

Nama : Rizky Tri Setya W

NIM : L200170054

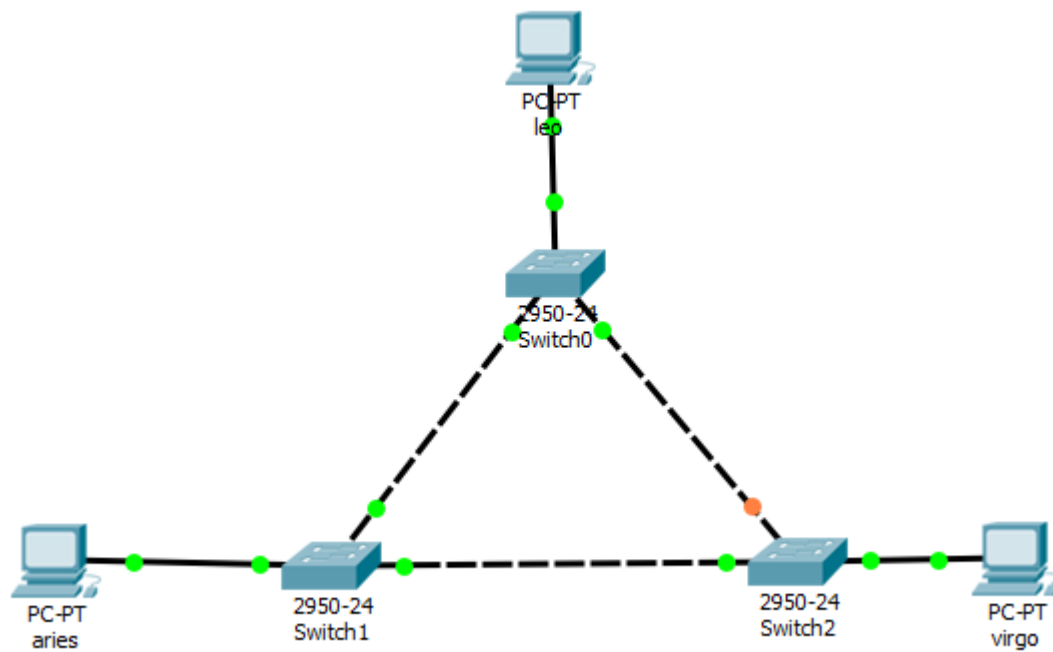
Kelas : B

MODUL 6

SPANNING TREE PROTOCOL

A. Kegiatan Praktikum

Kegiatan 1. Topologi 1



- a. Mengkonfigurasi IP address pada masing masing PC

Leo

Physical Config **Desktop** Programming Attributes

☐ DHCP ☒ Static

IP Address 172.21.1.1

Subnet Mask 255.255.0.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

Aries

Physical Config **Desktop** Programming Attributes

