

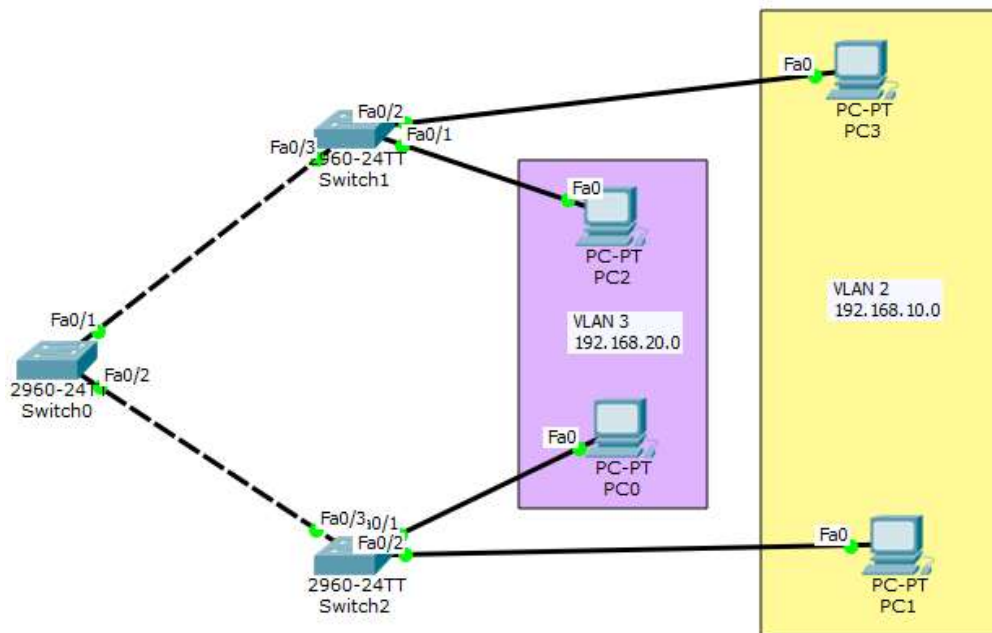
# Military Institute of Science and Technology

## Department of CSE, CSE 310, Week 12

### VTP (VLAN Trunking Protocol)

#### Problem 1:

Design the following network in packet tracer and create two VLANs. Then configure the switch so that PCs of the same VLAN can communicate, but those of the different VLAN cannot.



#### Switch 0:

```
Switch>en
Switch#config t
Switch(config)#hostname vtpserver
vtpserver(config)#vtp domain nm
vtpserver(config)#vtp password mist
vtpserver(config)#vtp mode server
vtpserver(config)#vlan 2
vtpserver(config-vlan)#name cse
vtpserver(config-vlan)#vlan 3
vtpserver(config-vlan)#name eece
vtpserver(config-vlan)#exit
vtpserver(config)#int range f0/1-2
vtpserver(config-if-range)#switchport mode trunk
```

```
vtpserver(config-if-range)#exit  
vtpserver(config)#do copy running-config startup-config
```

### **Switch 1:**

```
Switch>en  
Switch#config t  
Switch(config)#hostname vtpclient1  
vtpclient1(config)#vtp ver 2  
vtpclient1(config)#vtp domain nm  
vtpclient1(config)#vtp password mist  
vtpclient1(config)#vtp mode client  
vtpclient1(config)#int f0/1  
vtpclient1(config-if)#switchport mode access  
vtpclient1(config-if)#switchport access vlan 3  
vtpclient1(config-if)#int f0/2  
vtpclient1(config-if)#switchport mode access  
vtpclient1(config-if)#switchport access vlan 2  
vtpclient1(config-if)#int f0/3  
vtpclient1(config-if)# switchport mode trunk  
vtpclient1(config-if)#exit  
vtpclient1(config)#do copy running-config startup-config
```

