Práctica 1.1. Instalación de Nginx en el sistema Ubuntu

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Índice:

1. Describe con tus palabras:
- ¿Qué ventajas tiene un servidor web virtual frente a un servidor web 'real'?

En el caso de nginx es estable, sencillo, son pocos recursos los que se necesitan, brinda mejor calidad de servicios, por el dominio y su alta seguridad, gratuito y de alto rendimiento y escalabilidad.

2. Instalar y configurar un servidor web Nginx.
- Instala el paquete.

```
javiepi@ubusrv-jepi:~$ sudo systemctl status nginx
• nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
     Active: active (running) since Wed 2021-12-01 17:24:37 UTC; 15s ago
       Docs: man:nginx(8)
   Process: 1701 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited,>
   Process: 1712 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0>
  Main PID: 1715 (nginx)
      Tasks: 2 (limit: 2279)
     Memory: 2.6M
     CGroup: /system.slice/nginx.service
             ├─1715 nginx: master process /usr/sbin/nginx -g daemon on; master_process on;
             └─1717 nginx: worker process

dic 01 17:24:37 ubusrv-jepi systemd[1]: Starting A high performance web server and a reverse proxy >
dic 01 17:24:37 ubusrv-jepi systemd[1]: Started A high performance web server and a reverse proxy s>
lines 1-15/15 (END)
```

- Indica el fichero de configuración principal .

El fichero de configuración principal se encuenta en /etc/nginx/default

- Indica a quién afecta

Le afecta a todo el document root

3. ¿Cuál es el puerto por defecto por el que escucha Nginx?
El puerto por defecto es el puerto 80 y el de conexión segura es el puerto 443.

4. Aplica seguridad al servidor activando el firewall (ufw) y añadiendo las reglas adecuadas para que escuche solo por los puertos de los servicios que tenéis instalados hasta ahora.

Aquí he activado los puertos 80 y 443

```
javiepi@ubusrv-jepi:/$ sudo ufw status
Status: active

To                         Action      From
--                         ------      ----
80                         ALLOW       Anywhere
443                        ALLOW       Anywhere
80/tcp                     ALLOW       Anywhere
443/tcp                    ALLOW       Anywhere
80 (v6)                    ALLOW       Anywhere (v6)
443 (v6)                   ALLOW       Anywhere (v6)
80/tcp (v6)                ALLOW       Anywhere (v6)
443/tcp (v6)               ALLOW       Anywhere (v6)
```

5. En el directorio raiz por defecto (/var/www) crea una página de prueba básica (index.html).

- Accede desde el navegador usando la IP del servidor web. Debe mostrarse la página index.html del directorio raiz. Captura pantalla funcionando:

http://localhost (en el propio servidor)

```
javiepi@ubusrv-jepi:/$ sudo wget localhost
[sudo] password for javiepi:
--2021-12-01 21:48:41--  http://localhost/
Resolving localhost (localhost)... 127.0.0.1
Connecting to localhost (localhost)|127.0.0.1|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 407 [text/html]
Saving to: 'index.html'

index.html              100%[===================================>]     407  --.-KB/s    in 0s

2021-12-01 21:48:41 (92,1 MB/s) - 'index.html' saved [407/407]

javiepi@ubusrv-jepi:/$
```
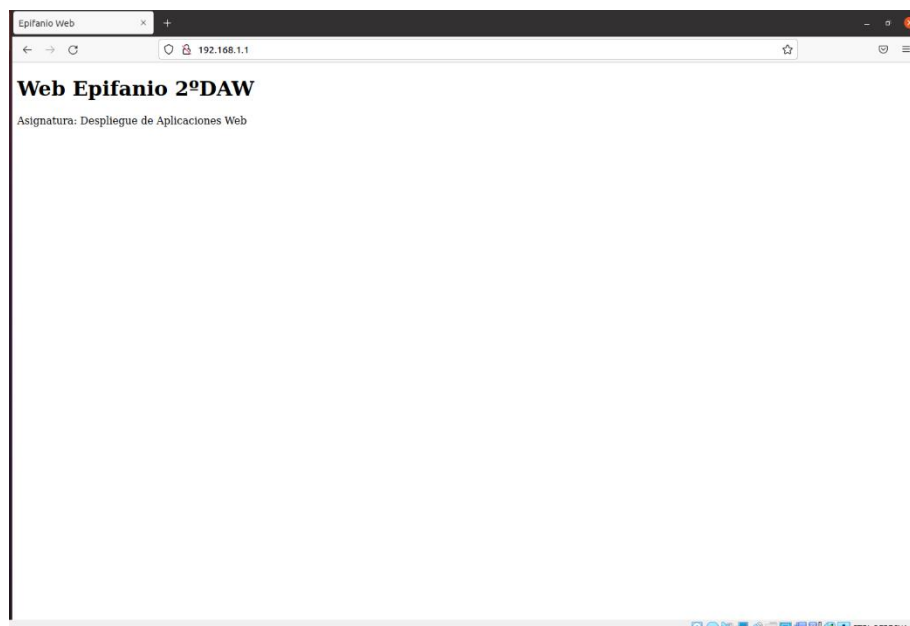
- Accede ahora usando el nombre del servidor; escribe en el navegador:
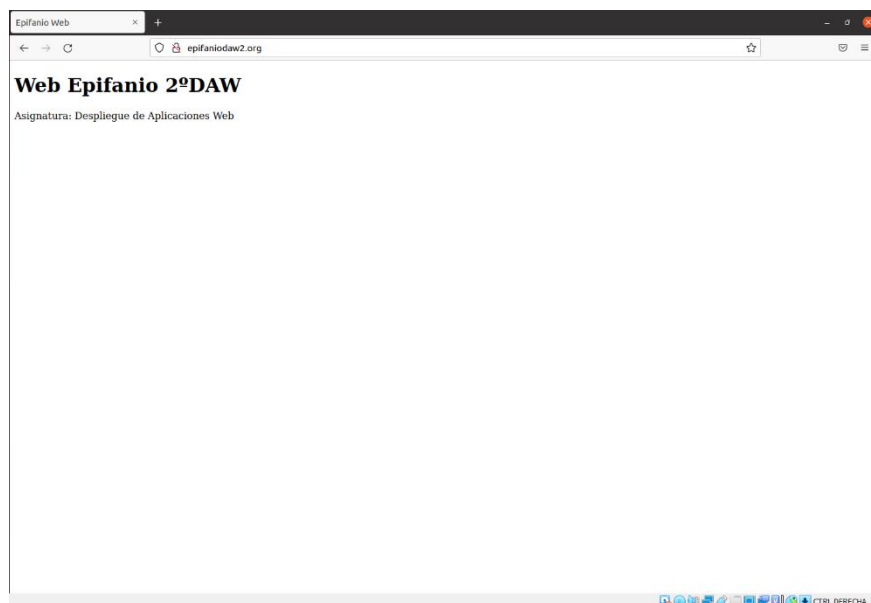
http://LaIPdetuservidorweb (desde cualquier máquina cliente)