☐ DHCP ☒ Static

IP Address 172.21.1.2

Subnet Mask 255.255.0.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

Virgo

Physical Config **Desktop** Programming Attributes

☐ DHCP ☒ Static

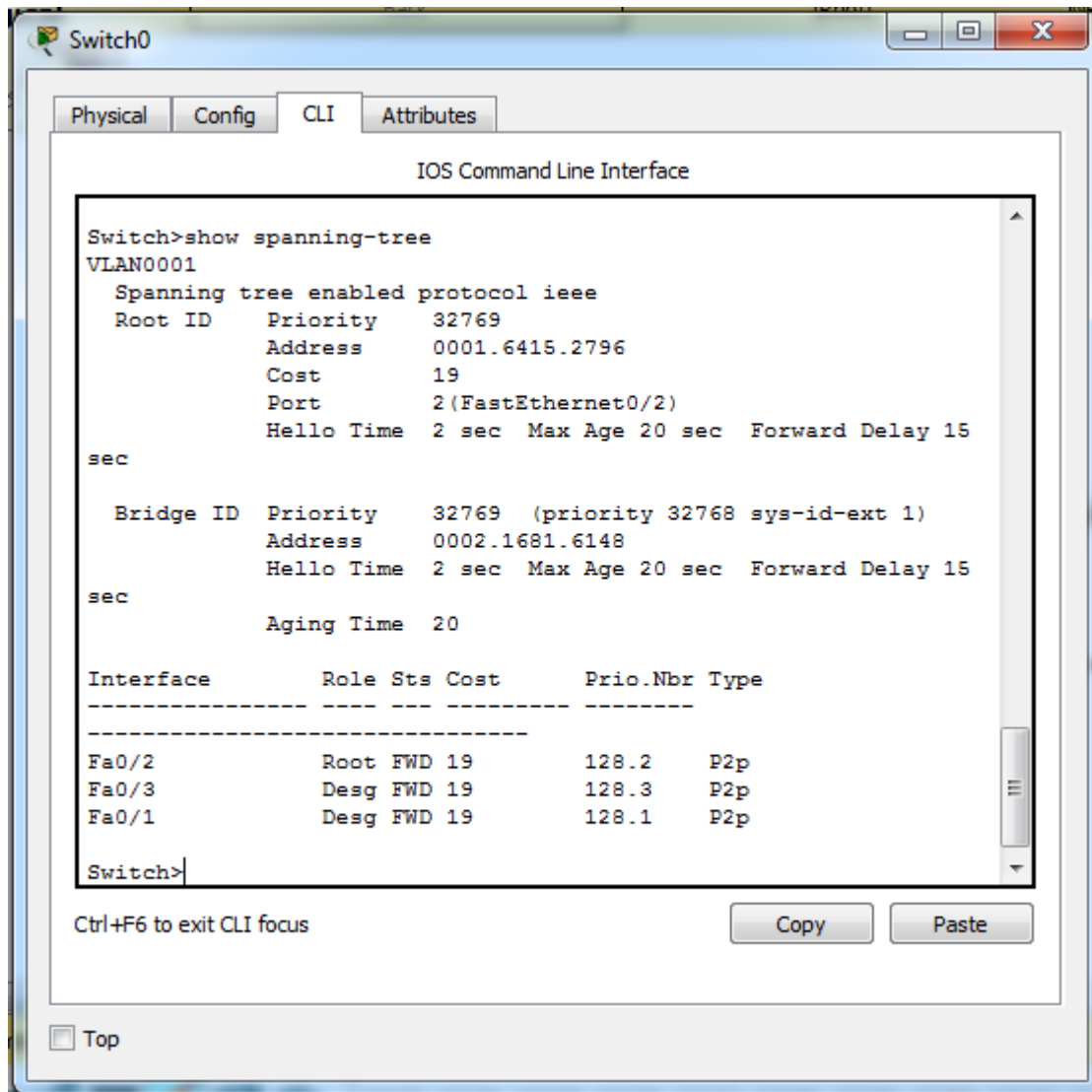
IP Address 172.21.1.3

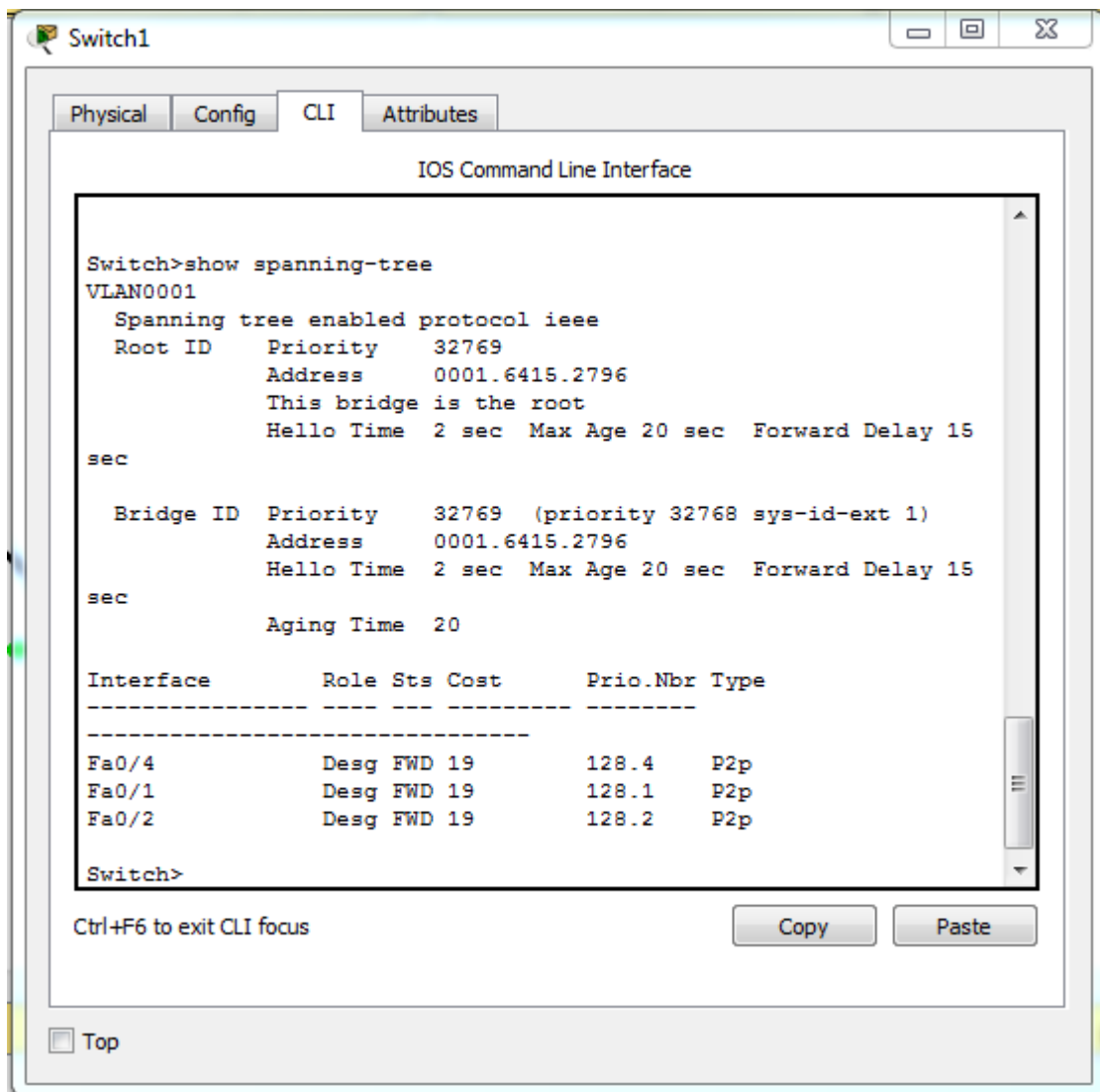
Subnet Mask 255.255.0.0

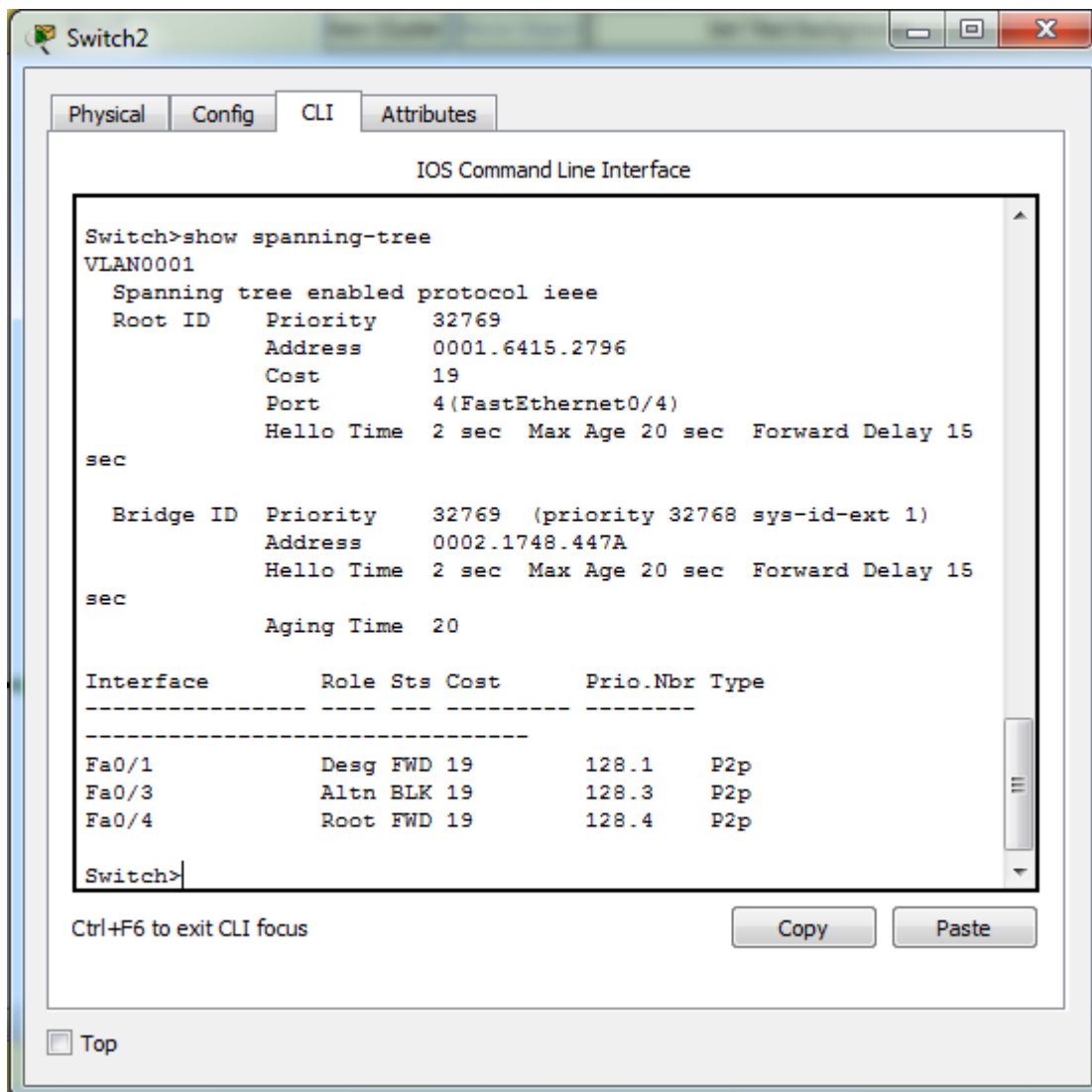
Default Gateway 0.0.0.0

DNS Server 0.0.0.0

- b. Melihat spanning-tree pada masing-masing server.







c. Tabel status STP pada masing-masing Switch :

- Switch0

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	19
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

- Switch1

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	-
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

- Switch2

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	19
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

d. Dalam kondisi default :

