



Enterprise Mobility Leader Gains Secure, Seamless, Global Remote Access

Overview

Country or Region: United States

Industry: High Tech & Electronics

Customer Profile

Symbol Technologies, based in Holtsville, New York, employs 5,600 and is a world leader in enterprise mobility solutions that streamline supply chains and drive productivity and profitability.

Business Situation

Symbol needed a secure, reliable, easy-to-manage way to enable its employees to access Microsoft® Exchange Server 2003 from remote locations all over the world.

Solution

Symbol worked with Ananke, Inc. to deploy Microsoft Internet Security and Acceleration (ISA) Server 2004 so that users can access their messaging services from virtually anywhere.

Benefits

- Secure, easy, mobile access from anywhere
- Minimal management
- A strong selling tool

“ISA Server 2004 offers mobile workers a choice. Our sales force can take advantage of rich e-mail capabilities, from anywhere in the world... from a tethered device... or using Symbol enterprise mobility devices.

Stephen Jamieson, Senior Director of Information Technologies, Symbol Technologies

To bolster its position as “The Enterprise Mobility Company,” Symbol Technologies needed to provide its employees with secure access to their e-mail and applications from anywhere in the world, and from a variety of devices. To achieve that, Symbol launched a synchronization-over-the-air initiative, and chose Microsoft® Internet Security and Acceleration (ISA) Server 2004 to safeguard this remote access. Because ISA Server 2004 supports many Exchange scenarios, Symbol employees at remote locations can access resources located on Microsoft Exchange Server 2003 directly from their familiar Microsoft Office Outlook® 2003 messaging and collaboration client with no virtual private network, additional software, or extra training required. In addition, this solution minimizes IT management and support time, and provides a strong selling tool for Symbol products.



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John Conway, President & CEO, Ananke Inc.

Situation

A world leader in mobile data management, Symbol Technologies offers innovative systems and services that connect decision makers to data, regardless of the boundaries of time and distance. The company's high-performance products range from laser bar code scanners and handheld computers to wireless communications networks for voice and data. Symbol adds exceptional value to those products with industry systems expertise and business partnerships that deliver value-added capabilities in retailing, transportation and logistics, warehousing, manufacturing, healthcare, education, government and military, hospitality, and finance. Symbol also supports its solutions with superior professional services, customer support, and education and training worldwide.

In early 2004, Symbol launched an initiative to migrate its 5,600 employees from Novell NetWare and Novell GroupWise to the Microsoft® Windows Server™ 2003 operating system (the foundation of Windows Server System™ integrated server software), Active Directory® service (included in Windows Server 2003), and Microsoft Exchange Server 2003 messaging and collaboration server software (another Windows Server System component). This move was made to reinforce Symbol's position as “The Enterprise Mobility Company” by providing its employees with on-demand access to information and providing solutions that deliver the same for its customers.

Symbol chose Exchange Server 2003 in order to take advantage of its strong support for mobile and remote users through services such as Microsoft Office Outlook Web Access (OWA) and Microsoft Outlook Mobile Access (OMA). The company also chose Exchange Server 2003 for its adherence to the Microsoft Trustworthy Computing initiative,

which focuses on delivering an available, reliable, and secure computing experience.

At about the same time that Symbol launched the migration to Windows Server 2003 and Exchange Server 2003, the company also launched a synchronization-over-the-air project to provide its remote users with direct access through Remote Procedure Call (RPC) over HTTP to Exchange Server 2003 from personal digital assistants (PDAs), Smartphones, and wireless computers located virtually anywhere.

Solution

Symbol had been working with Microsoft technology partner Ananke, Inc. of Providence, Rhode Island, on the Windows Server System deployment and the synchronization-over-the-air project, which started in May 2004. The first priority of the synch-over-the air project was to provide a secure way for employees to access e-mail from outside the corporate network through RPC over HTTP. After researching the options, Ananke found that the only security solution to support RPC over HTTP was Microsoft Internet Security and Acceleration (ISA) Server 2004.

ISA Server 2004 includes a secure RPC filter that performs application-layer inspection of RPC connections, and forwards only legitimate RPC connections to the server computer running Exchange Server on the corporate network. All other RPC connections, such as those generated by malicious code, are dropped by the application layer filter. “RPC over HTTP is the way to go to provide secure access, and ISA Server 2004 was the solution of choice for doing that,” says John Conway, Owner of Ananke, Inc.



“Deploying ISA Server 2004 has given our employees more secure connectivity than they had before, so they can be productive from anywhere and can fully demonstrate those capabilities on our devices to customers.”

Philip Freyer, Director of Information Systems,
Symbol Technologies

ISA Server 2004 was installed in a workgroup at each of the company's three major hubs—Holtsville, New York; Singapore; and Winnersh, United Kingdom—making it available to all Symbol employees. Installing ISA Server in a workgroup decreased the number of open ports on the internal firewall from more than 10 to just one, and allowed Symbol to install Exchange Server 2003 on server computers within the corporate network, rather than in the perimeter network.

“The servers running ISA Server 2004 are load balanced locally using RainWall for ISA from Rainfinity,” explains Conway. “The final architecture will include not only local load balancing, but also global load balancing using the 3-DNS Controller from F5 Networks.”

