

OAKLAWN HOSPITAL RESOLVES 3 BIG CHALLENGES WITH 1 SOLUTION

Oaklawn Hospital was seeing dramatic increases in its PACS-IW medical image system and the associated database. Storage requirements were being compounded with increasing amounts of data, and the cost and complexity of maintaining the current disaster recovery archive was increasing daily. Oaklawn wanted to reduce these costs while assuring security, privacy compliance and fast restores in the event of a disaster.

Oaklawn selected the Nexsan Assureon[®] for its enterprise-class manageability, scalability and cost efficiency but was pleasantly surprised when the solution not only met the hospital's archiving needs but also delivered exceptional performance to meet backup and disaster recovery requirements. As a result, Oaklawn addressed three problems with a single solution to optimize its PACS-IW storage.

ENVIRONMENT

- GE Centricity PACS-IW (Picture Archiving and Communication System) for medical images
- Nexsan Assureon® secure disk archive
- Nexsan Assureon Benefits
- Reduced long-term costs
- Resolved three challenges with one solution: archiving, data protection and disaster recovery
- Simplified management with self-auditing and self-healing file management
- Assured data security and privacy compliance
- Affordable enterprise-class archive also provides low-cost, remote disaster recovery



CUSTOMER OVERVIEW

Oaklawn Hospital is a highly regarded regional healthcare organization licensed for 77 acute care beds and a 17-bed inpatient psychiatric ward. It was founded in 1925 as a 12-bed hospital in a residential home, funded by a group of visionary philanthropists. Since its inception, Oaklawn has continued to be an independently owned non-profit hospital, with its main campus residing on the same site as the original hospital, providing facilities, equipment and technology that are usually only found at larger healthcare systems.

The hospital is renowned for advancing medicine and providing compassionate, personal care. It services Michigan's Calhoun County and parts of Branch and Eaton counties. With an active, courtesy and consulting medical staff of more than 150 physicians representing 30 specialties, Oaklawn Hospital is one of the region's largest employers and was one of seven Michigan organizations recognized in 2008 by Modern Healthcare's first national list of the "Top 100 Best Places to Work in Healthcare." The hospital has also been recognized as a "Magnet Hospital" by the American Nurses Credentialing Center (ANCC) for its achievement in meeting stringent criteria for nursing professionalism, teamwork and the highest standards in patient care.

BUSINESS CHALLENGE:

Cut the Costs of PACS Archiving and Disaster Recovery while Assuring Security and Patient Privacy

Oaklawn stores volumes of medical images using its Centricity PACS-IW imaging system. The PACS can deliver timely and efficient access to images, interpretations and related data, thus eliminating the need to manually file, retrieve or transport film jackets for CT scans and MRIs. The system also uses a secure network to transmit patient information and long and short-term archives for the storage and retrieval of images and reports.

Although Oaklawn's PACS breaks down the physical and time barriers associated with traditional film-based image retrieval, distribution and display, it required a solution that could meet their current storage needs with the scalability to meet their future growth. What's more, their data had to be efficiently archived and easily recovered in the event of a disaster. Alternative considerations for managing this volume of archived data were costly and presented management challenges which the hospital sought to mitigate. Oaklawn wanted to implement an on-premise storage archive and disaster recovery solution that was easy to use, lowered storage costs and ensured the hospital complied with privacy regulations and policies.

SECURE, SCALABLE, COST-EFFECTIVE

Assureon is known for its next generation security measures, but when you look ‘under the hood,’ Assureon reveals a full suite of features.

MANAGEABLE

- Simple to install and use
- Automated audits of file availability, integrity and access
- Automated file fingerprinting
- Automated file ingestion, retrieval, audits, de-duplication and replication without user intervention
- Quick and easy search with near instantaneous retrieval

SCALABLE

- No object limit; scale without performance penalty
- Scale performance and capacity independently
- Scale from a few terabytes to multiple petabytes
- Scale from a few terabytes to multiple petabytes

GREEN

- Energy saving AutoMAID® reduces energy costs up to 60%
- “Speed with Green” — near instant-aneous response from idle state
- Green Maximizer automatically migrates files to ‘green, greener, greenest’ states of energy savings based on file usage

“We wanted to be in control of our own destiny when it came to our PACS archive so that we could reduce costs and increase our efficiency,” said Natalie Spivak, information systems director, Oaklawn Hospital. “We already had an infrastructure in place, including an offsite disaster recovery location. We just needed to identify the right solution that would give us the archiving performance and scalability we needed at a price point that would suit our budget.”

