CR CLUSTER

Nous avons besoin de 2 routeurs et cluster

Voici le paramétrage du RTR2 et RTR1 finit :

```
 no ip address
 duplex auto
 speed auto
!
interface FastEthernet0/0.10
 encapsulation dot1Q 10
 ip address 172.17.1.3 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 10 ip 172.17.1.1
 standby 10 priority 80
!
interface FastEthernet0/0.20
 encapsulation dot1Q 20
 ip address 172.17.10.3 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 20 ip 172.17.10.1
 standby 20 priority 80
!
interface FastEthernet0/0.30
 encapsulation dot1Q 30
 ip address 172.18.0.243 255.255.255.240
 ip helper-address 172.17.1.4
 ip nat inside
 standby 30 ip 172.18.0.241
 standby 30 priority 80
!
interface FastEthernet0/0.50
 encapsulation dot1Q 50
 ip address 172.19.0.3 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 50 ip 172.19.0.1
 standby 50 priority 80
!
interface FastEthernet0/0.70
 encapsulation dot1Q 70
 ip address 10.0.0.3 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 70 ip 10.0.0.1
 standby 70 priority 80
!
interface FastEthernet0/1
 no ip address
 ip nat outside
 shutdown
 duplex auto
 speed auto
!
interface Serial0/2/0
 no ip address
 shutdown
 clock rate 125000
!
interface Serial0/2/1
 no ip address
 shutdown
 clock rate 125000
!
ip route 0.0.0.0 0.0.0.0 172.18.0.247
```

```
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
!
interface FastEthernet0/0.10
 encapsulation dot1Q 10
 ip address 172.17.1.2 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 10 ip 172.17.1.1
 standby 10 priority 150
 standby 10 preempt
!
interface FastEthernet0/0.20
 encapsulation dot1Q 20
 ip address 172.17.10.2 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 20 ip 172.17.10.1
 standby 20 priority 150
 standby 20 preempt
!
interface FastEthernet0/0.30
 encapsulation dot1Q 30
 ip address 172.18.0.242 255.255.255.
 ip helper-address 172.17.1.4
 ip nat inside
 standby 30 ip 172.18.0.241
 standby 30 priority 150
 standby 30 preempt
!
interface FastEthernet0/0.50
 encapsulation dot1Q 50
 ip address 172.19.0.2 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 50 ip 172.19.0.1
 standby 50 priority 150
 standby 50 preempt
!
interface FastEthernet0/0.70
 encapsulation dot1Q 70
 ip address 10.0.0.2 255.255.255.0
 ip helper-address 172.17.1.4
 ip nat inside
 standby 70 ip 10.0.0.1
 standby 70 priority 150
 standby 70 preempt
!
interface FastEthernet0/1
 no ip address
 ip nat outside
```

Voici les commandes de configuration du cluster du vlan 10,20,30,50 et 70 :
le cluster configuré sur le rtr1 est le cluster principal autrement dit le “patron” donc passera pas celui la et il sera le prioritaire sur celui configuré dans le rtr2 par exemple :

- RTR1 : standby 10 priority 150 = il est prioritaire car plus haut degré de priorité (150>80)
- RTR2 : standby 10 priority 80 = le cluster passe secondaire car le degré de priorité est inférieur à celui du RTR1 (80<150)

