

preinstall

|   |
|---|
| sudo apt-get update -y  |
| sudo apt-get install apache2 php7.0 libaprutil1-dbd-mysql -y  |
| Sudo apt-get install software-properties-common -y  |
| Sudo apt-key adv --recv-keys --keyserver hkp://keyserver.ubuntu.com:80 0xF1656F24C74CD1D8 -y                          |
| add-apt-repository 'deb [arch=amd64,i386,ppc64el] http://www.ftp.saix.net/DB/mariadb/repo/10.1/ubuntu xenial main' -y |
| sudo apt-get update -y  |
| sudo apt-get install mariadb-server mariadb-client -y   |
| sudo apt-get install apache2 php7.0 libaprutil1-dbd-mysql -y  |
| sudo systemctl start apache2  |
| sudo systemctl start mysql  |
| sudo systemctl enable apache2   |
| sudo systemctl enable mysql   |

configure database

|                    |
|--------------------|
| sudo mysql -u root |
| (ENTER PASSWORD)   |

Do this config in MariaDB Console:  
(Like This: MariaDB [(none)]> )

|   |
|---|
| create database defaultsite_db;   |
| GRANT SELECT, INSERT, UPDATE, DELETE ON defaultsite_db.* TO 'defaultsite_admin'@'localhost' IDENTIFIED BY 'password';             |
| GRANT SELECT, INSERT, UPDATE, DELETE ON defaultsite_db.* TO 'defaultsite_admin'@'localhost.localdomain' IDENTIFIED BY 'password'; |
| flush privileges;   |
| use defaultsite_db;   |
| create table mysql_auth ( username varchar(191) not null, passwd varchar(191), groups varchar(191), primary key (username) );     |

DO this in other Linux Terminal:

|                                 |   |
|---------------------------------|---|
| htpasswd -bns siteuser siteuser | first siteuser is username<br>second siteuser is password |
| Output is                       | siteuser:{SHA}tk7HEH6Wo7SKT6+3FHCgiGnJ6dA=)               |

Do this in MariaDB Console:

Now insert site user to mysql\_auth: (THIS PART IS ADDING USER TO DATABASE)

|   |
|---|
| INSERT INTO `mysql_auth` (`username`, `passwd`, `groups`)<br>VALUES('siteuser','{SHA}tk7HEH6Wo7SKT6+3FHCgiGnJ6dA=', 'sitegroup'); |
| exit;   |

Now Config Apache:

```
sudo a2enmod dbd
```

```
sudo a2enmod authn_dbd
```

```
sudo a2enmod socache_shmcb
```

```
sudo a2enmod authn_socache
```

```
sudo mkdir /var/www/html/protecteddir
```

```
sudo chown -R www-data:www-data /var/www/html/protecteddir
```

```
Sudo nano /etc/apache2/sites-available/000-default.conf
```

Attach next row to end of 000-default.conf and save

```
DBDriver mysql
```

```
DBDParams "dbname=defaultsite_db user=defaultsite_admin pass=password"
```

```
DBDMin 4
```

```
DBDKeep 8
```

```
DBDMax 20
```

```
DBDExptime 300
```

```
<Directory "/var/www/html/protecteddir">
```

```
# mod_auth_core and mod_auth_basic configuration
```

```
# for mod_authn_dbd
```

```
AuthType Basic
```

```
AuthName "My Server"
```

```
# To cache credentials, put socache ahead of dbd here
```

```
AuthBasicProvider socache dbd
```

```
# Also required for caching: tell the cache to cache dbd lookups!
```

```
AuthnCacheProvideFor dbd
```

```
AuthnCacheContext my-server
```

```
# mod_authz_core configuration
```

```
Require valid-user
```

```
# mod_authn_dbd SQL query to authenticate a user
```

```
AuthDBUserPWQuery "SELECT passwd FROM mysql_auth WHERE username = %s"
```

```
</Directory>
```

```
systemctl restart apache2
```

Now test url:

<http://localhost/protecteddir>