IMPLEMENTING CISCO MULTICAST (MCAST) V2.0

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The Implementing Cisco Multicast (MCAST) V2.0 course teaches you the fundamentals of IP multicasting, including multicast applications, sources, receivers, group management, and IP multicast routing protocols such as Protocol Independent Multicast (PIM) used within a single administrative domain. You will learn about issues in switched LAN environments and reliable IP multicasting, and technical solutions for simple deployments of IP multicast within a provider or customer network. The course reviews the configuration and troubleshooting guidelines for implementation of IP multicast on Cisco® routers. Labs offer hands-on experience to help you prepare to deploy IP multicast successfully.

How you'll benefit

This class will help you:

- Gain a solid understanding of the fundamentals of IP multicasting
- Understand the configuration and troubleshooting guidelines for implementation of IP multicast on Cisco routers
- Prepare to deploy IP multicast within a provider or customer network

Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The primary audience for this course is as follows:

- Network professionals
- Systems engineers
- Partners
- Customers

Course Duration
5 days

Course Price
$4,295.00 or 43 CLCs

Methods of Delivery
- Instructor Led
- Virtual ILT
- On-Site

Prerequisites

Before taking this course, you should have the following knowledge and skills:

- Work experience and configuration skills for Cisco routers and LAN switches

OUTLINE

Module 1: Course Introduction

Module 2: IP Multicast Concepts and Technologies
- Introducing IP Multicast
- Understanding the Multicast Service Model
- Defining Multicast Distribution Trees and Forwarding
- Reviewing Multicast Protocols

Module 3: Multicast on the LAN
- Mapping Layer 3 to Layer 2
- Working with Cisco Group Management Protocol
- Using Internet Group Management Protocol (IGMP) Snooping

Module 4: PIM Sparse Mode
- Introducing Protocol Independent Multicast Sparse Mode
- Understanding PIM-SM Protocol Mechanics
- Using PIM-SM in a Sample Situation
- Configuring and Monitoring PIM-SM

Module 5: Rendezvous Point Engineering
- Identifying RP Distribution Solutions
- Implementing Auto-RP
- Using PIMv2 Bootstrap Router (BSR)
- Using Anycast RP and MSDP

Module 6: PIM Sparse Mode Protocol Extensions
- Introducing Source-Specific Multicast (SSM)
- Configuring and Monitoring SSM
- Reviewing Bidirectional PIM
- Configuring and Monitoring Bidirectional PIM

Module 7: Multiprotocol Extensions for BGP
- Introducing MP-BGP
- Configuring and Monitoring MP-BGP

Module 8: Interdomain IP Multicast
- Examining Dynamic Interdomain IP Multicast
- Explaining Multicast Source Discovery Protocol
- Using MSDP Source-Active (SA) Caching
- Configuring and Monitoring MSDP

Module 9: IP Multicast Security
- Introducing IP Multicast and Security
- Securing a Multicast Network

Module 10: Multicast Optimization and High-Availability Features
- Using Multicast Optimization and High-Availability Features

Module 11: Applications of Multicast
- Exploring IP Multicast and Video Applications
- Using IP Multicast in Mission-Critical Environments
- Exploring How Enterprise IT Uses IP Multicasting Globally

LAB OUTLINE

Lab 1: Layer 2 and Layer 3 Multicast

Lab 2: PIM-SM Protocol Basics

Lab 3: PIM-SM Protocol Mechanics and Timers

Lab 4: PIM Sparse-Dense Mode and Manual RP Configuration

Lab 5: Configuring Dynamic RP Information Distribution

Lab 6: Bidirectional PIM

Lab 7: Source-Specific Multicast

Lab 8: Anycast RP, External MP-BGP, and MSDP Peering