NAMA : DEA MUTIA HUJENI
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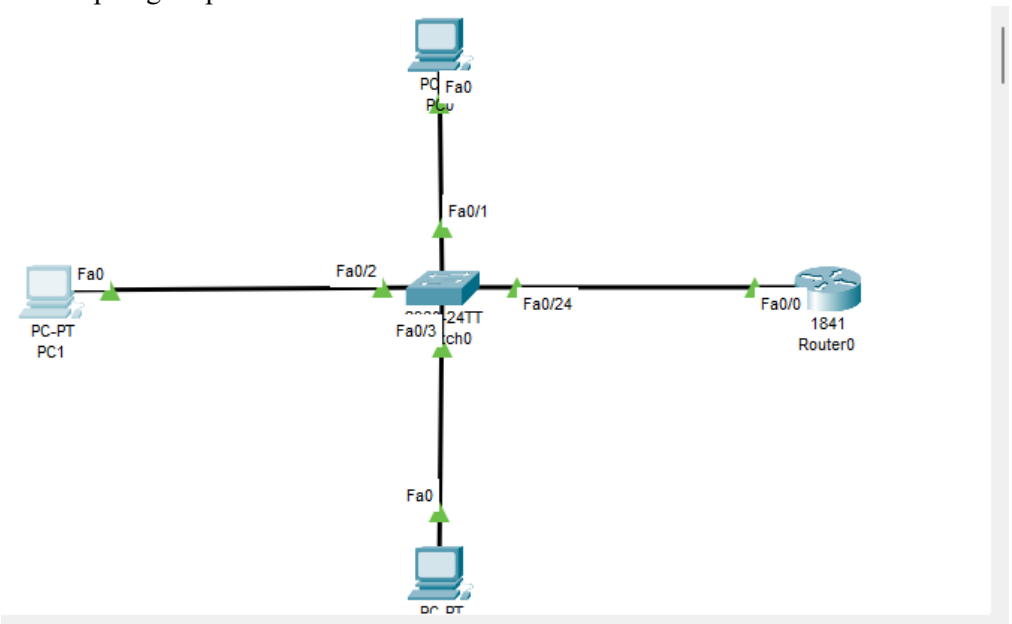
KELAS : MI3A
MATKUL : PRAKTIKUM JARINGAN KOMPUTER

1. Buat Topologi Seperti Gambar diatas




```
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
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 Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
1    enet  100001     1500  -      -      -        -    -        0      0
2    enet  100002     1500  -      -      -        -    -        0      0
 --More--
```

2. Buat Pengalamatan di PC

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

3. Selanjutnya kita aktifkan power switch tunggu beberapa menit switch akan booting
4. Setelah selesai switch loading sekarang kita lanjut konfigurasi switch
   Tulis hasil yang anda dapat

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, fa013, 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	
1002	Fddi-default	active	
1003	Token-ring-default	active	
1004	Fddinet-default	active	
1005	Trnet-default	active	

5. Konfigurasi Router

Tes Koneksi dengan menggunakan ICMP (catat hasil yang anda dapat)

NO	SUMBER	TUJUAN	HASIL	
			YA	TIDAK
1	PC1	PC2	YA	-
		PC3	YA	-
2	PC2	PC1	YA	-
		PC3	YA	-
3	PC3	PC1	YA	-
		PC2	YA	-

Pc0

```
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<1ms TTL=127
Reply from 192.168.100.2: bytes=32 time<1ms 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 = 0ms, Average = 0ms

C:\>ping 192.168.150.2

Pinging 192.168.150.2 with 32 bytes of data:

Reply from 192.168.200.1: Destination host unreachable.
Reply from 192.168.200.1: Destination host unreachable.
Reply from 192.168.200.1: Destination host unreachable.
Reply from 192.168.200.1: Destination host unreachable.

Ping statistics for 192.168.150.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Pc1

```
Cisco Packet Tracer PC Command Line 1.0
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<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time<1ms 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 = 0ms, Average = 0ms

C:\>ping 192.168.150.2

Pinging 192.168.150.2 with 32 bytes of data:

Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.
Reply from 192.168.100.1: Destination host unreachable.

Ping statistics for 192.168.150.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Pc2

```
Pinging 192.168.150.2 with 32 bytes of data:

Reply from 192.168.150.2: bytes=32 time=12ms TTL=128
Reply from 192.168.150.2: bytes=32 time=12ms TTL=128
Reply from 192.168.150.2: bytes=32 time=1ms TTL=128
Reply from 192.168.150.2: bytes=32 time=10ms TTL=128

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 = 8ms

C:\>ping 192.168.200.2

Pinging 192.168.200.2 with 32 bytes of data:

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

Ping statistics for 192.168.200.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

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<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time<1ms TTL=127
Reply from 192.168.200.2: bytes=32 time<1ms 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 = 0ms, Average = 0ms
```

Analisis:

1. Konfigurasi VLAN:
Terdapat beberapa VLAN yang telah diatur, di antaranya:
- VLAN 1 (Default) aktif dengan port FastEthernet (Fa0/4 hingga Fa0/23) serta GigabitEthernet (Gig0/1 dan Gig0/2) terhubung.
- VLAN 2 (Humas), VLAN 3 (Keuangan), VLAN 4 (IT), dan VLAN 5 (Pimpinan) juga aktif, namun masing-masing hanya menggunakan satu port.
- Selain itu, VLAN default seperti Fddi-default, Token-ring-default, Fddinet-default, dan Trnet-default juga aktif.

2. Pengujian Konektivitas:
- Pengujian terhadap perangkat menunjukkan bahwa perangkat dalam VLAN yang sama dapat saling berkomunikasi dengan baik.
- Sebagai contoh, PC1 bisa berinteraksi dengan PC2 dan PC3, begitu pula sebaliknya, sesuai pengaturan VLAN yang diterapkan.

Kesimpulan:
Pengujian ini berhasil membuktikan bahwa konfigurasi VLAN berjalan sesuai dengan harapan. Pemisahan segmen jaringan berdasarkan VLAN efektif untuk memfasilitasi komunikasi antar-perangkat di VLAN yang sama, menunjukkan isolasi jaringan yang tepat sesuai konfigurasi.