Impact Influence

Configuration des équipements

1. Plan d'adressage IP :

WAN

IPv4

132.186.32.32/27

Equipement	Sous-Réseau	Adresses utilisables	Adresse de broadcast
Routeur Bleu-Rouge	132.186.32.32/30	132.186.32.33 / 132.186.32.34	132.186.32.35
Routeur Vert-Bleu	132.186.32.36/30	132.186.32.37 / 132.186.32.38	132.186.32.39
Routeur Rouge-Vert	132.186.32.40/30	132.186.32.41 / 132.186.32.42	132.186.32.43

IPv6

Equipement	Sous-Réseau	Adresses utilisables	Préfixe	Flink Local
Routeur Bleu-Rouge	2001:0:CAFE:7::/64	2001:0:CAFE:7::1 / 2001:0:CAFE:7::2	/64	fe80::3
Routeur Vert-Bleu	2001:0:CAFE:6::/64	2001:0:CAFE:6::1 / 2001:0:CAFE:6::2	/64	fe80::2
Routeur Rouge-Vert	2001:0:CAFE:8::/64	2001:0:CAFE:8::1 / 2001:0:CAFE:8::2	/64	fe80::1

Bâtiment Vert

IPv4

Équipement	Adresse IP	Masque de sous-réseau	Passerelle par défaut	Plage DHCP
Routeur (interface 1)	192.168.5.1	255.255.255.0	N/A	N/A
Routeur (interface 2)	192.168.2.1	255.255.255.0	N/A	N/A
Switch 1 (Serveur Web)	192.168.5.2	255.255.255.0	192.168.1.1	192.168.1.100 - 192.168.1.200
Switch 2 (Réunion)	192.168.2.2	255.255.255.0	192.168.2.1	192.168.2.100 - 192.168.2.200
Serveur Web	192.168.5.10	255.255.255.0	192.168.5.1	N/A

IPv6

Équipement	Adresse IPv6 Globale	Adresse IPv6 Link-local	Préfixe
Routeur (interface 1)	2001:0:CAFE:5::1	FE80::1	/64
Routeur (interface 2)	2001:0:CAFE:2::1	FE80::1	/64
Switch 1 (Serveur Web)	2001:0:CAFE:5::2	FE80::2	/64
Switch 2 (Réunion)	2001:0:CAFE:2::2	FE80::2	/64
Serveur Web	2001:0:CAFE:5::10	FE80::10	/64

Bâtiment Bleu

IPv4

Équipement	Adresse IP	Masque de sous-réseau	Passerelle par défaut	Plage DHCP
Routeur (interface 1)	192.168.3.1	255.255.255.0	N/A	N/A
Routeur (interface 2)	192.168.4.1	255.255.255.0	N/A	N/A
Switch 1 (Accueil)	192.168.3.2	255.255.255.0	192.168.3.1	192.168.3.100 - 192.168.3.200
Switch 2 (Showroom)	192.168.4.2	255.255.255.0	192.168.4.1	192.168.4.100 - 192.168.4.200

IPv6

Équipement	Adresse IPv6 Globale	Adresse IPv6 Link-local	Préfixe
Routeur (interface 1)	2001:0:CAFE:3::1	FE80::1	/64
Routeur (interface 2)	2001:0:CAFE:4::1	FE80::1	/64
Switch 1 (Accueil)	2001:0:CAFE:3::2	FE80::2	/64
Switch 2 (Showroom)	2001:0:CAFE:4::2	FE80::2	/64

Bâtiment rouge

IPv4

Équipements réseau principaux

Équipement	Adresse IP	Masque de sous-réseau	Passerelle par défaut	Plage DHCP
SW-RED-CORE	192.168.100.1	255.255.255.0	N/A	N/A
SW-RED-DIST-1	192.168.100.2	255.255.255.0	192.168.100.1	N/A
SW-RED-DIST-2	192.168.100.3	255.255.255.0	192.168.100.1	N/A
Routeur Rouge	192.168.1.1	255.255.255.0	N/A	N/A

