Nama : Anang Prasetyo

NIM : L200180063

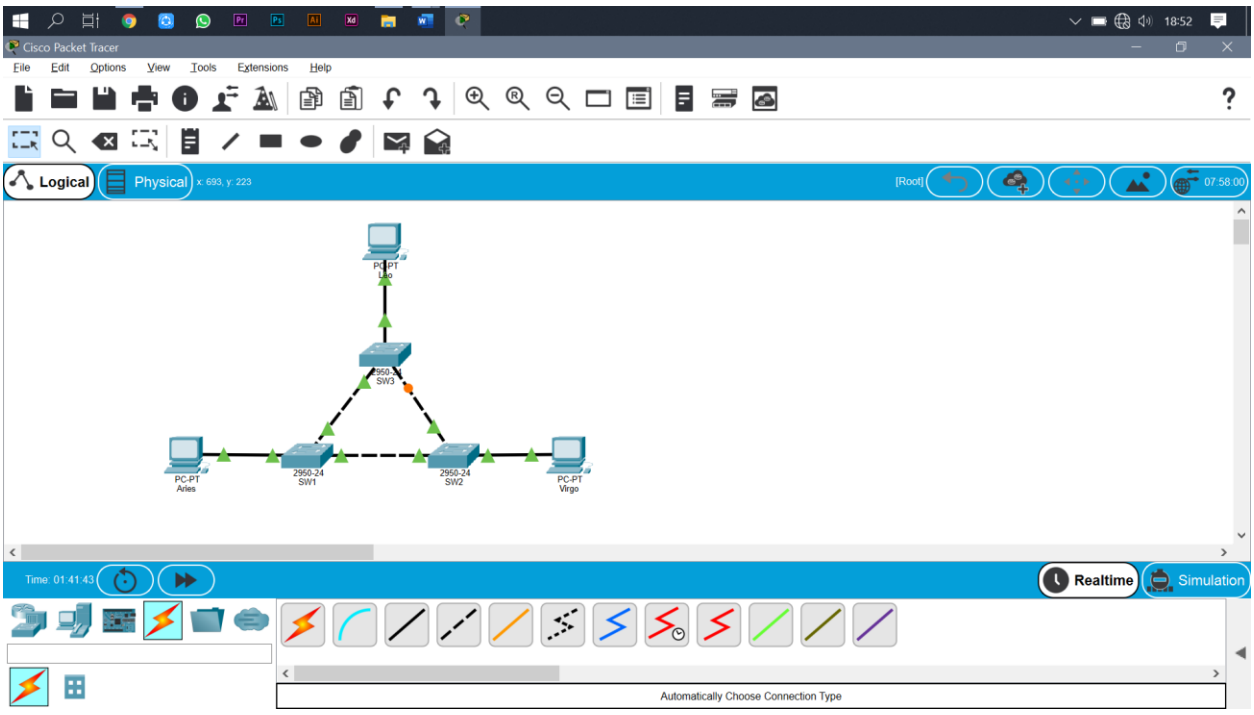
Kelas : B

MODUL 6

Kegiatan Praktikum

Kegiatan 1. Topologi 1

Desain jaringan



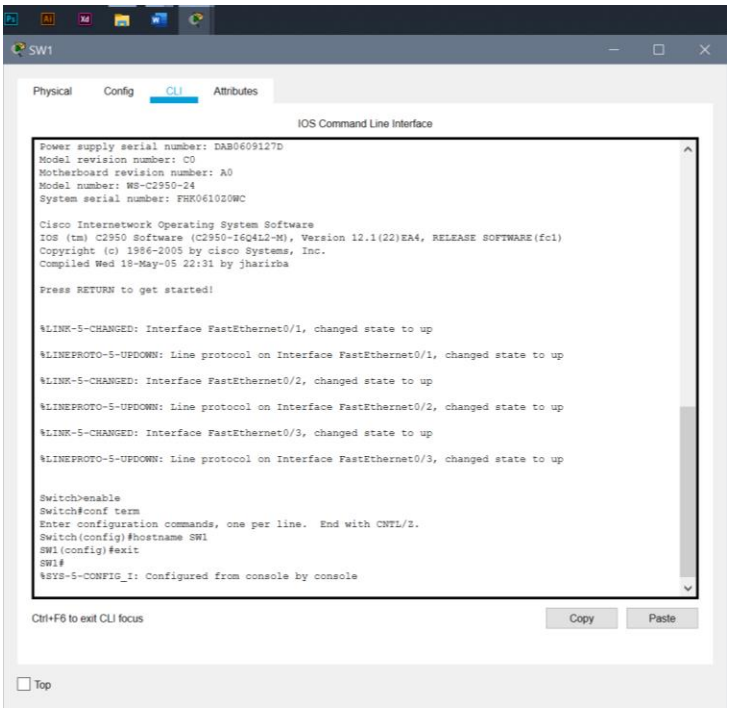
Tugas 1A

1. Pilih pada bagian Network Devices → Switches → pilih tipe 2950-24 → letakkan 3 switch → berikan nama SW1, SW2, dan SW3 pada masing masing switch
2. Pilih pada bagian End Devices → PC → letakkan 3 Komputer → berikan nama Aries, Leo, dan virgo pada masing masing komputer
3. Hubungkan dengan kabel. Pilih connections → pilih icon petir lalu sambung

