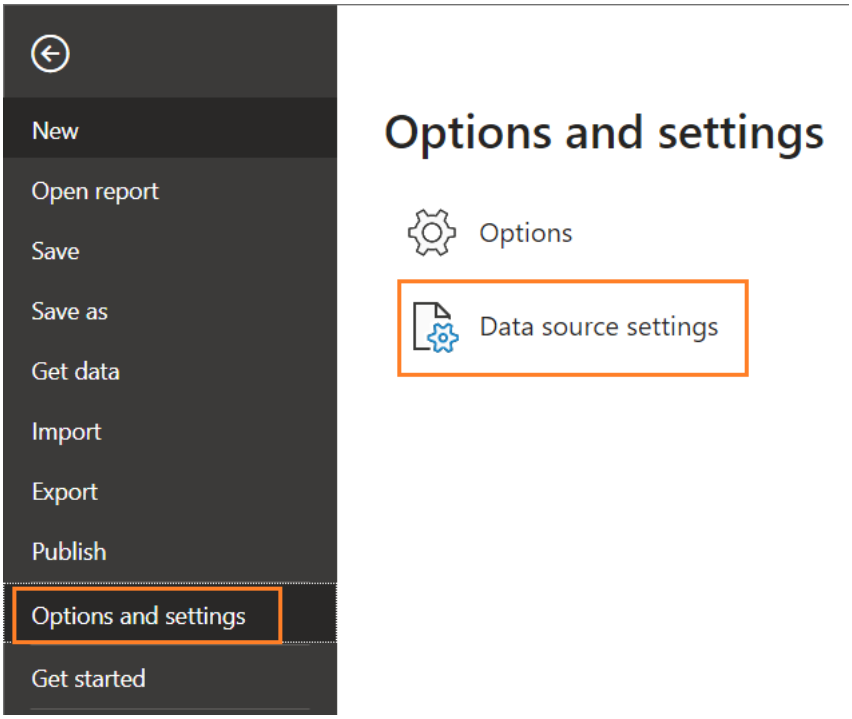
4. Select the desired template from the Client Data Tool\Report Templates\Power BI folder.

Note • *Alongside the SVM Client Data Tool, Power BI templates have been included.*

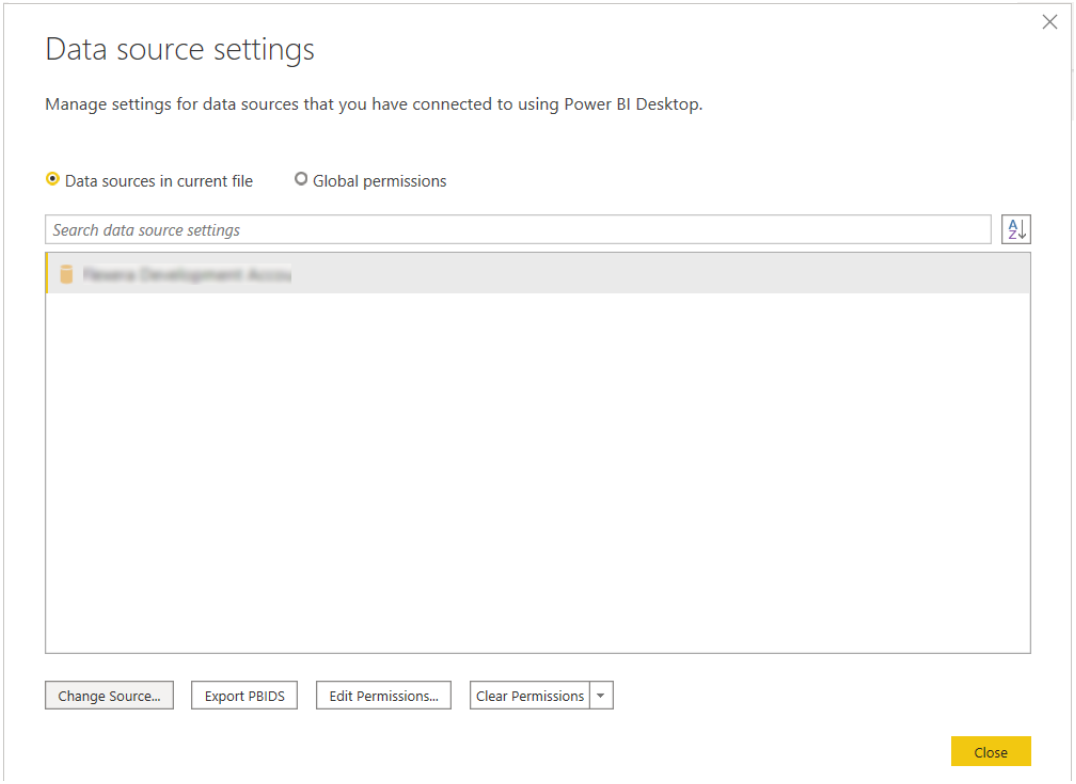
5. Once the template is selected, change the database source as mentioned in the below steps:

   - Click on the **File** menu, select **Options and settings**, and select **Data source settings**.

     The **Data source settings** dialog box appears.



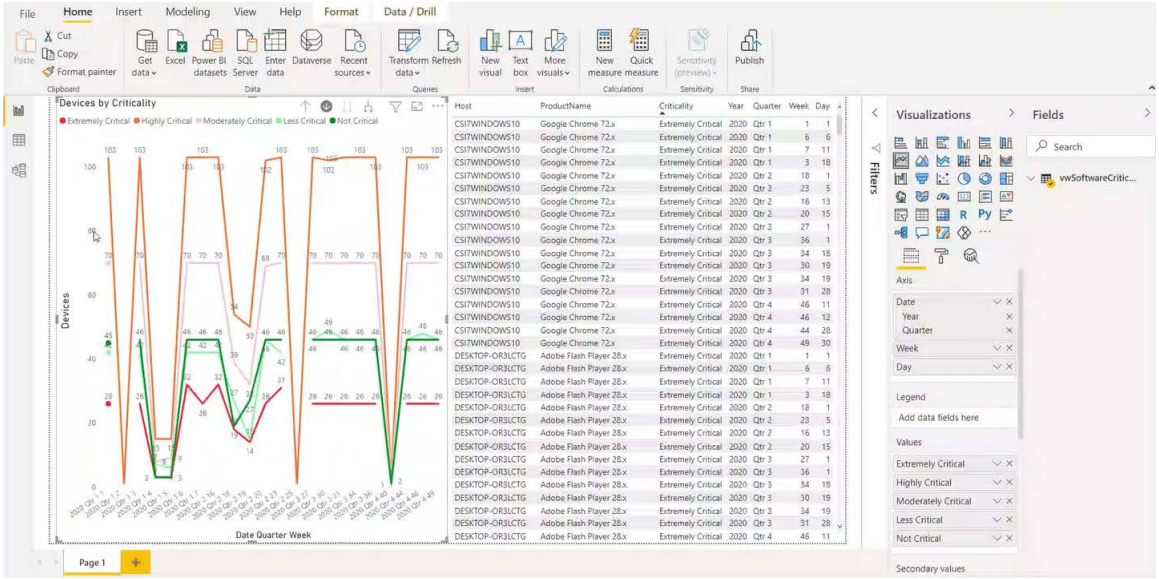
- In the **Data source settings**, select **Data sources in current file** by clicking on the radio button, and click the **Change Sources** button. The SQL Server database dialog box appears.



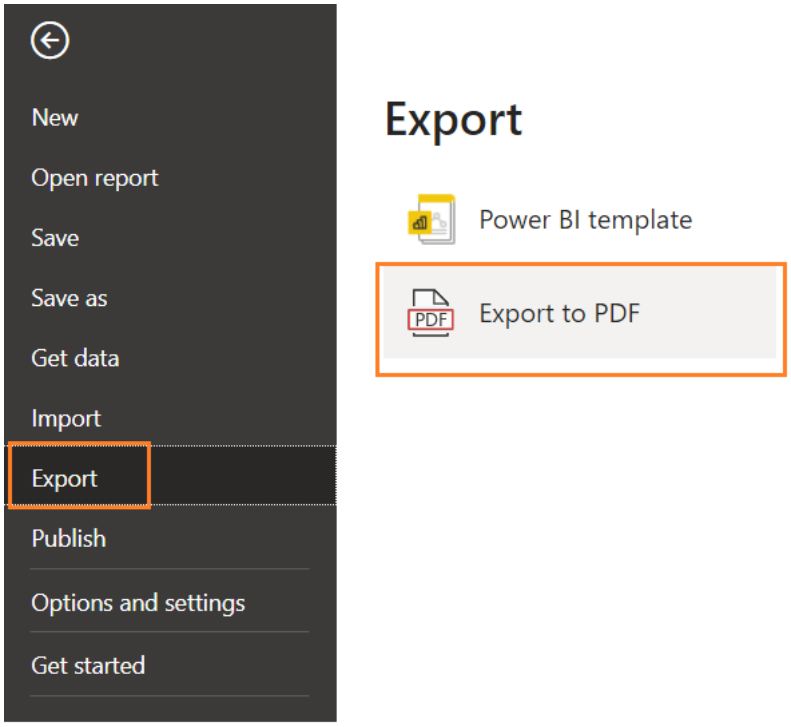
- In the **SQL Server database**, enter the server (port) details and the database details. Click **Ok** button.

- Upon successful action, the database source is updated.

6. You can see the report for the selected Template.



7. You can generate reports:
   - Criticality status by device
   - Criticality status by product
   - Device status by system score and date
   - Secure status by product
8. On the **File** menu, click **Save** to save your changes.
9. On the **File** menu, click **Save As**. The Save As dialog box opens. The **Save As** dialog box lets you specify the name and location where you want to save the template.
10. To export the report, select Export > Export to PDF from the File menu.



Join Flexera's Customer Community

Join Flexera's Customer Community - the place to go for case management, knowledge base articles, and product forums. A community of customers is waiting to meet you! To get started:

- Register (https://rebrand.ly/welcome-to-flexera) for a Welcome to Flexera session. These sessions are hosted by our Customer Success team. You'll get a high level overview of Flexera and its product and support resources.
- Visit our Customer Community (https://community.flexera.com/t5/Software-Vulnerability-Manager/ct-p/Software-Vulnerability-Manager). We extend case management privileges to two individuals per organization. If you need to update your technical contacts in Flexera's Customer Community, the following video explains how to do that: https://www.youtube.com/watch?v=bSD28T432QA&list=PLCuhlHqMRwWqqBAOs0_DKa30XEIim5ORR&index=6
- Anticipate an email from our Community containing your user credentials. Your organization's administrative contact (many times an individual in procurement or finance) has the ability to assign case management privileges.
- Request (https://community.flexerasoftware.com/register.php) access to our product forums! It's a great way to exchange best practices and tips and tricks with other customers like you!

5

The Dashboard

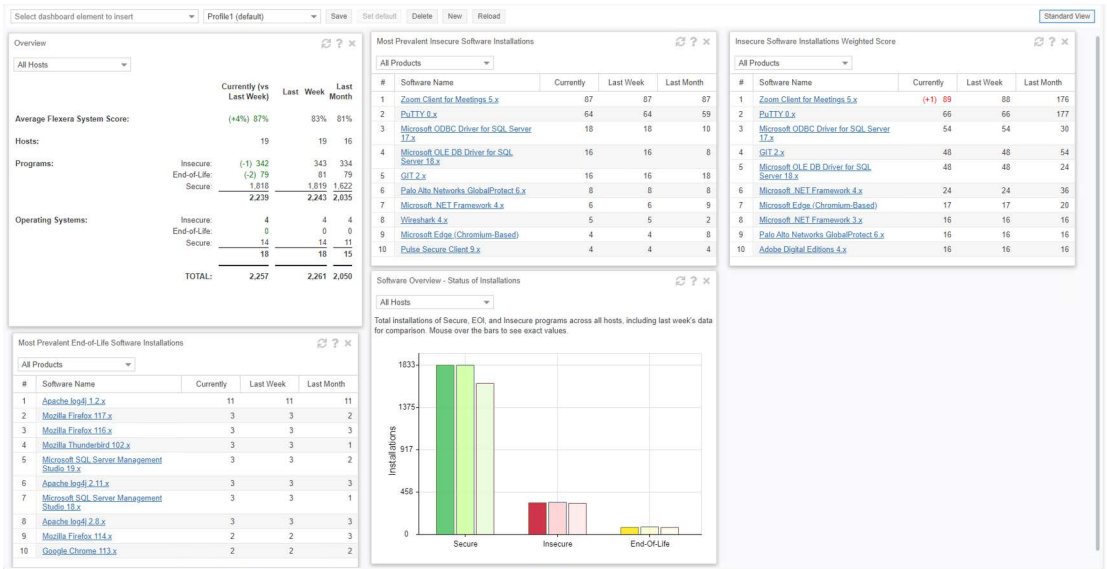
The Dashboard provides an overview of your hosts with the help of various “portlets”. Portlets are a collection of components that graphically display key data and allow you to create profiles which can display a unique combination of portlets.

The first time you login to the Software Vulnerability Manager console the Dashboard page will only display the Overview portlet. Select the Dashboard elements you want to view from the drop-down list on the upper left of the page. You can then either save the profile or, if you have created several profiles, set it as the default profile. You can also delete, add a new profile or reload the current profile view.

Click the **Fullscreen View** button to view the Dashboard page on full screen.

To exit the fullscreen view, click on the **Standard View** button.

You can see the Currently (vs Last Week), Last Week, and Last Month data for the respective widgets.



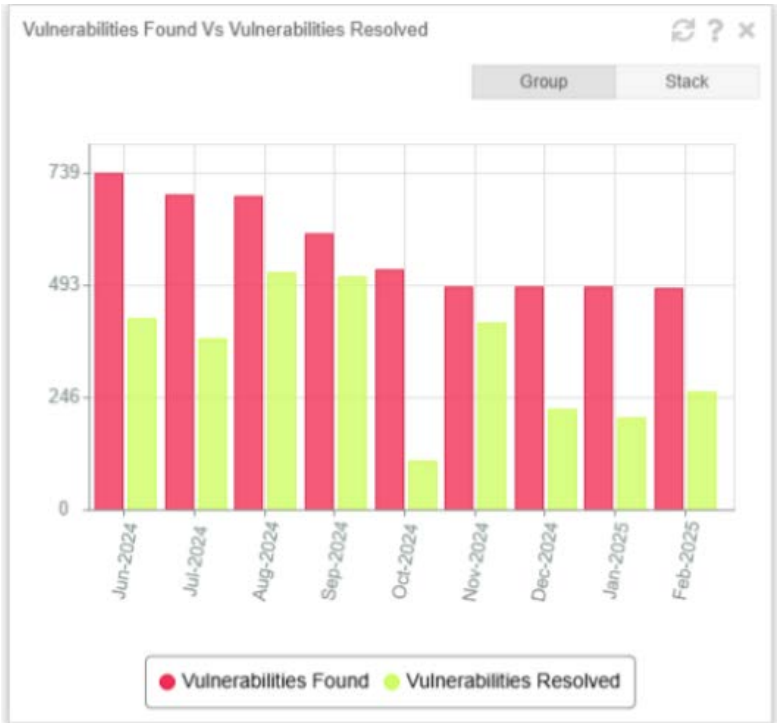
Vulnerabilities Found vs. Vulnerabilities Resolved Widget

Vulnerabilities Found vs. Vulnerabilities Resolved widget use to enhance security visibility and tracking.

Feature Overview:

- Displays monthly trend data for total and distinct vulnerabilities identified across environments.
- Tracks the number of vulnerabilities successfully remediated each month.
- Provides insights into active remediation trends, helping teams effectively monitor security efforts.

This new widget offers a clearer view of vulnerability management progress, enabling proactive risk mitigation across organization.



Tip • *Click in any portlet to refresh the data displayed. You can further filter the data in portlets that allow Smart Group selection.*

Tip • *Click in any portlet for more detailed information on the data displayed.*

Note • *You can only load one unique portlet at a time.*

Tip • *You can toggle between Full screen and Standard views and click Export to download a PNG image of the current Dashboard Profile.*

6

Agent Details

Software Vulnerability Manager Cloud Edition requires an Agent to be installed on your server to scan your environment for vulnerabilities. Installing the Software Vulnerability Manager Agent file `csia.exe` requires administrative privileges. When scanning your environment, the Agent collects data from each device that is scanned.

The following sections provide further details:

- Agent Administrative Privileges
- Agent Data Collection
- Agent Thread Priority
- Agent Caching of Scan Rules

Agent Administrative Privileges

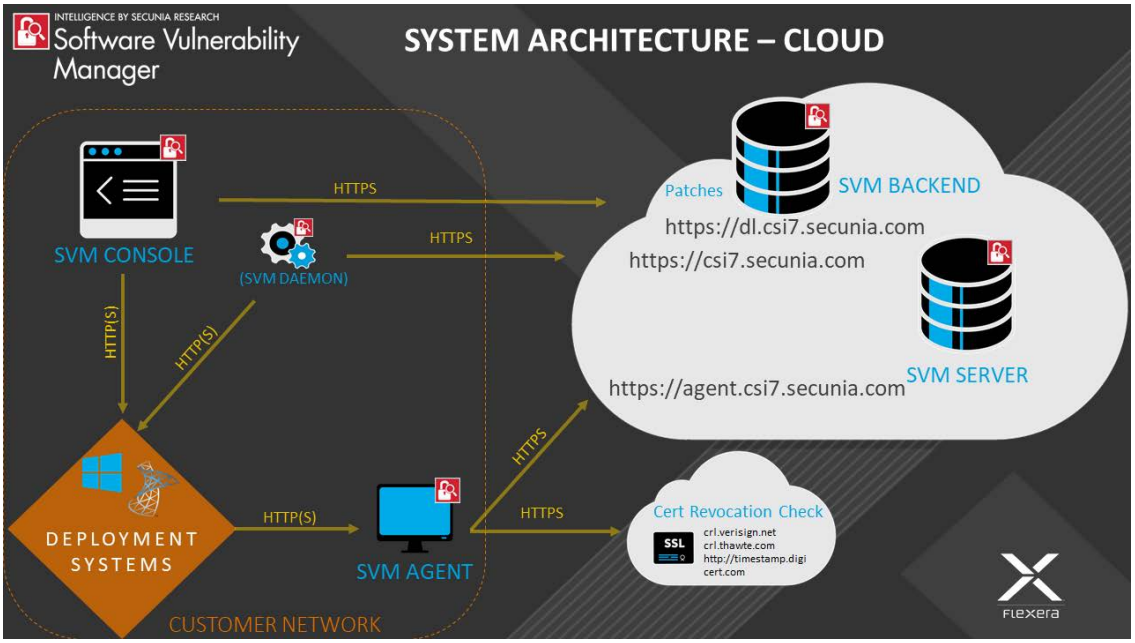
The Software Vulnerability Manager Agent requires administrative or root privileges for the following functionality:

- Install or uninstall the service
- Update configuration data stored in per-machine locations (Examples: MachineGUID (written once); last scan time (updated each scan))
- Scan the entire hard drive for vulnerable software (non-administrative users cannot read other users' local files)

Note • *At this time, it is not feasible to skip parts of this functionality when installing the Agent without administrative or root privileges.*

The Software Vulnerability Manager Agent requires network connectivity (HTTP/HTTPS) to https://csi7.secunia.com.

See the diagram below for an overview of the Software Vulnerability Manager Cloud System Architecture.



Agent Data Collection

After scanning your environment, the Software Vulnerability Manager Agent collects the following data, which is summarized into a single POST to https://csi7.secunia.com. The Agent collects data from Windows, Red Hat Enterprise Linux (RHEL) and macOS operating systems. The data collected varies by operating system as described below.

All operating systems

- Machine name
- MachineGUID (generated by Flexera)
- System type (architecture / operating system)
- IP address
- MAC address
- Time (GMT, local)

Windows

- Distinguished name
- List of security Knowledge Base articles installed or pending, source thereof
- List of vulnerable and unrecognized applications from the File System scan:
  - Sends only:
    - File path
    - File size

        - Metadata from the Portable Executable (PE) header to recognize known software (Examples: timestamp, machine architecture)
        - Metadata from the Version Block to recognize known software (Examples: product name, product version, company name, original file name, internal name, file version, comments, file description, legal copyright, legal trademarks, private build, special build)
    - Files collected are filtered by scan rules or type
- Locations of well-known system folders (Example: `C:\Program Files`)
- List of drives discovered or scanned
- Processing time and other profiling measures

Red Hat Enterprise Linux (RHEL)

- List of installed Red Hat Package Managers (RPMs) from rpm
- List of packages with security updates using the Yellowdog Updater Modified (YUM) tool

macOS

- List of applications from the File System scan of .plist sends only:
    - File path
    - Metadata from the list used to recognize known software (Examples: author; description; CFBundle: display name, identifier, short version string, version, executable, get info string, name, package type; NSHumanReadableCopyright)
- List of operating system updates queried from the system

Agent Thread Priority

Agent sets the lowest thread priority (THREAD_PRIORITY_IDLE) by default and begins background processing mode so that it can perform background work without significantly affecting activity in the foreground. The thread priority can be changed via command line (--scan-thread-priority) or registry (ScanThreadPriority) as explained below:

All Agents-specifics

SVM Agents will begin background processing mode so that it can perform background work without significantly affecting activity in the foreground. By default, SVM Agents for Windows, Linux, macOS will be installed with lowest thread priority:

THREAD_PRIORITY_IDLE

Windows/Linux-specifics

The thread priority can be changed via the command line using the following optional command-line parameter supported by the Agent for Windows/Linux:

--scan-thread-priority

Windows-specifics

On Windows hosts (SVM Agent for Windows), the configuration of thread priority is more flexible.

You can also configure the default thread priority of your Agents through the Windows registry entry ScanThreadPriority by specifying one of the following available values:

- 0: THREAD_PRIORITY_NORMAL
- 1: THREAD_PRIORITY_BELOW_NORMAL
- 2: THREAD_PRIORITY_LOWEST
- 3: THREAD_PRIORITY_IDLE

ScanThreadPriority is setup as a DWORD registry value in the Windows Registry.

The agent reads the setting from HKLM\SOFTWARE\Wow6432Node\Secunia\CSI Agent when running under the Local System account, and from HKCU\SOFTWARE\Secunia\CSI Agent when running under a different domain service user account.

See SetThreadPriority Windows API for more details about the parameters of thread priority.

The Software Vulnerability Agent doesn't use the background processing mode when THREAD_PRIORITY_NORMAL is specified.

macOS-specifics

The scan thread priority for macOS-based SVM Agents cannot be changed due to known performance problems when different than the lowest thread is being used by the SVM Agent on macOS hosts.

Agent Caching of Scan Rules

New scan agents available with this release, will now cache scan rules. Agent servers will determine if the agent needs a new set of rules and will only push these rules if needed. This will result in decrease in the amount of network traffic generated by the scan agents which will be especially beneficial in very large environments. To take benefit of this enhancement, the current version of the scan agent in your environment should be upgraded to the new version of the agent - 7.6.0.15 or later.

7

Scanning

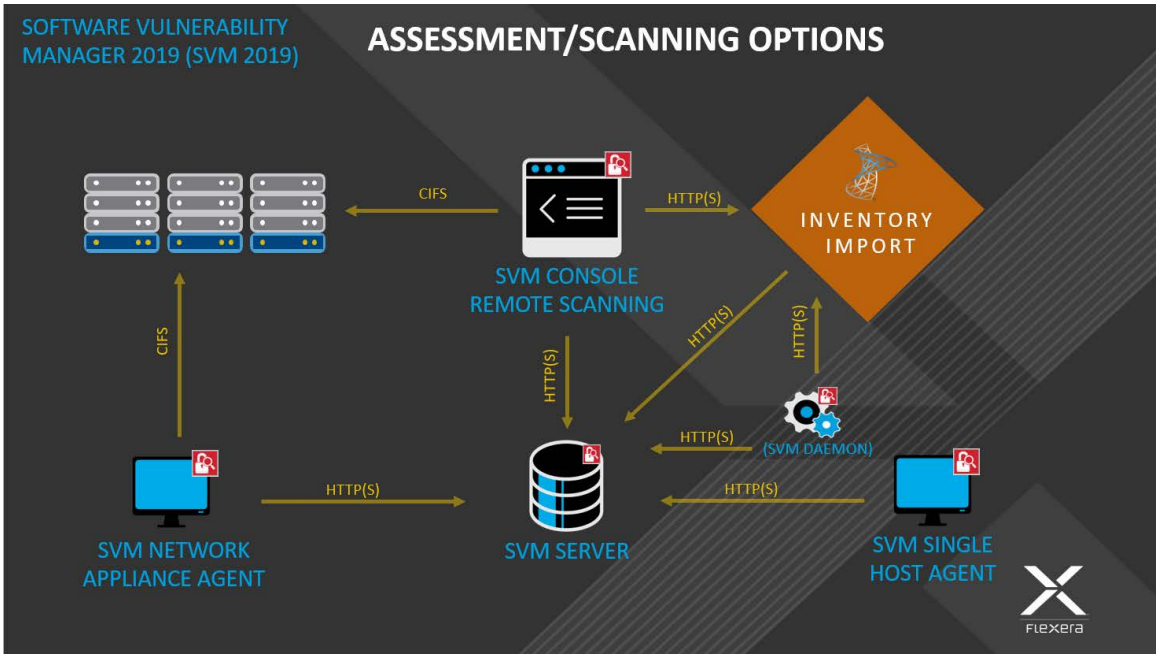
Software Vulnerability Manager allows scanning of target hosts using the following approaches:

- Single Host Agent-based scans are conducted by the Software Vulnerability Manager Agent that can be installed in different modes: Single Host mode, Network Appliance mode, or Command Line mode.
- Alternatively, you can scan the target hosts by launching a scan from the system where the Software Vulnerability Manager console is running. By using this approach, no software is installed in the target hosts. The scanning is performed using standard operating system services. This scan is also referred to as a “remote scan”.

The various types of scan are listed and shown below:

- Agent-based Scan – Requirements for Windows
- Agent-based Scan – Requirements for macOS
- Agent-based Scan – Requirements for Red Hat Enterprise Linux (RHEL)
- Remote/Agent-less Scan – Requirements (Windows)
- Remote Scanning Via Software Vulnerability Manager (Agent-less Scan)
- System Center Inventory Import
- Remote Scanning Via Agents
- Scanning Via Local Agents
- Run Scan from System Center Configuration Manager (SCCM)
- Scanning macOS
- Scanning Red Hat Enterprise Linux (RHEL)
- Filter Scan Results
- Completed Scans
- Inventory Assessment

Below is a visual overview of the Software Vulnerability Manager scanning options:



Note • *If the WSUS Self-Signed Certificate will be used to sign the update packages created by Software Vulnerability Manager, you can use a different certificate as an alternative.*

Important • *Administrators must ensure that Software Vulnerability Manager, and its scanning Agent respectively, have access to all necessary system and online resources which allow the application to run as intended. The following addresses should be allowed in the Firewall/Proxy configuration to ensure that the client system is allowed access to these online resources:* crl.verisign.net, crl.thawte.com, *http://*.ws.symantec.com, and https://*.secunia.com/*

Agent-based Scan – Requirements for Windows

The flexibility offered by Software Vulnerability Manager ensures that it can be easily adapted to your environment.

If you choose to scan using the installable Agent (Agent-based scans), as described in Single Host Agents, the following requirements should be present in the target hosts:

- Administrative privileges (to install the Software Vulnerability Manager Agent – `csia.exe`)
- Microsoft Windows Server 2012 R2 or Later (2016, 2019)
- Microsoft Windows Operating System: Windows 10, Windows 11
- Internet Connection – SSL 443/TCP to https://*.secunia.com/
- Windows Update Agent 2.0 or later

Agent-based Scan – Requirements for macOS

The following requirements should be met before installing the Single Host Agent on an Intel/arm based macOS machine:

- Supported Systems:
  - 10.8 Mountain Lion
  - 10.9 Mavericks
  - 10.10 Yosemite
  - 10.11 El Capitan
  - 10.12 Sierra
  - 10.13 High Sierra
  - 10.14 Mojave
  - 10.15 Catalina
  - 11 Big Sur
  - 12 macOS Monterey
  - 13 macOS Ventura
  - 14 macOS Sonama
  - 15 macOS Sequoia
- Administrator privileges at minimum (‘root’ privileges required for the installation)
- Internet Connection – SSL 443/TCP to https://*.secunia.com/
- The user installing the Agent must have 'execute' permissions on the file (chmod +x)

Note • *To install and scan Mac Agent in Mac OS Big Sur and above with ARM Architecture, you need to install* ***Rosetta*** *software.* `softwareupdate --install-rosetta`

Agent-based Scan – Requirements for Red Hat Enterprise Linux (RHEL)

Note • *The csia agent for RHEL is architecture independent (that is, it works for 32- and 64-bit).*

To install the Single Host Agent on a Red Hat Enterprise Linux (RHEL) machine, the user:

- Must be a member of the sudoer group.
- Must have write access to the `/etc/csia` folder to save configuration data.
- Must have a RHEL machine that supports the following operating systems:

- RHEL 7: requires: bash, sed, gawk, procps, coreutils, glibc(x86-32), libcurl(x86-32), libstdc++(x86-32), libuuid(x86-32), yum
- RHEL 8: requires: bash, sed, gawk, procps, coreutils, glibc(x86-32), libcurl(x86-32), libstdc++(x86-32), libuuid(x86-32), yum
- RHEL 9: requires: bash, sed, gawk, procps, coreutils, glibc(x86-32), libcurl(x86-32), libstdc++(x86-32), libuuid(x86-32), yum

For further RHEL agent installation information, see Installing the Software Vulnerability Manager Agent for Red Hat Linux.

***Note** • It may be possible to install the scan Agent on RHEL operating systems and configurations other than those described above. However, these have not been tested and are not supported by Flexera.*

Remote/Agent-less Scan – Requirements (Windows)

If you prefer to scan without installing the Software Vulnerability Manager Agent (Agent-less scans), the following requirements should be present in the target hosts:

- Ports 139/TCP and 445/TCP open inbound (on hosts)
- File sharing enabled on hosts
- Easy/simple file sharing disabled
- Windows Update Agent 2.0 or later

Required Windows services started on hosts:

- Workstation service
- Server service
- Remote Registry service (by default is disabled on Win7/Vista)
- COM+ services (COM+ System Application: Set to Automatic)

In order for a remote/Agent-less scan to succeed, the user executing the scan – whether that's the user running the Software Vulnerability Manager console or the user for the service running the network appliance – must have local administrative privileges on the scanned hosts.

When performing Remote/Agent-less scans, the result may be displayed as Partial in the Completed Scans page. This is caused by the Windows Firewall default settings that block the RPC dynamic ports.

On the host, in Windows Firewall, the user should create an inbound rule to allow inbound traffic for all products that use RPC dynamic ports.

Task ***To create the rule:***

1. From Windows Control Panel (View by Category) > System and Security > Windows Firewall, select Advanced settings
2. Select Inbound Rules in the Windows Firewall with Advanced Security on Local Computer pane and then select New Rule in the Actions pane
3. The New Inbound Rule wizard opens
4. Select Custom rule and click Next
5. Select All programs and click Next
6. In the Protocol and Ports window:
7. From the Protocol type: drop-down list, select TCP
8. From the Local port: drop-down list, select RPC Dynamic Ports
9. Click Next until the Profile window appears
10. Clear Private and Public, select Domain and click Next
11. Give the rule a name, for example: Software Vulnerability Manager
12. Click Finish

Once you have created the rule, use the Software Vulnerability Manager console to perform a remote scan of the PC. The host will connect to Windows Update and the scan status should be displayed as Success in the Completed Scans page.

Remote Scanning Via Software Vulnerability Manager (Agent-less Scan)

These scans are performed in an Agent-less manner and the credentials used by Software Vulnerability Manager to authenticate on the target hosts will be the same as those of the user that launched the Software Vulnerability Manager console.

This section describes the features for this Agent-Less Scan:

- Quick Scan
- Scan Groups
- Scan Progress

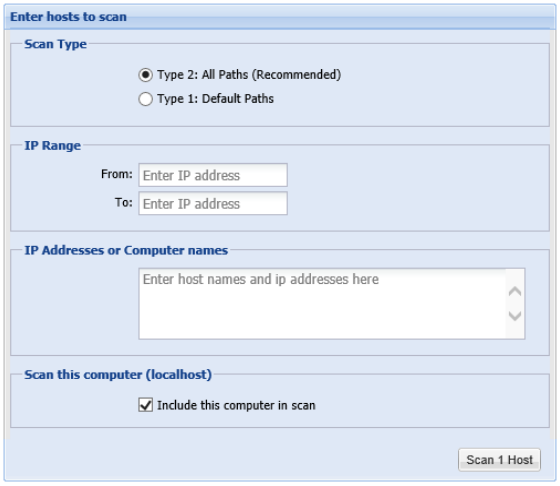
Important • *Please consider the system requirements for the Scan Groups/Agent-less scans, described in Remote/Agent-less Scan – Requirements (Windows).*

Note • *This is available using MS Edge in IE mode with Active X plugin installed. For more information, see Download and Install the Software Vulnerability Manager Plug-in.*

Quick Scan

Use this page to conduct quick, on-demand, scans from your Software Vulnerability Manager console against remote hosts on your network or your local PC. Enter the scan type and IP address range for the hosts you wish to scan in the Enter hosts to scan screen and click Scan Hosts.

For local host scanning, click **Include this computer in scan**.

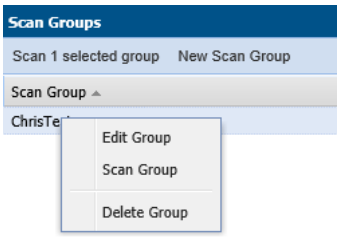


To make sure that you are able to remote scan the target host, please ensure that all the system requirements for the remote scan are in place.

The progress can be seen under Scan Progress.

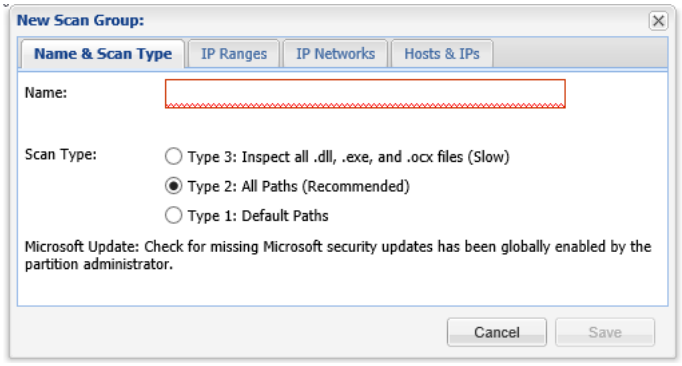
Scan Groups

This page displays a list of Scan Groups you have created. To start a scan, right-click the group name and select Scan Group.



If you are scanning remote hosts, your current login credentials, or the ones you supplied via “Run as...” will be used to authenticate against the remote hosts when conducting the scan.

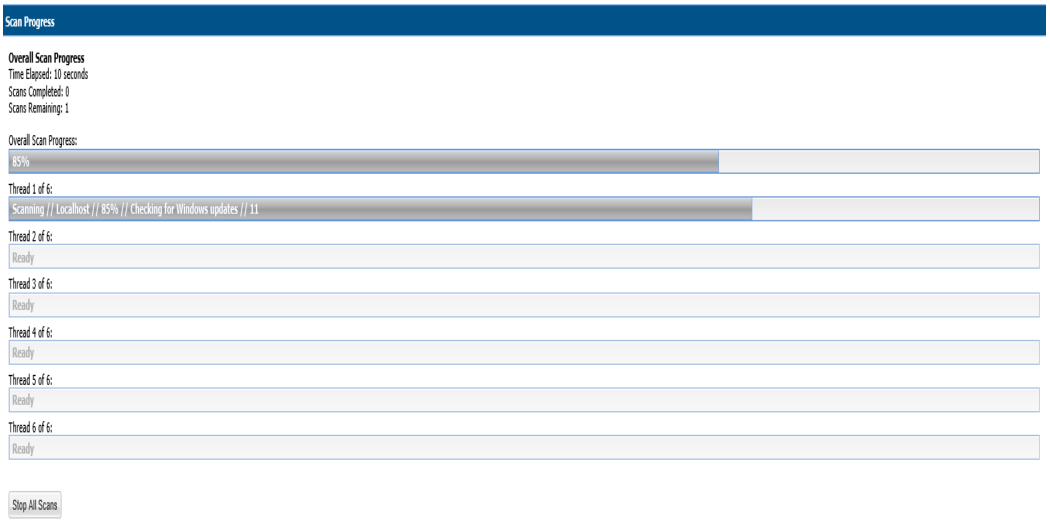
Click New Scan Group to create and configure a group of hosts to be scanned.



After navigating through the different tabs: Name & Scan Type, IP Ranges, IP Networks and Hosts & IPs, click Save to create the scan group.

Scan Progress

Use this page to track the scans being conducted. You can also configure the number of simultaneous scan threads (the default value is set to 5) as described in Settings.



System Center Inventory Import

Scan results are obtained from the data collected by the System Center software inventory agent, which avoids the need to install the Software Vulnerability Manager Agent on each client.

To set up an import schedule, see System Center Import Schedules (Requires the Software Vulnerability Manager Daemon).

System Center integration requires the following prerequisites:

- Setting up authentication. The user running the Software Vulnerability Manager console must have access to the database containing the data of the System Center. For System Center Configuration Manager, the database is named CM_<site_code> and for System Center Configuration Manager it is named SMS_<site_code>. To add permissions,

open SQL Server Management Studio, right-click the appropriate database, navigate to permissions and add Connect and Select.

- Setting up the software inventory agent. Assuming that the System Center site has been set up, open the System Center console and ensure that the System Center client (agent) is installed on the hosts to be scanned. In System Center Configuration Manager, go to Devices and right-click Install client. Then go to Administration > Client Settings > Properties > Software Inventory. To configure the broadest possible pattern, select File Detail: full and add the patterns *.dll, *.exe, *.ocx. Do not exclude the Windows directory. Less data will be generated by specifying a narrower pattern, however, the quality of the scan result will suffer.
- In addition, you might want to consider increasing the software inventory file size from the default of 5 MB to 12 MB. To accomplish this, change the following registry key on the System Center Server: HKLM\Software\Microsoft\SMS\Components\SMS_SOFTWARE_INVENTORY_PROCESSOR\Max File Size

Click Configure System Center. In the Software Vulnerability Manager System Center Configuration page, enter the System Center Server Name. Select the Use System Center Collection Name as Site name for imported hosts check box to use the Collection name as a host's Site name during Collection import and click Save.

If you select Manual, enter the SQL Host, SQL Port and SQL Database connection data and click Save.

In the System Center Inventory Import page, click Import Selected Collections or Import All Collections.

Important • *The scan result is based on the data collected by the software inventory agent, which may not be of the same quality as that of the Software Vulnerability Manager Agent (csia). This means that there could be discrepancies between a scan performed by the System Center integration and the csia. It may also result in some products not being detected correctly. For higher quality scan results Flexera recommends using the csia.*

System Center Import Schedules (Requires the Software Vulnerability Manager Daemon)

Click New System Center Import Schedule and enter:

The Schedule Name.

The Next Run date and time.

The Frequency (Hourly, Daily, Weekly or Monthly) that the import will be performed or select the One-Time Import check box.

Click Add Collections and enter the Collections to include in the Import Schedule.

Right-click an Import Schedule in the grid to edit or delete the schedule.

Remote Scanning Via Agents

You can use Network Appliance Agents for scanning one or more networks at scheduled intervals without having to install the Software Vulnerability Manager Agent in every single target host.

With the csia.exe installed in Network Appliance mode, you will have the ability to schedule remote scans.

The hosts to be scanned can be identified by an IP-range, IP-network or Host-name.

The Software Vulnerability Manager console allows you to easily manage the scans being performed by the Network Appliance Agent.

Important • *Please consider the system requirements for the Scan Groups/Agent-based scans, described in Agent-based Scan – Requirements for Windows and Agent-based Scan – Requirements for macOS.*

Software Vulnerability Manager Agent Command Line Options

You can use the following command line options for the Software Vulnerability Manager Agent.

- Help
- Version
- Install
- Uninstall
- Modify Settings
- Controlling the Service
- Scanning from the Command Line
- Randomizing the Agent Scan Schedule
- Agent Configuration Options

Help

Run the Software Vulnerability Manager Agent to get instructions and a list of command line options (ignores all other command line options, prints instructions and exits immediately). Also prints version as with
-V. Exclusive:

```
csia.exe -h
```

Version

Print the version number of the Software Vulnerability Manager Agent on the command line (exclusive):

```
csia.exe -V
```

Install

Install the Software Vulnerability Manager Agent from the command line, with configuration options. Installs as current user, prompts for password, settings saved to HKCU:

```
csia.exe -i <config options>
```

Install the Software Vulnerability Manager Agent from the command line to run as LocalSystem, with configuration options. Saves settings to HKLM:

```
csia.exe -i -L <config options>
```

Install the Software Vulnerability Manager Agent from the command line to run as <user>, with configuration options. Prompts for password and saves settings to HKEY_<user>:

```
csia.exe -i -R <user> <config options>
```

Install the Software Vulnerability Manager Agent from the command line to run as <user>, with <password> with configuration options. Saves settings to HKEY_<user>:

```
csia.exe -i -R <user>:<password> <config options>
```

Install the Software Vulnerability Manager Agent from the command line but not write anything to the registry (also works with -R and -L):

```
csia.exe -i -N
```

Uninstall

Uninstall the Software Vulnerability Manager Agent service, remove all settings and delete the key from the registry where the service reads them from:

```
csia.exe -r
```

Note • *The -L and -R options are irrelevant when uninstalling.*

If the service is installed but cannot be removed, then the registry settings aren't removed.

If the service is not installed, does nothing.

If the registry settings cannot be removed, a warning is given and the service is removed regardless.

To uninstall the Software Vulnerability Manager Agent service, while leaving the registry settings intact:

```
csia.exe –r –N
```

To remove the service, if installed, and delete the \Software\Secunia\Software Vulnerability Manager Agent registry key from everywhere in the registry (exclusive):

```
csia.exe --delete-all-settings
```

Modify Settings

Save command line setting to the registry, so the service will use it. The settings are saved to the location based on where installed the Software Vulnerability Manager Agent reads the settings from. If no agent is installed, or the settings cannot be saved to the correct location, nothing is saved, an error is printed and the command aborts:

```
csia.exe -S <config option>
```

Controlling the Service

Starts the service if it is not running (exclusive):

```
csia.exe --start
csia.exe --restart
```

Stops the service if it is running (exclusive):

```
csia.exe --stop
```

Scanning from the Command Line

Run Software Vulnerability Manager Agent with immediate command line scan, with options. Ignores registry settings and server settings:

```
csia.exe -c <config options>
```

Run Software Vulnerability Manager Agent locally in service mode as current user, reading options from command line, registry and server, with command line options taking precedence, then server options, then registry options. To stop the service once it is running, press CTRL+C:

```
csia.exe -fg <config options>
```

If possible, run the Software Vulnerability Manager Agent locally in service mode as a different user with -L and -R. This will read options in exactly the same way as a service, with the exception of <config options> on the command line override which, unlike a service, has no command line:

```
csia.exe -fg -L <config options>
csia.exe -fg -R <user> <config options>
```

Order of precedence:

- Settings given on command line take precedence but, when running as a service, there is no command line.
- Settings from server take precedence over settings read from registry.

Randomizing the Agent Scan Schedule

Set up a random scan schedule to stagger the scanning of multiple machines within a system. This command line applies to all platforms.

```
csia.exe -c -si <scan interval upper limit>
```

“si” represents scan interval, and the scan interval’s upper limit can be set up by the number of minutes.

For example, `csia.exe -c -si` 120 would mean that the scanning agent will start scanning after a delay of random minutes, which could be from 1 to 120 minutes.

Agent Configuration Options

The following table lists the Agent configuration options.

Table 7-1 • Agent Configuration Options

Configuration Option	Description
Program Options:	
-A/--network-appliance	Run in Network Appliance mode.
-c/--cli	Run software inspection from the command line using command-line settings and server-supplied settings. Exit codes returned: 0 - SUCCESS 1 - SERVER BUSY 2 - OPERATION FAILED 3 - SERVICE FAILED
-d <path> --debug <path>	Write diagnostic information to the specified file.
--getfileinfo <path>	Directory for output file
-h/--help	Display this message and exit.
-n/--checkin-interval <interval>	Set the check-in interval for the service. This setting is in the format INTEGER followed by M/H/D representing minutes, hours, or days. Example: 10M for a 10-minute interval or 2H for a two-hour interval
-o/--outdir <path>	Directory for output file
-oc/--output-csv <file>	Output inspection results to a CSV file.
-ox/--output-xml <file>	Output inspection results to an XML file.
-si/--scantime_interval <minutes>	Set a random range to delay running software inspection. 0 means no random range, or 1-60 minutes.
--skip-wait/--skipwait	Skip the initial 10 minute wait before the first check in.
-v --verbose	Display or log additional diagnostic information.
-V/--version	Display program version information and exit. Use this option when you want to check the version of the agent.
Customer Area Option:	

Table 7-1 • Agent Configuration Options (cont.)

Configuration Option	Description
-g/--group <group>	Create host as a member of <group> in your Software Vulnerability Manager Account (defaults to domain or langroup if unspecified).
Mac Agent Option:	
--delete-all-settings	Deletes all information, including Globally Unique Identifiers (GUID), from the system to ensure it is clean to accommodate a new installation.
Network Settings:	
-D --direct-connection	Bypass proxy, use direct connection.
--forcehttps	Force HTTPS, regardless of port. When this option is not specified, we default HTTPS on port 443 and HTTP on other ports. This option is for debugging purposes.
--ignore-ca	Ignore unknown certificate authority.
--ignore-cn	Ignore invalid Common Name in cert.
--ignore-crl	Ignore Certificate Revocation list.
--pac-url <url>	Proxy Autoconfig URL
--request-timeout <minutes>	Sets a timeout on network connections. Set for 1-10 minutes or use 0 for no timeout. Use this option to increase the timeout period of HTTP requests to prevent the timeout error when the server does not respond in 2 minutes.
-U <user:pass> --proxy-user <user:pass>	Set proxy credentials (saved in encrypted form).
--use-network-winhttp	Enable WinHttp network stack (default). Use WinHTTP when you want the agent to control the behaviors of the HTTP Internet protocol. We default WinHTTP to force using TLS 1.2. Also, the command line options for proxy such as -x, -U, and -D are designed to work in conjunction with WinHTTP. This option is for debugging purposes.
--use-network-wininet	Enable WinInet network stack. Use WinINet when you want to control the behaviors of HTTP Internet protocol using the Internet Options. Since WinINet does not have services support, the agent running as a service ignores this option. This option is for debugging purposes.

Table 7-1 • Agent Configuration Options (cont.)

Configuration Option	Description
-x <proxy:port> --proxy <proxy:port>	Set proxy.
Proxy Options:	
-D/--direct-connection	Force direct connection, overriding default internet proxy settings.
--pac-url <URL>	Specify the URL of the Proxy Auto Configuration file (.pac/.dat).
-U/--proxy-user <user[:pass]>	Specify Proxy authentication.
-x/--proxy <host[:port]>	Use HTTP proxy on given port.
Scan Options:	
--check-wmi	Use WMI to get Windows updates. Use this option to query Windows updates on SCCM using WMI in addition to a query using Windows Update Agent. This option could be used to see if the SCCM client on the device/host can be used for reporting missing KBs.
-t/--type	Software Inspection Type: 1, 2 (default), or 3. 1: Inspect applications in default locations only. 2: Inspect applications in non-default locations. 3: Inspect all .dll, .exe, and .ocx files. For details, see Scan Types.
-w/--no-os-update/--no-win-update	Do not connect to Windows Update.
--wua-proxy <0,1 or host[:port]>	Configure proxy settings for Windows Update. 0: Use the default setting. 1: Use the proxy configured with -x/--proxy. <host[:port]> Manually set the proxy host and port.
Scan settings that server can override:	
-g <group> --group <group>	Group name for association

Table 7-1 • Agent Configuration Options (cont.)

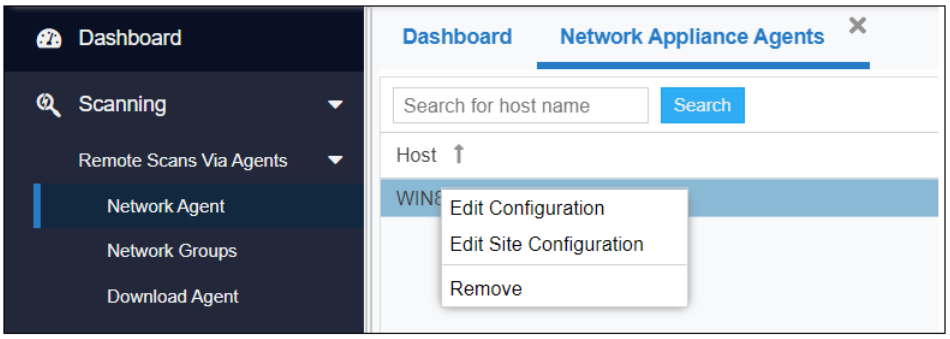
Configuration Option	Description
-n <minutes>M --checkin-interval <minutes>M -n <hours>H --checkin-interval <hours>H	Set Check-in interval.
-w --no-win-update --no-os-update	Disable windows update check.
Security Options:	
--ignore-ca	Ignore Unknown SSL Certificate Authority (CA).
--ignore-crl	Ignore SSL Certificate Revocation Check.
--ignore-cn	Ignore Invalid SSL Certificate Common Name (CN).
Server Options:	
--userid <userid>	Set the Software Vulnerability Manager access user ID.
--token <token>	Set the Software Vulnerability Manager access token.
--host <hostname>	Set the Server hostname.
--port <port>	Set the Server port.
Service Options:	
--delete-all-settings	Delete all settings related to this program from the registry. Deletes these settings from all registry keys.
--dry-run/--dryrun	Run up to the point of scanning without writing any changes and then exit (useful to log the configuration). Use this option to examine if the agent is able to run and communicate with the server. It will exit before scanning and won't make any changes to the system. You can use this option along with -c.
-i/--install	Install service.
-L/--localsystem	Run the service as the LocalSystem user.
--manual	When installing, set service to only be started manually, rather than automatically
-N/--no-registry-write	When installing, do not write any settings to registry. When removing, do not delete settings from registry.

Table 7-1 • Agent Configuration Options (cont.)

Configuration Option	Description
-p/--copy <dest>	Before installing, copy executable file to <dest> and install the service to run from <dest>.
-r/--remove	Remove service.
-R/--runas <user[:pass]>	Specify the user the service should run as. For a domain user type "user@domain" or "domain\user"
-S/--only-save-settings	Only save settings from the command line to registry, as the relevant user. Does not run, install or remove. Use this option when you want to modify the agent registry settings after the agent is installed. You need to restart the agent service to make the changes effective. This option could be used to edit the server options like userid/token/host/port stored in the registry. This setting is the opposite of “-N” options. If -N is used, no registry setting will be edited.
Service Recovery Settings:	
--service-failure-actions <actions>	Failure actions and their delay time (in milliseconds), separated by / (forward slash) – e.g., run/5000/reboot/800. Valid actions are <run|restart|reboot>. (Must be used in conjunction with the --service-failure-reset option)
--service-failure-command <command line>	Command line to be run on failure.
--service-failure-flag	Changes the failure actions flag setting of a service. If this setting is not specified, the Service Control Manager (SCM) enables configured failure actions on the service only if the service process terminates with the service in a state other than SERVICE_STOPPED. If this setting is specified, the SCM enables configured failure actions on the service if the service enters the SERVICE_STOPPED state with a Win32 exit code other than 0 in addition to the service process termination as above. This setting is ignored if the service does not have any failure actions configured.
--service-failure-reboot <message>	Message broadcast before rebooting on failure.
--service-failure-reset <period>	Length of period of no failures (in seconds) after which to reset the failure count to 0 (may be INFINITE). (Must be used in conjunction with --service-failure-actions)

Network Appliance Agents

Use this page to view a list of the hosts which have Network Appliance Agents installed. Right-click a host to configure the Network Appliance Agent installed on that host.



To scan using a Network Appliance Agent you must:

- Install the Agent in Network Appliance mode
- Create a Network Appliance Scan Group

A schedule links the above to perform scans of the group at set intervals.

To create a target group to be scanned by a Network Appliance agent, see Network Appliance Groups.

To download the network agent, see Download Network Agent.

Network Appliance Groups

Use this page to create a target group that will be scanned by a Network Appliance Agent. Click New Group to create a new target group that will be remotely scanned by one of the Network Appliance Agents previously installed.

Download Network Agent

Use this page to download the csia.exe file as well as read an explanation on how to install the Network Appliance Agent.

Important • *Ensure that the Agent file csia.exe is available in the system that will host the Agent in Network Appliance mode.*

Example: If you want to scan three different networks (for example Germany, United States, and United Kingdom) without having to install the Agent in Single Host mode, then you can install three instances of csia.exe in Network Appliance mode, one on each network.

Afterwards you will be able to scan all the hosts on the three locations at scheduled intervals by creating the appropriate scan groups in Network Appliance Groups and assigning each group to its respective and previously installed Network Appliance Agent.

Result: 15 minutes after installing a csia.exe in Network Appliance mode, the Network Appliance Agent will appear in Scanning > Remote Scanning Via Agents > Network Appliance Agents.

To specify the target host to be scanned by the Network Appliance Agent, please configure the scan group in Scanning > Remote Scanning Via Agents > Network Appliance Groups.

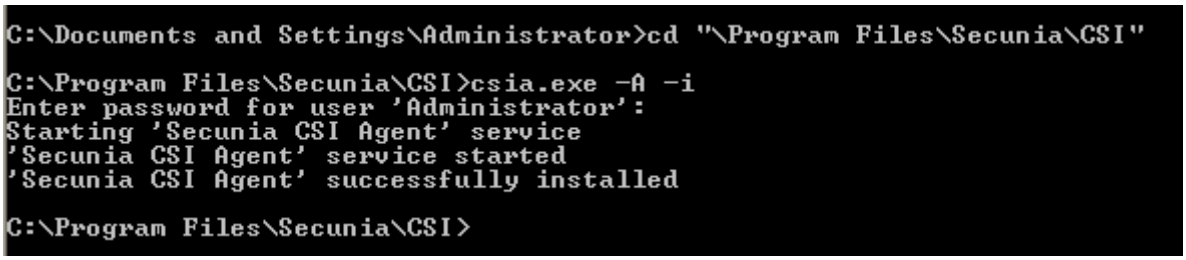
Install the Network Appliance Agent from the command prompt using:

>csia.exe -A –i

It is essential that the csia.exe is installed with the correct credentials.

The user installing the Network Appliance Agent must have administrator rights to all the target hosts that will be scanned by the Network Appliance Agent.

Example of an installation:



Scanning Via Local Agents

Software Vulnerability Manager provides different scan approaches, enabling you to select the one that best suits your environment. The Agent-based deployment is more robust and flexible for segmented networks or networks with mobile clients (for example, laptops). Once installed, the Agent will run silently in the background.

This is the recommended scanning approach due to its flexibility, usage convenience, and performance.

Important • *Please consider the system requirements for the Scan Groups/Agent-based scans, described in:*

- Agent-based Scan – Requirements for Windows
- Agent-based Scan – Requirements for macOS
- Agent-based Scan – Requirements for Red Hat Enterprise Linux (RHEL)

The Scan Process – How Does it Work? graphic references agent configuration options that are compared in Scan Types.

To scan using the Agent installed in Single Host mode, see Single Host Agents.

To download the local agent, see Download Local Agent.

Scan Types

When configuring the agent, you will be asked to select an **Inspection Type** or scan type, which are compared below.

Table 7-2 • Scan Types

Scan Type	Folders Searched	File Name Match	Applications Detected
Minimal Scan - Scan Type 1	Default folders only Example: Program Files	File names are matched first; then metadata is matched Example: `c:\Program Files\Mozilla Firefox\Firefox.exe`	Known applications in predefined locations on a host
Optimal Scan - Scan Type 2 ***Note*** • *Scan Type 2 is the default scan type.*	All files and folders	File names are matched first; then metadata is matched Example: `c:\Custom Mozilla Firefox Folder\Firefox.exe`	Known applications in any location (“portable applications”) on a host
Full Scan - Scan Type 3	All files and folders	Metadata only Example: `c:\Custom Mozilla Firefox Folder\myFirefox.exe`	Renamed applications that match a pattern detected in the first two scan types such as .exe, .dll, and .ocx in any location on a host

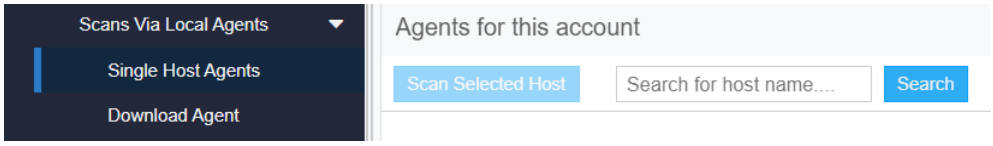
Single Host Agents

This page allows you to:

- Search for a site name to edit the configuration for agents joined to different sites.
- Manage configurations and schedule scans for the hosts where the Agent is installed as a service in Single Host mode.

Task ***To search for a site name to edit the configuration for agents joined to different sites:***

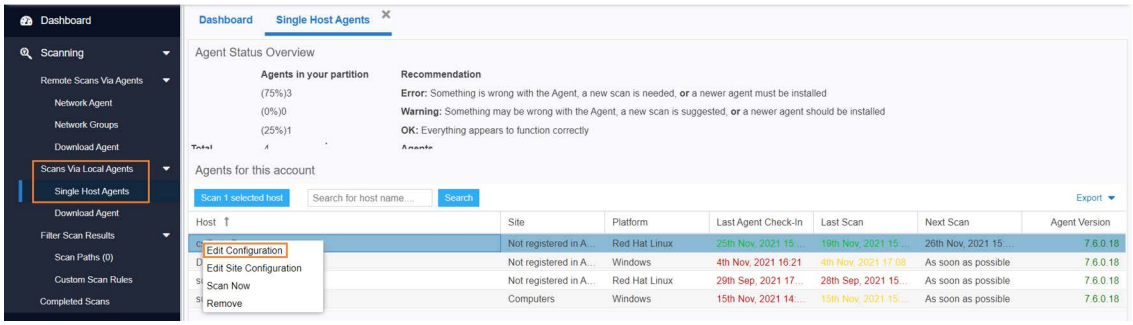
1. Navigate to the **Single Host Agents** view.



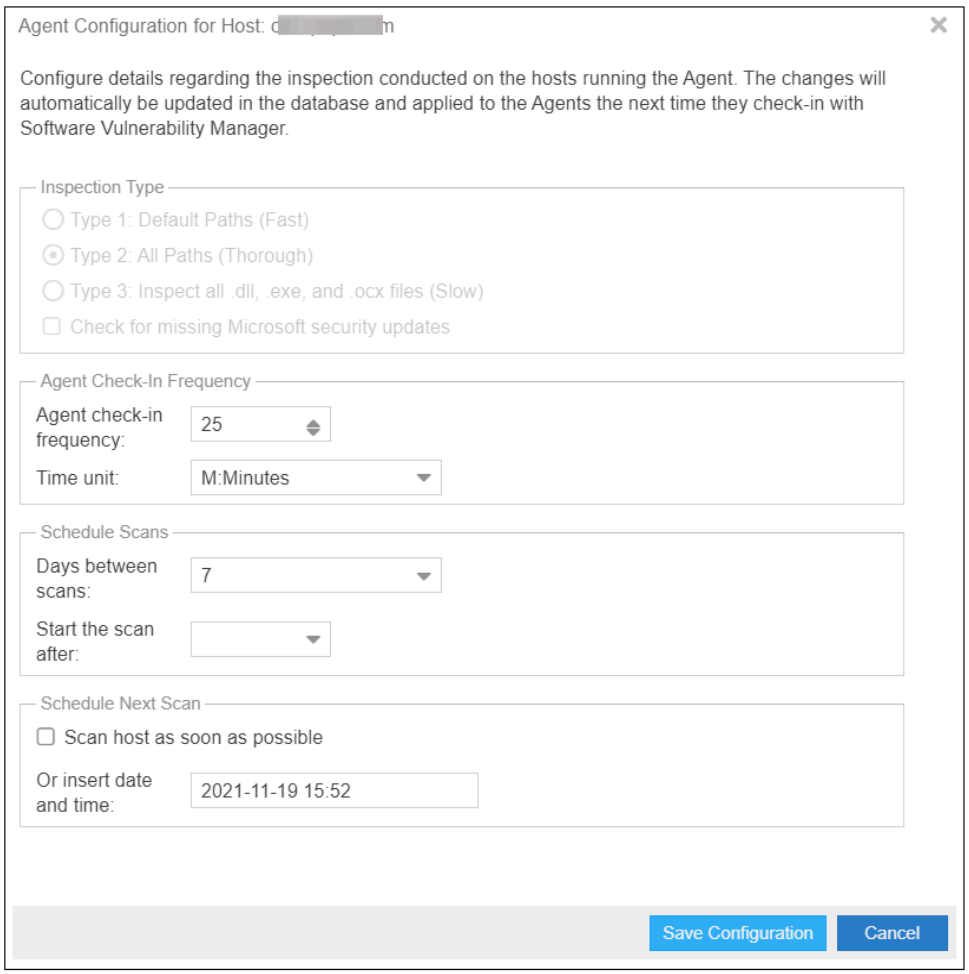
2. In the **Scan 1 selected host** search box, enter the site name and host name using the “OR” condition to show the respective result.

Task ***To manage the configuration of the selected Agent and change its settings (Inspection type, Check-in frequency, Days between scans):***

1. Double-click a host or Right-click a host name and select **Edit Configuration.**



The **Agent Configuration for Host** wizard opens.



2. Change the below settings as required:

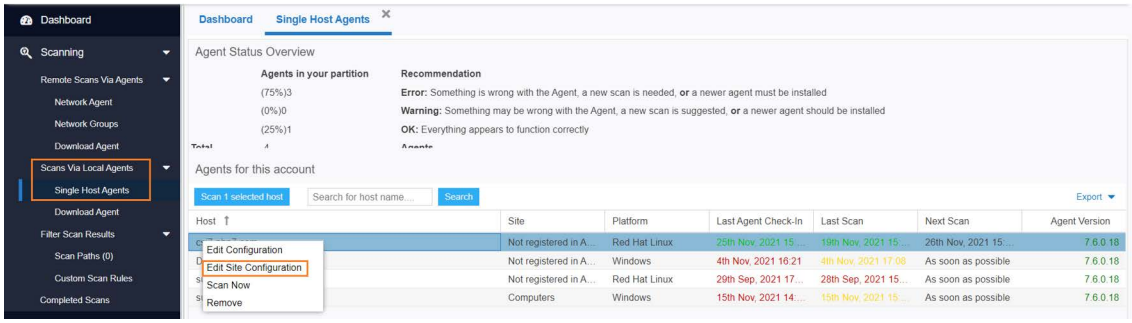
   - Inspection Type

- Agent Check-In Frequency
- Schedule Scans
- Schedule Next Scan

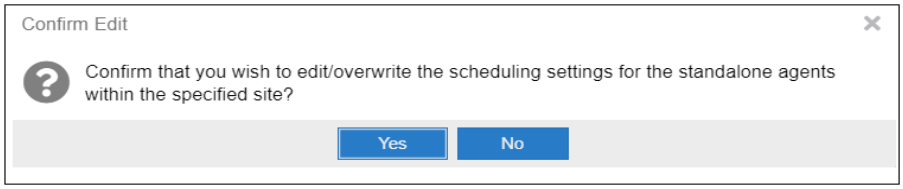
3. Select **Save Configuration** to save the changes.

Task ***To manage the configuration of the selected Site and change its settings (Inspection type, Check-in frequency, Days between scans):***

1. Right-click a host name and select **Edit Site Configuration** to manage the configuration for all the hosts in that Site.



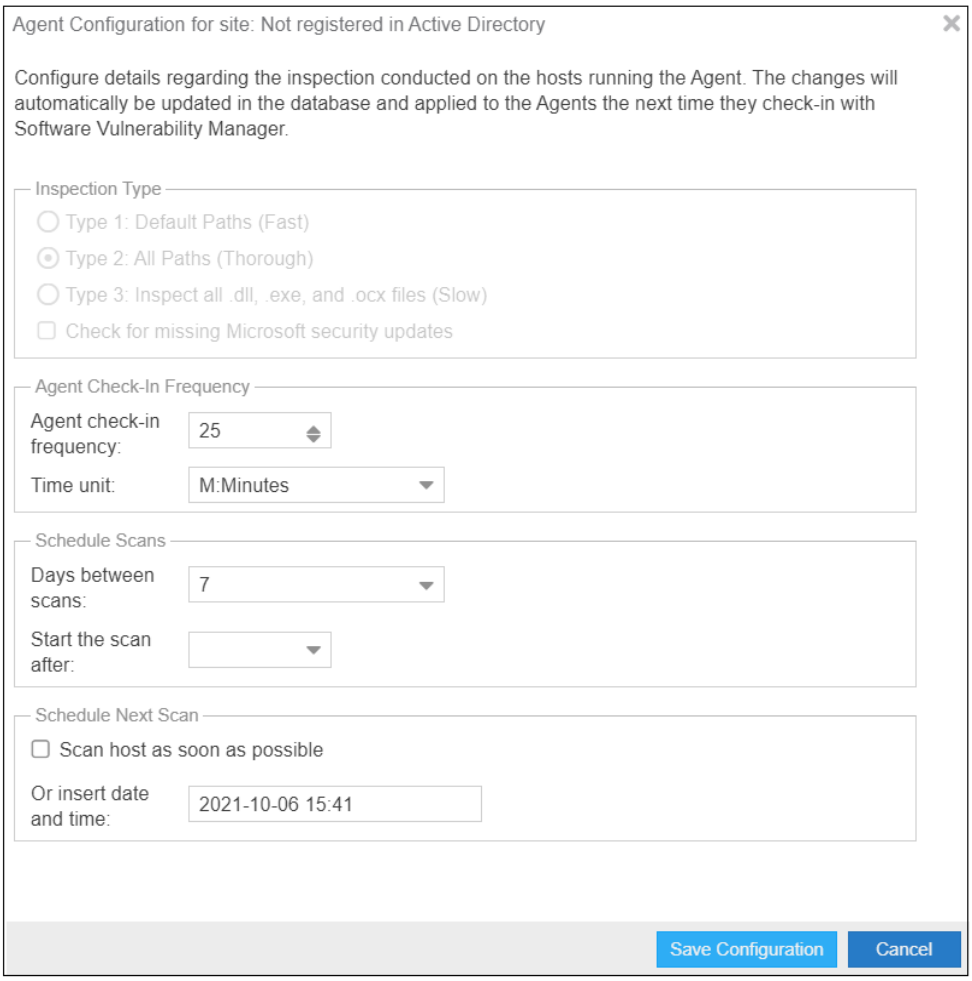
2. Select **Yes** in the **Confirm Edit** alert box.



3. Agent Configuration for site wizard opens, you can change the below settings as required:

- Inspection Type
- Agent check-in frequency
- Schedule Scans
- Schedule Next Scan

Note • *A **Site** is linked to multiple hosts, **Edit Site configuration** reflects the setting changes in all the hosts in that Site.*



4. Select **Save Configuration** to save the changes.

Important • *When selecting options under* ***Edit Site Configuration****, note that:*

- *Any edits to the scan schedule will come into effect only after the currently scheduled scan has completed. Each agent could potentially have a scan scheduled at different times. Therefore, any new scan configuration edit will affect the scan schedule at various times.*
- *Any edits made to the* ***Agent Check-In Frequency*** *option or selecting the* ***Schedule Next Scan*** *option* ***Scan host as soon as possible*** *will come into effect only after an agent has checked in as per the previously set scan frequency.*
- *The scan configuration settings set on the Software Vulnerability Manager website are not automatically transmitted to the agents. The agents have to connect to the Software Vulnerability Manager website as per their prior scheduled* ***Agent Check-In Frequency*** *before the agents become aware of the new scan configuration edits.*

The hosts scanned with the csia.exe will be grouped by Site. By default, the domain name will be used as a Site name.

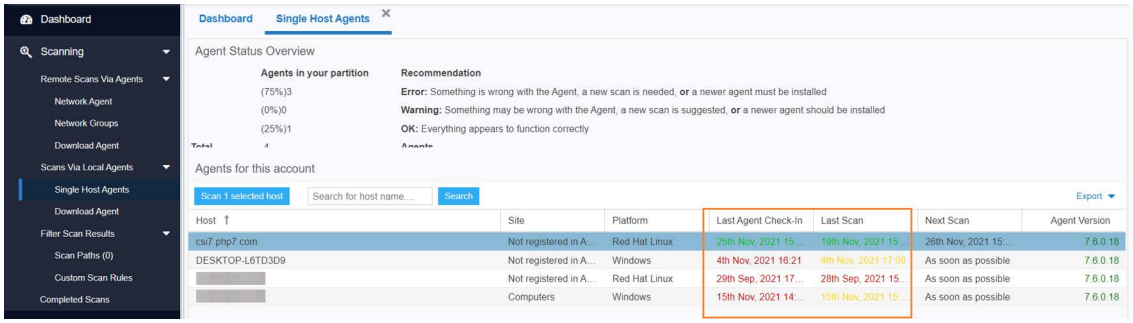
To change a Site name, please refer to Sites. You can also specify a Site name when installing the Agent, by using the -g parameter or by specifying a site name in the additional parameters when creating the Agent deployment package described in Agent Deployment.

Note • *When the agent runs as a service agent, it reads CSIAUser, CSIAToken, CSIAHost, CSIAPort, ProxyURL, and other optional settings from registry HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Secunia\CSI Agent.*

When the agent runs manually from the command line, the agent reads only CSIAUser, CSIAToken, CSIAHost, and CSIAPort from the registry unless required settings are specified on the command line or embedded in the executable. Other optional settings such has ***ProxyURL*** *to be specified on the command line. The Agent doesn't read them from the registry.*

5. The color codings are as mentioned below:

- Last Agent Check-In
  - If date is more than 7 days (604800 seconds) => Red
  - If date is more than 1 day (86400 seconds) => Yellow
  - If date is less than 1 day => Green
- Last Scan
  - If date is more than 32 days (2764800 seconds) => Red
  - If date is more than 8 days (691200 seconds) => Yellow
  - If date is less than 8 days => Green



Download Local Agent

Use this page to download the signed and unsigned Agents (`csia.exe`) as well as read an explanation on how to install the Agent in Single Host mode. For the signed Agents you shall download the token file `csia_token.ini`.

The following unsigned Agents are available:

- Download Agents with Token
  - Microsoft Windows
  - macOS - 64bit
  - macOS - 32bit (ver. 7.6.0.7)
  - Red Hat Linux 6.x
  - Red Hat Linux 7.x / Red Hat Linux 8.x / Red Hat Linux 9.x

The following Signed Agents are available:

- Download Signed Agents without Token
  - Microsoft Windows
  - macOS - 64bit

Important • *Note the following for Signed Agents:*

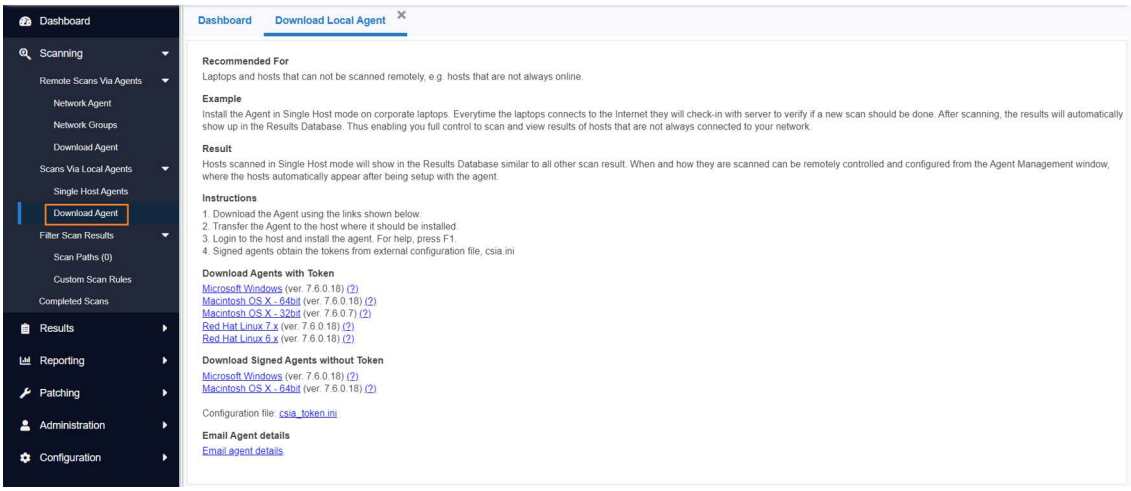
- *To install signed agent for Windows, download csia_token.ini and place it in the same folder where agent is saved.*
- *To install signed agent for MacOS, see Prepare Your Mac.*

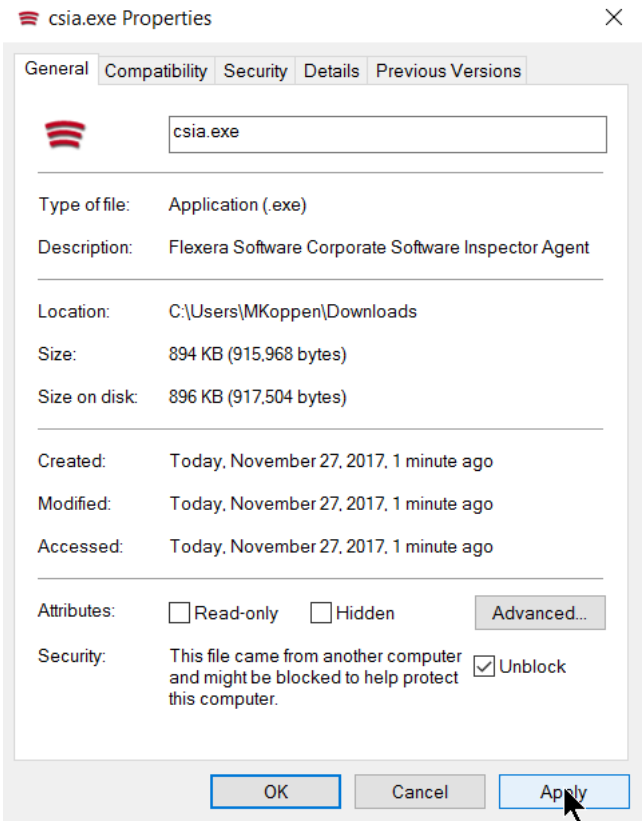
If your intention is to deploy the Software Vulnerability Manager Agent through WSUS/System Center please refer to Agent Deployment for further information.

Important • *Ensure that the Agent (`csia.exe`) is available in a local folder on the target PC before installing.*

Example

Install the `csia.exe` (Agent) in Single Host mode; download the Agent from the Software Vulnerability Manager console under **Scanning > Scanning via Local Agents > Download Local Agent**.





Note • *Make sure to right click on the .exe in the deployment share to "Unblock" it. Click* ***Apply > OK****.*

Once the Agent is installed, every time, for example, the laptop goes online (Internet connection) it will verify if a new scan should be conducted.

After scanning, the result will be displayed in Scanning > Completed Scans in the Software Vulnerability Manager console.

Important • *When the Agent is installed a unique identifier is generated so that each Agent has its own unique ID. For this reason, the Agent should not be included in OS images. Doing so will result in having several instances of the same Agent and in the inability to correlate the scan results with the scanned hosts.*

Result

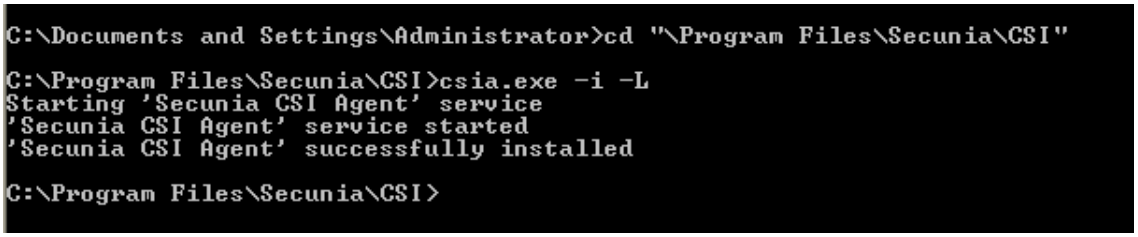
Hosts scanned with the Agent in Single Host mode will be displayed in Results > Host Smart Groups.

When and how the hosts are scanned can be controlled from the Software Vulnerability Manager console under Single Host Agents. Right-click a host name and select Edit Configuration to change the Agent settings.

Install the Agent from the command prompt with Local Admin account using:

```
csia.exe -i -L
```

Example of an installation:



By using the -L parameter, the Agent will be installed as a service running under the LocalService user account. For further information, refer to: http://msdn.microsoft.com/en-us/library/windows/desktop/ms684190%28v=vs.85%29.aspx

If you are a member of a domain and you do not use the -L switch, the service will be installed under the user account performing this action, granting the "logon as a service" privilege.

However, this privilege is usually removed in the next GPO background refresh since domain policies will not allow it. As a consequence, the Agent will stop working after the privilege has been removed.

Refer to Agent Deployment to deploy the csia.exe through WSUS/System Center for further information of how to deploy the csia.exe via Group Policy.

Important • *The csia.exe file is a customized executable, unique and private for your Software Vulnerability Manager account. This means that the csia.exe automatically links all scan results to your Software Vulnerability Manager account.*

Once the Agent is installed it will automatically scan after ten minutes. You can also initiate an on demand scan by executing csia.exe –c.

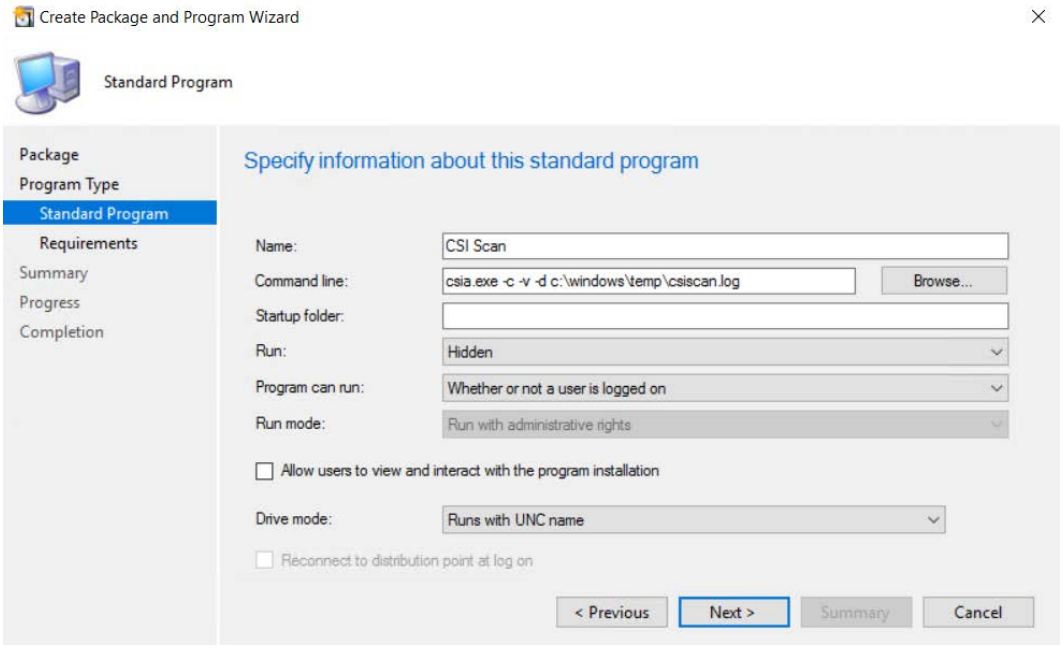
Run Scan from System Center Configuration Manager (SCCM)

The Software Vulnerability Manager Agent does not have to be installed on the local host to do a scan. You can create a traditional package in SCCM and run the scan on a weekly basis. To do this, you first need to be able to connect to https://svm.flexera.com

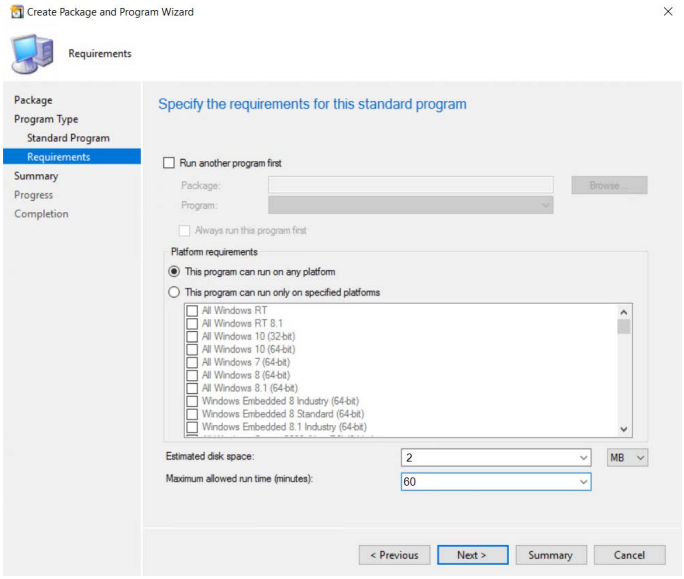
Task ***To run the Software Vulnerability Manager Agent inside an SCCM package:***

1. Download the latest Software Vulnerability Manager Agent as per Download Local Agent.
2. Launch the ConfigMgr console. Select **Software Library > Application Management > Packages**.
3. From the ribbon, click **Create Package**.
4. Complete the package information and click **Next**.
5. On the **Program Type** page, ensure **Standard Program** is selected and click **Next**.
6. On the **Standard Program** page, configure the following settings and click **Next**.
   - Name: **SVM Scan**
   - Command Line: `csia.exe -c -si 120 -v -d c:\windows\temp\csiscan.log` (creates a scan log file up to 16 MB in size)

- Run: **Hidden**
- Program can run: **Whether or not a user is logged on**

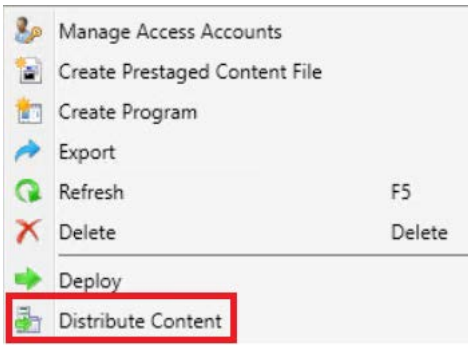


7. On the **Requirements** page, complete the requirements as shown below and click **Next**.



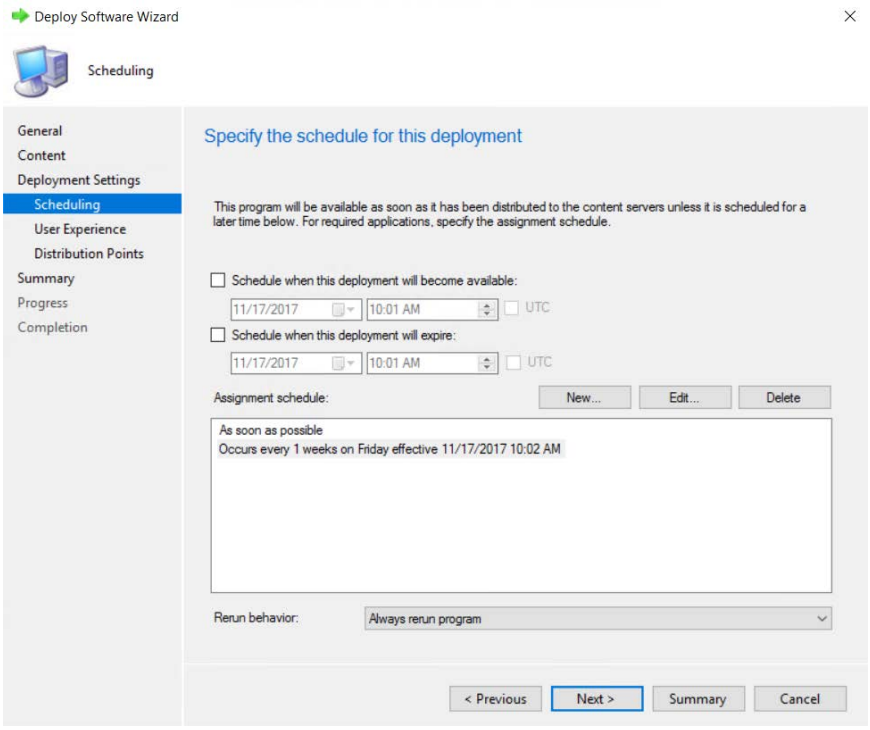
8. Finish the wizard.

