

Introduction	3
Overview of the Software Phone	3
Call Control window	3
Call Control window interface	5
Hot Keys	7
The Local Directory	7
System Tray icon and menu	8
Installation and setup	9
System requirements	9
Install the USB Headset Kit and i2050 software	9
Managing Contacts	11
Adding contacts	11
Editing contacts	11
Deleting contacts	12
Finding contacts	12
Filtering a Directory	12
Dialing from the Directory	13
Adding a Group to the Shortcut Bar	13
Customizing the Shortcut Bar	13
Properties dialog box	14
Managing calls	17
Making telephone calls	17
Answering telephone calls	17
Holding and retrieving telephone calls	17
Hanging up telephone calls	17
Listening to your messages	19
Listening to your messages	19
Message Lamp	19
Using Macros	21
About macros	21
Recording a macro	21

Menu Commands **23**

Enhanced window menu..... 23

Standard Window Menu 24

View menu..... 24

Macro menu 25

Help menu..... 25

Troubleshooting **27**

Application interoperability issues 27

Connectivity problems..... 27

Audio problems 30

Software Phone reset conditions..... 31

USB Headset problems..... 32

Introduction

The i2050 Software Phone turns your computer into a telephone.

The Software Phone provides all of the features you would expect. It provides a local telephone Directory, easy access to Voice Mail, Caller ID information and multiple telephone lines or line appearances.

To make a call, you can dial with either your keyboard or your mouse. To answer a call, simply click a button. Instead of holding a telephone receiver to hear and speak to callers, you wear a headset.

Designed to work with IP-based phone systems, the Software Phone provides Voice Over IP (VoIP) services using a telephony server and your company's local area network (LAN). The telephony server the Software Phone connects to provides you with many more network call management features to choose from.

Exactly which features you have access to and how they work will depend on your server. For example, your server may provide for features such as Call Conference, Call Transfer and Call Forwarding.

Overview of the Software Phone

The Software Phone consists of four main parts: the i2050 Software Phone window, the local directory, and the System Tray icon and menu.

The i2050 Software Phone window

This window displays the line keys, feature buttons and call display. You use this window to make and manage your telephone calls. You also use this window to access your network Directory (if one is available) and your Local Directory (see below).

To open the i2050 Software Phone window:

1. Click on *Start > Programs > Nortel Networks > i2050 Software Phone*

The Local Directory window

This window allows you to create, manage and use a Telephone Directory stored on your computer. Refer to Local Directory Overview.

The System Tray icon and menu

You can right-click on the Software Phone icon to make and manage calls. Refer to System Tray icon and menu.

Call Control window

There are two Call Control windows available for the Software Phone: Standard and

Enhanced. These two windows look different, but both windows provide access to the Software Phone features.

To access the Enhanced window, click on *Application Menu > Select Skin > Enhanced*.

Note: The Application Menu is accessed by clicking on the icon located at the top left corner of the Call Control menu.

To access the Standard window, click on *File > Select Skin > Standard*.

The Standard window appears by default when you first start the Software Phone.

Enhanced Call Control Window

The Enhanced i2050 Software Phone window (shown below) includes the Feature buttons, Soft key buttons, Line key buttons and dial pad buttons that allow you to easily make and manage telephone calls.

To change the information that appears on the window, click on *Trays > Lines, Trays > Number, or Trays > Combo*.

Tip: To see help information about an area or element on the screen, right click on the element you are interested in and then click on *What's This*.

Standard Call Control Window

The Standard i2050 Software Phone window (shown on page 4) includes the Feature buttons, Soft key buttons, Line key buttons and dial pad buttons that allow you to make and manage telephone calls.

To resize the window, drag the resize handle on the lower right corner of the window or select **View > Numeric Pad** or **View > Compact Lines**.

Tip: To see help information about an area or element on the screen, click on the *Help > What's This?* command and then click on the element you are interested in.

Call Control window interface

The Call Control window interface is shown below.



Message Waiting light

The red message light at the top of your screen flashes when you have Voice Mail messages.

Toolbar buttons

The Software Phone toolbar buttons allow you to access network telephone features.

