MARKET NOTE

Pure Storage Introduces a New "Unified Fast File and Object" Market Category at Its Accelerate User Conference

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EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: Pure Storage Introduces "Unified Fast File and Object" as a New Market Category

At its annual Accelerate user group conference, Pure Storage made a number of announcements that opened up new sales opportunities to ensure continued market growth over time. Strategically, the two most significant announcements were the addition of a native file storage support capability on the FlashArray, turning it into a unified storage platform, and the introduction of a new market category called "unified fast file and object" in which its FlashBlade system competes. Taken together, all these announcements open up new market opportunities, increasing Pure Storage's total available market, and provide needed new features for both on-premises and public cloud–based deployments using its systems.

Key Takeaways

- In 2018, Pure Storage acquired the file system software vendor Compuverde, and the company has now integrated that technology into its Purity FA storage operating environment, which supports block, NFS, and SMB data access methods to a globally shared storage pool. This feature becomes available to existing FlashArray customers with FA 6 at no extra charge and will enable the consolidation of general-purpose file-sharing workloads onto the FlashArray.

- Workloads that operate on machine-generated data are penetrating the enterprise more and more, and many of these need higher performance than traditional, unstructured, scale-out applications have required. With its all-flash configuration and cacheless architecture, the FlashBlade is a good fit for these types of workloads, and Pure Storage has seen enough interest in this space to propose a new market category called "unified fast file and object." Establishing a new market category does not happen overnight, but Pure Storage has made a good start and a strong case to establish this new segment.

- Pure Storage announced several new configurations in its replication portfolio, supporting long distance DR with automatic failover on FlashArray and file- and object-based replication capabilities on FlashBlade. Like all of its software features, these all became available to existing Pure Storage customers at no additional charge and will allow customers to use these systems across a broader set of workloads.

Source: IDC, 2020

IN THIS MARKET NOTE

At Pure Storage's annual Accelerate user conference, which was held on June 10, 2020, the vendor made a number of announcements designed to enable continued revenue growth over time. Areas addressed by the vendor with these announcements included expanded "cloud experience" offerings, improved data protection options, a new general-purpose file sharing capability, and a suggestion for a new market category. This IDC Market Note reviews the key announcements, discussing their importance both for Pure Storage and for the enterprise storage market as a whole.

IDC'S POINT OF VIEW

As enterprise storage vendors evolve to better cater to the needs of customers undergoing digital transformation, they are investing heavily in cloud-based technologies. As IT managers gain more experience working with public cloud technologies and making workload placement decisions, it is becoming increasingly evident to them that the place to start is with a hybrid cloud strategy that is tailored to an enterprise's evolving IT infrastructure needs. Pure Storage realized this several years ago and, in 2018, began to introduce capabilities and programs that moved customers toward a more "cloud" operating model that was consistent across traditional on-premises infrastructure, private cloud infrastructure, and public cloud infrastructure. Today, the vendor refers to this as the "modern data experience," a concept that encompasses a cloud experience everywhere (including multipublic cloud), enterprise-class storage capabilities, support for all data types (block/file/object), and artificial intelligence and machine learning (AI/ML)-driven IT infrastructure monitoring, management, and orchestration that simplify and improve the reliability of operations.

Before we delve into the product announcements, it's important to note that over the past 18 months, as the enterprise storage market has exhibited much lower growth, many of the established providers have experienced shrinking storage revenue. During that period, storage vendors such as Dell EMC, HPE, IBM, and NetApp have experienced in some cases double-digit quarterly revenue declines (based on a year-to-year comparison). Throughout that entire period, Pure Storage has continued to turn in revenue growth and, despite the COVID-19 pandemic (which has had both positive and negative effects on vendor revenue in different markets), has done so again this quarter. For the vendor's fiscal 1Q21, the company generated $367.1 million in revenue, up 12% year over year. Subscription services revenue, based on the vendor's Pure as-a-Service offerings, grew 37% year over year and are now well above $100 million annually. Pure Storage's continued ability to drive revenue growth is due to a combination of the vendor's storage technology, which is extremely simple to install and manage; the positive customer experience (CX) the vendor affords its customers (Pure Storage has the highest published, validated net promoter score in the storage industry); and its ability to deliver a consistent cloud operating model for both on-premises and off-premises offerings with its hybrid cloud strategy.

