

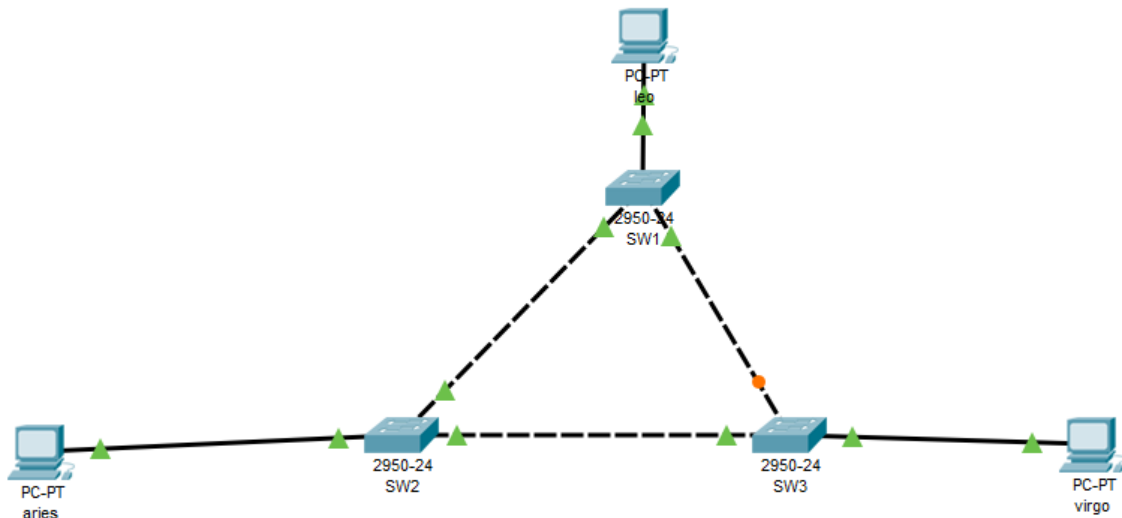
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**Kelas :C**

## **Modul 6**

### **Kegiatan 1. Topologi 1**



#### **Tugas 1A:**

Pertama kita beri 3 Switch 2950-24 lalu kita beri masing-masing PC per Switch dan sambungkan antar peripheral dengan media transmisi kabel

#### **Tugas 2A:**

##### **SW1**

*Switch>en*

*Switch#conf t*

*Enter configuration commands, one per line. End with CNTL/Z.*

*Switch(config)#hostname SW1*

*SW1(config)#end*

##### **SW2**

*Switch>en*

*Switch#conf t*

*Enter configuration commands, one per line. End with CNTL/Z.*

*Switch(config)#hostname SW2*

*SW2(config)#end*

### SW3

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname SW3

SW3(config)#end

### Tugas 4A:

### SW1

The screenshot shows the CLI of a switch named SW1. The user has entered the command 'show spanning-tree' for VLAN0001. The output displays the spanning tree enabled protocol IEEE, the root ID (32769), and the bridge ID (32769). It also shows the interface roles and costs for Fa0/1, Fa0/2, and Fa0/3.

```
SW1>en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address      0005.5E1E.E626
              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      0060.3E9B.9385
              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          Root FWD 19        128.2    P2p
Fa0/3          Desg FWD 19        128.3    P2p
```

SW1#

Ctrl+F6 to exit CLI focus

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## SW2

SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
changed state to up

SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0005.5E1E.E626
            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     0005.5E1E.E626
            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

SW2#
```

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## SW3

SW3

Physical Config **CLI** Attributes

IOS Command Line Interface

```
SW3>en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address    0005.5E1E.E626
             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    0090.2BBC.D8B8
             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          Altn BLK 19        128.3    P2p
Fa0/2          Root FWD 19        128.2    P2p

