



TC 4.1

The next generation Cisco TelePresence System team collaboration solution.

The Profile, the Quick Set C20 and Quick Set C20 Plus, as well as solutions based on the Codec C Series, bring colleagues face-to-face at the touch of a button through a user-friendly touch screen interface.

Easily share presentations and multimedia to spark ideas and generate better discussions.

**Cisco TelePresence Systems
Profile Series / Codec C Series / Quick Set C20**

**Use with
Cisco TelePresence Touch**



What's in this guide?

The top menu bar and the entries in the Table of Contents are all hyperlinks. Just click on them to go to the topic.

We recommend that you visit the Cisco web site regularly for updated versions of this guide. Go to: <http://www.cisco.com>

This document describes the use of the Cisco TelePresence Touch with the Cisco TelePresence System Profile Series, Codec C Series and Quick Set C20. For a description on how to use these video systems with the remote control Cisco TRC5, we refer to the TC4.0 User Guide which is available separately for download.

Getting started

- The basics of the Touch Controller 4
- Selfview and camera control 5
- Camera whitebalance, exposure, and backlight compensation 6
- Sound matters 7
- Receiving calls 7
- Ring tones and sounds 7
- Do not disturb 7

Placing calls

- Calling someone by dialing the number or the URI..... 9
- Searching for an entry in any of the lists 10
- Calling an entry in one of the lists..... 11
- Calling more than one..... 12
- Adding participants to an ongoing call..... 13

Using Favorites, Directory and History

- Favorites 15
- Searching..... 15
- Directory 15
- History..... 15

In-call features

- Features in a call—an overview 17
- Near end camera control in a call..... 18
- Camera presets in a call 18
- Using Touch Tones (DTMF) in a call..... 18
- Far end camera control in a call..... 18
- Sharing contents—conducting presentations 19
- Layout control 20

The Settings

- Gaining access to the Settings 22
- System Information 23
- Call Status..... 24
- Camera Control & Settings 25
- Ringtone & Sound Settings..... 26
- Administrator settings—Date, Time & Location..... 27
- Administrator settings—Call settings 28
- Administrator settings—IP settings for the codec.... 29
- Administrator settings—IP settings for the Touch controller..... 30
- Administrator settings—Pairing..... 31
- Administrator settings—H.323 settings 32
- Administrator settings—SIP settings..... 33
- Administrator settings—Provisioning 34
- Administrator settings—EMC Resilience mode..... 35



Chapter 1

Getting started

The basics of the Touch Controller



Basic operating principles



Tap the touch screen to wake up the system, if needed.



Tap a button to activate its function.



Scroll in lists as outlined.

Selfview and camera control



You may want to check how you appear on the screen. To do this, tap **More** ...



... then tap **Selfview** to watch the outgoing video (how the other side sees you).



You may want to adjust camera zoom and angle. While inside the **More** menu, tap **Camera control** ...



Use **+** and **-** to adjust the zoom and the arrow keys to adjust the camera's angle.



Tap **Back** to go one level back, or tap anywhere outside to exit the menu.

Entering **Camera Control** will also cause the system to show selfview, so if you know that camera adjustments are needed, you do not have to activate selfview first.

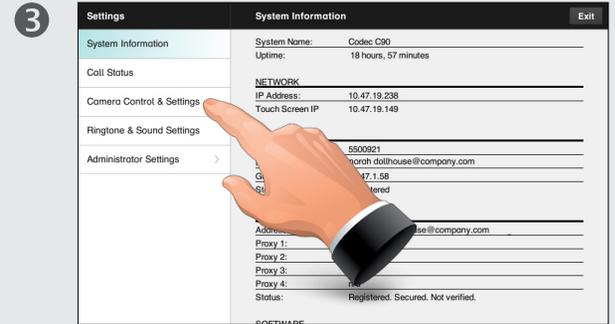
Camera whitebalance, exposure, and backlight compensation



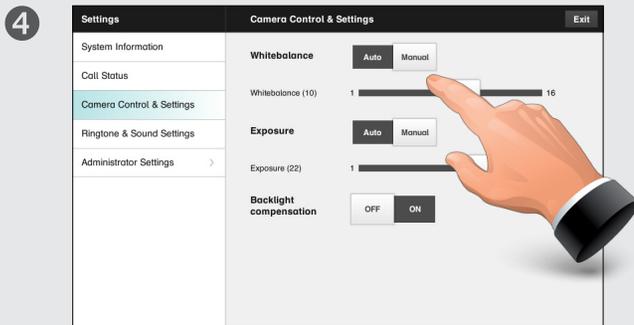
You may want to adjust the camera's whitebalance, exposure and backlight compensation. To do this, tap **More** ...



... then tap **Settings** to open the **Settings** menu.

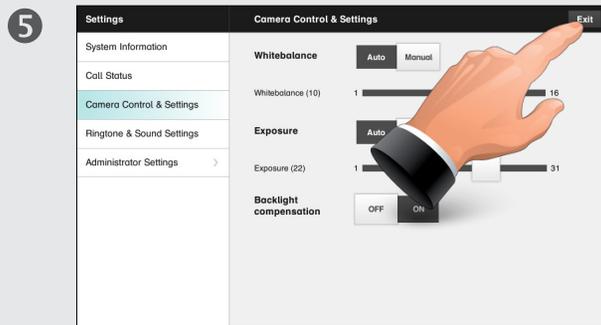


Tap **Camera Control & Settings** to open the menu ...



... then tap the **Manual** setting of **Whitebalance** and **Exposure** to adjust the settings or set them to **Auto** to let the system decide.

Backlight compensation improves the outgoing image when there is a strong light behind you.



Tap **Exit** when done.

Sound matters

You may deactivate the microphone for privacy reasons, if needed (1).

Tap as outlined (2) to adjust the sound volume.