Interfaces VLAN sur les Distributed Layer 3

Switch	VLAN 10 (DNS)	VLAN 20 (Info)	VLAN 30 (Finance)	VLAN 40 (Commercial)	VLAN 50 (RH)	VLAN 60 (Direction)
SW-RED-DIST-1	192.168.10.2	192.168.20.2	192.168.30.2	192.168.40.2	192.168.50.2	192.168.60.2
SW-RED-DIST-2	192.168.10.3	192.168.20.3	192.168.30.3	192.168.40.3	192.168.50.3	192.168.60.3

Configuration des VLANs et sous-réseaux

VLAN	Sous-réseau	Masque de sous-réseau	Passerelle par défaut	Plage DHCP
1 (Interconnexion Routeur-Switch)	192.168.1.0/24	255.255.255.0	192.168.1.1	N/A
10 (DNS)	192.168.10.0/24	255.255.255.0	192.168.10.1	N/A
20 (Informatique)	192.168.20.0/24	255.255.255.0	192.168.20.1	192.168.20.10-200
30 (Finance)	192.168.30.0/24	255.255.255.0	192.168.30.1	192.168.30.10-200
40 (Commercial)	192.168.40.0/24	255.255.255.0	192.168.40.1	192.168.40.10-200
50 (RH)	192.168.50.0/24	255.255.255.0	192.168.50.1	192.168.50.10-200
60 (Direction)	192.168.60.0/24	255.255.255.0	192.168.60.1	192.168.60.10-200
100 (Admin Système)	192.168.100.0/24	255.255.255.0	192.168.100.1	N/A

Adresses SW-RED-CORE dans chaque VLAN

VLAN	Adresse IP
VLAN 1	192.168.1.2
VLAN 10	192.168.10.1
VLAN 20	192.168.20.1
VLAN 30	192.168.30.1
VLAN 40	192.168.40.1
VLAN 50	192.168.50.1
VLAN 60	192.168.60.1
VLAN 100	192.168.100.1

Adresse statique du serveur DNS

Équipement	Adresse IP	Masque de sous-réseau	Passerelle par défaut	Plage DHCP
Serveur DNS	192.168.10.10	255.255.255.0	192.168.10.2	N/A

IPv6

Équipements réseau principaux

Équipement	Adresse IPv6 Globale	Adresse IPv6 Link-local	Préfixe
SW-RED-CORE	2001:0:CAFE:100::1	FE80::4	/64
SW-RED-DIST-1	2001:0:CAFE:100::2	FE80::2	/64
SW-RED-DIST-2	2001:0:CAFE:100::3	FE80::3	/64
Routeur Rouge	2001:0:CAFE:1::1	FE80::1	/64

Interfaces VLAN sur les Distributed Layer 3

Switch	VLAN 10 (DNS)	VLAN 20 (Info)	VLAN 30 (Finance)	VLAN 40 (Commercial)	VLAN 50 (RH)	VLAN 60 (Direction)
SW-RED-DIST-1	2001:0:CAFE:10::2	2001:0:CAFE:20::2	2001:0:CAFE:30::2	2001:0:CAFE:40::2	2001:0:CAFE:50::2	2001:0:CAFE:60::2
SW-RED-DIST-2	2001:0:CAFE:10::3	2001:0:CAFE:20::3	2001:0:CAFE:30::3	2001:0:CAFE:40::3	2001:0:CAFE:50::3	2001:0:CAFE:60::3

Configuration des VLANs et sous-réseaux

VLAN	Préfixe IPv6	Passerelle par défaut
1 (Interconnexion Routeur-Switch)	2001:0:CAFE:1::/64	2001:0:CAFE:1::1
10 (DNS)	2001:0:CAFE:10::/64	2001:0:CAFE:10::1
20 (Informatique)	2001:0:CAFE:20::/64	2001:0:CAFE:20::1
30 (Finance)	2001:0:CAFE:30::/64	2001:0:CAFE:30::1
40 (Commercial)	2001:0:CAFE:40::/64	2001:0:CAFE:40::1
50 (RH)	2001:0:CAFE:50::/64	2001:0:CAFE:50::1
60 (Direction)	2001:0:CAFE:60::/64	2001:0:CAFE:60::1
100 (Admin Système)	2001:0:CAFE:100::/64	2001:0:CAFE:100::1

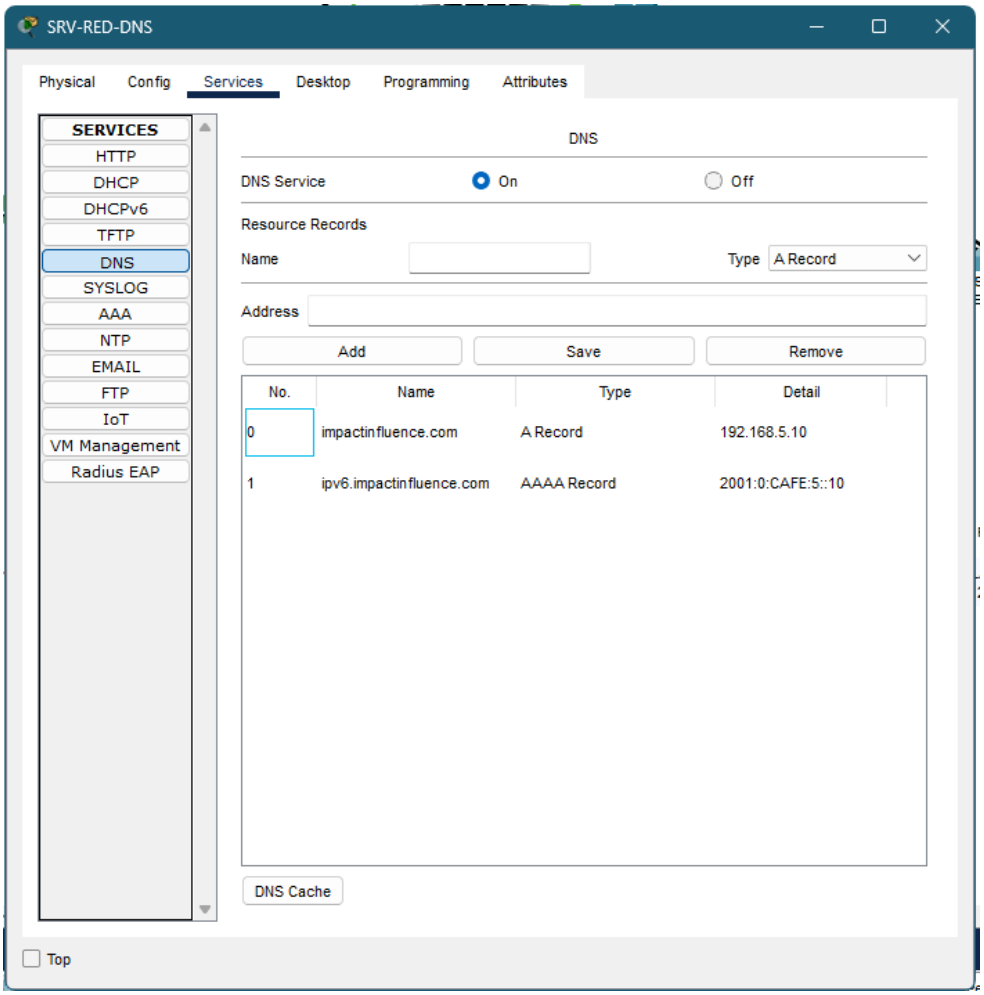
Adresses SW-RED-CORE dans chaque VLAN

VLAN	Adresse IPv6
VLAN 1	2001:0:CAFE:1::2
VLAN 10	2001:0:CAFE:10::1
VLAN 20	2001:0:CAFE:20::1
VLAN 30	2001:0:CAFE:30::1
VLAN 40	2001:0:CAFE:40::1
VLAN 50	2001:0:CAFE:50::1
VLAN 60	2001:0:CAFE:60::1
VLAN 100	2001:0:CAFE:100::1

Adresse statique du serveur DNS

Équipement	Adresse IPv6 Globale	Adresse IPv6 Link-local	Préfixe
Serveur DNS	2001:0:CAFE:10::10	FE80::10	/64

2. Configuration DNS :



3. <u>Configuration des routeurs (comprenant les tables de routage, les sous-interfaces et les NAT) :</u>

