zadara

Zadara Release Notes

Release 25.07

Zadara
Sep 19, 2026

LATEST RELEASE

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CHAPTER

ONE

KEY ENHANCEMENTS

The following section will breakdown the **main** additions delivered in zStorage 25.07 and its future service pack releases to the Zadara Storage Cloud platform.

1.1 Object Storage

1.1.1 Container-Level Replication

Object replication is the automatic duplication and ongoing synchronization of objects from a container in a source Object Storage to a target container in a remote Object Storage instance, or even to a target container in the same Object Storage instance as the source.

Container replication can be used to support disaster recovery, minimizing latency for users in different geographical locations, data sharing between environments, and consistency across distributed systems.

Key reasons for replication include:

- Data Protection and Disaster Recovery - Replication creates synchronized copies of containers across different systems or locations, safeguarding against data loss due to hardware failures, accidental deletions, or disasters.
- High Availability - By maintaining redundant copies, replication can ensure continuous access to data, even if one system or location becomes unavailable.
- Operational Flexibility - Replication allows for managing multiple copies of data, enabling features like cross-region data migration, load balancing, and offloading read operations to replicas.

Note: Configuring replication jobs may incur additional charges for data transfer. For more information, please contact your cloud administrator. (ZSTRG-30793)

For configuration details and usage examples, refer to the Container replication section of the Object Storage user guide.

1.1.2 Unified Identity Replication

The Unified Identity service allows Object Storage identity information, including users and access keys, to be replicated to a remote Object Storage region. This ensures consistent identity management across regions and simplifies multi-region deployments. (ZSTRG-33455)

Additional configuration guidance is available in the Unified identity section of the Object Storage user guide.

1.1.3 24TB HDD Support

Support for 24TB HDD drives has been added to Object Storage deployments. This enables higher storage density, improved cost efficiency, and better scalability for large-capacity Object Storage instances. (ZSTRG-35427)

1.1.4 Improved Object Storage Scalability

Object Storage scalability has been enhanced to support up to 6,000 Object Storage accounts within a single instance. This improvement is designed to better support large-scale, multi-tenant environments and service provider deployments. (ZSTRG-31202)

1.2 VPSA Storage Array / VPSA Flash Array

1.2.1 32Gb Fibre Channel Connectivity Support

Support for 32Gb Fibre Channel (FC) connectivity has been added for VPSA Storage Array and VPSA Flash Array deployments, subject to supported hardware configurations. This enhancement enables higher bandwidth and improved performance for FC-based workloads. (ZSTRG-27805)

1.2.2 SMB Service Engine Upgrade

The SMB service engine used by VPSA Storage Array and VPSA Flash Array has been upgraded to a newer version. This upgrade improves protocol stability, performance, and compatibility with SMB clients, while maintaining existing configuration and access semantics. (ZSTRG-31053)

1.3 Provisioning Portal

1.3.1 Cost and Usage Explorer

The Cost and Usage Explorer is a new global service available through Zadara's Global Provisioning Portal. It provides centralized visibility into cost and usage data across all environments, helping organizations better understand and manage their storage consumption.

For additional details and usage guidance, refer to the service documentation. (ZSTRG-33457)

1.4 Cloud Platfrom

1.4.1 NVMe-oF Cloud Backend Protocol Support

Support for NVMe over Fabrics (NVMe-oF) has been added as a cloud backend protocol. This enhancement enables low-latency, high-throughput connectivity to backend storage, improving performance for latency-sensitive and high-performance workloads. (ZSTRG-9989)

The *Changelog* section of this guide provides details on additional enhancements, changes and fixes introduced in this version.

CHAPTER

TWO

CHANGELOG

2.1 Version 25.07-779

2.1.1 Object Storage

- **ZSTRG-38286** - Resolved a memory leak in the proxy-server that caused the Proxy Virtual Controller to crash.
- **ZSTRG-37739** - Resolved an issue where uploading large objects using pre-signed URLs failed with CORS errors after upgrading Object Storage to 25.07.
- **ZSTRG-38476** - Resolved an issue where CORS preflight (OPTIONS) requests received a 403 (SignatureDoesNotMatch) error.

2.1.2 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-37730** - Upgraded the SMB engine

2.1.3 Storage Node

- **ZSTRG-38145** - Resolved an error in IPv6 address handling that could prevent certificates from being injected into Virtual Controllers.

2.1.4 Provisioning Portal

- **ZSTRG-38441** - Resolved an issue where the timezone displayed in the Software Update Rescheduling form in the Provisioning Portal was inconsistent.

2.1.5 Security

- **ZSTRG-38456,ZSTRG-38457,ZSTRG-38458,ZSTRG-38459** - Upgraded cross cloud components to mitigate the following CVEs
  - CVE-2025-66200
  - CVE-2026-34059
  - CVE-2026-8450
  - CVE-2026-8376
  - CVE-2026-9698
  - CVE-2026-9547
  - CVE-2026-5121
  - CVE-2026-5260
  - CVE-2026-9494
  - CVE-2026-11386
  - CVE-2026-12391
  - CVE-2026-58469
  - CVE-2026-58470
  - CVE-2026-58471
  - CVE-2026-58472

2.2 Version 25.07-752

2.2.1 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-37439** - Security – CVE-2026-31431 (“Copy Fail”) - mitigates the Linux kernel local privilege-escalation vulnerability in the algif_aead module on VPSA Storage Arrays running Container services.

2.3 Version 25.07-748

2.3.1 Object Storage

- **ZSTRG-37173,ZSTRG-37039,ZSTRG-36505** - Resolved an issue that could cause internal Object Storage processes to fail during certain delete and restore operations, improving overall service reliability.
- **ZSTRG-36547,ZSTRG-37154** - Resolved an issue where member user role unexpectedly lost delete permissions for containers and objects following an upgrade to version 25.07-723.
- **ZSTRG-36747** - Resolved an issue where the Unified Identity Service network port was exposed when the service was not enabled.
- **ZSTRG-36579** - Resolved an issue where CORS (Cross-Origin Resource Sharing) headers were absent on versioning-enabled containers.
- **ZSTRG-36234** - Resolved an issue where Audit Logs were not delivered to the configured target container when SSL termination was disabled.
- **ZSTRG-36761** - Resolved an issue where creating a user with an email address already registered in a different account was incorrectly blocked.
- **ZSTRG-36851** - Resolved an issue where Read-Only Cloud Admin administrator users were unable to open the Performance Resource Tree in the management console.
- **ZSTRG-36907,ZSTRG-35800** - Resolved an issue where multipart-uploaded objects were not replicated correctly to the destination container.
- **ZSTRG-37032** - Expired objects are now correctly excluded from replication jobs, preventing unnecessary errors in replication logs.

2.3.2 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-37064** - Fixed an issue where slow internal log processing caused VPSA failover to take longer than expected.
- **ZSTRG-33320** - (VPSA Flash Array) Emergency pool management actions are now evaluated based on physical capacity (i.e. Volume snapshot deletion, new Volume creation, Volume expansion etc.)
- **ZSTRG-36789** - A new `*.zadaravpsa.com` wildcard TLS certificate has been issued for VPSA, ensuring continued secure connectivity.

2.3.3 Security

- **ZSTRG-37098** - Security update addressing critical and high severity vulnerabilities across Storage Node, VPSA, and Object Storage components.

2.4 Version 25.07-723

2.4.1 Object Storage

- **ZSTRG-36252,ZSTRG-36147** - Fixed a regression introduced in a previous release that resulted in slower Object Storage management API responses.
- **ZSTRG-36234** - Fixed an issue where Container Audit Logs were not delivered to the target container due to disabled SSL termination.

2.4.2 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-36142** - Fixed an issue where a Docker image could not be created on a newly provisioned VPSA.
- **ZSTRG-36168** - Fixed an issue where Remote Discovery between a VPSA upgraded to 25.07 and a VPSA running 23.09 stopped working when both VPSAs are part of an Active Directory configuration.

2.4.3 Storage Node

- **ZSTRG-36176,ZSTRG-35847,ZSTRG-36029,ZSTRG-35861** - Storage Node 25.07 upgrade related fixes.

2.5 Version 25.07-710

2.5.1 Object Storage

- **ZSTRG-30793** - Introduced container-level replication to a remote Zadara Object Storage instance. For configuration details and usage examples, refer to the Container replication section of the Object Storage user guide.
- **ZSTRG-33455** - Introduced the Unified Identity service, enabling replication of the Object Storage Identity service to a remote Object Storage region. Additional configuration guidance is available in the Unified identity section of the Object Storage user guide.
- **ZSTRG-32520** - Introduced a revised Object Storage Controller specification with increased CPU and RAM allocation.
- **ZSTRG-35427** - Introduced 24TB HDD support, improving efficiency and cost effectiveness for large Object Storage instances.
- **ZSTRG-31202** - Scalability improvement: increased Object Storage support to up to 6,000 Object Storage accounts within a single instance.
- **ZSTRG-30429** - Added the ability to set create/delete permissions for a user on the account level. For additional information refer to the Managing Permissions section in the Object Storage user guide.
- **ZSTRG-35418,ZSTRG-32503** - Fixed an issue where the *Content-MD5* HTTP header was missing when attempting to set object lock retention. Veeam users considering an upgrade to v13 must upgrade their Object Storage instance to version 25.07-710 prior to upgrading to v13.
- **ZSTRG-35929** - Renewed the **.zadarazios.com* TLS certificate.
- **ZSTRG-27587** - Fixed an issue in the Object Storage usage report where the system provided only 60 days of data. The usage report can now generate up to 90 days of account usage data.
- **ZSTRG-35375** - Fixed an issue where setting permissions from the management console on a specific container did not populate the full user list.
- **ZSTRG-34792,ZSTRG-34518** - Fixed an issue encountered when attempting to delete an expired object.
- **ZSTRG-33753** - Fixed an issue where deleting a member user failed.
- **ZSTRG-33383** - Fixed an issue where versioned expired objects were not deleted by the OLCP rule.
- **ZSTRG-32501** - Fixed an issue where setting a custom metadata header returned an error.
- **ZSTRG-30897** - Fixed an issue where Object Storage administrators (ZIOS_ADMIN) did not receive notifications when members crossed their account quotas.

