

# Connecting Outside the Office

## CASE STUDY

### Collaborate instantly — and securely

**SITUATION** Cycle Oregon is an annual week-long bicycle tour of the state's small towns and back roads. Every day a unique traveling circus of 2,000+ riders and their gear — plus a concert stage, mobile kitchen, mess tents, shower trucks and more — has to pack up and move to a new town. With so many details, it takes more than a year to plan for each seven-day event, and the data involved is immense.

The challenge? The event management company's four employees need to access data not only from the road, but from some of the most remote towns in the Northwest, as they scout routes and work out details. The good news? With the Internet accessible from just about anywhere, it's simply a matter of building the right communication network.

"When I started working with them, they just had a peer-to-peer network," says Louis LeBlanc, an IT consultant in Portland. "No server, no centralized storage/sharing/security." LeBlanc installed Microsoft Small Business Server on a dedicated piece of

hardware, adding group functionality for internal and external email, calendar sharing, task creation, file sharing and more. To provide remote access, he installed a secure virtual private network (VPN) that allows access to the server from anywhere using the Internet, and also pushes data to their smartphones.

**RESULT** Whether they're in the office or in the backwoods, Cycle Oregon's staffers work smarter, quicker and more efficiently. "They don't have to worry that their data is reachable, useable, secure, stable and backed up," LeBlanc says. "They're able to be connected when and where they need to be, and that really enhances their productivity."

Photo source: Veer® stock photos.  
Photo does not represent Mr. Louis LeBlanc, Cycle Oregon or any related associates or products.



# An office network with no boundaries

Today, productivity must extend beyond your office walls in order to maintain a competitive edge. If your workers are away from the office and need important information or services, they're wasting time and costing you productivity if they do not have quick and easy access to what they need. That's why it's more important than ever to enable yourself and your workers — not to mention customers and vendors — to connect to your company network through mobile computing devices such as smartphones and portable computers.

This brochure will show you some of the benefits of extending your communications network outside the office, and explore some of the methods and devices you can use to do it.

## Improve productivity in any setting

Mobile technology provides an extension of your office infrastructure, allowing your employees, customers and suppliers to enjoy real-time access to devices, data and applications even if they're nowhere near your physical local area network (LAN).

Once they're connected, your workers can search company databases, access the latest iterations of project documents, stay in continuous touch with co-workers or handle customer requests from anywhere. Having mobile, remote real-time access to vital information gives you an advantage over competitors that aren't able to respond as quickly or effectively. In short, mobile networking helps everyone in your company make better use of their time in the office, at home or on the road. Here's a look at some of the specific business benefits you can gain with mobile business connections:

**Improve customer satisfaction levels** — Nothing pleases customers more than a quick response to their needs, and having a reputation for prompt service can make the difference in building successful long-term business relationships. Keeping up with customer communication and requests can be difficult when you're out of the office, but mobile computing allows you to respond immediately.

**Better communication, better collaboration** — Effective and timely communication is essential for successful collaboration. When all your workers are able to communicate wherever they are, they can work together more effectively.

**Flexible work environments** — Providing your workers with mobile computing tools creates a more flexible environment, empowering them to work from home or other places. (See "Is telecommuting a good option?")

**A greener workplace** — Workers no longer have to hit the road with a box full of printouts; they can use mobile computing to access what they need on the spot. And they can use portable or on-site printers to print out what they actually need.

## The right tools for the job

Every worker who's outside the office needs one or more mobile communication tools. But with the variety of choices available, it can be hard to decide what to equip your remote workers with. Here's a quick look at the main tools available, with the advantages and disadvantages of each.

**Laptops** — With increasingly faster processors, longer battery life, lighter weights and more connectivity options, laptops (also known as notebook computers) today offer performance equivalent to the desktop computer in your office. They remain a popular choice for their do-it-all functionality; however, they may gradually be eclipsed by smaller and even more portable devices with comparable capabilities and lower prices.

**The world's mobile worker population is expected to grow to nearly 1.2 billion people before the end of 2010 according to a Dec. 2009 report from IDC.**

— IDC, December, 2009\*

\* IDC, Worldwide Mobile Worker Population 2009-2013 Forecast, Doc #221309, December, 2009.



# Online Conferencing and Collaboration

For small businesses, new and affordable conferencing and Web-based collaboration tools can add real value to the way you do business. Whether you have salespeople on the road, a business with multiple locations or a group of teleworkers, you should consider these options for more efficient and cost-effective communication. You can increase your productivity by:

- Using online collaboration systems to allow participants to securely view and share information, and track changes without a paper trail or the need to be in the same location.
- Conducting inexpensive phone conferencing through your own network using Voice over Internet Protocol (VoIP) technology.
- Participating in video conferencing online as an alternative to in-person group meetings.

## Related guides

Connecting inside the office

Harnessing Internet-based computing

For more detailed information about connecting outside the office, please refer to the accompanying white paper on this topic.

