

# Prescription for Technology

*Doing More with Less*

**D**espite recent budget cuts, Hartford Hospital still needed to provide high quality IT services for its users, but without increased headcount. With Novell solutions, the hospital has created a stable infrastructure and has reduced IT administration and travel time by 90 percent.

## > Overview

Hartford Hospital is one of the largest teaching hospitals and tertiary care centers in New England with perhaps the region's busiest surgery practice. The hospital is an 867-bed regional referral center that provides high-quality care in all clinical disciplines and is one of the top 10 hospitals in the U.S. for cardiovascular surgery.

## > Challenge

Hospitals offer critical patient care 24/7 and require a highly stable and reliable IT infrastructure. Hartford Hospital needed a highly available network platform, as well as a stable collaboration platform for 17,000 users. The hospital's employees and 900 doctors also require secure access to applications, whether working in the hospital or off site.

The hospital's small IT staff was spending much of its time physically traveling to nearly 5,000 individual workstations across five buildings to install updates or troubleshoot issues. For large application rollouts, the hospital would have to hire additional staff. Centralizing desktop management would allow a small IT staff to keep the enterprise updated, without having to leave their desks.

## > Solution

Hartford Hospital is migrating many of its NetWare and Microsoft Windows servers to Novell Open Enterprise Server running SUSE Linux Enterprise.

"We wanted to move to Linux and Novell Open Enterprise Server to give us the networking functionality we are accustomed to with NetWare on a Linux platform," said Fernando Seguro, manager of Systems Engineering at Hartford Hospital. "SUSE Linux Enterprise Server gives us enormous flexibility with the ability to leverage open source applications, as well as build our own."

Hartford Hospital implemented Novell Open Enterprise Server running on SUSE Linux Enterprise for its file and printing services, as well as Novell Cluster Services for high availability. The hospital is also running a number of applications on SUSE Linux

Enterprise Server, including Novell GroupWise, and a variety of open source applications and tools including JBoss, Apache, Tomcat, MySQL and PERL.

The hospital is using both Xen virtualization and VMware ESX to consolidate its environment by virtualizing servers as much as possible.

Novell Identity Manager synchronizes user names and passwords across Novell eDirectory, Microsoft Active Directory and LDAP-enabled applications. Novell SecureLogin provides users with single sign-on access to applications, and Novell Access Manager provides secure authentication to the hospital's portal.

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**Fernando Seguro  
Manager of Systems Engineering  
Hartford Hospital**

With Novell ZENworks, the hospital has standardized nearly 5,000 workstations and can manage them from a central location. One administrator can now prepare and distribute new applications and updates in a matter of days, rather than weeks or months. Using remote control, the helpdesk can respond immediately to user requests without having to visit a workstation.

"The ease of management with Novell ZENworks can't be beat," said Seguro. "We work with hundreds of applications, but one administrator can do dozens of application rollouts and updates a year — without any additional IT help. We couldn't manage our environment in any other way."

Novell GroupWise is the collaboration tool of choice for 17,000 users at Hartford Hospital and throughout Hartford Health Care. GroupWise Messenger is especially popular for mobile users, such as nutritionists who can communicate with colleagues via secure instant messaging while traveling around with their laptops visiting patients.

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Novell GroupWise Mobile Server supports mobile users with Palm and Windows mobile devices, and Novell GroupWise BlackBerry Server supports the hospital’s 300 BlackBerry users.

“Our Novell GroupWise server had been running for 400 days before we had to take it down to apply a patch,” said Seguro. “In contrast, we have to reboot our Windows servers monthly.”

**> Results**

Novell solutions are helping Hartford Hospital cope with budget cuts by allowing a small IT staff to do more for its users, without additional IT help. Novell Open

Enterprise Server and SUSE Linux Enterprise Server provide a stable infrastructure and the opportunity to reduce hardware costs by consolidating 20 percent of its servers to date.

Novell identity management solutions reduce routine user administration and provide users with secure, single sign-on to applications. The hospital has reduced IT administration and travel time by 90 percent with one administrator for Novell ZENworks who can manage all its workstations from a central location. With the stability of Novell GroupWise, one administrator can manage e-mail and collaboration for 17,000 users.

“When we can’t hire more staff or invest in more hardware, we have to make do with what we have,” said Seguro. “Novell solutions allow us to actually do more with less. Novell has saved us a lot of money and our investment continues to pay off.”

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**Products and Services**

- Novell Open Enterprise Server
- SUSE Linux Enterprise Server
- Novell Cluster Services
- Novell Identity Manager
- Novell SecureLogin
- Novell Access Manager
- Novell ZENworks Suite
- Novell GroupWise

**Results**

- Reduced hardware costs by consolidating servers by 20 percent through virtualization
- Provided secure, single sign-on to applications
- Reduced IT administration and travel time by 90 percent