

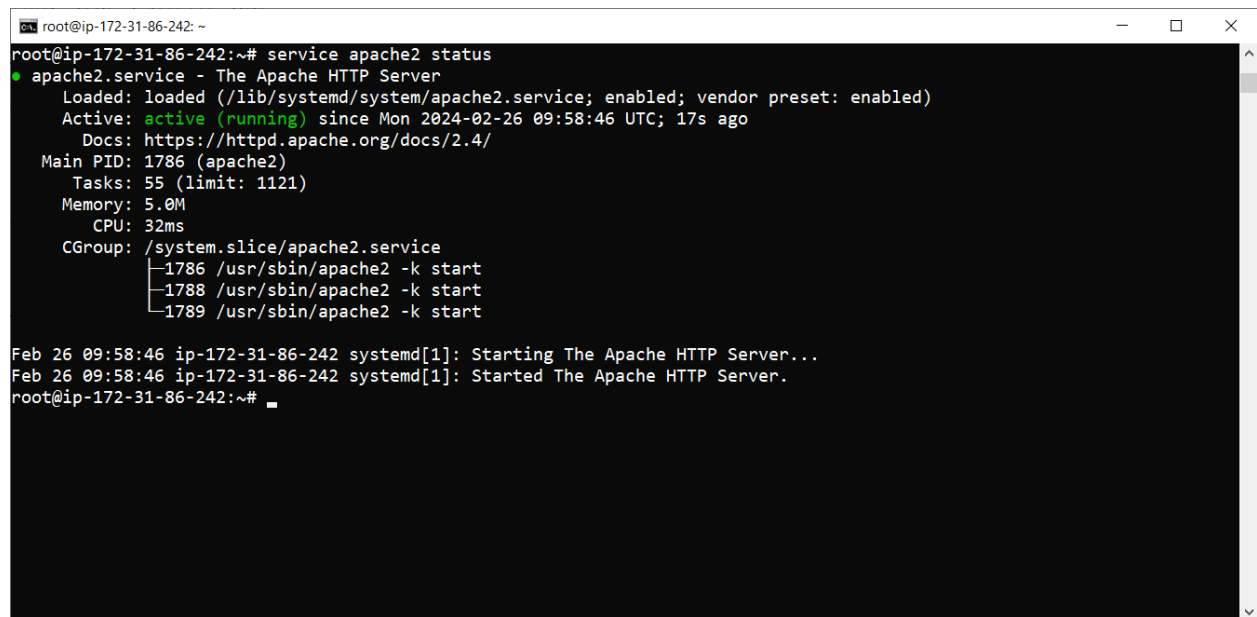
LAMP (Linux Apache2 Mysql PHP) Installation on Ubuntu machine.

Step 1 : Install apache2 on the ubuntu machine.

To install apache2 on the ubuntu machine, use the following command.

```
apt-get install apache2 -y
```

Check the status of apache2.

A terminal window screenshot showing the command 'service apache2 status' being executed. The output displays the service status as 'active (running)' and provides details such as the main PID (1786), tasks (55), memory usage (5.0M), and CPU usage (32ms). It also shows the CGroup path and the specific processes running under it. At the bottom, there are logs from systemd indicating the successful start of the Apache HTTP Server.

```
root@ip-172-31-86-242: ~
root@ip-172-31-86-242:~# service apache2 status
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-02-26 09:58:46 UTC; 17s ago
     Docs: https://httpd.apache.org/docs/2.4/
  Main PID: 1786 (apache2)
    Tasks: 55 (limit: 1121)
   Memory: 5.0M
      CPU: 32ms
   CGroup: /system.slice/apache2.service
           └─1786 /usr/sbin/apache2 -k start
             └─1788 /usr/sbin/apache2 -k start
               └─1789 /usr/sbin/apache2 -k start

Feb 26 09:58:46 ip-172-31-86-242 systemd[1]: Starting The Apache HTTP Server...
Feb 26 09:58:46 ip-172-31-86-242 systemd[1]: Started The Apache HTTP Server.
root@ip-172-31-86-242:~#
```

Step 2 : Install Mysql database.

Use the following command to install the mysql database on an ubuntu machine.

```
apt-get install mysql-server
```

Check if the server is properly installed or not.

```
root@ip-172-31-86-242: ~
root@ip-172-31-86-242:~# service mysql status
● mysql.service - MySQL Community Server
   Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-02-26 10:07:53 UTC; 24s ago
     Process: 15409 ExecStartPre=/usr/share/mysql/mysql-systemd-start pre (code=exited, status=0/SUCCESS)
    Main PID: 15417 (mysqld)
      Status: "Server is operational"
     Tasks: 38 (limit: 1121)
    Memory: 357.3M
       CPU: 1.062s
    CGroup: /system.slice/mysql.service
            └─15417 /usr/sbin/mysqld

Feb 26 10:07:52 ip-172-31-86-242 systemd[1]: Starting MySQL Community Server...
Feb 26 10:07:53 ip-172-31-86-242 systemd[1]: Started MySQL Community Server.
root@ip-172-31-86-242:~#
```

Step 3 : Install PHP and related libraries.

We have to install PHP and libraries that are required by PHP to communicate with Apache server and Mysql server.

