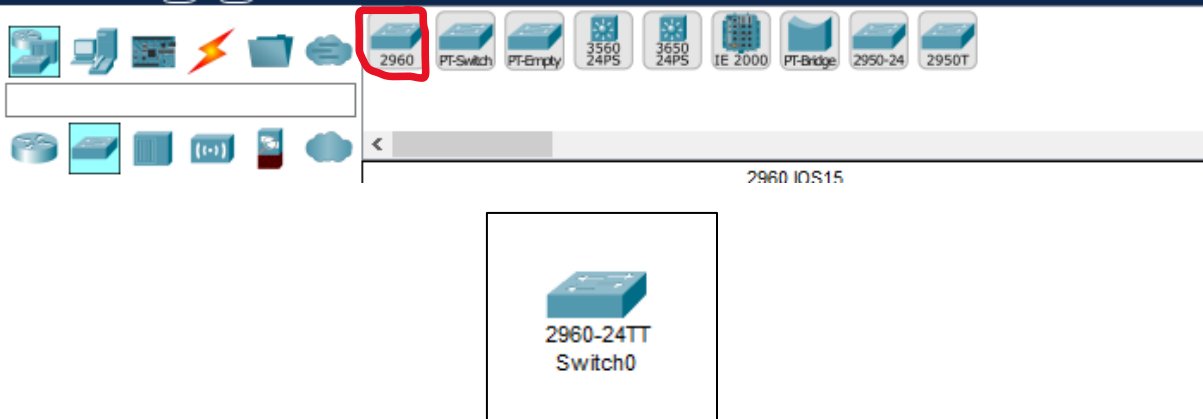
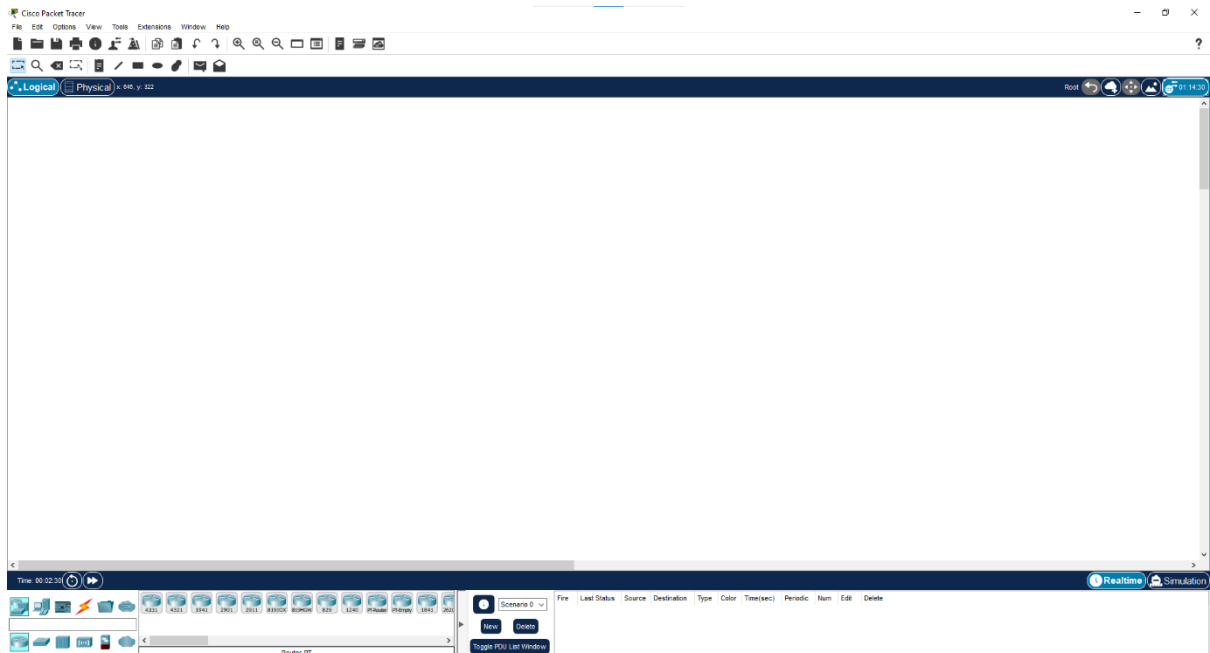


