Nama : Pawitro Purbangkoro

NIM : L200170045

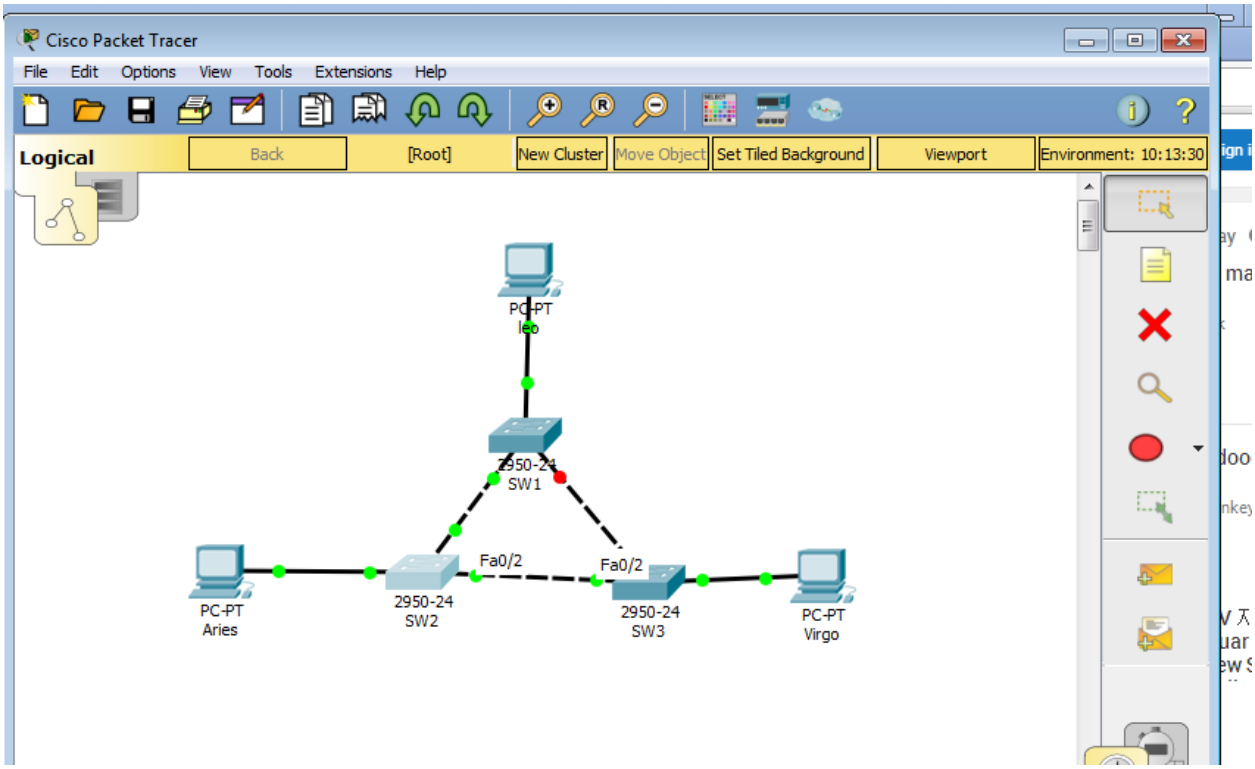
Kelas : B

MODUL 6

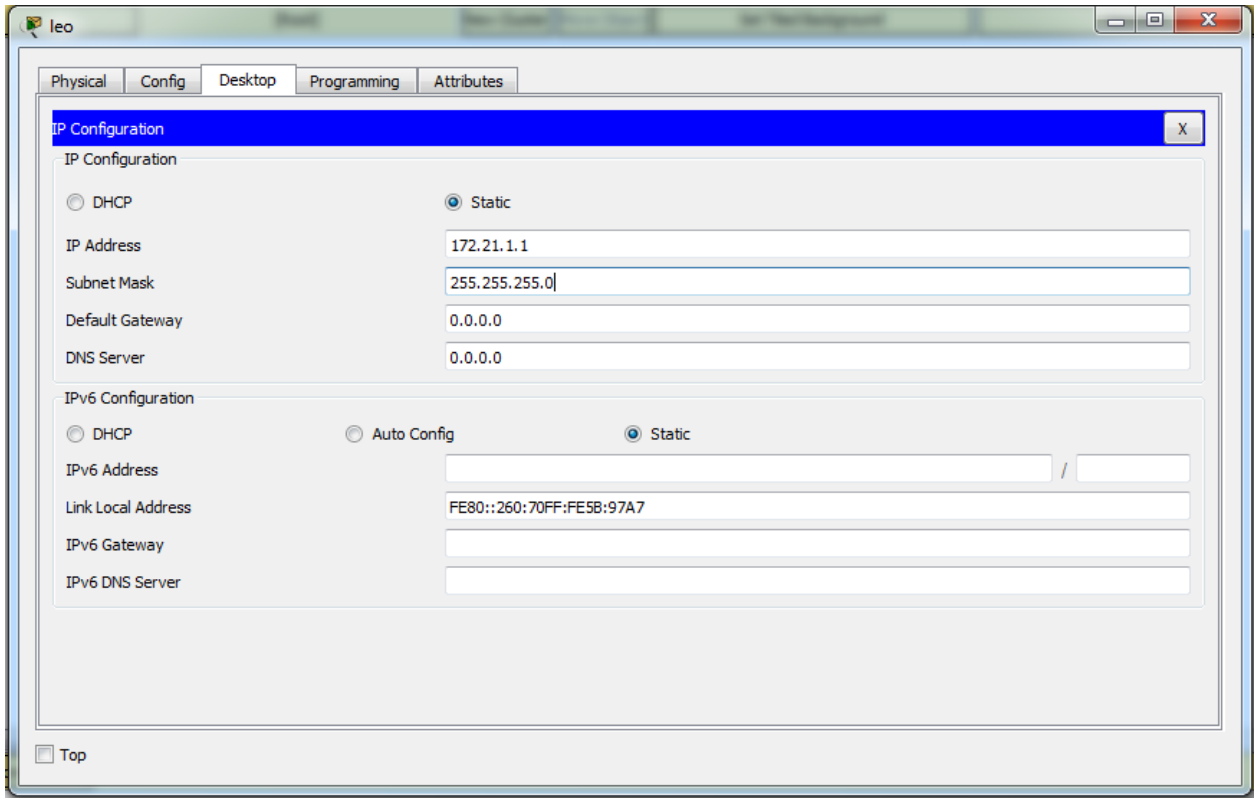
SPANNING TREE PROTOCOL

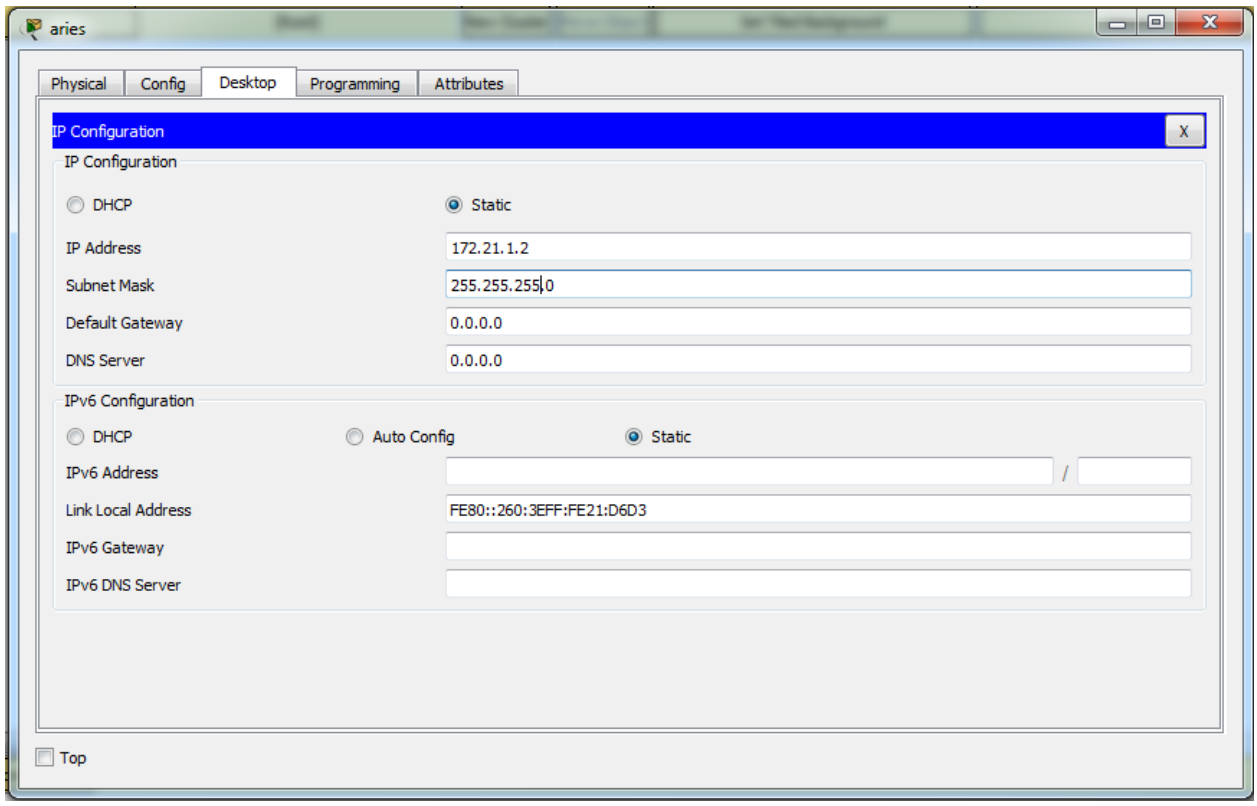