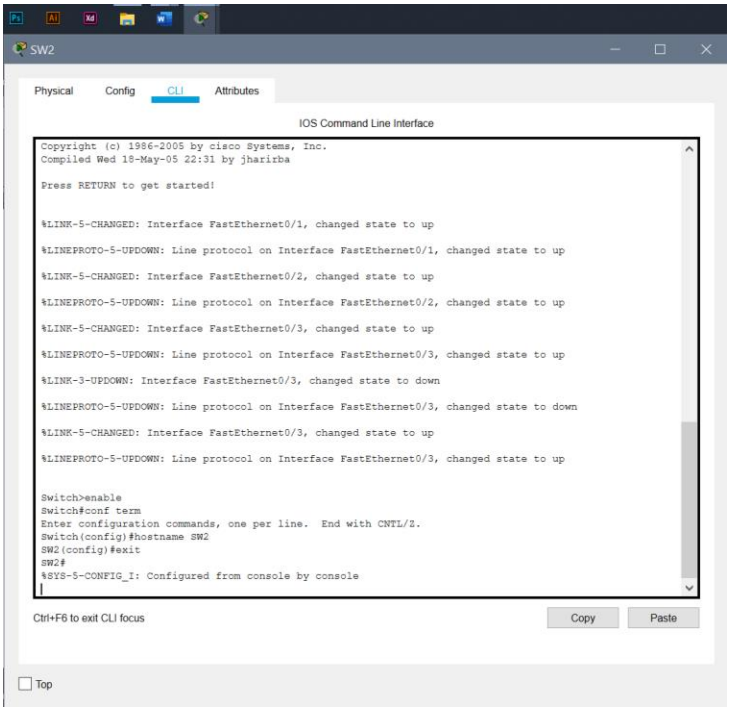
Tugas 2A

Langkah-langkah Pemberian nama masing-masing switch dengan SW1, SW2, dan SW3 dengan cara ketik enable → ketik conf term → ketik hostname SW1 / SW2 / SW3 → ketik exit

