

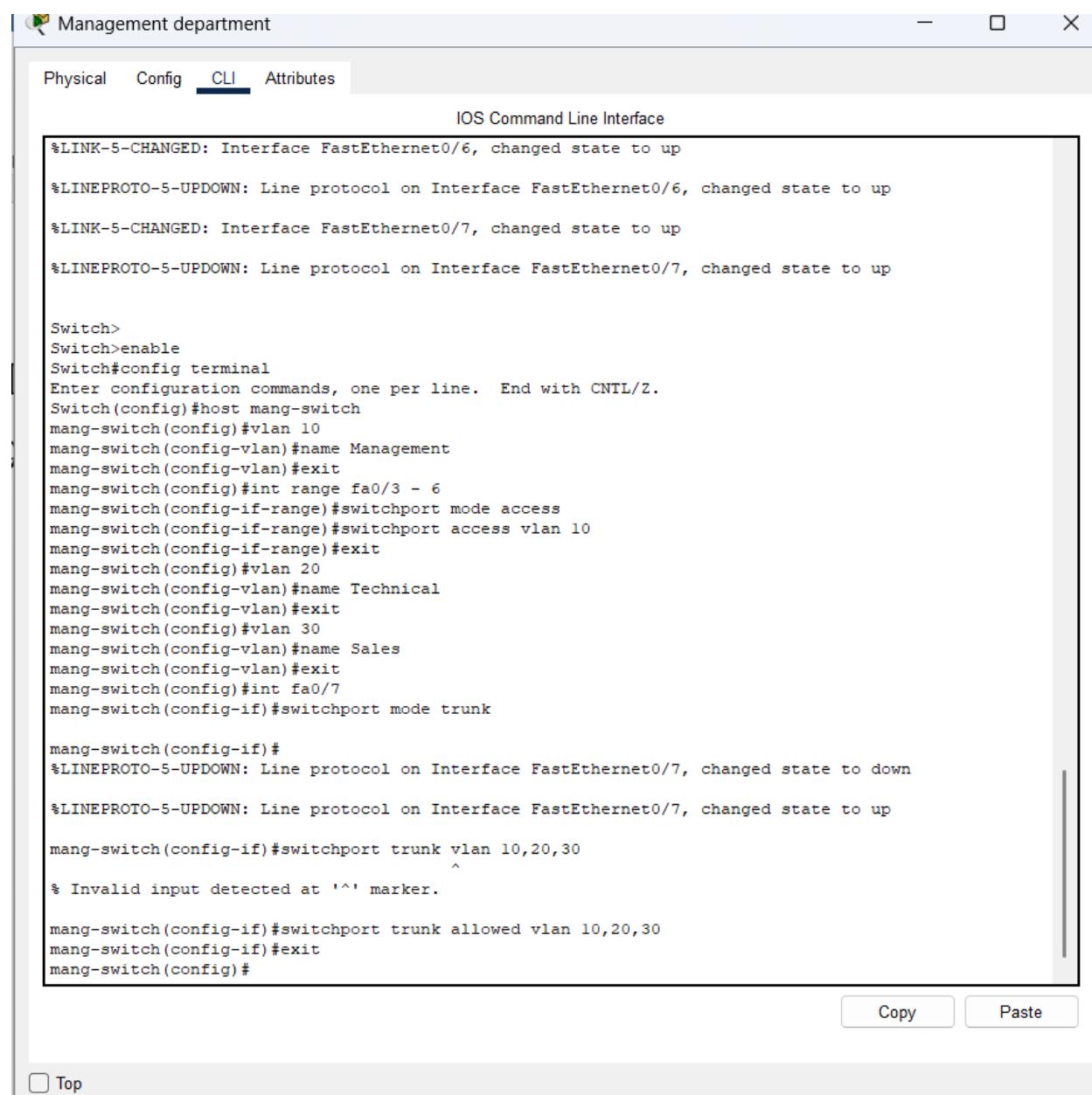
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CN LAB 11

TASK:

ASSIGN VLAN TO PORTS AND THEN INTER VLAN



The screenshot shows a terminal window titled "Management department". The tab bar at the top has "Physical", "Config", "CLI" (which is selected), and "Attributes". The main area is titled "IOS Command Line Interface". The terminal output is as follows:

```
%LINK-5-CHANGED: Interface FastEthernet0/6, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/7, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up

Switch>
Switch>enable
Switch#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#host mang-switch
mang-switch(config)#vlan 10
mang-switch(config-vlan)#name Management
mang-switch(config-vlan)#exit
mang-switch(config)#int range fa0/3 - 6
mang-switch(config-if-range)#switchport mode access
mang-switch(config-if-range)#switchport access vlan 10
mang-switch(config-if-range)#exit
mang-switch(config)#vlan 20
mang-switch(config-vlan)#name Technical
mang-switch(config-vlan)#exit
mang-switch(config)#vlan 30
mang-switch(config-vlan)#name Sales
mang-switch(config-vlan)#exit
mang-switch(config)#int fa0/7
mang-switch(config-if)#switchport mode trunk

mang-switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up
mang-switch(config-if)#switchport trunk vlan 10,20,30
^
% Invalid input detected at '^' marker.

mang-switch(config-if)#switchport trunk allowed vlan 10,20,30
mang-switch(config-if)#exit
mang-switch(config)#

```

At the bottom right of the terminal window are "Copy" and "Paste" buttons. At the bottom left is a "Top" button.

