

## Actividades Unidad 02

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1. Configurar un host virtual basado en nombres denominado daw02 que permita el acceso a una página web localizada en el directorio todo-daw02. Hacerla accesible a través de las siguientes URL que identifican a la empresa: `www.daw02.local` y `daw02.local`.

### Paso 1:

Modificamos el host de nuestra máquina local

```
GNU nano 7.2 hosts
# Static table lookup for hostnames.
# See hosts(5) for details.
192.168.70.223    dominio1.local www.dominio1.local
192.168.70.223    dominio2.local www.dominio2.local
192.168.70.223    daw02.local   www.daw02.local
```

[ El fichero «hosts» no es de escritura ]

^G Ayuda	^O Guardar	^W Buscar	^K Cortar	^T Ejecutar	^C Ubicación	M-U Deshacer
^X Salir	^R Leer fich.	^_ Reemplazar	^U Pegar	^J Justificar	^/ Ir a línea	M-E Rehacer

### Paso 2:

Creamos el directorio para daw02.local `sudo mkdir -p /var/www/html/todo-daw02/public_html`

```
rsc@ubuntuuserver:~$ ls /var/www/html/  
contacto.html dominio1.local dominio2.local index.html info.php todo-daw02  
rsc@ubuntuuserver:~$
```

### Paso 3:

Creemos el index.html para dicho dominio

```
<!DOCTYPE html>
<html lang="es">
  <head>
    <meta charset="utf-8">
    <title>Web DAW02</title>
  </head>
  <body>
    <h1>Home de DAW 02</h1>
    <p>Acceso No Limitado. Web Pública de DAW02</p>
  </body>
</html>
```

```
-- INSERTAR --
```

9,51-64

Todo

### Paso 4:

Damos permisos al usuario www-data sudo chown -R www-data: /var/www/html/todo-daw02

```
rsc@ubuntuserver:~$ sudo chown -R www-data: /var/www/html/todo-daw02/
```

**Paso 5:**

Creamos el archivo de conf para el dominio sudo nano /etc/apache2/sites-available/daw02.local.conf

```
<VirtualHost *:80>
    DocumentRoot /var/www/html/todo-daw02/public_html/
    ServerName daw02.local
    ServerAlias www.daw02.local
</VirtualHost>
```

[illegible]

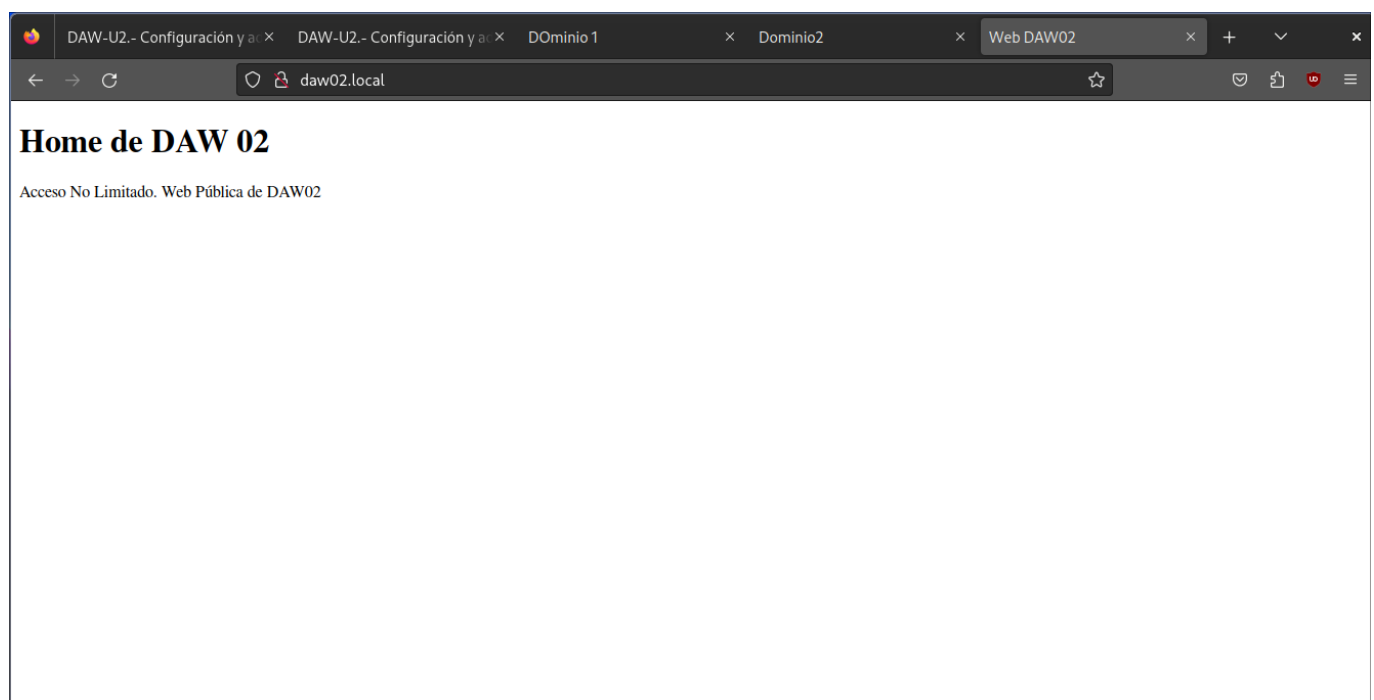
### Paso 6:

Habilitamos el sitio con `sudo a2ensite` y realizamos el `configTest`

```
rsc@ubuntu-server:~$ sudo a2ensite daw02.local
Enabling site daw02.local.
To activate the new configuration, you need to run:
  systemctl reload apache2
rsc@ubuntu-server:~$ sudo systemctl reload apache2
rsc@ubuntu-server:~$ sudo apachectl configtest
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0
.1.1. Set the 'ServerName' directive globally to suppress this message
Syntax OK
rsc@ubuntu-server:~$ _
```

## Paso 7:

Desde el navegador de nuestra máquina principal entramos a la dirección daw02.local



### Paso 1:

```
rsc@ubuntuuser:/etc/apache2/cert-ssl$ ls
741253f3.0  apache.pem  empresaRoger.csr  roger.crt  roger.key
rsc@ubuntuuser:/etc/apache2/cert-ssl$ sudo openssl req -new -nodes -keyout daw02.key -out daw02.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]:ES
State or Province Name (full name) [Some-State]:Granada
Locality Name (eg, city) []:Granada
Organization Name (eg, company) [Internet Widgits Pty Ltd]:DAW02
Organizational Unit Name (eg, section) []:SL
Common Name (e.g. server FQDN or YOUR name) []:daw02
Email Address []:daw02@daw.es

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:1234
An optional company name []:DAW02ALT
rsc@ubuntuuser:/etc/apache2/cert-ssl$ ls
741253f3.0  apache.pem  daw02.csr  daw02.key  empresaRoger.csr  roger.crt  roger.key
rsc@ubuntuuser:/etc/apache2/cert-ssl$
```

```
rsc@ubuntuserver:/etc/apache2/cert-ssl$ ls
741253f3.0 apache.pem daw02.csr daw02.key empresaRoger.csr roger.crt roger.key
rsc@ubuntuserver:/etc/apache2/cert-ssl$ sudo openssl x509 -in daw02.csr -out daw02.crt -req -signkey da
w02.key -days 3650
x509: Use -help for summary.
rsc@ubuntuserver:/etc/apache2/cert-ssl$ sudo openssl x509 -in daw02.csr -out daw02.crt -req -signkey
daw02.key -days 3650
Certificate request self-signature ok
subject=C = ES, ST = Granada, L = Granada, O = DAW02, OU = SL, CN = daw02, emailAddress = daw02@daw.
es
rsc@ubuntuserver:/etc/apache2/cert-ssl$ _
```

## Paso 2:

Creamos el archivo para el sitio daw02-ssl. y añadimos el certificado y la clave privada.



```

GNU nano 6.2 /etc/apache2/sites-available/daw02-ssl.conf
<IfModule mod_ssl.c>
    <VirtualHost *:443>
        DocumentRoot /var/www/html/todo-daw02/public_html
        ServerName daw02.local
        ServerAlias www.daw02.local
        # 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

        # For most configuration files from conf-available/, which are
        # enabled or disabled at a global level, it is possible to
        # include a line for only one particular virtual host. For example the
        # following line enables the CGI configuration for this host only
        # after it has been globally disabled with "a2disconf".
        #Include conf-available/serve-cgi-bin.conf

        # SSL Engine Switch:
        # Enable/Disable SSL for this virtual host.
        SSLEngine on

        # 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/apache2/cert-ssl/daw02.crt
        SSLCertificateKeyFile /etc/apache2/cert-ssl/daw02.key

[ Read 133 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location  M-U Undo
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_/ Go To Line M-E Redo

