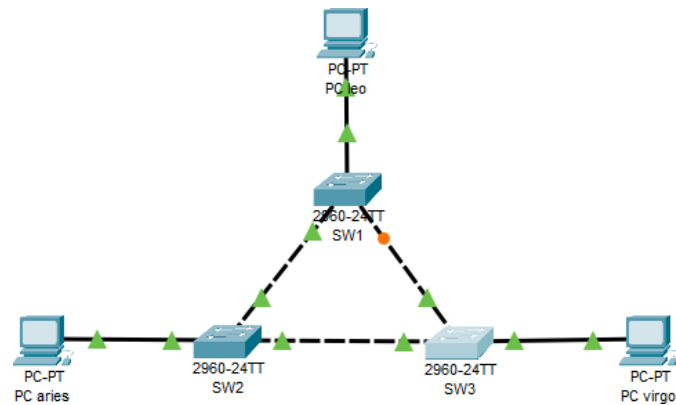


Nama : Nur Fadlilah Azzis  
NIM : L200180113/C

## Kegiatan 1. Topologi 1

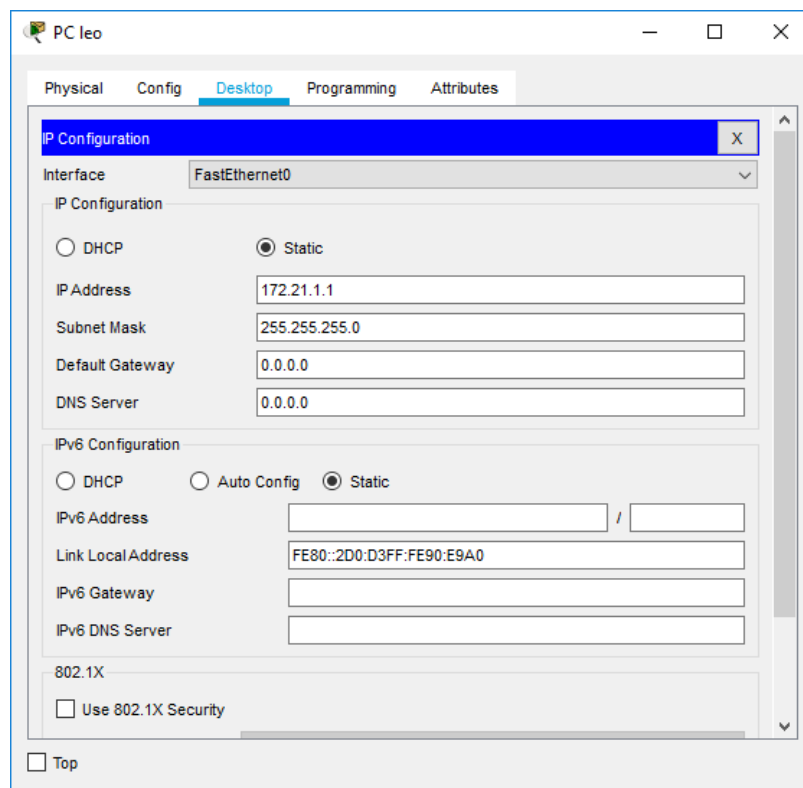
Tugas 1A: Membuat topologi

Modul 6



Tugas 2A: Konfigurasi masing-masing PC dengan alamat IP

- Leo = 172.21.1.1



- Aries = 172.21.1.2

The screenshot shows the 'PC aries' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is expanded, showing the 'FastEthernet0' interface. The 'Static' radio button is selected under 'IP Configuration'. The fields are filled with the following values:

Field	Value
Interface	FastEthernet0
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

Below the IP Configuration section, the 'IPv6 Configuration' section is also visible, with 'Static' selected. The 'Link Local Address' is set to FE80::201:C7FF:FE8B:C525. The '802.1X' section is collapsed, and the 'Use 802.1X Security' checkbox is unchecked. A 'Top' button is located at the bottom left of the window.

