

**I H C QU C GIA THÀNH PH H CHÍ MINH
TR NG I H C KHOA H C T NHIÊN**

**KHOA CÔNG NGH THÔNG TIN
MÔN:TH C T P M NG MÁY TÍNH**

BÁO CÁO BÀI T P TU N 6

Spanning Tree Protocol

L p: 09HCA

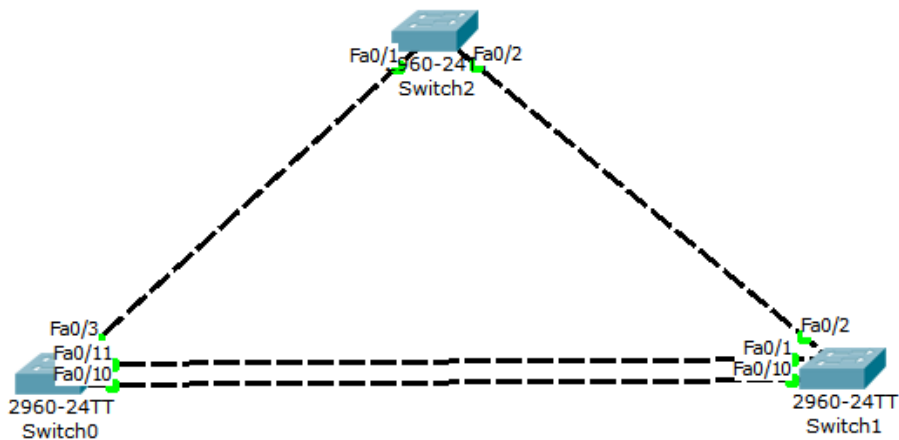
H tên : Võ Hu nh an

MSSV : 0941037

Phần 2: Cấu hình

Bài làm:

Mô hình thực hiện.



Quá trình broadcast Root Bridge, Root Port và Designated diễn ra từng

SW0

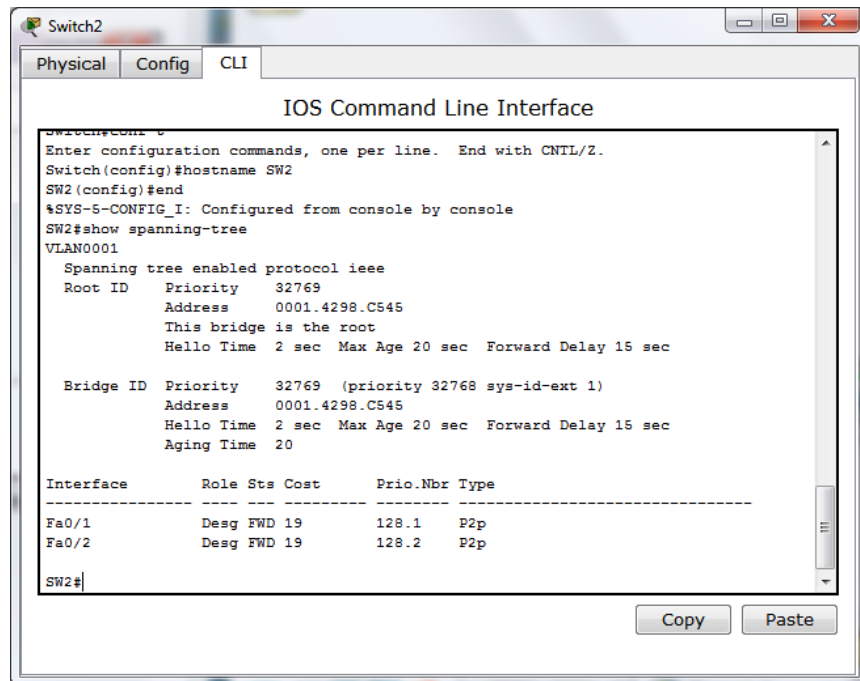
```
Switch0
Physical Config CLI
IOS Command Line Interface
SW0#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID    Priority    32769
           Address    0001.4298.C545
           Cost       19
           Port       3(FastEthernet0/3)
           Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

Bridge ID   Priority    32769 (priority 32768 sys-id-ext 1)
           Address    0001.649D.8DD7
           Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
           Aging Time 20

Interface   Role Sts Cost      Prio.Nbr Type
-----
Fa0/3       Root FWD 19        128.3    P2p
Fa0/10      Desg FWD 19        128.10   P2p
Fa0/11      Desg FWD 19        128.11   P2p

SW0#
```

