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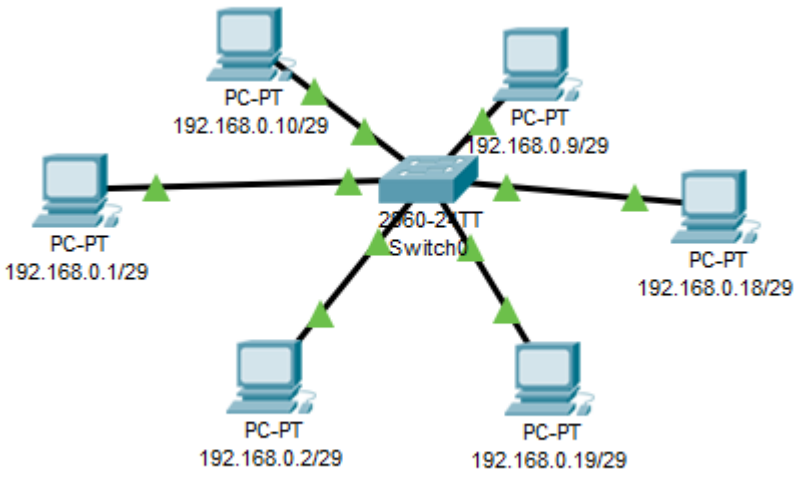
Nim : L200160015

Kelas : A

Modul 3

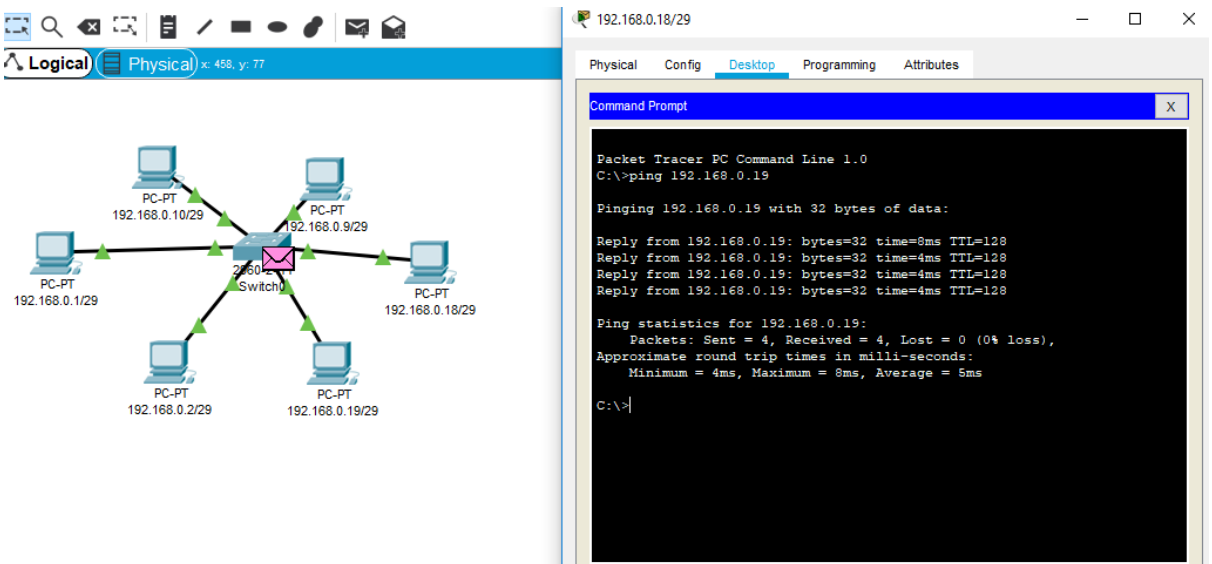
Percobaan 1



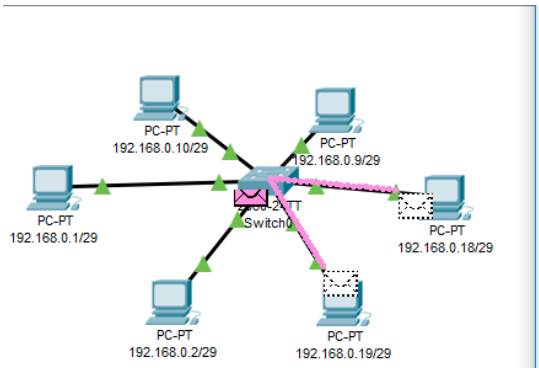
A. Membuat Vlan.

