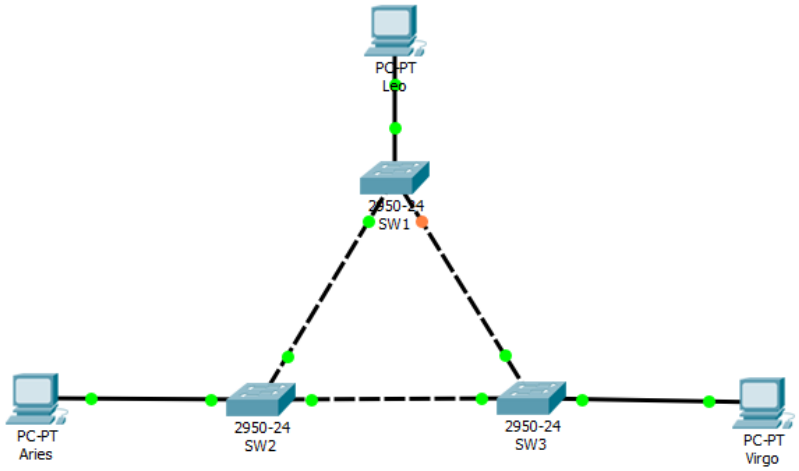
Nama : Anggit Astriani

NIM : L200180111

MODUL 6

Kegiatan 1. Topologi 1

Membuat topologi



Tugas 1A : Langkah pembuatan topologi

- Pada bagian Network Devices, klik bagian Switches, dan letakkan 3 buah Switch tipe 2950-24 dengan rangkai seperti gambar.
- Klik ikon End Devices, klik ikon PC dengan keterangan Generic Computer, letakkan 3 buah di dekat Switch masing-masing satu.
- Untuk menghubungkan Switch dan PC, pada bagian Connections klik ikon petir, lalu sambungkan rangkaian.