SW3#
```

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**Tugas 4B:****SW1**

No	Variabel	Nilai
1	Root ID	0005.5E1E.E626
2	Priority	32769
3	Mac Address	0060.3E9B.9385
4	Bridge ID	0060.3E9B.9385
5	Cost(0/1;0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

**SW2**

No	Variabel	Nilai
1	Root ID	0005.5E1E.E626
2	Priority	32769
3	Mac Address	0005.5E1E.E626
4	Bridge ID	0005.5E1E.E626
5	Cost(0/1;0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

**SW3**

No	Variabel	Nilai
1	Root ID	0005.5E1E.E626
2	Priority	32769
3	Mac Address	0090.2BBC.D8B8
4	Bridge ID	0090.2BBC.D8B8
5	Cost(0/1;0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

### Tugas 4C:

*Root bridge* : SW2

*Designated bridge* : SW1

*Root port* : SW1 (Fa0/2), SW3(Fa0/2)

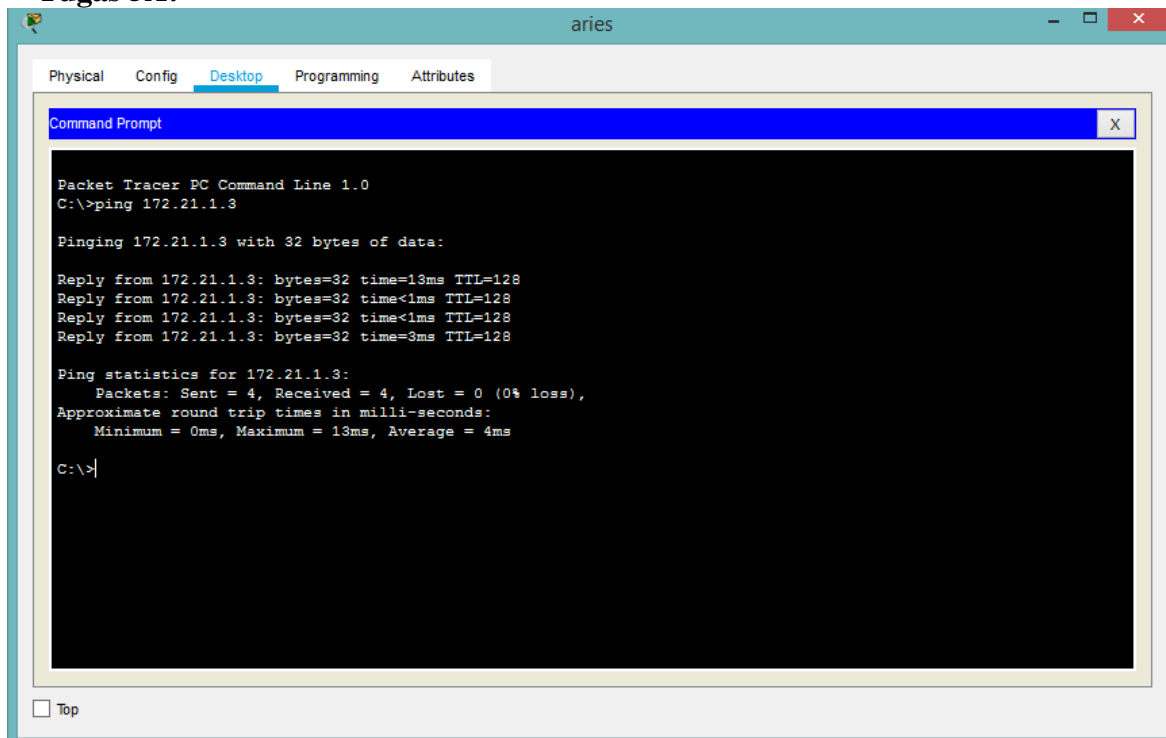
*Designated port* : SW1(Fa0/1;Fa0/3), SW2(Fa0/1,Fa0/2,Fa0/3), SW3(Fa0/1)

### Tugas 4D:

*Forwarding* : SW1(Fa0/1;Fa0/2;Fa0/3), SW2(Fa0/1;Fa0/2;Fa0/3), SW3(Fa0/1;Fa0/2)

*Blocking* : SW3(Fa0/3)

### Tugas 5A:



Masuk ke PC >> Desktop >> Command Prompt

Lalu ketik “ping 172.21.1.3”

### Tugas 6A:

Lakukan perintah dibawah untuk setiap switch :

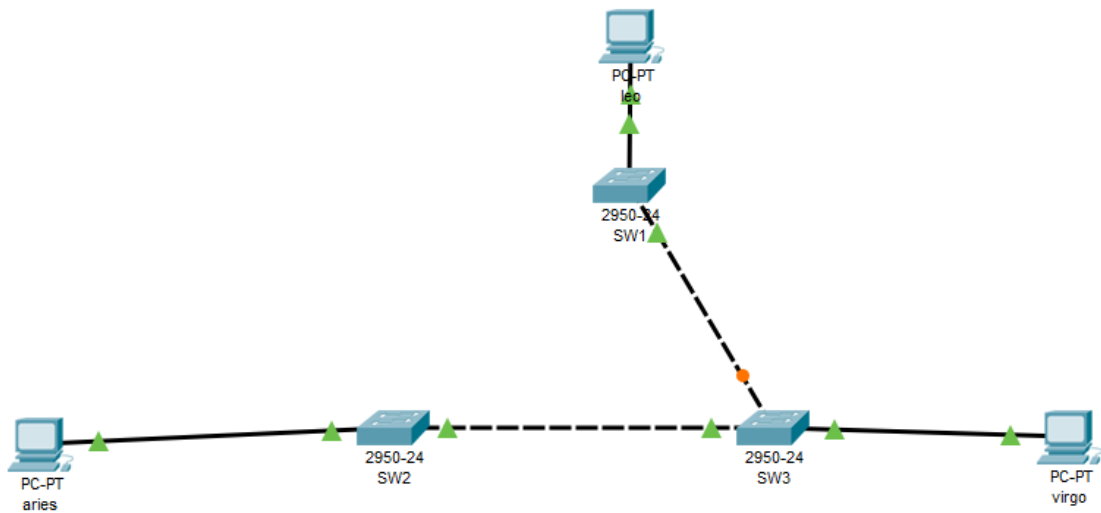
*SW1>en*

*SW1#write*

*Building configuration...*

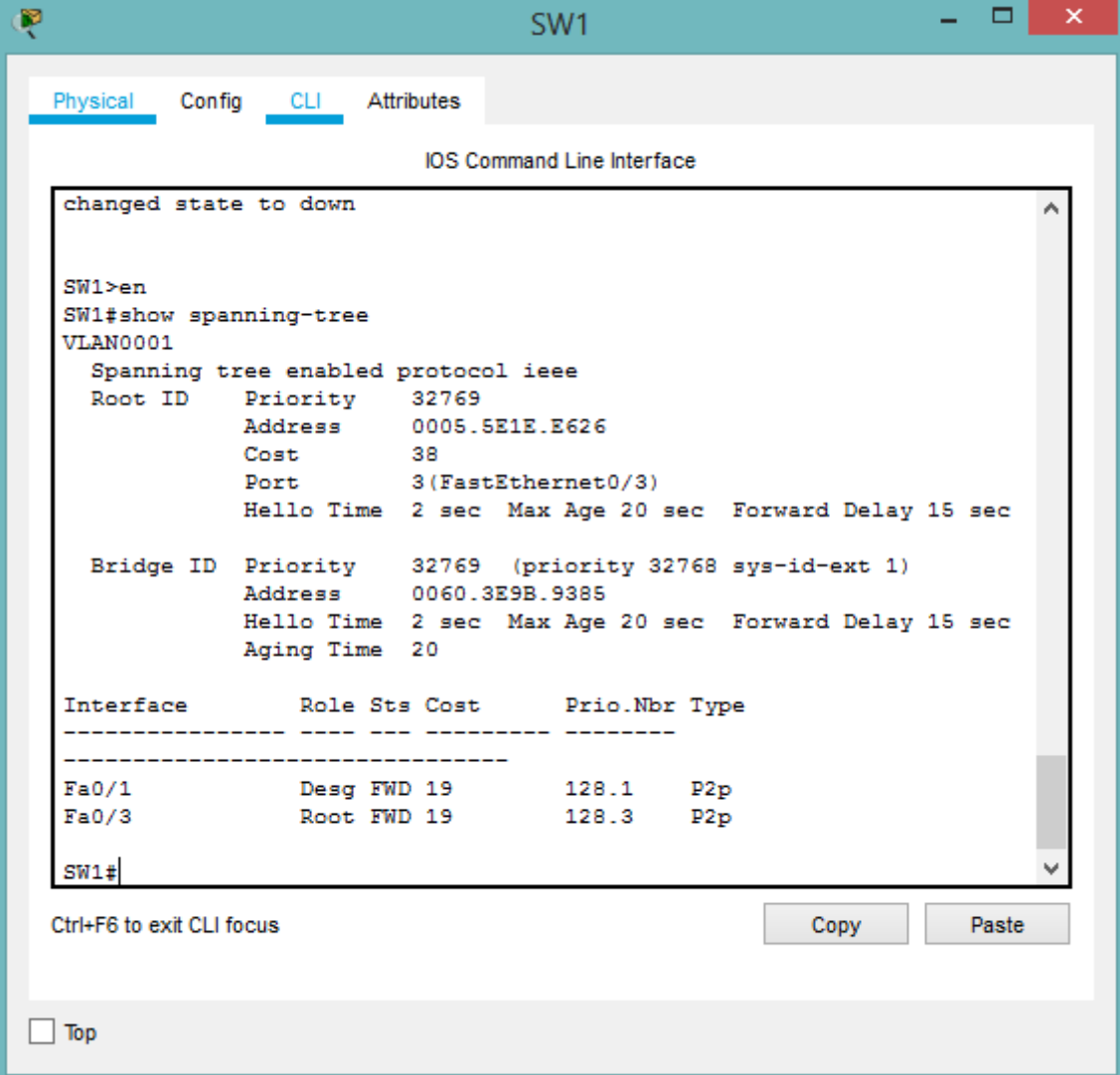
*[OK]*

