

FOR PHPMYADMIN WE NEED TO FOLLOW LAMP METHOD:

L = LINUX

A = APACHE

M = MariaDB

P = PHP, PHPMYADMIN

First install apache (httpd)

yum install httpd -y

```
[root@localhost ~]# sudo yum install httpd
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:01:30 ago on Wednesday 28 February 2024 08:37:55 AM.
Dependencies resolved.
=====
Package                        Architecture      Version           Repository        Size
=====
Installing:
httpd                          x86_64            2.4.57-8.el9      appstream         48 k
Installing dependencies:
apr                            x86_64            1.7.0-12.el9      appstream         123 k
apr-util                       x86_64            1.6.1-23.el9      appstream         95 k
apr-util-bdb                   x86_64            1.6.1-23.el9      appstream         13 k
centos-logos-httpd             noarch            90.4-1.el9        appstream         252 k
httpd-core                     x86_64            2.4.57-8.el9      appstream         1.5 M
httpd-filesystem               noarch            2.4.57-8.el9      appstream         13 k
httpd-tools                    x86_64            2.4.57-8.el9      appstream         83 k
Installing weak dependencies:
apr-util-openssl               x86_64            1.6.1-23.el9      appstream         15 k
mod_http2                      x86_64            2.0.26-1.el9      appstream         163 k
mod_lua                        x86_64            2.4.57-8.el9      appstream         60 k
=====
```

Start and enable apache:

systemctl enable --now httpd

Disable firewall & SELinux

systemctl disable --now firewalld

setenforce 0

Now, install MariaDB:

yum install MariaDB-server -y

```

[root@localhost ~]# sudo systemctl start httpd
[root@localhost ~]# systemctl disable --now firewalld.service
Removed "/etc/systemd/system/multi-user.target.wants/firewalld.service".
Removed "/etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service".
[root@localhost ~]# setenforce 0
[root@localhost ~]# sudo yum install mariadb-server
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:02:18 ago on Wednesday 28 February 2024 08:37:55 AM.
Dependencies resolved.
=====
Package                                Arch      Version                                Repository      Size
=====
Installing:
mariadb-server                         x86_64    3:10.11.6-1.module_el9+853+7b957b9b  appstream      10 M
Installing dependencies:
mariadb                               x86_64    3:10.11.6-1.module_el9+853+7b957b9b  appstream      1.7 M
mariadb-common                        x86_64    3:10.11.6-1.module_el9+853+7b957b9b  appstream       31 k
mariadb-connector-c                   x86_64    3.2.6-1.el9                            appstream      198 k
mariadb-connector-c-config            noarch    3.2.6-1.el9                            appstream       11 k
mariadb-errmsg                         x86_64    3:10.11.6-1.module_el9+853+7b957b9b  appstream      263 k
mysql-selinux                         noarch    1.0.5-1.el9                            appstream       36 k
perl-DBD-MariaDB                      x86_64    1.21-16.el9                            appstream      152 k
perl-File-Copy                        noarch    2.34-481.el9                           appstream       20 k
perl-Sys-Hostname                     x86_64    1.23-481.el9                           appstream       17 k
=====

```

Start and enable mariadb:

```
# systemctl enable --now mariadb
```

Login to set MariaDB:

```
[root@localhost ~]# sudo systemctl start mariadb
[root@localhost ~]# sudo systemctl enable mariadb.service
Created symlink /etc/systemd/system/mysql.service → /usr/lib/systemd/system/mariadb.service.
Created symlink /etc/systemd/system/mysqld.service → /usr/lib/systemd/system/mariadb.service.
Created symlink /etc/systemd/system/multi-user.target.wants/mariadb.service → /usr/lib/systemd/system/mariadb.service.
[root@localhost ~]# sudo 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...

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]
Enabled successfully!
Reloading privilege tables..
... **Success!**

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

Change the root password? [Y/n] n
... skipping.

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.

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.

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.

Remove test database and access to it? [Y/n]
- Dropping test database...

Login to mysql to create database and user account:

```
# sudo mysql
```

```

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

Reload privilege tables now? [Y/n]
... 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@localhost ~]# sudo mysql
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 11
Server version: 10.11.6-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)]> CREATE DATABASE example_database;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> GRANT ALL ON example_database.* TO 'root'@'localhost' IDENTIFIED BY 'admin@123' WITH GRANT
OPTION;

```

