SOLUTION BRIEF

Pure Fusion

Bringing the cloud model anywhere with a self-service, autonomous storage environment built for limitless scale

Pure Fusion™—an industry-first self-service, autonomous storage platform—marries the best of enterprise storage with the agility and scalability of the cloud. Pure Fusion from Pure Storage® delivers a software as a service (SaaS) management layer that pools storage arrays into availability zones and automates previously complex tasks such as workload placement, workload mobility, and fleet rebalancing. It also includes a new API framework that enables storage teams and end users to operate in an on-demand, Storage-as-Code™ model that integrates with the tools that developers use today.

- Rapid, automated deployment. Seamlessly automate through storage as code.
- Cloud self-service. Consume storage with the experience of public cloud services.
- Near infinite scale-out. Blow past the traditional storage cluster.
- Intelligent workload management. Manage ever-changing application needs
- Enhanced reliability. Ensure global availability without impacting performance

The Next Big Leap Forward in Storage Management

By delivering a near infinite scale-out storage model that unifies arrays and optimizes storage pools on the fly, Pure Fusion brings the simplicity of the cloud operating model anywhere, with on-demand consumption and back-end provisioning. End users will be able to rapidly consume volumes, file systems, and advanced data services like replication without waiting for back-end manual work, making hardware essentially invisible. And organizations will be able to scale up seamlessly with the powerful Pure family—including FlashArray™, FlashBlade®, Pure Cloud Block Store™, and Portworx®—taking performance, density, and data availability to new levels. View the new Pure Fusion Architecture in Figure 1.

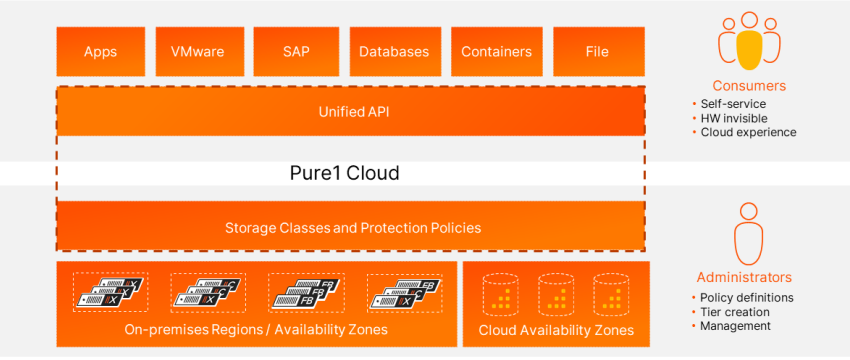

Figure 1: The Pure Fusion architecture enables a cloud-like consumption model

Cloud Self-service

In the era of self-service cloud offerings, users demand a modern, cloud-like experience. Pure Fusion offers users a cloud operating model to provision, consume, and manage storage for all enterprise workloads. It empowers storage admins to expose their services as easily managed storage tiers and data-protection policies, getting out of the never-ending cycle of responding to users' provisioning requests. Users provision their own storage objects without interacting with IT, including through an API-first storage-as-code interface for faster deployment and orchestration (see Figure 2).