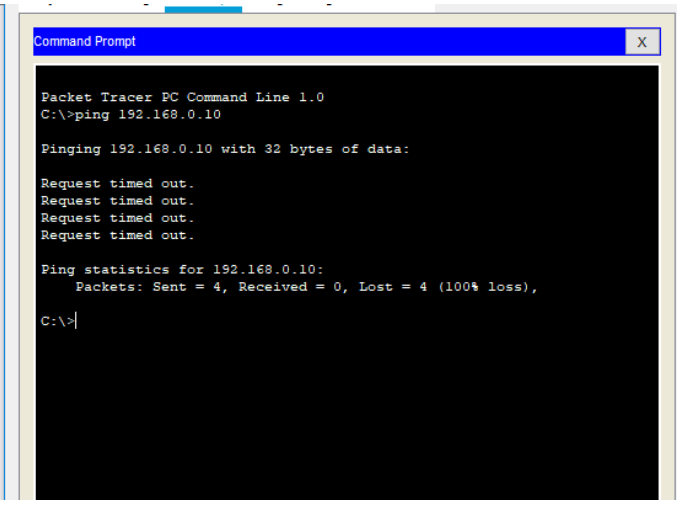
```
Switch(config)#Vlan 2
Switch(config-vlan)#name FKII
Switch(config-vlan)#int range fa0/9 - 10
Switch(config-if-range)#
Switch(config-if-range)#switch
Switch(config-if-range)#switchport access Vlan 2
Switch(config-if-range)#exit
Switch(config)#Vlan 3
Switch(config-vlan)#name FKIII
Switch(config-vlan)#int range fa0/18 - 19
Switch(config-if-range)#switchport access Vlan 3
Switch(config-if-range)#
```

B. Ping PC satu dengan PC lainnya yang memiliki Vlan yang sama (192.168.0.18 Ke 192.168.0.19 (VLAN 3)).



C. Ping PC satu dengan PC lainnya yang memiliki Vlan yang Berbeda (192.168.0.1 ke 192.168.0.10 (VLAN 1 ke VLAN 2)).

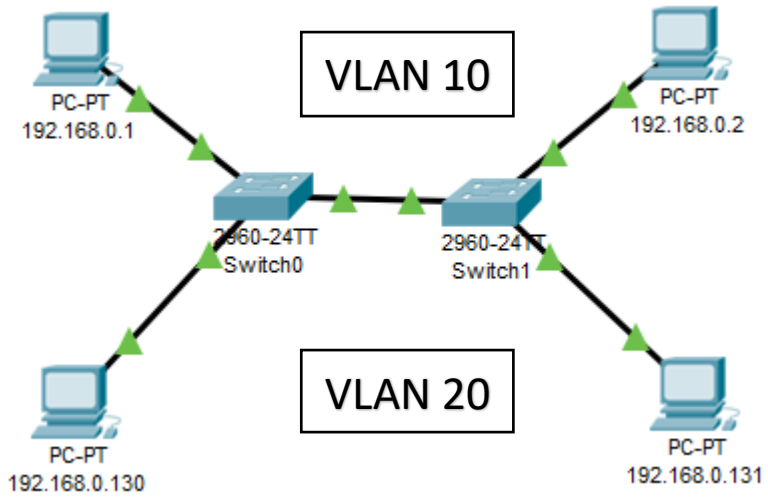




D. Analisa

Dari hasil praktikum diatas , dapat disimpulkan bahwa apabila melakukan ping antar pc dengan Vlan yang berbeda maka akan terjadi Request Time Out(RTO) , Sedangkan melakukan ping antar pc dengan Vlan yang sama akan terkoneksi. Hal ini menunjukan bahwa pengujian ping pada masing-masing VLAN dapat berhasil atau sukses jika port tersebut berada dalam satu VLAN yang sama dan sebaliknya.

Percobaan 2



A. Membuat Vlan.

- Switch 0

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#vlan 20
Switch(config-vlan)#exit
Switch(config)#int fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#int fa0/15
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#
```

```
Switch#show vlan brief

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, Fa0/16,
Fa0/17, Fa0/18
                                                 Fa0/19, Fa0/20,
Fa0/21, Fa0/22
                                                 Fa0/23, Fa0/24,
Gig0/1, Gig0/2
10   VLAN0010                          active    Fa0/1
20   VLAN0020                          active    Fa0/15
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
Switch#
```

- Switch 1

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#vlan 20
Switch(config-vlan)#exit
Switch(config)#int fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#int fa0/14
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#
```

```
Switch#show vlan br

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
                                                 Fa0/15, Fa0/16,
Fa0/17, Fa0/18
                                                 Fa0/19, Fa0/20,
Fa0/21, Fa0/22
                                                 Fa0/23, Fa0/24,
Gig0/1, Gig0/2
10   VLAN0010                          active    Fa0/1
20   VLAN0020                          active    Fa0/14
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
Switch#
```

B. Mode Trunk

- Switch 0

```
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int fa0/24
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)#
```

