Standard

IP Phone 2007
User Guide

NORTEL

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Revision history

March 2007

Standard 01.04. This document has been updated with the latest updates on the "Regulatory and Safety Information" section.

February 2007

Draft 01.01. This document is issued to support Multimedia Communication Server 5100 Release 4.0. It addresses CRs Q01542900 and Q01354191.

January 2007

Standard 01.01. This document is issued to support Multimedia Communication Server 5100 Release 4.0. This document contains information previously contained in the following legacy document, now retired: *IP Phone 2007 User Guide* (NN10042-114).

November 2005

Standard 3.0. This document is up-issued to support MCS 5100 Release 3.5.

November 2005

Standard 2.0. This document is up-issued to support MCS 5100 Release 3.5.

October 2005

Standard 1.0. This document is up-issued to support MCS 5100 Release 3.5.

Contents

New in this release

The following sections describe what is new in this document for Multimedia Communication Server (MCS) 5100 Release 4.0.

Feature changes

The following new features affect this document:

The following sections describe how the new features affect this release.

CFW and DND E911 operator callback

This feature provides enhancements to the Enhanced 911 (E911) system. When an Emergency Operator attempts to call back to a caller who dialed 911, the call is not blocked, rerouted or preempted by other calls. Therefore, the caller who made the 911 call can be contacted directly.

The following settings are overridden during an E911 call:

- Do Not Disturb (DND) enabled
- Call Forwarding (CFW) enabled
- Routable Services enabled

This feature also ensures that the callback has priority if the Session Manager server is in a minor or major overload situation.

Language support

This feature provides the ability for MCS 5100 clients to support multiple languages. The clients include the Multimedia PC Client, Multimedia Web Client, Personal Agent, IP Phone 2002, IP Phone 2004, IP Phone 2007, and MAS conferencing announcements. The supported languages are:

- English
- Parisian French
- German
- Latin America Spanish
- Japanese
- Korean
- Simplified Chinese
- Traditional Chinese
- Portuguese

Lotus Notes integration

This feature integrates the Multimedia PC Client with the IBM Lotus Notes application. The Multimedia PC Client for IBM Lotus Notes provides the following advanced IP telephony features:

- make SIP calls from inside Lotus Notes
- track incoming, outgoing, and missed calls in Lotus Notes folders
- use Lotus Notes contacts as your Lotus Notes directory
- see who is online and let others know that you are online
- control a Nortel IP Phone (IP Phone 2002, IP Phone 2004 or IP Phone 2007)
- send and receive files from contacts that have a SIP address
- send web pages, share whiteboards and share clipboards
- decline, redirect or ignore incoming calls
- send and receive text messages
- chair and participate in conference calls and use web collaboration (requires MAS)

MCP granular service packaging

With this feature, you can control the operation of services on a domain or user basis. Features such as Instant Messaging and Web Collaboration can be controlled. Users or domains can be restricted in their use of the service. The ability to send and receive instant messages is controlled, as well as the ability of a user or a group of users to transfer files, transfer a clipboard, send a URL to a user, or to manipulate a whiteboard.

MCS E911 caller hold

This feature adds two enhancements to the Enhanced 911 (E911) system.

- The originator of a 911 call cannot invoke mid-call features (such as Hold, Transfer, Call Park, and Conferencing), cannot make an additional call, and cannot receive incoming requests outside the emergency call.
- The originator of a 911 call cannot disconnect the call. The public safety answering point (PSAP) must disconnect the call.

Multiple Login restrictions

This feature provides the following enhancements:

- restriction to the number of simultaneous log-ons for an MCS user using a Multimedia PC Client, hardware SIP telephone or Multimedia Web Client
- configuration of the maximum number of simultaneous log-ons
- implementation and access enforcement through the service packages
- authorization to administrators to log out a user's connections
- restriction of call attempts from unregistered nodes

Other changes

This document was renumbered from NN10042-114 to NN42020-104.

This document includes safety information about the use of connecting cables, power cords, and AC adaptors that ship with the equipment or that Nortel specifies.

Citrix Application Gateway support is removed in MCS 5100 Release 4.0.

Regulatory and safety information

This chapter contains regulatory and safety information.

This chapter contains regulatory and safety information.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

> **Note:** The user should not make changes or modifications not expressly approved by Nortel Networks. Any such changes could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

⚠ Warning: This is a Class B product. In a domestic environment this product can cause radio interference in which case the user must take adequate measures.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
　取扱説明書に従って正しい取り扱いをして下さい。

Table 1 lists EMC compliance for various jurisdictions.

Jurisdiction	Standard	Description
United States	FCC CFR 47 Part 15	Class B Emissions: FCC Rules for Radio Frequency Devices
Canada	ICES-003	Class B Emissions: Interference-Causing Equipment Standard: Digital Apparatus
Australia/New Zealand	AS/NZS 3548 CISPR 22	Class B Emissions: Information technology equipment - Radio disturbance
European Community	EN 55022	Class B Emissions: Information technology equipment - Radio disturbance
	EN 55024	Information technology equipment - Immunity characteristics Limits and methods of measurement
	EN 61000-3-2	Limits for harmonic current emissions (equipment input current <= 16 A per phase)

Jurisdiction	Standard	Description
	EN 61000-3-3	Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current <= 16 A
Japan	VCCI	Regulations for voluntary control measures.

Table 2: Safety

Jurisdiction	Standard	Description
United States	UL 60950-1	Safety of Information Technology Equipment
Canada	CSA 60950-1-03	Safety of Information Technology Equipment
Australia/New Zealand	AS/NZS 60950.1:2003	Safety of Information Technology Equipment
European Community	EN 60950-1	ITE equipment - Safety - Part 1: General requirements

Other Safety Approvals: IEC 60950-1: ITE equipment - Safety - Part 1: General requirements

Other

US/Canada: Hearing Aid Compatibility (HAC) as per FCC Part 68.

This equipment complies with the CE Marking requirements.

Australia: AS/ACIF S004: Voice Frequency Performance Requirements for Customer Equipment

EU Countries: This device complies with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration may be obtained from http://www.nortel.com/products/announcements/eumrdc/index.html or Nortel Networks GmbH address: Ingolstaedter Strasse 14-18, 80807 Munich Germany.

DenAn regulatory notice for Japan

⚠ Warning

Please be careful of the following while installing the equipment:

- Please only use the Connecting cables, power cord, AC adaptors shipped with the equipment or specified by Nortel to be used with the equipment. If you use any other equipment, it may cause "failures, malfunctioning or fire".

- Power cords shipped with this equipment must not be used with any other equipment. In case the above guidelines are not followed, it may lead to death or severe injury

⚠ 警告

本製品を安全にご使用頂くため、以下のことにご注意ください。

- 接続ケーブル、電源コード、ACアダプタなどの部品は、必ず製品に同梱されております添付品または指定品をご使用ください。添付品・指定品以外の部品をご使用になると故障や動作不良、火災の原因となることがあります。

- 同梱されております付属の電源コードを他の機器には使用しないでください。上記注意事項を守らないと、死亡や大怪我など人身事故の原因となることがあります。

Introduction

This guide describes how to install, configure and use your Nortel IP Phone 2007.

The topics in this chapter include:

How this guide is organized

This guide is organized as follows:

For a brief overview about how to use the SIP Multimedia PC Client to control your IP Phone 2007 (a configuration called the SIP Multimedia PC Client Set), see "Appendix A: Multimedia PC Client and the IP Phone 2007" on page 125.

For a brief overview about how to use the SIP Multimedia Office Client to control your IP Phone 2007 (a configuration called the SIP Multimedia Office Client Set), see "Appendix B: Multimedia Office Client and the IP Phone 2007" on page 127.

For a brief overview about how to use the Multimedia PC Client for IBM Lotus Notes to control your IP Phone 2007 (a configuration called the Multimedia PC Client for IBM Lotus Notes Set), see "Appendix C: Multimedia PC Client for IBM Lotus Notes and the IP Phone 2007" on page 129.

For information about setting up telephones that are not already configured, see, "Appendix D: DHCP parameter configuration" on page 131.

For a list of telephone parts numbers and where to go for help, see "Appendix E: Customer support" on page 137.

Audience

This guide is intended for IP Phone 2007 users.

Text conventions

This guide uses the following text conventions:

bold text	Indicates the IP Phone 2007 soft key you must press. Example: Press the **Ok** soft key.
italic text	Indicates new terms, document titles Example: See IP Phone 2007 *User Guide* (NN42020-104).

Acronyms

This guide uses the following acronyms:

DHCP	Dynamic Host Configuration Protocol
DND	Do Not Disturb
DTMF	dual-tone multi-frequency
ISDN	Integrated Services Digital Network
IM	instant message
IP	Internet Protocol
IPCM	Internet Protocol Client Manager
LAN	local area network
LCD	liquid crystal display
LED	light emitting diode
MAC	Media Access Control
QoS	Quality of Service
SIP	Session Initiation Protocol
VoIP	Voice over IP
WAN	Wide Area Network

Related publications

For more information, see the following publications:

- IP Phone 2002 *Quick Reference* (NN42020-110)
- IP Phone 2002 *User Guide* (NN42020-126)
- IP Phone 2004 *Quick Reference* (NN42020-122)
- IP Phone 2004 *User Guide* (NN42020-103)
- *Multimedia Office Client User Guide* (NN42020-139)
- *Multimedia PC Client User Guide* (NN42020-102)
- *Personal Agent User Guide* (NN42020-100)
- *Multimedia PC Client for IBM Lotus Notes User Guide* (NN42020-148)

How to get help

For service issues, contact your local support or Information Services team.

IP Phone 2007 overview

The IP Phone 2007 brings voice and data to the desktop by connecting to a local area network (LAN) through an Ethernet connection.

The IP Phone 2007 provides all the functionality of the IP Phone 2004, using a graphical user interface (GUI). Advanced text and graphics-based Web-centric applications are supported.

The topics in this chapter include:

Features and services

The IP Phone 2007 supports the following features:

- twelve programmable feature soft keys
- two soft keys (self-labeled) that provide access to a maximum of ten features

> ➡ **Note:** Some IP Phone 2007 telephones are not configured to support soft key functionality. Consult your system administrator to verify if your telephone supports soft key functionality.

- speaker for on-hook dialing or on-hook listening
- volume control bar for adjusting the ringer, speaker, handset, and headset volume

- four call processing fixed keys:
  - Hold
  - Goodbye
  - Handsfree
  - Mute
- automatic network configuration
- hearing-aid compatible
- large, color touch panel display screen
- web-based applications support
- remote firmware download
- hardware features
  - integrated 3-port switch (LAN, PC and internal port for voice)
  - high-quality Voice over IP (VoIP) sound
  - local generation of call alerting, call progress, and dial tones (as well as support for out-of-band DTMF signaling) to conserve valuable LAN/WAN bandwidth
  - wideband-compatible speakerphone (150 Hz to 7 kHz) with acoustic echo cancellation
  - shared LAN access with a PC
  - headset jack with an On/Off key
- software features
  - Call Forward, Ignore, Decline, and Transfer
  - Speed Dial from an inbox, outbox, or address book
  - Conference, Call Waiting, and Call Hold
  - automatic registration when the device is activated
  - multiple user log on
  - inbox
  - outbox
  - address book
  - Call Park
  - message waiting indicator (icon and telephone lamp lights red)

— Meet Me audio conferencing

For configuration information, see *Personal Agent User Guide* (NN42020-100) and for user information, see *Meet Me Audio Conferencing Quick Reference* (NN42020-113). This system feature is optional.

— roaming between domains in the same system

This feature depends on system configuration; contact your system administrator for details.

— voice mail, Hotline, and two modes of access (Restricted and Full Access) when configured by the administrator

The IP Phone 2007 does not support the IP Phone Key Expansion Module (KEM).

Some features are available on all telephones. Consult your system administrator to verify which features are available.

