NORTEL

Solution Brief

IP Powered Business Solutions for SMBs

Small and medium businesses (SMBs) are a critical part of the business communications market. While high-quality communications are just as important to the SMB, they have many compelling reasons to operate differently than their larger counterparts. For the SMB, keeping up with rapidly changing technology and productivity systems in their business is not a choice, but a necessity. They must constantly look for new channels to market, improve customer service to clients and improve the quality of their products/services, which necessitates the best in communications. For these reasons, the SMBs in North America and Western Europe have been leaders in adopting rapidly evolving communication services. Cutting-edge communications give SMBs the potential for a clear step up in operational and productivity systems.

This solution brief highlights some of Nortel's cutting-edge communications tools for carriers to address SMBs. Nortel is a leader in developing solutions for both carriers and small and medium businesses. The integrated IP Powered Business solution gives carriers a simple, powerful suite of communications tools for small and medium businesses. Nortel is leveraging its leadership position in Voice over IP (VoIP) to deliver this suite of solutions. With its experience in deploying Session Initiation Protocol (SIP) and IP-based communications solutions, Nortel enables carriers to offer SMBs flexible options to migrate to advanced communications services available today. These solutions provide robust voice capabilities with the flexibility to add voice and data communications as one seamless service. All these solutions are open standard, but are offered in a complete end-to-end solution that removes the risk of service failures, costly service calls or truck rolls. Business made simple.

Solutions

Nortel gives carriers two complementary network solutions to facilitate VoIP and other IP services adoption by SMBs:

- **VoIP Lines solution** — Delivers converged voice and data services without requiring the SMB to deploy any switching equipment or software.
- **IP PBX Interconnect** — Delivers integrated access for all communications needs and connection to powerful IP PBXs like the Nortel Business Communications Manager.

These solutions also can be deployed together, providing a unique offering for SMBs that want to retain/acquire an

IP PBX at a main site (e.g. headquarters) and to implement a Hosted VoIP Line solution for remote smaller sites.

For the SMB's site, the solutions include a choice of SIP phones providing differentiating features when integrated in bundles with Nortel's market-leading application server. The phones are also fully open and can interwork with third-party access and customer premises equipment (CPE) devices. Nortel's portfolio of SIP phones for carriers includes business-class phones, video phones, integrated access devices (IADs), analog telephone adaptors (ATAs), softphones and clients. The solution architecture is provided in Figure 1. Nortel delivers all the features that SMBs need — from basic ***Voice over IP Business Services*** to advanced multimedia features, unified communications, fixed mobile convergence, web services, unified messaging and IVR. They can be bundled easily to enable carriers to target various SMB segments.

Carrier VoIP Lines solution

The Carrier VoIP Lines solution enables SMBs to receive the latest in IP voice and multimedia communications and to outsource the management of the service to the carrier. SMB customers are not required to train and employ staff to support VoIP or a PBX but purchase voice service from the carrier.

The Carrier VoIP Lines solution leverages the power of Nortel's Communication Server 2000 or Application Server 5200 servers in the carrier network to offer a powerful converged communications experience to SMBs. The Nortel Carrier VoIP Lines solution also includes an advanced SMB router — the Nortel Business Services Gateway (BSG). This single CPE device integrates routing, switching, mobility, security, quality of service (QoS) and SIP gateway capabilities for voice and data services. It incorporates advanced security mechanisms, including a firewall, to protect SMBs against unauthorized intrusions and malicious attacks, and has a PSTN switchover capability to ensure business continuity in the event of a loss of IP service. It also enables secure VPN site-to-site access over the wide area network (WAN) or across the public Internet. The BSG's QoS features include guaranteed application-aware quality of service and application quality monitoring. This means that users experience the same high levels of application-specific QoS as on a dedicated network.

IP PBX Interconnect

For SMB customers who desire a small PBX (e.g. Nortel BCM50) in their premises, Nortel offers a solution that enables the carrier to offer a VoIP solution to the SMB by providing a SIP PBX trunk back from the Communication Server 2000. The Communication Server 2000 delivers SIP-based VoIP VPN capabilities in addition to PRI and/or H.323.

