



Nortel IP Softphone 2050 Maintenance Release 3.2 (3.02.0045) General Availability - Global

REVISION HISTORY

Date	Revision #	Summary of Changes
23 December 2008	Original bulletin	This is the original publication.

Introduction

Nortel is pleased to announce the general availability of a maintenance release for the IP Softphone 2050 Release 3.02.0045 for Windows PC. This maintenance release delivers several minor enhancements to the IP Softphone 2050 as well as a number of fixes.

With this release, the IP SoftPhone 2050 for Windows PC is now fully compliant with the US Rehabilitation Act - Section 508 1194.21, providing assistive technology for disabled users or user with limited mobility. An updated Nortel Voluntary Product Accessibility Template (VPAT) which details the compliance is included as part of this bulletin in Appendix 1. The VPAT is also available externally upon request through the Nortel Rehabilitation Networking Solutions web site at <http://www.nortel.com/corporate/community/accessibility/index.html>.

This maintenance release is being provided as a no charge update to all customers who have purchased or upgraded to Release 3.0.

Note that this release is for Windows PC on Communication Server 1000 only. IP Softphone 2050 Release 2.x for Windows PC shall remain active as the current release for servers not declaring GA of IP Softphone 2050 Release 3.0 for Windows PC (i.e., BCM, SRG).

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New Features/Enhancements with IP Softphone 2050 Release 3.2

The Nortel IP Softphone 2050 Maintenance Release 3.2 provides the following enhancements:

- Enhanced Accessibility Screen
- Additional Accessibility Improvements

Enhanced Accessibility Screen

Overview

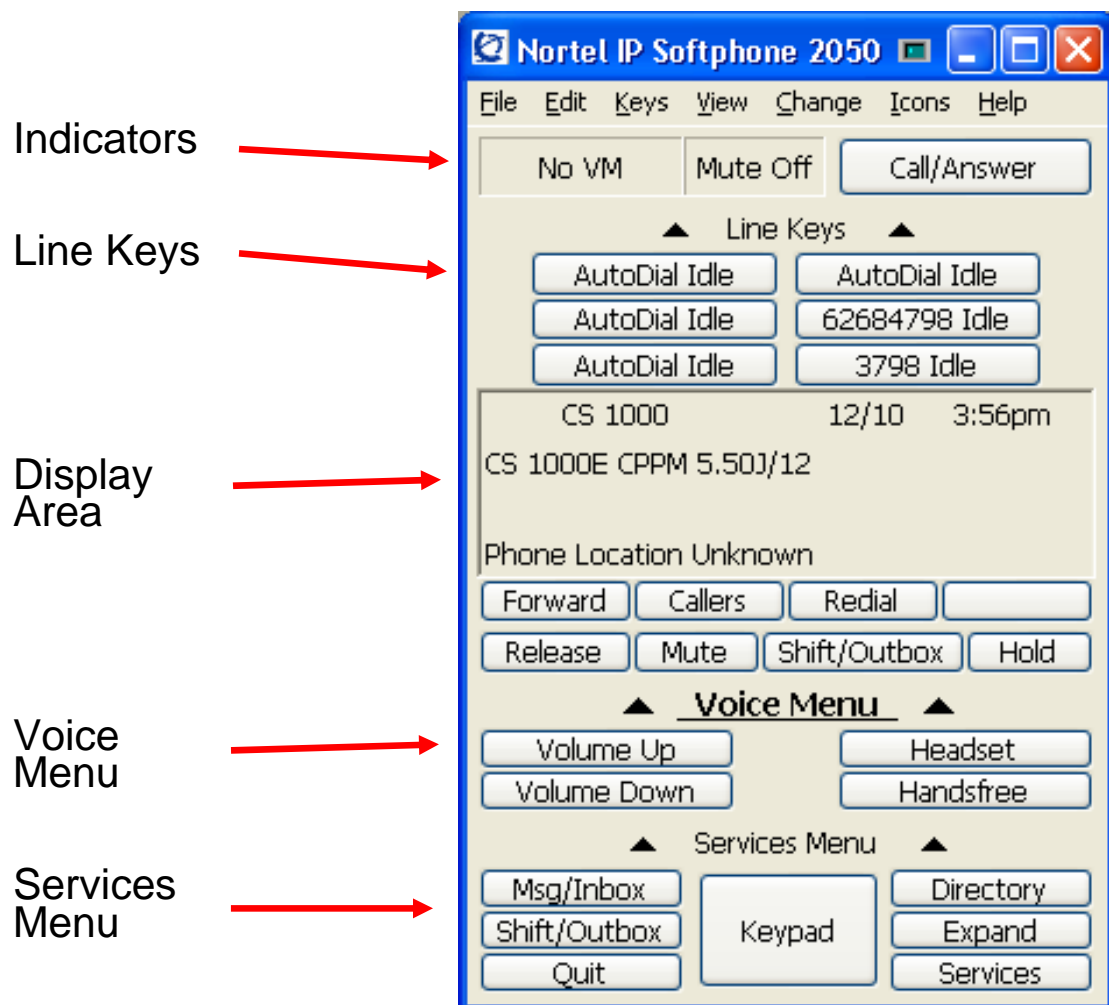
The IP Softphone 2050 for Windows Release 3.2 adds a number of improvements to the Accessibility Interface including:

- Compliance with US Rehabilitation Act - Section 508 1194.21
- Graphical skin
- Support of high contrast setting in the Microsoft OS accessibility options
- Each element of UI is accessible by keyboard and mouse
- Visual and audio notifications of program focus is provided
- Configurable font size
- Compatibility with accessibility aids, such as screen readers, screen magnification and voice input utilities.
- Ability to speak information from the 4-line display (TPS) fields
- Option during program installation to designate standard or accessibility user interface
- Indication of Mute and Message waiting
- Microsoft Windows XP, Vista, Office skin styles support
- Configurable color of font and background

Detailed Description

The Enhanced Accessibility interface in the Nortel IP Softphone 2050 Release 3.2 provides information grouped into 5 major sections. Three of the sections, Line Keys, Voice Menu and Services Menu may be either expanded or collapsed depending on the need for the additional information and functions to be revealed.

The following provides a detailed description of each element.



Navigation

Navigation around the Accessibility interface is via either mouse clicks or using the keyboard:

Tab	Move to next field
Shift+Tab	Move to previous field
Space	Execute the operation at the current cursor location, if this is possible. For example if the current cursor location is on a line key or a softkey that function will be executed. If the current cursor location is on a display line or the time or date field, nothing will be executed.
Up	In a call server menu, to go up to the next selection, press the keyboard's up arrow.
Down	In a call server menu, to go down to the next selection, press the keyboard's down arrow. A call server menu is presented in the display area when, Services button is clicked.

Interface Elements

Indicators	<p>This group reflects 2 UI elements located in the top right side of the main window.</p> <p>Messages (Off or On) indicates there is a voice mail message. Values that will appear here are No VM and VOICE MESSAGE.</p> <p>Mute (Off or On) indicates if the active call is muted or not. If a call is muted you will be able to hear the other party(s) but they will not be able to hear you. Values that will appear here are Indicators Mute On and Indicators Mute Off.</p> <p>The status of these indicators can also be reflected by sound effects which can be programmed in Settings on the Lamp Sounds tab.</p> <p>Each indicator is highlighted by red color if it has On state.</p>
Display	<p>The Display group provides server information. This includes the current display contents which is comprised of up to 4 lines of text. The four line display will contain calling line identity for an incoming call when calling line identity is available. In a directory application this area may present a callers list or directory entries depending on the features of the application.</p>

Navigation: As described above navigation within the Display group can be done by by tabbing (Tab and/or Shift+Tab) to the field or by Up/Down keys.

