MODUL 5

NIM   : L200180132
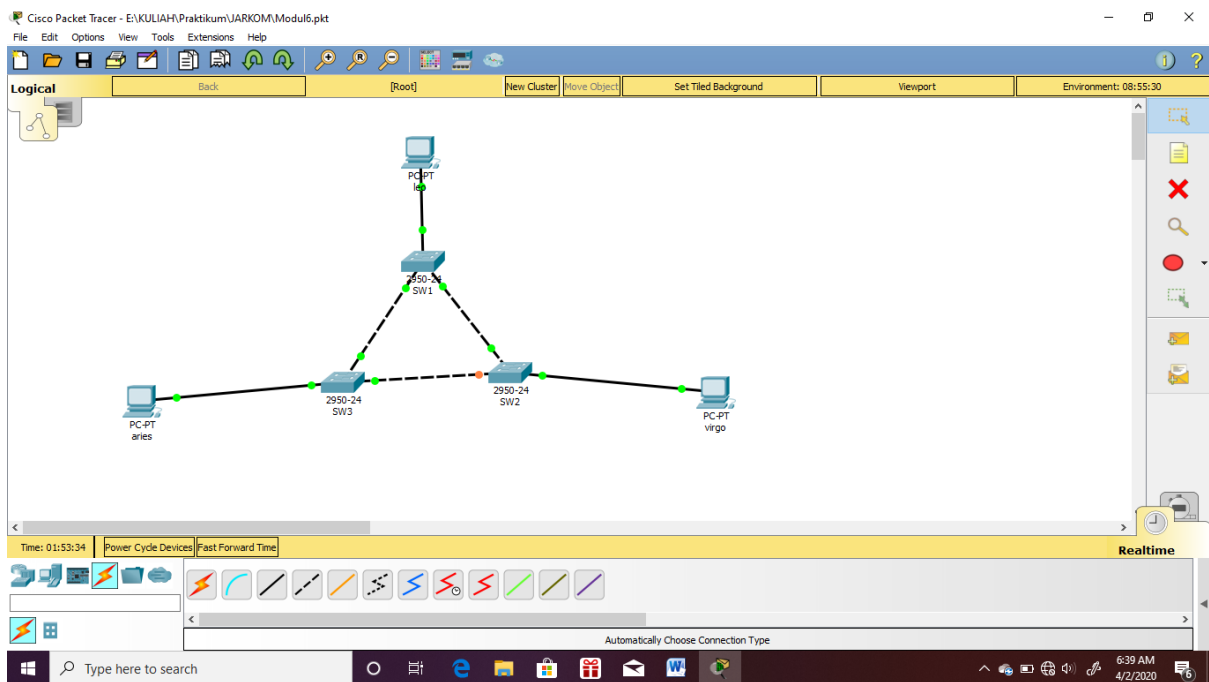
Nama   : Rohana Murniati Furshotun

