

# Implementing Cisco Multicast (MCAST) 2.0

Duration 5 Days

## COURSE CONTENT

The Implementing Cisco Multicast (MCAST) v2.0 course is a five-day instructor-led course covering the fundamentals of IP multicasting, which includes multicast applications, sources, receivers, group management, and IP multicast routing protocols (such as Protocol Independent Multicast, PIM) used within a single administrative domain (intradomain). The issues of switched LAN environments and reliable IP multicasting are covered as well. The course provides technical solutions for simple deployments of IP multicast within a provider or customer network. The curriculum provides the configuration and troubleshooting guidelines for implementation of IP multicast on Cisco routers. The labs provide students with the hands-on experience needed to successfully deploy IP multicast.

## COURSE OBJECTIVES

Upon completing this course, the learner will be able to meet these overall objectives:

- Introduce IP multicast services, to evaluate the functional model of IP multicasting and the technologies present in IP multicasting, acknowledge IP multicast benefits and associated caveats, and determine various types of multicast applications in order to understand the IP multicast conceptual model and its layer multicast addresses to data link layer addresses, and list the mechanisms for constraining multicast streams in a LAN environment.
- Introduce Protocol Independent Multicast sparse mode (PIM-SM) as the most current scalable IP multicast routing protocol to learn the principles of protocol operation and details, become familiar with the determinism built into sparse mode multicast protocols, and configure and deploy PIM-SM in complex IP multicast network deployments.

## COURSE OUTLINE

- Course Introduction
- **Module 1:** IP Multicast Concepts and Technologies
- **Module 2:** Multicast on the LAN
- **Module 3:** PIM Sparse Mode
- **Module 4:** Rendezvous Point Engineering
- **Module 5:** PIM Sparse Mode Protocol Extensions
- **Module 6:** Multiprotocol Extensions for BGP
- **Module 7:** Interdomain IP Multicast
- **Module 8:** IP Multicast Security
- **Module 9:** Multicast Optimization and High-Availability Features
- **Module 10:** Applications of Multicast

## WHO SHOULD ATTEND

Channel Partner / Reseller, Customer, Employee

## PREREQUISITES

The knowledge and skills that a learner must have before attending this course are as follows:

- Cisco Certified Network Associate (CCNA) certification.
- Work experience and configuration skills for Cisco routers and LAN switches.
- Implementing Cisco IP Routing (ROUTE).