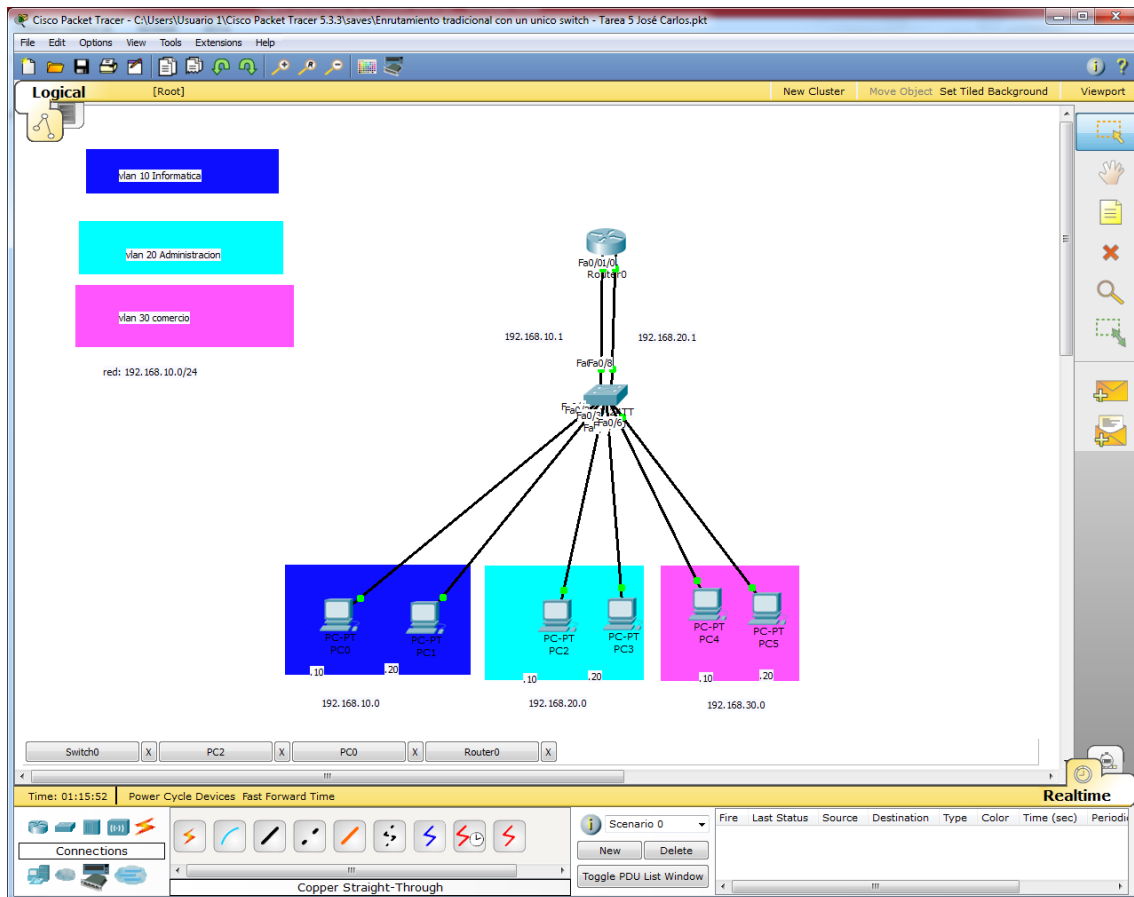


# José Carlos Roncero Blanco

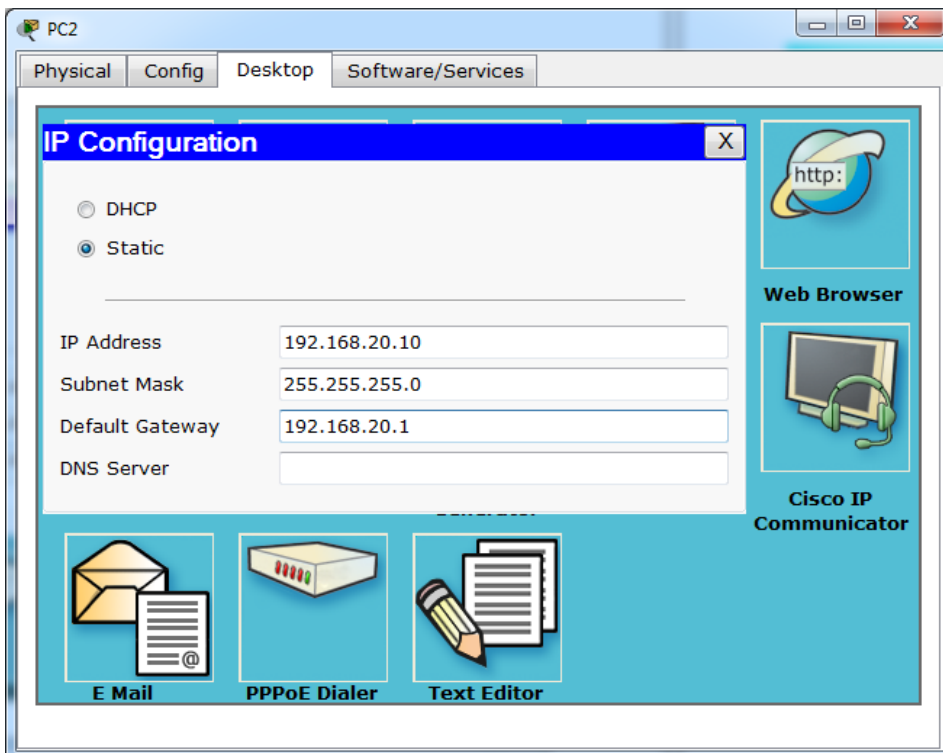