A. Kegiatan Praktikum

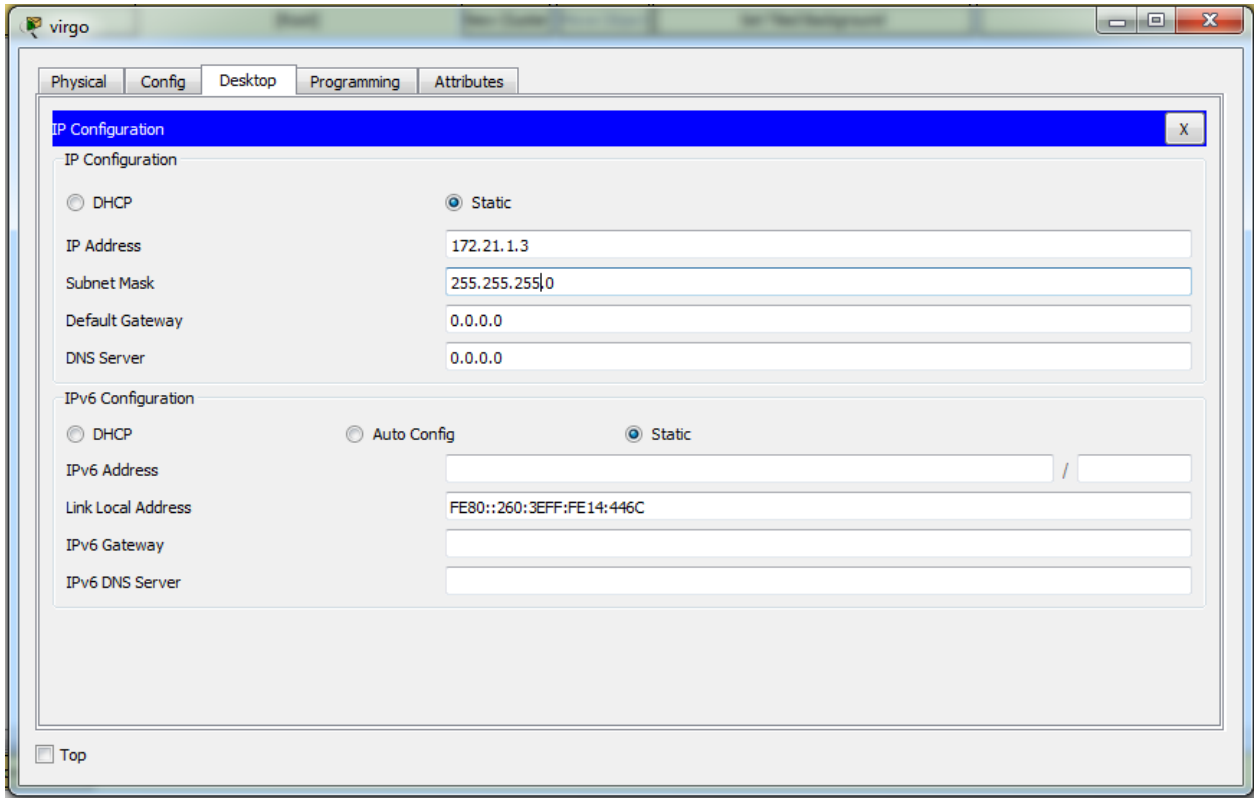
Kegiatan 1. Topologi 1



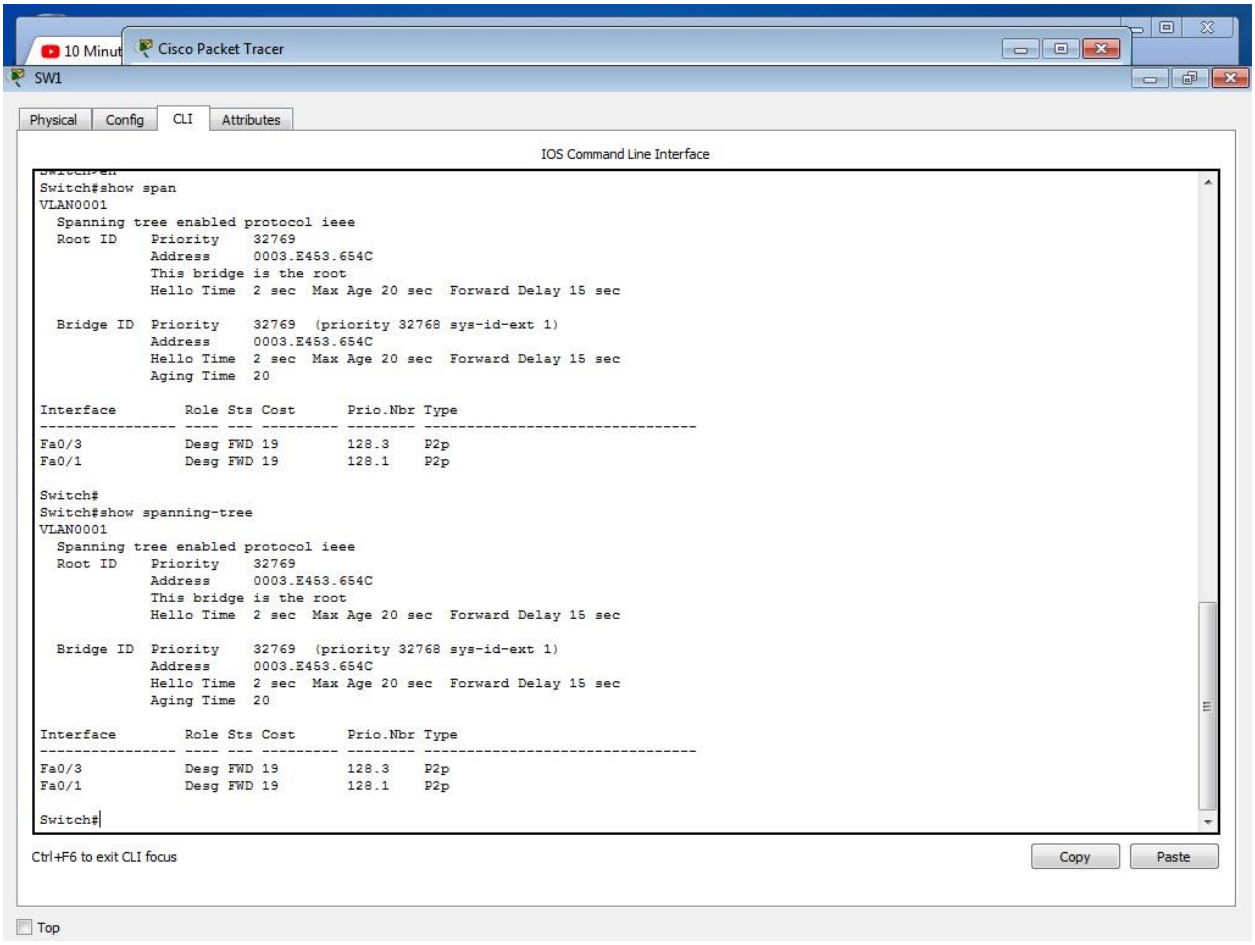
a. Memberi nama dan IP pada masing-masing computer.

