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NIM : L200180100

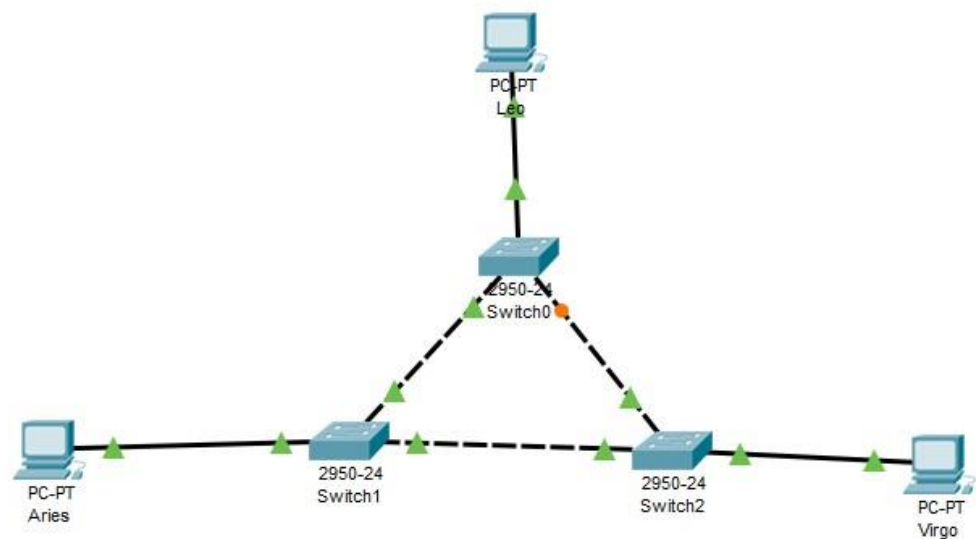
Kelas : C

PRAKTIKUM JARINGAN KOMPUTER

Modul 6

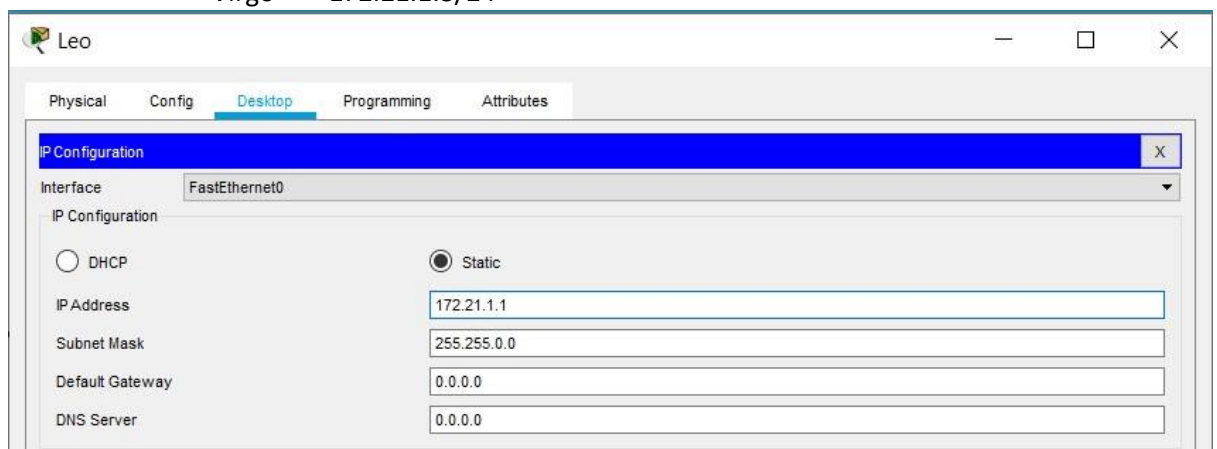
1. Kegiatan 1. Topologi 1

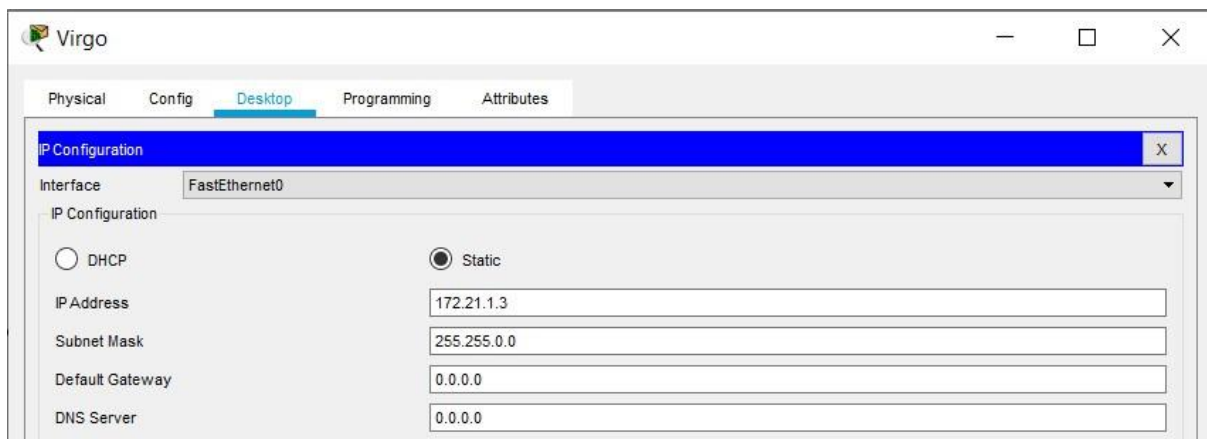
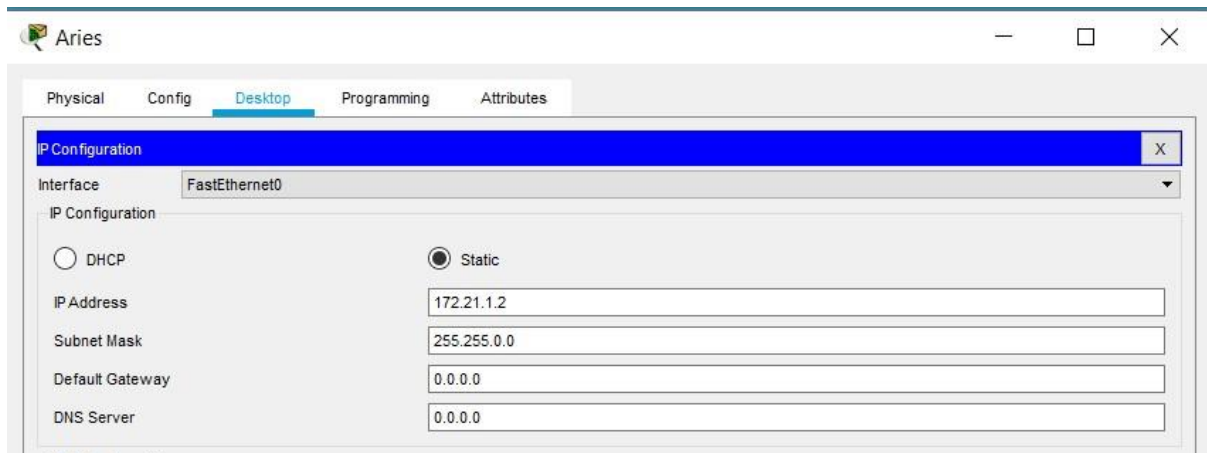
1. Menggunakan cisco paket tracer buat topologi berikut ini dengan menggunakan switch catalyst



2. Konfigurasi masing-masing PC dengan IP:

- Leo = 172.21.1.1/24
- Aries = 172.21.1.2/24
- Virgo = 172.21.1.3/24





3. Pada mode user atau mode privileged, dengan status STP pada masing-masing switch
 - Tekan Enter
 - Masuk ke mode privileged
 - Ketik show spanning-tree

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0003.E463.4461
            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     0009.7C2C.EB98
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface                Role Sts Cost      Prio.Nbr Type
-----
Fa0/24                   Desg FWD 19       128.24   P2p
Fa0/2                    Altn BLK 19       128.2    P2p
Fa0/1                    Root FWD 19       128.1    P2p

