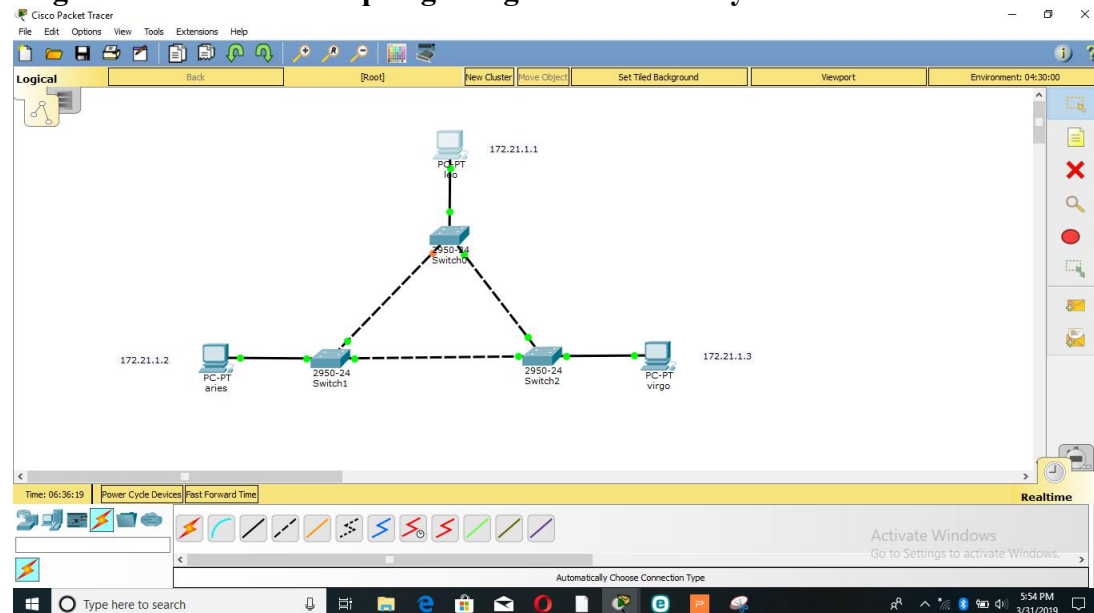Nama : Lail Nur Rachman
NIM : L200170137
Kelas C

MODUL 6

Kegiatan 1. Topologi 1

Tugas 1A. Pembuatan Topologi dengan switch Catalyst 2950.
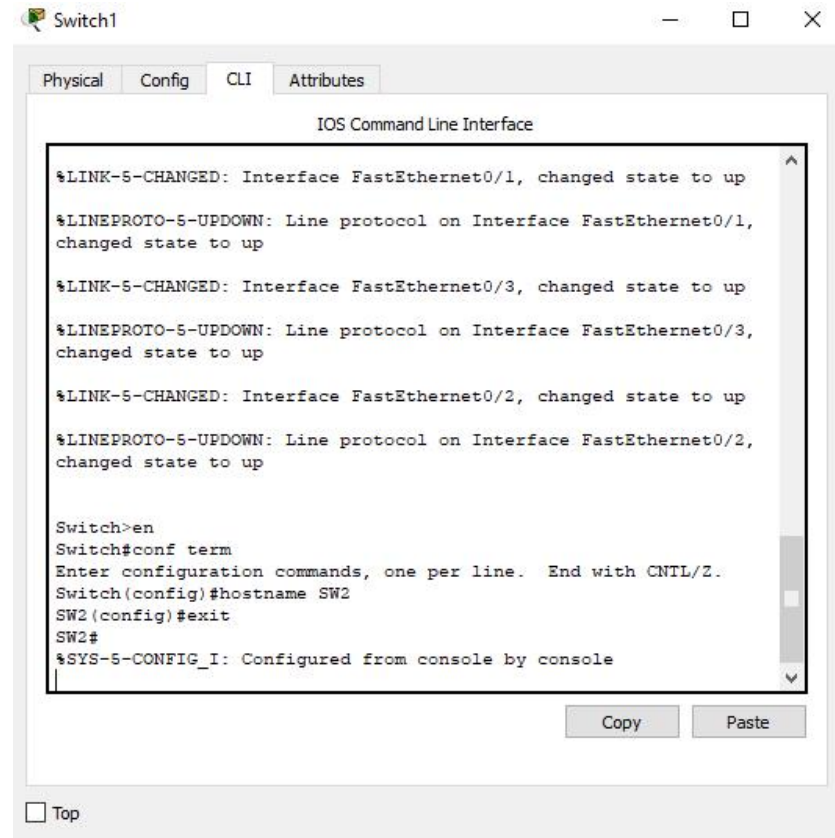

