Intelligent Data Management and Security for Financial Services

Key Benefits

- Software defined hybrid cloud flexibility
- Unified file and object support
- Massive scale
- Streamlined compliance
- Powerful storage efficiency
- Reduced cost of ownership
- Simple singular interface
- Strong security and resiliency

Situation

The finance industry is leading digital transformation. Data and technology are driving rapid growth in in the industry and financial services organizations are deliberately and aggressively disrupting their own markets. That's because new, agile fintechs are encroaching fast. And they're exploiting data to their advantage. Financial institutions successfully collecting, aggregating, and analyzing data to create superior customer experiences are winning.

However, even as data helps firms introduce new business models and reach more customers in new ways, it also introduces a major challenge: how to efficiently manage rapid data growth while keeping volumes of warm and cold data both accessible and safe? Compliance mandates like PCI and GDPR are top of mind, as are growing cyber security threats, risk of data breaches and costly ransomware attacks. Indeed, one industry report indicates that financial services are 300 times more likely to be the victim of a cyberattack than other organizations.

Why Cohesity SmartFiles for Financial Services?

Cohesity understands the challenges financial services organizations are facing. Cohesity SmartFiles provides next-gen data security and management that uniquely solves multiple challenges based on three key values that financial services customers consistently demand: **intelligent data management, hybrid cloud flexibility**, and **active threat defense**.

Cohesity SmartFiles is a software-defined, data-centric, unified file and object solution for the hybrid cloud. SmartFiles empowers financial services organizations to bring exceptional intelligence to their most critical file and object data with integrated applications for compliance, security, and analytics. It simplifies long-term unstructured data retention for cold and active archives, and provides cost-effective, secure, and immutable storage for your existing enterprise backup software. As it is specifically architected with industry standard NFS, SMB, and S3 interfaces, it can be used without disruption to your current environment. SmartFiles modernizes and simplifies data and application management, resiliency, privacy, and control by providing one platform for consolidating and securing archival data and backup datasets. Financial services organizations are uniquely empowered to efficiently manage data at scale for governance and compliance, with policy-based controls enabling automatic data placement on the most appropriate or economical tier or clouds. SmartFiles also delivers dramatic space efficiency for dramatic cost savings.
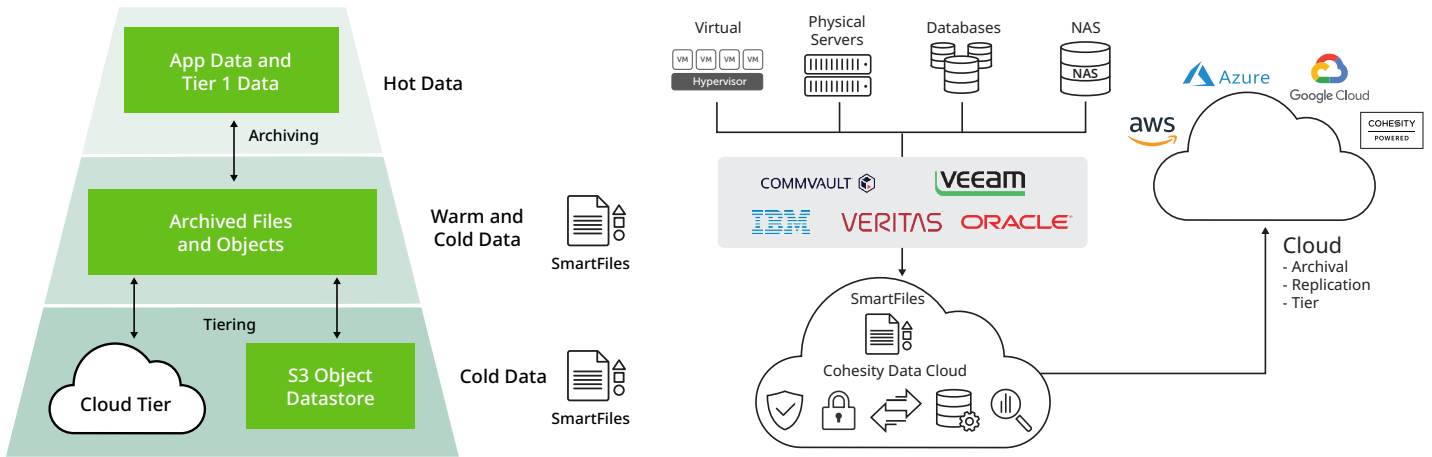
Figure 1: Modern, scalable archive and tiering, and immutable backup target

Hybrid Cloud Flexibility

Manage Data Growth. The vast majority of financial services data is unstructured and accumulating rapidly and requires secure management to satisfy security and privacy regulations. Such data includes customer statements, loan documents, ATM details, credit records, trading application data, legal transaction documents, banking records, bills receivable and payable, check images, email, social media, SMS texts, video, voice calls, tax records, application and security logs, and more.