- Root Bridge => Fa 0/2 (switch0) dengan Fa 0/4 (switch2)
- Designated Bridge => Fa 0/3 (switch0) dengan Fa 0/3 (switch2)
=> Fa 0/4 (switch1) dengan Fa 0/4 (switch2)
- Root Port => Fa 0/2 (switch0)
=> Fa 0/4 (switch2)
- Designated Port => Fa 0/3 (switch0)
=> Fa 0/1 (switch0)
=> Fa 0/4 (switch1)
=> Fa 0/1 (switch1)
=> Fa 0/2 (switch1)
=> Fa 0/1 (switch2)

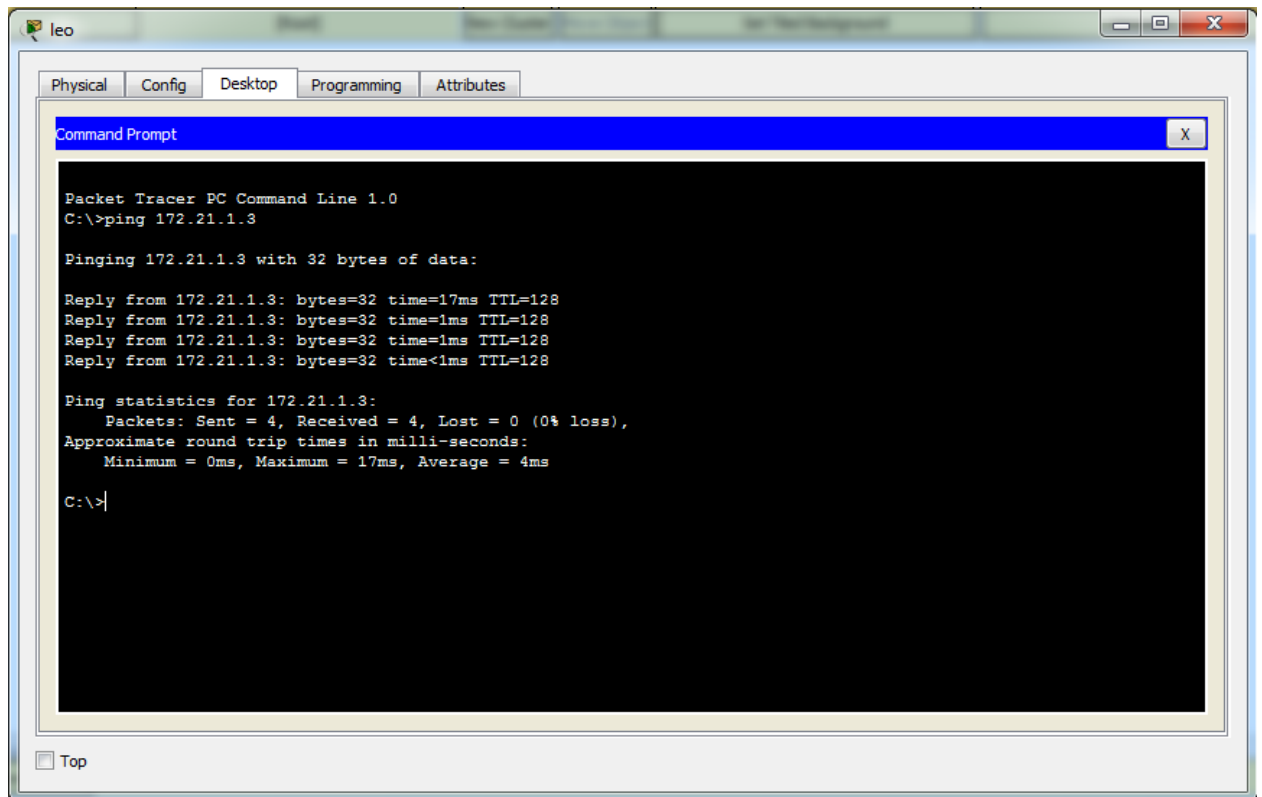
e. Dalam kondisi default :

- Port dalam kondisi Forwarding => Fa 0/2 (switch0)
=> Fa 0/3 (switch0)
=> Fa 0/1 (switch0)

