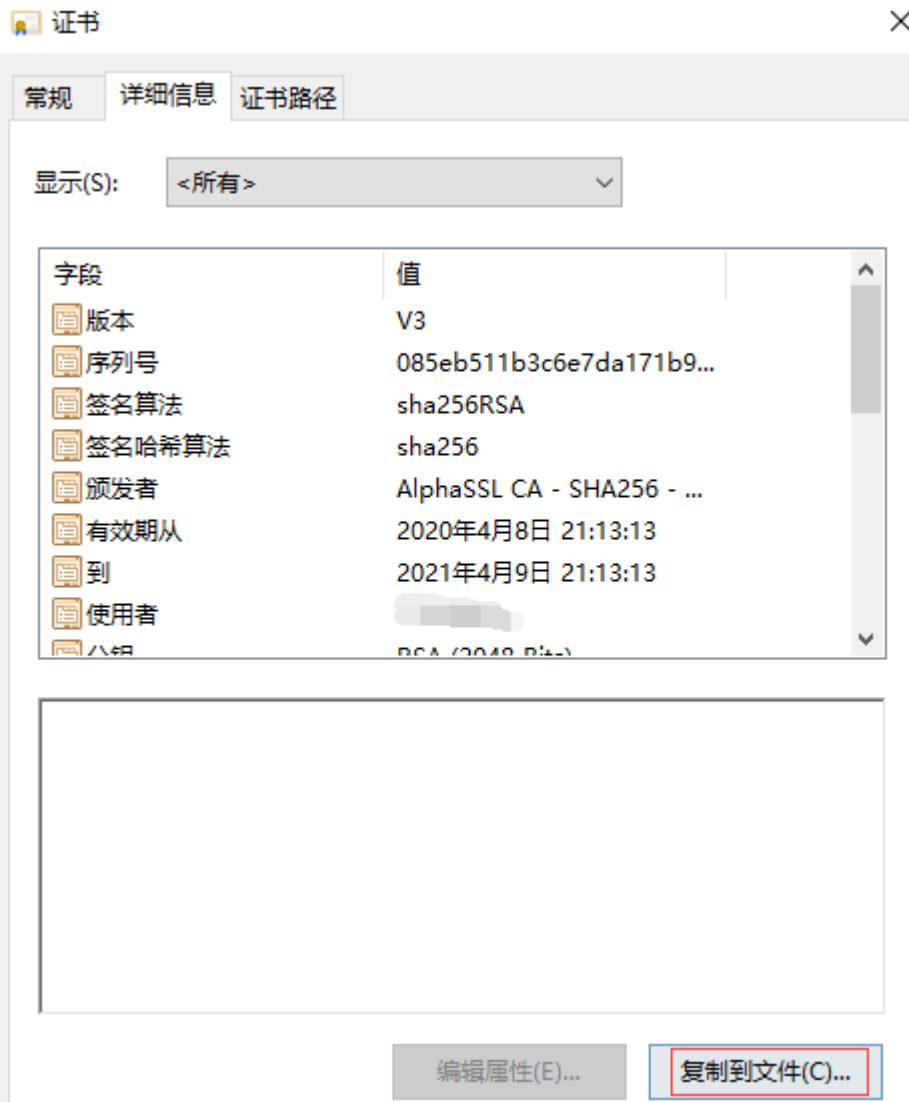


- 购买证书后下载证书文件
- 双击打开Apache的crt格式证书



- 详细信息-》复制到文件



- 选择Base64编码



← 证书导出向导

导出文件格式

可以用不同的文件格式导出证书。

选择要使用的格式:

- DER 编码二进制 X.509 (.CER)(D)
- Base64 编码 X.509(.CER)(S)
- 加密消息语法标准 - PKCS #7 证书(.P7B)(C)
 - 如果可能, 则包括证书路径中的所有证书(I)
- 个人信息交换 - PKCS #12(.PFX)(P)
 - 如果可能, 则包括证书路径中的所有证书(U)
 - 如果导出成功, 删除私钥(K)
 - 导出所有扩展属性(A)
 - 启用证书隐私(E)
- Microsoft 系列证书存储(.SST)(T)

下一步(N)

取消

- 设置名称为server

要导出的文件

指定要导出的文件名

文件名(F):

server

浏览(R)...

