



**Práctica https**

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**2ºDAW**

Vamos a mapear un archivo index.html que tenemos creado es usr/local/apache2/htdocs.

Ejecutamos el comando para poder crear el contenedor con el nombre HTTPS redirección de puertos 80:80 y 433:433 y la imagen será la de httpd:2.4

```
Windows PowerShell
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Prueba la nueva tecnología PowerShell multiplataforma https://aka.ms/pscore6

PS C:\Users\Spain> docker run -d --name HTTPS -v :/usr/local/apache2/htdocs -p 80:80 -p 443:443 httpd:2.4
Unable to find image 'httpd:2.4' locally
2.4: Pulling from library/httpd
e9995326b091: Pull complete
ee55ccd48c8f: Pull complete
bc66ebee7efe: Pull complete
5d0f831d3c0b: Pull complete
e559e5380898: Pull complete
```

A continuación entramos en la configuración del container y actualizamos con apt-get update. Acto seguido instalamos openssl con apt-get install openssl.

```
PS C:\Users\Spain> docker exec -it HTTPS /bin/bash
root@6da75ec35f04:/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-security 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 (4299 kB/s)
Reading package lists... Done
root@6da75ec35f04:/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 3 not upgraded.
root@6da75ec35f04:/usr/local/apache2# ls
bin  build  cgi-bin  conf  error  htdocs  icons  include  logs  modules
```

Nos movemos al fichero conf y ejecutamos lo siguiente para poder crear el certificado ssh.

Nos preguntará varias cosas y tendremos que ir contestando, como por ejemplo el nombre de la ciudad, país etc.

Esto es para la seguridad y lo deberemos contestar adecuadamente.

```

root@6da75ec35f04:/usr/local/apache2# cd conf
root@6da75ec35f04:/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'
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]:españa
string is too long, it needs to be no more than 2 bytes long

```

Ahora debemos de entrar con el nano en el fichero conf y descomentar varias líneas:

```

#LoadModule socache_shmcb_module modules/mod_socache_shmcb.so
#LoadModule ssl_module modules/mod_ssl.so
#Include conf/extra/httpd-ssl.conf

```

```

Windows PowerShell
GNU nano 5.4 httpd.conf *

# Multi-language error messages
#Include conf/extra/httpd-multilang-errordoc.conf

# Fancy directory listings
#Include conf/extra/httpd-autoindex.conf

# Language settings
#Include conf/extra/httpd-languages.conf

# User home directories
#Include conf/extra/httpd-userdir.conf

# Real-time info on requests and configuration
#Include conf/extra/httpd-info.conf

# Virtual hosts
#Include conf/extra/httpd-vhosts.conf

# Local access to the Apache HTTP Server Manual
#Include conf/extra/httpd-manual.conf

# Distributed authoring and versioning (WebDAV)
#Include conf/extra/httpd-dav.conf

# Various default settings
#Include conf/extra/httpd-default.conf

# Configure mod_proxy_html to understand HTML4/XHTML1
<IfModule proxy_html_module>
Include conf/extra/proxy-html.conf
</IfModule>

# Secure (SSL/TLS) connections
Include conf/extra/httpd-ssl.conf
#
# Note: The following must must be present to support
#       starting without SSL on platforms with no /dev/random equivalent
#       but a statically compiled-in mod_ssl.
#
<IfModule ssl_module>
SSLRandomSeed startup builtin
SSLRandomSeed connect builtin
</IfModule>

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute  ^C Location  M-U Undo     M-A Set Mark
^X Exit      ^R Read File ^M Replace   ^P Paste     ^J Justify  ^_ Go To Line M-E Redo     M-G Copy

```

Después le hacemos un reinicio y comprobamos.

```
root@6da75ec35f04:/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 globally to suppress this message
root@6da75ec35f04:/usr/local/apache2/conf#
PS C:\Users\Spain>
```

Entramos en el navegador con [https://localhost/Nombre\\_fichero](https://localhost/Nombre_fichero), en nuestro caso será “index.html” como vemos a continuación:

