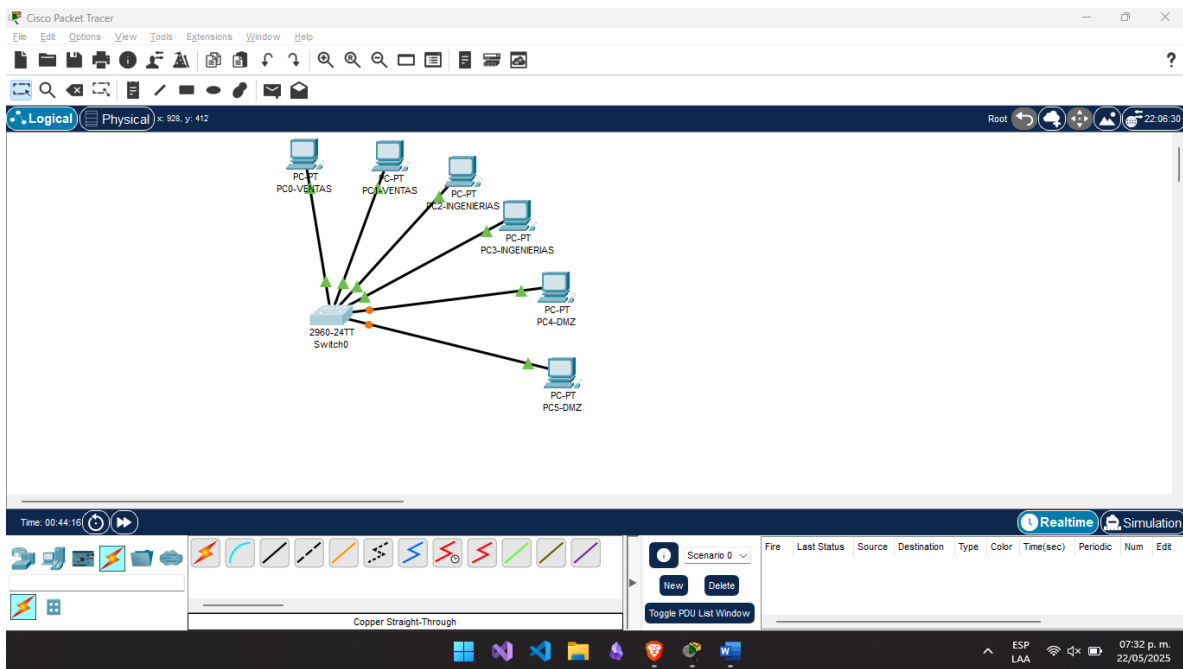
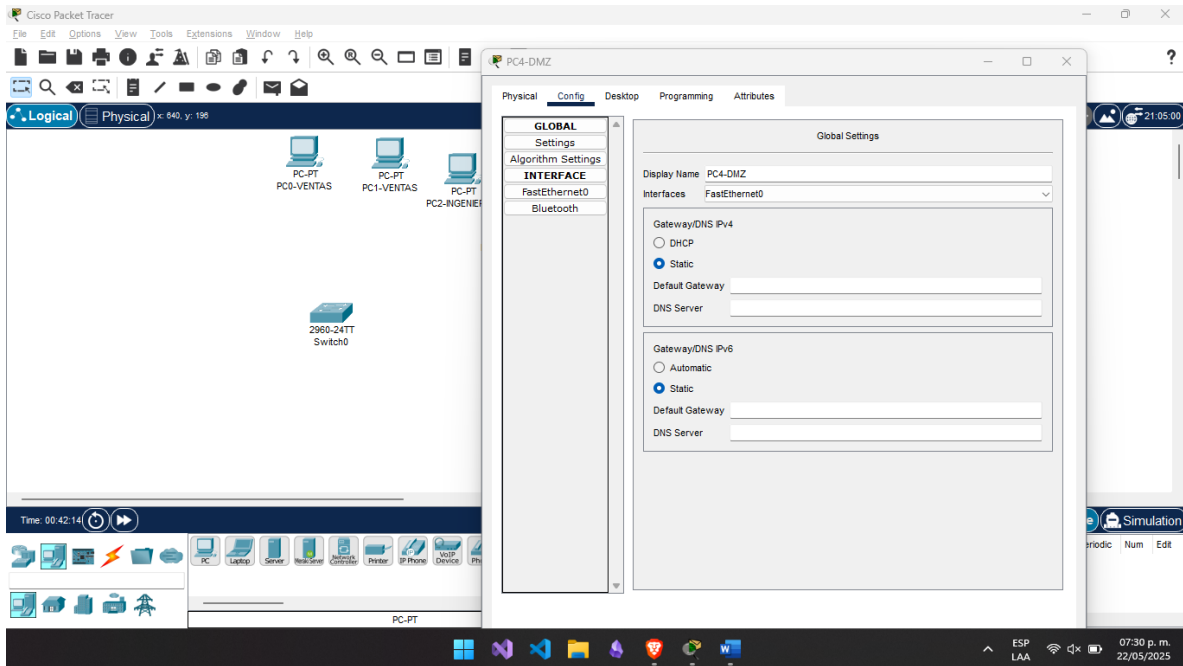