Ring tones and sounds

To set ringtones and sound, tap More (1) followed by Settings (2). Then tap **Ringtone & Sound Settings** (3).

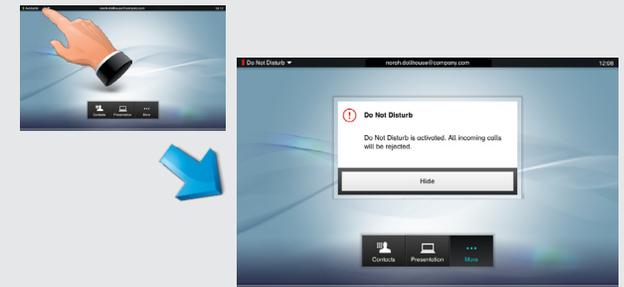


Set **Keytones** to **On** or **Off**, the **Ringtone volume** and select the ringtone of your choice. Tap **Exit** to go back.

Do not disturb

When set to **Do Not Disturb**, ringtones are muted and missed calls you get while having DND active, will be presented.

You may, however, place calls as much as you like. To activate this feature, press the icon in the upper left corner. Press again to deactivate.



You may also hide the Do Not Disturb poster by tapping **Hide**.

Receiving calls

When someone calls you, the below display will appear. Tap **ACCEPT** to accept the call or **DECLINE** to decline it.





Chapter 2

Placing calls

Calling someone by dialing the number or the URI

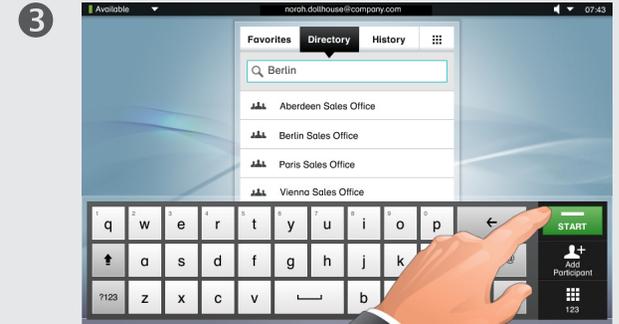


Tap **Contacts** as outlined, if needed.



Tap in the **Search or Dial** field (1).

This will produce the virtual keyboard. Tap **ABC** to switch to the QWERTY keyboard and tap **123** to switch to the numeric keyboard. Key in the number or URI (2)



Once the entire number or URI has been entered, tap the **START** button.



Tap **END** to terminate the call.

Searching for an entry in any of the lists



Tap **Contacts** as outlined, if needed ...



... then tap **Search or Dial**.



Enter the name, parts of the URI or parts of the number. Matches will appear as you write. Searching will take place within **Favorites, Directory** as well as **History** (see the next page for more on these).



Scroll among the matches, if needed ...



... then tap the entry to be called (1) and then tap **START** (2) to place the call.



Tap **END** to terminate the call.

Calling an entry in one of the lists



Tap **Contacts** as outlined, if needed ...



... then tap **Favorites, Directory, or History**.



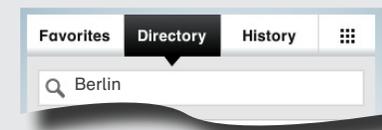
Scroll among the entries, if needed ...



... then tap the entry to be called and the **Place a call** dialog box appears. Tap **Start** to place the call.



Tap **END** to terminate the call.



Favorites. The list of favorites is your own shortlist of people and places you frequently call or otherwise want to have easy access to.

Directory. The directory serves as your corporate phone book. This directory cannot be edited by you. You may, however, copy entries to your list of favorites and edit them there.

History lists the received, placed and missed calls since the last time the list was cleared.

Keypad. Tap the keypad icon to produce the keypad to enter a number or URI.

Calling more than one

- 1 Calling several to initiate a video conference is an optional feature. If your system permits it, you may set up a list of several participants and then call them all in one go.
Enter a number or URI, or pick an entry from the **Directory**, the list of **Favorites**, or from the **History**.

- 2  Tap **ADD PARTICIPANT** as outlined to add the entry to the list of participants to be called.



The entry will appear on the bottom line of the touch pad, as outlined.



Repeat the procedure to add more participants. The maximum number of participants possible will depend on your system's configuration.



Adding participants to an ongoing call



While in a call you may add participants provided that your system permits to do so. Tap **Add** ...



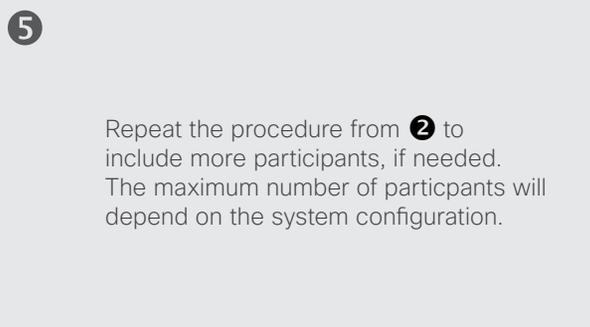
... then select, in the usual way, whom to add to the ongoing call.



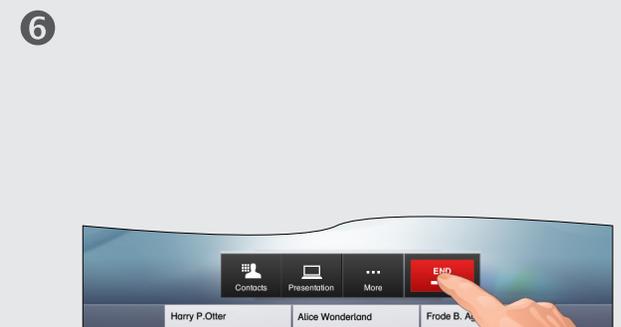
Once you have selected someone, the **ADD TO MEETING** dialog box will be produced ...