Tugas 2A.
Memberi nama SW1

Memberi nama SW2

Switch1 — □ ×

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 FastEthernet0/3, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3,
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
```
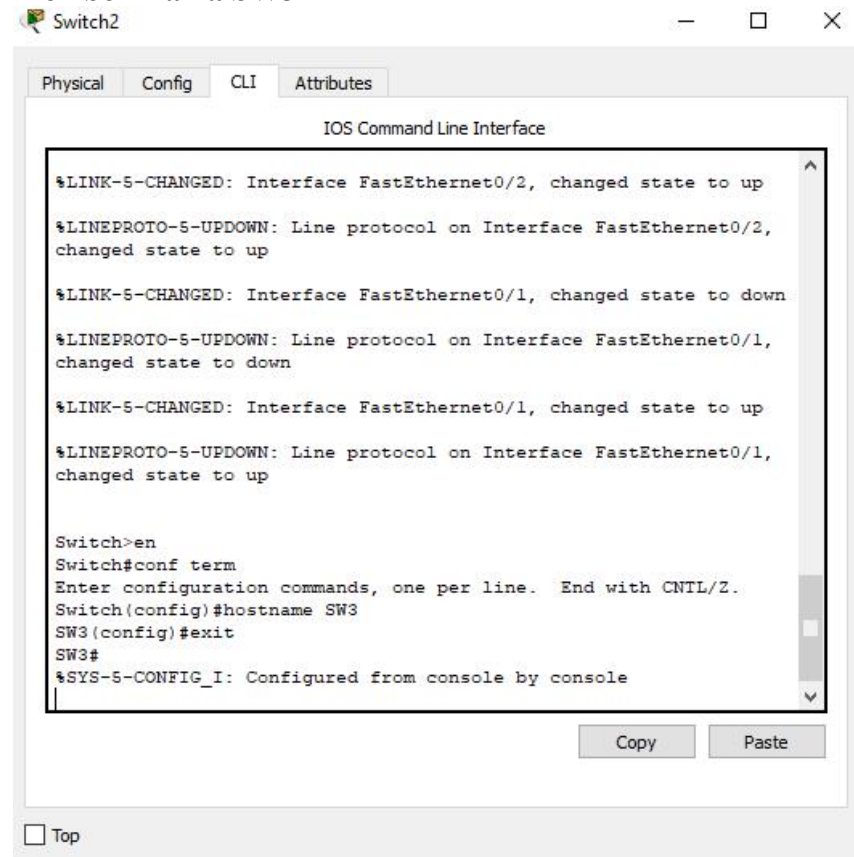
Copy | Paste

☐ Top

Memberi nama SW3

Switch2 — □ ×

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
%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 FastEthernet0/1, changed state to down

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

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

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


Switch>en
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
```

