

# Jamf SCCM Plug-in (for the Jamf Pro Server) User Guide

Version 3.70.0



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Jamf has made all efforts to ensure that this guide is accurate.

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### **Overview**

The Jamf SCCM plug-in pulls inventory information from Jamf Pro to the Jamf Pro SCCM Proxy Service, and then to Microsoft's System Center Configuration Manager (SCCM) (now Microsoft Endpoint Configuration Manager). It uses the Jamf Pro API and Microsoft's Configuration Manager Client Messaging SDK to ensure that SCCM always has the most up-to-date hardware and software information for the computers and mobile devices in your Jamf Pro instance.

The Jamf Pro SCCM Proxy Service is a Windows Service installed on either the SCCM server or a separate Windows computer. This Windows service communicates with the Classic API and relays inventory data to SCCM using the Configuration Manager Client Messaging SDK. This information is updated every 30 minutes by default but is configurable to a desired frequency. All communication with Jamf Pro occurs over the default network ports (commonly 8443 or 443), while communication with SCCM occurs over port 80 for HTTP or 443 for HTTPS depending on how your SCCM environment is configured.

### Requirements

To install the Jamf SCCM Proxy Service, you need:

- A Windows computer with Microsoft .NET Framework 4.6.2
- The ISV Proxy and CA certificates configured
   For instructions, see the <u>Configuring the Certificates for the SCCM Plug-in v3.40 or Later</u> Knowledge Base article.

**Note:** When the Jamf SCCM Proxy Service runs, an XML file is saved to the server for each device in Jamf Pro. The report is typically under 200 KB and saved to a folder with the same name as your Jamf Pro instance. Be sure to account for the disk space needed per device on the server where the Jamf SCCM Proxy Service is installed.

To install and configure the Jamf SCCM plug-in, you need:

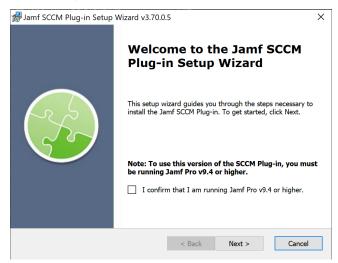
- Microsoft's System Center Configuration Manager (SCCM) 2012 or later
- Jamf Pro 9.4 or later
- Access to the Jamf Pro host server
- A Jamf Pro user account with privileges to read:
  - Computers
  - Smart computer groups (optional)
  - Static computer groups (optional)
  - Mobile devices
  - Smart mobile device groups (optional)
  - Static mobile device groups (optional)

**Note:** The optional group related permissions can be used to send groups of devices to SCCM using the Jamf SCCM Proxy Service Helper.

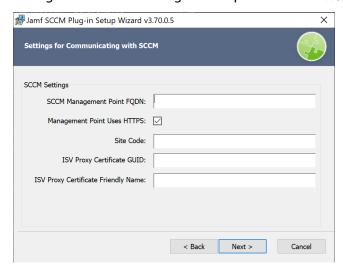
For instructions on granting privileges to Jamf Pro user accounts, see the <u>Jamf Pro Administrator's</u> Guide.

## **Installing the Jamf SCCM Proxy Service**

- 1. On a Windows computer that has Microsoft .NET Framework 4.6.2 and belongs to the same domain as the CA, extract the SCCM plug-in ZIP file.
- 2. Double-click the Jamf SCCM Proxy Installer .msi file in the SCCM plug-in directory, and verify that you are running Jamf Pro 9.4 or later. Then, click **Next** to proceed.



3. Configure the SCCM settings on the pane and click **Next**.



4. Configure the settings for communicating to the Jamf Pro server, and specify the information to send to SCCM.

Note: The Download and trust the CA certificate checkbox is selected by default.



- 5. Choose where you want to install the Jamf SCCM proxy service and click Next.
- 6. Click Install.
- 7. When the installation is complete, click **Finish**.



## **Upgrading the Jamf SCCM Plug-in**

The instructions in this section explain how to upgrade the Jamf SCCM plug-in v3.30 or later to the most current version.