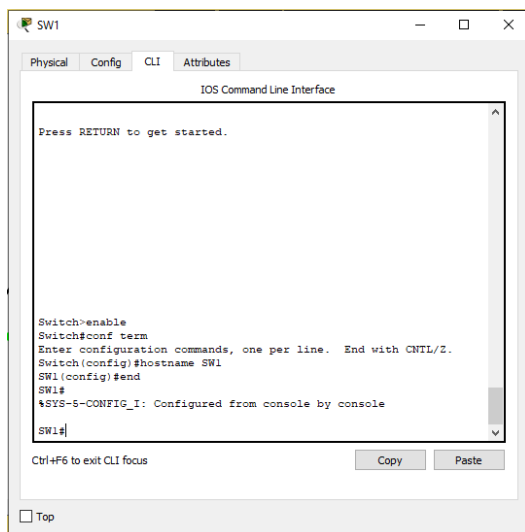Kelas   : D / Praktikum Jaringan Komputer
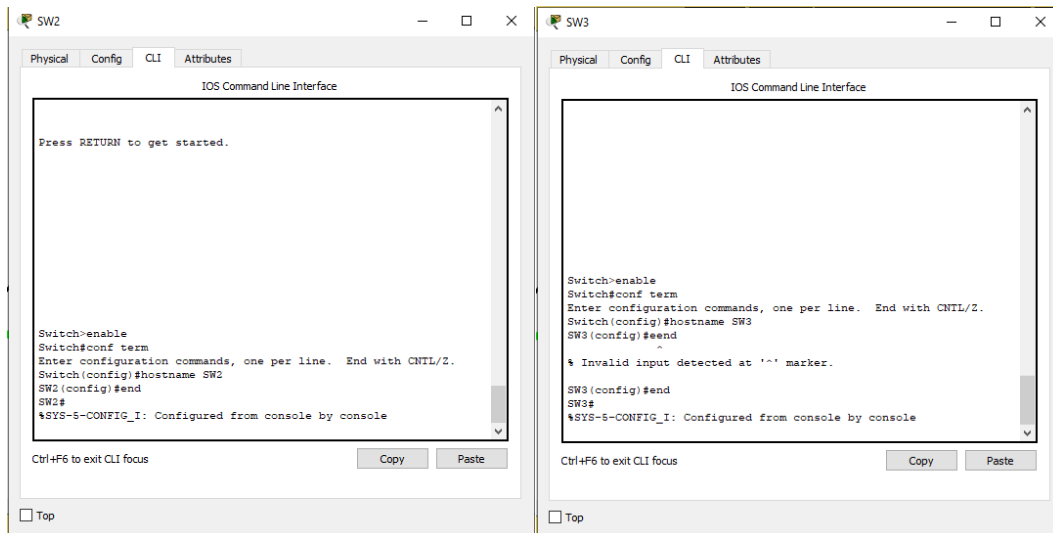
Asisten   : Ayasha, Reza

Kegiatan 1. Topologi 1
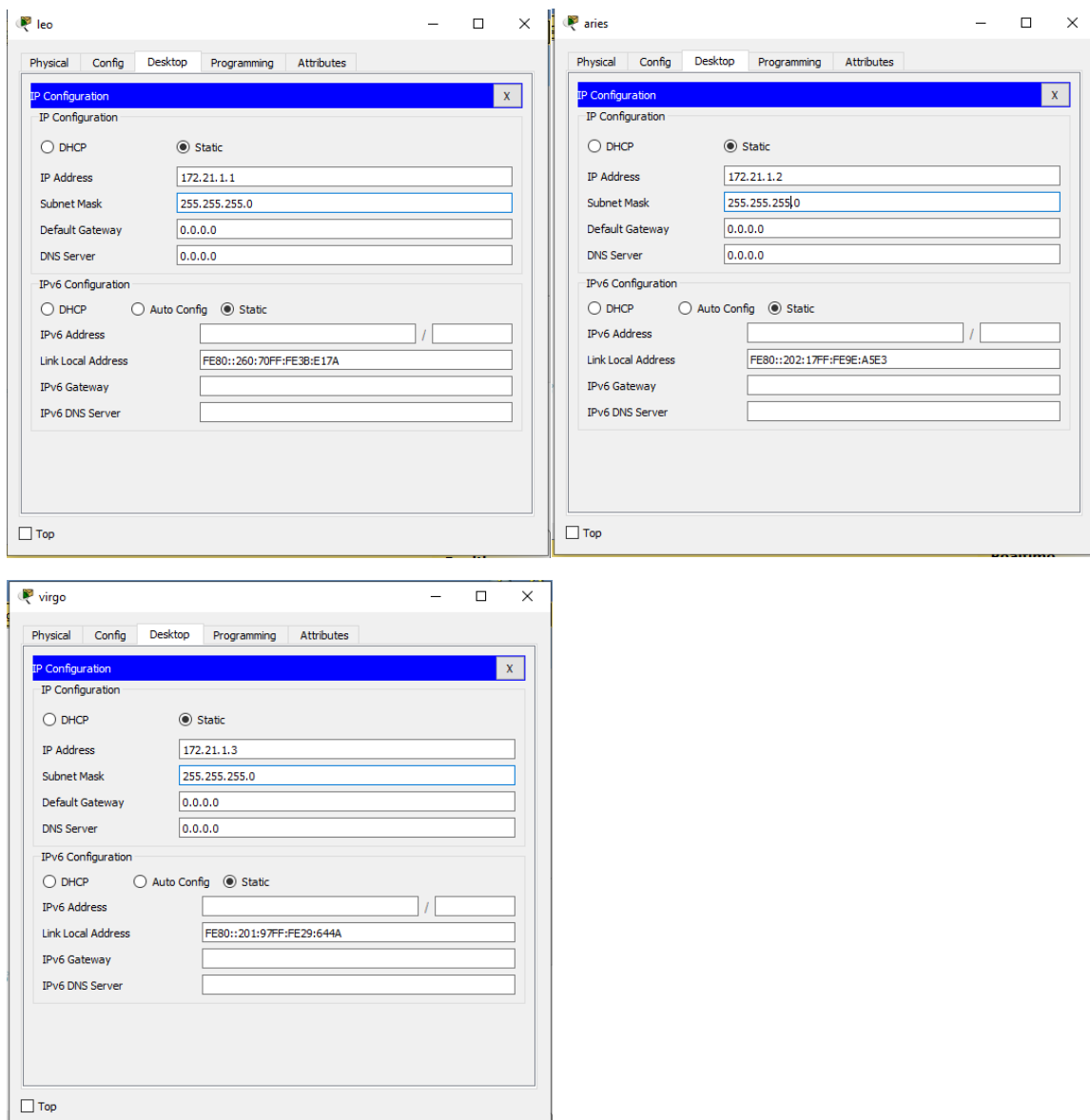
1A.

