TP1: Configuration & command

1. Basic configuration

1. Bash installation

➔ *apk update – apk upgrade – apk add bash*

2. Using bash

➔ *bash*

3. Root shell

Editing with "vi" the /etc/passwd file and replace the previous shell with bash

4. Installing man doc & completion

➔ *apk add bash-doc*

➔ *apk add bash-completion*

5. SSH config

➔ *apk add openssh-server openssh-client*

➔ *service sshd status*

➔ *service sshd start (stop or restart)*

➔ *rc-update add sshd (To start up ssh on boot)*

1. SSH Config

➔ *apt install openssh-server openssh-client*

➔ *systemctl status ssh*

➔ *systemctl start ssh*

2. Installing locate command

➔ *apt install mlocate*

➔ *To update db: -> sudo updatedb -> updatedb && locate -e bench-repo*

3. Add users to sudo group

➔ *usermod -aG sudo username*

➔ *reload bash or exit and return ssh*

6. Give users privileges

➔ *Edit /etc/sudoers file : username ALL=(ALL) /folder*

2. Network configuration

1. IP address

➔ *vi /etc/network/interfaces*

```
auto lo
iface lo inet loopback
iface lo inet6 loopback

auto eth0
iface eth0 inet static
        address 10.22.141.15
        netmask 255.255.252.0
        gateway 10.22.143.254
        hostname $(hostname)
```

➔ *ifup interface*

3. User creation & Access configuration

7. "useradd" command not found!

➔ *apk add shadow*

2. add & del a user

➔ *useradd -m username (m: move contents of the home directory to the new location, use only with -d used for new home directory)*

➔ *userdel username*

3. Change shell for a specific user

➔ *usermod username - -shell /bin/bash (or -s)*

8. Error: "Could not chdir to home directory /home/vivek: No such file or directory"

➔ *mkdir /home/username*

➔ *chown username:username /home/username*

➔ *chmod 0700 / home/username*

9. User only access to reboot

➔ *vi /etc/sudoers*

➔ *username ALL(ALL) /sbin/reboot*

➔ *sudo reboot*

4. Root SSH denied

➔ *nano /etc/ssh/sshdconfig*

➔ *change the attribute "PermitRootLogin" to "no"*

5. SSH access only to "superv"

➔ *nano /etc/ssh/sshdconfig*

➔ *Write a new attribute (if it doesn't exist) "AllowUsers superv"*

6. **Generation key**

➔ *ssh-keygen -t rsa*

7. **Copy the key to the server**

➔ *ssh-copy-id -I ~/.ssh/id_rsa.pub username@addr*

8. **Automation ssh**

➔ *ssh-agent (or ssh-agent bash to open it in a new bash)*

➔ *ssh-add ~/.ssh/id_rsa (enter the passphrase)*

➔ *ssh-add -t (nb of second) ~/.ssh/id_rsa (to make the agent memorize the key temporarily)*

➔ *ssh -i ~/.ssh/id_rsa.pub username@addr*

4. Control commands

9. **IP Machine**

➔ ip -f inet -o address | awk '{print $4}'
➔ alias aliasName="command to execute the script"

10. **Free space disk**

➔ *df -h | awk '{print $1 "\t\t\t" $4}' (apt install gawk)*

➔ *alias aliasName=" command to execute the script"*

11. **CPU Charge**

➔ *top | awk 'NR==3'*

➔ *alias aliasName=" command to execute the script"*

5. Collect data remotely

➔ *ssh username@addr 'command' > /tmp/file*

12. **Get IP Machine remotely**

➔ *ssh username@addr 'ip -f inet -o address' > /tmp/file*

13. **Get Free space disk remotely**

➔ *ssh username@addr ' ' > /tmp/file*

14. **Get Free space disk remotely**

➔ *ssh username@addr ' ' > /tmp/file*

6. Commands execution repeatedly

15. **Execution every 5 minutes**

➔ *crontab -e*

➔ */5 * * * * command_to_execute*

7. Shared directory

16. Samba server installation on Debian

➔ *sudo apt install samba*

17. Configuration Samba server

➔ *mkdir /home/superv/sharedFolder*

➔ *touch /home/superv/sharedFolder/txt*

➔ *sudo cp /etc/samba/smb.conf /etc/samba/smb.conf.bak*

➔ *sudo nano /etc/samba/smb.conf*

```
#====================== Global Settings =======================

[global]

## Browsing/Identification ###

# Change this to the workgroup/NT-domain name your Samba server will part of
   workgroup = SUPERVGROUP
```

```
[share]
   comment = Debian file server share
   path = /home/superv/sharedFolder
   browseable yes
   guest ok = yes
   read only = no
   create mask = 0755
```

➔ *sudo systemctl restart smbd*

1. *Installation smbclient*

➔ *sudo apt install smbclient*

2. *Connection to the sharedFolder*

➔ *smbclient //10.22.141.16/share*

10. Installation smbclient

➔ *sudo apk add samba-client*

11. Connection smbclient

➔ *smbclient //10.22.141.16/share*