

ADVANCED IPv6 TRAINING COURSE

This two-day course provides an in-dept coverage of key topics regarding IPv6 for both ISPs and enterprise users. The participant will gain insight into industry best practices and gain a high-level understanding of the most pressing IPv6 security concerns today.

Goals

- Identify what the differences are between IPv6 and IPv4 regarding routing protocols
- Learn how to implement OSPFv3 and BGP in an IPv6 network
- Understand the aspects of IPv6 that differ from IPv4, especially regarding host configuration, SLAAC and DHCPv6
- Recognise the existing solutions to provide a smooth transition to IPv6
- Acquire a general understanding of the major issues with IPv6 regarding security and IP address management
- Configure IPv6 with OSPF and BGP in a test network

Pre-Requisites

- A Laptop with a browser for the labs
- For this course you should know about:
 - IPv4 and IPv6 (i.e. RIPE NCC Basic IPv6 Course) networking
 - Basic networking concepts and protocols (OSPF, BGP)
 - For the labs: CLI and command line tools

Course Content

- Introduction
- IPv6 Packets
 - *IPv6 Header format*
 - *Path MTU discovery*
 - *Neighbour Discovery*
- Introduction to IPv6 Routing
- OSPFv3
- Multiprotocol BGP
- Distributing content with IPv6
- IPv6 on Mobile Networks
- Host configuration
 - *Windows*
 - *OSX*
 - *Linux*
- DHCPv6
- IPv6 Security
- IP Address Management Systems
- Tips and Tools

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