SW2



Switch2

Physical Config CLI

IOS Command Line Interface

```
Switch2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch2(config)#hostname SW2
SW2(config)#end
%SYS-5-CONFIG_I: Configured from console by console
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0001.4298.C545
            This bridge is the root
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

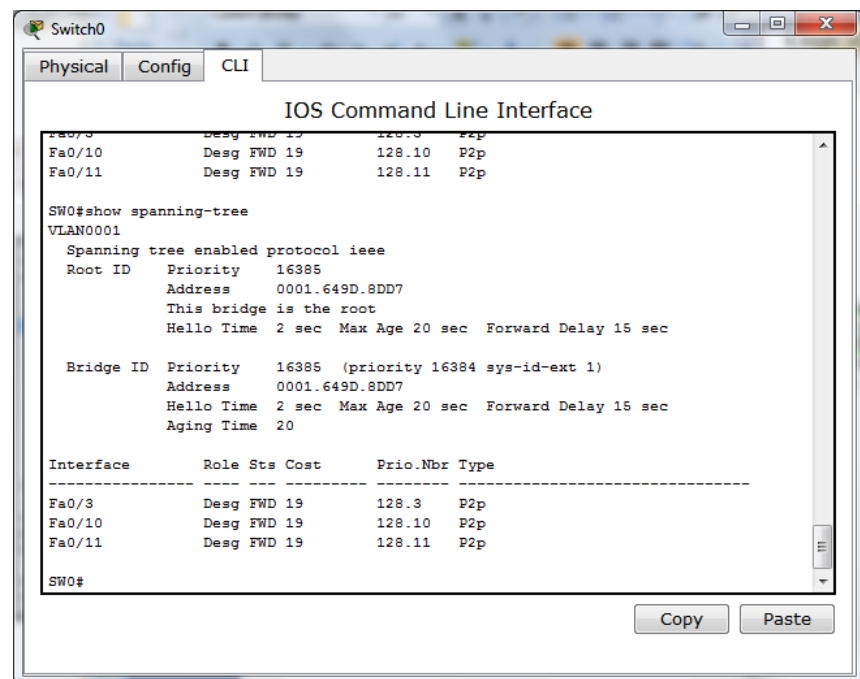
  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
            Address     0001.4298.C545
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface Role Sts Cost Prio.Nbr Type
-----
Fa0/1 Desg FWD 19 128.1 P2p
Fa0/2 Desg FWD 19 128.2 P2p

SW2#
```

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Thay i Root Bridge cho SW0



Switch0

Physical Config CLI

IOS Command Line Interface

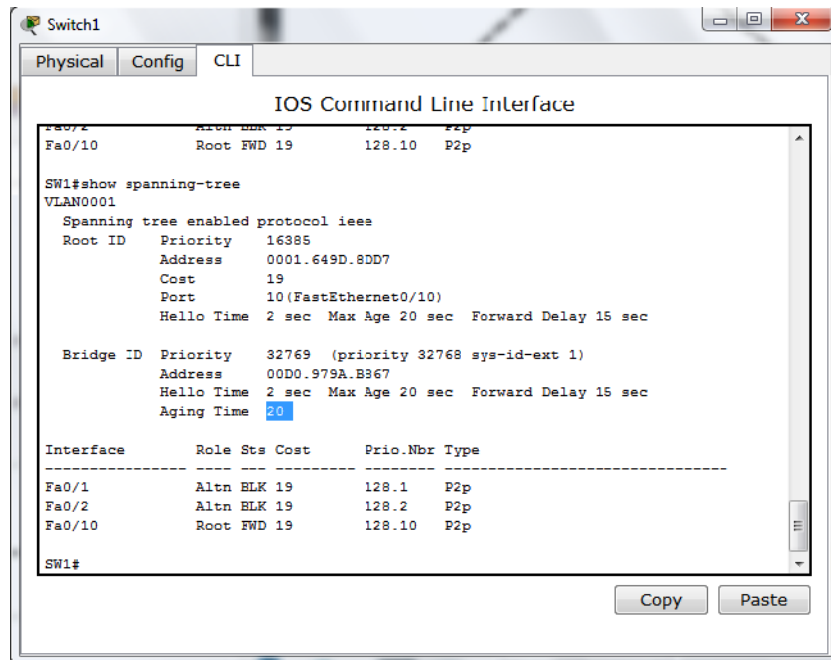
```
SW0#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    16385
            Address     0001.649D.8DD7
            This bridge is the root
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    16385 (priority 16384 sys-id-ext 1)
            Address     0001.649D.8DD7
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface Role Sts Cost Prio.Nbr Type
-----
Fa0/3 Desg FWD 19 128.3 P2p
Fa0/10 Desg FWD 19 128.10 P2p
Fa0/11 Desg FWD 19 128.11 P2p

SW0#
```

