

jks to cer

从 jks 文件中提取 cer 证书

- 显示keystore中所有证书

- `keytool -list -v -keystore {keystore.jks}`

- keystore和truststore都用 `-keystore` 参数

- 输出结果如下：

- ```
Enter keystore password:
Keystore type: JKS
Keystore provider: SUN

Your keystore contains 1 entry

Alias name: carootforserver
Creation date: Mar 19, 2018
Entry type: trustedCertEntry

Owner: CN=zjdex, OU=zjdex, O=zjdex, L=HZ, ST=ZJ, C=CN
Issuer: CN=zjdex, OU=zjdex, O=zjdex, L=HZ, ST=ZJ, C=CN
Serial number: 7b5374de
Valid from: Tue Jan 09 19:13:29 CST 2018 until: Wed Jan 09 19:13:29 CST 2019
Certificate fingerprints:
 MD5: CA:EA:59:4F:DF:34:F1:82:0A:7D:7E:76:A5:C1:67:9C
 SHA1: 42:59:FC:8B:9D:8B:D8:E6:13:64:96:64:15:C6:CA:A1:09:42:04:01
 SHA256:
CC:64:C4:E2:C3:60:01:DD:67:35:88:11:C7:DD:38:5E:66:16:C9:96:6E:CE:8B:D3:AD:A9:5D:6
1:12:09:A1:F3
Signature algorithm name: SHA256withRSA
Subject Public Key Algorithm: 2048-bit RSA key
Version: 3


```

- 结果中的别名 ( Alias Name ) 在提取 cer 时需要用

- 提取证书

- `keytool -exportcert -rfc -alias {alias} -file {cert_name.cer} -keystore {keystore.jks} -storepass {password}`

- 输出文件为 `{cert_name.cer}`

## java中使用 cer 文件

基于现有代码，把 cer 文件导入 keystore 中最方便

代码如下（来自[stackoverflow](https://stackoverflow.com)）：

```
import java.io.BufferedInputStream;
import java.io.IOException;
import java.io.InputStream;
//VERY IMPORTANT. SOME OF THESE EXIST IN MORE THAN ONE PACKAGE!
import java.security.GeneralSecurityException;
import java.security.KeyStore;
import java.security.cert.Certificate;
import java.security.cert.CertificateFactory;

KeyStore readKeyStoreFromCerFile(String certFileName) {
 //Put everything after here in your function.
 KeyStore trustStore = KeyStore.getInstance(KeyStore.getDefaultType());
 trustStore.load(null); //Make an empty store
 // InputStream fis = /* insert your file path here */;
 InputStream fis = new FileInputStream(certFileName);
 BufferedInputStream bis = new BufferedInputStream(fis);

 CertificateFactory cf = CertificateFactory.getInstance("X.509");

 while (bis.available() > 0) {
 Certificate cert = cf.generateCertificate(bis);
 trustStore.setCertificateEntry("fiddler"+bis.available(), cert);
 }
 return trustStore
}
```