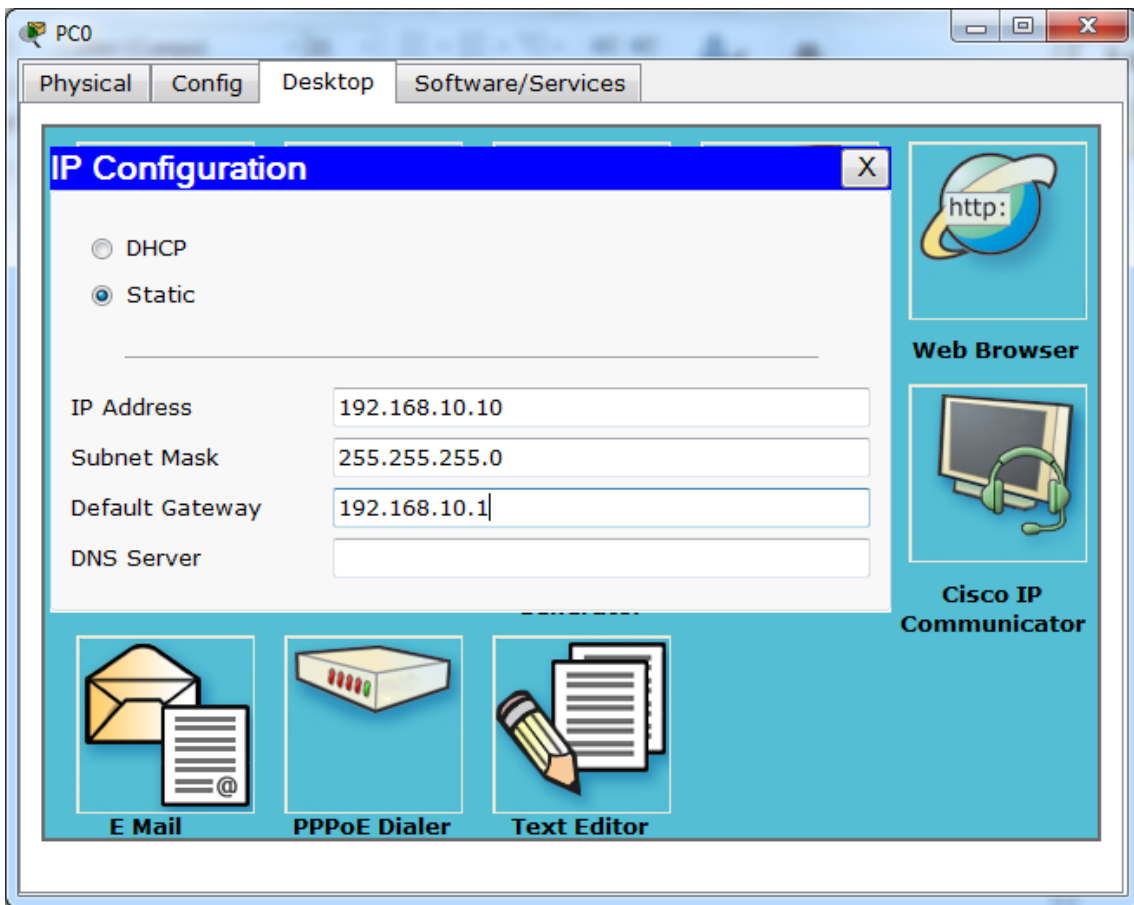
## Tarea 4 – Enrutamiento tradicional con un único switch

