

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.

Installing GeoTrust Certificates for Java Applications and Utilities

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')*

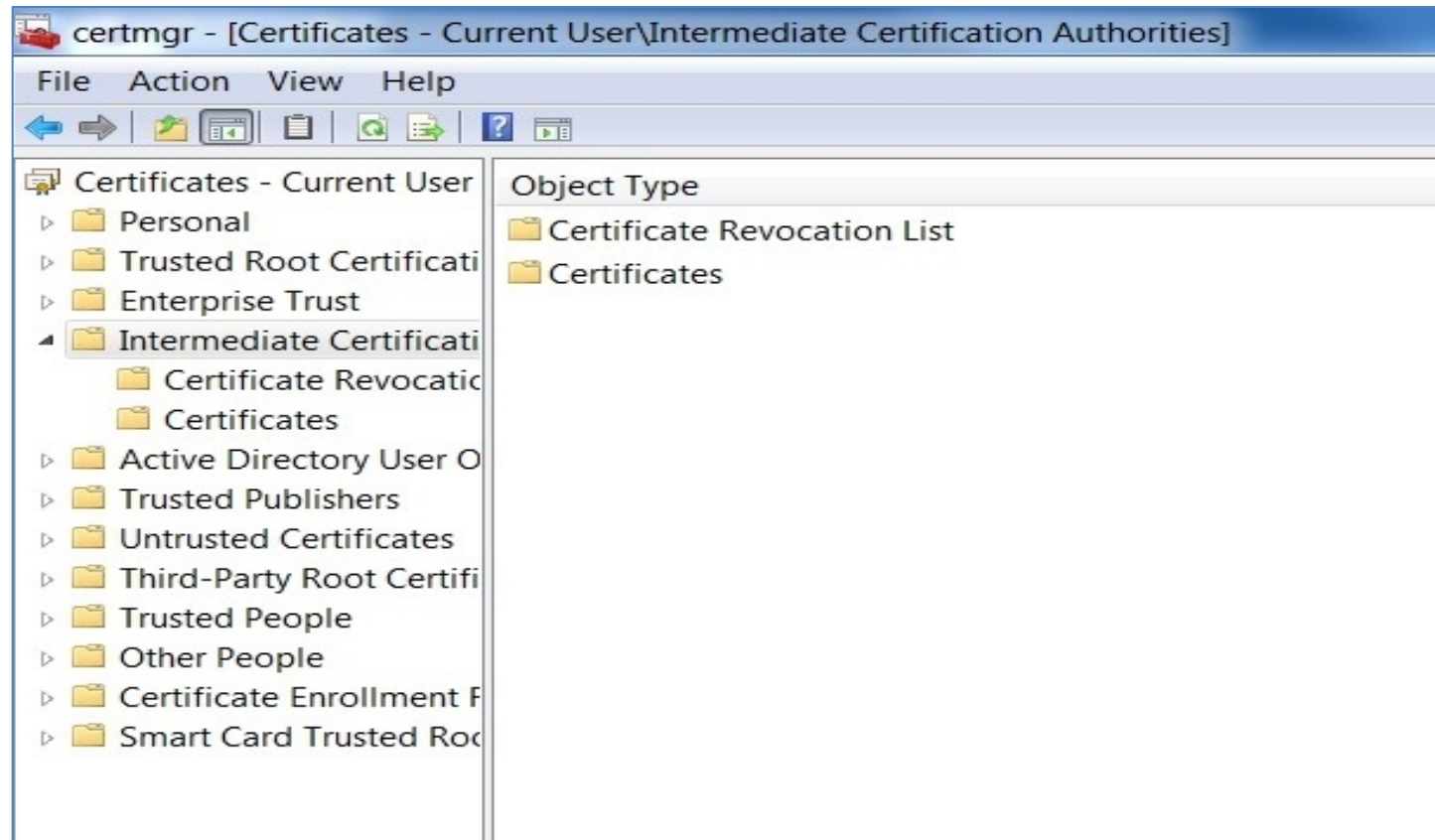
Note: If you see an error "already exists," this means you already have the certificates, and can skip that

To import the certificate files for .NET applications:

