

assignment 3 part 2

This should be a new remote git repository. **Don't change your part 1 repository!**

In the second part of this assignment you will get to further test your web configuration skills and system administration knowledge. You will also have a chance to demonstrate your overall understanding of the recent material with a short video presentation.

Using your own instructions and configuration from part 1 you are going to setup **two new servers** with a few small modifications to the part 1 configuration.

task 1

Create **two new** digital ocean droplets running Arch Linux with the **tag "web"**. You will use this tag when you setup your load balancer.

task 2

Create a load balancer to, well load balance the traffic to your site. The load balancer should be public facing and balance traffic between the two servers created above.

Settings:

- Regional, SF03, same as your servers
- Default VPC, same as your servers
- External(public)
- Use the "web" tag to load balance all servers with a web tag in the SF03 region.

task 3

Clone the updated starter code from the [updated starter code repository](#).

This contains an updated script that will generate an HTML document.

task 4

Update your server configuration to include a file server. When you visit 'your-ip/documents' you will see a list of the documents in the documents directory.

Your updated webgen user directories will look like this:

```
updated file structure of /var/lib/webgen:
index.html is still generated by generate_index
file-one and file-two are just sample files.
They should contain some text so you can confirm that
you can download from your file server.

.
├── bin/
│   └── generate_index
├── documents/
│   ├── file-one
│   └── file-two
└── HTML/
    └── index.html
```

Setup both servers like you did your server in part 1, but with the new features:

- updated script to generate an updated HTML document
- File server that will serve some test files on both servers.
- Update your README.md file to take into consideration the changes, and the fact that you are setting up two servers.

video presentation

Create a 10-15 minute video presentation in which, using your repository, you explain the files, and steps involved in setting up a server and load balancer.

The purpose of the video is to demonstrate your understanding of the material covered in this assignment.

Explain the contents of the files, the commands needed to setup and test your server, why you have created a system user instead of a regular user, why are files in the locations that they are in, what a load balancer is...

You can use additional resources, such as a tool like excalidraw to show diagrams.

You don't need to visibly be in the video, screen recording is fine. It should be your voice in the video, not an AI voice or text on the screen.

Submit a link to a video hosted by a service, like YouTube, Vimeo, Loom... I need to be able to watch the video without downloading anything.

General

I recommend making all of the files on your local machine, after upload them to your servers with `sftp`. This way you only have to write the files once.

You may want to create a simple script to setup the user and copy files to the correct locations. If you create a script for this put it in your Git repository that you submit. Just like last time your repository should contain everything you need to setup the servers(content and steps involved).

Deliverables

- A link to your new remote repository with updated configuration and instructions
- A link to your load balancers IP address
- A link to your video presentation
 - This must be a link to a video that I can watch without downloading anything

rubric

| criteria | excellent | good | satisfactory | incomplete |
|---|-----------|------|--------------|------------|
| New remote repository with updated code and instructions is complete. Git was used correctly | 10 | 8 | 5 | 0 |
| Load balancer and two new servers set up correctly and displays content from both servers when visiting LB IP | 10 | 8 | 5 | 0 |
| File server was set up correctly and test files can be downloaded | 10 | 8 | 5 | 0 |
| Video documentation clearly demonstrates understanding of material | 25 | 20 | 13 | 0 |