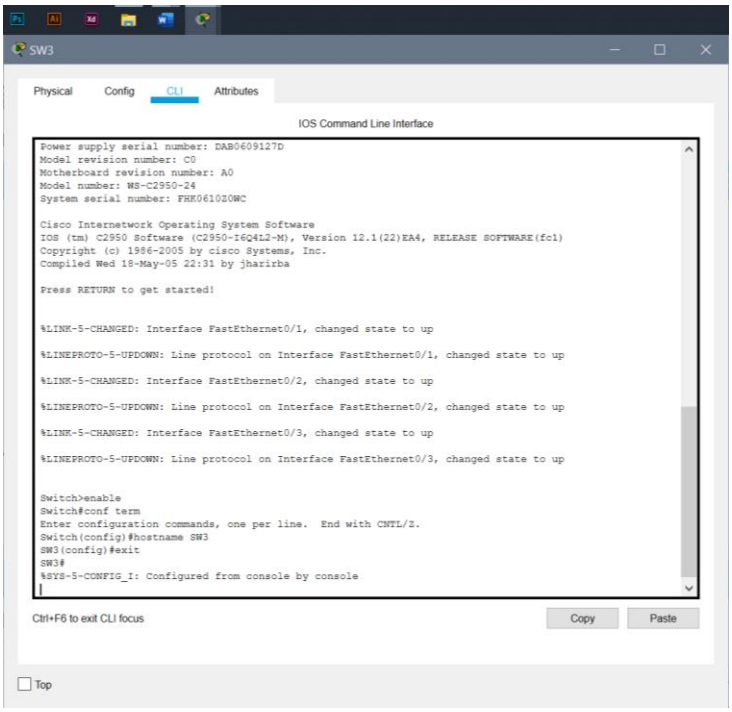
- SW1



- SW2

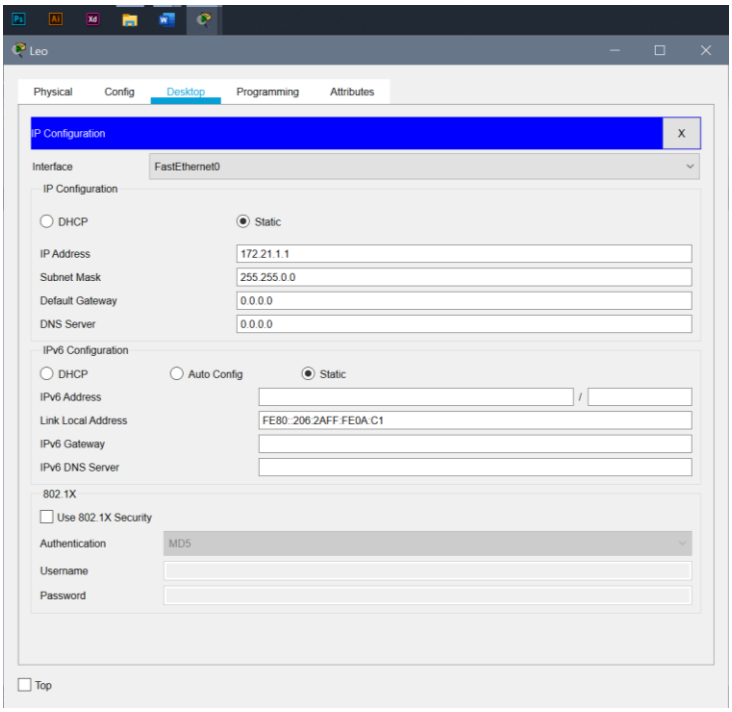


- SW3

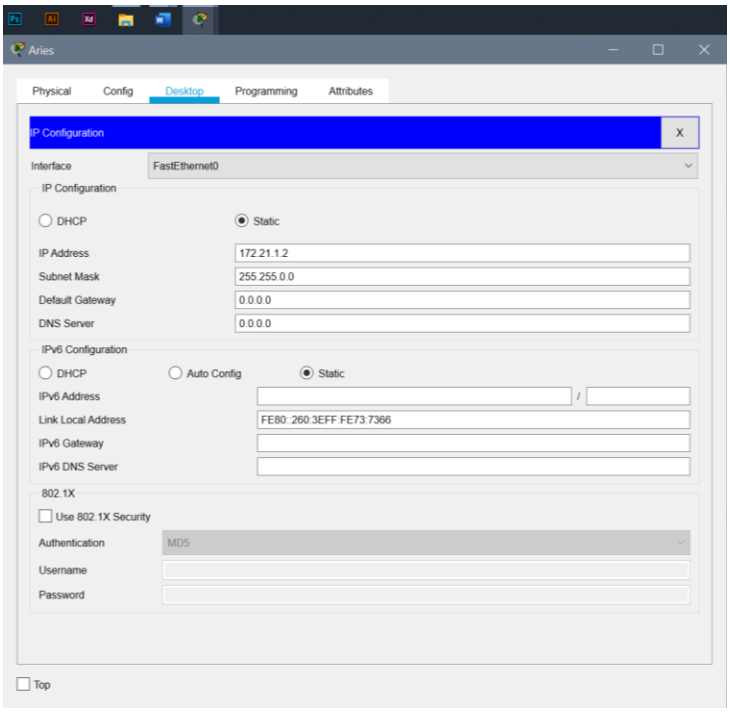


Mengonfigurasi masing-masing PC dengan alamat IP :

