R Privé:

Configuration DHCP

ip dhcp excluded-address 192.255.10.126

ip dhcp excluded-address 192.255.20.126

ip dhcp excluded-address 192.255.30.126

ip dhcp pool POOL10

- **network 192.255.10.0 255.255.255.128**
- **default-router 192.255.10.126**
- **dns-server 200.0.0.20**

ip dhcp pool POOL20

- **network 192.255.20.0 255.255.255.128**
- **default-router 192.255.20.126**
- **dns-server 200.0.0.20**

ip dhcp pool POOL30

- **network 192.255.30.0 255.255.255.128**
- **default-router 192.255.30.126**
- **dns-server 200.0.0.20**

ip dhcp pool POOL1

- **network 192.255.1.0 255.255.255.128**
- **default-router 192.255.1.126**

Configuration du Vpn

crypto isakmp policy 10

- **encr aes**
- **authentication pre-share**
- **group 2**

crypto isakmp key CLESECRETE address 223.255.13.2

crypto ipsec security-association lifetime seconds 86400

crypto ipsec transform-set VPNLABO esp-aes esp-sha-hmac

crypto map CARTEVPN 10 ipsec-isakmp

- **set peer 223.255.13.2**
- **set security-association lifetime seconds 86400**
- **set transform-set VPNLABO**
- **match address VPN**

ip access-list extended VPN

- **permit ip 192.255.10.0 0.0.0.255 222.255.10.0 0.0.0.255**

R Privé:

Configuration Interface

interface FastEthernet0/0

- **ip address 200.0.0.253 255.255.255.0**
- **ip access-group 50 out   // configuration du ACL**
- **ip nat outside   // configuration du NAT**
- **crypto map CARTEVPN**

interface FastEthernet0/1.1

- **encapsulation dot1Q 100**
- **ip address 192.255.10.126 255.255.255.128**
- **ip helper-address 192.255.1.1**
- **ip nat inside   // configuration du NAT**

interface FastEthernet0/1.2

- **encapsulation dot1Q 200**
- **ip address 192.255.20.126 255.255.255.128**
- **ip nat inside // configuration du NAT**

interface FastEthernet0/1.3

- **encapsulation dot1Q 300**
- **ip address 192.255.30.126 255.255.255.128**

interface FastEthernet0/1.5

- **encapsulation dot1Q 10**
- **ip address 192.255.1.126 255.255.255.128**

Configuration Protocol de Communication

router ospf 10

- **network 200.0.0.0 0.0.0.255 area 0**

ip nat inside source list 1 interface FastEthernet0/0 overload

Configuration ACL

access-list 50 deny 192.255.30.0 0.0.0.255

access-list 50 deny host 200.0.0.30

R DMZ:

Configuration Interface

interface FastEthernet0/0

- **ip address 200.0.0.254 255.255.255.0**

interface FastEthernet0/1

- **ip address 223.255.10.2 255.255.255.252**

router ospf 10

- **log-adjacency-changes**
- **redistribute bgp 110 subnets**
- **network 200.0.0.0 0.0.0.255 area 0**

Configuration Protocol de Communication

router bgp 110

- **bgp log-neighbor-changes**
- **neighbor 223.255.10.1 remote-as 100**
- **network 223.255.10.0**
- **redistribute ospf 10**

R Internet:

Configuration Interface

interface FastEthernet0/0

- **ip address 223.255.10.1 255.255.255.252**

interface FastEthernet0/1

- **ip address 223.255.11.1 255.255.255.252**

interface Ethernet0/0/0

- **ip address 223.255.12.1 255.255.255.252**

interface Ethernet0/1/0

- **ip address 223.255.13.1 255.255.255.252**

Configuration Protocol de Communication

router bgp 100

- **neighbor 223.255.11.2 remote-as 111**
- **neighbor 223.255.12.2 remote-as 112**
- **neighbor 223.255.13.2 remote-as 113**
- **neighbor 223.255.10.2 remote-as 110**

R Réseau 1:

Configuration Interface

interface FastEthernet0/0

- **ip address 223.255.12.2 255.255.255.252**
- **ip nat outside   // configuration du NAT**

interface FastEthernet0/1

- **ip address 222.255.20.1 255.255.255.0**
- **ip nat inside   // configuration du NAT**

ip route 0.0.0.0 0.0.0.0 223.255.12.1

Configuration Protocol de Communication

router bgp 112

      neighbor 223.255.12.1 remote-as 100
      network 223.255.12.0

ip nat inside source list 1 interface FastEthernet0/0 overload

R Réseau 1:

Configuration Interface

R Réseau 2:

Configuration du Vpn

crypto isakmp policy 10

- **encr aes**
- **authentication pre-share**
- **group 2**

crypto isakmp key CLESECRETE address 200.0.0.253

crypto ipsec security-association lifetime seconds 86400

crypto ipsec transform-set VPNLABO esp-aes esp-sha-hmac

crypto map CARTEVPN 10 ipsec-isakmp

- **set peer 200.0.0.253**
- **set security-association lifetime seconds 86400**
- **set transform-set VPNLABO**
- **match address VPN**

ip access-list extended VPN

- **permit ip 222.255.10.0 0.0.0.255 192.255.10.0 0.0.0.255**

Configuration Interface

interface FastEthernet0/0

- **ip address 223.255.13.2 255.255.255.252**
- **ip nat outside**
- **crypto map CARTEVPN**

interface FastEthernet0/1

- **ip address 222.255.10.1 255.255.255.0**
- **ip nat inside**

ip route 0.0.0.0 0.0.0.0 223.255.13.1

Configuration Protocol de Communication

router bgp 113

- **neighbor 223.255.13.1 remote-as 100**
- **network 223.255.13.0**

ip nat inside source list 1 interface FastEthernet0/0 overload