Laboratorio 22-23



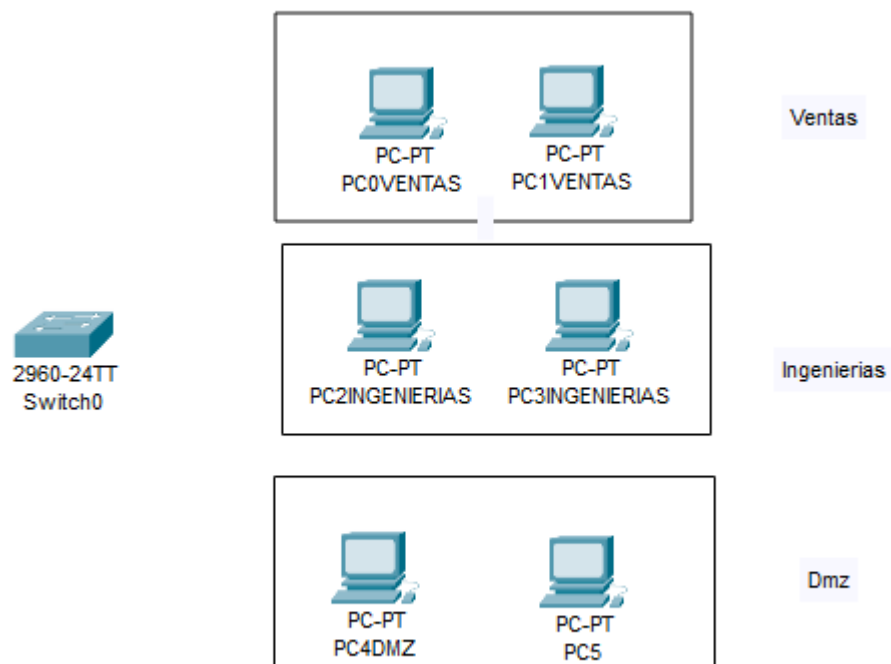
Se colocan 6 computadores

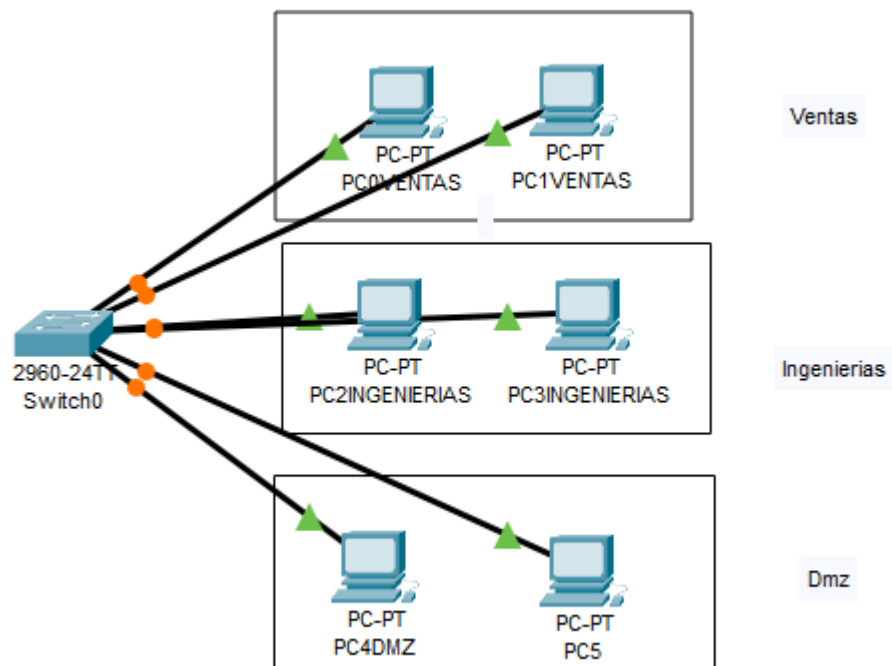


Global Settings	
Display Name	PC0VENTAS
Interfaces	FastEthernet0

Global Settings	
Display Name	<input type="text" value="PC2INGENIERIAS"/>
Interfaces	<input type="text" value="FastEthernet0"/>

Global Settings	
Display Name	<input type="text" value="PC4DMZ"/>
Interfaces	<input type="text" value="FastEthernet0"/>





Entramos al CLI de Switch y realizamos las siguientes acciones:

Switch0

Physical
Config
CLI
Attributes

IOS Command Line Interface

```

%LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/5, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/5, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/6, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6, changed state to up

Switch>show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/14, Fa0/15, Fa0/16
                                           Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23, Fa0/24
                                           Gig0/1, Gig0/2
1002 fddi-default        active
1003 token-ring-default  active
1004 fddinet-default     active
1005 trnet-default       active

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp  BrdgMode Transl Trans2
-----
1    enet    100001    1500   -       -       -       -   -         0      0
1002 fddi    101002    1500   -       -       -       -   -         0      0
1003 tr     101003    1500   -       -       -       -   -         0      0
1004 fdnet  101004    1500   -       -       -       ieee -         0      0
1005 trnet  101005    1500   -       -       -       ibm  -         0      0
--More--

```

Copy
Paste

☐ Top

Switch>
Switch>show vlan brief

```

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/14, Fa0/15, Fa0/16
                                           Fa0/17, Fa0/18, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23, Fa0/24
                                           Gig0/1, Gig0/2
1002 fddi-default        active
1003 token-ring-default  active
1004 fddinet-default     active
1005 trnet-default       active

```

```

Switch>enable
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name ventas
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name ingenierias
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name dmz
Switch(config-vlan)#exit
Switch(config)#

```

```
Switch#show vlan brief
```

VLAN	Name	Status	Ports
1	default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15, Fa0/16 Fa0/17, Fa0/18, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Fa0/24 Gig0/1, Gig0/2
10	ventas	active	
20	ingenierias	active	
30	dmz	active	
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

```

Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface range f0/1 - f0/2
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 10
Switch(config-if-range)#exit
Switch(config)#interface range f0/3 - f0/4
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 20
Switch(config-if-range)#exit
Switch(config)#interface range f0/5 - f0/6
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 30
Switch(config-if-range)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
show vlan brief

```

VLAN	Name	Status	Ports
1	default	active	Fa0/7, Fa0/8, Fa0/9, Fa0/10 Fa0/11, Fa0/12, Fa0/13, Fa0/14 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23, Fa0/24, Gig0/1, Gig0/2
10	ventas	active	Fa0/1, Fa0/2
20	ingenierias	active	Fa0/3, Fa0/4
30	dmz	active	Fa0/5, Fa0/6
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

Ahora colocamos las direcciones ip de los computadores

PC0VENTAS: 192.168.10.2
PC1VENTAS: 192.168.10.3
PC2INGENIERIAS: 192.168.20.2
PC3INGENIERIAS: 192.168.20.3
PC4DMZ: 192.168.30.2
PC5DMZ: 192.168.30.3

PC1VENTAS

Physical **Config** Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Bluetooth

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0090.2B9B.C3C8

IP Configuration

☐ DHCP

☒ Static

IPv4 Address 192.168.10.3

Subnet Mask 255.255.255.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address

