



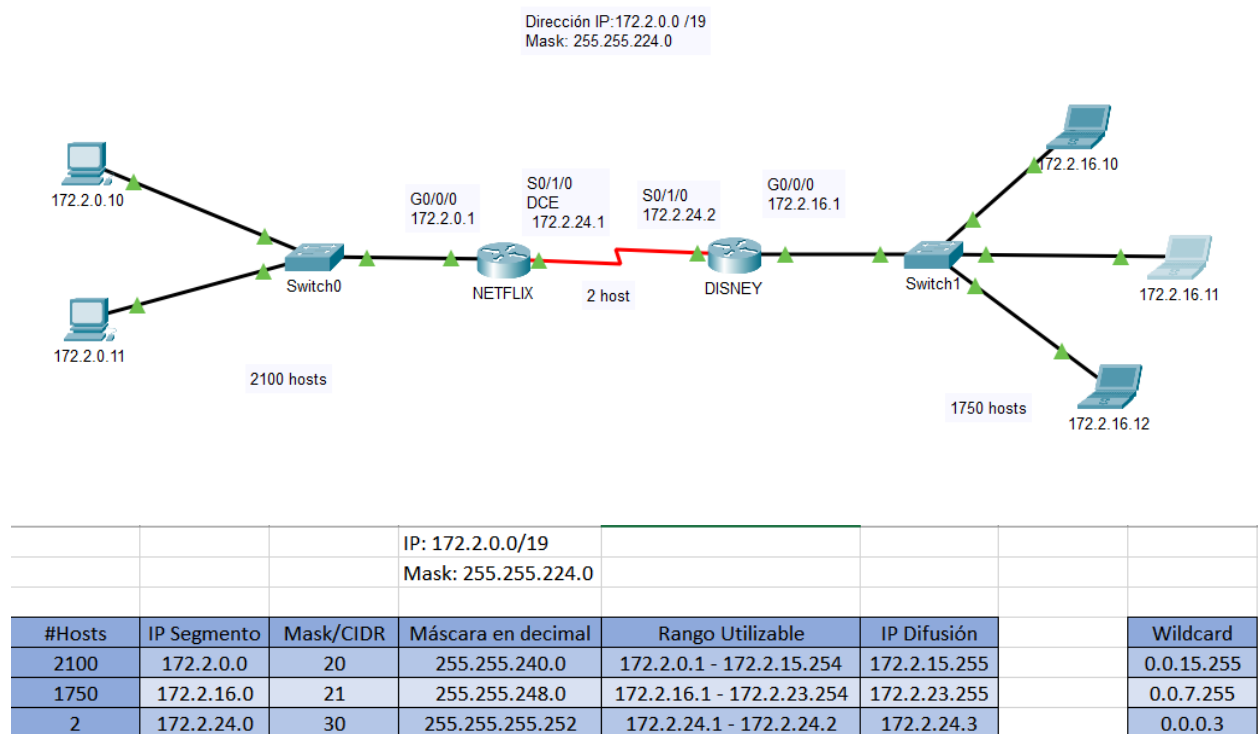
Tecnológico de Monterrey

Configuración básica y OSPF

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10 de junio del 2022

Interconexión de dispositivos (Gpo 300)



Verificación de la conectividad

172.2.16.11

Physical Config Desktop Programming Attributes

Command Prompt

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.2.16.11

Pinging 172.2.16.11 with 32 bytes of data:

Reply from 172.2.16.11: bytes=32 time=8ms TTL=128
Reply from 172.2.16.11: bytes=32 time<1ms TTL=128
Reply from 172.2.16.11: bytes=32 time=9ms TTL=128
Reply from 172.2.16.11: bytes=32 time<1ms TTL=128

Ping statistics for 172.2.16.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 9ms, Average = 4ms