2.5.2 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-27805** - Added support for 32Gb FC connectivity (with supported hardware).
- **ZSTRG-31053** - Upgraded the SMB service engine.
- **ZSTRG-32053** - Added the option to stop a Media Scan from the management UI.

- **ZSTRG-30201** - Added monitoring and alerting capabilities for a Remote Object Storage endpoint used for Backup to Object Storage. Monitoring can be enabled or disabled, with the ability to define the alert frequency.
- **ZSTRG-32794** - Fixed an issue where setting a Group Quota returned an error.
- **ZSTRG-29774** - Removed the Support section section from the management user interface
- **ZSTRG-31084** - Active Directory - for new directory integration, automatic domain discovery will be disabled (default) in order to avoid wrong detection of the available domains.

Important

Deprecation notice: In the next major zStorage release, planned for Q3 2026, the File-Life-Cycle (FLC) indexing feature will be sunset. Existing VPSA using the feature will continue to be supported in accordance with Zadara's support policy.

For additional information, please contact support@zadara.com.

2.5.3 Command Center

- **ZSTRG-35548** - Renewed the **.zadarastorage.com* TLS Certificate.
- **ZSTRG-33395** - Added the Backend network protocol used for drives and virtual controllers
- **ZSTRG-33460** - Added REST API to control password expiration settings.

2.5.4 Provisioning Portal

- **ZSTRG-33457** - Cost and Usage Explorer - Introduced a new global service via Zadara's Global Provisioning Portal providing centralized visibility into cost and usage data across all environments. For additional information please refer to the service user guide.
- **ZSTRG-29051** – Organization support – Introduced an *Organization* entity in Zadara's Global Provisioning Portal, enabling logical management of users and resources within an organization
- **ZSTRG-35548** - Renewed the **.zadarastorage.com* TLS Certificate
- **ZSTRG-30204** - Removed the option to enable FLC (File-Life-Cycle) Index during VPSA creation

2.5.5 Storage Node

- **ZSTRG-9989** - Added support NVMeOF as the cloud backend protocol
- **ZSTRG-25356** - As part of the 25.07 upgrade, the installer updates the NVIDIA network interface firmware. Activating the new firmware requires a node reboot. Until the reboot is performed, the node will continue to operate normally using the existing firmware, and there is no immediate requirement to reboot following the upgrade
- **ZSTRG-27637** - Upgrade SCST packages

2.5.6 Security

- **ZSTRG-34936** - Upgraded cross cloud components to mitigate the following CVEs

  - CVE-2024-5629
  - CVE-2024-56326
  - CVE-2024-56201
  - CVE-2024-3596
  - CVE-2025-0395
  - CVE-2022-49043
  - CVE-2024-34459
  - CVE-2024-56171
  - CVE-2025-24928
  - CVE-2025-27113
  - CVE-2024-31228
  - CVE-2024-51741
  - CVE-2024-46981
  - CVE-2025-27516
  - CVE-2025-1215
  - CVE-2025-26603
  - CVE-2024-11168
  - CVE-2024-9287
  - CVE-2024-6232
  - CVE-2025-4802
  - CVE-2025-47273
  - CVE-2025-46835
  - CVE-2025-27614
  - CVE-2025-27613
  - CVE-2025-48386
  - CVE-2025-48385
  - CVE-2025-48384
  - CVE-2025-29088

- CVE-2025-6965
- CVE-2025-6069
- CVE-2025-8194
- CVE-2024-55549
- CVE-2025-24855
- CVE-2025-59681
- CVE-2025-59682
- CVE-2025-49844
- CVE-2025-48040
- CVE-2025-48039
- CVE-2025-48038
- CVE-2025-48041
- CVE-2025-0840
- CVE-2025-8225
- CVE-2025-11839
- CVE-2025-7545
- CVE-2025-5244
- CVE-2025-11840
- CVE-2025-5245
- CVE-2025-1153
- CVE-2025-3198
- CVE-2025-1181
- CVE-2025-1182
- CVE-2025-11083
- CVE-2025-11081
- CVE-2025-11082
- CVE-2025-11494
- CVE-2025-11495
- CVE-2025-11414
- CVE-2025-11412
- CVE-2025-11413
- CVE-2025-64720
- CVE-2025-65018
- CVE-2025-64505
- CVE-2025-64506
- CVE-2024-29018
- CVE-2024-41110
- CVE-2024-36623
- CVE-2023-28842
- CVE-2024-36621
- CVE-2023-28841
- CVE-2024-23652
- CVE-2023-28840
- CVE-2024-23651
- CVE-2022-42898
- CVE-2022-45141
- CVE-2022-3437
- CVE-2023-34966

CHAPTER

THREE

KNOWN ISSUES AND LIMITATIONS

3.1 zStorage 25.07-710

3.1.1 VPSA Storage Array and Flash Array

- **ZSTRG-35526 - Deprecation notice - In the next major zStorage release, planned for Q3 2026,** the File-Life-Cycle (FLC) indexing feature will be sunset. The feature will continue to be supported in accordance with Zadara's support policy. For additional information, please contact support@zadara.com.

3.2 zStorage 23.09-SP3-381

3.2.1 Object Storage

- **ZSTRG-31968** - Uploading Folders or Objects in Object Storage has the following limitations:
  - A maximum of 10,000 files can be selected for upload to a folder.
  - A folder can contain a maximum of 10,000 files.
  - A file can be up to a maximum size of 2GB.

Important

Deprecation Warning – Beginning with Zadara's next planned zStorage release (25.07), the creation of non-compliant S3 container names will be prohibited. Existing non-compliant Containers will continue to operate normally (ZSTRG-31573).

3.3 zStorage 23.09-SP2

3.3.1 VPSA Storage Array and Flash Array

- **ZSTRG-30056** - Hosts connected to the VPSA using NVIDIA network adapter with OFED 23.10 should not use iSER as the transport protocol. OFED 23.10 supports TCP only as the transport protocol for VPSA connectivity.

3.4 zStorage 23.09

3.4.1 VPSA Storage Array and Flash-Array

- **ZSTRG-25274** - Starting of 23.09 creating new RAID6 Raid-Group is not allowed

3.4.2 Object Storage

- **ZSTRG-27887** - "Allow tenant name in URL" option for Swift API does not work for public objects access
- **ZSTRG-27282** - Container Audit logs present the Object Storage load-balancer IP instead of the source IP address
- **ZSTRG-27169** - Containers with versioning enabled (and/or large objects) will impact the average object size presented in ZIOS_ADMIN dashboard. The average object size that is presented will add the object's versions and multi-part segments to the object count
- **ZSTRG-27422** - Usage reports allows the user to select a retention period of up to 90 days where the system stores 60 days of usage reports

3.4.3 Unified API Documentation portal

Executing API requests from the docs interface itself are currently restricted due to CORS.

3.5 zStorage 23.03

3.5.1 Object Storage

The 23.03 release of Zadara's Object Storage does not support the following functionality that is part of the VPSA Object Storage:

- Account level rate limit
- Container level replication
- Account/container quotas (Update: Added to version 23.09)
- Object Life Cycle (Update: Added to version 23.09-SP1)
- External authentication (Openstack Keystone integration)

The features above will be added gradually back to the platform according to Zadara's Products road map.

Object Storage version 23.03 currently support the following data protection in a single zone layout:

- 2-Way mirroring
- Erasure Code 4+2

3.5.2 VPSA Storage Array and Flash-Array

- **ZSTRG-24231** - Introduced in 23.03, VPSA volume mirroring for NAS volumes from a VPSA running 23.03 to an older VPSA version with DOS attributes enabled should be avoided as older version will not be able to read the xattr created by the newer VPSA. It is recommended to upgrade both source and destination to 23.03 software version
- **ZSTRG-23612** - Flash-Array, Introduced in 23.03, creating a RAID6 using the SSD tier is now prohibited

3.5.3 Provisioning Portal

- **ZSTRG-23919** - In some cases, pending service creation request will be present despite the service request was already approved. The pending request will be cleared in the next internal sync (up to 10 minutes)
- **ZSTRG-23919** - In some cases, pending service creation requests will not be displayed as pending until the next internal sync (up to 10 minutes)
- **ZSTRG-24354** - introduced in 23.03, VLAN allocation pending requests is not visible in the provisioning portal
- **ZSTRG-24219** - Introduced in 23.03, pending action indicator for existing operations is not visible.

CHAPTER

FOUR

REVISION HISTORY

- 25.07-779, July 2026
- 25.07-752, May 2026
- 25.07-748, April 2026
- 25.07-723, February 2026
- 25.07-710, January 2026

CHAPTER

FIVE

ZSTORAGE SOFTWARE LIFE-CYCLE

The following section describes Zadara's software life-cycle policy, designed to guide and govern the development, deployment, and maintenance of our software systems. This policy serves as a cornerstone for Zadara's commitment to deliver high-quality, secure, and feature-rich software to Zadara's clients and partners.

While our platform may already be performing admirably, it is important to acknowledge that the technology landscape is ever-evolving. New features, functionalities, and security enhancements are regularly introduced to address emerging challenges and meet user demands. By upgrading to the latest software versions, we take advantage of these advancements, enabling us to deliver a superior user experience and maintain a competitive edge in the market.

5.1 Zadara End-Of-Support (EOS) policy

- Zadara provides full support for the latest release across both zStorage and zCompute product lines
- Zadara provides security support and bug fixes for the two major releases preceding the latest major release
- Zadara provides at least 6 months notice of deprecations
- Software version downgrade is strictly prohibited
- Any support inquiries for resources running unsupported versions will be addressed via upgrades

5.2 Zadara Version Support Stages

5.2.1 Full Support

During the Full Support stage, bug fixes and security patches may be released on a rolling basis as they become available. At Zadara's discretion, additional features may be provided, generally in the form of a service pack.

