

# IP6FD

## IPv6 Fundamentals, Design and Deployment



The goal of this course is to prepare the learner for transitioning to IPv6 based networks. IPv6FD encompasses design considerations, security considerations, configuration principles, configuring IOS devices for IPv6 and IPv6 transition mechanisms. Throughout the course students will be presented justification for the principles, concepts and practices contained in each lesson. This course will help network engineers understand, configure, and support Cisco devices running IOS software and covers the IPv6 routing protocols such as RIPng, OSPF, BGP, and IS-IS; IPv6 transition mechanisms including tunnels, ISATAP, NAT-PT, and 6to4; and other features. The design and deployment components present in depth coverage of IPv6 design and deployment for DNS, DHCP, integrating IPv6 in an IPv4 network, Multicast, and much more.

### Course Contents

- IPv6: Motivation, Features, Advantages
- IPv6: Header, Addressing, ICMPv6, Neighbor Discovery
- IPv6 in Operating Systems
- Mobile IPv6
- DNS and IPv6
- DHCPv6
- QoS in IPv6
- Routing Protocols in IPv6 Networks: RIPng, OSPFv3, IS-IS, EIGRP, MP-BGP, Redistribution
- First Hop Redundancy: HSRPv6
- Multicasting with PIMv6 and MLD
- Migration: Dual Stack, Tunnelmechanisms IPv6 in IP, 6to4, ISATAP
- Security: Access Lists, IPsec, IKE and VPNs
- Security and IOS Firewall with IPv6
- IPv6 Addressing, Multihoming
- MPLS and IPv6: 6PE and 6VPE
- Planning and Implementing IPv6 with Case Studies

### Knowledge Prerequisites

A good working knowledge of IPv4 protocols and Cisco routers is required.



### Reservation and Registration

We will be glad to make a free and non-binding course reservation for you for the duration of two weeks. On [www.experteach-training.com](http://www.experteach-training.com) under *Registration*, you can conveniently make course reservations, registrations, and hotel reservations. Alternatively, call us under +49 6074 4868-0.

For closed groups of participants, we can modify the course contents according to your requirements. Do not hesitate to contact us!



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5 days

€2,790 exclusive of V.A.T.

### Course date (mm/dd/yy)/Location

|                |            |                |            |
|----------------|------------|----------------|------------|
| 03/19-03/23/12 | Frankfurt  | 09/10-09/14/12 | Frankfurt  |
| 05/07-05/11/12 | München    | 10/08-10/12/12 | München    |
| 05/07-05/11/12 | Wien       | 10/08-10/12/12 | Wien       |
| 07/02-07/06/12 | Düsseldorf | 11/26-11/30/12 | Düsseldorf |
| 07/30-08/03/12 | Hamburg    |                |            |

Up-to-date information: [www.experteach-training.com](http://www.experteach-training.com) CVFD



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