**Magneto 2 Development Environment Setup**

**Step No. 1 Create a vagrant box for Ubuntu**

**Step No. 2 System Requirements**

1. Ubuntu Operating System
2. Latest Composer
3. Web Server (Apache 2.4 or Nginx 1.x )
4. Mysql 5.6 or 5.7
5. PHP 7.1.3 or 7.2.0
6. PHP Extensions
   1. ext-bcmath
   2. ext-ctype
   3. ext-curl
   4. ext-dom
   5. ext-gd
   6. ext-hash
   7. ext-iconv
   8. ext-intl
   9. ext-mbstring
   10. ext-openssl
   11. ext-pdo\_mysql
   12. ext-simplexml
   13. ext-soap
   14. ext-spl
   15. ext-xsl
   16. ext-zip
   17. lib-libxml
7. make sure PHP OPcache is enabled
8. PHP settings
   1. Time zone Asia/Dubai
   2. Memory limit 2GB or 4GB
   3. asp\_tags should be disable
   4. apache.save\_comments must enable

**Step No. 2 Install Apache2 with following command**

2.1 sudo apt-get install apache2

2.2 Then open /etc/apache2/sites-available/000-default.conf file and add following code

<Directory “/var/www/html”>

AllowOverride All

</Directory>

2.3 apache2 –v

To check apache is working

2.4 sudo service apache2 status it should be in running state

create a file with name phpinfo.php in place in /var/www/html folder in Ubuntu and write following code in it

<?php phpinfo(); ?>

and then open browser and type 127.0.0.1/phpinfo.php. should show php information

2.5 run below command so if server restart, apache2 service will

start automatically

sudo update-rc.d apache2 defaults

**Step No. 3 Install PHP version 7.1.x by running the following commands**

3.1 sudo apt-get install software-properties-common

sudo add-apt-repository ppa:ondrej/php

sudo add-apt-repository -y ppa:ondrej/php

sudo apt-get update

sudo apt-get install php7.1

3.2 Run the following command to install, required PHP module

sudo apt-get install libapache2-mod-php7.1 php7.1-common php7.1-gmp php7.1-curl php7.1-soap php7.1-bcmath php7.1-intl php7.1-mbstring php7.1-xmlrpc php7.1-mcrypt php7.1-mysql php7.1-gd php7.1-xml php7.1-cli php7.1-zip

sudo apt install zip unzip php7.0-zip

3.3 install mod rewrite

sudo a2enmod rewrite

3.4 Run the following command to setup locale

locale-gen en\_US.UTF-8

export LANG=en\_US.UTF-8

export LC\_ALL=en\_US.UTF-8

3.5 To search for specific PHP module

sudo apt-cache search module\_name

sudo apt-cache search php7.1-intl

3.5 to check PHP version & installed modules in PHP

php –v

php –m

3.6 Change the following php configuration value

open php.ini file located at /etc/php/7.1/apache2/php.ini

and adjust below property

/

memory\_limit = 2BG

upload\_max\_filesize = 100M

max\_execution\_time = 360

date.timezone = Asia/Dubai

3.7 after making changes restart apache2 server

sudo service apache2 restart

**Step No. 4 Install Mysql-Server run the following commands**

4.1 run the following commands to install mysql server

sudo apt install -y mysql-server mysql-client

sudo service mysql start

sudo mysql\_secure\_installation

mysql –u root –p

4.2 create database in mysql with name magento2

CREATE DATABASE magento2;

4.3 create user in database for magento2 with name magento2user with password m@g1t786

CREATE USER ‘magento2’@’LOCALHOST’ IDENTIFIED BY ‘m@g1t786’;

GRANT ALL ON magento2.\* to ‘magento2user’@’localhost’ IDENTIFIED BY ‘m@g1t786’ WITH GRANT OPTION;

FLUSH PRIVILEGES;

4.4 run below command so if server restart, mysql service will start automatically

sudo update-rc.d mysql defaults

4.5 if root user password is not working then follow the link below to reset password

<https://www.digitalocean.com/community/tutorials/how-to-reset-your-mysql-or-mariadb-root-password-on-ubuntu-18-04>

**Step No. 5 Download & Install phpMyadmin**

Download myphpadmin from <https://www.phpmyadmin.net/downloads/>

Extract file and copy to /var/www/magento-dev.local/public

Then open browser and enter <http://localhost/phpmyadmin>

Enter username root & password m@g1t786

**Step No.6 Install GIT , CURL and COMPOSER**

sudo apt-get install curl git

sudo curl -s https://getcomposer.org/installer | php

sudo mv composer.phar /usr/local/bin/composer

sudo composer

**Step No. 7 Downlaod Magento**

Create a user in ubunto with name magento\_user

sudo adduser magento\_user

sudo passwd magento\_user

Add magento\_user user to www-data Group

usermod -a -G www-data magento\_user

Restart Apache2 services

Service apache2 restart

Create a new directory in /var/www/html with name magento2

Make sure in vagrant file /var/www/html/magento2 is map to host directory

Make sure username & Group are changed to vagrant , vagrant in

/etc/apache2/apache2.conf

Make sure the magento2 directory ownership and permsion using below commands

config.vm.provision "shell", inline: "sudo chown -R :www-data /var/www/html/magento2"

place above command below the sharing folder in vagrant file

Get the megento software using composer

issue below command from /var/www/html/magento2 directory

composer create-project --repository=https://repo.magento.com/ magento/project-community-edition**=version** .

this will request you to enter username & password

login to <https://marketplace.magento.com/customer/account/> and click access keys 🡪 copy paste the username & password

Setup ownership & permission for shared group

cd <your Magento install dir>

find var generated vendor pub/static pub/media app/etc -type f -exec chmod g+w {} +

find var generated vendor pub/static pub/media app/etc -type d -exec chmod g+ws {} +

sudo chown -R :www-data .

chmod u+x bin/magento

Gulf Standard Time (Asia/Dubai)

**Step No. 8 Installing Sample Data in Magento**

Run the belwo command from installation directory (/var/www/html)

php bin/magento sampledata:deploy

php bin/magento setup:upgrade

make sure RAM for VM is 3 or more GB

**Step No. 9 Additional setup**

Creating a file in /etc/apache2/sites-available with name magento-dev.local.conf

Enter the following code in it

<VirtualHost \*:80>

# ServerName (domain) and admin email

ServerAdmin webmaster@magento-dev.local

ServerName magento-dev.local

DocumentRoot /var/www/magento-dev.local/public

# above folder of the site, we have to create this folder

# log file locations

LogLevel warn

ErrorLog /var/log/apache2/magento-dev.error.log

CustomLog /var/log/apache2/magento-dev.access.log combined

</VirtualHost>

enable the new virutalhost

from sites-availble folder location, enter following command to enable the site

sudo a2ensite magento-dev.local.conf

and to disable the default

sudo a2dissite 000-default.conf

restart the apache2 service and test the site.

Run the following command

Sudo chown –R www-data:www-data /var/www/magento-dev.local/

Step No. 6

Installing magento with sample data

Download magento 2 from magento website and extract the code to public folder in /var/www/magento-dev.local/public

Github [rizwanwakil2018@gmail.com](mailto:rizwanwakil2018@gmail.com)

sPersonal access tokens

33ce6daa8c0749a835389d7725fb356d083fc38a