Nama : Alfian Syahrani

NIM : L200170038

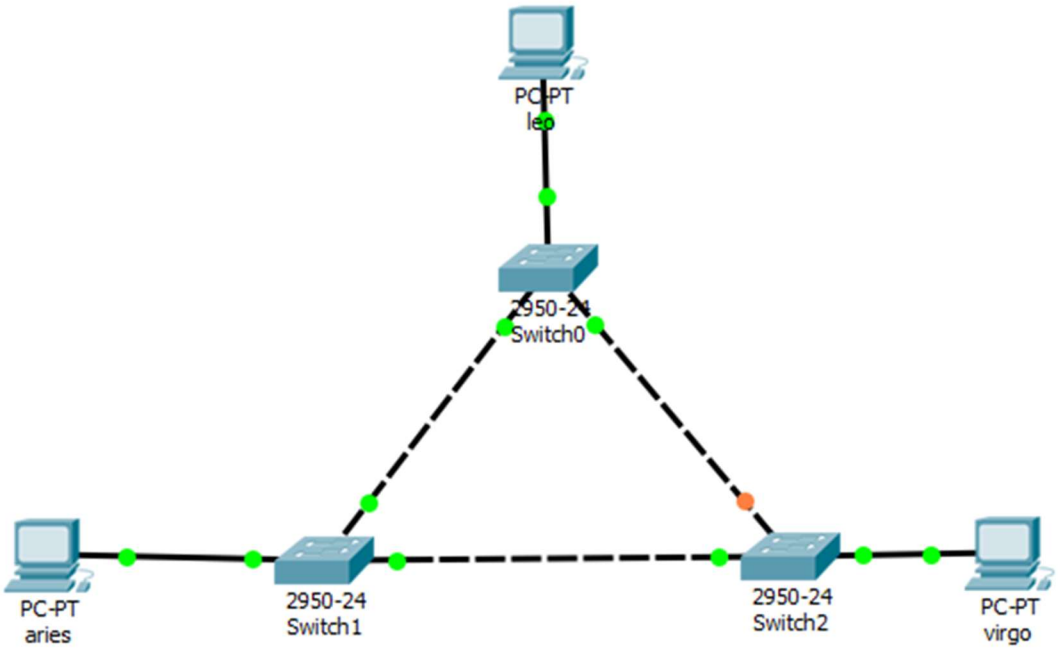
Kelas : A

MODUL 6

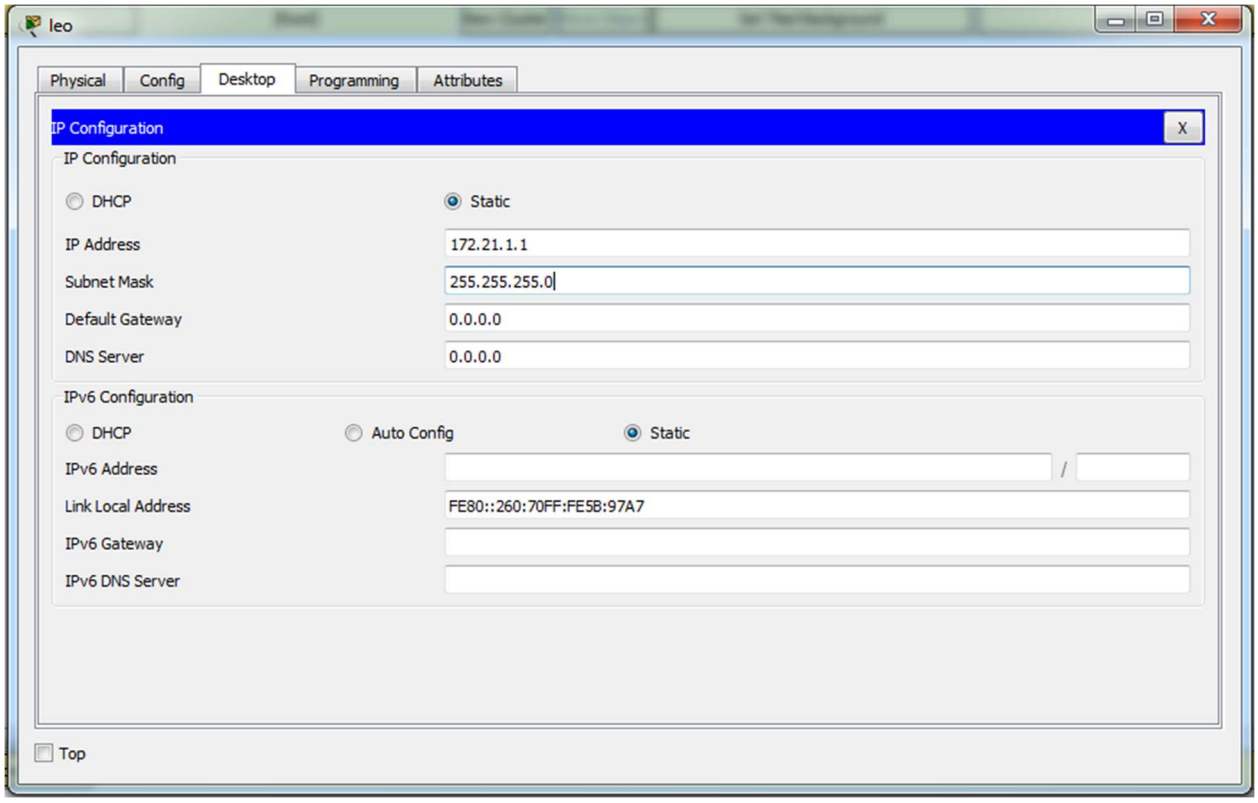
