Certificate Issues

To access SQL Inventory Manager over HTTPS with a self signed certificate you may need to enable SSL on SQL Inventory Manager 2.6 REST service, and add a certificate.

Using a self-signed certificate

⚠ Using a self-signed certificate only works with both IDERA Dashboard and SQL Inventory Manager installed on a local machine.

Creating a self-signed certificate

Before binding a certificate to Inventory Manager 2.6, you need to first add a certificate for IDERA Dashboard. For information on how to create a self signed certificate for Dashboard refer to Resolving the certificate error message.

ⓘ

Important

Make sure that the self-signed certificate created with the steps described above, and the keystore keypair are created to have each server listed as the common name.

Binding a certificate to Inventory Manager 2.6

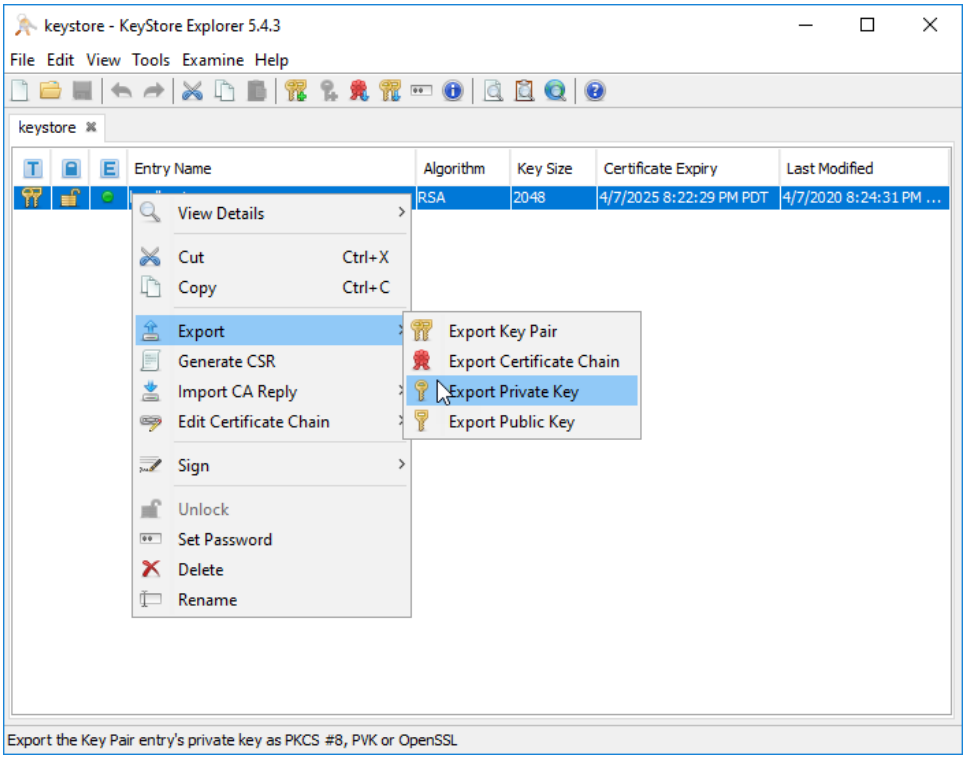
⚠

Before you begin

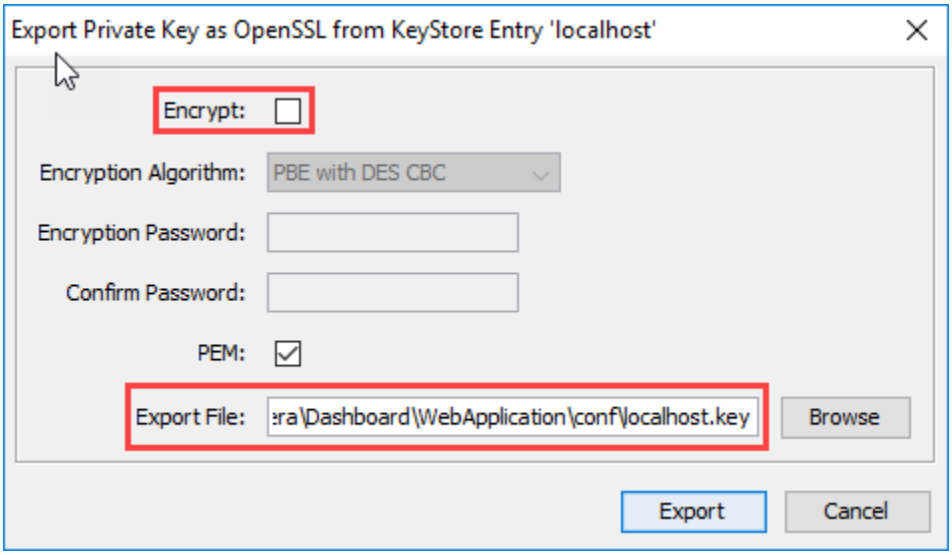
Make sure you perform the instructions in Resolving the certificate error message.

