

Virtana Helps JPS Health Network Reduce Infrastructure Costs



ABOUT

Industry
Healthcare

Headquarters
Fort Worth, Texas, USA



OBJECTIVE

Small IT team challenged with maintaining service levels for mission-critical applications amid 40% annual data growth

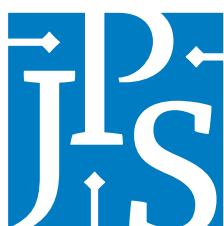


RESULTS

- Proactive problem identification and resolution
- Improved monitoring and reduced finger-pointing
- Better planning

ABOUT JPS Health Network

In October 1877, future Fort Worth, Texas, mayor John Peter Smith deeded five acres of land at what is now 1500 South Main Street to provide a place where individuals from Fort Worth and Tarrant County “could have the best of medical care.” In 1906, a hospital affiliated with the Fort Worth Medical College was opened in Fort Worth, and the foundation for JPS Health Network was laid. Today, JPS Health Network continues to serve the needs of the families in Tarrant County, working to improve individual health and access to high-quality healthcare. The facilities have grown to include a 567-bed hospital that is attached to a Patient Care Pavilion—a fivestory acute care facility, along with an outpatient care center and a dedicated facility for psychiatric services.





THE CHALLENGE:

Maintain performance and availability while controlling costs

JPS Health Network's Tarrant County main data center has a 200+ terabyte SAN, growing at over 40% annually, connected to application servers through a Brocade fabric supporting 300 fibre channel SAN ports. To optimize budget and resources, JPS uses both VMware server virtualization and storage virtualization. Their storage array was composed of two modular systems virtualized behind it and another standalone modular array. They have three full-time staff managing all storage and backup-related tasks for the entire JPS organization, supporting all office functions like email and billing and the ongoing migration to online patient records.

With an increasingly digitized patient-facing environment, Christopher Carlton, Storage Team Lead at JPS stated matter-of-factly that JPS IT systems "can't really be down at all." But it was increasingly difficult to maintain their traditionally high service levels in the face of 40% annual data growth—while keeping costs down. With a growing number of ports and disks, lack of standardization among vendorsupplied tools, and a lack of predictive problem avoidance capabilities, it was becoming a challenge to manage the SAN.

THE SOLUTION:

Virtana Infrastructure Monitoring automates SAN monitoring and analysis

Like many IT shops, JPS was challenged with tight budgets and getting more performance from existing resources. The team knew it must be proactive to avoid problems and anticipate issues before users and application owners were affected. The only way to do this without dramatically increasing the staff size was to find a way to proactively automate the monitoring and analysis of the effect of the SAN on application availability. According to Carlton, "All the storage vendors will help you to fix problems if you can identify the problem, and that's the trick." JPS wanted:

- A predictive analysis tool that could act like their "eyes and ears" to alert them to issues before they become serious problems.
- A reporting mechanism that could look deeper than vendor-supplied tools can at the hardware level to find things that might cause application problems.
- Centralized monitoring to accommodate a move from a primary only to a primary + backup site.
- An agnostic, vendor-neutral solution that would enable them to avoid finger-pointing and assist the vendors to provide better advice.
- A partner relationship with a flexible business model.
- A complementary solution to existing vendororiented monitoring solutions. (JPS uses storage-vendor-specific tools to manage their storage assets—dynamic provisioning, capacity utilization, etc.).



Prior to the Virtana Infrastructure Monitoring deployment, JPS would have to wait until a problem was reported, perhaps even in the form of an outage. In a typical scenario, they would look at individual components, system logs, etc. and do “process of elimination” troubleshooting.

With Virtana Infrastructure Monitoring, problems are identified much earlier, before they become serious, and root cause analysis is more efficient. For instance, with Virtana Infrastructure Monitoring, a problem the server team thought was SCSI controller-related turned out to be an HBA issue, saving potentially days of wasted investigative



THE RESULTS:

Improved performance, troubleshooting, and planning

Specific Virtana Infrastructure Monitoring benefits to JPS

- Ability to find problems before they affect application performance or availability.
- Capex savings by enabling a better understanding of true bottlenecks and potentially reducing the need to add hardware.
- Help in communicating with their server team and storage vendors. JPS can send them Virtana Infrastructure Monitoring reports and ask for their advice
- Non-intrusive solution with no impact on application users
- Help in validating tiering strategies. Having a neutral third-party to validate tiering and help match application requirements with the total SAN infrastructure helps eliminate “rules of thumb” planning.
- Great value-add from the Virtana staff. During the first week of Virtana Infrastructure Monitoring training and implementation, some of the staff learned more about storage than they’d learned in the previous three years