SPANNING TREE PROTOCOL

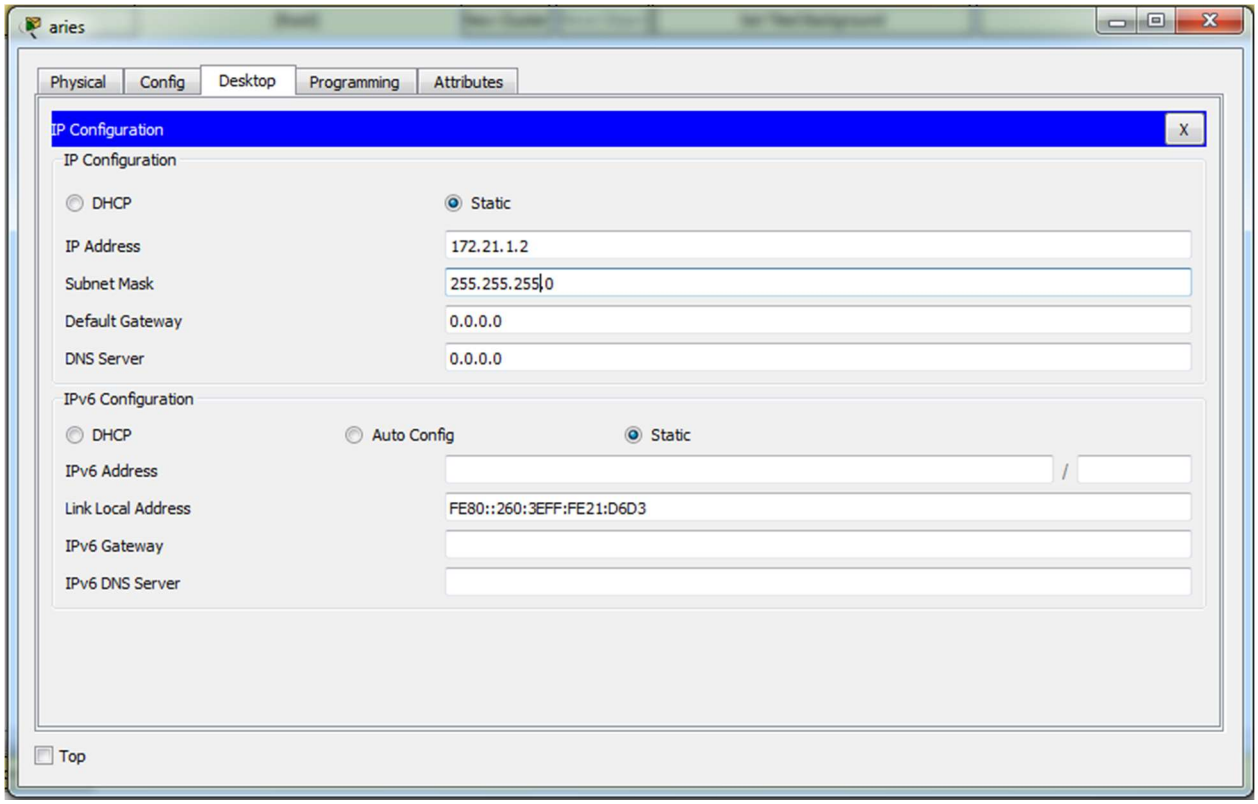
A. Kegiatan Praktikum

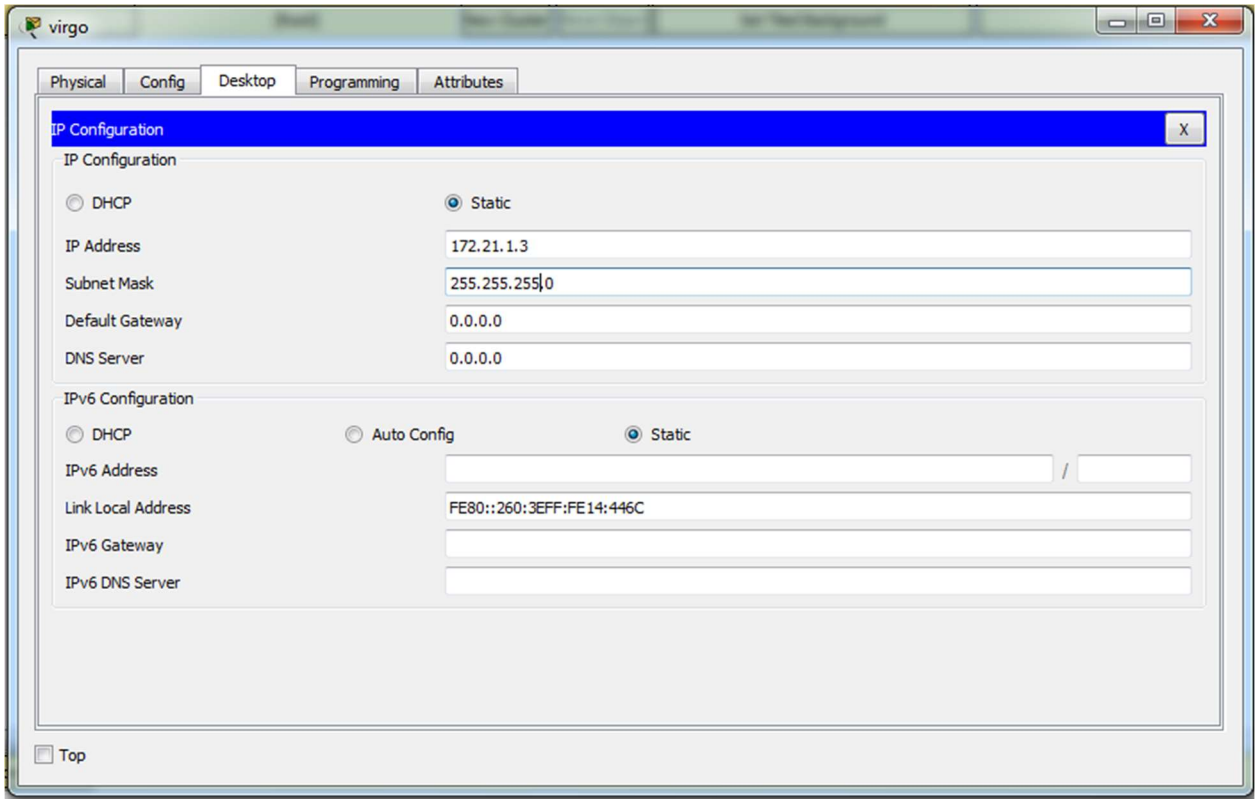
