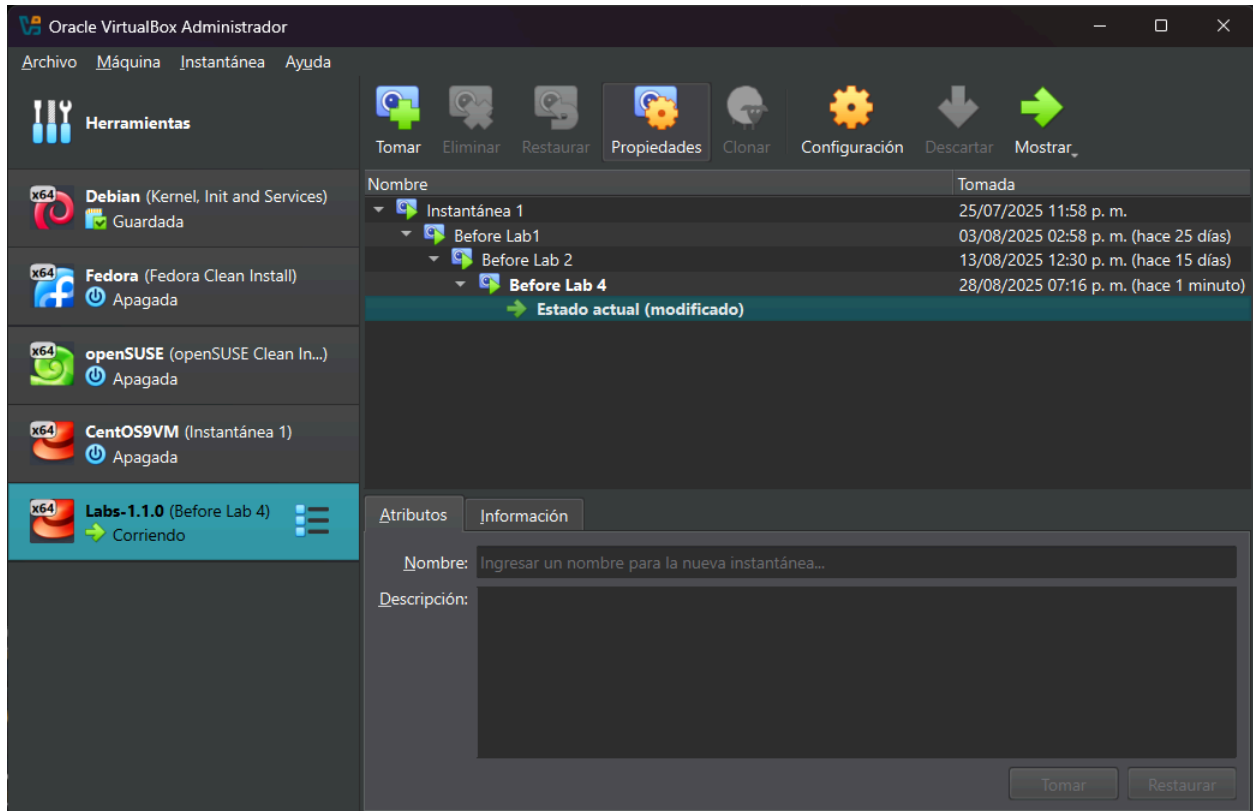


Laboratorio - Reparar un servicio dañado

1. Creo mi Snapshot de mi laboratorio



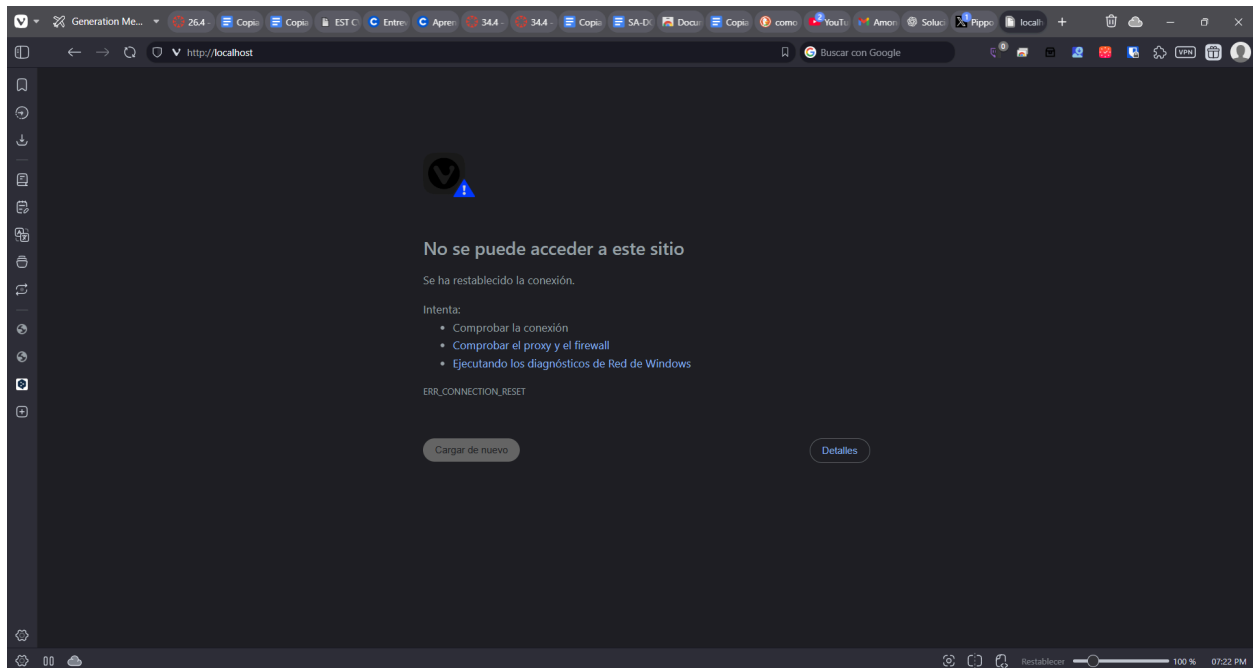
2. Me conecto remotamente con el server en CentOS

```
centos@vbox~  
Windows PowerShell  
Copyright (C) Microsoft Corporation. Todos los derechos reservados.  
  
Instale la versión más reciente de PowerShell para obtener nuevas características y mejoras. https://aka.ms/PSWindows  
  
PS C:\Users\Jair>  
PS C:\Users\Jair>  
PS C:\Users\Jair>  
PS C:\Users\Jair>  
PS C:\Users\Jair>  
PS C:\Users\Jair> ssh centos@localhost  
centos@localhost's password:  
Last login: Thu Aug 28 22:42:30 2025  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$ |
```

3. Inicio el laboratorio con el comando `startlab4`

```
centos@vbox~  
centos@localhost's password:  
Last login: Thu Aug 28 22:42:30 2025  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$ startlab4  
  
PLAY [Prep learner machines] *****  
  
TASK [Gathering Facts] *****  
ok: [localhost]  
  
TASK [Open port 80] *****  
ok: [localhost]  
  
TASK [Install httpd] *****  
ok: [localhost]  
  
TASK [Break httpd] *****  
changed: [localhost]  
  
TASK [Stop httpd] *****  
ok: [localhost]  
  
PLAY RECAP *****  
localhost : ok=5 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0  
  
[centos@vbox ~]$ |
```

Por las capturas, se puede ver que en estos momentos no hay servicio Apache y no puedo ver la bonita página de *localhost*



4. Reviso si el servicio de httpd está corriendo adecuadamente con el comando

```
sudo systemctl status httpd
```

```
centos@vbox:~$ sudo systemctl status httpd
TASK [Break httpd] *****
changed: [localhost]

TASK [Stop httpd] *****
ok: [localhost]

PLAY RECAP *****
localhost : ok=5    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$ sudo systemctl status httpd
o httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: inactive (dead)
   Docs: man:httpd.service(8)

Aug 28 22:42:06 localhost systemd[1]: httpd.service: Unit cannot be reloaded because it is inactive.
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
```