**Note:** If the Jamf SCCM plug-in is configured with the default polling interval of 30 minutes or a frequency less than 2 hours, it is recommended to stop the Jamf SCCM Plug-in service before you upgrade your SCCM environment. This prevents the plug-in from transferring data to SCCM during your maintenance window, which can cause errors.

- 1. On the server where the Jamf SCCM Proxy Service is installed, navigate to the following and locate the settings.xml file:
  - If you upgraded the Jamf SCCM Proxy Service:
     C:\Program Files (x86)\JAMF Software\JSS SCCM Proxy Service\
  - If you freshly installed the Jamf SCCM Proxy Service:
     C:\Program Files (x86)\Jamf\Jamf SCCM Proxy Service\
- 2. Save a copy of the settings.xml file to your desktop.
- 3. Uninstall the Jamf SCCM Proxy Service using the Control Panel.
- 4. Using the latest Jamf SCCM plug-in ZIP file, follow the instructions in the "Installing the Jamf SCCM Proxy Service" section to re-install the Jamf SCCM Proxy Service.

  You can use the copy of the settings.xml file to see which settings were applied in the previous version of the Jamf SCCM Proxy Service. All relevant settings are near the beginning of the file.
- 5. Log in to the Jamf Pro server.
- 6. If upgrading from 3.30 or earlier, remove the Client and CA certificates from Jamf Pro. Those certificates were required to install previous version of the plug-in, but they are no longer needed.

Any remaining files related to the plug-in are removed automatically when Jamf Pro is upgraded.

## Troubleshooting the Jamf SCCM Proxy Service

This section explains how the log and the helper application can be used to troubleshoot the Jamf SCCM Proxy Service.

### Changing the Jamf SCCM Proxy Service Logging Level

The log for the Jamf SCCM Proxy Service is located on the computer with the Jamf SCCM Proxy Service.

You can customize the amount of information that is included in the log by choosing one of the following logging levels:

- Debug
- Info
- Warn
- Error
- Fatal

By default, the log is configured to use the "Warn" level.

For more information on the logging levels, see the following Apache Logging Services documentation:

http://logging.apache.org/log4j/1.2/apidocs/org/apache/log4j/Level.html

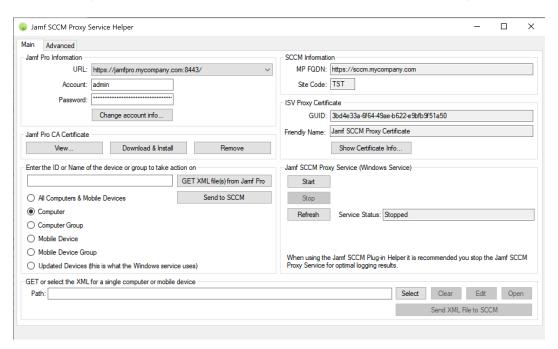
- 1. On the computer with the Jamf SCCM Proxy Service, navigate to the following and open the settings.xml file with a text editor:
  - If you upgraded the Jamf SCCM Proxy Service: C:\Program Files (x86)\JAMF Software\JSS SCCM Proxy Service\
  - If you freshly installed the Jamf SCCM Proxy Service:
     C:\Program Files (x86)\Jamf\Jamf SCCM Proxy Service\
- 2. Locate the element that begins with level value and replace the text in quotes with either "DEBUG", "INFO", "WARN", "ERROR", or "FATAL".
- 3. Save and close the file.

#### **Jamf SCCM Proxy Service Helper**

The Jamf SCCM Proxy Service Helper allows you to perform advanced troubleshooting tasks such as testing the connection to Jamf Pro and sending information on one or more computers or mobile devices to Jamf SCCM without waiting for a change in inventory.

