

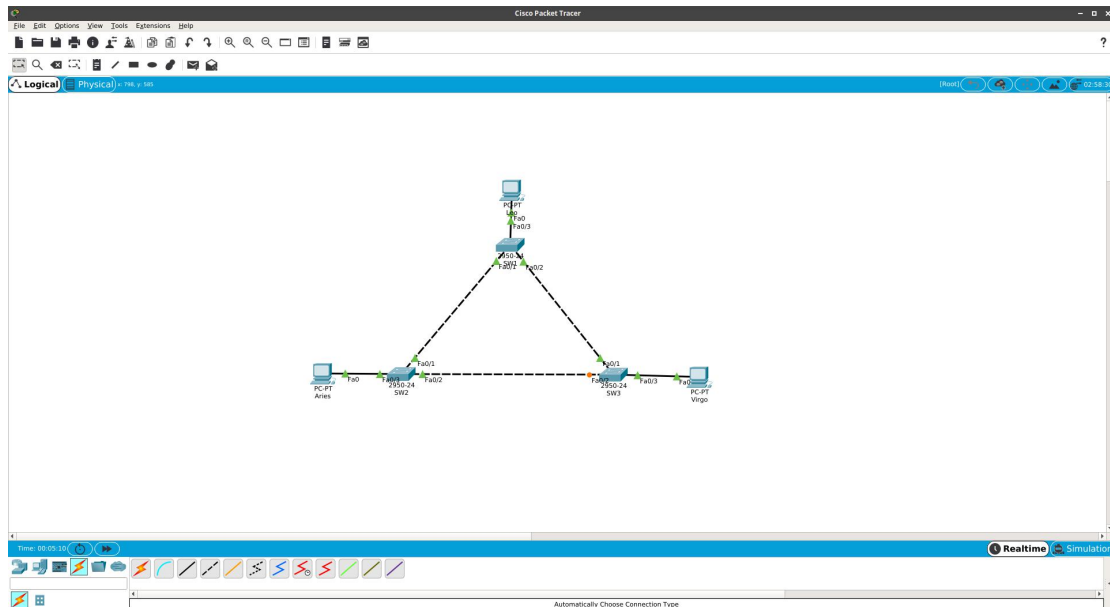
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Kelas : C

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 switch SW1. The 'CLI' tab is selected. The command 'show spanning-tree' has been executed, displaying the spanning tree configuration for VLAN0001. The output indicates that SW1 is the root bridge for this VLAN. Below the spanning tree information, a table shows the status of interfaces Fa0/1, Fa0/2, and Fa0/3, all of which are in the 'Desg FWD 19' state.

```
SW1>en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.9633.4035
             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     0001.9633.4035
             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              Desg FWD 19      128.3   P2p

SW1#
```

Ctrl+F6 to exit CLI focus

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☐ Top

SW2

Physical

Config

CLI

Attributes

SW2

IOS Command Line Interface

```
SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0001.9633.4035
            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     0003.E4C0.6B85
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface      Role Sts Cost      Prio.Nbr Type
-----
Fa0/1          Root FWD 19        128.1    P2p
Fa0/2          Desg FWD 19        128.2    P2p
Fa0/3          Desg FWD 19        128.3    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     0001.9633.4035
            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     00E0.8F44.52D6
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

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

SW3#
```

Ctrl+F6 to exit CLI focus

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Tugas 4B:**SW1**

| No | Variabel | Nilai |
|----|-------------------|----------------|
| 1 | Root ID | 0001.9633.4035 |
| 2 | Priority | 32769 |
| 3 | Mac Address | 0001.9633.4035 |
| 4 | Bridge ID | 0001.9633.4035 |
| 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 | 0001.9633.4035 |
| 2 | Priority | 32769 |
| 3 | Mac Address | 0003.E4C0.6B85 |
| 4 | Bridge ID | 0003.E4C0.6B85 |
| 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 | 0001.9633.4035 |
| 2 | Priority | 32769 |
| 3 | Mac Address | 00E0.8F44.52D6 |
| 4 | Bridge ID | 00E0.8F44.52D6 |
| 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 : SW1

