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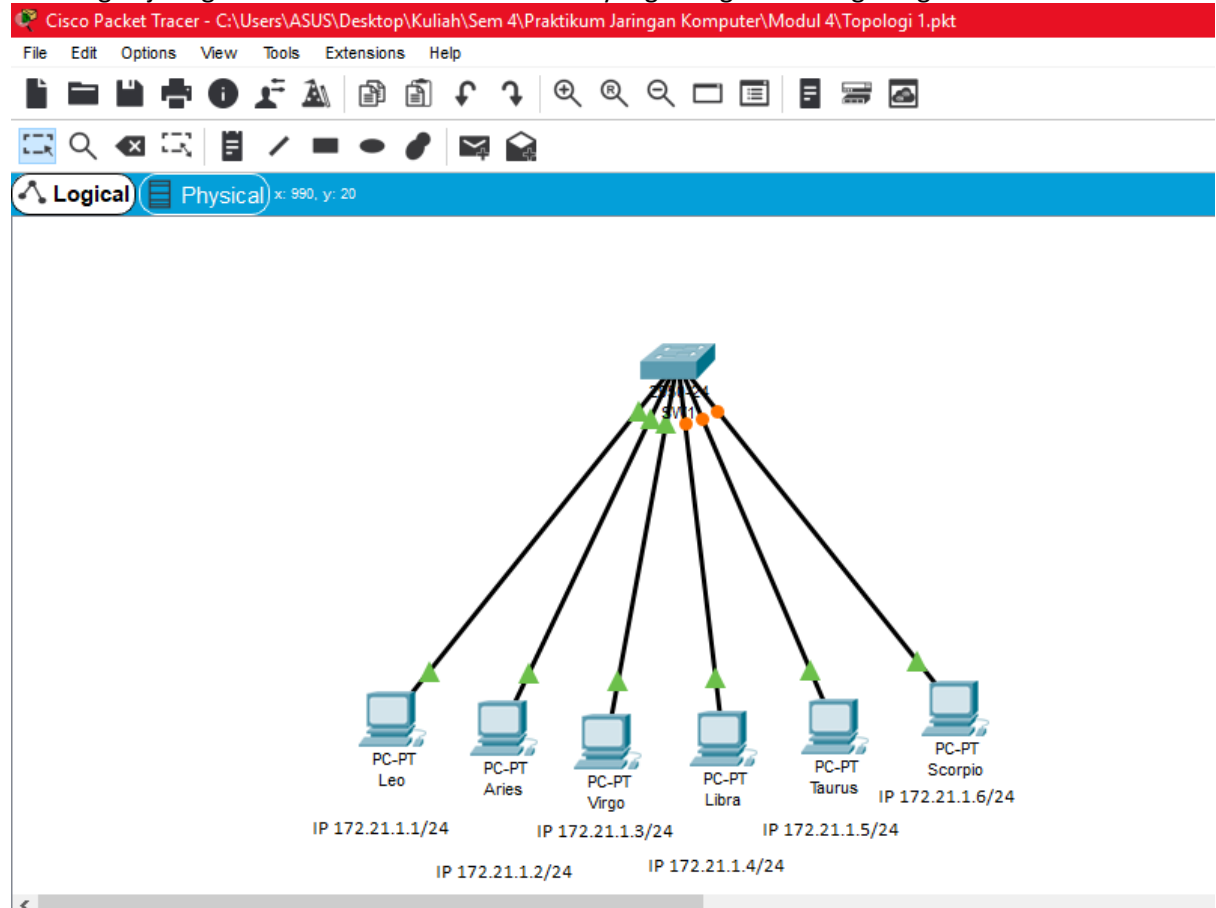
Kelas : D

Modul : 4

Kegiatan 1

1. Membuat topologi jaringan menggunakan cisco packet tracer

Rancangan jaringan terdiri dari 1 Switch dan 6 PC yang saling terhubung dengan Switch