Bâtiment Bleu :

```
R-BLUE#show ip route
Codes: L - local, C - connected, S - static, 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

     132.186.0.0/16 is variably subnetted, 5 subnets, 2 masks
C       132.186.32.32/30 is directly connected, Serial0/0/0
L       132.186.32.33/32 is directly connected, Serial0/0/0
C       132.186.32.36/30 is directly connected, Serial0/0/1
L       132.186.32.37/32 is directly connected, Serial0/0/1
R       132.186.32.40/30 [120/1] via 132.186.32.34, 00:00:15, Serial0/0/0
                         [120/1] via 132.186.32.38, 00:00:05, Serial0/0/1
R    192.168.2.0/24 [120/1] via 132.186.32.38, 00:00:05, Serial0/0/1
     192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.3.0/24 is directly connected, GigabitEthernet0/0
L       192.168.3.1/32 is directly connected, GigabitEthernet0/0
     192.168.4.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.4.0/24 is directly connected, GigabitEthernet0/1
L       192.168.4.1/32 is directly connected, GigabitEthernet0/1
R    192.168.5.0/24 [120/1] via 132.186.32.38, 00:00:05, Serial0/0/1
```

```
interface GigabitEthernet0/0
 ip address 192.168.3.1 255.255.255.0
 duplex auto
 speed auto
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:3::1/64
 ipv6 rip BLUE-RIPNG enable
 ipv6 enable
!
interface GigabitEthernet0/1
 ip address 192.168.4.1 255.255.255.0
 duplex auto
 speed auto
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:4::1/64
 ipv6 rip BLUE-RIPNG enable
 ipv6 enable
!
interface Serial0/0/0
 ip address 132.186.32.33 255.255.255.252
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:7::1/64
 ipv6 rip BLUE-RIPNG enable
 ipv6 enable
 clock rate 2000000
!
interface Serial0/0/1
 ip address 132.186.32.37 255.255.255.252
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:6::1/64
 ipv6 rip BLUE-RIPNG enable
 ipv6 enable
!
interface Vlan1
 no ip address
 shutdown
!
router rip
 version 2
 network 132.186.0.0
 network 192.168.3.0
 network 192.168.4.0
 no auto-summary
!
ipv6 router rip BLUE-RIPNG
!
ip classless
!
ip flow-export version 9
!
ipv6 route ::/0 Serial0/0/0 FE80::1
!
```

Bâtiment Rouge :

```
R-RED>show ip route
Codes: L - local, C - connected, S - static, 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

     132.186.0.0/16 is variably subnetted, 5 subnets, 2 masks
C       132.186.32.32/30 is directly connected, Serial0/0/0
L       132.186.32.34/32 is directly connected, Serial0/0/0
R       132.186.32.36/30 [120/1] via 132.186.32.33, 00:00:05, Serial0/0/0
                         [120/1] via 132.186.32.41, 00:00:25, Serial0/0/1
C       132.186.32.40/30 is directly connected, Serial0/0/1
L       132.186.32.42/32 is directly connected, Serial0/0/1
S    192.168.0.0/16 [1/0] via 192.168.1.2
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.1.0/24 is directly connected, GigabitEthernet0/0
L       192.168.1.1/32 is directly connected, GigabitEthernet0/0
R    192.168.2.0/24 [120/1] via 132.186.32.41, 00:00:25, Serial0/0/1
R    192.168.3.0/24 [120/1] via 132.186.32.33, 00:00:05, Serial0/0/0
R    192.168.4.0/24 [120/1] via 132.186.32.33, 00:00:05, Serial0/0/0
R    192.168.5.0/24 [120/1] via 132.186.32.41, 00:00:25, Serial0/0/1
```

```
interface GigabitEthernet0/0
 description Vers_SW-RED-CORE
 ip address 192.168.1.1 255.255.255.0
 ip nat inside
 duplex auto
 speed auto
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:1::1/64
 ipv6 rip RED-RIPNG enable
!
interface GigabitEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 description Vers_R-BLEU
 ip address 132.186.32.34 255.255.255.252
 ip nat outside
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:7::2/64
 ipv6 rip RED-RIPNG enable
!
interface Serial0/0/1
 description Vers_R-VERT
 ip address 132.186.32.42 255.255.255.252
 ip nat outside
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:3::2/64
 ipv6 address 2001:0:CAFE:8::1/64
 ipv6 rip RED-RIPNG enable
 clock rate 2000000
!
interface Vlan1
 no ip address
 ipv6 address FE80::4 link-local
 shutdown
!
router rip
 version 2
 network 132.186.0.0
 no auto-summary
!
ipv6 router rip RED-RIPNG
!
ip nat inside source list 10 interface Serial0/0/1 overload
ip classless
ip route 192.168.0.0 255.255.0.0 192.168.1.2
!
ip flow-export version 9
!
ipv6 route 2001:0:CAFE:10::/64 2001:0:CAFE:1::2
ipv6 route 2001:0:CAFE:20::/64 2001:0:CAFE:1::2
ipv6 route 2001:0:CAFE:30::/64 2001:0:CAFE:1::2
ipv6 route 2001:0:CAFE:40::/64 2001:0:CAFE:1::2
ipv6 route 2001:0:CAFE:50::/64 2001:0:CAFE:1::2
ipv6 route 2001:0:CAFE:60::/64 2001:0:CAFE:1::2
!
access-list 10 permit 192.168.1.0 0.0.0.255
access-list 10 permit 192.168.10.0 0.0.0.255
access-list 10 permit 192.168.20.0 0.0.0.255
access-list 10 permit 192.168.30.0 0.0.0.255
access-list 10 permit 192.168.40.0 0.0.0.255
access-list 10 permit 192.168.50.0 0.0.0.255
access-list 10 permit 192.168.60.0 0.0.0.255
access-list 10 permit 192.168.100.0 0.0.0.255
```

