

ASSUREON® MEDICAL IMAGE ARCHIVE

ACCELERATED CARE

Through the adoption of Picture Archiving Communications Systems (PACS), imaging departments have digitized almost every aspect of patient care. The volume of data generated by these systems has created an impasse for administrators who need to control the costs of storing and protecting this data while improving performance and availability. Assureon integrates Nexsan software innovation with unique hardware designs to optimize both the reliability and simplicity of the system. Assureon makes managing 100 million files as easy as managing 100 files.

ASSUREON® SECURE ARCHIVE FOR PACS

Assureon is an integrated medical image archive which is fully developed, manufactured and supported by Nexsan. Assureon combines self-managing and self-healing properties with unmatched storage density and affordability to fit any budget. All Assureon features are provided out-of-the-box and do not involve added costs or the third party add-ons required by alternative archive solutions. A robust data protection feature set ensures absolute file integrity and availability for all data without the need to interact with the system. Assureon provides remote site replication along with redundant hardware and data mirroring to ensure continuous access to data.

Nexsan uniquely justifies the use of disk storage in an archive environment with exclusive AutoMAID® power management technology, which automatically governs disk spin-down through deeper and deeper levels of sleep. AutoMAID uniquely delivers “speed with green,” by providing up to 60% energy savings without compromising disk storage performance. After the first I/O request is served, every subsequent I/O is served at full speed until user-defined periods of inactivity trigger drive migration through different levels of AutoMAID.

DATA PROTECTION

Original Study Preserved: Whenever a study is written, Assureon immediately creates a digital fingerprint for both the original file and the associated metadata. These secure copies are then leveraged to preserve image integrity for the duration of the retention period.

Automated Integrity Audits: Assureon protects data from viruses, corruption and incidental or intentional tampering. On a regular basis, Assureon audits validate the integrity of all archived data by comparing the files stored in the archive to the original fingerprint. If any discrepancies are discovered, Assureon automatically restores the study to the original state and logs the action. This ensures the data stored is the data received.



HIGHLIGHTS

- **Simple to Manage:** Self-managing, self-healing technology automates system and data management
- **Data Integrity Preserved:** Recurring file integrity audits regularly validate the authenticity of all data
- **Data Availability Protected:** Continuous serialization audits validate data availability
- **Uninterrupted Access:** Remote replication with failover ensures continuous operation during disaster or outage
- **File Access Audits:** All attempts to access data, whether successful or unsuccessful, are recorded
- **Reduced Complexity:** Disk-based performance and reliability relieves dependence on tier-2 storage. Assureon's self-management eliminates operational overhead

LOW TOTAL COST OF OWNERSHIP

Operational Overhead Minimized: The labor and cost associated with information and system management is reduced significantly with Assureon's fully automated management feature set. Both the system itself and the data contained are fully self-managed with intelligent alerts and reporting to keep IT informed.

Secondary Storage Costs Reduced: Assureon recall performance and high reliability provides more flexibility for facilities to reduce overall dependence on secondary storage. By reducing the amount of data retained on tier-2, imaging departments are able to reduce both the costs of expanding hardware and the related operational expenses of managing these systems.

Simplified Data Migration: Assureon integrates with applications transparently, providing facilities with the freedom to more effortlessly migrate data in the future.

Data Availability: Regular Assureon availability audits continuously validate the presence of all data. If any files are missing, Assureon will automatically restore the study and log the action.

Integrated System Protection: Hardware layer protection prevents the deletion of RAID sets or volumes.

DISASTER RECOVERY

Real-Time Replication: Whenever a study is written, Assureon immediately replicates both the file and associated metadata to the remote site. Continuous file audits protect against corruption during replication.

Failover to Remote Site: In the event of a failure at the primary site, Assureon will failover to the remote location enabling the facility to continue operations without interruption.

Automated Restore: When a primary site is restored, Assureon self-healing technology automatically audits all data and settings to ensure consistency of data, policies and settings between both sites.

Streamlined Disaster Recovery and Data Migration: Following a major disaster, data migration is simplified through automated file auditing and fast shortcut restore. Assureon enables restoration of data shortcuts at a rate of 800/sec.

*Above features require replicated configuration

PRIVACY PROTECTION

Privacy Protection: Assureon protects the privacy of patient data through user access authentication. This ensures that data is quickly available only to authorized users.

File Access Audits: Assureon records all attempts to access data, whether successful or unsuccessful. All file activities are recorded to provide absolute certainty that privacy has not been compromised.