



Product Bulletin

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UNiStim Firmware Maintenance Release 0604DAX for Phase II IP Phones (2001, 2002 & 2004), 0621C3N for IP Phone 2007, and 0623C3G, 0624C3G, 0625C3G and 0627C3G for IP Phone 1110, 1120E, 1140E and 1150E Respectively

REVISION HISTORY

Date	Revision #	Summary of Changes
31-July-07	Original bulletin	This is the original publication
10-Oct-07	Revision 1	New up-revision of IP Phone 11xx firmware to reinstate support for CS1K prior to release 5.0

Introduction

Nortel* is pleased to announce the general availability of a maintenance release of UNiStim firmware version **0604DAX** for the Phase II IP Phone 2001, Phase II IP Phone 2002, and Phase II IP Phone 2004. Nortel is also pleased to announce the general availability of a maintenance release of UNiStim firmware version **0621C3N** for the IP Phone 2007. In addition, Nortel is pleased to announce the general availability of maintenance releases of UNiStim firmware version **0623C3G**, **624C3G**, **0625C3G** and **0627C3G** for the IP Phone 1110, 1120E, IP Phone 1140E and IP Phone 1150E respectively.

NOTE: The 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware loads, for the IP Phone 1110, 1120E, 1140E and 1150E respectively, resolve an incompatibility discovered in the 0623C3F, 0624C3F, 0625C3F and 0627C3F firmware loads with Communication Server 1000 release 4.5 or earlier. With the up-revision of 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware loads the firmware loads 0623C3F, 0624C3F, 0625C3F and 0627C3F respectively have been manufactured discontinued.

Nortel recommends an upgrade to these maintenance releases of firmware for all applicable IP Phones and Call Servers at the earliest convenience. These maintenance releases are being provided as a no charge update to all customers.

These new firmware loads deliver enhancements to Nortel's IP Telephony Solution and deliver general quality improvements. The enhancements available include:

- More flexible network connectivity control
- Additional backlight control timers on selected IP Phones

Enhancements

More flexible network connectivity control

The 0604DAX, 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware loads introduce greater low level network control available through the phones configuration menus. The greater control includes:

- 1) Allowing 802.1q extended frame format to be disabled permitting the phone to connect to network infrastructure that does not support the 802.1Q extended frame format. As well, the new firmware allows for the provisioning of the 802.1Q priority settings for the voice traffic, both control and bearer, and the data traffic from the PC port.

The configuration menu has been expanded to include the additional content. The following new menu items have been added to the configuration menu:

Disable Voice 802.1Q: []
Ctrl Priority Bits: [Auto, 1, 2, 3, 4, 5, 6, 7]
Media Priority Bits: [Auto, 1, 2, 3, 4, 5, 6, 7]

Disable Data 802.1Q: []
Data Priority Bits: [Auto, 1, 2, 3, 4, 5, 6, 7]

- 2) allowing the link speed and the duplex mode on the IP phones to be provisioned independently for both the network port and the PC port

The configuration menu has been expanded to include the additional content. The following new menu items have been added to the configuration menu:

Ntwk Port Speed: [Auto, 10BT, 100BT]
Ntwk Port Duplex: [Auto, Force Full, Force Half]

PC Port Speed: [Auto, 10BT, 100BT]
PC Port Duplex: [Auto, Force Full, Force Half]

The PC Port menu items are not available on the IP Phone 2001 since this phone does not have a PC port.

Additional Timer Values Added to Backlight Control (Applies to IP Phone 2007, 1110, 1120E, 1140E and 1150E)

The 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware loads deliver two new backlight timer durations on the IP Phone 2007, 1110, 1120E, 1140E and 1150E respectively.

The Contrast and Brightness Tools are used to alter the physical settings of the display. The Backlight setting determines the time before the display sleeps (goes black) or dims.

Two new short duration intervals of 5 seconds and 1 minute have been added to the existing duration choices.

Because of the addition of the two new intervals, a previously selected preference may be adjusted when the new firmware is loaded onto the phone. This one time adjustment can be reset by entering the Contrast and Brightness Tools and selecting a new preference. Once the new preference is selected the selection will be persistent across future resets and upgrades.