Switch#
```

Ctrl+F6 to exit CLI focus

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Switch1

Physical Config CLI Attributes

IOS Command Line Interface

```
state is up

%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed
state to up

Switch>show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0003.E463.4461
            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.E463.4461
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

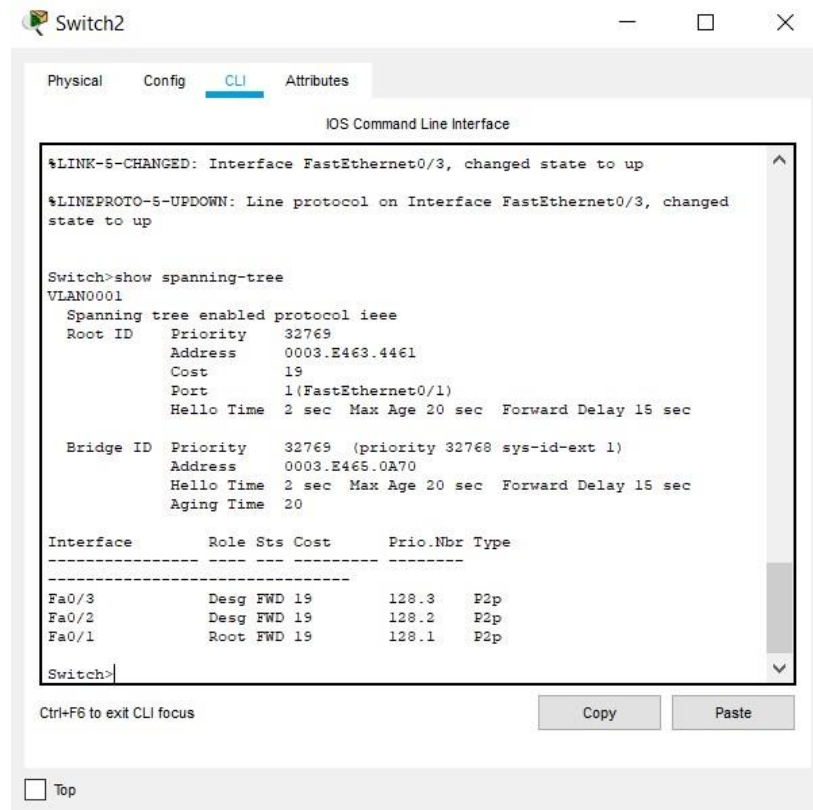
Interface                Role Sts Cost      Prio.Nbr Type
-----
Fa0/1                   Desg FWD 19       128.1    P2p
Fa0/3                   Desg FWD 19       128.3    P2p
Fa0/2                   Desg FWD 19       128.2    P2p

