

# Praktikum Jaringan Komputer

## MODUL 6

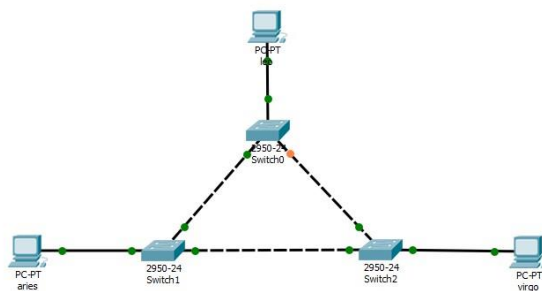
Nama : Oscar Satria Utama

NIM : L200180001

Kelas : A

### Kegiatan 1. Topologi 1

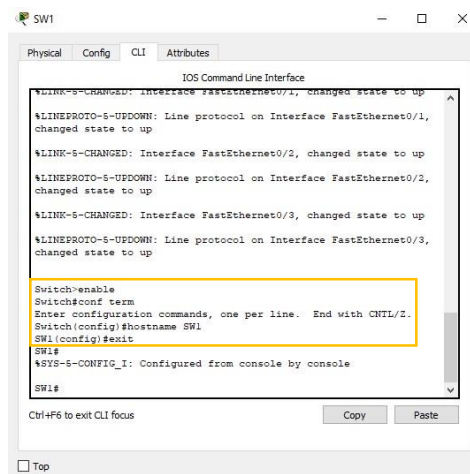
#### 1. Rancangan Jaringan



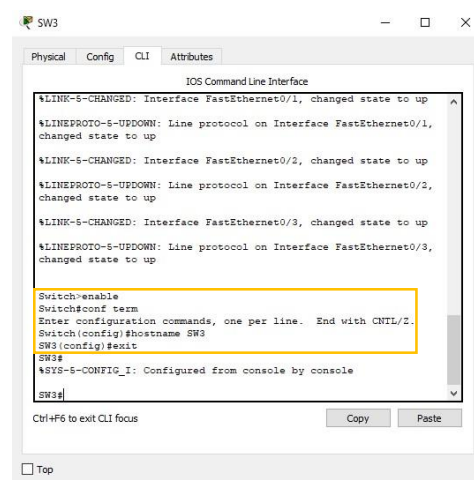
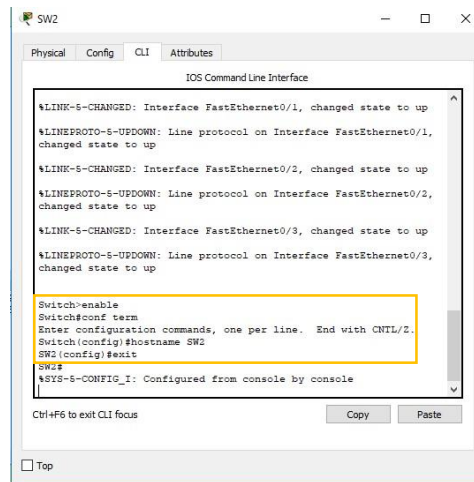
Drag 3 switch catalyst 2950 yang diambil dari network devices dan drop ke lembar kerja. Lalu drag 3 PC yang di ambil di end devices dan drop ke lembar kerja. Lalu hubungkan switch dengan switch dan switch dengan PC dengan connections.

#### 2. Pemberian nama switch dari mode user

SW1



SW2

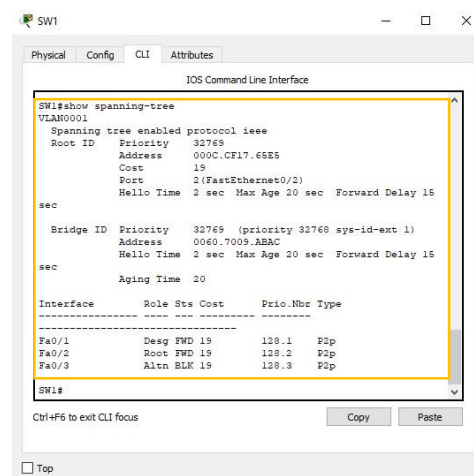


### SW3

Pemberian nama masing-masing switch dengan SW1, SW2, dan SW3 dengan cara ketik **enable** lalu ketik **conf term** lalu ketik **hostname SW1**(sesuai dengan nama switch nya)

## 3. Spanning-tree pada masing-masing switch

### SW1



No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0060.7009.ABAC
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

## SW2

```

%SYS-5-CONFIG_I: Configured from console by console
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000C.CF17.65E5
             This bridge is the root
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15
             sec

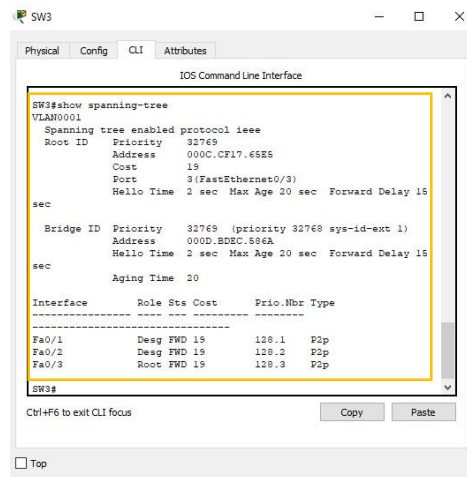
  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     000C.CF17.65E5
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15
             sec

             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
  
