

Nama : Ayasha Ninda Maharani

NIM : L200170143

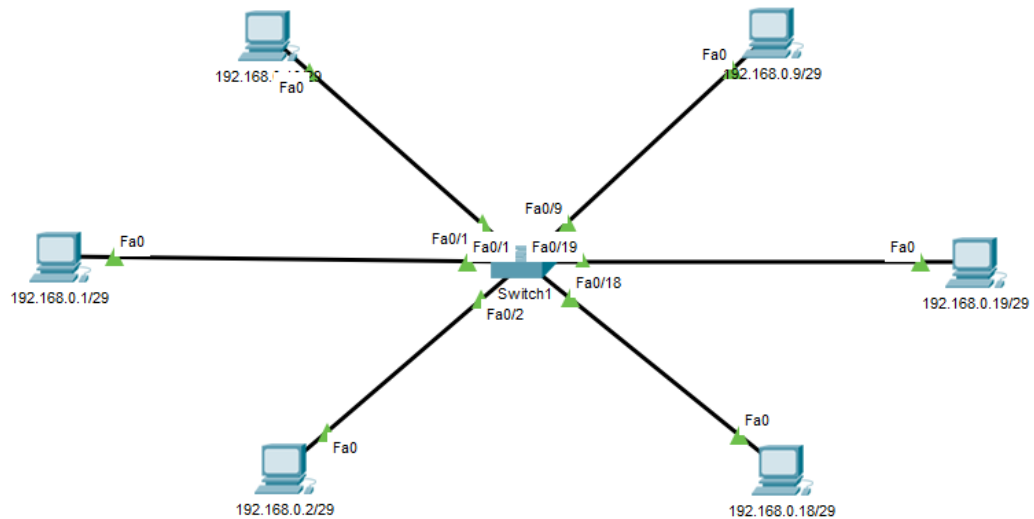
BAB 2

SUBNETING, VLAN

Percobaan

1. Jaringan VLAN A.

a. Konfigurasi Switch.



