

University Saves Time and Increases Productivity Through Unified Communications

Indiana University

Country

United States

Industry

Education—Universities

Challenge

A growing number of university IT employees work outside of their offices, often splitting their time between campuses. Because they are mobile, it is often challenging for them to communicate with colleagues.

Solution

Indiana University implemented a unified communications solution that combines Nortel Communication Server 2100 and Microsoft® Office Communications Server 2007.

Results

- Speeds communication and collaboration for mobile workers
- Simplifies IT staff meeting coordination
- Saves time and money
- Increases employee productivity
- Uses a complementary architecture to simplify IT management



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Michael Lucas, Director of Telecommunications Infrastructure, Indiana University

Indiana University, with eight campuses, is one of the largest universities in the United States. Thousands of university employees, including the school’s IT staff, rely heavily on voice mail and e-mail to communicate and perform their jobs. Over the last several years, however, the number of mobile employees has grown dramatically. In an effort to help those workers communicate more easily and effectively, the school sought to integrate communication tools and enhance collaboration by integrating its voice network and computer applications. In late 2007, IU implemented a unified communications solution based on Nortel Communication Server 2100 IP PBX and Microsoft® Office Communications Server 2007. This growing solution has streamlined and enhanced communications for employees and increased their productivity. It has also reduced travel time and costs and simplified IT administration.



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“Organizing meetings through Office Communications Server 2007 and scheduling them through Office Outlook 2007... has given us the opportunity to meet every month, which is more than we were meeting previously.”

Paul Clegg, Manager of Voice Networks, Indiana University

THE SCENARIO

Indiana University is a large university system with more than 110,000 students, faculty, and staff on eight campuses. It is one of the biggest universities in the United States, as well as one of the oldest state universities in the Midwest.

There are more than 36,000 Microsoft® Exchange Server 2007 e-mail messaging accounts in use by more than 16,000 faculty and administrative staff on all eight campuses. These employees depend on e-mail to schedule appointments and communicate with each other. Until recently, they also relied solely on the university’s Nortel Private Branch Exchange (PBX) phone system to communicate through voice mail.

However, communicating effectively through e-mail and voice mail had become increasingly challenging as more IT employees began working away from their offices. “Mobility is definitely on the rise within the IT department,” says Michael Lucas, Director of Telecommunications Infrastructure, Indiana University. “Many of us work on different campuses over the course of a week. For example, I work on the Indianapolis campus up to three days a week, but I still need to stay in touch with the main office in Bloomington. I really need to be reachable no matter where I am.”

The need for IT staff members to be mobile makes it challenging for them to meet regularly. “We’re supposed to have monthly meetings,” says Paul Clegg, Manager of Voice Networks, Indiana University. “But I have staff located in four different buildings on two separate campuses. It’s hard getting them all together in a central place, even with our existing video conferencing environment. Using rooms for a video conference in several buildings means we tie up several conference rooms with one meeting. Staff members also like having access to their office, e-mail, and phone while away from their offices, so they don’t miss important phone calls or urgent e-mail messages.”

In an effort to improve communications and collaboration for its increasingly mobile IT staff, Indiana University decided to implement a software solution that would provide more flexibility and increased functionality. For several years, the school has tested multiple solutions from various IP vendors.

Ultimately, the school determined that it needed a solution that would build on its Nortel telephony capabilities while seamlessly integrating with the university’s investments in Windows®-based IT infrastructure. “We use the Active Directory® service to manage the network, and the majority of our users now have the 2007 Microsoft Office system applications on their computers,” says Lucas. “In terms of growing our telephony and e-communications infrastructure, we needed better integration. Specifically, we needed to be able to better integrate our Nortel IP PBX communication capabilities with the Microsoft applications people use every day.”

THE SOLUTION

Starting in late 2005, an Indiana University technology team began meeting regularly with unified communications vendors. “We evaluated many different solutions during that time, but could not find the right one,” says Lucas. In 2006, however, the university learned about the Innovative Communications Alliance, a close relationship between Microsoft and Nortel through which the companies deliver joint innovation and unified communications solution development. This strategic alliance extends well beyond basic interoperability efforts, reflecting the companies’ shared software-centric vision for unified communications and a commitment to fully integrate their capabilities and develop innovative new solutions that increase business performance.

For instance, the Nortel Converged Office solution integrates the telephony features of the Nortel IP-Private Branch Exchange (PBX) CS 2100 phone system with Office Communications Server 2007. Microsoft Office Communicator 2007 provides users

with a single user interface to combined telephony, conferencing, presence, and instant messaging functions directly from their PC. They can also use it to perform remote call control for any desk phone connected to a Nortel IP-PBX.

“When the Nortel and Microsoft Alliance was announced, we knew we wanted to be involved,” says Lucas. “We already had Nortel telephony products here, as well as Microsoft products. We saw the Innovative Communications Alliance as a great opportunity to take advantage of combining those existing environments.”

In October 2007, the university deployed the Nortel Communication Server 2100 and Office Communications Server 2007 to a user group of 50 IT employees. “Our goal was to build a resilient environment with scalability and failover capabilities,” says Matt Dixon, Messaging Systems Engineer, Indiana University. “We also created an environment that gives users the ability to securely access Office Communications Server 2007 over the Internet, from outside the network.” The deployment team also implemented the Microsoft Office Outlook® 2007 messaging and collaboration client.

With the combined Nortel and Microsoft unified communications solution, faculty members and IT professionals can send and receive e-mail messages and instant messages; place and answer phone calls; and initiate audio, video, and Web conferences from their Microsoft Office applications. They can also use Office Communicator 2007 or any desktop phone to place calls, and can easily communicate with other Nortel IP PBX users by dialing five-digit internal phone extensions. Additionally, employees can use the Office Communicator 2007 client to answer calls made to their desk phone, even if they’re working remotely.

