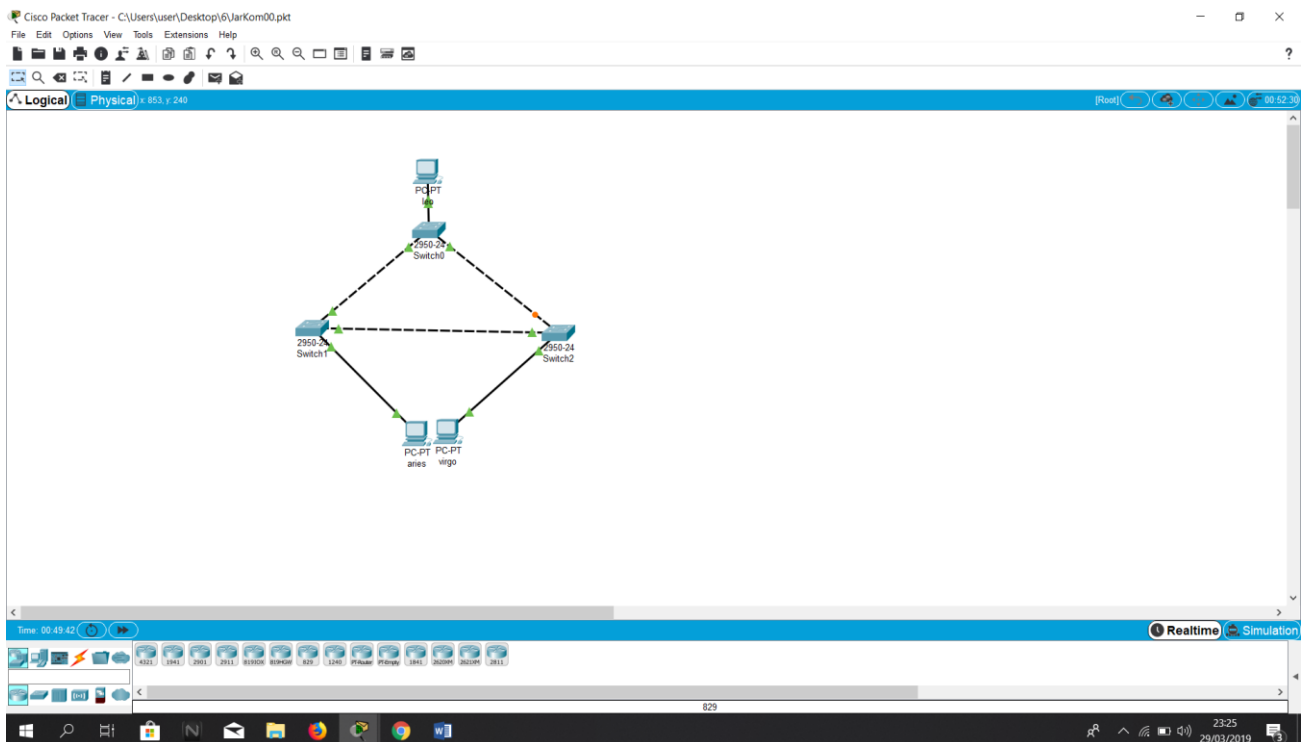


## Modul 6

Nama : Adam Risky Saefullah  
NIM : L200170080  
Kelas : B

### KEGIATAN 1a

1.A Berikut adalah struktur topologi



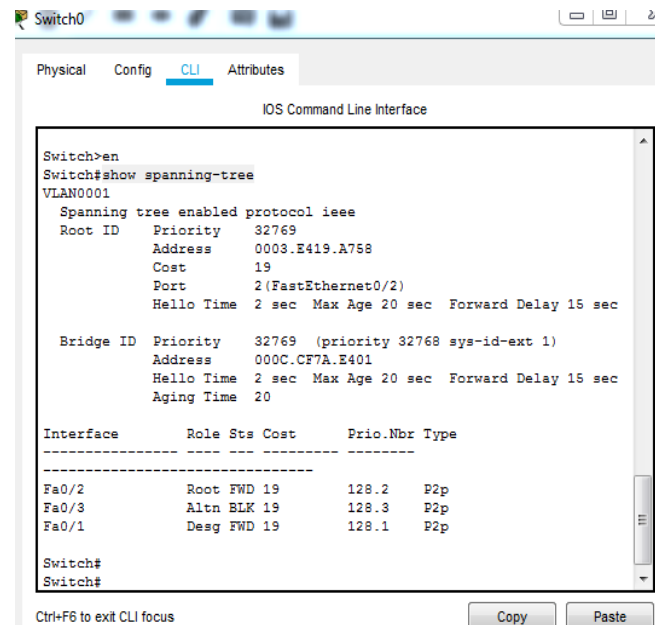
2.A Dari struktur jaringan diatas terdapat 3 Switch dan 3 *Workstation*, dengan nama *Switch* yaitu SW1, SW2, dan SW3. Sedangkan *Workstation* ialah Leo, Aries, dan Virgo.

