



## Cisco IP Conference Station 7935 Administration Guide

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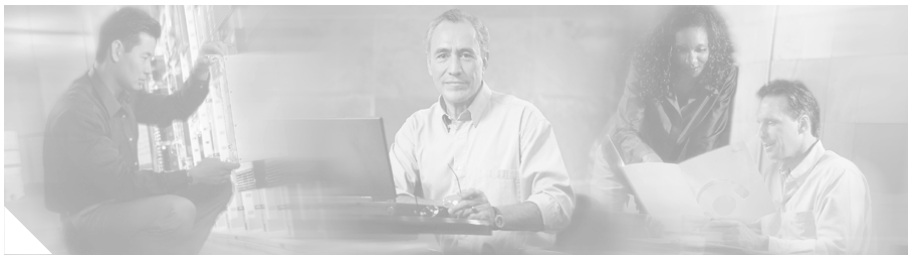
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## About This Guide

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### Overview

The Cisco IP Conference Station 7935 Administration Guide provides you with the information you need to understand, install, configure, and manage a Cisco IP Conference Station 7935 on your network.

### Audience

Network engineers, system administrators, or telecom engineers should review this guide to learn the steps required to properly set up the IP Conference Station on the network.

The tasks described in this guide are administration-level tasks and are not intended for end users of the IP Conference Station. Many of these tasks involve configuring network settings and affect the IP Conference Station's ability to function on the network.

These tasks require familiarity with Cisco CallManager since there is close interaction between the Cisco IP Conference Station 7935 and Cisco CallManager.

# Objectives

This guide provides all the necessary steps to make the Cisco IP Conference Station 7935 operational on the Voice over IP (VoIP) network. It does not provide detailed information about procedures performed on Cisco CallManager or other network devices. Refer to the Cisco CallManager documentation for information about configuring Cisco CallManager, and to the reference material that accompanied other network devices at your site for information about configuring those devices.

## How to Use this Guide

Locate the task you want to perform and then reference the corresponding chapter in this guide.

To do this	See
Review networking protocols, features, and connections	<a href="#">Chapter 1, “Overview of the Cisco IP Conference Station 7935”</a>
Understand interactions with other Cisco IP Telephony products	<a href="#">Chapter 1, “Overview of the Cisco IP Conference Station 7935”</a>
Install the Cisco IP Conference Station 7935	<a href="#">Chapter 2, “Installation of the Cisco IP Conference Station 7935”</a>
Configure the Cisco IP Conference Station 7935	<a href="#">Chapter 3, “Configuration of the Cisco IP Conference Station 7935”</a>
Troubleshoot and run diagnostics	<a href="#">Chapter 4, “Troubleshooting the Cisco IP Conference Station 7935”</a>
Review technical specifications	<a href="#">Appendix A, “Physical and Operating Environment Specifications”</a>

## Related Documentation

For more information about the IP Conference Station or Cisco CallManager, refer to these publications:

Document Name	Location
<i>Cisco IP Conference Station 7935 Release Notes</i>	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm</a>
<i>Cisco IP Conference Station 7935 Quick Start Guide</i>	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm</a>
<i>Cisco IP Conference Station 7935 Quick Reference Card</i>	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm</a>
<i>Regulatory Compliance and Safety Information for the Cisco IP Conference Station 7935</i>	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7935/index.htm</a>
Cisco CallManager documentation	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm</a>

## Document Conventions

This guide uses the following conventions.

Convention	Description
<b>boldface font</b>	Commands and keywords are in <b>boldface</b> .
<i>italic font</i>	Arguments for which you supply values are in <i>italics</i> .
[ ]	Elements in square brackets are optional.

Convention	Description
{ x   y   z }	Alternative keywords are grouped in braces and separated by vertical bars.
[ x   y   z ]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in <code>screen font</code> .
<b>boldface screen font</b>	Information you must enter is in <b>boldface screen font</b> .
<i>italic screen font</i>	Arguments for which you supply values are in <i>italic screen font</i> .
^	The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key.
< >	Nonprinting characters, such as passwords are in angle brackets.

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

**Timesaver**

This symbol means the described action saves time. You can save time by performing the action described in the paragraph.

Warnings use the following conventions:



Warning

This warning symbol means *danger*. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied this device.

Waarschuwing

Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen. Voor vertalingen van de waarschuwingen die in deze publicatie verschijnen, kunt u het document *Regulatory Compliance and Safety Information* (Informatie over naleving van veiligheids- en andere voorschriften) raadplegen dat bij dit toestel is ingesloten.

Varoitus

Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista. Tässä julkaisussa esiintyvien varoitusten käännökset löydät laitteen mukana olevasta *Regulatory Compliance and Safety Information* -kirjasesta (määräysten noudattaminen ja tietoa turvallisuudesta).

- Attention** Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions d'avertissements figurant dans cette publication, consultez le document *Regulatory Compliance and Safety Information* (Conformité aux règlements et consignes de sécurité) qui accompagne cet appareil.
- Warnung** Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewußt. Übersetzungen der in dieser Veröffentlichung enthaltenen Warnhinweise finden Sie im Dokument *Regulatory Compliance and Safety Information* (Informationen zu behördlichen Vorschriften und Sicherheit), das zusammen mit diesem Gerät geliefert wurde.
- Avvertenza** Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti. La traduzione delle avvertenze riportate in questa pubblicazione si trova nel documento *Regulatory Compliance and Safety Information* (Conformità alle norme e informazioni sulla sicurezza) che accompagna questo dispositivo.

- Advarsel** Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker. Hvis du vil se oversettelser av de advarslene som finnes i denne publikasjonen, kan du se i dokumentet *Regulatory Compliance and Safety Information* (Overholdelse av forskrifter og sikkerhetsinformasjon) som ble levert med denne enheten.
- Aviso** Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes. Para ver as traduções dos avisos que constam desta publicação, consulte o documento *Regulatory Compliance and Safety Information* (Informação de Segurança e Disposições Reguladoras) que acompanha este dispositivo.
- ¡Advertencia!** Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes. Para ver una traducción de las advertencias que aparecen en esta publicación, consultar el documento titulado *Regulatory Compliance and Safety Information* (Información sobre seguridad y conformidad con las disposiciones reglamentarias) que se acompaña con este dispositivo.
- Varning!** Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanligt förfarande för att förebygga skador. Se förklaringar av de varningar som förekommer i denna publikation i dokumentet *Regulatory Compliance and Safety Information* (Efterrättelse av föreskrifter och säkerhetsinformation), vilket medföljer denna anordning.

# Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

## World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

<http://www.cisco.com>

## Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

## Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).



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You can e-mail your comments to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems  
Attn: Document Resource Connection  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

### Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages

- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

<http://www.cisco.com/register/>

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.





# Overview of the Cisco IP Conference Station 7935

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The Cisco IP Conference Station 7935 is an IP-based, hands-free conference station that uses Voice over IP (VoIP) technology. The IP Conference Station interacts with several other key Cisco IP Telephony components, including Cisco CallManager.

The following topics in this chapter provide information about the IP Conference Station and its interaction with other key components of the Voice over IP (VoIP) network.

- [Networking Protocols, page 1-1](#)
- [Supported Features, page 1-3](#)
- [Available Connections, page 1-4](#)
- [Understanding Interactions with Other Cisco IP Telephony Products, page 1-4](#)
- [Understanding the Startup Process, page 1-5](#)
- [Understanding the Requirements for Installing and Setting Up the Cisco IP Conference Station 7935, page 1-6](#)

## Networking Protocols

The IP Conference Station supports several industry-standard and Cisco networking protocols required for voice communication. See the following table for an overview of the supported networking protocols.

Networking Protocol	Purpose	Usage Notes
Cisco Discovery Protocol (CDP)	<p>CDP is a device-discovery protocol that runs on all Cisco-manufactured equipment.</p> <p>Using CDP, a device can advertise its existence to other devices and receive information about other devices in the network.</p>	<p>The IP Conference Station uses CDP to communicate configuration information to the Cisco Catalyst switch. With CDP, each device sends periodic messages to a multicast address and in turn listens to the periodic messages sent by other devices. This allows devices on the network to discover one another and learn information such as protocols used, protocol addresses, and so on.</p>
Dynamic Host Configuration Protocol (DHCP)	<p>DHCP dynamically allocates and assigns an IP address to network devices.</p> <p>DHCP enables you to connect the IP phone into the network and become operational without manually assigning an IP address and configuring additional required network parameters.</p>	<p>DHCP is enabled by default. If disabled, you must manually configure the IP address, subnet mask, gateway, and TFTP server on each station.</p>
Internet Protocol (IP)	<p>IP is a messaging protocol that addresses and sends packets across the network.</p>	<p>To communicate using IP, network devices must have an assigned IP address, subnet, and gateway.</p> <p>IP addresses, subnets, and gateways identifications are automatically assigned if you are using the IP Conference Station with DHCP. If you are not using DHCP, you must manually assign these properties to each station locally.</p>

Networking Protocol	Purpose	Usage Notes
Real-Time Transport (RTP)	RTP is a standard for transporting real-time data, such as interactive voice and video over data networks.	The IP Conference Station can collect and process RTP traffic from routers, hubs, and switches.
Skinny Client Control Protocol (SCCP)	Skinny Client Control Protocol. A Cisco protocol using low-bandwidth messages that allows communication between IP devices and the Cisco CallManager.	The IP Conference Station uses SCCP to communicate with the Cisco CallManager.
Transmission Control Protocol (TCP)	TCP is a connection-oriented transport protocol.	The IP Conference Station uses TCP to connect to Cisco CallManager.
Trivial File Transfer Protocol (TFTP)	TFTP allows you to transfer files over the network.  On the IP Conference Station, TFTP enables you to obtain a configuration file specific to the IP Conference Station type.	TFTP requires a TFTP server in your network, which can be automatically identified from the DHCP server. If more than one TFTP server is running in your network, you must manually assign a TFTP server to each station locally.
User Datagram Protocol (UDP)	UDP is a connectionless messaging protocol for delivery of data packets.	The IP Conference Station receives and processes UDP messages.
Voice over IP (VoIP)	VoIP enables you to transfer voice communications over a data network using the Internet Protocol.	The IP Conference Station connects to the PSTN through a VoIP gateway.

