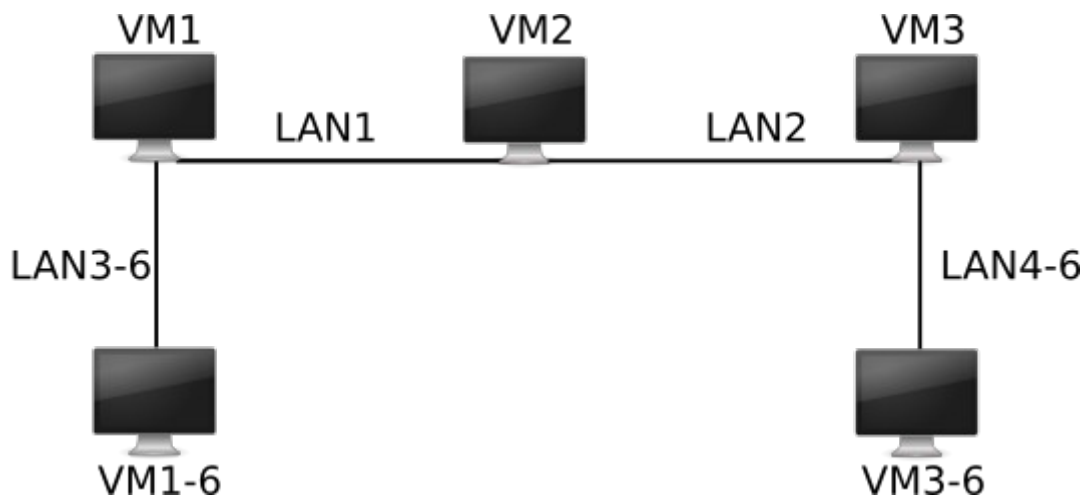


Rapport projet réseaux

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1. Configuration Réseau



- ping de VM1 vers VM3 :

```
m1reseaux@VM1:~$ ping 172.16.2.163
PING 172.16.2.163 (172.16.2.163) 56(84) bytes of data.
64 bytes from 172.16.2.163: icmp_seq=1 ttl=63 time=4.11 ms
64 bytes from 172.16.2.163: icmp_seq=2 ttl=63 time=1.47 ms
64 bytes from 172.16.2.163: icmp_seq=3 ttl=63 time=1.62 ms
^C
--- 172.16.2.163 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2007ms
rtt min/avg/max/mdev = 1.472/2.400/4.110/1.210 ms
```

- ping de VM3 vers VM1 :

```
m1reseaux@VM3:~$ ping 172.16.2.131
PING 172.16.2.131 (172.16.2.131) 56(84) bytes of data.
64 bytes from 172.16.2.131: icmp_seq=1 ttl=63 time=1.46 ms
64 bytes from 172.16.2.131: icmp_seq=2 ttl=63 time=1.38 ms
64 bytes from 172.16.2.131: icmp_seq=3 ttl=63 time=1.44 ms
^C
--- 172.16.2.131 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2011ms
rtt min/avg/max/mdev = 1.376/1.423/1.457/0.034 ms
```

- ping6 de VM1-6 vers VM1 :

```
m1reseaux@VM1-6:~$ ping6 fc00:1234:3::1
PING fc00:1234:3::1(fc00:1234:3::1) 56 data bytes
64 bytes from fc00:1234:3::1: icmp_seq=1 ttl=64 time=1.29 ms
64 bytes from fc00:1234:3::1: icmp_seq=2 ttl=64 time=1.12 ms
64 bytes from fc00:1234:3::1: icmp_seq=3 ttl=64 time=1.02 ms
^C
--- fc00:1234:3::1 ping statistics ---
```

```
3 packets transmitted, 3 received, 0% packet loss, time 2004ms
rtt min/avg/max/mdev = 1.023/1.143/1.293/0.112 ms
```