9. Distribute the package to all Distribution Points or groups using the **Distribute Content** feature.



Task ***To create the initial scan and the weekly reoccurring scan:***

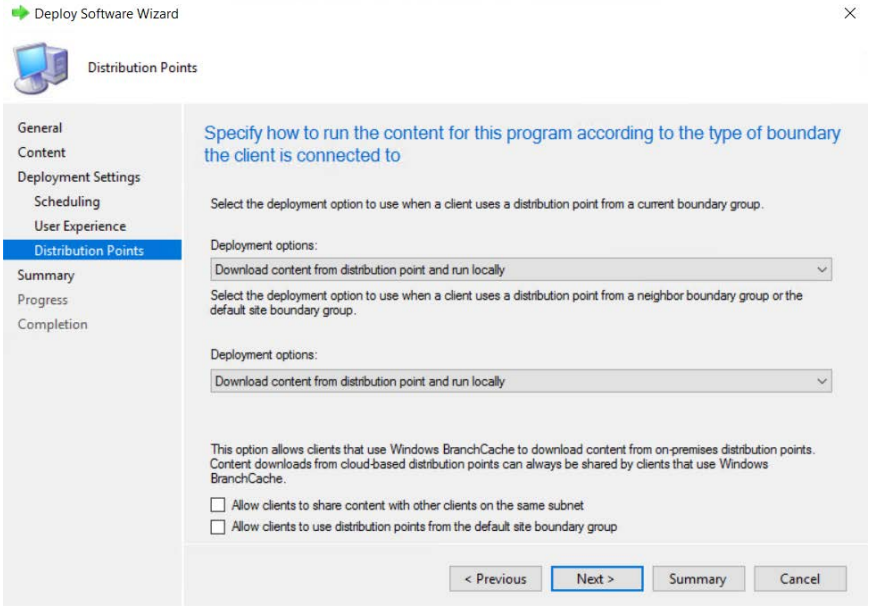
1. Select the Package and click **Deploy** on the ribbon.
2. On the **General** page, select the target collection and click **Next**.
3. On the **Content** page, verify that the content is distributed and click **Next**.
4. On the **Deployment Settings** page, ensure the purpose is Required and click **Next**.
5. On the **Scheduling** page, in the Assignment schedule click **New**. Schedule a scan for as soon as possible and create a weekly scanning schedule. Also configure the Rerun behavior deployment to **Always rerun program**.



Tip • *For larger environments, it is recommended to spread out the execution schedule of the scan package to avoid spikes of network traffic.*

6. On the user **Experience** page, click **Next**.

7. On the user **Distribution Points** page, select **Download content**, and click **Next**.



8. Finish the wizard.

You can now monitor the scanning results from the Software Vulnerability Manager console.

Scanning macOS

To scan Apple macOS machines, you need to deploy the Single Host Agent locally on the target system.

The installation can only be done under the Mac Terminal, as the Agent will be installed as a daemon (service) under the LocalSystem account.

Installation of Local Services on macOS systems requires root privileges. The ‘root’ account is disabled by default on Mac systems; therefore you need to enable it to proceed.

Before scanning macOS machines, please see the following sections:

- Download the Software Vulnerability Manager Agent for Apple macOS
- Prepare Your Mac
- Install the Mac Agent

Download the Software Vulnerability Manager Agent for Apple macOS

The Software Vulnerability Manager Agent for Mac OS X (csia) is a small, simple, customizable and extremely powerful Software Vulnerability Manager scan engine that offers a fully featured command line interface (CLI) to the Software Vulnerability Manager scanning functionality.

This allows you to run Software Vulnerability Manager scans directly from the command line, or to launch scans by using the Software Vulnerability Manager console.

You can download the Agent binary under Scanning > Scanning via Local Agents > Download Local Agents.

Important • *Ensure that the Agent is always available in a local folder on the target host.*

Prepare Your Mac

Installation of daemons (services) on macOS systems requires root account privileges. This means that root account should always be used when installing the Software Vulnerability Manager Agent.

You can switch to your local root account by using the command “su root” in your Mac Terminal. You will be prompted to provide the password for the root account.

```
bash-3.2$ su root
Password:
```

Provide the password for “root” if you know it. If you are not certain about the password, you may want to try entering “toor”, which is the default password for the root account, or you may also try with the current password of your Administrator account. Both ways may work, but if the account is disabled on the system, none of the passwords would work.

Important • *The Terminal window will not display the password you typed in. Once you have entered the password correctly, press ENTER and wait for confirmation.*

If you do not know the password for the root account, or the latter is currently disabled, you can perform the following actions to enable the account and set a new password:

- Open Terminal
- Type sudo passwd root
- Provide a new password

For more details on how to enable root account on macOS systems, please refer to:

http://support.apple.com/kb/ht1528

Important • *If you cannot enable the “root” account on the Mac, or you prefer to not use it directly, you can alternatively use the “sudo” switch before each command associated with Agent activities. For example: “sudo ./csia –i –L” can be used to install the Agent on the system.*

Once you are ready with setting/logging the root account you are one step away from installing the Agent.

When you download the Agent on a Mac system, normally the file is being set with limited file permissions on the system. You must check whether the file is allowed execution on the system by using the “ls -l” command which will list the file and will show its file permissions.

```
-rwxrwxrwx  1 csc  staff  803460 May 30 11:04 csia
-rwxr-xr-x@ 1 csc  staff  803460 Jun 11 13:04 csia_csc50
```

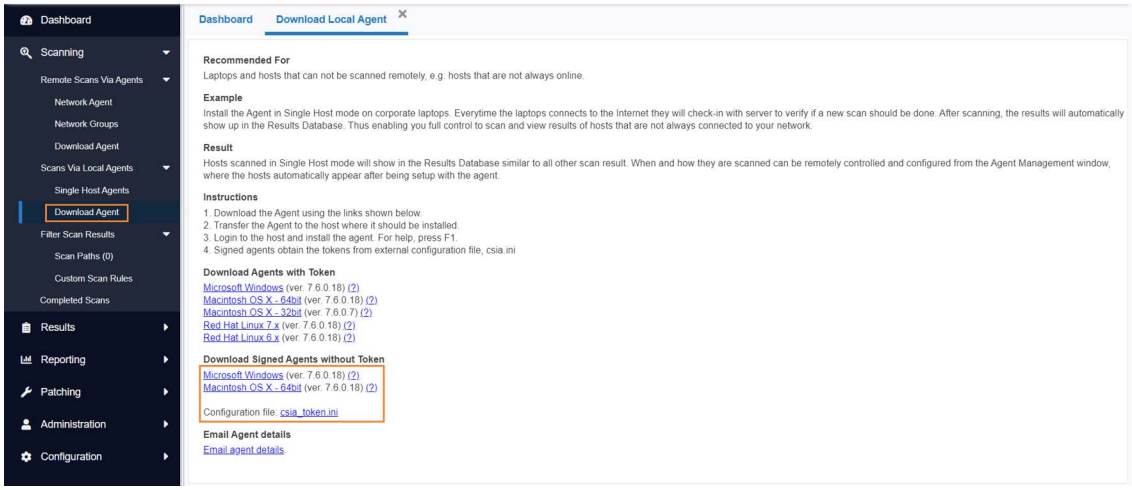
In case the permissions do not include execute rights (the “x” character) for any user, you should set them for the root account by using the chmod +x command.

chmod +x csia

(If you are not using the root account, add sudo before chmod)

Note • *For MacOS Catalina and Mojave note the following:*

- *In **Scanning > Scanning Via Local Agents > Download Agent**, download the disk image and csia_token.ini.*



- *Double-click the downloaded disk image to view the csia executable file.*
- *Drag & drop the csia executable file and csia_token.ini to your desired location to install the Mac agent.*

Mac Agent Code Signing on Privacy Preferences Policy Control (PPPC)

The Privacy Preferences Policy Control (PPPC) profile payload allows granting or denying of privacy access for specific applications to certain privacy features on macOS.

To obtain the agent code signing information, follow the below steps:

Task ***To obtain the agent code signing information:***

1. Download Mac agent without token (csia.dmg) and run.
2. Navigate to csia binary location and run.

   ```
   sh-3.2# codesign -dr - csia Executable=/Users/administrator/Downloads/csia designated => identifier csia and anchor apple generic and certificate 1[field.1.2.840.113635.100.6.2.6] /* exists / and certificate leaf[field.1.2.840.113635.100.6.1.13] / exists */ and certificate leaf[subject.OU] = QD9WNRE2L6
   ```

3. Placed the output in the Code Requirements section of PPPC configuration.

Install the Mac Agent

The traditional way of installing the Software Vulnerability Manager Agent is as a daemon (similar to local service in Windows) as it will operate under the macOS LocalSystem account.

Task ***Install the binary by using the Mac Terminal services as follows:***

1. Open **Terminal**:
   - `sudo su`
   - Pass: (Administrator password)
   - whoami (should be `root`)
2. Browse to the directory where you have placed the csia binary file:
   - `chmod +x csia`
   - Type the following command to install the Agent: `sudo ./csia -i`
   - Type the following command to launch the Agent scan: `./csia –c`

```
CSC-Mac:Downloads csc$ sudo ./csia -i
[01/20 13:40:49.294] Initializing Flexera Software Corporate Softwa
[01/20 13:40:49.311] GUID : F34D6E90-AFC4-401C-A687-4D3CAC380643
[01/20 13:40:49.318] 'com.secunia.csia' service started
```

The Agent shows in the Software Vulnerability Manager console approximately 15 minutes after the installation.

Use the "**-h**" switch to see a full list of parameters supported by the Agent.

Scanning Red Hat Enterprise Linux (RHEL)

Red Hat Enterprise Linux (RHEL) 6, 7, 8, and 9 are the operating systems officially supported by Flexera for the Software Vulnerability Manager RHEL scan Agent. It may be possible to install the scan Agent on operating systems and configurations other than those described. However, these have not been tested and are not supported by Flexera.

The scan Agent for RHEL uses the inventory which is already present (RPM) and displays this in the Software Vulnerability Manager after being processed by Flexera Detection/Version Rules. To download the Software Vulnerability Manager Agent for Red Hat Linux, go to Scanning > Scanning via Local Agents > Download Local Agents. For further information, see Installing the Software Vulnerability Manager Agent for Red Hat Linux.

Installing the Software Vulnerability Manager Agent for Red Hat Linux

Note • *This is a sample reference implementation that you can use to help guide your setup.*

To install the Software Vulnerability Manager Agent for Red Hat Linux:

The RHEL 6 Agent requires: bash, gzip, sed, gawk, procps, coreutils, glibc(x86-32), libcurl(x86-32), libconfig(x86-32), libuuid(x86-32), yum, yum-security.

In RHEL7 machine bash, sed, gawk, procps, coreutils, glibc(x86-32), libcurl(x86-32), libstdc++(x86-32), libuuid(x86-32), yum.

In RHEL8 machines bash, sed, gawk, procps-ng, policycoreutils-python-utils, glibc(x86-32), libcurl(x86-32), libstdc++(x86-32), libuuid, yum.

In RHEL9 machines bash, sed, gawk, procps-ng, policycoreutils-python-utils, glibc(x86-32), libcurl(x86-32), libstdc++(x86-32), libuuid, yum.

Login as root at the RHEL machine and install/update the package (the same command line option works for both cases):

```
su root
yum localinstall --nogpgcheck <path>/csia_linux-7.x.x.xx-x.noarch.rpm
```

Specifying proxy settings for the scanner (recommended method):

You can update the proxy setting to override the environment variables:

Update the proxy setting in the configuration file /etc/csia/csia.conf

Login as root and restart the scanner service:

```
su root
service com.secunia.csia restart (RHEL 6)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 7)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 8)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 9)
```

Specifying the LAN Group of the machine:

This setting will be overridden if the DNS domain name of the machine is publicly available (check with the “dnsdomainname” command).

Update the LanGroup setting in the configuration file /etc/csia/csia.conf

Login as root and restart the scanner service:

```
su root
service com.secunia.csia restart (RHEL 6)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 7)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 8)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 9)
```

Immediately update the RHEL Agent configuration:

If you have set the Agent check-in time to, for example, 1 day, it will be 1 day until the RHEL Agent picks up any configuration changes. If you want the RHEL Agent to immediately adapt to configuration changes, you can use the commands below to accomplish this by simply restarting the Agent service.

Login as root and restart the scanner service:

```
su root
service com.secunia.csia restart (RHEL 6)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 7)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 8)
```

OR

```
systemctl restart com.secunia.csia.service (RHEL 9)
```

Uninstalling:

Login as root and uninstall the scanner RPM package:

```
su root
rpm -e csia_linux
```

Important • *Software Vulnerability Manager supports scanning* ***Red Hat Enterprise Linux 8****.*

Filter Scan Results

Software Vulnerability Manager has the following scan features to restrict the locations inspected by the scan and to create and maintain custom rules for scanning customer created programs, drivers, and Plug-ins.

- Scan Paths
- Custom Scan Rules
- Extended Support

Scan Paths

Use this feature to create either a Allow list or Block list of paths/locations to restrict the locations inspected by the Software Vulnerability Manager scan.

You can add environment variables to the Allow list and Block list in the Scan Paths view. The environment variables will be resolved to the full path by the windows agent while scanning a host and will appropriately be either scanned or skipped.

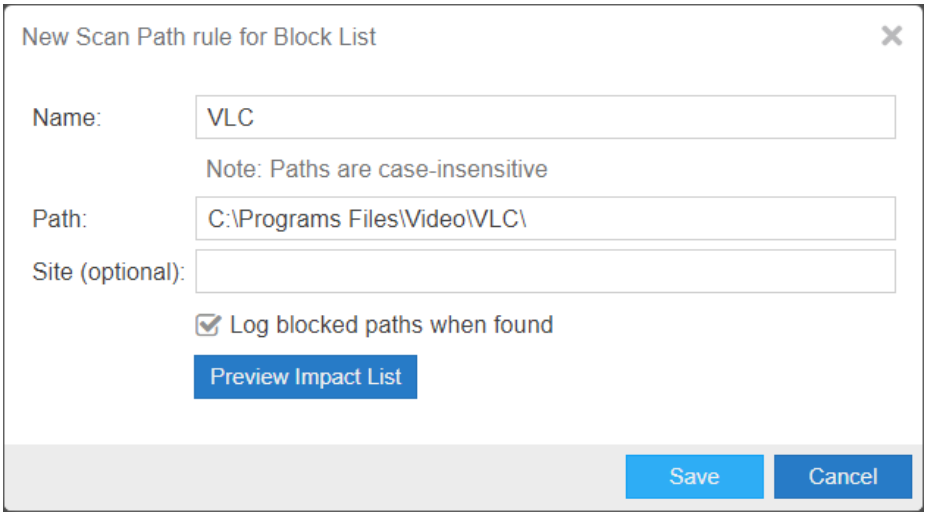
For Example:

If **%windir%** is added to the Block list in the Scan Paths, then the agent will skip **C:\Windows** folder and its subfolders while scanning a host.

Click Add Allow list Rule or Add Block list Rule and enter the Name, Path and Site (optional) details.

Note • *By checking the **Log blocked paths when found** option, while adding a path to the Blocked List, the paths will be recorded for your awareness. The products associated with logged paths will be available in the **Completed Scans** under the **Blocked Results** tab. These paths will not be considered for the applicability rules while generating an SPS patch.*

Note • *If masking is enabled and you wish to log an absolute path which is maskable, then such a path will not be excluded from the Scan Results.*



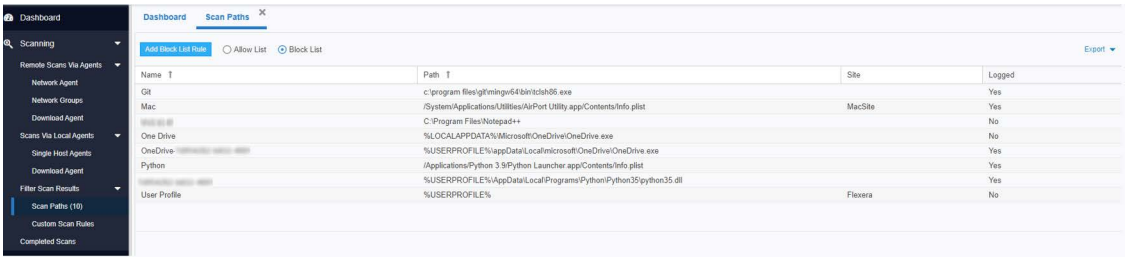
Important • *This feature is applicable to RHEL only if **Log blocked paths when found** option enabled in the Block List.*

If using the Allow list, all the locations listed will be inspected by the scanner and any other locations are excluded from Software Vulnerability Manager inspections.

If using the Block list, all the locations/paths block-listed will be ignored and any other paths are inspected by the Software Vulnerability Manager scan.

Important • *Use this feature with **caution**. By using the Scan Path Rules some of your paths will be excluded from the scan and Software Vulnerability Manager will not alert you towards excluded insecure products, even if they potentially expose your hosts to security threats.*

All logged paths will be set to **Yes** in the new column named **Logged** in the **Block List** view.



Important • *It is not possible to simultaneously use both a Block list and a Allow list.*

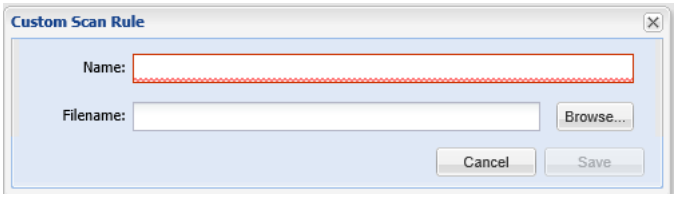
Note • *To exclude **Microsoft One Drive** files from agent scan, add "\OneDrive\" to you block list.*

*To exclude **Dropbox** files from agent scan, add "\Dropbox\" to you block list.*

*To exclude **Box.net** files from agent scan, add "\Box\" to you block list.*

Custom Scan Rules

Use the Custom Scan Rules page to create and maintain custom rules for scanning customer created programs, drivers, and plug-ins. Click New Custom Scan Rule and enter a Name for the rule and the Filename to scan. Click Browse to search for the file you want to add to the rule.



Right-click a rule in the grid to edit or delete the rule.

Important • *The file to be scanned must contain valid File Version Information.*

Extended Support

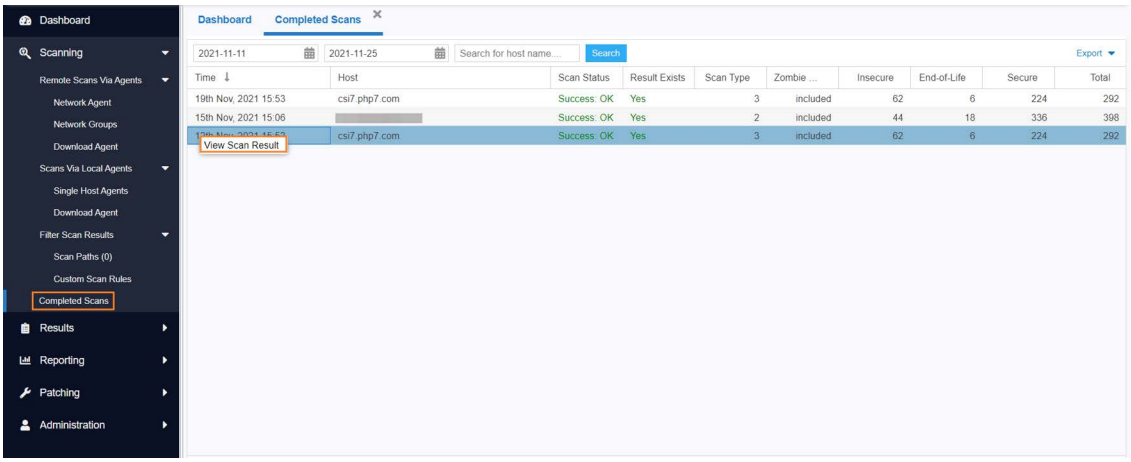
Use the Extended Support page to view, edit, and delete the extended support products. Right click on the product for which you wish to edit/delete and click on the menu option **Edit Extended Support** / **Delete Extended Support**.

To following topic is related to Extended Support:

- Add Extended Support

Completed Scans

Use this page to view a summary of the scans conducted. Double-click an entry for further details or right-click and select **View Scan Result**.

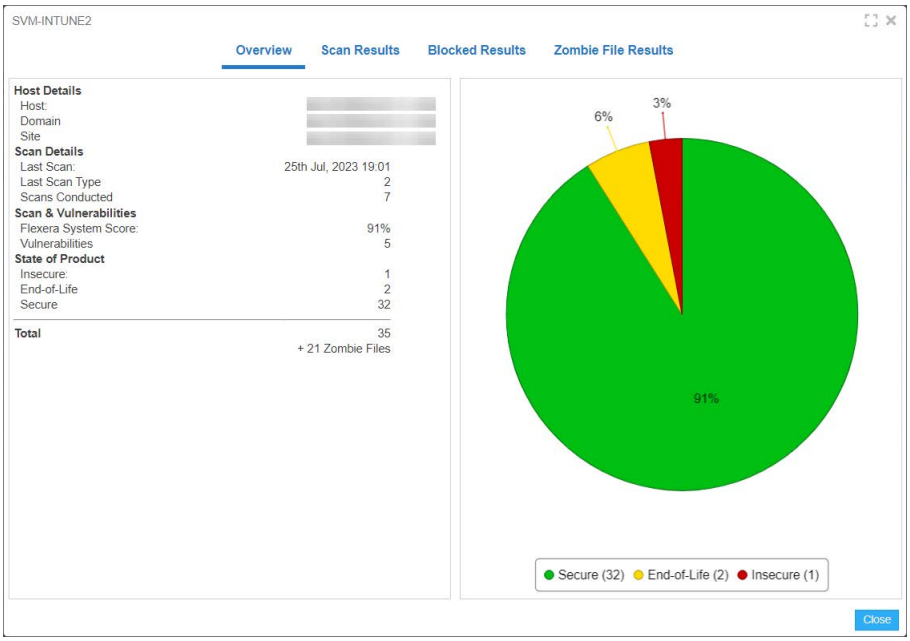


The overview page appears on the screen with the following tabs:

- Overview
- Scan Results
- Blocked Results
- Zombie File Results

Overview

Use this page to view the overview information of the Scan results.



Scan Results

In the Scan Results tab, you can view installations details of the product, and you can add desired product to the Block List.

To do so, right click on selected row and choose **View Installations** / **Add to Block List** from the context menu.

Success

The scan was completed successfully.

Partial

The Software Vulnerability Manager scans consists of two parts; the first part is the scan of third-party applications, the second part is collecting information about Microsoft patching status from the Windows Update Agent (WUA).

If the Software Vulnerability Manager scan engine is not able to obtain the required information from the WUA, the scan result will be Partial. Check the setting that controls the behavior of the WUA when a scan is completed (refer to Settings for further information).

Failed

Software Vulnerability Manager was not able to connect to the remote target to perform the scan. Refer to Remote/Agentless Scan – Requirements (Windows) for further information.

Possible Reasons for Scan Status

After you complete a scan, you will see a **Completed Scans** page. This page includes a **Scan Status** column. The following table explains the possible reasons for the Scan Status.

Table 7-3 • Possible Reasons for Scan Status

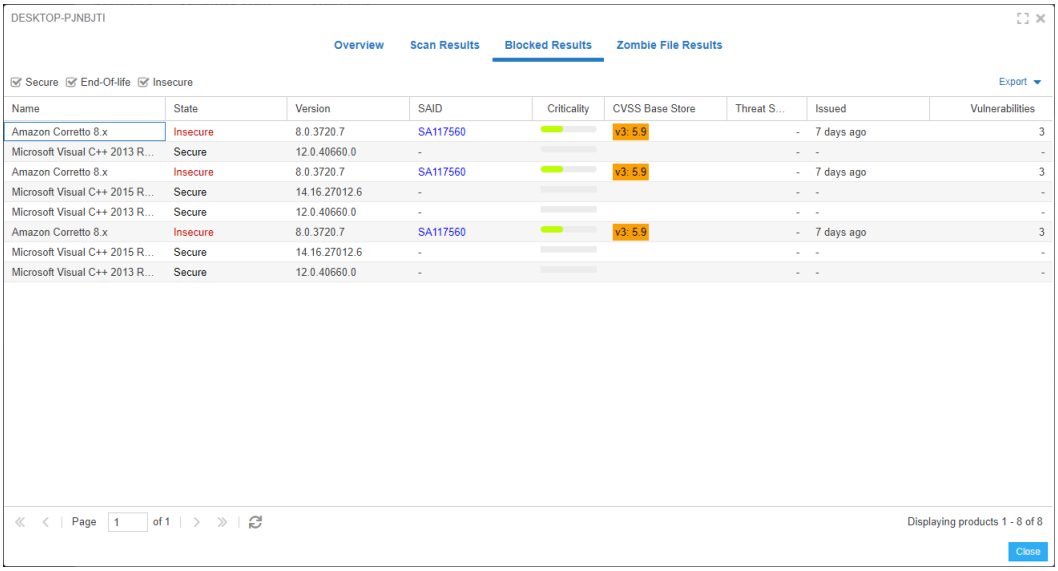
Scan Status	Possible Reasons
Success: OK	Scan executed successfully.
Partial Success	Scan executed with partial success.
Partial: Windows Update Failed	The scan was partially successful. An error occurred during the Windows update check due to possibly one or all of the following reasons: **1.** It appears that the RPC service is not running or that the Host is firewalled to disallow access to the RPC service. **2.** You do not appear to have specified the correct login credentials to perform Windows Update checks on the Host. **3.** Check that the Windows Update service is running on the Host and that you use the correct administrative login credentials. NOTE: This means that certain Microsoft products for this Host are listed with a potential incorrect security state.
Failure	Scan failed.

Table 7-3 • (cont.)Possible Reasons for Scan Status

Scan Status	Possible Reasons
Failed: License Limit Reached	You have reached the limit of your CSI License Key. To resolve this issue: **1.** Please make sure that you have removed all retired machines from your CSI console using the database cleanup tool. **2.** You may need to purchase more host licenses. Please contact sales@flexera.com for more licenses.
Failed: No Connection	Could not connect to Host. Check that the Host is not blocked by a firewall.
Failed: Resolving Host	Could not resolve Host. Please verify that you typed the host name correctly.
Failed: Access Denied	The scan failed. Please verify that you are using the correct administrative login credentials for the Host.
Failed: Error Connecting	Check that you have sufficient privileges to access the Host. Check that the Host is not blocked by a firewall.
Failed: Partial Success	The scan started, but it could not be completed due to possibly one or all of the following reasons: **1.** Please verify that you are using the correct administrative login credentials for the Host. **2.** 'Easy File Sharing' is disabled on the Host. **3.** The Host is not blocked by a firewall.
Failed: No Data Retrieved	The scan started, but it could not be completed. Please verify that you are using the correct administrative login credentials for the Host. 'Easy File Sharing' is disabled on the Host. The Host is not blocked by a firewall.
Failed: IP/AD Restrictions	The user who installed the agent on the specific machine is not allowed to scan a machine with that IP address.
Failed: Communications Error	There has been a communications error between the agent and the Host. This could be a temporary issue, so rescanning may resolve this issue.

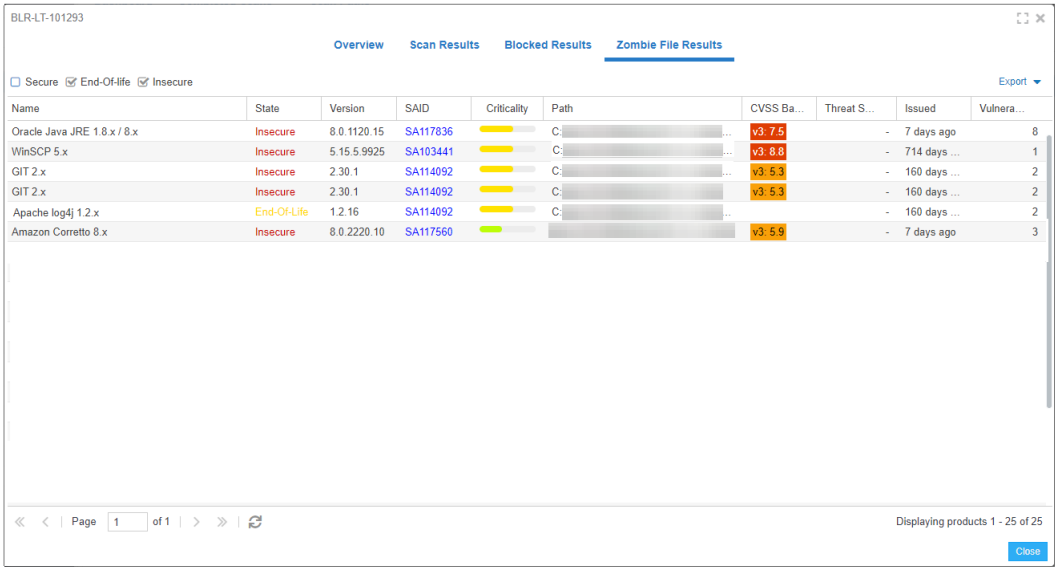
Blocked Results

The products associated with logged paths will be available in the Blocked Results tab. These paths will not be considered for the applicability rules while generating an SPS patch.



Zombie File Results

The discovered zombie files will be displayed in the Zombie File Results tab.



Inventory Assessment

This beta feature provides directional (less definitive than file-level scan using file signatures) inventory assessment results depending largely upon the detail of the version information contained in the supplied inventory data.

Use this page to view and import inventory files. This section includes the following topics:

- Import Inventory
- View Inventory Result

Prerequisites

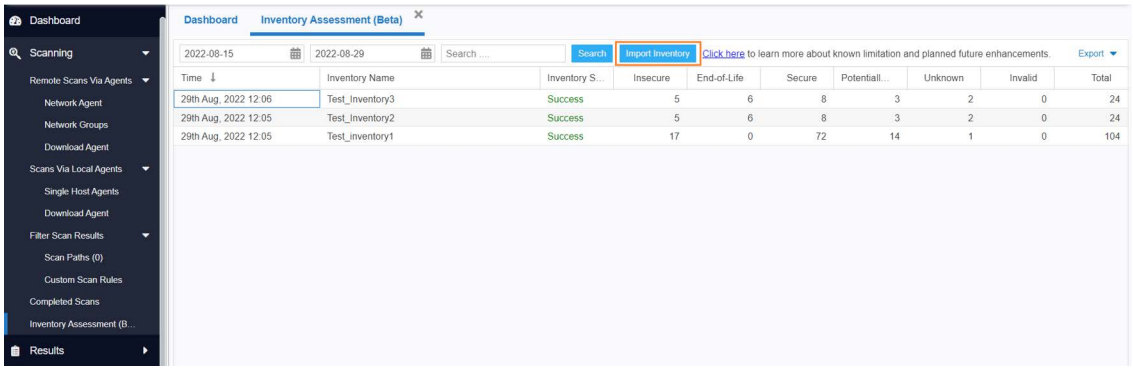
The CSV file can have any number of columns. However, it is mandatory that it has columns representing Product, Vendor, and Version. These columns will be imported into the inventory list.

Import Inventory

The file containing the software inventory is expected to be in the .csv format. To import the csv file, perform the following steps.

Task ***To import an inventory file:***

1. Click **Inventory Assessment** under **Scanning** menu in the left navigation pane.
2. Click **Import Inventory** in the Inventory Assessment (Beta) page.

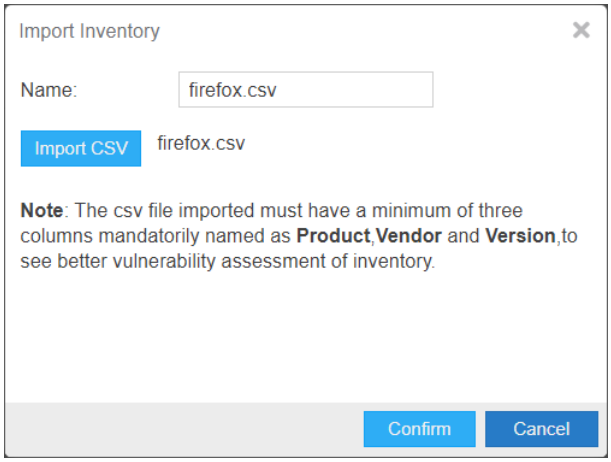


The Import Inventory dialog appears.

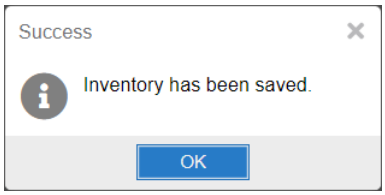
3. Name of the Inventory appears or (if required) enter the inventory name.
4. Click **Browse** and select the CSV file which has the inventory list.

Note • *It is mandatory that it has columns representing Product, Vendor, and Version.*

5. After importing the inventory file, click **Confirm**.



6. Click **Submit**.
7. Click **OK** and exit the dialog box.



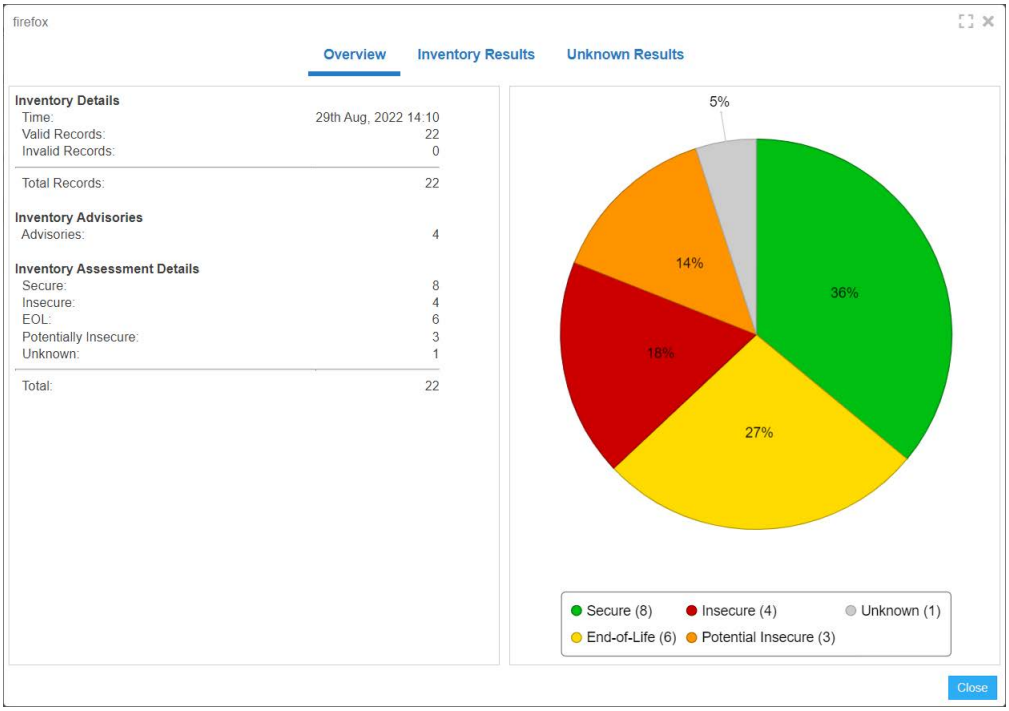
8. Upon successful import, all entries present in the CSV file will be displayed in the Inventory Assessment (Beta) page. Under Inventory Status column you can view the status of the imported file as, **In Queued**, **In Progress**, **Success**, and **Failed**.

View Inventory Result

Use this page to view a summary of the inventory list. Double-click an entry for further details or right-click and select **View Inventory Result**.

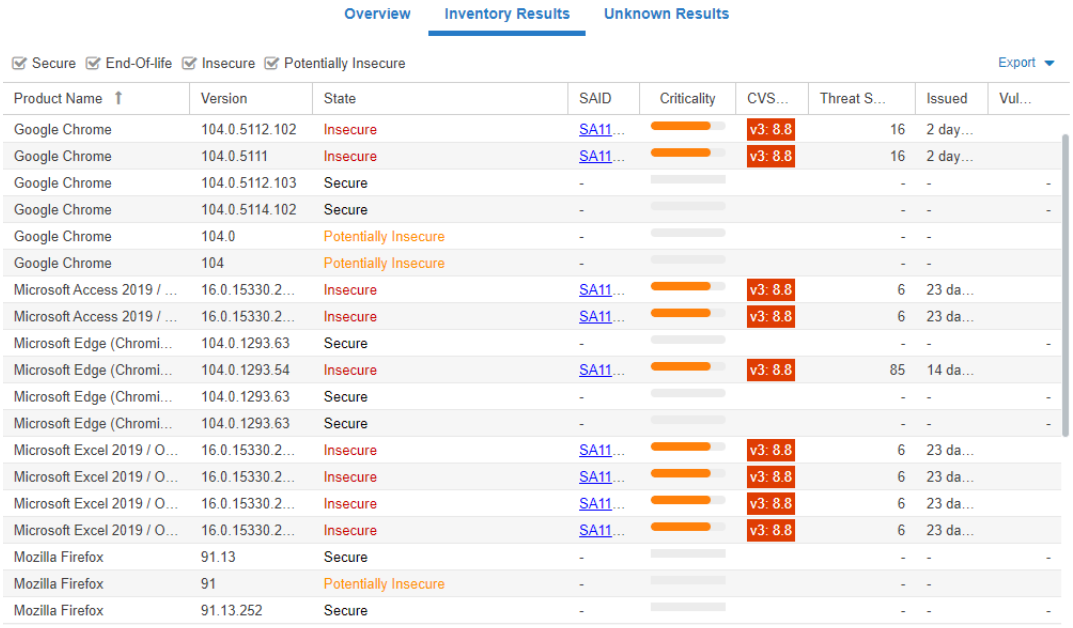
Overview

Use this page to view the overview information of the inventory data.



Inventory Results

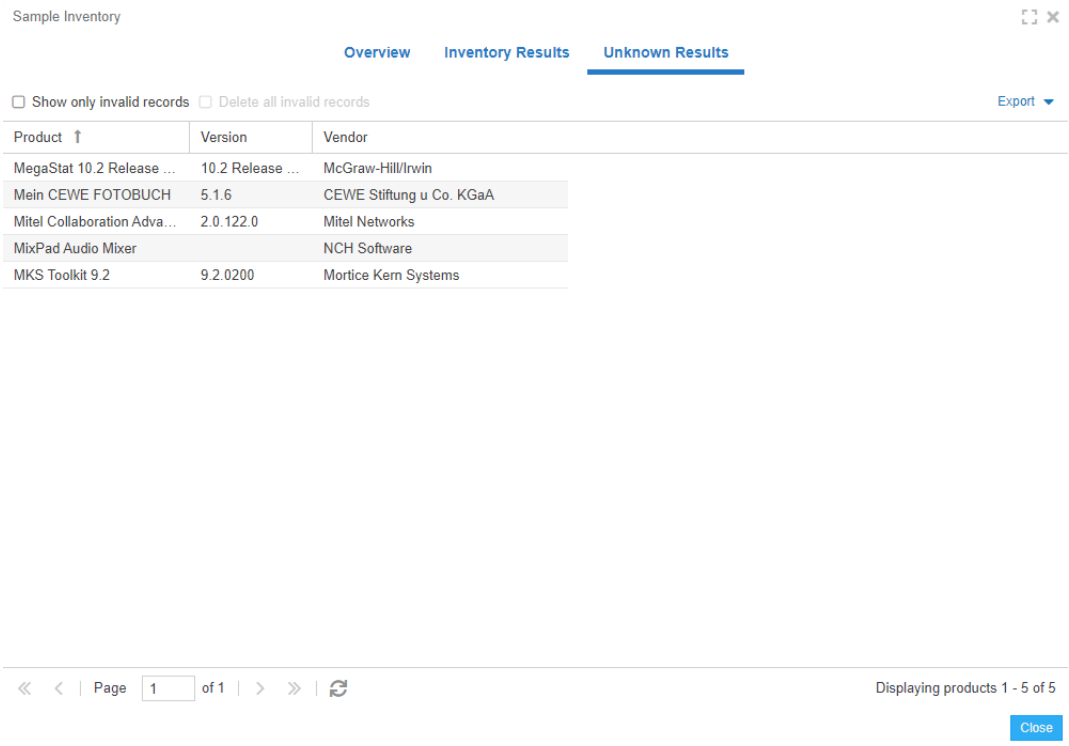
Use this page to view the inventory results of the inventory data. These advisories can be filtered by **Secure**, **End-Of-Life**, **Insecure**, and **Potentially Insecure**.



Product Name	Version	State	SAID	Criticality	CVS…	Threat S…	Issued	Vul…
Google Chrome	104.0.5112.102	Insecure	SA11…		v3: 8.8	16	2 day…	
Google Chrome	104.0.5111	Insecure	SA11…		v3: 8.8	16	2 day…	
Google Chrome	104.0.5112.103	Secure	-			-	-	-
Google Chrome	104.0.5114.102	Secure	-			-	-	-
Google Chrome	104.0	Potentially Insecure	-			-	-	
Google Chrome	104	Potentially Insecure	-			-	-	
Microsoft Access 2019 / …	16.0.15330.2…	Insecure	SA11…		v3: 8.8	6	23 da…	
Microsoft Access 2019 / …	16.0.15330.2…	Insecure	SA11…		v3: 8.8	6	23 da…	
Microsoft Edge (Chromi…	104.0.1293.63	Secure	-			-	-	-
Microsoft Edge (Chromi…	104.0.1293.54	Insecure	SA11…		v3: 8.8	85	14 da…	
Microsoft Edge (Chromi…	104.0.1293.63	Secure	-			-	-	-
Microsoft Edge (Chromi…	104.0.1293.63	Secure	-			-	-	-
Microsoft Excel 2019 / O…	16.0.15330.2…	Insecure	SA11…		v3: 8.8	6	23 da…	
Microsoft Excel 2019 / O…	16.0.15330.2…	Insecure	SA11…		v3: 8.8	6	23 da…	
Microsoft Excel 2019 / O…	16.0.15330.2…	Insecure	SA11…		v3: 8.8	6	23 da…	
Microsoft Excel 2019 / O…	16.0.15330.2…	Insecure	SA11…		v3: 8.8	6	23 da…	
Mozilla Firefox	91.13	Secure	-			-	-	-
Mozilla Firefox	91	Potentially Insecure	-			-	-	
Mozilla Firefox	91.13.252	Secure	-			-	-	-

Unknown Results

Use this page to view the unknown information of the inventory data.


Sample Inventory
Overview
Inventory Results
Unknown Results
Show only invalid records
Delete all invalid records
Export
Product
Version
Vendor
MegaStat 10.2 Release ...
10.2 Release ...
McGraw-Hill/Irwin
Mein CEWE FOTOBUCH
5.1.6
CEWE Stiftung u Co. KGaA
Mitel Collaboration Adva...
2.0.122.0
Mitel Networks
MixPad Audio Mixer
NCH Software
MKS Toolkit 9.2
9.2.0200
Mortice Kern Systems
Page
1
of 1
Displaying products 1 - 5 of 5
Close

8

Results

After scanning your system, you can use the following options to view your scan results:

- Sites
- Smart Groups
- Host Smart Groups
- Product Smart Groups
- Advisory Smart Groups
- Zero-Day Advisories

Sites

Use this page to view the Sites maintained within your account. You can double-click a Site name to see all the hosts grouped under that Site name.

Right-click a Site to view its Hosts or delete the Site.

Scanned hosts will be grouped in a Site with the same name as the domain they log on to.

Important • *Switching to Active Directory will remove your current Sites structure (your existing data will be backed up).*

Smart Groups

Smart Groups are the medium by which a Software Vulnerability Manager user views scan results. You are able to see the hosts, products, and associated advisories that are available to you, based on your view of the network as configured by your administrator. Furthermore, you are able to create custom filtered views of each of these using a variety of predefined criteria. The All Hosts, All Products, and All Advisory default Smart Groups are created by Flexera and cannot be edited or deleted. They represent an unfiltered view for their respective content. Use the filters when creating additional Smart

Groups to effectively customize the data you are most interested in, and want to see, create reports on, receive alerts and notifications about, and see dashboard portlet data on. Smart Groups are the basis by which most data in Software Vulnerability Manager are viewed, and can be used effectively to optimize your workflow.

Note • *Smart Groups are generated periodically, and the data you see is only as current as the last time the Smart Group was compiled. At any time, you can queue the recompilation of a Smart Group to get the most current data.*

Within the Smart Group grids, you can double-click to view/edit an existing group's configuration. Alternatively, right-click on any Smart Group to view, edit, compile or delete the group.

Click the check box, select the required Smart Group, and click Queue For Compilation button to update the data and notifications for the group. The group will usually update within minutes. Multiple selections are allowed.

Click Create New Smart Group button to configure a new Smart Group. Click + and – to add or remove criteria.

Click Templates, where available, to open the Smart Group Example Use Cases page. Select an appropriate use case and click Use Template to populate the Smart Group Overview and Configuration page, which you can then edit to match your specific requirements.

All edits are done under the Create & Edit page in the Smart Groups.

Important • *If you edit a configured Smart Group, all existing log files and notifications for the Smart Group will be deleted. New logs will be created after your changes have been saved.*

Important • *Content can be available in multiple Smart Groups at the same time. For example, if you have a Smart Group showing all insecure products and another showing all products from Adobe, then if a host has an Adobe product installed that is insecure, this will be displayed in both Smart Groups. Also note that when you first run a scan you won't see the hosts in All Hosts, or any reports, until the Smart Group is compiled.*

Note • *You can click Export to export a single page, all pages or schedule an export. The exports are saved in CSV format. To schedule an export from a smart group one must have the SVM Daemon installed and configured. For more information, see Download and Install the Software Vulnerability Manager Daemon.*

Host Smart Groups

This section describes how to:

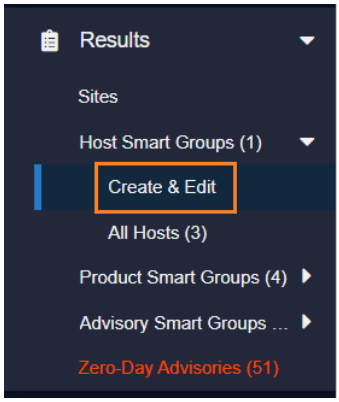
- Create a New Host Smart Group (see Create a New Host Smart Group)
- View existing configured Host Smart Groups (see Overview and Configuration)
- Configure new Host Smart Groups (see Configured Host Smart Groups)
- Filter Host Smart Groups on missing Microsoft Knowledge Base (KB) articles
- Filter Host Smart Groups on Operating System Build Version

Create a New Host Smart Group

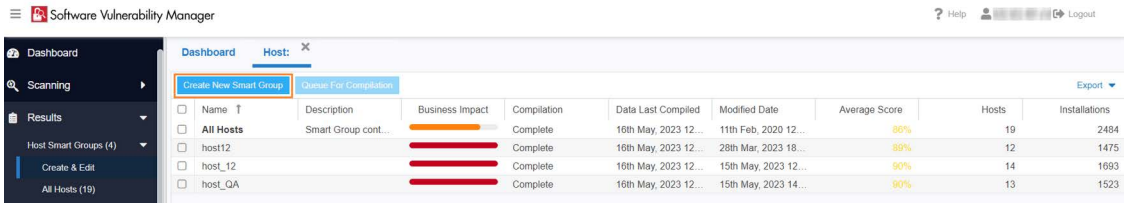
This page describes how to create a new Host Smart Group.

Task ***To create a new Host Smart Group:***

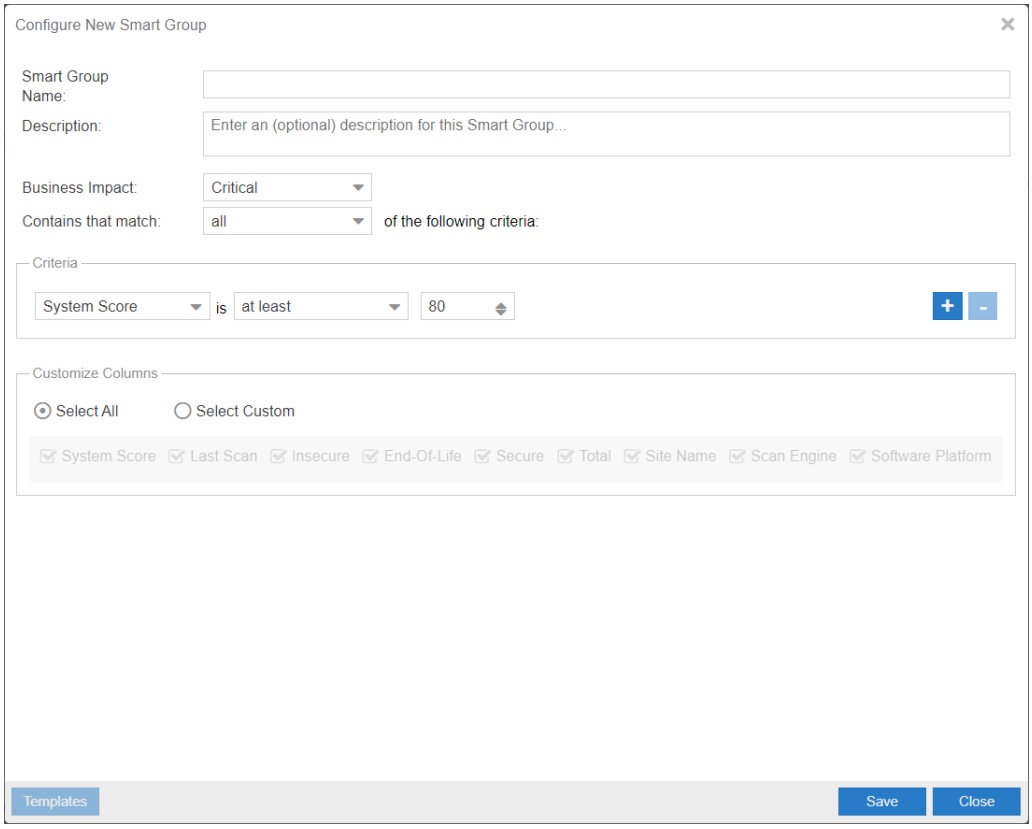
1. Navigate to **Host Smart Groups** > **Create & Edit**.



2. A list of created Host Smart Groups appears. To create a new Smart Group, click **Create New Smart Group** link.



3. The **Configure New Smart Group** dialog box opens.



4. Enter the valid name in the **Smart Group Name** field.
5. Enter the description of the smart group (optional) in the **Description** field.
6. From the **Business Impact** list, select the type of impact you want to add. You have the following options:

Table 8-1 • Business Impact list

Impact Type	Description
Critical	This value is typically used for remotely exploitable vulnerabilities that can lead to system compromise. It resembles the red color.
High	This value is typically used for remotely exploitable vulnerabilities that can lead to system compromise. It resembles the orange color.
Medium	This value is typically used for remotely exploitable Denial of Service vulnerabilities and for vulnerabilities that allow system compromises but require user interaction. It resembles the yellow color.
Minor	This value is typically used for cross-site scripting vulnerabilities and privilege escalation vulnerabilities. It resembles the light green color.
Low	This value is typically used for very limited privilege escalation vulnerabilities and locally exploitable Denial of Service vulnerabilities. It resembles the green color.

7. From the Criteria list, select the type of smart group criteria you want to add. You have the following options:

Table 8-2 • Smart Group Criteria Options

Smart Group Criteria	Description
System Score	Filter by system score. For more information, see System Score Settings.
System Platform	Filter by system platform.
Last Scan Date	Filter by last scan date of the host.
Site	Filter by site name.
Host	Filter by host name.
Missing KB Article	Filter hosts with missing Microsoft KB article.
CVE Number	Filter host by CVE Number from selected CVE list.
Host Name	Filter host name using begins with, starts with, and contains condition. This filter supports options like **contains**, **starts with**, **does not contain**, and **equals**. Then enter the Host name in the text field.
Site Name	Filter site name using begins with, starts with, and contains condition. This filter supports options like **contains**, **starts with**, **does not contain**, and **equals**. Then enter the Site name in the text field.
Operating System	Filter by operating system from selected list.
Operating System Build	Filter by specific version of the Operating System. For more details, see Filter Host Smart Groups on Operating System Build Version.

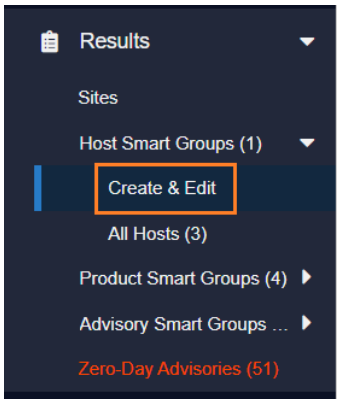
8. After updating the above fields, click **Save** button to create a new Host Smart Group.

Overview and Configuration

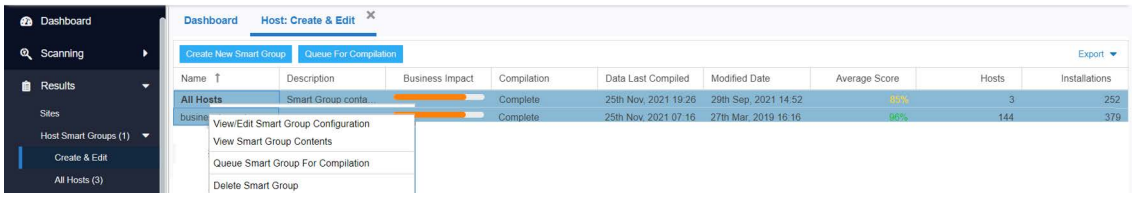
This page describes to view existing configure Host Smart Groups and to configure new Host Smart Groups.

Task ***To view the existing configured Host Smart Groups and configure new Smart Groups:***

1. Navigate to **Host Smart Groups** > **Create & Edit**.



2. Right-click an item in the grid to view, edit, compile or delete the Smart Group.



3. When the View/Edit Smart Group menu appears, make the needed changes to the Smart Group.

Note • *All Hosts is the default Smart Group and cannot be edited or deleted.*

Configured Host Smart Groups

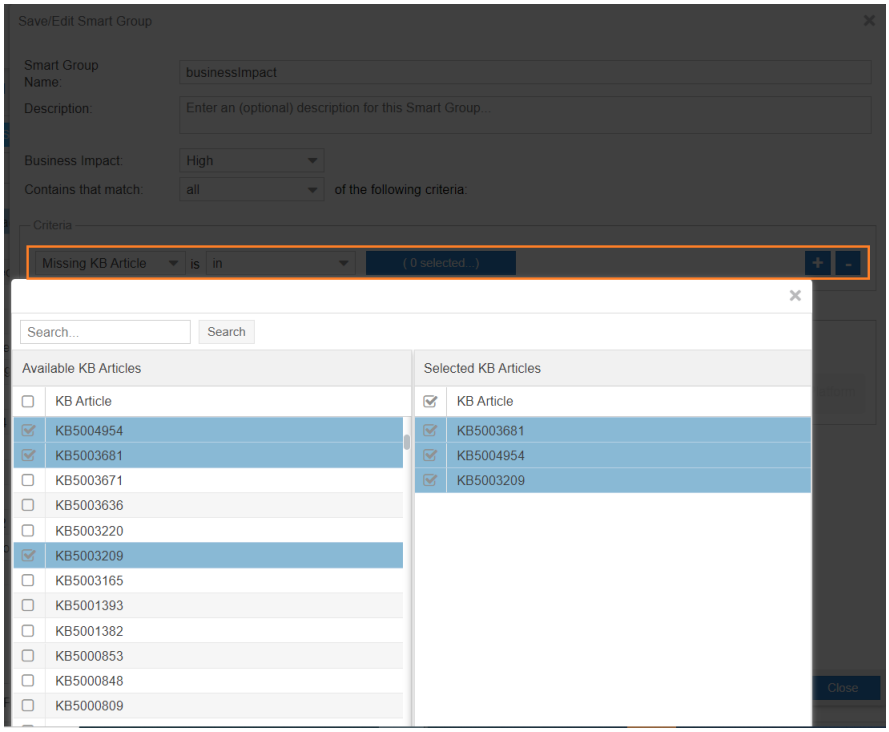
Use this page to view the information for each Host Smart Group you created. Right-click an item in the grid to view the scan result or delete the selected host.

Filter Host Smart Groups on missing Microsoft Knowledge Base (KB) articles

One option for filtering Host Smart Group information is by Microsoft KB articles to create a report of hosts that are missing one or several specific KB articles. This filtering can be used for new or existing Host Smart Groups.

Task ***To create a new Host Smart Group for missing Microsoft KB articles:***

1. Navigate to **Host Smart Groups** > **Create & Edit**.
2. In the **Criteria** field, select the **Missing KB Article** and the appropriate **in** or **Not in** option.
3. In the **KB Article Selection**, search for the available KB articles.
4. Place a check mark in front of the appropriate KB article to include in the Host Smart Group and click **Save**.

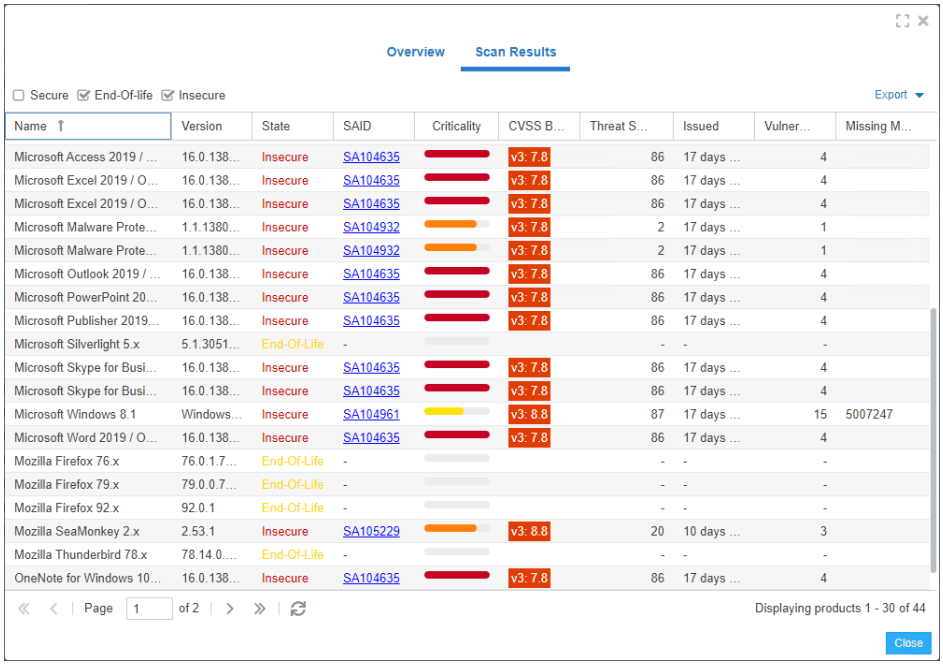


Important • *The following conditions affect the availability of selecting and listing missing Microsoft KB's.*

1. The selection of a particular KB in the **Available KB Articles** field is based on whether the PC's in the partition currently have a list of missing KB's.
2. When a new KB is released, it will appear using the **in** criteria filter after the scan is completed. To include future KB's, use the **Not in** filter and choose the oldest **Available KB Articles** list.
3. Only machines with missing KB's will be listed in the new host smart group. If a machine does not have any missing KB's, then the KB will not be listed in either the **in** or **Not in** filter.

Task ***To create a report of missing Microsoft KB articles:***

1. Navigate to the **Completed Scans** view.
2. Click **Export** to save the report as a CSV file.

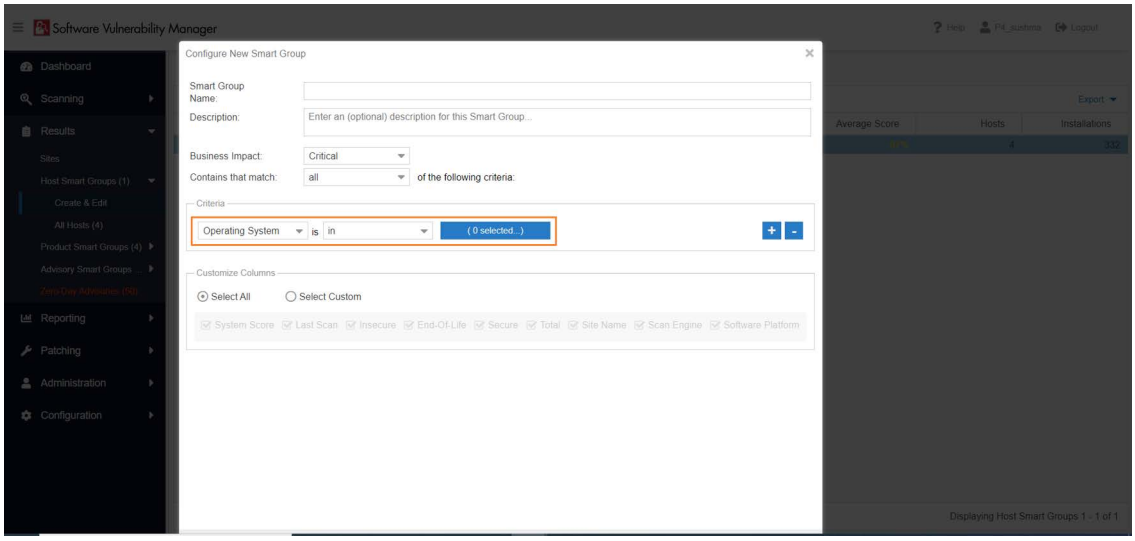


Filter Host Smart Groups on Operating System Build Version

One option for filtering Host Smart Group information is by Operating System Build. This filtering can be used for new or existing Host Smart Groups.

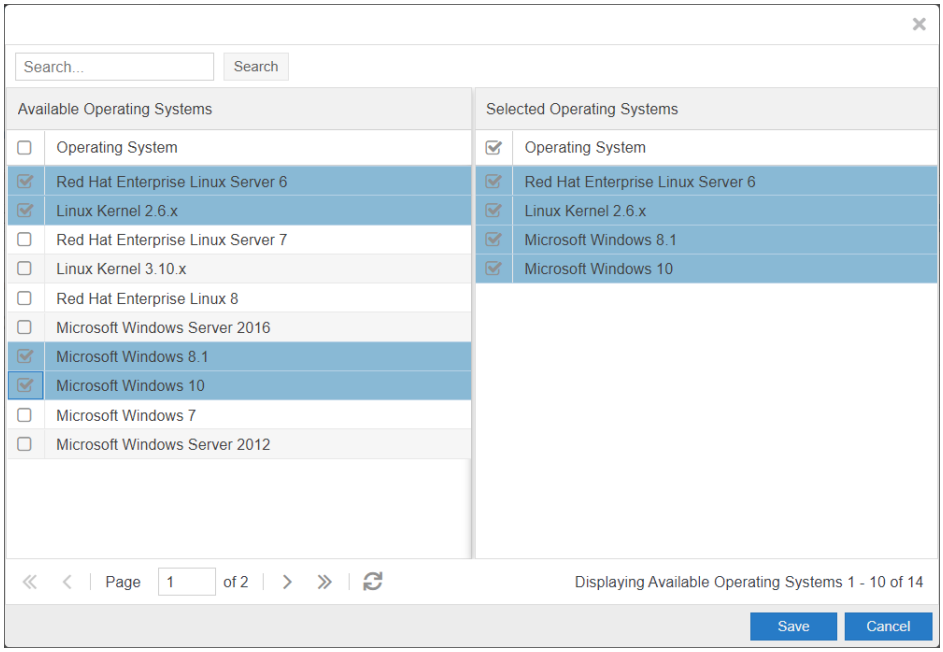
Task ***To create a new Host Smart Group for Operating System Build:***

1. Navigate to **Host Smart Groups** > **Create & Edit**.
2. In the **Criteria** field, select the **Operating System Build** and the appropriate **in** or **Not in** option.



3. In the **Operating System Build Selection**, search for the available Operating System Builds.

4. Place a check mark in front of the appropriate Operating System Builds to include in the Host Smart Group and click **Save**.



Product Smart Groups

This section describes how to:

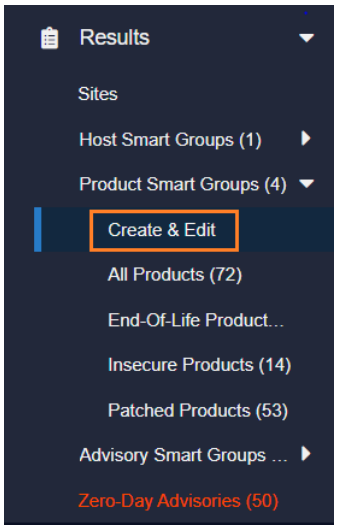
- Create a new Product Smart Group (See Create a New Product Smart Group)
- View existing configured Product Smart Groups (see Overview and Configuration)
- Configure new Product Smart Groups (see Configured Product Smart Groups)
- Filter Product Smart Groups on Operating System Build Version

Create a New Product Smart Group

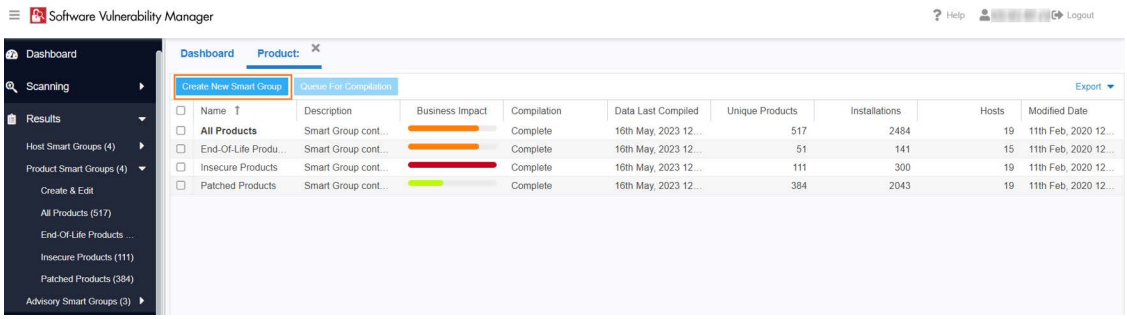
This page describes how to create a new Product Smart Group.

Task ***To create a new Product Smart Group:***

1. Navigate to **Product Smart Groups** > **Create & Edit**.



2. A list of created Product Smart Groups appears. To create a new Smart Group, click **Create New Smart Group** link. The **Configure New Smart Group** dialog box opens.



3. Enter the valid name in the **Smart Group Name** field.
4. Enter the description of the smart group (optional) in the **Description** field.
5. From the **Business Impact** list, select the type of impact you want to add. You have the following options:

Table 8-3 • Business Impact list

Impact Type	Description
Critical	This value is typically used for remotely exploitable vulnerabilities that can lead to system compromise. It resembles the red color.
High	This value is typically used for remotely exploitable vulnerabilities that can lead to system compromise. It resembles the orange color.

Table 8-3 • Business Impact list

Impact Type	Description
Medium	This value is typically used for remotely exploitable Denial of Service vulnerabilities and for vulnerabilities that allow system compromises but require user interaction. It resembles the yellow color.
Minor	This value is typically used for cross-site scripting vulnerabilities and privilege escalation vulnerabilities. It resembles the light green color.
Low	This value is typically used for very limited privilege escalation vulnerabilities and locally exploitable Denial of Service vulnerabilities. It resembles the green color.

6. From the **Criteria** list, select the type of smart group criteria you want to add. You have the following options:

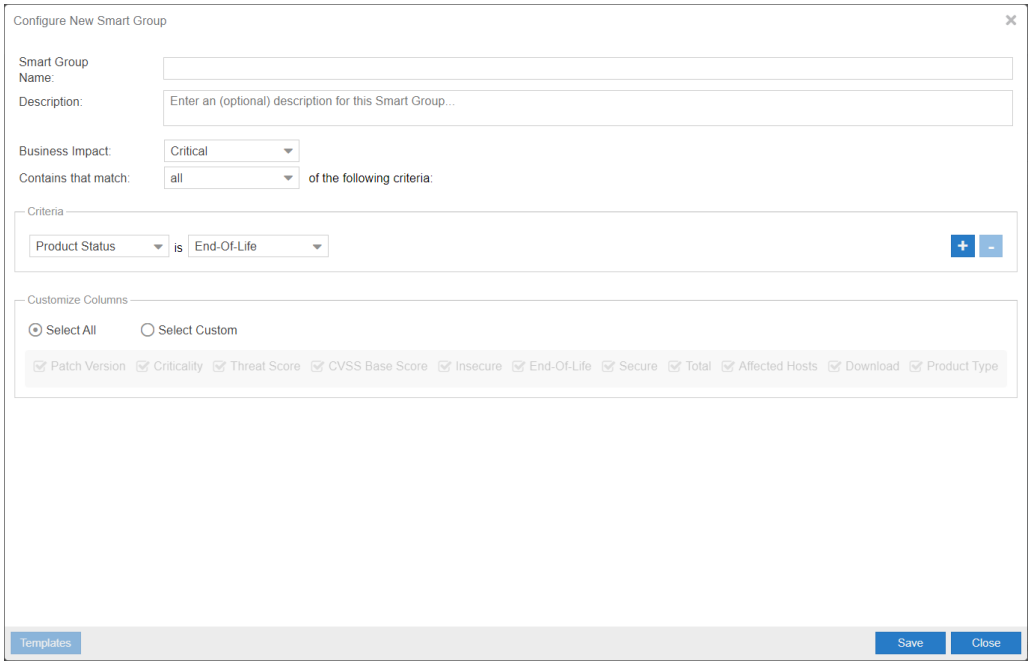
Table 8-4 • Product Smart Group Criteria Options

Smart Group Criteria	Description
Product Status	Filter by product status.
Criticality	Filter by criticality.
Threat Score	Filter by threat scores.
SAID Creation Date	Filter by SAILD creation date.
Last Scan Date	Filter by last scan date of the host.
Silent Installation	Filter by silent installation.
Site	Filter by site name.
Host	Filter by host name.
Product	Filter by product name.
System Platform	Filter by system platform.
Software Type	Filter by software type.
CVSS2 Score	Filter by CVSS2 score.
CVSS3 Score	Filter by CVSS3 score.
CVSS4 Score	Filter by CVSS4 score.
Product Name	Filter product name using **begins with**, **starts with**, **contains**, and **does not contain** condition. Then enter the Product name in the text field

Table 8-4 • Product Smart Group Criteria Options

Smart Group Criteria	Description
Host Name	Filter host name using **begins with**, **starts with**, **contains**, and **does not contain** condition. Then enter the Host name in the text field.
Site Name	Filter site name using **begins with**, **starts with**, **contains**, and **does not contain** condition. Then enter the Site name in the text field.
Vendor Name	Filter vendor name using **begins with**, **starts with**, **contains**, and **does not contain** condition. Then enter the Vendor name in the text field.
Operating System	Filter by operating system from selected list.
Operating System Build	Filter by specific version of the Operating System. Fore more information, see Filter Product Smart Groups on Operating System Build Version.

7. After updating the above fields, click **Save** button to create a new Product Smart Group.

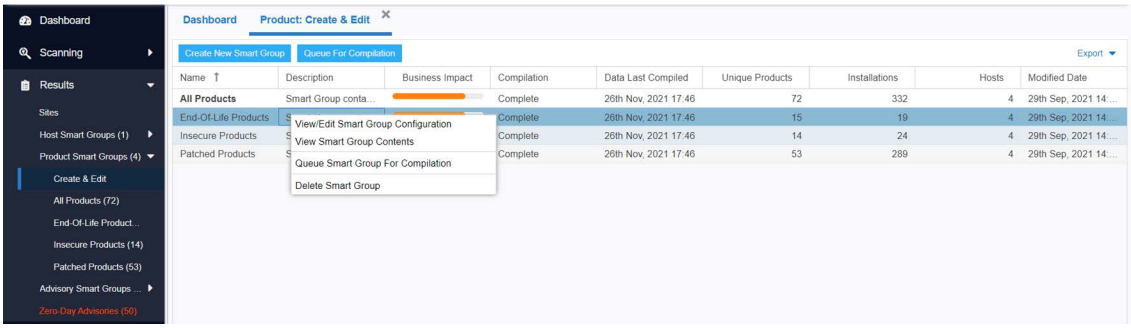


Overview and Configuration

Use this page to view the existing configured Product Smart Groups and to configure new Smart Groups. Right-click an item in the grid to view, edit, compile or delete the Smart Group. To filter Product Smart Groups by the Last Scan Date, see Last Scan Date for Product Smart Groups.

All Products is the default Smart Group and cannot be edited or deleted.

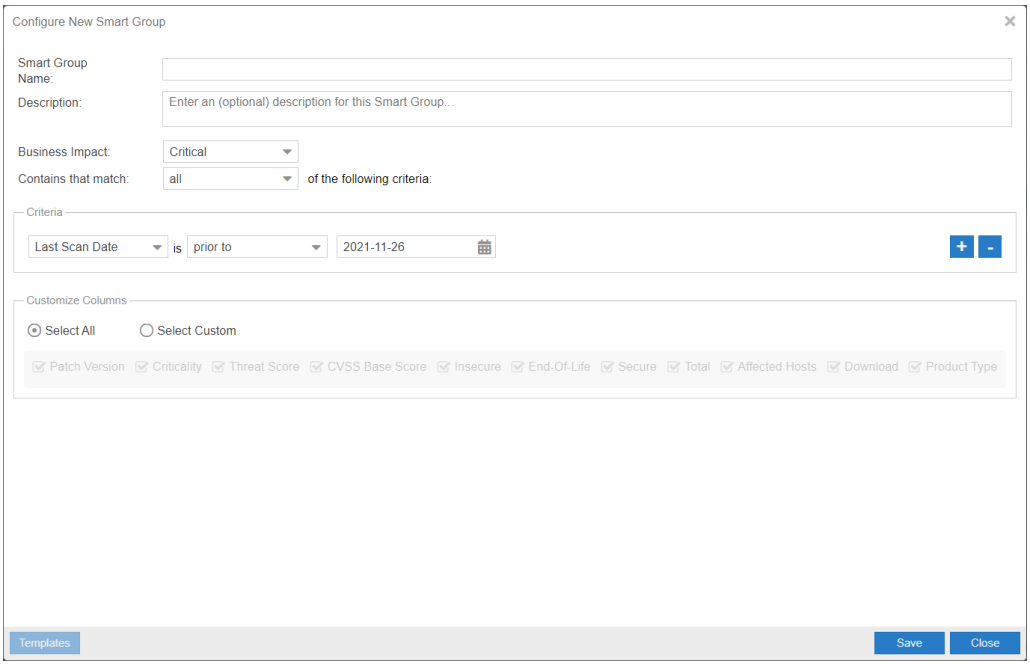
The other default Smart Groups for End-Of-Life Products, Insecure Products, and Patched Products have been pre-created for you by Flexera. You can right-click to view, edit, compile or delete these Smart Groups.



Last Scan Date for Product Smart Groups

Product Smart Groups can be filtered by **Last Scan Date**. This filter option lists products that were detected within a specified time interval using one of the following Last Scan Date options: exactly, prior to, after, older than, and within last.

For example: if machine1 was scanned on 26 November 2021 and a product was detected, then the product will be a result when searched using a Last Scan Date greater than 25 November 2021.



Configured Product Smart Groups

Use this page to view the information for each Product Smart Group you created. You can also add extended support for the End-of-Life Products.

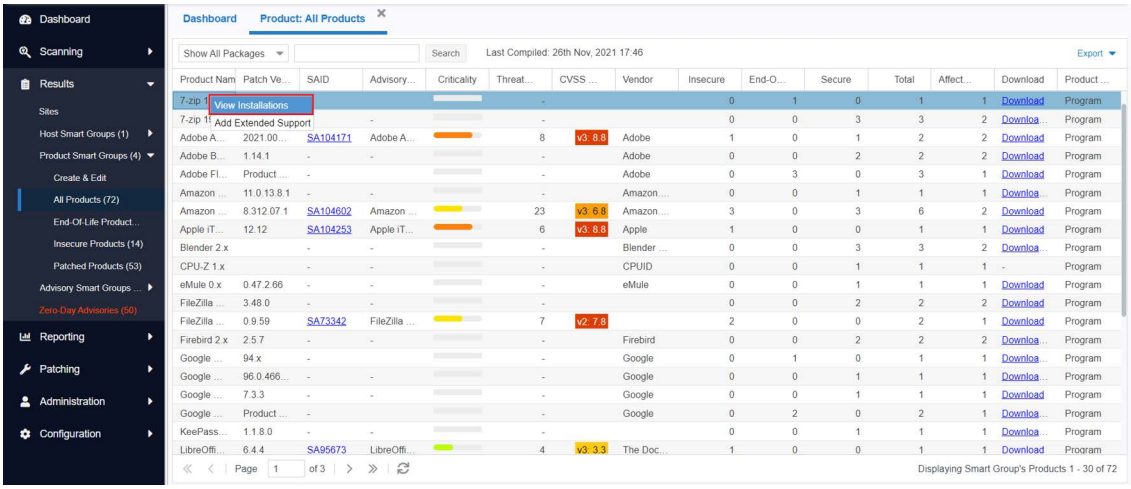
Right-click a product you can see the following menu options:

- View Installations

- Add Extended Support

View Installations

To see the installation details of a product in the Product Smart Groups, right-click a product in the grid and select **View Installations** from the menu option to display the installation details.

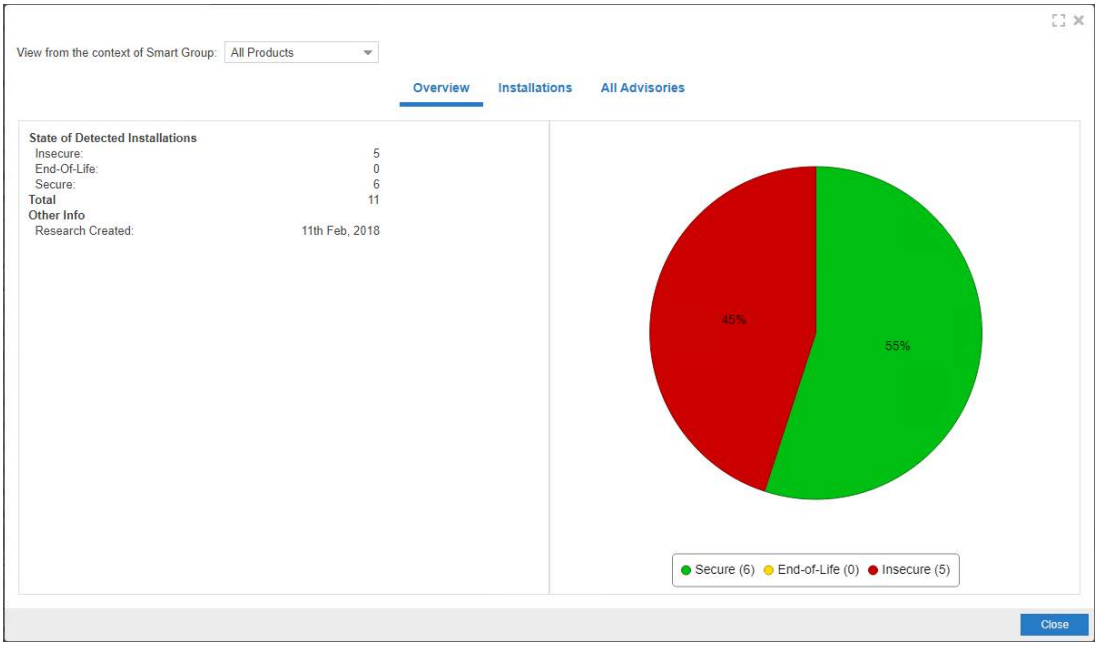


A dialog box opens with the following tabs:

- Overview
- Installations
- All Advisories

Overview

Provides the details of State of Detected Installations with a pie chart representation.



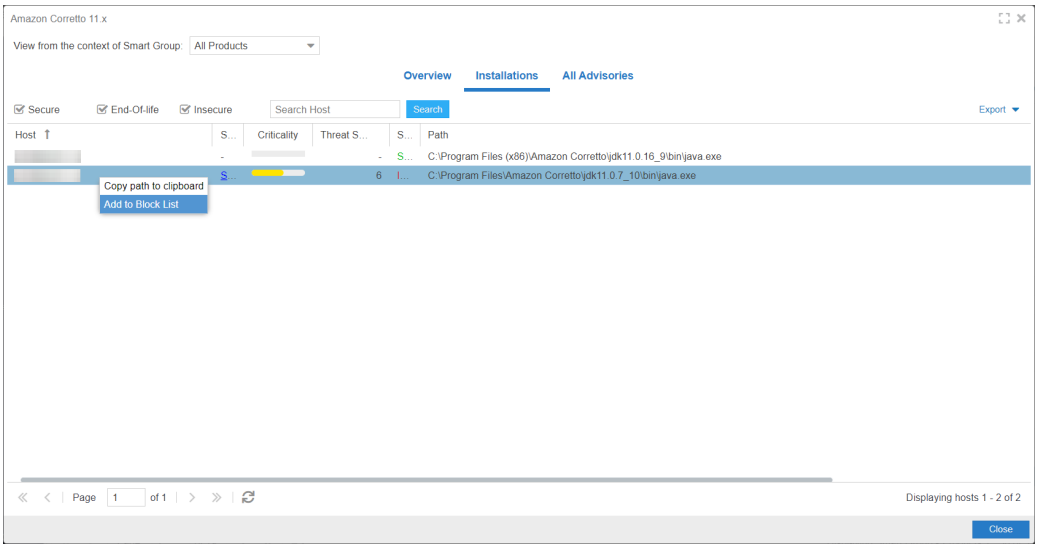
Installations

Provides the list of Host machines where product is installed.

Enter keywords in the **Search** box to search the matching host in the grid.

Copy selected host paths to the clipboard by right click on the row and choose **Copy path to clipboard**.

To add desired host to the Block list, right click on the row and choose **Add to Block List**.



All Advisories

Provides the list of Secunia Advisory ID and its criticality details.

Note • *For RedHat Linux 7, and Microsoft products updating via KB will have blank Patched version in Product Smartgroups.*

Add Extended Support

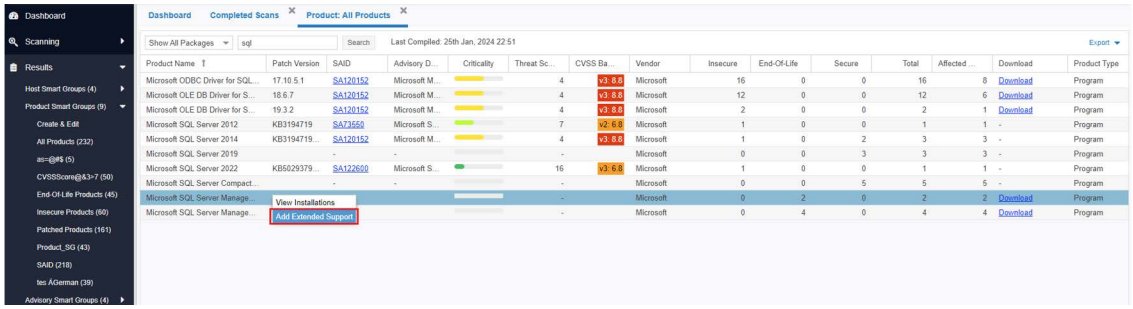
In this page you can configure Extended Security Updates (ESUs) for End-of-Life Products. The Extended Security Update (ESU) is an option run certain legacy products end of support.

