IP Softphone 2050 User Guide

Business Communications Manager

BCM50 2.0

N⊘RTEL

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Contents

Chapter 1
IP Softphone 2050 overview

The IP Softphone 2050 is a business telephone application that you can use to make and take calls over your computer. Using a headset or handset connected to your PC, you control calls with a click of the mouse pointer, from your PC keyboard, or from the USB Audio Adapter.

Designed to work with IP-based phone systems, the IP Softphone 2050 provides Voice over IP (VoIP) services using a telephony server and your Local Area Network (LAN) or Wide Area Network (WAN).

The server that supports your IP Softphone 2050 determines the features you can access, such as Call Conference, Call Transfer, and Call Forward.

Features

The IP Softphone 2050 supports the following features:

- Twelve user-defined feature keys: six Programmable Line
- (DN)/Feature Keys (self-labeled) and six lines/features accessed by pressing the shift key
- Four soft keys that provide access to a maximum of 10 features
- Four-line display
- Directory capabilities stored locally on your PC or linked to external directories, such as Lightweight Directory Access Protocol (LDAP), Microsoft Outlook, and Windows Address Book (WAB) contact management software
- One-click direct dialing from various windows and applications
- Five specialized fixed keys:
  — Directory
  — Inbox (Message)
  — Shift (Outbox)
  — Services
  — Expand
- Dedicated call processing keys:
  — Hold
  — Goodbye
  — Answer
  — Volume
  — Mute
  — Navigation
  — Message Waiting

- User-selected ringer that lets the PC speakers or the headset ring for incoming calls
- Choice of the following interfaces:
  - 1140 skin
  - Compact black and silver skins
  - Accessibility Interface for the visually impaired
- Programmable hot keys that allow single key access to user-definable features
- Supported languages including: English, French, Swedish, Danish, Norwegian, German, Dutch, Portuguese, Czech, Finnish, Hungarian, Italian, Polish, Spanish, Japanese, Russian, Latvian, and Turkish.
- Three input modes: Digit, Alpha, and Native
- Macro functions available for programming long dialing patterns

Components

- "Call Control window" on page 12.
- "Local Directory window" on page 12.
- "Settings window" on page 12.
- "System tray icon and menu" on page 13.
- "i2050.exe application" on page 13.

Call Control window

The IP Softphone 2050 Call Control window displays the line keys, feature buttons, and call display. Use this window to make and manage your telephone calls. You also use this window to access both your Local Directory and CS 1000 Directory features (Personal Directory, Redial List, Callers List, Application Server Administration, and Password Administration).

For more information about the Call Control window, refer to "Call Control window" on page 15.

Local Directory window

Use the Local Directory window to create, manage, and use a telephone directory stored on your local computer and to access external directories, such as LDAP, Outlook, and WAB.

Settings window

Use the Settings window—a series of dialog boxes—to set up the various IP Softphone 2050 features.

For information about opening the Settings window, refer to "IP Softphone 2050 Settings" on page 47.

System tray icon and menu

You can right-click the IP Softphone 2050 system tray icon—located at the right side of the Windows taskbar at the bottom of your screen—to make and manage calls.

i2050.exe application

The i2050.exe application lets the IP Softphone 2050 communicate with the server. It launches when you start the IP Softphone 2050 but remains hidden in the background. To verify that the i2050.exe is running, open the Windows Task Manager.

To view the i2050.exe process

Select Processes from the Task Manager window.
The process appears as long as the IP Softphone 2050 icon appears in the system tray.

Chapter 2
IP Softphone 2050 Call Control window

The IP Softphone 2050 Call Control window supports the 1140 skin—designed to look and feel like the desktop IP Phone 1140—as well as an additional two compact skins, available in black and silver. The IP Softphone 2050 also supports an Accessibility Interface for visually impaired users.

To open the IP Softphone 2050 Call Control window

1   From your desktop PC, select **Start.**

2   Select **All Programs**.

3   Select **Nortel > IP Softphone 2050 > IP Softphone 2050**.

Accessibility Interface

To open the IP Softphone 2050 Accessibility Interface from the Call Control window

1   From your desktop PC, select **Start > All Programs > Nortel > IP Softphone 2050 > IP Softphone 2050**.
    The Call Control window appears.

2   Select **File > Settings > Skin**.

3   Select **Accessibility Interface**.

> **Note:** If the IP Softphone 2050 is running, you must exit and restart for the change to the Accessibility Interface to take effect.

Call Control window

The Call Control window (see Figure 1 below and Figure 2 on page 16) includes the standard features that let you make and manage telephone calls.

For information on the elements of the Call Control window, see Table 1.

Figure 1 Call Control window—1140
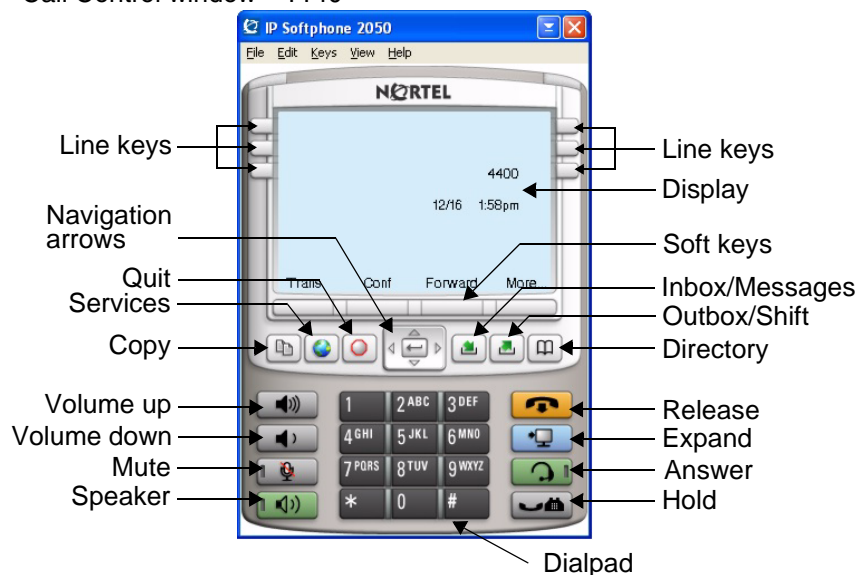
Figure 2 Call Control window—compact skin (silver)
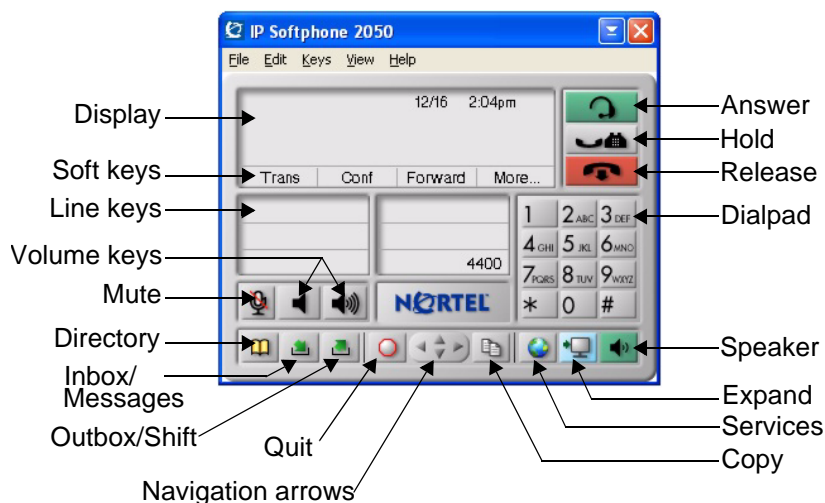
Accessibility Interface

The Accessibility Interface works with JAWS for Windows from Freedom Scientific—screen reading software that lets visually impaired users access the full range of IP Softphone 2050 features. The screen is divided into four groups of controls: Display, Line and Feature, Date and Time, and Indicators.

Menu Command options in the Accessibility Interface match those in the standard Call Control window.

For more information about navigating the Accessibility control groups and Menu Command options, see "Accessibility Interface" on page 65.

Call Control window elements and functions

Table 1 describes the elements and functions of the Call Control window

Table 1   IP Softphone 2050 components and functions

Element	Function
Primary display	To provide call information (such as Caller ID) and instructions for using certain soft key features.
	When idling, the telephone displays only the date and time.
Soft keys	To access server-definable features, such as Transfer (for connecting calls to other people), Conference (for group calls), and so on.
	To select a feature, click one of the four available soft-labelled soft keys, and then follow the instructions on the display.
	Available soft key features vary, depending on:
	Your current task: the features available at any time depend on your current call activity.
	Server support: IP Softphone 2050 functionality depends on communication server configuration.
	To view additional features, click the More soft key.
Copy*	Programmable button on BCM.
Quit*	Programmable button on BCM.
	To scroll through menus and lists in the display area.
Navigation arrows	Use the Send/Enter key at the center of the navigation cluster to confirm menu selection (1140 skin only).
Volume decrease increase	To increase or decrease the headset volume.
Mute	To listen to the receiving party without transmitting.
	To return to a two-way conversation, click the Mute button again.
	The mute button mutes the headset microphone.
Answer	To answer and make calls.
Hold	To place an active call on hold.
	The feature key label for the line on hold displays a flashing icon to indicate that the call is on hold.
	Return to the call by clicking the Line button of the call on hold.
Release	To terminate an active call.
Line keys	To access one of six programmable Line keys. These keys can represent line appearances, DNs, or features.
	The communication server provides the labels that appear on these keys.
Dialpad	To dial a telephone number. Use your mouse pointer to click the numbers you want to enter.
Directory*	Programmable button on BCM
Services	To access feature list and network services.
Expand	Feature reserved for future use.

