Instruction -

Certum CSR

Instruction for generating a CSR file for certificates in the Data Security category

version 1.1



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1. Scope of the instruction

The instruction includes:

- a description of "Certum Tools" app
- creating a CSR file necessary to issue a certification request in Certum store
- creating the .pfx certificate

2. Product description

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Certum's "Certum Tools" application enables:

- generating the CSR request necessary to issue the following certificates from the Data Security category:
 ✓ SSL
 - E-Mail ID (S/MIME)
 - Code Signing
 - Generating a .pfx file

The result of the application is the generation of the content of a CSR request and a private key and a .pfx file based on the public part of the certificate and matching private key necessary to install the certificate.

Requirements: You need a current version of Java to run the application. Certum also supports java 8: 202

3. Using the application

a) Launching the application

Download the application from the <u>https://www.support.certum.eu/en/what-is-csr/</u> website, run it and install it.

If you downloaded the .exe file, open the application normally,

If you are using the .jar version, download the "certum-tools-1.0.0-launcher.bat" file. To download this file, right-click on the download file and then select "Save File". Save both files in the same location. Always run the application from the .bat file using a double-click.

b) Changing the language

The application is available in two language versions: Polish and English.

When you open the application, you will see its simple interface. If you want to change the application language, you can do it by choosing "en" from the box in the bottom right corner. The application starts in Polish by default.

Common Name (CN)*					
Organization Name (O)					
Organization Unit (OU)					
Locality (L)					
E-mail (E)					
Country (C)			•		
Key algorithm	RSA	•			
Key size	2048	-			
Generate			Clear form		



c) Start generating a CSR

To generate the CSR and private key, start filling in the various fields you need for the certificate. Note that you will be able to overwrite all fields, except the Name (CN), from within the store.

In the Name (CN) field, depending on the certificate, enter:

- For SSL Commercial (DV), Trusted (OV) and Premium (EV) certificates: the name of the main domain (for a Wildcard certificate, remember the asterisk)
- For the E-mail ID (S/MIME) Individual certificate: the e-mail address
- For the E-mail ID (S/MIME) Business certificate: Name and surname
- For the Code Signing certificate: First and last name or company name.

Complete the following fields according to your needs and the scope of the data you want to have in the certificate.

After completing the fields, select the key algorithm and its length.

NOTE: Remember that EC is required for the National Node certificate.

After completing all the necessary fields, click Generate.

d) Saving a file

When you click Generate, the following files will be generated:

- A CSR, the content of which should be copied, saved and included in the Certum form in the store.

- A private key to be stored on your computer. It will be needed to create the certificate after Certum has signed the .csr file.

After clicking Save, the files are saved in the specified folder in the .pem format.

The private key will be saved under the default name privateKey.pem.