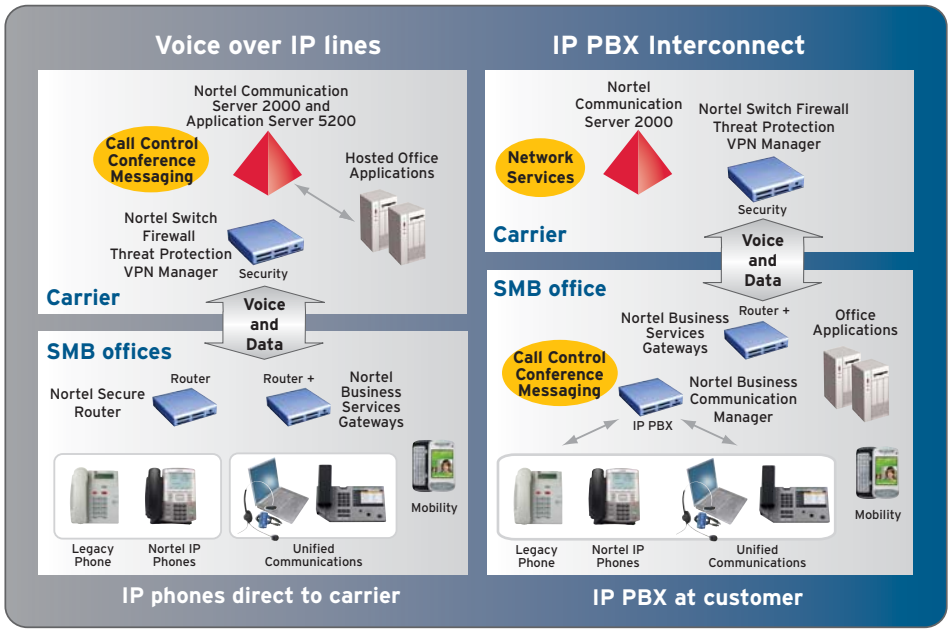
This IP PBX Interconnect solution eliminates the need for BRI, PRI or local PSTN gateways, therefore significantly lowering telephony costs. The Nortel solution relies on converged IP access delivering VoIP and data services to the end user on a single converged network. This solution enables carriers to host a homogeneous Dialing Plan and Service Set across all voice VPN endpoints, including multiple PBX sites and Centrex sites.

The solution offers integrated interworking with Nortel BCM50 or any open-standard SIP-based PBX. The IP PBX Interconnect solution is supported on a Managed IP Service and/or MPLS Private Network, providing the IP VPN options that support the connectivity and bandwidth needs. Complementing the BCM50 is a BSG, used as an integrated data device that serves as router, switch and Wi-Fi access point.

Voice over IP Business Services

The Nortel IP Powered Business solutions for SMBs supports as standard all the traditional features that businesses desire, consistent with the functionality of their own PBX or through subscribing to a Centrex service.

Figure 1. Nortel IP Powered Business Solutions for SMBs Deployment Options



In addition, it has advanced Centrex Voice features such as:

- Hunt Groups
- Call Park
- Call Pickup
- Message Waiting Indicator
- Abbreviated Dial
- Calling Name/Number Display
- Last Number Redial

Besides delivering the VoIP Business services, the Nortel offer includes as standard new VoIP features based on the Nortel Web Portal, which allows SMBs to self-manage their own features. The additional VoIP features that are enabled by Web Portal, and which are therefore available to all SMB customers, include:

- Find me/follow me
- Click to call
- Call screening and call logging
- Meet me conferencing (for up to six users)

Multimedia package

Nortel complements the rich VoIP Business service set with advanced multimedia services. Customers will benefit from the same rich set of voice services they have today, plus advanced IP-based services, such as:

- **Presence** — The ability to detect whether others in your business or user group are on the phone or online, which means less time trying to make contact with them.
- **Instant messaging** — Once you know someone is online, send them a secure message that they can read at once and respond to, even if they are currently on the phone.
- **Video** — Enables "ad hoc" videoconferencing, avoiding the need to pre-book or having to wait to use a dedicated facility.
- **File share** — Lets you instantly send to and receive files from a remote work colleague, even while engaged in a voice, video or multimedia session with that person, simply by dragging it to their onscreen profile.
- **Web push** — Enables a user to instantly display web pages on a contact's screen during active calls.

Unified Communications

Nortel offers Unified Communications solutions that help remove the barriers between voice, email conferencing, video and instant messaging. For the hyperconnected enterprise, this means reduced time to decision, increased productivity and the ability to provide a simple and consistent user experience across all types of communication. Through Nortel alliances with world-class enterprise software developers (e.g. Microsoft with the Innovative Communications Alliance), Nortel is delivering unified communications with value propositions that offer significant benefits to enterprise customers.

