

A DigitalOcean droplet in 10 minutes

Created by Brennen Bearnes



If you see a black screen just click on it and click any key to activate the console window.

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Guide Contents

Guide Contents	2
Overview	3
What is this "Cloud" Business, Anyway?	3
DigitalOcean	3
Account Setup	4
Droplet Creation	6
Connecting to Your Droplet	9
Connecting to the Console in the Browser	9
Connecting via SSH from Windows	9
Connecting via SSH from OS X or Linux	10
Basic Configuration & Further Reading	12
Further Reading	13

Overview

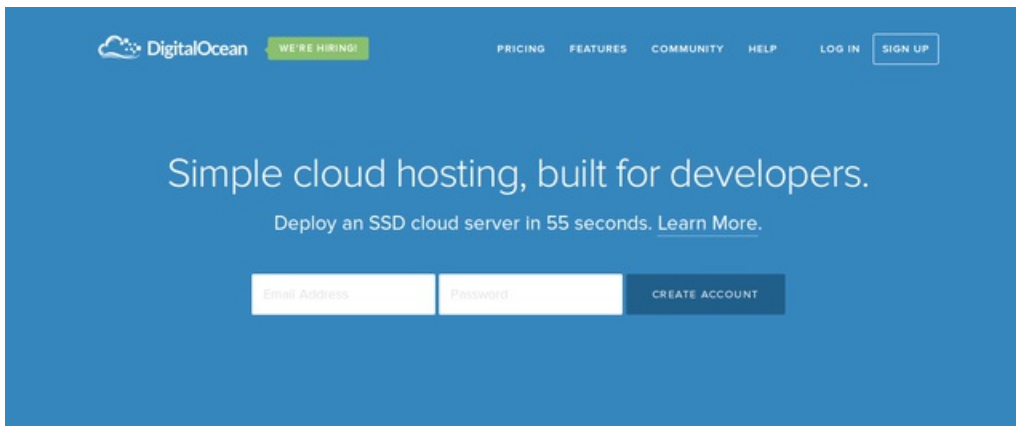
In [What is this "Linux", anyhow? \(https://adafru.it/sdn\)](https://adafru.it/sdn) we briefly covered a number of options for [getting access to a GNU/Linux environment \(https://adafru.it/CeJ\)](#). In this guide, we'll discuss one easy option for experimenting with a small server in the cloud.

What is this "Cloud" Business, Anyway?

[Cloud computing \(https://adafru.it/evx\)](https://adafru.it/evx) has been a tech industry buzzword for years now. Most industry buzzwords have a way of fizzling out after a while, but "the cloud" has passed into everyday speech as a routine shorthand for the often-nebulous world of networked software and storage. Used this way, it often comes with a certain amount of hand waving and fuzzy thinking, but you can usually dispel that by remembering that "cloud" is a useful shorthand for "happening on other people's computers".

There are gazillions of companies offering different cloud services, in ways that range from the simple to the brain-hurtingly complex. A lot of the modern internet runs on top of [Amazon's datacenters and networks \(https://adafru.it/evy\)](https://adafru.it/evy), for example.

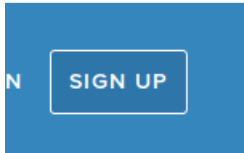
DigitalOcean



At \$5-10 a month for a server instance, [DigitalOcean \(https://adafru.it/eiU\)](https://adafru.it/eiU) offers a nice mix of simplicity and reasonable cost. If you'd like to experiment with running a Linux server on the internet, it's a great place to start.

In DigitalOcean terminology, individual servers are called "droplets", and managed by way of a web interface.

Account Setup



First, you'll need an account. Hit the DigitalOcean home page and click that SIGN UP button.



Create your DigitalOcean Account

By signing up, you agree to the [Terms of Service](#)

Already have an account? [Sign In](#)

You'll want to [pick a good password \(https://adafruit.it/evz\)](https://adafruit.it/evz) here, since access to this account gives root access to the servers you host under it.

DigitalOcean » **Welcome to DigitalOcean! Please Confirm Your Account**

Next, check your e-mail for a confirmation message from DigitalOcean, and click the confirmation link inside.

Welcome to DigitalOcean!

