

## CBT Nuggets - Cisco 642-446: CCVP CIPT1

If you work with Cisco Unified Communications Manager, or want to learn how, this is the training for you. Jeremy Cioara is the master of Cisco VoIP training, and his Cisco 642-446 video series shows you how to become a master of CallManager route plans and Cisco IP phones. Jeremy fills these VoIP videos with live configuration examples; carefully explains CUCM Route Plan, Partitions and Calling Search Spaces; and shows you how to set up your own CUCM lab environment. They also prepare you for the Cisco CCVP 642-446 CIPT1 exam. **What You'll Learn**

**Video 1: Cisco Voice: Cisco Certification and Getting the Most from this Series**|34:26 Welcome to the CIPT1 video series! This opening video discusses the series objectives and their relation to the Cisco CCVP certification exam. You'll also see recent changes to the Cisco certification process that make real world training (which is the goal of CBT Nuggets) the best possible way to prepare.

**Video 2: Fundamentals: Introduction to Cisco Unified Communications**|29:17 Cisco has attacked the market under their new Unified Communications strategy. This nugget walks through the "big picture" strategy of Cisco Unified Communications, then spends time looking specifically at Cisco Unified Communications Manager (CUCM - previously called Cisco CallManager or CCM). By time you're done, you'll understand the role, software and hardware requirements, and licensing of CUCM.

**Video 3: Fundamentals: CallManager Clustering Strategies**|35:12 Cisco designed CUCM to be a fully redundant system. In order to accomplish this, you'll need multiple servers arranged in a cluster. CUCM clusters have very unique attributes that are covered in this nugget. Likewise, you'll also learn the best designs for a CUCM deployment.

**Video 4: Fundamentals: Installing / Upgrading Cisco CallManager**|31:14 Installing CUCM was engineered by Cisco to be a fairly painless process. Nonetheless, there are some things to prepare for as you get ready to install or upgrade your CUCM server. This nugget walks through a live installation and upgrade of CUCM 7.X.

**Video 5: Fundamentals: CUCM Familiarity and Core System Settings**|31:14 The appliance flavor of CUCM (5.x / 6.x / 7.x versions) were designed with ease of management in mind. Most everything you do is controlled by a series of web interfaces. In this nugget, Jeremy walks through the major configuration interfaces and visits the CUCM CLI for some nitty-gritty troubleshooting.

**Video 6: User Accounts: Managing IP Telephony Users**|24:31 In the CUCM environment, IP phones comprise just one of your management tasks; user management has also crept into your scope of work! This nugget discusses the benefits of using user accounts with the phone system, the difference between End Users and Application Users, and finally the process to configure user accounts in your CUCM cluster.

**Video 7: User Accounts: Managing IP Telephony Users, Part 2**|45:08 The CUCM user management continues! In this nugget, Jeremy demonstrates how to use the Bulk Administration Tool (BAT) to manage users by the truckload. After this, he configures LDAP Synchronization and Authentication to link the CUCM and Active Directory databases. Finally, Jeremy discusses the configuration of user groups, roles, and privileges to create other CUCM administrators.

**Video 8: IPT Devices: Cisco IP Phones and Other End Devices**|35:54 Cisco IP Telephony (IPT) Device Madness! This nugget is dedicated to walking through the various devices you are able to use in your Cisco IPT network. You will move from entry level, to mid-range, then to upper end and specialty devices. However, don't cut out early! The most important concept of the entire nugget is at the end: Understanding the Cisco IP Phone Boot Process.

**Video 9: IPT Devices: Catalyst Voice-Enabled Switches**|24:12 In order to support the advanced VoIP networks of today, Cisco has added three features to their Catalyst switch line: Power over Ethernet (PoE), Voice/Auxiliary VLAN support, and Quality of Service (QoS). In this nugget, Jeremy walks through the concepts and configurations of each.

**Video 10: IPT Devices: Configuring CUCM to Support IP Phones**|33:31 It's time to get into the configuration of the Cisco IP Phones themselves! This nugget is dedicated to the core configuration concept that must be in place before you can add any IP Phones to the network: the Device Pool.

