

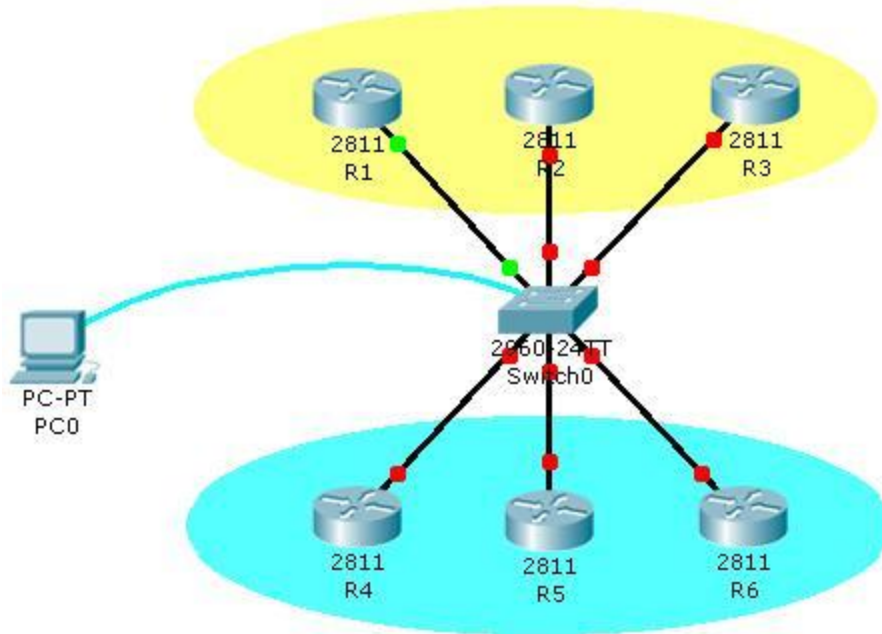
MINGGU KE-5

PRKATIKUM INTERNEWWORKING

VLAN(VIRTUAL LAN) DAN VTP(VIRTUAL TRUNKING PROTOCOLS)

PRAKTIKUM

1) Desain jaringan yang digunakan seperti dibawah ini:



2) Konfigurasi masing-masing perangkat dari desain gambar diatas seperti dibawah ini:

a) Perangkat SWITCH

- Rubah Hostname

```
Switch>enable
```

```
Switch#configure terminal
```

```
Switch(config)#hostname "SW"
```

```
SW(config)#exit
```

- Buat VLAN terlebih dahulu

```
SW#vlan database
```

```
SW(vlan)#vlan 2 name "VLAN KUNING"
```

```
SW(vlan)#vlan 3 name "VLAN BIRU"
```

```
SW(vlan)#exit
```

- Setting masing-masing FastEthernet ke dalam VLAN yang telah dipetakan

```
SW#configure terminal
```

```
SW(config)#interface range fastEthernet 0/1 – fastEthernet 0/3
```

```
SW(config-if)#switchport mode access
SW(config-if)#switchport access vlan 2
SW(config-if)#interface range fastEthernet 0/4 – fastEthernet 0/6
SW(config-if)#switchport mode access
SW(config-if)#switchport access vlan 3
SW(config-if)#end
```

b) Perangkat R1

```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.0.1 255.255.255.0
Router(config-if)#exit
Router(config)#hostname R1
```

c) Perangkat R2

```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.0.2 255.255.255.0
Router(config-if)#exit
Router(config)#hostname R2
```

d) Perangkat R3

```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.0.3 255.255.255.0
Router(config-if)#exit
Router(config)#hostname R3
```

e) Perangkat R4

```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#exit
Router(config)#hostname R4
```

f) Perangkat R5

```
Router>enable
```

```
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.1.2 255.255.255.0
Router(config-if)#exit
Router(config)#hostname R5
```