Tugas 2A : Memberi nama Switch melalui mode user

Switch>enable

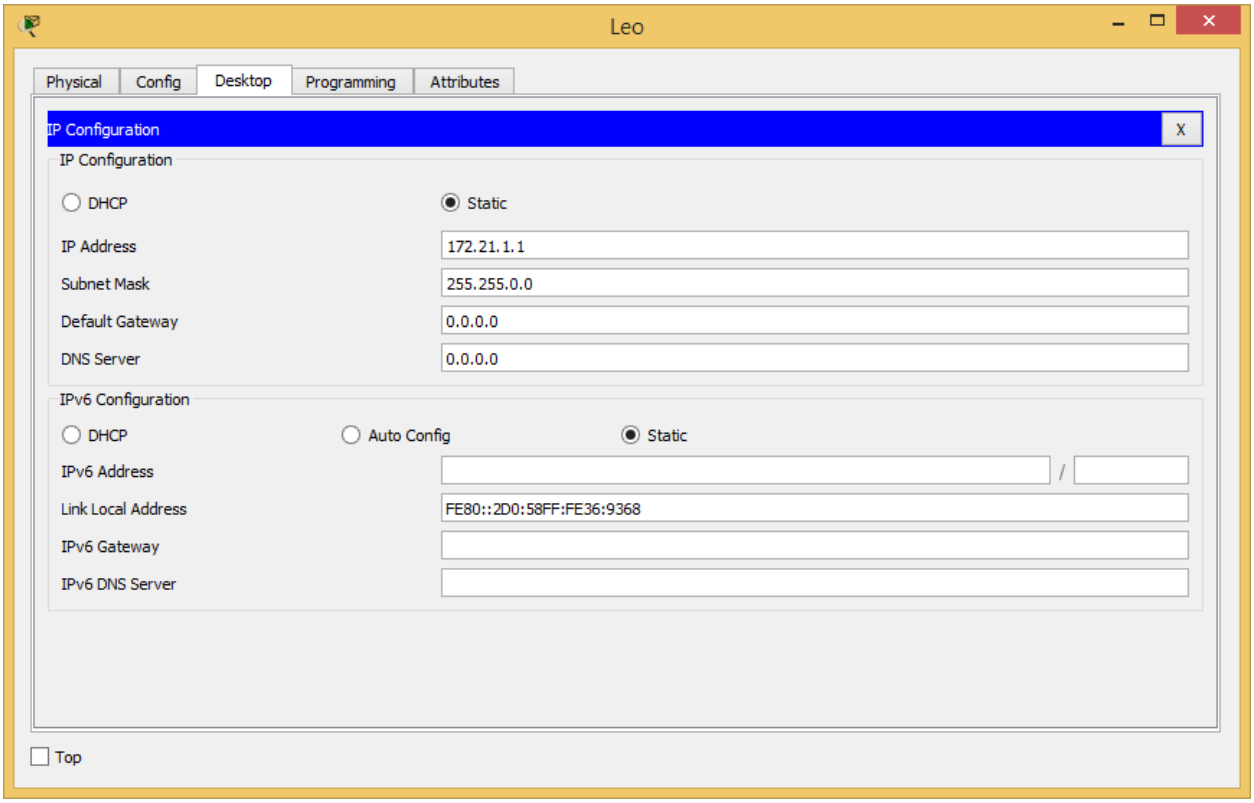
Switch#conf term

Switch(config)#hostname SW1

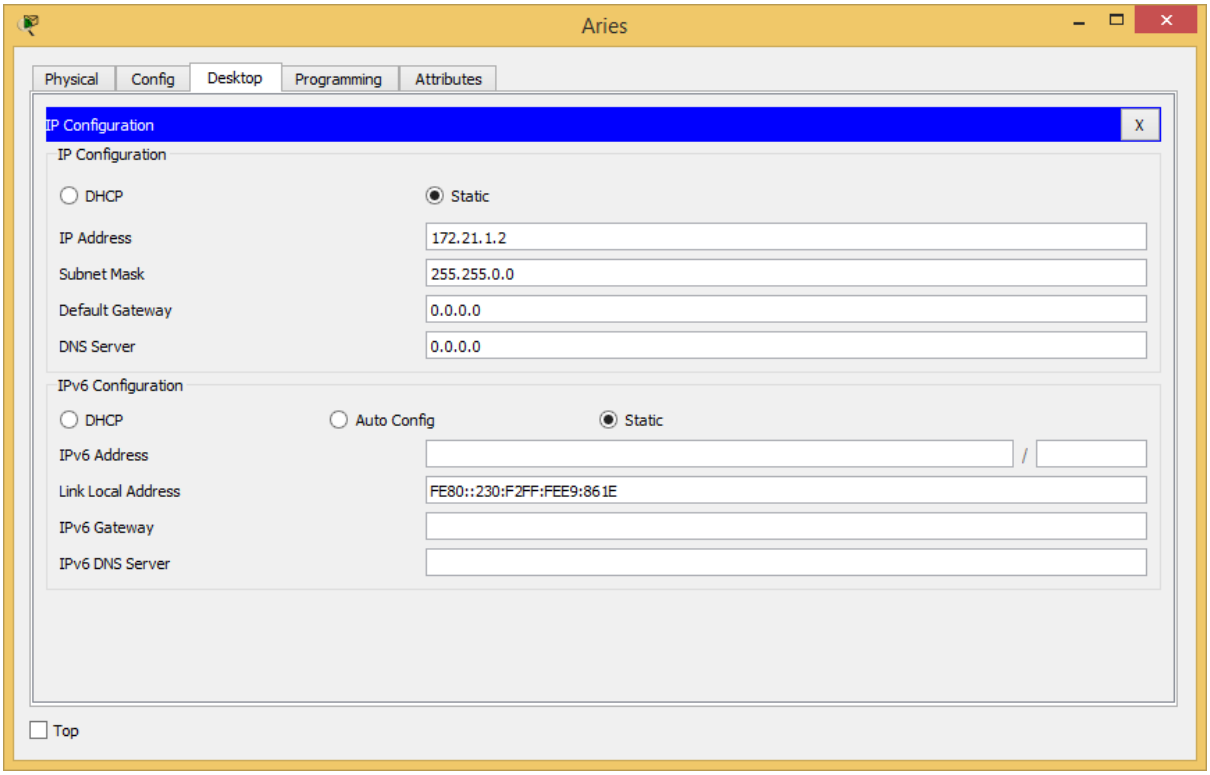
SW1(config)#end

Konfigurasi masing-masing PC

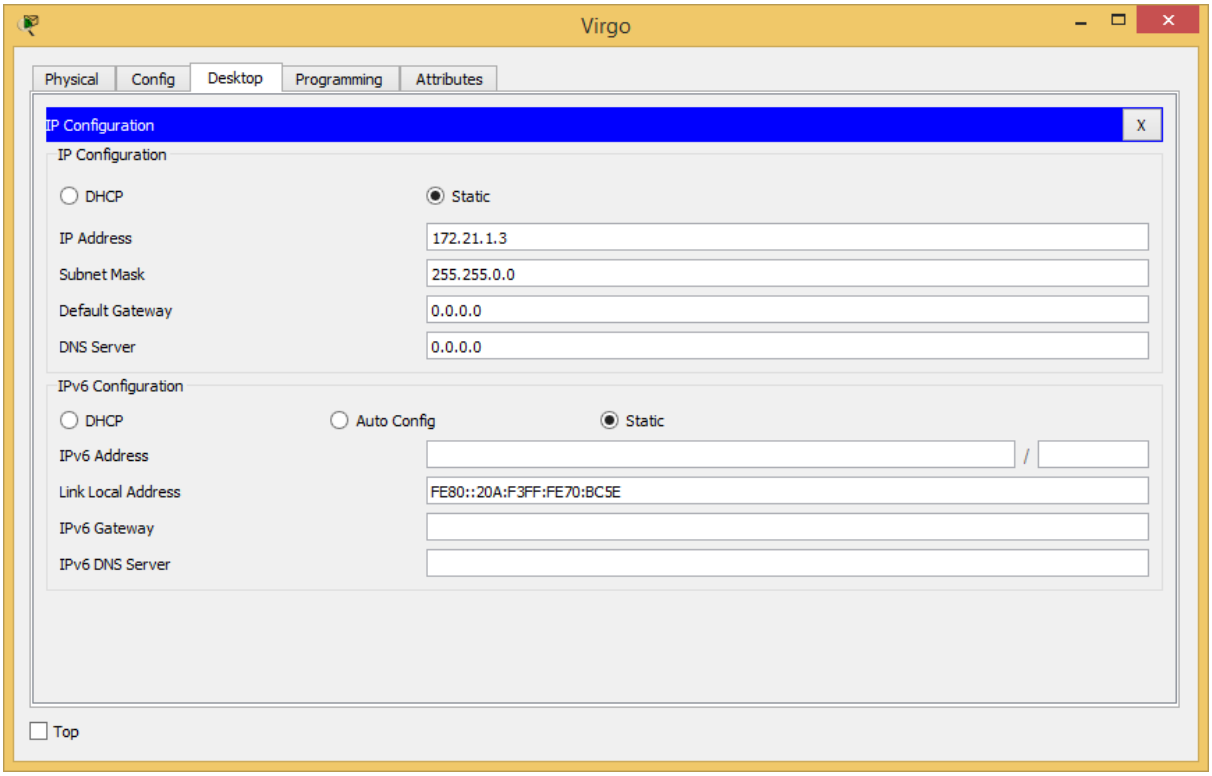