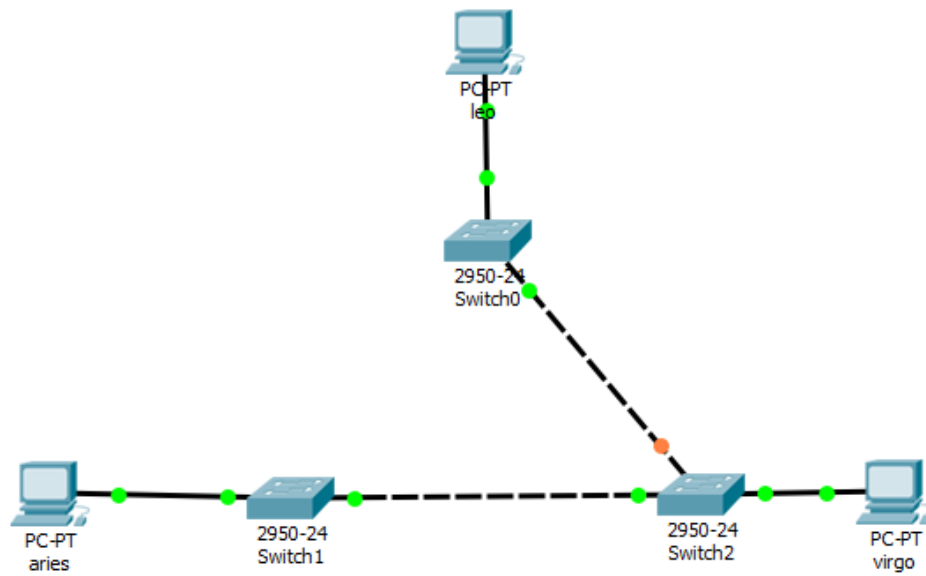
=> Fa 0/4 (switch1)
=> Fa 0/1 (switch1)
=> Fa 0/2 (switch1)
=> Fa 0/1 (switch2)
=> Fa 0/4 (switch2)

- Port dalam kondisi Blocking => Fa 0/3 (switch2)

f. Hasil dari ping pada PC Leo dengan PC Virgo.



Kegiatan 2. Topologi 2



- a. Mengkonfigurasi IP address pada masing masing PC seperti pada kegiatan sebelumnya, seperti kegiatan sebelumnya, nama PC diganti menjadi aries, virgo, dan leo.

