



UNITED NETWORK FOR ORGAN SHARING

Overview

Country or Region: United States

Industry: Healthcare

Customer Profile

The United Network for Organ Sharing (UNOS) facilitates every organ transplant performed in the United States and helps to ensure that organs are procured and distributed in a fair and timely manner.

Business Situation

UNOS wanted to make it easier for its 280 employees to work while traveling, for its 6,500 policymakers to collaborate, and to minimize help-desk tasks for its 3-person desktop support staff.

Solution

UNOS implemented a new solution to enhance mobile productivity and simplify IT management, using Microsoft® Exchange Server 2007 and the 2007 Microsoft Office system.

Benefits

- Faster deployments than with earlier versions
- Simplified IT environment
- Enhanced security
- Better collaboration, higher productivity
- Less custom development

New Messaging Infrastructure Helps Donor Network Boost Productivity, Collaboration

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In addition to facilitating every organ transplant in the United States, the United Network for Organ Sharing (UNOS) drives the development of organ transplantation policy. More than 30 UNOS-supported committees of geographically dispersed representatives from all aspects of transplantation—including UNOS-employed liaisons—meet regularly to establish and improve policies. To make it easier for employees traveling to and from these meetings to remain productive, and to simplify collaboration among committees, UNOS upgraded its messaging and collaboration infrastructure using Microsoft® Exchange Server 2007, Microsoft Office SharePoint® Server 2007, and Microsoft Office Enterprise 2007. With its enhanced capabilities, UNOS expects to increase remote employee productivity, simplify teamwork, and minimize support tasks so that its IT department can focus on strategic, value-adding tasks.

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Situation

The United Network for Organ Sharing (UNOS), located in Richmond, Virginia, is a nonprofit organization responsible for the management of organ transplantations in the United States. UNOS administers the nation's Organ Procurement and Transplantation Network (OPTN), which was established by the United States Congress under the National Organ Transplant Act of 1984. Through the OPTN, UNOS collects and manages transplant data, facilitates the organ-matching and placement process, and develops transplantation policy with help from a 6,500-member community representing transplant hospitals, organ procurement organizations and laboratories, voluntary health organizations, medical professionals, and donor families and recipients.

The data that UNOS collects and manages, such as posttransplant statistics, is critical to organ transplantation in this country, as it is used by the government as the basis for making improvements in the organ allocation process. Likewise, involvement by the 6,500 volunteers who make up the UNOS community is critical, as members guide organ transplantation policy to improve organ recipients' results. UNOS members participate in the policymaking process through representation on national committees and the UNOS board of directors. More than 30 national committees take part, including one committee for each type of organ administered by UNOS, and others such as Finance, Ethics, and Minority Affairs.

Each of these committees requires a liaison from UNOS, and each committee meets an average of three times per year. With additional board of directors meetings requiring attendance by UNOS employees, and with other UNOS employees frequently traveling to transplant sites to review compliance standards and conduct audits,

most of the workforce is highly mobile. “Of our 280 employees, half to two-thirds are traveling regularly,” says Blaine Hess, Assistant Executive Director of IT at UNOS. To maintain staff productivity in this mobile environment, he explains, UNOS needed “to provide a constantly connected work experience so that work can happen anywhere, anytime, in the same way it would if a person was in the office.”

To achieve this efficient, connected work environment, UNOS wanted to simplify access to e-mail and voice messages, faxes, and other communications, making all of these modes of communication available to users anywhere and from a single device—be that a portable computer, smartphone, mobile phone, or personal digital assistant (PDA). Effectively, UNOS leadership saw a need for its staff to have “the ability to communicate, regardless of the device they're working on,” according to Hess.

The organization also wanted to make it easier for mobile workers to securely access resources on the internal UNOS network. “The process for remote users has been pretty painful,” says Hess. UNOS uses Citrix Presentation Server to provide remote users with secure access to network-based files and applications. Hess describes the multistep process employees have used to access their e-mail messages and documents: “Users have to work in Citrix remotely, and if they want to work on a document from their laptop later, they have to e-mail the document to themselves, disconnect from Citrix, access their e-mail through Outlook Web Access, download the attachment to the hard disk drive, work on it, and then upload the document back to Citrix. And, one of the biggest challenges of the Citrix environment, for the IT department, is that it's difficult for us to protect against someone uploading a document containing a virus.”