... then tap **ADD TO MEETING** to include this participant in the meeting.



Repeat the procedure from **2** to include more participants, if needed. The maximum number of participants will depend on the system configuration.



Tap **END** to terminate the entire conference. To disconnect just one of the participants, tap the participant's name along the bottom line and then tap **END**.



Chapter 3

Using Favorites, Directory and History

History

History lists the received, placed and missed calls since the last time the list was cleared.

Tap **History** to produce the list ...



... then tap an entry.



You will now be able to:

- Call the entry by tapping **Start**.
- Add the entry to an ongoing call (optional feature).
- Add the entry to **Favorites**.
- Edit the entry information and then place the call.
- Change the call rate settings.
- Remove the entry from the list.
- Clear the entire list. To do this, scroll as outlined beyond what appears to be the top of the list. A **Clear List** button will then appear.



Directory

The **Directory** serves as your corporate phone book. This directory cannot be edited by you. You may, however, copy entries to your list of favorites and edit them there.

Tap **Contacts** (if needed) and then tap **Directory**. The directory is typically organized as folders.



Tap a folder (1) to show its contents, scroll (2) if needed to locate a folder or an entry within a folder.

Once located, tap the entry to call, edit or add to your list of favorites in the same way as with the history list.

It may happen that an entry copied from the directory to the list of favorites later is updated in the directory. This update will not be reflected in your list of favorites—you must then manually update the entry in the list of favorites.

Favorites

Favorites is your own shortlist of contacts you frequently call or otherwise want to have easy access to.

Adding to Favorites. To add someone to the list of favorites, locate the entry in **Directory** or **History** (as outlined) and tap it (1). This will produce a dialog box which allows you to tap **Add to Favorites** (2).



You may now edit the entry, if needed—just tap a field and the keyboard will be produced. Tap **Save** to put changes into effect..



Favorites should be considered as an editable directory and is used in the same way as **History**.

Searching

You may search for entries (numbers or URIs). Searches will be conducted within all the folders, i.e. within the **Favorites**, the **Directory** and the **History**.

Tap in the **Search or Dial** field and key in the name, URI or number. Matches will appear as you search.

Once located, tap the entry to call, edit or add to **Favorites**.



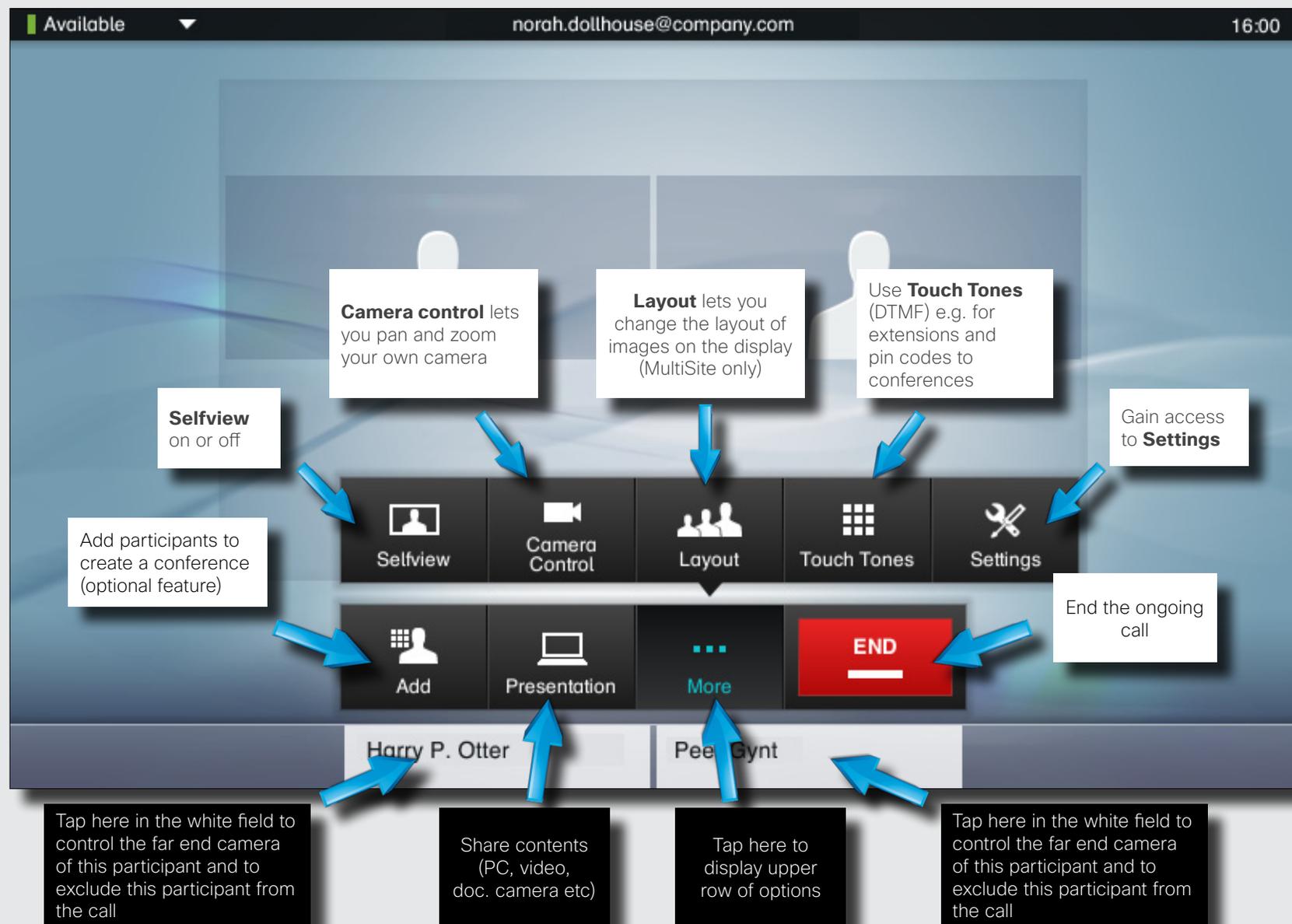
When searching within the corporate **Directory**, the search will apply to the current directory folder and its subfolders only. To go one level up, tap **Back**. To make the search apply to the entire corporate directory, do not enter (tap) any folder before the search is commenced.



