

HOW TO CONFIGURE DTRANSFER & VDO WITH SSL

RELEASE HISTORY

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BALAJI

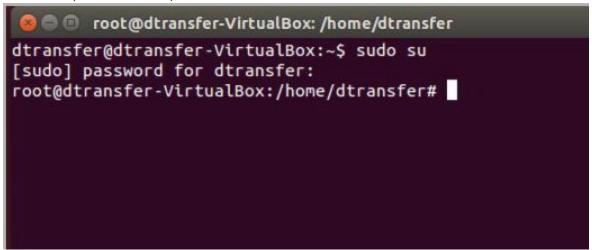
Pre-requisite:

- Ubuntu 14.04 LTS
- Apache, PHP, MYSQL

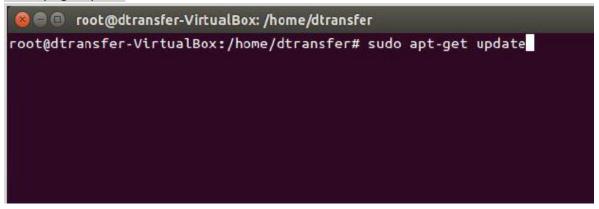
Steps to configure Dtransfer & Vdo:

 Press ctrl+alt+T for terminal and Login as root user sudo su

Then enter your root user's password



Update repository sudo apt-get update



3) Install Apache sudo apt-get install apache2

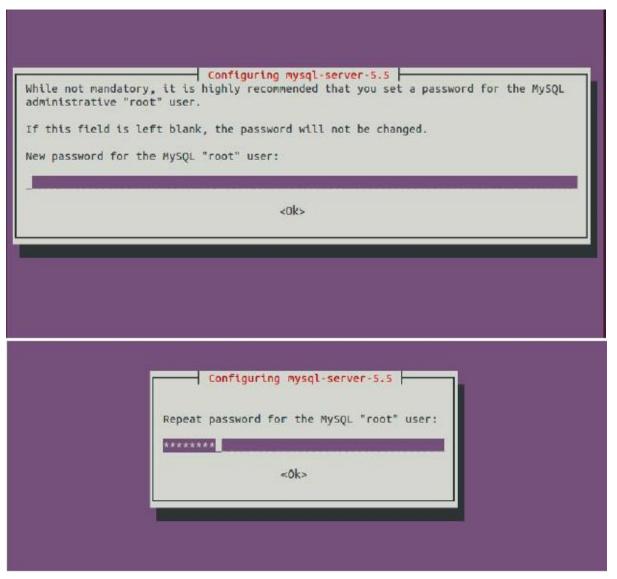
```
🔞 🗎 🕦 root@dtransfer-VirtualBox: /home/dtransfer
root@dtransfer-VirtualBox:/home/dtransfer# sudo apt-get install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  apache2-bin apache2-data libapr1 libaprutil1 libaprutil1-dbd-sqlite3
  libaprutil1-ldap
Suggested packages:
  apache2-doc apache2-suexec-pristine apache2-suexec-custom apache2-utils
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data libapr1 libaprutil1 libaprutil1-dbd-sqlite3
  libaprutil1-ldap
0 upgraded, 7 newly installed, 0 to remove and 647 not upgraded.
Need to get 1,276 kB of archives.
After this operation, 5,257 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

4) Install Mysgl

sudo apt-get install mysgl-server libapache2-mod-auth-mysgl php5-mysgl

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo apt-get install mysql-server lib
apache2-mod-auth-mysql php5-mysql
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  libaio1 libdbd-mysql-perl libdbi-perl libhtml-template-perl libmysqlclient18
  libperl5.18 libterm-readkey-perl mysql-client-5.5 mysql-client-core-5.5
  mysql-common mysql-server-5.5 mysql-server-core-5.5 perl perl-base
  perl-modules php5-common php5-json
Suggested packages:
  libmldbm-perl libnet-daemon-perl libplrpc-perl libsql-statement-perl
  libipc-sharedcache-perl tinyca mailx perl-doc libterm-readline-gnu-perl
  libterm-readline-perl-perl libb-lint-perl libcpanplus-dist-build-perl
 libcpanplus-perl libfile-checktree-perl liblog-message-perl
 libobject-accessor-perl php5-user-cache
The following NEW packages will be installed:
  libaio1 libapache2-mod-auth-mysql libdbd-mysql-perl libdbi-perl
 libhtml-template-perl libmysglclient18 libterm-readkey-perl mysgl-client-5.5
  mysql-client-core-5.5 mysql-common mysql-server mysql-server-5.5
  mysql-server-core-5.5 php5-common php5-json php5-mysql
The following packages will be upgraded:
 libperl5.18 perl perl-base perl-modules
4 upgraded, 16 newly installed, 0 to remove and 643 not upgraded.
Need to get 16.7 MB of archives.
After this operation, 98.9 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

During the installation, MySQL will ask you to set a root password. If you miss the chance to set the password while the program is installing, it is very easy to set the password later from within the MySQL shell



Once you have installed MySQL, we should activate it with this command: sudo mysql_install_db

root@dtransfer-VirtualBox:/home/dtransfer# sudo mysql_install_db

Then this command:

sudo /usr/bin/mysql_secure_installation

root@dtransfer-VirtualBox:/home/dtransfer# sudo /usr/bin/mysql_secure_installation

The prompt will ask you for your current root password.

Type it in.

Enter current password for root (enter for none):

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MySQL SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MySQL to secure it, we'll need the current password for the root user. If you've just installed MySQL, and you haven't set the root password yet, the password will be blank, so you should just press enter here.

Enter current password for root (enter for none):

OK, successfully used password, moving on...

OK, successfully used password, moving on...

Setting the root password ensures that nobody can log into the MySQL root user without the proper authorisation.

You already have a root password set, so you can safely answer 'n'.

Change the root password? [Y/n] n

Then the prompt will ask you if you want to change the root password. Go ahead and choose N and move on to the next steps. It's easiest just to say Yes to all the options. At the end, MySQL will reload and implement the new changes. By default, a MySQL installation has an anonymous user, allowing anyone to log into MySQL without having to have a user account created for them. This is intended only for testing, and to make the installation go a bit smoother. You should remove them before moving into a production environment.

Remove anonymous users? [Y/n] y

... Success!