Fixed Mobile Convergence

Fixed Mobile Convergence (FMC) provides a simple and effective user experience. By integrating any device including home phones, desk phones, mobile phones, Wi-Fi handsets and/or PC clients into a single service, Nortel delivers the following FMC solutions:

- **One Number Service** — A single number and voicemail across any existing devices on any service providers' networks.
- **Mobile Assistant** — The Mobile Assistant allows subscribers to access their corporate directory, presence-enabled buddy list, call logs and to exchange IMs directly from their mobile device.
- **Converged Mobility** — Lower costs, improve coverage or enter new market segments by offering both Wi-Fi and cellular with the same device.
- **Mobile Converged Desktop** — Users now have a Web interface to control their cellular service, which will enrich the mobile experience and increase usage by integrating PC-based multimedia and GUIs with legacy cellular devices.

Web Services

Nortel delivers powerful and standardized Web Services APIs to easily include telecommunication services into web applications with the Communication Server 2000 and Application Server 5200. Enterprises can now enhance their own web applications with minimal telephony knowledge using Parlay X APIs directly off the carriers' Nortel application servers. This enables rapid development of new exciting telephony web services that are combined with existing IT applications to implement, for example, Click-to-Connect functionality from an enterprise web site to its call center at the click of a button.

It's not just the products — Nortel Marketing

Nortel acknowledges that there are multiple solutions offering VoIP services for SMBs, and it can be challenging for the carrier to rise above the clutter and differentiate. Nortel is the market leader in VoIP deployment and as a result has gained invaluable experience deploying VoIP solutions for SMBs, large enterprises and residential applications alike. Specialized SMB marketing and business development teams at Nortel have been providing their expertise to carriers and SMBs for planning and configuring the solutions for deployment, as well as for helping the carriers and SMBs with the associated business planning, decision analysis, strategic readiness and technology consulting before the SMB customer chooses to migrate to IP Business Services.

- **SMB Co-Marketing:** Nortel's Carrier marketing team has teamed with the Nortel Enterprise marketing team to provide comprehensive SMB marketing support. Services could include Inside Sales support, SMB Sales Guides, Compilation and Analysis of secondary Market Research for things such as carrier-hosted Market Pricing Benchmarks, primary research to better understand SMB needs and desires, and market collateral. We'll also work with you to develop segment-specific business cases and business models for you to sell to SMBs.

Nortel Global Services

- **Systems Integration and Business Operations services:** These services simplify the SMB experience with IP voice and communications. Your choice of implementation services includes warehousing, provisioning, configuration, install and turn-up, and training.
- **Nortel hosts the solution for you:** We can provide hosting solutions for your VoIP switch, PSTN interconnect, origination/termination, local and long distance calling, business services and disaster recovery.
- **Nortel's legendary post-sales customer and operations support:** Our support services include helpdesk, technical support, hardware repair, spares management and software patches.

Conclusion

The business market has very high expectations for VoIP feature richness, quality, security and reliability. As a result, the networks can get extremely complex and difficult to manage. However, the complexity need not be passed on to the end user. Nortel's flexible IP Powered Business solutions leverage our leadership and experience in the VoIP market to enable carriers to offer simple and sophisticated communications tools for the SMBs. With our constant focus on the end-user experience, Nortel is simplifying the SMB decision, while enriching carriers with an IP communications toolkit to grow their share of SMB customers.

Nortel offers a comprehensive solution to carriers for providing SMBs with easy and simple implementation of converged communication services.

- **End-to-End SMB Solutions:** Our portfolio of products features the Communication Server 2000 IP multimedia softswitch, AS5200 SIP application server, Business Communications Manager, Business Services Gateway, IP phones, IP clients, Fixed Mobile Convergence applications, unified communications and a customizable web portal.

Nortel's end-to-end SMB VoIP solution encompasses:

- Two deployment options based on carrier application server choice
- Full solution validation
- Options for advanced SIP features (UM, UC, FMC, web services and IVR)
- Interworking with third-party IP PBXs
- Range of supported CPE devices
- Co-marketing materials
- Comprehensive SMB support services

These solutions are building upon Nortel's recognized global VoIP leadership in both the enterprise and carrier spaces (IP Lines shipped):

- Nortel is the worldwide leader in Carrier VoIP and has been for five years running (2002-2006). Source: Dell'Oro Group.
- Nortel is the worldwide leader in Enterprise VoIP in 1Q 2007 and has been for three years running (2004-2006). Source: Dell'Oro Group, Infonetics

Visit Nortel on the Web at **www.nortel.com**. For the latest Nortel news, visit **www.nortel.com/news**.

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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