Nama : Dewi Rahmawati

NIM : L200170188

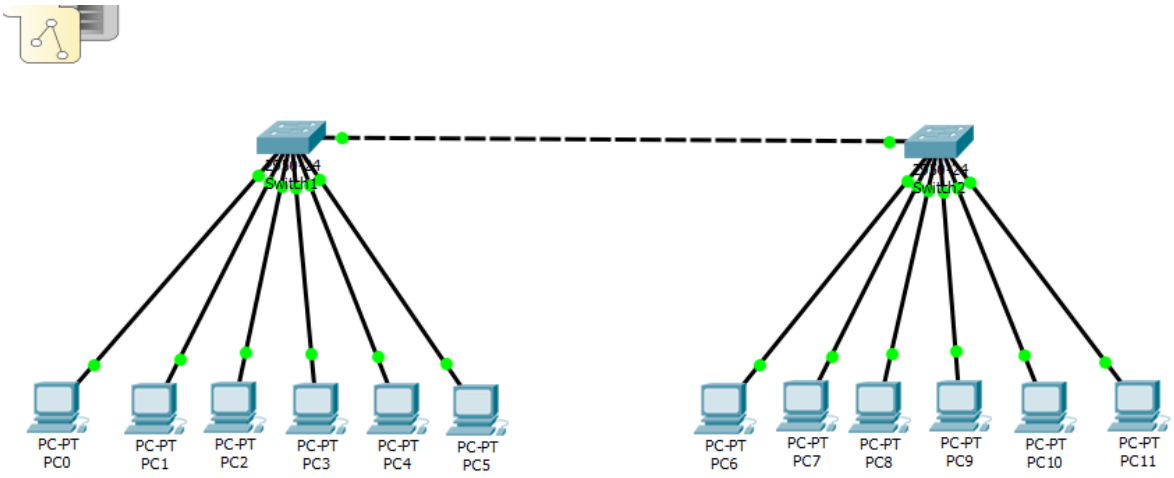
Kelas : D

Modul : 4

JARINGAN KOMPUTER

Kegiatan 2. Topologi 2

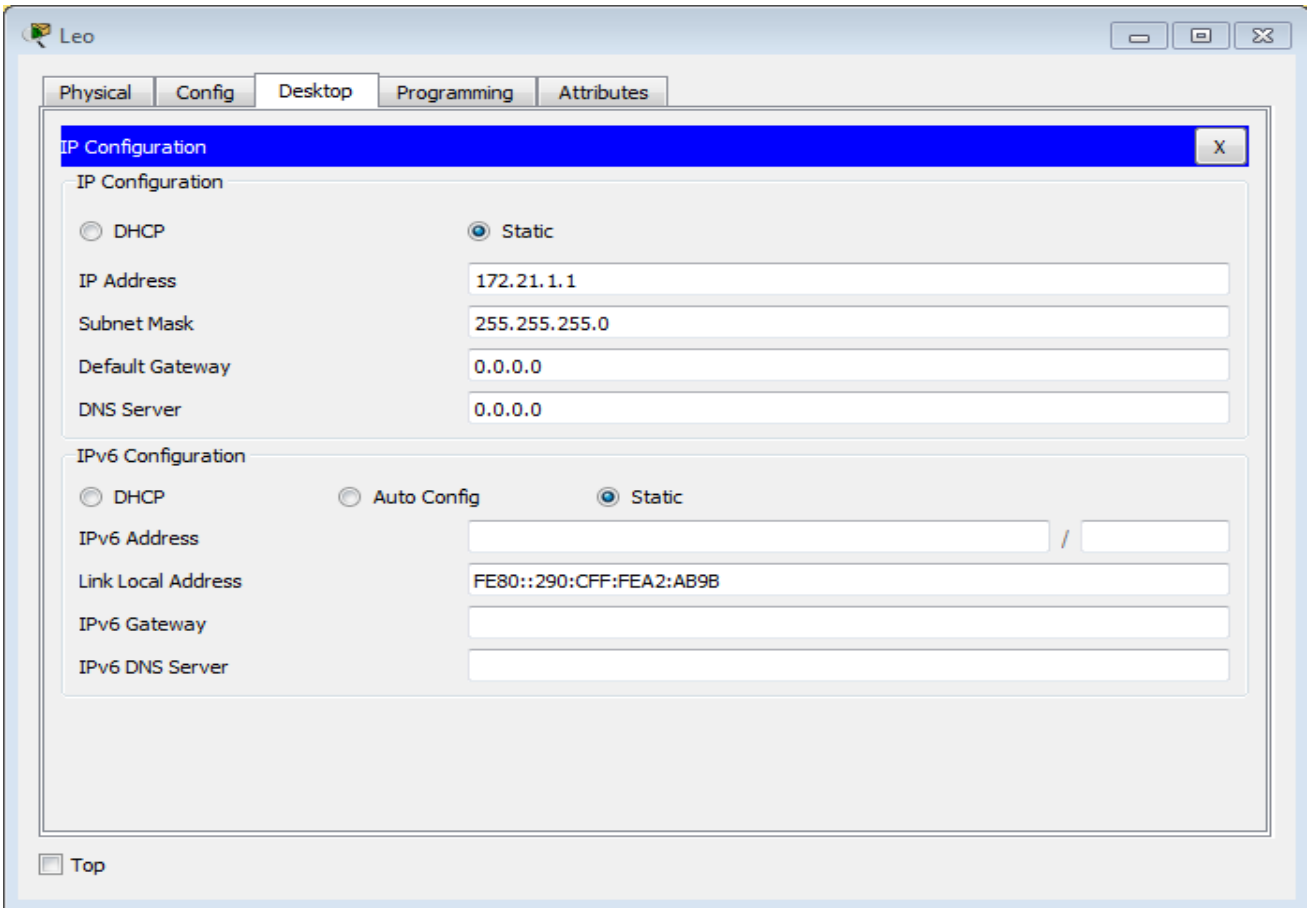
1. Membuat topologi berikut ini menggunakan packet tracer

