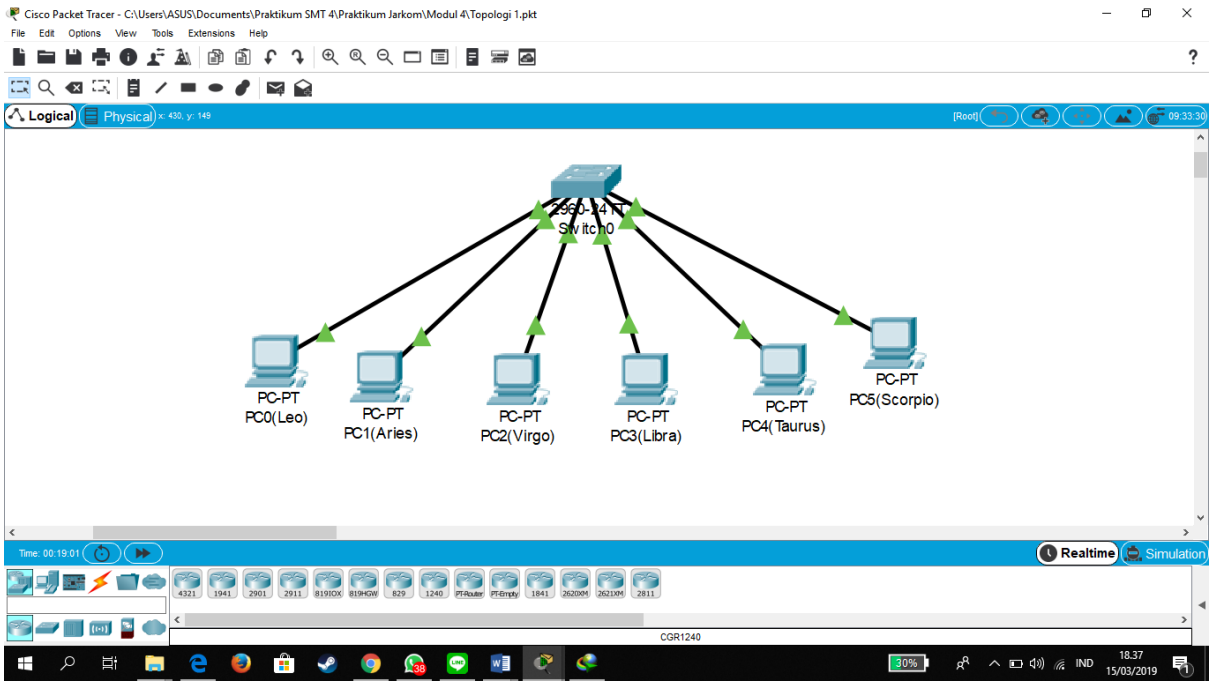
Zulfikar Bayu Budiman
L200170052
Kelas B

Topologi 1



Mengkonfigurasi switch dengan *mode user* atau *mode privileged*, dengan membuat 3 VLAN dengan nama Zodiak1, Zodiak2, Zodiak3. Dengan cara :

- Klik pada SWITCH kemudian klik CLI, lalu menuliskan langkah pengoperasian seperti dibawah ini : (Sebelum ada tulisan SWITCH# maka kita harus melaukan operasi (CTRL+Z => ENTER sampai ada tulisan SWITCH#)), kemudian ketikan
  a. Switch#enable
  b. Switch#conf term
  c. Switch(config)#vlan 10
  d. Switch(config-vlan)#nama zodiak1
  e. Switch(config-vlan)#exit
  f. Switch(config)#vlan 20
  g. Switch(config-vlan)#name zodiak2
  h. Switch(config-vlan)#exit
  i. Switch(config)#vlan 30
  j. Switch(config-vlan)#name zodiak3
  k. Switch(config-vlan)#exit

Pada *mode Configurasi*, konfigurasi port-port switch ke dalam VLAN sebagai berikut :

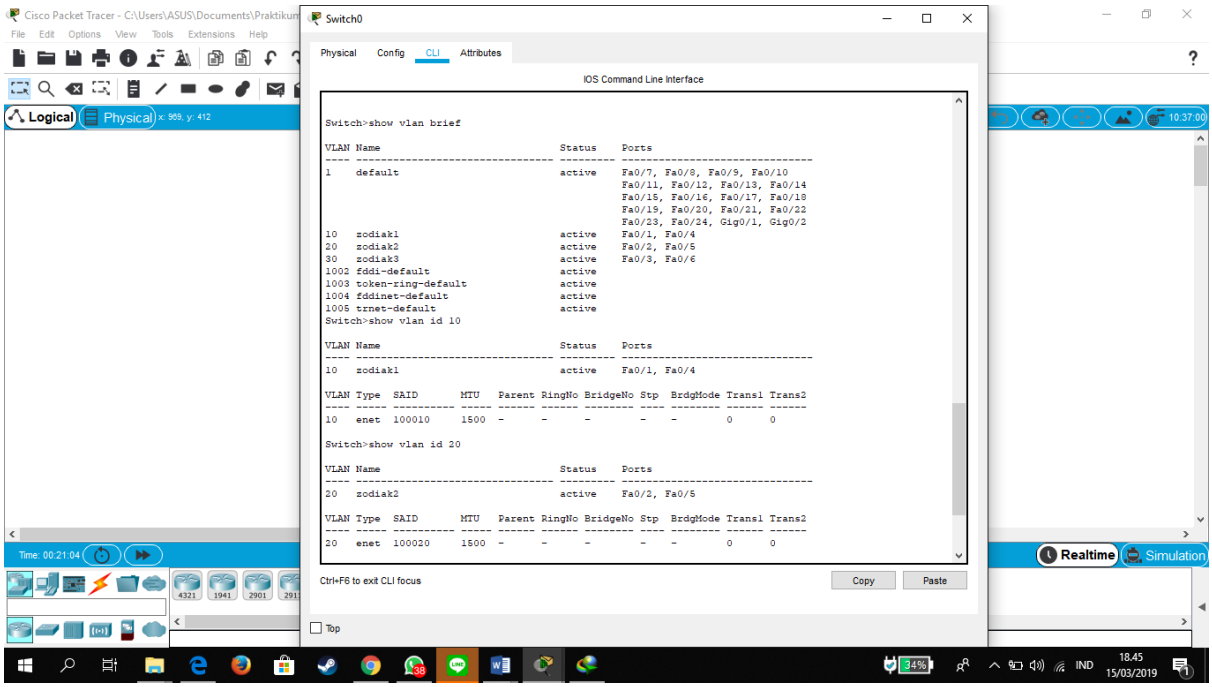
- Zodiak1 = leo (0) dan libra(4)
- Zodiak2 = aries (2) dan taurus(5)
- Zodiak3 = virgo (3) dan scorpio (6)