Element	Function
	To access your messages or return a call.
Inbox/Messages	
Outbox*	Dial mailbox in voicemail registry. Programmable button on BCM.
Speaker	To answer and make calls using the handsfree speaker

*For more information on programming memory buttons, please refer to the IP Phone 2004 User Guide (NN40050-108) or IP Phone 1140E User Guide. (NN40050-105)

Hot keys

You can assign keyboard hot keys to access the full range of Call Control window functions and menu options.

Adding a hot key

To add a new hot key

1   Open the Settings window. For information about opening the Settings window, refer to .

2   Select **Hot Keys**.

3   Choose the feature group that you want to access: **Buttons**, **Menu**, or **Select Fields** (Accessibility Interface only).

4   From the Items list, select the feature to which you want to assign a hot key.

5   Under Press a new shortcut key, enter the key combination—"Alt + Ctrl + V", for example—that you want as your hot key.

6   Click **Assign**.

> **Note:** If the key combination is already taken, the previously assigned feature appears in the Shortcut Key Currently Used By text box.

To assign a hot key, you can enter any keyboard key combination except

for the following:

- A to Z
- Shift-A to Shift-Z
- Alt-A to Alt-Z
- 0 to 9
- Alt+0 to Alt+9
- Asterisk (*)
- Number sign (#)
- Up, down, left, and right arrow keys
- Shift+Up, Shift+Down
- PageUp, PageDn
- Alt+F1 to Alt+F12
- F1, Shift+F1,Ctrl+F1, Ctrl+Alt+F1, Ctrl+Alt+Shift+F1
- Space bar

Removing a Hot Key

To remove a hot key

1 Open the Settings window.
For information on opening the Settings window, refer to "Opening the Settings window" on page 47.

2 Select **Hot Keys**.

3 Choose the feature group that you want to access: **Buttons**, **Menu**, or **Fields** (Accessibility Interface only).

4 From the Items list, select the feature from which you want to remove a hot key.

5 Click **Remove**.

System tray icon and menu

Use the IP Softphone 2050 system tray icon menu to manage phone calls and messages without opening the Call Control window.

To access the menu, right-click the IP Softphone 2050 icon in the Windows taskbar system tray. From this menu, you can make, answer, and manage your calls, as well as access macros and features.

Chapter 3
Installing and setting up the IP Softphone 2050

System requirements

To use the Nortel IP Softphone 2050, you require:

- Pentium-compatible CPU (200 MHz or higher)
- 128 Mbytes RAM or higher for Microsoft Windows 2000
- 256 Mbytes RAM or higher for Windows XP
- 55 Mbytes or higher free hard drive space (all languages)
- 800X600 or higher resolution monitor (16-bit color)
- Universal Serial Bus (USB) port (version 1.1 or 2.0)
- Nortel Enhanced USB Adapter (desktop) or Nortel Mobile USB Adapter (mobile)

Supported operating systems

To use the IP Softphone 2050, you must have one of the following operating systems:

- Microsoft Windows XP
- Microsoft Windows XP Professional Service Pack 1
- Microsoft Windows XP Professional Service Pack 2
- Microsoft Windows 2000 Professional
- Microsoft Windows 2000 Professional Service Pack 1
- Microsoft Windows 2000 Professional Service Pack 2
- Microsoft Windows 2000 Professional Service Pack 3
- Microsoft Windows 2000 Professional Service Pack 4

Nortel USB Audio Kit

The USB Audio Kit lets you hear and speak with your callers. To ensure proper IP Softphone 2050 functionality, use only the following Nortel-supported (or compatible) USB audio kits:

- Nortel Enhanced USB Adapter (desktop)
- Nortel Mobile USB Adapter (mobile)
- Algo Analog Terminal Adapter (compatible)

The Nortel USB Audio Kit includes:

- USB Headset Adapter (desktop or mobile)
- Installation Guide (English and French)
- USB cord

Some kits also include a headset.

The Algo Analog Terminal Adapter (ATA) is a USB adapter that lets you use analog terminals instead of headsets. With an Algo ATA users can, for example, use a cordless handset with their IP Softphone 2050.

> ➡ **Note:** The IP Softphone 2050 is compatible with the Algo ATA. For support, see www.algosolutions.com.

Installing the IP Softphone 2050

Refer to the IP Phones: Description, Installation, and Operation (553-3001-368) or consult your system administrator.

Installing the USB Headset Kit

The IP Softphone 2050 supports a desktop USB headset adapter, as well as a mobile adapter.

To install the USB Headset Kit

1 Ensure that you have the proper system requirements as listed in "Nortel USB Audio Kit" on page 21.

2 Ask your system administrator to change settings, if necessary, to allow you to connect the IP Softphone 2050 to the communication server.

3 If using the mobile adapter, connect the headset to the adapter. If using the desktop adapter, you must:

- Connect the coiled lower cord to the headset cord with the Quick Disconnect connector (make sure it is securely fastened).
- Connect the headset cord to the RJ9 jack on the adapter.

4 Connect the USB cable to the headset adapter and to one of the USB jacks on your computer or USB hub.

The first time the headset adapter is plugged in, a delay occurs while the Windows operating system configures the device and locates appropriate driver software. If the installation software asks for the original Windows CD-ROM, insert the CD-ROM so that the Windows operating system can locate drivers.

For more information about installing the IP Softphone 2050 software, contact your system administrator.

Chapter 4
Managing contacts from the Local Directory

You can use the following options to manage contacts in the Local Directory:

Adding contacts to a Local Directory

You can add contacts to a Local Directory list, or insert contacts into any group of shortcut links in the Shortcut Bar.

To add a contact to the Local Directory list

1 Open the Local Directory.

2 Select **Edit** > **New Contact**, or click **New Contact** on the toolbar.
The Properties dialog box appears.

3 Under the General tab (selected by default), enter the contact's name, address, telephone numbers, and other personal information.

4 Select the **Details** tab to enter any of the following contact details: Department, Office, or Assistant.

5 To enter miscellaneous information, select the **Notes** tab.

6 Select the **Settings** tab to define the default dialing number as Business, Home, or Mobile.

7 Click OK.

> **Note:** For more information on entering information in the property fields, see "Using the Properties dialog box" on page 28.

To add a contact to a group

1 In the Shortcut Bar, select the group of shortcut links to which you want to add a contact.

2 Select the contact you want to add, drag it to the Shortcut Bar, and then drop it under the selected group button.

> **Note:** You cannot directly add contacts to an external directory from within the Local Directory.

> **Note:** If the contents of an external directory change, you must first update that directory for the changes to show in the Local Directory. To update, right-click the imported directory and click Refresh.

Editing contacts in the Local Directory

To edit contacts in the Local Directory

1 Open the Local Directory.

2 Using your mouse pointer, highlight the contact you want to edit.

3 Open Properties using one of the following methods:

- Select **Edit > Properties**
- Click **Properties** on the toolbar.
- Right-click the selection and choose **Properties** from the menu.

4 Select the tab you need and edit the information.

5 Click OK.

Deleting contacts from the Local Directory

You can delete contacts from the Local Directory or remove contacts from a group of shortcut links.

To delete a contact from the Local Directory

1 Open the Local Directory.

2 Using your mouse pointer, select the contact you want to delete.

> **Note:** To delete a range of contacts, click the first contact in the range, and then shift-click the last contact in the range. The entire range highlights. You can also CTRL-click to select a number of contacts in different places.

3 Delete the contact by doing one of the following:

- Select **Edit > Delete**
- Click **Delete** on the toolbar.
- Right-click your selection and choose **Delete** from the menu.

4 To confirm the deletion, click **Yes**.

To remove a contact from a group of shortcut links

1 On the Shortcut Bar, select the group of shortcut links from which you want to delete a contact.

2 Right-click the contact, and choose **Remove Item** from the menu.

Finding contacts in the Local Directory

You can search for contacts in a Local Directory by name.

To find a contact in one of your directories

1 Open the Local Directory.

2 Select or click either of the following:

— Select **Edit > Find Contact**
— Click **Find Contact** on the toolbar.
  The Find Contact window appears.

3 Enter the name of the contact you want to find.

> **Note:** Names in the directory are formatted as last name, first name. Use this format when searching for a contact.

4 Click **Find Now**.
Search results display in the Find Contact window.

5 To stop a search, click **Stop**.

Filtering a Local Directory

The IP Softphone 2050 lets you filter a Local Directory, making it smaller and easier to manage. This feature is useful for dealing with large directories. By filtering a directory, you can reduce the number of names through which you must search.