The Extended Security Update (ESU) allows you to override an End-of-Life status to Secure/Insecure for the selected products. In this page you can add extended for the End-of-Life products.

To add extended support for the End-of-Life products, perform the following steps:

Task ***To add extended support for the End-of-Life products:***

1. In the **Results > Product Smart Groups** view, right click on an End-of-Life product, and then select **Add Extended Support** from the menu option.



   The dialog box opens.

2. In the **Extended Security Updates (ESU) Date** field, select the required date from the calendar list.
3. In the **Available Sites**, select required sites by clicking on the check box. You can see the selected sites in the right side of that section.

   Note • *Multiple sites can be selected*

4. In the **Available Hosts**, select required hosts by clicking on the check box. You can see the selected sites in the right side of that section.

   Note • *Multiple hosts can be selected.*

5. Upon adding the required details, click **Save** button.
6. Extended support added for the selected product can be seen in the **Scanning > Filter Scan Results> Extended Support**.
7. You can view override End-of-Life status to Secure/Insecure for the selected product in Scan Results, Smart Groups, and Reports.

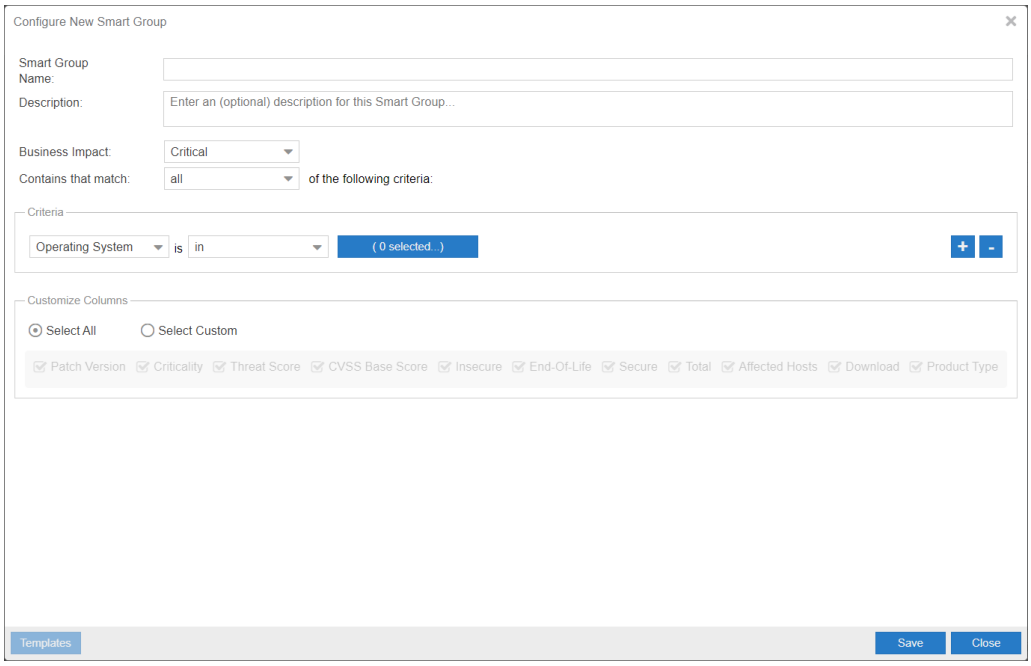
Note • *When No Sites or Hosts are selected, then ESU is applicable for all the hosts and sites.*

Filter Product Smart Groups on Operating System Build Version

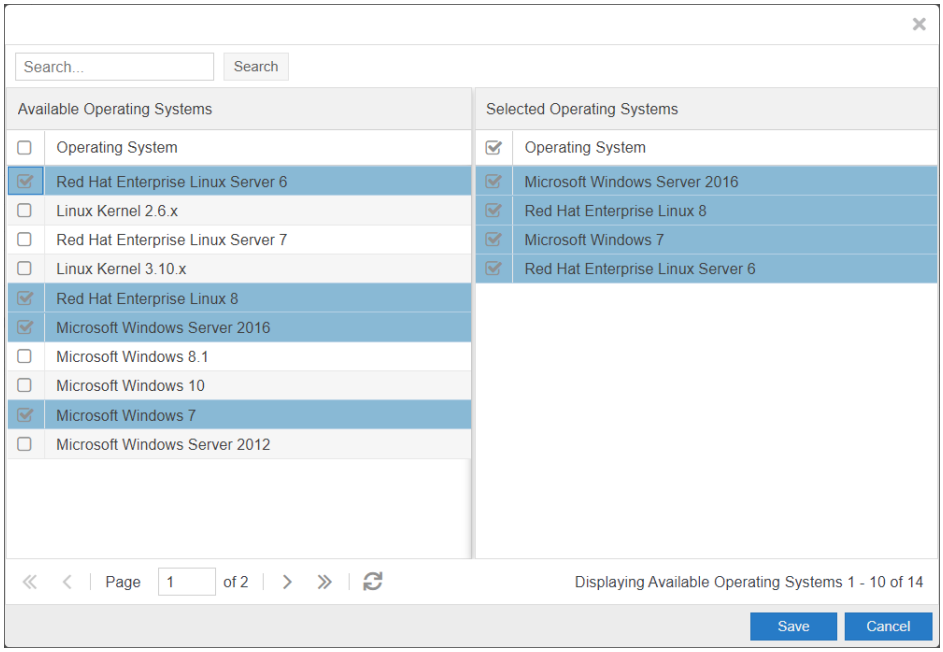
One option for filtering Product Smart Group information is by Operating System Build. This filtering can be used for new or existing Product Smart Groups.

Task ***To create a new Product Smart Group for Operating System Build:***

1. Navigate to **Product Smart Groups** > **Create & Edit**.
2. In the **Criteria** field, select the **Operating System Build** and the appropriate **in** or **Not in** option.



3. In the **Operating System Build Selection**, search for the available Operating System Builds.
4. Place a check mark in front of the appropriate Operating System Builds to include in the Product Smart Group and click **Save**.



Advisory Smart Groups

This section describes how to:

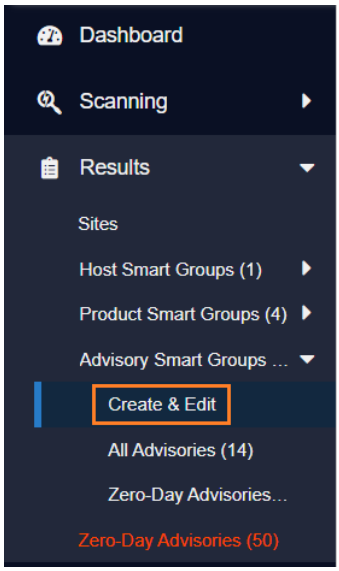
- Create a new Advisory Smart Group (See Create a New Advisory Smart Group)
- View existing configured Advisory Smart Groups (see Overview and Configuration)
- Configure new Advisory Smart Groups (see Configured Advisory Smart Groups)

Create a New Advisory Smart Group

This page describes how to create a new Advisory Smart Group.

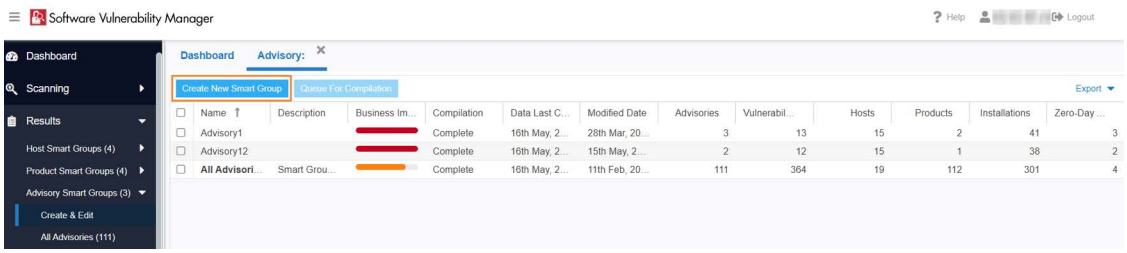
Task ***To create a new Advisory Smart Group:***

1. Navigate to **Advisory Smart Groups > Create & Edit**.



2. A list of created Advisory Smart Groups appears. To create a new Smart Group, click **Create New Smart Group** link.

   The **Configure New Smart Group** dialog box opens.



3. Enter the valid name in the **Smart Group Name** field.
4. Enter the description of the smart group (optional) in the **Description** field.
5. From the **Business Impact** list, select the type of impact you want to add. You have the following options:

Impact Type	Description
Critical	This value is typically used for remotely exploitable vulnerabilities that can lead to system compromise. It resembles the red color.
High	This value is typically used for remotely exploitable vulnerabilities that can lead to system compromise. It resembles the orange color.
Medium	This value is typically used for remotely exploitable Denial of Service vulnerabilities and for vulnerabilities that allow system compromises but require user interaction. It resembles the yellow color.

Impact Type	Description
Minor	This value is typically used for cross-site scripting vulnerabilities and privilege escalation vulnerabilities. It resembles the light green color.
Low	This value is typically used for very limited privilege escalation vulnerabilities and locally exploitable Denial of Service vulnerabilities. It resembles the green color.

6. From the **Criteria** list, select the type of smart group criteria you want to add. You have the following options:

Smart Group Criteria	Description
Criticality	Filter by criticality.
Threat Score	Filter by threat scores.
Advisory Published	Filters by Advisory published date.
Zero-Day Status	Filters by zero-day or non-zero day.
Impact Type	Filters by Impact type of the advisory.
Attack Vector	Filters by on attack vector.
CVSS Base Score	Filters by CVSS2 or CVSS3 or CVSS4 score.
Solution Status	Filters by solution Status.
CVSS2 Score	Filters by CVSS2 score.
CVSS3 Score	Filters by CVSS3 score.
CVSS4 Score	Filters by CVSS4 score.

7. After updating the above fields, click **Save** button to create a new Advisory Smart Group.

Overview and Configuration

Use this page to view the existing configured Advisory Smart Groups and to configure new Smart Groups.

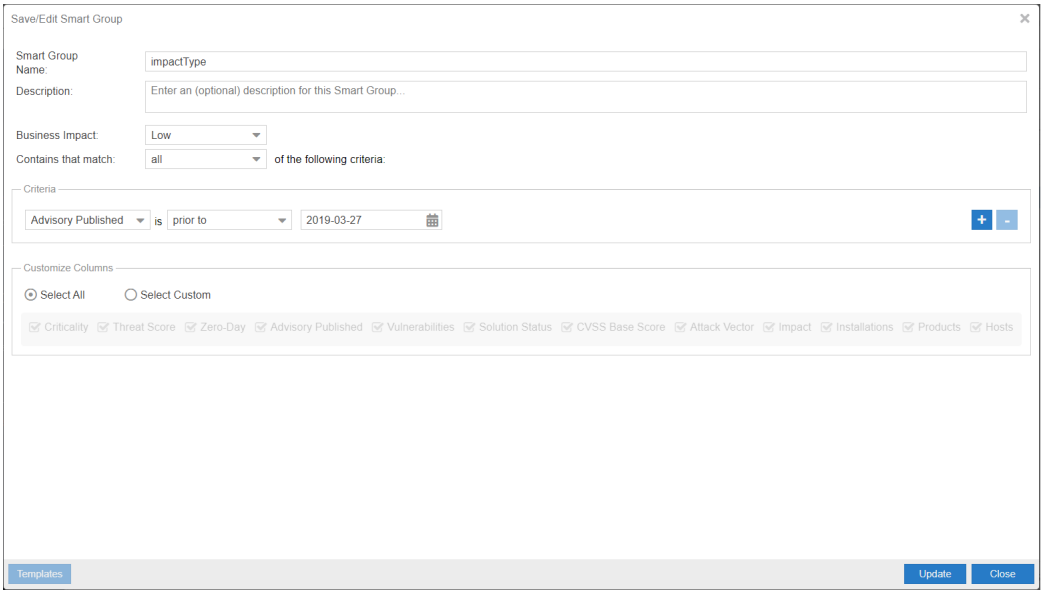
All Advisories is the default Smart Group and cannot be edited or deleted. For further details, see View/Edit Smart Group Configuration.

Zero-Day Advisories reference a vulnerability that is actively exploited prior to its disclosure. These advisories can be filtered by **Advisories that Affected You** and **All Advisories**.

View/Edit Smart Group Configuration

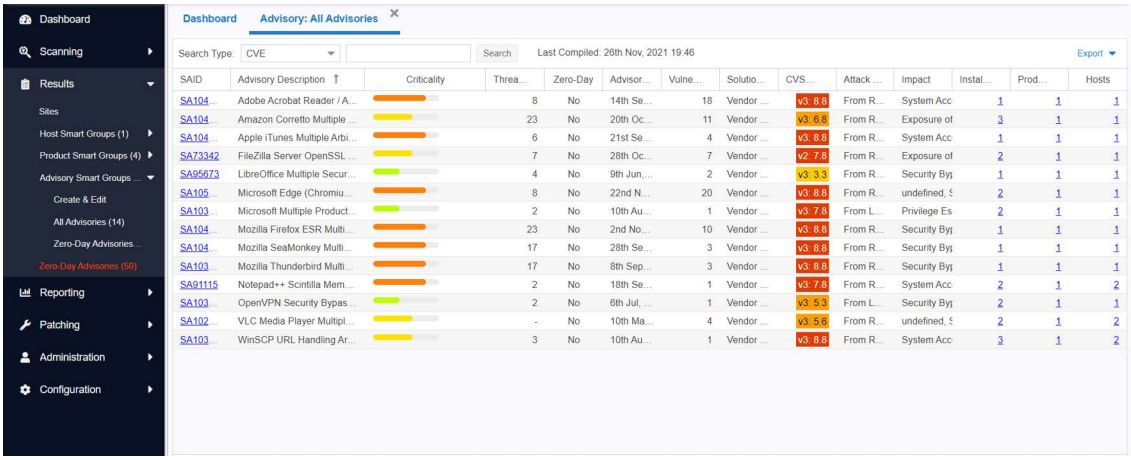
For each Smart Group, you can create or edit the advisory criteria using the Zero-Day Status and Advisory Published criteria. Both criteria include dates, which are created using the Coordinated Universal Time (UTC). Therefore, the local zone date of the user could be different from the zone the advisory data was saved in, which may lead to a difference in advisory lists.

In the **View/Edit Smart Group** menu, you can filter results by date for the following criteria: Advisory Published, Last Scan Date, and Secunia Advisory ID (SAID) Creation Date. This filtering by date creates a list of all Advisories published on that date.



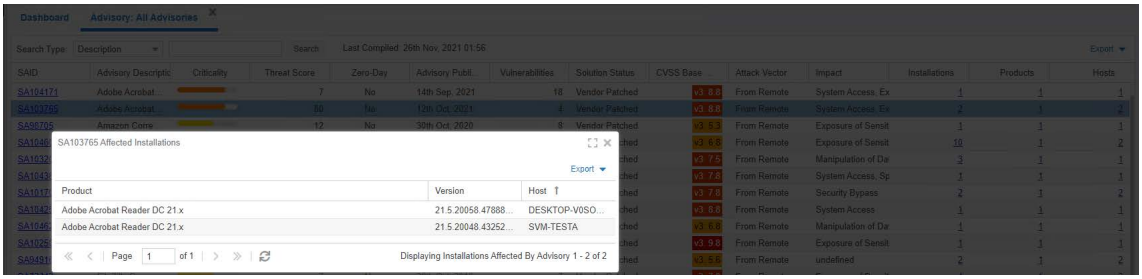
Configured Advisory Smart Groups

Use this page to view the information for each Advisory Smart Group you created. Click a Secunia Advisory ID **(SAID)** in the grid to display the details. For further details, see View All Advisories.

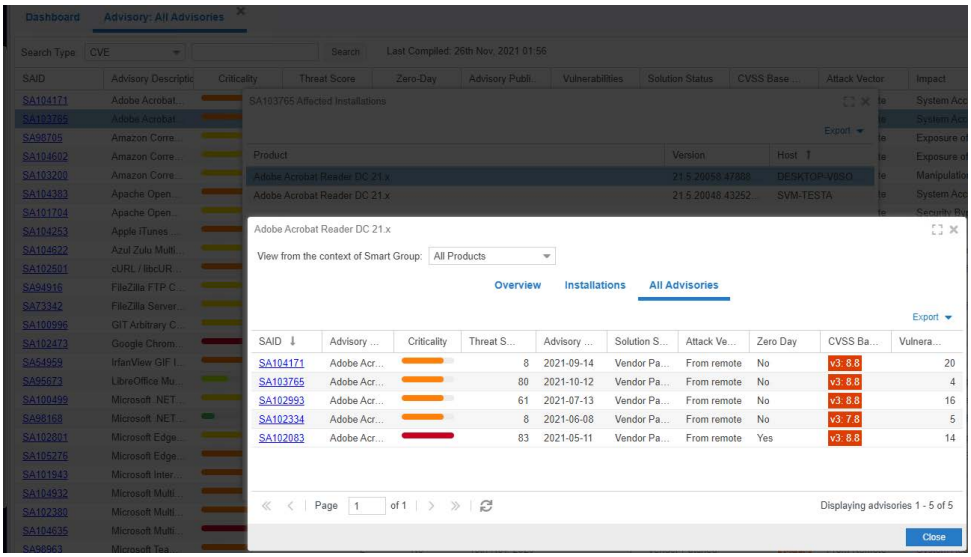


View All Advisories

Under the **Configured Advisory Group** view is a listing of All Advisories. For each advisory, you can click the corresponding number listed in the **Installations**, **Products**, and **Hosts** columns. After clicking the number in the **Installations** column, you will see a list of affected installations per host.



The All Advisories list affecting a product shows all current and past advisories that affect a product. Note that the Secunia Advisory ID number (SAID) listed under the **SAID** column could be related to different platforms.



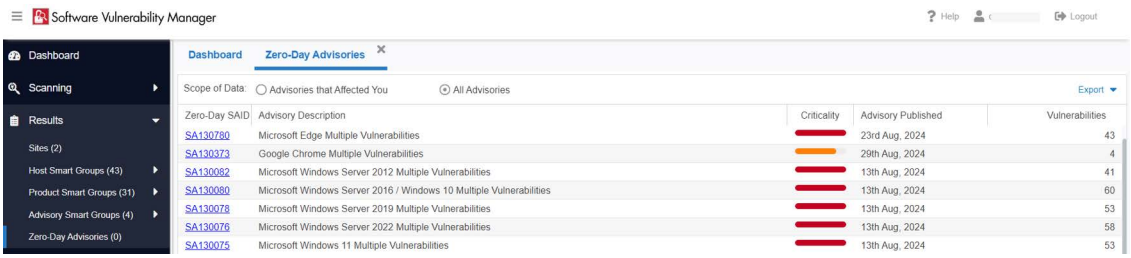
Zero-Day Advisories

Zero-Day Advisories reference vulnerabilities that are actively exploited before their disclosure. These advisories can be filtered by two categories:

- **Advisories that Affected You:**
  - Shows a filtered list of zero-day advisories that have specifically impacted your environment.
  - Includes both current and historic advisories relevant to your systems.
  - Helps focus on actionable vulnerabilities that need immediate attention.
- **All Advisories:**
  - Displays a comprehensive list of all known zero-day advisories.
  - Provides an overview of vulnerabilities, regardless of whether they directly affect your environment.

By clicking on any SAID, a popup appears with the CVE, CVSS scores, affected software's, and other advisory details.

- Clicking CVE Reference link navigates to the cve.mitre.org website for cybersecurity vulnerabilities information.
- Clicking Secunia Advisory Details links navigates to external Websites for additional details.


Software Vulnerability Manager
Help
Logout
Dashboard
Scanning
Results
Sites (2)
Host Smart Groups (43)
Product Smart Groups (31)
Advisory Smart Groups (4)
Zero-Day Advisories (0)
Dashboard
Zero-Day Advisories
Scope of Data:
Advisories that Affected You
All Advisories
Export
Zero-Day SAID
Advisory Description
Criticality
Advisory Published
Vulnerabilities
SA130780 Microsoft Edge Multiple Vulnerabilities 23rd Aug, 2024 43
SA130373 Google Chrome Multiple Vulnerabilities 29th Aug, 2024 4
SA130082 Microsoft Windows Server 2012 Multiple Vulnerabilities 13th Aug, 2024 41
SA130080 Microsoft Windows Server 2016 / Windows 10 Multiple Vulnerabilities 13th Aug, 2024 60
SA130078 Microsoft Windows Server 2019 Multiple Vulnerabilities 13th Aug, 2024 53
SA130076 Microsoft Windows Server 2022 Multiple Vulnerabilities 13th Aug, 2024 58
SA130075 Microsoft Windows 11 Multiple Vulnerabilities 13th Aug, 2024 53

9

Reporting

This chapter describes the following Software Vulnerability Manager reporting features:

- Report Configuration
- Smart Group Notifications
- Activity Log Notifications
- Database Access
- Scheduled Exports

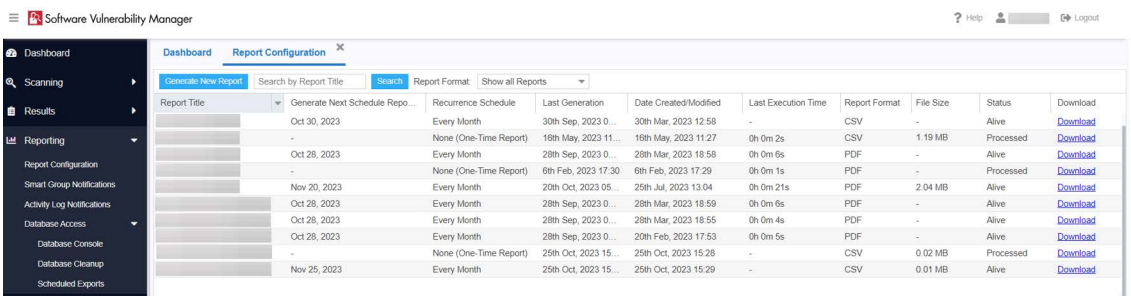
Report Configuration

Use this page to view a list of reports that have been configured and scheduled for generation.

You can configure a new report by clicking **Generate New Report** or right-click an existing report to view, edit or delete it. For more information, see Generate a New Report. The Software Vulnerability Manager reporting capabilities allow the user to schedule and fully customize the intended report.

In the **Search by Report Title** field, you can enter keywords in the **Search by Report Title** search box to find the matching entries in the grid.

In the **Report Format** drop down field, you can search for reports either by **Show all Reports** or **Recurring** or **One Time** or **PDF** or **CSV**.

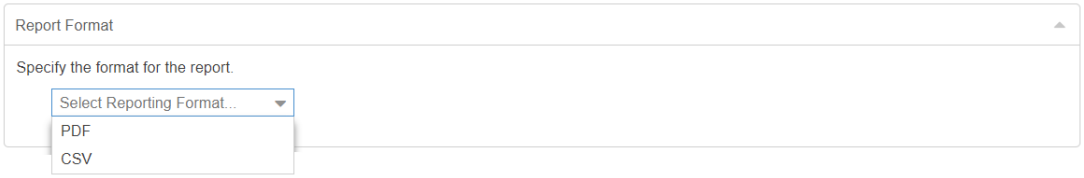


Generate a New Report

Use this page to view and generate a new report. Perform the following steps to generate a new report.

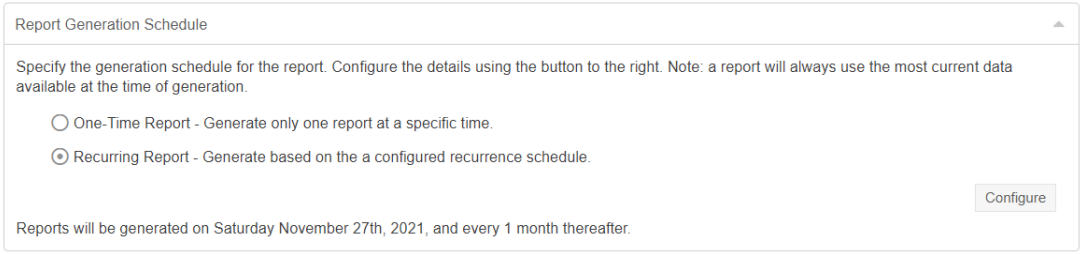
Task ***To generate a report:***

1. In the Report Configuration grid under Reporting, click **Generate New Report** button. The Configure New Report dialog box appears.
2. In the Report Format, choose either PDF or CSV as the format for the report.

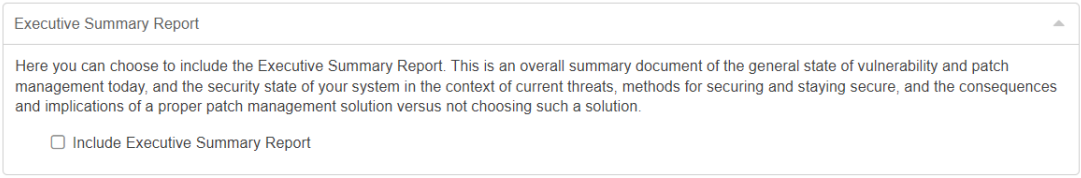


Note • *When using the CSV option for the report format, unused options are disabled. For more information, see Select the CSV Option for the Report Format.*

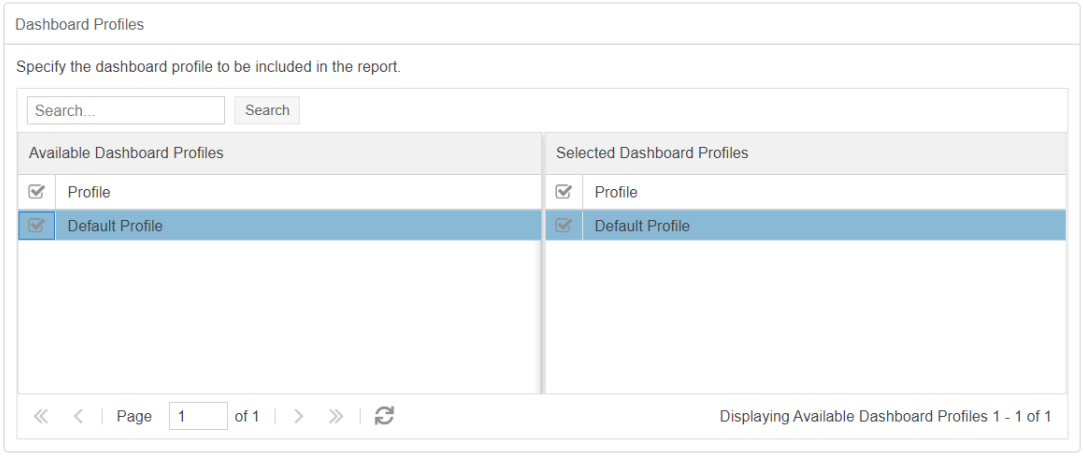
3. In the Report Generation Schedule, choose either a One-time only report or a recurring one (daily, weekly, monthly), and then click **Configure** to select the report distribution date or frequency schedule.



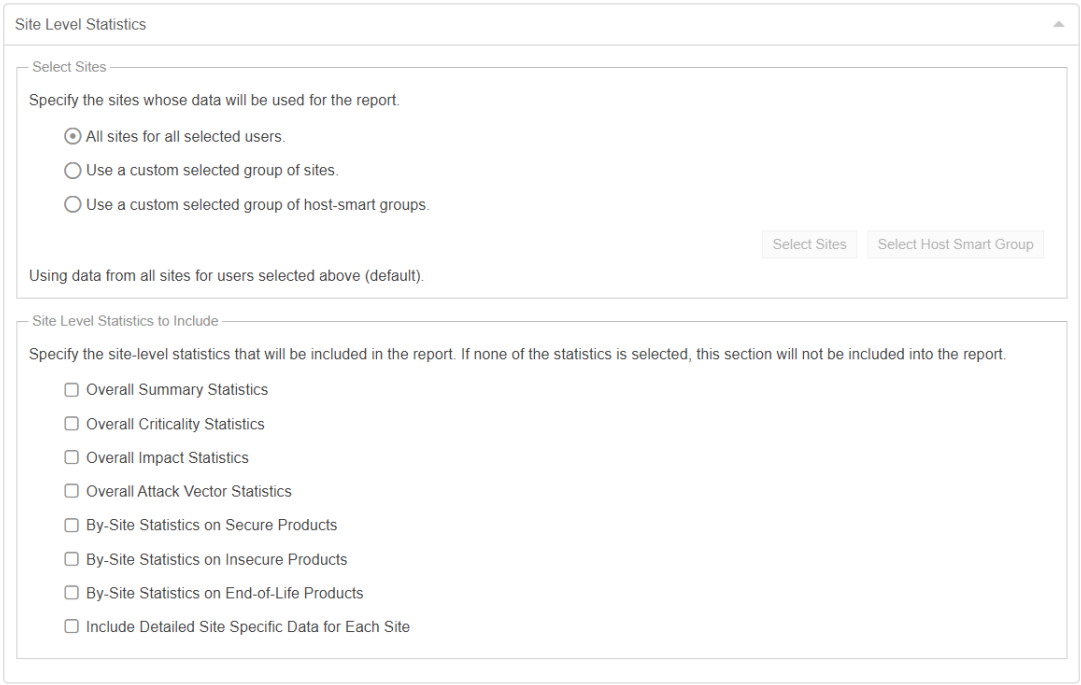
4. In the Execute Summary Report, select the **Include Executive Summary Report** check box which provides an overall summary with the general state of vulnerability and patch management.



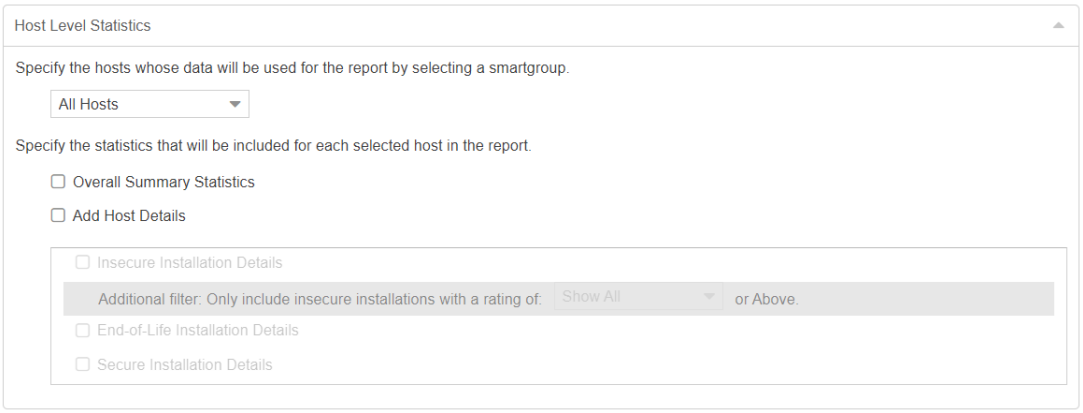
5. Choose the dashboard profile to be included in the report.



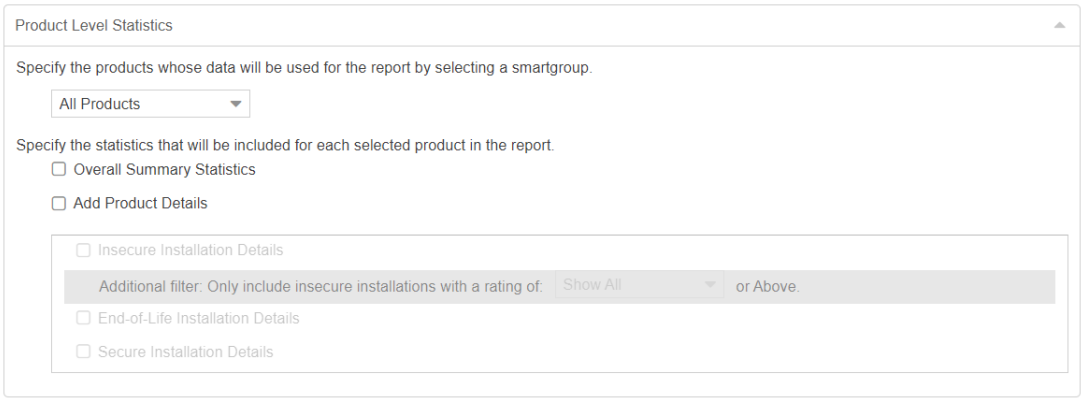
6. Choose which sites should be included together with which statistics to include.



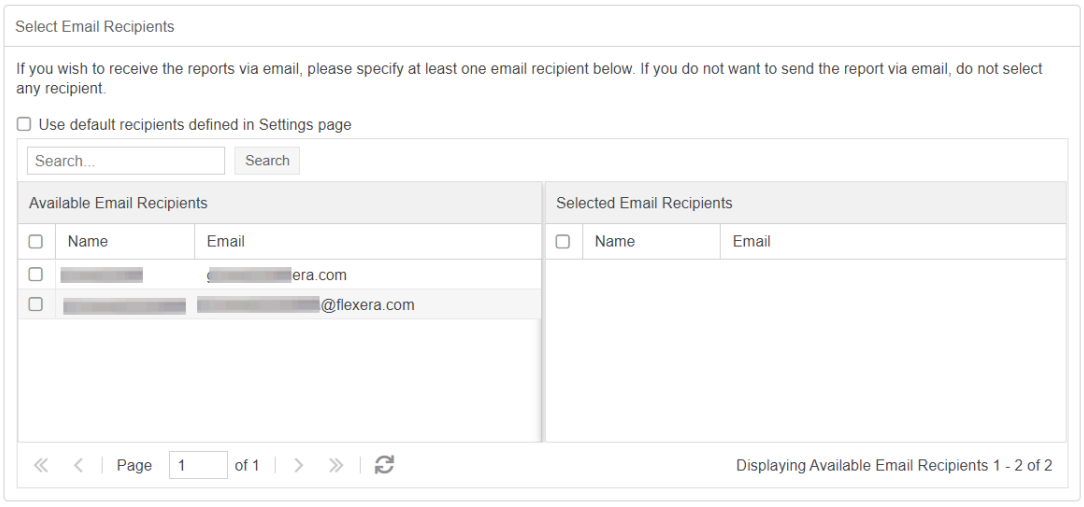
7. Choose a Host Smart Group to be included together with which statistics to include.



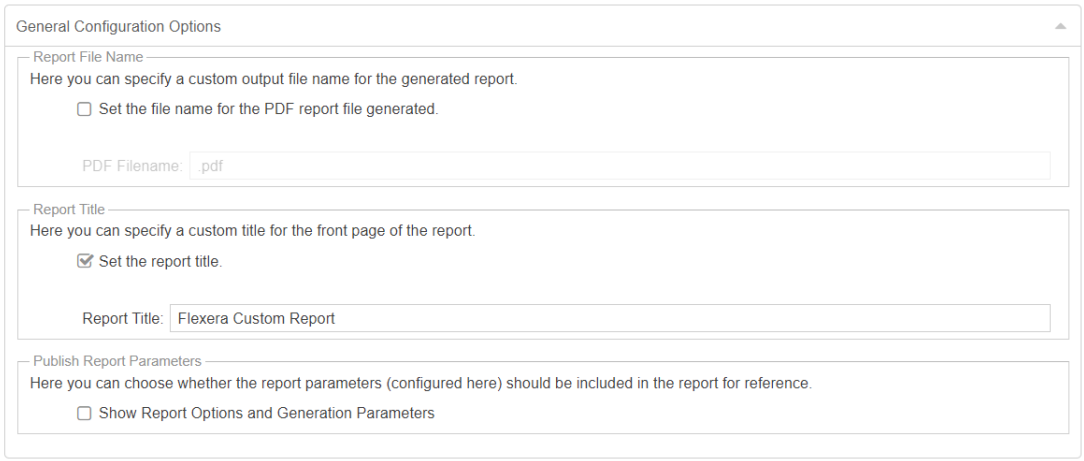
8. Choose a Product Smart Group to be included together with which statistics to include.



9. Choose the email address of the person(s) receiving the report or, if you do not want to send the report via email, do not select any recipients.



10. Choose the name for the PDF file, set the report title, and specify if you would like to include the report parameters in the report itself. All the reports available through this feature are provided in a PDF format and will be emailed to the defined email addresses in accordance with the schedule and recurrence specified. Once generated, a report can also be downloaded directly from the main page.

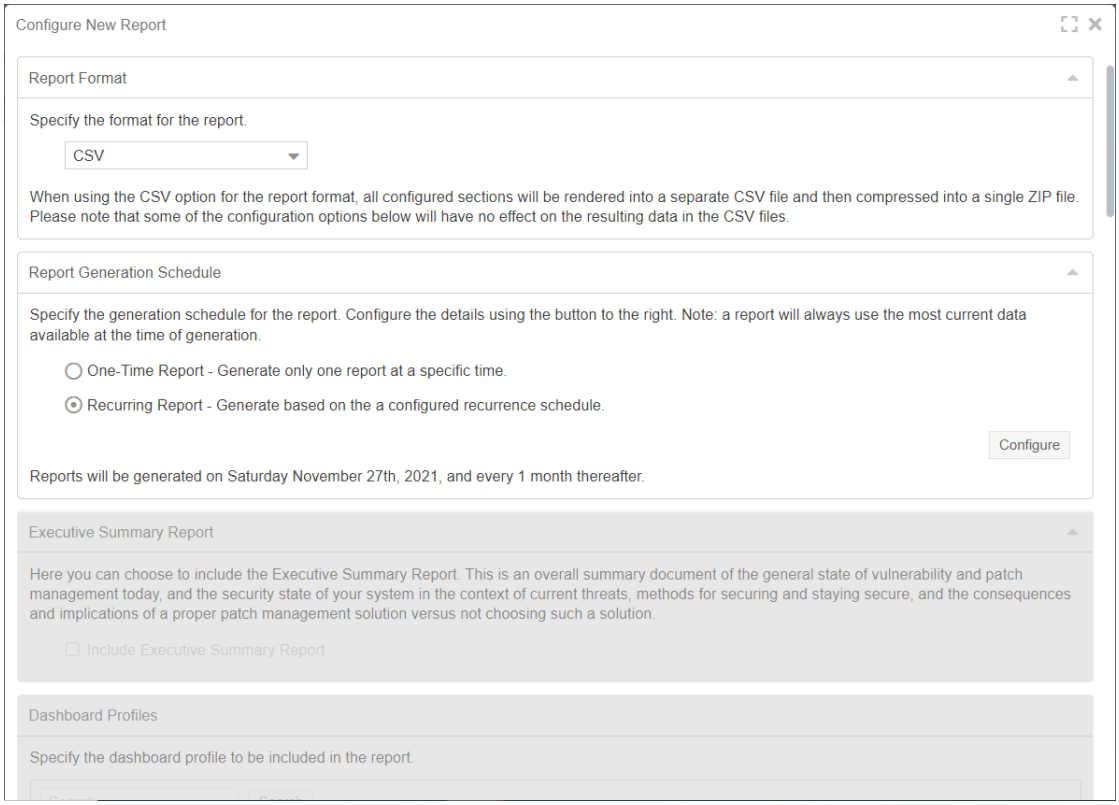


Important • *The emails containing the PDF reports will be sent from the Flexera Data Cloud - no-reply@flexerasoftware.com. Be aware that the email server from the recipient may block/filter the email if, for example, the size of the attachment exceeds a certain pre-defined threshold. If no email is being received, please check the email Spam filter and/or the Junk folder in the email client.*

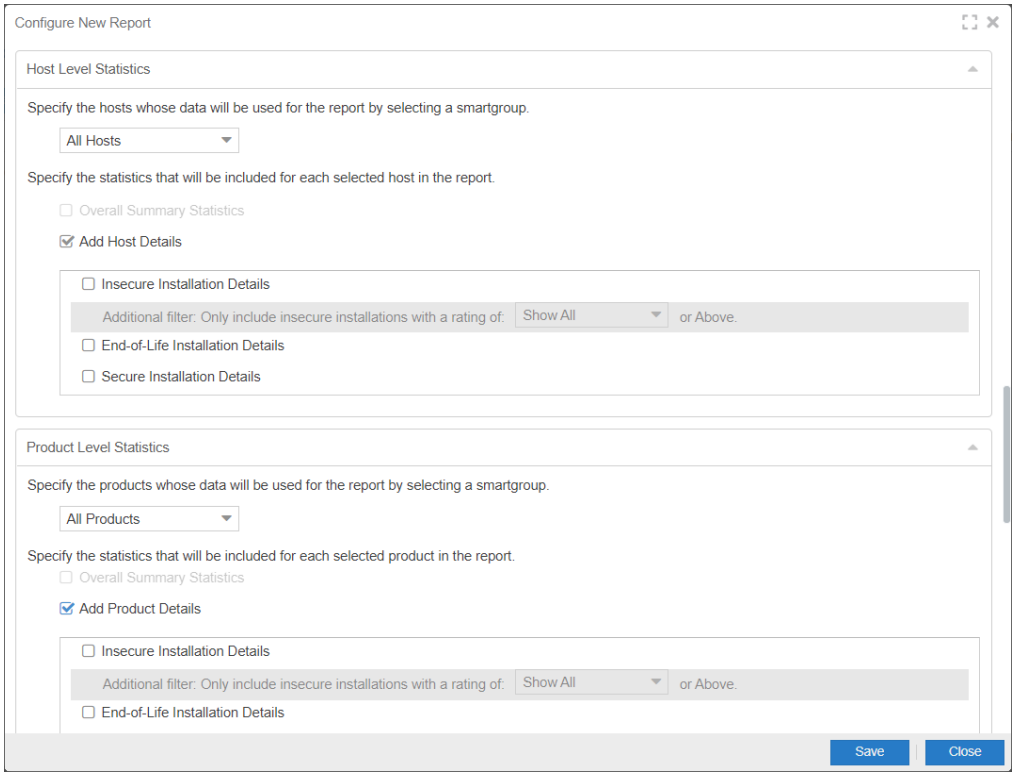
Select the CSV Option for the Report Format

When you select the CSV option for the report format, the following sections and options are disabled:

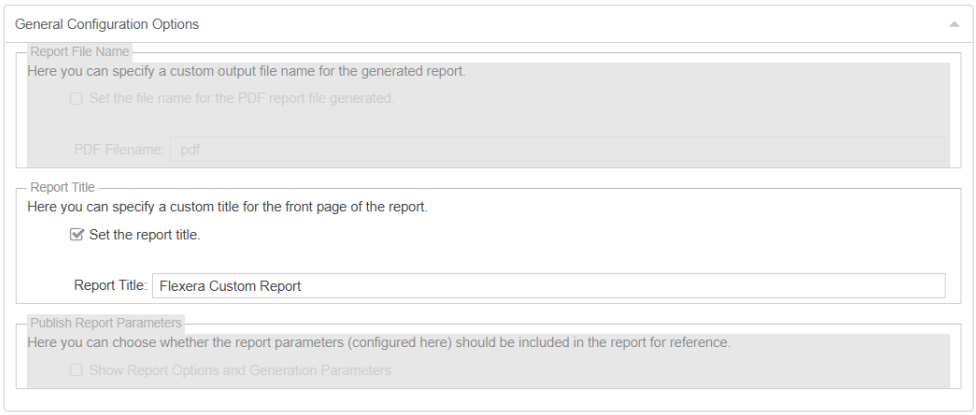
- **Executive Summary Report**, **Dashboard Profiles**, **Site Level Statistics**, and Overall Summary Statistics Check box for both **Host Level Statistics** and **Product Level Statistics** are disabled.



- Insecure Installation Details for both **Host Level Statistics** and **Product Level Statistics** are enabled only when you select **Add Product Details** and **Add Host Details** respectively.



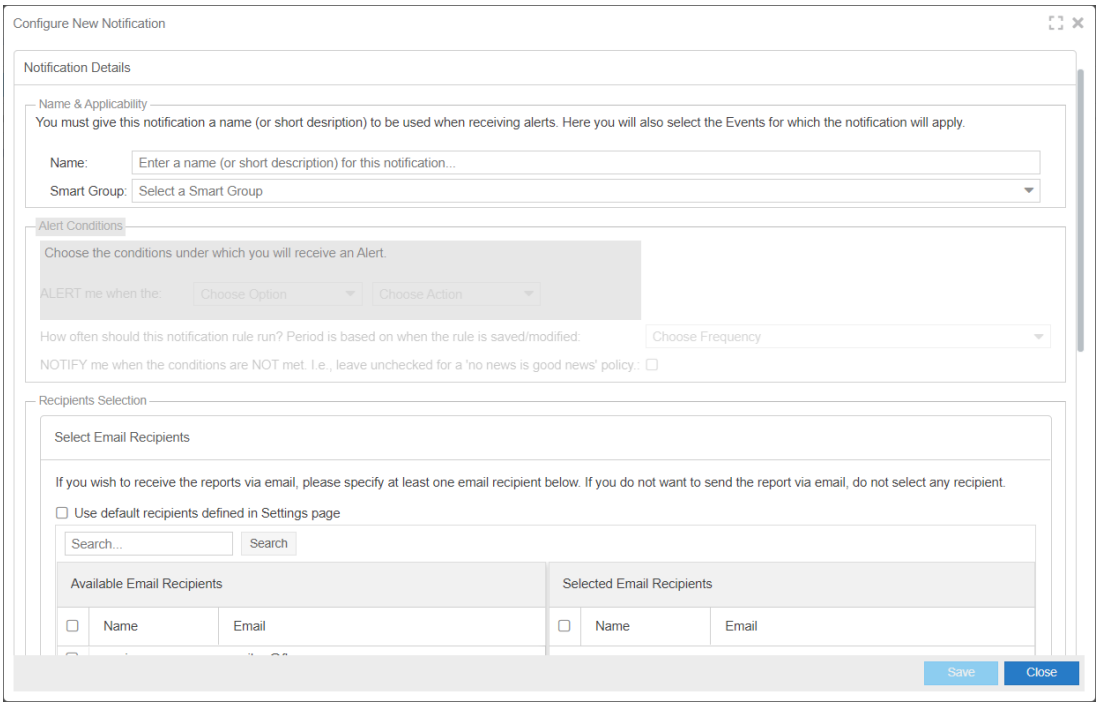
- **PDF Filename** tab and **Publish Report Parameters** sections are disabled.



Smart Group Notifications

Use this page to create and configure reminders, notifications, and alerts for a Smart Group based on the current state or changes to a group.

Click **Configure New Notification**, enter the required information and then click **Save**.



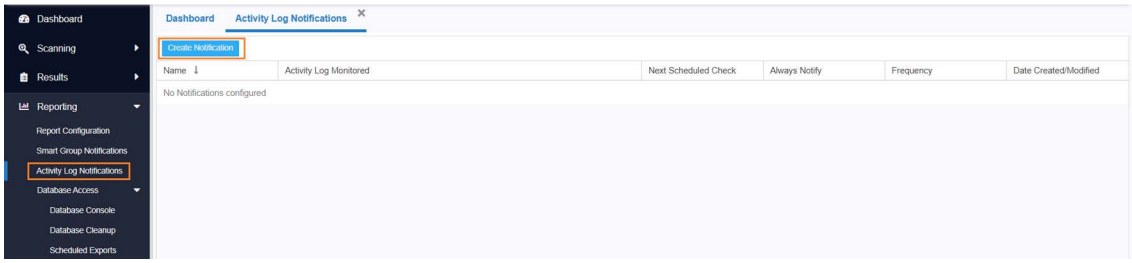
Activity Log Notifications

Use this page to schedule multiple notification digest for the respective events through emails.

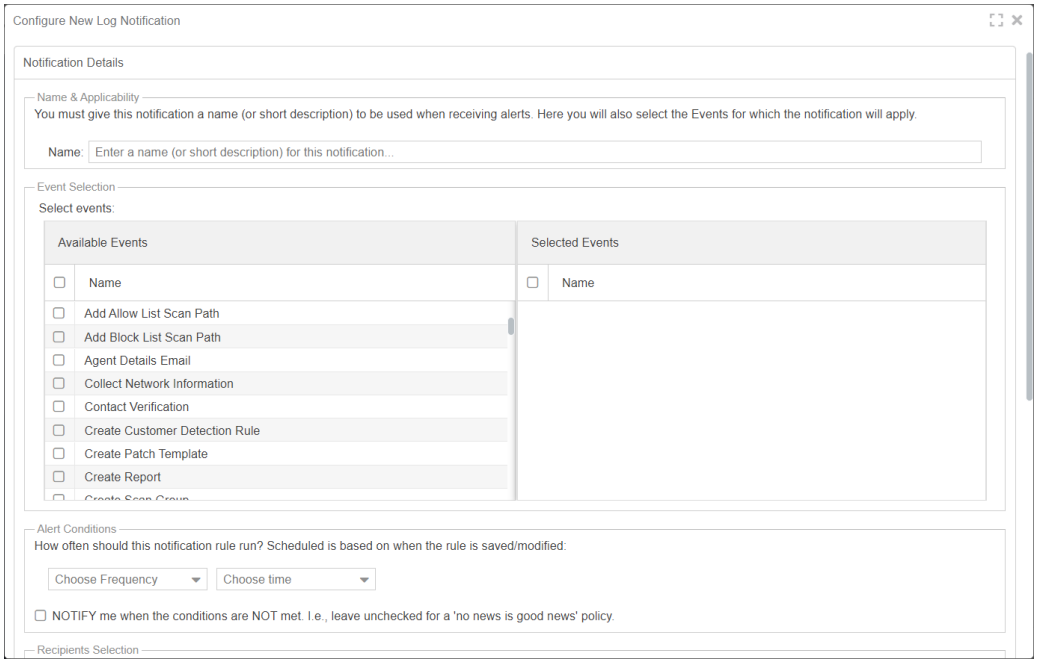
Creating Notifications for the Activity Log

Task ***To create Notifications:***

1. Click **Create Notification**. The **Configure New Log Notifications** dialog box opens.



2. Describe notification name, select the required events, and then select notification schedules.
3. These email notifications can be scheduled on an **Hourly**, **Daily**, **Weekly**, or **Monthly** basis. If you select **Daily**, or **Weekly**, or **Monthly** option, then you choose the time duration for the selected day.
4. Choose the recipients and then click **Save**.



Database Access

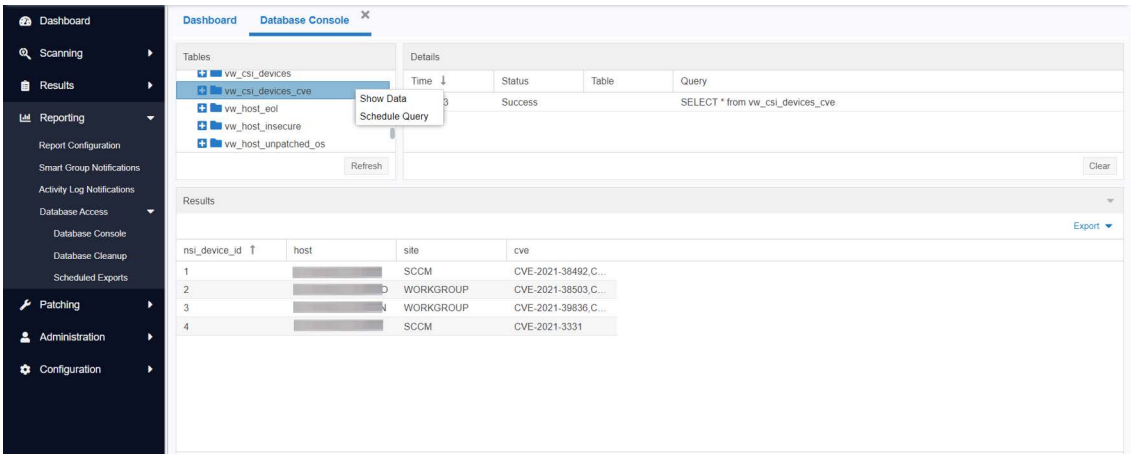
- To access Flexera's SQL database, see Database Console.
- To delete hosts from your Software Vulnerability Manager account by configuring rules that check for certain criteria, see Database Cleanup.

Database Console

Use this page to access Flexera's SQL database. You can access the content of each table by selecting the table name in the Tables pane. Expand the table name to view the objects and data types within that table.

To create an SQL query, right-click a table and select Show Data to automatically create a SELECT * FROM table query from the specific table. You can also right-click a table and select Schedule Query to create Scheduled Exports for the table and save the output to a CSV file.

The Details and Results panes display the status of the query.



Summary of the SQL Data in the Database Console Tables

The following table lists the SQL Data in the Database Console Tables:

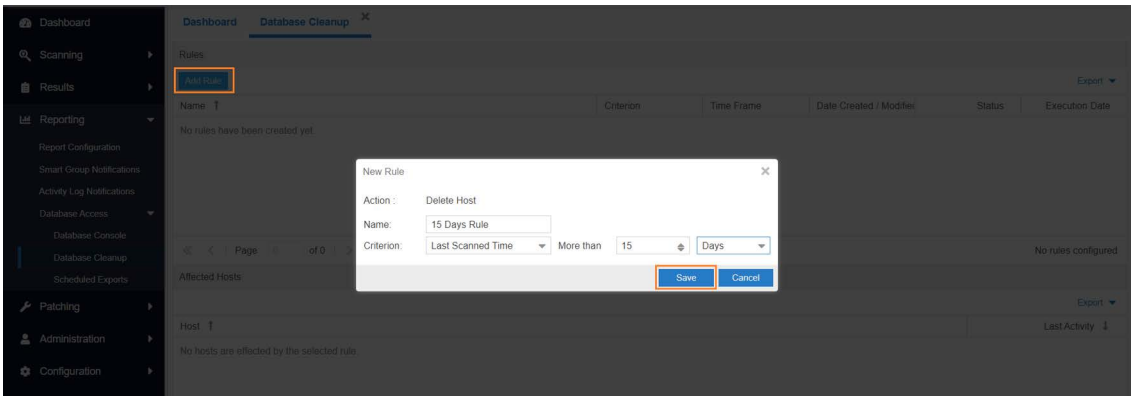
SQL Data	Description
vw_csi_devices	List of hosts with mac address & ip address
vw_csi_devices_cve	List of hosts affected by CVE
vw_host_eol	List hosts with End of Life software
vw_host_unpatched_os	List hosts with insecure operating system and operating system version
vw_host_insecure	List hosts with insecure software and software version

Database Cleanup

Use this page to delete hosts from your Software Vulnerability Manager account by configuring rules that check for certain criteria.

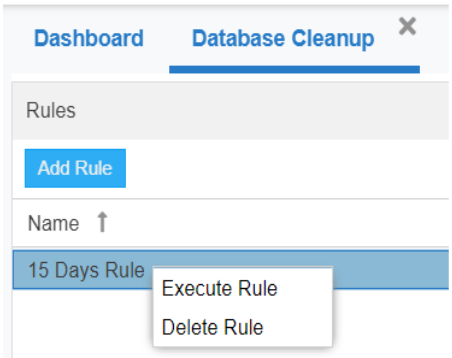
You can use this page, for example, to delete all the hosts that have not been scanned for more than 15 days.

Click **Add Rule**, enter the required information, and then click **Save**.



The rules can be based on Last Scan Time, Last Check-in Time or for Host that have been Never Scanned. Once a rule has been configured you can see which Affected Hosts meet the criteria defined in the rule and will be deleted from your Software Vulnerability Manager account.

Once you have checked the hosts to be deleted you can choose to run the rule. Right-click the rule name and select **Execute Rule**.



For scheduled database cleanup, see Host Deletion Settings.

Scheduled Exports

Use this page to view, edit or delete automated data extraction schedules.

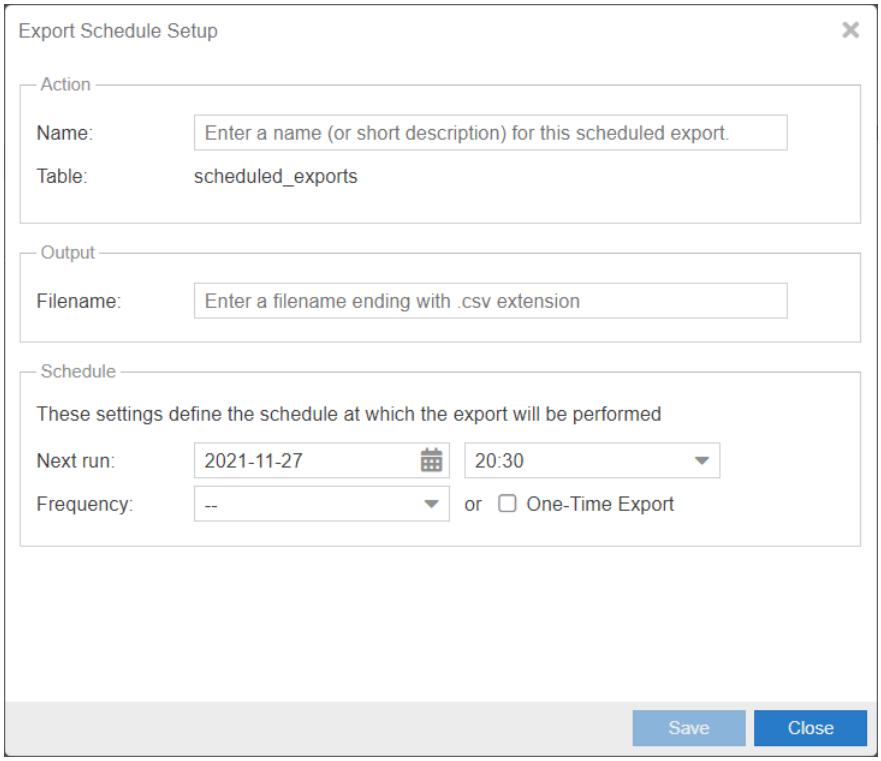
Important • *To schedule exports you must first download and install the Software Vulnerability Manager Daemon from https://www.flexera.com/svm-download.*

Right-click a table in the Database Console and select Schedule Query. You can configure the file by hiding columns in the grids prior to export.

In the Export Schedule Setup screen, enter:

- The Name of the scheduled export.
- The Filename that you want to save the CSV file as.

- The Next Run date and time.
- The Frequency (Hourly, Daily, Weekly or Monthly) that the export will be performed or select the One-Time Export check box.



Right-click a Scheduled Export in the grid to edit or delete the export.

10

Patching

After scanning your system and analyzing the appropriate vulnerabilities to patch, the next step is to patch your system. The following topics describe how to configure and deploy Software Vulnerability Manager's patching function.

- Flexera Package System (SPS)
- Creating a Patch with the Flexera Software Package System (SPS)
- The SPS Package Creation Wizard
- Vendor Patch Module
- External Package Signing for Software Vulnerability Manager Client Toolkit
- Patch Deployment Status
- Download Patch Publisher
- Patch Publisher Connections
- Agent Deployment
- Add Proxy Settings
- WSUS/System Center
- Creating the WSUS-CSI GPO Manually
- Deploying the Update Package Using WSUS
- Deploying the Update Package Using System Center
- Patch Configuration
- Patch Template
- QuickPatch
- Patch Automation
- Intune Publishing
- Workspace ONE Publishing

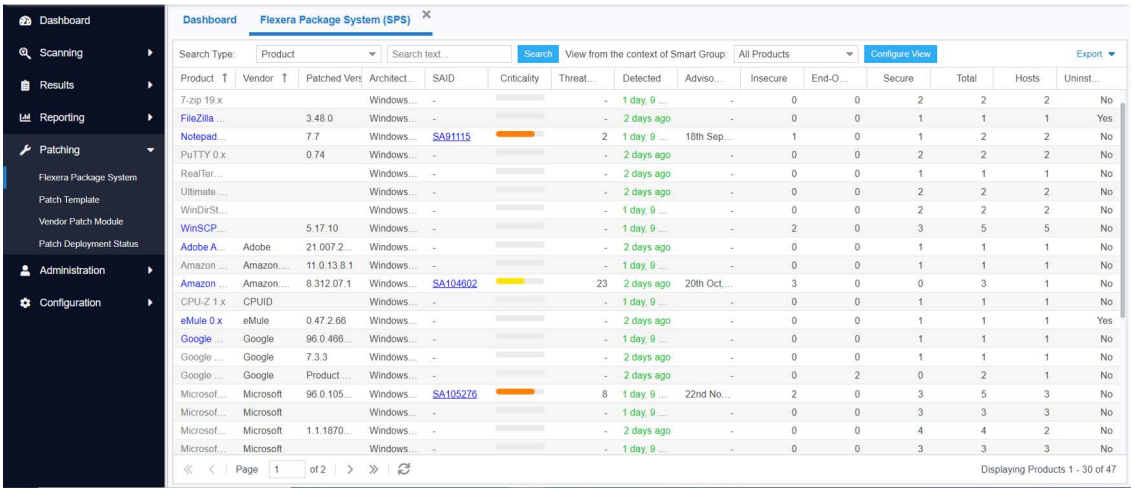
Flexera Package System (SPS)

This section provides further information regarding:

- Flexera SPS Page Features
- SPS Concepts and Terminology

Flexera SPS Page Features

The **Flexera Package System (SPS)** page displays a list of products for which Software Vulnerability Manager can automatically create an Update/Uninstall package. Right-click any of the listed products to view the available options.



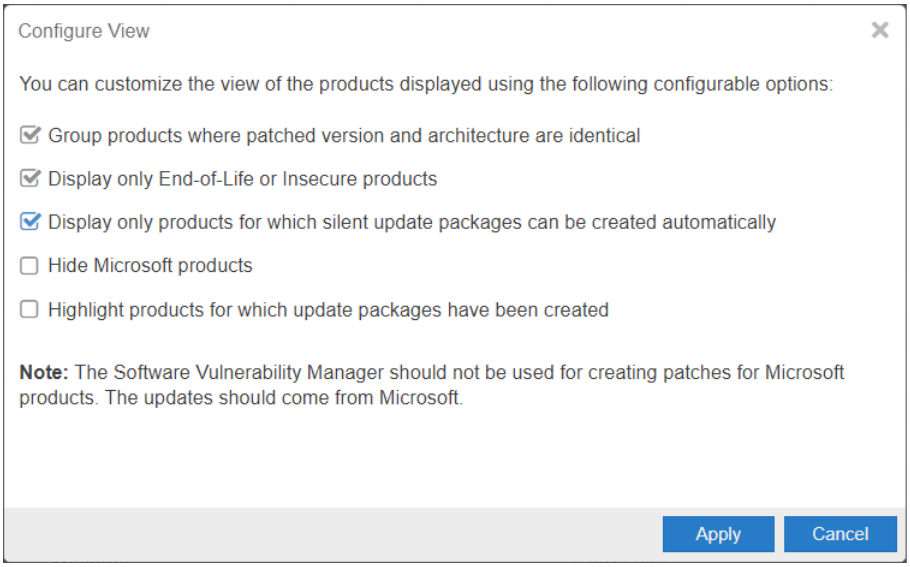
The **Flexera Package System (SPS)** features include:

- Product Display Criteria for SPS
- Language Selection for SPS
- Patch Update Searches by Common Vulnerabilities and Exposures (CVE)
- Advisory Published Date

Note • *Flexera SPS page now available in non-IE browser also. In order to use complete feature of patching, need to install Software Vulnerability Manager Plugin.*

Product Display Criteria for SPS

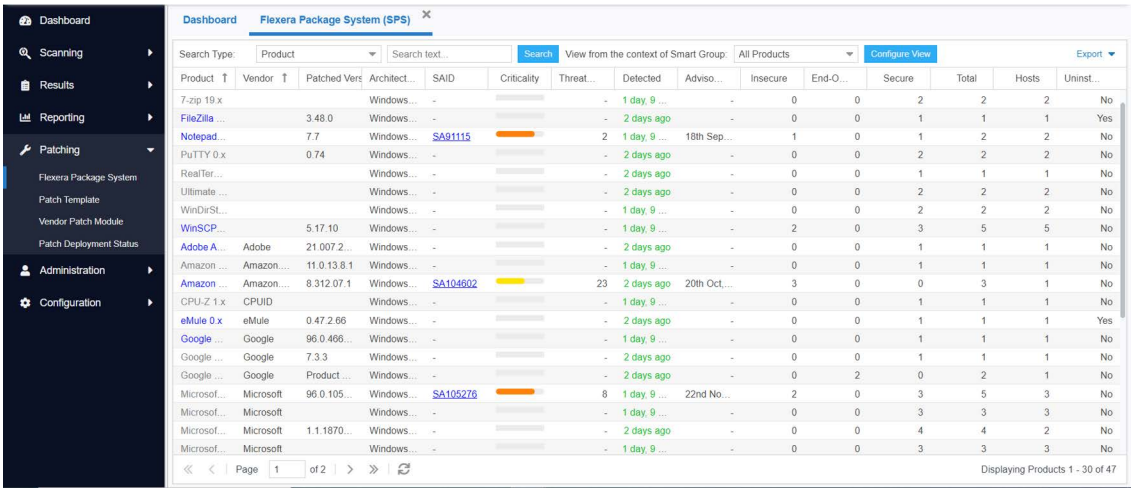
Click Configure View to select the criteria that will be used to display the products in this view.



When the Group products where patched version and architecture are identical check box is selected, the SPS page rows will be grouped by the product, architecture, and the patch required to update them to a secure version.

If a row represents two or more product versions that require the same update, then the Product column will not show the product version. For example, if Firefox 32.x and Firefox 37.x both require updating to patched version 40.x, then the Product column will display “Firefox” only.

This means that if, for example, four products previously required the same update, rather than listing them four times they will be listed once. This allows you to create fewer packages to target the same number of installations.



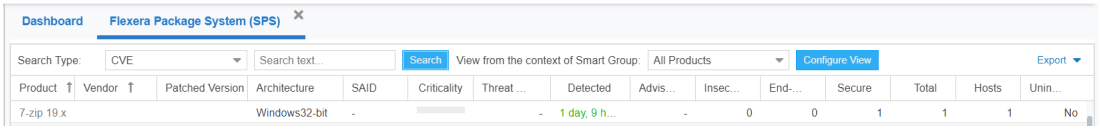
Note *• An SPS package created when the Group products where patched version and architecture are identical check box is selected (grouped mode) can cover multiple product rows that are displayed when the check box is not selected (ungrouped mode). Consequently this can lead to a discrepancy when determining whether an update for the product already exists if you are switching between the grouped and ungrouped modes. For example, if you create an update for a product in grouped mode, the update may not be accurately detected when using the ungrouped mode. For this reason it is recommended to only use the grouped mode when creating updates.*

Language Selection for SPS

You can target specific languages and approve packages before they are published. The package configuration, based on the product family, is retained for future use.

Patch Update Searches by Common Vulnerabilities and Exposures (CVE)

In the **Flexera Package System (SPS) Search Type field**, you can search patch updates by CVE, which are referenced in Secunia Advisories. The CVE results help identify affected hosts, advisories, and patches across entire organizations.



Advisory Published Date

The **Advisory Published** date is listed in the **Flexera Package System (SPS)** grouped and ungrouped views. This date provides a quick reference for the latest patching information.

Note • *In the Flexera Package System (SPS) ungrouped view which lists each product version separately, there will be no Secunia Advisory IDs (SAID) listed for End-of-Life (EOL) products. Therefore, the Advisory Published date will be blank for EOL products.*

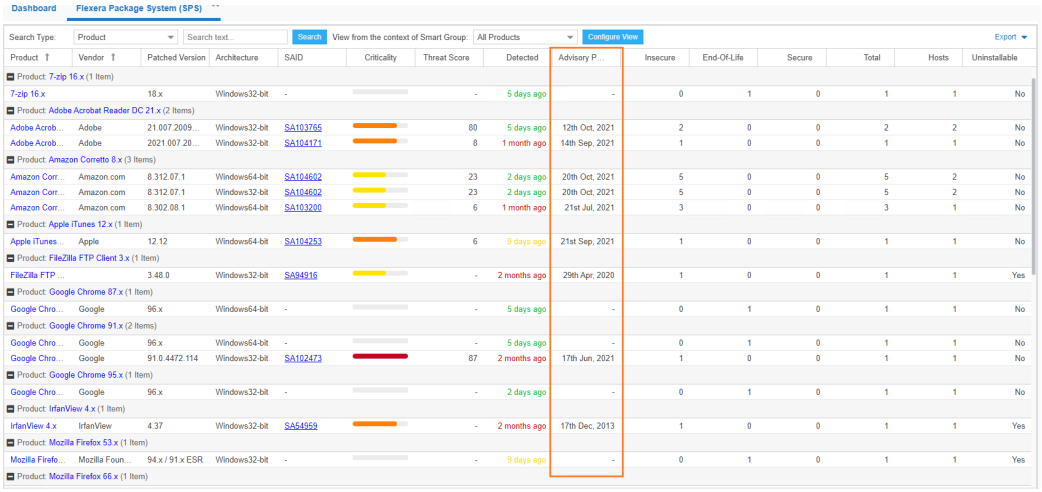


Figure 10-1: Flexera Package System (SPS) ungrouped view

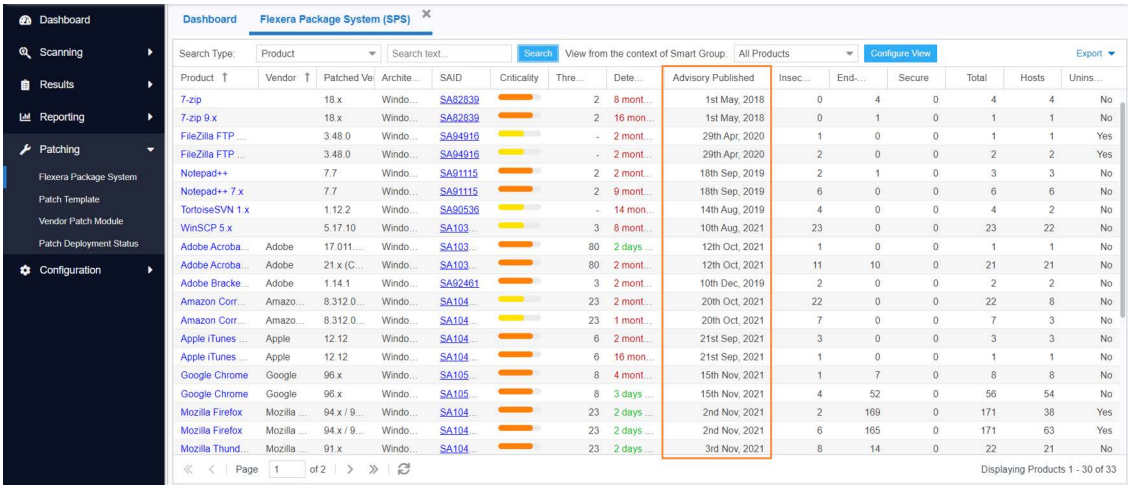


Figure 10-2: Flexera Package System (SPS) grouped view

SPS Concepts and Terminology

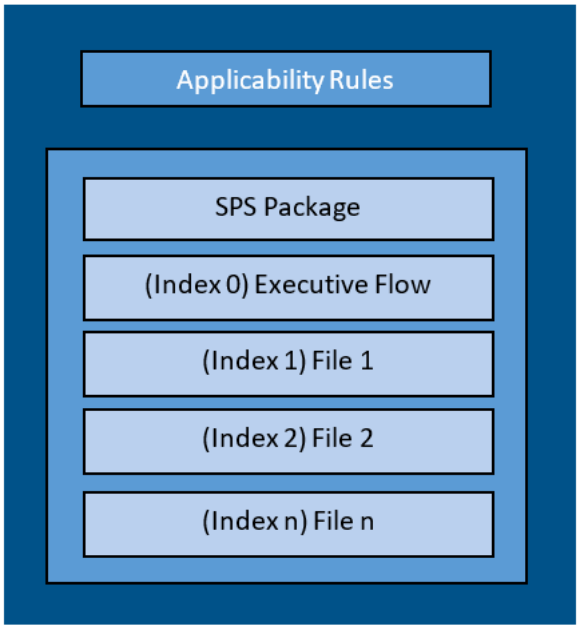
Software Vulnerability Manager users should become familiar with the concepts and terminology described in this section.

- Components of an SPS Package
- Applicability Rules
- SPS Package
- Execution Flow Script
- Files

Components of an SPS Package

The package consists of two parts; applicability rules and SPS package. The applicability rules are used by the deployment solution (WSUS, Workspace One, Intune, and BigFix) to only execute the package on computers that are applicable for the selected package.

The SPS package consists of the payload that is then executed on the computer.



The following sections explain in greater detail all the components that make a SPS package.

Applicability Rules

The applicability rules are rules used to decide whether or not a package should be offered to a client. These rules are as follows:

IsInstallableApplicabilityRule – Obtains the rules for determining whether or not this item is installable on a given computer. It generally consists of paths and version information of relevant files.

IsInstalledApplicabilityRule – Obtains the rules for determining whether or not this item is already installed on a given computer. It generally consists of keys and value information of relevant registry keys.

IsSupersededApplicabilityRule – Obtains or sets the rules for determining whether or not this item is superseded by another update on a given computer. It generally consists of paths and version information of relevant files.

SPS Package

The SPS package must always consist of at least one file that is placed at index “0”, this is the execution flow script, and any additional files will be numbered accordingly in ascending order. The execution flow script is either JScript (JavaScript), VBScript or PowerShell script; by default, a JavaScript example is provided in the SPS Package Creation Wizard.

The script will be automatically extracted from the SPS package and executed. Based on the execution flow more files can then be extracted and executed from the SPS package, referenced by their index order.

Important • *When using PowerShell Scripting as the execution controlling script of the package, you must ensure that Microsoft Visual C++ 2012 Redistributable (x86) is installed on the target hosts you are deploying the update package to.*

Execution Flow Script

This execution flow script is always executed. This is the file with index 0, and as such it will always be the first to run.

In the execution flow script you can define any other files to be extracted and executed. The default execution flow template that is provided in the SPS Package Creation Wizard will extract the first file supplied in the package with the specified silent parameters (usually this is the patch file provided by the vendor). Any other files added to the package will NOT be extracted or executed when using the example script.

If you create your own execution flow, no user interaction is available. To make your execution flow totally unattended, use log files accordingly for easy troubleshooting.

Files

The SPS package supports additional files besides the execution flow script. The added files will have array indices from 1 to n where the first file will have index 1, and the additional files are numbered in ascending order.

Creating a Patch with the Flexera Software Package System (SPS)

The Flexera Software Package System (SPS) page displays a list of products that you can create updates for.

Click Configure View to customize the list and limit the types of products shown, as well as highlight products for which packages have or have not been created.

If highlighted, products for which SPS packages exist will be shown in green.

A product will be displayed in blue if the vendor provides unattended/silent installation parameters for its patches. Any product listed in blue is available to have an update created in a simple 3 step process.

Some products are presented in gray because the vendor of the product does not provide silent installation parameters. If you choose to patch one these products, you must provide (import) the .MSI/.MSP/.EXE file together with the parameters for the unattended installation. Software Vulnerability Manager will then repackage and publish the update through the standard workflow. Packages cannot be automatically created by Software Vulnerability Manager for these products.

If you wish to create a new custom package that does not necessarily patch an existing product, for example to deploy new software, you can click New Custom Package. In this case you should provide the files/installer that will be executed on the target client together with the execution flow script.

With Software Vulnerability Manager you are able to create three different kinds of packages. Right-click a product and select one of the available options:

- Create an Update Package
- Create an Uninstall Package
- Create a Custom Package

For the Update and Uninstall packages a default execution flow script is provided in the SPS Package Creation Wizard (Step 2 of 4: Package Contents), which will fulfill most of the common needs.

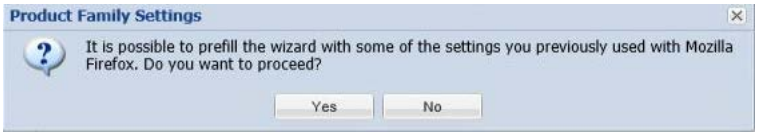
The execution flow script for an Update package can also be customized for additional functionality. You can also configure your patching package SPS Installer Parameters using dynamic check box options (where applicable) based on product functionality, including:

- Remove End User License Agreement
- Disable Automatic Updates
- Silent Install
- Update to lowest secure version
- No reboot necessary
- Cumulative updates in one package
- Set Security Level
- Remove system tray icon
- Restrict Java Applications
- Uninstall Prior to Installing
- Prevent Installation of Certain Components
- Prevent Collection of Anonymous Usage Statistics
- Remove Desktop Shortcut

Create an Update Package

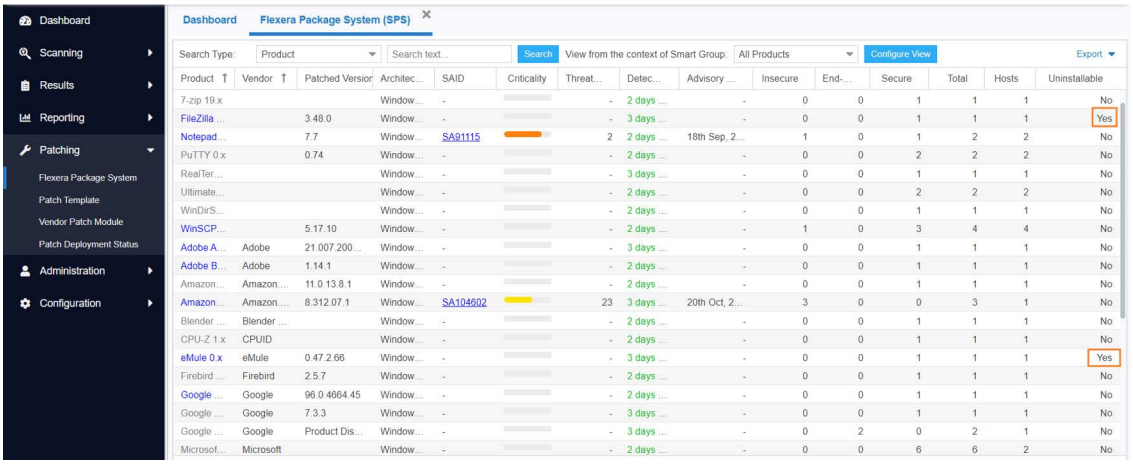
A Product will be displayed in blue if the vendor provides unattended/silent installation parameters for its patches. Any Product listed in blue is available to have an update created in a 3 step process. Right-click or double-click one of these Products and select Create Update Package to start the SPS Package Creation Wizard.

Software Vulnerability Manager retains Product Family Settings that you previously used. Click Yes to prefill the SPS Package Creation Wizard with the available settings.



Create an Uninstall Package

Any Products that are listed as Yes in the Uninstallable column are available to have an uninstall package created in a 3 step process exactly as the update packages in blue.



For Products listed as No in the Uninstallable column you must customize the execution flow script to successfully uninstall the product. This can be done by starting the SPS Package Creation Wizard and selecting the Edit Package Content check box in Step 1.

If you have an SPS XML template you can import it by clicking Import Package in the first step of the wizard. Once this is completed, all the fields in the wizard will be automatically populated, including the execution flow script.

Special attention should be given to the files mentioned in the execution flow script. These files can be files originally provided by the SPS template creator or they can be dynamically downloaded.

Important • *You should only import SPS packages if you trust the author of the package and the source from where you downloaded/obtained the package.*

Create a Custom Package

Software Vulnerability Manager allows creating custom packages that can be deployed through WSUS/System Center. By creating a custom package you can do a wide range of actions; everything from updating and uninstalling third-party applications to handling complex execution flows with multiple files.

The creation of a custom package can be done in two different ways. Either:

- Right-click a product and choose Create Custom Package. By doing this the product applicability rules will be included in the package; this will mean that the Custom Package will only be applicable for computers with the selected product installed.

  OR

- Click New Custom Package to start the SPS Package Creation Wizard. In this case no applicability rules will limit the installation base.

Independently of the chosen approach, in both cases the SPS Package Creation Wizard will be initiated.

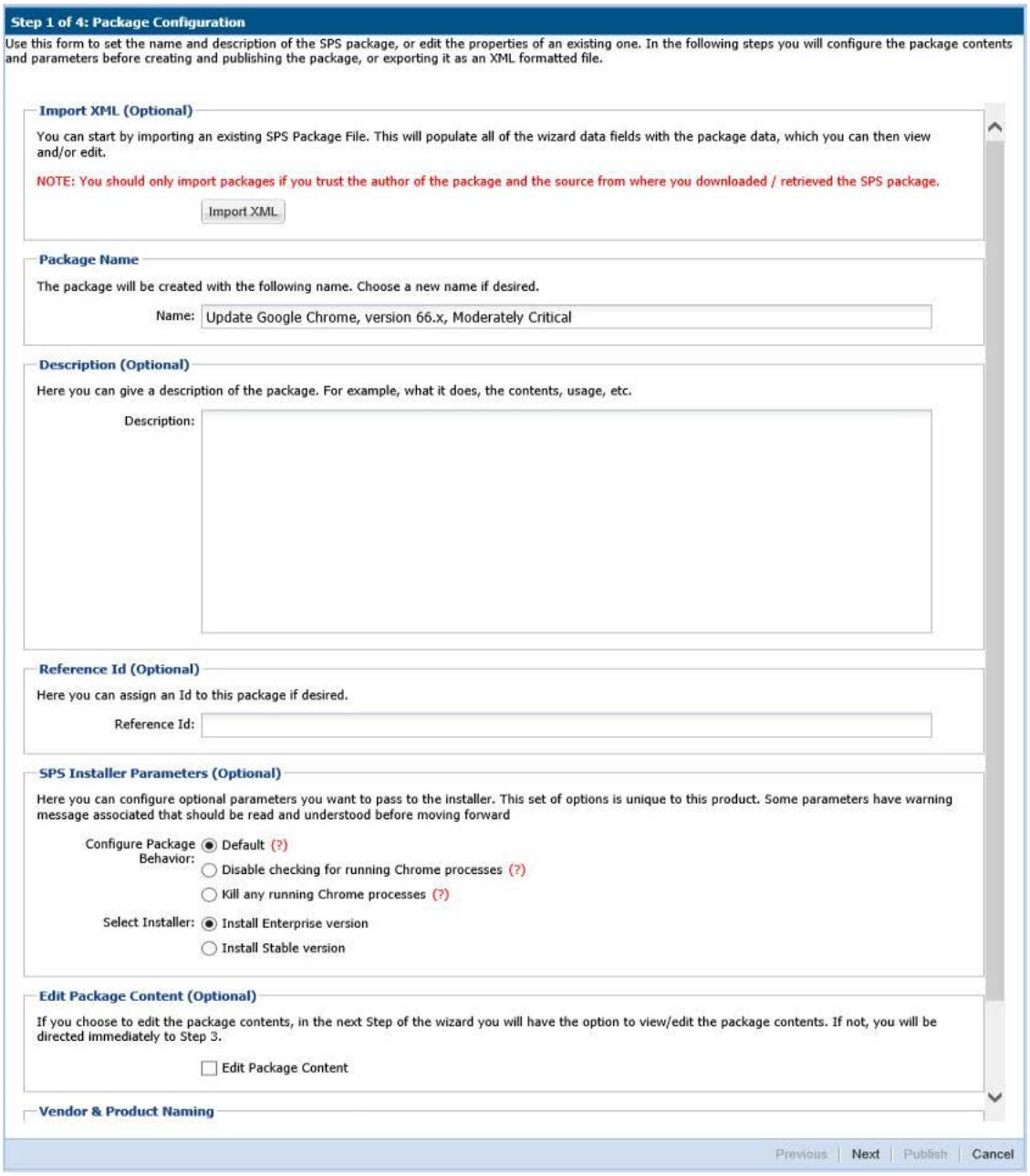
The SPS Package Creation Wizard

The following steps explain how to create the SPS Package:

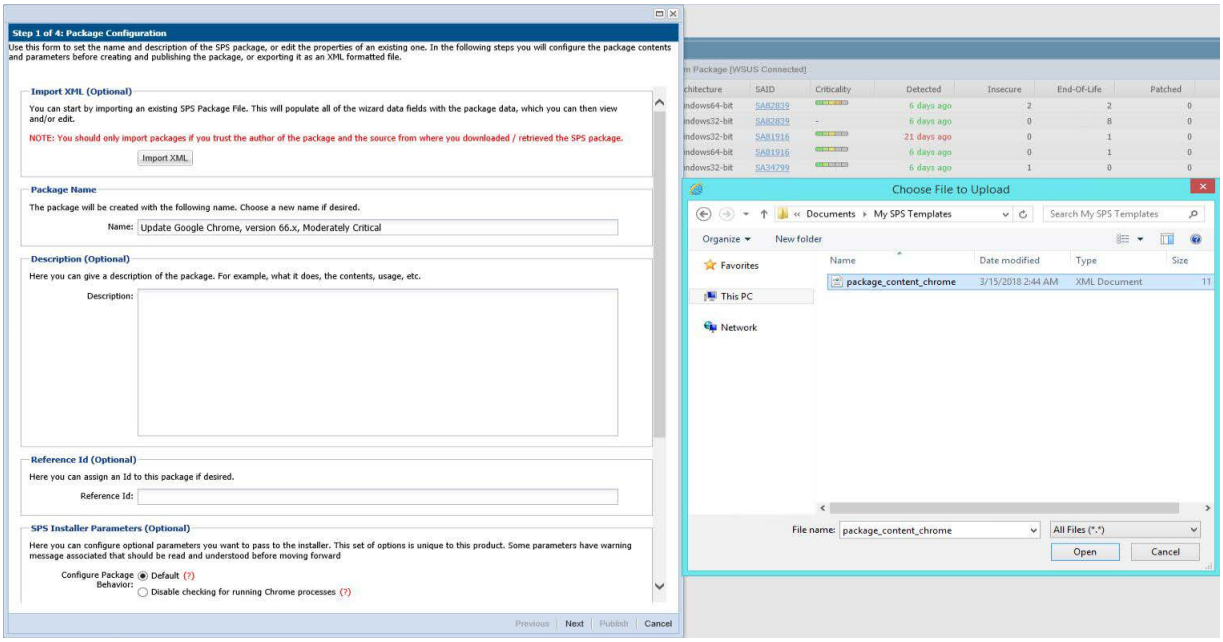
- Step 1 of 4: Package Configuration
- Step 2 of 4: Package Contents
- Step 3 of 4: Applicability Criteria - Paths
- Step 4 of 4: Applicability Criteria - Rules

Step 1 of 4: Package Configuration

In Step 1, no action is required if the selected product was in blue. You should only check Edit Package Content (Optional) if the product was in gray or there is a need to customize the update patch by selecting a different file(s) and/or defining a different execution flow script.