5. Verifico la integridad de los archivos de configuración de httpd con este comando:

```
sudo apachectl configtest
```

```
centos@vbox:~$ sudo systemctl status httpd
TASK [Stop httpd] *****
ok: [localhost]

PLAY RECAP *****
localhost : ok=5  changed=1  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0

[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$ sudo systemctl status httpd
o httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: inactive (dead)
   Docs: man:httpd.service(8)

Aug 28 22:42:06 localhost systemd[1]: httpd.service: Unit cannot be reloaded because it is inactive.
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$
[centos@vbox ~]$ sudo apachectl configtest
AH00526: Syntax error on line 47 of /etc/httpd/conf/httpd.conf:
Listen requires 1 or 2 arguments.
[centos@vbox ~]$
```

En efecto. Indica que hay un error en la *línea 47* del archivo de configuración. Me llama la atención lo que me devuelve el servicio de apachectl:

```
Listen requires 1 or 2 arguments.
```

6. Me meto a editar el archivo de configuración de httpd con este comando:

```
sudo vi /etc/httpd/conf/httpd.conf
```

Buscando, encontré el argumento que está mal

```
centos@vbox:~  
# Least PidFile.  
#  
ServerRoot "/etc/httpd"  
  
#  
# Listen: Allows you to bind Apache to specific IP addresses and/or  
# ports, instead of the default. See also the <VirtualHost>  
# directive.  
#  
# Change this to Listen on a specific IP address, but note that if  
# httpd.service is enabled to run at boot time, the address may not be  
# available when the service starts. See the httpd.service(8) man  
# page for more information.  
#  
#Listen 12.34.56.78:80  
Listen to the music  
  
#  
# Dynamic Shared Object (DSO) Support  
#  
# To be able to use the functionality of a module which was built as a DSO you  
# have to place corresponding 'LoadModule' lines at this location so the  
# directives contained in it are actually available _before_ they are used.  
# Statically compiled modules (those listed by 'httpd -l') do not need  
# to be loaded here.  
#  
# Example:  
# LoadModule foo_module modules/mod_foo.so  
#
```

Y lo corrijo para hacerlo correr sobre *localhost*

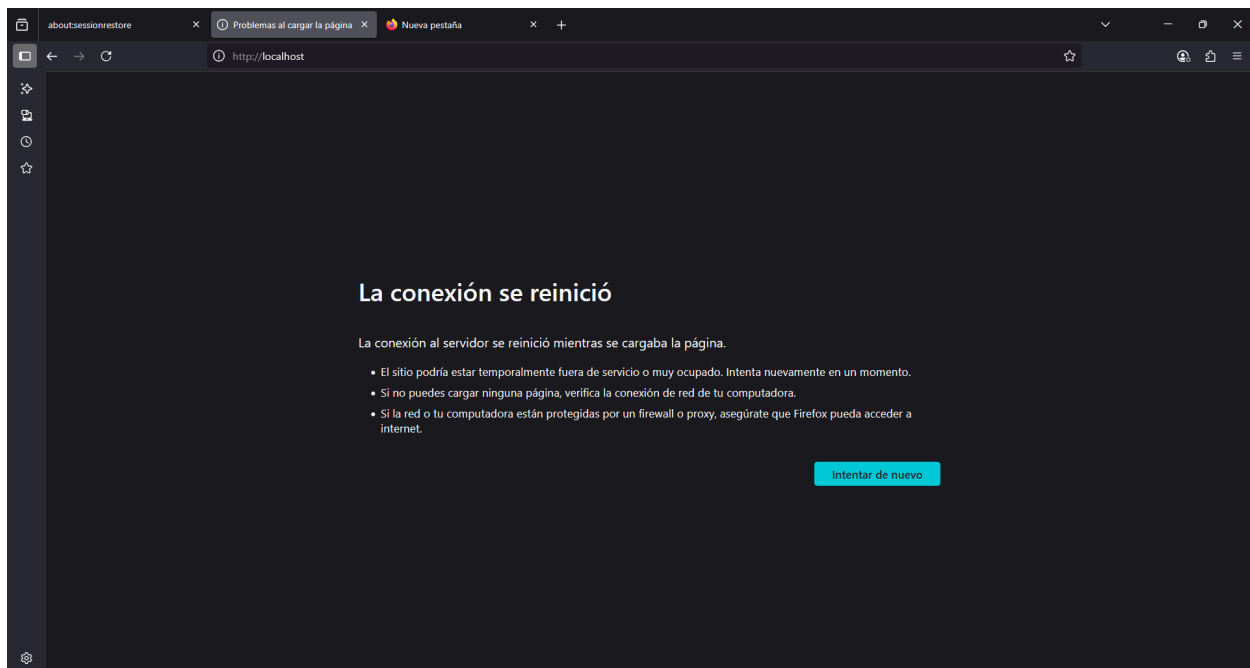
```
centos@vbox:~  
# Mutex directive, if file-based mutexes are used. If you wish to share the  
# same ServerRoot for multiple httpd daemons, you will need to change at  
# Least PidFile.  
#  
ServerRoot "/etc/httpd"  
  
#  
# Listen: Allows you to bind Apache to specific IP addresses and/or  
# ports, instead of the default. See also the <VirtualHost>  
# directive.  
#  
# Change this to Listen on a specific IP address, but note that if  
# httpd.service is enabled to run at boot time, the address may not be  
# available when the service starts. See the httpd.service(8) man  
# page for more information.  
#  
Listen 127.0.0.1:80  
  
#Listen to the music  
#  
# Dynamic Shared Object (DSO) Support  
#  
# To be able to use the functionality of a module which was built as a DSO you  
# have to place corresponding 'LoadModule' lines at this location so the  
# directives contained in it are actually available _before_ they are used.  
# Statically compiled modules (those listed by 'httpd -l') do not need  
# to be loaded here.  
#  
:wq|
```

```
centos@vbox:~  
# virtual host being defined.  
#  
#  
# ServerAdmin: Your address, where problems with the server should be  
# e-mailed. This address appears on some server-generated pages, such  
# as error documents. e.g. admin@your-domain.com  
#  
ServerAdmin root@localhost  
#  
# ServerName gives the name and port that the server uses to identify itself.  
# This can often be determined automatically, but we recommend you specify  
# it explicitly to prevent problems during startup.  
#  
# If your host doesn't have a registered DNS name, enter its IP address here.  
#  
ServerName localhost  
#  
# Deny access to the entirety of your server's filesystem. You must  
# explicitly permit access to web content directories in other  
# <Directory> blocks below.  
#  
<Directory />  
    AllowOverride none  
    Require all denied  
</Directory>  
:wq|
```

