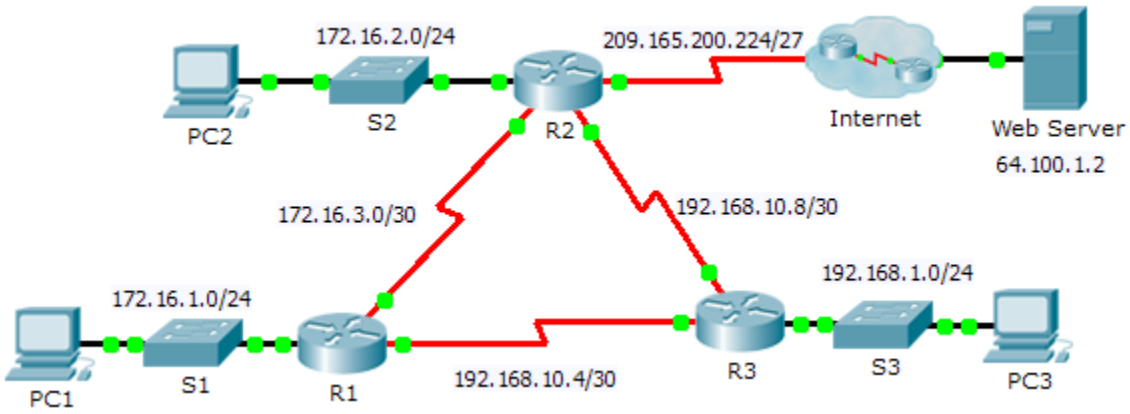
Packet Tracer – Troubleshooting Single-Area OSPFv2

Topology



Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway
R1	G0/0	172.16.1.1	255.255.255.0	N/A
	S0/0/0	172.16.3.1	255.255.255.252	N/A
	S0/0/1	192.168.10.5	255.255.255.252	N/A
R2	G0/0	172.16.2.1	255.255.255.0	N/A
	S0/0/0	172.16.3.2	255.255.255.252	N/A
	S0/0/1	192.168.10.9	255.255.255.252	N/A
	S0/1/0	209.165.200.225	255.255.255.224	N/A
R3	G0/0	192.168.1.1	255.255.255.0	N/A
	S0/0/0	192.168.10.6	255.255.255.252	N/A
	S0/0/1	192.168.10.10	255.255.255.252	N/A
PC1	NIC	172.16.1.2	255.255.255.0	172.16.1.1
PC2	NIC	172.16.2.2	255.255.255.0	172.16.2.1
PC3	NIC	192.168.1.2	255.255.255.0	192.168.1.1

Scenario

In this activity, you will troubleshoot OSPF routing issues using **ping** and **show** commands to identify errors in the network configuration. Then, you will document the errors you discover and implement an appropriate solution. Finally, you will verify end-to-end connectivity is restored.

Troubleshooting Process

1. Use testing commands to discover connectivity problems in the network and document the problem in the Documentation Table.
2. Use verification commands to discover the source of the problem and devise an appropriate solution to implement. Document the proposed solution in the Documentation Table.
3. Implement each solution one at a time and verify if the problem is resolved. Indicate the resolution status in the Documentation Table.
4. If the problem is not resolved, it may be necessary to first remove the implemented solution before returning to Step 2.
5. Once all identified problems are resolved, test for end-to-end connectivity.

Documentation Table

Device	Identified Problem	Proposed Solution	Resolved?
R3	Has no friendship with R2	delete hello interval adjustment	?
R1	Has no frienship with R3	172.16.10.4 leads to R2, Remove, Add 192.168.10.4 instead	?
R2	Default route	Make default-information originate	?
DUNNO	DUNNO	DUNNO	?
DUNNO	DUNNO	DUNNO	?