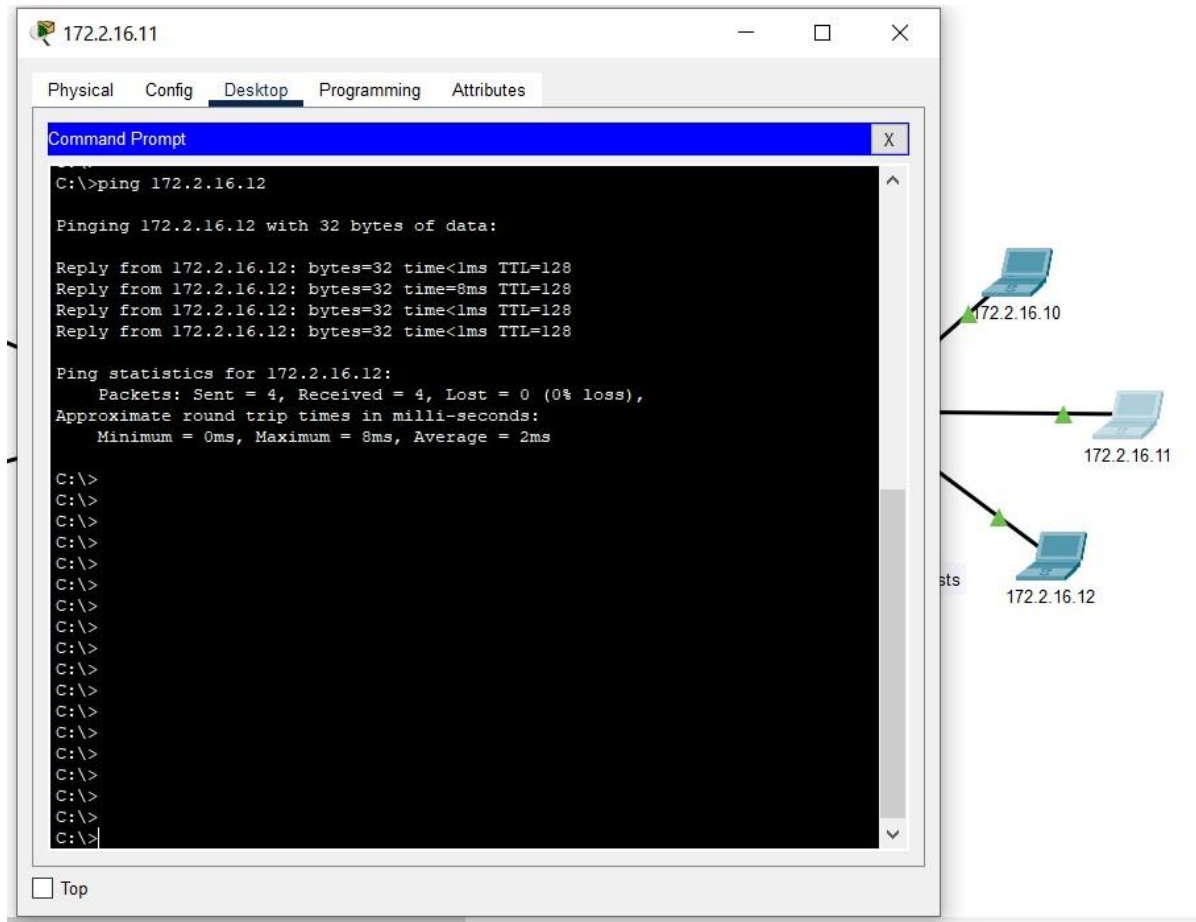
C:\>

```

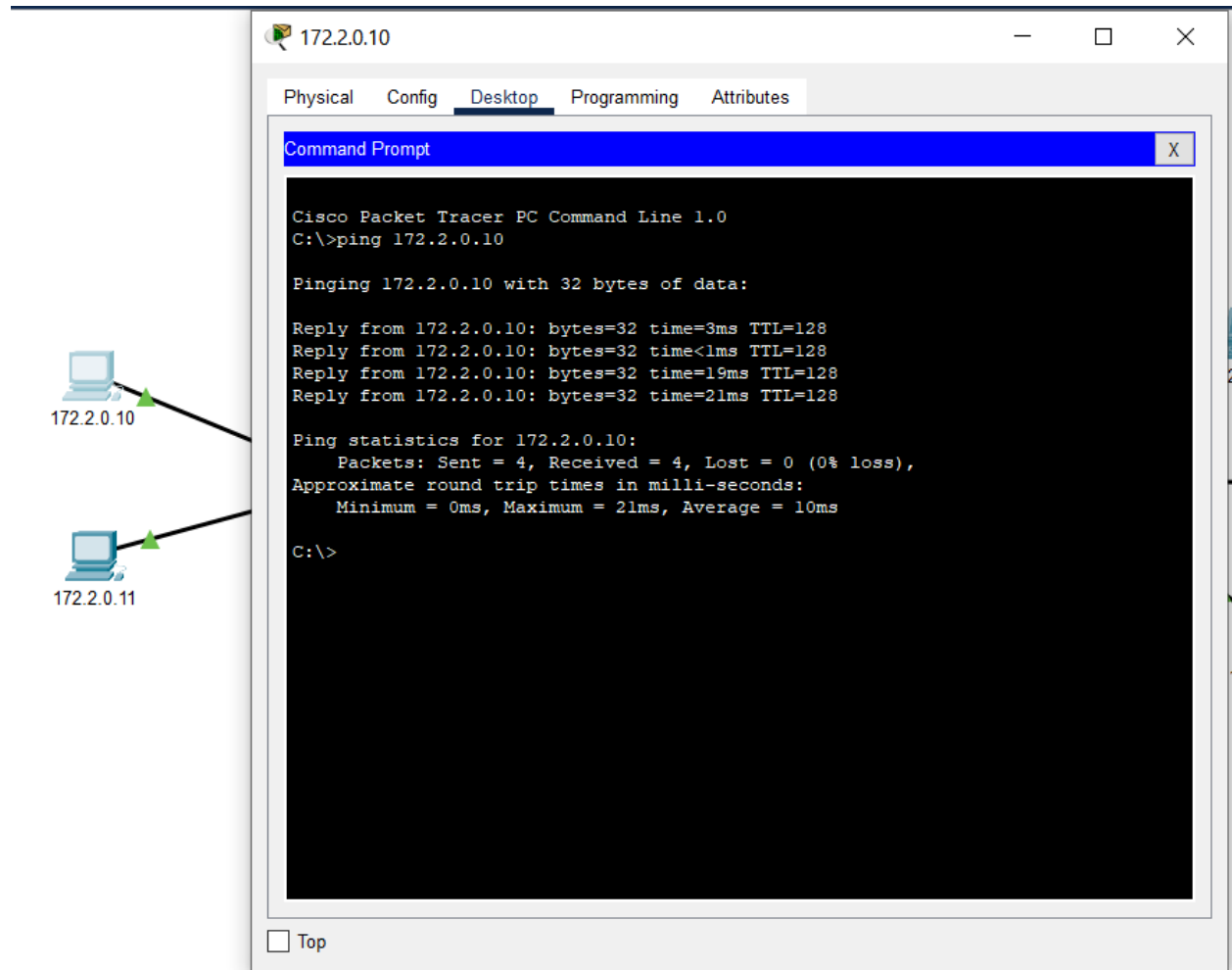
Top

Ping a la misma computadora

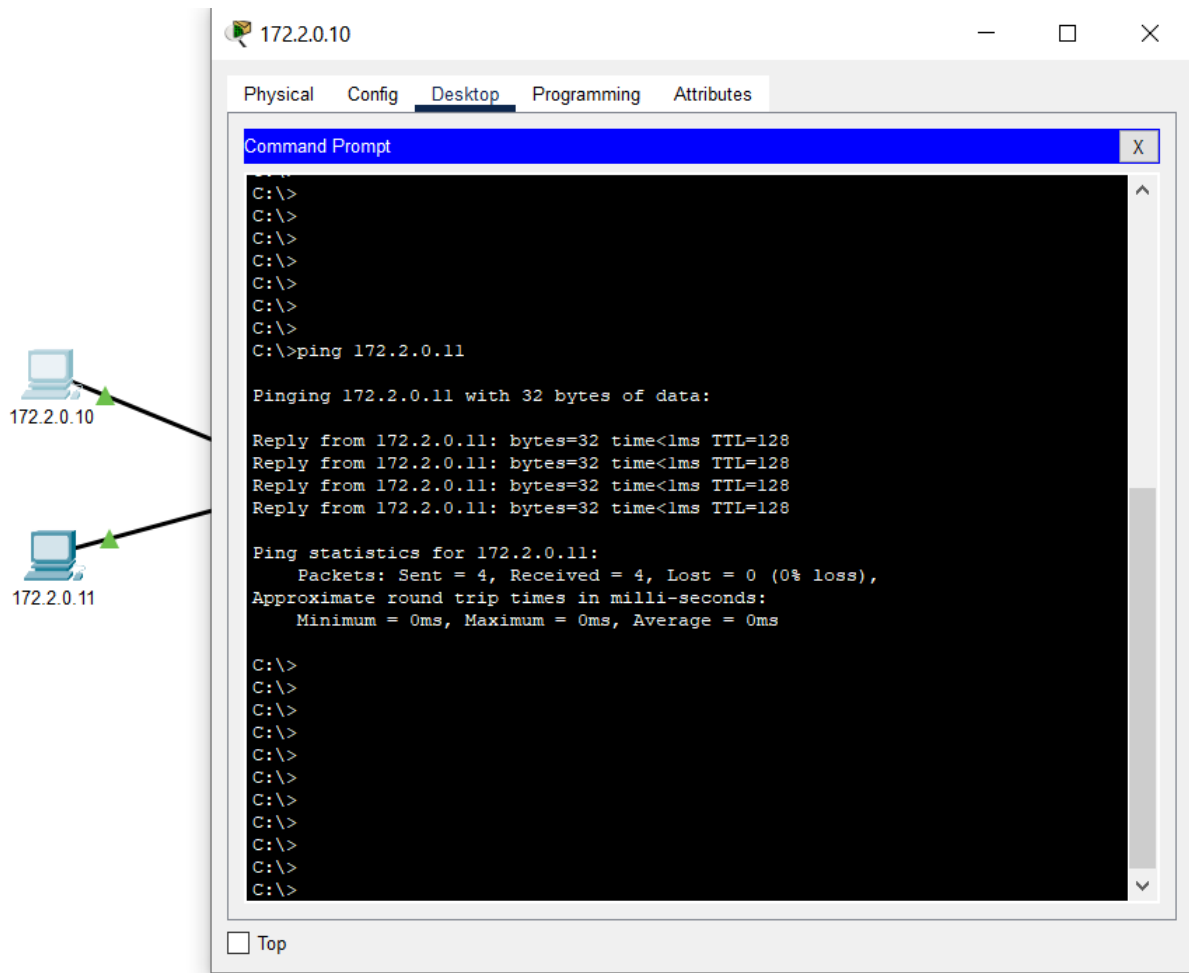
Ping de la computadora 172.2.16.11 a la 172.2.16.12



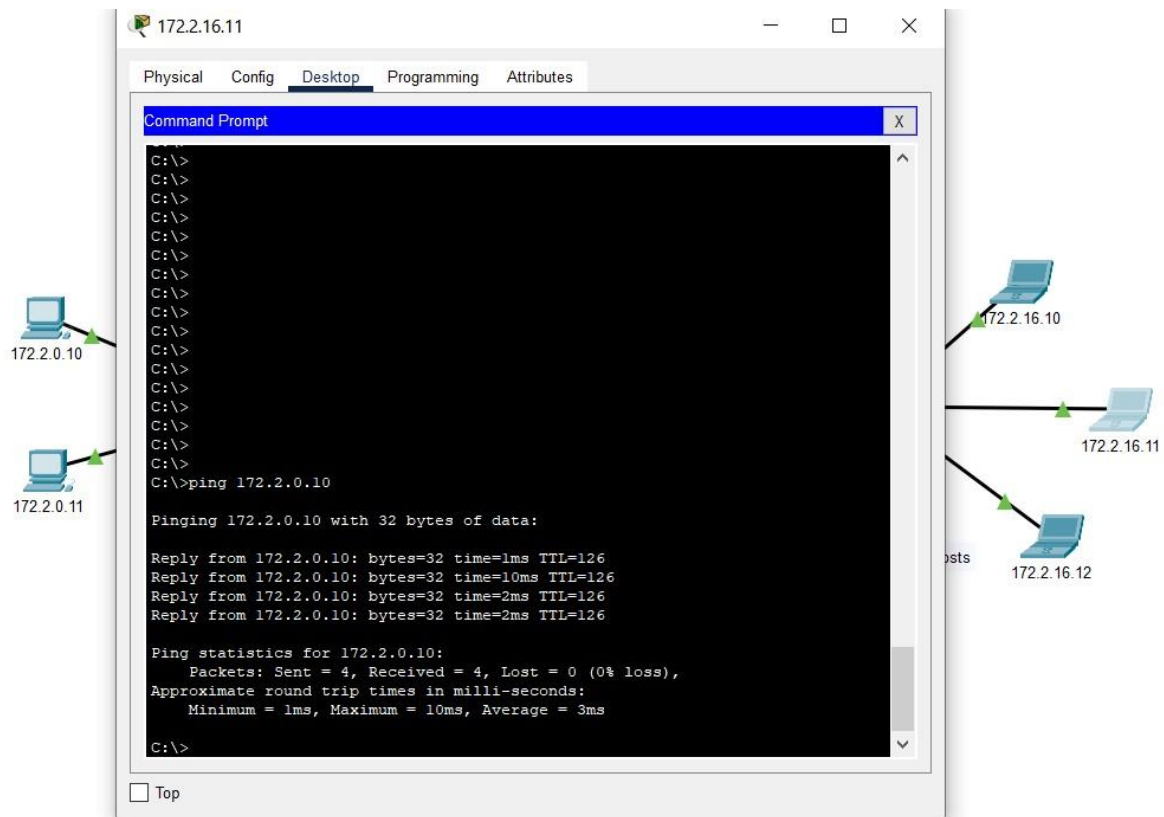
Ping a la misma computadora



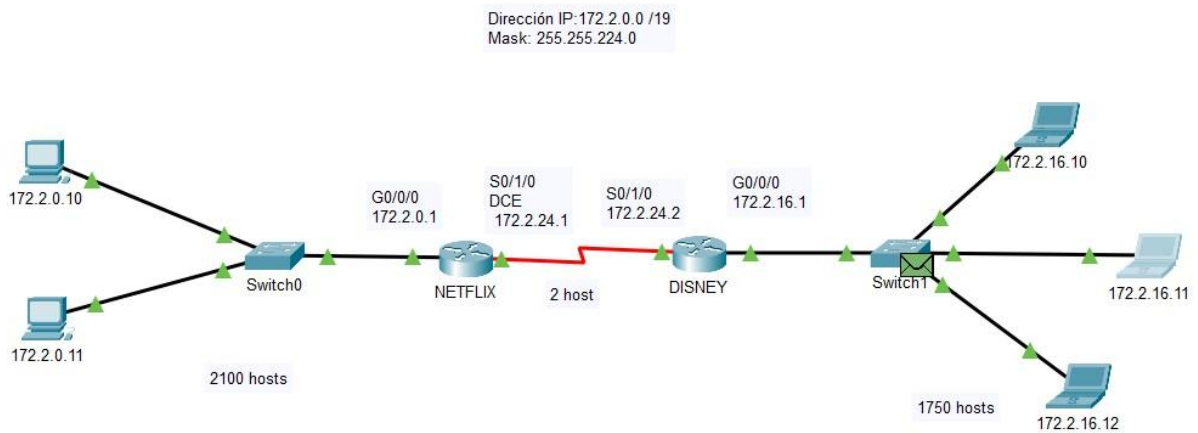
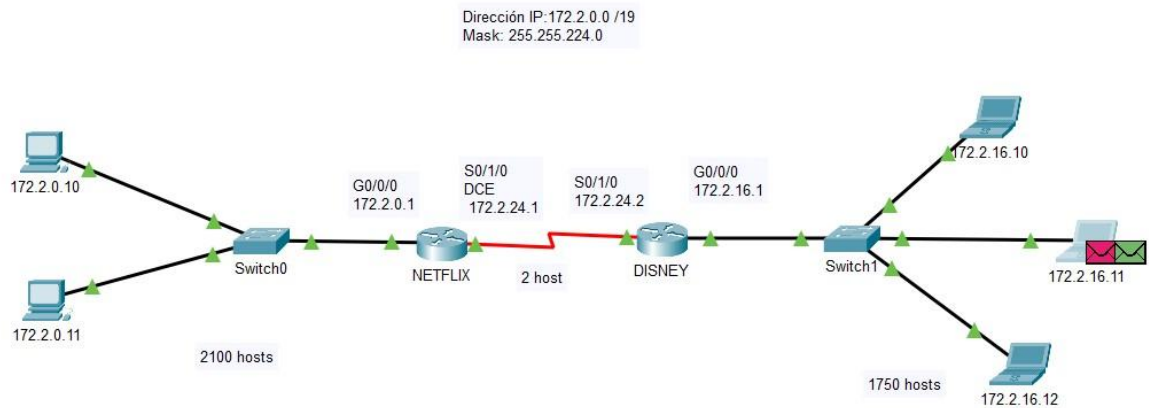
Ping de la computadora 172.2.0.10 a la 172.2.0.11



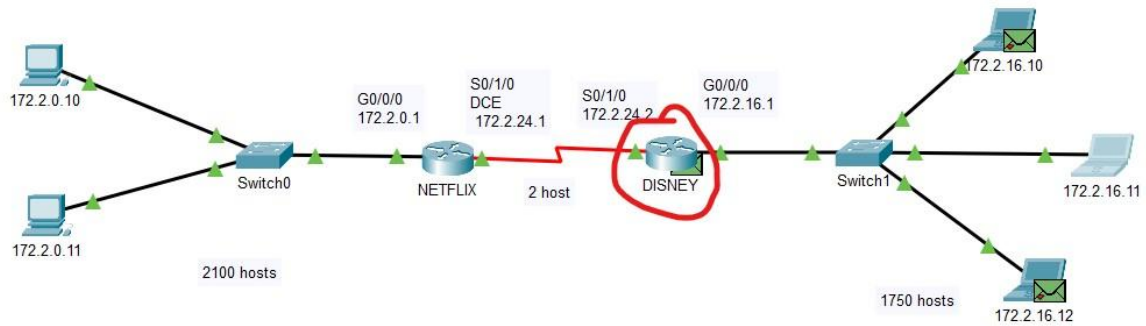
Conectividad de extremo a extremo (172.2.16.11 a 172.2.0.10)