```
... skipping.
```

By default, a MySQL installation has an anonymous user, allowing anyone to log into MySQL without having to have a user account created for them. This is intended only for testing, and to make the installation go a bit smoother. You should remove them before moving into a production environment.

Remove anonymous users? [Y/n] y

Normally, root should only be allowed to connect from 'localhost'. This ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n] y

... Success!

Normally, root should only be allowed to connect from 'localhost'. This ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n] y

By default, MySQL comes with a database named 'test' that anyone can access. This is also intended only for testing, and should be removed before moving into a production environment.

Remove test database and access to it? [Y/n] y

- Dropping test database...
- ... Success!
- Removing privileges on test database...
- ... Success!

By default, MySQL comes with a database named 'test' that anyon can access. This is also intended only for testing, and should be removed before moving into a production environment.

Remove test database and access to it? [Y/n] y

Reloading the privilege tables will ensure that all changes made so far will take effect immediately.

Reload privilege tables now? [Y/n] y

... Success!

Reloading the privilege tables will ensure that all changes made so far will take effect immediately.

Reload privilege tables now? [Y/n] y

Cleaning up...

All done! If you've completed all of the above steps, your MySQL installation should now be secure.

Thanks for using MySQL!

Once you're done with that you can finish up by installing PHP.

5) Install PHP

sudo apt-get install php5 libapache2-mod-php5 php5-mcrypt

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo apt-get install php5 libapache2-mod-php5 php 5-mcrypt
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
   libmcrypt4 php5-cli php5-readline
Suggested packages:
   php-pear libmcrypt-dev mcrypt
The following NEW packages will be installed:
   libapache2-mod-php5 libmcrypt4 php5 php5-cli php5-mcrypt php5-readline
0 upgraded, 6 newly installed, 0 to remove and 643 not upgraded.
Need to get 4,468 kB of archives.
After this operation, 19.5 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

6) Restart Apache

sudo service apache2 restart

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo service apache2 restart

* Restarting web server apache2

AH00558: apache2: Could not reliably determine the server's fully qualified domain name, usi
ng 127.0.1.1. Set the 'ServerName' directive globally to suppress this message
```