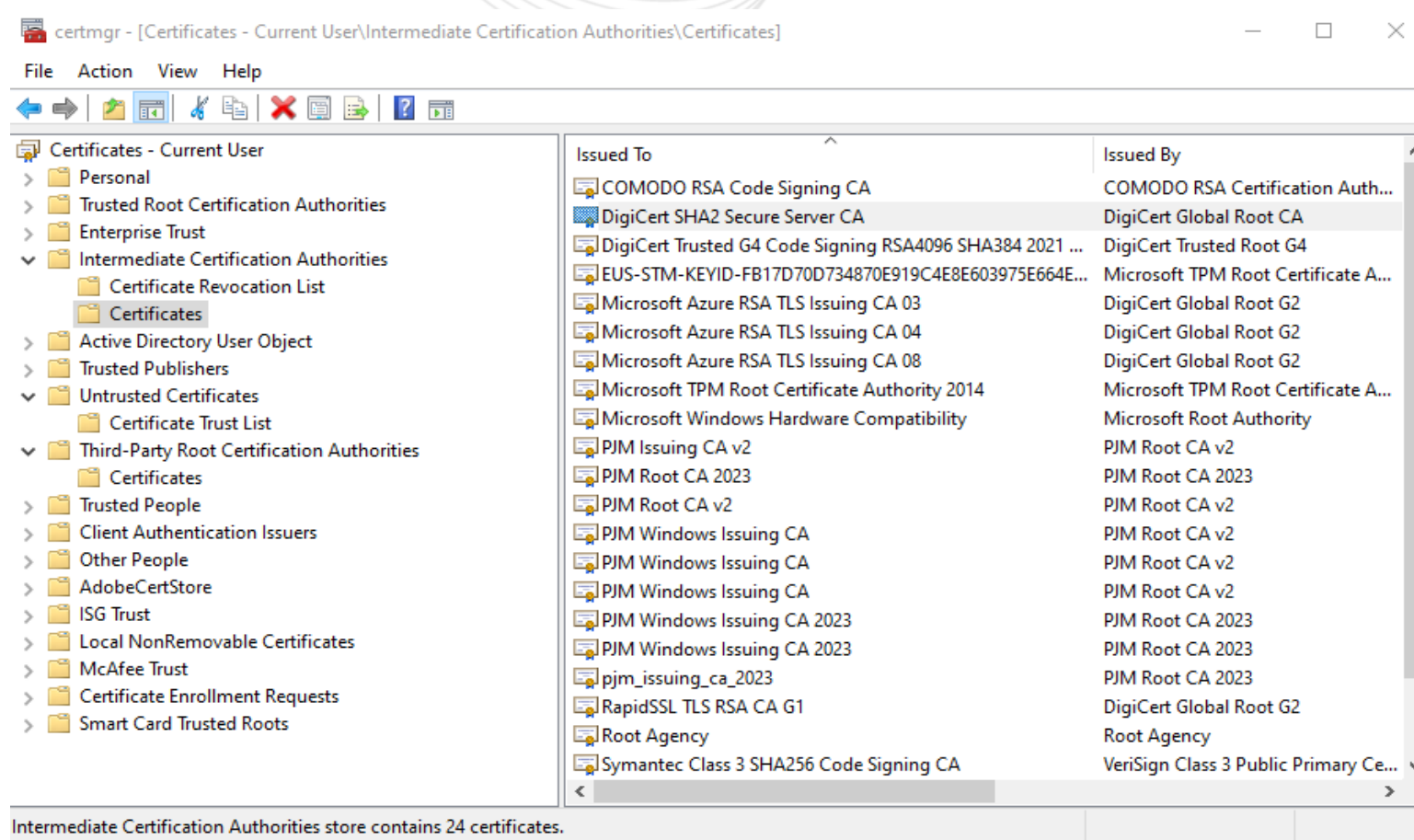
- Click **Start**, click **Run**, type certmgr.msc, and then click **OK**.

