COHESITY

SOLUTION BRIEF

SmartFiles: Secure Data Vault for Healthcare



Key Benefits

- Unlimited scale for healthcare application data
- Seamless integration with PACS, VNA, EMR, EHR
- Cyberthreat protection, detection, and recovery
- Reliable HIPAA compliance
- Reduced costs with superior storage efficiency
- Powerful search and analytics tools
- Flexible hybrid cloud data mobility
- Software-defined, unified file and object services

The explosion of digital healthcare and medical imaging data is powering improved diagnoses, speeding the testing of new drugs, and uncovering new treatments. To achieve these outcomes, a typical hospital can have over 100 applications in their digital healthcare ecosystem—ranging from patient records in EMR and EHR systems—to medical images like MRI, CT, X-Ray, and mammograms from PACS and VNA systems. Healthcare data is being managed today from many sources across multiple systems, often each with their own silo of storage. Furthermore, the high-fidelity nature of today's medical imaging systems is driving needs for larger storage capacities and perpetually causing costs to skyrocket.

Medical professionals need to correlate and analyze data across all of these different systems to better treat patients. But trying to manage and secure the sheer volume of data spread across all of these sources while maintaining HIPAA compliance has become time-consuming and difficult with traditional storage products. Another major headache for healthcare organizations is that patient data has become a massive target for cyberthreats like ransomware.

Healthcare was one of the most frequently attacked industries in 2022, and Healthcare ransomware attacks have more than doubled over the past 5 years. These attacks caused pandemonium and risks to patient safety—with emergency patients having to redirect to other hospitals, medical records becoming inaccessible, surgeries canceled, tests postponed, admissions halted, 911 services interrupted, dispatch centers having to rely on printed paper for emergency services, and more.

From a regulatory standpoint, sensitive patient medical data must be securely retained for at least 6 -14 years—and in many cases throughout the patient's life. Losing data or allowing unauthorized access can result in patient harm, lawsuits, and fines. Protecting data from these risks has become very challenging and expensive due to the inflexibility and high costs of aging legacy storage silos. Most legacy platforms also lack native search and audit capabilities. This poses huge challenges for complying with retention requirements and data privacy regulations like HIPAA, and for analyzing historical datasets.

The imposed limitations of legacy storage products make it difficult for healthcare organizations to keep up with capacity needs, putting data security and compliance at risk, and creating considerable management complexity. Healthcare organizations realize that there is tremendous opportunity in modern cloud-based solutions, as today's newest healthcare applications and tools can directly read and write from a cloud S3 target. But, many legacy storage products lack these capabilities.

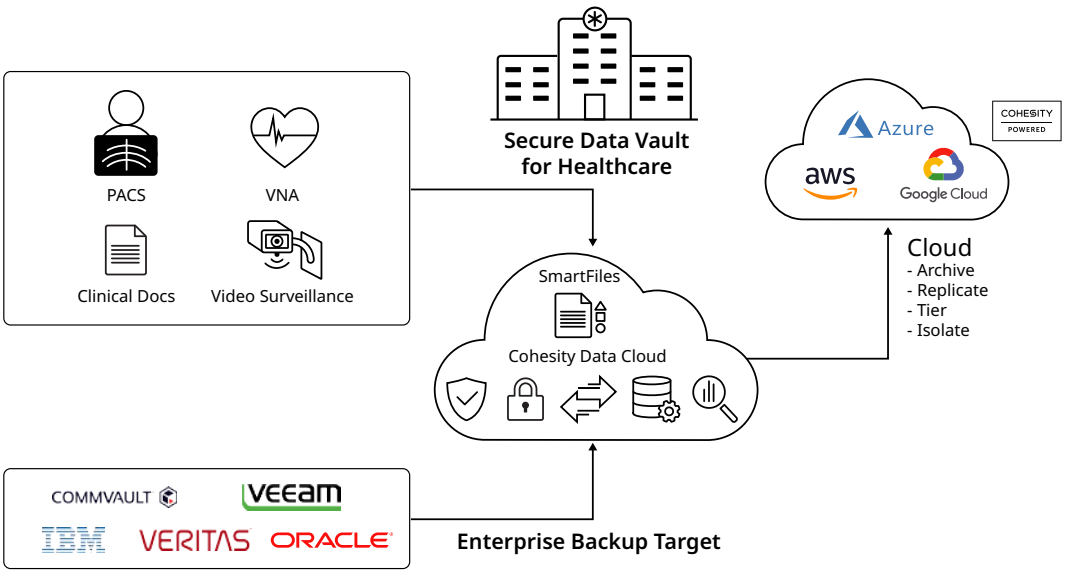

Figure 1: SmartFiles as a *Secure Data Vault for Healthcare* and *Enterprise Backup Target*

Why Cohesity SmartFiles for Healthcare?

Cohesity is a leader in data security and management with comprehensive cyber threat protection and detection, rapid ransomware recovery, and hybrid cloud mobility.

Cohesity SmartFiles offers a scalable and compliant **Secure Data Vault for Healthcare** for medical images and healthcare data with fast retrieval of data on-demand. With the flexibility to tier and archive with unlimited cloud scalability for secure data isolation and ultra-long-term retention, healthcare organizations can significantly reduce costs while maintaining fast local access to their data. SmartFiles protects data against the latest cyberthreats to keep ransomware at bay, with robust compliance features to satisfy regulations like HIPAA and GDPR.