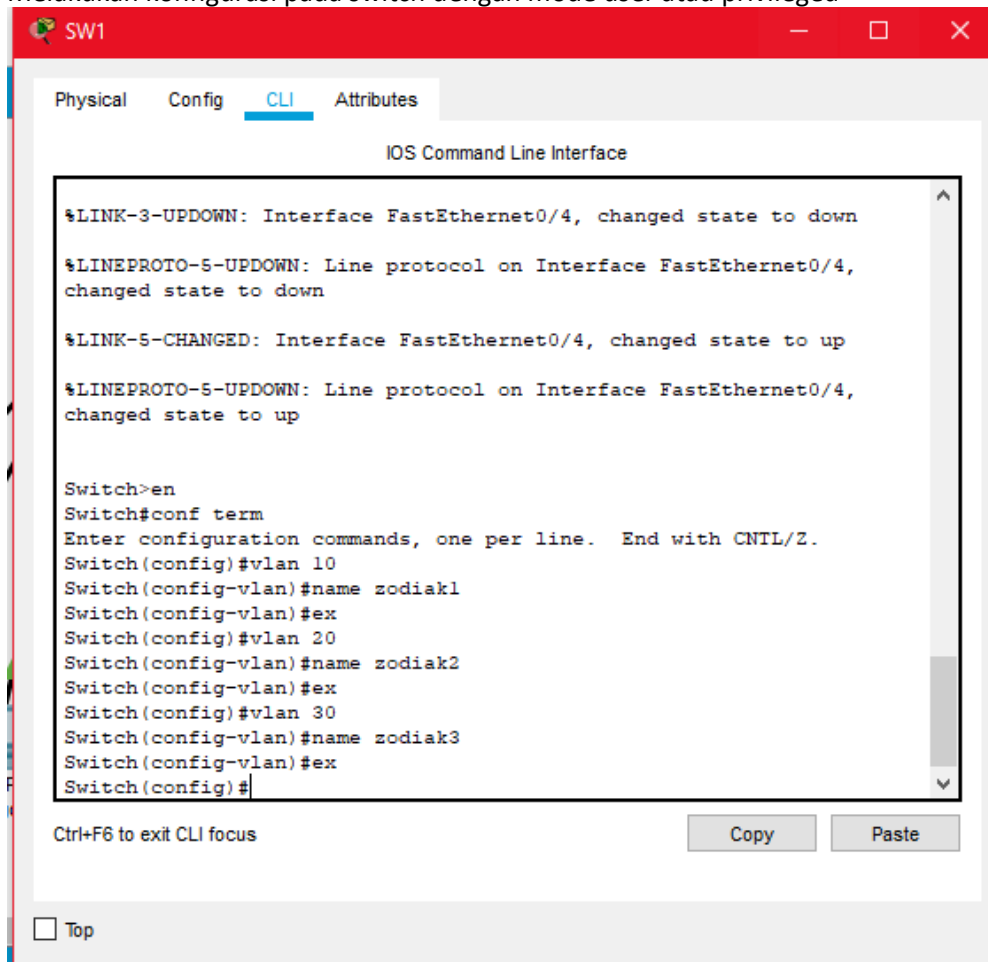
2. Perangkat diberi nama dengan berikut

- SW (Switch)
- Leo (PC0)
- Aries (PC1)
- Virgo (PC2)
- Libra (PC3)
- Taurus (PC4)
- Scorpio (PC5)