- Leo



- Aries

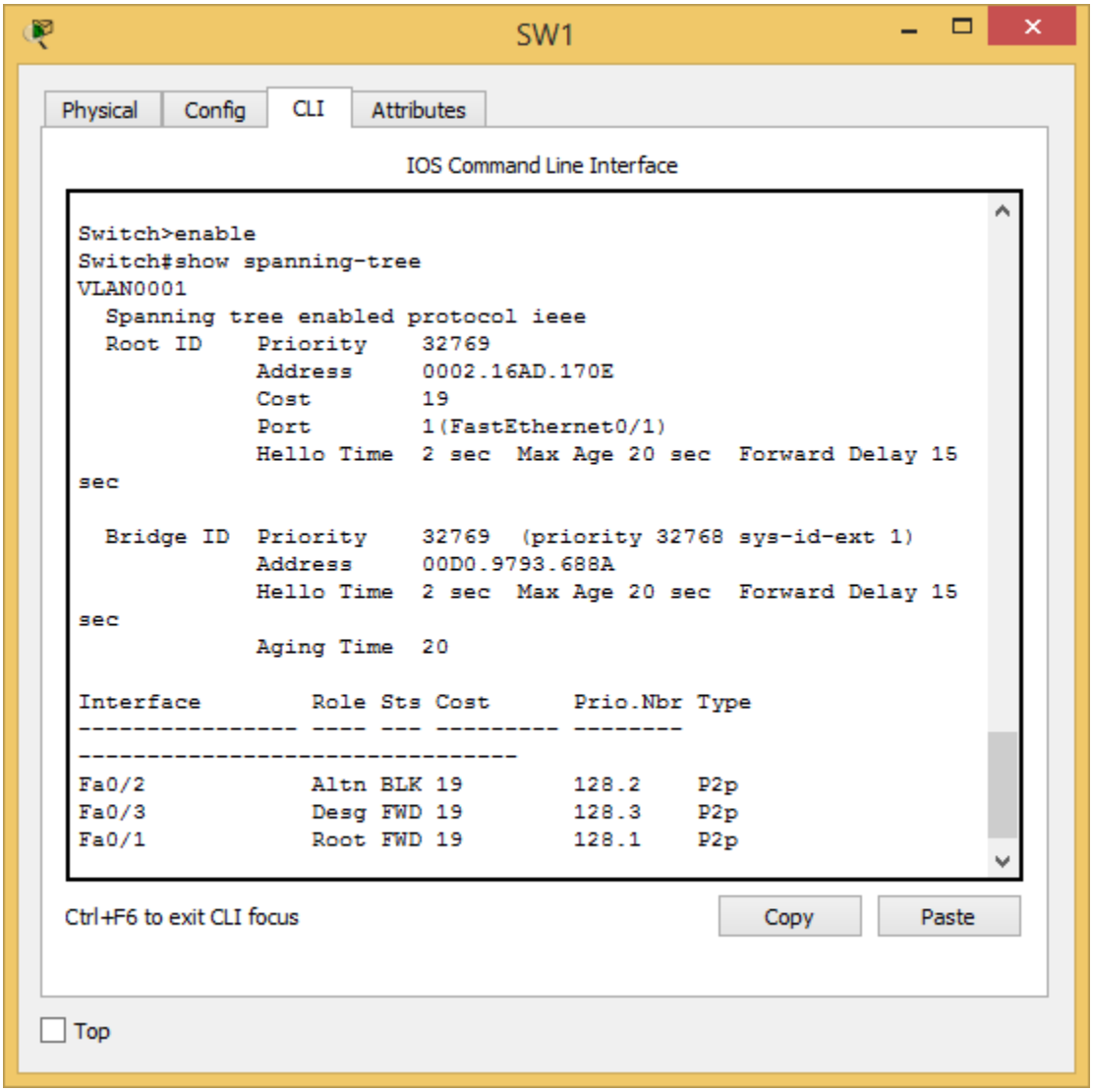

Aries
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.2
Subnet Mask
255.255.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::230:F2FF:FEE9:861E
IPv6 Gateway
IPv6 DNS Server
Top