Kegiatan 1. Topologi 1



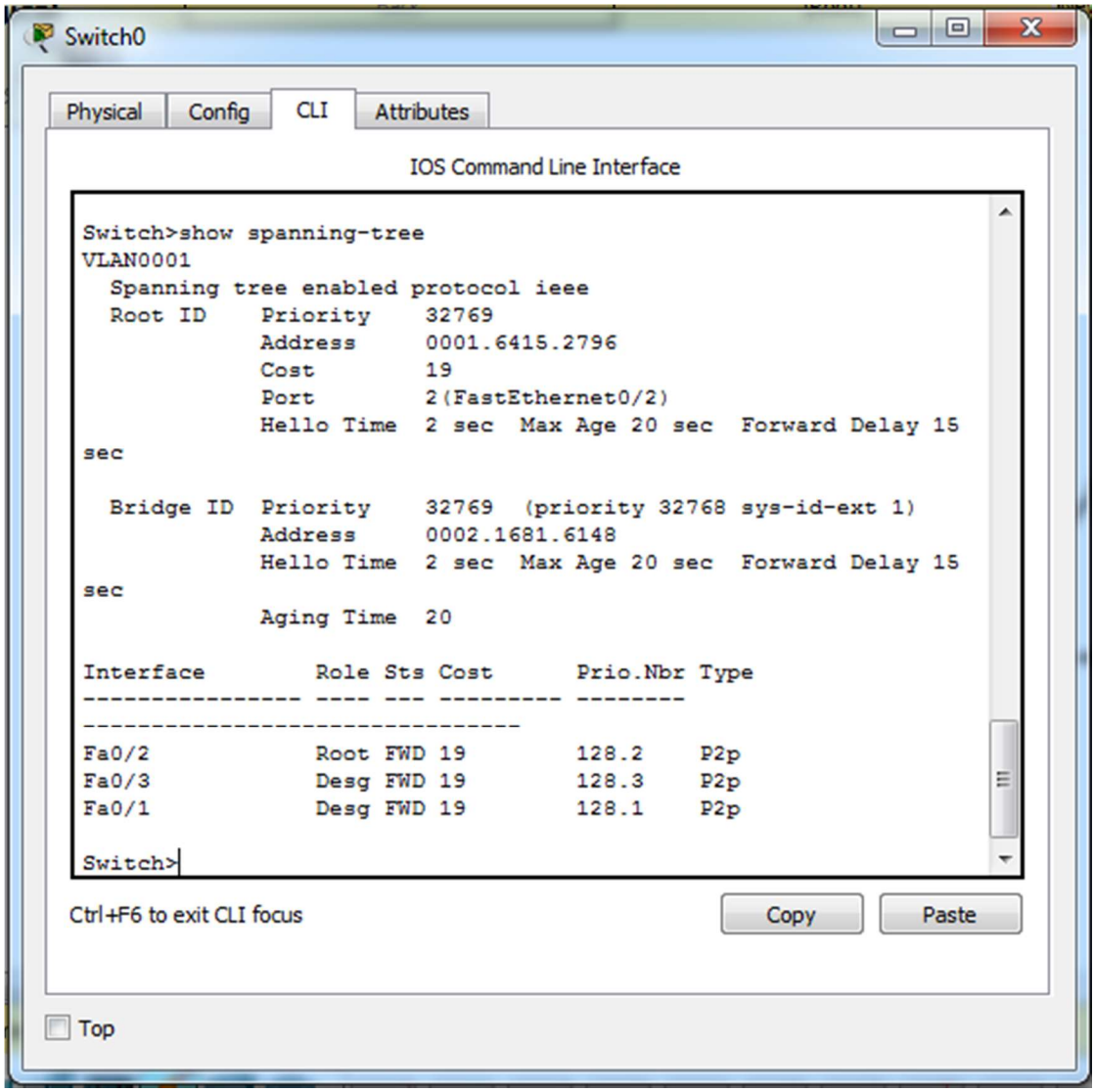
a. Memberi nama dan IP pada masing-masing computer.