Useful terms

The IP Phone 2007 looks like a regular telephone, but you need to keep some important differences in mind.

Multiple user logon

Your IP Phone 2007 can support up to four lines. Therefore, four people can log on to a single IP Phone 2007 to receive and place calls.

The first person who logs on to the telephone has the primary line. You can be logged on to several IP Phones at the same time. The maximum number of devices or clients that you can log on to depends on your service package. Your administrator can force a log out from your devices or clients.

Use the menu options to configure or view parameters that are specific to a line. If several users are logged on to the telephone, then the system prompts you to select your line button.

Address

When you enter an address to call someone, you enter a SIP address or a telephone number.

A SIP address is a unique identifier of users on the IP network. It has the same format as an e-mail address, for example, jdoe@lab1.org, but it is not an e-mail address. The characters before the at sign (@) represent the user name, in our example, jdoe. The characters after the at sign represent the domain name of the server, in our example, lab1.org. If you are in the same domain as the user you are calling, you do not need to enter the domain name section of their SIP address (for example, @lab1.org).

The network can track where you are and route your calls when you log on to any IP Phone 2007 by using your SIP address. Use SIP addresses to take advantage of other features such as presence.

To make it easier to place calls, you can store addresses (SIP addresses or telephone numbers) in a personal address book.

Meet Me audio conferencing

Use this feature to host audio conferences by providing a dial-in number and access code to participants. The chairperson activates the conference with their own password. The Meet Me audio conference window displays who has joined the conference.

Users who have access to the Personal Agent can change their chairperson password and select the option of whether the conference ends automatically when they disconnect. For more information about Meet Me audio conference preferences, see *Personal Agent User Guide* (NN42020-100). For information about Meet Me audio conferencing on your system, see your system administrator.

Layout and display

The following sections describe the buttons on your IP Phone 2007.

IP Phone 2007 buttons

Your IP Phone 2007 includes buttons that provide instant access to features of the telephone. Figure 1 "IP Phone 2007" on page 28 shows the buttons on your IP Phone 2007.

Figure 1   IP Phone 2007

Goodbye key

Hold key

Message waiting indicator/
Incoming call indicator

Handset

Speaker

Dialpad

Display
screen

Handsfree
LED

Navigation
keys

Handsfree
key

Stylus
holder

LED

Headset key

Context-sensitive soft keys

Volume
control bar

Mute key

Table 1   IP Phone 2007 buttons and keys

Use the **Volume control** bar to adjust the volume of the ringer, handset, headset, speaker, and the Handsfree feature. Press the right side of the rocker bar to increase volume; press the left side to decrease volume.

Use the **Goodbye** key to terminate an active call.

Press the **Hold** key to put an active call on hold. Tap the flashing line soft key to return to the caller on hold.

Use the **Navigation** keys to scroll through menus and lists appearing on the LCD display screen. The key rocks for up, down, left, and right movements.

Press the **Headset** key to answer a call when you are using the headset or to switch a call from the handset or handsfree to the headset.

Press the **Speaker** key to activate handsfree operation. The speaker LED indicator lights to indicate when handsfree is active.

Press the **Mute** key to listen to the receiving party but not transmit sound. Press the **Mute** key again to return to two-way conversation. The **Mute** key applies to handsfree, handset, and headset microphones. The Mute LED indicator flashes when the Mute option is in use.

Table 1   IP Phone 2007 buttons and keys

The **Message waiting indicator** flashes when a message is left for the user. Also, this indicator flashes when the ringer is ON.

The two keys on either side of the navigation key are context-sensitive soft keys, and have labels on the LCD.

Telephone display

The IP Phone 2007 provides a large, color touch panel display that supports color XML/HTML content through an external application server.

The IP Phone 2007 window-based user interface has two display areas:

- Application area
- Tools and navigation area

shows an example of an idle LCD display screen.

Figure 2   Idle LCD display screen
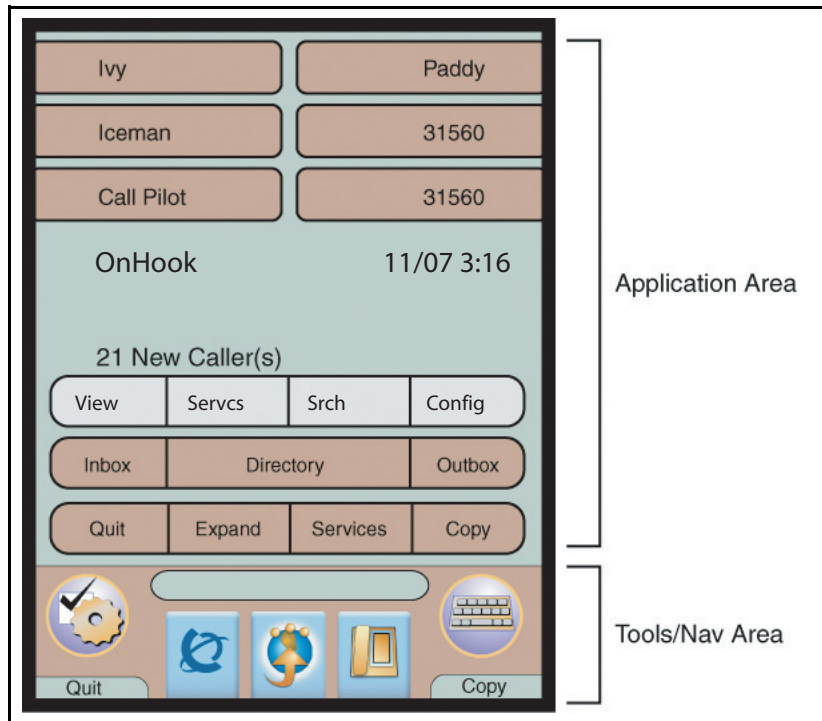
> **Note:** The display can differ from the above example.

To extend the life of the LCD panel, the panel goes dark (sleeps) after a period of inactivity. See "Adjusting contrast and brightness" on page 51 for information about configuring the amount of time that passes before the display panel sleeps.

Application area

The Application area provides

- line and feature soft key status
- information items such as caller number, caller name, feature prompt strings, user-entered digits, date and time information, and telephone information
- feature soft keys
- soft keys

Figure 3 "Application area" on page 32 shows the Application area.

Figure 3   Application area
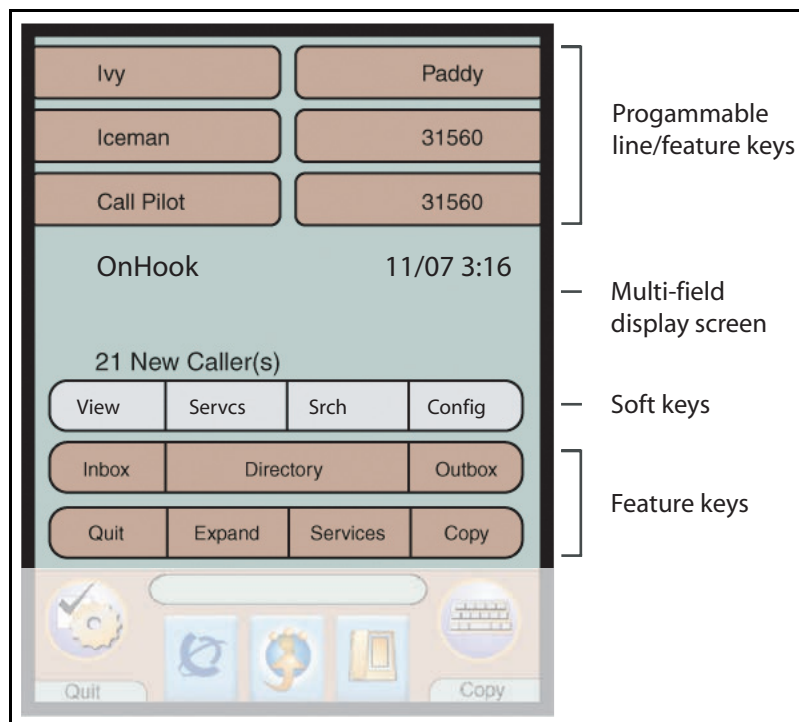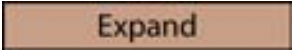
In the Feature keys area, the soft keys can show either text or icons. Table 2 "Soft keys text and icon equivalents" on page 32 shows the soft key text and icon equivalents. The text labels are displayed by default. You can display icons by using the Tools menu. For more information. see "Using the Button Customizing tool" on page 53.

Table 2   Soft keys text and icon equivalents

Text display	Icon display
Inbox	⬆
Directory	📖

Table 2   Soft keys text and icon equivalents

Text display	Icon display
Outbox	
Quit	
Expand	
Services	
Copy	

Tools/Navigation area

The Tools/Navigation area provides controls for navigating between features and for selecting tools. This area is visible and functional at all times.

Figure 4 Tools/Navigation area
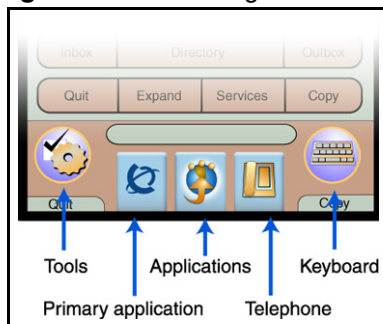
The Tools/Navigation area has five main elements that are presented as touchable soft keys:

 Tap this icon to determine which external graphical applications are registered (for example, My CallPilot), and to launch them by tapping the appropriate icon.

 Tap this icon to access the **Telephone** screen.

 Tap this soft key to access the primary graphical external application. The soft key displays the icon of the primary graphical application.

Tap this icon to access the following tools used on the IP Phone 2007:

- Network Configuration

- Local Diagnostics

- Touch Panel Setup

- Contrast and Brightness

- USB Devices

- TFTP Upgrade

- Preferences

- Lock menu

Tap this icon to display a virtual keyboard (pop-up keyboard) for text entry.

You can use the pop-up or the USB keyboard to enter text in some of the applications. See "Enter and edit text" on page 39 for more information.

Touch panel

You can perform point-and-click operations on your IP Phone 2007 by using the touch panel. The graphical user interface (GUI) presents soft keys directly on the display. You can use all Line/DN soft keys and feature soft keys by tapping the touch panel.

See "Cleaning the telephone Screen" on page 36 for important information.

Calibrate the touch panel

You can calibrate the touch panel by using the Tools menu. The system prompts you to use the stylus to tap three targets. See "Using the Touch Panel Setup tool" on page 50 for more information.

Stylus

You can operate the touch panel by using a stylus or your finger. A stylus is recommended to avoid damage to the touch panel.

Cleaning the telephone Screen

To clean the screen on the telephone, hold down the Goodbye key, and gently wipe the telephone screen with a soft, dry cloth.

Caution: Do not use liquids or powders on the telephone. Using anything other than a soft, dry cloth can contaminate telephone components and cause failure.

Call features and flexible feature codes

System administration is required for call features and flexible feature codes (FFC). Contact your system administrator to configure these features and codes on your telephone.

The Call features and FFCs must be assigned to your service package and must be supported by system software.

Security Features

Your Station Control Password (SCPW) enables the following security features:

- electronic Lock to prevent others from making calls from your telephone
- password-protected telephone features (for example, Address Book, Inbox, and Outbox)

Your initial SCPW is defined by your system administrator. Contact your system administrator for detailed information.

Changing your SCPW

Services	1. Tap the **Services** soft key.
	2. Press the **Up/Down** keys to scroll and select **Password Admin**.
Select	3. Tap the **Select** soft key.
	4. Use the dialpad to enter your password.
	5. Press the **Up/Down** keys to scroll and select **New Password**.
Select	6. Tap the **Select** soft key.
	7. Use the dialpad to enter the new password.
Select	8. Tap the **Select** soft key to accept the new password. Note: If you are locked out of your IP Phone 2007 or forget your SPCW, contact your system administrator.