To filter a directory

1   Click Filter on the toolbar, or **Directory > Filter** from the menu.
    The Filter dialog box appears.

2   From the **Field and Condition** lists, choose your filter criteria.

3   Enter the values you want included in the filtered list. For example, if under the filter criteria Field: Last Name, Condition: Starts With, you enter Value: C, only contacts with a last name starting with C appear in the Local Directory.

4   To apply the filter, click **Add**.

Dialing from the Local Directory

To call a contact stored in the Local Directory

1   Open the Local Directory.

2   Find the contact you want to call. You can dial using any of the following options:

   •   Double-click the phone number you want to dial.
   •   Double-click the contact's name.
   •   Right-click the contact's entry, and then click the desired telephone number in the menu.
   •   To dial the default telephone number, click Dial on the toolbar.
   •   Click the arrow beside the Dial toolbar button, and then click the desired telephone number from the list.

Dialing from the Redial List in the Local Directory

To dial from the Redial List

1   Open the Redial List using one of the following methods:

   •   Select **Redial List** in the Shortcut Bar of the Local Directory window.
   •   Select **Keys > Features > Redial List**

2   Find the contact using one of the following methods:

   •   Scroll to the desired contact.
   •   Search for the contact by name or number.

• Enter the number of the contact to find it.

3 To dial the selected entry, double-click the contact.

Dialing from the Callers List in the Local Directory

To dial from the Callers List

1 Open the Callers List using one of the following methods:

• Select **Callers List** in the Shortcut Bar of the Local Directory window.

• Select **Keys > Features > Inbox**

2 Find the contact using one of the following methods:

• Scroll to the desired contact.

• Search for the contact by name or number.

• Enter the number of the contact to find it.

3 To dial the selected entry, double-click the contact.

Managing Groups in the Shortcut Bar

You can add, remove, or rename groups in the Shortcut Bar of your Local Directory.

To open a group of shortcut links and view its list of contacts, click the desired group from the Shortcut Bar.

To add a group to a Local Directory

1 Right-click a blank area on the Shortcut Bar.

2 Select **Add New Group**.
A blank group button with a blinking cursor appears at the bottom of the Shortcut Bar.

3 Enter the name you want for the group and press **Enter**.

To remove a group in a Local Directory

1 Click open the group you want.

2 Right-click anywhere on or under the Group button and its list of contacts.

3 Select **Remove Group**.

4 At the "Delete? Are you sure?" prompt, click **Yes**.

To rename a group in the Local Directory

1   Click open the group you want.

2   Right-click anywhere on or under the Group button and list of contacts.

3   Select **Rename Group**.
A cursor appears in the Group button.

4   Enter the new name you want the group to be called.

5   Press **Enter**.

> **Note:** To view the list of contacts within a group, click the desired group in the Shortcut Bar.

Using the Properties dialog box

Use the Properties dialog box to enter or change contact information.

To open the Properties dialog box

1   Open the Local Directory.

2   Do one of the following:

- Select **Edit > New Contact.**
- Click **New Contact** on the toolbar.
- Select a contact.
- Select **Edit > Properties**
- Click **Properties**.

The Properties dialog box contains four tabs:

-
-
-
-

All four tabs offer an Export button. Use this button to export contact information to a *.vcf file. You can import this file into e-mail or contact manager applications, or any other software applications that use the *.vcf file format.

Properties—General tab

Use this tab to store a contact's name, address, e-mail address, company information, and telephone numbers. To create a contact record, enter the contact's name and at least one telephone number. All other information is optional.

> **Note:** To add a half-second delay in the dialing pattern, insert a comma in the telephone number, wherever you want the pause to occur. You can add as many pauses as required by inserting an equal number of commas.

Properties—Details tab

Use the Details tab to enter any of the following contact details:

- Department
- Office
- Assistant

Properties—Notes tab

Use this tab to record miscellaneous information about a contact. You can enter significant dates, recent orders, meeting locations, or any information you require when you call the contact.

Properties—Settings tab

Use this tab to set the default dialling number for the contact.

To set the Default Dial, click the desired option button: Business, Home, or Mobile.

To dial a contact's non-default telephone number, right-click the contact and select any other telephone number that appears in the menu.

Linking to external directories

You can access the following external directories from the Local Directory window:

- Lightweight Directory Access Protocol (LDAP) directory
- Outlook directory
- Windows Address Book directory (WAB)

To access these external directories, you must create a link to the desired directory in the Shortcut Bar. After you add the directory, an icon appears in the Shortcut Bar. You can then click the icon to view or dial contacts in that directory.

Linking to the LDAP directory

To add a link to the LDAP directory in the Shortcut Bar

1 From the Local Directory menu, select **Directory > Add Link To > LDAP Directory**
A Properties dialog box appears. From the Properties dialog box, you can access the following three tabs: General, Security, and Schema.

2 In the General tab, enter the following required information into the corresponding field:

- Directory Name: the name of the directory as you want it to appear in the Shortcut Bar.
- LDAP Path: the path to the LDAP directory stored on your hard drive.
- User Name and Password: if applicable, enter your LDAP user name and password.

3 In the Security tab, select from the following security protocols:

- Use Secure Authentication
- Use Encryption
- Use SSL Encryption
- Use Signing
- Use Sealing

4 In the Schema tab, select the desired LDAP schema from the Schema list. You can use this tab to add, remove, or modify an LDAP.

To add a new schema to the list

1 From the Schema tab, click **Add**.
A Dialog box opens. The Dialog box lists all current names and fields used by the LDAP directory.

2 In the Schema Name field, enter the name you want to use for your new LDAP schema.

3 Click **OK**.

To remove a schema from the list

1 In the Schema tab, select the schema you want to remove from the list.

2 Click **Remove**.
The LDAP Directory dialog box appears with the message "Remove the schema? Are you sure?"

3 Click **Yes**.

To modify an existing schema

1 In the Schema tab, select the schema you want to modify from the list.
A Dialog box opens. The Dialog box lists all current names and fields used by the LDAP directory.

2 Modify the Schema Name.

3 Click **OK**.

Linking to Outlook

To add a link to your Outlook directory in the Shortcut Bar

1 From the menu, select **Directory > Add Link To > Outlook Directory**
A Properties dialog box appears.

2 In the Directory Name field, enter the name of your Outlook directory, as you want it to appear in the Shortcut Bar.

3 Click **OK**.

Linking to Windows Address Book directory

To add a link to a WAB directory in the Shortcut Bar

1 From the menu, select **Directory > Add Link To > Windows Address Book**
A Properties dialog box appears.

2 In the Directory Name field, enter the name of your Windows Address Book directory, as you want it to appear in the Shortcut Bar.

3 In the WAB Name field, enter the name of the WAB file you want to link to from the Shortcut Bar.

> **Note:** If you do not know the name of the WAB file, click the browse button to the right of the WAB Name field. A Windows Open dialog box appears. Use this dialog box to navigate and select the file you need from your file system.

4 From the Properties dialog box, click **OK**.

Adding external contacts to the Local Directory

You can add contacts from any of the external directories to your Local Directory.

To add an external contact to the Local Directory

1 From the Shortcut Bar, click the external directory icon you want to access.
A list of contacts from the selected external directory appears.

2 Right-click the contact that you want to add to the Local Directory.

3 From the menu, select **Add to Local Directory**.
The Properties dialog box appears.

4 If no phone numbers appear in the Phone Numbers field, you must input at least one valid phone number. If the telephone numbers in the Phone Numbers field look correct, then click **OK**.
The contact is added to the Local Directory.

5 To access the added contact, click the Local Directory icon in the Shortcut Bar.

> → **Note:** You cannot directly add contacts to an external directory from within the Local Directory.

> → **Note:** If the contents of an external directory change, you must first update that directory for the changes to show in the Local Directory. To update, right-click the imported directory and click Refresh.

Chapter 5
Managing IP Softphone 2050 calls

Making telephone calls

Before making a call, ensure that you are wearing your headset.

To make a call

1 Open a Line using one of the following methods:

- On the Call Control window, click **Answer/Headset**.
  Your main telephone line appears.

- Select **Keys > Answer**

- From the Call Control window, select a **Line** key .

2 Enter the phone number using one of the following methods:

- Dial from the number pad of your computer keyboard.

- Dial from the Call Control window Dialpad, using the mouse pointer.

- Select **Keys > Macros**, and then choose the desired macro.

- Select **View > Local Directory**, and then:

a Open a directory feature: Local Directory, Redial List or Callers List.

b Scroll through the directory to find the contact you want.

c Select **Dial >** and choose **Business, Home,** or **Mobile**.

Answering telephone calls

Before answering a call, ensure that you are wearing your headset. When you receive a call, the speaker to which you set your phone rings, and Caller ID (if available) shows in the display area.

> **Note:** To select the speaker you want to ring, click **File > Settings > Sound Devices > Handsfree/Ringing/Paging device > Speaker**. Choose the desired speaker from the list.

You can answer a call using one of the following methods:

- On the Call Control window, click **Answer/Headset**.
- Click the **Line** key of whichever line is ringing.

> **Note:** Answering a new call automatically puts any active calls on hold. To switch between active callers, click the appropriate Line key to resume your call.

Holding and retrieving telephone calls

Before using the phone, ensure that you are wearing your headset.