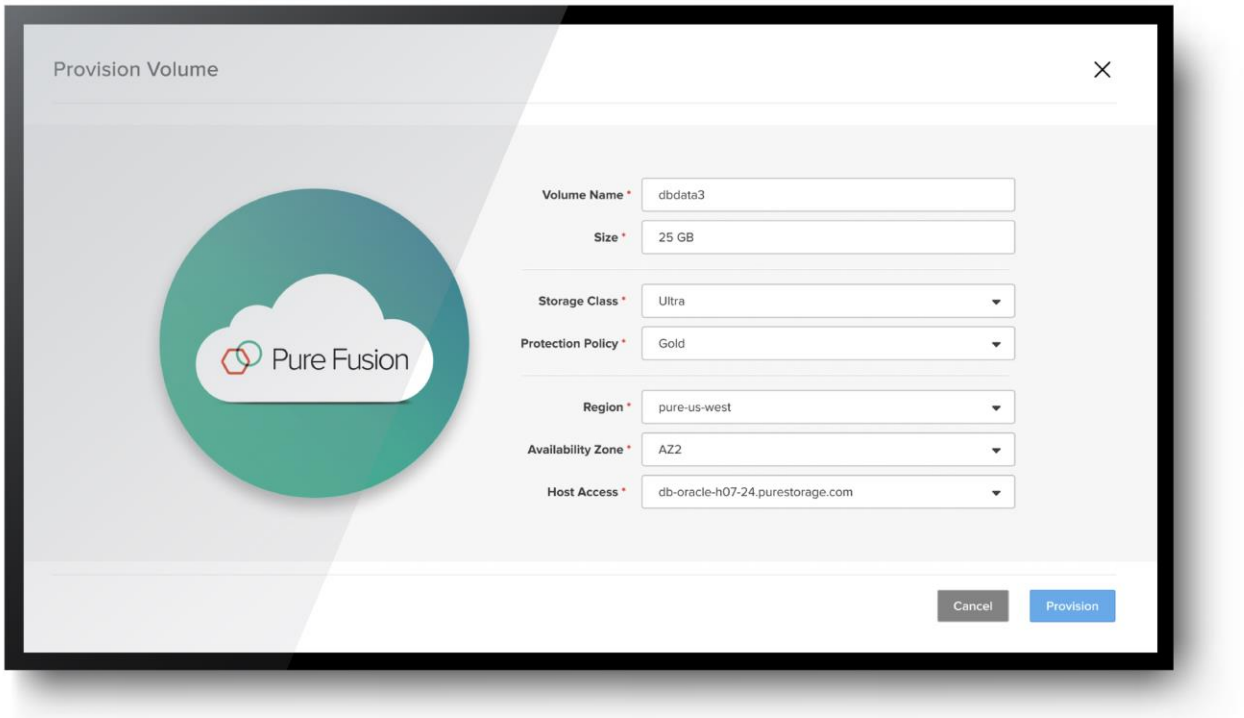

Figure 2: Users provision their own storage through a simple graphical user interface (GUI)

Near Infinite Scale-out

Current storage clusters have limitations. To be truly scalable, multiple arrays need to be interconnected and easily managed. Pure Fusion tears down the traditional role of storage clusters, imposing no restriction on storage media types. Pure Fusion delivers new cloud-like availability zones to achieve nearly unlimited scale-out (see Figure 3). Just add a new node to an existing availability zone, and Pure Fusion takes care of the rest. You can add these new nodes to any current storage tier or create new tiers from the same environment. That means no more worrying about matching cluster node types or troubleshooting workloads trapped in an individual array.

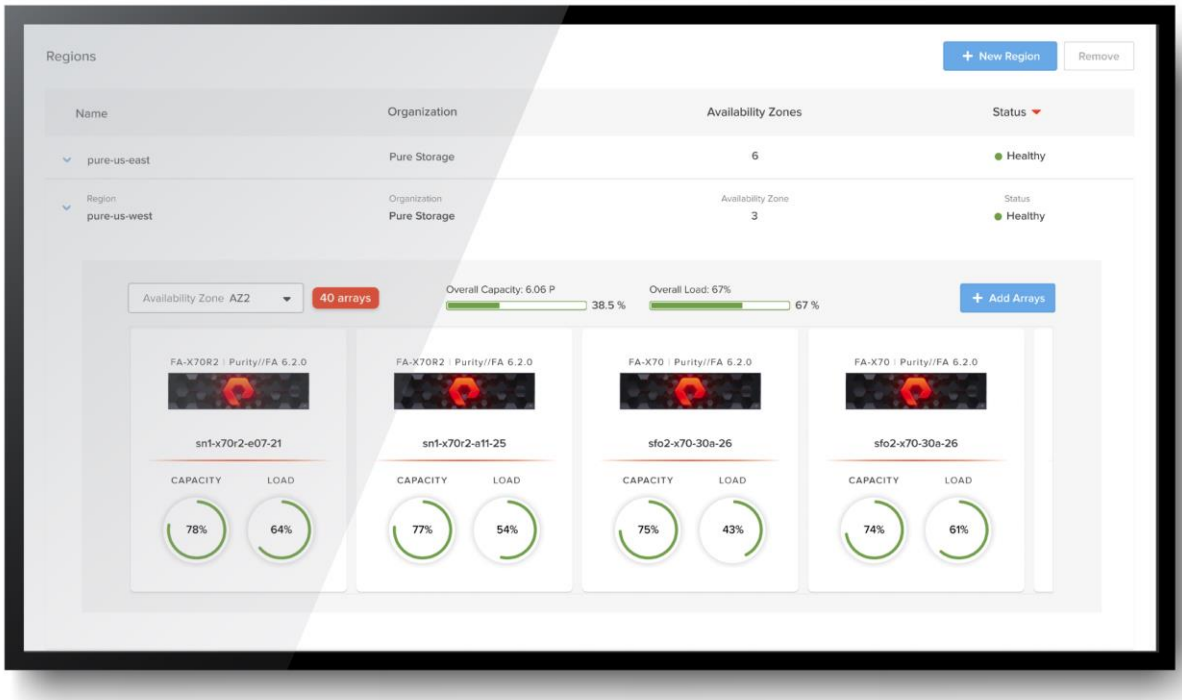

Figure 3: Pure Fusion's cloud-like availability zones enable nearly unlimited scale-out

Intelligent Workload Management

Consistently changing application requirements affect performance across the entire storage environment. Systems must be intelligent enough to manage multiple workloads for peak performance, and if necessary, to move or redistribute those workloads without disruption. The artificial intelligence (AI)-driven workload placement with Pure Fusion automatically allocates the best storage destination, removing the need to pick individual arrays for each workload (see Figure 4). It continually optimizes storage pools by rebalancing workloads on the fly. This means that your storage platform is always prepared.

