

# >THIS IS THE WAY

TO ENHANCE PERSONAL PRODUCTIVITY WITH IP MULTIMEDIA >THIS IS NORTEL

# **Product Brief** Nortel IP Phone 2007 A new dimension in desktop IP Phone user experience

The Nortel IP Phone 2007 unveils a new and exciting user experience with desktop IP Telephony. IP Phone 2007's large color touch-screen and support for multimedia communications enable presentation of a wide array of personalized information and services to your colleagues and customers — from company news to weather and traffic reports to daily specials and services to streaming audio and video. The result is the evolution of the desktop IP Phone into an "information appliance" — a strategic asset for converged communications that you can leverage to drive personal productivity, improved customer service and increased revenue opportunities for your business.

# New realm in user experience begins

With the Nortel IP Phone 2007, a new dimension in user experience with the desktop IP Phone awaits your colleagues and customers. Access to rich multimedia applications, including streaming video, data and web-centric content, can now be presented in color on the display of your IP Phone — efficiently, effectively and in a very pleasing manner (see Figure 1). Key to the multimedia presentation capabilities of IP Phone 2007 is its backlit, pixel-based, color touch-screen display. IP Phone 2007 comes standard with an integrated, 5.7" diagonal, QVGA<sup>1</sup>, Color Super-Twisted Nematic (CSTN), fully bitmapped Liquid Crystal Display (LCD).

Super Twisted Nematic (STN)<sup>2</sup> technology enhances a user's quality of experience with improved viewing angles and display screen contrast. Robust color



<sup>&</sup>lt;sup>1</sup> QVGA = Quarter Video Graphics Array

<sup>&</sup>lt;sup>2</sup> STN = Super-Twisted Nematic is a type of display which improves viewing angles and contrast at high multiplex rates.

screen definition is also inherent with the IP Phone 2007's design, supporting up to 16-bit color depth. This provides for a more enjoyable viewing experience when streaming video from graphical external application servers to the IP Phone 2007's display.

IP Phone 2007's design also intelligently accounts for when the display is not in use. IP Phone 2007 incorporates a configurable backlight timer which extends the life of the display. The backlight timer provides 5, 10, 15 and 20 minute, along with 1 and 2-hour timer settings, dimming the display when inactive for the preferred time period. For customers who require 24x7 display presence, the backlight timer also has a "sleep never" configurable setting.

# Multimedia access is quick and easy

IP Phone 2007 introduces a unique main navigation menu that makes the selection of multimedia content quick and easy (see Figure 2).

At the heart of the IP Phone 2007's main navigation menu is the "Applications" softkey. This softkey can be thought of as the IP Phone 2007's "portal" to multimedia applications delivering fast access to a wide array of multimedia-based information and services that can truly expand your business potential. Once the Applications softkey is tapped, a new screen is presented, which is where you select from your registered applications of choice. Each application has an icon for quick recognition and IP Phone 2007 can access as many applications as the external

### Figure 1. Examples of multimedia applications

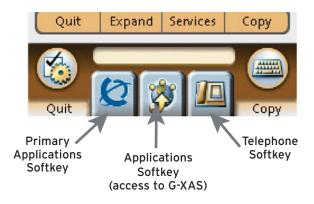


Point of interest map $^{\dagger}$ 



Security station video<sup>††</sup>

### Figure 2. Navigation menu



application server itself can support!<sup>3</sup> A tap of the application icon of choice and a secure communication session is established for you with the external application server over the network<sup>4</sup>. There's no waiting for a phone browser to upload an application file or program. There's no phone browser that could be the target of malicious code. It's that simple! IP Phone 2007 also introduces a Primary Applications softkey with the user in mind. This softkey, to the left of the Application softkey within the main navigation menu, offers direct single-step access to the last application accessed. Once tapped, this softkey also establishes a secure communication session with the external application server to access that application.

<sup>&</sup>lt;sup>3</sup> Icons are established when applications initially register with the external application server that the IP Phone 2007 is pointed to.