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Rob Spitzer, Systems Engineer,
SyCom Technologies

Though time-intensive and complex, these steps help ensure that UNOS abides by stringent privacy and security requirements for donor and recipient data. As a government-regulated public health entity, UNOS must comply with the security regulations of the Health Insurance and Portability and Accountability Act (HIPAA). “We have to follow the highest nondefense security and privacy requirements,” says Hess. “While we’ve never experienced a security breach, if someone did get into our systems and manipulated data, it could very well result in imminent loss of life.” Simply put, UNOS cannot afford any downtime when lives are at stake. In light of these potentially devastating consequences, Hess says that UNOS is always looking for better security measures, but especially ones that provide the highest levels of security while also supporting staff efficiency.

Similar to the goals UNOS has for streamlining the work of its employees, the organization also wanted to make it easier for its widespread member community to access information and work together, regardless of location. “We were looking for a flexible, cost-effective way for committees to remotely collaborate on their initiatives,” says Hess.

Finally, UNOS needed to be able to deliver these services with limited IT resources. “We have three people responsible for supporting 400 devices,” says Hess. “We wanted our desktop support staff to be able to shift their focus from building and fixing machines to supporting the organization’s business goals.”

Solution

In 2006, with the help of Microsoft® Gold Certified Partner SyCom Technologies, UNOS participated in the Microsoft Technology Adoption Program (TAP) for the Windows Vista® operating system, and in the Rapid Deployment Program (RDP) for the 2007

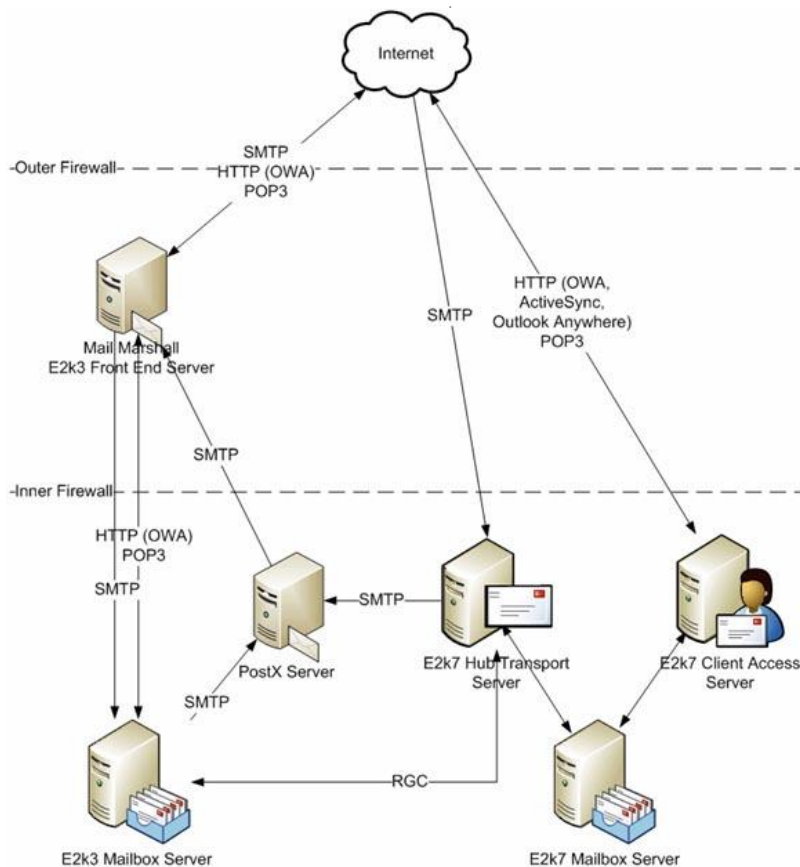
Microsoft Office system. SyCom, which, like UNOS is based in Richmond, Virginia, provides technology solutions to midsize companies and large enterprises. The company specializes in multiplatform, multivendor network infrastructure as well as voice and video communications and security technologies.

UNOS’s experiences with these early adopter programs sparked further interest in Microsoft technologies, most notably Microsoft Exchange Server 2007 messaging and collaboration server software, the Microsoft Office SharePoint® Server 2007 for centrally managing content and workflow, and the Microsoft Office Enterprise 2007 suite of desktop productivity programs. In early 2007, again with the help of SyCom, UNOS began its implementation of a new communications and collaboration infrastructure.

Hess says that the decision to deploy Exchange Server 2007 was part of UNOS’s overall vision of “a new way of doing work.” He explains: “Exchange Server 2007 is one pillar of our plan to give people the same work experience, no matter what computing or communication device they are using or where they are located.”

Exchange Server 2007 includes features and security enhancements that make it possible for UNOS IT administrators to provide an improved e-mail and calendaring experience to all of its mobile users through the same infrastructure used for the organization’s core messaging environment, which includes the Microsoft Office Outlook® messaging and collaboration client.