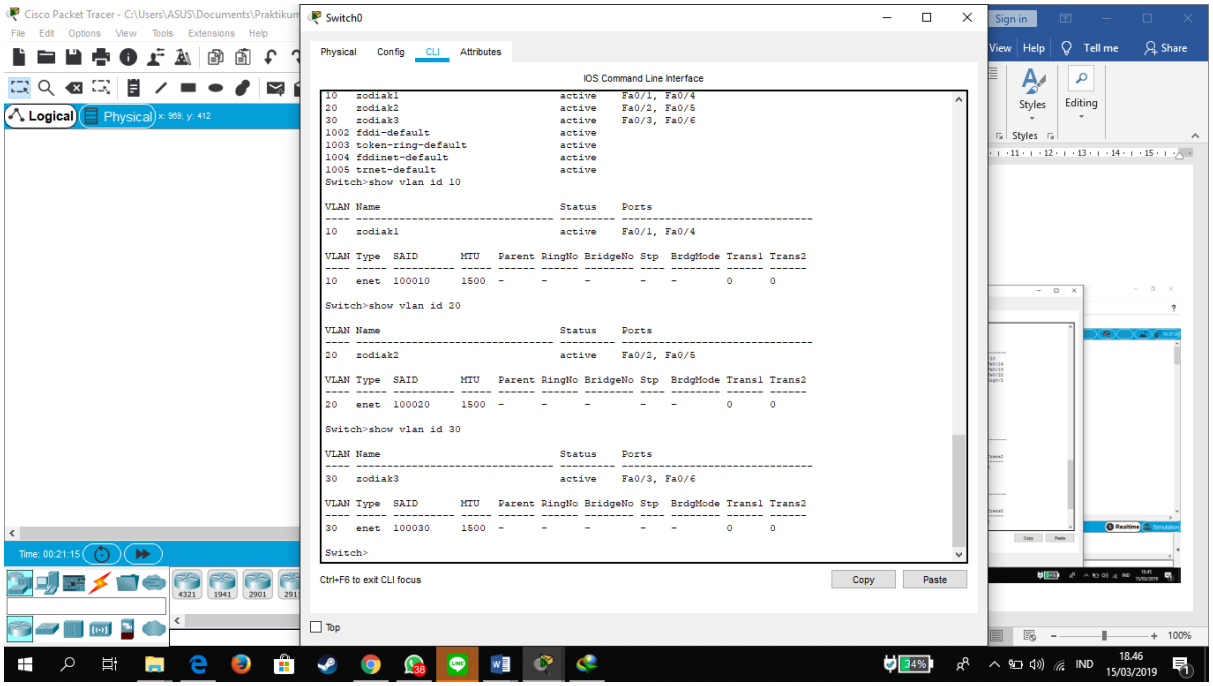
Masuk pada *mode Configuration*, kemudian :

a. Klik Fastethernet 0/1 (di Configuration)
b. Kemudian kembali ke CLI lalu ketikkan, switchport mode access
c. Ketik switchport access vlan 10
d. Exit
e. Klik Fastethernet 0/4 (di Configuration)
f. Kemudian kembali ke CLI, lalu ketikkan switchport mode access
g. Ketikkan switchport access vlan 10
h. Exit
   Dst.(Ulangi dengan cara yg sama sampai vlan 30)

Setelah itu semua lanjut Masuk ke mode priviledged

- Ketik show vlan brief
- Ketik show vlan id 10
- Ketik show vlan id 20
- Ketik show vlan id 30





a. zodiak1

No	Variable	Nilai
1	Nomor VLAN	10
2	Nama VLAN	zodiak1
3	Port	Fa 0/1, Fa 0/4
4	Status	Active

b. zodiak2

No	Variable	Nilai
1	Nomor VLAN	20
2	Nama VLAN	zodiak1
3	Port	Fa 0/2, Fa 0/5
4	Status	Active

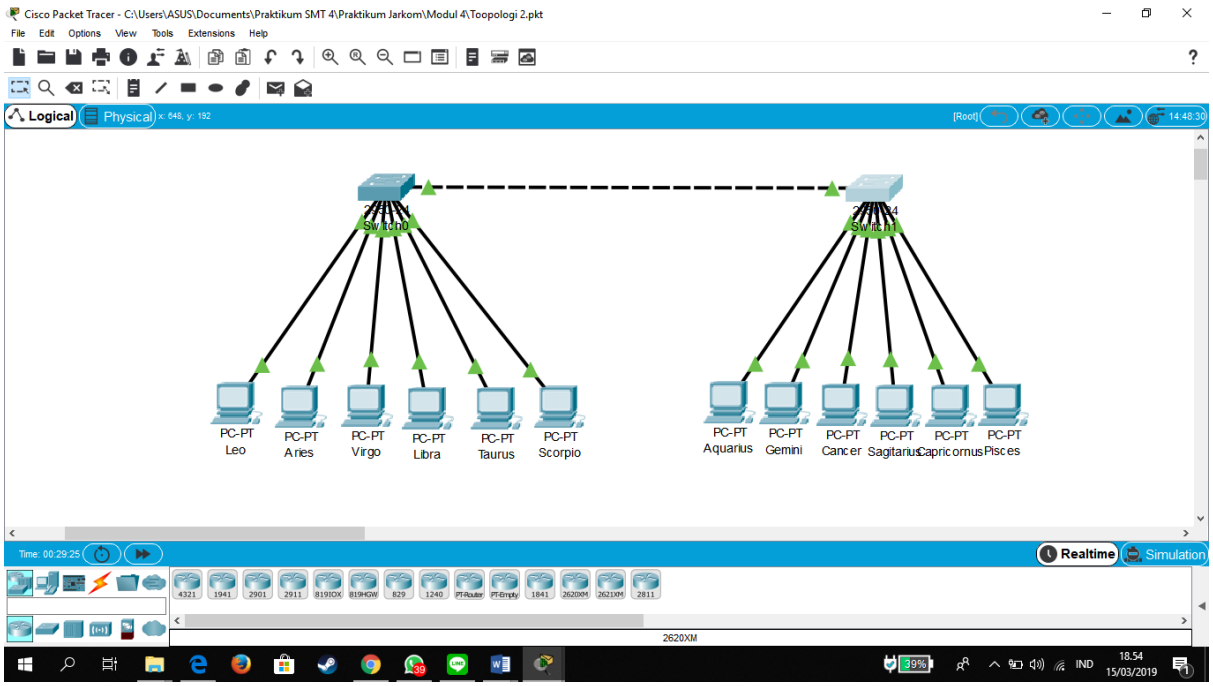
c. zodiak3

No	Variable	Nilai
1	Nomor VLAN	30
2	Nama VLAN	zodiak1
3	Port	Fa 0/3, Fa 0/6
4	Status	Active

