



Universidad Autónoma de Chiapas

Facultad de contaduría y administración - campus I

Licenciatura en ingeniería en desarrollo y tecnologías de software

Actividad: Act. 1.4 Realiza la Siguiente práctica en Packet Tracert configuracion de Vlans.

Materia: Conmutadores Y Redes Inalámbricas.

Nombre del docente: Dr. Luis Gutiérrez Alfaro.

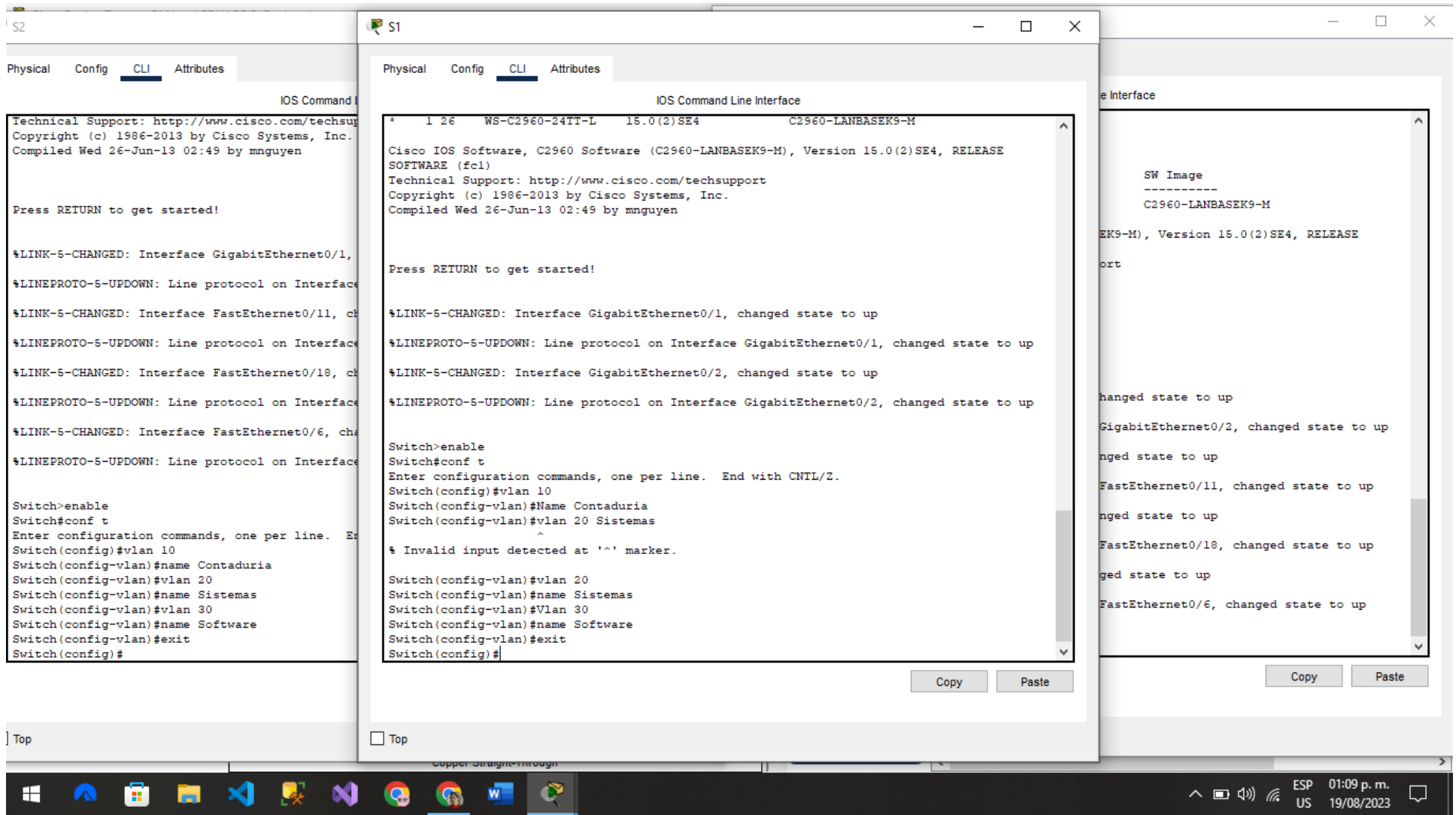
Nombre del alumno: Eduardo Enrique Gordillo Sánchez