- ping6 de VM3-6 vers VM3 :

```
m1reseaux@VM3-6:~$ ping6 fc00:1234:4::3
PING fc00:1234:4::3(fc00:1234:4::3) 56 data bytes
64 bytes from fc00:1234:4::3: icmp_seq=1 ttl=64 time=1.12 ms
64 bytes from fc00:1234:4::3: icmp_seq=2 ttl=64 time=0.788 ms
64 bytes from fc00:1234:4::3: icmp_seq=3 ttl=64 time=0.820 ms
^C
--- fc00:1234:4::3 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2024ms
rtt min/avg/max/mdev = 0.788/0.908/1.118/0.148 ms
```

2. L'interface virtuelle TUN

2.1. Création de l'interface

```
m1reseaux@VM1:/mnt/partage$ sudo ./tunalloc tun0
[sudo] password for m1reseaux:
Cr  ation de tun0
Faire la configuration de tun0...
Appuyez sur une touche pour continuer
```

```
Interface tun0 Configur  e:
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN
group default qlen 1000
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
inet6 ::1/128 scope host
valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast
state UP group default qlen 1000
link/ether 08:00:27:8d:c0:4d brd ff:ff:ff:ff:ff:ff
altname enp0s3
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic eth0
valid_lft 84908sec preferred_lft 84908sec
inet6 fe80::a00:27ff:fe8d:c04d/64 scope link
valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast
state UP group default qlen 1000
link/ether 08:00:27:df:01:f3 brd ff:ff:ff:ff:ff:ff
altname enp0s8
inet 172.16.2.131/28 brd 172.16.2.143 scope global noprefixroute eth1valid_lft
forever preferred_lft forever
inet6 fe80::b25:3230:144a:a039/64 scope link noprefixroute
valid_lft forever preferred_lft forever
4: eth2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast
state UP group default qlen 1000
link/ether 08:00:27:b9:28:13 brd ff:ff:ff:ff:ff:ff
altname enp0s9
inet6 fc00:1234:3::1/64 scope global noprefixroute
valid_lft forever preferred_lft forever
inet6 fe80::76d2:a330:668b:caee/64 scope link noprefixroute
valid_lft forever preferred_lft forever
5: tun0: <POINTOPOINT,MULTICAST,NOARP> mtu 1500 qdisc noop state DOWN
group default qlen 500
```

link/none

Appuyez sur une touche pour terminer

2.2. Configuration de l'interface

1- Configuration de l'interface tun0 avec l'adresse fc00:1234:ffff::1.

```
m1reseaux@VM1:/mnt/partage$ ip addr
5: tun0: <POINTOPOINT,MULTICAST,NOARP,UP,LOWER_UP> mtu 1500 qdisc
pfifo_fast state UNKNOWN group default qlen 500
link/none
inet6 fc00:1234:ffff::1/64 scope global
valid_lft forever preferred_lft forever
inet6 fe80::6b14:976c:ae77:eba3/64 scope link stable-privacy
valid_lft forever preferred_lft forever
```

Le script configure-tun.sh :

```
#!/bin/bash
ip -6 addr add fc00:1234:ffff::1/64 dev tun0
ip link set tun0 up
```

2- Oui, il faut modifier des informations de routage sur VM1 et VM1-6 et enlever les routes vers les LANs qui ne sont plus accessibles.

3- ping6 de VM1-6 vers tun0:

```
m1reseaux@VM1-6:~$ ping6 fc00:1234:ffff::1
PING fc00:1234:ffff::1(fc00:1234:ffff::1) 56 data bytes
64 bytes from fc00:1234:ffff::1: icmp_seq=1 ttl=64 time=0.694 ms
64 bytes from fc00:1234:ffff::1: icmp_seq=2 ttl=64 time=0.971 ms
64 bytes from fc00:1234:ffff::1: icmp_seq=3 ttl=64 time=0.833 ms^C
--- fc00:1234:ffff::1 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2010ms
rtt min/avg/max/mdev = 0.694/0.832/0.971/0.113 ms
```

ping6 de VM1 vers tun0:

```
m1reseaux@VM1:/mnt/partage$ ping6 fc00:1234:ffff::1
PING fc00:1234:ffff::1(fc00:1234:ffff::1) 56 data bytes
64 bytes from fc00:1234:ffff::1: icmp_seq=1 ttl=64 time=0.087 ms
64 bytes from fc00:1234:ffff::1: icmp_seq=2 ttl=64 time=0.116 ms
64 bytes from fc00:1234:ffff::1: icmp_seq=3 ttl=64 time=0.800 ms
^C
--- fc00:1234:ffff::1 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2045ms
rtt min/avg/max/mdev = 0.087/0.334/0.800/0.329 ms
```

-Lorsque on lance une capture avec wireshark sur tun0 on ne capte pas la trame du ping vers tun 0.

