Installing Certificates Java and .Net

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- The first working session with PJM SME's was held Sept. 26. The standard process for adding the certificate was reviewed and questions were answered.

- The Oct. 23 session is intended for application developers and other IT personnel who will be performing the certificate work.

- The certificates will be replaced in train and production environment on the below dates.

    – **Train**   **November 19, 2024**

    – **Production**   **December 3, 2024**

- The intermediate/root certificates are available now. Please work with your IT or application team to have it **appended** to the existing certificates in the SSL Trust store. The current certificates should **not** be replaced at this time.

  - Root: https://www.digicert.com/kb/digicert-root-certificates.htm#roots

  - Intermediate: https://www.digicert.com/kb/digicert-root-certificates.htm#intermediates

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Working Sessions										◆ Sep 26	◆ Oct 23		
Certificate Replacement												◆ Train: Nov. 19	◆ Prod: Dec. 3

Legend
- ● Start Date
- ◆ End Date

- [Download](#) the new DigiCert Intermediate Certificate

- Save the file with the name intermediate.pem. Make a note of the location of the file for future reference. For example, c:\windows\temp

- Next, [download](#) the root certificate

- Save the file with the name root.pem. Make a note of the location of the file for future reference. For example, c:\windows\temp

To import the certificate files for Java applications and utilities, find where Java is installed.

- If you already know where Java is installed, you can ignore the next steps and skip to step 2.

- On a Unix system, you can run one of these commands - "which java", "echo $JAVA_HOME" or "locate java".

- On a Windows system, you can run the "echo %JAVA_HOME%" command.

- For either of these, make a note of the path to the Java installation.

Once you have the path to the Java installation, run the following commands to install the certificates:

- cd <path_to_java_from_step_1>

- cd bin

- keytool -import -alias GeoTrustTLSRSACAG1 -trustcacerts -file <path_to_intermediate.pem> -keystore <path_to_java_from_step_1>\jre\lib\security\cacerts

  Note: for unix systems you may need to execute this as ./keytool

- keytool -import -alias DigiCertGlobalRootG2 -trustcacerts -file <path_to_root.pem> -keystore <path_to_java_from_step_1>\jre\lib\security\cacerts

  Note: For both of these commands, you will be prompted to enter the keystore password: enter your configured keystore password (the default is 'changeit')

Note: If you see an error "already exists," this means you already have the certificates, and can skip that

To import the certificate files for .NET applications:

- Click **Start**, click **Run**, type certmgr.msc, and then click **OK**.

  Note: You may need administrative permissions to open certificate manager in Microsoft Management Console snap-in.

