

Case Study:

**Huntington Hospital Implements Disaster Recovery Solution to Ensure MEDITECH System Availability and Support Patient Care**

*JJWild, a Provider of Integrated Healthcare Delivery Solutions, Orchestrates Successful Implementation Working with Technology Partners and Internal IT Staff*

**Goal:** Protect MEDITECH Healthcare Information System in the event of a disaster or failure, and facilitate Microsoft server upgrades and system maintenance without system interruptions to ensure the highest quality of patient care.

**Solution:** Install a self-hosted disaster recovery system involving two identical data centers with a failover strategy designed to minimize disruption to Huntington's operations.

**Background**

Huntington Hospital is a 525-bed not-for-profit, community hospital, located in Pasadena, California. The hospital offers a full complement of acute medical care and community services, ranging from general medicine to the foremost specialized programs in cardiology, oncology, orthopedics, women's and children's services, surgery, emergency, and psychiatry. The hospital has a state-of-the-art IT environment and an extensive installed base of MEDITECH applications with heavy dependence on their Advanced Clinical System.

Tim Kirk, formerly Chief Information Officer at Huntington Hospital, led the development and implementation of the hospital's IT plan with the overriding goal of supporting safe and accurate patient care. The hospital's IT infrastructure facilitates all aspects of the healthcare delivery continuum. Tim, along with key members of Huntington's Information Systems Department, recognized that ongoing investment in technology is necessary to ensure the highest quality of healthcare.

With clinicians depending heavily on MEDITECH's Advanced Clinical System, uptime and system availability at Huntington Hospital is critical. Like any organization, system availability can be compromised by a number of factors, including power outages, environmental disasters, or even routine maintenance. At healthcare organizations such as Huntington Hospital, system downtime can directly affect patient care and safety. With the full support of the Board of Directors and the Hospital Executive Team, Huntington embarked on an ambitious project to create a self-hosted disaster recovery infrastructure to ensure the availability of their MEDITECH System during planned and unplanned system outages.

**Project Goal**

The Huntington IS Department is led by Anker Anderson, Interim CIO, Debbie Dunn, Director of Customer Support, and Jake Chan, Director of Applications. Huntington's vision was to create a primary, self-hosted (as opposed to outsourced) disaster recovery infrastructure consisting of two identical, redundant data centers that would provide failover capabilities. The two data centers would also facilitate server upgrades and routine system maintenance. In either case, the redundant data centers would enable routine switching from one to the other when needed while maintaining availability of their MEDITECH System and applications. "With patient safety our primary objective, and our dependence on the MEDITECH system an important component to help us realize that goal, we needed a solution we could depend on," stated Anker Anderson.

## **Solution**

### **Choosing a Systems Integrator**

A critical component to the project's success was integrating the various technologies and technology partners involved in the solution as well as managing the process in conjunction with the hospital's IT staff. Huntington chose JJWild as the primary integrator because of their extensive experience helping MEDITECH hospitals design and implement backup and recovery solutions and their strategic partnerships with many of the industry's leading technology providers. JJWild partnered with BridgeHead Software, EMC, and HP to implement Huntington's solution.

JJWild worked directly with Anker and acted as the single point of contact throughout the entire project, orchestrating the efforts of all the technology partners. Anker felt that "JJWild's expertise and strong relationships allowed them to manage the complexities of the project and coordinate the efforts of BridgeHead, EMC, HP, and MEDITECH to create a fully integrated solution."

### **Creating the Implementation Team**

JJWild assembled its team of design and network engineers, technology consultants, application consultants, and a project director to design, test, validate, and implement the project to meet Huntington Hospital's timeline and expectations. The project team involved as many as 30 individuals at different stages of the implementation, all managed by JJWild's project director, Rob Goodlad.

"It was critical that we had the right people with the right expertise in place," said Rob. "We needed to take an in-depth look at their existing applications, processes, and technologies and properly align them with the new self-hosted disaster recovery solution. We leveraged the expertise throughout JJWild and our technology partners, and worked side by side with Huntington Hospital, keeping them informed and engaged every step along the way".

### **Designing the Plan**

JJWild facilitated the project kick-off meeting with the entire JJWild project team, technology partners, and Huntington Hospital's IT staff. The key components of the

implementation involved infrastructure installation and integration, process realignment, network integration, offline testing, validation, and live implementation.

The team's most critical objective was to gain a full understanding of Huntington's overall goals and expectations and develop an IT plan for the infrastructure solution that would address hardware, software, and integration components. JJWild delivered the infrastructure design document shortly after the kick-off meeting.

### **Integration, Installation, Testing, and Validation**

JJWild coordinated the efforts of the technology partners and Huntington Hospital's IT staff to install, integrate, and test the physical infrastructure and connectivity of the two identical data centers. All hardware testing and network validation were performed prior to installation to ensure a smooth implementation at Huntington.

One of the greatest challenges addressed by JJWild's implementation team was to map out a plan that would enable the redundant data centers to be tested offline within a "real world" network environment that simulated the complexities of Huntington's MEDITECH infrastructure. The JJWild team, in conjunction with Anker and Huntington's IT staff, installed the MEDITECH System and BridgeHead's Integrated Serverless Backup and Integrated Disaster Recovery technology in the data centers and tested simulated disaster scenarios and planned/unplanned downtime situations to validate failover capabilities.

### **Process Realignment**

JJWild worked closely with Huntington's IT staff to gain an in-depth understanding of existing processes and how they needed to be realigned with the new disaster recovery solution. Together, they transformed existing processes and designed new procedures that would ensure system availability during failover or alternation between one data center to the other.

## **Results**

### **Live Implementation**

Upon completion of the final testing and validation, the team developed a Go Live plan. The implementation goal was to migrate data and have the two redundant data centers fully functional and online in 12 hours or less to minimize end-user downtime and disruption to hospital operations.

With the entire implementation team at the ready, either on-site or standing by on the telephone, the data centers were brought online. Huntington Hospital's self-hosted disaster recovery solution was successfully implemented within the expected time frame and to the hospital's expectations. "JJWild worked with us as a true partner," stated Anker, "orchestrating a disaster recovery solution that not only benefits our clinicians and IT staff, but our patients as well."

Shortly after Go Live, Huntington successfully put their disaster recovery solution to the test and successfully failed over to their secondary data center in a planned outage after applying all current Microsoft patches. The process to complete the fail over was executed as planned and took only one hour, significantly exceeding Huntington's goal of four hours.

With their state-of-the-art, robust, self-hosted disaster recovery solution implemented, Huntington is already working with JJWild and their other partners as to actively pursue additional strategies to enhance their Healthcare Operational Continuity readiness. They have begun to embark on the implementation of a managed disaster recovery solution to further protect them from regional disasters as well as high availability computing systems to further minimize planned and unplanned downtime.