# 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>

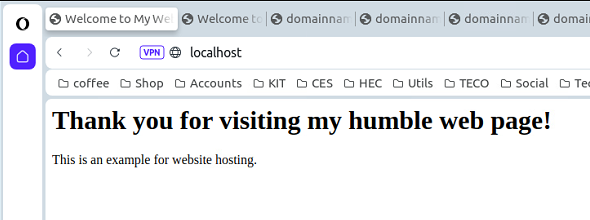
<p>

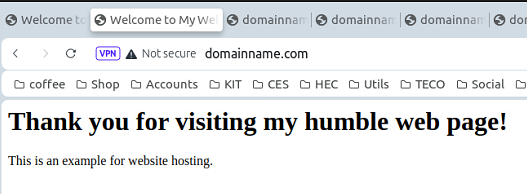
This is an example for website hosting.

</p>

</body>

</html>





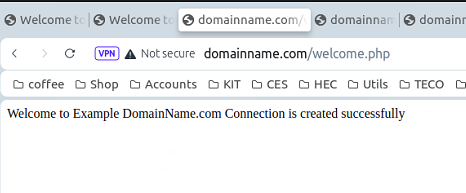
## Try a Welcome PHP

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

<?php

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

?>



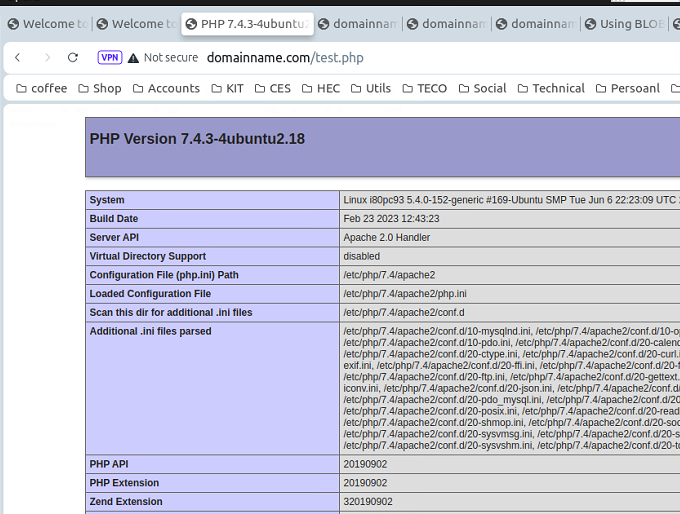
## Default PHP Info

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) {

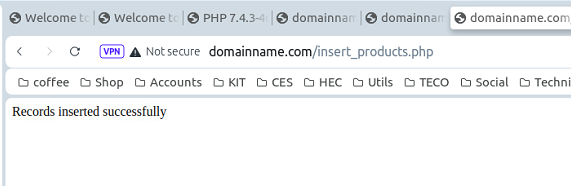
$stmt = $pdo->prepare($sql);

$stmt->execute($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>';

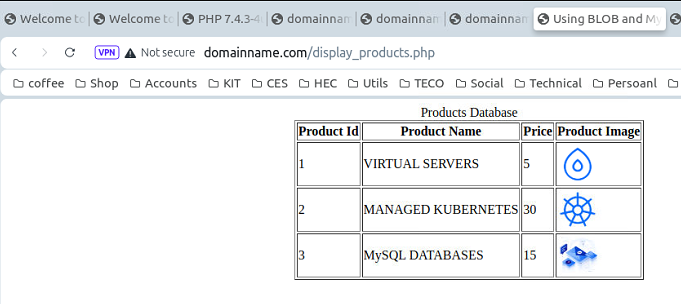
}

?>

</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 \*/

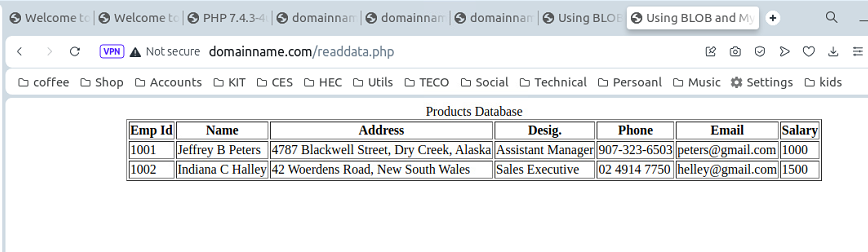
if($connect->connect\_error)