Termino por guardar los cambios hechos sobre el archivo de configuración.

7. Compruebo el servicio httpd

```
centos@vbox:~  
o httpd.service - The Apache HTTP Server  
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)  
   Active: inactive (dead)  
   Docs: man:httpd.service(8)  
  
Aug 28 22:42:06 localhost systemd[1]: httpd.service: Unit cannot be reloaded because it is inactive.  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$ sudo apachectl configtest  
AH00526: Syntax error on line 47 of /etc/httpd/conf/httpd.conf:  
Listen requires 1 or 2 arguments.  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$ nano /etc/httpd/conf/httpd.conf  
-bash: nano: command not found  
[centos@vbox ~]$ vi /etc/httpd/conf/httpd.conf  
[centos@vbox ~]$ sudo vi /etc/httpd/conf/httpd.conf  
[centos@vbox ~]$  
[centos@vbox ~]$  
[centos@vbox ~]$ sudo httpd -t  
AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using fe80::a00:27ff:fe90:7e5%enp  
0s3. Set the 'ServerName' directive globally to suppress this message  
Syntax OK  
[centos@vbox ~]$ |
```

10. Checho el log a ver qué está mal

```
sudo vi /var/log/httpd/error_log
```

```
centos@vbox:~  
[Thu Aug 28 23:52:40.275667 2025] [core:notice] [pid 2080:tid 2080] SELinux policy enabled; httpd running as context sys  
tem_u:system_r:httpd_t:s0  
[Thu Aug 28 23:52:40.423602 2025] [suexec:notice] [pid 2080:tid 2080] AH01232: suEXEC mechanism enabled (wrapper: /usr/s  
bin/suexec)  
AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using fe80::a00:27ff:fe90:7e5%enp  
0s3. Set the 'ServerName' directive globally to suppress this message  
[Thu Aug 28 23:52:50.550833 2025] [lbmethod_heartbeat:notice] [pid 2080:tid 2080] AH02282: No slotmem from mod_heartmoni  
tor  
[Thu Aug 28 23:52:50.587715 2025] [mpm_event:notice] [pid 2080:tid 2080] AH00489: Apache/2.4.62 (CentOS Stream) configur  
ed -- resuming normal operations  
[Thu Aug 28 23:52:50.588758 2025] [core:notice] [pid 2080:tid 2080] AH00094: Command line: '/usr/sbin/httpd -D FOREGROUN  
D'  