Expand Certificates (local computer), expand Trusted Root Certification Authorities and then click **Certificates**:
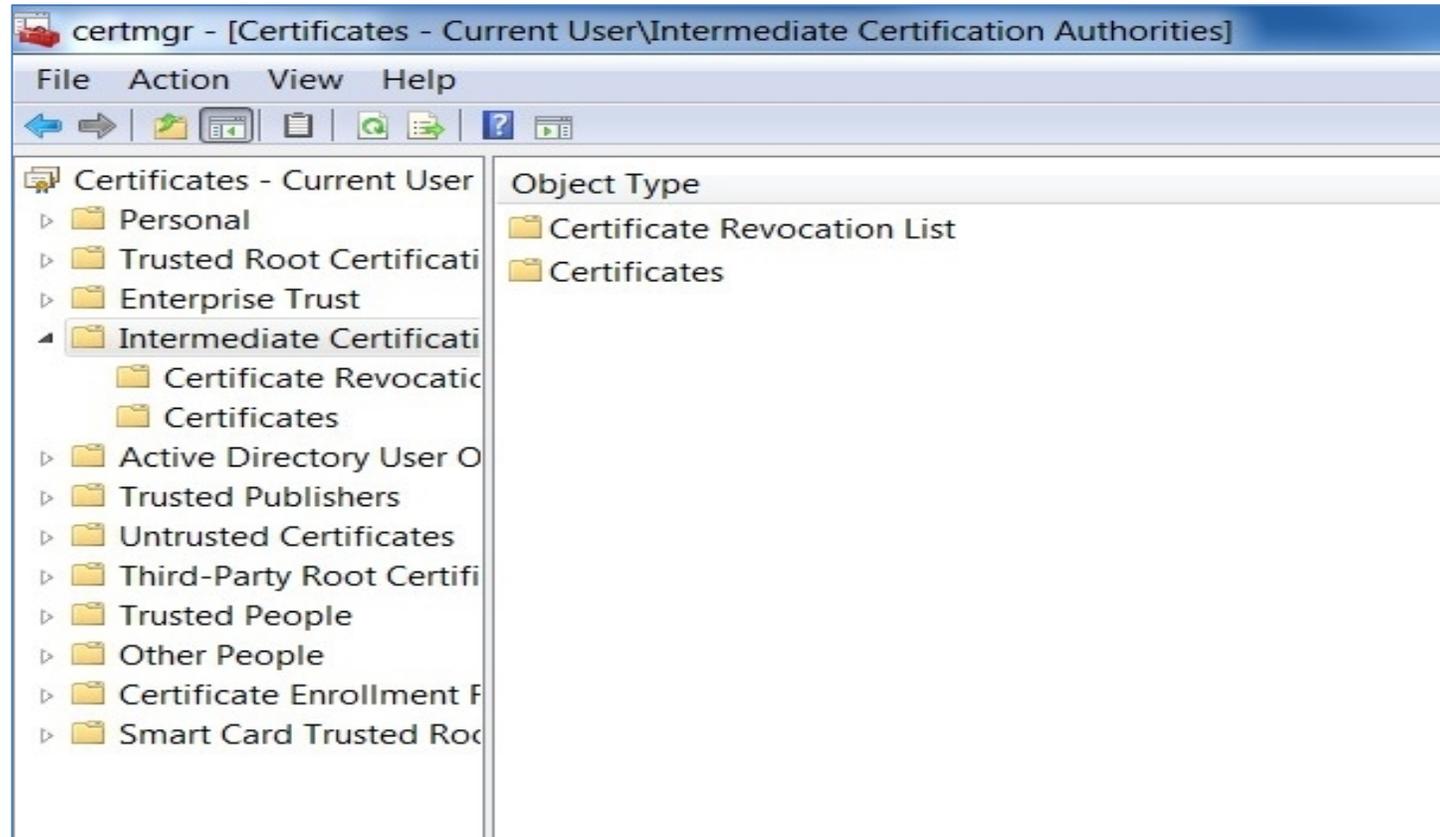
Confirm the intermediate certificate is not already listed – DigiCert SHA2