Designated bridge : SW2

Root port : SW2 (Fa0/1), SW3(Fa0/1)

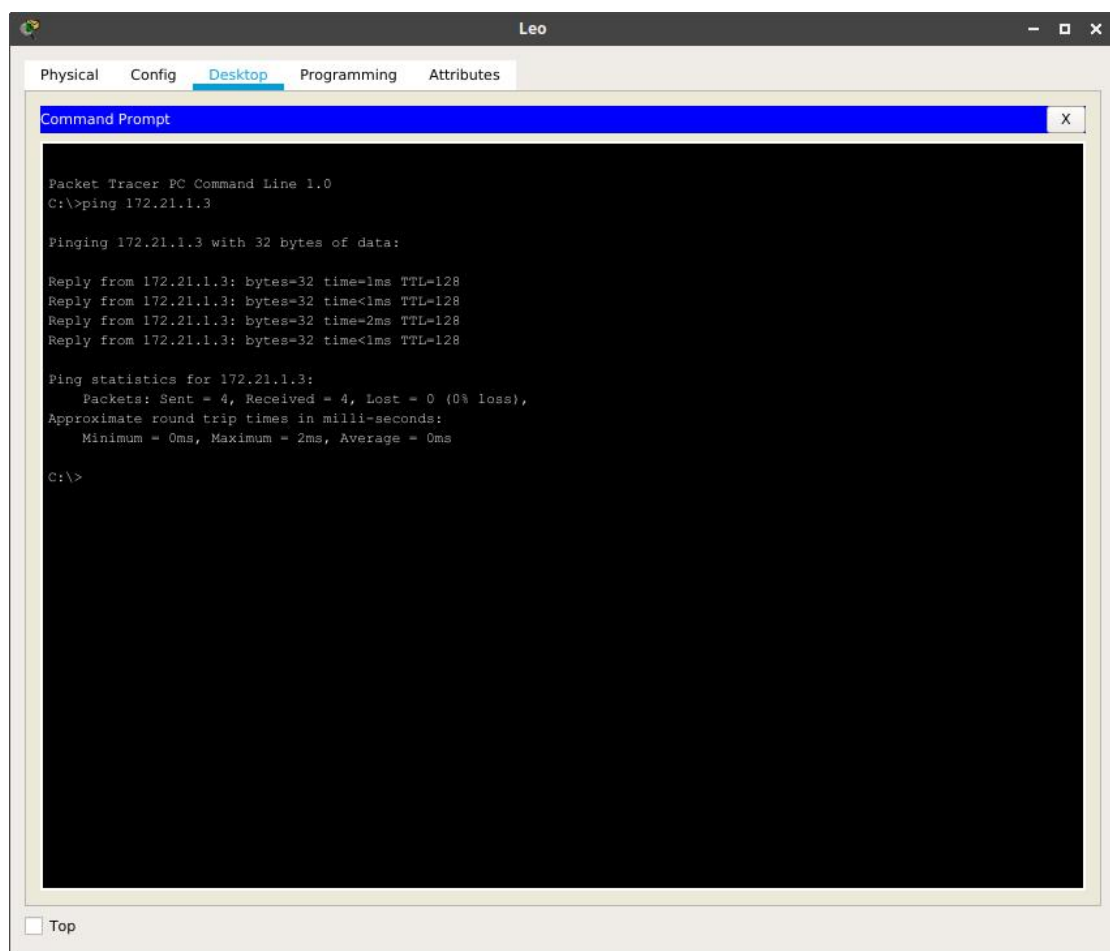
Designated port : SW1(Fa0/1;Fa0/2;Fa0/3), SW2(Fa0/2;Fa0/3), SW3(Fa0/3)

Tugas 4D:

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

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 :