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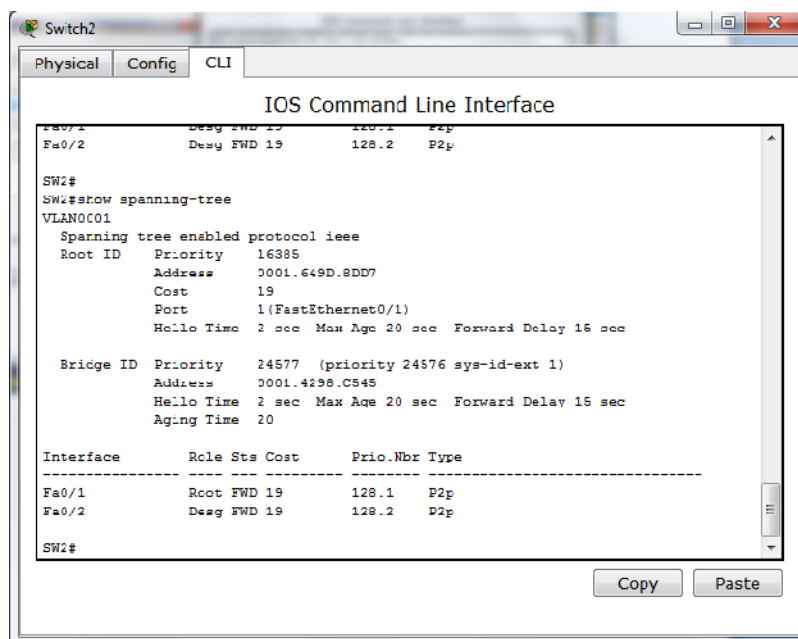


Thay i cho SW1 tr thành Root ta s đ ng câu l nh

SW1(config)#spanning-tree vlan 1 priority 8193

➔ t priority cho SW1 th p h n Root Bridge hi n tại.