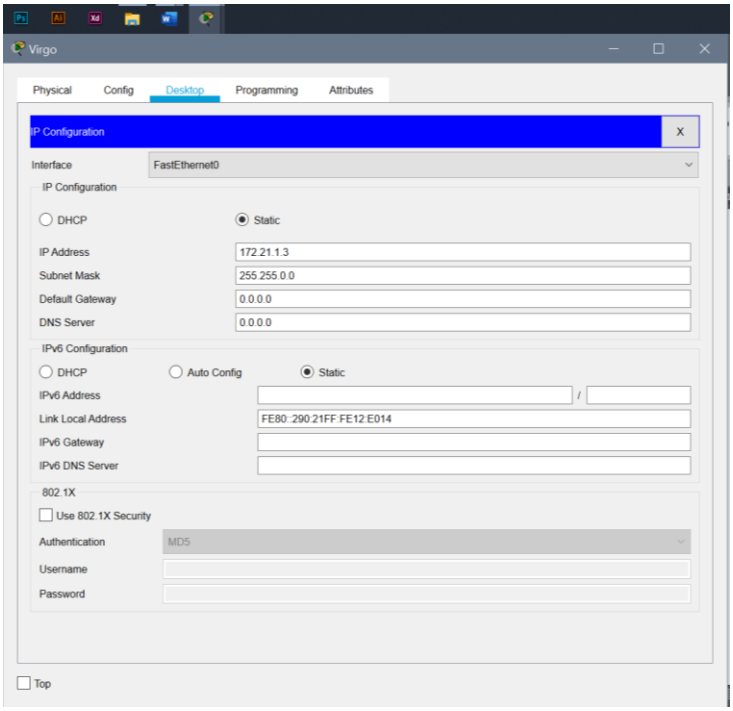
- Leo = 172.21.1.1/24



- Aries = 172.21.1.2/24

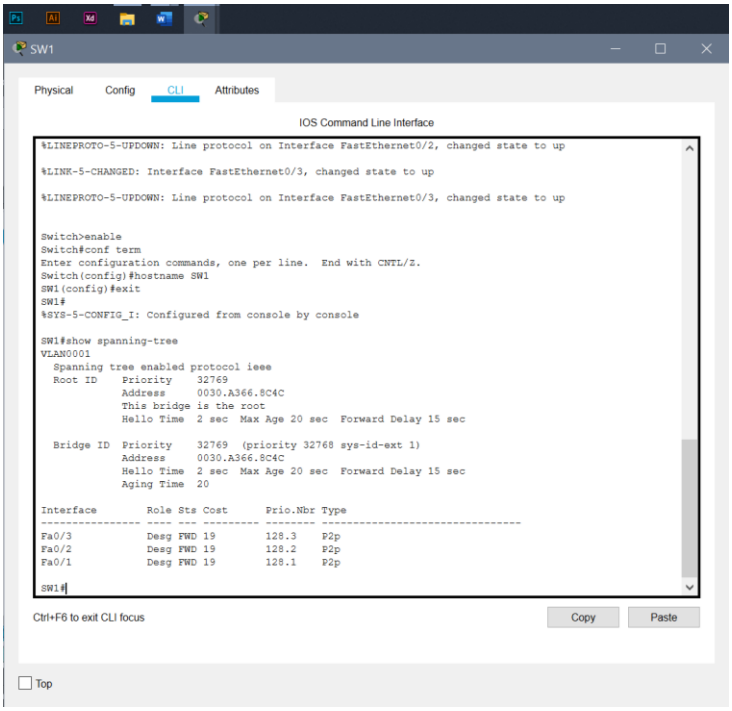


- Virgo = 172.21.1.3/24

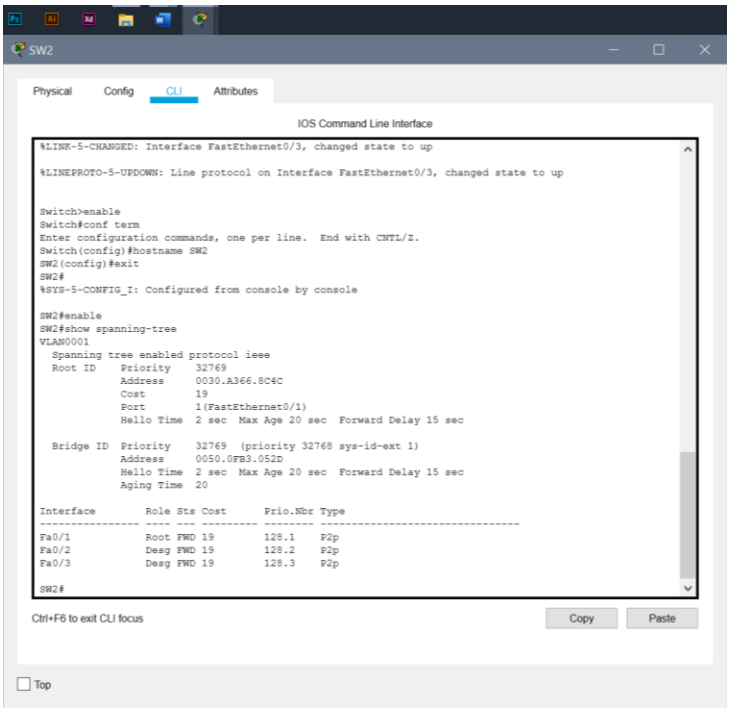


Tugas 4A

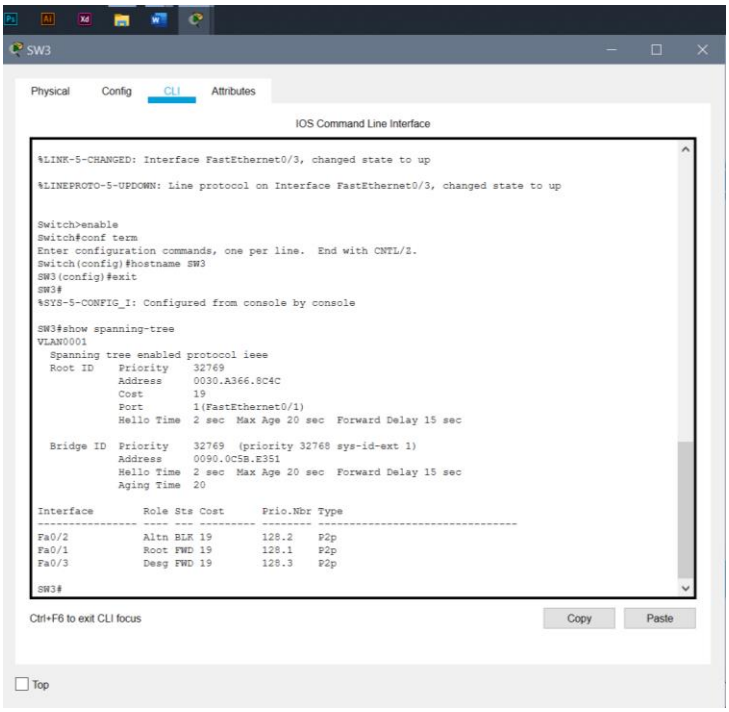
- SW1



- SW2



- SW3


SW3
Physical
Config
CLI
Attributes
IOS Command Line Interface
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/2.
Switch(config)#hostname SW3
SW3(config)#exit
SW3#
%SYS-5-CONFIG_I: Configured from console by console
SW3#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 0030.A366.8C4C
Cost 19
Port 1(FastEthernet0/1)
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)
Address 0090.0C5B.E351
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 20
Interface Role Sts Cost Prio.Nbr Type
Fa0/2 Altn BLK 19 128.2 P2p
Fa0/1 Root FWD 19 128.1 P2p
Fa0/3 Desg FWD 19 128.3 P2p
SW3#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