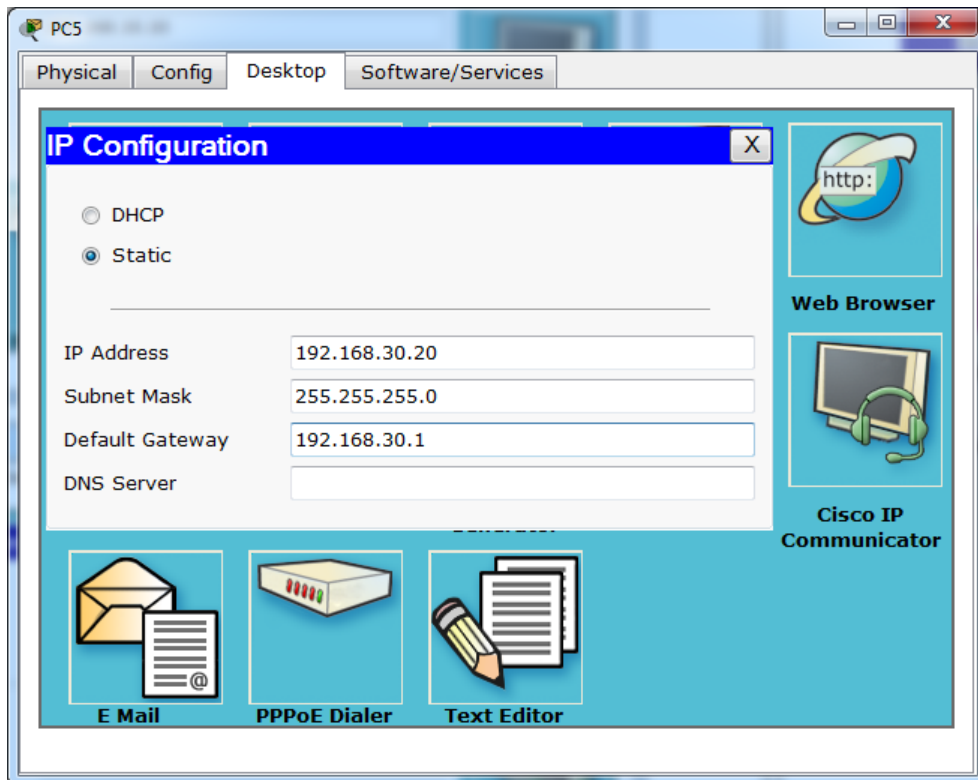
Este será mi supuesto practico:



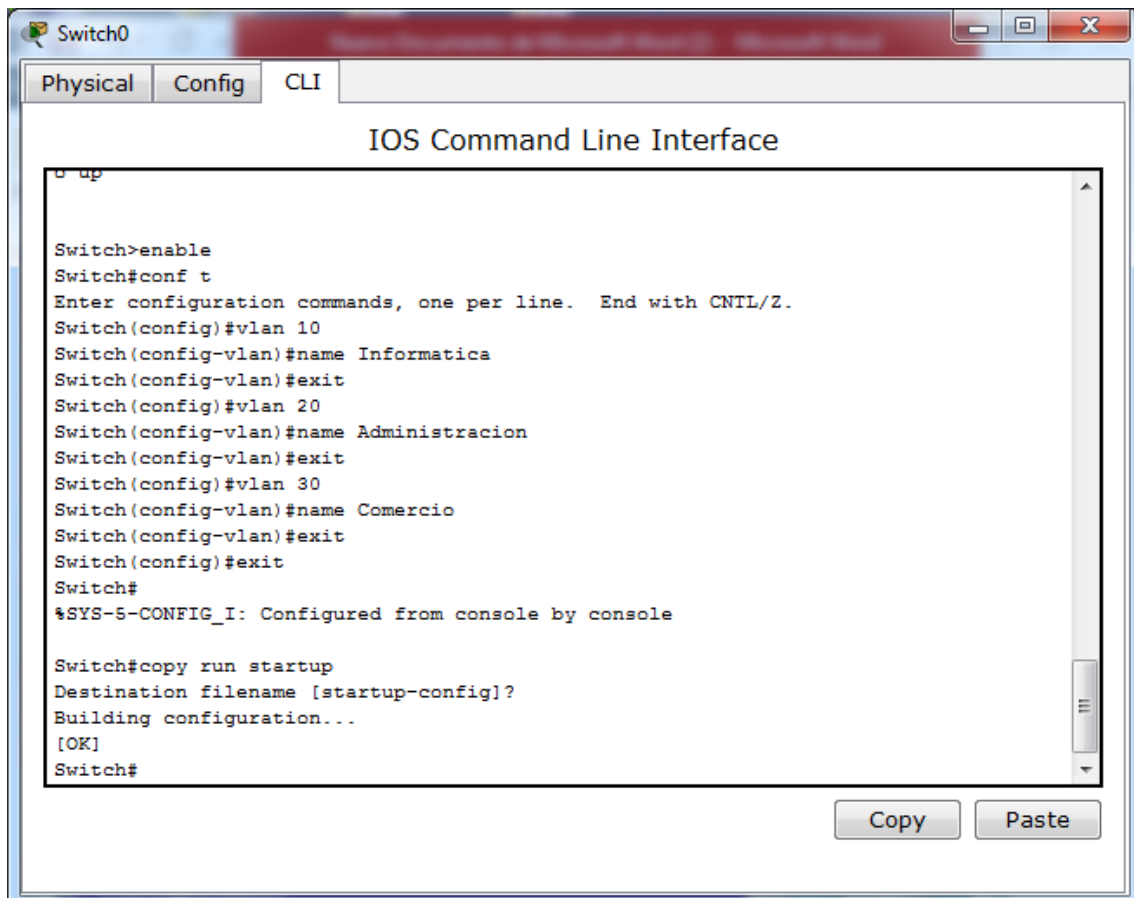
Tendre un router, un switch y 6 pc, donde crearemos 3 vlan. Cada vlan tendrá una red distinta y la finalización será poder establecer comunicación entre las diferentes Vlan

