



# GHANA TELECOM UNIVERSITY COLLEGE AND AFRALTI, KENYA



**INVITES YOU TO A FIVE DAY WORKSHOP**

## **DEPLOYING MULTI-PROTOCOL LABEL SWITCHING (MPLS)**

### **DESCRIPTION:**

This course discusses the principles, operations and configuration of MPLS technology. Multiprotocol label switching (MPLS) combines the performance and capabilities of Layer 2 (data link layer) switching with the proven scalability of Layer 3 (network layer) routing.

MPLS enables service providers to meet the challenges of explosive growth in network utilization while providing the opportunity to differentiate services without sacrificing the existing network infrastructure. By incorporating MPLS into their network architecture, service providers can save money, increase revenue and productivity, provide differentiated services, and gain competitive advantages.

### **WORKSHOP OBJECTIVE:**

After completing this course participants would be able to:

- ❖ Describe the features of MPLS
- ❖ Describe how MPLS labels are assigned and distributed
- ❖ Identify the Cisco IOS tasks and command syntax necessary to implement MPLS on frame-mode Cisco IOS platforms as well as the commands required to successfully configure, monitor, and troubleshoot VPN operations
- ❖ Describe the MPLS peer-to-peer architecture and explain the routing and packet forwarding model in this architecture
- ❖ Identify how the MPLS VPN model can be used to implement managed services and Internet access
- ❖ Describe the various Internet access implementations that are available and the benefits and drawbacks of each model
- ❖ Provide an overview of MPLS Traffic Engineering etc.

### **WORKSHOP TOPICS:**

- ❖ Introducing Basic MPLS Concepts
- ❖ Establishing the Service Provider IGP Routing Environment
- ❖ Configuring, monitoring and troubleshooting Frame-Mode MPLS on Cisco IOS Platforms
- ❖ Establishing the Core MPLS Environment
- ❖ Forwarding MPLS VPN Packets
- ❖ Running OSPF between PE and CE Routers
- ❖ Configuring BGP as the Routing Protocol between PE and CE routers

### **TARGET AUDIENCE:**

This course targets staff in telecom operators (fixed and mobile), service providers, and regulatory authorities and any other organizations that have implemented, or are intending to implement enterprise level MPLS solutions.

### **PRE-REQUISITE:**

Cisco Certified Network Associate (CCNA) certification or equivalent level of working knowledge and experience is recommended.

Practical experience with deploying and operating networks based on Cisco network devices and Cisco IOS is strongly recommended.

**Date:** 2nd – 6th August 2010

**Venue:** Ghana Telecom University College, Tesano, Accra.

**Fee:** USD \$1000

### **HOW TO APPLY:**

Application forms can be downloaded online at <http://www.gtuc.edu.gh> or [www.afralti.org](http://www.afralti.org)

**Registration Deadline: Friday, July 30, 2010**

### **CONTACT:**

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