IDC LINK
Real-time IDC Research® opinion on industry news, trends and events

Why Pure Storage Is Buying Portworx for $370 Million

September 18, 2020

By: Eric Burgener, Gary Chen, Lucas Mearian

IDC's Quick Take

Pure Storage's acquisition of Portworx is an excellent strategic investment and provides the vendor with a leading container storage and data services start-up with strong traction among enterprises in a variety of vertical markets. Portworx gives Pure Storage a solid foothold in a nascent but quickly growing marketplace that virtually all established storage vendors have already recognized as strategic to the future of DevOps and containerized deployment methodologies.

Because this is a fast emerging, but critical aspect of enterprise digital transformation, Pure Storage and Portworx will have to be methodical in their go-to-market approach – keeping Portworx' containerized software open to heterogeneous storage. This is something both companies have already said they will pursue, but they've also indicated future efforts to more tightly integrate their respective technologies. This will be a fine line between remaining open while optimizing Portworx on Pure Storage.

M&A Announcement Highlights

On September 16, 2020, Pure Storage announced its intent to purchase Portworx for $370 million in cash. Portworx is a six-year-old, cloud-native Kubernetes storage and data services platform company. As a leading Kubernetes Data Services platform, Portworx is used for building, automating, protecting, and securing cloud-native applications, providing persistent, enterprise-class storage for container development and deployment. Portworx suite of products support every stage of the application development and deployment life cycle, addressing the five most common problems DevOps teams encounter when running container-based, stateful services in production: storage/high availability, backup, disaster recovery, security, and migrations. The vendor's software supports all major container orchestrators and platforms such as Kubernetes (all distributions), OpenShift, DC/OS, and Hashicorp Nomad.

With an eye toward an already robust open source Kubernetes community, Pure Storage stated it will continue to run Portworx as a separate business unit, allowing any other vendor's storage to be used as the underlying infrastructure through the Container Storage Interface (CSI) standard.

IDC's Point of View

This is Pure Storage's largest acquisition, and it is with good reason.

While many IT organizations are working with containers, it is still a relatively young market, and best practices are still evolving. There isn't much awareness of issues around persistent storage and data management, but that will rapidly change as our data is already illustrating.

By 2023, the number of container hosts — including physical and virtual — is expected to reach more than 104 million, driven mainly by microservices deployments. The container infrastructure software market is also proportionately robust and growing at a CAGR of 63%, according to IDC.

Simply put, containers are the future of modern application development with a rapidly growing infrastructure software market.

Traditional hardware vendors and cloud providers are fast joining the race to support containers, and Pure Storage has correctly determined the importance of persistent storage infrastructure support for containers; the company has taken a bold step to further its offerings in this space with Portworx.

Containers are a lighter-weight, more portable alternative to virtual machines (VMs) for helping developers build, test, and deploy applications; and, that's at the heart of persistent storage and data services for containerized applications. A combination of primary and secondary storage is needed to meet the business requirements of those applications. Using traditional storage technologies built and optimized for VMs will likely be problematic for containerized environments that are more dense and dynamic and require higher scalability.

For example, a typical vSphere cluster may be running 200 services based on a single Oracle database (DB) instance. In a typical Kubernetes environment, an enterprise may be running 2,000 data services or an order of magnitude increase because each application is broken down into microservices; each microservice will require access to its own database, which may be on Oracle DB or a combination of others, such as Kafka, Cassandra, or PostgreSQL. As lighter-weight containers, container-based environments promise to be more efficient in their use of resources than VM-based environments.

Pure Storage is focused on delivering flash-based storage as a service in a multicloud world. As a cloud-based, containerized product, Portworx gives Pure Storage a cloud-native storage, and data services play for enterprise container DevOps as they move forward in their digital journey.

It is a critical part of the value proposition for Pure Storage — that Portworx sales approach gives them an ability to establish broader relationships at higher levels within various customers. Several of Pure Storage's competitors (specifically Dell and HPE) are selling higher into the organizations and can leverage relationships they've formed in other areas as well (i.e., servers) that Pure Storage doesn't have, so this acquisition will help broaden the nature of its customer relationships in organizations using containers.