b. Menambahkan VLAN 2 dan VLAN 3 serta memasukkan port sesuai dengan VLAN.

```
Switch1
Physical Config CLI Attributes
IOS Command Line Interface

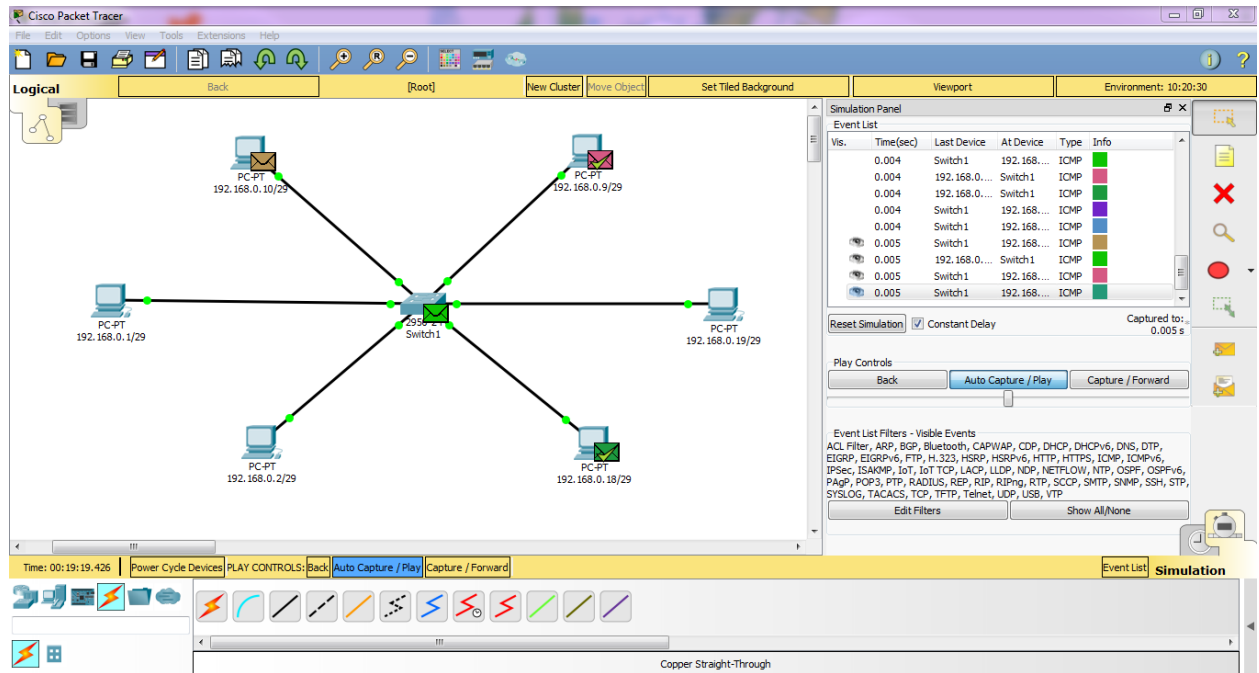
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to down

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up

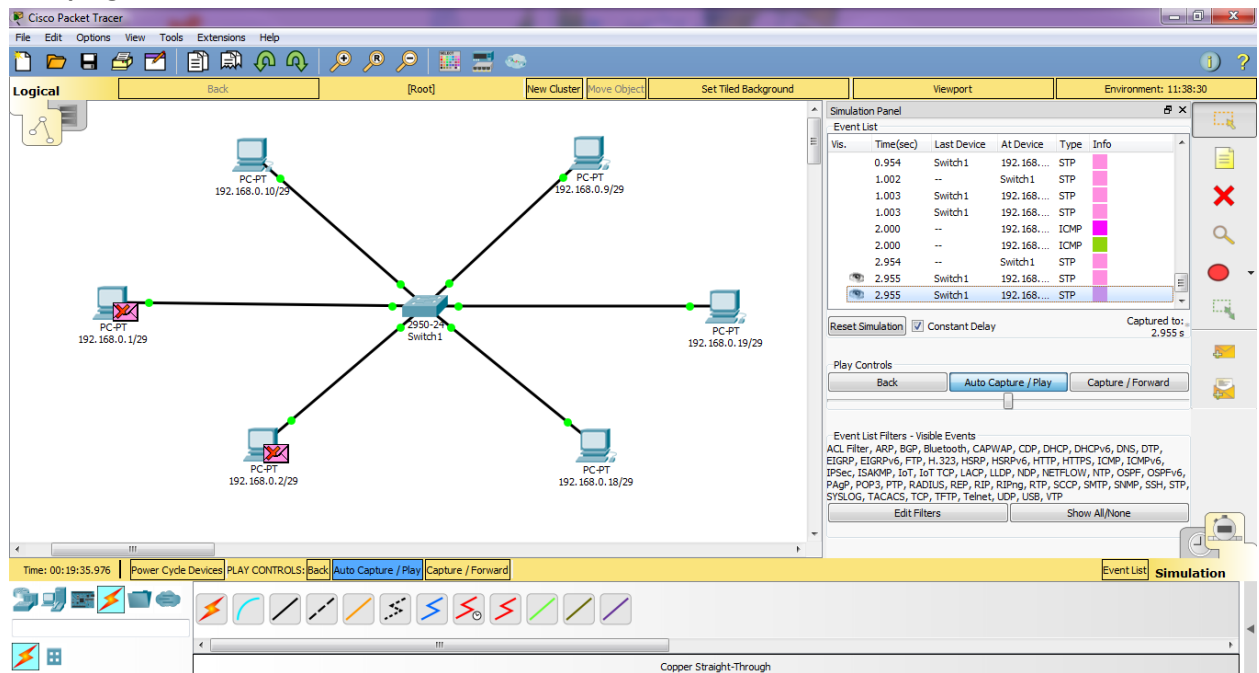
Switch>en
Switch#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name FK11
Switch(config-vlan)#int range fa0/9-10
Switch(config-if-range)#switchport access vlan 2
Switch(config-if-range)#vlan 3
Switch(config-vlan)#name FK12
Switch(config-vlan)#int range fa0/18-19
Switch(config-if-range)#switchport access vlan 3
Switch(config-if-range)#

Ctrl+F6 to exit CLI focus
```