5.2.2 Maintenance Support

When a software version enters the Maintenance Support stage, no additional features will be released. As required, high priority bug fixes will be released. Full security support will be provided for releases in the Maintenance Support phase.

5.2.3 End of Support

Upon entering the End of Support phase, customer requests and bug fixes will be addressed via upgrade. In addition, no credits will be extended due to issues that arise from unsupported versions. In the case of failure of unsupported resources, Zadara does not guarantee that the system can be restored and that data can be preserved.

5.2.4 Releases support status

zStorage Release	Support status
25.07	Full support
23.09	Maintenance Support
23.03	Maintenance Support
22.06 (and older)	End of support

Version 23.03 End of Support Notice

Version **23.03** is scheduled to transition to **End of Support (EOS)** in the **second half of 2026**, in alignment with the upcoming major **zStorage** release.

Important

The **VPSA Object Storage** product will **remain fully supported** and actively maintained under version 22.06. It is **not affected** by the general EOS timeline.

5.2.5 How to find your version

- Both VPSA and Object Storage versions can be viewed via the Management UI Main Dashboard.
- Storage Node versions can be viewed via the Command Center Storage Node Dashboard
- CCVM (Cloud) versions can be viewed from the Cloud Controller (CCMaster) Storage Node Dashboard

5.2.6 Supported upgraded paths

For your reference, a mapping of the current zStorage upgrade paths is provided below.

Please note that in order to minimize upgrade disruptiveness, Zadara customers are encouraged to upgrade to new versions as they become available.

Source Version	**Destination version**				
	25.07	**23.09**	**23.03**	**22.06 (EOS)**	**21.07 (EOS)**
25.07	✓	X.	✗	✗	✗
23.09	✓	✓	✗	✗	✗
23.03	✓	✓	✓	✗	✗
22.06 (EOS)	✗	✓	✓	✓	✗
21.07 (EOS)	✗	✗	✓	✓	✓

5.2.7 How to Upgrade

Zadara's Global Operations team is actively deploying upgrades to ensure our customers and partners around the world are able to continually leverage the latest and greatest Zadara software.

If you would like to book your VPSA/Object Storage/Cloud upgrade, please contact support@zadara.com and one of our team members will reach out to schedule a day/time that works best for you and your organization. You can also submit a ticket directly to us using the below link (please reference 'Upgrade' in the subject line): https://support.zadarastorage.com/hc/en-us/requests/new

CHAPTER

SIX

RELEASE 23.09

The following section will breakdown the **main** additions delivered in zStorage 23.09 and its service pack releases (23.09-SP1, 23.09-SP2 and 23.09-SP3) to the Zadara Storage Cloud platform.

6.1 Object Storage

6.1.1 UI Console search and direct uploads and downloads

Version: 23.09-SP3

The Object Storage UI has enhanced usability with a search and sort feature for containers, folders and files, and direct uploads and downloads of folders and objects. This includes the option to specify versions of versioned objects for download.

For more details, see:

- Search for Containers
- Search for Folders or Objects
- Uploading Folders or Objects
- Downloading Objects

6.1.2 Custom MTU

Version: 23.09-SP3

MTU size configuration has been extended in Object Storage, with the option to overwrite an MTU size selected from the UI drop-down.

Any custom MTU value in the range of 1420 - 9000 is supported.

6.1.3 Presigned URL for POST (Object Upload)

Version: 23.09-SP3

Using a presigned URL for POST (object upload) is now supported for Swift.

See the Presigned URL for POST example.

6.1.4 Support for S3 Transfer Manager multipart uploads and downloads

Version: 23.09-SP3

Object Storage now supports S3 Transfer Manager (HEAD and GET on multipart segments).

See the Multipart Object example example.

6.1.5 Object life-cycle policy

Version: 23.09-SP1

Managing digital assets efficiently is crucial for organizations. Zadara's Object Storage platforms offer scalable and durable solutions for vast amounts of unstructured data. Managing this data effectively requires a strategic approach. An Object Life Cycle Policy automates the management of objects from creation to deletion, balancing cost and compliance.

(ZSTRG-23790)

6.1.6 CORS S3 Compatible API support

Version: 23.09-SP1

CORS (Cross-Origin Resource Sharing) is a security feature that permits Object Storage containers to accept requests from different origins by specifying permissible origins, methods, and headers. It is important as it enables web applications to securely interact with the Object Storage resources across various domains, ensuring proper data access while maintaining stringent security protocols.

(ZSTRG-26582)

6.1.7 Accounts and Containers(buckets) quotas

Accounts and container-level quotas empower the Object Storage administrator to specify and manage data usage within the Object Storage platform. The platform includes an integrated notification mechanism and customizable threshold, enhancing the administrator's ability to effectively oversee and regulate storage resources.

(ZSTRG-23709)

6.1.8 Container Logging

The Container Logging feature offers logging functionalities for objects stored in the object storage system. This feature is intended to offer insights into activities at the object level, facilitating audit trails. It aids in comprehending access patterns, usage statistics, and identifying security incidents.

(ZSTRG-24592)

6.1.9 Strong Consistency

Zadara's NextGen Object Storage was built with strong consistency in mind, ensuring read operations will always return the most recent data. With zStorage 23.09, Zadara's Object Storage is strong consistent for all object operations.

(ZSTRG-23073)

6.2 VPSA Storage Array & All Flash Array

6.2.1 Custom MTU

Version: 23.09-SP3

MTU size configuration has been extended, with the option to overwrite an MTU size selected from the UI dropdown.

Any custom MTU value in the range of 1420 - 9000 is supported.

6.2.2 Periodic media scan on all user RAID groups

Version: 23.09-SP3

A media scan is a proactive maintenance process that scans the underlying drives of a RAID group, identifies potential issues, and automatically tries to correct media errors when detected.

The VPSA performs periodic regular media scans on the drives in each RAID group, with default scheduling configured to minimize performance impact.

For more details, see RAID Group Media Scan.

6.2.3 File System Trim (FSTRIM) and Defragmentation custom schedule support

Version: 23.09-SP3

On HDD media, the defragmentation process reorganizes files that are fragmented into non-contiguous blocks, by rearranging them into contiguous blocks. This reduces seek time and improves file access speed.

On SSD media, the File System Trim (FSTRIM) operation improves performance and extends the lifespan of the drive with effective erasure and reuse of deleted blocks.

Customizing File System Trim (FSTRIM) and Defragmentation schedules is now supported in VPSA Storage Array and Flash Array.

For more details, see:

- Defragmentation
- File System Trim

6.2.4 Enhanced NAS volume unmount error handling

Version: 23.09-SP3

Deletion of snapshots might affect snapshot policy routines, such as creating new snapshots or deleting expired ones.

If a folder from the SMB File History Snapshot remains open on a client, the snapshot deletion might fail.

In such cases, the VPSA now sends a “Failed to unmount busy file history snapshot” notification to the VPSA owner, and opens a support ticket.

In these situations, it is recommended to Restart File Services.

6.2.5 Enhanced Virtual Controller (VC) Failover

Version: 23.09-SP2

VPSA version 23.03-SP2 introduces significant improvements in the VC (Virtual Controller) failover time, further improving the efficiency and transparency of VPSA Engine upgrade, software upgrade and scheduled failover for VPSA server clients. This enhancement will be visible to server clients after the VPSA has been fully upgraded to 23.09-SP2.

(ZSTRG-28238)

6.2.6 VMware’s Extended-XCOPY API

Version: 23.09-SP1

VMware Extended XCOPY (E-XCOPY) is a feature introduced in vSphere 8.0 U1 that optimizes data copies between VMFS datastores hosted on different storage arrays. E-XCOPY allows you to offload, migrate, and clone workloads between VMFS datastores that reside in separate storage arrays. It significantly improves the performance of tasks like Storage vMotion and cloning by leveraging array-based data movement instead of relying solely on host-assisted data copying within vSphere. By using E-XCOPY, you can reduce the impact on vSphere resources during large-scale data transfers.

Users who wishes to leverage this capability please contact support@zadara.com

(ZSTRG-27217)

6.2.7 Self-managed VPSA software updates

zStorage 23.09 allows VPSA owners to manage the software life-cycle of their VPSAs. Upon releasing a new software version the platform will notify the VPSA owner and will allow self-managed upgrade directly from Zadara's Provisioning Portal. VPSA Administrators can start their software upgrade immediately or schedule it for a later time per their convenience.

(ZSTRG-19954)

6.3 Command Center

6.3.1 Custom MTU

Version: 23.09-SP3

MTU size configuration has been extended, with the option to overwrite an MTU size selected from the UI dropdown.

Any custom MTU value in the range of 1420 - 9000 is supported.

6.4 Version 23.09-SP3-399

6.4.1 Object Storage

- **ZSTRG-35064** - Fixed an issue in the segment-tracker service where a percent-encoded form of a multi-part object name led the orphan-object cleanup service to incorrectly identify some valid data fragments as orphans
- **ZSTRG-35088** - Fixed a performance issue in large Object Storage deployments where multi-delete API (DeleteObjects) requests experienced increased latency.

