

Nama : Bachtaiar Nuhri Kurniawan

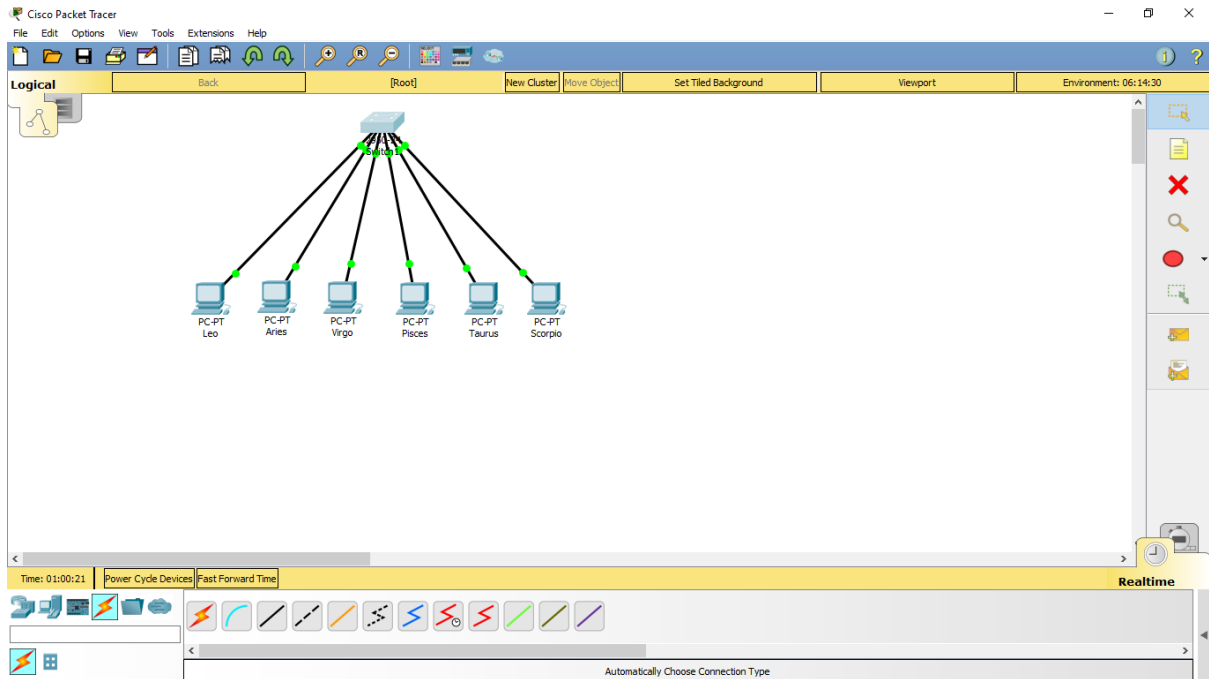
Nim : L200180031

Kelas : B

