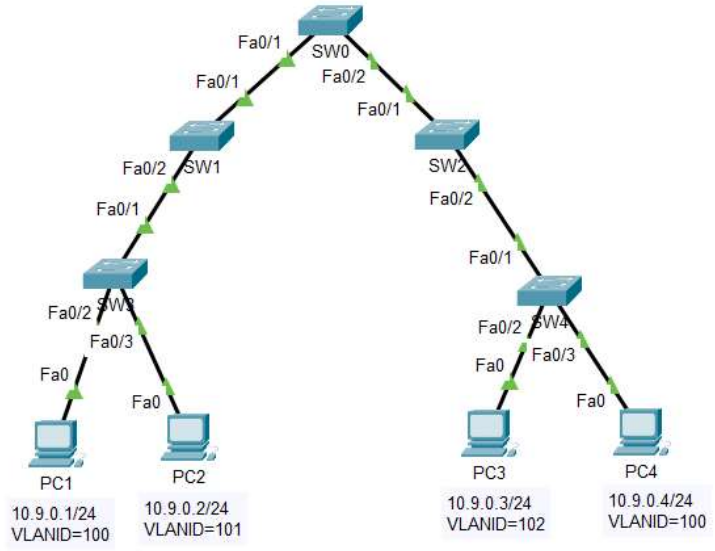
Redes de Computadores - RECOMP – 2023/2024
Configure VLANs and VTP

Lab Topology:
The lab network topology is illustrated below:



Objectives
Part 1: Initial configuration
Part 2: Add VLANs to a Switch
Part 3: Configure VTP

Addressing Table

Device	Interface	IPv4 Address	Subnet Mask
PC1	F0/2	10.9.0.1	255.255.255.0
PC2	F0/3	10.9.0.2	255.255.255.0
PC3	F0/2	10.9.0.3	255.255.255.0
PC4	F0/3	10.9.0.4	255.255.255.0

Table 1 – IP Addresses

VLANs Table

VLAN ID	VLAN NAME
100	VLAN_100
101	VLAN_101
102	VLAN_102

Table 2 – VLANs

Scenario
In this activity, you will configure VLANs in one switch and propagate them through the network with the help of the VPT protocol.

Instructions

Step 1: Initial configuration

a) Statically assign the IP Addresses to PCs according to Table 1.
b) Assign each switch a hostname according to the topology diagram.

Step 2: Add VLANs to a Switch

a) Create all the VLANs of Table 2, in the SW0. This will be the main switch from where the VLAN database is propagated to other switches.

```
SW0 (config)#vlan 100
Configure a name for the VLAN.
SW0 (config-vlan)#name vlan_100
```

Repeat for all the VLANs.

Step 3: Configure VTP

a) Configure every connection between switches to trunk-mode. All switches' ports are by default in dynamic mode, thus, if one end of the connection is manually changed to trunk-mode, the other end will automatically also change to trunk-mode.

```
SW0 (config)#interface range FastEthernet0/1-2
SW0 (config-if)#switchport mode trunk
```

b) On switch SW0, change the VTP domain name to RECOMP and place a password for administrative purposes. The SW0 is already in VTP Server mode (default).

```
SW0(config)#vtp domain RECOMP
SW0(config)#vtp password 123
```

c) Check the VTP status.

```
SW0#show vtp status
```

d) Change the VTP mode of every switch to client mode, place the same domain and place the same password (except in SW0).

```
SW1(config)#vtp mode Client
SW1(config)#vtp domain RECOMP
SW1(config)#vtp password 123
```

e) Check if all the VLANs have transferred.
f) On SW3 and SW4 configure interfaces as access ports and assign the VLANs.

Assign the port connected to **PC1** to VLAN 100.

```
SW3(config)# interface F0/2
SW3(config-if)#switchport access vlan 100
```

Repeat the process for PC2 (VLAN 101), PC3(VLAN 102) and PC4 (VLAN 100)

g) With **show vlan brief** command to verify VLAN configuration.
h) Check the connectivity between all the PCs and explain the results.