Pure Storage enhances management capabilities with Pure Fusion and Portworx Data Services

Analysts - Henry Baltazar

Publication date: Friday, October 15 2021

Introduction

Pure Storage is positioning Pure Fusion as a self-service autonomous storage platform, and provides a SaaS management plane to simplify workload placement, mobility and fleet rebalancing. The vendor's recent launch also introduced Portworx Data Services, which is a database-as-a-service platform for Kubernetes.

The Take

Pure Storage's latest announcements are focused on making storage invisible, scalable and instantly accessible – delivering value propositions typically associated with public cloud storage environments. The new Pure Fusion and Portworx Data Services (PDS) offerings should appeal to developers, DevOps engineers and application stakeholders, as opposed to the traditional storage and infrastructure professionals that consume and manage enterprise storage systems. The strategic decision to extend to new markets makes sense, given that Pure Storage is looking to add new services to its lineup to boost its subscription revenue, although it will likely need to continue to make marketing investments to highlight the value of Pure Fusion, PDS and Portworx.

Context

The vendor made a number of key announcements at the 2021 Pure Storage Financial Analyst Day in September. Subscription services account for over one-third of Pure's revenue, and new additions such as the Portworx Data Services database-as-a-service offering and Pure Fusion SaaS management platform should drive even more customers toward the subscription business.

Pure continues to gain traction in larger accounts and claims it is now in 50% of the Fortune 500 companies. The large-enterprise segment of Pure's business accounts for over 50% of its sales, with its top 10 customers spending over $100m. In Pure's most recent earnings call for Q2 FY 2022 (period ending August 1, 2021), it announced revenue of $497m, which was up 23% year over year,

with subscription services revenue coming in at $172m, which was up 31%. It posted a net loss of $45m, which was down from a $65m loss the previous year for Q2.

The overall goal with Pure's new products is to simplify storage management and consumption, in order to help organizations meet the requirements of the on-demand data culture.

Pure Fusion

Pure Fusion is designed to provide a new cloud operating model with infinite scale, self-service provisioning and intelligent workload management. The architecture is currently integrated with FlashArray//X and FlashArray//C, and will integrate with Pure Cloud Block Store in subsequent releases. We expect to see integrations for FlashBlade, Portworx and third-party storage systems in the future.

The vendor is positioning Pure Fusion as a modern alternative to traditional storage clustering, with its new service now having the ability to take Pure Storage arrays and use them to create cloud-like availability zones that can scale out without requiring customers to add matching cluster node types or imposing storage media restrictions.

To accelerate deployment, customers can integrate Pure Fusion availability zones and automated provisioning into automation frameworks and in-house custom self-service portals, using tools such as Terraform and Ansible, through Pure Fusion's API-first interface. The platform uses AI-driven workload placement to ensure data resides in the best storage location, without forcing the administrator to choose which individual system to use. The Pure Fusion background rebalances the workloads across the storage pools without creating unplanned disruptions. The vendor claims that Pure Fusion can provide enhanced reliability to keep data accessible while delivering adequate performance – even in the event that nodes or HA pairs wind up having an issue within the availability zone.

Pure Fusion will enter preview at the end of the year, with general availability expected in the first half of 2022.

Portworx Data Services

The newly announced Portworx Data Services is designed to deliver single-click deployments of enterprise-grade data services with support for a number of key capabilities, including backup/restore, high availability, data security, capacity management and data migration. With these tasks offloaded, DevOps and developer teams can focus on innovation instead of dealing with daily firefighting to solve performance and reliability issues that may arise. The Portworx Data Services catalog includes support for a number of data services platforms, including Cassandra, Kafka, RabbitMQ and Redis, with additional database support planned for the future.

The vendor claims that Portworx Data Services have no lock-in, given that customers can run the services on any infrastructure they choose, ranging from on-premises to public cloud, and can ensure stakeholders get the same DBaaS experience in all execution venues. Portworx Data Services will run on any Kubernetes distribution, including Red Hat OpenShift, VMware Tanzu, Amazon EKS and GKE on Google.

The data protection provides scheduled backup policies and application-aware backup and restore. The service uses Portworx's PX Backup platform, which is tightly integrated with Kubernetes to protect application configurations, objects and data.

The early access program for Portworx Data Services is now open, with general availability expected in early 2022.

Competition

Pure Storage continues to compete with storage players such as Dell EMC, Hitachi Vantara, HPE, IBM and NetApp in the storage systems and management software space. The vendor is disrupting the storage market with an all-flash storage lineup that is gaining traction as more organizations gradually replace their disk- and hybrid-storage-based arrays with all-flash arrays that have higher performance and efficiency advantages in terms of power and rack-space consumption.

The introduction of Pure Fusion and the Portworx Data Services will help Pure customers improve the provisioning, management and resiliency of their environments, to help stakeholders rapidly attain storage resources without having to wait for administrators to fulfill their requests. We would note that the aforementioned competitors are also looking to simplify storage for their cloud-native customers with their own initiatives, such as NetApp's Astra Control application-aware data management offering and Dell's Project Karavi, which was recently renamed as Container Storage Modules. A number of other players are looking to deliver cloud-native data protection and data management, including Arrokto, Diamanti, Veeam's Kasten, MayaData and StorageOS. Red Hat supports its OpenShift customers with its Ceph-based OpenShift Container Storage, and launched its own Red Hat Data Services a year ago. It should be noted that Portworx partners with Red Hat, has a place in the Red Hat Operator Hub and supports the storage needs of a number of OpenShift customers.

Portworx Data Services is designed to be an alternative to DBaaS services such as Amazon RDS or MongoDB Atlas when a customer needs to run data services outside those environments or needs a data service that is not provided by these vendors. The vendor believes customers that currently use open source data services could be enticed to use Portworx Data Services for support and reduced management burdens.

SWOT Analysis

Strengths	Weaknesses
Pure Storage continues to grow its revenue and subscription services businesses.	The vendor is still relatively small compared with its larger competitors, although it is gaining more traction in the high-end enterprise. Pure will have to invest in its marketing outreach to promote awareness for its products and capabilities beyond the enterprise storage market.
Opportunities	**Threats**
The emergence of cloud-native has created a need for advanced tools and automation to reduce the burden of infrastructure provisioning and management. Pure Fusion and Portworx Data Services are both attacking this pain point for customers.	All of Pure's rivals are also looking to modernize their offerings to better address the needs of cloud-native architecture and modern applications.

Source: 451 Research