- Virgo

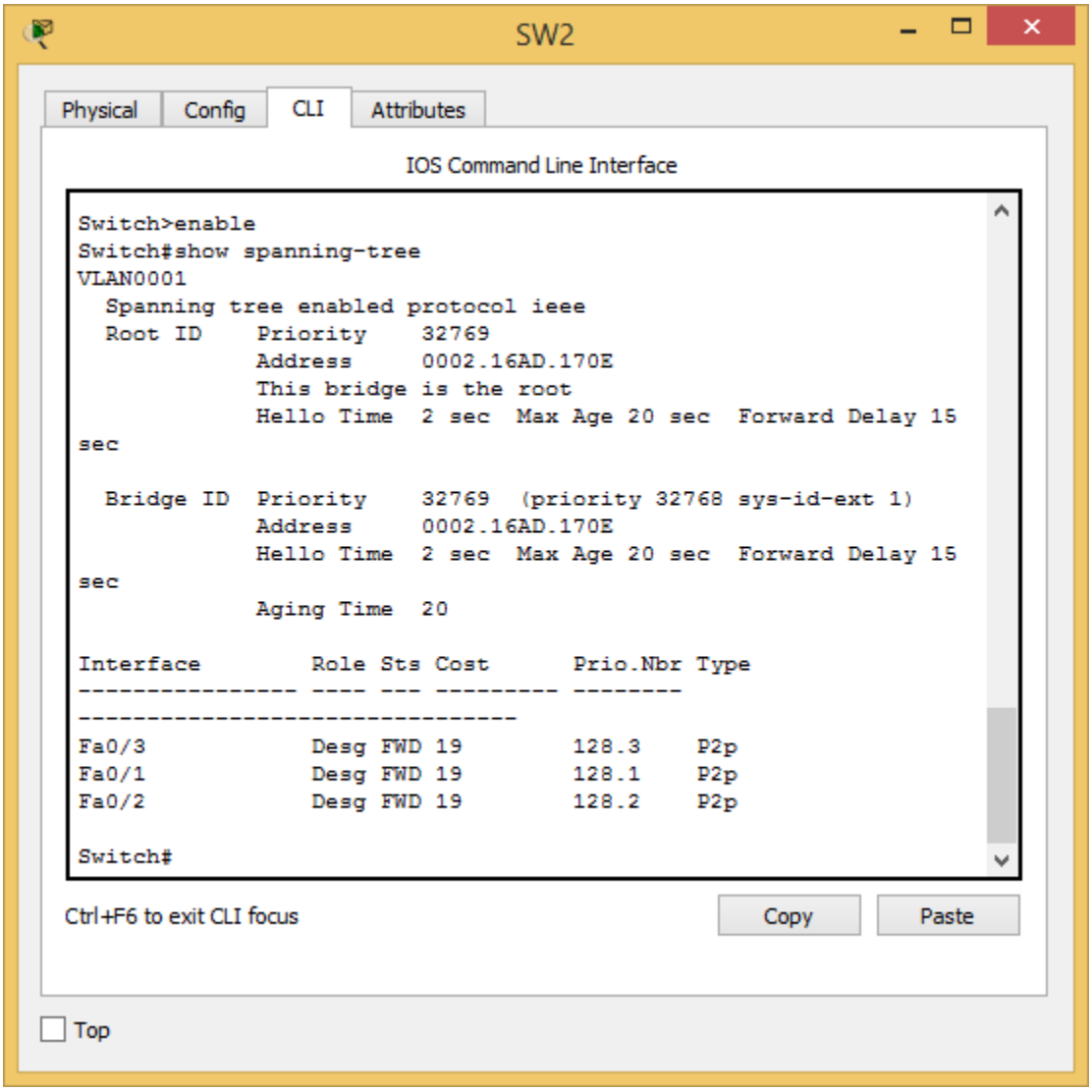

Virgo
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.3
Subnet Mask
255.255.0.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::20A:F3FF:FE70:BC5E
IPv6 Gateway
IPv6 DNS Server
Top

Tugas 4A : Pada mode *user* atau *privileged*, lihat status STP pada masing-masing switch.

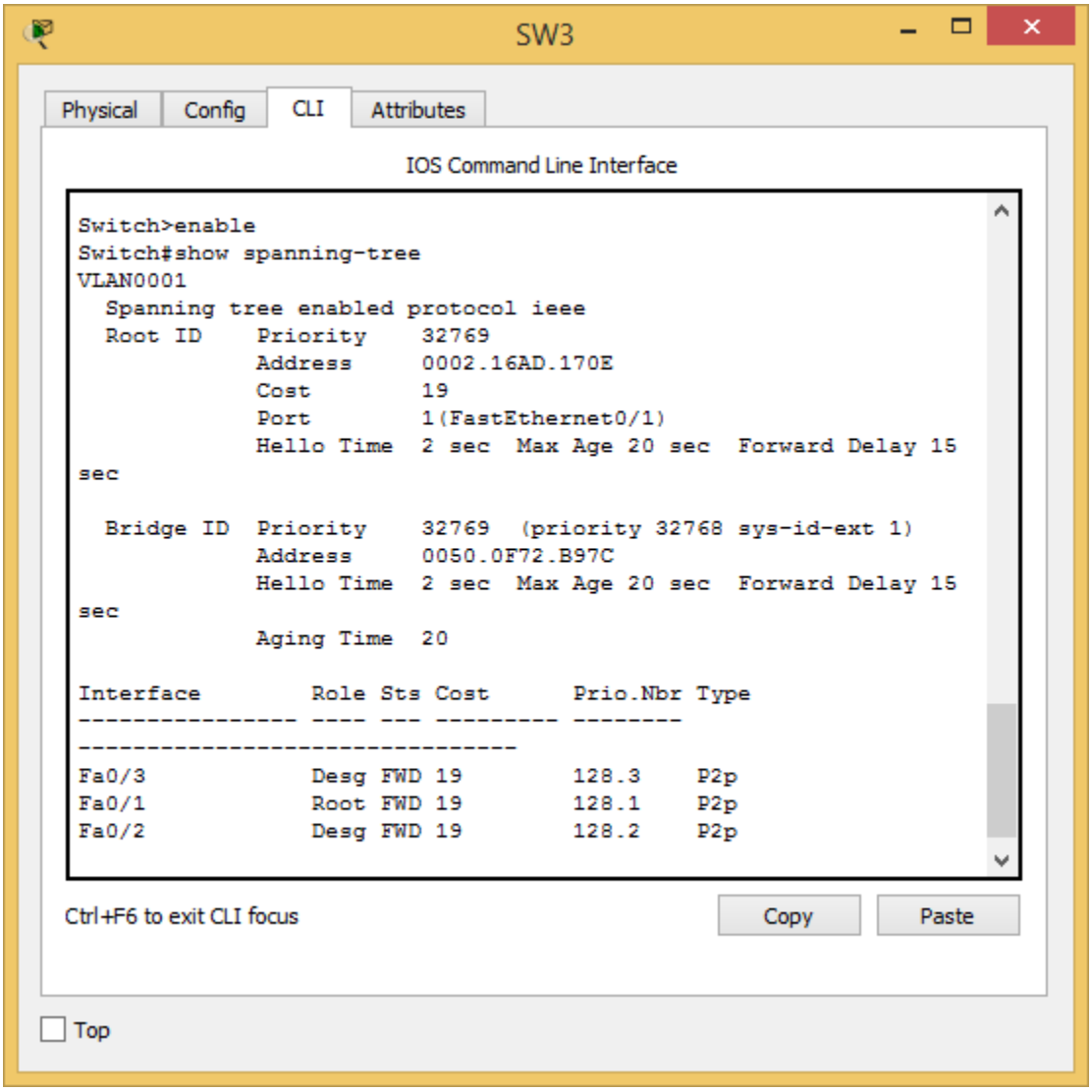
- SW1



- SW2


SW2
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 0002.16AD.170E
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 0002.16AD.170E
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
Fa0/1 Desg FWD 19 128.1 P2p
Fa0/2 Desg FWD 19 128.2 P2p
Switch#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

