

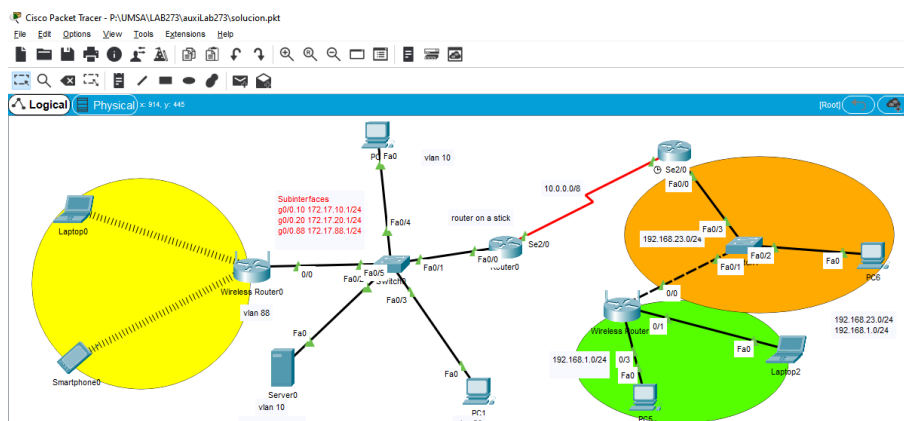
## REQUERIMIENTOS

- EXPLICAR LAS MODIFICACIONES QUE SE HIZO EN LOS ROUTERS PARA EN ENRUTAMIENTO CON OSPF.

Siguiendo los siguientes pasos se logro la solucion al problema de conectividad en el ejercicio planteado por el auxiliar lab-273.

### Paso1

con el comando **#show ip route** se verifico en ambos Routers que Direcciones de Red aprendidas en su tabla de enrutamiento a traves del protocolo OSPF.



```
Router0>enable
Router0#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 not set

C    10.0.0.0/8 is directly connected, Serial2/0
C    172.17.0.0/24 is subnetted, 3 subnets
C      172.17.10.0 is directly connected, FastEthernet0/0.10
C      172.17.20.0 is directly connected, FastEthernet0/0.20
C      172.17.88.0 is directly connected, FastEthernet0/0.88
```

En el Router 0 solo podemos observar que tiene Direcciones de Red directamente conectadas denotadas con la letra C y no así la direcciones de red aprendidas por el protocolo OSPF que se denotan con la letra O

Red 192.168.3.0 (Falta)

En el Router1 podemos ver que tiene Direcciones de Red directamente conectadas denotadas con la letra C y las direcciones de red aprendidas por el protocolo OSPF que se denotan con la letra O:

Vlan10 172.17.10.0 via s2/0  
Vlan20 172.17.20.0 via s2/0  
Vlan88 172.17.88.0 via s2/0

```
Router1>enable
Router1#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 not set

C    10.0.0.0/8 is directly connected, Serial2/0
C    172.17.0.0/24 is subnetted, 3 subnets
O      172.17.10.0 [110/65] via 10.0.0.2, 00:07:45, Serial2/0
O      172.17.20.0 [110/65] via 10.0.0.2, 00:07:45, Serial2/0
O      172.17.88.0 [110/65] via 10.0.0.2, 00:07:45, Serial2/0
C    192.168.23.0/24 is directly connected, FastEthernet0/0
```

## Paso2

Eliminamos el enrutamiento OSPF que se realizo con el comando **#no router ospf 273**

## Paso3

Realizamos nuevamente el enrutamiento OSPF agregando la Red de enlace entre Router 0 y Router1 **10.0.0.0/8** tomando como **AREA 0**

**Hacemos el enrutamiento mediante el protocolo OSPF siguiendolos siguientes comandos:**

- #Router (nombre del proceso) (numero de proceso)
- #network (dirección de Red) (mascara WILDCARD)(numero de AREA)

**Agregamos la Red de (que sirve como enlace entre router0 y router1)**

```
Router0>enable
Router0#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router0(config)#router ospf 273
Router0(config-router)#network 172.17.10.0 0.0.0.255 area 0
Router0(config-router)#network 172.17.20.0 0.0.0.255 area 0
Router0(config-router)#network 172.17.88.0 0.0.0.255 area 0
Router0(config-router)#network 10.0.0.0 0.255.255.255 area 0
Router0(config-router)#

Router1>enable
Router1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router1(config)#router ospf 273
Router1(config-router)#network 192.168.23.0 0.0.0.255 area 0
Router1(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router1(config-router)#network 10.0.0.0 0.255.255.255 area 0
Router1(config-router)#
```

