

Nama : Windiapriani Ginayawati

NIM : L200170157

Kelas : D

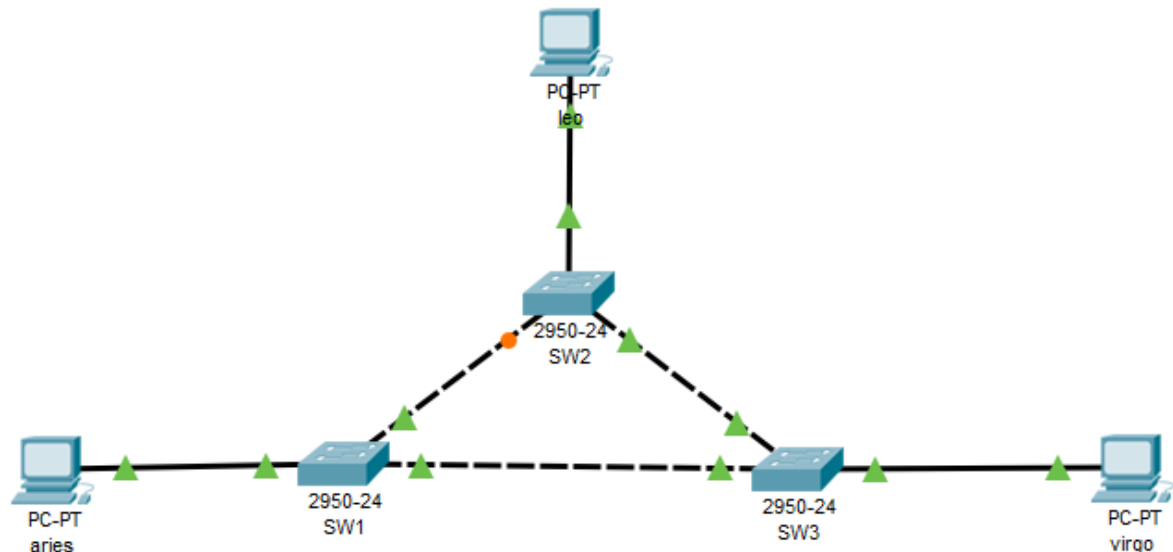
Modul: VI

---

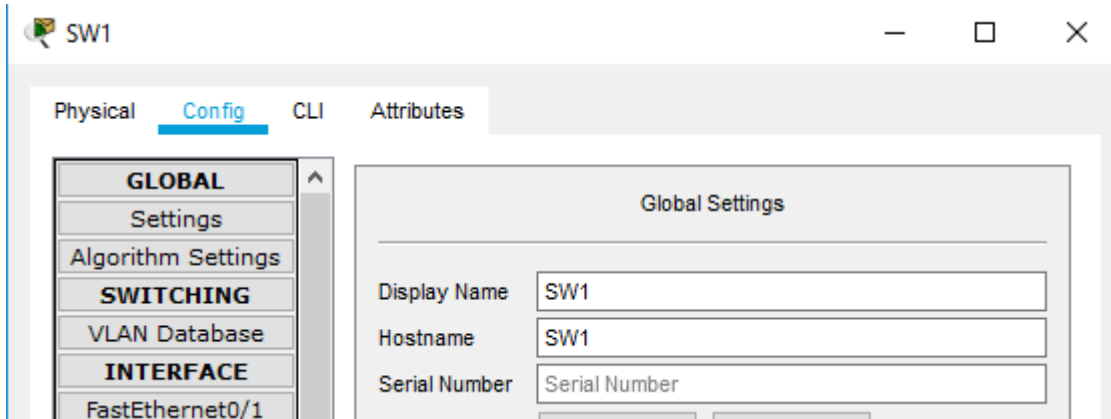
## Tugas Modul VI

### Kegiatan 1. Topologi 1

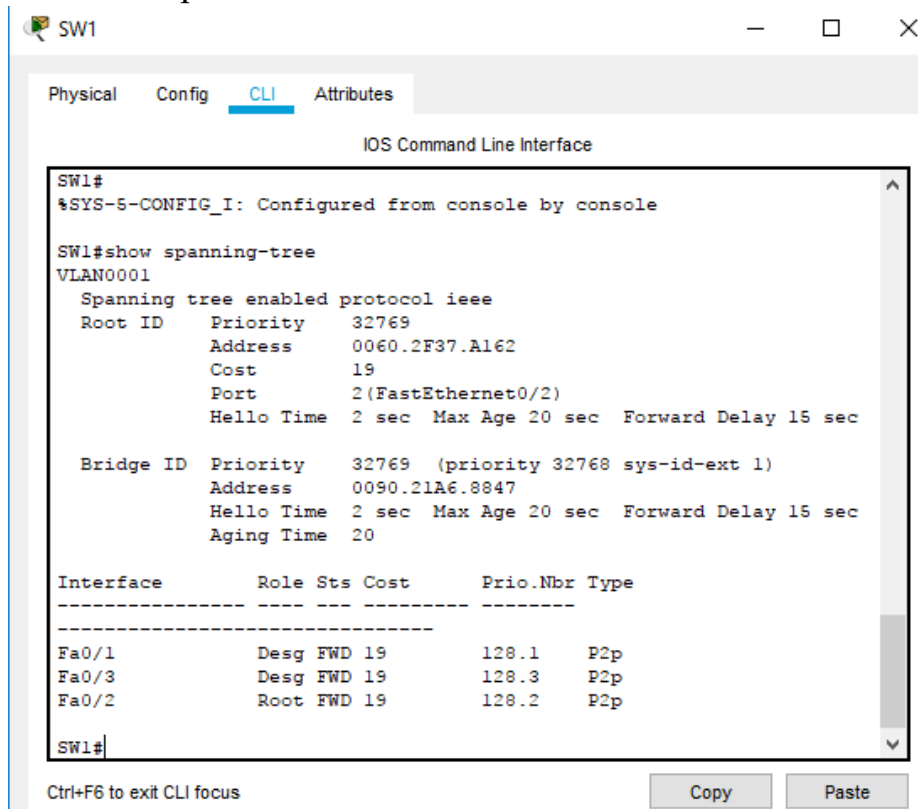
- Tugas 1A: Tulis langkah pembuatan topologi
  - Menggunakan packet tracer, siapkan 3 switch 2950-24 dan 3 PC dengan ketentuan IP Address sebagai berikut.
  - PC leo = 172.21.1.1/24
  - PC aries = 172.21.1.2/24
  - PC virgo = 172.21.1.3/24
  - Lalu dibuat topologinya seperti gambar berikut ini.



- Tugas 2A: Tulis langkah pemberian nama switch.
  - Klik sekali pada switch yang ingin diberi nama/diubah namanya.
  - Pada tab config, terdapat kolom bernama display name dan hostname. Ubah nama switch pada kolom display name sesuai yang diinginkan.



- Tugas 4A: Pada kondisi default, capture masing-masing tampilan status STP ketiga switch
- Status STP pada SW1



- Status STP pada SW2

SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```

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     0060.2F37.A162
            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     00D0.FF87.EBED
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

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

SW2#

Ctrl+F6 to exit CLI focus

Copy Paste

○ Status STP pada SW3

SW3

Physical Config **CLI** Attributes

IOS Command Line Interface

```

SW3(config)#ex
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     0060.2F37.A162
            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     0060.2F37.A162
            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
  
```

SW3#

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- Tugas 4B: isi tabel berikut sesuai status STP tiap switch

- SW1

No	Variabel	Nilai
1	Root ID	32769 : 0060.2F37.A162
2	Priority	32769
3	MAC Address	0090.21A6.0047
4	Bridge ID	32769 : 0090.21A6.0047
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW2

