

LABORATORIO 5 TECH

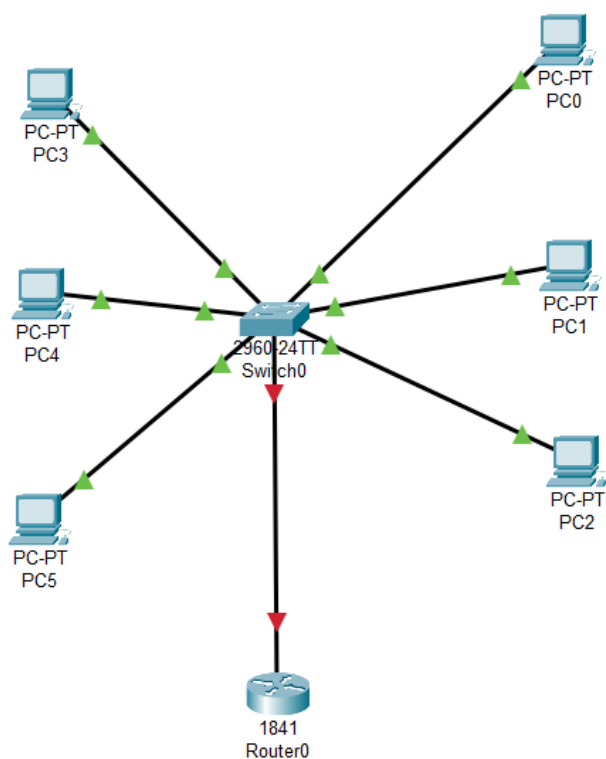
JESUS DAVID DE LA HOZ PEÑA

UNIVERSIDAD POPULAR DEL CESAR

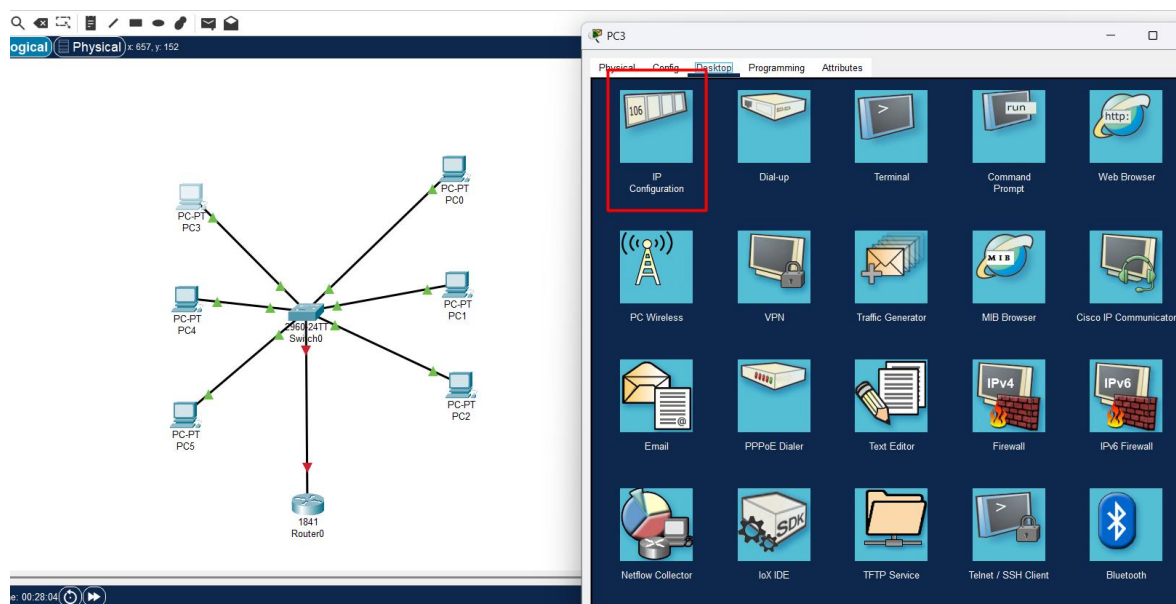
VALLEDUPAR

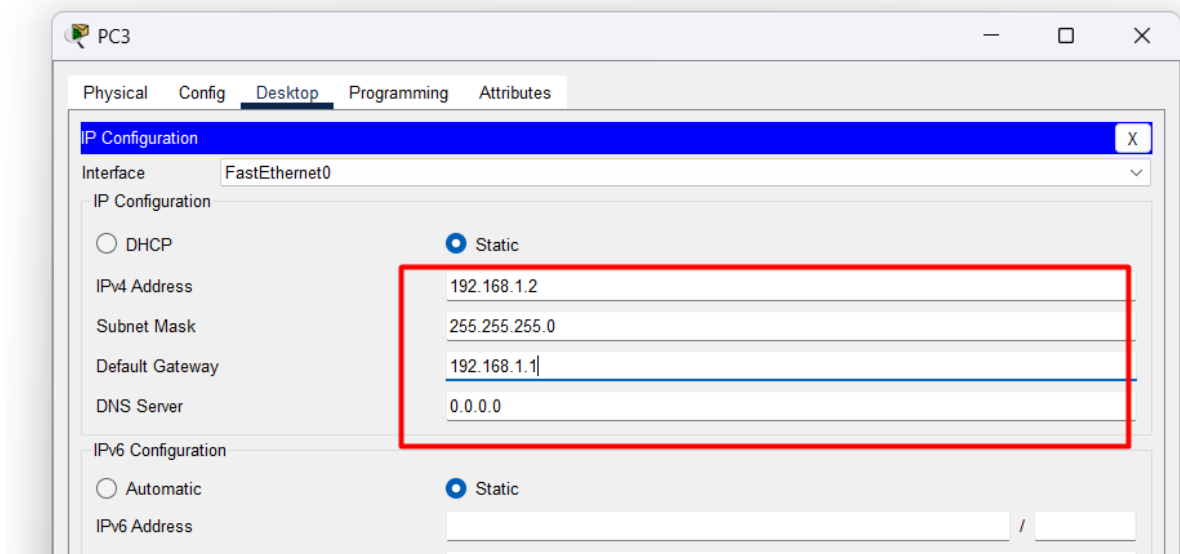
2025

