

How to Create Your Own SSL Certificate Authority for Local HTTPS Development

<https://deliciousbrains.com/ssl-certificate-authority-for-local-https-development/>

First, we generate CA's private key:

```
openssl genrsa -des3 -out FakeCA.key 2048
```

Then we generate a CA root certificate:

```
openssl req -x509 -new -nodes -key FakeCA.key -sha256 -days 1825 -out FakeCA.pem
```

we create a private key for the server:

```
openssl genrsa -out localhost.key 2048
```

Then We create a CSR (Certificate Signing request)

```
openssl req -new -key localhost.key -out localhost.csr
```

Now we create a server(localhost) pem

```
openssl x509 -req -in localhost.csr -CA FakeCA.pem -CAkey FakeCA.key -CAcreateserial -out localhost.pem -days 1825 -sha256
```

Then we make the CA and server(localhost) certificates installable

```
openssl pkcs12 -export -in FakeCA.pem -inkey FakeCA.key -out FakeCAcontainer.pfx
```

```
openssl pkcs12 -export -in localhost.pem -inkey localhost.key -out localhostcontainer.pfx
```