To put a call on Hold or retrieve a call from Hold

1 Click the **Line** key for the active call.
2 From the Call Control window, click **Hold**.

Hanging up telephone calls

When your call ends, you must manually terminate the active line.

To terminate a telephone call

1 Click the appropriate **Line** key to ensure it is selected.
2 From the Call Control window, click **Goodbye/Release**.

Chapter 6
IP Softphone 2050 USB Headset Adapter

You must install a Nortel USB Audio kit before using the IP Softphone 2050. See "Installing the USB Headset Kit" on page 22.

Overview

The features of the USB Headset Adapter are described inTable 2.

Table 2   USB Headset Adapter elements and functions

Element	Function
Message Waiting light	The red Message Waiting light is located at the top of the USB Headset Adapter.
	The light illuminates when you have voicemail messages waiting.
	The light flashes when a call is ringing on the IP Softphone 2050.
Maximize button	Press the Maximize button to maximize or minimize the IP Softphone 2050.
	If the IP Softphone 2050 is minimized, press this button to maximize the IP Softphone 2050 window.
	If the IP Softphone 2050 is maximized but behind another window, press this button to bring the IP Softphone 2050 to the foreground.
	If the IP Softphone 2050 is maximized, press this button to minimize the IP Softphone 2050.
Smart Function buttons	Available on the desktop adapter only. Press this button to access the Smart Functions menu. For more information, refer to "Using the Smart Functions menu" on page 37.
Answer button	To answer an incoming call, press Answer.
	If you have no incoming call when you press this button, the IP Softphone 2050 selects a line and you hear a dial tone.
Release buton	Press the Release button to terminate the current call.
Mute button	Press the Mute button to mute a call. When you mute a call, you can still hear your caller, but your caller cannot hear you. Press the Mute button a second time to resume your conversation.
Mute light	You can find the Mute light beside the Mute button. With a call on mute, the Mute light illuminates. With a call off mute, the Mute light remains off.

Element	Function
Volume button	Use the Volume button to control the volume of the headset. When the Smart Functions Menu appears, use these buttons to move up and down in the menu.
Backlight	The backlight illuminates when your headset is connected to the IP Softphone 2050 application. To activate or deactivate the backlight feature, click on **File > Settings > USB Headset**, and select or clear the Use backlight check box.

Answering calls with the USB Headset Adapter

You can use the USB Headset Adapter to answer calls whenever the IP Softphone 2050 is running—even if minimized or running in the background.

To answer a call using the USB Headset Adapter

1 Ensure that you are wearing your headset.

2 Press **Answer**.

> **Note:** If you want to view Caller ID before answering while the IP Softphone 2050 is minimized or running in the background, click the Maximize button. This brings up the IP Softphone Call Control window.

Hanging up calls with the USB Headset Adapter

You can use the USB Headset Adapter to hang up calls whenever the IP Softphone 2050 is running—even if minimized or running in the background.

To hang up a telephone call using the USB Headset Adapter, press the Release button.

Adjusting the volume with the USB Headset Adapter

You can adjust the volume of your telephone calls using the USB Headset Adapter. Ensure that you are wearing your headset so you can hear the changes as you make them.

To increase the volume, press the right up arrow on the Volume button.

To decrease the volume, press the left down arrow on the Volume button.

Muting a call

When you mute a call, you can still hear your caller, but your caller cannot hear you.

To mute a call using the Headset adapter, press the Mute button.

Using the Smart Functions menu

The Smart Functions menu provides quick access to IP Softphone 2050 features. You can customize what appears on this menu using the Configuration Utility.

To access the Smart Functions menu

1 Press the **Smart Functions** button on the USB Headset Adapter.

2 Highlight the feature you want using one of the following:

  • Mouse pointer
  • Keyboard arrow keys
  • Volume button on the USB Headset Adapter

3 To select the feature, click **OK**.

> **Note:** If only one feature shows up in the menu, the Don't display this dialog again check box appears. Select this check box to map the Smart Function button directly to that one available feature. You can then press the Smart Function button to execute the feature directly, bypassing the menu.

> **Note:** The Smart Functions button is available only on the desktop version of the USB Headset Adapter.

Customizing the Smart Functions menu

You can customize the features that appear on the Smart Functions menu using the Configuration Utility.

To customize the Smart Functions menu

1 From the Call Control window, select **File > Settings > USB Headset**
The USB Headset Settings window opens.

2 Click **Configure Smart Functions**.
The Configure Smart Functions dialog box opens.

3 From the dialog box, you can Add, Remove, or Rearrange functions from the Smart Function menu.

  — To add a function, select the function you want from the Available functions list, and then click **Add**.
  — To remove a function, select the function you want to remove from the list, and then click **Remove**.
  — To rearrange a function, click the function you want to move either up or down in the menu, and then click the appropriate button: Move Up or Move down.

4 To close the Configure Smart Functions dialog box, click **OK**.

5 To close the USB Headset dialog box, click **OK**.

You can also add special functions to the Smart Functions menu.

Custom Functions for Smart Functions menu

From the Configure Smart Functions dialog box, you can add, delete, and modify custom functions on the Smart Functions menu.

To add a custom function

1   Click **New**.

2   In the Name box, enter the name you want to appear on the Smart Functions menu.

3   In the Command box, enter the pathname and file name of the function you want to add.

> **Note:** If you do not know the pathname or file name of the function, click Browse beside the Command box. You can then navigate to the correct file, select it, and click Open.

4   In the Arguments box, enter any arguments that are required for this function.

> **Note:** If you want the IP Softphone 2050 to prompt you for the argument when you select this special function, select Prompt for arguments.

5   In the Initial directory box, enter the pathname of the directory you want this function to use.

> **Note:** As with the Command box in step 3, if you are unsure of the pathname or filename, click Browse next to the Initial directory box. You can then navigate to the correct directory, make your selection, and click OK to finish.

6   To change the icon that appears beside this function on the Smart Functions menu, click Change, then go through steps 7 to 9. If you do not want to change the icon, go to step 10.

7   Click **Browse**.

8   Navigate to the file you entered in the Command box and select it.

9   Click **Open**.

10   Select one of the icons that appears.

11   Click **OK**.

12   To add the new function to the Smart Functions menu, click **OK**.

To modify a custom function

1   Select the custom function you want to modify.

2   Click **Modify**.

3   Make the required changes.

4 Click **OK**.

To remove a custom function

1 Select the custom function you want to remove.

2 Click **Delete**.

3 To confirm the deletion, click **Yes**.

Chapter 7
IP Softphone 2050 macros

About macros with the IP Softphone 2050

Use the IP Softphone 2050 to enter macros. A macro is a sequence of keystrokes that you can use to automate repetitive actions. For example, you can program a macro that selects a particular telephone line and then dials a telephone number automatically, or a macro that ensures a certain number is always dialed out on a particular telephone line.

To access the IP Softphone 2050 Macro Settings menu from the Call Control window, click **File > Settings > Macros**

All macros are listed in the Macros Settings window. You can also access macros by selecting **Keys > Macros.**

Entering a macro

You can enter a macro to automate a procedure or repetitive action.

To enter a macro

1 Open the Settings window. For details, refer to.

2 Select **Macros**.
The Macros settings dialog box opens.

3 Click ![icon]
The New Macros dialog box opens.

4 Enter the name of your new macro.

5 Create the macro using a combination of the following:

   • To enter numbers, click the dialpad.

   • Select the actions you want from the Keys menu, and then click **Add**.

6 To add the new macro to the list, click **Apply**.

7 To exit the Macros dialog box, click **OK**.

> ➡ **Note:** Use the Pause action to introduce a half-second delay in the macro—a requirement for some Interactive Voice Response applications and voicemail systems.

Deleting a macro

To delete a macro

1 From the Macro menu, select the macro you want to delete.

2 Click **Delete Macro**. This clears the macro.

3 To finalize the change, press **Apply**.

Playing a macro

You can play macros to dial telephone numbers or access your voicemail.

To play a macro

1 From the Call Control window, select **Keys > Macros**

2 Select the desired Macro by name.

Chapter 8
IP Softphone 2050 menu commands

Call Control window menu command

The IP Softphone 2050 supports a Windows-style menu command system, with File, Edit, Keys, View, and Help menus all available. With Show Menu Bar selected, the menu bar appears above the Call Control window.

To show the menu, select **View > Menu Bar Options > Show Menu Bar**

To hide the menu, select **View > Menu Bar Options > Autohide Menu Bar**. To access the menu when set to Autohide, move your cursor over the top part of the Call Control window. The menu appears.

> **Note:** The IP Softphone 2050 must be in focus for the Autohide Menu Bar function to work. To bring the IP Softphone 2050 into focus, click anywhere on the Call Control window.

Using the File menu

From the File menu, you can choose from any of the following:

- Run in background—Sends the Call Control window to the background, but leaves the application running to receive calls.
- Record this call—Begins recording all incoming or outgoing calls.
- Settings—Opens the Settings window and the various tabs.
- Exit—Closes the IP Softphone 2050 application.