Line keys

This group reflects a group of 6 buttons on the phone where lines and features can be programmed. This programming can be done by your system administrator or in some cases by the end user. An individual button can be programmed as either a line key or a feature key subject to server restrictions.

By default the Line keys group is expanded. It can be collapsed by clicking on Line keys group name.

A line key represents a directory number or a line appearance or in some cases a dedicated external line. Pressing a line key will normally give dial tone and allow the user to make a call, or will answer a call if there is an incoming call.

A directory number, sometimes called a primary line, is a system wide, uniquely identified line key. When your directory number is dialed the server will route calls to your directory number on your set. This is the simplest variant of a line key and is very similar in concept to a residential phone number. All active sets have an associated directory number.

A line appearance is a server feature which allows users to have virtual appearances of each others directory numbers. Thus co-workers who have been given line appearances of your directory number, may pick up your calls if you are unavailable and vise versa.

Navigation: As described above navigation within the Display group can be done by tabbing (Tab and/or Shift+Tab) or by shortcut keys (Alt pressing shows keystrokes).

Voice menu

This group reflects 4 buttons for call processing. Volume Up/Down allow to change the volume level of speech path during the call and volume level of ringing tone during incoming call.

Headset and Handsfree buttons allow to make or answer calls using appropriate audio paths.

By default Voice menu is expanded on the screen. It can be collapsed by clicking on Voice menu group name.

Navigation: As described above navigation within the Display group can be done by by tabbing (Tab and/or Shift+Tab) or by shortcut keys (Alt pressing shows keystrokes).

Services menu

This group reflects 7 buttons. The following buttons provides call server features:

- **Msg/Inbox** – accesses the voice mail application to listen to messages.
- **Shift/Outbox** - provides access to voice mail application to compose an outgoing message or switch between line keys pages.
- **Quit** - exits from the current display menu if one is in active.
- **Directory** - accesses the network directory application.
- **Expand** - accesses GXAS server applications.
- **Services** - Selects a feature. Specific features depend on how the call server administrator has configured the user's set. Examples of features which can be made available here include: *Hot Desking, Do Not Disturb, Page, Call Park, Call Pickup Directed, Call Pickup Group, Voice Call, Speed Dial, Message Send, Link, Ring Again, Voice Call Deny, Call Forward, Conference, Transfer, Background Music, Last Number Redial.*

The same functionalities can be called from Keys->Features menu.

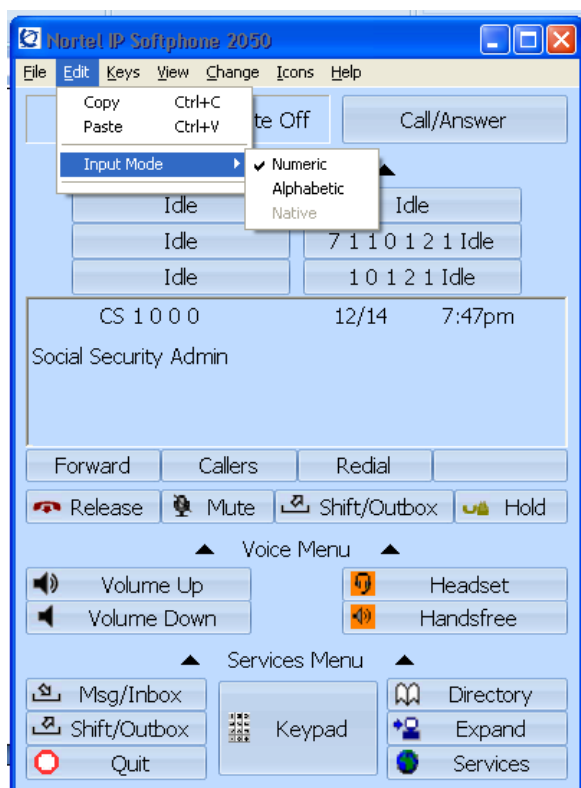
The Keypad button displays the new dialog with digit keys (see picture below)

By default the services menu is expanded. It can be collapsed by clicking on Services menu group name.

Navigation: As described above navigation within the Display group can be done by by tabbing (Tab and/or Shift+Tab) or by shortcut keys (Alt pressing shows keystrokes).

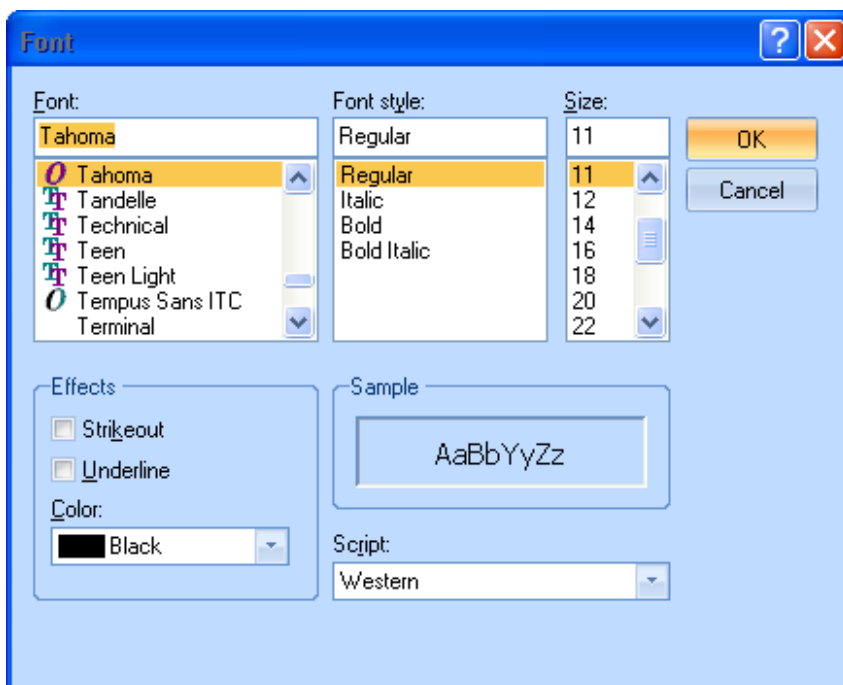
Numeric/Alphabetic Feature

The Numeric and Alphabetic feature allows the user to set the characters that will display in the keypad. Please note that Dragon users can simply dictate the number without the keypad open as long as the call is off hook.



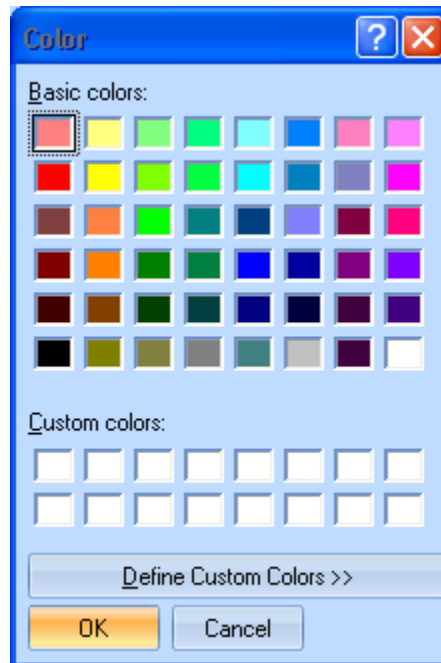
Font Selection

Users may now change the font type of both the interface elements as well as the focus font to meet individual needs.



