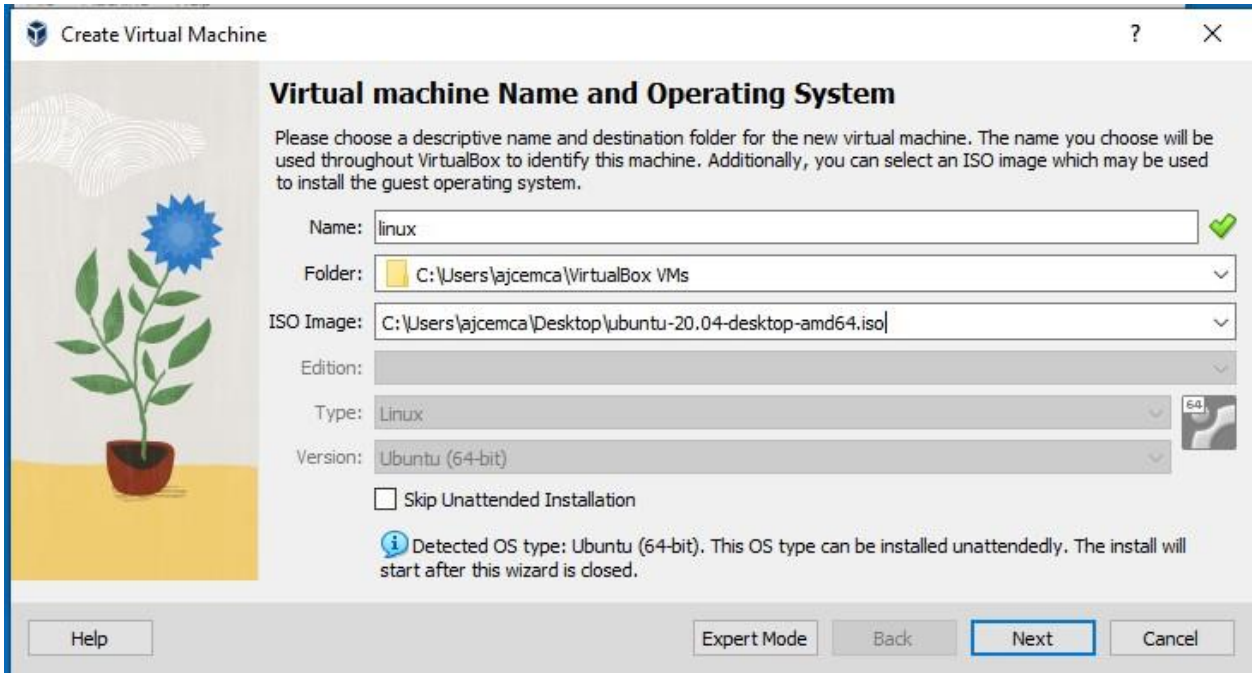
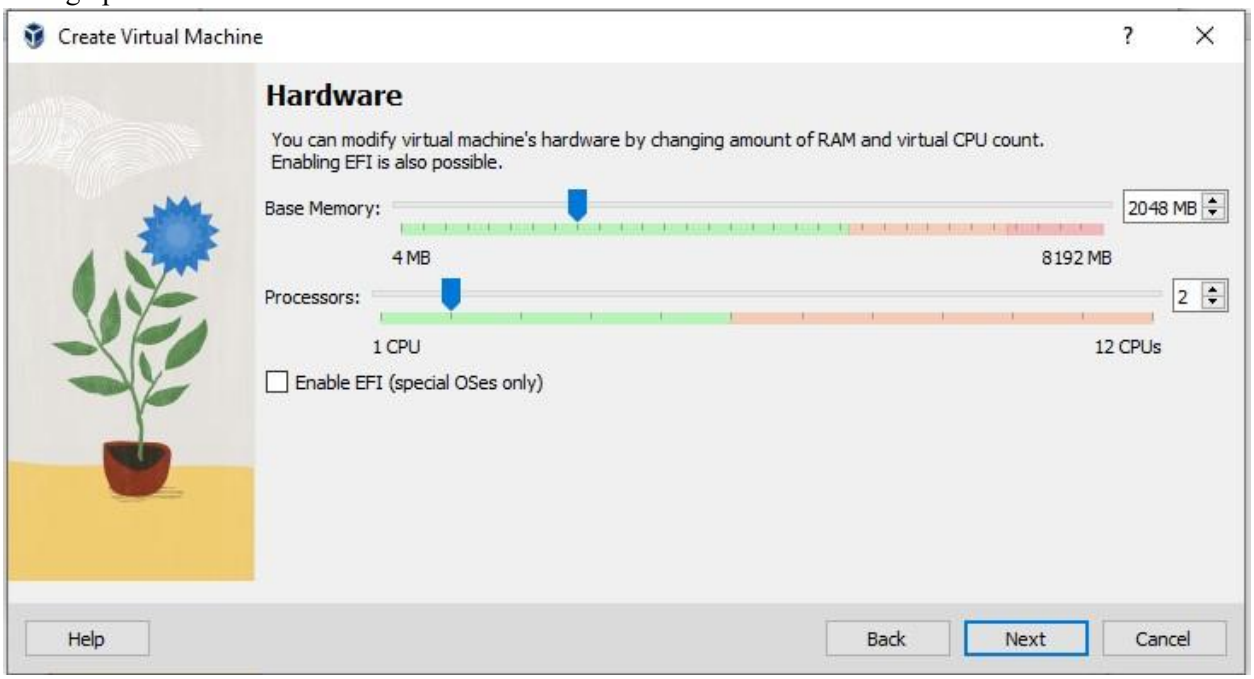
