

InfraStruXure® Keeps Pace with Evolving Healthcare Technology



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*Ronald Crall
CIO
St. Joseph Healthcare
Bangor, Maine*

"St Joseph Hospital is a 112 bed rural hospital that, like everyone, faces availability and security issues as we strive to meet regulatory requirements. But our remote geographic location adds the potential of being cut off from public electrical infrastructure and outside support by ice storms.

"Healthcare has evolved to the point that most clinical modalities (lab, x-ray, CT scan and MRI equipment) are microprocessor-controlled and interfaced to a central clinical database. The introduction of computerized radiology, computerized health information records, and electronic ordering/validation of laboratory tests and pharmaceuticals, requires an extremely secure, dependable and available information environment. The increased demand for this technology has increased our data center density and required substantial increases in power and cooling requirements.

"Since virtually all aspects of the hospital are electronically supported, if we have downtime the entire facility is on hold. We would be unable to access critical medical information, putting us at risk for an adverse clinical outcome due to a system failure. The loss of the public and physician community confidence in our ability to provide quality medical care would be devastating. The business office, claims processing also comes to a standstill with significant economic effect.

Data Center in Turmoil

"When I joined St. Joseph Healthcare, the IT infrastructure was an unsupportable collection of legacy applications supported by only a few servers, and a core health information management system that was highly customized, seriously out of date, and unsupportable by staff or vendor. We quickly expanded to 70 servers and our newest equipment ran on three-phase 208 volt with no UPS to support them. We had no plan for growth and we needed better line conditioning.

"The hospital had experienced a short network failure when equipment, protected by one of our many small UPS systems, shut down after a power spike, due to an interruption required to protect the equipment from harmful voltage. Our power design and fault tolerance had not evolved as fast as our dependence on a highly available system. This wakeup call prompted an immediate search for a solution. We wanted to replace our multitude of UPS systems with a single fault-tolerant, easily manageable solution that could provide 208v and 120v output, as well as better surge suppression. It was time to call in the experts.

Valuable Engineering Support, Pre-Sale

"APC's engineering team assessed our situation and provided valuable information, guidance,

and support. The pre-sales engineering analysis and follow up report, done twice as we funded an interim solution and later wanted confirmation that the initial solution was still valid, was a very detailed evaluation and engineering workup. I have never seen this level of professional engineering done on a prospective basis: truly impressive. Their proposal for InfraStruXure® could be presented to final management for approval as delivered, and their competence was definitely a deciding factor in our purchase decision.

Cost-Efficiency, Simplicity, Reliability

“Compared to some traditional data center setups, InfraStruXure is extremely well engineered and easy to manage. When we evaluated long-term cost of ownership its installation and operational simplicity, dependability of parts and service organization all showed positive metrics. We determined InfraStruXure’s cost was reasonable considering the cost of downtime.

“Our InfraStruXure solution was delivered as promised and installation, managed by APC, was a breeze. System loads are now easily balanced and monitored, and no extensive training of our staff was required. Our immediate and expected future needs have been completely met. InfraStruXure’s ease of use is certainly valuable but the protection it offers from future failure is priceless. In addition, it responds to our need for faultless remote management and monitoring for a planned disaster recovery site.

InfraStruXure® Ready for the Future

“As healthcare evolves into a marriage of medicine and technology, huge volumes of data are generated and processing requirements for computer aided diagnosis will increase. This will bring a need for a tremendously robust and sophisticated computing environment. As a component-based and easily expandable solution, our InfraStruXure investment can be leveraged as additional power or cooling challenges present themselves.

“InfraStruXure now protects all the servers that provide building access, HVAC controls, clinical modalities, patient records, radiology, pharmacy, and laboratory systems as well as all back office systems. All network closets are also protected and environmentally monitored with APC equipment. We are very pleased that we now have current systems and conform to industry best practices.”