

# Université Sultan Moulay Slimane Faculté Polydisciplinaire Béni Mellal Département INFORMATIQUE (MIP)

Filière : Science de données et sécurité des systèmes d'information

A.U: 2023-2024

Module: Réseaux Informatiques

Sujet



Présenté Par :

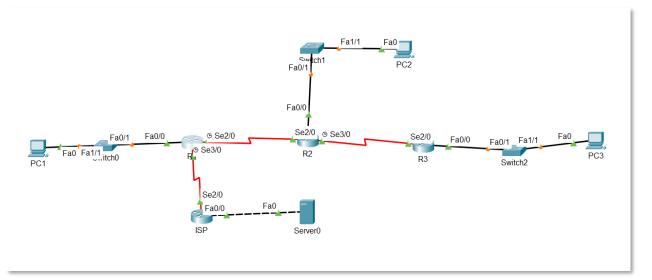
MAFTOUH Omar

**KHADIM Mohamed Hamza** 

Encadré Par:

Pr: FARISS Meriam

#### Partie 01



#### 1. Configuration de R1:

# a. Configuration initiale:

```
Router(config)#hostname R1
R1(config) #INT FA0/0
R1(config-if) #ip address 192.168.1.1 255.255.255.0
R1(config-if) #no shutdown
R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R1(config-if) #INT se2/0
R1(config-if) #ip address 192.168.2.1 255.255.255.0
R1(config-if)#clock rate 128000
R1(config-if) #no shutdown
%LINK-5-CHANGED: Interface Serial2/0, changed state to down
R1(config-if) #INT se3/0
R1(config-if)#ip address 192.168.6.1 255.255.255.0
R1(config-if)#clock rate 128000
R1(config-if) #no shutdown
%LINK-5-CHANGED: Interface Serial3/0, changed state to down
```

# b. Routage statique:

# R1(config)#ip route 0.0.0.0 0.0.0.0 S3/0

# c. Configuration RIP:

```
R1(config) #router rip
R1(config-router) #version 2
R1(config-router) #no auto-summary
R1(config-router) #network 192.168.1.0
R1(config-router) #network 192.168.2.0
R1(config-router) #network 192.168.6.0
R1(config-router) #passive-interface fa0/0
```

#### 2. Configuration de R2:

#### a. Configuration initiale:

```
Router(config) #hostname R2
R2(config)#int fa0/0
R2(config-if)#ip address 192.168.3.1 255.255.255.0
R2(config-if) #no shutdown
R2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R2(config-if)#int s2/0
R2(config-if)#ip address 192.168.2.2 255.255.255.0
R2(config-if) #no shutdown
R2(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
R2(config-if)#int s/0
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state
R2(config-if)#int s3/0
R2(config-if)#ip address 192.168.4.1 255.255.255.0
R2(config-if)#clock rate 128000
R2(config-if) #no shutdown
%LINK-5-CHANGED: Interface Serial3/0, changed state to down
```

#### b. Configuration RIP:

```
R2(config) #router rip
R2(config-router) #version 2
R2(config-router) #no auto-summary
R2(config-router) #network 192.168.2.0
R2(config-router) #network 192.168.3.0
R2(config-router) #network 192.168.4.0
R2(config-router) #passive-interface fa0/0
```

### 3. Configuration de R3:

#### a. Configuration initiale:

```
R2(config) #router rip
R2(config-router) #version 2
R2(config-router) #no auto-summary
R2(config-router) #network 192.168.2.0
R2(config-router) #network 192.168.3.0
R2(config-router) #network 192.168.4.0
R2(config-router) #passive-interface fa0/0
```

```
R3(config-if) #int fa0/0
R3(config-if) #ip address 192.168.5.1 255.255.255.0
R3(config-if) #no shutdown
R3(config-if) #
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

#### b. Configuration RIP:

```
R3(config) #router rip
R3(config-router) #version 2
R3(config-router) #no auto-summary
R3(config-router) #network 192.168.4.0
R3(config-router) #network 192.168.5.0
R3(config-router) #passive-interface fa0/0
```

#### 1. Configuration de ISP:

#### a. Configuration initiale:

```
Router(config) #hostname ISP
ISP(config) #int fa0/0
ISP(config-if) #ip address 64.100.0.1 255.255.0.0
ISP(config-if) #no shutdown

ISP(config-if) #
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

ISP(config-if) #int se2/0
ISP(config-if) #ip address 192.168.6.2 255.255.255.0
ISP(config-if) #no shutdown

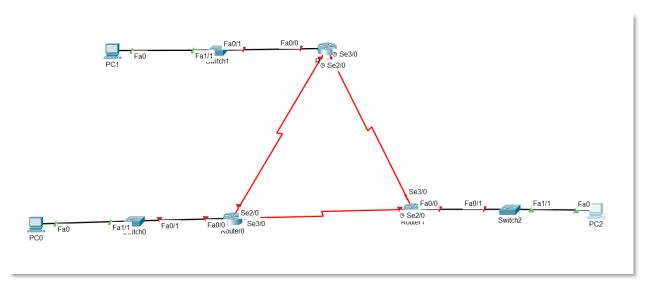
ISP(config-if) #
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
```

#### b. Routage statique:

ISP(config) #ip route 192.168.0.0 255.255.248.0 se2/0

Résultat final										
Fire	Last Status	Source	Destination	Туре	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC1	PC3	ICMP		0.000	N	0	(edit)	(delete)
•	Successful	PC2	Server0	ICMP		0.000	N	1	(edit)	(delete)
•	Successful	Server0	PC3	ICMP		0.000	N	2	(edit)	(delete)

### Partie 2: Configuration OSPF dans une zone unique:



#### 1. Sur R1:

```
R1(config) #router ospf 10
R1(config-router) #router-id 1.1.1.1
R1(config-router) #network 172.16.1.0 0.0.0.255 area 0
R1(config-router) #network 172.16.3.0 0.0.0.255 area 0
R1(config-router) #network 192.168.10.8 0.0.0.3 area 0
R1(config-router) #passive-interface fa0/0
```

#### 2. Sur R2:

```
R2(config) #router ospf 10
R2(config-router) #router-id 2.2.2.2
R2(config-router) #network 172.16.2.0 0.0.0.255 area 0
R2(config-router) #network 172.16.3.0 0.0.0.3 area 0
R2(config-router) #network 172.16.3.0 0.0.0.3 area 0
00:25:17: %OSPF-5-ADJCHG: Process 10, Nbr 1.1.1.1 on Seria 0
R2(config-router) #network 172.16.10.8 0.0.0.3 area 0
R2(config-router) #passive-interface fa0/0
```

#### 3. Sur R3:

```
R3(config) #router oSpf 10
R3(config-router) #router-id 3.3.3.3
R3(config-router) #network 192.168.1.0 0.0.0.255 area 0
R3(config-router) #network 192.168.10.4 0.0.0.3 area 0
R3(config-router) #network 192.168.10.8 0.0.0.3 area 0
R3(config-router) #passive-interface fa0/0
R3(config-router) #
```