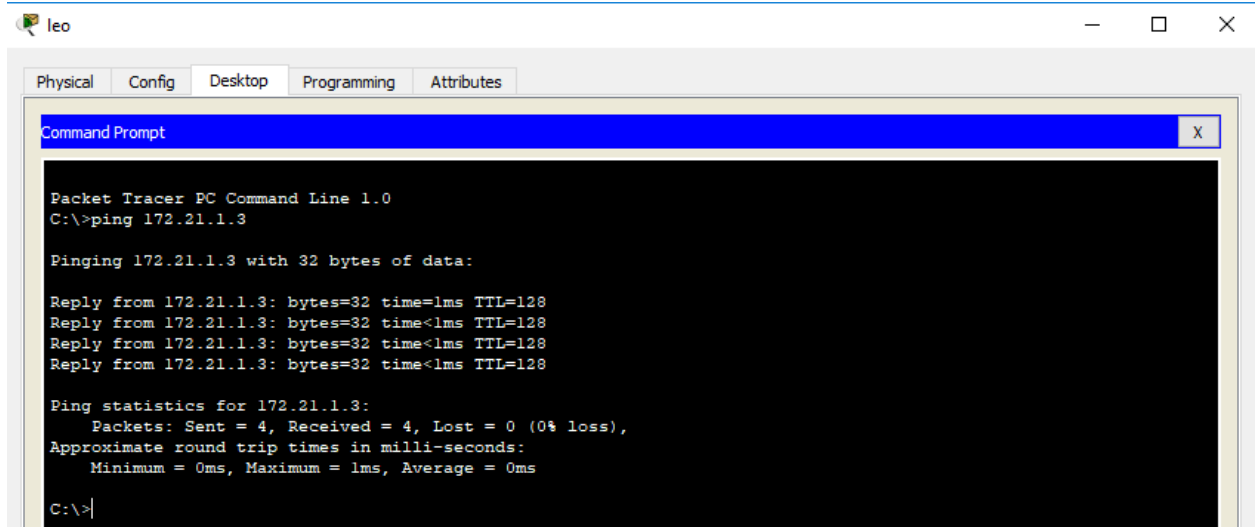
No	Variabel	Nilai
1	Root ID	32769 : 0060.2F37.A162
2	Priority	32769
3	MAC Address	00D0.FF87.EBED
4	Bridge ID	32769 : 00D0.FF87.EBED
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW3

No	Variabel	Nilai
1	Root ID	32769 : 0060.2F37.A162
2	Priority	32769
3	MAC Address	0060.2F37.A162
4	Bridge ID	32769 : 0060.2F37.A162
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- Tugas 4C: pada kondisi default tersebut, switch dan port mana saja yang:
  - Menjadi root bridge = SW3
  - Menjadi designated bridge = SW2(0/3) dan SW1(0/1;0/3)
  - Menjadi root port = SW2(0/2), dan SW1(0/2)
  - Menjadi designated port = SW3(0/1;0/2;0/3), SW2(0/3), dan SW1(0/1;0/3)

- Tugas 4D: pada kondisi default tersebut, switch dan port mana saja yang:
  - Berada pada keadaan forwarding = SW1(0/1;0/2;0/3), SW2(0/2;0/3), dan SW3(0/1;0/2;0/3)
  - Berada pada keadaan blocking = SW2(0/1)
- Tugas 5A: Langkah untuk melakukan ping
  - Klik pada salah satu PC, lalu pilih tab desktop
  - Setelah itu klik command prompt
  - Masukkan perintah ping lalu IP dari PC lain yang akan diuji koneksinya, misalnya ping dari PC leo ke PC virgo seperti gambar berikut ini.

