TP 5 Compte rendu Fabien Mauhourat

Question 1

sudo pacman -S vagrant

Question 2

vagrant box add ubuntu/bionic64
vagrant init ubuntu/bionic64
vagrant up
vagrant ssh

Information VM :
Adresse ip : ip addr show → 10.0.2.15/24
Gateway : ip route → 10.0.2.2
Memoire : free -m → 1GB
CPU : lscpu → 2 coeurs
Disque : df -h → 10GB
Partage : df -h / mount → /vagrant

Question 3

vim Vagrantfile :

```
config.vm.provider "virtualbox" do |vb|
    vb.gui = true
    vb.memory = "512"
  end
```

Question 4

Vagrant propose deux modes de configuration en plus de l'interface nat créée par défaut sur l'invité :

- Private network → config.vm.network "private_network", ip: "192.168.33.10"
- Public network → config.vm.network "public_network"

États des interfaces :

- enp0s3 → interface nat → 10.0.2.15/24

- enp0s8 → private network → 192.168.33.10/24
- enp0s9 → public network → ip dans le même réseau que ma machine physique

Question 5

sudo apt install apache2

Test invité :
vagrant@ubuntu-bionic:~$ curl -I 127.0.0.1
HTTP/1.1 200 OK
Date: Sun, 20 Oct 2019 20:09:44 GMT
Server: Apache/2.4.29 (Ubuntu)
Last-Modified: Sun, 20 Oct 2019 20:06:31 GMT
ETag: "2aa6-5955d1a6aed5c"
Accept-Ranges: bytes
Content-Length: 10918
Vary: Accept-Encoding
Content-Type: text/html

Configurer le forward de port :

config.vm.network "forwarded_port", guest: 80, host: 8080, host_ip: "127.0.0.1"

Test machine hôte :

fabien@arch-desk ~/Vagrant> curl -I 127.0.0.1:8080
HTTP/1.1 200 OK
Date: Sun, 20 Oct 2019 20:13:07 GMT
Server: Apache/2.4.29 (Ubuntu)
Last-Modified: Sun, 20 Oct 2019 20:06:31 GMT
ETag: "2aa6-5955d1a6aed5c"
Accept-Ranges: bytes
Content-Length: 10918
Vary: Accept-Encoding
Content-Type: text/html

Question 6

Génération de la paire de clé :

ssh-keygen -t rsa -b 4096

Modification du vagrantfile pour configurer l' échange de clé :

```
config.vm.provision "file", source: "./id_rsa.pub", destination: "~/.ssh/me.pub"
config.vm.provision "shell", inline: <<-SHELL
  cat /home/vagrant/.ssh/id_rsa.pub >> /home/vagrant/.ssh/authorized_keys
SHELL
config.ssh.private_key_path =  "./id_rsa"
```

Connexion en ssh :

ssh -i ./id_rsa -o StrictHostKeyChecking=no vagrant@127.0.0.1 -p 2222

Question 7

vagrant destroy

Question 8

Création du bridge :

```
sudo ip link add name br0 type bridge
sudo ip link set dev br0 up
sudo ip addr add 192.168.50.1/24 broadcast 192.168.50.255 dev br0
sudo iptables -t nat -A POSTROUTING -o interface_sortie_hôte -j MASQUERADE
```

Configuration du vagrantfile :

```
Vagrant.configure("2") do |config|
  config.vm.box = "ubuntu/bionic64"
  config.vm.network "forwarded_port", guest: 80, host: 8080, host_ip: "127.0.0.1"
  config.vm.network "public_network", bridge: "br0", ip: "192.168.50.2"
  config.vm.provision "shell", inline: <<-SHELL
     apt-get update
     apt-get install -y apache2
     chown -R www-data:www-data /var/www/html
     chmod -R 775 /var/www/html
     usermod -a -G www-data vagrant
  SHELL
  config.vm.provision "file", source: "./test.html", destination: "/var/www/html/test.html"
end
```

Test invité :

```
vagrant@ubuntu-bionic:~$ curl -I 127.0.0.1/test.html
HTTP/1.1 200 OK
Date: Sun, 20 Oct 2019 21:11:58 GMT
Server: Apache/2.4.29 (Ubuntu)
Last-Modified: Sun, 20 Oct 2019 21:09:46 GMT
ETag: "0-5955dfc9de4f1"
Accept-Ranges: bytes
Content-Type: text/html
```

Test machine hôte :

```
fabien@arch-desk ~/Vagrant> curl -I 127.0.0.1:8080/test.html
HTTP/1.1 200 OK
Date: Sun, 20 Oct 2019 21:11:19 GMT
Server: Apache/2.4.29 (Ubuntu)
Last-Modified: Sun, 20 Oct 2019 21:09:46 GMT
ETag: "0-5955dfc9de4f1"
Accept-Ranges: bytes
Content-Type: text/html
```