Bâtiment Vert :

```
R-GREEN#show ip route
Codes: L - local, C - connected, S - static, 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

     132.186.0.0/16 is variably subnetted, 5 subnets, 2 masks
R       132.186.32.32/30 [120/1] via 132.186.32.42, 00:00:19, Serial0/0/0
                         [120/1] via 132.186.32.37, 00:00:22, Serial0/0/1
C       132.186.32.36/30 is directly connected, Serial0/0/1
L       132.186.32.38/32 is directly connected, Serial0/0/1
C       132.186.32.40/30 is directly connected, Serial0/0/0
L       132.186.32.41/32 is directly connected, Serial0/0/0
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.2.0/24 is directly connected, GigabitEthernet0/1
L       192.168.2.1/32 is directly connected, GigabitEthernet0/1
R    192.168.3.0/24 [120/1] via 132.186.32.37, 00:00:22, Serial0/0/1
R    192.168.4.0/24 [120/1] via 132.186.32.37, 00:00:22, Serial0/0/1
     192.168.5.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.5.0/24 is directly connected, GigabitEthernet0/0
L       192.168.5.1/32 is directly connected, GigabitEthernet0/0
```

```
!
interface GigabitEthernet0/0
 ip address 192.168.5.1 255.255.255.0
 duplex auto
 speed auto
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:5::1/64
 ipv6 rip GREEN-RIPNG enable
 ipv6 enable
!
interface GigabitEthernet0/1
 ip address 192.168.2.1 255.255.255.0
 duplex auto
 speed auto
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:2::1/64
 ipv6 rip GREEN-RIPNG enable
 ipv6 enable
!
interface Serial0/0/0
 ip address 132.186.32.41 255.255.255.252
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:8::2/64
 ipv6 rip GREEN-RIPNG enable
 ipv6 enable
!
interface Serial0/0/1
 ip address 132.186.32.38 255.255.255.252
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:6::2/64
 ipv6 rip GREEN-RIPNG enable
 ipv6 enable
 clock rate 2000000
!
interface Vlan1
 no ip address
 shutdown
!
router rip
 version 2
 network 132.186.0.0
 network 192.168.2.0
 network 192.168.5.0
 no auto-summary
!
ipv6 router rip GREEN-RIPNG
!
ip classless
!
ip flow-export version 9
!
ipv6 route ::/0 Serial0/0/0 FE80::1
!
```