Link Local Address FE80::290:2BFF:FE9B:C3C8

☐ Top

PC2INGENIERIAS

Physical

Config

Desktop

Programming

Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Bluetooth

FastEthernet0

Port Status

☒ On

Bandwidth

☒ 100 Mbps

☐ 10 Mbps

☒ Auto

Duplex

☐ Half Duplex

☒ Full Duplex

☒ Auto

MAC Address

00D0.BC2C.6718

IP Configuration

☐ DHCP

☒ Static

IPv4 Address

192.168.20.2

Subnet Mask

255.255.255.0

IPv6 Configuration

☐ Automatic

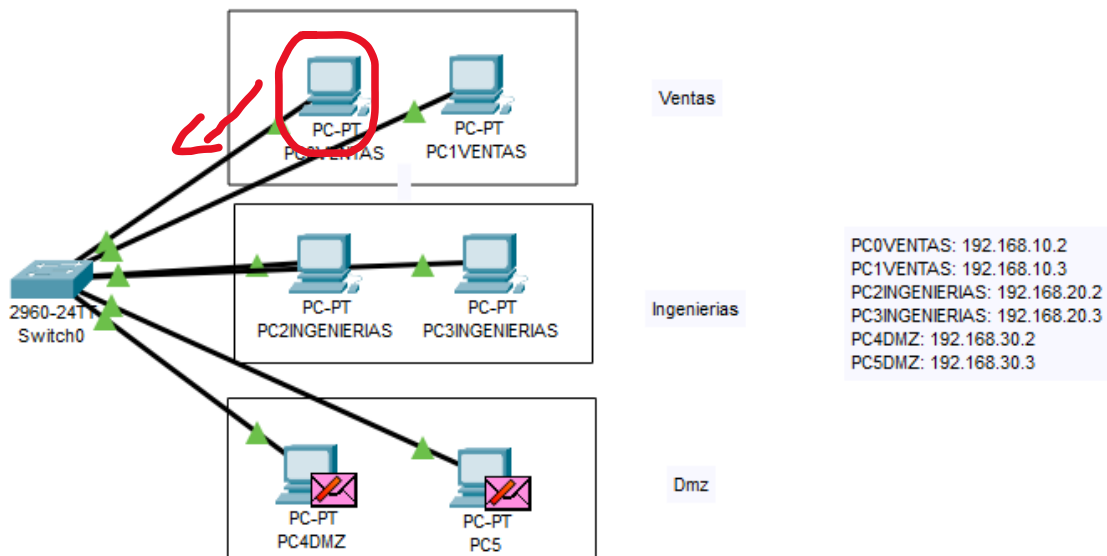
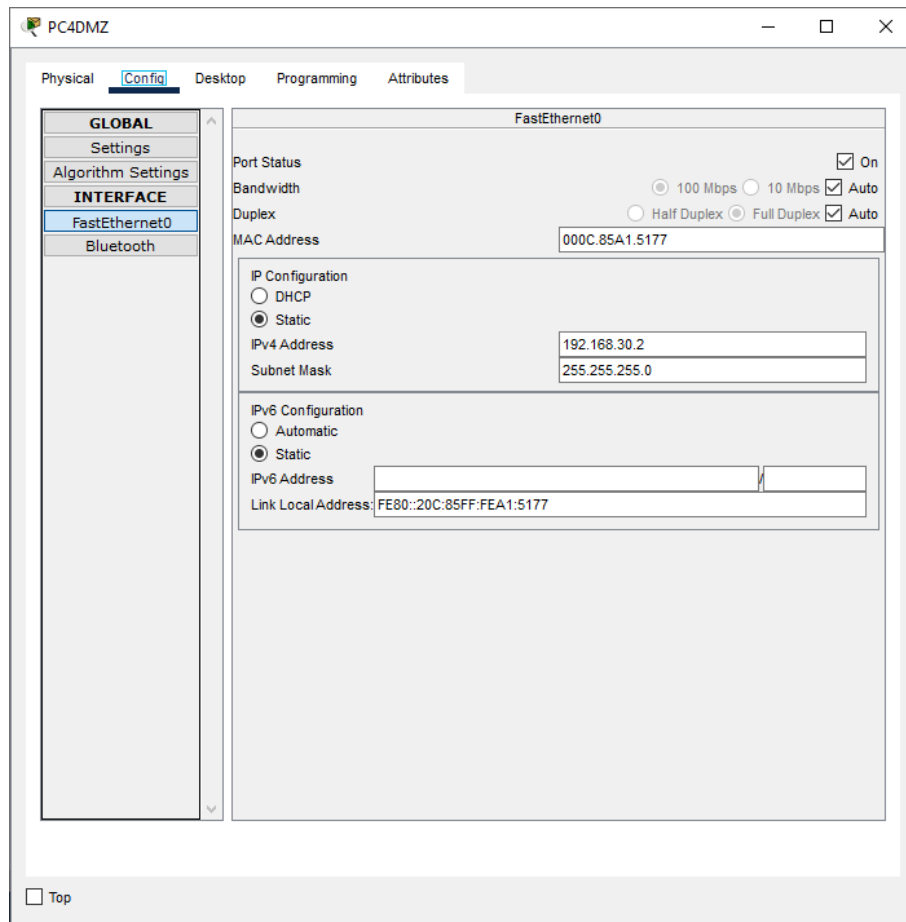
☒ Static