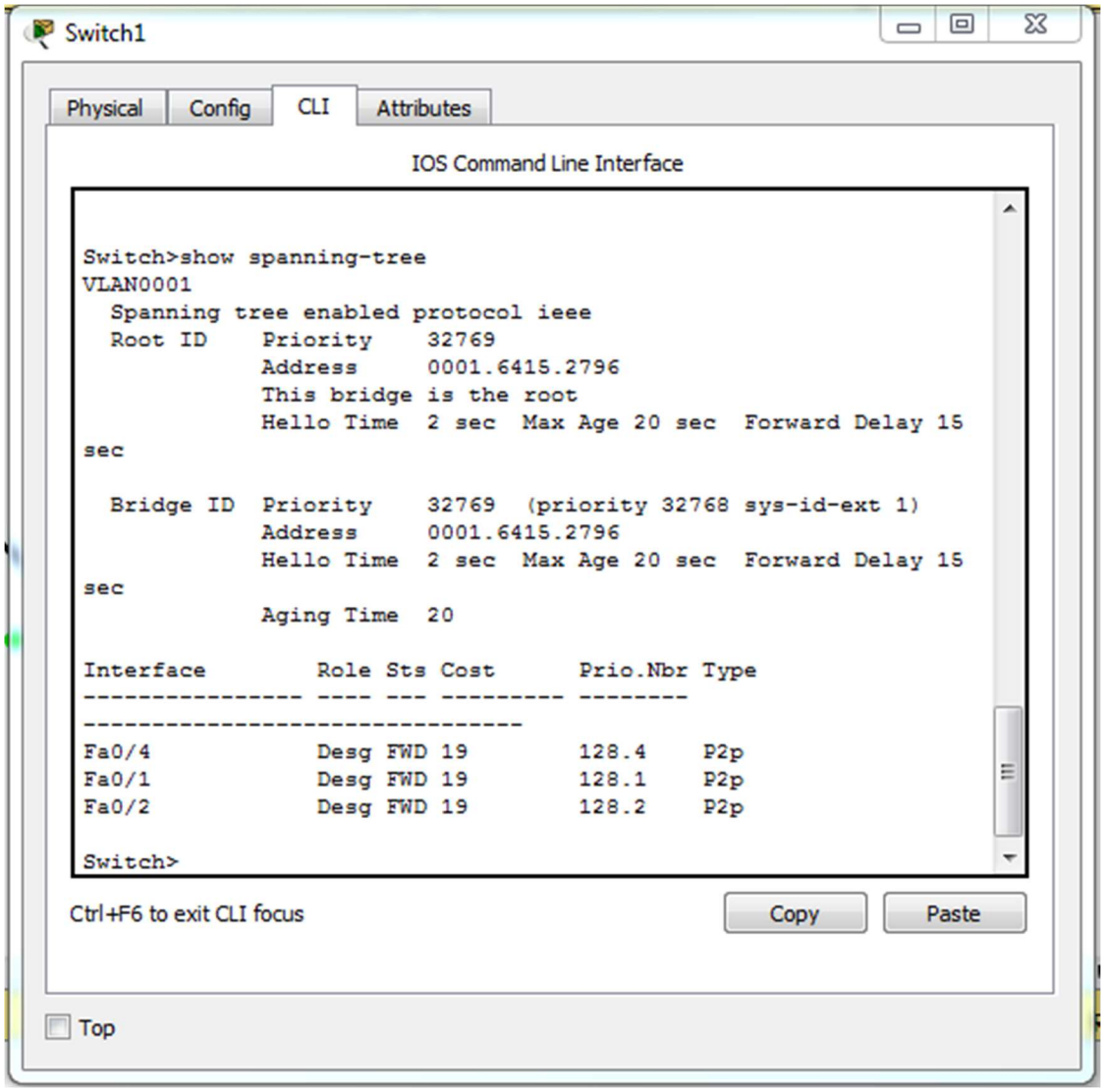


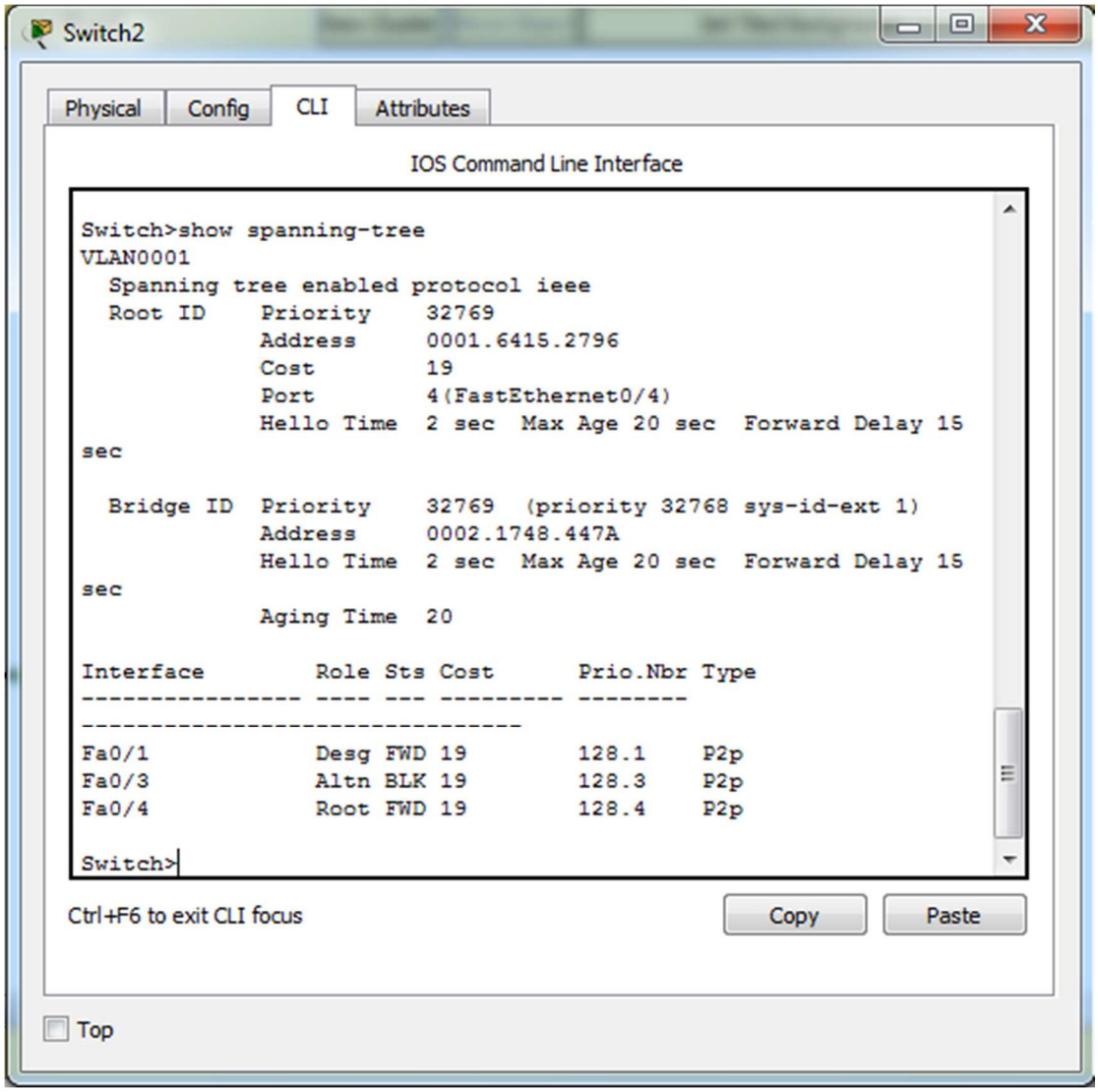



virgo
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.3
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::260:3EFF:FE14:446C
IPv6 Gateway
IPv6 DNS Server
Top

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




Switch1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Switch>show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 0001.6415.2796
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 0001.6415.2796
Hello Time 2 sec Max Age 20 sec Forward Delay 15
sec
Aging Time 20
Interface Role Sts Cost Prio.Nbr Type