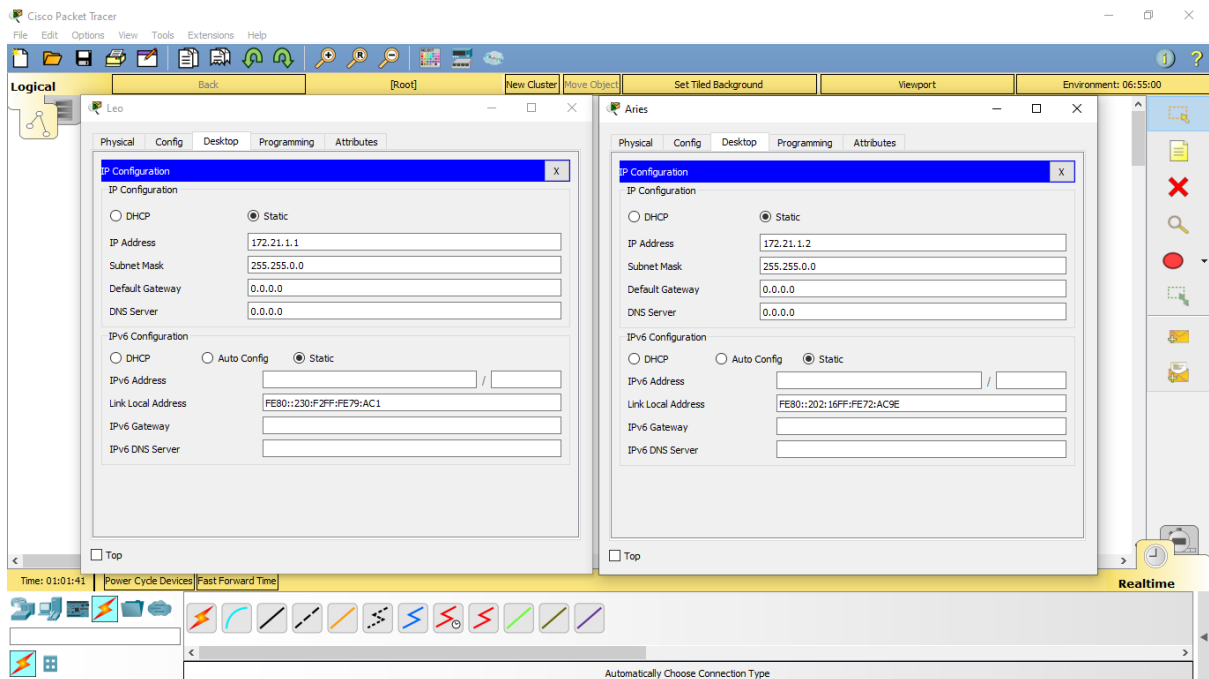
MODUL 4

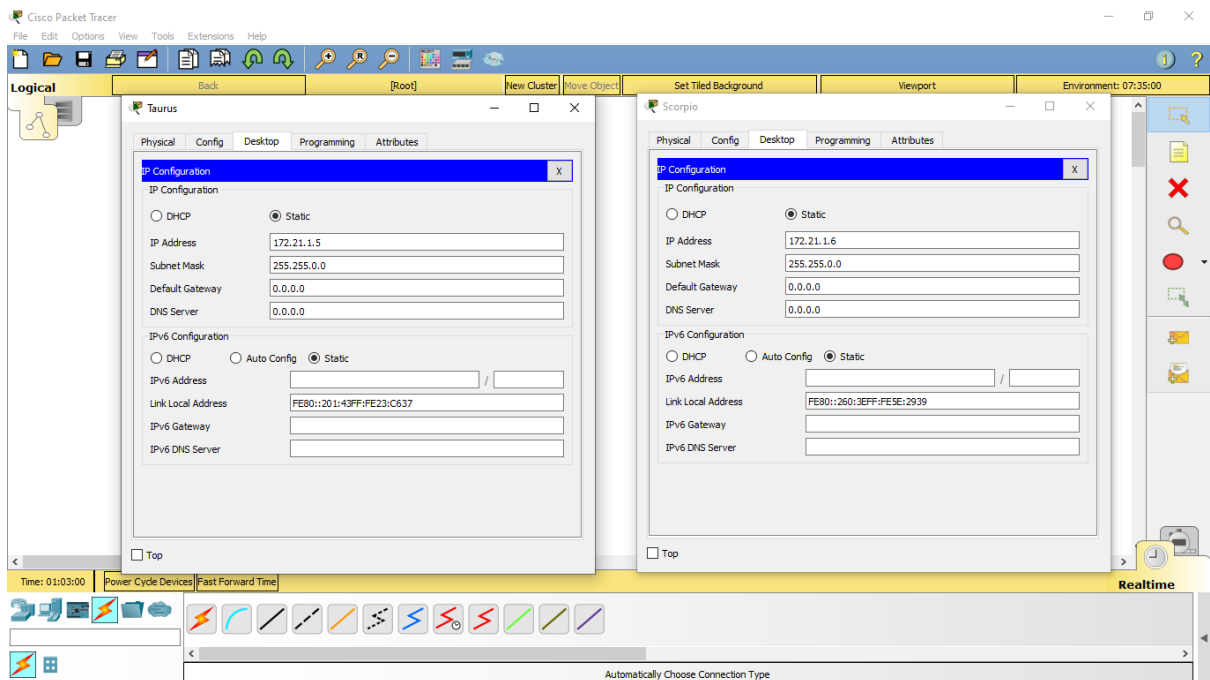
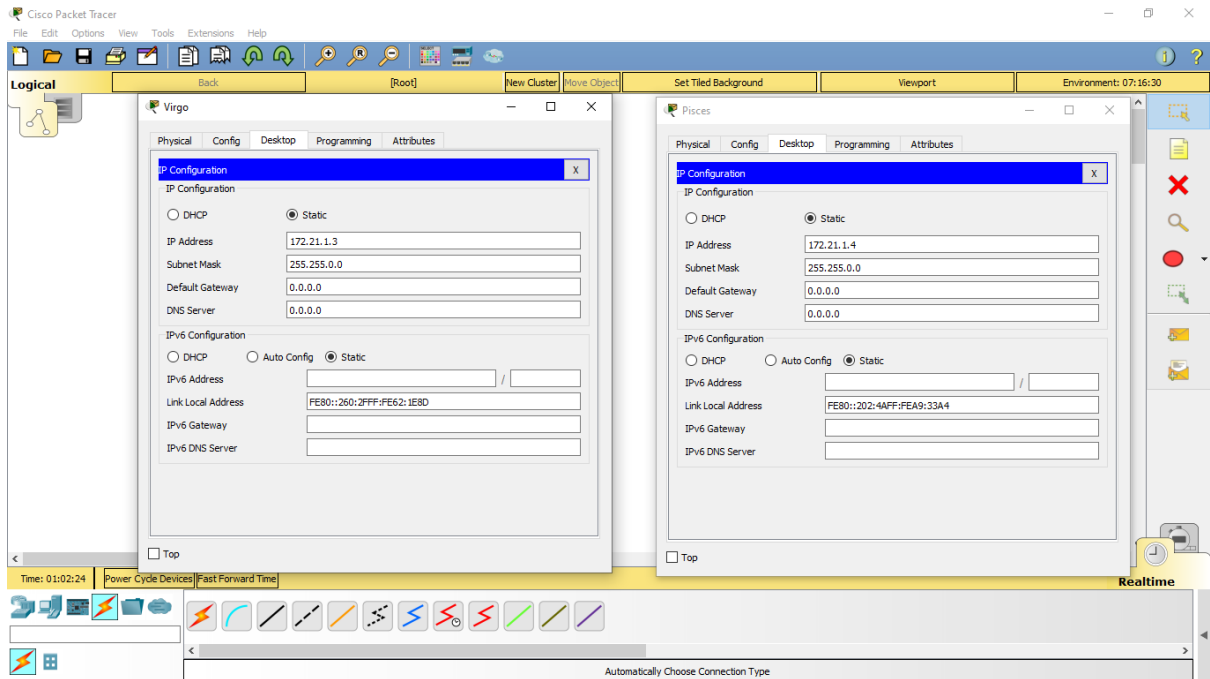
Kegiatan 1