6.5 Version 23.09-SP3-393

6.5.1 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-33450** - Fixed an issue where the access keys for an existing B2OS endpoint could not be updated
- **ZSTRG-34409** - Added visibility in the VPSA event log entry for KMIP key rotation event

6.6 Version 23.09-SP3-391

6.6.1 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-32534** - Updated zadaravpsa.com VPSA TLS certificate
- **ZSTRG-33363, ZSTRG-33635** - Resolved an issue where iSCSI target login was permitted too early in the activation process, which can potentially cause VMware path disruption (PDU) during a VPSA failover

6.6.2 Command Center

- **ZSTRG-32319** - Resolved an issue where existing password policies could inadvertently block user access to the Command Center
- **ZSTRG-33382** - Resolved an issue affecting the IP access control whitelist mechanism

6.7 Version 23.09-SP3-381

6.7.1 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-29710** - Added the ability to add a custom schedule for the FSTRIM process (more information)
- **ZSTRG-30822** - Added the ability to add a custom schedule for NAS defragmentation process (more information)
- **ZSTRG-26077** - Added Active Directory DNS monitoring
- **ZSTRG-28508** - Added the instance description to the main dashboard
- **ZSTRG-29723** - Added the option to search and filter by the volume comment field
- **ZSTRG-29182** - Implemented a periodic Media Scan mechanism for all RAID groups
- **ZSTRG-27710** - Added the ability to define a custom MTU for the Front-End (FE) interface
- **ZSTRG-30202** - Added a notification when VPSA failed unmounting a volume/snapshot due to a client lock
- **ZSTRG-30633** - Added the ability to restart the NAS services directly from the management interface (either SMB or NFS) (more information)
- **ZSTRG-31492** - Added new B2OS (Backup to Object Storage) metrics to the VPSA performance section

6.7.2 Object Storage

- **ZSTRG-30381** - Added formal support for IPv6 Front End network (NextGen Object Storage)
- **ZSTRG-26093** - Added support for uploading/downloading objects from the Object Storage management interface along with the option to download a specific object version (more information)
- **ZSTRG-26093** - Added a container search option in the Object Storage management interface
- **ZSTRG-28610** - Added support for S3 Transfer Manager (HEAD/GET support of multipart segments) (more information)
- **ZSTRG-28543** - Added the option to honor any client region value
- **ZSTRG-28521** - Added quota display for all accounts in the main grid display
- **ZSTRG-28508** - Added the instance description to the main dashboard
- **ZSTRG-29989** - Fixed an issue where bandwidth traffic was incorrectly reported
- **ZSTRG-27855** - Added support for POST (upload) pre-signed URLs (more information)
- **ZSTRG-27710** - Added the ability to define a custom MTU for the Front-End (FE) interface
- **ZSTRG-29588** - Fix an issue where PUT request is failing due to an orphan metadata header
- **ZSTRG-31762** - Updated TLS certificate of zadarazios.com domain

Important

Deprecation Warning – Beginning with Zadara's next planned zStorage release (25.07), the creation of non-compliant S3 container names will be prohibited. Existing non-compliant Containers will continue to operate normally (ZSTRG-31573).

6.7.3 Security

Version 23.09-SP3 introduces a range of security fixes and enhancements across the entire zStorage product line.

Notable updates include the mitigation of the following CVEs:

- CVE-2019-8331
- CVE-2018-20676
- CVE-2016-10735
- CVE-2018-20677
- CVE-2018-14042
- CVE-2018-14040
- ZSTRG-30546 - Added protection against XSS injection
- ZSTRG-27978 - Upgrade of outdated UI components

6.7.4 Interoperability

- **Zadara VPSA CSI for Kubernetes** - Zadara VPSA CSI version 2.4.2 is now available. For more information, see CSI Driver in the VPSA Storage Array user guide, and the Zadara CSI repository on Github.

6.8 Version 23.09-SP2-248

6.8.1 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-28238** - VPSA version 23.03-SP2 introduces significant improvements in the failover time, further improving the efficiency and transparency of VPSA Engine upgrade, software upgrade and scheduled failover for VPSA server clients. This enhancement will be visible to server clients after the VPSA has been fully upgraded to 23.09-SP2.
- **ZSTRG-27428** - Interoperability (VMware ESXi v8): Renewed official support for VPSA with FC connectivity
- **ZSTRG-30033** - Fixed an issue in the server's automatic connection script that caused an error during execution on RHEL
- **ZSTRG-30020** - For RAID groups, the VPSA will set the maximum sync speed based on the media type (HDD or SSD)
- **ZSTRG-28463** - Added the VPSA description to the main dashboard information tile

6.8.2 Object Storage

- **ZSTRG-29616** - Fixed an issue where the Object Storage was stuck in the "Rebalancing" state
- **ZSTRG-29485** - Fixed an issue where VHS mode couldn't be enabled after being disabled
- **ZSTRG-28113** - Scaling enhancements for OLCP (Object Life Cycle Policy) to support expiration rules for large-scale containers
- **ZSTRG-28961** - Fixed an issue where renaming an object failed when using the CyberDuck client
- **ZSTRG-28941** - Fixed an issue where deleting a large object from the management console did not delete the underlying segments
- **ZSTRG-28931** - Added the expiration timestamp response for OLCP enabled containers' PUT requests (S3 API)
- **ZSTRG-28395** - Fixed an issue where a Static Website returned a 500 error instead of a 40X error
- **ZSTRG-28449** - Fixed an issue when using temporary URLs for large objects (Swift API)
- **ZSTRG-28857** - Fixed an issue where querying the accounts API returned an incorrect account count

- **ZSTRG-28463** - Added the Object Storage description to the main dashboard information tile
- **ZSTRG-28401** - Fixed an issue where account capacity usage is presented incorrectly
- **ZSTRG-28188** - Fixed a Proxy server issue where an incomplete PUT, terminated prematurely by the client, was not handled as expected by the Proxy, leading to high memory utilization.
- **ZSTRG-28186** - Fixed an issue with account custom reporting where the usage was calculated for a fixed 30-day period

6.8.3 Command Center

- **ZSTRG-29814** - Fixed an issue where setting Active Directory connectivity was not successful while using a Firefox browser
- **ZSTRG-29530** - Fixed an issue where trying to set a custom logo was not working as expected
- **ZSTRG-29387** - Fixed an issue where the Object Storage view was returning an error
- **ZSTRG-28637** - Fixed an issue where the displayed timezone did not match the cloud's configured timezone

6.8.4 Provisioning Portal

- **ZSTRG-29964** - Fixed an issue in the VPSA creation wizard where some of the extended cache options were not displayed
- **ZSTRG-28989** - Add the ability to hide Object Storage for a new service offering

6.8.5 Security

Version 23.09-SP2 introduces a range of security fixes and enhancements across the entire zStorage product line.

Notable updates include the mitigation of the following CVEs:

- CVE-2024-38428
- CVE-2024-1013
- CVE-2024-6345
- CVE-2024-3651

6.9 Version 23.09-SP1-317

6.9.1 Command Center

- **ZSTRG-28683** - Increase Cloud Control allowed IP from 50 to 256 IP entries

6.10 Version 23.09-SP1-309

6.10.1 Object Storage

- **ZSTRG-23790** - Added Object Life Cycle support (including S3 API support)
- **ZSTRG-26582** - Added S3API CORS support
- **ZSTRG-27854** - Adjust container permissions cache to 60 seconds. With this change, both Container and Account ACL cache duration are 60 seconds
- **ZSTRG-27300** - Improved responsiveness of the Object Storage management console, particularly when handling multiple user requests, has been implemented to address slow UI performance
- **ZSTRG-28020** - Usage reports generator can now produce reports for the last two calendar months
- **ZSTRG-28211** - Fixed an issue where a disabled account user could still access the system

- **ZSTRG-27872** - Fixed an issue where an object that contains a comma (,) in its name couldn't be deleted from the console
- **ZSTRG-27379** - Fixed an issue where the capacity dashboard graph doesn't reflect the actual capacity
- **ZSTRG-26953** - Fixed an issue where the diagnostic reachability test failed for the Public IP as the source interface

6.10.2 VPSA Storage Array / VPSA Flash Array

- **ZSTRG-27217** - Added support for VMware's Extended-XCOPY API to allow Storage vMotion across two storage array. Users who wish to leverage this capability, please contact support@zadara.com
- **ZSTRG-28029** - Improved failover experience for VPSAs with block volumes consumers
- **ZSTRG-27898** - Adjusted the demote rate from the VPSA performance SSD tier to the capacity tier in an All Flash Array to avoid high SSD tier usage
- **ZSTRG-27539** - (*VPSA Storage Array*) New encrypted volumes will use a new encryption cipher which improves performance. There is no impact on existing VPSA volumes and VPSA Flash Array
- **ZSTRG-27321** - Enhanced stability for RAID protection
- **ZSTRG-28300, ZSTRG-28216** - Fixed an issue where internal API timeout can lead to a controller failover
- **ZSTRG-27875** - Fixed an issue where VPSA Flash Array went into Lock-Down state
- **ZSTRG-26953** - Fixed an issue where diagnostic reachability test failed for Public IP as the source interface

6.10.3 Command Center

- **ZSTRG-27886** - Fixed an issue where user with a RO permissions couldn't get the Storage Node CPU information
- **ZSTRG-27547** - RestAPI - Fixed an issue where used capacity per VPSA was not returned correctly

6.10.4 Provisioning Portal

- **ZSTRG-27144** - General UI enhancements
- **ZSTRG-28110** - Fixed an issue where unsupported protection policies were listed for Object Storage creation

6.10.5 Storage Node & Cloud Orchestration

- **ZSTRG-28505** - Rolled out a new zStorage Cloud Controller certificate
- **ZSTRG-22856** - Enhanced the cloud internal monitoring capabilities to detect networking issues

6.10.6 Security

Version 23.09-SP1 introduces a range of security fixes and enhancements across the entire zStorage product line, bolstering protection and improving user safety.

