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**Title: Setting up a WordPress Server**

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**OS: Ubuntu 16.10**

**Setup:**

To get started on being able to ping two different virtual machines with VirtualBox then go ahead and download the latest version from this url: <https://www.virtualbox.org/wiki/Downloads> . Make sure that everything has been downloaded correctly. For this tutorial, I will be using a Windows host machine with enough resources for two virtual machines. The first machine will be named master1 and the second will be master2. Each will have 10 GB in storage and 2 GB in RAM. Do the following:

* Go to settings->General->Advanced
  + And change the Shared Clipboard to: Bidirectional
  + And change Drag’n’Drop to: Bidirectional
* Go to settings->System
  + Uncheck the floppy and move it down below hard disk.
* Go to settings->System->Processor
  + Make sure that the Enable PAE/NX is unchecked.
* Go to settings->Storage
  + Click the cd under Controller: IDE, and on the far right click the other cd and pick your virtual optical disk drive. This is where you can add your OS image.
* Go to settings->Network
  + Go to Adapter 2, click the checkbox next “Enable Network Adapter”.
  + Next switch the Attached to from Not Attached to Host-Only Adapter.
  + Next, change the Promiscuous Mode under the Advanced settings to Allow VMs.
  + Then click the “ok” button at the bottom.

**Part 1:**

* Type: sudo apt-get install apache2
* Type: sudo apt-get install mysql-client mysql-server
  + You will have to enter a password for mysql
* Type: sudo apt-get install phpmyadmin
  + Select Apache2
  + Hit yes
  + Give a password for your database
* Type: sudo mysql\_secure\_installation
  + There will be basic information to enter.
* Type: sudo apt-get install php7.0 php7.0-mysql libapache2-mod-php7.0 php7.0-cli php7.0-cgi php7.0-gd
* Type: sudo ufw stop
* Type: sudo ufw disable
* Type: sudo systemctl start apache2.service
* Type sudo systemctl enable apache2.service
* Type: sudo nano /etc/apache2/mods-enable/dir.conf
  + Edit the DirectoryIndex and put index.php first of the list (comma seperated string)
* Type: sudo systemctl restart apache2.service
* Type: sudo nano /etc/php/7.0/apache2
  + Edit the diable\_functions, and put phpinfo.
* Type: sudo nano /etc/apache2/apache2.conf
  + Put this at the end of the file. Include /etc/phpmyadmin/apache.conf
* Type: sudo systemctl restart apache2.service
* Type: sudo systemctl restart mysql.service
* Type: reboot

**Part 2 (WordPress install):**

* If you don’t want to have Word Press installed then don’t do the following commands / instructions.
* Type: cd /home/username/Downloads
* Type: wget -c <http://wordpress.org/latest.tar.gz>
* Type: tar -xzvf latest.tar.gz
* Type: sudo rsync -av wordpress/\* /var/www/html/
* Type: sudo chown -R www-data:www-data /var/www/html/
* Type: sudo chmod -R 755 /var/www/html/
* Type: mysql -u root -p
  + mysql> CREATE DATABASE wp\_myblog;
  + mysql> GRANT ALL PRIVILEGES ON wp\_myblog.\* TO 'your\_username\_here'@'localhost' identified by 'your\_chosen\_password\_here';
  + mysql> FLUSH PRIVILEGES;
  + mysql> EXIT;
* Type: cd /var/www/html
* Type: sudo mv wp-config-sample.php wp-config.php
* Type: sudo nano wp-config.php
  + Example
  + // \*\* MySQL settings - You can get this info from your web host \*\* //
  + /\*\* The name of the database for WordPress \*/
  + define('DB\_NAME', 'database\_name\_here');
  + /\*\* MySQL database username \*/
  + define('DB\_USER', 'username\_here');
  + /\*\* MySQL database password \*/
  + define('DB\_PASSWORD', 'password\_here');
  + /\*\* MySQL hostname \*/
  + define('DB\_HOST', 'localhost');
  + /\*\* Database Charset to use in creating database tables. \*/
  + define('DB\_CHARSET', 'utf8');
  + /\*\* The Database Collate type. Don't change this if in doubt. \*/
  + define('DB\_COLLATE', '');
* Type: sudo systemctl restart apache2.service
* Type: sudo systemctl restart mysql.service
* sudo service networking restart
* Type: reboot
* Go to your sight now on any browser, and type localhost. Try 127.0.0.1, this may be different for every machine.

**Other:**

* By now you should be able to log into your phpmyadmin with either your root account, or a user that they set you up with. Remember that phpmyadmin is just an interface/GUI for MySQL.
* Here are some commands for the MySQL database.
  + SHOW VARIABLES LIKE 'validate\_password%';
  + DROP DATABASE tutorial\_database;
  + SHOW DATABASES;