

# HEALTH CARE CASE STUDY



## Healthcare Services Company Deploys Virtual Instruments' VirtualWisdom SAN Optimization Platform to Improve Customer Service

### Overview and IT Contribution

This leading healthcare services company has been in business for more than 100 years. As one of the largest healthcare services company, they combine innovation, technology and process knowledge, strong relationships and a business approach to give customers and partners the power to succeed.

Their vision is to help create a healthcare system where quality is higher, mistakes are fewer and costs are lower. They provide pharmaceuticals, medical supplies and healthcare information technologies that make healthcare safer while reducing costs. And they touch virtually every aspect of healthcare. For instance, they distribute a huge proportion of the medicines used in North America, supplying thousands of North American health care locations.

### IT Environment

The IT department is more than just a supporting function; it is a core contributor to the value of the company. For instance, they help prevent thousands of medication errors every week through automation and bar-code scanning technology that helps to ensure the right patient gets the right drug at the right time.

The two primary datacenters span the continent, with a Cisco fabric in the east and Brocade in west. Together, the sites support a mix of UNIX, LINUX, and Windows servers, approximately 500 of which are SAN attached through over 5,000 ports. The eastern site supports a separate fabric for managed services, which supports a wide

### Challenges:

- Maintain a position as a pre-eminent health care services company
- Prevent observed performance problems
- Drive costs out of IT infrastructure

### Solution:

- Virtual Instruments VirtualWisdom ProbeV software

### Customer Benefits:

- Proactive problem resolution keeps the SAN architecture optimized and eliminates major problems from affecting business operations, helping to keep costs down
- The ability to design optimal SAN storage that can be easily scaled over time

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-Senior SAN Administrator

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range of customers including pharmacies and hospitals. Storage is primarily supplied by EMC.

Consistent with the business goals of controlling costs, the IT department is charged with finding significant savings in infrastructure. Already, they have seen significant savings through consolidation and through improved server utilization by virtualizing with VMware. Going forward, additional savings are expected through better use of tier 2 and 3 storage, and automating server and storage provisioning.

## VirtualWisdom Value

According to the company, "Since we have implemented VirtualWisdom to monitor our SAN, we have gained tremendous visibility into our infrastructure that was not available previously. We are using the product to monitor our Inter-Switch Links which we could not do up until that time. Now we can identify exactly where SAN congestion is occurring – at the hosts on the edge, on storage arrays on the core, or on the ISLs between the core and edge. This has definitely enhanced the accuracy of our root cause analysis when congestion occurs." If traffic exceeds a pre-defined threshold, VirtualWisdom sends SNMP alerts to the Tivoli Enterprise Console. The deployment team's success is measured by SLAs, and many of the applications are directly customer-facing so fast turnaround on problem resolution is key.

They go on to state "We can now empirically demonstrate when ISLs are getting saturated and add more links as necessary without guesswork. Another thing that has impressed us with the product is that as we grow our SAN infrastructure by adding switches to the fabrics, VirtualWisdom is automatically identifying the new ISLs and monitoring them without direct administrator intervention."

## VirtualWisdom Value

To lower the cost of its IT infrastructure and to continue to drive down the costs of delivering healthcare services, they are starting to deploy server virtualization using VMware. As the rollout of VMware accelerates, they are investigating Virtual Instruments' VirtualWisdom to optimize the performance and utilization of their virtualized infrastructure. Today, IT can only isolate SAN traffic to a specific ESX server – it then becomes a guessing game to identify the VM that is the source of the traffic. The addition of VirtualWisdom will dissipate the "virtual cloud" and open up the data-path view from the VM to the LUN. And since VirtualWisdom is a simple software add-on to the existing VirtualWisdom product, it has an advantage over other products that might require new servers (physical or virtual) to be added to their infrastructure.

## Lessons Learned

The IT team lead for this project suggests that customers should "invest the time to get the most out of the reporting, there's a lot of data you can get if you know what you're doing."

*"I have been impressed by the demos of the VirtualWisdom product. I've seen several products that will provide performance monitoring of CPU and memory utilization in the virtual infrastructure, but this is the only one I've seen that provides detailed SAN performance data on a per VM basis"*

-Senior SAN Administrator



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