Primero creamos una llave privada RSA de 2048 bits

```
O debian@debian:~

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debian@debian:~$ open ssl genrsa -out /etc/ssl/private/myserver.key 2048
```

Despues creamos un CSR certificate signing request

```
debian@debian:~$ openssl req -new -key /etc/ssl/private/myserver.key -out /etc/ssl/certs/myserver.csr
```

Aqui ingresamos informacion sobre la empresa

```
debian@debian:~$ sudo openssl req -new -key /etc/ssl/private/myserver.key -out /etc/ssl/certs/myserver.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]:MX
State or Province Name (full name) [Some-State]:Chihuahua
Locality Name (eg, city) []:Delicias
Organization Name (eg, company) [Internet Widgits Pty Ltd]:MiEmpresa
Organizational Unit Name (eg, section) []:IT
Common Name (e.g. server FQDN or YOUR name) []:mi-dominio.com
Email Address []:admin@mi-dominio.com
```

Aqui firmamos el CSR con nuestra llave privada para validar el certificado por 265 dias.

```
debian@debian:-$ sudo openssl x509 -req -days 365 -in /etc/ssl/certs/myserver.csr -signkey /etc/ssl/private/myserver.key -o
ut /etc/ssl/certs/myserver.crt
Certificate request self-signature ok
subject=C = MX, ST = Chihuahua, L = Delicias, O = MiEmpresa, OU = IT, CN = mi-dominio.com, emailAddress = admin@mi-dominio.com
```

Aqui deditamos el archivo de configuracion

```
/etc/apache2/sites-available/default-ssl.conf *
 GNU nano 7.2
            practice often causes hanging connections with brain-dead browsers
       #
            this only for browsers where you know that their SSL implementation
            works correctly.
           Notice: Most problems of broken clients are also related to the HTTP
           keep-alive facility, so you usually additionally want to disable
          keep-alive for those clients, too. Use variable "nokeepalive" for t
         Similarly, one has to force some clients to use HTTP/1.0 to workaro>
           their broken HTTP/1.1 implementation. Use variables "downgrade-1.0">
           "force-response-1.0" for this.
        BrowserMatch "MSIE [2-6]" \
               nokeepalive ssl-unclean-shutdown \
               downgrade-1.0 force-response-1.0
        BrowserMatch "MSIE [17-9]" ssl-unclean-shutdown
</VirtualHost>
        #SSLOptions +FakeBasicAuth +ExportCertData +StrictRequire
        <FilesMatch "\.(?:cgi|shtml|phtml|php)$">
               SSLOptions +StdEnvVars
        </FilesMatch>
        <Directory /usr/lib/cgi-bin>
               SSLOptions +StdEnvVars
        </Directory>
```

```
# SSL Engine Switch:
# Enable/Disable SSL for this virtual host.
SSLEngine on
SSLCertificateFile /etc/ssl/certs/myserver.crt
SSLCertificateKeyFile /etc/ssl/private/myserver.key

# A self-signed (snakeoil) certificate can be created by installing
# the ssl-cert package. See
# /usr/share/doc/apache2/README.Debian.gz for more info.
# If both key and certificate are stored in the same file, only the
# SSLCertificateFile directive is needed.

# SSLCertificateFile /etc/ssl/certs/ssl-cert-snakeoil.pem
# SSLCertificateKeyFile /etc/ssl/private/ssl-cert-snakeoil.key
```

```
GNU nano 7.2 /etc/apache2/sites-available/default-ssl.conf *

<VirtualHost *:443>
ServerAdmin admin@mi-dominio.com
ServerName mi-dominio.com

DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn, # error, crit, alert, emerg.

# It is also possible to configure the loglevel for particular # modules, e.g.

#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined
```