Membuat Topologi

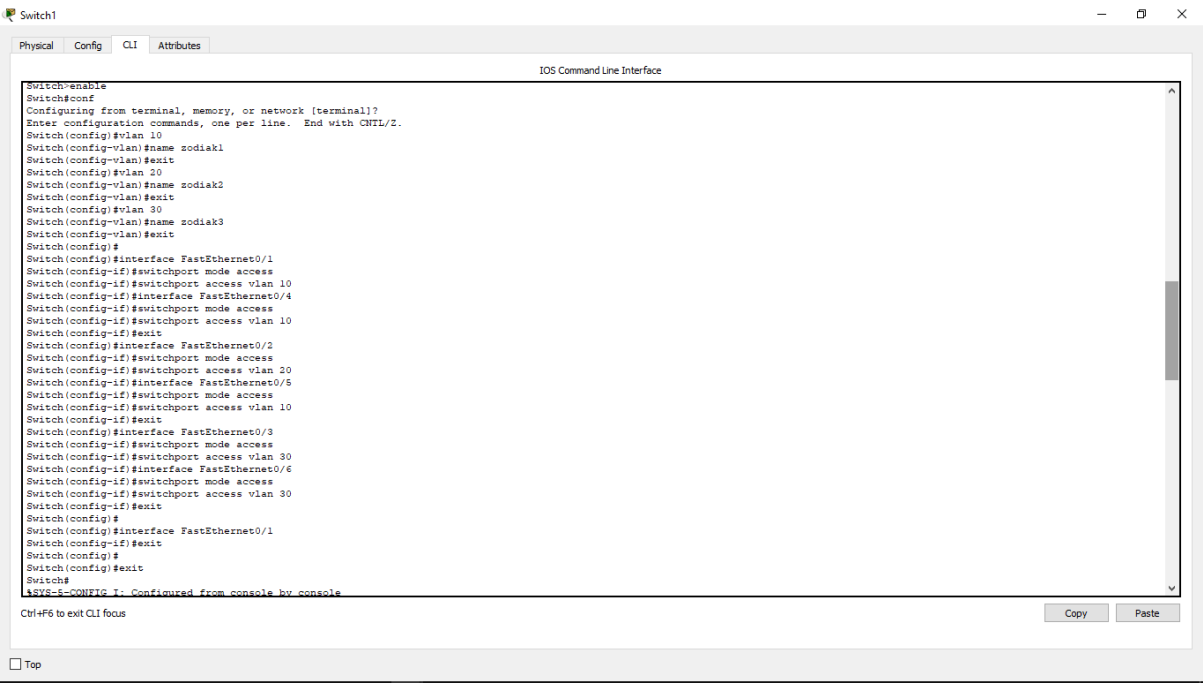


Konfigurasi masing masing PC

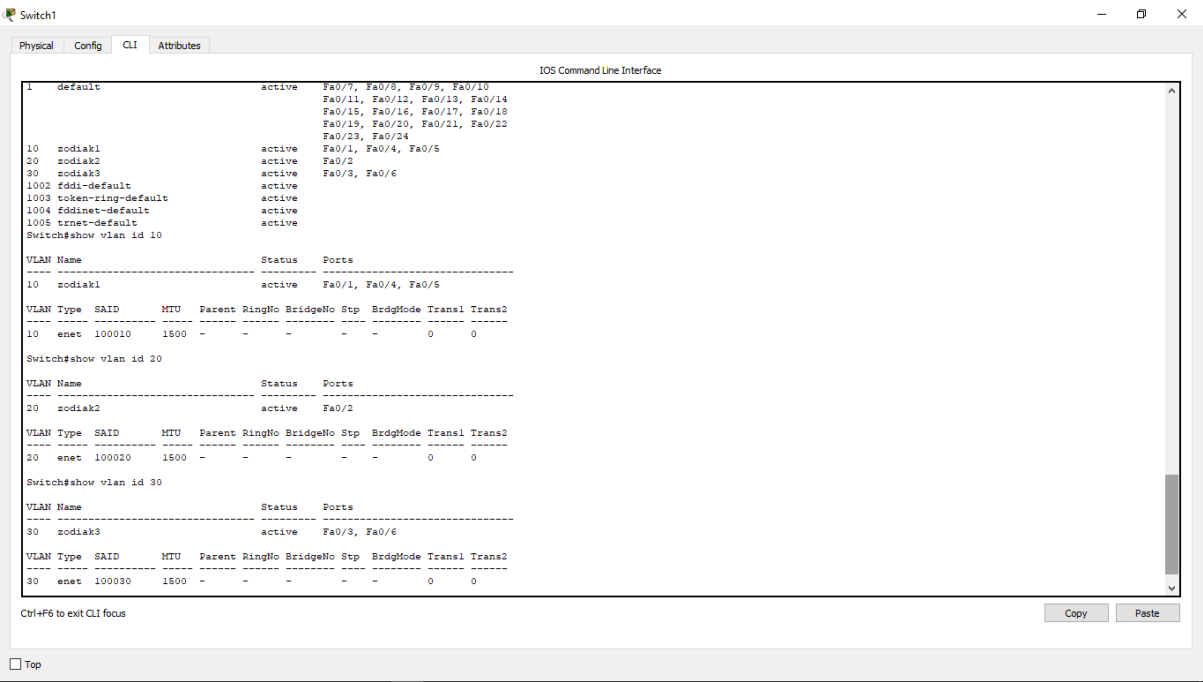




Konfigurasi pada switch dan konfigurasi port-port switch



Melihat Konfigurasi VLAN yang telah dibuat



Tugas 6a

No	Variabel	Nilai
1.	Nomor Vlan	10
2.	Nama Vlan	Zodiak1
3.	Port	Fa0/1, Fa0/4
4.	Status	Active

No	Variabel	Nilai
1.	Nomor Vlan	20
2.	Nama Vlan	Zodiak2
3.	Port	Fa0/2, Fa0/5
4.	Status	Active

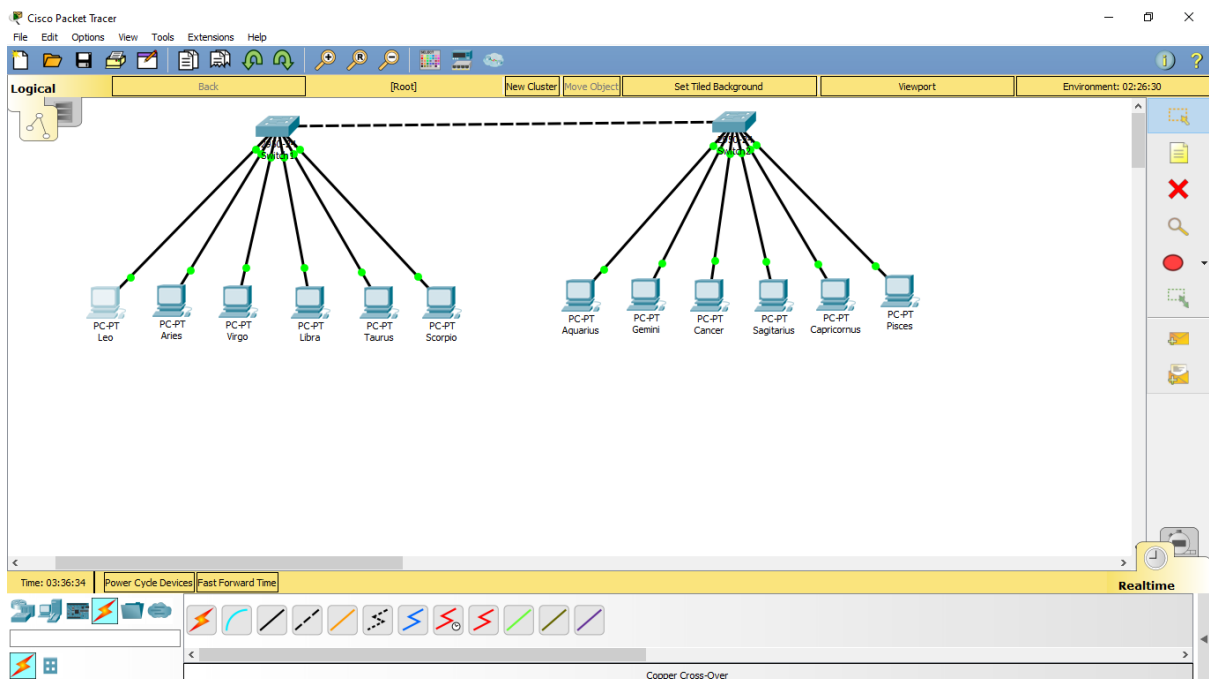
No	Variabel	Nilai
1.	Nomor Vlan	30
2.	Nama Vlan	Zodiak3
3.	Port	Fa0/3, Fa0/6
4.	Status	Active

