SCCM Plug-in User Guide

Version 3.0

JAMF software

JAMF Software, LLC
© 2012 JAMF Software, LLC. All rights reserved.

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

JAMF Software
301 4th Ave S Suite 1075
Minneapolis, MN 55415
(612) 605-6625

Under the copyright laws, this publication may not be copied, in whole or in part, without the written consent of JAMF Software, LLC.

The Casper Suite, the JAMF Software logo, the JAMF Software Server (JSS), and the Recon Suite are trademarks of JAMF Software, LLC in the United States and other countries.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.

All other product and service names mentioned are the trademarks of their respective companies.

Contents

Page 4 **Overview**

Page 4 **Requirements**

Page 5 **Generating an ISV Proxy Certificate**
Step 1: Create a Certificate Template
Step 2: Generate an ISV Proxy Certificate from the Template
Step 3: Copy the ISV Proxy Certificate to the SCCM Server
Step 4: Register the ISV Proxy Certificate with SCCM

Page 11 **Exporting the CA Certificate**

Page 12 **Generating a Client Certificate for the SCCM Plug-in**

Page 15 **Copying the Client Certificate and CA Certificate to the JSS Host Server**

Page 15 **Setting Up the JSS SCCM Proxy Service**

Page 16 **Installing the SCCM Plug-in**

Page 17 **Configuring the SCCM Plug-in**

Page 18 **Troubleshooting the SCCM Plug-in**

Page 18 **Troubleshooting the JSS SCCM Proxy Service**

Page 19 **Release History**

Page 19 **Known Issues**

Overview

The SCCM plug-in sends inventory information from the JSS to the JSS SCCM Proxy Service, and then to Microsoft's System Center Configuration Manager (SCCM). It uses the JSS Events API to ensure that SCCM always has the most up-to-date hardware and software information for the computers and mobile devices in your JSS.

Requirements

Installing and configuring the SCCM plug-in requires:

- Microsoft's System Center Configuration Manager (SCCM) 2012
- The Casper Suite or Recon Suite v8.6 running in your environment
- A JSS user account with the following API privileges:
  - Read Computers
  - Read Mobile Devices

  For instructions on granting API privileges to JSS user accounts, see the "Managing JSS User Accounts" section of the *Casper Suite Administrator's Guide*.

Generating an ISV proxy certificate requires:

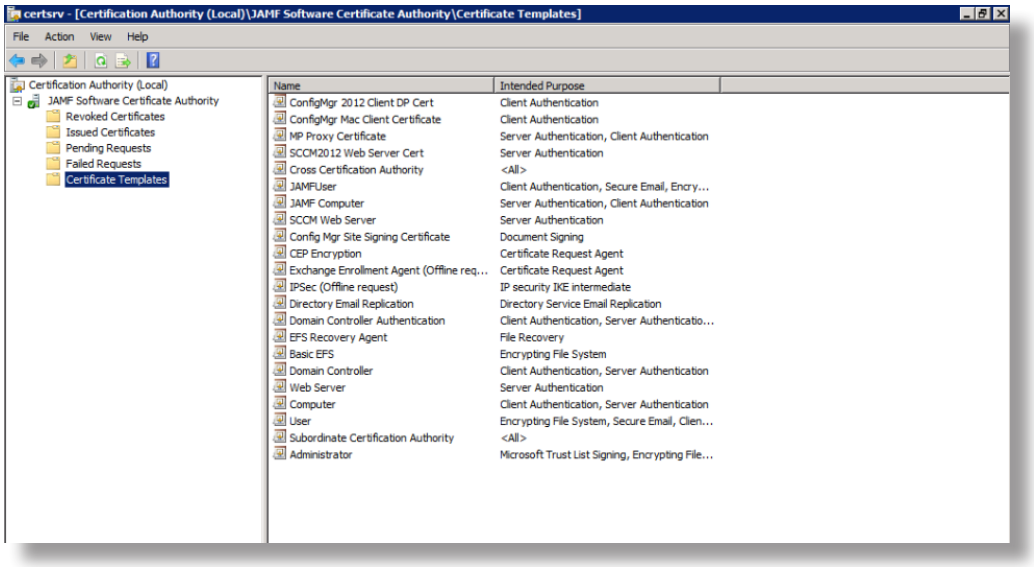
- A Windows computer with the Certification Authority snap-in
- A public key infrastructure (PKI) that does not use the CA that is built into the JSS
- Console access to the SCCM server
- Administrative rights to the SCCM Console

Setting up the JSS SCCM Proxy Service requires a Windows computer with Microsoft .NET Framework 4.