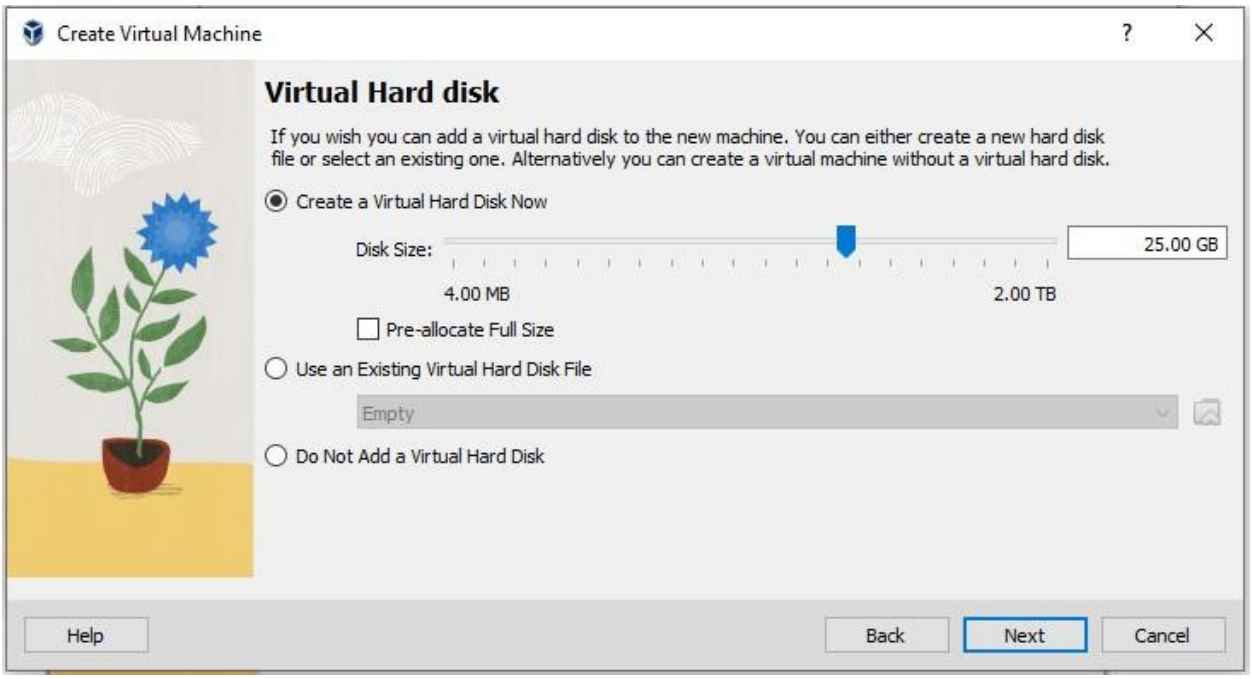
Installation of LAMP on Oracle Virtual Box