## Supported Features

The IP Conference Station functions much like the traditional analog conferencing unit allowing you to set up and place conference calls and receive calls. The IP Conference Station also supports features such as call hold, redial, and mute.

In addition to these traditional telephony features, the IP Conference Station also includes features enabling you to administer and monitor it as an IP networking device. On the IP Conference Station, you can locally configure features such as DHCP, TFTP, and IP settings. You can also integrate the IP Conference Station with the corporate Lightweight Directory Access Protocol 3 (LDAP3) standard directory to enable users to search for co-workers' contact information directly from the IP Conference Station. From Cisco CallManager, you can modify additional settings, which are viewable from the IP Conference Station's network configuration settings. Use this guide for information about configuring these settings.

## Available Connections

The IP Conference Station includes the following connections for accessing the data network and providing power to the station:

- Power Interface Module (PIM) for connection between the IP Conference Station and the network
- a single RJ-45 connector for accessing the data network and connecting to the PIM, which provides power to the IP Conference Station
- universal power supply for connection to a standard electrical power outlet in the wall

## Understanding Interactions with Other Cisco IP Telephony Products

To function in the IP telephony network, the IP Conference Station must be connected to a networking device, such as a Cisco Catalyst switch, in order to obtain network connectivity. The IP Conference Station must also be registered with a Cisco CallManager system in order to make and receive calls.



# Understanding How the IP Conference Station Interacts with Cisco CallManager

Cisco CallManager is an open and industry-standard call processing system. Cisco CallManager software runs on a Windows 2000 server and sets up and tears down calls between phones, integrating traditional PBX functionality with the corporate IP network. Cisco CallManager manages the components of the IP telephony system, the conference stations, the phones, access gateways, and the resources necessary for such features as call conferencing and route planning.

For information about configuring Cisco CallManager to work with the IP devices described in this chapter, refer to the *Cisco CallManager Administration Guide* and the *Cisco CallManager System Guide*.

## Understanding the Startup Process

When connecting to the VoIP network, the IP Conference Station goes through a standard startup process.

### Loading the Stored Station Image

The IP Conference Station has non-volatile Flash memory in which it stores firmware images and user-defined preferences. At startup, the IP Conference Station runs a bootstrap loader that loads a station image stored in Flash memory. Using this image, the station initializes its software and hardware.

### Configuring VLAN

If the IP Conference Station is connected to a Cisco Catalyst switch, the switch next informs the conference station of the voice virtual local area network (VLAN) defined on the switch. The IP Conference Station needs to know its VLAN membership before it can proceed with the Dynamic Host Configuration Protocol (DHCP) request for an IP address.

### Obtaining an IP Address

If the IP Conference Station is using DHCP to obtain an IP address, the station queries the DHCP server to obtain one.

### Accessing TFTP Server

In addition to assigning an IP address, the DHCP server also directs the IP Conference Station to a TFTP Server. You must configure option 150 on the DHCP server for the TFTP information to be passed from the server to the client.

If the IP Conference Station has a statically-defined IP address, you must configure the alternate TFTP server locally on the IP Conference Station, and the IP Conference Station then goes to that alternate TFTP server directly.

### Requesting the Configuration File

The TFTP server has configuration files (.cnf file format) for telephony devices, which define parameters for connecting to Cisco CallManager.

If you have enabled auto-registration in Cisco CallManager, the IP Conference Stations access a default configuration file (SEPdefault.cnf.xml) from the TFTP server. If you have manually entered the IP Conference Stations into the Cisco CallManager database, the station accesses an .xml file corresponding to its device name.

### Contacting Cisco CallManager

The configuration file defines how the IP Conference Station communicates with Cisco CallManager. After obtaining the file from the TFTP server, the station next attempts to make a TCP connection to the highest priority Cisco CallManager on the list.

## Understanding the Requirements for Installing and Setting Up the Cisco IP Conference Station 7935

To install and configure the IP Conference Station, you must configure some network settings, set up Cisco CallManager, and make changes locally on the IP Conference Station.

Refer to the following table for information on these procedures.

Task	Purpose	For More Information
Configure routers, gateways, and switches to handle voice communication	Sets up the IP telephony network.	See the documentation included with these devices.
Configure Cisco CallManager	Supports call processing and handling in the network.	See the Cisco CallManager documentation or online help in the Cisco CallManager application.
Decide whether to auto-register IP Conference Stations or add to the Cisco CallManager database manually	Determines how the IP Conference Station is added to the Cisco CallManager database and how a directory number is assigned.	<ul style="list-style-type: none"> <li>• See the <a href="#">“Preparing to Install”</a> section on page 2-1.</li> <li>• See the Cisco CallManager documentation or online help in the Cisco CallManager application.</li> </ul>
Connect the IP Conference Station to the network	Adds the IP Conference Station to the network.	See the <a href="#">“Installing and Connecting to the Network”</a> section on page 2-11.
Configure locally defined network settings on the IP Conference Station	Sets IP settings if not using DHCP in the network and assigns a TFTP server.	See the <a href="#">“Configuring Startup Network Settings”</a> section on page 2-14 and the <a href="#">“Accessing Network Configuration Settings”</a> section on page 3-5.





# Installation of the Cisco IP Conference Station 7935

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For each IP Conference Station that you install in your network, you must first make some critical decisions about how to configure the station in your network. You can then safely install the IP Conference Station and verify its operation.

Refer to the appropriate topics in this chapter to understand how to install and configure the IP Conference Station.

- [Preparing to Install, page 2-1](#)
- [Installing the Cisco IP Conference Station 7935, page 2-6](#)
- [Introducing the Cisco IP Conference Station 7935, page 2-14](#)

## Preparing to Install

Before you begin installing the IP Conference Station, you must configure Cisco CallManager for the conference stations and make decisions about how you want the stations to be added to the Cisco CallManager database. Because Cisco CallManager handles the call processing on the network, this is a critical step. You can choose to have the stations auto-register themselves with the database, or you can add the stations manually.

## Setting the Default Device Load

To set the default device load for the IP Conference Station in Cisco CallManager, perform these steps.

- 
- Step 1** Copy the IP Conference Station load to C:\Program Files\Cisco\TFTPPath on the Cisco CallManager server.
  - Step 2** Start Cisco CallManager Administration.
  - Step 3** Choose **System > Device Defaults**.
  - Step 4** In the Device Defaults Configuration window, scroll down to the Cisco 7935 Device Type.
  - Step 5** Set the Load Information to the load in TFTPPath.
  - Step 6** Scroll back to the top of the page and click **Update**.
- 

## Adding a New Device

To add the IP Conference Station as a new device in Cisco CallManager, perform these steps.

- 
- Step 1** Choose **Device > Add a New Device**.  
The Add a New Device page displays.
  - Step 2** Choose **Phone** from the Device Type drop-down list box, and click **Next**.  
The Add a New Phone page displays.
  - Step 3** Choose the the **Cisco 7935** phone type and click **Next**. (Once you select a phone type, you cannot modify it.)  
The Phone Configuration page displays.
  - Step 4** Enter the required fields as described in the following table.

Field	Description
MAC Address	<p>Enter the Media Access Control (MAC) address that identifies Cisco IP Conference Station 7935. The value must be 12 hexadecimal characters.</p> <p>The MAC address is located on the bottom of the IP Conference Station, or you may already have a list of the MAC addresses of the IP Conference Stations you are installing.</p>
Device Pool	<p>Choose the device pool to which you want this IP Conference Station assigned. The device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.</p> <p>The value you choose overrides the default value for this type of device.</p>
Phone Button Template	<p>Choose the appropriate phone button template. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button.</p>

- Step 5** At the top of the page, click **Insert**.
- Step 6** Add a directory number to this IP Conference Station.
- If you need instructions, refer to the “Directory Number Configuration Settings” topic in the Cisco CallManager Administration online help.
- Step 7** Reset the IP Conference Station to apply the new settings.

## Using Auto-Registration

Use auto-registration to automatically add an IP Conference Station to the network and automatically assign a directory number to it. During auto-registration, the directory number assigned is the next one available in sequential order within the device pool assigned to this conference station type in Cisco CallManager.

If you enable auto-registration in Cisco CallManager, after you connect the IP Conference Station to the network, the station begins the automatic startup process to obtain a directory number.

You can also use auto-registration to quickly register all stations with the Cisco CallManager database. You can then modify any settings, such as the directory numbers, from Cisco CallManager.

The following procedure provides an overview of the steps you must perform in Cisco CallManager. Refer to the Cisco CallManager Administration documentation or online help in the Cisco CallManager Administration application for additional information.

- 
- Step 1** Start Cisco CallManager Administration.
  - Step 2** Enable auto-registration in Cisco CallManager by selecting **System > Cisco CallManager**.
  - Step 3** From the list of Cisco CallManagers, select the Cisco CallManager where you want to check auto-registration.
  - Step 4** Verify that the “Auto-registration Disabled on this Cisco CallManager” setting is *not* selected.
  - Step 5** Install the station by following the instructions in the [“Installing the Cisco IP Conference Station 7935”](#) section on page 2-6.
  - Step 6** To modify settings, return to Cisco CallManager Administration and select **Device > Phone**.

Enter search criteria for the new IP Conference Station and click **Find**. You should see the MAC address for the new IP Conference Station.

---

## Adding IP Conference Stations Manually

If you want to assign specific directory numbers to specific IP Conference Stations without using auto-registration, you must manually add each station to the Cisco CallManager database.

If you are not using Dynamic Host Configuration Protocol (DHCP) in your network, you must also configure the IP settings and Trivial File Transfer Protocol (TFTP) server locally on each station.



Alternatively, you might use DHCP, but want to manually set the TFTP server. In this case, allow the station to start up, using DHCP, and then re-assign the TFTP server.

## Using DHCP

If you are using DHCP in your network, but you are not using auto-registration, follow these steps to manually add the IP Conference Station to the Cisco CallManager database.

