

Nama : Nur Taufiq Hidayat

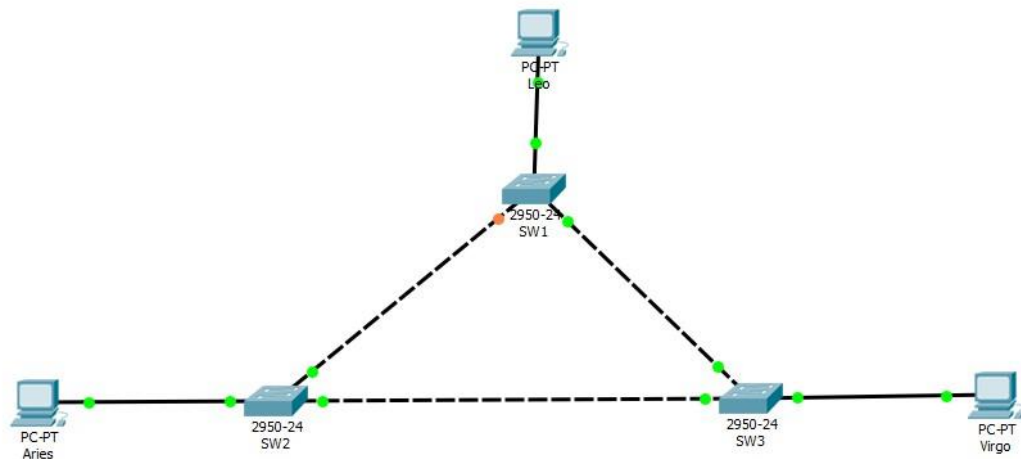
NIM : L200180069

Kelas : B

MODUL 6

Kegiatan Praktikum 1. Topologi 1

- a. Membuat topologi pada packet tracer menggunakan switch Catalyst 2950



Tugas 1A

- Pada bagian Network Devices, klik bagian Switches, dan letakkan 3 buah Switch tipe 2950-24 bentuk seperti gambar.
 - Klik ikon End Devices, klik ikon PC dengan keterangan Generic Computer, letakkan 3 di dekat switch masing-masing satu.
 - Untuk menghubungkan pilih pada bagian Connections, klik ikon petir, lalu sambungkan dari switch satu ke yang lain, lalu hubungkan PC dengan switch yang berada di dekatnya.
- b. Memberi nama pada masing-masing switch dengan SW1, SW2, dan SW3

Tugas 2A

- SW1

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW1
SW1(config)#exit
SW1#
```

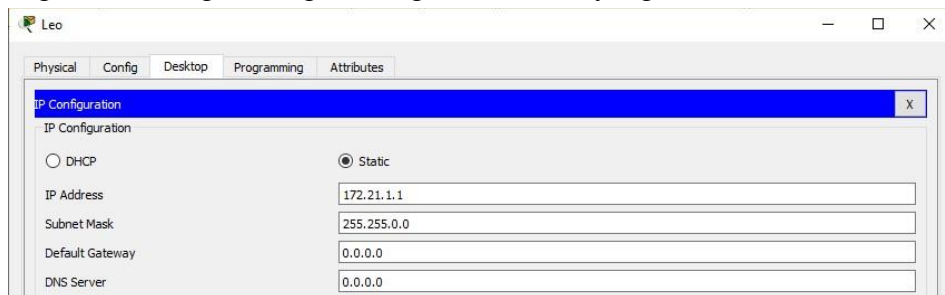
- SW2

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW2
SW2(config)#exit
SW2#
```