To bind a certificate follow the instructions below:

1. Launch the keyStore Explorer application as an Administrator.
2. Open the keystore file used for the IDERA Dashboard. When prompted for a password, enter *password,* and click **OK**.
3. Right-click on the keypair and select *Export> Export Private Key*.



4. On the **Export Private Key Type** window, select *OpenSSL*, and click **OK**.
5. On the **Export Private Key as OpenSSL from Keystore Entry** window, deselect the *Encri pt* option, update the *Export File* if needed, and click **OK**.



> ⚠ Steps 6 - 9 can be performed on a different computer. These steps are related to the OpenSSL tool, which is not required to be intalled on the server hosting the IDERA products.

6. Install OpenSSL.

> ⓘ You can find a few options available to obtain the software at https://wiki.openssl.org/index.php/Binaries.

7. Once you complete the installation of OpenSSl, run the Command Promt as Administrator.
8. Change the directory to the bin folder within the installation directory of OpenSSL. Enter the following command:

```
cd "C:\Program Files\OpenSSL-Win64\bin"
```

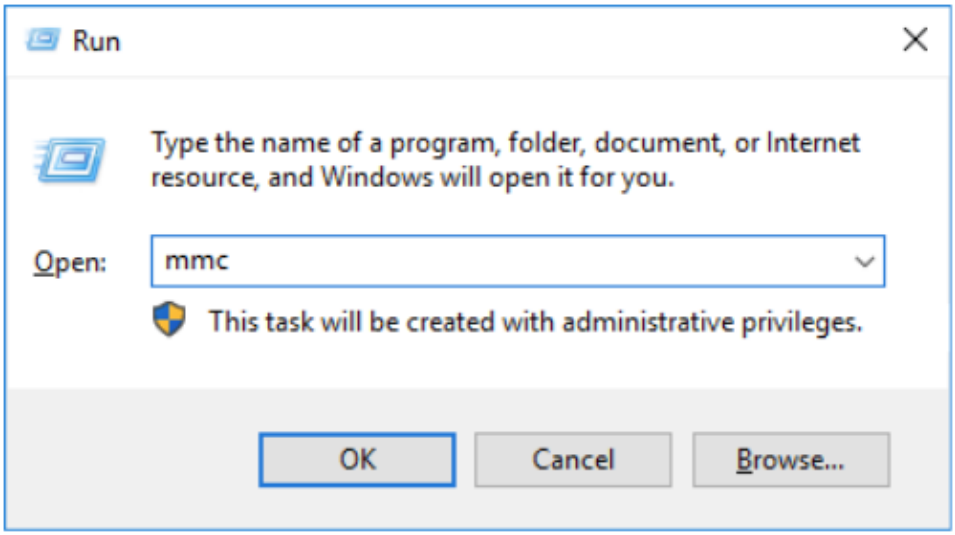
9. Use the following command as an example to generate the PFX key using the private key and certificate that was previously created.

```
openssl pkcs12 -export -out <file path to the new personal
information exchange file>.pfx -inkey <file path path to private
key>.key -in <file path to certificate>.cer
```