Notable updates include the mitigation of the following CVEs:

- CVE-2024-26130
- CVE-2024-21626
- CVE-2024-20952
- CVE-2024-24680
- CVE-2023-45803
- CVE-2023-2603
- CVE-2023-33460
- CVE-2023-45802
- CVE-2022-31160
- CVE-2022-31160
- CVE-2021-41184
- CVE-2021-41183
- CVE-2021-41182
- CVE-2020-22219
- CVE-2020-11022
- CVE-2020-11023
- CVE-2019-9511
- CVE-2019-9513
- CVE-2019-9516
- CVE-2019-8331
- CVE-2019-11358
- CVE-2018-14041
- CVE-2018-20676
- CVE-2018-14040
- CVE-2018-14042
- CVE-2018-20677
- CVE-2016-10735
- CVE-2015-9251

6.11 Version 23.09-302

6.11.1 Object Storage

- **ZSTRG-25989** - Variety of improvements for a metadata policy performance and scale-out process
- **ZSTRG-25736** - Fixed an issue where the public URL is not presented with a custom endpoint
- **ZSTRG-25251** - Fixed an issue where changing the Object Storage instance name is not populated in the UI
- **ZSTRG-23709** - Added the ability to set account/container level quota
- **ZSTRG-23073** - Strong Consistency for all object operations
- **ZSTRG-24592** - Added the option to define container level auditing
- **ZSTRG-26506** - Added Zadara's Object Storage signature to S3API responses (Server = Zadara)

6.11.2 VPSA Storage Array / VPSA All Flash

- **ZSTRG-26744** - Fixed an issue where high memory utilization is caused due to an internal reporting process
- **ZSTRG-26686** - Fixed an issue where snapshot is stuck in "Deletion Pending" state
- **ZSTRG-25274** - Starting of 23.09 creating new RAID6 Raid-Group is not allowed
- **ZSTRG-25022** - Added the option to list existing tags for Volumes filtering
- **ZSTRG-22987** - Added a display of expected volume size post expansion
- **ZSTRG-24727** - Upgrade Samba SMB service
- **ZSTRG-22767** - KMIP KMS *Equinix SmartKeys* is now labeled as *Fortanix DSM*

6.11.3 Command Center

- **ZSTRG-26652** - Allow administrator to select a permanent UI language in the VPSA UI view (cloud_admin), with the new behavior the language selected for the cloud_admin view will persist.
- **ZSTRG-27270** - Updated zadarastorage.com TLS certificate

6.11.4 Provisioning Portal

- **ZSTRG-25855** - Fixed an issue where custom logo got stretched in the login screen
- **ZSTRG-19954** - Added the ability for VPSAs owners to upgrade their VPSA software version directly from the Provisioning Portal
- **ZSTRG-26272** - (AWS Marketplace Users) Added the visibility of the AWS account ID
- **ZSTRG-26272** - (AWS Marketplace Users) Added a protection to prevent AWS account association
- **ZSTRG-27270** - Updated zadarastorage.com TLS certificate

6.11.5 Security

Provisioning Portal

- **ZSTRG-24912** - Diverse security-related solutions and improvements aimed at enhancing the security of Provisioning Portal web application.

Command Center

- **ZSTRG-24912** - Diverse security-related solutions and improvements aimed at enhancing the security of Provisioning Portal web application.

VPSA Storage Array/Flash Array

- **ZSTRG-24912** - Diverse security-related solutions and improvements aimed at enhancing the security of Provisioning Portal web application.

Cloud common components

- **ZSTRG-26902** - Upgraded cross cloud components to mitigate the following CVEs
  - CVE-2019-20838
  - CVE-2022-24407

6.11.6 API Documentation

The zStorage cloud products API documentation is now available in a unified portal: https://api-doc.zadara.com/ The old documentation portals will be deprecated gradually and currently serves the RestAPI documentation for version 23.03 and below.

6.12 Revision history

- 23.09-SP3-399, November 2025
- 23.09-SP3-393, September 2025
- 23.09-SP3-391, July 2025
- 23.09-SP3-381, February 2025
- 23.09-SP2-248, October 2024
- 23.09-SP1-317, June 2024
- 23.09-SP1-309, May 2024
- 23.09-302, December 2023

CHAPTER

SEVEN

RELEASE 23.03

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version.

7.1 Object Storage

zStorage 23.03 introduces the next generation of high-performance, efficient, and durable object storage engine. This new solution is the culmination of Zadara's dedication to delivering cutting-edge technology that meets and exceeds the demands of our users' object storage needs. With Zadara's 23.03 Object Storage, you can expect lightning-fast data access and retrieval, exceptional scalability and efficiency, and unmatched durability that can withstand even the most challenging data-intensive workloads. Our goal is to provide you with an object storage solution that empowers you to manage your data more effectively and efficiently along with the ability to scale up and out according to your business needs. zStorage 23.03 Object Storage is designed to provide expected performance, even as data volumes grow exponentially.

Please note that the new object storage engine requires a dedicated instance and existing instance cannot be upgraded to use the 23.03 software version. This is due to the vast architectural changes and object storage data layout We understand that this may cause some inconvenience, but we want to ensure that you get the most out of the new engine's capabilities. Therefore, we recommend that you set up a new instance for the new engine to take full advantage of its advanced features and performance benefits.

Zadara's Solutions and Support teams are available to assist you with this process and answer any questions you may have.

There are some VPSA Object Storage features that are currently not available in the 23.03 Object Storage version, the full list can be found in the *Object Storage* section in the **Known issues and limitation**.

7.2 VPSA Flash Array

As an ongoing enhancement since zStorage 22.06 release, Zadara's zStorage 23.03 release includes significant performance enhancements for Zadara's VPSA Flash Array in either single tier or multi-tier configurations. Customers can expect decreased write latency, improved defragger rate limits, reduced CPU footprint on writes and more.

7.3 Provisioning Portal

The Provisioning Portal has undergone a significant update, introducing a new application framework engine along with a sleek and modern interface. These enhancements are expected to boost significantly the application's overall performance and make the provisioning and management operations even better.

7.4 Version 23.03-SP1-192

7.4.1 Storage Node & Cloud Orchestration

- **ZSTRG-28505** - Rolled out a new zStorage Cloud Controller certificate

7.5 Version 23.03-SP1-191

The following version was released in order address cloud nodes level(Storage Nodes).

7.6 Version 23.03-SP1-188

7.6.1 Object Storage

- **ZSTRG-26470** - Multi-delete performance enhancement
- **ZSTRG-26505,ZSTRG-26325** - S3API match the *Last-Modified* timestamp format for *Head-Object* and *List-Object* APIs. Both APIs will return the timestamp with seconds granularity
- **ZSTRG-26010,ZSTRG-25959** - S3API fixed an issue where *Access Denied* error was returned for a multipart operation for a user with write-only permissions

7.7 Version 23.03-SP1-158

7.7.1 Object Storage

- **ZSTRG-23197** - Enhance delete-objects (multi-delete) performance, specially helpful with use-cases where multi-delete is commonly used (i.e. backup applications)
- **ZSTRG-23358** - Fixed an issue where drive replacement was rejected
- **ZSTRG-25881** - Fixed an issue where GET returns 412 HTTP for a multipart object with ETag verification

7.7.2 Command Center

- **ZSTRG-25263** - Fixed an issue where retrieving VPSA capacity trend returns an error

7.7.3 VPSA Storage Array

- **ZSTRG-24280** - Fixed an issue where deleting an empty pool was failing due to orphan volume entry in the Recycle Bin
- **ZSTRG-24270** - Fixed an issue where FC paths were indicating the wrong status while zoning was removed
- **ZSTRG-25903** - Fixed an issue where iSCSI initiator login doesn't create a server record

7.7.4 Security

Version 23.03-SP1 brings a variety of security fixes and improvements across the entire zStorage product line, strengthening protection and enhancing user safety. Notable changes include the following CVEs:

- CVE-2023-31484
- CVE-2023-2455
- CVE-2023-2650
- CVE-2023-29491
- CVE-2023-30608
- CVE-2023-33204
- CVE-2021-20233
- CVE-2020-11080
- CVE-2020-15707

7.8 Version 23.03-227

7.8.1 VPSA Storage Array

- **ZSTRG-25289** - Fixed an issue where NFS share may get hang
- **ZSTRG-25201** - Fixed an issue where volume deletion may fail if the standby VC is not in normal state
- **ZSTRG-25038** - Fixed an issue where creating a new server record from the management interface will strip the CIDR (issue was introduced in 22.06-SP1)

7.8.2 Provisioning Portal

- **ZSTRG-25261** - Fixed an issue where activation URL sent by email is not working as expected
- **ZSTRG-25276** - Fixed an issue where VPSA Public IP is not visible

7.9 Version 23.03-221

7.9.1 Provisioning Portal

- **ZSTRG-24241,ZSTRG-25087,ZSTRG-25119,ZSTRG-25073,ZSTRG-25141** - Fixed various security vulnerabilities
- **ZSTRG-25171** - Fixed an issue with public IP assignment for VPSA/Object Storage instances

7.10 Version 23.03-214

7.10.1 VPSA Storage Array

- **ZSTRG-22281** - Upgraded SMB engine (4.17), addresses security and performance issues

7.10.2 VPSA Flash Array

- **ZSTRG-24043, ZSTRG-24042, ZSTRG-23279, ZSTRG-23621** - Defragger performance improvements and tiering optimization
- **ZSTRG-24493** - Fixed an issue where file analytics presentation was not presented properly
- **ZSTRG-24167** - Fixed an issue where VPSA hibernation failed
- **ZSTRG-23967** - Fixed an issue where raid-group wasn't released from a pool after shrinking was completed

7.10.3 Command Center

- **ZSTRG-21109** - Fixed an issue where SNMP V3 Auth key and Priv Key were not save after edit
- **ZSTRG-20148** - Fixed an issue where remote authentication with Okta as the LDAPS provider wasn't working

7.10.4 Security

Provisioning Portal

- **ZSTRG-21946** - SCSS Attack protection

Command Center

- **ZSTRG-21946, ZSTRG-22020** - SCSS Attack protection

VPSA Storage Array/Flash Array

- **ZSTRG-22019** - SCSS Attack protection

Cloud common components

- **ZSTRG-22023** - Upgraded cross cloud components to mitigate the following CVEs
  - CVE-2023-27538
  - CVE-2022-44640
  - CVE-2022-0417
  - CVE-2022-47629

Known issues and limitations

Object Storage

The 23.03 release of Zadara's Object Storage does not support the following functionality that is part of the VPSA Object Storage:

- Account level rate limit
- Container level replication
- Account/container quotas
- Object Life Cycle
- External authentication (Openstack Keystone integration)

The features above will be added gradually back to the platform according to Zadara's Products road map.

