Pure Storage announces Portworx Data Services and Pure Fusion

Pure Storage, supported by its recent acquisition of Portworx, is releasing its newly launched Portworx Data Services (PDS) into early access program (EAP). Pure also announced Pure Fusion™ a new self-service, autonomous storage platform delivering the best of enterprise storage with the agility and scalability of the cloud. Fusion will be in EAP by YE.

Portworx Data Services (PDS)

DevOps has come to realize that it needs to run stateful application services in containers, so they can scale and have HA that match the containerized apps that use them. Portworx by Pure Storage supplies stateful storage for containers already but with PDS, they are moving up the stack.

Previously Portworx Enterprise offered k8s containers storage with high availability, secure access, backup/DR, capacity management and compliance. With PDS, they now offer a DBaaS (although, more than just databases). This includes 1 click deployment, day-2 ops, scaling, monitoring and lifecycle services

In its initial release, PDS will support Redis, (Apache) Kafka, Cassandra and RabbitMQ. PDS service management includes outage detection and automated bringing up new pods where needed. DevOps can select automated backup and DR for use with their storage. Kafka and RabbitMQ are messaging/streaming data services.

PDS runs on Portworx's service portal and will support deployment and management for these application services in any CNCF k8s cluster, which includes EKS, AKS, GKS, and VMware Tanzu as well as bare metal k8s deployments. PDS requires that Portworx storage are running in the k8s environment.

DevOps will select application service SLAs from the portal such as performance, availability, data protection, etc. and the PDS will generate k8s YAML config files to deploy and monitor the service.

Pure Storage Fusion

The challenges with provisioning enterprise storage are many. One user requested 20TB of storage, only to find out 6 weeks later it couldn't be provided. Pure Fusion will make provisioning storage as simple, scalable and self-service as provisioning cloud compute storage. Much of this could be done on a single array basis before, but Fusion adds support for multiple arrays, availability zones (AZ) and sites as well as more sophisticated management and monitoring.

Fusion's initial release will support iSCSI storage on FlashArray //X and //C and Cloud Block Store for AWS and Microsoft Azure. Over time, Pure will add support for other networking protocols as well FlashArray File, FlashBlade and Portworx. Also at initial release, Fusion only works with new Pure Storage deployments and block storage use-cases such as VMFS-based VMware environments.

Fusion is Storage-as-Code™ for DevOps and is a major change to Pure Storage's API as well as control plane. Some control plane enhancements include automatic rebalancing of storage volumes across arrays within the same AZ, monitoring storage for performance and addressing performance issues as they crop up by moving storage to maintain SLAs.

Storage admins supply the storage pools definitions and storage attributes SLAs they wish to make available and once set up, users can self-service provisioning storage within these pools.

Significance

Pure Fusion is a natural evolution of their current self-service capabilities. Pure's large customers have been asking for something like this for a while now.

But the real problem is that Pure and every storage vendor is trying to stem the migration of applications and data to the cloud. One way to slow cloud adoption is to offer cloud like self-service capabilities and to offer multi-cloud capabilities. Pure's not the last to the market with something like this but also not the first. VMware has the same problem and are using vRealize to provide this.

As for, PDS, at one level, it's a typical move up the stack to grab more customer spend by providing more capabilities. Of course, it can help slow competitive adoption.

But PDS competes with managed service providers (MSPs) that offer such services already in their own private clouds and likely had used Portworx storage. So, this won't help MSPs. But none of them offer these services on prem. All public cloud providers offer similar services operating on their clouds. PDS can compete because they can offer services that crosses cloud providers.

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