- Virgo = 172.21.1.3

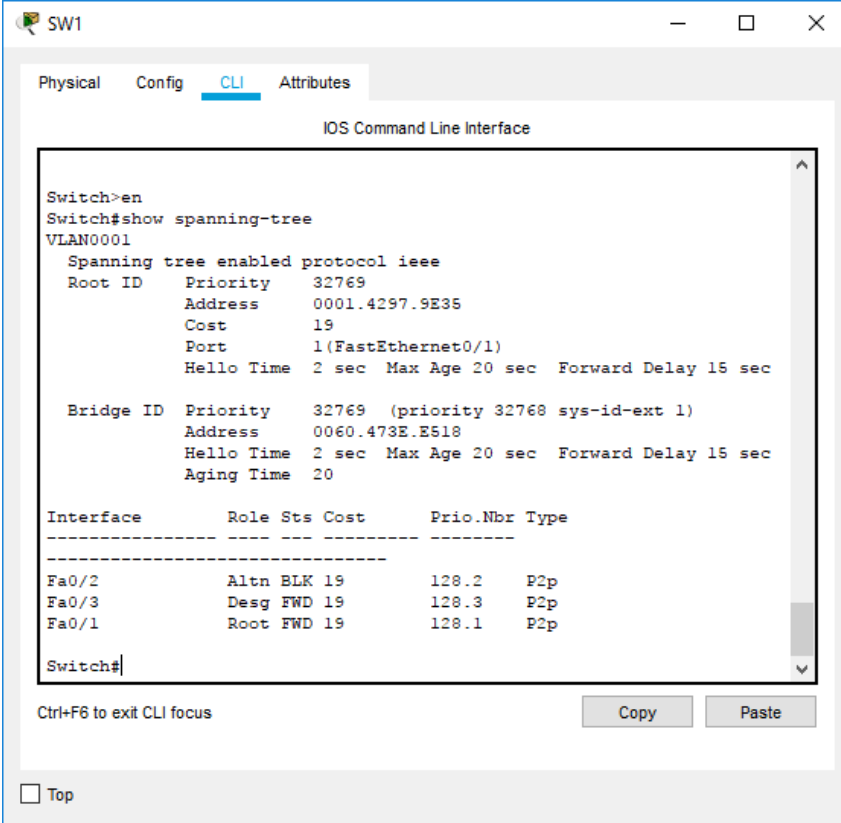
The screenshot shows the 'PC virgo' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is expanded, showing the 'FastEthernet0' interface. The 'Static' radio button is selected under 'IP Configuration'. The fields are filled with the following values:

Field	Value
Interface	FastEthernet0
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

Below the IP Configuration section, the 'IPv6 Configuration' section is also visible, with 'Static' selected. The 'Link Local Address' is set to FE80::20C:CFFF:FE40:9210. The '802.1X' section is collapsed, and the 'Use 802.1X Security' checkbox is unchecked. A 'Top' button is located at the bottom left of the window.

Tugas 4A: Pada kondisi default, capture masing-masing tampilan STP switch(SW1, SW2, dan SW3).