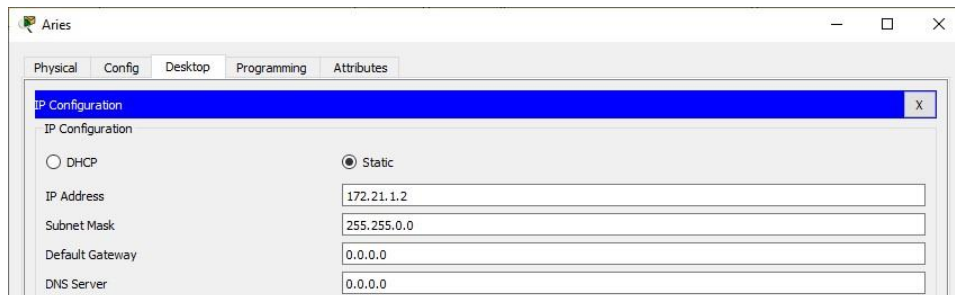
- SW3

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#exit
SW3#
```

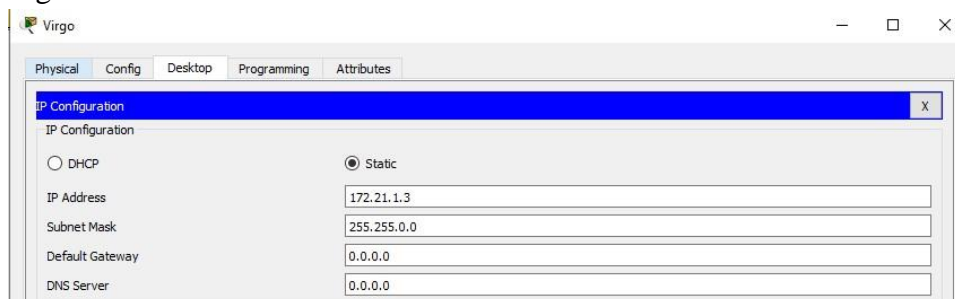
c. Konfigurasi masing-masing IP dengan alamat IP yang tertera di modul □ Leo



- Aries



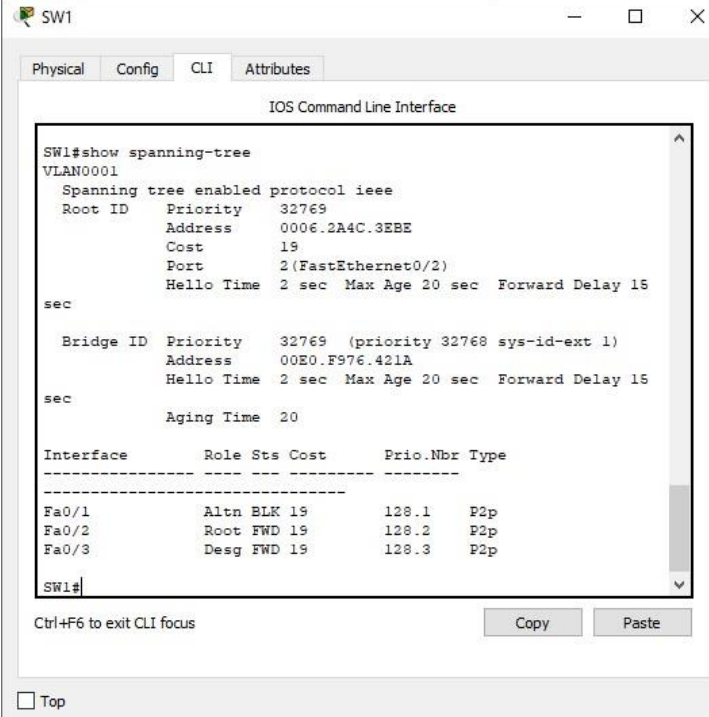
- Virgo



d. Pada mode user atau mode privileged, melihat status STP pada masing-masing switch

Tugas 4A

- SW1



SW1

Physical Config CLI Attributes

IOS Command Line Interface

```
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0006.2A4C.3EBE
            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     00E0.F976.421A
            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

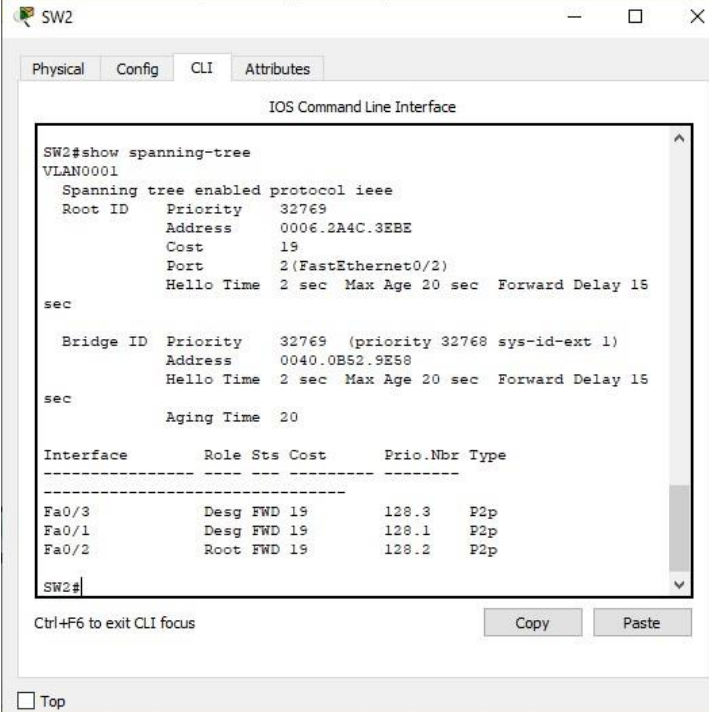
SW1#
```

Ctrl+F6 to exit CLI focus

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- SW2



SW2

Physical Config CLI Attributes

IOS Command Line Interface

