CVFS Product Release Notes

Release 6.0.5.12

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CVFS 6.0.5.12 version support matrix

CVFS general release	Additional CVFS products
CVFS 6.0.5.12	CVFS CSI Driver version 2.0
CVFS 6.0.5.12	CVFS VAAI NAS Plugin version 4.2
CVFS 6.0.5.12	CVFS vCenter Plugin version 4.3.1

CVFS 6.0.5.12 Release Documentation

Title	contents
Hedvig Cluster Deployment Guide	how to set up, install, and upgrade Hedvig Storage Cluster Nodes, Storage Proxies, and Deployment Servers. Also, how to set up for HCI, AWS, KVM, Hyper-V, Multipath I/O, and HTTPS support.
Hedvig Command Reference	how to use all commands in the Hedvig CLI to create and manage Virtual Disks, snapshots, and clones, as well as manage Hedvig Storage Proxies, Storage Pools, rereplication, SNMP, MIBs, and OST AIR.
Hedvig CSI User Guide	how to install, configure, and provision storage for the Hedvig CSI Driver, as well as how to create snapshots and clones and perform data migration.
Hedvig Deduplication Design User Guide	how Hedvig deduplication design, including with respect to GC (garbage collection), is implemented.
Hedvig Encrypt360 User Guide	how to use the Hedvig Encrypt360 feature, which provides software-based encryption that is AES-256, FIPS compliant encryption of data in flight and at rest.
Hedvig MIB User Guide	how to set up the Hedvig MIB and configure SNMP, including sending a test trap and all hedvigTrapsEntry traps and descriptions.
Hedvig Operator User Guide	how to use the Hedvig Operator, the official operator to deploy and manage Hedvig components in container orchestrators such as Kubernetes – including how to install, create a configuration for, and upgrade Hedvig components with.

Title	contents
Hedvig Pensieve User Guide	how to use Hedvig's Pensive Service, which monitors the metrics for a system – providing a system snapshot to help troubleshoot Hedvig Cluster issues.
CVFS Product Release Notes	[this document] special notes on upgrading and installing the current release, as well as highlights of the current release and a few previous releases.
Hedvig RBAC User Guide	how to set up and manage Hedvig RBAC, including user, role, and tenant management.
Hedvig: Resetting VMware ESXi NFS 4.1 Transfer Size	how to use two hidden parameters, ForeMaxRqstSize and ForeMaxRespSize, in the ESXi advanced settings, to increase the maximum NFS 4.1 transfer size up to 1024 KB.
Hedvig REST API User Guide	how to use the Hedvig REST API to create and manage Virtual Disks, snapshots, and clones, as well as manage Hedvig Storage Clusters.
Hedvig S3 Protocol-Compatible Object Storage User Guide	how to use Hedvig's S3 Protocol-Compatible Object Storage, including how to set up configuration files, SSE, HTTPS, AWS CLI, and S3 API calls supported by Hedvig.
Hedvig S3 Protocol-Compatible Object Storage User Interface Guide	how to use Hedvig's S3 Protocol-Compatible Object Storage User Interface, which supports S3 Bucket operations. This UI enables basic S3 operations, such as bucket/object creation; bucket/object basic metadata management; listing objects; managing folders; uploading, downloading, and deleting objects; etc.

Title	contents
Hedvig Troubleshooting Guide	how to troubleshoot Hedvig Storage Proxy and Cluster Node service status, health status, and metrics, as well as changing log file settings, performing data collection, and recommended SSD specifications.
Hedvig UI Installer User Guide	how to install Hedvig products with a user interface-based installation process.
Hedvig VAAI NAS Plugin User Guide	how to use the Hedvig VAAI NAS Plugin, which enables the use of VMware vSphere Storage APIs – Array Integration (VAAI) in the Hedvig environment.
Hedvig Virtualized Storage for Microsoft Hyper-V Clusters User Guide	how to set up Hyper-V Failover Clusters with Hedvig, including how to configure Scale-out File Server (SOFS).
CVFS vCenter Plugin User Guide	how to use the CVFS vCenter Plugin, which integrates CVFS functionality into the VMware vSphere Client, a Web browser-based application that connects to the vCenter Server in order to manage vSphere infrastructure.
Hedvig WebUI User Guide	how to use the Hedvig WebUI to create and manage Virtual Disks, snapshots, and clones, as well as manage Hedvig Storage Clusters, Storage Proxies, Storage Pool Migration, rebalancing, and SNMP configurations.