- libapache2-mod-php
- php-mysql

Run the following command to install PHP and related libraries.

```
apt-get install php libapache2-mod-php php-mysql
```

```
root@ip-172-31-86-242: ~
root@ip-172-31-86-242:~# php --version
PHP 8.1.2-1ubuntu2.14 (cli) (built: Aug 18 2023 11:41:11) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.2-1ubuntu2.14, Copyright (c), by Zend Technologies
root@ip-172-31-86-242:~#
```

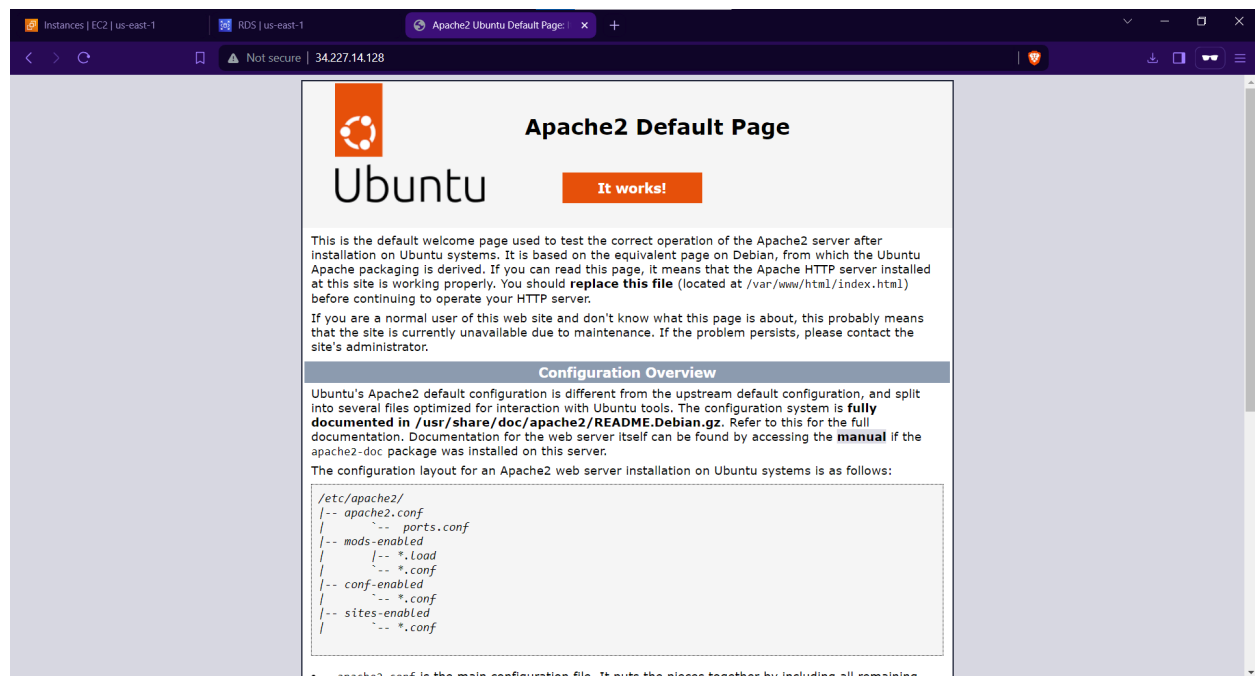
Step 4 : Final Configurations.

Create a file named 'info.php' in /var/www/html/ and add following content in that file.

```
<?php phpinfo(); ?>
```

Save file and exit.

Now check whether everything is installed properly or not. To check the installation copy the public IP of the instance and paste it in a search bar of a browser.




Type /php.info at the end of the link in above image. This will redirect us to the PHP file we created in /var/www/html directory.

Instances | EC2 | us-east-1 RDS | us-east-1 PHP 8.1.2-1ubuntu2.14 - php.ini

Not secure | 34.227.14.128/info.php

PHP Version 8.1.2-1ubuntu2.14



System	Linux ip-172-31-86-242 6.2.0-1017-aws #17-22.04.1-Ubuntu SMP Fri Nov 17 21:07:13 UTC 2023 x86_64
Build Date	Aug 18 2023 11:41:11
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.1/apache2
Loaded Configuration File	/etc/php/8.1/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/8.1/apache2/conf.d
Additional .ini files parsed	/etc/php/8.1/apache2/conf.d/10-mysqld.ini, /etc/php/8.1/apache2/conf.d/10-opcache.ini, /etc/php/8.1/apache2/conf.d/10-pdo.ini, /etc/php/8.1/apache2/conf.d/20-calendar.ini, /etc/php/8.1/apache2/conf.d/20-ctype.ini, /etc/php/8.1/apache2/conf.d/20-exif.ini, /etc/php/8.1/apache2/conf.d/20-fi.ini, /etc/php/8.1/apache2/conf.d/20-fileinfo.ini, /etc/php/8.1/apache2/conf.d/20-ftp.ini, /etc/php/8.1/apache2/conf.d/20-gettext.ini, /etc/php/8.1/apache2/conf.d/20-iconv.ini, /etc/php/8.1/apache2/conf.d/20-mysql.ini, /etc/php/8.1/apache2/conf.d/20-pdo_mysql.ini, /etc/php/8.1/apache2/conf.d/20-phar.ini, /etc/php/8.1/apache2/conf.d/20-posix.ini, /etc/php/8.1/apache2/conf.d/20-readline.ini, /etc/php/8.1/apache2/conf.d/20-shmop.ini, /etc/php/8.1/apache2/conf.d/20-sockets.ini, /etc/php/8.1/apache2/conf.d/20-sysvmsg.ini, /etc/php/8.1/apache2/conf.d/20-syssem.ini, /etc/php/8.1/apache2/conf.d/20-sysvshm.ini, /etc/php/8.1/apache2/conf.d/20-tokenizer.ini
PHP API	20210902
PHP Extension	20210902
Zend Extension	420210902
Zend Extension Build	API420210902.NTS
PHP Extension Build	API20210902.NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3

If you see this page on your browser, your installation is successful.