- SW1



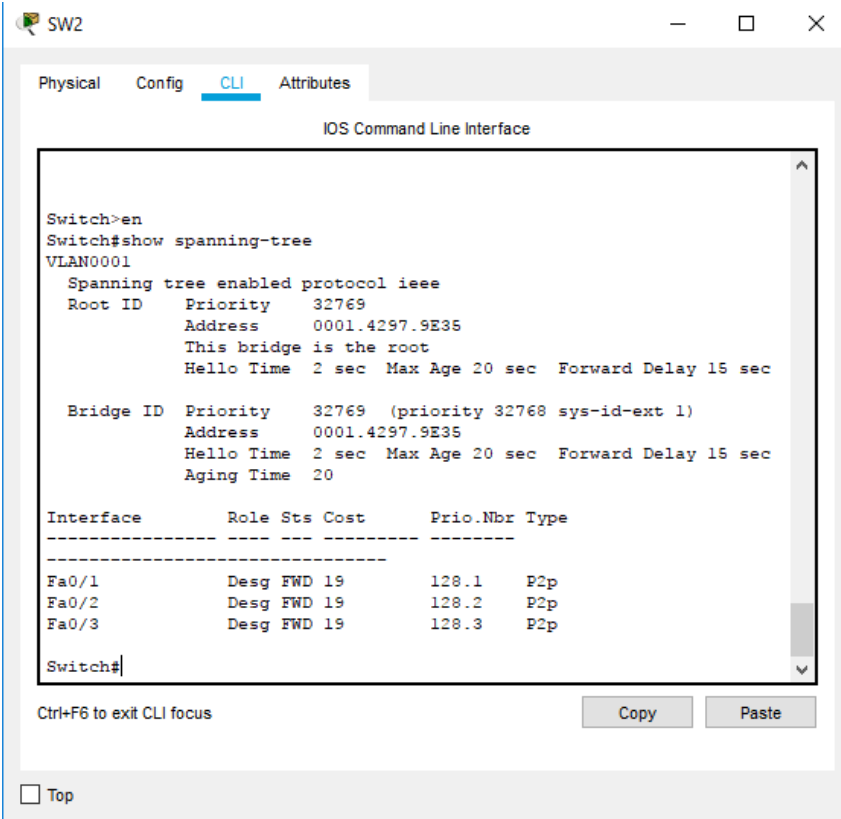
```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0001.4297.9E35
            Cost        19
            Port        1(FastEthernet0/1)
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
            Address     0060.473E.E518
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20
```

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

Switch#

- SW2



```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0001.4297.9E35
            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     0001.4297.9E35
            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

Switch#

- SW3

