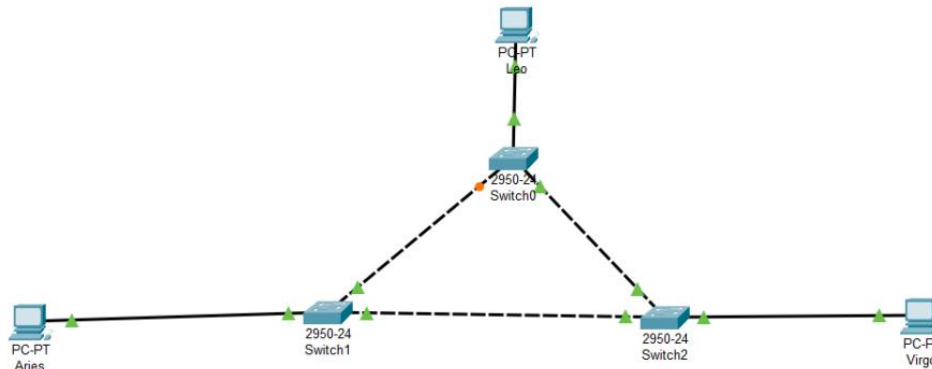


1. Keg 1



1A = Set up 3 switch type 2950-24 and 3 PC-PT. Then connect them all with cables.(PC-PT to Switch [Straight], Switch to Switch [Cross]).

2A = Change the name of the switch by double click and go to config menu. Change the switches to Switch0, Switch1, Switch2.

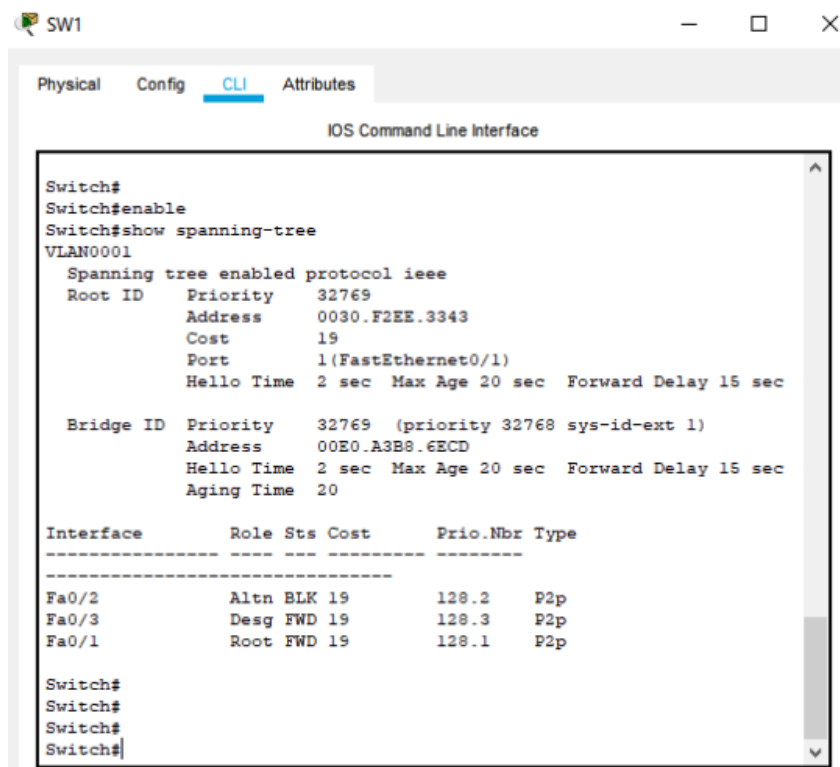
PC ip :

Leo = 172.21.1.1/24

Aries = 172.21.1.2/24

Virgo = 172.21.1.3/24

4A = Status STP Switch



SW 2

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch>enable
Switch#spt
Translating "spt"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer
address

Switch#enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             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     0030.F2EE.3343
             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
Fa0/3          Desg FWD 19        128.3    P2p
Fa0/2          Desg FWD 19        128.2    P2p

Switch#
```

SW3

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch>enable
Switch#show spanning tree
^
% Invalid input detected at '^' marker.

Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             Cost         19
             Port         2 (FastEthernet0/2)
             Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     0060.3EAl.7E03
             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          Root FWD 19        128.2    P2p
Fa0/3          Desg FWD 19        128.3    P2p

Switch#
```