3. Setelah itu konfigurasi setiap *Workstation* dengan IP Address:

- Leo = 172.21 1.1/24
- Aries = 172.21 1.2/24
- Virgo = 172.21 1.3/24

4.

A. Tampilan masing-masing status STP(Spanning Tree Protocol) pada switch.



Switch0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0003.E419.A758
            Cost        19
            Port        2(FastEthernet0/2)
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

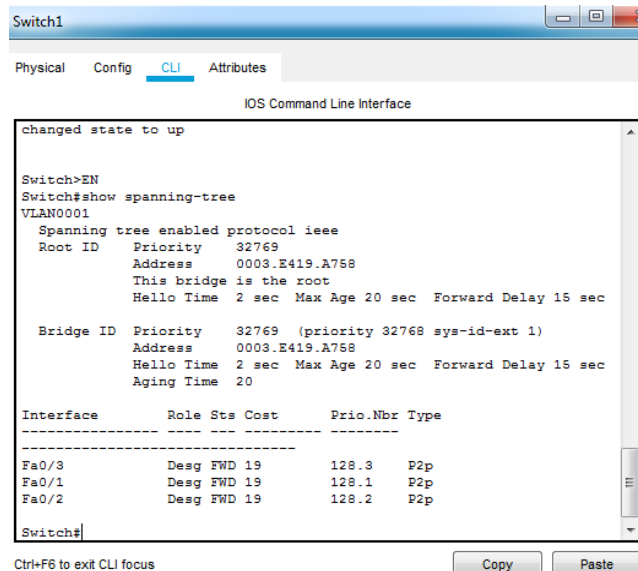
  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
            Address     000C.CF7A.E401
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

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

Switch#
Switch#
```

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Switch1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
changed state to up

Switch>EN
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0003.E419.A758
            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     0003.E419.A758
            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#
```

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```

Switch2
Physical Config CLI Attributes
IOS Command Line Interface

Switch>en
Switch#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID    Priority    32769
           Address    0003.E419.A758
           Cost       19
           Port       2(FastEthernet0/2)
           Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID   Priority    32769 (priority 32768 sys-id-ext 1)
           Address    0004.9A72.073C
           Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
           Aging Time 20

Interface   Role Sts Cost      Prio.Nbr Type
-----
Fa0/2       Root FWD 19        128.2   F2p
Fa0/3       Desg FWD 19        128.3   F2p
Fa0/1       Desg FWD 19        128.1   F2p
Switch#

```

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B.

SW 0

No	Variable	Nilai
	<b>Root ID</b>	
1	Priority	32769
2	MAC Adress	0003.E419.A768
	<b>Bridge ID</b>	
3	Cost(0/1;0/2;0/3)	19
4	Hello Time	2 Sec
5	Max Age	20 Sec
6	Forward Delay	15 Sec

SW1

No	Variable	Nilai
	<b>Root ID</b>	
1	Priority	32769
2	MAC Adress	0003.E419.A768
	<b>Bridge ID</b>	
3	Cost(0/1;0/2;0/3)	19
4	Hello Time	2 Sec
5	Max Age	20 Sec
6	Forward Delay	15 Sec

SW2

No	Variable	Nilai
	<b>Root ID</b>	
1	Priority	32769
2	MAC Address	0003.E419.A758
	<b>Bridge ID</b>	
3	Cost(0/1;0/2;0/3)	19
4	Hello Time	2 Sec
5	Max Age	20 Sec
6	Forward Delay	15 Sec

C. Pada kondisi default *Switch* dan *Port* yang menjadi :

- *Root Bridge* ialah **Switch SW3**
- *Designated Bridge* ialah **Switch SW1**
- *Root Port* ialah **Fa0/3** pada **SW1** dan **Fa0/3** pada **SW2**
- *Designated Port* ialah **Fa0/1** dan **Fa0/2**

D. Pada kondisi default port yang :

- Berada pada keadaan *forwarding* pada **SW1(Fa0/1, Fa0/2, dan Fa0/3)**, **SW2(Fa0/1 dan Fa0/3)**, dan **SW3(Fa0/1, Fa0/2, dan Fa0/3)**.
- Berada pada keadaan *blocking* pada **SW2 (Fa0/2)**.

5. Ping dari Pc Leo ke Virgo