With an impressive list of enterprise customers, Portworx has set itself up as a leader in the cloud-native, Kubernetes storage space. In turn, Pure Storage gives Portworx its larger go-to-market capability and a storage platform that can be packaged or sold separately.

Pure Storage began investing years ago to build its own platform to support for containers and Kubernetes, first by investing in a FlexVolume driver, then through the CSI specification. Ultimately, Pure Storage reached beyond CSI with Service Orchestrator, a container storage-as-a-service offering for customer hybrid clouds.

Portworx enables new cloud-native use cases for customers running on a variety of Pure Storage products including FlashArray, FlashBlade, and Pure as-a-Service, as well as any other underlying on-premises or cloud storage.

There are already strong synergies between these two companies, both culturally and operationally. Both companies are keenly focused on the user experience above all else. Pure Storage delivers a sophisticated, flash-based storage infrastructure on premises or through a cloud service. Portworx connects containerized applications to that storage along with enabling a number of key data protection

and migration services. The two companies also share a number of enterprise customers, such as Kroger's grocery stores and Canada's RBC bank. The headquarters of Pure Storage and Portworx are also in geographic proximity: Pure Storage is based in Mountain View, California, and Portworx in Los Altos, California, less than a couple of miles away.

Portworx already claims a number of Fortune 2000 and other large enterprise customers, including Audi, Carrefour, Comcast, Ford Motor Company, GE Digital, Lufthansa, and TMobile.

Because Portworx software is also delivered as a container, it is portable and deployable on premises, in the cloud, or on hybrid cloud environments. Portworx relies on Container Storage Interface (CSI), as the standard for exposing arbitrary block and file storage systems to containerized workloads on Kubernetes. Because of that, underlying storage infrastructure doesn't matter, whether Dell EMC, HPE, NetApp or cloud-based AWS, Azure, or others.

Competitively, Pure Storage and Portworx are facing two main obstacles:

- For on premises, their main competition simply has more inertia. Most customers tend to use their existing storage and don't implement something new for containers. Many existing NAS/SAN and HCI vendors also support CSI and are trying to be more container native as well. Currently, container platforms are an area of interest for all large infrastructure suppliers. Many have launched their own solutions, others are in active R&D.
- In the public cloud, container customers are gravitating toward first-party storage services and are not interested in installing or managing their own layer on top of that. To gain traction in that space, any technology supplier will need a unique differentiator, as public cloud providers are going to continue closing gaps to keep customers on first-party services as much as possible.

An additional note of caution for Pure Storage. Both vendors readily admitted that Portworx' former "storage agnostic" approach contributed mightily to their industry-leading position in Kubernetes storage. Even though the two companies are saying nothing will change, they also said in the long run they will increase the integration between the two vendors' offerings. As Pure Storage begins to pursue this kind of integration, they will need to ensure that they do not create situations that may cause other storage vendors (e.g., Dell EMC, Hitachi, HPE, Huawei, IBM, NetApp) to want to deploy container-based environments around vendors other than Portworx. There are a number of other options available in the market (e.g., Diamanti, Robin.io, StorageOS, MayaData).

Both vendors and customers are very familiar with coopetition. With the Portworx acquisition, Pure Storage is in a situation similar to EMC/VMware, IBM/Red Hat, and others where continued success means keeping that unit separate and independent in most ways, while finding appropriate integrations and synergies. But they'll need to pursue partnerships with competitors as well and do that fairly. Container-native storage is an emerging market, but Portworx has been the early leader with a successful go-to-market strategy that has garnered significant traction among large enterprises.

This is something Pure Storage will need to consciously manage going forward if they want to continue to enjoy broad usage of Portworx technology on heterogeneous storage.

Subscriptions Covered:

Software-Defined Compute: Virtualization, Cloud, and Container Platforms, Software-Defined Infrastructure: Compute and Storage, Storage and Computing Infrastructure Software Platforms, Storage Systems

Please contact the IDC Hotline at 800.343.4952, ext.7988 (or +1.508.988.7988) or sales@idc.com for information on applying the price of this document toward the purchase of an IDC or Industry Insights service or for information on additional copies or Web rights. Visit us on the Web at www.idc.com. To view a list of IDC offices worldwide, visit www.idc.com/offices. Copyright 2020 IDC. Reproduction is forbidden unless authorized. All rights reserved.