

In here I planed to discuss about some day to day things we want to know.

Emalsha's Blog



How install and configure Apache,MariaDB,PHP on Arch Linux. (Antergos OS)

Today I am going to tell you how install LAMP (Apache,MariaDB , PHP on Linux) and configure it.

LAMP stack is set of open source software to up and run web application. Small description about these software will given in each chapter.

To install these software on Arch Linux you can use pacman manager (graphical tool or terminal). If you use pacman-manager graphical tool search each software and it will show you latest version available on repository. If you use terminal use this code to update repository first.

```
sudo pacman -Syu
```

Install Apache

Web server is the software which receive the request to web page and take to the web page. Apache is the most widely used web server software which developed and maintain by Apache Software Foundation. Apache is an open-source software available for free.

Now you have up to date pacman repository and can install Apache.

```
sudo pacman -S apache
```

After that edit **/etc/httpd/conf/httpd.conf** file. To open that file on nano,

```
sudo nano /etc/httpd/conf/httpd.conf
```

Then comment out the module mention below,

```
#LoadModule unique_id_module modules/mod_unique_id.so
```

*[In nano text editor use **Ctrl + w** search text and remove '#' to comment out a line]*

Then save (Ctrl + O) and close (Ctrl + x) the file.

Now we can restart Apache server using this command.

```
sudo systemctl restart httpd
```

If you get error like ,

httpd: apr_sockaddr_info_get() failed for #####

httpd: Could not reliably determine the server's fully qualified domain name, using 127.0.0.1 for ServerName

you can add your hostname *(To find your hostname just type 'hostname' and execute on terminal)* to host file and fix this issue. To do that open host file using nano and add your hostname at the end of line begin with 127.0.0.1 (localhost IP).

```
sudo nano /etc/hosts
```

Add hostname on this line,

```
127.0.0.1    localhost.localdomain    localhost #####(you hostname)
```

*example: 127.0.0.1 localhost.localdomain localhost **Emalsha-PC***

Now you can restart web server using given command. To check whether httpd service run correctly use this command to get service status.

```
sudo systemctl status httpd
```

It will give you this kind of result,

```
[emalsha@Emalsha-PC ~]$ sudo systemctl status httpd
● httpd.service - Apache Web Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Thu 2017-02-16 17:12:47 +0530; 1 day 15h ago
 Main PID: 408 (httpd)
   Tasks: 10 (limit: 4915)
  CGroup: /system.slice/httpd.service
          └─ 408 /usr/bin/httpd -k start -DFOREGROUND
             446 /usr/bin/httpd -k start -DFOREGROUND
             447 /usr/bin/httpd -k start -DFOREGROUND
             448 /usr/bin/httpd -k start -DFOREGROUND
             449 /usr/bin/httpd -k start -DFOREGROUND
             450 /usr/bin/httpd -k start -DFOREGROUND
            1205 /usr/bin/httpd -k start -DFOREGROUND
            1208 /usr/bin/httpd -k start -DFOREGROUND
            1210 /usr/bin/httpd -k start -DFOREGROUND
            1211 /usr/bin/httpd -k start -DFOREGROUND

Feb 16 17:12:47 Emalsha-PC systemd[1]: Started Apache Web Server.
[emalsha@Emalsha-PC ~]$
```

Now you can try Apache web server by creating simple html page on **/srv/http/** directory.

```
sudo nano /srv/http/index.html
```

Then put this html on it,

```
<html>

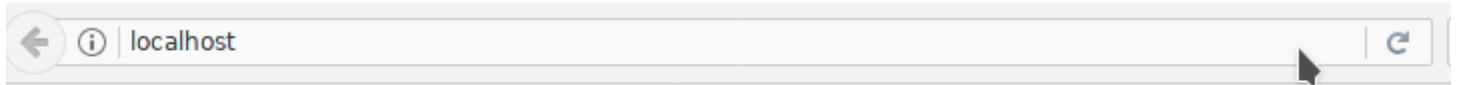
<title>Welcome Apache Web Server</title>

<body>
<h1>This is testing file to Apache web server.</h1>
```

```
</body>
```

```
</html>
```

Save and close the file and browse localhost (or given IP ex:127.0.0.1) on your browser.If you got this result you successfully installed Apache web server software.