```
C:\>ping 172.21.1.3

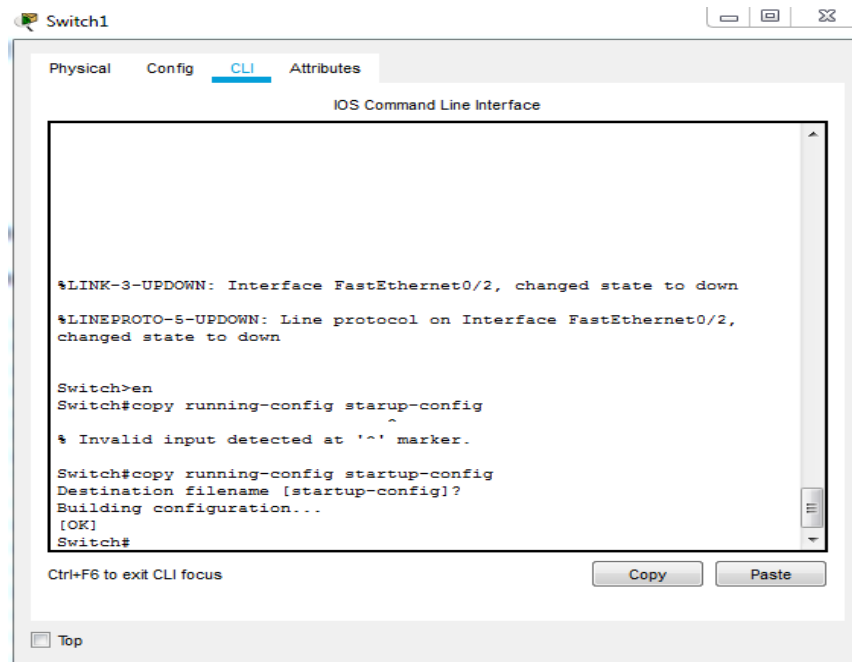
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=1ms 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
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 = 1ms, Average = 0ms