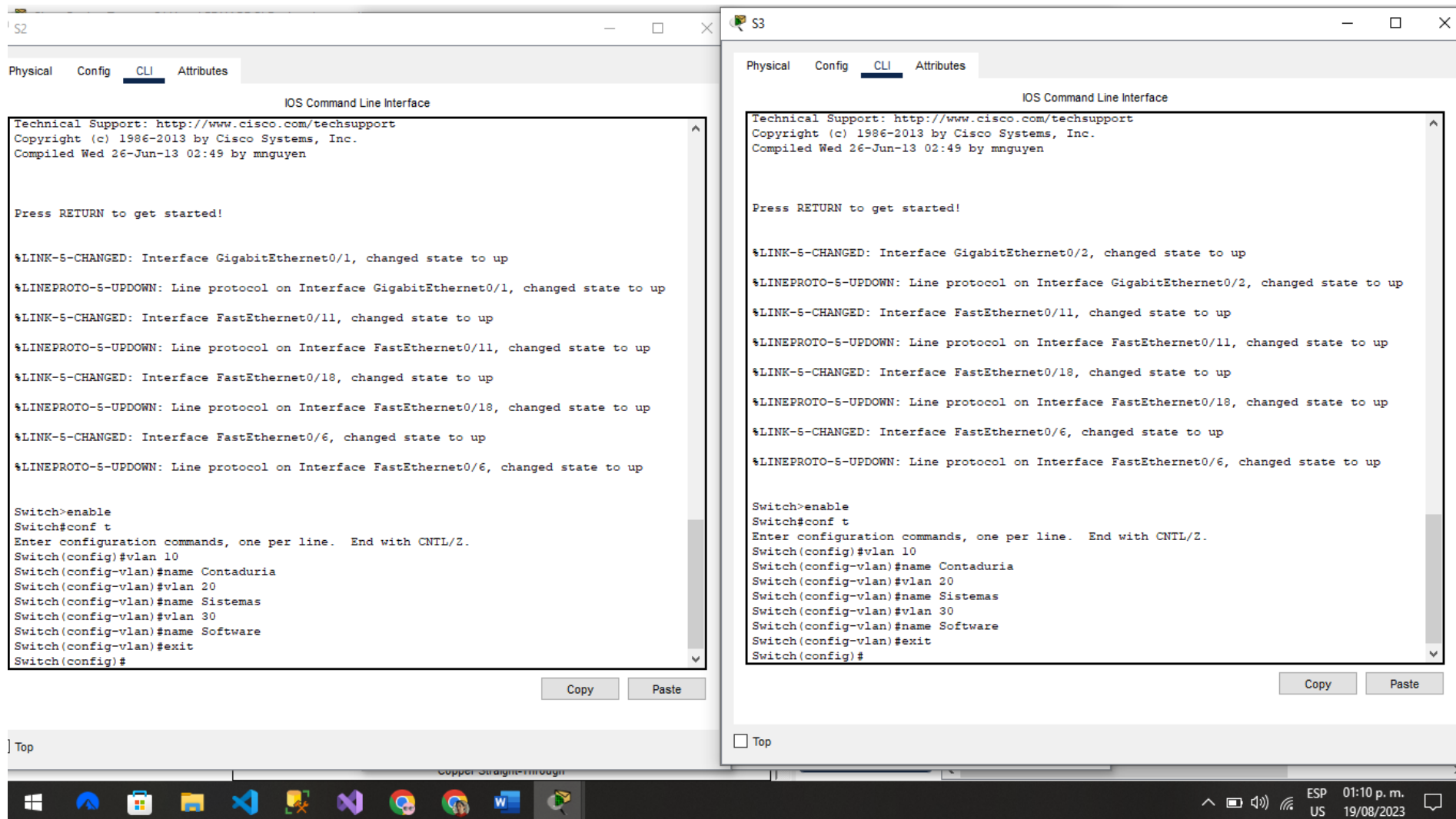
Número de control: A200359

Grado y Grupo: 7 ° N

19 de agosto de 2023, Tuxtla GTZ, Chiapas

CONFIGURACION DE LAS INTERFACES Y VLANS





Physical Config **CLI** Attributes

IOS Command Line Interface

```
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#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface range g0/1-2
Switch(config-if-range)#switchport mode trunk

Switch(config-if-range)#
%LINEPROTO-S-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-S-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-S-UPDOWN: Line protocol on Interface GigabitEthernet0/2, changed state to down

%LINEPROTO-S-UPDOWN: Line protocol on Interface GigabitEthernet0/2, changed state to up

Switch(config-if-range)#switchport trunk native vlan 99
Switch(config-if-range)#
Switch(config-if-range)#switchport trunk native vlan 99
Switch(config-if-range)#
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),
with Switch GigabitEthernet0/2 (1)
```

Copy Paste

IOS Command Line Interface

```
Switch(config-if-range)#  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),  
with Switch GigabitEthernet0/2 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99),  
with Switch GigabitEthernet0/1 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99),  
with Switch GigabitEthernet0/1 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),  
with Switch GigabitEthernet0/2 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),  
with Switch GigabitEthernet0/2 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99),  
with Switch GigabitEthernet0/1 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),  
with Switch GigabitEthernet0/2 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99),  