[Thu Aug 28 23:59:52.366727 2025] [mpm_event:notice] [pid 2080:tid 2080] AH00492: caught SIGWINCH, shutting down gracefu  
lly  
[Thu Aug 28 23:59:53.545839 2025] [core:notice] [pid 2284:tid 2284] SELinux policy enabled; httpd running as context sys  
tem_u:system_r:httpd_t:s0  
[Thu Aug 28 23:59:53.546087 2025] [suexec:notice] [pid 2284:tid 2284] AH01232: suEXEC mechanism enabled (wrapper: /usr/s  
bin/suexec)  
[Thu Aug 28 23:59:53.584033 2025] [lbmethod_heartbeat:notice] [pid 2284:tid 2284] AH02282: No slotmem from mod_heartmoni  
tor  
[Thu Aug 28 23:59:53.619961 2025] [mpm_event:notice] [pid 2284:tid 2284] AH00489: Apache/2.4.62 (CentOS Stream) configur  
ed -- resuming normal operations  
[Thu Aug 28 23:59:53.620046 2025] [core:notice] [pid 2284:tid 2284] AH00094: Command line: '/usr/sbin/httpd -D FOREGROUN  
D'  
[Fri Aug 29 00:14:48.279071 2025] [mpm_event:notice] [pid 2284:tid 2284] AH00492: caught SIGWINCH, shutting down gracefu  
lly  
[Fri Aug 29 00:14:49.772696 2025] [core:notice] [pid 2519:tid 2519] SELinux policy enabled; httpd running as context sys  
tem_u:system_r:httpd_t:s0  
@  
"/var/log/httpd/error_log" 19L, 2731B
```

Me indica que algo sigo teniendo mal en la configuración del server

Y vuelvo a modificar el parámetro de Listen

```
centos@vbox:~$ cat /etc/httpd/conf/httpd.conf
# Least PidFile.
#
ServerRoot "/etc/httpd"

#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on a specific IP address, but note that if
# httpd.service is enabled to run at boot time, the address may not be
# available when the service starts. See the httpd.service(8) man
# page for more information.
#
Listen 80

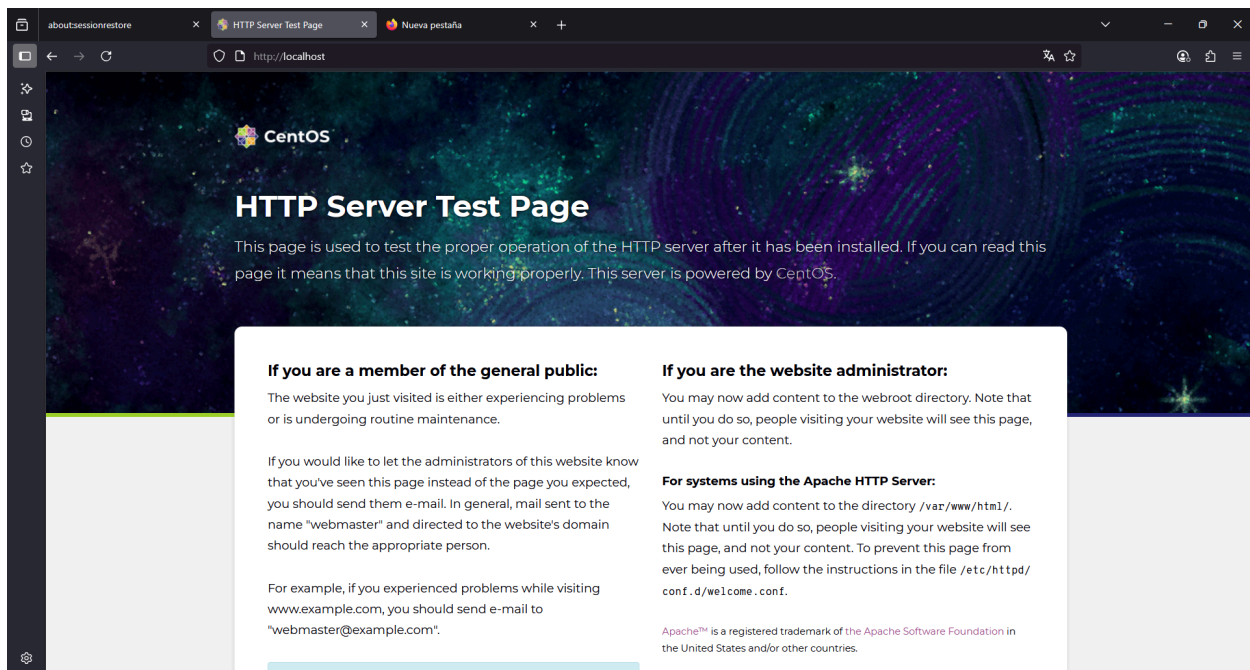
#
# Dynamic Shared Object (DSO) Support
#
# To be able to use the functionality of a module which was built as a DSO you
# have to place corresponding 'LoadModule' lines at this location so the
# directives contained in it are actually available _before_ they are used.
# Statically compiled modules (those listed by 'httpd -l') do not need
# to be loaded here.
#
# Example:
# LoadModule foo_module modules/mod_foo.so
#
```

