Dynamic Multipoint VPN

CONFIGURATION

Matiere: Conception et
Implémentation
d'un Réseau
Sécurisé
Code: NET379
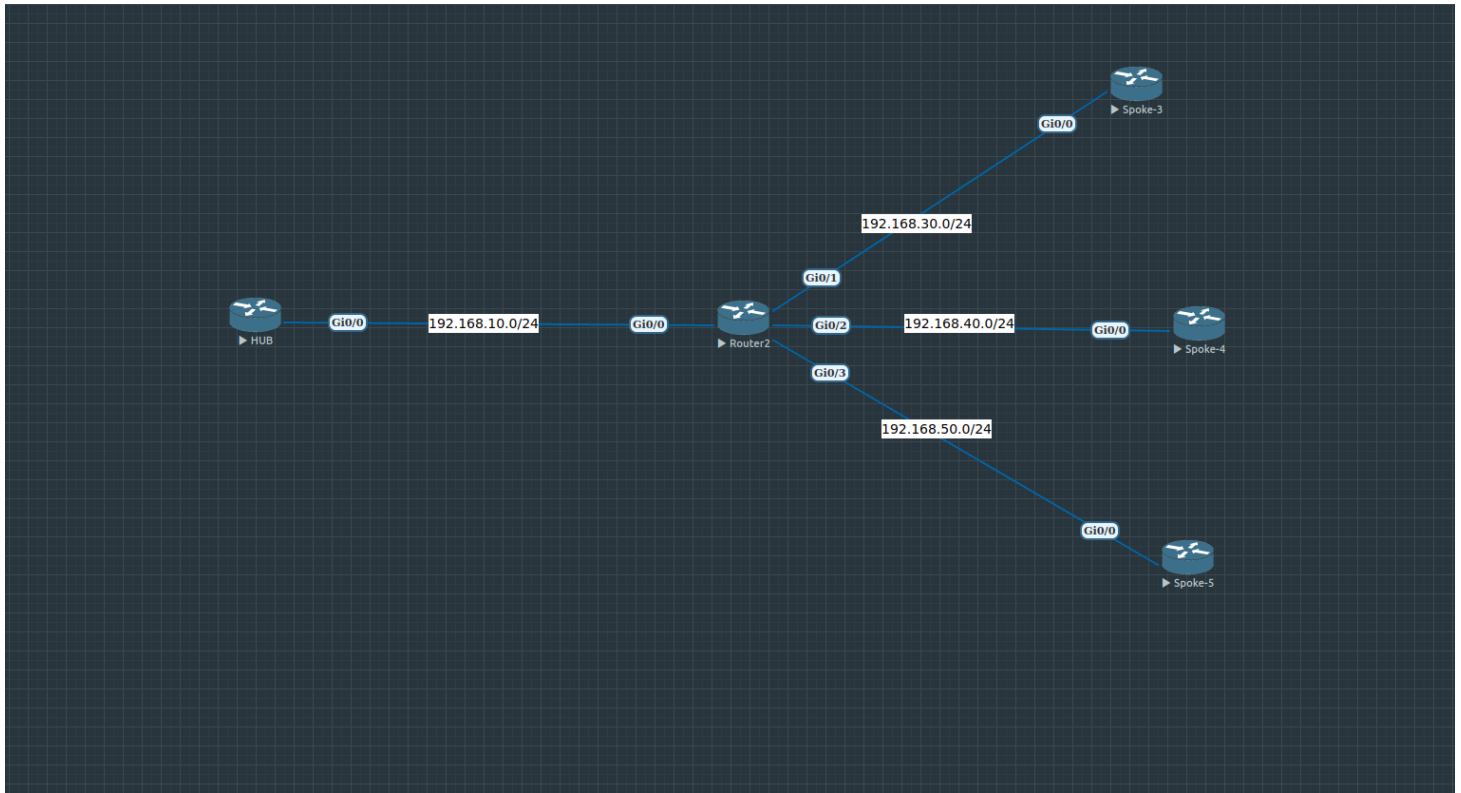Professeur: M. NOUGBEGNON
ELISEE
Etudiant: AHLIDZA K.
 Emmanuel
Annee universitaire:2021-2022

IPNET INSTITUTE OF TECHNOLOGY

TOPOLOGIE

- **HUB**

HUB#sh run

Building configuration...

hostname HUB

!

!

crypto isakmp policy 1

encr 3des

hash md5

authentication pre-share

crypto isakmp key 6 Emma@2204 address 0.0.0.0

!

