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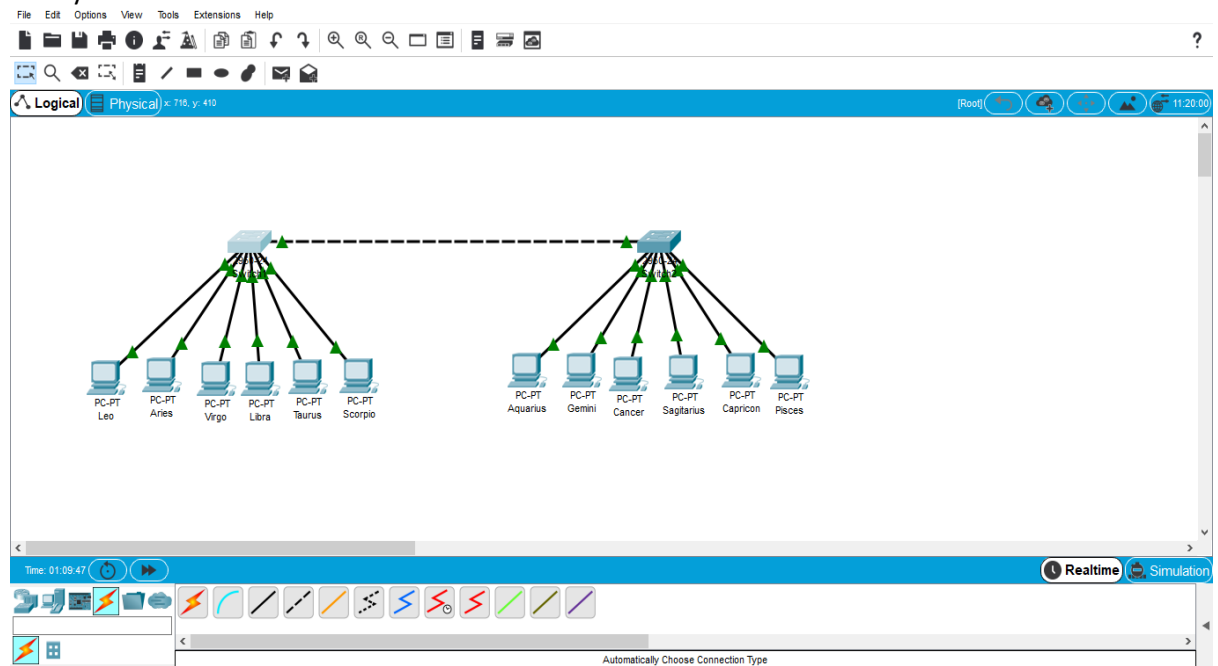
NIM : L200170029

Kelas : B

MODUL 4 VIRTUAL LAN DAN TRUNKING

Kegiatan 2. Topologi 2

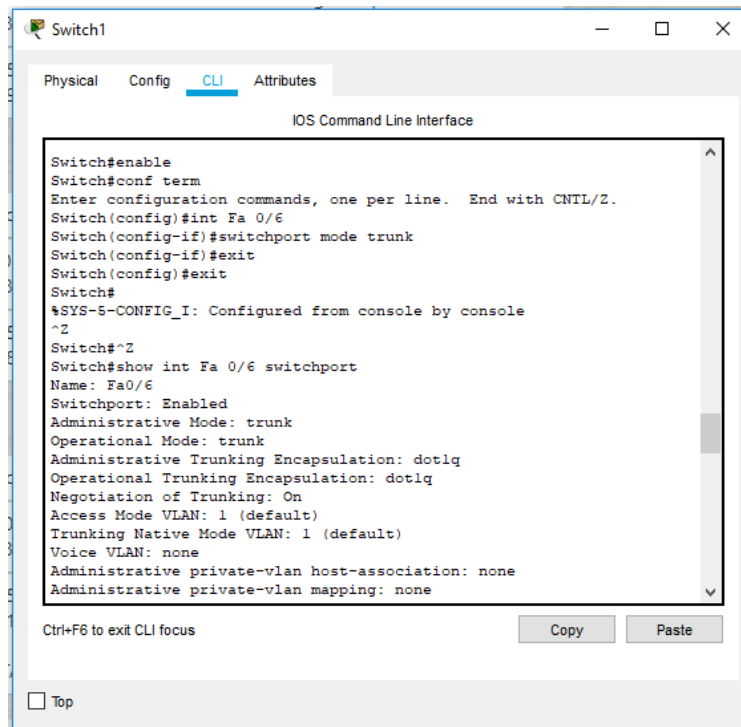
1. Menggunakan cisco packet tracer membuat topologi berikut dengan menggunakan switch Catalyst 2950.