Chapter 4

In-call features

Features in a call—an overview



Near end camera control in a call

- 1 Tap **More ...**
- 2 ... then tap **Camera Control**.
- 3 Adjust zoom and pan as required. Tap **Back** to exit

Far end camera control in a call

- 1 Tap the name along the bottom line ...
- 2 ... then tap **Camera Control**.
- 3 Adjust zoom and pan as required. Tap **Back** to exit

This works for point-to-point as well as multisite calls.

Camera presets in a call

Camera presets cannot be accessed in this version. They are currently available only when the system is used with the Cisco remote control.

Note that when the endpoint/codec has been paired with the Touch control device, the system will refuse to accept commands from the remote control.

Using Touch Tones (DTMF) in a call

Sometimes you may be urged to enter touch tones (DTMF) during a call, typically to reach extensions or to provide a pin code.

- 1 Tap **More ...**
- 2 ... then tap **Touch Tones**.
- 3 Use the touch tone keypad. Tap anywhere outside it to exit.

Sharing contents—conducting presentations

1



You may share contents in a call—or outside a call. In the latter case you will be using your video system to share contents in your local meeting room.

Make sure your presentation source is connected to the video system before you start.

2



In a call, or outside a call, tap **Presentation** ...

3



... then select source by scrolling horizontally, if needed ...

4



Tap **PRESENT** to start sharing contents.

5



Tap again to gain access to the stop sharing contents menu ...

6



... then tap **Stop Presenting** to actually stop sharing contents.

Note that you may alter the screen layout when sharing contents—see the next page for more. Applies to when being in a call only.

Layout control



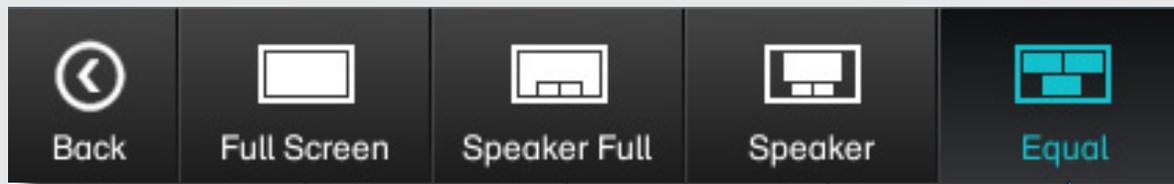
If you are in a MultiSite call or in a Point-to-point call with a presentation, you may alter the layout on the screen. To do this start by tapping **More** ...



... then tap **Layout** ...



... and finally select your preferred layout.



Takes you one menu level back

The one who speaks get the full screen. Nothing else is shown.

The one who speaks gets the main frame. The others are shown as PiP (Picture in Picture).

The one who speaks gets the main frame. The others are shown as images below the main frame.

All participants are shown in frames of identical sizes.

When a presentation is included in a call, all participants will be shown **above** the presentation, instead of below. This will provide a better feeling of eye contact.

Full screen will show the presentation only.

Changes to this set of layouts made by the TC-console utility are not supported and will be ignored.

The video endpoints whose use is described in this manual can be configured via the touch screen controller or via its web interface. For full access to all configurable parameters the web interface must be used—the Touch Controller provides access to a limited set of parameters only.

Chapter 5

The Settings

Gaining access to the Settings

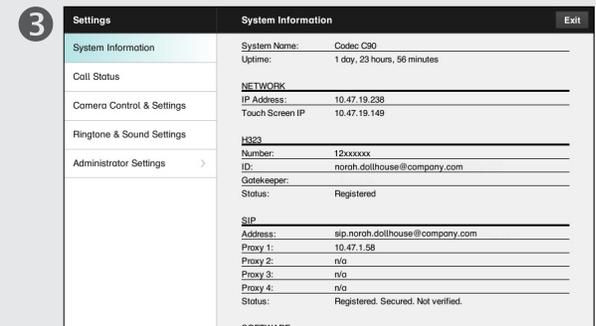
Access the Settings as follows:



Tap **More** ...



... then tap **Settings** ...



... and then you get access to the settings available. Observe that there are several other settings available, but these can be accessed from the web interface only. See the Administrator guide for your Cisco product. This guide is available for download separately.

System Information

The **System Information** pane contains information on the system's software and hardware versions and connections, SIP and H.323 status etc.

Settings	System Information Exit
System Information	System Name: <u>Codec C90</u> Uptime: <u>1 day, 23 hours, 56 minutes</u>
Call Status	NETWORK
Camera Control & Settings	IP Address: <u>10.47.19.238</u> Touch Screen IP <u>10.47.19.149</u>
Ringtone & Sound Settings	H323
Administrator Settings >	Number: <u>12xxxxxx</u> ID: <u>norah.dollhouse@company.com</u> Gatekeeper: Status: <u>Registered</u>
	SIP
	Address: <u>sip.norah.dollhouse@company.com</u> Proxy 1: <u>10.47.1.58</u> Proxy 2: <u>n/a</u> Proxy 3: <u>n/a</u> Proxy 4: <u>n/a</u> Status: <u>Registered. Secured. Not verified.</u>
	SOFTWARE

Call Status

The **Call Status** pane provides in-call information on such things as call rate and frame rate, protocols used, packet loss and jitter.

