Server Setup & Connection - Cheatsheet

Commands used in the video:

Command	Description
`cd ~`	Change directory to home directory.
`ls`	List files & folders in the current directory.
`cd ..`	Go up one directory (to the parent directory).
`ssh-keygen`	Generate public and private key.
`ssh -i private_key_name root@server_ip`	Connect to the server & decrypt messages using private key.
`cd ~/.ssh`	Go to the directory that contains your ssh keys.
`mkdir`	Create a directory in the current directory you are in.
`ls -a`	List files & folders in the current directory, -a means all, so the files and folders that are hidden will appear too.
`cat file_name`	Display a file in the current folder.

▼ 1. Create Droplet On DigitalOcean

All resources created in this datacenter will be members of the same VPC network. They can communicate securely over their Private IP addresses.

Choose an image

OS Marketplace (226)   Custom images

| Ubuntu | Fedora | Debian | CentOS | AlmaLinux | Rocky Linux | RancherOS |

Version

22.10 x64 ⌄

22.10 x64

22.04 (LTS) x64

20.04 (LTS) x64

Need help picking a plan? Help me choos

CPU options: ● Regular   ○ Premium Intel **NEW**   ○ Premium AMD **NEW**
with SSD   with NVMe SSD   with NVMe SSD

$**4**/mo	$**6**/mo	$**12**/mo	$**18**/mo	$**24**/mo	$**48**/mo
$0.006/hour	$0.009/hour	$0.018/hour	$0.027/hour	$0.036/hour	$0.071/hour
512 MB / 1 CPU	1 GB / 1 CPU	2 GB / 1 CPU	2 GB / 2 CPUs	4 GB / 2 CPUs	8 GB / 4 CPU
10 GB SSD Disk	25 GB SSD Disk	50 GB SSD Disk	60 GB SSD Disk	80 GB SSD Disk	160 GB SSD D
500 GB transfer	1000 GB transfer	2 TB transfer	3 TB transfer	4 TB transfer	5 TB transfe

● ○

Show all

Additional Storage

Need more disk space? Add a volume with no manual setup.
Block storage volumes add extra disk space. We automatically format and mount your volume so it's available as soon as your
Droplet is, and you can move volumes seamlessly between Droplets at any time. Think of it like a flash drive for your VM.

Add Volume

Referrals

Give $200, Get $25

Everyone you refer gets $200 in credit over 60 days. Once they've spent $25 with us, you'll get $25. There is no limit to the amount of credit you can earn through referrals.

Share your link

Copy your personal referral link and share it with your friends and followers.

REFERRAL LINK

https://m.do.co/c/9d35b8872239

SHARE VIA

Tw

Droplet is, and you can move volumes seamlessly between Droplets at any time. Think of it like a flash drive for your VM.

Choose Authentication Method ?

SSH Key	Password
Connect to your Droplet with an SSH key pair	Connect to your Droplet as the "root" user via password

Choose your SSH keys

☑ mbpro

New SSH Key

We recommend these options

▼ 2. Command Line Basics

`cd ~`	Change directory to home directory.
`ls`	List files & folders in the current directory.
`cd ..`	Go up one directory (to the parent directory).

Most of what we're gonna do with server is on the command line.

And it's a little intimidating for people. Especially if you're just using your mouse and inspecting and all these things. But by the end of the day, you're gonna love the command line. You'll see it's so powerful, it's so repeatable. And really, you can just throw that mouse out right now.

why the command line?

cuz not all the servers have their GUI graphical user interface,

And originally, when computers were first invented, it's all people had.

Okay, so We're just gonna play around with the command line, just a little bit,

▼ 3. SSH - What is it?

by now we're in the portion of DigitalOcean where it says hey how do you wanna log in

you can use SSH keys or you can use a one time password.

And it's tempting to use a password because it's simpler

they send an email to you, you log in and you're good to go but thats for pussies.

With ssh you can set it up once and you can use it everytime, and it is secure.

SH keys are the strongest authentication we can get right now.

And I like the idea of SSH keys because it's just a really powerful concept, where I encrypt something, or you can encrypt something, and the only way to decrypt it is with a key that only I have.

So you can send me a message using my public key.

and if someone gets it it will be like a blob of text that means nothing.

 But the only way to decrypt it is my private key.

So it's like it's a good one way encryption.

And if we have password and username and someone steals that username and password I have to reset everything.

And at some point I need the transmit that username and password over the internet, and if someone's sitting in the middle, they can intercept that.

If someone is sitting in the middle and you are using ssh they will see just some garbage encrypted text that does not mean anything.

