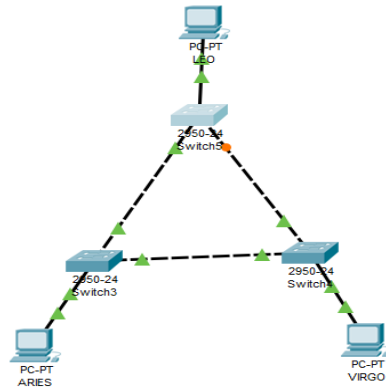


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## Praktikum Jarkom Modul 6

### Kegiatan 1, Topologi 1

#### 1. Rancangan Jaringan



#### 2. Pemberian Nama Switch

##### a. SW 1

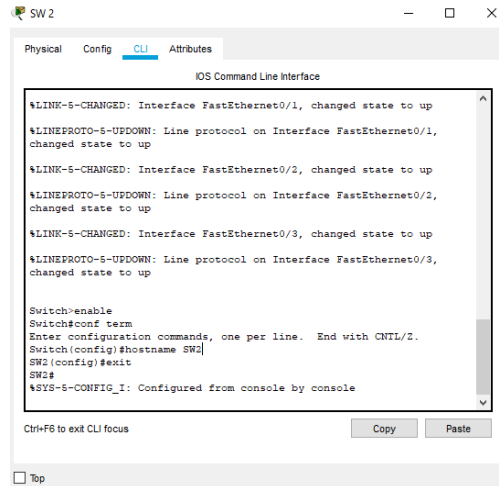
```
IOS Command Line Interface

%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

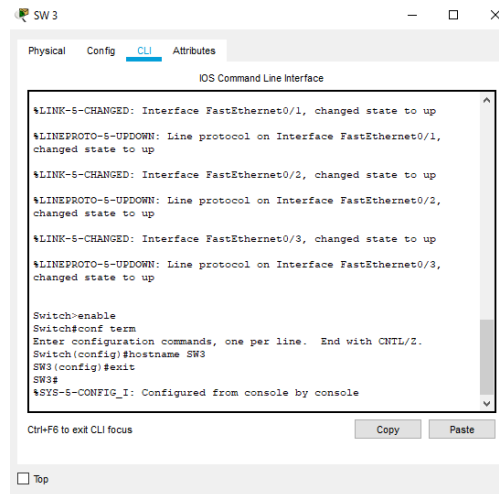
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW1
SW1(config)#exit
SW1#
$SYS-5-CONFIG_I: Configured from console by console

Ctrl+F6 to exit CLI focus
```