Using the Edit menu

From the Edit menu, you can choose from any of the following:

- Copy—Copies the contents in the display window for use in other applications.
- Paste—Pastes phone numbers or other dialable strings copied from other applications.
- Input Mode—Selects method that the application uses to interpret input from the keyboard. The three methods are:
  - Numeric—Select Numeric and the IP Softphone 2050 interprets keyboard characters (a 1-800 number, for example) as single numbers for dialing.

— Alphabetic—Select Alphabetic and the IP Softphone 2050 interprets each keyboard character as a multiple number. For example, use this option when entering a name in a network directory, where the algorithm interprets the character B, for example, as 2 2. With alphabetic mode selected, the application interprets the name Bob as 2 2 pause 6 6 6 pause 2 2 pause.

— Native—Select Native and the IP Softphone 2050 interprets alphabetic keys as ASCII characters. Requires server support (the item normally appears dimmed).

Using the Keys menu

From the Keys menu, you can choose from any of the following:

- Headset/Handset—Select to answer an incoming call, or obtain a dial tone to make a call.
- Handsfree—Select to answer or make a call using the handsfree speaker. To set the desired speaker, select File > Settings > Sound Devices. From Handsfree/Ringing/Paging device, select your Speaker from the speakers list.
- Answer—Select to answer an incoming call or obtain a dial tone.
- Release—Select to end a call.
- Hold—Select to put an active call on hold.
- Mute—Select to place your call on mute. You can hear the caller, but the caller cannot hear you.
- Send—Select to confirm menu selections and terminate input sequences.
- Features—Select to view a list of available, server-supported features.
- Macros—From the macros menu, select the macro you want to dial.

Using the View menu

From the View menu, you can choose from any of the following:

- Local Directory—Select to access the Local Directory window.
- Menu Bar Options—Select to show or hide the menu bar. Select Autohide Menu Bar to hide the menu bar when not in use.
- Always on Top—Select to keep the phone on top at all times.

Using the Help menu

From the Help menu, you can choose from any of the following:

- Quickstart—Select to view basic information on operating the Call Control window and the USB headset.
- Hot Keys—Select to view a list of both Buttons and Menus hot keys.
- License Agreement—Select to view Nortel's software license agreement.
- Contents—Select to open the contents section of the IP Softphone 2050 Help system.
- Search—Select to search for a specific item in the IP Softphone 2050 Help system.
- Index—Select to open the index section of the IP Softphone 2050 Help system.
- About IP Softphone 2050—Select to view information about the IP Softphone 2050, such as the version number or copyright information.

Chapter 9
IP Softphone 2050 Settings

Use the Settings window (shown in) to access and configure the many IP Softphone 2050 features and functions. You can open the Settings window from the Windows Start Menu or from the IP Softphone 2050 Call Control window.

Figure 3   The Settings window
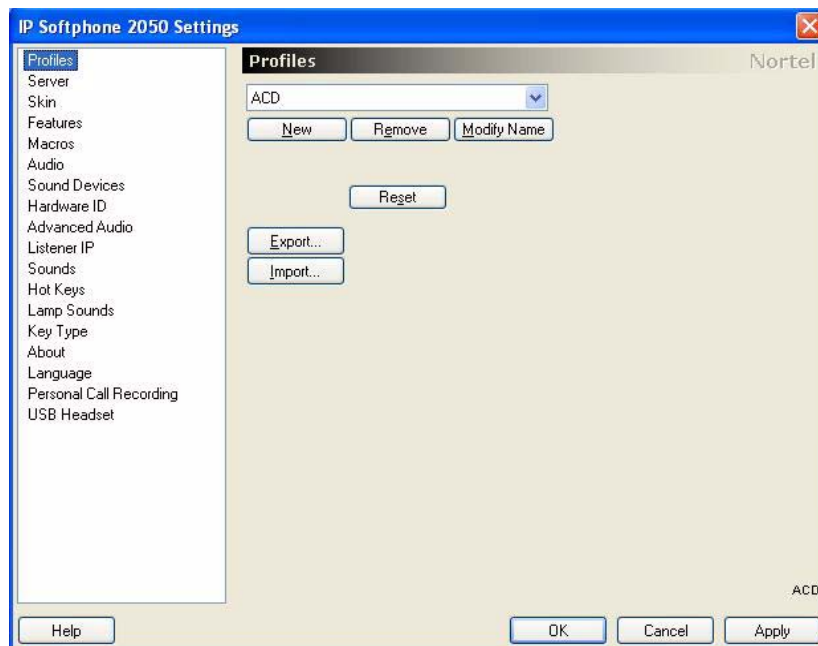
Opening the Settings window

Use one of the following options to open the Settings window:

- From the Windows operating system:
  — Select **Start > Programs > Nortel > IP Softphone 2050 > IP Softphone 2050 Settings**
  — Select **Start > Control Panel > IP Softphone 2050**. (In Windows XP, select Switch to Classic View to view the list of settings.)
- From the IP Softphone 2050 Call Control window:
  — Select **File > Settings**.

Using the Settings window

The following sections describe how to configure the various IP Softphone 2050 features and functions:

- "Profiles" on page 48.
- "Server" on page 51.
- "Skin" on page 52.
- "Features" on page 53.
- "Macros" on page 53.
- "Audio" on page 53.
- "Sound Devices" on page 54.
- "Hardware ID" on page 55.
- "Advanced Audio" on page 56.
- "Listener IP" on page 57.
- "Sounds" on page 57.
- "Hot Keys" on page 58.
- "Text Replacements" on page 58.
- "Lamp Sounds" on page 59.
- "Key Type" on page 60.
- "About" on page 60.
- "Language" on page 60.
- "Personal Call Recording" on page 61.
- "USB Headset" on page 61.

Features and functions are listed in the left pane of the IP Softphone 2050 Settings window (see Figure 3 on page 47). Select the desired feature to open the corresponding dialog box.

Profiles

Use profiles to configure the IP Softphone 2050. Using profiles, you can keep multiple IP Softphone 2050 configurations on the same computer. When you make changes to any feature or function, the changes affect only the current profile.

> **➡** **Note:** The name of the current profile appears at the lower right corner of all IP Softphone 2050 Settings dialog boxes, above the Apply button (see Figure 3 on page 47).

To open the Profiles dialog box, select **Profiles** from the list in the left pane of the Settings window.

Creating new profiles

A text box at the top of the Profiles dialog box displays the current profile.

To create a new profile

1   Click **New**.
An empty text box called Profile Name opens.

2   Enter the name of the new profile.

3   Click **OK**.

Removing profiles

To remove a profile

1   From the list of profiles, select the profile that you want to remove.

2   Click **Remove**.
A "Remove profile? Are you sure?" message appears.

3   Click **Yes**.
The profile is deleted from the list.

> **Note:** My Server is a built-in profile name and cannot be deleted.

Modifying profile names

To modify a profile name

1   From the list of profiles, select the profile that you want to modify.

2   Click **Modify Name**.
The Profile Name text box opens, with the name of the profile highlighted.

3   Enter the new profile name.

4   Click **OK**.
The new name shows in the list.

Selecting profiles

To choose which profile the IP Softphone 2050 uses for your current session

1 From the list of profiles, select the desired profile.

2 Click **Reset**.

If the IP Softphone 2050 is currently running, it tries to reestablish communication with the server (as defined by the profile). The Main Application screen opens.

If the IP Softphone 2050 is not currently running, the Settings window closes. The next time you start the IP Softphone 2050, it attempts to connect to the server (as defined by the profile).

> **Note:** Check the server dialog box in IP Softphone 2050 Settings to see which server your current profile uses.

Exporting profiles

You can export your IP Softphone 2050 profiles to your computer hard drive, either to back up the configuration or for use in other applications.

To export your profiles

1 Click **Export**.
A Save As dialog box opens.

2 Save your profiles using the file name and directory of your choice.

Your current IP Softphone 2050 profiles are now saved as "Config Backup Files" (*cfx).

Importing Profiles

Use import to restore backed-up configuration files for current use.

To import saved profiles

1 Click **Import**.
An Open dialog box opens.

2 Locate and select the profile you want to use.
The Import Profiles text box opens.

3 Select the profile or profiles that you want to import.

4 Click **OK**.

Server

Use the Server dialog box to configure the connection between the IP Softphone 2050 and your communications server. You can either use the default method (DHCP) or manually specify an IP address.

To open the Server dialog box, select Server from the list in the left pane of the Settings window.

Using DHCP

With Automatic (DHCP) enabled, the IP Softphone 2050 reads server addresses from a Dynamic Host Configuration Protocol (DHCP) server.

> **Note:** To use DHCP, your Local Area Network (LAN) must include a DCHP server. Contact your System Administrator to set up the server with the correct IP address values.

To use the Automatic (DHCP) method

1 Select the **Automatic (DHCP)** check box.

2 From the Server list, select your server. You can choose from the **Primary**, **Secondary**, or **Application (XAS) servers**.

> **Note:** Primary and Secondary servers are assigned by DHCP.

> **Note:** XAS support is reserved for future use.

Using IP addresses and DNS names

If your communications server does not support DHCP, then you must assign an IP address or DNS name manually.

