

Documentación del Laboratorio de Linux de reparar un servicio dañado

Lo que se realizó durante este fue primero que nada buscar información de como resolver problemas similares a este en internet por lo que hice fue consultar diferentes paginas web entre las cuales consulte tutoriales técnicos de ZebraHost, Stack Overflow en español aunque también utilice a la IA para que apoyara a resolver este laboratorio simplemente la utilice como tutor para que fuera guiando y me ayudara en los momentos en los cuales me atore y no sabía para donde ir y una vez ya explicado esto paso a la documentación de la practica

Lo primero que realice fue inicializar la máquina virtual de CentOS posteriormente logearme en ella y después abrir el CMD y escribí **ssh centos@localhost** e introducir nuevamente la contraseña e inicializar el laboratorio 4

```
Microsoft Windows [Versión 10.0.26100.4946]
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C:\Users\Cesar Abraham Juarez>ssh centos@localhost
centos@localhost's password:
Last login: Fri Aug 29 02:02:16 2025
[centos@vbox ~]$ centos
-bash: centos: command not found
[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] *****
^[[Achanged: [localhost]

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

PLAY RECAP *****
localhost : ok=5  changed=2  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0

[centos@vbox ~]$
[centos@vbox ~]$ startlab4
```

Posteriormente lo que realice fue verificar el estado del servicio **httpd** utilizando el comando **sudo systemctl status httpd**. Y **sudo systemctl status httpd** todo esto para confirmar y poder encontrar los errores de httpd

```
[centos@vbox ~]$ sudo systemctl status httpd
○ httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: inactive (dead) since Fri 2025-08-29 02:05:02 BST; 1min 12s ago
   Duration: 3min 2.640s
   Docs: man:httpd.service(8)
   Process: 726 ExecStart=/usr/sbin/httpd $OPTIONS -DFOREGROUND (code=exited, status=0/SUCCESS)
   Main PID: 726 (code=exited, status=0/SUCCESS)
   Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
   CPU: 1.213s

Aug 29 02:01:57 localhost systemd[1]: Starting The Apache HTTP Server...
Aug 29 02:01:58 localhost.localdomain httpd[726]: AH00558: httpd: Could not reliably determine the server's fully qualified domain name, setting 'localhost.localdomain'
Aug 29 02:01:58 localhost.localdomain systemd[1]: Started The Apache HTTP Server.
Aug 29 02:01:58 localhost.localdomain httpd[726]: Server configured, listening on: port 80
Aug 29 02:05:01 vbox systemd[1]: Stopping The Apache HTTP Server...
Aug 29 02:05:02 vbox systemd[1]: httpd.service: Deactivated successfully.
Aug 29 02:05:02 vbox systemd[1]: Stopped The Apache HTTP Server.
Aug 29 02:05:02 vbox systemd[1]: httpd.service: Consumed 1.213s CPU time.
[centos@vbox ~]$
[centos@vbox ~]$ sudo systemctl start httpd
Job for httpd.service failed because the control process exited with error code.
See "systemctl status httpd.service" and "journalctl -xeu httpd.service" for details.
[centos@vbox ~]$ sudo systemctl start httpd
```

Lo cual los errores que encontré fueron los siguientes

Error de sintaxis: AH00526: Syntax error on line 47 of /etc/httpd/conf/httpd.conf.

Falta de argumento: Listen requires 1 or 2 arguments.

Los cuales estos dos errores me indicaban que la directiva Listen, encargado de decirle al servidor en qué puerto escuchar, no estaba configurado correctamente en la línea 47 del archivo de configuración.

```
[centos@vbox ~]$ sudo sealert -a /var/log/audit/audit.log
sudo: sealert: command not found
[centos@vbox ~]$ sudo restorecon -Rv /var/www/html
[centos@vbox ~]$ sudo systemctl restart httpd
Job for httpd.service failed because the control process exited with error code.
See "systemctl status httpd.service" and "journalctl -xeu httpd.service" for details.
[centos@vbox ~]$ sudo restorecon -Rv /var/www/html
[centos@vbox ~]$ sudo chcon -Rt httpd_sys_content_t /ruta/del/archivo
chcon: cannot access '/ruta/del/archivo': No such file or directory
[centos@vbox ~]$ sudo setsebool -P httpd_can_network_connect on
[centos@vbox ~]$ sudo systemctl restart httpd
Job for httpd.service failed because the control process exited with error code.
See "systemctl status httpd.service" and "journalctl -xeu httpd.service" for details.
[centos@vbox ~]$ sudo setenforce 0
[centos@vbox ~]$ sudo systemctl restart httpd
Job for httpd.service failed because the control process exited with error code.
See "systemctl status httpd.service" and "journalctl -xeu httpd.service" for details.
[centos@vbox ~]$ sudo systemctl status httpd
* httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: failed (Result: exit-code) since Fri 2025-08-29 02:29:15 BST; 29s ago
   Duration: 3min 2.640s
   Docs: man:httpd.service(8)
   Process: 2845 ExecStart=/usr/sbin/httpd $OPTIONS -DFOREGROUND (code=exited, status=1/FAILURE)
   Main PID: 2845 (code=exited, status=1/FAILURE)
   Status: "Reading configuration..."
   CPU: 83ms

Aug 29 02:29:15 vbox systemd[1]: Starting The Apache HTTP Server...
Aug 29 02:29:15 vbox httpd[2845]: AH00526: Syntax error on line 47 of /etc/httpd/conf/httpd.conf:
Aug 29 02:29:15 vbox httpd[2845]: Listen requires 1 or 2 arguments.
Aug 29 02:29:15 vbox systemd[1]: httpd.service: Main process exited, code=exited, status=1/FAILURE
Aug 29 02:29:15 vbox systemd[1]: httpd.service: Failed with result 'exit-code'.
Aug 29 02:29:15 vbox systemd[1]: Failed to start The Apache HTTP Server.
[centos@vbox ~]$
```