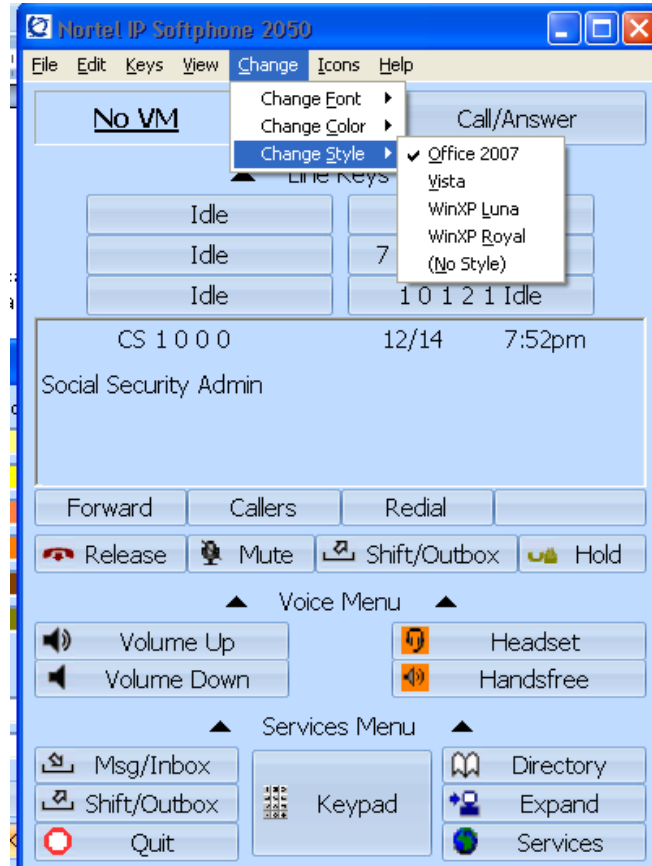
Color Selection

A user can change the indicators color e.g. mute on, voicemail message indicator.



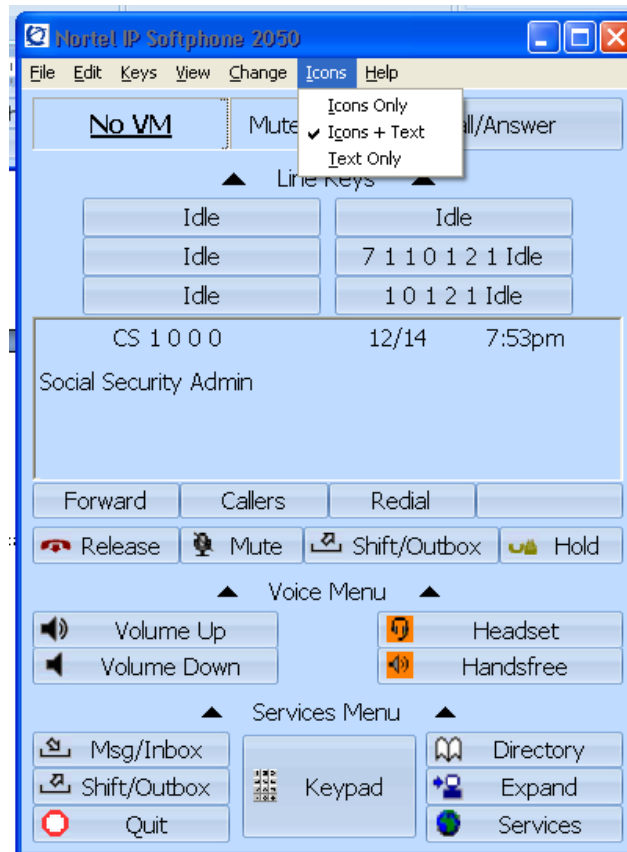
Style Selection

Users can now change the style of the Accessibility interface to meet visual needs or preferences.



Icon Selection

Users may now choose to view the Accessibility Interface with text and icons, icons only or text only. This feature is useful for someone who is visually impaired or has a learning disability.

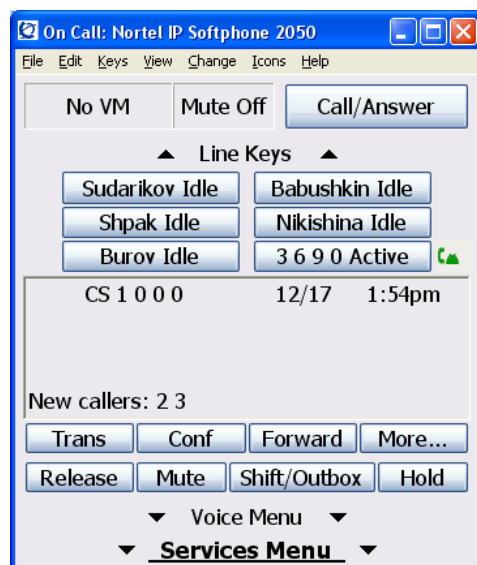
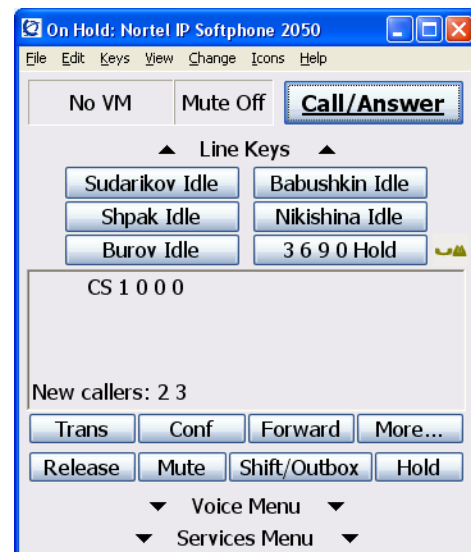
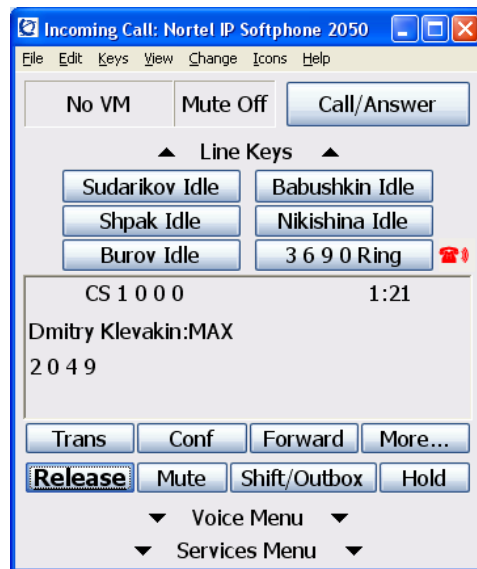


Active Call Status in Window Title

The accessibility interface window title now indicates the current call status. You will see “Incoming call” during ringing for an incoming call, “On Call” during an active call and “On Hold” when you have a call on hold.

The value of this feature is that if your IP Softphone 2050 is in background, you can quickly check the call state from the Windows Task Bar. JAWS users can simply hit a JAWS keystroke to read the title of the window to know the status.

The feature is implemented for the Accessibility mode only.



Accessibility Interface Limitations

The following limitations apply to the IP Softphone 2050 for Windows Release 3.2.

- The Graphical External Application Server (GXAS) interface (added in Release 3.1) is not compliant with the accessibility feature;
- KEM is not supported for accessibility mode.