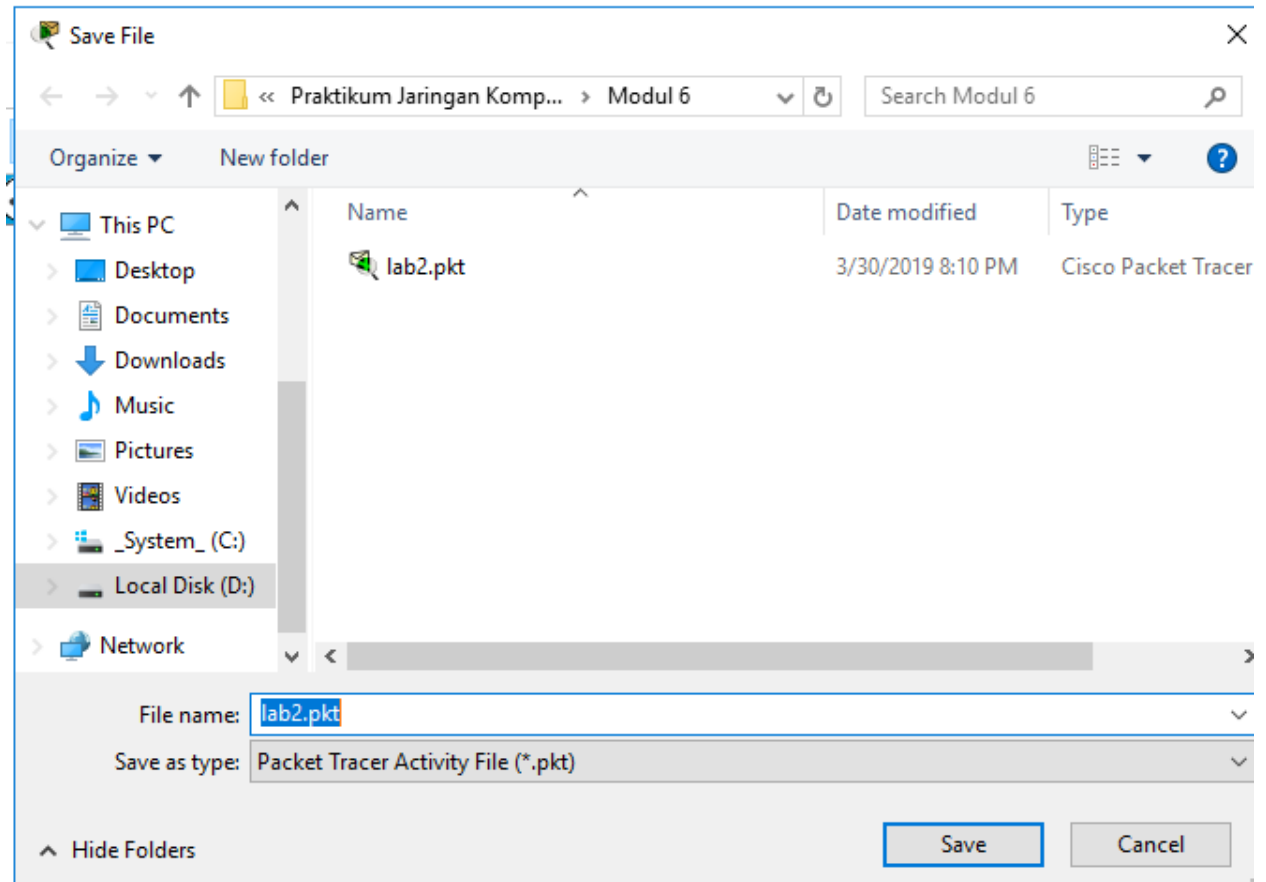


- Tugas 6A:
 

Klik switch kemudian pilih CLI masuk ke mode user/privillage kemudian tulis Swtich#copy running-config startup-config