Switch>
```

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4. Isi tabel untuk setiap switch **SW 0**

No	Variabel	Nilai
1	Root ID	32769:0003.E363.4461
2	Priority	32769
3	MAC Address	0003.E363.4461
4	Bridge ID	32769:0009.7C2C.EB98
5	Cost(0/1;02;03)	Fa0/2419 ;Fa0/2 19;Fa0/1 19
6	Hello Time	2 Sec
7	MaxAge	20 Sec
8	Forwar	15 Sec

Role	Stat
Desg	FWD
Altn	BLK
Root	FWD

SW 1

No	Variabel	Nilai
1	Root ID	32769:0003.E463.4461
2	Priority	32769

3	MAC Address	0003.E463.4461
4	Bridge ID	32769:0003.E463.4461
5	Cost(0/1;02;03)	Fa0/1 19;Fa0/3 19;Fa0/2 19
6	Hello Time	2 Sec
7	MaxAge	20 Sec
8	Forwar	15 Sec

Role	Stat
Desg	FWD
Desg	FWD
Desg	FWD

SW 2

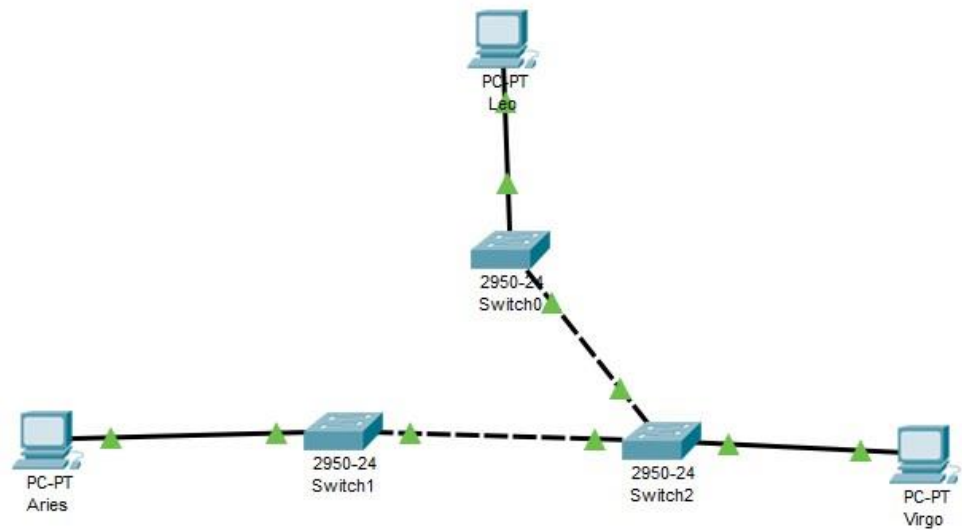
No	Variabel	Nilai
1	Root ID	32769:0003.E463.4461
2	Priority	32769
3	MAC Address	0003.E463.4461
4	Bridge ID	32769:0003.E468.0A70
5	Cost(0/1;02;03)	Fa0/3 19;Fa0/2 19;Fa0/1 19
6	Hello Time	2 Sec
7	MaxAge	20 Sec
8	Forwar	15 Sec

Role	Stat
Desg	FWD
Desg	FWD
Root	FWD

