

### trustStore, keyStore

The only difference between trustStores and keyStores is what they store:

- *trustStore*: certificates from other parties that you expect to communicate with, or from Certificate Authorities that you trust to identify other parties,
- *keyStore*: private keys, and the certificates with their corresponding public keys.

Learn more: [Javarevisited - Difference between trustStore and keyStore in Java](#)

### How do you spot a root CA ?

- Root certificates are self-signed,
- Self-signed certificates have the same issuer and subject,
- The "CA" field is set to true.

### Create, generate

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| <b>Generate a Java keystore and key pair</b>                                      | <code>keytool -genkey -alias mydomain -keyalg RSA -keystore keystore.jks -keysize 2048</code>                                     |
| <b>Generate a keystore and self-signed certificate</b>                            | <code>keytool -genkey -keyalg RSA -alias selfsigned -keystore keystore.jks -storepass password -validity 360 -keysize 2048</code> |
| <b>Generate a certificate signing request (CSR) for an existing Java keystore</b> | <code>keytool -certreq -alias mydomain -keystore keystore.jks -file mydomain.csr</code>   |

### Import, export

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| <b>Import a root or intermediate CA certificate to an existing Java keystore</b> | <code>keytool -import -trustcacerts -alias root -file Thawte.crt -keystore keystore.jks</code>                                     |
| <b>Import a signed primary certificate to an existing Java keystore</b>          | <code>keytool -import -trustcacerts -alias mydomain -file mydomain.crt -keystore keystore.jks</code>                               |
| <b>Import New CA into Trusted Certs</b>  | <code>keytool -import -trustcacerts -file /path/to/ca/ca.pem -alias CA_ALIAS -keystore \$JAVA_HOME/jre/lib/security/cacerts</code> |

### Check, list

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| <b>Check a stand-alone certificate</b>                  | <code>keytool -printcert -v -file mydomain.crt</code>                        |
| <b>Check which certificates are in a Java keystore</b>  | <code>keytool -list -v -keystore keystore.jks</code>                         |
| <b>Check a particular keystore entry using an alias</b> | <code>keytool -list -v -keystore keystore.jks -alias mydomain</code>         |
| <b>List Trusted CA Certs</b>                            | <code>keytool -list -v -keystore \$JAVA_HOME/jre/lib/security/cacerts</code> |

### Delete

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| <b>Delete a certificate from a Java Keytool keystore</b> | <code>keytool -delete -alias mydomain -keystore keystore.jks</code> |
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### Passwords

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|--|---|
| <b>Change a Java keystore password</b> | <code>keytool -storepasswd -new new_storepass -keystore keystore.jks</code> |
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The password must be provided to all commands that access the keystore contents. For such commands, if a *-storepass* option is not provided at the command line, the user is prompted for it.