## Paso3

Verificamos nuevamente las tablas de enrutamiento en ambos routers con el comando **#show ip route**, si aprendieron las redes remotas mediante el protocolo **OSPF**

**Hacemos el enrutamiento mediante el protocolo OSPF siguiendolos siguientes comandos:**

- #Router (nombre del proceso) (numero de proceso)
- #network (dirección de Red) (mascara WILDCARD)(numero de AREA)

**Agregamos la Red de (que sirve como enlace entre router0 y router1)**

```
Router0>enable
Router0#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
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, Serial2/0
  172.17.0.0/24 is subnetted, 3 subnets
C      172.17.10.0 is directly connected, FastEthernet0/0.10
C      172.17.20.0 is directly connected, FastEthernet0/0.20
C      172.17.88.0 is directly connected, FastEthernet0/0.88
O    192.168.23.0/24 [110/65] via 10.0.0.1, 00:18:45, Serial2/0
Router0#

Router1>enable
Router1#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
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, Serial2/0
  172.17.0.0/24 is subnetted, 3 subnets
O      172.17.10.0 [110/65] via 10.0.0.2, 00:30:11, Serial2/0
O      172.17.20.0 [110/65] via 10.0.0.2, 00:30:11, Serial2/0
O      172.17.88.0 [110/65] via 10.0.0.2, 00:30:11, Serial2/0
C    192.168.23.0/24 is directly connected, FastEthernet0/0
Router1#
```

ANTES DE VERIFICAR LA CONECTIVIDAD SE CORRIGIO LAS DIRECCIONES IP DE LA PC6 Y ASIGNACION DE DIRECCION GATEWAY Y DIRECCIONES DNS EN LA PC Y EN EL ROUTER INALAMBRICO PARA QUE HAYA CONECTIVIDAD ENTRE LAS PC'S DE LA RED INALAMBRICA CON LOS DEMAS

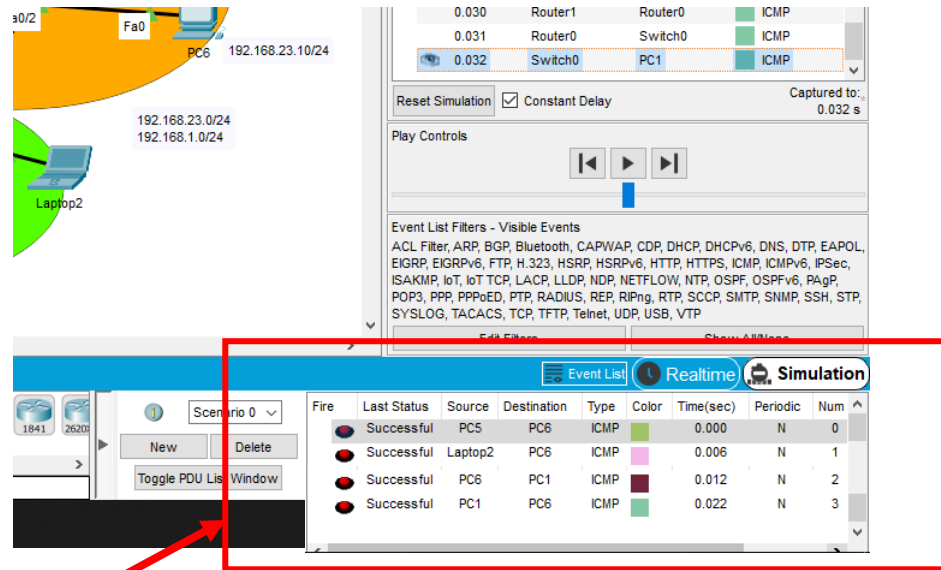
The image displays three screenshots of network configuration interfaces, illustrating the setup for connectivity between wireless PCs and other network devices.