### Kegiatan 2. Topologi 2



## Tugas 9A:

### SW1



The screenshot shows the CLI interface of a switch named SW1. The 'CLI' tab is selected. The command 'show spanning-tree' has been executed for VLAN0001, displaying the spanning tree configuration. The output shows that the spanning tree is enabled with protocol IEEE. The root ID is 32769 with address 0005.5E1E.E626, cost 38, and port 3 (FastEthernet0/3). The bridge ID is 32769 (priority 32768 sys-id-ext 1) with address 0060.3E9B.9385. The interface Fa0/1 is designated as the root port with a cost of 19, and Fa0/3 is the root port with a cost of 19. The interface Fa0/1 is in the 'Desg' state, and Fa0/3 is in the 'Root' state. The interface Fa0/1 is in the 'FWD' state, and Fa0/3 is in the 'FWD' state. The interface Fa0/1 is in the 'P2p' state, and Fa0/3 is in the 'P2p' state.

changed state to down

SW1>en  
SW1#show spanning-tree  
VLAN0001  
Spanning tree enabled protocol ieee  
Root ID      Priority      32769  
             Address        0005.5E1E.E626  
             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        0060.3E9B.9385  
             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	Root	FWD	19	128.3	P2p

SW1#

Ctrl+F6 to exit CLI focus

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## SW2

Physical

Config

CLI

Attributes

SW2

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3,
changed state to down

SW2#en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0005.5E1E.E626
             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     0005.5E1E.E626
             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

SW2#
```