**Video 11: IPT Devices: Configuring CUCM to Support IP Phones, Part 2**|38:58 Once you have the CUCM Device Pools configured, Cisco provides a variety of methods to add phones to the database. In this nugget, Jeremy walks through adding IP Phones manually, using auto-registration, and using the Bulk Administration Tool (BAT). In addition, Jeremy wraps up by walking through the basic Cisco IP Phone security settings.

**Video 12: Route Plan: Implementing MGCP Gateways**|38:13 Now that the local IP Phones are ringing, it's time to connect outside our network. In this first look at the CUCM route plan structure, Jeremy discusses the role of gateways, gateway protocols, and the specifically focuses on MGCP concepts and configuration.

**Video 13: Route Plan: Understanding Route Plan Fundamentals**|43:59 Specifically designated as the Most Valuable Part (MVP) of the series, this nugget discusses the core route plan structure and configuration. By time you're done here, you'll be putting together the Route Patterns, Route Lists, and Route Groups into a congruent system.

**Video 14: Route Plan: Call Processing, Transformations, and Translations**|25:51 Building upon the CUCM route plan foundations from the previous nugget, Jeremy now moves into the more advanced topics of overlapping dial plans, urgent priority, T302 timer, and route filters.

**Video 15: Route Plan: Call Processing, Transformations, and Translations, Part 2**|35:19 In VoIP networks, calls can leave your network through WAN or PSTN connections. Based on the exit point, you may need to transform dialed number (DNIS) or

caller-id (ANI) information. This nugget walks through the tools to accomplish this: transformation masks, digit discard instructions, prefix digits, and translation patterns. **Video 16: Route Plan: Partitions and Calling Search Spaces|35:59** Partitions and Calling Search Spaces (CSSs) are by far the most complex topic in the CUCM route plan architecture. This initial "Part 1" nugget helps you to understand the purpose and use of Partitions and CSSs and walks through practice scenarios which employs them to accomplish specific objectives. **Video 17: Route Plan: Partitions and Calling Search Spaces, Part 2|38:58** The Partition and CSS discussion continues as Jeremy dives into some critical Cisco best-practices for your organization. **Video 18: Route Plan: Partitions and Calling Search Spaces, Part 3|42:10** To wrap up the Partition and CSS discussion, Jeremy covers Time of Day Routing functionality, Forced Authorization Codes (FACs), and Client Matter Codes (CMCs). **Video 19: Route Plan: Call Coverage Features|28:56** While full call queuing is part of the Cisco IP Contact Center (IPCC) software, CUCM does support basic call hunting features. In this nugget, you'll learn the components and configuration of call hunting in a VoIP environment. **Video 20: VoIP Features: Media Resources|46:42** Media Resources are the "engines" of your VoIP network. Without them, you could not handle conference calls, transcoding, or even converting analog and digital voice into VoIP. In this nugget, Jeremy discusses the configuration and management of software and hardware media resources. **Video 21: VoIP Features: Media Resources, Part 2|26:47** The Media Resource journey continues as Jeremy focuses specifically on the configuration of Conference Bridge (CFB) and Music on Hold (MoH). **Video 22: VoIP Features: Using IP Phone Features|28:49** You've stepped into the first of three nuggets on "Phone Feature Madness!" In this nugget you'll learn specifically about the Call Park and Call Pickup (including Group Call Pickup and Other Group Call Pickup). **Video 23: VoIP Features: Using IP Phone Features, Part 2|44:40** The phone features continue as Jeremy walks through the configuration of Shared Lines, Hold Reversion, Do not Disturb (DND), and Intercom. **Video 24: VoIP Features: Using IP Phone Features, Part 3|38:41** As you wrap up the CUCM general phone features, you'll add CallBack, Barge and Privacy, and XML Services to your skill set. **Video 25: VoIP Features: Presence-Enabled Directories and Speed Dials|32:41** It is the feature cool enough to get its own nugget: Presence. Presence allows you to become a "watcher" of other directory numbers in your organization to check their status before placing a call. As you go through this nugget, you will learn the objectives and configuration of Presence in CUCM. **Video 26: VoIP Features: Voicemail Integration with Cisco Unity|44:41** What's a VoIP network without voicemail? In this final nugget, Jeremy walks through the planning and process behind integrating CUCM and Cisco Unity together. Download **[This hidden password content is only available for our VIP member. Become VIP Member NOW**