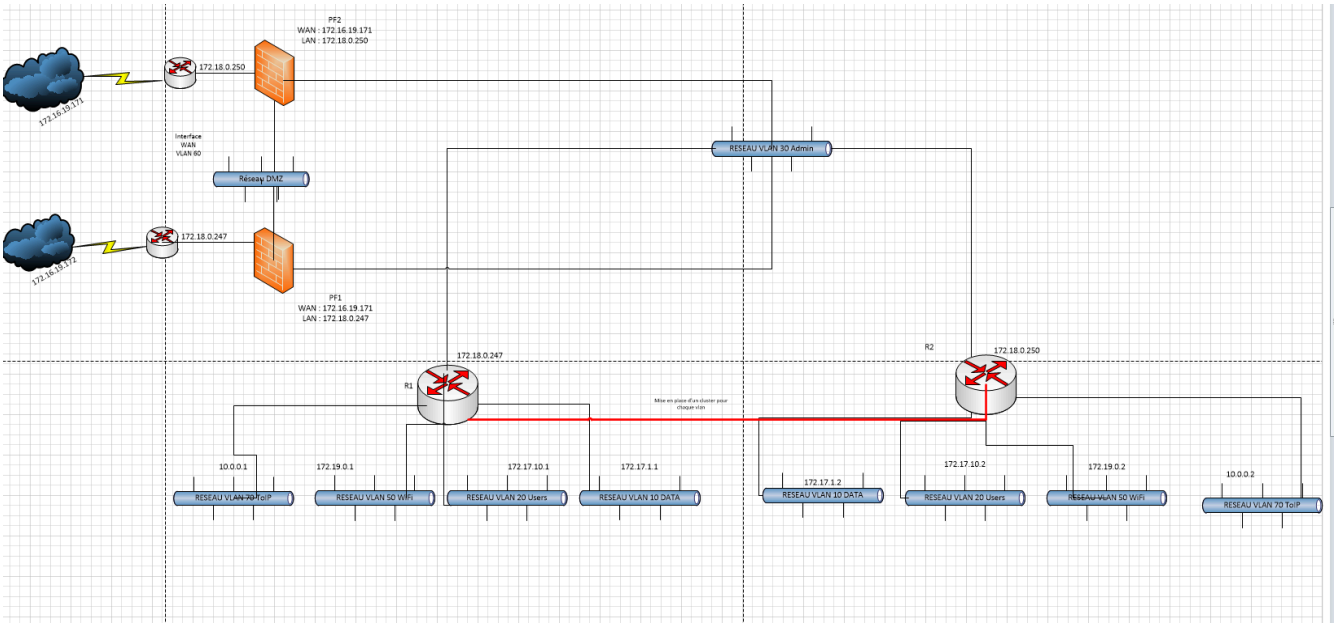
Config RTR2:

```
RTR2#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
RTR2(config)#int fa0/0.10
RTR2(config-subif)#standby 10 ip 172.17.1.1
RTR2(config-subif)#standby 10 priority 80
RTR2(config-subif)#exit
RTR2(config)#int fa0/0.20
RTR2(config-subif)#standby 20 ip 172.17.10.1
RTR2(config-subif)#standby 20 priority 80
RTR2(config-subif)#exit
RTR2(config)#int fa0/0.30
RTR2(config-subif)#standby 30 ip 172.18.0.241
RTR2(config-subif)#standby 30 priority 80
RTR2(config-subif)#exit
RTR2(config)#int fa0/0.50
RTR2(config-subif)#standby 50 ip 172.19.0.1
RTR2(config-subif)#standby 50 priority 80
RTR2(config-subif)#exit
RTR2(config)#int fa0/0.70
RTR2(config-subif)#standby 70 ip 10.0.0.1
RTR2(config-subif)#standby 70 priority 80
RTR2(config-subif)#exit
```

Config RTR1:

```
Router(config)#int fa0/0.10
Router(config-subif)#standby 10  ip 172.17.1.1
Router(config-subif)#standby 10 priority 150
Router(config-subif)#
*Jan 28 23:43:15.761: %HSRP-5-STATECHANGE: FastEthernet0/0.10 Grp 10 state Speak -> Standby
*Jan 28 23:43:16.261: %HSRP-5-STATECHANGE: FastEthernet0/0.10 Grp 10 state Standby -> Active
Router(config-subif)#standby 10 preempt
Router(config-subif)#exit
Router(config)#int fa0/0.20
Router(config-subif)#standby 20  ip 172.17.10.1
Router(config-subif)#standby 20 priority 150
Router(config-subif)#standby 20 preempt
Router(config-subif)#exit
Router(config)#exit
*Jan 28 23:45:20.993: %HSRP-5-STATECHANGE: FastEthernet0/0.20 Grp 20 state Speak -> Standby
*Jan 28 23:45:21.493: %HSRP-5-STATECHANGE: FastEthernet0/0.20 Grp 20 state Standby -> Ac
Router(config)#
Router(config)#int fa0/0.30
Router(config-subif)#standby 30  ip 172.18.0.241
Router(config-subif)#standby 30 priority 150
Router(config-subif)#standby 30 preempt
Router(config-subif)#exit
Router(config)#int fa0/0.50
*Jan 28 23:46:53.385: %HSRP-5-STATECHANGE: FastEthernet0/0.30 Grp 30 state Speak -> Standby
*Jan 28 23:46:53.885: %HSRP-5-STATECHANGE: FastEthernet0/0.30 Grp 30 state Standby -> Active
Router(config-subif)#standby 30  ip 172.19.0.1
% Must use unique HSRP group number for each logical interface
   that is a member of the same physical interface.
Router(config-subif)#standby 50  ip 172.19.0.1
Router(config-subif)#standby 50 priority 150
Router(config-subif)#standby 50 preempt
Router(config-subif)#exit
Router(config)#int fa0/0.C(
*Jan 28 23:47:53.221: %HSRP-5-STATECHANGE: FastEthernet0/0.50 Grp 50 state Speak -> Standby
*Jan 28 23:47:53.721: %HSRP-5-STATECHANGE: FastEthernet0/0.50 Grp 50 state Stand
Router(config)#int fa0/0.70
Router(config-subif)#standby 70  ip 10.0.0.1
Router(config-subif)#standby 70 priority 150
Router(config-subif)#standby 70 preempt
Router(config-subif)#
*Jan 28 23:50:06.197: %HSRP-5-STATECHANGE: FastEthernet0/0.70 Grp 70 state Speak -> Standby
*Jan 28 23:50:06.697: %HSRP-5-STATECHANGE: FastEthernet0/0.70 Grp 70 state Standby -> Active
Router(config-subif)#exit
```

Nous devons appliquer un script au routeur qui servira à détecter que si un ping sur le RTR1 qui est n'est pas réalisable alors il déclenchera le RTR2



une fois cela faut créer la haute disponibilité , pour cela il faut créer deux script un qui d'exécute sur les machine dans la dmz pour changer la passerelle et un autre qui se connecte sur les deux routeur qui change les ip route.