### **Switch 2:**

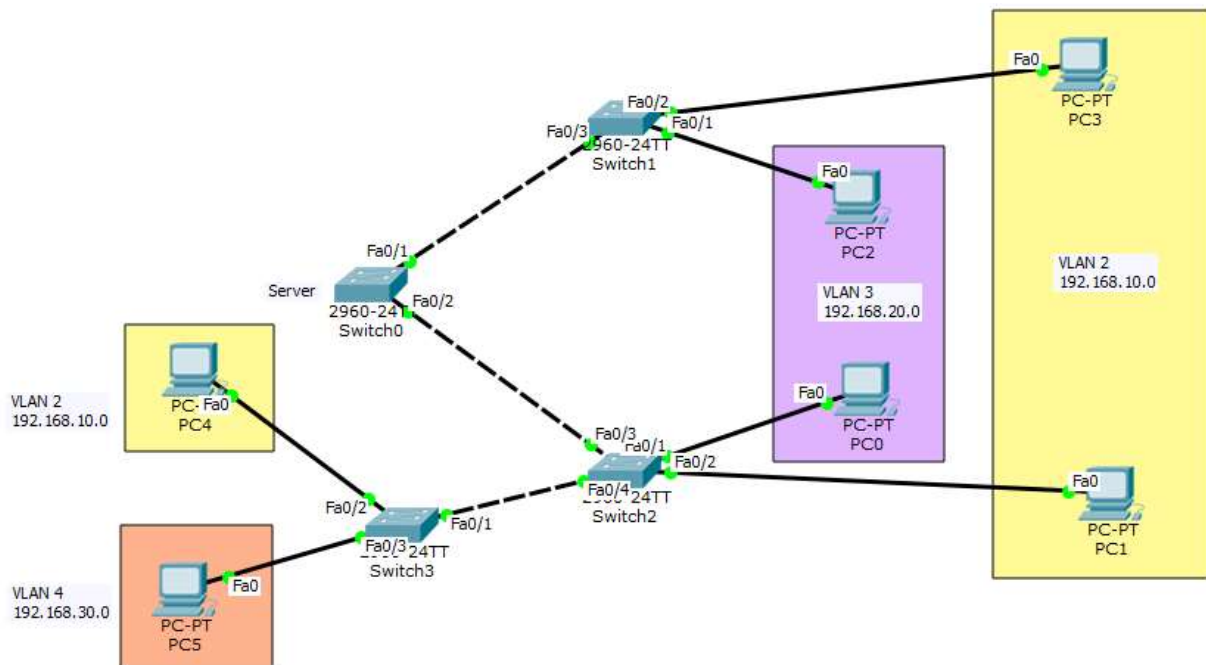
```
Switch>en  
Switch#config t  
Switch(config)#hostname vtpclient2  
vtpclient2(config)#vtp ver 2  
vtpclient2(config)#vtp domain nm  
vtpclient2(config)#vtp password mist  
vtpclient2(config)#vtp mode client  
vtpclient2(config)#int f0/1  
vtpclient2(config-if)#switchport mode access  
vtpclient2(config-if)#switchport access vlan 3  
vtpclient2(config-if)#int f0/2  
vtpclient2(config-if)#switchport mode access  
vtpclient2(config-if)#switchport access vlan 2  
vtpclient2(config-if)#int f0/3  
vtpclient2(config-if)# switchport mode trunk
```

```
vtpclient2(config-if)#exit
vtpclient2(config)#do copy running-config startup-config
```

\*\* Then PC configuration

### **Problem 2:**

Design the following network in packet tracer and create three VLANs. Then configure the switch so that PCs of the same VLAN can communicate, but those of the different VLAN cannot.



\*\* Complete all the steps of the above problem. Then do the following steps:

### **Switch 0 (Server Switch):**

```
vtpserver(config)#vlan 4
vtpserver(config-vlan)#name me
vtpserver(config-vlan)#exit
```

### **Switch 2 (Client Switch):**

```
Vtpclient2(config-if)#int f0/4
Vtpclient2(config-if)# switchport mode trunk
```

### **Switch 3 (Client Switch):**

```
Switch>en
Switch#config t
Switch(config)#hostname vtpclient3
vtpclient3(config)#vtp ver 2
vtpclient3(config)#vtp domain nm
vtpclient3(config)#vtp password mist
vtpclient3(config)#int f0/1
vtpclient3(config-if)#switchport mode trunk
vtpclient3(config-if)#int f0/2
vtpclient3(config-if)#switchport mode access
vtpclient3(config-if)#switchport access vlan 2
vtpclient3(config-if)#int f0/3
vtpclient3(config-if)#switchport mode access
vtpclient3(config-if)#switchport access vlan 4
vtpclient3(config-if)#exit
vtpclient3(config)#do copy running-config startup-config
```

**\*\* Then PC configuration**