```

Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address    0001.4297.9E35
             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    0001.9767.C509
             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                    Desg FWD 19        128.2   P2p
Switch#
  
```

Tugas 3B: Untuk tiap-tiap switch, isikan tabel berikut:

- SW1

NO	Variable	Nilai
1	Root ID	32769, 0001.4297.9E35
2	Priority	32769
3	MAC Address	0001.4297.9E35
4	Bridge ID	32769, 0001.4297.9E35
5	Cost (0/1;0/2;0/3)	Fa0/2 Altn;BLK;19;128.2;P2p Fa0/3 Desg;FWD;19;128.3;P2p Fa0/1 Root;FWD19;128.1;P2p
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW2

NO	Variable	Nilai
1	Root ID	32769, 0001.4297.9E35
2	Priority	32769
3	MAC Address	0001.4297.9E35

4	Bridge ID	32769, 0001.4297.9E35
5	Cost (0/1;0/2;0/3)	Fa0/1 Desg;FWD;19;128.1;P2p Fa0/2 Desg;FWD;19;128.2;P2p Fa0/3 Desg;FWD;19;128.3;P2p
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW3

NO	Variable	Nilai
1	Root ID	32769, 0001.4297.9E35
2	Priority	32769
3	MAC Address	0001.4297.9E35
4	Bridge ID	32769, 0001.4297.9E35
5	Cost (0/1;0/2;0/3)	Fa0/1 Root;FWD;19;128.1;P2p Fa0/3 Desg;FWD;19;128.3;P2p Fa0/2 Desg;FWD;19;128.2;P2p
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