```

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.000 sec)

MariaDB [(none)]> exit
Bye
[root@localhost ~]# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 12
Server version: 10.11.6-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)]> exit
Bye

```

Install epel-release:

```

[root@localhost ~]# yum install epel-release -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:06:06 ago on Wednesday 28 February 2024 08:37:55 AM.
Dependencies resolved.

```

Package	Architecture	Version	Repository	Size
Installing:				
epel-release	noarch	9-7.el9	extras-common	19 k
Installing weak dependencies:				
epel-next-release	noarch	9-7.el9	extras-common	8.1 k
Transaction Summary				
Install 2 Packages				

Install php:

```
# yum install php -y
```

```
[root@localhost ~]# sudo yum install php -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:03:01 ago on Wednesday 28 February 2024 08:56:24 AM.
Dependencies resolved.
```

Package	Architecture	Version	Repository	Size
Installing:				
php	x86_64	8.0.30-1.el9	appstream	4.7 k
Installing dependencies:				
nginx-filesystem	noarch	1:1.22.1-2.el9	appstream	12 k
php-common	x86_64	8.0.30-1.el9	appstream	681 k
Installing weak dependencies:				
php-cli	x86_64	8.0.30-1.el9	appstream	3.1 M
php-fpm	x86_64	8.0.30-1.el9	appstream	1.6 M
php-mbstring	x86_64	8.0.30-1.el9	appstream	469 k
php-opcache	x86_64	8.0.30-1.el9	appstream	510 k
php-pdo	x86_64	8.0.30-1.el9	appstream	82 k
php-xml	x86_64	8.0.30-1.el9	appstream	133 k

Transaction Summary

Login to mysql :

mysql -u root -p

```
[root@localhost ~]# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 13
Server version: 10.11.6-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)]> CREATE TABLE example_database.todo_list (
  -> item_id INT AUTO INCREMENT,
  -> content VARCHAR(255),
  -> PRIMARY KEY(item_id)
  -> );
Query OK, 0 rows affected (0.367 sec)

MariaDB [(none)]> INSERT INTO example_database.todo_list (content) VALUES ("My first important item");
Query OK, 1 row affected (0.002 sec)

MariaDB [(none)]> SELECT * FROM example_database.todo_list;
+-----+-----+
| item_id | content |
+-----+-----+
| 1 | My first important item |
+-----+-----+
1 row in set (0.001 sec)
```

Now, install phpMyAdmin:

yum install phpMyAdmin -y

```
[root@localhost ~]# sudo yum install phpmyadmin
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:07:48 ago on Wednesday 28 February 2024 08:56:24 AM.
Dependencies resolved.
=====
Package                        Architecture    Version         Repository      Size
=====
Installing:
phpMyAdmin                    noarch         5.2.1-1.el9     epel            8.0 M
Installing dependencies:
libzip                        x86_64         1.7.3-8.el9     appstream       62 k
php-gd                        x86_64         8.0.30-1.el9    appstream       40 k
php-intl                      x86_64         8.0.30-1.el9    appstream      149 k
php-mysqlnd                   x86_64         8.0.30-1.el9    appstream      150 k
php-pear-zip                  x86_64         1.19.2-6.el9    appstream       58 k
php-process                   x86_64         8.0.30-1.el9    appstream       41 k
=====
Transaction Summary
=====
Install 7 Packages
Total download size: 8.5 M
```

Go and edit config file:

```
# vi /etc/httpd/conf.d/phpMyAdmin.conf
```

Add these line:

```
<Directory "/usr/share/phpMyAdmin">
    AllowOverride None
    Options None
    Allow from All
    Require all granted
</Directory>

Alias /phpmyadmin /usr/share/phpMyAdmin
```

```
[root@localhost ~]# sudo vi /etc/httpd/conf.d/phpMyAdmin.conf
```

```
<Directory "/usr/share/phpMyAdmin">
    AllowOverride None
    Options None
    Allow from All
    Require all granted
</Directory>

Alias /phpmyadmin /usr/share/phpMyAdmin
```

```
[root@localhost ~]# systemctl restart mariadb
[root@localhost ~]# service httpd restart
```