4-

```
m1reseaux@VM1:/mnt/partage$ ping6 fc00:1234:ffff::10
PING fc00:1234:ffff::10(fc00:1234:ffff::10) 56 data bytes
^C
--- fc00:1234:ffff::10 ping statistics ---
13 packets transmitted, 0 received, 100% packet loss, time 12280ms
```

il n'existe pas de route vers fc00:1234:ffff::10, avec wireshark on capte la trame ICMP6 de fc00:1234:ffff::1 vers fc00:1234:ffff::10,

2.3. Récupération des paquets

2-

```
00000140 00 00 86 dd 60 04 bb 69 00 40 3a 40 fc 00 12 34 |....`..i.@:~...4|
00000150 ff ff 00 00 00 00 00 00 00 00 00 01 fc 00 12 34 |.....4|
00000160 ff ff 00 00 00 00 00 00 00 00 00 10 80 00 af 1b |.....|
00000170 85 0d 00 01 96 de 80 63 00 00 00 00 4a cb 0e 00 |.....c....J...|
00000180 00 00 00 00 10 11 12 13 14 15 16 17 18 19 1a 1b |.....|
00000190 1c 1d 1e 1f 20 21 22 23 24 25 26 27 28 29 2a 2b |....!"$%&'()*+|
00000200 2c 2d 2e 2f 30 31 32 33 34 35 36 37
```

3 -

```
0000 60 04 bb 69 00 40 3a 40 fc 00 12 34 ff ff 00 00
0010 00 00 00 00 00 00 00 01 fc 00 12 34 ff ff 00 00
0020 00 00 00 00 00 00 00 10 80 00 af 1b 85 0d 00 01
0030 96 de 80 63 00 00 00 00 4a cb 0e 00 00 00 00 00
0040 10 11 12 13 14 15 16 17 18 19 1a 1b 1c 1d 1e 1f
0050 20 21 22 23 24 25 26 27 28 29 2a 2b 2c 2d 2e 2f
0060 30 31 32 33 34 35 36 37
```

On voit que la trame captée sur wireshark correspond à ce qui est obtenu par test_ifun.

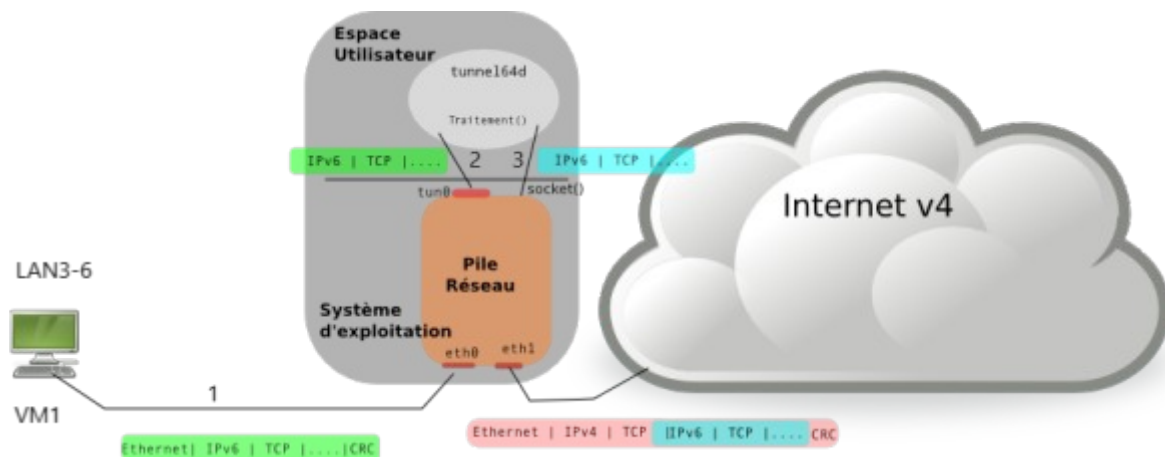
4- D'après la documentation, si le flag IFF_NO_PI est activé on ne donne plus d'information sur le paquet dans l'en-tête. Si le flag n'est présent alors on a comme format de trame : 2 octets pour le flags et 2 octets pour le protocole dans l'en-tête de la trame.