Tr ng thái các port trên các SW:



```
Switch1
Physical Config CLI
IOS Command Line Interface

1000 enet 101C03 1500 - - - - 0 0
1004 enet 101C04 1500 - - - - 0 0
1005 enet 101C05 1500 - - - - 0 0

SW1#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 8193
Address 00D0.979A.B367
This bridge is the root
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID Priority 8193 (priority 8192 sys-id-ext 1)
Address 00D0.979A.B367
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 20

Interface Role Sts Cost Prio Nbr Type
-----
Fa0/1 Desg LSN 19 128.1 P2p
Fa0/2 Desg FWD 19 128.2 P2p
Fa0/10 Desg FWD 19 128.10 P2p

SW1#
```

```
Switch0
Physical Config CLI
IOS Command Line Interface

Fa0/10 Desg FWD 19 128.10 P2p
Fa0/11 Desg FWD 19 128.11 P2p

SW0#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 8193
Address 00D0.979A.B367
Cost 16
Port 11 (FastEthernet0/11)
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

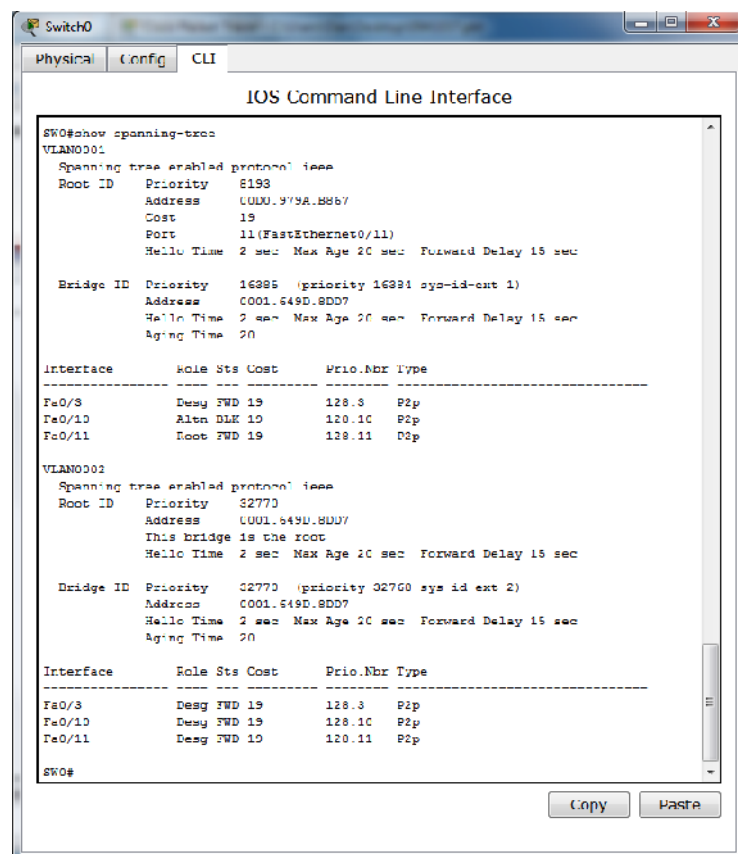
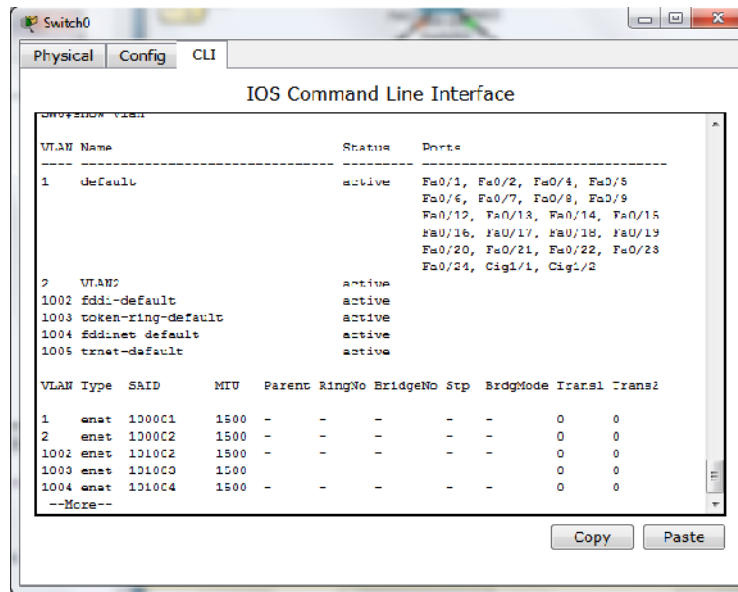
Bridge ID Priority 16385 (priority 16384 sys-id-ext 1)
Address 0001.549D.8DD7
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 20

Interface Role Sts Cost Prio Nbr Type
-----
Fa0/3 Desg FWD 19 128.3 P2p
Fa0/10 Altn BLK 19 128.10 P2p
Fa0/11 Root FWD 19 128.11 P2p

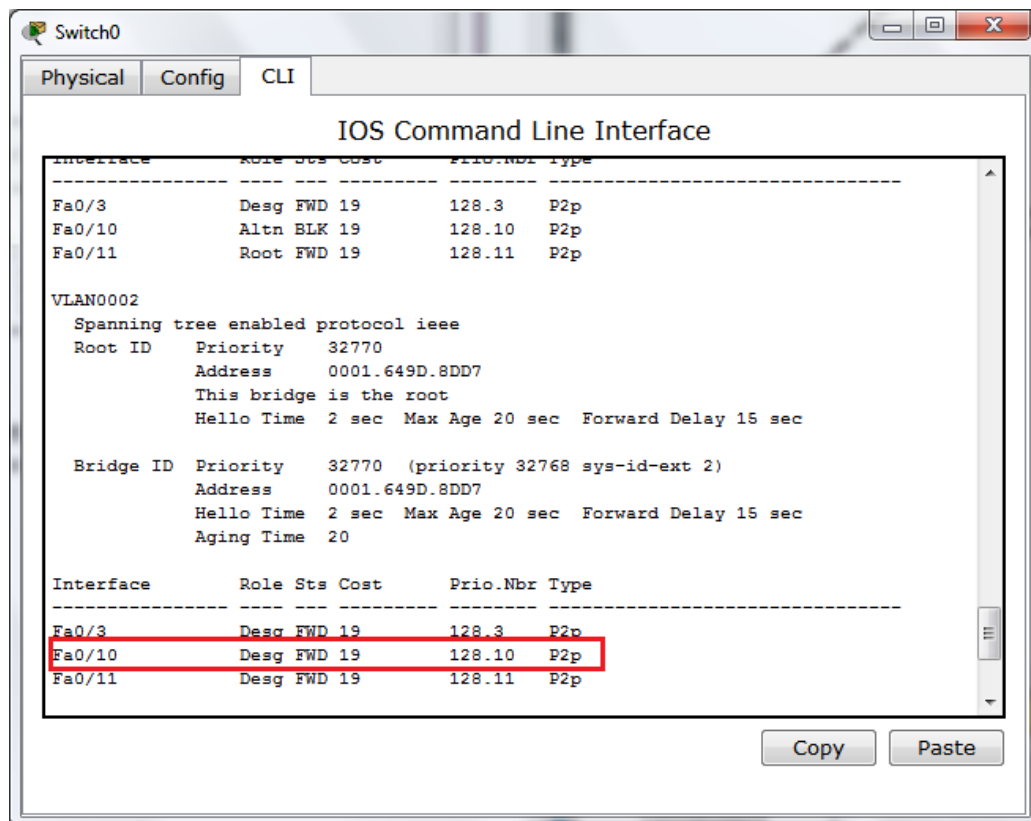
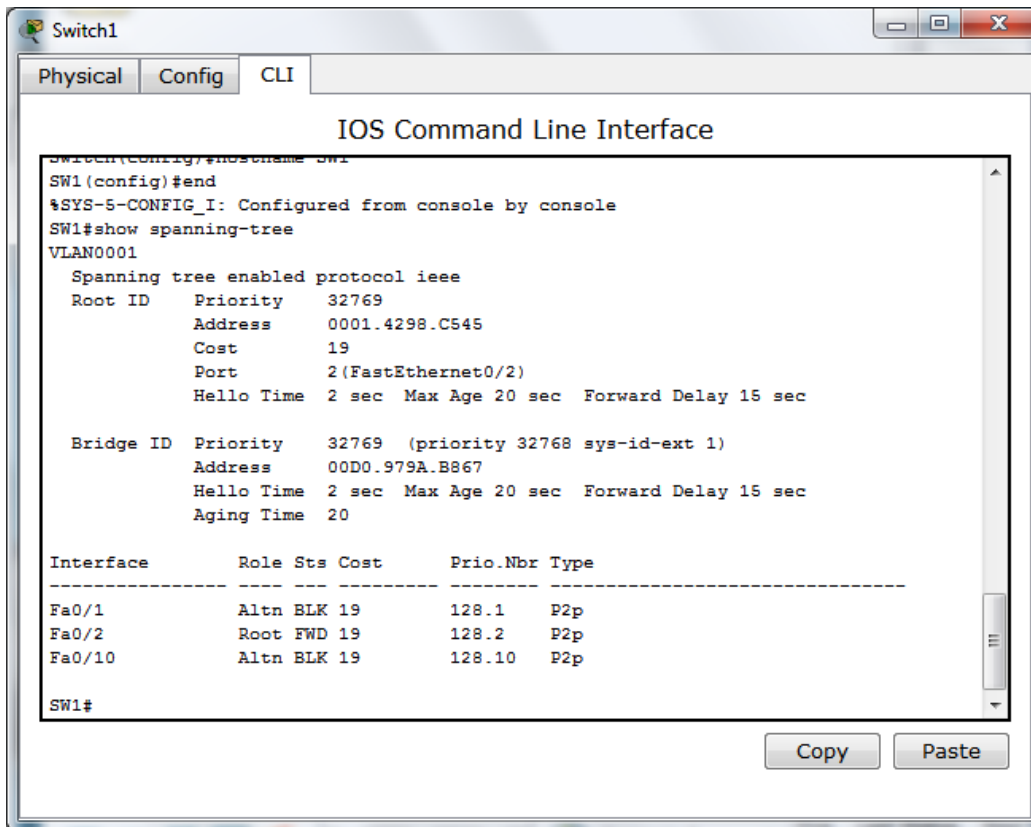
SW0#
```