7) Install SSH(Enable port 22)

sudo apt-get install openssh-server

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo apt-get install openssh-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  libck-connector0 ncurses-term openssh-client openssh-sftp-server
 python-requests python-urllib3 ssh-import-id
Suggested packages:
 libpam-ssh keychain monkeysphere rssh molly-guard
The following NEW packages will be installed:
 libck-connector0 ncurses-term openssh-server openssh-sftp-server
 python-requests python-urllib3 ssh-import-id
The following packages will be upgraded:
 openssh-client
1 upgraded, 7 newly installed, 0 to remove and 642 not upgraded.
Need to get 1,265 kB of archives.
After this operation, 3,845 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

sudo ufw allow 22

root@dtransfer-VirtualBox:/home/dtransfer# sudo ufw allow 22

sudo service apache2 restart

8) Enable URL Rewrites

sudo a2enmod rewrite

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo a2enmod rewrite
Enabling module rewrite.
To activate the new configuration, you need to run:
service apache2 restart
root@dtransfer-VirtualBox:/home/dtransfer#
```

sudo service apache2 restart

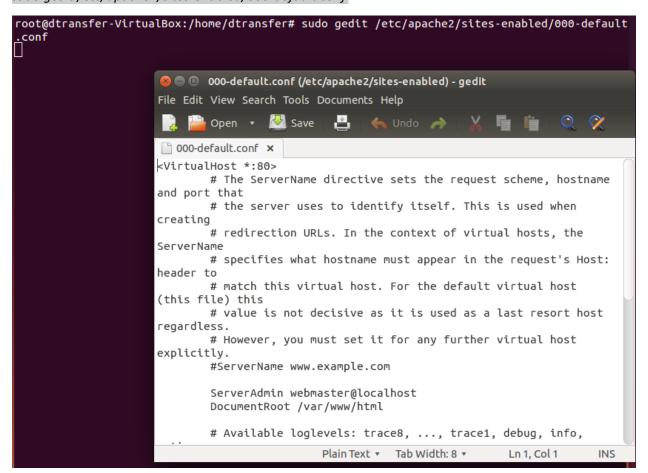
```
root@dtransfer-VirtualBox:/home/dtransfer# sudo service apache2 restart

* Restarting web server apache2

AH00558: apache2: Could not reliably determine the server's fully qualified domain name, usi
ng 127.0.1.1. Set the 'ServerName' directive globally to suppress this message

[ OK ]
root@dtransfer-VirtualBox:/home/dtransfer#
```

sudo gedit /etc/apache2/sites-enabled/000-default.conf



Inside that file, you will find the <VirtualHost *:80> block on line 1. Inside of that block, add the following block:

/etc/apache2/sites-available/default

```
Options Indexes FollowSymLinks MultiViews
      AllowOverride All
      Order allow, deny
      allow from all
</Directory>
Your file should now match the following. Make sure that all blocks are properly indented.
/etc/apache2/sites-available/default
<VirtualHost *:80>
 <Directory /var/www/html>
 </Directory>
</VirtualHost>
<VirtualHost *:80>
<Directory /var/www/html/>
    Options Indexes FollowSymLinks MultiViews
    AllowOverride All
    Order allow, deny
    allow from all
</Directory>
    # The ServerName directive sets the request scheme, hostname and
port that
    # the server uses to identify itself. This is used when creating
    # redirection URLs. In the context of virtual hosts, the
ServerName
    # specifies what hostname must appear in the request's Host:
header to
    # match this virtual host. For the default virtual host (this
file) this
    # value is not decisive as it is used as a last resort host
regardless.
    # However, you must set it for any further virtual host
explicitly.
```

To put these changes into effect, restart Apache.

<Directory /var/www/html>

sudo service apache2 restart

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo service apache2 restart

* Restarting web server apache2

AH00558: apache2: Could not reliably determine the server's fully qualified domain name, usi
ng 127.0.1.1. Set the 'ServerName' directive globally to suppress this message

[ OK ]
root@dtransfer-VirtualBox:/home/dtransfer#
```

