

# BEND CONVERGES

CISCO SYSTEMS AND OBSIDIAN TECHNOLOGIES STRAIGHTEN OUT THE CITY OF BEND, OREGON, WITH IP TELEPHONY. **BY ERIC J. ADAMS**

**BEND, OREGON, A CITY OF 55,000 AT THE FOOTHILLS OF THE CASCADE** Mountains, prides itself on its diversity. But when it comes to the municipal government's communications system, the city's IT department believes strongly that many are not better than one.

"We were setting up new fire and police substations and a new fire-administration building, and we were looking at yet another standard key-switch telephone system," says Steve Meyers, Bend's IT director. "With each new facility, we would have a new generation of products to learn and maintain, and it was becoming a maintenance nightmare."

Meyers and Robert Bussabarger, Bend's network administrator, saw an opportunity to reverse this trend and converge the city's growing numbers of voice and data technologies into one Internet Protocol (IP) network, easing the delivery of communications services through a single common infrastructure.

"I went to the management team and said 'We're getting too fragmented. We need to go in the other direction—converging our telephone technology with our network technology to save hard costs and maintenance costs,'" says Meyers, who is responsible for keeping the city's 450 employees plugged in and active.

Today, the new converged network and IP Communications

## TEAM PLAYERS

**MISSION** \\ Cisco Systems® and channel partner Obsidian Technologies ([obsidiantechologies.com](http://obsidiantechologies.com)) bring customers end-to-end IP telephony and IP video solutions and use the power of converged networks to deliver immediate strategic and financial benefits to business and public-sector customers.

**STRATEGIES** \\ The strategic relationship is built on Obsidian Technologies' expertise in on-site project management, solution-development, and consulting and Cisco's leadership in developing intelligent enterprisewide infrastructure solutions.

**PROGRAMS** \\ Cisco and Obsidian Technologies developed joint initiatives and implementation teams that take advantage of Cisco's scalable IP networks and Obsidian Technologies' telephony solutions and integration.

**About 25 miles west of Bend, Sparks Lake is a popular fly-fishing spot.**

IT Director Steve Meyers expects to recoup the entire cost of the IP solution in three and one-half years. "And that's just the hard dollars," he says.

solution extends to virtually every city employee, providing traditional phone features such as caller ID, call forwarding, and voice mail, as well as advanced services such as weather forecasts, airport information, and advanced directory services.

Money alone didn't drive Meyers' vision of convergence. "Our patchwork phone systems were a mess," he says. "Employees in one department couldn't forward calls to employees in other departments. It was a major operation when someone wanted to move offices or work temporarily from somewhere else. We were spending too much time and money on maintenance, administrative, and infrastructure costs. And the phone-system confusion didn't help with the public's perception of us."

Meyers and Bussabarger put together a request for quotes for a converged network, and Cisco Systems® along with its local channel partner Obsidian Technologies presented the case for the Cisco® AVVID (Architecture for Voice, Video and Integrated Data) solution.

The city of Bend liked Obsidian Technologies' proposal for two reasons. The first was Cisco AVVID's intelligent call-management technology, which provides seamless call routing, network-to-desktop computer telephony integration (CTI), and advanced telephony features. The second attraction was Obsidian Technologies itself—Bend liked the fact that it would be working with a local company that had local ties and proven expertise.

"At the time that we started our project, our network was already built on a Cisco infrastructure, so we had a pretty high level of confidence in Cisco," says Meyers, "but IP telephony is new stuff and we wanted a vendor that could deliver locally and be there locally when we had a problem."

City workers benefit from the advanced capabilities of IP telephones, such as auto attendant, "follow me" messaging, message forwarding to off-system users, and centralized directory integration.

Because each Cisco IP Phone is a network device that plugs into the data network, it allows employees "to take their phones with them when they move offices or work elsewhere for the day," says Mike Elmore, the city's public works director.

**CHANNEL EXPERTISE**

Obsidian Technologies was no stranger to converged networks, having worked with Selsius, a company Cisco acquired for its IP telephony networking technology.

"We're a paradigm shift for Cisco," says David Markey, president of Obsidian

**Bend Chief of Police Andy Jordan accesses the city's converged IP network as IT Director Steve Meyers looks on.**



Technologies. "In the past, Cisco aligned with the big guys. But IP telephony is not a commodity; it's a skill set that requires you to know telephone technology as well as high-contact, on-location, hands-on implementation. We're small, but we excel in what we do."

From Cisco's perspective, a talented channel partner has no substitute.

"Our channel partners are absolutely critical to our success," says Chuck Robbins, vice president of U.S. Channels at Cisco. "Obsidian Technologies played a pivotal role in helping the city of Bend identify the numerous competitive advantages of a converged IP telephony solution."