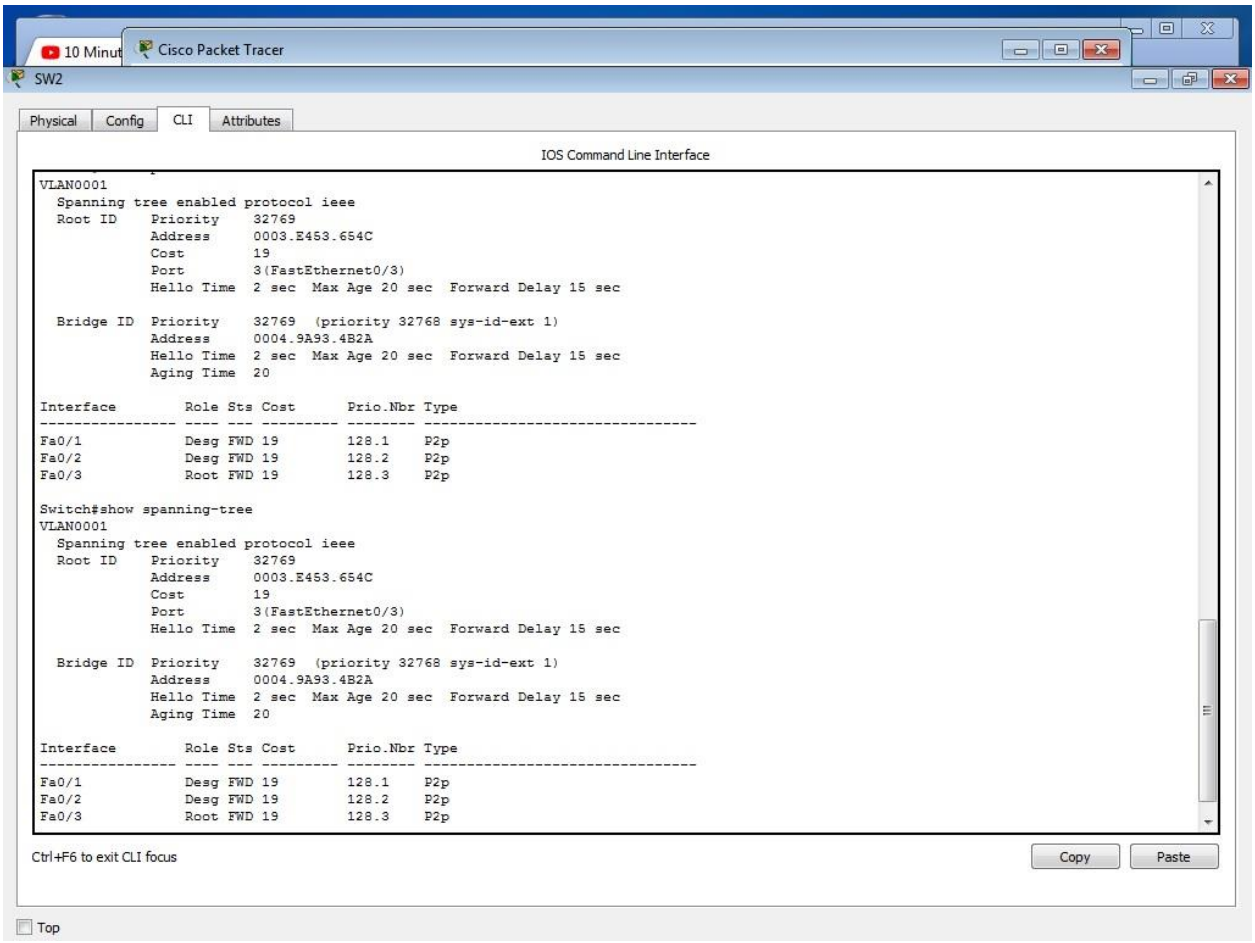


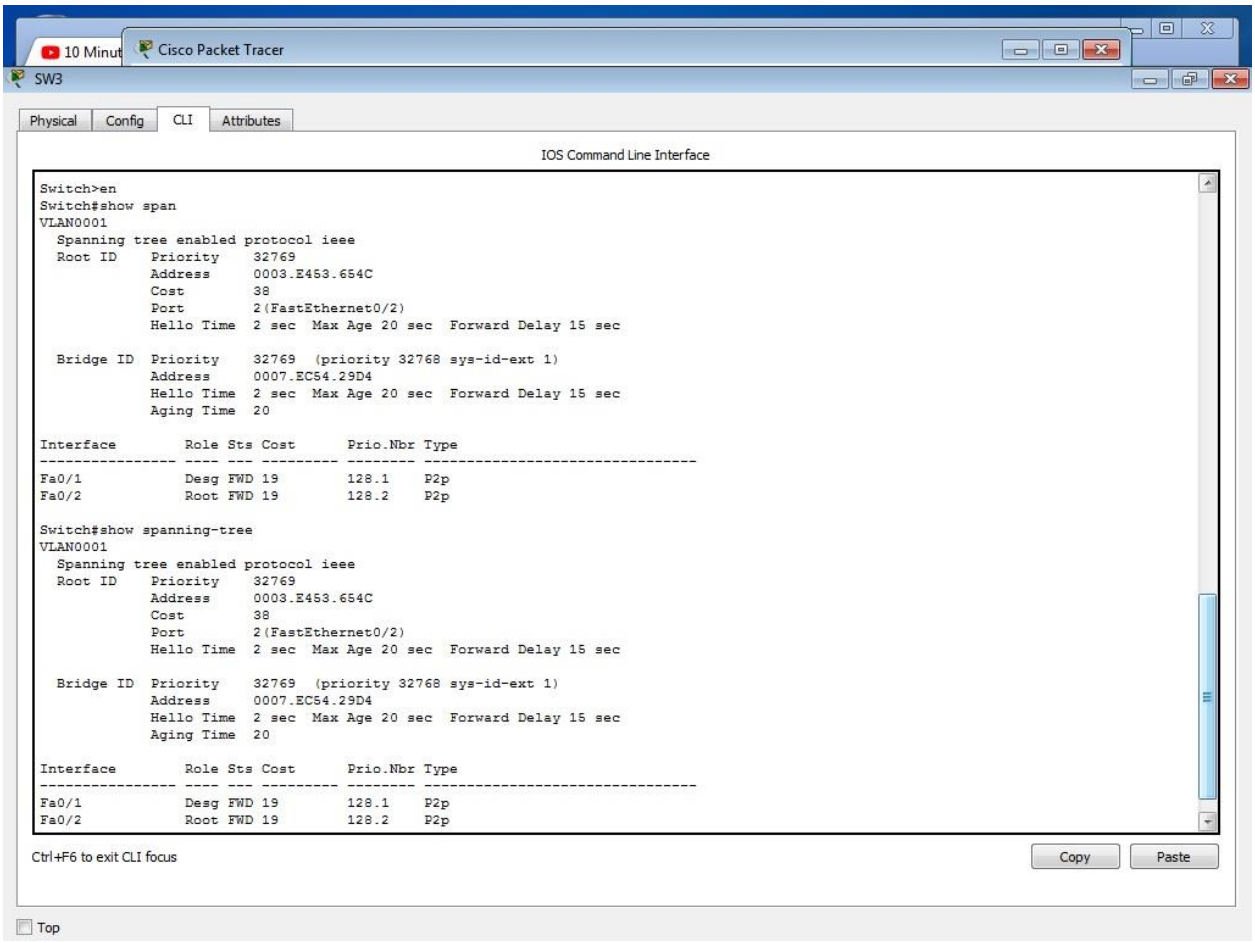

aries
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.2
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::260:3EFF:FE21:D6D3
IPv6 Gateway
IPv6 DNS Server
Top


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.