Asignaremos las diferentes ip a cada equipo dependiendo de su red

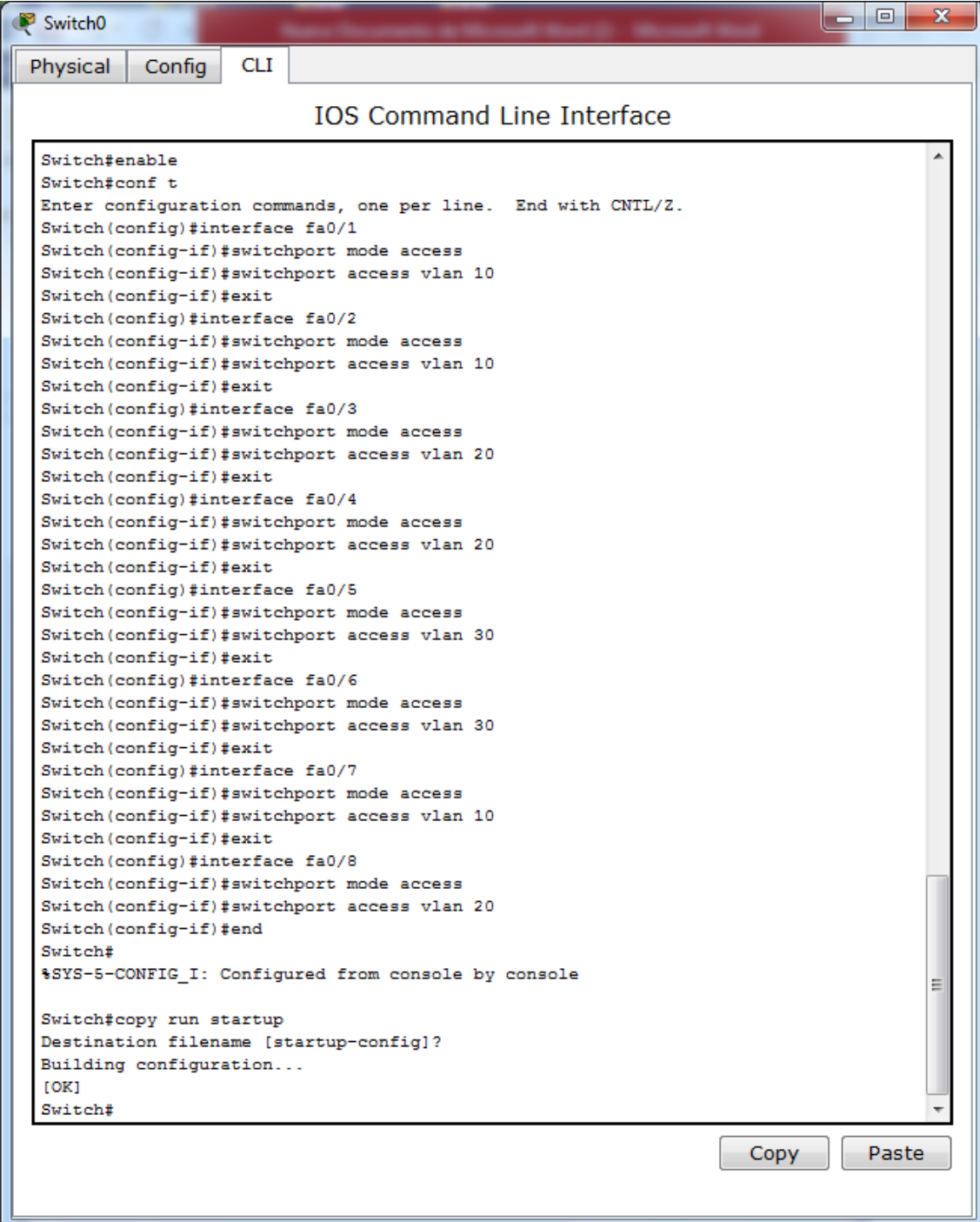




Crearemos las vlan en el switch



Ahora vamos a añadir las interfaces a las vlan que deseemos

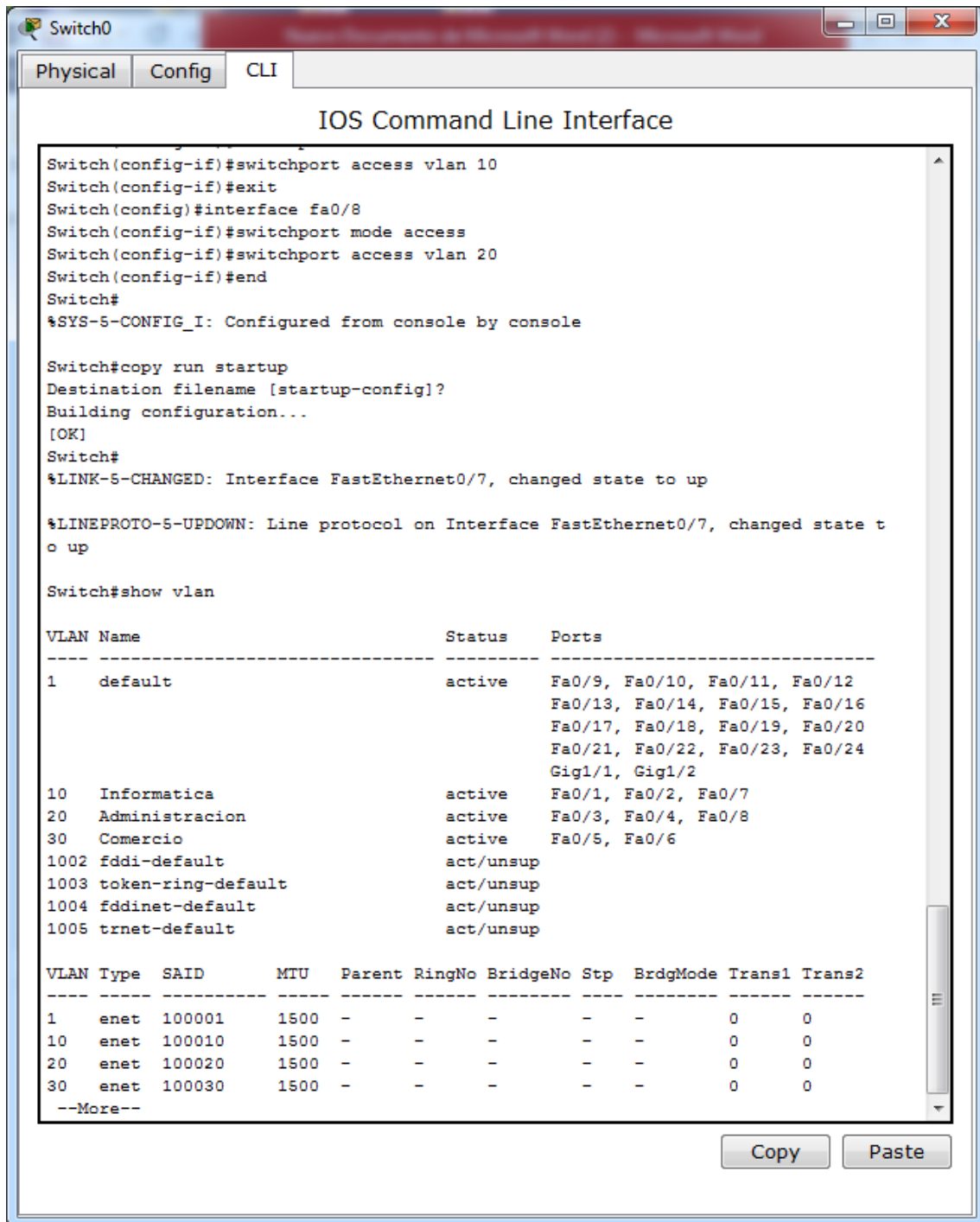


```
Switch0
Physical Config CLI
IOS Command Line Interface

Switch#enable
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface fa0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#interface fa0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#interface fa0/7
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fa0/8
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#copy run startup
Destination filename [startup-config]?
Building configuration...
[OK]
Switch#
```

