APACHE WEB ZERBITZARIA

Praktika honen helburua Ubuntu makina batean Apache zerbitzari bat martxan jartzea izango da, eta baldintza hauek bete beharko dituzue:

Apache instalatu

```
aratz@aratz-VirtualBox:~$ sudo apt install apache2
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is
ld by process 2507 (unattended-upgr)
```

Status-a begiratu

```
aratz@aratz-VirtualBox:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor prese>
     Active: active (running) since Wed 2023-09-20 09:03:32 CEST; 8min ago
       Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 27123 (apache2)
      Tasks: 55 (limit: 5331)
     Memory: 4.9M
        CPU: 144ms
     CGroup: /system.slice/apache2.service
             ├─27123 /usr/sbin/apache2 -k start
             ├─27124 /usr/sbin/apache2 -k start
             └─27125 /usr/sbin/apache2 -k start
```

- Besterik adierazi ezean, "Ongi etorri *zureizena*-ren web zerbitzarira!" mezua erakusten duen orrialdea erakutsiko du.

  Lehenengoz sortu gure html-a

```
aratz@aratz-VirtualBox:/var/www/html$ sudo nano inicio.html
```

```
<!DOCTYPE html>
<html>
<body>
        <h1>ONGI ETORRI ARATZ-en WEB ZERBITZARIRA</h1>
</body>
</html>
```

Ruta espesifikatu default dokumentuan

```
aratz@aratz-VirtualBox:~$ sudo nano /etc/apache2/sites-available/000-default.conf
```

```
        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 t
        # 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
        <Directory /var/www/html>
                DirectoryIndex inicio.html
                Options Indexes FollowSymLinks
                AllowOverride None
                Require all granted
        </Directory>
</VirtualHost>

 vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

ONGI ETORRI ARATZ-en WEB ZERBITZARIRA
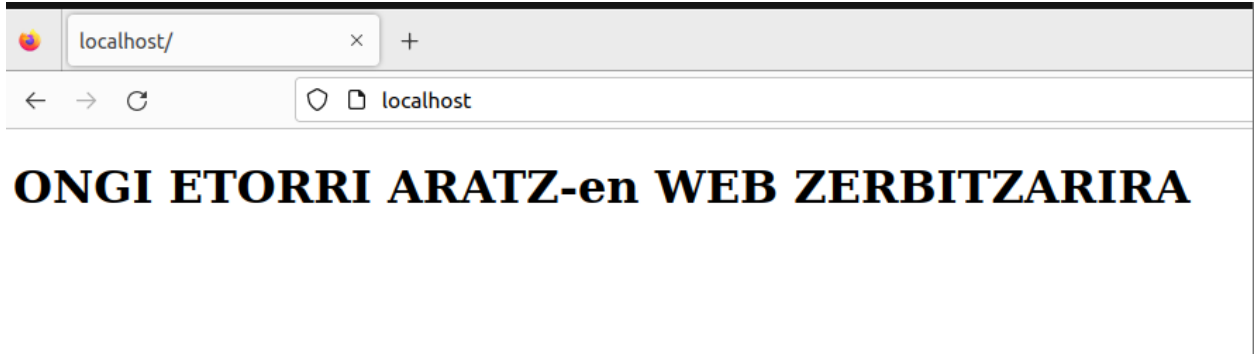
- www.*zureizena*.org domeinura sartzean, /var/www/html/*zureizena* karpetaren edukia erakutsiko da.

Zerbitzari izena espesifikatu

```
ServerAdmin webmaster@localhost
ServerName aratz.com
ServerAlias www.aratz.com
DocumentRoot /var/www/html
```

Gure direktorio sortu htmla-rekin

```
aratz@aratz-VirtualBox:/var/www/html$ sudo mkdir aratz
aratz@aratz-VirtualBox:/var/www/html$ cd /var/www/html/aratz
aratz@aratz-VirtualBox:/var/www/html/aratz$ sudo nano inicio.html
```

```
<!DOCTYPE html>
<html>
<body>
        <h1>NIRE WEB ORRIA</h1>
</body>
</html>
```

localhost/   +

← → C   🛡 🗋 localhost
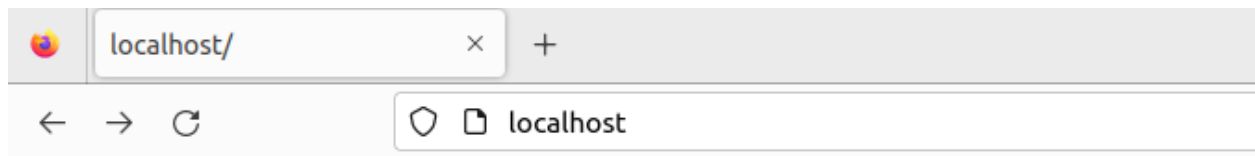
NIRE WEB ORRIA

- Log fitxategien izenak hurrengoak izango dira:
  - Erroreak: *zureizena*-error.log
  - Sarbideak: *zureizena*-access.log

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

- Aurreko direktorioaren barruan "pribatua" izeneko karpeta bat egongo da, eta bertan "sanjorge" erabiltzaile eta "sanjorge" pasahitzarekin konektatzen diren erabiltzaileak bakarrik sartuko dira.

  Lehenengoz password txt bat sortuko dugu eta barruan gure erabiltzail eta pasahitza jarriko dugu

```
aratz@aratz-VirtualBox:~$ sudo htpasswd -c /etc/apache2/sites-available/contras sanjorge
New password:
Re-type new password:
Adding password for user sanjorge
```

  Directorio pribatua sortu

