HOMEWORK 3

Answer all questions from practical assignment 2.

Section(s):

Create two new LXD containers from the image you created

Question: Note that we did not start the containers immediately because they would have the same IP address (from the image), and that is a problem. Can you explain why? **Answer:** If we are to start the two server simultaneously, they would both have the same `ip` address, thus causing a conflict is accessing them (this is just impossible). This will happen, because the image we are creating the servers from, has its networking configure with a single 'ip** address, as it should, but this means that we have to then go to each server and manually change the addresses to free ones.

Configure Ansible on your server

Question: Can you explain why it is a good idea to verify the authenticity of remote servers? **Answer:** Because the server might be broken into and we must make sure that it has not been corrupted. If it has been, adequate measures must be taken. Also connections with remote servers has to be done in a secure way, so that nobody can *spy* on the conversation between the *client* and the *server**.

Run ad-hoc commands with Ansible from your server

```
ansible servers -m command -a "df -h | grep lxd/" -i ansible-hosts
```

Question: Oops, that failed. Why did it fail and can you fix the command? **Answer:** The error we get when running this command is:

```
df: '|': No such file or directory
df: grep: No such file or directory
df: lxd/: No such file or directorynon-zero return code
```

Which means that we have syntax errors in our command. If we want to check the available space, we have to tell `ansible` to run a bash command on the server, where the syntax is as follows:

```
ansible servers -m command -a "bash -c 'df -h | grep lxd/'" -i ~/ansible-hosts
```

Run an Ansible playbook from your server

Question: The playbook failed. Why? Try to fix it. **Answer:** It failed, because of the `postgres` in tag in the playbook does not match the actual name in the `./vars/` directory, where the file with the credentials is called 'posgresql.yml**.

Question: How can you verify that postgresql was actually installed and that the superuser was created?
Answer: Using the same commands we used to test if `bittornado` was installed:

```
ansible servers -m command -a "bash -c \
'dpkg -l posgresql | grep ii'" -i ~/ansible-hosts
```

Question: The execution failed. What happened? What do you need to do to run the playbook successfully? **Answer:** It failed because we need to tell `ansible` to run commands with enabled verification. That is, we need the `--ask-vault-pass` flag when running the playbook. Then when we run it, it will ask us for a password, with which we encrypted the file, thus running the command successfully.

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