Labo n°5: VLAN et routage inter-VLAN

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Schéma du labo:

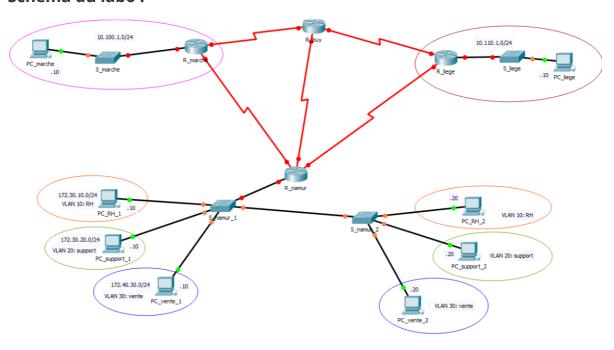


Table d'adressage

Host	Network	IP range	Broadcast
LAN3 (60)	172.16.30. 0	172.16.30. 1 => 172.16.30. 62	172.16.30.63
LAN1 (20)	172.16.30. 64	172.16.30. 65 => 172.16.30. 94	172.16.30.95
LAN2 (7)	172.16.30. 96	172.16.30. 97 => 172.16.30. 110	172.16.30.111
WAN12	172.16.30. 112	172.16.30. 113 => 172.16.30. 114	172.16.30.115
WAN13	172.16.30. 116	172.16.30. 117 => 172.16.30. 118	172.16.30.119
WAN23	172.16.30. 120	172.16.30. 121 => 172.16.30. 122	172.16.30.123

Répartitions des adresses IP

Host/Device	Interface	IP	Mask
R_marche	g0/0	10.100.1.1	255.255.255.0 (/24)
R_marche	s0/0/0	192.168.10.9	255.255.255.252 (/30)
R_marche	s0/0/1	192.168.10.1	255.255.255.252 (/30)

Host/Device	Interface	IP	Mask
R_huy	s0/0/0	192.168.10.5	255.255.255.252 (/30)
R_huy	s0/0/1	192.168.10.13	255.255.255.252 (/30)
R_huy	s0/1/0	192.168.10.2	255.255.255.252 (/30)

Host/Device	Interface	IP	Mask
R_liege	g0/0	10.110.1.1	255.255.255.0 (/24)
R_liege	s0/0/0	192.168.10.6	255.255.255.252 (/30)
R_liege	s0/0/1	192.168.10.17	255.255.255.252 (/30)

Host/Device	Interface	IP	Mask
R_namur	s0/0/0	192.168.10.10	255.255.255.252 (/30)
R_namur	s0/0/1	192.168.10.14	255.255.255.252 (/30)
R_namur	s0/1/0	192.168.10.18	255.255.255.252 (/30)
R_namur	g0/0.10	172.30.10.1	255.255.255.0 (/24)
R_namur	g0/0.20	172.30.20.1	255.255.255.0 (/24)
R_namur	g0/0.30	172.40.30.1	255.255.255.0 (/24)

R_marche

hostname R_marche

int g0/0

```
ip address 10.100.1.1 255.255.255.0
```

no shut

int s0/0/0

ip address 192.168.10.9 255.255.255.252

no shut

int s0/0/1

ip address 192.168.10.1 255.255.255.252

no shut

router rip

version 2

passive-interface g0/0

network 10.0.0.0

network 192.168.10.0

no auto-summary

R_huy

hostname R_huy

int s0/0/0

ip address 192.168.10.5 255.255.252

no shut

int s0/0/1

ip address 192.168.10.13 255.255.255.252

no shut

int s0/1/0

ip address 192.168.10.2 255.255.255.252

no shut

router rip

version 2

network 192.168.10.0

no auto-summary

R_liege

hostname R_liege

int g0/0

```
ip address 10.110.1.1 255.255.255.0
```

no shut

int s0/0/0

ip address 192.168.10.6 255.255.255.252

no shut

int s0/0/1

ip address 192.168.10.17 255.255.255.252

no shut

router rip

version 2

passive-interface g0/0

network 10.0.0.0

network 192.168.10.0

no auto-summary

R_namur

hostname R_namur

int g0/0

no shut

int g0/0.10

encapsulation dot1Q 10

ip address 172.30.10.1 255.255.255.0

int g0/0.20

encapsulation dot1Q 20

ip address 172.30.20.1 255.255.255.0

int g0/0.30

encapsulation dot1Q 30

ip address 172.40.30.1 255.255.255.0

int s0/0/0

ip address 192.168.10.10 255.255.252

no shut

int s0/0/1

ip address 192.168.10.14 255.255.255.252

no shut

int s0/1/0

ip address 192.168.10.18 255.255.255.252

no shut

router rip

version 2

passive-interface g0/0.10

passive-interface g0/0.20

network 172.30.0.0

network 192.168.10.0

no auto-summary

S_namur_1

```
hostname S_namur_1
ip domain-name henallux.be
username ssh secret ssh
  int f0/1
  switchport access vlan 10
  switchport mode access
  int f0/9
  switchport access vlan 20
  switchport mode access
 int f0/17
  switchport access vlan 30
  switchport mode access
 int g0/1
 switchport mode trunk
 int g0/2
  switchport mode trunk
 int Vlan20
  ip address 172.30.20.30 255.255.255.0
```

ip default-gateway 172.30.20.1

line vty 04

login local

transport input ssh

S_namur_2

```
hostname S_namur_2
ip domain-name henallux.be
username ssh secret ssh
```

int f0/1

switchport access vlan 10 switchport mode access

int f0/9

switchport access vlan 20 switchport mode access

int f0/17

switchport access vlan 30 switchport mode access

int g0/2

switchport mode trunk

int Vlan20

ip address 172.30.20.40 255.255.255.0

ip default-gateway 172.30.20.1

line vty 04

login local

transport input ssh

PC_RH_1

ipv4 address	172.30.10.10	
Subnet Mask	255.255.255.0	
Default Gateway	172.30.10.1	

PC_RH_2

ipv4 address	172.30.10.20
Subnet Mask	255.255.255.0
Default Gateway	172.30.10.1

PC_support_1

ipv4 address	172.30.20.10
Subnet Mask	255.255.255.0
Default Gateway	172.30.20.1

PC_support_2

ipv4 address	172.30.20.20
Subnet Mask	255.255.255.0
Default Gateway	172.30.20.1

PC_vente_1

ipv4 address	172.40.30.10
Subnet Mask	255.255.255.0
Default Gateway	172.40.30.1

PC_vente_2

ipv4 address	172.40.30.20
Subnet Mask	255.255.255.0
Default Gateway	172.40.30.1