```

### Paso 3:

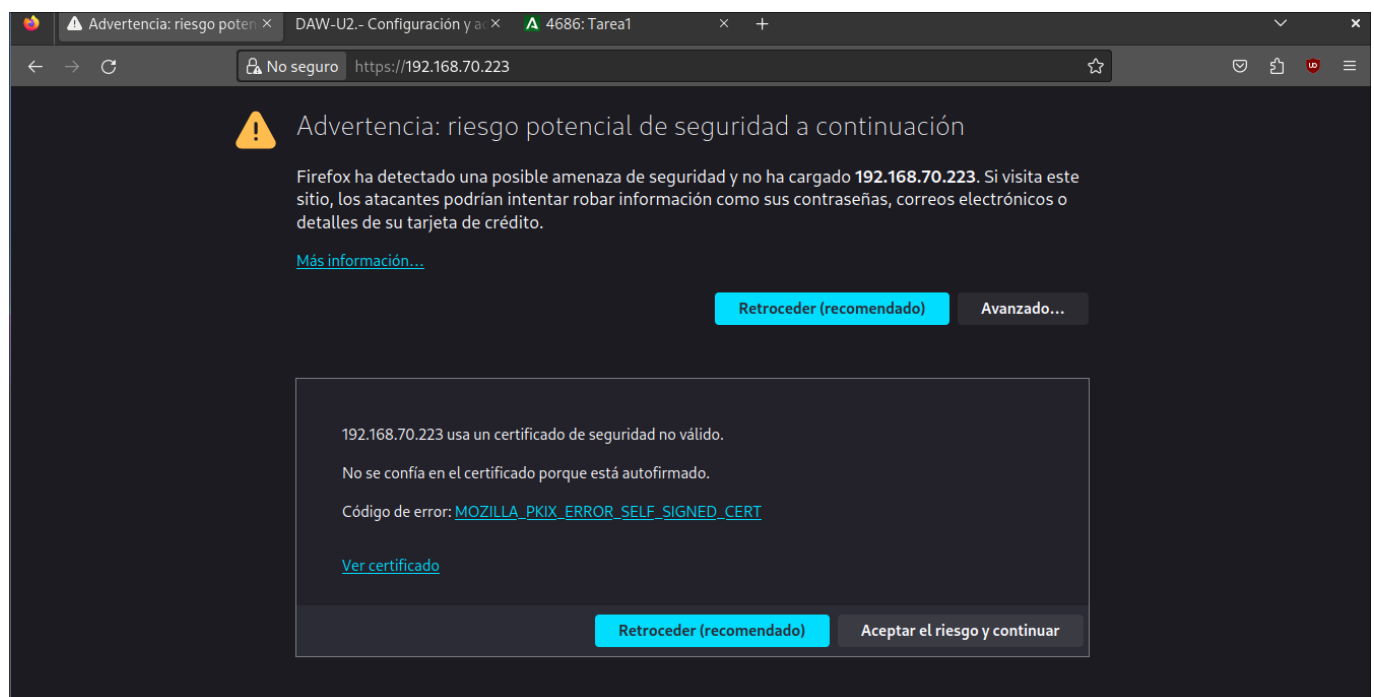
Habilitamos el soporte SSL y el sitio daw02-ssl. Reiniciamos apache.

```
rsc@ubuntuuserver:~$ sudo a2ensite daw02-ssl.conf
Enabling site daw02-ssl.
To activate the new configuration, you need to run:
  systemctl reload apache2
rsc@ubuntuuserver:~$ sudo systemctl reload apache2
Job for apache2.service failed.
See "systemctl status apache2.service" and "journalctl -xeu apache2.service" for details.
rsc@ubuntuuserver:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2023-10-23 08:47:47 UTC; 4min 4s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 634 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Process: 1195 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=1/FAILURE)
  Main PID: 792 (apache2)
    Tasks: 6 (limit: 2221)
   Memory: 35.4M
      CPU: 453ms
   CGroup: /system.slice/apache2.service
           └─792 /usr/sbin/apache2 -k start
             918 /usr/sbin/apache2 -k start
             919 /usr/sbin/apache2 -k start
             920 /usr/sbin/apache2 -k start
             921 /usr/sbin/apache2 -k start
             922 /usr/sbin/apache2 -k start

oct 23 08:47:28 ubuntuuserver systemd[1]: Starting The Apache HTTP Server...
oct 23 08:47:46 ubuntuuserver apachectl[667]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 192.168.70.223. Set the 'ServerName' directive globally to suppress this message
oct 23 08:47:47 ubuntuuserver systemd[1]: Started The Apache HTTP Server.
oct 23 08:51:39 ubuntuuserver systemd[1]: Reloading The Apache HTTP Server...
oct 23 08:51:39 ubuntuuserver apachectl[1198]: AH00526: Syntax error on line 8 of /etc/apache2/ports.conf: Cannot define multiple Listeners on the same IP:port
oct 23 08:51:39 ubuntuuserver apachectl[1195]: Action 'graceful' failed.
oct 23 08:51:39 ubuntuuserver apachectl[1195]: The Apache error log may have more information.
oct 23 08:51:39 ubuntuuserver systemd[1]: apache2.service: Control process exited, code=exited, status=1/FAILURE
oct 23 08:51:39 ubuntuuserver systemd[1]: Reload failed for The Apache HTTP Server.
rsc@ubuntuuserver:~$ _
```

#### Paso 4:

En nuestra máquina entramos en la dirección de la pagina con https://



Aceptamos y veremos la web.