Secure Patient Data

Protect sensitive patient and medical data from cybercriminals. Cohesity offers a multilayered approach to defending digital healthcare data. Unlimited immutable snapshots and DataLock features (WORM) keep data safe by preventing it from being modified or deleted. Based on Zero Trust data security principles, Cohesity's architecture helps mitigate risks from malicious attacks with at-rest and in-flight data encryption, role-based access controls, multi-factor authentication, and quorum approvals to prevent unauthorized administrative changes.

Detect anomalies like ransomware with ML-based threat intelligence and scanning to detect risks, malware, and other indicators of compromise (IOCS) across the digital healthcare data landscape. Additionally, with comprehensive logging of all file operations, healthcare organizations can respond easily to compliance and security investigations related to suspicious user behaviors.

Recover instantly at scale from data outages and attacks, with confidence that the recovery data is clean and free of cyber vulnerabilities. Reduce downtime and help ensure continuous healthcare operations by recovering data quickly to any historical point-in-time.

Intelligent Data Management for Medical Data

SmartFiles delivers the capacity, performance, and scale to help healthcare organizations eliminate data silos with a data security and management platform and unified management console that is ideal for: secure and cost-effective long-term retention of healthcare data, optimizing cost and performance for backups, and streamlining disaster recovery with hybrid cloud data mobility across multiple sites and clouds.

Consolidate data from healthcare applications and medical images from PACS and VNA systems, and medical records from EMR and EHR systems—as well as unstructured data from enterprise backups, video surveillance, archives, big data, and more.

Improve patient outcomes with native search features so healthcare providers can easily correlate and search across medical records and clinical documents to accelerate and improve patient care, as well as quickly respond to compliance and security investigations.

Reduce healthcare IT costs as much as 51% or even more, by consolidating data from workloads common to healthcare, while achieving up to 96x or greater storage efficiency. SmartFiles delivers global deduplication, compression, and small file optimization for superior space efficiency and data reduction. Cohesity SmartFiles significantly reduces your data footprint, lowers operational costs, and minimizes the attack surface to protect your critical healthcare data from cyber threats.

Lower Total Cost of Ownership (TCO) by optimizing cost and performance throughout the digital healthcare data lifecycle. Uncover powerful data insights by analyzing hot, warm, and cold data utilization from third party NAS systems - for policy-based tiering of data to SmartFiles with automated lifecycle management of data to the most appropriate or economical tiers or clouds.

Integrate seamlessly with existing healthcare and backup applications. Future-proof your data and simplify management with unified file and object support for the protocols that your applications and users rely on most - including SMB, NFS, and S3.

Satisfy Compliance with HIPAA and other data privacy regulations like GDPR with secure, long-term, and cost-effective data retention in your location or clouds of choice. Data lifecycle management automation features empower healthcare organizations to avoid compliance violations and costly fines. By economically retaining data throughout the life of patients, or else for specified time periods, SmartFiles ensures that sensitive patient data always remains protected from loss and unauthorized access.

Avoid vendor lock-in for healthcare IT with software-defined hybrid cloud flexibility and the option to deploy on a choice of hardware at the edge, on-premises, or in the cloud. Freedom of choice is paramount to enabling healthcare IT organizations to stay ahead of tomorrow's demands. SmartFiles software-defined hybrid cloud architecture, combined with its intelligent data lifecycle management features, make it effortless to scale and mobilize healthcare data across any on-premises and cloud locations of choice. Powered by a cloud scale architecture with the ability to handle billions of files, SmartFiles compute and storage nodes can be scaled independently with support for heterogenous disk and all-flash platforms.

Keep patient data accessible at the most critical times. In the healthcare industry, loss of data access and system downtime can be catastrophic to patient health and safety. SmartFiles is designed with a highly-available and fault-tolerant architecture to deliver the highest-levels of system and data integrity required in the healthcare industry. Eliminate forklift operations with non-disruptive upgrades to radically simplify future expansions without costly downtime and burdensome data migrations.

Do More With Healthcare Data

Add an extra layer of protection against ransomware for critical healthcare data with Cohesity FortKnox, a highly-secure SaaS-based data isolation and recovery solution that improves cyber-resiliency with immutable copies of data in a Cohesity-managed cloud vault.

Gain the deepest level of intelligent threat protection with Cohesity DataHawk. Further investigate security and compliance events with custom alerting, visualizations, and reporting of user activities - with audit trails for rogue behaviors like mass deletions, failed access attempts, and other possible data exfiltration indicators.

Put your healthcare application data to work and derive new insights with integrated Marketplace apps. These apps run directly on data in-place to: mitigate risk from cyber threats, accelerate content searches, streamline compliance and eDiscovery, detect anomalies, develop actionable insights with analytics, and more – all without requiring extensive infrastructure.

The Smart Choice

Healthcare organizations choose Cohesity SmartFiles because it is the smartest way to optimize cost, scale and efficiency for your unstructured data. It is a simple, singular solution that lets you manage, secure, and do more with your data with next-level software-defined file and object services for the hybrid cloud.

Learn how a healthcare organization avoided paying ransom and lowered their medical imaging costs with Cohesity.

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