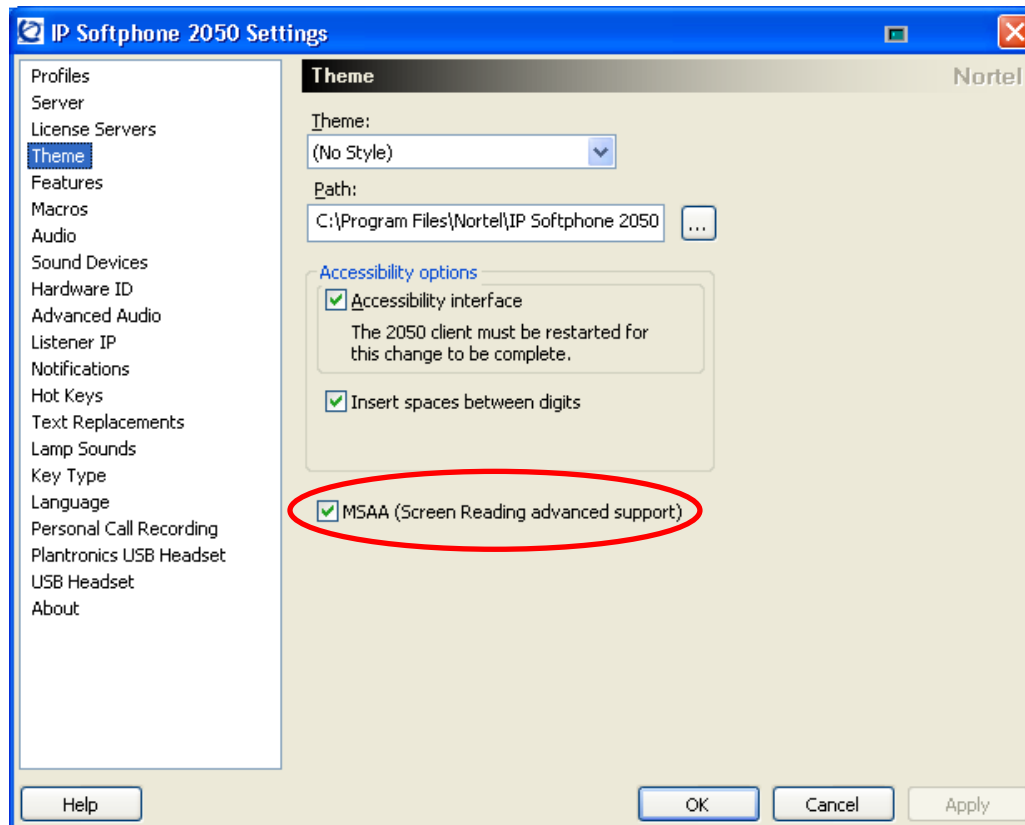
Additional Accessibility Features and Improvements

Microsoft Active Accessibility (MSAA) Screen Reading Advanced Support

MSAA is a technology in all releases of Microsoft Windows that provides a standard, consistent mechanism for exchanging information between applications and assistive technologies.

Some screen reading applications use only the caption of an object and do not read the object name. This feature allows MSAA compatible products, such as JAWS, to read the MSAA information. Without the option checked it will read what is provided through the user interface.

By default this feature is disabled. This feature is available in both Skinned and Accessibility modes.



The Insert spaces between digits feature forces JAWS to read the number correctly.

New Call Voice Notification

IP Softphone 2050 Release 3.2 now can provide spoken Voice Notification (English only) on incoming calls without the need to install a supplemental accessibility application such as JAWS from Freedom Software, Inc. This feature is available for both skinned and Accessibility mode.

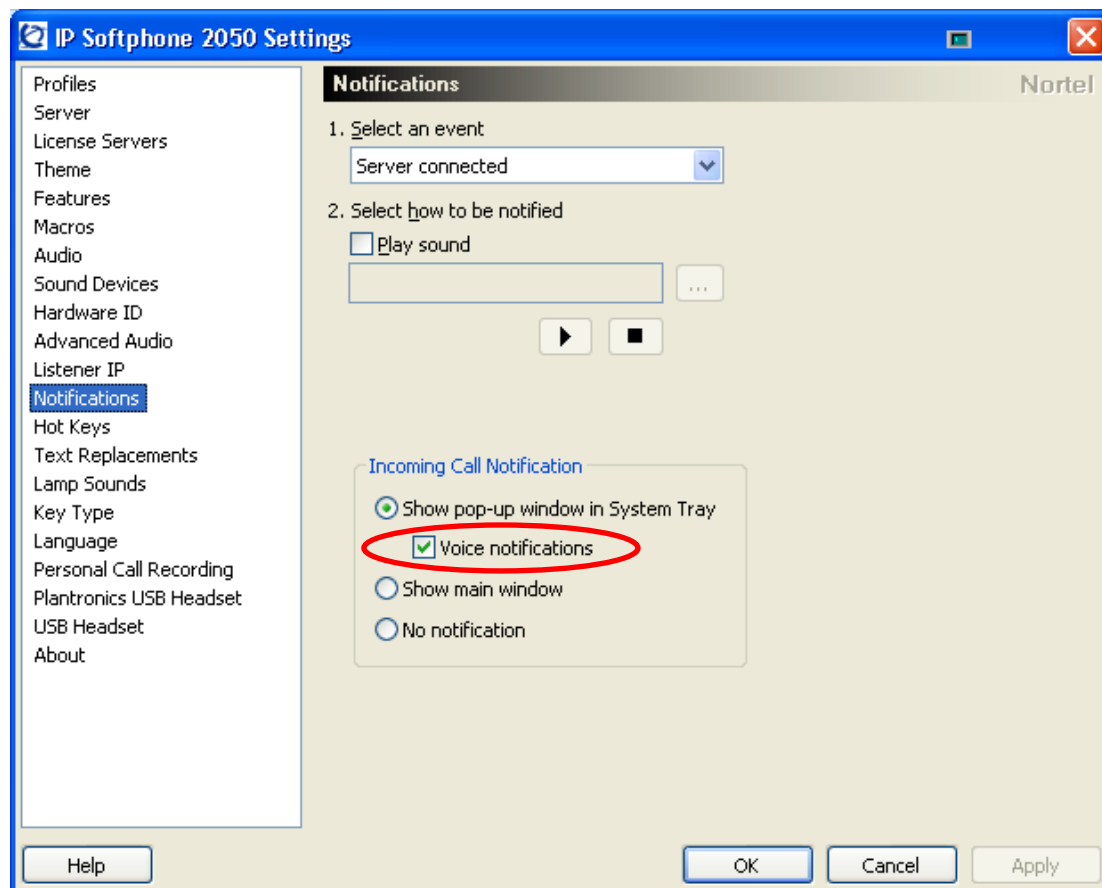
This feature can be enabled only if the “Show pop-up window in System Tray” notification is set. The main purpose is to provide notification of a new incoming call while the main IP Softphone 2050’s window is hidden or minimized.

