# Manufacturer Improves Messaging Security and Productivity, Reduces Hardware Costs

## Overview

**Country or Region:** United States
**Industry:** Manufacturing

### Customer Profile

Gates Corporation of Denver, Colorado, manufactures automotive and industrial belts, hoses, and power transmissions. The company has 13,500 employees and customers all over the world.

### Business Situation

Messaging is mission critical to Gates, and the company wanted better defense against spam, better protection for confidential e-mail content, easier access to messages, and help with compliance.

### Solution

Gates deployed Microsoft® Exchange Server 2007 to take advantage of unified messaging, improved security, and easier management. The firm plans to roll out the server application to 6,800 users.

### Benefits

- Higher productivity from easier access to messages
- Safer messaging from encryption, spam filtering
- Easier administration and better disaster recovery
- Double the number of mailboxes per server

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Dave Kirkland, Director of Network Services, Gates Corporation

Gates Corporation is a global manufacturer of industrial and automotive belts and hoses. With more than 13,500 employees in 22 countries, Gates depends on its messaging system to keep teams in touch with one another and with customers. Eager to give mobile users better access to their messages, strengthen its defense against spam, improve disaster recovery, and reduce costs, the company was an early adopter of Microsoft® Exchange Server 2007. Gates is enjoying higher worker productivity from Exchange Server 2007 Unified Messaging and easy remote access to messages. Gates has also improved message security with improved data encryption and antispam/antivirus filtering. Using Exchange Server 2007 replication, the Gates IT staff can improve its disaster recovery plan, and the larger mailbox capacity has allowed the company to reduce server and storage requirements.

## Situation

Gates Corporation of Denver, Colorado, manufactures industrial and automotive products such as hoses, hydraulics, and power transmission products. With more than 13,500 employees working around the world, Gates has depended on its Microsoft® Exchange Server 2003 messaging system to keep employees in touch, in the office and on the road. Approximately 6,800 employees use the company's messaging system, with at least 1,000 workers accessing messages from mobile devices. (Some 6,700 Gates employees are factory and field workers.)

Although Gates had a state-of-the-art messaging system, the company sought an even better defense against spam, which required considerable IT expense to isolate and valuable worker time to sort and delete. Dave Kirkland, Director of Network Services at Gates Corporation, wanted a way to inspect messages at the network perimeter instead of inside the company firewall. "Why pay for tons of spam to travel on our expensive network bandwidth any farther than it has to?" he asks rhetorically. "I'd rather move the task of message filtering to the edge of the network."

Kirkland worried about the security of outgoing messages, too, and looked for better message encryption capabilities to protect sensitive data leaving the company. He explains, "We wanted to encrypt and archive select mail, for regulatory purposes, and a way to detect when any message contained sensitive information, such as a Social Security number, so we could encrypt it, delete it, or send a warning to the employee."

In addition to wanting to strengthen messaging security, the Gates IT staff wanted to simplify message access for all its employees, especially mobile workers, who had difficulty checking their messages while they were on the road. For example, when mobile workers used a Windows Mobile® powered Pocket PC to access e-mail messages containing links to Microsoft Windows® SharePoint® Services sites, they could not get to those documents until they returned to the office.

Finally, the IT staff wanted to streamline the company's messaging infrastructure wherever possible to reduce management time and hardware costs. "Managing our messaging infrastructure is a full-time job for several people, and whenever we can automate tasks and reduce hardware and software investments, we save money," adds Mike Langenkamp, Exchange Architect at Gates Corporation. Lowering the cost of disaster recovery was another priority.

## Solution

In mid-2006, Gates learned of Microsoft Exchange Server 2007 and worked with Microsoft Services to deploy a beta version of the software. Microsoft Services helped with server sizing, the installation of Exchange Server 2007, and the implementation of Exchange Server 2007 Unified Messaging. Approximately 30 people have participated in a pilot of the new messaging solution; Gates plans to roll out the software companywide in early 2007.

