

GUÍA DE INSTALACIÓN Y CONFIGURACIÓN DE APACHE, MARIADB, PYTHON Y GIT EN FEDORA

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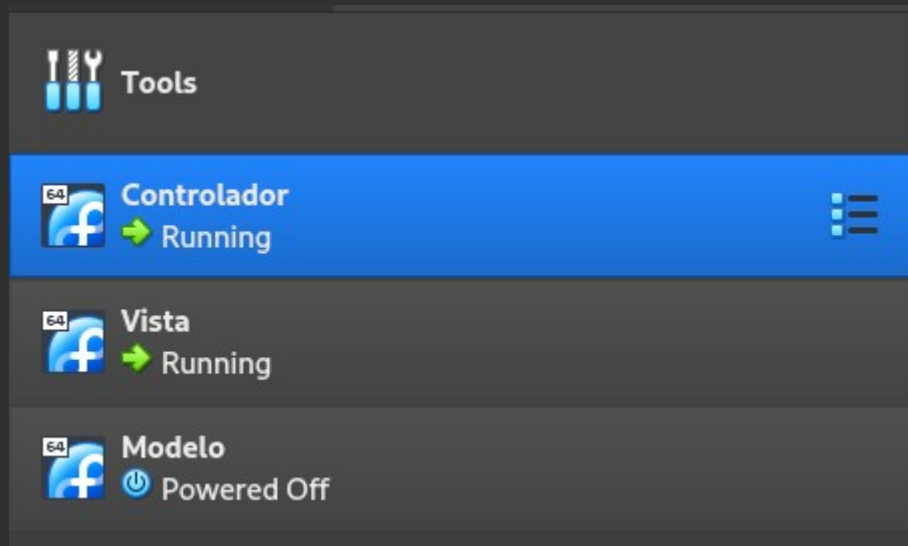


Máquinas Virtuales

- Para la configuración es necesario tener instalado virtualbox.



- Instalar tres máquinas virtuales “**Fedora Server 40**” con los siguientes nombres:
 - Modelo
 - Vista
 - Controlador



Controlador

- Instalar el servicio httpd: `sudo dnf install httpd -y`

```
starlord ~ sudo dnf install httpd -y
[sudo] password for starlord:
```

- Iniciar el estado del servicio: `sudo systemctl start httpd`

```
starlord ~ 1 sudo systemctl start httpd
starlord ~
```

- Consultar el estado del servicio: `sudo systemctl status httpd`

```
starlord ~ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Drop-In: /usr/lib/systemd/system/service.d
            └─10-timeout-abort.conf
   Active: active (running) since Tue 2024-07-23 10:16:21 CST; 32min ago
     Docs: man:httpd.service(8)
  Main PID: 1351 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
    Tasks: 177 (limit: 9370)
   Memory: 20.0M (peak: 20.3M)
      CPU: 2.102s
   CGroup: /system.slice/httpd.service
            └─1351 /usr/sbin/httpd -DFOREGROUND
               1474 /usr/sbin/httpd -DFOREGROUND
               1477 /usr/sbin/httpd -DFOREGROUND
               1478 /usr/sbin/httpd -DFOREGROUND
               1481 /usr/sbin/httpd -DFOREGROUND

Jul 23 10:16:20 fedora systemd[1]: Starting httpd.service - The Apache HTTP Server...
Jul 23 10:16:20 fedora (httpd)[1351]: httpd.service: Referenced but unset environment variable evaluates to an empty string: OPTIONS
Jul 23 10:16:21 fedora httpd[1351]: AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using ::1. See
Jul 23 10:16:21 fedora httpd[1351]: Server configured, listening on: port 80
Jul 23 10:16:21 fedora systemd[1]: Started httpd.service - The Apache HTTP Server.
lines 1-23/23 (END)
```

- Reiniciar el estado del servicio: `sudo systemctl restart httpd`

```
starlord ~ sudo systemctl restart httpd
starlord ~
```

Modelo

- Instalar el servicio de MariaDB: `sudo dnf install mariadb-server -y`

```
starlord ~ sudo dnf install mariadb-server -y
[sudo] password for starlord:
```

- Iniciar el servicio: `sudo systemctl start mariadb`

```
starlord ~ 1 sudo systemctl start mariadb
starlord ~
```

