

Nama : Nur Aini Afdallah

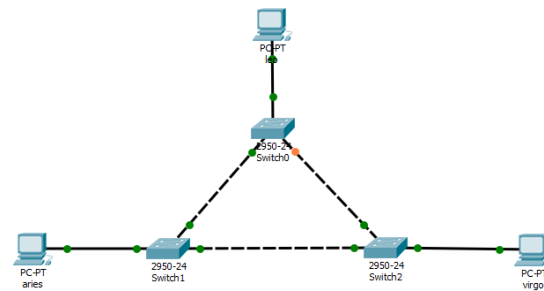
NIM : L200170107

Kelas : C

Modul : 6

Kegiatan 1. Topologi 1

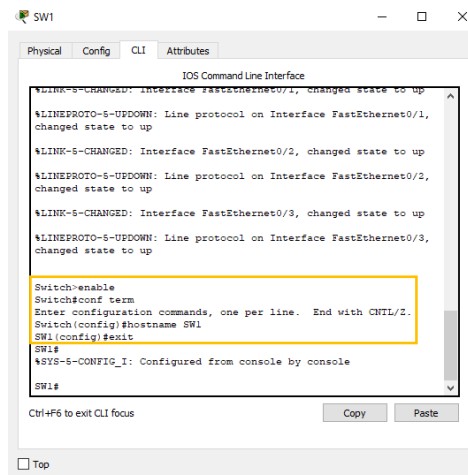
1. Rancangan Jaringan



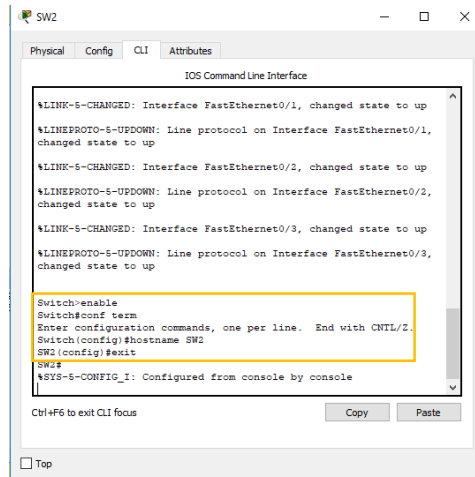
Drag 3 switch catalyst 2950 yang diambil dari network devices dan drop ke lembar kerja. Lalu drag 3 PC yang di ambil di end devices dan drop ke lembar kerja. Lalu hubungkan switch dengan switch dan switch dengan PC dengan connections.

2. Pemberian nama switch dari mode user

SW1



SW2



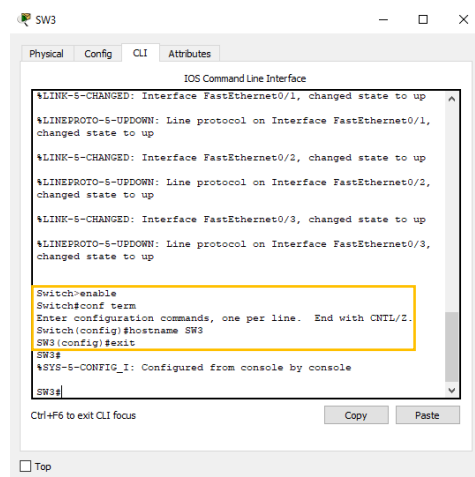
```
SW2
Physical Config CLI Attributes
IOS Command Line Interface

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2,
changed state to 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>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW2
SW2(config)#exit
SW2#
%SYS-5-CONFIG_I: Configured from console by console

Ctrl+F6 to exit CLI focus
```