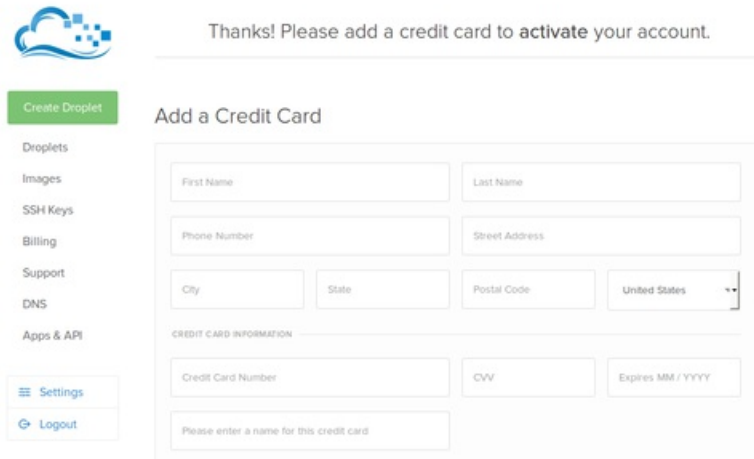
Thanks for signing up for DigitalOcean! To deploy your first cloud server (Droplet), please verify your email address by clicking the link below.

CONFIRM EMAIL

Note that this link will expire in 24 hours if it's not activated.

Happy Coding,
Team DigitalOcean

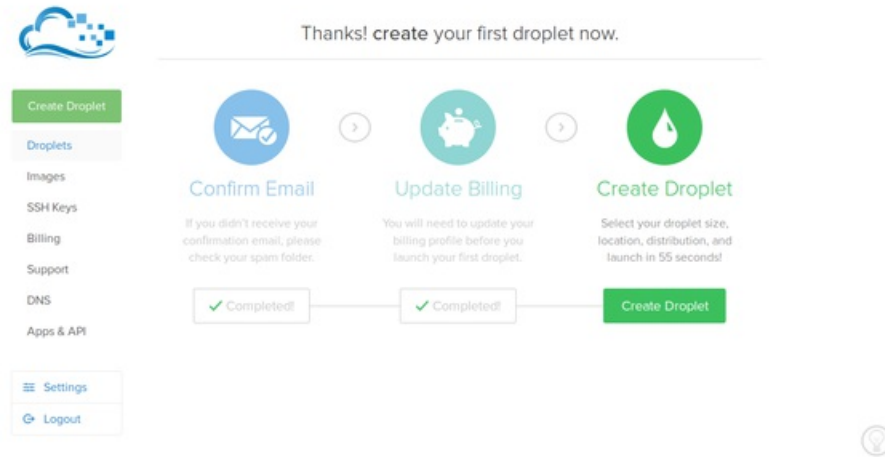
You should then be asked to provide a credit card number to pay for the account.



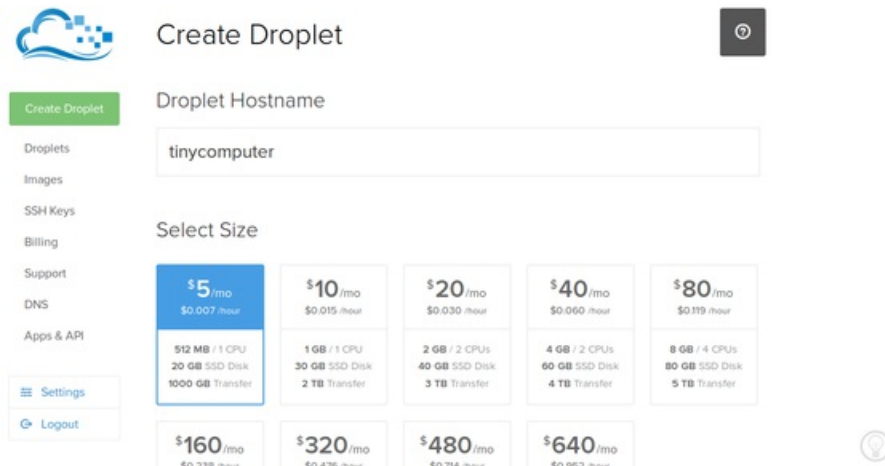
The screenshot shows the DigitalOcean user interface. At the top left is the DigitalOcean logo. To its right, a message reads: "Thanks! Please add a credit card to **activate** your account." Below this is a navigation menu on the left with items: "Create Droplet" (highlighted in green), "Droplets", "Images", "SSH Keys", "Billing", "Support", "DNS", "Apps & API", "Settings", and "Logout". The main content area is titled "Add a Credit Card" and contains a form with the following fields:

