

## **IPv6 Overview**

This course provides an overview of Internet Protocol version 6 and how it differs in makeup and operation to that of IPv4. This has been designed to provide basic information on the protocol itself and the features that make it an improvement on the popular IPv4.

### **Prerequisites:**

None, this course provides a basic overview of IPv6.

### **Learning Objectives:**

At the end of the course, participants will be able to relate to:

- The IPv6 Protocol
- IPv4 and IPv6 Address Comparison
- IPv6 Features
- IPv6 128 bit Address
- Routing Prefixes and Subnetting

### **Who Should Attend?**

- Project managers, technicians and support staff that need a basic overview of the IPv6 Protocol and its operation.

### **Course Outline**

- Understand the IPv6 Protocols
- Compare IPv4 and IPv6 Addressing
- Understand new features associated with IPv6
- Understand the IPv6 Header sections
- Have an appreciation of IPv6 Routing and Routing Protocols
- Be able to de-construct the IPv6 128 bit Address
- Understand the IPv6 Abbreviated Address Format
- Be able to determine Prefix Lengths
- Understand IPv6 Global Routing Prefixes
- Understand the format and use for the Unique Local Unicast Address
- Understand IPv6 Host Configuration and Connectivity
- Understand the options for IPv6 Host Configuration such as NDP, SLAAC and DHCP