

LAMP environment configuration on EC2 instance.

1

```

72 collectd-python3          available    [=stable]
+ Note on end-of-support. Use 'info' subcommand.
[root@ip-172-31-32-241 ~]# cat /etc/system-release
Amazon Linux release 2 (Karoo)
[root@ip-172-31-32-241 ~]# amazon-linux-extras install php8.2
Topic php8.2 has end-of-support date of 2025-06-30
Installing php-pdo, php-fpm, php-mysqlnd, php-cli, php-json
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Cleaning repos: amzn2-core amzn2extra-docker amzn2extra-kernel-5.10 amzn2extra-mariadb10.5 amzn2extra-php8.2
22 metadata files removed
8 sqlite files removed
0 metadata files removed
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core                               3.6 kB 00:00:00
amzn2extra-docker                        2.9 kB 00:00:00
amzn2extra-kernel-5.10                  3.0 kB 00:00:00
amzn2extra-mariadb10.5                  3.0 kB 00:00:00
amzn2extra-php8.2                       2.9 kB 00:00:00
(1/11): amzn2-core/2/x86_64/group_gz    2.7 kB 00:00:00
(2/11): amzn2-core/2/x86_64/updateinfo  809 kB 00:00:00
(3/11): amzn2extra-docker/2/x86_64/updateinfo 15 kB 00:00:00
(4/11): amzn2extra-kernel-5.10/2/x86_64/updateinfo 48 kB 00:00:00
(5/11): amzn2extra-mariadb10.5/2/x86_64/updateinfo 6.9 kB 00:00:00
(6/11): amzn2extra-docker/2/x86_64/primary_db 109 kB 00:00:00
(7/11): amzn2extra-mariadb10.5/2/x86_64/primary_db 125 kB 00:00:00
(8/11): amzn2extra-php8.2/2/x86_64/primary 20 kB 00:00:00
(9/11): amzn2extra-php8.2/2/x86_64/updateinfo 3.3 kB 00:00:00
(10/11): amzn2extra-kernel-5.10/2/x86_64/primary_db 23 MB 00:00:00
(11/11): amzn2-core/2/x86_64/primary_db 71 MB 00:00:01
Resolving Dependencies
--> Running transaction check
--> Package php-cli.x86_64 0:8.2.9-1.amzn2 will be installed
--> Package php-common.x86_64 0:8.2.9-1.amzn2 will be installed
--> Processing Dependency: libzip.so.5()(64bit) for package: php-common-8.2.9-1.amzn2.x86_64
--> Package php-fpm.x86_64 0:8.2.9-1.amzn2 will be installed
--> Package php-mysqlnd.x86_64 0:8.2.9-1.amzn2 will be installed
--> Package php-pdo.x86_64 0:8.2.9-1.amzn2 will be installed
--> Running transaction check
--> Package libzip.x86_64 0:1.3.2-1.amzn2.0.1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

```

Install httpd package

#yum install -y httpd

```

[root@ip-172-31-32-241 ~]# yum install -y httpd
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.58-1.amzn2 will be installed
--> Processing Dependency: httpd-filesystem = 2.4.58-1.amzn2 for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: httpd-tools = 2.4.58-1.amzn2 for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: httpd-filesystem for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: mod_http2 for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: system-logos-httpd for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.58-1.amzn2.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.58-1.amzn2.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.7.2-1.amzn2 will be installed
--> Package apr-util.x86_64 0:1.6.3-1.amzn2.0.1 will be installed
--> Processing Dependency: apr-util-bdb(x86-64) = 1.6.3-1.amzn2.0.1 for package: apr-util-1.6.3-1.amzn2.0.1.x86_64
--> Package generic-logos-httpd.noarch 0:18.0.0-4.amzn2 will be installed
--> Package httpd-filesystem.noarch 0:2.4.58-1.amzn2 will be installed
--> Package httpd-tools.x86_64 0:2.4.58-1.amzn2 will be installed
--> Package mailcap.noarch 0:2.1.41-2.amzn2 will be installed
--> Package mod_http2.x86_64 0:1.15.19-1.amzn2.0.1 will be installed
--> Running transaction check
--> Package apr-util-bdb.x86_64 0:1.6.3-1.amzn2.0.1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                                Arch              Version              Repository            Size
=====
Installing:
httpd                                  x86_64            2.4.58-1.amzn2       amzn2-core            1.4 M
Installing for dependencies:
apr                                    x86_64            1.7.2-1.amzn2        amzn2-core            130 k
apr-util                              x86_64            1.6.3-1.amzn2.0.1    amzn2-core            101 k
apr-util-bdb                          x86_64            1.6.3-1.amzn2.0.1    amzn2-core            22 k
generic-logos-httpd                   noarch            18.0.0-4.amzn2       amzn2-core            19 k
httpd-filesystem                      noarch            2.4.58-1.amzn2       amzn2-core            25 k
httpd-tools                           x86_64            2.4.58-1.amzn2       amzn2-core            88 k
mailcap                               noarch            2.1.41-2.amzn2       amzn2-core            31 k
mod_http2                             x86_64            1.15.19-1.amzn2.0.1  amzn2-core            149 k
=====

