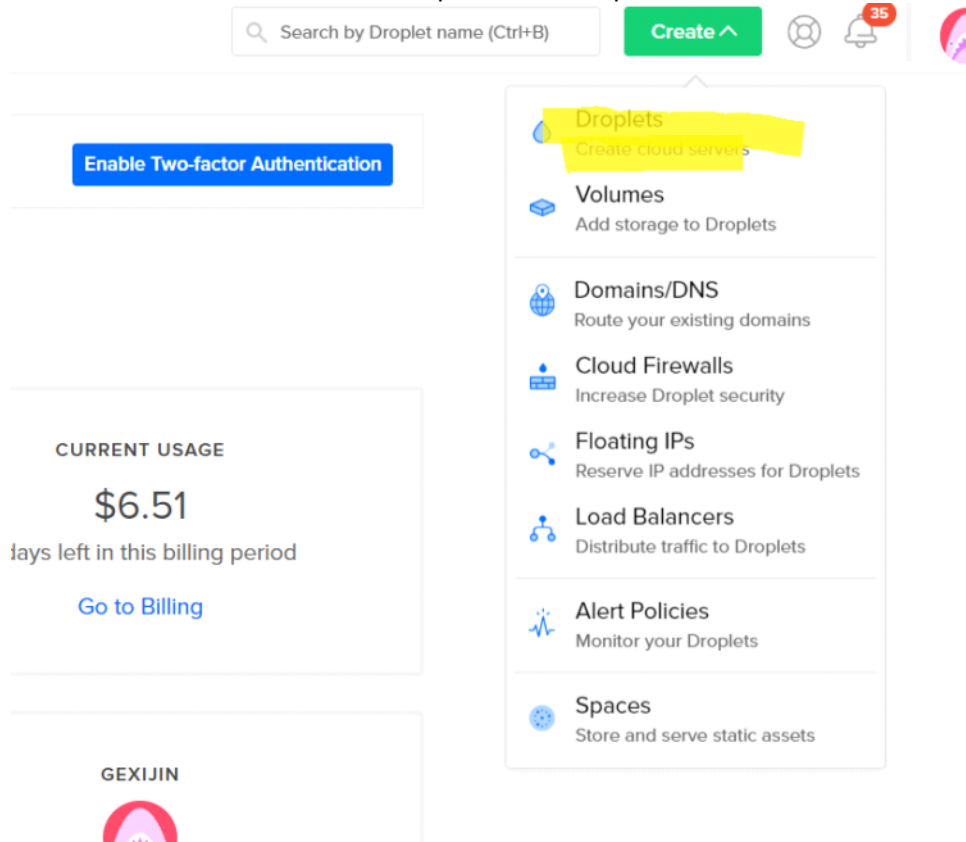


New Server Configuration - Digital Ocean

Wednesday, June 27, 2018 9:28 AM

1. Login to digital ocean
2. Create Droplet with Docker App
 - a. Click 'Create' button and select 'Droplet' in the dropdown box



- b. In the new page, click on 'One-click apps' and choose 'Docker' App

Enhance the security of your account by enabling two-factor authentication. [Enable Two-factor Authentication](#)

Create Droplets

Choose an image [?](#)

[Distributions](#) [Container distributions](#) [1. Click Here First One-Click apps](#)

Discourse 2.0.20180404 on 16.04

Django 1.8.7 on 16.04

Docker 17.12.0-ce on 16.04

Dokku 0.11.3 on 16.04

Ghost 1.21.1 on 16.04

GitLab 11.0.0-ce.0 on 16.04

LAMP on 16.04

LEMP on 16.04

Machine Learning and AI

MEAN on 16.04

MongoDB 3.4.10 on 16.04

MySQL on 16.04

NodeJS 6.12.3 on 16.04

PhpMyAdmin on 16.04

Ruby-on-Rails on 16.04

WordPress 4.9.1 on 16.04

- c. Scroll down in the same page and select droplet size.

Please check with Dr. Ge for the droplet size. Current suggestion is CPU Optimized 4G Memory, 2 cpu, 25G SSD one.

Choose a size

Standard Droplets

Balanced virtual machines with a healthy amount of memory tuned to host and scale applications like blogs, web applications, testing / staging environments, in-memory caching and databases.

MEMORY	vCPUs	SSD DISK	TRANSFER	PRICE
1 GB	1 vCPU	25 GB	1 TB	\$5/mo \$0.007/hr
2 GB	1 vCPU	50 GB	2 TB	\$10/mo \$0.015/hr
3 GB	1 vCPU	60 GB	3 TB	\$15/mo \$0.022/hr
2 GB	2 vCPUs	60 GB	3 TB	\$15/mo \$0.022/hr
1 GB	3 vCPUs	60 GB	3 TB	\$15/mo \$0.022/hr
4 GB	2 vCPUs	80 GB	4 TB	\$20/mo \$0.030/hr
8 GB	4 vCPUs	160 GB	5 TB	\$40/mo \$0.060/hr
16 GB	6 vCPUs	320 GB	6 TB	\$80/mo \$0.119/hr

CPU Optimized Droplets

Compute optimized virtual machines with dedicated hyper-threads from best in class Intel CPUs for CPU intensive applications like CI/CD, video encoding, machine learning, ad serving, batch processing and active front-end web servers.

MEMORY	DEDICATED vCPUs	SSD DISK	TRANSFER	PRICE
2 GB	1 vCPU	20 GB	3 TB	\$20/mo \$0.030/hr
4 GB	2 vCPUs	25 GB	4 TB	\$40/mo \$0.060/hr
8 GB	4 vCPUs	50 GB	5 TB	\$80/mo \$0.119/hr
16 GB	8 vCPUs	100 GB	6 TB	\$160/mo \$0.238/hr
32 GB	16 vCPUs	200 GB	7 TB	\$320/mo \$0.476/hr
64 GB	32 vCPUs	400 GB	9 TB	\$640/mo \$0.952/hr

- d. Region and other option.

We pickup San Francisco region, and additional option are not used.

- e. Wait until droplet created and built

Once droplet app built, Dr. Ge will receive an email from digital ocean, contains the IP and root password of this droplet.

3. Login to the droplet.

After login to the droplet, system will ask you to change the default root password.

4. Clone code from github:

- Run following command on droplet command line
git clone <https://github.com/iDEP-SDSU/idep.git>
- A folder called 'idep' will be created

5. Build up the image:

- Jump into idep folder:

cd idep

- b. Run setup script:

sudo nohup sh setup.sh

Here:

sudo is required for script building up docker image

nohup keep script running even your SSH connection is lost

System will ask you to input your root password.

- c. The image building process will take one to two hour.

6. After the script finish running, check docker image using:

docker image -ls

There should at least have 2 image which names:

Webapp and **Nignx**

Webapp image size around 2GB

Nignx image is several hundred MB

Also, there should be a new folder **data/** created in idep/

Which includes:

convertIDs.db (file)

data_go/ (folder)

geneInfo/ (folder)

motif/ (folder)

pathwayDB/ (folder)

They are the data we need for running server

Data set change? - please check maintain FQA section 2.

7. Run Service:

Under idep/ folder, run follow command to start service:

docker-compose up -d --scale webapp=15

Scale change? - please check maintain FQA section 3.