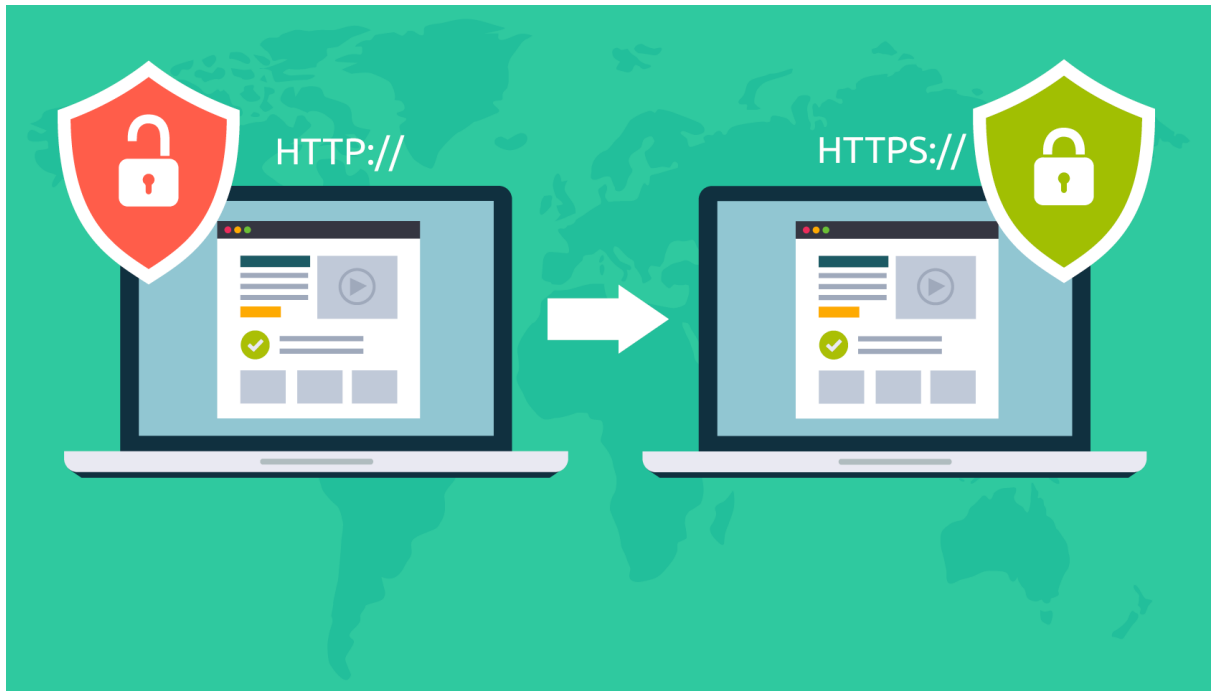# MEMORIA HTTPS

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MÓDULO: Despliegue

Para empezar tendremos que hacer docker run de httpd:2.4 donde indicaremos el nombre que deseemos con --name, mapeamos el volumen en local utilizando -v, igual con el puerto utilizando -p .

```
estudiante@DAW1:~$ docker run -d --name HTTPS -v home\estudiante\gitHttps:/usr/local/apache2/htdocs/httpd -p 80:80 -p 443:443 httpd:2.4
20c70c05a6ae51697406531808586d2cc0adc6064c2aaba5df7f5c823f84ee29
```

Una vez realizado lo anterior tendremos que hacer un docker exec, accediendo al mismo, donde nos posicionamos en la carpeta "conf" escribiendo el siguiente comando:

"openssl req -days 365 -newkey rsa:2048 -keyout server.key -out server.crt"

```
estudiante@DAW1:~$ docker exec -it HTTPS /bin/bash
root@20c70c05a6ae:/usr/local/apache2# apt-get update
Get:1 http://deb.debian.org/debian bullseye InRelease [116 kB]
Get:2 http://deb.debian.org/debian-security bullseye-security InRelease [48.4 kB]
Get:3 http://deb.debian.org/debian bullseye-updates InRelease [44.1 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 Packages [8184 kB]
Get:5 http://deb.debian.org/debian bullseye-security/main amd64 Packages [194 kB]
Get:6 http://deb.debian.org/debian bullseye-updates/main amd64 Packages [14.6 kB]
Fetched 8600 kB in 2s (3909 kB/s)
Reading package lists... Done
root@20c70c05a6ae:/usr/local/apache2# apt-get install openssl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssl is already the newest version (1.1.1n-0+deb11u3).
openssl set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.
root@20c70c05a6ae:/usr/local/apache2# ls
bin  build  cgi-bin  conf  error  htdocs  icons  include  logs  modules
root@20c70c05a6ae:/usr/local/apache2# cd ./
root@20c70c05a6ae:/usr/local/apache2# ls
bin  build  cgi-bin  conf  error  htdocs  icons  include  logs  modules
root@20c70c05a6ae:/usr/local/apache2# cd conf/
root@20c70c05a6ae:/usr/local/apache2/conf# openssl req -x509 -days 365 -newkey rsa:2048 -keyout server.key -out server.crt
Generating a RSA private key
..+++++
.........................................................................................................+++++
writing new private key to 'server.key'
```

Editaremos el fichero httpd.conf utilizando nuestro editor de texto favorito, descomentando las siguientes lineas:

#LoadModule socache_shmcb_module modules/mod_socache_shmcb.so

#LoadModule ssl_module modules/mod_ssl.so

#Include conf/extra/httpd-ssl.conf

```
.................................................+++++
writing new private key to 'server.key'
Enter PEM pass phrase:
Verifying - Enter PEM pass phrase:
-----
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]:ES
State or Province Name (full name) [Some-State]:Sevilla
Locality Name (eg, city) []:Brenes
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Jacaranda
Organizational Unit Name (eg, section) []:
Common Name (e.g. server FQDN or YOUR name) []:javier
Email Address []:villarrealhinojojavier@gmail.com
root@20c70c05a6ae:/usr/local/apache2/conf# ls
extra  httpd.conf  magic  mime.types  original  server.crt  server.key
root@20c70c05a6ae:/usr/local/apache2/conf# nano httpd.conf
bash: nano: command not found
root@20c70c05a6ae:/usr/local/apache2/conf# apt-get install nano
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libgpm2 libncursesw6
Suggested packages:
  gpm hunspell
The following NEW packages will be installed:
  libgpm2 libncursesw6 nano
0 upgraded, 3 newly installed, 0 to remove and 5 not upgraded.
Need to get 824 kB of archives.
After this operation, 3087 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://deb.debian.org/debian bullseye/main amd64 libncursesw6 amd64 6.2+20201114-2 [132 kB]
```

Para terminar utilizaremos el comando "usr/local/apache2/conf# apachectl restart", una vez hecho esto ya podremos acceder a través del puerto 443.

```
Do you want to continue? [Y/n] y
Get:1 http://deb.debian.org/debian bullseye/main amd64 libncursesw6 amd64 6.2+20201114-2 [132 kB]
Get:2 http://deb.debian.org/debian bullseye/main amd64 nano amd64 5.4-2+deb11u1 [656 kB]
Get:3 http://deb.debian.org/debian bullseye/main amd64 libgpm2 amd64 1.20.7-8 [35.6 kB]
Fetched 824 kB in 0s (5685 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package libncursesw6:amd64.
(Reading database ... 7140 files and directories currently installed.)
Preparing to unpack .../libncursesw6_6.2+20201114-2_amd64.deb ...
Unpacking libncursesw6:amd64 (6.2+20201114-2) ...
Selecting previously unselected package nano.
Preparing to unpack .../nano_5.4-2+deb11u1_amd64.deb ...
Unpacking nano (5.4-2+deb11u1) ...
Selecting previously unselected package libgpm2:amd64.
Preparing to unpack .../libgpm2_1.20.7-8_amd64.deb ...
Unpacking libgpm2:amd64 (1.20.7-8) ...
Setting up libgpm2:amd64 (1.20.7-8) ...
Setting up libncursesw6:amd64 (6.2+20201114-2) ...
Setting up nano (5.4-2+deb11u1) ...
update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz because associated file /usr/share/man/man1/nano.1.gz (of link
group editor) doesn't exist
update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/pico.1.gz because associated file /usr/share/man/man1/nano.1.gz (of link gr
oup pico) doesn't exist
Processing triggers for libc-bin (2.31-13+deb11u4) ...
root@20c70c05a6ae:/usr/local/apache2/conf# nano httpd.conf
root@20c70c05a6ae:/usr/local/apache2/conf# apachectl restart
AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive global
```