Quality Improvements

The 0604DAX, 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware loads also continue to improve the overall quality of the Phase II IP Phones (2001, 2002, 2004), IP Phone 2007 and Next Generation IP Phones (1110, 1120E, 1140E and 1150E) through the delivery of ongoing resolution of CRs and closed cases. In total, approximately 70 resolved issues have been closed, and 14 customer cases have been closed in these new firmware loads since the last suite of GA firmware loads. The list of resolved critical issues and the list of closed cases since the last suite of generally available (GA) firmware loads are listed below.

The 0604DAX, 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware releases fix many minor issues and the following critical issues since the last suite of GA firmware loads:

Remote chance that DHCP may suspend
Slight chance that IP Phone may lock on Active Call
Difficulty connecting to server if network cable unplugged and then restored
Errors sometimes occurring during DHCP option handling
IP Phone sometimes not re-registering after server maintenance
Difficulty downloading firmware if link speed set to 100BT Full Duplex
Sound quality may be impaired after network disruption
IP Phone may not respond to Zone Pages
Issues with EAP if Password or Device ID are input incorrectly
In "Enter Admin. Password" menu, using an USB mouse may freeze the phone

The 0604DAX, 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware releases close the following cases:

Case #	Title
070104-91739	CRC errors occurring during large file transfer when using auto negotiation
070326-78016	Set cannot be muted with "AnswerBack" on a BCM platform
070412-96011	DHCP Release sometimes not being sent
070606-51244	XAS IP address may change to 1.1.0.0 after upgrading firmware
060726-18008 060911-74038	Etherset QoS Statistics may be reported incorrectly
061019-18728	IP Phone might respond to ARP with wrong IP address
061020-20102 061027-27675 070226-47774 070313-65095	Connection to XAS may resets resulting in loss of IP Zone Paging
070330-83922	1-way speech sometimes occurring with SRTP PSK
070417-00508	IP Phone did not reset after upgrading firmware
070510-24253	DHCP lease sometimes not released in the default VLAN

Product Advisements

2-Step Upgrade May Be Required (Applies to IP Phone 1120E and 1140E)

One important note when upgrading the IP Phone 1120E to 0624C3G or the IP Phone 1140E to 0625C3G from any load previous to 0624C1B or 0625C1B respectively, is that a 2-step upgrade will be required. The IP Phone 1120E and 1140E cannot be upgraded directly to the newly released firmware if they are currently running firmware previous to 0624C1B and 0625C1B respectively. Instead, the phones must first be upgraded to 0624C1B and 0625C1B or newer (recommend 0624C3C and 0625C3C). Once the phones are running at least 0624C1B and 0625C1B firmware, they will accept being upgraded to 0624C3G and 0625C3G respectively.

Current release of SRTP PSK is not backward compatible with older version of SRTP PSK (Applies to IP Phone 2001, 2002, 2004, 2007, 1110, 1120E, 1140E, 1150E)

One important note when upgrading the IP Phones to the current releases of firmware is to realize that the current releases of SRTP PSK is not compatible with older versions of SRTP PSK. All phone wishing to provide secure communication using SRTP PSK must upgrade to the current firmware version **0604DAX** for the Phase II IP Phone 2001, Phase II IP Phone 2002, and Phase II IP Phone 2004, firmware version **0621C3N** for the IP Phone 2007 and firmware versions **0623C3G, 0624C3G, 0625C3G** and **0627C23** for the IP Phone 1110, 1120E, 1140E and IP Phone 1150E respectively.

Network Loop (Applies to IP Phone 2002, 2004, 2007, 1120E, 1140E)

These firmware releases include a fix to help prevent network loop scenarios from being introduced into the network, and the resultant network outages that can occur. The network loop avoidance fix was first introduced in 0604D9H, 0621C2B, 0624C1E and 0625C1E. One important note when upgrading to 0604DAX, 0621C3N, 0624C3G or 0625C3G from any load previous to 0604D9H, 0621C2B, 0624C1E or 0625C1E respectively, is that IP Phones that were inadvertently mis-wired during initial installation will not be allowed to work until the cabling problem is corrected. This fix is only an issue if the installer, when installing the Nortel IP Phone 2002, 2004, 2007, 1120E or 1140E, inadvertently connected the network Ethernet cable to the PC Ethernet port on the back of the phone, instead of connecting it to the network Ethernet port on the back of the phone. Phase II IP Phones (2002 and 2004) running firmware previous to 0604D9H, IP Phones 2007 running firmware previous to 0621C2B and IP Phone 1120E and 1140E running firmware previous to 0624C1C and 0625C1C respectively will work when incorrectly connected, but this does introduce the potential for network degradation. These new firmware loads will try and safe guard the network by trying to prevent phones that are mis-cabled to function. **This means that the IP Phones that are working on a previous release of firmware may stop working if they are not correctly wired.**