```
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0006.2A4C.3EBE
            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     0040.0B52.9E58
            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        Root FWD 19        128.2    P2p

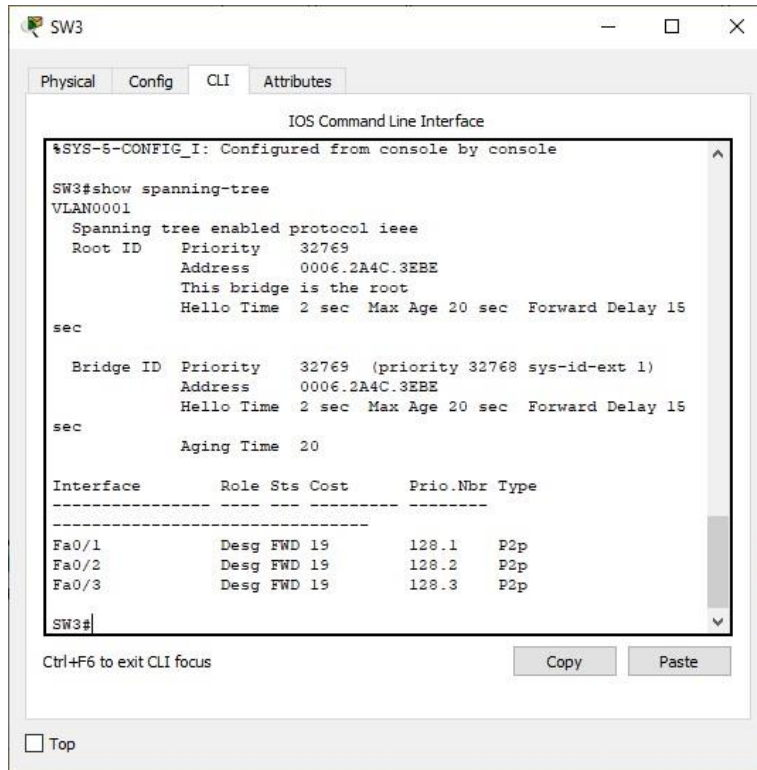
SW2#
```

Ctrl+F6 to exit CLI focus

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- SW3



Tugas 4B

- SW1

No.	Variabel	Nilai
1.	Root ID	32769
2.	Priority	32769
3.	MAC Address	00E0.F976.421A
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

No.	Variabel	Nilai
1.	Root ID	32769
2.	Priority	32769
3.	MAC Address	0040.0B52.9E58
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	32769
3.	MAC Address	0006.2A4C.3EBE
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

Tugas 4C

- Root bridge : SW3
- Designated bridge : SW2
- Root port : SW1 (Fa0/2), SW2 (Fa0/2)
- Designated port : SW1 (Fa0/3), SW2 (Fa0/1, Fa0/3), SW3 (Fa0/1, Fa0/2, Fa0/3)

Tugas 4D

- Forwarding : ○ SW1 : Fa0/2, Fa0/3 ○ SW2 : Fa0/1, Fa0/2, Fa0/3 ○ SW3 : Fa0/1, Fa0/2, Fa0/3
- Blocking : SW1 (Fa0/1)

e. Melakukan ping dari PC Leo ke PC Virgo

```

Leo
Physical Config Desktop Programming Attributes
Command Prompt X
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=16ms 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

