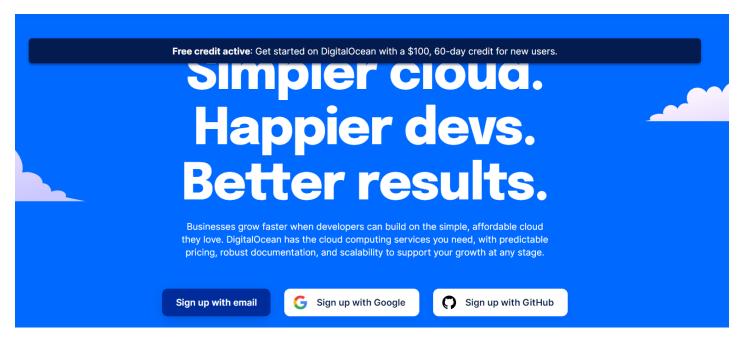
### Overview

This is a tutorial on setting up a server on DigitalOcean, a cloud computing platform. We will walk through whole process from creating an account to setting up a server instance and connecting to it. The process should be similar for any cloud computing services. Once you set up your server on any platform of your choice the remaining deploying steps should be identical. Here is a tutorial that may serve as a general guide on deploying your Python app onto any hosting platforms: How to Deploy Python App Using uWSGI and Nginx.

DigitalOcean is a cloud infrastructure provider focused on simplifying web infrastructure for software developers. It allows you to rent servers with different performance at different cost. For more detailed information, you may refer to the official website help page here.

# Creating an account

You can sign up to DigitalOcean using our affiliate link. Doing so gives you a starting credit of \$100 to spend in 60 days. Click this link to create your account and get the \$100: https://m.do.co/c/d54c088544ed. If the link doesn't work, paste it into your browser.



Create an account

After clicking the link, you should see a page like the above. Create your account at the left-bottom corner and you'll receive the \$100 automatically. Beware that you'll be asked to provide payment info when creating the account, since all services (which you'll choose below) in DigitalOcean will be charged after your credit runs out.

### Creating a Droplet

A server instance in DigitalOcean is called a <code>Droplet</code> . It's just a name that may vary in different platforms, for example, <code>Dyno</code> for <code>Heroku</code> and <code>EC2</code> for <code>AWS</code> (Amazon Web Service). Below are the steps to create a <code>Droplet</code> .

#### Choosing an image

To create a <code>Droplet</code>, we must first specify an image, that is, choosing what Operating System you want for the server. We recommend to use a Ubuntu LTS (Long Term Support) distribution. For more info on Ubuntu life time, please refer to the official Ubuntu end of life page here. In our example, we'll use <code>Ubuntu 20.04 (LTS) x64</code>, which is an LTS distribution.

#### Choosing a size

Next, we need to choose the specs for our server. In this tutorial, we'll be using the most basic tier of a Standard Droplet, which offers a single Regular Intel CPU with 1GB RAM, 25GB SSD and 1000 GB transfer at \$5 per month. Generally, it's more than enough for running personal applications. You may also run several services in a single Droplet.

### Choosing a datacenter region

Generally, choosing a region that's *closest to your users* will make your service deliver faster. If your users are primarily in the United States, you could choose a United States-based Droplet.

### Other configurations

In our example, we do not need to add any other services such as block storage or private network. So we will ignore these settings to keep our setup simple and cheap.

You may choose to use SSH key and follow the steps recommended by DigitalOcean or create a password.

### Setting up a password

If you want to use a password you just have to select the "Create a root password to access Droplet" and then insert a strong password which you can use to login remotely or through DigitalOcean's Droplet Console.

### Setting up an SSH key

If you choose to use SSH key, then each time you want to login to the server from outside DigitalOcean's site, you will need to provide the key. For example in windows using GitBash terminal you need to add the pass the full path for the ssh-key file:

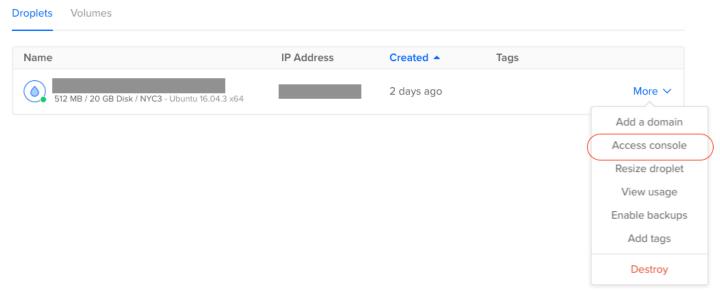
ssh root@insert-droplet-ip -i /c/Users/insert-username/.ssh/insert-ssh-key-filenam

Be aware that this command will only work for the root user, if you want to add an ssh key for another user you can see the details in DigitalOcean's docs.

Since you have to have access to the SSH key whenever you log in, it can be more secure or more troublesome depending on the scenario.

At last, you may change the name of your Droplet to something you like and then click Create to create and launch your Droplet.

# Connecting to our droplet



DigitalOcean Access Console

Once you've created your Droplet click the "Access Console" option in the dropdown menu associated with your Droplet, as shown in above image, and click the Launch Droplet Console button.

If you have successfully followed the tutorial so far, then you have finished all the setting-ups that are specific to DigitalOcean. The following sections can serve as a standalone tutorial and can be applied to deployment onto any other platforms as well.

# Deploying application onto our server

After setting up our server (Droplet), the next thing we may want to do is to deploy our application onto the server. We will not, however, cover the process in this tutorial. Instead we recommend you to read this separate tutorial: How to Deploy Python App Using uWSGI and Nginx. We organize contents in such way because deployment is an independent process and should be similar on any platforms, not specific to DigitalOcean. So if you are curious, please check it out.

Thanks for reading!