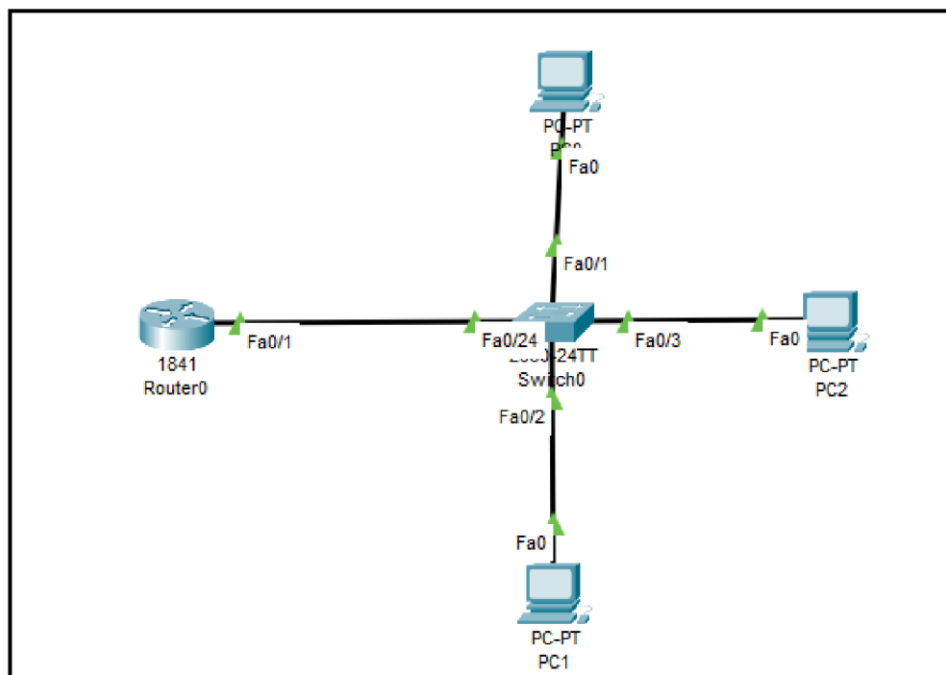## LAPORAN HASIL PRAKTIKUM

Nama : M.FATIHUL RAHMAN
Nim : 09010282327035
Jurusan :Manajemen Informatika

Judul Percobaan : VLAN

Hasill Percobaan :

VLAN	Name	Status	Port
1	Default	Active	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 Gig0/1, Gig0/2
2	Humas	Active	Fa0/1
3	Keuangan	Active	Fa0/2
4	IT	Active	Fa0/3
5	Pimpinan	Active	

Hasil Percobaan :

```
VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    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, Gig0/1, Gig0/2
2    humas                            active    Fa0/1
3    keuangan                         active    Fa0/2
4    IT                               active    Fa0/3
5    pimpinan                         active
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 Transl Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
1    enet  100001     1500  -      -      -        -    -        0      0
2    enet  100002     1500  -      -      -        -    -        0      0
--More--
```

No	Nama Device	Alamat	Netmask
1	PC1	192.168.100.2	255.255.255.0
2	PC2	192.168.200.2	255.255.255.0
3	PC3	192.168.150.2	255.255.255.0

PC 1

Physical	Config	Desktop	Programming	Attributes

IP Configuration   X

Interface   FastEthernet0   ⌄

IP Configuration

◯ DHCP   ● Static

IPv4 Address   192.168.200.2
Subnet Mask   255.255.255.0
Default Gateway   192.168.200.1
DNS Server   0.0.0.0

PC 2

Physical	Config	Desktop	Programming	Attributes

IP Configuration   X

Interface   FastEthernet0   ⌄

IP Configuration

◯ DHCP   ● Static

IPv4 Address   192.168.100.2
Subnet Mask   255.255.255.0
Default Gateway   192.168.100.1
DNS Server   0.0.0.0