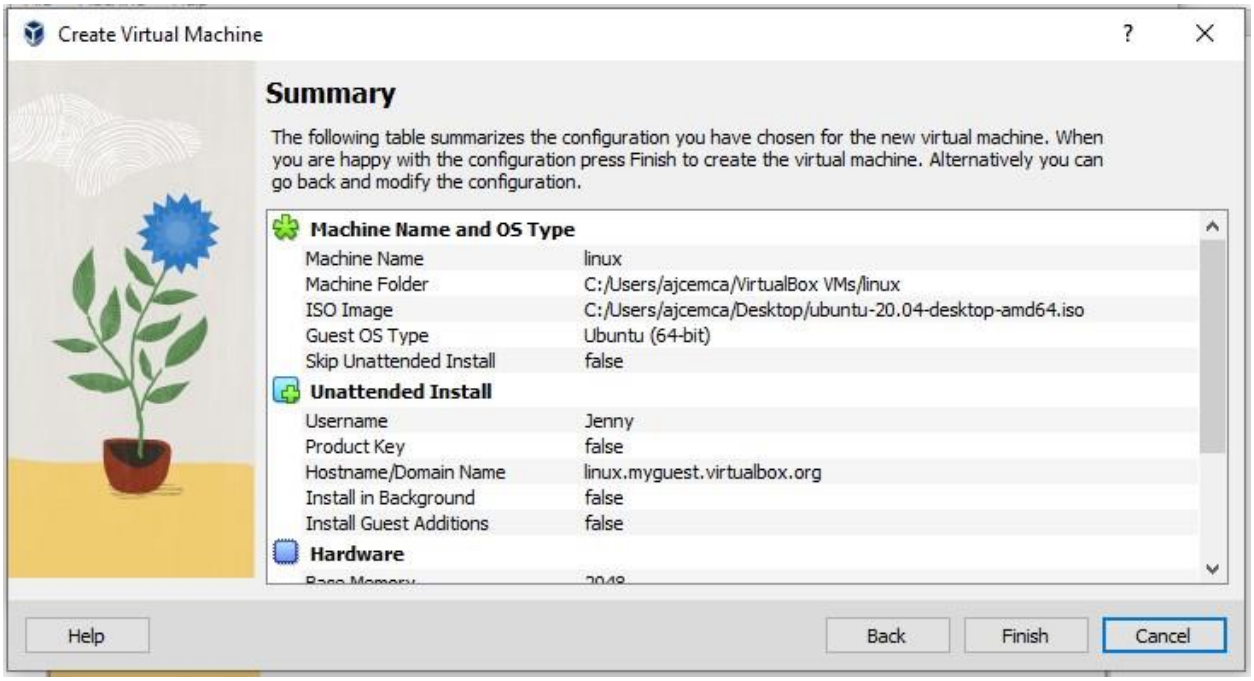


Installation of Linux

Setting up resources

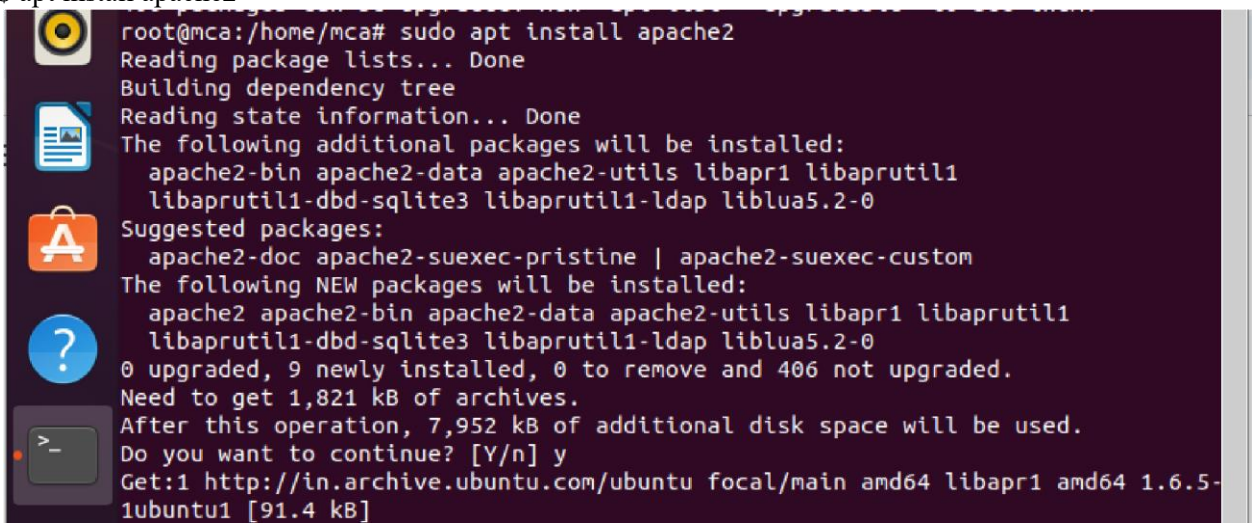



Create Virtual Machine
Virtual Hard disk
If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select an existing one. Alternatively you can create a virtual machine without a virtual hard disk.
Create a Virtual Hard Disk Now
Disk Size:
25.00 GB
4.00 MB
2.00 TB
Pre-allocate Full Size
Use an Existing Virtual Hard Disk File
Empty
Do Not Add a Virtual Hard Disk
Help
Back
Next
Cancel


Create Virtual Machine
Summary
The following table summarizes the configuration you have chosen for the new virtual machine. When you are happy with the configuration press Finish to create the virtual machine. Alternatively you can go back and modify the configuration.
Machine Name and OS Type
Machine Name linux
Machine Folder C:/Users/ajcemca/VirtualBox VMs/linux
ISO Image C:/Users/ajcemca/Desktop/ubuntu-20.04-desktop-amd64.iso
Guest OS Type Ubuntu (64-bit)
Skip Unattended Install false
Unattended Install
Username Jenny
Product Key false
Hostname/Domain Name linux.myguest.virtualbox.org
Install in Background false
Install Guest Additions false
Hardware
Help
Back
Finish
Cancel

