



Overview

Country or Region: United States

Industry: Wireless telecommunications

Customer Profile

Headquartered in San Diego, California, QUALCOMM develops products, services, and technologies for digital wireless communication. It has more than 9,300 employees.

Business Situation

QUALCOMM is interested in promoting productivity through unified-messaging technology—the integration of a recipient's voice mail, faxes, and e-mail messages into one inbox.

Solution

As part of an ongoing strategy to maintain a technologically advanced messaging infrastructure, QUALCOMM evaluated a beta version of Microsoft® Exchange Server 2007 Enterprise Edition.

Benefits

- Easy access to messages, improved productivity
- Potential long-term cost savings
- Simplified IT management
- Powerful, efficient calendaring
- Reliable foundation for future enhancements

QUALCOMM Gets Long-Term Savings, Improves Productivity with Unified Messaging

“I could sit on the beach in the Bahamas and say, ‘I feel like working for a minute. I’ll use my cell phone and check my inbox.’ Now, I can do that without having a laptop, PDA, or even Internet service.”

Steven Presley, Senior IT Engineer for Messaging, QUALCOMM

QUALCOMM develops next-generation digital wireless communications products and services and licenses its technologies to more than 135 companies worldwide. As part of an ongoing strategy to investigate new communications technologies, the company deployed a beta version of Microsoft® Exchange Server 2007, looking particularly at the software’s rich unified-messaging capabilities. Based on the success of the early deployment, QUALCOMM plans to implement the new solution enterprise wide, upgrading its existing messaging infrastructure built on Microsoft Exchange Server 2003. Calendaring improvements and ready access to messages will also help improve productivity, especially for the company’s global mobile sales force.



Situation

Founded in 1985, QUALCOMM is a leader in developing and delivering innovative digital wireless communications products and services based on code division multiple access and other advanced technologies. Its mission is to develop its technologies and solutions for the purpose of enabling key participants in the wireless value chain. Headquartered in San Diego, California, QUALCOMM employs more than 9,300 workers and strives to maintain a high-quality work environment. It has appeared on *Fortune* magazine's list of "100 Best Companies to Work for in America" for six years in a row.

As a provider of technology and communications services, QUALCOMM understands the business benefits of using IT to promote more effective communication among its own employees. The company's diverse messaging environment is built on a variety of software, including the Microsoft® Exchange Server 2003 communication and collaboration server, Microsoft SharePoint® Portal Server 2003 for document sharing through Web sites, and Microsoft Office Live Communications Server 2005 for instant messaging.

The Microsoft Office System, which includes the Microsoft Office Outlook® 2003 messaging and collaboration client, is installed on many employees' computers, supporting day-to-day office communication and productivity tasks. The company's Avaya S8710 PBX system provides telephony service.

QUALCOMM is interested in promoting productivity through unified-messaging technology. With unified messaging, an employee's voice mail, faxes, and e-mail messages are integrated into one inbox. Also, employees can manage their e-mail, calendar, and personal contacts using a

telephone. As part of an ongoing strategy to keep its messaging infrastructure up-to-date, the company continuously investigates new unified-messaging and related products.

Solution

In June 2006, QUALCOMM deployed a beta version of Microsoft Exchange Server 2007 Enterprise Edition. "I was very interested in this software because of its focus on unified messaging and mobility," says Steven Presley, Senior IT Engineer for Messaging at QUALCOMM. "We do a lot of work with wireless technology, so Exchange Server 2007 is a natural fit for us—something we'd want to know about pretty early."

First, QUALCOMM set up Exchange Server 2007 in an initial staging called the "sandbox," a multiserver test environment where the company installs the latest technologies to see how they work and what features and challenges they will bring. In the sandbox, IT technicians evaluate the system's stability as they change configuration settings or add new features and components. Next, QUALCOMM deployed Exchange Server to a pilot environment that more closely resembles the company's full production system. The pilot included both Exchange Server 2003 and Exchange Server 2007 servers, with the latter running on the Windows Server® 2003 Enterprise x64 Edition operating system. For Exchange Server 2007, one server computer provided the unified-messaging role and another provided the hub transport, client access, and mailbox roles.

