It’s a surprising but very real statistic: 50 to 70 percent of office space is unoccupied during normal business hours, according to the International Telework Association and Council. Where are these people? Some are elsewhere in the building or visiting another company site. Others are working at home or on the road. With the widespread adoption of telecommuting, wireless and various other “virtual office” technologies, this trend will only increase.

How can businesses ensure that time and distances do not become barriers to productive collaboration? What’s the best way to provide connectivity for employees who are often on the move, such as healthcare professionals, plant supervisors and sales associates?

In the past, the choices for small to medium-sized businesses were limited. There are wireless solutions designed for consumers, to allow them to network computers and printers in the home. These systems are inexpensive and simple to use, but they don’t offer the features and security needed for business communications. Then there are wireless local area networks targeted for larger enterprises with a dedicated network management team. In addition to access points throughout the workspace, these systems generally require a central controller and separate security platform. The high-end architecture is optimized for a large installation but difficult for a small business to cost-justify.

Now there’s a wireless networking solution designed specifically for the requirements and budgets of small to medium-sized businesses. Wherever employees must stay in touch throughout a building — with a full set of voice and data features — Nortel has the IP mobility solution to fit.

Wireless networking tailored for your business
A wireless local area networks (WLAN) based on the Nortel Business Access Point 120 enables workers to roam throughout your office, while their voice and data communications services follow

If you need to extend secure, reliable wireless service to 10 to 50 on-site employees, or as many as 100 — and it has to be simple and affordable — Nortel has the solution to fit.
them. This WLAN solution is ideal for offices, medical clinics, retail stores, schools and service/distribution centers — anywhere you need to extend secure, reliable wireless service to 10 to 50 employees, or as many as 100.

The set-up is simple. Compact access points, about the size of a hardback novel, are mounted on walls or ceilings in areas where you need wireless coverage. The access point can either have a wired connection back to your LAN switch or it can communicate over the air to another access point, and from there to an Ethernet switch.

A single access point can extend wireless service up to 1,100 feet, depending on transmission speed and characteristics of the space. Reach is greater at slower speeds and in open office areas, less at higher speeds or in spaces cluttered with walls, machinery or other obstructions for radio waves.

Users access the wireless network using PCs or PDAs equipped with wireless communication cards (standard equipment on most devices sold today). If the device has a headset, microphone and a Nortel IP Softphone 2050, users can also place and receive voice calls.

**Voice mobility throughout the workplace**

**Missed telephone calls can result in lost business.** When customers call, they expect to reach the right person — right away. Voice mobility throughout the workplace enables callers to reach employees directly — whether they’re at their desk, in a meeting, in the warehouse or on the showroom floor. Nortel offers a high-quality, in-building Digital Mobility communications solution that relies on a series of base stations and repeaters to provide mobile telephony services across the workplace. Workers can remain connected to their phone as they conduct business throughout company facilities.

**Consider the advantages of wireless communications**

**Improve productivity and customer care.** E-mail, Internet access, call forwarding, conference calling, voice mail, personalized greetings, Unified Messaging, Automated Attendant… these features and more will work just the same on the voice-ready wireless device as on the desktop phone.

For example, a supervisor could send and receive e-mails while working with team members all over the facility. A nurse or physician could use a tablet PC at the patient’s bedside to retrieve and update electronic patient records from a central server. An automotive technician could enter vehicle diagnostic information into a handheld device and transmit this data to the service counter. A sales associate could handle phone calls from anywhere on the sales floor, to be always available to answer customer questions. A warehouse clerk could scan RFID tags on cartons and immediately update centralized inventory and shipping records.

**Enjoy secure, clear conversations and continuous coverage.** All too familiar with the dropped calls that are common in public cell phone networks, business owners naturally are concerned that a private wireless solution might have inferior quality. You want to be sure the network will perform consistently and project a professional image for the business.

With the Nortel solution, data service is robust and voice quality is clear and reliable. There are no dead zones, no static or fading. Callers won’t even know you’re talking on a laptop, tablet PC or PDA with a headset. Users can wander from one coverage area to another without losing their connections. The hand-off between access points takes place in milliseconds, so there’s no interruption in voice or data services.

For example, a plant supervisor could walk from the manufacturing floor to executive offices — areas served by two or more different access points — without losing the connection. A nurse could go from the ICU to patient rooms while consulting with a physician over a voice-equipped PDA.

Nortel Business Access Point 120 units are so affordable that they can be deployed anywhere you need to provide guaranteed coverage.
Protect the network and its users from unauthorized access. A single security breach can cost you tens of thousands of dollars. With Nortel solutions, you won’t have to worry about security and confidentiality. Users are registered to the system with passwords; nobody can cut in on their service or accidentally tune into their conversations or data transmission. Encryption protects the confidentiality of traffic in the air, so even if a hacker could intercept a wireless transmission, the content would be unreadable.

For even greater security, the WLAN solution can also segregate traffic into virtual sub-networks. Each virtual LAN (VLAN) performs just like a private network. For example, you could set up VLANs to segregate sensitive financial transactions from general employee e-mail and data transfers. Or isolate visitors’ traffic from employee communications. Or keep confidential patient information away from the clinic’s operational systems, such as for purchasing and personnel management. The WLAN supports up to eight of these virtual LANs.

Provide a Wi-Fi hotspot as an added bonus for customers. The VLAN capability enables you to set up a wireless hotspot for customers to use when they visit your locations. Guest traffic can be directed to a separate VLAN that connects only with the Internet and not to any internal network resources or users.

For example, customers could browse the Web and use e-mail while they’re in your dining area, customer lounge or guest room. While sipping a latte, waiting for a car to be serviced, or relaxing in the hotel lobby, customers could connect with friends and colleagues just as they normally do from public hotspots. This capability enriches the customer experience without compromising the security of your internal company network.

Easy to install and manage
The architecture of the WLAN solution is simple, which means there’s a minimum of equipment to install and manage. And the access points are so economical that you don’t have to conduct a complex site survey before installation. Just estimate the range you are likely to get under your operating conditions, and it’s easy to come up with a plan. You can always add more access points later if you need to.

And because the access points can receive their power over the Ethernet connection from the switch, you don’t even have to worry about having power outlets at each access point.

This WLAN is simple for the casual computer user to manage. You use the same graphical management interface that manages other elements of the network, such as the Nortel Business Secure Router 222 and Nortel Business Ethernet Switch 100. The intuitive, graphical Web interface is consistent across these products, which makes administrative tasks easy.

Business communications made simple
A Nortel WLAN solution redefines the way business gets done, and enables your employees to achieve new levels of productivity and customer satisfaction.

Don’t take chances with your business communications. Count on the company that has been delivering telephony and data systems to the world’s largest service providers and enterprises for decades — the company that pioneered the digital revolution, reinvented business networking in the Internet Age, and is a leader in small and medium business telephony.

To find out more about how your business can benefit from wireless local area networking, contact your local reseller or visit us on the Web at www.nortel.com/smb.
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.

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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