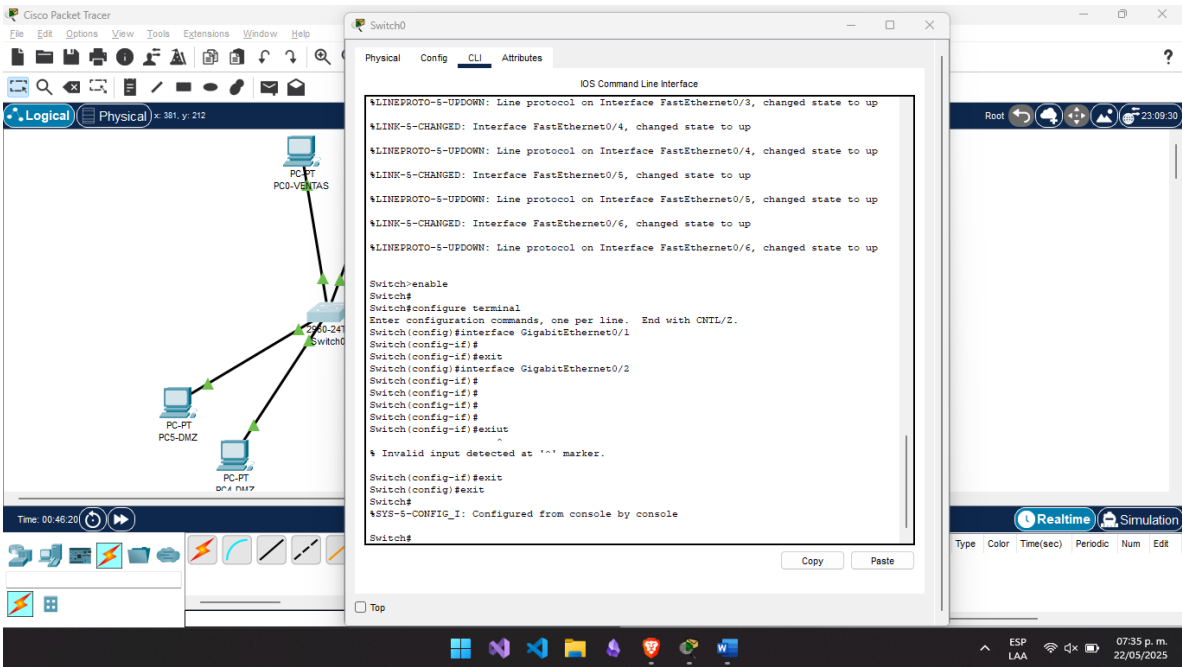
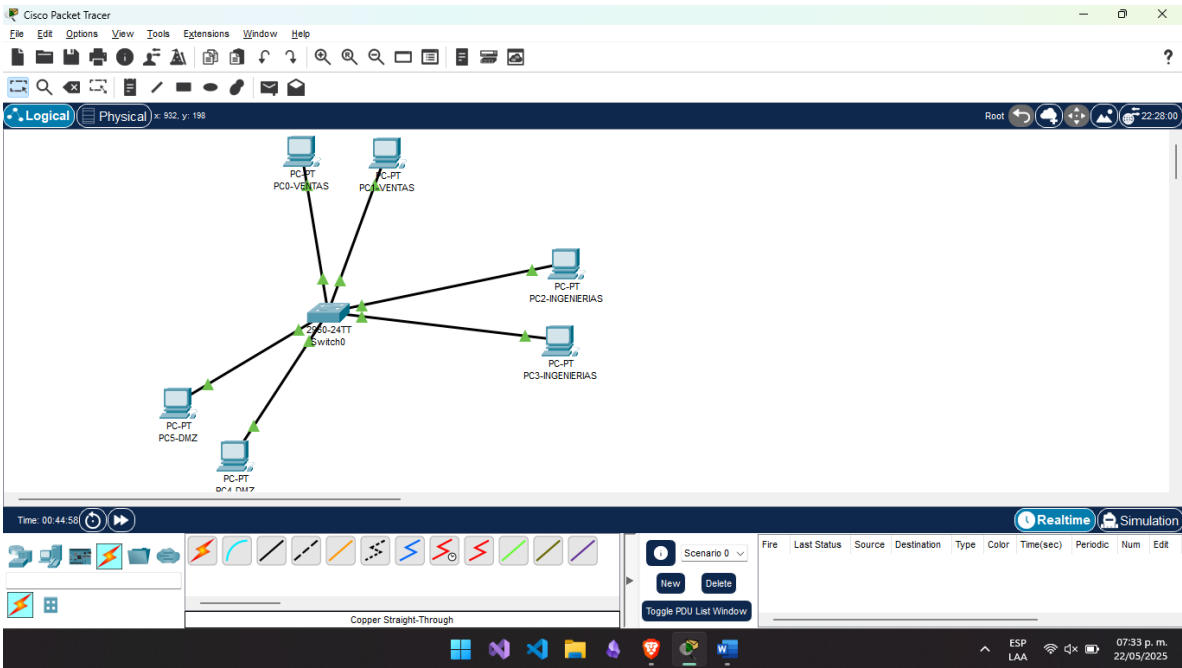


