



## Customer Snapshot

### HIGHLIGHTS

#### CHALLENGE

Technology refresh for legacy servers offers opportunity to explore virtualization

#### SOLUTION

VMware and Intel technology creates a scalable virtual infrastructure that transforms multiple legacy servers into easily administered virtual machines.

#### VMWARE AND INTEL AT WORK

VMware® Infrastructure 3 Enterprise, featuring:

- ESX Server
  - Dell PowerEdge R 900 servers with Intel Xeon 7330 processors, attached to EMC CX700 SAN
- VirtualCenter 2
- VMotion
- Distributed Resource Scheduler (DRS)
- High Availability (HA)

#### DEPLOYMENT ENVIRONMENT

- Guest operating systems: Windows 2000, Windows 2003
- Virtualized Applications: Citrix, web servers, physician's portal, IIS, SQL, Domain Controllers, Active Directory, Certificate Authority, Software Update Services

"It used to take two to three weeks to procure a server, rack it, cable it, and get the operating system laid down. We can now deploy a server in about 30 minutes. That's just one of the ways that virtualization has been a big feather in the cap of the engineering department here at the hospital."

**Roy Turner**

*Server Systems Engineer, Frederick Memorial Healthcare*

## Virtualization Cures Frederick Memorial Healthcare's Server Ills

Based in Frederick, Maryland, the Frederick Memorial Healthcare System, (Frederick) has 375 doctors and nearly 2500 employees providing area residents with quality healthcare.

While Frederick's physicians are tending to human lives, the IT department is managing lifespans of a different sort: technology lifespans. "We had approximately 50 legacy servers that were approaching end of life," says Roy Turner, a server systems engineer at Frederick. "We had to decide whether to replace those servers with physical hardware or to make the leap into virtualization. After completing a Virtualization Readiness Assessment, we were convinced that virtualization was the way to go."

VMware Infrastructure 3, running on Intel-based servers, provided the platform Frederick needed to move forward. The organization converted 80 percent of its data center—nearly 85 servers—onto just six VMware ESX hypervisors.

"Our ESX hypervisors are barely breaking a sweat," says Turner. "Some of the hypervisors are running between 13 and 15 virtual machines. But with the way we've built the solution—particularly with the underlying power of the Intel processors—the ESX hypervisors can efficiently handle anywhere from 30 to 35 virtual machines. We've hardly scratched the surface of our virtualization solution yet—there's plenty of room for growth."

### RESULTS

- Reduce data center footprint by 30 percent. "We had 16 racks in our data center and we were able to remove five of those racks," says Turner.
- Decrease energy consumption by 35 percent. "Prior to virtualization, we had four uninterruptible power supplies running at 90 plus percent capacity," says Turner. "Now, they're running at closer to 55 percent."
- Save \$40k in annual hardware costs. "Not having to pay maintenance contracts on the legacy servers that we've virtualized easily saves us \$30-40,000 per year," says Turner.