

# Configure the CA Certificate for the SnapCenter SAP HANA Plug-ins service on Linux host

SnapCenter Software

Nirupama Sriram, Soumik Das June 10, 2021

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## Configure the CA Certificate for the SnapCenter SAP HANA Plug-ins service on Linux host

You should manage the password of the custom plug-ins keystore and its certificate, configure the CA certificate, configure root or intermediate certificates to the custom plug-ins trust-store, and configure CA signed key pair to custom plug-ins trust-store with SnapCenter Custom Plug-ins service to activate the installed digital certificate.

Custom plug-ins uses the file 'keystore.jks', which is located at /opt/NetApp/snapcenter/scc/etc both as its trust-store and key-store.

## Manage password for custom plug-in keystore and alias of the CA signed key pair in use

## **Steps**

- You can retrieve custom plug-in keystore default password from custom plug-in agent property file.
   It is the value corresponding to the key 'KEYSTORE PASS'.
- 2. Change the keystore password:

```
keytool -storepasswd -keystore keystore.jks
```

3. Change the password for all aliases of private key entries in the keystore to the same password used for the keystore:

```
keytool -keypasswd -alias "alias_name_in_cert" -keystore keystore.jks
```

Update the same for the key KEYSTORE\_PASS in agent.properties file.

4. Restart the service after changing the password.



Password for custom plug-in keystore and for all the associated alias password of the private key should be same.

## Configure root or intermediate certificates to custom plugin trust-store

You should configure the root or intermediate certificates without the private key to custom plug-in trust-store.

#### Steps

- Navigate to the folder containing the custom plug-in keystore: /opt/NetApp/snapcenter/scc/etc.
- Locate the file 'keystore.jks'.
- 3. List the added certificates in the keystore:

```
keytool -list -v -keystore keystore.jks
```

4. Add a root or intermediate certificate:

```
keytool -import -trustcacerts -alias myRootCA -file
/root/USERTrustRSA_Root.cer -keystore keystore.jks
```

- 5. Restart the service after configuring the root or intermediate certificates to custom plug-in trust-store.
  - You should add the root CA certificate and then the intermediate CA certificates.

## Configure CA signed key pair to custom plug-in trust-store

You should configure the CA signed key pair to the custom plug-in trust-store.

### Steps

- Navigate to the folder containing the custom plug-in keystore /opt/NetApp/snapcenter/scc/etc.
- 2. Locate the file 'keystore.jks'.
- 3. List the added certificates in the keystore:

```
keytool -list -v -keystore keystore.jks
```

4. Add the CA certificate having both private and public key.

```
keytool -importkeystore -srckeystore /root/snapcenter.ssl.test.netapp.com.pfx
-srcstoretype pkcs12 -destkeystore keystore.jks -deststoretype JKS
```

5. List the added certificates in the keystore.

```
keytool -list -v -keystore keystore.jks
```

- 6. Verify that the keystore contains the alias corresponding to the new CA certificate, which was added to the keystore.
- 7. Change the added private key password for CA certificate to the keystore password.

Default custom plug-in keystore password is the value of the key KEYSTORE\_PASS in agent.properties file.

```
keytool -keypasswd -alias "alias_name_in_CA_cert" -keystore keystore.jks
```

8. If the alias name in the CA certificate is long and contains space or special characters ("\*",","), change the alias name to a simple name:

```
keytool -changealias -alias "long_alias_name" -destalias "simple_alias"
-keystore keystore.jks
```

9. Configure the alias name from CA certificate in agent.properties file.

Update this value against the key SCC\_CERTIFICATE\_ALIAS.

10. Restart the service after configuring the CA signed key pair to custom plug-in trust-store.

## Configure certificate revocation list (CRL) for SnapCenter Custom Plug-ins

### About this task

- SnapCenter Custom Plug-ins will search for the CRL files in a pre-configured directory.
- Default directory for the CRL files for SnapCenter Custom Plug-ins is 'opt/NetApp/snapcenter/scc/etc/crl'.

### Steps

1. You can modify and update the default directory in agent.properties file against the key CRL\_PATH.

You can place more than one CRL file in this directory. The incoming certificates will be verified against each CRL.

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