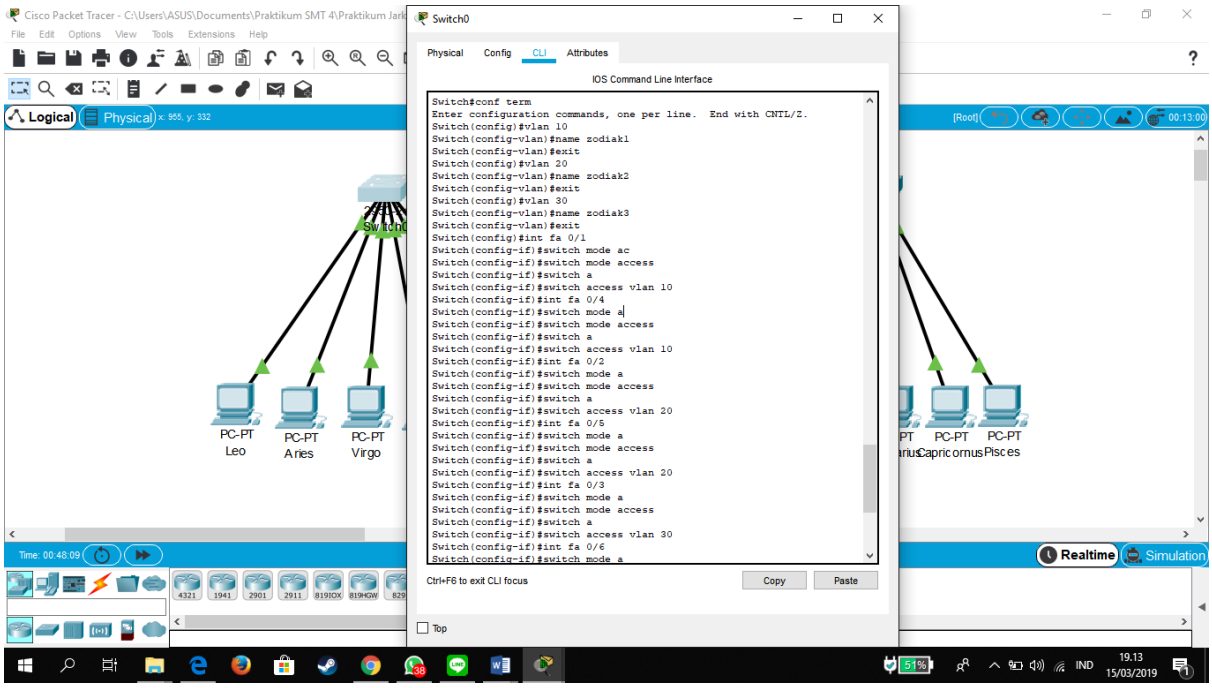
Kesimpulan :

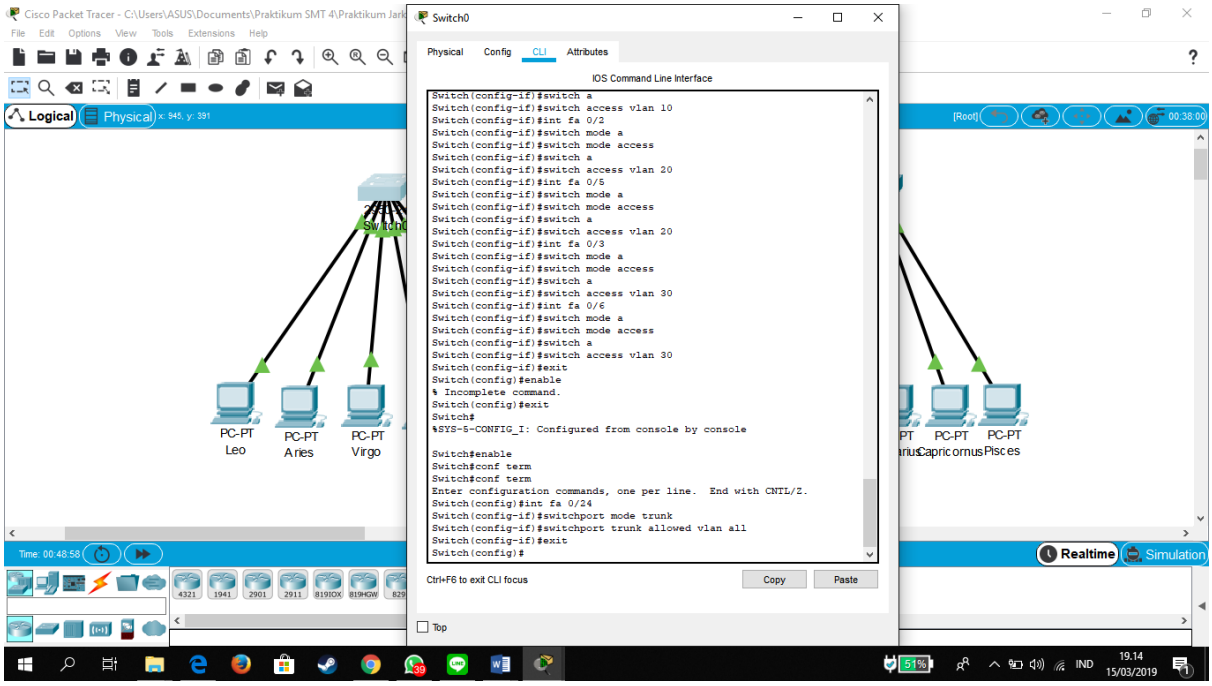
“”Jadi dari setiap 6 komputer dibagi menjadi 3 VLAN yang berbeda, yaitu zodiak1, zodiak2, dan zodiak3. No/id vlan 10 bernama zodiak1 yang berisi port Fa 0/1(Leo) dan Fa 0/4(Libra), No/id vlan 20 bernama zodiak2 yang berisi port Fa 0/2(Aries) dan Fa 0/5(Taurus), dan No/id vlan 30 bernama zodiak3 yang berisi port Fa 0/3(Virgo) dan Fa 0/6(Scorpio), dan status semua vlan itu adalah active/aktif.’’”