- SW3



Tugas 4B : Tabel tiap switch

- SW1

No	Variabel	Nilai
1	Root ID	32769 : 0002.16AD.170E
2	Priority	32769
3	MAC Address	00D0.9793.688A
4	Bridge ID	32769 : 00D0.9793.688A
5	Cost (0/1 ; 0/2 ; 0/3)	19

6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW2

No	Variabel	Nilai
1	Root ID	32769 : 0002.16AD.170E
2	Priority	32769
3	MAC Address	0002.16AD.170E
4	Bridge ID	32769 : 0002.16AD.170E
5	Cost (0/1 ; 0/2 ; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW3

No	Variabel	Nilai
1	Root ID	32769 : 0002.16AD.170E
2	Priority	32769
3	MAC Address	0050.0F72.B97C
4	Bridge ID	32769 : 0050.0F72.B97C
5	Cost (0/1 ; 0/2 ; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

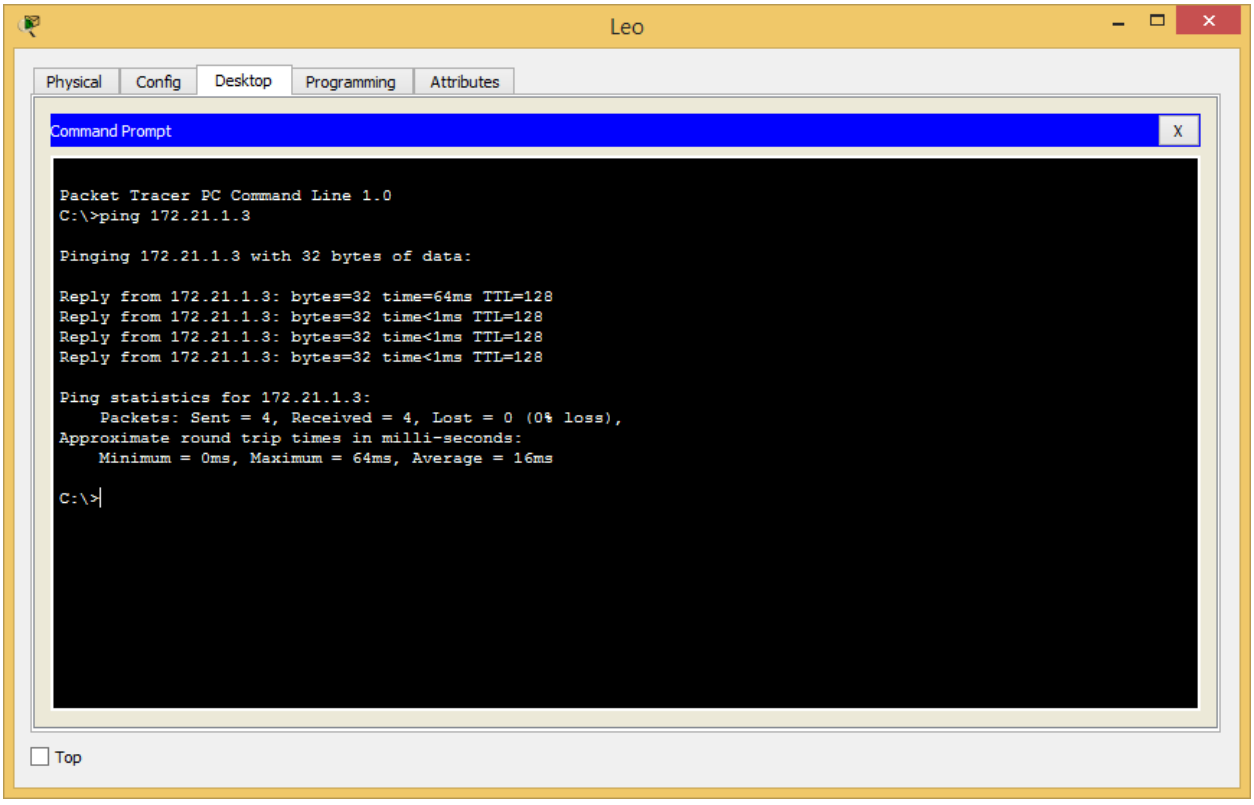
Tugas 4C :

- Root bridge : SW2
- Designated bridge : SW3
- Root port : SW1 (Fa0/1), SW3 (Fa0/1)
- Designated port : SW1 (Fa0/3), SW2 (Fa0/1, Fa0/2, Fa0/3), SW3 (Fa0/2, Fa0/3)

Tugas 4D :

- Keadaan forwarding :
  - SW1 (Fa0/1, Fa0/3),
  - SW2 (Fa0/1, Fa0/2, Fa0/3),
  - SW3 (Fa0/1, Fa
- Keadaan Blocking : SW1 (Fa0/2)