Leo

Physical Config **Desktop** Programming Attributes

☐ DHCP ☒ Static

IP Address 172.21.1.1

Subnet Mask 255.255.0.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

Aries

Physical Config **Desktop** Programming Attributes

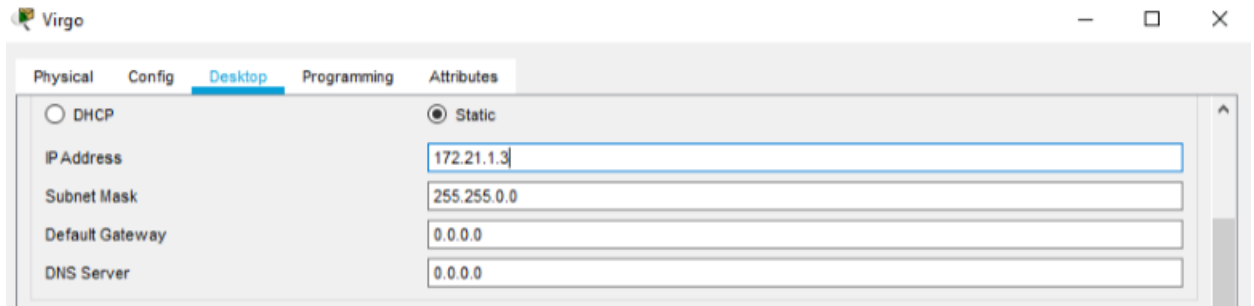
☐ DHCP ☒ Static