The Import Package feature allows you to import a SPS template in XML format that will automatically populate all the fields of the SPS Package Creation Wizard. This feature will be especially relevant when creating custom updates or when creating update packages for the products in gray.



In Step 4 of the wizard you will also have the option to export the XML template for the package being created.

After clicking Next, and if Edit Package Content (Optional) was not selected, you will go directly to Step 3 of 4: Applicability Criteria - Paths.

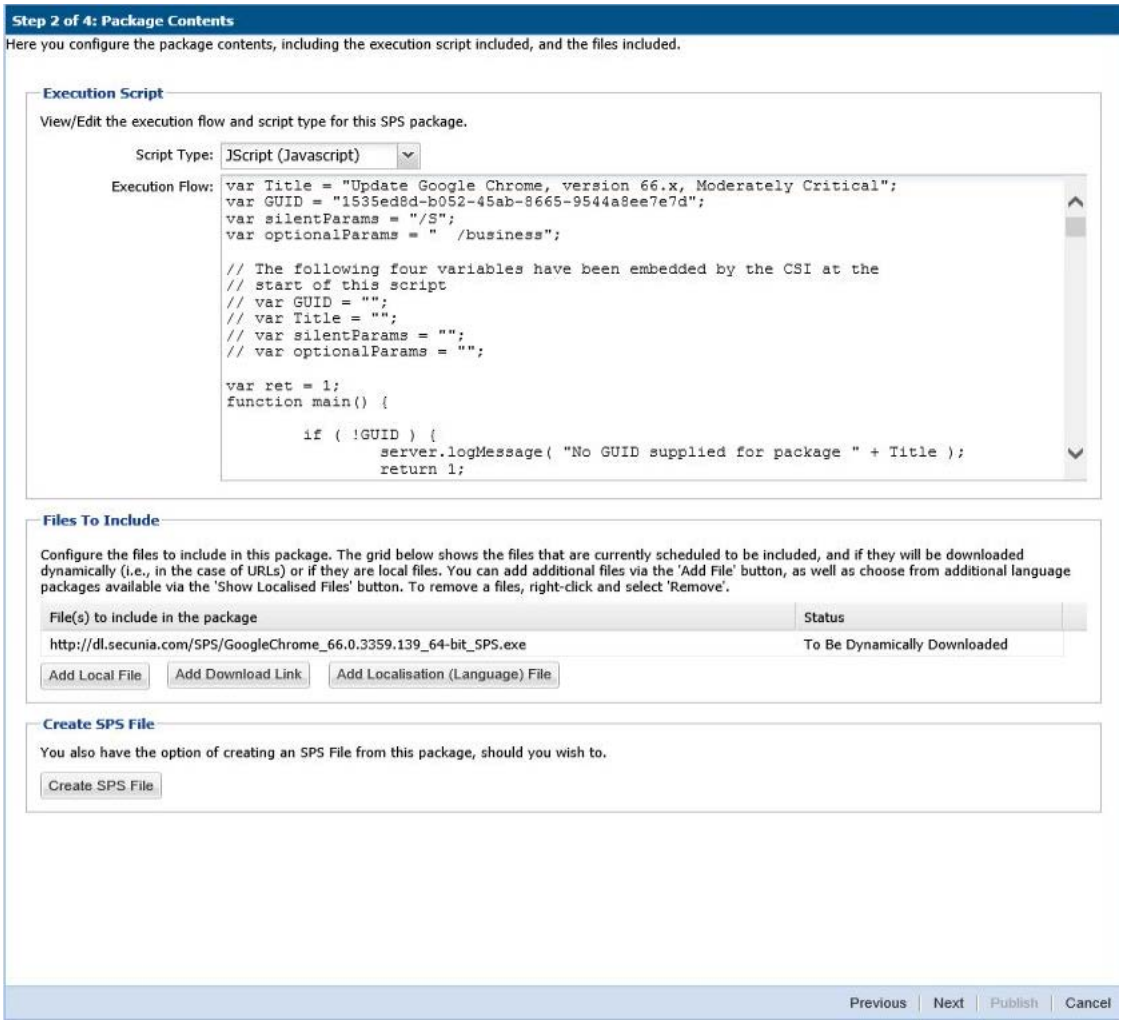
Step 2 of 4: Package Contents

Step 2 becomes available when Edit Package Content is selected in Step 1. The first section of Step 2 is the Execution Script where you select JScript (Javascript), VBScript or Powershell Script and then review or create a customized execution flow.

You are also able to change the files that are included in the SPS package, which can either be local files or links to be dynamically downloaded upon publishing of the package.

To test a newly created execution flow together with the added files click Create SPS File. A SPS.exe file is created that can be executed locally prior to being published into the WSUS server.

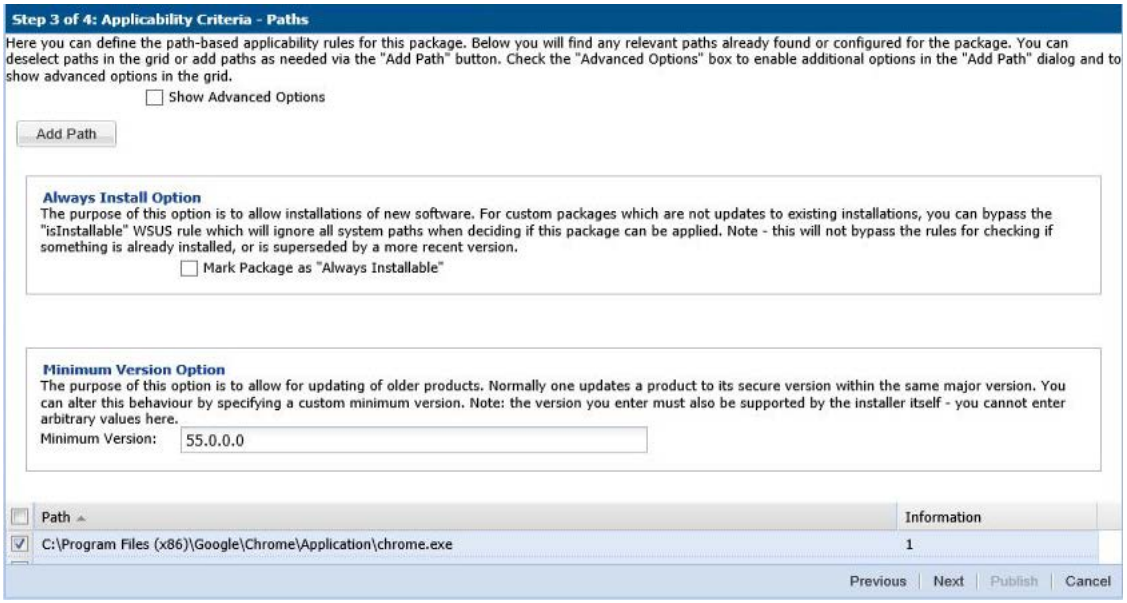
This SPS.exe file will include the execution flow script and the files to be included, but not the applicability rules.



Step 3 of 4: Applicability Criteria - Paths

In Step 3 you should select the paths/locations to which this package should be applied. These are usually populated by Software Vulnerability Manager based on the scans previously conducted.

Please be advised to only choose paths that are valid to avoid any update loops. You can also use paths with CSIDL and KNOWNFOLDERID if you select the Show Advanced Options check box. These variables should be used with their decimal value.



For packages that should not have any paths for applicability, select the Mark Package as “Always Installable” check box to ignore all paths. Paths for App-V and Mac OS X are filtered out since they are not supported for patching.

Use the Minimum Version Option to update older products. Normally, a product is updated to its secure version within the same major version. You can alter this behavior by specifying a custom minimum version. Note: the version you enter must also be supported by the installer itself - you cannot enter arbitrary values here.

Importing Bulk File Paths in the SPS Package Creation Wizard

To help with situations where you wish to include specific file paths for scanning software, you can now import multiple file paths by providing a CSV file during Step 3 of the patch/template creation process.

On the **Step 3 of 4: Applicability Criteria - Paths** panel, click **Add Path** to open the **Import Path Applicability Rules for Package** dialog box, and select a local CSV file which contains file paths.

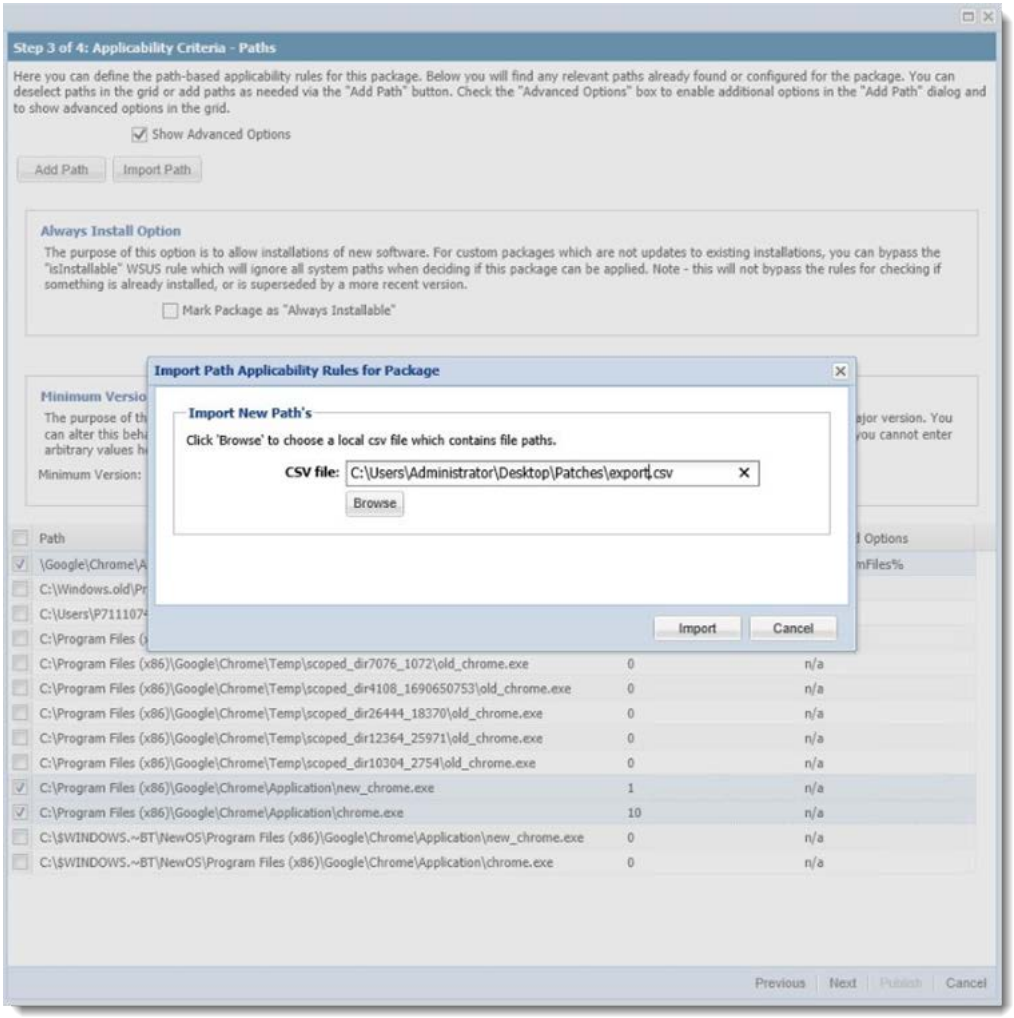


Figure 11: Import Path Applicability Rules for Package Dialog Box

This enables you to target specific file paths or to include file paths discovered in other partitions in order to create a single patch for deployment that covers all desired file paths.

CSV File Format

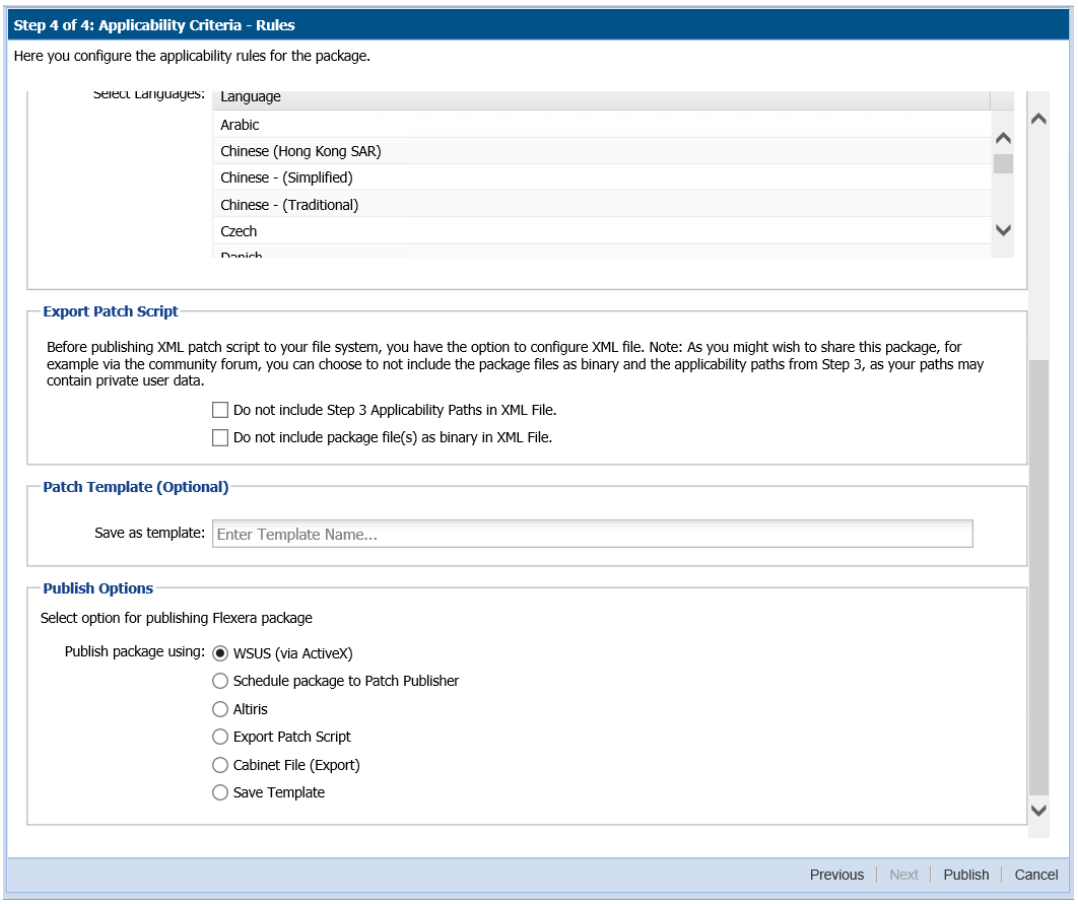
When creating a CSV file for import, file paths entered in the following formats are acceptable:

```
C:\Users\Administrator\AppData\Local\Temp\Acme\acinstall\tools\acmeinstall\tools\7z.exe
C:\Program Files\Acme\tools\7z.exe
%ProgramFiles%\Acme\tools\7z.exe
```

Note • *The CSV file does not need to have comma-separated values, but just a list. You don't have to use quotes when there are spaces in a file path. The CSV file can essentially be a text list with just one column. As a single column list of values, simply provide one file path per line (no header row or additional columns should be included).*

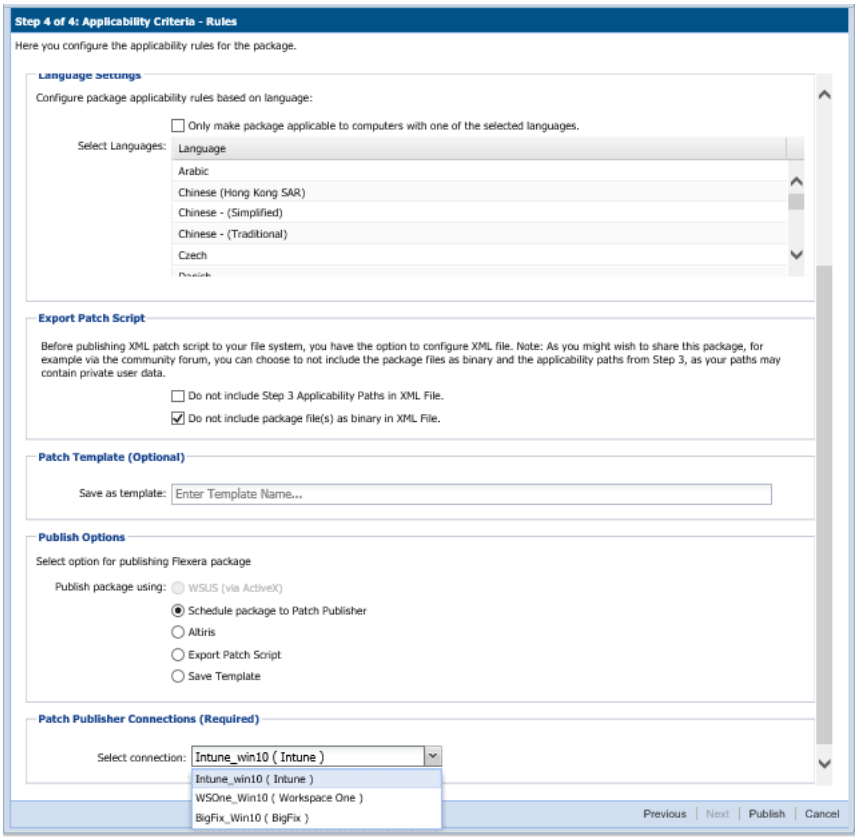
Step 4 of 4: Applicability Criteria - Rules

In Step 4 you should specify if you want to limit the package to 32-bit or 64-bit systems or computers with specific operating system languages. The patch file to be deployed will be automatically downloaded in the background by the Software Vulnerability Manager console. Once this is completed the Software Vulnerability Manager console will repackage and publish the update package into the WSUS/System Center. To export a package select File System (Export) and click **Publish**.



To publish a package through the Patch Publisher, select the **Publish Options** > **Schedule package to Patch Publisher**, and then select the required connection from the **Patch Publisher Connections (Required)** drop down.

Note • *Patch Publisher Connections are available only when you install the Patch Publisher.*



If a reboot is required after the package has been installed this can also be configured in the second part of this step as well as checking if Java is running.

To configure your package to only be applicable for certain languages of the operating system, select Only make package applicable to computers with one of the selected languages and select the relevant language.

In this step you are also able to export the package that you have already configured to be used for future reference. You have the option to include or exclude Step 3 applicability paths and the installer as binary.

The two options (Do not include Step 3 Applicability Paths in XML File and Do not include the package file(s) as binary in XML File) are taken into consideration only when exporting the package to the File System (Export), otherwise the selection will be disregarded.

Vendor Patch Module

Vendor Patch Module represents the largest set of patch data on the market today. It is designed to integrate several hundred out of the box patches for prioritization and publishing within SVM. Additionally, it exposes details which helps you to be aware what patches exist, and to provide as much detail as possible to make bringing your own patch to SVM easier. These additional entries are typically missing something like the actual setup file (because the vendor does not make it publicly available) or because we don't have default applicability criteria (but can leverage assessment results for your environment).

Tip • *To know more about the Vendor Patch Module, click here.*

This section provides further information regarding:

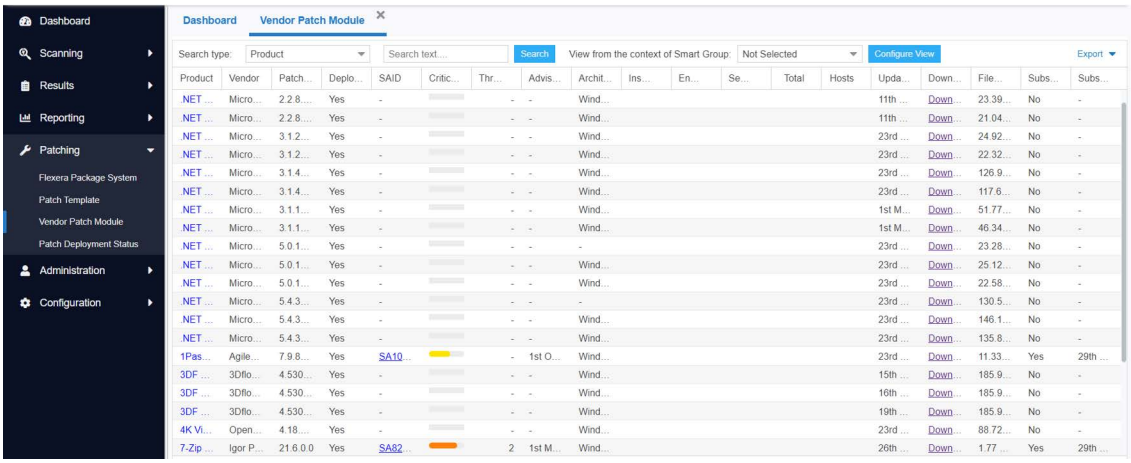
- Vendor Patch Module Page Features
- Creating a Patch with the Vendor Patch Module
- Package Creation Wizard in Vendor Patch Module
- Automating Patch Deployment

Important • *Vendor Patch Module is an optional feature and must be purchased separately:*

- *For pricing and availability, please contact your sales representative or contact us online at: https://www.flexera.com/about-us/contact-us.html*
- *If the feature is not purchased, you can view the list of available patches but cannot use them.*

Vendor Patch Module Page Features

The **Vendor Patch Module** page displays a list of products for which Software Vulnerability Manager can automatically create an Update/Uninstall package. Right-click any of the listed products to view the available options.

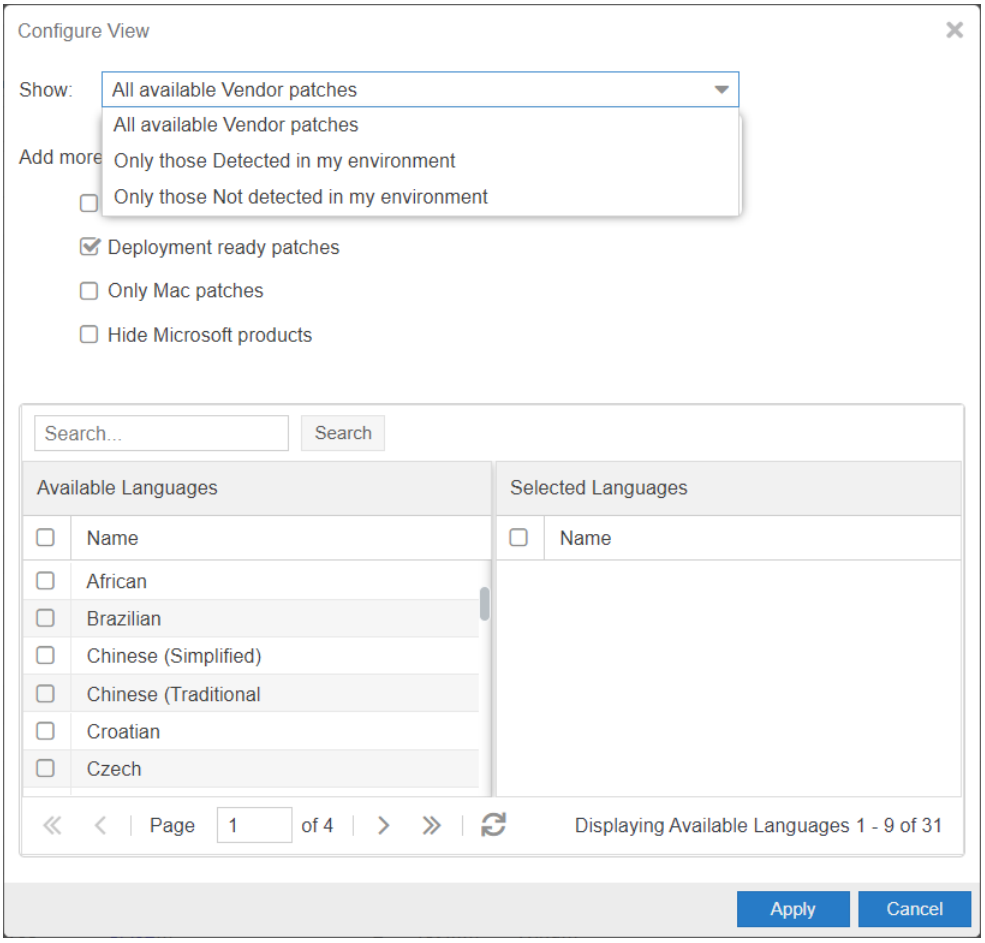


The **Vendor Patch Module** features include:

- Product Display Criteria for Vendor Patch Module
- Patch Update Searches by Common Vulnerabilities and Exposures
- Advisory Published Date in Vendor Patch Module
- Threat Score in Vendor Patch Module

Product Display Criteria for Vendor Patch Module

Click **Configure View** to define a criteria from either or both the **Show** drop down and the **Add more filters** check boxes. This criteria will be used to display the filtered products in this view.



The following display criteria are available.

Table 10-1 • Product Display Criteria for Vendor Patch Module

Drop Down	Options
Show	Select one of the following options: • **All available Vendor patches**—Displays all the list of out of the box patches available in the module. (Default) • **Only those Detected in my environment**—Displays a list of out of the box patches available for applications which are already installed in the user environment. • **Only those Not detected in my environment**—Displays a list of out of the box patches available for other applications which are not deployed in the user environment.

Table 10-1 • Product Display Criteria for Vendor Patch Module

Drop Down	Options
Add more filters	Select one or more following check boxes to add more criteria defined in the **Show** drop down: • **Download available**—Displays a list of out of the box patches available to download • **Deployment ready patches**—Displays a list of deployable out of the box patches which have no missing details. These patches are highlighted in **Blue** color in the products list and have a high rate of success in mass deployment. • **Only Mac patches**—Displays a list of out of the box patches for MAC OS, you can easily download them for deployment in your Mac management solution of choice. • **Hide Microsoft products**—Hides only a list of out of the box patches provided by the vendor Microsoft. • **Highlight products for which packages have been created**—Displays a list of products in **Green** color for which packages have been created successfully.

Note • *MSP packages are currently* ***Not deployment*** *ready, but deployment is possible depending on the environment that these packages are ready to be deployed as is.*

Select Package Language

You can target specific languages and approve packages before they are published. The **Configure View** settings in the Vendor Patch Module can be retained for future use.

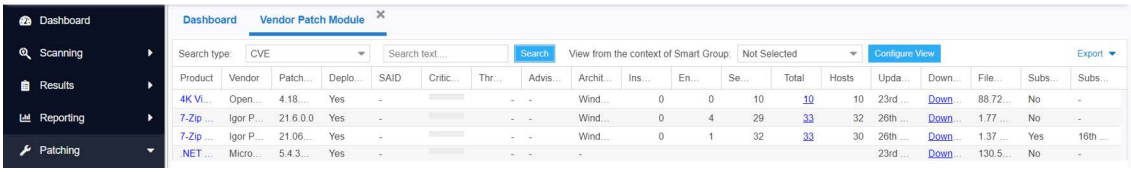
By default, the following package language is selected:

- English
- English (UK)
- English (US)
- English GB
- English US
- Multi

You are also able to change the default selected language and select new package languages.

Patch Update Searches by Common Vulnerabilities and Exposures

In the **Vendor Patch Module Search Type field**, you can search a patch updates by CVE, which are referenced in Secunia Advisories. The CVE results help identify affected hosts, advisories, and patches across the entire organizations when appropriate Smartgroup filters are chosen.



Advisory Published Date in Vendor Patch Module

The **Advisory Published** date is listed in the **Vendor Patch Module** provides a quick reference for the latest patching information.

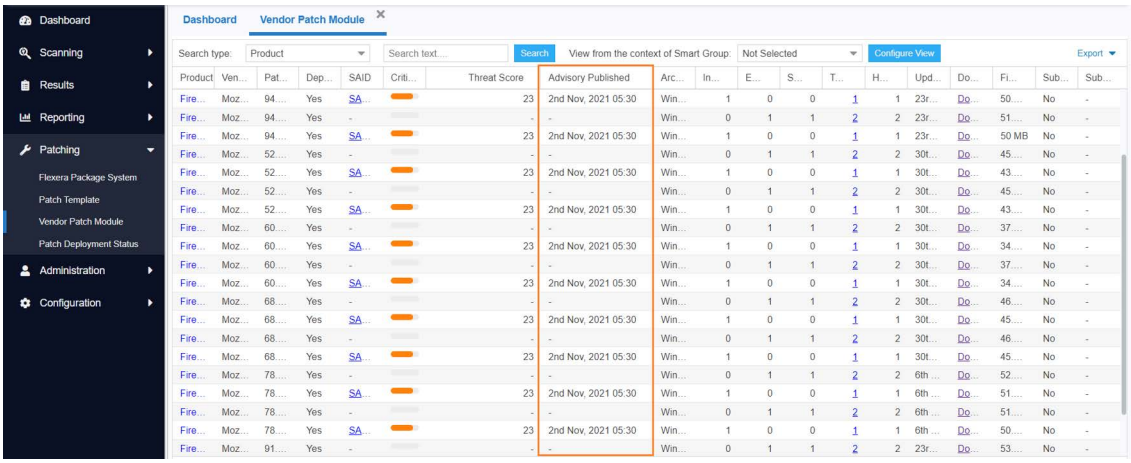


Figure 10-1: Vendor Patch Module Advisory published date

Threat Score in Vendor Patch Module

The **Threat Score** provides the Threat Score information for the out of the box patches listed in the **Vendor Patch Module**.

Note • *Threat Score is available only for users with Threat Intelligence Module*

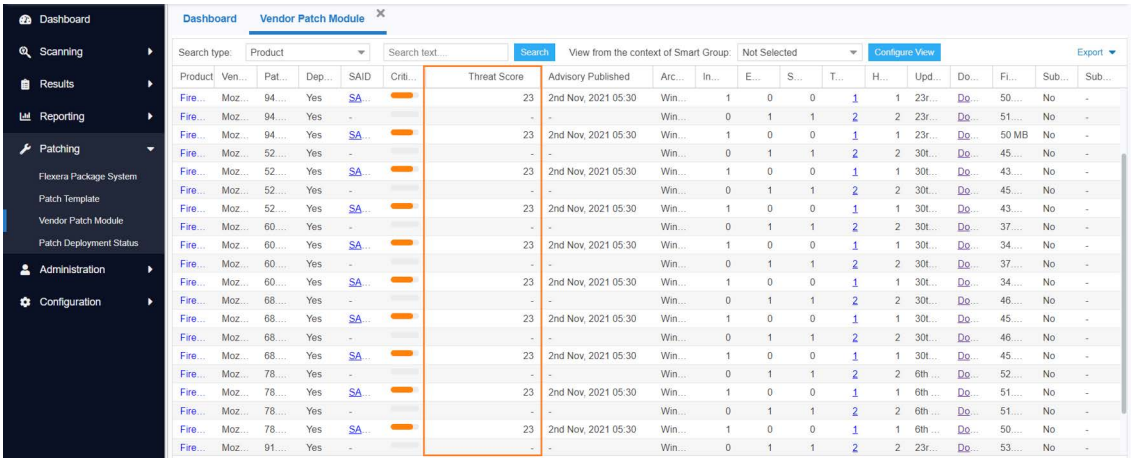


Figure 10-2: Vendor Patch Module Threat Score

Creating a Patch with the Vendor Patch Module

The Vendor Patch Module page displays a list of products that you can create updates for.

Click Configure View to customize the list and limit the types of products shown in the list as per your requirements.

A product will be displayed in blue if the vendor provides unattended/silent installation parameters for its patches. Any product listed in blue is available to have an update created in a simple 3 step process.

Some products are presented in gray because the vendor of the product does not provide setup files to deploy, Packages cannot be automatically created by Software Vulnerability Manager for these products.

With Vendor Patch Module you can update a package. Right-click a product you can see the following options:

- Create an Update Package
- View Installations
- Patch Information
- Subscribe to Patch
- Edit Subscription
- Pause Subscription
- Resume Subscription
- QuickPatch

To Update packages a default execution flow script is provided in the (Step 2 of 4: Package Contents), which will fulfill most of the common needs.

Important • *The following color codes are used in the Vendor Patch Module products list:*

- ***Blue color patches*** *- Out of the box patches are ready to deploy with no missing details, so no extra details needed to deploy these patches.*

- ***Black color patches*** *- Patches that are missing some information but are available to download. To create a patch, any missing details must be provided.*
- ***Gray color patches*** *- Patches that are missing some information including the vendor setup files. To create a patch, the vendor setup must be provided along with any missing details.*
- ***Green color patches*** *- Patches for which publishable packages have already been created.*

Create an Update Package

A Product will be displayed in blue if the vendor provides unattended/silent installation parameters for its patches. Any Product listed in blue is available to have an update created in a 3 step process. Right-click one of these Products and select Create Update Package to start the Package Creation Wizard.

To **Create Update Package** using 3 step process, see Package Creation Wizard in Vendor Patch Module

Note • *You cannot **Create Update Package** for MAC OS patches.*

View Installations

To see the installation details of a product in the Vendor Patch Module, Right-click on a product and select **View Installations** to open the wizard.

The **View Installations** wizard provides the following details:

- **Overview** - Provides the details of **State of Detected Installations** with a pie chart representation.
- **Installations** - Provides the list of Host machines where product is installed. For more information, see Installations.
- **All Advisories** - Provides the list of Secunia Advisory ID and its criticality details.

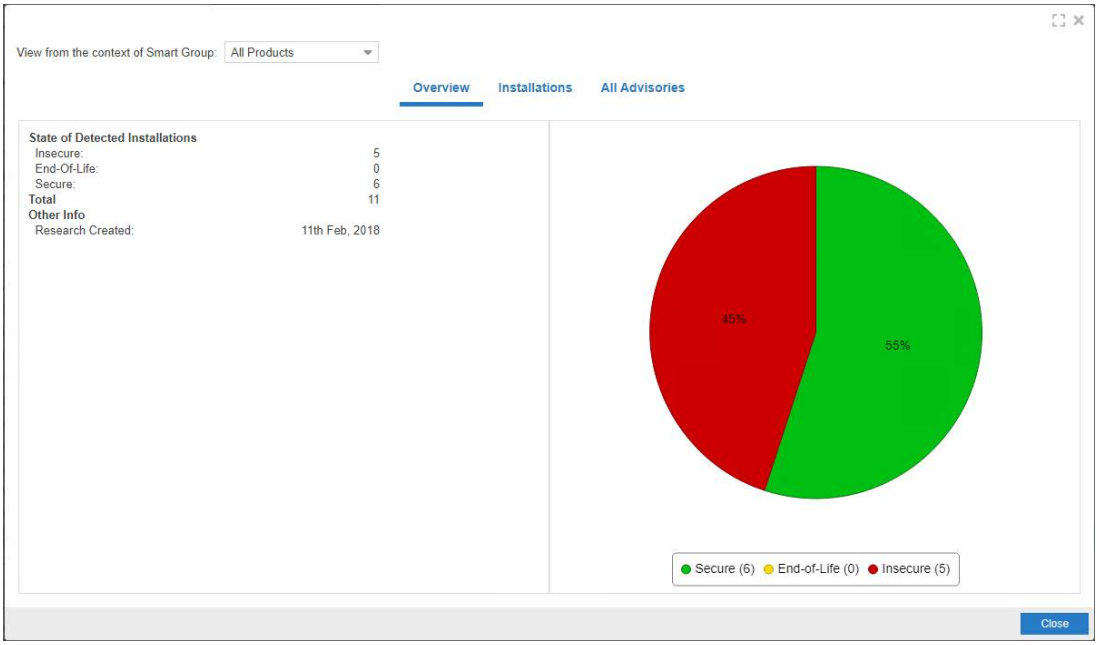


Figure 10-3: View Installations Wizard

Patch Information

To know the details about any patch in the Vendor Patch Module, Right-click and select Patch Information.

Patch Information provides the following details of a selected patch:

- Product Name
- Vendor
- Patched Version
- Architecture
- Uninstall Parameters (If required)
- File Size in MB
- Date Modified
- Deployment ready status
- Download link

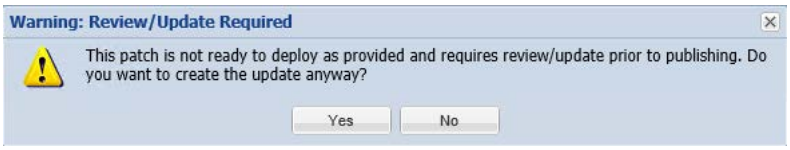
Package Creation Wizard in Vendor Patch Module

The following steps explain how to create update Package:

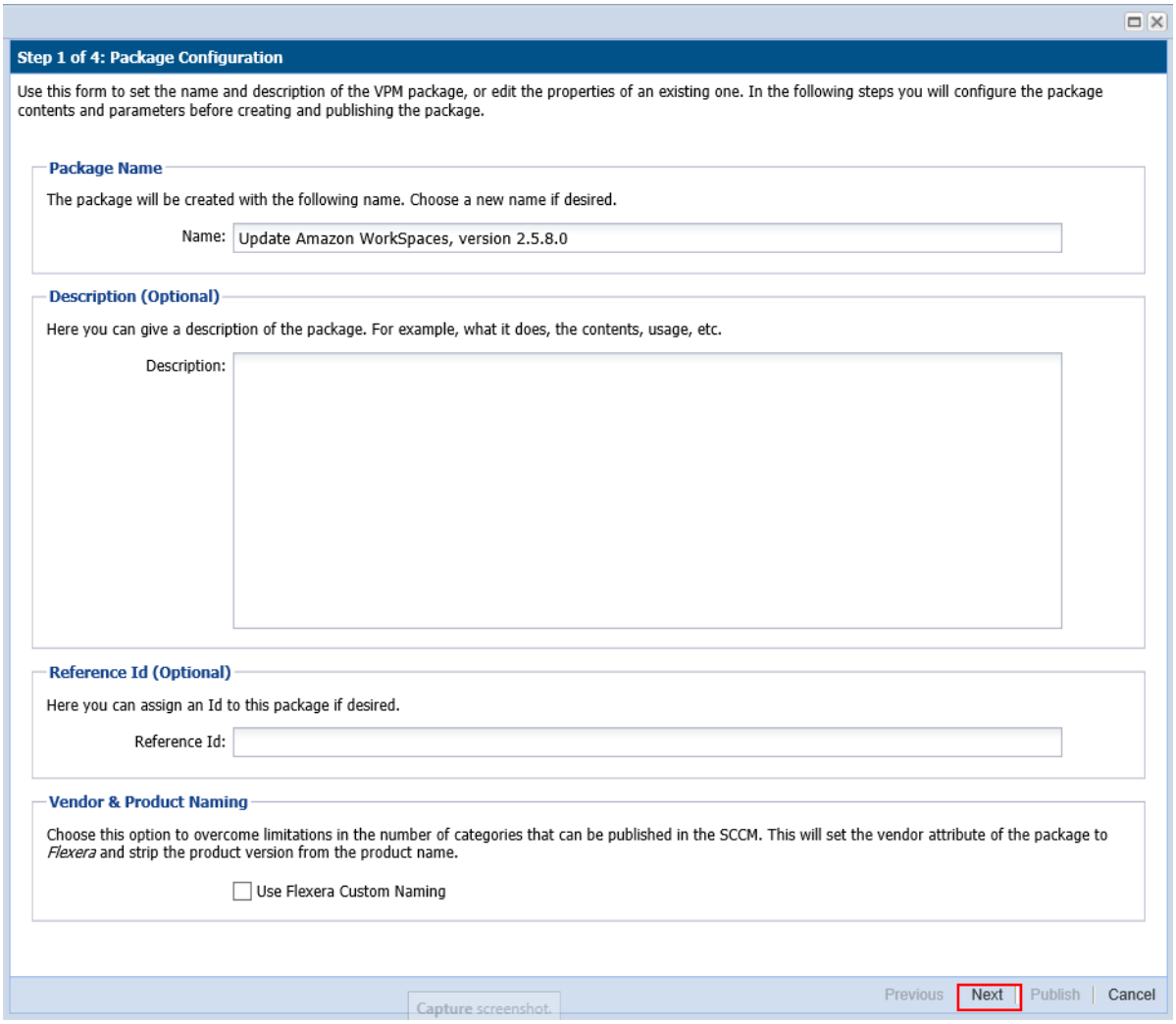
- Step 1 of 4: Package Configuration
- Step 2 of 4: Package Contents
- Step 3 of 4: Applicability Criteria - Paths
- Step 4 of 4: Applicability Criteria - Rules

Step 1 of 4: Package Configuration

In Step 1, if the selected product was in **Black** and **Gray** you will get a Warning message. click **Yes** to initiate the **Package Configuration** wizard.



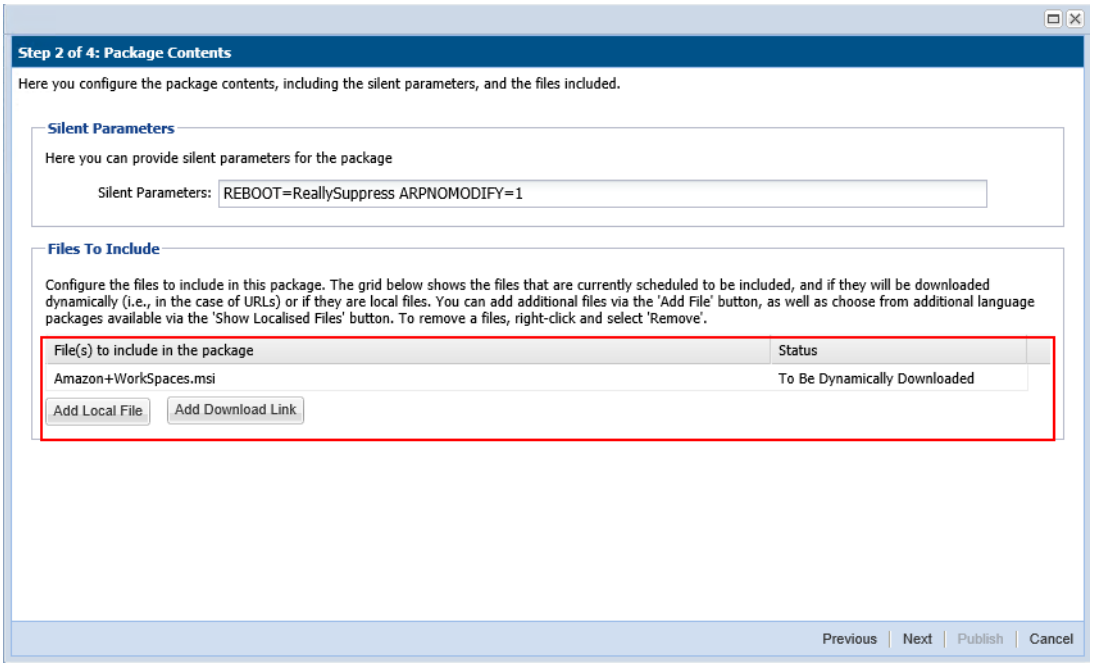
In the Package Configuration wizard, click **Next**.



Step 2 of 4: Package Contents

Step 2 provides the following package details:

- Silent Parameter
- Files to Include
  - Add Local File
  - Add Download Link



You are also able to change the files that are included in the update package, which can either be local files or links to be dynamically downloaded upon publishing of the package.

Click **Next** to open the **Applicability Criteria - Paths** wizard.

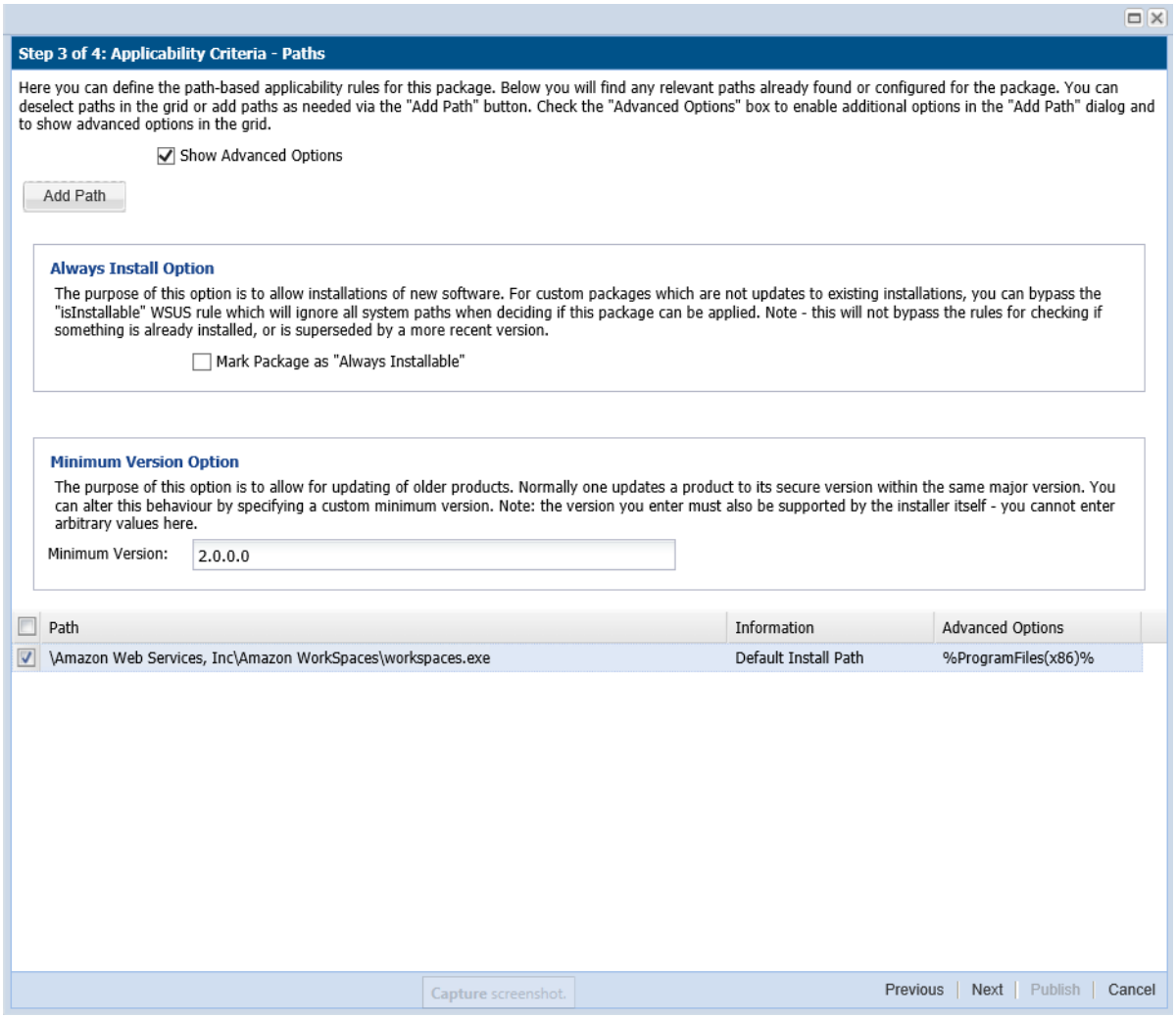
Note • *Note the following:*

- *If the selected product was **Blue** and **Black** in color, you can see the file(s) to include in the package.*
- *If the selected product was **Gray** in color, you need to add the file(s) or download link manually.*

Step 3 of 4: Applicability Criteria - Paths

In Step 3 you should select the paths/locations to which this package should be applied. These are usually populated by Software Vulnerability Manager based on the scans previously conducted.

Please be advised to only choose paths that are valid to avoid any update loops. You can also use paths with CSIDL and KNOWNFOLDERID if you select the Show Advanced Options check box. These variables should be used with their decimal value.



For packages (except .msi and .msp) that do not have any paths for applicability, select the Mark Package as “Always Installable” check box to ignore all paths. Paths for App-V and Mac OS X are filtered out since they are not supported for patching.

Use the Minimum Version Option to update older products. Normally, a product is updated to its secure version within the same major version. You can alter this behavior by specifying a custom minimum version.

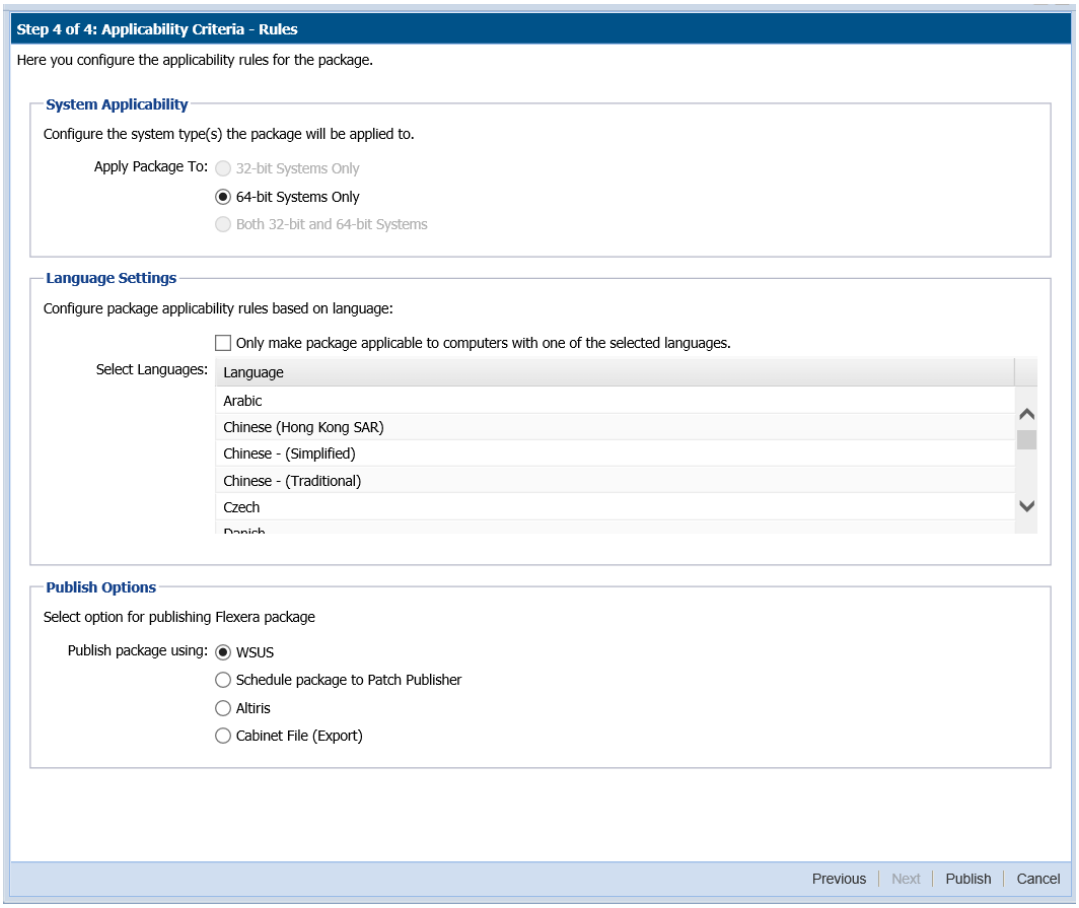
Click **Next** to open the **Applicability Criteria - Rules** wizard.

Note • *The minimum version you enter must also be supported by the installer itself - you cannot enter arbitrary values here.*

Step 4 of 4: Applicability Criteria - Rules

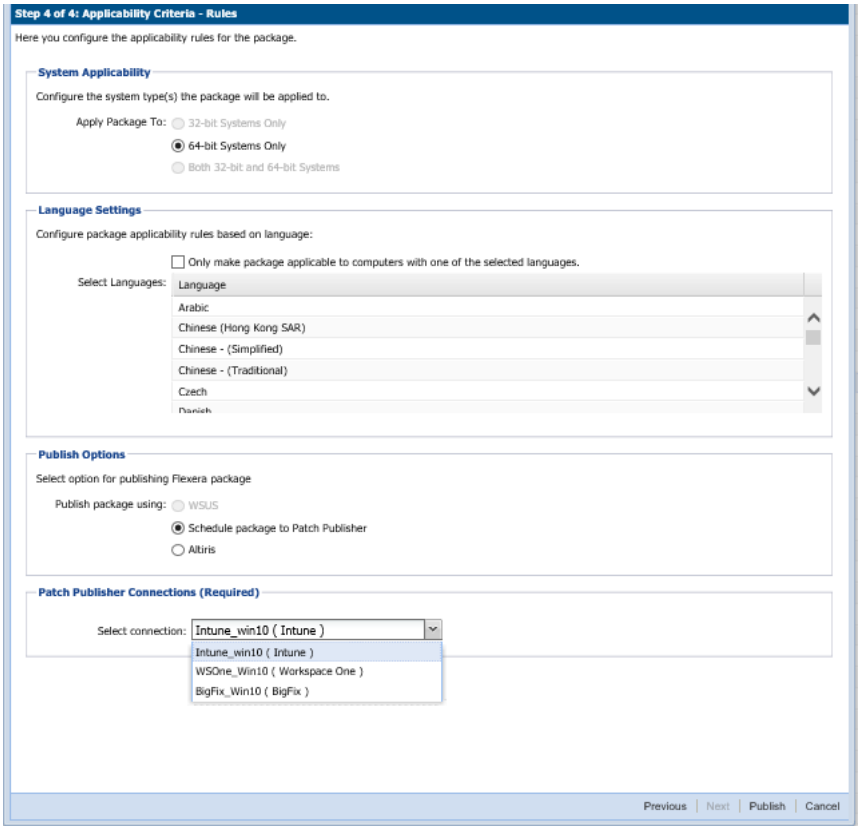
In Step 4 you should specify if you want to limit the package to 32-bit or 64-bit systems or computers with specific operating system languages. The patch file to be deployed will be automatically downloaded in the background by the Software Vulnerability Manager console. Once this is completed the Software Vulnerability Manager console will publish the update package into the WSUS/System Center.

To export the package, select Cabinet File (Export), and click **Publish**.



To publish a package through the Patch Publisher, select the **Publish Options** > **Schedule package to Patch Publisher**, and then select the required connection from the **Patch Publisher Connections (Required)** drop down.

Note • *Patch Publisher Connections are available only when you install the Patch Publisher for the account.*



To configure your package to only applicable for certain languages of the operating system, select Only make package applicable to computers with one of the selected languages and select the relevant language.

After deployment, you can see the patches for which packages have been successfully created are highlighted in **Green** color in the **Vendor Patch Module** products list. See Product Display Criteria for Vendor Patch Module.

Automating Patch Deployment

With Software Vulnerability Manager, you can subscribe, unsubscribe, edit, pause, and resume the automatic publishing of patches. To do so, right click on any SPS Template or VPM patch and select the following option:

- Subscribe to Patch
- Edit Subscription
- Pause Subscription
- Resume Subscription

Subscribe to Patch

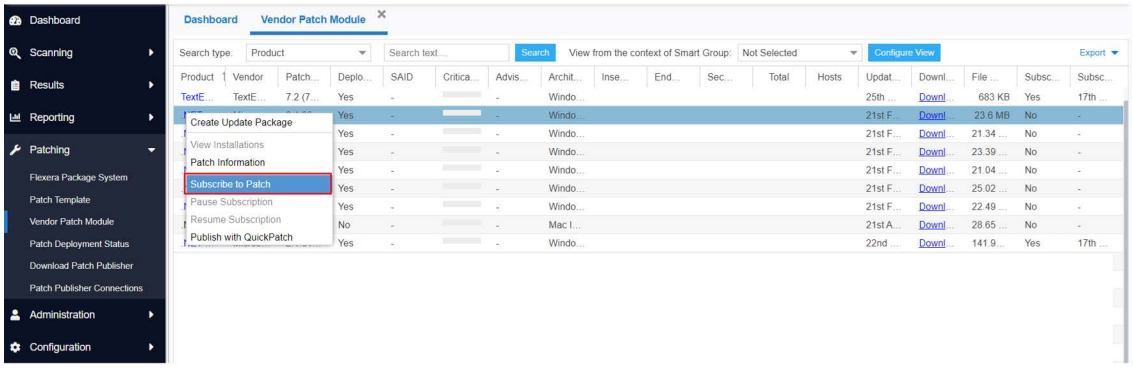
Subscribe to package option provides interface to define the threshold for automation. It helps you to set the below preferences, based on your requirements.

Task ***To subscribe to SPS and VPM patches for automatic publishing:***

1. Right click on any SPS template or VPM patch.

   To use this option, navigate to **Patching >> Vendor Patch Module** or **Patching >> Patch Template**.

2. Select **Subscribe to Patch** option from the context menu.



   The **Configure Subscription** dialog box appears.

3. Click **Select connections to Publish** drop down and select required connections from the list.

Note • *You can select multiple connections to publish. To select multiple connections hold Shift key.*

To make assignments for end point deployments for Intune publishing, click **Manage Assignments**. The Manage Assignments dialog box appears.

Note • *The Manage Assignments button is available only for Intune publishing.*

In the **Select Connection** field, the default connection will be pre-selected. If required, choose the desired configured connection from the drop down list.

In the **Required** section, you can add the following:

- Add Groups
  - Click **Add Groups**. The Intune Assignment Groups dialog box appears.
  - Select the required group from the list or enter keywords in the Search box, and then click **Find** button to display matching entries in the grid. Select the desired group(s) from the list.

Note • *You can select multiple groups.*

  - After selecting the required groups, click **Save** and exit the dialog box.
  - To remove a selected group, click the delete icon in the **Delete** column.
- Add All Devices

- Click **Add All Devices** to include all available devices.
- To remove added devices, click the delete icon in the **Delete** column.

***Note** • If **Add All Devices** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Devices**.*

- Add All Users
  - Click **Add All Users** to include all available users.
  - To remove added users, click the delete icon in the **Delete** column.

***Note** • If **Add All Users** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Users**.*

After adding the details, click **Save** and exist the dialog box.

4. Define the following:

   Either one of the below preferences can be defined:

   - **Always publish a new patch when a new version is available—**Publishes when new version of the patch is available.
   - **Only publish a new patch when any of the following are true:** Publishes when any one of the defined preferences are met.
     - SAID CVSS score is greater than
     - Criticality is greater than

       Extremely Critical

       Highly Critical

       Moderately Critical

       Less Critical

       Not Critical
     - **Patched version greater than—**By default current version of a patch will be displayed

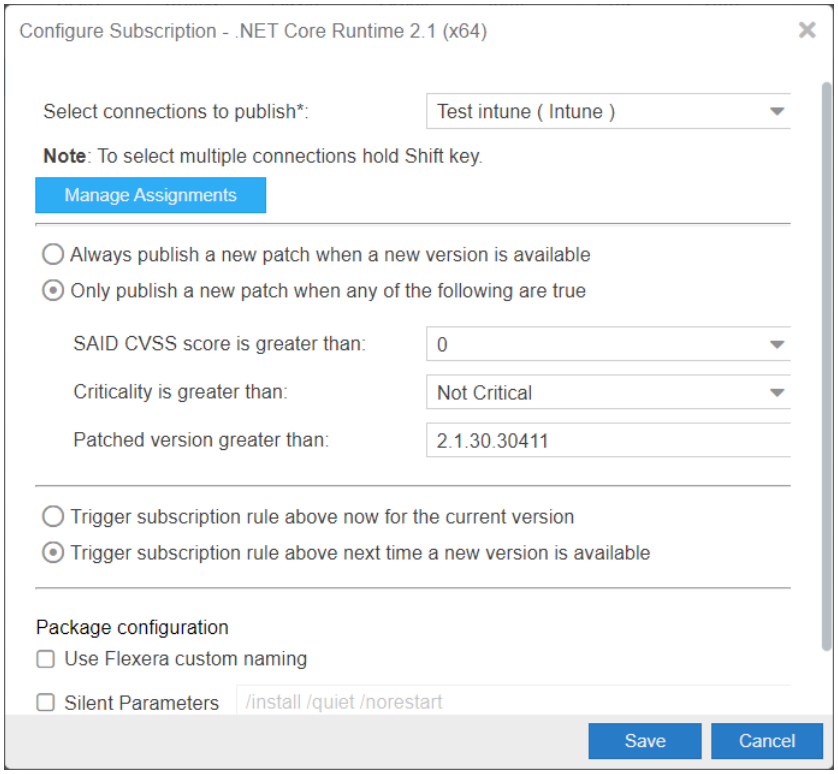
   Either one of these options must be selected to define the deployment schedule based on the above preferences:

   - **Trigger subscription rule above now for the current version—**Publishes the package right away
   - **Trigger subscription rule above next time a new version is available—**Start publishes the package when newer version is available

   Either one of these options must be selected for package configure:

   - **Use Flexera custom naming—**Saves as a Flexera custom name
   - **Silent Parameters—**Saves custom silent parameters for VPM subscription

5. After selecting, click **Save** button.



6. Click **OK** and agree the confirmation dialog that appears.
7. Upon successful action, the **Subscribe** column will be changed to **Yes**, and the **Subscription Started** column will be updated as per the subscription started date.

If you have installed Patch Publisher, then you can select the **Patch Publisher Connections** while subscription.

Note • *The Patch Publisher Connections are available only when you install the Patch Publisher.*

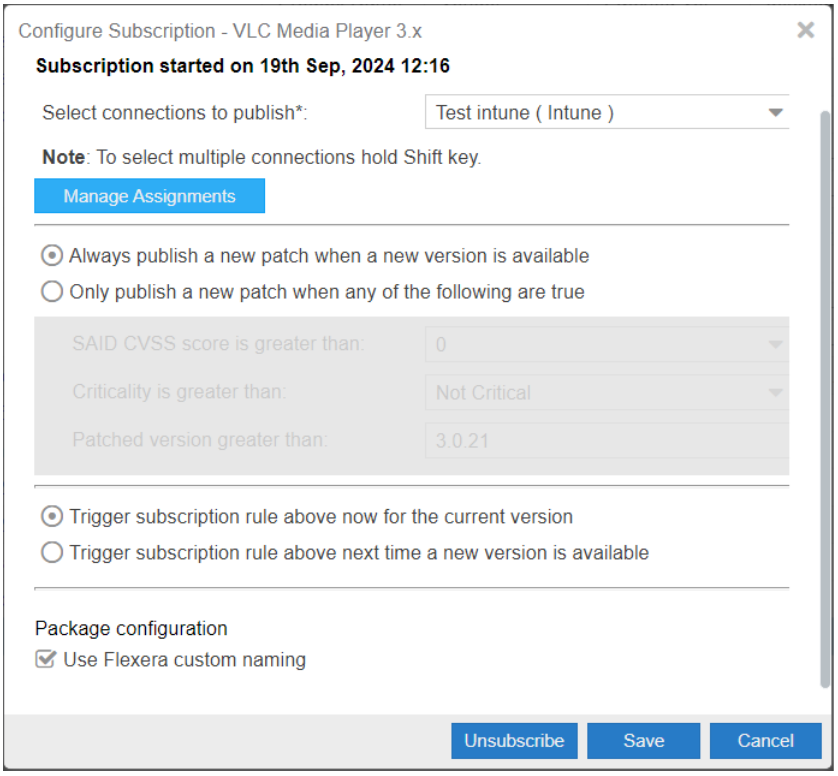
Edit Subscription

If the package is already subscribed as explained in Subscribe to Patch, you can right click and select **Edit Subscription** to edit the configured preferences.

Make the necessary modifications and click **Save**. Then, click **OK** and confirm in the dialog that appears. Once the action is successfully completed, the modifications will be updated.

Click **Cancel** to close the Configure Subscription dialog box without saving your changes.

To unsubscribe the subscription, click **Unsubscribe** button.



Pause Subscription

If the package is already subscribed as explained in Subscribe to Patch, you can right click and select **Pause Subscription** from the context menu.

Click **OK** to confirm in the dialog that appears. Once the action is successful, the **Subscribe** column will change to **Paused**.

Resume Subscription

If the package is already subscribed as explained in Pause Subscription, you can right click and select **Resume Subscription** from the context menu.

Click **OK** to confirm in the dialog that appears. Once the action is successful, the **Subscribe** column will change to **Yes**.

External Package Signing for Software Vulnerability Manager Client Toolkit

Using Manual Signatures (also known as External Signatures) allows separating the privilege of Windows Server Update Services (WSUS) administration from the privilege to mark a package as trusted for deployment. With automatic signatures (typically, but not always, using a self-signed certificate), the WSUS administrator has full access to a digital certificate and private key that is trusted by all the machines within the organization. With Manual signatures, WSUS, and thus the WSUS administrator, does not require access to the private key.

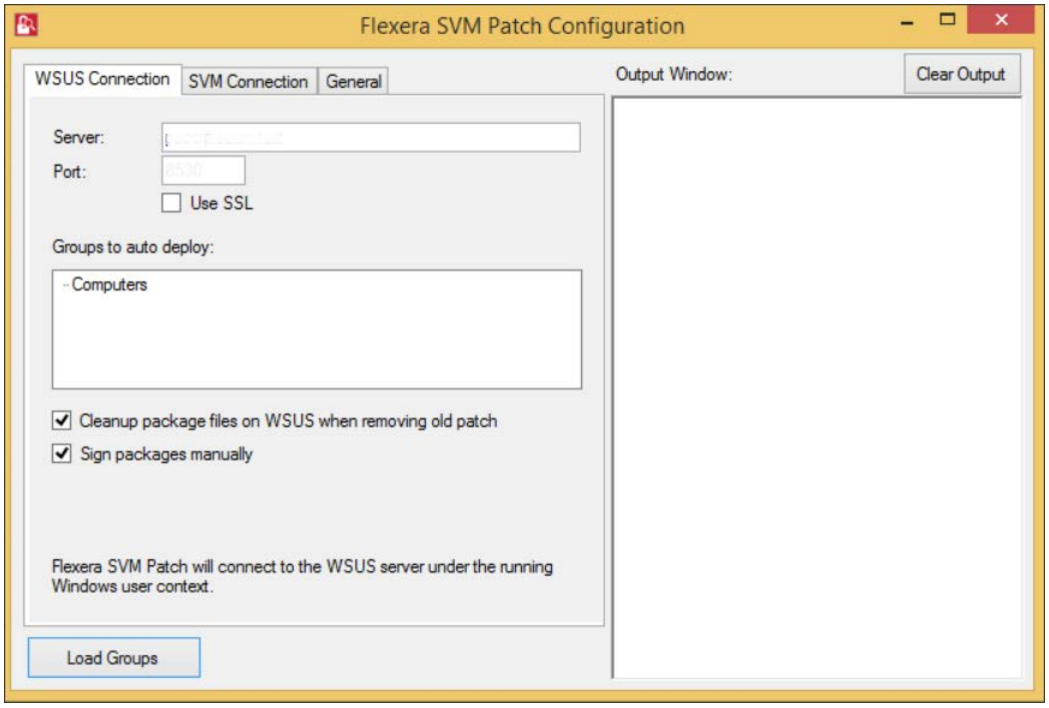
Prerequisites

The below prerequisites are required:

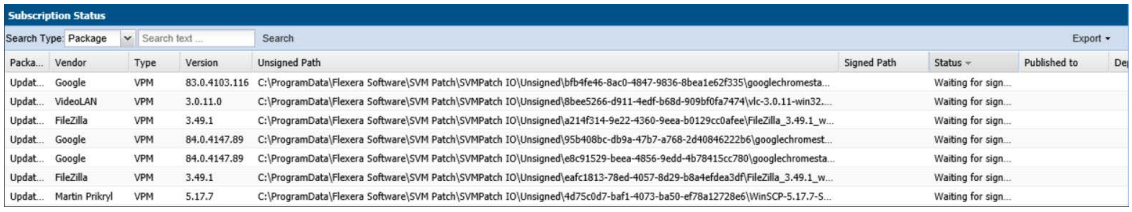
- pfx certificate needs to be installed in WSUS m/c in Trusted publisher and Trusted CA.
- pfx certificate needs to be installed in Trusted publisher and Trusted CA in the m/c where patch daemon is installed.

Task ***To External Package Signing, perform the following steps:***

1. In Patch daemon, select **Sign package manually** option.



2. Restart the patch daemon.
3. Subscribe VPM packages and wait for patch daemon to fetch the tasks.
4. Patch daemon creates unsigned .cab files and places in the unsigned folder location.
5. The Unsigned folder location is available in the subscription status page as an unsigned path.



6. Sign the cab file using the format below and place the signed .cab file in the signed folder.

   For example:

   C:\ProgramData\Flexera Software\SVM Patch\SVMPatch IO\Signed\package_id\

Note • *Private Keys are typically stored in .pvk files, and public keys are stored in .cer or .pfx files.*

7. During the next check-in, the daemon picks and publishes the signed cab files.

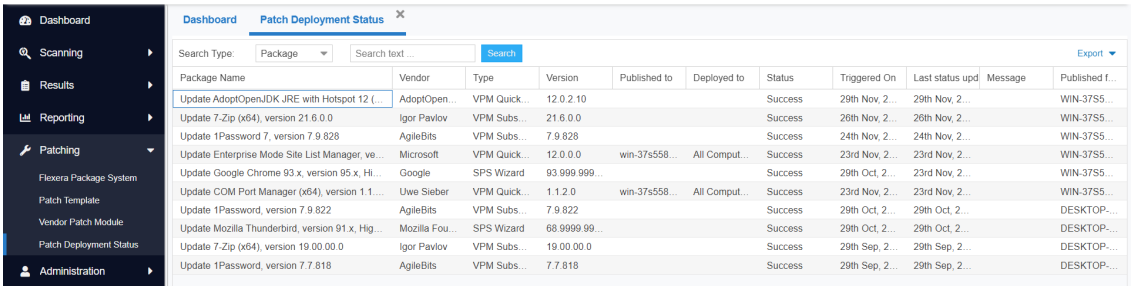
Patch Deployment Status

Use this page to view the status and details of SPS and VPM patches published.

Upon mouse hovering on the **Message** column, you will see the entire message appear as a tooltip. Alternatively, you can click on the **Message** to see the entire message appear in a popup message box.

This view provides further information regarding:

- Manage Assignments
- Delete



Manage Assignments

Note • *Management assignments are only available for Intune and are disabled for Quick Patch.*

You can add or edit assignments for deployed patches based on their specific status.

Task ***To add or edit deployed patches:***

1. On **Patching** menu, click **Patch Deployment Status** in the left pane.

   The Patch Deployment Status grid appears.

2. Right click on a desired deployed patch and select **Manage Assignments** from the context menu.

   The Manage Assignments page appears.

3. In the **Connection** field, the default connection will be pre-selected. If required, choose the desired configuredconnection from the drop down list.

4. In the **Required, Available, and Uninstall** sections, you can add the following:

   - Add Groups

- Click **Add Groups**. The Intune Assignment Groups dialog box appears.
- Select the required group from the list or enter keywords in the Search box, and then click **Find** button to display matching entries in the grid. Select the desired group(s) from the list.

Note • *You can select multiple groups.*

- After selecting the required groups, click **Save** and exit the dialog box.
- To remove a selected group, click the delete icon in the **Delete** column.

- Add All Devices
  - Click **Add All Devices** to include all available devices.
  - To remove added devices, click the delete icon in the **Delete** column.

Note • *If **Add All Devices** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Devices**.*

- Add All Users
  - Click **Add All Users** to include all available users.
  - To remove added users, click the delete icon in the **Delete** column.

Note • *If **Add All Users** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Users**.*

5. After adding the details, click **Save** and exist the dialog box.
6. Upon successful, assignment details are added to the selected patch.

The **Manage Assignments** and **Delete** options are available in the context menu based on the status of the patch:

Table 10-2 • Context Menu options based on Status of the Patch

Status of Patch	Manage Assignments	Delete
Added to Queue	Yes	Yes
In Progress	No	No
Pending Deployment	Yes	No
Success	Yes	No
Failed	No	Yes
Waiting for signature	No (not a status for Intune, so it doest not apply)	No

Table 10-2 • Context Menu options based on Status of the Patch

Status of Patch	Manage Assignments	Delete
Signed	No (not a status for Intune, so it doest not apply)	No
Added to Queue + Valid App ID	Yes	No
Failed + Valid App ID	Yes	No

Delete

To delete deployed patches based on their specific status, perform the following steps.

Task ***To delete a deployed patch:***

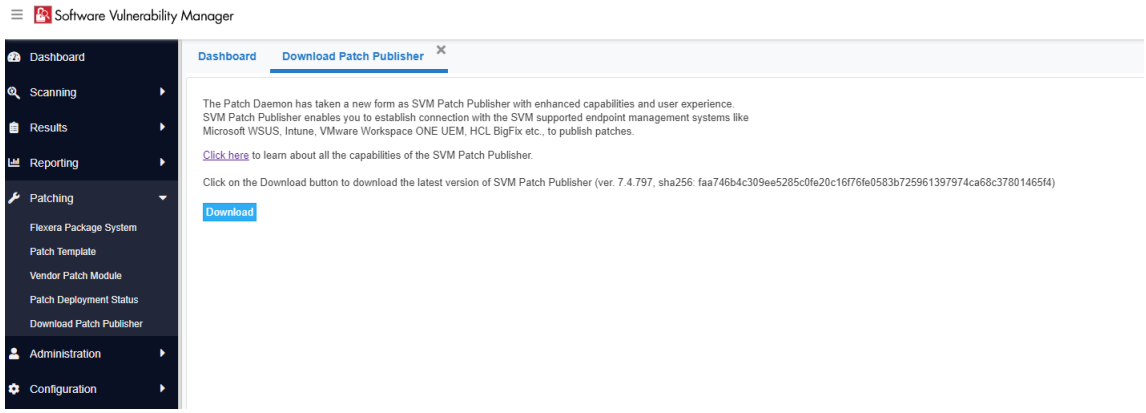
1. On **Patching** menu, click **Patch Deployment Status** in the left pane

   The Patch Deployment Status grid appears.

2. Right click on a desired deployed patch and select **Delete** from the context menu.
3. Click **Yes** and confirm to proceed the changes.
4. Upon confirming, the selected patch will be removed.

Download Patch Publisher

Use this page to download the latest version of Patch Publisher. Click on **Download** button to download the latest version of Patch Publisher from the Software Vulnerability Manager console.



Patch Publisher Connections

Use this page to view / delete Patch Publisher and its connections.

- View Patch Publisher Connections
- Delete Patch Publisher and its Connections
- Delete Independent Patch Publisher Connections

Note • *This feature is available only at SVM New User Interface.*

View Patch Publisher Connections

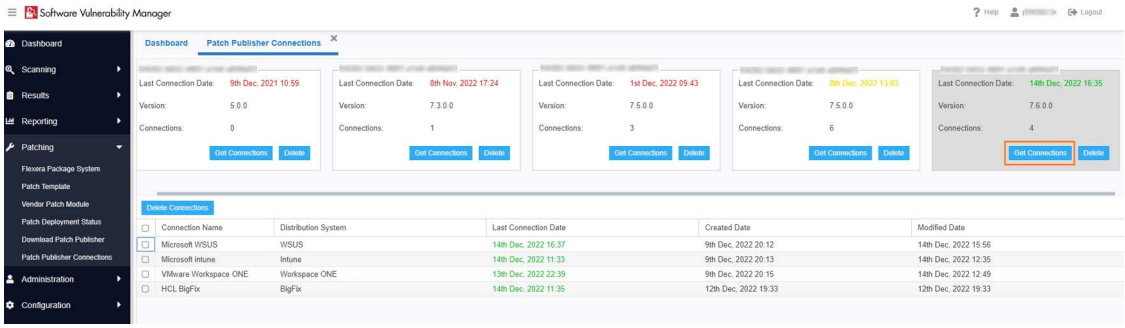
To view Patch Publisher connections, perform the following steps.

Task ***To view Patch Publisher connections:***

1. On **Patching** menu, click **Patch Publisher Connections** in the left pane.

   The **Patch Publisher Connections** page appears with connection details.

2. Select the desired patch publisher and click on **Get Connections** to get the connection details.



Delete Patch Publisher and its Connections

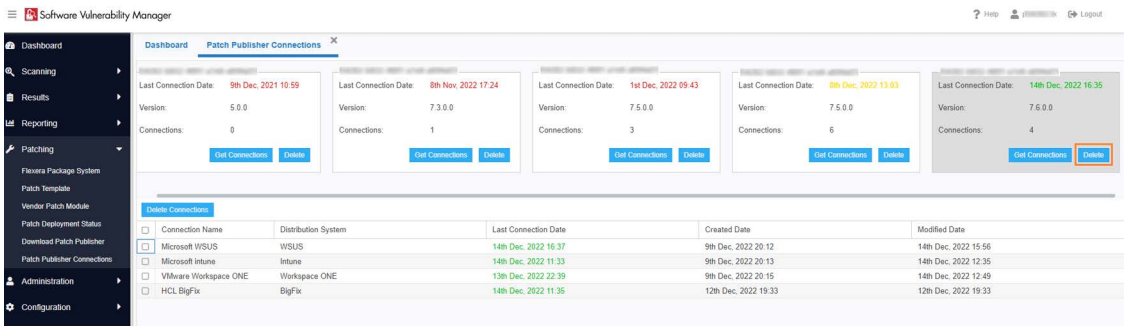
To delete Patch Publisher connections, perform the following steps.

Task ***To delete Patch Publisher connections:***

1. On **Patching** menu, click **Patch Publisher Connections** in the left pane.

   The **Patch Publisher Connections** page appears with connection details.

2. Select the desired patch publisher and click on **Delete** button.



3. Select **Yes** or **No** to confirm whether or not to delete the Patch Publisher connection.

Delete Independent Patch Publisher Connections

To delete Independent Patch Publisher connections, perform the following steps.

Task ***To delete independent Patch Publisher connections:***

1. On **Patching** menu, click **Patch Publisher Connections** in the left pane.

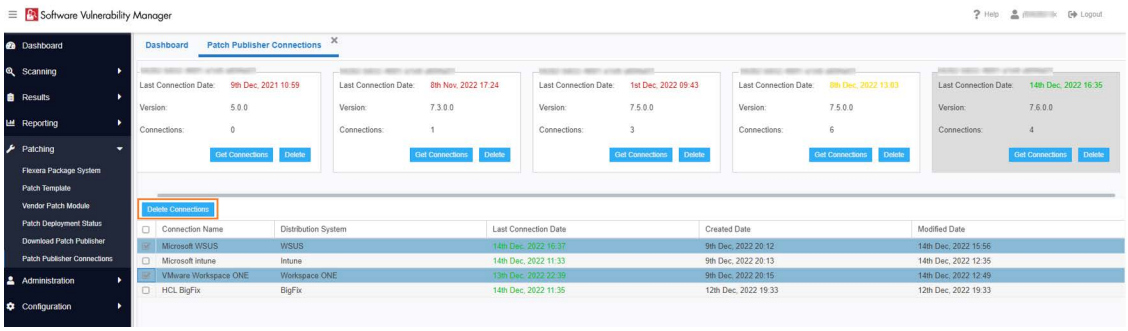
   The **Patch Publisher Connections** page appears with connection details.

2. Select the desired patch publisher and click on **Get Connections** to get the connection details.

3. Click on the check box button and select the independent connections that you want to delete.

   Note • *You can select multiple connections (if required).*

4. Click on **Delete Connections** button.

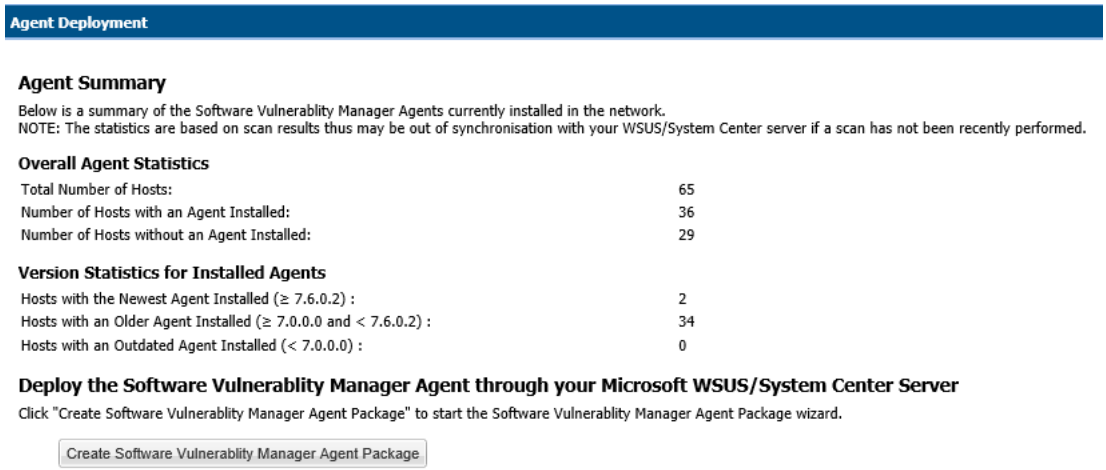


5. Select **Yes** or **No** to confirm whether or not to delete the Patch Publisher connection.

Agent Deployment

If you choose to scan the target host by using the Software Vulnerability Manager Agent in Single Host mode (recommended), you can easily distribute and install the Agent by deploying it through the currently supported deployment solutions WSUS/System Center, Intune, Workspace One, and BigFix.

Click Create CSI Agent Package under Agent Deployment to start the Software Vulnerability Manager Agent Package wizard.

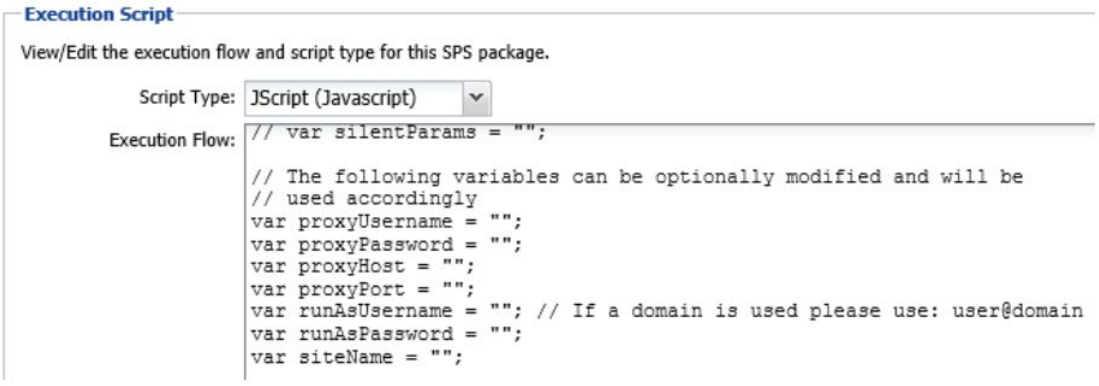


The Software Vulnerability Manager Agent Package can be created and managed just like any other SPS package.