3. Konfigurasi IP masing masing PC

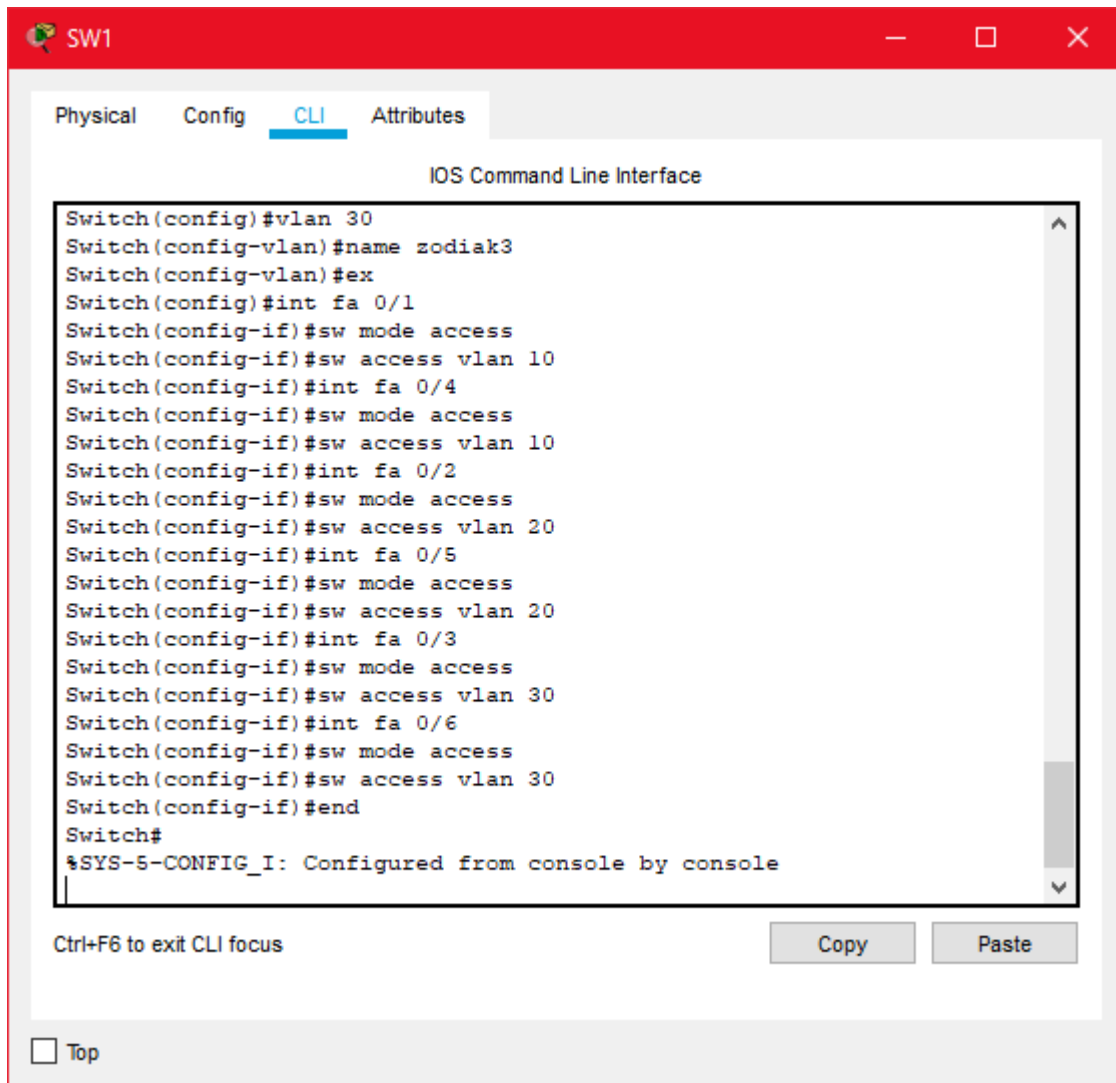
- Leo = 172.21.1.1/24
- Aries = 172.21.1.2/24
- Virgo = 172.21.1.3/24
- Libra = 172.21.1.4/24
- Taurus = 172.21.1.5/24
- Scorpio = 172.21.1.6/24