▼ 4. SSH - Practical example

```
mkdir ~/.ssh
cd ~/.ssh
ssh-keygen
```

```
known_hosts      known_hosts.old testkey        testkey.pub
hans@hanss-macbook-pro .ssh % ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/Users/hans/.ssh/id_rsa): guide
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in guide
Your public key has been saved in guide.pub
The key fingerprint is:
SHA256:GTXyXBdznIpssM5IL1kno41Wjkro9hdEoMa23cF2TB8 hans@hanss-macbook-pro.home
The key's randomart image is:
+---[RSA 3072]----+
|    .. ..oE. +oo|
| . . ..o*.o.. +.|
|   = .+.o*.. .  |
| o o oooO = .   |
|  ...o.S =      |
|  . . X *       |
| . . o o        |
|  o . .         |
|  . ...         |
+----[SHA256]-----+
hans@hanss-macbook-pro .ssh %
```

```
SHA256:GTXyXBdznIpssM5IL1kno41Wjkro9hdEoMa23cF2TB8 hans@hanss-macbook-pro.home
The key's randomart image is:
+---[RSA 3072]----+
|    .. ..oE. +oo|
| . . ..o*.o.. +.|
|   = .+.o*.. .  |
| o o oooO = .   |
|  ...o.S =      |
|  . . X *       |
| . . o o        |
|  o . .         |
|  . ...         |
+----[SHA256]-----+
hans@hanss-macbook-pro .ssh % ls
guide          guide.pub      known_hosts      known_hosts.old testkey        testkey.pub
hans@hanss-macbook-pro .ssh % cat guide.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABgQDIqmFKmtxMwxWEk0frG6sTgX14ueoYQY6dVyZhgl+Xz5JDCsrwuz3X8LqtaVusbE1Kst7jvJ
sVvaFCvzWxGTj18Y5rMSE0MaWxr3c2aozy0alvwFTpyzPp7vJAXQbRQqpyxYRN1MAQH0DbU2I7qxa3uMwOZZE6EednF+La1686VMLEQjLiaMXu
dyags5gqyPtT1myoIS2QWkHX2R3slIyZZYjEkndjpApBYwHoB+Bv26Ri//3sQgJWbdoD3ru67i92B1CLGNCTXxm63WHuNJwjTbFpT6uGPtcYDt
mlEGIuIoRNkN84KA/qI3AoAzlpuYxrKCfhdYEpETPToSUyJkJDYkzba+lZchxcdrLmthmhoT1cA9HU+eYZz1HciHO3POfJE5jW7KQj9Lz6vsLh
v7NOsQNv+HARE2hDfgl9z4WxZXH5Miqtb128OttCn5BgT0q1q6qqi3S0j6BOjcC7RMFQ3ZYYQGFlF7SC28hD91fCS6qJOWc19Bhg+JgYZja83H
k= hans@hanss-macbook-pro.home
hans@hanss-macbook-pro .ssh %
```

New SSH key

Copy your public SSH key and paste it in the space below. For instructions on how, follow the steps on the right.

SSH key content
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABgQDIqmFKmtxMwxWEk0frG6sTgX14ue
oYQY6dVyZhgl+Xz5JDCsrwuz3X8LqtaVusbE1Kst7jvJsVvaFCvzWxGTj18Y5rMS
E0MaWxr3c2aozy0alvwFTpyzPp7vJAXQbRQqpyxYRN1MAQH0DbU2I7qxa3uM
wOZZE6EednF+La1686VMLEQjLiaMXudyags5gqyPtT1myoIS2QWkHX2R3slIyZ
ZYjEkndjpApBYwHoB+Bv26Ri//3sQgJWbdoD3ru67i92B1CLGNCTXxm63WHu
NJwjTbFpT6uGPtcYDtmlEGIuIoRNkN84KA/qI3AoAzlpuYxrKCfhdYEpETPToS
JkJDYkzba+lZchxcdrLmthmhoT1cA9HU+eYZz1HciHO3POfJE5jW7KQj9Lz6vsLh

Name
guide-key

Add SSH Key

SSH Keys

Follow these instructions to create or add SSH keys on Linux, MacOS & Windows. Windows users without OpenSSH can install and use PuTTY instead.

