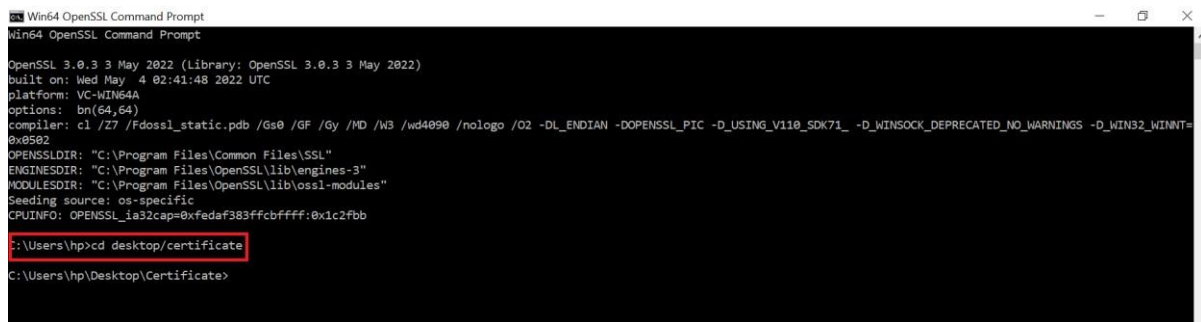# Certificate Creation for accessing SDR API

Certificate can be created by using any one of the below two options.

- PowerShell
- Open SSL

Option 1: Certificate generation with Open SSL

1. Install the Open SSL.
2. Run the OpenSSL Command Prompt and set the directory to the folder where certificate to be stored.
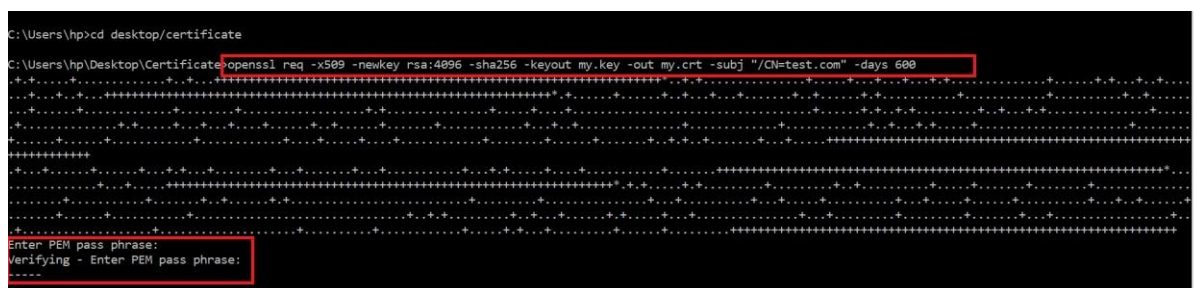

3. Run the below command ❼ provide **Enter PEM pass phrase** and save the pass phrase to provide it on the command to generate .pfx certificate.

> **openssl req -x509 -newkey rsa:4096 -sha256 -keyout my.key -out my.crt -subj "/CN=test.com" -days 600**

4. Run the below command to generate the .pfx certificate.

> **openssl pkcs12 -export -name "test.com" -out my.pfx -inkey my.key -in my.crt**

Provide the below details:

- Enter pass phrase for my.key: Provide the pass phrase passed on step 3
- Enter Export Password: Provide the password for .pfx certificate and save it for later use.

5. Exported .pfx certificate will be stored in the directory where OpenSSL was installed.

   MacOS users can generate the client certificate using OpenSSL option mentioned above. Since MacOS comes with OpenSSL pre-installed, users can skip step 1 and follow the rest to create a client certificate.

   Note: Share the .pfx certificate and the export password to SDR Support Team to get access to SDR API's on Demo Environment.

