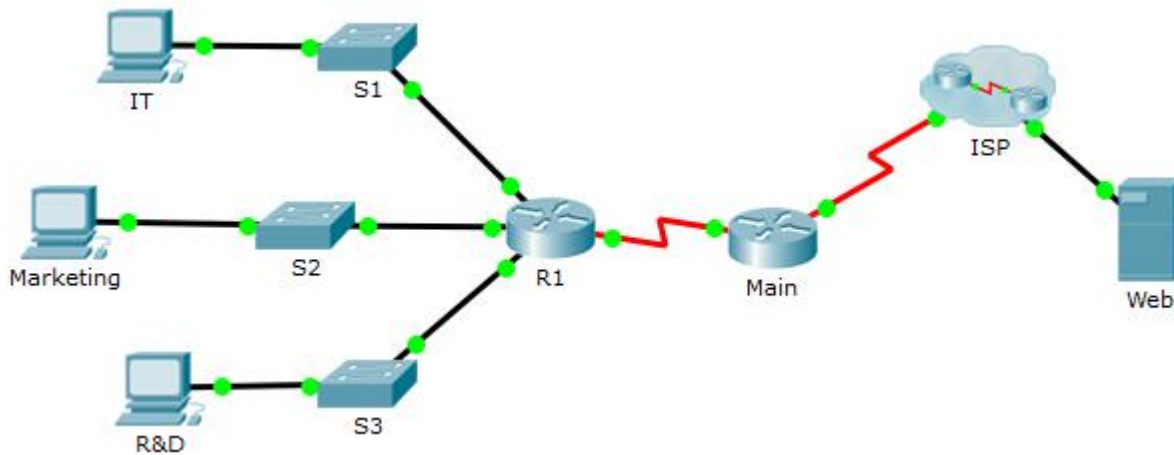


Packet Tracer – Troubleshooting Challenge (Instructor Version)

Instructor Note: Red font color or gray highlights indicate text that appears in the instructor copy only.

Topology



Addressing Table

Device	Interface	IPv4 Address	Subnet Mask	Default Gateway
		IPv6 Address/Prefix	IPv6 Link-local	
R1	G0/0	172.16.1.62	255.255.255.192	N/A
		2001:DB8:CAFE::1/64	FE80::1	N/A
	G0/1	172.16.1.126	255.255.255.192	N/A
		2001:DB8:CAFE:1::1/64	FE80::1	N/A
	G0/2	172.16.1.254	255.255.255.128	N/A
		2001:DB8:CAFE:2::1/64	FE80::1	N/A
S0/0/1	10.0.0.2	255.255.255.252	N/A	
	2001:DB8:2::1/64	FE80::1	N/A	
Main	S0/0/0	209.165.200.226	255.255.255.252	N/A
		2001:DB8:1::1/64	FE80::2	N/A
	S0/0/1	10.0.0.1	255.255.255.252	N/A
		2001:DB8:2::2/64	FE80::2	N/A
S1	VLAN 1	172.16.1.61	255.255.255.192	172.16.1.62
S2	VLAN 1	172.16.1.125	255.255.255.192	172.16.1.126
S3	VLAN 1	172.16.1.253	255.255.255.128	172.16.1.254
IT	NIC	172.16.1.1	255.255.255.192	172.16.1.62
		2001:DB8:CAFE::2/64	FE80::2	FE80::1
Marketing	NIC	172.16.1.65	255.255.255.192	172.16.1.126
		2001:DB8:CAFE:1::2/64	FE80::2	FE80::1
R&D	NIC	172.16.1.129	255.255.255.128	172.16.1.254
		2001:DB8:CAFE:2::2/64	FE80::2	FE80::1
Web	NIC	64.100.0.3	255.255.255.248	64.100.0.1
		2001:DB8:ACAD::3/64	FE80::2	FE80::1

Scenario / Background

After an update to the network, some devices were misconfigured. You have been tasked with correcting the configurations and verifying that all the PCs can access the websites, R1, switches, and other PC can access R1 using SSH.

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

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

Packet Tracer – Troubleshooting Challenge

Required number of hosts per subnet:

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

Requirements

- IT, Marketing, and R&D PCs can navigate to www.cisco.pka and www.cisco6.pka.
- IT, Marketing, and R&D PCs can SSH into R1 with the username **Admin1** and encrypted password **Admin1pa55**.
- All PCs should be able to ping R1, S1, S2, S3, and other PCs.

Script

R1 Configuration

```
interface GigabitEthernet0/1
 ip address 172.16.1.126 255.255.255.192
 username Admin1 secret Admin1pa55
 line vty 0 4
 transport input ssh
```

S1 Configuration

No Change

S2 Configuration

```
interface Vlan1
 ip address 172.16.1.125 255.255.255.192
```

S3 Configuration

No Change

IT PC Configuration

```
Incorrect IPv4 address
Incorrect default gateway
```

Marketing PC Configuration

No Change

R&D PC Configuration

```
Incorrect IPv6 address
```