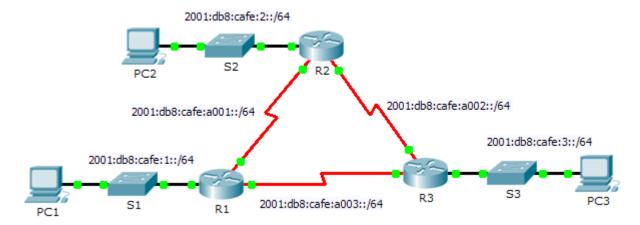


# Packet Tracer - Configuring Basic OSPFv3 in a Single Area

## **Topology**



#### **Addressing Table**

Device	Interface	IPv6 Address/Prefix	Default Gateway
R1	G0/0	2001:db8:cafe:1::1/64	N/A
	S0/0/0	2001:db8:cafe:a001::1/64	N/A
	S0/0/1	2001:db8:cafe:a003::1/64	N/A
R2	G0/0	2001:db8:cafe:2::1/64	N/A
	S0/0/0	2001:db8:cafe:a001::2/64	N/A
	S0/0/1	2001:db8:cafe:a002::1/64	N/A
R3	G0/0	2001:db8:cafe:3::1/64	N/A
	S0/0/0	2001:db8:cafe:a003::264	N/A
	S0/0/1	2001:db8:cafe:a002::2/64	N/A
PC1	NIC	2001:db8:cafe:1::10/64	fe80::1
PC2	NIC	2001:db8:cafe:2::10/64	fe80::2
PC3	NIC	2001:db8:cafe:3::10/64	fe80::3

#### **Objectives**

Part 1: Configure OSPFv3 Routing

**Part 2: Verify Connectivity** 

#### **Background**

In this activity, the IPv6 addressing is already configured. You are responsible for configuring the three router topology with basic single area OSPFv3 and then verifying connectivity between end devices.

## Part 1: Configure OSPFv3 Routing

#### Step 1: Configure OSPFv3 on R1, R2 and R3.

Use the following requirements to configure OSPF routing on all three routers:

- Enable IPv6 routing
- Process ID 10
- Router ID for each router: R1 = 1.1.1.1; R2 = 2.2.2.2; R3 = 3.3.3.3
- Enable OSPFv3 on each interface

**Note:** Packet Trace version 6.0.1 does not support the **auto-cost reference-bandwidth** command, so you will not be adjust bandwidth costs in this activity.

### Step 2: Verify OSPF routing is operational.

Verify each router has established adjacency with the other two routers. Verify the routing table has a route to every network in the topology.

## Part 2: Verify Connectivity

Each PC should be able to ping the other two PCs. If not, check your configurations.

**Note:** This activity is graded using only connectivity tests. The instructions window will not show your score. To see your score, click **Check Results > Assessment Items**. To see the results of a specific connectivity test, click **Check Results > Connectivity Tests**.