



Pure Storage: Your OpenStack Storage Solution

Simon Dodsley

Director, Open Source Integrations
Pure Storage
(<http://theansibleguy.com>)

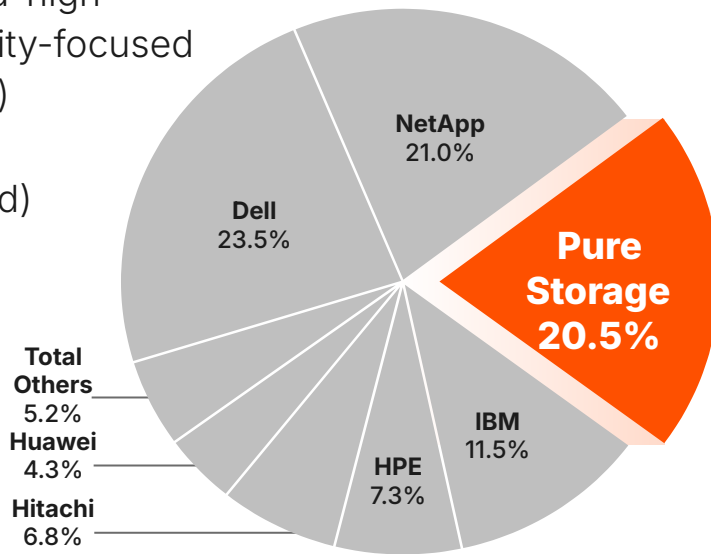


Happy 15th Birthday to OpenStack from another 15 year old...



Who are Pure Storage?

- Founded in 2009
- Fastest growing enterprise company
- All-Flash storage platforms
- On-prem arrays designed for ultra-high performance all the way to capacity-focused
- Cloud-based array (Azure + AWS)
- Single operating system for all
- NPS score of **81** (3rd party verified)



IDC Quarterly Enterprise Storage Systems Q2 2024



Proven Leadership over a Decade

50%+

Lower TCO

5-10x

Less Labor
to Operate

10x

More Reliable

2-5x

Less Power
and Space

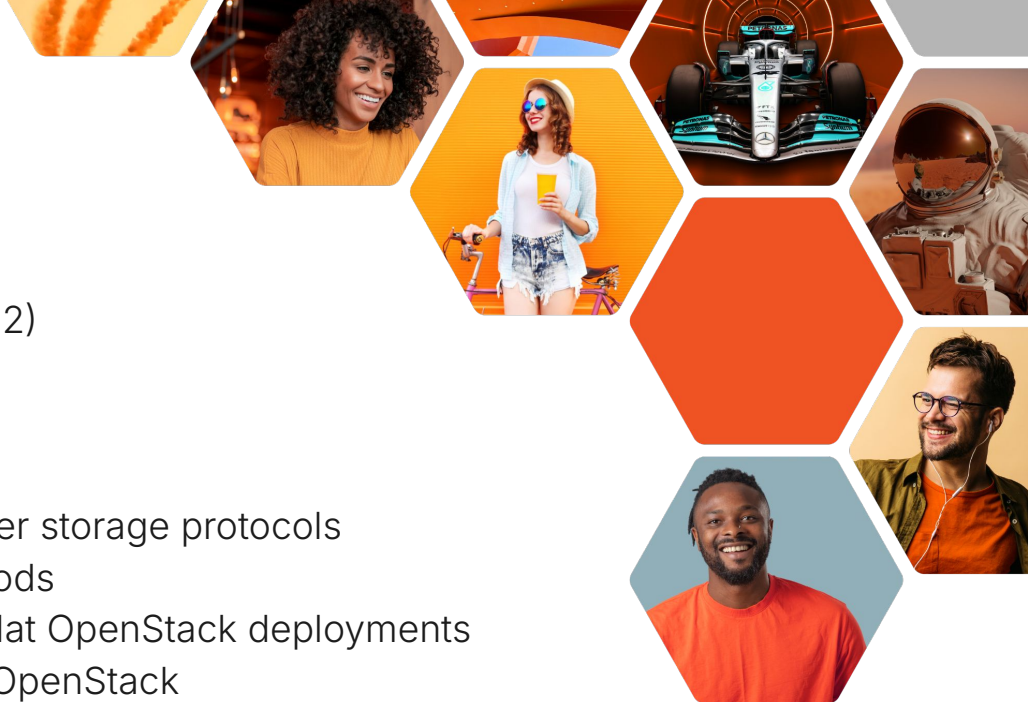
Always Improving Non-disruptively

Consistent Unified Platform



Pure and OpenStack

- First in-tree Cinder driver in Juno (2014 H2)
- Continuous contributor to OpenStack
- In-tree Manila driver in Xena (2021 H2)
- Contributed to 26 projects
- Only vendor to support all approved Cinder storage protocols
- Integrated into multiple deployment methods
- Only NVMe-TCP certified driver for Red Hat OpenStack deployments
- Preferred storage platform for Canonical OpenStack



OpenStack Integrations

- FlashArray™ for Cinder
- FlashBlade® for Manila
- FlashArray is #1 after Ceph for Block Storage - OpenStack User Survey 2024
- All block protocols supported - **iSCSI**, **FC**, **NVMe-RoCE** and **NVMe-TCP**
- Averages an industry-leading 5:1 data reduction with a total efficiency of 10:1 (including thin provisioning)



FlashArray//XL™

Unmatched performance, ultimate scalability

Up to 36GB/s throughput



FlashArray//X™

High performance for mission-critical workloads

As low as 250us latency



FlashArray//C™

The perfect blend of performance and price

Up to 9PB effective capacity



FlashArray//E™

Benefits of all-flash, better economics than disk

80% less energy, 60% less cost



Pure Cloud Block Store™

Optimize spend with virtual block storage in the public cloud

Up to 50% less cost



Cinder Features

- Active/Active support
- Multi-backend with enhanced scheduling capabilities
- Full replication support (async, sync, trisync [3-site])
- Front-end storage Quality of Service
- Consistency groups, included replicated
- Full snapshotting capabilities, including snapshot restore
- Dynamic Oversubscription
- Enabling VMware migrations - support for vVols from 2025.1 (Epoxy)
- Backend for Glance stores and glance image-cache



Ceph-less OpenStack is possible



Ceph has historically been used to facilitate all your storage needs in one platform...

Do the same, and more,
with **Pure Storage**

	Ceph	Pure Storage
Block Storage	✓	✓
File Storage	✓	✓
Glance Store and/or Image Cache	✓	✓
Swift support	✓	✓
Nova ephemeral storage	✓	✓
Keyless Data-at-Rest Encryption	✗	✓
Replication	✗	✓
Storage Quality of Service	✗	✓
Consistency Groups	✗	✓
External management	✓	✗



OpenStack Partnerships



More Information...

Come chat at our booth whilst enjoying your coffee