Settings	Call Status Exit
System Information	Remote URI: peer.gynt@himself.enough.no
Call Status	Call Rate: 768 Encryption Type: None
Camera Control & Settings	Protocol: sip Encryption Off
Ringtone & Sound Settings	VIDEO Transmit Presentation Receive Presentation
Administrator Settings >	Protocol: H264 Off H264 Off
	Resolution: 768x448 n/a 768x448 n/a
	Frame Rate: 30 n/a 29 n/a
	Channel Rate: 704 kbps n/a 664 kbps n/a
	Total Packet Loss 0.0% 0.0%
	Current Packet Loss 0.0% 0.0%
	Jitter: 1 ms 2 ms
	AUDIO Transmit Receive
	Protocol: AACLD - Mono AACLD - Mono
	Channel Rate: 63 kbps 63 kbps
	Total Packet Loss 0.0% 0.0%
	Current Packet Loss 0.0% 0.0%
	Jitter: 2 ms 0 ms

Camera Control & Settings

The **Camera Control & Settings** pane lets you set the whitebalance and exposure of the camera. If you do not want to tweak this yourself, just leave it to the system by selecting **Auto**.

Backlight compensation comes in handy when there is much light behind you. Without compensation you will easily appear very dark to the far end.

Note how the settings chosen are indicated. In the example shown, Backlight compensation is set to Off.

Settings	Camera Control & Settings Exit
System Information	<p>Whitebalance <input checked="" type="radio"/> Auto <input type="radio"/> Manual</p> <p>Whitebalance (10) 1 <input type="range" value="10"/> 16</p>
Call Status	
Camera Control & Settings	<p>Exposure <input checked="" type="radio"/> Auto <input type="radio"/> Manual</p> <p>Exposure (22) 1 <input type="range" value="22"/> 31</p> <p>Backlight compensation <input type="radio"/> OFF <input checked="" type="radio"/> ON</p>
Ringtone & Sound Settings	
Administrator Settings >	

Ringtone & Sound Settings

The **Ringtone & Sound Settings** pane lets you specify:

- **Keytones** on or off. When set to on you will hear a sound every time you tap a field on the Touch controller.
- **Ringtone volume**. How loud your ringtone shall sound.
- **Ringtone**. Select among several ringtones. You will hear a sample every time you tap a ringtone.

Note how the settings chosen are indicated. In the example shown, Keytones are set to Off.

Administrator settings—Date, Time & Location

The **Date, Time & Location** settings let you specify:

- 24h or 12h time format.
- Your preferred date format.
- Your preferred time zone.
- Whether date and time shall be set automatically or manually.

Note how the settings chosen are indicated. In the example shown, Time format is set to 24h.

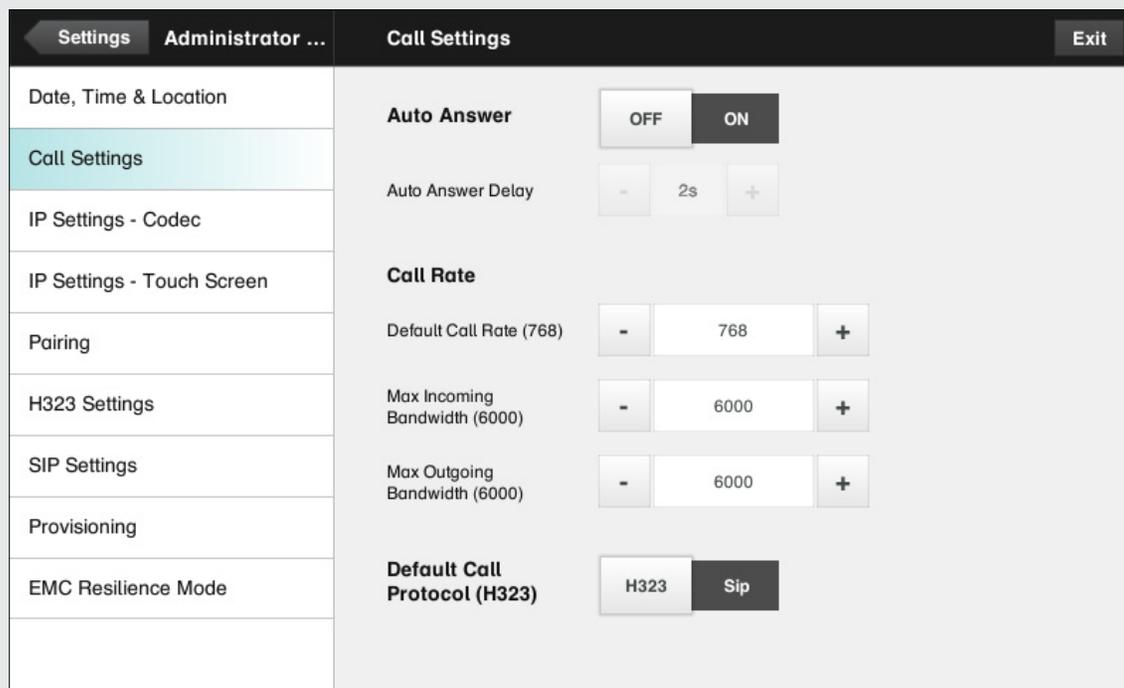
Settings	Administrator ...	Date, Time & Location	Exit																				
Date, Time & Location		Time format <input type="radio"/> 24h <input checked="" type="radio"/> 12h																					
Call Settings		Date format <input type="radio"/> dd.mm.yy <input checked="" type="radio"/> mm.dd.yy <input type="radio"/> yy.mm.dd																					
IP Settings - Codec		Time zone <input type="button" value="-"/> GMT+01:00 (Amsterdam, Berlin, Bern, R <input type="button" value="+"/>																					
IP Settings - Touch Screen		Date and time <input type="radio"/> Auto <input checked="" type="radio"/> Manual																					
Pairing		<table border="0"> <tr> <td>Hour</td> <td>Minute</td> <td>Year</td> <td>Month</td> <td>Day</td> </tr> <tr> <td><input type="button" value="+"/></td> </tr> <tr> <td>15</td> <td>34</td> <td>2011</td> <td>Jan</td> <td>25</td> </tr> <tr> <td><input type="button" value="-"/></td> </tr> </table>	Hour	Minute	Year	Month	Day	<input type="button" value="+"/>	15	34	2011	Jan	25	<input type="button" value="-"/>									
Hour	Minute	Year	Month	Day																			
<input type="button" value="+"/>	<input type="button" value="+"/>	<input type="button" value="+"/>	<input type="button" value="+"/>	<input type="button" value="+"/>																			
15	34	2011	Jan	25																			
<input type="button" value="-"/>	<input type="button" value="-"/>	<input type="button" value="-"/>	<input type="button" value="-"/>	<input type="button" value="-"/>																			
H323 Settings																							
SIP Settings																							
Provisioning																							
EMC Resilience Mode																							