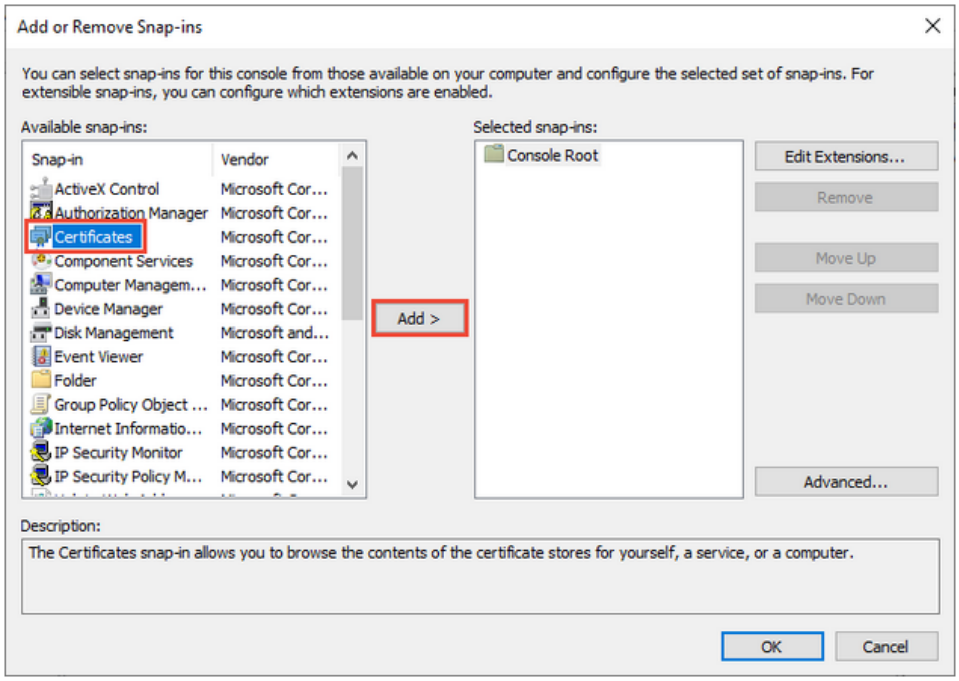
Execute the command, and when prompted for a password, enter *password* for both the export password and the verification password. You will be able to see the newly created PFX key.

> ⚠ The following steps must be perfomed on the server hosting the IDERA Dashboard and the IDERA SQL Inventory Manager.

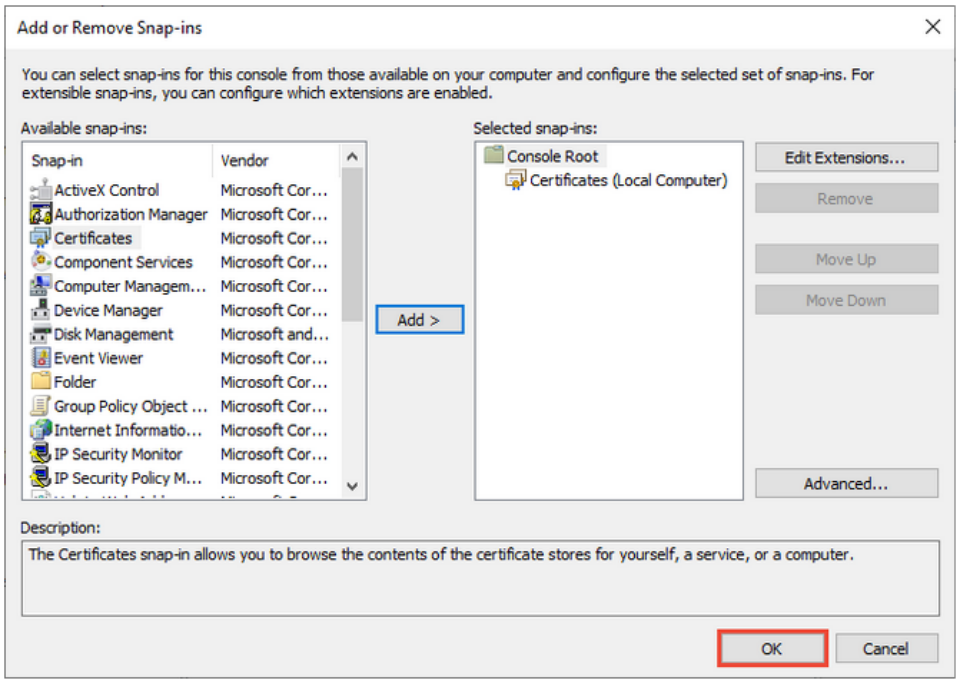
10. Open the Microsoft Management Console (MMC) and load the Certificates snap-in.
a. Select **Run** from the **Start** menu, enter *mmc*, and click **OK**.