Aquí mostraremos un show vlan



Ahora vamos a configurar las interfaces del router

Router0

Physical Config CLI

### IOS Command Line Interface

```
Router>enable
Router#show ip interface brief
Interface                IP-Address      OK? Method Status        Protocol
FastEthernet0/0          unassigned      YES unset  administratively down down
FastEthernet0/1          unassigned      YES unset  administratively down down
Modem0/0/0               unassigned      YES unset  administratively down down
FastEthernet1/0          unassigned      YES unset  administratively down down
Vlan1                    unassigned      YES unset  administratively down down
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

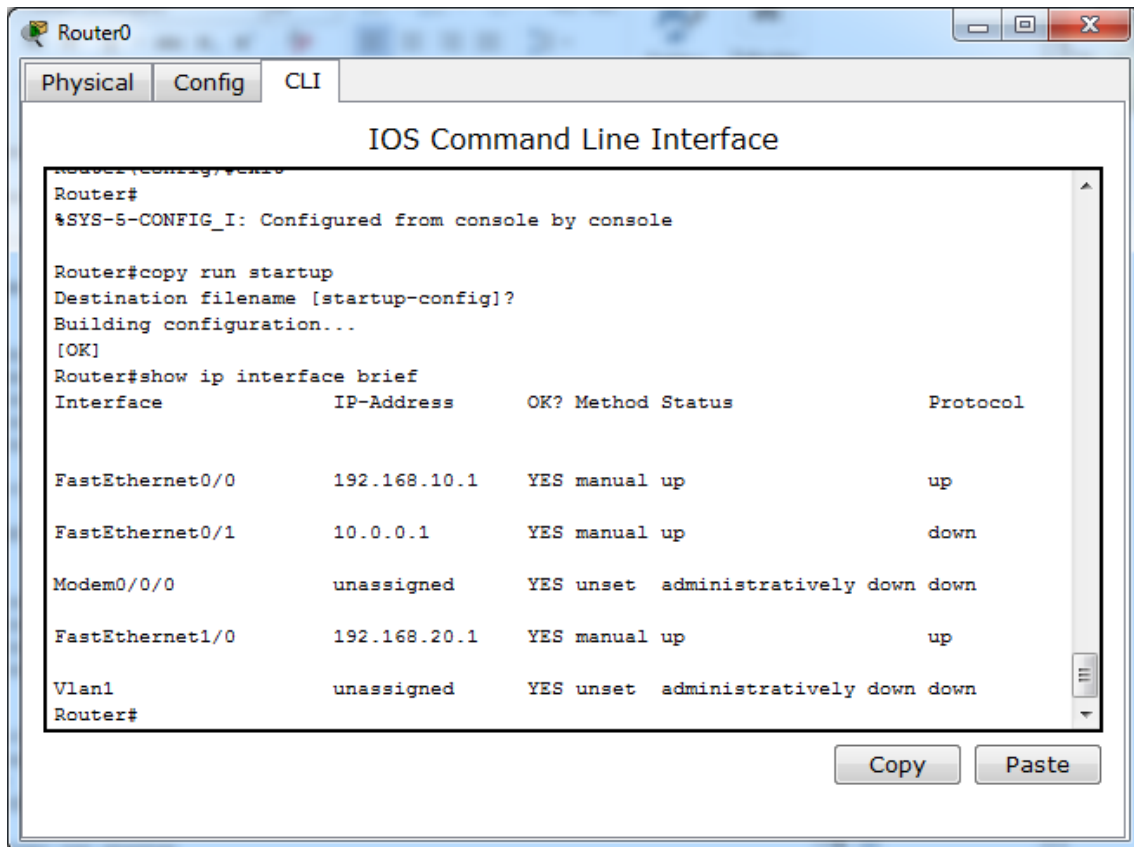
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit
Router(config)#interface fa0/1
Router(config-if)#ip address 192.168.20.1 255.255.255.0
Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#copy run startup
Destination filename [startup-config]?
```

Copy Paste



Como podemos ver ahora el pc 0 puede realizar un ping y comunicarse con los diferentes equipos de las otras vlan

The image shows a Packet Tracer PC Command Prompt window. The window title is "PC0" and it has tabs for "Physical", "Config", "Desktop", and "Software/Services". The Command Prompt window has a blue title bar with "Command Prompt" and a close button. The text inside the Command Prompt is as follows:

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.10: bytes=32 time=8ms TTL=127
Reply from 192.168.20.10: bytes=32 time=18ms TTL=127
Reply from 192.168.20.10: bytes=32 time=11ms TTL=127

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 18ms, Average = 12ms

PC>ping 192.168.30.10

Pinging 192.168.30.10 with 32 bytes of data:

Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.

Ping statistics for 192.168.30.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>
```