CREATE ARROWHEAD CLOUD SELF SIGNED CERTIFICATE with KeyStore Explorer 5.4.1

KeyStore Explorer is a free GUI tool for managing certificates, which is available for all common operation systems: https://keystore-explorer.org/downloads.html

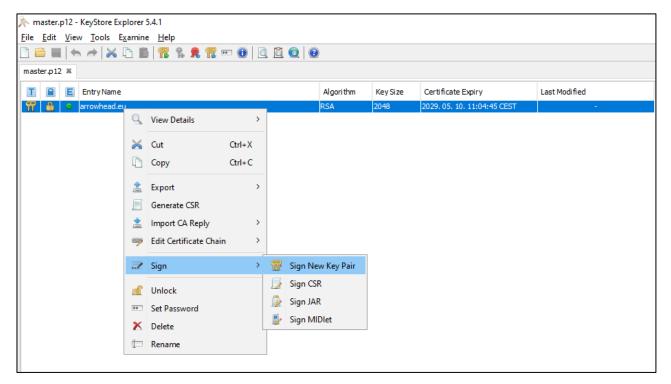
1st STEP:

Open the master.p12 located in "certificate" folder.



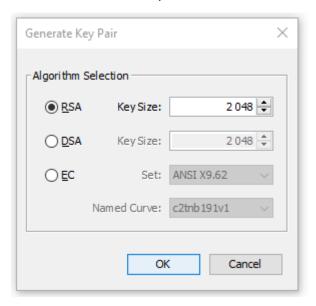
2nd STEP:

Right click on "arrowhead.eu" key pair entry and select "Sign New Key Pair" and enter its password (123456):



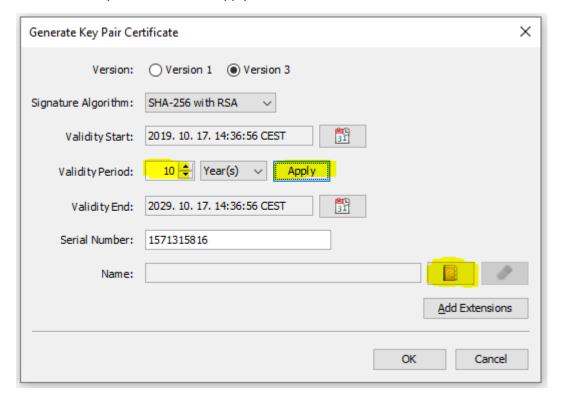
3rd STEP:

Select "RSA" and set "Key Size" to 2048:



4th STEP:

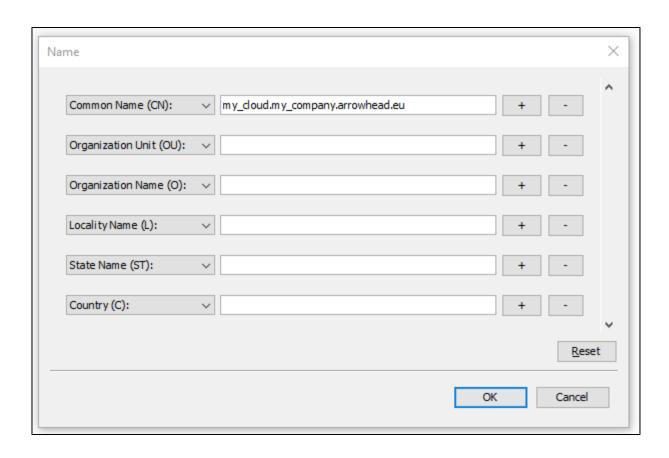
Set the "Validity Period" and hit "Apply", then click on "Edit name":



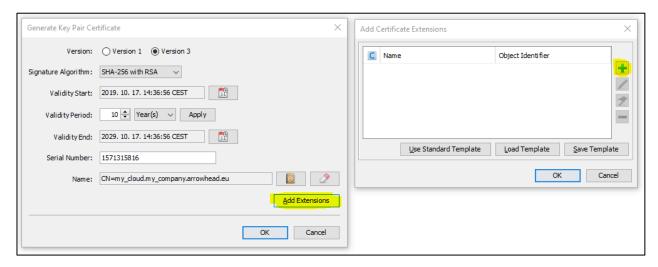
5th STEP:

Fill out the "Common Name (CN)" and hit "OK". The certificate naming convention have strict rules:

- The different parts are delimited by dots, therefore parts are not allowed to contain any of them.
- A cloud certificate name has to consist of four part and the last two part have to be 'arrowhead' and 'eu'.



