# JPS Health Network

Benefits

- Discovery of SAN related problems before they could cause outages

- Increased productivity of existing staff

- Provides quicker responses from storage vendors by providing insightful VirtualWisdom reports

"To-date, we've used VirtualWisdom to find and resolve four problems before they would have eventually caused an outage. We're using it as an additional person on our team. Once you have it, you see a big value"

Christopher Carlton
Storage Team Leader

Virtana helps JPS Health Network reduce infrastructure costs
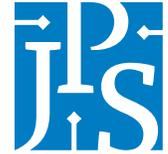
Company Overview

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 health care. The facilities have grown to include a 567-bed hospital that is attached to a Patient Care Pavilion—a five-story acute care facility, along with an outpatient care center and a dedicated facility for psychiatric services.

IT Environment and Role

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 comprised of two modular systems virtualized behind it and another standalone modular array. There are now 3 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.

Challenges and Concerns

One of the key challenges was in maintaining traditional 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 vendor-supplied tools, and an inability to do predictive problem avoidance, it was becoming a challenge to manage the SAN.

With an increasingly digitized patient-facing environment, Christopher Carlton, Storage Team Lead at JPS states matter-of-factly that JPS IT systems "can't really be down at all."

Solution Evaluation

Like many IT shops, JPS was challenged with tight budgets and with getting more performance from existing resources. To do this, IT knew it must be proactive; it had 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 some way to proactively automate the monitoring and analysis of the effect of the SAN on application availability. According to Christopher 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, something that could act like their "eyes and ears" to alert to issues before they become serious problems. Something to help prevent outages.

- A reporting mechanism that could take a deeper look than vendor- supplied tools, something at the hardware level to find things that might cause application problems. With a light staff, JPS couldn't spend time watching every SAN component.

- 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 offer better advice.

- A partner relationship with a flexible business model.

- A complementary solution to existing vendor-oriented monitoring solutions. (JPS uses storage-vendor specific tools to manage their storage assets (dynamic provisioning, capacity utilization, etc.).

Benefits of the Virtana VirtualWisdom Solution

Prior to the VirtualWisdom 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 VirtualWisdom, problems were identified much earlier, before they became serious, and root cause analysis became more efficient. For instance, with VirtualWisdom, a problem the server team thought was SCSI controller-related turned out to be an HBA issue, saving potentially days of wasted investigative work.

Why use Virtana?

Specific Virtana benefits to JPS Health Network include:

- Finds problems before they affect application performance or availability

- Saves CAPEX by enabling a better understanding of true bottlenecks and potentially reducing the need to add hardware

- Helps in communicating with our server team and our storage vendors. JPS can send them VirtualWisdom reports and ask for their advice

- No impact on users of application; a non- intrusive solution

- Helps validate tiering strategies—need a neutral third-party in order to validate tiering, to 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 VI training and implementation, some of the staff learned more about storage than they'd learned in the past 3 years

Learn more about VirtualWisdom

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Virtana
2331 Zanker Road
San Jose, CA 95131
Phone: +1.408.579.4000