Object Storage version 23.03 currently support the following data protection in a single zone layout:

- 2-Way mirroring
- Erasure Code 4+2

VPSA Storage Array and Flash-Array

- **ZSTRG-24231** - Introduced in 23.03, VPSA volume mirroring for NAS volumes from a VPSA running 23.03 to an older VPSA version with DOS attributes enabled should be avoided as older version will not be able to read the xattr created by the newer VPSA. It is recommended to upgrade both source and destination to 23.03 software version
- **ZSTRG-23612** - Flash-Array, Introduced in 23.03, creating a RAID6 using the SSD tier is now prohibited

Provisioning Portal

- **ZSTRG-23919** - In some cases, pending service creation request will be present despite the service request was already approved. The pending request will be cleared in the next internal sync (up to 10 minutes)
- **ZSTRG-23919** - In some cases, pending service creation requests will not be displayed as pending until the next internal sync (up to 10 minutes)
- **ZSTRG-24354** - introduced in 23.03, VLAN allocation pending requests is not visible in the provisioning portal
- **ZSTRG-24219** - Introduced in 23.03, pending action indicator for existing operations is not visible.

7.11 Revision history

- 23.03-SP1-192, May, 2024
- 23.03-SP1-191, December 2023
- 23.03-SP1-188, October 2023
- 23.03-SP1-158, July 2023
- 23.03-227, May 2023
- 23.03-221, April 2023
- 23.03-214, April 2023

CHAPTER

EIGHT

RELEASE 22.06-SP3

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version and 22.06-SP2.

Release 22.06-SP3 is a service pack release which includes scalability, security, usability improvements and bug fixes for Zadara's VPSA Object Storage.

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version.

8.1 Version 22.06-SP3-36

8.1.1 VPSA Object Storage

- **ZSTRG-33874** - Fixed an issue with ZELB endpoint connectivity caused by Proxy VC failure
- **ZSTRG-33598** - Fixed an issue where a 500 HTTP error was returned during drive replacement
- **ZSTRG-34293** - Reverted the behavior introduced in ZSTRG-32908 (22.06-SP3-27) related to RFC 7232. The *ETag* header is now returned according to OpenStack Swift specifications
- **ZSTRG-27869** - Fixed an issue where password expiration reminders were sent to disabled account users
- **ZSTRG-34251** - Fixed an issue where the *content-type* header was not replicated to the destination object storage with container replication
- **ZSTRG-34735** - Fixed an issue where the S3API ETag header (*s3api-etag*) was not returned for multipart objects
- **ZSTRG-34740** - Fixed an issue where the *delete-objects* command using the S3 CLI failed due to the "Content-MD5" header

8.2 Version 22.06-SP3-27

8.2.1 VPSA Object Storage

- **ZSTRG-31764** - Updated *zadarazios.com* wildcard certificate
- **ZSTRG-31243, ZSTRG-31730** - Fixed security vulnerabilities in the object server and the object storage management console
- **ZSTRG-33011** - Fixed an issue where redundant requests were being made to containers with static website configurations
- **ZSTRG-32908** - Added full support for RFC 7232 compliance in the returned ETag values of objects
- **ZSTRG-31076, ZSTRG-28670** - Fixed an issue where deletion of empty containers would hang
- **ZSTRG-30955** - Fixed an issue where the container replication service did not refresh after a configuration update
- **ZSTRG-28497** - Fixed an issue where container replication jobs returned failures

- **ZSTRG-30840** - Fixed an issue where latency on a single drive impacted overall client operation latency
- **ZSTRG-28994** - Fixed inconsistency between the “Capacity Trend” graph in Command Center and the “Data In” reports in VPSA Object Storage
- **ZSTRG-28279** - Fixed an issue where account usage was not properly displayed in the accounts view
- **ZSTRG-27897** - Fixed an issue where a 503 error was incorrectly returned for a deleted object

8.3 Known issues and limitations

8.3.1 VPSA Object Storage

- **ZSTRG-27422** - Usage reports allows the user to select a retention period of up to 90 days where the system stores 60 days of usage reports

8.4 Revision history

- 22.06-SP3-36, September 2025
- 22.06-SP3-27, May 2025

CHAPTER

NINE

RELEASE 22.06-SP2

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version and 22.06-SP1.

Release 22.06-SP2 is a service pack release which includes scalability, security, usability improvements, new enhancements and bug fixes for Zadara's Object Storage.

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version.

9.1 Version 22.06-SP2-101

9.1.1 VPSA Object Storage

- **ZSTRG-27699** - Updated zadarazios.com wildcard certificate
- **ZSTRG-26420, ZSTRG-26791, ZSTRG-27094** - Container level replication enhancements to improve replication rates and error handling
- **ZSTRG-26936** - Fixed an issue where account deletion doesn't complete as expected
- **ZSTRG-26527** - Fixed an issue where VNI IP allocation failed post upgrade to 22.06-SP2-84
- **ZSTRG-27633, ZSTRG-27421** - Fixed an issue where a user cannot sign in to the management interface
- **ZSTRG-26762** - Fixed an issue where MTU configuration was not applied for the ZELB

9.2 Version 22.06-SP2-84

9.2.1 VPSA Object Storage

- **ZSTRG-25945** - Fixed an issue where container replication job could experience failure as a result of restricted network speed
- **ZSTRG-25996** - Fixed an issue wherein the performance of the Object Storage user management interface was adversely affected by a background drive replacement, leading to slowness

9.3 Version 22.06-SP2-82

9.3.1 VPSA Object Storage

- **ZSTRG-25751** - Fixed an issue where ZELB advertise wrong MAC address upon a failure
- **ZSTRG-25546, ZSTRG-25763** - Performance enhancements for GET and POST (multi objects delete)

9.4 Version 22.06-SP2-78

9.4.1 VPSA Object Storage

- **ZSTRG-24742** - Fixed an issue where public objects access were rejected on versioned containers.
- **ZSTRG-24547** - Fixed an issue which caused restore operation to fail
- **ZSTRG-20263** - Increased concurrency for background delete operations
- **ZSTRG-22196** - Fixed an issue when a replication job is stuck in “Creating” status
- **ZSTRG-23399** - Fixed an issue where VNI IP addresses were not assigned as expected
- **ZSTRG-24487** - Improved keystone auth service resiliency
- **ZSTRG-24304** - Fixed an issue where UI login failed for an instance with a high volume of accounts
- **ZSTRG-25367** - Fixed an issue where using the aws s3 cp command failed for multipart objects
- **ZSTRG-25420** - Fixed an issue where using Swift API for Temp URL returned an error
- **ZSTRG-24534** - Fixed an issue with content-type assignment
- **ZSTRG-23838** - Fixed an issue where cache-control header was not not set properly for multipart-upload
- **ZSTRG-21124** - Fixed an issue where usage report had a fixed calendar days resulting in a wrong average usage reporting

9.4.2 Security

- CVE-1999-0511
- CVE-2021-41524
- CVE-2021-41773
- CVE-2021-42013
- CVE-2022-47950

9.5 Known issues and limitations

9.5.1 VPSA Storage Array and Flash-Array

- **ZSTRG-20381, 22.06-86** - SMB: domain admin attempt to take ownership on a folder owned by another user fails in case inheritance is disabled

9.5.2 VPSA Object Storage

- **ZSTRG-27422** - Usage reports allows the user to select a retention period of up to 90 days where the system stores 60 days of usage reports

9.6 Revision history

- 22.06-SP2-101, February 2024
- 22.06-SP2-84, July 2023
- 22.06-SP2-82, July 2023
- 22.06-SP2-78, May 2023

CHAPTER

TEN

RELEASE 22.06-SP1

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version.

Release 22.06-SP1 is a service pack release which includes scalability, security, usability improvements, new features and bug fixes.

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 22.06 major version.

10.1 Version 22.06-SP1-236

10.1.1 VPSA Storage Array/Flash-Array

- **ZSTRG-25038** - Fixed an issue where creating a new server record from the management interface will strip the CIDR (issue was introduced in 22.06-SP1)

10.1.2 VPSA Object Storage

- **ZSTRG-25113** - Fixed an issue where management interface would not launch as expected
- **ZSTRG-25066** - Fixed an issue where new instance creation would fail

10.2 Version 22.06-SP1-235

10.2.1 VPSA Storage Array

- **ZSTRG-24833** - Fixed an issue where KMIP request fails with internal error due to a key parse issue
- **ZSTRG-24807** - Updated zadaravpsa.com TLS certificate
- **ZSTRG-24794** - Flash-Array - Fixed an issue where pool expansion may lead to a failover

10.2.2 VPSA Object Storage

- **ZSTRG-24880** - Fixed an issue where an updated TLS certificate wasn't populated as expected to all VCs
- **ZSTRG-24851** - Improved container replication performance
- **ZSTRG-24803** - Improved object multi-delete performance for non-versioned containers.
- **ZSTRG-22925** - Adjusted rebalance concurrency based on disk capacity usage

10.3 Version 22.06-SP1-218

10.3.1 VPSA Flash Array

- **ZSTRG-24416** - Fixed a rare issue where large IO sent by the initiator may lead to a VC crash
- **ZSTRG-24186** - Fixed an issue where a reference to a segment on a device which was removed, may lead to a VC crash

10.3.2 VPSA Storage Array

- **ZSTRG-24605,ZSTRG-24606** - Fixed an issue introduced in 22.06 in the SCST package that may impact VPSAs performance

10.3.3 VPSA Object Storage

- **ZSTRG-24605,ZSTRG-24606** - Fixed an issue introduced in 22.06 in the SCST package that may impact VPSA Object Storage performance
- **ZSTRG-24294** - Fixed an issue where container replication job is stuck in “creating” status
- **ZSTRG-24239** - Fixed an issue where container Life-Cycle policy was not working properly
- **ZSTRG-24022** - Updated the default TLS certificate (zadarazios.com domain)
- **ZSTRG-24321, ZSTRG-22671** - Adjusted re-balancing concurrency levels

10.3.4 Storage Node

- **ZSTRG-24605,ZSTRG-24606** - Fixed an issue introduced in 22.06 in the SCST package that may impact VPSAs performance.