4B =

SW 1

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	00E0.A3B8.6ECD
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW 2

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0030.F2EE.3343
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW 3

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0060.3EA1.7E03
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

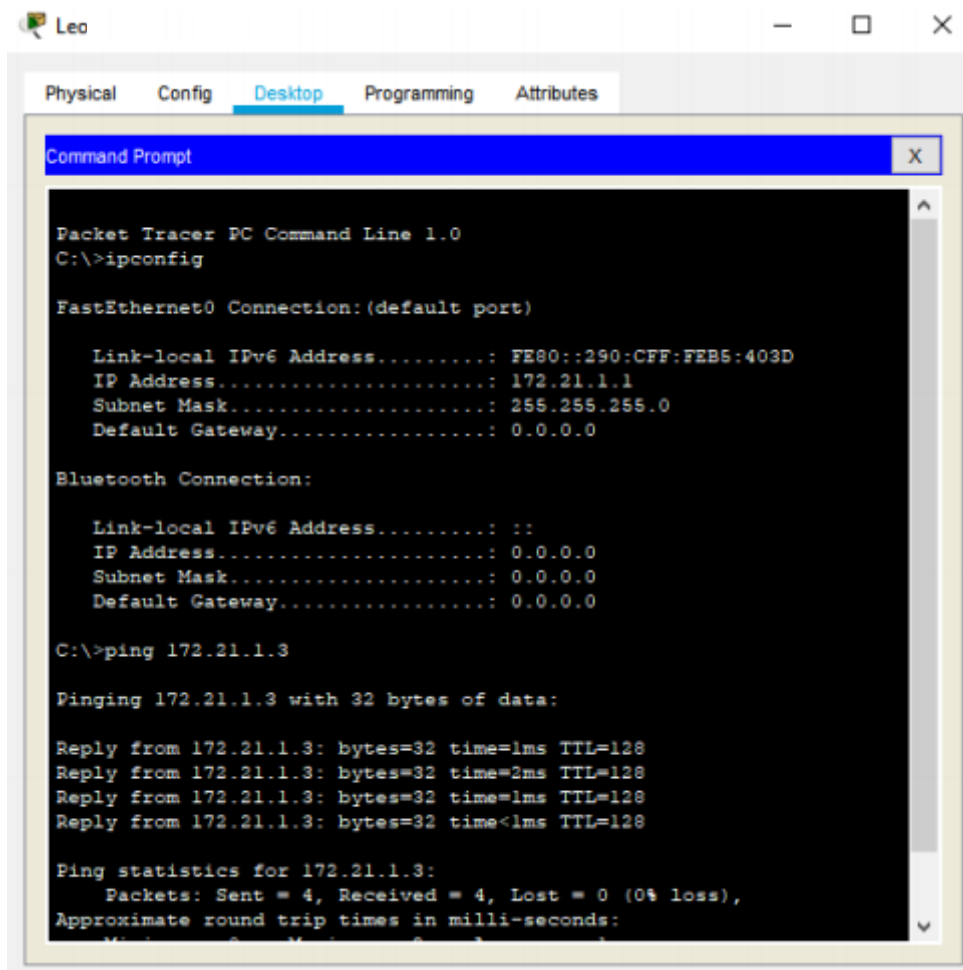
4C =

- Root Bridge : SW2
- Designated Bridge : SW1, SW3
- Root Port : SW1 FastEthernet0/1 , SW3 (FastEthernet0/2)
- Designated Port : SW1 = Fa0/3 , SW2 = Fa0/1,Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/2,Fa0/3

4D =

- Forwarding : SW1 = Fa0/1,Fa0/3 , SW2 = Fa0/1,Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/1,Fa0/2,Fa0/3
- Blocking : SW1 = Fa0/2