Tugas 4B

- SW1

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0030.A366.8C4C
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Fordward Delay	15 sec

- SW2

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0050.0FB3.052D
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Fordward Delay	15 sec

- SW3

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0090.0C5B.E351
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Fordward Delay	15 sec

Tugas 4C

Pada kondisi default tersebut, switch dan port mana saja yang:

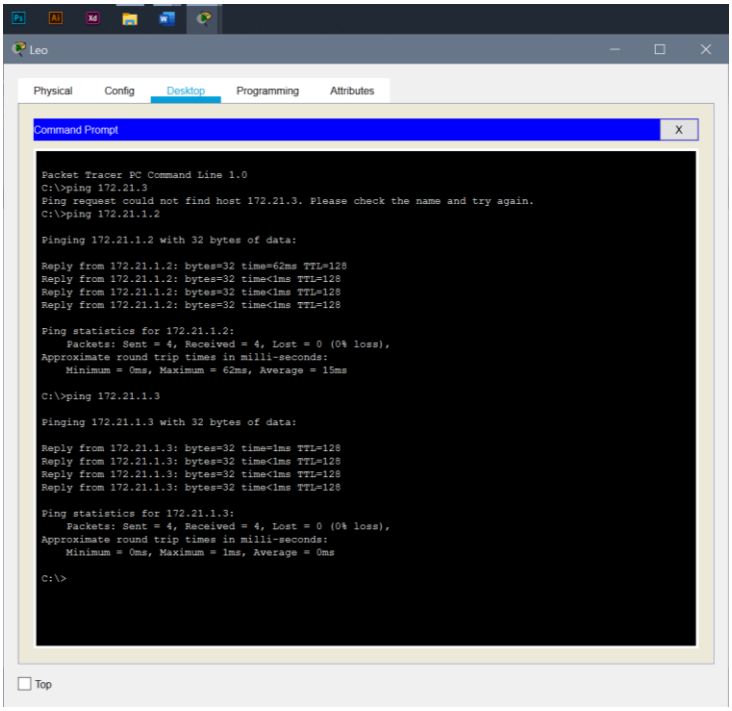
- Menjadi root bridge : SW1
- Menjadi designated bridge : SW3
- Menjadi root port : SW2(0/2), SW3(0/3)
- Menjadi designated port : SW3(0/3)

Tugas 4D

Pada kondisi default tersebut, switch dan port mana saja yang :

- Berada pada keadaan forwarding : SW1(0/3, 0/2, 0/1), SW2(0/1, 0/2, 0/3), dan SW3(0/1, 0/3)
- Berada pada keadaan blocking : SW3(fa 0/2)

Melakukan ping dari PC Leo ke PC Virgo



Tugas 5A

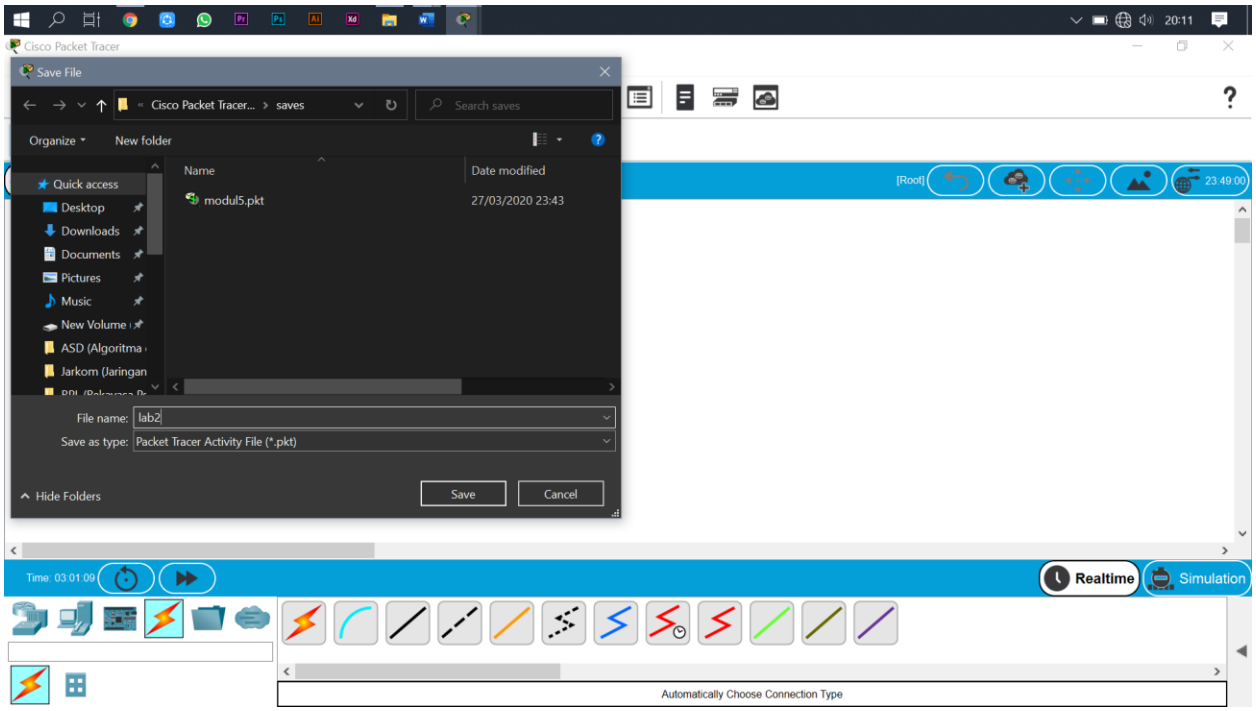
Langkah untuk melakukan perintah ping dari PC Leo ke PC Virgo :