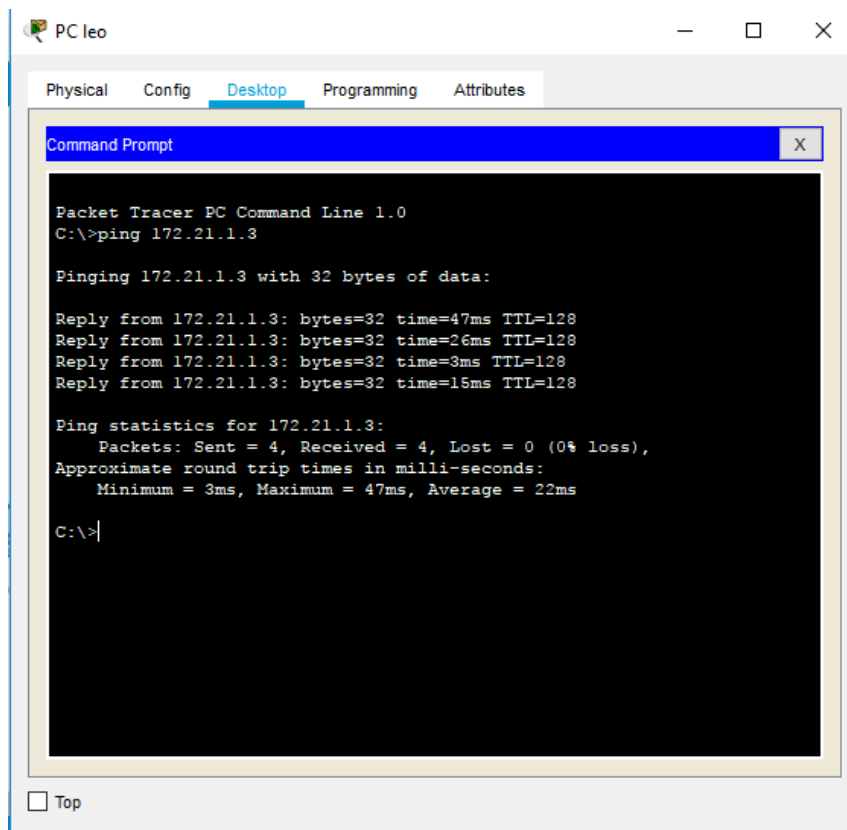
Tugas 4C: Pada kondisi default tersebut, switch dan port mana saja yang:

- Menjadi *root brided* : SW2
- Menjadi *designated brided* : SW2
- Menjadi *root port* : SW1 (Fa0/1), SW3 (Fa0/3)
- Menjadi *designated port* :SW3

Tugas 4D: Pada kondisi defaulttersebut, dan port mana saja yang:

- Berada pada keadaan *forwarding* : SW2, SW3, dan SW1 (Fa0/3 dan Fa0/1)
- Berada pada keadaan *blocking* : SW1 (Fa0/2)

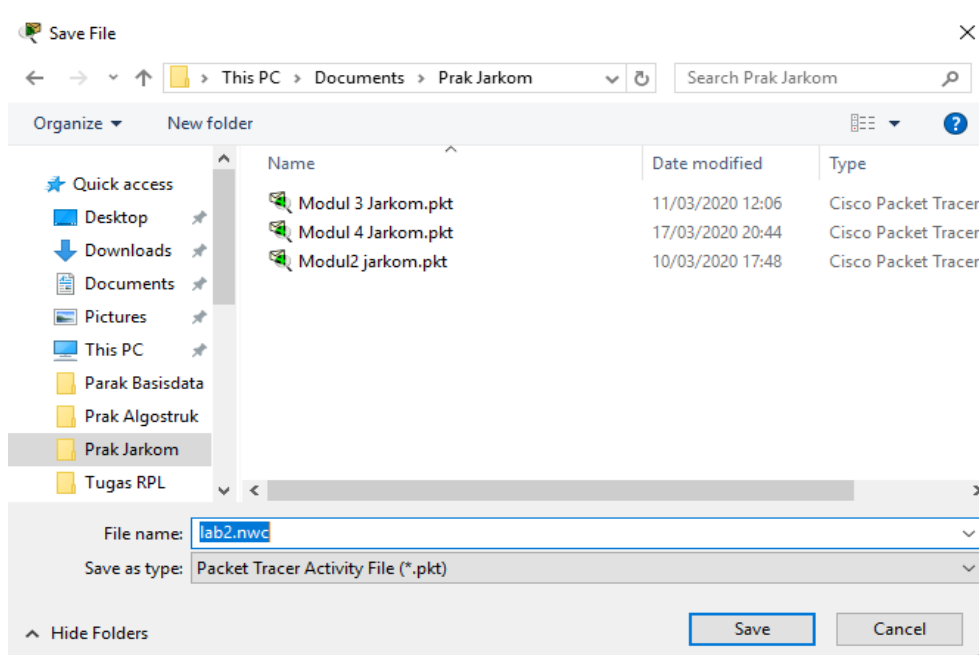
Dari PC Leo lakukan ping ke PC Virgo



Tugas 5A: Tuliskan langkah untuk melakukan perintah ping

Jawab : Klik PC leo pilih menu “Desktop” lalu pilih Command Promt” lalu ketikan perintah ‘ping 172.21.1.3’ pada Command Promt tanpa tanda petik.

Simpan konfigurasi jarinagn dengan nama lab2.nwc



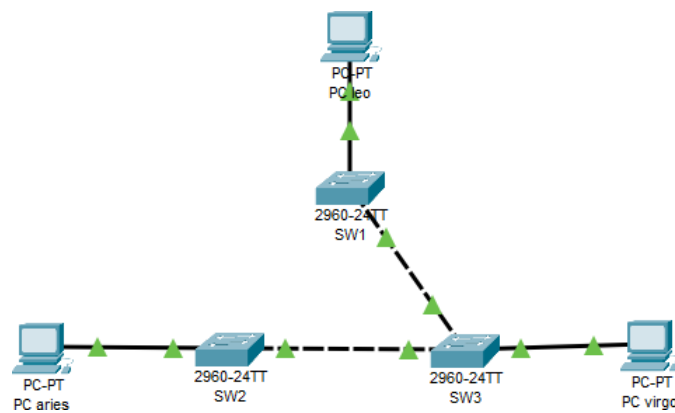
Tugas 6A: Tuliskan langkah untuk menyimpan konfigurasi jaringan.

Jawab :

- Klik "File"
- Pilih "Save as"
- Pilih direktori
- Ketikkan nama file "lab2.nwc"
- Klik "save"

## Kegiatan 2. Topologi 2

a. Membuat topologi



b. Lakukan langkah lab 4 dan lab 5

Tugas 4A: Pada kondisi default, capture masing-masing tampilan STP switch(SW1, SW2, dan SW3).

- SW1

SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