10 Minut
Cisco Packet Tracer
SW2
Physical
Config
CLI
Attributes
IOS Command Line Interface
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 0003.E453.654C
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 0004.9A93.4B2A
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
Fa0/3 Root FWD 19 128.3 P2p
Switch#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 0003.E453.654C
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 0004.9A93.4B2A
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
Fa0/3 Root FWD 19 128.3 P2p
Ctrl+F6 to exit CLI focus
Copy
Paste
Top



c. Tabel status STP pada masing-masing Switch :

- Switch1

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0003.E453.654C
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

- Switch2

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0003.E453.654C
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

- Switch3

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0003.E453.654C
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

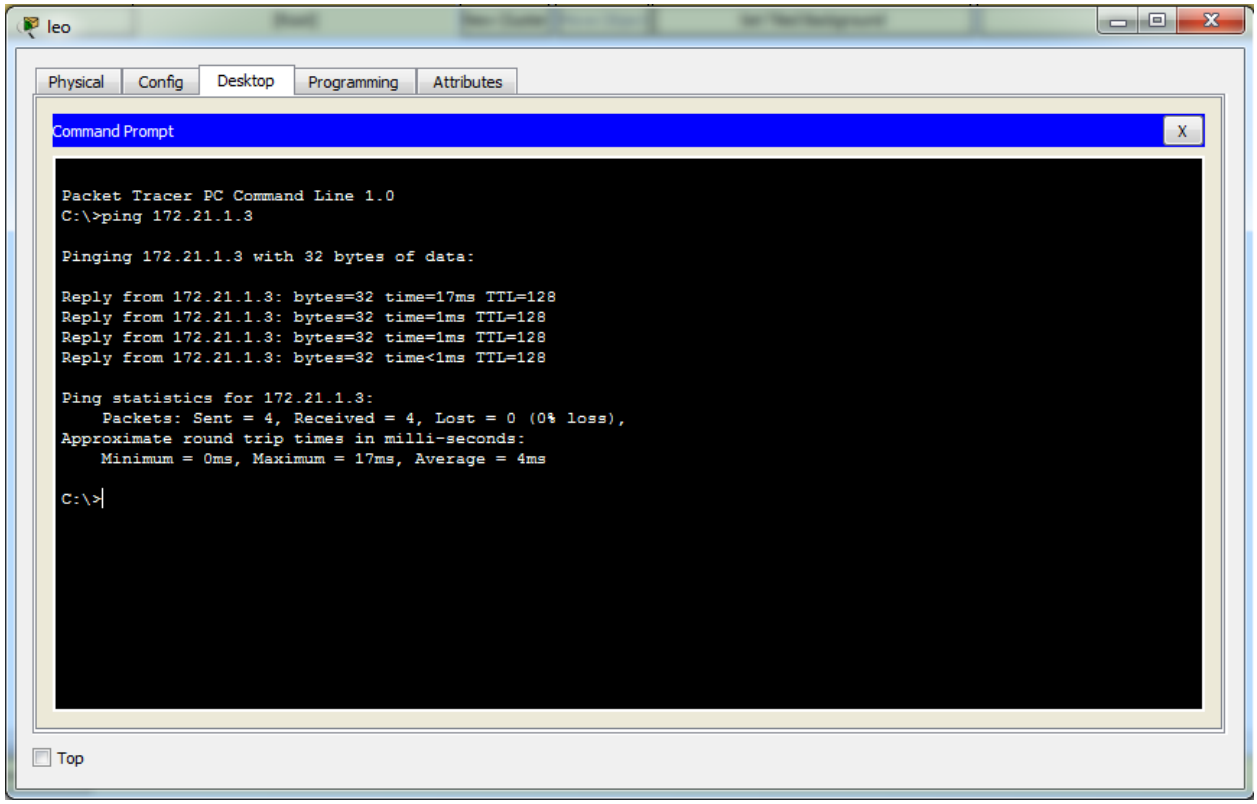
d. Dalam kondisi default :
- Root Bridge => Fa 0/2 (switch1) dengan Fa 0/4 (switch3)
- Designated Bridge => Fa 0/3 (switch1) dengan Fa 0/3 (switch3)
  => Fa 0/4 (switch2) dengan Fa 0/4 (switch3)
- Root Port => Fa 0/2 (switch1)
  => Fa 0/4 (switch3)
- Designated Port => Fa 0/3 (switch1)
  => Fa 0/1 (switch1)
  => Fa 0/4 (switch2)
  => Fa 0/1 (switch2)
  => Fa 0/2 (switch2)
  => Fa 0/1 (switch3)

e. Dalam kondisi default :
- Port dalam kondisi Forwarding => Fa 0/2 (switch1)
  => Fa 0/3 (switch1)
  => Fa 0/1 (switch1)