The following procedure provides an overview of the steps you must perform in Cisco CallManager. Refer to the Cisco CallManager Administration documentation or online help in the Cisco CallManager Administration application for additional information.

- 
- Step 1** Start Cisco CallManager Administration.
  - Step 2** Add an IP Conference Station to Cisco CallManager by selecting **Device > Add a New Device**.  
The Add a New Device page displays.
  - Step 3** Choose **Phone** from the Device Type drop-down list box, and click **Next**.  
The Add a New Phone page displays.
  - Step 4** Choose the the **Cisco 7935** phone type and click **Next**.  
The Phone Configuration page displays.
  - Step 5** Enter the required fields.
  - Step 6** Install the station by following the instructions in the [“Installing the Cisco IP Conference Station 7935”](#) section on page 2-6.
-

## Assigning Static IP Addresses

If you do not use DHCP in your network, you must assign static IP addresses to each station, and you must configure each station locally.

The following procedure provides an overview of the steps you must perform in Cisco CallManager. Refer to the Cisco CallManager Administration documentation or online help in the Cisco CallManager Administration application for additional information.

- 
- Step 1** Start Cisco CallManager Administration.
  - Step 2** Add a station to Cisco CallManager by selecting **Device > Add a New Device**.  
The Add a New Device page displays.
  - Step 3** Choose **Phone** from the Device Type drop-down list box, and click **Next**.  
The Add a New Phone page displays.
  - Step 4** Choose the the **Cisco 7935** phone type and click **Next**.  
The Phone Configuration page displays.
  - Step 5** Enter the required fields.
  - Step 6** Install the IP Conference Station by following the instructions in the [“Installing the Cisco IP Conference Station 7935”](#) section on page 2-6.
  - Step 7** Configure the IP settings by following the instructions in the [“Configuring IP Settings”](#) section on page 3-7.
  - Step 8** Configure the TFTP server by following the instructions in the [“Configuring TFTP Options”](#) section on page 3-11.
- 

## Installing the Cisco IP Conference Station 7935

Before installing an IP Conference Station, be sure to verify that your network meets the requirements that follow and that Cisco CallManager is properly configured. Most importantly, review the safety precautions in the [“Safety Notices”](#) section on page 2-9.

## Before You Begin

Before you begin the installation of the IP Conference Station, review the following:

- [“Package Contents” section on page 2-7](#)
- [“Network Requirements” section on page 2-8](#)
- [“Cisco CallManager Configuration” section on page 2-8](#)
- [“Safety Notices” section on page 2-9](#)

## Package Contents

Review the following list to be sure that you have received all of the necessary items to install the IP Conference Station.

- 1 Cisco IP Conference Station 7935 unit
- 1 6 ft. CAT 5 Cable
- 1 25 ft. CAT 5 Cable
- 1 Power Interface Module (PIM)
- 1 Power Supply Unit (a country-specific power cord must be ordered separately)
- 1 Documentation Roadmap
- 1 Quick Start Guide
- 1 Quick Reference Card
- 1 Regulatory Compliance and Safety Information Guide
- 1 Warranty Card

## Network Requirements

For the IP Conference Station to successfully operate as an IP conference station endpoint in your network, your network must meet the following requirements:

- Working VoIP Network
  - Voice over IP (VoIP) configured on your Cisco routers and gateways
  - Cisco CallManager installed in your network and configured to handle call processing
- IP network that supports DHCP or manual assignment of IP address, gateway, and subnet mask
- TFTP Server

## Cisco CallManager Configuration

The IP Conference Station requires Cisco CallManager to handle call processing. Refer to the Cisco CallManager documentation or online help in the Cisco CallManager Administration application to ensure that the Cisco CallManager is properly set up to manage the IP Conference Station and to properly route and process calls.

If you plan to use auto-registration, verify that it is enabled and properly configured in Cisco CallManager before connecting any IP Conference Station to the network. See the [“Using Auto-Registration” section on page 2-3](#) for details.

## Safety Notices

These are the safety considerations for using the IP Conference Station. Read these notices before you install or use the IP Conference Station. You can also refer to the *Regulatory Compliance and Safety Information for the Cisco IP Conference Station 7935* for international agency compliance, safety, and statutory information for the Cisco IP Conference Station 7935.



Warning

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**Read the installation instructions before you connect the system to its power source.**

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Warning

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**Only trained and qualified personnel should be allowed to install, replace, or service this equipment.**

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Warning

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**Ultimate disposal of this product should be handled according to all national laws and regulations.**

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Warning

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**Do not work on the system or connect or disconnect cables during periods of lightning activity.**

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Warning

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**To avoid electric shock, do not connect safety extra low voltage (SELV) circuits to telephone network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables.**

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Warning

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**This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15 A U.S. (240 VAC, 10 A international) is used on the phase conductors (all current-carrying conductors).**

---



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**Warning**

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**The device is designed to work with TN power systems.**

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**Warning**

---

**The plug-socket combination must be accessible at all times because it serves as the main disconnecting device.**

---



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**Caution**

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The Cisco IP Conference Station 7935 is inoperable during a power outage if it is not supported by a UPS (uninterruptible power supply) when using a local power supply unit. This affects your ability to reach 911.

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**Caution**

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Using a cell phone or mobile phone in close proximity to an IP Conference Station might cause interference.

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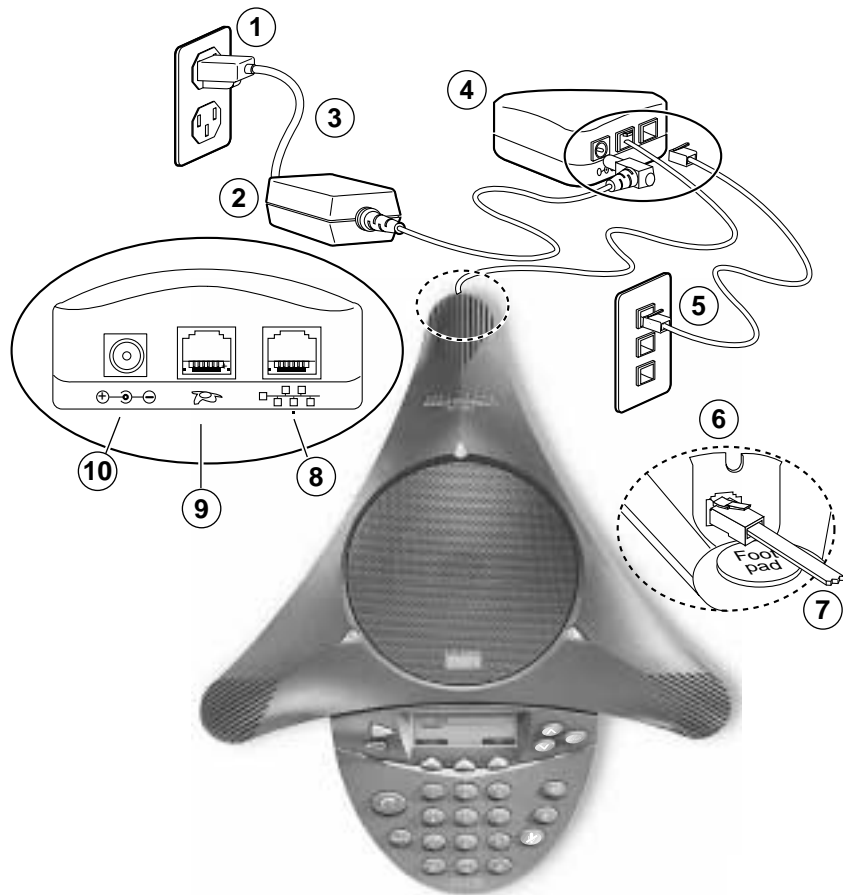
## Installing and Connecting to the Network

You must connect the IP Conference Station to the network and to a power source before using it. Refer to the following picture for graphical views of the installation procedures.



### Note

Daisy-chaining IP Conference Stations to other Cisco IP Phones is not supported and will not work.



48052

1	Power outlet in the wall	6	RJ-45 port on the bottom of the IP Conference Station
2	Power supply unit	7	Free end of the 25 ft. CAT 5 cable
3	Power supply unit power cord	8	LAN connection on PIM
4	PIM	9	25 ft. CAT 5 cable connection on PIM
5	LAN connection	10	AC adapter port on PIM for power supply unit

To install an IP Conference Station, perform the following steps:

- 
- Step 1** Place the IP Conference Station on a flat surface, for example, a conference room table or desktop.
- Step 2** Connect one end of the 6 ft. CAT 5 cable to your data network port and connect the other end to the *network* (LAN) port on the PIM.
- Step 3** Connect the free end of the 25 ft. CAT 5 cable to the *RJ-45* port on the bottom of the IP Conference Station. (The cable is pre-plugged into the PIM.)
- Step 4** Connect the power supply unit to the *AC adapter* port on the PIM, and plug the other end into a standard electrical power outlet in the wall.
- 



**Note**

If you do not correctly connect the cables, PIM, power supply, and the IP Conference Station unit, the IP Conference Station will not work. Use of non-Cisco certified components may not work and may void the IP Conference Station product warranty.

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## Verifying Startup Process

After the IP Conference Station has been connected to power for at least 15 seconds, it begins its startup process by cycling through these steps:

1. The following messages appear in the LCD screen display as the IP Conference Station starts up:
  - Cisco Systems, Inc.  
Polycom Technology  
Copyright 2001
  - Renewing/Obtaining IP Address  
Loading Application  
Configuring IP  
Press Menu to Reconfigure
  - Station IP (IP address)  
Contacting (IP address)
  - Opening: CM IP address
  - Registering



---

**Note** The startup process may take several minutes, and some of these messages may not appear due to the access speed of your network.

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2. After the IP Conference Station has successfully registered with a Cisco CallManager, the following information appears in the LCD screen display:
  - Date and Time
  - IP Address
  - Local number
  - The message “Press the Phone Key to get a dial tone”
  - Corp Dir and Ph Book softkeys

If the IP Conference Station successfully passes through these steps, it has started properly.