SW3



```
SW3
Physical Config CLI Attributes
IOS Command Line Interface

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2,
changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3,
changed state to up

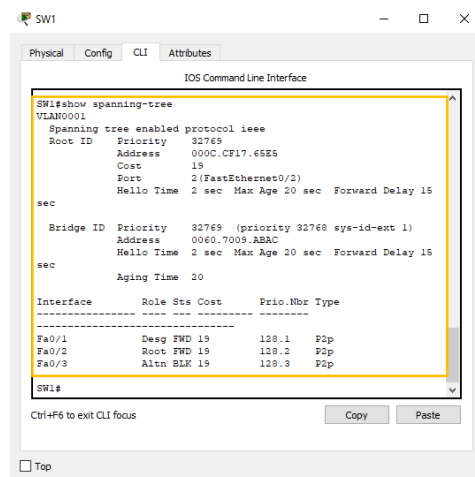
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#exit
SW3#
%SYS-5-CONFIG_I: Configured from console by console

SW3#
```

Pemberian nama masing-masing switch dengan SW1, SW2, dan SW3 dengan cara ketik **enable** lalu ketik **conf term** lalu ketik **hostname SW1**(sesuai dengan nama switch nya)

3. Spanning-tree pada masing-masing switch

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    000C.CF17.6E85
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    0060.7009.ABAC
Hello Time 2 sec Max Age 20 sec Forward Delay 15
sec

Aging Time 20

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

SW1#
```

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0060.7009.ABAC
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

```

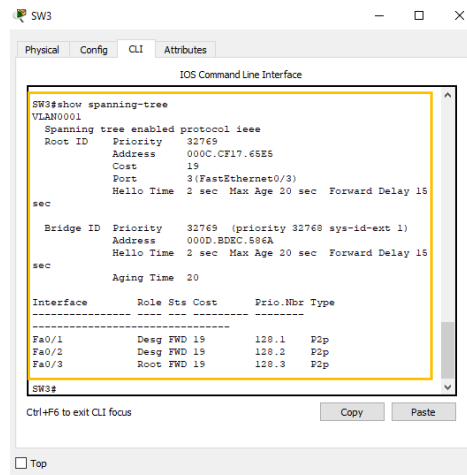
IOS Command Line Interface
#SYS-5-CONFIG_I: Configured from console by console
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000C.CF17.65E5
             This bridge is the root
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15
             sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     000C.CF17.65E5
             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 Desg FWD 19 128.2 P2p
SW2#
  
```

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000C.CF17.65E5
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

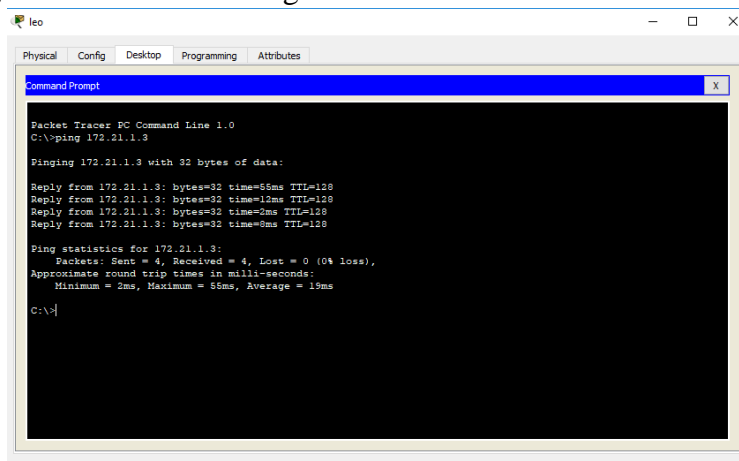
SW3



No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000D.BDEC.586A
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 : SW2
- Designated bridge : SW3
- Root port : SW1(0/2), SW3(0/3)
- Designated port : SW3(0/3)
- Port keadaan forwarding : SW1(0/1, 0/2), SW2(0/1, 0/2, 0/3), dan SW3(0/1, 0/2, 0/3)
- Port keadaan blocking : SW1(0/3)

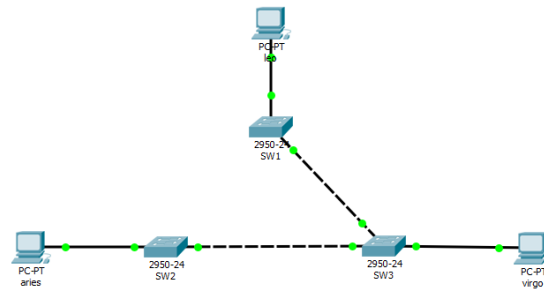
4. Lakukan ping dari PC leo ke PC virgo



Tap 2 kali pada PC leo lalu pilih dekstop lalu pilih command prompt. Ketikkan **ping 172.21.1.3** lalu enter dan akan keluar hasilnya. Bahwa PC leo dan PC virgo saling berhubungan.

Kegiatan 2. Topologi 2

1. Rancangan Jaringan



2. Spanning-tree pada masing-masing switch

SW1

