

Steps to export and submit Android valid signer certificates

On the local machine, locate the specific Keystore file that is used for the APK signing. The file location may vary for different setup. For example, in Linux or MAC OSX environment, the default Keystore file for Eclipse IDE is located at `~/android/`

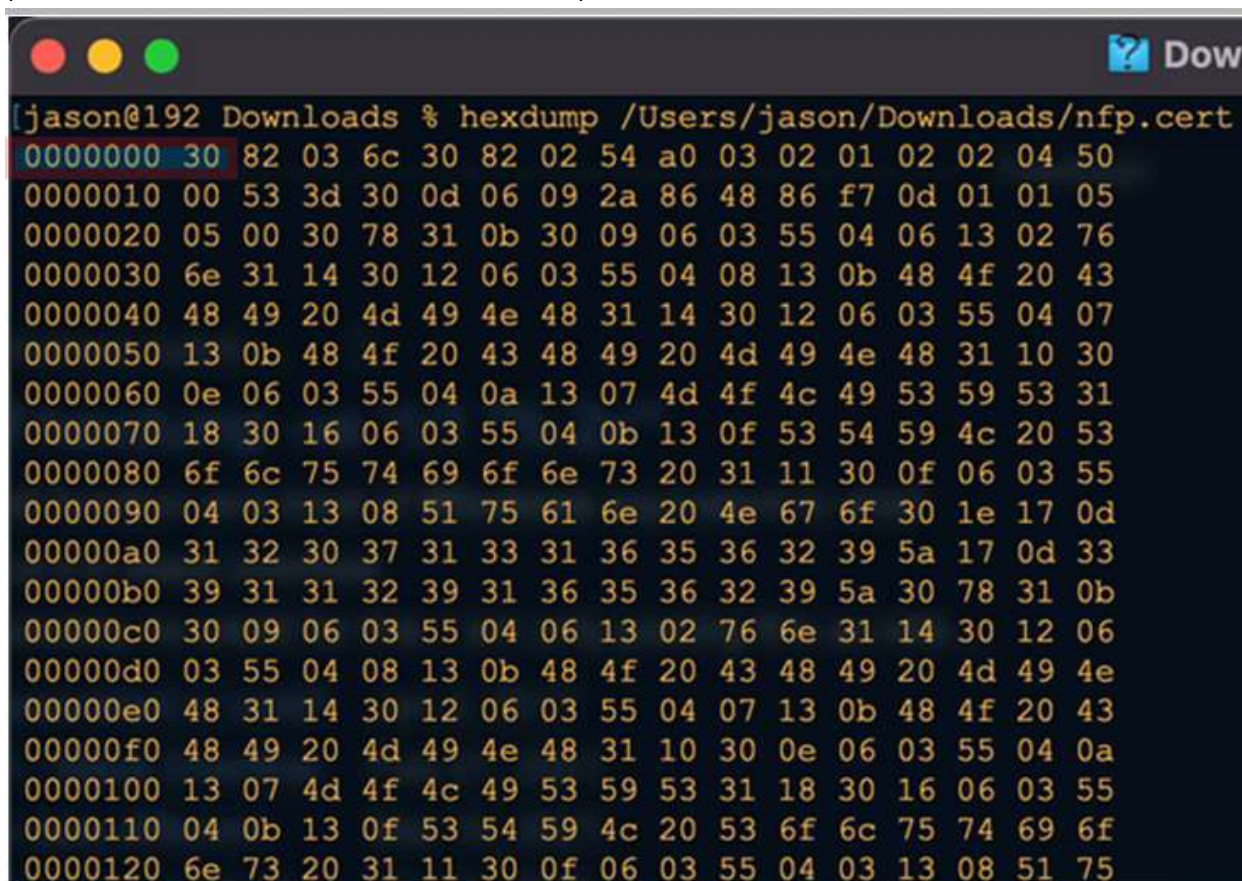
Go to terminal, obtain the Certificates information with the command line as follows:

```
keytool -export -keystore <keystore> -alias <alias> -file
<output.cer>
```

After export, verify if the certificate is in DER format (extension can be .cer but format should be DER). You can use either of the following commands to verify the formatting:

1. `hexdump <file>`

(The certificate should start with "00000000 30")



```
jason@192 Downloads % hexdump /Users/jason/Downloads/nfp.cert
00000000 30 82 03 6c 30 82 02 54 a0 03 02 01 02 02 04 50
00000010 00 53 3d 30 0d 06 09 2a 86 48 86 f7 0d 01 01 05
00000020 05 00 30 78 31 0b 30 09 06 03 55 04 06 13 02 76
00000030 6e 31 14 30 12 06 03 55 04 08 13 0b 48 4f 20 43
00000040 48 49 20 4d 49 4e 48 31 14 30 12 06 03 55 04 07
00000050 13 0b 48 4f 20 43 48 49 20 4d 49 4e 48 31 10 30
00000060 0e 06 03 55 04 0a 13 07 4d 4f 4c 49 53 59 53 31
00000070 18 30 16 06 03 55 04 0b 13 0f 53 54 59 4c 20 53
00000080 6f 6c 75 74 69 6f 6e 73 20 31 11 30 0f 06 03 55
00000090 04 03 13 08 51 75 61 6e 20 4e 67 6f 30 1e 17 0d
000000a0 31 32 30 37 31 33 31 36 35 36 32 39 5a 17 0d 33
000000b0 39 31 31 32 39 31 36 35 36 32 39 5a 30 78 31 0b
000000c0 30 09 06 03 55 04 06 13 02 76 6e 31 14 30 12 06
000000d0 03 55 04 08 13 0b 48 4f 20 43 48 49 20 4d 49 4e
000000e0 48 31 14 30 12 06 03 55 04 07 13 0b 48 4f 20 43
000000f0 48 49 20 4d 49 4e 48 31 10 30 0e 06 03 55 04 0a
0000100 13 07 4d 4f 4c 49 53 59 53 31 18 30 16 06 03 55
0000110 04 0b 13 0f 53 54 59 4c 20 53 6f 6c 75 74 69 6f
0000120 6e 73 20 31 11 30 0f 06 03 55 04 03 13 08 51 75
```

2. Alternatively, you can use this command:

`openssl x509 -text -noout -inform DER -in <android.cer>`

The certificate should load, else will show error if not DER.

Google Play signing is enabled for Android Production app

** If enabled, you should download the Google certificate and pass it to us together with your signer cert. (2 certificates in total are expected).

1. Google app signing key
2. Upload key

You can download the certificate for the app signing key and your upload key from the Release > Setup > App Integrity page in the Play Console. This is used to register public key(s) with API providers; it's intended to be shared, as it does not contain your private key.

For reference:

<https://developer.android.com/studio/publish/appsigning#api-providers>