```

Start https service and enable it.

```

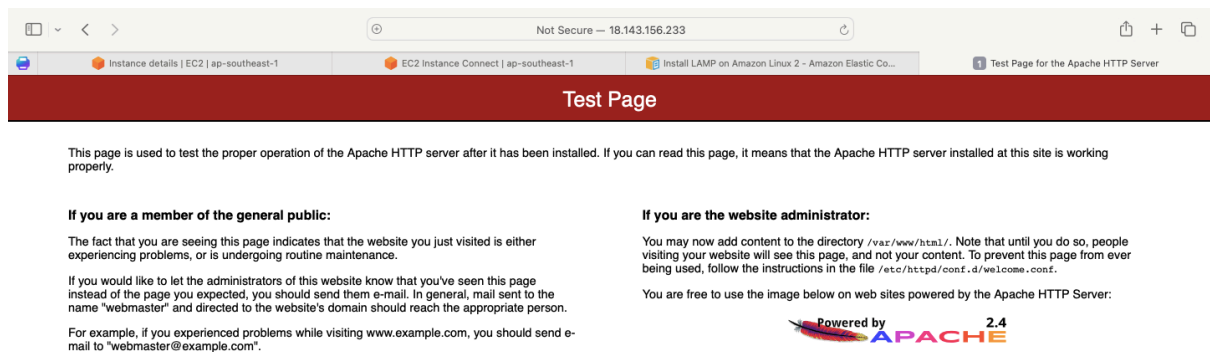
#systemctl start httpd
#systemctl enable httpd
#systemctl status httpd

```

```
[root@ip-172-31-32-241 ~]# systemctl start httpd
[root@ip-172-31-32-241 ~]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-32-241 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Drop-In: /usr/lib/systemd/system/httpd.service.d
            └─php-fpm.conf
   Active: active (running) since Tue 2024-02-27 12:28:56 UTC; 35s ago
     Docs: man:httpd.service(8)
  Main PID: 4115 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
   CGroup: /system.slice/httpd.service
            └─4115 /usr/sbin/httpd -DFOREGROUND
               4117 /usr/sbin/httpd -DFOREGROUND
               4118 /usr/sbin/httpd -DFOREGROUND
               4119 /usr/sbin/httpd -DFOREGROUND
               4123 /usr/sbin/httpd -DFOREGROUND
               4124 /usr/sbin/httpd -DFOREGROUND

Feb 27 12:28:56 ip-172-31-32-241.ap-southeast-1.compute.internal systemd[1]: Starting The Apache HTTP Server...
Feb 27 12:28:56 ip-172-31-32-241.ap-southeast-1.compute.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-172-31-32-241 ~]#
```