PC Leo melakukan ping ke PC Virgo

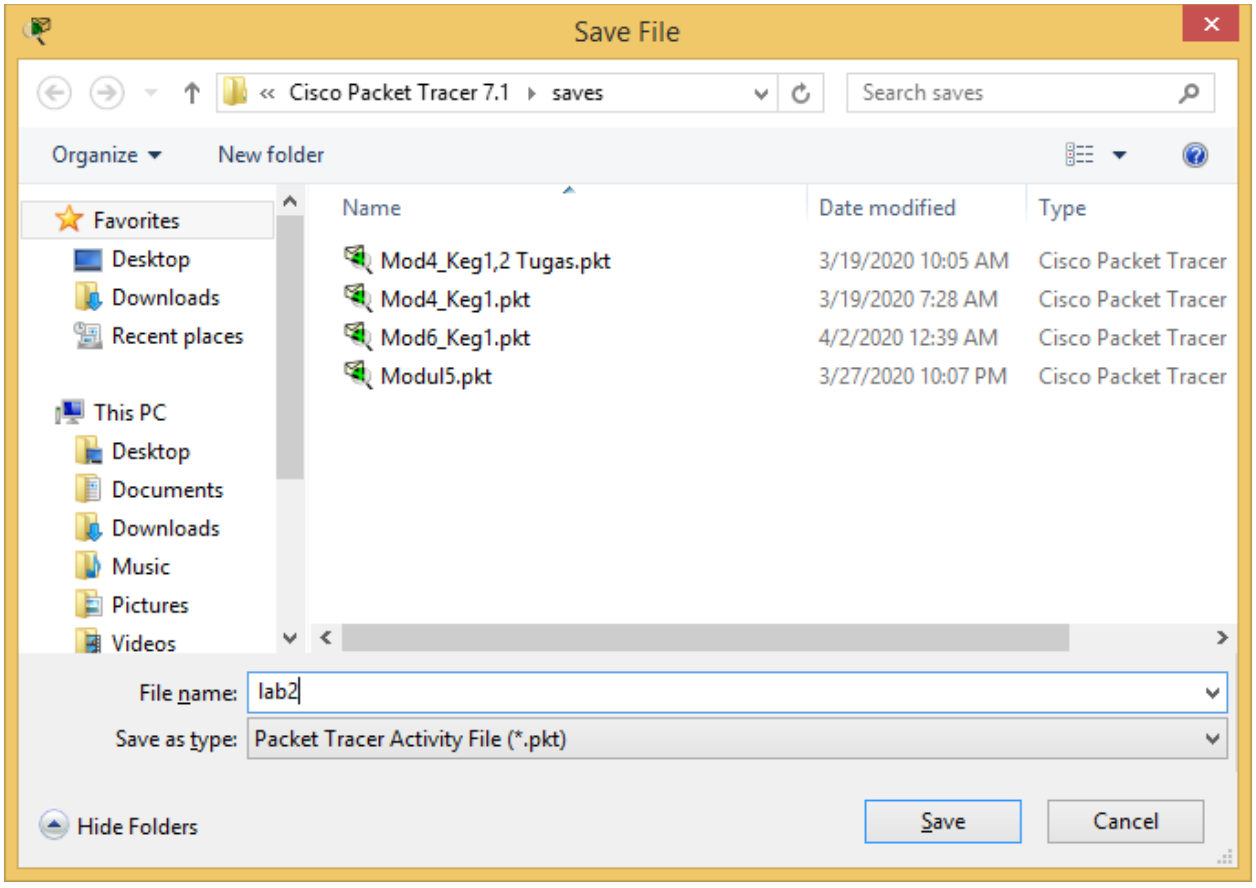


Tugas 5A : Langkah perinta ping

1. Klik PC Leo
2. Pilih tab desktop
3. Pilih command promp
4. Ketikkan ping 172.21.1.3

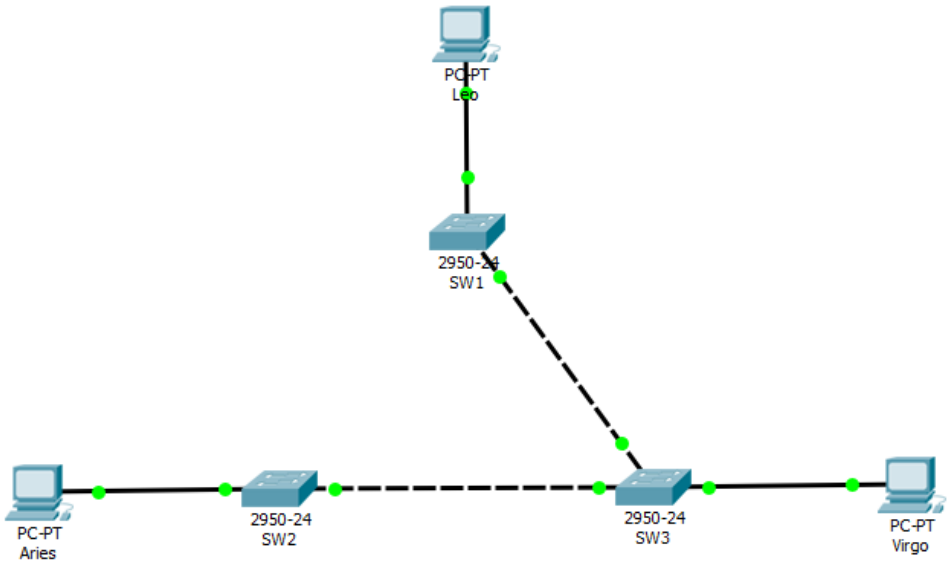
Tugas 6A : Langkah menyimpan konfigurasi jaringan