Option 2: Certificate generation with PowerShell

1. Open PowerShell and run the below command to generate the self-signed certificate

   ```
   New-SelfSignedCertificate -certstorelocation cert:\CurrentUser\My\ -dnsname example.com
   ```
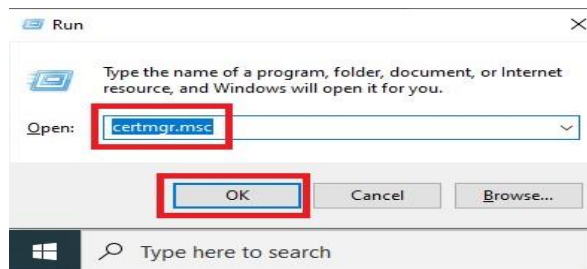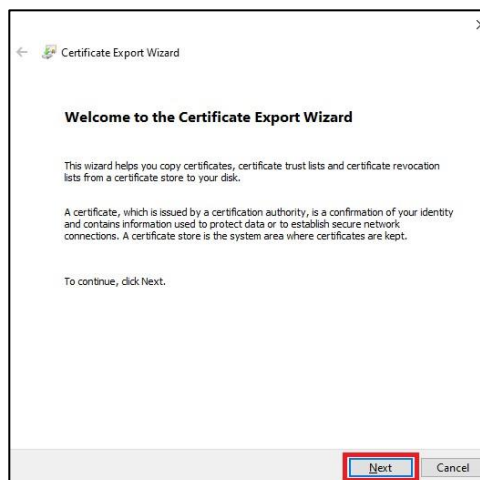

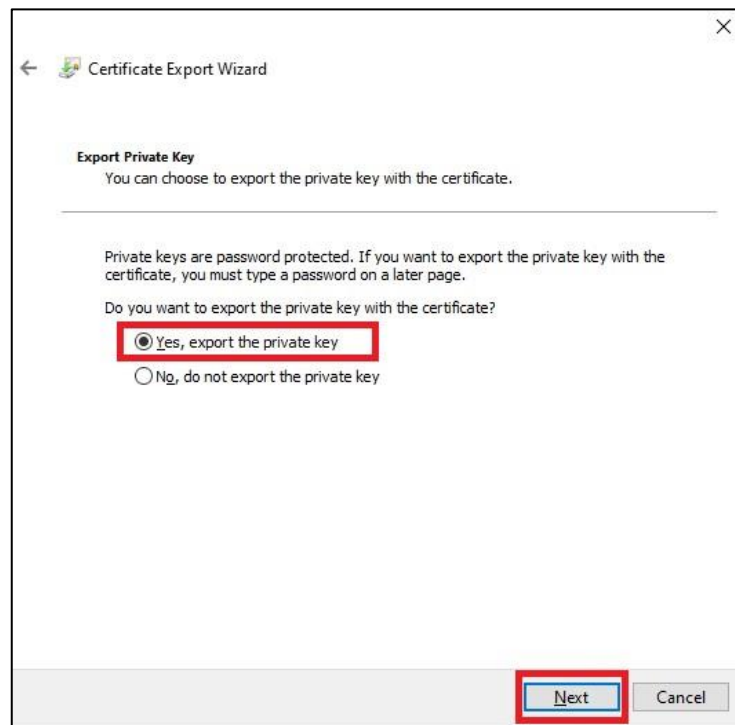2. To Export the certificate in .pfx format, go to run → type certmgr.msc and click ok