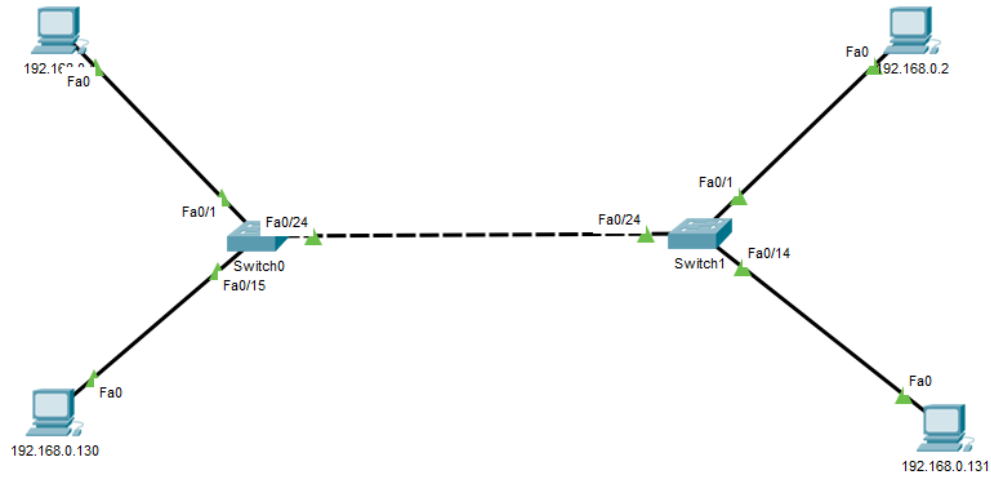
c. Test ping antar PC dalam VLAN yang sama.



d. Test ping antar PC dalam VLAN berbeda.



2. Jaringan VLAN B.



a. VLAN.

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/15, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/15, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/24, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to up

Switch>show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, 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, Fa0/16, Fa0/17
                                           Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                           Fa0/22, Fa0/23
2    VLAN2                  active    Fa0/15
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
2    enet  100002    1500    -      -      -      -    -      0      0
1002 fddi  101002    1500    -      -      -      -    -      0      0
1003 tr   101003    1500    -      -      -      -    -      0      0
1004 fdnet 101004    1500    -      -      -      ieee -      0      0
--More--
```

Ctrl+F6 to exit CLI focus

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Switch1

Physical Config **CLI** Attributes

IOS Command Line Interface

```

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/14, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/14, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/24, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to up

Switch>show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                           Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                           Fa0/9, Fa0/10, Fa0/11, Fa0/12
                                           Fa0/13, Fa0/15, Fa0/16, Fa0/17
                                           Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                           Fa0/22, Fa0/23
2    VLAN2                 active    Fa0/14
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
2    enet    100002    1500  -     -     -     -     -     0      0
1002 fddi    101002    1500  -     -     -     -     -     0      0
1003 tr      101003    1500  -     -     -     -     -     0      0
1004 fddnet 101004    1500  -     -     -     -     -     0      0
--More--

```

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b. Mode Trunk.

Switch0

Physical **Config** CLI Attributes

FastEthernet0/10
FastEthernet0/11
FastEthernet0/12
FastEthernet0/13
FastEthernet0/14
FastEthernet0/15
FastEthernet0/16
FastEthernet0/17
FastEthernet0/18
FastEthernet0/19
FastEthernet0/20
FastEthernet0/21
FastEthernet0/22
FastEthernet0/23
FastEthernet0/24

FastEthernet0/24

Port Status

Bandwidth ☒ 100 Mbps ☐ 10 Mbps

Duplex ☐ Half Duplex ☒ Full Duplex

Trunk VLAN 1-1005

Tx Ring Limit 10

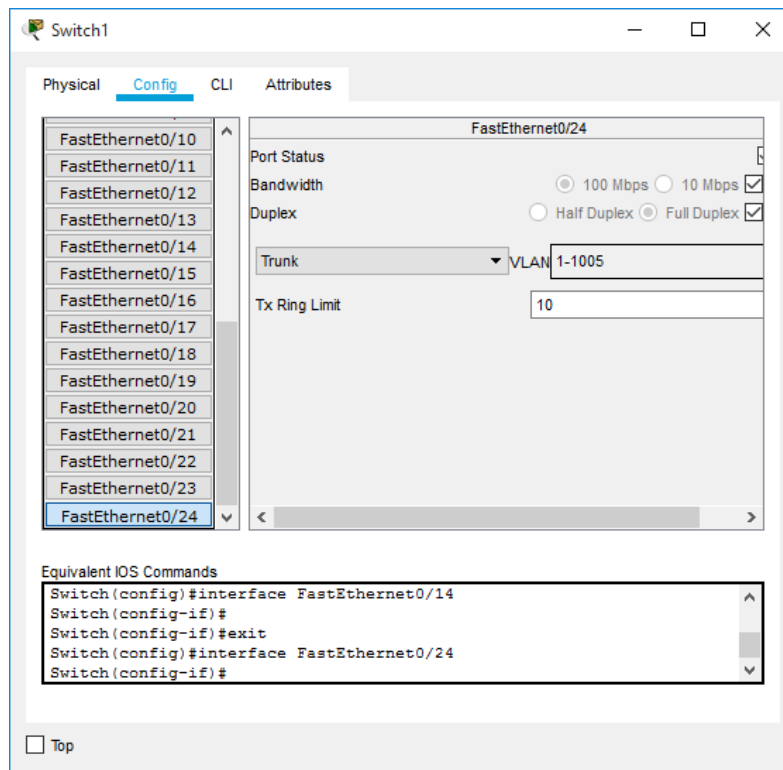
Equivalent IOS Commands