4. Melakukan konfigurasi pada switch dengan mode user atau privileged

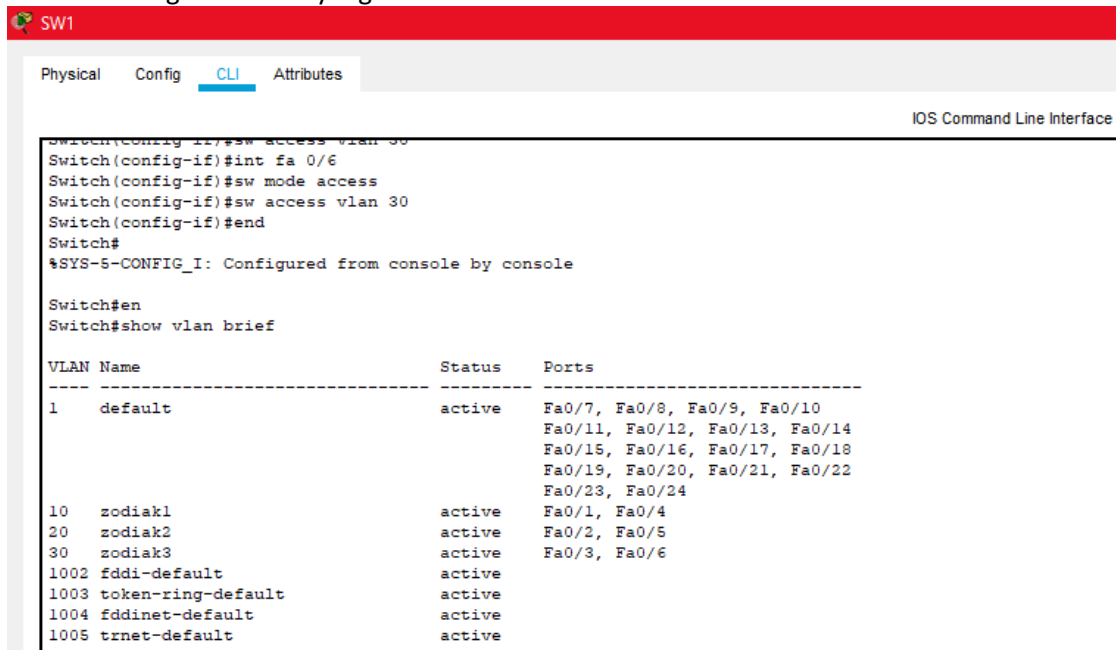


Membuat 3 VLAN dengan nama zodiak1, zodiak2, zodiak3

5. Melakukan konfigurasi port-port switch ke dalam VLAN dengan anggota :
- Zodiak1 = leo dan libra
 - Zodiak2 = aries dan taurus
 - Zodiak3 = virgo dan scorpio



6. Melihat konfigurasi VLAN yang telah dibuat



```

SW1
Physical Config CLI Attributes
IOS Command Line Interface

10 zodiak1 active Fa0/1, Fa0/4
20 zodiak2 active Fa0/2, Fa0/5
30 zodiak3 active Fa0/3, Fa0/6
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active
Switch#show vlan id 10

VLAN Name                Status    Ports
-----
10  zodiak1                active    Fa0/1, Fa0/4

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp   BrdgMode Transl Trans2
-----
10  enet  100010  1500   -     -     -     -     -       0       0

Switch#show vlan id 20

VLAN Name                Status    Ports
-----
20  zodiak2                active    Fa0/2, Fa0/5

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp   BrdgMode Transl Trans2
-----
20  enet  100020  1500   -     -     -     -     -       0       0

Switch#show vlan id 30

VLAN Name                Status    Ports
-----
30  zodiak3                active    Fa0/3, Fa0/6

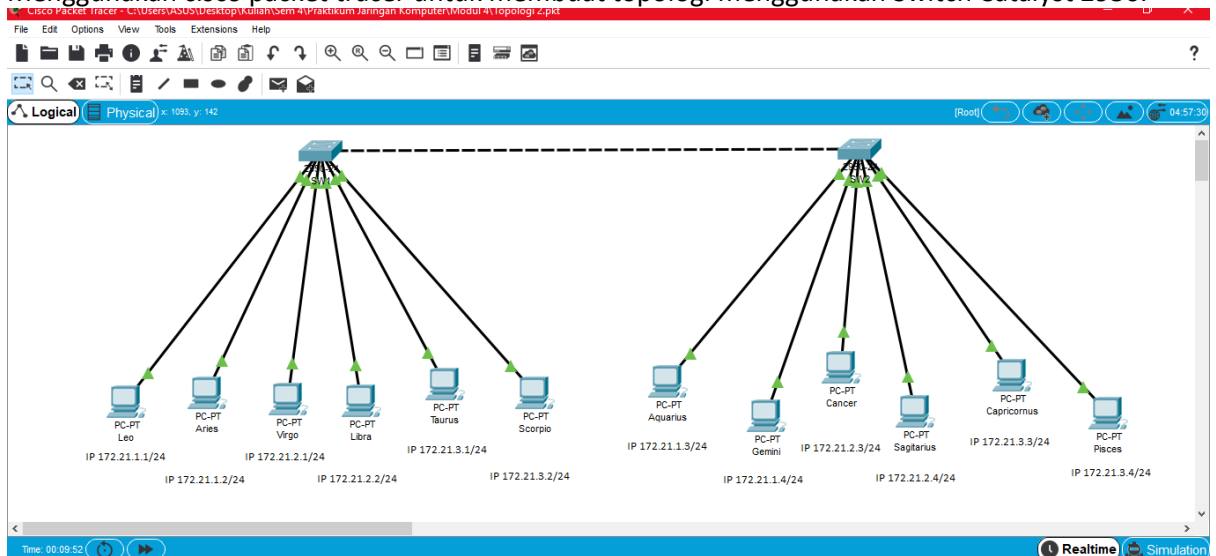
VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp   BrdgMode Transl Trans2
-----
30  enet  100030  1500   -     -     -     -     -       0       0

Switch#