1. Klik pada PC Leo
2. Pilih tab desktop
3. Pilih command prompt
4. Ketik ping 172.21.1.3

Tugas 6A:

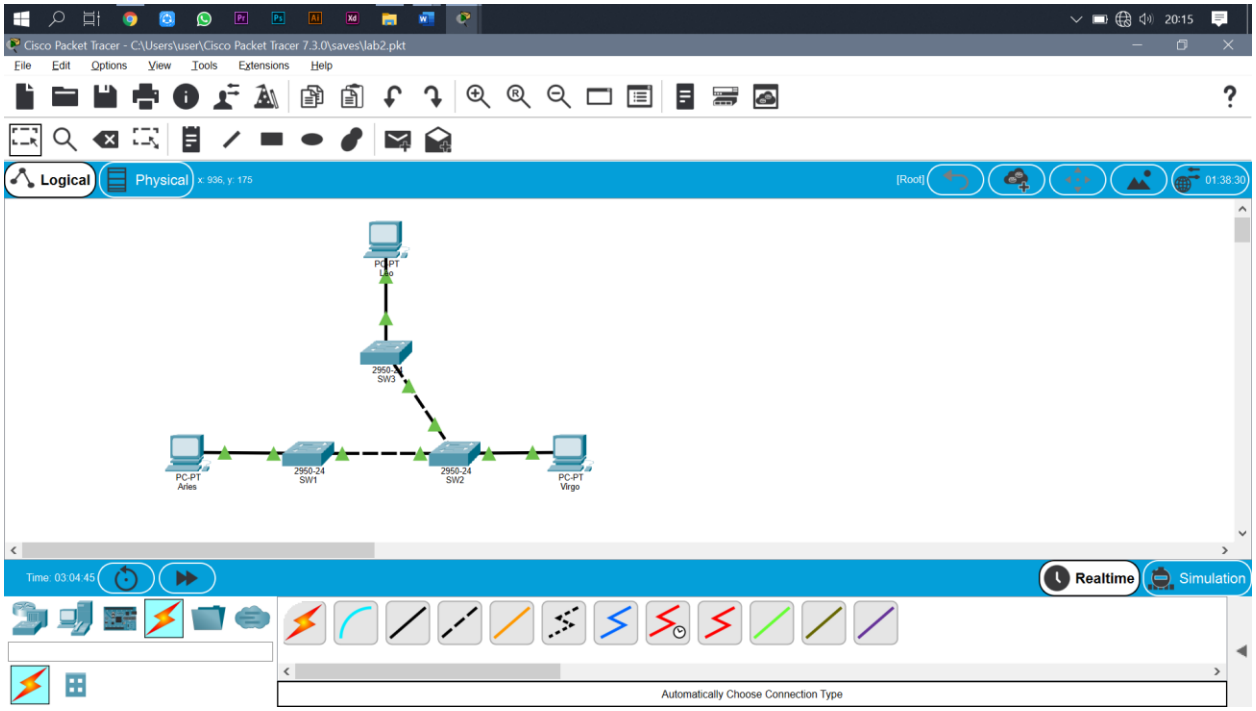
Langkah-langkah untuk menyimpan konfigurasi jaringan