Setup proceeded smoothly. "Installing the server roles in Exchange Server 2007 was easy," says Presley. "Microsoft has greatly improved the setup process. I can now perform truly unattended scripted installations."

By August, the test environment had been set up with most major Exchange Server features, and the IT department transitioned Exchange Server 2007 to a broader pilot project. As part of the pilot, QUALCOMM deployed the new solution to 100 employees for use in their day-to-day work. They access the system using both Office Outlook 2003 and Office Outlook 2007 and the latest version of Microsoft Office Outlook Web Access.

In September, Exchange Server unified messaging was set up to work with the company's existing Avaya PBX phone system. QUALCOMM used a partner, The VIA Group, to perform the unified-messaging deployment. Based in Houston, Texas, The VIA Group has sold, installed, and supported voice mail messaging systems and unified-communication solutions throughout North and South America and Europe for over 13 years.

"Our team worked closely with Microsoft and QUALCOMM, creating an implementation plan for unified messaging to insure a successful integration at QUALCOMM," says Kevin Carswell, Chief Executive Officer of The VIA Group. "Once on site, the actual integration, testing, and setting up of the initial users was a breeze. We have been designing and implementing unified-messaging solutions for nearly a decade, and, from our vantage point, the unified-messaging technology from Microsoft is scalable, robust with features, and easy to work with."

Benefits

Exchange Server 2007 helps QUALCOMM provide employees with easier access to their messages, resulting in increased productivity. The company benefits from long-term savings and a lower total cost of ownership (TCO) arising from simplified IT management and more efficient use of IT resources. The new solution also provides a reliable foundation

on which to add new functionality in the future.

Easy Access to Messages, Improved Productivity

Exchange Server 2007 offers rich support for unified messaging and a variety of ways to access messages. These faster, more flexible communication options will help employees generally, and the mobile sales force in particular, to get their work done more easily and become more productive.

"With unified messaging, it's pretty much one-stop shopping: Everything is coming into my inbox," says Jenn Magbanua, Staff Manager and Engineer at QUALCOMM. "If I'm working at home, I don't have to think, 'Okay, I need to call into work to check if I have any voice mail.' I'm actually seeing voice mail as it arrives throughout the day. I can listen to those messages if I want, or I can get back to them later. I can see missed calls. I know who's tried to call me but didn't leave a message. All of this is really helpful."

Also, with Outlook Voice Access, employees can access their Exchange Server mailboxes using a standard or mobile telephone, making it ideal for travelers who don't have ready access to the Internet. Through touch-tone or speech-enabled menus, they can hear and modify calendar appointments, listen to e-mail messages (using text to speech), listen to voice mail messages, call or send messages to people listed in their personal contacts, or call employees listed in the corporate directory. "All our people who have tried calling in and using voice commands say that it has been a great experience, with the exception of directory searches, which is still a work in progress," Presley says.

Presley adds, "Having anywhere access to e-mail and voice mail is going to be a huge benefit. I could sit on the beach in the Bahamas and say, 'I feel like working for a

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Potential Long-Term Cost Savings

Exchange Server 2007 offers expected savings in a least three ways. QUALCOMM can take advantage of integrated unified messaging rather than paying for separate systems for e-mail, voice mail, and other services, improved productivity can reduce the TCO, and the new solution is both highly scalable and efficient in its use of hardware resources.

“We've seen the costs of using other products for unified messaging,” says John Guadarrama, Staff IT Manager and Engineer for QUALCOMM. “These costs are often very high and maintaining parallel voice mail and e-mail environments is difficult. Instead, we want to use what we have in place today—Exchange Server 2007—to avoid the costs of maintaining separate systems. In addition to saving on direct costs, we are seeing indirect TCO benefits from increased productivity. Employees are getting faster responses to questions and can manage their vital business communications using tools they are already familiar with.”

