

BITACORA

PUNTO 1

enrutar OSPF

ROUTER 1

```
Router1(config)#router ospf 7
```

```
Router1(config-router)#network 172.20.7.56 0.0.0.3 area 0
```

```
Router1(config-router)#network 192.168.10.0 0.0.0.255 area 0
```

```
Router1(config-router)#network 192.168.20.0 0.0.0.255 area 0
```

ROUTER 2

```
Router2(config)#router ospf 7
```

```
Router2(config-router)#network 172.20.7.60 0.0.0.3 area 0
```

```
Router2(config-router)#network 192.168.10.0 0.0.0.255 area 0
```

```
Router2(config-router)#network 192.168.20.0 0.0.0.255 area 0
```

ROUTER 3

```
router ospf 7
```

```
network 172.20.7.56 0.0.0.3 area 0
```

```
network 172.20.7.60 0.0.0.3 area 0
```

```
network 172.20.7.0 0.0.0.31 area 0
```

SWML01

```
router ospf 7
```

```
network 172.20.7.0 0.0.0.31 area 0
```

```
network 172.20.7.48 0.0.0.7 area 0
```

```
network 172.20.7.32 0.0.0.15 area 0
```

SWML02

router ospf 7

network 172.20.7.48 0.0.0.7 area 0

network 192.168.30.0 0.0.0.255 area 0

network 192.168.40.0 0.0.0.255 area 0

SWML03

router ospf 7

network 172.20.7.32 0.0.0.15 area 0

network 192.168.30.0 0.0.0.255 area 0

network 192.168.40.0 0.0.0.255 area 0

PUNTO 6

Etherchannel

Sw2

Switch2(config)#int range fa0/21-23

Switch2(config-if-range)#channel-group 1 mode active

Switch2(config)#int port-channel 1

Switch2(config-if)#sw mode trunk

Sw3

Switch3(config)#int range fa0/21-23

Switch3(config-if-range)#channel-group 1 mode active

Switch3(config)#int port-channel 1

Switch3(config-if)#sw mode trunk

PUNTO 3

CONFIG enrutamiento VLANS 30 - 40 sw multicapa

SWML02

Ip routing

interface Vlan30

ip address 192.168.30.2 255.255.255.0

interface Vlan40

ip address 192.168.40.2 255.255.255.0

SWML03

Ip routing

interface Vlan30

ip address 192.168.30.3 255.255.255.0

interface Vlan40

ip address 192.168.40.3 255.255.255.0

PUNTO 7

CONFIG VLANS 30 - 40

Sw2

```
Switch2(config)#vlan 30
```

```
Switch2(config-vlan)#vlan 40
```

```
Switch2(config)#int range g0/1-2
```

```
Switch2(config-if-range)#sw mo trunk
```

```
Switch2(config)#int range fa0/1-5
```

```
Switch2(config-if-range)#sw mode access
```

```
Switch2(config-if-range)#sw access vlan 30
```

```
Switch2(config-if-range)#int range fa0/6-10
```

```
Switch2(config-if-range)#sw mo access
```

```
Switch2(config-if-range)#sw access vlan 40
```

Sw3

```
Switch3(config)#vlan 30
```

```
Switch3(config-vlan)#vlan 40
```

```
Switch3(config)#int range fa0/1-5
```

```
Switch3(config-if-range)#sw mode access
```

```
Switch3(config-if-range)#sw access vlan 30
```

```
Switch3(config-if-range)#int range fa0/6-10
```

```
Switch3(config-if-range)#sw mo access
```

Switch3(config-if-range)#sw access vlan 40

Switch3(config)#int range g0/1-2

Switch3(config-if-range)#sw mode trunk

SWML02

SWML02(config)#vlan 30

SWML02(config-vlan)#vlan 40

SWML02(config)#int range g1/0/23-24

SWML02(config-if-range)#sw mo tr

SWML02(config-if-range)#sw mo trunk

SWML03

SWML03(config)#vlan 30

SWML03(config-vlan)#vlan 40

SWML03(config)#int range g1/0/23-24

SWML03(config-if-range)#sw mode tr

PUNTO 4

GW REDUNDANTE VLAN 10 - 20

ROUTER 1

```
Router(config)#int g0/0/0.10  
standby 10 ip 192.168.10.1  
standby 10 priority 150  
standby 10 preempt
```

```
Router1(config)#int g0/0/0.20  
standby 20 ip 192.168.20.1  
standby 20 priority 150  
standby 20 preempt
```