**Improved Network Protection Features**

Gates plans to augment its Active Directory® service authentication with Microsoft Internet Security and Acceleration (ISA) Server 2006, which integrates with Exchange Server 2007 to provide security features at the network's edge and connect remote users to Exchange Server 2007. Gates will use ISA Server 2006 to provide secure remote access to SharePoint sites; ISA Server 2006 exposes those sites to the Internet, allowing even employees not logged on to the corporate network to easily access documents on SharePoint sites. "This feature will conserve network traffic, because there's no reason to

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Dave Kirkland, Director of Network Services, Gates Corporation

send a document to 400 people if it's sitting on a SharePoint site," Langenkamp says.

Gates is testing Exchange Server 2007 Standard Edition but will ultimately move to Exchange Server 2007 Enterprise Edition to take advantage of clustering capability. The company is considering using the Cluster Continuous Replication (CCR) feature of Exchange Server 2007 to implement cost-effective disaster recovery using a less expensive storage array than is now needed with Exchange Server 2003.

Gates also plans to deploy the Exchange Server 2007 Edge Transport server role, which further strengthens network security by quarantining and rejecting incoming messages according to defined rules, and Microsoft Forefront™ Security for Exchange Server, which helps protect local server computers against malicious software and spam. "My intent is to replace a third-party antivirus product with Microsoft Forefront and Edge Transport services," Kirkland says. "These Microsoft technologies give us other capabilities, such as the ability to put the spam filter on the outer network edge rather than inside the virus-scanning engine."

**Easier Access to Messages**

The Gates IT staff is very excited about Exchange Server 2007 Unified Messaging, which allows employees to receive e-mail messages, voice mail, calendar items, and faxes from a single inbox in the Microsoft Office Outlook® 2007 messaging and collaboration client. Users access their messages through a Web browser using Microsoft Office Outlook Web Access or over a telephone using a new technology called Outlook Voice Access.

Also, the integration of Exchange Server 2007 with Microsoft Office SharePoint Server 2007 has made it easier for mobile employees to access documents on SharePoint sites from Outlook Web Access and from Windows Mobile powered smartphones and Pocket PCs. "Exchange Server 2007 makes documents on SharePoint sites instantly accessible, from an Internet connection or mobile device," Langenkamp says.

Gates worked with Gold Systems, a Microsoft Gold Certified Partner of Boulder, Colorado, that specializes in telephony applications, to implement unified messaging. Gold Systems expanded Gates's Cisco CallManager 4.1 infrastructure to allow the additional voice-channel capacity needed to support the full features of Exchange Unified Messaging. Specifically, Gold Systems used a Dialogic T1/E1 Media Gateway (TIMG) configured with Media Gateway Control Protocol (MGCP) to provide T1 integration to the Cisco CallManager 4.1 private branch exchange (PBX).

**Improved IT Management Features**

The IT staff is looking forward to using the new command-line interface to automate activities in Exchange Server 2007 and improve messaging system manageability. The staff plans to use the Exchange Server 2007 Management Pack for System Center Operations Manager 2005 to monitor and manage Exchange Server 2007. "The Exchange Server 2007 team wrote the management pack, and they know better than we what keeps Exchange Server 2007 healthy," Kirkland says. "It will let us know what's going on before something breaks and will give us statistical uptime indicators and peak-performance configurations."

Exchange Server 2007 also contains a number of features aimed at simplifying regulatory compliance for IT and business managers. These features include pervasive message encryption, better message transport and storage rules, easy message archiving, and auditing tools. "The encryption of our entire message flow provided by Exchange Server 2007 is very attractive to

us," Kirkland says. "Also, the automated journaling and auditing tools will save us time in preparing reports."

## Benefits

By moving to Microsoft Exchange Server 2007, Gates has improved employee productivity with unified messaging and easier remote access to messages, while strengthening messaging security. The company also foresees a reduction in the number of messaging servers and storage capacity, as well as the ability to increase the total number of mailboxes.

### Higher Productivity from Easier Access to Messages

Ensuring open communications between employees and between Gates and its customers and partners is critical to maintaining rapid business response. Exchange Unified Messaging has simplified message management for all employees and is speeding message access for mobile workers. "We have 100 voice-mail systems around the world, which used to make it impossible to share voice mail," Kirkland says. "With Exchange Server 2007, we can route voice-mail messages anywhere, regardless of the PBX system. Exchange Server 2007 has given us a single, unified voice-messaging system that we can deploy worldwide."