5A =



The screenshot shows a Packet Tracer Desktop window with a Command Prompt open. The Command Prompt displays the output of the 'ipconfig' command for FastEthernet0 and Bluetooth connections, followed by a 'ping 172.21.1.3' command. The ping results show four successful replies with 0% loss.

```
Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection: (default port)

    Link-local IPv6 Address . . . . . : FE80::290:CFF:FE85:403D
    IP Address. . . . . : 172.21.1.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 0.0.0.0

Bluetooth Connection:

    Link-local IPv6 Address . . . . . : ::
    IP Address. . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . : 0.0.0.0

C:\>ping 172.21.1.3

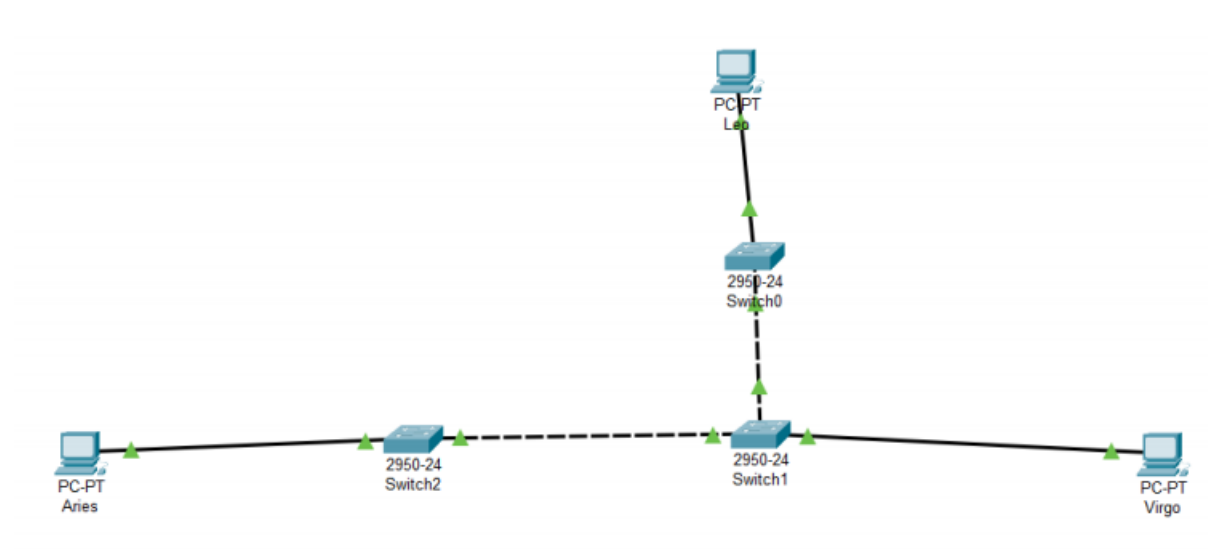
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=2ms TTL=128
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
```

6A = Ctrl+S, Set name to “lab2”, Save

2. Keg 2



PC ip :

Leo = 172.21.1.1/24

Aries = 172.21.1.2/24

Virgo = 172.21.1.3/24

4A =

```
SW1
Physical Config CLI Attributes
IOS Command Line Interface

%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to down

Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0030.F2EE.3343
              Cost      38
              Port      2 (FastEthernet0/2)
              Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

    Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
              Address    00E0.A3B8.6ECD
              Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
              Aging Time 20

Interface      Role Sts Cost      Prio.Nbr Type
-----
Fa0/2          Root FWD 19        128.2    P2p
Fa0/3          Desg FWD 19        128.3    P2p

Switch#
```

Physical Config **CLI** Attributes

IOS Command Line Interface

```
%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to down

Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0030.F2EE.3343
            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     0030.F2EE.3343
            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
Fa0/2          Desg FWD 19        128.2   P2p

Switch#
```

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0030.F2EE.3343
            Cost         19
            Port         2(FastEthernet0/2)
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
            Address     0060.3EA1.7E03
            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          Root FWD 19        128.2   P2p
Fa0/3          Desg FWD 19        128.3   P2p