But realize that a mis-cabled phone may still work, even with the new firmware, if the network infrastructure supports Auto MDIX. And, if the network infrastructure supports Auto MDIX, network loop can still occur if the network is not running the Spanning Tree Protocol (STP) or a similar loop avoidance protocol.

As a preventative measure to reduce the potential for network degradation, and to prevent mis-cabled phones from ceasing to work when their firmware is upgraded, please consider taking the necessary steps to ensure your Nortel IP phones network cables are plugged into the correct ports on the back of the phone – network cable into the network Ethernet port, and the PC Ethernet cable (if connecting a PC) to the PC Ethernet port (little computer icon) on the back of the phone.

*Correction to VLAN Access Process (Applies to IP Phone 2002, 2004, 2007, 1120E, 1140E) – **may impact current network configurations***

The 0604DAX, 0621C3N, 0624C3G and 0625C3G firmware releases continue to support the changes to the VLAN Access Process that were first introduced in 0604D9H, 0621C2B, 0624C1E or 0625C1E firmware.

When upgrading to 0604DAX, 0621C3N, 0624C3G or 0625C3G from any load previous to 0604D9H, 0621C2B, 0624C1E or 0625C1E respectively, the corrections to the VLAN

access process, might impact current customer network configurations, especially if something special was done to compensate for the former operation of the phone.

1) Voice VLAN enabled with the Automatic VLAN Discovery feature – initial DHCP request is forwarded based on the Data VLAN policy (i.e. untagged if Data VLAN is disabled or tagged with the Data VLAN ID if Data VLAN is enabled). Subsequent DHCP requests and the resolution of a Voice VLAN will be as per existing automatic operation.

The potential impact of this change to an installed customer network is:

- If they have a Data VLAN configured on the phone, and
- they have the auto configure VLAN feature enabled, and
- they DO NOT have their DHCP server on the Data VLAN

then the phone running these new firmware images will not register to the call server.

Customers should check that the DHCP server is on the Data VLAN if they've configured a Data VLAN on their phones.

2) Stripping of egress Data VLAN tag is configurable – VLAN tag stripping can be enabled or disabled in addition to enabling VLAN support on the phone's PC port. If VLAN is enabled on the phone's PC port (ingress direction), the **default will be to strip** the tag on the egress direction. However, this can be manually overridden to disable stripping even if VLAN tagging (ingress direction) is enabled on the phone's PC port. Likewise if VLAN is disabled on the phone's PC port, the default will be to NOT to strip the tag on the egress direction. But this again can be overridden to enable stripping even if VLAN is disabled on the phone's PC port (ingress direction).

If stripping is disabled, the packet is sent to the phone's PC port unmodified. If stripping is enabled, the 802.1q header is removed (assuming one exists) from the packet before forwarding it out the phone's PC port

Important Note: While these changes corrects the VLAN access process, the change might impact current customer network configurations, especially if something special was done to handle the prior operation of the phone.

For more information on VLAN support in the IP Phones, please refer to the IP Phones Description, Installation and Operation Document, NTP 553-3001-368.

One way speech path behind NAT Routers (Applies to IP Phone 2001, 2002, 2004, 2007, 1120E, 1140E, 1150E)

A problem exists that with some NAT routers that causes one way speech path. This problem is addressed by the application of patch **MPLR21030** on the Communication Server 1000 Release 4.5 and 4.0. (Note: IP Phone usage behind NAT routers is not supported with Communication Server 1000 Release 3.0). The Communication Server 1000 patch is located in the Meridian PEP library at the www.nortel.com/support web site.

Outstanding Known Issues

Although the 0604DAX, 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware releases greatly improve the overall quality of the IP Phones, these firmware releases still include some outstanding known issues:

Backlight Interaction with USB devices (IP Phone 2007, 1120E, 1140E and 1150E)

Some USB devices (i.e. Mice or Keyboards) send regular coordinate update messages to the phone even when the device is not being used. This can cause the sleep mode for the backlight to not be properly invoked.