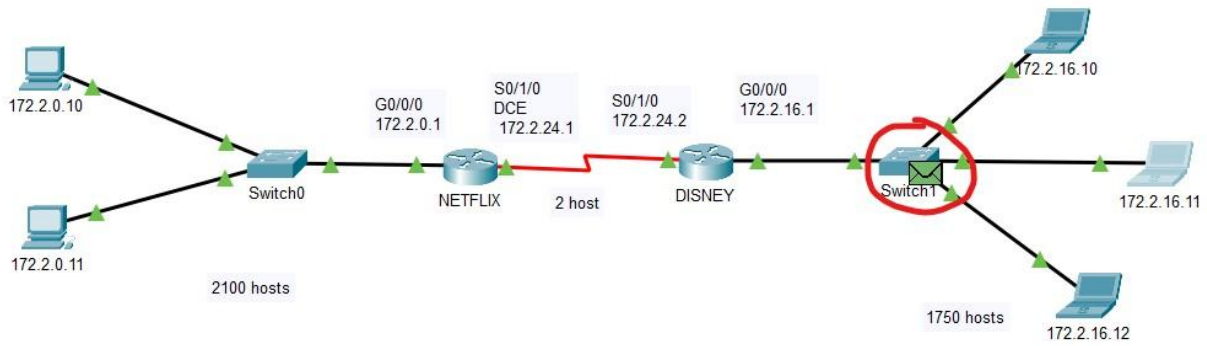
Verificación de la ruta



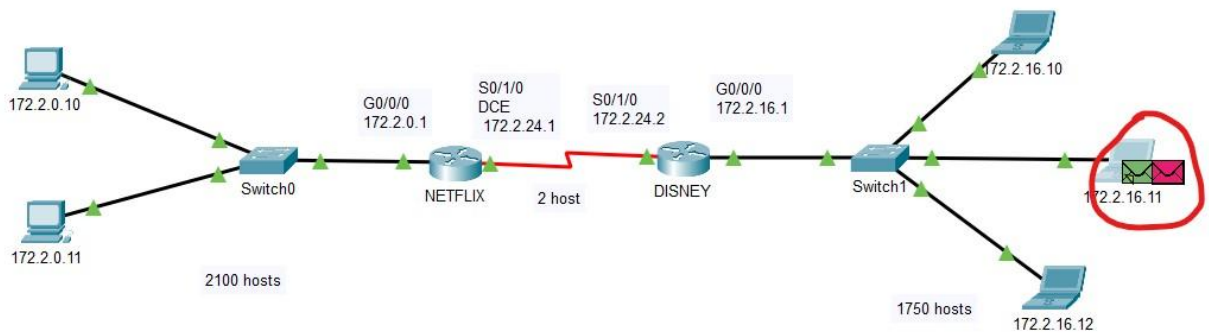
Dirección IP: 172.2.0.0 /19
Mask: 255.255.224.0



Dirección IP: 172.2.0.0 /19
Mask: 255.255.224.0



Dirección IP: 172.2.0.0 /19
Mask: 255.255.224.0



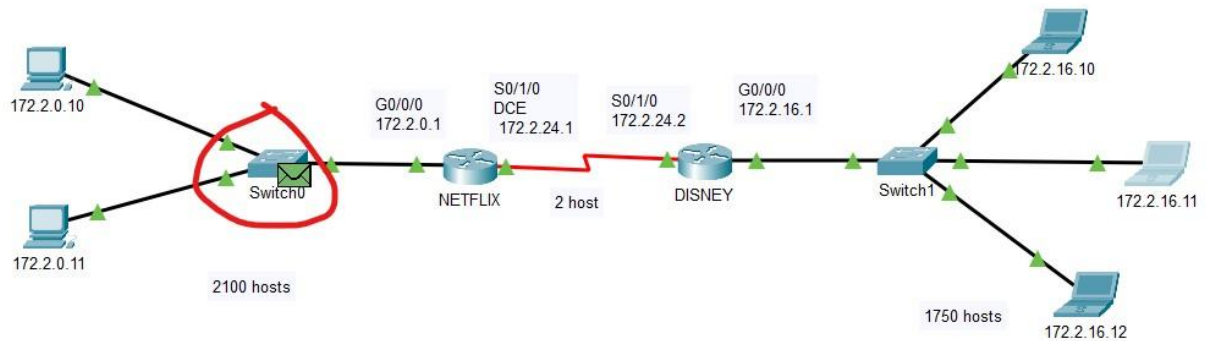
The diagram illustrates a network topology with the following components and connections:

- Left Side:** Two hosts with IP addresses 172.2.0.10 and 172.2.0.11 are connected to **Switch0**. A label "2100 hosts" is associated with this group.