Modelo

- Reiniciar el estado del servicio: **sudo systemctl restart mariadb**

```
starlord ~ 1 sudo systemctl restart mariadb
starlord ~
```

- Consultar el estado del servicio: **sudo systemctl status mariadb**

```
starlord ~ 1 sudo systemctl status mariadb
● mariadb.service - MariaDB 10.11 database server
   Loaded: loaded (/usr/lib/systemd/system/mariadb.service; enabled; preset: disabled)
   Drop-In: /usr/lib/systemd/system/service.d
            └─l10-timeout-abort.conf
   Active: active (running) since Tue 2024-07-23 11:04:52 CST; 1min 16s ago
     Docs: man:mariabdb(8)
            https://mariadb.com/kb/en/library/systemd/
   Process: 9973 ExecStartPre=/usr/libexec/mariadb-check-socket (code=exited, status=0/SUCCESS)
   Process: 9996 ExecStartPre=/usr/libexec/mariadb-prepare-db-dir mariadb.service (code=exited, status=0/SUCCESS)
   Process: 10043 ExecStartPost=/usr/libexec/mariadb-check-upgrade (code=exited, status=0/SUCCESS)
  Main PID: 10033 (mariabdb)
    Status: "Taking your SQL requests now..."
     Tasks: 8 (limit: 9370)
  Memory: 76.6M (peak: 79.2M)
     CPU: 349ms
   CGroup: /system.slice/mariadb.service
           └─10033 /usr/libexec/mariabdb --basedir=/usr

Jul 23 11:04:51 fedora systemd[1]: Starting mariadb.service - MariaDB 10.11 database server...
Jul 23 11:04:51 fedora mariadb-prepare-db-dir[9996]: Database MariaDB is probably initialized in /var/lib/mysql already, nothing is done
Jul 23 11:04:51 fedora mariadb-prepare-db-dir[9996]: If this is not the case, make sure the /var/lib/mysql is empty before running mariadb
Jul 23 11:04:51 fedora (mariabdb)[10033]: mariadb.service: Referenced but unset environment variable evaluates to an empty string: MYSQLD
Jul 23 11:04:52 fedora systemd[1]: Started mariadb.service - MariaDB 10.11 database server.
lines 1-23/23 (END)
```

Configuración MariaDB

- Iniciar permisos como super-usuario: **sudo su**

```
starlord ~ sudo su
[sudo] password for starlord:
root@fedora: /home/starlord#
```

- Accede a la ruta: **/usr/bin/mysql_secure_installation**

```
root@fedora: /home/starlord# /usr/bin/mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user. If you've just installed MariaDB, and
haven't set the root password yet, you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...
```

Configuración MariaDB

- Presiona la tecla “n”

```
Setting the root password or using the unix_socket ensures that nobody
can log into the MariaDB root user without the proper authorisation.

You already have your root account protected, so you can safely answer 'n'.

Switch to unix_socket authentication [Y/n] n
... skipping.
```

- Presiona la tecla “y”

```
You already have your root account protected, so you can safely answer 'n'.

Change the root password? [Y/n] y
New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
... Success!

By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB without having to have a user account created for
them. This is intended only for testing, and to make the installation
go a bit smoother. You should remove them before moving into a
production environment.
```

- Presiona la tecla “y”

```
Remove anonymous users? [Y/n] y
... Success!

Normally, root should only be allowed to connect from 'localhost'. This
ensures that someone cannot guess at the root password from the network.
```

- Presiona la tecla “y”

```
Disallow root login remotely? [Y/n] y
... Success!

By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.
```

- Presiona la tecla “y”

```
Remove test database and access to it? [Y/n] y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.
```

- Presiona la tecla “y”

```
Reload privilege tables now? [Y/n] y
... Success!

Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
root@fedora:/home/starlord#
```

Configuración MariaDB

- Accede a MariaDB con la contraseña que se configuró anteriormente.

```
starlord ~ mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 3
Server version: 10.11.8-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> 
```

Controlador

- Revisar que versión python esta instalada en el sistema: **python --version**

```
starlord ~ python --version
Python 3.12.4
starlord ~ 
```

- En caso de no tener instalado python ejecutar el comando: **sudo dnf install python -y**

```
starlord ~ sudo dnf install python -y
[sudo] password for starlord:
```