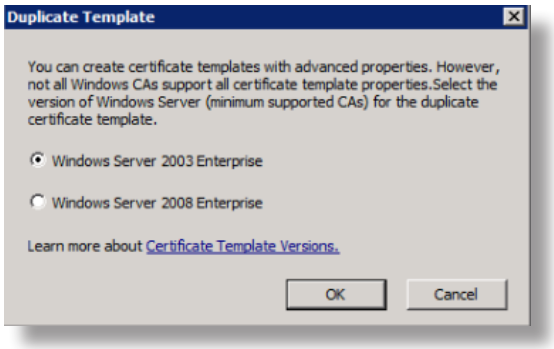
Generating an ISV Proxy Certificate

Step 1: Create a Certificate Template

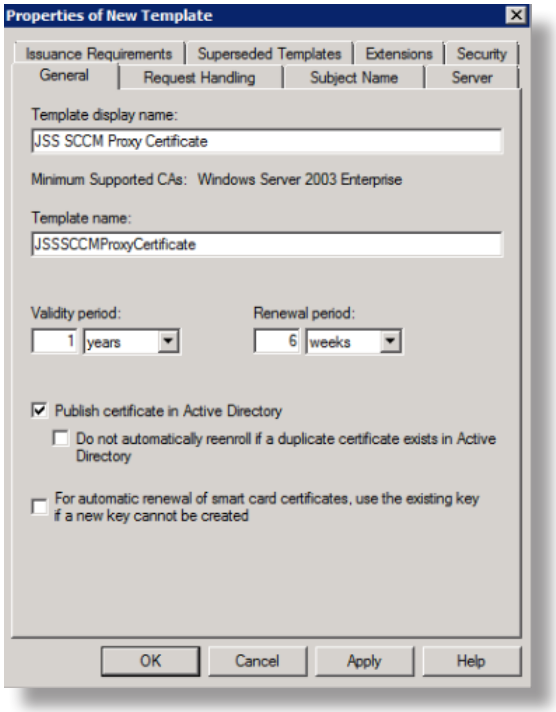
1. On a Windows computer with the Certification Authority snap-in, open the Certification Authority.
2. In the Certification Authority tool, expand the certificate authority in the sidebar.
3. Right-click Certificate Templates in the sidebar and select **Manage**.



4. In the Template Manager window, right-click the Computer template and select **Duplicate Template**.
5. In the Duplicate Template dialog that appears, select the **Windows Server 2003 Enterprise** option, and then click **OK**.

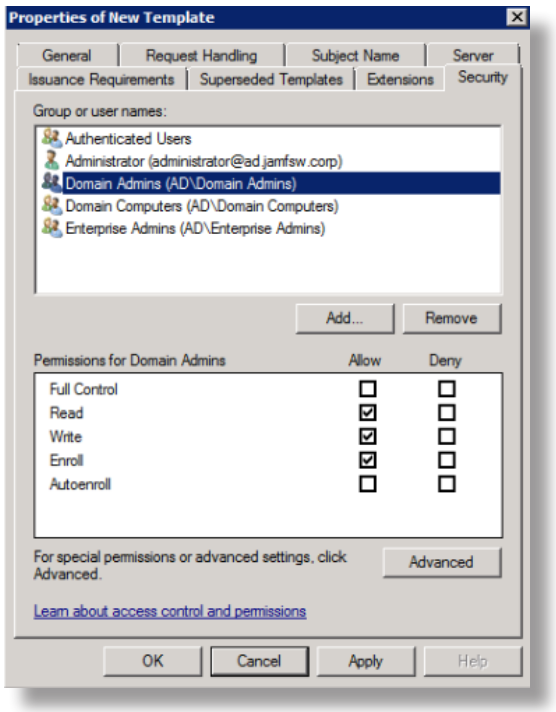


6. On the **General** tab, enter a display name for the template, and select the **Publish certificate in Active Directory** checkbox.



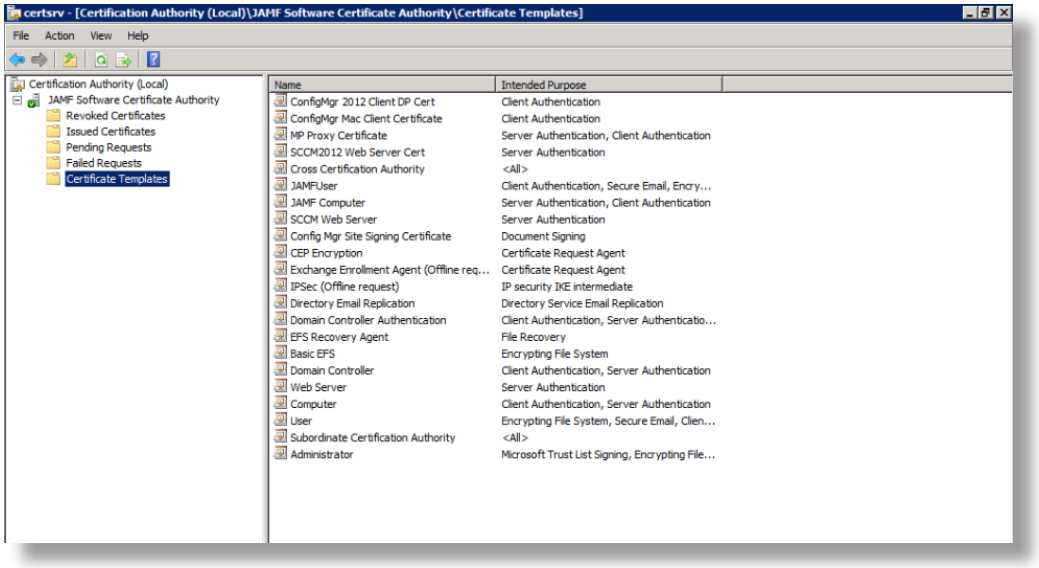
7. On the **Subject Name** tab, choose "Common name" from the **Subject name format** pop-up menu.