When an incoming call arrives, the pop-up window is displayed and the voice notification option feature will speak the following information:

Incoming call to <Number> From <Caller Name> <Number>

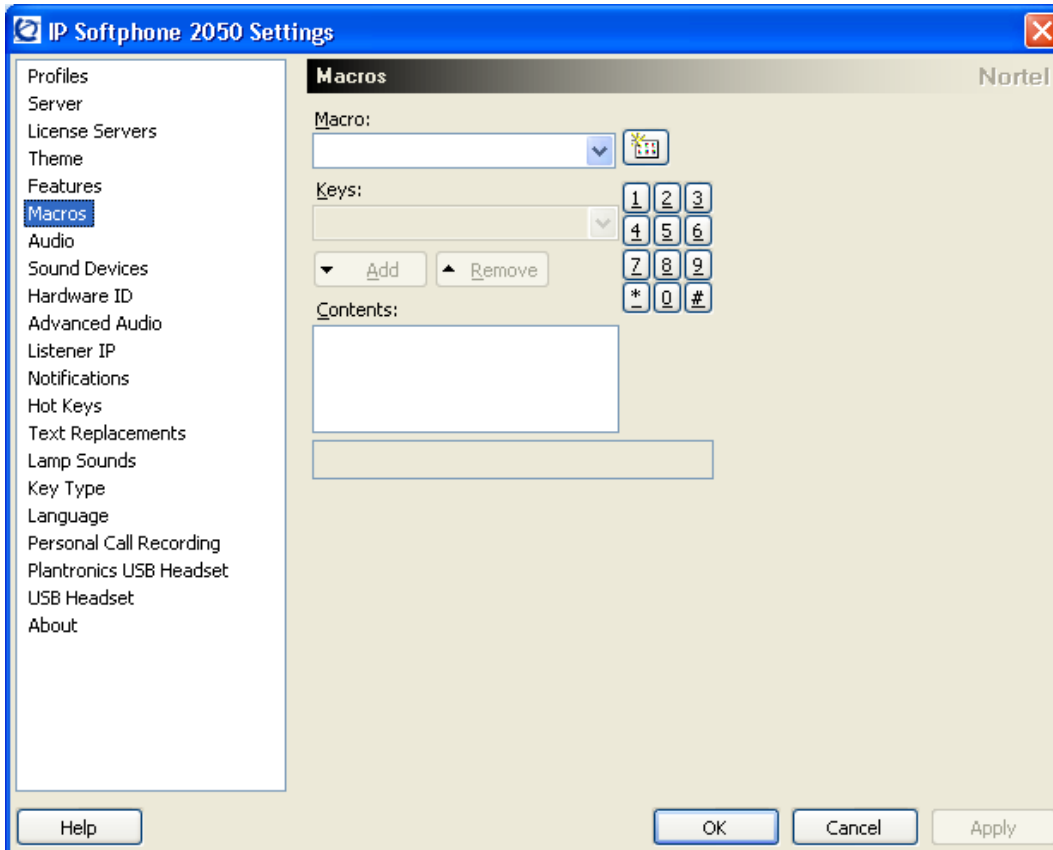
This feature is activated by checking the Voice Notifications box in the Settings Menu -> Notifications -> Incoming Call Notification section. Note that the *Sounds* menu on the Settings screen has now been renamed to *Notifications*. This menu includes the ability to associate a sound with an event as with earlier versions. Release 3.2 now adds the ability to control the operation of the popup window as well as voice notifications on an incoming call.

Other settings such as the speaker voice, playback speed and output device may be adjusted through the Speech icon on the Windows Control Panel.



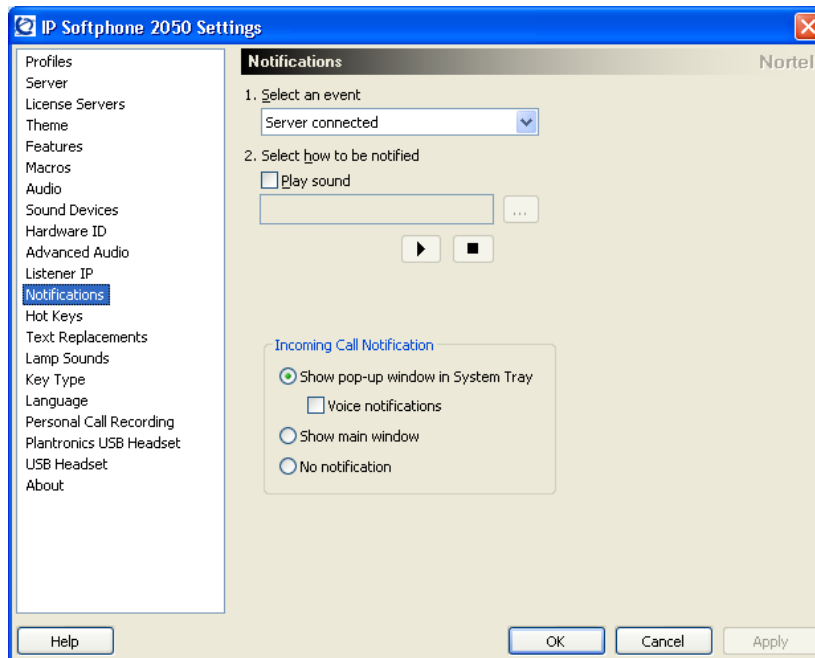
Keystroke Macros

This existing feature in the IP SoftPhone 2050 allows users to create Macros that can record a series of keystrokes and assign just one keystroke to it. This can be beneficial to mobility impaired users to greatly reduce the number of keystrokes required for routine tasks, such as opening the call history list, etc.

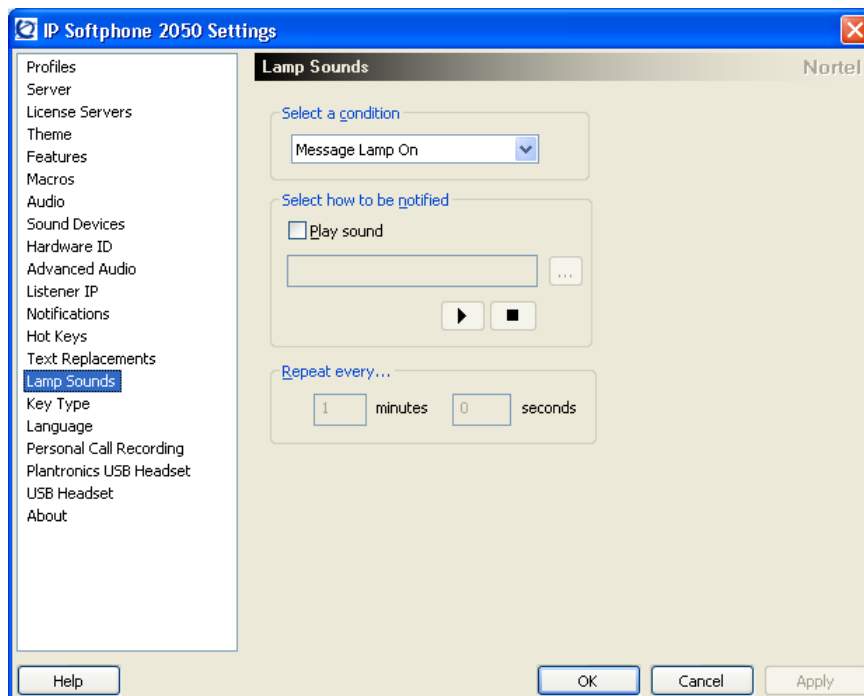


Assigning Sounds to Events and Lamps

The IP SoftPhone 2050 allows users to associate sounds (wav files) to system events and lamps on the softphone. System events may be associated with sounds through the Notifications menu item. For example, this can be used by a visually impaired person to know if the status of the 2050 and server connection changes.



The Lamp Sounds menu allows a unique sound to be associated with the status of a lamp. This is great for visually impaired person to know if there is a message waiting or if the microphone was muted.