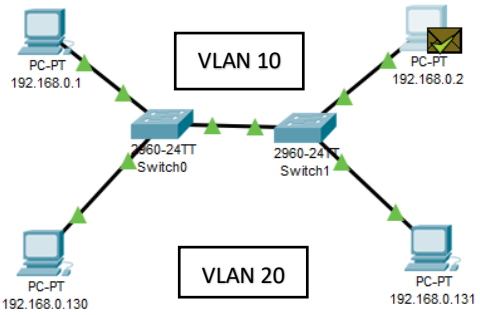
```
Switch#show int trunk
Port        Mode         Encapsulation  Status        Native vlan
Fa0/24      on           802.1q         trunking      1

Port        Vlans allowed on trunk
Fa0/24      1-1005

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

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

Switch#
```

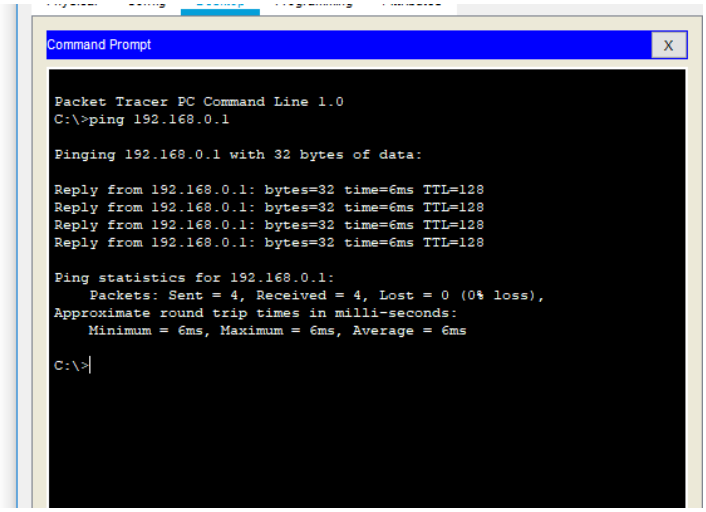
- Switch 1

```
Switch#%SPANTREE-2-RECV_PVID_ERR: Received 802.1Q BPDU on non trunk
FastEthernet0/24 VLAN1.

%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet0/24 on VLAN0001.
Inconsistent port type.


%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#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int fa0/24
Switch(config-if)#switch mode trunk
Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#
```

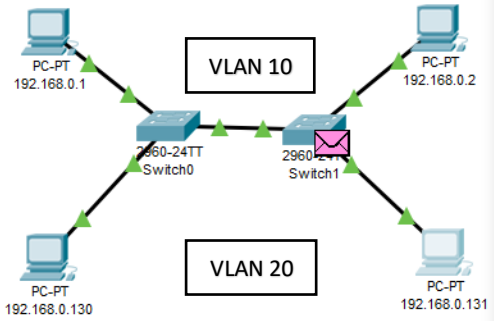
```
Switch#show int trunk
Port        Mode         Encapsulation  Status        Native vlan
Fa0/24      on           802.1q         trunking      1

Port        Vlans allowed on trunk
Fa0/24      1-1005

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

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

Switch#
```

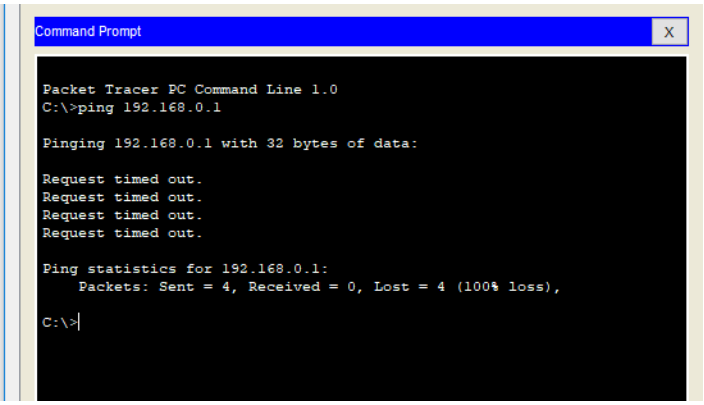
C. Melakukan Ping pada salah satu PC ke PC lain dalam Vlan yang sama (192.168.0.2 Ke 192.168.0.1 (VLAN 10)).





D. Melakukan Ping pada salah satu PC ke PC lain dalam Vlan yang berbeda (192.168.0.131 Ke 192.168.0.1 (VLAN 20 ke VLAN 10)).





E. Analisis

Dari hasil percobaan dapat disimpulkan bahwa konfigurasi trunking bertujuan untuk menghubungkan antar switch agar dapat berkomunikasi satu sama lain dan dapat menghubungkan 2 vlan yang berbeda untuk dapat berkomunikasi. Hanya saja pada percobaan ini , hanya PC dengan Vlan yang sama yang dapat berkomunikasi, sedangkan antar beda vlan tidak bisa. Hal ini dikarenakan tidak ada nya router yang tersambung dengan switch.