VLAN and Basic Configuration

Time: 30 mins

Take IP address 192.168.10.0/22. Create necessary VLSM to give IP address as following

- Faculty/Staff (240 hosts)
- Students (240 hosts)
- Guest (120 hosts)
- Native (10 hosts)
- Management (10 hosts)

Addressing Table

Device	Interface	IP Address
R1	G0/1.10	1st usable IP address
	G0/1.20	1st usable IP address
	G0/1.30	1st usable IP address
	G0/1.88	1st usable IP address
	G0/1.99	1st usable IP address
S1	VLAN 99	3rd usable IP address
PC1	NIC	10th usable IP address
PC2	NIC	10th usable IP address
PC3	NIC	10th usable IP address

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

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1. Set host name CSE-R1 and CSE-S1.

   Extra; Crack the enable password to access R2 router and set all password to "CSE19". And use it. If unable to crack use R1

2. Set password to all access port and enable password in both S1 and R1.

3. Assign IP addressing to R1 and S1 based on the Addressing Table.

4. Configure the default gateway on S1.

5. 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.

6. Configure G0/1 of S1 as a static trunk and assign the native VLAN.

7. Configure inter-VLAN routing on R1 based on the Addressing Table.

8. Configure SSH on S1 switch to establish remote connection.

9. Verify connectivity. R1, S1, and all PCs should be able to ping each other.