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☐ Top

Tugas 3. Konfigurasi IP
Konfigurasi IP pada Leo

leo — □ X

| Physical | Config | Desktop | Attributes | Software/Services |

IP Configuration X

IP Configuration

○ DHCP   ⦿ Static

IP Address   172.21.1.1

Subnet Mask   255.255.255.0

Default Gateway

DNS Server

IPv6 Configuration

○ DHCP   ○ Auto Config   ⦿ Static
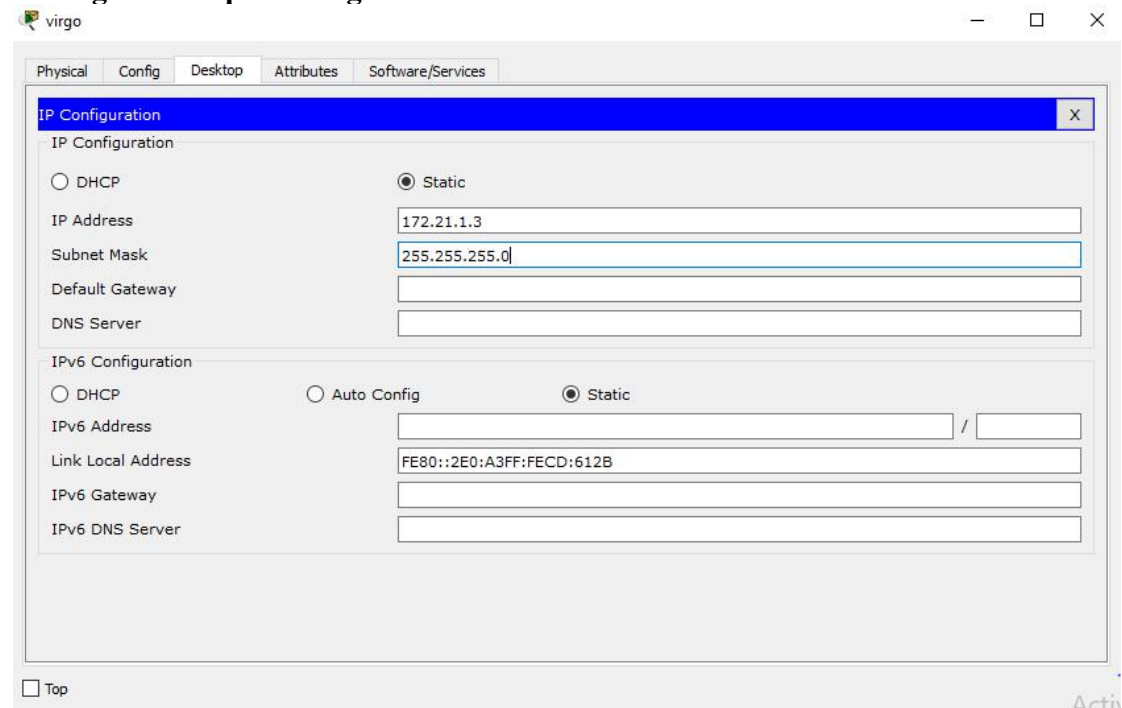
IPv6 Address   /