4. Configuration des switchs (comprenant les paramètres DHCP, les VLAN, le LACP et les ACL) :

4.1 Configuration des switchs de type layer 3 :

Switch Core :

```
SW-RED-CORE#show 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 192.168.1.1 to network 0.0.0.0

C    192.168.1.0/24 is directly connected, Vlan1
C    192.168.10.0/24 is directly connected, Vlan10
C    192.168.20.0/24 is directly connected, Vlan20
C    192.168.30.0/24 is directly connected, Vlan30
C    192.168.40.0/24 is directly connected, Vlan40
C    192.168.50.0/24 is directly connected, Vlan50
C    192.168.60.0/24 is directly connected, Vlan60
C    192.168.100.0/24 is directly connected, Vlan100
S*   0.0.0.0/0 [1/0] via 192.168.1.1
```

```
SW-RED-CORE#show ipv6 route
IPv6 Routing Table - 18 entries
Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP
       U - Per-user Static route, M - MIPv6
       I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary
       ND - ND Default, NDp - ND Prefix, DCE - Destination, NDr - Redirect
       O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2
       ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
       D - EIGRP, EX - EIGRP external
S   ::/0 [1/0]
     via 2001:0:CAFE:1::1
C   2001:0:CAFE:1::/64 [0/0]
     via ::, Vlan1
L   2001:0:CAFE:1::2/128 [0/0]
     via ::, Vlan1
C   2001:0:CAFE:10::/64 [0/0]
     via ::, Vlan10
L   2001:0:CAFE:10::1/128 [0/0]
     via ::, Vlan10
C   2001:0:CAFE:20::/64 [0/0]
     via ::, Vlan20
L   2001:0:CAFE:20::1/128 [0/0]
     via ::, Vlan20
C   2001:0:CAFE:30::/64 [0/0]
     via ::, Vlan30
L   2001:0:CAFE:30::1/128 [0/0]
     via ::, Vlan30
C   2001:0:CAFE:40::/64 [0/0]
     via ::, Vlan40
L   2001:0:CAFE:40::1/128 [0/0]
     via ::, Vlan40
C   2001:0:CAFE:50::/64 [0/0]
     via ::, Vlan50
L   2001:0:CAFE:50::1/128 [0/0]
     via ::, Vlan50
C   2001:0:CAFE:60::/64 [0/0]
     via ::, Vlan60
L   2001:0:CAFE:60::1/128 [0/0]
     via ::, Vlan60
C   2001:0:CAFE:100::/64 [0/0]
     via ::, Vlan100
L   2001:0:CAFE:100::1/128 [0/0]
     via ::, Vlan100
L   FF00::/8 [0/0]
     via ::, Null0
```

```
ip dhcp excluded-address 192.168.20.1 192.168.20.9
ip dhcp excluded-address 192.168.30.1 192.168.30.9
ip dhcp excluded-address 192.168.40.1 192.168.40.9
ip dhcp excluded-address 192.168.50.1 192.168.50.9
ip dhcp excluded-address 192.168.60.1 192.168.60.9
!
ip dhcp pool VLAN20-POOL
 network 192.168.20.0 255.255.255.0
 default-router 192.168.20.1
 dns-server 192.168.10.10
ip dhcp pool VLAN30-POOL
 network 192.168.30.0 255.255.255.0
 default-router 192.168.30.1
 dns-server 192.168.10.10
ip dhcp pool VLAN40-POOL
 network 192.168.40.0 255.255.255.0
 default-router 192.168.40.1
 dns-server 192.168.10.10
ip dhcp pool VLAN50-POOL
 network 192.168.50.0 255.255.255.0
 default-router 192.168.50.1
 dns-server 192.168.10.10
ip dhcp pool VLAN60-POOL
 network 192.168.60.0 255.255.255.0
 default-router 192.168.60.1
 dns-server 192.168.10.10
```

```
interface GigabitEthernet1/0/1
 switchport trunk allowed vlan 1,10,20,30,40,50,60,100
 switchport mode trunk
!
interface GigabitEthernet1/0/2
 switchport mode trunk
```

```
interface Vlan1
 ip address 192.168.1.2 255.255.255.0
 ipv6 address FE80::4 link-local
 ipv6 address 2001:0:CAFE:1::2/64
 ipv6 rip RED-RIPNG enable
!
interface Vlan10
 mac-address 00d0.5859.9901
 ip address 192.168.10.1 255.255.255.0
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:10::1/64
!
interface Vlan20
 mac-address 00d0.5859.9902
 ip address 192.168.20.1 255.255.255.0
 ip access-group 100 out
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:20::1/64
!
interface Vlan30
 mac-address 00d0.5859.9903
 ip address 192.168.30.1 255.255.255.0
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:30::1/64
!
interface Vlan40
 mac-address 00d0.5859.9904
 ip address 192.168.40.1 255.255.255.0
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:40::1/64
!
interface Vlan50
 mac-address 00d0.5859.9905
 ip address 192.168.50.1 255.255.255.0
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:50::1/64
!
interface Vlan60
 mac-address 00d0.5859.9906
 ip address 192.168.60.1 255.255.255.0
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:60::1/64
!
interface Vlan100
 mac-address 00d0.5859.9907
 ip address 192.168.100.1 255.255.255.0
 ipv6 address FE80::1 link-local
 ipv6 address 2001:0:CAFE:100::1/64
!
```

```
router rip
!
ipv6 router rip RED-RIPNG
!
ip classless
ip route 0.0.0.0 0.0.0.0 192.168.1.1
!
ip flow-export version 9
!
ipv6 route ::/0 2001:0:CAFE:1::1
!
access-list 100 permit icmp any any echo-reply
access-list 100 permit tcp any any established
access-list 100 permit ip 192.168.20.0 0.0.0.255 any
access-list 100 deny ip any any
access-list 101 permit udp 192.168.20.0 0.0.0.255 host 192.168.10.10 eq domain
access-list 101 permit udp 192.168.30.0 0.0.0.255 host 192.168.10.10 eq domain
access-list 101 permit udp 192.168.40.0 0.0.0.255 host 192.168.10.10 eq domain
access-list 101 permit udp 192.168.50.0 0.0.0.255 host 192.168.10.10 eq domain
access-list 101 permit udp 192.168.60.0 0.0.0.255 host 192.168.10.10 eq domain
ipv6 access-list BLOCK-RG-IN
 permit tcp any any
 permit icmp any any echo-reply
 permit icmp any any nd-na
 permit icmp any any nd-ns
 deny ipv6 any 2001:0:CAFE:10::/64
 deny ipv6 any 2001:0:CAFE:20::/64
 deny ipv6 any 2001:0:CAFE:30::/64
 deny ipv6 any 2001:0:CAFE:40::/64
 deny ipv6 any 2001:0:CAFE:50::/64
 deny ipv6 any 2001:0:CAFE:60::/64
 permit ipv6 any any
```