Oaklawn also needed a solution that could reduce recovery time in the event of a disaster. Extended downtime was not acceptable, since PACS images and data are critical in the event of a patient emergency.

“Other solutions we looked at force you to recover all images in their entirety before the PACS system can be brought back online following an outage or disaster,” said Spivak. “Having to recover tens of thousands of images across a standard IP network could take several days. This would mean that our PACS system would have to remain offline for an extended period of time. We simply could not afford that amount of downtime.”

SOLUTION:

Nexsan Assureon Delivers Three Solutions in One for Reliable Data Protection, Efficient Archiving, and Rapid Recovery

After reviewing its options, Oaklawn selected Nexsan Assureon to meet its archiving and disaster recovery requirements. The powerful archiving solution is certified by GE for use in Centricity PACS-IW environments and enabled Oaklawn to easily configure its desired solution for archiving and disaster recovery at a remote building site that is connected to the main hospital GE Centricity PACS-IW system over an IP network. PACS images are stored on local disks at the primary hospital site and are also replicated by the Assureon agent and sent to the Assureon unit at the remote site for archiving and disaster recovery.

Oaklawn received a pleasant surprise when it discovered that Assureon could also help with the hospital’s backup needs. The new solution enables Oaklawn to back-up its PACS-IW database and replicate it hourly to the Assureon unit at the remote site.

Assureon also offers a unique “shortcut” feature that does not require that all images be restored in their entirety before the PACS system can be brought back online. Instead, Assureon can restore just the shortcuts to the PACS system so that the hospital can have access to all the images in just minutes.

“With the Assureon shortcut feature, images are restored to the PACS-IW system as they are needed by the doctors,” said Spivak. “As a result, recovery occurs on an ‘as needed’ basis, which allows us to recover from any disaster and be back in operation in minutes rather than hours or days. This is a truly patient life-saving feature for us.”



Our Assureon solution enables us to do more with less,” said Spivak. “We have increased our efficiency and responsiveness while continuing to ensure data security and patient privacy. But even more importantly, we know that when an emergency strikes we can quickly deliver the critical images our doctors need to assure high-quality patient care.”

NATALIE SPIVAK

INFORMATION SYSTEMS DIRECTOR
OAKLAWN HOSPITAL

RESULTS:

Reduced Operational Costs, Streamlined Data Protection and Recovery Assurance in Just Minutes

Assureon enabled Oaklawn to achieve all of its PACS data protection goals and more. Furthermore, having internal control over its archiving solution has given Oaklawn increased confidence in the security and privacy of its PACS solution. With Assureon, the hospital has lowered operational expenses by managing archiving and disaster recovery processes in-house while also dramatically improving protection of its PACS data through hourly backup replications that were not possible with other technologies. Finally, Oaklawn can now assure that in the event of an emergency, critical patient images can be restored within minutes— something no other solution could deliver.

For Oaklawn, Assureon delivers the following advantages:

- **GE Centricity PACS-IW certification** – Assureon stores files, images, recordings, web pages and more as objects with a unique universal identifier. This approach has been validated by GE Healthcare for use with its Centricity PACS-IW system.
- **Assured security and auditing** – Assureon establishes an unalterable audit trail for the life of the image or data file. Every time the file is accessed, Assureon retains a record of who accessed the file and when.
- **Automated data security and privacy compliance** – Assureon offers automated integrity management and file immutability technology that protect organizations against accidental or unauthorized file deletion. This ensures that files can be retained for regulation-compliant or flexible time periods.
- **Automated management with self-auditing and self-healing file management** – Assureon continually monitors files for fingerprint discrepancies, protecting them against tampering, viruses and corruption as well as accidental or deliberate deletion or theft. If discrepancies are discovered, Assureon notifies the administrator and self-heals the file.

ABOUT IMATION

Imation is a global data storage and information security company. Imation’s Nexsan portfolio features solid-state optimized unified hybrid storage systems, secure automated archive solutions and high-density enterprise storage arrays. Nexsan solutions are ideal for mission-critical IT applications such as virtualization, cloud, databases, and collaboration; and energy efficient, high-density storage for backup and archiving. There are more than 11,000 customers of Nexsan solutions worldwide with more than 33,000 systems deployed since 1999. Nexsan systems are delivered through a worldwide network of cloud service providers, value-added resellers and solutions integrators. For more information, visit www.imation.com/nexsan.