Contrast Adjustments: Local & TPS contrast adjustments are not synchronized (IP Phone 1110, 1120E, 1140E and 1150E)

The IP Phone 1110, 1120E, 1140E and 1150E graphical display contrast control can be adjusted either locally (on the phone) or through the call server (TPS) control. The Communication Server 1000 TPS does not yet synchronize its contrast setting with the local control. This means if the local control is used exclusively, then whenever the phone has a power cycle, the TPS contrast setting is restored and the user may need to adjust contrast again.

The local contrast control on the IP Phone 1110, 1120E, 1140E and 1150E is accessed by a "double press" of the Services key and selecting "1. Preferences", then "1. Display Settings" in the menu. The TPS contrast control is accessed with a "single press" of the Services key, then selecting "Telephone Options", then "Contrast Adjustment".

IP Phone Compatibility

These firmware releases are compatible with the following IP Phones:

PEC	Description	Firmware file
NTDU90AA16	IP Phone 2001 (Ethergray) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU90BA16	IP Phone 2001 (Ethergray) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU90AA70	IP Phone 2001 (Charcoal) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU90BA70	IP Phone 2001 (Charcoal) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU90AB70	IP Phone 2001 (Charcoal with Bezel) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU90BB70	IP Phone 2001 (Charcoal with Bezel) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU90AC70E6	IP Phone 2001 (Charcoal with Bezel) with Icon keycaps (RoHS)	0604DAX.bin
NTDU90BC70E6	IP Phone 2001 (Charcoal with Bezel) with English Text label keycaps (RoHS)	0604DAX.bin
NTDU90BBGS	IP Phone 2001 GSA	0604DAX.bin
NTDU91AA16	IP Phone 2002 (Ethergray) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU91BA16	IP Phone 2002 (Ethergray) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU91AA70	IP Phone 2002 (Charcoal) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU91BA70	IP Phone 2002 (Charcoal) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU91AB70	IP Phone 2002 (Charcoal with Bezel) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU91BB70	IP Phone 2002 (Charcoal with Bezel) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU91AC70E6	IP Phone 2002 (Charcoal with Bezel) with Icon keycaps (RoHS)	0604DAX.bin
NTDU91BC70E6	IP Phone 2002 (Charcoal with Bezel) with English Text label keycaps (RoHS)	0604DAX.bin
NTDU91BBGS	IP Phone 2002 GSA	0604DAX.bin

NTDU92AA16	IP Phone 2004 (Ethergray) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU92BA16	IP Phone 2004 (Ethergray) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU92AA70	IP Phone 2004 (Charcoal) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU92BA70	IP Phone 2004 (Charcoal) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU92AB70	IP Phone 2004 (Charcoal with Bezel) with Icon keycaps – Manufacture Discontinued	0604DAX.bin
NTDU92BB70	IP Phone 2004 (Charcoal with Bezel) with English Text label keycaps – Manufacture Discontinued	0604DAX.bin
NTDU92AC70E6	IP Phone 2004 (Charcoal with Bezel) with Icon keycaps (RoHS)	0604DAX.bin
NTDU92BC70E6	IP Phone 2004 (Charcoal with Bezel) with English Text label keycaps (RoHS)	0604DAX.bin
NTDU91BBGS	IP Phone 2004 GSA	0604DAX.bin
NTDU96AB70	IP Phone 2007 (Charcoal with Bezel) – Manufacture Discontinued	0621C3N.bin
NTDU96AC70E6	IP Phone 2007 (Charcoal with Bezel) (RoHS)	0621C3N.bin
NTYS02AAE6	IP Phone 1110 Graphite with Icon keycaps	0623C3G.bin
NTYS02BAE6	IP Phone 1110 Graphite with English keycaps	0623C3G.bin
NTYS03AA	IP Phone 1120E Graphite with Icon Keycaps – Manufacture Discontinued	0624C3G.bin
NTYS03BA	IP Phone 1120E Graphite with English keycaps – Manufacture Discontinued	0624C3G.bin
NTYS03AC	IP Phone 1120E Graphite with Icon Keycaps	0624C3G.bin
NTYS03BC	IP Phone 1120E Graphite with English keycaps	0624C3G.bin
NTYS03ABE6	IP Phone 1120E Graphite with Icon Keycaps (RoHS) – Manufacture Discontinued	0624C3G.bin
NTYS03BBE6	IP Phone 1120E Graphite with English Keycaps (RoHS) – Manufacture Discontinued	0624C3G.bin
NTYS03BBGSE6	IP Phone 1120E GSA (RoHS) – Manufacture Discontinued	0624C3G.bin
NTYS03ACE6	IP Phone 1120E Graphite with Icon Keycaps (RoHS)	0624C3G.bin
NTYS03BCE6	IP Phone 1120E Graphite with English keycaps (RoHS)	0624C3G.bin
NTYS03BCGSE6	IP Phone 1120E GSA (RoHS)	0624C3G.bin
NTYS05AA	IP Phone 1140E Graphite with Icon Keycaps – Manufacture Discontinued	0625C3G.bin