Tugas 6b

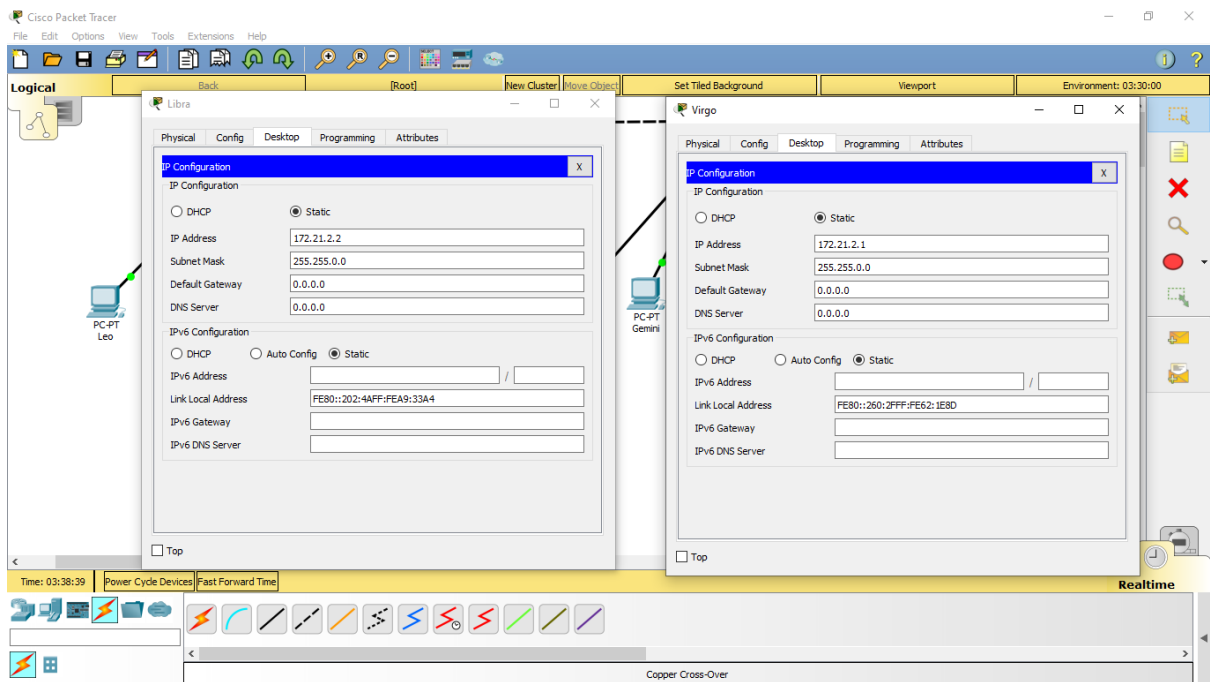
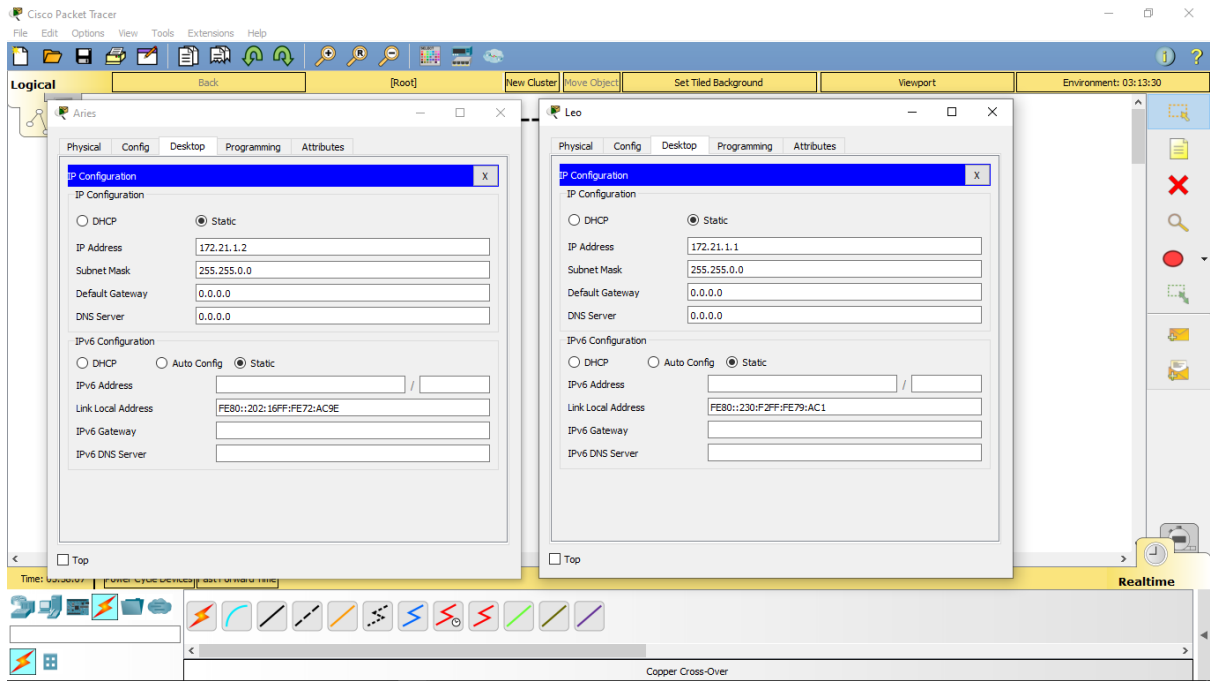
Hasil dari 6A yaitu configuration yang kita lakukan telah menjadikan 3 id vlan yang terdiri dari zodiak1(10), zodiak2(20), zodiak3(30) dan masing-masing id vlan diisi dengan 2 port (PC) dan semua vlan statusnya telah aktif.