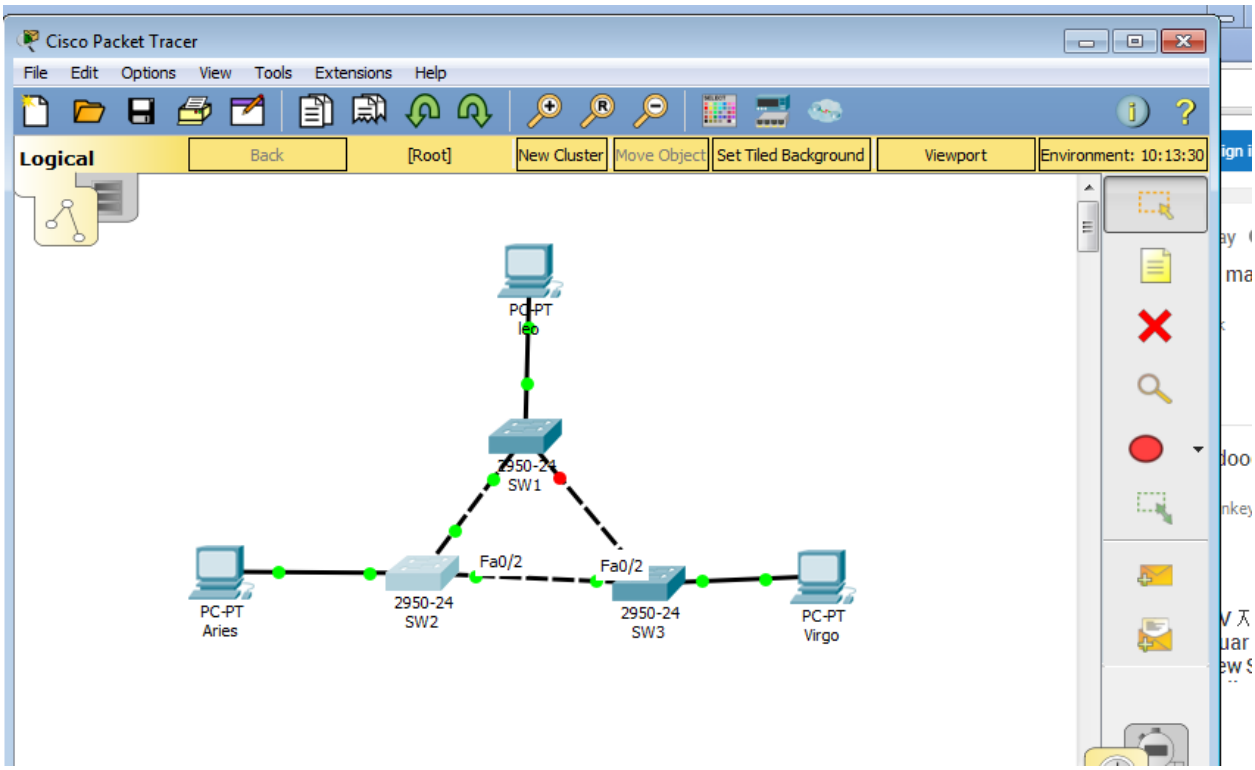
=> Fa 0/4 (switch2)
=> Fa 0/1 (switch2)
=> Fa 0/2 (switch2)
=> Fa 0/1 (switch3)
=> Fa 0/4 (switch3)

- Port dalam kondisi Blocking => Fa 0/3 (switch3)