PC 3

Physical	Config	Desktop	Programming	Attributes

IP Configuration   X

Interface   FastEthernet0   ⌄

IP Configuration

◯ DHCP   ● Static

IPv4 Address   192.168.150.2
Subnet Mask   255.255.255.0
Default Gateway   192.168.150.1
DNS Server   0.0.0.0

Hasill Percobaan :

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PC 1	PC 2	Ya	
		PC 3	Ya	
2	PC 2	PC 1	Ya	
		PC 3	Ya	
3	PC 3	PC 1	Ya	
		PC 2	Ya	

PC 1

```
C:\>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time<1ms TTL=127
Reply from 192.168.100.2: bytes=32 time=12ms TTL=127
Reply from 192.168.100.2: bytes=32 time=13ms TTL=127
Reply from 192.168.100.2: bytes=32 time=14ms TTL=127

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 14ms, Average = 9ms

C:\>ping 192.168.150.2

Pinging 192.168.150.2 with 32 bytes of data:

Reply from 192.168.150.2: bytes=32 time=1ms TTL=127
Reply from 192.168.150.2: bytes=32 time=12ms TTL=127
Reply from 192.168.150.2: bytes=32 time=12ms TTL=127
Reply from 192.168.150.2: bytes=32 time=12ms TTL=127

Ping statistics for 192.168.150.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 12ms, Average = 9ms
```

PC 2

```
C:\>ping 192.168.200.2

Pinging 192.168.200.2 with 32 bytes of data:

Reply from 192.168.200.2: bytes=32 time<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time=12ms TTL=127
Reply from 192.168.200.2: bytes=32 time=12ms TTL=127
Reply from 192.168.200.2: bytes=32 time=12ms TTL=127

Ping statistics for 192.168.200.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 12ms, Average = 9ms

C:\>ping 192.168.150.2

Pinging 192.168.150.2 with 32 bytes of data:

Reply from 192.168.150.2: bytes=32 time<1ms TTL=127
Reply from 192.168.150.2: bytes=32 time=11ms TTL=127
Reply from 192.168.150.2: bytes=32 time=12ms TTL=127
Reply from 192.168.150.2: bytes=32 time=11ms TTL=127

Ping statistics for 192.168.150.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 12ms, Average = 8ms
```

PC 3

```
C:\>ping 192.168.200.2

Pinging 192.168.200.2 with 32 bytes of data:

Reply from 192.168.200.2: bytes=32 time<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time=12ms TTL=127
Reply from 192.168.200.2: bytes=32 time<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time=13ms TTL=127

Ping statistics for 192.168.200.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 6ms

C:\>ping 192.168.100.2

Pinging 192.168.100.2 with 32 bytes of data:

Reply from 192.168.100.2: bytes=32 time<1ms TTL=127
Reply from 192.168.100.2: bytes=32 time<1ms TTL=127
Reply from 192.168.100.2: bytes=32 time=12ms TTL=127
Reply from 192.168.100.2: bytes=32 time=11ms TTL=127

Ping statistics for 192.168.100.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 12ms, Average = 5ms
```

Analisi Percobaan :

Jadi untuk melakukan Tes koneksi antar PC maka pada saat melakukan settingan IP configuration pada setiap PC maka tambahkan default gateaway-nya sesuai dengan IP yang telah kita buat di dalam CLI pada router yang berguna untuk memastikan bahwa PC bisa berkomunikasi dengan jaringan lain di luar subnet lokal, melalu router yang sudah dikonfigurasi.

Kesimpulan Percobaan :

Tes koneksi antar tiga PC menunjukkan bahwa setiap PC dapat berkomunikasi dengan baik dalam VLAN yang sama. Penambahan default gateway pada konfigurasi IP setiap PC terbukti penting untuk memungkinkan komunikasi di luar subnet lokal melalui router yang sudah dikonfigurasi. Secara keseluruhan, konfigurasi VLAN dan default gateway berfungsi dengan baik, mendukung komunikasi di dalam dan di luar subnet VLAN.