2A. Mengubah nama Switch dengan mode user atau privilage

SW2 - CLI
```
Press RETURN to get started.

Switch>enable
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW2
SW2(config)#end
SW2#
%SYS-5-CONFIG_I: Configured from console by console
```

SW3 - CLI
```
Switch>enable
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#eend
                 ^
% Invalid input detected at '^' marker.

SW3(config)#end
SW3#
%SYS-5-CONFIG_I: Configured from console by console
```

c. Konfigurasi PC

leo - Desktop - IP Configuration
- Static
- IP Address: 172.21.1.1
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0
- DNS Server: 0.0.0.0
- IPv6 Static
- Link Local Address: FE80::260:70FF:FE3B:E17A

aries - Desktop - IP Configuration
- Static
- IP Address: 172.21.1.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0
- DNS Server: 0.0.0.0
- IPv6 Static
- Link Local Address: FE80::202:17FF:FE9E:A5E3

virgo - Desktop - IP Configuration
- Static
- IP Address: 172.21.1.3
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0
- DNS Server: 0.0.0.0
- IPv6 Static
- Link Local Address: FE80::201:97FF:FE29:644A

d.

SW1

```
SW1#en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0010.11C3.1658
             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     0010.11C3.1658
             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#
```

SW2

```
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0010.11C3.1658
             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     0060.70CC.E281
             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            Altn BLK 19        128.2    P2p

SW2#
```

SW3

```
SW3#en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0010.11C3.1658
             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     0060.475B.AB15
             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
Fa0/1            Root FWD 19        128.1    P2p

SW3#
```

4B.

No	Variabel (SW1)	Nilai
1	Root ID	32769.0010.11C3.1658
2	Priority	32769
3	MAC Address	0010.11C3.1658
4	Bridge ID	32769.0010.11C3.1658
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

No	Variabel (SW2)	Nilai
1	Root ID	32769.0010.11C3.1658
2	Priority	32769
3	MAC Address	0060.70CC.E281
4	Bridge ID	32769.0060.70CC.E281
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

No	Variabel (SW3)	Nilai
1	Root ID	32769. 0010.11C3.1658
2	Priority	32769
3	MAC Address	0060.475B.AB15
4	Bridge ID	32769.0060.475B.AB15
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

4C.