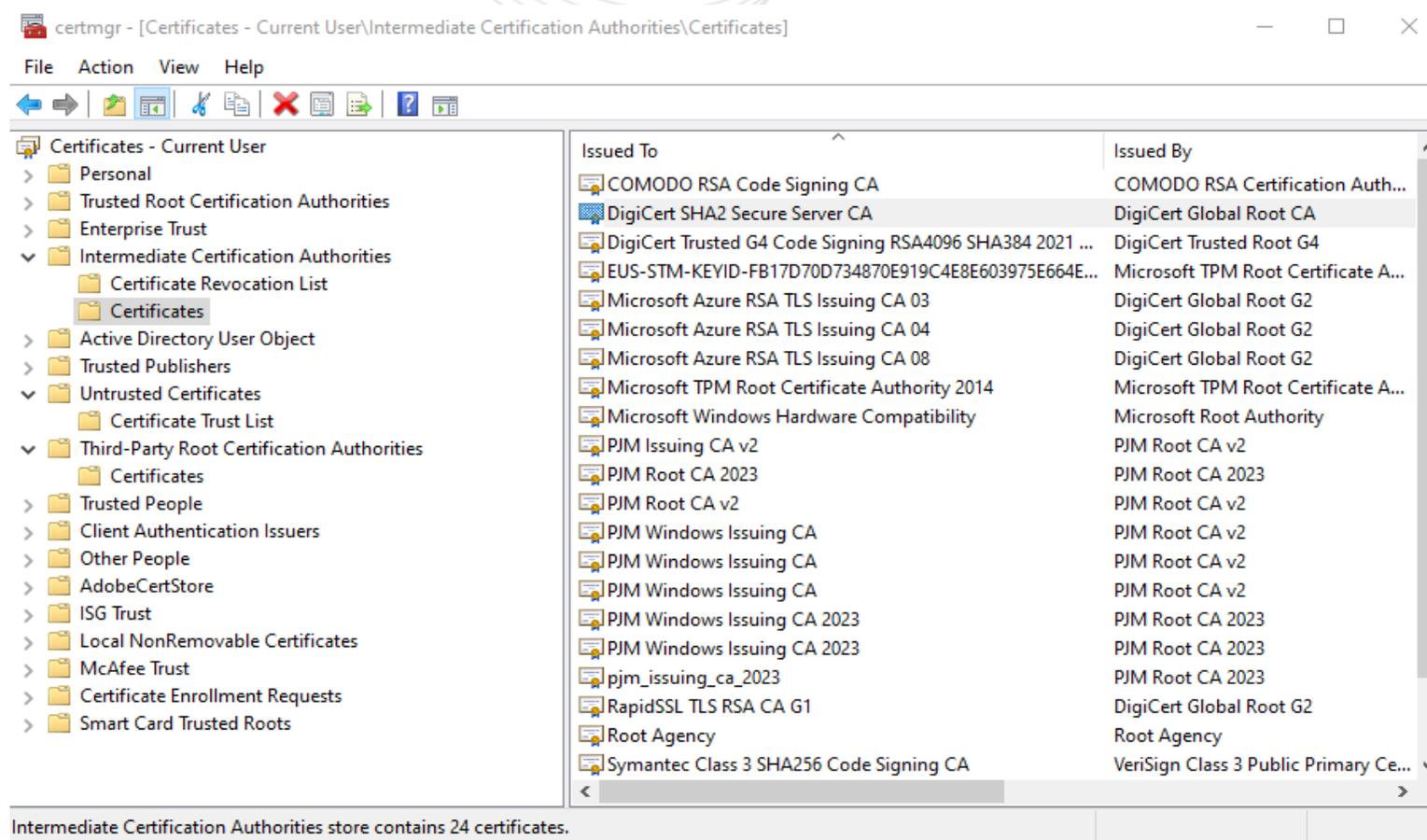
If not listed, expand **certificates (local computer)**, expand **Intermediate Certification Authorities** right- click **Certificates**, click **All Tasks**, and then click **Import**.