Highlights of the CVFS 6.0.5.12 release

Platform compatibility update for Rocky Linux 9
Includes a minor library-level update to ensure stable operation in Rocky Linux 9 environments.

Highlights of the CVFS 6.0.5.10 release

Memory leak fixes and stability improvements
Addresses memory-related issues to improve runtime stability and prevent service degradation over time.

Platform support for Rocky Linux 9
Adds compatibility with Rocky Linux 9, enabling deployment on newer operating system environments.

Highlights of the CVFS 6.0.5.6 release

Version 6.0.5.6 is a consolidation and stabilization release in the 6.0.x Innovation line, addressing correctness, efficiency, and reliability issues observed in earlier 6.0.5.x versions.

Key Enhancements and Fixes

- Improved EC Healing Behavior for RF3 Under Full Storage Pool Conditions
- Fixes inefficiencies during EC healing from RF3 data when storage pools are consistently full.
- Memory Usage Improvements During Storage Pool Full Scenarios
- Addresses a minor memory leak observed when operating near high watermark storage capacity on one or more disks
- RBL / SPM Interaction Fixes
- Improves coordination between concurrent RBL and SPM workflows

  Improved Efficiency of SPM Metadata Persistence
- Optimizes how SPM tracks and persists on disk metadata, minimizing unnecessary information retention and reducing memory and storage overhead.
- SPM Bug Fixes and Stability Improvements
- Includes miscellaneous fixes to improve robustness and correctness of SPM workflows across a range of operational scenarios.
- Operational and Security Fixes
- Addresses a set of known issues impacting deployment workflows, system logging under full disk conditions, hardware metadata accuracy, role configuration, and security vulnerabilities, including CVE fixes and access control hardening.

Highlights of the CVFS 6.0.5.5 release

Version 6.0.5.5 continues the 6.0.x Innovation line with a focus on stability and runtime efficiency.

Key Enhancements and Fixes

- Memory Optimizations

  Improves memory utilization across core services to enhance runtime efficiency.

Highlights of the CVFS 6.0.5.4 release

Version 6.0.5.4 builds on the 6.0.x Innovation line with a focus on read performance and startup efficiency.

Key Enhancements and Fixes

- Read Performance Architecture Enhancement

  Introduces substantial read performance improvements through a key architectural change. Index data is now maintained in a persistent, high performance NVMe storage layer, rather than relying on transient in memory caches populated from HDD.
- Faster and More Consistent Read Operations

  Persisting index data on NVMe improves read latency and consistency, particularly across steady state operation and restart scenarios.
- Significantly Faster Service Startup and Upgrades

  Because index information is immediately available after restart, services no longer need to scan the entire node dataset during startup, resulting in dramatically faster service start times and reduced upgrade duration.
- Operational Efficiency Improvements

  Reduces cache warm up overhead and variability, improving predictability of node restarts and lifecycle operations.

Early Access Notes

- Read performance enhancements are not enabled by default.
- Intended for early adopters and controlled environments.
- Feedback from this phase informs subsequent stabilization and broader enablement.

Highlights of the CVFS 6.0.4 release

Version 6.0.4 marks the first CVFS Innovation release in the 6.0.x series.

The 6.0.x Innovation line follows a faster feature cadence, delivering platform updates, performance work, and architectural changes earlier than the Long Term Support (LTS) stream.

Relationship to LTS

- 6.0.x includes all fixes mentioned in the 5.0.x LTS stream.
- On top of LTS fixes, 6.0.4 introduces Innovation only enhancements, including performance improvements, early access features, and internal service optimization.

Key Enhancements and Fixes

- JDK 21 Support

  Upgrades runtime components to JDK 21 for improved performance, stability, and long term maintainability.

- RBL / SPM Progress Bar Fixes

  Enhances accuracy of reporting for lifecycle operation progress indicators in RBL/SPM workflows.

- IRBL Parallelism Configuration

  Increases parallelism for IRBLs targeting the same pool to reduce rebuild time and improve operational throughput. Also provides a configuration option for further optimization via developer tools.

- Space Reservation Feature Bug Fixes
- Developer Workflow Enhancements for SPM

  Simplifies SPM triggering flows through improvements in developer tooling.

- Fix for Empty RF3 Containers Causing SPM Stall

  Addresses a condition where empty RF3 containers could cause SPM operations to hang.

- Developer CLI Validation Improvements

  Adds validation checks to prevent invalid command inputs and reduce operational errors.

- Improved Fix Disk Reliability

  Prevents long running or stalled fix disk operations after NVMe failures.