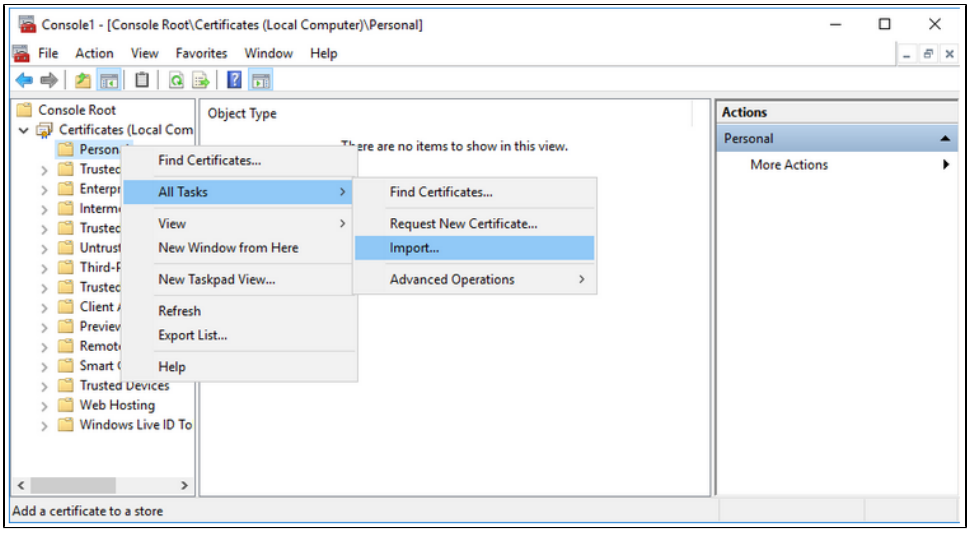
b. On the **MMC** window, from the File menu, select *Add/Remove Snap-in*. The Add or Remove Snap-in windows displays.
c. From the *Available snap-ins* list, choose **Certificates**, then select **Add**.



d. In the **Certificate snap-in** window, select **Computer Account**, and click **Next**.
e. In the **Select Computer** window, leave **Local computer** selected, and click **Finish**.
f. In the **Add or Remove Snap-in** window, select **Ok**.



11. Expand *Certificates* and locate the **Personal** folder.
12. Right-click on the **Personal** folder and select *All Tasks> Import*.



13. Use the *Certificate Import Wizard* to import the PFX file that was previously created.
14. Retrieve the thumbprint of the imported PFX key.
    a. Double-click on the imported PFX key.
    b. On the **Certificate** window, go to the *Details* tab.
    c. Scroll through the list of fields and click **Thumbprint**.
    d. Copy the hexadecimal characters from the box. If this thumbprint is used in code for the `x509FindType`, remove the spaces between the hexadecimal numbers.

> ⚠ The GUID for the IDERA SQL Inventory Manager is "{af5a4e5f-435c-4333-ab2b-cac62e140248}".

15. Run the Command Promt as an Administrator and delete existing bindings to the IDEA SQL Inventory Manager Rest Service port 9276, executing the following command:

```
netsh http delete ssl 0.0.0.0:9276
```

16. Run the Command Promt as an Administrator and bind the new PFX key by using the commands below.

```
netsh
http
add ssl ipport=0.0.0.0:9276 certhash=<thumbprint of the PFX key
(with spaces removed)> appid="{af5a4e5f-435c-4333-ab2b-
cac62e140248}" clientcertnegotiation=enable
```