<sup>&</sup>lt;sup>4</sup> External Application Servers (XAS) support text-based presentations. Graphical XAS (G-XAS) servers support both text and graphical presentations. IP Phone 2007 supports both XAS and G-XAS with its integration of Virtual Network Computing (VNC) technology and Remote Frame Buffer (RFB) Protocol.

<sup>&</sup>lt;sup>†</sup> Point of interest map screen capture courtesy of Nevotek, Inc.

<sup>&</sup>lt;sup>††</sup>Security station video screen capture courtesy of Citrix, Inc.

#### Figure 3. Nortel IP Phone 2007



#### Figure 4. Administration screen



# USB offers choice in navigation

IP Phone 2007 also expands the quality of user experience with its integration of a Universal Serial Bus (USB) port within the phone. The USB 1.1 port supports a standard USB mouse, keyboard and hub at initial introduction<sup>5</sup>. A USB mouse can be used for navigation of Web-centric content and IP Phone 2007 menus. A USB keyboard can be helpful to streamline text or numerical entry and boost personal productivity, as an alternative option, to the alphanumeric dialpad of the phone. IP Phone 2007, for additional user flexibility, even comes with an onscreen popup keyboard that can be used for data entry as an alternative to the USB keyboard!

With the IP Phone 2007, users benefit with a choice in navigation tools to meet their communication needs. Whether leveraging USB for mouse and keyboard support, the on-screen popup keyboard as an alternative to the USB keyboard or the touch-screen via finger-tap or stylus, the IP Phone 2007 delivers flexible navigation options, truly maximizing personal productivity.

# Telephony receives first priority

With IP Phone 2007, multimedia applications support does not come at the expense of telephony communications. IP Phone 2007 delivers the same rich suite of business-grade telephony features, supported from Nortel Communication Servers, as with the Nortel IP Phone 2004 today. The telephony screen of the IP Phone 2007 emulates the key layout of the IP Phone 2004 and also supports up to twelve programmable line/feature keys<sup>6</sup> (see Figure 3). This makes the transition to IP Phone 2007 even more seamless for customers seeking a premier desktop IP Phone experience and who have adopted IP Phone 2004 sets in their network today.

Telephony also takes precedence when multimedia content is presented on the

display. IP Phone 2007 will temporarily suspend multimedia content so that an incoming call can be presented or an outgoing call can be made.

Once the call is connected, the multimedia session will resume where it left off, without user intervention being required.

### Administrators benefit as well

IT administrators will also see benefits in IP Phone 2007's design. New with IP Phone 2007 introduction is a tools icon, which facilitates "point-n-click" access to administrative tool menus from the main navigation menu (see Figure 4). Selection menus are visually presented and include network and local diagnostics, touchscreen setup, contrast and brightness settings, USB device inventory, firmware upgrades and user preferences. Now, for example, an administrator can simply tap on an IP address with a mouse click or finger-tap to "ping" it or run a tracert command to the IP address.

<sup>5</sup> Maximum power supplied by the IP Phone 2007's USB port is 500mA — capable of registering most USB devices and powering one lowspeed device. Other USB peripherals (Web-camera, thumb drive, card readers) are not supported with the initial release but are under evaluation for possible future release.

The USB port is located on the underside of the IP Phone adjacent to the 10/100 Ethernet connection.

<sup>&</sup>lt;sup>6</sup> Number of programmable line/feature keys is Nortel Communication Server dependent.

# **Unlimited potential**

Unleash the potential of the desktop IP Phone for your business today. Contact your Nortel representative for further details to discuss how IP Phone 2007 can help your business. Some sample applications include:

Hospitality – Showcase property services for customer service and revenue generation such as front desk services, restaurant menus, property events, etc.

