

IPTD (Cisco IP Telephony Design)

Cisco Authorized 5-day Course on IP Telephony Technology

Course Description

This Authorized Cisco IP Telephony Design course is designed to capture the breadth of technical issues surrounding the design of Voice over Data networks. You will learn a methodology that brings order to solving the problems faced by network engineers. This course will discuss the technical issues of designing Voice over Data networks.

In addition, it will assist both sales and technical personnel to assess customers' current network, the Cisco methodology for implementing Voice over Data networks, and to design sustainable and appropriate IPT designs.

Intended Audience

Engineers, Architects, and Support professionals involved with Voice over Data networks will benefit significantly from this course.

Course Objectives

Upon completing this course you will be able to:

- Design contemporary Cisco IP Communications Solutions that conform to the recommendations and outcomes outlined in the Cisco IP Telephony Solutions Reference Design Guide (SRND)
- Design of an IP Telephony solution, leveraging expert and peer interaction.
- Design a large campus LAN to support an IP telephony solution.
- Design a fast, secure, highly available WAN link with the quality of service needed to support IP Telephony solutions.
- Design an IP telephony solution.
- How to select IP telephony gateways that are appropriately sized for customer load conditions and appropriately scalable for their growth projections.
- How to select appropriate Cisco media resources for an IP Telephony solution.
- Determine the size and position of applications for the services requested by an IPT customer.

Outline: IPTD-Cisco Telephony Design

1. **Draft the Infrastructure Assessment**
 - Cisco AVVID IP Telephony
 - CallManager Deployment Options
 - Planning and Preparation
 - Report on Existing Telecom Traffic Flow
 - Evaluate Network Availability for IP Communications
2. **Design IP Communications**
 - Design the LAN to Support IP Communications
 - Design the WAN to Support IP Communications
 - Size and Select Voice Gateways
 - Design Media Resources
 - Size and Position New Applications
 - Design the Dial Plan
 - Design the Emergency Services
 - Design a Secure IPC Solution
 - Design For the Implementation
3. **Design IPC Deployment Models**
 - Design a Single Site IPC Solution.
 - Design a Multi-Site WAN with Centralized Call Processing
 - Design a Multi-Site WAN with Distributed Call Processing
 - Design CallManager Clusters Over the IP WAN
 - Multi-Site MPLS WAN Considerations Case Study