To assign a manual IP address or DNS name, you must have the following information about your call server

- IP address or DNS name
- Port number
- Server type

To assign an IP address or DNS name

1 From the Server list, select the server you want to configure: **Primary** or **Secondary**.

2 Select IP and enter the IP address, or select **Name** and enter the DNS name.

3 From the **Type** list, select your server type.
The default port number shows in the Port text box.

4 If your server port number is different from the default number, enter the correct number in the Port text box.

> **Note:** Symposium call center agents must select the Symposium check box.

Restoring defaults

To restore the settings dialog to its default settings, click **Restore Defaults**.

Resetting the connection

To reset the server connection while the IP Softphone 2050 is running, click **Reset**.

Skin

Use the Skin dialog box to select the 1140 skin or one of two available compact skin colors (black or silver). You can also use this dialog box to switch to the Accessibility Interface.

To choose the skin

1 From the Skin menu, select **1140**, **black**, or **silver**.

2 Click **OK**.

If the default path was overwritten during installation, then you must designate the correct path to the IP Softphone 2050 file.

To select the path to the IP Softphone file

1 Click **Browse**.
A Browse for folders dialog box opens.

2 Locate and select the IP Softphone 2050 folder in your file system.

3 Click **OK**.

> ➡ **Note:** You can also use the skin dialog box to set the IP Softphone 2050 to the Accessibility Interface. For information about opening or using the Accessibility Interface, refer to "Accessibility Interface" on page 65.

Features

Use the Features dialog box to rearrange the features found under **Keys > Features** on the Call Control window.

The Feature Menu lists all available server-supported features. Use the arrow keys to move individual items up and down in the list. The list includes:

*   Directory
*   Services
*   Expand
*   Copy
*   Quit
*   Inbox
*   Outbox

> ➡ **Note:** In CS 1000 systems, the Available Features list remains empty.

You can access any item on the Available Features list from the **Keys > Features** list.

Macros

For information on setting macros, refer to "IP Softphone 2050 macros" on page 41.

Audio

Use the Audio dialog box to adjust the level of buffering between your audio hardware and the IP Softphone 2050.

Use the Quality slider to increase or decrease the amount of delay. Less delay speeds up buffering, but reduces audio quality. Higher quality improves audio quality, but slows down buffering.

> **Note:** If your IP Softphone 2050 audio sounds choppy or broken, move the slider toward Higher Quality.

Sound Devices

Use the Sound Devices dialog box to select and set the various IP Softphone sound devices.

The dialog box is separated into two areas:

*   Headset or Handset device
*   Handsfree/Ringing/Paging device

Headset or handset device

When using a headset or handset, use this area to:

*   Select the microphone and speaker
*   Adjust volume
*   Select or clear mute status

The Microphone text box displays the currently selected microphone. To change the microphone, select the microphone you want to use from the microphone list.

The Speaker text box displays the currently selected speaker. To change the speaker, select the speaker you want to use from the speaker list.

To adjust the volume of the microphone and speaker, use the volume slider bar.

To mute both devices, select **Mute**.

Handsfree/Ringing/Paging Device

When using a handsfree/ringing/paging device, use this area to:

*   Select the microphone and speaker
*   Adjust volume
*   Select or clear mute status

The Microphone text box displays the currently selected microphone. To change the microphone, select the microphone you want to use from the microphone list.

The Speaker text box displays the currently selected speaker. To change the speaker, select the speaker you want to use from the speaker list.

To adjust the volume of the microphone and speaker, use the volume slider bar.

To mute both devices, select **Mute**.

To return the settings to installation defaults, click Restore Original Values.

Hardware ID

> ➡ **Note:** This dialog box is intended for expert users only.

Use the Hardware ID dialog box to select the hardware address reported to your communications server. The Hardware ID text box displays the current hardware address.

MAC addresses

The IP Softphone 2050 default IP address comes from your Ethernet hardware, as a Medium Access Control (MAC) address. If several Ethernet interfaces are installed, then the IP Softphone 2050 chooses the first MAC address it detects and uses that address in all subsequent re-connections.

> ➡ **Note:** Some Virtual Private Network (VPN) clients hide their MAC addresses. In this case, you must override the default value to prevent problems communicating with the server.

Selecting MAC addresses

To select a MAC address

1 Click **Auto-Create**. The Hardware ID text box displays the next address in a range of addresses.

2 Continue clicking **Auto-Create** to move through the range of available addresses, until you find the one you need.

After you click through all available MAC addresses, Auto-Create generates random hardware ID numbers. Select one of these numbers if your Ethernet hardware address is not unique to the server.

To return the settings to their installation defaults, click **Restore Defaults**.

To reset the Hardware ID while the IP Softphone 2050 is running, click **Reset**.

> ➡ **Note:** The Firmware Version field displays the latest IP Softphone 2050 firmware version reported by the server.

Advanced Audio

> ➡ **Note:** This dialog box is intended for expert users only.

Use the Advanced Audio dialog box to override the audio values defined by your communications server.

Using NetEQ (Global IP Sound)

Select NetEQ (Global IP Sound) to use the audio values assigned by NetEQ packet-loss concealment software. NetEQ helps maintain voice quality in loss-prone environments (wireless, internet, and so on).

Overriding communication server values

In cases where network performance causes audio difficulties, adjusting the values in this area can help achieve a workable audio quality balance.

Select the Override communication server values to adjust the following values:

- Jitter
- Highwater Mark
- Early Packet Resync
- Late Packet Resync

Jitter

Though voice frames are transmitted at a fixed rate, some frames arrive faster or slower than others. This can result in degraded sound quality called jitter. A jitter buffer adds a small delay in the delivery of the frames, smoothing out transmission and improving sound quality.

To increase or decrease the number of frames in the jitter buffer, click the up or down arrows on the Jitter spin box.

Highwater Mark

The highwater mark indicates the greatest number of frames the jitter buffer allows before it starts discarding packets.

To increase or decrease the highwater mark, click the up or down arrows on the Highwater Mark spin box.

> ➡ **Note:** The highwater mark must be set to 2.5 times the value in the Jitter spin box. If assigned a smaller value, the IP Softphone 2050 automatically corrects the error.

Early Packet and Late Packet Resync

These values tell the IP Softphone 2050 when to discard the contents of the jitter buffer and restart.

If a packet arrives either before the early packet resync value (set in milliseconds), or after the late packet resync value (also set in milliseconds), then the resync operation begins.

To increase or decrease either the early packet resync value or the late packet resync value, click the up or down arrows on the corresponding spin boxes.

Both resync values must be set at least five times the Highwater Mark.

Calculate the resync values using the following formula: frame size x highwater mark x 2.

The frame size refers to the number of milliseconds per frame. Frame size is assigned by the communications server. A typical frame size is 10 milliseconds.

Listener IP

	Note: This dialog box is intended for expert users only.

Use the Listener IP dialog box to override port assignments when the IP Softphone 2050 application conflicts with another application on your computer.

Under normal operation, the IP Softphone 2050 listens for UNIStim traffic on all IP addresses and IP ports. You can set the IP Softphone 2050 to listen to only one specific IP address or port.

To use a specific address

1 Select **Use a specific address**.
The dimmed text box activates.

2 Enter the address to which you want the IP Softphone 2050 to listen. The format of the IP address is 99.99.99.99.

To use a specific port

1 Select **Use a specific port**.
The dimmed text box activates.

2 Enter the port to which you want the IP Softphone 2050 to listen.

To return the settings to their installation defaults, click Restore Defaults.

Sounds

Use the Sounds dialog box to select sound effects for when the IP Softphone 2050 connects to, or disconnects from, a call server.

You can assign a sound to any of the following three events:

- Server connected
- Server unreachable
- Server unresponsive

To assign a sound to an event

1 From the Select an event list, select the event to which you want to assign a sound.

2 Select **Play sound**.

3 Enter the path and file name of the audio file you want to use. You can also search for the file by clicking browse.
The selected file name appears in the text box.

> **Note:** The IP Softphone 2050 currently supports only .wav files

To test the selected sound, press the play arrow button. To stop the sound while playing, click the square stop button.

Hot Keys

You can assign keyboard hot keys to access the full range of Call Control window functions and menu options.

For information on adding or removing hot keys from the IP Softphone 2050, refer to "Hot keys" on page 19.

Text Replacements

> **Note:** This dialog box is available from the Accessibility Interface only

Use the Text Replacements dialog box to modify the server-supplied text in the Accessibility Interface. Modification lets you shorten or eliminate superfluous language picked up by the screen-reading software.

The text replacement table lists all the text replacement rules that are currently assigned. Both the original text and the replaced text appear in the list.

To add a new text replacement rule, or to modify an existing rule

1 Click **New** or **Modify**.
A Find and Replace dialog box opens.

2 Enter the text that you want to change in the Find what text box. You can assign parameters to the search by selecting any of the following:

- Whole word searches for the entire word.
- Display searches the display area.
- Context searches the context area.
- Softkeys searches the softkeys area.
- Line/Feature Key text searches the Line/Features area.
- Date and Time searches the date and time area.