Switch#
```

4B =

SW1

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	00E0.A3B8.6ECD
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW2

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0030.F2EE.3343
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

SW3

No	Variable	Value
1.	RootID	32769:0030.F2EE.3343
2.	Priority	32769
3.	MAC Address	0060.3EA1.7E03
4.	Bridge ID	32769
5.	Cost (0/1;0/2/0/3)	19/19/19
6.	Hello	2 s
7.	Max Age	20 s
8.	Forward Delay	15 s

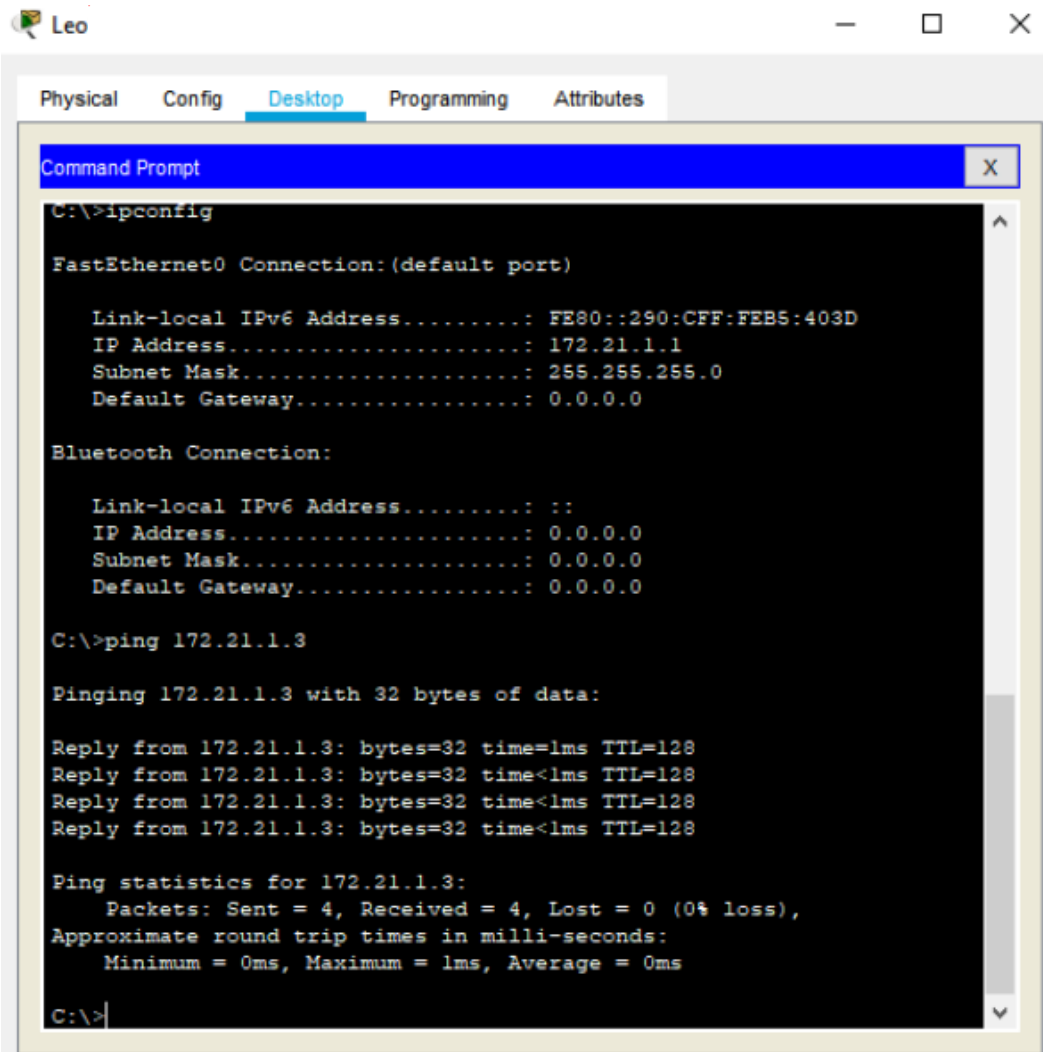
4C =

- Root Bridge : SW2
- Designated Bridge : SW1, SW3
- Root Port : SW1 FastEthernet0/2 , SW3 (FastEthernet0/2)
- Designated Port : SW1 = Fa0/3 , SW2 = Fa0/1,Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/3

4D =

- Forwarding : SW1 = Fa0/1,Fa0/3 , SW2 = Fa0/2,Fa0/3 , SW3 = Fa0/1,Fa0/1,Fa0/2,Fa0/3
- Blocking : Has no blocking port

5A =



The screenshot shows a window titled "Leo" with a tabbed interface. The "Desktop" tab is active, displaying a "Command Prompt" window. The Command Prompt shows the output of the `ipconfig` and `ping` commands.

```
C:\>ipconfig

FastEthernet0 Connection:(default port)

    Link-local IPv6 Address . . . . . : FE80::290:CFF:FEB5:403D
    IP Address. . . . . : 172.21.1.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 0.0.0.0

Bluetooth Connection:

    Link-local IPv6 Address . . . . . : ::
    IP Address. . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . : 0.0.0.0

C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```