NTYS05BA	IP Phone 1140E Graphite with English keycaps – Manufacture Discontinued	0625C3G.bin
NTYS05AC	IP Phone 1140E Graphite with Icon Keycaps	0625C3G.bin
NTYS05BC	IP Phone 1140E Graphite with English keycaps	0625C3G.bin
NTYS05ABE6	IP Phone 1140E Graphite with Icon Keycaps (RoHS) – Manufacture Discontinued	0625C3G.bin
NTYS05BBE6	IP Phone 1140E Graphite with English Keycaps (RoHS) – Manufacture Discontinued	0625C3G.bin
NTYS05BBGSE6	IP Phone 1140E GSA (RoHS) – Manufacture Discontinued	0625C3G.bin
NTYS05ACE6	IP Phone 1140E Graphite with Icon Keycaps (RoHS)	0625C3G.bin
NTYS05BCE6	IP Phone 1140E Graphite with English Keycaps (RoHS)	0625C3G.bin
NTYS05BCGSE6	IP Phone 1140E GSA (RoHS)	0625C3G.bin
NTYS06AAE6	IP Phone 1150E Graphite with Icon Keycaps (RoHS)	0627C3G.bin
NTYS06BAE6	IP Phone 1150E Graphite with English Keycaps (RoHS)	0627C3G.bin

IP Phone 2004 (NTEX00), Phase 1 IP Phone 2002 (NTDU76), and Phase 1 IP Phone 2004 (NTDU82) cannot load these releases.

Call Server Compatibility and Requirements

These firmware releases are compatible with the below Nortel Call Servers.

Call Server	Notes / Advisements
CS 1000 4.5 - X21 4.50W - IP Line 4.50.88 or later - SS 4.50.88 or later	<p><i>Nortel recommends an upgrade to these firmware releases at the earliest opportunity.</i></p>
CS 1000 4.0 - X21 4.00T - IP Line 4.00.55 or later - SS 4.00.55 or later	<p><i>Nortel recommends an upgrade to these firmware releases at the earliest opportunity.</i></p> <p>For Phase II IP Phones, details on using OTM or Element Manager to upgrade the phones can be found in NTP 553-3001-365.</p> <p>For IP Phone 2007, 1120E and 1140E a Trivial File Transfer Protocol (TFTP) Server is required to distribute firmware to IP Phones. The TFTP Upgrade menu on the IP Phone is used to upgrade the firmware.</p> <p>The IP Phone 1150E is not supported on this platform.</p>
CS1000 3.0 - X21 3.00 - IP Line 3.10.81 or later - SS 2.11.03 or later	<p><i>Nortel recommends an upgrade to these firmware releases at the earliest opportunity.</i></p> <p>For Phase II IP Phones, details on using OTM or Element Manager to upgrade the phones can be found in NTP 553-3001-365.</p> <p>For IP Phone 2007, 1120E and 1140E a Trivial File Transfer Protocol (TFTP) Server is required to distribute firmware to IP Phones. The TFTP Upgrade menu on the IP Phone is used to upgrade the firmware.</p> <p>The IP Phone 1110 and 1150E are not supported on this platform.</p>