## Carlos Alberto Rasgo Solano





```
VLAN10-VENTAS: 192.168.10.1
VLAN20-INGENIERIAS: 192.168.20.1
VLAN30-DMZ: 192.268.30.1
```

## Carlos Alberto Rasgo Solano

The screenshot shows the Cisco Packet Tracer interface. On the left, a network diagram displays a central switch (Switch0) connected to three PCs: PC-PT (PC0-VENTAS), PC-PT (PC0-DMZ), and PC-PT (PC0-PAIS). The switch is configured with a VTY line. The right pane shows the CLI of Switch0 in the 'CLI' tab. The output of the 'show interfaces' command is displayed, showing the status of FastEthernet0/4, 5, and 6. The CLI also shows the configuration of the VTY line.

```
Switch0
CLI
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#enable
Switch#
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface GigabitEthernet0/1
Switch(config-if)#
Switch(config)#interface GigabitEthernet0/2
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#enable
Switch#config t
```

The screenshot shows the Cisco Packet Tracer interface. On the left, a network diagram displays a central switch (Switch0) connected to three PCs: PC-PT (PC0-VENTAS), PC-PT (PC0-DMZ), and PC-PT (PC0-PAIS). The switch is configured with a VTY line. The right pane shows the CLI of Switch0 in the 'CLI' tab. The output of the 'show vlan' command is displayed, showing the status of VLANs 1, 1002, 1003, 1004, and 1005. The CLI also shows the configuration of the VTY line.

```
Switch0
CLI
IOS Command Line Interface

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

Switch#enable
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch#
%SYS-5-CONFIG_I: Configured from console by console

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    BrgdMode Transl Transl
-----
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--
```

## Carlos Alberto Rasgo Solano

The screenshot shows a Cisco Packet Tracer environment. On the left, a network topology is visible with a central switch (Switch0) connected to four PCs: PC-PT (PC0-VENTAS), PC-PT (PC5-DMZ), PC-PT (PC6-FIN7), and PC-PT (PC7-FIN7). The switch is configured with five VLANs. The CLI window for Switch0 is open, displaying the following information:

```
Switch0
Physical Config CLI Attributes
IOS Command Line Interface
1005 ternet-default
active
VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrgdMode Trans1 Trans2
1enet 100001 1500 - - - - 0 0
1002 fddi 101002 1500 - - - - 0 0
1003 tr 101003 1500 - - - - 0 0
1004 Ednet 101004 1500 - - - IEEE 0 0
1005 ternet 101005 1500 - - - IBM 0 0
VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrgdMode Trans1 Trans2
Remote SPAN VLANs
Switch#show vlan brief
% Invalid input detected at '^' marker.
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 ternet-default active
Switch#
```

The screenshot shows the same Cisco Packet Tracer environment as the previous one. The CLI window for Switch0 is open, displaying the same information as before, but with additional configuration commands entered:

```
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#
```