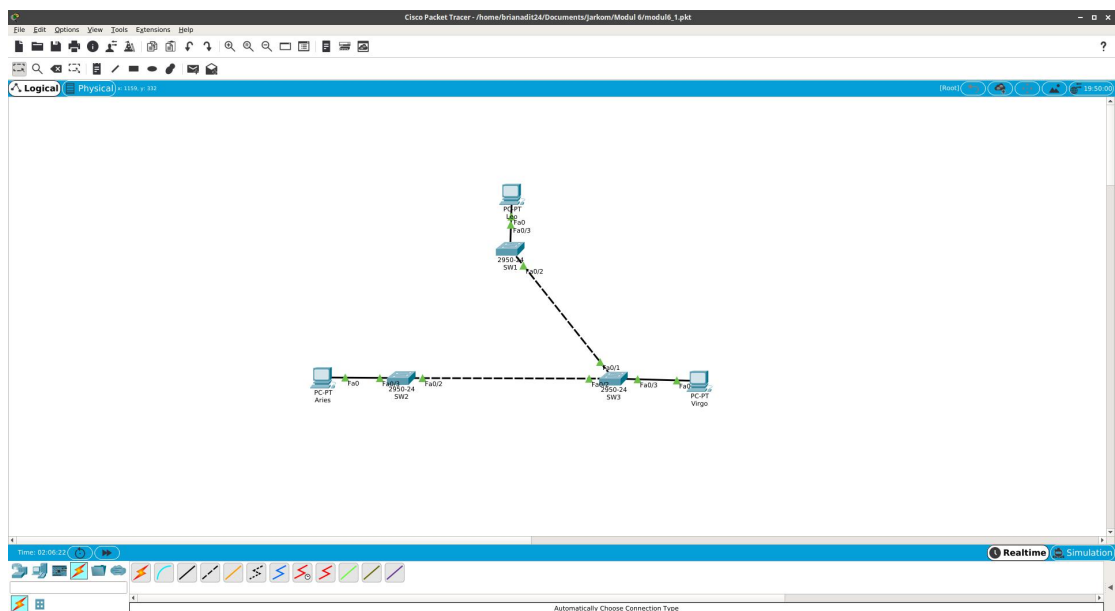
SW1>en

SW1#write

Building configuration...