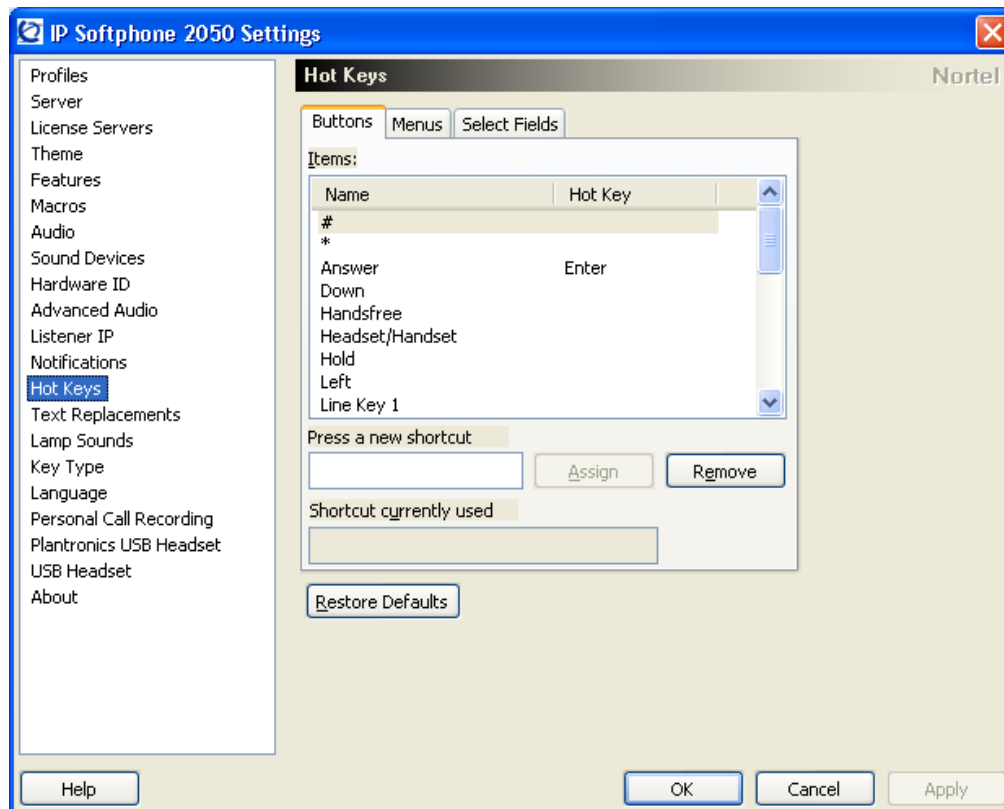


Hotkeys

The hotkey feature allows the user to customize hotkeys for most used features. This feature also assists with re-assigning key conflicts that may result from using assistive technology devices.

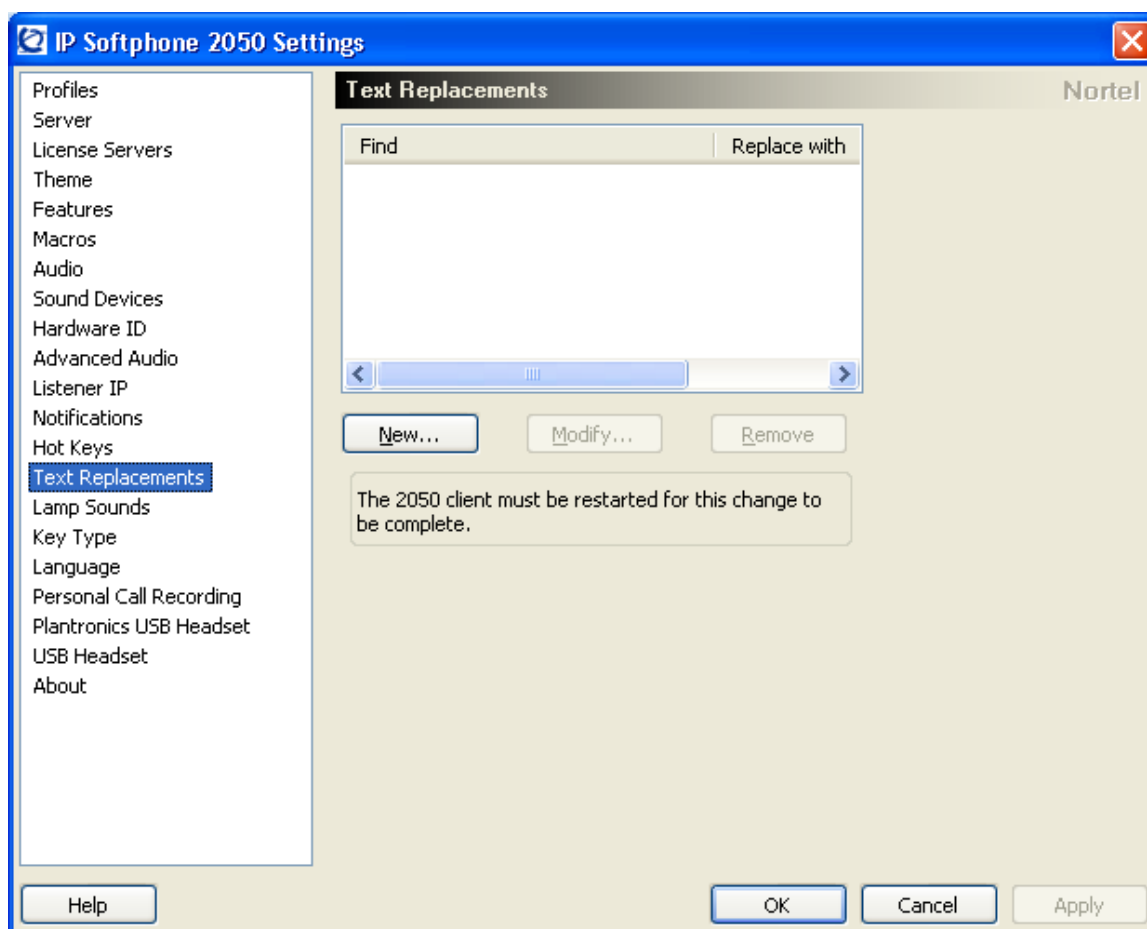
When a Hot Keys is associated with a Button or Menu, the Hot Key will shift the input focus to the associated Item and activate it.

The Hot Key Select Fields feature is used to shift input focus to an associated Item, but not to activate it. To activate the Item, a user must then click or press Enter. The Select Fields feature allows configuring Hot Keys for Accessibility UI specific elements such as Keypad, Line Key Button, Services Menu Button, Voice Menu Button, Time, Date...



Text Replacements

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



Quality Improvements

The Nortel IP Softphone 2050 Maintenance Release 3.2 contains numerous resolved issues. The list of resolved issues since Release 3.1 is listed below.