Administrator settings—Call settings

The **Call Settings** pane lets you specify:

- **Auto Answer** On or Off. If you set this to **On**, the system will respond automatically to incoming calls. Note that the microphone will NOT be muted. If risk of eavesdropping is an issue, you may want to set this setting to **Off**.
- **Auto Answer Delay**. Specify the time until your system actually responds to an incoming call.
- **Default Call Rate**. If your connection has limited capacity you may want to use this setting.
- **Max Incoming/Outgoing Bandwidth**. You may specify these separately. May come in handy if you are on an asymmetric connection.
- **Default Call Protocol**. Specify which protocol to use as default.

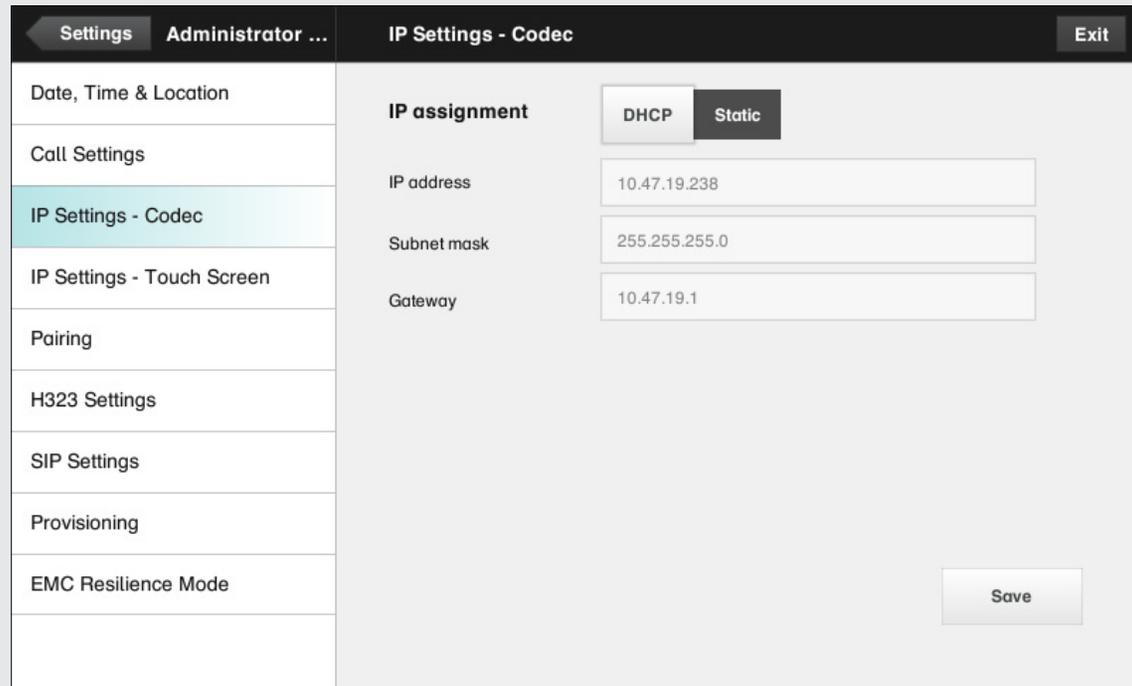
Note how the settings chosen are indicated. In the example shown, Auto Answer is set to Off.



Administrator settings—IP settings for the codec

The **IP settings** pane for the Codec of the system lets you specify:

- The use of **DHCP** or **Static** IP addresses. If you decide to use **Static**, make sure you tap **Save** before leaving the menu.

