

Assureon



Secure Content-Addressable Storage(CAS) Solution

Assureon™ is an intelligent and secure networked storage system designed to store, manage, protect, dispose of, and provide fast, easy access to fixed content/compliance information in a cost-effective manner. Data within an organization falls into two categories; dynamic - which is typically held in databases and subject to constant change, and static - which is reference or fixed content data, that changes infrequently and typically has a long life and high value. Reference data takes many forms, such as office documents, email messages, contracts, employee information, medical records and images, surveillance video, media content, and more.

Numerous studies by industry analysts agree that reference data is the fastest growing segment of the storage market. The Enterprise Strategy Group predicted fixed content/reference data growing at a compound annual rate of ninety-two percent in their research report, *The Next Wave: A Snapshot*. Existing storage architectures are not optimized for the unique conditions and requirements reference data demands, and the scalability necessary to handle this phenomenal growth.

Assureon is the right solution for organizations that are faced with the challenge of storing and managing an ever increasing amount of reference information and want to do so in a cost-effective way. **Assureon** simplifies and reduces the personnel and management costs associated with the long-term retention of reference information.

Assureon is for businesses that need to comply with existing regulations or new laws addressing the protection, management and disposition of information.

Assureon enables business practices that reduce the risks associated with electronic discovery requests and potential litigation. The unprecedented flexibility and security of **Assureon** empowers organizations that are implementing corporate governance practices for the long term management of their digital assets. There are significant TCO (Total Cost of Ownership) savings to be made within every business when using highly managed "hardened" information storage as provided by **Assureon**.

ASSUREON: THE NEXT GENERATION OF SECURE ARCHIVING

Assureon is based upon a combination of CAS (Content Addressable Storage) with advanced 256-bit encryption and other security and data protection technologies. CAS technology produces a unique file identifier for all objects, based on their content. **Assureon's** 2nd generation object storage model stores files, images, recordings, web pages, etc, as objects with a secure and unique universal identifier. This approach differs from traditional file system models, where an application or user names the file and then places it in a hierarchical file system. Traditional file system models suffer from a lack of scalability and a high management cost. In an object model, the archived physical object is completely separate from the logical location or application. With **Assureon**, administrators can now be relieved of performing typical storage housekeeping tasks, such as formatting file systems, creating volumes and binding LUNs).



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CAS Features

- **Single Instance Store:** Assureon's CAS technology enables single instance store, whereby only one copy of a data object is kept. Assureon will de-duplicate objects based on their CAS address and store only one copy, resulting in less storage needed, reduced network bandwidth and less overall cost.
- **Authentication and Integrity:** Assureon technology verifies and reports that all assets and asset metadata has not been tampered with or corrupted.
- **Immutability:** An object placed under Assureon management cannot be changed or erased until the end of its retention period.
- **WORM functionality:** Assureon provides non-erasable, non-rewritable functionality
- **Access Speed:** Assureon enables immediate online access to reference data as opposed to traditional offline storage.
- **Information Assurance:** Assureon technology ensures that information is authentic, available where and when needed, and accessed only as authorized.
- **File Level Retention Enforcement:** Assureon enforces retention policies at the object level allowing different retention periods to be placed on files based upon their importance to an organization.
- **Assignment of Retention Periods:** Assureon will assign a retention period based either upon a 3rd party application (ex. document management or email management package) or Assureon can place the appropriate retention policy based upon its own file watcher program.
- **Audit Trails for Compliance:** Assureon meets many requirements of the numerous compliance laws and privacy regulations including:
 - Digital Time Stamped Records - a requirement of FDA regulations
 - Serialization - a requirement of SEC regulations.
 - User Access Trail - a requirement of HIPAA
- **Military-strength deletion / disposition:** At the end of a retention period objects are scrubbed through an automated seven step process once authorized by the appropriate administrator. Additionally, the keys to deleted encrypted data will be "scrubbed" providing a "double" delete function.
- **Security and Data Protection:** 256-bit AES encryption can be placed on all or selected assets under Assureon's management. Tamper-proof time stamping of assets adds an additional layer of security.
- **Business Continuity Protection:** Assureon supports remote replication of assets across the WAN and can be configured to keep duplicate files at a remote site.
- **Media Independence:** In addition to disk, Assureon supports offline media such as tape and optical allowing user's to benefit not only from the high level of security provided by the encryption on their tapes, but also from the CAS single instance store technology, which reduces storage consumption and costs.
- **Selective Disposition on Offline Media:** Until now, objects backed up to offline media such as tape or optical disk have been impossible to delete at the individual file level. Assureon delivers higher levels of security by providing crypto key deletion of these files. At the end of a retention period or as authorized in the event of a security breach or attack, Assureon will scrub encrypted files online as well their associated encryption keys which are stored in multiple, redundant locations. Once a key is destroyed the file information, either online or on removable media, cannot be read.
- **Enabling Information Lifecycle Management (ILM):** Assureon is a powerful tool that automates the operational steps (Classify, Place, Protect, Archive, Access, Expire) of the lifecycle process for reference data within an organization.
- **Fail-safe CAS Technology:** Assureon utilizes a dual cryptographic process (hashing algorithm) to create its unique CAS address, which ensures the integrity of the file and no loss of information through potential data collisions.



ASSUREON™