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**:



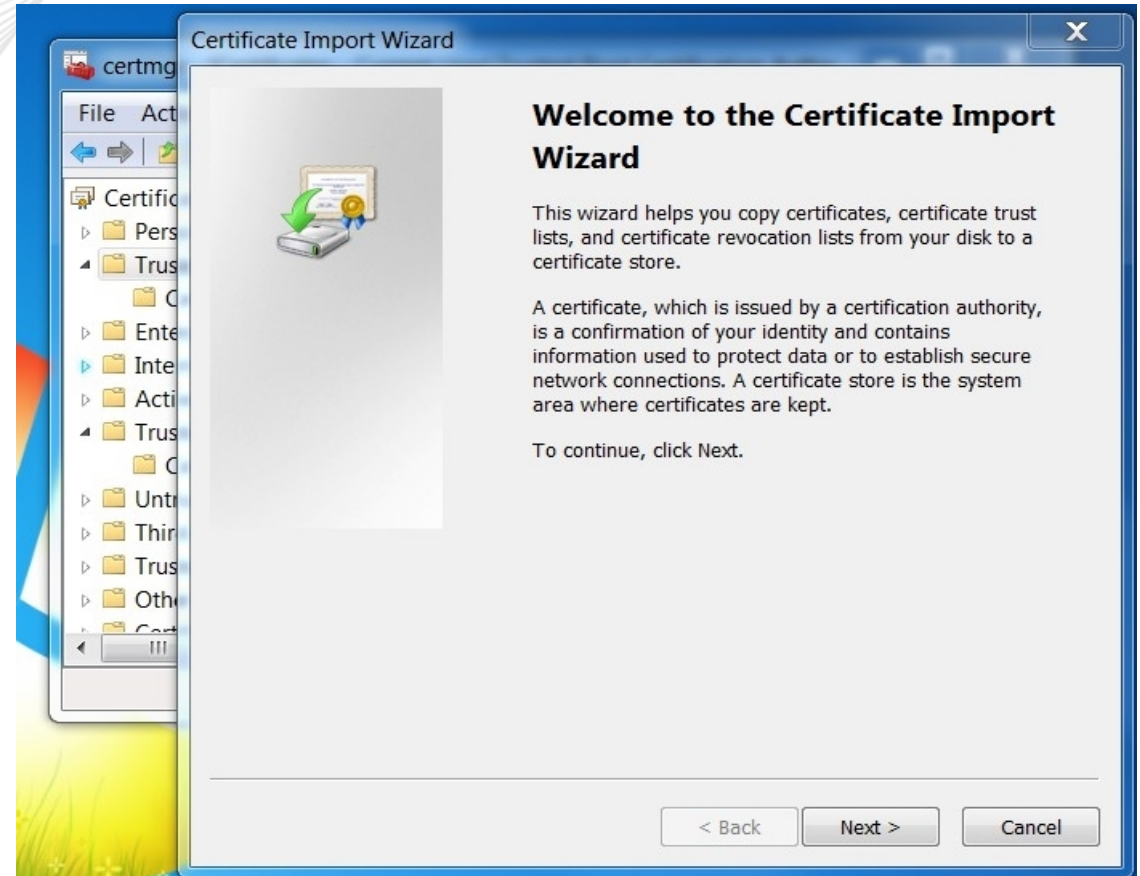
Confirm the intermediate certificate is not already listed – DigiCert SHA2



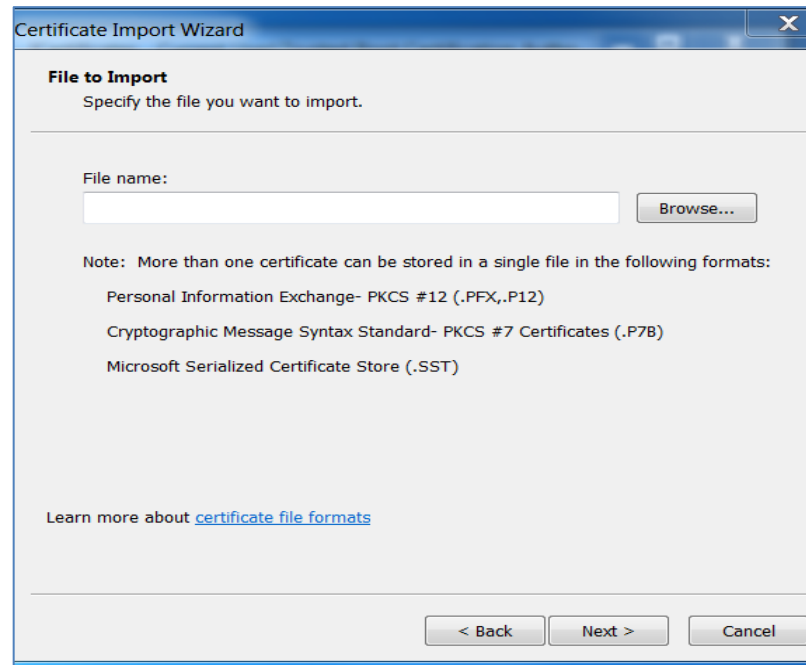
If not listed, expand **certificates (local computer)**, expand **Intermediate Certification Authorities** right- click **Certificates**, click **All Tasks**, and then click **Import**.