## Carlos Alberto Rasgo Solano

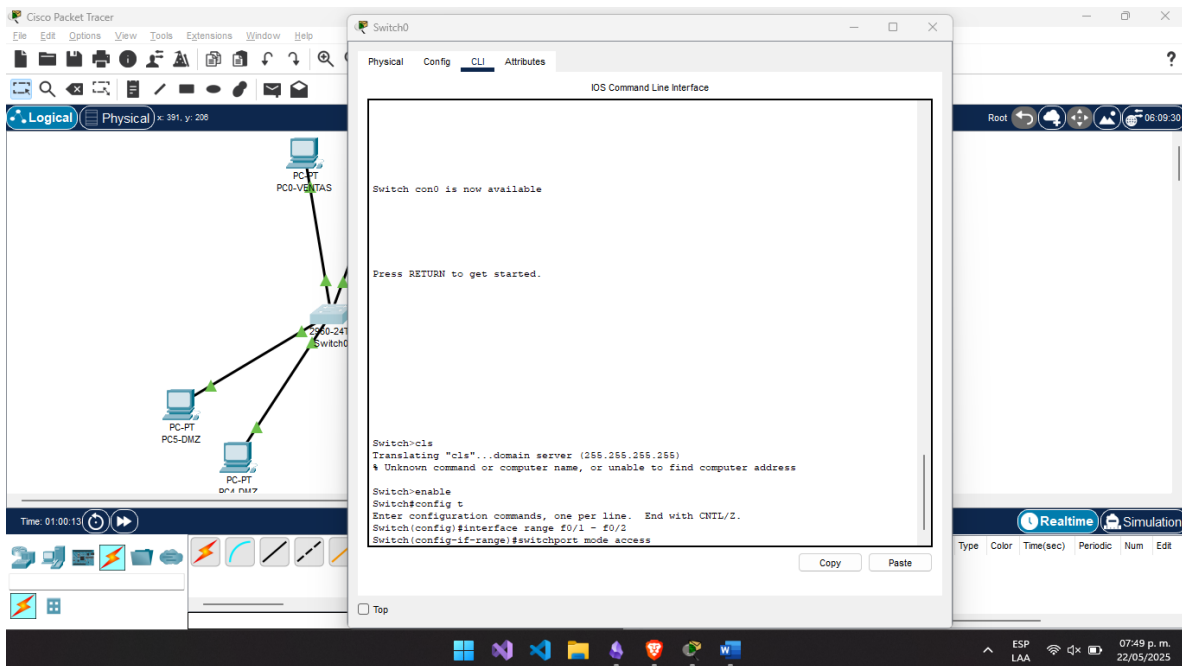
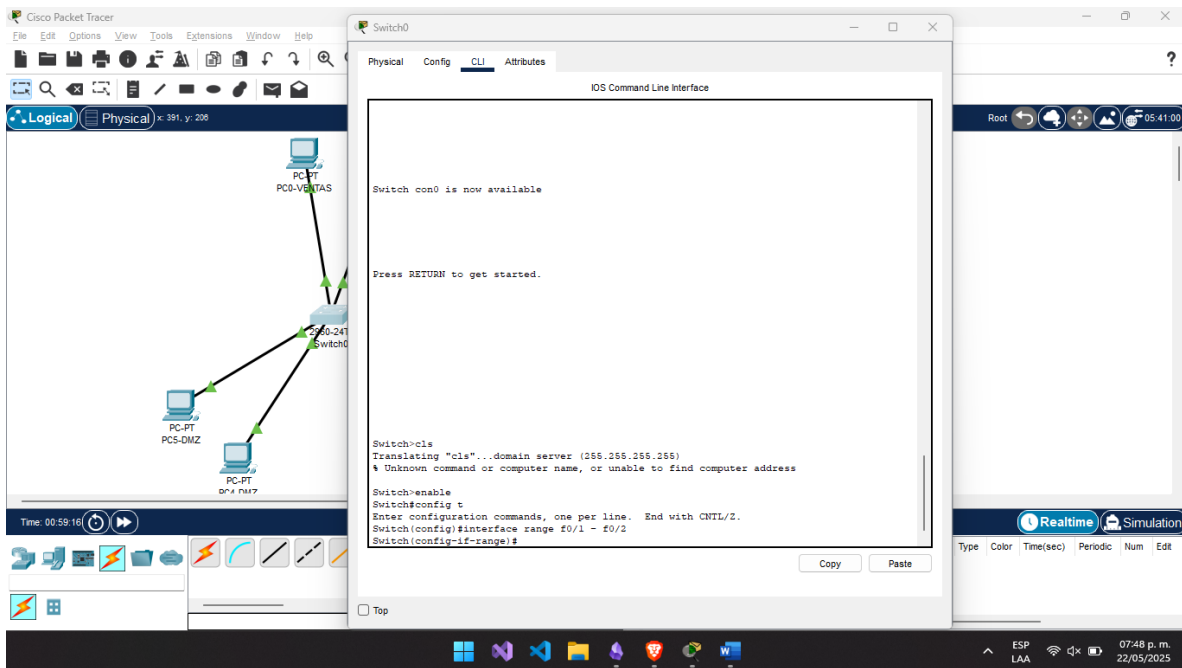
The top screenshot shows the Cisco Packet Tracer interface. On the left, a network diagram displays a central switch (Switch0) connected to three PCs: PC-PT (PC0-VENTAS), PC-PT (PC1-DMZ), and PC-PT (PC2-INGENIERIAS). The switch is configured with three VLANs: 10 (VENTAS), 20 (INGENIERIAS), and 30 (DMZ). The CLI window for Switch0 is open, showing the following commands and output:

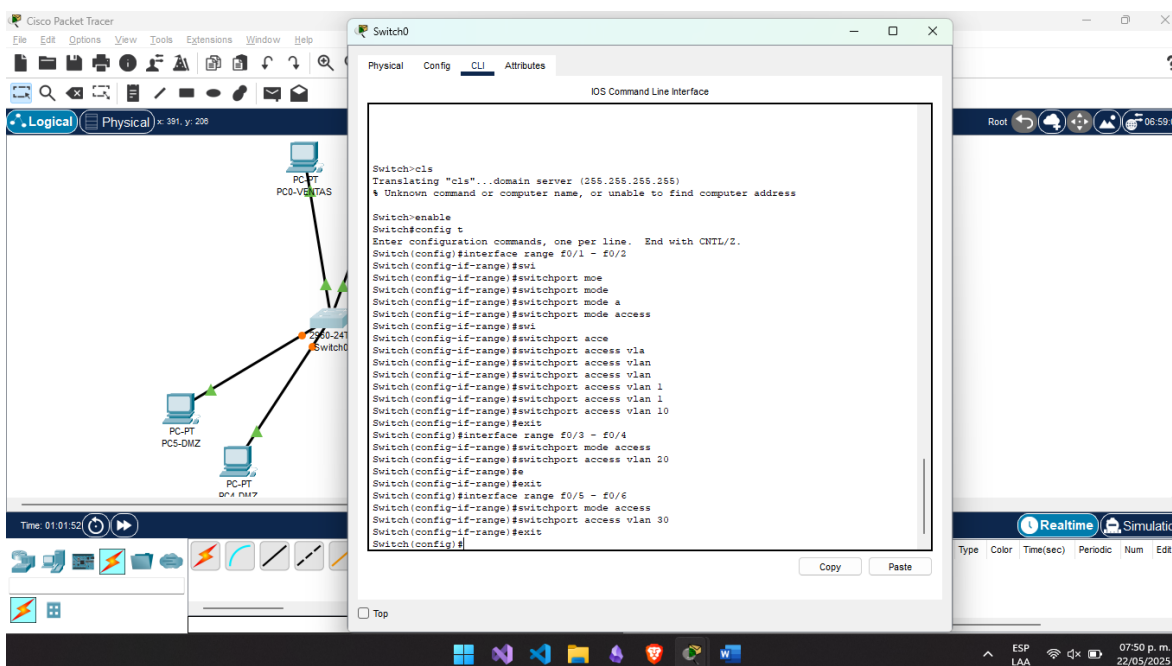
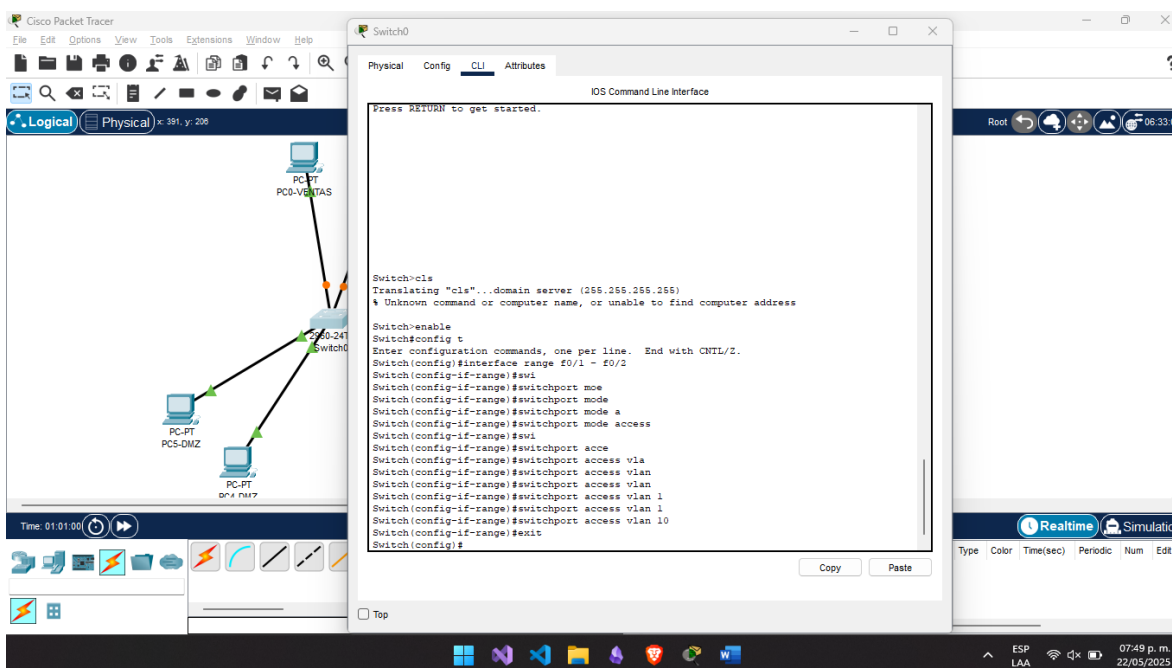
```
Switch0#show vlan brief
% Invalid input detected at '^' marker.
Switch0#show vlan brief
VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           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
Switch0#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch0(config)#vlan 10
Switch0(config-vlan)#name ventas
Switch0(config-vlan)#exit
Switch0(config)#vlan 20
Switch0(config-vlan)#name ingenierias
Switch0(config-vlan)#exit
Switch0(config)#vlan 30
Switch0(config-vlan)#name dmz
Switch0(config-vlan)#exit
Switch0(config)#
```

The bottom screenshot shows the same Cisco Packet Tracer interface. The network diagram is identical to the top screenshot. The CLI window for Switch0 is open, showing the following commands and output:

```
Switch0#show vlan brief
% Invalid input detected at '^' marker.
Switch0#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
Switch0#
```

## Carlos Alberto Rasgo Solano





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The image shows the Cisco Packet Tracer interface. On the left, a network diagram displays a central switch (Switch0) connected to several PCs: PC0-VENTAS, PC1-DMZ, PC2-DMZ, and PC3-DMZ. The switch is labeled 'Switch0' and '2950-24TT'. The right pane shows the CLI configuration for Switch0.

```
Switch(config)#interface range E0/3 - E0/4
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 20
Switch(config-if-range)#exit
Switch(config)#interface range E0/5 - E0/6
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 30
Switch(config-if-range)#exit
Switch(config)#exit
Switch(config)#exit
Switch#
Switch#show
Switch#show r
Switch#show running-config
Switch#show running-config |
Switch#show vl
Switch#show vlan br
Switch#show vlan brief
Switch#
```

The output of the 'show vlan brief' command is displayed as follows:

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	

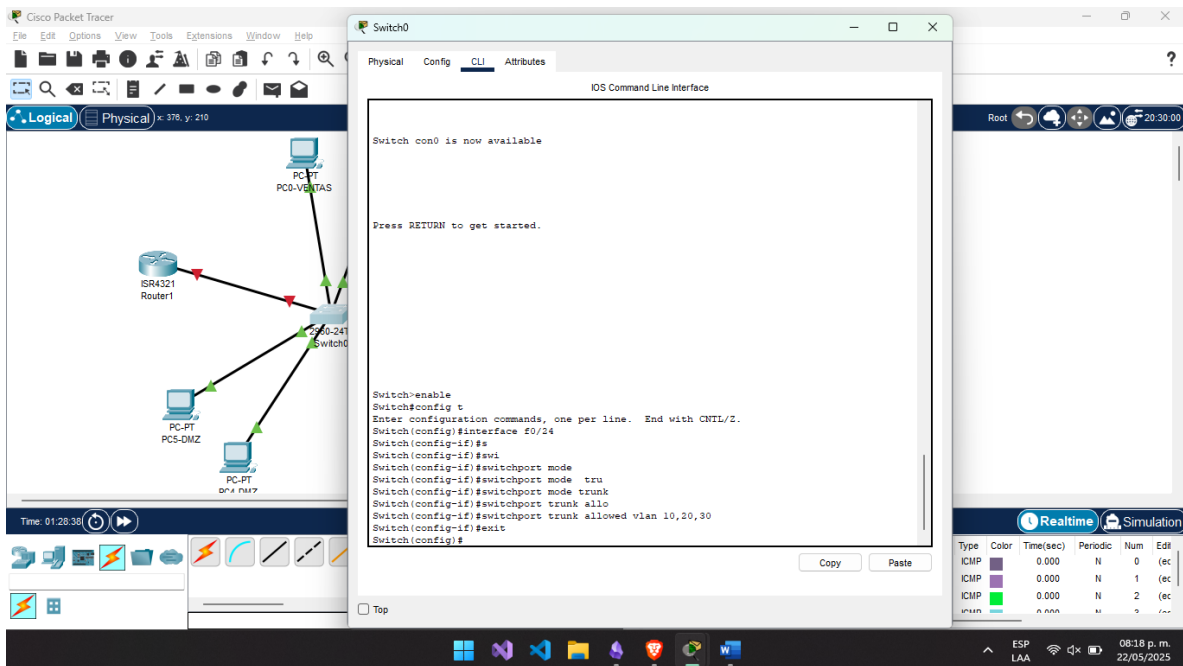
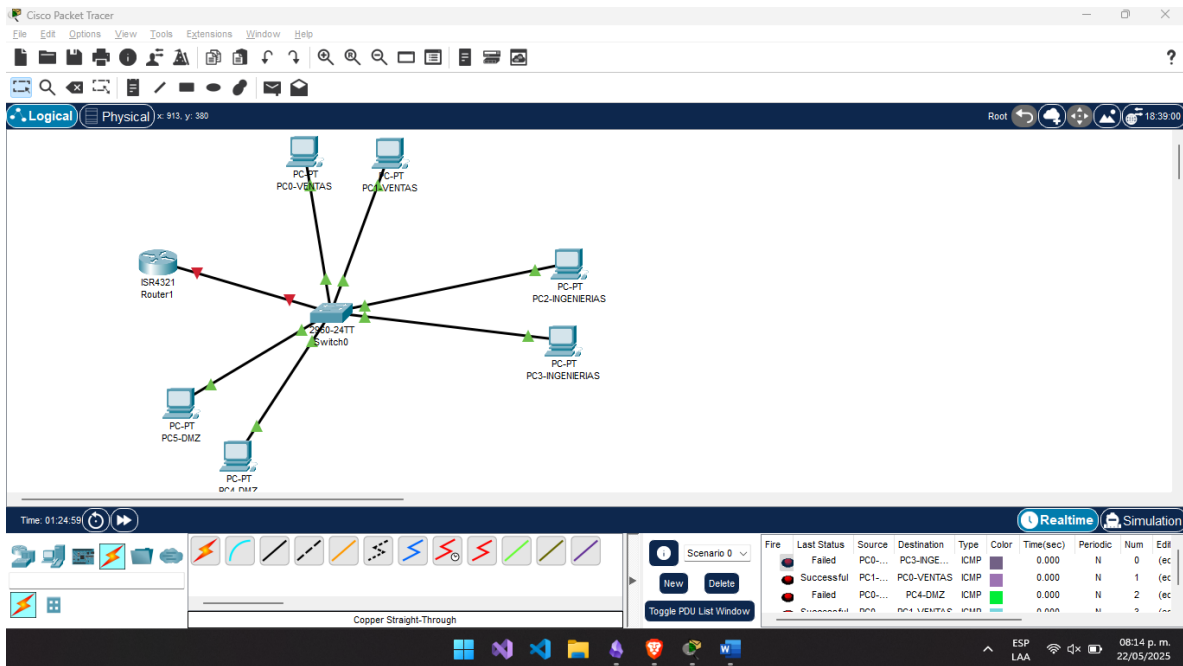
The image shows the Cisco Packet Tracer interface. On the left, a network diagram displays a central switch (Switch0) connected to several PCs: PC0-VENTAS, PC1-VENTAS, PC2-INGENIERIAS, PC3-INGENIERIAS, PC4-DMZ, and PC5-DMZ. The switch is labeled 'Switch0' and '2950-24TT'. The right pane shows a packet capture table.