```

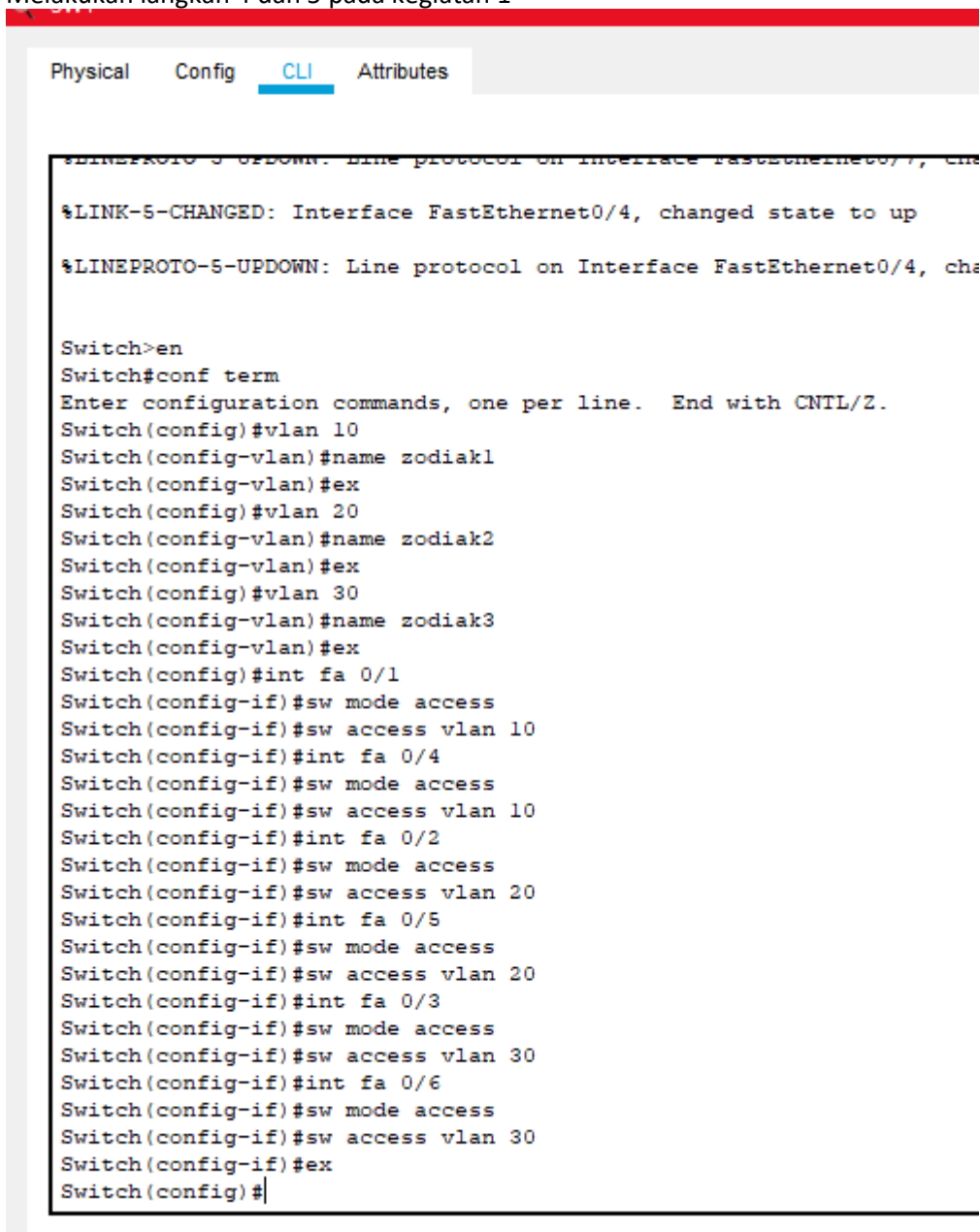
Kegiatan 2

1. Menggunakan cisco packet tracer untuk membuat topologi menggunakan Switch Catalyst 2950.



2. Nama perangkat SW1 (switch0), leo (PC0), aries (PC1), virgo (PC2), libra (PC3), taurus (PC4), scorpio (PC5)
3. Nama perangkat SW2 (switch1), aquarius (PC6), gemini (PC7), cancer (PC8), sagittarius (PC9), capricornus (PC10), Pisces (PC11)