Reinicio Servicio, checo si el servicio httpd está activo.

```
centos@vbox:~$ sudo httpd -t
Syntax OK
centos@vbox:~$ sudo vi /etc/httpd/conf/httpd.conf
centos@vbox:~$ sudo systemctl restart httpd
centos@vbox:~$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: active (running) since Fri 2025-08-29 00:14:49 BST; 5s ago
     Docs: man:httpd.service(8)
  Main PID: 2519 (httpd)
    Status: "Started, listening on: port 80"
    Tasks: 177 (limit: 23169)
   Memory: 39.7M
      CPU: 694ms
  CGroup: /system.slice/httpd.service
          └─2519 /usr/sbin/httpd -DFOREGROUND
             2520 /usr/sbin/httpd -DFOREGROUND
             2521 /usr/sbin/httpd -DFOREGROUND
             2522 /usr/sbin/httpd -DFOREGROUND
             2523 /usr/sbin/httpd -DFOREGROUND

Aug 29 00:14:49 vbox systemd[1]: Starting The Apache HTTP Server...
Aug 29 00:14:49 vbox httpd[2519]: Server configured, listening on: port 80
Aug 29 00:14:49 vbox systemd[1]: Started The Apache HTTP Server.
centos@vbox:~$ sudo vi /var/log/httpd/error_log
centos@vbox:~$ sudo vi /etc/httpd/conf/httpd.conf
centos@vbox:~$
```

Lo está, reviso Localhost.



Ya pude recuperar el sitio.

11. Escribo el comando `stoplab4` para finalizar el laboratorio. Termina siendo un éxito

```
centos@vbox:~$ sudo httpd -t
Syntax OK
centos@vbox:~$ sudo vi /etc/httpd/conf/httpd.conf
centos@vbox:~$
centos@vbox:~$ sudo systemctl restart httpd
centos@vbox:~$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
   Active: active (running) since Fri 2025-08-29 00:14:49 BST; 5s ago
     Docs: man:httpd.service(8)
  Main PID: 2519 (httpd)
    Status: "Started, listening on: port 80"
   Tasks: 177 (limit: 23169)
  Memory: 39.7M
    CPU: 694ms
  CGroup: /system.slice/httpd.service
          └─2519 /usr/sbin/httpd -DFOREGROUND
            └─2520 /usr/sbin/httpd -DFOREGROUND
              └─2521 /usr/sbin/httpd -DFOREGROUND
                └─2522 /usr/sbin/httpd -DFOREGROUND
                  └─2523 /usr/sbin/httpd -DFOREGROUND

Aug 29 00:14:49 vbox systemd[1]: Starting The Apache HTTP Server...
Aug 29 00:14:49 vbox httpd[2519]: Server configured, listening on: port 80
Aug 29 00:14:49 vbox systemd[1]: Started The Apache HTTP Server.
centos@vbox:~$ sudo vi /var/log/httpd/error_log
centos@vbox:~$ sudo vi /etc/httpd/conf/httpd.conf
centos@vbox:~$ stoplab4
centos@vbox:~$
```