8. On the **Security** tab, ensure that the user that you plan to use to generate the ISV proxy certificate has read and enroll permissions, and then click **OK**.



9. Close the Template Manager window.

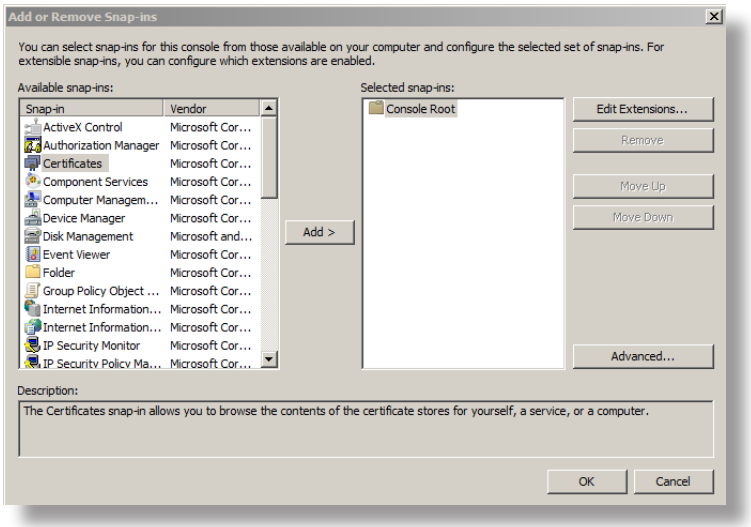
10. In the Certification Authority tool, right-click Certificate Templates in the sidebar, and select **New** > **Certificate Template to Issue**.



11. Choose the template you just created and click **OK**.

Step 2: Generate an ISV Proxy Certificate from the Template

1. On the Windows computer on which you plan to install the JSS SCCM Proxy Service, open Microsoft Management Console (MMC).
2. From the menu bar, choose **File** > **Add/Remove Snap-in**.
3. Select **Certificates** in the list of snap-ins and click the **Add** button.



4. Select the **Computer account** option and click **Next**.
5. Select the **Local computer (the computer this console is running on)** option.

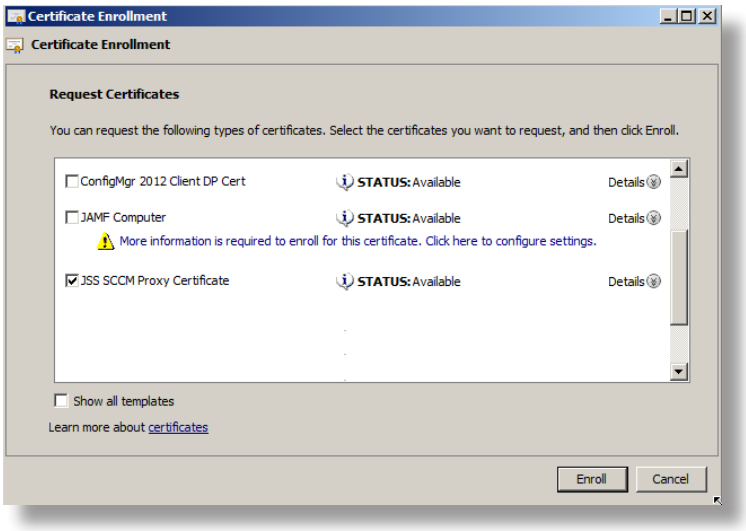
6. Click **Finish**, and then click **OK**.

   The certificate is displayed below the Console Root folder in the sidebar.

7. Expand "Certificates (Local Computer)" in the sidebar.

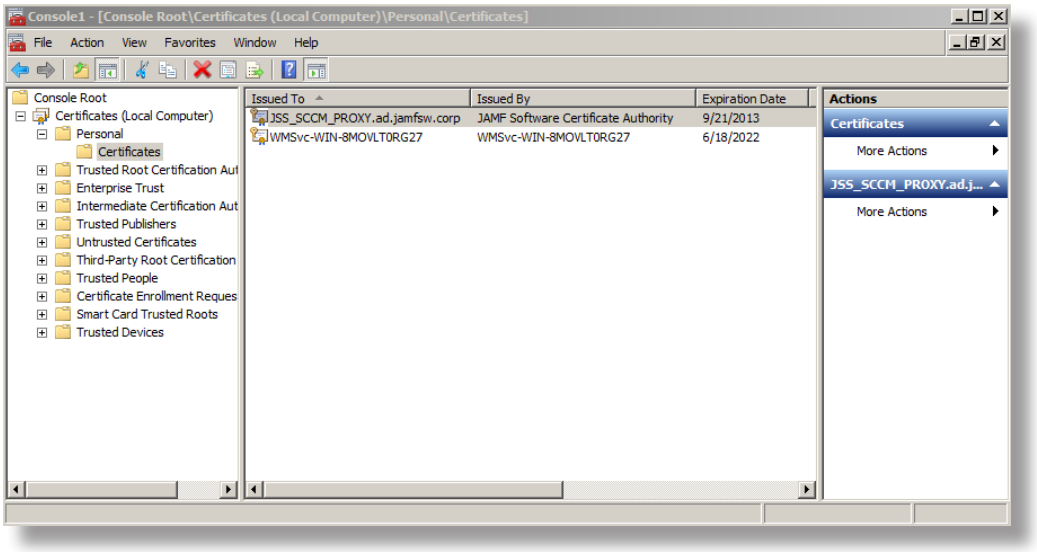
8. Right-click the Personal folder in the sidebar under "Certificates (Local Computer)", and select **All Tasks** > **Request New Certificate**.