SVM Agent Deployment Package Configurations

The Agent Deployment package allows the configuration of a variety of agent installation options that can be used to customize the agent prior to deploying the package.

The command-line options of the agent can be set in the script that is provided at step 2 of the SPS Agent Deployment package configuration wizard.



Configure **runAsUsername** when you intend to install and run the agent under service account different than **LocalSystem**. You are required to configure the **runAsPassword** together with that.

Configure **runAsUsername** and **runAsPassword** when the network proxy will block **LocalSystem** to perform online connections. Then you will be required to use a service account to run the agent as an authenticated user to have it easily bypass network blocking.

Configure **ProxyUsername** and **ProxyPassword** variables when the username and password for the network proxy are not shared with active directory and are verified only against the proxy server.

Configure **proxy host** and **proxyPort** variables when you want to specify which proxy should be used by the local agent to successfully connect to its target online servers at Flexera.

Configure the **SiteName** variable when you want to define a custom site grouping in the management interface. This method should never be combined with the use of Active Directory feature in Software Vulnerability Manager. You must decide which you will use and stick to it.

SiteName is also used when extra options like debugging parameters or scan interval randomization commands must be included in the installation command of the agent.

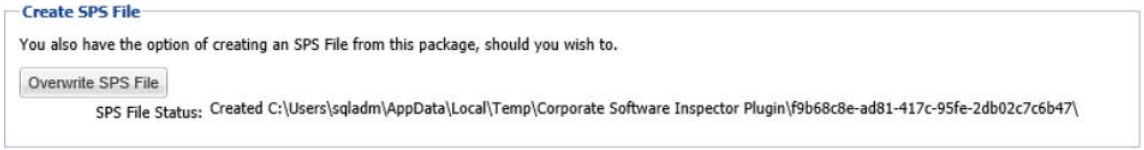
The next command will install the agent with custom site Hi, scan interval 30 minutes, and will create a log file of the installation of the agent that will run until you uninstall the agent.

```
siteName = “Hi –si 30 –d c:\agent-log.txt –v”;
```

Preliminary Package Testing

After your settings are configured in the script SPS gives you the option to export the file on the local file system and execute it. The exported file is always called sps.exe. This executable is ready to install, and it includes the settings you have set in the execution flow script.

For each script change, you can export different package and test until you get a working package. This is your final goal, an agent deployment package that installs an agent that successfully communicates with its server without errors.

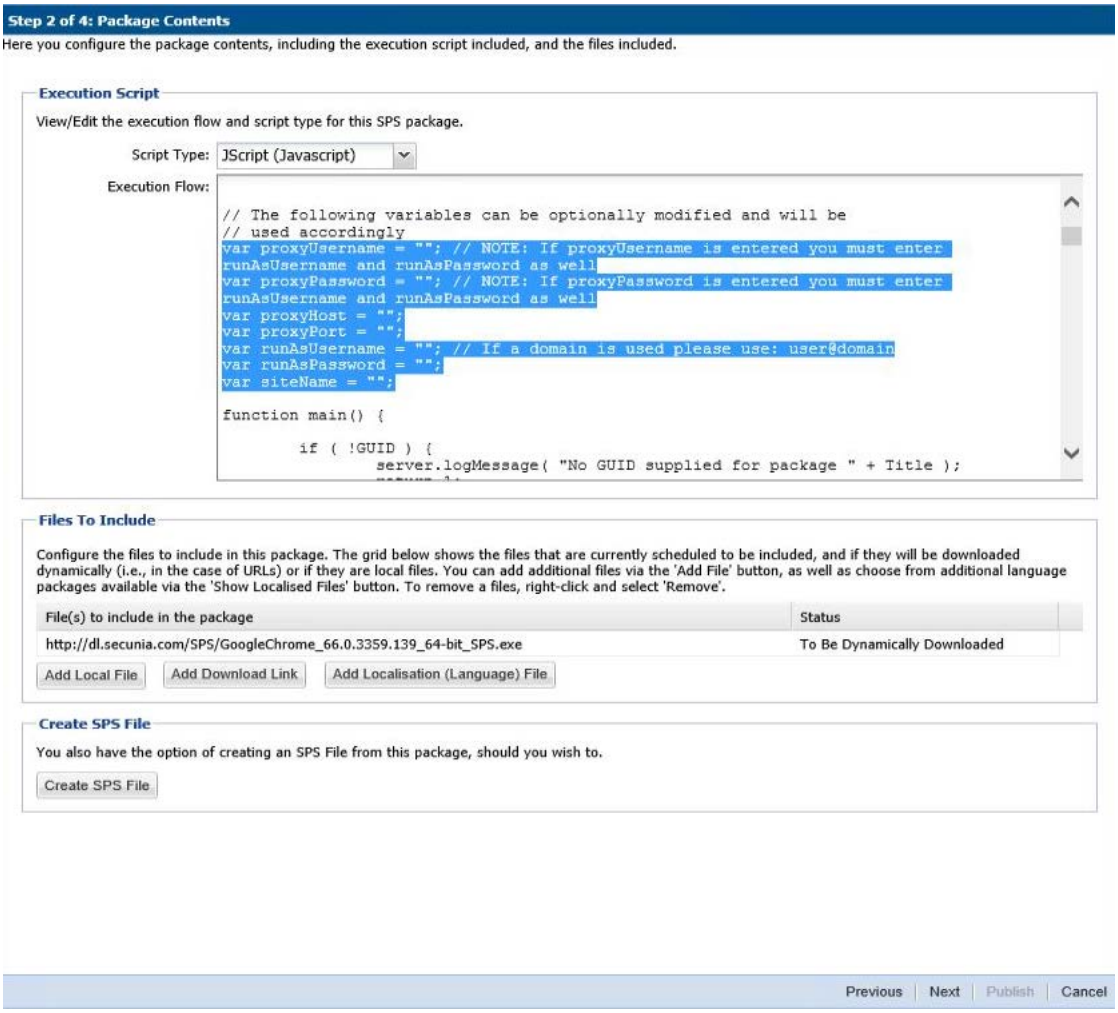


Agent Package Applicability

The agent deployment package enables you to publish the installer as a software update to WSUS. Its applicability rules are set to always install. It will execute on any endpoint where it has not been installed, or where a previous agent version exists without having to pass SCCM package applicability evaluation which is traditional for every other 'update' type of package published through SVM.

Add Proxy Settings

You can add proxy settings to the installation script in the SPS wizard when creating the agent deployment package. In Step 2 of 4: Package Contents, modify the variables in the Execution Flow field.



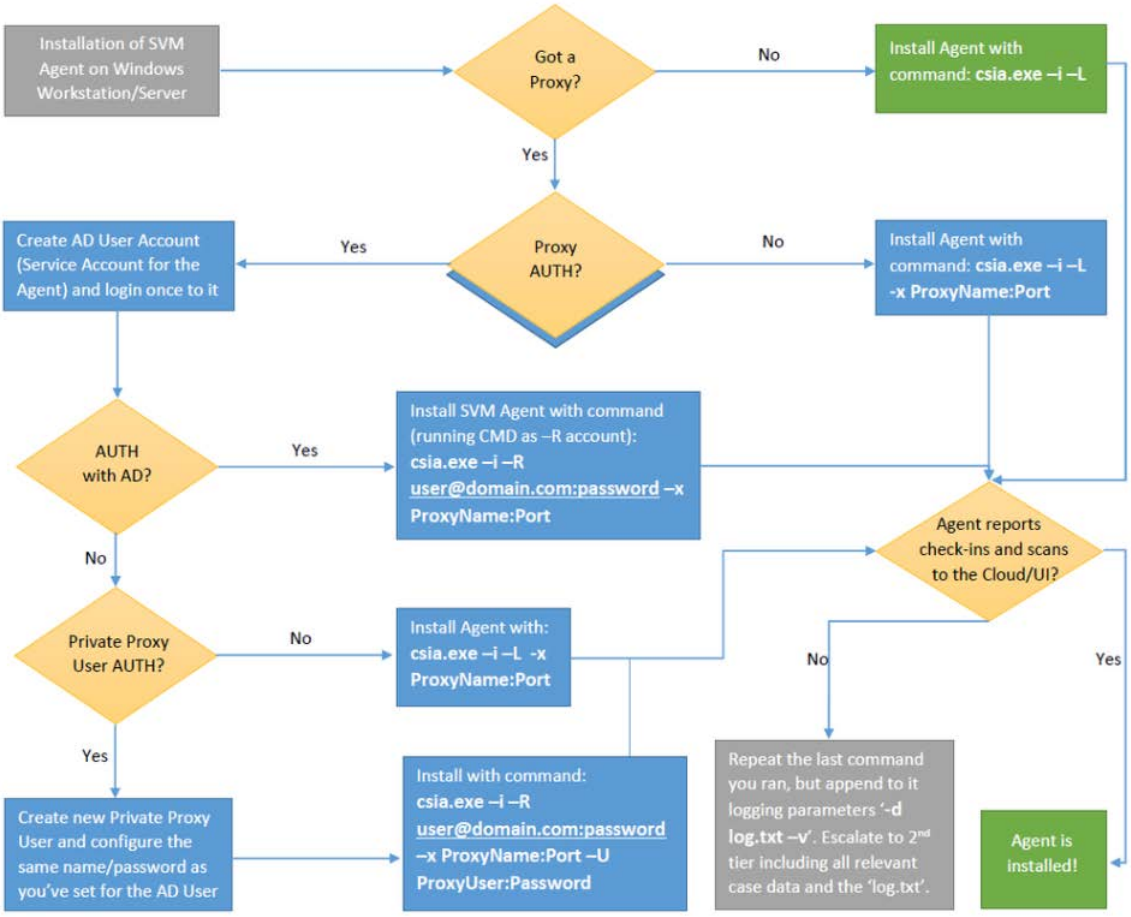
SVM Agent Deployment Logic to Avoid Proxy Blocking

When there is a proxy on the network, in many cases you might be best suited to install agents under managed domain service account which can authenticate through the proxy successfully, especially when the LocalSystem account is disallowed to connect online by Proxy or local domain policies.

When there is no proxy or the existing proxy does not require client/user authentication to allow online access, installing the Single Host Agent under LocalSystem account and setting up the netsh winhttp forwarding to the correct proxy server is sufficient to have the Agent bypass the network successfully.

You should use this logic flow to match the correct way to set up your Agent based on the networking requirements of your estate. -L symbolizes installation under "LocalSystem" while -R symbolizes "RunAs" installation under a managed domain service account.

This type of planning can save you from having to revert to a different configuration because of network proxy blocking and permission problems that prevent SVM 2019 Agents to report back scan results.



You can use automated deployment and configure the correct parameters in the Agent configuration. For more information see, SVM Agent Deployment Package Configurations.

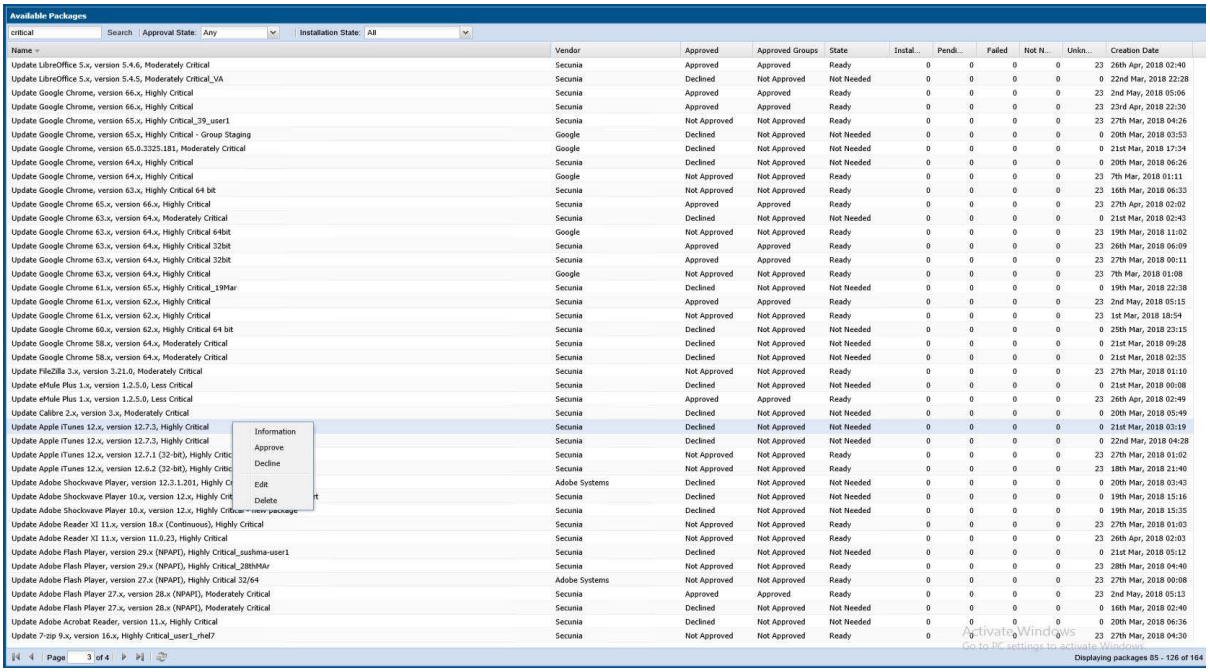
WSUS/System Center

The following sections describe the WSUS/System Center:

- Available
- Deployment

Available

Right-click a package for more options such as Approve, Decline or Delete or double-click a package to display additional status details.



Important • *Once the updates have been published into the WSUS, the same rules previously configured for the Microsoft updates will apply to the updates created by Software Vulnerability Manager. If the updates automatically appear with the Approved status, this means that this setting is being inherited from the WSUS.*

Deployment

Use this page to view a host's information collected from the WSUS Server. Use the Installation State drop-down list to filter the hosts being displayed.

Right-click a host and select Information to view additional details such as: Scan Result, Patch Information, Patches Available and Overview.

You can also right-click a host listed in this view and select Verify and Install Certificate to install the required certificate created or imported in Step 2 - Certificate Status.

Usually, the certificate is installed through a GPO as described in Step 3 – Group Policy Status.

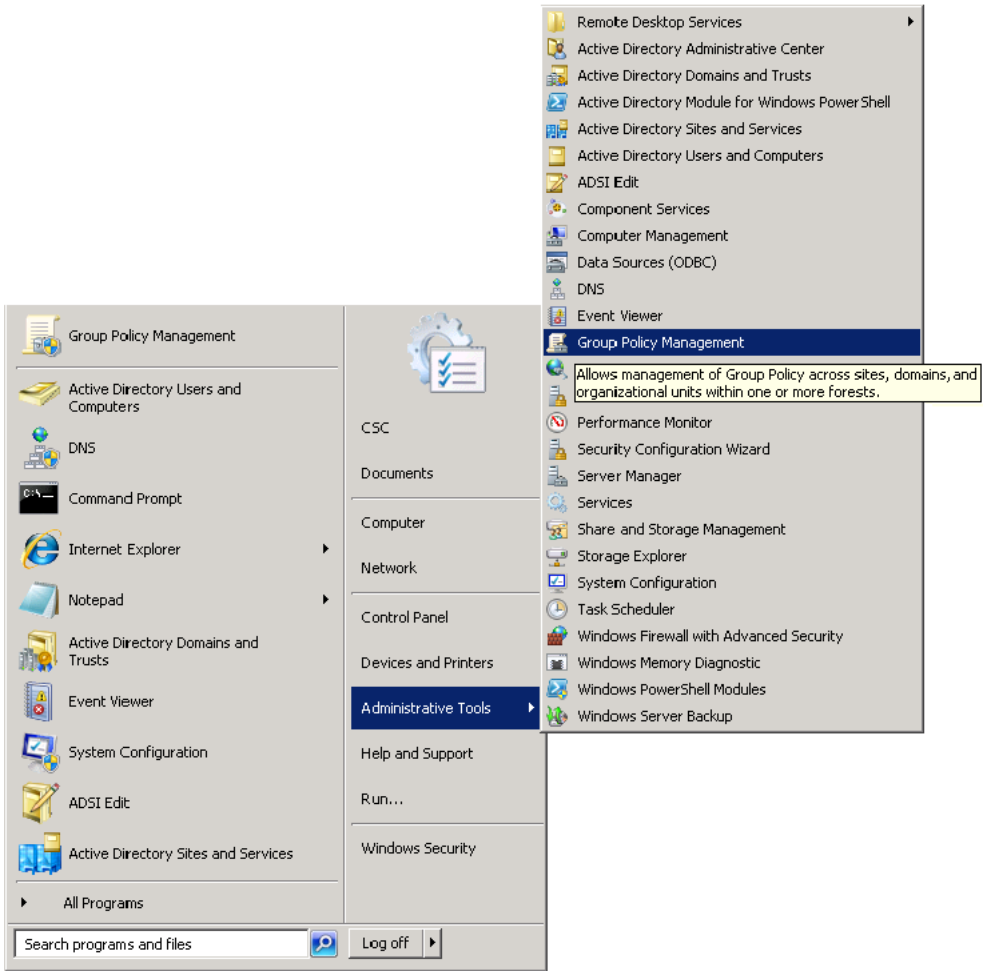
In order for Software Vulnerability Manager to connect to WSUS and to create packages successfully, Internet Explorer must be run As Administrator in most cases (right-click and select Run as administrator). Also note that the Remote Registry must be enabled on hosts for which you intend to install the certificate using the Software Vulnerability Manager GUI. The remote registry is not needed if distributing the certificate through GPO.

The WSUS Self-Signed Certificate can also be installed through a manually created Group Policy.

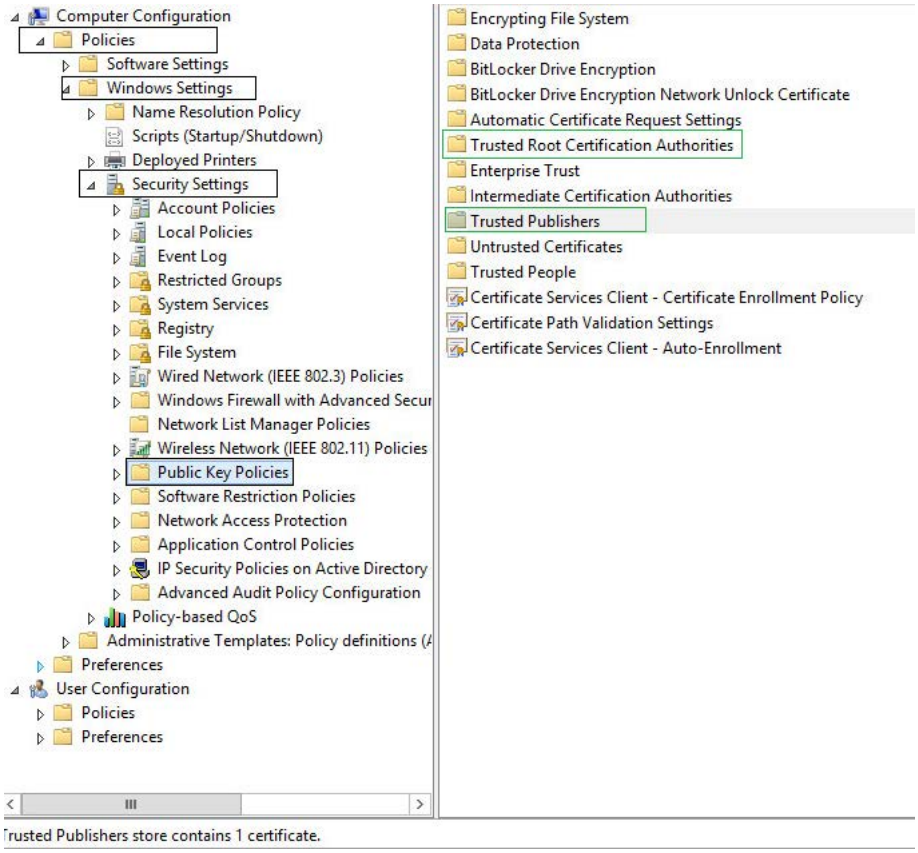
Creating the WSUS-CSI GPO Manually

Task ***To create the WSUS-CSI GPO manually:***

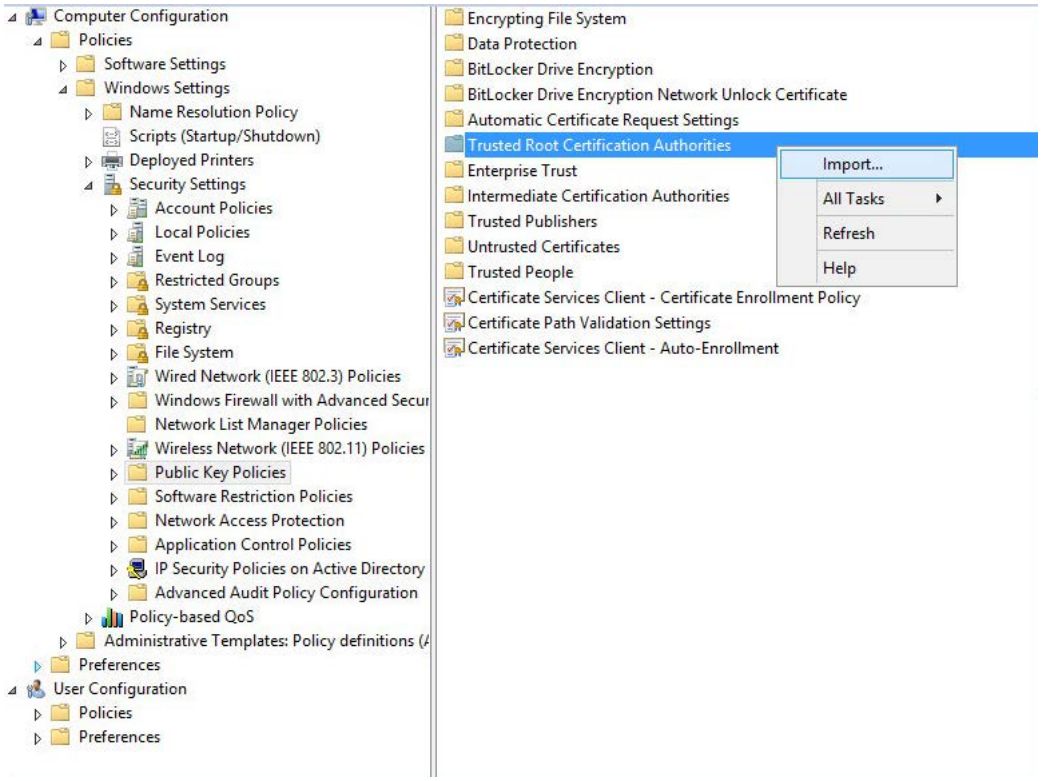
1. Export the WSUS Self-Signed Certificate.
2. On the Domain Controller, click Start > Administrative Tools > Group Policy Management. Right-click your Domain name and select Create a GPO in this domain and Link it here. Alternatively, you can edit an existing GPO.



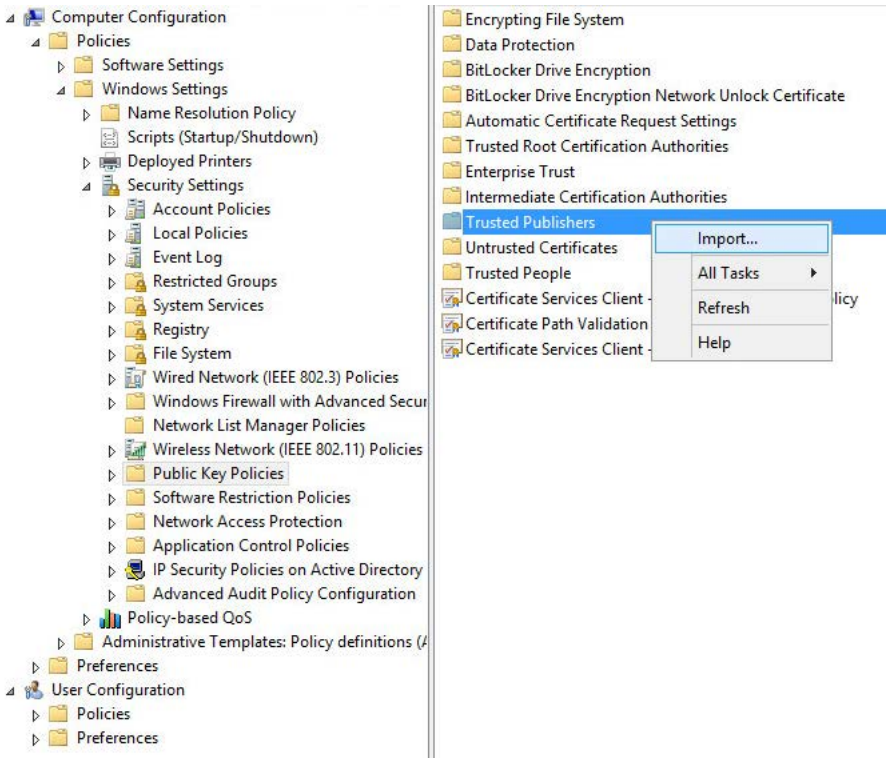
3. Right-click the GPO that you created/edited in the previous steps and select Edit.
4. Navigate to Computer Configuration > Policies > Windows Settings > Security Settings > Public Key Policies.



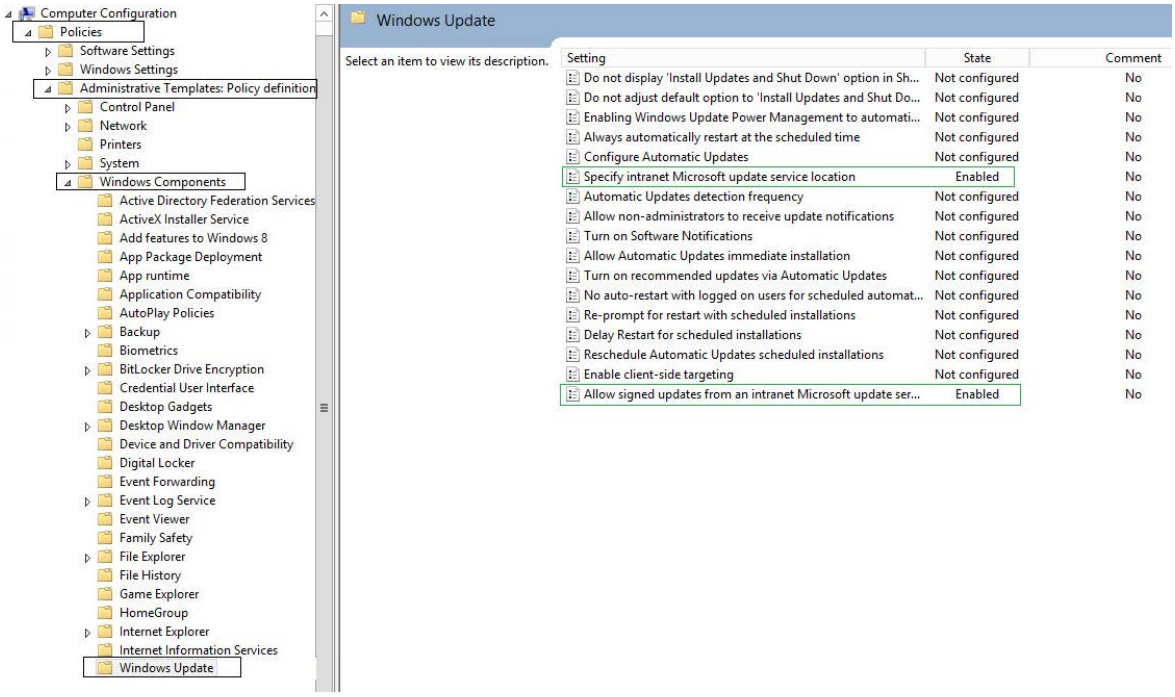
5. Right-click Trusted Root Certification Authority and select Import. Import the certificate that you exported in Step 1.



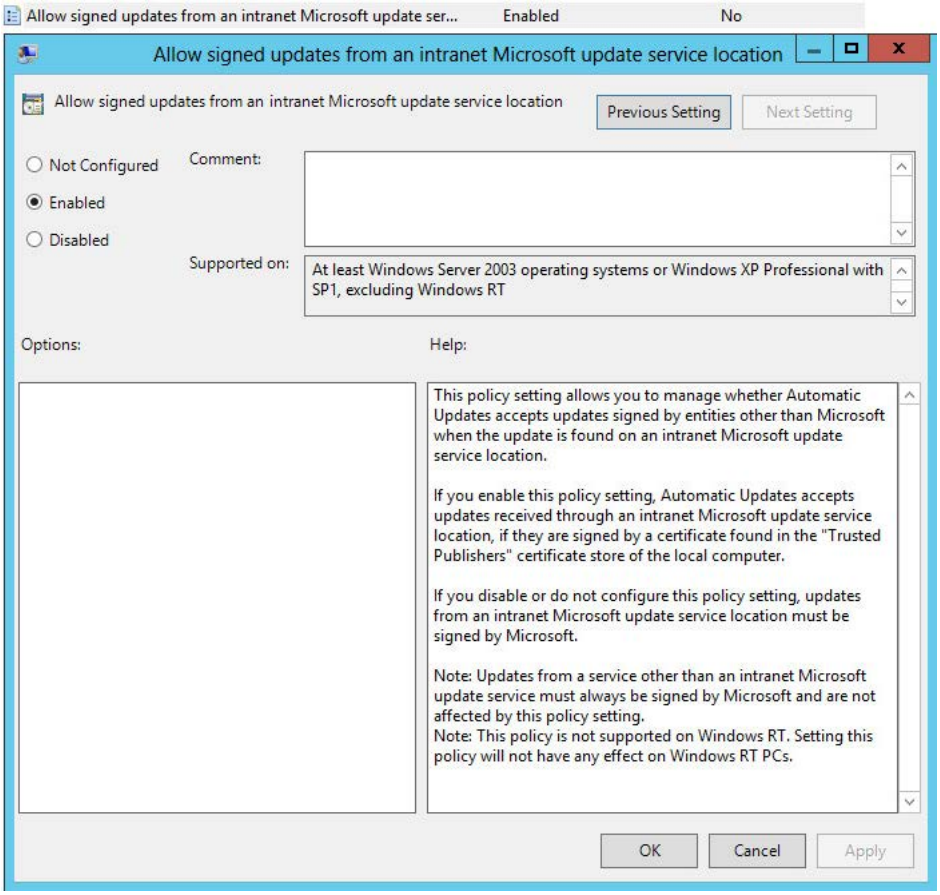
6. Repeat Step 4 and import the certificate for Trusted Publishers.



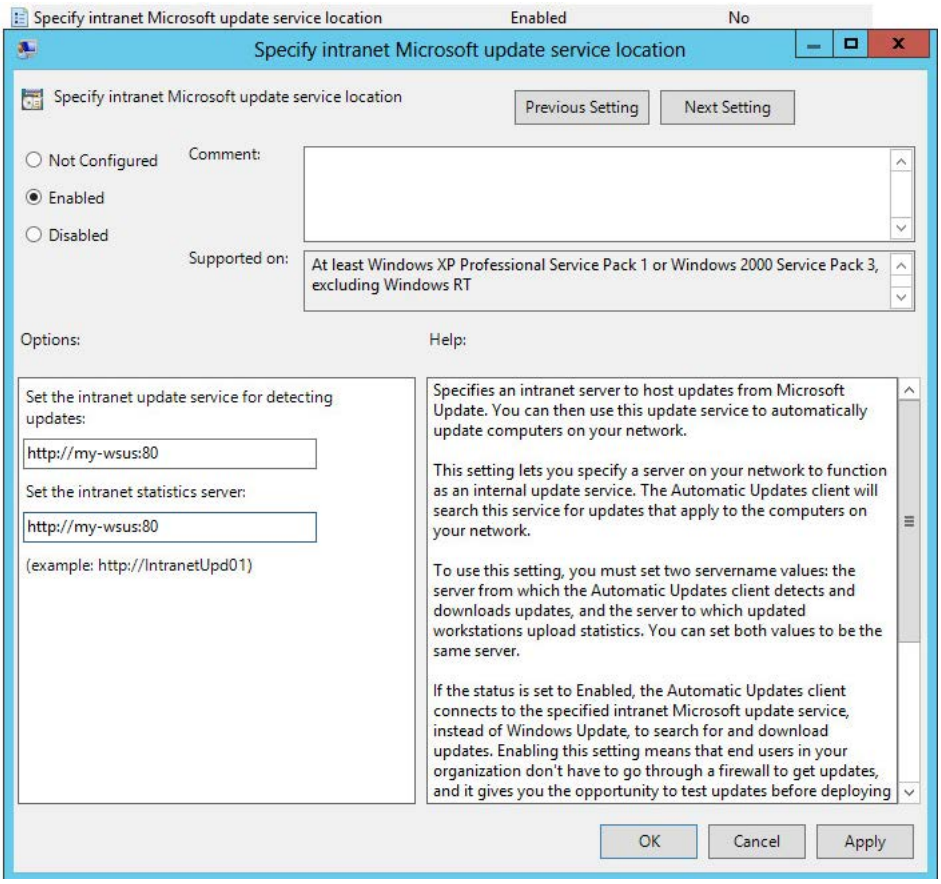
7. Navigate to Computer Configuration > Administrative templates > Windows Component > Windows Update.



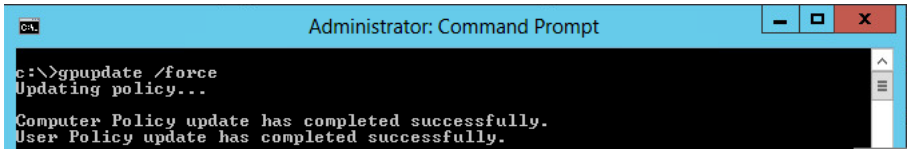
8. On the right-side menu, double-click **Allow signed updates from an intranet Microsoft update service location**. Select **Enabled** and click **OK**.



9. On the right-side menu, double-click Specify intranet Microsoft update service location. Enable this setting and modify the existing empty fields with the intranet address of your WSUS Server. This step is only valid for WSUS integration and is not required for System Center Configuration Manager integration.



10. Link the created GPO to an Active Directory container appropriate for your environment.



The clients affected by the created GPO will install the certificate being distributed (either the WSUS Self-Signed Certificate or your own CA certificate) and acknowledge the Windows Update settings that you have specified in the GPO.

By default, Group Policy refreshes in the background every 90 minutes, with a random offset of 0 to 30 minutes. If you want to refresh Group Policy sooner, you can go to a command prompt on the client computer and type:

```
gpupdate /force
```

Refer to http://technet.microsoft.com/en-us/library/cc720539 for further information on how to configure Automatic Updates by Using Group Policy.

Deploying the Update Package Using WSUS

To deploy the update package using WSUS, the update package must be approved. After publishing the package into the WSUS, and assuming that the update is visible under Available, right-click the package name and select Approve.

You will be prompted to select the computer target groups for which you would like to approve the update. These target groups are configured in the WSUS.

The same approach should be used if you wish to decline a previously approved update.

Deploying the Update Package Using System Center

The actions Approve and Decline are only applicable if the package is to be deployed through WSUS. If you are using the Microsoft System Center, the package created with Software Vulnerability Manager will be available in your System Center.

Integrate SVM with WSUS/SCCM and Deploy a Patch

Users often require additional help for the logical process workflow when it comes to integrating the Software Vulnerability Manager 2019 software to their internal WSUS or SCCM servers for patching.

In most, users need additional elaboration on what is the right sequence of steps to integrate SVM and what actions will be needed to troubleshoot expected errors that come in their way as part of the deployment process.

Flexera has made a logic flow map that provides essential knowledge of the steps involved to integrate the SVM to your internal server infrastructure and the steps to troubleshoot basic errors or exceptions that might come in your way while you're performing this process. We also provided an extensive amount of additional information that can help you investigate package errors in the different phases of the deployment process of a package made with SVM and handled for deployment in WSUS/SCCM/CCM.

Customers are highly encouraged to follow this diagram at their best effort, before reporting support cases to Flexera Support, as they would also receive a greater knowledge in learning each step of the integration while following the diagram.

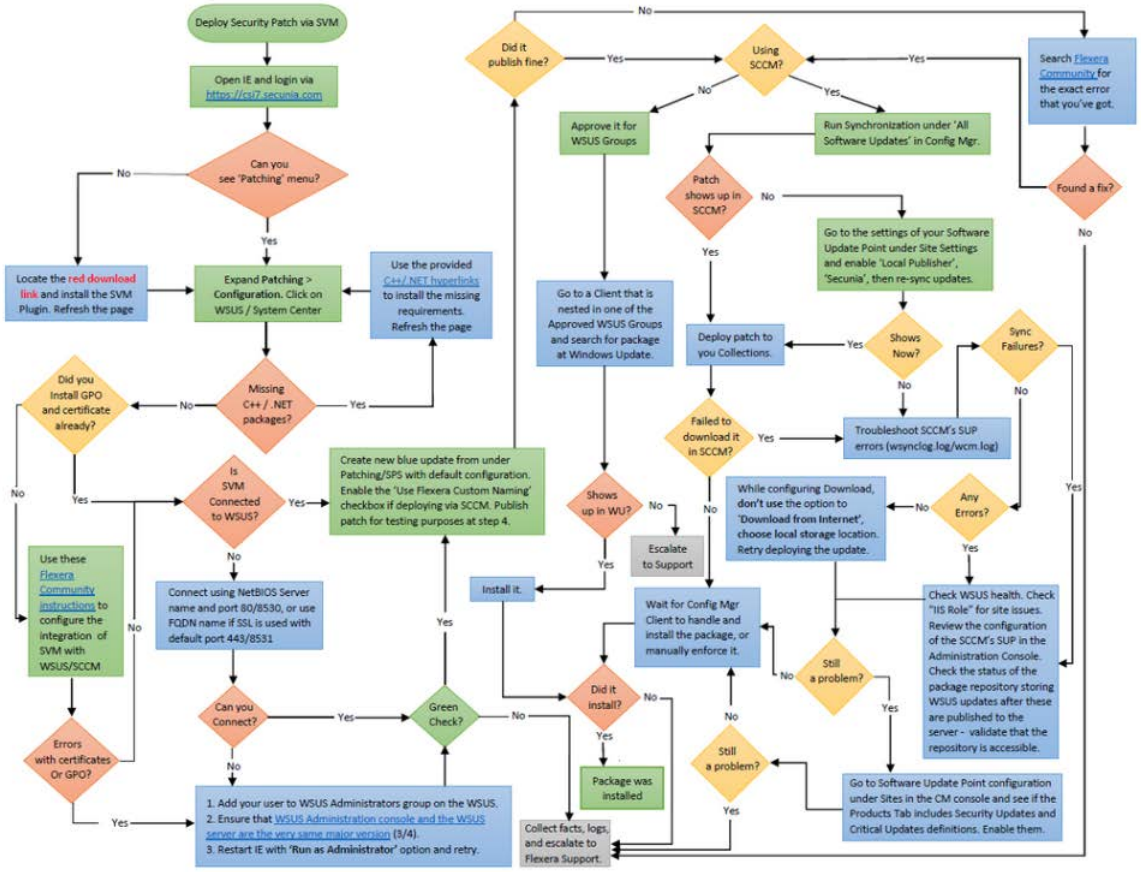


Figure 10-4: Logic Flow Map

You can download the attached PDF document under this KB for a better resolution of the logic map.

Customers are highly advised to include the relevant log files that enable visibility when they send their cases to the Flexera Support team. Depending on where the problem occurred (in which phase), the following log files can be relevant:

Patch Creation phase

If there was a technical problem not covered by the logic flow map, the first course of action should always be to search the error you see inside this Flexera Community site, as Flexera Support issues KBs for each new error that is detected with customers. The chance of finding a solution here is very high.

If that did not help you solve the issue or move further in the mapping process, find the "%userprofile%\My Documents\csi_pluginlog.txt" file on the system where you tried creating a patch and submit that to our Support team adding as much as information about your case as possible.

Patch Deployment phase

The patch was published successfully, but there is an issue with your WSUS server not sending the update to the recipients you approved it for. This may be expected if the recipients did not have the same software already installed (hence, the patch is not applicable, that's why it is not showing up). This is where you have to check the patch applicability rule configured in the SPS wizard -> steps 3 and 4 and verify all enabled requirements of the patch against the clients not receiving it.

If the patch was published to SCCM, you should first and foremost ensure that your SCCM/WSUS (SUP) configuration is intact. If it is and you're successfully publishing Microsoft patches that way, then you can troubleshoot the wsynclog.log file for errors that might shed lighter on what is causing a problem with the synchronization of the patch between the WSUS DB and the SCCM's own database.

Patch Download/Installation phase

If the patch has shown up and you've deployed it to hosts, but the hosts failed to install it, you can look into the respective client logs for the CCM Client service, Windows Update, or the Secunia Logs as well:

- Check C:\Windows\SecuniaPackage.log for any traces of installation - did package ran to install?

If it ran - patch applicability rules are fine - there's an execution error, however.

If it did not run at all and there are no traces of that - there are most likely patch applicability issues or management point download issues. Such problems can be diagnosed in the log files (to name a few):

`C:\Windows\CCM\Logs\UpdatesDeployment.log`

`C:\Windows\CCM\Logs\UpdatesHandler.log`

- If the patch ran and there's an obvious error in the SecuniaPackage.log file - check the "C:\Windows\WindowsUpdate.log" file next. You can also find more information on the CCM->WUA patch passing in the C:\Windows\CCM\Logs\WUAHandler.log file.

Windows Update is the last service to touch the patch upon execution and the first one to handle the incoming errors - disregarding if you use SCCM or WSUS - that's the case for both scenarios. This log file will contain many lines of error description that you can check against MS Technet first.

- If you deploy patch via SCCM and your WUA service, CCM service, and SecuniaPackage.log all indicate that the package was installed correctly (hence, exit code = 0), but your SCCM is showing wrong compliance of the patch, then you are likely to be looking at a known bug in the CCM "state message" handling of the CCM service that transmits the wrong execution status to its server (for which you can only talk to Microsoft about as Flexera cannot be helpful to solve known CCM-related bugs).

This issue can be identified using some of the following logs:

`C:\Windows\CCM\Logs\StateMessage.log`

`C:\Windows\CCM\Logs\SCNotify_<domain>@>WindowsUsername>`

`C:\Windows\CCM\Logs\SCClient_<domain>@>WindowsUsername>`

as well as the following local WMI classes where CCM stores the incorrectly handled package execution status, and the incorrect state messages being sent to the SCCM server database (to name a few):

`root\ccm\SoftwareUpdates\UpdatesStore -Class CCM_UpdateStatus`

`root\ccm\SoftwareUpdates\DeploymentAgent -Class CCM_TargetedUpdateEx1`

`root\ccm\SoftwareUpdates\DeploymentAgent -Class CCM_AssignmentCompliance`

`root\ccm\ClientSDK -Class CCM_SoftwareUpdate`

`root\ccm\SoftwareUpdates\WUAHandler.`

Patch Configuration

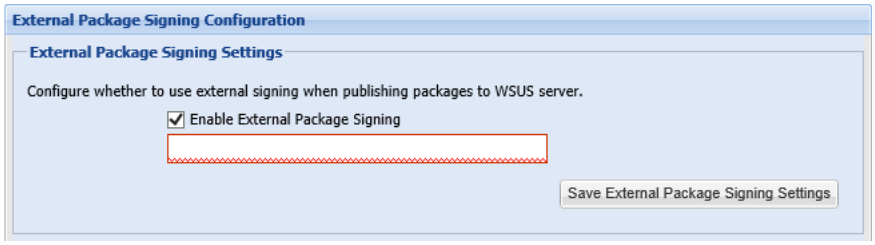
The following patch configurations are available in Software Vulnerability Manager:

- External Package Signing
- WSUS/System Center
- Setting Up Clients to Access WSUS
- Third-Party Integration
- Create and Publish the Package

External Package Signing

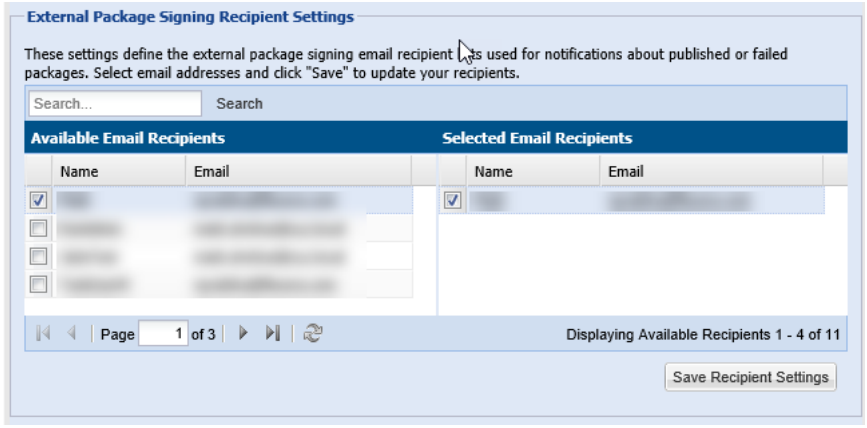
Software Vulnerability Manager allows you to export packages as Cabinet files (.cab) which can be used to publish signed cab files using the Software Vulnerability Manager Daemon. To enable this feature, you must run `daemon.exe -S --publish-dir <PATH>` after the Daemon has been installed. This will initiate a monitoring feature in the Daemon which will look for Cabinet files in the directory `<PATH>/Flexera Software IO/`.

Note • `<PATH>` *must be an existing directory that is accessible by the user the Daemon is running as and the subdirectory* `Flexera Software IO` *is added by the Daemon for security reasons.*

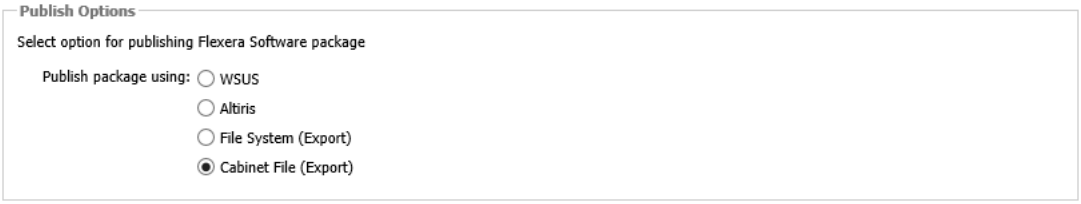


Select Enable External Package Signing on the configuration page and provide a path to where the packages will be exported. Similar to the Software Vulnerability Manager Daemon, a subdirectory (`Flexera Software IO`) will be added for security reasons.

Specify the recipients who will receive an email notification when a package is published or if it failed to do so.



If the External Package Signing option is enabled the SPS Package Wizard will by default select the Cabinet File (Export) option in Step 4.



An export will create a Cabinet file which includes the files required to patch applicable components.

To publish these packages, you must sign them and place them in the Daemon monitoring directory. The WSUS server must be set up correctly with the certificate used to sign the packages. Once a Cabinet file has been exported it can be signed using your favorite signing method. Then, after placing it in the directory monitored by the Daemon, it will be picked up and published to the WSUS server. You must ensure that the WSUS server can verify the certificate used for signing.

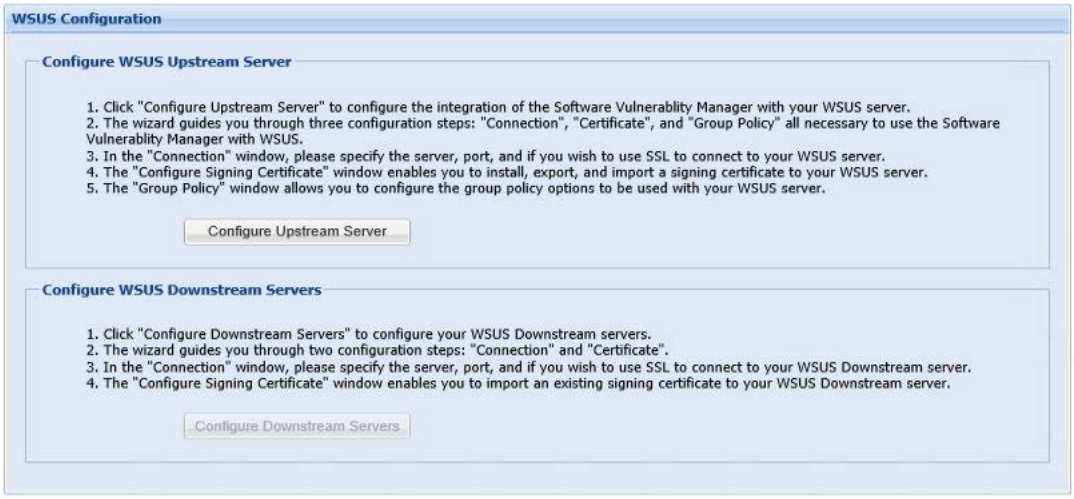
A notification email will be sent to the account email of the user running the Daemon to inform the user know about success or failure for published packages.

Note • *The export and monitoring directories should not be the same since it will try to publish unsigned Cabinet files which will not be allowed.*

WSUS/System Center

Use this option to configure the integration of Software Vulnerability Manager with your WSUS server(s). If you have a single WSUS server, which is connected to the Microsoft Updates site, running the Configure Upstream Server wizard will be sufficient for setting up Software Vulnerability Manager with WSUS.

After clicking Configure Upstream Server, a configuration wizard will be initiated.



Follow the wizard steps to successfully integrate Software Vulnerability Manager with your Microsoft WSUS.

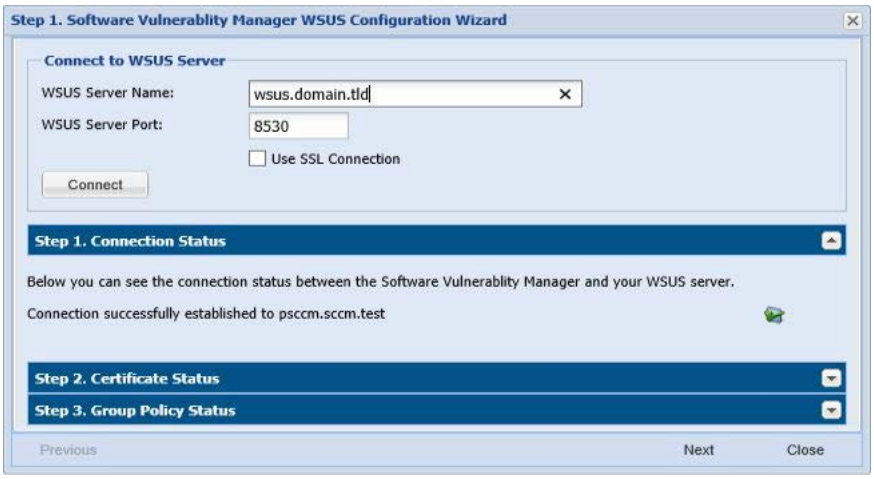
- Step 1 – Connection Status

- Step 2 - Certificate Status
- Step 3 – Group Policy Status

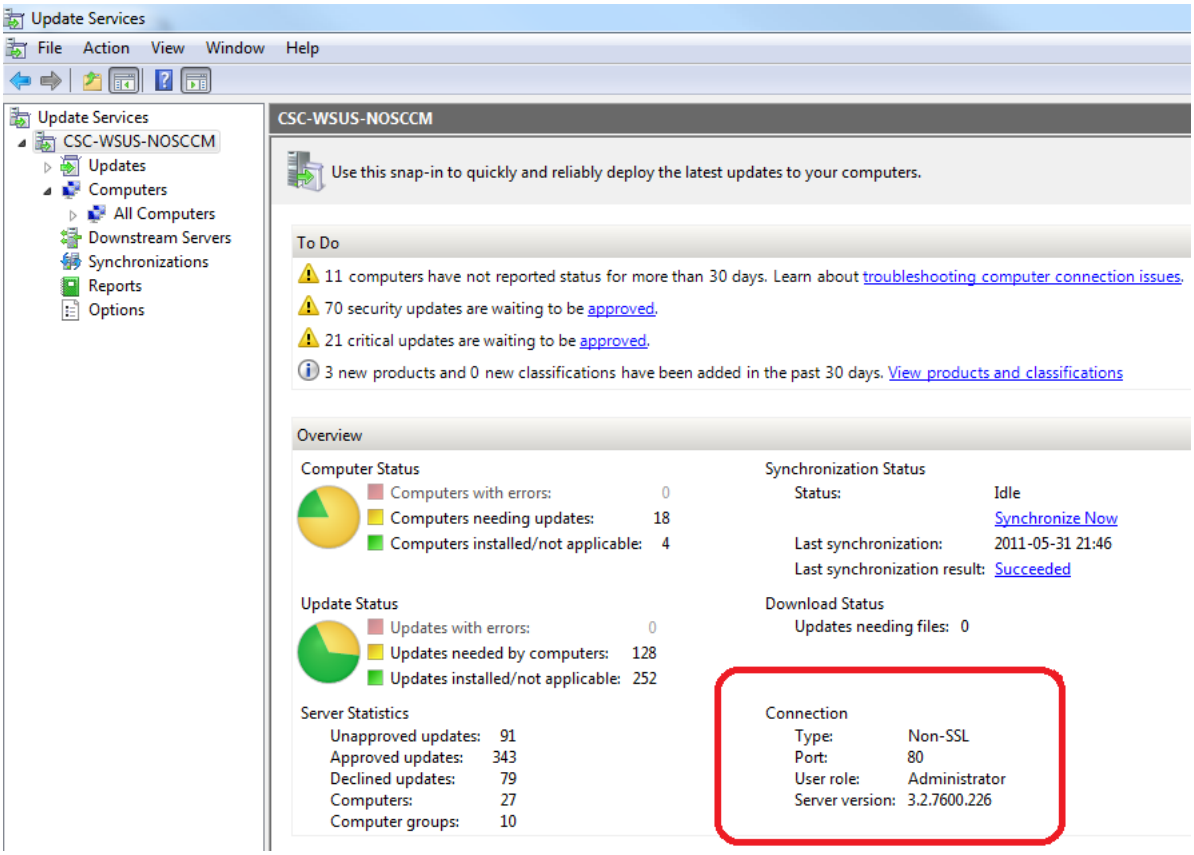
Step 1 – Connection Status

In Step 1 you should provide the relevant information (NetBIOS name and port number) for the main Upstream WSUS server. After inserting the required information, click Connect.

To check the status of the connection, expand Step 1. Connection Status.



If you are unsure of which port number to use, check your WSUS configuration as shown.



Important • *If you have a WSUS server hierarchy with one or more Downstream Replica WSUS server(s) connected to an Upstream WSUS server, please run the Configure Downstream Servers after running the Configure Upstream Server wizard.*

Important • *The port number used to connect to your WSUS depends on your settings. Ports 80 or 8530 are commonly used when SSL is not configured. Only select the Use SSL Connection check box if your WSUS is configured to accept SSL connections.*

Important • *Refer to http://technet.microsoft.com/en-us/library/bb633246.aspx for further information on how to configure WSUS to use SSL.*

Step 2 - Certificate Status

A code-signing certificate is needed to publish third-party updates to WSUS/System Center so they can be deployed as patches. In this Step Software Vulnerability Manager can request the WSUS to create and install the WSUS Self-Signed Certificate.

To create and install a WSUS Self-Signed Certificate in all appropriate certificate stores, click Automatically create and install certificate.

The WSUS Self-Signing Certificate must be installed/provisioned in the following systems:

- WSUS Server

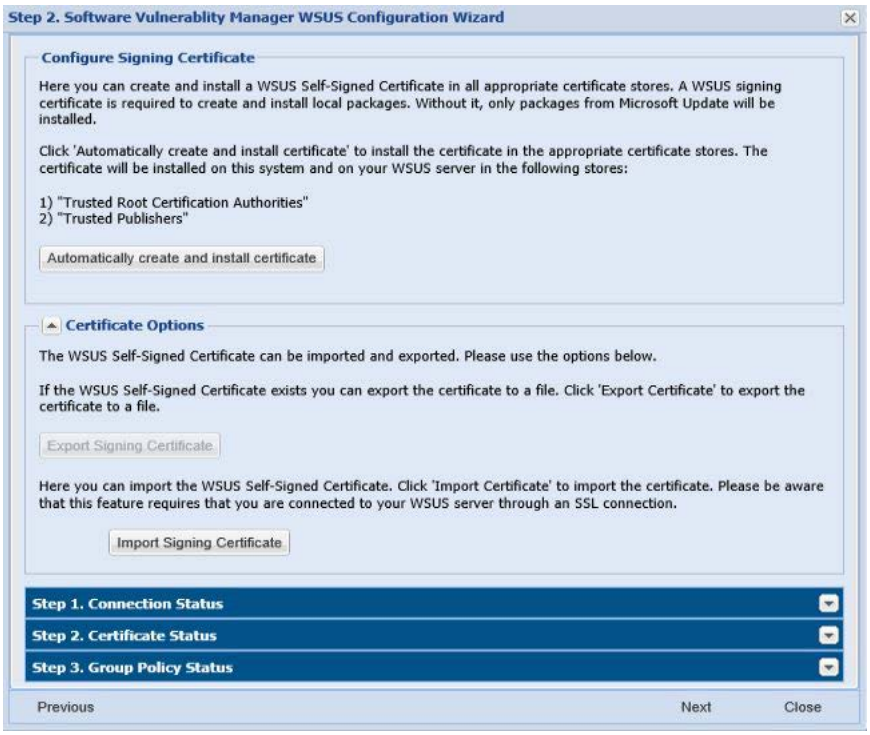
  The system running Software Vulnerability Manager (note that the certificate must also be installed on the system running the Software Vulnerability Manager console)

- Clients receiving the Update

  The created certificate is required and it will be used for all future publishing. Without it, only packages from Microsoft Update will be installed.

If you would like to use your own CA certificate instead of the Microsoft WSUS Self-Signing Certificate, click Import Signing Certificate.

At Step 3 – Group Policy Status, the certificate created/imported in this step will be provisioned to all clients through a GPO.



Important • *Be careful not to re-provision a signing certificate on a WSUS server that already has a signing certificate assigned. Doing so can cause issues with certificate validation at the WSUS server and target computers unless BOTH certificates (new and old) are left in the appropriate certificates stores (Trusted Publishers and Trusted Root Authorities). It can also cause issues with troubleshooting.*

Once a certificate is either inserted or created it does not need to be re-created until it expires or needs to be replaced.

Click Automatically create and install certificate. The certificate will be installed on the WSUS server in the following stores:

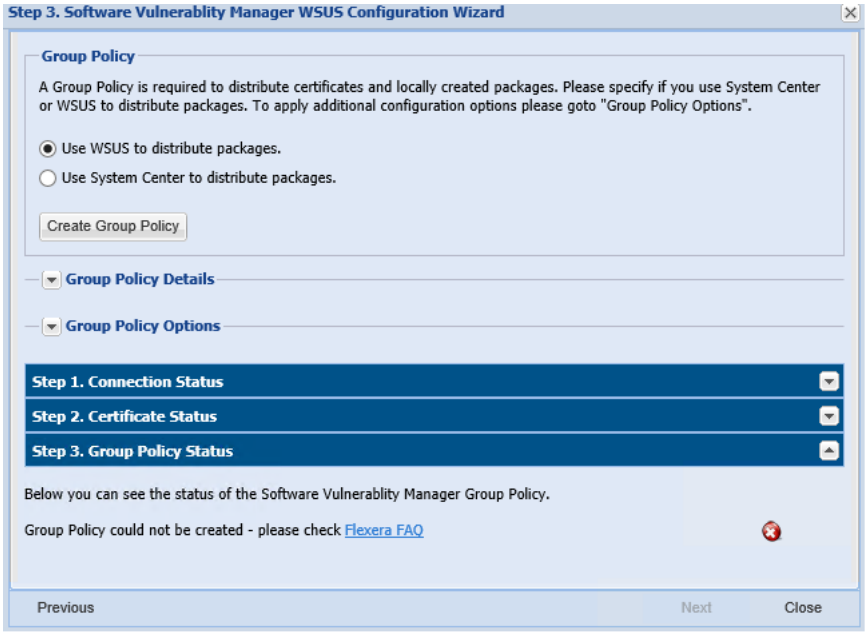
- Trusted Root Certification Authorities
- Trusted Publishers
- WSUS – The certificate in this location must also contain the private key

Expand the Certificate Options to access the import and export certificate features.

Step 3 – Group Policy Status

A Group Policy is required to distribute certificates and locally created packages. Software Vulnerability Manager can easily create this GPO so the WSUS Signing Certificate is distributed to all clients. Please choose to use WSUS or System Center. Once this is completed expand the Group Policy Options.

If you are creating the Software Vulnerability Manager WSUS Group Policy for the first time, proceed by selecting all the options and then click Create Group Policy.



Important • *Besides distributing the certificate through the Software Vulnerability Manager WSUS GPO, it is also possible to provision certificate to the target computers by going to Patching > WSUS/System Center > Deployment, selecting the target hosts where the certificate is to be installed (CTRL+ mouse click for multiple selection) and then right-click and select Verify and Install Certificate.*

Remote Registry service (disabled by default on Win7/Vista) should be enabled and started for the certificate to be successfully installed.

If you prefer to create your own Group Policy to distribute the WSUS Signing Certificate, please refer to Creating the WSUS-CSI GPO Manually. If you prefer not to create the Software Vulnerability Manager WSUS Group Policy, the existing Windows Updates GPOs must be edited in accordance with Setting Up Clients to Access WSUS.

Important • *If you use Microsoft System Center Configuration Manager, please make sure you do not select the first option Use the WSUS Server specified in Software Vulnerability Manager.*

Important • *If you already have the Windows Updates being configured through a Group Policy, we suggest you select the first 3 options in the Create a new Software Vulnerability Manager WSUS Group Policy page.*

Important • *The Software Vulnerability Manager WSUS Group Policy will be created but not linked to your domain. This way you can easily check the details of the newly created GPO and verify that the existing WSUS GPOs are correctly configured.*

Setting Up Clients to Access WSUS

If you choose not to create a new Group Policy using the Software Vulnerability Manager WSUS Group Policy wizard, please edit your existing WSUS Group Policy as follows:

1. In the Group Policy Management Console (GPMC), browse to the Group Policy Object (GPO) on which you want to configure WSUS and click Edit.
2. In the GPMC, expand Computer Configuration, expand Administrative Templates, expand Windows Components, and click Windows Update. Select:
   - Enable: Configure Automatic Updates (choose your settings)
   - Enable: Specify intranet Microsoft update service location (add the host name/IP of your WSUS server)
   - Enable: Allow signed updates from an intranet Microsoft update service location (Important – enables WSUS to distribute patches through Software Vulnerability Manager)
3. If Windows update not working, then check whether:
   - WUServer contains WSUS server, WSUSStatusServer contains WSUS server:portnumber, AcceptTrustedPublishedCerts:1 in location

     [HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\WindowsUpdate]

     ```
     "WUServer"="psccm.sccm.test"

     "WUStatusServer"="psccm.sccm.test:8530"

     "ElevateNonAdmins"=dword:00000001

     "AcceptTrustedPublisherCerts"=dword:00000001
     ```

   - In registry location, [HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\WindowsUpdate\AU], check"UseWUServer"=1

Important • *For installing the WSUS server in your environment we recommend reading the Step-by-Step Installation Guide provided by Microsoft:*

http://technet.microsoft.com/en-us/wsus/default.aspx

Third-Party Integration

Software Vulnerability Manager provides you with the capability of publishing packages using third-party patch deployment solutions, for example Altiris. To support this feature, Flexera has enhanced the package export feature. The exported xml file contains additional information that can be helpful in creating packages in other tools, including:

- The version numbers
- The executable itself
- The vulnerability/criticality

Flexera has retained the simplicity of the xml file by giving you the options to exclude large binary files and applicability paths from the file, in the form of check boxes in the package creation wizard. To perform a complete export, clear they Do not include package files check box during Step 4 of the SPS Package Creation Wizard.

In order for Software Vulnerability Manager to integrate with other patch deployment solutions, you need to create a configuration file, a script file and an applicability check script file:

- Configuration file. The configuration file is actually a representative of the tool and a visual integration between Software Vulnerability Manager and that tool. The file is an xml file that should contain the tool name, script name and the input/setting fields required to configure the settings for the tool (text fields, radio buttons and check boxes are supported). When Software Vulnerability Manager is launched it checks for the presence of any configuration file and, if there is a valid configuration file in the Extensions folder in the Software Vulnerability Manager path, it dynamically loads a GUI under the Patching menu of Software Vulnerability Manager. The configuration file also acts as an input file for the script.
- Script file. This script file corresponds to the SDK that the user has created to create and dispatch the package in the respective tool. The script file can be an executable, Java, VB, Python, or Perl script. Click Publish to execute the script file.
- Applicability Check script file. This script file runs the sps.exe on the computer if the applicability checks are cleared. This file is published together with the package to establish if the package is applicable to the system or not.

Important • *Running the script is a very strong feature. Use caution and ensure the sanity of the script file before publishing.*

Create and Publish the Package

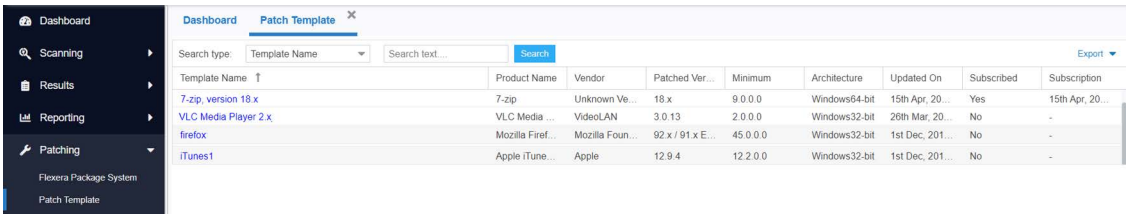
Task ***To create and publish the package:***

1. Place the configuration and script files in the Extensions folder. The Extensions folder should be created in the same folder as the csi.exe.
2. Launch Software Vulnerability Manager. If the configuration file format is valid, a configuration option will be visible under the Patching menu (for example, Altiris Configuration).
3. Click the configuration option to open a page where input and settings can be provided and saved.
4. Go to the SPS creation wizard. Complete all the package wizard fields or import a package. In Step 4 of 4: Applicability Criteria - Rules, there will be radio buttons allowing you to select the tool that you want to publish the package with. There will be as many selection options as there are valid configuration files.

5. Clicking Publish for any tool other than WSUS will run the script placed in the Extensions folder and named in the xml file.
6. Software Vulnerability Manager waits for the script to finish and, depending upon the execution of the script being successful or not, displays a message.
7. After successful publishing, the package can be seen in the respective tool.

Patch Template

The Software Vulnerability Manager Patching tab includes a Patch Template feature so that users can save a template of their patches for a product. With the Patch Template feature, the user can prepopulate Flexera's Software Package System (SPS) four-step deployment process and publish directly to WSUS using previously selected options.

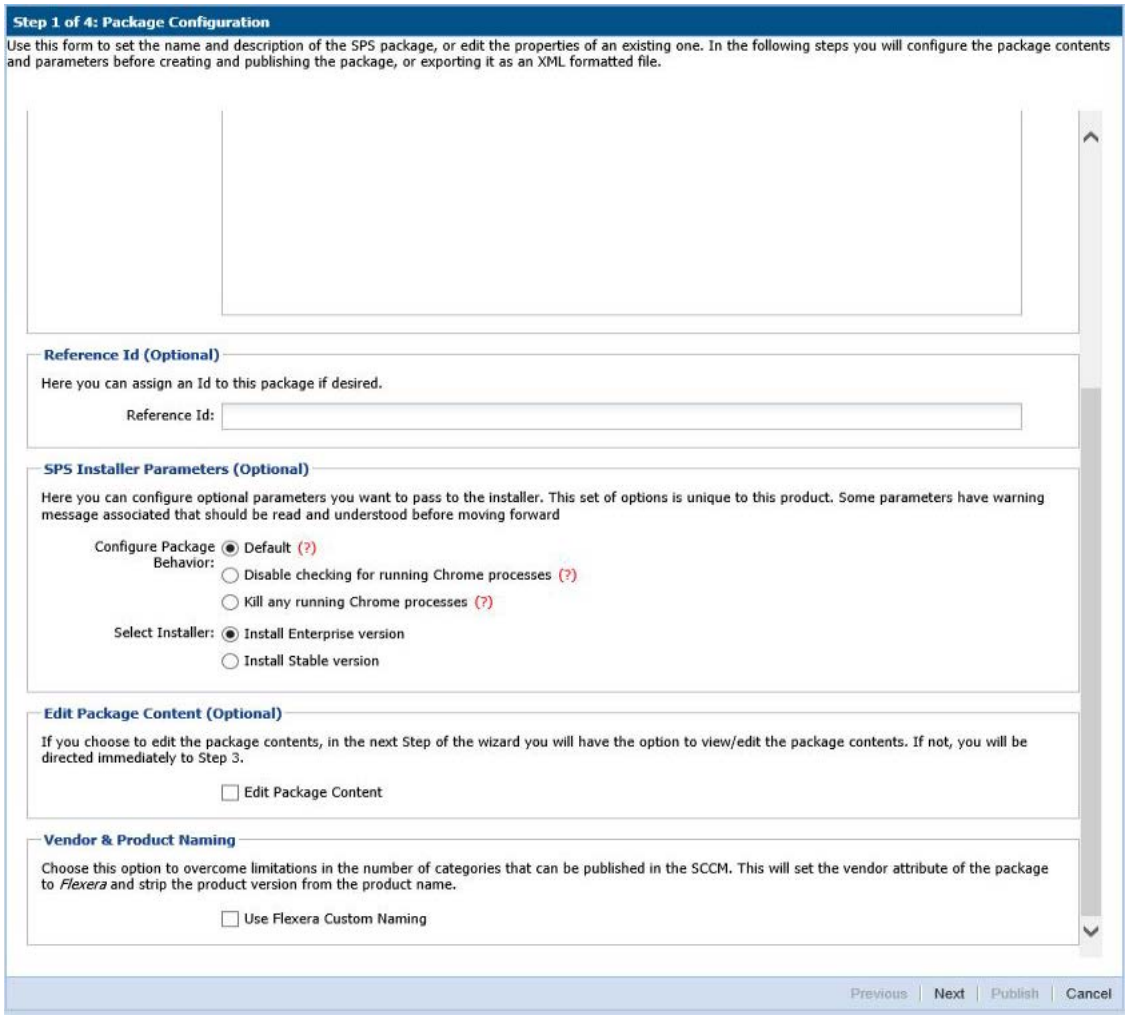


Creating a Patch Template

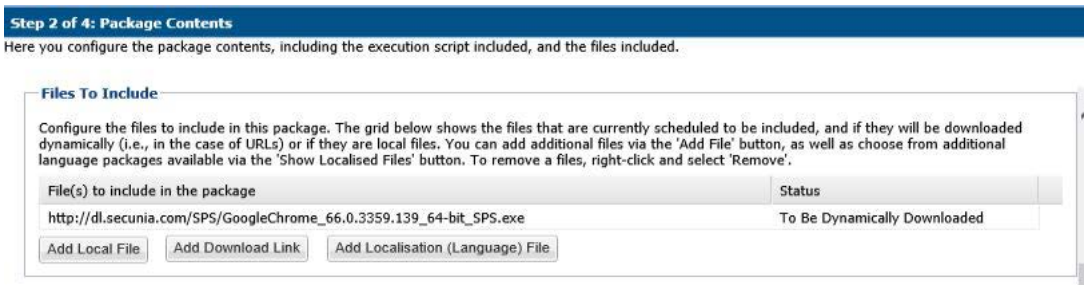
To create a patch template, perform the following steps.

Task ***To create a Patch Template:***

1. From the **Patching > Flexera Patching System (SPS)** tab, select an insecure product from the grid. Right click and choose an option from the context menu. For example, select **Create Update Package**.
2. In Step 1 of 4 of the SPS wizard (**Package Configuration**), select the appropriate SPS Installer Parameters and choose whether you want to edit the package contents. Click **Next** when done.

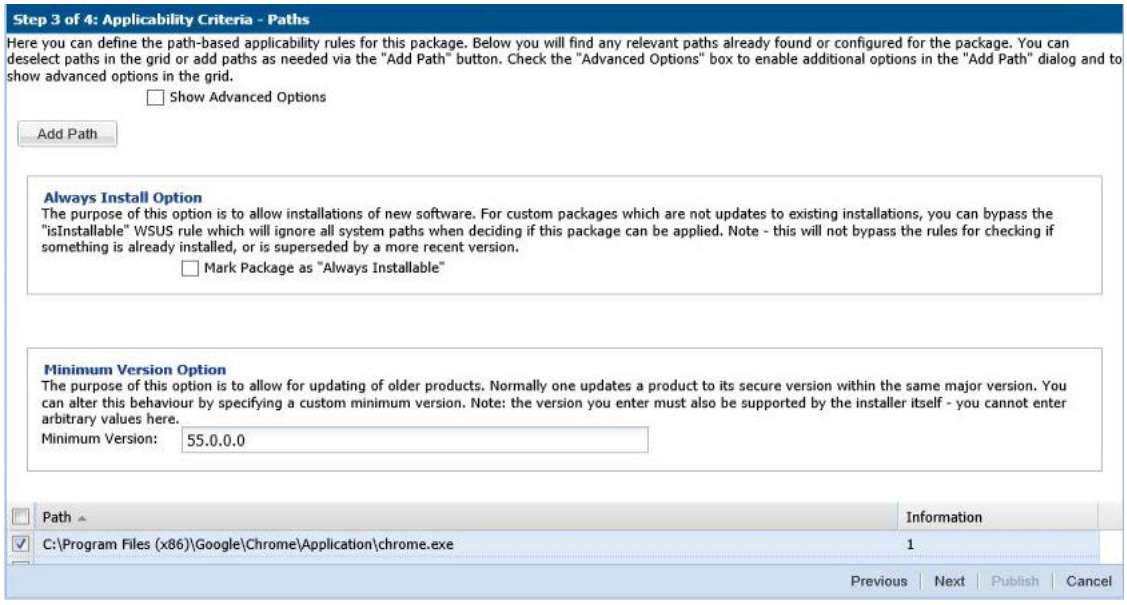


3. Step 2 of 4 of the SPS wizard (**Package Contents**) lists the latest files to include in the package. Click **Next**.

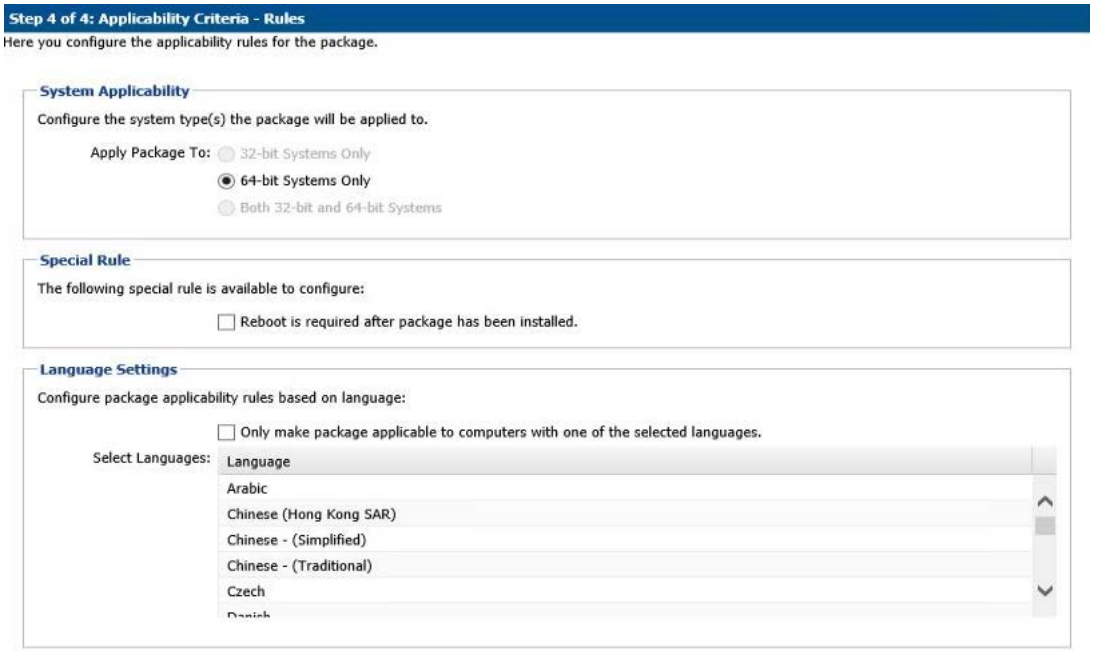


4. In Step 3 of 4 of the SPS wizard (**Applicability Criteria - Paths**), select the appropriate paths to save the package. Click **Next**.

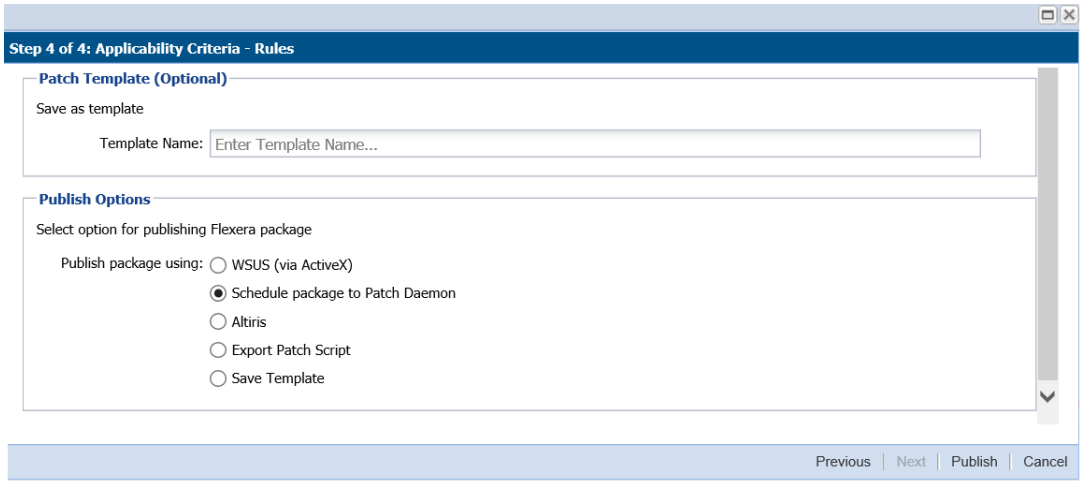
Note • *The Patch Template will always show paths based on the latest assessment.*



5. In Step 4 of 4 of the SPS wizard (**Applicability Criteria - Rules**), select the appropriate **System Applicability**, **Special Rules**, and **Language Settings**.

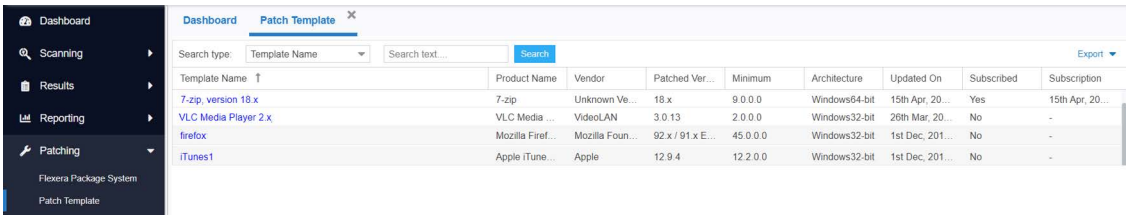


6. In the **Patch Template (Optional)** field, enter the `Template Name` and select **Save Template**. Click **Publish** to create the new template, which is saved under the **Patch Template** tab.



Note • *Providing a template name while publishing a package to WSUS will publish and create a template at the same time. If the template name is empty, it will only publish the package as a regular workflow.*

A patch template only needs to be created once for the life of the product, provided that there are no changes to the product's architecture (32-bit versus 64-bit) or to the SPS Installer Parameters from **Step 1 of 4: Package Configuration**. Over time, the product's Patched Version listed under the Flexera Package System (SPS) menu will increase. Patch Templates automatically update up to within three patched versions as listed under the Flexera Package System (SPS) menu. After three patched versions, you can edit the Patch Template to deploy the latest patched version to your system.

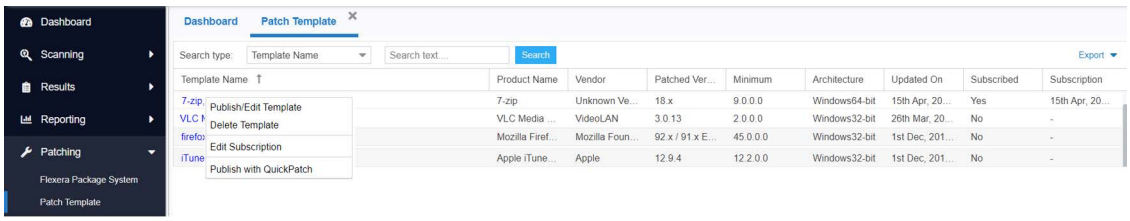


Editing a Patch Template or Publishing from a Patch Template

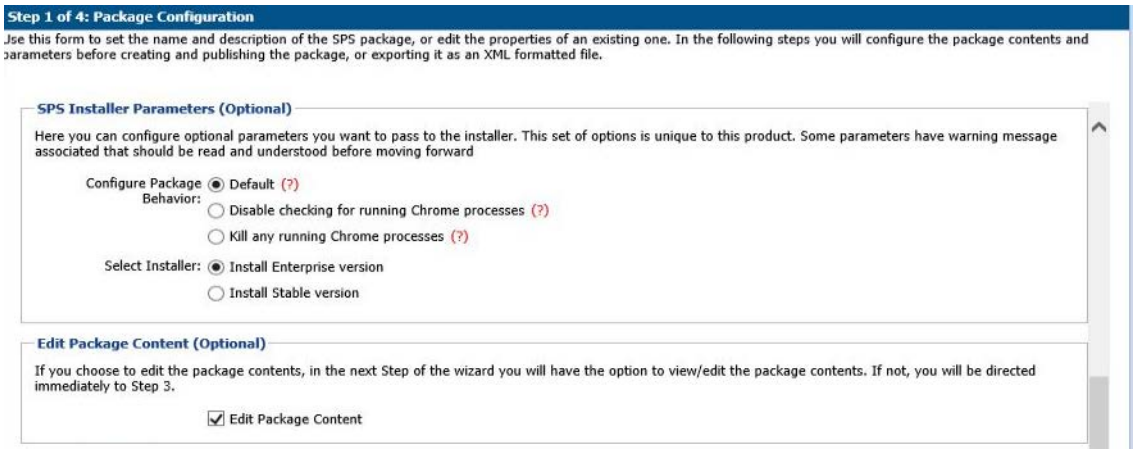
To edit a patch template or publish from a patch template, perform the following steps.

Task ***To edit a Patch Template or to publish from a Patch Template:***

1. From the **Patching > Patch Template** tab, select a template and select **Publish/Edit Template** from the context menu.