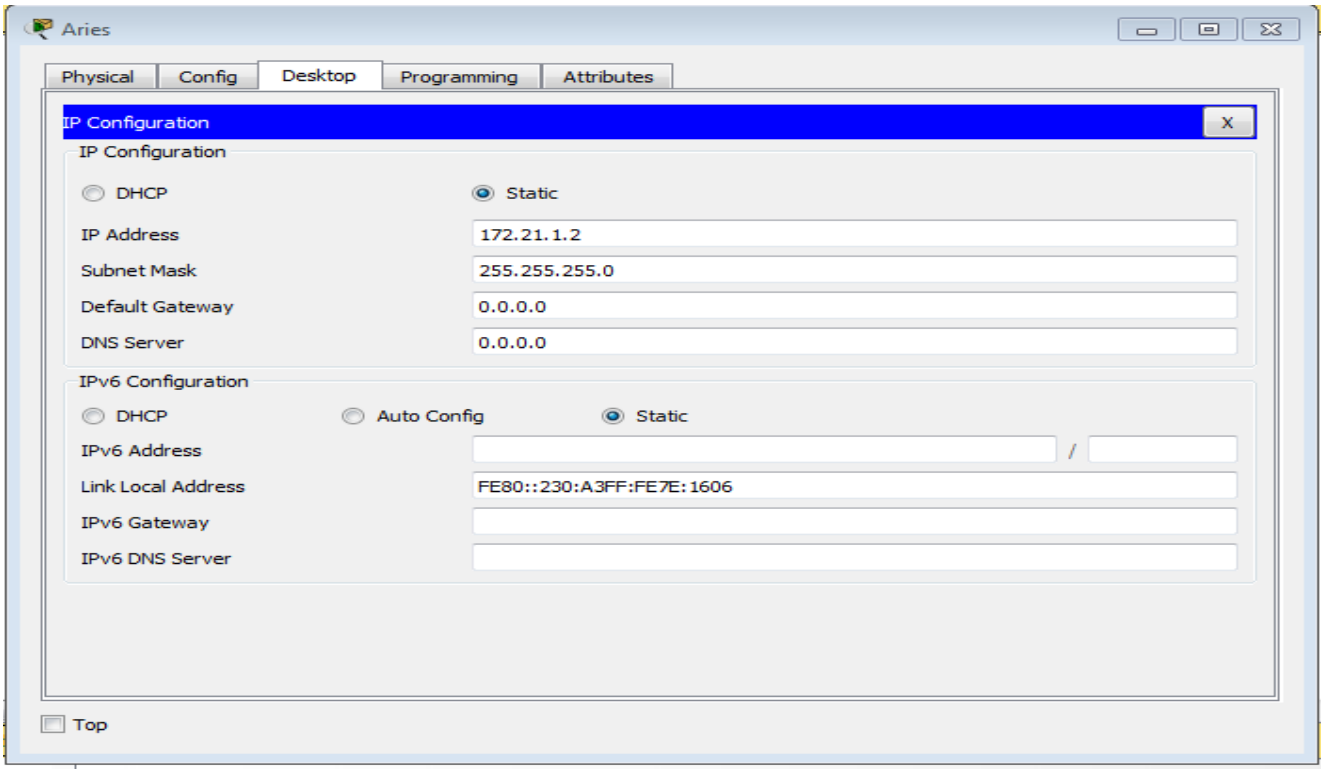


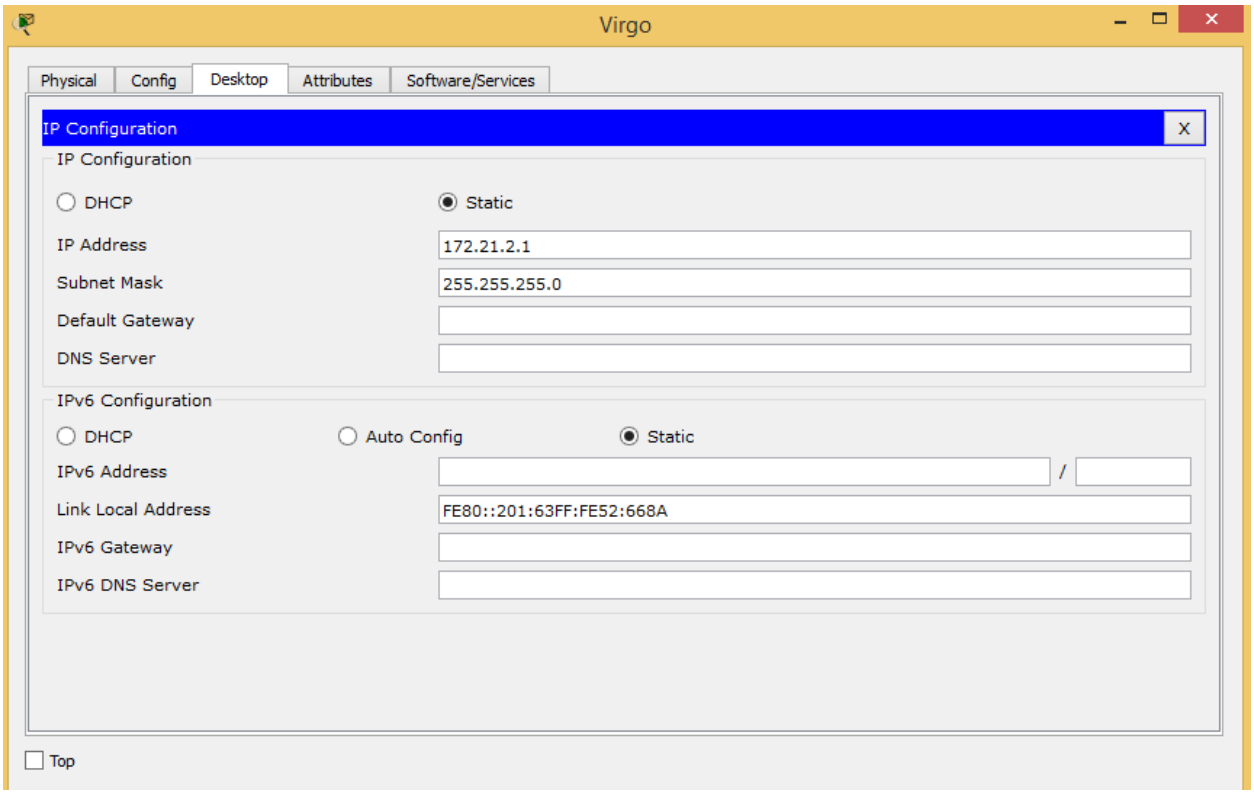
2. Memberi nama masing masing perangkat
   a. Switch1 : SW1
   b. Switch1 : SW2
   c. Pc0 : Leo
   d. Pc1 : Aries
   e. Pc2 : Virgo
   f. Pc3 : Libra
   g. Pc4 : Taurus

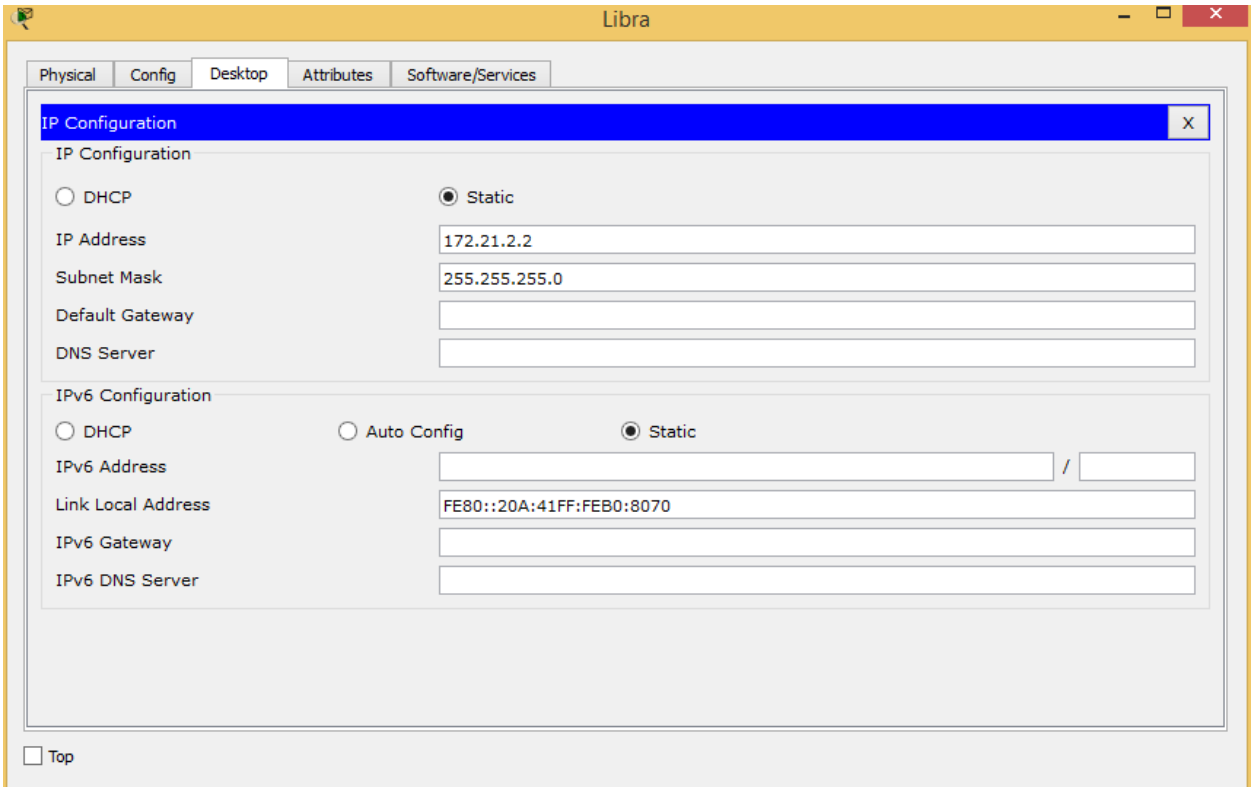
h. Pc5 : Scorpio
i. Pc6 : Aquarius
j. Pc7 : Gemini
k. Pc8 : Cancer
l. Pc9 : Sagitarius
m. Pc10 : Capcicorn
n. Pc11 : Pisces