```
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address     000C.CF17.6525
              Cost        38
              Port        3 (FastEthernet0/3)
              Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

    Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
              Address     0060.7009.ABAC
              Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
              Aging Time  20

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

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0060.7009.ABAC
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	38
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2

The screenshot shows a network switch CLI window titled 'SW2'. The 'CLI' tab is active, displaying the following text:

```

IOS Command Line Interface
%LINK-PROT-5-UPDOWN: Line protocol on interface FastEthernet0/2,
changed state to down

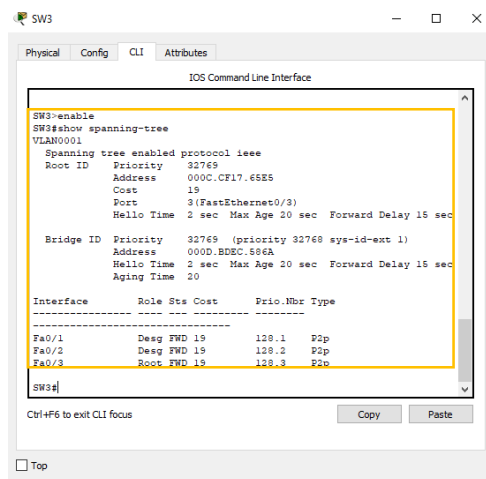
SW2>enable
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000C.CF17.65E5
             This bridge is the root
             Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     000C.CF17.65E5
             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
  
```

At the bottom of the CLI window, there is a 'Top' button and a status bar indicating 'Ctrl+F6 to exit CLI focus'.

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000C.CF17.65E5
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

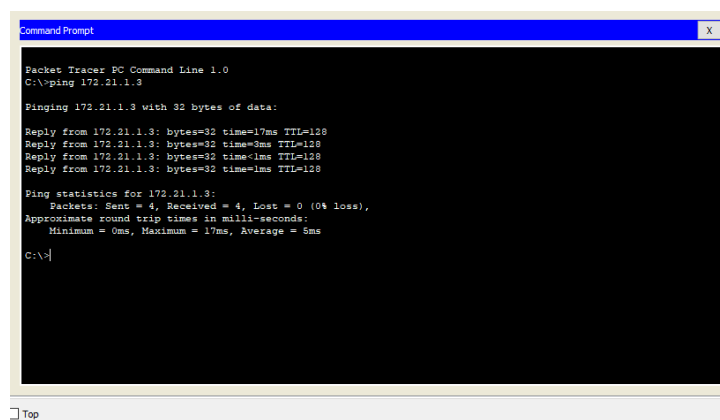
SW3



No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000D.BDEC.586A
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 : SW2
- Designated bridge : SW3
- Root port : SW1(0/3), SW3(0/3)
- Designated port : SW3(0/3)
- Port keadaan forwarding : SW1(0/1, 0/3), SW2(0/1, 0/3), dan SW3(0/1, 0/2, 0/3)
- Port keadaan blocking : -

3. Lakukan ping dari PC leo ke PC virgo



Tap 2 kali pada PC leo lalu pilih dekstop lalu pilih command prompt. Ketikkan **ping 172.21.1.3** lalu enter dan akan keluar hasilnya. Bahwa PC leo dan PC virgo saling berhubungan.