Pure Storage's announcements at its annual user conference gave the company additional capabilities and programs to help its customers achieve the modern data experience. First, the vendor added native file-based storage capabilities to its FlashArray, an NVMe-based platform that is optimized for low-latency enterprise workloads. This turns the FlashArray into a unified storage platform, opening up significant workload consolidation (block and file) opportunities for its customers and a major new general-purpose file sharing market for Pure Storage.

Second, Pure Storage expanded its replication portfolio on both FlashArray and FlashBlade (which is optimized for big data analytics workloads that need high bandwidth and high degrees of concurrency). In Purity FA, the storage operating system on the FlashArray, the vendor added a new disaster recovery (DR) option, ActiveDR, to a replication portfolio that already includes snapshot-based asynchronous replication, synchronous replication, and stretch clusters (ActiveCluster). ActiveDR uses continuous asynchronous replication and provides a low RPO option for customers that don't have multiple datacenters in a single metro location (a prerequisite to use the ActiveCluster option). This should help the company better cater to very high-availability requirements in certain geographies (such as North America, which drives over 40% of the world's enterprise storage revenue) where many customers don't have datacenters close enough to each other to use ActiveCluster.

In the 3.0 release of Purity FB, the storage operating system for FlashBlade, the vendor released a file and object replication capability that can replicate files and/or objects from FlashBlade to another FlashBlade or AWS S3. There is a simple, one-click DR workflow that can provide 30-minute recovery for any file-based data back to a FlashBlade system. Purity FB 3 also included FlashBlade SafeMode – secure immutable snapshots designed to deliver air gap protection against ransomware attacks, hackers, or data corruption that can be used in workflows like any other FlashBlade snapshot. Pure Storage also mentioned a new market category that it calls "unified fast file and object" in the company's FlashBlade news (which we'll discuss further in the sections that follow).

Third, the vendor has expanded its Pure as-a-Service offerings to make them more attractive. Pure as-a-Service is not just a leasing option, it goes beyond that with cloud features that include on-demand provisioning, unified billing across storage services that can span both on-premises and off-premises (i.e., public cloud) locations, IASB 2019 compliance for a true "opex" model, nondisruptive multigenerational technology refresh, and terms as short as a year for as little as 50TB of capacity. Shorter terms can be very interesting for customers that need a new storage system today but are also considering when in the next two to three years they will be moving more workloads to the public cloud. Just recently, Pure Storage began offering Pure as-a-Service free for the first three months for new customers with a 12-month contract of 50TB or more.

It should be noted that Cloud Block Store (CBS) is a software-only version of Purity FA that can be run in the public cloud. Introduced in 2019, customers have primarily used it to "lift and shift" database applications that can't be rearchitected into a true "opex" operating model. Patented data reduction technology obtained through the StorReduce acquisition in 2018 enables deduplicated data sets to be migrated between on-premises and off-premises operating models without rehydration for much more efficient data movement. CBS enables customers to enjoy enterprise-class capabilities regardless of the operating model and is a key component of the modern data experience.

Pure Storage's focus on Pure as-a-Service during the conference illustrates its dedication to building the company's portfolio offering around a cloud operating model that delivers a differentiating hybrid cloud experience. The success of Pure as-a-Service is critical to the vendor not only because most customers need a true opex model as an option in infrastructure purchases going forward but also because simplifying infrastructure services delivery will allow Pure Storage to become increasingly strategic to its customers by allowing them to focus on higher-level business objectives (rather than assembling and managing IT infrastructure components).

Unified Storage Done Right

With the introduction of the native file storage capabilities in Purity FA, existing customers get the unified storage capability at no extra charge and can deploy it without disrupting existing application

services. The fact that the file system support is native, and not bolted on like the file support with some of Pure Storage's competitors, means that it operates out of a truly shared storage pool. Data services used against this pool operate at a global level, which means that features such as deduplication and dual parity RAID operate more efficiently than they do in systems where the block- and file-based storage pools are separate. With file operating as a first-class object in Purity, file services are easier to deploy and manage and offer higher performance. The file system capability supports both NFS and SMB data access methods.