IP Address 172.21.1.2

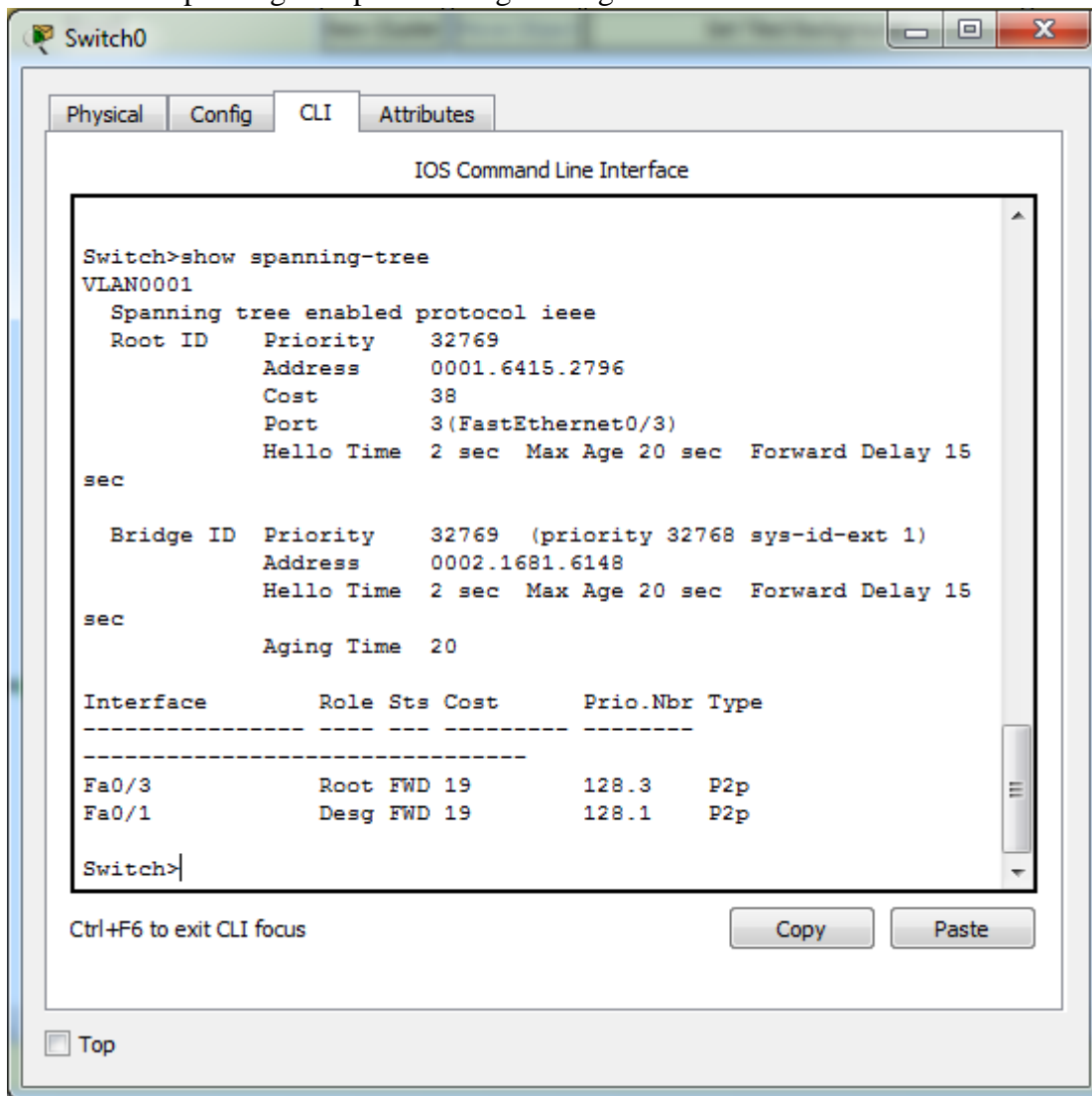
Subnet Mask 255.255.0.0

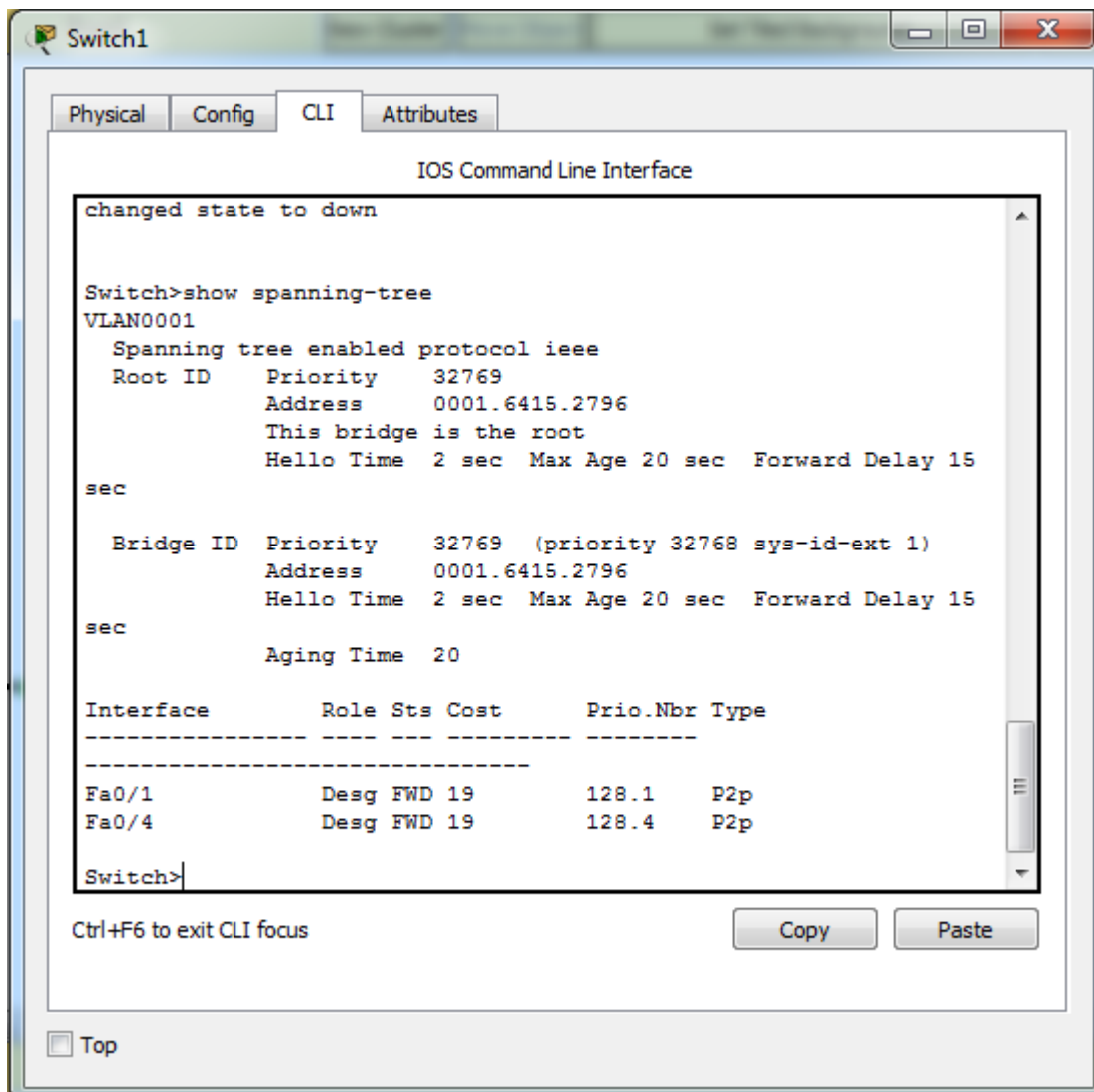
Default Gateway 0.0.0.0

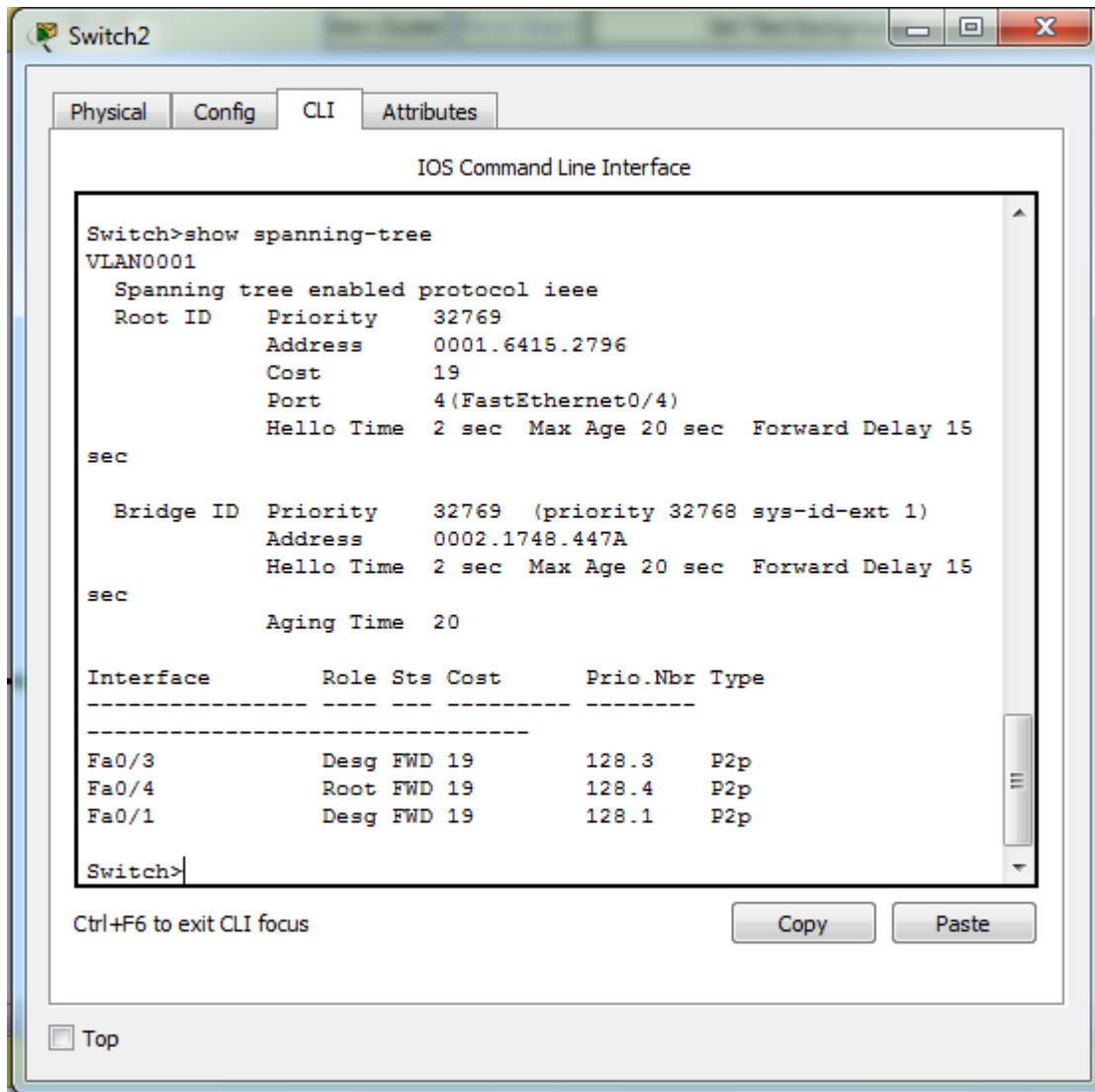
DNS Server 0.0.0.0



b. Melihat spanning-tree pada masing-masing server.