This is testing file to Apache web server.

Install MariaDB

MariaDB Server is one of the most popular database servers in the world. It's made by the original developers of MySQL and guaranteed to stay open source. It is an enhanced, drop-in replacement for MySQL. MariaDB is used because it is fast, scalable and robust, with a rich ecosystem of storage engines, plugins and many other tools make it very versatile for a wide variety of use cases.

Already you have updated your pacman repository and now we can install latest version.

```
sudo pacman -S mysql
```

Since 2013 MariaDB is the official default implementation of MySQL in Arch Linux. Therefore when you going to install mysql it will ask whether install MariaDB or Percona server. Use default selection MariaDB and continue installation.

Start MariaDB using this command

```
sudo systemctl start mysqld
```

You can check is it running by using this command

```
sudo systemctl status mysqld
```

It gives you this kind of result.

```
[emalsha@Emalsha-PC ~]$ sudo systemctl status mysqld
● mariadb.service - MariaDB database server
   Loaded: loaded (/usr/lib/systemd/system/mariadb.service; enabled; vendor preset: disabled)
   Active: active (running) since Thu 2017-02-16 17:15:13 +0530; 2 days ago
     Process: 1164 ExecStartPost=/bin/sh -c systemctl unset-environment _WSREP_START_POSITION (code=exited, status=0/SUCCESS)
     Process: 1081 ExecStartPre=/bin/sh -c [ ! -e /usr/bin/galera_recovery ] && VAR= || VAR=/usr/bin/galera_recovery; [ $? -
     Process: 1079 ExecStartPre=/bin/sh -c systemctl unset-environment _WSREP_START_POSITION (code=exited, status=0/SUCCESS)
   Main PID: 1135 (mysqld)
     Status: "Taking your SQL requests now..."
     Tasks: 27 (limit: 4915)
    CGroup: /system.slice/mariadb.service
            └─1135 /usr/sbin/mysqld

Feb 16 17:15:12 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:12 140572201569792 [Note] InnoDB: Highest supported file format is
Feb 16 17:15:12 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:12 140572201569792 [Note] InnoDB: 128 rollback segment(s) are activ
Feb 16 17:15:12 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:12 140572201569792 [Note] InnoDB: Waiting for purge to start
Feb 16 17:15:12 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:12 140572201569792 [Note] InnoDB: Percona XtraDB (http://www.perco
Feb 16 17:15:12 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:12 140572201569792 [Note] Plugin 'FEEDBACK' is disabled.
Feb 16 17:15:12 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:12 140571609896704 [Note] InnoDB: Dumping buffer pool(s) not yet st
Feb 16 17:15:13 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:13 140572201569792 [Note] Server socket created on IP: '::'.
Feb 16 17:15:13 Emalsha-PC mysqld[1135]: 2017-02-16 17:15:13 140572201569792 [Note] /usr/sbin/mysqld: ready for connections.
Feb 16 17:15:13 Emalsha-PC mysqld[1135]: Version: '10.1.21-MariaDB' socket: '/run/mysqld/mysqld.sock' port: 3306 MariaDB S
Feb 16 17:15:13 Emalsha-PC systemd[1]: Started MariaDB database server.
[emalsha@Emalsha-PC ~]$
```

Now you have to set up root password and other security settings. To do this use this command.

```
mysql_secure_installation
```

It will proceed you to some questions and first will ask root password. But very first you haven't set any password therefore keep it blank and enter. Then it will ask your new password and continue process. It's better to follow default options it suggested.

If you got error like

error: 'Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' (2)'

Check that mysqld is running and that the socket: '/var/run/mysqld/mysqld.sock' exists!

Then try this command.

```
sudo mysql_install_db --user=mysql --basedir=/usr --datadir=/var/lib/mys
```

Now MariaDB is ready to use.