**Wireless Router1 - Internet Setup:** This window shows the configuration for the router's internet connection. The "Static IP" option is selected. The "Internet IP Address" is set to 192.168.23.2, the "Subnet Mask" is 255.255.255.0, and the "Default Gateway" is 192.168.23.1. The "DNS 1" field is highlighted with a red box and contains the value 172.17.10.22. A red arrow points to this field.

**Wireless Router1 - DHCP Server Settings:** This window shows the configuration for the DHCP server. The "DHCP Server" is enabled. The "Start IP Address" is 192.168.1.100, the "Maximum number of Users" is 50, and the "IP Address Range" is 192.168.1.100 - 149. The "Static DNS 1" field is highlighted with a red box and contains the value 172.17.10.22. A red arrow points to this field.

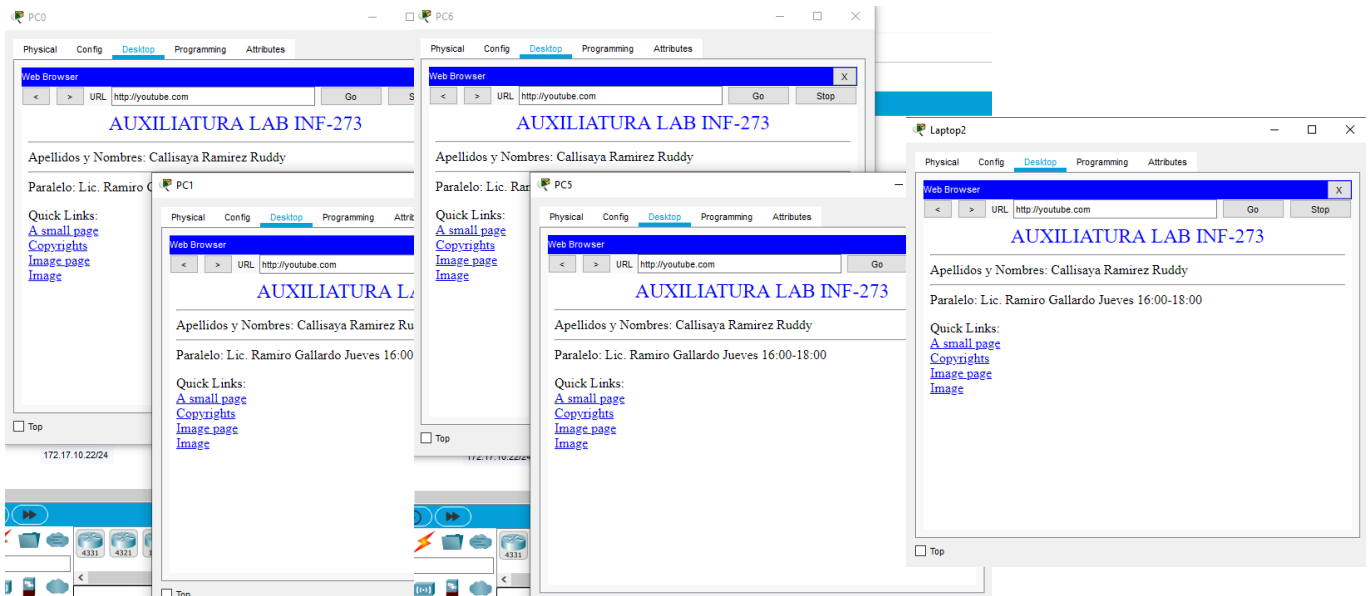
**PC6 - IP Configuration:** This window shows the configuration for the PC's IP address. The "Static" option is selected. The "IP Address" is 192.168.23.10, the "Subnet Mask" is 255.255.255.0, the "Default Gateway" is 192.168.23.1, and the "DNS Server" is 172.17.10.22. A red box highlights these four fields, and a red arrow points to the "DNS Server" field.

- CONECTIVIDAD ENTRE LA PC5 Y PC6
- CONECTIVIDAD ENTRE LA LAPTOP Y PC6
- CONECTIVIDAD ENTRE LA PC6 Y PC1
- CONECTIVIDAD ENTRE PC1 Y PC6



**Conectividad exitosa según los requerimientos**

- TODOS LOS HOSTS PUEDAN VER EL HTML DEL SERVIDOR YOUTUBE.COM



- AL SERVIDOR YOUTUBE.COM MODIFICAR EL HTML Y PONER NOMBRE COMPLETO Y PARALELO