- First Name
- Last Name
- Phone Number
- Street Address
- City
- State
- Postal Code
- United States (dropdown menu)
- CREDIT CARD INFORMATION section containing:
 - Credit Card Number
 - CVV
 - Expires MM / YYYY
- Please enter a name for this credit card

Droplet Creation

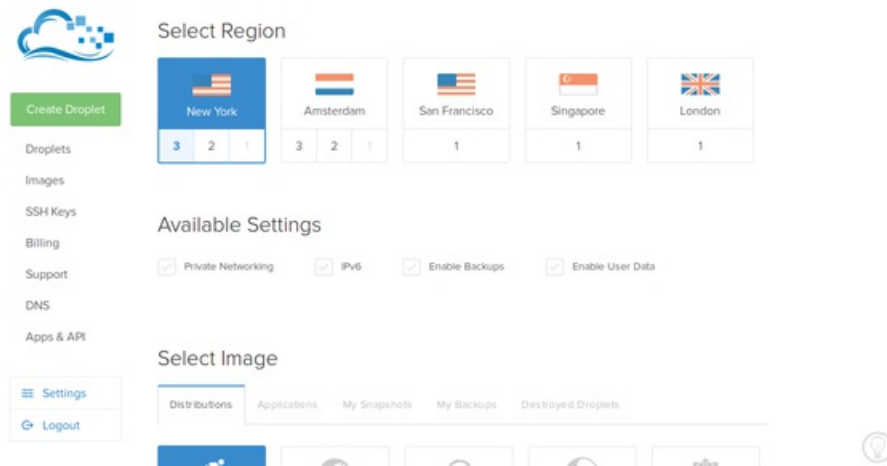


With the bureaucracy taken care of, you're ready to fire up a virtual machine. Click that "Create Droplet" button, and you should see a screen like this one.



The \$5/mo option is more than adequate for most purposes, so let's go with that. Next you'll be asked to select which region the droplet should live in - or more exactly, which of several datacenters you'd like to host it in.

It's often advisable to pick something on your continent just to avoid a slow connection to the server. In this case, I went with New York.

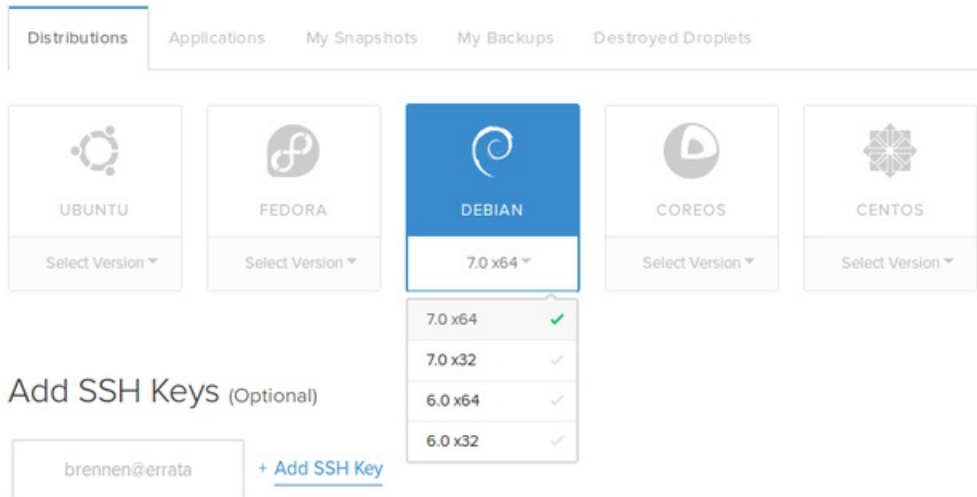


Next, you'll be prompted to select an **image** containing a pre-installed [distribution](https://adafru.it/CeK) (<https://adafru.it/CeK>).

Here, I'm going with the latest stable Debian, because that's the most like a Raspberry Pi install of Raspbian. If you're planning to follow along with tutorials in this series, Debian (stable but fairly stale) or Ubuntu (a lot like Debian, but with fresher software and some different design priorities) will usually work well. Other choices are well worth exploring, but keep in mind that there are subtle (or not-so-subtle) differences between the distributions.