hit PublicIP

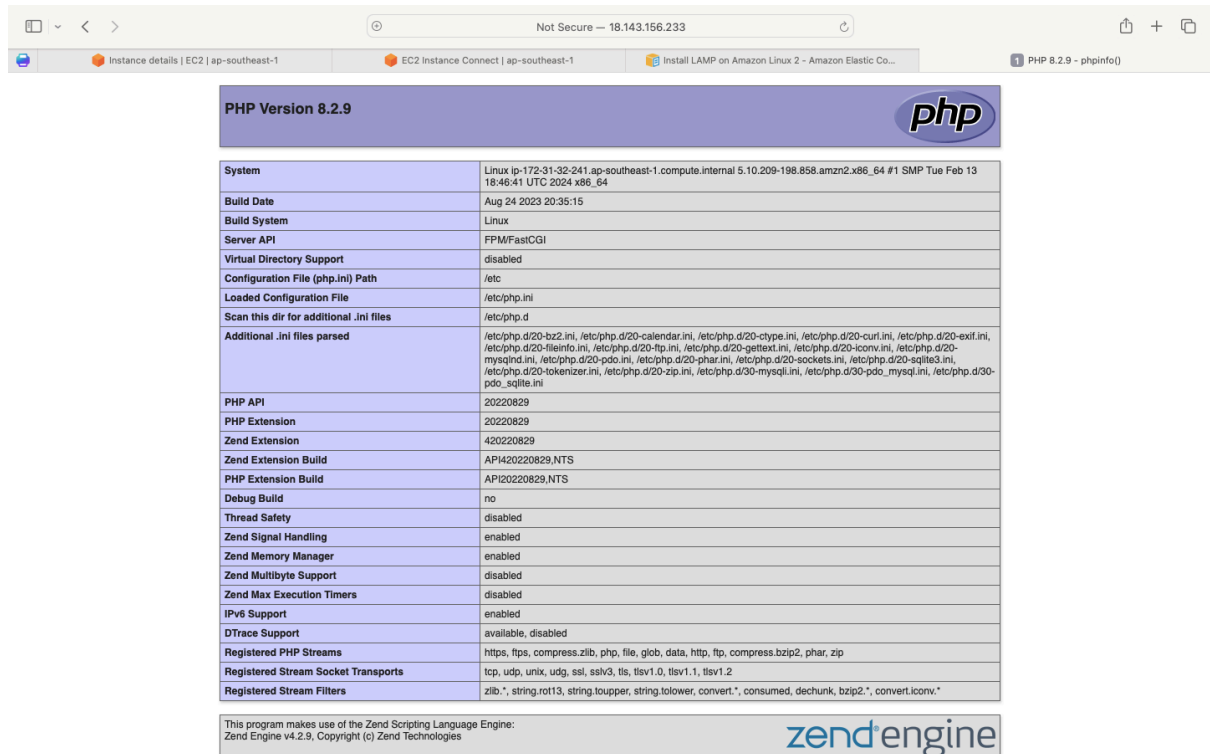


To test your LAMP server

```
#echo "<?php phpinfo(); ?>" > /var/www/html/phpinfo.php
```

```
[root@ip-172-31-32-241 ~]# echo "<?php phpinfo(); ?>" > /var/www/html/phpinfo.php
```

hit PublicIp/phpinfo.php



| PHP Version 8.2.9 | |
|--|---|
| System | Linux ip-172-31-32-241.ap-southeast-1.compute.internal 5.10.209-198.858.amzn2.x86_64 #1 SMP Tue Feb 13 18:46:41 UTC 2024 x86_64 |
| Build Date | Aug 24 2023 20:35:15 |
| Build System | Linux |
| Server API | FPFM/FastCGI |
| Virtual Directory Support | disabled |
| Configuration File (php.ini) Path | /etc |
| Loaded Configuration File | /etc/php.ini |
| Scan this dir for additional .ini files | /etc/php.d |
| Additional .ini files parsed | /etc/php.d/20-bz2.ini, /etc/php.d/20-calendar.ini, /etc/php.d/20-ctype.ini, /etc/php.d/20-curl.ini, /etc/php.d/20-exif.ini, /etc/php.d/20-fileinfo.ini, /etc/php.d/20-ftp.ini, /etc/php.d/20-gettext.ini, /etc/php.d/20-iconv.ini, /etc/php.d/20-mysqli.ini, /etc/php.d/20-pdo.ini, /etc/php.d/20-pdo_mysql.ini, /etc/php.d/20-phar.ini, /etc/php.d/20-sockets.ini, /etc/php.d/20-sqlite3.ini, /etc/php.d/20-tokenizer.ini, /etc/php.d/20-zip.ini, /etc/php.d/30-mysql.ini, /etc/php.d/30-pdo_mysql.ini, /etc/php.d/30-pdo_sqlite.ini |
| PHP API | 20220829 |
| PHP Extension | 20220829 |
| Zend Extension | 420220829 |
| Zend Extension Build | API420220829,NTS |
| PHP Extension Build | API20220829,NTS |
| Debug Build | no |
| Thread Safety | disabled |
| Zend Signal Handling | enabled |
| Zend Memory Manager | enabled |
| Zend Multibyte Support | disabled |
| Zend Max Execution Timers | disabled |
| IPv6 Support | enabled |
| DTrace Support | available, disabled |
| Registered PHP Streams | https, ftps, compress.zlib, php, file, glob, data, http, ftp, compress.bzip2, phar, zip |
| Registered Stream Socket Transports | tcp, udp, unix, udg, ssl, sslv3, tls, tlsv1.0, tlsv1.1, tlsv1.2 |
| Registered Stream Filters | zlib.*, string.rot13, string.toupper, string.tolower, convert.*, consumed, dechunk, bzip2.*, convert.iconv.* |
| This program makes use of the Zend Scripting Language Engine: Zend Engine v4.2.9, Copyright (c) Zend Technologies | |

Start mariadb service.

```
#systemctl start mariadb
#mysql_secure_installation
```

Follow below steps and save changes.

Type the current root password. By default, the root account does not have a password set. Press Enter.

Type Y to set a password, and type a secure password twice

- Type Y to remove the anonymous user accounts
- Type Y to disable the remote root login.
- Type Y to remove the test database
- Type Y to reload the privilege tables and save your changes.

```
[root@ip-172-31-32-241 ~]# systemctl start mariadb
[root@ip-172-31-32-241 ~]# 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] y
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] y
New password:
Re-enter new password:
Sorry, passwords do not match.

New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
... Success!
```