Turning Password Protection on or off

→ **Note:** The default setting for Password Protection is off.
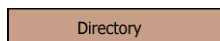
Directory	1. Tap the **Directory** soft key.
	2. Press the **Up/Down** navigation keys to scroll and select **Change Protection Mode**.

3. Use the dialpad to enter your password (if Password Protection is enabled).

4. Tap the **Enter** soft key.

5. Press the **Up/Down** navigation keys to scroll and select one of the following:
   • **Enable Password Protection**
   • **Disable Password Protection**
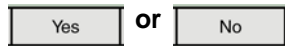
6. Select one of the following:
   • **Yes** to accept the selection.
   • **No** to return to the **Directory** menu.

7. Tap the **Done** soft key.

Enter and edit text

You can enter and edit text on your IP Phone 2007 by using the following methods:

- telephone dialpad
- soft keys
- pop-up keyboard

Which method you must use for text entry depends on the application. The following table shows the applications and input devices that can be used for text entry.

Table 3   Application and input devices

For	Use
Call Server applications (for example, changing feature key labels, adding address book entries, or dialing)	Dialpad Pop-up or USB keyboard for numeric entries only
Graphical applications	Pop-up keyboard
Tools menu	Pop-up keyboard Dialpad for numeric entries

Enter text by using the dialpad

You can use the dialpad to enter text when you use features such as programming a SpeedDial soft key.

For example, to enter the letter A, press the number **2** key once. To enter the letter C, press the number **2** key three times. This is only the case if Alpha dialing is turned on. Press the **Alpha/NoAlpha** soft key to toggle between entering characters and entering digits, or see "Turning Alpha Dialing on or off" on page 55 for more information.

➡ **Note:** No letters are associated with the number 1 key or the number 0 key.

When you enter IP addresses by using the dialpad, the address is entered as xxx*xxx*xxx*xxx, and the telephone translates this to xxx.xxx.xxx.xxx.

Edit text by using the soft keys

You can use soft keys to access text when you use applications such as Address Book, Outbox, and Inbox.

Table 4 "Soft key editing functions" on page 40 describes the soft key editing functions on the IP Phone 2007.

Table 4   Soft key editing functions

Soft key	Description
Cancel	Stop the current action.
Choose	Select a symbol.
Clear	Clear the input field.
Case	Switch the next character to either uppercase or lowercase.
Delete	Backspace one character.
Done/Select/Enter	Depends on application.
More	Access additional soft keys.

Enter text by using the pop-up keyboard

A full uppercase and lowercase keyboard and a number pad are available to enter text. You can type on the keyboard by using the stylus. You can use the pop-up keyboard to enter text in the tools and graphical applications.

To enter numbers in telephone applications (for example, when you dial), the keyboard can be used to enter digits (0–9), star (*) and pound (#).

Helpful hints

When navigating the IP Phone 2007 menus or entering text, keep the following tips in mind:

- In a numbered menu list, press the dialpad number that corresponds to the item on the list to select it.
- Use the navigation buttons to scroll vertically and horizontally through display information. In the address book, inbox, outbox and friends lists, the right navigation button displays details about an entry.
- Use the star (*) dialpad button to return to the beginning of a list and the pound (#) button to go to the end of a list.
- To capitalize a letter, first enter the letter using the dialpad and then press the up navigation button to apply capitalization.

Quick Services menu

Use the Services soft key, below the Directory soft key, to access the Quick Services menu, which lists commonly used items from the various soft key menus. Tap the **Services** soft key to access the Quick Services menu, which provides access to the following features:

1. Presence (see "Presence" on page 92)
2. Global Search (see "Global Search" on page 114)
3. Stock Query (see "Stock Query" on page 107)
4. Send IM (see "Send IM" on page 108)
5. Do Not Disturb (see "Do Not Disturb" on page 110)
6. Retrieve Parked Call (see "Retrieve Parked Call" on page 113)

For more information about each of these items, see the appropriate section as indicated by the text in parentheses, above.

Secure your telephone

Use the Electronic Lock feature to prevent others from making calls from your telephone. You control the Electronic Lock feature by using your Station Control Password (SCPW). For information about how to change your Station Control Password, see "Changing your SCPW" on page 37.

Locking your telephone

1. Lift the handset.

2. Dial the Electronic Lock Activate FFC.

3. Dial your Station Control Password.

4. Perform one of the following:
   • If you are dialing locally, press the **Goodbye** key.
   • If you are dialing the FCC remotely, dial your DN.

or

Unlocking your telephone

1. Lift the handset.

2. Dial the Electronic Lock Deactivate FFC.

3. Dial your Station Control Password.

or

4. Perform one of the following:
   • If you are dialing locally, press the **Goodbye** key.
   • If you are dialing the FCC remotely, dial your DN.

Installation

This chapter describes how to install your IP Phone 2007.

The topics in this chapter include:

> ➡ **Note:** Contact your system administrator to ensure that your network is prepared for you to configure and initialize your IP Phone 2007.

Before you begin

Before you begin setting up your telephone, ensure that you have the following components:

- IP Phone 2007 telephone
    — Telephone handset
    — Telephone handset cord
    — IP Phone 2007 base
- AC adapter
- Ethernet cable
- Active LAN connection

Telephone controls

shows the layout and buttons of an IP Phone 2007.

Figure 5 IP Phone 2007

Connecting your IP Phone 2007

> **Caution:** Do not plug the IP Phone 2007 into a regular telephone jack. This results in severe damage to the IP Phone. Consult your system administrator to ensure that you plug your telephone into a 10/100BaseT Ethernet jack.

1 Connect one end of the handset cord to the handset jack (identified with a handset icon) on the telephone base and connect the other end of the handset cord to the handset.

2 Select one of the following connections:

a For a telephone not sharing a LAN access with a PC, connect one end of the Ethernet cable to the Ethernet plug (identified with a network icon) on the telephone and the other end to your 10/100BaseT Ethernet jack.

b For a telephone sharing a LAN access with a PC, connect one end of the Ethernet cable to the Ethernet plug (identified with a network icon) on the telephone and the other end to your 10/100BaseT Ethernet jack. Connect one end of a second Ethernet cable to the PC Ethernet port (identified with a PC icon) on the back of the telephone and the other end to the computer Ethernet port.

3 Contact your installation technician for the proper power option. This telephone can be powered by an optional AC adapter or using Power over Ethernet.

> **Warning:** If you are using an AC adapter, you must use the IP Phone 2007 Global Power Adapter (part number N0014020) or your telephone cannot operate.

4 Thread the cord around the retaining hook, and channel provided.

5 Secure the telephone footstand to the telephone base.

Use the angle grip on the top back of the telephone to change position.

6 Contact your system administrator for configuration instructions.

shows a layout of bottom of the IP Phone 2007 including connections.

Figure 6   IP Phone 2007 bottom-view.

LAN Ethernet port
PC Ethernet port
AC Adapter jack

USB port
Tilt adjust latch

Stylus holder
Headset jack
Handset jack

Attachment clips   Cord guides
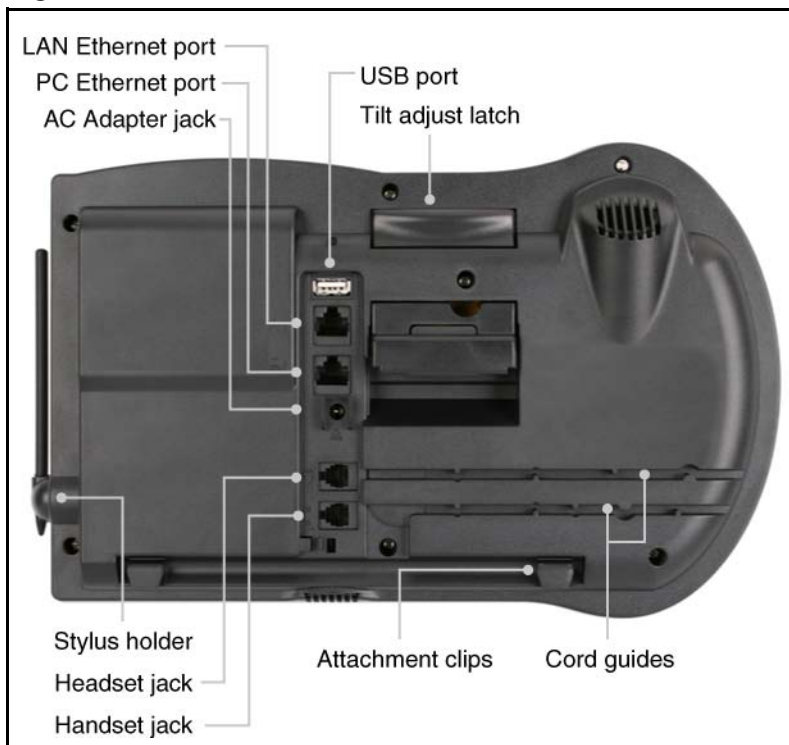
Configuration

This chapter provides information about the configuration options found in the Tools menu and the Config menu.

The topics in this chapter include:

Tools menu (local options)

Your IP Phone 2007 has both local and server-based options. The local options include the following entries in the Tools menu:

- Network Configuration
- Local Diagnostics
- Touch Panel Setup
- Contrast and Brightness
- USB Devices
- TFTP Upgrade
- Preferences

→ **Note:** Some of these items can be used only by the system administrator.

Network Configuration

The Network Configuration option provides access to information configured when the telephone was installed. This tool is for administrator use only.

Local Diagnostics

The Local Diagnostic menu contains tools that diagnose local problems. This menu is for administrator use only.

Using the Touch Panel Setup tool

The Touch Panel Setup tool calibrates the touch panel and stylus. Calibration is required when stylus taps are not interpreted correctly.

1. Tap the **Tools** icon.

2. Tap the **Touch Panel Setup** soft key.

   Touch Panel Set Up

   The screen displays a calibration map, the **CANCEL** soft key appears, and the system prompts
   Touch the center of the red ball.

3. Using the stylus, tap each of the dots, in order, starting with the red dot in the lower-left portion of the screen, and following the sequence as prompted.

   After the third dot is tapped, the display changes to indicate the result of the calibration. If the calibration is successful, the telephone reports Data calibration is CORRECT, prompts Save Data Calibration?, and displays the **YES** and **NO** soft keys, and calibration statistics.

   Perform one of the following:
   — Tap the **YES** soft key to save the calibration settings and exit to the main display.
   — Tap the **NO** soft key to stop the calibration settings and exit to the main display.

• If the calibration is not successful, the
telephone reports
`Data calibration is INCORRECT`,
prompts `Repeat Calibration?`,
and displays the **YES** and **NO** soft keys, and
calibration statistics

Perform one of the following:

YES

NO

— Tap the **YES** soft key to try the calibration
again (starting at step 3).
— Tap the **NO** soft key to abandon the
calibration and exit to the main display.

Adjusting contrast and brightness

Use the Contrast and Brightness tools to adjust the physical settings of the display.

1. Tap the **Tools** icon.

Contrast and Brightness

2. Tap the **Contrast and Brightness** soft key.

The following choices are displayed:
• `Contrast` and a set of **Down** and **Up** soft keys
• `Brightness` and a set of **Down** and **Up** soft
keys
• `Sleep in xxx`, where `xxx` is a time in minutes
or hours, and a set of **Down** and **Up** soft keys

Up

3. To increase the display contrast, tap the **Up** soft
key beside the `Contrast` label.

Down

4. To decrease the display contrast, tap the **Down**
soft key beside the `Contrast` label.

Up

5. To increase the display brightness, tap the **Up**
soft key beside the `Brightness` label.

Down	6. To decrease the display brightness, tap the **Down** soft key beside the Contrast label.
Up or Down	7. To increase or decrease the time before the display sleeps (goes black), tap the **Up** or **Down** soft key beside the Sleep in label. The sleep time increases or decreases from the default, and provides settings for: 5m (5 minutes) 15m (15 minutes) 30m (30 minutes) 1h (1 hour—default) 2h (2 hours) Never (screen does not go black). Extending the sleep time or never sleeping reduces the life span of the display screen.
Exit	8. Tap the **Exit** soft key to exit to the main display. Changes are saved automatically.