10.4 Version 22.06-SP1-211

10.4.1 VPSA Storage-Array

- **ZSTRG-24123** - Fixed an issue where a a block volume creation was rejected due to the RG count in the underlying pool

10.4.2 VPSA Object Storage

- **ZSTRG-24085** - Fixed a regression in 22.06-SP1-203 where new external authentication configuration is still using the internal authentication endpoint
- **ZSTRG-24150** - Fixed a regression in 22.06-SP1-203 where external SSL termination was not working as expected for Public IP endpoint

10.5 Version 22.06-SP1-203

10.5.1 VPSA Flash-Array

zStorage 22.06 release includes significant performance enhancements for Zadara’s VPSA Flash Array in either single tier or multi-tier configurations. Customers can expect decreased write latency, improved defragger rate limits, reduced CPU footprint on writes and more.

zStorage 22.06-SP1 release includes additional enhancements improving IO path efficiency and performance.

(**ZSTRG-20431**, **ZSTRG-20432**, **ZSTRG-21251**, **ZSTRG-21054**, **ZSTRG-20653**, **ZSTRG-20577**)

10.5.2 VPSA Storage Array

- **ZSTRG-22870** - Fixed a performance presentation issue (regression in 22.06)
- **ZSTRG-22984** - ZCS (Zadara Container Service) Added support for Docker Hub v2 API
- **ZSTRG-22985** - Fixed an issue where container logs (ZCS) timed out
- **ZSTRG-22643** - Improved Active Directory connectivity issues handling
- **ZSTRG-21374** - Fixed an issue where a project quota cannot be assigned to a folder that contains a white space
- **ZSTRG-19520** - Allow the VPSA administrator to enable/disable iSCSI connectivity over Public IP (via VPSA security settings)
- **ZSTRG-15027** - Added protection for ESX servers to avoid discovery/connectivity issues where LUN ID 0 is not used
- **ZSTRG-23010** - Fixed an issue where the auto-connection script couldn't detect the correct network interface for a Linux server
- **ZSTRG-22283** - Fixed an issue with the VPSA RestAPI where VSS provider snapshot operation would fail

10.5.3 VPSA Object Storage

- **ZSTRG-21214** - Added enhancements to the policy's rebalancing mechanism
- **ZSTRG-22610** - Fixed an issue where creating an all-capital letters account name failed
- **ZSTRG-22184** - Fixed an issue where quota notification did not include the usage value
- **ZSTRG-20711** - Fixed an issue where the console did not present the latest retention date for containers with object-lock enabled
- **ZSTRG-22151** - Added IPv6 for container level replication
- **ZSTRG-20322** - Added the "secure" cookie attribute for TLS connection
- **ZSTRG-22305** - Fixed an issue where custom branding can be reset due to an upgrade

10.5.4 Command Center

- **ZSTRG-22562** - Adjust the IP address listing for a specific Virtual Network

10.5.5 Provisioning Portal

- **ZSTRG-22682** - Fixed an issue where branding customizations are lost due to a service restart

10.5.6 Security

- CVE-2018-16877
- CVE-2018-16878
- CVE-2019-3885
- CVE-2022-22817
- CVE-2020-25687
- CVE-2021-43618
- CVE-2022-3116
- CVE-2022-39260
- CVE-2022-3515
- CVE-2020-16156
- CVE-2022-42916
- CVE-2022-35737
- CVE-2022-34526
- CVE-2022-44638
- CVE-2022-43680
- CVE-2022-41974
- CVE-2022-41742

10.6 Interoperability

- **ZSTRG-23180** - CSI Driver v2.2.0 - minor version release focused primarily on security patches. The full CSI Driver changelog can be found in Zadara's CSI driver Github repository . The CSI driver is not part of the 22.06-SP1 release and can be used with VPSAs running version 20.12 or later.

10.7 Known issues and limitations

10.7.1 VPSA Storage Array and Flash-Array

- **ZSTRG-20381, 22.06-86** - SMB: domain admin attempt to take ownership on a folder owned by another user fails in case inheritance is disabled

10.8 Revision history

- 22.06-SP1-236, May 2023
- 22.06-SP1-235, April 2023
- 22.06-SP1-218, March 2023
- 22.06-SP1-211, January 2023
- 22.06-SP1-203, December 2022 (GA)

CHAPTER

ELEVEN

RELEASE 22.06

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 21.07 major version.

11.1 Version 22.06-104

11.1.1 VPSA Flash Array

- **ZSTRG-22419** - Fixed an issue where VPSA may crash due to extremely high stat devices count.
- **ZSTRG-22306** - Fixed an issue where Virtual Capacity present negative value.
- **ZSTRG-22299** - Fixed a rare issue where VPSA failed over due to a false-positive allocation protection mechanism.

11.2 Version 22.06-99

11.2.1 VPSA Storage Array and VPSA Flash Array

- **ZSTRG-21778** - Fixed an issue that can cause invalid presentation of block volumes data copies capacity, following a process of storage level volume migration between storage pools

11.2.2 VPSA Object Storage

- **ZSTRG-21658** - Add the option to discover a remote Object Storage endpoint using the Cloud Outnet network
- **ZSTRG-20612** - Modified default TTL for an API token to 15 days (from 1 day)
- **ZSTRG-21958** - Optimized authentication flow to reduce latency for initial authentication

11.3 Version 22.06-90

11.3.1 VPSA Storage Array

- **ZSTRG-21717** - Fix an issue where paused volume migration job could move to failed state post resume

11.3.2 VPSA Object Storage

- **ZSTRG-20777** - Fixed an issue where pending DB sharding request can impact PUT performance
- **ZSTRG-21646** - Fix an issue where container replication discovery via cloud outnet network interface fails

11.4 Version 22.06-89

11.4.1 Command Center

- **ZSTRG-21553** - Fixed an issue where Command Center timezone configuration was ignoring the cloud configuration

11.5 Version 22.06-86

11.5.1 VPSA Storage Array

- **ZSTRG-20667** - Fix an issue where iSCSI initiator name containing non-asci characters may cause a VC failover
- **ZSTRG-20005** - Fixed an issue where Project quota cannot be deleted
- **ZSTRG-19644** - Starting of VPSA version 22.06 the integrated McAfee Antivirus is no longer available
- **ZSTRG-19188** - Added NFS4 session metrics in the VPSA metering graphs
- **ZSTRG-17714** - Added IOwait metrics to the VPSA Controllers (performance view)
- **ZSTRG-19012** - Fixed an issue where errors reported for a non-existing volume
- **ZSTRG-17837** - Change the user facing message when detaching a block volume that uses LUN ID 0
- **ZSTRG-17182** - Flash Array performance optimization
- **ZSTRG-17654** - Upgrade Samba SMB service
- **ZSTRG-15328** - Add the option to choose between asynchronous & synchronous for newly created NAS volumes (global/per volume configuration)
- **ZSTRG-2793** - Added support for volumes/pool custom user tagging

11.5.2 VPSA Object Storage

- **ZSTRG-21089** - Fixed an issue where user couldn't login immediately after account creation
- **ZSTRG-21052** - S3API: fixed an issue for retention time format response upon an update
- **ZSTRG-21039** - S3API: fixed an issue with AWSv4 signatures when using special characters in the object name.
- **ZSTRG-20988** - S3API - Fixed an issue with prefix/delimiter/marker quoting
- **ZSTRG-21017** - Improved Container Replication bandwidth utilization
- **ZSTRG-20968** - Fixed an issue for member user role permissions after upgrading from 21.07 Object Storage.
- **ZSTRG-20850** - Added support for dynamic multi-chunk upload size to the Container Replication data mover.
- **ZSTRG-20828** - Fixed an issue where deleting a document using IBM Filenet returned 500 error.
- **ZSTRG-20612** - Improved API token generation
- **ZSTRG-20475** - Fixed a high latency issue observed due to an internal worker memory footprint
- **ZSTRG-20151** - Fix an issue where applying custom TLS certificate failed
- **ZSTRG-14923** - Fix an issue where the percentage of the policy balance was presenting wrong value

11.5.3 Security

- **ZSTRG-21346,ZSTRG-21322,ZSTRG-21340** - Hardening of the Provisioning Portal and Command Center web applications.
- **ZSTRG-21386,ZSTRG-18648** - Upgraded cross-cloud components to mitigate the following CVEs (among with lower severity CVEs that were excluded from the list)

- CVE-2018-25032
- CVE-2019-13050
- CVE-2019-9923
- CVE-2020-25648
- CVE-2020-28196
- CVE-2020-36332
- CVE-2021-20288
- CVE-2021-20305
- CVE-2021-22947
- CVE-2021-25217
- CVE-2021-26937
- CVE-2021-31535
- CVE-2021-3177
- CVE-2021-31873
- CVE-2021-3246
- CVE-2021-33657
- CVE-2021-3520
- CVE-2021-3737
- CVE-2021-38185
- CVE-2021-40153
- CVE-2021-4034
- CVE-2021-40528
- CVE-2021-41072
- CVE-2022-0391
- CVE-2022-0891
- CVE-2022-1271
- CVE-2022-1304
- CVE-2022-1552
- CVE-2022-1664
- CVE-2022-25310
- CVE-2022-26377
- CVE-2022-27776
- CVE-2022-28330
- CVE-2022-28463
- CVE-2022-28614
- CVE-2022-28615
- CVE-2022-28658
- CVE-2022-29155
- CVE-2022-29404
- CVE-2022-29800
- CVE-2022-29824
- CVE-2022-29869
- CVE-2022-30522
- CVE-2022-30556
- CVE-2022-30789
- CVE-2022-31813
- CVE-2022-2068