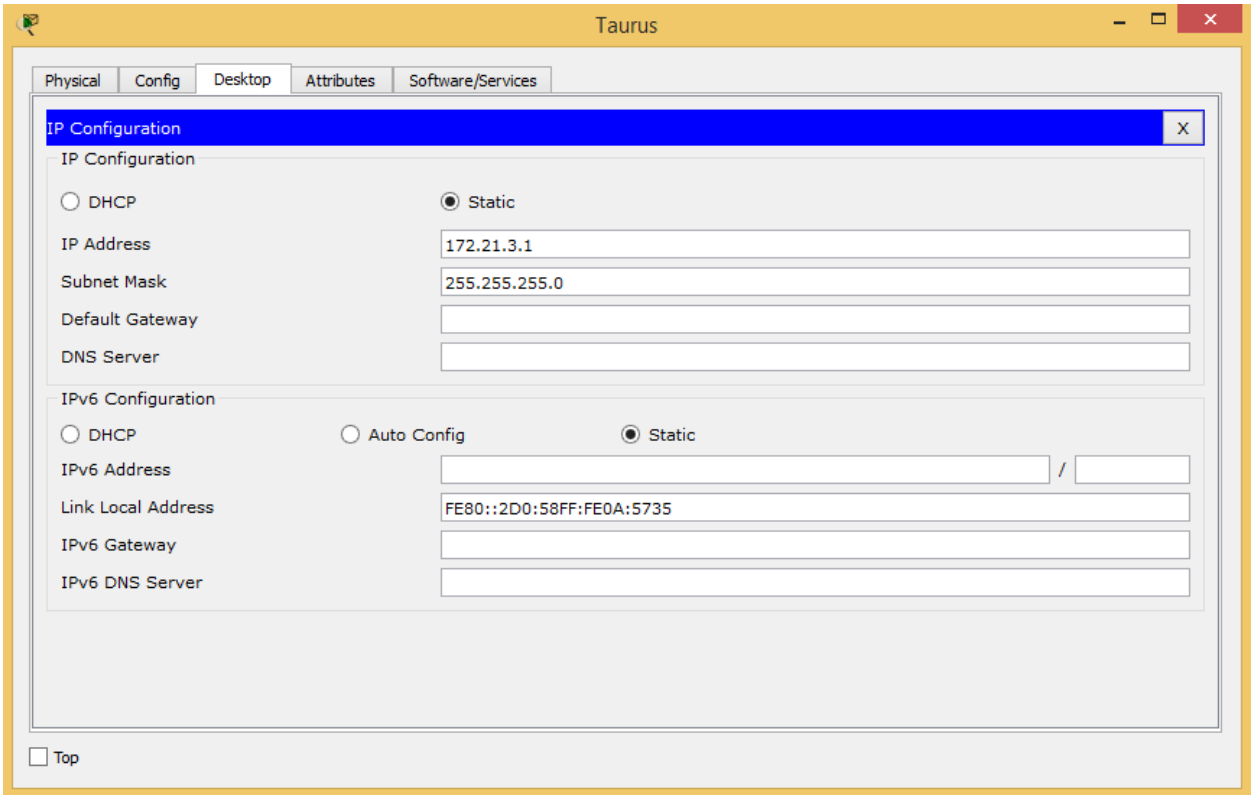
3. Merubah konfigurasi tiap PC

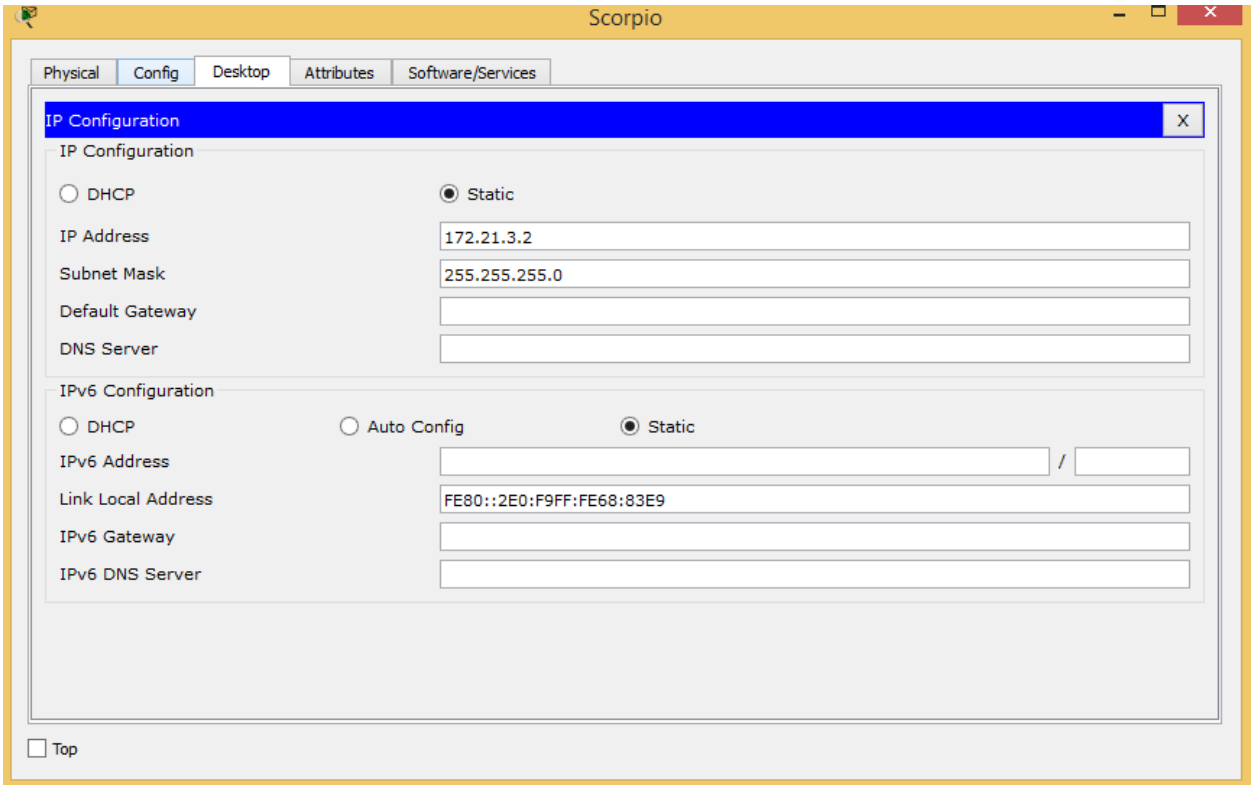


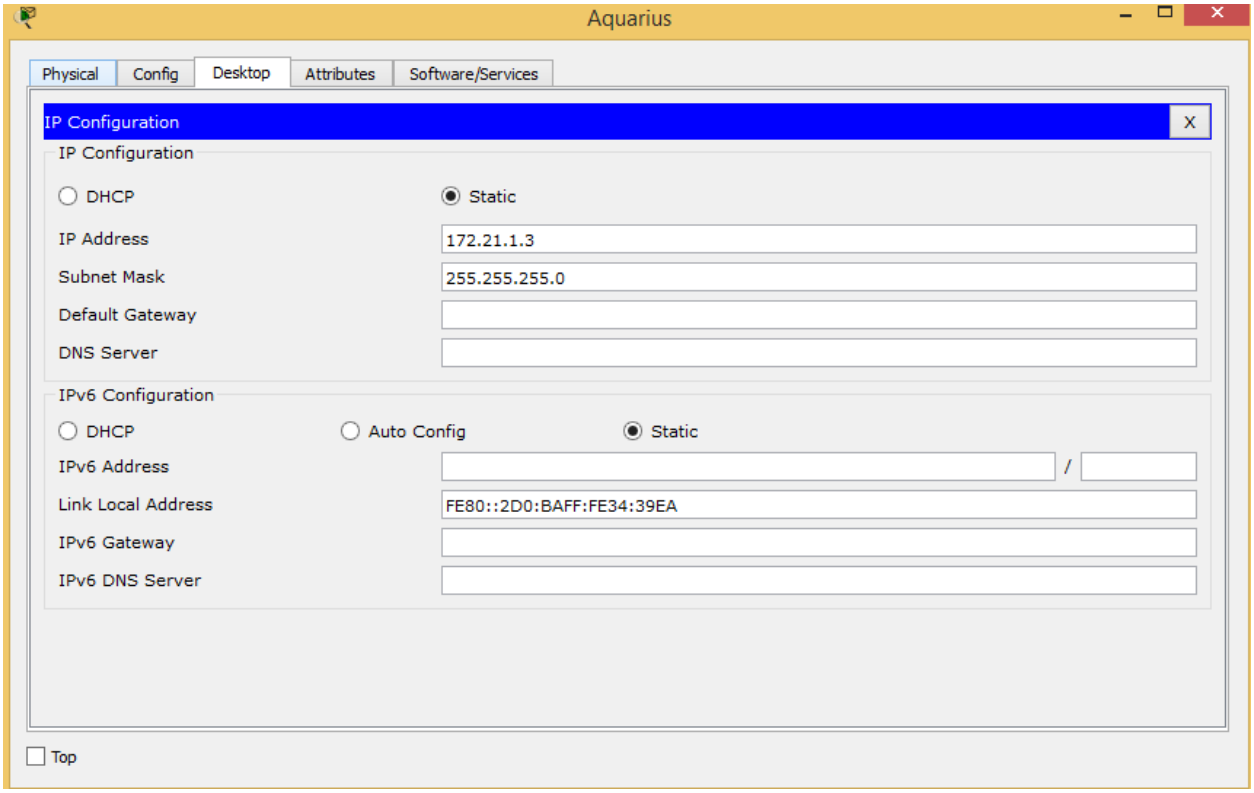

Aries
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.2
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::230:A3FF:FE7E:1606
IPv6 Gateway
IPv6 DNS Server
Top

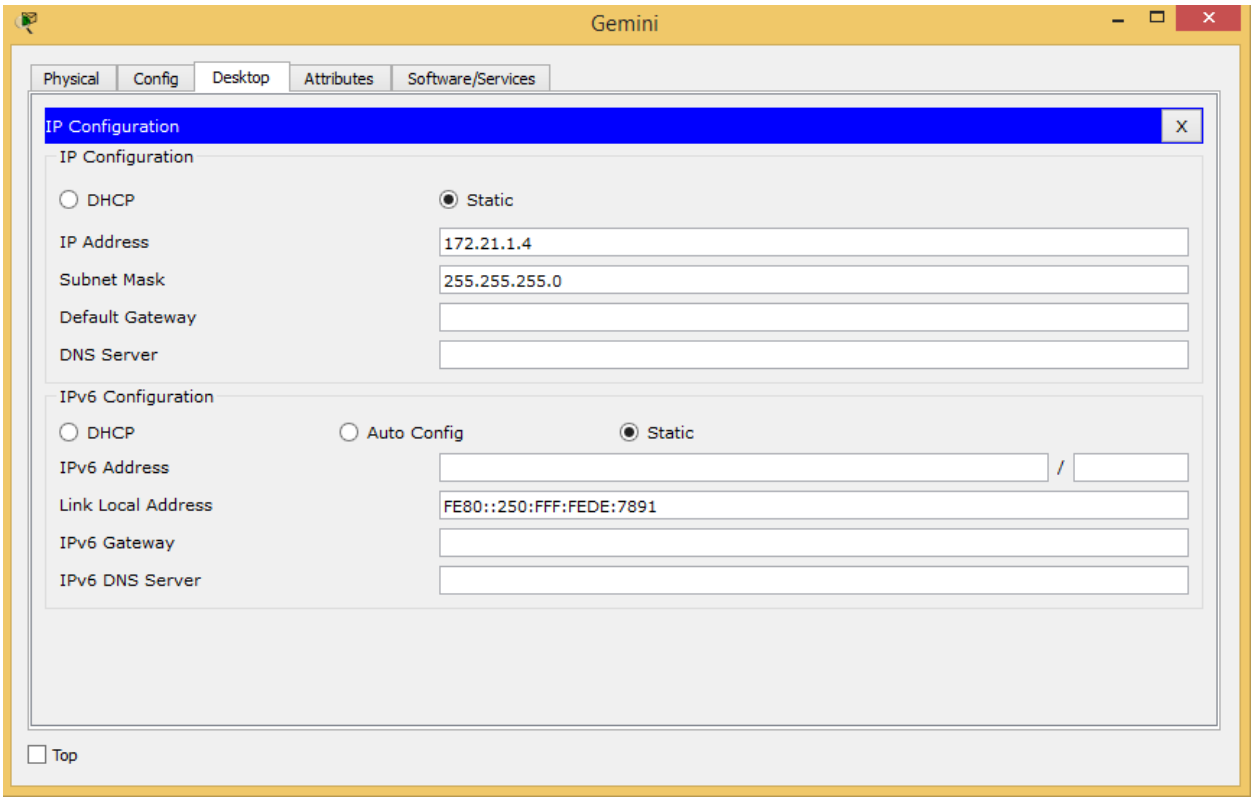

Virgo