Switch Distributed 1 :

```
interface Port-channel1
!
interface GigabitEthernet1/0/1
 switchport mode trunk
!
interface GigabitEthernet1/0/2
!
interface GigabitEthernet1/0/3
 channel-group 1 mode on
!
interface GigabitEthernet1/0/4
 channel-group 1 mode on
!
interface GigabitEthernet1/0/5
 channel-group 1 mode on
!
interface GigabitEthernet1/0/6
 channel-group 1 mode on
!
interface GigabitEthernet1/0/7
 switchport access vlan 20
 switchport mode access
!
interface GigabitEthernet1/0/8
 switchport access vlan 30
 switchport mode access
!
interface GigabitEthernet1/0/9
 switchport access vlan 40
 switchport mode access
!
interface GigabitEthernet1/0/10
 switchport access vlan 50
 switchport mode access
!
interface GigabitEthernet1/0/11
 switchport access vlan 60
 switchport mode access
!
interface GigabitEthernet1/0/12
 switchport access vlan 10
 switchport mode access
!
```

```
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan10
 mac-address 0060.708d.0c01
 ip address 192.168.10.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:10::2/64
!
interface Vlan20
 mac-address 0060.708d.0c02
 ip address 192.168.20.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:20::2/64
!
interface Vlan30
 mac-address 0060.708d.0c03
 ip address 192.168.30.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:30::2/64
!
interface Vlan40
 mac-address 0060.708d.0c04
 ip address 192.168.40.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:40::2/64
!
interface Vlan50
 mac-address 0060.708d.0c05
 ip address 192.168.50.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:50::2/64
!
interface Vlan60
 mac-address 0060.708d.0c06
 ip address 192.168.60.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:60::2/64
!
interface Vlan100
 mac-address 0060.708d.0c07
 ip address 192.168.100.2 255.255.255.0
 ipv6 address FE80::2 link-local
 ipv6 address 2001:0:CAFE:100::2/64
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.1.2
ip route 192.168.20.0 255.255.255.0 192.168.1.2
ip route 192.168.30.0 255.255.255.0 192.168.1.2
ip route 192.168.40.0 255.255.255.0 192.168.1.2
ip route 192.168.50.0 255.255.255.0 192.168.1.2
ip route 192.168.60.0 255.255.255.0 192.168.1.2
!
```