下一步(N)

取消

- 导出成功



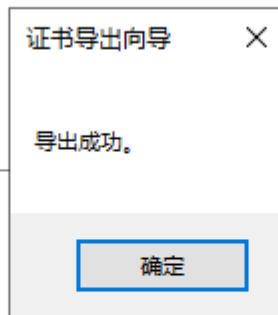
← 证书导出向导

正在完成证书导出向导

你已成功完成证书导出向导。

你已指定下列设置:

文件名	D:\桌面\ [redacted] \Apache\server.cer
导出密钥	否
包括证书路径中的所有证书	否
文件格式	Base64 编码 X.509 (*.cer)



完成(F) 取消

- 打开key文件，将key复制出来

```
1 -----BEGIN RSA PRIVATE KEY-----
2 [REDACTED]
3 h+su1Bq20y2V... kFzihpgo0CTUv
4 78wOS0RInZeqPrEdAyv/X43LNyTjVMMqRL5g3bDZZWm6xo50c9B4kDvSAIzUhqQ9
5 w19bdf44r52fyAiVoR7RzGjF+rD4PJxiayvr59s6p4MywBVlt7xfOUL3hFuWE2UW
6 hb2Acd0smNo7ct2GHNLOhlUV1Bb4wCmqAu3NUVhVinrF5J/zyr6BCj9a4CA1K1Tg
7 FA7YMH2vkZVLb+rY9yzICyDdx0DXDUyBiD5+nwIDAQABoIBAFS4QTjlJCSEC4ck
8 5dQupYZoCig2VKn/IcZqUU5hstjVmRJJfgtffiF5zbImciqEyRFAjK71R0hLW034E
9 7wgwmhBpa7com6p8GbW82JSRPQAlmCrxhlylCDpTDjDpgns4TSaZtL12ldg3XRUS
10 lWCwysrj1NhVKKIE+nO6Uytj8q+P/6XGauylZsnN5n7UTkuFw67SszPWTWggnSqt
11 XpgvTbZLHr74UazYM/R46E7uqHqIxn1hgZ0vhgnQS+jOeXIi31Y3ze1AVXfwaiM8
12 PPe1DwUe9c5Nh90NnMdZ7frRABt0h9GFwxfmDarvx03kl/EqFgbx6ytqRA1qoPsc
13 nNFGREkCgYEA+u2ThxXd7wmJQIPHgrDjH/odQxQm0/I+MWxanDhkhKTS3TtjRGLs
14 sGWE3i2Mij3E12p/7TcYdPBftvlBe0a/UoOz6gomOGgQhjer04OI9QP8uMBqRsBm
15 p/+j8BC1XyVfzuT48cbM3sOyLSc8dQTKjrZMYGiC0IRralni9WBXDtsCgYEA4/ml
16 D4pROH+DaUtM0vt4wFYgh51Gb2AjLreA408fqQ+xvIdoE6YjBeeAKxwQW6Ut0RXc
17 OON259LBcoAjm1VmJzklisr/Ly51OZzGPuOEzCnQAb8JZWikORATTz5vi+U8Gv8L
18 ikM7PJnfvZvNrf4PCrK2dlp0cbz8TjEWl0jJ68I0CgYEAARMJe/PVYLFgTcT7zAI7K
19 gNyRwvof1XKF0T85jy7gPdbA+uIFcTLupG/wr4sKpK7sVCeV1ftF0lUOmna33ikS
20 Vjwo5WyBbfpvzgiMO37nD1HkcErBoN6cjpVZqdHHHa+8q9RHdSabLI/tnlrRK/vV
21 fbYTFZk+31McJUenk6r1pVsCgYAUshaciC5DtYh+Sb7YnB0B7S2YPbP+ilu5caMn
22 BHrePgSNzkSwsKwt17/y/ujHYvuxl6m2l2EeYynKUQBUvQNX9X+NIDSuZnWclDWg
23 sVvWhKrqn9qNj7jAqWXyUjAeDLaumJjEQzB09plo7wYlxyAxJbN40H/kir8yXTX1
24 PzC9RQKBgQCtTlpLuAUbeizGLpkfDq5l+gtCjn338bvY/U+ytXf34qIplW8LzOX0
25 [REDACTED] 4QlWne9L
26 [REDACTED]
27 -----END RSA PRIVATE KEY-----
```

