# How to setup Linux, Apache, MySQL, PHP (LAMP) Stack on Ubuntu 16.04

<https://medium.com/techkylabs/how-to-install-linux-apache-mysql-php-lamp-on-ubuntu-16-04-f82a60b0d40d>

# PHP and MySQL/MariaDB tutorial on Ubuntu

<https://linuxhint.com/php-mysql-tutorial/>

How to install and configure Apache2

<https://devm.io/open-source/apache2-install-config-169923>

## Enable ports

# 8 Steps How To Install A Web Server and Host a Website on Your Own Linux Computer

<https://www.linuxfordevices.com/tutorials/ubuntu/install-web-server-host-website-linux>

# How to Start/Stop MySQL Server on Ubuntu

<https://www.tutorialrepublic.com/faq/how-to-start-stop-mysql-server-on-ubuntu.php>

# How to Return MySQL Data in JSON Format With PHP On Ubuntu 20.04 Server

<https://www.alibabacloud.com/blog/how-to-return-mysql-data-in-json-format-with-php-on-ubuntu-20-04-server_598024>

# How To Use the MySQL BLOB Data Type to Store Images with PHP on Ubuntu 18.04

<https://www.digitalocean.com/community/tutorials/how-to-use-the-mysql-blob-data-type-to-store-images-with-php-on-ubuntu-18-04>

# Tests

## sudo nano /etc/hosts

127.0.0.1 localhost

127.0.1.1 i80pc93

# 127.0.0.1 mypersonaldomain.com

#141.3.72.86 website1-example.com

141.3.72.86 domainname.com

sajjad@i80pc93:/var/www/domainname.com$ sudo nano /etc/hosts

## Examples Files

sajjad@i80pc93:/var/www/domainname.com$ ls

config2.php dbconnection.php index.html readdata1.php test.php

config.php display\_products.php insert\_products.php readdata.php welcome.php

## Default Index File

sajjad@i80pc93:/var/www/domainname.com$ cat index.html

<html>

<head>

<title>Welcome to My Website</title>

</head>

<body>

<h1>Thank you for visiting my humble web page!</h1>

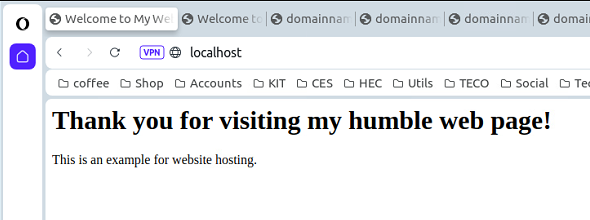
<p>

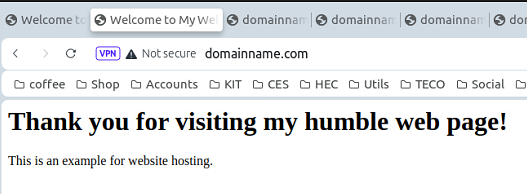
This is an example for website hosting.

</p>

</body>

</html>





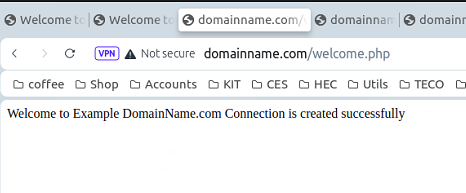
## Try a Welcome PHP

sajjad@i80pc93:/var/www/domainname.com$ cat welcome.php

<?php

echo "Welcome to Example DomainName.com \n Connection is created successfully";

?>



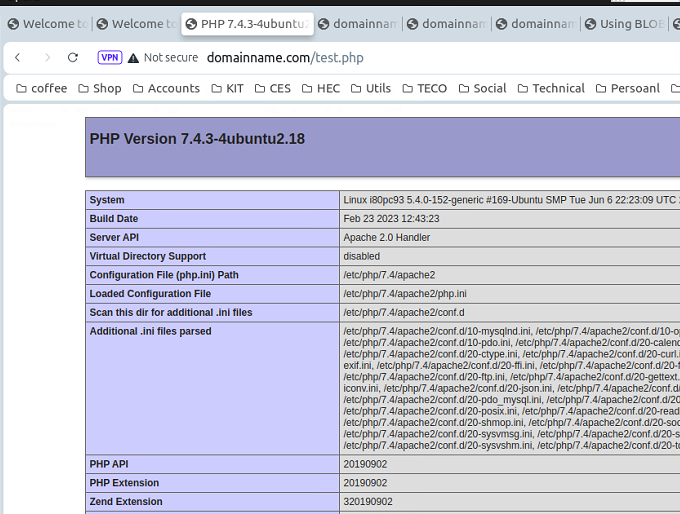
## Default PHP Info

sajjad@i80pc93:/var/www/domainname.com$ cat test.php

<?php

echo phpinfo();