9. Follow the onscreen instructions, and then select the checkbox next to the template you just created. Then, click **Enroll**.



> ***Note:*** If the template you just created is not listed, verify that the user you are using to generate the ISV proxy certificate has the appropriate permissions.

   The newly created certificate should appear in the list of certificates.

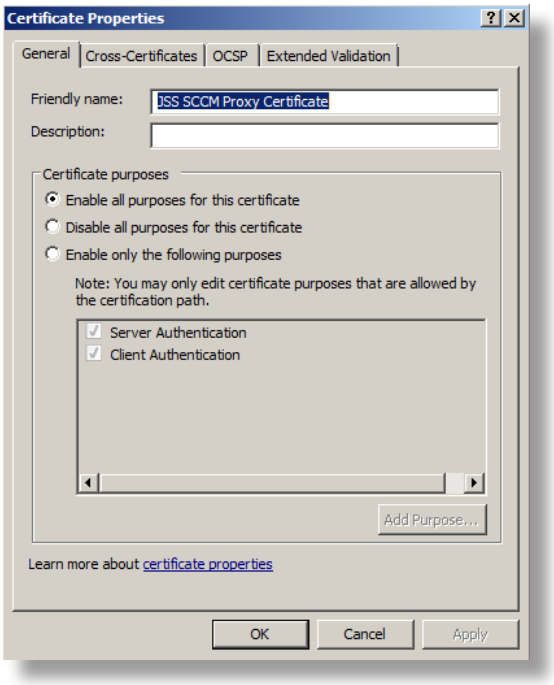


10. Double-click the newly created certificate.

11. In the dialog that appears, click the **Details** tab, and then click **Edit Properties**.

12. Enter a friendly name for the newly created certificate and click **OK**.

    It is recommended that you use "JSS SCCM Proxy Certificate" for the friendly name.



13. Click **OK** again.

14. Right-click the certificate and select **All Tasks** > **Export**.

15. Follow the onscreen instructions to export the certificate as a DER-encoded .cer file.

Step 3: Copy the ISV Proxy Certificate to the SCCM Server

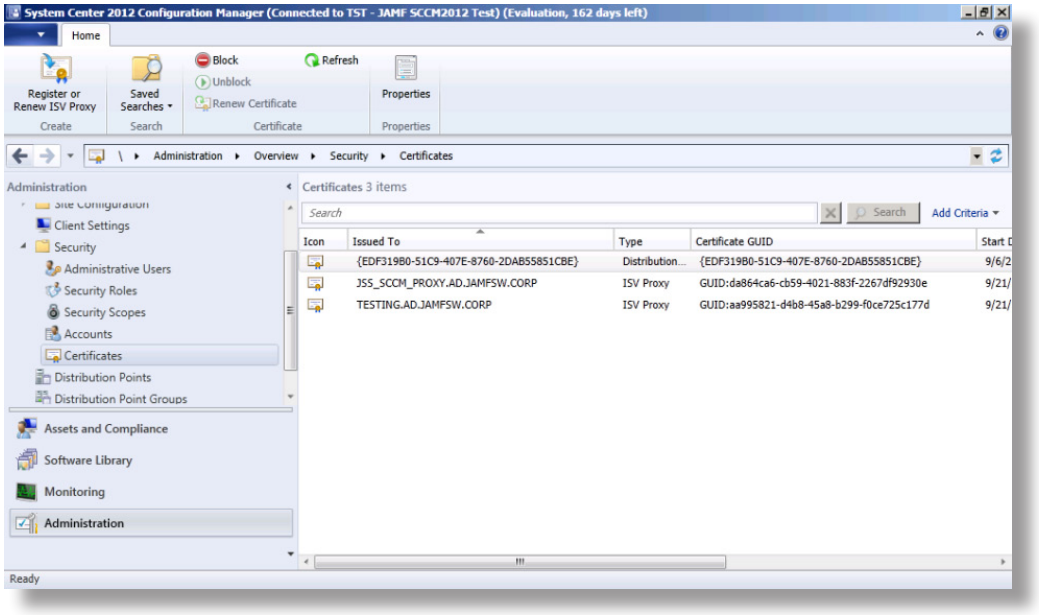
If you do not plan to install the JSS SCCM Proxy Service on the SCCM server, copy the ISV proxy certificate (.cer) to the SCCM server. If the JSS SCCM Proxy Service will be installed on the SCCM Server, skip to "Step 4: Register the ISV Proxy Certificate with SCCM".

Step 4: Register the ISV Proxy Certificate with SCCM

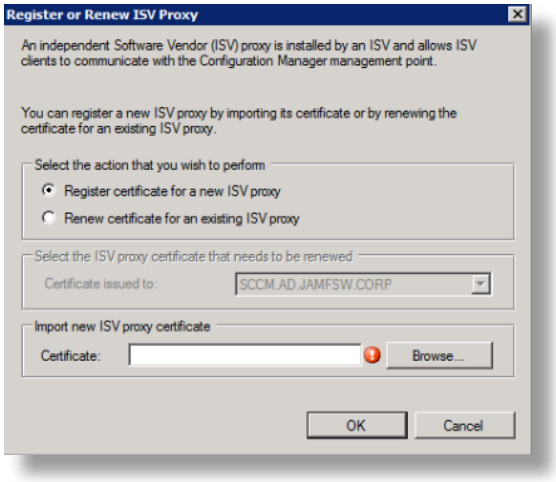
1. On the SCCM server, open SCCM and click the Administration category in the sidebar.