Click on "Add Extension", then on the green "+" button:



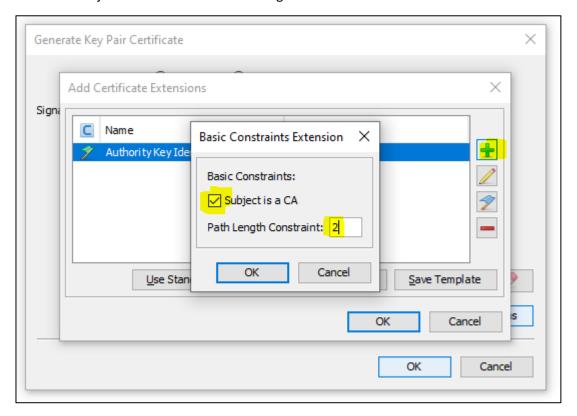
7th STEP:

Select "Authority Key Identifier", then click on "key" button and select "160-bit Hash":

Key Identifier:		
Authority Cert Issuer:	General Name Directory Name	Key Identifier X
		Generation Method:
		● <u>1160-bit Hash</u> ○ 64-bit Hash
		OK Cancel
Authority Cert Serial Number:	1557479085	OK Cancer
		OK Cancel

8th STEP:

Click again on the green "+" button of "Add Certificate Extensions" window, select "Basic Constraints", then tick "Subject is a CA" and set "Path Length Constraint" to 2:



Click again on the green "+" button of "Add Certificate Extensions" window, select "Subject Key Identifier", then click on "key" button and select "160-bit Hash":



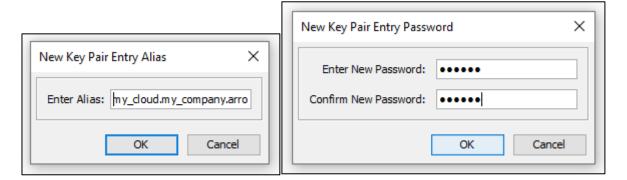
10th STEP:

Click on "OK" button of "Generate Key Pair Certificate" window:

Generate Key Pair Cer	tificate X
Version:	○ Version 1
Signature Algorithm:	SHA-256 with RSA V
Validity Start:	2019. 10. 17. 14:36:56 CEST
Validity Period:	10 Year(s) V Apply
Validity End:	2029. 10. 17. 14:36:56 CEST
Serial Number:	1571315816
Name:	CN=my_cloud.my_company.arrowhead.eu
	Add Extensions
	OK Cancel

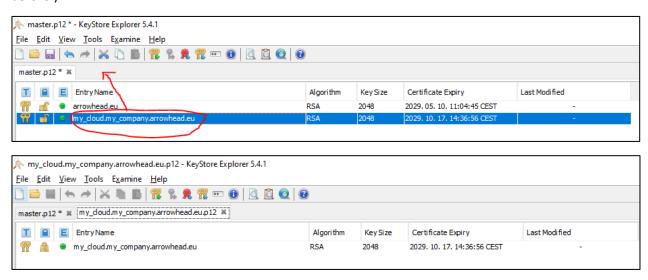
11th STEP:

Set alias equals to the Certificate Common name (eg.: "my_cloud.my_company.arrowhead.eu"), then give a password.



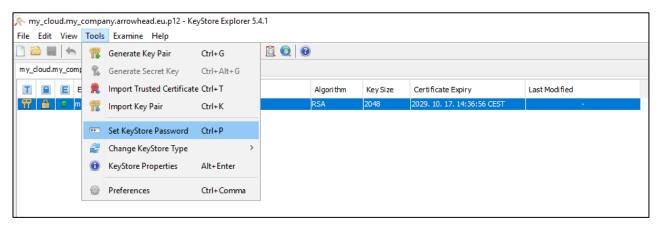
12th STEP:

Drag & Drop you newly created key-pair entry to a new tab (It will ask for the password given in the step before.):



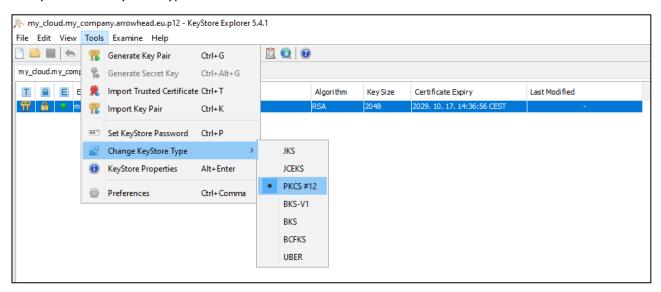
Close the "master.p12" and DO NOT SAVE THE CHANGES!

Click on "Tools" menu and set the "KeyStore Password" (It must be the same as the key-pair password given in the 11th step.):



14th STEP:

Verify that the "KeyStore type" is settled to "PKCS#12":



15th STEP:

Save your new key-pair certificate as my_cloud.p12.

("File"->"Save as"-> declare the extension as ".p12")