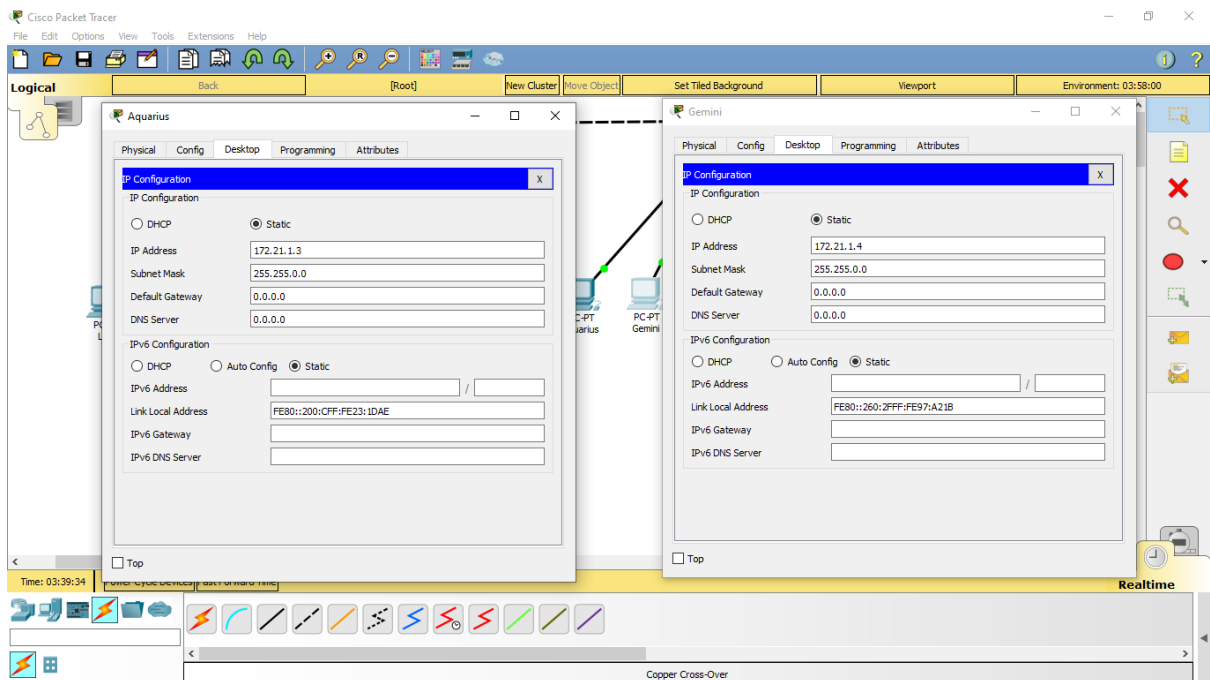
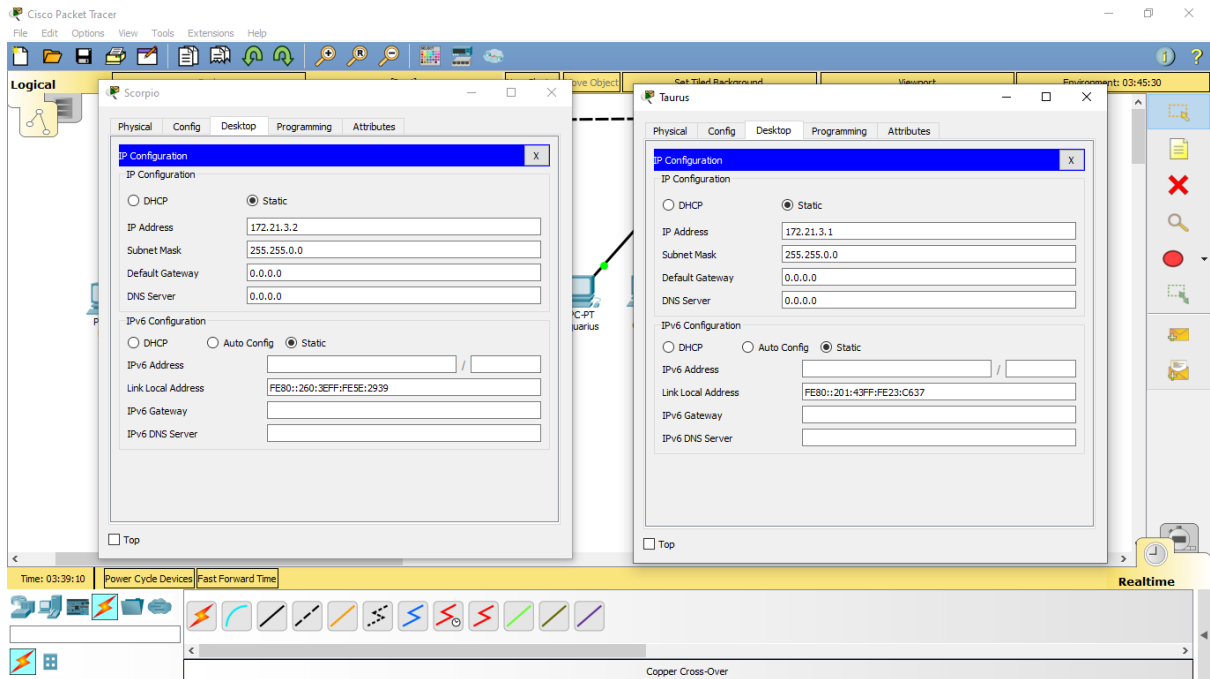
Kegiatan 2