Note: The features available and exactly how they work depend on the Communications Server your Software Phone is attached to, and the setup provided by your System Administrator.

For information on how to use or set up these features, contact your system administrator.

Enhanced Call Control Window Toolbars

Primary Display

The information display area provides call information (such as Caller ID) and instructions for using certain Soft Key features. When the telephone is idle, only the date and time appear.

Soft Keys

Soft Keys allow the Software Phone to support a wide variety of features, including network features. The four Soft Keys are located just below the display.

To select a feature, simply click the appropriate Soft Key button, and then follow the instructions that appear on the display.

The Soft Key features you have to choose from will depend on two things:

- Your current task. The features available at any point in time will depend on your current call activity. For example, more features are available when you have an active call than when you do not.
- The features that are available to you. Much of the functionality of the Software Phone comes from the server it is connected to, and the features on that server that the System Administrator has made available to you.

Tip: If there are more than four features available, click on the *More* Soft Key to see them.

Navigation arrows

Use the navigation arrows, up or down, left or right, to scroll the call display area.

Volume and Mute buttons

You can easily adjust the volume of your telephone calls. Ensure you are wearing your headset so you can hear the changes as you make them.

To decrease the volume, click on the button on the left. To increase the volume, click on the button on the right.

Muting a phone call

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

To mute a call, click on the *Mute* button.

Dial Pad

The Dial Pad lets you dial a telephone number. Click on the numbers you want to enter.

Tip: You can also use the number pad on your keyboard to enter a telephone number.

Line Keys

The Software Phone includes six programmable Line keys that are programmed by the system administrator. These keys can represent line appearances, DN's or features. The Communications Server provides the labels that appear on these keys.

To use the programmed feature, line or DN, click on the corresponding Line key.

An additional six programmable keys are available by clicking on the Shift key.

For more information about the lines, DN or features that appear on the Line keys, contact your System Administrator or refer to your Communications Server documentation.

Hot Keys

Within the Primary User Interface, the computer keyboard provides hot keys for one press access to common features:

- answer (Enter)
- release (F12)
- hold (F5)
- softkeys/interactive keys (F1-F4)
- alphabetic keys map to numbers as per dial-pad mapping
- arrow keys map to navigation keys
- Alt-V pastes or inserts data into the interface (For example, you can copy a phone number from Microsoft Outlook and paste it into the Software Phone interface.)

The Local Directory

The Software Phone Local Directory allows you to store a phone Directory on your computer and link to external directories. It even allows you to filter Directories so they are easier to use.

Note: Do not confuse the Local Software Phone Directory with the Network Directory you can access by clicking the Directory toolbar button.

To open the local Software Phone Directory:

• On the i2050 Software Phone window, click on *Application Menu > Local Directory > Local Directory*, or *View > Local Directory*.

The Shortcut Bar on the left side of the Directory lets you access Groups and

Directories. Groups allow you to organize your Directories. A Group is represented by a button on the Shortcut Bar. Directories appear as icons inside Groups.

To select a Group, simply click on its button. By Default, the Local Directory has two Groups: Main and Quick Dials. For more information on adding more Groups, refer to Adding a Group to a Shortcut Bar.

The Main Group

If you click on the Main Group button, the Local Directory appears:

Note: Some Communications Servers do not provide Calling Party and Called Party identification to the i2050 Software Phone. Therefore, the name and number of the caller is not available to the i2050 Software Phone, even when it appears on the Primary Display.

The Quick Dials Group

If you click on the Quick Dials button, you will see the contacts stored in the Quick Dials Directory.

System Tray icon and menu

The i2050 Software Phone System Tray icon allows you to manage your phone calls and messages without opening the main i2050 Software Phone window.

If the i2050 Software Phone window is minimized on the Taskbar, click on either the i2050 Taskbar icon or the System Tray icon to view it.

Right-click on the System Tray icon to open a pop-up menu that allows you to make, answer or manage your calls.

