

IPv6 Addressing and Subnetting

Course Content

The IPv6 Addressing and Subnetting course is an instructor-led course. This 1-day course aims at providing network engineers and technicians that are working in the enterprise sector with the knowledge and skills that are needed to study and configure IPv6 addresses.

Who should attend

This course is primarily intended for:

- Network Engineers and Technicians
- Network Operations Center (NOC) Support Personnel and Help Desk Technicians
- Any individual involved in implementation and verification of routing protocols in the enterprise networks

If you are looking for a course that focuses on IPv6 for Enterprise Networks, it is recommended that you attend IP6FD.

Prerequisites

- Routing, switching and access product knowledge and skills equivalent.
- Working knowledge of routing protocols

Outline: IPv6 Addressing and Subnetting

You will learn:

Module 1: Introduction to IPv6

- Explaining the Rationale for IPv6
- Evaluating IPv6 Features and Benefits
- IPv6 Operations

Module 2: Understanding the IPv6 Addressing Architecture

- IPv6 Address Format
- IPv6 Address Prefix
- IPv6 Address Types
- IPv6 Address Assignment

- IPv6 Unicast Address
- IPv6 Global Unicast Address
- IPv6 Link-Local Unicast Address
- IPv6 Anycast Address

Module 3: Describing the IPv6 Header Format

- IPv6 Header Fields
- Description of IPv6 Header Fields
- IPv6 Extension Headers
- Routing Header
- Fragment Header
- ICMPv6 Packet

Module 3: Ipv6 Subnetting

- Understanding IPv6 Subnetting
- Related Concepts
- IPv6 Subnetting
- IPv6 Subnetting Planning Suggestions