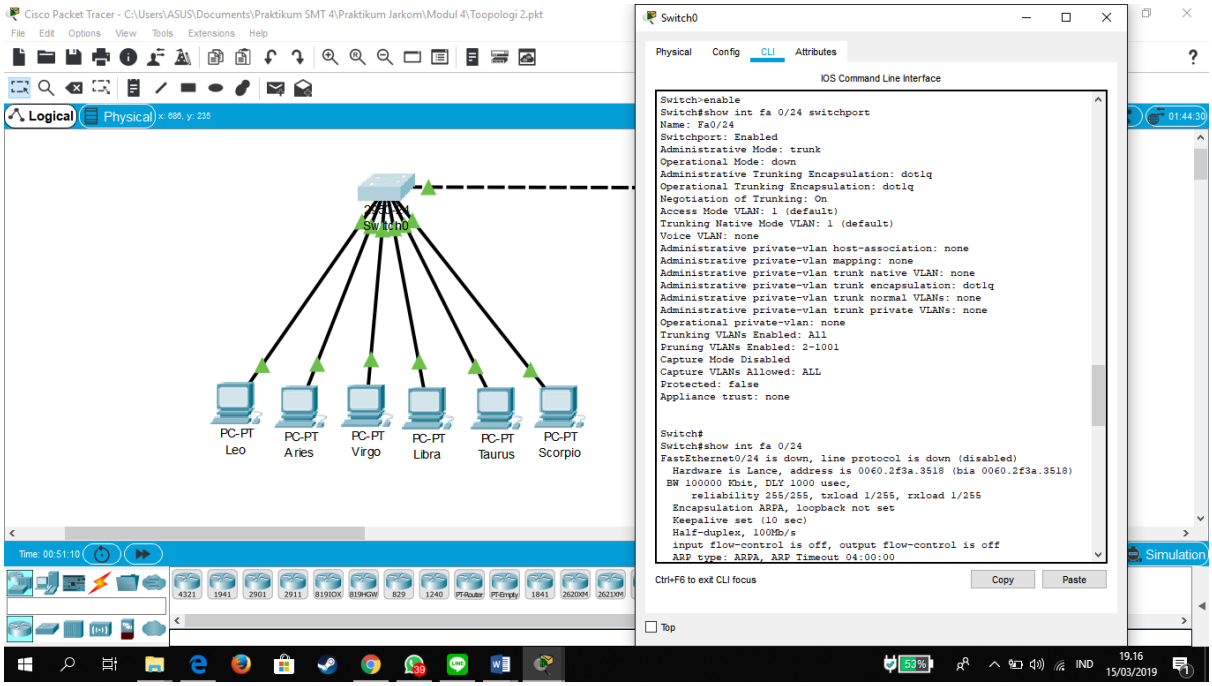
Topologi 2

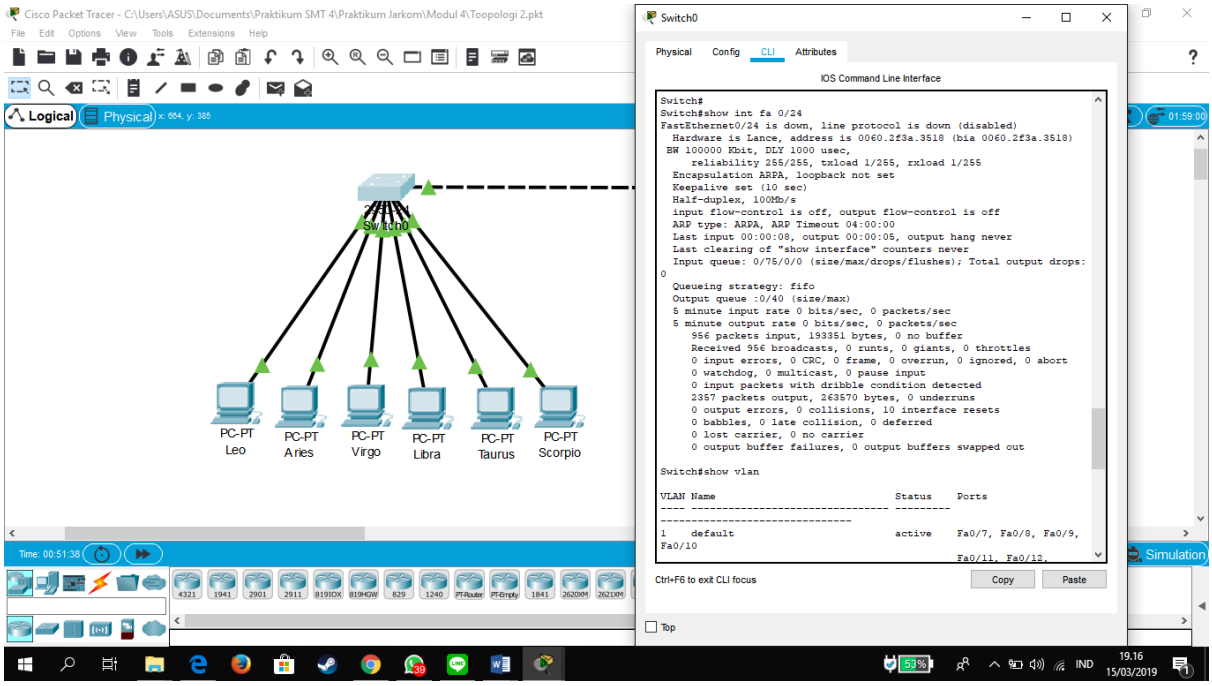


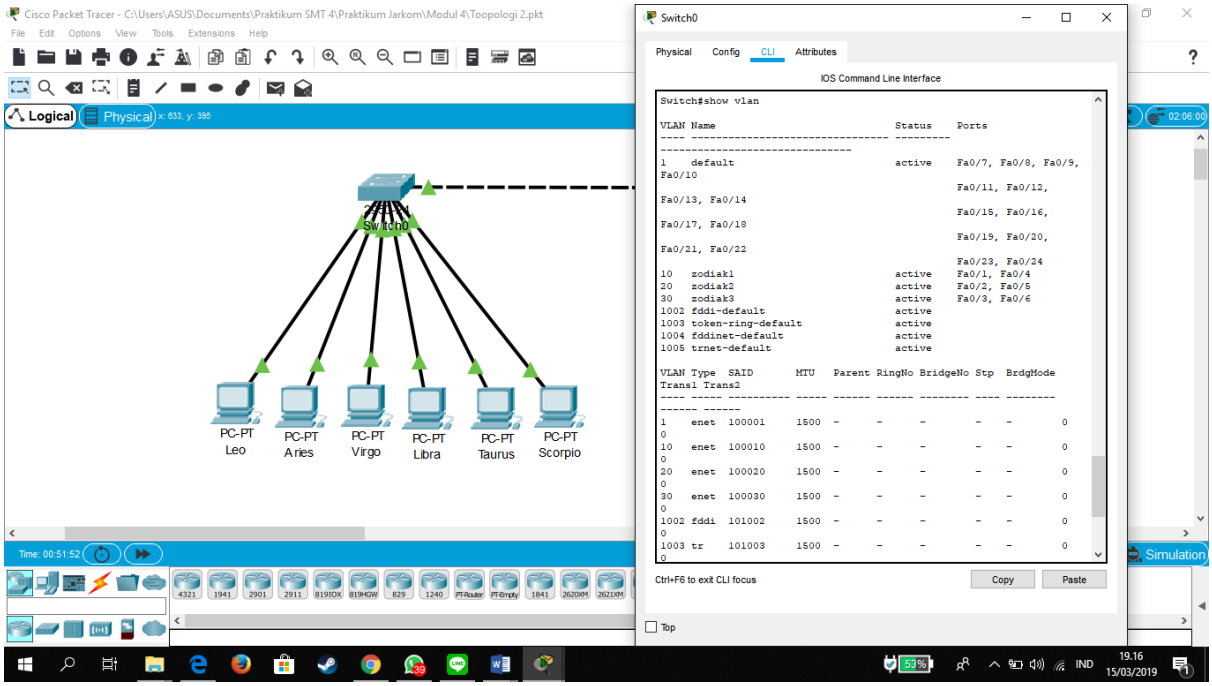
- Memberi nama dan IP pada masing-masing PC
- Membuat VLAN dan mengkonfigurasi port-port pada switch ke VLAN
- Melakukan konfigurasi VLAN Trunking pada switch pertama (switch 0)
- Melihat konfigurasi Trunking VLAN