Lalu enter. Simpan konfigurasi jaringan dengan nama lab2.pkt

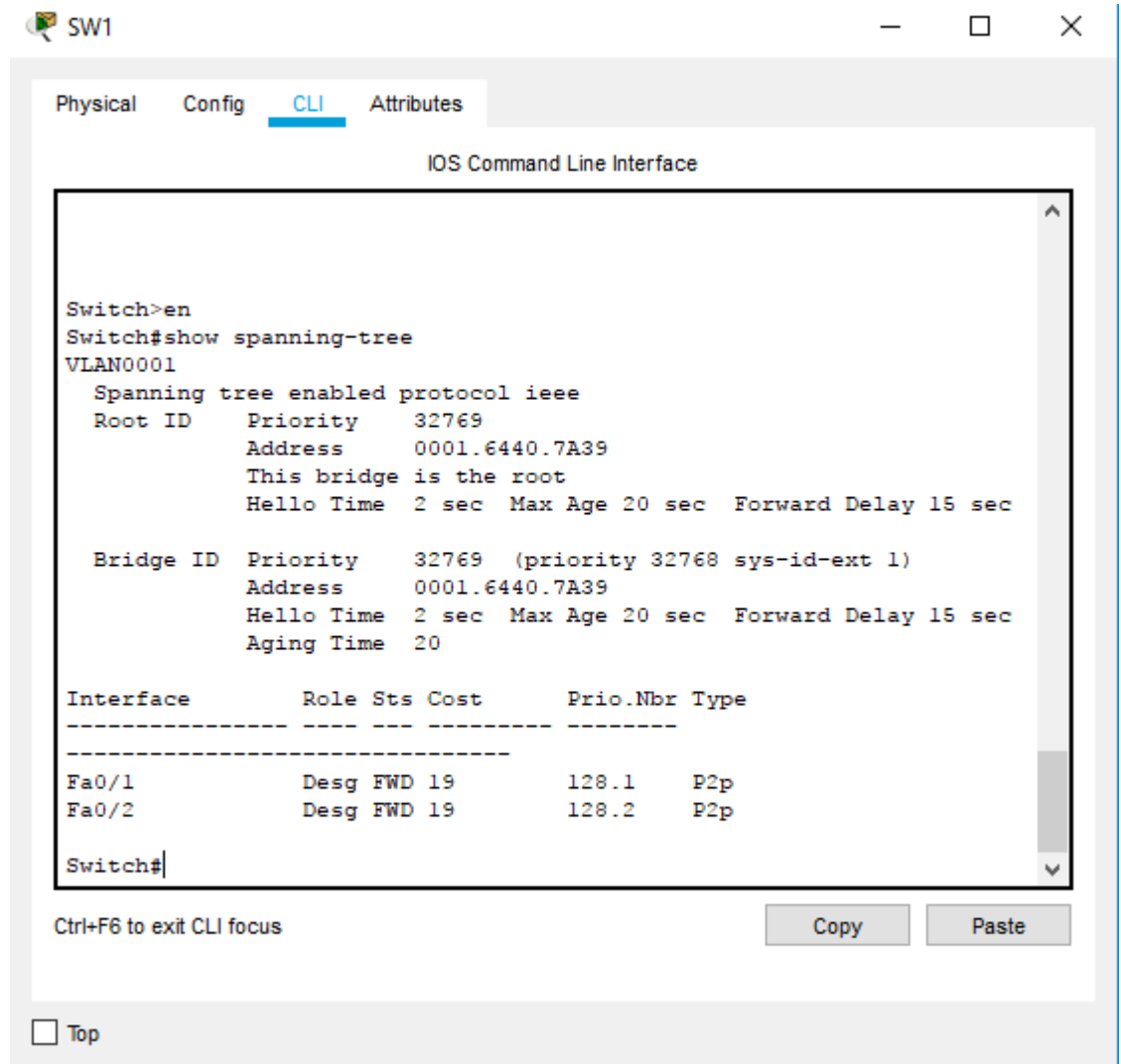
```

SW1>en
SW1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
SW1#
  