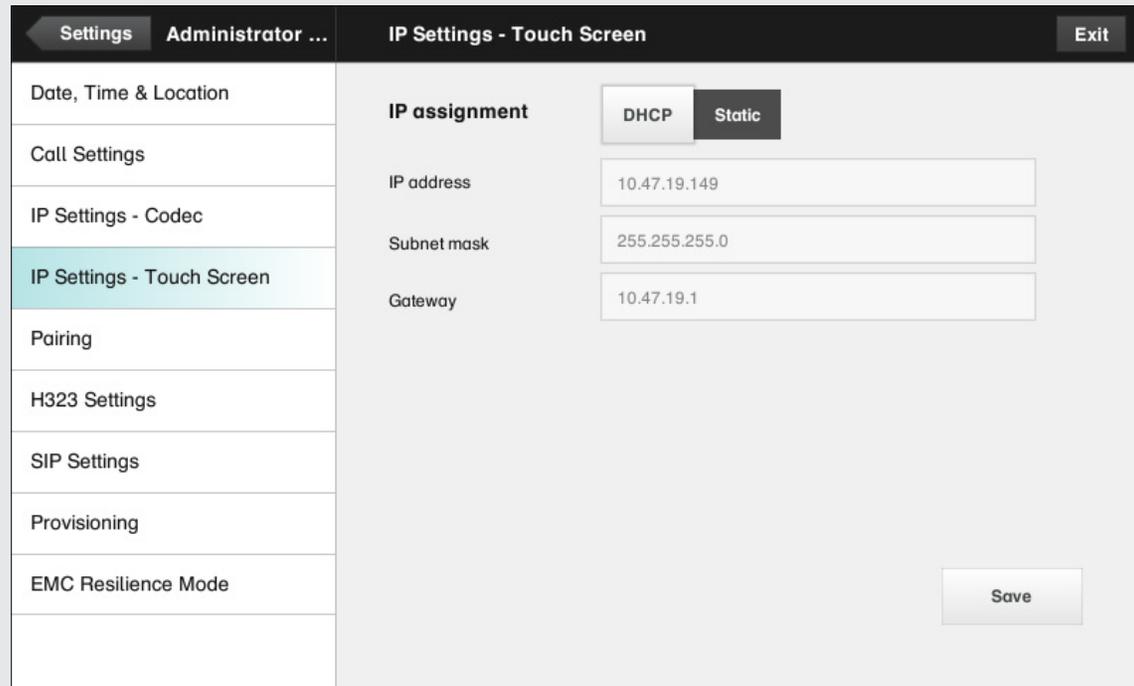


Settings	Administrator ...	IP Settings - Codec	Exit
Date, Time & Location		IP assignment	
Call Settings		<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IP Settings - Codec		IP address: 10.47.19.238	
IP Settings - Touch Screen		Subnet mask: 255.255.255.0	
Pairing		Gateway: 10.47.19.1	
H323 Settings			
SIP Settings			
Provisioning			
EMC Resilience Mode			
			Save

Administrator settings—IP settings for the Touch controller

The **IP settings** pane for the Touch controller of the system lets you specify:

- The use of **DHCP** or **Static** IP addresses. If you decide to use **Static**, make sure you tap **Save** before leaving the menu.



Administrator settings—Pairing

The **Pairing** pane shows status on the pairing of the Codec and the Touch controller of your video system. It also provides you with the option of unpairing the two.

Settings	Administrator ...	Pairing	Exit
Date, Time & Location		Paired with: Cisco TelePresence System Codec C90	
Call Settings		Product: Cisco TelePresence System Codec C90	
IP Settings - Codec		H323 id: xxxxx	
IP Settings - Touch Screen		Software: TC4.1.0.- (TEST SW)	
Pairing		IP address: 10.47.19.238	
H323 Settings		Serial number: N/A	
SIP Settings			
Provisioning			
EMC Resilience Mode			
			<input type="button" value="Unpair"/>

Administrator settings—H.323 settings

The **H.323 Settings** pane lets you specify:

- An **H.323 alias**.
- Your **H.323 id**.
- **Gatekeeper discovery (Manual or Automatic)**.
- The **Gatekeeper address** must be specified by you if discovery has been set to manual.
- **Authentication mode On or Off**. If set to *On*, the video system will send **Login name** and Password to the Gatekeeper for authentication.

In addition there are:

- Two fields to enter **Login name** and **Password**. The alphanumeric keyboard will appear whenever needed.

Be sure to:

- Tap **Save** to put changes into effect.

Settings	Administrator ...	H323 Settings	Exit
Date, Time & Location	H323 number	<input type="text" value="5500921"/>	
Call Settings	H323 id	<input type="text" value="margareth.wennersteen.C90@tandberg.com"/>	
IP Settings - Codec	Gatekeeper discovery	<input checked="" type="radio"/> Auto <input type="radio"/> Manual	
IP Settings - Touch Screen	Gatekeeper address	<input type="text" value="10.47.1.58"/>	
Pairing	Authentication mode	<input type="radio"/> OFF <input checked="" type="radio"/> ON	
H323 Settings	Login name	<input type="text"/>	
SIP Settings	Password	<input type="text"/>	
Provisioning			
EMC Resilience Mode			
			<input type="button" value="Save"/>

Administrator settings–SIP settings

The **SIP settings** pane lets you specify:

- Your **URI**.
- The **Default transport layer**, this can be set to **TCP**, **UDP**, **TLS** or **Auto**.
- The **Proxy type** can be set to **Standard**, **Alcatel**, **Avaya**, **Cisco**, **Microsoft**, **Nortel**, **Experimental**, **Siemens**.
The experimental setting is for testing purposes.
- **Outbound** is not used in this version.
- **Proxy discovery** can automatic or manual. In the case of manual the proxy address must be specified by you.
- **Login name** and **Password** is required by the VCS.