- Switch0:** A blue switch icon connected to the left hosts and the first router.
- Router 1 (NETFLIX):** A blue router icon with interface **G0/0/0** (IP 172.2.0.1) connected to Switch0 and interface **S0/1/0** (IP 172.2.24.1) connected to the second router. It is labeled "NETFLIX".
- Host:** A red line segment between the two routers is labeled "2 host".
- Router 2 (DISNEY):** A blue router icon with interface **S0/1/0** (IP 172.2.24.2) connected to the first router and interface **G0/0/0** (IP 172.2.16.1) connected to Switch1. It is labeled "DISNEY".
- Switch1:** A blue switch icon circled in red, connected to the second router and three right-side hosts. It is labeled "Switch1".
- Right Side:** Three hosts with IP addresses 172.2.16.10, 172.2.16.11, and 172.2.16.12 are connected to Switch1. A label "1750 hosts" is associated with this group.

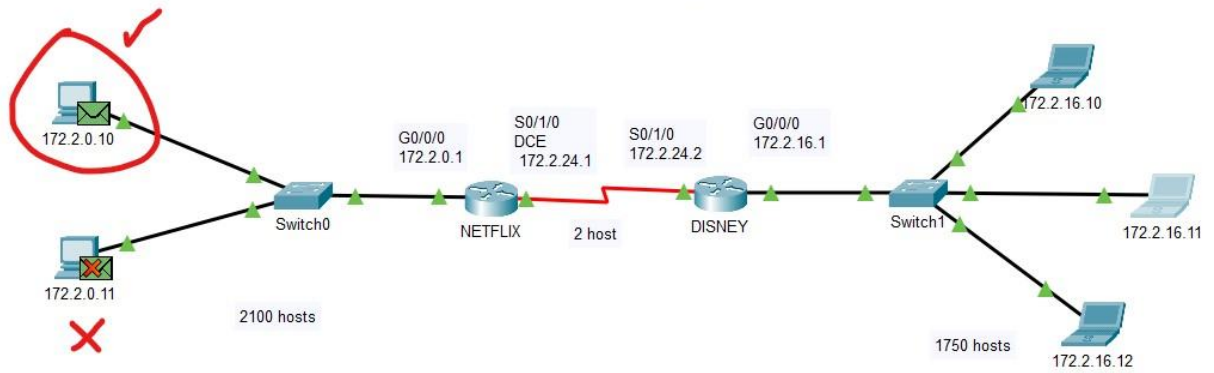
The diagram illustrates a network topology for a video streaming service. It shows a path from 2100 hosts (left) to 1750 hosts (right). The path consists of Switch0, a NETFLIX router (G0/0/0 172.2.0.1, S0/1/0 DCE 172.2.24.1), a 2-host link, a DISNEY router (S0/1/0 172.2.24.2, G0/0/0 172.2.16.1), and Switch1. The DISNEY router is highlighted with a red circle, indicating it is the focus of the analysis.

The diagram illustrates a network topology for a video streaming service. It shows a path from a source of 2100 hosts (IPs 172.2.0.10 and 172.2.0.11) through a series of network devices to a destination of 1750 hosts (IPs 172.2.16.10, 172.2.16.11, and 172.2.16.12). The path includes Switch0, a red circle labeled 'NETFLIX' (G0/0/0 172.2.0.1, S0/1/0 DCE 172.2.24.1), a red line labeled '2 host' (S0/1/0 172.2.24.2), a router labeled 'DISNEY' (G0/0/0 172.2.16.1), and Switch1. The destination is 1750 hosts with IP 172.2.16.12.


Dirección IP: 172.2.0.0 /19
Mask: 255.255.224.0



Dirección IP: 172.2.0.0 /19
Mask: 255.255.224.0



Verificación de la tabla de enrutamiento

 NETFLIX

Physical

Config

CLI

Attributes

IOS Command Line Interface