Import the intermediate certificate.

- In the **Certificate Import Wizard** dialog box, figure 5, click **Next**.



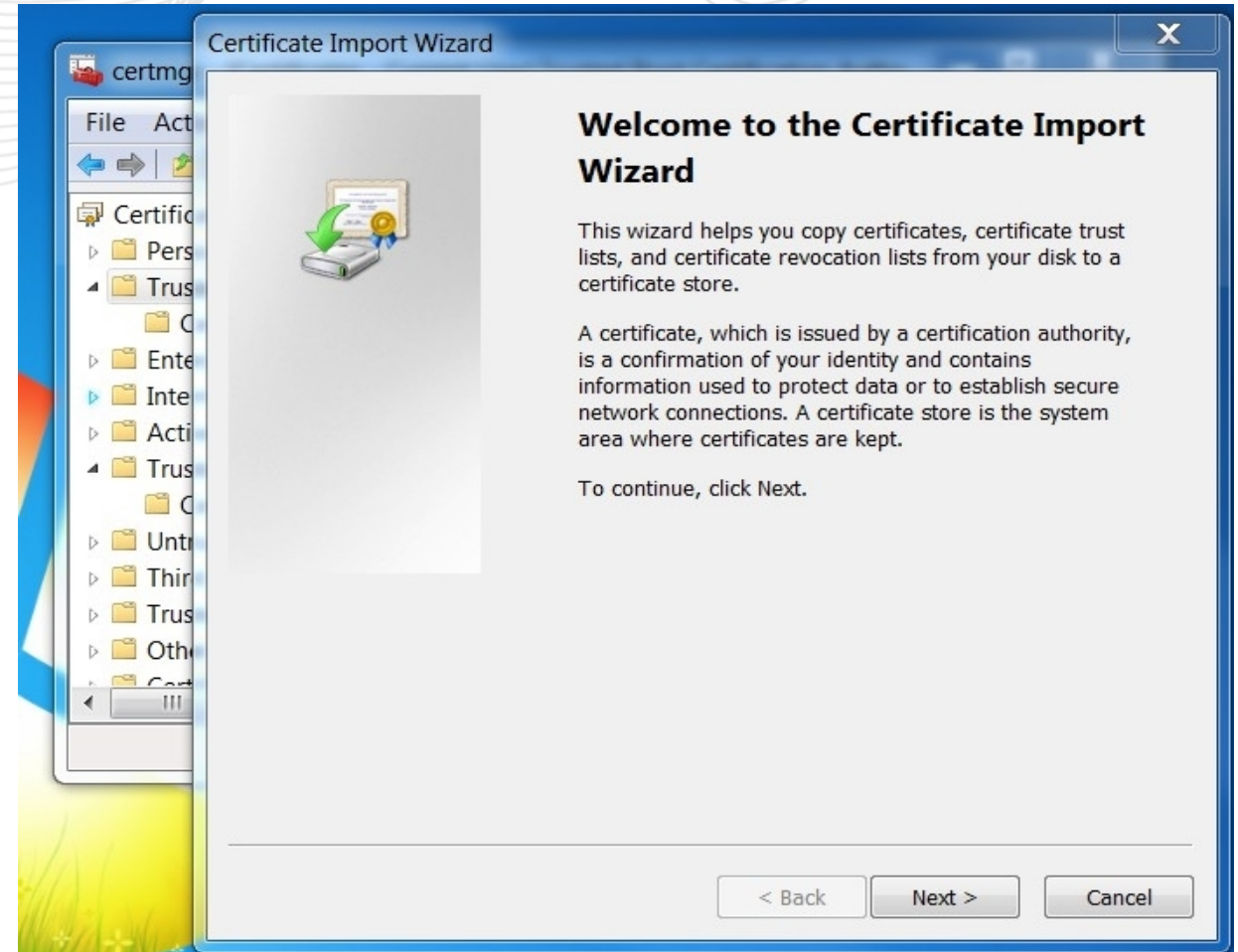
In the **File name** box, give the path of the intermediate certificate authority file downloaded in the first section of this document. For example, c:\windows\temp\intermediate.pem