Import the intermediate certificate.

- In the **Certificate Import Wizard** dialog box, figure 5, click **Next.**
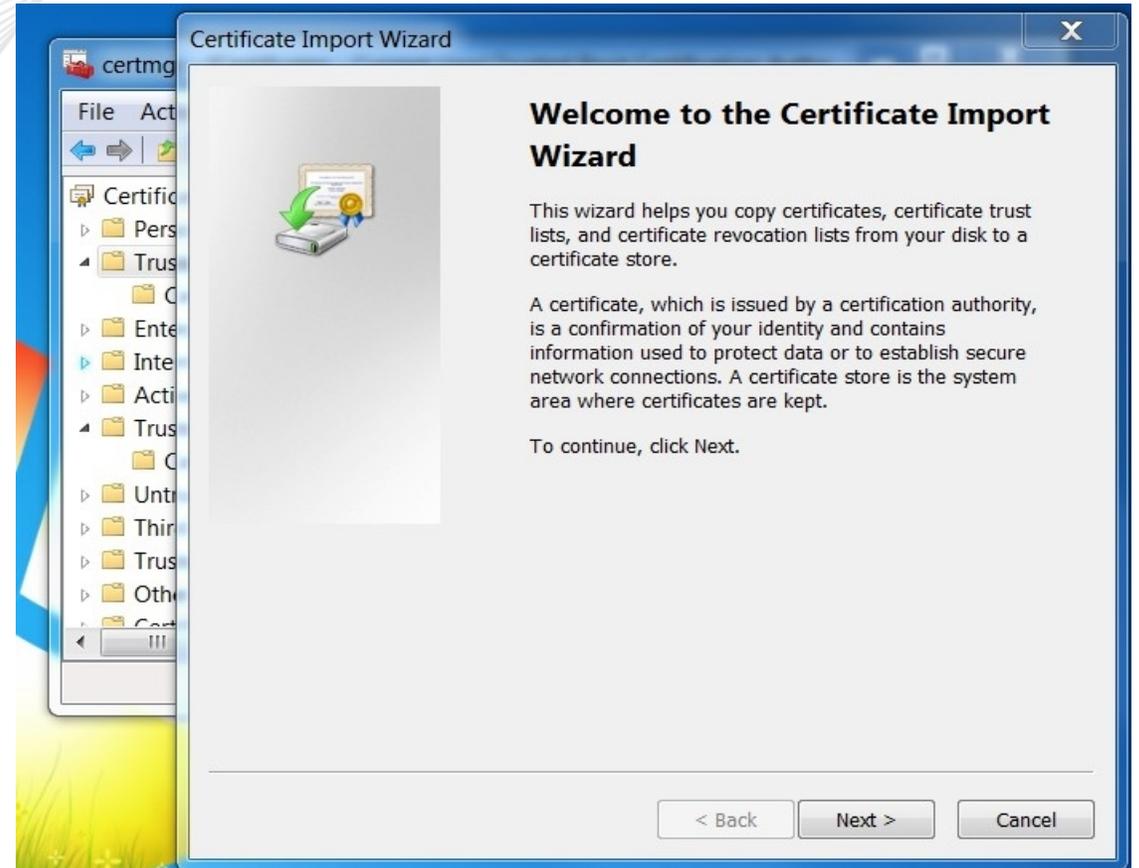
In the **File name** box, give the path of the intermediate certificate authority file downloaded in the first section of this document. For example, c:\windows\temp\intermediate.pem
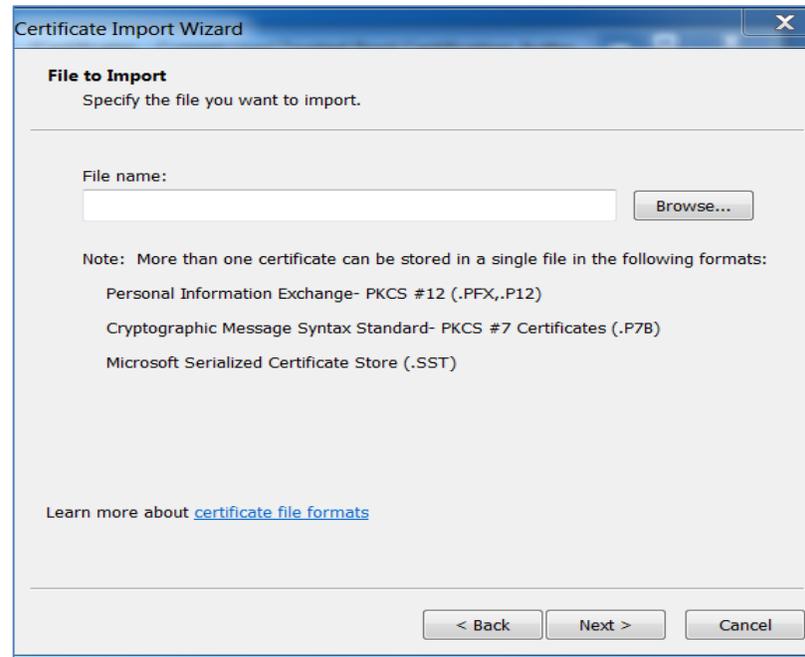
- Click **Next** two times.

- Click **Finish**, and then click **OK**. You should see a message appear 'The import was successful'.

- ***Import the Root Certificate***

- Expand **Certificates (local computer)**, expand **Trusted Root Certification Authorities**, and then click **Certificates**.

  - In the right pane, confirm that the certificate for 'DigiCert Global Root CA' is not listed.

  - If not listed, **import** the root certificate.

  - **Expand Certificates (local computer)**, right-click **Trusted Root Certification Authorities**, click **All Tasks**, and then click **Import**.

