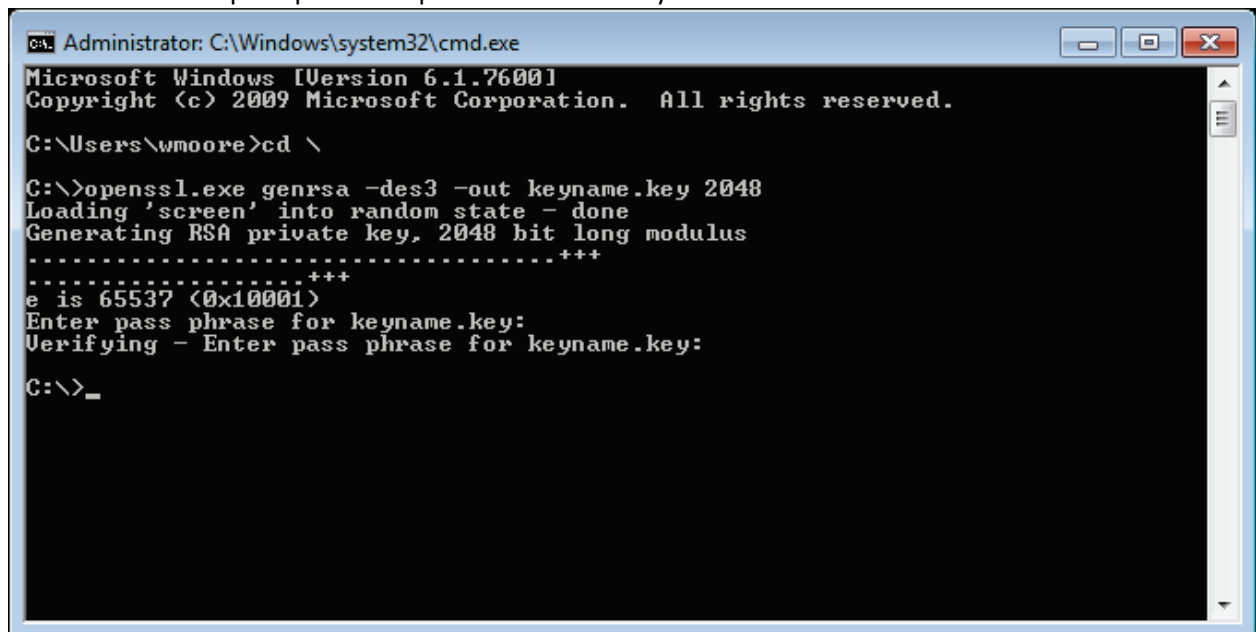


OpenSSL can be used to generate a private key and a certificate signing request for use with acquiring and using an SSL certificate with Mail Express.

In order to do so, please perform the following:

1. Acquire OpenSSL: From <http://www.slproweb.com/products/Win32OpenSSL.html> and download the following:
 - a. Win32 - Win32 OpenSSL v(x) Light (*where (x) is the most recent version*)
 - b. Win32 - [Visual C++ 2008 Redistributables](#)Or
 - a. Win64 - Win64 OpenSSL v(x) Light (*where (x) is the most recent version*)
 - b. Win64 - [Visual C++ 2008 Redistributables \(x64\)](#)
2. Install the appropriate package from 1.b above
3. Install the appropriate package from 1.a above
4. Navigate into the bin subdirectory of the OpenSSL directory (or add it to your Windows Path so it is recognized)
5. Run the following command to set the location of the configuration file:
`set OPENSSL_CONF=c:\[PATH TO YOUR OPENSSL DIRECTORY]\bin\openssl.cfg`
NOTE: You will need to change the "[PATH TO YOUR OPENSSL DIRECTORY]" section to fit your installation directory for OpenSSL.
6. Run the following command to generate the key file:
`openssl.exe genrsa -des3 -out <keyname>.key 2048`

NOTE: You will be prompted for a password for the key file.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