2. Click the disclosure triangle next to the Security folder in the sidebar.

3. Right-click Certificates and select **Register or Renew ISV Proxy**.



4. In the Register or Renew ISV Proxy dialog, select the **Register certificate for a new ISV proxy** option, and browse for the ISV proxy certificate (.cer).



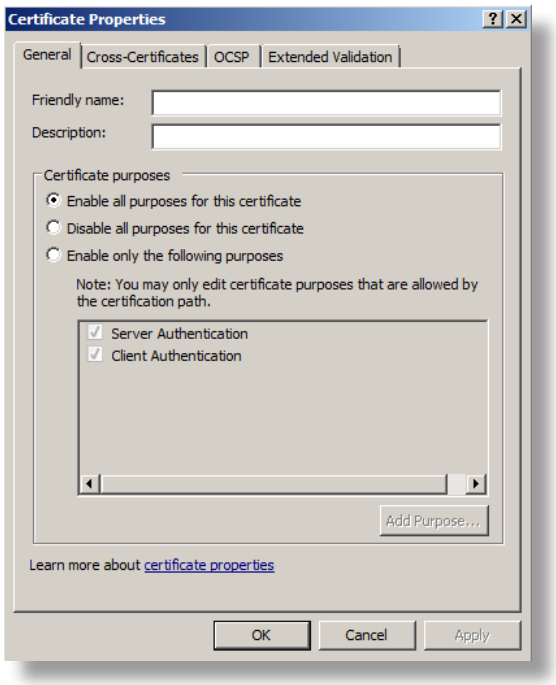
5. Click **OK** to close the Register or Renew ISV Proxy dialog.

6. Take note of the certificate GUID for the ISV proxy certificate. You will need to enter this when you set up the JSS SCCM Proxy Service.

Exporting the CA Certificate

1. On the Windows computer on which you plan to install the JSS SCCM Proxy Service, open Microsoft Management Console (MMC).
2. Expand "Certificates (Local Computer)" and the Trusted Root Certification Authorities folder in the sidebar.
3. Under the Trusted Root Certification Authorities folder in the sidebar, click the Certificates folder.
4. In the list of certificates, double-click the CA certificate.
5. In the dialog that appears, click the **Details** tab, and then click **Edit Properties**.
6. Ensure that the CA certificate has a friendly name and click **OK**.

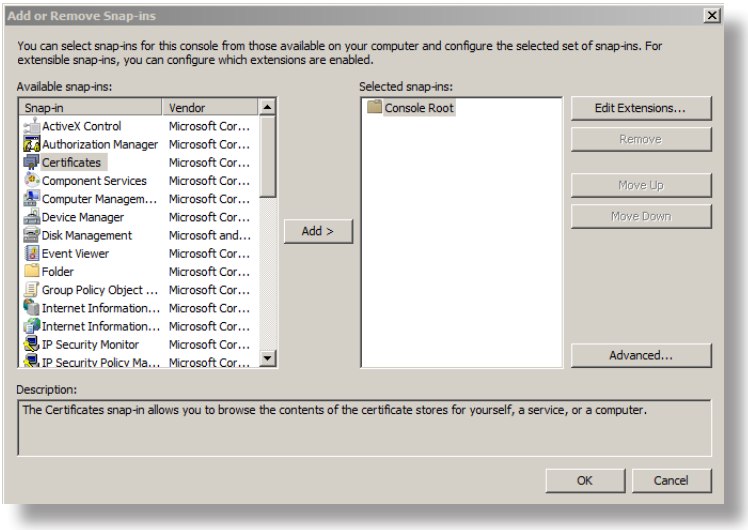
> ***Note:*** Take note of the friendly name for the CA certificate. You will need to enter this when you set up the JSS SCCM Proxy Service.



7. Click **OK** again.
8. Right-click the CA certificate and select **All Tasks** > **Export**.
9. Follow the onscreen instructions to export the certificate as a DER-encoded .cer file.

Generating a Client Certificate for the SCCM Plug-in

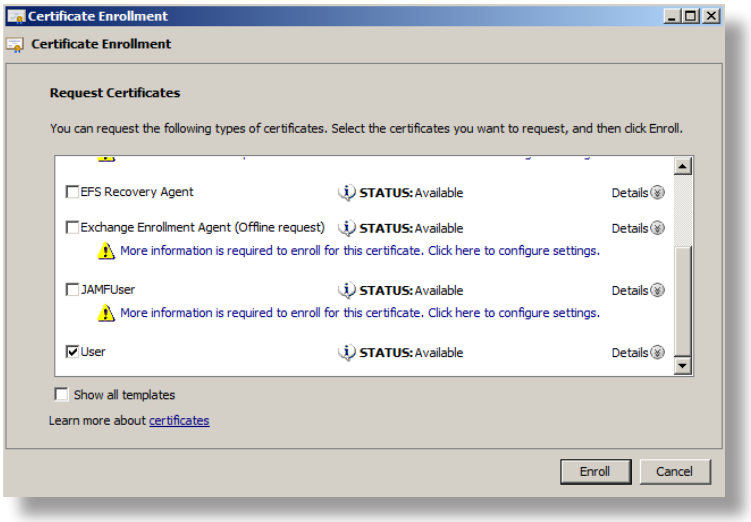
1. On a Windows computer that belongs to the same domain as the CA, open Microsoft Management Console (MMC).
2. From the menu bar, choose **File** > **Add/Remove Snap-in**.
3. Select **Certificates** in the list of snap-ins and click the **Add** button.