- 打开server.cer将上面复制的key粘贴到尾部，然后保存

```
key server.cer
16
17
18 aGFzc2wuY29tL2dzL2dzYWxwaGFzaGEyZzIuY3JsMCEGA1UdEQQaMBiCCyouaWRj
19 NTIwLmNugglpZGM1MjAuY24wHQYDVR01BBYwFAYIKwYBBQUHAWEGCCsGAQUFBwMC
20 MB8GA1UdIwQYMBaAFPXN1TwIUPlqTzq3l9pWg+Zp0mj3MB0GA1UdDgQWBBSj22Mc
21 3CM/UGs2bjHv+S2ZdMLoOzCCAQQGCisGAQQB1nkCBAIEgfUEgfIA8AB1ALvZ37wf
22 inG1k5Qj16qSe0c4V5UKq1LoGpCWZDaOhtGFAAABcVnsYwsAAAQDAEYwRAIgfdbw
23 Gk/VMxEotQ8kZpnQBs4k3k51T1QmoKo/NoZ3CsACICjfPuYKTVHtv8BGxk9gx6w1
24 Qd8A1DDCk8QJNAND5hsEAHcAh3W/5118+IxDmV+9827/Vo1HVjb/SrVgwbTq/16g
25 gw8AAAFxWexjQwAABAMASDBGAiEAX0eXZvUYSHuDV3SsSgIXEnmq+uUoDqM2VqcT
26 bT/BclcCIQDK4kdq0o4bIaOfYQyCOGjshBLdtUniouo4a60q9Ua4RTANBqkqhkiG
27 9w0BAQsFAAOCAQEASH84pge6MPAWKN+xUrNTRErSkmKaAcEwsj1BumEe+S/8KVFL
28 9z+HrjVKzKVv6V+XI+sRnuDIDgZo6mCnmGwaluTGBkXwp98BalbSuebtAB5Yq6dG
29 4rWM+mW+u59TJOMHxpvXpy+MQWwbALhECQflRfSf2fELmn9bkAD4356lpHABaEbG
30 aP9dEMmgduauNF5OrJWntzHsFm4+mMpOSr3nSYwmXTT8RDh7osIvqFvo9IET7Rw+
31
32 -----END CERTIFICATE-----
33 -----BEGIN RSA PRIVATE KEY-----
34
35
36
37 78wOSURInzeqPrEdAyv/X43LNyTjVMMqRL5g3bDZZWm6xo50c9B4kDVSA1zUhqQ9
38 w19bdf44r52fyAiVoR7RzGjF+rD4PJxiayvr59s6p4MywBVlt7xfOUL3hFuwe2UW
39 hb2AcD0smNo7ct2GHNLOhlUV1Bb4wCmqAu3NUVhVinrF5J/zyr6BCj9a4CA1K1Tg
40 FA7YM2vkZVLb+rY9yzICyDdx0DXDUyBiD5+nwIDAQABAoIBAFS4QTj1JCSEC4ck
41 5dQupYZoCig2VKn/IcZqUU5hstjVmRJJfgtFiF5zbImciqEyRFAjK71R0hLW034E
42 7wgwmhBpa7com6p8GbW82JSRPQAlmCrxhlylCDpTDjDpgns4TSaZtL12ldg3XRUS
43 lWCwySrl1NhVKKIE+n06Uytj8q+P/6XGauylZsnN5n7UTkuFw67SzZPWTWggnSqt
44 XpgvTbZLHr74UazYM/R46E7uqHqIxn1hgZ0vhgnQS+jOeXIi31Y3ze1AVXfwaiM8
45 PPe1DwUe9c5Nh90NnMdZ7frRABt0h9GFwxfmDARvx03kl/EqFgbx6ytqRALqoPsc
46 nNFGREkCgYEA+u2ThxXd7wmJQIPHgrDjH/odQxQm0/I+MWxanDhkhKTS3TtjRGLs
47 sGWE3i2Mij3E12p/7TcYdPBftvlBe0a/UoOz6gomOGgQhjer04OI9QP8uMBqRsBm
48 p/+j8BC1XyVfzuT48cbM3sOyLSc8dQTKjrZMYGiC0IRralni9WBXDtsCgYEA4/ml
49 D4pROH+DaUtM0vt4wfyGh51Gb2AjLreA408fqQ+XvIdoE6YjBeeAKxwQW6Ut0RXc
50 OON259LBcoAjM1VmJzkli5r/Ly51OZZGPuOEzCnQAb8JZWikorATTz5vi+U8Gv8L
51 ikM7PJnfZvNrf4PCrK2dlp0cbz8TjEW10jJ68I0CgYEA rMJe/PVYLFgTcT7zAI7K
52 gNyRwvof1XKF0T85jy7gPdbA+uIFcTLupG/wr4sKpK7sVCeVlftF0lUOmna33iks
53 Vjwo5WyBbfpvzgiMO37nd1HkcErBoN6cjpVZqdHHHa+8q9RHdSabLI/tnlrRK/vV
54 fbYTFZk+31McJUenk6rlpVsCgYAUshaci5DtYh+Sb7YnB0B7S2YPbP+ilu5caMn
55 BHrePgSNzkSwsKwt17/y/ujHYvuxl6m212EeYynKUQBuvQNX9X+NIDSuZnWClDWg
56 sVvWhKrqn9qNj7jAqWXyUjAeDLaumJjEQzB09plo7wYlxyAxJbN40H/kir8yXTX1
57 PzC9RQKBgQCtTlpLuAUbeiZGLpkfDq51+gtCjn338bvY/U+ytXf34qIplW8LzOX0
58
59 -----END RSA PRIVATE KEY-----
60
```