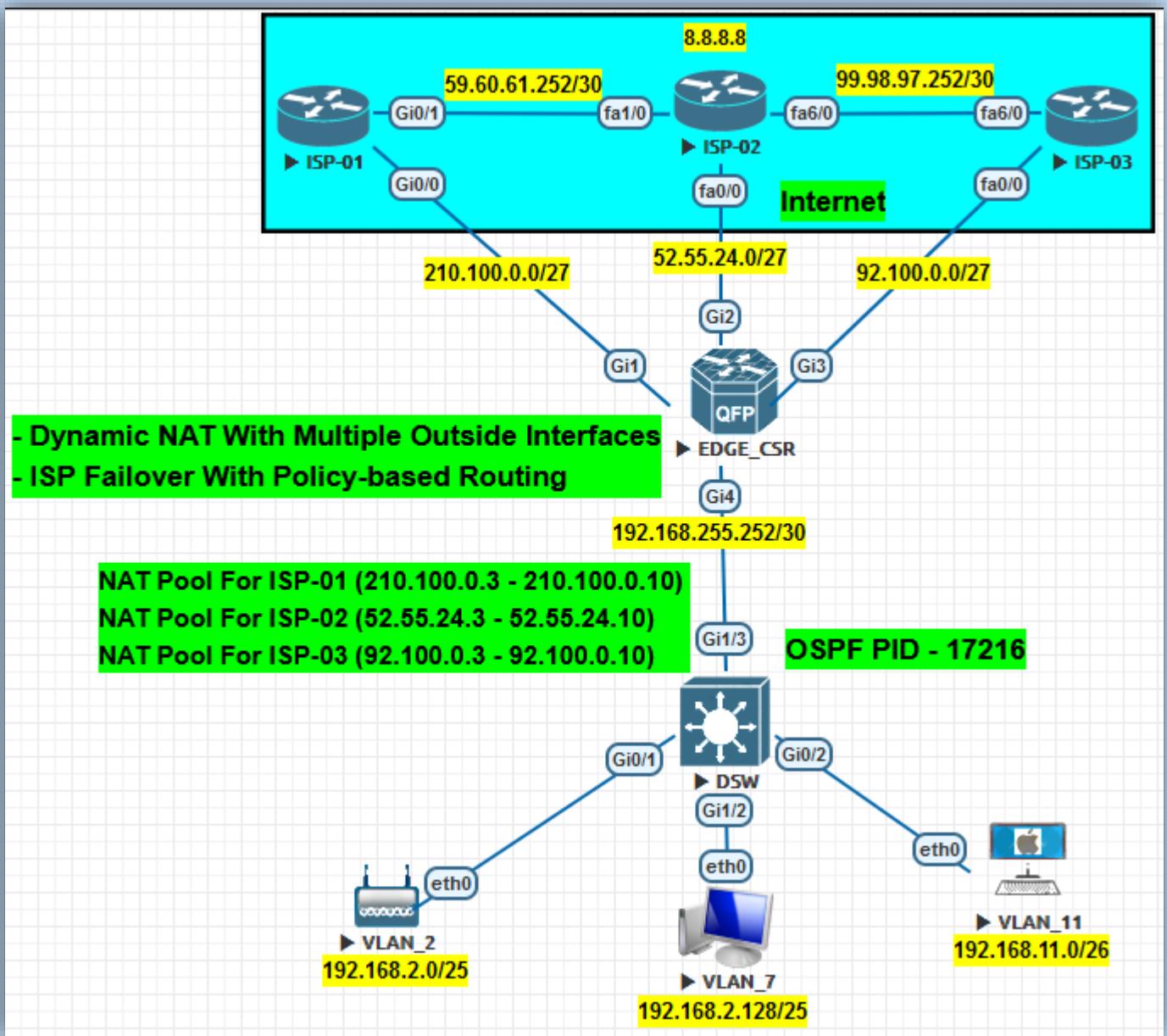


## Dynamic NAT With Multiple Outside Interfaces

And

## ISP Failover With Policy-based Routing



1. VLAN-2 must be internet failover in the order of ISP-01, ISP-02, ISP-03.

2. VLAN-7 must be internet failover in the order of ISP-02, ISP-03, ISP-01.

3. VLAN-11 must be internet failover in the order of ISP-03, ISP-01, ISP-02.

## NAT Configuration

### EDGE-CSR

```
ip access-list extended NAT-ACL
```

```
permit ip 192.168.2.0 0.0.0.127 any
```

```
permit ip 192.168.2.128 0.0.0.127 any
```

```
permit ip 192.168.11.0 0.0.0.63 any
```

```
deny ip any any
```

```
!
```

```
ip nat pool ISP-01 210.100.0.3 210.100.0.10 netmask 255.255.255.224
```

```
ip nat pool ISP-02 52.55.24.3 52.55.24.10 netmask 255.255.255.224
```

```
ip nat pool ISP-03 92.100.0.3 92.100.0.10 netmask 255.255.255.224
```

```
!
```

```
route-map ISP-01 permit 10
```

```
match ip address NAT-ACL
```

```
match interface GigabitEthernet1
```

```
!
```

```
route-map ISP-02 permit 10
```

```
match ip address NAT-ACL
```

```
match interface GigabitEthernet2
```

```
!
```

```
route-map ISP-03 permit 10
```

```
match ip address NAT-ACL
```

```
match interface GigabitEthernet3
```

```
!  
ip nat inside source route-map ISP-01 pool ISP-01  
ip nat inside source route-map ISP-02 pool ISP-02  
ip nat inside source route-map ISP-03 pool ISP-03  
!  
interface GigabitEthernet1  
ip nat outside  
!  
interface GigabitEthernet2  
ip nat outside  
!  
interface GigabitEthernet3  
ip nat outside  
!  
interface GigabitEthernet4.1001  
ip nat inside  
!  
ISP Failover With PBR  
EDGE-CSR  
ip sla 100  
icmp-echo 210.100.0.1 source-ip 210.100.0.2  