with Switch GigabitEthernet0/1 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99),  
with Switch GigabitEthernet0/1 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),  
with Switch GigabitEthernet0/2 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/1 (99),  
with Switch GigabitEthernet0/1 (1).  
  
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet0/2 (99),  
with Switch GigabitEthernet0/2 (1).  
|
```

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CONFIGURACION DE LAS IP DE LAS PC

Cisco Packet Tracer - C:\Users\EDUARDO\Desktop\tarea.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 574, y: 53

172.17.10.21
VLAN 10
PC1

172.17.20.22
VLAN 20
PC2

172.17.30.23
VLAN 30
PC3

F0/11 F0/18 F0/6

G0/1 G0/2

S1 S2

Time: 00:24:07

Copper Straight-Through

PC1

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.17.10.21

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::204:9AFF:FE57:6B23

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

Simulation

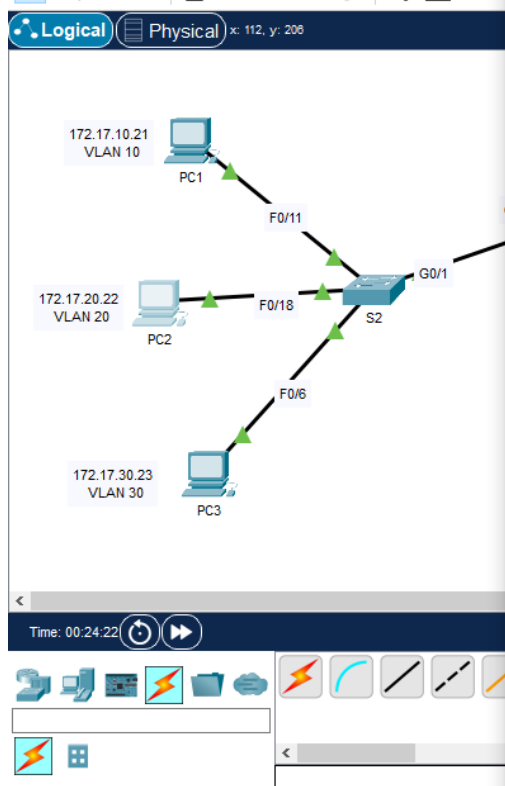
Num Edit

09:49:30

01:17 p. m.
19/08/2023

Cisco Packet Tracer - C:\Users\EDUARDO\Desktop\tarea.pkt

File Edit Options View Tools Extensions Window Help



PC2

Physical Config Desktop Programming Attributes

P Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.17.20.22

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::260:2FFF:FE7D:E030

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Root

09:58:00

Realtime Simulation

Type Color Time(sec) Periodic Num Edit

Cisco Packet Tracer - C:\Users\EDUARDO\Desktop\tarea.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 156, y: 329

172.17.10.21
VLAN 10
PC1

172.17.20.22
VLAN 20
PC2

172.17.30.23
VLAN 30
PC3

F0/11

F0/18

F0/6

S2

G0/1

Time: 00:24:37

Windows taskbar icons: File Explorer, VS Code, Edge, Word, etc.