Installation and setup

System requirements

To use the Nortel Networks i2050 Software Phone, you need:

- Pentium-compatible CPU (200 MHz or higher)
- 128 Mbytes RAM (Microsoft Windows 2000)
- 64 Mbytes of RAM (Microsoft Windows 98)
- 55 Mbytes of free hard drive space (all languages)
- 800X600 resolution monitor (16-bit color)
- Universal Serial Bus (USB) port
- Nortel Networks USB Audio Kit

Supported operating systems

- Microsoft Windows 2000 Professional
- Microsoft Windows 2000 Professional Service Pack 1
- Microsoft Windows 2000 Professional Service Pack 2
- Microsoft Windows 98
- Microsoft Windows 98 Second Edition

USB Audio Kit

You must have a Nortel Networks USB Audio Kit to use the Software Phone. The USB Audio Kit allows you to hear and speak with your callers.

The USB Audio Kit includes:

- USB Headset Adapter
- Installation Guide (English and French)
- USB cord
- Telephony grade monaural headset
- Lower cordset with quick disconnect

Install the USB Headset Kit and i2050 software

Follow these steps to install the USB Headset Kit and i2050 software.

1. Ensure that you have the proper system requirements as listed above.
2. Call your System Administrator who may need to change some settings before you can connect the Software Phone on the Communications Server.
3. Refer to the *i2050 Software Phone Installation Guide* for complete instructions on the installation, setup, and configuration of the i2050 Software Phone.

Managing Contacts

Adding contacts

You can add contacts to the Local Directory in the Main Group, or to any Group in the Shortcut Bar.

To add a contact:

1. Click on the *Main* Group and click on the *Local Directory*.

or,

Click on the *Group* in the Shortcut Bar you want to add contacts to. You can click on *Main*, *Quick Dials* or any custom Group you have created.

2. Click on *File > New Contact...* or click on the New Contact toolbar button. The *Properties* dialog box appears.

3. On the Business tab (which is selected by default), enter the contact's name, address, telephone numbers and other personal information.

4. Select the Email Address tab to enter the contact's e-mail address.

5. Select the Notes tab to enter notes or miscellaneous information.

6. Select the Settings tab to define the contact's default telephone number and assign multimedia (sound and graphic) call announcements. (Note: This option is not available for i2050 Software Phone).

7. Click on *Save*.

Tip: You can drag a shortcut to a contact from the Local Directory in the Main Group to any other Group.

Note 1: You cannot add contacts to external Directories such as an LDAP Directory.

Note 2: If the contents of an external Directory has changed, you must update the Directory before you can see the changes in the Software Phone. To update the Directory, right click on the imported directory and then click *Refresh*.

Editing contacts

To edit a contact's information:

1. On the Call Control window, click on *File > Local Directory > Local Directory* or *Application Menu > Local Directory* to open the Directory window.

2. Find and click on the contact entry you want to edit.

3. Click on *File > Properties* or click on the Properties toolbar button. The Properties dialog box appears.

4. Select each tab and edit the information as desired.

5. Click on *Save*.

Deleting contacts

To delete a contact:

1. On the Call Control window, click on *File > Local Directory > Local Directory* or *Application Menu > Local Directory* to open the Directory window.
2. Find and click on the contact you want to delete. To delete a range of contacts, click on the first contact in the range and then shift-click on the second contact in the range. You can also CTRL-click to select contacts.
3. Click on *File > Delete* or click on the Delete toolbar button.
4. Click on *Yes* to confirm the deletion.

Finding contacts

To find a contact in one of your Directories:

1. On the Call Control window, click on *File > Local Directory > Local Directory* or *Application Menu > Local Directory* to open the Directory window.

2. Find and click on the Directory you want to search in.

Click *File > Find Contact...* or click on the Find Contact toolbar button. The *Find Contact* dialog box appears.

3. Enter your search criteria. You can enter the name, e-mail address or phone number. Remember to enter it the way it appears in the Directory. For example, the name should be in the format, "last name, first name."
4. Click on *Find Now*. The dialog box expands to display a list of the contacts that fit your search criteria.

To stop a search, click on *Stop*.