3. In certificate manager go to personal → certificates → select the generated certificate and right click select All Tasks → Select Export.
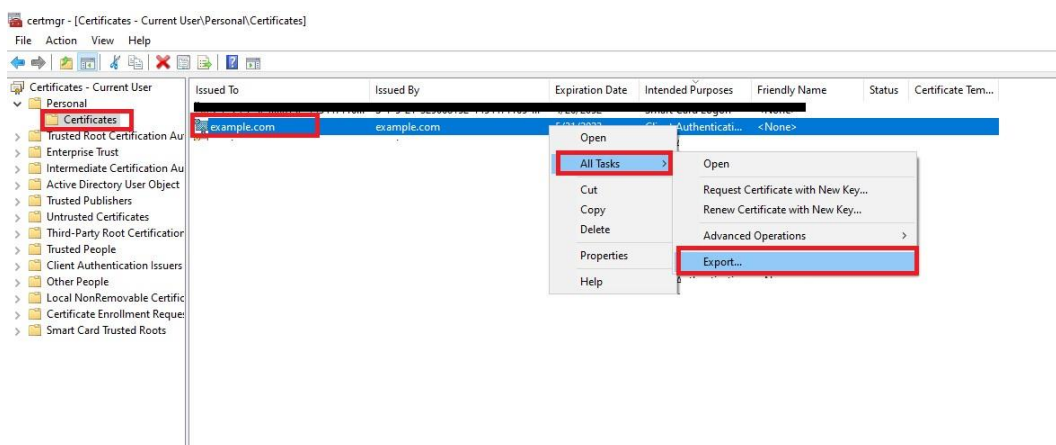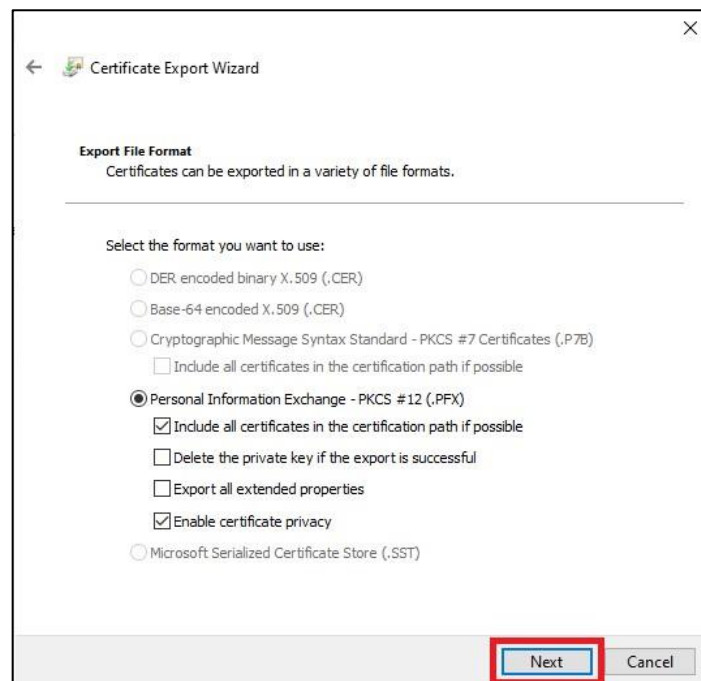

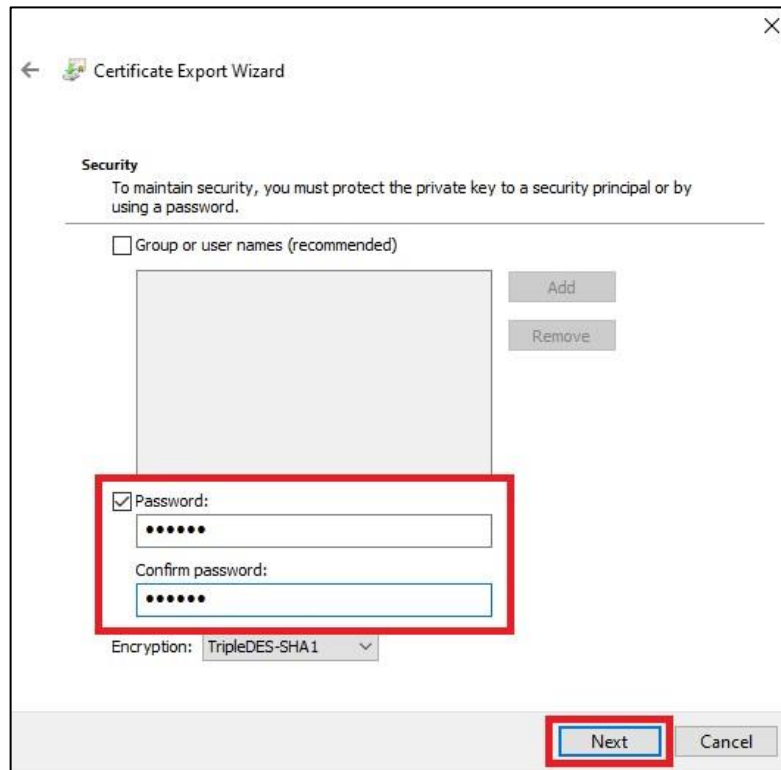4. In Certificate Export Wizard click Next to continue.