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.2.1
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::201:63FF:FE52:668A
IPv6 Gateway
IPv6 DNS Server
Top

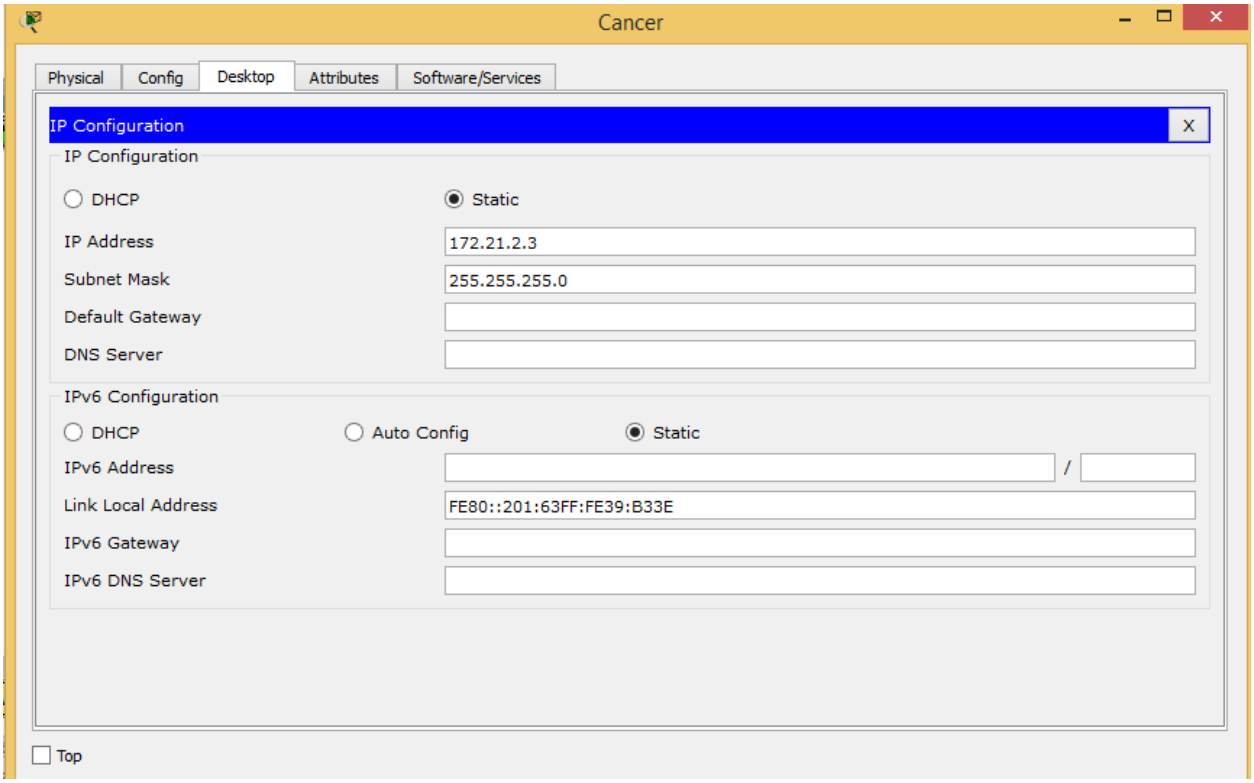

Libra
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.2.2
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::20A:41FF:FEB0:8070
IPv6 Gateway
IPv6 DNS Server
Top