2. Memberi nama masing-masing perangkat dengan SW1 (switch 1), Leo(PC0), Aries (PC1), Virgo (PC2), Libra (PC3), Taurus (PC4), dan Scorpio (PC5) untuk segmen switch 1.
3. Memberi nama masing-masing perangkat dengan SW2 (switch 2), Aquarius (PC6), Gemini (PC7), Cancer (PC8), Sagittarius (PC9), Capricornus (PC10), dan Pisces (PC11) untuk segmen switch 2.
4. Konfigurasi masing-masing PC dengan nama dan alamat IP berikut ini :
 - Leo = 172.21.1.1/24
 - Aries = 172.21.1.2/24
 - Virgo = 172.21.2.1/24
 - Libra = 172.21.2.2/24
 - Taurus = 172.21.3.1/24
 - Scorpio = 172.21.3.2/24
 - Aquarius = 172.21.1.3/24
 - Gemini = 172.21.1.4/24
 - Cancer = 172.21.2.3/24
 - Sagittarius = 172.21.2.4/24
 - Capricornus = 172.21.3.3/24
 - Pisces = 172.21.3.4/24
5. Konfigurasi VLAN trunking pada switch 1.

Langkah pengoperasian :

- Masuk pada mode configuration
- Masuk pada mode interface yang di pakai untuk trunking
- Switch(config)#interface Fa 0/6
- Switch(config-if)#switchport mode trunk
- Switch(config-if)#exit



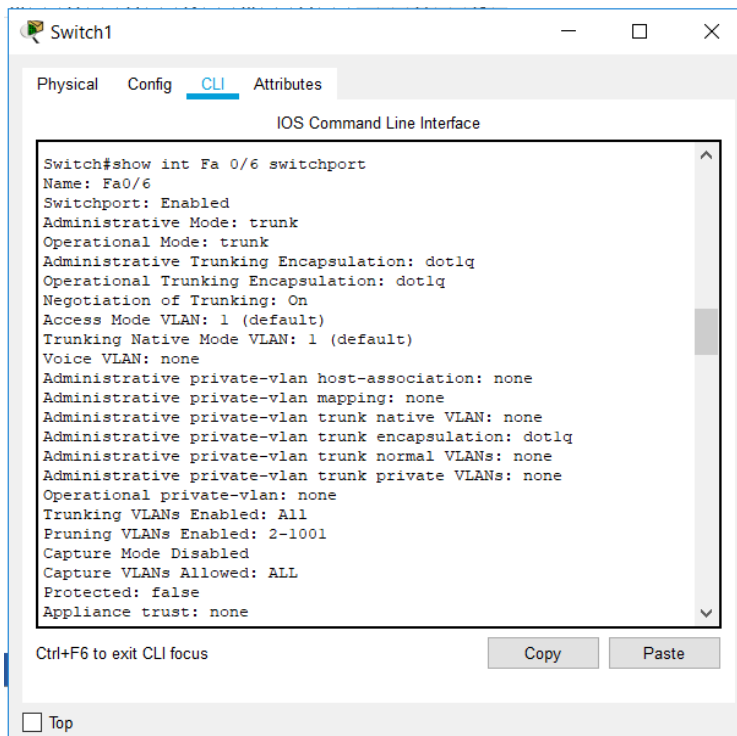
The screenshot shows a window titled "Switch1" with tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The terminal shows the following commands and output:

```
Switch#enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int Fa 0/6
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
^Z
Switch#^Z
Switch#show int Fa 0/6 switchport
Name: Fa0/6
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
```

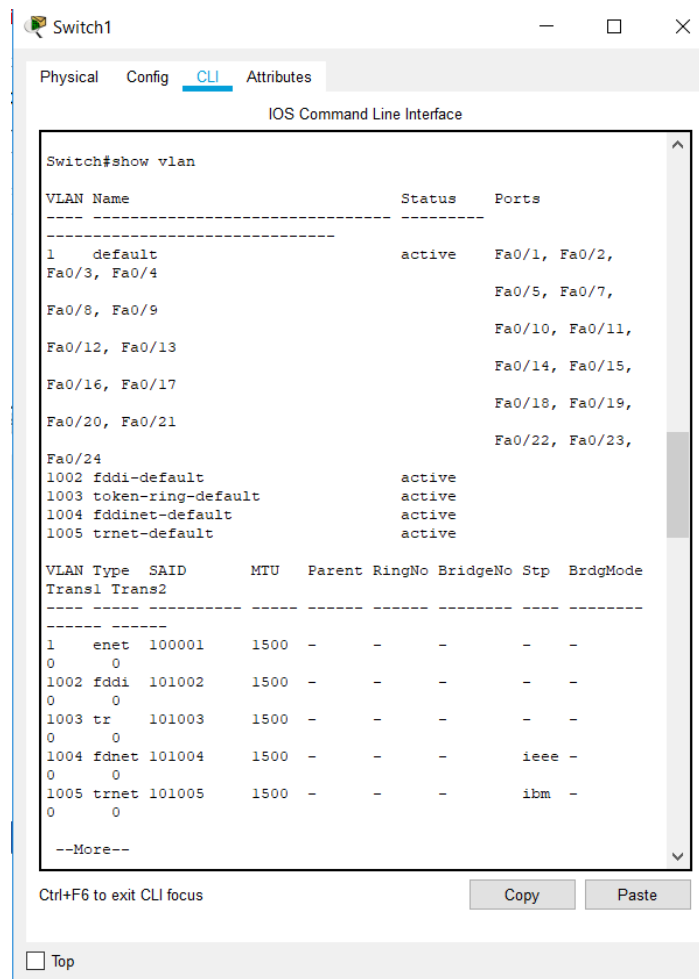
At the bottom of the CLI window, there is a "Ctrl+F6 to exit CLI focus" message and "Copy" and "Paste" buttons. A "Top" button is also visible at the bottom left of the window.