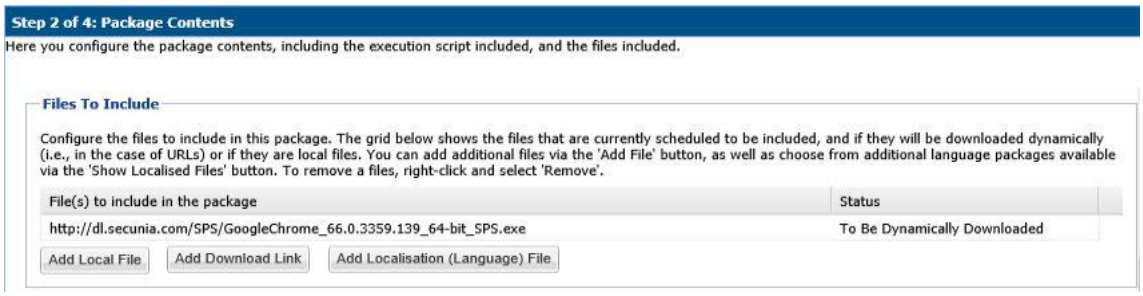


2. Step 1 of 4 of the Flexera SPS wizard will open with the SPS parameters prefilled. From the same SPS wizard, you can either publish the package to various channels or you can save only the template.
3. To update the Patch Template to the latest patched version:
   a. Select **Edit Package Content** in the Edit Package Content field and click **Next**.



Important • *If you need to publish the package from the template without updating the template, update the* ***Package Name*** *in Step 1 of 4 of the SPS wizard to identify the package version that you deploy to your system. The package will be published with the updated settings.*

   b. Confirm the updated patched version file appears under **Files to Include** in Step 2 of 4 of the Flexera SPS wizard and click **Next**.



   c. When Step 3 of 4 of the Flexera SPS wizard appears, click **Next**.
   d. When Step 4 of 4 of the Flexera SPS wizard appears, click **Publish**.

Deleting a Patch Template

To delete a Patch Template, perform the following steps.

Task ***To delete a Patch Template:***

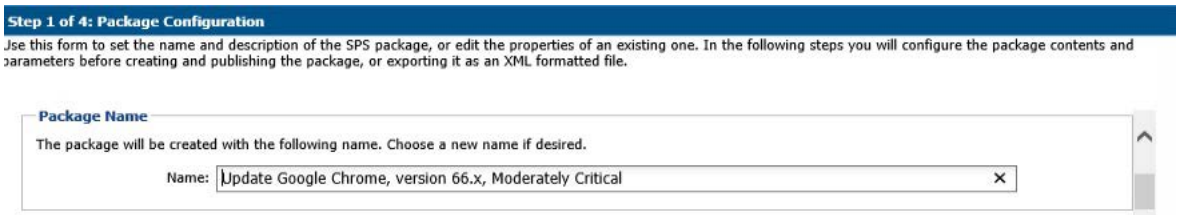
1. From the **Patching > Patch Template** tab, select a template and select **Delete Template** from the context menu.
2. Select **Yes** or **No** to confirm whether or not to delete the Patch Template.

Publishing a Patch Template to WSUS

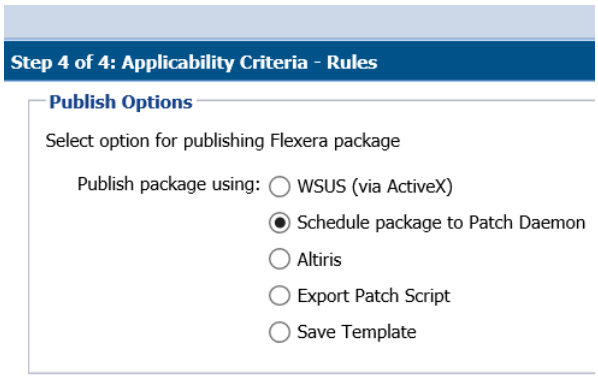
To publish a Patch Template to WSUS, perform the following steps.

Task ***To publish a Patch Template to WSUS:***

1. From the **Patching > Patch Template** tab, select the template to be published to WSUS. Right click and select **Publish/Edit Template** from the context menu.
2. When Step 1 of 4 of the SPS wizard (**Package Configuration**) appears, update the **Package Name** to indicate this package is for WSUS publishing and click **Next**.

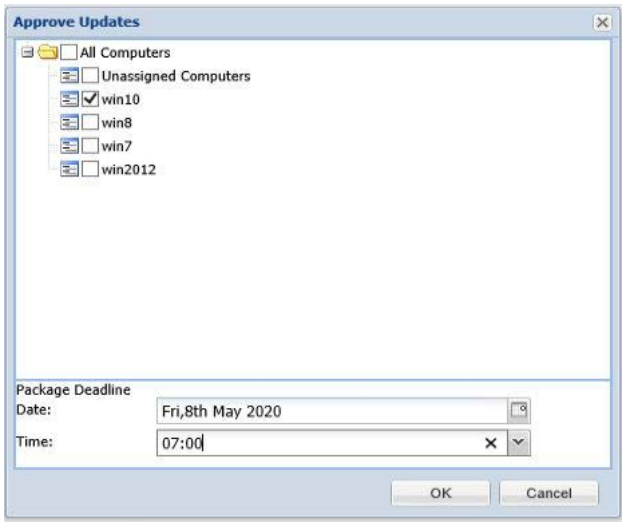


3. When Step 3 of 4 of the SPS wizard (**Applicability Criteria - Paths**) appears, click **Next**.
4. In Step 4 of 4 of the SPS wizard (**Applicability Criteria - Rules**), select **WSUS** for the publishing option and click **Publish**.



5. The **Attempting to Publish Package - Please Wait** status appears. After the WSUS package is successfully created, a **Success** pop-up window appears. Click **Approve package**.

6. When the **Approve Updates** pop-up window appears, select the appropriate computers to deploy the WSUS package to, select the appropriate date and time to deploy the WSUS package, and click **OK**.



7. When the **Success - Package successfully approved** pop-up window appears, click **OK**.

8. You can confirm the WSUS package listing under **Patching > WSUS / System Center > Available Packages**.

The following topics are releted to Patch Template:

- Subscribe to Patch
- Edit Subscription
- Pause Subscription
- Resume Subscription

QuickPatch

This is a new and quick way for non-IE browsers to publish patches from SVM to an end-point management system with no dependency on ActiveX. QuickPatch publishes patches to end-point management system via Patch Daemon using defaults (no customizations).

Note • *QuickPatch is available only in the new SVM web interface.*

To do so, right click on any SPS template or VPM patch and select **Publish with QuickPatch** from the context menu. The **Publish with QuickPatch** dialog box appears.

Click **Select connection** drop down and select the required connections from the list.

Note • *You can select multiple connections to publish.*

To make assignments for end point deployments for Intune publishing, click **Manage Assignments**. The Manage

Assignments dialog box appears.

Note • *The **Manage Assignments** button is available only for Intune publishing.*

In the **Connection** field, the default connection will be pre-selected. If required, choose the desired configured connection from the drop down list.

In the **Required** section, you can add the following:

- Add Groups
  - Click **Add Groups**. The Intune Assignment Groups dialog box appears.
  - Select the required group from the list or enter keywords in the **Search Text** box, and then click **Search** button to display matching entries in the grid. Select the desired group(s) from the list.

    Note • *You can select multiple groups.*
  - After selecting the required groups, click **OK** and exit the dialog box.
  - To remove a selected group, click the delete icon in the **Delete** column.
- Add All Devices
  - Click **Add All Devices** to include all available devices.
  - To remove added devices, click the delete icon in the **Delete** column.

    Note • *If **Add All Devices** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Devices**.*
- Add All Users
  - Click **Add All Users** to include all available users.
  - To remove added users, click the delete icon in the **Delete** column.

    Note • *If **Add All Users** is already selected, the hyperlink will be disabled. The option will only be enabled again once you delete the selected **Add All Users**.*

After adding the details, click **Save** and exist the dialog box.

Select required **Package Configuration** and then click **Publish**.

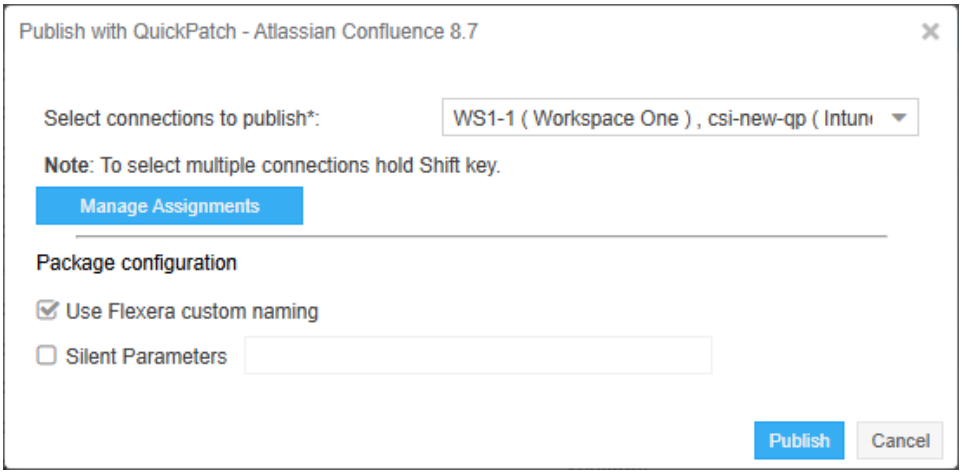


Figure 10-5: Click Publish

Note • *If you have installed the Patch Publisher, then you can select the* ***Patch Publisher Connections*** *for the Quick Patch publish.*

Click **Ok** and agree the confirmation dialog which appears.

The selected patch will be published to Patch Daemon.

Once the patch published, status in the **Patch Deployment status** will appear as **Success**.

If the same version of patch is published, then an error popup will be shown that **Already sent to Patch Daemon**.

Note • *Patches are published based on the versions.*

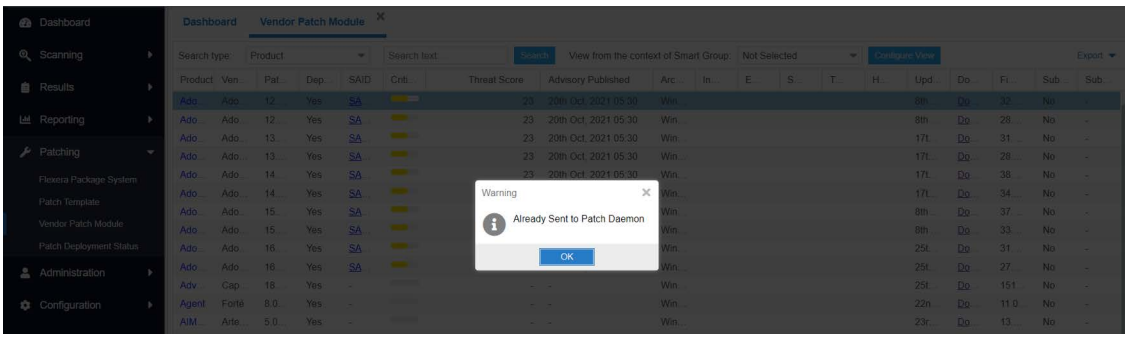


Figure 10-6: Error popup appears

Patch Automation

With Software Vulnerability Manager, you can automate publishing of patches. To do so, right click on any SPS template or VPM patch and select **Subscribe to Patch** from the context menu.

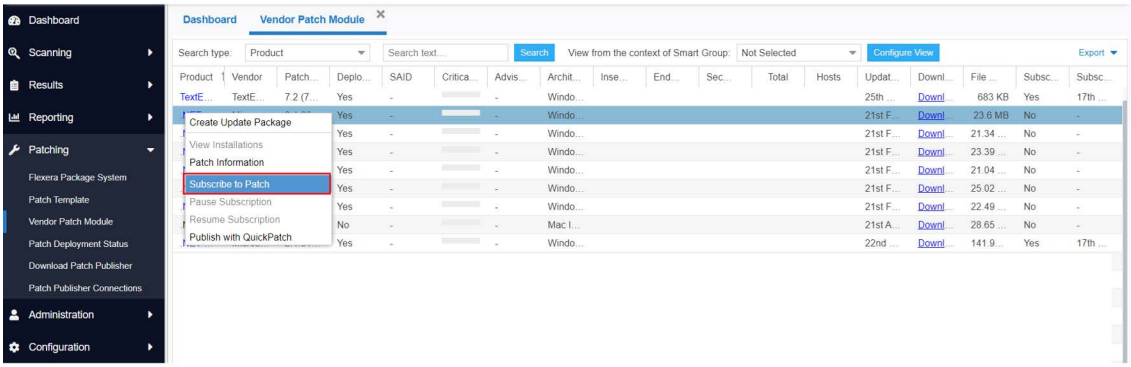


Figure 10-7: Selecting Subscribe to Patch from the Context Menu

On the **Configure Subscription** dialog box, specify the details as described in Subscribe to Patch.

Patch automation is delivered via a new version of the SVM Patch Publisher. To download this tool kit click here.

Important • *Patch Daemon will be deprecated in the future; therefore, you are encouraged to migrate to the new SVM Patch Publisher tool. To download, click here.*

Patch automation is delivered via a new version of the Flexera SVM Patch Configuration (Version 2.x) tool, which is part of the Software Vulnerability Manager Client Toolkit. For more information on the toolkit, visit the SVM Toolkit blog in the Flexera Community.

The SVM Client Toolkit contains offline utilities such as the Multi-partition Reporting Tool, WSUS Management Tool, and Client Data Tool which add value to SVM. This toolkit does not consist of Patch Daemon. The toolkit can be downloaded at:

https://resources.flexera.com/tools/SVM/SVMClientToolkit.msi

Note • *If you are already having the SVM Toolkit installed, the installer will upgrade you to the latest version.*

You can see the status and details of patches published automatically on a new page named **Patch Deployment Status**, which is opened by selecting **Patch Deployment Status** on the **Patching** menu.

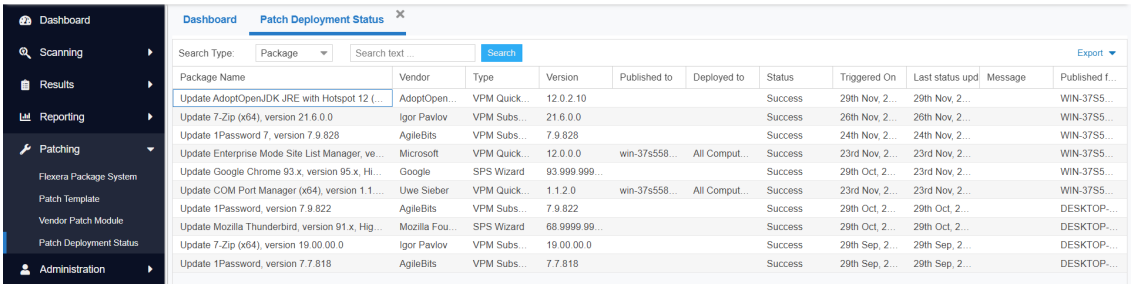


Figure 10-8: Patch Deployment Status Page

All the patch level activities are also recorded in the Activity Log, which is opened by selecting **Activity Log** on the **Configuration** menu.

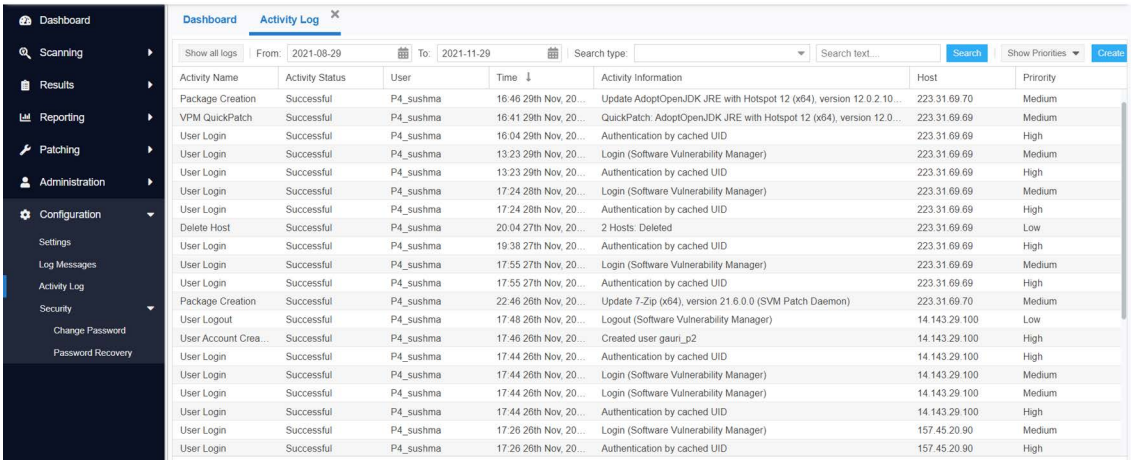


Figure 10-9: Activity Log Page

Unsubscribe Automatic publishing of the Patches

To unsubscribe automatic publishing of the patches, right click on any subscribed VPM Patch, and then select **Edit Subscription** from the context menu. The **Configure Subscription** dialog box appears.

On **Configure Subscription** dialog box, select **Unsubscribe**.

Note • *You can select multiple connections (if required).*

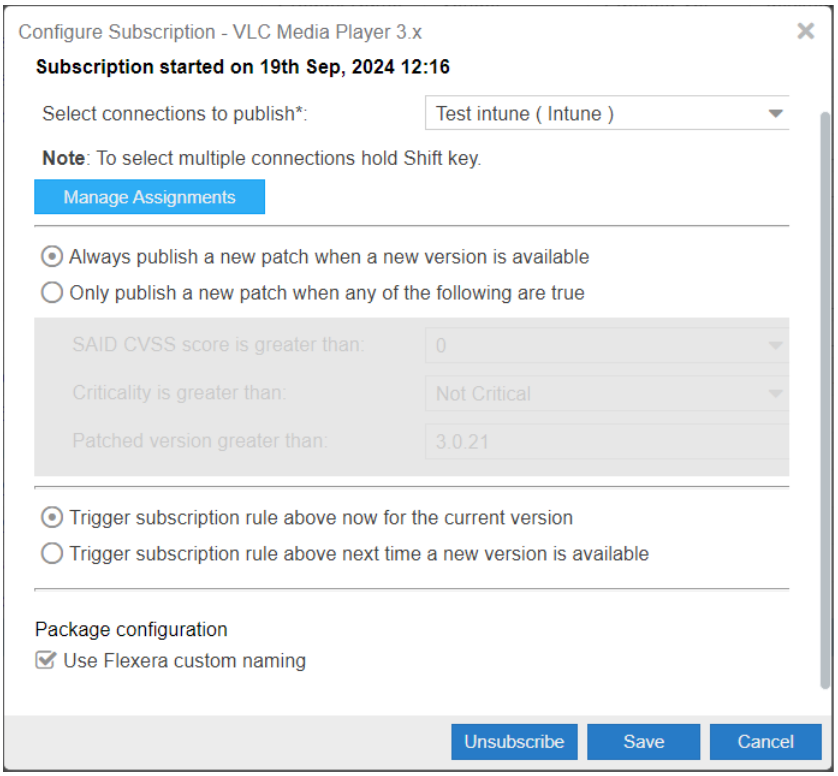


Figure 10-10: Select Unsubscribe

Click **Ok** and agree the confirmation dialog which appears.

The following topics related to Patch Automation:

- Subscribe to Patch
- Edit Subscription
- Pause Subscription
- Resume Subscription

Intune Publishing

Software Vulnerability Manager (Cloud Edition) can now publish SPS/ VPM patches to Microsoft Intune.

This new capability requires a new version of patch daemon, released as a part of SVM Toolkit.

Note • *Patch Daemon will be deprecated in the future; therefore, you are encouraged to migrate to the new SVM Patch Publisher tool. To download, click here.*

To publish patches to Intune, it will be necessary to configure valid Intune credentials and token. For more details, see Set up a Distribution Connection for Microsoft Intune.

Once this is setup, you can use either Patch Automation or Patch Publisher or Create Update Package wizard (ActiveX) to publish SPS/ VPM patches to Intune.

Note • *Patch daemon convert the patch to intunewin format before publishing.*

Note • *The Patch Daemon may be installed on any workstation or server. There are two prerequisites:*

- *For Windows 10 RSAT must be installed which can be obtained here https://www.microsoft.com/en-us/download/details.aspx?id=45520*
- *For Windows 8.1 RSAT must be installed which can be obtained here https://www.microsoft.com/en-us/download/details.aspx?id=39296&displaylang=en*
- *Minimum version of .Net 4.7.2 must be installed.*

Set up a Distribution Connection for Microsoft Intune

To obtain the required credentials to set up a distribution connection for Microsoft Intune, perform the following process.

- App Registration
- Create Client Secret
- API Permissions

App Registration

To register an application perform the following steps.

Task ***To register an application:***

1. Obtain login credentials for Intune services on Microsoft Azure.
2. Log in to Microsoft Azure using the obtained credentials.

   https://azure.microsoft.com/en-in/account/
3. Once logged in, from the list of available Azure services, choose **Azure Active Directory**.

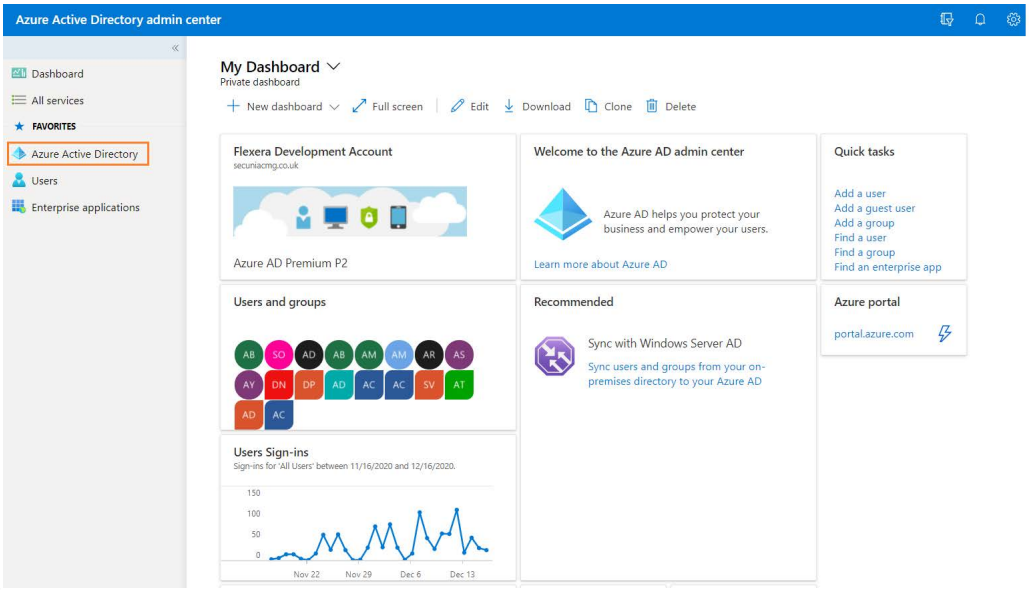


Figure 10-11: Choose Azure Active Directory

4. After selecting, it navigates to overview page of the **Dashboard**, select **App registrations** in the left panel.

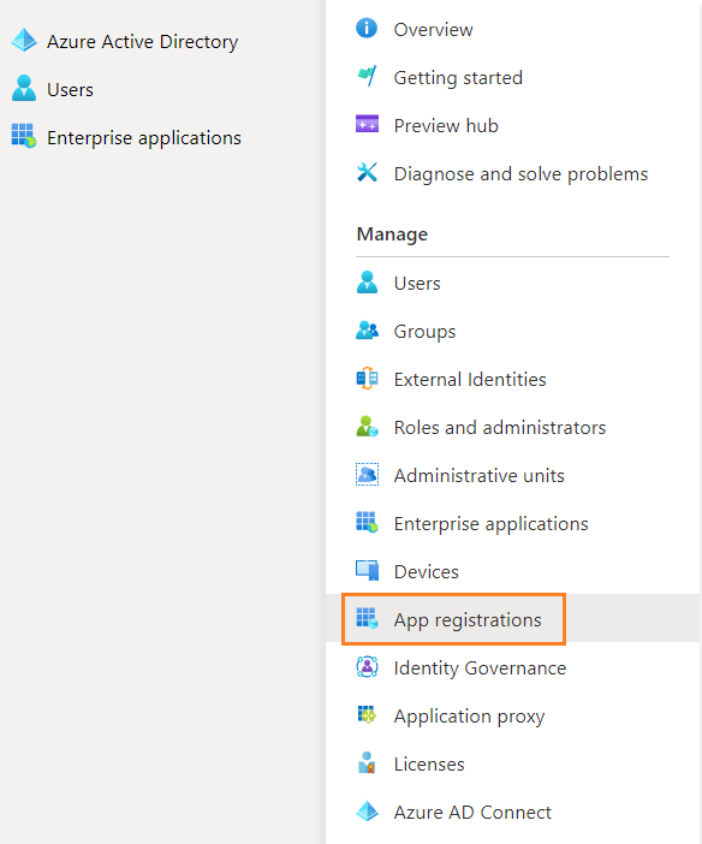


Figure 10-12: Select App Registrations

5. Click on **New registration** and enter values to complete the registration.

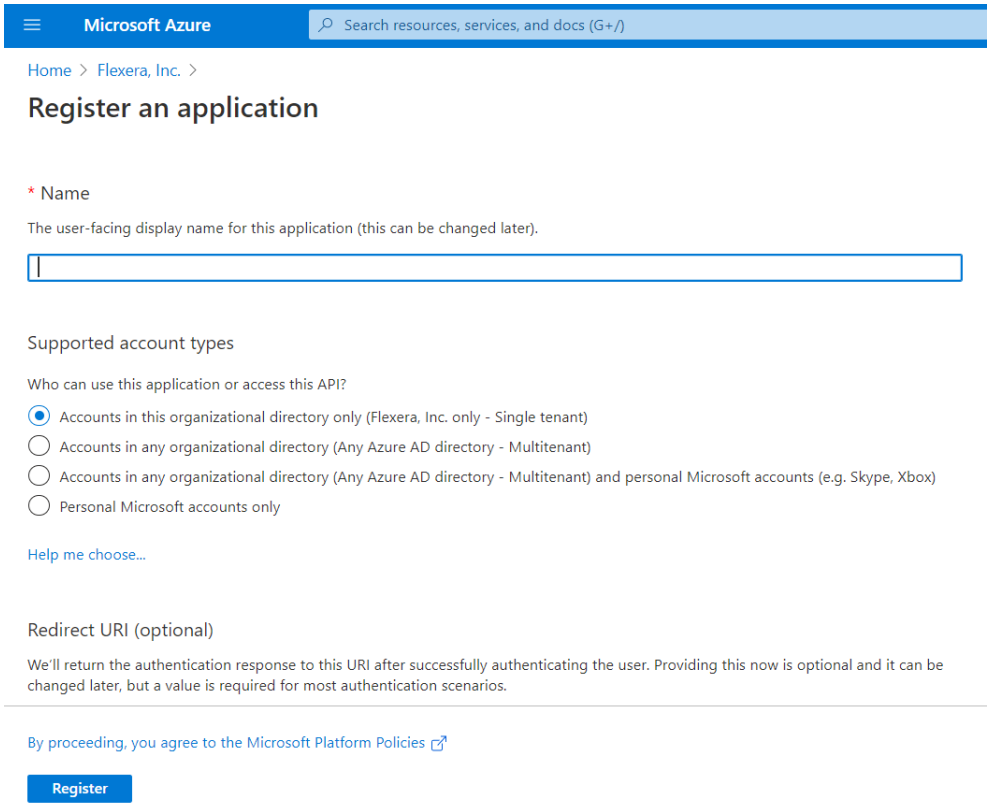


Figure 10-13: New Registration page

6. Click **Register**. The new registered application will be listed.

7. Click on the registered account to get Intune connection details like **Application (client) ID** and the **Directory (tenant) ID**, which will be used later for authentication purposes.

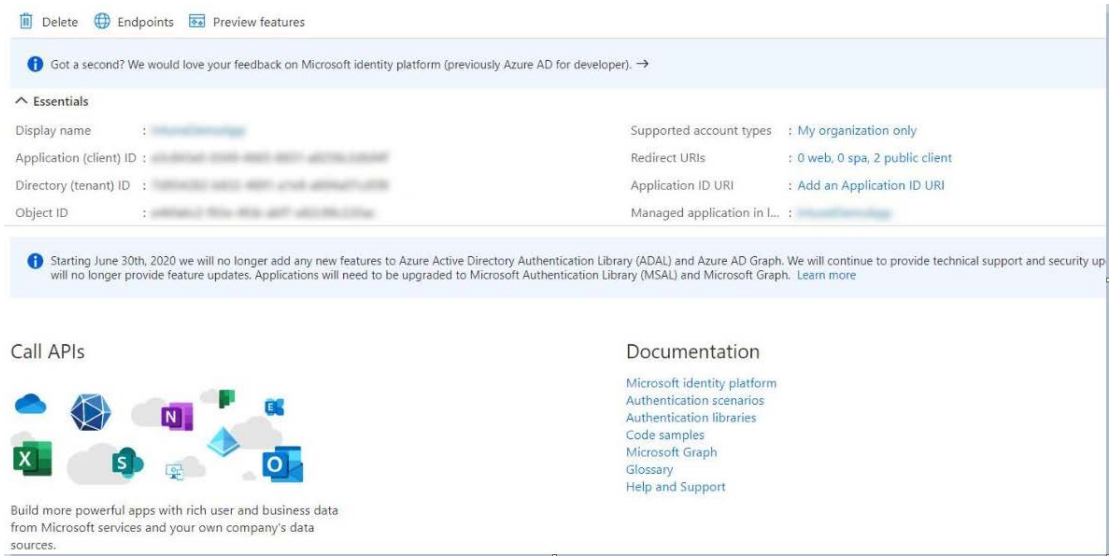


Figure 10-14: Intune Connection details page

Create Client Secret

To obtain client secrets for the registered account, perform the following steps.

Task ***To obtain client secrets:***

1. On the application account details page, select **Certificates & secrets** from the left panel.
2. To get new client secret, click **New client secret**.
3. Provide a description to describe your client secret, choose the expiration date you wish to set, and then click **Add**. The Client secret will then be listed in the Client Secrets section.

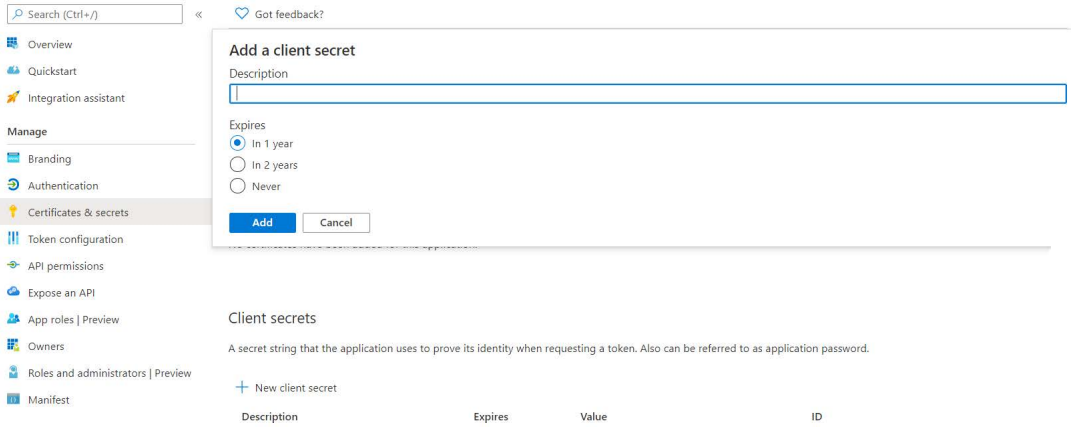


Figure 10-15: Click Add

4. The Client secret will then be listed in the Client Secrets section, copy the client secret Value, as it will only be visible and available to the user now.

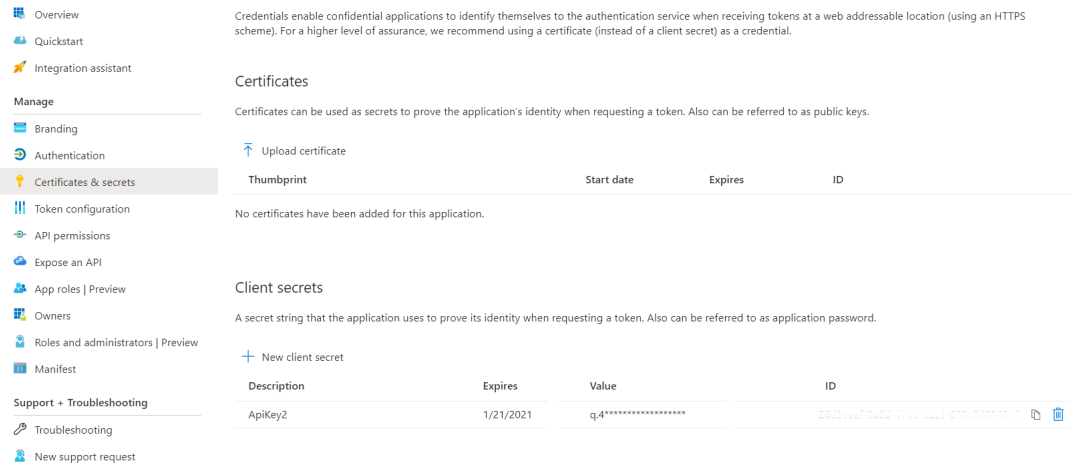


Figure 10-16: Client Secrets details

API Permissions

To obtain API permissions for the registered application, perform the following steps:

Task ***To obtain API permissions:***

1. Select the registered account.
2. Select **API permissions** from left navigation panel.
3. Click **Add a permission**. The **Request API permissions** panel appears, select **Microsoft Graph**.

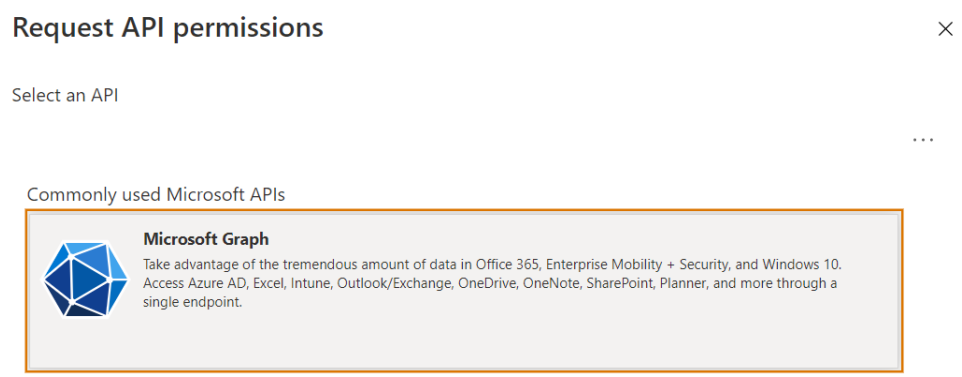


Figure 10-17: Select Microsoft Graph

4. In the Microsoft Graph, select **Application Permissions**.
   a. **Device Management Permission**—Under **DeviceManagementApps**, select **DeviceManagementApps.ReadWrite.All**, and then click **Add permissions**.

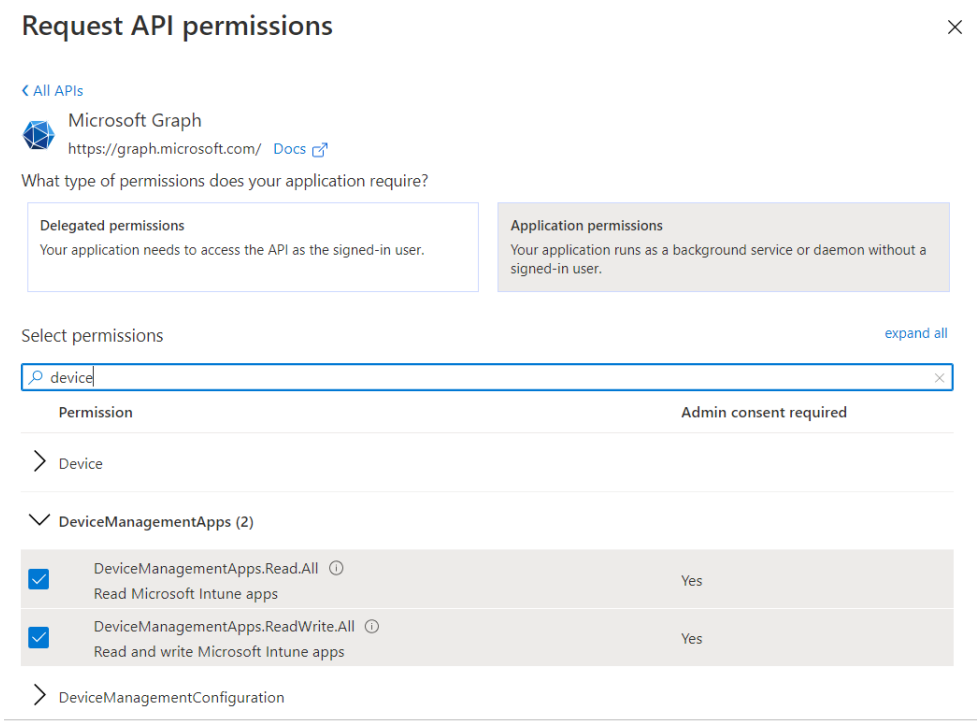


Figure 10-18: Request API permissions page

b. **Group Permission**—Under **Group**, select **GroupMember.Read.All**, and then click **Add permissions**.

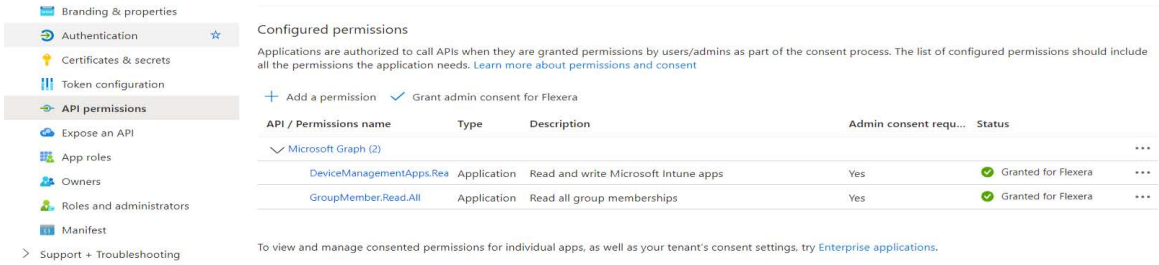


Figure 10-19: Add Group Permissions

5. Click on **Grant admin consent for Flexera Development Account** and consent to the permissions. The status will turn to **Granted**. Make sure the permissions are of type Delegated.

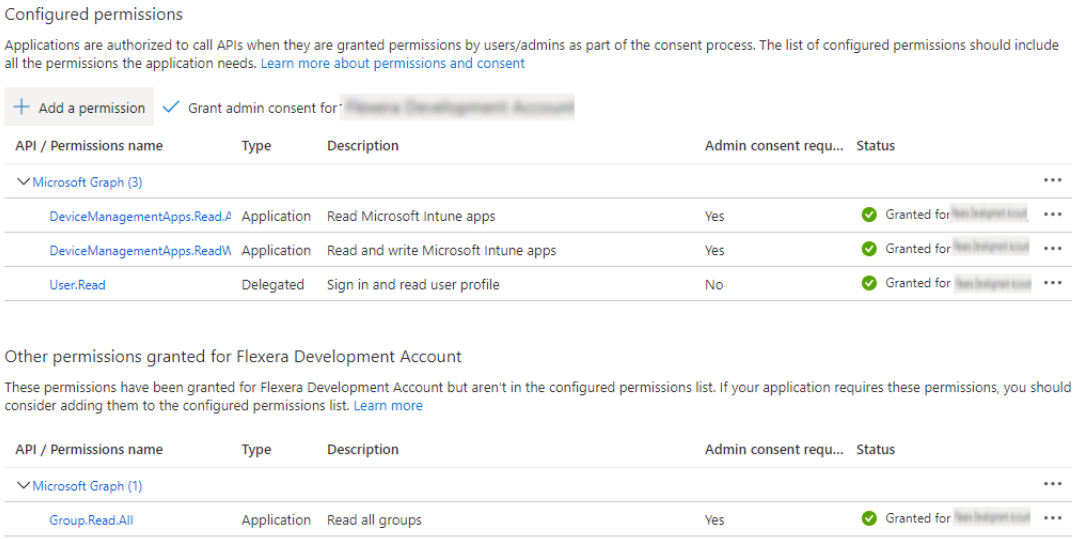


Figure 10-20: Configured permissions page

Workspace ONE Publishing

Software Vulnerability Manager can now publish SPS and VPM patches to VMware Workspace ONE.

This new capability requires a new version of patch daemon, released as a part of SVM Toolkit.

Note • *Patch Daemon will be deprecated in the future; therefore, you are encouraged to migrate to the new SVM Patch Publisher tool. To download, click here.*

To publish patches to Workspace ONE, it will be necessary to configure with valid Workspace ONE connection details. For more details, see Set up a Distribution Connection for Workspace ONE.

Once the connection to Workspace ONE is configured, you can use either Patch Automation or Create Update Package wizard (ActiveX) or Patch Publisher to publish SPS and VPM patches to Workspace ONE.

Note • *Workspace ONE permits publishing a single application only once to an Organization Group. Therefore, if you attempt to publish an application to a Workspace ONE Organization Group that already contains that application, the publication will fail.*

Set up a Distribution Connection for Workspace ONE

To set up a distribution connection for Workspace ONE, perform the following process.

- Basic or Certificate Authentication Type
- Create Tenant ID / API Key

For more details on Test Connections, see Flexera SVM Patch Configuration and SVM Patch Publisher

Basic or Certificate Authentication Type

For Workspace ONE connection, you can select **Authentication Type** as either **Basic** or **Certificate**.

If you selected authentication type as a **Basic**, then enter your Workspace ONE **User Name** and **Password**.

If you selected authentication type as a **Certificate**, then provide certificate details as mentioned in the below steps:

Task ***To provide Certificate authentication:***

1. Log in to Workspace ONE using the valid credentials.
2. Once logged in, choose **Accounts** in the left panel.
3. Under **Administrators**, choose **List View**.

   The Admin users will then be listed in the **List View** page.

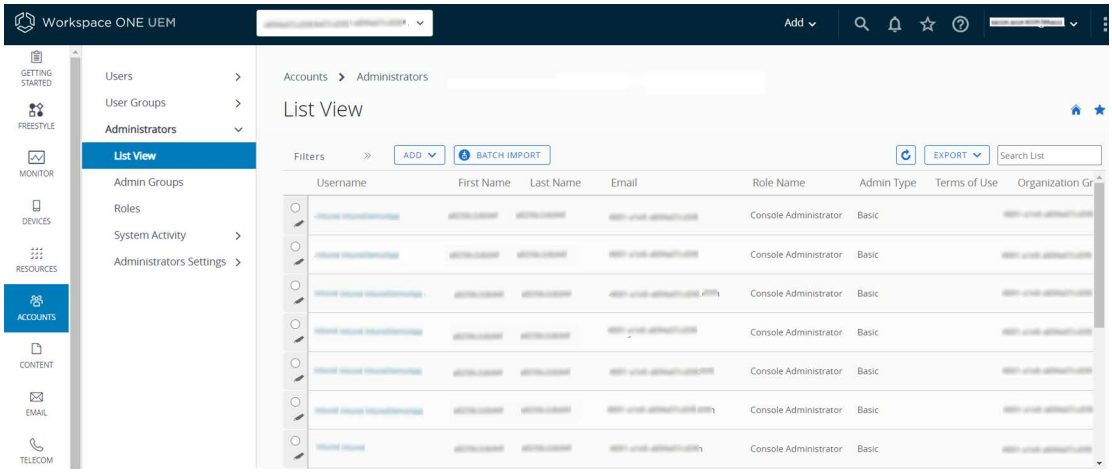


Figure 10-21: List View Page

4. Click the **Username**. The **Add/Edit Admin** panel appears. Choose **API** tab.
5. In the API tab, generate a certificate export password by entering the valid values in the **Certificate Password** test box, and then click the **Export Client Certificate** button.

   Certificate has been exported to the local folder.

Note • *This password will be used later for importing the certificate.*

Note • *By default **Certificates** authentication will be selected.*

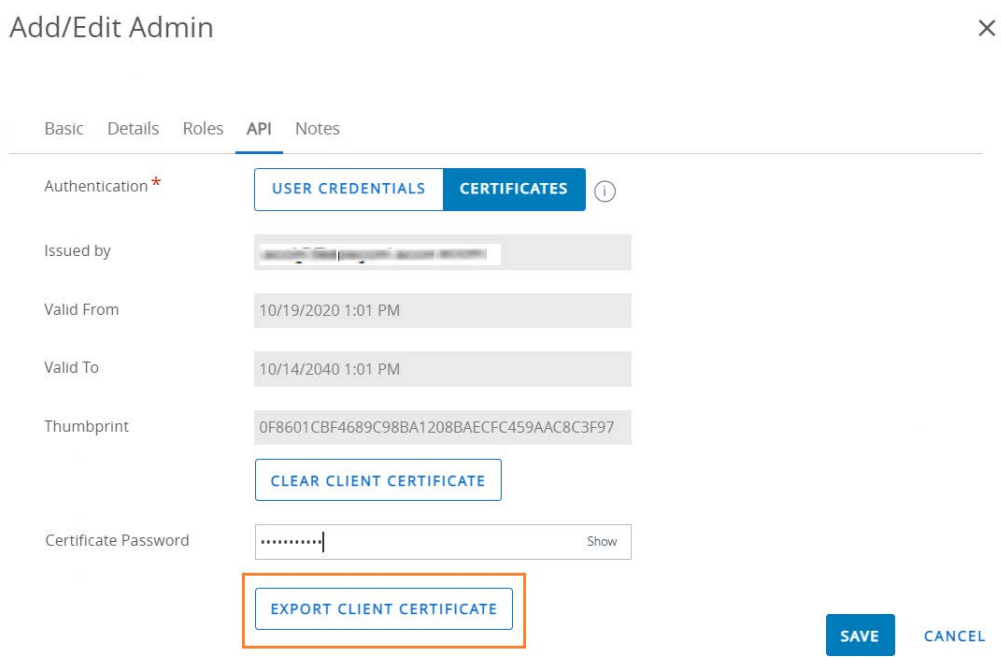


Figure 10-22: Generate Certificate Password

6. Double click the exported certificate, the **Certificate Import Wizard** dialog box appears.

   Select the store location to **Local Machine**, where you can import the certificate. Click **Next**.

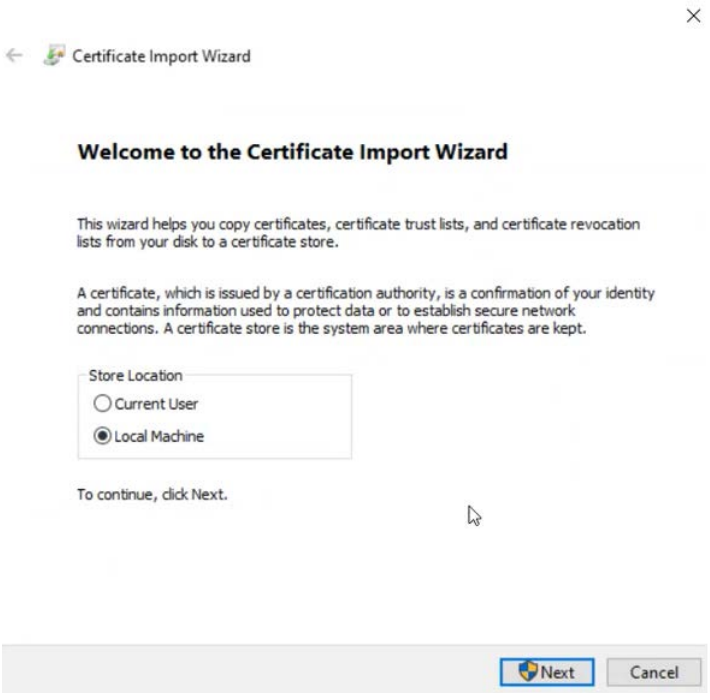


Figure 10-23: Select Local Machine

7. In the **File to Import** page, optionally, specify the file you want to import. Click **Next**.

8. In the **Private key protection** page, enter the certificate password, and then click **Next**.

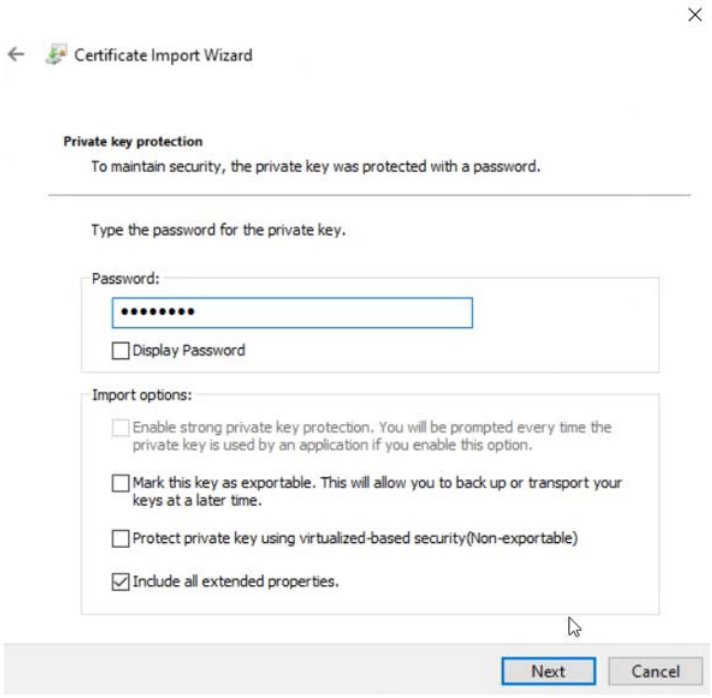


Figure 10-24: Enter Certificate Password

9. In the **Certificate Store** page, select **Place all Certificate in the following store** radio button, and then browse to the **Personal** folder where you can install the certificate. Click **Next**.
10. Click **Finish** to import the certificate.

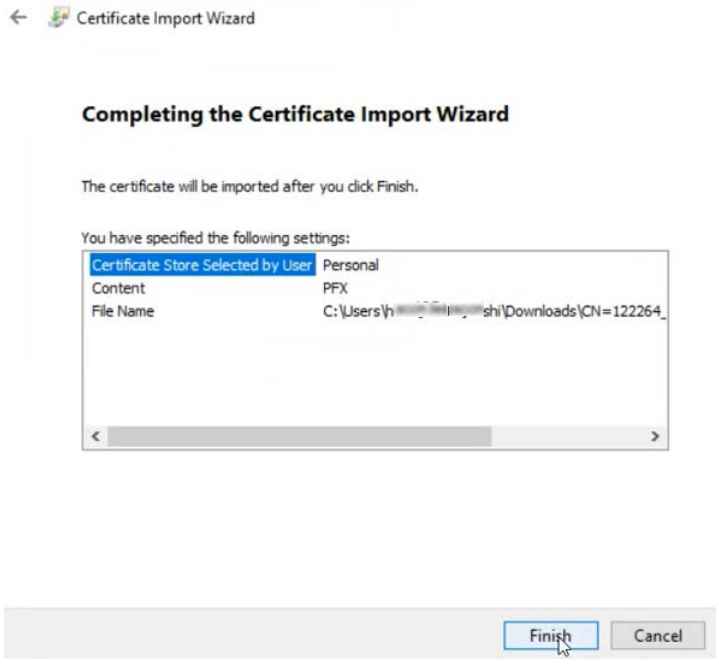


Figure 10-25: Click Finish

11. Click **Ok** and agree the confirmation dialog which appears.
12. In the Flexera SVM Patch Configuration, click **Thumbprint**, browse and select the **Certificate**.

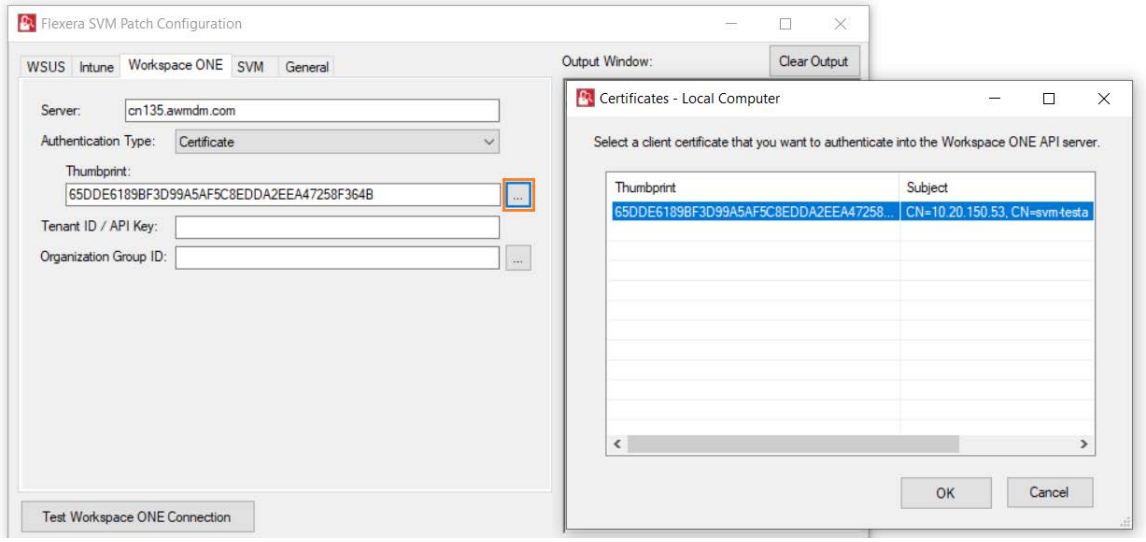


Figure 10-26: Browse and select Certificate

13. In the SVM Patch Publisher, click **Thumbprint**, browse and select the **Certificate**.

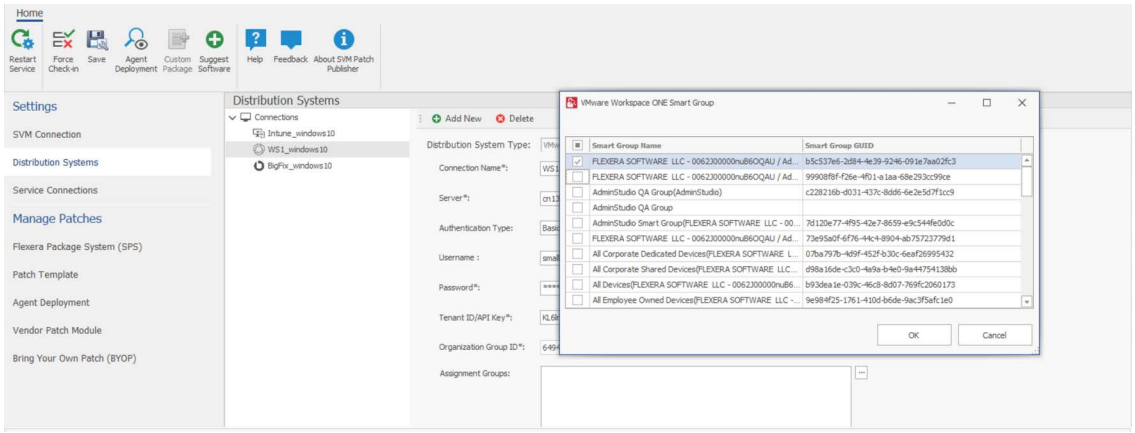


Figure 10-27: Select Certificate

Create Tenant ID / API Key

To obtain Tenant ID / API Key for the registered account, perform the following steps.

Task ***To obtain Tenant ID / API Key:***

1. In the application page, select **GROUPS & SETTINGS** from the left panel.

   The **Groups & Settings** page appears.

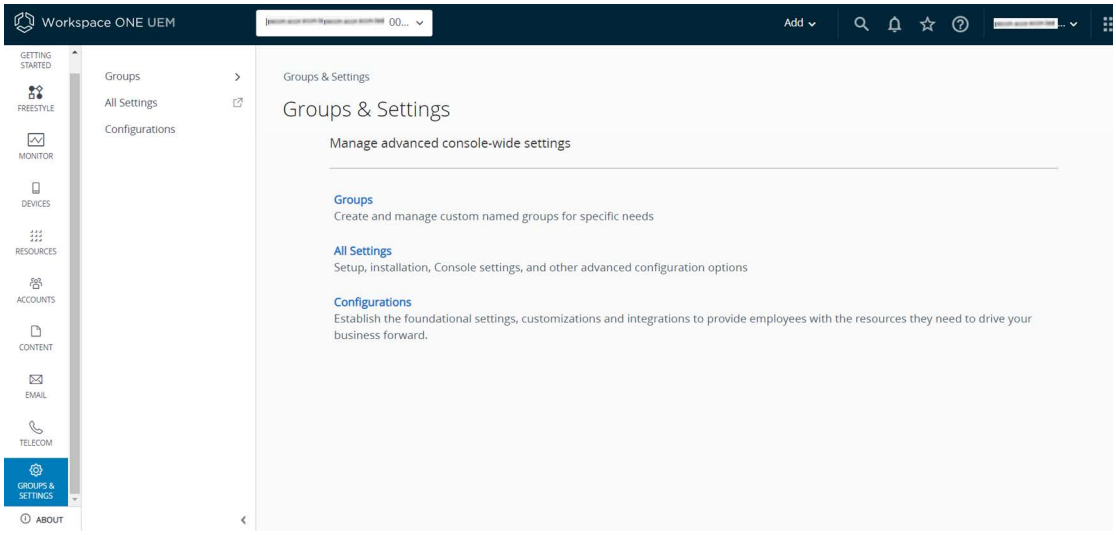


Figure 10-28: Groups & Settings page

2. On the **Group & Settings > All Settings > Systems > Advanced > API > REST API**.

Note • *Make sure that the **Enable API Access** field should be **ENABLED**.*

3. In the **REST API** page, The Tenant ID / API Key details will be listed in the **API Key** column.

4. To get new Tenant ID / API Key, click **Add**.

5. Provide a service name, description to describe your API, choose the account type you wish to set, and then click **Save**. The Tenant ID / API Key will then be listed in the **API Key** column.

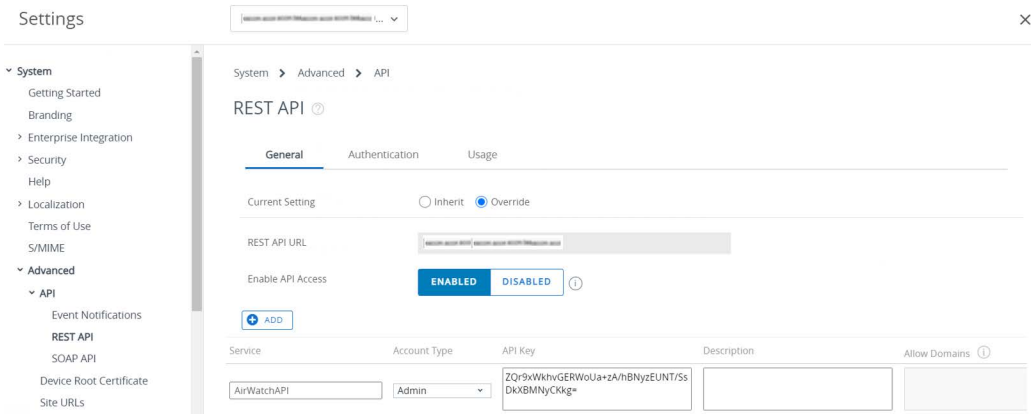


Figure 10-29: Click Add

11

Administration

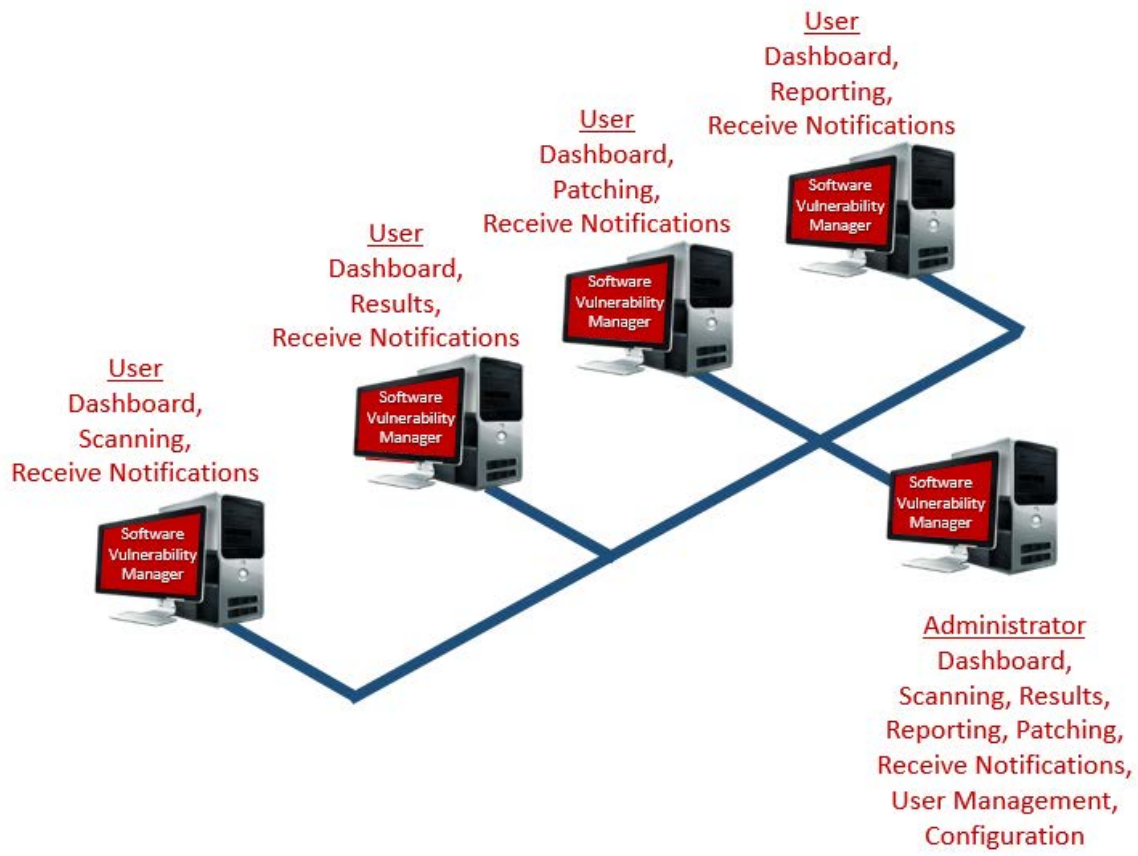
This chapter discusses the following Software Vulnerability Manager administrative features:

- Roles
- User Management
- Active Directory
- IP Access Management (Requires the Software Vulnerability Manager Plug-in)
- Password Policy Configuration

Roles

Software Vulnerability Manager uses role-based account management. Each Software Vulnerability Manager user is created and assigned a set of roles and limitations as appropriate. These roles determine which parts of Software Vulnerability Manager the user has access to and limits what the user can view and scan.

Every user of Software Vulnerability Manager can receive notifications such as reports, email and SMS.



The roles are as follows:

- **Scanning**—Allows the user to scan hosts and view the Scanning menu of Software Vulnerability Manager.
  - Filter Scan Results – Allows the user to access and configure Allow list and Block list filtering and Custom Scan Results.
- **Patching**—Allows the user to access the Patching module.
- **Results**—Allows the user to view scan results via, for example, Smart Groups.
- **Reporting**—Allows the user to access various reporting options and the Database Console and Database Cleanup menus.
  - Database Access—Allows the user to access the Database Console and schedule exports. There are no options to restrict the user's network access if this option is selected.
- Read Only—Prohibits the user from making any changes that write data to the Flexera Software Cloud. Read Only users do not have Scanning or Patching capabilities.
- Restricted—Users are read only users with limited functionality. A Restricted user is unable to view the default set of Smart Groups and are restricted to:
  - Viewing only the Custom Smart Groups that have been created for them,
  - Viewing the Reports that have been created for them.
  - Changing their password.

Only the Root Administrator can access the Active Directory and Password Policy Configuration. Administrative users have additional capabilities that allow:

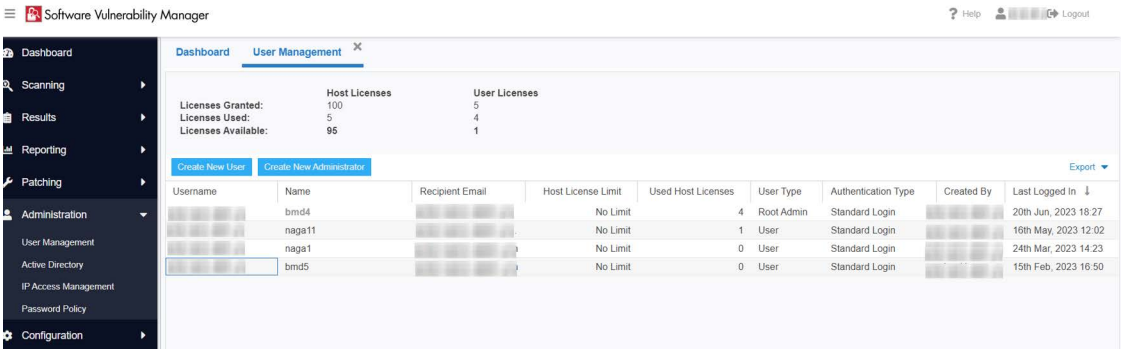
- Configuring Software Vulnerability Manager
- Creating users and assigning their roles and restrictions
- Assigning License limits

None of the access limitations apply to an administrative user and they can view all Hosts and Results.

User Management

Use this page to administer your Software Vulnerability Manager users.

- Create a New Administrator
- Create a New User



Create a New Administrator

Click Create New Administrator and fill in the form, providing all the necessary details about the administrative user and include the limits to assign to the user.

An email will be sent to the user containing a welcome message and their Software Vulnerability Manager login credentials.

Right-click an existing account to view, edit or delete the account.

Create a New User

To create a new user account, click Create New User and fill in the form, providing all the necessary details about the user. Select the User Roles & Permissions to assign the roles to the user.

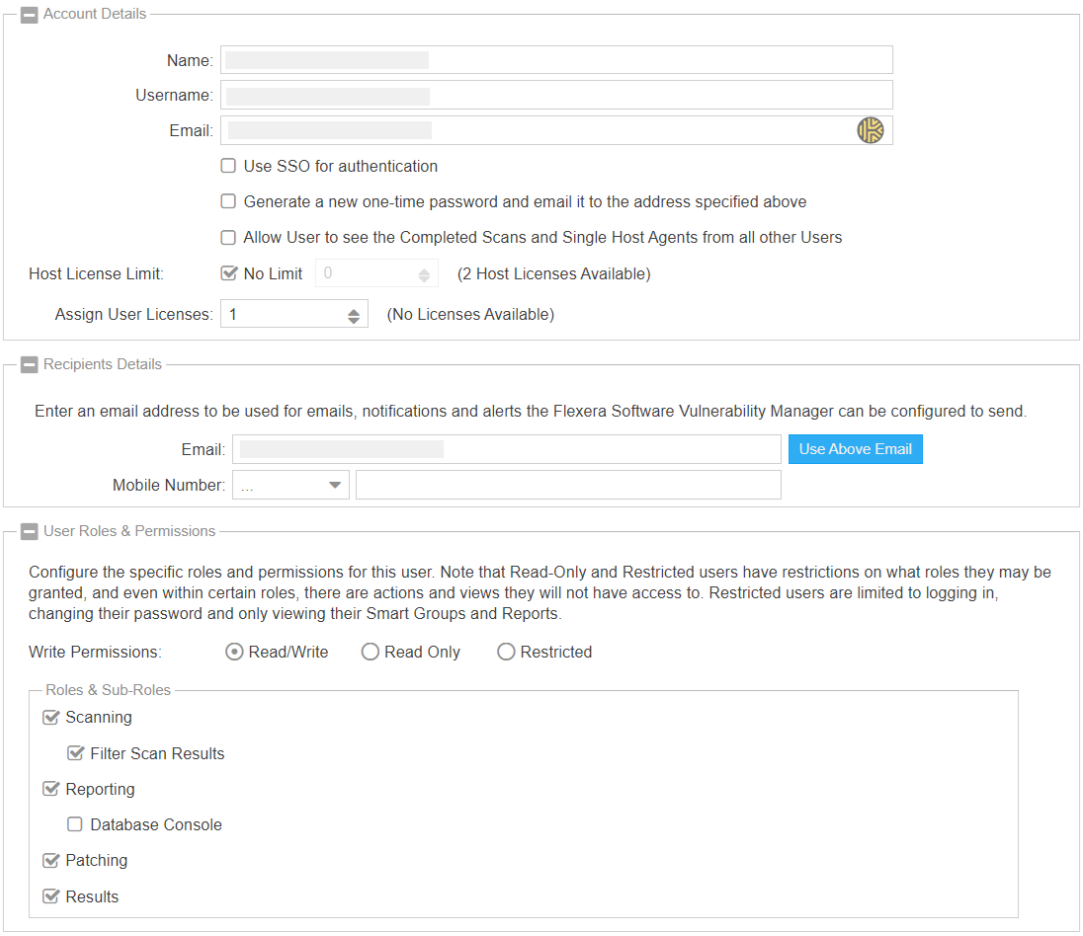
A confirmation email with activation instructions will be sent to the email address provided.

Select the check boxes under Restrict User's Network Access to specify which network endpoints you would like to allow the user to have access to. You can use existing configured Host name or IP Based Restrictions. Please note that Host names must be entered with the langroup(domain) in the format hostname.langroup. Using only the Host name will not work as you could have the same Host name in different domains which will allow users to see hosts they might not be permitted to see.

Note • *Restrict User's Network Access options are not available when a Database Access Role is granted.*

Create a New User for Single Sign-On (SSO)

To create a new user account, click **Create New User** and fill in the form, providing all the necessary details about the user. Select **Use SSO for authentication** and then select the **User Roles & Permissions** to assign the roles to the user.



Active Directory

As a Root Administrator, you can select Enable Active Directory integration to allow your group policies to be automatically updated in Software Vulnerability Manager when changes are made to the Active Directory.

Important • *Switching to Active Directory will hide your current Sites structure and the Results > Sites menu. For these to be displayed you must disable the Active Directory integration, logout, and then login to Software Vulnerability Manager. It is NOT recommended to toggle Active Directory on and off unnecessarily.*

Note • *In the SVM new User Interface, you can now configure Active Directory scan and use the schedule options to set Active Directory scans at selected intervals using daemon. Manual scan cannot be done.*

Requirements to integrate Software Vulnerability Manager with the Active Directory Domain:

- Active Directory Domain environment
- Domain User privileges
- Port 3268 (msft-gc protocol) open between Domain Controller and Software Vulnerability Manager Host

Enabling Active Directory imports all discovered computer objects in the Active Directory Schema. Disabling Active Directory does not delete the computer objects in Software Vulnerability Manager. Deleting sensitive computer information in Software Vulnerability Manager must be done manually by the user.

Use the options below to control which Active Directory paths will be scanned. The Active Directory scanner will attempt to fetch the widest structure possible starting from the provided root location. The scanner only analyses Domain Controllers and Organizational Units.

All accessible branches - By looking at the Active Directory Partitions, the scanner determines the accessible Domain Controllers that can be scanned.

Specific Domain Controller - You can specify a certain Domain Controller to be scanned. It must be accessible from the host running Software Vulnerability Manager. Select Set nETBIOSName manually to enter the nETBIOSName of the Domain Controller.

The view options help you control how the elements of the Active Directory are displayed. You can select the Show Distinguished Names for sites instead of single Organizational Units check box to display multiple Organizational Units with the same name. Note that this does not affect the Site name for server-side exports or generated reports.

You can use the schedule options to set Active Directory scans at regular intervals or perform a manual scan.

Note • *Manual Active directory scan requires Internet Explorer running in Admin mode with ActiveX functionality and will be available only with previous interface (https://csi7.secunia.com).*

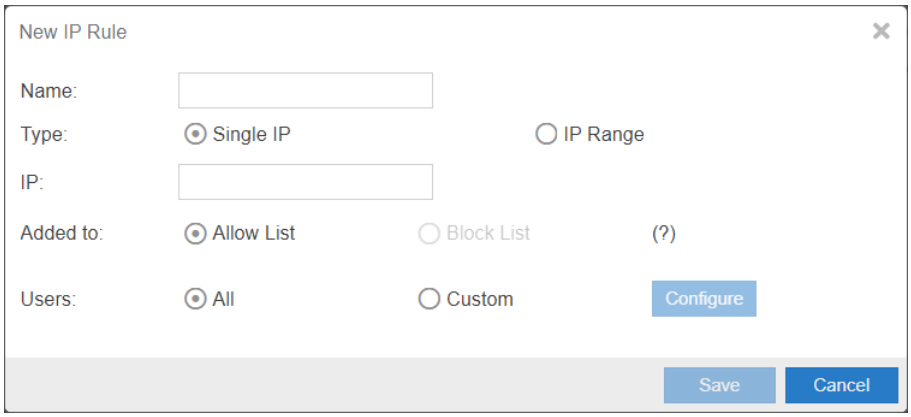
IP Access Management (Requires the Software Vulnerability Manager Plug-in)

As a Root Administrator, you can use this page to configure the IP addresses the Software Vulnerability Manager console can be accessed from.

Important • *The first IP Access Rule you set up must always be a Allow list rule and must include the external (public) IP address of the console you are creating the rule from. If, for example, you check ipconfig you will find the internal IP address, which will not work. You can find your external IP address by using an Internet search engine and typing "find my ip address".*

Task ***To create a new rule:***

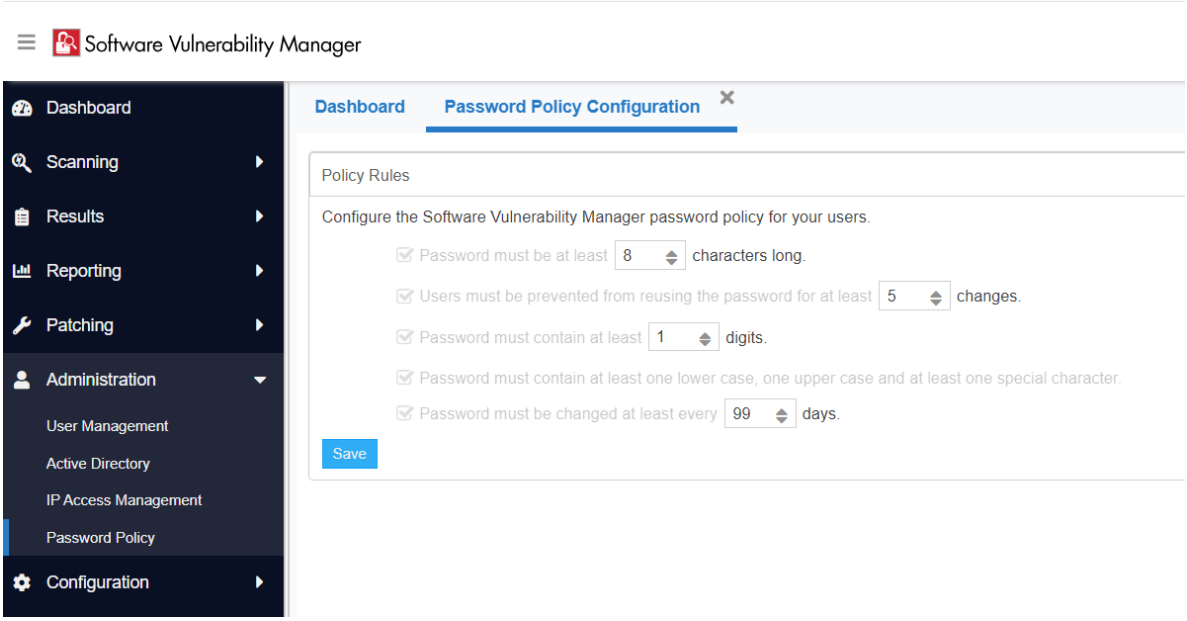
1. Click New IP Rule. Enter a name for the rule, the IP address or IP range, select to add the rule to a allow list or block list, and the users to apply the rule to. The rule can contain a Single IP or an IP range, but you need to start with a allow list rule. If you allow list one IP address (the one you are using), then all other IP addresses are block-listed by default.



2. Once you have created a allow list rule with an IP range, you can then block list a Single IP or an IP range within the allow list IP range.
3. All IPs that have been added to a allow list are able to use Software Vulnerability Manager and IPs added to a block list are not able to connect.
4. To test if an IP has access to Software Vulnerability Manager based on the current rules, click Check IP.

Password Policy Configuration

Use this page to configure the password policy for users. This policy should be set on a "global" level, that is, the password policy cannot be configured differently for different users. The Administrator defines the policy based on the options displayed in the Policy Rules dialog. These Policy Rules are mandatory.


Software Vulnerability Manager
Dashboard
Scanning
Results
Reporting
Patching
Administration
User Management
Active Directory
IP Access Management
Password Policy
Configuration
Dashboard
Password Policy Configuration
Policy Rules
Configure the Software Vulnerability Manager password policy for your users.
Password must be at least 8 characters long.
Users must be prevented from reusing the password for at least 5 changes.
Password must contain at least 1 digits.
Password must contain at least one lower case, one upper case and at least one special character.
Password must be changed at least every 99 days.
Save

12

Configuration

This chapter describes the following features that can be configured in Software Vulnerability Manager:

- Settings
- Log Messages
- Activity Log
- Software Suggestions
- Security

Settings

Use this page to configure various settings within Software Vulnerability Manager.

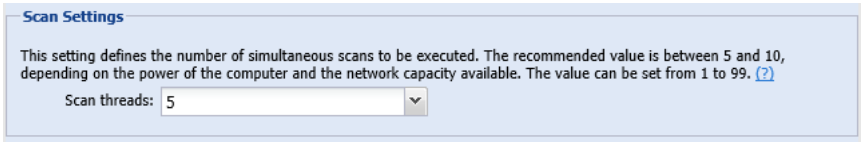
- Scan Threads
- Live Updates
- Collect Network Information
- Zombie File Settings
- Host Deletion Settings
- Check for Missing Microsoft Security Update Settings
- Flexera Software Package System (SPS) Timestamp
- Mask Paths That Show User Names
- Configure Agents Status Polling
- Configure Site name for agents deployed with custom name
- Java Assessment Settings
- Scan Exclusion Paths

- System Score Settings
- Default Recipient Settings
- Windows Update Settings
- Single Sign-On (SSO) Settings
- Configure Single Sign-On (SSO)
- Configure Single Sign-On (SSO) with Azure

Scan Threads

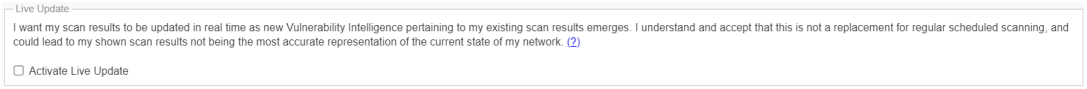
Define the number of simultaneous scans to be executed. You can set the Scan threads value from 1 to 99 (the default is 5).

Please note that the number of simultaneous scan threads will not affect the scans being performed by the CSIA (Agent), since these scans are made locally by the agents.



Live Updates

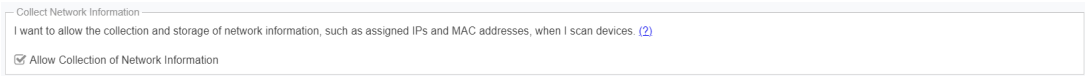
Select the Activate Live Update check box to update your scan results as new Vulnerability Intelligence pertaining to your existing scan results emerges. By doing this you agree that you understand and accept that this is not a replacement for regular scheduled scanning and could lead to your shown scan results not being the most accurate representation of the current state of your network. Live Update changes will only modify scan data received after enabling this feature. Older scan results will not be affected by this feature. Please note that Live Update does not update Red Hat Agent scan results.



Collect Network Information

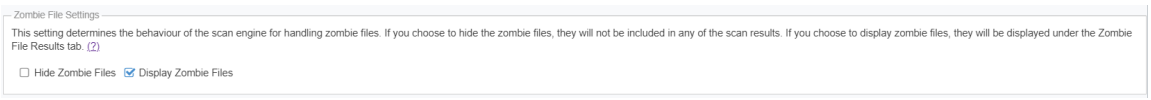
Select the Allow Collection of Network Information check box to allow collection and storage of network hardware information, such as assigned IP and Mac addresses, when scanning devices to be able to restrict users based on IP addresses or IP Networks.

Note • *The collected information is not visible to users except from the Database Console. This option is only available to the Root Administrator.*



Zombie File Settings

Zombie files are files that were left behind after removing or applying a product/patch. Software Vulnerability Manager will pick up these files since these are listed in Software Vulnerability Manager file signature as being related to an Insecure or End-Of-Life product. Select the Hide Zombie Files check box to ensure that zombie files will not be included in any of the scan results. With the Hide Zombie Files setting enabled, only the highest version of the discovered product will be displayed in the scan results. To activate the Hide Zombie Files setting, a new scan is needed to change the scan results.



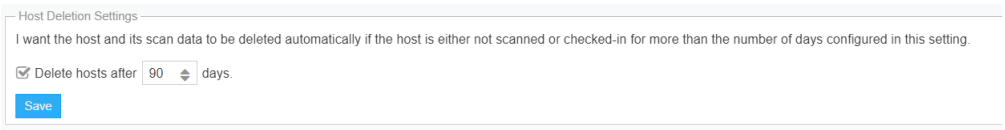
The **Display Zombie Files** check box option enables only when the **Hide Zombie Files** option is unchecked. With the **Display Zombie Files** check box enable, the discovered zombie files will be displayed in the Scanning > Completed Scans > View Scan Result > Zombie File Results tab. For more information, see Zombie File Results.

Note • *Zombie File results may appear as unlinked files, but they could still be essential for application functionality. Users should confirm their necessity before deletion to prevent disruptions.*

The Hide Zombie Files setting is a global setting for a partition that applies to all users of that partition. This option is visible to all users, but only Partition Administrators are able to change it. Refer to Appendix A - Partition Management for more information.

Host Deletion Settings

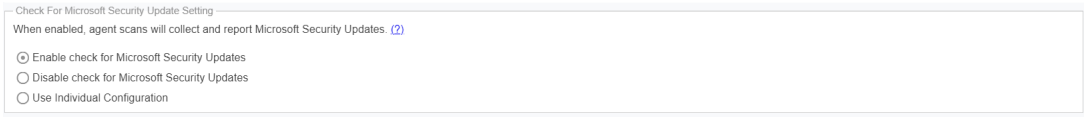
A new setting to delete hosts and their scan data for which the last scanned/check-in time is greater than the specified number of days.



Check for Missing Microsoft Security Update Settings

The Check for Missing Microsoft Security Update Settings determines whether or not agents perform the Windows Update check to collect and report missing Microsoft Security Updates:

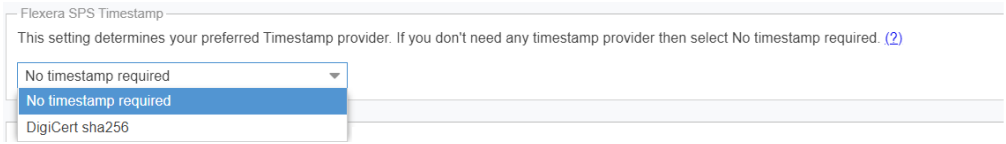
- Enable check for missing Microsoft Security Updates – All agents will check for missing Microsoft updates, using the Windows Update Settings.
- Disable check for missing Microsoft Security Updates – No agents will check for missing Microsoft updates.
- Use individual configuration – Agents will use their site settings or their individual settings for determining whether to check for missing Microsoft updates. If their individual or site setting says that the agent should check for missing Microsoft updates, then that agent will do the check, using the Windows Update Settings.



This option is visible to all users, but only Partition Administrators are able to change it. Refer to Appendix A - Partition Management for more information.

Flexera Software Package System (SPS) Timestamp

The Flexera SPS Timestamp setting allows users to track when a patch was deployed to its system when Creating a Patch with the Flexera Software Package System (SPS).



Under the **Flexera SPS Timestamp** drop-down menu, you can select the default “No timestamp required” option or the appropriate timestamp provider.