Healthcare – Nursing stations where nurses and doctors could pick up messages as well as view patient records or as hallway deployments providing interactive maps for hospital floors

**Retail** – Customer service/sales personnel accessing product inventory records or order status where a PC is not practical or desirable

Manufacturing – Time clock applications (e.g., employee check-in, check out), production status updates and presentation of ERP applications data

Sales offices – Front lobbies or general gathering areas to promote sales events and specials using still-frames or streaming video

Security stations – Push surveillance video of a parking garage or campus entrances to a security station or wall mount for use as a security door phone

<sup>†††</sup> Number of features is Nortel Communication Server dependent

†††† Requires Nortel Communication Server support for wideband

††††† SIP support planned via future firmware download

# **Phone features**

- Up to twelve soft programmable line/feature keys presented within the display<sup>†††</sup>
- Four state sensitive soft label keys presented within the display
- Virtual Network Computing (VNC) technology supports external application servers and multimedia application presentation
- Applications and Primary Applications softkeys provide quick access to registered applications via external application servers
- Integrated touch-screen, on-screen popup keyboard and a USB port for mouse, keyboard and hub support offers flexible navigation of menus and data entry
- Integrated "Stylus Valet" for convenient access and storage to IP Phone 2007 styli (one stylus comes standard with phone)
- Tools softkey delivers single click access to configuration, diagnostic and user preference menus
- Backlit LCD with local contrast and brightness settings offers enhanced viewing angles
- Configurable backlight timer extends display life with 5, 10, 15, 20 minute, 1 and 2 hour settings. "Sleep never" setting for 24x7 environments.
- Built-in amplifier for direct connection of amplified and unamplified headsets
- Integrated 10/100 Base-T switch supports collocating a PC for single LAN "drop" connections
- Power over Ethernet and Local AC power options for choice in powering
- Up to 650 telephony features as delivered from Nortel Communication Servers\*\*\*
- Wideband capable speaker technology<sup>††††</sup>
- "SIP ready" \*\*\*\*\*
- Desktop or wall mountable
- Color: Charcoal with metallic bezel



# **Technical specifications**

#### Display

- Integrated 5.7" (12.7 cm x 17.8 cm) QVGA, Color Super Twisted Nematic (CSTN), 240x320 pixel, fully bitmapped, backlit (Cold Cathode Florescent Tube), touch-screen Liquid Crystal Display
- Up to 16-bit color definition with dither suitable for streaming video

#### Power

- Supports IEEE 802.3af and pre-standard Nortel and Cisco proprietary power schemes
- Local power via Universal 100/240VAC, 50/60Hz Power Adapter delivering 48VDC @ 0.52A Max
- Power dissipation: 8 watts typical; 13 watts maximum. IEEE Class 3 device

#### **USB** port

• Single USB port delivering maximum 500mA power output

#### Servers

- Business Communications Manager 200 and 400 Servers with Release 3.7 and later
- Succession\* 1000 Release 3.0; Communication Server 1000 Release 4.0 and later
- Multimedia Communication Server 5100 Release 3.5

#### **Codecs/Quality of Service**

- G.711a-law, G.711µ-law; G.729a and Annex B
- 802.1p/Q, DiffServ and VLAN tagging of both telephony and PC port traffic

#### Dimensions

• (Width x depth x height) 295mm x 172mm x 170mm on footstand

#### Weight

• 3.0 lbs/1.75 kg

#### Standards

- IEEE 802.3, 802.3af, 802.3u
- 802.1x and EAP
- 802.1p/Q, DiffServ, VLAN tagging of both telephony and PC port traffic
- DHCP (partial and full) and static IP address assignment

#### Data rates

- 10/100 Mbps Auto Sensing
- Manually configurable for 10 and 100 Mbps full duplex for use with non auto-sensing Ethernet switches

#### **Operating temperature**

• +5°C to 40°C 40°F to 104°F

#### **Relative humidity**

• 5% to 95% (non-condensing)

#### Storage temperature

• -40°C to 70°C -40°F to 158°F

#### EMC

- United States FCC CFR 47 Part 15 Class B
- Canada ICES-003 Class B
- Australia/NZ AS/NZS 3548 CISPR 22
- European Community EN 55022/CISPR 22
- EN 55024
- EN 61000-3-2
- EN 61000-3-3

#### Safety

- United States UL 60950 3rd Edition
- Canada CSA 60950-00
- European Community EN 60950-1
- Australia/New Zealand AS/NZS 60950.1:2003

#### US/Canada/Australia

• Hearing Aid Compatibility (HAC) as per FCC Part 68 Australia: AS/ACIF S004

Complies with the CE Marking requirements.



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For more information, contact your Nortel representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

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