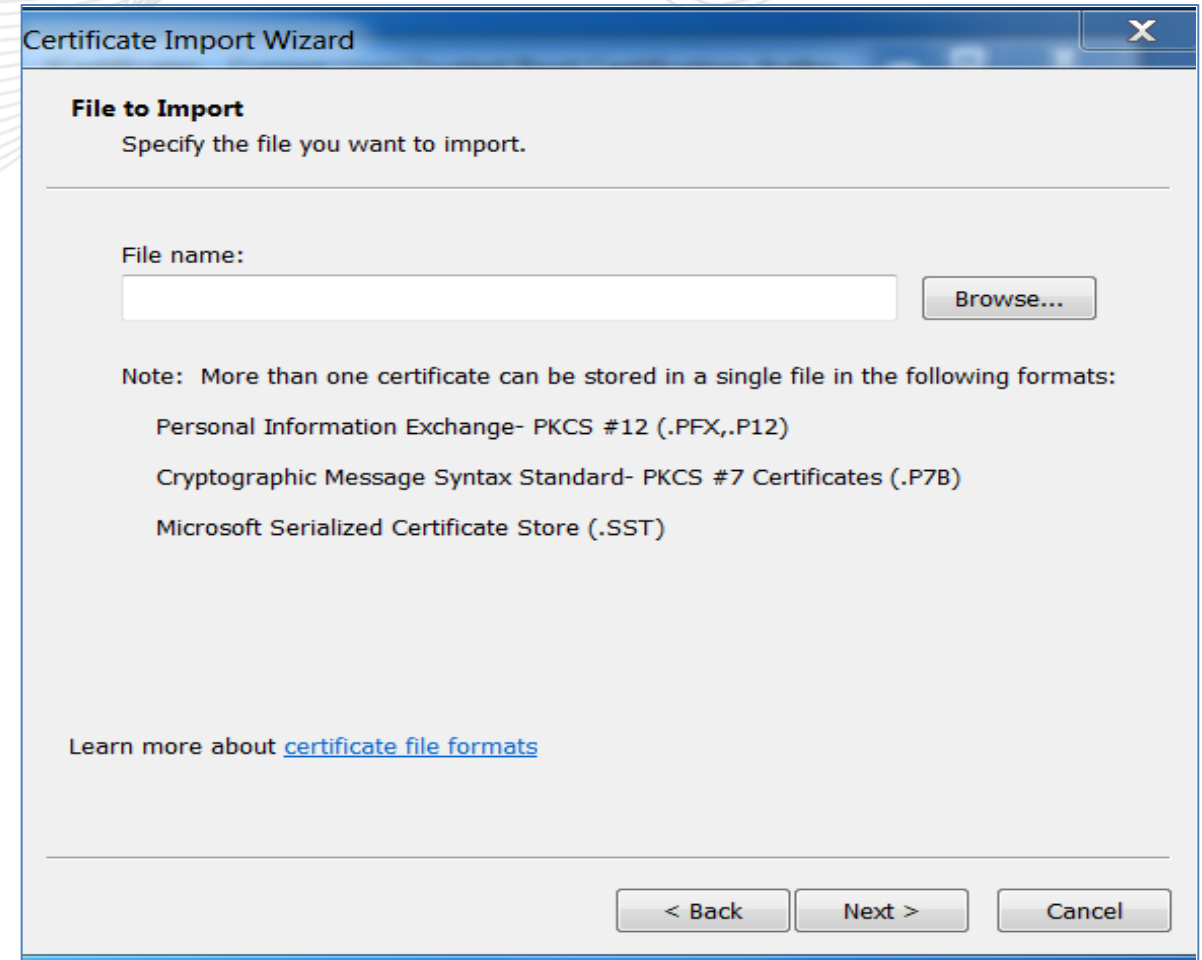
- Click **Next** two times.
- Click **Finish**, and then click **OK**. You should see a message appear 'The import was successful'.

- ***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'.