Installation of Apache

$ apt install apache2

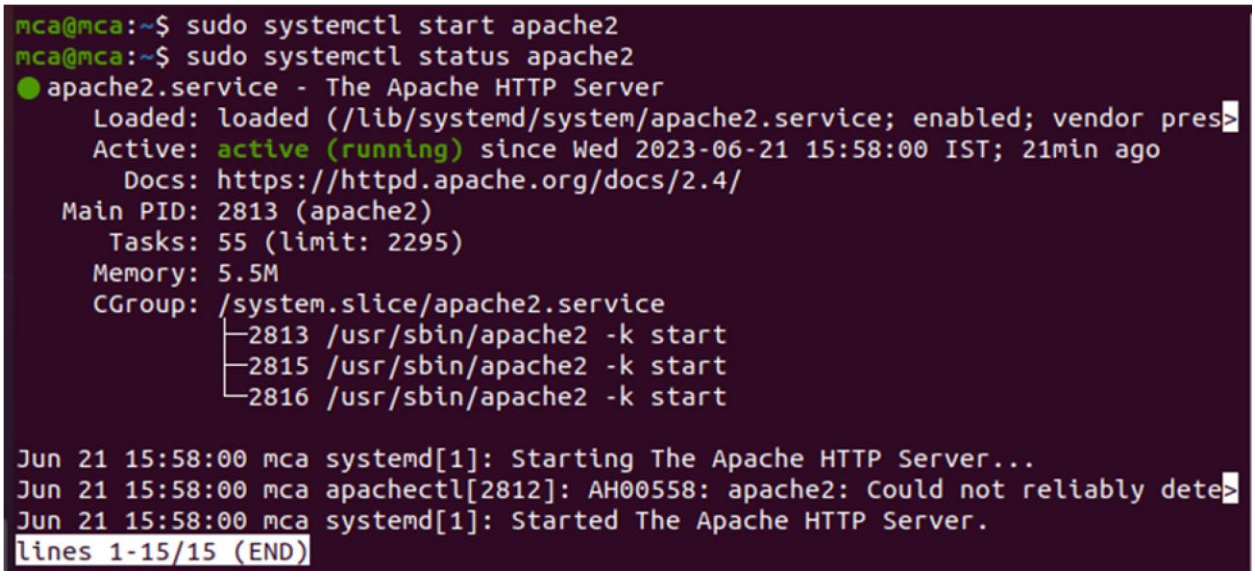


Start Apache

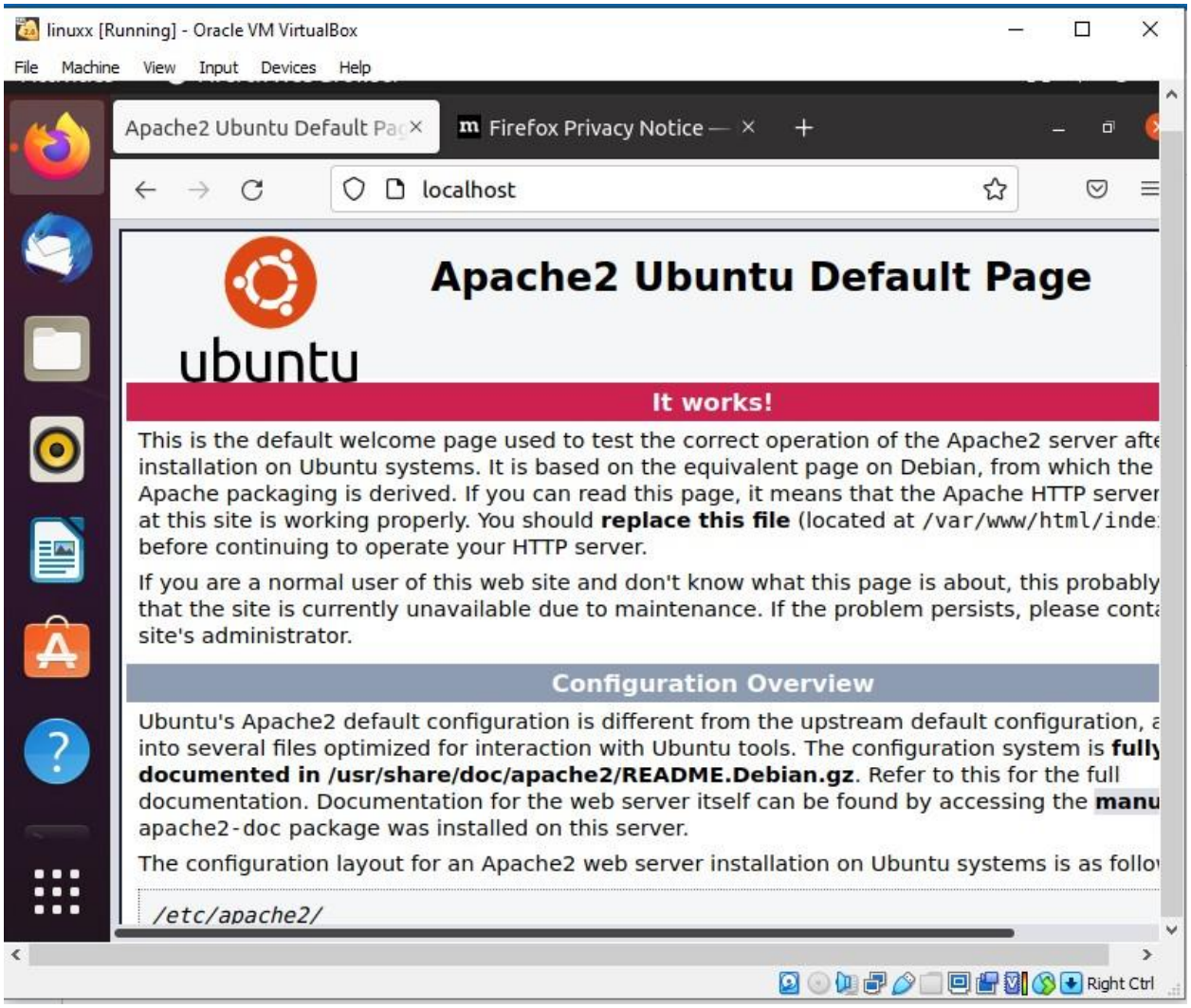
$ sudo systemctl start apache2

Check status of Apache

$ sudo systemctl status apache2



Check localhost



Installation of MySQL Server

$ sudo apt install mysql-server -y

```
mca@mca:~$ sudo apt install mysql-server -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libaio1 libcgi-fast-perl libcgi-pm-perl libevent-core-2.1-7
  libevent-pthreads-2.1-7 libfcgi-perl libhtml-template-perl libmecab2
  mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libipc-sharedcache-perl mailx tinyca
The following NEW packages will be installed:
  libaio1 libcgi-fast-perl libcgi-pm-perl libevent-core-2.1-7
  libevent-pthreads-2.1-7 libfcgi-perl libhtml-template-perl libmecab2
  mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-server mysql-server-8.0 mysql-server-core-8.0
0 upgraded, 16 newly installed, 0 to remove and 362 not upgraded.
Need to get 36.5 MB of archives.
```

Start MySQL

$ sudo systemctl start mysql

Check status of MySQL

$ sudo systemctl status mysql

```
mca@mca:~$ sudo systemctl start mysql
mca@mca:~$ sudo systemctl status mysql
● mysql.service - MySQL Community Server
     Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset>
     Active: active (running) since Wed 2023-06-21 16:26:15 IST; 1min 24s ago
   Main PID: 29486 (mysqld)
     Status: "Server is operational"
      Tasks: 37 (limit: 2295)
     Memory: 354.2M
     CGroup: /system.slice/mysql.service
             └─29486 /usr/sbin/mysqld

Jun 21 16:26:14 mca systemd[1]: Starting MySQL Community Server...
Jun 21 16:26:15 mca systemd[1]: Started MySQL Community Server.
```

Enter into MySQL from CLI

$ sudo muysql

```
mca@mca:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.33-0ubuntu0.20.04.2 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

mysql>
```

show databases;