TFTP Upgrade

The TFTP Upgrade menu is used to upgrade the firmware in the telephone. This menu is for administrator use only.

Preferences

The Preferences menu contains the Button Customizing Tool and the Exit soft key. Use this menu option to adjust system preferences.

Accessing the Preferences menu

To access the Preferences menu contrast, tap the **Config** soft key and select **3. Preferences**.

Using the Button Customizing tool

1. Tap the **Tools** icon.

2. Tap the **Preferences** soft key.

3. Tap the **Button Customizing Tool** soft key.
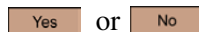
Three columns are displayed and the **Apply** and **Exit** soft keys:

Buttons	Icons	Labels
Inbox		_ _ _ _ _ _ _ _
Directory		_ _ _ _ _ _ _ _
Outbox		_ _ _ _ _ _ _ _
Quit		_ _ _ _ _ _ _ _
Expand		_ _ _ _ _ _ _ _
Services		_ _ _ _ _ _ _ _
Copy		_ _ _ _ _ _ _ _

The boxes that have a black outline are the current settings.

4. To change a soft key from displaying text to displaying the icon, tap the associated icon. A black box appears around the icon.

5. To change a soft key to display a custom label:

   • Tap twice on the corresponding field in the Label column to get a blinking cursor. A black box appears around the label.

   • Enter text by typing on the USB keyboard or virtual keyboard.

   • Tap somewhere on the screen to stop editing the field.

   • The system truncates the label if it does not fit into the display area of the soft key.

6. Perform one of the following:

   Apply

   • To apply the changes, tap the **Apply** soft key.

   Exit

   • To abandon the changes, tap the **Exit** soft key. The system responds Save changes? and the **Yes** and **No** soft keys display.

   Perform one of the following:

   Yes or No

   — Tap the **Yes** soft key to save the changes.

   — Tap the **No** soft key to abandon the changes and exit to the Preferences menu.

   Exit

7. Tap the **Exit** soft key to return to the Preferences menu.

Turning Alpha Dialing on or off

1. Press the **Up/Down** navigation keys to scroll and select **Alpha Dialing: ON**.

2. Tap the **Change** soft key.

   The following prompt appears: Turn alphanumeric dialing on / off?
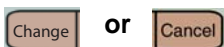
3. Perform one of the following:
   - Tap the **Change** soft key to turn Alpha Dialing on or off.
   - Tap the **Cancel** soft key to discard changes and return to the Config menu.

Turning Instant Message Display on or off

1. Press the **Up/Down** navigation keys to scroll and select IM Display: ON

2. Tap the **Change** soft key.

   The following prompt appears: Instant Message display for device is ON. Turn it OFF?
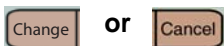
3. Perform one of the following:
   - Tap the **Change** soft key to turn Instant Message Display on or off.
   - Tap the **Cancel** soft key to discard changes and return to the Config menu.

Configuring Name Search

1. Press the **Up/Down** navigation keys to scroll and select **Search Method: Name Sea**.

2. Tap the **Change** soft key.

3. Press the **Up/Down** navigation keys to scroll and select one of the following:
   1. Index Search
   2. 1st Character Search
   3. Name Search

4. Perform one of the following:
   • Tap the **Change** soft key to select the selected option.
   • Tap the **Cancel** soft key to discard changes and return to the Config menu.

Turing Ignore Action on or off

1. Press the **Up/Down** navigation keys to scroll and select **Ignore Action: LOCAL**

2. Tap the **Change** soft key.
   The following prompt appears: Set IGNORE action to affect all network contacts?
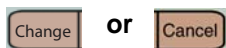
3. Perform one of the following:
   • Tap the **Change** soft key to turn Ignore Action on or off.
   • Tap the **Cancel** soft key to discard changes and return to the Config menu.

Selecting the dialpad language

1. Press the **Up/Down** navigation keys to scroll and select **Dial Pad: a-z**

2. Tap the **Change** soft key.

3. Press the **Up/Down** navigation keys to scroll and select one of the available languages (for example, **1. English**).
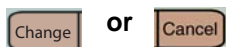
4. Perform one of the following:
   • Tap the **Change** soft key to use the selected language.
   • Tap the **Cancel** soft key to discard changes and return to the Config menu.

Idle Display

Use this option to enter the message you want the telephone to display when idle.

1. Press the **Up/Down** navigation keys to scroll and select **4. Idle Display**.

2. Tap the **Select** soft key.
   The following prompt appears: Set Idle Display >

3. Use the dialpad to enter the string you want to search for.
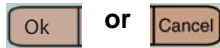
4. Perform one of the following:
   - Tap the **Ok** soft key to use the new idle display message.
   - Tap the **Cancel** soft key to discard changes and return to the Config menu.

Specifying location

Use the Location option to indicate your location.
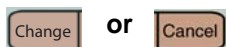
1. Press the **Up/Down** navigation keys to scroll and select **5. Location**.

2. Tap the **Select** soft key.

3. Press the **Up/Down** navigation keys to scroll and select one of the listed locations.
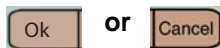
4. Perform one of the following:
   - Tap the **Ok** soft key to use the selected location.
   - Tap the **Cancel** soft key to discard changes and return to the Config menu.

Language Preferences

The display is available in several languages. You can use two methods to configure which language appears on your phone.

- Config menu (to control the language used by features)
- Tools menu (to control the language used by local menus)

Config menu

To choose a language, tap the **Config** soft key, and select **6. Language Preferences** from the menu.
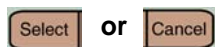
1. Press the **Up/Down** navigation keys to scroll and select the desired language (for example, German [Deutsche]).

2. Perform one of the following:
   - Tap the **Select** soft key to save the new language selection.
   - Tap the **Cancel** soft key to discard changes and return to the Config menu.

Tools menu

See "Preferences" on page 52 for instructions on changing the language for the local labels of the graphical user interface.

Time Preferences

Several date and time formats are available. Formats are based on the 12- and 24-hour clocks.

To access Time Preferences, tap the **Config** soft key and select **7. Time Preferences** from the menu.

1. Tap one of the soft keys: **DateFm**, **TmZone**, or **TimeFm**.

2. Press the **Up/Down** navigation keys to scroll and select the format.
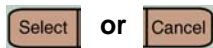
3. Perform one of the following:
   - Tap the **Select** soft key to save the format and return to the **Time Format** menu.
   - Tap the **Cancel** soft key to keep existing settings.
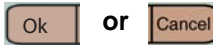
4. Perform one of the following:
   - Tap the **Ok** soft key to use the selected date and time format.
   - Tap the **Cancel** soft key to discard changes and return to the Config menu.

Display Version

The Display Version option shows the load and IPCM information. This option is for administrator use.

Resetting the IP Phone 2007

Use this option to reset the telephone to factory default settings.

To access the Reset Phone option, tap the Config soft key and select **9. Reset Phone** from the menu.

1. Press the **Select** soft key. The following prompt appears: Reset Phone.
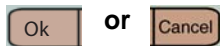
2. Perform one of the following:
   - Tap the **Ok** soft key to reset the telephone.
   - Tap the **Cancel** soft key to keep existing settings and return to the Config menu.

Switching to an alternate Controller server

Use this option to switch to an alternative Controller server.

To access the Switch Controller option, tap the **Config** soft key and select **10. Switch Controller** from the menu.

Select

1. Press the **Select** soft key.

   The following prompt displays:

   ```
   Use Alternate Controller 2?
   Host: xxx.xxx.xxx.xxx
   Port: xxxx
   ```

Ok **or** Cancel
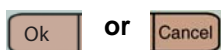
2. Perform one of the following:
   - Tap the **Ok** soft key to search for the alternate controller.
   - Tap the **Cancel** soft key to keep existing settings and return to the Config menu.

   Note: If the telephone fails to connect to an alternative controller, it restores the connection to the existing controller.

Exiting the Preferences menu

Exit

Tap the **Exit** soft key to return to the main display.

Config menu

The **Config** soft key provides access to the Configuration menu, which contains the following items:

To access the Config menu, tap the **Config** soft key on the idle display.

Volume Setting

Use this option to change the volume of the ringer, handset, headset, and handsfree, and to choose the ring pattern.

To access the volume and ringer controls, tap the **Services** soft key, select **Config**, and select **1. Volume Setting** from the menu.

Adjusting the ring pattern

To adjust the ring pattern*:*

1. Press the **Up/Down** navigation keys to scroll and select **1. Ringer Pattern**

2. Press the **Up/Down** navigation keys to scroll and select the ring pattern you want to use (the telephone plays the selected ring pattern).
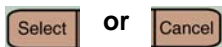
3. Perform one of the following:
   • Tap the **Select** soft key to save the changes and return to the **Config** menu.
   • Tap the **Cancel** soft key to keep existing settings.

Adjusting the handset volume

To adjust the handset volume:

1. Press the **Up/Down** navigation keys to scroll and select **2. Handset listen**.

2. Tap the **Select** soft key.

3. Press the **Left/Right** navigation keys to increase or decrease the volume.
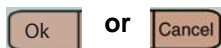
4. Perform one of the following:
   • Tap the **Ok** soft key to save the changes and return to the **Config** menu.
   • Tap the **Cancel** soft key to keep existing settings.

Adjusting the headset volume

To adjust the headset volume:

1. Press the **Up/Down** navigation keys to scroll and select **3. Headset listen**.

2. Tap the **Select** soft key.

3. To increase or decrease the volume, perform one of the following:
   - Tap the **Up** or **Down** soft keys.
   - Press the **Up/Down** navigation keys.

4. Perform one of the following:
   - Tap the **Select** soft key to save the changes and return to the **Config** menu.
   - Tap the **Cancel** soft key to keep existing settings.
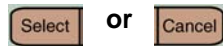
Adjusting the handsfree volume

To adjust the handsfree volume:

1. Press the **Up/Down** navigation keys to scroll and select **4. Handsfree listen**.

2. Tap the **Select** soft key.
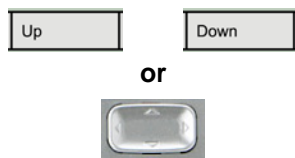
3. To increase or decrease the volume, perform one of the following:
   • Tap the **Up** or **Down** soft keys.
   • Press the **Up/Down** navigation keys.
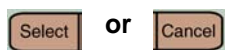
4. Perform one of the following:
   • Tap the **Select** soft key to save the changes and return to the **Config** menu.
   • Tap the **Cancel** soft key to keep existing settings.

Adjusting the alerting volume

To adjust the alerting volume:

1. Press the **Up/Down** navigation keys to scroll and select **5. Buzzer**.

2. Tap the **Select** soft key.
   The buzzer sounds.

3. To increase or decrease the volume, press the **Up/Down** navigation keys.
   The buzzer sounds.
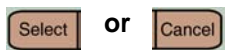
4. Perform one of the following:
   • Tap the **Select** soft key to save the changes and return to the **Config** menu.
   • Tap the **Cancel** soft key to keep the previous volume settings.

Contrast Setting

There are two methods to adjust the display screen contrast:

- Config menu
- Tools menu

Config menu

To adjust the LCD screen contrast, tap the **Config** soft key and select **2. Contrast Setting**.

Adjusting display screen contrast:
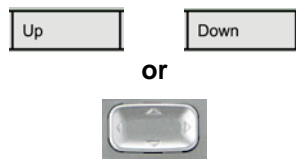
1. To increase or decrease the display contrast level, perform one of the following:
   - Tap the **Up** or **Down** soft keys.
   - Press the **Up/Down** navigation keys.
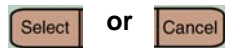
2. Perform one of the following:
   - Tap the **Select** soft key to save the changes and return to the **Config** menu.
   - Tap the **Cancel** soft key to keep existing settings.