Issues Resolved

Priority 2	
Q01904549	GXAS: Page Override Call for Indian Navy does not work as expected
Q01901453	GXAS: 2050_No voice when 2050 receives call in the case it is in active zone
Q01962718	GXAS: OFF-HOOK status of any IP Softphone 2050 is not updated
Q01879793	IP Softphone 2050 v3.00.0197 - TAPI - Windows Dialer.exe Interop
Q01875581	IP Softphone 2050 v3.00.0197 - TAPI Dialing Issue.
Q01933678	IP Softphone 2050 v3.01.0062 - Softphone Disconnects all calls when using TAPI, when incoming call
Priority 3	
Q01899150	IP Softphone 2050 turns to background mode after cancel 1 call when in settings menu
Q01926066	IP Softphone 2050 "LiveDialPad" and TAPI issue
Q01948093	Unable to select Accessibility mode from installer
Q01965719	Opening file in Local Directory causes phone's crash.
Q01935717	Accessibility: SSA Report - Focus isn't shifted to found list of contacts in Local Directory
Q01935753	Accessibility: SSA Report – Quick Start window UI should be improved
Q01944983	Accessibility: SSA Report – Local Directory -> header text for list items is not read by JAWS
Q01945822	Accessibility: SSA Report - Unable to read the License Agreement dialog
Q01945041	Accessibility: SSA Report - label text is not read with listboxes.
Q01945914	Accessibility: SSA Report - No way to sort headers through the keyboard
Q01810546	Can not launch Settings in Build 3.1.0009 (Version 3.1).
Q01935686	Accessibility: SSA Report - Some Settings items are not selectable with PC keyboard
Q01935904	New feature for Accessibility UI - "Number Processing"
Q01944980	Accessibility: SSA Report - Arrow buttons in Local Directory are read as dot dot dot
Q01944990	Accessibility: SSA Report - Local Directory-> wrong tab order for Phone Number dialog
Q01929831	IP Softphone 2050 v3.01.0062 - Softphone Window Minimizing unexpectedly
Q01802252	Help menu-Hot keys-window will be blank after switching to other application
Q01764681	Uninstall option of IP Softphone 2050 must be provided in the start menu
Q01833977	Settings: New profiles created with selected profile's Advanced Audio
Q01833981	Settings: New profiles created with selected profile's Listener IP
Q01833987	Settings: New profiles created with selected profile's Hot Keys
Q01833990	Settings: New profiles created with selected profile's Lamp Sounds

Priority 4	
Q01901468	GXAS: 2050 v3.1 _Can't finish sending Page by clicking End button
Q01962293	Wrong behavior when user use short key to open Change field
Q01906943	Different icons in task bar and system tray
Q01804582	Document Octothorpe key use on PC numeric Keypad
Q01772537	Some legacy traces appear when theme is changed
Q01785688	"Full restart" message appeared 2 times when change skin to Accessibility interface
Q01789673	Launching settings on fresh install causes phone to redraw
Q01825173	Settings: New profiles created with selected profile's skin

Technical Advisements for Release 3.2 (Build 45)

Below are known issues that are unresolved in “3.02.0045”. Although still unresolved, they are non-service affecting and are deemed not to be critical as to prevent this software release going to general availability. It is our intention to provide a resolution to these issues in a future maintenance. Consult your Nortel representative for further details.

[Q01973611](#) Accessibility: Indicator colors are not saved at the moment IP Softphone 2050 is closed. So, with the next start the default colors will be used until they are changed again.

[Q01973575](#) Accessibility: Page Up/Down and Home/End do not move between control groups on the accessibility screen.

[Q01909034](#) Phone responds slowly and has wrong window when refreshing diagnostics. When refreshing the diagnostics screen, the 2050 may respond slowly to an incoming call.

[Q01908397](#) Maximize button on USB Audio Adapter doesn't work except the first time. When the GXAS window is opened, pressing the Maximize button on the USB Audio Adapter to minimize/restore the program only works the first time.

Ordering Guidelines and Procedures

The Nortel IP Softphone 2050 Release 3.2 Maintenance Release for Windows PC is generally available globally as of December 23rd, 2008. This maintenance release is available as an update only and must be applied to an installed 3.0 release. Information on ordering the 3.0 release follows.

Software licensing was introduced with the Nortel IP Softphone 2050 Release 3.0 for Windows PC client. Software licensing eliminates the requirement to purchase a CDROM copy of the IP Softphone 2050 Release 3.0 client application on a per-desktop basis. Instead, Right-to-Use Licenses are purchased from Nortel's Keycode Retrieval System (KRS) which is accessible via the Nortel support portal at the link below: www.nortel.com/support/tools/krs. Additional information on generating and retrieving keycodes is provided in a later section of this notice.

IP Softphone 2050 Release 3.0 software licensing is based on "pool-of-users" approach to provide increased cost-effectiveness to customers. For example, if a customer has identified that they have 100 active users of the IP Softphone 2050 Release 3.0 client at any given time out of a total population of 500 IP Softphone 2050 users, then they should plan on purchasing 100 (or more) licenses to support their employees. An active (or "checkout") license is required in order to make a call with the IP Softphone 2050 Release 3.0 client. Licenses are hosted on a Licensing Server, which is a customer supplied PC and is located at the customer premise.

Three order codes are established with Release 3.0 introduction. There is a Right-to-Use (RTU) license for new IP Softphone 2050 Release 3.0 client purchases. An upgrade Right-to-Use license has been established offering a discount for installed base customers of Release 1.x and 2.x wishing to upgrade to Release 3.0. Finally, for customers wishing to have a CDROM copy of the IP Softphone 2050 client .exe file on premise, a third order code has been made available for such a purpose.

New Purchases:

PEC	Description
NTDW84BA	IP Softphone 2050 Rls 3.0 New User License (CS 1000)

Upgrades from IP Softphone 2050 Releases 1.x/2.x to Release 3.0:

PEC	Description
NTDW84CA	IP Softphone 2050 Upgrade License from Rls 1 and 2 (CS 1000)

Software CD Package (CS 1000):

PEC	Description
NTDW84FA	IP Softphone 2050 Software CD Package (CS 1000)

The Nortel IP Softphone 2050 Release 3.0 for Windows PC client is included in Enterprise Configurator Release 7.1.1 (available December 2007). It is being unhidden at time of general availability of the IP Softphone 2050 Release 3.0 client. Release 2.x shall also continue to be supported within EC 7.1.1 at this time.

At time of general availability, support is on Nortel Communication Server 1000 Release 3.0 and later (Note: Individual features may require a later release of CS 1000 – consult the System Requirements section of this bulletin for further details.) Note also that telephony feature delivery from the Nortel Communication Server 1000 requires an IP User License to be available (or purchased) from the Nortel Communication Server 1000. This IP User License is the very same Software User License as supported on Nortel's IP desksets such as the IP Phone 1140E and IP Phone 2004.

Both the Nortel Business Communications Manager (BCM) platforms and Survivable Remote Gateway (SRG) platforms are formulating support plans for IP Softphone 2050 Release 3.0. They shall continue to support Release 2.x at time of this bulletin.

Upgrade for Existing IP Softphone 2050 R3.0 Installations

Those users who have purchased and installed Release 3.0 and later may proceed to download the upgrade version of 3.2.

Software Download Instructions:

To download the upgrade file from the Nortel web site, follow these instructions:

Note: You will need to login to complete the steps below.

1. Access the www.nortel.com/support web site.
2. Select "**Phones, Clients & Accessories**".
3. Select "**IP Softphone 2050**" on the Phones, Clients & Accessories page.
4. Select "**Software Downloads**" on the IP Softphone 2050 page. Select "Maintenance Release"
5. Select the "**IP Softphone 2050 R3.2 (update only)**" link and download the file.
6. Refer to the applicable NTP for instructions on Windows 2000, Windows XP, or Windows Vista 32-bit.