```

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000C.CF17.65E5
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

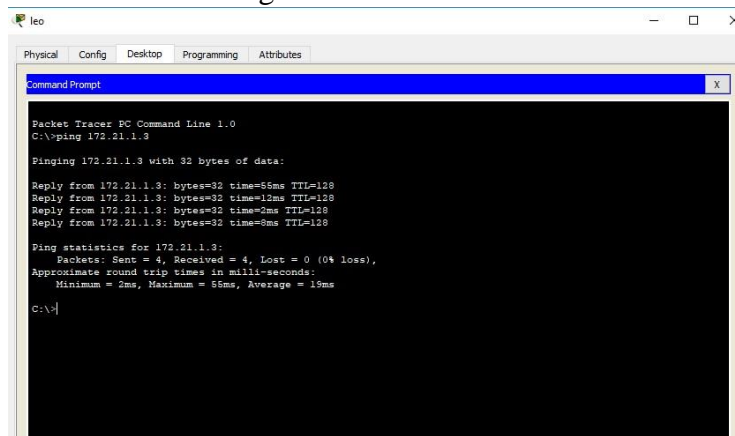
## SW3



No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000D.BDEC.586A
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- ☐ Root bridge : SW2
- ☐ Designated bridge : SW3
- ☐ Root port : SW1(0/2), SW3(0/3)
- ☐ Designated port : SW3(0/3)
- Port keadaan forwarding : SW1(0/1, 0/2), SW2(0/1, 0/2, 0/3), dan SW3(0/1, 0/2, 0/3)
- Port keadaan blocking : SW1(0/3)

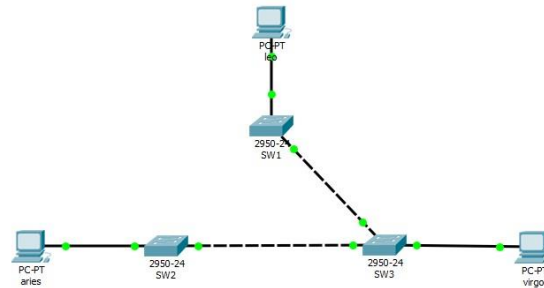
#### 4. Lakukan ping dari PC leo ke PC virgo



Tap 2 kali pada PC leo lalu pilih dekstop lalu pilih command prompt. Ketikkan **ping 172.21.1.3** lalu enter dan akan keluar hasilnya. Bahwa PC leo dan PC virgo saling berhubungan.

## Kegiatan 2. Topologi 2

### 1. Rancangan Jaringan



### 2. Spanning-tree pada masing-masing switch

SW1

```
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000C.CF17.65E5
             Cost        38
             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     0060.7009.ABAC
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface Role Sts Cost Prio.Nbr Type
-----
Fa0/3 Root FWD 15 128.3 P2p
Fa0/1 Desg FWD 15 128.1 P2p
```

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0060.7009.ABAC
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	38
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

## SW2

```

SW2>enable
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address    000C.CF17.65E5
             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    000C.CF17.65E5
             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
Fa0/3     Desg FWD 19   128.3 P2p
  
```

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000C.CF17.65E5
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

## SW3

```

SW3>enable
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address    000C.CF17.65E5
             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    000D.BDEC.586A
             Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time 20

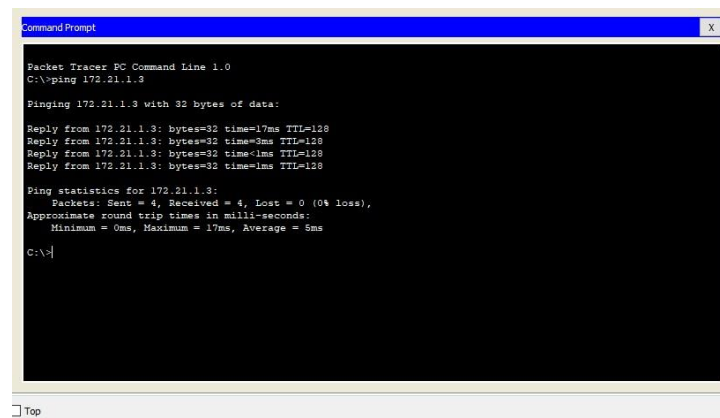
Interface Role Sts Cost Prio.Nbr Type
-----
Fa0/1     Desg FWD 19   128.1 P2p
Fa0/2     Desg FWD 19   128.2 P2p
Fa0/3     Root FWD 19   128.3 P2p
  
```

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-

3	MAC Address	000D.BDEC.586A
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- ☐ Root bridge : SW2
- ☐ Designated bridge : SW3
- ☐ Root port : SW1(0/3), SW3(0/3)
- ☐ Designated port : SW3(0/3)
- Port keadaan forwarding : SW1(0/1, 0/3), SW2(0/1, 0/3), dan SW3(0/1, 0/2, 0/3)
- Port keadaan blocking : -

### 3. Lakukan ping dari PC leo ke PC virgo



```

Command Prompt

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=17ms TTL=128
Reply from 172.21.1.3: bytes=32 time=3ms 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 = 17ms, Average = 5ms

C:\>

```

Tap 2 kali pada PC leo lalu pilih dekstop lalu pilih command prompt. Ketikkan **ping 172.21.1.3** lalu enter dan akan keluar hasilnya. Bahwa PC leo dan PC virgo saling berhubungan.