5. Select export the private key option and click next.
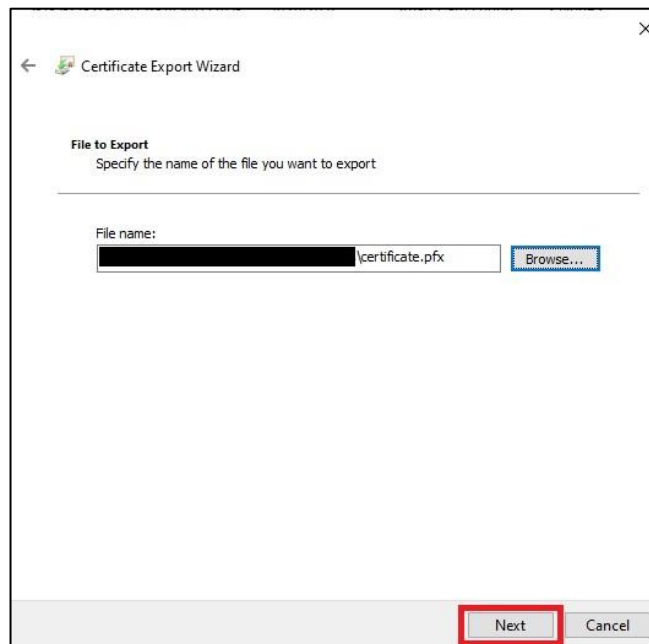
6. Leave the defaults and click next.

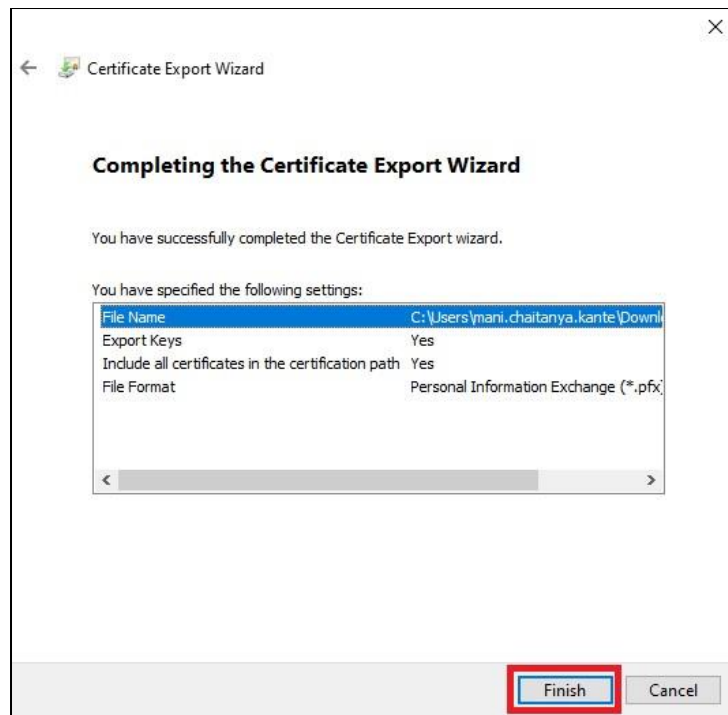7. Provide the password for certificate and click next.

8. Select the path and provide certificate name to save the certificate.

9. Click on Finish.

10. Exported .pfx certificate will be stored on the folder path provided on step 8.

   Note: Share the .pfx certificate and the password to SDR Support team to get access to SDR APIs .