4. Konfigurasi masing-masing PC :
- 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
 - Sagitarius = 172.21.2.4/24
 - Capricornus = 172.21.3.3/24
 - Pisces = 172.21.3.4/24
5. Melakukan langkah 4 dan 5 pada kegiatan 1



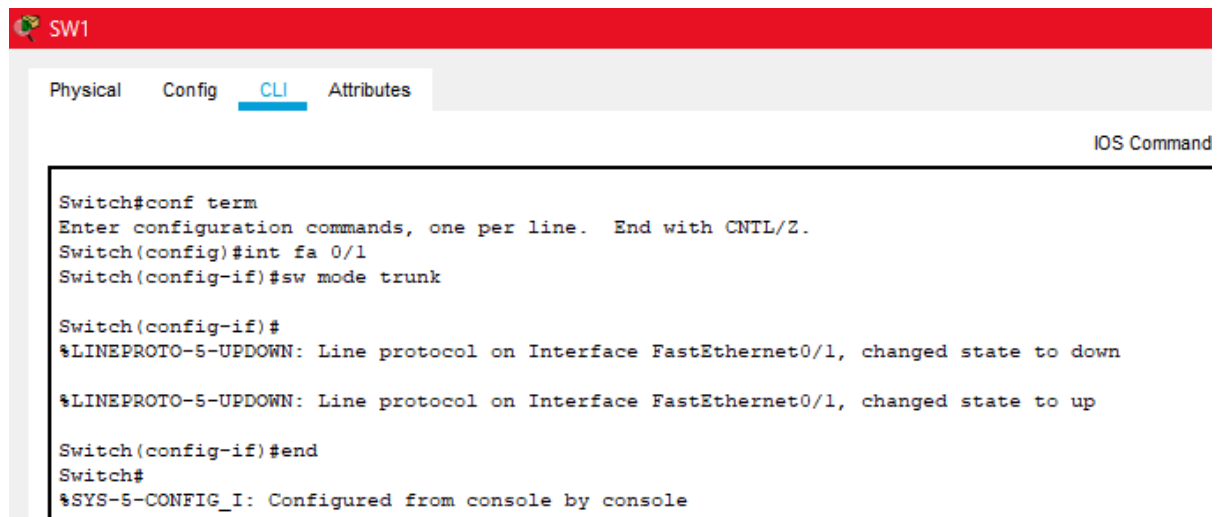
```
Physical  Config  CLI  Attributes

%LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, cha

Switch>en
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)#ex
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#ex
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#ex
Switch(config)#int fa 0/1
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#int fa 0/4
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#int fa 0/5
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#int fa 0/3
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#ex
Switch(config)#
```

6. Melakukan konfigurasi VLAN trunking pada switch 1



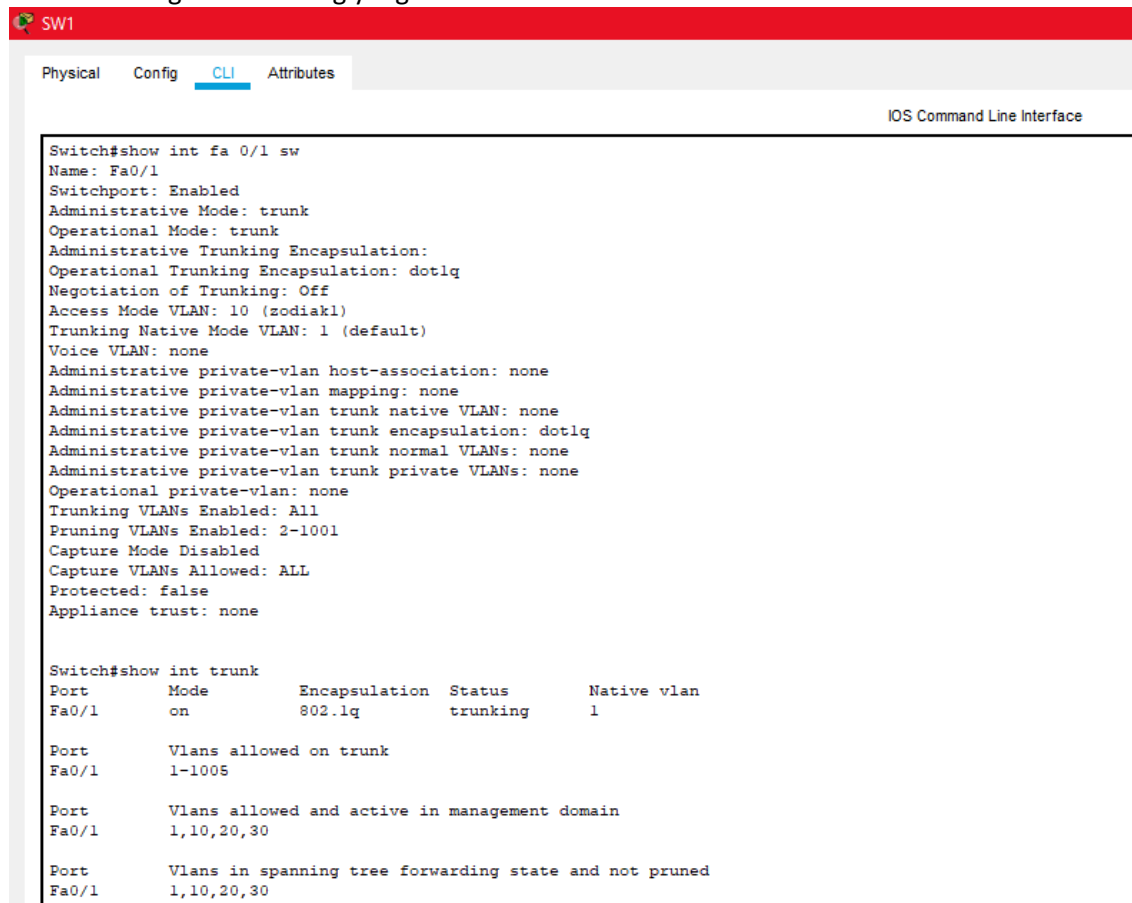
```
SW1
Physical Config CLI Attributes
IOS Command

Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/1
Switch(config-if)#sw mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```

7. Melihat konfigurasi trunking yang telah dibuat



