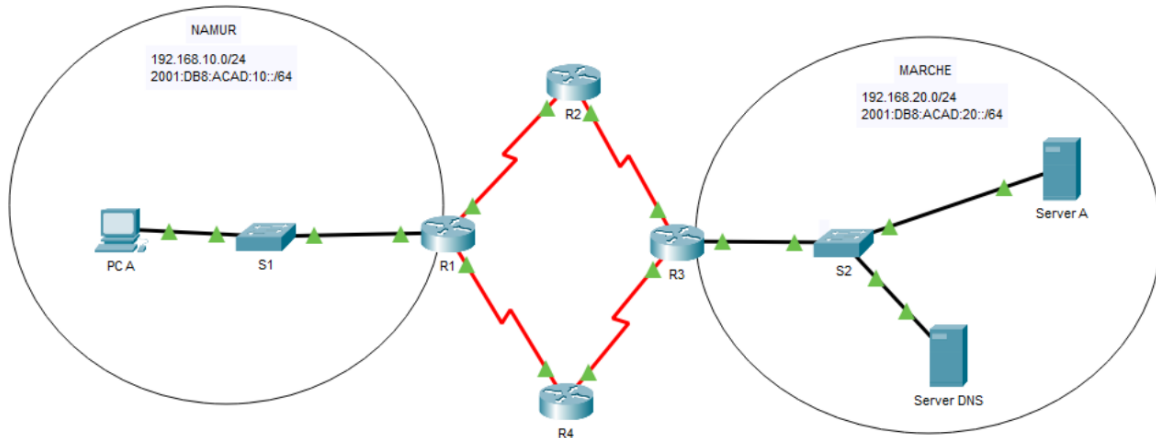


Labo n°3 : Dual Stack

-> Morgan Valentin

Schéma du labo :



Répartitions des adresses IP

Host/Device	Interface	IP	IPv6
R1	g0/0	192.168.10.1	2001:DB8:ACAD:10::/64 => EUI-64
R1 (=> R2)	s0/0/0	10.10.10.1	2001:DB8:ACAD:100::1/64
R1 (=> R4)	s0/0/1	10.10.10.9	2001:DB8:ACAD:102::1/64

Host/Device	Interface	IP	IPv6
R2 (=> R1)	s0/0/0	10.10.10.2	2001:DB8:ACAD:100::2/64
R2 (=> R3)	s0/0/1	10.10.10.5	2001:DB8:ACAD:101::1/64

Host/Device	Interface	IP	IPv6
R3	g0/0	192.168.20.1	2001:DB8:ACAD:20::1/64
R3 (=> R4)	s0/0/0	10.10.10.14	2001:DB8:ACAD:103::2/64
R3 (=> R2)	s0/0/1	10.10.10.6	2001:DB8:ACAD:101::2/64

Host/Device	Interface	IP	IPv6
R4 (=> R3)	s0/0/0	10.10.10.13	2001:DB8:ACAD:103::1/64
R4 (=> R1)	s0/0/1	10.10.10.10	2001:DB8:ACAD:102::2/64

R1

```
hostname R1
```

```
no ip domain-lookup
```

```
ipv6 unicast-routing
```

int g0/0

```
description vers Namur
```

```
ip add 192.168.10.1 255.255.255.0
```

```
ipv6 address 2001:DB8:ACAD:10::/64 eui-64
```

```
ipv6 address FE80::1 link-local
```

```
no shut
```

int s0/0/0

```
description vers R2
```

```
ip add 10.10.10.1 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:100::1/64
```

```
ipv6 address FE80::1 link-local
```

```
no shut
```

int s0/0/1

```
description vers R4
```

```
ip add 10.10.10.9 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:102::1/64
```

```
ipv6 address FE80::1 link-local
```

```
no shut
```

```
ip dhcp excluded-address 192.168.10.1
```

ip dhcp pool pool-ipv4

```
network 192.168.10.0 255.255.255.0
```

```
default-router 192.168.10.1
```

```
dns-server 192.168.20.250
```