##### b. SW 2

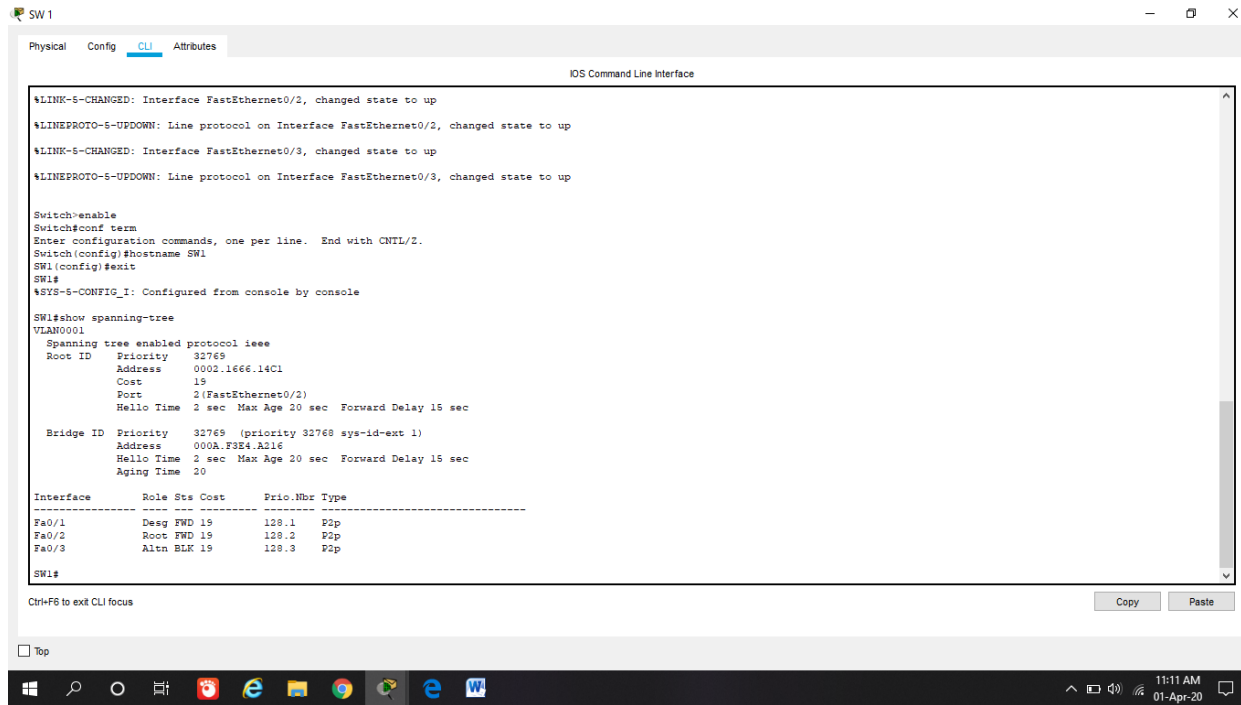


### c. SW 3



## 3. Spanning Tree pada Setiap Switch

### a. SW 1



No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	000A.F3E4.A216
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

b. SW 2

SW2

Physical Config CLI Attributes

IOS Command Line Interface

Press RETURN to get started.

```

SW2>show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0002.1666.14C1
             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     0002.1666.14C1
             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-

Ctrl+F6 to exit CLI focus

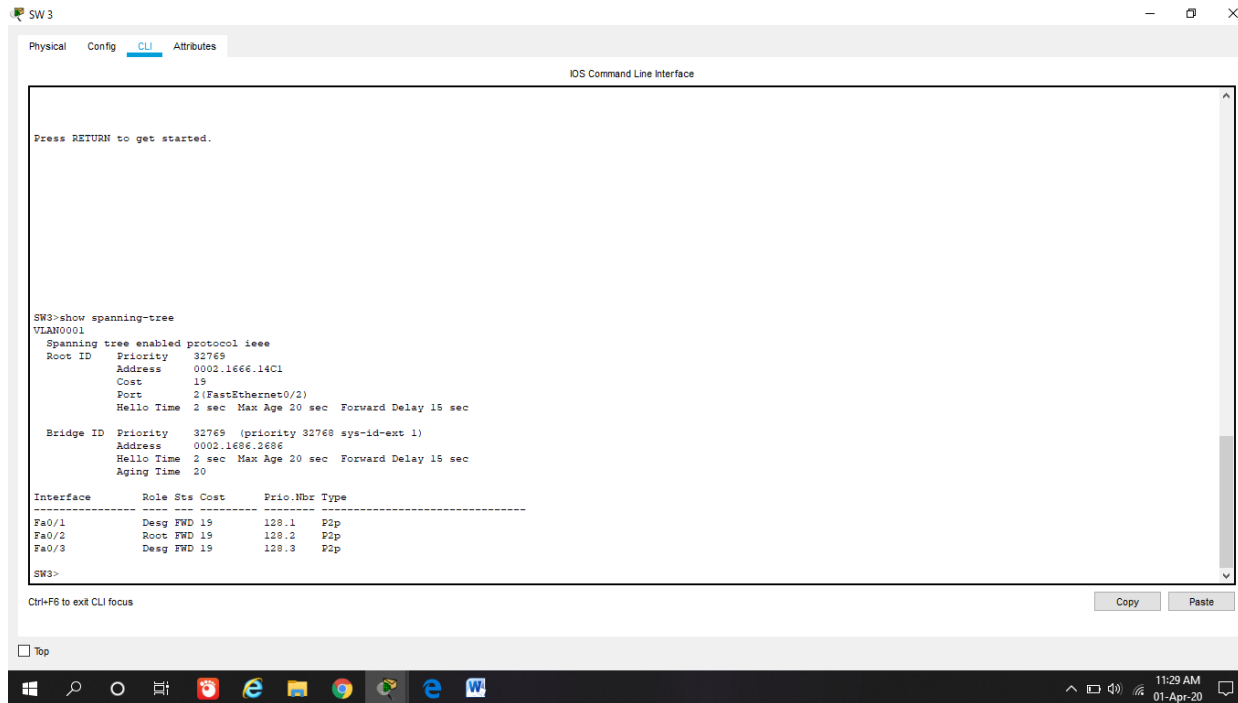
Copy Paste

Top

Windows taskbar: 11:21 AM 01-Apr-20

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0002.1666.14C1
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

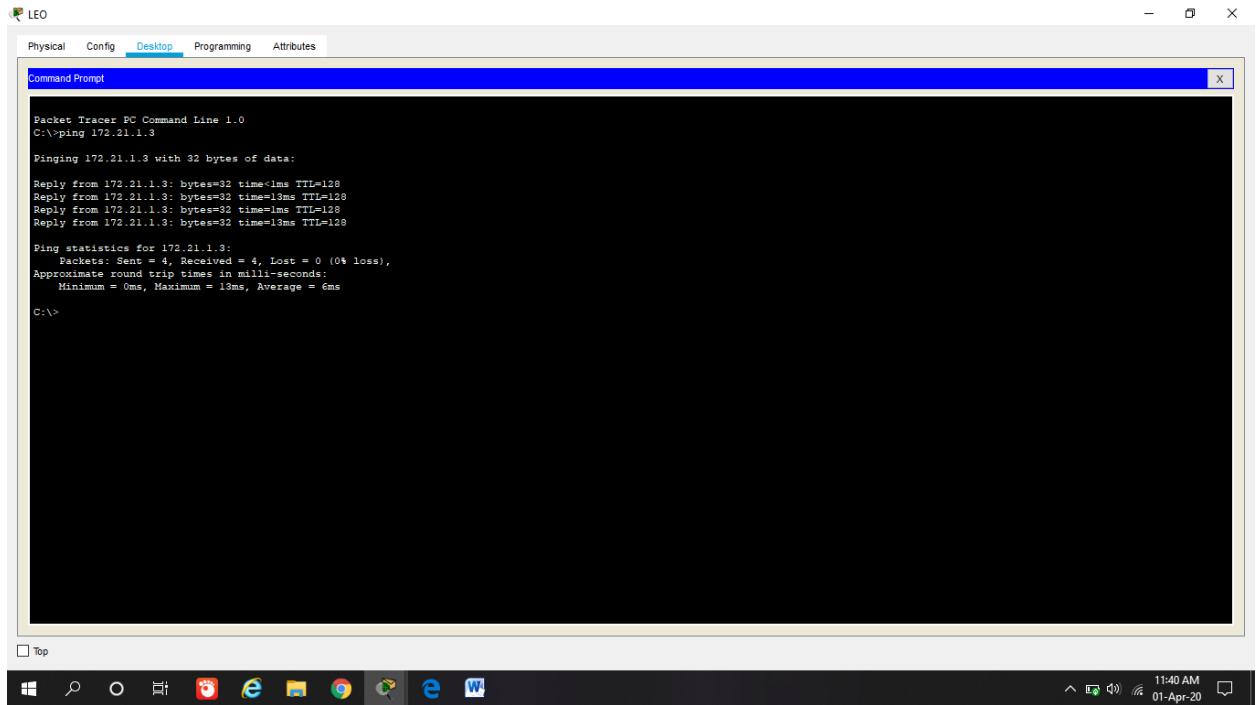
c. SW 3



No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0002.1686.2686
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

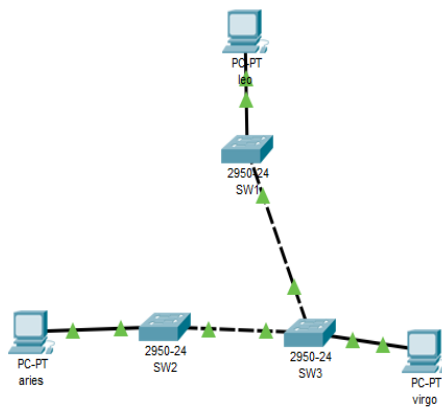
- Root Bridge : SW2
- Designated Bridge : SW3
- Root port : SW1(0/1),SW3(0/3)
- Designated port : SW3(0/3)
- Port keadaan forwarding :  
SW1(0/1,0/2),SW2(0/1,0/2,0/3),SW3(0/1,0/2,0/3)
- Port keadaan blocking :SW1(0/3)

4. Lakukan PING dari PC leo ke virgo



## Kegiatan 2, Topologi 2

### 5. Rancangan Jaringan



### 6. Spanning Tree pada Setiap Switch

#### a. SW 1

SW1

Physical Config CLI Attributes

IOS Command Line Interface

```

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

Switch>en
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname SW1
SW1(config)#exit
SW1#
%SYS-5-CONFIG_I: Configured from console by console

SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0001.42C5.1905
              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    0090.2172.0708
              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

SW1#

```

Ctrl+F6 to exit CLI focus

Copy Paste

Top

Windows taskbar: 12:17 PM 01-Apr-20

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0090.2172.A216
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

b. SW 2

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

Switch>en
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

SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address    0001.42C5.1905
              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    0001.96DB.5708
              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          Root FWD 19      128.2    P2p

SW2#

```

Ctrl+F6 to exit CLI focus

Copy Paste

Top

Windows taskbar: 12:18 PM 01-Apr-20

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0001.96DB.5708
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

c. SW 3



The screenshot shows a network switch CLI interface with the following output:

```

SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.42C5.1905
             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     0001.42C5.1905
             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
  
```

Below the CLI window, there is a Windows taskbar with various application icons and a system clock showing 12:19 PM on 01-Apr-20.

No	Variabel	Nilai
1	Root ID	32769
2	Priority	-
3	MAC Address	0001.42C5.1905
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	Max Age	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),SW3(0/1,0/2,0/3)
- Port keadaan blocking :-

7. Lakukan PING dari PC leo ke virgo