```
%Error parsing filename (Bad file number)
NETFLIX#
NETFLIX#confi t
Enter configuration commands, one per line.  End with CNTL/Z.
NETFLIX(config)#sho ip ro
NETFLIX(config)#exit
NETFLIX#
%SYS-5-CONFIG_I: Configured from console by console

NETFLIX#sho ip rou
NETFLIX#sho ip route
Codes: L - local, C - connected, S - static, 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

      172.2.0.0/16 is variably subnetted, 5 subnets, 4 masks
C       172.2.0.0/20 is directly connected, GigabitEthernet0/0/0
L       172.2.0.1/32 is directly connected, GigabitEthernet0/0/0
O       172.2.16.0/21 [110/65] via 172.2.24.2, 00:16:06, Serial0/1/0
C       172.2.24.0/30 is directly connected, Serial0/1/0
L       172.2.24.1/32 is directly connected, Serial0/1/0

NETFLIX#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top

IOS Command Line Interface

```
end

DISNEY#
?Bad filename
%Error parsing filename (Bad file number)
DISNEY#
?Bad filename
%Error parsing filename (Bad file number)
DISNEY#sho ip rou
DISNEY#sho ip route
Codes: L - local, C - connected, S - static, 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

      172.2.0.0/16 is variably subnetted, 5 subnets, 4 masks
O       172.2.0.0/20 [110/65] via 172.2.24.1, 00:19:13, Serial0/1/0
C       172.2.16.0/21 is directly connected, GigabitEthernet0/0/0
L       172.2.16.1/32 is directly connected, GigabitEthernet0/0/0
C       172.2.24.0/30 is directly connected, Serial0/1/0
L       172.2.24.2/32 is directly connected, Serial0/1/0

DISNEY#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Archivo de configuración (NETFLIX)

```
!  
version 15.4  
no service timestamps log datetime msec  
no service timestamps debug datetime msec  
no service password-encryption  
!  
hostname NETFLIX  
!  
!  
!  
!  
!  
!  
!  
!  
no ip cef  
no ipv6 cef  
!  
!  
!  
!  
!  
!  
!  
!  
no ip domain-lookup  
!  
!  
spanning-tree mode pvst  
!  
!  
!  
!  
!  
!  
interface GigabitEthernet0/0/0
```

description Conexion de NETFLIX a 2100 hosts

ip address 172.2.0.1 255.255.240.0

duplex auto

speed auto

!

interface GigabitEthernet0/0/1

no ip address

duplex auto

speed auto

shutdown

!

interface GigabitEthernet0/0/2

no ip address

duplex auto

speed auto

shutdown

!

interface Serial0/1/0

description Conexion Serial al router DISNEY

ip address 172.2.24.1 255.255.255.252

clock rate 128000

!

interface Serial0/1/1

no ip address

clock rate 2000000

shutdown

!

interface Vlan1

no ip address

shutdown

!

router ospf 10

log-adjacency-changes

network 172.2.0.0 0.0.15.255 area 0

network 172.2.24.0 0.0.0.3 area 0

!

ip classless

!

ip flow-export version 9

!

!
!
!
!
!
!
!

line con 0

logging synchronous

!

line aux 0

!

line vty 0 4

login

!

!

!

end