3 Enter the new text in the **Replace with** text box.

4 Click **OK**.
The Find what dialog box closes.

5 Click **Apply**.

To remove an existing text replacement rule

1 Select the rule you want to remove from the list.

2 Click **Remove**.
The text rule disappears. The affected text returns to its original form.

Lamp Sounds

Use the Lamp Sounds dialog box to select sound effects that let you know when the message lamp or mute lamp is on.

To assign a sound for either the message or mute lamp

1 From the Select a condition list, select **Message Lamp O**n or **Mute Lamp On**.

2 Select **Play sound**.

3 Enter the path and file name of the audio file you want to use. You can also search for the file by clicking the browse button.
When selected, the file name appears in the text box.

4 Enter how often you want the sound repeated in the minutes and seconds fields (found in the Repeat every area).

> **Note:** The IP Softphone 2050 currently supports only .wav files

Key Type

The IP Softphone Call Control window supports six line/feature keys (Figure 2 on page 16). Use the Key Type dialog box to select which keys the IP Softphone 2050 uses to place calls (line keys).

To assign a line key

1   Select the check box next to the key or keys that you want to use. Key layout corresponds to the layout on the Call Control window.

2   Click **Apply**.

To return the settings to their installation defaults, click **Restore Defaults**.

Phone number dialog box

When you make a call from the Local Directory, or select Make Call from the system tray menu, a Phone number dialog box opens. A Select a line key menu in the dialog box lists all selected lines. Use the Key Type dialog box to add or remove items from this list.

Accessibility Interface

In the Accessibility Interface, selected keys show as Idle or Active. Keys not selected (feature keys) show as Feature Inactive or Feature Active.

About

The About dialog box displays current information about the IP Softphone 2050, including the following:

•   Current version number
•   Copyright information
•   Nortel logo
•   Global IP Sound logo

Language

Use the Language dialog box to select the language for the IP Softphone 2050 Settings window, Local Directory, and all menus and dialogs associated with the main application.

> **➡** **Note:** Some language that you encounter in operating the IP Softphone 2050 comes from your communications server, or from your computer operating system (OS). Setting the language from the Language dialog box does not affect either server-supplied or OS-supplied language.

To change the currently set language

1 From the language list, select the language you want.

2 Click **OK**.

Supported languages include: English, French, Swedish, Danish, Norwegian, German, Dutch, Portuguese, Czech, Finnish, Hungarian, Italian, Polish, Spanish, Japanese, Russian, Latvian, and Turkish.

Personal Call Recording

To use Personal Call Recording, a Nortel-certified third-party application must be installed. Use the Personal Call Recording dialog box to:

• Let the IP Softphone 2050 record calls.

• Launch the Personal Call Recording application.

• Display a warning message when call recording is enabled.

Information about the third party application shows in the following fields:

• Application displays the name of the third party application.

• Version displays the current version number of the application.

• Vendor displays the vendor name of the application.

• Path displays the directory and file name where the third party application resides on your computer.

To allow the IP Softphone 2050 to record calls

1 Select **Allow this application to record calls**.

2 Click **OK** or **Apply**.

To launch the call recording application on startup

1 Select **Launch the Personal Call Recorder application**.

2 Click **OK** or **Apply**.

To display warning messages when call recording is enabled

1 Select **Display a warning message when call recording is enabled**.

2 Click **OK** or **Apply**.

USB Headset

Use the USB Headset dialog box to:

- Select the type of headset you want to use.
- Set controls for the external lamp (if applicable).
- Activate the backlight on the USB Headset Adapter.
- Access the Configure Smart Functions dialog box.

Selecting the headset

For optimal performance, select the headset from the list that matches the headset currently connected to your USB Headset Adapter.

To choose a headset

1 From the list, select the headset you are using.

2 Click **Apply**.

Setting external lamp controls

> **Note:** The external lamp is available on the desktop adapter only.

The IP Softphone 2050 supports an optional external LED lamp (also known as an in-use lamp). The lamp provides visual indication of call status, headset connection, and messages waiting.

You can set the lamp to illuminate under the following conditions:

- Manual Override
- Headset Disconnect
- Active Call
- Message Waiting

Select the cadence (how the lamp illuminates) that you want to use for each of the above conditions. Available cadences include:

- None
- On
- Flash
- Flicker
- Blink

Manual Override

With Manual Override enabled, you can turn on the external lamp by pressing the Smart Functions button on your USB Headset Adapter.

To enable Manual Override, select the cadence you want from the list. To disable Manual Override, select None.

Headset Disconnect

With Headset Disconnect enabled, the external lamp activates when the headset registers as disconnected from the USB Headset Adapter.

To enable Headset Disconnect, select the cadence you want from the list. To disable Headset Disconnect, select None.

Active Call

With Active Call enabled, the external lamp activates when the IP Softphone 2050 registers an active call.

To enable Active Call, select the cadence you want from the list. To disable Active Call, select None.

If you enable Active Call when the USB Headset Adapter is selected as the Ringing Speaker, then the external lamp also activates on incoming calls.

> **Note:** Any other application using the same audio channel as the USB Headset Adapter also activates the external lamp.

Message Waiting

With Message Waiting enabled, the external lamp activates when the IP Softphone 2050 registers a message waiting.

To enable Message Waiting, select the cadence you want from the list. To disable Message Waiting, select None.

Priority

If more than one condition is enabled, then the external lamp activates according to the condition with the highest priority. The priority of the conditions, from highest to lowest, is as follows:

• Manual Override
• Headset Disconnect
• Active Call
• Message Waiting

Using the backlight

The USB Headset Adapter uses a backlight to illuminate the buttons, letting you know when the IP Softphone 2050 is running.

To enable the backlight, select **Use backlight**.

Configuring Smart Functions

The Smart Functions button on the desktop USB Headset Adapter provides quick access to IP Softphone 2050 features.

For information on configuring the Smart Functions button, refer to "Customizing the Smart Functions menu" on page 38.

> → **Note:** The Smart Functions button is available on the desktop version of the USB Headset Adapter only.

Chapter 10
Accessibility Interface

The Accessibility Interface works with screen reading software—such as JAWS for Windows from Freedom Scientific—that lets visually-impaired users access the full range of IP Softphone 2050 features.

To open the IP Softphone 2050 Accessibility Interface from the Call Control window

1   Select **File > Settings > Skin**

2   Select **Accessibility Interface**.

> **Note:** You must exit and restart the IP Softphone 2050 for the change to Accessibility Interface to take effect.

Control Groups

The Accessibility Interface lets you move through four groups of controls: Display, Line and Feature, Date and Time, and Indicators.

Display

Use the Display group to check the current operating conditions of the IP Softphone 2050.

When on a call, you can navigate the Display group to:

- Check the calling line ID.
- Check the status of different call-handling options, such as Conference and Transfer.

When not on a call, you can navigate the Display group to:

- Program the IP Softphone 2050.
- Access voice mail.

Line and Feature

Choose from six available Line and Feature group keys to place or receive calls, or to access a range of server-supported IP Softphone 2050 features.

> **Note:** Only your system administrator can assign Line keys. Contact your system administrator for more information about the available features that your server provides.

Date and Time

Use the Date and Time group to check the current date and time. When on a call, you can check the duration of your connection in the top field of the group.

Indicators

Use the Indicators group to check if you have a message waiting or to determine if the mute function is off or on.

Accessibility Interface Menu

The Accessibility Interface offers a Menu Command system identical to the standard Call Control window. File, Edit, Keys, View, and Help are all supported. For further details, see "IP Softphone 2050 menu commands" on page 43.

Navigating Control Groups and Menu Commands

You can navigate through the four Control Group fields, as well as the Menu Command system, using your keyboard instead of the mouse pointer.

Navigating Control Groups

Use the following keystrokes to move through the four Control Group fields:

- To move to the next field, press Tab.
- To move to the previous field, press Shift + Tab.
- To move to the next control group, press Page down.
- To move to the previous control group, press Page up.
- To skip to the first control group, press Home.
- To skip to the last control group, press End.
- To read the field at the current cursor location, press F1.
- To read the contents of the control group at the current cursor location, press Shift + F1.
- To execute a command from the current cursor location (when over an executable field), press Shift + Enter.

Navigating Menu Commands

To access the Menu Command system from the keyboard, press Alt + the first letter of the menu you want to access. For example, press Alt + F to access the File menu.

From within the Menu Command system, you can:

- Use the arrow keys to move left and right among the five menus.
- Use the arrow keys to move up and down the menu, highlighting options as you go.
- To make your selection, press Enter. Or press the first letter of the selection you want.

Using hot keys

You can assign keyboard hot keys to access the full range of Call Control window functions and menu options—necessary for using all of the IP Softphone 2050 features from the Accessibility Interface.

For more information on adding or removing hot keys, see .

Chapter 11
Troubleshooting the IP Softphone 2050

The following sections describe various troubleshooting issues and suggested remedy actions:

- "Connectivity problems" on page 69.
- "Audio problems" on page 72.
- "Reset conditions" on page 75.
- "USB Headset problems" on page 75.
- "Directory problems" on page 77.

Connectivity problems

Communication server is unreachable

Symptom:

One of the following messages appears:

- Connecting...
- Server unreachable. Reconnecting in xx seconds.
- 802.1 QoS is not supported on your network.

