How to set up the production enviroment

**Create Digital Ocean account**

-Firstly we should create an account in digitalocean.

**Generating a new SSH key**

1) Open Git Bash.

2) Paste the text below, substituting in your GitHub email address.

**ssh-keygen -t rsa -b 4096 -C "your\_email@example.com"**

This creates a new ssh key, using the provided email as a label.

3) When you're prompted to "Enter a file in which to save the key," press Enter. This accepts the default file location.

### Add your SSH key to the ssh-agent

Before adding a new SSH key to the ssh-agent to manage your keys, you should have [checked for existing SSH keys](https://help.github.com/articles/checking-for-existing-ssh-keys) and [generated a new SSH key](https://help.github.com/articles/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent#generating-a-new-ssh-key).

**1)** Check if the ssh-agent is running

* If you are using the Git Shell that's installed with Github , the ssh-agent should be running.
* If you are using another terminal promt , start it manually  
   **$ eval $(ssh-agent -s)**

**2)** Add your SSH private key to the ssh-agent.

**$ ssh-add ~/.ssh/id\_rsa**

**3)**Add your SSH key to your Github account

### Add your SSH key to the Digital Ocean

**1)** Copy your public key by using the command :

**$ cat ~/.ssh/id\_rsa.pub**

**2)** Log in to Digital Ocean

* Go to **Settings**
* Go to **Security**
* Click **add SSH key**
* Paste the public key and give it an unique name

### Create a Digital Ocean droplet

**1)** Open Digital Ocean and go to **Create** and select **Droplet**

**2)** Under the Create Droplets tab, we choose which image to create, for this project we used **One Clicked**  **apps**, in this case we choose **MEAN** (Mongo, Express, Angular, Node JS).

**3)** Then we choose the **RAM** , **CPU** and the **STORAGE**

4) We choose the country were the serve is being hosted and it's better to choose the closest country.

5) Selecting our SSH key that we created.

6) Enter the name of your Droplet and click **Create**

### Connecting to our Server

**1)** We are connecting to our Server by writing the command:

**$ ssh root@"[your.ipaddress]"**

(The ip address it is founded in the Digital Ocean at our Droplet)

**2)** After that click enter to the question (Do you allow to connect to this computer)

**3)** If the nodejs , mongodb ,npm are not installed you can install it by using :

**$ apt-get install nodejs**

**$ apt -get install npm**

**3)** Install a node version

**$ npm install n -g**

**4)** Install the latest version of node

**$** **n stable**

**5)**Check if you have the latest version of node and npm

**$ node -v**

**$ npm -v**

### Setting up Automatic Deployment with Git

1) Go to var directory by using :

$ cd /var

2) Create a folder

$ mkdir repo

3) Get to the repo and create another folder

$ cd repo && mkdir site.git

4) Create the git repository

- In our server directories, head up into var folder (existing), create directory 'repo' , and inside of that new folder we create another one 'site.git'

- Inside the new created folder we initialize new empty git repository by using 'git init --bare'

- In the folder hooks, we create the file (touch 'post-receive'), and using build in editor called NANO we get opportunity to write in this specific file.

- We paste the script '#!/bin/sh

git --work-tree=/var/www/Application --git-dir=/var/repo/site.git checkout -f'

- In order to execute the file, we need to set the proper permissions using:

'chmod +x post-receive'

- Inside of the /var/www we create a new directory called Application.

Adding the production server repository in our github

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- We go to the local machine directory

- We add the remote production repository by 'git remote add production ssh://root@URL/var/repo/site.git'