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

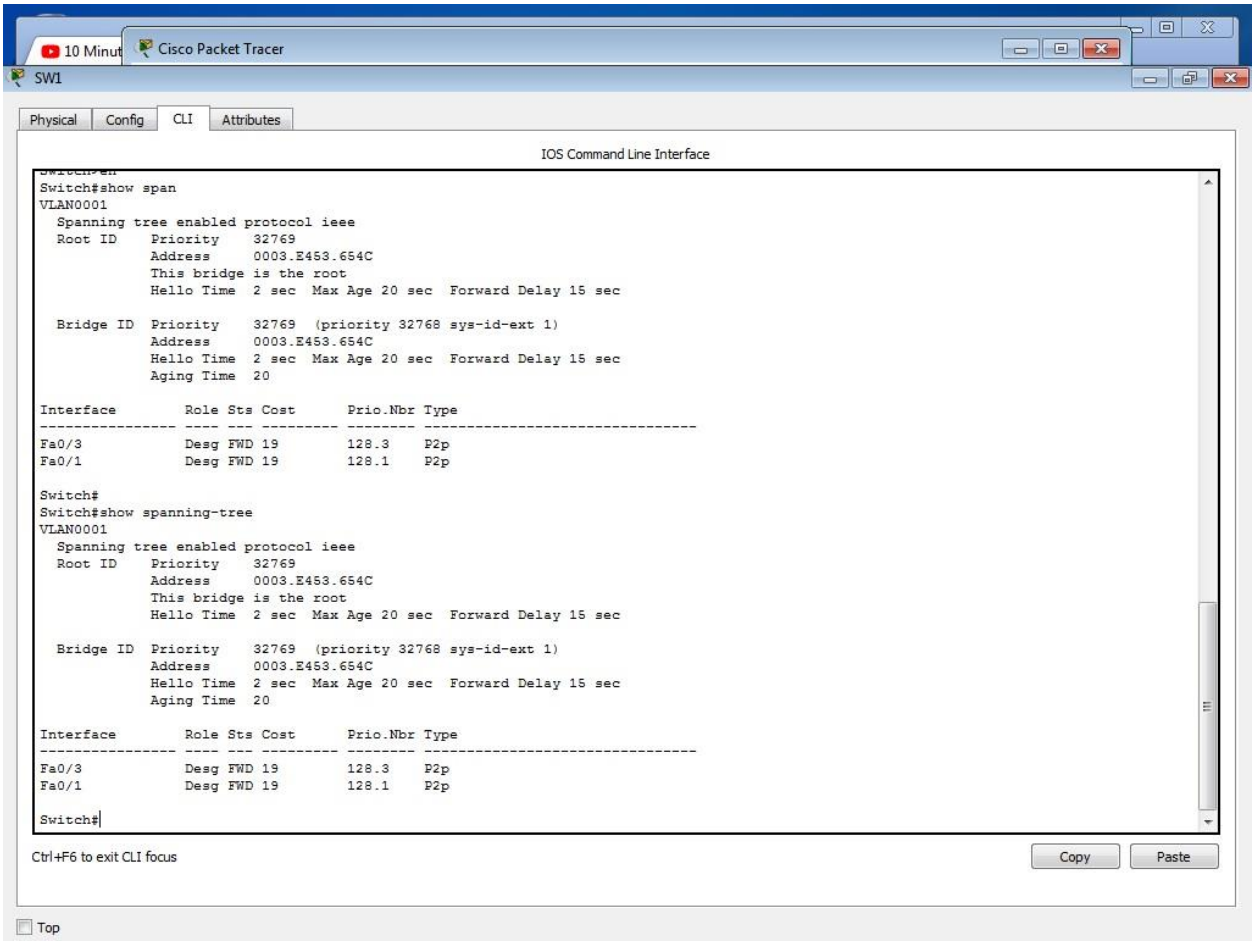


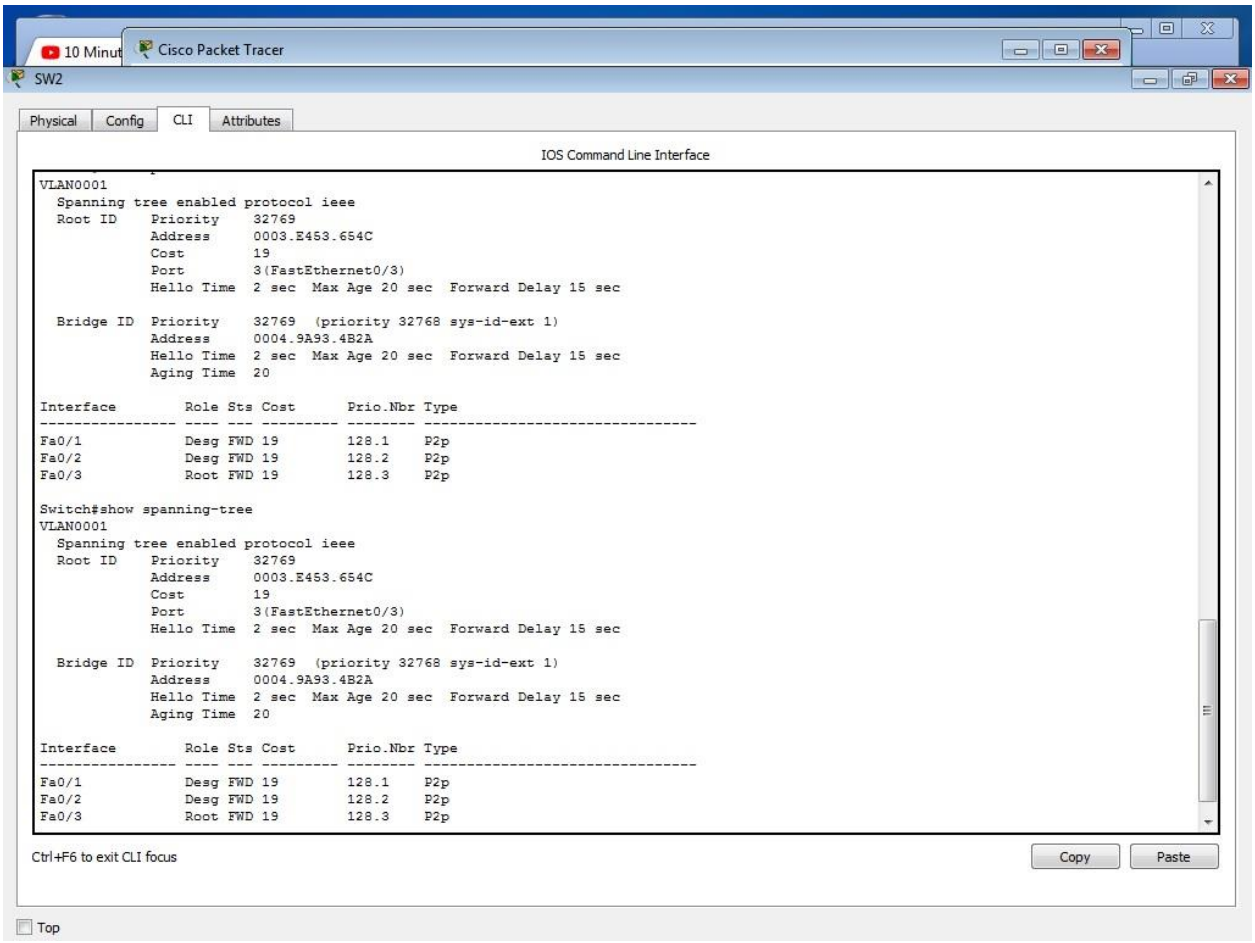
Kegiatan 2. Topologi 2



a. Karena rangkaian sebelumnya hanya diberikan sedikit perubahan, berupa penghapusan kabel dari switch1 dengan switch2.

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

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Root ID Priority 32769
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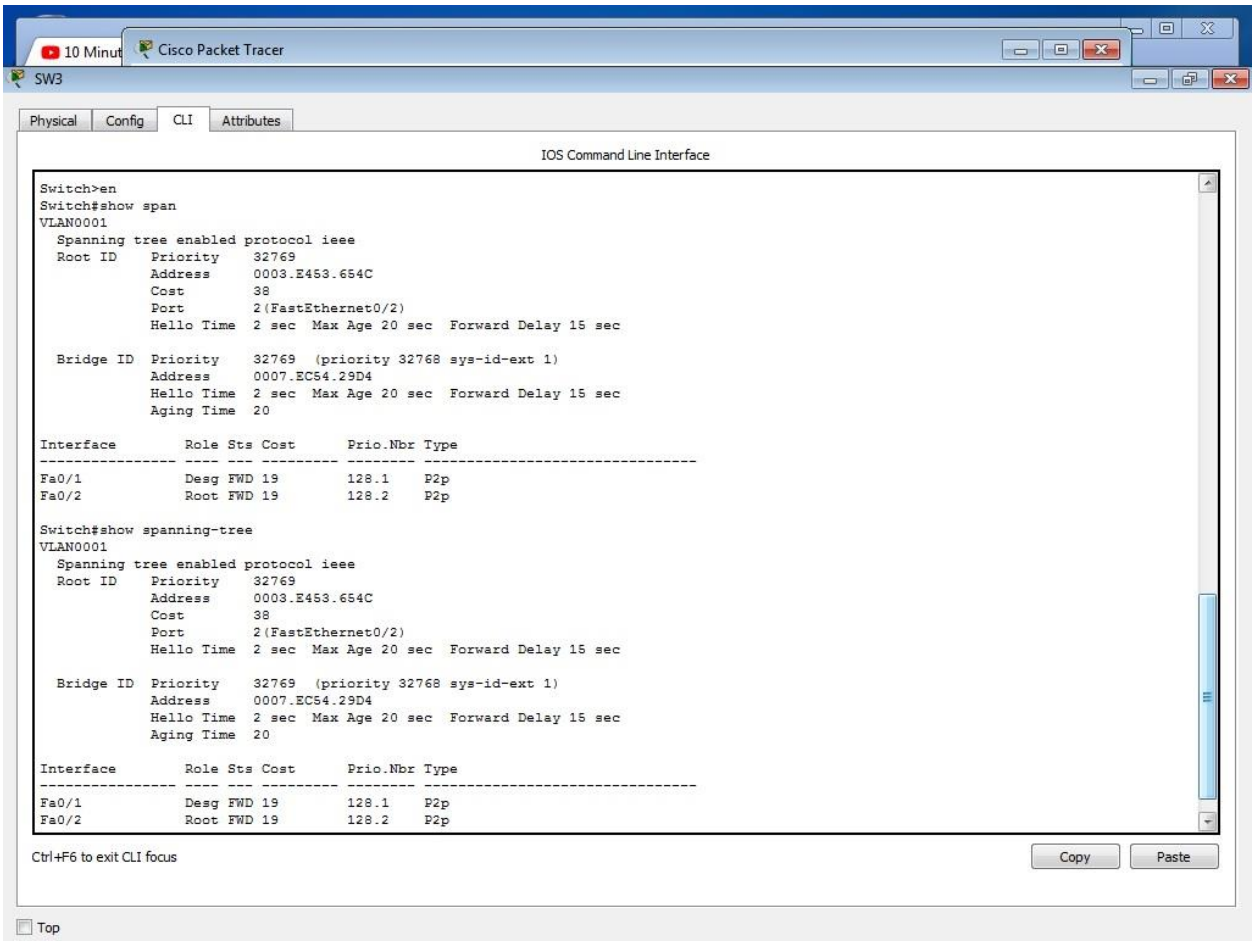
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)
Address 0004.9A93.4B2A
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 20
Interface Role Sts Cost Prio.Nbr Type
Fa0/1 Desg FWD 19 128.1 P2p
Fa0/2 Desg FWD 19 128.2 P2p
Fa0/3 Root FWD 19 128.3 P2p
Switch#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 0003.E453.654C
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 0004.9A93.4B2A
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
Fa0/3 Root FWD 19 128.3 P2p
Ctrl+F6 to exit CLI focus
Copy
Paste
Top