Tools menu

Use the Tools menu method to adjust the contrast when the telephone is not connected to a call server. For more information and the procedure, see "Adjusting contrast and brightness" on page 51.

Make and receive calls

This chapter describes features associated with making and receiving calls.

The topics in this chapter include:

Make a call

There are several ways to make a call from an IP Phone 2007:

- off-hook dialing
- on-hook dialing
- handsfree dialing

Using off-hook dialing

1. Lift the handset.

2. Dial the number.

3. To terminate the call, perform one of the following:
   • Replace the handset into the cradle.

   or

   • Press the **Goodbye** key.
   Note: You cannot end an emergency services call.
   Emergency services calls are ended only by
   emergency services personnel.

Making a call using on-hook dialing

1. Leave the handset in the cradle.

Line 2
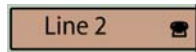
2. Tap the line (DN) soft key.

3. After the dial tone sounds, dial the number.

4. When the called party answers, lift the handset.
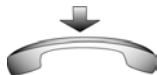
5. To end the call, perform one of the following:
   • Replace the handset into the cradle.

   or

   • Press the **Goodbye** key.
   Note: You cannot end an emergency services call.
   Emergency services calls are ended only by
   emergency services personnel.

Handsfree dialing

Use Handsfree dialing to use a built-in microphone and speaker, or a headset, instead of the handset. While you are on an active call, you can switch between the Handset and Handsfree mode.

Making a handsfree call

1. Press the **Handsfree** key.

2. If a headset is connected, press the **Headset** key.

3. Dial the number.

Ending a handsfree call

Press the **Goodbye** key.

Note: You cannot end an emergency services call. Emergency services calls are ended only by emergency services personnel.

Muting a handsfree call

1. Press the **Mute** key. The LED indicator flashes.

2. Press the **Mute** key again to return to a two-way handsfree conversation.

Switching from handsfree mode to handset mode

Lift the handset.

Switching from handset mode to handsfree mode

1. Press the **Handsfree** key.

2. Replace the handset.

Using a headset

1. Connect the headset to the headset jack or the handset jack.

2. Press the **Headset** key.

Switching from handsfree mode to headset mode

Press the **Headset** key.

Directory applications

You can make calls using various Directory applications available on your IP Phone 2007.

The applications include:

- Address Book
- Inbox
- Outbox

Making a call by using the Address Book

Use the Address Book to store a maximum of 100 entries consisting of names and numbers.

To access the Address Book, tap the **Directory** soft key.

1. Press the **Up/Down** navigation keys to scroll and select a name in the **Address Book**.
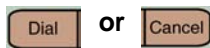
2. Perform one of the following:
   - Tap the **Dial** soft key to dial the resulting number.
   - Tap the **Cancel** soft key to exit without dialing.

Making a call by using the Inbox

The Inbox feature automatically stores up to a maximum of 100 callers. After 100 callers are stored, each additional caller overwrites the oldest entry.

To use Inbox, tap the **Directory** soft key and select **Inbox**.

1. Press the **Up/Down** navigation keys to scroll and select a name in the **Inbox**.
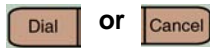
2. Perform one of the following:
   • Tap the **Dial** soft key to dial the resulting number.
   • Tap the **Cancel** soft key to exit without dialing.

Making a call by using the Outbox

The Outbox feature automatically stores a maximum of 20 previously dialed telephone numbers.

To use Outbox, tap the **Directory** soft key and select **Outbox**.

1. Press the **Up/Down** navigation keys to scroll and select a name in the **Outbox**.
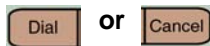
2. Perform one of the following:
   • Tap the **Dial** soft key to dial the resulting number.
   • Tap the **Cancel** soft key to exit without dialing.

Predial

Use the Predial feature to enter, preview, and edit numbers before dialing.

Using Predial

1. Without selecting the line soft key, enter the number to be dialed.

2. Tap a line soft key to dial the number.

2498

3. Lift the Handset when the called party answers or, if you are using Handsfree mode, begin to speak.

Editing a Predial number

1. Use the dialpad to enter the number.
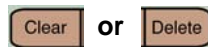
2. Perform one of the following:

Clear **or** Delete
   • To erase all numbers, tap the **Clear** soft key. Reenter the number.
   • To change numbers one at a time, tap the **Delete** soft key to backspace. Reenter the number.
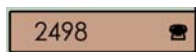
3. Tap a line soft key to dial the number.

2498

SpeedDial

Use the SpeedDial feature to display, store, and automatically dial telephone numbers.

Storing a SpeedDial number

| SpeedDial | 1. Without lifting the handset, tap the appropriate **SpeedDial** soft key. |
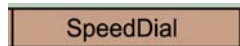
1. Without lifting the handset, tap the appropriate **SpeedDial** soft key.

   Note: The display screen displays the word SpeedDial next to the appropriate soft key.

2. Using the dialpad, dial the telephone number (including access code) to store on the selected **SpeedDial** soft key.
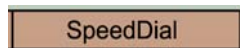
3. Tap the **SpeedDial** soft key a second time to store the number on the selected soft key.

   Note: Once a number is stored, the word SpeedDial disappears, and the stored number appears.

4. Using the dialpad, assign a label to the soft key.

   Note: After the label is assigned, the number disappears and only the label appears on the screen next to the soft key.

Displaying a SpeedDial number
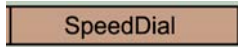
Display	1. Tap the **Display** soft key.
SpeedDial	2. Tap a **SpeedDial** soft key in the upper display area to display the number associated with that soft key.

Using SpeedDial
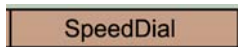
	1. Lift the handset.
SpeedDial	2. Tap a **SpeedDial** soft key in the upper display area to dial the number associated with that soft key.

Answering a call

Each incoming call makes the telephone ring, makes the line/DN soft key flash and show a ☎, and makes the Message Indicator lamp flash.

> **Note:** You cannot answer a second incoming call while you are on an emergency services call.

- Lift the handset.

- Press the **Handsfree** button located on the left side of the handset.

- Tap the line (DN) soft key beside the LCD indicator as it flashes.

  2498 ☎

- Press the **Headset** key if a headset is connected to your telephone.

Call management

This chapter describes how to manage your calls efficiently using the IP Phone 2007. For related information, see "IP Phone 2007 overview" on page 23 and "Advanced features and services" on page 91.

The topics in this chapter include:

Placing a call on hold

Use the Hold feature when you are talking on one line and another call arrives on a second line. Retain the original call by placing it on hold, and then answer the second call.

> **Note:** You cannot place an emergency services call on hold.

Press the Hold key. The LCD indicator flashes beside the line on hold.

If Automatic Hold is enabled, the active call is automatically placed on hold when you answer the second call.

Retrieving a call on hold
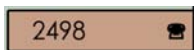
2498 Tap the flashing line (DN) soft key.

Transferring a call

Use the Transfer feature to direct a call to another party.

> ➡ **Note:** You cannot transfer an emergency services call.

> ➡ **Note:** You cannot redirect a call to a caller who has already redirected the call to you. For example, if Caller A calls Caller B, Caller B can redirect the call to Caller C and return to available status. Although Caller B is available, Caller C cannot redirect the call to Caller B because the system treats this route as already attempted without success. This treatment prevents redirect loops. If Caller C attempts to redirect the call to Caller B, the call ends and Caller A receives a temporarily unavailable message.

Transfer	1. Tap the **Transfer** soft key. The other party is placed on hold and a dial tone sounds. The LCD indicator light flashes steadily.
	2. Dial the DN number to which the call is to be transferred, or use **Address Book**, **Outbox**, or **Inbox** to select a number to dial.
Transfer	3. When that number rings or a person answers, tap the **Transfer** soft key to connect the calling party.

Returning to the original call

You can return to the original call if the transfer is incomplete.

2498 ☎	If the person called is not available, tap the line (DN) soft key (next to the LCD indicator) to reconnect to the original call.

Using Timed Reminder Recall

Use the Timed Reminder Recall feature to receive a reminder tone when a transferred call is not answered.

1. Tap the **Transfer** soft key.
   The call is placed on hold.

2. Dial the number to which the call is being transferred.

3. Perform one of the following to start the call timer:
   or
   • Tap the **Transfer** soft key.
   • Replace the handset before the extension answers.
   If the transfer is complete, the recall timer stops.

If the transferred call is not answered, your telephone rings:

4. Lift the handset to reconnect to the original caller.

5. Perform one of the following:
   or
   • Tap the **Transfer** soft key and repeat the transfer.
   • If the transfer is picked up while you are on the line, press the **Goodbye** key to complete the transfer.

Using Attendant Recall

Use the Attendant Recall feature to contact an attendant during a call and to connect the call to the attendant.

AttRcl	1. Tap the **Attendant Recall** soft key and stay on the line until the attendant answers.
	2. Press the **Goodbye** key. The caller remains connected to the attendant.

Displaying incoming calls

Use the Display feature to display a second incoming caller's number and name (if available) during an active call, without interfering with the call in progress.

Display	1. Tap the **Display** soft key.
2498	2. Tap the flashing line (DN) soft key.

Trace a malicious call

Use the Malicious Call Trace feature to trace nuisance calls within your system.

> ➡️ **Note:** This is not a default feature. Contact your system administrator to configure this feature on your telephone. You cannot use this feature if you are on an emergency call.

Using Call Trace during a call

| CallTrace | Tap the **Call Trace** soft key. |

Using Call Trace without the Call Trace soft key

| Transfer **or** Conf | 1. Perform one of the following:
• Tap the **Transfer** soft key.
• Tap the **Conference** soft key. |
| | 2. Dial the SPRE code followed by 83 or dial the Call Trace FFC to automatically reconnect. |

Searching for users

Use the Srch menu to access the search function, which you can use to find other users.

To access the Srch menu, tap the **Srch** soft key on the idle display.

1. Use the **Up/Down** navigation keys to scroll and select one of the following:
   1. User Name
   2. Name
   3. Last Name
   4. First Name,
   5. Phone Number
   Note: The choice you make in this step determines the parameters used to search. For example, select **3. Last Name** to search based on user last name.

2. Tap the **Select** soft key.
   A prompt appears, instructing you to enter the user name, name, first name, last name, or telephone number, depending on your choice in the previous step.

3. Use the dialpad to enter the string you want to search for.

4. Tap the **Ok** soft key to search. One of the following occurs:
   • If the search is unsuccessful, you can tap **Srch** to try another search, or **Cancel** to return to the idle display.
   • If the search is successful, a list of names appears.

5. Use the **Up/Down** navigation keys to select an entry.

6. Perform one of the following:
   - Tap the **Call** soft key to dial the selected entry.
   - Tap the **Save** soft key to save the entry to the Address Book.
   - Tap the **Srch** soft key to try another search.
   - Tap the **Cancel** soft key to return to the Servcs menu.

Conference calling

Use the features described in this section to create conversations between more than two people.

> **Note:** You cannot initiate a conference while you are on an emergency services call.

Using the Call Join feature

Use the Call Join feature to connect a call to a current active call. This creates a conference between the two callers and yourself.

To connect a call that is on hold (on a different line) to your current call:
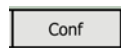
Conf	1. Tap the **Conference** soft key.
2498 ☎	2. Tap the line soft key that has the number of the caller you want to connect to your current call.
Conf	3. Tap the **Conference** soft key to add the person on hold to your conversation.
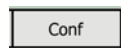
Setting up a conference call

Use the Conference feature to set up a conference call. The maximum number of people the Conference feature supports, usually three or six people including yourself, depends on your telephone configuration.