9) Enhance default values

sudo gedit /etc/php5/apache2/php.ini

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo gedit /etc/php5/apache2/php.ini
                         🔞 🖨 📵 php.ini (/etc/php5/apache2) - gedit
                         File Edit View Search Tools Documents Help
                              급 Open 🔻 🔼 Save
                                                        ← Undo →
                         php.ini ×
                         [PHP]
                         ; About php.ini
                         .......
                         ; PHP's initialization file, generally called php.ini, is
                        responsible for
                         ; configuring many of the aspects of PHP's behavior.
                         ; PHP attempts to find and load this configuration from a number of
                         locations.
                         ; The following is a summary of its search order:
                        ; 1. SAPI module specific location.
                        ; 2. The PHPRC environment variable. (As of PHP 5.2.0)
                         ; 3. A number of predefined registry keys on Windows (As of PHP
                         5.2.0)
                        ; 4. Current working directory (except CLI)
                        ; 5. The web server's directory (for SAPI modules), or directory of
                        PHP
                         ; (otherwise in Windows)
                          6. The directory from the --with-config-file-nath commile time
                                                      .ini ▼ Tab Width: 8 ▼
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                                                                                          INS
```

Find the below variables and change it

```
Default:
```

```
post_max_size = 8M (Line 693)
upload_max_filesize = 2M (Line 805)
memory_limit = 128M (Line 406)
max_execution_time = 30 (Line 385)
Update to:
post_max_size = 800M
upload max filesize = 2000M
```

memory_limit = 512M

max execution time = 300

```
; Maximum size of POST data that PHP will accept.
; Its value may be 0 to disable the limit. It is ignored if POST
data reading
; is disabled through enable_post_data_reading.
; http://php.net/post-max-size
post_max_size = 800M
; Temporary directory for HTTP uploaded files (will use system
default if not
; specified).
; http://php.net/upload-tmp-dir
;upload tmp dir =
; Maximum allowed size for uploaded files.
; http://php.net/upload-max-filesize
upload_max_filesize = 2000M
; Maximum input variable nesting level
; http://php.net/max-input-nesting-level
;max input nesting level = 64
; How many GET/POST/COOKIE input variables may be accepted
; max input vars = 1000
; Maximum amount of memory a script may consume (128MB)
; http://php.net/memory-limit
memory_limit = 512M
; Resource Limits ;
; Maximum execution time of each script, in seconds
; http://php.net/max-execution-time
; Note: This directive is hardcoded to 0 for the CLI SAPI
max execution time = 300
```

Save file and then execute

sudo service apache2 restart

```
root@dtransfer-VirtualBox:/home/dtransfer# sudo service apache2 restart

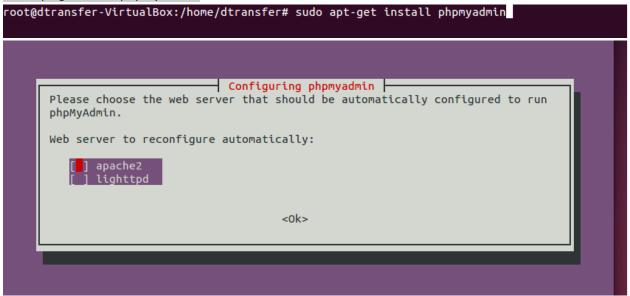
* Restarting web server apache2

AH00558: apache2: Could not reliably determine the server's fully qualified domain name, usi
ng 127.0.1.1. Set the 'ServerName' directive globally to suppress this message