Link Local Address   FE80::202:16FF:FEA6:EE05

IPv6 Gateway

IPv6 DNS Server

☐ Top

Activ

Konfigurasi IP pada Aries

aries — □ X

| Physical | Config | Desktop | Attributes | Software/Services |

IP Configuration X

IP Configuration

○ DHCP   ⦿ Static

IP Address   172.21.1.2

Subnet Mask   255.255.255.0

Default Gateway

DNS Server

IPv6 Configuration

○ DHCP   ○ Auto Config   ⦿ Static

IPv6 Address   /
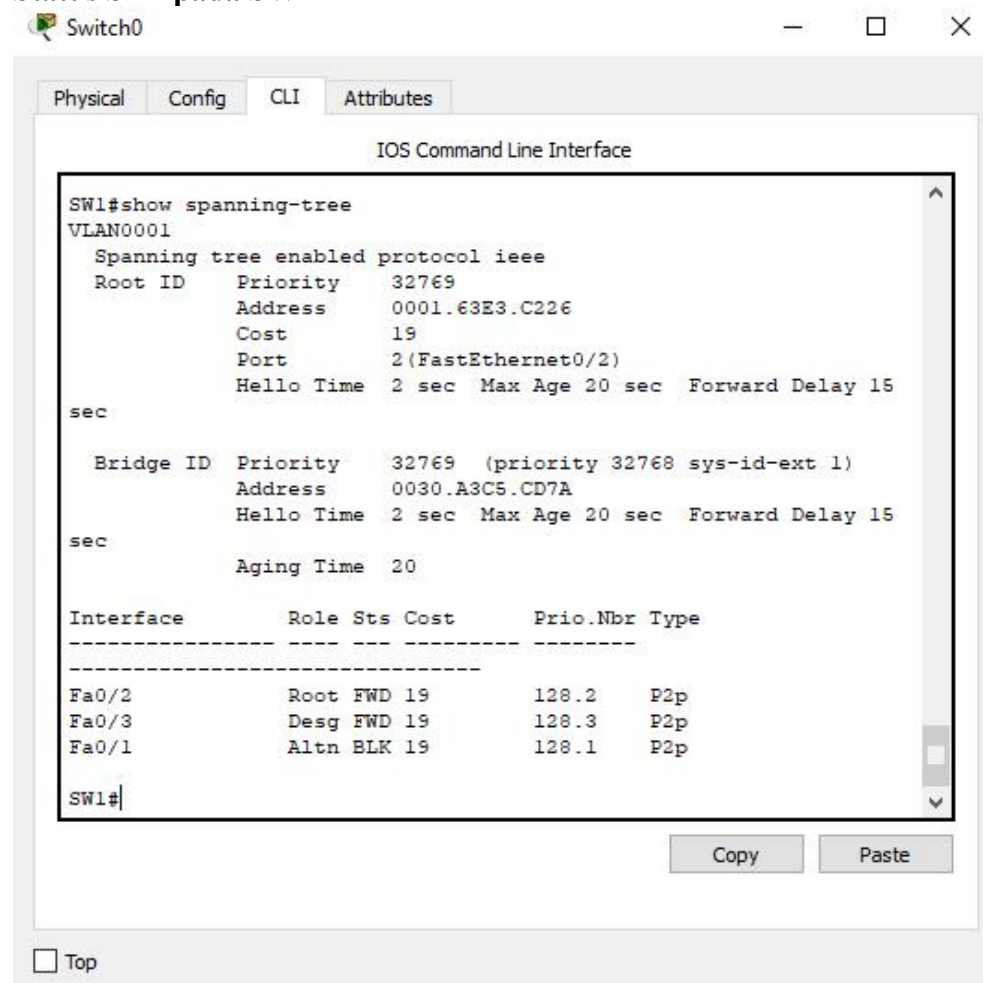
Link Local Address   FE80::2D0:D3FF:FE64:B910

IPv6 Gateway

IPv6 DNS Server

☐ Top

Activ

Konfigurasi IP pada Virgo

Tugas 4A.
Status STP pada SW1

Status STP pada SW2

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0001.63E3.C226
             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     0002.175C.5628
             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
Fa0/1            Desg FWD 19        128.1    P2p