```
aratz@aratz-VirtualBox:~$ mkdir /var/www
mkdir: cannot create directory '/var/www': File exists
aratz@aratz-VirtualBox:~$ cd /var/www
aratz@aratz-VirtualBox:/var/www$ mkdir pribatua
mkdir: cannot create directory 'pribatua': Permission denied
aratz@aratz-VirtualBox:/var/www$ sudo mkdir pribatua
```

  .htaccess dokumentu bat sortuko dugu code onekin barruan pribatu karpetan

```
  GNU nano 6.2
AuthType Basic
AuthName "AREA PROTEGIDA"
AuthUserFile /etc/contras
Require valid-user
```

Geroago html bat sortu

```
<!DOCTYPE html>
<h1>GAFGASFSAFDASFSAD</h1>
</html>
```

This site is asking you to sign in.

Username

Password

Cancel   Sign in

GAFGASFSAFI

Save login for http://localhost?

Username

sanjorge

Password

••••••••

☐ Show password

Don't save   ⌄   Save

- www.*zureizena*.org webgunea, webgune segurua izango da, eta horretarako ziurtagiri bat izango du, non zure izena identifikatu al izango den.

Openssl instalatu

```
aratz@aratz-VirtualBox:~$ sudo apt-get install openssl
[sudo] password for aratz:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssl is already the newest version (3.0.2-0ubuntu1.10).
openssl set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 19 not upgraded.
aratz@aratz-VirtualBox:~$
```

Key eta Csr sortu

```
aratz@aratz-VirtualBox:~$ openssl genrsa -out server.key 1024
aratz@aratz-VirtualBox:~$ openssl req -new -key server.key -out server.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 be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:SP
State or Province Name (full name) [Some-State]:Granada
Locality Name (eg, city) []:Granada
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Aratz
Organizational Unit Name (eg, section) []:Aratz
Common Name (e.g. server FQDN or YOUR name) []:Aratz
Email Address []:a@a.com

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:
```

```
aratz@aratz-VirtualBox:~$ openssl x509 -req -days 365 -in server.csr -signkey server.key -out server.crt
Certificate request self-signature ok
subject=C = SP, ST = Granada, L = Granada, O = Aratz, OU = Aratz, CN = Aratz, emailAddress = a@a.com
```

Hemen ikusi ahal ditugu biak

```
aratz@aratz-VirtualBox:~$ ls -l
total 44
drwxr-xr-x 2 aratz aratz 4096 sep 20 09:57 Desktop
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Documents
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Downloads
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Music
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Pictures
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Public
-rw-r--r-- 1 root  root   672 sep 25 09:28 server.csr
-rw------- 1 root  root   916 sep 25 09:26 server.key
drwx------ 4 aratz aratz 4096 sep 19 08:10 snap
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Templates
drwxr-xr-x 2 aratz aratz 4096 sep 18 14:23 Videos
```

```
ServerAdmin webmaster@localhost
ServerName aratz.org
ServerAlias www.aratz.org
DocumentRoot /var/www/html/aratz
```

Direktorio berdinan sortu behar dugu dokumentu bat non espezifikatzen den key eta csr

```
<VirtualHost *:443>
        ServerName www.aratz.org
        Document /var/www/www.aratz.org

        SSLEngine on
        SSLCertificateFile /etc/ssl/certs/apache-selfsigned.crt
        SSLCerificatekeyFile /etc/ssl/private/apache-selfsigned.key
</VirtualHost>
```

- HTTP konexio guztiak HTTPS izan daitezen birbideratuko dira.

```
aratz@aratz-VirtualBox:~$ 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:
Module socache_shmcb already enabled
Module ssl already enabled
aratz@aratz-VirtualBox:~$ a2enmod rewrite
Enabling module rewrite.
Could not create /etc/apache2/mods-enabled/rewrite.lo
aratz@aratz-VirtualBox:~$ sudo a2enmod rewrite
[sudo] password for aratz:
Enabling module rewrite.
To activate the new configuration, you need to run:
  systemctl restart apache2
aratz@aratz-VirtualBox:~$ systemctl restart apache2
```

Gehitu config

```
RewriteEngine On
RewriteCond %{HTTPS} !=on
RewriteRule ^/?(.*) https://%{SERVER_NAME}/$1
ServerAdmin webmaster@localhost
ServerName www.aratz.org
ServerAlias aratz.org
DocumentRoot /var/www/html
```

- Probak egin ahal izateko HTML fitxategi desberdinak beharko ditugu: bat lehenetsitako gunerako, beste bat www.*zureizena*.org domeinurako eta beste bat "pribatua" karpetara sartzen garenerako.

Kopiak sortu

```
sudo cp /etc/apache2/sites-available/000-default.conf /etc/apache2/sites-available/pribado-default.conf
```

```
<VirtualHost *:80>
        # The ServerName directive sets the re
        # the server uses to identify itself.
        # redirection URLs. In the context of
        # specifies what hostname must appear
        # match this virtual host. For the def
        # value is not decisive as it is used
        # However, you must set it for any fur
        #ServerName www.example
        ServerAdmin webmaster@localhost
        ServerName www.aratz.org
        ServerAlias aratz.org
        DocumentRoot /var/www/privado
```

```
        <Directory /var/www/pribado>
                DirectoryIndex inicio.html
                Options Indexes FollowSymLinks
                AllowOverride All
                Require all granted
        </Directory>
/VirtualHost>
```

Egindakoa funtzionatzen duela egiaztatu beharko duzue.