

Packet Tracer – Troubleshooting Challenge

Addressing Table

Device	Interface	IP Address / Prefix	Default Gateway
R1	G0/0	172.16.1.62 /26	N/A
		2001:db8:cafe::1/64	
		fe80::1	
	G0/1	172.16.1.126 /26	N/A
		2001:db8:cafe:1::1/64	
		fe80::1	
	G0/2	172.16.1.254 /25	N/A
		2001:db8:cafe:2::1/64	
		fe80::1	
	S0/0/1	10.0.0.2 /30	N/A
		2001:db8:2::1/64	
		fe80::1	
Main	S0/0/0	209.165.200.226 /30	N/A
		2001:db8:1::1/64	
		fe80::2	
	S0/0/1	10.0.0.1 /30	N/A
		2001:db8:2::2/64	
		fe80::2	
S1	VLAN 1	172.16.1.61 /26	172.16.1.62
S2	VLAN 1	172.16.1.125 /26	172.16.1.126
S3	VLAN 1	172.16.1.253 /25	172.16.1.254
IT	NIC	172.16.1.1 /26	172.16.1.62
		2001:db8:cafe::2/64	fe80::1
		fe80::2	
Marketing	NIC	172.16.1.65 /26	172.16.1.126
		2001:db8:cafe:1::2/64	fe80::1
		fe80::2	
R&D	NIC	172.16.1.129 /25	172.16.1.254
		2001:db8:cafe:2::2/64	fe80::1
		fe80::2	

Device	Interface	IP Address / Prefix	Default Gateway
Web	NIC	64.100.0.3 /29	64.100.0.1
		2001:db8:acad::3/64	fe80::1
		fe80::2	

Objectives

- Troubleshoot common issues in a LAN.

Background / Scenario

After an update to the network, some devices were misconfigured. You must correct the configurations and verify that all the PCs can access the Web server, R1, and the switches. In addition, all PCs should be able to access R1 using SSH. You should verify connectivity for both IPv4 and IPv6 except for the switches.

Instructions

Router R1 and all the switches have been preconfigured with the following:

- Enable password: **Ciscoenpa55**
- Console password: **Ciscoconpa55**
- Admin username and password for SSH: **Admin1/Admin1pa55**

Required number of hosts per subnet:

- IT: 50 hosts
- Marketing: 50 hosts
- R&D: 100 hosts

If all configuration problems have been fixed, all devices should be able to ping each other and the web server.