Currently, UNOS has deployed Exchange Server 2007 to its first group of employees within the organization. For the deployment, SyCom and UNOS took advantage of Exchange Server 2007 tools that help IT



Architecture diagram for Microsoft Exchange Server 2007 implementation at UNOS

professionals proactively examine both the server topology and individual servers for configuration discrepancies. Rob Spitzer, Systems Engineer at SyCom, says, "The integration of the Exchange Best Practices Analyzer tool was great. And the Exchange Server troubleshooting tools were very good at showing exactly which patches and components we needed to complete the deployment."

Hess plans to complete the full-scale deployment in November 2007, when a voice over IP (VoIP) gateway from Nortel, the organization's phone service provider, is expected to be available. At that time, UNOS will add an Exchange Server 2007 Unified Messaging

server that will enable access to voice messages through users' Office Outlook or Outlook Web Access e-mail inboxes.

A second pillar supporting the vision of a new way of work at UNOS is Microsoft Office SharePoint Server 2007. The enhanced integration between SharePoint Server 2007 and Outlook 2007 is important to UNOS. According to Hess, "The ability to have document libraries replicated and synchronized from SharePoint Server 2007 to Outlook 2007 will make a significant difference to us."

UNOS is also expecting Office SharePoint Server 2007 to help simplify IT management of portal security by providing comprehensive control over content and policy settings. In addition, users should find it easier to create and manage intranet sites and tools without help from IT staff. In preparation for the deployment, UNOS organized its content into two categories: one that will be accessible only to UNOS employees, and another that will be accessible to all of the external groups and individuals who collaborate with UNOS. UNOS is currently in the process of deploying Office SharePoint Server 2007.

The third pillar supporting the UNOS vision is the deployment of Microsoft Office Enterprise 2007 to the organization's 280 employees. Once the Exchange Server deployment is complete, UNOS plans to use 2007 Office messaging and collaboration client software and the Outlook Anywhere feature of Exchange Server 2007 (formerly known as RPC over HTTP) to streamline mobile workers' access to their important information stored in Exchange Server. This feature makes it possible for remote workers to access Exchange Server accounts through the rich interface of the Office Outlook 2007 client just as they would when working within the company network, without needing any

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special connections or hardware, such as a virtual private network (VPN) or a smart card. UNOS is deploying Office Enterprise 2007 using the Zero Touch Installation (ZTI) component of Microsoft Solution Accelerator for Business Desktop Deployment (BDD) 2007. This solution accelerator provides end-to-end guidance and tools for automating large-scale deployments of the 2007 Office system with Microsoft Systems Management Server 2003.

Benefits

UNOS has experienced a rapid, cost-effective first phase of its deployment of Exchange Server 2007 and Office Enterprise 2007, and believes that these new products will result in higher overall efficiency for its IT department and for the rest of the UNOS staff. It also expects that the improvements to Exchange Server 2007 and its overall integration with the 2007 Microsoft Office system will enable staff to work more productively when away from the office, will provide enhanced security for sensitive data, and will lead to better collaboration among UNOS members. According to Spitzer, “This deployment is about working better, smarter, and quicker—doing more with the same number of people.”

Faster Deployments Than with Previous Installations

Hess says that the deployment of Exchange Server 2007 “has been approximately three times faster” than the time it took to implement UNOS’s previous messaging environment. He estimates that it took the organization six weeks with two people working part-time to deploy the previous environment, compared to the two weeks of two people working part-time that it took to implement Exchange Server 2007. Hess attributes this fast deployment to the “wealth of documentation available on Microsoft TechNet for Exchange Server 2007, and the ease of configuring Exchange Server 2007 in a multiserver environment.”

Additionally, Hess says that the deployment of Office Enterprise 2007 has been very smooth, due to UNOS’s use of BDD 2007 with Systems Management Server 2003 to remotely perform ZTI. “Using Zero Touch Installation, our error rate for installing software dropped from 15 to 20 percent to zero. Before, our relatively small desktop staff of three employees had to support 400 devices and physically touch these to correct deployment errors reactively. Now we can proactively shift their focus to value-adding activities. Our gains will be that we’ll be able to use our desktop staff’s time in a better way.” Hess also estimates that creating and deploying Office Enterprise 2007 images has taken his staff 20 to 30 percent less time thanks to the enhanced customization tools and the automated ZTI.

