

ALL-FLASH, FAST AND ROBUST

OBJECT STORAGE FOR HPC & AI

On Demand ObjectStor is an appliance based preconfigured Object Storage Solution, built on MinIO Enterprise Object Store, aimed at small to midsized HPC/AI installations which provides high performance specially aimed at AI workloads working on a Kubernetes platform. It can be easily scaled horizontally by adding more nodes thus increasing performance and capacity. The customers have the flexibility to choose OPEX or CAPEX business models.

Hardware:

HPE ProLiant Servers

HPE Aruba Ethernet Switch

Nvidia Mellanox Ethernet Switches

Nvidia Mellanox Ethernet Adapters

SYSTEM HIGHLIGHTS

On Demand ObjectStor consists of tightly coupled and integrated stack using Rocky Linux, MinIO and monitoring tools. The system is built using industry standard hardware, HPE server/storage, Nvidia Mellanox Ethernet Switches and Adapters.

Rocky Linux

MinIO Enterprise

Prometheus/Grafana

KEY BENEFITS

FAST AND HIGH PERFORMANCE

On Demand ObjectStor, powered by MinIO, simplifies storage with a single-layer, object-only design, eliminating metadata databases and reducing latency. With read/write speeds of 183GB/s-171GB/s on standard hardware, it supports AI/ML workloads like Spark, TensorFlow, Presto, Hadoop HDFS, and H2O.

KUBERNETES NATIVE STORAGE

The Kubernetes-native and high-performance object storage platform of On Demand ObjectStor with MinIO are designed to cater to the hybrid cloud demands. It is capable of delivering stable functionality for your applications.

KUBERNETES MULTI-TENANCY

Deploy and manage multiple isolated tenants within the same Kubernetes cluster. Tenants are fully isolated, protected from disruption from the others, and scales independently. MinIO secures each tenant separately, and encrypts data saved on drives and transmitted across the network.

SOFTWARE DEFINED

On Demand ObjectStor supports multiple use cases for wide-ranging environments. The software-definite suite of MinIO runs in the public and private clouds seamlessly at the edge and establishes itself as a front-runner in hybrid cloud object storage.

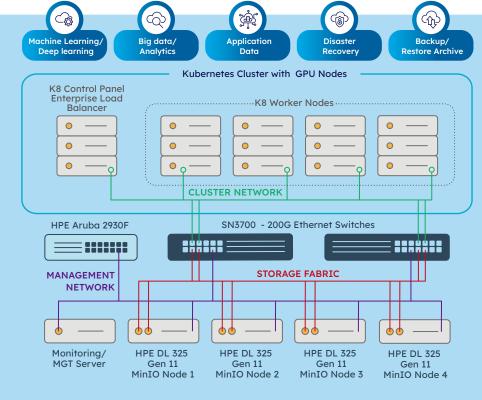
KEY FEATURES

- All Flash storage for demanding HPC/AI workloads.
- Fully Redundant System consisting of 4x MinIO nodes and with redundant links to High-speed switches.
- 2x Nvidia Mellanox 100/200Gbe Ethernet Switches.
- System monitoring stack is included.
- Central syslog server integration if required.
- Software Defined, Build-in Multi-Tenancy and natively secure.
- All Software are included with 3 years subscription/licenses with support.
- Optionally RHEL subscription can be included instead of Rocky Linux.
- On Demand ObjectStor is available in 3 configurations: 100TB/ 200TB/ 600TB.

SYSTEM ARCHITECTURE

On Demand ObjectStor is powered by MinIO Enterprise Object Store which is built for production environments where everything matters - performance, security, scale and manageability.

Cloud-native by design, it is ideal for large scale AI/ML infrastructure, modern data lakes and data lakehouses and database workloads. It is software-defined and runs on any cloud - private, public, colo or edge.



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ODS provides Secure High Performance Computing (HPC) and Artificial Intelligence (AI) infrastructure solutions. We provide end-to-end services from conceptualisation, design, and deployment to management. The HPC/AI solutions and services are complemented with identity and access management software and cloud-based Identity-as-a-Service that allows enterprises to securely manage identities and secure access across computer networks and cloud computing environments.



