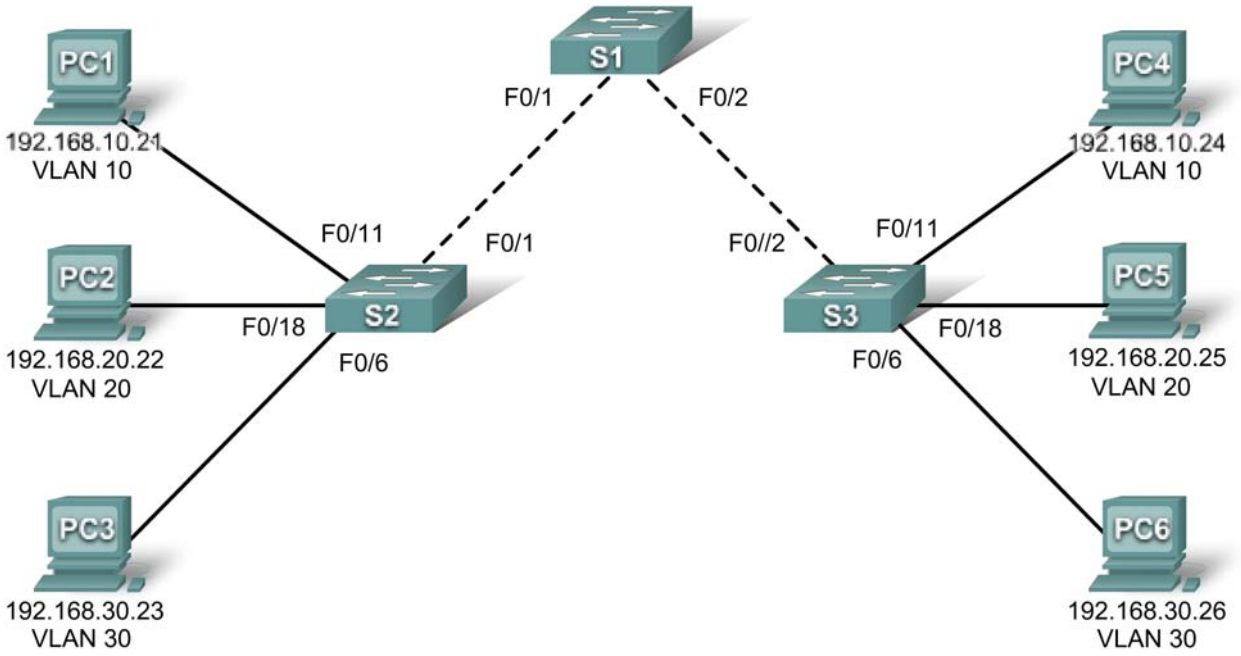
PT Activity 3.5.3: Troubleshooting VLAN Configurations

Topology Diagram



Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway
S1	**VLAN 56**	192.168.56.11	255.255.255.0	N/A
S2	**VLAN 56**	192.168.56.12	255.255.255.0	N/A
S3	**VLAN 56**	192.168.56.13	255.255.255.0	N/A
PC1	**NIC**	192.168.10.21	255.255.255.0	192.168.10.1
PC2	**NIC**	192.168.20.22	255.255.255.0	192.168.20.1
PC3	**NIC**	192.168.20.23	255.255.255.0	192.168.30.1
PC4	**NIC**	192.168.10.24	255.255.255.0	192.168.10.1
PC5	**NIC**	192.168.20.25	255.255.255.0	192.168.20.1
PC6	**NIC**	192.168.30.26	255.255.255.0	192.168.30.1

Port Assignments (Switches 2 and 3)

Ports	Assignment	Network
Fa0/1 – 0/5	VLAN 56 – Management&Native	192.168.56.0/24
Fa0/6 – 0/10	VLAN 30 – Guest(Default)	192.168.30.0/24
Fa0/11 – 0/17	VLAN 10 – Faculty/Staff	192.168.10.0/24
Fa0/18 – 0/24	VLAN 20 – Students	192.168.20.0/24

Learning Objectives

- Find and correct the network errors.
- Document the corrections to the network.

Introduction

In this activity, you will practice troubleshooting a misconfigured VLAN environment. The initial network has errors. Your objective is to locate and correct any and all errors in the configurations and establish end-to-end connectivity. Your final configuration should match the topology diagram and addressing table. All passwords are set to **cisco**, except the **enable secret** password, which is set to **class**.

Task 1: Find and Correct Network Errors

Once all errors are corrected, PCs belonging to the same VLAN should be able to ping each other. In addition, S1, S2, and S3 should be able to ping each other.

Your completion percentage should be 100%. If not, find and correct any errors.

Task 2: Document the Corrected Network