SW2#
```
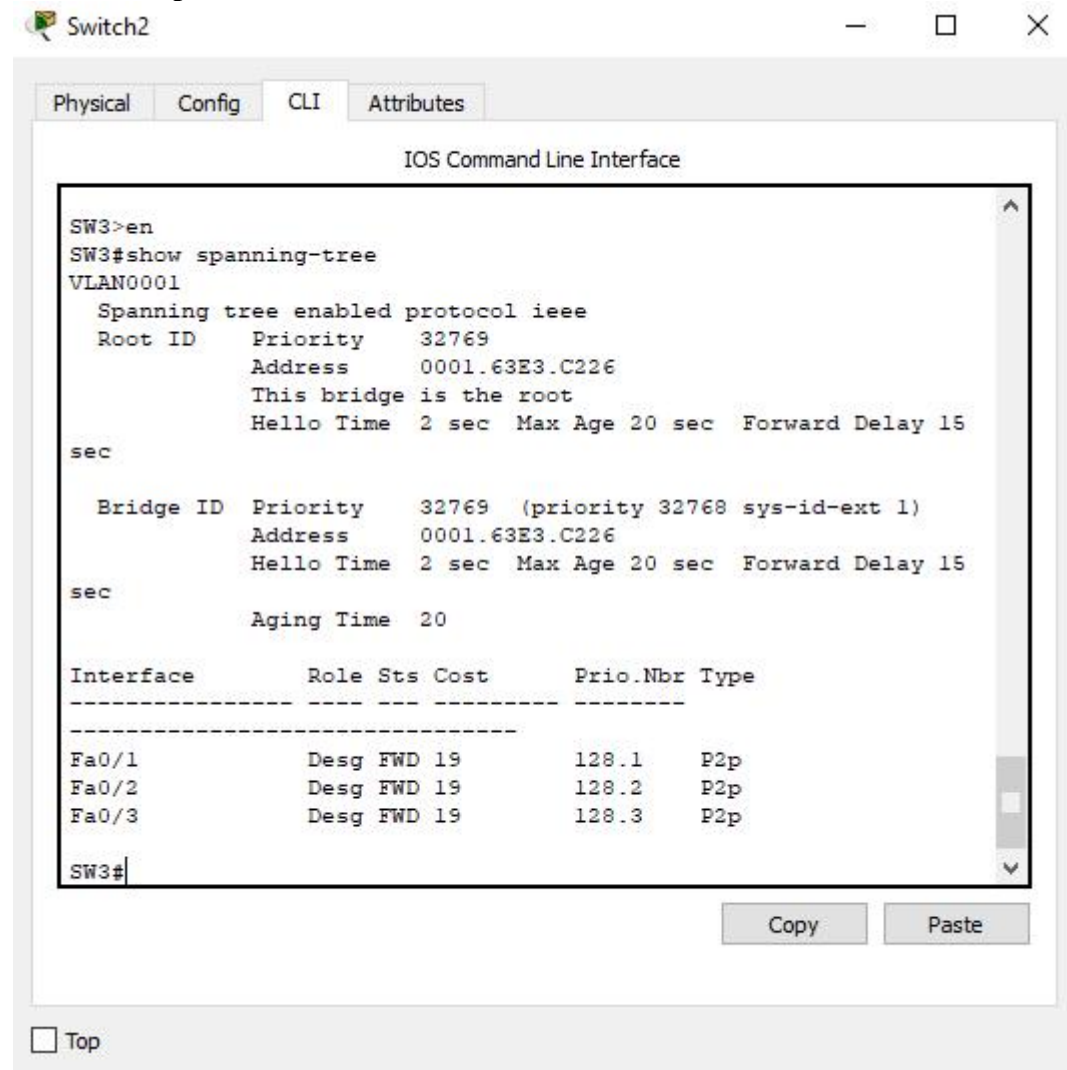
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☐ Top

Status STP pada SW3

Tugas 4B.

SW1

No	Variable	Nilai
1	Root ID	32769.0001.63E3.C226
2	Priority	32769
3	MAC Address	0030.A3C5.CD7A
4	Bridge ID	32769.0030.A3C5.CD7A
5	Cost(0/1;0/2;0/3)	0/1 : 19 0/2 : 19 0/3 : 19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

SW2

No	Variable	Nilai
1	Root ID	32769.0001.63E3.C226

2	Priority	32769