Remember :

You want this service run each time therefore you can enable load this service at startup by using this command.

```
sudo systemctl enable mysqld httpd
```

If you want these services start use this

if you want these services start use this ,

```
sudo systemctl start ##### ← service name
```

if you want to restart

```
sudo systemctl restart #####
```

if you want to get current status

```
sudo systemctl status #####
```

Install PHP

PHP is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. Current stable php version is 7.1.2 (when I write this blog – 18/02/2017) and install using this command.

```
sudo pacman -S php php-apache
```

Then edit Apache configuration file

```
sudo nano /etc/httpd/conf/httpd.conf
```

First find this line and comment it.

```
LoadModule mpm_event_module modules/mod_mpm_event.so  
( put '#' at the beginning)
```

Then put this lines at the end of the config file.

```
LoadModule mpm_prefork_module modules/mod_mpm_prefork.so  
LoadModule php7_module modules/libphp7.so  
AddHandler php7-script php  
Include conf/extra/php7_module.conf  
save and close the file.
```

Now you can check whether php installed correctly or not by creating simple php file on apache host folder.

```
nano /srv/http/info.php
```

and put this lines on it.

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

You have altered **httpd.conf** file therefor restart the httpd server to take this updates.

```
sudo systemctl restart httpd
```

Now you can browse **<http://localhost/info.php>** (**[!\[\]\(8d0f0e0fe25b320c33272c52aec1fbca_img.jpg\)

System	Linux Emalsha-PC 4.9.8-1-ARCH #1 SMP PREEMPT Mon Feb 6 12:59:40 CET 2017 x86_64
Build Date	Feb 14 2017 21:25:05
Configure Command	./configure '--srcdir=../php-7.1.2' '--config-cache' '--prefix=/usr' '--sbindir=/usr/bin' '--sysconfdir=/etc/php' '--localstatedir=/var' '--with-layout=GNU' '--with-config-file-path=/etc/php' '--with-config-file-scan-dir=/etc/php/conf.d' '--disable-rpath' '--mandir=/usr/share/man' '--without-pear' '--with-apxs2' '--enable-bcmath=shared' '--enable-calendar=shared' '--enable-dba=shared' '--enable-exif=shared' '--enable-ftp=shared' '--enable-gd-native-ttf' '--enable-intl=shared' '--enable-mbstring' '--enable-shmop=shared' '--enable-soap=shared' '--enable-sockets=shared' '--enable-sysvmsg=shared' '--enable-sysvsem=shared' '--enable-sysvshm=shared' '--enable-xml=shared' '--enable-zip=shared' '--with-bz2=shared' '--with-curl=shared' '--with-dbm4=/usr' '--with-ldap=shared' '--with-ldap-sasl' '--with-libzip' '--with-mcrypt=shared' '--with-mhash' '--with-mysql-sock=/run/mysqld/mysqld.sock' '--with-mysqli=shared,mysqld' '--with-openssl' '--with-pcre-regex=/usr' '--with-pdo-dblib=shared,/usr' '--with-pdo-mysql=shared,mysqld' '--with-pdo-odbc=shared,unixODBC,/usr' '--with-pdo-pgsql=shared' '--with-pdo-sqlite=shared,/usr' '--with-pgsql=shared' '--with-pspell=shared' '--with-readline' '--with-snmpp=shared' '--with-sqlite3=shared,/usr' '--with-tidy=shared' '--with-unixODBC=shared,/usr' '--with-xmllrpc=shared' '--with-xsl=shared' '--with-zlib' '--enable-pcntl'
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File \(php.ini\) Path	/etc/php

Loaded Configuration File	/etc/php/php.ini
Scan this dir for additional .ini files	/etc/php/conf.d
Additional .ini files parsed	(none)
PHP API	20160303
PHP Extension	20160303
Zend Extension	320160303
Zend Extension Build	API320160303,NTS

Wow ... You have installed php correctly.

Congratulations ! Now you have LAMP stack and start the building yourself.