?>



## Reading .php files in the website directory by default

Sajjad@i80pc93:/var/www/domainname.com$ sudo nano /etc/apache2/mods-enabled/dir.conf

sajjad@i80pc93:/var/www/domainname.com$ cat /etc/apache2/mods-enabled/dir.conf

<IfModule mod\_dir.c>

DirectoryIndex index.php index.html index.cgi index.pl index.php index.xhtml index.htm

</IfModule>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet

## Read SQL into PHP as JSON

sajjad@i80pc93:/var/www/domainname.com$

sajjad@i80pc93:/var/www/domainname.com$ cat config.php

<?php

define('DB\_NAME', 'test\_company');

define('DB\_USER', 'root');

define('DB\_PASSWORD', '#sajjan2');

define('DB\_HOST', 'localhost');

$pdo = new PDO("mysql:host=" . DB\_HOST . "; dbname=" . DB\_NAME, DB\_USER, DB\_PASSWORD);

$pdo->setAttribute(PDO::ATTR\_ERRMODE, PDO::ERRMODE\_EXCEPTION);

$pdo->setAttribute(PDO::ATTR\_EMULATE\_PREPARES, false);

?>

sajjad@i80pc93:/var/www/domainname.com$ cat insert\_products.php

<?php

require\_once 'config.php';

$products = [];

$products[] = [

'product\_name' => 'VIRTUAL SERVERS',

'price' => 5,

'product\_image' => file\_get\_contents("https://i.imgur.com/VEIKbp0.png")

];

$products[] = [

'product\_name' => 'MANAGED KUBERNETES',

'price' => 30,

'product\_image' => file\_get\_contents("https://i.imgur.com/cCc9Gw9.png")

];

$products[] = [

'product\_name' => 'MySQL DATABASES',

'price' => 15,

'product\_image' => file\_get\_contents("https://i.imgur.com/UYcHkKD.png" )

];

$sql = "INSERT INTO products(product\_name, price, product\_image) VALUES (:product\_name, :price, :product\_image)";

foreach ($products as $product) {

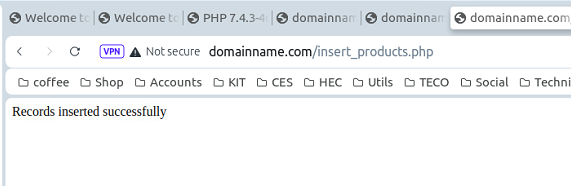
$stmt = $pdo->prepare($sql);

$stmt->execute($product);

}

echo "Records inserted successfully";

?>



sajjad@i80pc93:/var/www/domainname.com$ cat display\_products.php

<html>

<title>Using BLOB and MySQL</title>

<body>

<?php

require\_once 'config.php';

$sql = "SELECT \* FROM products";

$stmt = $pdo->prepare($sql);

$stmt->execute();

?>

<table border = '1' align = 'center'> <caption>Products Database</caption>

<tr>

<th>Product Id</th>

<th>Product Name</th>

<th>Price</th>

<th>Product Image</th>

</tr>

<?php

while ($row = $stmt->fetch(PDO::FETCH\_ASSOC)) {

echo '<tr>';

echo '<td>' . $row['product\_id'] . '</td>';

echo '<td>' . $row['product\_name'] . '</td>';

echo '<td>' . $row['price'] . '</td>';

echo '<td>' .

'<img src = "data:image/png;base64,' . base64\_encode($row['product\_image']) . '" width = "50px" height = "50px"/>'

. '</td>';

echo '</tr>';

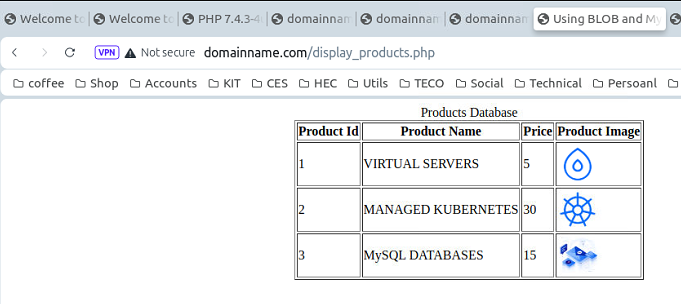
}

?>

</table>

</body>

</html>



[sajjad@i80pc93:/var/www/domainname.com$](mailto:sajjad@i80pc93:/var/www/domainname.com$)