PC3

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.17.30.23

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::2E0:A3FF:FED1:E7C7

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Top

Root

10:06:00

Realtime Simulation

Type Color Time(sec) Periodic Num Edit

ESP US 01:17 p. m. 19/08/2023

File PC4

Physical Config Desktop Programming Attributes

P Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.17.10.24

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::204:9AFF:FE4A:4A39

Default Gateway

DNS Server

802.1X

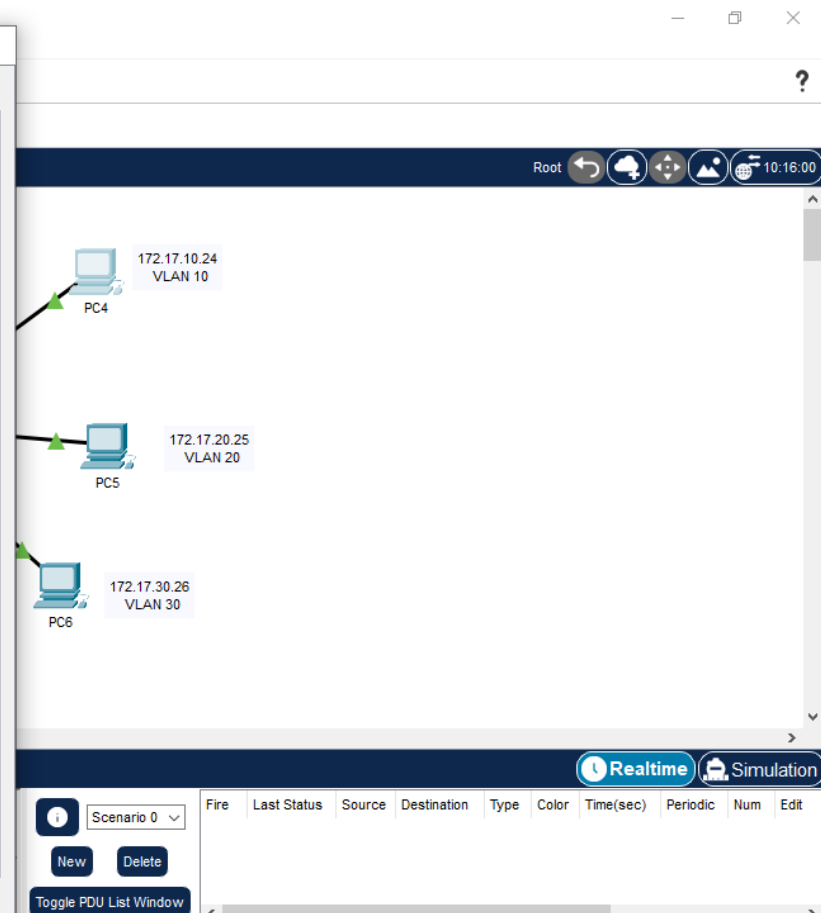
☐ Use 802.1X Security

Authentication MD5

Username

Password

Top



Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.17.20.25

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::202:17FF:FE75:2298

Default Gateway

DNS Server

802.1X

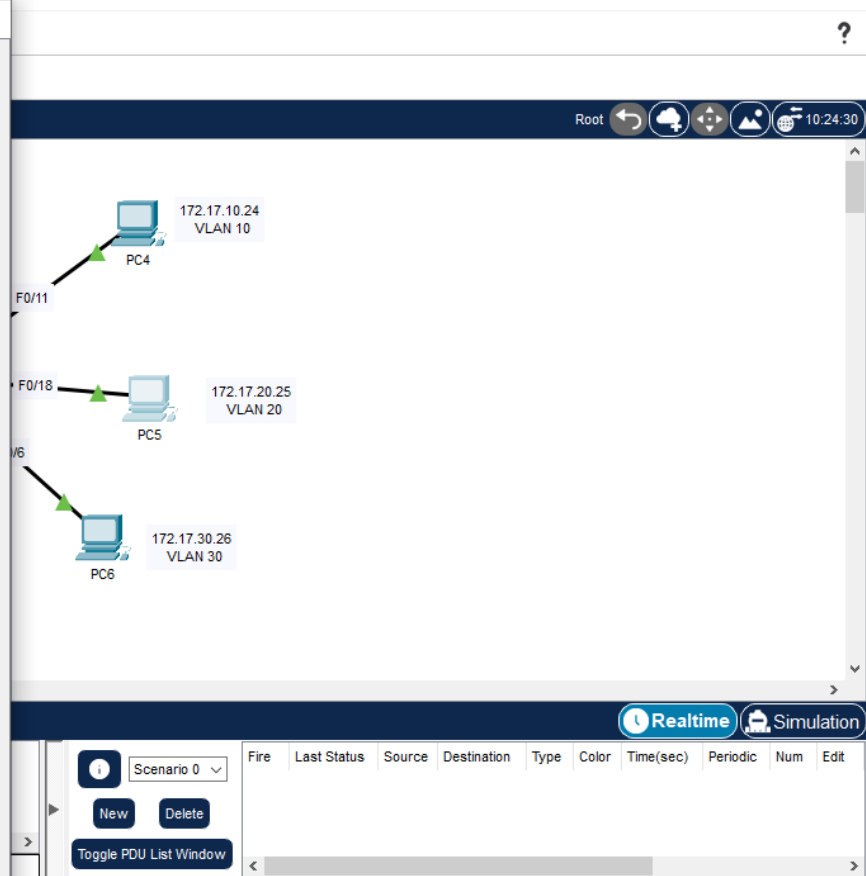
☐ Use 802.1X Security

Authentication MD5

Username

Password

Top



PC6

Physical Config Desktop Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 172.17.30.26

