

PRODUCT BRIEF | Software Defined Storage & De-Clustered RAID Solutions

OBSIDIAN STORAGE APPLIANCE

The Obsidian Storage Appliance is available both as a software defined storage (SDS) hardware and software appliance, as well as a de-clustered RAID (DRAID) Appliance.

De-Clustered RAID (DRAID) Appliance

Obsidian Storage Appliance is a ZFS-based, de-clustered RAID (DRAID) Appliance designed to serve as a robust iSCSI backup storage target and as a general purpose storage appliance for Enterprises and Cloud Service Providers.

The platform includes integrated hardware and software with a middleware layer providing either resilient backup, data protection, as a rapid-recovery storage target for third-party

backup applications or as a robust volume services as a primary storage appliance.

Viking Enterprise Solutions (VES) Obsidian Storage Appliance technology provides up to 20% better I/O performance and from 2.5 to 1000 times faster array rebuild rate compared to traditional de-clustered RAID arrays.

The Obsidian Storage Appliance is flexible and powerful enough to also support a range of secondary and primary storage applications including use as a stand-alone fast compute and storage node, video broadcasting or cache serving platform.

DRAID BENEFITS

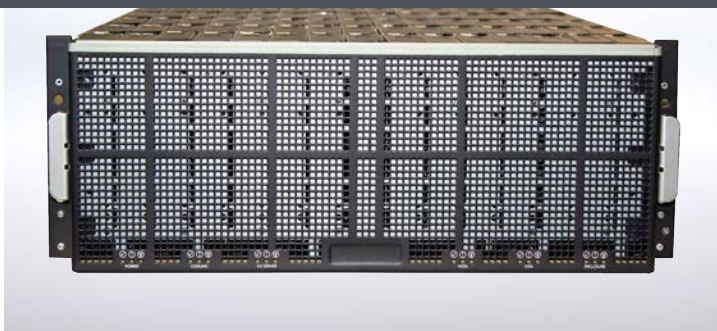
- ▶ ZFS-based Architecture Provides Robust Data Integrity Assurance with Block-level Checksums and Pro-active Corruption Scanning
- ▶ Pre-configured and Tuned Storage Pools for Convenience, Reduced Errors, and Quick Deployment
- ▶ 20% Faster I/O Performance and 250% – 1000% Faster RAID Rebuild Time vs. Traditional RAID Arrays

EASY TO USE

- ▶ Easy to use Menu System aimed at reducing errors by Data Center Personnel
- ▶ LED Indicator driven disk replacement wizard
- ▶ Remaining time & progress bar for Rebuilding process

DRAID FEATURES

- ▶ Robust Volume Services including Thin Provisioning, Compression, Deduplication and Snapshots/Clones
- ▶ Supports High capacity SAS drives: 14TB+
- ▶ Close to 1 Petabyte of storage in a 4U form factor
- ▶ Improved data protection with triple parity
- ▶ Ability to rebuild a 14TB drive in a matter of hours
- ▶ Shares iSCSI Block Devices or Files with NFS
- ▶ Obsidian Storage Appliance supports usage monitoring & alerting of end user volume services activities



OBSIDIAN STORAGE APPLIANCE

Automation

- ▶ Simple, clear CLI, with SDK provided at support for Solarwinds, Zabbix, Nagios

Networking

- ▶ 10Gbps Sharing of iSCSI Volumes
- ▶ Bonding Network Interfaces & Link Aggregation
- ▶ Easy export of volumes over iSCSI to initiators & groups

Alerting

- ▶ Scheduling of proactive scrubbing aids detection & early warning via email alert/notifications
- ▶ Email notifications to inform multiple user of important events on the storage appliance
- ▶ Manage Email Address Lists with "To" list & "cc" users
- ▶ Notification sent when issues are detected or if a particular volume is shared

SOFTWARE DEFINED STORAGE (SDS) APPLIANCE

SDS BENEFITS

- ▶ Supports many storage formats, block, file, and object
- ▶ Manages S3, iSCSI, NFS, SMB support for multiple storage needs
- ▶ Interfaces with modern cloud and existing hypervisor SAN environments
- ▶ Erasure Coding for multi-node data redundancy
- ▶ Encryption, deduplication, and compression for secure and efficient data storage
- ▶ Tightly integrated with Kubernetes components allows flexibility in managing storage in cloud or hybrid cloud solutions

SDS FEATURES

- ▶ Certified hardware provides safe, reliable foundation for high performance and scalable storage solutions
- ▶ Powerful graphical and command line user interfaces – easy to implement and manage
- ▶ In-factory integration delivers solutions ready to plug into on-premises infrastructure
- ▶ Flexible storage device configurations range from all-NVME to all-SSD to all-HDD or any hybrid combination optimizing cost and performance
- ▶ Can be deployed as a hyperconverged Kubernetes or Openshift solution
- ▶ Deployable as a black-box scalable storage array