3	MAC Address	0002.175C.5628
4	Bridge ID	32769.0002.175C.5628
5	Cost(0/1;0/2;0/3)	0/1 : 19 0/2 : 19 0/3 : 19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

SW3

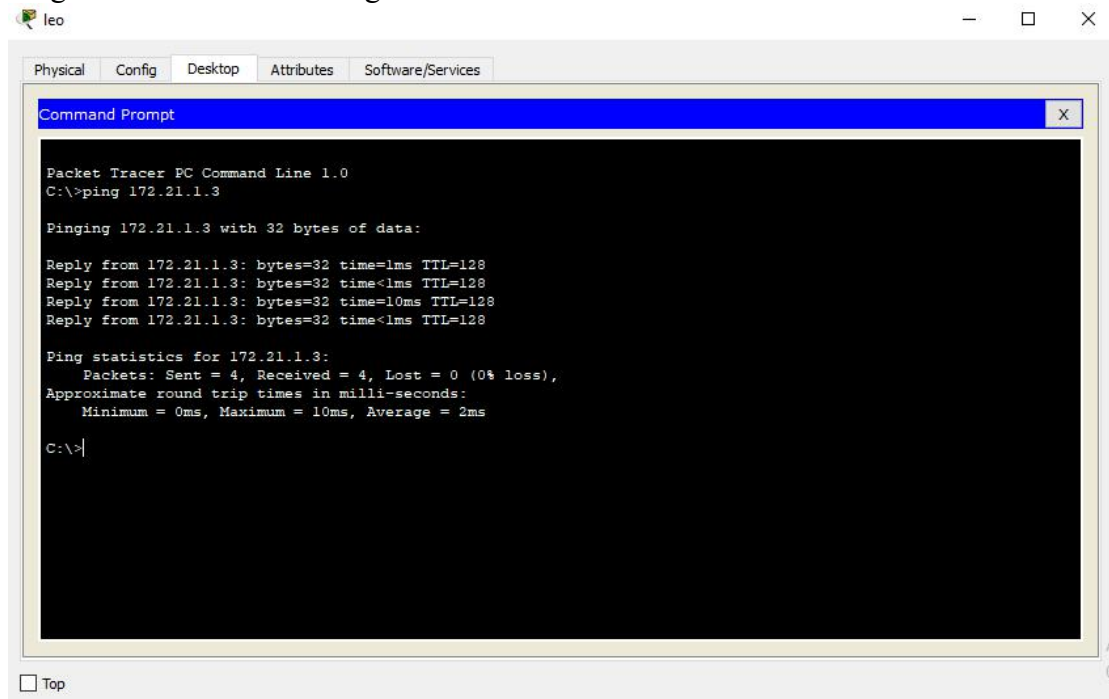| No	Variable	Nilai
1	Root ID	32769.0001.63E3.C226
2	Priority	32769
3	MAC Address	0001.63E3.C226
4	Bridge ID	32769.0001.63E3.C226
5	Cost(0/1;0/2;0/3)	0/1 : 19 0/2 : 19 0/3 : 19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

Tugas 4C.
