REPORT REPRINT

Pure Storage acquires Portworx, gains holistic Kubernetes storage and data management platform

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By Liam Rogers

The vendor is best known for its all-flash storage, but Pure Storage continues to make inroads into the cloud. Its latest move is the acquisition of Kubernetes storage and data management startup Portworx. The deal gives Pure a significant boost to its ability to support stateful applications at scale on-premises and in the cloud.

Introduction

All-flash storage specialist Pure Storage has made forays into the cloud and containers, and now the vendor is expanding its cloud-native capabilities by acquiring purpose-built Kubernetes storage specialist Portworx. This deal provides a significant boost to Pure Storage's ability to support stateful applications at scale on-premises and in the cloud, with a purpose-built container storage and data management platform.

Snapshot

ACQUIRER	Pure Storage
TARGET	Portworx
SUBSECTOR	Container storage
DEAL VALUE	$370m
DATE ANNOUNCED	16-Sep-20
CLOSING DATE, EXPECTED	By the end of September
ADVISERS	None disclosed

451 TAKE

Portworx enables Pure Storage to double down on its embrace of storage spanning on-premises and public cloud. Pure Storage could already support stateful applications consuming storage from its arrays, but the addition of Portworx provides a software-defined platform that also goes beyond cloud-native storage into data management. This not only bolsters Pure Storage's technical capabilities in supporting the lifecycle of stateful apps, wherever they reside, but it also opens up the vendor's go-to-market strategy.

With a new SDS platform and distinct backup product, Pure has the ability to target a wider variety of accounts than those that would previously have bought into the Pure Storage ecosystem. This involves targeting personas such as DevOps engineers and developers, which are heavily involved in container usage and have influence over tooling, but less involved in traditional storage purchases. This is especially true because the driving mantra behind Portworx has been agnosticism, and bringing storage to Kubernetes wherever and however it is being deployed.

In the past, price has been cited as a barrier to entry into the Pure product line, and although flash prices have continued to decrease and lower that barrier, Portworx takes it down even further via its ability to leverage commodity hardware. Additionally, while Kubernetes at the edge is an emerging scenario, Portrworx recently added support for edge-centric Kubernetes distribution K3s, providing a pathway for Pure Storage to take on even more new opportunities as the need to bring storage to stateful apps at the edge, core and cloud grows.

Deal details

Pure Storage paid $370m in cash for Portworx, and this marks the company's largest acquisition to date. Portworx is Pure's third acquisition after its 2019 purchase of scale-out file storage vendor Compuverde, and the 2018 purchase of cloud storage data reduction specialist StorReduce. Both were purchased for less than $50m, according to 451 Research's M&A KnowledgeBase.

While these previous acquisitions were ultimately integrated into Pure Storage products as important features, the Portworx team will be joining Pure Storage and operating as a distinct cloud-native business unit. Pure Storage says it will continue the subscription-based pricing model, including the free tier that Portworx offers now, as well as continuing to sell PX-Backup as a stand-alone service.

Container specialists have been a hot commodity, and storage is a significant factor for some vendors. SUSE bought Rancher Labs in July 2020, which included a commercialization of the open source container storage project Longhorn that originated at Rancher. Commvault bought SDS container storage vendor Hedvig in 2019. And Google bought cloud NAS and container storage SDS startup Elastifile, also in 2019.

Deal rationale

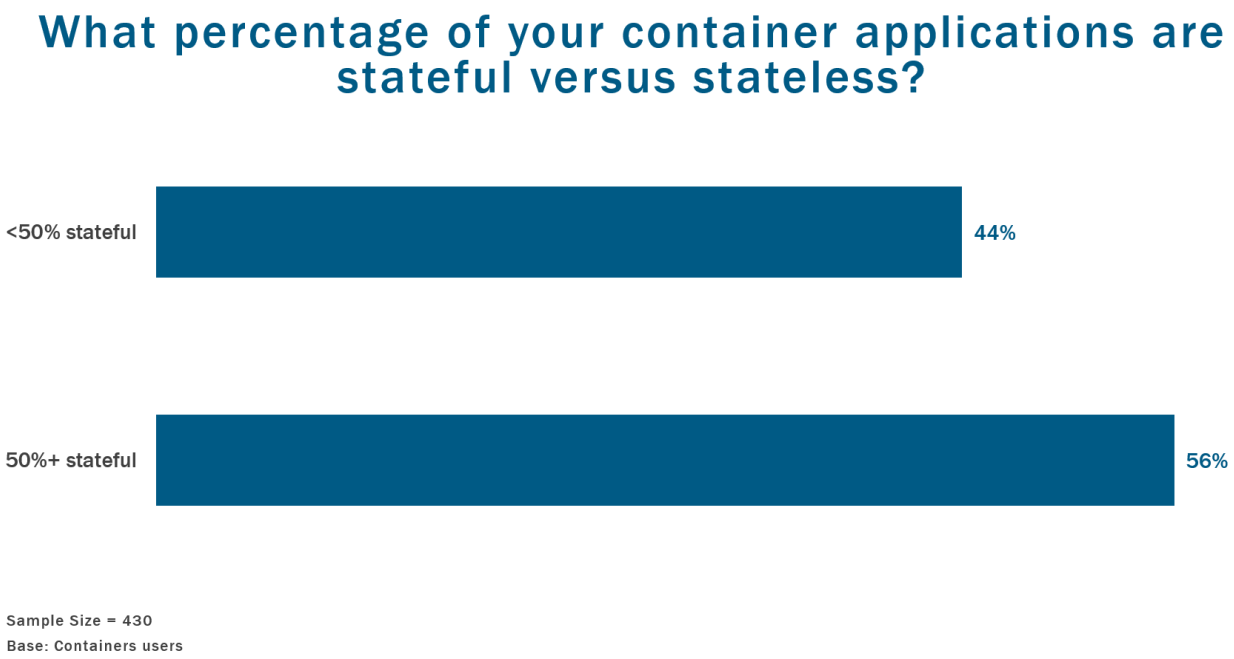
Pure Storage says that joint enterprise customers and those deploying Portworx on top of Pure arrays is what drove initial interest. Pure Storage and Portworx both target large enterprises, but the companies tend to target different personas within those companies.

