

Practical Introduction to IPv6

The course focuses on practical aspects and implementation of IPv6 (Internet Protocol version 6). Delegates will learn the basic practical configuration of IPv6 using Cisco workstations, switches and routers.

Prerequisites:

Some prior basic knowledge and configuration skills using Cisco switches and routers would be advantageous.

Aim:

To provide delegates with a practical introduction to IPv6, including the configuration of workstations, switches and routers, with a view to building a simple working IPv6 network.

Objectives:

Delegates will:

- Understand the IPv6 Protocols and Operation
- Understand the IPv6 Address Types and use of the IPv6 Prefix
- Understand the Unique Local Unicast Address
- Understand IPv6 Subnetting
- Be introduced to IPv6 Routing Protocols
- Understand IPv6 Host Configuration and Connectivity
- Understand the options for IPv6 Host Configuration such as NDP, SLAAC and DHCP
- Configure Static IPv6 Addresses
- Understand the use of the EUI-64 Interface Identifier
- Verify IPv6 interfaces on Cisco routers
- Verify IPv6 routes on Cisco routers
- Manually configure the IPv6 Link Local Address on Cisco routers
- Identify Local and Connected IPv6 routes
- Configure and verify Static IPv6 routes
- Configure and verify Default IPv6 routes
- Configure, verify and troubleshoot OSPFv3 routing