1. Ketik CTRL + S
2. Beri nama lab2 yang akan berekstensi sesuai aplikasi yang digunakan



Kegiatan 2 Topologi 2

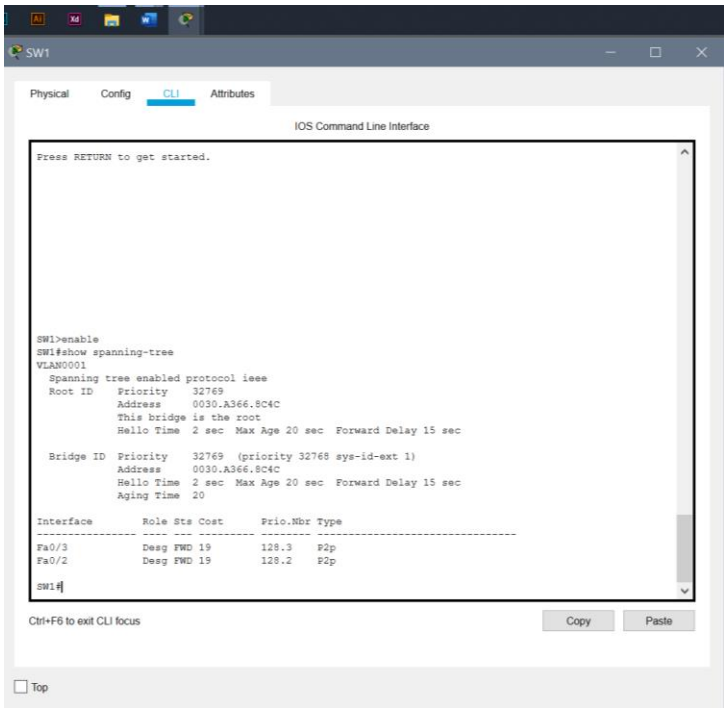
Desain jaringan



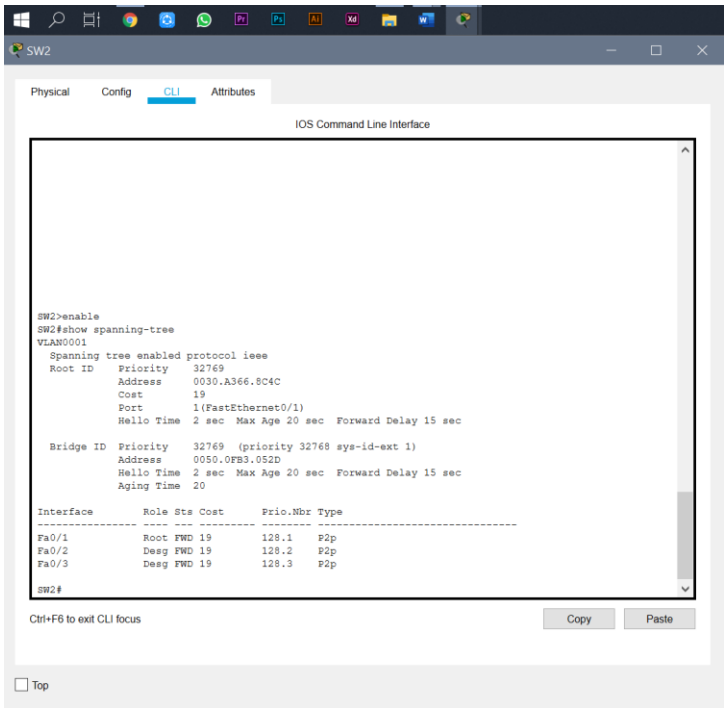
Melakukan langkah lab. 4, dan lab. 5 dengan mengetikkan perintah “show spanning-tree”

Tugas 9A : Mengerjakan seperti langkah lab. 4

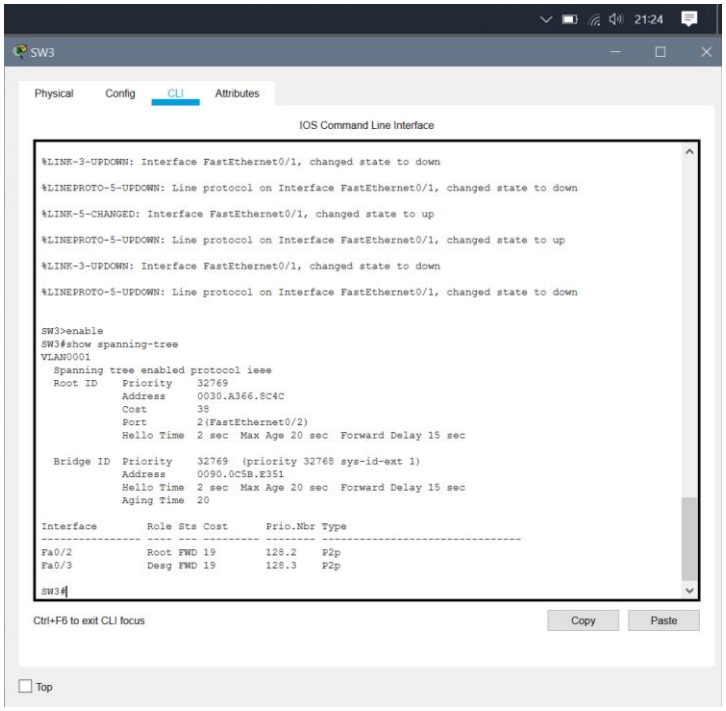
- SW1



- SW2



- SW3



Mengisi table

- SW1

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0030.A366.8C4C
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Fordward Delay	15 sec

- SW2

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0050.0FB3.052D
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Fordward Delay	15 sec

- SW3

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Address	0090.0C5B.E351
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Fordward Delay	15 sec