The packet capture table is as follows:

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edi
●	Successful	PC1-...	PC0-VENTAS	ICMP	■	0.000	N	1	(ec
●	Failed	PC0-...	PC4-DMZ	ICMP	■	0.000	N	2	(ec
●	Successful	PC0-...	PC1-VENTAS	ICMP	■	0.000	N	3	(ec



# Carlos Alberto Rasgo Solano



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The image shows the Cisco Packet Tracer interface. On the left, a network topology is visible with a central switch connected to a router (ISR4321) and several PCs (PC-DMZ, PC-PT, PC-VLAN). The main window displays the CLI for Router1. The CLI shows the initial configuration dialog and the user entering the command 'enable'.

```
IOS Command Line Interface

use. Delivery of Cisco cryptographic products does not imply
third-party authority to import, export, distribute or use encryption.
Importers, exporters, distributors and users are responsible for
compliance with U.S. and local country laws. By using this product you
agree to comply with applicable laws and regulations. If you are unable
to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wurl/export/crypto/tool/stqrg.html

If you require further assistance please contact us by sending email to
export@cisco.com.

cisco ISR4321/K9 (1RU) processor with 1687137K/6147K bytes of memory.
Processor board ID FLM2041W2ND
2 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
4194304K bytes of physical memory.
3223551K bytes of flash memory at bootflash:.

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]:
* Please answer 'yes' or 'no'.
Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
```

The image shows the Cisco Packet Tracer interface. On the left, a network topology is visible with a central switch connected to a router (ISR4321) and several PCs (PC-DMZ, PC-PT, PC-VLAN). The main window displays the CLI for Router1. The CLI shows the initial configuration dialog and the user entering the command 'enable'.

```
IOS Command Line Interface

to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wurl/export/crypto/tool/stqrg.html

If you require further assistance please contact us by sending email to
export@cisco.com.

cisco ISR4321/K9 (1RU) processor with 1687137K/6147K bytes of memory.
Processor board ID FLM2041W2ND
2 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
4194304K bytes of physical memory.
3223551K bytes of flash memory at bootflash:.

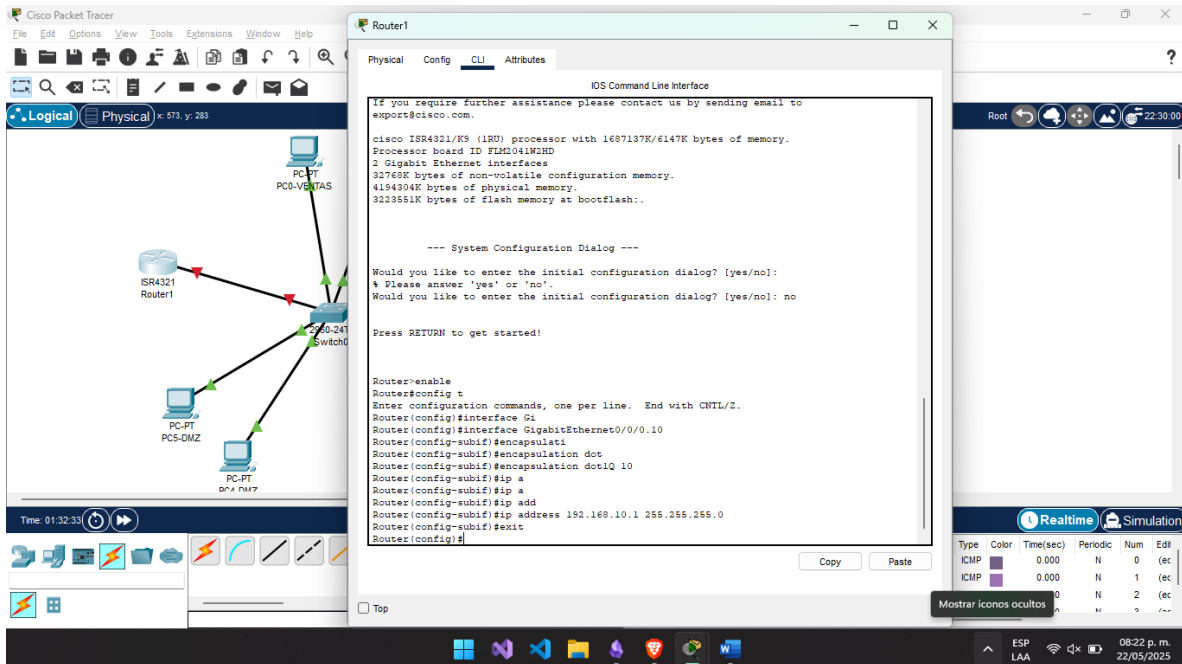
--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]:
* Please answer 'yes' or 'no'.
Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Gi
Router(config)#interface GigabitEthernet0/0/0.10
Router(config-subif)#encapsulation
Router(config-subif)#encapsulation dot
Router(config-subif)#encapsulation dot1Q 10
Router(config-subif)#
```

# Carlos Alberto Rasgo Solano



Router1

Physical Config CLI Attributes

IOS Command Line Interface

If you require further assistance please contact us by sending email to [export@cisco.com](mailto:export@cisco.com).

cisco ISR4321/K9 (180) processor with 1687137K/6147K bytes of memory.  
Processor board ID FIM2041W2ED  
2 Gigabit Ethernet interfaces  
32768K bytes of non-volatile configuration memory.  
4194304K bytes of physical memory.  
322551K bytes of flash memory at bootflash:.