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>

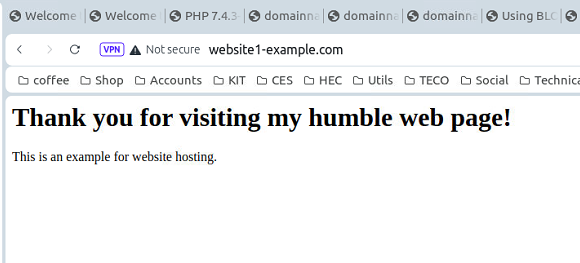
<body>

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

</body>

</html>

sajjad@i80pc93:/var/www$



# Murtaza Website for Racks Wires

sajjad@i80pc93:/var/www/domainname.com$ mysql -u root -p

Enter password:#sajjan2

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 32

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>

mysql> show databases

-> ;

+--------------------+

| Database |

+--------------------+

| company |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

| test\_company |

+--------------------+

6 rows in set (0.40 sec)

mysql>

mysql> create database murtaza;

Query OK, 1 row affected (0.47 sec)

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| company |

| information\_schema |

| murtaza |

| mysql |

| performance\_schema |

| sys |

| test\_company |

+--------------------+

7 rows in set (0.01 sec)

mysql> use murtaza;

Database changed

mysql> CREATE TABLE rack (rackid INT AUTO\_INCREMENT PRIMARY KEY, rname VARCHAR(50) UNIQUE, height INT, width INT, units INT);

Query OK, 0 rows affected (1.25 sec)

mysql> CREATE TABLE item (itemid INT AUTO\_INCREMENT PRIMARY KEY,iname VARCHAR(50) UNIQUE, rackid INT, HUL INT, HUN INT, chaining INT);

Query OK, 0 rows affected (0.97 sec)

mysql> CREATE TABLE energychain (chainid INT AUTO\_INCREMENT PRIMARY KEY,cname VARCHAR(50) UNIQUE);

Query OK, 0 rows affected (0.68 sec)

mysql> CREATE TABLE cable (cableid INT AUTO\_INCREMENT PRIMARY KEY,cname VARCHAR(50) UNIQUE, code INT, specs VARCHAR(50), source VARCHAR(50), destination VARCHAR(50), S.ID INT, D.ID INT, S.Port VARCHAR(20), D.Port VARCHAR(20),S.Unit INT, D.Unit INT, Adjustment INT, Length INT) ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual thatcorresponds to your MySQL server version for the right syntax to use near '.ID INT, D.ID INT, S.Port VARCHAR(20), D.Port VARCHAR(20),S.Unit INT, D.Unit INT' at line 1

mysql> CREATE TABLE cable (cableid INT AUTO\_INCREMENT PRIMARY KEY, cname VARCHAR(50) UNIQUE, code INT, specs VARCHAR(50), source VARCHAR(50), destination VARCHAR(50), sid INT, did INT, sport VARCHAR(20), dport VARCHAR(20),sunit INT, dunit INT, adjustment INT, length INT) ;

Query OK, 0 rows affected (0.87 sec)

mysql>

mysql> INSERT INTO rack (rname, height, width, units) values ('electronics',180,50,38);

Query OK, 1 row affected (0.13 sec)

mysql> INSERT INTO rack (rname, height, width, units) values ('photonics',180,50,38);

Query OK, 1 row affected (0.15 sec)

mysql> describe rack;

+--------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+--------+-------------+------+-----+---------+----------------+

| rackid | int | NO | PRI | NULL | auto\_increment |

| rname | varchar(50) | YES | UNI | NULL | |

| height | int | YES | | NULL | |

| width | int | YES | | NULL | |

| units | int | YES | | NULL | |

+--------+-------------+------+-----+---------+----------------+

5 rows in set (0.33 sec)

mysql> select \* from rack;

+--------+-------------+--------+-------+-------+

| rackid | rname | height | width | units |

+--------+-------------+--------+-------+-------+

| 1 | electronics | 180 | 50 | 38 |

| 2 | photonics | 180 | 50 | 38 |

+--------+-------------+--------+-------+-------+

2 rows in set (0.00 sec)

mysql> INSERT INTO energychain (cname) values ('energychain');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO energychain (cname) values ('direct');

Query OK, 1 row affected (0.13 sec)

mysql> select \* from energychain;

+---------+-------------+

| chainid | cname |

+---------+-------------+

| 2 | direct |

| 1 | energychain |

+---------+-------------+

2 rows in set (0.00 sec)

mysql> INSERT INTO item (iname, rackid, HUL, HUN, chaining) values ('touchscreen',1,26,13,2);

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO item (iname, rackid, HUL, HUN, chaining) values ('pc',1,8,2,2);

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO item (iname, rackid, HUL, HUN, chaining) values ('spt+sw',2,10,3,1);

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO item (iname, rackid, HUL, HUN, chaining) values ('syncro5ucom',1,13,5,2);

Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO cable ( cname code, specs, source, destination, sid, did, sport, dport,sunit, dunit, adjustment, length) values ('displayport',591212,'xyz','touchscreen','pc',1,2,'default','default',0,0,,0,0);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'code, specs, source, destination, sid, did, sport, dport,sunit, dunit, adjustmen' at line 1

mysql> INSERT INTO cable ( cname, code, specs, source, destination, sid, did, sport, dport,sunit, dunit, adjustment, length) values ('displayport',591212,'xyz','touchscreen','pc',1,2,'default','default',0,0,,0,0);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ',0,0)' at line 1

mysql> INSERT INTO cable ( cname, code, specs, source, destination, sid, did, sport, dport,sunit, dunit, adjustment, length) values ('displayport',591212,'xyz','touchscreen','pc',1,2,'default','default',0,0,0,0);

Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO cable ( cname, code, specs, source, destination, sid, did, sport, dport,sunit, dunit, adjustment, length) values ('twocables',243242,'xyz','syncro5ucom','spt+cw',4,3,'default','default',0,0,0,0);

Query OK, 1 row affected (0.13 sec)

mysql> select \* from item;

+--------+-------------+--------+------+------+----------+

| itemid | iname | rackid | HUL | HUN | chaining |

+--------+-------------+--------+------+------+----------+

| 1 | touchscreen | 1 | 26 | 13 | 2 |

| 2 | pc | 1 | 8 | 2 | 2 |

| 3 | spt+sw | 2 | 10 | 3 | 1 |

| 4 | syncro5ucom | 1 | 13 | 5 | 2 |

+--------+-------------+--------+------+------+----------+

4 rows in set (0.00 sec)

mysql> select \* from cable;

+---------+-------------+--------+-------+-------------+-------------+------+------+---------+---------+-------+-------+------------+--------+

| cableid | cname | code | specs | source | destination | sid | did | sport | dport | sunit | dunit | adjustment | length |

+---------+-------------+--------+-------+-------------+-------------+------+------+---------+---------+-------+-------+------------+--------+

| 1 | displayport | 591212 | xyz | touchscreen | pc | 1 | 2 | default | default | 0 | 0 | 0 | 0 |

| 2 | twocables | 243242 | xyz | syncro5ucom | spt+cw | 4 | 3 | default | default | 0 | 0 | 0 | 0 |

+---------+-------------+--------+-------+-------------+-------------+------+------+---------+---------+-------+-------+------------+--------+

2 rows in set (0.00 sec)

mysql>

mysql> exit

Bye

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

config2.php config.php dbconnection.php display\_products.php index.html insert\_products.php readdata1.php readdata.php test.php welcome.php

sajjad@i80pc93:/var/www/domainname.com$ sudo cp config2.php config3.php

[sudo] password for sajjad:

sajjad@i80pc93:/var/www/domainname.com$ sudo vim config3.php

sajjad@i80pc93:/var/www/domainname.com$ sudo cp readdata

readdata1.php readdata.php

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

[sudo] password for sajjad:

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

[sudo] password for sajjad:

sajjad@i80pc93:/var/www/domainname.com$ sudo cp readdata.php readdata3.php

sajjad@i80pc93:/var/www/domainname.com$ sudo vim readdata3.php

sajjad@i80pc93:/var/www/domainname.com$ sudo vim readdata3.php

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

sajjad@i80pc93:/var/www$ sudo cp -r domainname.com murtaza.com

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

sajjad@i80pc93:/var/www/murtaza.com$ head /etc/hosts 10

==> /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

141.3.72.86 murtaza.com

# The following lines are desirable for IPv6 capable hosts

::1 ip6-localhost ip6-loopback

fe00::0 ip6-localnet

head: cannot open '10' for reading: No such file or directory

sajjad@i80pc93:/var/www/murtaza.com$ while trying www.murtaza.com/readdata3.php does not show new data but shows data from domainname.com/readdata3.php

sajjad@i80pc93:/var/www/murtaza.com$ sudo cp /etc/apache2/sites-available/domainname.com.conf /etc/apache2/sites-available/murtaza.com.conf

sajjad@i80pc93:/var/www/murtaza.com$ sudo cp vim /etc/apache2/sites-available/murtaza.com.conf

cp: cannot stat 'vim': No such file or directory

sajjad@i80pc93:/var/www/murtaza.com$ sudo vim /etc/apache2/sites-available/murtaza.com.conf

sajjad@i80pc93:/var/www/murtaza.com$ sudo cat /etc/apache2/sites-available/murtaza.com.conf

<VirtualHost \*:80>

ServerAdmin admin@murtaza.com

ServerName murtaza.com

ServerAlias www.murtaza.com

DocumentRoot /var/www/murtaza.com

ErrorLog ${APACHE\_LOG\_DIR}/error.log

CustomLog ${APACHE\_LOG\_DIR}/access.log combined

</VirtualHost>

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

sajjad@i80pc93:/var/www/murtaza.com$ sudo a2ensite murtaza.com

Enabling site murtaza.com.

