## **Debugging SSL Certificates**

## **Online Tools**

Really nice set of tools to do a bunch of things, https://www.sslshopper.com/ssl-converter.html

## **Testing**

Assuming that your CA certs are available, without a web server you can determine if a certificate is valid,

```
openssl s_server -cert www.krypton.com_server.crt -key
www.kryptong.com_server.key -CApath /etc/ssl/certs/ -www
```

The result will be an SSL http service listening on port 4433 with the follow response from the running the command,

```
Using default temp DH parameters
Using default temp ECDH parameters
ACCEPT
```

Further testing can be done by pointing your browser to, https://www.krypton.com:4433 where you will a page showing the various ciphers available and some statistics about your connection. Most modern browsers will also allow you to examine the certificate as well.

## **Getting Information**

An SSL certificate contains information about, issuer, valid dates, subject, and crypto. The useful thing about this command is that you do not need CA certificates to view certificates,

```
openssl x509 -text -in www.krypton.com_server.crt
```