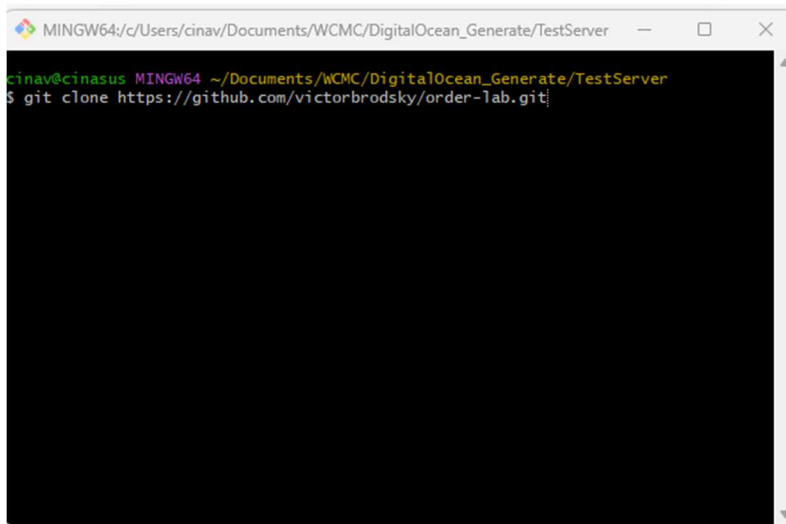


Installation Instructions

I. Digital Ocean via Packer

- create new folder "New Server" and open a command console from this folder (i.e. 'Git Bash Here')



```
MINGW64~/c/Users/cinav/Documents/WCMC/DigitalOcean_Generate/TestServer
cinav@cinavus MINGW64 ~/Documents/WCMC/DigitalOcean_Generate/TestServer
$ git clone https://github.com/victorbrodsky/order-lab.git
```

- Clone ORDER repository from git:
`git clone https://github.com/victorbrodsky/order-lab.git`
- Go to packer directory:
`cd order-lab/packer/`
- Run packer installation script:
`bash deploy-order-digital-ocean.sh --token mytoken -os alma9 --protocol https`

Example to install Alma9 server with multi-tenancy for “https://view.online” domain:

```
bash deploy-order-digital-ocean.sh --token mytoken --os alma9 --protocol https --domainname
view.online --sslcertificate installcertbot --email oli2002@med.cornell.edu --sshfingerprint
1a:55:66:2b:11:3c:11:b4:33:d5:99:44:f6:33:22:11 --multitenant haproxy | tee deploypacker.log
```

Notes:

--sshfingerprint option is required for certbot and certificate installation.

To use ssh, ssh key should be added to DigitalOcean: Settings->Security->Add SSH Key

If certbot installation will fail during automated installation, certbot can be installed later manually via Droplet Console or by running `doctl`.

Via Droplet Console:

Go to DigitalOcean: Droplets -> click on newly generated droplet -> click Access -> Launch Droplet Console

The screenshot shows the DigitalOcean Droplet Console interface. At the top, the droplet name is **packer-1745532836**, located in **NYC3** with **AlmaLinux** OS. It has **2 GB Memory** and **40 GB Disk**. A blue **Upsize Droplet** button and a green **ON** toggle are visible. Below this, network details are shown: **ipv4: 68.183.51.53**, **ipv6: Enable now**, **Private IP: 10.132.0.9**, and **Reserved IP: Enable now**. A **Console** link with a terminal icon is on the right. On the left, a sidebar lists various actions: **Graphs**, **Access** (highlighted), **Power**, **Volumes**, **Resize**, **Networking**, **Backups**, **Snapshots**, **Kernel**, **History**, **Destroy**, **Tags**, and **Recovery**. The main content area has two sections. The first is **Droplet Console**, which includes a description, a **Log in as... root** input field, and a blue **Launch Droplet Console** button. The second section is **Recovery Console**, with a description and a grey **Launch Recovery Console** button.

In console, run these command:

```
cd /srv/order-lab-homepagemanager/packer/
```

```
bash /srv/order-lab-homepagemanager/packer/install-certbot.sh view.online installcerbot  
oli2002@med.cornell.edu haproxy
```

The screenshot shows a terminal window titled "packer-1745532836 - DigitalOcean Droplet Web Console — Mozilla Firefox". The URL bar shows https://cloud.digitalocean.com/droplets/491394663/terminal/ui?os_user=root. The terminal output is as follows:
Activate the web console with: `systemctl enable --now cockpit.socket`
Last login: Fri Apr 25 13:56:23 2025 from 162.243.190.66
[root@packer-1745532836 ~]# cd /srv/order-lab-homepagemanager/packer/
[root@packer-1745532836 packer]#
[root@packer-1745532836 packer]# bash /srv/order-lab-homepagemanager/packer/install-certbot.sh view.online installcerbot
oli2002@med.cornell.edu haproxy

This script will install Certbot, set up the certificate, and configure haproxy.cfg to apply it.

By running doctl from local PC:

```
doctl compute ssh "packer-1745521900" --ssh-key-path ./sshkey --ssh-command 'bash /srv/order-lab-homepagemanager/packer/install-certbot.sh view.online installcertbot oli2002@med.cornell.edu haproxy'
```

To initialize tenant run in browser:

<http://view.online/directory/admin/first-time-login-generation-init>

II. Installation ORDER on the provided server with installed Alma9 or RHEL9

If the server is already provided with Alma9 or RHEL9, go to the server console and run:

```
sudo yum install -y git
cd /srv
git clone https://github.com/victorbrodsky/order-lab.git
cd order-lab/packer/
```

Run `alma9_install.sh` to install Apache, Postgresql, PHP, required utilities:
`bash alma9_install.sh dbusername dbpassword protocol domain sslcertificate email multitenant`

Run `install-multitenancy.sh` to install multi-tenant ORDER system with HaProxy for `view.online` domain, the installation log will be stored in `multitenancy.log` file:
`bash install-multitenancy.sh -u dbusername -t dbpassword -m haproxy -p /srv -s none -d none -e none -l none | tee multitenancy.log`

Example to install Apache, Postgresql, PHP, required utilities, multi-tenant ORDER system with HaProxy for `view.online` domain:

```
bash alma9_install.sh symfony symfony https view.online installcertbot oli2002@med.cornell.edu haproxy
bash install-multitenancy.sh -u symfony -t symfony -m haproxy -p /srv -s none -d none -e none -l none |
tee multitenancy.log
```

To initialize tenant run in browser:

`http://view.online/directory/admin/first-time-login-generation-init`

In all cases: if the web site is not opening, check haproxy and php-fpm status on the server:

```
sudo systemctl status haproxy
sudo systemctl status php-fpm
sudo systemctl status httpdhomepagemanager
sudo systemctl status httpdtenantmanager
sudo systemctl status httpdtenantapp1
sudo systemctl status httpdtenantapp2
sudo systemctl status httpdtenantappdemo
```