Web (https://0.freebasics.com/xupsells/?encryptedcontinueuri=AauIEpjmWsBB34WosJ29OZW2fH3Xy5hhsf_rcdNrbFNJzOcBcr-TCJ1OPQxOoKNdRz5PYlbpbhFnYtD-kTyVCiaNRT5ADBnyByI76fGhwbnPyHKCzQ&encryptedbackuri=AauSf4AEtk87bgWhlktR1FqUzaPtye6oc5ZqOGdZeneAQsNR1eJyMNDWHvL_N97vXryCJBglEbUpKIj07jJD-kuCP3KiTGBSWWQt7eLwKexuSzCMuPyb9wEGkthzDidTgWvJCKAZ8ItuX64nhTnSdbwVsf9sGBxfqbntEJIRYKu0qlTqxpQpNqizVCEe8vwTY0lNWZ0EuFVMp22i5Lb3UIU0nb5GKp3IYcL1wZSfirCj1PV2S-74QoimP68BtkGrO2UR8F-foa92avjASGJEv8_vpK8qDhWyc_D-xF45egjCGmTvW6UiJH-GeKf4flk2Eon1smoIKwLkQI8PhMsuqDrnb_wk629neM8J7SbB5kQBmjeMpT_jD6EvEq1YLUqfd8VRubOvVc8elK6bo341bi9ZwYOPcjYIWNWWMRArdG0tlkyuJEbTnFCDvRG5csD0goMlWWQnG_r1XwE4BZnOXUT_zOi5xTFnHd6mp9GaLJHDgxw7MXTPEMwFkCmxnRu0z5TTxVw&why=not_zero_rated&service_id=353927438289245&no_header=1)

emalsha

February 19, 2017

Apache /
ArchLinux /
Install LAMP on Arch Linux /
LAMP /
MariaDB /
MYSQL /
PHP

8 thoughts on “How install and configure Apache,MariaDB,PHP on Arch Linux. (Antergos OS)”

Kanushka Gayan says:

February 21, 2017 at 2:06 PM

👍 good job

Renlv

Reply

nataly says:

May 26, 2017 at 7:43 AM

thank you, this is perfect


Reply

Diego Tsuyoshi says:

December 12, 2017 at 4:26 AM

Thanks, this guide helped a lot!!

Reply

 **dag** says:

July 29, 2018 at 1:44 PM

Now you can try Apache web server by creating simple html page on /srv/http/ directory.

1

```
sudo nano /srv/http/index.html
```

Then put this html on it,

Welcome Apache Web Server

This is testing file to Apache web server.

Save and close the file and browse localhost (or given IP ex:127.0.0.1) on your browser.If you got this result you successfully installed Apache web server software.

WE don't have right on srv/html ... how can we fixe that please

Reply

emalsha says:

August 8, 2018 at 9:54 AM

Hi Dag,

Yes you may don't have permission to create new file on that folder.

So, first identify you current user by opening new terminal and give command "users",

Then it will show you current users. Then you can change ownership and give permission to that user to work on /srv/http/.. folder

To change ownership use, "chown YOUR_USER:YOUR_USER_GROUP /srv/http"

To change permission use, "chmod +655 /srv/http"

Reply

bitwhale says:

November 29, 2018 at 1:08 AM

After installing MariaDB if you encounter errors starting the server the solution is in the Arch wiki...

```
# mysql_install_db --user=mysql --basedir=/usr --datadir=/var/lib/mysql
```

This has to be done before starting MariaDB in order to set it up properly.

Reply

stewieandro says:

December 1, 2018 at 6:56 AM

Thank you Emalsha! I spent an entire day trying to set up my LAMP stack on Manjaro before I came across your blog. Unlike many other internet tutorials, you broke the subject down in a clear and readable manner! Not only did it solve my issues, it helped me to understand the configuration of LAMP software so that in the future I will be able to more easily solve other problems. Cheers!

Reply

Muhammed says:

January 14, 2019 at 6:17 AM

Thank you! Is so clear and simple

Reply

Blog at WordPress.com.