To activate the new configuration, you need to run:

systemctl reload apache2

sajjad@i80pc93:/var/www/murtaza.com$ sudo a2dissite 000-default.conf

Site 000-default already disabled

sajjad@i80pc93:/var/www/murtaza.com$ sudo systemctl restart apache2

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

mysql> describe item;

+----------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+----------+-------------+------+-----+---------+----------------+

| itemid | int | NO | PRI | NULL | auto\_increment |

| iname | varchar(50) | YES | UNI | NULL | |

| rackid | int | YES | | NULL | |

| HUL | int | YES | | NULL | |

| HUN | int | YES | | NULL | |

| chaining | int | YES | | NULL | |

+----------+-------------+------+-----+---------+----------------+

6 rows in set (0.06 sec)

mysql> ALTER TABLE item ADD FOREIGN KEY F1(rackid) REFERENCES rack(rackid);

Query OK, 4 rows affected (3.64 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> describe item;

+----------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+----------+-------------+------+-----+---------+----------------+

| itemid | int | NO | PRI | NULL | auto\_increment |

| iname | varchar(50) | YES | UNI | NULL | |

| rackid | int | YES | MUL | NULL | |

| HUL | int | YES | | NULL | |

| HUN | int | YES | | NULL | |

| chaining | int | YES | | NULL | |

+----------+-------------+------+-----+---------+----------------+

6 rows in set (0.00 sec)

mysql> ALTER TABLE item ADD FOREIGN KEY F2(chaining) REFERENCES energychain(chainid);

Query OK, 4 rows affected (2.60 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> describe item;

+----------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+----------+-------------+------+-----+---------+----------------+

| itemid | int | NO | PRI | NULL | auto\_increment |

| iname | varchar(50) | YES | UNI | NULL | |

| rackid | int | YES | MUL | NULL | |

| HUL | int | YES | | NULL | |

| HUN | int | YES | | NULL | |

| chaining | int | YES | MUL | NULL | |

+----------+-------------+------+-----+---------+----------------+

6 rows in set (0.00 sec)

mysql>

mysql> select rname , height , width , units, cname , iname, HUL, HUN from rack r join item i on r.rackid=i.rackid join energychain e on i.chaining=e .chainid;

+-------------+--------+-------+-------+-------------+-------------+------+------+

| rname | height | width | units | cname | iname | HUL | HUN |

+-------------+--------+-------+-------+-------------+-------------+------+------+

| electronics | 180 | 50 | 38 | direct | syncro5ucom | 13 | 5 |

| electronics | 180 | 50 | 38 | direct | pc | 8 | 2 |

| electronics | 180 | 50 | 38 | direct | touchscreen | 26 | 13 |

| photonics | 180 | 50 | 38 | energychain | spt+sw | 10 | 3 |

+-------------+--------+-------+-------+-------------+-------------+------+------+

4 rows in set (0.00 sec)

mysql> select rname , height , width , units, cname , iname, HUL, HUN from rack r join item i on r.rackid=i.rackid join energychain e on i.chaining=e.chainid where itemid=1;

+-------------+--------+-------+-------+--------+-------------+------+------+

| rname | height | width | units | cname | iname | HUL | HUN |

+-------------+--------+-------+-------+--------+-------------+------+------+

| electronics | 180 | 50 | 38 | direct | touchscreen | 26 | 13 |

+-------------+--------+-------+-------+--------+-------------+------+------+

1 row in set (0.00 sec)

mysql>

mysql> select r.rackid, rname , height , width , units, cname , iname, HUL, HUN from rack r join item i on r.rackid=i.rackid join energychain e on i.chaining=e.chainid;

+--------+-------------+--------+-------+-------+-------------+-------------+------+------+

| rackid | rname | height | width | units | cname | iname | HUL | HUN |

+--------+-------------+--------+-------+-------+-------------+-------------+------+------+

| 2 | photonics | 180 | 50 | 38 | energychain | spt+sw | 10 | 3 |

| 1 | electronics | 180 | 50 | 38 | direct | touchscreen | 26 | 13 |

| 1 | electronics | 180 | 50 | 38 | direct | pc | 8 | 2 |

| 1 | electronics | 180 | 50 | 38 | direct | syncro5ucom | 13 | 5 |

+--------+-------------+--------+-------+-------+-------------+-------------+------+------+

4 rows in set (0.00 sec)

mysql>