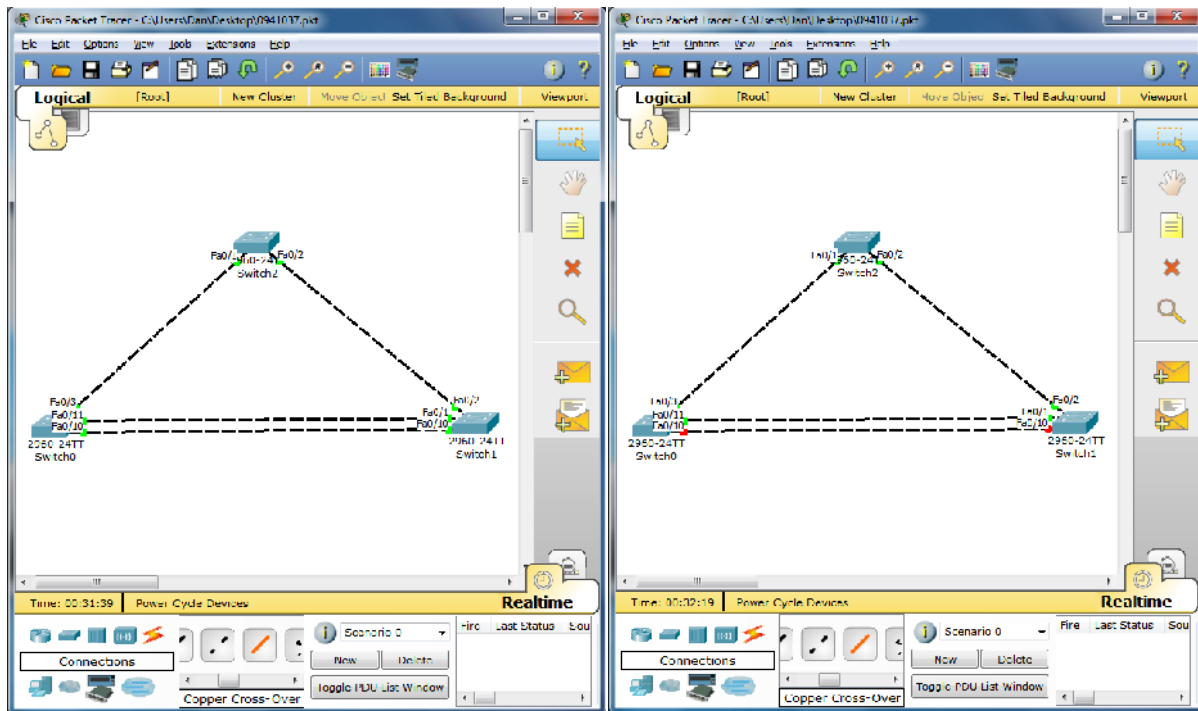
Spanning tree với các VLAN khác nhau.

a các port v mode TRUNK và xem hình ã có VLAN 2



T th nghi m tính n ng





Switch0

Physical Config CLI

IOS Command Line Interface

```

VLAN0001
Spanning tree enabled protocol ieee
Root ID    Priority    8193
           Address    00D0.979A.B867
           Cost       19
           Port       11(FastEthernet0/11)
           Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID   Priority    16385 (priority 16384 sys-id-ext 1)
           Address    0001.649D.8DD7
           Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
           Aging Time 20

Interface   Role Sts Cost      Prio.Nbr Type
-----
Fa0/3       Desg FWD 19        128.3   P2p
Fa0/11      Root FWD 19        128.11  P2p

VLAN0002
Spanning tree enabled protocol ieee
Root ID    Priority    32770
           Address    0001.649D.8DD7
           This bridge is the root
           Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
  
```

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