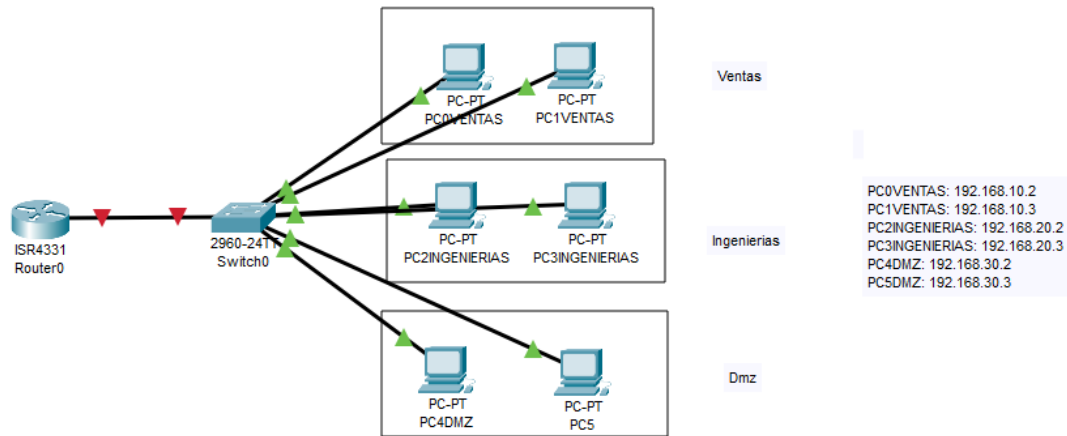
IPv6 Address

Link Local Address

FE80::2D0:BCFF:FE2C:6718

☐ Top





Volvemos al CLI del Switch

```
Switch>enable
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface f0/24
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk allowed vlan 10,20,30
Switch(config-if)#exit
```

Ahora vamos al CLI del Router

```
Router>enable
Router#config t
^
% Invalid input detected at '^' marker.

Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/0.10
Router(config-subif)#encapsulation dot1q 10
Router(config-subif)#ip address 192.168.10.1 255.255.255.0
Router(config-subif)#exit
Router(config)#interface GigabitEthernet0/0/0.20
Router(config-subif)#encapsulation dot1q 20
Router(config-subif)#ip address 192.168.20.1 255.255.255.0
Router(config-subif)#exit
Router(config)#interface GigabitEthernet0/0/0.30
Router(config-subif)#encapsulation dot1q 30
Router(config-subif)#ip address 192.168.30.1 255.255.255.0
Router(config-subif)#exit
Router(config)#
```

```

Router(config-subif)#exit
Router(config)#interface Gi
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/0/0.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0.10, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/0/0.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0.20, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/0/0.30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0.30, changed state to up

Router(config-if)#

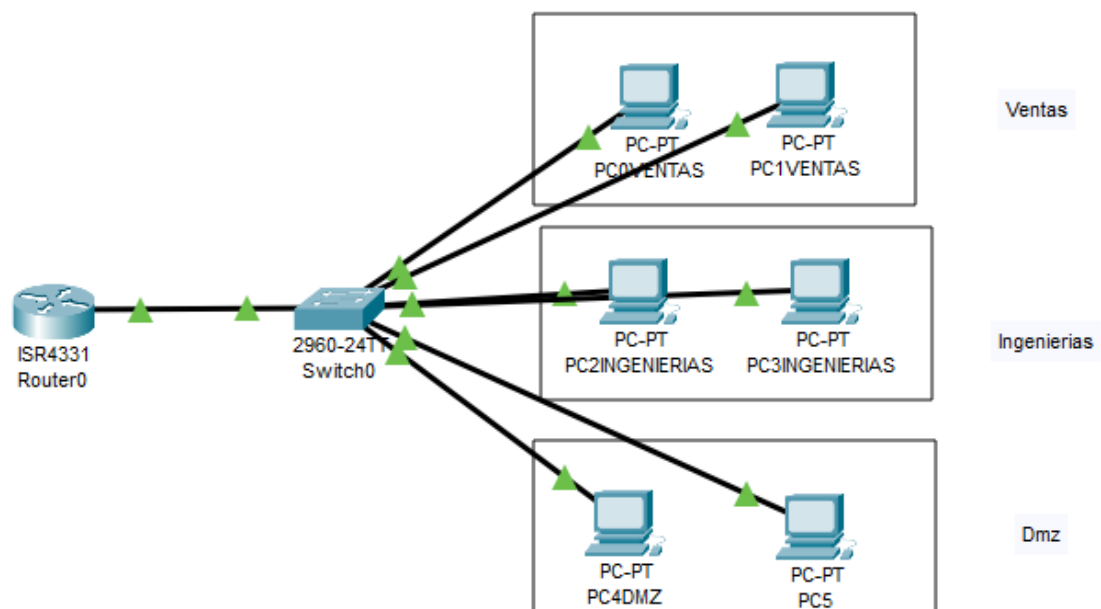
```

```

Router(config-if)#exit
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#write memory
Building configuration...
[OK]
Router#

```



Se colocan las direcciones Gateway a los computadores para completar la conexión.