DevOps Crash Course

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softserve

Snapshots

- Snapshots allow you to save a particular state of a VM; this can be handy when you want to test something, or you're about to make a change to that VM, and you need to be able to roll back to a working instance
- You can create a snapshot when a VM is either on, saved, or off

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Bash scripting

- Bash script starts with

#!/bin/bash

- We can use command line arguments in scripts

- ~$ ./say_hello.sh Tymko

- Hello Tymko

- ~$ cat say_hello.sh

- #!/bin/bash

- echo Hello $1

Bash scripting

- We can create functions in bash

  #!/bin/bash

  say_hello () {

     echo Hello $1

    }

  say_hello Tymko

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Bash scripting

```bash
#Setup logging

set -e

LOG_F="/tmp/sftp-server-setup_"`date "+%F-%T"`".log"

exec &> >(tee "${LOG_F}")

echo "Logging setup to ${LOG_F}"
```

Bash scripting

#Adding user with passwordless access to sudo

sudo adduser $1

sudo passwd $1

sudo usermod -aG wheel $1

echo "$1 ALL=(ALL) NOPASSWD: ALL" | sudo EDITOR='tee -a' visudo

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Bash scripting

```
#Updating system and installing vsftpd server

sudo yum update -y

sudo yum install vsftpd -y


#Configuring vsftpd service

sudo systemctl start vsftpd

sudo systemctl enable vsftpd
```

Bash scripting

#Disable firewalld service

sudo sysemctl stop firewalld

#Homework: configure firewalld

#Backup default config

sudo cp /etc/vsftpd/vsftpd.conf /etc/vsftpd/vsftpd.conf.default

Bash scripting

#Function for changing config

```
change_config () {

  grep -q "^$1" /etc/vsftpd/vsftpd.conf && sudo sed -i "s/^$1.*/$1=$2/" /etc/vsftpd/vsftpd.conf || echo "$1=$2" | sudo tee -a /etc/vsftpd/vsftpd.conf

}
```

Bash scripting

#Configuring vsftpd server

change_config anonymous_enable NO

change_config local_enable YES

change_config write_enable YES

change_config chroot_local_user YES

change_config allow_writeable_chroot YES

change_config userlist_enable YES

Bash scripting

change_config userlist_file /etc/vsftpd/user_list

change_config userlist_deny NO

change_config chroot_list_enable YES

change_config chroot_list_file /etc/vsftpd/chroot_list

change_config pasv_enable YES

change_config pasv_max_port 10001

change_config pasv_min_port 10000

Bash scripting

```
#Configuring sftp user

echo $1 | sudo tee –a /etc/vsftpd/user_list

echo $1 | sudo tee –a /etc/vsftpd/chroot_list


#Restarting vsftpd service

sudo systemctl restart vsftpd
```

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Snapshots

- First and foremost, the VM you want to work with must not be running.

- You can restore a snapshot if the VM is either in a saved state or powered off.

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