Fa0/4 Desg FWD 19 128.4 P2p
Fa0/1 Desg FWD 19 128.1 P2p
Fa0/2 Desg FWD 19 128.2 P2p
Switch>
Ctrl+F6 to exit CLI focus
Copy
Paste
Top



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

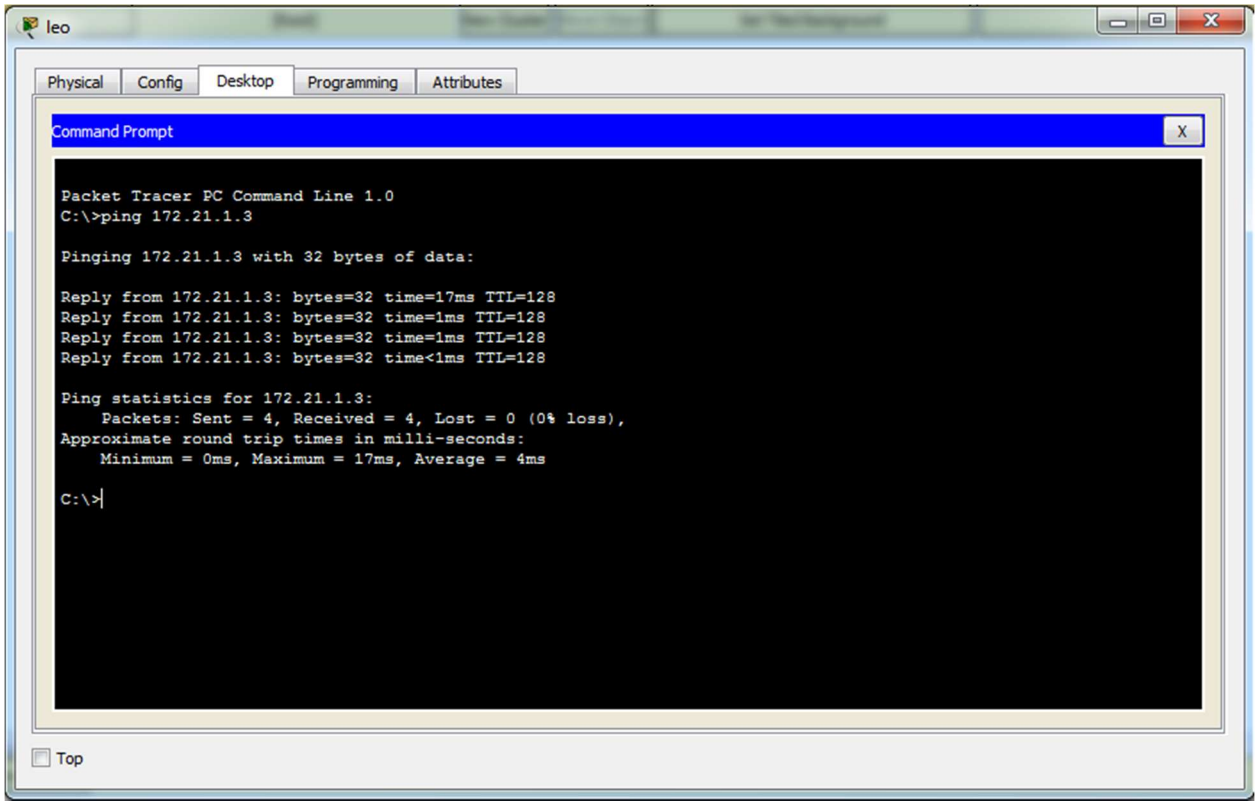
d. Dalam kondisi default :
- Root Bridge => Fa 0/2 (switch0) dengan Fa 0/4 (switch2)
- Designated Bridge => Fa 0/3 (switch0) dengan Fa 0/3 (switch2)
  => Fa 0/4 (switch1) dengan Fa 0/4 (switch2)
- Root Port => Fa 0/2 (switch0)
  => Fa 0/4 (switch2)
- Designated Port => Fa 0/3 (switch0)
  => Fa 0/1 (switch0)
  => 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)