SmartFiles provides hybrid cloud flexibility for cost-effective capacity and data management that can grow seamlessly to handle billions of files. SmartFiles gives you the ability to scale compute and storage nodes independently. It supports heterogeneous disk and all-flash platforms, which allow you to seamlessly deploy new hardware platforms along with older ones. There's no need for forklift upgrades, and you can also retire end-of-life platforms without needing expensive data migrations. SmartFiles is also a multicloud solution. You can tier, archive or replicate data across one or more clouds, and you can use SmartFiles as a target for cloud applications by using its native S3 interface.

Intelligent Data Management

Eliminate Expensive Silos and Management Complexity. The fast and efficient data processing that financial services organizations strive to achieve is often impeded by data that is siloed in legacy systems and in product- or service-specific applications. Holistic data management often requires multiple third-party application integrations, which increase complexity. Consequently, many banks are not capitalizing on their data-rich advantages and are unable to manage and leverage their best and most actionable datasets, while competitive threats come from traditional rivals and disruptive challengers, including fintech start-ups, and Big Tech.

SmartFiles provides a better way to consolidate, correlate, and analyze data across all of these different sources. Using its native SMB, NFS and S3 APIs, SmartFiles is able to consolidate archiving, compliance, and backup datasets, as well as file data, commercial and custom S3 application data, and data from modern IoT and analytics environments. Once data is consolidated on SmartFiles, you can apply security and data protection policies to meet compliance requirements, create policies to automate data movement across the datacenter and public clouds, and gain cost efficiencies through deduplication, compression and a built-in search engine.
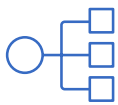
Content Management
- Secure file repository
- Scalable libraries
- File & Object

Splunk Warm & Cold Buckets
- Cost-effective cold archiving
- On-premises, cloud or both
- Frozen data to cloud

Corporate Audio & Video
- Corporate communication
- In-house productions
- Education and training

Digital Archives
- Digital documents
- Audio and video files
- Active & passive archives
- Backup datasets

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Reduce Cost of Ownership. SmartFiles reduces hardware storage requirements by as much as 96x or more through data deduplication, compression, small file optimization, and dedupe across data center volumes. Storage costs and performance can be further optimized by intelligently moving data to the most appropriate locations or clouds.

- **Data deduplication** – Based on advanced sliding window variable dedupe technology. This means that duplicate data that has been slightly changed is still deduped—which is beyond traditional dedupe capabilities.

- **Compression** – Zstandard compression algorithm for high compression ratios.

- **Small file optimization** – Eliminated the small file amplification penalty common to traditional NAS file systems. Small files are stored efficiently and without the need for triple-mirroring inefficiency. Put simply, 50TB of small files under SmartFiles consumes about 50TB of capacity.

Active Threat Defense

Meet Regulatory and Data Privacy Requirements. According to GDPR, all data must be retained only for as long as it is useful and in a manner that is easily accessible to the data owner. To satisfy multiple financial services regulations, data must be stored for backup, disaster recovery and archiving, all while keeping redundant copies to a minimum for purposes of efficiency and cost-effectiveness. Losing data or allowing unauthorized access can result in loss of consumer confidence, lawsuits, and significant penalties.

SmartFiles provides active threat defense to fortify datasets with unlimited immutable snapshots and support for WORM. It also includes access control settings and threat detection and recovery capabilities that are based on a variety of features, including vulnerability scanning. Data durability is provided through always-on background processes that check for corruption due to memory, disk, or network errors. Currently, SmartFiles compliance has been validated via SEC, FIPS, Common Criteria and PCI-DSS certifications.

Defeat Cyber Threats and Ransomware. Cybersecurity for unstructured data is imperative for financial services organizations. SmartFiles' integrated cybersecurity makes security easy to deploy and manage. It's a multi-layered security approach to prevent, detect, and analyze threats:

- Prevent – Immutable file system, software encryption, over the wire encryption, multi-factor authentication, DataLock (WORM), and adherence to FIPS 140-1 and 140-2 standards.

- Detect – Anti-virus: Detect infected files and prevent files from being compromised

- Analyze – Observe user and behavior analytics for security and compliance reasons

Do More with Data

Make Your Data Productive. Once data has been consolidated on SmartFiles, you can expand the value of your unstructured data with a comprehensive Marketplace app ecosystem of integrated third-party applications. These powerful apps run directly on data in-place to: mitigate risk from cyber threats and ransomware, accelerate content and metadata search, streamline compliance and eDiscovery, detect anomalies, develop actionable insights with powerful analytics, and more.

The Smart Choice

Financial services 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.

Make your vision for modern unstructured data management a reality with Cohesity.

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