Create a new key pair, if needed

Open a terminal and run the following command:
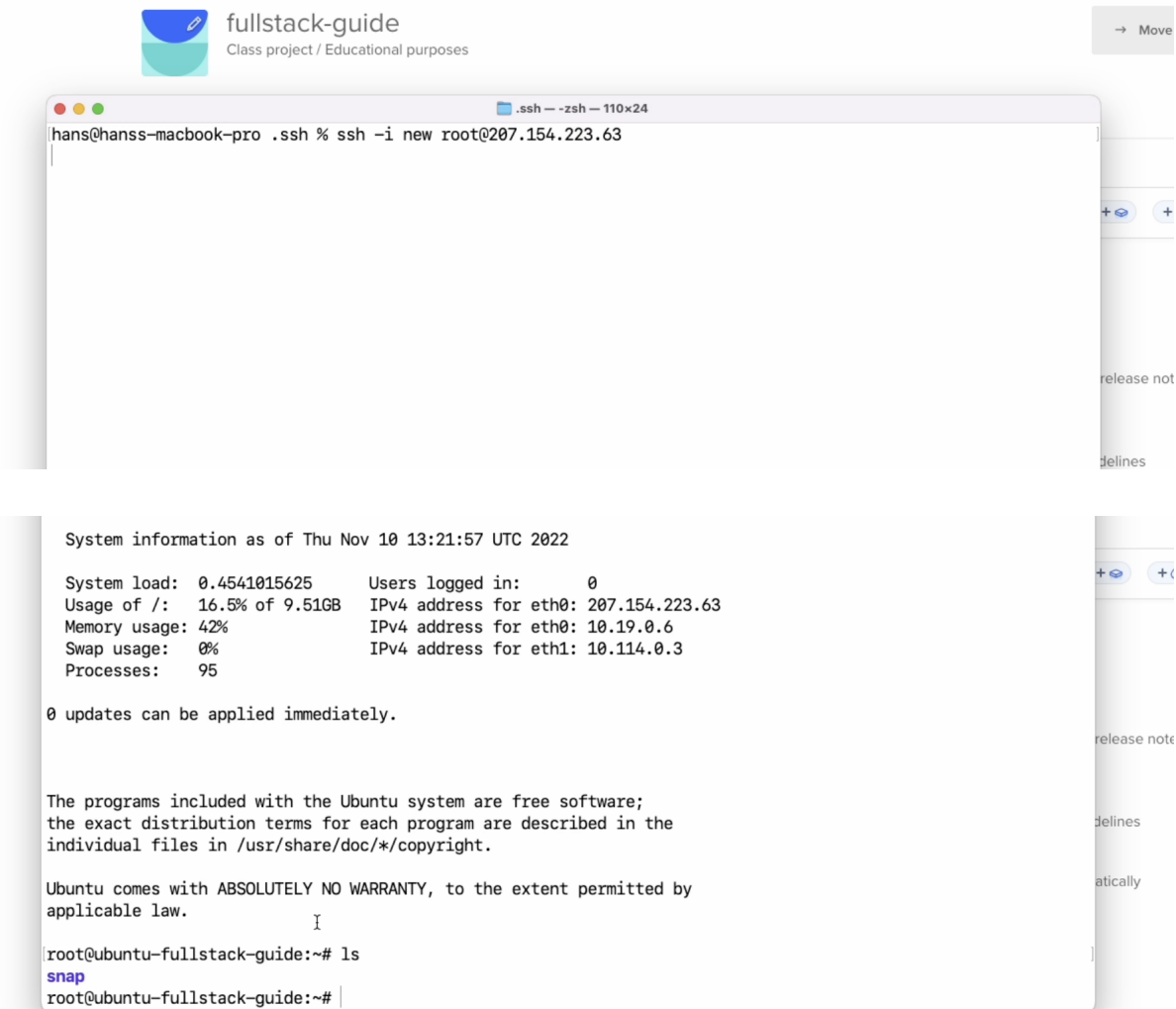
```
ssh-keygen
```
Copy

You will be prompted to save and name the key.

```
Generating public/private rsa key
pair. Enter file in which to save
the key (/Users/USER/.ssh/id rsa):
```

▼ 5. Connect to the server

`ssh -i private_key_name root@server_ip`	Connect to the server & decrypt messages using private key.
`cd ~/.ssh`	Go to the directory that contains your ssh keys.

fullstack-guide
Class project / Educational purposes

→ Move

```
● ● ●                    .ssh — -zsh — 110×24
hans@hanss-macbook-pro .ssh % ssh -i new root@207.154.223.63
```

release not

delines

```
System information as of Thu Nov 10 13:21:57 UTC 2022

System load:   0.4541015625      Users logged in:       0
Usage of /:    16.5% of 9.51GB   IPv4 address for eth0: 207.154.223.63
Memory usage: 42%                IPv4 address for eth0: 10.19.0.6
Swap usage:    0%                IPv4 address for eth1: 10.114.0.3
Processes:     95

0 updates can be applied immediately.




The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.                   I

root@ubuntu-fullstack-guide:~# ls
snap
root@ubuntu-fullstack-guide:~#
```

release note

delines

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