N=XSAN

ASSUREON
ARCHIVE
STORAGE
DATA SHEET

There is some data that is too important to lose, too private to be seen and too critical to be tampered with.

OVERVIEW

The Nexsan Assureon™ archive storage system is ideal for any organization that needs to implement storage optimization, regulatory and corporate compliance, or the long-term archiving of unstructured data . Users do not need to learn anything new, change how they access data or learn any new processes. Assureon archive storage systems can house from 3TB to multiple PB of unstructured data.

Assureon archive storage systems are very popular in the financial and healthcare industries; federal, state and local government organizations; as well as call centers, video surveillance and organizations with multiple remote offices.

STORAGE OPTIMIZATION

Up to 80% of data on primary storage is unstructured. Due to the nature of unstructured data, it either never changes or changes infrequently. This data can be easily and transparently offloaded by an IT generalist onto a cost-effective Assureon archive storage system without any disruption to ongoing operations. In addition to freeing up space on primary storage for active data, the data on Assureon is automatically protected from day one. Assureon-protected data does not need to be repeatedly backed up during weekly full or daily incremental backups, dramatically reducing the size, time and cost of the backup process. The data on Assureon is better protected and instantly available. The space on primary storage can be freed up immediately once data is protected by Assureon. Data can also be left on primary storage for periods of high access then replaced with a shortcut or deleted after a set period of time.

REGULATORY AND CORPORATE COMPLIANCE

Assureon is ideal for organizations that must comply with governmental regulatory requirements including HIPAA, GLBA, Sarbanes-Oxley, Federal Rules of Civil Procedure (FRCP), SEC 17A-4 and PCI DSS. Assureon exceeds even the strictest regulatory requirements for data integrity, protection, privacy, security, longevity and availability with full audit trails. Additionally, Assureon makes it easy and automatic for organizations to adhere to their internal guidelines for data retention, deletion, privacy, protection and risk mitigation.

ASSUREON FEATURES

INTEGRITY

- **Fingerprints** – Each time a file is saved, a unique fingerprint is generated using both an MD5 and SHA1 hash of its contents and metadata, so history and contents cannot be altered after the fact (WORM storage)

- **Serial Numbers** – Each file is assigned a serial number which is used to ensure no files are missing or inappropriately added

- **Secure Time** – Tampering with the system time clock is prevented by using a global, redundant, secure time source (Stratum Level I hardware time sources

- **Two Copies** – Each file and its fingerprint are stored twice in the Assureon. The second copy is either stored in a separate RAID disk set in the same Assureon or on a remote Assureon

- **Data Verification** – Files are continually verified against their fingerprints, repaired using their copies and safeguarded by RAID disk arrays for days or decades

SCALABILITY AND HIGH AVAILABILITY

- **Remote Replication** – Two active Assureon systems can continuously replicate to each other to protect against a site failure

- **Failover/failback** – Native active/active replication protects against site disasters with automatic read failover and manual write failover

- **Performance & Capacity** – Scale capacity up to multiple petabytes and add performance by using multiple Assureon archive storage systems together

- **InfiniBand** – Optional High Speed Assureon with InfiniBand connectivity provides blazing-fast retrieval of data from the Assureon archive

REMOTE AND BRANCH OFFICES

It can be particularly challenging to meet corporate compliance guidelines for data that resides in remote or branch offices, which often have little or no onsite IT personnel. The easiest solution to this challenge is to place Assureon at corporate headquarters with an Assureon Edge NAS in each remote office, providing NFS and CIFS shares. All data stored on the branch office Assureon Edge is securely transmitted to the Assureon archive storage system at corporate to be archived. Alternatively, the Assureon Client is installed on branch office Windows 2003 or 2008 servers where it archives selected directories and files by transmitting them to Assureon at corporate headquarters

LONG-TERM ARCHIVE

The Assureon archive storage system stores data for days or decades with unsurpassed integrity and protection in an easy to administer system that resides on-premise, in the cloud or both. High availability is built into each replicated Assureon system. High speed InfiniBand connectivity is available as an optional add-on for ultimate performance. Each file is fingerprinted and stored twice within Assureon on separate RAID disk sets, or, better yet, on separate Assureon archive storage systems that are geographically separated. Background data integrity auditing uses the fingerprints and duplicate copies to ensure authentic files for days or decades without the need for administrative intervention. Self-healing integrity checks and file availability audits along with digitally signed metadata files and third-party secure time stamps work together for the utmost protection of files within Assureon. Together, this applies a verifiable chain of custody to each data set throughout the retention period.

CLOUD STORAGE

Assureon archive storage systems are designed with multi-tenancy in mind. Online archive storage providers utilize security features such as certificate-based authentication and separate AES-256 encryption for each cloud services customer. Additionally, each file is individually encrypted with its own AES-256 key to provide the strongest separation and security of data for each client. Standard reports keep track of storage usage for each cloud services customer and enables easy import into their billing systems.

ABOUT NEXSAN

Nexsan is a global leader in storage, back up and data management solutions that are focused on seamlessly and securely enabling a connected workforce. Its broad solution portfolio empowers enterprises to securely store, protect and manage valuable business data – allowing users to sync, share and access files from any device, anywhere, anytime. www.nexsan.com