**PROFESSIONAL TRAINING COURSE** 



# 4 Days Course on IPV6 : Fundamentals, Protocols

# **& Implementation**

Learn. Prepare. Evolve.







### **About the Course**

In the few coming years, a new protocol Internet Protocol version 6 (IPv6) will be used together with Internet Protocol version 4 (IPv4) in order to support the shortage of the public Internet addresses The new version IPv6 is designed to support the limitation of the IPv4 and to enhance the Internet protocol in terms of security, scalability and management.. This course provides a foundation of Internet standards-based IPv6 concepts and is suitable for network engineers as well as to support professionals who are already familiar with basic networking concepts and TCP/IP.

#### **Objectives**

At the end of this program participants will be able to achieve the following objectives:

- To identify the importance of the IPv6 in organizations.
- To design a network topology based on the IPv6.
- To differentiate between IPv4 and IPv6 in the data communication in a networks.
- To develop an understanding of the issues, philosophies and techniques involved in managing and migrating an IPv4 to IPv6.

#### **Methodology**

A variety of presentation methods will be used including short lecture-style, group discussions, laboratory sessions and exercises.

#### **Prerequisites**

Basic knowledge in computer and networking.

#### **Course Settings**

Date	Refer to Training Calendar
Venue	Refer to Training Calendar
Fees	Contact Us at sales@2-sigma.com
Timings	0900-1700 (4 Days)
Inclusive	Certificates and notes
Audience	IT Officer, Network Engineer and Network Administrator
Level	Basic to Intermediate



## **Network Fundamentals and IPv6 - Schedule**

	Day 1
09.00am – 10.00am	Network Fundamentals I
	Internetworking
	Internet Protocols
40.00	
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	Network Fundamentals II
	IPv4 Subnetting     (viriable Length Subnet Masks () (LCMs)
	<ul> <li>Variable Length Subnet Masks (VLSMs)</li> </ul>
12.45pm – 02.15pm	Lunch
02.15pm – 05.00pm	Working With Network Simulation
	Local Area Network Design
	IPv4 addressing Scheme
	Day 2
09.00am – 10.00am	Switching and Routing
	<ul> <li>IPv4 Routing (Static, RIP, EIGRP and OSPF)</li> </ul>
	Layer 2 Switching
	Virtual LANs
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	Working with Network Simulation
10.000am 12.10pm	IP Routing Static
	IP Routing RIP
	IP Routing EIGRP
	IP Routing OSPF
12.45pm – 02.15pm	Lunch
02.15pm – 05.00pm	Working with Network Simulation
	Layer 2 Switching
	Virtual LANs
	Day 3
09.00am – 10.00am	IPv6 Introduction Part 1
	<ul> <li>IPv4 Issues and IPv6 Benefits</li> </ul>
	Ipv6 Header Structure
	IPv6 Addressing Overview
10.00am – 10.30am	Breakfast
10.30am – 12.45pm	IPv6 Introduction Part 2
	IPv6 Address Type     IPv6 Subsetting and Aggregation
	<ul> <li>IPv6 Subnetting and Aggregation</li> </ul>



	Implementing IPv6		
12.45pm – 02.15pm	Lunch		
02.15pm – 05.00pm	Working with Network Simulation (IPv6)		
	IPv6 Addressing		
	IPv6 Neighbour Discovery		
	IPv6 Static Routing		
	IPv6 RIPng		
	IPv6 OSPFv3		
	IPv6 Tunnelling		
Day 4			
09.00am – 10.00am	Working with Networking Devices		
	IPv4 and IPv6		
10.00am – 10.30am	Breakfast		
10.30am – 12.45pm	Working with Networking Devices		
	Routing and Switching		
12.45pm – 02.15pm	Lunch		
02.15pm – 05.00pm	Working with Networking Devices		
	IPv6 Tunnelling		

#### More Information

**Two Sigma Technologies** 19-2, Jalan PGN 1A/1, Pinggiran Batu Caves, 68100 Batu Caves, Selangor Tel: 03-61880601/Fax: 03-61880602

To register, please email to <u>sales@2-sigma.com</u> or fax the registration form to 03-61880602, we will contact you for further action.