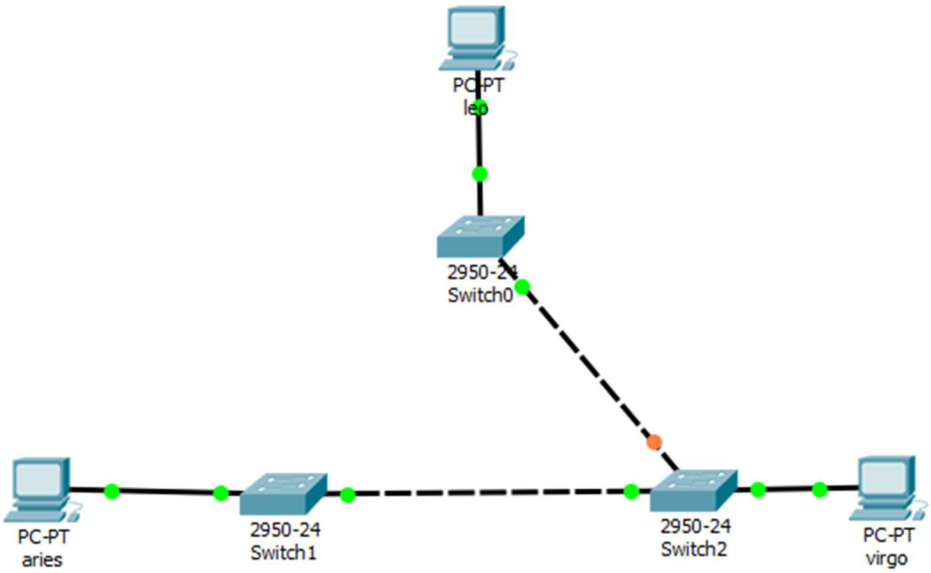
=> Fa 0/4 (switch1)
=> Fa 0/1 (switch1)
=> Fa 0/2 (switch1)
=> Fa 0/1 (switch2)
=> Fa 0/4 (switch2)