Filtering a Directory

The Software Phone Directory allows you to filter Directories so that they aren't as large. This makes them smaller and easier to manage and use. This feature is especially useful for dealing with large, cumbersome Directories. For example, by filtering a Directory you can greatly reduce the number of names you have to search through.

1. Select the Directory you want to filter in the Shortcut Bar.
2. Click on the Filter toolbar button. The Filter dialog box appears.
3. Add your filter criteria.

Tip: For help on using particular fields, click on the question mark in the upper left corner of the dialog box and then click on the field you want help on.

Dialing from the Directory

To call a contact stored in the Directory:

1. On the Call Control window, click on *File > Local Directory > Local Directory* or *Application Menu > Local Directory* to open the Directory window.
2. Locate the contact you want to call, then do one of the following:
 - Double-click on the phone number you want to dial; or
 - Double-click on the contact's name or click on the *Call Contact* toolbar button to dial the default telephone number; or
 - Right-click on the contact's entry and click on the desired telephone number in the pop-up menu; or
 - Click on the arrow beside the *Call Contact* toolbar button and click on the desired telephone number in the pop-up menu.

Adding a Group to the Shortcut Bar

Groups allow you to organize your Directories and contacts. Groups appear as buttons on the Shortcut Bar on the left side of the Directory. By Default, the Local Directory has two Groups, *Main* and *Quick Dials*.

To add a new Group:

1. Right-click on a blank area on the Shortcut Bar and click on *Add New Group*. A blank Group button appears at the bottom of the Shortcut Bar with a blinking cursor in it.
2. Enter the name you want for the Group and press Enter on the keyboard.

Tip: To add contacts to a Group, simply drag them onto the Group button of the Group you want to add them to.

To view the contents of a Group, simply click on its button.

Customizing the Shortcut Bar

You can customize the way the Shortcut Bar appears.

To change the size of the Directory icons:

- Right-click on a blank area of the Shortcut Bar and click on either *Large Icons* or *Small Icons*.

To change the appearance of the Shortcut bar:

1. Right-click on a blank area in the Shortcut Bar and click on *Properties*. The Shortcut Bar properties dialog box appears.
2. Enter your custom settings.

Tip: For help on using particular fields, click on the question mark in the upper left

corner of the dialog box and then click on the field you want help on.

Properties dialog box

Use the Properties dialog box to enter or change your contacts' information.

To open the Properties dialog box:

1. On the i2050 Software Phone window, click on *File > Local Directory > Local Directory* or *Application Menu > Local Directory* to open the Directory window.
2. Click on *File > New Contact...* or the New Contact toolbar button, or click on a contact and click on *File > Properties...* or the Properties toolbar button.

This dialog box contains four tabs:

Properties - Business tab

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

Note: Inserting a comma in the telephone number inserts a 0.5 second delay before dialing the numbers that follow the commas. Insert as many commas as required.

Export button

This button exports the contact information to a *.vcf file. This file can then be imported into e-mail or contact manager applications, or other software applications that use the *.vcf file format.

Properties - Email Address tab

Use this tab to store e-mail information. You cannot send e-mail using the Software Phone.

Email address - Enter the contact's e-mail address.

Email type - Enter a label for the e-mail address. For example, "Personal e-mail account."

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 need to be available when you call the contact.

Properties - Settings tab

Use this tab to select which telephone number you dial by default. That is, the number that is dialed automatically unless you specify otherwise. The Default Dial telephone number setting you specify here applies only to this contact.

Tip: You can dial a contact's non-default telephone number by right clicking on the contact and selecting any other telephone number that appears in the popup menu.

Managing calls

Making telephone calls

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

To make a call:

Select the line you want to use by clicking on a *Line* key.

Enter the phone number using the number pad on your keyboard or using the mouse and the Software Phone Dial Pad.

Tip: To make a call on your prime telephone line, click the *Answer* button and dial the telephone number as described above.

Answering telephone calls

To answer a call, ensure you are wearing your headset. When you receive a call, you will hear the Software Phone ringer through the Ringing Speaker and you will see Caller ID (if available) on the display area.

Note: The Ringing Speaker is the device you specify on the Select Sound Devices screen of the Configuration Utility.