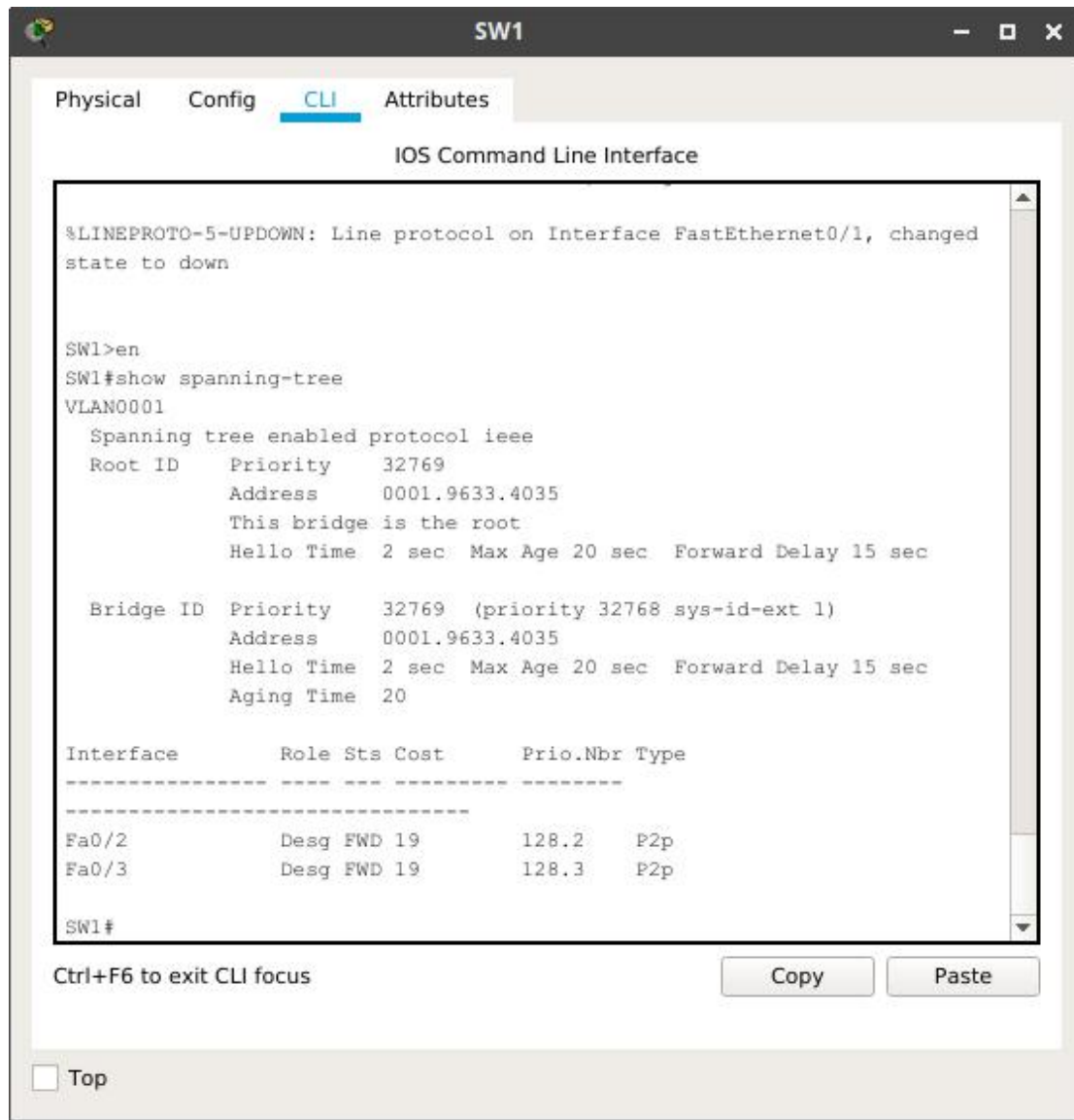
[OK]

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 history shows the user entering 'en' to enter enable mode, then 'show spanning-tree' to view the spanning tree configuration for VLAN0001. The output indicates that the spanning tree is enabled and that the switch is the root of the tree. Below this, a table shows the status of interfaces Fa0/2 and Fa0/3, both in a forwarding state.

Physical Config **CLI** Attributes

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed
state to down

SW1>en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address      0001.9633.4035
             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      0001.9633.4035
             Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
             Aging Time 20

Interface      Role Sts Cost      Prio.Nbr Type
-----
Fa0/2          Desg 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

Physical

Config

CLI

Attributes

SW2

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed
state to down

SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address      0001.9633.4035
            Cost        38
            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      0003.E4C0.6B85
            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

SW2#
```

Ctrl+F6 to exit CLI focus

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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    0001.9633.4035
            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    00E0.8F44.52D6
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

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

SW3#
```

Ctrl+F6 to exit CLI focus

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SW1

| No | Variabel | Nilai |
|----|---------------|----------------|
| 1 | Root ID | 0001.9633.4035 |
| 2 | Priority | 32769 |
| 3 | Mac Address | 0001.9633.4035 |
| 4 | Bridge ID | 0001.9633.4035 |
| 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 | 0001.9633.4035 |
| 2 | Priority | 32769 |
| 3 | Mac Address | 0003.E4C0.6B85 |
| 4 | Bridge ID | 0003.E4C0.6B85 |
| 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 | 0001.9633.4035 |
| 2 | Priority | 32769 |
| 3 | Mac Address | 00E0.8F44.52D6 |
| 4 | Bridge ID | 00E0.8F44.52D6 |
| 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 : SW1

Designated bridge : SW3

Root port : SW2 (Fa0/1), SW3(Fa0/2)

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

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

Blocking : None