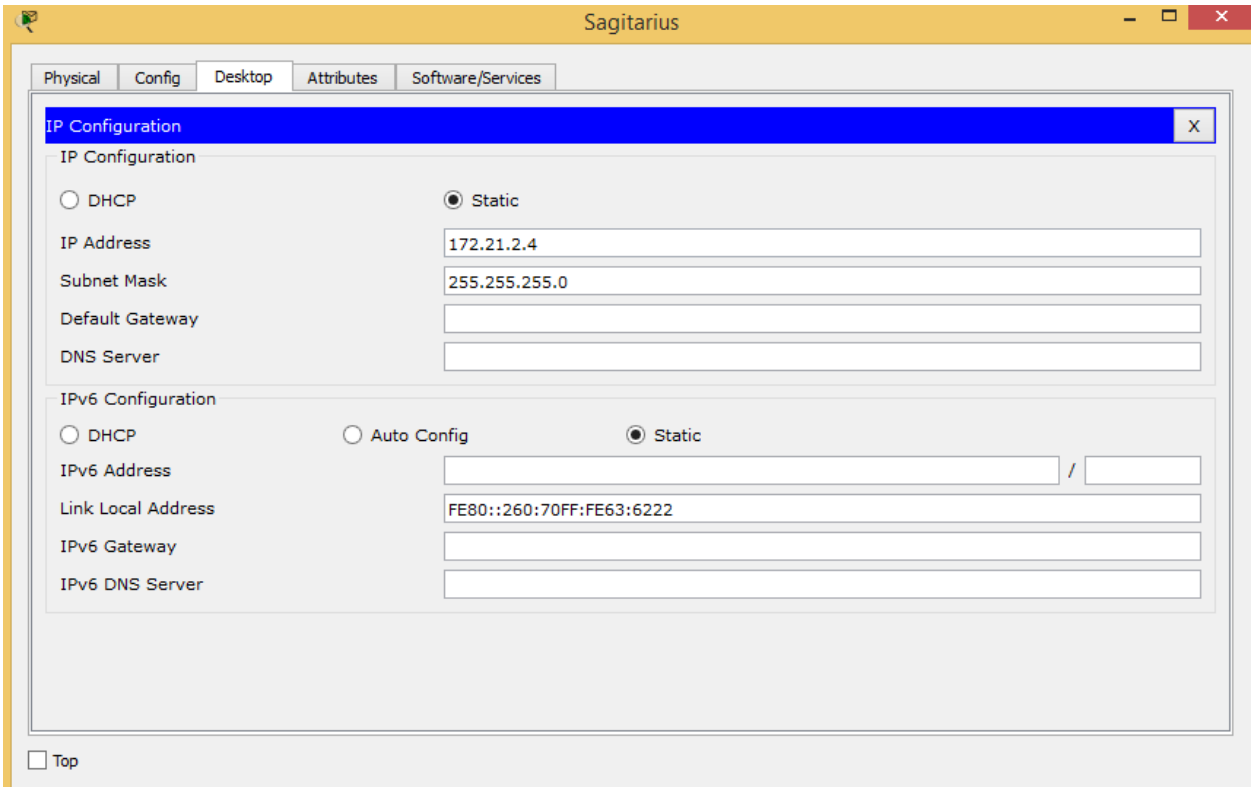

Taurus
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.3.1
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::2D0:58FF:FE0A:5735
IPv6 Gateway
IPv6 DNS Server
Top

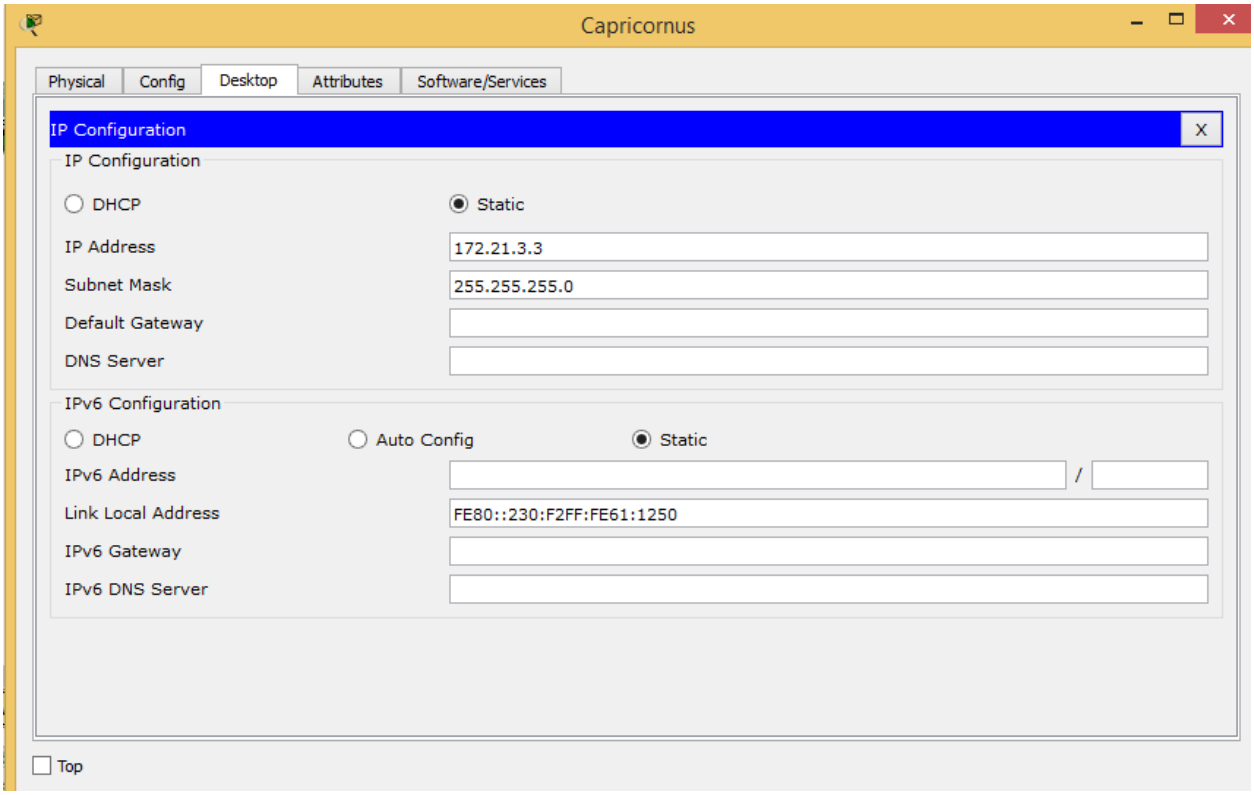

Scorpio
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.3.2
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::2E0:F9FF:FE68:83E9
IPv6 Gateway
IPv6 DNS Server
Top