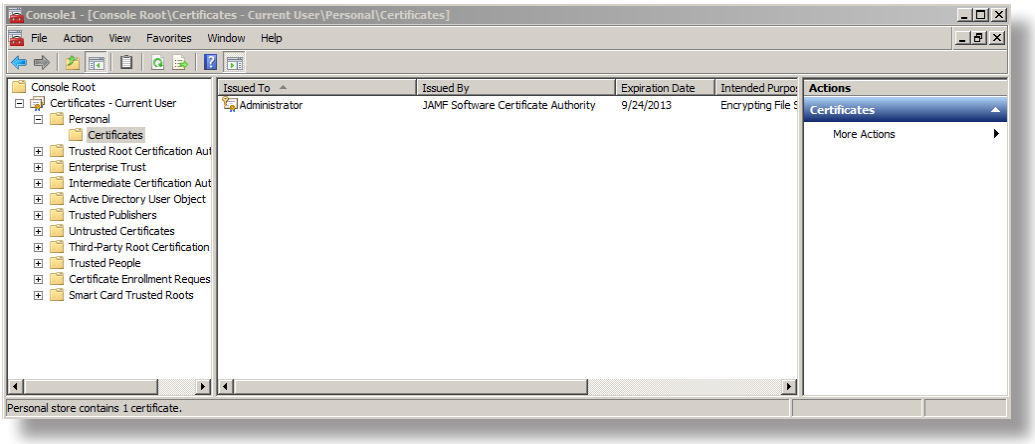
4. Select the **My User Account** option.
5. Click **Finish**, and then click **OK**.

   The certificate is displayed below the Console Root folder in the sidebar.
6. Expand "Certificates - Current User" in the sidebar.
7. Right-click the Personal folder in the sidebar under "Certificates - Current User", and select **All Tasks** > **Request New Certificate**.

8. Follow the onscreen instructions and select the checkbox next to the "User" template. Then, click **Enroll**.

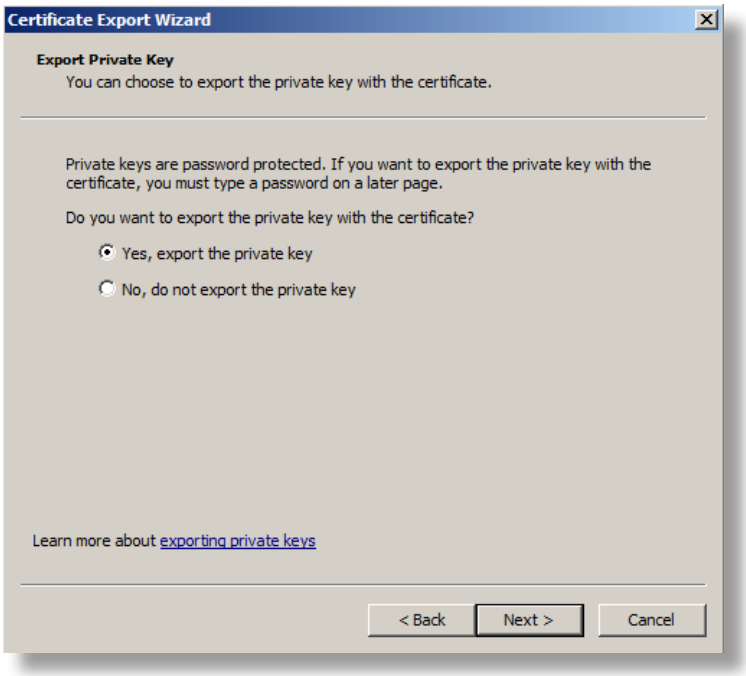


The newly created certificate should appear in Personal folder in the list of certificates.