<p>SRG 200/400 1.0 (BCM 3.7 based)</p>	<p>It is mandatory that SRG 1.0 customers upgrade to SRG200/400 RIs1.5 to ensure official support for the latest feature and software application support across the IP Phone portfolio.</p>
<p>SRG 200/400 1.5 (BCM 4.0 based)</p>	<p><i>Nortel recommends an upgrade to these firmware releases at the earliest opportunity.</i></p> <p>No SRG patches are required to support the Enhanced Firmware Download feature that allows the IP Phone firmware supported on the SRG 200/400 1.5 to remain in synch with the Communication Server 1000 Main office. SRG 200/400 1.5 officially extends support for the following set types: IP Phone 2000 Series Key Expansion Module (KEM)* (in Normal Mode only), IP Phone 1120E, and IP Phone 1140E.</p> <p>In addition, if the “Main” is Communication Server 1000 release 4.5, no patch is necessary on the Communication Server 1000 to upgrade the IP Phone. But if the “Main” is Communication Server 1000 release 3.0 or 4.0, a CS1000 patch is required on the “Main” to allow the SRG 50 to upgrade the IP Phone firmware. The patch is MPLR21148 and is available from the Meridian PEP library at the www.nortel.com/support web site.</p> <p>The IP Phone 1110 and 1150E are not supported on SRG200/400 RIs1.5</p>
<p>SRG 50 1.0</p>	<p><i>Nortel recommends an upgrade to these firmware releases at the earliest opportunity.</i></p> <p>The SRG 50 Enhanced Firmware download patch (BCM050.090-SRG) is required to keep the IP Phone firmware supported on the SRG 50 in synch with the Communication Server 1000 Main office. This patch will work for all versions of IP client firmware. The patch will allow you to upgrade the IP Phone firmware. The SRG patch is entitled BCM050.090-SRG. This patch is available at the www.nortel.com/support web site in the SRG 50 1.0 section.</p> <p>To officially support the IP Phone 1120E and 1140E a SRG Interim Release Patch (<u>BCM050.099 BCM50 1.0: BCM050.099-SRG</u>) is required for SRG 50 RIs 1.0 systems. The Interim Release Patch is available on the www.nortel.com/support web site in the SRG 50 section.</p> <p>In addition, if the “Main” is Communication Server 1000 release 4.5, no Communication Server 1000 patch is necessary on the Communication Server 1000 to upgrade the IP Phones. But if the “Main” is Communication Server 1000 release 3.0 or 4.0, a Communication Server 1000 patch is required on the “Main” to allow the SRG 50 to upgrade the IP Phone firmware. The patch is MPLR21148 and is available from the Meridian PEP library at the www.nortel.com/support web site.</p>

	<p>The IP Phone 1110 and 1150E are not supported on SRG 50 RIs1.0.</p> <p>Although not required, it is strongly recommended that SRG 50 1.0 customers upgrade to 2.0 to ensure the latest feature and software application support across the IP Phone portfolio</p>
<p>SRG 50 2.0</p>	<p><i>Nortel recommends an upgrade to these firmware releases at the earliest opportunity.</i></p> <p>No SRG 50 patches are required to support the Enhanced Firmware Download feature that allows the IP Phone firmware supported on the SRG 50 to remain in synch with the Communication Server 1000 Main office. SRG50 2.0 officially extends support for the following set types: IP Phone 2000 Series Key Expansion Module (KEM)* (in Normal Mode only), IP Phone 1120E, and IP Phone 1140E.</p> <p>In addition, if the “Main” is Communication Server 1000 release 4.5, no patch is necessary on the Communication Server 1000 to upgrade the IP Phone. But if the “Main” is Communication Server 1000 release 3.0 or 4.0, a Communication Server 1000 patch is required on the “Main” to allow the SRG 50 to upgrade the IP Phone firmware. The patch is MPLR21148 and is available from the Meridian PEP library at the www.nortel.com/support web site.</p> <p>The IP Phone 1110 and 1150E are not officially supported on SRG 50 2.0 and is therefore supported in normal mode only.</p>

