“Implementing IPv6 Networks” Training

Course Objectives

After completing the “**Implementing IPv6 Networks**” course, you will be able to:

- Describe the features, benefits, and operation of the IPv6 protocol.
- Install, configure and maintain equipment supporting IPv6 features available on Cisco IOS routers, as well as IPv6 hosts running SUN Solaris, Microsoft Windows, Linux, HP Tru64, and BSD
- Deploy IPv6 networks and integrate IPv6 to coexist on existing IPv4 networks.

Audience Prerequisites

Network professionals with a good working knowledge of all routing protocols. To fully benefit from this training, you must have routing, switching, and access product knowledge and skills equivalent to the Cisco Certified Network Professional (CCNP) certification or better.

Course Description

Version 2.5 of the “**Implementing IPv6 Networks**” course is a 3-day instructor-led training course that provides technical training to network professionals including the knowledge and skills required to install, configure, and maintain devices that support IPv6 features available on Cisco IOS routers, as well as IPv6 hosts running Sun Solaris, Microsoft Windows, Linux, HP Tru64, and BSD.

The hands-on lab exercises in this course provide critical training to enable network professionals to install, configure, an maintain IPv6 networks and make the integration and coexistence of IPv6 and IPv4 networks successful. This course covers the configuration of routing protocols such as RIP, integrated IS-IS, BGP4+, IPv6 deployment strategies including overlay tunnels, IPv6 Provider Edge Router over MPLS (6PE), and NAT-PT, and other IPv6 features supported on Cisco IOS routers.

Course Outline

1. Introduction to IPv6: Rationale for IPv6; IPv6 Features and benefits; IPv6 Header Format

2. IPv6 Operation: IPv6 Addressing Architecture; IPv6 Data Link; (Lab 1: Enabling IPv6 on Cisco Routers , Configuring IPv6 Interfaces); ICMPv6 and Neighbor Discovery Protocol; Using DNS and DHCP with IPv6; Supporting Security and Mobility with IPv6 (Lab 2: Using Neighbor Discovery)

3. Routing in IPv6 Networks: Routing with RIPng (Lab 3: Configuring RIP Protocol); Routing with Integrated IS-IS Protocol (Lab 4: Configuring IS-IS Protocol); Routing with BGP4+ Protocol (Lab 5: Configuring BGP4+ Protocol)

4. Using IPv6 Services: Using IPv6 Access Control Lists; Using IPv6 Access Technologies; Using IPv6 SSH; Using IPv6 DNS AAA Client; Cisco IOS Features as examples

5. IPv6 Deployment Startegies: Deploying Dual Stack; Deploying Overlay Tunnels (Lab 6: Configuring Overlay Tunnels); Deploying 6PE over MPLS; IPv6-only to IPv4-only Strategies; Using NAT-PT (Lab 7: Configuring NAT-PT); (Lab 8: Troubleshooting IPv6 Network)

6. Connecting to the IPv6 Internet The 6Bone Network; The IPv6 Internet; Connecting to the IPv6 Internet; IPv6 Case Study; IPv6 Host Configurations (Solaris, MS Windows, FreeBSD, Tru64).

Registration Information

For more information on this course and to locate a delivery training partner please visit the following URLs for course discription, available course schedule, locations and registration.

http://www.cisco.com/pcgi-bin/front.x/wwtraining/CELC/index.cgi?action=CourseDesc&COURSE_ID=2235

You could also contact the following organizations directly to find out their IPv6 training delivery schedule:

USA

IBM Learning Services - US

Phone: (800) IBM-TEACH

Native-6 Group

Phone: 360-201-7886
Email: info@native6group.com

EMEA

Azlan Limited

Phone: 44 1734 894400
Fax: 44 1734 894300
Email: info@globalknowledge.de

Global Knowledge Germany

Phone: 49 40 8996 700
Fax: 49 40 898512
Email: icon@icon-gmbh.com

NIL Limited

Phone: 386-1-4746-500
Fax: 386-1-4746-501
Email: info@nil.si

Synergy

Phone: +9714-391-6806
Fax : +9714-391-6806
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