6. Melihat konfigurasi :

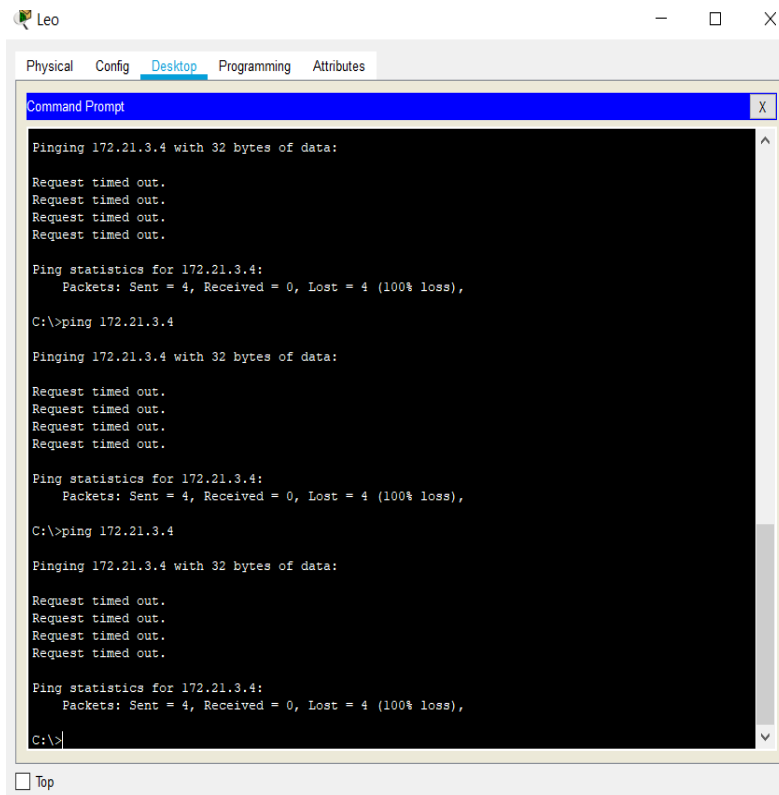
- Ketik show int Fa 0/6 switchport



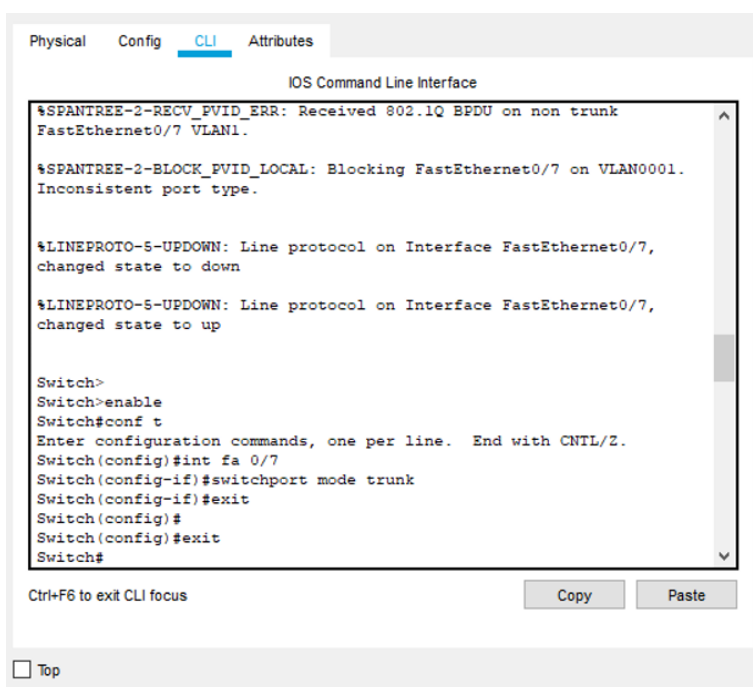
- Ketik show vlan



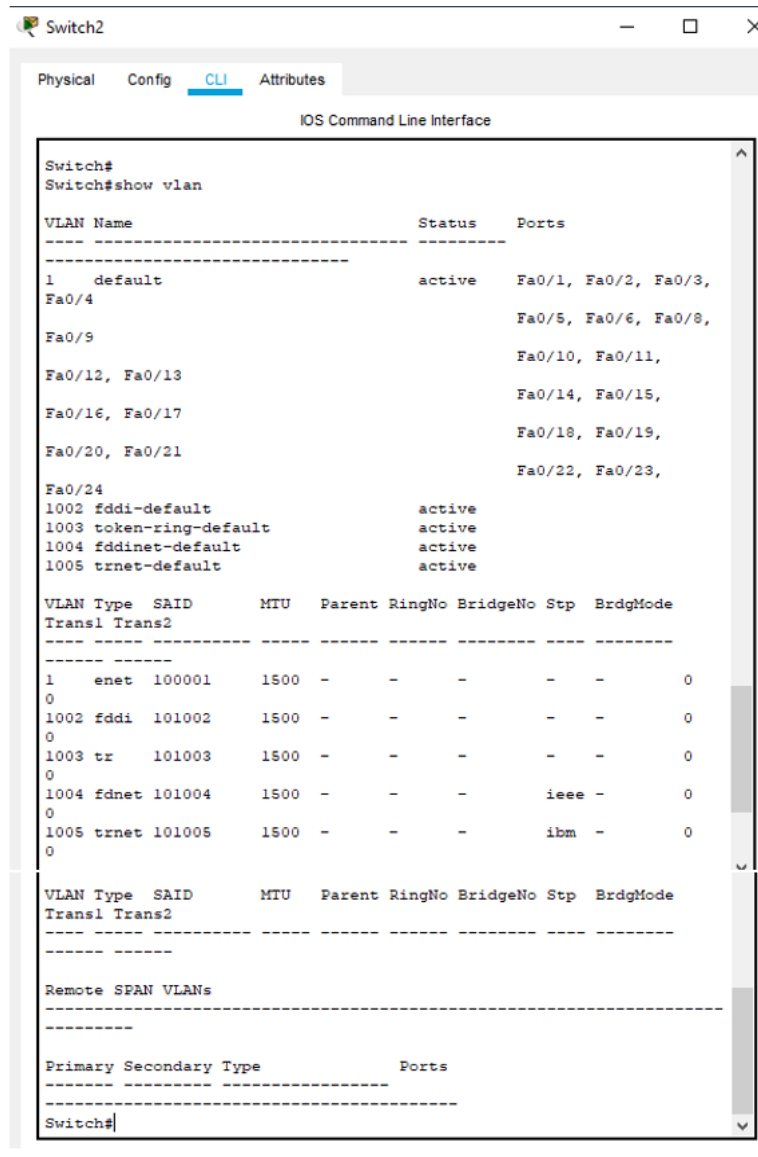
7. Lakukan PC Leoke PC Pisces



8. Konfigurasi VLAN trunking pada switch 2



9. Melihat hasil konfigurasi trunking pada switch 2



The screenshot shows a network switch interface with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the output of the 'show vlan' command. The output is divided into two main sections: a summary table and a detailed table.

```
Switch#
Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3,
Fa0/4, Fa0/5, Fa0/6, 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
1002 fddi-default        active
1003 token-ring-default  active
1004 fddinet-default     active
1005 trnet-default        active

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp  BrdgMode
Trans1 Trans2
-----
1    enet    100001    1500   -      -      -      -      -      0
0
1002 fddi    101002    1500   -      -      -      -      -      0
0
1003 tr      101003    1500   -      -      -      -      -      0
0
1004 fdnet  101004    1500   -      -      -      -      -      0
0
1005 trnet  101005    1500   -      -      -      -      -      0
0

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp  BrdgMode
Trans1 Trans2
-----
Remote SPAN VLANs
-----

Primary Secondary Type      Ports
-----
Switch#
```

10. Uji coba ping

```
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
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:\>ping 172.21.1.2

Pinging 172.21.1.2 with 32 bytes of data:

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

Ping statistics for 172.21.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

PC leo ke PC 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=110ms 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 = 110ms, Average = 29ms

C:\>
```

```
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:\>
```

```
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:\>
```

```
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=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
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 = 1ms, Average = 0ms

C:\>
```

- Kesimpulan dari kegiatan di atas adalah apabila PC berada pada VLAN yang sama, maka akan menghasilkan status Reply. Tetapi jika berada pada VLAN yang berbeda akan menghasilkan status Request Time Out.