! Pour accéder au réseau de Marche

```
ip route 192.168.20.0 255.255.255.0 s0/0/0
```

```
ip route 192.168.20.0 255.255.255.0 s0/0/1
```

```
ipv6 route 2001:DB8:ACAD:20::/64 s0/0/0
```

```
ipv6 route 2001:DB8:ACAD:20::/64 s0/0/1
```

R2

```
hostname R2
```

```
no ip domain-lookup
```

```
ipv6 unicast-routing
```

int s0/0/0

```
description vers R1
```

```
ip add 10.10.10.2 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:100::2/64
```

```
ipv6 address FE80::2 link-local
```

```
no shut
```

int s0/0/1

```
description vers R3
```

```
ip add 10.10.10.5 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:101::1/64
```

```
ipv6 address FE80::2 link-local
```

```
no shut
```

! Pour accéder au réseau de Marche - Passer par R3

```
ip route 192.168.20.0 255.255.255.0 s0/0/1
```

```
ipv6 route 2001:DB8:ACAD:20::/64 s0/0/1
```

! Pour accéder au réseau de Namur - Passer par R1

```
ip route 192.168.10.0 255.255.255.0 s0/0/0
```

```
ipv6 route 2001:DB8:ACAD:10::/64 s0/0/0
```

R3

```
hostname R3
```

```
no ip domain-lookup
```

```
ipv6 unicast-routing
```

int g0/0

```
description vers Marche
```

```
ip add 192.168.20.1 255.255.255.0
```

```
ipv6 address 2001:DB8:ACAD:20::1/64
```

```
ipv6 address FE80::3 link-local
```

```
no shut
```

int s0/0/0

```
description vers R4
```

```
ip add 10.10.10.14 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:103::2/64
```

```
ipv6 address FE80::3 link-local
```

```
no shut
```

int s0/0/1

```
description vers R2
```

```
ip add 10.10.10.6 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:101::2/64
```

```
ipv6 address FE80::3 link-local
```

```
no shut
```

! Pour accéder au réseau de Namur

```
ip route 192.168.10.0 255.255.255.0 s0/0/0
```

```
ip route 192.168.10.0 255.255.255.0 s0/0/1
```

```
ipv6 route 2001:DB8:ACAD:10::/64 s0/0/0
```

```
ipv6 route 2001:DB8:ACAD:10::/64 s0/0/1
```

R4

```
hostname R4
```

```
no ip domain-lookup
```

```
ipv6 unicast-routing
```

int s0/0/0

```
description vers R3
```

```
ip add 10.10.10.13 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:103::1/64
```

```
ipv6 address FE80::4 link-local
```

```
no shut
```

int s0/0/1

```
description vers R1
```

```
ip add 10.10.10.10 255.255.255.252
```

```
ipv6 add 2001:DB8:ACAD:102::2/64
```

```
ipv6 address FE80::4 link-local
```

```
no shut
```

! Pour accéder au réseau de Marche - Passer par R3

```
ip route 192.168.20.0 255.255.255.0 s0/0/0
```

```
ipv6 route 2001:DB8:ACAD:20::/64 s0/0/0
```

! Pour accéder au réseau de Namur - Passer par R1

```
ip route 192.168.10.0 255.255.255.0 s0/0/1
```

```
ipv6 route 2001:DB8:ACAD:10::/64 s0/0/1
```

Server A	
ipv4 address	192.168.20.10
Subnet Mask	255.255.255.0
Default Gateway	192.168.20.1
DNS Server	192.168.20.250
ipv6 address	2001:DB8:ACAD:20::10/64
link local address	FE80::10
ipv6 gateway	2001:DB8:ACAD:20::1
ipv6 DNS Server	2001:DB8:ACAD:20::250

Server DNS	
ipv4 address	192.168.20.250
Subnet Mask	255.255.255.0
Default Gateway	192.168.20.1
DNS Server	192.168.20.250
ipv6 address	2001:DB8:ACAD:20::250/64
link local address	FE80::250
ipv6 gateway	2001:DB8:ACAD:20::1
ipv6 DNS Server	2001:DB8:ACAD:20::250

(DNS)

Domain name	Record Type	Value
server_a	A	192.168.20.250
server_a_v6	AAAA	2001:DB8:ACAD:20::250