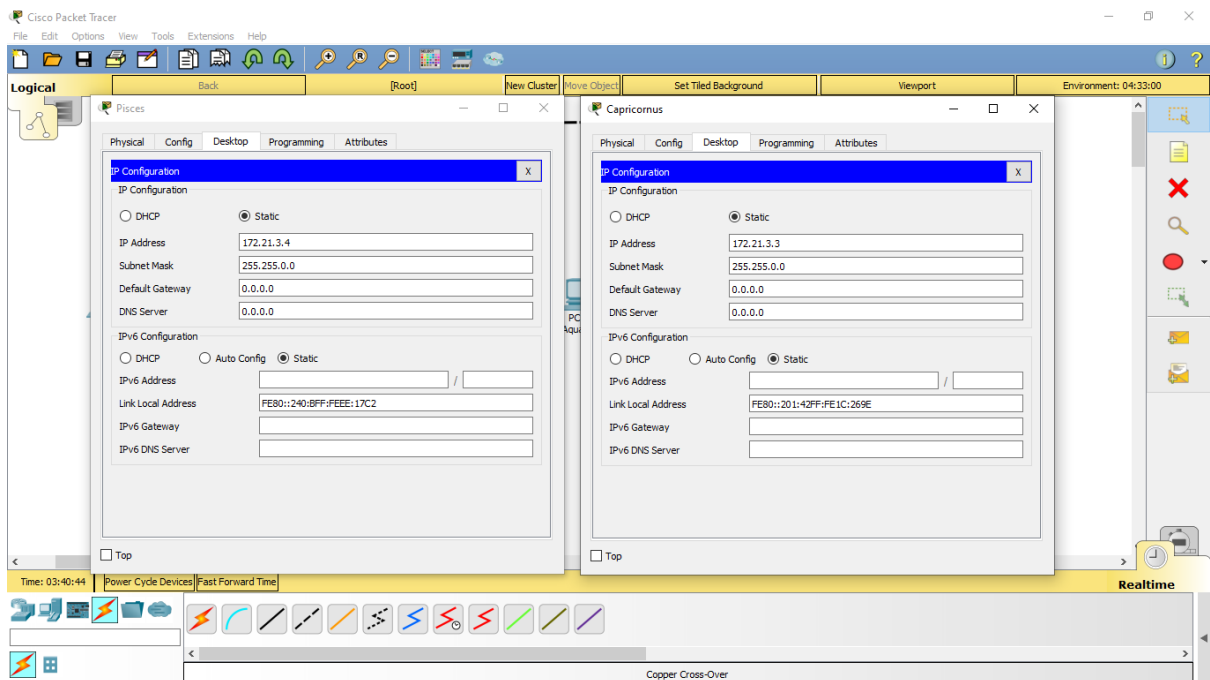
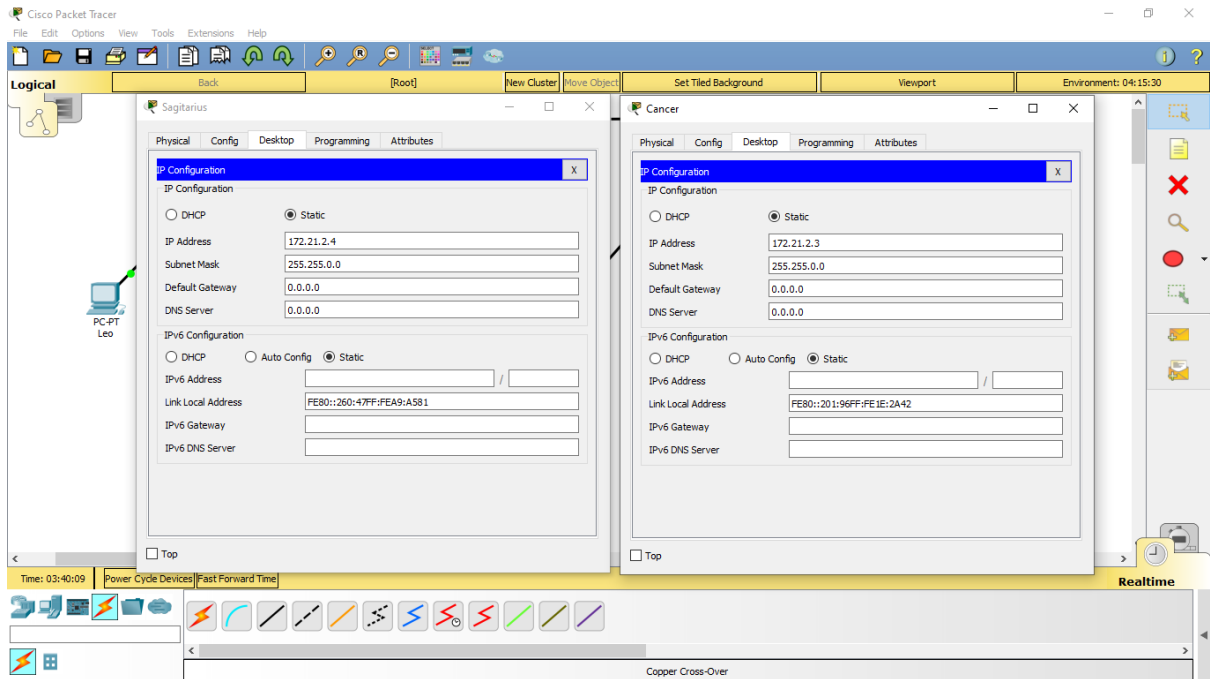
Membuat Topologi