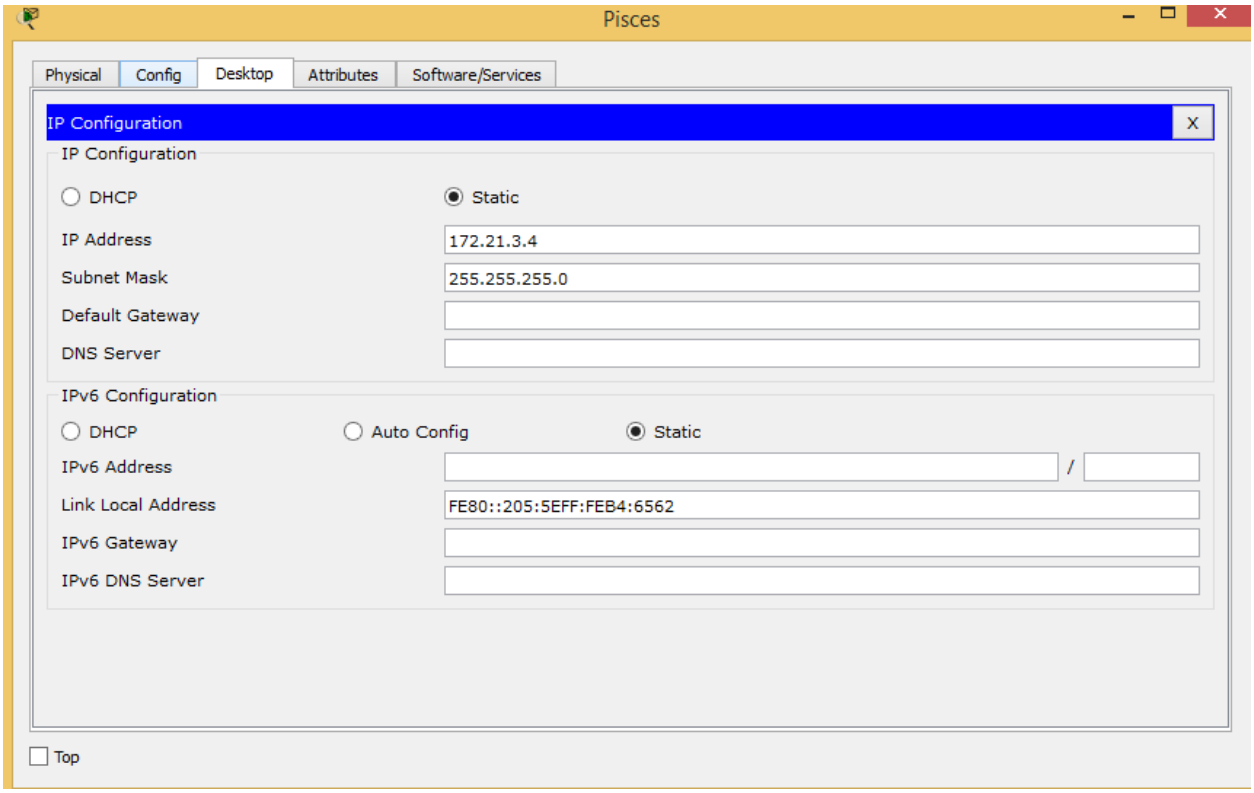

Aquarius
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.3
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::2D0:BAFF:FE34:39EA
IPv6 Gateway
IPv6 DNS Server
Top


Gemini
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.1.4
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::250:FFF:FEDE:7891
IPv6 Gateway
IPv6 DNS Server
Top

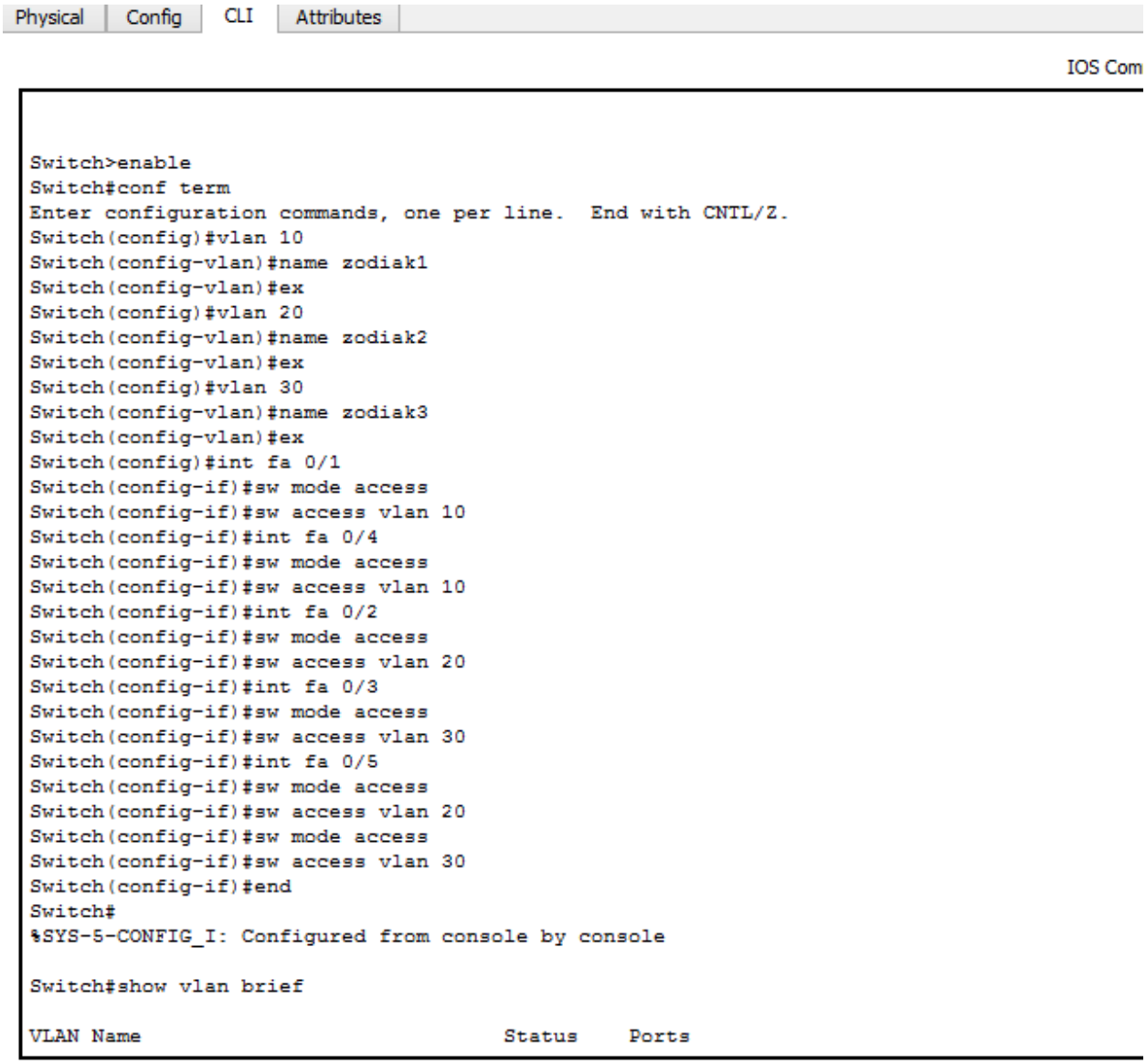

Cancer
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.2.3
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::201:63FF:FE39:B33E
IPv6 Gateway
IPv6 DNS Server
Top


Sagitarius
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.2.4
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::260:70FF:FE63:6222
IPv6 Gateway
IPv6 DNS Server
Top