Aqui habilitamos SSL y el modulo SSL

```
debian@debian:~$ sudo a2enmod ssl
Considering dependency setenvif for ssl:
Module setenvif already enabled
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create s
elf-signed certificates.
To activate the new configuration, you need to run:
  systemctl restart apache2
debian@debian:~$ sudo a2ensite default-ssl
Enabling site default-ssl.
To activate the new configuration, you need to run:
systemctl reload apache2
```





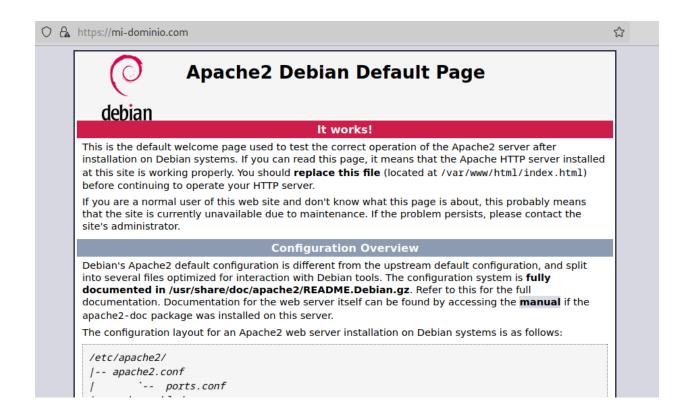
Warning: Potential Security Risk Ahead

Firefox detected a potential security threat and did not continue to mi-dominio.com. If you visit this site, attackers could try to steal information like your passwords, emails, or credit card details.

Learn more...

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Advanced...



El reporte jSOn menciona que la llave se encuentra en el archivo /etc/ssl/private/myserver.key. Abajo confirmo que si lo esta.

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/etc/ssl/private/myserver.key

----BEGIN PRIVATE KEY----

MIIEVQIBADANBgkqhkiG9w0BAQEFAASCBKcwggSjAgEAAoIBAQDLcsoUavIaDVtK
WovtxxDrVTQSQ62cKTHGsx3i93x0P0IJYahnRWaNRU5gA/JtvN7MHMK49Xj8KB4A
UO7FfkfY+gZwXuK95+ssESvozv9aS3A+pZKJXFxaZYmWysBdGlao8VrHZ50i8JAF
sCC9fLH9MMA90igH8WpQpBwvy8SONUZo7pQUF4SuzjT86J2Enq1WfvJExH9sAVn/
089719ERINdJH/UjRICyprroi8PMLo0t9p3WgIUiNuP7tujk/73qmyX3EMMURzlr
Hiplb/qIUmvHAL/QsIClsCCHxJsIZmdv6lyv4TlmJNwGfYwBztx7fCvznhE2EMil
WtREfUIhAgMBAAECggEAG1qSL/+XEIimMw+Mi8o9jJ6WkzQVRg9F2YTgqlEDIzAU
JWXDeisbGDhuyrsNH9MKk5/0UGD0xNZx/jHjgJszdslbD0W6r7Tcaj7ey/z02U0W
Ul35n01TP3YycxtMlNgD0dDF11TnjDiS7KjbJg77cWLaHhXA+xxq4m/G0GjpwwLK
QhnichOrrFZRMekIQmqVh5U3OS/CjCQMjuif19cLiP3a5/Upglc3chBJum3av/TS
pyBvCLticGWxB7vJ1dUKijvpVzhTvufkLP04MYIanQ5UGGtpmgD4NzqY3C74erzu
+aAm2Ih63G9rJhUxAzbXFGxZkGPqgxB2BlXTrqBN7wKBgQDwiXI7H6x1catJXvDg
BCLnWXY4Gby2Vj14/DvzzBxYAcRnsqyXwmaTItF1Sh/ifX7w9z3RJCr83mSUOgvi
xPc9323qZjg8xyoqmV5EOXM5oFCKMD3TT1bAmh1/w7xZZdMlXgcG+uFPZS/GgZ0q
twmCHWbbV2/zVjXk+G2Iqhr1VwKBgQDYhvjHpch1HNve13iv0cc1/0dQGUAgeqnI