!

```
crypto ipsec transform-set
venus esp-3des
mode tunnel
!
crypto ipsec profile DMVPN
set transform-set venus
!
interface Tunnel0
ip address 100.100.100.1
255.255.255.0
no ip redirects
ip mtu 1416
ip nhrp map multicast
dynamic
ip nhrp network-id 1
tunnel source 192.168.10.2
tunnel mode gre multipoint
tunnel protection ipsec profile
DMVPN
```

```
!
interface GigabitEthernet0/0
ip address 192.168.10.2
255.255.255.0
duplex full
speed 100
media-type rj45
!
ip route 192.168.30.2
255.255.255.255 192.168.10.1
ip route 192.168.40.2
255.255.255.255 192.168.10.1
ip route 192.168.50.2
255.255.255.255 192.168.10.1
!
end

HUB#
```

Router2

```
Router2#sh run

Building configuration...

! Last configuration change at
12:34:25 UTC Thu Mar 24 2022
!
hostname Router2
!
interface Loopback0
no ip address
!
interface GigabitEthernet0/0
ip address 192.168.10.1
255.255.255.0
duplex auto
speed auto
media-type rj45
!

interface GigabitEthernet0/1
ip address 192.168.30.1
255.255.255.0
duplex auto
speed auto
media-type rj45
!
interface GigabitEthernet0/2
ip address 192.168.40.1
255.255.255.0
duplex auto
speed auto
media-type rj45
!
interface GigabitEthernet0/3
ip address 192.168.50.1
255.255.255.0
duplex auto
speed auto
```

```
media-type rj45
!
!
end


Router2#
    Spoke-3
Spoke-3#sh run
Building configuration...


!
! Last configuration change at
12:34:35 UTC Thu Mar 24 2022
!
hostname Spoke-3
!
crypto isakmp policy 1
encr 3des

hash md5
authentication pre-share
crypto isakmp key 6
Emma@2204 address 0.0.0.0
!
!
crypto ipsec transform-set
venus esp-3des
mode tunnel
!
crypto ipsec profile DMVPN
set transform-set venus
!
interface Loopback0
ip address 3.3.3.3 255.255.255.0
!
interface Tunnel0
ip address 100.100.100.2
255.255.255.0
```

no ip redirects

ip mtu 1416

ip nhrp map 100.100.100.1
192.168.10.2

ip nhrp map multicast
192.168.10.2

ip nhrp network-id 1

ip nhrp nhs 100.100.100.1

tunnel source 192.168.30.2

tunnel mode gre multipoint

tunnel protection ipsec profile
DMVPN

!

interface GigabitEthernet0/0

ip address 192.168.30.2
255.255.255.0

duplex auto

speed auto

media-type rj45

!

ip route 192.168.10.2
255.255.255.255 192.168.30.1

!

end

Spoke-3#

Spoke-4

Spoke-4#sh run

! Last configuration change at
12:27:28 UTC Thu Mar 24 2022

!

hostname Spoke-4

!

crypto isakmp policy 1

encr 3des

hash md5

authentication pre-share

```
crypto isakmp key 6
Emma@2204 address 0.0.0.0
!
!
crypto ipsec transform-set
venus esp-3des
mode tunnel
!
crypto ipsec profile DMVPN
set transform-set venus
!
interface Loopback0
ip address 4.4.4.4 255.255.255.0
!
interface Tunnel0
ip address 100.100.100.3
255.255.255.0
no ip redirects
ip mtu 1416

ip nhrp map 100.100.100.1
192.168.10.2
ip nhrp map multicast
192.168.10.2
ip nhrp network-id 1
ip nhrp nhs 100.100.100.1
tunnel source 192.168.40.2
tunnel mode gre multipoint
tunnel protection ipsec profile
DMVPN
!
interface GigabitEthernet0/0
ip address 192.168.40.2
255.255.255.0
duplex auto
speed auto
media-type rj45
!
ip route 192.168.10.2
```

255.255.255.255 192.168.40.1

!

end

Spoke-4#

<u>Spoke-5</u>

Spoke-5#sh run

!

! Last configuration change at 12:26:59 UTC Thu Mar 24 2022

!

hostname Spoke-5

!

crypto isakmp policy 1

encr 3des

hash md5

authentication pre-share

crypto isakmp key 6 Emma@2204 address 0.0.0.0

!

crypto ipsec transform-set venus esp-3des

mode tunnel

!

crypto ipsec profile DMVPN

set transform-set venus

!

interface Loopback0

ip address 5.5.5.5 255.255.255.0

!

interface Tunnel0

ip address 100.100.100.4 255.255.255.0

no ip redirects

ip mtu 1416

```
ip nhrp map 100.100.100.1
192.168.10.2

ip nhrp map multicast
192.168.10.2

ip nhrp network-id 1

ip nhrp nhs 100.100.100.1

tunnel source 192.168.50.2

tunnel mode gre multipoint

tunnel protection ipsec profile
DMVPN
!
interface GigabitEthernet0/0

ip address 192.168.50.2
255.255.255.0

duplex auto

speed auto

media-type rj45

!

ip route 192.168.10.2
255.255.255.255 192.168.50.1

!

end


Spoke-5#
```

Test de ping des adresses tunnel