 Technical department

— □ ×

Physical Config **CLI** Attributes

## IOS Command Line Interface

```
%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
%LINK-5-CHANGED: Interface FastEthernet0/7, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up

Switch>
Switch>en
Switch#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#host tech-switch
tech-switch(config)#vlan 20
tech-switch(config-vlan)#name Technical
tech-switch(config-vlan)#exit
tech-switch(config)#int range fa0/3 - 6
tech-switch(config-if-range)#switchport mode access
tech-switch(config-if-range)#switchport access vlan 20
tech-switch(config-if-range)#exit
tech-switch(config)#vlan 10
tech-switch(config-vlan)#name Management
tech-switch(config-vlan)#exit
tech-switch(config)#vlan 30
tech-switch(config-vlan)#name Sales
tech-switch(config-vlan)#exit
tech-switch(config)#int fa0/7
tech-switch(config-if)#switchport mode trunk

tech-switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up

tech-switch(config-if)#switchport trunk allowed vlan 10,20,30
tech-switch(config-if)#exit
tech-switch(config)#+
```

Sales Department

Physical Config **CLI** Attributes

IOS Command Line Interface

```
%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
%LINK-5-CHANGED: Interface FastEthernet0/7, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up

Switch>
Switch>en
Switch#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#host sales-switch
sales-switch(config)#vlan 30
sales-switch(config-vlan)#name Sales
sales-switch(config-vlan)#exit
sales-switch(config)#int range fa0/4 - 7
sales-switch(config-if-range)#switchport mode access
sales-switch(config-if-range)#switchport access vlan 30
sales-switch(config-if-range)#exit
sales-switch(config)#vlan 10
sales-switch(config-vlan)#name Management
sales-switch(config-vlan)#exit
sales-switch(config)#vlan 20
sales-switch(config-vlan)#name Technical
sales-switch(config-vlan)#exit
sales-switch(config)#
sales-switch(config)#
sales-switch(config)#int fa0/1
sales-switch(config-if)#switchport mode trunk

sales-switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

sales-switch(config-if)#switchport trunk allowed vlan 10,20,30
sales-switch(config-if)#exit
sales-switch(config)#

```

Inter vlan in router

Router2

Physical Config CLI Attributes

IOS Command Line Interface

```
export@cisco.com.

Cisco 1841 (revision 5.0) with 114688K/16384K bytes of memory.
Processor board ID FTX0947Z18E
M860 processor: part number 0, mask 49
2 FastEthernet/IEEE 802.3 interface(s)
191K bytes of NVRAM.
63488K bytes of ATA CompactFlash (Read/Write)
Cisco IOS Software, 1841 Software (C1841-ADVISERVICESK9-M), Version 12.4(15)T1, RELEASE SOFTWARE
(fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed 18-Jul-07 04:52 by pt_team

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: n

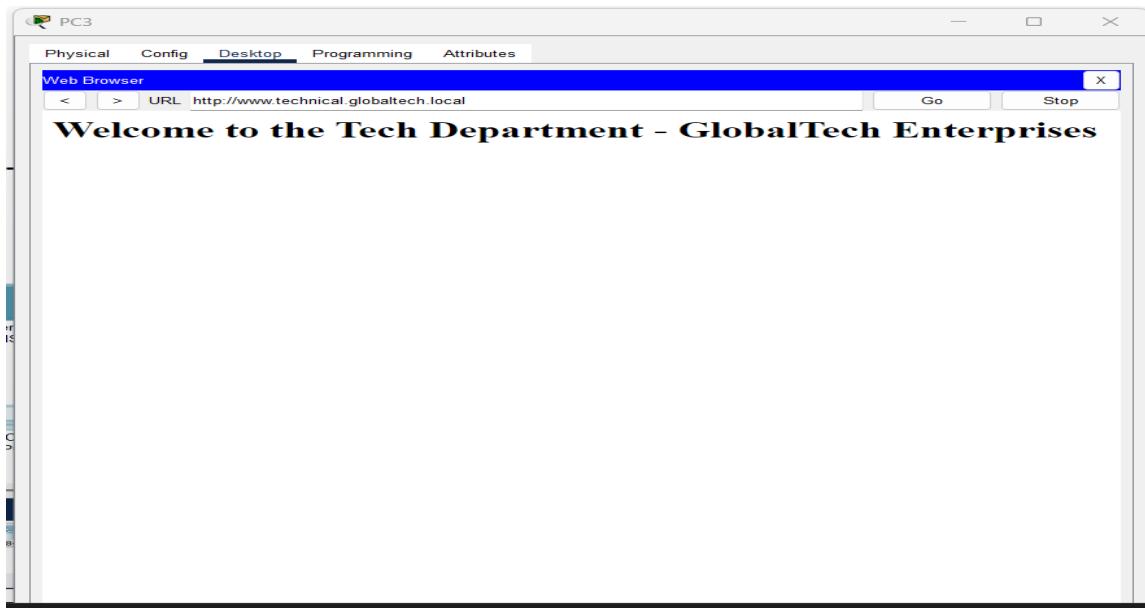
Press RETURN to get started!

Router>
Router>en
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int f0/0.10
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)#int fa0/0.20
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)#int fa0/0.30
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)#
```