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| db1                |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.65 sec)
```

Installation of PHP

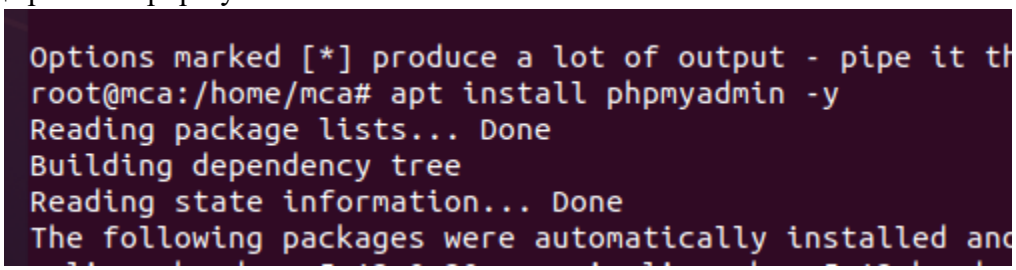
$apt install libapache2-mod-php php-mysql

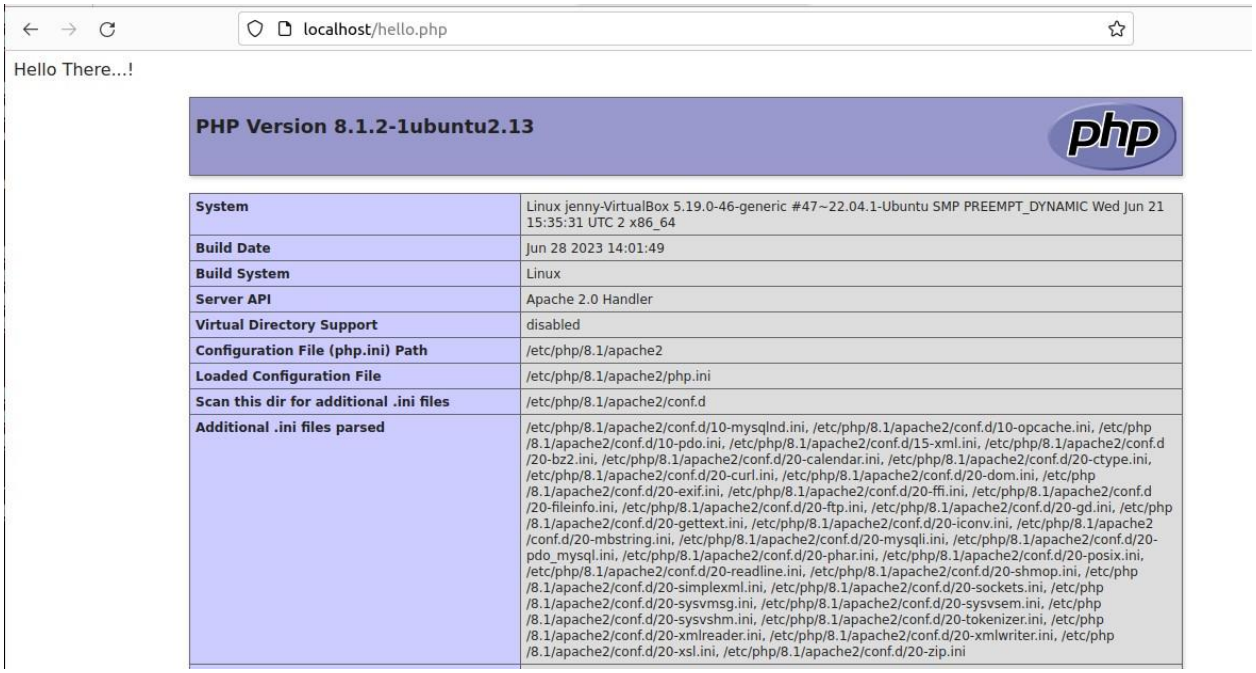
```
root@mca:/home/mca# apt install php libapache2-mod-php php-mysql
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php7.4 php-common php7.4 php7.4-cli php7.4-common
  php7.4-json php7.4-mysql php7.4-opcache php7.4-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php libapache2-mod-php7.4 php php-common php-mysql php7.4
  php7.4-cli php7.4-common php7.4-json php7.4-mysql php7.4-opcache
  php7.4-readline
```

$systemctl restart apache2

Installation of phpMyAdmin

$apt install phpmyadmin

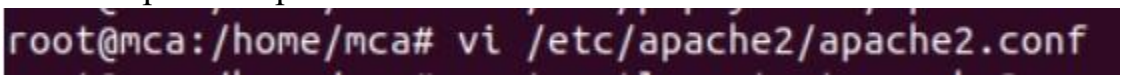




System	Linux jenny-VirtualBox 5.19.0-46-generic #47~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Jun 21 15:35:31 UTC 2 x86_64
Build Date	Jun 28 2023 14:01:49
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.1/apache2
Loaded Configuration 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-mysqlnd.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/15-xml.ini, /etc/php/8.1/apache2/conf.d/20-bz2.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-curl.ini, /etc/php/8.1/apache2/conf.d/20-dom.ini, /etc/php/8.1/apache2/conf.d/20-exif.ini, /etc/php/8.1/apache2/conf.d/20-ffi.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-gd.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-mbstring.ini, /etc/php/8.1/apache2/conf.d/20-mysqli.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-simplexml.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-sysvsem.ini, /etc/php/8.1/apache2/conf.d/20-sysvshm.ini, /etc/php/8.1/apache2/conf.d/20-tokenizer.ini, /etc/php/8.1/apache2/conf.d/20-xmlreader.ini, /etc/php/8.1/apache2/conf.d/20-xmlwriter.ini, /etc/php/8.1/apache2/conf.d/20-xsl.ini, /etc/php/8.1/apache2/conf.d/20-zip.ini

To enable phpMyAdmin open the /etc/apache2/apache2.conf file using a text editor.

$ vi /etc/apache2/apache2.conf



Include /etc/phpmyadmin/apache.conf