```

changed state to down

Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address    0001.4297.9E35
            Cost       38
            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    0060.473E.E518
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time 20

Interface      Role Sts Cost      Prio.Nbr Type
-----
Fa0/2          Root FWD 19        128.2   P2p
Fa0/3          Desg FWD 19        128.3   P2p
Switch#

```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- SW2

SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```

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

Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address    0001.4297.9E35
            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    0001.4297.9E35
            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
Switch#

```

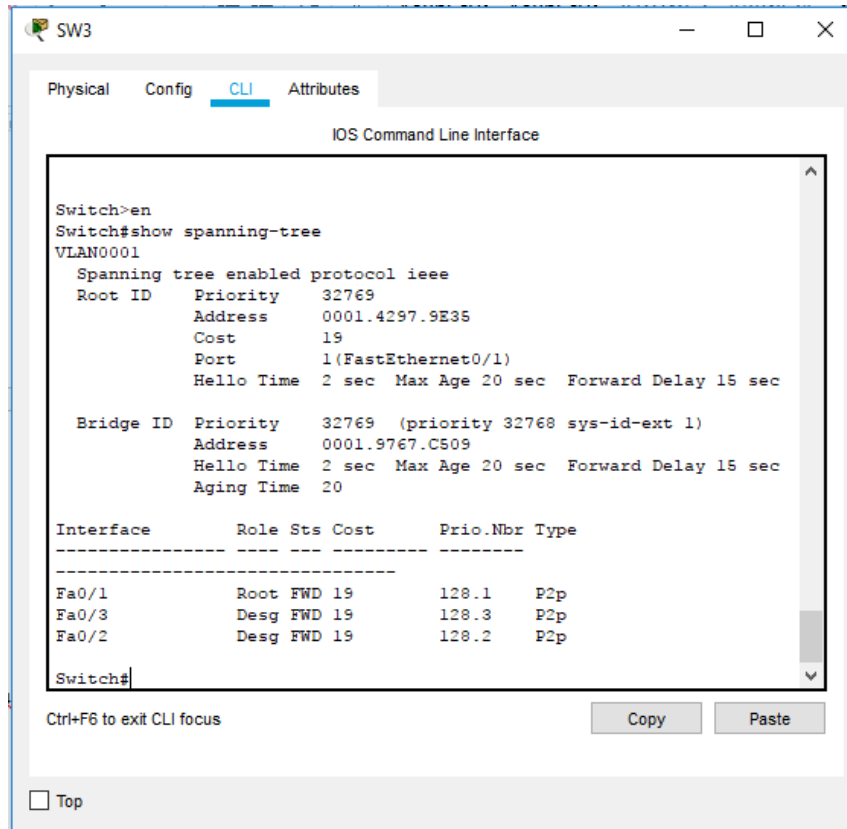
Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top



- SW3



Tugas 3B: Untuk tiap-tiap switch, isikan tabel berikut:

- SW1

NO	Variable	Nilai
1	Root ID	32769, 0001.4297.9E35
2	Priority	32769
3	MAC Address	0001.4297.9E35
4	Bridge ID	32769, 0001.4297.9E35
5	Cost (0/1;0/2;0/3)	Fa0/2 Root;FWD;19;128.2;P2p Fa0/3 Desg;FWD;19;128.3;P2p
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW2

NO	Variable	Nilai
1	Root ID	32769, 0001.4297.9E35
2	Priority	32769
3	MAC Address	0001.4297.9E35
4	Bridge ID	32769, 0001.4297.9E35
5	Cost (0/1;0/2;0/3)	Fa0/2 Desg;FWD;19;128.2;P2p

		Fa0/3 Desg;FWD;19;128.3;P2p
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- SW3

NO	Variable	Nilai
1	Root ID	32769, 0001.4297.9E35
2	Priority	32769
3	MAC Address	0001.4297.9E35
4	Bridge ID	32769, 0001.4297.9E35
5	Cost (0/1;0/2;0/3)	Fa0/1 Root;FWD19;128.1;P2p Fa0/3 Desg;FWD;19;128.3;P2p Fa0/2 Desg;FWD;19;128.2;P2p
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Tugas 4C: Pada kondisi default tersebut, switch dan port mana saja yang:

- Menjadi *root brided* : SW2
- Menjadi *designated brided* : SW2
- Menjadi *root port* : SW1 (Fa0/2), SW3 (Fa0/1)
- Menjadi *designated port* :SW2

Tugas 4D: Pada kondisi defaulttersebut, dan port mana saja yang:

- Berada pada keadaan *forwarding* : SW1, SW2, dan SW3
- Berada pada keadaan *blocking* : tidak ada

Dari PC Leo lakukan ping ke PC Virgo

```
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=23ms TTL=128
Reply from 172.21.1.3: bytes=32 time=11ms TTL=128
Reply from 172.21.1.3: bytes=32 time=21ms TTL=128
Reply from 172.21.1.3: bytes=32 time=22ms 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 = 11ms, Maximum = 23ms, Average = 19ms

C:\>
```

Tugas 5A: Tuliskan langkah untuk melakukan perintah ping

Jawab : Klik PC lalu pilih menu “Desktop” lalu pilih Command Prompt” lalu ketikkan perintah ‘ping 172.21.1.3’ pada Command Prompt tanpa tanda petik.