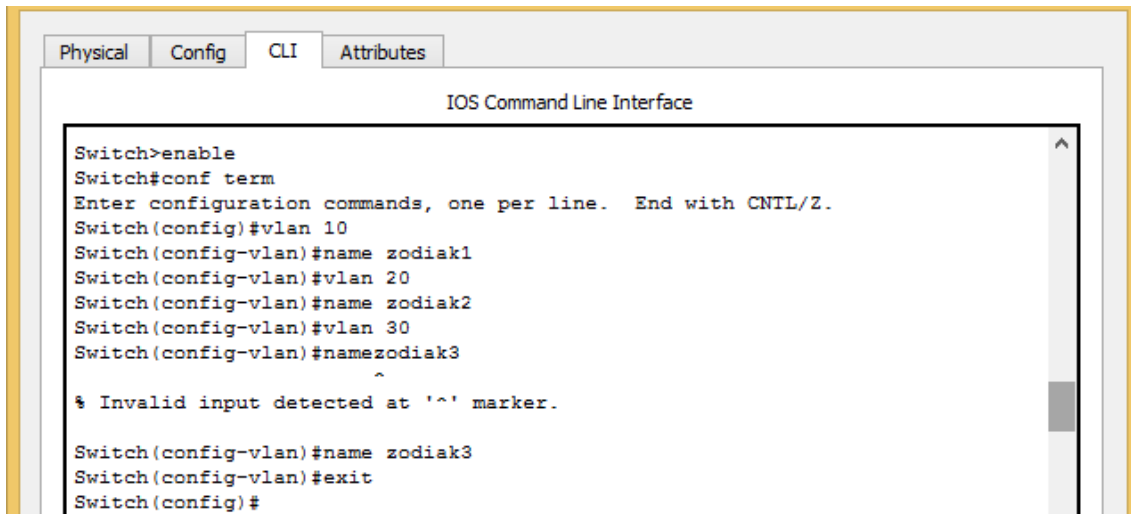
Konfigurasi Masing Masing PC







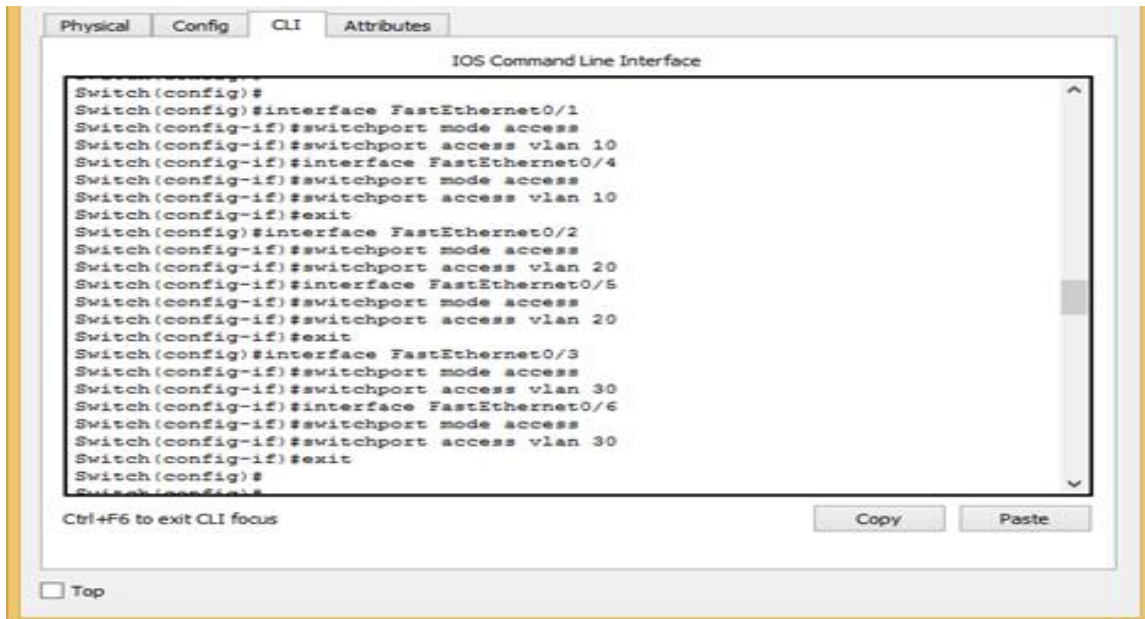
Konfigurasi pada switch untuk membuat 3 Vlan dengan nama zodiak1, zodiak2, zodiak3



```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#^
% Invalid input detected at '^' marker.

Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#
```

Melakukan konfigurasi port-port switch ke dalam Vlan zodiak1, zodiak2, dan zodiak3 pada switch1



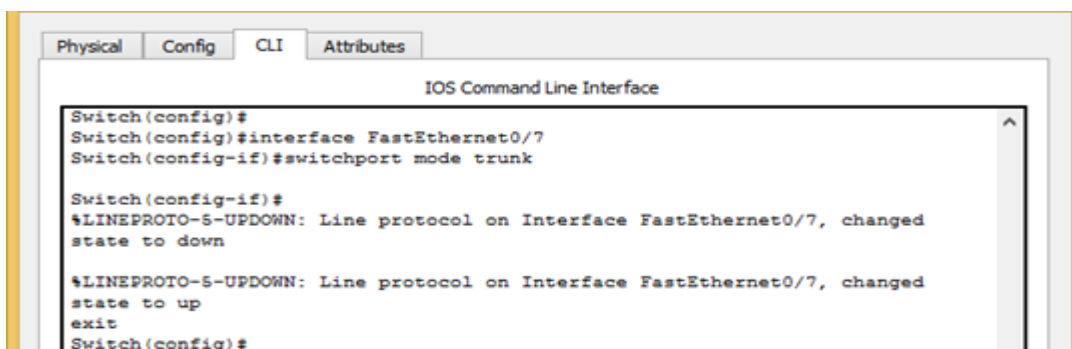
```
Switch(config)#
Switch(config)#interface FastEthernet0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface FastEthernet0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#interface FastEthernet0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#interface FastEthernet0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#
Switch(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Konfigurasi Vlan trunking pada switch 1



```
Switch(config)#
Switch(config)#interface FastEthernet0/7
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed
state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed
state to up
exit
Switch(config)#
```


Melihat konfigurasi trunking pada switch 1

The first screenshot shows the configuration of interface Fa0/7. The output of the `show interface Fa 0/7 switchport` command is as follows:

```
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none
```

The second screenshot shows the output of the `Switchshow int trunk` command, displaying the status of Fa0/7 as a trunk port with native VLAN 1 and allowed VLANs 1, 10, 20, 30.

```
Port      Mode      Encapsulation  Status      Native vlan
Fa0/7     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/7     1-1005

Port      Vlans allowed and active in management domain
Fa0/7     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/7     1,10,20,30
```

The third screenshot shows the output of the `Switchshow vlan` command, displaying the status of various VLANs and their associated ports.

```
VLAN Name                Status    Ports
-----
1    default                active    Fa0/8, Fa0/9, Fa0/10, Fa0/11, Fa0/12, Fa0/13, Fa0/14, Fa0/15, Fa0/16, Fa0/17, Fa0/18, Fa0/19, Fa0/20, Fa0/21, Fa0/22, Fa0/23, Fa0/24
10   sdiak1                 active    Fa0/1, Fa0/4
20   sdiak2                 active    Fa0/2, Fa0/5
30   sdiak3                 active    Fa0/3, Fa0/6
1002 fddi1-default          act/unsup
1008 tokenring-default   act/unsup
1004 fddinet-default     act/unsup
1006 tokenring-default  act/unsup
```

The fourth screenshot shows the output of the `Switchshow vlan` command, displaying the status of various VLANs and their associated ports.

```
VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp    BridgeMode Trans1 Trans2
-----
1    enet  100001    1500   -     -     -     -     -     0      0
10   enet  100010    1500   -     -     -     -     -     0      0
20   enet  100020    1500   -     -     -     -     -     0      0
30   enet  100030    1500   -     -     -     -     -     0      0
1002 fddi  101002    1500   -     -     -     -     -     0      0
1008 te  101008    1500   -     -     -     -     -     0      0
1004 fde  101004    1500   -     -     -     -     -     0      0
1006 tnet  101006    1500   -     -     -     -     -     0      0
```

The fifth screenshot shows the output of the `Switchshow vlan` command, displaying the status of various VLANs and their associated ports.

```
VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp    BridgeMode Trans1 Trans2
-----
1002 fddi  101002    1500   -     -     -     -     -     0      0
1008 te  101008    1500   -     -     -     -     -     0      0
1004 fde  101004    1500   -     -     -     -     -     0      0
1006 tnet  101006    1500   -     -     -     -     -     0      0
```

The sixth screenshot shows the output of the `Switchshow vlan` command, displaying the status of various VLANs and their associated ports.