URL Allowlist for new Timestamp server

New DigiCert timestamping service IP address:

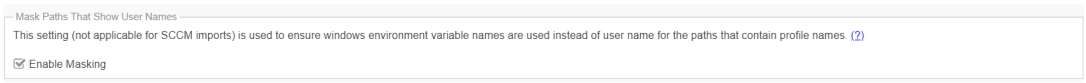
If necessary, allow this service so that you can access it on your network. It recommended to allow by domain name (timestamp.digicert.com), but if you are required to allow by IP, the new IP address will be: 216.168.244.9

Mask Paths That Show User Names

To comply with the European Union’s General Data Protection Regulation (GDPR), folder names that contain user information (Example: `C:\Documents and Settings\Username`) can be concealed using environment variables instead of hard-coded paths (Example: `%HOMEPATH%`).

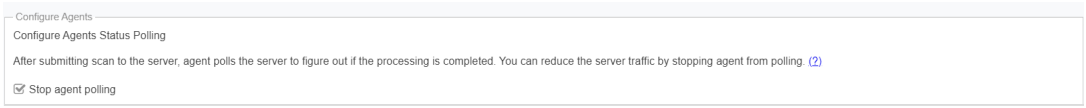
Select **Enable Masking** to turn on the GDPR functionality of concealing user name information.

Note • *This setting is only available beginning with the Software Vulnerability Manager May 2018 release.*



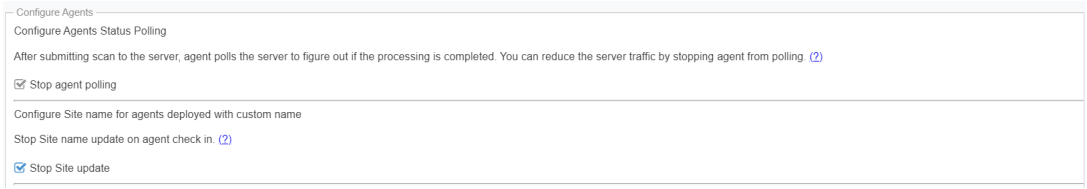
Configure Agents Status Polling

To address a server’s high CPU usage during high volume of scan data, agent polling has been switched off by default as agent polling is intended for debugging purposes only and is not needed for core functionality. You have the ability to turn agent polling ON or OFF.



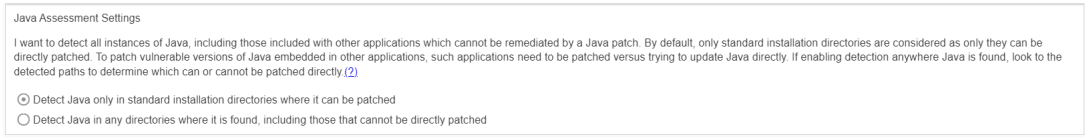
Configure Site name for agents deployed with custom name

Note • *If you are using custom Site name for a single host agent, then enable* ***Stop Site update*** *check box.*



Java Assessment Settings

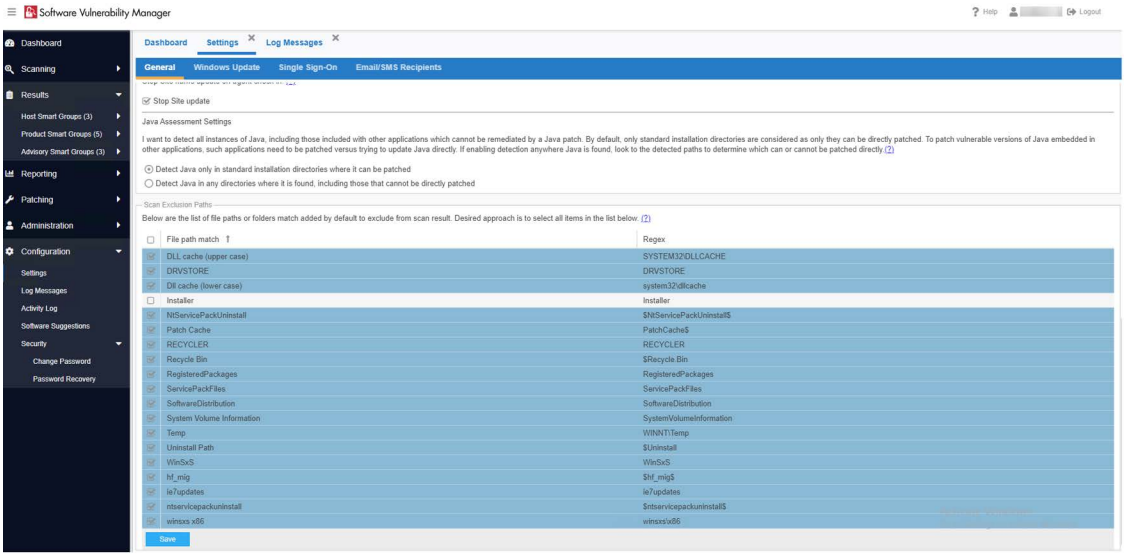
The **Java Assessment Settings** allows to you specify if you want to detect Java instances in the standard installation directories alone or in all the directories.



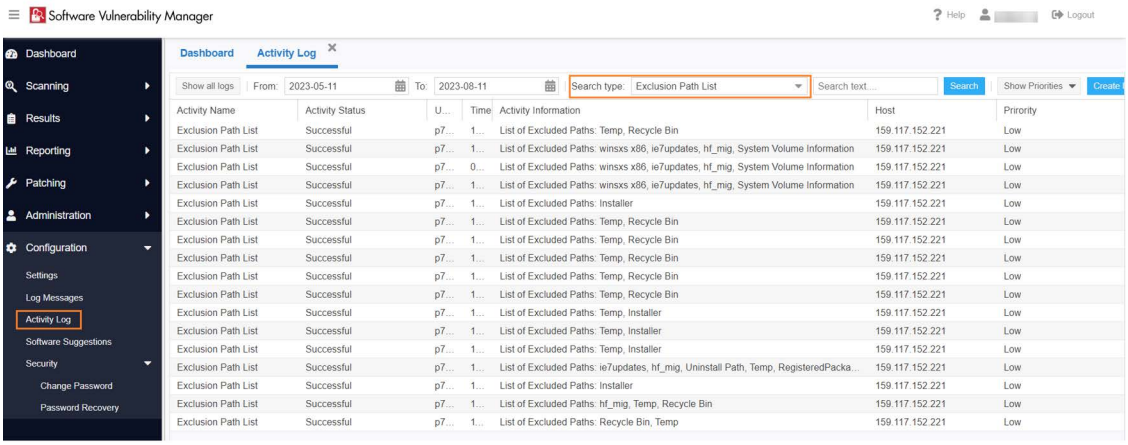
Note • *SVM does not detect the Java versions that are embedded in a third-party application to avoid conflicts with publicly available Java versions. It is recommended to update the embedded Java versions through the updates provided by the third-party application vendor.*

Scan Exclusion Paths

In the **Scan Exclusion Paths**, by default, all paths will be selected and products with these paths are not included in the scan results. To include the excluded product and their paths to the scan result, uncheck the desired row and run the scan.

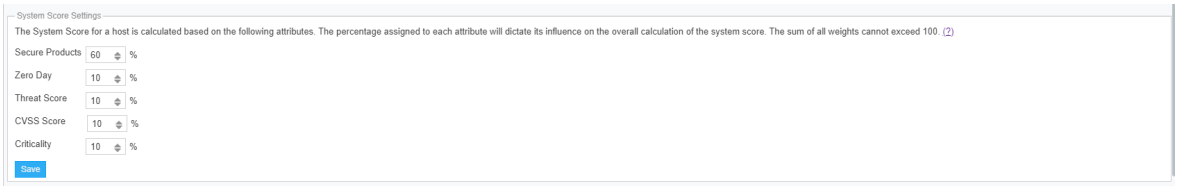


The excluded paths can be viewed in the **Configuration > Activity Log** grid by selecting Search type as **Exclusion Path List**.

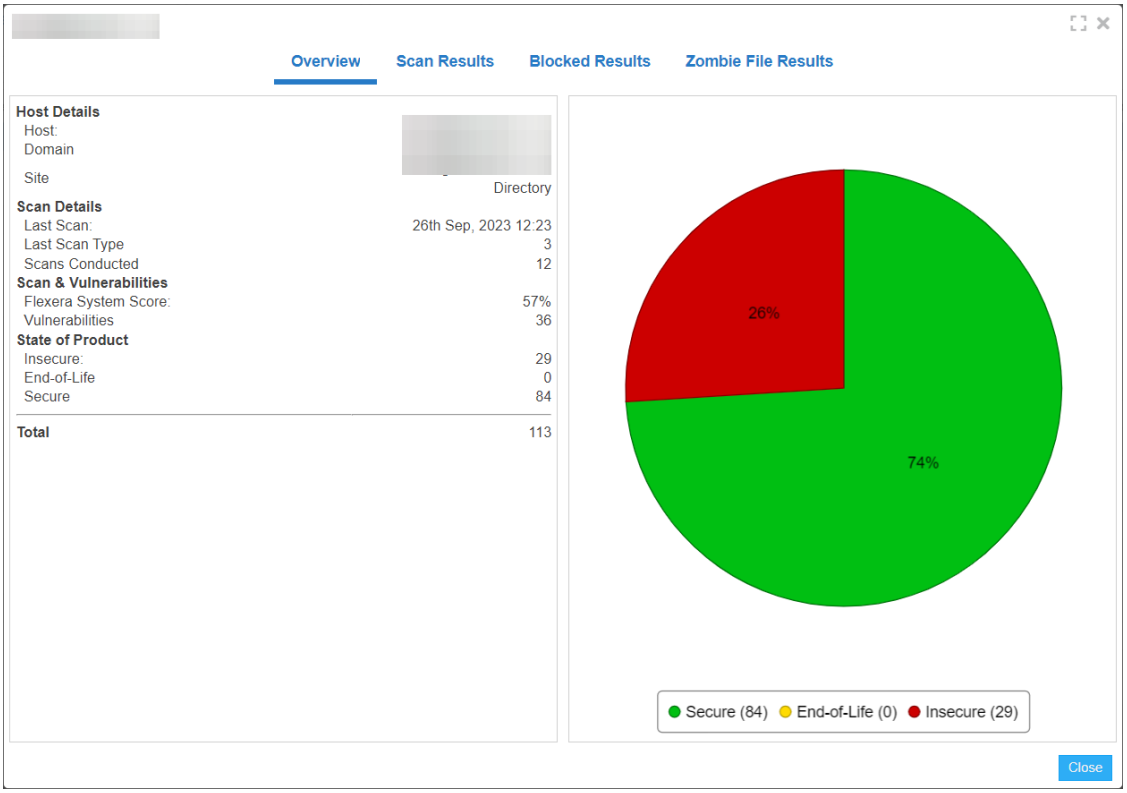


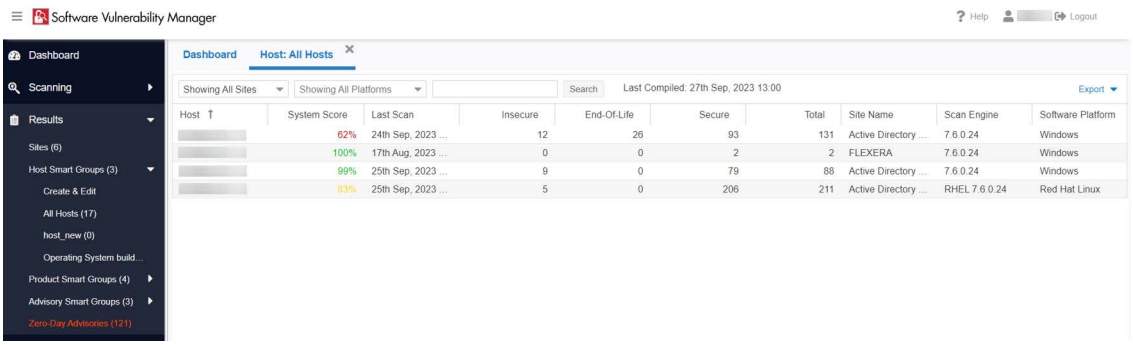
System Score Settings

In the **System Score Settings**, you can configure weightage for each criterion to calculate the system score for hosts. The sum of all weights cannot exceed 100. The percentage assigned to each attribute will dictate its influence on the overall calculation of the system score.

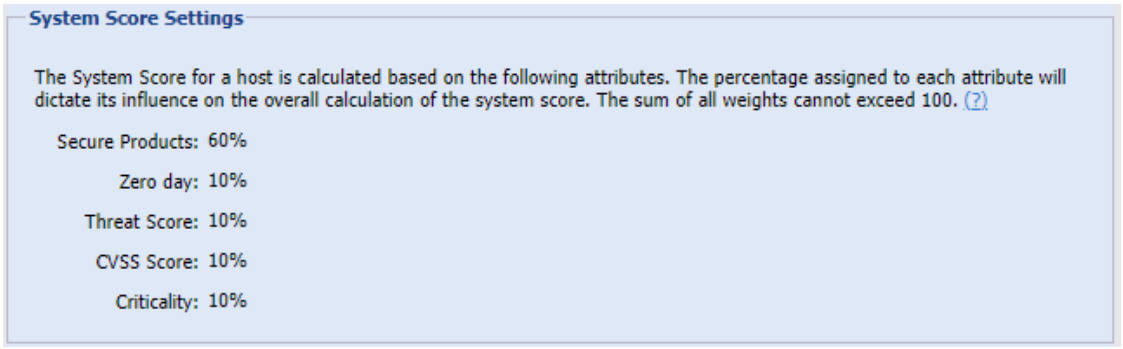


Upon defining the criteria and running the scan, the system score details will be displayed in the **Scanning > Completed Scans > View Scan Result > Overview** tab. Also displayed in the **Host Smart Groups** grid.



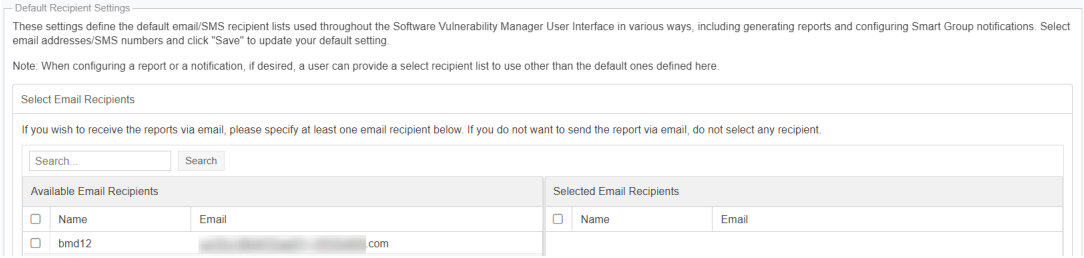


In the old SVM user interface, configured criteria details will be displayed in the **Configuration > Settings > System Score Settings**. These attributes cannot be edited.



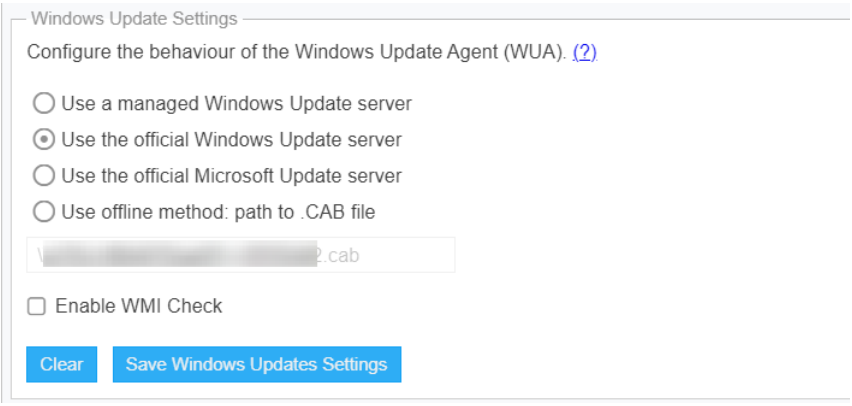
Default Recipient Settings

Specify the default email and SMS recipient lists used throughout the Software Vulnerability Manager User Interface in various ways, including generating reports and configuring Smart Group notifications.



Windows Update Settings

The **Windows Update Settings** control the behavior of the Windows Update Agent (WUA) used by Software Vulnerability Manager and the Software Vulnerability Manager Agent (`csia.exe`) to retrieve update information on Windows and other Microsoft products. Each update setting is further explained below.



Use a managed Windows Update server

The `csia.exe` agent will request a check for updates through an enterprise managed WSUS instance. On machines not configured through WSUS, this check for updates will result in the error: 0x80244011 "WUServer policy value is missing in the registry".

Use the official Windows Update server

The `csia.exe` agent will request a check for updates through the public Windows Update server. This check will only return updates related to Windows.

Use the office Microsoft Update server

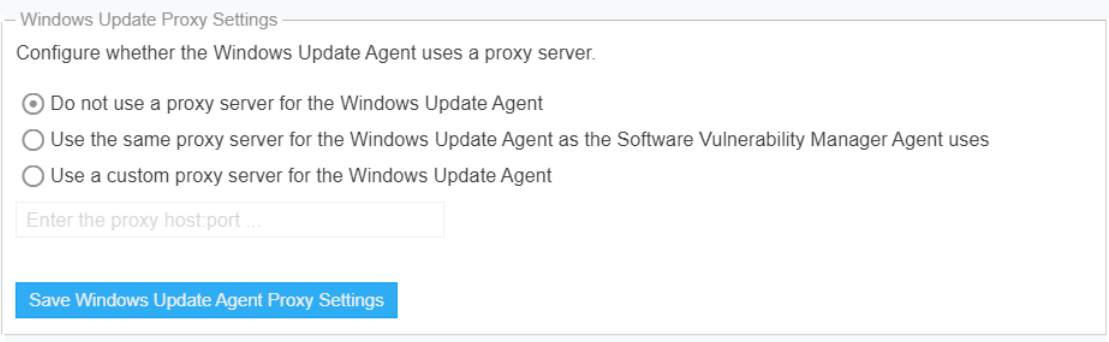
The `csia.exe` agent will request a check for updates through the public Windows Update server. This check will return a superset of the "Windows Update server" results that include Windows updates and updates for Microsoft products such as Office (non App-V, non App-X installs only) and MSVC redistributables.

Use offline method: path to .CAB file

You should implement the `.cab` file scanning of windows update for clients that are not connected to the Internet and cannot access WSUS or MU/WU. In such situations Microsoft provides a `.cab` file that can be used to scan the system. There are limitations to this feature:

- You are responsible for placing the file in a location accessible by Windows Update Services. The file must be on the local file system; placing the file on a shared drive is not supported by Windows Update Services.
- The alternate scan data source (`.cab` file) only includes high priority updates (security bulletins, critical updates, update rollups) and some service packs. It does not include optional updates (such as updates, feature packs, and tools) and some service packs. If a machine uses this source for scanning, then it is likely that fewer patches will be detected.
- Software Vulnerability Manager should be run as administrator.

For the **Windows Update Proxy Settings,** select “Do not use a proxy server for the Windows Update Agent”.



Enable WMI Check

Agents can be configured to include security updates from SCCM in the scan data. This feature can be used along with an existing missing security update collection or as the only source for missing knowledge base information.

Single Sign-On (SSO) Settings

On the **Configuration > Settings** tab, you can specify SSO Settings.

IdP Configuration Instructions

Under SSO Settings on the **Configuration > Settings** tab, you can specify the following IdP Configuration Instructions settings.

Table 12-1 • SSO SETTINGS / IdP CONFIGURATION INSTRUCTIONS

Settings	Description
Single Sign On URL	This field lists the application’s single sign-on URL. You will need to enter this URL into the settings for your chosen Identity Provider.
Account Key	Set this field in your Identity Provider (IdP) as a SAML attribute named accountKey.

Table 12-1 • SSO SETTINGS / IdP CONFIGURATION INSTRUCTIONS

Settings	Description
Generate and Show Key	Click to generate and display the Account Key. ***Note*** • *This key is not stored on the Software Vulnerability Manager server. Make sure that you keep it in a safe place. If you lose it, you may regenerate the key, but doing so will invalidate the old key.*
Service Provider Metadata URL	Lists the Service Provider Metadata URL.

Service Provider Configuration

Under SSO Settings on the **Configuration > Settings** tab, you can specify the following Service Provider Configuration settings.

Table 12-2 • SSO SETTINGS / SERVICE PROVIDER CONFIGURATION

Settings	Description
SSO Enabled	Select this option to enable Single Sign-On.
Disable standard login	If you are using Single Sign-On at your organization, select this option to disable standard login options for all of your users (except root). ***Important*** • *Before selecting this option, make sure that SSO is working correctly, to prevent user lockout.*
Upload IdP Metadata XML file	Select this option if you want to upload the IdP metadata XML file.
Provide IdP Metadata URL	Select this option if you want to enter the identity provider metadata URL into the **IdP Metadata URL** field.
Automatically create new users	Select this option to automatically create new users.
Default groups for new users	Specify the default group for new users.

Note • *For more information on Single Sign-On, see Configure Single Sign-On (SSO).*

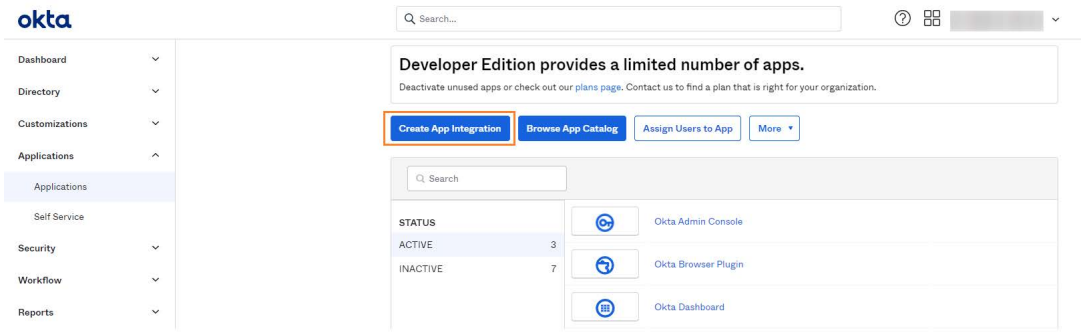
Configure Single Sign-On (SSO)

Note • *The following information is unique to the single sign-on vendor Okta (SAML 2.0). Single sign-on procedures from other vendors may vary.*

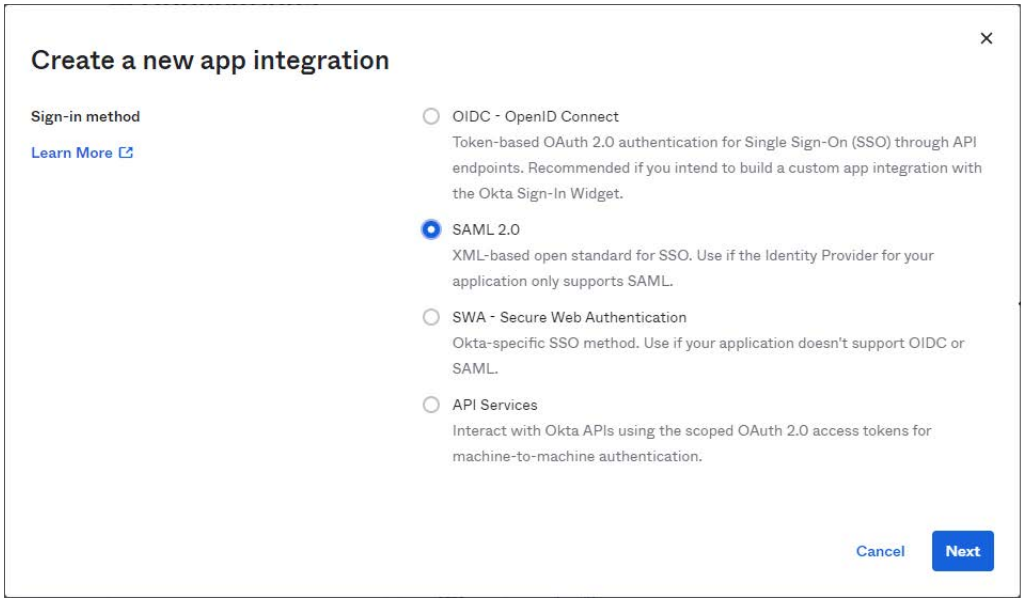
Perform the following steps to configure Single Sign-On (SSO).

Task ***To set up Okta (SAML 2.0) to use as a single sign-on (SSO) with Software Vulnerability Manager:***

1. Sign in to Okta.
2. Create an admin account.
3. Click **Create App Integration** to create a new Okta SSO app.

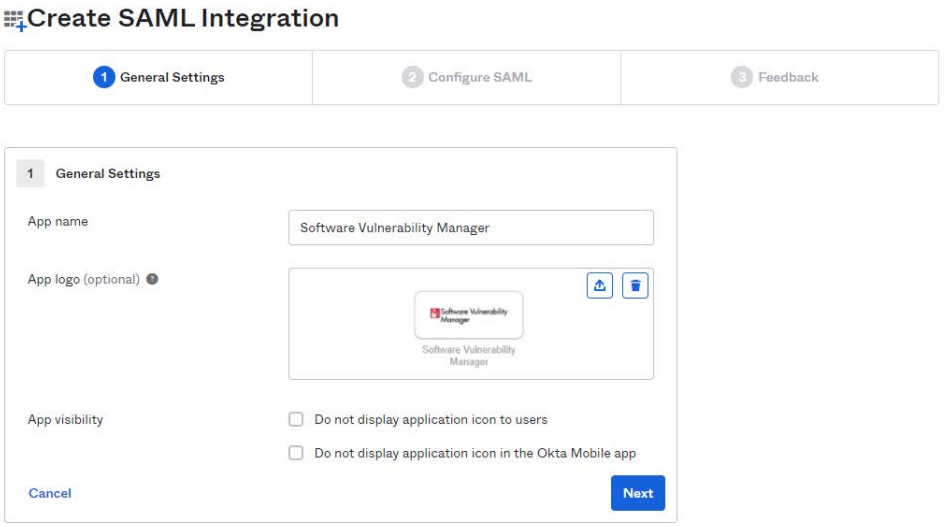


4. Choose **SAML 2.0** and then click **Next**.



5. Enter the name of application in the **App name** field (Example: SVM). In the **App logo (optional)** field, click upload icon and select the application logo. Then click **Next**.

Note • *Username needs to be in email format.*

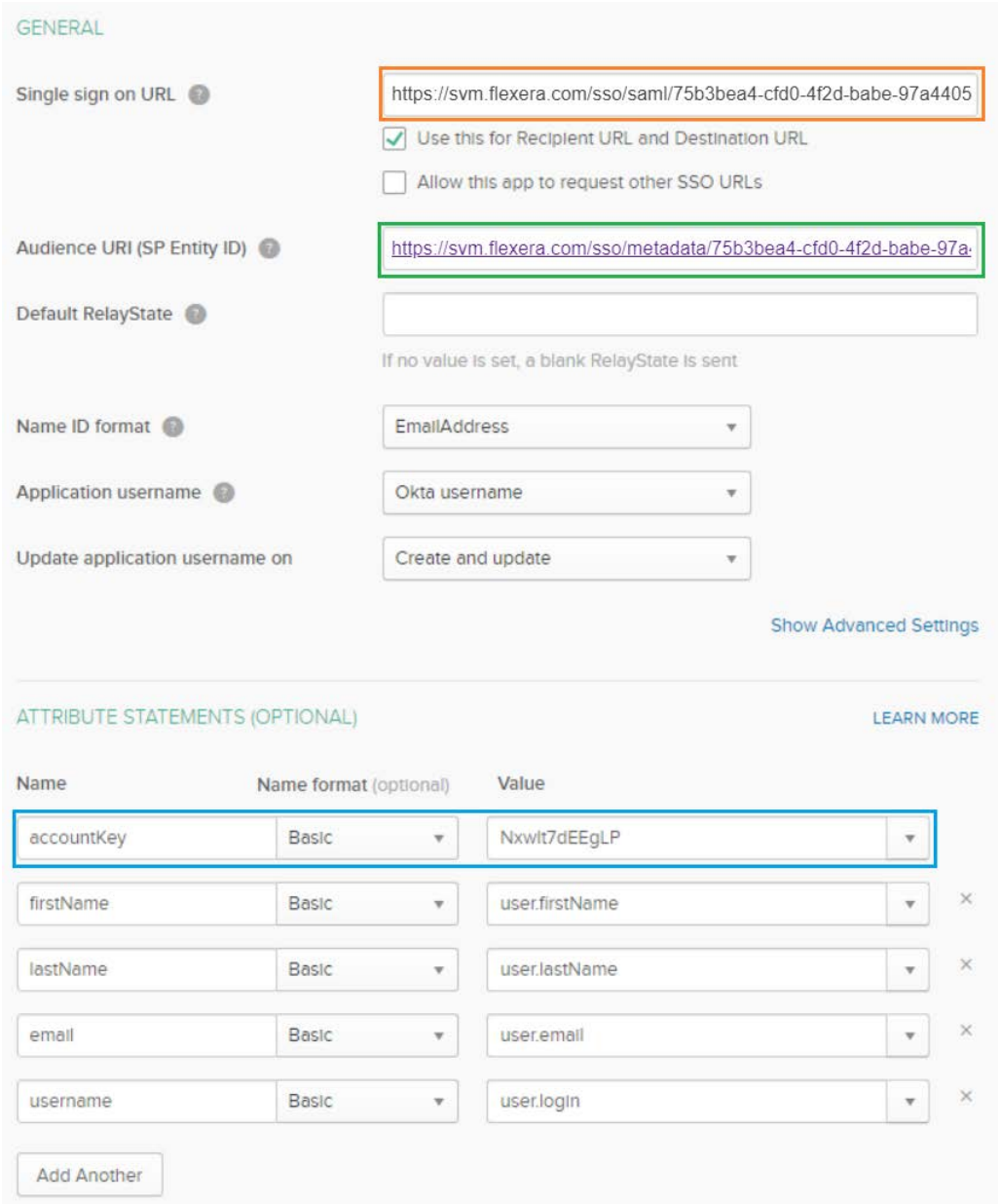


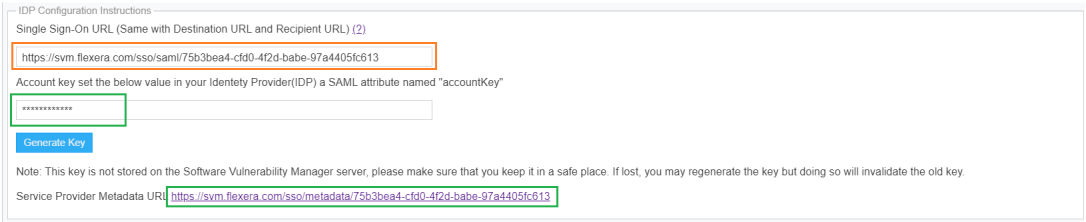
6. Copy the following from the Software Vulnerability Manager **Configuration > Settings** fields and paste in the **Okta SAML Settings** > fields:

   - Single Sign On URL (Same with Destination URL and Recipient URL) to Single sign on URL.
   - Service Provider Metadata URL to Audience URI (SP Entity ID).
   - Account Key to accountKey Value.

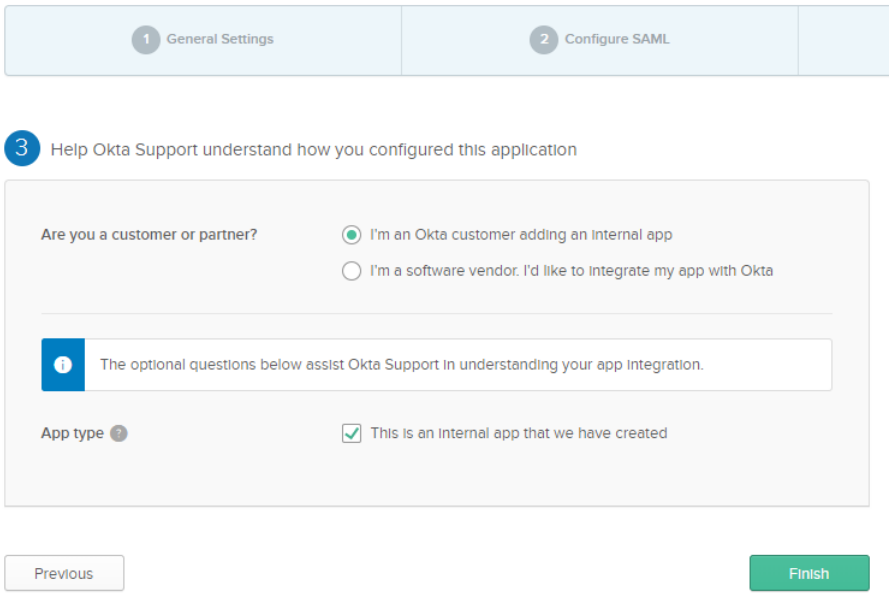
   Complete the remaining **Okta SAML Settings > Attribute Statements (Optional)** name and value fields using the field's drop-down list:

   - firstName
   - lastName
   - email
   - username

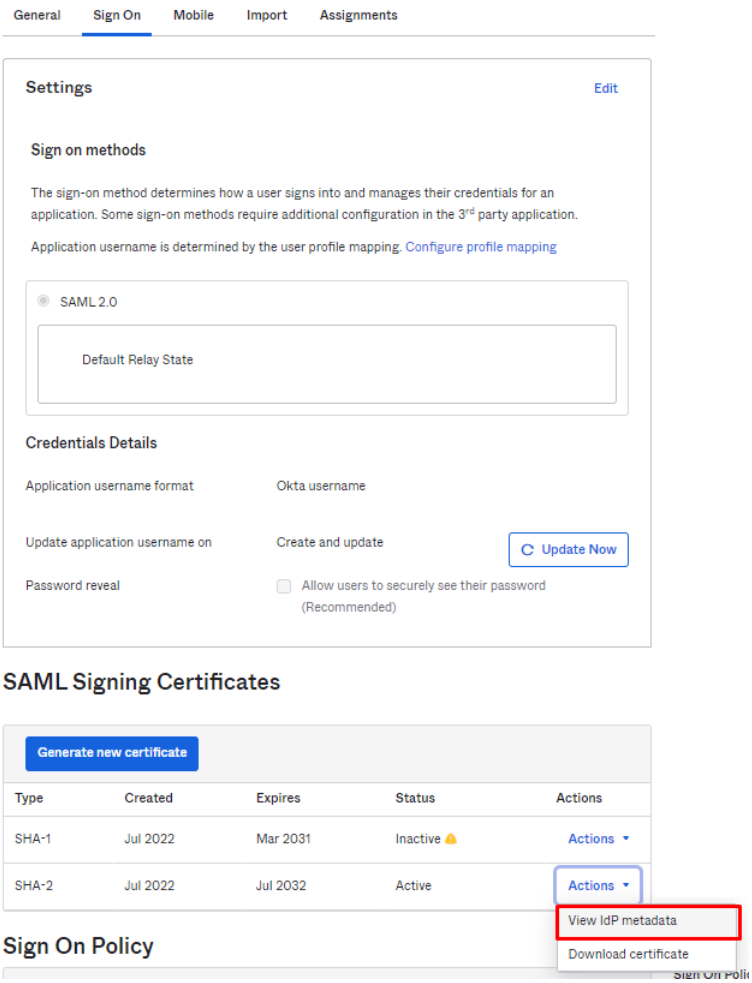




7. Click (if not already selected) **I'm an Okta customer adding an internal app** for the Create SAML Integration - Step 3 Feedback screen.



8. At the Okta **SignOn**, select **SAML Signing Certificates > Actions** drop down **> View IdP metadata**.

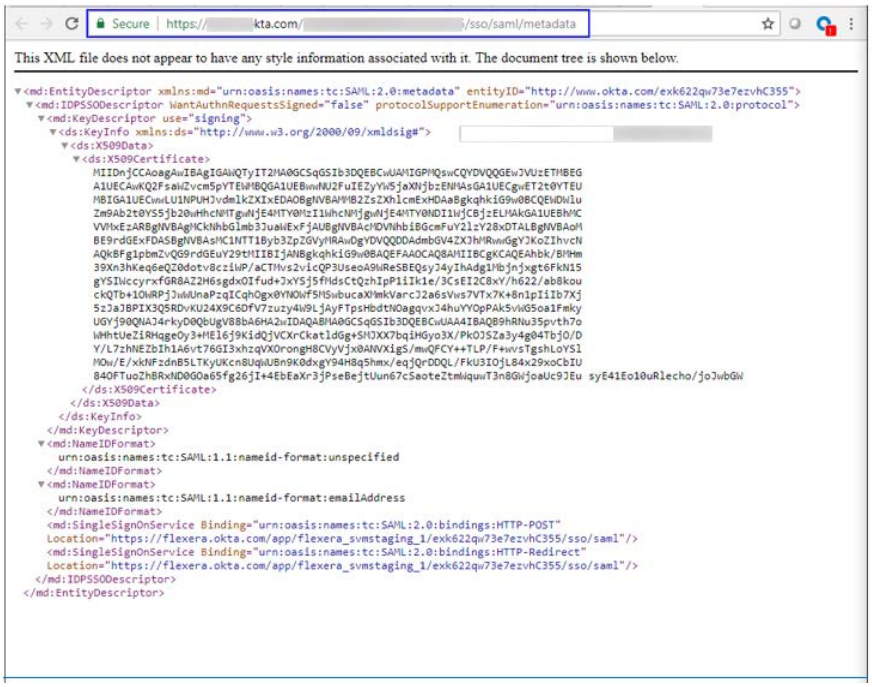


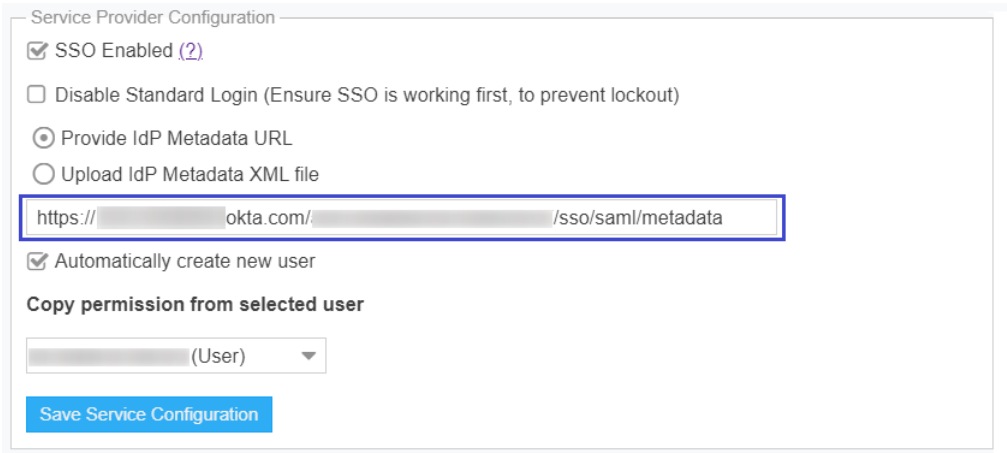
9. Copy the Identity Provider metadata URL from Okta, login into the partition admin, browse **Configuration >Settings > Service Provider Configuration**, and then check **SSO Enabled**. Select **Provide IdP Metadata URL** and paste the copied IdP metadata URL into the text box.

Note • *Single Sign-On settings can be updated only by the partition admin.*

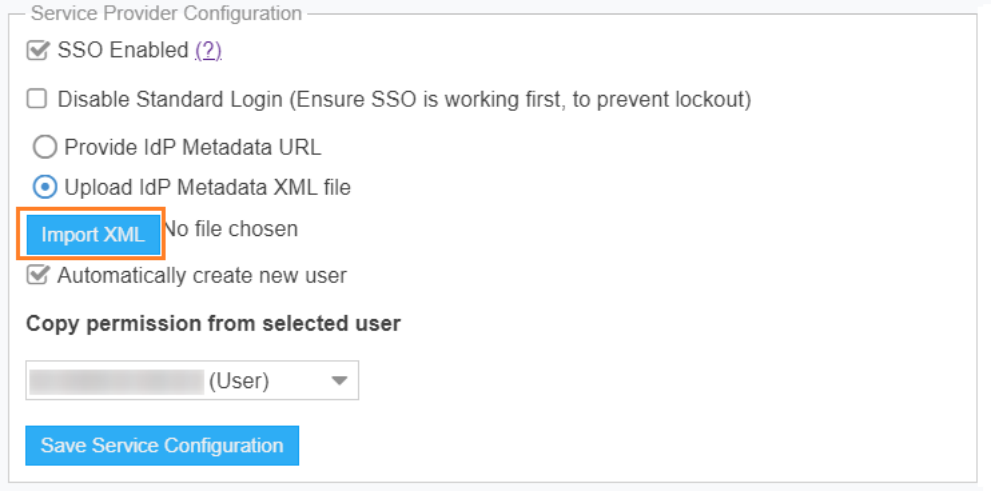
Note • *For Binaries like Daemon, sc2012 plugin, Client toolkit will be logged in only by the standard login credentials. If disable standard login is selected, then the binaries will be logged in only by the partition administrator.*

Note • *For a secure connection, the Assertions Signed (or similarly named) setting should be enabled on your IDP.*





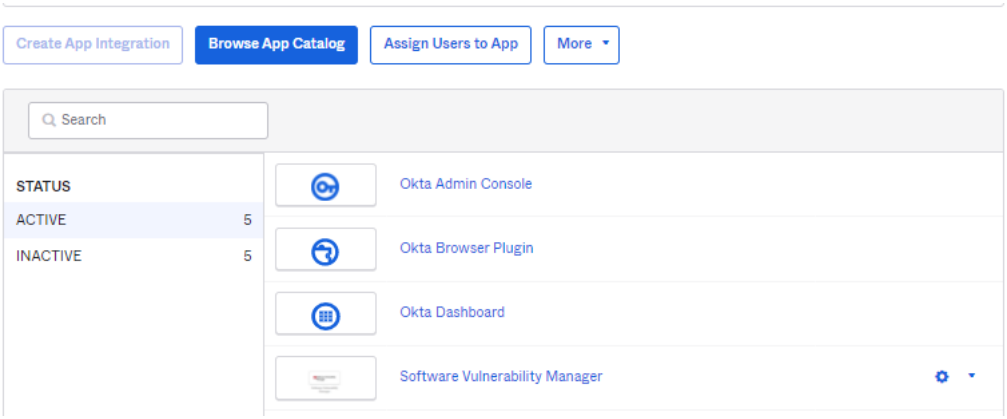
Copy the Identity Provider metadata context from Okta and save in XML format. When you select **Upload IdP Metadata XML file**, click **Import XML**, browse and select the XML file.



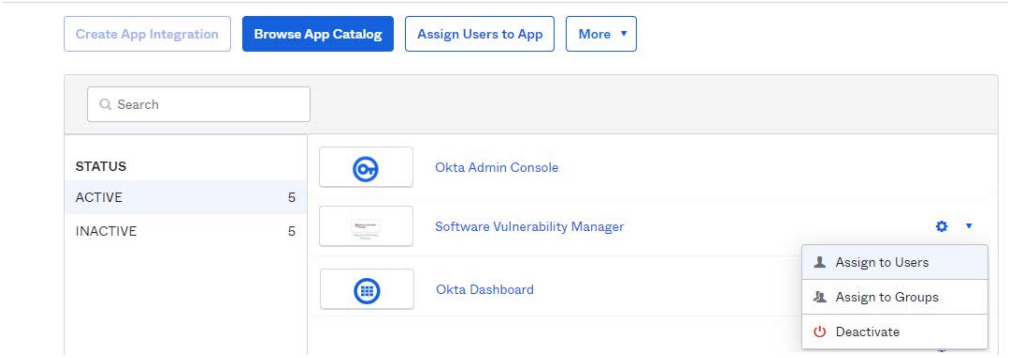
10. To create an auto user, select the **Automatically create new user** check box and selected the template user from the drop down.
11. If you want to disable standard login options for all of your users (except root), select the **Disable standard login (Ensure SSO is working first, to prevent lockout)** option.

Important • *Before selecting this option, make sure that SSO is working correctly, to prevent user lockout.*

12. Click **Save Service Configuration** on the **Configuration > Settings** page.
13. Add Software Vulnerability Manager users to the Okta SSO account.



14. To assign Software Vulnerability Manager users to the Okta SSO app, click settings drop down, and choose **Assign to Users**. You can also assign user by clicking **Assign Users to App** tab.



15. Users can login to Okta by entering the valid credentials and then click on Software Vulnerability Manager app to access the application.
16. Users are then logged into the Software Vulnerability Manager Login page.

Important • *For security purposes, Software Vulnerability Manager has a session timeout that will log you off after 2 hours of inactivity.*

Configure Single Sign-On (SSO) with Azure

To configure SSO in Azure, perform the following steps:

- Create an Enterprise Application
- Assign Users to the Enterprise Application
- Set up Single Sign-On (SSO) in Azure
- Create Auto User in Azure

Create an Enterprise Application

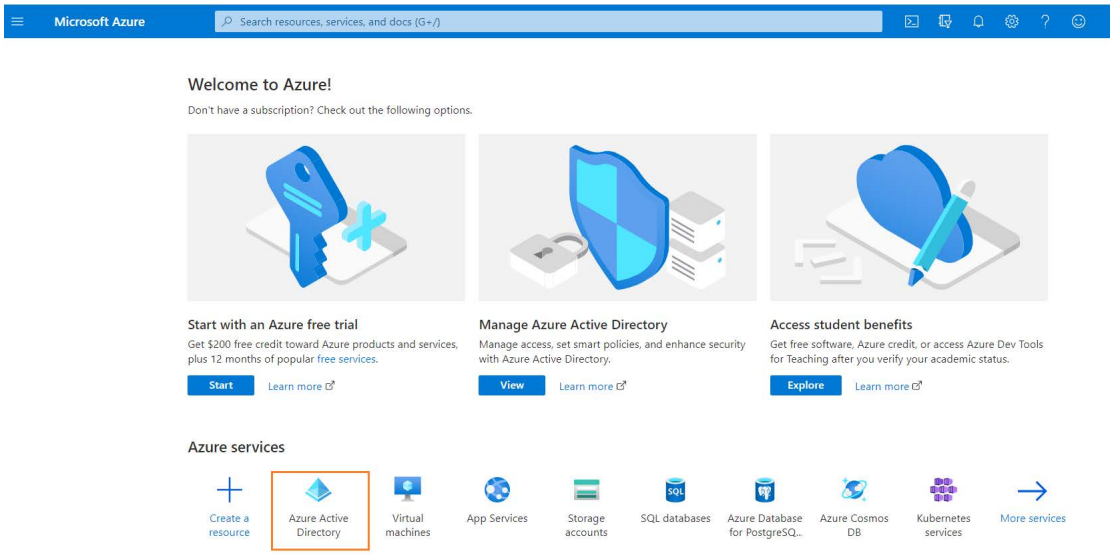
Perform the following steps to add Software Vulnerability Manager as an Enterprise Application Azure Active Directory.

Task ***To create an Enterprise Application:***

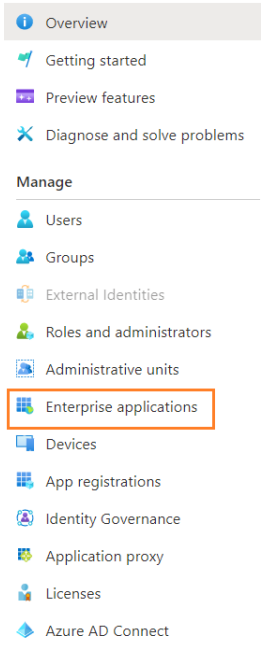
1. Log in to Microsoft Azure using the obtained credentials.

   https://azure.microsoft.com/en-in/account/

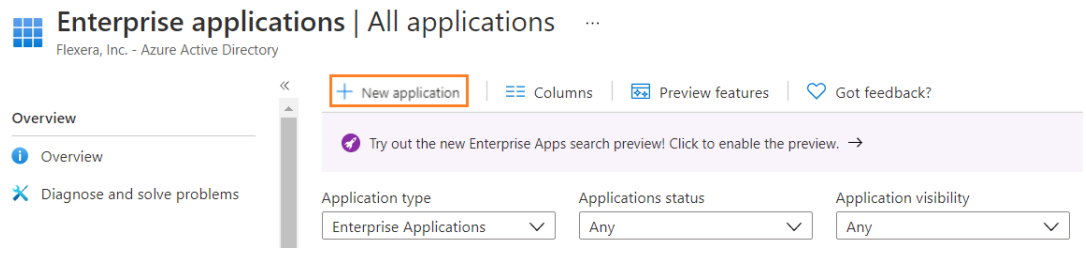
2. From the list of available Azure services, choose **Azure Active Directory**.



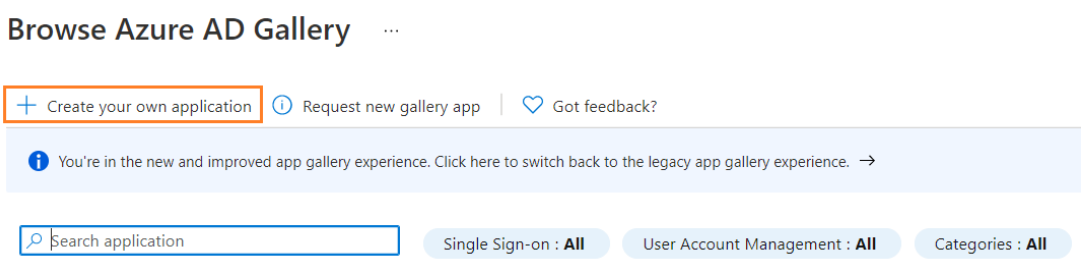
3. Click on **Enterprise applications** in the left pane.



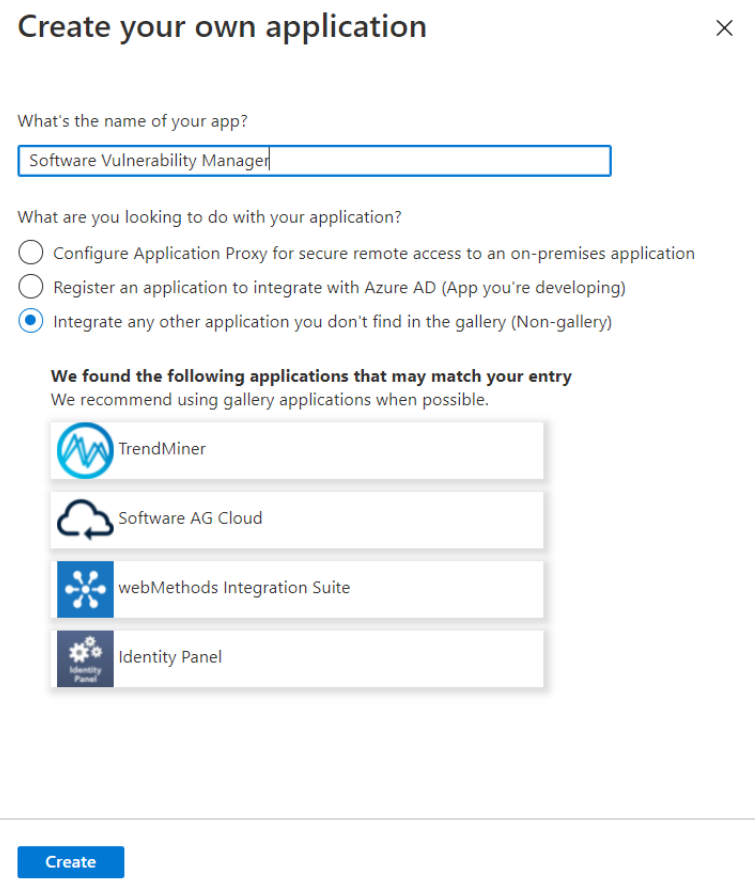
4. Click **+ New application**.



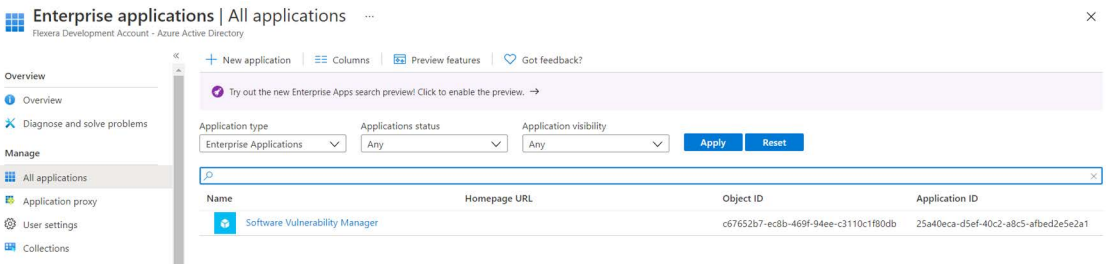
5. Click **+ Create your own application**.



6. Enter a name for the application.



7. Click **Create**. The new enterprise application will be created.

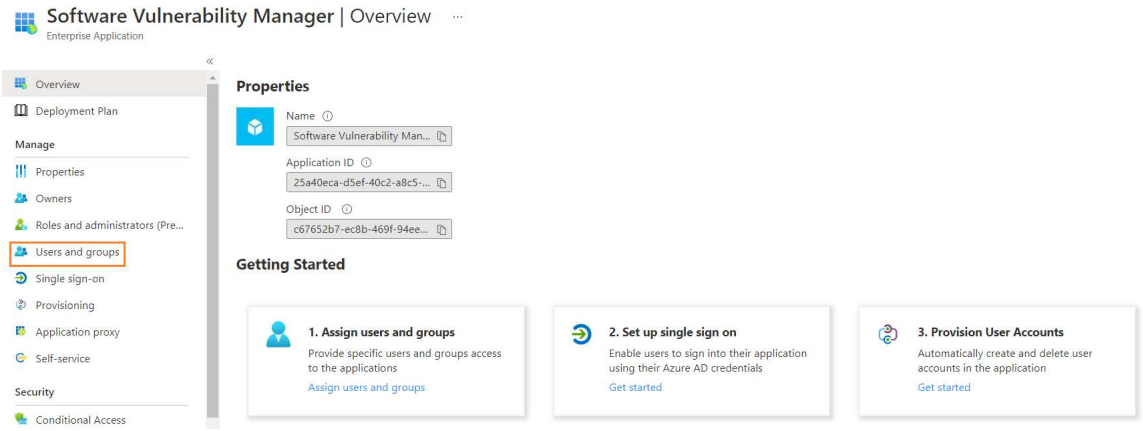


Assign Users to the Enterprise Application

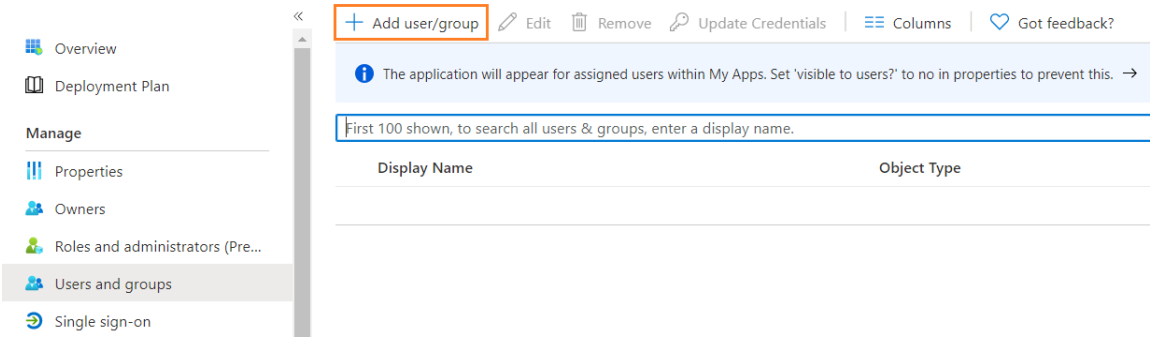
To assign users or groups to the enterprise application, perform the following steps.

Task ***To assign User:***

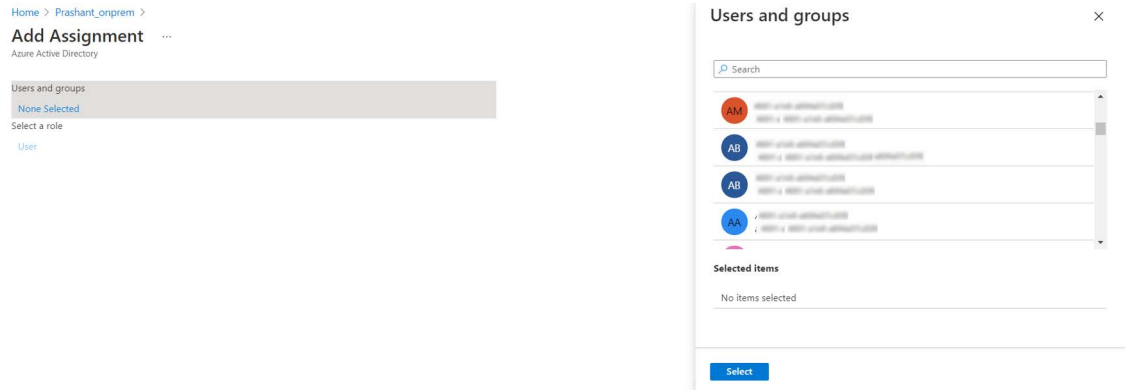
1. On the application account details page, select **Users and groups** from the left panel.



2. Click **+ Add user/group**.



3. Under **Add Assignment > Users and groups** click **None Selected** link. Search and select desired users and groups, and then click **Select**.



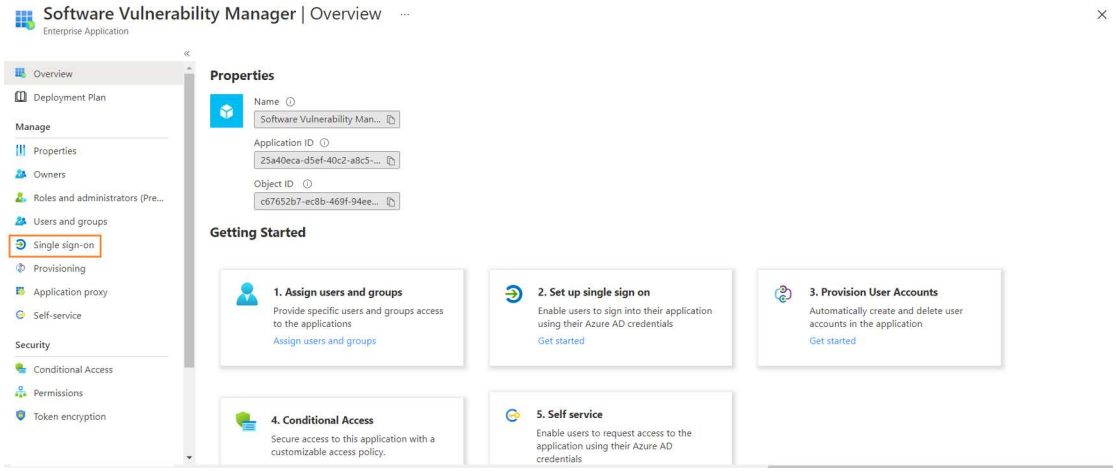
4. After selecting, click **Assign**. The Users and groups then assigned to the Enterprise Application.

Set up Single Sign-On (SSO) in Azure

For setting up single sign-on in Azure, perform the following steps.

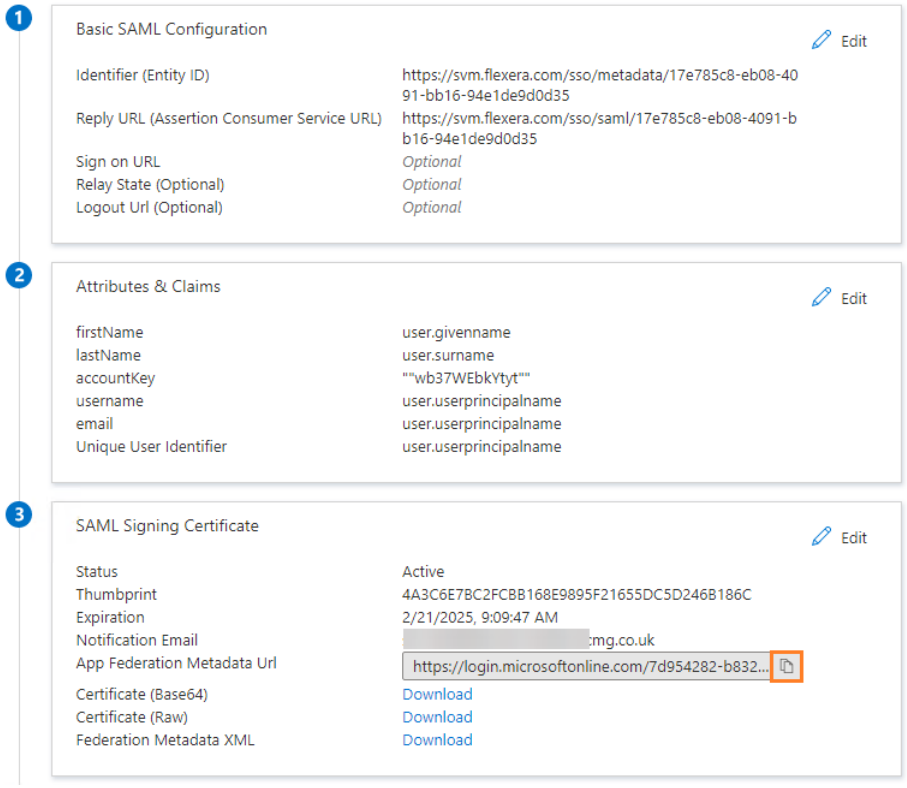
Task ***To set up single sign-on:***

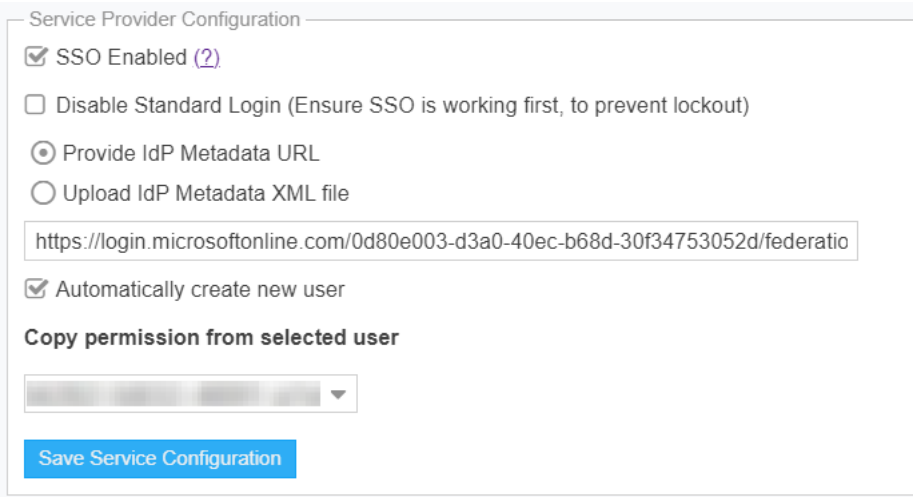
1. On the application account details page, select **Single sign-on** from the left panel. You can also select from the Overview page by clicking Get started link.



2. Click SAML.

3. The **Set up Single Sign-On with SAML** page appears. Under **SAML Signing Certificate** field copy Metadata URL, login to Software Vulnerability Manager, browse **Configuration >Settings > Service Provider Configuration**, and then check **SSO Enabled**. Select **Provide IdP Metadata URL** and paste the copied URL into the text box.





To create an auto user - select the **Automatically create new user** check box and then select the template user from the drop-down.

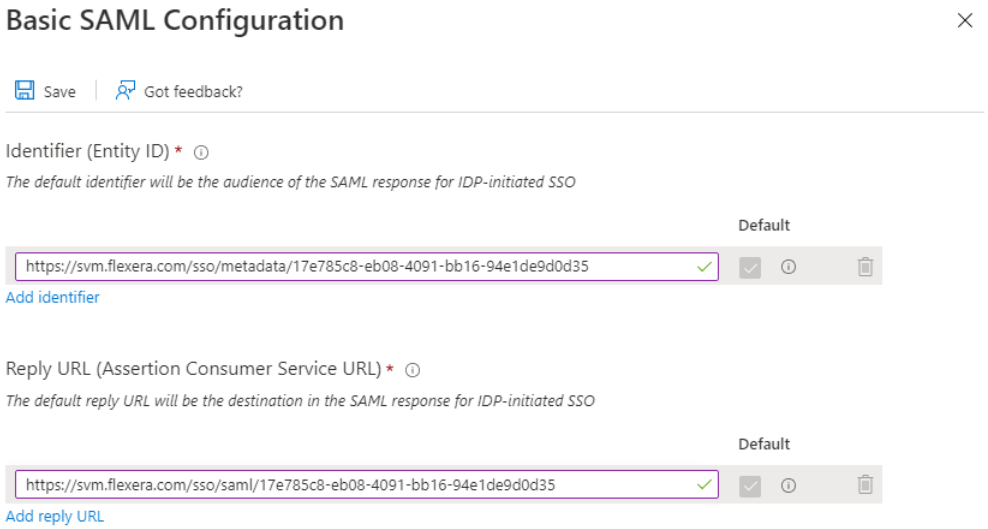
4. Generate an account key from the Software Vulnerability Manager **Configuration > Settings > IdP Configuration Instructions** and then click **Save Service Configuration** button. Click **Ok** and agree the confirmation dialog which appears.

5. Copy the following from the Software Vulnerability Manager **Configuration > Settings** fields and paste in the Azure **Single sign on > Set up Single Sign-On with SAML > Basic SAML Configuration**:

   - Single Sign On URL (Same with Recipient URL and Destination URL) to Reply URL (Assertion Consumer Service URL).

- Single sign on URL and Audience URL (SP Entity ID) to Identifier (Entity ID).

After selecting the details click Save.

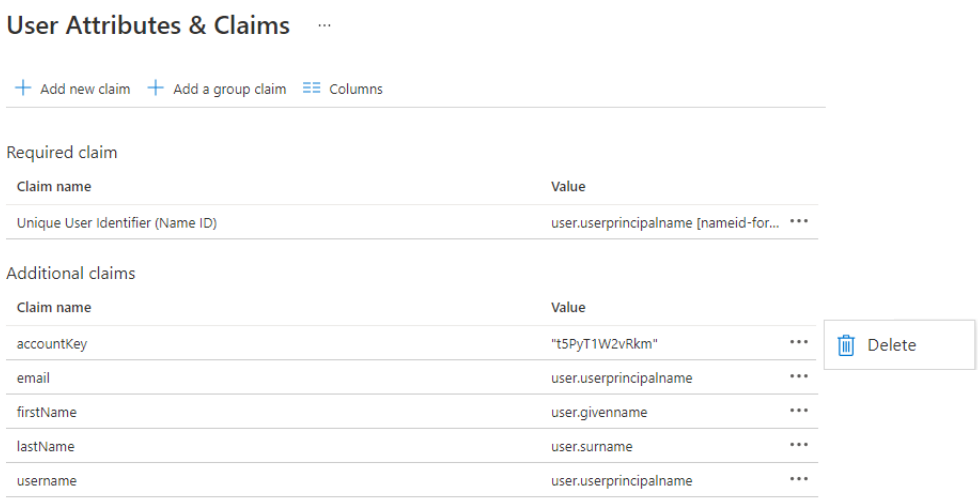


Note • *Metadata URL cannot be used for the multiple applications.*

6. Edit the User Attributes & Claims

- Click **Edit**.

- The User Attributes & Claims page appears.
- Delete all old attributes and claims by clicking the context menu icon.



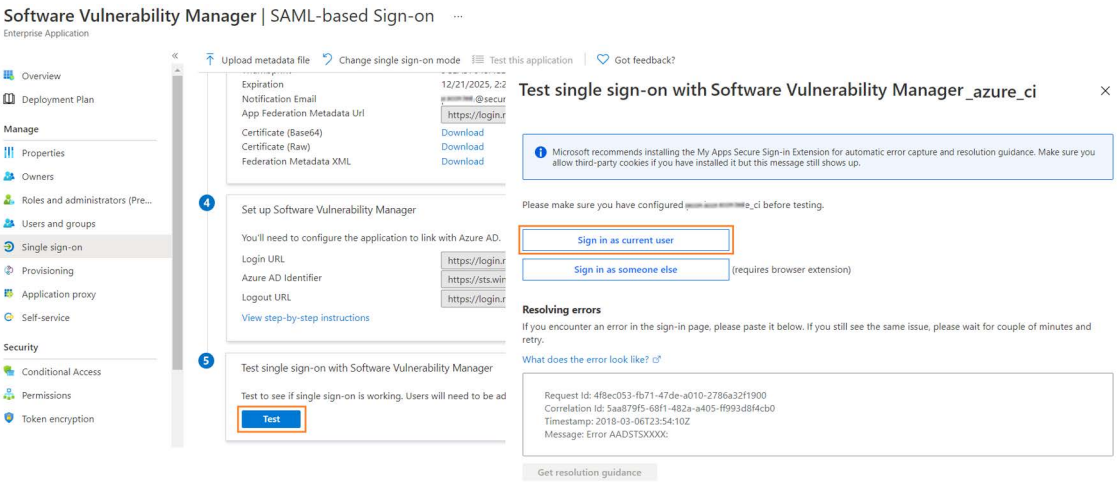
- Click + Add New claim to add new attributes and claims.
- The Manage claim page appears.
- Enter name in the text field.
- Select the source attributes from the drop down list.
- After selecting, click **Save**.

Follow the above steps and add attributes and claims for the following:

- firstName
- lastName
- email
- username
- accountKey

Note • *While selecting accountKey attributes paste the generated Account key which is copied from the Software Vulnerability Manager Configuration > Settings > IdP Configuration Instructions.*

7. After configuring, click **Test**, and then click **Sign in as current user** link.



8. After successful action it navigates to the Software Vulnerability Manager application.

Note • *You can also access through the Service Provider (SP) login for the created application by using the assigned user.*

Create Auto User in Azure

This section helps to create an auto user in Azure Active Directory.

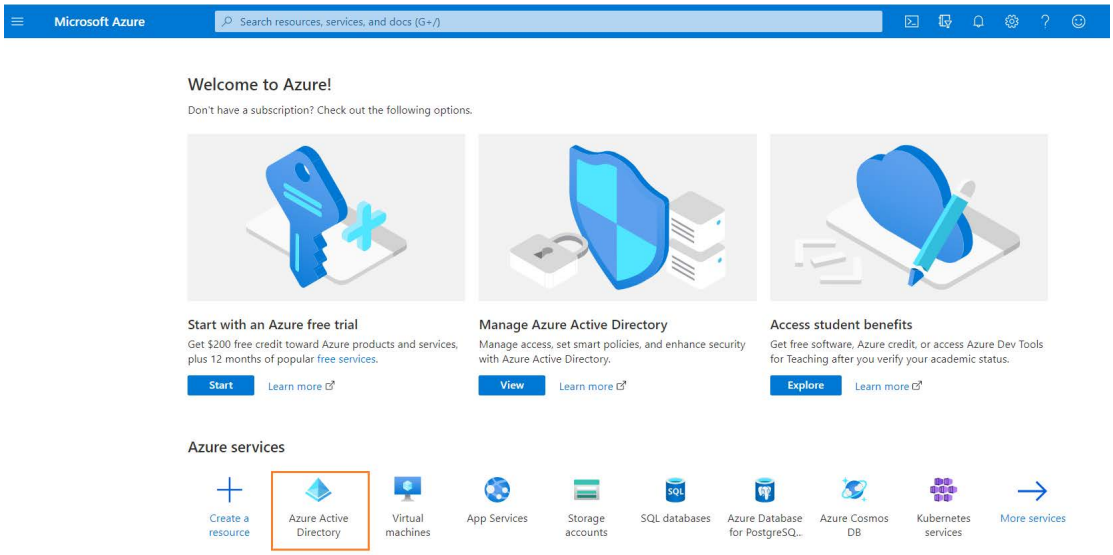
Perform the following steps to create an auto user in Azure Active Directory.

Task ***To create an auto user in Azure Active Directory:***

1. Log in to Microsoft Azure using the obtained credentials.

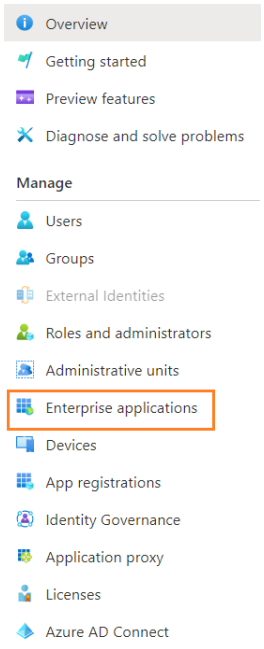
   https://azure.microsoft.com/en-in/account/

2. From the list of available Azure services, choose **Azure Active Directory**.

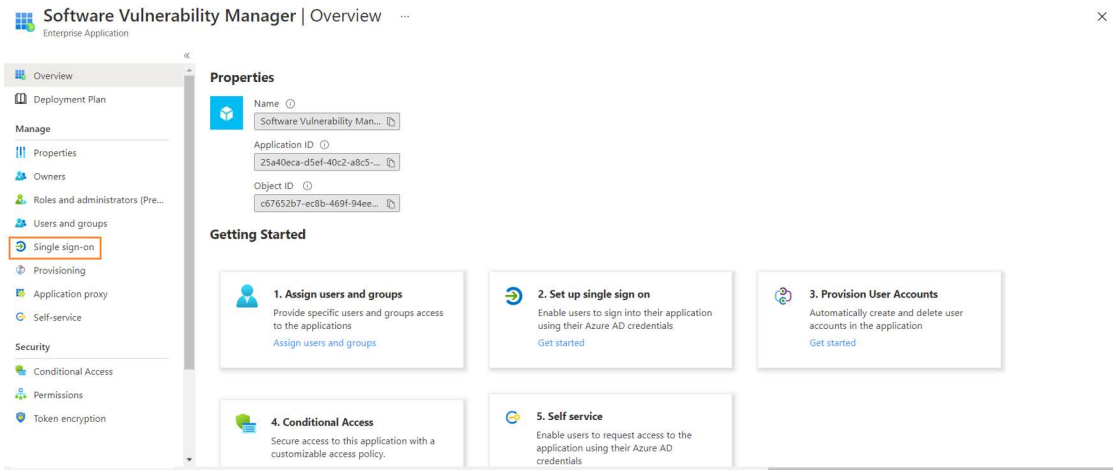


The Overview page appears on the screen.

3. Click on **Enterprise applications** in the left pane.



4. Select desired enterprise application from the list. The overview of the selected application appears.
5. Select **Single sign-on** from the left pane. You can also select from the Overview page by clicking **Set up single sign on** under **Getting started**.

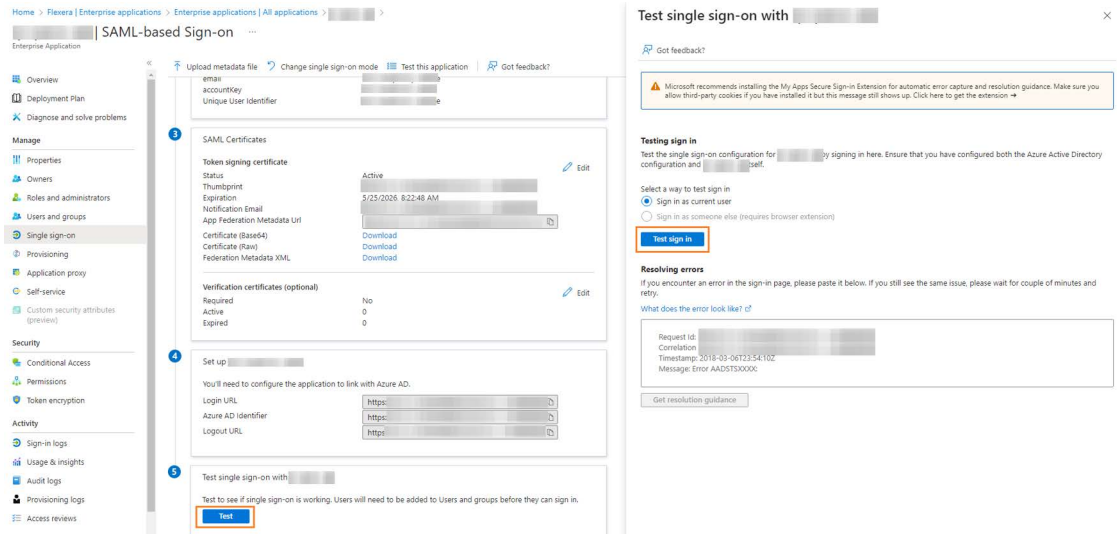


The **Set up Single Sign-On** page appears.

Note • *Make sure that assigned users or groups to the enterprise application. For more information, see Assign Users to the Enterprise Application.*

Note • *Make sure that the **Automatically create new user** option has been checked while configuring SSO. For more information, see Set up Single Sign-On (SSO) in Azure.*

6. Click **Test**. The **Test single sign-on** appears on the right side. Click the **Test Sign in** button.



7. Upon successful action, auto user will be created and navigates to the Software Vulnerability Manager application.

Log Messages

Use this page to view sequential data regarding the actions being performed by Software Vulnerability Manager. It can also be used to detect and fix any issues that you might experience with the Software Vulnerability Manager console. The Log Details page becomes populated when you select the Configuration > Settings > Debug Logging > Enable Logging check box.

Right-click on a message to copy the row data to the clipboard. Click Clear to remove all log entries. In the event of a support request you may be requested to provide relevant information from this page.

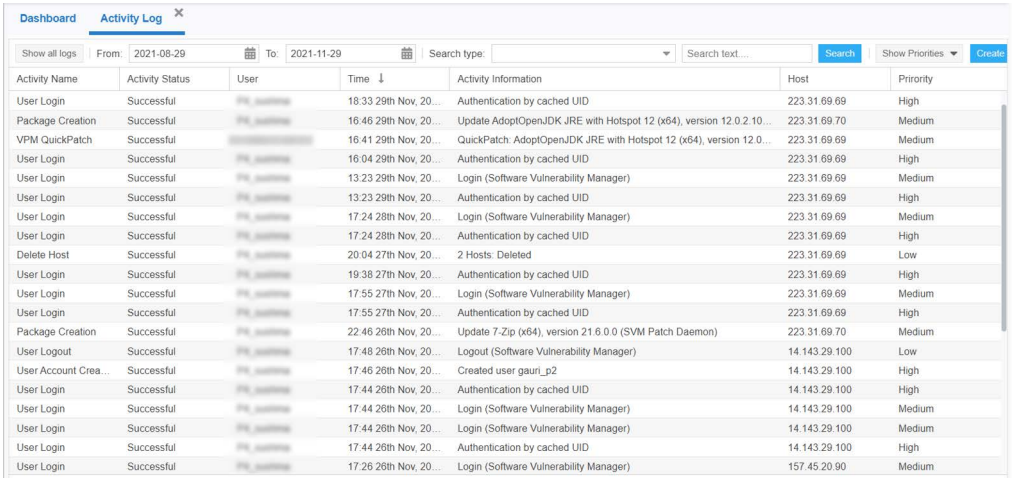
Activity Log

Use this page to view information about user activity within Software Vulnerability Manager, for example "write" actions, logins, and so on, with the exception of scans (due to the volume of data generated). You can access a full activity and login log for compliance monitoring and auditing purposes.

Click the calendar icon next to the From and To fields to set a specific Activity Log date range to view. You can also use the Search field to filter the Activity Log results to specific actions, for example changes to IP access rules.

The excluded paths can be viewed by selecting Search type as **Exclusion Path List**.

Select Show Priorities to filter the results by High, Medium or Low Priority.



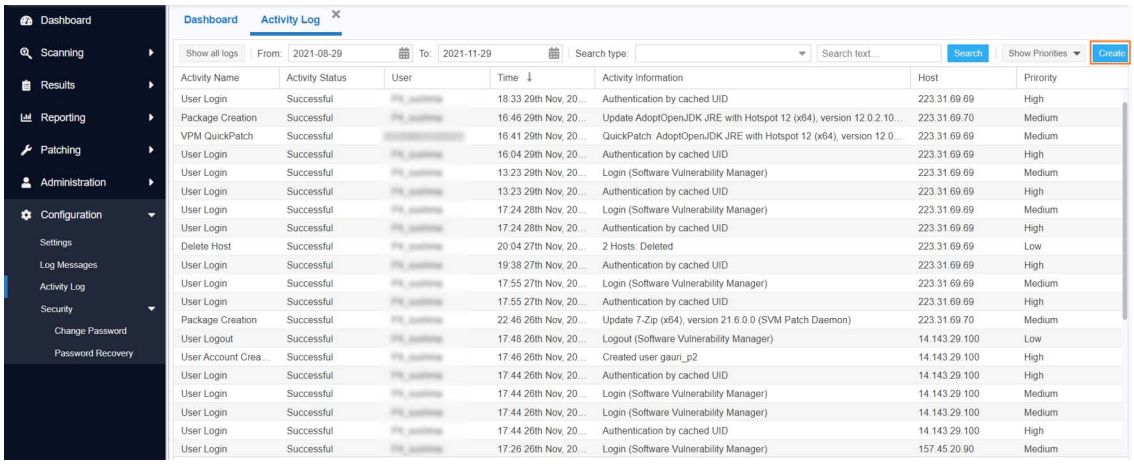
Activity Name	Activity Status	User	Time	Activity Information	Host	Prirority
User Login	Successful	[redacted]	18:33 29th Nov, 20...	Authentication by cached UID	223.31.69.69	High
Package Creation	Successful	[redacted]	16:46 29th Nov, 20...	Update AdoptOpenJDK JRE with Hotspot 12 (x64), version 12.0.2.10...	223.31.69.70	Medium
VPM QuickPatch	Successful	[redacted]	16:41 29th Nov, 20...	QuickPatch: AdoptOpenJDK JRE with Hotspot 12 (x64), version 12.0...	223.31.69.69	Medium
User Login	Successful	[redacted]	16:04 29th Nov, 20...	Authentication by cached UID	223.31.69.69	High
User Login	Successful	[redacted]	13:23 29th Nov, 20...	Login (Software Vulnerability Manager)	223.31.69.69	Medium
User Login	Successful	[redacted]	13:23 29th Nov, 20...	Authentication by cached UID	223.31.69.69	High
User Login	Successful	[redacted]	17:24 28th Nov, 20...	Login (Software Vulnerability Manager)	223.31.69.69	Medium
User Login	Successful	[redacted]	17:24 28th Nov, 20...	Authentication by cached UID	223.31.69.69	High
Delete Host	Successful	[redacted]	20:04 27th Nov, 20...	2 Hosts: Deleted	223.31.69.69	Low
User Login	Successful	[redacted]	19:38 27th Nov, 20...	Authentication by cached UID	223.31.69.69	High
User Login	Successful	[redacted]	17:55 27th Nov, 20...	Login (Software Vulnerability Manager)	223.31.69.69	Medium
User Login	Successful	[redacted]	17:55 27th Nov, 20...	Authentication by cached UID	223.31.69.69	High
Package Creation	Successful	[redacted]	22:46 26th Nov, 20...	Update 7-Zip (x64), version 21.6.0.0 (SVM Patch Daemon)	223.31.69.70	Medium
User Logout	Successful	[redacted]	17:48 26th Nov, 20...	Logout (Software Vulnerability Manager)	14.143.29.100	Low
User Account Crea...	Successful	[redacted]	17:46 26th Nov, 20...	Created user gauri_p2	14.143.29.100	High
User Login	Successful	[redacted]	17:44 26th Nov, 20...	Authentication by cached UID	14.143.29.100	High
User Login	Successful	[redacted]	17:44 26th Nov, 20...	Login (Software Vulnerability Manager)	14.143.29.100	Medium
User Login	Successful	[redacted]	17:44 26th Nov, 20...	Login (Software Vulnerability Manager)	14.143.29.100	Medium
User Login	Successful	[redacted]	17:44 26th Nov, 20...	Authentication by cached UID	14.143.29.100	High
User Login	Successful	[redacted]	17:26 26th Nov, 20...	Login (Software Vulnerability Manager)	157.45.20.90	Medium

Create Notifications for the Activity Log

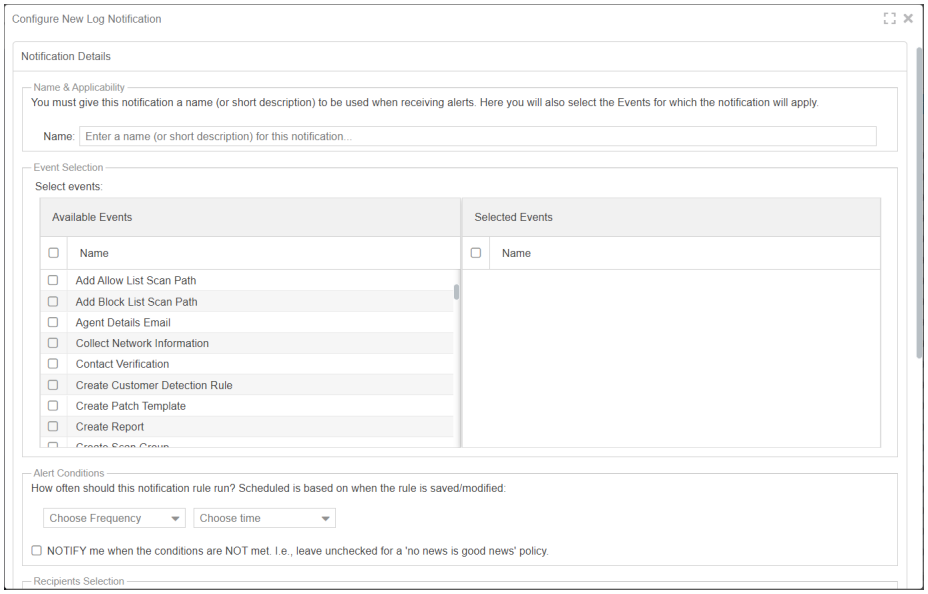
With this configuration, you can schedule multiple notification digest for the respective events through emails.