Ctrl+F6 to exit CLI focus

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## SW3

Physical

Config

CLI

Attributes

SW3

IOS Command Line Interface

```
SW3>en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0005.5E1E.E626
             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     0090.2BBC.D8B8
             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
Fa0/2          Root FWD 19        128.2    P2p

SW3#
```

Ctrl+F6 to exit CLI focus

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**SW1**

No	Variabel	Nilai
1	Root ID	0005.5E1E.E626
2	Priority	32769
3	Mac Address	0060.3E9B.9385
4	Bridge ID	0060.3E9B.9385
5	Cost(0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

**SW2**

No	Variabel	Nilai
1	Root ID	0005.5E1E.E626
2	Priority	32769
3	Mac Address	0005.5E1E.E626
4	Bridge ID	0005.5E1E.E626
5	Cost(0/2;0/3)	19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

**SW3**

No	Variabel	Nilai
1	Root ID	0005.5E1E.E626
2	Priority	32769
3	Mac Address	0090.2BBC.D8B8
4	Bridge ID	0090.2BBC.D8B8
5	Cost(0/1;0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

***Root bridge :*** SW2

***Designated bridge :*** SW3

***Root port :*** SW1 (Fa0/3), SW3(Fa0/2)

***Designated port :*** SW1(Fa0/1), SW2(Fa0/1;Fa0/2), SW3(Fa0/1;Fa0/3)

***Forwarding :*** SW1(Fa0/1;Fa0/3), SW2(Fa0/1;Fa0/2),  
SW3(Fa0/1;Fa0/2;Fa0/3)

***Blocking :*** None