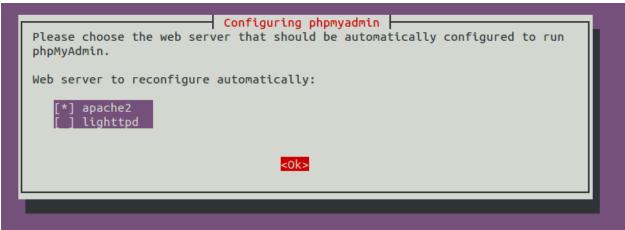
[ OK ]
root@dtransfer-VirtualBox:/home/dtransfer#
```

10) Install phpmyadmin

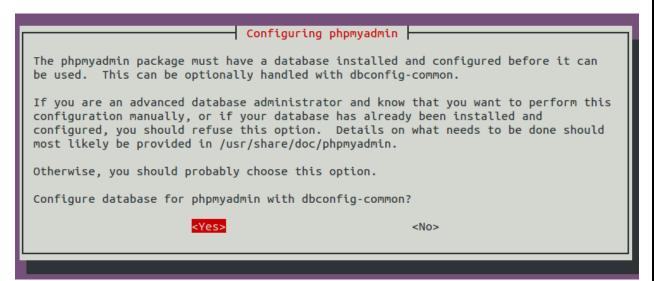
sudo apt-get install phpmyadmin



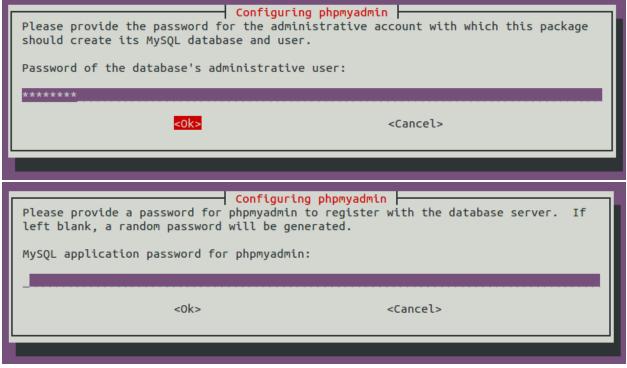
Select the apache by clicking space. It is selection necessary after selection it will contain a start please confirm twice that its selected.



Select Yes



Enter password you used while installing MySql

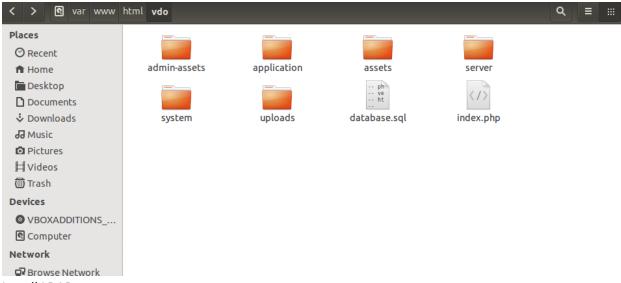


11) Setting permissions

sudo chmod 777 -R /var/www/html

root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/

12) Create a directory inside /var/www/html/ with any name, Which is referred as foldername and eg used in images is vdo



13) Install LDAP

sudo apt-get install php5-ldap

sudo service apache2 restart

14) Place the zip into /var/www/html/dtransfer/ and extract into root of html directory

sudo chmod 777 -R /var/www/html/dtransfer/application/logs

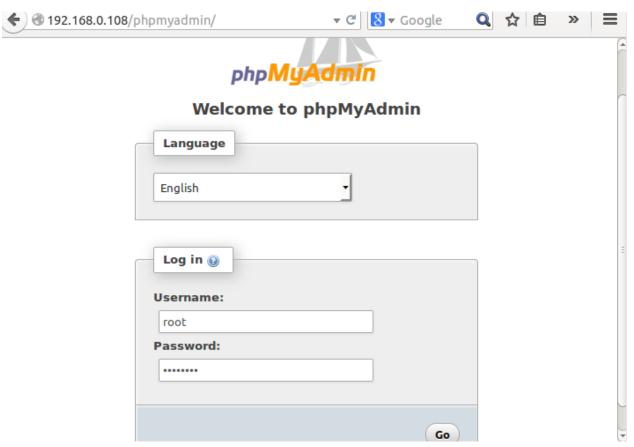
sudo chmod 777 -R /var/www/html/dtransfer/uploads

sudo chmod 777 -R /var/www/html/dtransfer/server/php/files

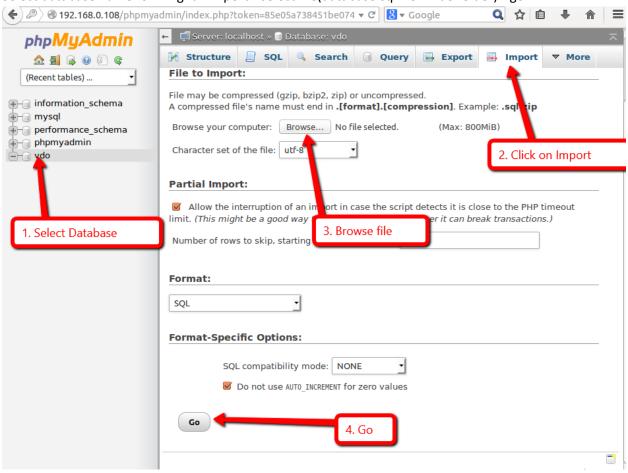
```
root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/vdo/application/l