- *Root bridge*   : SW3
- *Designated brigde* : SW2
- *Root port*   : SW1 0/2 dan SW2 0/2
- *Designated port*   : SW1 0/3, SW2 0/1 0/3, SW3 0/1 0/2 0/3
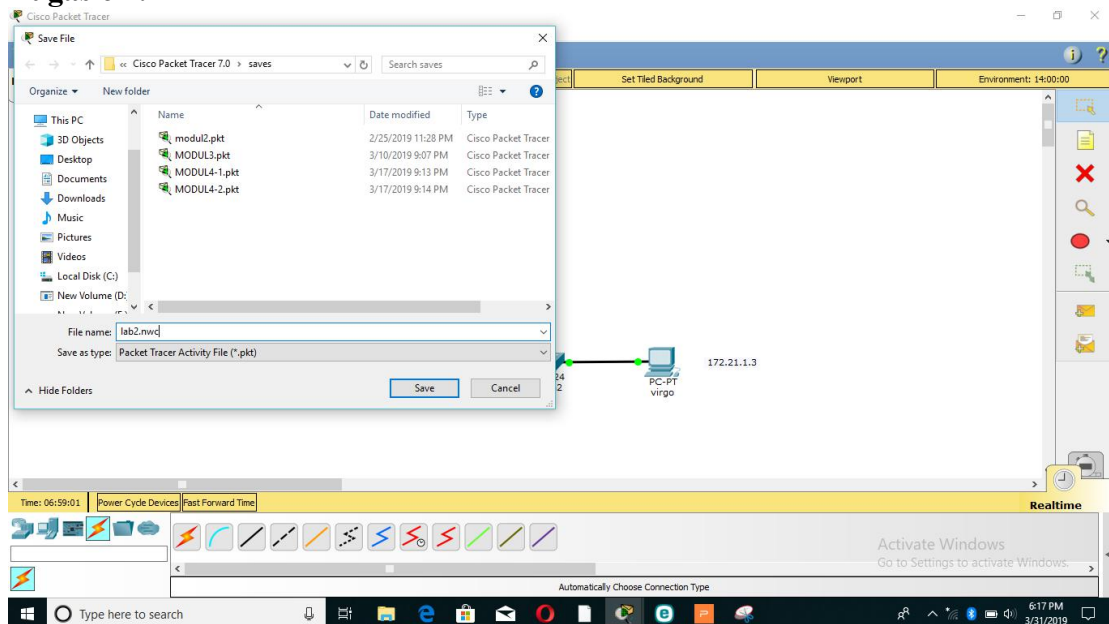
Tugas 4D
- Keadaan *forwarding*   : SW2 dan SW3
- Keadaan *blocking*   : SW1
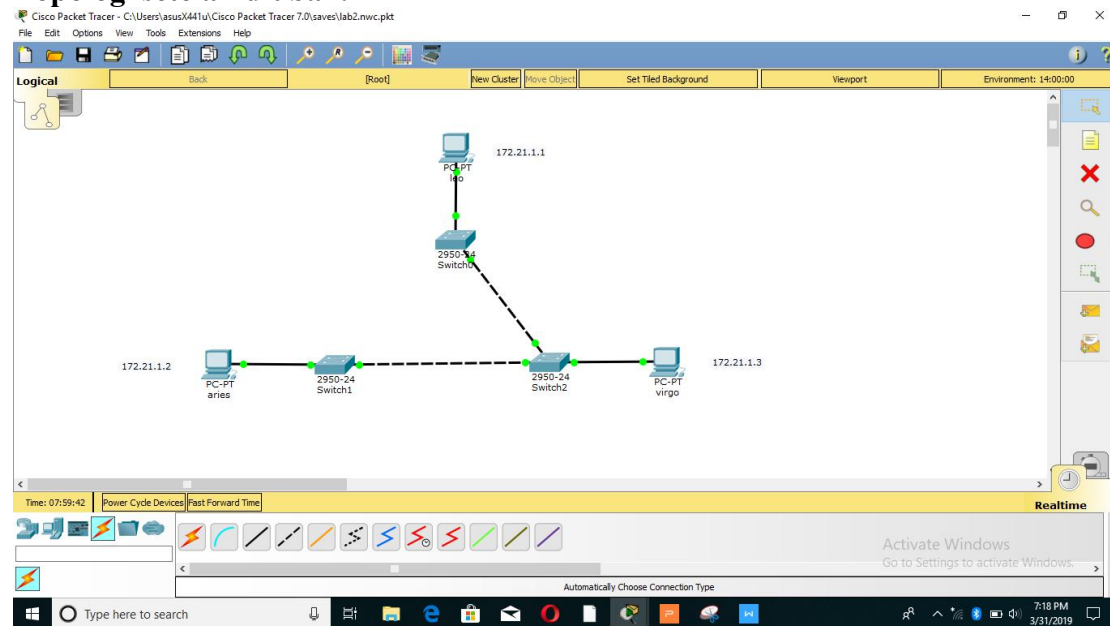
Tugas 5A.

Ping dari PC Leo ke PC Virgo

Tugas 6A.

Kegiatan 2. Topologi 2

Topologi setelah diubah.

Status STP pada SW1

Status STP pada SW2

