

# Essentials of IPv6

*The key building block of the next generation Internet*



## Overview

The Internet Protocol has been deployed for coming close to 30 years in its current format and has recently run out of IP addresses, the last batch being allocated to the Asia Pacific region. This problem was foreseen by the Internet community for many years but the majority of organisations have delayed the implementation of the new IP version 6. There will now be an Internet comprising of two different IP versions which will necessitate a number of interesting and complex solutions for ISPs to provide next generation services to their customers.

This program presents an overview of the key feature of IPv6, its interaction with the legacy Internet and will also include some practical example demos of its use. Concepts and features are explained in simple terminology with reference to many examples.

## Who can benefit

This program is designed to provide those working in the ICT & telecoms industry with an introduction to IPv6. It is useful for anyone that needs to understand how IPv6 will be deployed and the impact it will have

## Pre requisite knowledge

None

## Outline

### Introduction

- History of IPv4
- What is wrong with IPv4?
- We've run out of addresses!
- Interim solutions for limited IPv4 addresses
- Rationale for IPv6
- Key IPv6 elements
- When will IPv4 be phased out?
- What new services does IPv6 enable?
- Malaysia's roadmap for IPv6 deployment

### Key IPv6 Features

- More addresses
- Address formats
- How are addresses configured & deployed?
- Security implications
- Providing quality with IPv6

### IPv6 Deployment

- IPv6 & Windows
- IPv6 & UNIX/Linux and MAC OS
- Mobile devices
- Network & CPE devices (e.g. home routers, IP phones, etc.)
- Applications & IPv6: web & email
- Migrating to IPv6
- Co-existence of IPv4 and IPv6
- Business impact

### IPv6 Demonstrations

- Autoconfiguring IPv6 Addresses
- IPv6 and domain names
- IPv6 web access

DURATION 1 day

MAXIMUM CLASS SIZE 20