SISU MEDICAL SOLUTIONS
Healthcare IT service provider transforms business with EMR-as-a-Service

OVERVIEW
SISU Medical Solutions provides rural and community hospitals with access to advanced electronic hospital and practice management solutions that might not otherwise be available to these healthcare providers due to limited budgets and resources. The company is based in Duluth, Minnesota.

BUSINESS CHALLENGES
SISU had grown from providing IT support services for a single hospital to supporting 17 rural and community hospitals. As the local healthcare market evolved, community hospitals were merging with larger health systems, shrinking the number of healthcare providers in the cooperative.

As SISU began its IT transformation, the organization needed to develop new avenues for growth including enhanced IT-as-a-Service offerings for clinical and business requirements, but its IBM storage area network (SAN) was unreliable and limited the organization’s ability to expand.

After thoroughly evaluating its options, SISU chose to standardize on EMC for all of its storage, backup, and recovery needs in order to advance its vision for cloud-enabled services.

Scott Lee, SISU’s chief executive officer, explains, “Because the applications we support are critical for hospital efficiency and effective patient care, high-performing data storage and protection of vital medical records are front and center priorities for us. EMC provided us with a complete suite that addresses our immediate needs for performance, reliability, security, and protection while enabling our growth.”

SOLUTIONS
To optimize storage performance and utilization, SISU Medical Solutions implemented EMC® VNX® and EMC VNXe® unified storage. The EMC IT infrastructure supports SISU’s full line of hosted applications including MEDITECH HIS, LSS Data Systems Medical and Practice Management (a wholly owned subsidiary of MEDITECH), GE Centricity electronic medical records (EMR), eClinicalWorks EHR and practice management, and Epic clinical systems.

To protect patient-critical data hosted at its data center, SISU relies on an integrated EMC backup and recovery solution comprised of EMC Data Domain® deduplication storage systems, EMC NetWorker® unified backup and recovery, and EMC RecoverPoint™ remote data protection. The service provider also uses EMC Avamar® deduplication backup software and system to provide backup-as-a-service to clients. Avamar provides SISU the ability to back up customers’ virtual environments, and easily restore them into its environment in the case of a disaster.

Using VMware® vSphere™, SISU has virtualized 85 to 90 percent of its infrastructure, including its MEDITECH environment.
Results

- Enabled transformation into an IT-as-a-Service provider for healthcare
- Provided end users with a significant increase in speed and performance for MEDITECH
- Achieved a 98.9 percent deduplication rate for MEDITECH data
- Improved recovery times and reduced time to backup applications
- Enabled robust disaster recovery for virtualized MEDITECH environment

DRIVING NEW GROWTH OPPORTUNITIES

With EMC, SISU has transformed its business by creating new opportunities for growth that include for-profit cloud services such as EMR-as-a-service, backup-as-a-service and, soon, analytics-as-a-service running on EMC Greenplum®. By leveraging VNX and VMware, SISU has been able to execute its strategy of moving from a cooperative to multi-tenancy model.

Bill Sislo, SISU’s director of technical operations, comments, "VNX and VMware provide the increased redundancy, agility, and performance we need in our new IT-as-a-service model. We’ve noticed a performance increase where it really matters—the end users. Customers immediately began reporting significant speed increases with the MEDITECH applications. The quality of the EMC systems is second to none—really flawless. There has been no downtime."

The VNX and VMware infrastructure provides a cost-effective way for SISU to provide services to its hospital and physician practice customers. By efficiently moving and rebalancing virtual resources running MEDITECH and other clinical applications, the company is maximizing value and the quality of patient care delivery for its clients. "Aggregating our services and support across multiple enterprises in a streamlined, virtualized infrastructure provides our clients with substantial economies of scale and cost savings,” Sislo says.

"And because EMC storage, backup and recovery, and VMware solutions are so well integrated, it takes less time to manage our infrastructure," he continues.

“EMC is extremely knowledgeable about MEDITECH and designed a lot of our solution. As we continue to evolve our infrastructure, we can turn directly to EMC for first-hand knowledge and expertise.”

Scott Lee
Chief Executive Officer at SISU Medical Solutions

INTEGRATED PROTECTION OF PATIENT DATA

With quality of patient care so dependent on its cloud services, SISU has transformed backup and recovery, moving away from tape to an automated solution.

"With tape, we could only back up once each day,” says Sislo. "Now, by using Data Domain, NetWorker, and RecoverPoint, we're making cuts every hour. That means we can also go back through the backup data hour by hour if a recovery is needed." He continues, "With the EMC solutions, backup times have been reduced and we’re seeing a 98.9 percent deduplication rate of MEDITECH data through Data Domain. Our backup efficiency and reliability have improved dramatically thanks to EMC."

ENSURED ACCESS TO CRITICAL MEDICAL INFORMATION

SISU is enabling more robust disaster recovery by leveraging EMC RecoverPoint with MEDITECH’s Integrated Serverless Backup (ISB) and Integrated Disaster Recovery (IDR) processes to replicate data from the primary data center to a remote facility.
EMC products’ integration with VMware also plays an important role in disaster recovery by allowing virtual machines to be moved efficiently to the remote site where they can be available at a moment’s notice.

“Resiliency is critical to moving forward with our cloud service business model,” notes Lee. “Integrated replication technologies from EMC and VMware that are certified with MEDITECH are paramount for maintaining an environment where physicians and clinicians can still access critical medical information even when systems go down.”

STRATEGIC PARTNERSHIP FOR GROWTH
SISU has come to rely on EMC as a strategic partner in enabling the transformation and growth of its business. Key factors for this continued engagement are EMC’s integrated solutions and strong partner relationships with VMware and MEDITECH.

“Storage, backup, and virtualization are all wrapped together, so we only need to make one call to EMC to get consistent, responsive customer support from engineers with broad technical expertise,” remarks Sislo. “That makes it a lot easier for us to get our jobs done without spending a lot of time chasing down multiple vendors.”

“Our technical team works very closely with EMC’s MEDITECH experts to quickly identify and resolve any issues,” Lee adds. “The beauty is that EMC has been a long-standing partner with MEDITECH, so the technical integration is very tight. EMC is extremely knowledgeable about MEDITECH and designed a lot of our solution. As we continue to evolve our infrastructure, we can turn directly to EMC for first-hand knowledge and expertise.”

CONTACT US
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