```
Switch1                                             —    □    ✕

Physical    Config    CLI    Attributes

                   IOS Command Line Interface

  SW2>en
  SW2#show spanning-tree
  VLAN0001
    Spanning tree enabled protocol ieee
    Root ID    Priority    32769
               Address     0001.63E3.C226
               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     0002.175C.5628
               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

  SW2#

                                        Copy        Paste

□ Top
```

Status STP pada SW3

```
Switch2                                             —    □    ✕

Physical    Config    CLI    Attributes

                   IOS Command Line Interface

  SW3>en
  SW3#show spanning-tree
  VLAN0001
    Spanning tree enabled protocol ieee
    Root ID    Priority    32769
               Address     0001.63E3.C226
               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     0001.63E3.C226
               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

  SW3#

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□ Top
```

SW1

No	Variable	Nilai
1	Root ID	32769.0001.63E3.C226
2	Priority	32769
3	MAC Address	0030.A3C5.CD7A
4	Bridge ID	32769.0030.A3C5.CD7A
5	Cost(0/1;0/2;0/3)	0/1 : - 0/2 : 19 0/3 : 19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

SW2

No	Variable	Nilai
1	Root ID	32769.0001.63E3.C226
2	Priority	32769
3	MAC Address	0002.175C.5628
4	Bridge ID	32769.0002.175C.5628
5	Cost(0/1;0/2;0/3)	0/1 : - 0/2 : 19 0/3 : 19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

SW3

No	Variable	Nilai
1	Root ID	32769.0001.63E3.C226
2	Priority	32769
3	MAC Address	0001.63E3.C226
4	Bridge ID	32769.0001.63E3.C226
5	Cost(0/1;0/2;0/3)	0/1 : 19 0/2 : 19 0/3 : 19
6	Hello Time	2 sec
7	Max Age	20 sec
8	Forward Delay	15 sec

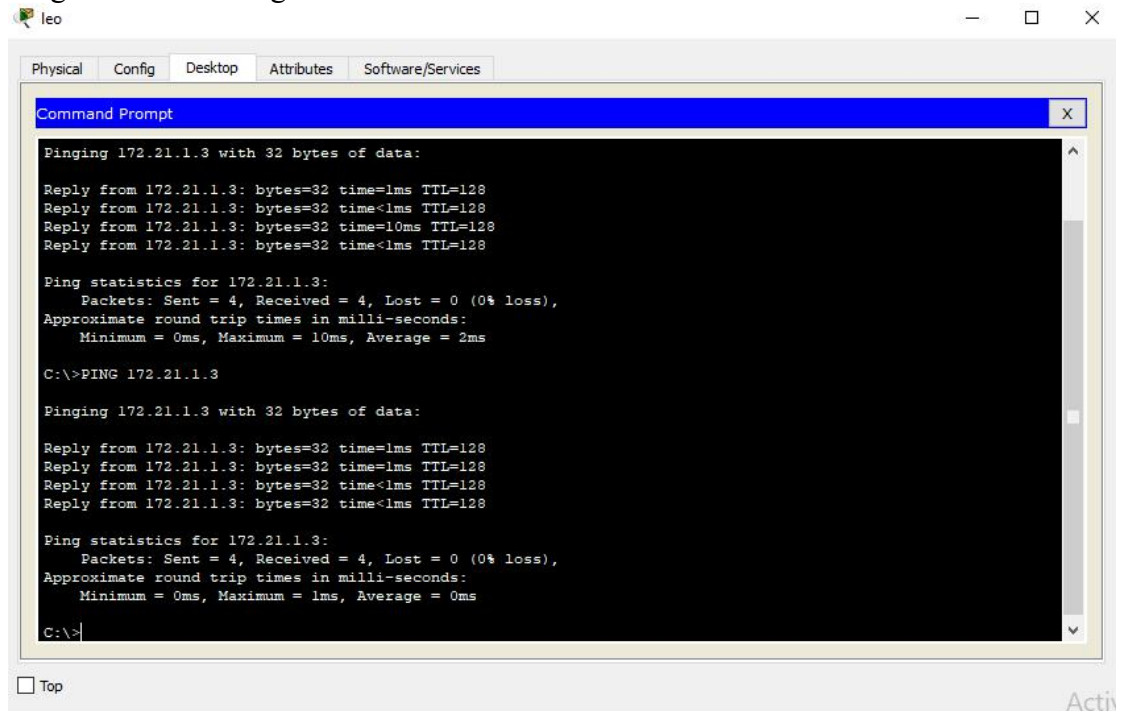## Tugas 4C.
- *Root bridge*   : SW1
- *Designated brigde* : SW2
- *Root port*   : SW1 0/2 dan SW2 0/2
- *Designated port*   : SW1 0/3, SW2 0/3, SW3 0/1 0/2 0/3

Tugas 4D
- Keadaan *forwarding*   : SW2 dan SW3
- Keadaan *blocking*   : SW1

Tugas 5A.
Ping dari Leo ke Virgo

leo   — ☐ ✕

| Physical | Config | Desktop | Attributes | Software/Services |

Command Prompt   X

```
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=10ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms 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 = 0ms, Maximum = 10ms, Average = 2ms

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=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms 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 = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

☐ Top

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