**Netbooks** — These smaller models (often called mini-notebooks) offer better portability than laptops, with smaller sizes, lighter weights and lower prices. They're also more energy-efficient. However, they sacrifice processing power and other features traditional notebooks offer. Netbooks fall between the full-on functionality of notebooks and the new wave of tablet computers such as the iPad.

**Tablets** — With the introduction of the iPad, and its instant popularity, the tablet has entered the conversation as an alternative to laptop computers. As opposed to netbooks, which attempt to mimic the broad capabilities of laptop and desktop computers, tablets offer a different model for mobile computing. They allow customers to choose from an a la carte menu of software applications, letting them "design" their own computer to perform specific functions they need. They feature easy-to-use touch interfaces, and their screens are larger and easier to read than smartphones. However, they're more expensive than smartphones — and they don't make calls.

**Smartphones** — Smartphones are essentially a combination of a wireless phone and a mobile computer. With improved Internet access, sophisticated touch screens and even office-type applications available on some phones, these devices can serve as mobile business assets. However, they don't offer the same computing power as larger devices, they're still not as fast online, their screens are small and not good for creating content, and they tie users into a particular carrier network.

**Wireless phones** — These basic devices can be handy for calls, voicemail, texting and even email. They can be extremely limited in their display capabilities, however.



## WiFi, WiMAX and mobile broadband: a quick guide

As your business considers wireless technology tools, you'll come across references to WiFi, WiMAX and mobile broadband. Here are some basic descriptions and comparisons of these three options:

**WiFi** — The basic standard for wireless technology. WiFi is used to create a local area network (LAN) that allows anyone within range to connect to it wirelessly (although access can be controlled by passwords). WiFi makes connecting to Internet within a business fast and easy, and can provide access to customers or the public within a relatively small area (typically around 150 feet indoors and 300 feet outdoors). Typical bandwidth for WiFi ranges between 256k and 5 Mbps (Megabits per second).

While WiFi is convenient, there are some drawbacks besides distance and speed limitations: your workers must be near a WiFi spot to work efficiently, there is a limited total bandwidth that is shared by all users, and security is a concern on any public network. It's not recommended that you use a public WiFi network to access or send business documents.

**WiMAX** — Technically an extension of the traditional "broadband" connections ISPs offer, such as DSL or cable. As such, it is typically offered on month-to-month contracts, and your business is tied into one wireless carrier. WiMAX was created largely to serve as the "last-mile" connection for remote locations, using transmitters similar to cell phone towers to carry its signal.

WiMAX systems use a network of transmitters so that bandwidth can be distributed as needed, and small businesses can typically connect as many devices as they need to without diminished performance. WiMax can typically cover a distance of 5 miles or more, with a bandwidth ranging between 1 and 5 Mbps. But it can also be significantly more expensive than WiFi.

**Mobile broadband** — A mobile broadband device (typically, a data card or a portable USB modem) lets you access the Internet using the same network of signals mobile phones do. With mobile broadband, as long as you can get a mobile phone signal, you can perform all the functions you could if you were connected to a fixed broadband line. This allows you to use a laptop or other larger device for online work rather than a smartphone with a smaller screen and limited online file-viewing capability. However, signal strength and stability are not always guaranteed, and the time spent online may be counted against a provider plan's usage limit.

# Is telecommuting a good option?

As mobile technology improves to enable workers to accomplish the same tasks from virtually anywhere, the question of whether employees need to work on-site is a natural one. While many businesses are not set up for remote workers, companies as large as Hewlett-Packard and IBM have deployed entire departments with no physical offices. If your business might be a candidate for telecommuting (or teleworking, as it's also called), here are some factors to consider.

- Telecommuting eliminates the worker's cost of commuting, providing an attractive compensation factor in hiring.
- Even with part-time telecommuting, your business can rotate schedules so one office space can serve multiple employees, cutting your office costs.
- Telecommuting offers more flexible work schedules so that companies with customers across time zones can better serve them in a timely way.
- Companies that offer telecommuting report increased employee satisfaction and reduced absenteeism.
- Telecommuting can be a powerful recruiting incentive for caregivers, the disabled or people living in remote areas.
- Commuting time saved can amount to the equivalent of an extra day off every two weeks for the average worker.
- Telecommuting is a greener option that helps reduce traffic congestion and greenhouse gas emissions.

## Need more? We're with you.

Your community representative is always happy to help. You can count on them as a resource for compliance solutions to consider that fit your specific business needs, budget and level of expertise, as well as advice and resources on a range of small business technology issues.

Visit <http://centurylink.com/smb-resources> to contact your community representative, and learn more about how technology can boost your business. You'll find information sheets, videos, case studies and more.

**38% of people nationwide  
who do not currently  
telecommute said they had  
job-related tasks that they  
thought they could perform  
from home.**

*—WorldatWork Telework  
Trendlines, 2009*

Service not available in all areas. Contact CenturyLink for details.