Simplified IT Environment, Enhanced Security

When asked how Exchange Server 2007 enables mobile productivity and will benefit the IT staff, Hess says, “That’s easy. In the long run, Exchange Server 2007 will enable us to use and support fewer products and fewer ways of accessing our systems. For example, Outlook Anywhere may eventually replace Citrix and Outlook Web Access. And because users will have a single way of doing work regardless of where they are, they won’t have to remember things like how to get into Citrix, how to work in Citrix, how to get into Outlook Web Access, and so on.” This simplified environment will significantly minimize the time that the UNOS IT department spends training users on how to access systems, and will also minimize the number of support requests it receives from mobile employees.

Implementing Exchange Server 2007 also fits in with the organization’s high security standards. “At UNOS, we are very good at what we do in terms of security. We’re

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considered a model contractor by the Department of Health and Human Services. But we are always looking for ways to improve. We believe that bringing Exchange Server 2007 into our environment will enhance the security of our data," says Hess.

Better Collaboration, Higher Productivity

In addition to providing employees with the improved collaboration capabilities in Exchange Server 2007, UNOS plans to use Office SharePoint Server 2007 "as a collaborative environment, both internally and externally," says Hess. "Furthermore, with Office SharePoint Server 2007, committees will have much more flexibility in their collaboration. They'll be able to collaborate the way they want to, managing the environment themselves, without having to involve IT." With the ability to easily create and control their own collaborative workspaces, and to adapt these workspaces to the needs of their projects, UNOS committees will be able to remain productive while working remotely.

About Exchange Server 2007, Hess adds: "Unified Messaging will really make it easier for our mobile employees to get information faster and make decisions faster," and that "Outlook Anywhere is going to fundamentally change the way we work. Most of our users use Office Outlook 2007 as their primary means of conducting day-to-day work, and they'll be able to continue to do so, even when working remotely."

In Office Enterprise 2007, the Microsoft Office Fluent™ user interface, which replaces multiple menus and toolbars with one easy place to find all the commands a user needs, will streamline the way people work within Microsoft Office programs. Other improvements Hess thinks will contribute to enhanced productivity within his organization include the rich SmartArt™ graphics capabilities in the Microsoft Office PowerPoint® 2007 presentation graphics

program, which users can manipulate more easily than elements in previous versions, and improvements to Microsoft Office Excel® 2007 spreadsheet software, such as table headings that remain in view while a user scrolls through a long table.

Less Custom Development

Hess says that the self-sufficiency brought about by enhancements to the 2007 Office system will also enable committees to work together flexibly, without requiring as much custom development. For example, with Office SharePoint Server 2007, committee members can create their own workspaces and SharePoint sites or use out-of-the-box workflows for document review processes, without any coding. "Non-developers will be able to do development work. This means that our developers' time can be used for more strategic purposes. We hope to cut time spent on custom development by 10 to 20 percent," Hess says.

Future Plans

UNOS is in the process of integrating the Microsoft Office Communicator 2007 unified communications client with its in-house-developed Web application, DonorNet. DonorNet provides electronic access to organ donors' medical files, as well as the ability to collect and transmit organ offer information in real time. Adoption of Office Communicator 2007 will enable UNOS to add an important component to the instantaneous DonorNet environment—real-time, secure, audible instant messaging. To accomplish this integration, UNOS plans to transition the entire UNOS member community from its own custom security module for authentication of external users to the Active Directory® service. Active Directory, a component of the Windows Server® 2003 operating system, provides the means to manage user identities and relationships within a network environment.

For More Information

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For more information about SyCom Technologies products and services, call (804) 474-5211 or visit the Web site at: www.sycomtech.com

For more information about the United Network for Organ Sharing (UNOS), call (804) 782-4800 or visit the Web site at: www.unos.org

UNOS also plans to deploy the Windows Vista desktop operating system organizationwide by the end of 2007.

Microsoft Server Product Portfolio

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

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

Software and Services

- Microsoft Office
 - Microsoft Office Enterprise 2007
 - Microsoft Office SharePoint Server 2007
- Microsoft Server Product Portfolio
 - Windows Server 2003
 - Microsoft Exchange Server 2007 Enterprise Edition
 - Microsoft Systems Management Server 2003
- Windows Vista Enterprise
- Technologies
 - Active Directory
 - Microsoft Exchange Best Practices Analyzer Tool

- Microsoft Outlook Web Access
- Microsoft Solution Accelerator for Business Desktop Deployment 2007 Zero Touch Installation Edition

Hardware

- HP ProLiant DL585 G2 server computers
- Toshiba Tecra portable computers
- Dell Dimension desktop computers
- Palm Treo 600 and 700 series smartphones

Partners

- SyCom Technologies