OpSusArchive

Healthcare Data Management

The Challenge: Maintaining Compliance with Storage Retention Mandates

As health records are increasingly digitized, the requirement to maintain patient records in accordance with state retention laws is becoming ever more difficult and costly. The period of time for which records must be kept is growing, the amount of data within each record is increasing, and the security with which patient records are maintained has never been more important.

While the requirement to keep and secure these records does not diminish with time, the need to access them does. It is impractical to store older records on tier 1 storage which is expensive and built for high performance. Yet medical records must still be accessible. The challenge then becomes maintaining readily accessible storage for large amounts of variable data in a cost-effective way.

The Solution: OpSus Archive

OpSus Archive is a cloud-based storage solution built for healthcare data archiving. OpSus Archive provides reliable, geographically dispersed object storage for healthcare data management. Optimized for MEDITECH Scanning and Archiving (SCA) and Picture Archiving Communication System (PACS) studies, OpSus Archive is also able to provide low cost, reliable, long-term storage for any enterprise data which needs to be retained but not regularly accessed (e.g. video surveillance).

Object Storage

Traditional block and file storage systems are designed for limited amounts of structured data. Block storage allows applications access to the physical storage medium in the form of predesignated, uniform segments of space. This results in high performance but complex management. File storage applies an abstracted mapping system to the physical medium. This comes with a slight performance overhead but simplifies management while allowing files to be edited granularly. Block and file storage are high performing but difficult and expensive to scale.

Object Storage is designed for large quantities of unstructured data. It consolidates all aspects of a file (data, metadata, object ID, attributes) into one object and stores it on a flat, single namespace with a globally unique identifier. Because of this consolidation, files in an object store must be entirely overwritten for every edit. Access is reliant on applications having specific programmatic interfaces. Object storage does not rely on traditional RAID type data protections.

Object storage forgoes performance for optimized simplicity and scalability — all at a low cost.

Highly Available

OpSus Archive employs forward-checking error correction (FEC) erasure coding to achieve high levels of durability and resilience with less overhead, reducing costs without sacrificing availability.

Geo-Dispersed

OpSus Archive disperses data across multiple tier 4 data centers for increased availability and security. This provides site loss tolerance in the event of a disaster at any of the data centers.

Compliant

OpSus Cloud Services are HIPAA and HITECH compliant, SSAE 16 SOC I Type II certified, and have successfully completed MEDITECH's Infrastructure and IT Process Audit, achieving a 5-star rating and best practice classification from Securance Consulting.

CloudWave

100 Crowley Drive, Marlborough, MA 01752 877-991-1991 gocloudwave.com

Consumption Billing

OpSus Archive customers are charged only for the storage capacity actually being consumed. There is no contracted minimum charge or additional usage fees.

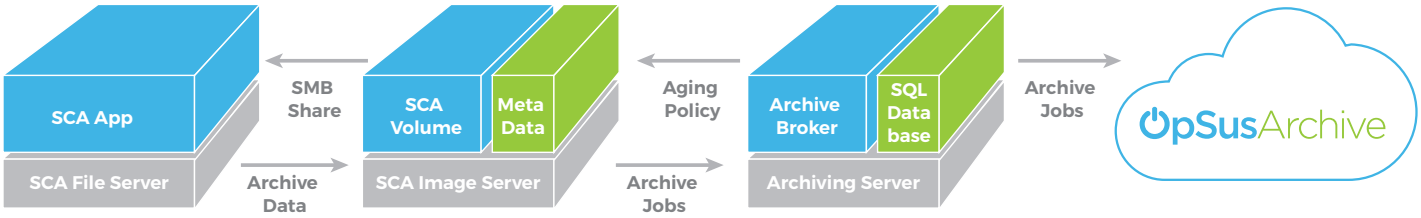
Secure

OpSus Cloud Services are hosted in Tier 4 data centers, as rated by the Electronic Industries Alliance, the Telecommunications Industry Association, and the Uptime Institute. A Tier 4 data center has 2n the required resources for every critical systems element (power, cooling, network, etc). In addition to physical security and durability, OpSus Archive encrypts all ingested data both in transit and at rest. OpSus Archive data encryption requires no key management from the end users, providing security without complexity.

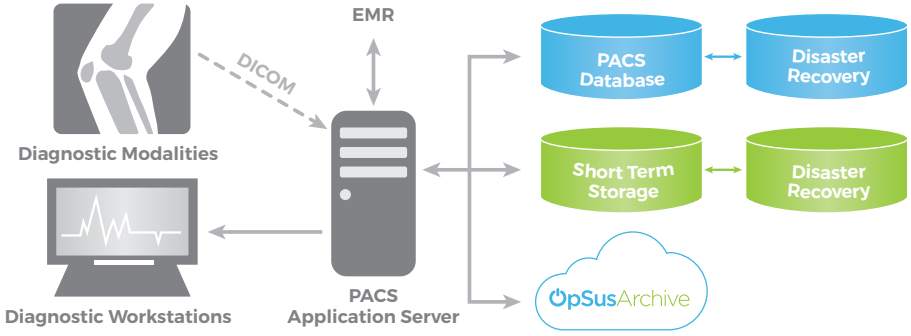
Service Levels

OpSus Archive provides low-cost, scalable target storage for applications capable of writing to either an S3 or an OpenStack Swift API. Applications are given access to a secure, multi-tenant environment where each organization's data is isolated from the data and access of all other organizations. The application seamlessly writes to the OpSus Cloud instead of local storage, with no impact to the end-user.

OpSus archive Plus includes the implementation and configuration of a MEDITECH-compatible archive broker. An archive broker, the application that sits between tier 1 and tier 2 storage, facilitates the archive process by applying policies to automate archiving, resulting in faster reading of data from the archive. The archive broker reads from SMB/CIFS shares and can write to cloud interfaces, effectively eliminating compatibility issues.



Example Architecture: **OpSus Archive for MEDITECH SCA** becomes the repository for permanent storage. The SCA volume retains the production storage where data is being frequently accessed and rewritten. Old files are automatically stubbed and written to OpSus Archive.



Example Architecture: **OpSus Archive for PACS** replaces the long-term storage for studies which are not frequently accessed. These files are pulled back to production storage when access is required, facilitating superior performance.

Partner with CloudWave

CloudWave architects every solution for Operational Sustainability. Scalability, security, and simplicity are at the core of every offering. Moving to the cloud for healthcare data management allows hospitals to focus less on the costs and complexity of data retention and more on the delivery of patient care.

Learn More at www.gocloudwave.com.

CloudWave offers a complete suite of services to provide customers with options for end-to-end EMR/EHR, Imaging, and enterprise systems support and management.

CloudWave

OpSus CloudCare