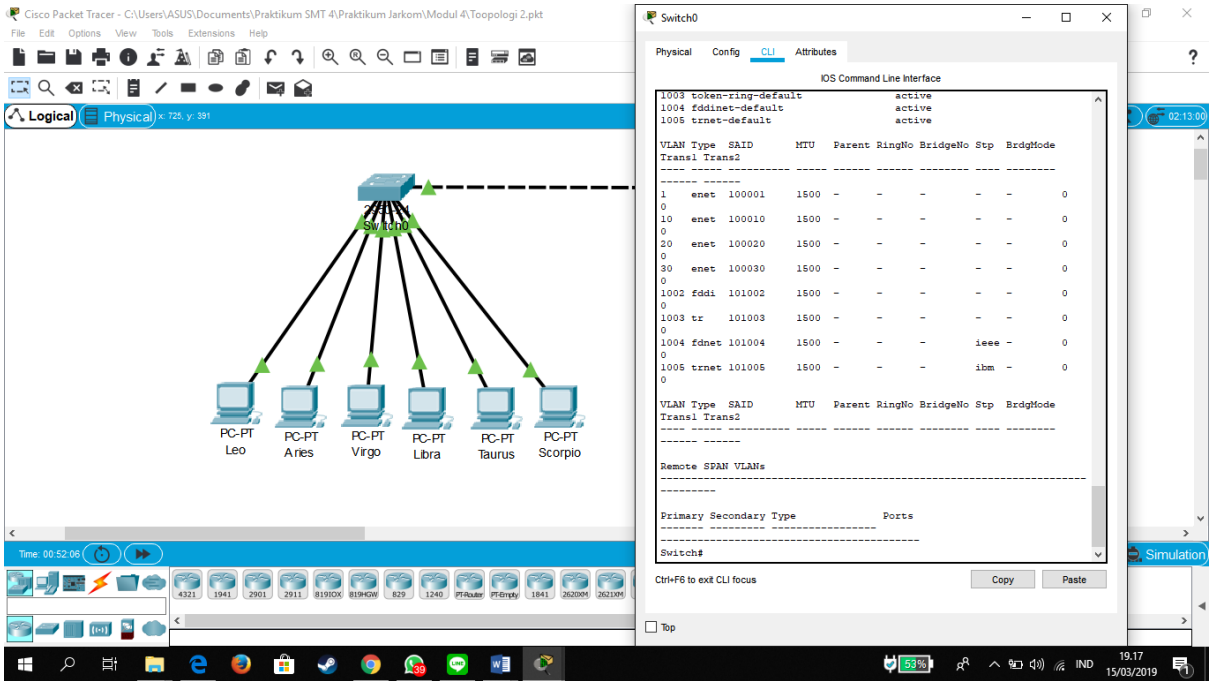



Switch0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 20
Switch(config-if)#int fa 0/5
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 20
Switch(config-if)#int fa 0/3
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 30
Switch(config-if)#exit
Switch(config)#enable
% Incomplete command.
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console
Switch#enable
Switch#conf term
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/24
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk allowed vlan all
Switch(config-if)#exit
Switch(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Logical
Physical
PC-PT Leo
PC-PT Aries
PC-PT Virgo
PC-PT Capricornus
PC-PT Pisces
Realtime
Simulation

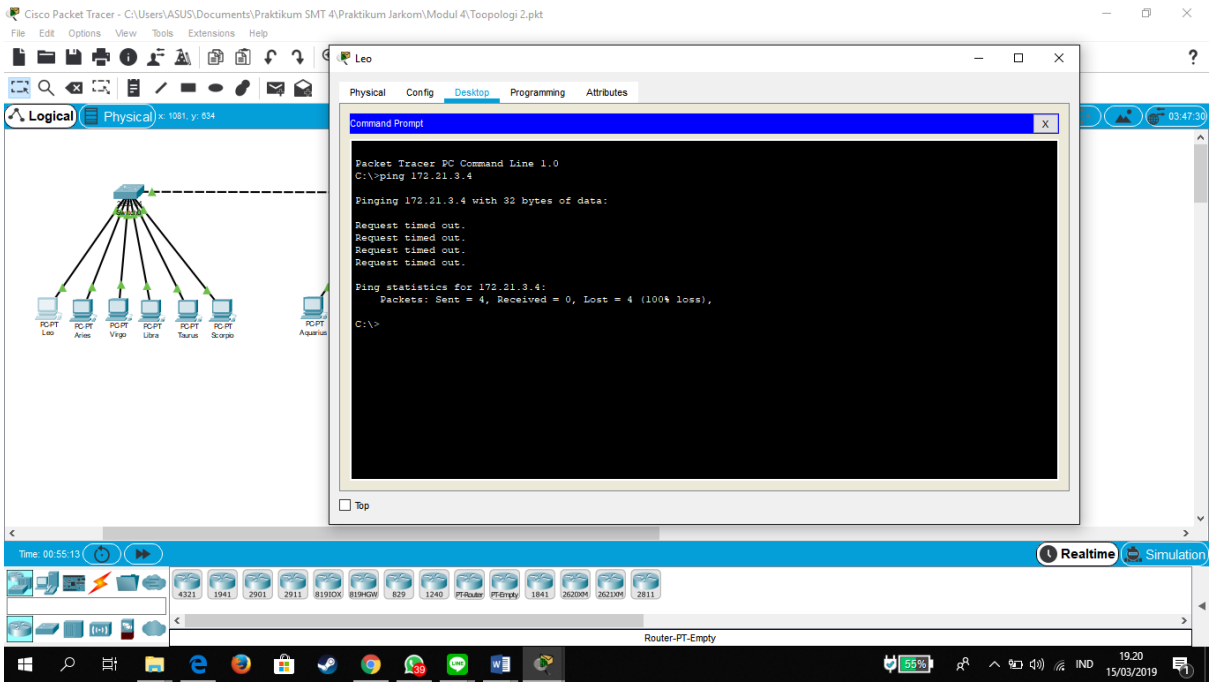

Switch0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Switch>enable
Switch#show int fa 0/24 switchport
Name: Fa0/24
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: 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
Switch#
Switch#show int fa 0/24
FastEthernet0/24 is down, line protocol is down (disabled)
Hardware is Lance, address is 0060.2f3a.3518 (bia 0060.2f3a.3518)
BW 100000 Kbit, DLY 1000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Half-duplex, 100Mb/s
input flow-control is off, output flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Logical
Physical
PC-PT Leo
PC-PT Aries
PC-PT Virgo
PC-PT Libra
PC-PT Taurus
PC-PT Scorpio
Simulation

