

Mobile IP

01 – 05 February 2016,
Gaborone, Botswana



COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION

Overview

Participants will learn the reasons for and consequences of development towards mobile computing. The necessary enhancements of IP are explained thoroughly. The information presented about routing and registration for mobile users and the security issues that are emerging will enable the participants to understand Mobile IP in the protocol versions - Mobile IPv4 and 6.

For more information:
about this course, or to register,
contact us on:
Tel: **+44 (0) 208 600 3808**
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Objectives

The objective of this course is to provide participants with:

- A better understanding of the nature and structure of the TCP/IP protocol.
- An insight of the IP protocol suite, its applications and implications on the management of IP-based systems.
- An understanding of the issues presented in employing IP services on mobile platforms.
- An enhanced knowledge of the technological solutions for enabling Mobile IP.
- Explore the specific applications of IPv4 and IPv6 in the mobile environment.

Target Audience

This course is designed for individuals with a technical background, as well as for executives operating in the sales and marketing departments who are working towards meeting requirements for the ongoing mobile computing development. Non-technical staff of regulatory agencies involved in next generation network (NGN) issues or new mobile application technologies will also benefit from attending this course.

Course Outline

Introduction and networking basics

- Networks and protocols
- Development of TCP/IP
- TCP/IP features and standards
- Protocol layers and the OSI Model
- TCP/IP protocol suite and comparison with OSI model

TCP/IP Protocol suite

- Network access layer
- The internet layer
- Sub-netting and CIDR
- The transport layer
- The application layer

TCP/IP Networking

- Connectivity infrastructure
- Routing
- Firewalls
- Name resolutions

Overview of IPv6

- Need for new IP version
- IPv6 addressing
- IPv6 coexistence with IPv4
- IPv6 with quality of service (QoS)

Mobile IP

- Mobile IP overview
- Components of a Mobile IP network
- How Mobile IP works
- Agent discovery
- Registration
- Tunnelling
- Security
- Solution to network mobility

IP applications and Mobile IP considerations

- IP and the internet
 - The World Wide Web (WWW)
 - URL and URI
 - HTML and HTTP
 - Content and content filtering
 - Email and email formats
 - Webmail
 - Email protocols
 - Spam and mail filtering
- Streaming and Multimedia services
 - Streaming issues and solutions
 - QoS
 - Voice and video streaming
- Web services and e-commerce

For more information about registration please contact **Fargani Tambeayuk** at **+44 20 8600 3808** or email **f.tambeayuk@cto.int**

Who we are

The CTO is the oldest and largest Commonwealth organisation engaged in multilateral collaboration in the field of ICTs. Using in-house and partner experience, it supports members in integrating ICTs to deliver effective development interventions that emancipate, enrich, equalise and empower people within the Commonwealth and beyond.

What we do

The work of the CTO goes back to the Organisation's creation in 1901 as the Pacific Cable Board. Since then, the CTO has been at the centre of continuous and extensive international communications development funding, cooperation and assistance programmes. Since 1985, the Organisation has delivered to its members in Europe, the Caribbean, the Americas, Africa and Asia-Pacific over 3,760 bilateral and multilateral telecommunications and ICT capacity building projects in the form of policy, operational and regulatory training, and expert assistance. Moreover, the CTO has been at the forefront of generating cutting-edge knowledge through its research and consultancy services, as well as sharing ideas through its conferences and workshops held around the world. This long history as a development facilitator provides the Organisation with a unique and growing delivery capacity for ICT4D programmes and services.

Supporting ICT4D in the Commonwealth

The CTO seeks to work collaboratively with other Commonwealth bodies to build mutually beneficial synergies in the interests of its members. The CTO has a key role to play in leading ICT4D initiatives across the Commonwealth, and it is committed to working together with other Commonwealth entities to reduce overlap and replication of activities. The CTO welcomes the opportunity to offer secretariat support to any Commonwealth ICT initiatives that reflect the needs and interests of its members.