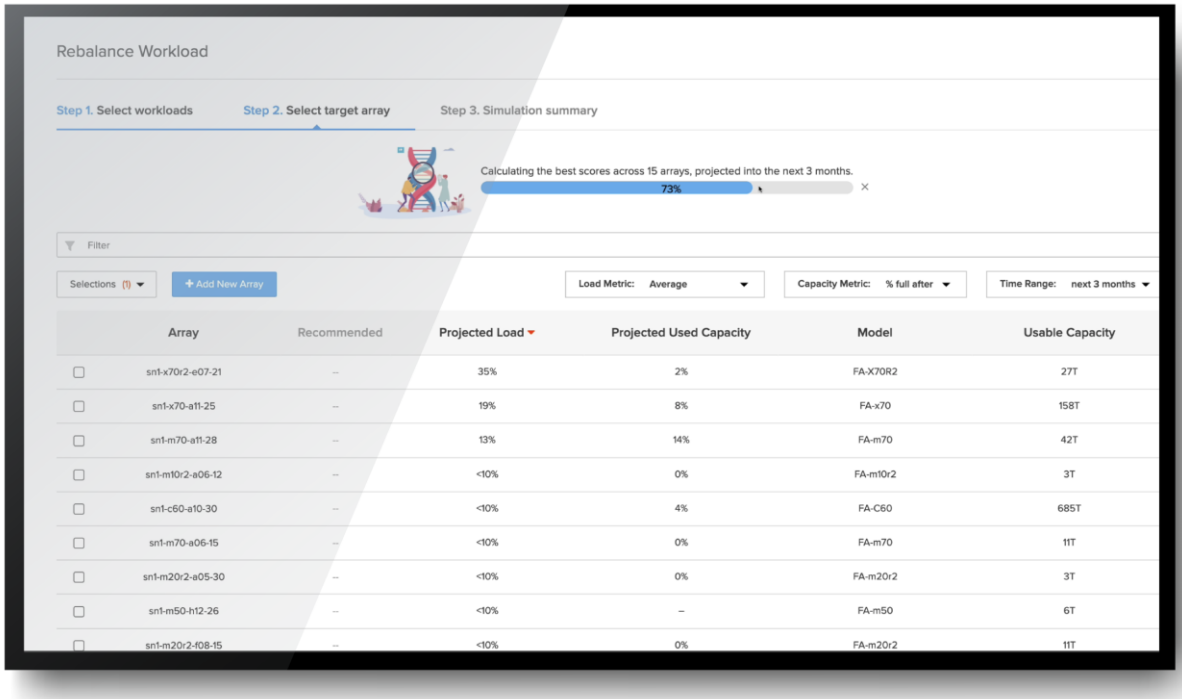

Figure 4: AI-driven workload placement rebalances workloads

Rapid Automated Deployment

Storage admins can integrate Pure Fusion availability zones and automated provisioning into broader data-center automation frameworks and behind in-house custom self-service portals with tools such as Terraform and Ansible, using Fusion's powerful cloud-like API-first interface. Storage as code enables seamless automation (see Figure 5).

```
resource "purestorage_placement_group" "default_pg" {
  provider      = harbormaster
  name          = "default"
  display_name  = "No Affinity"
  tenant_space  = purestorage_tenant_space.ts.name
}

resource "purestorage_volume" "oracledata" {
  provider      = harbormaster
  name          = "oracle-data"
  size          = 1073741824
  tenant_space  = purestorage_tenant_space.ts.name
  storage_class = "db-ultra"
  placement_group = purestorage_placement_group.default_pg.name
  display_name = "Oracle Data Volume"
}

resource "purestorage_volume" "oracledata2" {
  provider      = harbormaster
  name          = "oracle-data2"
  size          = 1073741824
  tenant_space  = purestorage_tenant_space.ts.name
  storage_class = "db-ultra"
  placement_group = purestorage_placement_group.default_pg.name
  display_name = "Oracle Log Volume"
}
resource "purestorage_volume" "oracleconfig" {
  provider      = harbormaster
  name          = "oracle-config"
  size          = 1073741824
  tenant_space  = purestorage_tenant_space.ts.name
  storage_class = "db-capacity"
  placement_group = purestorage_placement_group.default_pg.name
  display_name = "Oracle Data Volume"
}

resource "purestorage_volume" "oraclelog" {
  provider      = harbormaster
```

Figure 5: Pure Fusion storage capabilities are exposed via APIs for integration into broader automation frameworks

Enhanced Reliability

Built-in data protection capabilities and the rock-solid reliability of our Pure Storage platform ensure that data is available and protected. Ensure continuity and performance of business services even through unexpected issues or demand changes. Even if controllers or high-availability (HA) pairs have issues, they won't impact the performance or availability of any other devices in the pool.

Additional Resources

Shift your storage paradigm today with Pure Fusion, a modern storage framework that delivers software-defined storage across platforms.

- Contact your account manager for a trial.
- Learn more about the instant storage provisioning, infinite scale-out, and intelligent workload management features of Pure Fusion.

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