3. Un tunnel simple pour Ipv6

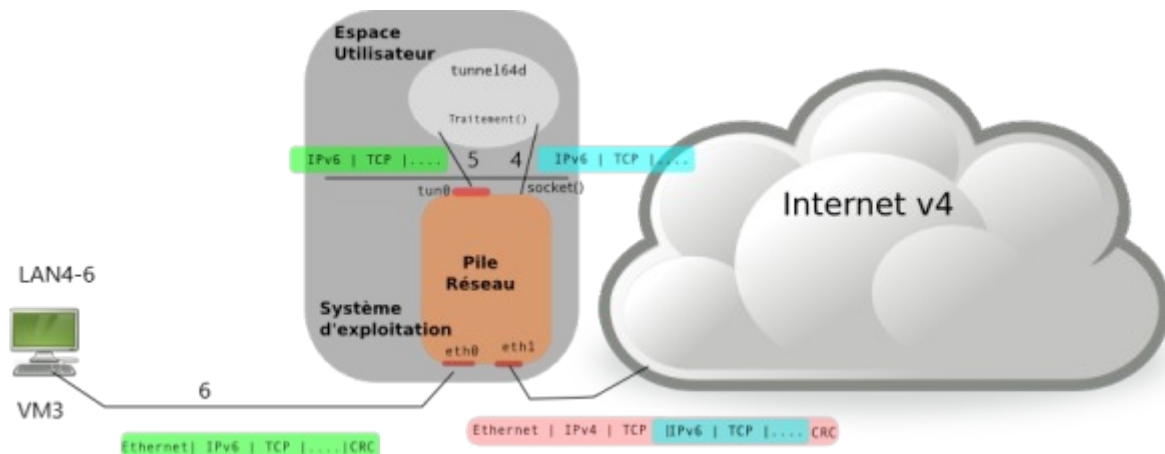
3.2. Redirection du trafic sortant

2- Après le lancement de ext_out, lorsqu'on écrit dans le descripteur de tun0 du serveur, le trafic est écrit dans le tunnel du client aussi.

3.4. Mise en place du tunnel entre VM1 et VM3 : Schémas



- 1 – Envoie d'un paquet vers LAN4 depuis LAN3-6 et passe par l'interface tun0 de VM1.
- 2 – Le client lit sur le tunnel les données à envoyer.
- 3 – Les données sont envoyées dans une socket.



- 4 – Le serveur lit depuis la socket les données reçues.
- 5 – Les données sont écrites dans le tunnel tun0.
- 6 – Le paquet reçu est transmis vers LAN4-6

4. Validation Fonctionnelle

4.1. Configuration

VM1 :

```
m1reseaux@VM1-6:/mnt/partage$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group
default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
```

```

        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:8d:c0:4d brd ff:ff:ff:ff:ff:ff
    altname enp0s3
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic eth0
        valid_lft 84024sec preferred_lft 84024sec
    inet6 fe80::a00:27ff:fe8d:c04d/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:f9:44:5d brd ff:ff:ff:ff:ff:ff
    altname enp0s8
    inet6 fc00:1234:3::16/64 scope global noprefixroute
        valid_lft forever preferred_lft forever
    inet6 fe80::ac33:cf1a:7796:bb7b/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
m1reseaux@VM1-6:/mnt/partage$ ip -6 route
::1 dev lo proto kernel metric 256 pref medium
fc00:1234:3::/64 dev eth1 proto kernel metric 100 pref medium
fc00:1234:4::/64 via fc00:1234:3::1 dev eth1 metric 1024 pref medium
fe80::/64 dev eth1 proto kernel metric 100 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium

```

VM2 :

```

m1reseaux@VM2:/mnt/partage$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group
default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:8d:c0:4d brd ff:ff:ff:ff:ff:ff
    altname enp0s3
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic eth0
        valid_lft 83840sec preferred_lft 83840sec
    inet6 fe80::a00:27ff:fe8d:c04d/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:94:af:7f brd ff:ff:ff:ff:ff:ff
    altname enp0s8
    inet 172.16.2.132/28 brd 172.16.2.143 scope global noprefixroute eth1
        valid_lft forever preferred_lft forever
    inet6 fe80::d8d8:ba7:71cd:ccf4/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
4: eth2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:3d:c0:60 brd ff:ff:ff:ff:ff:ff
    altname enp0s9
    inet 172.16.2.162/28 brd 172.16.2.175 scope global noprefixroute eth2
        valid_lft forever preferred_lft forever
    inet6 fe80::4e17:e12d:a730:652a/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
m1reseaux@VM2:/mnt/partage$ ip route
10.0.2.0/24 dev eth0 proto kernel scope link src 10.0.2.15
172.16.2.128/28 dev eth1 proto kernel scope link src 172.16.2.132 metric 100

```

172.16.2.160/28 dev eth2 proto kernel scope link src 172.16.2.162 metric 101

VM3 :

```
m1reseaux@VM3:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group
default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:8d:c0:4d brd ff:ff:ff:ff:ff:ff
    altname enp0s3
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic eth0
        valid_lft 83923sec preferred_lft 83923sec
    inet6 fe80::a00:27ff:fe8d:c04d/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:20:2c:65 brd ff:ff:ff:ff:ff:ff
    altname enp0s8
    inet 172.16.2.163/28 brd 172.16.2.175 scope global noprefixroute eth1
        valid_lft forever preferred_lft forever
    inet6 fe80::73fb:17dc:7524:9947/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
4: eth2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:bd:4e:74 brd ff:ff:ff:ff:ff:ff
    altname enp0s9
    inet6 fc00:1234:4::3/64 scope global noprefixroute
        valid_lft forever preferred_lft forever
    inet6 fe80::5dc5:da3c:251f:82d2/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
9: tun0: <POINTOPOINT,MULTICAST,NOARP,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast
state UNKNOWN group default qlen 500
    link/none
    inet6 fc00:1234:ffff::1/64 scope global
        valid_lft forever preferred_lft forever
    inet6 fe80::686:1831:74a4:497/64 scope link stable-privacy
        valid_lft forever preferred_lft forever
m1reseaux@VM3:~$ ip -6 route
::1 dev lo proto kernel metric 256 pref medium
fc00:1234:3::/64 dev tun0 metric 1024 pref medium
fc00:1234:4::/64 dev eth2 proto kernel metric 101 pref medium
fc00:1234:ffff::/64 dev tun0 proto kernel metric 256 pref medium
fe80::/64 dev eth1 proto kernel metric 100 pref medium
fe80::/64 dev eth2 proto kernel metric 101 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium
fe80::/64 dev tun0 proto kernel metric 256 pref medium
```

VM1-6 :

```
m1reseaux@VM1-6:/mnt/partage$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group
default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
```

```

    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:8d:c0:4d brd ff:ff:ff:ff:ff:ff
    altname enp0s3
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic eth0
        valid_lft 84024sec preferred_lft 84024sec
    inet6 fe80::a00:27ff:fe8d:c04d/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:f9:44:5d brd ff:ff:ff:ff:ff:ff
    altname enp0s8
    inet6 fc00:1234:3::16/64 scope global noprefixroute
        valid_lft forever preferred_lft forever
    inet6 fe80::ac33:cf1a:7796:bb7b/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
m1reseaux@VM1-6:/mnt/partage$ ip -6 route
::1 dev lo proto kernel metric 256 pref medium
fc00:1234:3::/64 dev eth1 proto kernel metric 100 pref medium
fc00:1234:4::/64 via fc00:1234:3::1 dev eth1 metric 1024 pref medium
fe80::/64 dev eth1 proto kernel metric 100 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium

```

VM3-6 :

```

m1reseaux@VM3-6:/mnt/partage$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group
default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:8d:c0:4d brd ff:ff:ff:ff:ff:ff
    altname enp0s3
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic eth0
        valid_lft 83819sec preferred_lft 83819sec
    inet6 fe80::a00:27ff:fe8d:c04d/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
group default qlen 1000
    link/ether 08:00:27:fe:75:87 brd ff:ff:ff:ff:ff:ff
    altname enp0s8
    inet6 fc00:1234:4::36/64 scope global noprefixroute
        valid_lft forever preferred_lft forever
    inet6 fe80::f852:4aae:ad3d:5d3a/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
m1reseaux@VM3-6:/mnt/partage$ ip -6 route
::1 dev lo proto kernel metric 256 pref medium
fc00:1234:3::/64 via fc00:1234:4::3 dev eth1 metric 1024 pref medium
fc00:1234:4::/64 dev eth1 proto kernel metric 100 pref medium
fe80::/64 dev eth1 proto kernel metric 100 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium

```


4.2. Couche 3

- ping de VM1-6 vers VM3-6 :

```
m1reseaux@VM1-6:/mnt/partage$ ping6 fc00:1234:4::36
PING fc00:1234:4::36(fc00:1234:4::36) 56 data bytes
64 bytes from fc00:1234:4::36: icmp_seq=1 ttl=62 time=4.25 ms
64 bytes from fc00:1234:4::36: icmp_seq=2 ttl=62 time=3.24 ms
64 bytes from fc00:1234:4::36: icmp_seq=3 ttl=62 time=3.15 ms
^C
--- fc00:1234:4::36 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2005ms
rtt min/avg/max/mdev = 3.148/3.545/4.252/0.501 ms
```

- ping de VM1-6 vers VM3 :

```
m1reseaux@VM1-6:/mnt/partage$ ping6 fc00:1234:4::3
PING fc00:1234:4::3(fc00:1234:4::3) 56 data bytes
64 bytes from fc00:1234:4::3: icmp_seq=1 ttl=63 time=2.79 ms
64 bytes from fc00:1234:4::3: icmp_seq=2 ttl=63 time=2.38 ms
64 bytes from fc00:1234:4::3: icmp_seq=3 ttl=63 time=2.33 ms
^C
--- fc00:1234:4::3 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2004ms
rtt min/avg/max/mdev = 2.326/2.499/2.789/0.206 ms
```

- ping VM3-6 vers VM1-6 :

```
m1reseaux@VM3-6:/mnt/partage$ ping6 fc00:1234:3::16
PING fc00:1234:3::16(fc00:1234:3::16) 56 data bytes
64 bytes from fc00:1234:3::16: icmp_seq=1 ttl=62 time=3.06 ms
64 bytes from fc00:1234:3::16: icmp_seq=2 ttl=62 time=3.23 ms
64 bytes from fc00:1234:3::16: icmp_seq=3 ttl=62 time=2.98 ms
^C
--- fc00:1234:3::16 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 2.976/3.088/3.225/0.103 ms
```

- ping VM3-6 vers VM1 :

```
m1reseaux@VM3-6:/mnt/partage$ ping6 fc00:1234:3::1
```

```
PING fc00:1234:3::1(fc00:1234:3::1) 56 data bytes
```

```
64 bytes from fc00:1234:3::1: icmp_seq=1 ttl=63 time=2.44 ms
```

```
64 bytes from fc00:1234:3::1: icmp_seq=2 ttl=63 time=2.32 ms
```

```
64 bytes from fc00:1234:3::1: icmp_seq=3 ttl=63 time=2.31 ms
```

```
^C
```

```
--- fc00:1234:3::1 ping statistics ---
```

```
3 packets transmitted, 3 received, 0% packet loss, time 2007ms
```

```
rtt min/avg/max/mdev = 2.305/2.356/2.443/0.061 ms
```