ogs
root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/vdo/uploads
root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/vdo/server/php/fi
les
root@dtransfer-VirtualBox:/home/dtransfer#
```

15) Setting up database

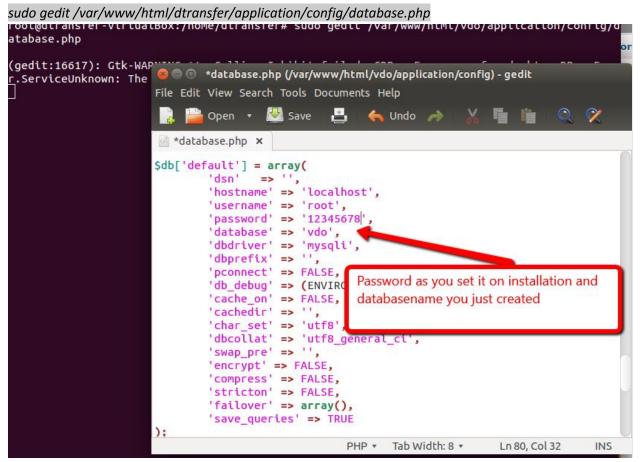
Open Browsers visit http://yourlocalip/phpmyadmin



Enter username as root and password you set during MySql installation Click on database then enter database name and create, here referred as dtransfer. Importing Database Select database name form right->import->select file(database.sql from vdo folder)->go



16) Updating the database config file



Change the password you set while installing MySql on line 80, save and exit.

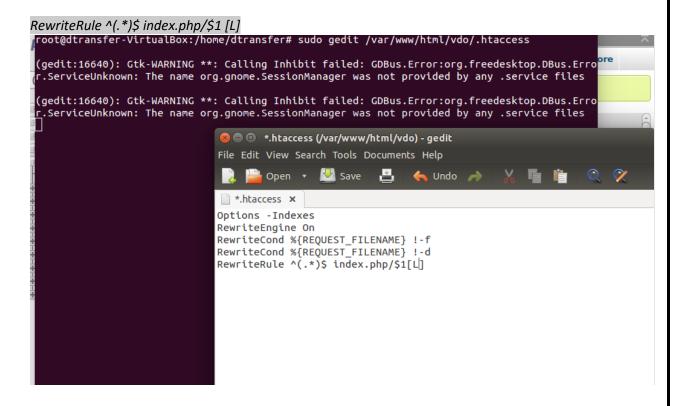
17) Create a file name .htaccess and add following code sudo gedit /var/www/html/dtransfer/.htaccess

Options -Indexes

RewriteEngine On

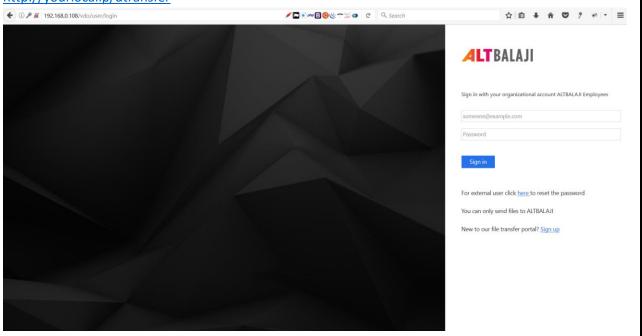
RewriteCond %{REQUEST_FILENAME} !-f

RewriteCond %{REQUEST_FILENAME} !-d



Save and exit.

18) Setup is done you will be able to see the installation in your browser by http://yourlocalip/dtransfer



19) We will now setup easy host names for public sudo gedit /etc/apache2/sites-enabled/000-default.conf