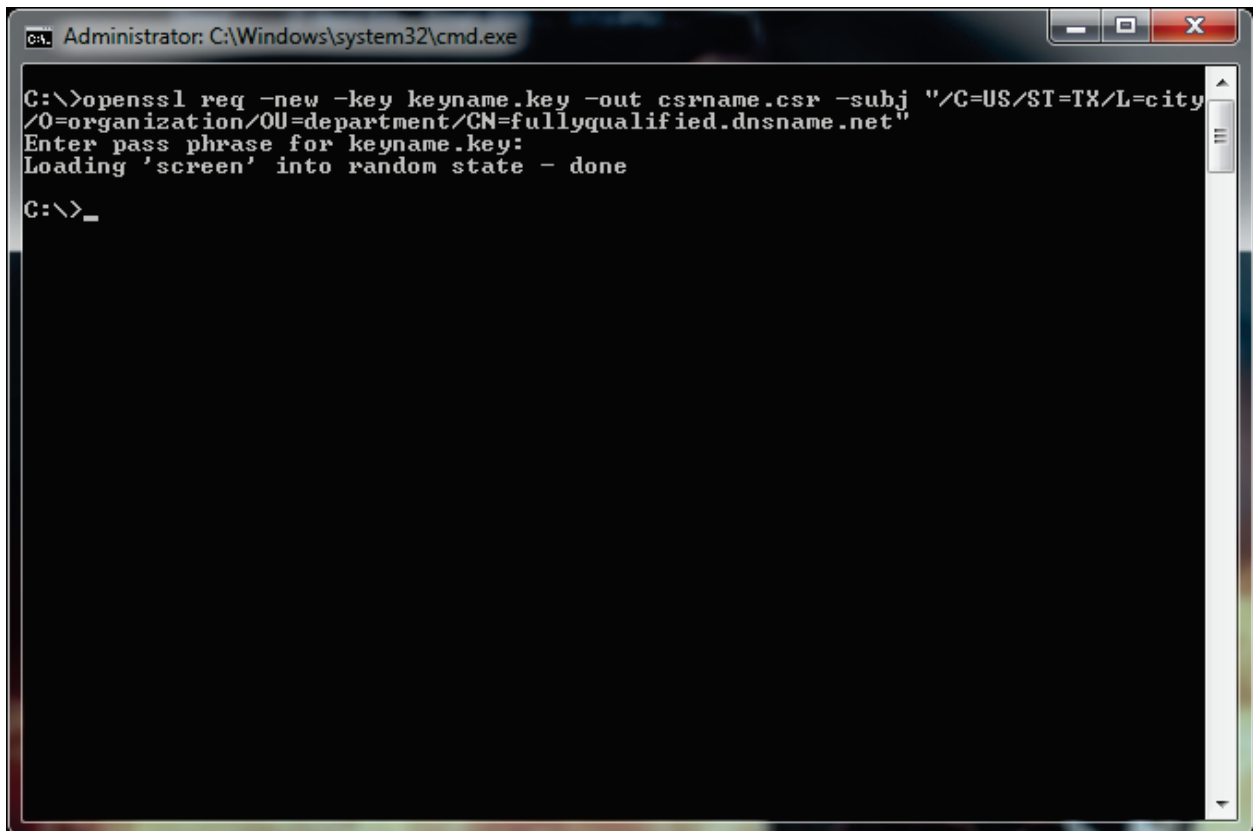
C:\Users\wmoore>cd \

C:\>openssl.exe genrsa -des3 -out keyname.key 2048
Loading 'screen' into random state - done
Generating RSA private key, 2048 bit long modulus
.....+++
.....+++
e is 65537 (0x10001)
Enter pass phrase for keyname.key:
Verifying - Enter pass phrase for keyname.key:

C:\>_
```

7. Run the following command to generate the csr file:
`openssl req -new -key <keyname>.key -out <csrname>.csr -subj
"/C=<country>/ST=<state>/L=<city>/O=<organization>/OU=<department>/CN=<fullyqualified.dnsname.net>"`

NOTE: You will be prompted for the password you used when creating the key file.



```
Administrator: C:\Windows\system32\cmd.exe
C:\>openssl req -new -key keyname.key -out csrname.csr -subj "/C=US/ST=TX/L=city
/O=organization/OU=department/CN=fullyqualified.dnsname.net"
Enter pass phrase for keyname.key:
Loading 'screen' into random state - done
C:\>_
```

Now you can provide the CSR to the Certificate Signing Authority (CSA).

NOTES:

- If you have to copy and paste CSR on the CSA's website, we suggest using "Wordpad" to accomplish this so that it is formatted correctly.
- If you are prompted for the type of certificate that you want to use, it must be an X.509 and Apache or ApacheSSL.
- Please make sure that you keep the key file and the csr file together as the key file will be needed again when deploying the signed certificate to the Mail Express server.