## Configuring Startup Network Settings

If you are not using DHCP in your network, you must configure the following network settings on the IP Conference Station after installing the station on the network:

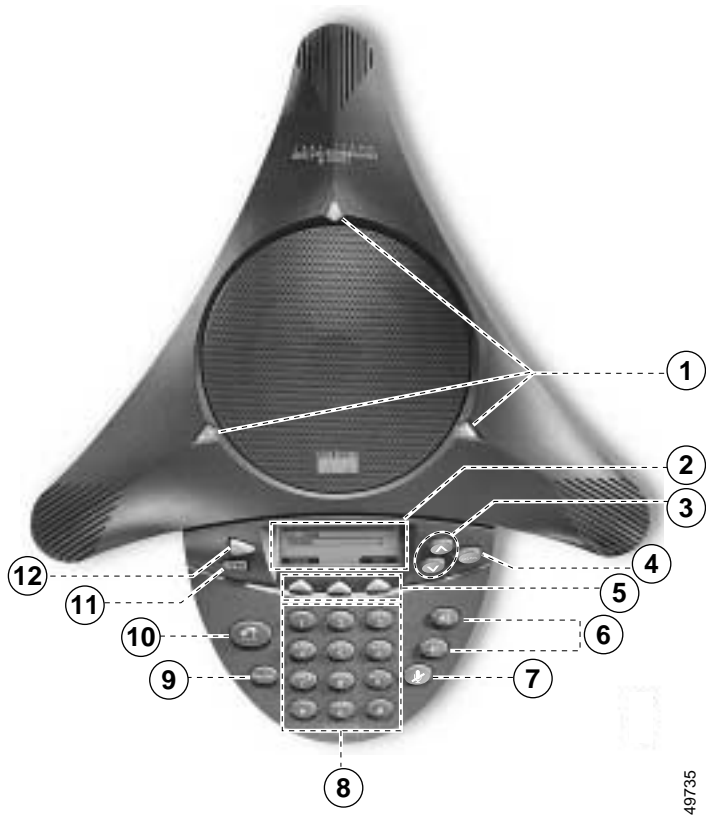
- IP address
- IP subnet mask
- Default gateway IP address
- TFTP server IP address



Collect the necessary information and follow the procedures described in [Chapter 3, “Configuration of the Cisco IP Conference Station 7935”](#).




## Introducing the Cisco IP Conference Station 7935




The IP Conference Station provides basic business audio conferencing features and functions, such as Call Hold, Call Transfer, Call Release, Mute, and Conference, over an IP network. It is designed to be used primarily on desktops and in small- to medium-sized conference rooms to facilitate conference calling. It replaces a traditional analog conferencing unit on an IP telephony network. The IP Conference Station supports G.711 and G.729a audio compression.

The IP Conference Station is shown in the following picture.



1	LEDs	<p>Provide call status indicators.</p> <p><b>Call State Off:</b> LEDs All off</p> <p><b>Dial Tone On:</b> LEDs All Green</p> <p><b>Dialing:</b> LEDs All Green</p> <p><b>Connected:</b> LEDs All Green</p> <p><b>Mute:</b> LEDs All Red and blinking</p> <p><b>Hold:</b> LEDs All Red and on</p> <p><b>Incoming Call:</b> LEDs All Green and blink with ring</p> <p><b>Ringing:</b> LEDs All Green and blink with ring</p>
2	LCD screen	<p>Provides a status indicator that reads “Press the Phone Key to get a dial tone” when the IP Conference Station is online and fully operational. In the main display, the LCD screen shows the date and time, IP address, and local phone number assigned to the IP Conference Station. Also displays the IP Conference Station system status, including configuration and all administrative settings.</p>
3	<p>Scroll buttons</p> 	<p>Allow you to scroll through the menus or through an open list in the LCD screen.</p>
4	<p>Select button</p> 	<p>Selects a menu option or list item that is highlighted.</p>

5	Softkeys	<p><b>Answer:</b> picks up the current call</p> <p><b>Conf:</b> adds a party to a conference call</p> <p><b>Corp Dir:</b> lets you search a corporate directory for a number to call</p> <p><b>End Call:</b> ends a call and returns to the resting display or to the active call list</p> <p><b>Hold:</b> puts the active call on hold</p> <p><b>GPickup:</b> lets you pick up a call within your group or another group</p> <p><b>Pickup:</b> lets you pick up a call within your group</p> <p><b>Ph Book:</b> opens the Phone Book</p> <p><b>New Call:</b> lets you dial a new number</p> <p><b>Resume:</b> returns to the selected held call</p> <p><b>Transfer:</b> transfers the current call</p>
6	Volume buttons 	Increase or decrease the volume of the call, speaker, ringer, or dial tone, depending on which sound is currently active.
7	Mute button 	Turns call muting on or off.
8	Dialing pad	Allows you to dial phone numbers, add or edit Phone Book entries, and enter other input depending on the menu selected.
9	Redial button 	Automatically redials the last dialed number.

10	<p>Phone button</p> 	<p>Allows you to get a dial tone, answer an incoming call, and hang up a call.</p>
11	<p>Exit button</p> 	<p>Returns to the main LCD screen display from a menu, a list, or the Phone Book.</p>
12	<p>Menu button</p> 	<p>Opens and closes the main menu on the IP Conference Station. The main menu includes the following selections:</p> <p><b>Call Functions:</b> opens the call function options, including Meet Me, Park, Pick-up, Group Pick-up, and Transfer.</p> <p><b>Phone Book:</b> opens the Phone Book.</p> <p><b>Settings:</b> opens the Settings options, including Contrast, Language, Ringer, Time Format, and Date Format.</p> <p><b>Admin Setup:</b> opens Admin Setup.</p>



# Configuration of the Cisco IP Conference Station 7935

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The Cisco IP Conference Station 7935 is a network device and includes configurable network settings. You must configure many of these settings before the IP Conference Station is accessible and usable for your users.

Refer to the appropriate topics in this chapter to understand how to configure the IP Conference Station.

- [Verifying System Settings, page 3-2](#)
- [Accessing Network Configuration Settings, page 3-5](#)
- [Verifying Firmware Version Information, page 3-12](#)
- [Resetting the IP Conference Station, page 3-13](#)
- [Erasing the Local Configuration, page 3-13](#)
- [Upgrading the Application Load, page 3-18](#)
- [Changing the Ethernet Port Configuration, page 3-20](#)
- [Changing the Administrator Password, page 3-21](#)
- [Configuring a Corporate Directory, page 3-21](#)
- [Configuring a Local Directory, page 3-24](#)
- [Additional Features, page 3-26](#)
- [Web Interface, page 3-27](#)

# Verifying System Settings

The IP Conference Station contains detailed information about its current system settings. This information is useful when troubleshooting or when making changes to any system settings.



## Timesaver

You can also use the Cisco IP Conference Station 7935 Web Interface to view system settings. See the [“Web Interface” section on page 3-27](#).

Follow these steps to verify system settings:

- Step 1** Press the **Menu** button.
- Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
- Step 3** Press the **Select** button.
- Step 4** Enter the administrator password. (The default administrator password is \*\*#.)
- Step 5** Press the **Enter** softkey.
- Step 6** Press the **Up** or **Down** scroll button to select System Info and then press the **Select** button.
- Step 7** Press the **Up** or **Down** scroll button to scroll through the system information described in the following table.

System Setting	Description	Usage Notes
Language	Displays the language selection for the IP Conference Station.	English is the default language.
Local number	This is the local phone number assigned to the IP Conference Station.	Conference calls are initiated using this number.
DHCP	Indicates whether DHCP is enabled or disabled.	DHCP is enabled by default. You can disable DHCP through the Admin Setup > Network Setup.



System Setting	Description	Usage Notes
MAC Address	Indicates the unique Media Access Control (MAC) address of the IP Conference Station.	Cannot configure.
IP Address	This is the IP address assigned to the IP Conference Station.	The IP address identifies the IP Conference Station on the network.  Set automatically if DHCP is enabled.
IP Mask	Indicates the subnet mask used by the IP Conference Station.	Set automatically if DHCP is enabled.
Router 1	Identifies the default gateway used by the IP Conference Station.	Set automatically if DHCP is enabled.
Host Name	Identifies the unique host name assigned to the IP Conference Station.	Assigned through Cisco CallManager.
Domain	Identifies the domain in which the IP Conference Station resides.	May be assigned through the DHCP server.
DNS Address	Identifies the DNS server address for the IP Conference Station.	May be assigned through the DHCP server.
Op VLAN ID	Indicates the Virtual Local Area Network (VLAN) in which the IP Conference Station is a member.	VLAN ID assigned to the IP Conference Station via CDP.
Adm VLAN ID	Indicates the VLAN in which the IP Conference Station is a member.	VLAN ID assigned to the IP Conference Station by the system administrator. See the <a href="#">“Configuring VLAN Options”</a> section on page 3-10.  <b>Note</b> This setting is ignored, if the VLAN ID is assigned via CDP.

## Verifying System Settings

System Setting	Description	Usage Notes
CallManager 1 Address, CallManager 2 Address, CallManager 3 Address	Identifies the Cisco CallManager systems that are available for processing calls from this IP Conference Station.	Set automatically from Cisco CallManager.
Main TFTP	Indicates Trivial File Transfer Protocol (TFTP) Server address used by the IP Conference Station to obtain configuration files and the firmware.	Set automatically if DHCP is enabled.
Alt TFTP Addr	Indicates an Alternate TFTP Server address used by the IP Conference Station to obtain configuration files and the firmware.	Must be manually set.
Alt TFTP	Indicates whether or not Alt TFTP Server is enabled.	Must be manually set.
Boot Load ID	Indicates the current load ID of the firmware.	Set automatically by the IP Conference Station.
App Load ID	Indicates the current load ID of the software.	Set automatically by the IP Conference Station.
HW (hardware) Revision	Indicates the hardware revision level.	Set automatically by the IP Conference Station.
SW (software) Version	Indicates the firmware version loaded on the IP Conference Station.	Set automatically by the IP Conference Station.
Dial Tone	Indicates the dial tone setting on the IP Conference Station.	The default is Tone 1.
Ringer	Indicates the ringer sound setting on the IP Conference Station.	There are five ringer sounds. You can also shut off the ringer sound.
Time	Indicates the time setting on the IP Conference Station.	There are two time format settings.

