

Re-instating a revoked OpenVPN certificate

When a certificate is being revoked, initially the effect is only found in the index.txt file where the entry for the certificate will be edited. The line for the relevant certificate should start with a **V**, but after revocation it will start with an **R**:

```
/etc/openvpn/easy-rsa# ./easyrsa revoke testuser
[...]
Revoking Certificate D733DAE853A207D3D65FD3BD852112AF.
```

Effect:

```
/etc/openvpn/easy-rsa# cat pki/index.txt
R      290816115757Z      190819120820Z      D733DAE853A207D3D65FD3BD852112AF
      unknown      /CN=testuser
```

The second thing you will notice is the timestamp of the revocation which has been added as well, here displayed in **RED**.

After this “template” file index.txt has been edited, the CRL file will require (manual) updating:

```
/etc/openvpn/easy-rsa# ./easyrsa gen-crl
```

Her effect is now:

```
/etc/openvpn/easy-rsa# openssl crl -in pki/crl.pem -text -noout
[...]
```

Revoked Certificates:

```
Serial Number: D733DAE853A207D3D65FD3BD852112AF
Revocation Date: Aug 19 12:08:20 2019 GMT
Signature Algorithm: sha256WithRSAEncryption
61:19:04:57:0b:5b:14:9c:17:a6:7c:a2:7f:33:5b:41:7f:ee:
11:28:f4:1f:27:a8:84:ca:b9:b0:3f:e7:1a:90:00:5e:89:48:
51:60:82:59:f3:8a:0b:88:7a:44:fa:59:ba:3b:5e:bb:20:64:
8a:bc:fe:8a:35:54:bc:41:72:bd:40:7f:54:bf:27:fc:46:a8:
07:69:4f:77:c8:9d:86:f3:2b:a0:79:88:39:ce:18:0b:ae:22:
6b:72:3f:d6:9b:b2:49:2c:27:13:bc:8e:ca:54:b5:00:7b:f2:
b5:36:96:b3:e9:f4:5b:d0:3d:30:7a:0f:c9:2a:e4:1c:85:b2:
      87:e7:32:c4:11:95:19:47:2e:56:63:d7:a8:03:90:f5:ab:d6:
8e:f1:3b:d6:3c:19:34:6a:35:a2:78:0d:dd:cc:bd:1e:be:33:
df:7d:77:cc:09:fb:bb:2d:f8:36:70:94:45:12:1d:bb:bd:76:
af:51:a0:9d:54:a2:42:9b:ba:9b:91:9f:fd:53:00:30:40:96:
e5:0c:80:5d:fb:ef:4e:00:26:02:de:50:90:6a:3c:a9:10:15:
c8:ca:a4:af:6f:23:f9:e5:db:b6:75:11:35:60:6f:b7:69:c7:
89:27:8c:d5:17:db:05:1e:16:23:8a:2f:e3:95:92:02:22:7c:
df:6d:5a:93
```

To reverse the procedure, make a valid copy of index.txt, edit it and change the **R** back into a **V** and remove the timestamp.

Example:

```
/etc/openvpn/easy-rsa# vi pki/index.txt
R      290816115757Z      190819120820Z      D733DAE853A207D3D65FD3BD852112AF
unknown /CN=testuser
```

→ Becomes:

```
V      290816115757Z      D733DAE853A207D3D65FD3BD852112AF  
unknown /CN=testuser
```

Update the CRL file:

```
/etc/openvpn/easy-rsa# ./easyrsa gen-crl
```

The effect is now:

```
/etc/openvpn/easy-rsa# openssl crl -in pki/crl.pem -text -noout  
[...]
```

No Revoked Certificates.

Note: The whole procedure does not require a restart of the OpenVPN server daemon.