En mi caso la ip: 192.168.1.1

http://www.[tuapellido]DAW2.org. (desde cualquier máquina cliente)

En mi caso epifanioDAW2.org

Nota: Para el último caso debe estar bien configurado el fichero /etc/hosts o debe estar funcionando correctamente el servicio DNS (debe existir una entrada o registro de tipo alias (CNAME) para 'www' en el archivo de zona directa) .

a) La configuración de la ruta donde se buscará el index.html que queremos mostrar se indica con la directiva root que se indica en el fichero default de configuración en sites-avaiable,

Muestra la captura con su valor

```
  GNU nano 4.8                    /etc/nginx/sites-available/default
server {
        listen 80 default_server;
        listen [::]:80 default_server;

        # SSL configuration
        #
        # listen 443 ssl default_server;
        # listen [::]:443 ssl default_server;
        #
        # Note: You should disable gzip for SSL traffic.
        # See: https://bugs.debian.org/773332
        #
        # Read up on ssl_ciphers to ensure a secure configuration.
        # See: https://bugs.debian.org/765782
        #
        # Self signed certs generated by the ssl-cert package
        # Don't use them in a production server!
        #
        # include snippets/snakeoil.conf;

        root /var/www/html/epifanio/;

        # Add index.php to the list if you are using PHP
        index index.html index.htm index.nginx-debian.html;

        server_name _;

        location / {
                # First attempt to serve request as file, then
                # as directory, then fall back to displaying a 404.
                try_files $uri $uri/ =404;
        }
```

b) ¿Cuál es el fichero de log para el servicio ?

log para accesos error.log y los dos estan /var/log/nginx

- ¿Qué directiva lo indica?

```
  GNU nano 4.8                    var/log/nginx/error.log
2021/12/01 17:14:34 [emerg] 4134#4134: bind() to 0.0.0.0:80 failed (98: Address already in use)
2021/12/01 17:14:34 [emerg] 4134#4134: bind() to [::]:80 failed (98: Address already in use)
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2021/12/01 17:14:34 [emerg] 4134#4134: bind() to [::]:80 failed (98: Address already in use)
2021/12/01 17:14:34 [emerg] 4134#4134: still could not bind()
2021/12/01 17:23:23 [emerg] 1602#1602: bind() to 0.0.0.0:80 failed (98: Address already in use)
2021/12/01 17:23:23 [emerg] 1602#1602: bind() to [::]:80 failed (98: Address already in use)
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2021/12/01 17:23:34 [emerg] 1633#1633: still could not bind()
                              [ Read 33 lines ]
^G Get Help    ^O Write Out   ^W Where Is    ^K Cut Text    ^J Justify    ^C Cur Pos     M-U Undo
^X Exit        ^R Read File   ^\ Replace     ^U Paste Text  ^T To Spell   ^_ Go To Line  M-E Redo
```

- Escribe el comando para visualizar sus últimas 20 líneas .

tail -20 access.log

```
javiepi@ubusrv-jepi:/$ sudo tail -20 /var/log/nginx/error.log
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2021/12/01 17:23:34 [emerg] 1633#1633: still could not bind()
javiepi@ubusrv-jepi:/$ _
```