Conf	1. While you are on a call, tap the **Conference** soft key to place the party on hold. You receive dial tone.
(keypad)	2. Dial the number of the person you want to add to the conference call. You can talk privately to the person you are adding at this time. Note: You can also use the **Outbox**, **Directory** (Address Book) or **Inbox** to find and dial the number of the person you want to add to the conference call.
Conf	3. Tap the **Conference** soft key a second time to conference all parties together.
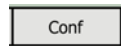
If the person you attempt to add to the conference is unavailable:

(Goodbye key)	4. Press the **Goodbye** key.
2498 ☎	5. Tap the line (DN) soft key with the flashing status icon to return to your original call.

Conferee Selectable Display and Disconnect feature

Use the Conferee Selectable Display feature to list active conferees and disconnect a conferee from the conference call.

Viewing active conferees

| ConfDsp | 1. While you are on a conference call, tap the **Conferee Selectable Display** soft key to turn on the LCD indicator. Each tap changes the screen to show a different active conferee. |

Note: This action has no effect on the display of other telephones involved in the conference.

2. Press the **Goodbye** key.

If configured, the Conference Count Display returns an updated total count of conferees. The LCD indicator turns off.

Disconnecting a conferee

| ConfDsp | 1. While you are on a conference call, tap the **Conferee Selectable Display** soft key until the conferee you want to disconnect appears on the screen. |

| 2498 | 2. Tap the **DN** soft key on which the conference call is established. |
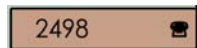
3. For a single conferee, press the **Goodbye** key. If configured, the Conference Count Display returns an updated total count of conferees. The LCD indicator turns off.

Note: For multiple conferees, repeat steps 1 and 2 until all conferees are disconnected. Then press the **Goodbye** key.

Instant Messaging

You can use your IP Phone 2007 to exchange text messages with other users.

> **Note:** The ability to send or receive instant messages (IM) depends on your service package.

Sending an instant message

To access the Send IM option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **2. Send IM**, and tap the **Select** soft key. See "Send IM" on page 108.

Respond to an instant message

When you receive a text message, the sender's name appears on your display with the text of the message, and the soft keys **Detail** and **Cancel** become available.

Replying to a message

1. Press the **Detail** soft key.

2. Press the **Reply** soft key.

3. Use the dialpad to enter the address you wish to send a message to.
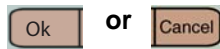
4. Tap one of the following soft keys:
   - **Ok** (to send your reply)
   - **Cancel** (to discard your reply, and return to the idle display).

Responding with a phone call

To call the party that sent a message:

1. Press the **Detail** soft key.

2. Press the **Call** soft key.

Advanced features and services

This chapter describes the advanced features and services that are available on your IP Phone 2007. Contact your system administrator to determine if these call features are available on your telephone.

The topics in this chapter include:

View menu

Tap the **View** soft key to access the View menu, to access the following menu options:

- Friends
- Presence
- Call Subject
- Reject Reason
- Line Information
- Inbox
- Address Book
- Outbox

Friends

To access the Friends list, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **1. Friends**, and tap the **Select** soft key.

Using the Friends list

1. Use the **Up/Down** navigation keys to scroll and select an entry.

2. Perform one of the following:
   - Tap the Call soft key to dial the selected party.
   - Tap the Status soft key to display the status of the selected party.
   - Tap the SendIM soft key to send a message to selected party.
   - Tap the Cancel soft key to return to the View menu.

Presence

Use this option to indicate your availability.

To access the Presence option, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **2. Presence**, and tap the **Select** soft key. The following prompt appears:

```
Your Current Status is [Unknown] Want to change it?.
```

Configuring your status as Connected

1. Tap the **Yes** soft key.

2. Use the **Up/Down** navigation keys to scroll and select **1. Connected**.

3. Tap the **Select** soft key.

4. Use the **Up/Down** navigation keys to scroll and select a status.
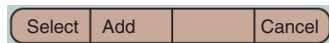
5. Perform one of the following:
   - Tap the **Select** soft key to select the selected status entry.
   - Tap the **Add** soft key to create a new status entry.
   - Tap the **Cancel** soft key to discard your changes.

Configuring your status as Unavailable

1. Tap the **Yes** soft key.

2. Use the **Up/Down** navigation keys to scroll and select **2. Unavailable**.

3. Tap the **Select** soft key.

4. Use the **Up/Down** navigation keys to scroll and select one of the following:

- **1. none**
- **2. Busy**
- **3. On Vacation**
- **4. Offline**
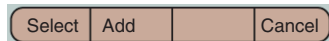
5. Perform one of the following:

- Tap the **Select** soft key to select the selected status entry.
- Tap the **Add** soft key to create a new status entry.
- Tap the **Cancel** soft key to discard your changes.

Call Subject

Use this menu item to store and access frequently used call subjects.

Adding a call subject to a dialed call

To access the Call Subject option, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **3. Call Subject**, and tap the **Select** soft key. A list of existing call subjects appears (if no call subjects are available, the **Add** option is automatically selected).

Adding a call subject to a call from your Address book

1. Go off hook, either by picking up the handset or pressing the handsfree key.

2. Tap the **View** soft key

3. Use the **Up/Down** navigation keys to scroll and select **3. Call Subject**.

4. Tap the **Select** soft key.

5. Press the **Subject** soft key.

6. Use the **Up/Down** navigation keys to scroll and select one of the following:
   • **1. none**
   • **2. Busy**
   • **3. On Vacation**
   • **4. Offline**

7. Perform one of the following:
   • Tap the **Select** soft key to select the selected status entry.
   • Tap the **Add** soft key to create a new status entry.
   • Tap the **Cancel** soft key to discard your changes.
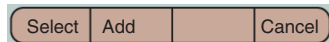
8. Press the **Directory** soft key.

9. Scroll to the entry you wish to call.

10. Tap the **Select** soft key to make the call.

Adding a call subject to a call from your Inbox or Outbox

1. Go off hook.

2. Press the **Subject** soft key.

3. Use the **Up/Down** navigation keys to scroll and select one of the following:
   • **1. none**
   • **2. Busy**
   • **3. On Vacation**
   • **4. Offline**

4. Perform one of the following:
   • Tap the **Select** soft key to select the selected status entry.
   • Tap the **Add** soft key to create a new status entry.
   • Tap the **Cancel** soft key to discard your changes.

5. Press the **Directory** soft key.

6. Scroll to the Inbox or Outbox entry.

7. Tap the **Select** soft key to select the Inbox or Outbox.

8. Scroll to the entry you wish to call.

9. Tap the **Select** soft key to make the call.

Using an existing call subject

1. Use the **Up/Down** navigation keys to scroll and select an existing call subject.

2. Tap the **Ok** soft key.

Adding a new call subject

1. Use the **Up/Down** navigation keys to scroll and select an existing call subject.

2. Tap the **Add** soft keys.
   The following prompt appears: Enter Call Subject and press Ok.

3. Use the dialpad to enter the call subject.
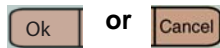
4. Perform one of the following:
   • Tap the **Ok** soft key to create the new entry.
   • Tap the **Cancel** soft key to discard your changes.

Modifying a call subject

1. Use the **Up/Down** navigation keys to scroll and select an existing call subject.

2. Tap the **Modify** soft key to edit the selected entry.
   The following prompt appears: Enter Call Subject and press Ok.

3. Use the dialpad to edit the call subject.
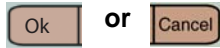
4. Perform one of the following:
   • Tap the **Ok** soft key to accept your changes.
   • Tap the **Cancel** soft key to discard your changes.

Deleting a call subject

1. Use the **Up/Down** navigation keys to scroll and select an existing call subject.

2. Tap the **Delete** soft key to remove the selected entry.
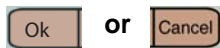
3. Perform one of the following:
   • Tap the **Ok** soft key to delete the selected entry.
   • Tap the **Cancel** soft key to discard your changes.

Reject Reason

Use this menu item to store a text message describing the reason for rejecting a call. For example, "Sorry, I'm on the other line".

To access the Reject Reason option, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **4. Reject Reason**, and tap the Select soft key. The following prompt appears: Enter Reject Reason and press Ok:

Storing a Reject Reason entry

1. Use the dialpad to enter or edit the reject reason.
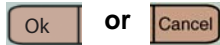
2. Perform one of the following:
   Ok   **or**   **Cancel**
   - Tap the **Ok** soft key to accept the changes and return to the View menu.
   - Tap the **Cancel** soft key to discard your changes.

Line information

Use this option to view information about the current line (DN).

To access the Line Information option, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **5. Line Information**, and tap the **Select** soft key.

Viewing line information

1. Use the **Up/Down** navigation keys to scroll and select one of the following:
   - **Name**
   - **Domain**
   - **Presence**
   - **FeatActv**
   - **ReDail**

2. Tap the **Cancel** soft key to return to the View menu.

Inbox

The Inbox feature logs all incoming calls. The Inbox can store up to 100 entries in the list. When the list is full, the system overwrites the oldest entry. Use the Inbox feature to review missed calls and to dial calls. The Inbox contains the:

- Caller's last and first name (if available)
- Directory Number (DN) of the caller
- Time and date of the call
- Number of times the caller calls
- Whether the call was Missed

Entries in Inbox are sorted according to the time calls are received.

> **Note:** If password control is enabled, enter your SCPW at the prompt.

There are two methods available to access the Inbox:

- Inbox soft key on the idle display
- Config menu

Idle display

At the idle display, tap the **Inbox** soft key to access the Inbox.

Config menu

To access the Inbox from the Config menu, tap the **View** soft key, use the **Up/ Down** navigation keys to scroll and select **6. Inbox**, and tap the **Select** soft key.

Dialing an entry

1. Use the **Up/Down** navigation keys to scroll and select an entry.

2. Tap the **Call** soft key.

Deleting an entry

1. Press the **Up/Down** navigation keys to scroll and select the desired entry.

2. Tap the **Delete** soft key.

3. Perform one of the following:
   - Tap the **Ok** soft key to delete the selected entry.
   - Tap the **AllUser** soft key to delete all entries created by the current user.
   - Tap the **All** soft key to delete all entries in the outbox.
   - Tap the **Cancel** soft key to return to the Config menu without deleting anything.

Address Book

Use the Address Book feature to create and store up to 100 directory entries. A Address Book entry can contain:

- Last name (up to 24 characters)
- First name (up to 24 characters)
- Telephone numbers (up to 31 characters)

There are two methods available to access the Address Book:

- **Directory** soft key on the idle display
- **Config** menu

Idle Display

At the idle display, tap the **Directory** soft key to access the Address Book.

Config Menu

To access the Address Book from the Config menu, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **7. Address Book**, and tap the **Select** soft key.

Adding an entry

AddNew	1. Tap the **Add** soft key. Note: If the message Directory is full appears, one or more entries must be deleted to add a new entry.
Next	2. Tap the **Next** soft key.
	3. Use the dialpad to enter the telephone number.
Next	4. Tap the **Next** soft key.
	5. Use the dialpad to enter the name.
Done **or** Cancel	6. Do one of the following: • Tap the **Done** soft key to save the new entry. • Tap the **Cancel** soft key to return to the **Add** screen.
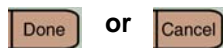
Editing an entry
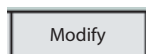
	1. Press the **Up/Down** navigation keys to scroll and select the desired entry.
Modify	2. Tap the **Modify** soft key.

3. Use the dialpad to edit the entry.
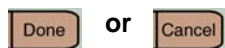
4. Perform one of the following:
   • Tap the **Done** soft key to save your changes.
   • Tap the **Cancel** soft key to discard your changes.

Deleting an entry

1. Press the **Up/Down** navigation keys to scroll and select the desired entry.

2. Tap the **Delete** soft key.

3. Perform one of the following:
   • Tap the **Ok** soft key to delete the selected entry.
   • Tap the **AllUser** soft key to delete all entries created by the current user.
   • Tap the **All** soft key to delete all entries in the outbox.
   • Tap the **Cancel** soft key to return to the Config menu without deleting anything.