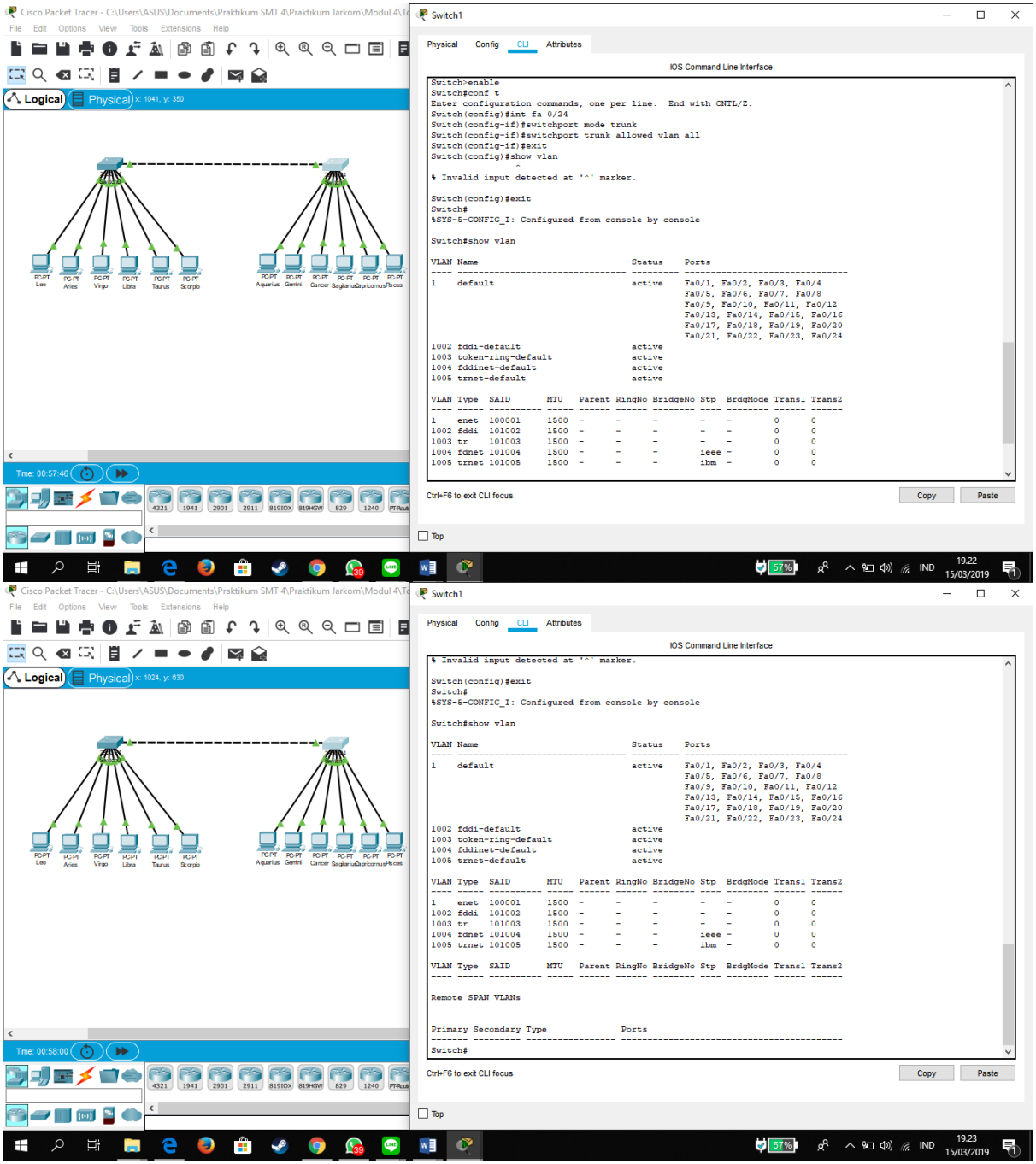

Cisco Packet Tracer - C:\Users\ASUS\Documents\Praktikum SMT 4\Praktikum Jarkom\Modul 4\Toopologi 2.pkt
Switch0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Switch#
Switch#show int fa 0/24
FastEthernet0/24 is down, line protocol is down (disabled)
Hardware is Lance, address is 0060.2f3a.3518 (bia 0060.2f3a.3518)
BW 100000 Kbit, DLY 1000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Half-duplex, 100Mb/s
input flow-control is off, output flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:08, output 00:00:05, output hang never
Last clearing of "show interface" counters never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops:
0
Queueing strategy: fifo
Output queue :0/40 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
956 packets input, 193351 bytes, 0 no buffer
Received 956 broadcasts, 0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
2357 packets output, 263570 bytes, 0 underruns
0 output errors, 0 collisions, 10 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier
0 output buffer failures, 0 output buffers swapped out
Switch#show vlan
VLAN Name Status Ports
1 default active Fa0/7, Fa0/8, Fa0/9,
Fa0/10
Fa0/11, Fa0/12,
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Logical
Physical
Switch0
PC-PT Leo
PC-PT Aries
PC-PT Virgo
PC-PT Libra
PC-PT Taurus
PC-PT Scorpio
Time: 00:51:38
Simulation
19.16
15/03/2019


Cisco Packet Tracer - C:\Users\ASUS\Documents\Praktikum SMT 4\Praktikum Jarkom\Modul 4\Toopologi 2.pkt
Switch0
Physical
Config
CLI
Attributes
IOS Command Line Interface
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 Fa0/1, 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
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
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Logical
Physical
Switch0
PC-PT Leo
PC-PT Aries
PC-PT Virgo
PC-PT Libra
PC-PT Taurus
PC-PT Scorpio
Time: 00:51:52
Simulation
19.16
15/03/2019