To answer a call:

1. Click the *Answer* button or click on the *Line* key of the ringing line. If you are on another call, that call is put on Hold.

Tip: To switch between callers, click on the appropriate line key.

Holding and retrieving telephone calls

To manage calls, ensure you are wearing your headset.

To put a call on Hold, or take a call off Hold:

1. Click on the *Line* key for the call.
2. Click on the *Hold* button.

Hanging up telephone calls

To hang up a telephone call:

1. Click on the appropriate *Line* key to ensure it is selected.
2. Click on the *Release* key.

Listening to your messages

Listening to your messages

When you have new messages, the Message Lamp flashes.

Contact your System Administrator for information on how to access your Voice Mail messages.

Tip: You can also check to see the calls you received. Refer to Local Directory Overview.

Message Lamp

The Message Lamp at the top of your screen can indicate the following:

- Lit red means message waiting indicator
- Flashing red indicates an incoming call
- Grey means there is no message waiting or no incoming message

Using Macros

About macros

The Software Phone allows you to record macros. A macro is a saved sequence of steps. For example, you can program a macro that would select a particular telephone line and then dial a telephone number automatically. Macros can be used to ensure that certain numbers are always dialed out on a particular telephone line and also makes it easier for you to dial a number.

Once you have recorded a macro, it is saved under the Macro menu.

Recording a macro

You can record macros that will dial telephone numbers or access your Voice Mail.

To record a macro:

1. Click on *Macro > Record* or click on *Application Menu > Record*.
2. Complete the sequence of steps you want to record. For example, click on one of your telephone lines and then enter a telephone number using your keyboard. If you want a Macro to dial a number, ensure you select a *Line* key.
3. When you are finished, click on the *Finish* button at the bottom of the Call Control window. A dialog box appears.
4. Enter the name of your macro.
5. Select a location for the macro on the Macro menu.

Note: If you started recording a macro but you do not complete this function, click on the *Abort* button at the bottom of the Call Control window.

To delete a macro, record a new macro over the existing macro.

Note: Inserting a comma in the telephone number inserts a 0.5 second delay before dialing the numbers that follow the commas. Insert as many commas as required.

Menu Commands

Enhanced window menu

Click on *Application Menu* to access the menu on the Enhanced Window menu.

Trays

Selects the information that appears on the Enhanced Window.

Retract Tray - Displays no additional information, so the Enhanced Window takes up less space.

Lines - Displays the Line keys in two columns.

Number Pad - Displays the Dial pad.

Combo - Displays the Line Keys and the Dial Pad.

Configure Audio

Specifies the sound device you want to use with the Software Phone. A sound device such as the USB Audio Kit allows your computer to send and receive audio (sound) signals.

Select Skin

Select the Call Control window, Standard or Enhanced.

Select Language

Selects the language that is used on the i2050 Software Phone.

Local Directory

Opens the Local Directory.

- Alt-V pastes or inserts data into the interface (For example, you can copy a phone number from Microsoft Outlook and paste it into the Software Phone interface.)

Macro [Name]

Executes the macro you saved in this command.

Record

Starts recording a macro.

Help

Opens the i2050 help window.

About

Displays the version of the i2050 Software phone information.

Exit

Closes the application.

Standard Window Menu

The Standard Window Menu contains the following items and are explained in the Enhanced Window menu section above:

Configure Audio

Specifies the sound device you want to use with the Software Phone. A sound device such as the USB Audio Kit allows your computer to send and receive audio (sound) signals.

Select Skin

Select the Call Control window, Standard or Enhanced.

Select Language

Selects the language that is used on the i2050 Software Phone.

Exit

Closes the application.

View menu

The View menu contains the following items:

Local Directory

Displays the Local Directory.

Message Waiting

Shows or hides the Message Waiting Light.

Toolbar

Shows or hides the Toolbar.

Primary Display

Shows or hides the Primary Display.

Compact Lines

Displays the Software Phone's Line keys in two columns so that the main window takes up less space.

Numeric Pad and Lines

Displays the Dial Pad and the telephone Line keys in one column.