System Setting	Description	Usage Notes
Date	Indicates the date setting on the IP Conference Station.	There are two date format settings.
Codec	Indicates the compression setting on the IP Conference Station.	Set automatically by the IP Conference Station.
Net Config	Indicates the Ethernet port configuration on the IP Conference Station.	May be set to full (FDX) or half (HDX) duplex.
Net Speed	Indicates the Ethernet port speed configuration on the IP Conference Station.	May be set to 10 Mbps, 100 Mbps, or Auto.
HTTP Port	Indicates the HTTP port through which users access the Web interface.	The default is 80. May be set to any number. If you change the default value, users will have to use this number suffixed to the IP address of the IP Conference Station when they access the Web interface.

## Accessing Network Configuration Settings

You must log in through Admin Setup in order to access the IP Conference Station network settings.

Follow these steps to access the network settings:

- 
- Step 1** Press the **Menu** button.
  - Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
  - Step 3** Press the **Select** button.
  - Step 4** Enter the administrator password. (The default administrator password is \*\*#.)

- Step 5** Press the **Enter** softkey.
- Step 6** Press the **Up** or **Down** scroll button to select Network Setup, and then press the **Select** button.
- 

You can now access and change network settings.



#### Timesaver

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You can also use the Cisco IP Conference Station 7935 Web Interface to change network options. See the [“Web Interface” section on page 3-27](#).

---

## Changing DHCP Settings

DHCP automatically assigns IP addresses to devices when you connect them to the network. Follow the appropriate procedures in this section to enable or disable DHCP.

### Enabling DHCP

DHCP is enabled by default.

Follow these steps to reset DHCP if it becomes disabled.

---

- Step 1** Press the **Up** or **Down** scroll button to select DHCP.
- If DHCP is disabled, the option displays as:
- ```
DHCP Disabled
```
- Step 2** Press the **Enable** softkey to enable DHCP.
- Step 3** Press the **Save** softkey.
- Step 4** Press the **Yes** softkey to save your changes, or press **No** to cancel.
-

## Disabling DHCP

If you are not using DHCP in your network, you can disable DHCP.

Follow these steps to disable DHCP before you manually assign an IP address to an IP Conference Station.

- 
- Step 1** Press the **Up** or **Down** scroll button to select DHCP.
- If DHCP is enabled, the option displays as:
- ```
DHCP Enabled
```
- Step 2** Press the **Disable** softkey to disable DHCP.
- Step 3** Press the **Save** softkey.
- Step 4** Press the **Yes** softkey to save your changes, or press **No** to cancel.
- 

## Configuring IP Settings

Use these guidelines to manually configure the IP Settings.

- You can use 0.0.0.0 for the subnet mask only if the default gateway is also 0.0.0.0.
- Ensure the TFTP server has an IP address.
- Ensure the default gateway IP address is on the same subnet as the host IP address.

## Assigning an IP Address



### Note

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You can only manually assign an IP address if DHCP is disabled.

---

The IP address is the unique logical address identifying each host computer, or node, on a TCP/IP network. An IP address is a 32-bit number expressed as four decimal numbers from 0 to 255 separated by periods.

Each IP address has two parts: the network ID and the host ID. The network ID identifies all hosts that are on the same physical network. The host ID identifies a specific host on a network.

Follow these steps to assign an IP address.

- 
- Step 1** Press the **Up** or **Down** scroll button to select IP address.  
The current IP address is displayed.
- Step 2** Use the < softkey to delete the current IP address.
- Step 3** Use the dialing pad to enter a new IP address.  
Use the . softkey to enter periods (.) and the < softkey to correct any mistakes.
- Step 4** Press the **Save** softkey to save your changes.
- 

## Assigning a Subnet Mask



---

**Note** You can only manually assign a subnet mask if DHCP is disabled.

---

The subnet mask is used to partition the IP address into a network and a host identifier. The subnet mask is used to mask a portion of the IP address so that TCP/IP can distinguish the network ID from the host ID.

Follow these steps to assign a subnet mask.

- 
- Step 1** Press the **Up** or **Down** scroll button to select IP Mask.
- Step 2** Use the < softkey to delete the current subnet mask.
- Step 3** Use the dialing pad to enter a new subnet mask.  
Use the . softkey to enter periods (.) and the < softkey to correct any mistakes.
- Step 4** Press the **Save** softkey to save your changes.
-

## Assigning a Default Gateway



---

**Note** You can only manually assign a default gateway if DHCP is disabled.

---

When you manually assign an IP address to an IP Conference Station, you can assign the default gateway to be used.

Follow these steps to assign a default gateway.

- 
- Step 1** Press the **Up** or **Down** scroll button to select Router 1.
  - Step 2** Use the < softkey to delete the current IP address.
  - Step 3** Use the dialing pad to enter a new IP address.  
Use the . softkey to enter periods (.) and the < softkey to correct any mistakes.
  - Step 4** Press the **Save** softkey to save your changes.
- 

## Assigning a Domain Name

The domain name is the name of the Domain Name System (DNS) domain in which the IP Conference Station is located. DNS is a hierarchical name for TCP/IP host computers that provides standard naming conventions.

Follow these steps to assign a domain name.

- 
- Step 1** Press the **Up** or **Down** scroll button to select Domain.
  - Step 2** Use the dialing pad to enter a new domain name.  
To enter letters, use the numbers associated with a particular letter. For example, the **2** key has the letters ABC. For a lower case “a,” press **2** twice. Press the **2** key repeatedly to scroll through the available letters and numbers. Pause after the selected letter appears on the display.

Press the < softkey to correct any mistakes. Press the **.sp- \_** softkey to use a period (.), space, dash (-), or underscore (\_) character.

- Step 3** Press the **Save** softkey to save your changes.
- 

## Assigning DNS Servers

DNS allows users to specify remote computers by host names, which are character strings with some mnemonic value, rather than IP addresses, which are strings of numbers.

The IP Conference Station uses DNS to resolve the host name of TFTP servers, Cisco CallManager systems, and web server host names when the system is configured to use names rather than IP addresses.

Follow these steps to assign a DNS server.

---

- Step 1** Press the **Up** or **Down** scroll button to select DNS.
- Step 2** Use the dialing pad to enter a new DNS server address.  
Use the **.** softkey to enter periods (.). Use the < softkey to correct any mistakes.
- Step 3** Press the **Save** softkey to save your changes.
- 

## Configuring VLAN Options

You can change the administrative VLAN used by the IP Conference Station. However, if you have an auxiliary VLAN assigned on the Cisco Catalyst switch, that setting overrides any changes made on the IP Conference Station.



Follow these steps to configure the VLAN ID on the IP Conference Station.

- 
- Step 1** Press the **Up** or **Down** scroll button to select Adm VLAN.
  - Step 2** Press the < softkey to erase the current VLAN ID.
  - Step 3** Use the dialing pad to enter a new VLAN ID (0 - 4095).
  - Step 4** Press the **Save** softkey to save your changes.
- 

## Configuring TFTP Options

If you do not use DHCP to direct the IP Conference Station to a TFTP Server, you must manually assign one. To accomplish this, an alternative TFTP Server must be assigned instead of the one assigned by DHCP.

### Assigning a TFTP Server

For the IP Conference Station, the Main TFTP Server cannot be changed. If you want to assign an alternate TFTP Server, you must manually assign it. To assign an alternative TFTP Server, see the [“Using an Alternate TFTP Server”](#) section on page 3-11.

### Using an Alternate TFTP Server

If you want to override the TFTP address that the IP Conference Station received through DHCP, you must manually enable an alternate TFTP Server.

Follow these steps to enable an alternate TFTP Server.

- 
- Step 1** Press the **Up** or **Down** scroll button to select Alt TFTP.  
If the IP Conference Station is not using an alternate TFTP Server, the option displays as:  
`Alt TFTP NO.`
  - Step 2** Press the **Yes** softkey.  
The Alternate TFTP option reads `Yes.`

- Step 3** Press the **Save** softkey to save your change.
- Step 4** Press the **Down** scroll button to select Alt TFTP Addr.  
Use the dialing pad to enter a new Alternate TFTP Server address.  
Use the . softkey to enter periods (.), and the < softkey to correct any mistakes.
- Step 5** Press the **Save** softkey to save your changes.
- 

## Configuring the HTTP Port

For increased security, you might want to change the HTTP Port number. Follow these steps to set the HTTP Port.

- Step 1** Press the **Up** or **Down** scroll button to select HTTP Port Change, and then press the **Select** button.
- Step 2** In the HTTP Port field, enter a new HTTP port number.



**Note** The default value is 80. You can enter any number. Users will have to use this number suffixed to the IP address of the IP Conference Station when they access the Web interface.

---

- Step 3** Press the **Save** softkey to save your changes.
- 

## Verifying Firmware Version Information

You can obtain information about the firmware version installed on the IP Conference Station.

Follow these steps to verify the firmware version on an IP Conference Station.

- Step 1** Press the **Menu** button.
- Step 2** Press the **Up** or **Down** scroll button to select System Information.

- Step 3** Press the **Select** button.
- Step 4** Press the **Up** or **Down** scroll button to select SW Version.  
The firmware version number is displayed.
- 

## Resetting the IP Conference Station

If you reset the IP Conference Station, any changes made that have not been saved are lost and set back to the previous settings.

Follow this step to reset the IP Conference Station.

- Press \* \* \* # \* \* \* on the dialing pad.

The message `Restarting` appears in the LCD screen.

The IP Conference Station re-starts and goes through the startup process.

## Erasing the Local Configuration

If you want to erase all locally stored configuration options, you can do so by restoring all settings to their factory default values, including enabling DHCP.



