

1 Configuration des Routeurs :

Etapes 1 : Configuration du routeur principal

```
Router>
Router>
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip address 192.168.200.253 255.255.255.0
Router(config-if)#no shut

Router(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

Router(config-if)#
Router(config-if)#int S2/0
Router(config-if)#ip address 200.100.10.253 255.255.255.252
Router(config-if)#no shut

%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#ex
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Etapes 2 : Configuration du routeur de Secours :

```
Router(config)#int fa0/0
Router(config-if)#ip address 192.168.200.254 255.255.255.0
Router(config-if)#no shut

Router(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

Router(config-if)#
Router(config-if)#
Router(config-if)#
Router(config-if)#int s2/0
Router(config-if)#ip address 200.100.20.253 255.255.255.252
Router(config-if)#no shut

%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#ex
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#
Router#
Router#sh ip int br
Interface                IP-Address      OK? Method Status          Protocol
FastEthernet0/0          192.168.200.254 YES manual  up              up
FastEthernet1/0          unassigned      YES unset  administratively down down
Serial2/0                 200.100.20.253 YES manual  down            down
Serial3/0                 unassigned      YES unset  administratively down down
FastEthernet4/0          unassigned      YES unset  administratively down down
FastEthernet5/0          unassigned      YES unset  administratively down down
Router#
```

Etapes 3 Configuration Routeur Sièges :

```
Router(config-if)#
Router(config-if)#ip address s2/0
      ^
% Invalid input detected at '^' marker.

Router(config-if)#int s2/0
Router(config-if)#ip address 200.100.10.254 255.255.255.252
Router(config-if)#no shut

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

Router(config-if)#
Router(config-if)#ip address 200.100.
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, chang
% Ambiguous command: "ip a"
Router(config-if)#
Router(config-if)#
Router(config-if)#
Router(config-if)#ip address s3/0
      ^
% Invalid input detected at '^' marker.

Router(config-if)#int s3/0
Router(config-if)#ip address 200.100.20.254 255.255.255.252
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
```

2 Mise en place du Routage RIP

Routage sur le routeur Sièges :

```
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 192.168.10.0
Router(config-router)#network 200.100.10.0
Router(config-router)#network 200.100.20.0
Router(config-router)#exit
Router(config)#
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route

Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, FastEthernet0/0
C    200.100.10.0/30 is subnetted, 1 subnets
C      200.100.10.252 is directly connected, Serial2/0
C    200.100.20.0/30 is subnetted, 1 subnets
C      200.100.20.252 is directly connected, Serial3/0
```

Routage du Routeur principal :

```
Router(config)#
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 200.100.10.0
Router(config-router)#network 192.168.200.0
Router(config-router)#exit
Router(config)#
```

Routage du Routeur de Secours :

```
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 200.100.20.0
Router(config-router)#network 192.168.200.0
Router(config-router)#exit
Router(config)#
```

Une fois tous configuré on ping nos pc et nos serveurs pour confirmer la connectivité

3 Mise en place du HSRP

Dans le routeur Principal

```
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#standby 100 ip 192.168.200.1
Router(config-if)#standby 100 preempt
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Dans le routeur de secours :



```
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#standby 100 ip 192.168.200.1
Router(config-if)#standby 100 priority 110
Router(config-if)#en
%HSRP-6-STATECHANGE: FastEthernet0/0 Grp 100 state Speak -> Standby

% Ambiguous command: "en"
Router(config)#
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Une fois terminé on désactive le routeur, par exemple on éteint une interface (INT S2/0) :

Serial2/0	
Port Status	<input type="checkbox"/> On
Duplex	<input checked="" type="radio"/> Full Duplex
Clock Rate	2000000 ▼

Mais grâce au protocole HSRP le Routeur de secours reprend le relais :

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	Server1	PC3	ICMP		0.000	N	0	(edit)	