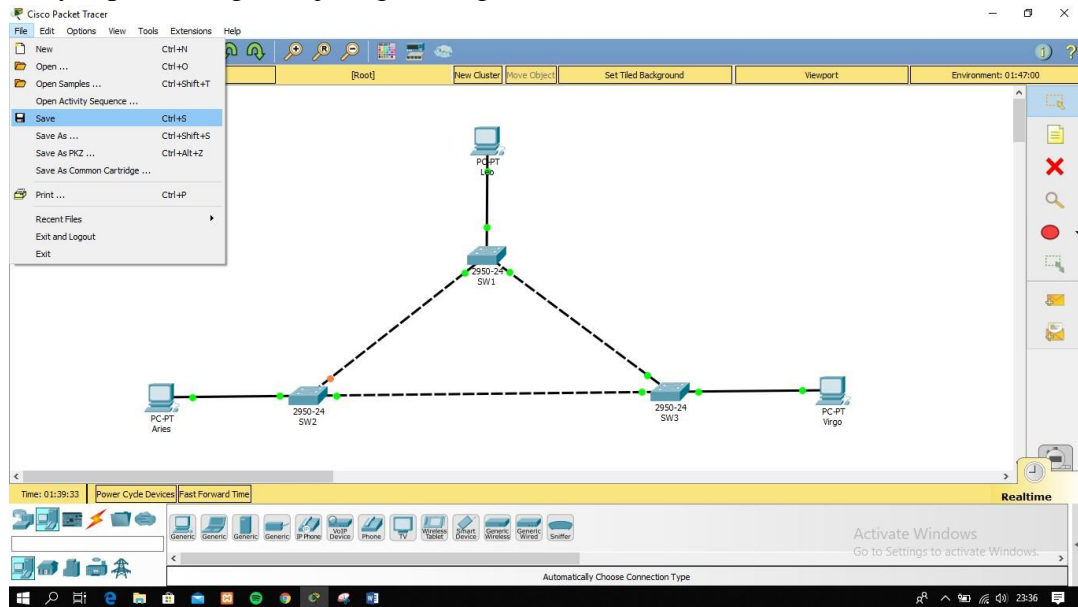
Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 16ms, Average = 4ms
C:\>

```

Tugas 5A

- Klik pada PC Leo
- Pilih tab desktop
- Pilih command prompt
- Ketikkan ping 172.21.1.3

f. Menyimpan konfigurasi jaringan dengan nama lab2.nwc

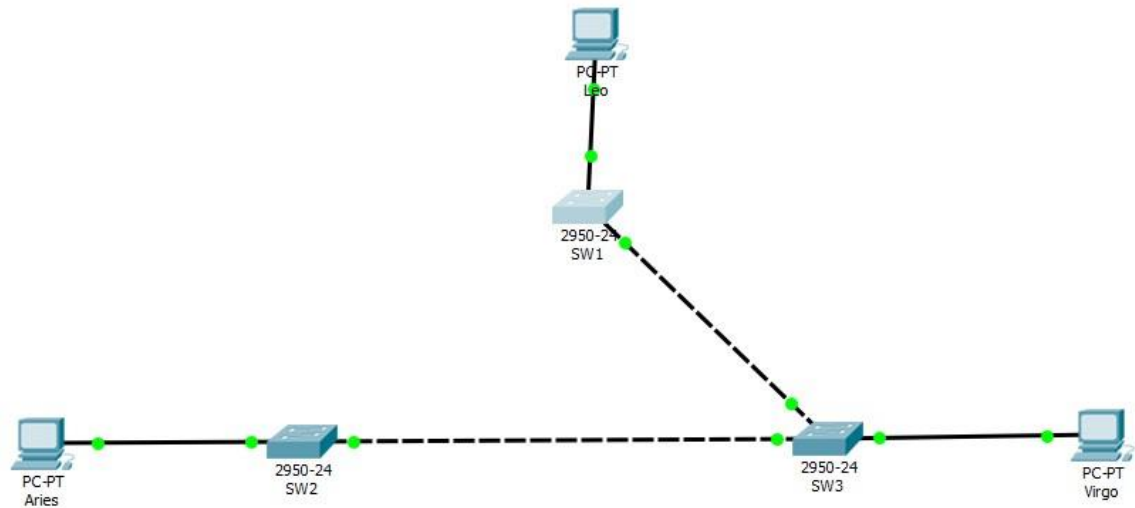


Tugas 6A

- Pilih file
- Pilih save
- Pilih direktori untuk tempat menyimpan
- Isikan nama dengan lab2 (ekstensi akan sesuai dengan aplikasi yang digunakan)

2. Topologi 2

Mengubah topologi menjadi berikut :



Tugas 9A

- SW1

SW1

Physical
Config
CLI
Attributes

IOS Command Line Interface

```

SW1>show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0006.2A4C.3EBE
            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     00E0.F976.421A
            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
Fa0/2          Root FWD 19        128.2    P2p