There's even an option to use [FreeBSD](https://adafru.it/evB) (<https://adafru.it/evB>), an operating system that's a [direct descendant](https://adafru.it/evC) (<https://adafru.it/evC>) of the original AT&T Unix codebase. (FreeBSD is well worth exploring in its own right.)

Select Image



You also have the option to add an SSH key here. Go ahead, if you know what an SSH key is and have one lying around. Otherwise, we'll get into that in a minute.

Available Settings



Lastly, there are a variety of configuration options. If you're planning to keep this droplet around for a while, you might want to enable backups now, because it's a little trickier if you change your mind later on.

All set? Click the CREATE DROPLET button and see what happens.

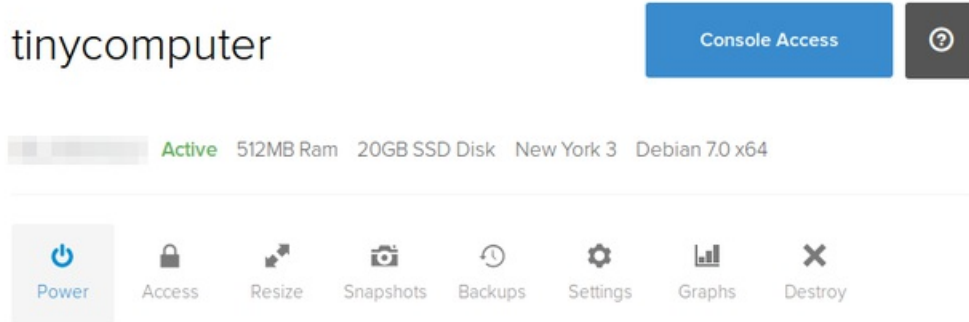
We are now creating your droplet



Approximately 30 seconds remaining

Connecting to Your Droplet

By now, you should be looking at something like the following.



If you added an SSH key during the droplet creation process, you're probably already familiar with SSH - just connect directly to the displayed IP address with the username "root".

Otherwise, check your e-mail. You should have a root password waiting.

DigitalOcean » **Your new Droplet is created! (tinycomputer) - DigitalOcean**

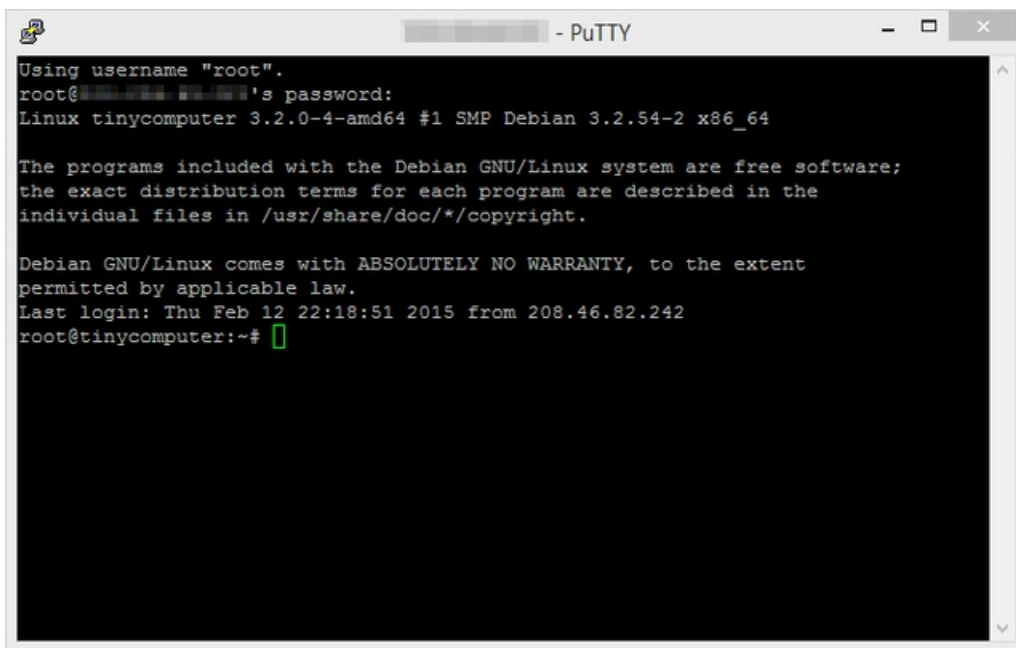
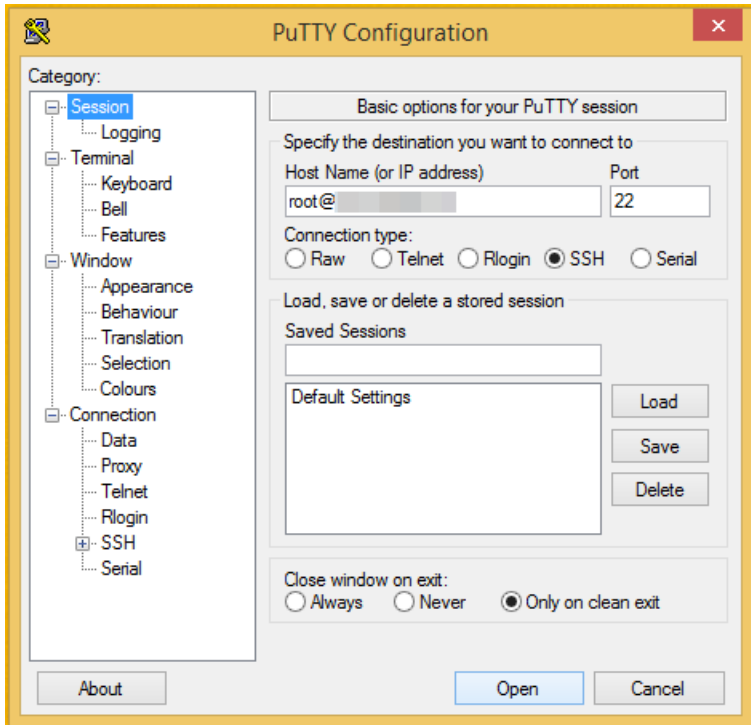
Connecting to the Console in the Browser

