CMX 10.5 SSL證書安裝過程

目錄

簡介

本文將提供有關如何獲取免費SSL證書以及如何在CMX上安裝該證書的示例。本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

必要條件

需求

思科建議您瞭解以下主題：

— 可在外部解析的域名

— 基本linux技能

- PKI（公開金鑰基礎架構）基礎知識

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- CMX 10.5

準備和備份

Web證書位於以下資料夾中：

```
[root@cmxtry ssl]# pwd
/opt/haproxy/ssl
```
備份舊證書和金鑰：

```
[cmxadmin@cmxtry ssl]$cd /opt/haproxy/ssl/

[cmxadmin@cmxtry ssl]$su root
Password: (enter root password)

[root@cmxtry ssl]# mkdir ./oldcert
[root@cmxtry ssl]# mv host.* ./oldcert/

[root@cmxtry ssl]# ls ./oldcert/
host.key   host.pem
```

如果您不太熟悉Linux，可以使用以下方式解釋上述命令：

```
[cmxadmin@cmxtry ssl]$cd /opt/haproxy/ssl/

[cmxadmin@cmxtry ssl]$su root
Password: (enter root password)

[root@cmxtry ssl]# mkdir /opt/haproxy/ssl/oldcert
[root@cmxtry ssl]# mv host.pem /opt/haproxy/ssl/oldcert/
[root@cmxtry ssl]# mv host.key /opt/haproxy/ssl/oldcert/

[root@cmxtry ssl]# ls /opt/haproxy/ssl/oldcert/
host.key   host.pem
```

設定

生成私鑰：

```
openssl genrsa -out cmxtry.com.key 2048

[root@cmxtry ssl]# openssl genrsa -out cmxtry.com.key 2048
Generating RSA private key, 2048 bit long modulus
............
...............
e is 65537 (0x10001)

[root@cmxtry ssl]# ls
cmxtry.com.key   oldcert
```
使用在上一步中生成的私鑰生成CSR（證書簽名請求）。

```
[root@cmxtry ssl]# openssl req -new -sha256 -key cmxtry.com.key -out cmxtry.com.csr

You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:BE
State or Province Name (full name) [Some-State]:
Locality Name (eg, city) []:DIEGEM
Organization Name (eg, company) [Internet Widgits Pty Ltd]:CMXTRY
Organizational Unit Name (eg, section) []:CMXTRY
```

```
Common Name (e.g. server FQDN or YOUR name) []:cmxtry.com
Email Address []:avitosin@cisco.com

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:Cisco123
An optional company name []:CMXTRY
```

```
[root@cmxtry ssl]# ls
cmxtry.com.csr   cmxtry.com.key   oldcert
```
顯示CSR:

```
[root@cmxtry ssl]# cat cmxtry.com.csr
-----BEGIN CERTIFICATE REQUEST-----
MIIDZTCCAk0CAQAwgY0xCzAJBgNVBAYTAkJFMRMwEQYDVQQIDApTb21lLVN0YXRl
MQ8wDQYDVQQHDAZESUVHRU0xDzANBgNVBAoMBkNNWFRSWTEPMA0GA1UECwwGQ01Y
VFJZMRMwEQYDVQQDDApjbXh0cnkuY29tMSEwHwYJKoZIhvcNAQkBFhJhdml0b3Np
bkBjaXNjby5jb20wggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCkEIg0
AxV/3HxAxUu7UI/LxkTP+DZJvvuua1WgyQ+tlD4r1+k1Wv1eINCJqywglCKt9vVg
aiYp4JAKL28TV7rtSKqNFnWDMtTKoYRkYWI3L48r9Mu9Tt3zDCG09ygnQFi6SnmX
VmKx7Ct/wIkkBXfkq1nq4vqosCry8SToS1PThX/KSuwIF6w2aKj1Fbrw3eW4XJxc
5hoQFrSsquqmbi5IZWgH/zMZUZTdWYvFc/h50PCBJsAa9HTY0sgUe/nyjHdt+V/l
alNSh41jsrulhWiPzqbaPW/Fej9/5gtPG5LReWuS20ulAnso4tdcST1vVletoXJw
F58S8AqeVrcOV9SnAgMBAAGggZEwFQYJKoZIhvcNAQkCMQgMBkNNWFRSWTAXBgkq
hkiG9w0BCQcxCgwIQ2lzY28xMjMwXwYJKoZIhvcNAQkOMVIwUDAJBgNVHRMEAjAA
MBcGA1UdEQQQMA6CDF9fSE9TVE5BTUVfXzAdBgNVHSUEFjAUBggrBgEFBQcDAQYI
KwYBBQUHAwIwCwYDVR0PBAQDAgOoMA0GCSqGSIb3DQEBCwUAA4IBAQCBslfRzbiw
WBBBN74aWm6YwkO0YexpR2yCrQhcOsxWTujPVvzNP9WaDNxu1rw6o3iZclGi6D61
qFsKtchQhnclvOj7rNI8TInaxIorR2zMy0lF2vtJmvY4YQFso9qzmuaxkmttEMFU
Fj0bxKh6SpvxePh6+BDcwt+kQExK5aF3Q6cRIMyKBS2+I5J5eddJ0cdIqTfwZOGD
5dMDWqHGd7IZyrend8AMPZvNKm3Sbx11Uq+A/fa7f9JZE0O2Q9h3sl3hj3QIPU6s
w1Pyd66/OX04yYIvMyjJ8xpJGigNWBOvQ+GLvK0ce441h2u2oIoPe60sDOYldL+X
JsnSbefiJ4Fe
-----END CERTIFICATE REQUEST-----
```
複製CSR（包括憑證請求行的開始和憑證請求行的結束）。

以我的實驗室為例，我當時使用的是Comodo公司的免費證書(https://www.instantssl.com/)

[OBJ]