Task ***To create Notifications:***

1. Click **Create**.



2. The **Configure New Log Notifications** dialog box opens.

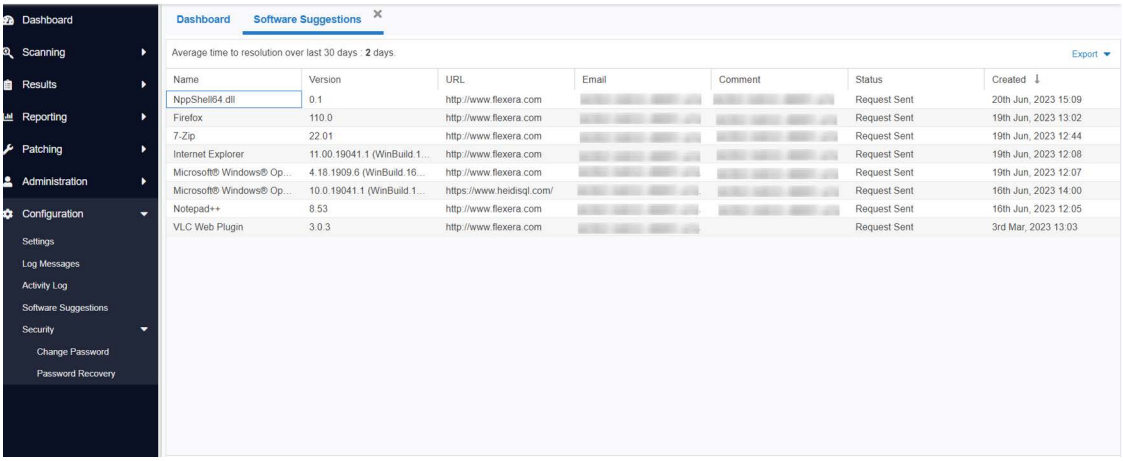


3. Describe notification name, select the required events, and then select notification schedules.
4. These email notifications can be scheduled on an **Hourly**, **Daily**, **Weekly**, or **Monthly** basis. If you select **Daily**, or **Weekly**, or **Monthly** option, then you choose the time duration for the selected day.
5. Choose the recipients and then click **Save**.

Software Suggestions

Use this page to view details of the suggested software.

You can see the average time to resolution in days.



Under Status column you can view the status as given below:

Table 12-3 • Suggest Software Status Column Details

Status	Description
Request Sent	Indicates the suggested software request has been sent to SVM.
Needs Clarification	Indicates that the suggested software request needs clarification.
In Progress	Indicates the suggested software request is In progress.
Not Applicable	Indicates the suggested software request is not applicable.
Pending Review	Indicates that the suggested software review in pending.
Completed	Indicates that the suggested software is added to SVM.
Rejected	Indicates that the suggested software request is rejected.

Note • *You can delete only your Software Suggestion records.*

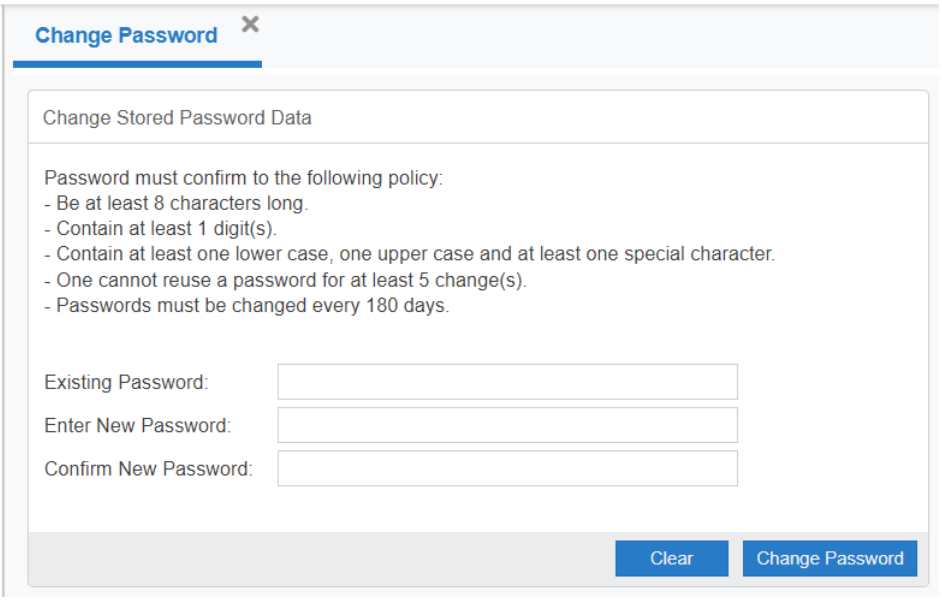
Security

Software Vulnerability Manager provides the following security features for user passwords:

- Change Password
- Password Recovery Settings

Change Password

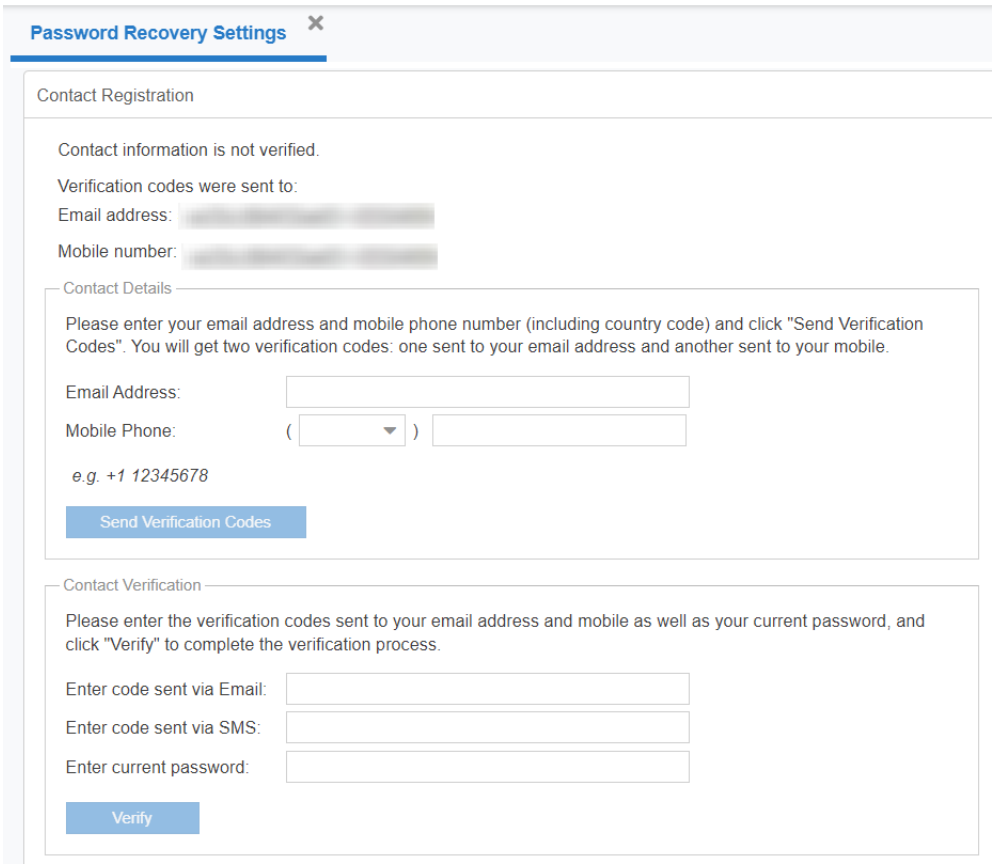
Use this page to change the Software Vulnerability Manager account password for the user that is currently logged in. The new password must contain a minimum of eight characters, or comply with the criteria defined in the Password Policy Configuration rules.



Password Recovery Settings

Use this page to verify your email address and mobile number that will be used for password recovery. If your password is lost, you can reset it at login by clicking **Forgot your password?** You will then be prompted to change your password using your verified email address and mobile number.

In the Contact Details fields, you must provide your email address and a mobile phone number and click Send Verification Codes. The verification code will be received in two separate messages – one SMS on your mobile phone and the second via an email message. When entering your mobile phone number, you should select your country code from the drop-down list.



Note • *If you have not configured your password recovery settings and you need to reset your password at login, you can restore access to your user account. After clicking* ***Forgot your password?*** *Flexera will send an email to the email address used at the time of your account creation. The email subject line will state: "Flexera Software Vulnerability Manager Password Recovery Failed". The email will state: "Dear customer, you have not configured the password recovery settings. Please contact your admin/Support."*

Appendix A - Partition Management

This appendix explains how to create and administer your Software Vulnerability Manager Partitions:

- Introduction
- Partition Management

Introduction

Use Administration > Partition Management to create and administer:

- Additional Software Vulnerability Manager Partitions by assigning a specific number of host and user licenses
- User roles with specific modules and read/write permissions with host licenses

Your overall corporate group of machines is your network. Software Vulnerability Manager gives you the ability to logically partition your network. If you only use one network partition then your network and your network partition are the same thing. If your company is divided across logical and physical partitions, you can mimic that in Software Vulnerability Manager by creating multiple network partitions.

Refer to Administration for more information regarding User Management.

Note • *Using a single WSUS server with multiple partitions is not supported.*

Partition Management

Use this page to create and administer your Software Vulnerability Manager Partitions.

- Overview
- Permissions
- Host and User Licenses

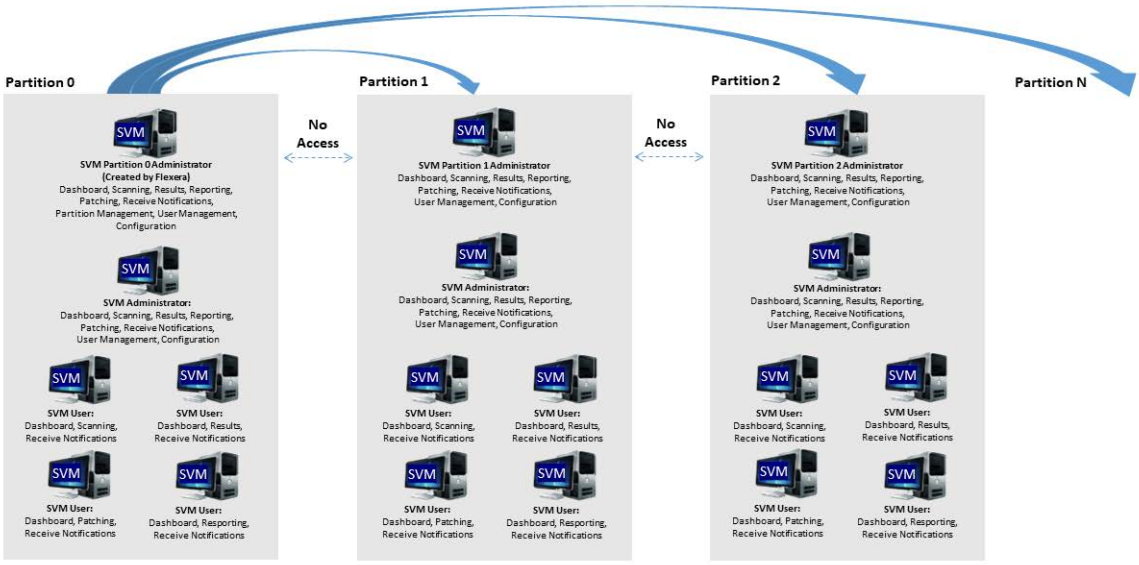
- Create a New Partition Administrator
- Grant User Access to all Completed Scans and Single Host Agent Entries

Overview

When Flexera creates the Software Vulnerability Manager base user, this user is the Partition Administrator of “Partition 0”. The Partition 0 Administrator is the unique global administrator for the company, irrespective of how many partitions are created.

The Partition 0 Administrator can create further network partitions by creating new Partition Administrators. Only the Partition 0 Administrator can create new partitions.

Every partition has identical functionality – the only difference is that an entire partition (N>0) can be deleted by the Partition 0 Administrator.



Note • *Just as creating a partition is done by creating a new Partition Administrator, deleting an entire partition is done by deleting the Partition Administrator.*

Within a partition, there is only one Partition Administrator. All additional accounts are regular users, however, these users all have specific roles. One of the roles a user can have an Administrator.

The main difference between users who have the Administrator role and those who don’t is that Administrators can create and delete other users within their partition. They can delete any non-administration users, but not other Administrator users.

The Partition 0 Administrator can access the Partition Management and User Management menus.

All other Partition Administrators can only access the User Management menu.

Permissions

The MySQL user that is being used to connect to the database requires full privileges on the MySQL server (including the grant option) as in the following SQL statement:

```
GRANT ALL PRIVILEGES ON *.* TO ‘secunia_user’@'localhost' WITH GRANT OPTION;
```

The WITH GRANT OPTION is only required when creating Partitions. If you don’t want to permanently give the GRANT privilege to Software Inspector’s MySQL user, you can give the permission temporarily when creating Partitions and then revoke the permission afterwards.

Host and User Licenses

The Partition 0 Administrator is assigned user licenses from Flexera. When the Administrator creates a new partition, licenses are allocated to the Partition Administrator of that partition. Those licenses are effectively no longer relevant to Partition 0 – and no one in Partition 0 can use them. The Partition 0 Administrator can reclaim unused licenses from another Partition by right-clicking an existing account and editing it.

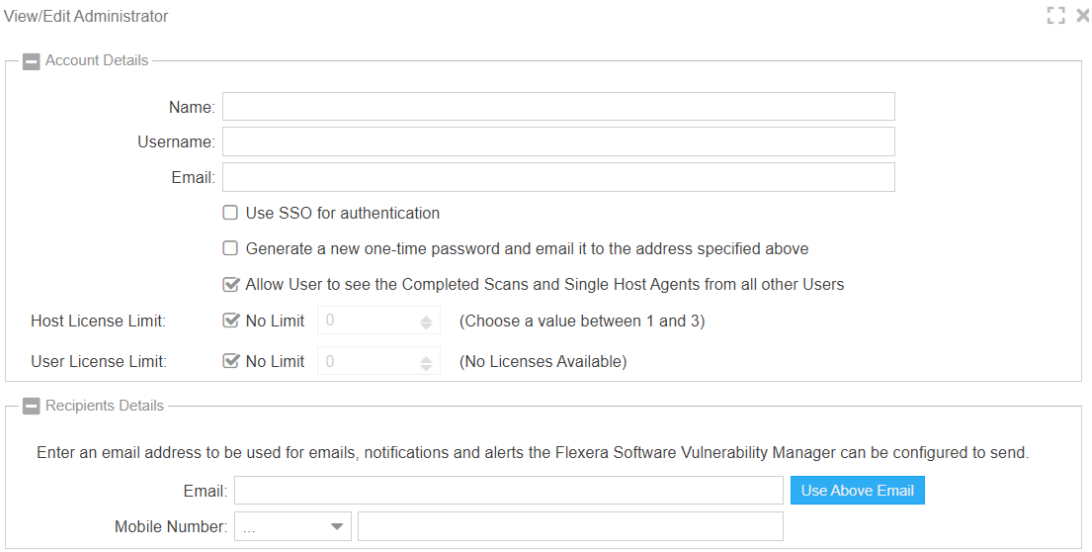
The Host and User licenses in a given partition belong to a shared pool. Any user who scans hosts will use host licenses from this pool. When a user is created, an Administrator can limit how many active licenses they can claim – note, this is only an upper bound of the licenses they can use, and should not be confused with them being “assigned” licenses.

User licenses are used per account. For example, when the Partition 0 Administrator is assigned 100 licenses from Flexera, they use one for their account, so there are 99 left in the pool. The Partition 0 Administrator only assigns them when creating a new Partition. For example, the Partition 0 Administrator creates a user for Partition 1 (that takes 1 license), and gives the Partition 1 Administrator 50 user licenses. The Partition 0 Administrator now has 48 left, and the Partition 1 Administrator has 50, meaning, at most 50 additional users could be created in Partition 1.

When an Administrator in a given partition creates a user, they use 1 user license from the pool in that partition. When that user is deleted, their user license is re-added to the pool.

Create a New Partition Administrator

Click Create New Partition Administrator and fill in the form, providing all the necessary details about the Partition Administrator and include the number of host and user licenses to assign.



An email will be sent to the User containing a welcome message and the Software Vulnerability Manager login credentials.

Right-click an existing account to view, edit or delete the partition.

Partition Administrators can choose Smart Groups to copy to another account using the Create/Edit User form.

Note • *Sub-Accounts are not allowed to modify their copy of a Smart Group.*

The Partition Administrator can also unshare a copy of a Smart Group.

If the Sub-Account already has a Smart Group of the same name and type, the Partition Administrator cannot share their copy with them.

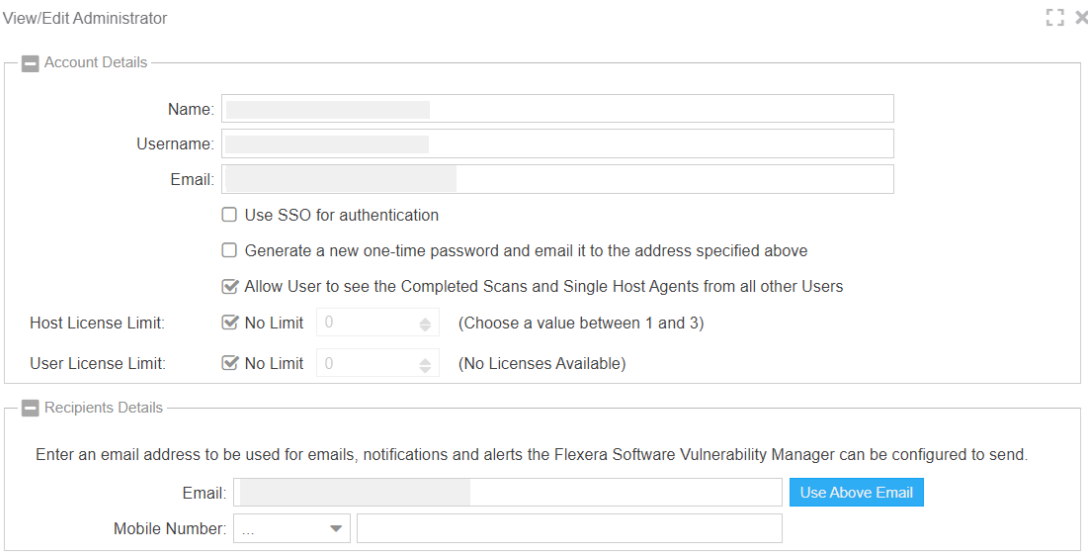
If the Partition Administrator modifies the Smart Group, all shared copies are also modified.

If the Partition Administrator deletes the Smart Group, all shared copies are also deleted.

Grant User Access to all Completed Scans and Single Host Agent Entries

Partition Administrators can permit a user or administrator to view all Completed Scans and Single Host Agents by selecting a check box in the User Account Details form.

When enabled, the user will be able to see the Completed Scans and Single Host Agents from all other users in their partition.



Note • *This functionality is not available when editing a Partition Administrator or when creating a new user or administrator, only when editing an existing one.*

B

Appendix B - About Secunia Advisories

This section includes the following articles:

- CVSS (Common Vulnerability Scoring System)
- CVE References
- Where (Attack Vector)
- Criticality (Severity Rating)
- Impact (Consequence)

CVSS (Common Vulnerability Scoring System)

The Common Vulnerability Scoring System (CVSS) provides an open framework for communicating the characteristics and impacts of IT vulnerabilities.

CVSS enables IT managers, vulnerability bulletin providers, security vendors, application vendors, and researchers to all benefit by adopting this common language of scoring IT vulnerabilities.

CVSS consists of three groups: Base, Temporal, and Environmental. Each group produces a numeric score ranging from 0 to 10, and a Vector; a compressed textual representation that reflects the values used to derive the score.

- **The Base group** represents the intrinsic qualities of a vulnerability.
- **The Temporal group** reflects the characteristics of a vulnerability that changes over time.
- **The Environmental group** represents the characteristics of a vulnerability that are unique to any user's environment.

For details on interpreting a CVSS vector, refer to https://www.first.org/cvss/specification-document.

Secunia Advisories include a Secunia derived CVSS score and vector, as well as a link to an implementation of the NIST CVSS calculator so that a user can adjust temporal and environmental metrics for advisories that match your Watch Lists.

The National Vulnerability Database (NVD) CVSS score/vector for each relevant CVE contained in an Advisory is also shown, and is similarly linked to the NIST CVSS calculator.

CVE References

A CVE (Common Vulnerabilities and Exposures) name represents a unique, standardized name and description for a given vulnerability or exposure.

Searching on a CVE reference (for example CVE-2009-3793 or simply 2009-3793) will find all Secunia Advisories in the database that list that particular CVE as a reference.

An Advisory can contain more than one CVE reference, and not every Advisory has an associated CVE reference.

Where (Attack Vector)

The following are Where (Attack Vector) values.

Local System

Local system describes vulnerabilities where the attack vector requires that the attacker is a local user on the system.

Local Network

From local network describes vulnerabilities where the attack vector requires that an attacker is situated on the same network as a vulnerable system (not necessarily a LAN).

This category covers vulnerabilities in certain services (for example, DHCP, RPC, administrative services, and so on), which should not be accessible from the Internet, but only from a local network and optionally a restricted set of external systems.

Remote

From remote describes vulnerabilities where the attack vector does not require access to the system nor a local network.

This category covers services, which are acceptable to expose to the Internet (for example, HTTP, HTTPS, SMTP) as well as client applications used on the Internet and certain vulnerabilities, where it is reasonable to assume that a security conscious user can be tricked into performing certain actions.

Criticality (Severity Rating)

The following are Severity Rating values.

Extremely Critical

This value is typically used for remotely and easily exploitable vulnerabilities that are otherwise designated “highly critical” but also have been exploited in the wild before their publication (zero-day). These vulnerabilities typically exist in services like FTP, HTTP and SMTP or specific client systems such as email programs or browsers. Operating systems can also be prone to them—e.g., when font handling is performed on operating system level.

Highly Critical

- This value is generally used for remotely and easily exploitable vulnerabilities that can lead to system compromise.

- Successful exploitation doesn't usually require any interaction, but there are no known exploits available at the time of disclosure.
- These vulnerabilities typically exist in services like FTP, HTTP and SMTP or specific client systems such as email programs or browsers. Operating systems can also be prone to them—e.g., when font handling is performed on operating system level.

Moderately Critical

This value is usually used for remotely and easily exploitable denial-of-service vulnerabilities against services like FTP, HTTP and SMTP. Additionally, easily exploitable vulnerabilities that could lead to information disclosure or affect the integrity of a product can result in this criticality level.

This rating is also used for vulnerabilities allowing system compromise on LANs in services like SMB, RPC, NFS, LPD and similar services that are not intended for use over the Internet.

Less Critical

This value is typically used for cross-site scripting and local privilege escalation vulnerabilities.

This rating is also used for vulnerabilities allowing exposure of sensitive data to local users.

Not Critical

This value is typically used for very limited privilege escalation vulnerabilities and locally exploitable Denial of Service vulnerabilities.

This rating is also used for non-sensitive system information disclosure vulnerabilities (for example, remote disclosure of installation path of applications).

Impact (Consequence)

The following are Consequence values.

Brute Force

Used in cases where an application or an algorithm allows an attacker to guess passwords in an easy manner.

Cross-Site Scripting

Cross-Site Scripting vulnerabilities allow a third party to manipulate the content or behavior of a web application in a user's browser, without compromising the underlying system.

Different Cross-Site Scripting related vulnerabilities are also classified under this category, including "script insertion" and "cross-site request forgery".

Cross-Site Scripting vulnerabilities are often used against specific users of a website to steal their credentials or to conduct spoofing attacks.

DoS (Denial of Service)

This includes vulnerabilities ranging from excessive resource consumption (for example, causing a system to use a lot of memory) to crashing an application or an entire system.

Exposure of Sensitive Information

Vulnerabilities where documents or credentials are leaked or can be revealed either locally or remotely.

Exposure of System Information

Vulnerabilities where excessive information about the system (for example. version numbers, running services, installation paths, and similar) are exposed and can be revealed from remote and, in some cases, locally.

Hijacking

Covers vulnerabilities where a user session or a communication channel can be taken over by other users or remote attackers.

Manipulation of Data

This includes vulnerabilities where a user or a remote attacker can manipulate local data on a system, but not necessarily be able to gain escalated privileges or system access.

The most frequent type of vulnerabilities with this impact are SQL-injection vulnerabilities, where a malicious user or person can manipulate SQL queries.

Privilege Escalation

Covers vulnerabilities where a user is able to conduct certain tasks with the privileges of other users or administrative users.

This typically includes cases where a local user on a client or server system can gain access to the administrator or root account, thus taking full control of the system.

Security Bypass

Covers vulnerabilities or security issues where malicious users or people can bypass certain security mechanisms of the application. The actual impact varies significantly depending on the design and purpose of the affected application.

Spoofing

Covers various vulnerabilities where it is possible for malicious users or people to impersonate other users or systems.

System Access

Covers vulnerabilities where malicious people are able to gain system access and execute arbitrary code with the privileges of a local user.

Unknown

Covers various weaknesses, security issues, and vulnerabilities not covered by the other impact types, or where the impact is not known due to insufficient information from vendors and researchers.

Appendix C - CSV Export File Cross-References

When you export data from the Software Vulnerability Manager user interface to a CSV file, some values may differ. Each data set in this appendix includes a cross-reference table to explain the different values between the user interface and CSV file.

Note • *Dates and times in the Software Vulnerability Manager database are created using the Coordinated Universal Time (UTC). In the UI, dates and times in UTC are converted to reflect your local time zone. This UTC date and time conversion is not possible for CSV reports, resulting in a date and time mismatch between the UI and CSV report.*

Note • *When you set the agent to scan "As soon as possible", the date and time in the UI will be listed "As soon as possible" with a date in the past as the next scan date. In the CSV report, the scan date is the actual date from the Software Vulnerability Manager database without transformation.*

This section provides a cross-reference for the following CSV file values:

- Host Smart Group
- Advisory Smart Group
- Product Smart Group
- Scan Result
- Completed Scan
- Scheduled Exports
- Single Host Agent
- Smart Group Notifications
- User Management

Host Smart Group

For further information regarding the Business Impact terminology, see Criticality (Severity Rating).

Advisory Smart Group

Table C-1 • Advisory Smart Group Values from the User Interface Versus the Exported CSV File

Advisory Smart Group Value	Software Vulnerability Manager User Interface	Exported CSV File
Criticality - Extremely Critical	5 bars (red)	1
Criticality - Highly Critical	4 bars (orange)	2
Criticality - Moderately Critical	3 bars (yellow)	3
Criticality - Less Critical	2 bars (light green)	4
Criticality - Not Critical	1 bar (green)	5
Zero Day	No	0
Zero Day	Yes	1
Solution Status	Unpatched	1
Solution Status	Vendor Patched	2
Solution Status	Vendor Workaround	3
Solution Status	Partial Fix	4
Attack Vector	From remote	1
Attack Vector	From local network	2
Attack Vector	Local system	3
Impact	System Access	1
Impact	Denial of Service	2
Impact	Privilege Escalation	3
Impact	Exposure of Sensitive Information	4
Impact	Exposure of System Information	5

Table C-1 • Advisory Smart Group Values from the User Interface Versus the Exported CSV File (cont.)

Advisory Smart Group Value	Software Vulnerability Manager User Interface	Exported CSV File
Impact	Brute Force	6
Impact	Manipulation of Data	7
Impact	Spoofing	8
Impact	Cross Site Mapping	9

See Appendix B - About Secunia Advisories for further information regarding the following terminology:

- Where (Attack Vector)
- Criticality (Severity Rating)
- Impact (Consequence)

Product Smart Group

For further information regarding the Criticality terminology, see Criticality (Severity Rating).

Scan Result

Table C-2 • Scan Result Values from the User Interface Versus the Exported CSV File

Scan Result Value	Software Vulnerability Manager User Interface	Exported CSV File
Criticality - Extremely Critical	5 bars (red)	1
Criticality - Highly Critical	4 bars (orange)	2
Criticality - Moderately Critical	3 bars (yellow)	3
Criticality - Less Critical	2 bars (light green)	4
Criticality - Not Critical	1 bar (green)	5
Issued	Number of days ago	Month, Day, Year
Soft Type - OS	1	1
Soft Type - Program	2	2

For further information regarding the Criticality terminology, see Criticality (Severity Rating).

Completed Scan

Table C-3 • Completed Scan Values from the User Interface Versus the Exported CSV File

Completed Scan Values	Software Vulnerability Manager User Interface	Exported CSV File
Time	Date, Month, Year, Time (24-hour clock)	Month, Day, Year, Time (12-hour clock)
Results Exist	Yes	1
Results Exist	No	0
Zombie Files	included	(Blank)
Zombie Files	not included	0

Scheduled Exports

Table C-4 • Scheduled Exports Values from the User Interface Versus the Exported CSV File

Scheduled Exports Values	Software Vulnerability Manager User Interface	Exported CSV File
Frequency	One-Time Export	0
Frequency	Hourly	1
Frequency	Daily	2
Frequency	Weekly	3
Frequency	Monthly	4
Last Execution Status	Failed	0
Last Execution Status	Success	(Blank)

Single Host Agent

Table C-5 • Single Host Agent Values from the User Interface Versus the Exported CSV File

Single Host Agent Values	Software Vulnerability Manager User Interface	Exported CSV File
Platform	Mac OS X	11
Platform	Windows	21 or 31
Platform	Red Hat Linux	41

Smart Group Notifications

Table C-6 • Smart Group Notifications Values from the User Interface Versus the Exported CSV File

Smart Group Notifications Values	Software Vulnerability Manager User Interface	Exported CSV File
Smart Group Type	Host	1
Smart Group Type	Product	2
Smart Group Type	Advisory	3
Always Notify	No	0
Always Notify	Yes	1
Frequency	One-Time Export	0
Frequency	Hourly	1
Frequency	Daily	2
Frequency	Weekly	3
Frequency	Monthly	4

User Management

Table C-7 • User Management Values from the User Interface Versus the Exported CSV File

User Management Values	Software Vulnerability Manager User Interface	Exported CSV File
Host License Limit	No Limit	-1
User Type	User	0
User Type	Root Admin or Admin	1

D

Appendix D - Threat Intelligence

Software Vulnerability Manager Threat Intelligence helps you prioritize the patching efforts.

In a world where there are more than 40,000 new vulnerabilities every year, being smart about prioritizing remediation efforts is essential. Leveraging our optional Threat Intelligence Module, another valuable layer of insight is provided to help you understand which of the vulnerabilities affecting your environment are actually being exploited in the wild.

Industry reports, including Gartner shows that between 6%-10% of the vulnerabilities disclosed each year actually are exploited in the wild. Turns out that most of these have medium CVSS scores, which are typically overlooked by organizations. With the insights provided by threat intelligence, it is possible better optimize the time spent remediating software vulnerabilities. Avoid spending time and resources in patching vulnerabilities that do not have evidence of exploitation, and favor those that do. Prioritization is crucial for effective risk mitigation and resource utilization.

Leveraging machine learning, artificial intelligence, and human curation from thousands of sources in the open, deep and dark web, our Threat Intelligence Module augments Software Vulnerability Manager's vulnerability intelligence with a Threat Score that provides the ultimate prioritization tool for your busy desktop operations teams.

This appendix explains how the Software Vulnerability Manager Threat Intelligence module helps the enterprises to manage their resources and Patching Vulnerabilities more effectively, the following topics are discussed in this section:

- Evidence of Exploitation
- Criteria for the Threat Score Calculation
- Threat Score Calculation - Examples
- Threat Intelligence Data for Operations and Security
- Threat Score Locations

Note • *Please note the following:*

- *Secunia Advisory Threat Scores and Vulnerability (CVE) Threat Scores are each calculated as described in the Criteria for the Threat Score Calculation section (an Advisory score is not determined by simply adding related CVE Threat Scores).*
- *For pricing and availability, please contact your sales representative or contact us online at: https://www.flexera.com/about-us/contact-us.html*

- *For more details about the SVM or SVR Threat Intel Modules, please see our datasheet: https://www.flexera.com/media/pdfs/datasheet-svm-threat-intelligence-module.pdf*

Evidence of Exploitation

There are 10 primary rules that can impact the assigned Threat score and they are:

- It has been linked to remote access Trojan
- It has been linked to ransomware
- It has been linked to penetration testing tools
- It has been linked to malware
- It has been linked to an exploit kit
- It has been linked to a cyber exploit
- It has been linked to an exploit wild
- It has been linked to POC verified
- It has been linked to vulnerability developed tools
- It has been linked to verified intelligence

In Software Vulnerability Manager we provide the resulting score for any given Secunia Advisory to add value to the prioritization process. In Software Vulnerability Research, where a security persona requires more insight, we provide these Threat Scores for the Secunia Advisory, and for each vulnerability in the advisory. Further, we will show which of the rules above were triggered to arrive at the threat score presented.

Criteria for the Threat Score Calculation

Triggered rules increase the score by the values identified in the chart below based on the highest severity level triggered.

Table D-1 • Rules, Severity and Value

Rule	Severity	Value
Recently Linked to Remote Access Trojan	Medium	+2
Historically Linked to Remote Access Trojan	Low	+1
Recently Linked to Ransomware	Medium	+2
Historically Linked to Ransomware	Low	+1
Recently Linked to Penetration Testing Tools	Medium	+2
Historically Linked to Penetration Testing Tools	Low	+1
Recently Linked to Malware	Medium	+2

Table D-1 • Rules, Severity and Value

Rule	Severity	Value
Historically Linked to Malware	Low	+1
Recently Linked to Exploit Kit	Medium	+2
Historically Linked to Exploit Kit	Low	+1
Linked to Recent Cyber Exploit	Low	+1
Linked to Historical Cyber Exploit	Low	+1
Recently exploited in the wild	Very Critical	+5
Exploited in the wild in the past year	Critical	+4
Historically exploited in the wild	High	+3
Recent remote code execution POC verified	Critical	+4
Recent POC verified	High	+3
Historical remote code execution POC verified	Medium	+2
Recent possible POC	Medium	+2
Historical POC verified	Low	+1
Tools to exploit the vulnerability developed recently	Medium	+2
Tools to exploit the vulnerability developed historically	Low	+1
Recently verified intelligence	High	+3
Historically Verified intelligence	Low	+1

The rule with the highest criticality determines the point range and the starting value for the Threat Score. The ranges for each are as follows:

Table D-2 • Criticality - Ranges

Criticality	From	To
Very Critical	71	99
Critical	45	70
High	24	44

Table D-2 • Criticality - Ranges

Criticality	From	To
Medium	13	23
Low	1	12
None	0	0

Note • *when assigning a Threat Score to the SAID, we do not simply add up the scores for each associated vulnerability, but rather follow the same rules outlined here to calculate the Security Advisory threat score.*

Threat Score Calculation - Examples

Some examples to explain how we would arrive at a Threat Score.

Example 1

A SAID has two CVEs; two come back as exploited.

Triggered Rules

The following rules are triggered:

- **CVE1 triggers**
  - Historically Linked to Remote Access Trojan
  - Recent remote code execution POC verified
- **CVE2 triggers**
  - Historically Linked to Exploit Kit

The Threat Score would be **51**.

Calculating the Score

The criticality range is set by the most critical rule triggered, which is critical. This sets the score's maximum and minimum range as between 45 and 70.

Item	Value
Base Score	+45
Recent remote code execution POC verified	+4
Linked to Recent Cyber Exploit	+1

Item	Value
Historically Linked to Remote Access Trojan	+1
Threat Score (Sum of above values)	**51**

Example 2

A SAID has seven CVEs; and all come back as exploited.

Triggered Rules

The following rule is triggered by all CVEs:

- **CVE1, CVE2, CVE3, CVE4, CVE5, CVE6 and CVE7 triggers**
  - Recently Linked to Malware

The Threat Score would be **23**.

Calculating the Score

The criticality range is set by the most critical rule triggered, which is critical. This sets the score's maximum and minimum range as between 13 and 23.

Item	Value
Base Score	+13
Recently Linked to Malware	+2 * 7 CVE = +14
Threat Score (Sum of above values)	**27** ***Note*** *• At this point, we have exceeded the maximum for a critical threat, which is 23, so the score is 23.*

Example 3

A SAID has one CVE and it comes back as exploited.

Triggered Rules

The following rule is triggered:

- **CVE1 triggers**
  - Historically exploited in the wild

The Threat Score would be **27**.

Calculating the Score

The criticality range is set by the most critical rule triggered, which is high. This sets the score's maximum and minimum range as between 24 and 44.

Item	Value
Base Score	+24
Historically exploited in the wild	+3
Threat Score (Sum of above values)	**27**

Example 4

A SAID has many CVEs, none come back as exploited.

The score would be **0** because there are no rules triggered.

Advisory with Multiple Vulnerabilities

An advisory Threat Score is based upon each of the CVEs included in an Advisory as specified above. In Software Vulnerability Research, the vulnerabilities that have exploits are indicated with a red circle for easier identification.

Threat Intelligence Data for Operations and Security

Software Vulnerability Manager and Software Vulnerability Research cater to different audiences with different needs. Software Vulnerability Manager (for operations) provides what is needed for Operations to better prioritize remediation efforts. Whereas Software Vulnerability Research (for security) provides more detail to meet the needs of security teams.

Table D-3 • Software Vulnerability Manager vs. Software Vulnerability Research

Software Vulnerability Manager	Software Vulnerability Research
• Offers a Threat Score at the Advisory level	• Offers a Threat Score at the Advisory level • Offers a Threat Score at the vulnerability level, within the advisory • Offers a list of which rules were triggered to arrive at the Threat Score displayed

Threat Score Locations

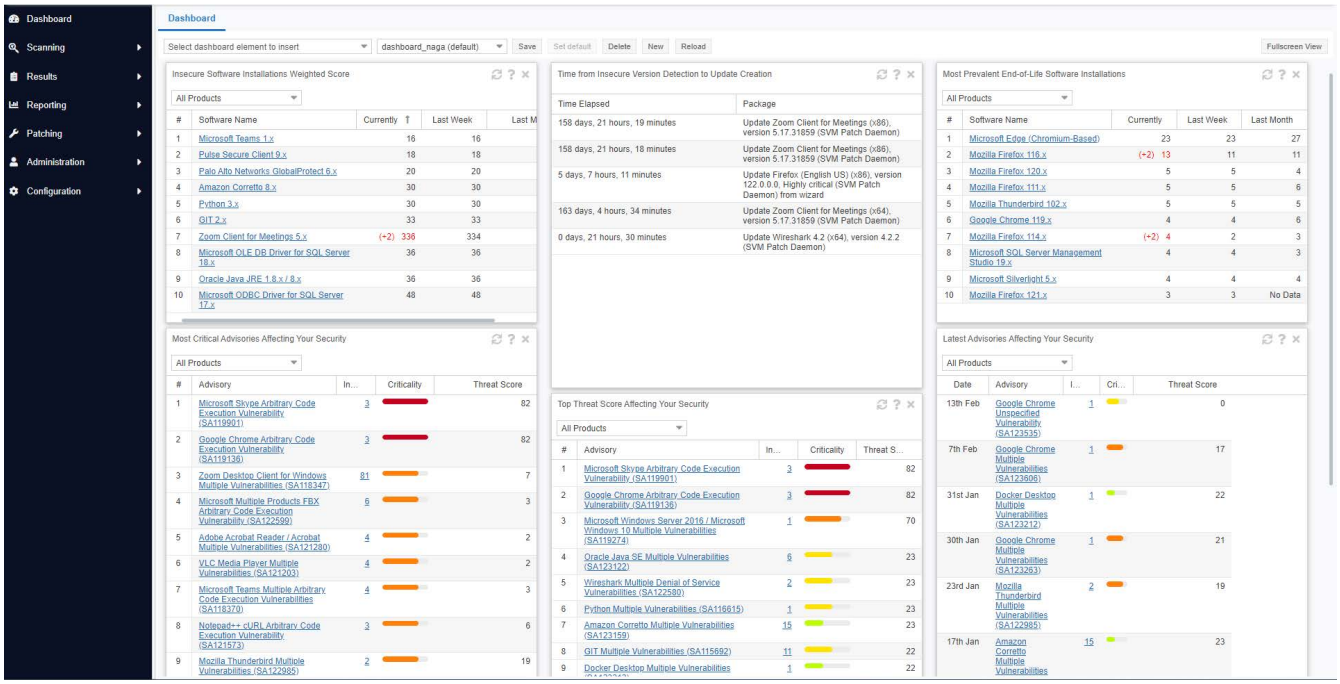
In Software Vulnerability Manager, subscribed users can find the Threat Score in the following places:

- Dashboard Threat Score

- Completed Scan Page Threat Score
- All Advisory Popup Threat Score
- All Installation Popup Threat Score
- Advisory Summary Threat Score
- Host Smart Group Threat Score
- Product Smart Group Threat Score
- Smart Group Criteria Threat Score
- All Advisory Threat Score
- All Advisory Smart Group Criteria Threat Score
- Zero Day Advisory Threat Score
- Flexera Package System (SPS) List Threat Score

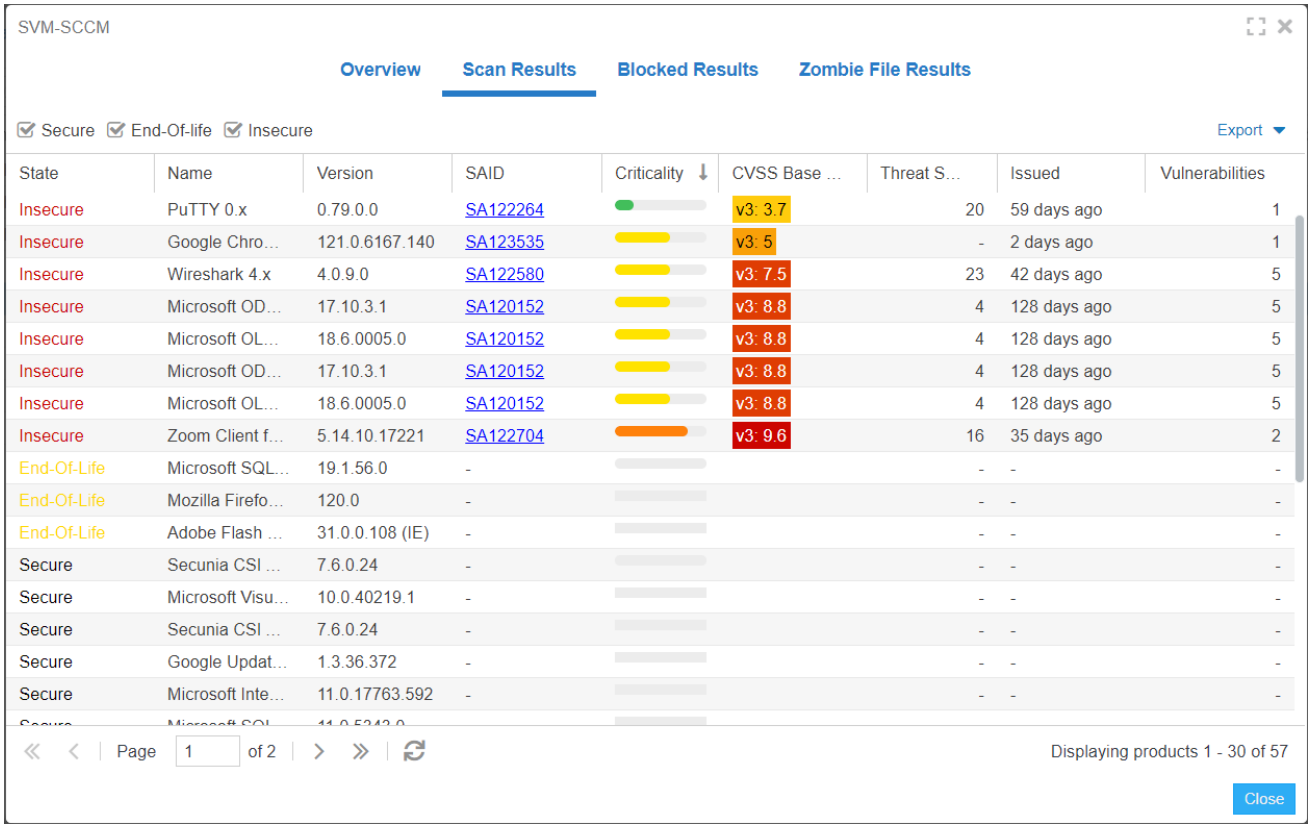
Dashboard Threat Score

The following image is an example of the Dashboard Threat Score.



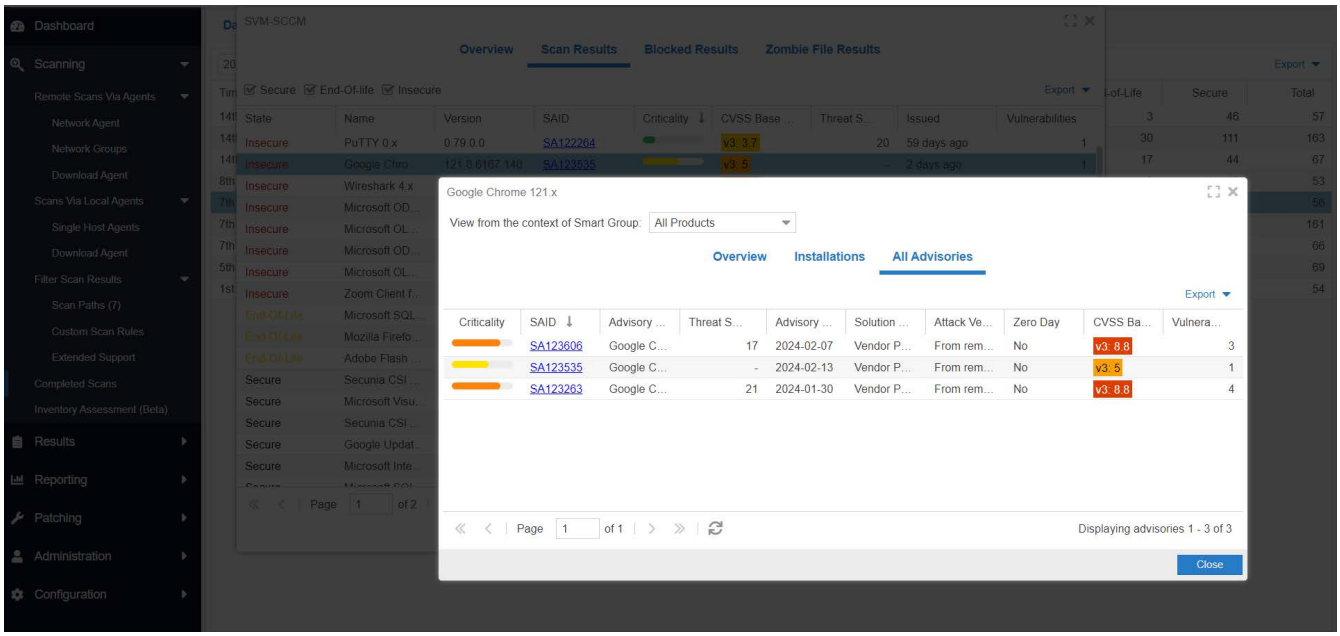
Completed Scan Page Threat Score

Once the scan is completed, the user can see the **Threat Score** in the **Scan Result**.



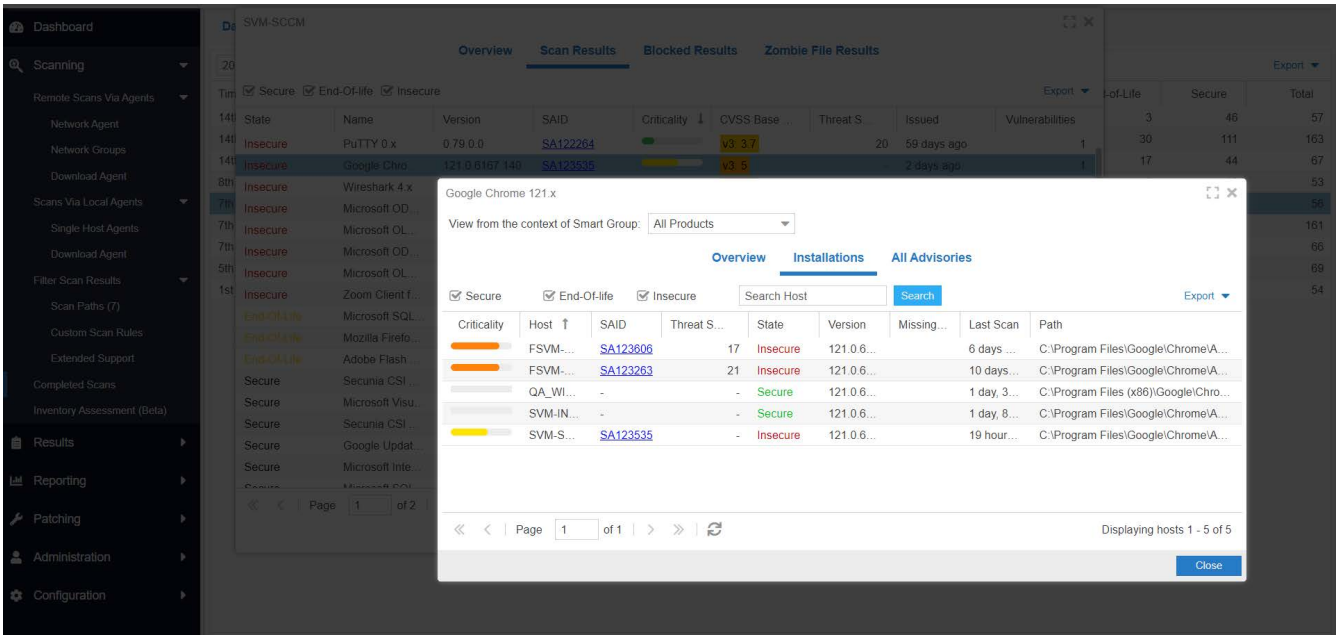
All Advisory Popup Threat Score

When the user double clicks any of the products in the above screen, all the advisories related to that product appear along with their **Threat Score**.



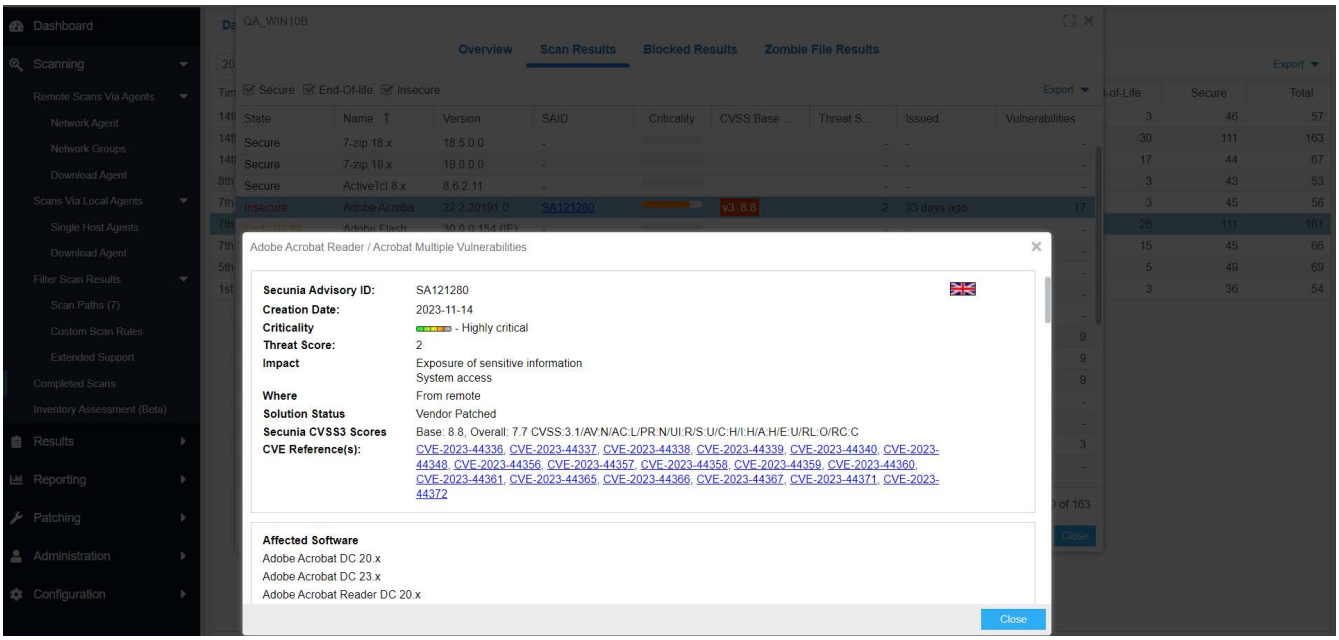
All Installation Popup Threat Score

When the user double clicks the product and selects the **Installations** tab, all the installations of that product get appear along with their **Threat Score**.



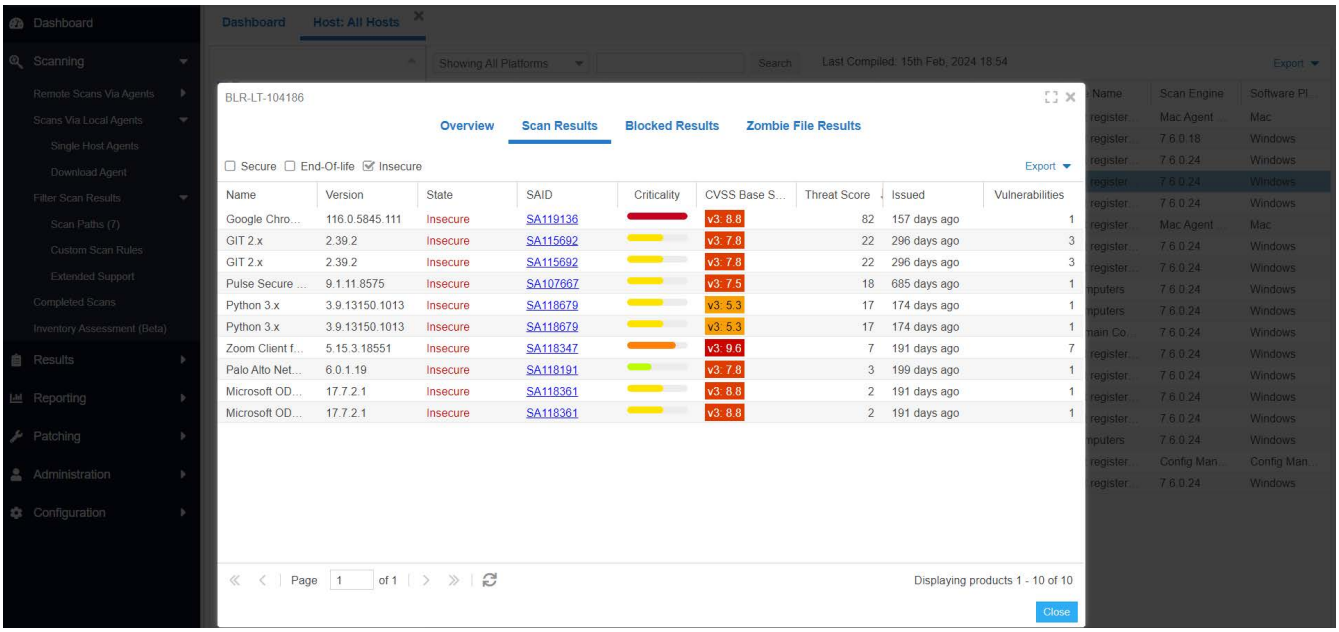
Advisory Summary Threat Score

After Clicking on any **SAID**, a popup appears with the **Threat Score** and other required details.



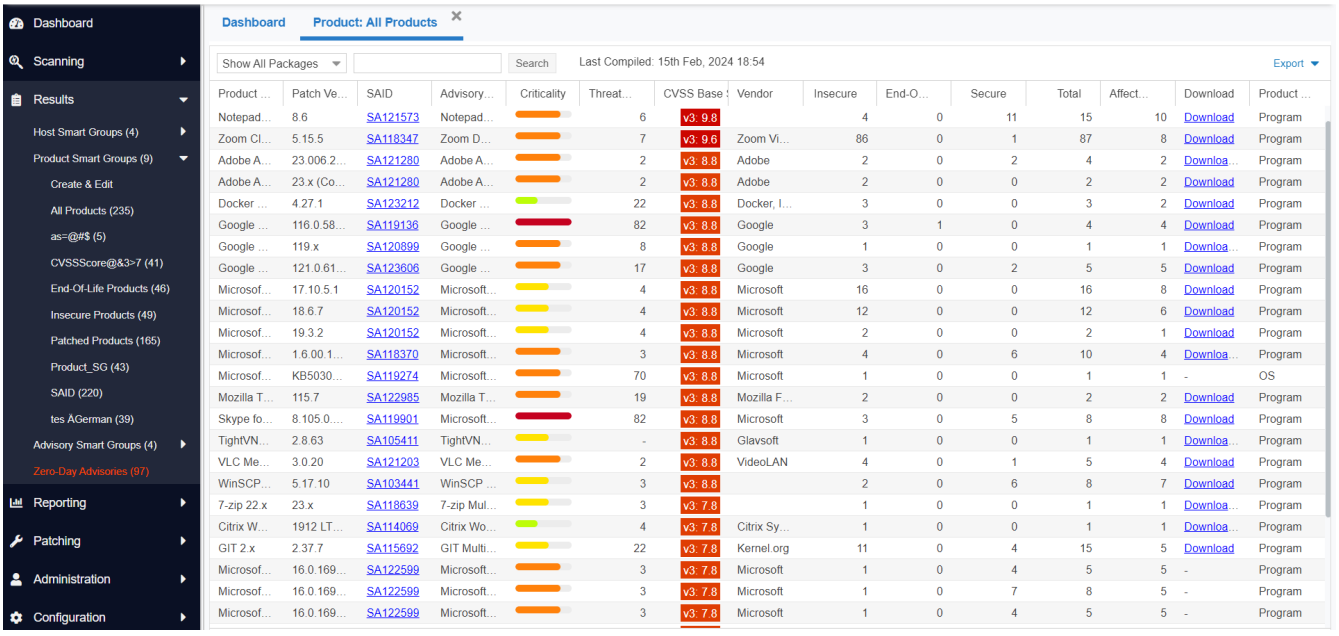
Host Smart Group Threat Score

The **Threat Score** appears for all the products on the **Host Smart Group Scan Result** page.



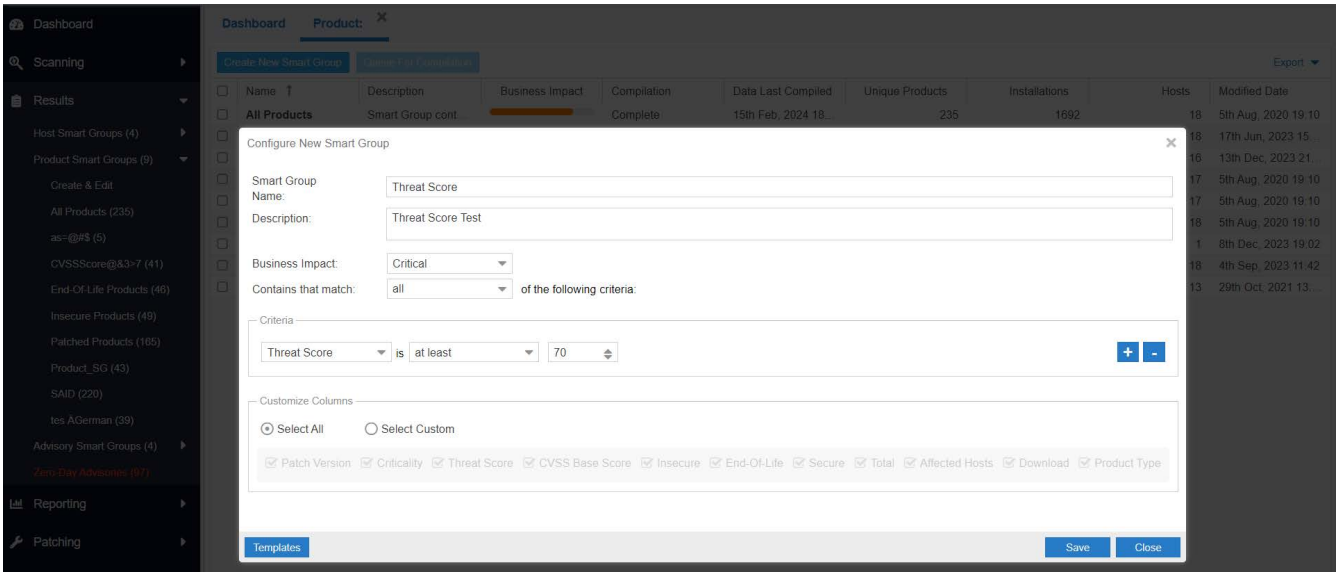
Product Smart Group Threat Score

The **Threat Score** appears for all the products on the **Product Smart Group Result** page.



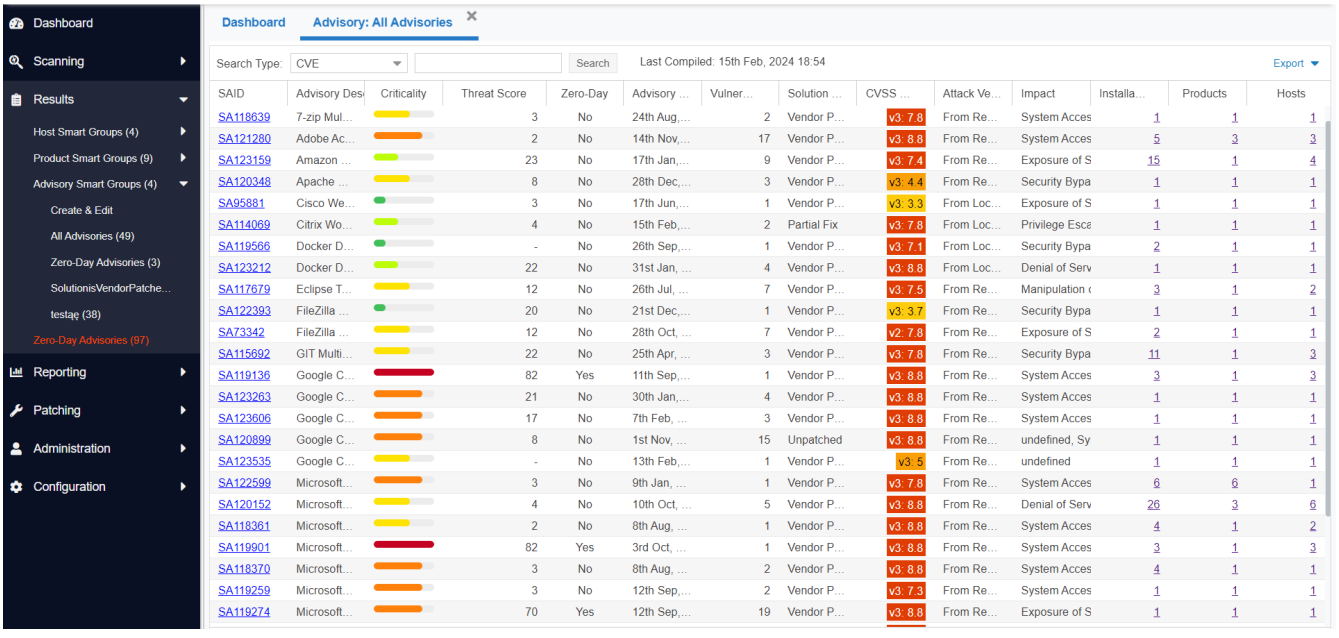
Smart Group Criteria Threat Score

When creating the **Product Smart Group**, the **Threat Score** option is available for the **Criteria** specification. The result is displayed based on the selection. By default, the **Threat Score Criteria** is set to **70**.



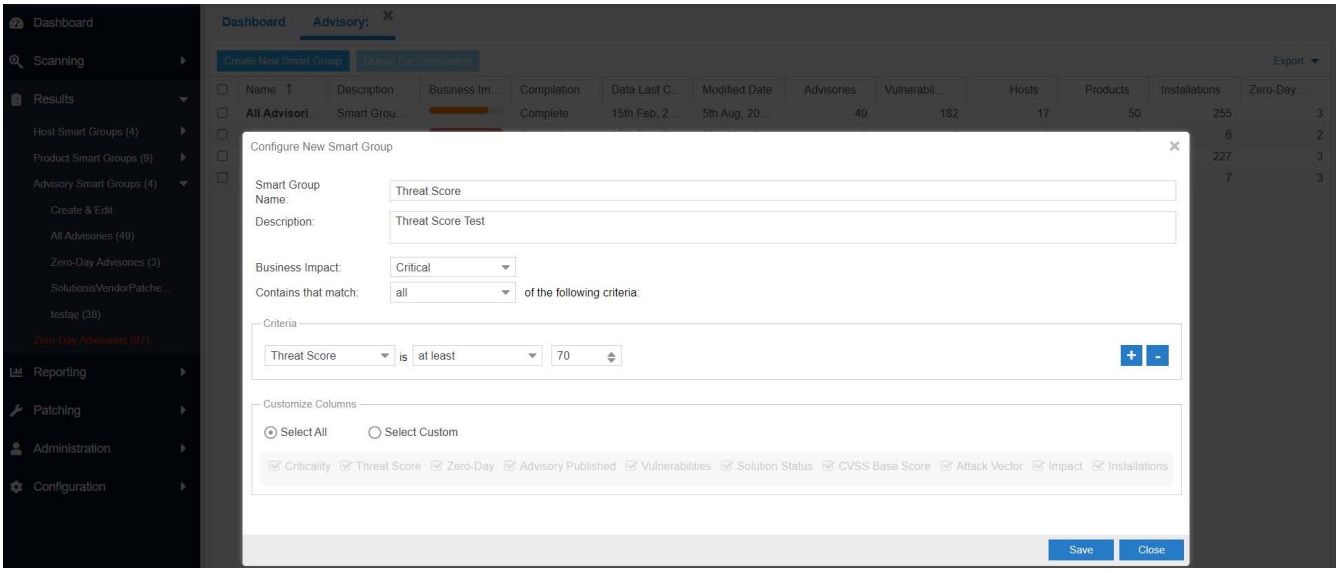
All Advisory Threat Score

The **Threat Score** is made available in the **All Advisories** page.



All Advisory Smart Group Criteria Threat Score

When creating the **Advisory Smart Group**, the **Threat Score** option is available for the **Criteria** specification. The result is displayed based on the selection. By default, the **Threat Score Criteria** is set to **70**.

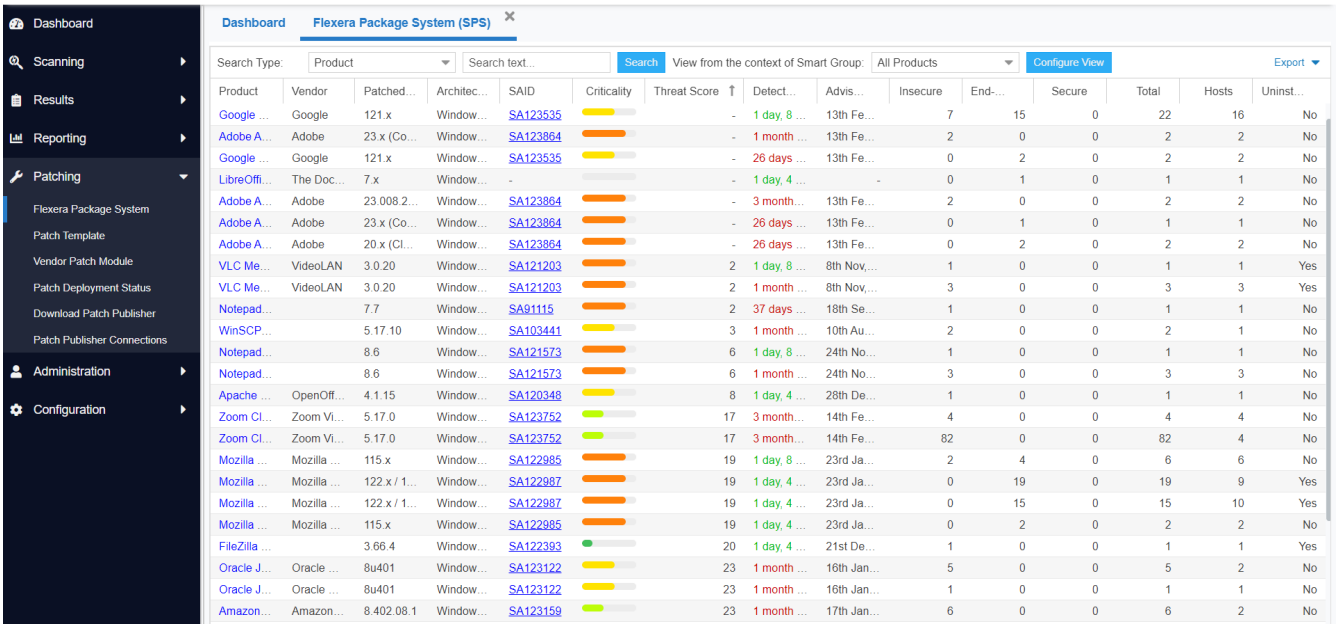


Zero Day Advisory Threat Score

The Threat Score appears in the **Zero Day Advisories** page. Selecting the **All Advisories** option displays the list of all the zero day advisories while selecting the **Advisories that Affected You** option displays only the list of all the current and historic zero day advisories that have affected you. The list of advisories seen here may vary from the list in the Smart Groups under the **Results** section.

Flexera Package System (SPS) List Threat Score

The Threat Score appears in the Flexera Package System (SPS) list, which helps user to prioritize patches.



Product	Vendor	Patched...	Architec...	SAID	Criticality	Threat Score	Detect...	Advis...	Insecure	End-...	Secure	Total	Hosts	Uninst...
Google ...	Google	121.x	Window...	SA123535		-	1 day, 8 ...	13th Fe...	7	15	0	22	16	No
Adobe A...	Adobe	23.x (Co...	Window...	SA123864		-	1 month ...	13th Fe...	2	0	0	2	2	No
Google ...	Google	121.x	Window...	SA123535		-	26 days ...	13th Fe...	0	2	0	2	2	No
LibreOffi...	The Doc...	7.x	Window...	-		-	1 day, 4 ...	-	0	1	0	1	1	No
Adobe A...	Adobe	23.008.2...	Window...	SA123864		-	3 month...	13th Fe...	2	0	0	2	2	No
Adobe A...	Adobe	23.x (Co...	Window...	SA123864		-	26 days ...	13th Fe...	0	1	0	1	1	No
Adobe A...	Adobe	20.x (Cl...	Window...	SA123864		-	26 days ...	13th Fe...	0	2	0	2	2	No
VLC Me...	VideoLAN	3.0.20	Window...	SA121203		2	1 day, 8 ...	8th Nov,...	1	0	0	1	1	Yes
VLC Me...	VideoLAN	3.0.20	Window...	SA121203		2	1 month ...	8th Nov,...	3	0	0	3	3	Yes
Notepad...		7.7	Window...	SA91115		2	37 days ...	18th Se...	1	0	0	1	1	No
WinSCP...		5.17.10	Window...	SA103441		3	1 month ...	10th Au...	2	0	0	2	1	No
Notepad...		8.6	Window...	SA121573		6	1 day, 8 ...	24th No...	1	0	0	1	1	No
Notepad...		8.6	Window...	SA121573		6	1 month ...	24th No...	3	0	0	3	3	No
Apache ...	OpenOff...	4.1.15	Window...	SA120348		8	1 day, 4 ...	28th De...	1	0	0	1	1	No
Zoom Cl...	Zoom Vi...	5.17.0	Window...	SA123752		17	3 month...	14th Fe...	4	0	0	4	4	No
Zoom Cl...	Zoom Vi...	5.17.0	Window...	SA123752		17	3 month...	14th Fe...	82	0	0	82	4	No
Mozilla ...	Mozilla ...	115.x	Window...	SA122985		19	1 day, 8 ...	23rd Ja...	2	4	0	6	6	No
Mozilla ...	Mozilla ...	122.x / 1...	Window...	SA122987		19	1 day, 4 ...	23rd Ja...	0	19	0	19	9	Yes
Mozilla ...	Mozilla ...	122.x / 1...	Window...	SA122987		19	1 day, 4 ...	23rd Ja...	0	15	0	15	10	Yes
Mozilla ...	Mozilla ...	115.x	Window...	SA122985		19	1 day, 4 ...	23rd Ja...	0	2	0	2	2	No
FileZilla ...		3.66.4	Window...	SA122393		20	1 day, 4 ...	21st De...	1	0	0	1	1	Yes
Oracle J...	Oracle ...	8u401	Window...	SA123122		23	1 month ...	16th Jan...	5	0	0	5	2	No
Oracle J...	Oracle ...	8u401	Window...	SA123122		23	1 month ...	16th Jan...	1	0	0	1	1	No
Amazon...	Amazon...	8.402.08.1	Window...	SA123159		23	1 month ...	17th Jan...	6	0	0	6	2	No

Appendix E - Troubleshooting Techniques

This appendix explains Troubleshooting Techniques of the Software Vulnerability Manager:

- Intune
- Patch Publisher

Intune

This section includes the following topics:

- Prerequisites
- Publishing
- SVM Patch Configuration
- SVM Patch Configuration / General Tab
- Troubleshooting Tips
- FAQs

Prerequisites

Intune POC (Proof of Concept) requires the following prerequisites:

- For Intune connection details, refer Add Intune API Application (Client) ID and Directory (Tenant) ID on Intune Connection. For more details, see Intune Publishing and Set up a Distribution Connection in Flexera SVM Patch Configuration for Microsoft Intune.
- To get Application (Client) ID, Directory (Tenant) ID, and Client Secret app registration need to be done. For more details, see App Registration and Create Client Secret.
- Make sure that the following Intune Graph API Permission are available to the user. For more details, see API Permissions.

- Make sure that you have at least five to eight distribution endpoints in your sample test environment.
- To enroll a device/endpoint to an Intune follow this link https://docs.microsoft.com/en-us/mem/intune/user-help/enroll-windows-10-device
- For each endpoint, please ensure:
  - Endpoints have been recently booted up to ensure there are no pending updates that could hinder Intune publishing.
  - The credentials that will publish to endpoint has permissions to run PowerShell scripts - not required.
  - If installing Win32 apps then antimalware settings should exclude the following directories

    On x64 client machines:

    - C:\Program Files (x86)\Microsoft Intune Management Extension\Content
    - C:\windows\IMECache

    On x86 client machines:

    - C:\Program Files\Microsoft Intune Management Extension\Content
    - C:\windows\IMECache

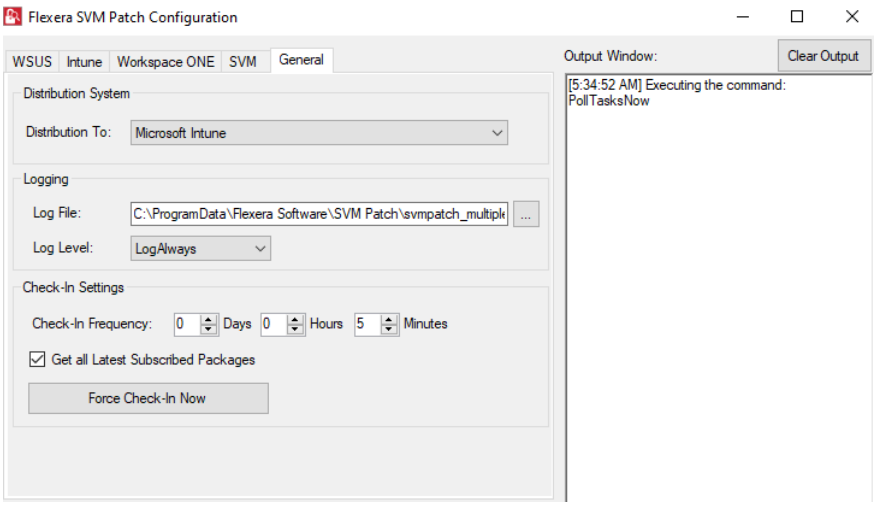
Publishing

Once the prerequisites are completed, you can begin publishing from:

- The SVM console - To create and publish the package, see Create and Publish the Package.
- The Patch Publisher - To create and publish the package, follow the steps as mentioned in Create Patch Wizard.

SVM Patch Configuration

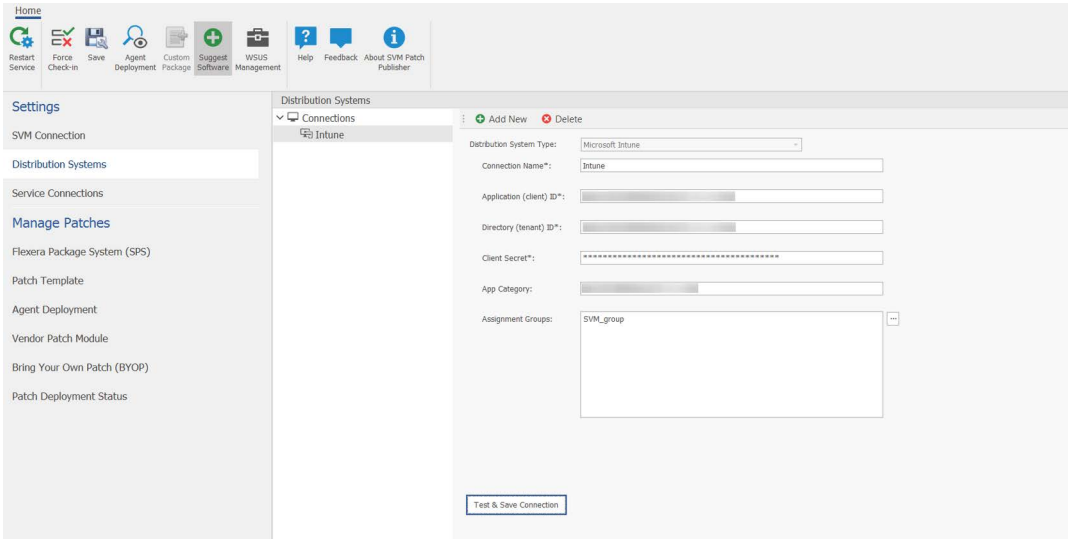
The Flexera SVM Patch Configuration Tool can control the publish into Intune.



For more information on Intune connection, see Flexera SVM Patch Configuration.

SVM Patch Publisher

The SVM Patch Publisher tool can be used to publish into Intune.



For more information, see SVM Patch Publisher.

SVM Patch Configuration / General Tab

To set SVM Patch Configuration, perform the following steps.

Task ***To configure:***

1. In the General Tab set the **Distribution To: Microsoft Intune**.
2. You can click **Force Check-In Now** to distribute to Intune immediately or wait for the Check-In.
3. You can check log file (c:\ProgramData\Flexera Software\SVM Patch\svmpatch.log) for confirmation that publishing happened to Intune. Here is a sample line:

   [26/05/2021 16:09:35|V] [POST data]: {"data":{"package_id":"f8072330-ddd2-469f-8762-e3cd28a2969d","error":""},"status":"success","task_type":"publish_package"}

4. You can then check for your app in Intune.

5. Now that your Application is in Intune, you can decide how to distribute.

Troubleshooting Tips

Following are the troubleshooting tips for Intune:

- Intune log file location is C:\ProgramData\Microsoft\IntuneManagementExtension\Logs. For detailed debugging check IntuneManagementExtension.log. Search for package name / Application ID.
- Use %WinDir%\CCM\CMTrace.exe tool to read Intune logs.
- Installation status of SPS package logged at C:\windows\SecuniaPackage.log
- If install fails most time the reason is, the file in use by other application. In such cases, restart the machine. Some other common reasons are listed here.
- Debugging for PowerShell script not running, refer https://docs.microsoft.com/en-us/mem/intune/apps/intune-management-extension#issue-powershell-scripts-do-not-run
- Check whether the service **Microsoft Intune Management Extension** is running in endpoint.
- Intune Management extension polls for packages for every hour. We can do force polling by restarting the Microsoft Intune Management Extension service.
- Once the package gets installed, it takes at least five minutes to reflect in Apps section of Intune interface. Sort by Date created to list recently published packages.

FAQs

The following table provides answers to frequently asked questions regarding Intune application.

Table E-1 • FAQs

Question	Answer
Do endpoints need to have PowerShell execution policy to allow script execution?	Not required to have execution permissions for a patch to get installed. We made **Enforce script signature check and run script silently** in detection scripts to No for an Intune application. Hence it bypasses the execution-policy and runs irrespective of the execution policy being set in endpoint.

Do any files be excluded from virus scanning in endpoints?	Antimalware settings should exclude the following Intune directories:
	• On x64 client machines:
	  ◦ C:\Program Files (x86)\Microsoft Intune Management Extension\Content
	  ◦ C:\windows\IMECache
	• On x86 client machines:
	  ◦ C:\Program Files\Microsoft Intune Management Extension\Content
	  ◦ C:\windows\IMECache
	More details, see https://docs.microsoft.com/en-us/mem/intune/apps/apps-win32-troubleshoot

Is it possible to deploy the agent via Intune?	Yes via a feature in the product introduced in the April release of the Patch Daemon (version 5.0.385 and above).
What permissions does the Patch Daemon account require? Does it require PowerShell script execution rights?	• It requires an account which has access directory as an administrator with rights to create new app registrations. • It does not require PowerShell execution permissions as PowerShell is not leveraged when publishing a package to Intune.

Patch Publisher

Patch Publisher requires the following prerequisites:

- OS Windows 10 or later
- Windows 2016 R2 or later
- .Net framework version 4.7.2 or later
- RSAT should be enable and needs to be installed only when you configure a connection to the Windows Server Update Services (WSUS).
- Architecture - 64 bit operating systems

- You can install in Local admin/domian admin
- OS Requirements (for WSUS Distribution System):
  - Install Patch publisher in Windows Server 2016 or Windows 10, for Windows 2016 WSUS.
  - Install Patch Publisher in Windows Server 2019 or Windows 10, for Windows 2019 WSUS.
  - Install Patch Publisher in Windows Server 2022 or Windows 10, for Windows 2022 WSUS.