- Menjadi root bridge : SW1
- Menjadi designated bridge : SW2 dan SW3
- Menjadi root port : SW2 : (Fa 0/1) dan SW3 : (Fa 0/1)
- Menjadi designated port : SW1 : (Fa 0/1, Fa 0/2, Fa 0/3); SW2 : (Fa 0/3); SW3 : (Fa 0/2, Fa 0/3)

4D.

- Berada pada keadaan forwarding : SW1 : (Fa 0/1, Fa 0/2, Fa 0/3); SW2 : (Fa 0/1, Fa 0/3); SW3 : (Fa 0/1, Fa 0/2, Fa 0/3).
- Berada pada keadaan blocking   : SW2 (Fa 0/2)

5A. langkah pinging PC Leo ke PC Virgo

Masuk ke PC leo -> klik desktop -> pilih cmd -> ketik 'ping 172.21.1.3'.
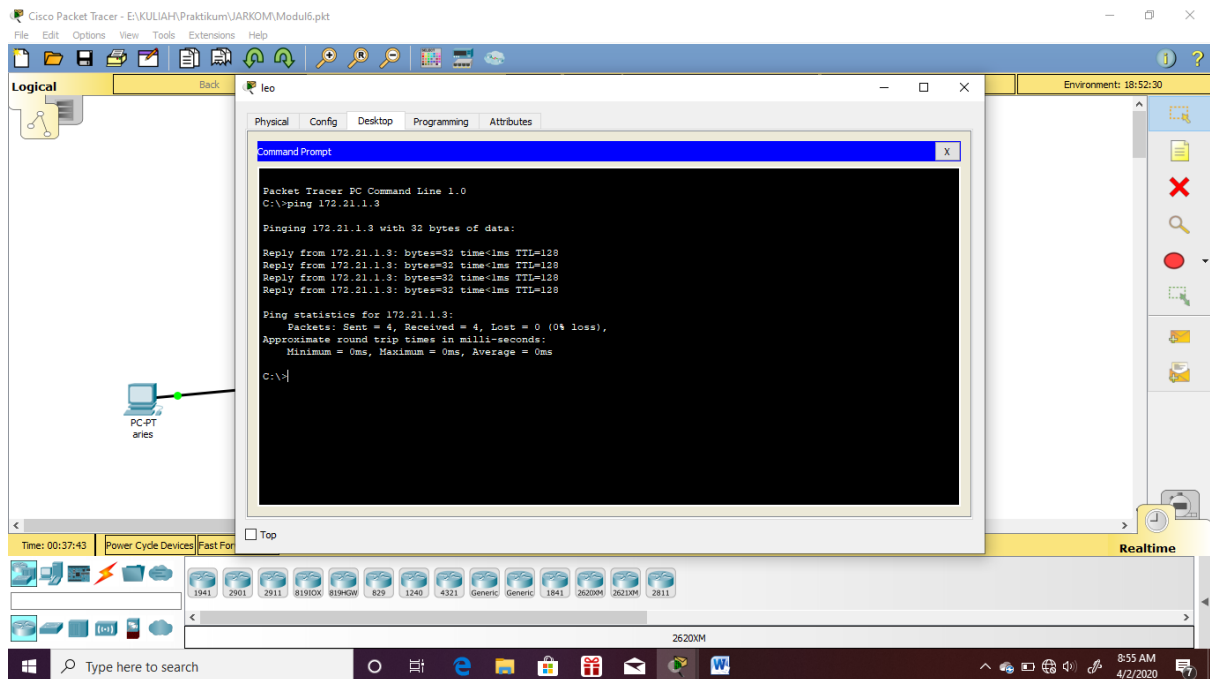
6A.
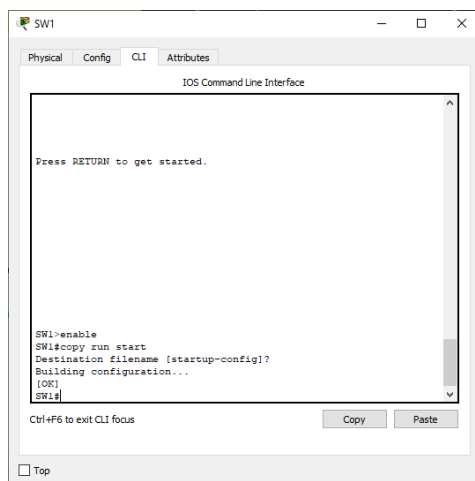
Kegiatan 2. Topologi 2
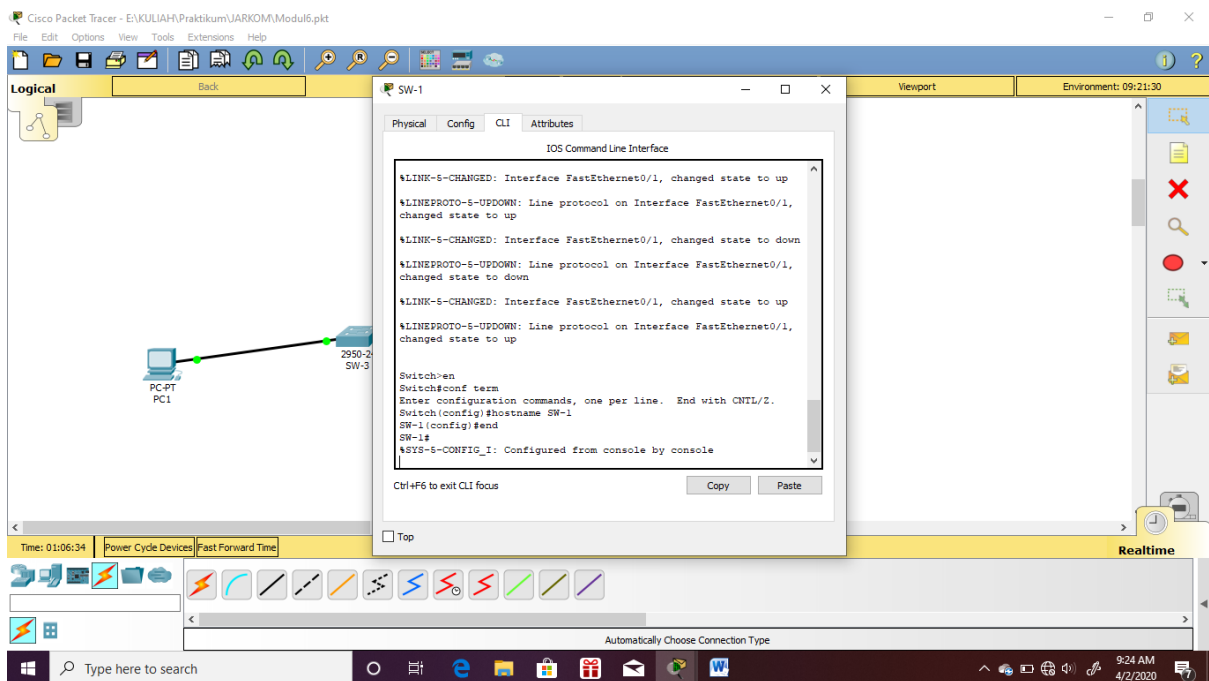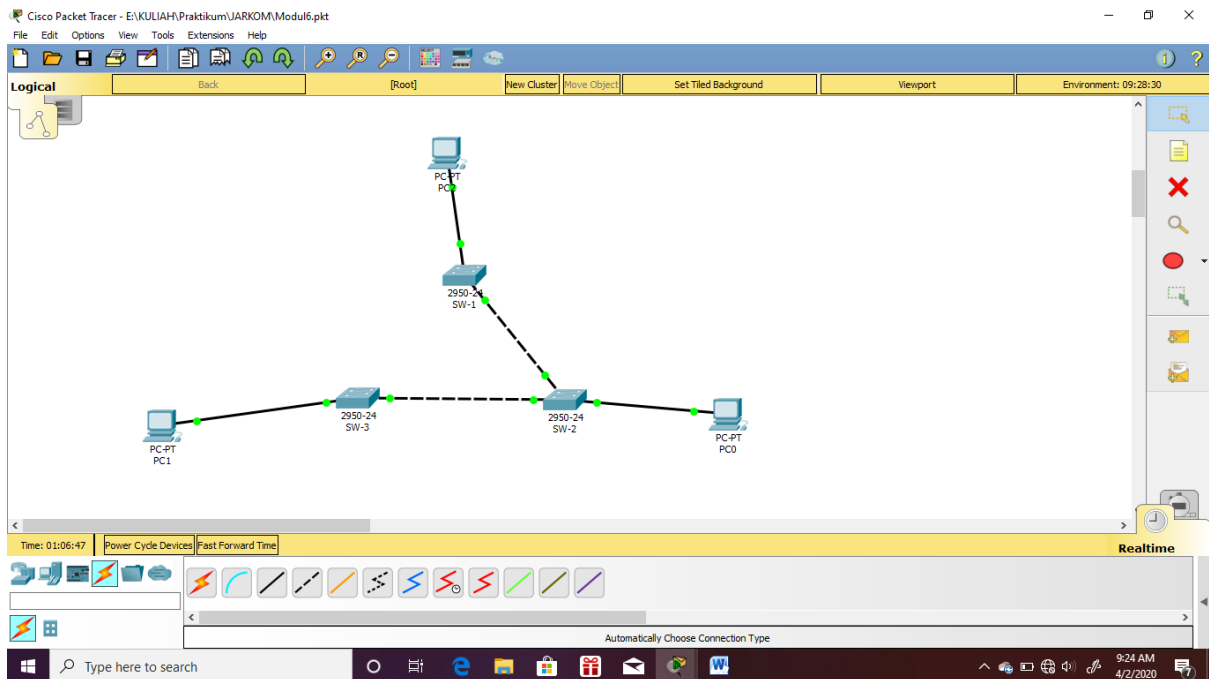
Melihat status STP