System Tray

Shows or hides the Software Phone task tray icon. Right-click on this icon to make or manage telephone calls.

Macro menu

The Macro menu contains the following items:

Macro [Name]

Executes the macro you saved in this command.

Record

Starts recording a macro.

Abort

Stops recording a macro.

Help menu

The Help menu contains the following items:

Contents

Displays the help topics.

Search

Searches the help topics for a word or phrase.

Index

Displays the index for the help topics.

What's This?

Activates Context Sensitive Help. After selecting this command, click on any area of the screen to see help information about it.

About

Displays information about the Software Phone.

Troubleshooting

Application interoperability issues

Some applications do not properly check versions of shared system files at installation time. This can cause interoperability problems between the Software Phone and other applications.

For example, installing Timbuktu version 2.0 for Windows 2000 overwrites a .dll file that is also used by the Software Phone. The Software Phone requires the newer version of the.dll and installs this newer version if necessary. To use the Software Phone on the same computer as version 2.0 of Timbuktu, you must install Timbuktu first.

The Software Phone follows Windows and Install Shield standards for version management of system files.

Connectivity problems

Communications Server is unreachable

Symptom:

One of the following messages appear:

- 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 Communications Server could not be established. A random retry time was set after which the Software Phone will try to re-connect. This process is repeated infinitely until successfully connected.

If the Communications Server is up and reachable and the Software Phone is pointed to the correct IP address, the Connecting... message should appear briefly or not appear at all.

The Server unreachable message indicates that there is problem reaching the Communications Server.

Potential causes:

- Network is down
- Computer is not connected to the network
- Invalid communications server settings in Configuration Utility
- Invalid communications server settings in DHCP configuration
- Communications server is down

Action:

- Try pinging another station on the network.
- Try pinging the communications server.
- Use the Configuration Utility to verify the communications server IP address and port number.
- Verify the communications server configuration is correct (a port is available, a license is available, security is correct, etc.).
- In the i2050 configuration utility QoS tab, select the off radio button and then restart the i2050 application.

Connection is reinitializing

Symptom:

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

Description:

This message indicates that the Software Phone has established a connection and has sent a request to the Communications Server to resume connection. The Communications Server is expected to reply to this request. Some Communications Servers pass the Software Phone to different sub-components causing this message to appear two or three times in rapid succession during a normal start up.

Potential causes:

- If the message appears briefly then this is part of a normal startup.
- If the message persists, the i2050's Communications Server programming may be in error.

Action:

Wait to ensure that this message is not a transient start up message. If the message still appears ensure your Communications Server programming is correct.

Authorization Failed

Symptom:

The following message appears:

- Authorization failed

Description:

Client has not been authorized to use the Communications Server.

Potential causes:

- The client has not been authorized by your system administrator.
- The HardwareID in your configuration (Configuration Utility) does

not match the HardwareID provisioned for the Communications Server.

Action:

Contact your system administrator.

Unable to retrieve Communications 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 is 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 Communications Server.

Potential causes:

- Invalid HardwareID in Configuration Utility
- Invalid Communications Server configuration

Action:

- Ensure your Communications Server programming is correct.
- Contact your system administrator

Display Updates are Very Slow

Symptom:

- Cannot connect properly to the Communications Server
- Messages written to the Software Phone are presented very slowly.
- Floppy drive may be active.

Potential Causes:

The Trace utility may be turned on and writing signaling information to a slow disk such as a floppy drive.

Action:

- The Trace feature should be disabled (unchecked) during normal operation. To check the status of the trace feature open the Configuration Utility and then open the Trace tab.
- If you are using the trace feature, the specified directory should be on a local, high-speed disk drive.

Audio problems

Verify basic audio operation

To verify the physical connection and proper Windows audio configuration, record an audio message and play it back using the USB headset.

One-Way Audio

- Check that the handsfree option has been programmed for the Software Phone on the Communications Server.
- Check if the mute option has been turned on. If the mute option is on, the Mute button appears red on the Software Phone interface.
- Check that Network Address Translation (NAT) device is used in the system. If so, check the NAT configuration. You will get one-way audio, if the NAT configuration causes the Software Phone to attempt to connect to the wrong IP address.

