

Installation instructions

This is not a product suitable for production deployment, it is still in development.

Installation instructions for Ubuntu Server 16.04 LTS. Deployment was checked on this platform but should work similarly with any Ubuntu distribution.

Installing Apache2, My SQL, PHP5 and Composer

Laravel 5.3 framework requires some dependencies before deployment, complete list can be found [here](#). To do this open a terminal window (command line) as a root user and execute following commands:

```
$ apt-get install python-software-properties
$ add-apt-repository ppa:ondrej/php
$ apt-get update
$ apt-get install -y php5.6 php5.6-mcrypt php5.6-gd
$ apt-get install apache2 libapache2-mod-php5
$ apt-get install mysql-server php5.6-mysql
$ curl -sS https://getcomposer.org/installer | php
$ mv composer.phar /usr/local/bin/composer
$ chmod +x /usr/local/bin/composer
```

During MySQL installation, leave all option to default and remember the *root* user password you set. This will install all necessary dependencies.

Deploying the web application

Before web application deployment it is necessary to create a database schema for the application. This can be done by executing the following:

```
$ mysql -u root -p
```

Type in previously set MySQL *root* user password. After that create a new database in the same terminal type in the following:

```
$ CREATE DATABASE dbname;
$ CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'password';
$ GRANT ALL PRIVILEGES ON dbname.* TO 'newuser'@'localhost';
$ REVOKE GRANT OPTION ON dbname.* FROM 'newuser'@'localhost';
$ FLUSH PRIVILEGES;
$ exit;
```

Here *dbname* is the name of the database for the web application and *newuser* and *password* is the username and password for the web application.

Next step is to copy the application itself to */var/www/<application_name>* folder, to do this simply create a new folder in */var/www/* and extract the application package there. Next make a copy of *.env.dev* file and rename it to *.env* – in this file all configuration of application is done. Open *.env* file with text editor and change the following:

```
APP_ENV=production
APP_NAME=<application_name>
APP_DEBUG=false
APP_URL=<full_url_of_application>
DB_DATABASE=<dbname>
DB_USERNAME=<username>
DB_PASSWORD=<password>
```

DB_DATABASE, DB_USERNAME and DB_PASSWORD were previously set and must match those that were set.

Next it is needed to set file permissions, pull in additional dependencies, generate the application unique key, migrate the database and seed the database. To do this open a terminal window as root user:

```
$ cd /var/www/<application folder>
$ composer install
$ chown -R www-data:www-data .
$ chmod -R gu+rwX .
$ php artisan key:generate
$ php artisan migrate:refresh
$ php artisan db:seed
```

Final step is to configure Apache 2. Navigate to `/etc/apache2/sites-available` folder, there create a `<application_name>.conf` file. Open the created file with text editor and insert the following:

```
<VirtualHost *:80>

    ServerName <<server_name eg. localhost>>
    DocumentRoot /var/www/<application_folder>/public

    <Directory />
        Options FollowSymLinks
        AllowOverride None
    </Directory>

    <Directory /var/www/<application_folder> >
        AllowOverride All
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/error.log
    LogLevel warn
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

Save and close the file. To enable the changes, open a terminal window as a root user and execute:

```
$ a2ensite <application_name>
$ service apache2 reload
```

That is, it, your website should be working when you access the URL of your server and log in as `user@mail.com` with password 123. If any additional help is needed, you can reference:

<https://httpd.apache.org/docs/2.4/vhosts/examples.html>

<http://tecadmin.net/install-laravel-framework-on-ubuntu/>

<https://www.howtoforge.com/tutorial/install-laravel-on-ubuntu-for-apache/>

<https://www.digitalocean.com/community/tutorials/a-basic-mysql-tutorial>

<http://guntars.github.io/tech/2014/12/06/guide-to-installing-ubuntu-server-with-apache-mysql-php-laravel/>