- **Import** the root certificate

- In the **Certificate Import Wizard** dialog box, click **Next**.
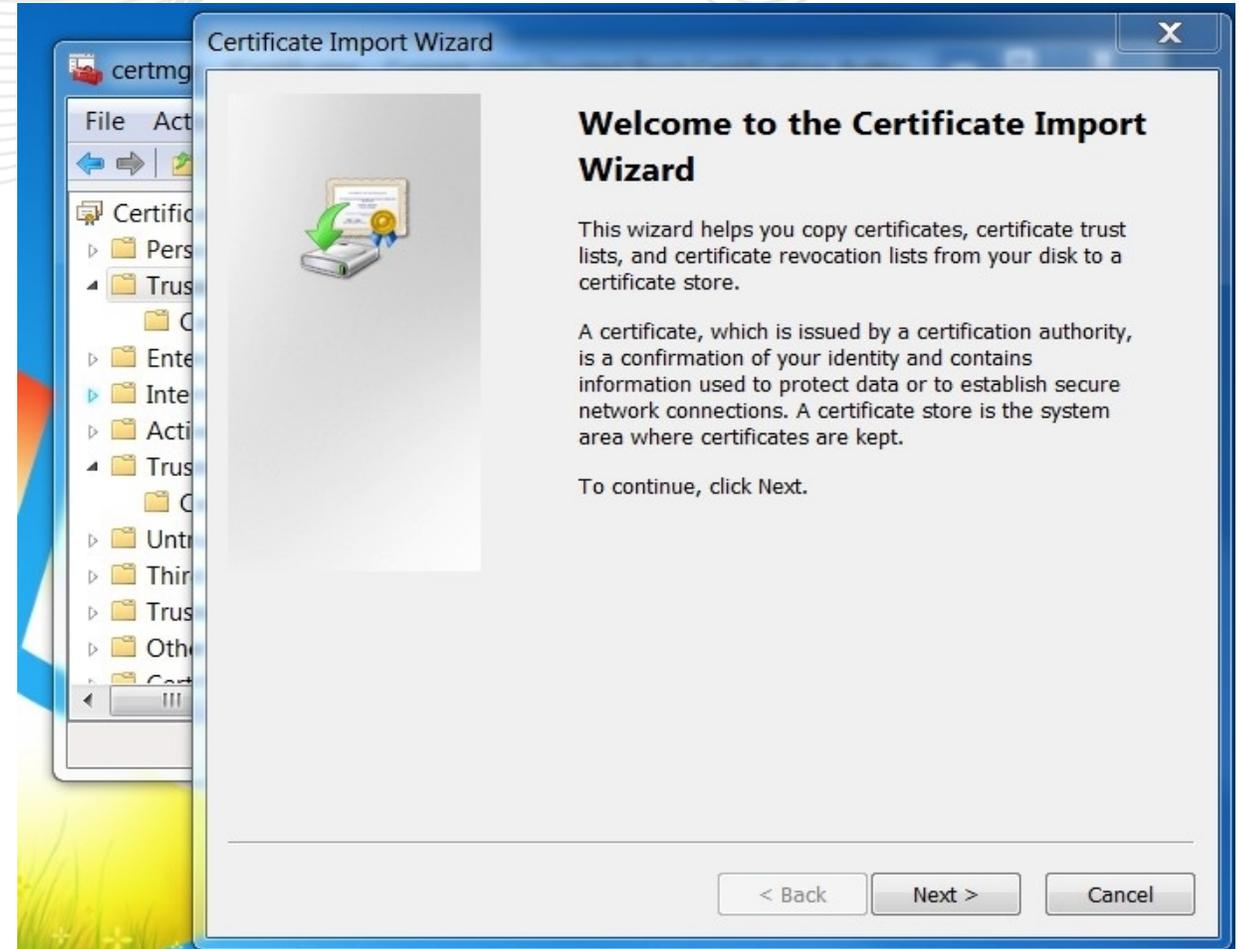
In the **File name** box, give the path of the root certificate authority file downloaded in the first section of this document. For example, c:\windows\temp\root.pem

- Click **Next** two times.

- Click **Finish**, and then click **OK**. You should see a message appear 'The import was successful'.