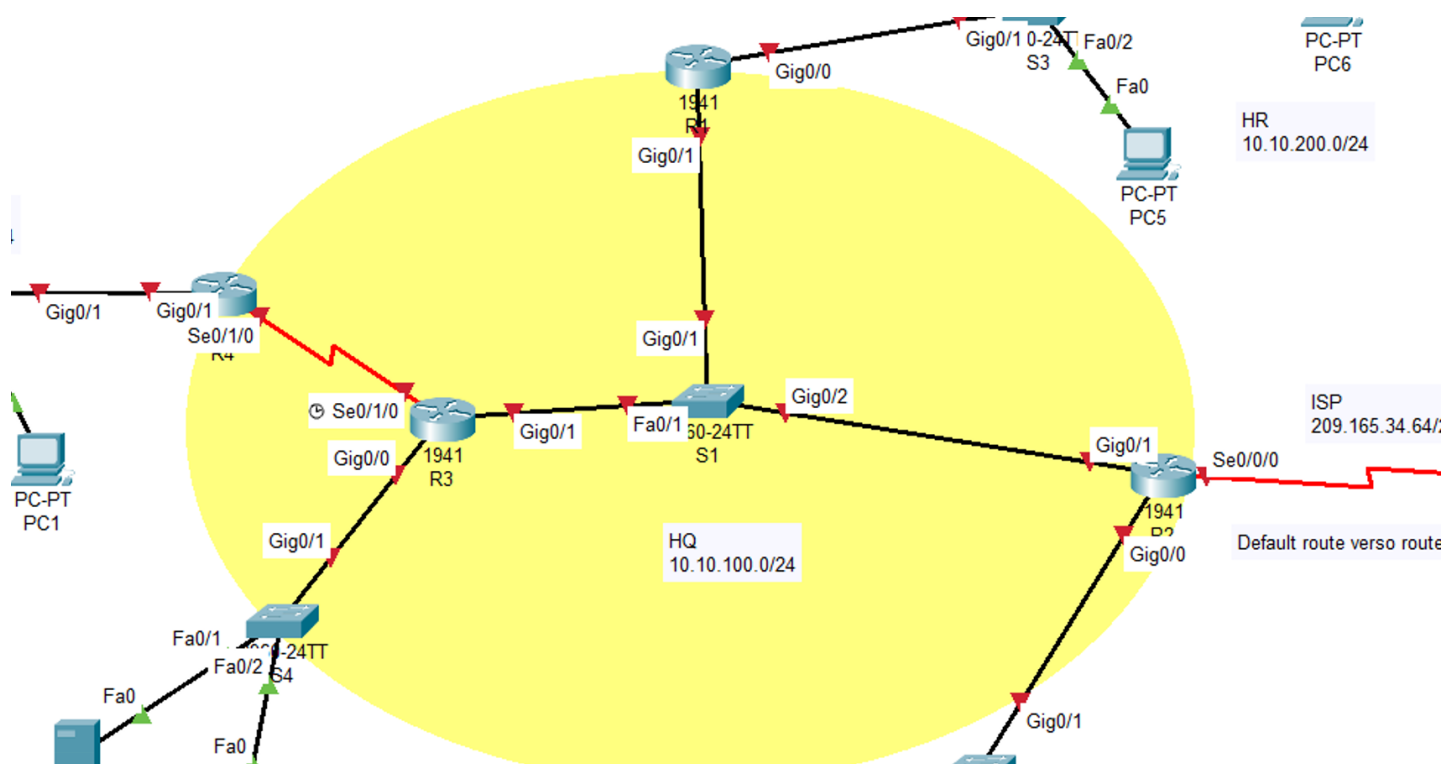


- 1) Configurare le vlan 10, 20, 30 con Router-on-a-Stick
- 2) Configurare OSPF sui router R1, R2, R3, R4 con process-id 10
- 3) Scegliere router-id per ogni router
- 4) Impostare priorità maggiore al link di R2 in modo tale che sia il DR
- 5) Fare in modo che R1 sia il BDR
- 6) Annunciare le reti in ospf tramite il comando "network"
- 7) Cambiare hello-interval a 20 secondi e dead-interval a 80
- 8) Cambiare la reference bandwidth a 10000
- 9) Configurare la default-route e annunciarla tramite OSPF

```
R1(config)# interface g0/1
R1(config-if)# ip address 10.10.100.1 255.255.255.0
R1(config-if)# no shutdown
R1(config-if)# exit
R1(config)# interface g0/0
R1(config-if)# ip address 10.10.200.1 255.255.255.0
R1(config-if)# no shutdown
R1(config-if)# exit
R1(config)# router ospf 1
R1(config-router)# router-id 1.1.1.1
R1(config-router)# auto-cost reference-bandwidth 1000
R1(config-router)# passive-interface g0/0
R1(config-router)# network 10.10.100.0 0.0.0.255 area 0
R1(config-router)# network 10.10.200.0 0.0.0.255 area 0
R1(config-router)# ip ospf dead-interval 80
R1(config-router)# ip ospf hello-interval 20
R1(config-router)# exit
R1(config)# interface g0/1
R3(config-if)# ip ospf priority 10
R1(config-if)# exit
R1(config)#
```



```

R2(config)# interface g0/0
R2(config-if)# no shutdown
R2(config-if)# exit
R2(config)# interface g0/0.10
R2(config-if)# encapsulation dot1Q 10
R2(config-if)# ip address 10.10.110.1 255.255.255.0
R2(config-if)# exit
R2(config)# interface g0/0.20
R2(config-if)# encapsulation dot1Q 20
R2(config-if)# ip address 10.10.120.1 255.255.255.0
R2(config-if)# exit
R2(config)# interface g0/0.30
R2(config-if)# encapsulation dot1Q 30
R2(config-if)# ip address 10.10.130.1 255.255.255.0
R2(config-if)# exit

R2(config)# interface g0/1
R2(config-if)# ip address 10.10.100.1 255.255.255.0
R2(config-if)# no shutdown
R2(config-if)# exit
R2(config)# router ospf 1
R2(config-router)# router-id 2.2.2.2
R2(config-router)# auto-cost reference-bandwidth
// Lo configuro como DR sul link com R1
R2(config)# ip ospf priority 5
R2(config-router)# ip ospf hello-interval 20
R2(config-router)# ip ospf dead-interval 80
R2(config-router)# network 10.10.100.0 0.0.0.255 area 0
R2(config-router)# network 10.10.110.0 0.0.0.255 area 0
R2(config-router)# network 10.10.120.0 0.0.0.255 area 0
R2(config-router)# network 10.10.130.0 0.0.0.255 area 0
R2(config-router)# passive-interface g0/0.10
R2(config-router)# passive-interface g0/0.20