As part of the deployment, the university also implemented Microsoft Exchange Server 2007 Unified Messaging, which gives each employee one unified inbox in which he or she can receive voice-mail messages and e-mail messages through Office Outlook 2007.

In February 2008, Indiana University expanded the solution, which includes the voice and conferencing capabilities of Office Communications Server 2007 in addition to Exchange Server 2007 Unified Messaging, to 400 users at both the Bloomington and Indianapolis campuses.

The university plans to further expand the user group across all of its campuses, with the idea that all 36,000 accounts on the network will be offered the same unified communications capabilities.

THE RESULTS

The new capabilities provided through the Innovative Communications Alliance for Indiana University unify its communications systems, greatly improve IT employee communication, and make it easier for them to conduct regular meetings. The unified communications solution ultimately saves time and money and significantly enhances employee productivity. With its single integrated architecture, it also simplifies overall IT management and reduces costs for the university.

Improves Communication for Mobile Workers

With the new solution’s unified communications capabilities, mobile IT employees at Indiana University now have a much better ability to get in touch with each other. Using Office Communications Server 2007 features like presence awareness, employees can quickly and easily see whether a colleague is available. “I can communicate much better with my colleagues,” says Lucas. “I can instantly see if someone is on a call or in a meeting, and then I just click on his or her name in



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Michael Lucas, Director of Telecommunications Infrastructure, Indiana University

Office Communicator 2007 to call or send an instant message. I don't have to use more than one client to do all that.”

Using Microsoft Exchange Server 2007 Unified Messaging, employees can easily receive both voice-mail and e-mail messages on their computers through Office Outlook 2007. As a result, they can communicate effectively without being tied to their offices. This gives some university employees a greater ability to telecommute.

“I can work from anywhere now,” says Jennifer Van Horn, Manager of Network Distribution, Indiana University. “Recently, we've had some heating and cooling issues in our main Bloomington building, and I was able to take my laptop and go to another part of the building and continue taking phone calls and e-mail messages.”

By using the solution's voice features, Indiana University employees have much better integrated and enhanced call functionality than before. As a result, they have more communication options. “With Office Communicator 2007, placing and receiving calls is so much easier,” says Lucas. “When my IP-PBX phone rings, I get a message on my computer screen with the caller's number and name. At that point, I can choose to answer the call on my computer or on my desk phone. Or, if I'm rushing out the door, I can forward the call to my cell phone.”

Increases IT Staff's Ability to Meet Regularly

Because they now have integrated communication tools, IT employees at the university can meet more easily and regularly. “Organizing meetings through Office Communications Server 2007 and scheduling them through Office Outlook 2007 is very easy,” says Clegg. “No matter where employees are located, they can join a Microsoft Office Live Meeting on their computer. They only need a video camera and USB headset, and we can conduct a meeting as if we were in the same room. That has given us the opportunity to meet anytime we choose.”

Lucas reports that impromptu meetings are also on the rise as a result of this technology. “My boss was in a hotel in California recently while I was in Indianapolis,” he says. “Using Office Communicator 2007, he sent me an instant message to ask if I had time for a phone call to discuss some work issues, and we were able to take care of that business very quickly. If we had wanted to, we could also have easily escalated that call to a video conference. It's remarkably flexible.”

Saves Time and Money

Indiana University may also be able to reduce travel time to handle specific kinds of employee training thanks to Office Communicator 2007. “We just hired an IT person in Bloomington, and I needed to train him even though I was on the Indianapolis campus,” Clegg says. “All I had to do was open Office Communicator 2007 to demonstrate everything to him in real time. What might have taken a full day, considering the travel time, only took a few minutes.”

Lucas adds, “By not driving so much between campuses, there's no doubt we'll reduce travel costs,” says Lucas. “That's a very big advantage, considering how fuel prices keep going up.”

Increases Employee Productivity

With the ability to take advantage of integrated voice and computer functions, university IT employees can be more efficient and productive at work. For instance, by using Active Directory as the single directory for contacts, employees can quickly and easily find colleagues. “I no longer have to spend time looking for a person in an outdated online directory,” remarks Van Horn. “That actually means I can get more accomplished during my day.”

The presence awareness feature in Office Communications Server 2007 will help boost employee productivity. “By using this solution, I can see that my boss is on another call,” says Lucas. “All I need to do is send him an instant message telling him

to call me when he's free. So I don't have to put effort into leaving voice-mail messages, or trying to track him down. I can keep working until he calls me back."

Uses a Single, Complementary Architecture to Simplify IT Management

The combined Nortel and Microsoft solution is based on a single, complementary technology architecture, which means that there are fewer components to deploy, operate, and support. In addition, the system uses Active Directory as the single directory for the IT and telephony environment, which simplifies management for Indiana University IT managers. "Every user in the university already has an account set up through Active Directory," says Lucas. "Students, IT staff, and faculty are all in the directory. That is one of the keys to this solution for us, because it simplifies administration. As we scale the solution, it will be easy for us to activate existing accounts for Office Communications Server 2007."

The single architecture also means IT administrators will not have to work on more than one system as the number of online meetings and conferences grows. "More and more, we will be doing conference calls through Office Communications Server 2007," says Clegg. "We won't have to expand the ports on our existing conferencing systems. It really streamlines everything for us."



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SOLUTION AT A GLANCE

Microsoft Office

- Microsoft Office Communications Server 2007
- Microsoft Office Communicator 2007
- Microsoft Office Outlook 2007

Nortel Communications Server 2100

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