The new messaging environment has also made employees more productive by allowing them to quickly sort through the messages that daily flood inboxes and voice-mail systems. "The ability to manage and delete voice-mail messages from my inbox is what I've been waiting for, for years," Kirkland adds.

With voice-enabled access to their inboxes, mobile users, especially, will be able to track their messages and meetings more easily. "Our salespeople can have their mail messages and appointments read to them over the phone while driving," says Greg Vigil, Director of Global Enterprise Collaboration at Gates. "If you're running late to a meeting, you can call Outlook Voice Access and say, 'I'm 15 minutes late,' and Office Outlook will send an e-mail message to all meeting attendees. It will change the way our salespeople do business."

"Exchange Server 2007 Unified Messaging is a powerful first release," Kirkland adds. "The speech recognition and read-back are unlike any I've seen before."

### Safer Messaging from Pervasive Encryption, Spam Filtering

Exchange Server 2007 encryption technology automatically encrypts incoming messages based on the receiving organization's configuration. It also helps to protect sensitive information in transit, without the complexity of a public key infrastructure and without requiring special client software or user training.

The improved compliance features, such as easier-to-use message-filtering and mail-flow rules, also are helping Gates ensure the confidentiality of sensitive mail. "We really don't want mail concerning mergers, acquisitions, and competitive issues to be intercepted and made public," Kirkland says. "Exchange Server 2007 is helping us protect information and important documents that are traveling over our e-mail system."

Plus, by employing Exchange Server 2007 antivirus and antispam capabilities at Gates, Kirkland has achieved his goal of halting spam at the network edge, thereby preserving valuable network bandwidth. "Exchange Server 2007 has made our messaging system more reliable and secure than it's ever been," Kirkland says.

"[With Exchange Server 2007,] we'll be able to double the number of users per server computer, from 1,500 to 3,000, thereby consolidating messaging servers."

Mike Langenkamp, Exchange Architect, Gates Corporation

**Easier Administration and Better Disaster Recovery**

Using the replication technologies in Exchange Server 2007, the Gates IT staff is able to administer the messaging environment more easily, without disrupting service to users and without forcing engineers to work weekends installing upgrades and security updates. "Using Local Continuous Replication, we can switch operation to a backup server and make changes without interruption," Langenkamp says.

Gates is considering using Exchange Server 2007 replication capabilities to create two active messaging sites in different geographical locations, for disaster recovery purposes. If the primary data center is disrupted, Gates can keep its mission-critical Exchange Server 2007 system running with very little effort.

"Using Cluster Continuous Replication, we'll be able to build a disaster recovery plan using native Microsoft components, versus using expensive, third-party products like we do today," Kirkland says. "We'll be able to dispense with shared storage, expensive host bus adapters, and other elements. The failover capabilities of Cluster Continuous Replication will be critical to maintaining continuous uptime and availability."

**Double the Number of Mailboxes per Server**

Thanks to the extended memory and larger caches of x64 systems and a more efficient routing algorithm, Exchange Server 2007 offers improved storage efficiency and mailbox capacity. "In Exchange Server 2007, the number of usable databases increases dramatically, and RAM requirements drop," Langenkamp says. "The ultimate benefit is an increase in mailbox size and an improvement in data storage usage. We'll be able to double the number of users per server computer, from 1,500 to 3,000, thereby consolidating messaging servers. We'll also be able to increase the total number of mailboxes companywide, from 7,500 to 10,000, without a hardware increase." Gates will also be able to expand mailbox size to 1 gigabyte and move to lower-cost storage.

## For More Information

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For more information about Gates Corporation products and services, call (303) 744-1911 or visit the Web site at: www.gates.com

### Microsoft Server Product Portfolio

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

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

### Software and Services

- Microsoft Server Product Portfolio
  - Microsoft Exchange Server 2007
- Microsoft Office
  - Microsoft Office Outlook 2007
- Microsoft Office SharePoint Server 2007
- Technologies
  - Microsoft Office Outlook Voice Access
  - Microsoft Office Outlook Web Access
  - Microsoft Windows SharePoint Services
- Services
  - Microsoft Services

### Hardware

- 12 HP DL385 server computers
- HP EVA5000 storage area network

### Partners

- Gold Systems



Document published December 2006

Microsoft