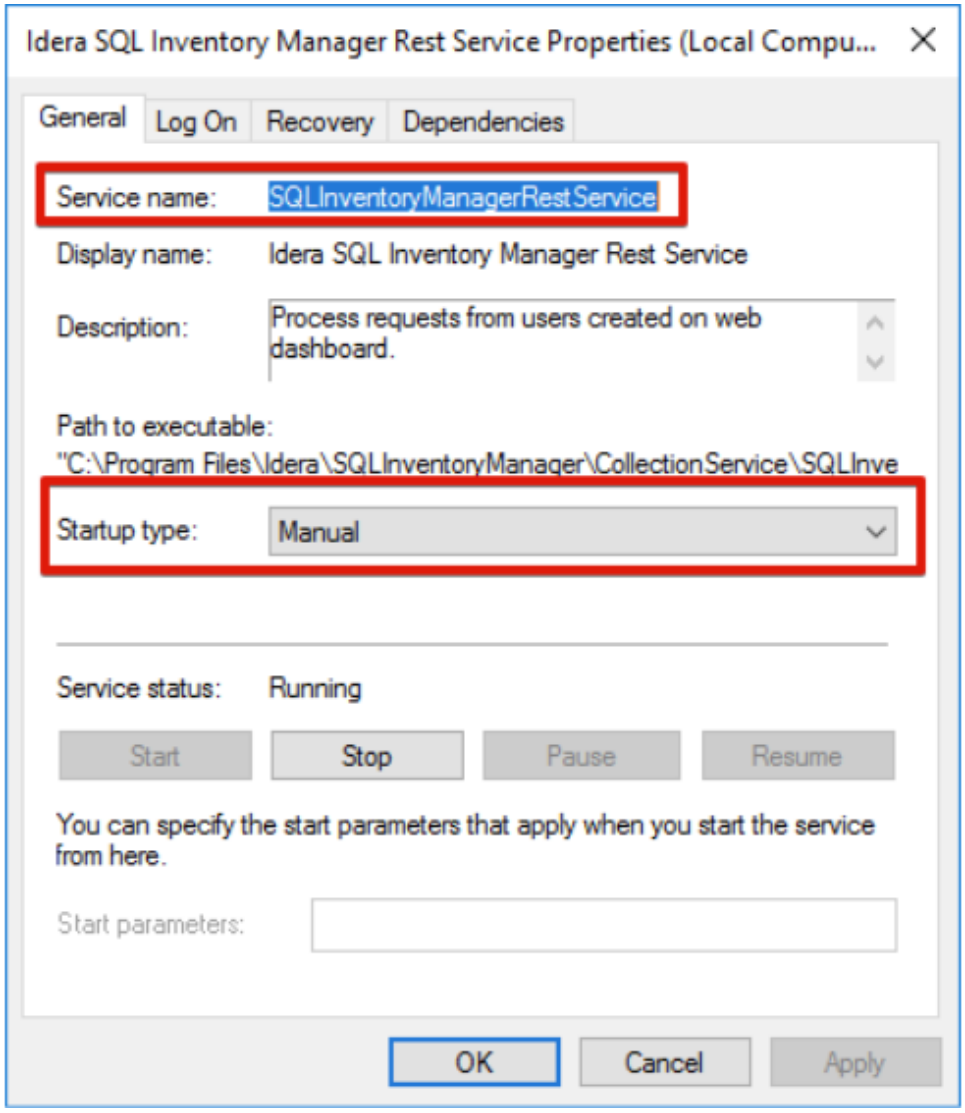
17. You may create a BAT file to run on startup of Windows, and make sure the certificate is applied when the server starts up, if the service is restarted. The content of the BAT file is the following:

    NET START SQLInventoryManagerRestService
    TIMEOUT /T 2

netsh http delete ssl 0.0.0.0:9276

netsh http add sslcert ipport=0.0.0.0:9276
certhash=<thumbprint of the PFX key (with spaces removed)>
appid="{af5a4e5f-435c-4333-ab2b-cac62e140248}"

Configure the service to have a *Manual* start up so the BAT file will start the service.



To add a certificate to the Trusted Root Certification Authorities store in Windows, refer to Manage Trusted Root Certificates.