```
<VirtualHost *:80>
```

ServerAdmin admin@example.com

ServerName hostname

ServerAlias hostname

DocumentRoot /var/www/html/foldername

<Directory /var/www/html/foldername>

Options Indexes FollowSymLinks MultiViews

AllowOverride All

Order allow, deny

allow from all

</Directory>

</VirtualHost>

Hostname is the domain name you want to assign and completed setup in your domain account pointing it to machine in eg. we used vdo.altbalaji.in

```
<VirtualHost *:80>
   ServerAdmin vdoadmin@altbalaji.in
   ServerName vdo.altbalaji.in
   ServerAlias vdo.altbalaji.in
   DocumentRoot /var/www/html/vdo/
```

```
<Directory /var/www/html/vdo>
   Options Indexes FollowSymLinks MultiViews
   AllowOverride All
   Order allow,deny
   allow from all
</Directory>
```

20) Setting up cron jobs

chmod +x /var/www/html/dtransfer/cron.php

crontab -е

Add this to file and save.

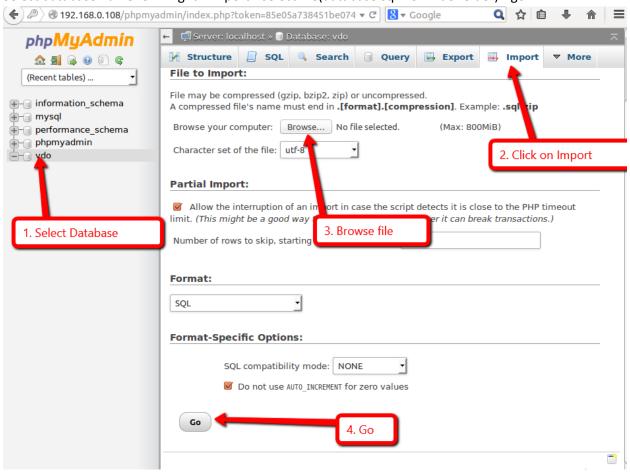
0,30 * * * * /usr/local/bin/php /var/www/html/cron.php

21) Place the zip into /var/www/html/vdo/ and extract into root of html directory sudo chmod 777 -R /var/www/html/vdo/application/logs sudo chmod 777 -R /var/www/html/vdo/uploads

sudo chmod 777 -R /var/www/html/vdo/server/php/files root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/vdo/application/logs root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/vdo/uploads root@dtransfer-VirtualBox:/home/dtransfer# sudo chmod 777 -R /var/www/html/vdo/server/php/files root@dtransfer-VirtualBox:/home/dtransfer# 22) Setting up database Open Browsers visit http://yourlocalip/phpmyadmin 192.168.0.108/phpmyadmin/ 20 Setting up database Open Browsers visit http://yourlocalip/phpmyadmin



Enter username as root and password you set during MySql installation Click on database then enter database name and create, here referred as vdo. Importing Database Select database name form right->import->select file(database.sql from vdo folder)->go



23) Updating the database config file

```
sudo gedit /var/www/html/vdo/application/config/database.php
root@atransfer-virtualBox:/nome/atransfer# sudo geatt /var/www/ntmt/vdo/apptication/config/a
atabase.php
(gedit:16617): Gtk-WAP 🚫 🖨 🗈 *database.php (/var/www/html/vdo/application/config) - gedit
                        File Edit View Search Tools Documents Help
                               🔒 Open 🔻 💹 Save
                                                            Undo
                        *database.php x
                        $db['default'] = array(
                                 'dsn' => '',
                                 'hostname' => 'localhost',
                                 'username' => 'root',
                                 'password' => '12345678'
                                 'database' => 'vdo',
'dbdriver' => 'mysqli',
'dbprefix' => '',
                                 'pconnect' => FALSE,
                                                         Password as you set it on installation and
                                 'db debug' => (ENVIRO
                                 'cache_on' => FALSE,
                                                         databasename you just created
                                 'cachedir' => '',
                                 'char_set' => 'utf8',
                                 'dbcollat' => 'utf8_general_ci',
                                 'swap pre' => '',
                                 'encrypt' => FALSE,
                                 'compress' => FALSE,
                                 'stricton' => FALSE,
                                 'failover' => array(),
                                 'save_queries' => TRUE
                        );
                                                        PHP Tab Width: 8 T
                                                                                 Ln 80, Col 32
                                                                                                 INS
```

Change the password you set while installing MySql on line 80, save and exit.

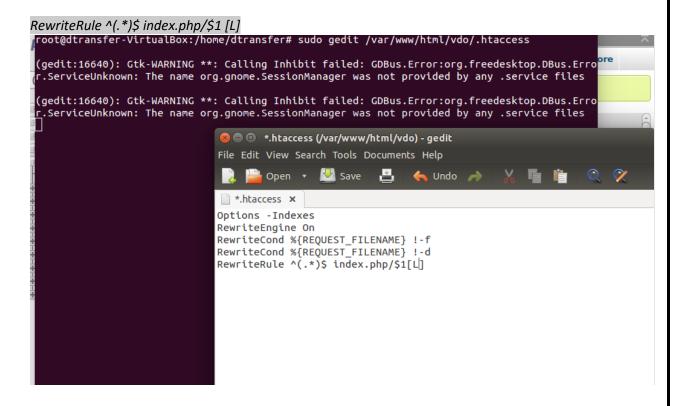
24) Create a file name .htaccess and add following code sudo gedit /var/www/html/vdo/.htaccess

Options -Indexes

RewriteEngine On

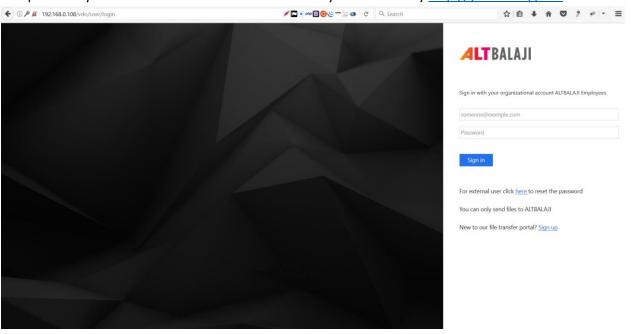
RewriteCond %{REQUEST_FILENAME} !-f

RewriteCond %{REQUEST_FILENAME} !-d



Save and exit.

25) Setup is done you will be able to see the installation in your browser by http://yourlocalip/vdo



26) We will now setup easy host names for public sudo gedit /etc/apache2/sites-enabled/000-default.conf <VirtualHost *:80>

ServerAdmin admin@example.com

ServerName hostname

ServerAlias hostname

DocumentRoot /var/www/html/foldername

<Directory /var/www/html/foldername>

Options Indexes FollowSymLinks MultiViews

AllowOverride All

Order allow, deny

allow from all

</Directory>

</VirtualHost>

Hostname is the domain name you want to assign and completed setup in your domain account pointing it to machine in eg. we used vdo.altbalaji.in

