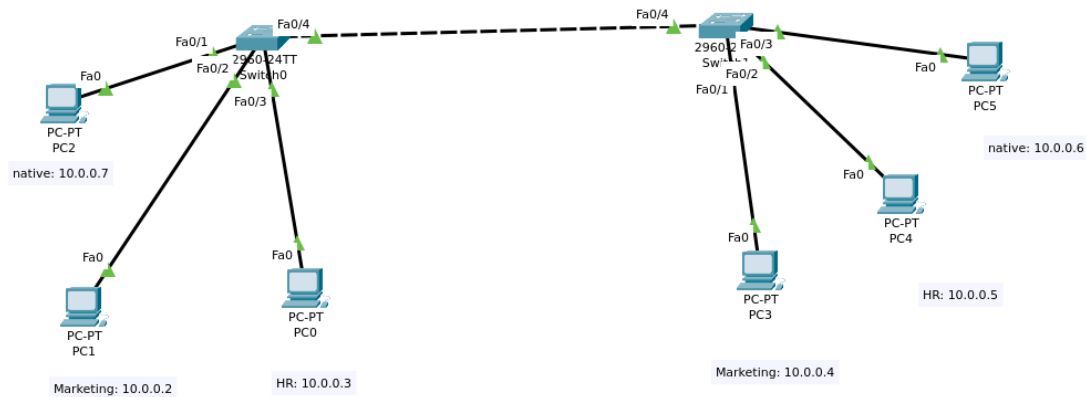


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Q6)



Assigning Switch0 VLAN:

```
Switch>
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name Marketing
Switch(config-vlan)#exit
Switch(config)#vlan 3
Switch(config-vlan)#name HR
Switch(config-vlan)#exit
Switch(config)#interface fa0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 2
Switch(config-if)#exit
Switch(config)#interface fa0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 3
Switch(config-if)#do show vlan br
```

VLAN Name	Status	Ports
1 default	active	Fa0/1, 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
2 Marketing	active	Fa0/2
3 HR	active	Fa0/3
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

```
Switch(config-if)#
```

Assigning Switch1 VLAN:

```
Switch(config-if)#exit
Switch(config)#int fa0/3
Switch(config-if)#switchport mode acces
Switch(config-if)#switchport access vlan 3
Switch(config-if)#exit
Switch(config)#
Switch(config)#
Switch(config)#int fa0/4
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to down

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

Switch(config-if)#switchport trunk allowed vlan add 2
Switch(config-if)#switchport trunk allowed vlan add 3
Switch(config-if)#switchport trunk native vlan 50
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#do show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/4     on        802.1q         trunking    50

Port      Vlans allowed on trunk
Fa0/4     1-1005

Port      Vlans allowed and active in management domain
Fa0/4     1,2,3

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/4     1,2,3

Switch(config)#
Switch(config)#interface FastEthernet0/1
Switch(config-if)#|
```

Assigning Trunk port with native vlan as vlan 50 in Switch1:

```
Switch(config-if)#exit
Switch(config)#int fa0/3
Switch(config-if)#switchport mode acces
Switch(config-if)#switchport access vlan 3
Switch(config-if)#exit
Switch(config)#
Switch(config)#
Switch(config)#int fa0/4
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to down

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

Switch(config-if)#switchport trunk allowed vlan add 2
Switch(config-if)#switchport trunk allowed vlan add 3
Switch(config-if)#switchport trunk native vlan 50
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#do show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/4     on        802.1q         trunking    50

Port      Vlans allowed on trunk
Fa0/4     1-1005

Port      Vlans allowed and active in management domain
Fa0/4     1,2,3

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/4     1,2,3

Switch(config)#
Switch(config)#interface FastEthernet0/1
Switch(config-if)#
```

Assigning Trunk port with native vlan as vlan50 in Switch2:

```

Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 3
Switch(config-if)#exit
Switch(config)%%SPANTREE-2-RECV_PVID_ERR: Received 802.1Q BPDU on non trunk FastEthernet0/4
VLAN1.

%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet0/4 on VLAN0001. Inconsistent port type.

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to down

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

Switch(config)#
Switch(config)#int fa0/4
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk allowed vlan add 2
Switch(config-if)#switchport trunk allowed vlan add 3
Switch(config-if)#switchport trunk native vlan
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/4 (1), with S
Switch(config-if)#switchport trunk native vlan 50
Switch(config-if)#exit
Switch(config)#do show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/4     on        802.1q         trunking    50

Port      Vlans allowed on trunk
Fa0/4     1-1005

Port      Vlans allowed and active in management domain
Fa0/4     1,2,3

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/4     1,2,3

Switch(config)#

```

We can see that the moment we set the native vlan as 50 in the port connected to Switch1, Switch2 gives native vlan mismatch error as this is not yet configured to be 50. So, we have to ALWAYS keep the native vlan in all switches the same.

Pinging devices:

Marketing PC1 to Marketing PC3:

```
C:\>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```

HR PC0 to HR PC4:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data:

Reply from 10.0.0.5: bytes=32 time<1ms TTL=128
Reply from 10.0.0.5: bytes=32 time<1ms TTL=128
Reply from 10.0.0.5: bytes=32 time<1ms TTL=128
Reply from 10.0.0.5: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Native VLAN ping:

```
C:\>ping 10.0.0.6

Pinging 10.0.0.6 with 32 bytes of data:

Reply from 10.0.0.6: bytes=32 time<1ms TTL=128
Reply from 10.0.0.6: bytes=32 time<1ms TTL=128
Reply from 10.0.0.6: bytes=32 time<1ms TTL=128
Reply from 10.0.0.6: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```

Thus, we have successfully assigned Native VLAN to both Switches.