9. Right-click the newly created certificate and select **All Tasks** > **Export**.
10. Click **Next** to proceed.

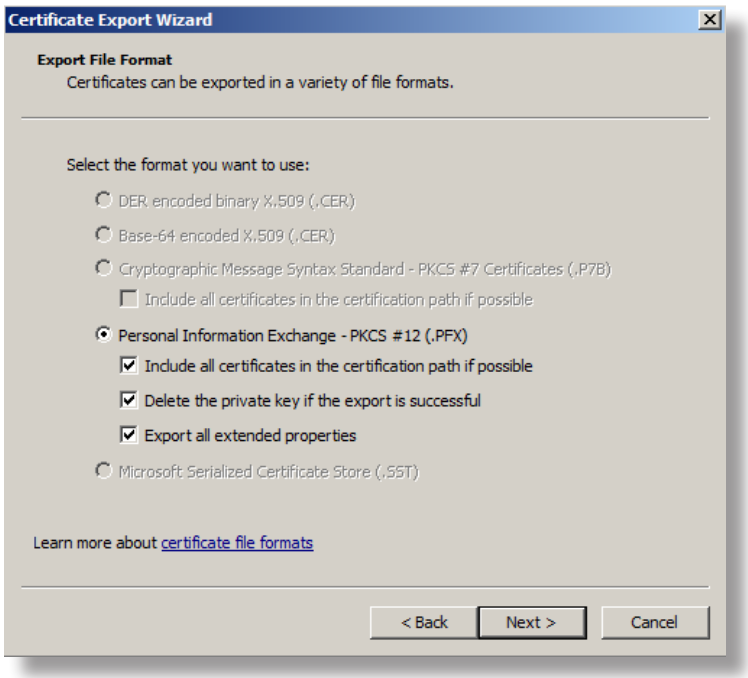
11. Select the **Yes, export the private key** option, and then click **Next**.



12. Select the following options:

- **Include all certificates in the certification path if possible**
- **Delete the private key if the export is successful**
- **Export all extended properties**

Then, click **Next**.



13. Enter and verify a password for the certificate, and then click **Next**.
14. Complete the onscreen instructions to export the certificate as a .pfx file.

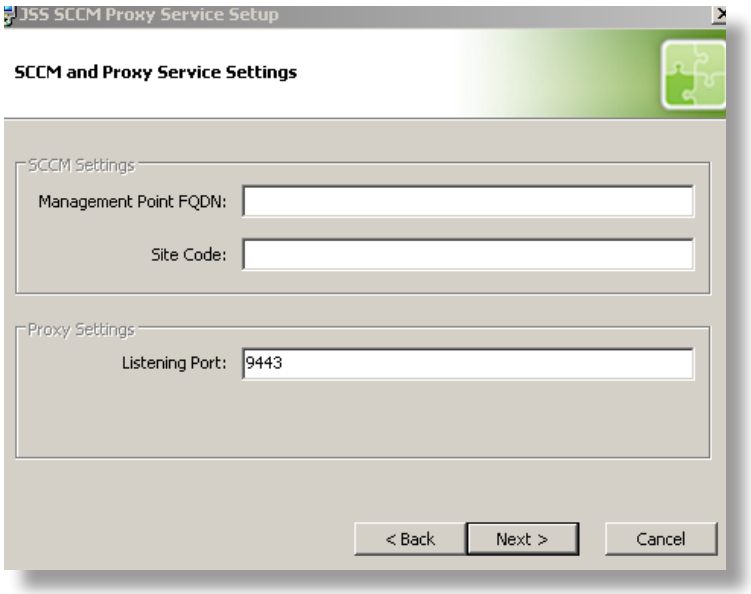
Copying the Client Certificate and CA Certificate to the JSS Host Server

1. Copy the client certificate (.pfx) to the server that hosts the JSS.
   It is recommended that you put the client certificate in `/Library/JSS/`.
2. Copy the CA certificate (.cer) to the server that hosts the JSS.
   It is recommended that you put the CA certificate in `/Library/JSS/`.
3. Ensure that the account used to run Tomcat has read access to both certificate files.

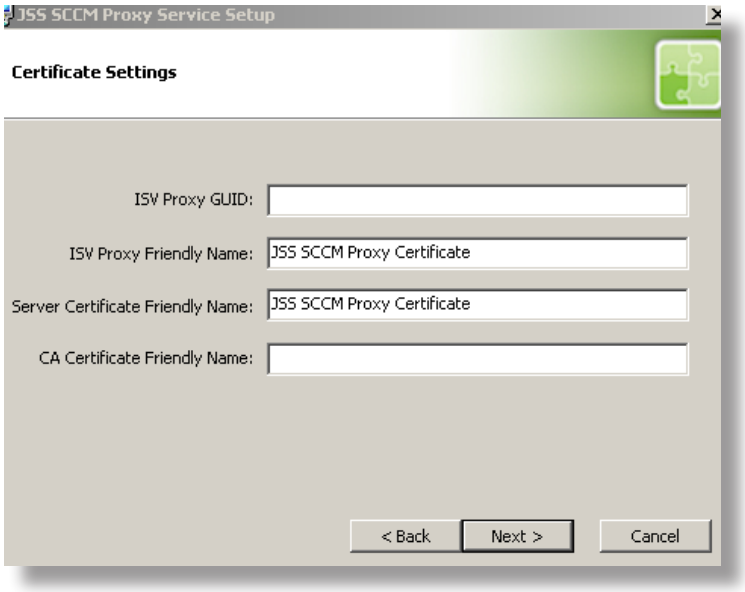
Setting Up the JSS SCCM Proxy Service

> ***Note:*** Before completing this procedure, you may need to make a firewall exception for port 9443 on the computer on which you plan to install the JSS SCCM Proxy Service.

1. On a Windows computer with Microsoft .NET Framework 4, extract the SSCM plug-in ZIP file.
2. Double-click the JSS SCCM Proxy Installer .msi file in the SSCM plug-in directory, and click **Next** to proceed.
3. Enter the fully qualified domain name (FQDN) for your SCCM management point, and your SCCM site code.



4. Enter the listening port number for the proxy and click **Next**.
5. Enter information about the ISV proxy certificate, server certificate, and CA certificate.