```
<VirtualHost *:80>
    ServerAdmin vdoadmin@altbalaji.in
    ServerName vdo.altbalaji.in
    ServerAlias vdo.altbalaji.in
    DocumentRoot /var/www/html/vdo/

<Directory /var/www/html/vdo>
    Options Indexes FollowSymLinks MultiViews
    AllowOverride All
    Order allow,deny
    allow from all

<p
```

Steps to configure SSL for Dtransfer & Vdo:

1) Enable SSL

sudo a2enmod ssl

sudo service apache2 restart

2) Edit SSL File

sudo gedit/etc/apache2/sites-available/default-ssl.conf

<IfModule mod ssl.c>

<VirtualHost _default_:443>

ServerAdmin admin@example.com

ServerName your_domain.com

ServerAlias www.your_domain.com

DocumentRoot /var/www/html

ErrorLog \${APACHE_LOG_DIR}/error.log

CustomLog \${APACHE_LOG_DIR}/access.log combined

SSLEngine on

SSLCertificateFile /etc/apache2/ssl/apache.crt

SSLCertificateKeyFile /etc/apache2/ssl/apache.key

<FilesMatch "\.(cgi|shtml|phtml|php)\$">

SSLOptions +StdEnvVars

</FilesMatch>

<Directory /var/www/html/foldername>

Options Indexes FollowSymLinks MultiViews

AllowOverride All

Order allow, deny

allow from all

</Directory>

<Directory /usr/lib/cgi-bin>

SSLOptions +StdEnvVars

</Directory>

BrowserMatch "MSIE [2-6]" \

nokeepalive ssl-unclean-shutdown \

downgrade-1.0 force-response-1.0

BrowserMatch "MSIE [17-9]" ssl-unclean-shutdown

</VirtualHost>

</lfModule>

- 3) Place your certificate files to correct path and add it in above code accordingly and change your foldername with the path of installation.
- 4) Activate SSL File

sudo a2ensite default-ssl.conf

sudo service apache2 restart

- 5) You can now test to visit via https.
- 6) Additional Settings

Please visit foldername>application/config/config.php change base_url to your domain name include https eg. \$config['base_url'] = 'https://drophere.altdigital.in';

7) Forcing for https only

Visit foldername>.htaccess file add following code at the end

RewriteCond %{SERVER PORT} 80

RewriteRule ^(.*)\$ https://www.example.com/\$1 [R,L]

Replace example.com with your domain eg. https://drophere.altdigital.in