Packet Tracer - Inter-VLAN Routing Challenge Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway
R1	G0/0	172.17.25.2	255.255.255.252	N/A
	G0/1.10	172.17.10.1	255.255.255.0	
	G0/1.20	172.17.20.1	255.255.255.0	
	G0/1.30	172.17.30.1	255.255.255.0	
	G0/1.88	172.17.88.1	255.255.255.0	
	G0/1.99	172.17.99.1	255.255.255.0	
S1	VLAN 99	172.17.99.10	255.255.255.0	172.17.99.1
PC1	NIC	172.17.10.21	255.255.255.0	172.17.10.1
PC2	NIC	172.17.20.22	255.255.255.0	172.17.20.1
PC3	NIC	172.17.30.23	255.255.255.0	172.17.30.1
Server	NIC	172.17.50.254	255.255.255.0	172.17.50.1

VLAN and Port Assignments Table

VLAN	Name	Interface
10	Faculty/Staff	F0/11-17
20	Students	F0/18-24
30	Guest(Default)	F0/6-10
88	Native	G0/1
99	Management	VLAN 99

Scenario

In this activity, you will demonstrate and reinforce your ability to implement inter-VLAN routing, including configuring IP addresses, VLANs, trunking, and subinterfaces.

Instructions

Configure the devices to meet the following requirements.

- Assign IP addressing to R1 and S1 based on the Addressing Table.
- Configure the default gateway on S1.
- Create, name, and assign VLANs on S1 based on the VLAN and Port Assignments Table. Ports should be in access mode. Your VLAN names should match the names in the table exactly.
- Configure G0/1 of S1 as a static trunk and assign the native VLAN.

- **All** ports that are not assigned to a VLAN should be disabled.
- Configure inter-VLAN routing on R1 based on the Addressing Table.
- Verify connectivity. R1, S1, and all PCs should be able to ping each other and the server.