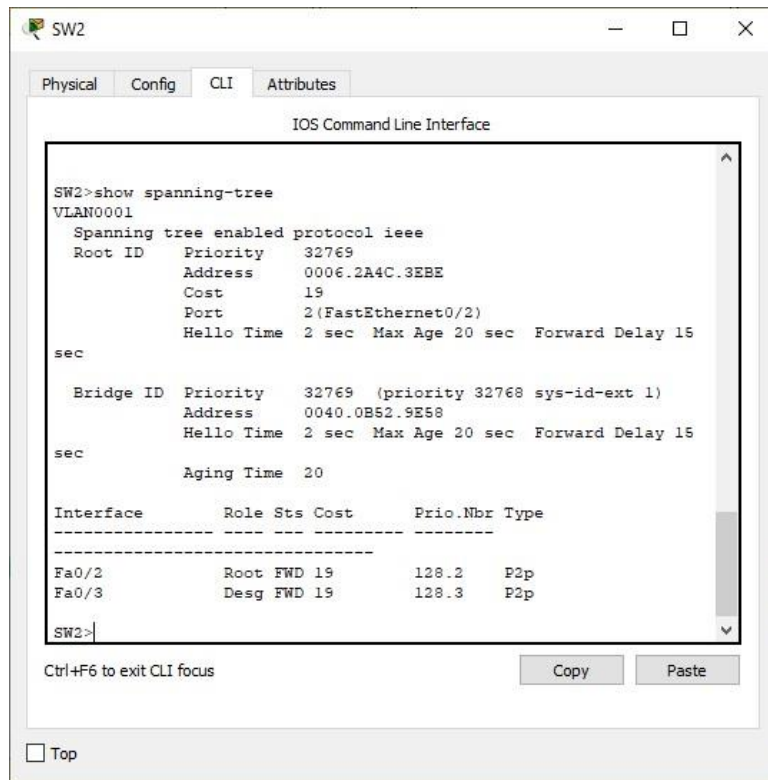
```

SW1>

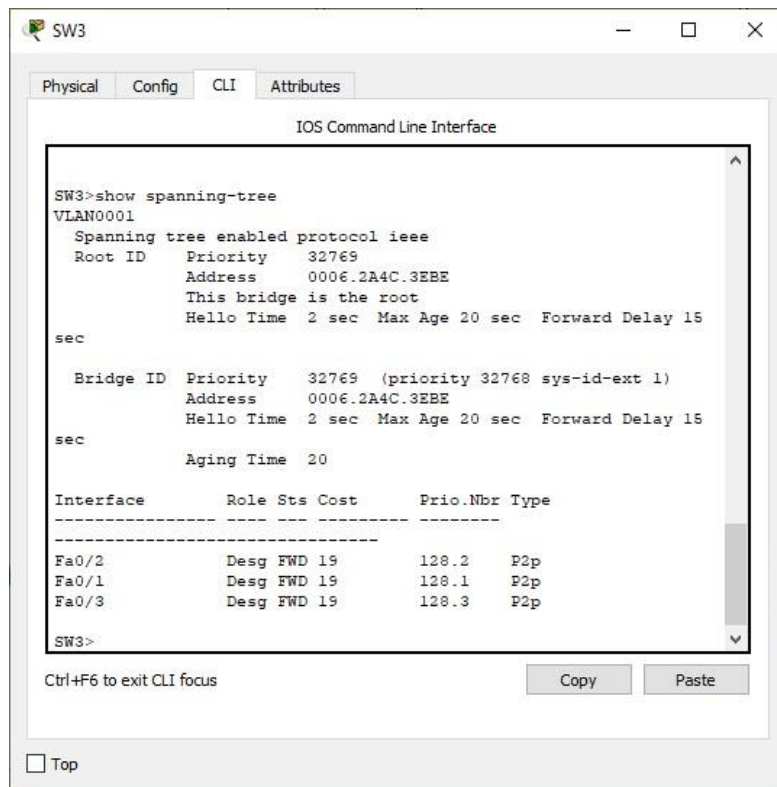
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- SW2



- SW3



- SW1

No.	Variabel	Nilai
1.	Root ID	32769
2.	Priority	32769
3.	MAC Address	00E0.F976.421A
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

No.	Variabel	Nilai
1.	Root ID	32769
2.	Priority	32769
3.	MAC Address	0040.0B52.9E58
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	32769
3.	MAC Address	0006.2A4C.3EBE
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 : SW3
- Designated bridge : SW2
- Root port : SW1 (Fa0/2), SW2 (Fa0/2)
- Designated port : SW1 (Fa0/3), SW2 (Fa0/3), SW3 (Fa0/1, Fa0/2, Fa0/3)
- Forwarding :

○ SW1 : Fa0/2, Fa0/3 ○ SW2
: Fa0/2, Fa0/3 ○ SW3 : Fa0/1,
Fa0/2, Fa0/3

- Blocking : Tidak ada port yang ter-block