Diseño de la red: En este apartado hemos colocado los dispositivos conectados a un switch, y este mismo conectado a un router

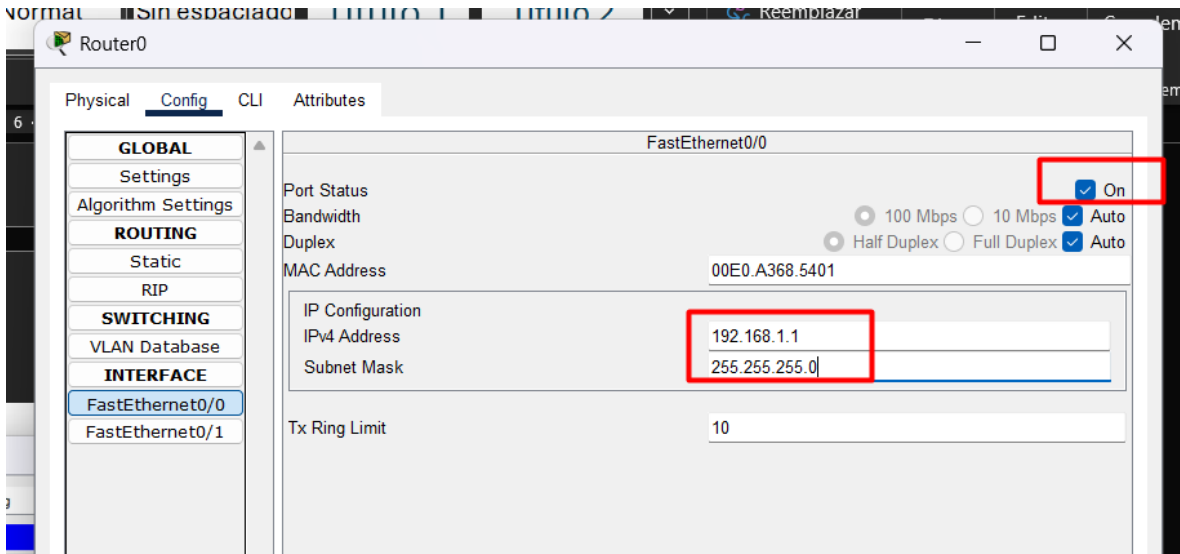


Siguiente a esto, configuramos la ip de cada uno de los dispositivos de esta forma:

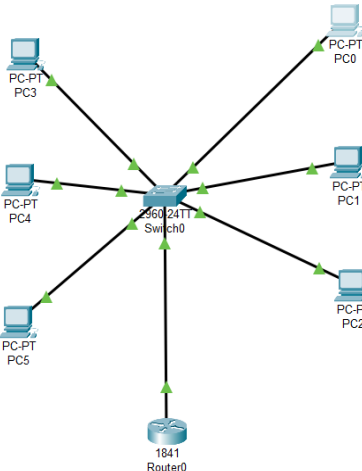




Ahora colocamos el ip del router que seria “192.168.1.1” en el apartado config en FastEther 0/0



Ahora probamos la conectividad y como vemos están perfectamente conectados



PC0

PC-PT PC0

PC-PT PC1

PC-PT PC2

PC-PT PC3

PC-PT PC4

PC-PT PC5

2960 24TT Switch0

1841 Router0

PC0

Physical Config Desktop Programming Attributes

Command Prompt

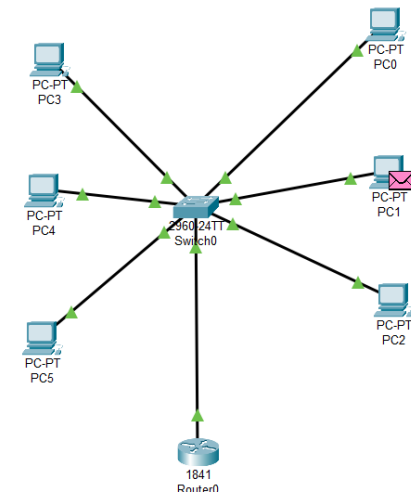
```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time=6ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 6ms, Average = 1ms

C:\>
```



PC0

PC-PT PC0

PC-PT PC1

PC-PT PC2

PC-PT PC3

PC-PT PC4

PC-PT PC5

2960 24TT Switch0

1841 Router0

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

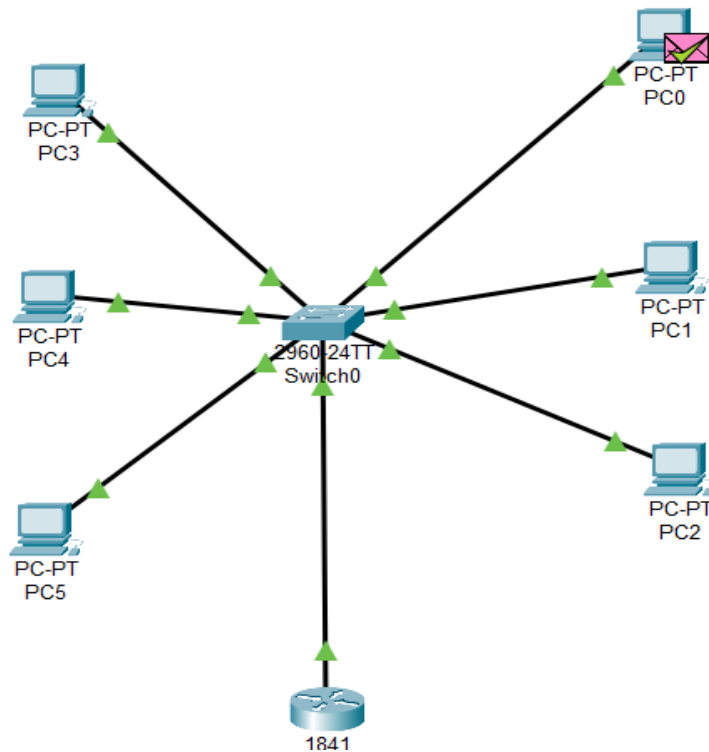
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
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Reply from 192.168.1.3: bytes=32 time=6ms TTL=128
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Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 6ms, Average = 1ms

C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=4ms TTL=128
```



Finalmente, en la información de como se transportan podemos ver que en la capa física, son bits en la capa de enlace ya se utiliza la dirección Mac y en la capa de red ya se utiliza direcciones Ip.

At Device: PC0 Source: PC0 Destination: 192.168.1.3	
In Layers Layer7 Layer6 Layer5 Layer4 Layer 3: IP Header Src. IP: 192.168.1.3, Dest. IP: 192.168.1.2 ICMP Message Type: 0 Layer 2: Ethernet II Header 0002.1664.2BC2 >> 000A.F36B.65A2 Layer 1: Port FastEthernet0	Out Layers Layer7 Layer6 Layer5 Layer4 Layer3 Layer2 Layer1
1. FastEthernet0 receives the frame.	