

HEDVIG DISTRIBUTED STORAGE PLATFORM

Hedvig's software-defined storage solution provides simple, scalable, and secure distributed storage platform for deploying highly-available cloud-like applications.

Hedvig Storage Service

PROCESSORS	x86 Servers	
PUBLIC CLOUD PROVIDERS	Amazon Web Services, Microsoft Azure, Google Cloud Platform	Supported with any cloud provider that delivers standard compute instances with persistent storage services
IOPS/NODE, MBPS/NODE	Variable	Dependent on storage node hardware configuration
MINIMUM NODES PER STORAGE CLUSTER	Three	
MAXIMUM NODES PER STORAGE CLUSTER	Unlimited	
MAXIMUM CAPACITY PER STORAGE CLUSTER	Unlimited	

Hedvig Storage Proxy

PROCESSORS	x86
HYPERVISORS	VMware vSphere, Microsoft Hyper-V, KVM , Xen
CONTAINERS	Docker, CoreOS
BARE METAL	CentOS
CACHING	Write-through read cache via Flash/SSD on application host
HIGH AVAILABILITY	Active/passive failover
MULTIPATH I/O (MPIO)	Supported via HA Storage Proxy configuration

Hedvig Virtual Disk

STORAGE PROTOCOLS	Block	iSCSI
	File	NFS (v2, v3, v4)
	Object	Amazon S3, OpenStack Swift APIs
BACKUP TYPE	Optional flag which can be used to create backup optimized shared NFS volume	
MAXIMUM VIRTUAL DISKS PER STORAGE PROXY	Unlimited	
MAXIMUM VIRTUAL DISKS PER STORAGE CLUSTER	Unlimited	
MINIMUM VIRTUAL DISK SIZE	1 GB	
MAXIMUM VIRTUAL DISK SIZE	Unlimited	
MINIMUM BLOCK SIZE	512 bytes	
MAXIMUM BLOCK SIZE	64 KB	

DATA PROTECTION		
TUNABLE REPLICATION	Number of copies	1-6
	Type	Synchronous and asynchronous
	Policy	Agnostic, rack-aware, datacenter-aware
SNAPSHOTS	Maximum number of snapshots	Unlimited
CLONES	Maximum number of clones	Unlimited
SELF-HEALING	Automatic, accelerated data rebuild from distributed data copies across storage cluster	
ENCRYPTION	Inline software-based AES XTS encryption provides data security in-flight as well as at-rest	
I/O OPTIMIZATION		
AUTO-BALANCING	Automatic distribution of data across cluster to optimize capacity and resource utilization	
AUTO-TIERING	Automatic placement of active data on the highest performing storage resources	
I/O SEQUENTIALIZATION	Random I/O aggregation to streamline data writes to the storage cluster	
PIN-TO-FLASH	Designation of Flash/SSD as exclusive storage media type for data	
PRE-FETCH	Automated pre-fetch mechanism to speed up sequential read workloads	
STORAGE EFFICIENCY		
INLINE COMPRESSION	Data is compressed before being flushed to disks	
INLINE GLOBAL DEDUPLICATION	Data is deduplicated inline at the compute layer to reduce network payload and also globally to significantly lower backup storage footprint	
THIN PROVISIONING	Creates volumes without requiring pre-allocation and reservation of unused physical disk capacity	
OTHER VOLUME FEATURES		
CLUSTERED FILE SYSTEM SUPPORT	Enables support for multi-writer environments	
RDM SUPPORT	Enables direct LUN-access for virtual machines	
LOCATION-AGNOSTIC	Build multi-site, hybrid-cloud, and multi-cloud backup solutions with Hedvig's highly-available virtual disk(s) spanning across geographically distant locations	

Management Interfaces and APIs

HEDVIG WEBUI	Web-based graphical user interface (GUI)	Any HTML5-compatible web browser including mobile devices
CLI	RSH/SSH	Supports all administrative, provisioning, monitoring, and automation functions
API	REST-based and RPC	
VCENTER PLUGIN	Storage provisioning and management from with the VMware vSphere web management interface.	

Ecosystem Drivers and Integrations

VCENTER PLUGIN	Provision and manage Hedvig storage from with the VMware vSphere web management interface
VERITAS NETBACKUP OST PLUGIN	Hedvig's OST plugin increases NetBackup performance for backups and restores and also implements advanced storage operations such as OPTDUP and AIR
VEEAM TESTED BACKUP REPOSITORY SOLUTION	Hedvig is a Veeam-ready backup repository solution and enables seamless integration with existing Veeam backup policies and workflows
DOCKER VOLUME PLUGIN	Dynamically provision Hedvig Virtual Disks from the Docker container framework using Docker certified plugin
OPENSTACK DRIVERS	Integrates Hedvig block and object storage functionality with OpenStack using Cinder and Swift drivers
KUBERNETES FLEXVOLUME	Hedvig provides dynamic volume provisioner for Kubernetes container orchestration framework
MESOSPHERE	Dynamically provision persistent volumes from DC/OS via the Docker Volume Plugin

ABOUT HEDVIG

Built by software engineers of the world's largest distributed systems, Hedvig delivers modern storage for enterprise compute environments running at any scale. Customers using the Hedvig platform transform their storage from a box where data resides to a fundamental business enabler.