

M2-ESECURE Rezo avancé

Corrigé du TP10: NAT64 et DNS64

Jean Saquet
jean.saquet@unicaen.fr

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1 Introduction

Nous utiliserons le réseau de la figure 1
m3 et m4 seront les machines de notre réseau “V6-only”.

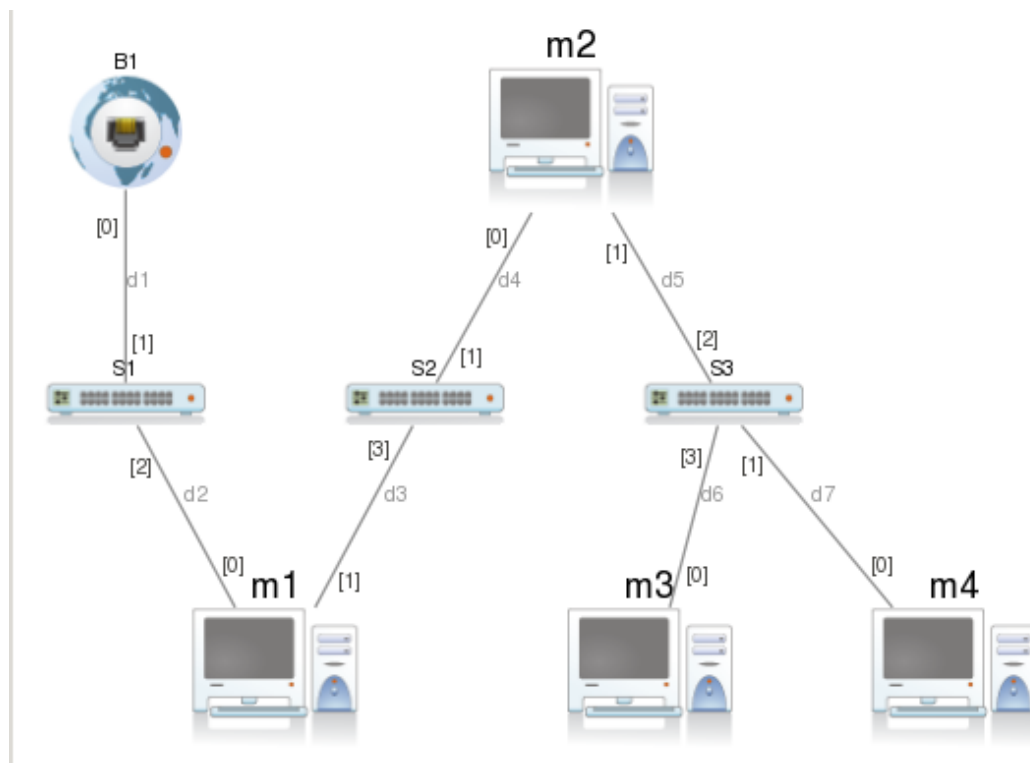


FIGURE 1 – Le réseau utilisé

2 Configuration adresses et routage

2.1 interfaces de m1

```
auto eth0
iface eth0 inet static
    address 192.168.128.31
    netmask 255.255.255.0
    gateway 192.168.128.1

iface eth0 inet6 static
    address 2001:660:7101:ffff:20::2f
    netmask 80
    gateway 2001:660:7101:ffff:20::1

auto eth1
iface eth1 inet static
    address 192.168.31.1
    netmask 255.255.255.0

iface eth1 inet6 static
    address 2001:660:7101:2f::1
    netmask 64
```

2.2 ripngd de m1

```
hostname ripng1
password zebra
enable password zebra
router ripng
network eth0
route 2001:660:7101:2f::/64
network eth1
distribute-list local-only out eth0
distribute-list local-only out eth1
!
log stdout
```

2.3 interfaces de R1

```
auto eth0
iface eth0 inet static
    address 192.168.31.2
    netmask 255.255.255.192
    gateway 192.168.31.1

iface eth0 inet6 static
    address 2001:660:7101:2f::2
    netmask 64
    gateway 2001:660:7101:2f::1
```

```

auto eth1
iface eth1 inet6 static
    address 2001:660:7101:1f::1
    netmask 64

```

2.4 ripngd de R1

```

hostname ripng2
password zebra
enable password zebra
router ripng
network eth0
route 2001:660:7101:1f::/64
distribute-list local-only out eth0
!
log stdout

```

Sur les machines m3 et m4, on configurera manuellement une adresse v6 du réseau 2001:660:7101:1f::/64. Exemple sur m3 :

```

auto eth0
iface eth0 inet6 static
    address 2001:660:7101:1f::3
    netmask 64
    gateway 2001:660:7101:1f::1

```

3 NAT64 et DNS64

3.1 DNS64

Cette partie est simple.
Configuration de totd sur m3 :

```

more /etc/totd.conf
forwarder 2001:660:7101:ffff:20::1 port 53
prefix 3ffe:ffff:cafe:baba:dead:fade::
port 53
pidfile /var/run/totpid

```

Configuration du resolv.conf sur m4 :

```

more /etc/resolv.conf
\# enlever la première ligne en TP marionnet SVP
\#nameserver 10.14.32.30
\#nameserver 192.168.128.1
nameserver 2001:660:7101:1f::3

```

3.2 NAT64

Points à modifier dans le fichier `tayga.conf` :

```
tun-device nat64
```

```
ipv4-addr 192.168.31.64
```

```
prefix 3ffe:ffff:cafe:baba:dead:fade::/96
```

```
dynamic-pool 192.168.31.64/31
```

```
data-dir /var/db/tayga
```

NAT sur m1 : `iptables -t nat -A POSTROUTING -s 192.168.31.64/31 -o eth0 -j MASQUERADE`
Commandes sur R1 :

```
tayga --mktun
```

```
ip link set nat64 up
```

```
ip addr add 192.168.31.2 dev nat64
```

```
ip addr add 2001:660:7101:2F::2 dev nat64
```

```
ip route add 192.168.31.64/31 dev nat64
```

```
ip route add 3ffe:ffff:cafe:baba:dead:fade::/96 dev nat64
```

```
tayga
```

enfin le arp pour pallier le bug :

```
arp -s 192.168.31.65 jadresse mac de eth0 de m2j
```

Vous devriez alors pouvoir consulter www.microsoft.com à partir d'e m3