```
Include /etc/phpmyadmin/apache.conf
```

Restart apache. go to

localhost/phpmyadmin/

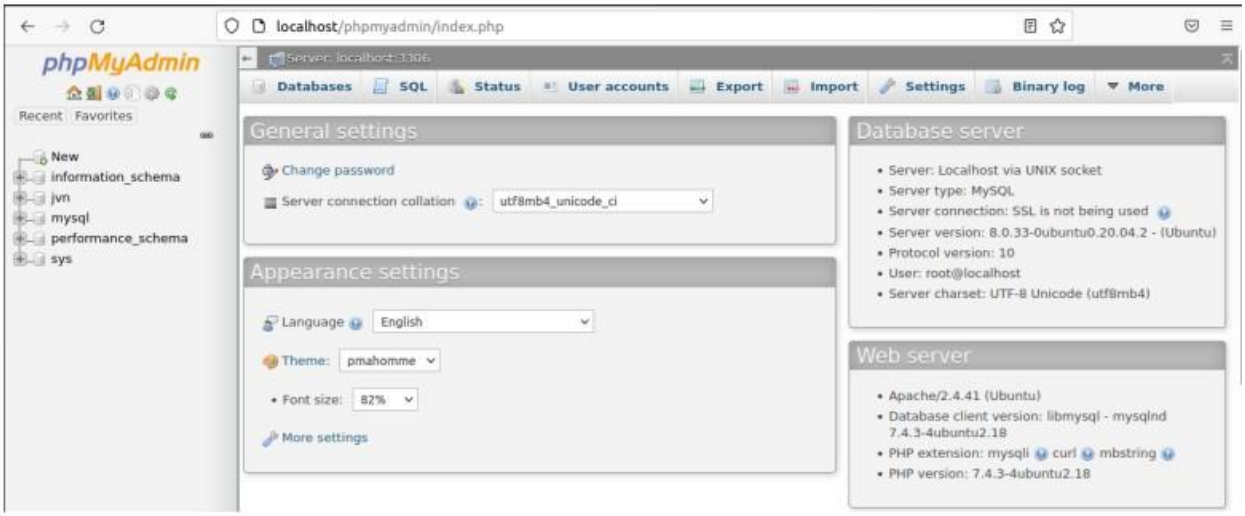
change password

```
mysql> alter user root@localhost identified with caching_sha2_password by "root";
Query OK, 0 rows affected (0.35 sec)
```

fetching some contents

```
mysql> select user,authentication_string,plugin, host from mysql.user;
+------------------+------------------------------------------------------------------------+-----------------------+-----------+
| user             | authentication_string                                                  | plugin                | host      |
+------------------+------------------------------------------------------------------------+-----------------------+-----------+
| debian-sys-maint | $A$005$IsquQ"QxmYD\%MStmosXmws3pvInou5Os4HobWvrvcl64IlRTpRfnFpp0 | caching_sha2_password | localhost |
| mysql.infoschema | $A$005$THISISACOMBINATIONOFINVALIDSALTANDPASSWORDTHATMUSTNEVERBRBEUSED | caching_sha2_password | localhost |
| mysql.session    | $A$005$THISISACOMBINATIONOFINVALIDSALTANDPASSWORDTHATMUSTNEVERBRBEUSED | caching_sha2_password | localhost |
| mysql.sys        | $A$005$THISISACOMBINATIONOFINVALIDSALTANDPASSWORDTHATMUSTNEVERBRBEUSED | caching_sha2_password | localhost |
| root             |                                                                        | auth_socket           | localhost |
+------------------+------------------------------------------------------------------------+-----------------------+-----------+
5 rows in set (0.02 sec)
```

localhost/phpmyadmin/index.php


localhost/phpmyadmin/index.php
phpMyAdmin
Recent
Favorites
New
information_schema
jvn
mysql
performance_schema
sys
Server: localhost:3306
Databases
SQL
Status
User accounts
Export
Import
Settings
Binary log
More
General settings
Change password
Server connection collation:
utf8mb4_unicode_ci
Appearance settings
Language
English
Theme:
pmahomme
Font size:
82%
More settings
Database server
Server: Localhost via UNIX socket
Server type: MySQL
Server connection: SSL is not being used
Server version: 8.0.33-0ubuntu0.20.04.2 - (Ubuntu)
Protocol version: 10
User: root@localhost
Server charset: UTF-8 Unicode (utf8mb4)
Web server
Apache/2.4.41 (Ubuntu)
Database client version: libmysql - mysqlnd 7.4.3-4ubuntu2.18
PHP extension: mysqli curl mbstring
PHP version: 7.4.3-4ubuntu2.18