```

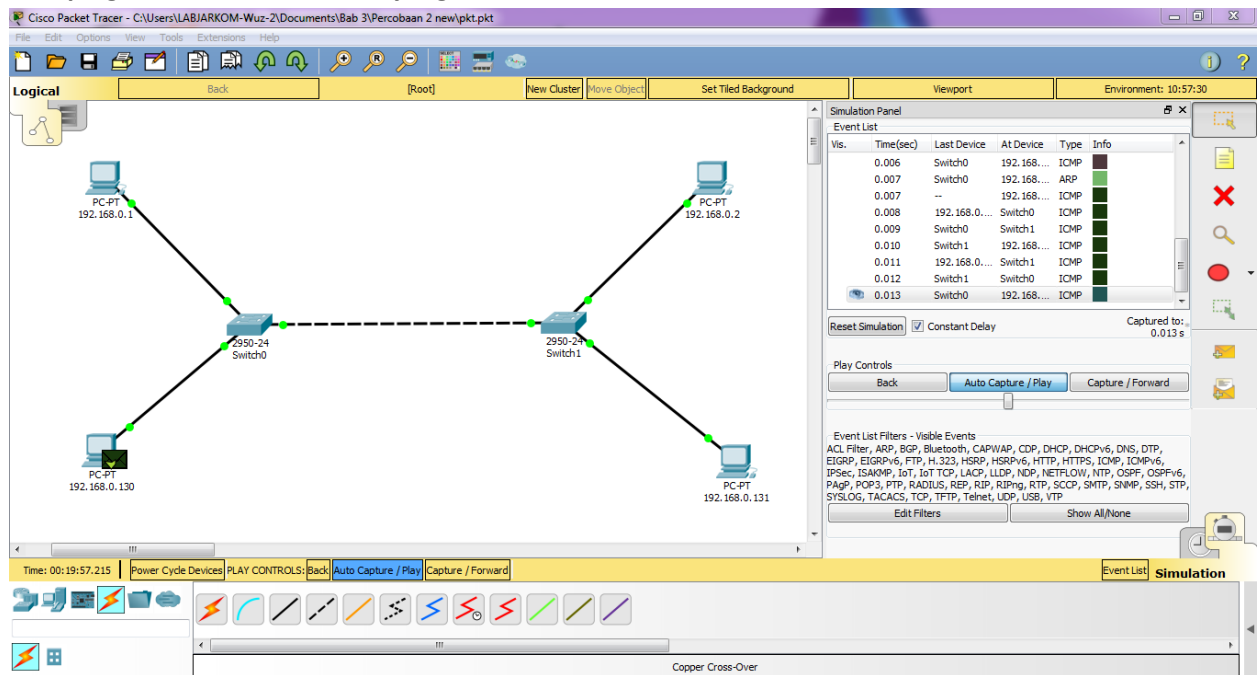
Switch(config)#interface FastEthernet0/15
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/24
Switch(config-if)#

```

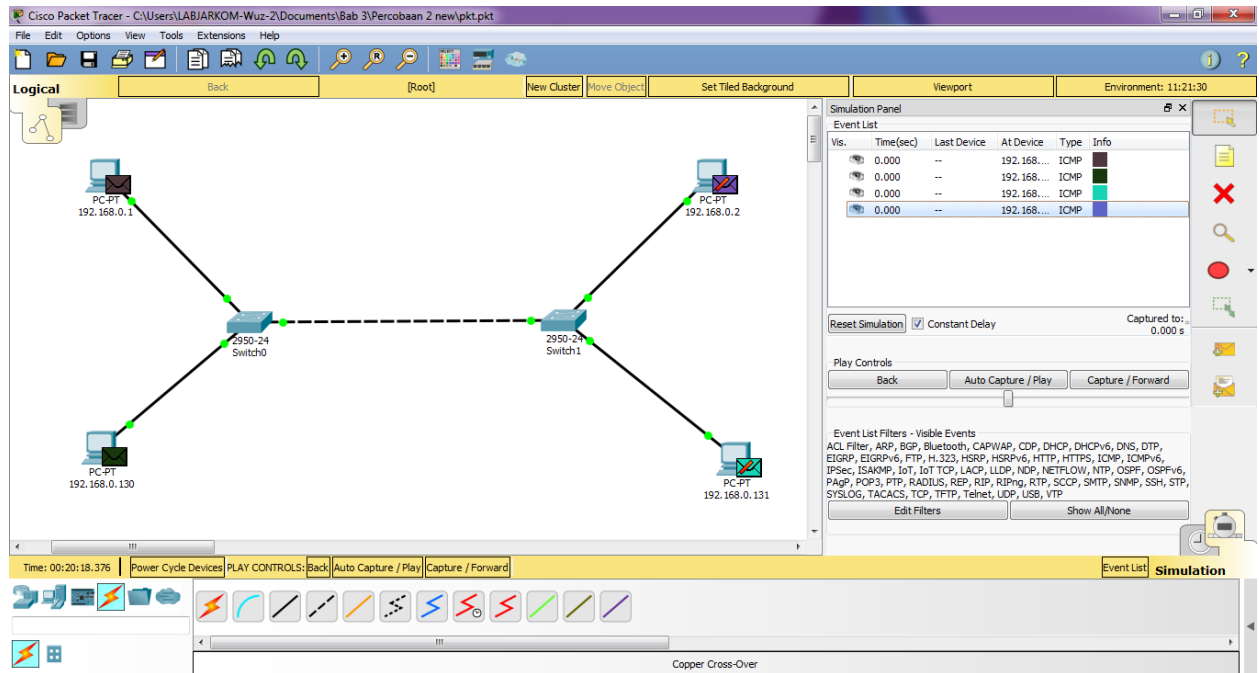
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c. Test ping antar PC dalam VLAN yang sama.

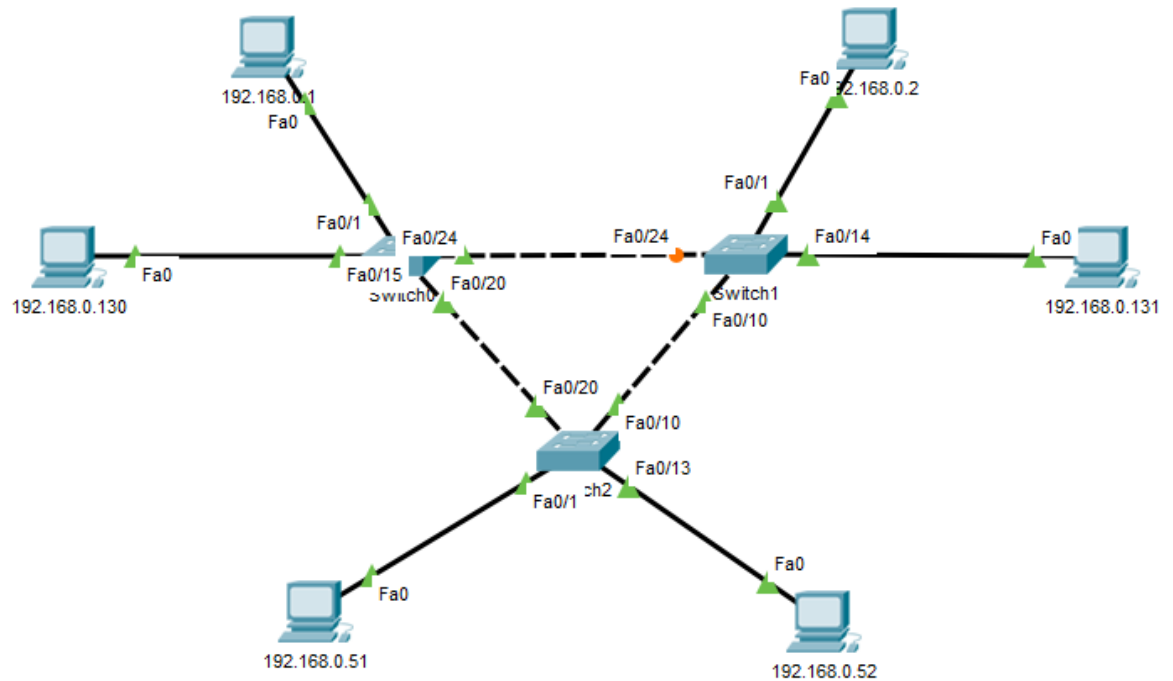


d. Test ping antar PC dalam VLAN berbeda.



Tugas

1. Topologi.



2. VLAN.

Switch0

