openssl□□□□□

□□□□

□□Linux□openssl□□□□cer□□crt

```
openssl x509 -in server.cer -out server2.crt -inform DER
```

crt□□cer(DER□□)

```
openssl x509 -in server.crt -out server.cer -outform DER
```

□crt□key□□□pfx□ca

```
openssl pkcs12 -export -in server.crt -inkey server.key -out server.pfx -certfile ca.crt -password pass:123456
```

pfx□□□pem

```
openssl pkcs12 -in server.pfx -out server.pem -nodes -password pass:123456
```

pem□□crt

```
openssl x509 in server.pem -out server.crt
```

pem□□key

```
openssl rsa -in server.pem -out server.key
```

pfx□□crt□ca

```
openssl pkcs12 -in server.pfx -nokeys -out server2.crt -nodes -password pass:123456
```

pfx□□key

```
openssl pkcs12 -in server.pfx -nocerts -out server2.key -nodes -password pass:123456
```

crt □□ p7b

```
openssl crl2pkcs7 -nocrl -certfile server.crt -out server.p7b -certfile ca.crt
```

pfx□□jks

```
keytool -importkeystore -srckeystore server.pfx -destkeystore server.jks -srcstoretype PKCS12 -deststoretype jks -s
```

jks□pfx

```
keytool -importkeystore -srckeystore server.jks -destkeystore server2.pfx -srcstoretype jks -deststoretype PKCS12
```

□□3□□□□□□□□hash□□□□□□□

```
openssl pkey -in server.key -pubout -outform pem | sha256sum
openssl x509 -in server.crt -pubkey -noout -outform pem | sha256sum
openssl req -in server.csr -pubkey -noout -outform pem | sha256sum
```

□□crt

```
openssl x509 -in server.crt -text -noout
```

□□□□

```
openssl verify server.crt
```

□□key

```
openssl rsa -in server.key -text -noout
```

□□key

```
openssl rsa -noout -text -check -in server.key
```

□□ server.pfx

```
openssl pkcs12 -info -in server.pfx
```

□□ server.jks

```
keytool -v -list -storetype jks -keystore server.jks -storepass 123456
```

□□:cer□□IIS□□□crt□□apache□nginx□□□

□□□□

cert□cr certificate□□

windows□□□□:cer pfx p7b□cer□der□□(□□□)□base64□□(plain text)

apache□nginx□□pem□crt

java□□jks□pfx

pem□□.crt□.key

□□□□□BEGIN CERTIFICATE□□□□END CERTIFICATE

□□□□□BEGIN RSA PRIVATE KEY□□□□END RSA PRIVATE KEY

□□□□:

https://ssorc.tw/7142/openssl-command-line-convert-file-for-pem-der-p7b-pfx-cer/

Revision #3
Created 26 February 2025 07:27:29 by Ron
Updated 16 May 2025 10:14:54 by Ron