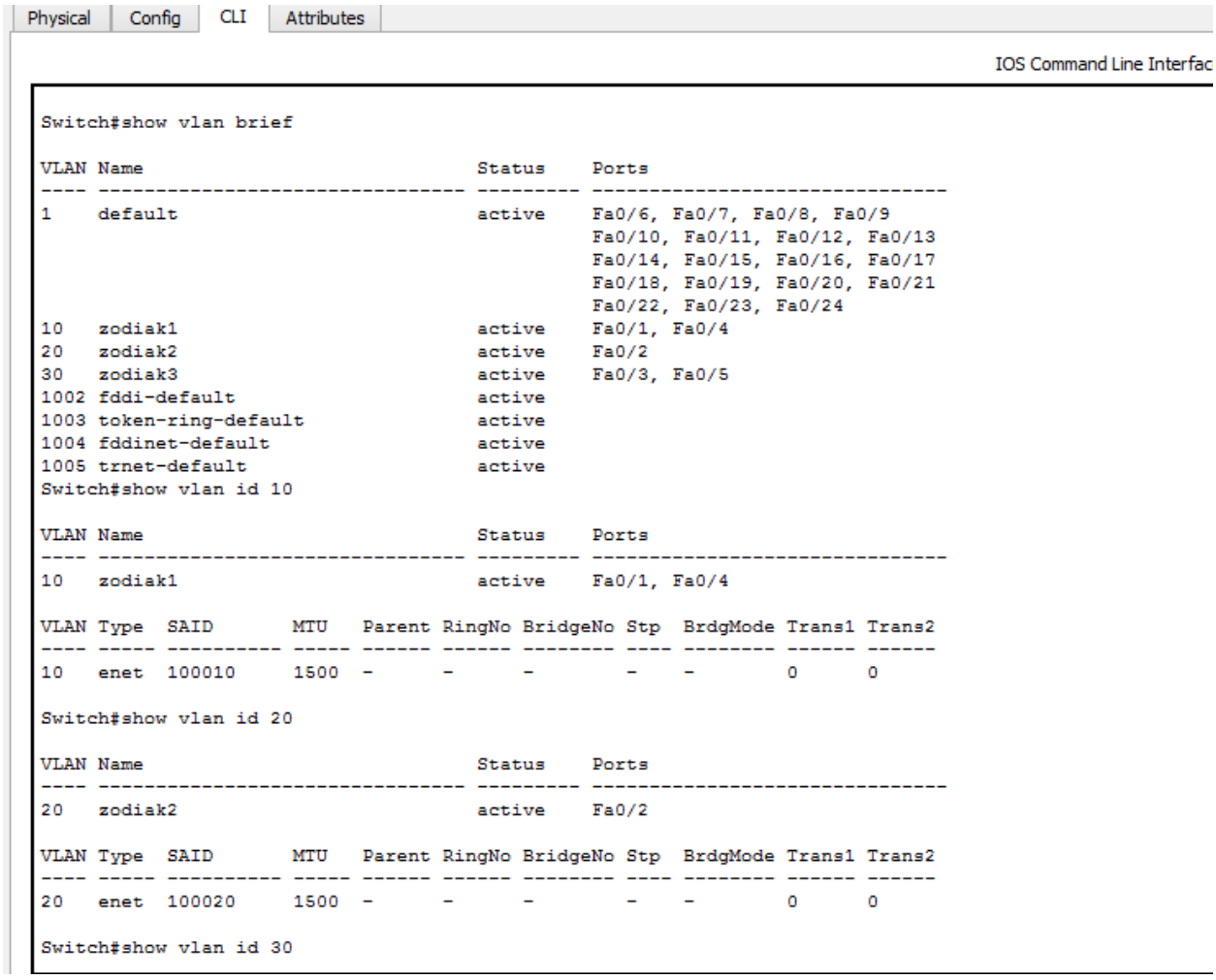

Capricornus
Physical
Config
Desktop
Attributes
Software/Services
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.3.3
Subnet Mask
255.255.255.0
Default Gateway
DNS Server
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::230:F2FF:FE61:1250
IPv6 Gateway
IPv6 DNS Server
Top



4. Membuat 3 buah Vlan dengan nama zodiak1, zodiak2, dan zodiak3
5. Selanjutnya pada mode konfigurasi, kelompokkan port-port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3. Pengaturannya sebagai berikut :
    - Zodiak1 : leo dan libra
    - Zodiak2 : aries dan Taurus
    - Zodiak3 : virgo dan scorpio



6. Menampilkan informasi Vlan secara keseluruhan

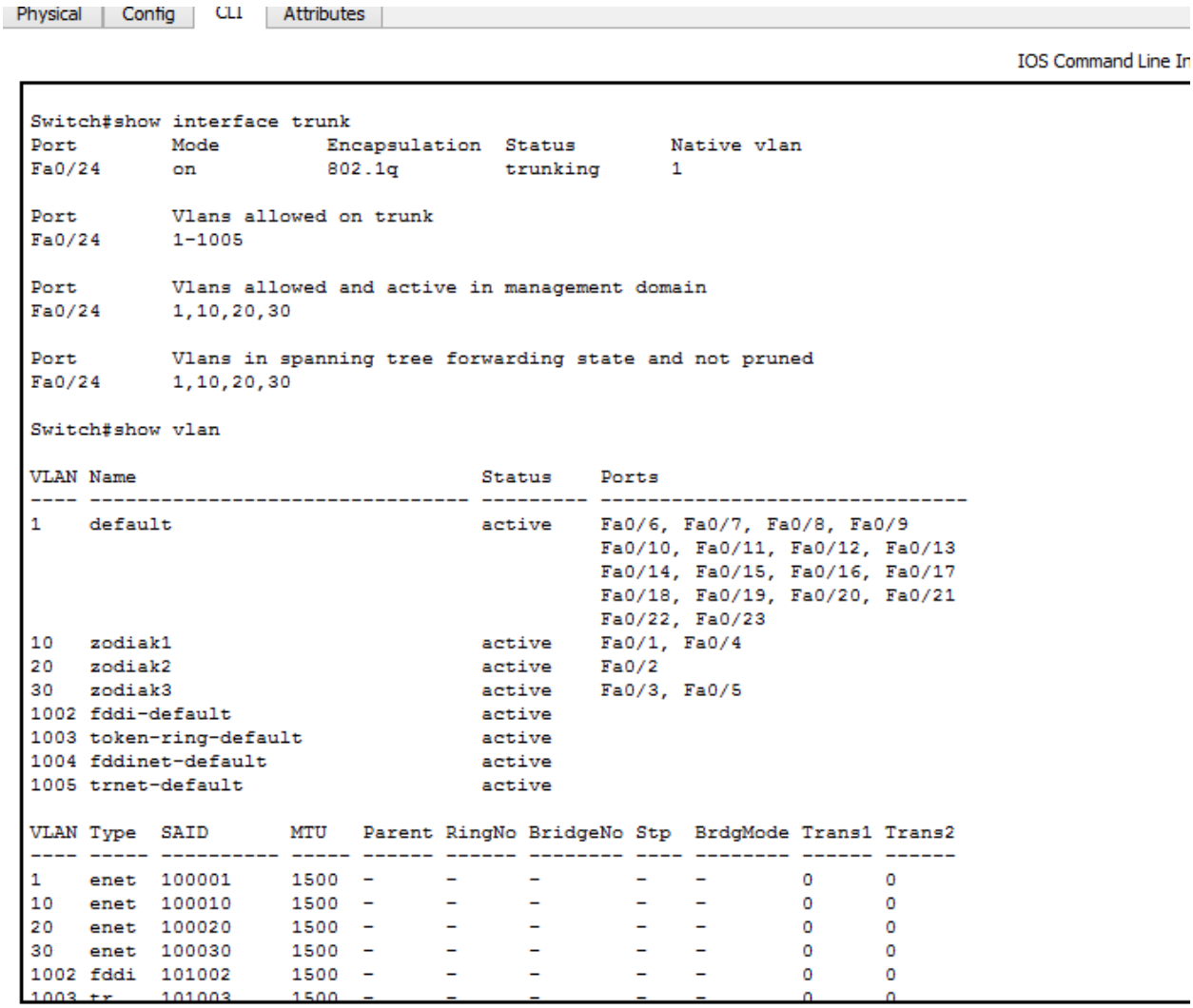


7. Mode privileged

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface fa 0/24
Switch(config-if)#witchport mode trunk
                  ^
% Invalid input detected at '^' marker.

Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to up

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

Switch#show interface fastethernet 0/24 switchport
Name: Fa0/24
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
```




```
Switch#show interface trunk
Port        Mode         Encapsulation  Status        Native vlan
Fa0/24      on           802.1q         trunking      1

Port        Vlans allowed on trunk
Fa0/24      1-1005

Port        Vlans allowed and active in management domain
Fa0/24      1,10,20,30

Port        Vlans in spanning tree forwarding state and not pruned
Fa0/24      1,10,20,30

Switch#show vlan

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    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
10   zodiak1                          active    Fa0/1, Fa0/4
20   zodiak2                          active    Fa0/2
30   zodiak3                          active    Fa0/3, Fa0/5
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
```

Physical | Config | CLI | Attributes

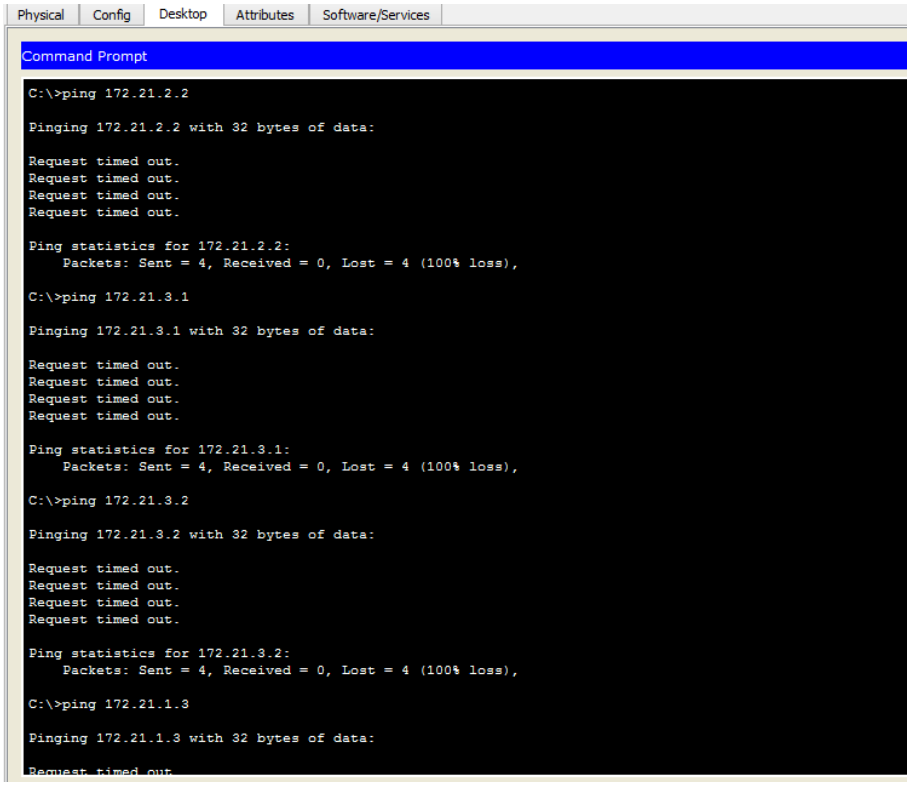
IOS Command

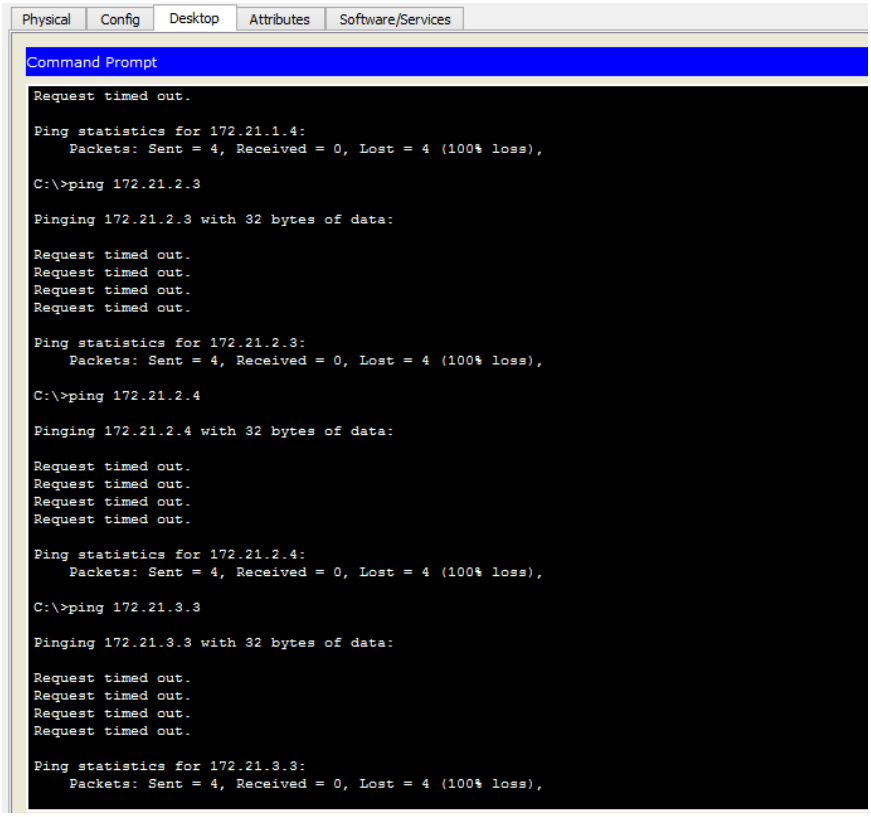
```
Switch#show vlan

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    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
10   zodiak1                           active    Fa0/1, Fa0/4
20   zodiak2                           active    Fa0/2
30   zodiak3                           active    Fa0/3, Fa0/5
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

Remote SPAN VLANs
------------------------------------------------------------------------------

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

8. Ping dari PC leo ke pisces

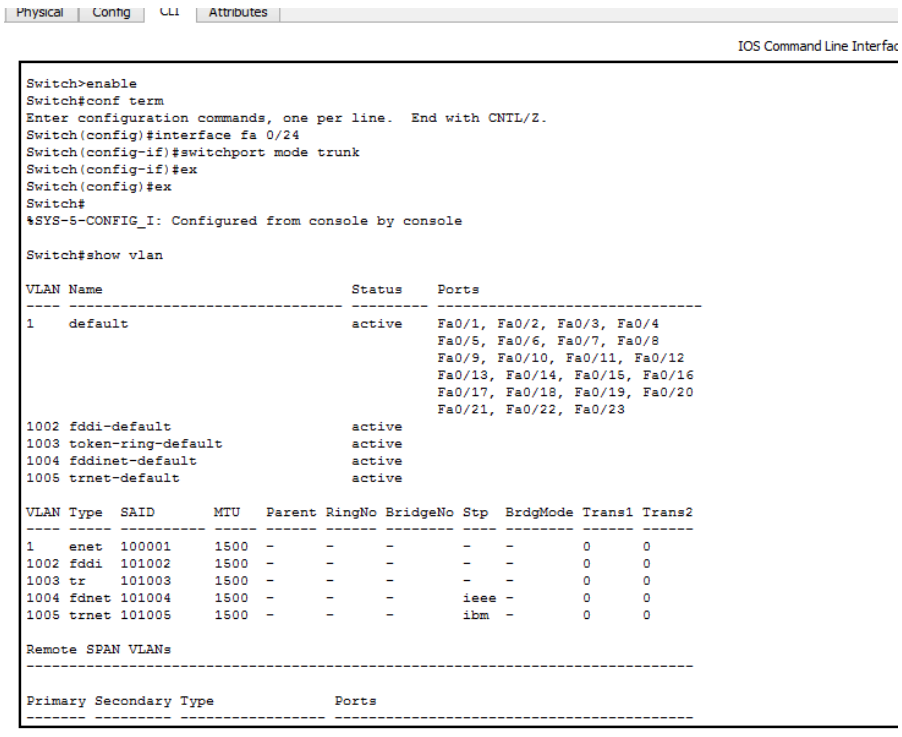
Command Prompt

```
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=22ms TTL=128
Reply from 172.21.1.1: bytes=32 time=18ms TTL=128
Reply from 172.21.1.1: bytes=32 time=18ms TTL=128
Reply from 172.21.1.1: bytes=32 time=10ms 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 = 10ms, Maximum = 22ms, Average = 17ms

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 172.21.2.1

Pinging 172.21.2.1 with 32 bytes of data:

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

Ping statistics for 172.21.2.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 172.21.2.2
```


Physical
Config
Desktop
Attributes
Software/Services
Command Prompt
C:\>ping 172.21.2.2
Pinging 172.21.2.2 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.21.2.2:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 172.21.3.1
Pinging 172.21.3.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.21.3.1:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 172.21.3.2
Pinging 172.21.3.2 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.21.3.2:
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.



9. Konfigurasi VLAN pada switch 2



10. Ubah mode privileged

11. Mode configuration

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int fa 0/1
Switch(config-if)#ex
Switch(config)#ex
Switch#
%SYS-5-CONFIG_I: Configured from console by console

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)#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 0/3
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#int fa 0/5
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#end
Switch#
```

12. Melakukan ping di setiap PC

```
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:

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
```

```
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:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

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

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```