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

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

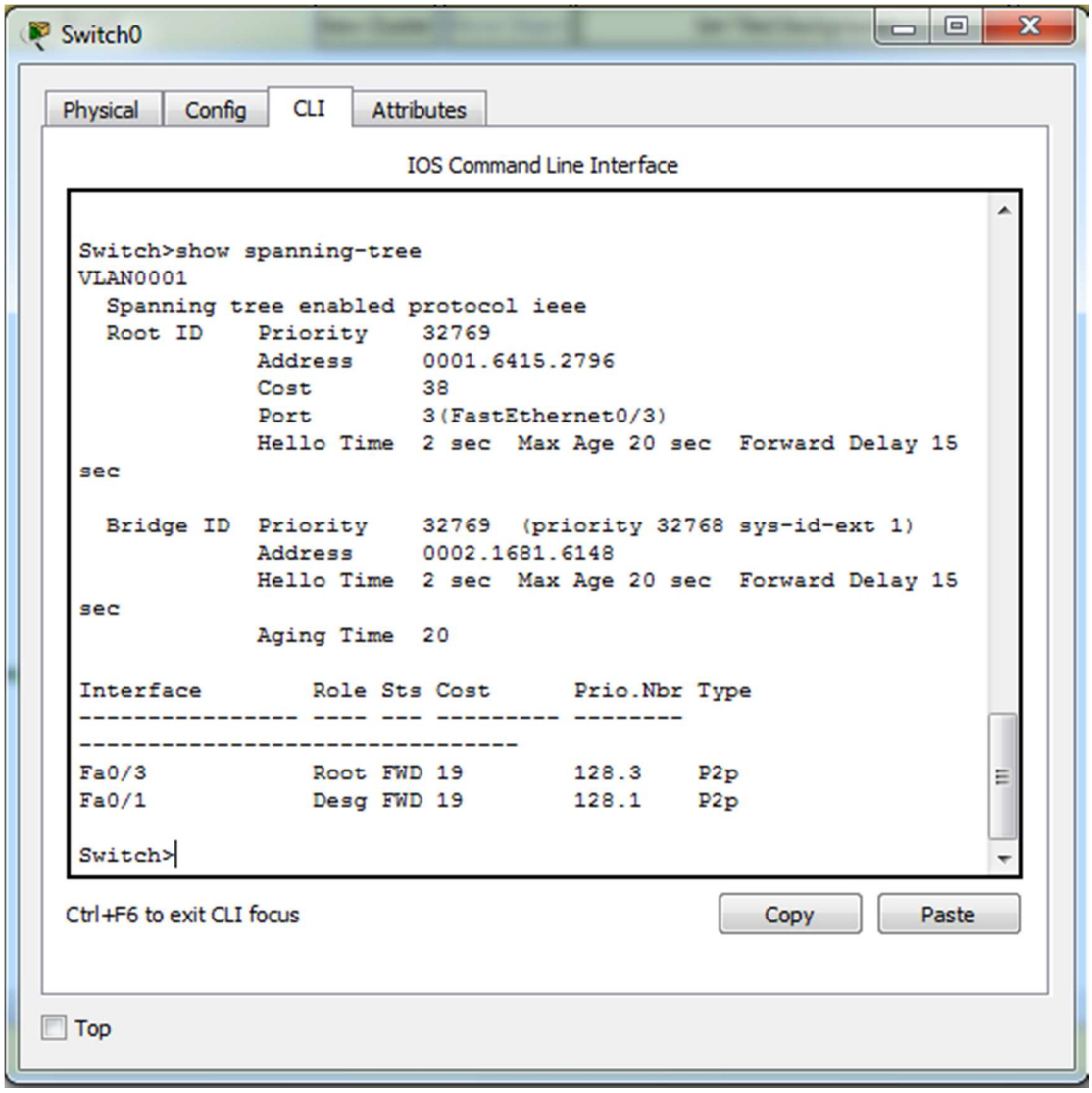


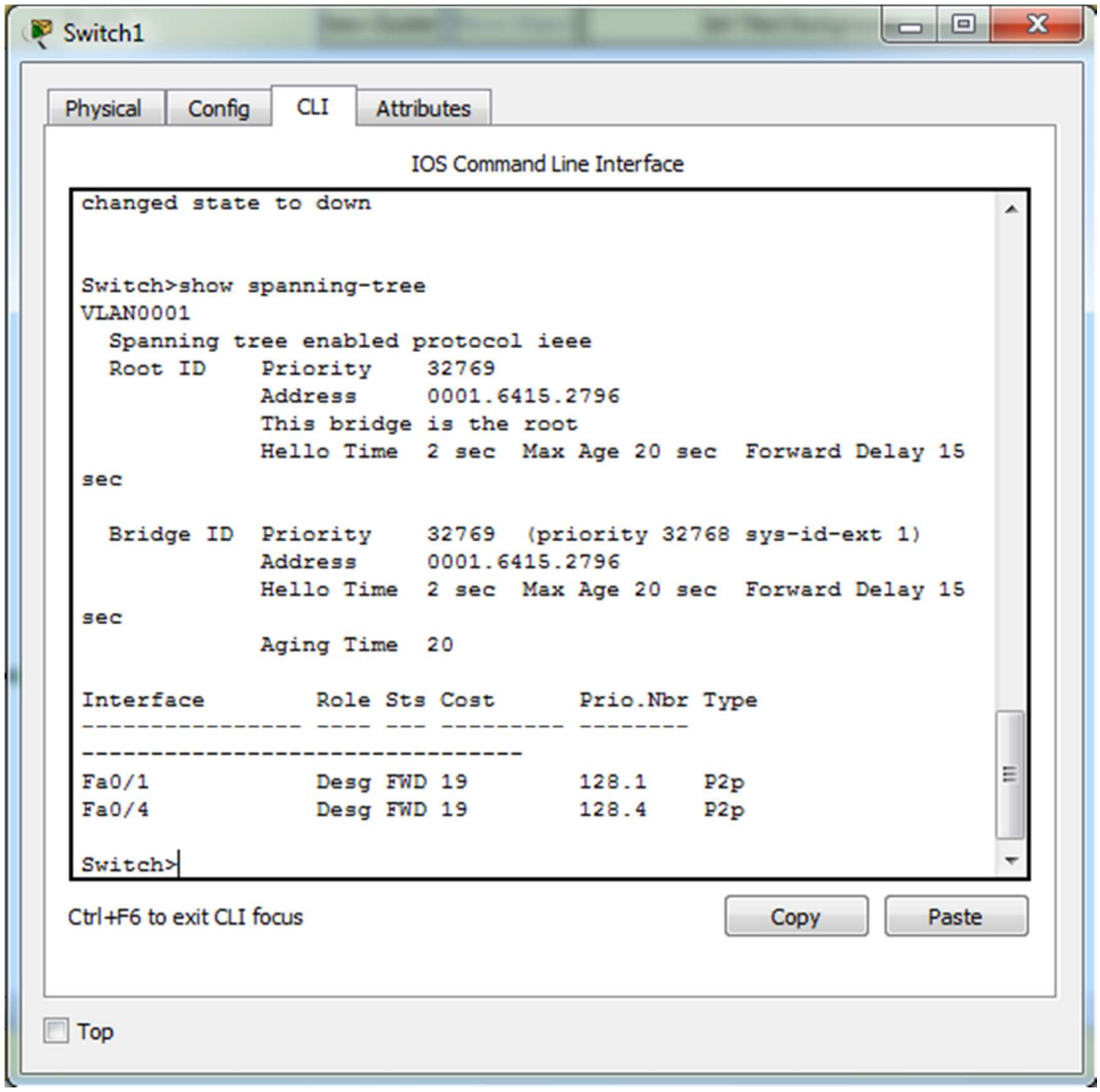
Kegiatan 2. Topologi 2

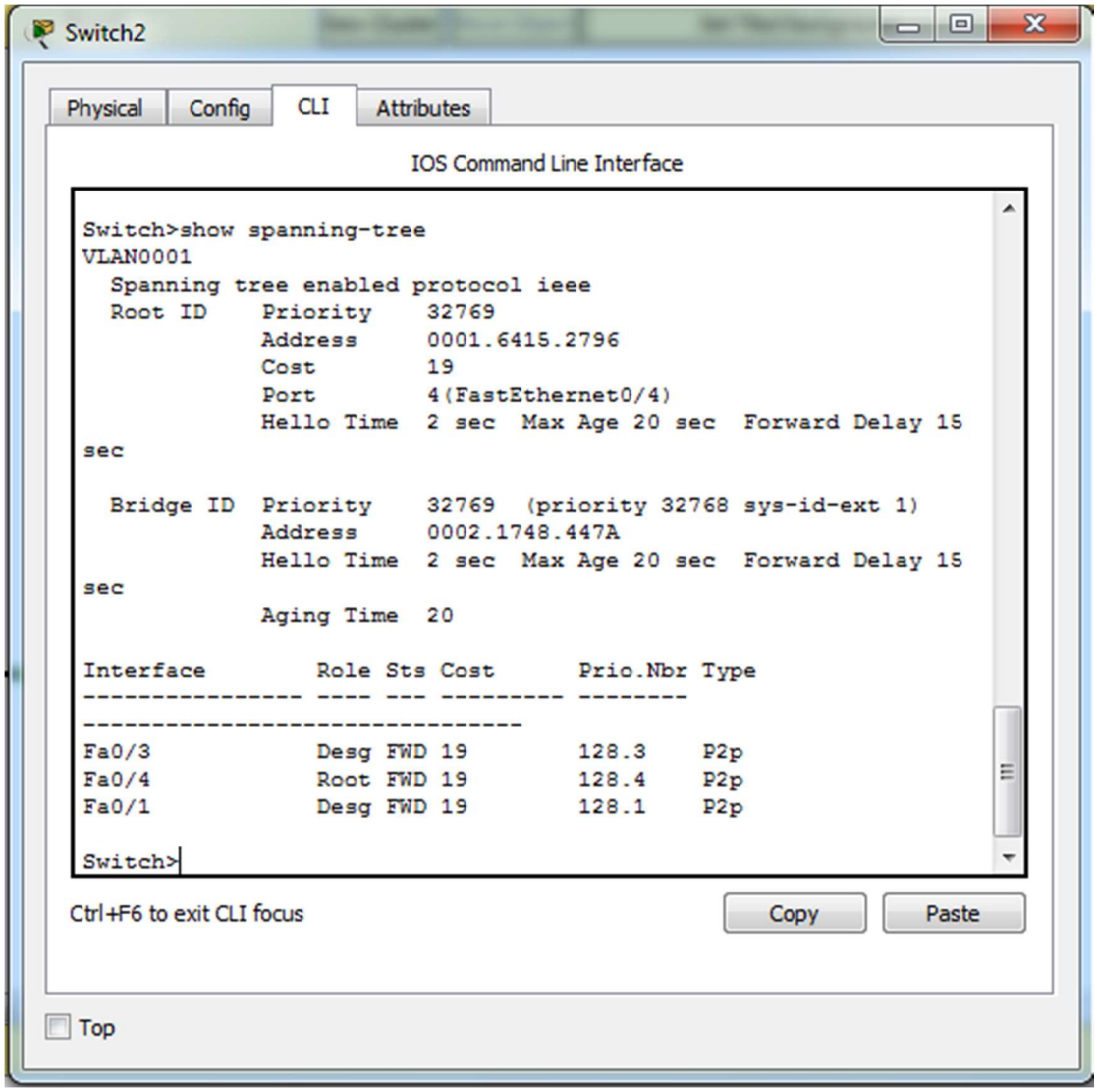


a. Karena rangkaian sebelumnya hanya diberikan sedikit perubahan, berupa penghapusan kabel dari switch0 dengan switch1.

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




Switch1
Physical
Config
CLI
Attributes
IOS Command Line Interface
changed state to down
Switch>show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 0001.6415.2796