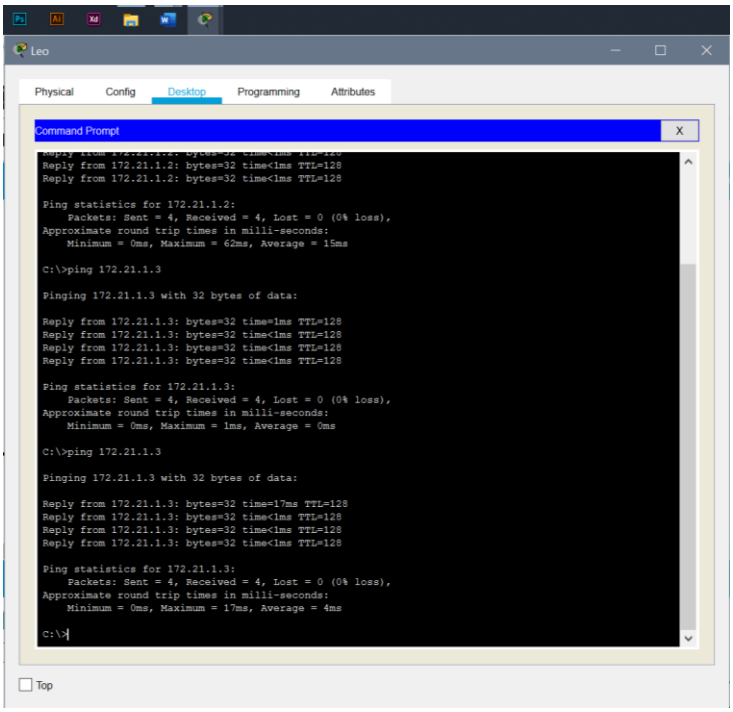
Pada kondisi default tersebut, switch dan port mana saja yang:

- Menjadi root bridge : SW1
- Menjadi designated bridge : SW3
- Menjadi root port : SW3(0/2), SW2(0/1)
- Menjadi designated port : SW2(0/2, 0/3), SW3(0/3)

Pada kondisi default tersebut, switch dan port mana saja yang :

- Berada pada keadaan forwarding : SW1(0/3, 0/2), SW2(0/1, 0/2, 0/3), dan SW3(0/2, 0/3)
- Berada pada keadaan blocking : tidak ada (-)

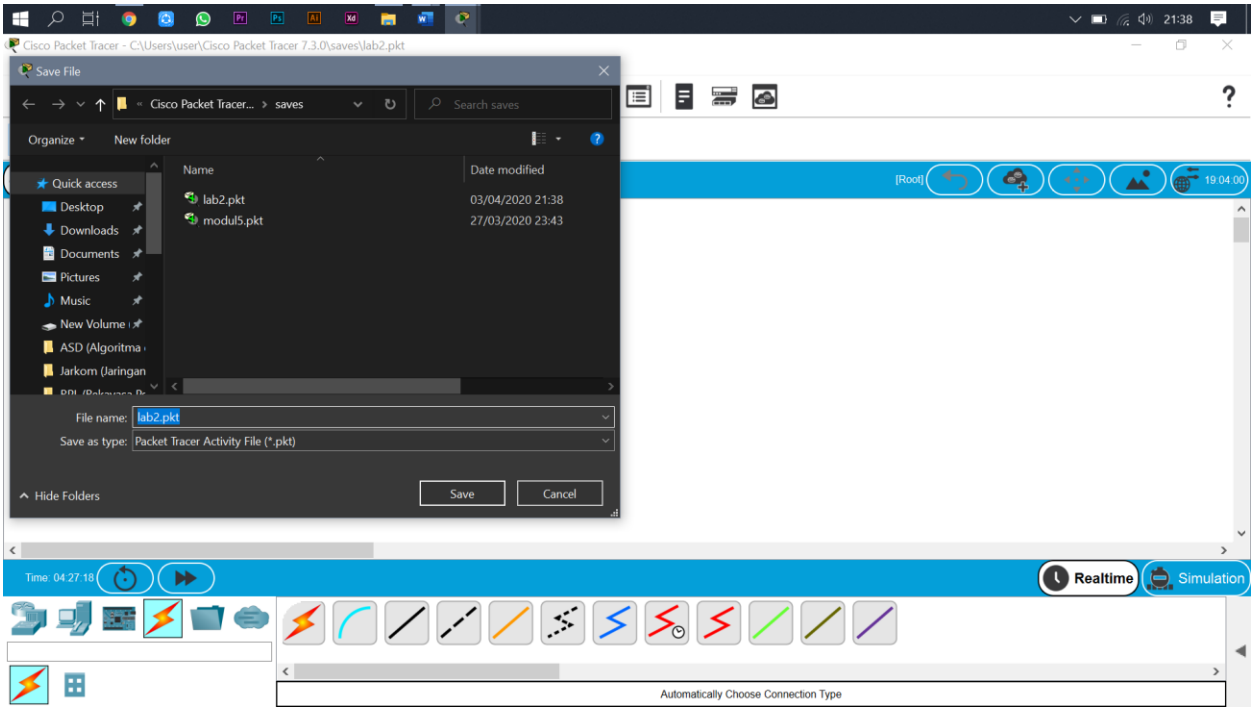
Melakukan ping dari PC Leo ke PC Virgo



Langkah untuk melakukan perintah ping dari PC Leo ke PC Virgo :

1. Klik pada PC Leo
2. Pilih tab desktop
3. Pilih command prompt
4. Ketik ping 172.21.1.3

Menyimpan konfigurasi jaringan



Langkah-langkah untuk menyimpan konfigurasi jaringan

1. Ketik CTRL + S
2. Beri nama lab2 yang akan berekstensi sesuai aplikasi yang digunakan