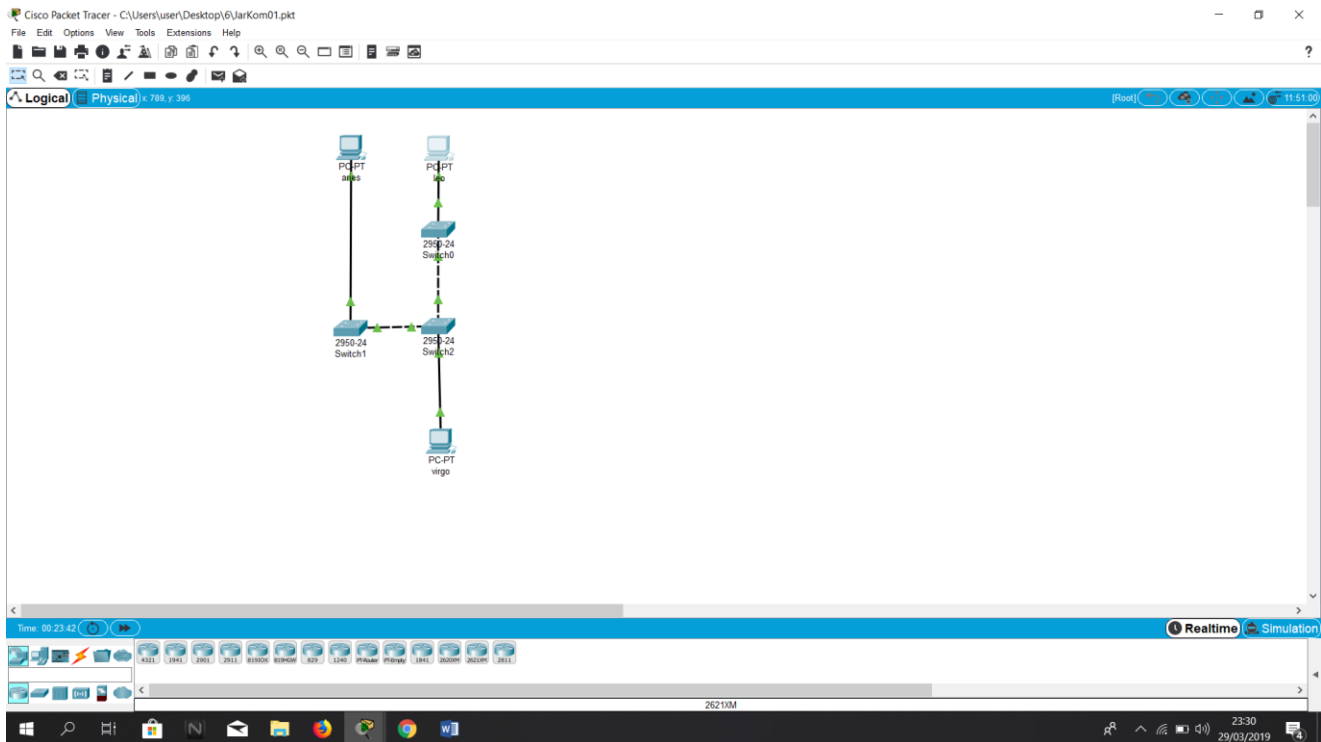
C:\>
```

## 6.A Menyiapkan konfigurasi switch



## Kegiatan 2. Topologi 2

1. menggunakan Packet Tracer mengubah struktur jaringan sebelumnya menjadi seperti dibawah ini.



2. Setelah mengubah struktur topologi jaringan selanjutnya lakukan seperti pada kegiatan 1 No 4 menentukan kondisi *default* tersebut, *switch* dan *port* dengan mengetik ***show spanning-tree*** pada masing-masing *Switch* .
  - Menjadi *root bridge* adalah **SW3**
  - Menjadi *designated bridge* adalah tidak ada yang memiliki jalur terblok.
  - Menjadi *root port* adalah **SW1 (Fa0/3) dan SW2(Fa0/3)**.
  - Menjadi *designated port* adalah tidak ada *designated port* karena pada *designated bridge* tidak ada jalur yang ter blok.

Pada semua *switch* semua *port* pada keadaan *Forwarding*, tidak ada *port* yang ter *Blocking*.

Switch0

Physical Config **CLI** Attributes

IOS Command Line Interface

```

changed state to down

Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0003.E419.A758
              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    000C.CF7A.E401
              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 19        128.3   F2p
Fa0/1          Desg FWD 19        128.1   F2p
Switch#

```

Ctrl+F6 to exit CLI focus

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Switch1

Physical Config **CLI** Attributes

IOS Command Line Interface

```

changed state to up

Switch>EN
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0003.E419.A758
              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    0003.E419.A758
              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   F2p
Fa0/1          Desg FWD 19        128.1   F2p
Fa0/2          Desg FWD 19        128.2   F2p
Switch#

```

Ctrl+F6 to exit CLI focus

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Switch2

PhysicalConfigCLIAttributes

IOS Command Line Interface

Switch>en  
Switch#show spanning-tree  
VLAN0001  
Spanning tree enabled protocol ieee  
Root ID Priority 32769  
Address 0003.EA19.A758  
Cost 19  
Port 2(FastEthernet0/2)  
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec  
  
Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)  
Address 0004.9A72.073C  
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec  
Aging Time 20  
  
Interface Role Sts Cost Prio.Nbr Type  
-----  
Fa0/2 Root FWD 19 128.2 P2p  
Fa0/3 Desg FWD 19 128.3 P2p  
Fa0/1 Desg FWD 19 128.1 P2p  
  
Switch#

Ctrl+F6 to exit CLI focus

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