Because of its analog telephony background, Obsidian Technologies had the experience necessary to overcome the project's major challenge of gradually migrating the city's legacy phone systems to the Cisco IP Communications solution.

"This was really important for us, because we knew we wouldn't have the funds to make the transition all at once, which meant we had to deal with two systems for a while," says Meyers.

## CRUCIAL COLLABORATION

Bend had no room for failure. The first installations, beginning in 2000, were at police and fire stations, so reliability and flawless performance were critical from the moment the city deployed the IP telephony solution.

Meyers secured a franchise agreement with the local cable company to get fiber access for a metropolitan-area network (MAN). The agreement gave the city instant access to both the bandwidth and the physical reach that was necessary to extend high-speed data and voice capabilities to remote office locations—all with the security and reliability required for city service.

Obsidian Technologies worked closely with Cisco to ensure the feasibility of the new network's design and to ensure product availability at a time when new equipment was just coming off the assembly line.

"At the time, a new Cisco switch was just coming out, and we wanted to take advantage of the product's capabilities. But the switch was so new it wasn't available," says Markey. "I have long-term relationships with the Cisco people here, and they literally dismantled portions of their lab to get me the equipment I needed for this deployment."

## CONVERGED CITY

Enthusiasm for the IP solution from municipal workers further encouraged Bend's city leaders to fully transition to a converged network. In March 2003, the city boxed up the last of its legacy phone system equipment. Bend now operates on a fully converged single data and voice network.

Meyers expects to recoup the entire cost of the IP solution in three and one-half years. "And that's just the hard dollars," he says.


Meyers expects to significantly save on reduced maintenance, administrative, and infrastructure costs, particularly as the city grows and adds new locations and employees.

"Now that we have the entire city on one communications system, training is far easier," says Meyers. "And we can maintain the phones from a browser on the network rather than on site."

Elmore is also exploring the solution's videoconferencing capabilities for training and daily briefings, as are leaders in the police and fire departments.

"We're not quite ready for implementation, but videoconferencing means we won't have to bring in people from remote locations, and that will save us money," says Andy Jordan, Bend's chief of police.

Emergency response departments have begun to connect the phone systems to Cisco Emergency Responder, a solution that automatically identifies the location of emergency 911 calls from municipal employees using IP telephones. "It will save us a few critical moments when we get calls from employees," says Jordan.

"This is more than a phone system," says Meyers. "It's a technology foundation for the future of the city." 

BASED IN PENNGROVE, CALIFORNIA, ERIC J. ADAMS WRITES REGULARLY ABOUT BUSINESS TRENDS AND SOLUTIONS. HIS WORK APPEARS IN THE *NEW YORK TIMES*, THE *LOS ANGELES TIMES*, *WIRED*, AND OTHER PUBLICATIONS.

## NEXT STEPS

For more on Cisco AVVID, go to [cisco.com/go/avvid](http://cisco.com/go/avvid). To learn more about Cisco IP Communications solutions, go to [cisco.com/go/iptelephony](http://cisco.com/go/iptelephony).

- "Enhanced Communications" on page 58 profiles more companies using IP Communications solutions.
- For more information about Cisco's channel partners, go to [cisco.com](http://cisco.com) and click on Partners & Resellers.

# NEW CONNECTIONS

**YAHOO**  
[smallbusiness.yahoo.com](http://smallbusiness.yahoo.com)

Cisco Systems and Yahoo have teamed to launch the Cisco Solution Center on Yahoo! Small Business. The Cisco Solution Center ([ciscosolutioncenter.com](http://ciscosolutioncenter.com)) offers small and medium-sized businesses (SMBs) industry-specific information about the benefits of networking solutions that help maintain security, raise productivity and efficiency, improve customer satisfaction, and lower operating costs.

"SMBs have a desperate need for information and resources, but they just don't know where to start. The irony is that while nearly 75 percent of them have Internet access, few are using online resources to get the help they need when they need it," says Raymond Boggs, vice president for small/medium business research at IDC.

The Cisco Solution Center helps companies learn to take advantage of Internet-business solutions through case studies, industry-specific background information, and other features for industries including education, financial services, health care, hospitality, manufacturing, professional services, public sector, retail, transportation, and wholesale.

The Cisco Solution Center also features the Cisco Internet Business Roadmap, a tool that helps growing businesses develop individualized Internet-business plans to quickly and easily identify the combined networking solutions that best fit their needs.

"The Cisco Solution Center on Yahoo Small Business is another vehicle that amplifies Cisco's continued commitment to the SMB market," says Peter Alexander, vice president of Worldwide Commercial Marketing at Cisco. "We understand the challenges that SMBs face, so we continue to deliver Cisco's expertise, solutions, brand, and partnerships to help customers realize strategic value that will accelerate their business progress."