SW-1

```
Switch>en
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW-1
SW-1(config)#end
SW-1#
%SYS-5-CONFIG_I: Configured from console by console

SW-1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.6382.CE45
             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     0009.7C93.9C25
             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
Fa0/1            Root FWD 19        128.1    P2p

SW-1#
```

SW-2

```
Switch>en
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW-2
SW-2(config)#end
SW-2#
%SYS-5-CONFIG_I: Configured from console by console

SW-2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.6382.CE45
             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.A397.35E7
             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

SW-2#
```

SW-3

```
Switch>en
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW-3
SW-3(config)#end
SW-3#
%SYS-5-CONFIG_I: Configured from console by console

SW-3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.6382.CE45
             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     0001.6382.CE45
             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
Fa0/1            Desg FWD 19        128.1    P2p

SW-3#
```

Table

No	Variabel (SW-1)	Nilai
1	Root ID	32769.0001.6382.CE45
2	Priority	32769
3	MAC Address	0009.7C93.9C25
4	Bridge ID	32769.0009.7C93.9C25
5	Cost(0/1; 0/2; 0/3)	19; 19; -
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

No	Variabel (SW-2)	Nilai
1	Root ID	32769.0001.6382.CE45
2	Priority	32769
3	MAC Address	00E0.A397.3567
4	Bridge ID	32769.00E0.A397.3567
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

No	Variabel (SW-2)	Nilai
1	Root ID	32769.0001.6382.CE45
2	Priority	32769
3	MAC Address	0001.6382.CE45
4	Bridge ID	32769.0001.6382.CE45
5	Cost(0/1; 0/2; 0/3)	19; 19; -
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- Root bridge   : SW - 3
- Designated bridge : SW - 2
- Root port   : SW - 1 (Fa 0/1); SW - 2 (Fa 0/2)
- Designated port   : SW - 1 (Fa 0/2); SW - 2 (Fa 0/1, Fa 0/3); SW - 3 (Fa 0/1, Fa 0/2)
- Forwarding   : SW – 1 (Fa 0/1, Fa 0/2); SW – 2(Fa 0/1, Fa 0/2, Fa 0/3); SW – 3 (Fa 0/1, Fa 0/2)
- Blocking   : tidak ada

Menyimpan konfig