**Note**: It is recommended that you stop the Windows Service when using the Jamf SCCM Proxy Service Helper.

The following screen shot shows the helper application and its functionality:



The helper must be "Run as administrator." It is stored in the same directory as the proxy service and is located in the following:

- Upgraded Jamf SCCM plug-in:
  - C:\Program Files (x86)\JAMF Software\JSS SCCM Proxy Service\JAMF.JSS. ProxyService.Plugins.SCCM2012.Helper.exe
- Fresh install Jamf SCCM plug-in:
  - C:\Program Files (x86)\Jamf\Jamf SCCM Proxy Service\Jamf.
    ProxyService.Plugins.SCCM2012.Helper.exe

## **Release History**

Version	Changes
3.70.0	General Enhancements and Bug Fixes:
	<ul> <li>Updated the Configuration Manager Client Messaging SDK to version 5.1902.1006.1000.</li> </ul>
	<ul> <li>Fixed an issue that prevented some iPhone XR, iPhone XS, and Mac mini data from being sent to SCCM.</li> </ul>
	<ul> <li>Fixed an issue that caused the Jamf SCCM Proxy Service to overwrite computer records in SCCM with each new inventory submission.</li> </ul>
	<ul> <li>Fixed an issue that prevented hardware and software inventory from sending data to SCCM.</li> </ul>
	<ul> <li>Fixed an issue that prevented device data from being submitted to SCCM even though a success message was displayed.</li> </ul>
	<ul> <li>Fixed an issue that caused an error to occur when the "GET" API command was issued to retrieve inventory data for devices on the limited access node.</li> </ul>
	Jamf SCCM Proxy Service Helper Enhancements and Bug Fixes:
	<ul> <li>Separated the functionality into Main and Advanced tabs.</li> </ul>
	Moved the functionality related to XSL transform to the Advanced tab.
	<ul> <li>Added the ability to download and install the CA certificate for the selected Jamf Pro Server.</li> </ul>
	<ul> <li>Added information to explain it is best to stop the service.</li> </ul>
	<ul> <li>Modified the friendly name of the certificate to indicate it is used by the Jamf SCCM Service Proxy.</li> </ul>
	<ul> <li>Added the friendly name of the ISV certificate to appear with the thumbprint.</li> </ul>
	<ul> <li>Renamed the Change Password button to Change account info.</li> </ul>
	<ul> <li>Renamed the Change Password form to Change Jamf Pro Account Info and added a Change Jamf Pro User account field.</li> </ul>
	Renamed occurrences of "JSS" to "Jamf Pro".
	Fixed an issue that prevented the Jamf Pro username from being changed.
	• Fixed an issue that prevented the Delta HINV <b>Open</b> button from opening the XML file.

Version	Changes
3.60.0	<ul> <li>Updated the dependency from the System Center Configuration Manager SDK, which added support (or resolved a product issue) for issuing SHA-256 certificates from an Enterprise Certificate Authority.</li> <li>Fixed an issue that prevented the Jamf SCCM plug-in from sending hardware inventory information to SCCM if the <username> attribute for a computer or mobile device contained a backslash ("\") when imported from Jamf Pro.</username></li> <li>Fixed an issue that caused the text "Not Bound" to be sent for the Domain field instead of a blank value when a computer was not bound to Active Directory.</li> <li>Note: Depending on your environment, you may need to modify workflows that depend on the "Not Bound" field value. If your workflow depends on the "Not Bound" text value appearing in the Domain field in the Properties window and the Domain and Domain Role fields in the Resource Explorer window, you should change the text in your workflow to use an empty string (i.e., blank or no value) instead of "Not Bound".</li> <li>Fixed an issue that caused the value of the <use_proxyserver_domain_when_adstatus_notbound> attribute to not be recognized in the settings.xml file. When this attribute was set to true, computer hardware inventory information was sent to SCCM, including the Domain field in the Properties window and the Domain and Domain Role fields in the Resource Explorer window, indicating that the computer was not bound, instead of the proper domain information.</use_proxyserver_domain_when_adstatus_notbound></li> </ul>
3.51	<ul> <li>Fixed an issue that caused the incorrect date to be displayed for "Last Hardware Scan" in the SCCM Plug-in for computers and mobile devices.</li> <li>Fixed an issue that prevented the SCCM plug-in from making calls to the customer API if TLSv1 is not an SSLEnabledProtocol in the JSS.</li> </ul>
3.50	Fixed an issue where the SCCM plug-in caused exponential growth of the SCCM database. The issue was fixed by adding a Delta report capability which sends reports that contain what has changed for each device registered with SCCM after the initial full-inventory report.
3.43	Fixed an issue where the SCCM Plug-in added multiple entries for the same client into the SCCM database.
3.42	<ul> <li>Fixed an issue where the JSS Proxy Service could not be upgraded or re-installed using a different account than what was used during the initial installation.</li> <li>Fixed an issue that caused the JSS host server's response type to default to JSON instead of XML.</li> </ul>
3.41	<ul> <li>Fixed an issue that caused the FQDN for a computer to list the NetBIOS name at the end instead of at the beginning.</li> <li>Fixed an issue that prevented files sent from the JSS to the SCCM Plug-in from being saved if the SCCM Plug-in is in debug mode.</li> </ul>