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

Installing the SCCM Plug-in

1. On the server that hosts the JSS, run the JSS SCCM Plug-in Installer JAR file.
   - On OS X and Linux, execute a command similar to the following:

     ```
     sudo java -jar /path/to/JSS_SCCM_PluginInstaller.jar
     ```

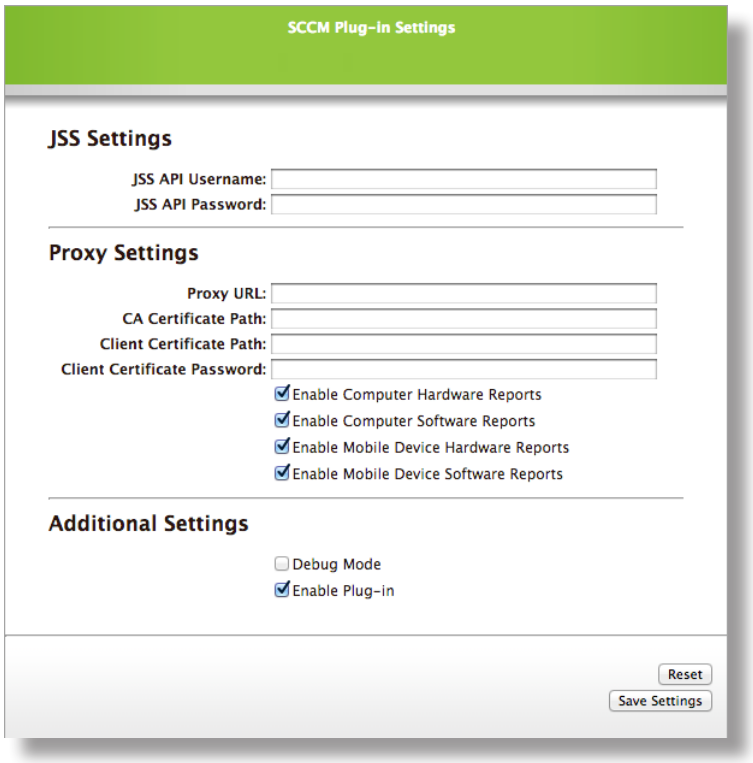
   - On Windows, run Command Prompt as an administrator and execute a command similar to the following:

     ```
     java -jar /path/to/JSS_SCCM_PluginInstaller.jar
     ```

2. When prompted to restart Tomcat, type "y" to proceed.

Configuring the SCCM Plug-in

1. Log in to the JSS with a web browser.
2. Navigate to https://jss.mycompany.corp:8443/SCCMPluginSettings.html.
3. Enter credentials for a JSS user account with API privileges to read computers and mobile devices.



4. Enter the URL for the proxy.

   The URL must include the correct protocol and domain, and the port that you entered when you set up the JSS SCCM Proxy Service. For example, "https://sccm.mycompany.corp:9443".

5. Enter the path to the CA certificate.

   For example, "/Library/JSS/CAcertificate.cer".

6. Enter the path to the client certificate.

   For example, "/Library/JSS/clientCertificate.pfx".

7. Enter the password for the client certificate.
8. Choose which inventory information you want to send to SCCM.
9. Select the **Enable Plug-in** checkbox, and then click **Save Settings**.

Troubleshooting the SCCM Plug-in

The log for the SCCM plug-in is located in one of the following locations on the server that hosts the JSS:

- **OS X:** `/Library/JSS/Logs/`
- **Linux:** `/usr/local/jss/logs/`
- **Windows:** `C:\Program Files\JSS\Logs\`

To enable Debug mode for the SCCM plug-in:

1. Log in to the JSS with a web browser.
2. Navigate to https://jss.mycompany.corp:8443/SCCMPluginSettings.html.
3. Select the **Debug Mode** checkbox, and then click **Save Settings**.

Troubleshooting the JSS SCCM Proxy Service

The log for the JSS SCCM Proxy Service is located in `C:\Program Files (x86)\JAMF Software\JSS SCCM Proxy Service\` on the computer with the JSS SCCM Proxy Service. This log allows you to configure logging levels that log varying amounts of information. 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

To configure logging for the JSS SCCM Proxy Service:

1. On the computer with the JSS SCCM Proxy Service, navigate to `C:\Program Files (x86)\JAMF Software\JSS SCCM Proxy Service\` and open the `settings.xml` file with a text editor.
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.

4. Open Services Management Console.
5. Right-click the JSS SCCM Proxy Service and select **Restart**.

Release History

Version	Changes
v2.0	▪ Added compatibility with the JSS Conduit v2.0. ▪ Decreased memory usage. ▪ Added the ability to export inventory information for secondary MAC addresses, additional disk partitions, and logical disk sizes. ▪ Fixed an issue that caused the SCCM plug-in to export inaccurate data for computers that don't have unique computer names in SCCM.
v3.0	▪ 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. ▪ Added support for Microsoft's SCCM 2012. ▪ Added support for communication over HTTPS.

Known Issues

The following issues are known in the SCCM plug-in v3.0:

- When you upgrade the JSS, you need to re-install the SCCM plug-in.
- Mobile device and computer names that are updated in the JSS are not updated in SCCM.
- The SCCM plug-in can be used with English and French language packs only.