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 0001.6415.2796
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
Fa0/4 Desg FWD 19 128.4 P2p
Switch>
Ctrl+F6 to exit CLI focus
Copy
Paste
Top



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

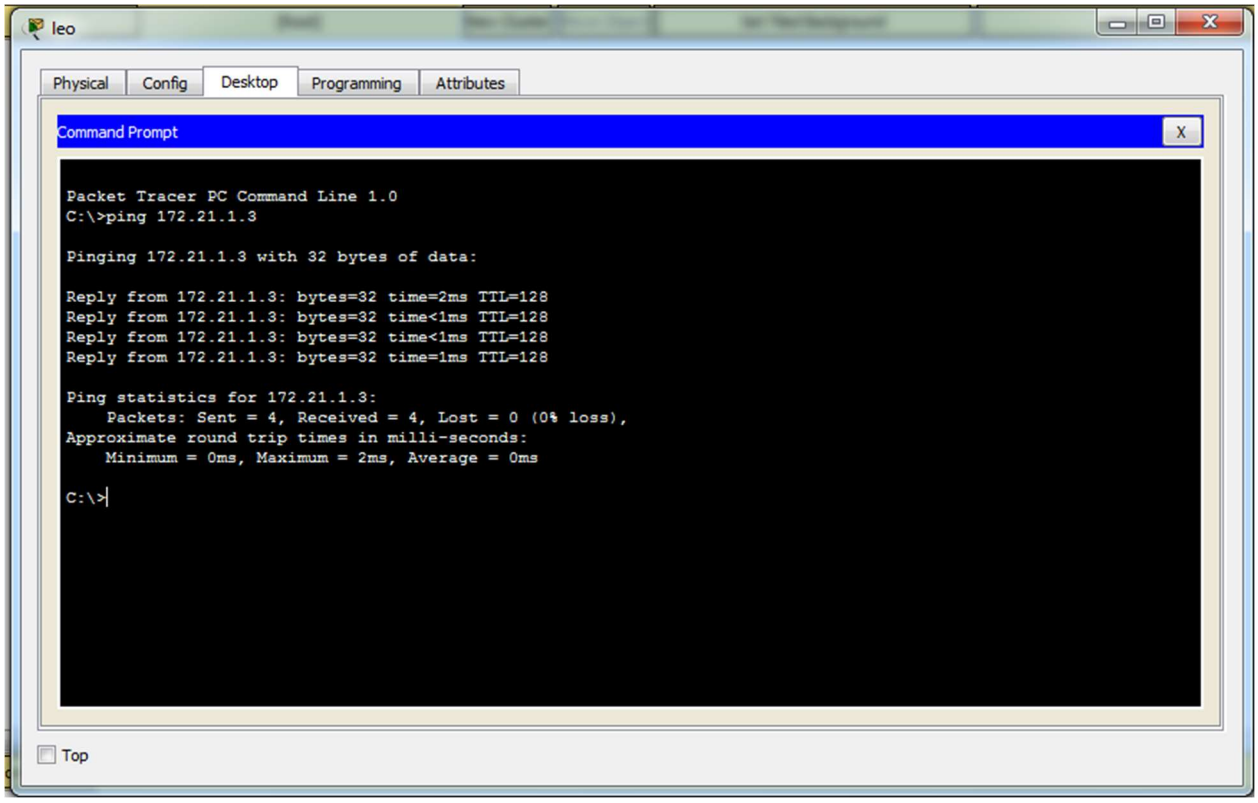
No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0001.6415.2796
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	-
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

- 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