Pure Storage's choice to integrate file support in this manner did mean it took a while for development, but now that it's out, it offers a better value proposition around unified storage than bolt-on options. Prospects are not likely to buy FlashArray just for its file support, but the fact that it's there strengthens its value proposition as a workload consolidation platform, which could help tip the balance on an initial sale. Most existing FlashArray customers will consider moving file shares off dedicated platforms and onto FlashArray to help streamline their IT infrastructure and lower costs. At any rate, this addition reflects an increase in Pure Storage's overall total available market (TAM).

Unified Fast File and Object: A New Market Category?

FlashBlade uses a very different architecture than FlashArray. Designed more for throughput with the machine-generated data common to modern data applications and big data analytics workloads, it features a cacheless architecture and a scale-out design. Each FlashBlade blade (the storage devices used in FlashBlade) includes compute, storage, and networking resources, and each system can support up to 150 of these "blades." FlashBlade sold well into technical computing environments (as well as some others) for big data analytics-oriented workloads. Since 2018, IDC research has consistently indicated that end users will adopt object stores for newer, high-performance workloads such as real-time analytics, media streaming, and webserving, and it was increasingly clear that HDD-based scale-out designs were struggling to meet evolving performance requirements in this area. Although Pure Storage was the first vendor to release an all-flash system for unstructured data environments, the company has since been joined by several other established storage vendors.

More and more enterprise customers are pursuing the modernization of their application development practices for on-premises workloads. While public cloud plays a major role in that effort, organizations also require solutions that can deliver performance, simplicity, and agility in on-premises infrastructure (both traditional and private cloud), and this is where systems offering an ability to consolidate file and object workloads can play a key role. Adoption rates are increasing for AI/ML-driven modern analytics, log analytics, EDA and classic software development, DevOps, containerized applications, and modern data protection — all of which many customers are looking to consolidate onto a common platform that delivers the "cloud experience" for on-premises workloads.

At Accelerate, FlashBlade general manager Matt Burr talked about a new market category he calls "unified fast file and object" that seeks to solidify the unstructured data use cases that can benefit from scale-out all-flash architectures. With its performance architecture, ease of use, and unified storage support, FlashBlade provides a scalable platform to consolidate file- and object-based workloads on a system offering the same operational simplicity and consumption models as the public cloud provides today. In its recent fiscal 1Q21 earnings release, Pure Storage noted that FlashBlade has become a $500 million business for the company in three short years, and it claims that that alone is enough to base a new market category on. Given that other vendors are also selling all-flash systems for unstructured data environments, this new category is already easily twice that large.

Defining a new market category is not easy though. In IDC's opinion, the four things needed to truly position a new market segment for growth are a disruptive technology that is distinct from alternatives and drives clear value for a well-defined set of customers, a concise definition of the solution around which the segment is based, a multivendor market ecosystem, and a general level of market awareness. Pure Storage has definitely identified a market need that could be the basis for a new market category, but the company has work to do to firmly establish this as a new segment. Establishing a new segment does not generally happen overnight.

Summing It Up

Pure Storage's strategy has always been focused on consistently laying a foundation for long-term revenue growth. Milestone announcements throughout the vendor's history have opened up new market segments, significantly expanding the company's TAM each time. With these announcements, the vendor has opened up a new general-purpose file sharing market opportunity, expanded data protection and business continuity capabilities across both its FlashArray and FlashBlade storage platforms, revealed significant traction it is getting with both its Pure as-a-Service and FlashBlade offerings, demonstrated an ability to continue to grow revenue despite a challenging economic climate, and fired the first shot over the bow to establish a new market segment (unified fast file and object). This is a lot to introduce with one launch, and it will be a lot for existing Pure Storage customers as well as prospects to digest, but there is no doubt that this makes the vendor an even more compelling option as a strategic storage partner for enterprises of all sizes.

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Related Research

- *Pure Storage Introduces Compelling All-Flash Alternative to HFAs for Secondary Storage Workloads* (IDC #US45549019, September 2019)
- *Pure Storage Prepares to Step into the General-Purpose File Sharing Market* (IDC #US45012619, April 2019)

Synopsis

This IDC Market Note reviews the key announcements made by Pure Storage and discusses their importance both for the company and for the enterprise storage market as a whole. At Pure Storage's annual Accelerate user conference, which was held on June 10, 2020, the vendor made announcements that included expanded "cloud experience" offerings, improved data protection options, a new general-purpose file sharing capability, and a suggestion for a new market category.

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