Regarding IT resources, Presley adds, “Exchange Server 2007 can absolutely support expanding our messaging infrastructure with relatively modest investments in hardware. Because of its reduced storage requirements, 64-bit architecture, and clustering capabilities, we could certainly support many, many more users on a single server than we could with the previous version—and do it reliably, with great expectations of high uptime.”

Simplified IT Management

Using new deployment, management, and monitoring tools in Exchange Server 2007, the IT department can accomplish many administrative tasks more easily. “As soon as the IT staff crosses the learning curve and understands the user interface changes, day-to-day administration will become much more efficient than it was before,” says Presley.

Presley cites AutoDiscover as a specific example of improved IT management. “AutoDiscover has been a blessing,” he says. “Before, when new employees logged on for the first time, we had an IT technician manually configure their Outlook settings. Now, with AutoDiscover, Exchange Server 2007 configures settings automatically, making setup easier, faster, and less frustrating.”

“Another example is the Exchange Management Shell, which brings us an amazing number of features that we've wanted for years and makes many routine tasks much less difficult,” Presley says.

Powerful, Efficient Calendaring

Exchange Server 2007 offers a variety of new and improved features that make it easier for employees to schedule their time and activities. “I think the most important feature for us, bar none, is the improvement to calendaring,” says Presley. “From what we've seen, Exchange Server 2007 is going to resolve a lot of the problems and concerns that many of our employees have had in terms of using calendar functions efficiently.”

For example, the new calendaring system reduces scheduling conflicts by removing redundant calendar items (requests, declines, and accepts) from employees' inboxes, leaving only the most up-to-date item. It also marks meeting requests as tentative on recipients' calendars until they can act on the request, and, utilizing the

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Exchange Server 2007 free/busy Web service, it offers continually updated availability information. With Exchange Server 2007, these features are provided on the server side of the infrastructure, ensuring that clients remain up-to-date.

Resources (meeting rooms, projectors, and so on) can automatically accept requests when they're available, or they can automatically decline when they're not and then send a message describing the conflict. Employees can efficiently schedule meetings by following visual cues that highlight the best and worst dates and times to meet, based on the schedules of the meeting invitees and of the required meeting resources.

Reliable Foundation for Future Enhancements

As the pilot project matures, QUALCOMM is beginning to deploy some additional features of Exchange 2007. For example, system reliability can be improved by continuously replicating data across multiple servers in a clustered environment. This establishes an automatically updated second copy of the production database. In the event of a disk failure or data corruption, switching to the copy is a simple, inexpensive method of recovery. “We would like to implement Cluster Continuous Replication, and we have plans to do it once we conduct a trial project in the near future.”

The company is also examining the new solution's faxing capability. “We have a team looking at using Exchange Server to receive faxes,” says Magbanua. “Implementing this component of unified messaging, instead of using a separate system, may provide yet another way to save money.”

“It's only the beginning,” concludes Presley. “The ability to access e-mail, voice mail, faxes, calendaring, and so on, from one

place, through many types of devices and interfaces, from a laptop or a Palm Treo to a low-end cell phone, from home or work or anywhere else—the benefits of all this are going to continue for a long time.”

For More Information

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Microsoft Server Product Portfolio

For more information about the Microsoft server product portfolio, go to: www.microsoft.com/servers/default.aspx

For more information about Microsoft Exchange Server, go to: www.microsoft.com/exchange

Software and Services

- Microsoft Server Product Portfolio
 - Microsoft Exchange Server 2007 Enterprise Edition
 - Windows Server 2003 Enterprise x64 Edition
- Microsoft Office
 - Microsoft Office Outlook 2007

Technologies

- Microsoft Office Outlook Web Access

Hardware

- Avaya S8710 PBX telephone system
- HP ProLiant DL385 server computers