Portworx's platform goes beyond tables-stakes storage capabilities, and provides a holistic storage and data management platform that includes high availability, backup, disaster recovery and migration capabilities. Pure Storage has put increasing emphasis on facilitating customer usage of hybrid clouds, and with its migration and application mobility capabilities, the addition of Portworx will not only revamp Pure's container storage capabilities, but also provide a way to further develop customer hybrid cloud usage.

The need for these types of features is growing, and despite containers initially being intended for stateless applications, they are increasingly being used for stateful applications. In our Voice of the Enterprise: DevOps, Workloads and Key Projects 2020 survey, 56% of organizations with containers in use said that half or more of their container applications are stateful (see Figure 1).

Figure 1: Stateless vs. stateful container apps

Source: 451 Research



The advent of the container storage interface (CSI) has provided a de facto standard for providing Kubernetes-based apps with data persistence, but there continues to be storage-related challenges as organizations embrace cloud-native. As stateful container apps, especially data-rich ones, make up a larger portion of production workloads, users will find greater need for broader application-centric data management capabilities, and vendors will need to demonstrate that they can provide the same level of storage and data protection standards that customers have become accustomed to with more traditional workloads.

In our Voice of the Enterprise: Storage, Data Management and Disaster Recovery 2020 study, 43% of organizations with containers in use indicated that they are relying on legacy or preexisting data-protection tools as their primary data-protection strategy for containerized applications and associated data volumes. However, legacy data protection tools tend to be geared toward backing up an entire VM or disk, and not toward supporting dynamic cloud-native applications. Additionally, as hybrid and multi-cloud usage becomes more commonplace, there will be a growing impetus for maintaining the mobility of applications.

Target profile

Cloud-native storage vendor Portworx was founded in 2014, and is currently headquartered in Los Altos, California. The company has taken in $55.5m in funding to date. Its most recent round was a $27m series C, raised in March 2019. Portworx has over 145 customers, and features logos from sizeable organizations such as Kroger, Comcast and T-Mobile. The vendor claims that dozens of customers have signed deals worth $250,000+ including one Q3 deal valued over $1m.

Early in 2020, Portworx made its PX-Backup service generally available, and the company offers its capabilities as a stand-alone product to meet the cloud-native, data protection needs of a wider user base outside of its existing enterprise storage customers.

Acquirer profile

Pure storage was founded in 2009, and went public in 2015. The vendor is best known for its lineup of all-flash storage arrays, namely the FlashArray and FlashBlade products. In 2019, the company added an all-QLC flash array to its lineup to compete with the cost-effectiveness of hybrid disk and flash arrays.

The company has also delved into the cloud with storage services such as Pure Cloud Block Store. The vendor is no stranger to containers, and has supported them through its Pure Storage Orchestrator: PSO provides a simplified interface for managing FlashArray and FlashBlade storage for use with Kubernetes apps via CSI. Pure Storage says the PSO team will be joining Portworx in the cloud-native business unit to continue development.

Competition

Pure storage has competed with other significant all-flash array vendors such as Dell EMC, Hitachi Vantara, Hewlett Packard Enterprise, IBM and NetApp. NetApp also competes in cloud block storage on public clouds via its Cloud Volumes ONTAP service.

While container storage was once a niche offering, the list of vendors competing in this space has grown significantly over the past few years. Incumbent players such as Dell EMC, Hitachi Vantara, HPE, IBM, NetApp and VMware all offer CSI drivers so that their storage products can be used to support with stateful applications, as do public cloud players AWS, Azure and GCP.

Red Hat supports its Openshift customer with its Ceph-based OpenShift Container Storage, and startups such as Diamanti, MayaData, Quobyte and StorageOS round out the field. 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.

Several startups and some of the aforementioned container storage vendors (Portworx included) also offer data protection and data management capabilities designed for stateful applications. Kasten was an early entrant into this space, and focuses specifically on backup, DR and application mobility for Kubernetes-based apps. The vendor now partners with backup giant Veeam. Pure had also partnered with Kasten earlier this year, and says it will maintain this partnership moving forward, despite overlap in functionality with Portworx.

VMware and MayaData both leverage the open source container, data protection tool Velero in their offerings. NetApp's Project Astra (not yet GA) is aimed at addressing the data management needs of stateful apps. Arrikto, Catalogic and Diamanti also provide data management capabilities, and Zerto plans to release its entrant into the sector early next year.