## **How to Sign JARS**

http://wiki.plexinfo.net/?title=How to sign JAR files

http://sitysat.blogspot.com/2010/01/automatically-signing-jar-files-in.html

http://docs.oracle.com/javase/6/docs/technotes/guides/jar/jar.html#Signed%20JAR%20File

```
nsglnxdev1.micron.com:/home/ftrujillo [189]$ keytool -genkey -help
keytool -genkeypair [OPTION]...
Generates a key pair
Options:
 -alias <alias>
                               alias name of the entry to process
 -keyalg <keyalg>
                               key algorithm name
 -keysize <keysize>
                               key bit size
 -sigalg <sigalg>
                               signature algorithm name
 -destalias <destalias>
                               destination alias
 -dname <dname>
                               distinguished name
 -startdate <startdate>
                               certificate validity start date/time
 -ext <value>
                               X.509 extension
 -validity <valDays>
                               validity number of days
 -keypass <arg>
                               key password
 -keystore <keystore>
                               keystore name
 -storepass <arg>
                               keystore password
 -storetype <storetype>
                               keystore type
 -providername <providername>
                               provider name
 -providerclass  provider class name
                               provider argument
 -providerarg <arg>
 -providerpath <pathlist>
                               provider classpath
                               verbose output
 -protected
                               password through protected mechanism
nsglnxdev1.micron.com:/home/ftrujillo [190]$ keytool -genkey -alias FJTJavaSign -keystore
FJTKeyStore -validity 36500
What is your first and last name?
  [Unknown]: Francis Trujillo
What is the name of your organizational unit?
  [Unknown]: Micron Technology, Non-Volatile Group ProdEng
What is the name of your organization?
  [Unknown]: NVEProdEng
What is the name of your City or Locality?
  [Unknown]: Boise
What is the name of your State or Province?
  [Unknown]: Idaho
What is the two-letter country code for this unit?
  [Unknown]: US
Is CN=Francis Trujillo, OU="Micron Technology, Non-Volatile Group ProdEng", O=NVEProdEng, L=Boise, ST=Idaho,
C=US correct?
  [no]: y
Enter key password for <FJTJavaSign>
       (RETURN if same as keystore password):
nsglnxdev1.micron.com:/home/ftrujillo [192]$ file FJTKeyStore
FJTKeyStore: Java KeyStore
nsglnxdev1.micron.com:/home/ftrujillo [193]$ ls -al FJTKeyStore
-rw-r--r-- 1 ftrujillo ftrujillo 1386 Jun 3 13:38 FJTKeyStore
nsglnxdev1.micron.com:/home/ftrujillo/NetBeansProjects/0baGUI/dist [206]$ jarsigner -keystore
~/FJTKevStore ObaGUI.jar FJTJavaSign
Enter Passphrase for keystore:
```

```
nsglnxdev1.micron.com:/home/ftrujillo/NetBeansProjects/0baGUI/dist [213]$ jarsigner -verify -verbose -
keystore ~/FJTKeyStore ObaGUI.jar -certs
s k
        3134 Tue Jun 03 13:53:40 MDT 2014 META-INF/MANIFEST.MF
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        3046 Tue Jun 03 13:53:40 MDT 2014 META-INF/FJTJAVAS.SF
        1181 Tue Jun 03 13:53:40 MDT 2014 META-INF/FJTJAVAS.DSA
           0 Thu May 29 09:28:08 MDT 2014 META-INF/
           0 Thu May 29 09:28:06 MDT 2014 org/
           0 Thu May 29 09:28:06 MDT 2014 org/micron/
           0 Thu May 29 09:28:06 MDT 2014 org/micron/nve/
           0 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/
        1501 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/CustomTableCellRenderer.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        1216 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/CustomTableModel$RegCellData.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
smk
        5041 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/CustomTableModel.class
     X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
smk
        2338 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/DefaultSamplePlan.class
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fitiavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        1565 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/IBMSamplePlan.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$1.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fitiavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         786 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$10.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         556 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$11.class
smk
     X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        3667 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$12$1.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
smk
        1316 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$12.class
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
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smk
        3882 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$13$1.class
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        1408 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$13.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        1646 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$14$1.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        1363 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$14.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
        1101 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$2.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$3.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$4.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$5.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
smk
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$6.class
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
smk
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$7.class
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fitiavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
         752 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$8.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
smk
         784 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI$9.class
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
       32536 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MainUI.class
smk
      X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho,
C=US (fjtjavasign)
      [certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]
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smk 2014 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MyDefaultTableModel.class

X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho, C=US (fjtjavasign)

[certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]

smk 2857 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/MyListener.class

X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho, C=US (fjtjavasign)

[certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]

smk 163 Thu May 29 09:28:06 MDT 2014 org/micron/nve/oba/QASamplePlan.class

X.509, CN=Francis Trujillo, OU="Micron Technology, Inc.", O=NVE Product Engineering, L=Boise, ST=Idaho, C=US (fjtjavasign)

[certificate is valid from 6/3/14 1:46 PM to 5/10/14 1:46 PM]

s = signature was verified

m = entry is listed in manifest

k = at least one certificate was found in keystore

i = at least one certificate was found in identity scope

jar verified.