g) Perangkat R6

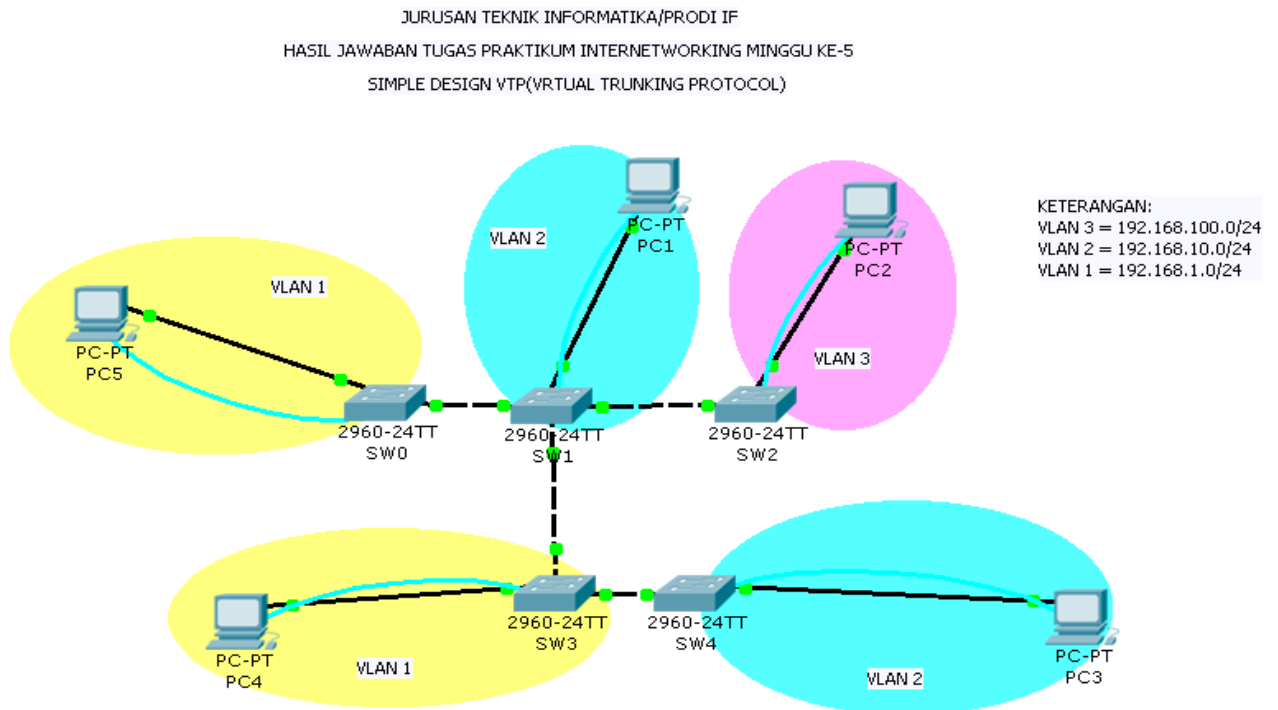
```
Router>enable
Router#configure terminal
Router(config)#interface fastEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.0.1 255.255.255.0
Router(config-if)#exit
Router(config)#hostname R6
```

3) Log/Pencatatan

- Melihat hasil vlan database yang ada di switch gunakan perintah dibawah ini:
SW#show vlan
- Mengecek koneksi untuk masing-masing Router gunakan perintah dibawah ini:
R1#ping 192.168.0.2
- Melihat hasil konfigurasi yang sudah dilakukan di sisi Router gunakan perintah dibawah ini:
R1#show running-config

TUGAS PRAKTIKUM

1) Desain jaringan yang digunakan seperti gambar dibawah ini:



2) Konfigurasi masing-masing device seperti dibawah ini:

a) Switch 0

```
Switch>enable  
Switch#configure terminal  
Switch(config)#vtp mode client  
Switch(config)#vtp domain prodiif  
Switch(config)#vtp password prodiif  
Switch(config)#end
```

b) Switch 1

```
Switch>enable  
Switch#configure terminal  
Switch(config)#vtp mode transparent  
Switch(config)#vtp domain prodiif  
Switch(config)#vtp password prodiif  
Switch(config)#end
```

c) Switch 2

```
Switch>enable
```

```
Switch#configure terminal
Switch(config)#vtp mode server
Switch(config)#vtp domain prodiif
Switch(config)#vtp password prodiif
Switch(config)#vlan 2
Switch(config-vlan)#name "VLAN BIRU"
Switch(config-vlan)#vlan 3
Switch(config-vlan)#name "UNGU"
Switch(config-vlan)#end
```

d) Switch 3

```
Switch>enable
Switch#configure terminal
Switch(config)#vtp mode client
Switch(config)#vtp domain prodiif
Switch(config)#vtp password prodiif
Switch(config)#end
```

e) Switch 4

```
Switch>enable
Switch#configure terminal
Switch(config)#vtp mode client
Switch(config)#vtp domain prodiif
Switch(config)#vtp password prodiif
Switch(config)#end
```

3) Log/pencatatan

- Untuk melihat database VLAN, gunakan perintah berikut:
Switch#show vlan
- Untuk melihat status VTP suatu switch, gunakan perintah berikut:
Switch#show vtp status

4) Konfigurasi pada PC Client seperti berikut ini:

- PC 1
IP Address = 192.168.10.101
IP Netmask = 255.255.255.0
- PC 2
IP Address = 192.168.100.100
IP Netmask = 255.255.255.0

- PC 3
IP Address = 192.168.10.100
IP Netmask = 255.255.255.0

- PC 4
IP Address = 192.168.1.2
IP Netmask = 255.255.255.0

- PC 5
IP Address = 192.168.1.100
IP Netmask = 255.255.255.0