Generated CSR

MIIEowIBAAKCAQEAp2MhDt1ZWrFXBWo3f9pN+eA BnBMi7BIr7vIJkmhoh71M7zH52dsgJnJcafQDslCmEu +uWPsbyHqx4XjppTTx8DeouLhrWU8ZRqIwibZHuCN 7RaT4egGyJ6RlzgNbZ43QWH9Iw3TYGAas76tduEikK G2OGvEvJN/IgnnMmMsR2wZ0vGkxtrIwVZJdqiWHzC frvc1J7aGU44NZSv7Zsf51Fh2yjSLtXG7R16PwIDAQAE UiPFFHmAyPWnDI5aDPfAwLJi9Wr6uGsJ8iCXQIXrrhc 9v8AbErboRqkRPAhQK06+J5ittF9mAvFTxXTkum+juc 0LOHPAANbUD3G+M0IFHKe92DAU78wKqdF9Kq6IA Lo5rOsrmwUeI/pKcOHmT38aZiIRByM6L0qTkihpDN	9/vEpQ6dUkeLq+gp7FPB9bbS3 i1sW84C4MXj8qKfi48fC7 Xf8HtFBWt04qml6s001Z+7t /klScBTZWBLmMo4ODTAXO1 SRb6VAJX+wrT8XcCd9oUpZ6C 3AoIBAQCEIMeziB5EbMAY dyQHRZZL3IzzIWyOmz5/xl c4t+Q4eLFSP1TrosNcbnFH ZMInFjL9XF4B8/00eQJyTsVtO			
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d9oUpZ6Cfrvc1J7aGU44NZSv7ZsfS1Fh2yjSLtXG7R16PwIDAQABMA0GCSqGSlb3				
4ODTAXO1G2OGvEvJN/IgnnMmMsR2wZ0vGkxtrlwVZJdqiWHzGRb6VAJX+wrT8XcC				
s001Z+7t7RaT4egGyJ6RlzgNbZ43QWH9Iw3TYGAas76tduEikK/klScBTZWBLmMo				
Kfi48fC7+uWPsbyHqx4XjppTTx8DeouLhrWU8ZRqIwibZHuCNXf8HtFBWt04qmI6				
FPB9bbS3BnBMi7BIr7vIJkmhoh71M7zH52dsgJnJcafQDslCmEui1sW84C4MXj8q				
	AQEFAAOCAQ8AMIIBCgKCAQEAp2MhDt1ZWrFXBWo3f9pN+eA9/vEpQ6dUkeLq+gp7			
AQEFAAOCAQ8AMIIBCgKCAQEAp2MhDt1ZWrFXBW				
MIICVzCCAT8CAQAwFDESMBAGA1UEAwwJY2VydH AQEFAAOCAQ8AMIIBCgKCAQEAp2MhDt1ZWrFXBW	VtLnBsMIIBIjANBgkqhkiG9w0B			

4. Creating a .pfx files

The .pfx file is needed to install the certificate. It should be created with a previously saved private key (generated previously from within the application) and a certificate file, available for download after issuing from the client's account on the Certum store.



a) Once the certificate is issued, download the certificate file in binary or text form from the Certificate Management tab.

The file can be saved in two formats:

- The file downloaded using the "Save Binary" option has an extension .cer

- The file downloaded with the "Save as text" option has an extension .pem. The pem file can be opened with notepad, e.g. to copy its contents.

Note: If you do not know where the downloaded files are stored, check the Downloads folder.

b) Create a .pfx file

Open Certum Tools. Select the Generator pfx tab (p12)

- In the "Certificate" part load the file with the certificate, that is the public part of the certificate, downloaded in the previous step from the Certum store.

- In the "Private Key" part load the private key file previously generated from Certum application.

Set the password. Remember it! You will need it to install the certificate. You will not be able to complete the process without it. After clicking "Generate", the file will be available for download.



⑦ Certificate*	BEGIN CERTIFICATE	^
	MIIFFTCCA/2gAwIBAgIQA7zFx7Rv7GTQ7	7V+wWkxhNiANBgkahkiG9w0BAQsFADB7MQswC
	EwIOTDFiMCAGA1UFChMZVW5pemV0	byBU7WNobm9sb2dp7XMgUy5Bl iEnMCUGA1UE
	IENIcnBn7mliVXBnh24gOXV0aG9vaXB5N	MR8wHOVDVOODEv7D7XI0dW0gO2vbc3MgSSBD
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	Load cartificato filo	
	Load certificate file	
Private key*	BEGIN RSA PRIVATE KEY	<u>^</u>
	MIIEpgIBAAKCAQEA4YZhCmGOSZeoD0+	-zf5Q8nm9Mo7BlXvZb+Hw4GFeZrmxBlydV
	UEry/4lSbfn3+ILUWQhbF5Bpu+IOeuCL/	cUE4o49YC+q2aKEI6ZHTSNOAu2kYD71
	H/DvyceSUr8nixDhveId0ITC7mXHe8eNX	(FO1joliS+sclg+r8sZuNN05MVhisR/p
	WH64kIAeyNEr2SsfxDT1ShtbmlxnoX6d6	EG14cH980GOGvmv25H8KPYYf65ZfWEv
	2Kn/KNQvVJSOph6oQOkeb8q/e8Rgs4Cf	NpCzstGGD2GlPW71rVU/8tk4z3gQBWp0M
	· · · · · · · · ·	
	Load private key file	
Despuerd*		
Passworu	•••••	
	Show password	
	Generate	Clear form