```
Remote SPAN VLANs
-----
Primary Secondary Type      Ports
-----
Switch1
```

Tugas 7a

Mengaktifkan switch port Fa0/1(port yang digunakan untuk trunk), Administrative mode menjadi trunk dan juga Operational Mode trunk.

The screenshot shows a Windows command prompt window with the following output:

```
C:\>ping 172.21.3.4

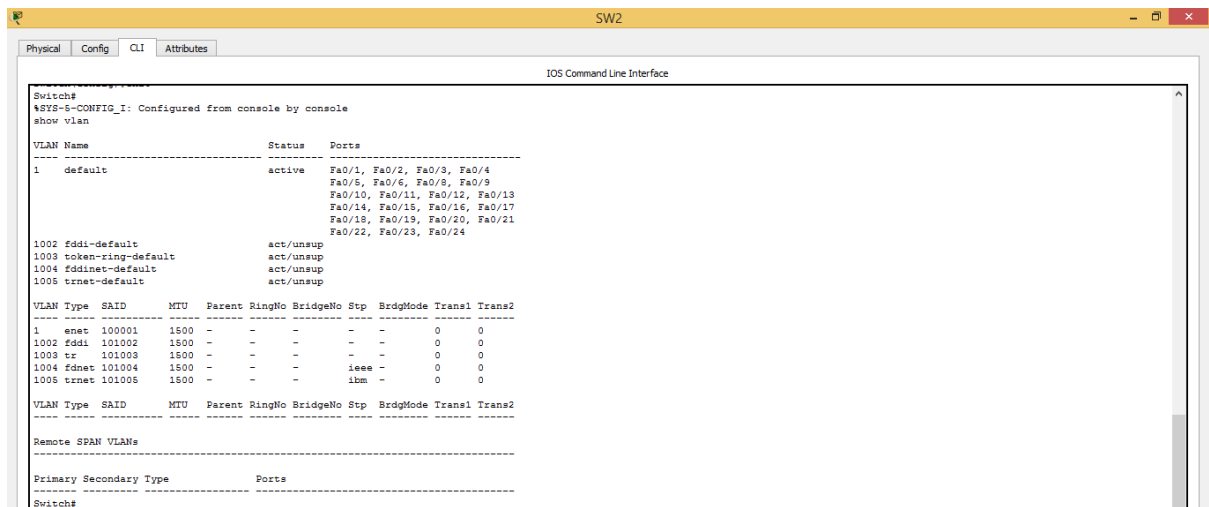
Pinging 172.21.3.4 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

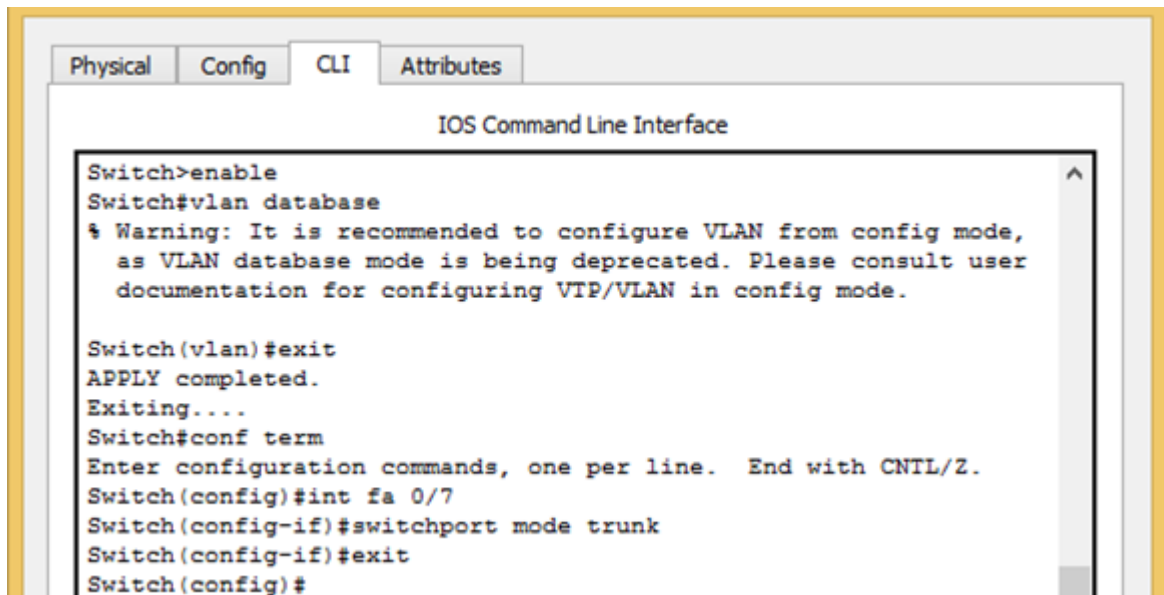
Ping statistics for 172.21.3.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Tugas 8a

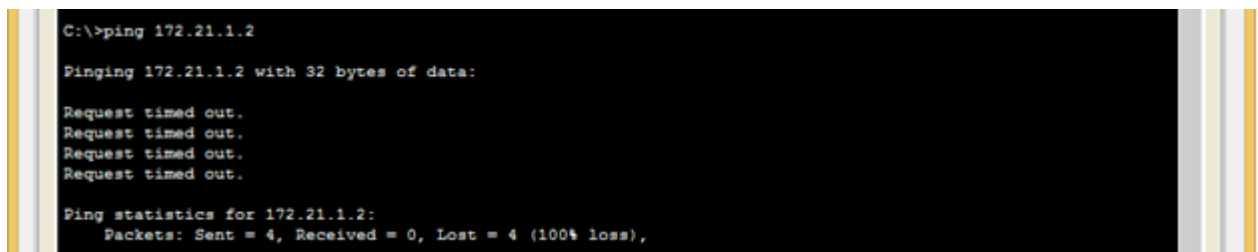


Konfigurasi pada switch 2



Tugas 10a

Leo ke Aries



Leo ke Aquarius

```
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=231ms 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=12ms 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 = 231ms, Average = 60ms

C:\>
```

Leo ke Pisces

```
C:\>ping 172.21.3.4

Pinging 172.21.3.4 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.3.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Libra ke cancer

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.2.3

Pinging 172.21.2.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.2.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Libra ke Leo

```
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time=13ms TTL=128
Reply from 172.21.1.1: bytes=32 time=1ms TTL=128
Reply from 172.21.1.1: bytes=32 time<1ms TTL=128
Reply from 172.21.1.1: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 13ms, Average = 3ms

C:\>
```

Tugas 12a

Dari beberapa hasil percobaan diatas, dapat disimpulkan apabila pc berada pada vlan sama, maka akan menghasilkan balasan atau reply dari IP tujuan pada saat melakukan pengujian Ping, seperti contohnya pc Leo ke Pc Aquarius dan Pc Libra ke Pc Leo.

Akan tetapi apabila berada pada vlan yang berbeda akan menghasilkan status RTO, seperti pada contoh pc Leo ke pc Aries, pc Leo ke Pc Psices, dan pc Libra ke Pc cancer.