R2(config-router)# passive-interface g0/0.30
R2(config-router)# exit
R2(config)# interface s0/0/0
R2(config-if)# no shutdown
R2(config-if)# ip address 209.165.34.65 255.255.255.240
R2(config-if)# exit
// Default Route
R2(config)# ip route 0.0.0.0 0.0.0.0 209.165.34.66
R2(config)# router ospf 1
R2(config-router)# default-information originate
R2(config-router)# exit

R2(config)# interface s0/1/0
R2(config-if)# no shutdown
R2(config-if)# ip address 10.10.56.1 255.255.255.252
R2(config-if)# exit
R2(config)# ip ospf 10
R2(config-router)# ip ospf 1 area 0
R2(config-router)# exit
R2(config)#

```

```
R3(config)# interface g0/0
R3(config-if)# ip address 10.10.10.1 255.255.255.224
R3(config-if)# no shutdown
R3(config-if)# exit
R3(config)# interface g0/1
R3(config-if)# ip address 10.10.100.3 255.255.255.0
R3(config-if)# no shutdown
R3(config-if)# exit
R3(config)# interface s0/1/0
R3(config-if)# ip address 10.10.34.1 255.255.255.252
R3(config-if)# no shutdown
R3(config-if)# exit
R3(config)# router ospf 1
R3(config-router)# router-id 3.3.3.3
R3(config-router)# auto-cost reference-bandwidth
R3(config-router)# network 10.10.100.0 0.0.0.255 area 0
R3(config-router)# network 10.10.34.0 0.0.0.3 area 0
R3(config-router)# exit
R3(config)# interface g0/1
R3(config-if)# ip ospf hello-interval 20
R3(config-if)# ip ospf dead-interval 80
R3(config-if)# exit
R3(config)# interface s0/0/0
R3(config-if)# no shutdown
R3(config-if)# ip address 10.10.36.1 255.255.255.252
R3(config-if)# ip ospf 1 area 0
R3(config-if)# exit
// Modifico manualmente il costo dei link
R3(config)# interface g0/1
R3(config-if)# ip ospf cost 100
R3(config-if)# exit
R3(config)# interface s0/0/0
R3(config-if)# ip ospf cost 1
R3(config-if)# exit
R3(config)#
```

```
R4(config)# interface g0/1
R4(config-if)# ip address 172.16.50.1 255.255.255.0
R4(config-if)# exit
R4(config)# interface s0/1/0
R4(config-if)# ip address 10.10.34.2 255.255.255.0
R4(config-if)# exit
R4(config)#
```

```
ISP(config)# interface s0/1/0
ISP(config-if)# no shut
ISP(config-if)# ip address 209.165.34.66 255.255.255.240
ISP(config-if)# exit
ISP(config)# ip route 0.0.0.0 0.0.0.0 209.165.34.65
ISP(config)#
```

```
R6(config)# interface s0/1/0
R6(config-if)# 10.10.36.2 255.255.255.252
R6(config-if)# ip ospf 1 area 0
R6(config-if)# no shutdown
R6(config-if)# exit
R6(config)# router ospf 1
R6(config-router)# router-id 6.6.6.6
R6(config-router)# exit
R6(config)# interface s0/1/1
R6(config-if)# ip address 10.10.10.56.2 255.255.255.252
R6(config-if)# exit
R6(config)#
```