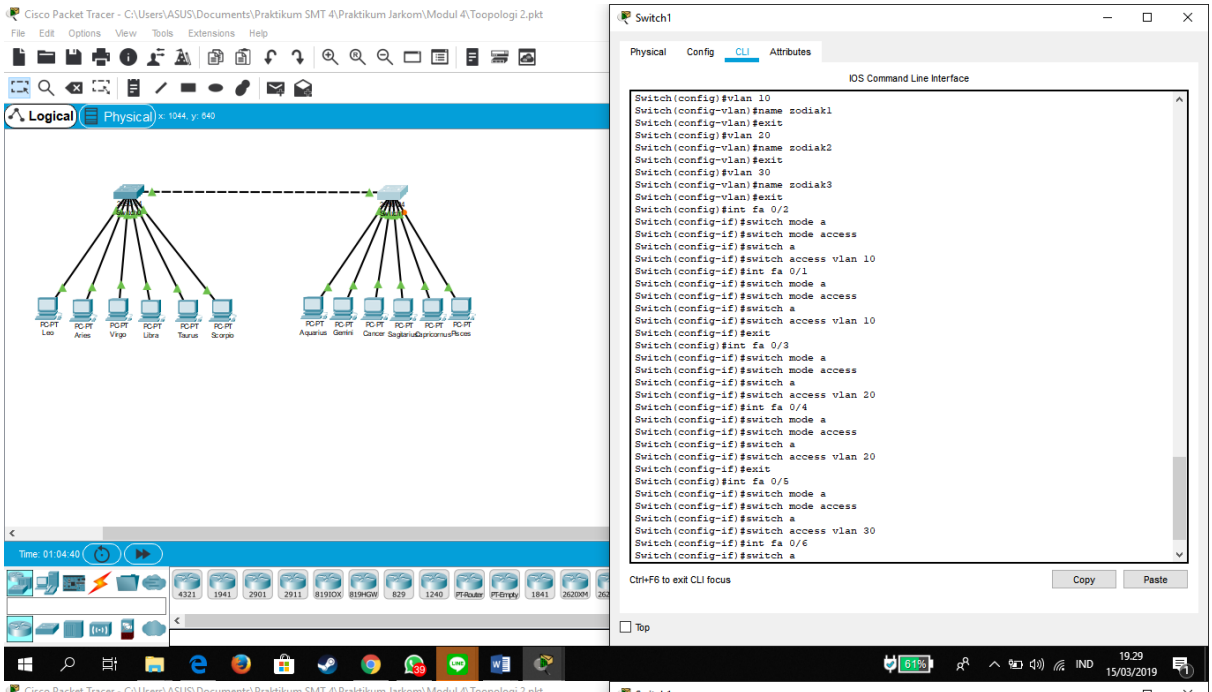


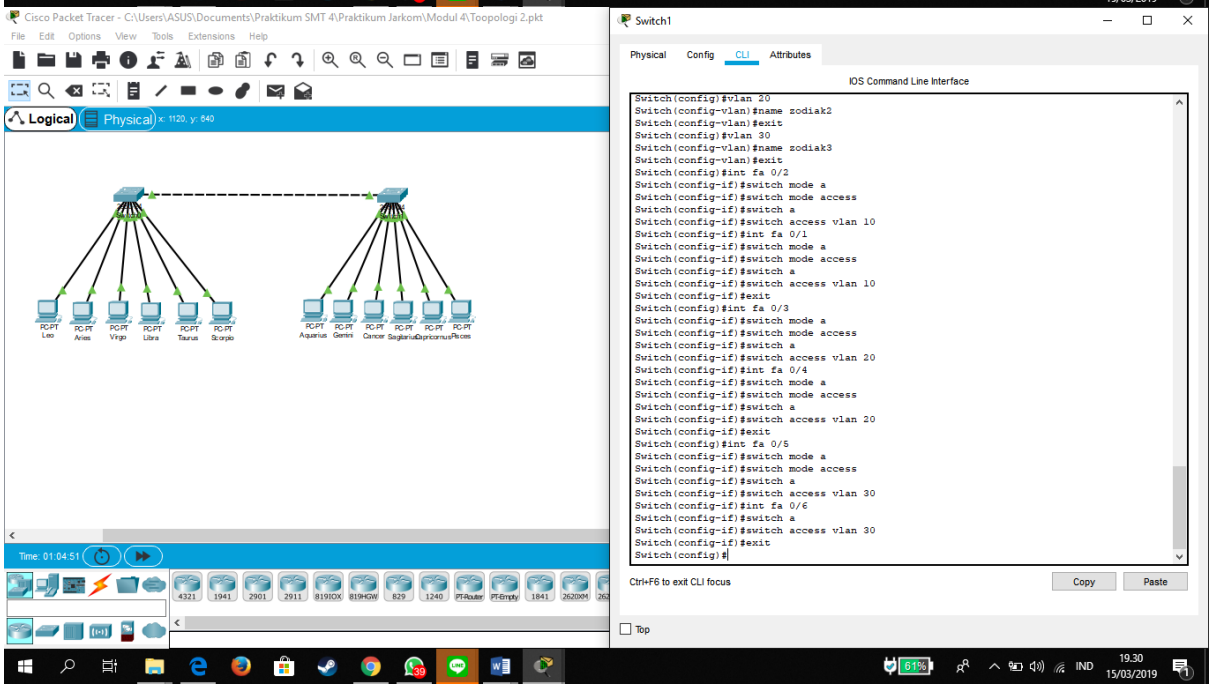
""Vlan pada port 0/1 sampai dengan 0/6 sudah terkonfigurasi dan telah di Trunking pada port 0/24""