ISA Server 2004 also generates the OWA logon form that users must complete before they can be granted access to the OWA Web site. This helps to ensure that only authenticated OWA users are allowed to reach Exchange Server 2003. If successfully authenticated, the user is then granted access to the OWA Web site and to Exchange Server 2003 e-mail and other services. Symbol can also configure ISA Server 2004 forms-based authentication to log off a user at a specified interval, which reduces network exposure when users log on from publicly accessible sites, such as airport Web kiosks.

“ISA Server 2004 offers mobile workers a choice,” says Stephen Jamieson, Senior Director of Information Technologies for Symbol Technologies. “Our sales force is able to take advantage of rich e-mail capabilities from anywhere in the world. An account manager can access e-mail from a tethered device, such as a corporate notebook computer or at the point of business activity using Symbol enterprise mobility devices.”

With ISA Server 2004 in place, Symbol employees can travel anywhere in the world and access e-mail, contacts, calendars, and task folders, using the full Microsoft Outlook e-mail client, or OWA for low-bandwidth situations, or OMA on a variety of mobile devices. When workers connect to the Internet through a hot spot, they are first connected to the closest hub, and then ISA Server 2004 passes the authentication information to the home mailbox server for that user.

Setting up the ISA Server 2004 pilot for approximately 15 people in the U.S. office took less than a week. After three months of testing with various mobile devices and Outlook clients, Ananke deployed ISA Server 2004 in January 2005.

“It's a global solution for both the internal associates and contractors that work for Symbol,” Conway says. “We'll be moving to ISA Server 2004 Enterprise Edition shortly after it is released so that we can better manage the ISA Server environments globally and take advantage of the additional features.”

Benefits

By using Microsoft ISA Server 2004 in tandem with Microsoft Exchange Server 2003, Symbol enabled its employees to connect directly to Exchange Server 2003 from remote locations using the full Microsoft Outlook e-mail client, OWA, or OMA. This eliminated the deployment, configuration, management, and training time required for a virtual private network (VPN), and enables Symbol employees to connect seamlessly to their e-mail, calendars, contacts, and task lists from virtually anywhere, which helps boost productivity. These capabilities also provide a strong selling tool for Symbol to use in demonstrating its products to customers.





Secure, Easy, Mobile Access from Virtually Anywhere

Because ISA Server 2004 enables secure Exchange RPC connections to Microsoft Exchange Server, Symbol employees can connect directly from remote locations without using a VPN connection. This also means that Symbol employees can use their familiar Microsoft Outlook client software to take advantage of the full scope of Exchange services from remote locations. Users can also use Outlook Web Access for low-bandwidth situations, or Outlook Mobile Access to connect to Exchange Server 2003 from a variety of mobile devices. This versatility and ease of use saves the company the costs normally associated with VPN connection time and training, and helps increase productivity.

"When I'm out of the office with a carrier-based device or my wireless device and am in a hot spot, I can open Pocket Outlook, Calendar, To Do, or Contacts on the device and have instant access to my information just as if I was in the office, without having to connect through a VPN," says Barbara Kovacs, Manager of Information Technologies for Symbol Technologies.

Minimal Management

Because ISA Server 2004 and Exchange Server 2003 are both part of Windows Server System, they integrate easily to provide a secure end-to-end messaging solution. Using RPC over HTTP to provide mobile users with secure, direct access to Exchange Server also saves IT setup and management time. There's no need to deploy VPN software, so the workstation configuration is the same for remote users as it is for those working in Symbol offices—and the company avoids VPN management, support, and software costs.

A Strong Selling Tool

The increased mobility that Symbol can offer its employees as a result of its synchronization-over-the-air solution also helps reinforce its position as The Enterprise Mobility Company. "Deploying ISA Server 2004 has given our employees more secure connectivity than they had before, so they can be productive from anywhere and can fully demonstrate those capabilities on our devices to customers," says Philip Freyer, Director of Information Systems for Symbol Technologies.



For More Information

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For more information about Ananke IT Solutions and their products and services, call (401) 331 - 2780 or visit the Web site at: www.ananke.com



For more information about Symbol Technologies products and services, call (631) 738 - 3814 or visit the Web site at: www.symbol.com



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Microsoft Windows Server System

Microsoft Windows Server System integrated server infrastructure software is designed to support end-to-end solutions built on Windows Server 2003. It creates an infrastructure based on integrated innovation, Microsoft's holistic approach to building products and solutions that are intrinsically designed to work together and interact seamlessly with other data and applications across your IT environment. This helps you reduce the costs of ongoing operations, deliver a more secure and reliable IT infrastructure, and drive valuable new capabilities for the future growth of your business.

For more information about Windows Server System, go to: www.microsoft.com/windowsserversystem

Software and Services

- Windows Server System
 - Microsoft Windows Server 2003
 - Microsoft Internet Security and Acceleration Server 2004
 - Microsoft Exchange Server 2003
- Microsoft Office System
 - Microsoft Office Outlook 2003

- Technologies
 - Active Directory

Hardware

- IBM X345

Partners

- Ananke, Inc.