d. Tabel status STP pada masing-masing Switch :

- Switch0

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	38
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

- Switch1

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	-
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

- Switch2

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	19
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

g. Dalam kondisi default :

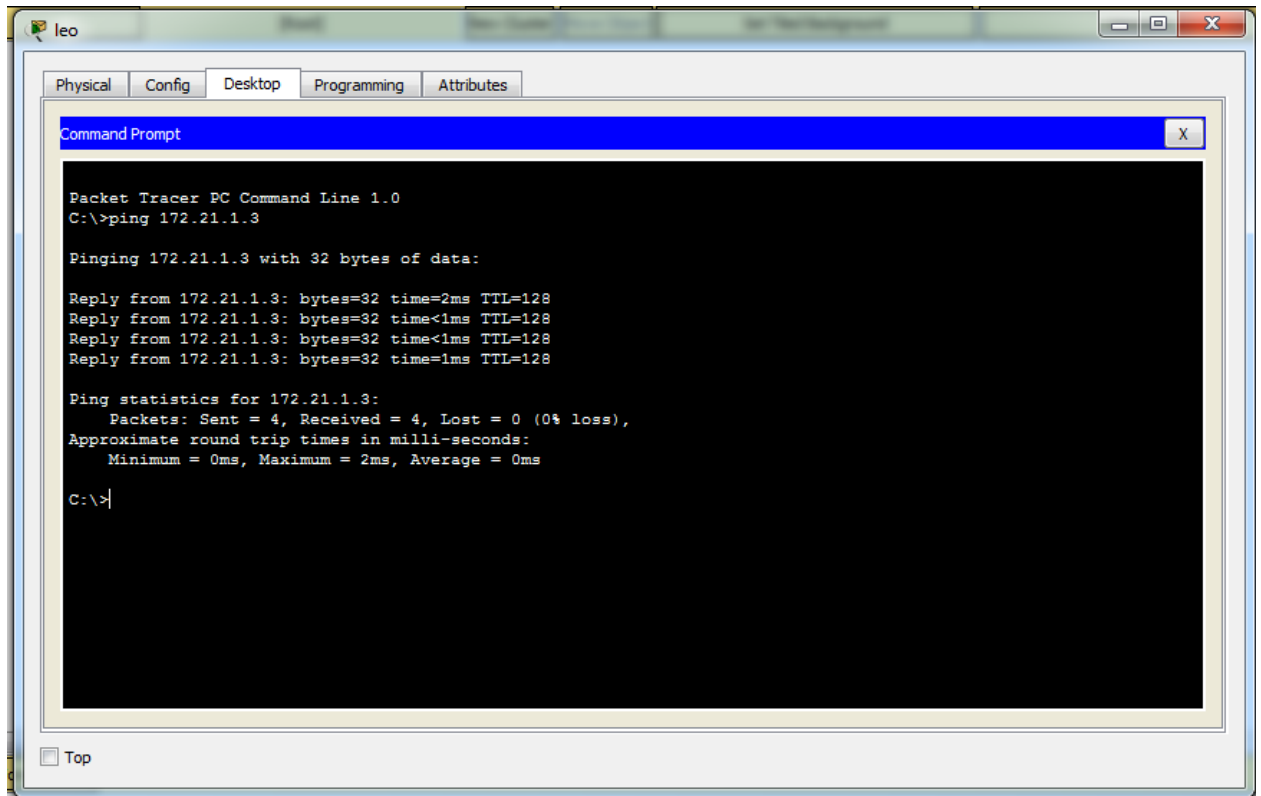
- Root Bridge => Fa 0/3 (switch0) dengan Fa 0/4 (switch2)
- Designated Bridge => Fa 0/4 (switch1) dengan Fa 0/3 (switch2)
- Root Port => Fa 0/3 (switch0)
=> Fa 0/4 (switch2)
- Designated Port => Fa 0/1 (switch0)
=> Fa 0/4 (switch1)
=> Fa 0/1 (switch1)
=> Fa 0/1 (switch2)
=> Fa 0/3 (switch2)

h. Dalam kondisi default :

- Port dalam kondisi Forwarding => Fa 0/3 (switch0)
=> Fa 0/1 (switch0)
=> Fa 0/4 (switch1)
=> Fa 0/1 (switch1)
=> Fa 0/1 (switch2)
=> Fa 0/4 (switch2)
=> Fa 0/3 (switch2)

- Port dalam kondisi Blocking => -

c. Hasil dari ping pada PC Leo dengan PC Virgo



The screenshot shows a Packet Tracer PC Command Line window for PC Leo. The window has tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a Command Prompt window. The Command Prompt shows the execution of a ping command to 172.21.1.3, resulting in four successful replies with 0% loss.

```
Packet Tracer PC Command Line 1.0
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=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
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 = 2ms, Average = 0ms

C:\>|
```