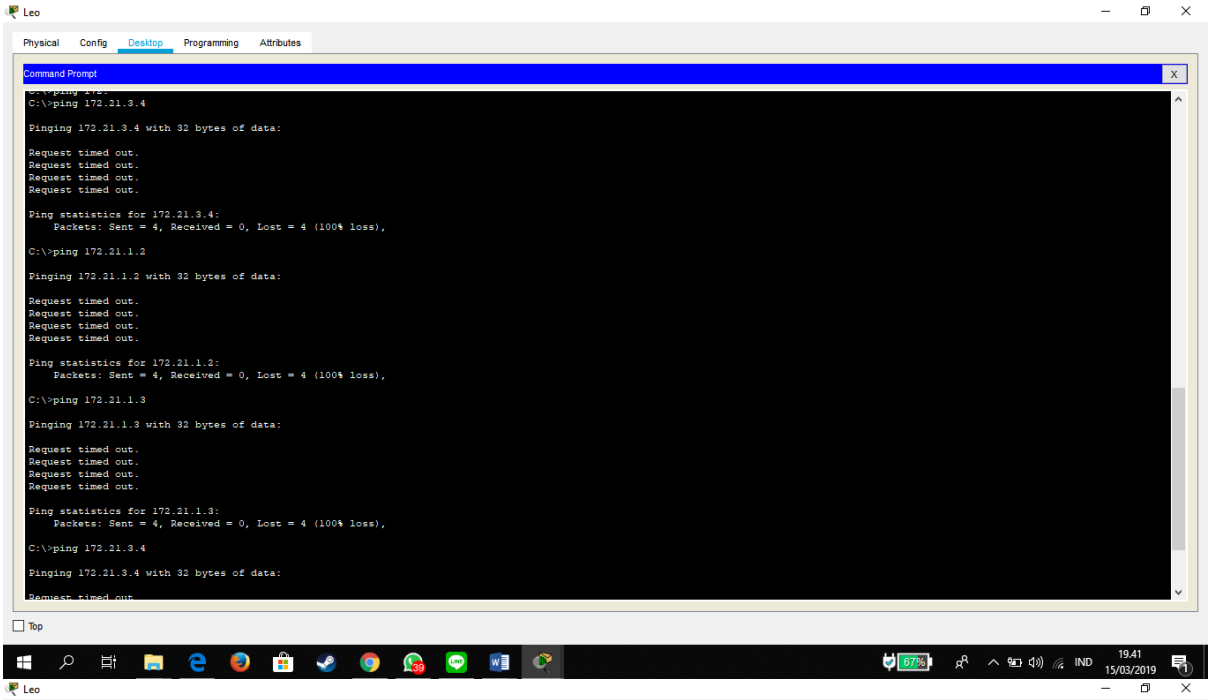


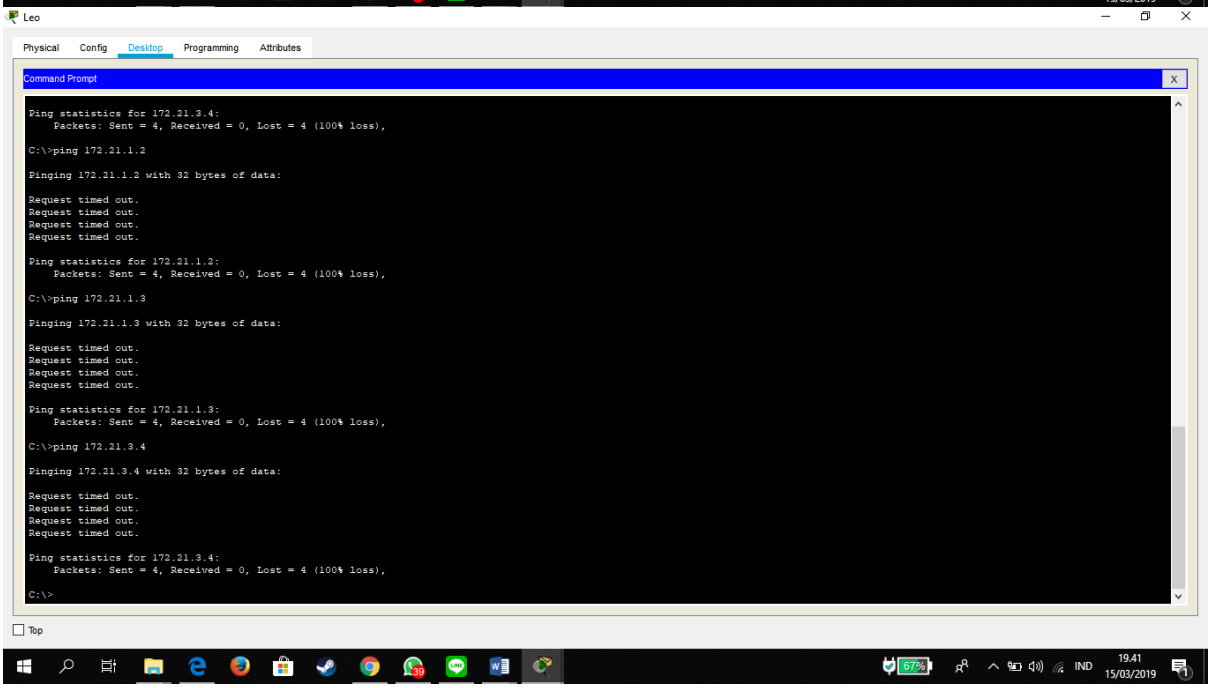


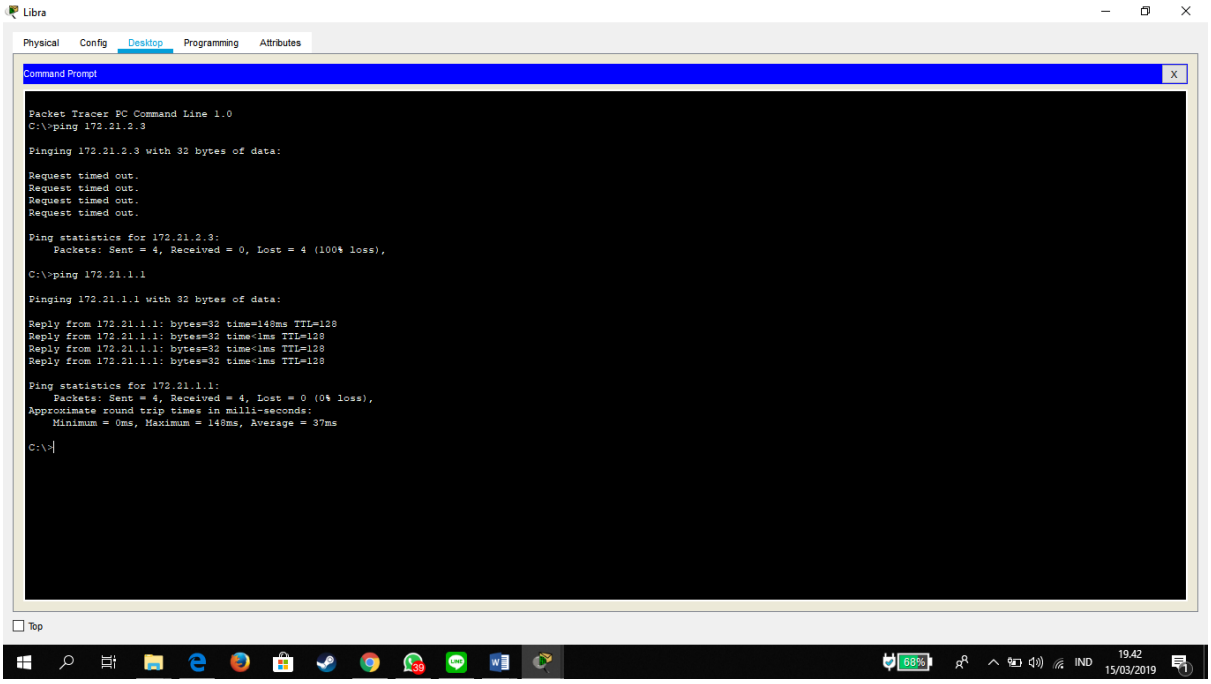
“”Vlan pada port 0/1 sampai dengan 0/6 sudah terkonfigurasi dan telah di Trunking pada port 0/24””


Cisco Packet Tracer - C:\Users\ASUS\Documents\Praktikum SMT 4\Praktikum Jarkom\Modul 4\Toopologi 2.pkt
File Edit Options View Tools Extensions Help
Logical
Physical
x: 1044, y: 640
Time: 01:04:40
Switch1
Physical Config CLI Attributes
IOS Command Line Interface
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#int fa 0/2
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 10
Switch(config-if)#int fa 0/1
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/3
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/5
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switch a
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
19.29
15/03/2019


Cisco Packet Tracer - C:\Users\ASUS\Documents\Praktikum SMT 4\Praktikum Jarkom\Modul 4\Toopologi 2.pkt
File Edit Options View Tools Extensions Help
Logical
Physical
x: 1120, y: 640
Time: 01:04:51
Switch1
Physical Config CLI Attributes
IOS Command Line Interface
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#int fa 0/2
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 10
Switch(config-if)#int fa 0/1
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/3
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/5
Switch(config-if)#switch mode a
Switch(config-if)#switch mode access
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switch a
Switch(config-if)#switch access vlan 30
Switch(config-if)#exit
Switch(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
19.30
15/03/2019


Leo
Physical
Config
Desktop
Programming
Attributes
Command Prompt
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:\>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:\>ping 172.21.3.4
Pinging 172.21.3.4 with 32 bytes of data:
Top
67%
IND
19.41
15/03/2019


Leo
Physical
Config
Desktop
Programming
Attributes
Command Prompt
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:\>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:\>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:\>
Top
67%
IND
19.41
15/03/2019



“”Dari percobaan diatas/pengetesan Ping diatas dapat saya simpulkan bahwa Ping dengan Vlan yang berbeda beda dan switch yang berbeda tidak memungkinkan untuk mendapat kan reply, tapi malah mendapat rto. walaupun telah dilakukan Trunking, Akan tetapi memungkinkan untuk mendapatkan reply dari Vlan yang sama, dan tidak terjadi rto.””