Broken or choppy speech

The Audio Quality slider adjusts the number of buffers between the computer audio device and the Software Phone application. Less delay reduces the audio delay but increases the chances of getting broken or absent audio. Higher quality reduces the chances of broken audio but increases the audio delay.

If you are receiving choppy or broken speech, try moving the Audio Quality slider toward Higher Quality.

Other causes of audio issues

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 may not work well together. For example; the Software Phone may exhibit intermittent breaks in audio when using notebooks that have a Xircom RealPort Cardbus Ethernet 10/100+Modem 56 PC Card (PCMCIA) inserted when the notebook is docked. 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 which in turn causes Software Phone 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:

Download and install a new PC Card driver from the Xircom web site. You will require administrator privileges on Windows 2000 and you should carefully follow the installation instructions provided by Xircom.

Advanced Audio settings

Under normal conditions, you should always select the *Use Communications Server values* option. When you choose this option, the Software Phone uses the jitter buffer parameters sent from the Communications Server.

You can override these settings by selecting the *Override Communications Server values* option. Nortel Networks recommends that you do not use this option.

Software Phone reset conditions

The Software Phone resets when:

- instructed to do a hard reset or soft reset by the Communications Server
- when you change the Software Phone skin
- in some cases, firewall applications that intercept or delay packets can cause the Software Phone to reset due to the expiration of the Watchdog timer. Exercise care when using firewall applications on the same computer as the Software Phone.
- there is an excessively long delay or loss of communication with the server.

USB Headset problems

Headset is not functioning

Try the following in order presented:

1. Verify that you have Windows 98, Windows 98 SE or Windows 2000 Professional. To check the type of operating system you are using, right click on *My Computer* and then click *Properties*.
2. Check that *Universal Serial Bus controllers* appears in the Windows Device Manager under the Hardware Tab. If it does not appear, you might need to enable USB in your computer's setup menus or get a BIOS upgrade. Contact your computer supplier.
3. Check that *USB Audio Device* appears under "Sound, video and game controllers" in the Windows Device Manager. If it does not, and the above conditions are correct then see **USB** in Windows Help under the troubleshooting section.
4. Ensure that you have selected *USB Audio Device* as the microphone and speaker for the Software Phone.

Cannot hear audio through the headset

- Ensure that the headset plugged into the USB adapter is the one provided by the manufacturer.
- Check the connectors for a loose connection.

Sound still comes out of my computer speakers

Description:

The i2050 is not configured to direct all call audio to the headset.

Action:

1. Configure the USB Headset by going to the i2050 Call Control Window, and clicking on *Application Menu > Configure Audio*.
2. Choose *USB Audio Device* from the drop-down list next to Headset Microphone.
3. Choose *USB Audio Device* from the drop-down list next to Headset Speaker.
4. Chose the desired device from the drop-down list next to Ringing Speaker.
5. Click *OK*.

Note: Clicking *OK* is necessary.

All Windows sounds come out of the headset

Description:

In some cases, the Windows operating system defaults all the sounds to the new sound device. All Windows sounds, in addition to the i2050 Software Phone sound

and call audio, are now coming into the USB Headset.

Action:

Use the Sounds Control panel to change the audio device back to your sound card. The Software Phone should remain set to USB Audio Device.

1. Select the appropriate sound card:

- **For Windows 98 or Windows 98 SE**, click on *Start > Settings > Control Panel > Multimedia*.
- **For Windows 2000**, click on *Start > Settings > Control Panel > Sounds and Multimedia*.

2. Click on the *Audio Tab*, select the appropriate sound card and click *OK*.

3. Configure the USB Headset by going to the i2050 Call Control Window, and clicking on *Application Menu > Configure Audio*.

4. Choose *USB Audio Device* from the drop-down list next to Headset Microphone.

5. Choose *USB Audio Device* from the drop-down list next to Headset Speaker.

6. Chose the desired device from the drop-down list next to Ringing Speaker.

7. Click *OK*.

Note: Clicking *OK* is necessary.