DigitalOcean droplets offer in-browser access to the console. Just click that "Console Access" button and enter "root" for the username, followed by the password from your e-mail. You'll be immediately prompted to replace this with a password of your own choosing, and then you should find yourself with a shell prompt.

Connecting via SSH from Windows

First, [download a copy of PuTTY \(https://adafruit.it/aWh\)](https://adafruit.it/aWh). You just need putty.exe from that link, to start.

Next, enter `root@[your ip address]` in the "Host Name (or IP address)" field and hit the "Open" button.



Connecting via SSH from OS X or Linux

First, get to a terminal. On the Mac, look for the Terminal in your Applications folder. On Linux, run one of xterm, lxterm, Gnome Terminal, etc. In menus, these can usually be found under "Accessories".

Once you're at a prompt, just invoke SSH like so.

```
ssh root@192.168.0.5
```

...replacing `192.168.0.5` with your droplet's IP address.

Basic Configuration & Further Reading

Now that you're logged into a working machine, there are a few basics it'd be good to take care of.

First, you should probably add a non-root user. You can do that with `adduser yourname`, which will interactively prompt you for some info about the new user.

```
root@tinycomputer:~# add
```



Again, choose a strong password here.

Next, you'll probably want to give this user the ability to use `sudo`, and disable root logins over SSH. Start by making sure that `sudo` is installed.

```
root@tinycomputer:~#
```



...then add your new user to the `sudoers` group. In my case, this looks like:

```
root@tinycomputer:~# addgroup brennen sudo
Adding user `brennen' to group `sudo' ...
Adding user brennen to group sudo
Done.
```

Finally, tell SSH it shouldn't allow direct root logins any more. Start by opening `/etc/ssh/sshd_config` in nano.

```
nano /etc/ssh/sshd_config
```

Next, look for this line:

```
PermitRootLogin yes
```

And change to:

```
PermitRootLogin no
```

And finally restart the SSH service:

```
root@tinycomputer:~# service ssh restart  
[ ok ] Restarting OpenBSD Secure Shell server: sshd.
```

Further Reading

With that out of the way, you're ready to explore.

For command line basics, check out our [What is the Command Line? \(https://adafru.it/sdo\)](https://adafru.it/sdo) and [An Illustrated Shell Command Primer \(https://adafru.it/CeI\)](https://adafru.it/CeI).

For general server administration topics, [DigitalOcean's community support system \(https://adafru.it/evD\)](https://adafru.it/evD) is chock full of useful reference material and tutorials.