### Caution

Erasing the local configuration removes all user-defined changes made locally on the IP Conference Station, including the Phone Book. If you choose this option, these settings are set back to their default values.

---

Follow this procedure to restore the default settings.

- 
- Step 1** Press the **Menu** button.
  - Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
  - Step 3** Press the **Select** button.
  - Step 4** Enter the administrator password (the default administrator password is **\*\*#**), and press the **Enter** softkey.
  - Step 5** Press the **Down** scroll button to select Restore Defaults.
  - Step 6** Press the **Select** button.

The following message appears:

```
All settings and data will be lost. Including Phone Book Entries.
Press Yes to Confirm or No to Exit.
```

- Step 7** Press the **Yes** softkey to confirm the restore, or press the **No** softkey to exit.

A message appears confirming that the settings have been restored to the defaults and the IP Conference Station will restart.




---

**Note** You must hang up all calls before you can restart the IP Conference Station.

---

## Default Settings

The IP Conference Station default settings are provided in the following table.

Setting (Default Value)	Valid Options	Administrator-controlled	User-controlled	Notes
Administrator password (**#)	-	Y	N	
End-user password (7935)	-	Y	N	

Setting (Default Value)	Valid Options	Administrator-controlled	User-controlled	Notes
CM1 address (no default)	-	N	N	Set by Cisco CallManager (via the .cnf file)
CM2 address (no default)	-	N	N	Set by Cisco CallManager (via the .cnf file)
CM3 address (no default)	-	N	N	Set by Cisco CallManager (via the .cnf file)
Alternate TFTP Server (no default)	-	Y	N	
Boot load file (PC0503010913)	-	N	N	Set by the IP Conference Station
Compression (no default)	G.711; G.729a	N	N	Set by Cisco CallManager
Date (no default)	-	N	N	Set by Cisco CallManager
Date format (MM/DD/YY)	MM/DD/YY DD/MM/YY	Y	Y	
DHCP (Enable)	Enable/Disable	Y	N	
Dial tone	Tone 1	Y	Y	In the current release, Tone 1 is the only choice
Ethernet port configuration (Auto)	Auto 100-FCS 100-HDX 10-FDX 10-HDX	Y	N	

## Erasing the Local Configuration

Setting (Default Value)	Valid Options	Administrator-controlled	User-controlled	Notes
CM1 address (no default)	-	N	N	Set by Cisco CallManager (via the .cnf file)
CM2 address (no default)	-	N	N	Set by Cisco CallManager (via the .cnf file)
CM3 address (no default)	-	N	N	Set by Cisco CallManager (via the .cnf file)
Alternate TFTP Server (no default)	-	Y	N	
Boot load file (PC0503010913)	-	N	N	Set by the IP Conference Station
Compression (no default)	G.711; G.729a	N	N	Set by Cisco CallManager
Date (no default)	-	N	N	Set by Cisco CallManager
Date format (MM/DD/YY)	MM/DD/YY DD/MM/YY	Y	Y	
DHCP (Enable)	Enable/Disable	Y	N	
Dial tone	Tone 1	Y	Y	In the current release, Tone 1 is the only choice
Ethernet port configuration (Auto)	Auto 100-FCS 100-HDX 10-FDX 10-HDX	Y	N	

Setting (Default Value)	Valid Options	Administrator-controlled	User-controlled	Notes
HTTP Port (80)	Any number	Y	N	
IP Address (no default)	-	Y	N	
IP Mask (no default)	-	Y	N	
Language (English)	English	Y	Y	In the current release, English is the only choice
LCD screen contrast (level 8)	Levels 1 - 24	Y	Y	
Local number (no default)	-	N	N	Set by Cisco CallManager
Main TFTP Server address (no default)	-	N	N	Set from DHCP server
Phone Book (no default)	20 entries	Y	Y	
Ringer (Pro)	Pro, Biz, Euro, Chirp, Bell, Ringer Off	Y	Y	
Router1 (no default)	-	Y	N	
SW download file (P005?301)	-	Y	N	Set by the IP Conference Station
Time of day (no default)	-	N	N	Set by Cisco CallManager
Time of day format (12-hour)	12-hour 24-hour	Y	Y	
Use Alt TFTP Server (No)	Yes/No	Y	N	
Volume (level 21)	Levels 0- 29	Y	Y	

# Upgrading the Application Load

You can upgrade the application load on the IP Conference Station only from Cisco CallManager.

Follow this procedure to upgrade the application load.

- 
- Step 1** From the Cisco.com Web site, download the new application load (for example PC00503010100).
  - Step 2** Copy the new load to C:\Program Files\Cisco\TFTPPath.
  - Step 3** Start Cisco CallManager Administration.
  - Step 4** Choose **System > Device Defaults**.
  - Step 5** In the Device Defaults Configuration window, scroll down to the Cisco 7935 Device Type.
  - Step 6** Change the Load Information to the new load that you downloaded.
  - Step 7** Click **Update**.
  - Step 8** Reset all of the IP Conference Stations so that they receive the new load.
- 

When the application load is being updated, the following messages appear on the IP Conference Station LCD screen.



**Message Text for Successful Upgrade**

Rebooting

(when reset through Cisco CallManager), *or*

```

Restarting
(when reset by pressing **#**)
Cisco Systems, Inc.
Polycom Technology
Copyright 2001
Obtaining IP address
Loading Application
Renewing IP address
Loading Application
Configuring IP
Press Menu to Reconfigure
Station IP: (IP address)
Contacting: (TFTP Server)
Upgrading...(percentage) done
DO NOT POWER OFF
Upgrading 100% done
Rebooting
Cisco Systems, Inc.
Polycom Technology
Copyright 2001
Obtaining IP address
Loading Application
Renewing IP address
Loading Application
Configuring IP
Press Menu to Reconfigure
Station IP: (IP address)
Contacting: (TFTP Server)
Opening: CM IP address; Registering

```

**Message Text for Unsuccessful Upgrade**

Rebooting

(when reset through Cisco CallManager), *or*

```

Restarting
(when reset by pressing **#**)
Cisco Systems, Inc.
Polycom Technology
Copyright 2001
Obtaining IP address
Loading Application
Renewing IP address
Loading Application
Configuring IP
Press Menu to Reconfigure
Station IP: (IP address)
Contacting: (TFTP Server)
Upgrading...(percentage) done
DO NOT POWER OFF
Upgrading 0% done
File not found in TFTP Server
USING EXISTING VERSION
or
Error in upgrade file format
USING EXISTING VERSION
or
Bad Checksum in upgrade file
USING EXISTING VERSION

```

# Changing the Ethernet Port Configuration

Follow this procedure to change Ethernet port configuration options.



## Timesaver

You can also use the Cisco IP Conference Station 7935 Web Interface to change options. See the [“Web Interface” section on page 3-27](#).

- 
- Step 1** Press the **Menu** button.
  - Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
  - Step 3** Press the **Select** button.
  - Step 4** Enter the administrator password. (The default administrator password is \*\*#.)
  - Step 5** Press the **Enter** softkey.
  - Step 6** Press the **Up** or **Down** scroll button to select Ethernet Port Config and the press the **Select** button.
  - Step 7** To change the speed setting:
    - a. Select one of the following:
      - AUTO
      - 10 MBPS-FullDuplex
      - 10 MBPS-HalfDuplex
      - 100 MBPS-FullDuplex
      - 100 MBPS-HalfDuplex
    - b. Press the **Change** softkey to save your selection.
  - Step 8** Press the **Menu** button to return to the Admin setup menu options.

The IP Conference Station automatically restarts.
-

# Changing the Administrator Password

Follow this procedure to change the administrator password.



## Timesaver

You can also use the Cisco IP Conference Station 7935 Web Interface to change options. See the “[Web Interface](#)” section on page 3-27.

- 
- Step 1** Press the **Menu** button.
  - Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
  - Step 3** Press the **Select** button.
  - Step 4** Enter the administrator password. (The default administrator password is \*\*#.)
  - Step 5** Press the **Enter** softkey.
  - Step 6** Press the **Up** or **Down** scroll button to select Change Passcode and then press the **Select** button.
    - a. Use the dialing pad to enter the new password in the Passcode field.  
Use the < softkey to correct any mistakes.
    - b. Re-enter the new password in the Confirm field.
  - Step 7** Press the **Save** softkey to save the new password, or press the **Cancel** softkey to exit without saving.
- 

## Configuring a Corporate Directory

You can access a directory of employee names and phone numbers on the IP Conference Station. Before users can access the directory, you must configure the directory on Cisco CallManager.

## Configuring Cisco CallManager

To use the corporate directory, you must have users entered into a Lightweight Directory Access Protocol (LDAP) directory configured with Cisco CallManager. Follow this procedure to configure the directory.

- 
- Step 1** Open Cisco CallManager
- Step 2** Select **User > Global Directory**.  
Search for users in the system.
- Step 3** To add a new user, click **Add a New User**.  
Add any desired users.

Refer to the online help in the Cisco CallManager Administration application for details, or refer to the *Cisco CallManager Administration Guide* and the *Cisco CallManager System Guide*.

---

## Using the Corporate Directory

After the corporate directory is configured in Cisco CallManager, you can use this feature on the IP Conference Station.

### Searching for Corporate Users

You can search the corporate directory on the IP Conference Station by name and by phone number.

## Search by Name

Follow this procedure to search the corporate directory by name.

- 
- Step 1** Press the **Corp Dir** softkey.
- The search screen displays. You can search by First Name or Last Name, or both.
- Step 2** Using the keypad, enter the search criteria, namely First Name and Last Name. Press the **Up** or **Down** scroll button to select a field.
- When searching by name, you can enter one or more characters to broaden or narrow your search.
- When entering letters, select the appropriate number key for the letter you want, and press that key the equivalent number of times for the correct letter. For example, to enter a B, press the **2** key two times, and to enter a C, press the **2** key three times.
- Use the **<** softkey to go backward while entering search data.
- To cancel a search, press the **Cancel** softkey.
- Step 3** Press the **Search** softkey to start the search.
- The message “Searching...” flashes on the LCD screen display.
- Step 4** After the search results display, use the **Up** or **Down** scroll button to select an entry.
- If the search results include more than 32 entries, you can press the **more >>** softkey followed by the **Next** softkey to display the next group of entries.
- To go back to the previous group entries, press the **more >>** softkey followed by the **Back** softkey.
- To return to the Search screen, press the **more >>** softkey followed by the **NewSearch** softkey.
- Step 5** Press the **Dial** softkey to call the number. To edit the number before calling, press the **EditDial** softkey.
- Step 6** To exit the directory, press the **Exit** softkey or the **Exit** button.
-

## Search by Phone Number

Follow this procedure to search the corporate directory by phone number.

