Convert Ignition Keystore to Distributor Keystore

NOTE: The procedure below is only applicable when running pre-4.0.4 modules. Manually configuring MQTT Distributor to consume a Java keystore is supported and will work properly when running pre-4.0.4 modules, but it is no longer the recommended process for encrypting MQTT communication. If possible, please upgrade to modules version 4.0.4 or higher and follow the default workflow to secure MQTT communication.

Whether you are using a certificate issued by a trusted CA (Certificate Authority) or a self-signed certificate, internally MQTT Distributor accesses these certificates via the Java keyStore file that it is configured to use. This keyStore must contain the public certificate, the private key, and possibly an intermediate certificate if applicable. If you've already SSL enabled your Ignition web server then you have all of the required certificates already contained inside of Ignition's keystore. However, you must convert Ignition's keystore (of type PKCS #12) to a keystore of type JKS so it can be used by MQTT Distributor. Follow the steps below to do this conversion.

Convert Keystore

Locate Ignition's Keystore

Locate Ignition's keystore in <ignition_install_dir>/webserver/ssl.pfx

Import Ignition's Keystore

Launch Keystore Explorer and create a new keystore of type JKS.

Sele	ct the type of the new KeyStore
0.	ICEKS
0	KS
\bigcirc	PKCS #12
\bigcirc	BKS-V1
\bigcirc	BKS
\bigcirc	UBER
\bigcirc	BCFKS
	Cancel OK

Import Ignition's keystore by choosing to 'import a key pair' of type PKCS #12

	File: ssl.p	ofx			
	PI	KCS2JKS		0	
Name		^	Date Modified		
🕅 ssl.pfx			Monday, June 2	2, 2020 2:2	4 PM
	File Format	: All Files		\$	
					Choose
New Folder				Cancel	Choose

Use the password 'ignition' to decrypt Ignition's keystore and click Import. Next, click OK to reuse the existing keypair alias.

Decryption Password:	•••••		
PKCS #12 Key Pair File:	/Users/nate/Testing/Certs/Ignition8/PKCS2JKS/ssl.pfx	Browse	Details
		Cancel	Import

Give the new key pair a password of 'ignition' (or whatever you want). Click OK to complete import.



Save the Converted Keystore

Save the keystore and give it the same password provided in the step above. Give the keystore file a name with the extension '.jks'

	Save As: key	store.jks			
	е РКС	CS2JKS		0	
Name		^	Date Modified		
🖹 ssl.pfx			Monday, June 22, 2020 2:24 PM		
	File Format:	All Files		0	
	rile rormat:	All Files			
New Folder				Cancel	Carro
				Cancel	Save

Enter New Password		
Confirm New Password		
	Cancel	ОК

Configure Distributor to use Keystore

Next, MQTT Distributor must be configured to use the newly created Java keystore (JKS). Following the steps here to configure MQTT Distributor.

Additional Resources

- Inductive Automation's Ignition download with free trial https://inductiveautomation.com/downloads/
- Azure Injector download with free trial
 - https://inductiveautomation.com/downloads/third-party-modules
- Questions about this tutorial?
 - Check out the Cirrus Link Forum: https://forum.cirrus-link.com/
 Contact support: support@cirrus-link.com
- Sales questions
- Email: sales@cirrus-link.com
 Phone: +1 (844) 924-7787
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