Outbox

Use the Outbox to view information about calls you have made, including names and numbers, and to redial called numbers. There are two methods available to access the Outbox:

• Outbox soft key on the idle display
• Config menu

Idle Display

At the idle display, tap the **Outbox** soft key to access the Outbox.

Config Menu

To access the Address Book from the Config menu, tap the **View** soft key, use the **Up/Down** navigation keys to scroll and select **8. Outbox**, and tap the **Select** soft key.

Dialing an entry

1. Use the **Up/Down** navigation keys to scroll and select an entry.

2. Tap the **Call** soft key.

Deleting an entry

1. Press the Up/Down navigation keys to scroll and select the desired entry.

2. Tap the **Delete** soft key.
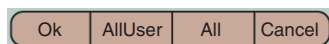
3. Perform one of the following:
   - Tap the **Ok** soft key to delete the selected entry.
   - Tap the **AllUser** soft key to delete all entries created by the current user.
   - Tap the **All** soft key to delete all entries in the outbox.
   - Tap the **Cancel** soft key to return to the Config menu without deleting anything.

Services menu

Tap the **Srvcs** soft key to access the Services menu, which provides access to the following items:

- Stock Query
- Send IM
- Call Forward
- Do Not Disturb
- User Login
- User Logout
- Retrieve Parked Call
- Global Search
- Program Key

In the Services menu, the current setting for options is marked with a telephone icon.

Stock Query

Use the Stock Query option to check the value of stocks.

To access the Stock Query option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **1. Stock Query**, and tap the **Select** soft key.

Using Stock Query

1. Use the dialpad to enter the stock symbol.

Query **or** Cancel
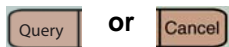
1. Perform one of the following:
   - Tap the **Query** soft key to search for information on the stock.
   - Tap the **Cancel** soft key to return to the **Srvcs** menu.

Send IM

Use the Send IM option to send a message to another subscriber.

To access the Send IM option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **2. Send IM**, and tap the **Select** soft key.

The following prompt appears:

```
Enter address and press Next:
```

Sending a message

1. Use the dialpad to enter the address.

2. Tap the **Select** soft key. The following prompt appears: Enter message and press Send:

3. Use the dialpad to enter the message.
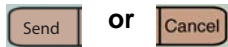
4. Perform one of the following:
   - Tap the **Send** soft key send the message.
   - Tap the **Cancel** soft key to return to the Srvcs menu.

Call Forward

Use the Call Forward feature to forward all incoming calls to another line.

> **Note:** The Call Forward feature is bypassed when you place an emergency services call. Calls returned by emergency services personnel ring at the location where the call originated.

To access the Call Forward option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **3. Call Forward**, and tap the **Select** soft key.

The following prompt appears:

Enter address and press Forwrd:

Enabling call forwarding
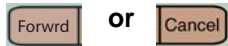
1. Use the dialpad to enter the address.

2. Tap one of the following soft keys:
   - **Forwrd** (to enable call forwarding)
   - **Cancel** (to return to the Srvcs menu)

   If you choose the **Forwrd** soft key, the system attempts to contact the address you entered. If the system accepts the address you entered, a message appears stating

   ```
   Automatic Call Forwarding (All Calls) is
   now enabled.
   ```

Disabling call forwarding
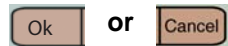
The following prompt appears:

```
Disable Automatic Call Forwarding
```

Perform one of the following:

• Tap the **Ok** soft key.

The following message appears:

```
Automatic Call Forwarding (All Calls) is
now disabled
```

• Tap the **Cancel** soft key to return to the Srvcs menu.

Do Not Disturb

Use the Do Not Disturb option to reject all incoming calls so that you can work without interruption.

→ **Note:** You cannot enable the Do Not Disturb feature during an emergency services call.

To access the Do Not Disturb option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **4. Do Not Disturb**, and tap the **Select** soft key.

The following prompt appears:

```
Enable Do Not Disturb? (Reject all calls)
```

Enabling Do Not Disturb
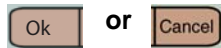
Perform one of the following:
- Tap the **Ok** soft key enable Do Not Disturb to automatically reject all calls.
- Tap the **Cancel** soft key to return to the **Srvcs** menu.

Disabling Do Not Disturb
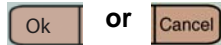
After the Disable Do Not Disturb? prompt appears, perform one of the following:
- Tap the Ok soft key disable Do Not Disturb.
- Tap the Cancel soft key to return to the Srvcs menu and leave Do Not Disturb active.

User Login

Use this option to log on to your IP Phone 2007.

To access the User Login option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **5. User Login**, and tap the **Select** soft key.

Logging on

The following prompt appears:
`Enter ID and press Login:`

1. Use the dialpad to enter the your user ID.
   Note: Press the **Lang** soft key to choose a different language.

2. Tap the **Login** soft key.
   The following prompt appears:
   `Enter password and press Login:`

3. Use the dialpad to enter your password.

4. Tap the **Login** soft key.
   The following prompt appears:
   `Use timed login for: xxh:`

5. Use the dialpad to enter the time before the login expires.
   Note: Tap the **Timed** or **Days** soft keys to edit the login timer.

6. Tap the **Login** soft key.
   The following prompt appears:
   `Authentication required, Enter password:`

7. Use the dialpad to re-enter your password.
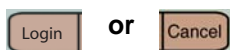
8. Perform one of the following:
   - Tap the **Login** soft key to log in.
   - Tap the **Cancel** soft key to cancel the log on.

User Logout

Use this option to log off your telephone.

To access the User Logout option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **6. User Logout**, and tap the **Select** soft key.

Logging off

The following prompt appears:

```
Enter password and press Logout:
```

1. Use the dialpad to enter your password.
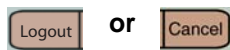
2. Perform one of the following:
   • Tap the **Logout** soft key to log out of the telephone.
   • Tap the **Cancel** soft key to return to the Srvcs menu without logging out.

Retrieve Parked Call

Use this option to return to a call you previously parked.

To access the Retrieve Parked Call option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **7. Retrieve Parked Call**, and tap the **Select** soft key.

Retrieving a parked call

The following prompt appears:

```
Enter Call ID:
```
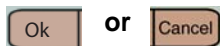
1. Use the dialpad to enter the Call Id.

2. Perform one of the following:
   • Tap the **Ok** soft key to retrieve the parked call.
   • Tap the **Cancel** soft key to return to the Srvcs menu.

Global Search

Use this option to search for other users. You can search based on any of the following: User Name, Name, First Name, Last Name, or Phone Number.

To access the Global Search option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **8. Global Search**, and tap the **Select** soft key.

Searching for another user

1. Use the **Up/Down** navigation keys to scroll and select one of the following:
   1. User Name
   2. Name
   3. Last Name
   4. First Name,
   5. Phone Number

2. Tap the **Select** soft key.

3. Use the dialpad to enter the search terms (name or number, depending on your selection in step 1).

4. Tap the **Ok** soft key to search. One of the following occurs:

• If the search is successful, a list of names appears. Use the **Up/Down** navigation keys to select an entry, and perform one of the following:

— Tap the **Call** soft key to dial the selected entry.
— Tap the **Save** soft key to save the entry to the Address Book.
— Tap the **Srch** soft key to try another search.
— Tap the **Cancel** soft key to return to the Servcs menu.
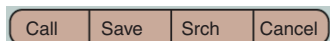
• If the search is unsuccessful, perform one of the following:
— Tap the **Srch** soft key to try another search.
— Tap the **Cancel** soft key to return to the Servcs menu.
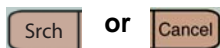
Program key

Use this option to program custom soft keys.

To access the Program key option, tap the **Srvcs** soft key, use the **Up/Down** navigation keys to scroll and select **9. Program key**, and tap the **Select** soft key.

## Programming soft keys

1. Use the **Up/Down** navigation keys to scroll and select the key you wish to program (choices are displayed from Key 1: through Key 6:).

2. Tap the **Set** soft key to program a function for the selected key.

3. Use the **Up/Down** navigation keys to scroll and select the function you want to assign to the key:
   - Speed Dial
   - Send IM
   - Call Forward
   - Presence
   - Do Not Disturb
   - Stock Query

4. Tap the **Select** soft key. The following prompt appears:
   Enter a label:

5. Use the dialpad to enter the label.

Note: Press the **Options** soft key to access additional options.
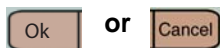
6. Perform one of the following:
   - Tap the **Ok** soft key to assign the function to the key.
   - Tap the **Cancel** soft key to discard your changes.

or

Viewing information about soft key assignments

1. Use the **Up/Down** navigation keys to scroll and select a key.

2. Tap the **Info** soft key.

Removing soft key assignments

1. Use the **Up/Down** navigation keys to scroll and select the key you wish to remove the key assignment from.

2. Tap the **Remove** soft key.
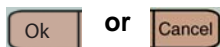
3. Perform one of the following:
   - Tap the **Ok** soft key to remove the key assignment.
   - Tap the **Cancel** soft key exit the menu without removing the key assignment.

or

Troubleshooting

This chapter includes instructions for resolving some common problems that you can encounter.

The topics in this chapter include:

Local Diagnostics

The Local Diagnostic menu contains tools you can use to diagnose local problems. This menu is for administrator use only.

Locating the MAC address

Examine your IP Phone 2007. The white label on the bottom left of the telephone lists a series of numbers. The last number is the MAC address (similar to 00 60 38 XX XX XX). Record this address for future use. See Figure 7 "MAC address location" on page 120.

Figure 7 MAC address location

Restarting your IP Phone 2007 manually

There are two ways to manually restart your IP Phone 2002.

Power cycle (unplug and replug) your phone.

OR

Press the Config soft key and select the Reset Phone option.

Call does not connect

Before you report a network problem, ensure that you are using the correct SIP address to call someone.

Using SIP addresses versus IP addresses

Rather than dialing an IP address (for example, ron@12.134.47.78), remember to use the SIP address (for example, ron3@acme.com). The proxy server that routes the call may serve several domains, and may not know the domain where a user IP address resides.

Domain name

You must enter the domain (for example, @acme.com) if the person you are calling is not in your domain.

> → **Note:** The domain name in a user address must not be an Internet domain.

Call is connected but there is no audio

If you are using the handset, check that the headset button is not activated. The red LED beside the headset button indicates when the headset option is active. When the headset option is active, and even if there is no headset plugged in, you cannot receive or transmit audio through the handset.

Audio settings

Using your IP Phone 2007, you can change speech codec settings while on a call to improve audio quality. The term codec is an acronym that stands for "Compression/Decompression".

The codec setting controls how speech compresses or decompresses into digital packets for transmission over the network. Each codec selection provides a framesize in milliseconds for encoding the speech packets. The larger the framesize, the less packets are required and so the greater the efficiency of transmitting speech over the network. However, it also means that the speech delay is increased on the call.

> **Note:** The changed setting applies only to the current active call. The settings return to default for the next call.

A general rule for selecting the codec and framesize is shown in Table 5 "Codec and framesize" on page 122..

Table 5   Codec and framesize

High quality	Medium quality	Low quality
PCMU 20 ms	PCMU 30 ms	G729A 30 ms
PCMA 20 ms	PCMA 30 ms	
G729A 20 ms		

Changing audio settings during a call

1   During an active call, press the **Audio** soft key.

2   Select the **Change audio setting** option and press **Ok**.

3   Use the navigation buttons to select the desired quality setting and press **Select**. The system applies the new audio settings.

> **Tip:** Your system administrator sets the default codec and framesize for all your calls.

Quality of service information

To improve your service or to determine a solution to a quality issue, your service provider can ask you to record quality of service information for your calls.