- 
- Step 1** Press the **Corp Dir** softkey.  
The search screen displays.
- Step 2** Press the **Up** or **Down** scroll button to select the Number field.  
Using the keypad, enter the number. When searching by number, you can enter one or more digits to broaden or narrow your search.  
Use the < softkey to go backward while entering search data.  
To cancel a search, press the **Cancel** softkey.
- Step 3** Press the **Search** softkey to start the search.  
The message “Searching...” flashes on the LCD screen display.
- Step 4** After the search results display, use the **Up** or **Down** scroll button to select an entry.  
If the search results include more than 32 entries, you can press the **more >>** softkey followed by the **Next** softkey to display the next group of entries.  
To go back to the previous group entries, press the **more >>** softkey followed by the **Back** softkey.  
To return to the Search screen, press the **more >>** softkey followed by the **NewSearch** softkey.
- Step 5** Press the **Dial** softkey to call the number. To edit the number before calling, press the **EditDial** softkey.
- Step 6** To exit the directory, press the **Exit** softkey or the **Exit** button.
- 

## Configuring a Local Directory

The Phone Book is a convenient way to store frequently dialed conference call numbers.

**Timesaver**

You can also use the Cisco IP Conference Station 7935 Web Interface to access the Phone Book. See the [“Web Interface” section on page 3-27](#).

## Using the Phone Book

You can use the phone book as a directory for your frequently called conference numbers.

### Opening the Phone Book

- Press the **Ph Book** softkey.

### Adding an Entry

- 
- Step 1** To add an entry in the phone book, press the **New Entry** softkey.
- Step 2** Using the Dialing pad, enter the last name, first name, and phone number for the new entry. Press the **Up** or **Down** scroll button to select the Last, First, or Number fields.
- When entering letters, select the appropriate number key for the letter you want, and press that key the equivalent number of times for the correct letter. For example, to enter a B, press the **2** key two times, and to enter a C, press the **2** key three times.
- Use the < softkey to go backward while entering data.
- Step 3** Press the **Save** softkey to save the new entry, or press the **Exit** softkey to exit without saving.



---

**Note** You can add a maximum of 20 entries to the phone book.

---

## Editing an Entry

- 
- Step 1** To edit an entry in the phone book, press the **Up** or **Down** scroll button to select an entry. Press the **View/Edit** softkey.
- You can change or clear the selected entry using the **Change** or **Clr Entry** softkeys respectively.
- Press the < softkey to go backward when changing an entry.
- Step 2** Press the **Save** softkey to save your changes, or press the **Exit** softkey to exit without saving.
- Step 3** Press the **Menu** button to return to the main menu, or press the **Exit** button to return to the resting display.
- 

## Additional Features

Additional features supported on the IP Conference Station include: Meet Me, Call Park, and Call Pickup.

### Meet Me

The IP Conference Station supports Meet Me conferences. A Meet Me conference allows other callers to dial into the conference call. A Meet Me conference requires a special conference number. Refer to the Cisco CallManager Administration documentation or online help in the Cisco CallManager Administration application for information on configuring a Meet Me conference number.

### Call Park

The IP Conference Station allows you to store or “park” a call at a specified number and then use any other phone in the Cisco CallManager system (for example, a phone in someone else’s office or in a conference room) to retrieve the



call. Call Park numbers need to be configured. Refer to the Cisco CallManager Administration documentation or online help in the Cisco CallManager Administration application for information on configuring call park numbers.

## Call Pickup

The IP Conference Station allows you to answer a call that comes in on a telephone extension other than on your IP Conference Station. When you hear an incoming call ringing on another phone, you can redirect the call to your IP Conference Station by using the call pickup feature.

There are two types of call pickup available on the IP Conference Station:

- Call Pickup—pick up incoming calls within your own group. The appropriate call pickup group number is dialed automatically when you choose this feature.
- Group Call Pickup—pick up incoming calls within your own group or in other groups. You must dial the appropriate call pickup group number when using this feature.

Call Pickup and Group Call Pickup are optional features that can be configured, and the IP Conference Station does not support these features by default. Refer to the Cisco CallManager Administration documentation or online help in the Cisco CallManager Administration application for information about configuring call pickup.

## Web Interface

Some of the features and functions of the IP Conference Station can be configured through the Cisco IP Conference Station 7935 Web Interface.

## Description of the Web Interface

The Cisco IP Conference Station 7935 Web Interface appears in your Web browser as a tri-pane window. The browser menu and toolbar appear at the top of the window, the table of contents links appear in the left navigation pane, and the linked information and configuration fields appear in the right pane. A banner also

appears in the top right corner of the right pane and remains persistent through all the pages in the Web interface. The banner information includes: software version, protocol type, boot load ID, application load ID, IP address, MAC address, and local number.

The content of the Web interface is different for administrators and end-users. Both the administrator and end-user views require login passwords.

## Using the Web Interface

To access the Cisco IP Conference Station 7935 Web Interface follow these instructions.

---

**Step 1** Open your Web browser.

**Step 2** In the address field enter:

*http://IP address of the IP Conference Station:<HTTP port number>*



---

**Note** If you changed the HTTP Port number, you need to use that number as a suffix to the IP address.

---



---

**Note** Configuration information applies to the specific IP Conference Station associated with the IP address you enter.

---

The Web interface appears.

The initial page is the login page.

**Step 3** To log in as the administrator, enter the administrator password and click **Login**.



---

**Note** The default administrator password is \*\*#.

---



---

**Note** When logged on to the IP Conference Station Web pages, the Web pages will time out after approximately 20 minutes of inactivity. You will then have to log back in.

---

**Step 4** To log off, click **Administrator Logout**.

---

## Administrator Settings

The Administrator Settings include the following Web pages:

- System Information
- Network Setup
- Phone Book
- Sounds
- Time & Date
- Diagnostics
- Passwords/HTTP Port Change
- Restore Factory Defaults

Each page is described in the sections that follow.

## System Information

The System Information Web page is the default page and provides the following read-only configuration information.

**General settings, including:**

- Language
- Local number
- DHCP
- IP Address
- IP Mask
- Router1 Address
- Host Name
- Domain Name
- DNS Server IP Address
- Operational VLAN ID
- Admin VLAN ID
- CallManager 1 Address
- CallManager 2 Address
- CallManager 3 Address
- Main TFTP Address
- Alternate TFTP Address
- Use Alternate TFTP
- Hardware Revision
- Software Version

**Sound settings, including:**

- Dial Tone
- Ringer

**Time/Date settings, including:**

- Time
- Date

**Compression, including:**

- Supported Codecs
- Current Call
- Jitter Buffer
- Silence Suppression

**Network Configuration, including**

- Mode
- Speed

## Network Setup

The Network Setup Web page lets you change the following settings.

- DHCP
- Domain Name and DNS Server IP address
- Admin VLAN ID
- TFTP Servers
- Ethernet Configuration

**DHCP**

You can enable or disable DHCP for the IP Conference Station. When DHCP is enabled, the network dynamically assigns the IP address to the IP Conference Station.

**Note**

---

If you disable DHCP, you must manually set the IP address, IP mask, and Router for each IP Conference Station.

---

**Domain Name and DNS Server IP Address**

You can set the Domain Name and the DNS Server IP Address for the IP Conference Station.

### Administrator VLAN ID

You can set the Administrator VLAN ID for the IP Conference Station. The VLAN ID should be a number between 0 and 4095.

### TFTP Servers

You can set the alternate TFTP Server for the IP Conference Station.

### Ethernet Configuration

You can set Ethernet port configuration and the Ethernet port speed for the IP Conference Station.

## Phone Book

The Phone Book Web page lets you quickly add, delete, and edit entries. You can also dial numbers from the Phone Book.

On the Phone Book Web page, you can view entries by alphabetical sequence or by numbers only.

### Opening the Phone Book

To open the Phone Book Web page:

- Click **Phone Book** in the navigation pane.
- To view the entries by alphabetic sequence, click one of the letter combinations, for example to view entries beginning with the letter “D”, click **DEF**.
- To view the entries by phone number, click **Numbers Only**.

## Adding an Entry

To add an entry in the phone book:

---

**Step 1** Click the **Add** button.

**Step 2** Enter the phone number, last and first name, and company name.



---

**Note** The Phone number and last name are required entries.

---

**Step 3** Click **Add New Entry**.

Repeat these steps to add other entries to the phone book.



---

**Note** You can add a maximum of 20 entries to the phone book.

---

## Deleting an Entry

To delete an entry in the phone book:

---

**Step 1** Select the entry you want to delete.

**Step 2** Click the **Delete** button.

**Step 3** Confirm the deletion by clicking the **Delete** button again.

---

## Editing an Entry

To edit an entry in the phone book:

- 
- Step 1** Select the entry you want to change.
  - Step 2** Click the **Edit** button.  
Make any changes to the entry.
  - Step 3** Click the **Update** button to save your changes.
- 

## Dialing a Number in the Phone Book

To dial a number in the phone book:

- Select the entry you want and click **Dial**.

The following message appears on the Web page:

```
Your call attempt from the web is successful!
```



---

**Note** You can only dial one call from the Phone Book Web page at a time. Multiple calls from the Phone Book Web page are not supported.

---

## Sounds

The Sounds Web page lets you select the ringer sound and the dial tone.

### Opening the Sounds Web Page

To open the Sounds Web page:

- Click **Sounds** in the navigation pane.



