

Packet Tracer - Inter-VLAN Routing Challenge

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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.

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- 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.

Post your screenshots

On the PT Activity window, make sure that the completion grade is **100%**. Click on the **Check Results** button and select the **Assessment Items** tab. Take a screen shot of the whole window, showing the table of assessment items, and the score/item count. Own your photo by placing a watermark on your photo with your name and USC ID Number. Paste your screenshot below:

The screenshot shows the Cisco Packet Tracer Activity Results window for the 'Inter-VLAN Routing Challenge'. The window title is 'Cisco Packet Tracer - D:\JinBus\CpE 3212\4.5.1 Packet Tracer - Inter-VLAN Routing Challenge.pka'. The 'Assessment Items' tab is selected, showing a tree view of the network configuration and a table of assessment results. The 'Score' is 108/108 and the 'Item Count' is 38/38. A watermark for 'Danica Marie A. Dumalagan' and '18103276' is overlaid on the screenshot.

Activity Results

Time Elapsed: 00:21:57

Congratulations Danica Marie Dumalagan! You completed the activity.

Overall Feedback | Assessment Items | Connectivity Tests

Expand/Collapse All | Show Incorrect Items

Assessment Items	Status	Points	Component(s)	Feedback
Network				
R1				
Ports				
GigabitEthernet0/0		0	Other	
✓ Port Status	Correct	1	Physical	
GigabitEthernet0/1		0	Other	
✓ Port Status	Correct	1	Inter-VLAN Routi...	
GigabitEthernet0/1.10				
802.1Q		0	Other	
✓ VLAN ID	Correct	4	Inter-VLAN Routi...	
✓ IP Address	Correct	4	Inter-VLAN Routi...	
✓ Subnet Mask	Correct	4	Inter-VLAN Routi...	
GigabitEthernet0/1.20				
802.1Q		0	Other	
✓ VLAN ID	Correct	4	Inter-VLAN Routi...	
✓ IP Address	Correct	4	Inter-VLAN Routi...	
✓ Subnet Mask	Correct	4	Inter-VLAN Routi...	
GigabitEthernet0/1.30				
802.1Q		0	Other	
✓ VLAN ID	Correct	4	Inter-VLAN Routi...	
✓ IP Address	Correct	4	Inter-VLAN Routi...	
✓ Subnet Mask	Correct	4	Inter-VLAN Routi...	
GigabitEthernet0/1.88				
802.1Q				
✓ Native VLAN	Correct	1	Configure Inter-...	
✓ VLAN ID	Correct	4	Inter-VLAN Routi...	
✓ Encapsulation	Correct	1	Inter-VLAN Routi...	
✓ IP Address	Correct	4	Inter-VLAN Routi...	
✓ Subnet Mask	Correct	4	Inter-VLAN Routi...	

Score : 108/108

Item Count : 38/38

Component	Items/Total	Score
Basic Device Configuration	4/4	7/7
Configure Inter-VLAN Routing	1/1	1/1
Inter-VLAN Routing Configuration	16/16	61/61
Other	1/1	1/1
Physical	7/7	7/7
Switching	1/1	1/1
VLAN Configuration	8/8	30/30

Close