Top

## DNS SERVICE AND HTTP

From same pc access all vlans web page



## All config in central switch

Switch0

Physical Config **CLI** Attributes

IOS Command Line Interface

VLAN	Name	Status	Ports
1	default	active	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	Management	active	
20	Technical	active	
30	Sales	active	
1002	fdmi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

Switch#show int trunk

Port	Mode	Encapsulation	Status	Native vlan
Fa0/1	on	802.1q	trunking	1
Fa0/2	auto	n-802.1q	trunking	1
Fa0/3	auto	n-802.1q	trunking	1
Fa0/4	on	802.1q	trunking	1

Port Vlans allowed on trunk

Fa0/1	1-1005
Fa0/2	1-1005
Fa0/3	1-1005
Fa0/4	1-1005

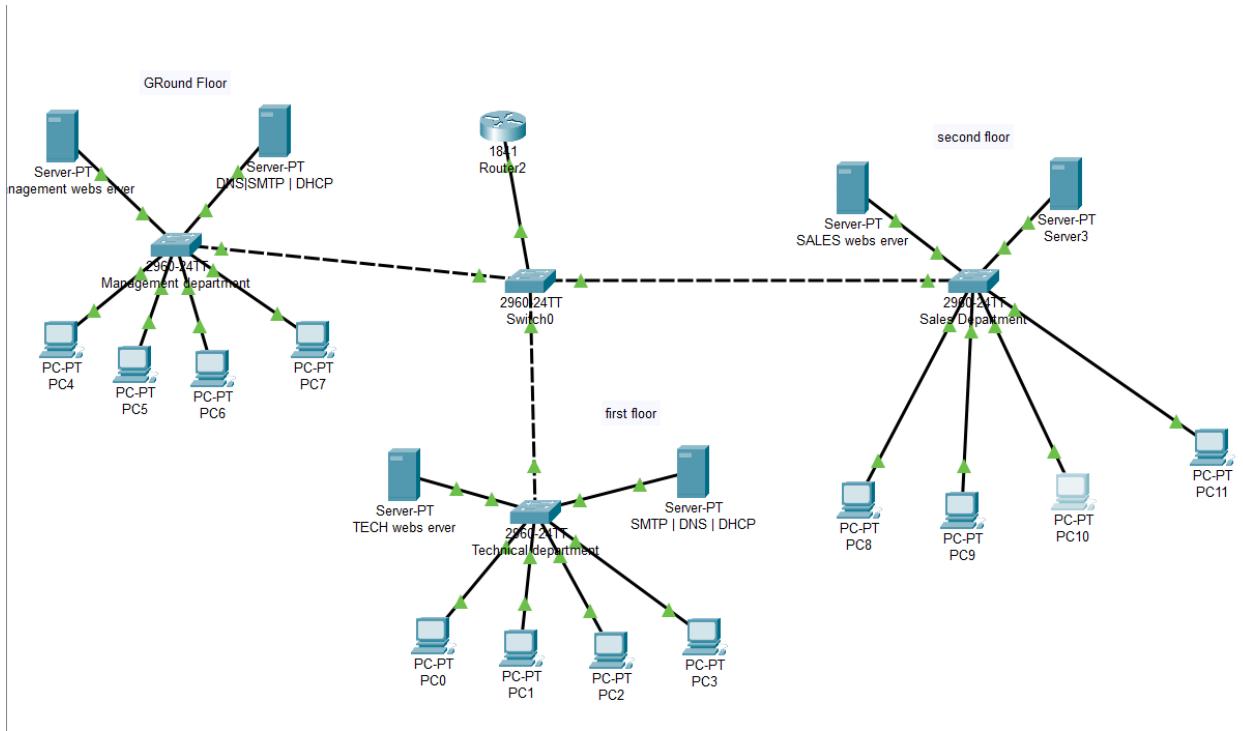
Port Vlans allowed and active in management domain

Fa0/1	1,10,20,30
Fa0/2	1,10,20,30
Fa0/3	1,10,20,30
Fa0/4	1,10,20,30

Port Vlans in spanning tree forwarding state and not pruned

Fa0/1	1,10,20,30
Fa0/2	1,10,20,30
Fa0/3	1,10,20,30

--More--



circuit link