1. Klik File
2. Pilih Save
3. Beri nama lab2.ekstensi akan menyesuaikan dengan aplikasi yg digunakan



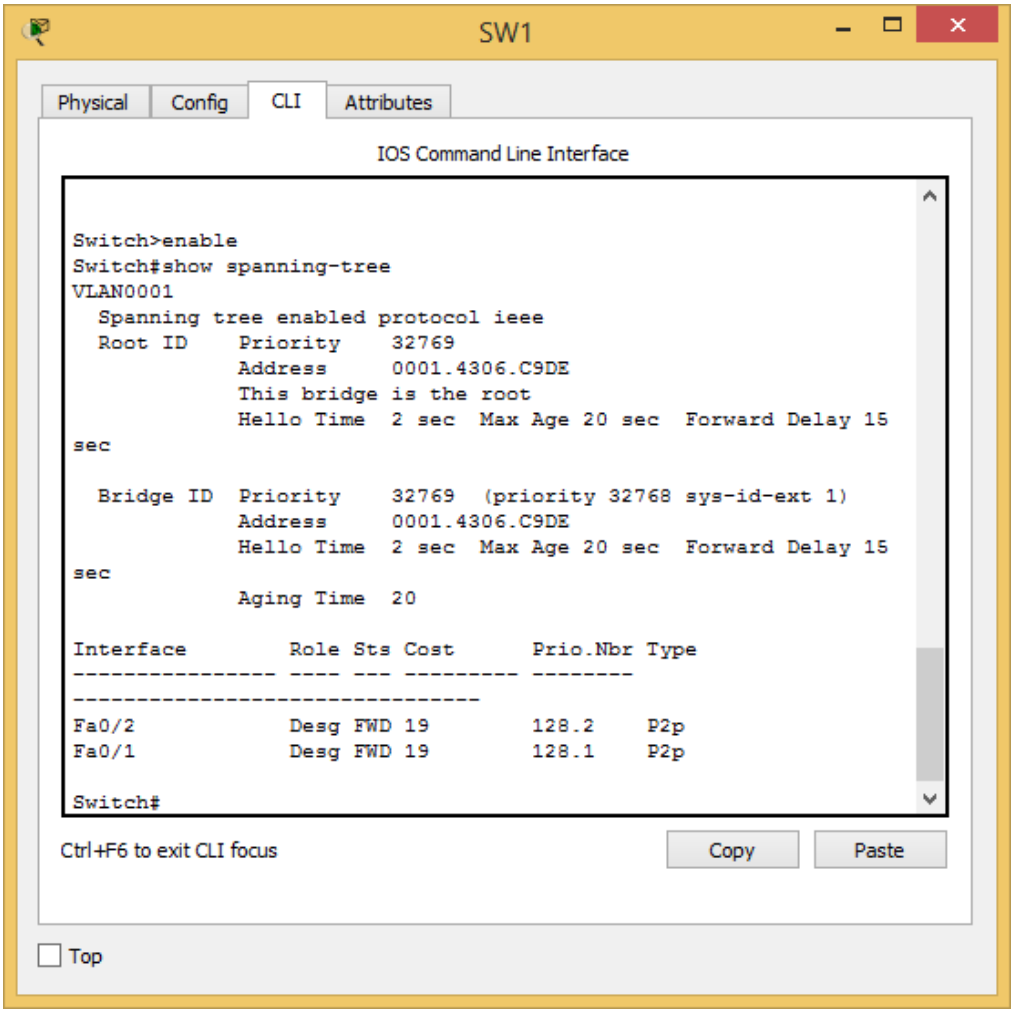
Kegiatan 2. Topologi 2

Membuat topologi



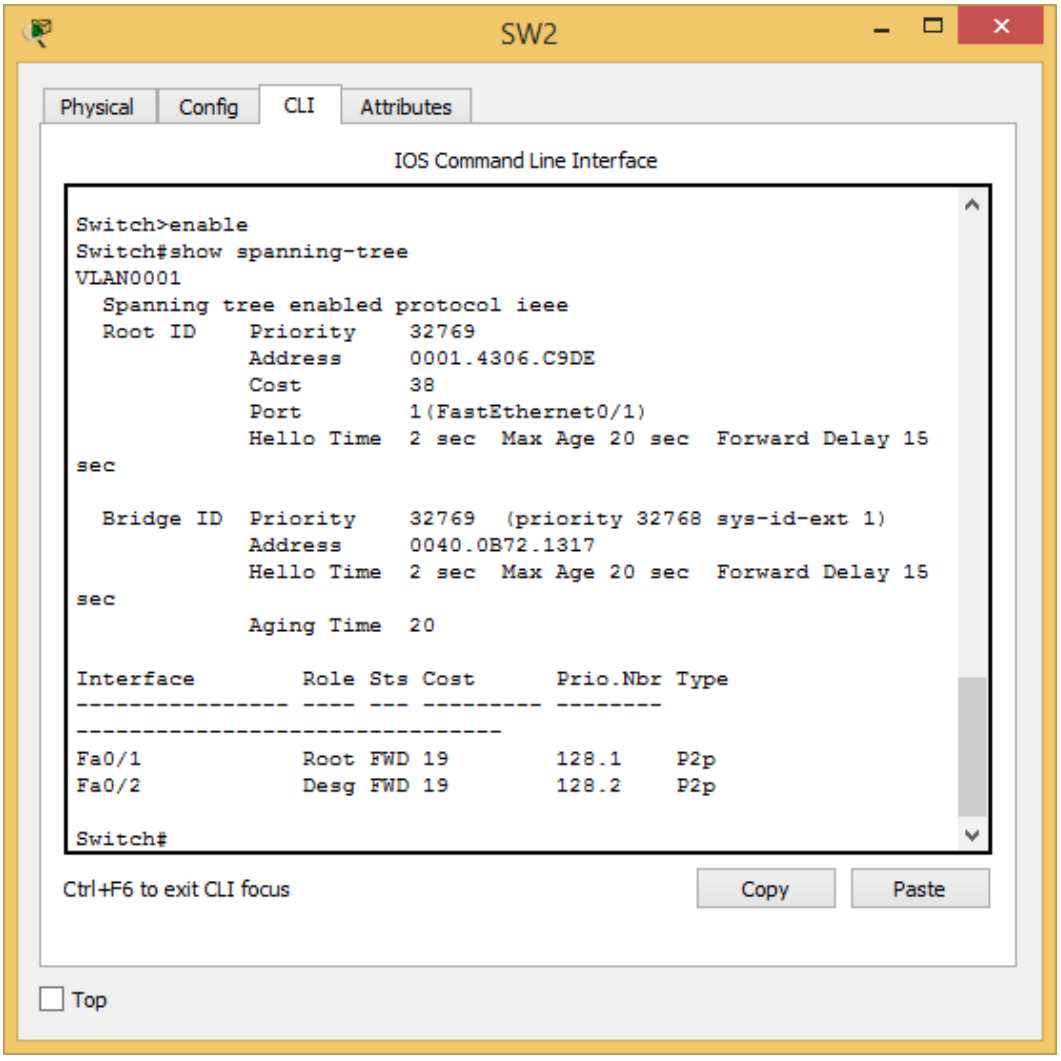
Tugas 9A : Status STP masing-masing switch