## Changing the Ringer Sound

To change the ringer sound:

---

**Step 1** Select a ringer sound from the list box.

There are five ringer sounds: Pro, Biz, Euro, Chirp, Bell, and also Ringer Off.



---

**Note** Selecting Ringer Off shuts off the ringer sound on the IP Conference Station.

---

**Step 2** Click **Set Ringer**.

**Step 3** Click **Test Ringer** to hear the Sound you selected.

---

## Time & Date

Normally, the time and date is automatically set from the Cisco CallManager.

The Time & Date Web page lets you manually change the time and date formats that appear on the LCD screen on the IP Conference Station.

### Opening the Time & Date Web page

To open the Time & Date Web page:

- Click **Time & Date** in the navigation pane.

### Changing the Time and Date Formats

To change the time format:

---

**Step 1** Select the 12-hour clock option button for 12-hour time format, or select the 24-hour clock option button for 24-hour time format.

**Step 2** Click **Change** to save your changes.

---

To change the date format:

- 
- Step 1** Select the MM/DD/YY option button for a month/date/year format, or select the DD/MM/YY option button for a day/month/year format.
- Step 2** Click **Change** to save your changes.
- 

## Diagnostics

The Diagnostics Web page lets you test network connectivity to another device.

### Opening the Diagnostics Web Page

- Click **Diagnostics** in the navigation pane.

## Ping

To Ping another device:

- 
- Step 1** Enter the IP address of the device you want to ping.
- Step 2** Click **Ping**.
- 

You should receive a response back from the device.

## Passwords/HTTP Port Change

The Passwords/HTTP Port Change Web page lets you change the administrator and user login passwords.

### Opening the Password Web Page

- Click **Passwords/HTTP Port Change** in the navigation pane.

## Changing the Administrator Password

---

- Step 1** In the Old Admin Password box, enter the current administrator password.
  - Step 2** In the New Admin Password box, enter the new administrator password.
  - Step 3** In the Confirm Admin Password box, enter the new administrator password again.
  - Step 4** Click **Change**.
- 

## Changing the End User Password

---

- Step 1** Click **Change User Password**.
  - Step 2** In the Old User Password box, enter the current user password.
  - Step 3** In the New User Password box, enter the new user password.
  - Step 4** In the Confirm User Password box, enter the new user password again.
  - Step 5** Click **Change**.
- 

## Changing the HTTP Port

---

- Step 1** Click **Change HTTP Port**.
  - Step 2** In the New HTTP Port box, enter a new HTTP Port number.  
  
The default value is 80. When you change the HTTP Port number, a user must add the HTTP port number to the IP address of an IP Conference Station when accessing the Web interface. For example:  
  
`http://IP address of IP Conference Station:<HTTP port number>`
  - Step 3** Click **Change**.
-

## Restore Factory Defaults

The Restore Defaults Web page lets you restore the factory default settings on the IP Conference Station.

### Opening the Restore Defaults Web Page

- Click **Restore Defaults** in the navigation pane.

### Restoring Defaults



#### Caution

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When you restore the factory defaults, all current settings, configuration, and data, including the phone book entries, are lost.

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To restore defaults:

- Click **Restore Defaults**.



#### Note

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For a list of default settings, refer to the [“Default Settings” section on page 3-14](#).

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# Troubleshooting the Cisco IP Conference Station 7935

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The IP Conference Station includes diagnostic capabilities in the LCD interface to help you troubleshoot problems that might occur.

Refer to the appropriate topics in this chapter to troubleshoot the IP Conference Station.

- [Viewing Network Statistics, page 4-1](#)
- [Using Ping, page 4-2](#)
- [Other Troubleshooting, page 4-3](#)

## Viewing Network Statistics

You can view network statistics through the Diagnostics menu.



### Note

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Network statistics are not available on the Web interface.

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Follow these steps to view network statistics.

---

- Step 1** Press the **Menu** button
- Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
- Step 3** Press the **Select** button.

- Step 4** Enter the administrator password (the default administrator password is **\*\*#**) and then press the **Enter** softkey.
- Step 5** Press the **Up** or **Down** scroll button to select Diagnostics, and then press the **Select** button.
- Step 6** Select Network Statistics and press the **Select** button.
- The following statistical information appears.
- Network stats (for example, Auto-FDX-100Mbps or 10Mbps-HDX)
  - Rcv: count of frames received
  - Xmt: frames transmitted
  - REr: frames received in error
  - BCast: broadcast frames
- Use the **Clear** softkey to clear the current counts and start all counts at zero for the current session.
- Step 7** Press the **Menu** button to go back to the Diagnostics menu, or press the **Exit** button to return to the resting display.
- 

## Using Ping

You use Ping to test network connectivity to another device. Ping is available through the Diagnostics menu.

Follow these steps to use Ping.

- 
- Step 1** Press the **Menu** button
- Step 2** Press the **Up** or **Down** scroll button to select Admin Setup.
- Step 3** Press the **Select** button.
- Step 4** Enter the administrator password (the default administrator password is **\*\*#**) and then press the **Enter** softkey.
- Step 5** Press the **Up** or **Down** scroll button to select Diagnostics, and then press the **Select** button.
- Step 6** Select Ping and press the **Select** button.

- Step 7** Use the dialing pad to enter the IP address of the device you want to ping.  
Press the **.** softkey to enter periods (.) and press the **<** softkey to correct mistakes.
- Step 8** Press the **Execute** softkey.  
A reply message similar to the following should display:  
Reply from 0.0.0.0
- Step 9** Press the **Menu** button to go back to the Diagnostics menu, or press the **Exit** button to return to the resting display.

## Other Troubleshooting

The following table provides some information for troubleshooting possible problems with the IP Conference Station.

Problem Description	Resolution
LCD screen message display	<p>If the message “Obtaining IP Address” is persistent in the LCD screen display, check the DHCP server and check the network connections.</p> <p>If the message “Cannot contact TFTP Server” is persistent in the LCD screen display, check to make sure that the TFTP Server is up and running.</p>
Poor voice quality when calling digital cell phones using the G.729 codec	<p>In Cisco CallManager, you can configure the network to use the G.729 codec (G.711 is the default). When the G.729 codec is used, calls between the IP Conference Station and a digital cellular phone will have poor voice quality. Use the G.729 codec only when necessary.</p> <p>For more information, refer to the Cisco CallManager application online help.</p>
No dial tone	<p>Check that all connections are secure and in place.</p> <p>Make sure all connections are correct.</p>

Problem Description	Resolution
IP Conference Station does not ring	<p>Check that the ringer setting is not “Ringer Off.”</p> <p>Check the volume level.</p>
IP Conference Station resetting	<ul style="list-style-type: none"> <li>• The IP Conference Station resets when it loses contact with the Cisco CallManager software.</li> </ul> <p>The following status message appears in the LCD screen if the IP Conference Station loses contact with the Cisco CallManager software:</p> <p style="padding-left: 20px;">Registering</p> <ul style="list-style-type: none"> <li>• The IP Conference Station resets when it loses contact with the network.</li> </ul> <p>The following status message appears in the LCD screen if the IP Conference Station loses contact with the network</p> <p style="padding-left: 20px;">Configuring IP</p> <p>These lost connections can be due to any network connectivity disruption, including cable breaks, switch outages, and switch reboots.</p>
No LCD screen display	<p>Check to make sure that the IP Conference Station has power.</p> <p>Make sure that the power supply unit is plugged in.</p>
LCD screen display issues	<p>You might see beat frequencies (scan lines) in the LCD screen if you are using certain types of older fluorescent lights in your building. Moving the IP Conference Station away from the lights, or replacing the lights, should resolve the problem.</p>
DTMF delay	<p>When you are on a call that requires keypad input, if you press the keys too quickly, some of them might not be recognized.</p>





# Technical Specifications for the Cisco IP Conference Station 7935

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This appendix describes the technical specifications for the Cisco IP Conference Station.

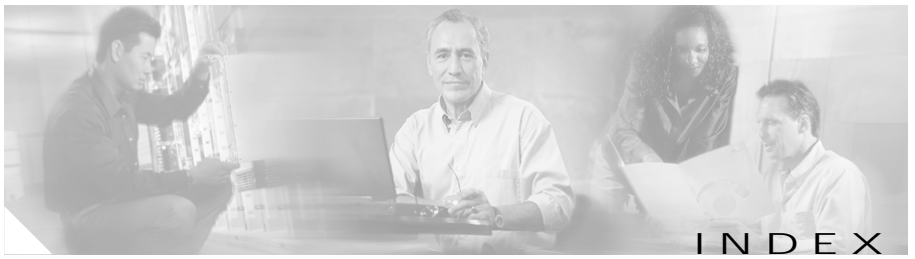
## Physical and Operating Environment Specifications

Specification	Value or Range
Operating temperature	0°C to 40°C (32° to 104°F)
Operating relative humidity	20% to 85% (non-condensing)
Storage temperature	-30°C to 55°C (-22° to 131°F)
Height	31.5 cm (12 1/2 in.)
Width	30.2 cm (12 in.)
Depth	5.7 cm (2 1/4 in.)
Weight	0.8 kg (1 3/4 lb.)
Power	<ul style="list-style-type: none"><li>• AC/DC adapter (100-240 V~, 50-60 Hz, 500 mA)</li><li>• Power Interface Module (PIM)</li><li>• Country Cord (orderable)</li></ul>

Specification	Value or Range
Cables	<ul style="list-style-type: none"><li>• One 6 ft. CAT 5 cable</li><li>• One 25 ft. CAT 5 cable</li></ul>
Distance Requirements	As supported by the Ethernet Specification, each Conference Station must be within 100 meters (330 feet) of a wiring closet.

## Cable Specifications

- Keyed RJ-45 plug for the 25 ft. CAT 5 cable connection on the bottom of the IP Conference Station unit
- Keyed RJ-45 plug for the 25 ft. CAT 5 cable connection on the PIM
- RJ-45 plug for the 6 ft. CAT 5 cable connection on the PIM
- 30-volt power connector for power connection on the PIM



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