## Read SQL into PHP as Simple

sajjad@i80pc93:/var/www/domainname.com$ cat config2.php

<?php

define('DB\_NAME', 'company');

define('DB\_USER', 'root');

define('DB\_PASSWORD', '#sajjan2');

define('DB\_HOST', 'localhost');

$pdo = new PDO("mysql:host=" . DB\_HOST . "; dbname=" . DB\_NAME, DB\_USER, DB\_PASSWORD);

$pdo->setAttribute(PDO::ATTR\_ERRMODE, PDO::ERRMODE\_EXCEPTION);

$pdo->setAttribute(PDO::ATTR\_EMULATE\_PREPARES, false);

?>

sajjad@i80pc93:/var/www/domainname.com$ cat readdata.php

<html>

<title>Using BLOB and MySQL</title>

<body>

<?php

require\_once 'config2.php';

$sql = "SELECT \* FROM employees";

$stmt = $pdo->prepare($sql);

$stmt->execute();

?>

<table border = '1' align = 'center'> <caption>Products Database</caption>

<tr>

<th>Emp Id</th>

<th>Name</th>

<th>Address</th>

<th>Desig.</th>

<th>Phone</th>

<th>Email</th>

<th>Salary</th>

</tr>

<?php

while ($row = $stmt->fetch(PDO::FETCH\_ASSOC)) {

echo '<tr>';

echo '<td>' . $row['id'] . '</td>';

echo '<td>' . $row['name'] . '</td>';

echo '<td>' . $row['address'] . '</td>';

echo '<td>' . $row['designation'] . '</td>';

echo '<td>' . $row['phone'] . '</td>';

echo '<td>' . $row['email'] . '</td>';

echo '<td>' . $row['salary'] . '</td>';

echo '</tr>';

}

?>

</table>

</body>

</html>

sajjad@i80pc93:/var/www/domainname.com$ cat dbconnection.php

<?php

$server='localhost';

$username='root';

$password='#sajjan2';

$database = 'company';

mysqli\_report(MYSQLI\_REPORT\_ERROR | MYSQLI\_REPORT\_STRICT);

/\* Create database connection with correct username and password/\*

$connect=new mysqli($servername,$username,$password,$database);

/\* Check the connection is created properly or not \*/

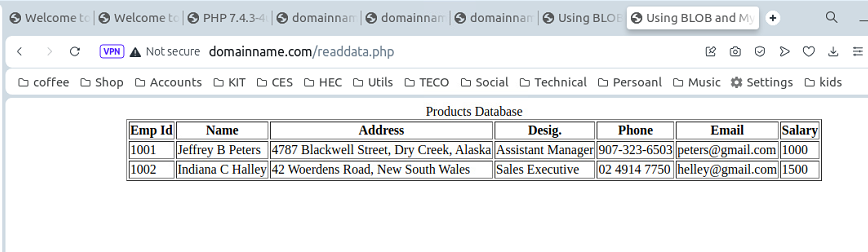
if($connect->connect\_error)

echo "Connection error:" .$connect->connect\_error;

else

echo "Connection is created successfully"; ?>

[sajjad@i80pc93:/var/www/domainname.com$](mailto:sajjad@i80pc93:/var/www/domainname.com$)



# Another Website Example

sajjad@i80pc93:/var/www$ ls

domainname.com host\_example html info.net mypersonaldomain.com sajjad website1-example.com

sajjad@i80pc93:/var/www$ sudo nano /etc/hosts

sajjad@i80pc93:/var/www$ cat /etc/hosts

hosts hosts.allow hosts.deny

sajjad@i80pc93:/var/www$ cat /etc/hosts

127.0.0.1 localhost

127.0.1.1 i80pc93

# 127.0.0.1 mypersonaldomain.com

141.3.72.86 website1-example.com

141.3.72.86 domainname.com

# The following lines are desirable for IPv6 capable hosts

::1 ip6-localhost ip6-loopback

fe00::0 ip6-localnet

ff00::0 ip6-mcastprefix

ff02::1 ip6-allnodes

ff02::2 ip6-allrouters

sajjad@i80pc93:/var/www$ cat website1-example.com/

access.log error.log index.html

sajjad@i80pc93:/var/www$ cat website1-example.com/index.html

<html>

<head>

<title>website1-example.com</title>

</head>

<body>

<h2> Welcome to website1-example.com </h2>

</body>

</html>

sajjad@i80pc93:/var/www$