d. Tabel status STP pada masing-masing Switch :

- Switch1

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0003.E453.654C
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

- Switch2

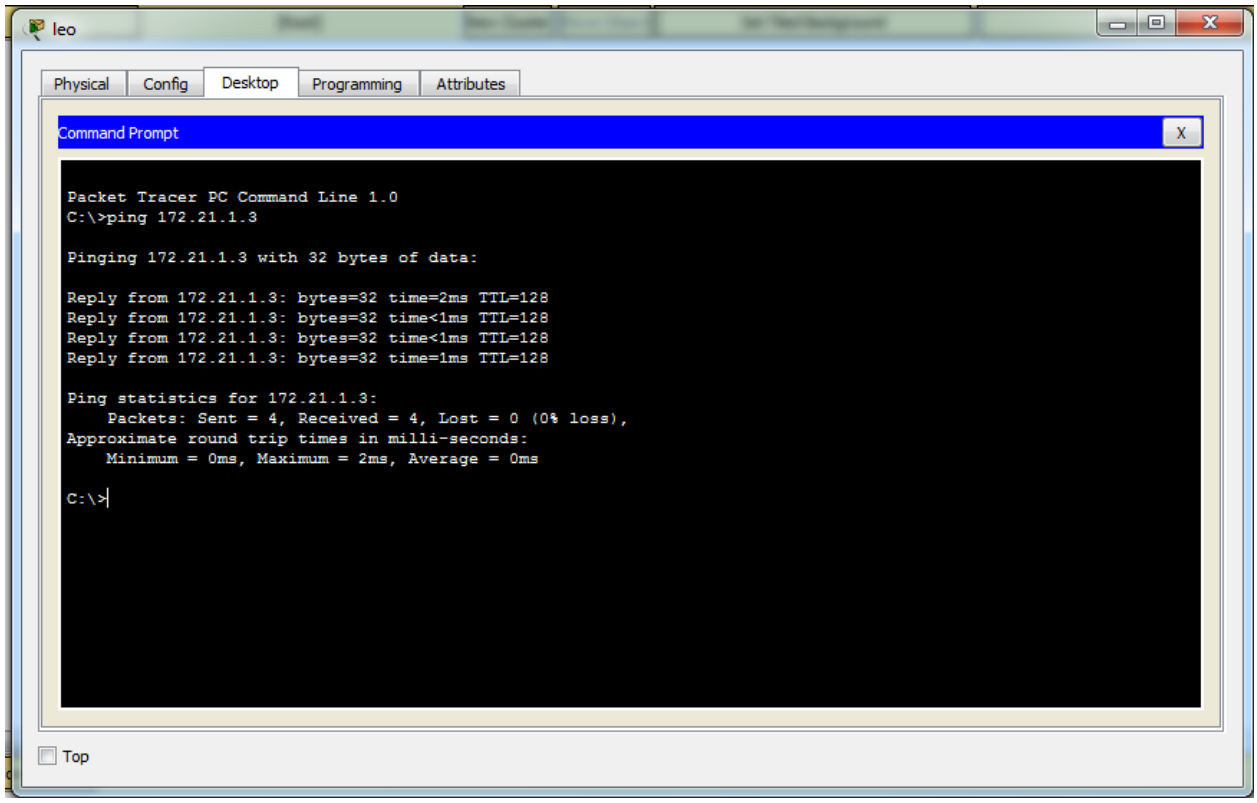
No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0003.E453.654C
4	Bridge ID	32769
5	Cost (0/1;0/2;0/3)	-
6	Hello Time	2 Sec
7	Max Age	20 Sec
8	Forward Delay	15 Sec

- Switch3

No	Variable	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0003.E453.654C
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 (switch1) dengan Fa 0/4 (switch3)
- Designated Bridge => Fa 0/4 (switch2) dengan Fa 0/3 (switch3)
- Root Port => Fa 0/3 (switch1)
  => Fa 0/4 (switch3)
- Designated Port => Fa 0/1 (switch1)
  => Fa 0/4 (switch2)
  => Fa 0/1 (switch2)
  => Fa 0/1 (switch3)
  => Fa 0/3 (switch3)

h. Dalam kondisi default :
- Port dalam kondisi Forwarding => Fa 0/3 (switch1)
  => Fa 0/1 (switch1)
  => Fa 0/4 (switch2)
  => Fa 0/1 (switch2)
  => Fa 0/1 (switch3)
  => Fa 0/4 (switch3)
  => Fa 0/3 (switch3)

- Port dalam kondisi Blocking => -

c. Hasil dari ping pada PC Leo dengan PC Virgo