

Solution Showcase

DataCore vFilO: Visibility and Control of Unstructured Data for the Modern, Digital Business

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Abstract: Organizations that want to succeed in the digital economy must contend with the cost and complexity introduced by the conventional segregation of multiple file system silos and separate object storage repositories. Fortunately, they can look to DataCore vFilO software for help. DataCore employs innovative techniques to combine diverse unstructured data resources to achieve unprecedented visibility, control, and flexibility.

Overview

According to ESG research, 71% of IT organizations report that data storage technology is strategic to their IT and business operations. Additionally, nearly half (49%) of these surveyed organizations state that data *is* their business, and 31% of them expect to offer data-centric products and services within the next 24 months.¹

Findings such as those indicate how vital it has become to “be digital” to stay competitive. But being a digital business does not simply mean using more technology. A truly digital business leverages data to gain the competitive advantages it desires. Some businesses now even sell data and data-based insights to drive their revenue growth.

In enabling that kind of digital business capability, modern file and object data services play an important role. For that reason, businesses should consider looking into [DataCore vFilO](#) software. vFilO is a modern, software-defined file and object storage solution that delivers what organizations today need: a blend of scale, infrastructure flexibility, intelligence, and data-handling abilities aligned to the requirements of the business.

The Modern File Storage Challenge

ESG recently conducted research focused on the challenges of managing and storing file data, including identifying the most common challenges specific to file storage (see Figure 1).²

¹ Source: ESG Master Survey Results, [2019 Data Storage Trends](#), November 2019.

² *ibid.*

Figure 1. Top Five Most Common File Storage Challenges

In general, what would you say are your organization's biggest challenges in terms of its on-premises file storage environment? (Percent of respondents, N=372, five responses accepted)



Source: Enterprise Strategy Group

It is interesting to examine how the challenges listed in Figure 1 correspond to problems that are typically prevalent in traditional IT architectures. For instance, challenges related to data protection, data migration, and the cost of hardware are symptomatic of the greater challenge of managing large, rapidly growing volumes of file data using a traditional storage architecture. Likewise, a lack of content/data awareness highlights the growing need among businesses to locate and identify the right data quickly when necessary.

In ESG's technology spending intentions research, only 6% of surveyed line-of-business executives viewed their company's IT group as a competitive facilitator/differentiator working in support of the rest of the business, while 25% actually regarded IT as a business inhibitor. Among the surveyed executives who believe IT is inhibiting business success, 43% said it is because workers have difficulties accessing the data that they need for business operations and analysis.³

A related finding also shows that 23% of younger organizations (i.e., businesses less than 20 years old) identify the performance of their file storage as a business challenge. That discovery highlights that younger businesses—which are more likely to be heavily digitally oriented—have a greater need for performance from their file storage environments than older companies do (12%).⁴

Regardless of age, size, or industry, no business can tap into the value of its data if its storage environment unnaturally fragments that data and thus creates data-access barriers. Copying or moving data every time a department needs to leverage it isn't sustainable either. So what needs to change? Organizations need to rethink/revisit their philosophy on file storage. They need to place a greater emphasis on finding solutions that can place data according to the data's business relevance, with full transparency to the on- or off-premises storage resource that can best provide the required levels of availability, economical operation, performance, and so on.

DataCore vFilo—Distributed File and Object Storage Virtualization

DataCore vFilo could fit the bill nicely. It is an innovative software-defined solution that assimilates existing file servers and other NAS appliances, along with complementary object storage solutions, in ways that suit the needs of a modern digital organization. It generates metadata for each assimilated file or object, gathering all attributes for the available storage resources. For a business, vFilo offers a better way to get all unstructured data under control using a device-independent, multi-protocol-supported approach, ultimately allowing the organization to store file/object data *where it makes the most sense*.

³ Source: ESG Master Survey Results, [2019 Technology Spending Intentions Survey](#), March 2019.

⁴ Source: ESG Master Survey Results, [2019 Data Storage Trends](#), November 2019.

vFile possesses an intriguing set of differentiators, including:

- **A consolidated global namespace that spans on- and off-premises locations for both file and object data.** Digital content is accessible from multiple protocols, and the solution features automated load-balancing. Both of those features support a scale-out architecture that can grow (or shrink) on demand. In addition, the software deduplicates, compresses, and encrypts inactive data before migrating it to object storage on-premises or in the cloud.
- **High-performance, enterprise-level file storage** with a parallel NFS (pNFS) architecture and support for snapshots, clones, and replication. pNFS is preferable to the traditional clustered NFS servers deployed today because pNFS can eliminate I/O bottlenecks and related scalability and performance issues. pNFS does this by separating the data from the metadata (moving the metadata server out of the data path).
- **Integrated intelligence to maximize the value of data** including live-data mobility with automated, policy-driven data movement and an ability to capture telemetry information on file usage patterns with storage behavior factored into the data-placement choices. vFile offers extensible metadata, which it keeps separate from data to accelerate keyword queries and ad-hoc correlations.

All of those features reflect the emphasis on intelligence and agility that DataCore has injected into vFile.

The Bigger Truth

DataCore's new vFile software shares important traits with its existing SANsymphony software-defined block storage platform. Both technologies are certainly enterprise class (highly agile, available, and performant). But each solution exhibits those traits in its own manner, taking the varying requirements for block, file, and object data into account. That's important at a time when a lot of companies are maintaining hundreds to thousands of terabytes of unstructured data spread across many file servers, other NAS devices, and object storage repositories both onsite and in the cloud.

The addition of vFile to its product portfolio will allow DataCore to position itself in a different, even more compelling way now. DataCore is able to offer a "one-two punch" —namely, one of the best block storage SDS solutions in SANsymphony, and now one of the best next-generation SDS solutions for file and object data in vFile.

Together, vFile and SANsymphony will put DataCore in a really strong position to support any IT organization looking for better ways to overcome end-users' file-sharing/access difficulties, keep hardware costs low ... and maximize the value of corporate data to achieve success in a digital age.

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