- SW1



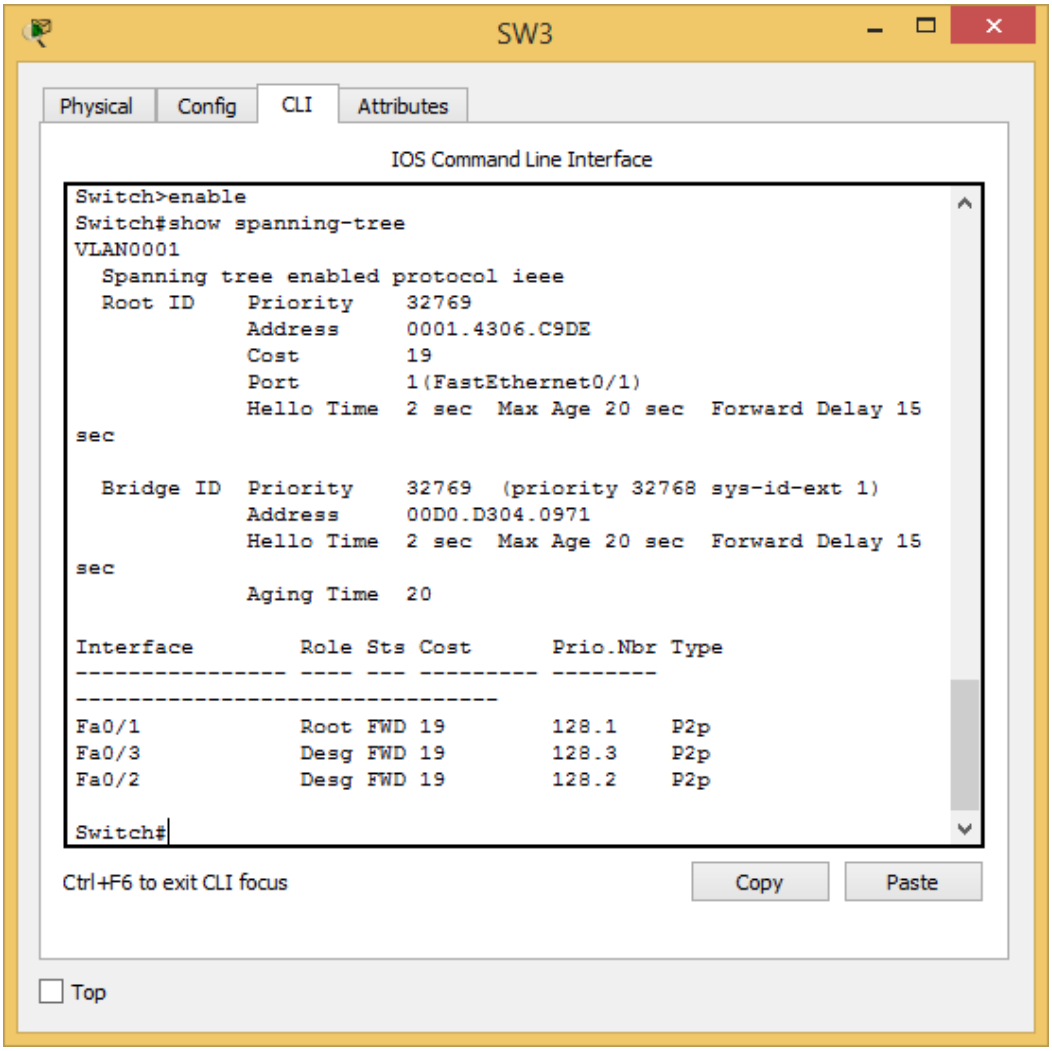
No	Variabel	Nilai
1	Root ID	32769 : 0001.4306.C9DE
2	Priority	32769
3	MAC Address	0001.4306.C9DE
4	Bridge ID	32769 : 0001.4306.C9DE
5	Cost	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW2



No	Variabel	Nilai
1	Root ID	32769 : 0001.4306.C9DE
2	Priority	32769
3	MAC Address	0040.0B72.1317
4	Bridge ID	32769 : 0040.0B72.1317
5	Cost	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW3



No	Variabel	Nilai
1	Root ID	32769 : 0001.4306.C9DE
2	Priority	32769
3	MAC Address	00D0.D304.0971
4	Bridge ID	32769 : 00D0.D304.0971
5	Cost	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Menentukan :

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

Menentukan :

- Keadaan forwarding :
  - SW1 (Fa0/1, Fa0/2)
  - SW2 (Fa0/1, Fa0/2)
  - SW3 (Fa0/1, Fa0/2, Fa0/3)
- Keadaan blocking : tidak ada

Ping PC Leo ke PC Virgo