

# PURE SERVICE ORCHESTRATOR

## Container Storage-as-a-Service

### SUMMARY

Container adoption is exploding, but a lack of persistent storage support and scalability to match container speeds threatens to slow the trend. Now, Pure Service Orchestrator delivers container storage-as-a-service to build and deploy scale-out, microservice-based applications on demand that meet the needs of dynamic containerized environments. In effect, the agility that you once expected only from the public cloud is now possible on premise.

### THE ADVENT OF CONTAINER STORAGE-AS-A-SERVICE

Pure Service Orchestrator functions as the control plane virtualization layer that enables containerized environments to move away from consuming storage-as-a-device to consuming storage-as-a-service. It integrates seamlessly with container orchestration frameworks, like Kubernetes, so you can effortlessly deliver persistent storage support for your containerized applications.

With Pure Service Orchestrator's smart provisioning, elastic scaling, and transparent recovery, it's now easy to build microservice-based applications, Platform-as-a-Service on premises, and a CI/CD pipeline powered by containers.

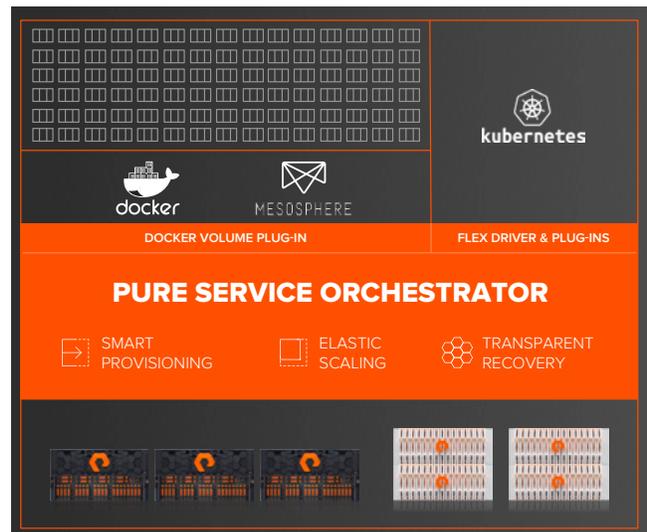


FIGURE 1. Pure Service Orchestrator



#### SMART PROVISIONING

Automated container storage, on demand  
Policy-based provisioning  
Full integrated with Kubernetes, Docker



#### ELASTIC SCALING

Scale across multiple arrays seamlessly  
File and block on shared infrastructure  
Add new storage with a single command



#### TRANSPARENT RECOVERY

Automatic failover for unhindered service  
Self heals to ensure data access integrity  
Enterprise-grade resiliency

## HOW PURE DELIVERS CONTAINER STORAGE-AS-A-SERVICE

### Smart Provisioning

Pure Service Orchestrator delivers storage on demand by automatically making the best provisioning decision for each storage request. It assesses multiple factors such as performance load, capacity utilization, and the health of your storage system in real-time. Policy-tags allow you to make important decisions about your infrastructure – such as assigning dev/test and prod arrays. Service Orchestrator delivers an effortless experience and frees the container admin from writing complex pod definitions. Provisioning storage for containers is now as simple as specifying the desired storage size. That’s it. No size specified? No problem. Pure Service Orchestrator will provision for those requests too.

### Elastic Scaling

Pure Service Orchestrator scales container storage across multiple FlashArray and FlashBlade™ systems or a

mix of both systems, supporting file and block as needed, and delivers the flexibility to have varied configurations for each storage system that is part of the service. Adding new storage arrays to your shared storage infrastructure is as easy as plugging them in and registering them via a quick, single command. With this simplicity, you can start small and scale storage seamlessly across shared infrastructure as the needs of your containerized environments grow.

### Transparent Recovery

To ensure your services stay robust, Pure Service Orchestrator self-heals – protecting you against issues such as node failure and array performance or capacity limits. For example, Pure Service Orchestrator helps prevent accidental data corruption by ensuring a storage volume is bound to a single persistent volume claim at any given time. This ensures that if a Kubernetes cluster “split-brain” condition occurs, simultaneous I/O to the same storage volume, which could otherwise corrupt data, is prevented.

## RUN CONTAINERS ALONGSIDE ALL YOUR OTHER WORKLOADS

With Pure Service Orchestrator, enterprises can now extend their infrastructure beyond existing scale-up and virtualized applications to support containerized, persistent applications – all on Shared Accelerated Storage .

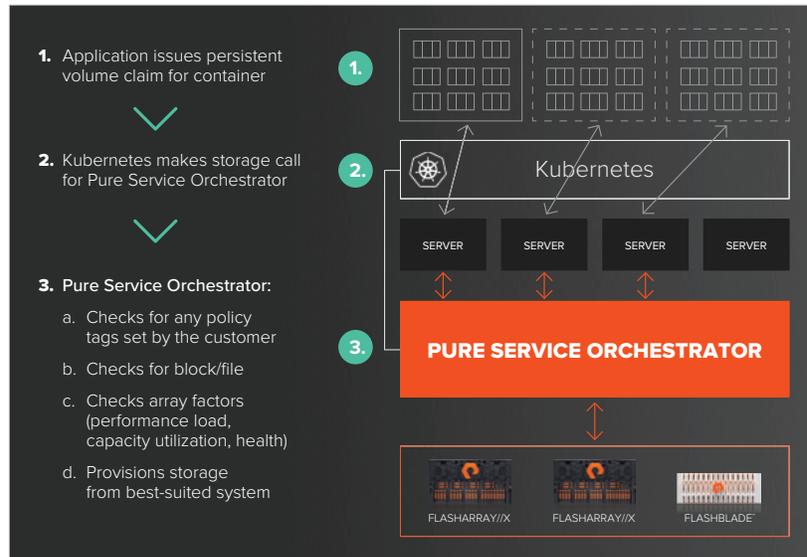


FIGURE 2. Persistent storage for containers: from request to consumption in seconds