ROUTER 2

```
Router2(config)#int g0/0/0.10  
standby 10 ip 192.168.10.1  
standby 10 preempt
```

```
Router2(config-subif)#int g0/0/0.20  
standby 20 ip 192.168.20.1  
standby 20 preempt
```

PUNTO 5

GW REDUNDANTE VLAN 30 - 40

SWML02

```
SWML02(config)#int vlan 30  
SWML02(config-if)#standby 30 ip 192.168.30.1
```

SWML02(config-if)#standby 30 priority 150

SWML02(config-if)#standby 30 preempt

SWML02(config-if)#int vlan 40

SWML02(config-if)#standby 40 ip 192.168.40.1

SWML02(config-if)#standby 40 priority 150

SWML03

SWML03(config)#int vlan 30

SWML03(config-if)#standby 30 ip 192.168.30.1

SWML03(config-if)#standby 30 preempt

SWML03(config-if)#int vlan 40

SWML03(config-if)#standby 40 ip 192.168.40.1

SWML03(config-if)#standby 40 preempt

PUNTO 8

Configuracion de VLANS 10 - 20

SW1

Switch(config)#vlan 10

Switch(config-vlan)#vlan 20

Switch(config)#int range fa0/1-5

Switch(config-if-range)#sw mod access

Switch(config-if-range)#sw access vlan 10

Switch(config-if-range)#int range fa0/6-10

Switch(config-if-range)#sw mod access

Switch(config-if-range)#sw access vlan 20

Switch(config)#int g0/1

Switch(config-if)#switchport mode trunk

Switch(config)#int fa0/24

Switch(config-if)#sw mode trunk

PUNTO 9

DHCP

ROUTER 3 (dhcp)

ip dhcp excluded-address 192.168.10.1

ip dhcp excluded-address 192.168.10.2

ip dhcp excluded-address 192.168.10.3

ip dhcp excluded-address 192.168.20.1

ip dhcp excluded-address 192.168.20.2

ip dhcp excluded-address 192.168.20.3

!

ip dhcp pool vlan10

network 192.168.10.0 255.255.255.0

default-router 192.168.10.1

ip dhcp pool vlan20

network 192.168.20.0 255.255.255.0

default-router 192.168.20.1

ip dhcp excluded-address 192.168.10.1

ip dhcp excluded-address 192.168.10.2

ip dhcp excluded-address 192.168.10.3

ip dhcp excluded-address 192.168.20.1


```
ip dhcp excluded-address 192.168.20.2
ip dhcp excluded-address 192.168.20.3
ip dhcp excluded-address 192.168.30.1
ip dhcp excluded-address 192.168.30.2
ip dhcp excluded-address 192.168.30.3
ip dhcp excluded-address 192.168.40.1
ip dhcp excluded-address 192.168.40.2
ip dhcp excluded-address 192.168.40.3
!
```

```
ip dhcp pool vlan10
network 192.168.10.0 255.255.255.0
default-router 192.168.10.1

ip dhcp pool vlan20
network 192.168.20.0 255.255.255.0
default-router 192.168.20.1

ip dhcp pool vlan30
network 192.168.30.0 255.255.255.0
default-router 192.168.30.1

ip dhcp pool vlan40
network 192.168.40.0 255.255.255.0
default-router 192.168.40.1
```

SWML02

```
SWML02(config)#int vlan 30
SWML02(config-if)#ip helper-address 172.20.7.1
SWML02(config-if)#int vlan 40
SWML02(config-if)#ip helper-address 172.20.7.1
```

SWML03

```
SWML03(config)#int vlan 30
```

```
SWML03(config-if)#ip helper-address 172.20.7.1
```

```
SWML03(config-if)#int vlan 40
```

```
SWML03(config-if)#ip helper-address 172.20.7.1
```

ROUTER 1

```
Router1(config)#int g0/0/0.10
```

```
Router1(config-subif)#ip helper-address 172.20.7.58
```

```
Router1(config-subif)#int g0/0/0.20
```

```
Router1(config-subif)#ip helper-address 172.20.7.58
```

ROUTER 2

```
Router2(config)#INT G0/0/0.10
```

```
Router2(config-subif)#IP HELP
```

```
Router2(config-subif)#IP HELPer-address 172.20.7.62
```

```
Router2(config-subif)#INT G0/0/0.20
```

```
Router2(config-subif)#IP HELPer-address 172.20.7.62
```