```
SW1
Physical Config CLI Attributes
IOS Command Line Interface

Switch#show int fa 0/1 sw
Name: Fa0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 10 (zodiak1)
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

Switch#show int trunk
Port Mode Encapsulation Status Native vlan
Fa0/1 on 802.1q trunking 1

Port Vlans allowed on trunk
Fa0/1 1-1005

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

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

SW1

Physical Config CLI Attributes

IOS Command

Fa0/1 1,10,20,30

Switch#show vlan

VLAN	Name	Status	Ports
1	default	active	Fa0/7, 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	zodiak1	active	Fa0/4
20	zodiak2	active	Fa0/2, Fa0/5
30	zodiak3	active	Fa0/3, Fa0/6
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
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
30	enet	100030	1500	-	-	-	-	-	0	0
1002	fddi	101002	1500	-	-	-	-	-	0	0
1003	tr	101003	1500	-	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	-	ieee	-	0	0
1005	trnet	101005	1500	-	-	-	ibm	-	0	0

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	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
1003	tr	101003	1500	-	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	-	ieee	-	0	0
1005	trnet	101005	1500	-	-	-	ibm	-	0	0

Remote SPAN VLANs

Primary	Secondary	Type	Ports

Switch#

8. Melakukan ping dari PC leo ke PC pisces

Leo

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:\>

```

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9. Melakukan konfigurasi VLAN trunking pada switch 2

```

SW2
Physical Config CLI Attributes
IOS Command Lin

Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#en
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/1
Switch(config-if)#sw mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
Switch(config-if)#end
Switch#

```

10. Melihat konfigurasi vlan pada switch 2

```

SW2
Physical Config CLI Attributes

Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                           Fa0/6, Fa0/7, 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  -     -     -     ieee -     0      0
1005 trnet 101005       1500  -     -     -     ibm  -     0      0

