





ROCHESTER GENERAL HOSPITAL

# CHALLENGE

Increase reliability and availability of missioncritical applications within healthcare organization

#### SOLUTION

VMware Infrastructure 3 simplifies IT administration and provides greater control over computing environment.

#### **VMWARE AT WORK**

VMware Infrastructure 3 Enterprise, featuring:

- $\bullet$  ESX 3 with VMFS
- VirtualCenter 2.5
- VMotion
- Distributed Resource Scheduler (DRS)
- High Availability (HA)

### **DEPLOYMENT ENVIRONMENT**

- ESX 3 running on IBM 3850 and 3950 BladeCenters attached to EMC CX-380 and CX-320 SANs
- Guest operating systems: Windows 2000, Windows 2003, Windows NT 4.0, Linux
- Virtualized production applications: MS Exchange, SMTP Gateway, SQL, Oracle 9i, homegrown electronic medical record system, McKesson HSM/ PMM, GE Centricity, Domain Controllers, Print Servers, Citrix Terminal Services

"We have a VMware-first policy, and have virtualized nearly 90 percent of our application environment—that shows how much confidence we have in VMware technology."

Tom Gibaud

Manager of Information Technology, ViaHealth

# ViaHealth / Rochester General Hospital

ViaHealth is a family of health care providers serving the greater Rochester, New York area through facilities such as Rochester General Hospital. With over 6,500 employees system-wide, ViaHealth's goal is to build an all-inclusive health care delivery system.

ViaHealth's server engineering department is responsible for managing server and application environments for the entire ViaHealth network of facilities. "We do application testing, installs, upgrades, maintenance and a lot more," says Tom Gibaud, manager of information technology at ViaHealth. "Our job is to keep the systems up and running as much as possible. After all, people don't choose when to be sick, so we need to be available 24/7/365."

Using VMware Infrastructure 3, ViaHealth became one of the first healthcare organizations to implement mission-critical applications like McKesson HSM/PMM and GE Centricity in a virtual environment. Features such as High Availability (HA), Distributed Resource Scheduler (DRS), and VMotion work together to simplify IT administration and increase application availability. "Simply put, VMware Infrastructure 3 helps us better manage our computing environment," says Gibaud. "For example, if we notice that there is a memory error on a server, it is very easy for us to VMotion that box somewhere else, replace the memory chip, and then VMotion it back. Try doing that with a data center full of physical servers!"

# Results

- Virtualize 50+ SQL servers. "These are the SQL servers that touch the patient and have a lot of traffic—if they're down, it's an issue," says Gibaud. "Having them virtualized on ESX3 hosts provides us with greater reliability and more uptime."
- Virtualize 5000 Exchange mailboxes. "We converted all our Exchange servers into our VMware environment and had no issues whatsoever," says Gibaud.
- Achieve 5:1 server consolidation ratio. "We have 300 virtual machines running on 60 ESX3 hosts," says Gibaud. "In addition to simplifying administration, this consolidation has allowed us to get rid of 12 racks of servers within our data center—a nice side benefit."