- Root Bridge : SW 1
- Designated bride : SW 2
- Root Port : SW 0 Fa0/1, SW 2 Fa0/1
- Designated Port : SW 0 Fa0/24, SW 1 Fa0/1 Fa0/3 Fa0/2, SW 3 Fa0/3 Fa0/2
- Port yang berada pada keadaan forwarding :
SW 0 Fa0/24 Fa0/1, SW 1 Fa0/1 Fa0/2 Fa0/3, SW 2 Fa0/3 Fa0/2 Fa0/1
- Port yang berada pada keadaan blocking : Sw 0 Fa0/2

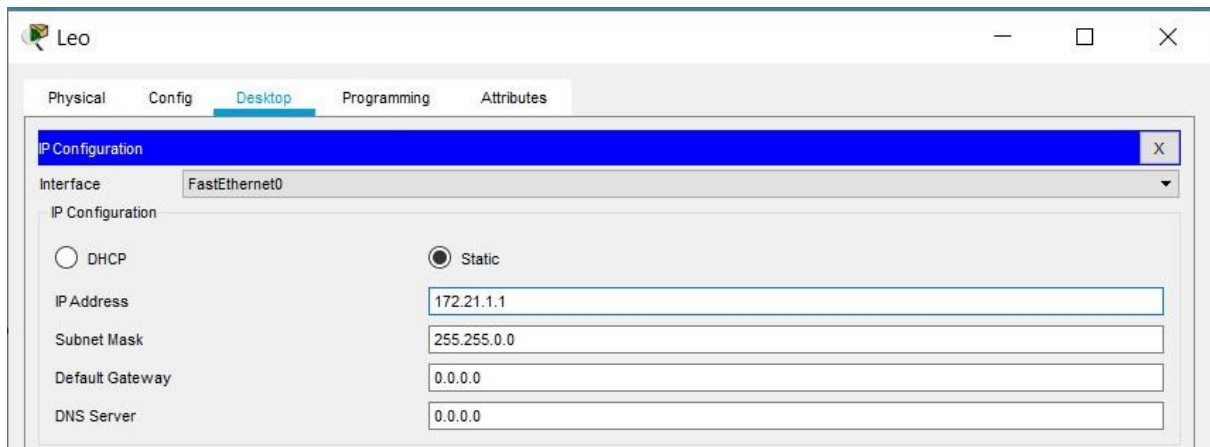
2. Kegiatan-2(Topologi 2)

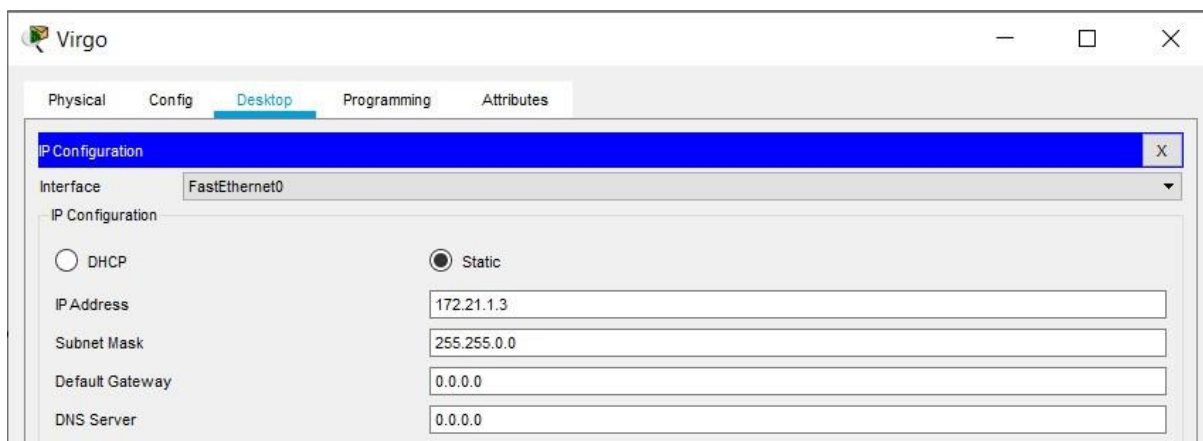
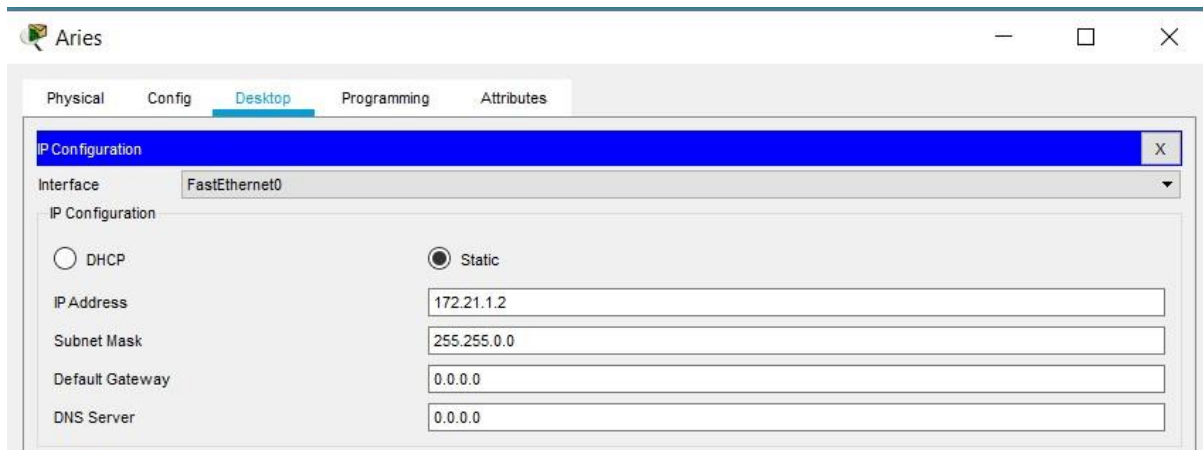
1. Menggunakan paket tracer buat topologi berikut ini dengan menggunakan switch catalyst 2950



2. Konfigurasi masing-masing PC dengan IP :

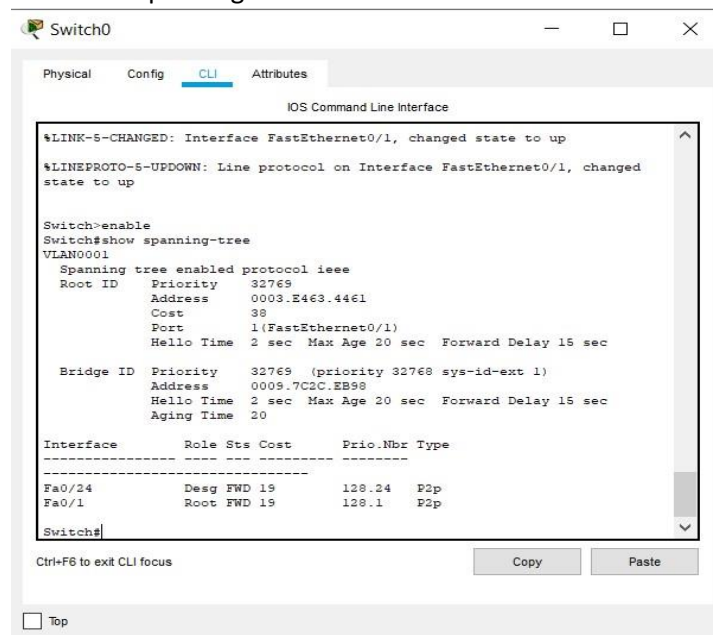
- Leo : 172.21.1.1/24
- Aries : 172.21.1.2/24
- Virgo : 172.21.1.3/24





3. Pada mode user atau mode privileged, dengan status STP pada masing-masing switch

- Tekan Enter
- Masuk ke mode privileged
- Ketik show spanning-tree



Switch1

Physical
Config
CLI
Attributes

IOS Command Line Interface