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

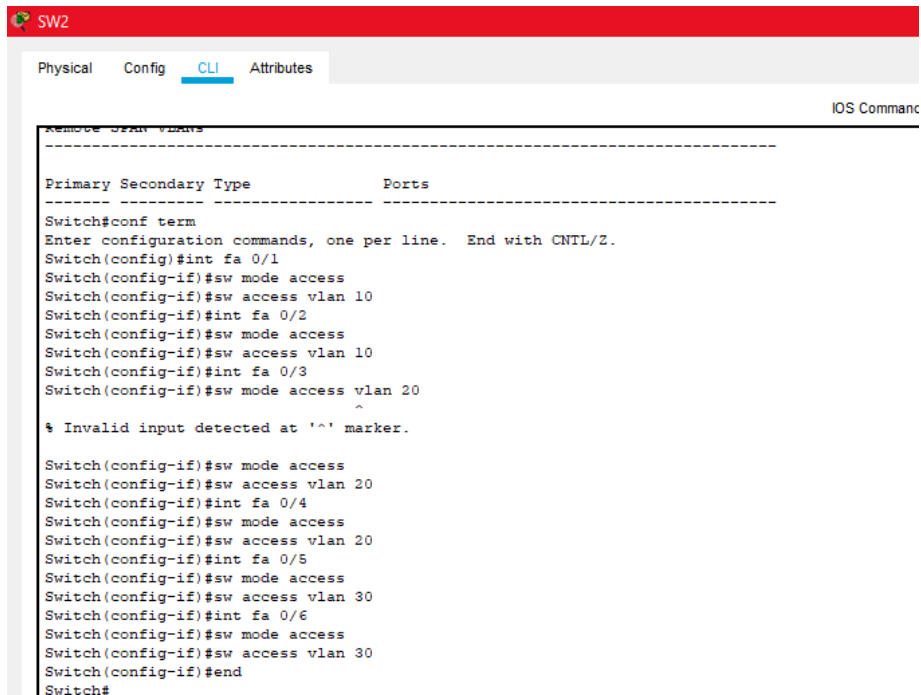
Remote SPAN VLANs
-----

Primary Secondary Type            Ports
-----

```

11. Melakukan konfigurasi port-port switch ke dalam VLAN dengan anggota

- Zodiak1 = aquarius dan gemini
- Zodiak2 = cancer dan sagitarius
- Zodiak3 = capricornus dan pisces



SW2

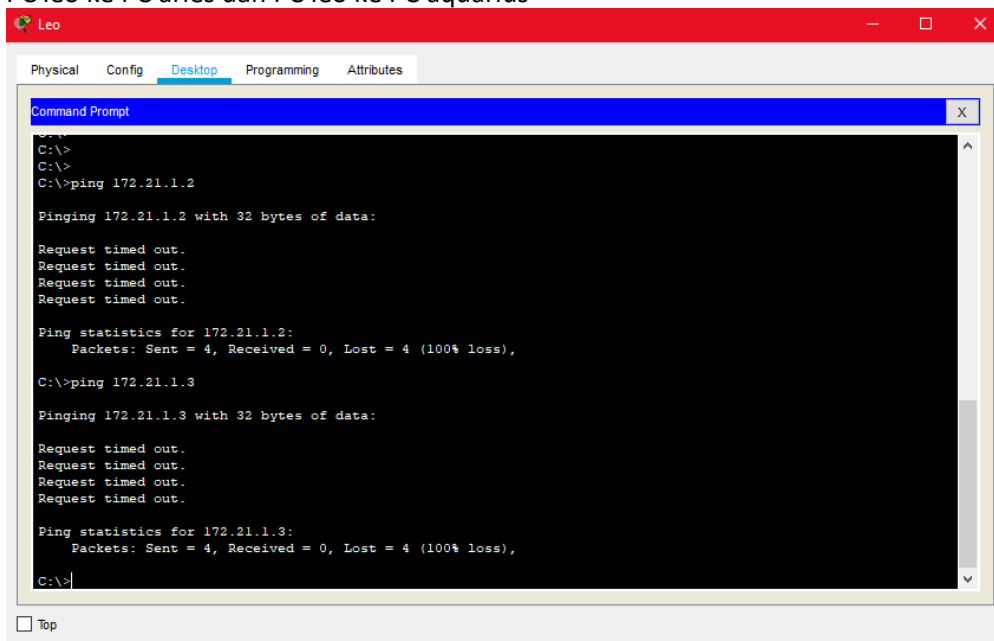
Physical Config **CLI** Attributes

IOS Command

```
Remove VLAN VLAGS
-----
Primary Secondary Type          Ports
-----
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/1
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#int fa 0/3
Switch(config-if)#sw mode access vlan 20
Switch(config-if)#sw mode access
^
% Invalid input detected at '^' marker.

Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#int fa 0/5
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#end
Switch#
```

12. Melakukan ping
PC leo ke PC aries dan PC leo ke PC aquarius



Leo

Physical Config **Desktop** Programming Attributes

Command Prompt

```
C:\>
C:\>
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:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

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

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

PC leo ke PC pisces



Leo

Physical Config **Desktop** Programming Attributes

Command Prompt

```
C:\>
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),
```

PC libra ke PC cancer dan PC libra ke PC leo