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::202:4AFF:FE51:7CAD

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

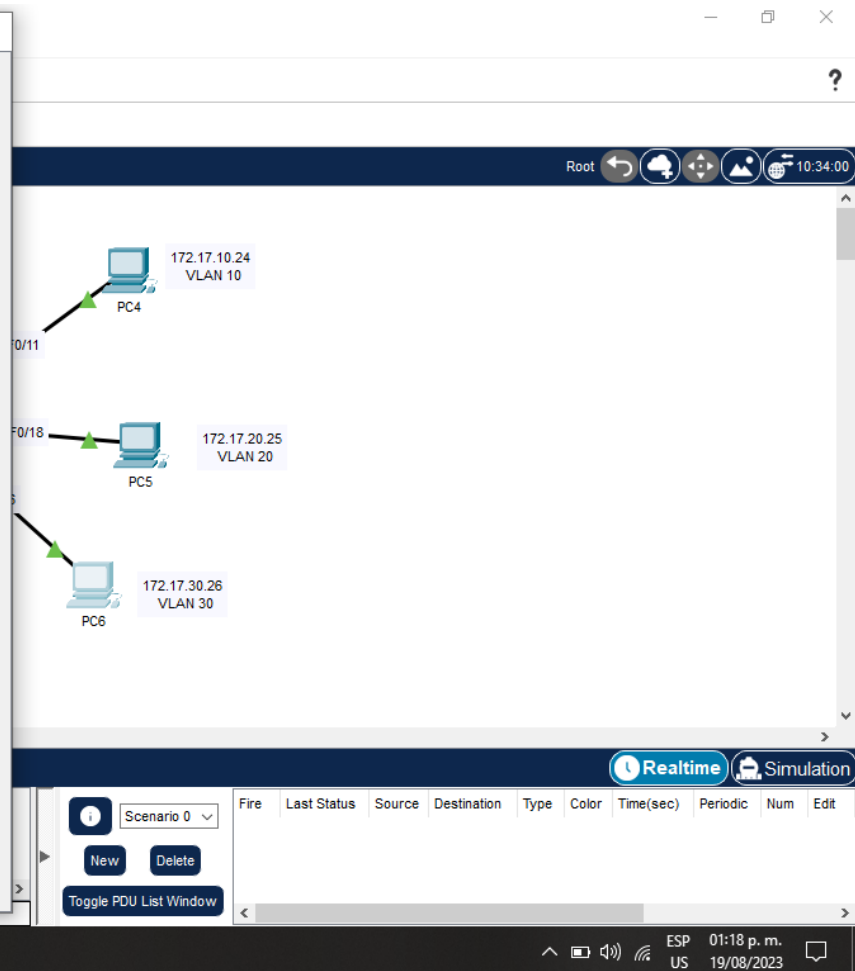
Authentication: MDS

Username:

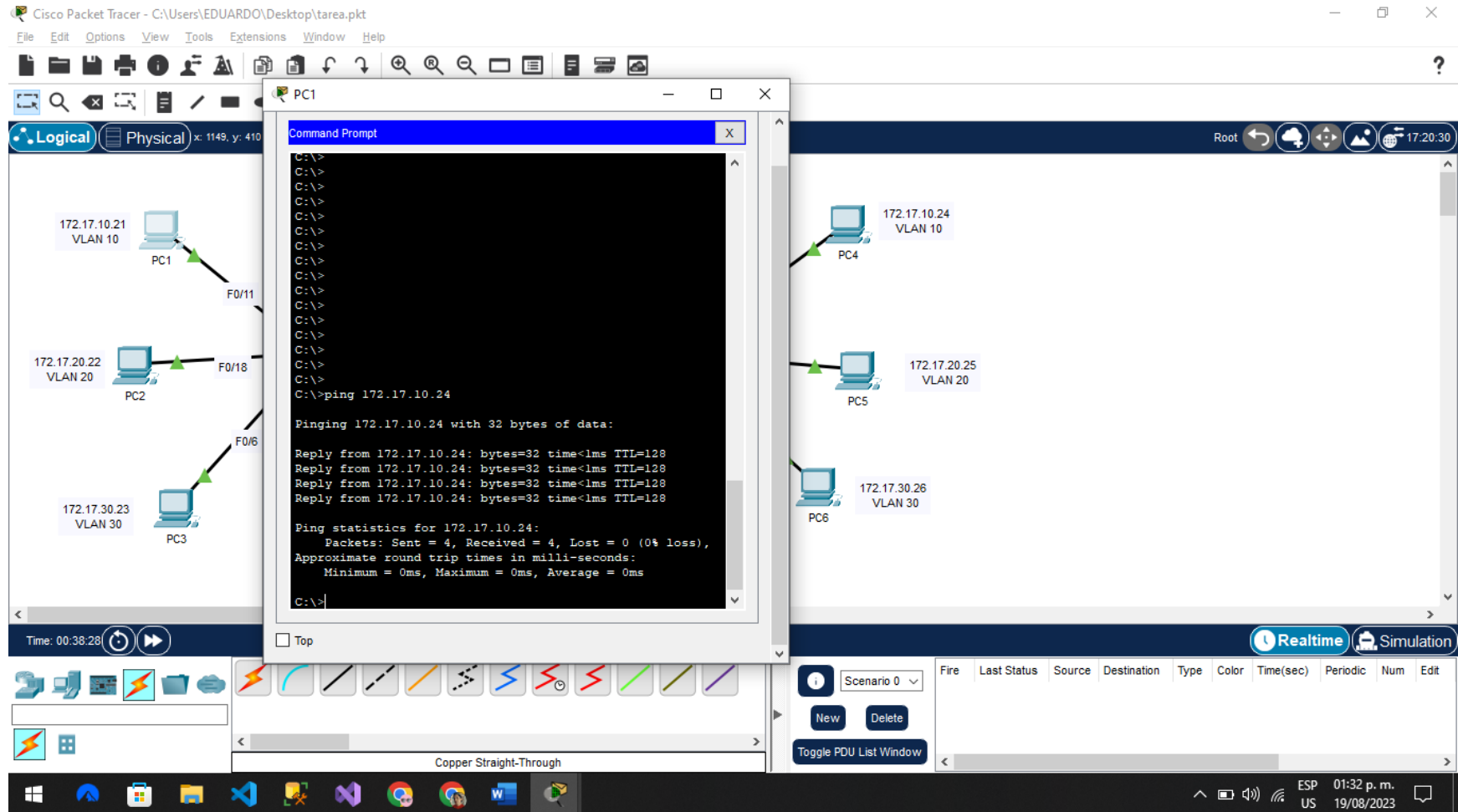
Password:

Top

Copper Straight-through



PING CON LAS VLAN 10



PING CON LAS VLAN 20

The screenshot displays the Cisco Packet Tracer interface. On the left, a network topology is visible with three PCs connected to a central switch:

- PC1: 172.17.10.21, VLAN 10
- PC2: 172.17.20.22, VLAN 20
- PC3: 172.17.30.23, VLAN 30

In the center, a 'PC2' window is open, showing the 'Desktop' tab with a 'Command Prompt' window. The command prompt displays the following output:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.17.20.25

Pinging 172.17.20.25 with 32 bytes of data:

Reply from 172.17.20.25: bytes=32 time<1ms TTL=128
Reply from 172.17.20.25: bytes=32 time<1ms TTL=128
Reply from 172.17.20.25: bytes=32 time<1ms TTL=128
Reply from 172.17.20.25: bytes=32 time<1ms TTL=128

Ping statistics for 172.17.20.25:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 172.17.20.25

Pinging 172.17.20.25 with 32 bytes of data:

Reply from 172.17.20.25: bytes=32 time<1ms TTL=128
Reply from 172.17.20.25: bytes=32 time<1ms TTL=128
Reply from 172.17.20.25: bytes=32 time<1ms TTL=128
Reply from 172.17.20.25: bytes=32 time=13ms TTL=128

Ping statistics for 172.17.20.25:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 13ms, Average = 3ms

C:\>
```

On the right, another network topology is visible with three PCs connected to a central switch:

- PC4: 172.17.10.24, VLAN 10
- PC5: 172.17.20.25, VLAN 20
- PC6: 172.17.30.26, VLAN 30

The bottom of the interface shows the 'Realtime' and 'Simulation' tabs, a 'Scenario 0' dropdown, and a 'Toggle PDU List Window' button. The system tray at the bottom indicates the time is 01:32 p.m. on 19/08/2023.

PING CON LAS VLAN 30

The screenshot displays the Cisco Packet Tracer interface with a network topology and a command prompt window for PC3.

Network Topology:

- PC1: 172.17.10.21, VLAN 10
- PC2: 172.17.20.22, VLAN 20
- PC3: 172.17.30.23, VLAN 30
- PC4: 172.17.10.24, VLAN 10
- PC5: 172.17.20.25, VLAN 20
- PC6: 172.17.30.26, VLAN 30

Command Prompt (PC3):

```
Cisco Packet Tracer PC Command Line 1.0
C:\>172.17.30.26
Invalid Command.

C:\>ping 172.17.30.26

Pinging 172.17.30.26 with 32 bytes of data:

Reply from 172.17.30.26: bytes=32 time<1ms TTL=128
Reply from 172.17.30.26: bytes=32 time<1ms TTL=128
Reply from 172.17.30.26: bytes=32 time<1ms TTL=128
Reply from 172.17.30.26: bytes=32 time<1ms TTL=128

Ping statistics for 172.17.30.26:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 172.17.30.26

Pinging 172.17.30.26 with 32 bytes of data:

Reply from 172.17.30.26: bytes=32 time<1ms TTL=128
Reply from 172.17.30.26: bytes=32 time<1ms TTL=128
Reply from 172.17.30.26: bytes=32 time<1ms TTL=128
Reply from 172.17.30.26: bytes=32 time<1ms TTL=128

Ping statistics for 172.17.30.26:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

The interface also shows a 'Logical' tab on the left, a 'Physical' tab on the right, and a 'Realtime' tab at the bottom. The status bar at the bottom indicates the time is 01:32 p.m. on 19/08/2023.