```

%LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0003.E463.4461
              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.E463.4461
              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          Desg FWD 19        128.2    P2p
Switch#

```

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Switch2

Physical
Config
CLI
Attributes

IOS Command Line Interface

```

%LINK-3-UPDOWN: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0003.E463.4461
              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.E465.0A70
              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          Desg FWD 19        128.2    P2p
Fa0/1          Root FWD 19        128.1    P2p
Switch#

```

Ctrl+F6 to exit CLI focus

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4. Isi tabel untuk setiap switch : **SW 0**

No	Variabel	Nilai
1	Root ID	32769:0003.E463.4461
2	Priority	32769
3	MAC Address	0003.E463.4461
4	Bridge ID	32769:0009.7C2C.EB98
5	Cost(0/1;02;03)	Fa 0/24 19;Fa 0/1 19
6	Hello Time	2 Sec
7	MaxAge	20 Sec
8	Forwar	15 Sec

Role	Stat
Desg	FWD
Root	FWD

SW 1

No	Variabel	Nilai
1	Root ID	32769:0003.E463.4461
2	Priority	32769
3	MAC Address	0003.E463.4461
4	Bridge ID	32769:0003.E463.4461
5	Cost(0/1;02;)3)	Fa 0/3 19; Fa 0/2 19
6	Hello Time	2 Sec
7	MaxAge	20 Sec
8	Forwar	15 Sec

Role	Stat
Desg	FWD
Desg	FWD

SW 2

No	Variabel	Nilai
1	Root ID	32769:0003.E463.4461
2	Priority	32769
3	MAC Address	0003.E463.4461
4	Bridge ID	32769:0003.E465.4461
5	Cost(0/1;02;)3)	Fa 0/3 19; Fa 0/2 19; Fa 0/1 19
6	Hello Time	2 Sec

7	MaxAge	20 Sec
8	Forwar	15 Sec
Role	Stat	
Desg	FWD	
Desg	FWD	
Root	FWD	

- Root Bridge : SW 1
- Designated bride : SW 2 SW 0
- Root Port : SW 0 Fa0/1, SW 2 Fa0/1
- Designated Port : SW 0 Fa0/24, SW 1 Fa0/3 Fa0/2, SW 3 Fa0/3 Fa0/2
- Port yang berada pada keadaan forwarding :
SW 0 Fa0/24 Fa0/1, SW 1 Fa0/2 Fa0/3, SW 2 Fa0/3 Fa0/2 Fa0/1
- Port yang berada pada keadaan blocking :