Switch Distributed 2 :

```
interface Port-channel1
 switchport mode trunk
!
interface GigabitEthernet1/0/1
 switchport mode trunk
!
interface GigabitEthernet1/0/2
 switchport mode trunk
 channel-group 1 mode on
!
interface GigabitEthernet1/0/3
 switchport mode trunk
 channel-group 1 mode on
!
interface GigabitEthernet1/0/4
!
interface GigabitEthernet1/0/5
 switchport mode trunk
 channel-group 1 mode on
!
interface GigabitEthernet1/0/6
 switchport mode trunk
 channel-group 1 mode on
!
interface GigabitEthernet1/0/7
 switchport access vlan 20
 switchport mode access
!
interface GigabitEthernet1/0/8
 switchport access vlan 30
 switchport mode access
!
interface GigabitEthernet1/0/9
 switchport access vlan 40
 switchport mode access
!
interface GigabitEthernet1/0/10
 switchport access vlan 50
 switchport mode access
!
interface GigabitEthernet1/0/11
 switchport access vlan 60
 switchport mode access
!
interface GigabitEthernet1/0/12
 switchport access vlan 10
 switchport mode access
!
```

```
interface Vlan1
 no ip address
 shutdown
!
interface Vlan10
 mac-address 0007.ecbb.2e01
 ip address 192.168.10.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:10::3/64
!
interface Vlan20
 mac-address 0007.ecbb.2e02
 ip address 192.168.20.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:20::3/64
!
interface Vlan30
 mac-address 0007.ecbb.2e03
 ip address 192.168.30.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:30::3/64
!
interface Vlan40
 mac-address 0007.ecbb.2e04
 ip address 192.168.40.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:40::3/64
!
interface Vlan50
 mac-address 0007.ecbb.2e05
 ip address 192.168.50.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:50::3/64
!
interface Vlan60
 mac-address 0007.ecbb.2e06
 ip address 192.168.60.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:60::3/64
!
interface Vlan100
 mac-address 0007.ecbb.2e07
 ip address 192.168.100.3 255.255.255.0
 ipv6 address FE80::3 link-local
 ipv6 address 2001:0:CAFE:100::3/64
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.1.2
ip route 192.168.20.0 255.255.255.0 192.168.1.2
ip route 192.168.30.0 255.255.255.0 192.168.1.2
ip route 192.168.40.0 255.255.255.0 192.168.1.2
ip route 192.168.50.0 255.255.255.0 192.168.1.2
ip route 192.168.60.0 255.255.255.0 192.168.1.2
!
```

4.2 **Configuration des switchs de type layer 2 :**

Switch Serveur WEB :

```
interface Vlan1
 ip address 192.169.5.2 255.255.255.0
!
ip default-gateway 192.169.5.1
```

Switch Réunion:

```
interface Vlan1
 ip address 192.168.2.2 255.255.255.0
 shutdown
!
ip default-gateway 192.168.2.1
!
```

Switch Accueil:

```
interface Vlan1
 ip address 192.168.3.2 255.255.255.0
 shutdown
!
ip default-gateway 192.168.3.1
!
```

Switch Showroom:

```
interface Vlan1
 ip address 192.168.4.2 255.255.255.0
 shutdown
!
ip default-gateway 192.168.4.1
!
```

Switch Direction:

```
interface Vlan1
 no ip address
 shutdown
```

Switch RH:

```
interface Vlan1
 no ip address
 shutdown
```

Switch Commerciaux/Chargés de clientèle:

```
interface Vlan1
 no ip address
 shutdown
```

Switch Finance :

```
interface Vlan1
 no ip address
 shutdown
```

Switch Service Informatique :

```
interface Vlan1
 no ip address
 shutdown
```

Switch du serveur DNS :

```
interface Vlan1
 no ip address
 shutdown
```