1   Press the **Audio** soft key.

2   Select the **Monitor audio quality** option.

3   Note the information displayed for the media stream of this call.

Appendix A: Multimedia PC Client and the IP Phone 2007

You can use your IP Phone 2007 to provide premium-quality voice communication while your PC, with the Multimedia PC Client, provides advanced IP and multimedia services.This configuration is called the Multimedia Client Set. For more information about this Multimedia Client Set, see *Multimedia PC Client User Guide* (NN42020-102).

> →   **Note:** The ability to use your Multimedia PC Client to control your IP Phone 2007 depends on your service package.

> →   **Note:** You must be logged on to both the IP Phone 2007 and the Multimedia PC Client for the Multimedia Client Set to work.

Configuring your Multimedia PC Client to control your IP Phone 2007

1   Select **Tools > Preferences** and then select the **i200x Internet Telephone** list item.

2   Select the **Use the i200x telephone for voice instead of PC** check box.

3   Enter the port number (and optionally the MAC address) for the IP Phone 2007.

> **Tip:** The Multimedia PC Client can automatically detect and fill the MAC address field with information it obtains from the first IP Phone that contacts it on the port specified in step 4.

4   Select the **Network controls the i200x telephone when PC Client exits**
     check box if you want the network to take over control of the IP Phone 2007
     when the Multimedia PC Client exits.

     This feature is selected by default.

5   Select the **PC Client routes voice to/from i200x (for private IP addresses)**
     check box if you want the Multimedia PC Client to route voice to/from the
     telephone for private IP addresses.

     This option can be required if you use a private LAN in a home office. This
     option is not usually required for work office use. This feature is not selected
     by default.

6   Click **Ok** to save your changes or click **Cancel** to exit without saving.

IP Phone 2007 indicator

The Multimedia PC Client main window has a status area with a telephone icon.
This icon is lit when the Multimedia PC Client controls the IP Phone 2007 for
voice telephony.

Appendix B: Multimedia Office Client and the IP Phone 2007

You can use your IP Phone 2007 to provide premium-quality voice communication while your PC, with the Multimedia Office Client, provides advanced IP and multimedia services. This configuration is called the Multimedia Client Set. For more information about this Multimedia Client Set, see *Multimedia Office Client User Guide* (NN42020-139).

> **Note:** You must be logged on to both the IP Phone 2007 and the Multimedia Office Client for the Multimedia Client Set to work.

> **Note:** The ability to use your Multimedia Office Client to control your IP Phone 2007 depends on your service package.

Configuring your Multimedia Office Client to control your IP Phone 2007

1 In the Microsoft Outlook, select **Multimedia** > **Preferences** and then select the **200x** list item.

2 Select the **Use the i200x telephone for voice instead of PC** check box to indicate that you want the IP Phone to provide voice while the PC provides advanced IP and multimedia services.

3 Enter the port number (and optionally the MAC address) for the IP Phone.

> **Tip:** The Multimedia Office Client can automatically detect and fill the MAC address field with information it obtains from the first IP Phone that contacts it on the port specified in step 3.

4 Select the **Network controls the 200x telephone when Multimedia Office Client exits** check box if you want the network to take over control of the IP Phone when the Multimedia Office Client exits.

By default, this check box is selected.

5 Check whether the Multimedia Office Client routes voice to and from the telephone for private IP addresses.

This option can be required if you use a private LAN in a home office. It is not usually required for work office use. By default, this check box is not selected.

6 Click **OK** to save your changes or click **Cancel** to exit without saving.

IP Phone 2007 indicator

The Multimedia Office Client main window has a tool bar with a 200x toggle button. This button is highlighted when the Multimedia Office Client controls the IP Phone 2007 for voice telephony.

Appendix C: Multimedia PC Client for IBM Lotus Notes and the IP Phone 2007

You can use your IP Phone 2007 to provide premium-quality voice communication while your PC, with the Multimedia PC Client for IBM Lotus Notes, provides advanced IP and multimedia services. This configuration is called the Multimedia Client Set. For more information about this Multimedia Client Set, see *Multimedia PC Client for IBM Lotus Notes User Guide* (NN42020-148).

> **Note:** You must be logged on to both the IP Phone 2007 and the Multimedia PC Client for IBM Lotus Notes for the Multimedia Client Set to work.

> **Note:** The ability to use your Multimedia PC Client for IBM Lotus Notes to control your IP Phone 2007 depends on your service package.

Configuring your Multimedia PC Client for IBM Lotus Notes to control your IP Phone 2007

1 In the Multimedia PC Client for IBM Lotus Notes client, select **Multimedia > Preferences** and then select the **200x** list item.

2 Select the **Use the i200x telephone for voice instead of PC** check box to indicate that you want the IP Phone to provide voice while the PC provides advanced IP and multimedia services.

3 Enter the port number (and optionally the MAC address) for the IP Phone.

> **Tip:** The Multimedia PC Client for IBM Lotus Notes can automatically detect and fill the MAC address field with information it obtains from the first IP Phone that contacts it on the port specified in step 3.

4   Select the **Network controls the 200x telephone when Multimedia PC Client for IBM Lotus Notes exits** check box if you want the network to take over control of the IP Phone when the Multimedia PC Client for IBM Lotus Notes exits.

By default, this check box is selected.

5   Check whether the Multimedia PC Client for IBM Lotus Notes routes voice to and from the telephone for private IP addresses.

This option can be required if you use a private LAN in a home office. It is not usually required for work office use. By default, this check box is not selected.

6   Click **OK** to save your changes or click **Cancel** to exit without saving.

IP Phone 2007 indicator

The Multimedia PC Client for IBM Lotus Notes main window has a tool bar with a 200x toggle button. This button is highlighted when the Multimedia PC Client for IBM Lotus Notes controls the IP Phone 2007 for voice telephony.

Appendix D: DHCP parameter configuration

After you power up your IP Phone 2007, if the display indicates that the server is unreachable and it continuously resets, you must configure the DHCP parameters.

Considerations for parameter configuration

When configuring parameters, consider the following items:

- To enter requested information in the menu fields, press the number keys on the dialpad. Press the star (*) key to enter a period (.) when you enter an IP address.
- To record the entry and advance the initialization to the next parameter, press **Ok**.
- To abandon the manual configuration process and restart the power-up, press **Cancel**.
- If you enter parameters manually, use the **BKSpace** or **Clear** soft keys to edit the default entry. Press the **BKSpace** soft key to delete a single character. Press the **Clear** soft key to delete the entire entry.
- If you try to move to the next parameter without entering text in the current field, an audible beep notifies you. Each parameter must have a corresponding entry.

Begin the initialization process

To begin the initialization process, at the flashing Nortel screen, quickly press 0, 0, 7, star (*) on the dialpad.

> **Tip:** If you miss the flashing introduction screen, unplug and plug in your IP Phone 2007 to reach the configuration screen where you can press the keys.

If your network supports DHCP go to "If your network supports DHCP" on page 132. If your network does not support DHCP go to "If your network does not support DHCP" on page 133.

If your network supports DHCP

> **Tip:** If necessary, contact your system administrator to check whether your network supports DHCP.

To initialize you IP Phone 2007 if your network supports DHCP:

1 If your IP Phone 2007 network supports DHCP, enter the configuration parameters at the prompt in the display area of your telephone as described in Table 6 "DHCP configuration parameters" on page 132.

Table 6 DHCP configuration parameters

Parameter	Value	Definition
DHCP (enable)	1	Yes
DHCP (full or partial)	1	Partial
S1 IP	<valid Server IP address>	Primary server (IP Client Manager or Multimedia PC Client) IP address
S1 PORT	5000	Primary server port
S1 ACTION	1 or 7	Primary action code (must be configured to 1 if using Unistim Firmware)

Table 6 DHCP configuration parameters

Parameter	Value	Definition
S1 RETRY Count	1	Primary retry count
S2 IP	<valid Server IP address>	Secondary server (IP Client Manager or Multimedia PC Client) IP address **Note:** If you do not know the secondary IP address, use the primary IP address for the secondary address.
S2 Port	5000	Secondary server port **Note:** If you do not know the secondary port, use the primary port.
S2 ACTION	1 or 7	Secondary action code (must be configured to 1 if using Unistim Firmware)
S2 RETRY COUNT	1	Secondary retry count
VLAN (0=No, 1=Yes)	0	QoS 802.1q VLAN Tag Service
cfg XAS	0-No, 1-Yes	Select No

> ⚠ **Warning:** The VLAN parameter must never be selected unless the underlying network switches are configured to filter on VLAN IDs. Otherwise, the IP Phone 2007 can fail to work properly.

After you press the **Ok** soft key on the last configuration parameter, you see a message "Locating Server".

If your network does not support DHCP

Use the following procedure if your network does not support DHCP.

Configuring parameters

1 Enter a **0** on the dialpad to indicate that DHCP is not supported.

2 Follow the prompts to configure all necessary parameters as described in Table 7 "Configuration parameters" on page 134.

After you press the **Ok** soft key on the last configuration parameter, you see a message "Locating Server".

Table 7 Configuration parameters

Parameter	Value	Definition
SET IP	<valid IP address>	IP address of your IP Phone 2007 provided by your system administrator
NETMSK	<valid subnet mask>	Subnet Mask provided by your system administrator
DEF GW	<valid Default Gateway>	Default gateway IP network address provided by your system administrator
S1 IP	<valid Server IP address>	Primary server (IP Client Manager or Multimedia PC Client) IP address
S1 PORT	5000	Primary server port
S1 ACTION	1	Primary action code (enter 1 for UNIStim)
S1 RETRY Count	1	Primary retry count
S2 IP	<valid Server IP address>	Secondary server (IP Client Manager or Multimedia PC Client) IP address **Note:** If you do not know the secondary IP address, use the primary IP address for the secondary address.
S2 Port	5000	Secondary server port **Note:** If you do not know the secondary port, use the primary port.
S2 ACTION	1	Secondary action code (enter 1 for UNIStim)
S2 RETRY COUNT	1	Secondary retry count
VLAN (0=No, 1=Yes)	0	QoS 802.1a VLAN Tag Service

⚠ **Warning:** The VLAN parameter must never be selected unless the underlying network switches are configured to filter on VLAN IDs. Otherwise, the IP Phone 2007 can fail to work properly.

Standard

136

Appendix E: Customer support

You can order the following parts and supplies for your IP Phone 2007 from your authorized distributor.

Table 8 Parts and supplies

Description	Part number
IP Phone 2007 package contents include: • IP Phone 2007 (charcoal with metallic mezel) • Handset • Handset cord • Footstand • 7 ft (2.1 m) CAT5 Ethernet cable • Getting started card	NTDU96AB70
Replacement parts	
7 ft (2.1 m) CAT5 Ethernet cable	AO648375
Handset (charcoal)	AO758634
Handset cord (charcoal)	N0000764
Footstand (charcoal)	AO538587
IP Phone 2007 power adapter	
Global power adapter	N001420
IP Phone 2007 power cords	
Cord 9.9 ft (3 m), NA Power, NEMA, 125Vac 13[a] NA, M. East, Taiwan, Indonesia, Philippines, Korea, Thailand, Vietnam, Japan	NTTK14AB
Cord 8 ft (2.4 m), ANA Power AS-3, 240Vac 10 A Australia, New Zealand, PRC	NTTK15AA
Option 11C Standard European Power Cord 250Vac Other EMEA, Kenya	NTTK16AB
Option 11C Swiss Power Cord, 9.9 ft (3m), 125Vac Switzerland	NTTK17AB

Table 8 Parts and supplies

Description	Part number
Option 11C UK Power Cord 240Vac Hong Kong, Ireland, UK, Singapore, Malaysia, India, Bangladesh, Pakistan, Brunei, Sri Lanka	NTTK18AB
Option 11C Denmark Power Cord Kit, 9.9 ft (3 m), 125Vac Denmark	NTTK22AB

For help finding an authorized distributor call 1(800) 4NORTEL or 1 (800) 466-7835.

Multimedia Communication Portfolio

Multimedia Communication Server 5100
IP Phone 2007 User Guide