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]:  
% Please answer 'yes' or 'no'.  
Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>enable  
Router#config t  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)#interface Gi  
Router(config)#interface GigabitEthernet0/0/0.10  
Router(config-subif)#encapsulation  
Router(config-subif)#encapsulation dot  
Router(config-subif)#encapsulation dot1Q 10  
Router(config-subif)#ip a  
Router(config-subif)#ip add  
Router(config-subif)#ip address 192.168.10.1 255.255.255.0  
Router(config-subif)#exit  
Router(config)#

Copy Paste

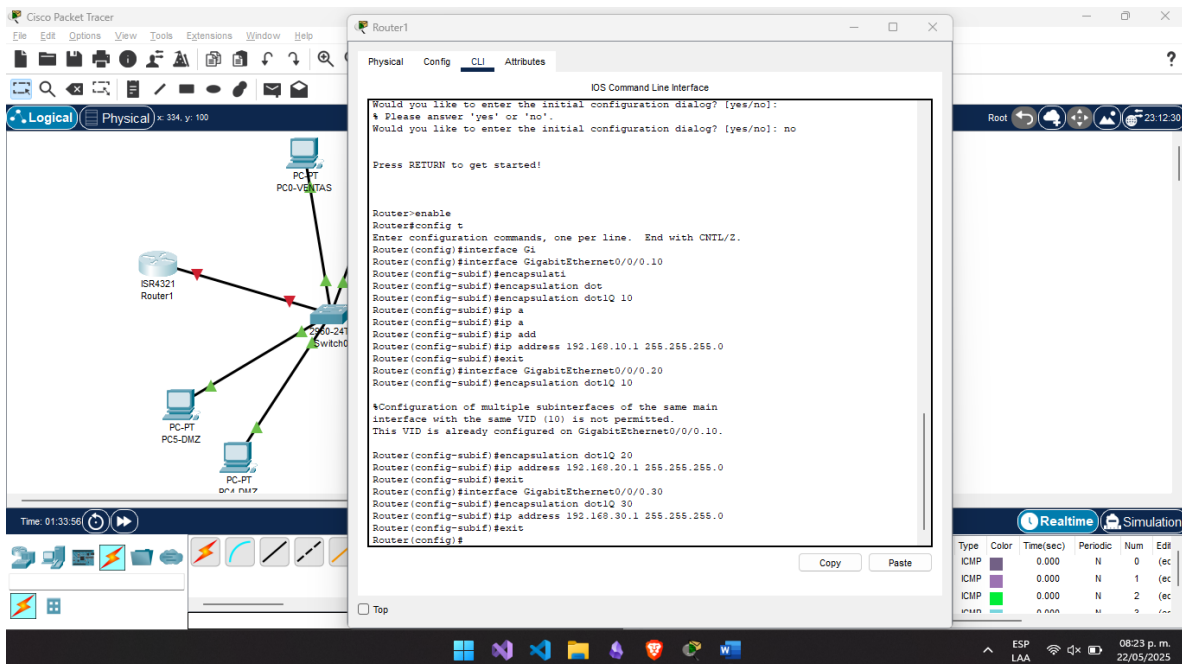
Top

Realtime Simulation

Type	Color	Time(sec)	Periodic	Num	Edi
ICMP		0.000	N	0	(ec
ICMP		0.000	N	1	(ec
ICMP		0.000	N	2	(ec

Mostrar iconos ocultos

ESP LAA 08:22 p.m. 22/05/2025



Router1

Physical Config CLI Attributes

IOS Command Line Interface

Would you like to enter the initial configuration dialog? [yes/no]:  
% Please answer 'yes' or 'no'.  
Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>enable  
Router#config t  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)#interface Gi  
Router(config)#interface GigabitEthernet0/0/0.10  
Router(config-subif)#encapsulation  
Router(config-subif)#encapsulation dot  
Router(config-subif)#encapsulation dot1Q 10  
Router(config-subif)#ip a  
Router(config-subif)#ip add  
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 10  
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)#

Copy Paste

Top

Realtime Simulation

Type	Color	Time(sec)	Periodic	Num	Edi
ICMP		0.000	N	0	(ec
ICMP		0.000	N	1	(ec
ICMP		0.000	N	2	(ec

ESP LAA 08:23 p.m. 22/05/2025

## Carlos Alberto Rasgo Solano

The top screenshot shows a Cisco Packet Tracer network diagram. A central switch, labeled 'Switch0', is connected to four PCs: 'PC-PT', 'PC-VENTAS', 'PC-DMZ', and 'PC-PT'. A router, labeled 'ISR4321 Router1', is connected to the switch. The network is viewed in the 'Logical' tab. The CLI window for Router1 shows the following configuration:

```
Router1
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)#interface GigabitEthernet0/0/0
Router(config-if)#no shut
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)#exit
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

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

The bottom screenshot shows the same Cisco Packet Tracer network diagram, but with a different configuration for Router1. The network is viewed in the 'Logical' tab. The CLI window for Router1 shows the following configuration:

```
Router1
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)#interface GigabitEthernet0/0/0
Router(config-if)#no shut
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)#exit
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

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