Physical Config **CLI** Attributes

IOS Command Line Interface

Press RETURN to get started.

Switch>show vlan

VLAN Name	Status	Ports
1 default	active	Fa0/1, 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, Fa0/16, Fa0/17 Fa0/19, Fa0/19, Fa0/21, Fa0/22 Fa0/23
2 VLAN2	active	Fa0/15
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
2	enet	100002	1500	-	-	-	-	0	0
1002	fddi	101002	1500	-	-	-	-	0	0
1003	tr	101003	1500	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	ieee	-	0	0

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Switch1

Physical Config **CLI** Attributes

IOS Command Line Interface

Press RETURN to get started.

Switch>show vlan

VLAN Name	Status	Ports
1 default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/11, Fa0/12, Fa0/13 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23
2 VLAN2	active	Fa0/14
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

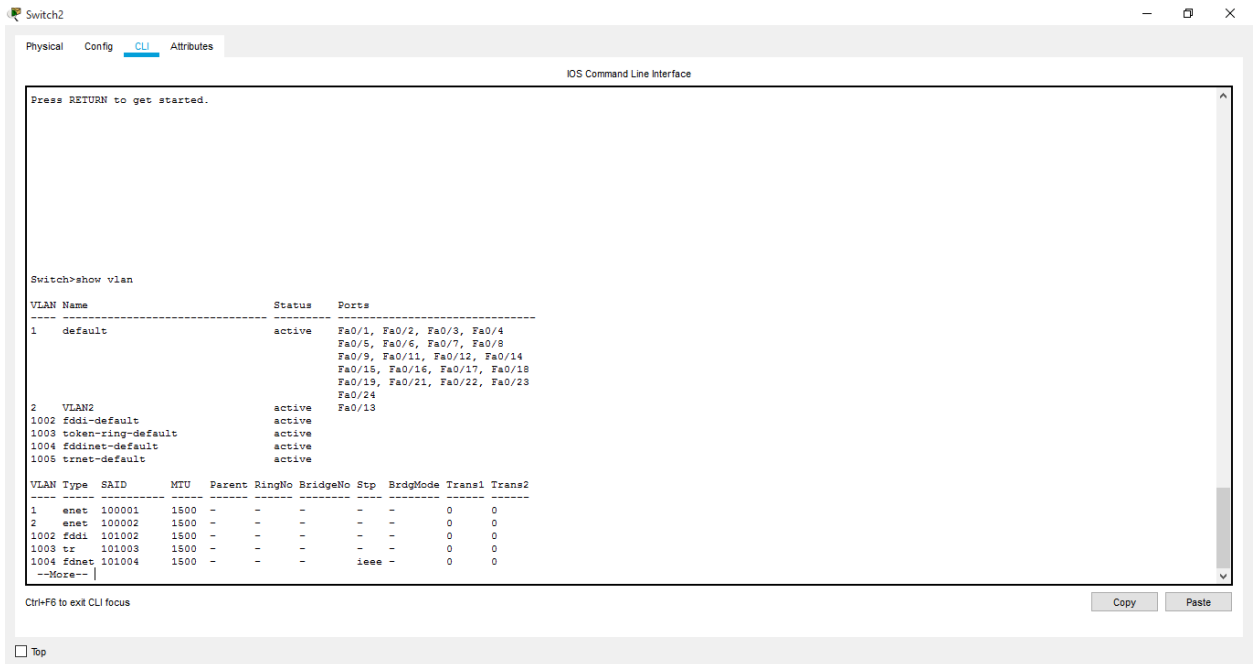
VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	0	0
2	enet	100002	1500	-	-	-	-	0	0
1002	fddi	101002	1500	-	-	-	-	0	0
1003	tr	101003	1500	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	ieee	-	0	0

--More-- |

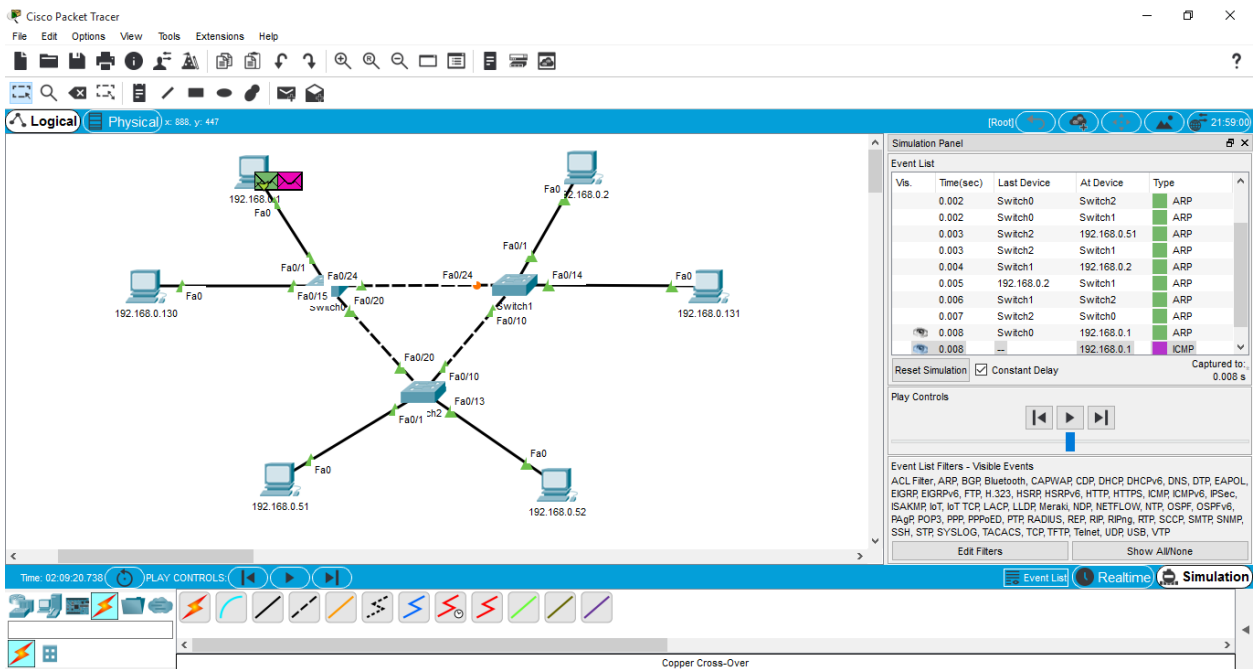
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3. Test ping antar PC dalam VLAN yang sama.



4. Test ping antar PC dalam VLAN berbeda.