Apartir de aquí desde este punto fue donde me comencé a atorar una disertes comandos para poder solucionar este problema pero no mas nada fue en este punto que pedí ayuda a la ia para que me ayudara y apartir de este punto me dijo que tenía que instalar nano con el comando **sudo yum install nano** y así lograr poder editar los archivos que me decía que tenia el error


```
GNU nano 5.6.1 /etc/httpd/conf/httpd.conf Modified
# The directives in this section set up the values used by the 'main'
# server, which responds to any requests that aren't handled by a
# <VirtualHost> definition. These values also provide defaults for
# any <VirtualHost> containers you may define later in the file.
#
# All of these directives may appear inside <VirtualHost> containers,
# in which case these default settings will be overridden for the
# 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.
#
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^M-U Undo     ^M-A Set Mark  ^M-J To Bracket
^X Exit      ^R Read File  ^N Replace    ^U Paste      ^J Justify    ^_ Go To Line  ^M-E Redo     ^M-G Copy      ^M-Q Where Was
```

Por lo que después de volver a revisar el documento que me marcaba error de sintaxis me di cuenta que era en la parte de **listen to the musical** final lo cambia a **Listen 80** y guarde los cambios y después de hacer pruebas finalmente funciona aunque para revisar sin tener que entrar otra vez al documento use el comando de **cat /etc/httpd/conf/httpd.conf** y el que use para entrar al archivo y editarlos fue el siguiente **sudo nano /etc/httpd/conf/httpd.conf**

```
# Specify a default charset for all content served; this enables
# interpretation of all content as UTF-8 by default. To use the
# default browser choice (ISO-8859-1), or to allow the META tags
# in HTML content to override this choice, comment out this
# directive:
#
AddDefaultCharset UTF-8

<IfModule mime_magic_module>
#
# The mod_mime_magic module allows the server to use various hints from the
# contents of the file itself to determine its type. The MIMEMagicFile
# directive tells the module where the hint definitions are located.
#
MIMEMagicFile conf/magic
</IfModule>

#
# Customizable error responses come in three flavors:
# 1) plain text 2) local redirects 3) external redirects
#
# Some examples:
#ErrorDocument 500 "The server made a boo boo."
#ErrorDocument 404 /missing.html
#ErrorDocument 404 "/cgi-bin/missing_handler.pl"
#ErrorDocument 402 http://www.example.com/subscription_info.html
#

#
# EnableMMAP and EnableSendfile: On systems that support it,
# memory-mapping or the sendfile syscall may be used to deliver
# files. This usually improves server performance, but must
# be turned off when serving from networked-mounted
# filesystems or if support for these functions is otherwise
# broken on your system.
```

```
centos@vbox:~  
GNU nano 5.6.1 /etc/httpd/conf/httpd.conf  
#  
# Do not add a slash at the end of the directory path. If you point  
# ServerRoot at a non-local disk, be sure to specify a local disk on the  
# 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 12.34.56.78:80  
Listen 80  
  
#  
# Dynamic Shared Object (DSO) Support  
#  
# To be able to use the functionality of a module which was built as a DSO you  
^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  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line  M-E Redo     M-6 Copy
```

Una vez ya hechas estas correcciones los comandos que estuve utilizando para comprobar que por fin ya estuvieron bien hecho la práctica del laboratorio fueron los siguientes

sudo systemctl restart httpd

sudo systemctl status httpd

```
centos@vbox:~  
#EnableMMAP off  
#EnableSendfile on  
  
# Supplemental configuration  
#  
# Load config files in the "/etc/httpd/conf.d" directory, if any.  
  
[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; enabled; preset: disabled)  
   Active: active (running) since Fri 2025-08-29 03:46:48 BST; 32s ago  
     Docs: man:httpd.service(8)  
   Main PID: 12592 (httpd)  
   Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"  
     Tasks: 177 (limit: 11113)  
   Memory: 23.6M  
     CPU: 280ms  
   CGroup: /system.slice/httpd.service  
           └─12592 /usr/sbin/httpd -DFOREGROUND  
             └─12593 /usr/sbin/httpd -DFOREGROUND  
               └─12594 /usr/sbin/httpd -DFOREGROUND  
                 └─12595 /usr/sbin/httpd -DFOREGROUND  
                   └─12596 /usr/sbin/httpd -DFOREGROUND  
  
Aug 29 03:46:48 vbox systemd[1]: Starting The Apache HTTP Server...  
Aug 29 03:46:48 vbox systemd[1]: Started The Apache HTTP Server.  
Aug 29 03:46:48 vbox httpd[12592]: Server configured, listening on: port 80  
[centos@vbox ~]$
```

Finalmente una vez ya realizado las pruebas correspondientes y verificar que todo funcionara bien procedí por finalizar el laboratorio