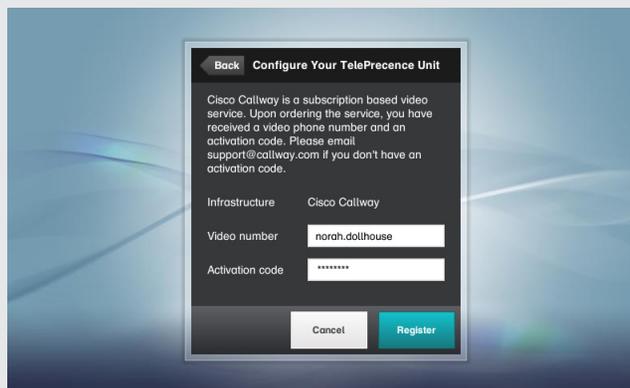
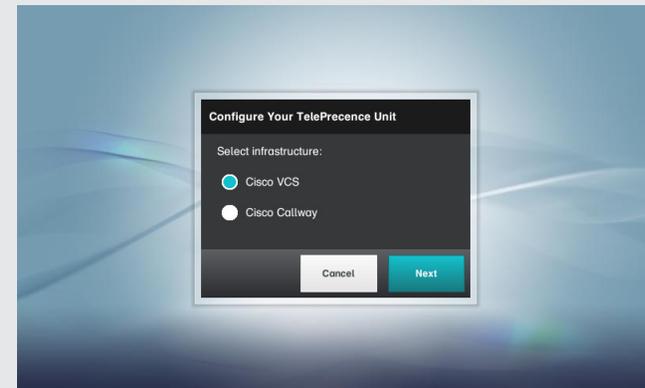
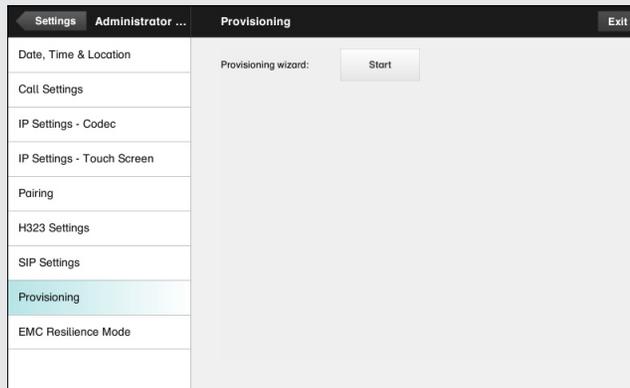
Be sure to:

- Tap **Save** to put settings into effect.

Settings	Administrator ...	SIP Settings	Exit
Date, Time & Location		URI	<input type="text" value="sip:margareth.wennersteen.C90@tandberg.com"/>
Call Settings		Default transport	<input checked="" type="radio"/> TCP <input type="radio"/> UDP <input type="radio"/> TLS <input checked="" type="radio"/> Auto
IP Settings - Codec		Proxy type	<input type="button" value="-"/> <input type="text" value="Standard"/> <input type="button" value="+"/>
IP Settings - Touch Screen		Proxy discovery	<input checked="" type="radio"/> Auto <input type="radio"/> Manual
Pairing		Proxy address	<input type="text" value="10.47.1.58"/>
H323 Settings		Login name	<input type="text"/>
SIP Settings		Password	<input type="text"/>
Provisioning			<input type="button" value="Save"/>
EMC Resilience Mode			

Administrator settings—Provisioning

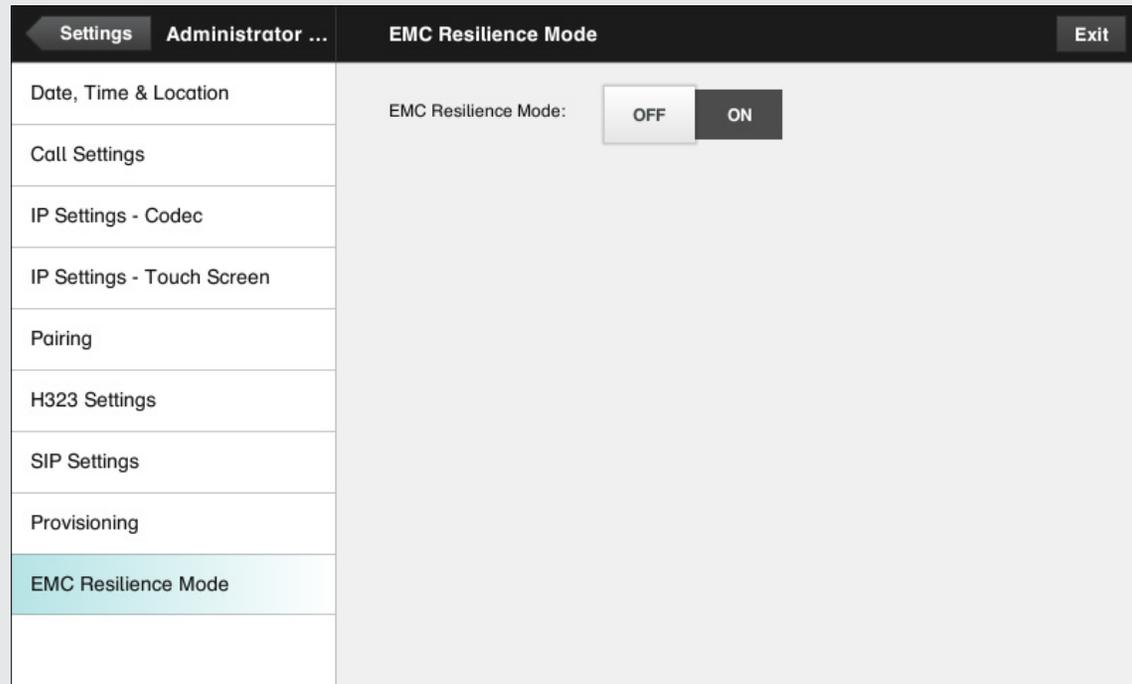
Provisioning connects you to Callway or VCS. When either of these were ordered and received from Cisco you should also have obtained the necessary information and codes. Just follow the wizard.



Administrator settings—EMC Resilience mode

If the Touch controller is used in environments with considerable amounts of electromagnetic noise present, you may experience an appearance of false signals—as if someone tapped the Touch controller when nobody obviously did so.

To cope with this you may set the **EMC Resilience Mode** to **On**. You must then press and hold for a little while, rather than just tap, in order to make the system aware of your tapping. This will avoid the appearance of false signals.



THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.



On our web site you will find an overview of the worldwide Cisco contacts.

Go to: <http://www.cisco.com/web/siteassets/contacts/index.html>

Corporate Headquarters
Ciso Systems, Inc.
170 West Tasman Dr.
San Jose, CA 95134 USA