

Configure OSPFv3 on the core switch

Article Overview

OSPFv3 can be configured on a core switch by enabling IPv6 routing, assigning a router ID, activating OSPFv3 per interface, and defining areas for each link.

Step 1: Enable IPv6 Routing

Before configuring OSPFv3, ensure that IPv6 routing is enabled globally on the switch:

```
Switch(config)# ipv6 unicast-routing
```

This allows the switch to forward IPv6 packets and participate in OSPFv3 routing .

Step 2: Assign IPv6 Addresses

Configure IPv6 addresses on the interfaces that will participate in OSPFv3. OSPFv3 uses link-local addresses for neighbor communication, so even if no global IPv6 address is assigned, ipv6 enable is sufficient:

```
Switch(config)# interface GigabitEthernet1Switch(config-if)# ipv6 address
```

```
2001:db8:1::1/64Switch(config-if)# ipv6 enable
```

Repeat for all interfaces connecting to OSPF neighbors .

Step 3: Configure the OSPFv3 Process

Enter router OSPFv3 configuration mode and assign a router ID (32-bit value, often an IPv4 address or unique number):...

Article Content

Sep 19, 2025

Cisco Nexus 7000 Series NX-OS Unicast Routing Configuration Guide ...

This chapter describes how to configure OSPFv3 IPv6 features including LSAs, path cost, and route redistribution on

May 18, 2026

OSPFv3 Configuration > Open Shortest Path First Version 3 (OSPFv3 ...

Chapter Description In this sample chapter from CCNP and CCIE Enterprise Core ENCOR 350-401 Official Cert Guide, 2nd Edition,

Apr 07, 2026

How to Configure OSPFv3: Complete Guide (Updated 2025)

Figure 1 shows the reference topology for configuring OSPFv3. You can also see the commands for configuring

Feb 20, 2026

Use OSPFv3 Configuration Example

Configure OSPFv3 on Cisco IOS XE step by step: ipv6 unicast-routing, address families, per-interface activation, and

Jun 10, 2026

Configuring OSPFv3 on the routing switch

To configure a router ID, and other OSPFv3 configuration you must be in the OSPFv3 router configuration context, as indicated by

Jul 07, 2026

Cisco Nexus 7000 Series NX-OS Unicast Routing Configuration

If you configure OSPFv3 in a virtual port channel (vPC) environment, use the following timer commands in router

Jan 25, 2026

Commands to configure OSPFv3 on the routing switch

Commands to configure OSPFv3 on the routing switch This section describes the commands to configure OSPFv3 on the routing

May 26, 2026

Configuring OSPF For IPv6 – OSPFv3 in Cisco

No implicit router-ID: You must manually configure the RID as the OSPFv3 uses the same algorithm as OSPFv2 for

May 01, 2026

OSPFv3 Configuration Step-by-Step with Example

So we will need an IPv4 address on our OSPF router somewhere if we are running OSPF version 3, simply for the purpose of a

Nov 02, 2025

OSPF Configuration Guide

As a result, Layer 3 switches are configured with IP addresses on their Switched Virtual Interfaces (SVIs) or routed

Jun 15, 2026

Configuring OSPFv3

If you configure OSPFv3 in a virtual port channel (vPC) environment, use the following timer commands in router configuration mode

May 10, 2026

Use OSPFv3 Configuration Example

As soon as OSPFv3 is enabled on the Stub Router, it sends out OSPFv3 Type 1 Hello messages to the FF02::5 multicast address.

Aug 06, 2025

EOS 4.36.1F

OSPFv3 is based on OSPFv2 and includes enhancements that utilize IPv6 features. However, OSPFv3 is configured and operates

Jun 14, 2026

How to Configure OSPFv3: Complete Guide (Updated

Master How to configure OSPFv3 with this 2025 updated guide: step-by-step commands,

Sep 13, 2025

"Basic OSPFv3 Configuration Example On ASR9K"

Introduction: In this document you will see basic OSPv3 configuration on ASR9k. This document covers basic OSPFv3

Nov 28, 2025

IPv6 OSPF Version 3 (OSPFv3) Configuration & Verification

To configure IPv6 OSPF version 3 (OSPFv3) routing protocol, IPv6 addressing and unicast-routing must be already configured on

Jul 30, 2025

Configure OSPFv3 as PE-CE Protocol with Loop Prevention Techniques

Introduction This document describes the loop prevention features and the minimum configuration steps when you

Apr 11, 2026

8 Steps of OSPFv3 Configuration on Cisco | OSPF For IPv6 Config!

OSPFv3 is one of the most used IPv6 Routing Protocols. Here, we will see OSPFv3 Configuration on Cisco Routers. We will learn

Contact Us

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