The license server software is available at

http://www116.nortel.com/software/i/IP2050_v3/Licensing_server_sw/2050R3.0.0154_Licensing_Server.zip

Keycode Retrieval Process

Before proceeding, you must have the following information available:

- Fully Qualified Domain Name (FQDN) *of the PC on which the license server will be installed.*
- Purchase Order Number

Registering/generating keycodes for the IP Softphone 2050:

1. Access the www.nortel.com/support web site.
2. Select “**Support & Training – Online Self-Service – Keycode Retrieval**”.
3. At Step 1, Select “**Global Login**”
4. At Step 2 , Select product family “**IP Softphone 2050**”
5. Enter login credentials.
6. Click on “**Product Registration**” on the sidebar.
7. Enter hostname in Site Name
Note: CLLI code is not used for the 2050
8. Enter the geographical location in City, Country , State fields.
Note: This information is used for reference purposes only.
9. Click **Save**

Assuming an order has been placed for a number of users. SAP will have created a non-stock PO and will send to KRS.

10. Click on “**Generate Keycode**” on the sidebar
11. At Step 1, Enter the Host ID from the previous step into the **Enter HostID** field.
12. At Step 2, Enter the **Purchase Order Number**. Alternatively, you can search by Nortel Order #, COEO, Customer PO# or Alternate Order #.
Note: COEO = Common Equipment order number for carrier customers.
Authorization codes are used by stocking distributors.
13. At Step 3. Select the quantity of the number of licenses desired.
14. Click **Continue**. The program then returns back to the Select PO screen to allow users to pull licenses from multiple POs if desired.
15. Click **Go To Summary**
16. Click **Generate Keycode**. A new keycode is generated in KRS database. The User is then directed to the Keycode Retrieve screen.
17. Select **Download Keycode** and apply to the system. Saves as a .lic file on the local system.

Expansions:

1. Click on “**Generate Keycode**” on the sidebar
2. At Step 1, Enter the Host ID from the previous step into the **Enter HostID** field.
3. At Step 2, Enter the **Purchase Order Number** to pull license entitlement from.
4. At Step 3. Enter quantity of additional number of seats required.
5. Click **Generate Keycode**.

Note: With the IP Phone 2050, each license increment generates an additional license file. This is different from other products where a single license file is revised to include the additional values.

If you are experiencing any problems with the KRS system, click on the **CONTACT KRS SUPPORT** link at the bottom of the page.

Training

For North America, applicable Global Knowledge leader-led training courses will include the Product Bulletin for the IP Softphone 2050 Release 3.0 for Windows PC client until the next overall update for the courses is performed by the Global Knowledge team. Global Knowledge is Nortel's exclusive training partner in North America. Courses planned for updating include:

- 0797C VoIP & Multimedia Applications Engineering
- 0767C CS1K 5.0 Engineering and Network Design
- 0763C CS1K 5.0 Installation & Commissioning

Course schedules and additional course content detail can be found at the Global Knowledge website at:

<http://get.globalknowledge.com/norteltraining>

For schedules of other regional training, consult Nortel.com at www.nortel.com/training

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Nortel is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world's most critical information. Serving both service provider and enterprise customers, Nortel delivers innovative technology solutions encompassing end-to-end broadband, Voice over IP, multimedia services and applications, and wireless broadband designed to help people solve the world's greatest challenges. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at www.nortel.com.

Appendix 1: Nortel Voluntary Product Accessibility Template

Name of products: IP Softphone 2050

Contact for more Information: nortelr@nortel.com

REVISION HISTORY

Date	Revision #	Summary of Changes
30 June 2007	Original bulletin	This is the original publication
December 2008	1	Revision

Introduction

*Nortel understands the Section 508 requirements as outlined in the RFP. Nortel is committed to ensuring that products and solutions offered by Nortel are accessible as useable by people with disabilities.

Main Topic

Nortel's solution is comprised of a wide array of sophisticated telecommunications equipment, servers, and operating systems. Most equipment will be located in secured areas and only accessed by certified Nortel engineers which meets the exception criteria for 1194.3 (f) Products located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment are not required to comply with this part.

For products that have software and terminals with user interfaces, a Nortel Voluntary Accessibility Template is available below.

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References and Related Documents

The Nortel Voluntary Product Accessibility Template is derived from the Access Boards Voluntary Product Accessibility Template™, or VPAT™. The purpose of the VPAT™ is to assist Federal contracting officials and other buyers in making preliminary assessments regarding the availability of commercial “Electronic and Information Technology” products and services with features that support accessibility. It is assumed and recommended that offerers will provide additional contact information to facilitate more detailed inquiries.

The first table of the Template provides a summary view of the section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. Column one of the Summary Table describes the subsections of subparts B and C of the Standards. The second column describes the supporting features of the product or refers you to the corresponding detailed table, "e.g., equivalent facilitation." The third column contains any additional remarks and explanations regarding the product. In the subsequent tables, the first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

Summary Table Voluntary Product Accessibility Template™		
<i>Criteria</i>	Supporting Features	Remarks and explanations
Section 1194.21 Software Applications and Operating Systems	Supports	The IP Softphone 2050's accessibility skin provides an accessible interface for people using assistive technology devices.
Section 1194.22 Web-based Internet Information and Applications	Not Applicable	Not applicable
Section 1194.23 Telecommunications Products	Not Applicable	Not applicable
Section 1194.24 Video and Multi-media Products	Not Applicable	Not applicable

Section 1194.25 Self-Contained, Closed Products	Not Applicable	Not applicable
Section 1194.26 Desktop and Portable Computers	Not Applicable	Not applicable
Section 1194.41 Information, Documentation and Support	Supports	User documentation is available upon request in an accessible electronic format.

Section 1194.21 Software Applications and Operating Systems – Detail Voluntary Product Accessibility Template™

<i>Criteria</i>	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supports	The IP Softphone is operable using only the keyboard. The IP Softphone 2050 has hotkeys assigned for control elements. To provide even more accessibility, the IP Softphone 2050 has a very robust and customizable hotkey feature that allows users to assign a custom keystrokes to commonly used features.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supports	IP Softphone 2050 supports OS accessibility features including sticky keys, filter keys, mouse keys, etc. A user can select any of the high contrast color schemes found in the display settings.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that	Supports	The IP Softphone 2050 provides an on screen focus that moves among interface elements.

Assistive Technology can track focus and focus changes.		
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supports	The IP Softphone 2050 was tested with several market leading assistive technology devices.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supports	The meaning assigned to bitmapped images is consistent throughout the IP Softphone 2050 application.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supports	Textual information is provided in the IP Softphone 2050 application and is available to assistive technology devices including the content, in out caret location and attributes.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supports	Windows selectable colors are supported by IP Softphone 2050.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not Applicable	Not Applicable
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Not Applicable	Color is not used to indicate actions, prompting responses, etc. in the accessibility skin of the IP Softphone 2050.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not Applicable	
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than	Supports	IP Softphone 2050 does not feature any flashing or

2 Hz and lower than 55 Hz.		blinking items that blink in the dangerous ranges specified.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports	The IP Softphone 2050 was market-leading assistive technology and appropriately speaks all labels, data and cues in a logical tab order. Keyboard access is provided in the IP Softphone 2050 application.

Section 1194.41 Information, Documentation and Support – Detail

Voluntary Product Accessibility Template™

<i>Criteria</i>	Supporting Features	Remarks and explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge	Supports	Accessible electronic documentation is available upon request.
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	All accessibility features in the IP Softphone 2050 are available in accessible electronic format.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	Support services can accommodate the needs of disabled end users by supplying TTY devices and other communication strategies.