Description:

These messages indicate that the connection with the communication server cannot be established. The IP Softphone 2050 sets a random retry time, after which it attempts to reconnect. This process repeats until the IP Softphone 2050 successfully connects.

The "Connecting..." message appears briefly (or not at all) under the following conditions:

- The communication server is running and reachable.
- The IP Softphone 2050 is directed to the correct IP address.

The "Server unreachable" message appears when the IP Softphone 2050 encounters a problem contacting the communication server.

Potential causes:

- Network down
- Computer not connected to the network
- Invalid communication server settings in the Configuration Utility
- Invalid communication server settings in DHCP configuration
- Communication server down

Action:

- Ping another station on the network.
- Ping the communication server.
- Use the Server dialog box in the Settings window to verify the communication server IP address and port number. (for more information, see "Server" on page 51)
- Verify correct configuration of the communication server. Check for the following: an available port, an available license, and for correct security.

Connection is reinitializing

Symptom:

The following message appears: "Connection Established. Reinitializing..."

Description:

This message appears after the IP Softphone 2050 establishes a connection and sends a request to the communication server to resume connection. The communication server is expected to reply to this request. Some communication servers direct the IP Softphone 2050 to various subcomponents, causing this message to appear two or three times in rapid succession during a normal startup.

> ➡ **Note:** Under normal setup, the "Connection Established. Reinitializing..." message appears briefly, then disappears after successful connection.

Potential causes:

- A "Connection Established. Reinitializing..." message indicates a programming error in the communication server.

Action:

Wait a moment. Under normal operation, the message disappears after successful connection. If the message continues, check for correct communication server programming.

Authorization failed

Symptom:

The following message appears: "Authorization failed".

Description:

The IP Softphone 2050 has no authorization to use the communication server.

Potential causes:

- Your system administrator has not authorized the IP Softphone 2050.
- The HardwareID found in the Settings window (under the Hardware ID dialog box) does not match the HardwareID provisioned for the communication server.

Action:

Contact your system administrator.

Unable to retrieve communication server parameters from DHCP server

Symptom:

The following message appears:"DHCP server is not available".

Description:

A connection with the DHCP server cannot be established.

Potential causes:

- Network down
- DHCP server configuration error

Action:

Contact your system administrator.

Service denied

Symptom:

The following message appears:"Service Denied. Reason XXXX ".

Description:

You are not authorized to use the communication server.

Potential causes:

- Invalid HardwareID in the Hardware ID dialog box. (see "Hardware ID" on page 55)
- Invalid communication server configuration

Action:

Ensure that your communication server programming is correct.

Contact your system administrator.

Audio problems

Basic audio operation

To verify the physical connection of the USB adapter and headset, as well as proper Windows audio configuration

1 Record an audio message.
2 Play the message back using the USB headset.

One-way audio

If you experience problems with one-way only audio:

- Check that your system administrator has programmed the handsfree option on the communication server.
- Check that the mute button is disabled. If mute is enabled, the mute button on the Call Control window appears red.
- If your server uses a Network Address Translation (NAT) device, check for proper NAT configuration. One-way only audio problems can occur when incorrect NAT configuration causes the IP Softphone 2050 to attempt to connect to the wrong IP address.

Broken or choppy speech

Broken or choppy speech can occur due to any of the following:

- Low level of audio buffering
- Windows transition effects
- Other running applications

Audio buffering

Use the Audio dialog box to adjust the level of buffering between your audio hardware and the IP Softphone 2050. For details, refer to "Audio" on page 53.

Use the audio Quality slider to increase or decrease the amount of delay. Less delay speeds up buffering, but reduces audio quality. Higher quality improves audio quality, but slows down buffering.

When experiencing choppy or broken speech, move the Audio Quality slider toward Higher Quality.

Windows transition effects

The Windows operating system uses very high process and thread priorities when performing low-level Windows operations, such as minimizing and maximizing applications. This can cause brief breaks in the IP Softphone 2050 audio streams.

To reduce the severity of these breaks, turn off the Windows transition effects for menus and tool tips.

To turn off the Windows transition effects

1 Select **Start > Control Panel > Display**

2 Select the **Effects** tab, (or, in Windows XP, the Effects button on the Appearance tab).

3 Clear **Use transition effects for menus and tool tips**.

Other applications

Other applications running on your computer, especially CPU-intensive applications or applications that intercept or delay packets (such as firewalls), can cause broken audio.

Multiple Ethernet interfaces on a single PC can sometimes conflict with each other. For example, the IP Softphone 2050 sometimes exhibits intermittent breaks in audio when using docked notebooks that have a Xircom RealPort Cardbus Ethernet 10/100+Modem 56 PC Card (PCMCIA) inserted. In the specific case of this PC card, the problem relates to a version of the Xircom driver. This driver takes CPU cycles even when it is not active and this, in turn, causes IP Softphone 2050 audio to become choppy.

Solutions for this example are:

- Upgrade your Xircom driver.
- Remove the PC card when the notebook is docked.

To upgrade your Xircom driver

1 Download and install a new PC card driver from the Xircom web site.

2 Follow the installation instructions provided by Xircom.

> **Note:** You require administrator privileges on Windows 2000.

Windows sound plays from the headset

Description:

Windows sounds play from your headset instead of your computer speakers, interfering with IP Softphone 2050 audio.

Action:

In some cases, the Windows operating system defaults all the sounds to the new sound device.

To set Windows sounds to play from your computer speakers

1 Select **Start > Control Panel > Sounds, Speech, and Audio Devices**

2 Select **Sounds and Audio Device**.

3 Select **Audio**.

4 From the Sound Playback > Default device list, select your computer sound card.

> **Note:** If you do not want to use the Headset Adapter for playback, select another device from the Sound playback > Default device list.

Advanced audio problems due to network performance

If network performance causes audio problems, use the Advanced Audio dialog box in the IP Softphone 2050 Settings window to override your communication server audio values.

For more information on Advanced Audio, see "Advanced Audio" on page 56.

Reset conditions

The IP Softphone 2050 resets when:

- The communication server causes the IP Softphone 2050 to perform a hard reset.
- You change the IP Softphone 2050 skin.
- Firewall applications intercept or delay packets, causing the IP Softphone 2050 to reset due to the expiration of the Watchdog timer.

> **Note:** Use care when using firewall applications on the same computer as the IP Softphone 2050.

- Excess delay or loss of communication with the server occurs.

USB Headset problems

Headset not functioning

If you experience any headset problems, try the following actions in the order presented:

1 Verify that you are using a supported operating system. For a list of supported operating systems, refer to "System requirements" on page 21. To check your operating system:

    a Select **Start**.

    b Right-click **My Computer**.

    c Select **Properties**.
A System Properties window appears.

    d Select **General**.
The General tab lists system, registration, and computer information.

2 Verify that Universal Serial Bus controllers appears in the Windows Device Manager. To open the Device Manager:

    a Select **Start**.

    b Right-click **My Computer**.

    c Select **Properties**.
The System Properties window appears.

  d Select **Hardware**.
    The Hardware dialog tab appears.

  e Click **Device Manager**.

3 If Universal Serial Bus controllers does not appear in the Device Manager:

- Ensure that USB is enabled in your computer setup menu.
- Check for a BIOS upgrade.
- Contact your computer supplier.

4 Verify that USB Audio Device appears under Sound, video and game controllers in the Windows Device Manager. To open the Device Manager, refer to step 2.

5 Verify that HID-compliant device and USB Human Interface Device appear under Human Interface Devices in the Windows Device Manager. To open the Device Manager, refer to step 2.

6 If none of the devices in steps 4 and 5 appear in the Windows Device Manager (and the conditions in steps 1 and 2 are correct), then consult the USB Troubleshooting section in Windows Help.

7 Verify that you have selected USB Audio Device as the microphone and speaker for the Softphone.

USB Headset Adapter features appear dimmed

Symptom:

In the USB Headset dialog box of the IP Softphone 2050 Settings window, all the features appear dimmed.

Description:

Either the IP Softphone 2050 does not recognize the adapter as a supported Nortel adapter, or the adapter is earlier than 2.0. Supported adapters include: Enhanced USB Adapter (desktop) and Nortel Mobile USB Adapter (mobile).

Potential causes:

- Your USB Headset Adapter does not support the functions listed on the USB Headset dialog box.
- The USB Headset Adapter has failed to enumerate properly.

Action:

If you suspect faulty enumeration, do the following:

1 Unplug the USB cable from the USB Headset Adapter.

2 Wait one minute.

3 Plug the USB cable into the USB Headset Adapter. This forces the USB Headset Adapter to re-enumerate.

Cannot hear audio through headset

Ensure that your headset manufacturer matches that of the USB adapter.

Check all jacks and plugs for a loose connection.

Sound still comes out of my computer speakers

Description:

The IP Softphone 2050 configuration does not direct all call audio to the headset.

Action:

To direct all call audio to your headset, select USB Audio Device as both headset microphone and headset speaker in the Sound Devices dialog box (see "Sound Devices" on page 54).

Directory problems

To use the Redial List and Callers List:

• The communication server must support these features.
• Your system administrator must enable the appropriate class of service.

If you cannot access the Redial List or Callers List, contact your system administrator.

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