Version	Changes
3.40	<ul> <li>Requires the JSS v9.4 or later.</li> <li>Added support for exporting Android devices to SCCM.</li> <li>Uses a polling model that no longer requires the JSS Plug-in.</li> <li>Compatible with hosted instances of the JSS.</li> <li>Reduced the number of required certificates from five to one or two depending on the configuration of the management point in SCCM.</li> </ul>
3.30	<ul> <li>The SCCM Plug-in now sends light-weight messages from the JSS to the SCCM.</li> <li>REST lookups and XSL transformations are now performed on the proxy service.</li> <li>Fixed an issue that prevented partition information from being correctly reported in SCCM.</li> <li>Added the ability to send the Active Directory status and FileVault 2 status in the JSS v9.0 and later.</li> <li>Added support for the JSS v9.2.</li> <li>The plug-in now listens for API events in JSS v9.23 and later.</li> <li>Fixed an issue that caused a false error message to appear when saving plug-in settings.</li> <li>Added a helper application that troubleshoots and aids proxy service functionality.</li> </ul>
3.21	<ul> <li>Added support for the JSS v9.1.</li> <li>Fixed an issue that caused the SMS_MP_CONTROL_MANAGER component status to be displayed as "Warning".</li> </ul>
3.2	<ul> <li>Added support for the JSS v9.0.</li> <li>Fixed an issue that prevented the SCCM plug-in from sending information for computers in the JSS that do not have a UDID.</li> </ul>
3.11	<ul> <li>Fixed an issue that prevented computer and mobile device names from being updated in SCCM when updated in the JSS. The issue was fixed by ensuring that the SCCM plug-in uses the serial number as the value for the hardware ID.</li> <li>Fixed an issue that prevented apostrophes (') from being included in names of computers and mobile devices that were added to SCCM using the SCCM plug-in.</li> <li>The JSS SCCM Proxy Service now sends the Heartbeat Discovery data discovery record (DDR) to SCCM, which allows SCCM to determine if computers and mobile devices are still active.</li> </ul>
3.1	<ul> <li>Added an option to the JSS SCCM Proxy Service Installer to specify if the SCCM management point uses HTTPS.</li> <li>Fixed an issue that prevented the log for the SCCM plug-in from being created on Linux.</li> <li>Fixed an issue that prevented the SCCM plug-in from being installed on Windows.</li> </ul>
3.0	<ul> <li>Re-implemented the plug-in to interact with the JSS Events API, allowing inventory information from the JSS to be updated in SCCM in real time.</li> <li>Added support for Microsoft's SCCM 2012.</li> <li>Added support for communication over HTTPS.</li> </ul>
2.0	<ul> <li>Added compatibility with the JSS Conduit v2.0.</li> <li>Decreased memory usage.</li> <li>Added the ability to export inventory information for secondary MAC addresses, additional disk partitions, and logical disk sizes.</li> <li>Fixed an issue that caused the SCCM plug-in to export inaccurate data for computers that don't have unique computer names in SCCM.</li> </ul>

### **Known Issues**

The following issue is known in the Jamf SCCM plug-in v3.42 or later:

The Jamf SCCM plug-in can be used with English and French language packs only.