System Compatibility and Requirements

System	Notes / Advisements
<p>Nortel Application Gateway 1000</p>	<p><i>These firmware releases continue to provide support to interwork with Nortel Application Gateway 1000.</i></p> <p>The Application Gateway 1000 delivers business applications to the IP Phones. It is an open, standards-based network platform that supports simultaneous voice and data services. The Nortel Application Gateway 1000 is used by organizations to deploy and manage multiple applications across the range of Nortel IP Phones including the 2001, 2002, 2004, 2007, 1120E, 1140E and 1150E.</p> <p>For more information on the capabilities introduced with Nortel Application Gateway 1000 please refer to the Product Bulletin P-2006-0034-Global-REV1 and Product Bulletin P-2007-0006-Global</p> <p>The IP Phone 1110 and 1150E is not supported by the Application Gateway 1000.</p>
<p>Nortel Secure Multimedia Controller (SMC) 1.0</p>	<p><i>These firmware releases continue to provide support to interwork with Nortel Secure Multimedia Controller (SMC) 2450.</i></p> <p>The SMC 2450 is a purpose-built application firewall, delivering an integrated inside threat security solution to protect Nortel's IP phones and multimedia communication servers. The SMC 2450 creates a "Secure Multimedia Zone" around the converged infrastructure to protect against Denial of Service attacks and other security threats, while pre-configured policy settings simplify deployment and ensure the integrity and availability of the business critical converged, multimedia infrastructure.</p> <p>For more information on the capabilities introduced with Nortel SMC 2450 please refer to the SMC 2450 Product bulletin P-2006-0131-Global and the SMC 2450 Sales and Marketing bulletin SM-2006-0132-Global.</p>

IP Phone Firmware Upgrade Method (Communication Server Dependent)

Communication Server 1000

The IP Phone 2007, 1110, 1120E, 1140E and 1150E supports remote firmware upgrades through both a TFTP process and a more automated UFTP process direct from the Communication Server 1000 Release 4.5 or later. The method to upgrade the IP Phone 2007, 1110, 1120E and 1140E firmware depends on the call server software.

- Communication Server 1000 Release **4.0** and Succession 1000 Release **3.0** systems must use TFTP
- Communication Server 1000 Release **4.5** or later systems can use UFTP or TFTP

The IP Phone 1150E firmware can use UFTP or TFTP since it is only supported on Communication Server 1000 Release **4.5** or later.

For more information on TFTP and UFTP firmware upgrade processes, please refer to the IP Phones Description, Installation and Operation Document, NTP 553-3001-368.

Survivable Remote Gateway (SRG) 200/400 and SRG 50

For information on firmware upgrade processes for the SRG200/400, please refer to the Main Office Configuration Guide for SRG200/400 RIs 1.5, NTP 553-3001-207

For information on firmware upgrade processes for the SRG50, please refer to the Main Office Configuration Guide for SRG50 RIs 2.0, NTP 553-3001-207.

IP Phone Configuration Menu

The Phase II IP Phone configuration menu has been expanded with the 0604DAX firmware release. The text-based menu structure below presents the complete configuration menu now available:

EAP Enable?[0-N,1-Y]:0

if "1"

DeviceID[]

Password:[***]**

LLDP Enable? [0-N,1-Y]:1

DHCP? [0-N,1-Y]:1

if "0"

SET IP: xxx.xxx.xxx.xxx

NETMSK: xxx.xxx.xxx.xxx

DEF GW: xxx.xxx.xxx.xxx

S1 IP: xxx.xxx.xxx.xxx

S1 PORT:

S1 ACTION:

S1 RETRY COUNT:

S1 PK: FFFFFFFFFFFFFFFF

S2 IP: xxx.xxx.xxx.xxx

S2 PORT:

S2 ACTION:

S2 RETRY COUNT:

S2 PK: FFFFFFFFFFFFFFFF

else if "1"

DHCP:0-Full,1-Partial:1

if "1"

S1 IP: xxx.xxx.xxx.xxx

S1 PORT:

S1 ACTION:

S1 RETRY COUNT:

S1 PK: FFFFFFFFFFFFFFFF

S2 IP: xxx.xxx.xxx.xxx

S2 PORT:

S2 ACTION:

S2 RETRY COUNT:

S2 PK: FFFFFFFFFFFFFFFF

Speed[0-A,1-10,2-100]:0

if "1" or "2"

```

    Duplex[0-A,1-F,2-H]:0
Cfg XAS?[0-N, 1-Y]:1
    if "1"
    XAS IP: xxx.xxx.xxx.xxx
Voice 802.1Q[0-N,1-Y]:1
    if "1"
    VOICE VLAN?[0-N,1-Y]:0
        if "1"
        VLAN Cfg ?0-Auto,1-Man :1
            if "0"
            LLDP MED ? [0-N, 1-Y] :0
                if "0"
                LLDP VLAN ? [0-N,1-Y] :0
                    if "0"
                    DHCP ? [0-N, 1-Y] :0
            else if "1"
            VOICE VLAN ID :
            VLANFILTER ?[0-N,1-Y] :0
        Ctrl pBits[0-7,8-Au] :8
        Media pBits[0-7,8-Au] :8
PC Port ? [0-OFF,1-ON] :1 This menu item, and submenus, are not applicable on IP Phone 2001
    if "1"
    Speed[0-A,1-10,2-100]:0
        if "1" or "2"
        Duplex[0-A,1-F,2-H]:0
    Data 802.1Q[0-N,1-Y]:1
        if "1"
        DATA VLAN?[0-N,1-Y]:0
            if "1"
            DATA VLAN Cfg ?0-A,1-M :0
                if "1"
                DATA VLAN ID :
            Data pBits[0-7,8-Au] :8
            PCUntagAll ?[0-N,1-Y]:0
Cached IP? [0-N, 1-Y]:0
GARP Ignore?[0-N,1-Y]:0
PSK SRTP?[0-N, 1-Y]:1

```

The IP Phone 2007, 1110, 1120E, 1140E and 1150E configuration menu has been expanded with the 0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G firmware releases. The graphic menu structure below presents the complete configuration menu now available:

Enable 802.1x (EAP):

DeviceID:

Password:

Enable 802.1ab (LLDP):

DHCP: [No, Partial, Full]

Set IP: xxx.xxx.xxx.xxx

Net Mask: xxx.xxx.xxx.xxx

Gateway: xxx.xxx.xxx.xxx

S1 IP: xxx.xxx.xxx.xxx

Port:

S1 Action:

Retry:

S1 PK: FFFFFFFFFFFFFFFF

S2 IP: xxx.xxx.xxx.xxx

Port:

S2 Action:

Retry:

S2 PK: FFFFFFFFFFFFFFFF

Ntwk Port Speed: [Auto, 10BT, 100BT]

Ntwk Port Duplex: [Auto, Force Full, Force Half]

Disable Voice 802.1Q:

VoiceVLAN: [No VLAN, LLDP MED, LLDP VLAN Name, DHCP, Enter VLAN ID]

VLAN Filter :

Ctrl Priority Bits: [Auto, 1, 2, 3, 4, 5, 6, 7]

Media Priority Bits: [Auto, 1, 2, 3, 4, 5, 6, 7]

Disable PC Port:

PC Port Speed: [Auto, 10BT, 100BT]

PC Port Duplex: [Auto, Force Full, Force Half]

Disable Data 802.1Q:

DataVLAN: [No VLAN, LLDP VLAN Name, Enter VLAN ID]

Data Priority Bits: [Auto, 1, 2, 3, 4, 5, 6, 7]

PC-Port Untag All:

Cached IP:

Ignore GARP:

Enable PSK SRTP:

XAS IP: xxx.xxx.xxx.xxx

Graphical XAS:

Port

TFTP IP: xxx.xxx.xxx.xxx

Enable Bluetooth: [Auto, yes, No] *This menu item on IP Phone 1140E and 1150E only*

The IP Phone 2007, 1110, 1120E, 1140E and 1150E contain a password protection mechanism to lock out access to the Network Configuration menu. If **enabled**, access to the Network Configuration menu is password protected and the password is prompted by a pop up window. One must type the password 26567*738 (color*set) from the dial pad and press the Down arrow or mouse click "OK" to enter the Network Configuration menu.

When an incorrect password is entered, the Network Configuration Menu is not opened.

To thwart password guessing, only 3 incorrect password entries in a row are allowed. After the 3rd incorrect entry, the password entry is ignored for 5 minutes. During this period of time, the password prompt is displayed and the entered digits accepted; however, the phone will not process the incoming digits. The password prompt window simply closes and the behavior is identical to that of an incorrect password entry. The user will assume the incorrect password has been entered and try again. Thus even if the correct password is guessed during the 5 minute period, it will be ignored. This effectively reduces the guess entry rate to 3 guesses every 5 minutes.

Once the password has been entered, access to the Network Configuration menu remains active for 5 minutes. During the 5 minutes, the menu can be freely navigated, exited and entered without being prompted again for the password. When the 5 minutes expires, the menu is closed. The password must be reentered to access the Menu.

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