```



## Kegiatan 2. Topologi 2

- Tugas 9A: kerjakan sama seperti tugas 4
  - Status STP tiap switch
- SW1



The screenshot shows the CLI of a switch named SW1. The 'CLI' tab is selected. The command 'show spanning-tree' is executed, displaying the STP status for VLAN0001. The output indicates that the spanning tree is enabled, the root is the local bridge, and the interfaces Fa0/1 and Fa0/2 are in the 'Desg FWD' state.

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.6440.7A39
             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     0001.6440.7A39
             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

Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

Top

○ SW2

SW2

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      0001.6440.7A39  
             Cost          38  
             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      0010.1174.63E5  
             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  
  
Switch#

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top



- SW3

```

Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address    0001.6440.7A39
            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    0001.9762.1D70
            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
Fa0/3                    Desg FWD 19        128.3    P2p
Fa0/2                    Desg FWD 19        128.2    P2p

Switch#
  
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- Isi tabel sesuai status STP tiap switch

- SW1

No	Variabel	Nilai
1	Root ID	32769 : 0001.6440.7A39
2	Priority	32769
3	MAC Address	0001.6440.7A39
4	Bridge ID	32769 : 0001.6440.7A39
5	Cost(0/1;0/2)	19
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

○ SW2

No	Variabel	Nilai
1	Root ID	32769 : 0001.6440.7A39
2	Priority	32769
3	MAC Address	0010.1174.63E5
4	Bridge ID	32769 : 0010.1174.63E5
5	Cost(0/1;0/2)	19
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

○ SW3

No	Variabel	Nilai
1	Root ID	32769 : 0001.6440.7A39
2	Priority	32769
3	MAC Address	0001.9762.1D70
4	Bridge ID	32769 : 0001.9762.1D70
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

- Tugas 4C: pada kondisi default tersebut, switch dan port mana saja yang:
  - Menjadi root bridge = SW1
  - Menjadi designated bridge = SW2(0/2) dan SW3(0/2;0/3)
  - Menjadi root port = SW2(0/1) dan SW3(0/1)
  - Menjadi designated port = SW1 (0/1;0/2), SW2 (0/1;0/2), dan SW3(0/2;0/3)
- Tugas 4D: pada kondisi default tersebut, switch dan port mana saja yang:
  - Berada pada keadaan forwarding = SW1(0/1;0/2), SW2(0/1;0/2), dan SW3(0/1;0/2;0/3)
  - Berada pada keadaan blocking = Tidak ada switch yang berada pada keadaan blocking