threshold 200  
timeout 250
```

frequency 3

!

ip sla schedule 100 life forever start-time now

!

ip sla 200

icmp-echo 52.55.24.1 source-ip 52.55.24.2

threshold 200

timeout 250

frequency 3

!

ip sla schedule 200 life forever start-time now

!

ip sla 300

icmp-echo 92.100.0.1 source-ip 92.100.0.2

threshold 200

timeout 250

frequency 3

!

ip sla schedule 300 life forever start-time now

!

track 100 ip sla 100 reachability

delay down 1 up 1

!

track 200 ip sla 200 reachability

delay down 1 up 1

!

track 300 ip sla 300 reachability

delay down 1 up 1

!

ip access-list extended VLAN-02

permit ip 192.168.2.0 0.0.0.127 any

deny ip any any

!

ip access-list extended VLAN-07

permit ip 192.168.2.128 0.0.0.127 any

deny ip any any

!

ip access-list extended VLAN-11

permit ip 192.168.11.0 0.0.0.63 any

deny ip any any

!

route-map ISP-PBR permit 10

match ip address VLAN-02

set ip next-hop verify-availability 210.100.0.1 10 track 100

set ip next-hop verify-availability 52.55.24.1 20 track 200

set ip next-hop verify-availability 92.100.0.1 30 track 300

!

```
route-map ISP-PBR permit 20  
  match ip address VLAN-07  
  set ip next-hop verify-availability 52.55.24.1 10 track 200  
  set ip next-hop verify-availability 92.100.0.1 20 track 300  
  set ip next-hop verify-availability 210.100.0.1 30 track 100
```

!

```
route-map ISP-PBR permit 30
```

```
  match ip address VLAN-11  
  set ip next-hop verify-availability 92.100.0.1 10 track 300  
  set ip next-hop verify-availability 210.100.0.1 20 track 100  
  set ip next-hop verify-availability 52.55.24.1 30 track 200
```

!

```
interface GigabitEthernet4.1001
```

```
  ip policy route-map ISP-PBR
```

!