Known issues and limitations

VPSA Storage Array and Flash-Array

- **ZSTRG-20381, 22.06-86** - SMB: domain admin attempt to take ownership on a folder owned by another user fails in case inheritance is disabled

Revision history

- 22.06-104, September 2022
- 22.06-99, August 2022
- 22.06-90, July 2022
- 22.06-89, July 2022
- 22.06-86, July 2022 (GA)

CHAPTER

TWELVE

RELEASE 21.07-SP1

12.1 Key Enhancements

12.1.1 VPSA Object Storage

Object-Lock S3 API performance improvement

(**ZSTRG-12992,ZSTRG-17467**)

With version 21.07-SP1, Zadara improved significantly its VPSA Object Storage handling of the following S3 compatible Object-Lock APIs:

- Put-object-retention
- Multi-delete

With Object-Lock enabled use-cases(i.e Veeam's immutable backup), where the backup application requires periodical update of the objects in the backend container (bucket) with an updated "Retention Date". Updating the object's metadata requires a single API request per object, which can result with millions of consecutive requests. The change in the way the VPSA Object Storage handle the object metadata allow the Object Storage to serve x3-x4 more requests in parallel.

New account administrator dashboard

(**ZSTRG-18975**)

Similar to the VPSA Object Storage administrator, a new account dashboard was introduced to provide a snapshot visibility to the account administrators. The dashboard will provide the following information:

- General VPSA Object Storage information
- Performance metering snapshot:
  - Total throughput
  - Total operations/s
  - Operation type breakdown
  - Capacity history
  - Account status (capacity, containers count, object count, users etc)

Release 21.07-SP1 is a service pack release which includes scalability, security, usability improvements, new features and bug fixes.

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform on top of the previous 21.07 major version.

12.2 Version 21.07-SP1-313

Build **21.07-SP1-313** primary addresses VPSA Object Storage issues related to performance at scale and IPv6 connectivity.

12.2.1 VPSA Object Storage

- **ZSTRG-23006** - Fixed an issue where remote Object Storage discovery via the cloud's Outnet network failed
- **ZSTRG-22702** - Fixed an issue where remote Object Storage connectivity using IPv6 failed
- **ZSTRG-22840, ZSTRG-22703, ZSTRG-21142** - Improvements for the VPSA management console performance for Object Storage with more than 1000 accounts
- **ZSTRG-22701, ZSTRG-21797, ZSTRG-22706** - Improved infrastructure handling for large metering database

12.3 Version 21.07-SP1-297

12.3.1 VPSA Storage Array

- **ZSTRG-20472** - Update for zadaravpsa.com TLS certificate

12.3.2 VPSA All-Flash Array

- **ZSTRG-20472** - Update for zadaravpsa.com TLS certificate
- **ZSTRG-20007** - Performance - Improving write buffer backend async IO

12.3.3 VPSA Object Storage

- **ZSTRG-20110** - Improve the performance of the authentication API response
- **ZSTRG-19964** - S3API compatibility - fix an issue where VersionID is not returned for multipart object PUT request
- **ZSTRG-20316** - Fixed an issue with replication job that fails sporadically
- **ZSTRG-20278** - Fixed an issue where disabling MFA authentication for a single user did not work as expected

12.4 Version 21.07-SP1-292

12.4.1 VPSA Storage Array

- **ZSTRG-19070** - Fixed an issue with FC NULL pointer exception may lead to a VC crash
- **ZSTRG-20061,20062** - Upgrade VC level packages to handle various security vulnerabilities
- **ZSTRG-20149** - Fixed an issue where non-rotated metering dc records may lead to a VPSA lockdown
- **ZSTRG-19185** - Adjust iSCSI configuration to avoid issue where SN times out

12.4.2 VPSA Object Storage

- **ZSTRG-20154** - Fix a display issue where rebalance percentage can exceed 100%
- **ZSTRG-20071** - Fix an issue where container(bucket) with non unicode characters cannot be deleted
- **ZSTRG-19980** - Fix an issue where where permissions are not handled correctly with multipart objects
- **ZSTRG-20061,20062** - upgrade VC level packages to handle various security vulnerabilities

12.4.3 CCVM

- **ZSTRG-20061,20062** - upgrade CCVM level packages to handle various security vulnerabilities

12.4.4 Storage Node

- **ZSTRG-17726** - Fixed an issue where support ticket creation and licensing validation might fail with IPv6 proxy configuration
- **ZSTRG-20246** - Fixed an issue with FreeIPA package

12.5 Version 21.07-SP1-280

12.5.1 VPSA Storage Array

- **ZSTRG-19295** - Fixed a display issue in the VPSA graphical interface where the dashboard was not loaded.
- **ZSTRG-19587** - Fixed an issue in which DOS attributes were not saved properly after copying files to SMB share with enabled SMB File history
- **ZSTRG-19845** - Fixed and issue in which the deletion of the SMB directory with “hide unreadable” files inside was allowed

12.5.2 VPSA Object Storage

- **19849** - Zadara’s wildcard certificate for zadarazios.com domain was renewed (valid until April 2023)
- **ZSTRG-19176, ZSTRG-19807** - Fixed an issue where recursive deletion of a container (bucket) was terminated unexpectedly.
- **ZSTRG-19409** - Fixed an issue where the console did not display more than 50,000 containers (limit set to 100,000 containers)
- **ZSTRG-19876** - Fixed an issue with the dashboard presentation of the total throughput value
- **ZSTRG-19983** - Fixed an issue where delete of an object failed using Cloudberry Explorer for Openstack client
- **ZSTRG-19395** - Fixed an issue with reporting inconsistencies for source-target Object Storage with remote replication

12.5.3 Storage Node

- **ZSTRG-19514** - Fixed an issue in the underlying storage node iSER driver where NULL pointer is returned

12.5.4 Security

ZSTRG-19684 - Upgraded storage node components to mitigate the following CVEs (among with lower severity CVEs that were excluded from the list)

- CVE-2016-10228
- CVE-2019-17543
- CVE-2019-25013
- CVE-2020-27618
- CVE-2020-29562
- CVE-2020-6096
- CVE-2020-8625
- CVE-2021-22901
- CVE-2021-22926
- CVE-2021-2372
- CVE-2021-25214
- CVE-2021-25215
- CVE-2021-25216
- CVE-2021-25220
- CVE-2021-27645
- CVE-2021-3326
- CVE-2021-35604
- CVE-2021-35942
- CVE-2021-3711
- CVE-2021-3999
- CVE-2022-0396
- CVE-2022-23218
- CVE-2022-23219

12.6 Version 21.07-SP1-237

12.6.1 VPSA Storage Array

- **ZSTRG-18306** - Allow allocation of two VNIs (Virtual Network Interfaces) with a matching VLAN ID

- **ZSTRG-18138** - Fix an issue where Japanese characters couldn't be used for configuring quota for a project

12.6.2 VPSA Object Storage

- **ZSTRG-18306** - Allow allocation of two VNIs (Virtual Network Interfaces) with a matching VLAN ID
- **ZSTRG-13938** - Removed the option to add an additional data policy to an existing VPSA Object Storage
- **ZSTRG-16969** - Disable the automatic provisioning of ZELB for Premium+ Object Storage
- **ZSTRG-17385** - Disable management interface port (8080) when internal TLS termination is set
- **ZSTRG-15831** - Fix an issue where object last replication time is not updated correctly
- **ZSTRG-18262** - Fix an issue where MinIO client cloud not parse object retntion date
- **ZSTRG-18122** - Fix an issue where new object replication job was blocked due to an old replication job for the same container
- **ZSTRG-17820** - Fix an issue where the color indicator for a policy in protected state was not updates
- **ZSTRG-17390** - Fix an issue where TLS1.1 was still offered as supported protocol in an existing Object Storage.
- **ZSTRG-17395** - Added support for Content-Disposition header
- **ZSTRG-15831** - Fix an issue where lifecycle policy was not executed according to the defined rule
- **ZSTRG-15224** - Fix an issue with the main dashboard operations where the breakdown display a summary of operations instead of concurrent operation

12.6.3 Command Center

- **ZSTRG-12973** - Cloud administrators can now restrict access to their Command Center and Provisioning Portal to a specific IP addresses

12.6.4 Security

ZSTRG-17818 - Upgraded cross cloud components to mitigate the following CVEs

- CVE-2018-10852
- CVE-2021-23017
- CVE-2021-3712
- CVE-2017-8872
- CVE-2019-20388
- CVE-2020-24977
- CVE-2021-3516
- CVE-2021-3517
- CVE-2021-3518
- CVE-2021-3537

12.7 Known issues and limitations

In 21.07-SP1-237 no known issues or limitations were introduced.

12.8 Revision History

- 21.07-SP1-297, May 2022
- 21.07-SP1-292, April 2022
- 21.07-SP1-280, March 2022
- 21.07-SP1-237, February 2022 (GA)

CHAPTER

THIRTEEN

RELEASE 21.07

13.1 Key Enhancements

13.1.1 VPSA Storage Array

Volume QoS (Quality of Service)

zStorage 21.07 VPSA has been enhanced to support users specified capping for block volumes IO rate and consumed throughput. VPSA users can now specify upper limits for: read IOPS, write IOPS, read throughput and write through for every VPSA volume.

Volume QoS is supported in both VPSA Storage Arrays and VPSA Flash Arrays, QoS can be configured from volumes of all media types (SSD/HDD/Tiered) Both IOPS and Bandwidth capping definitions can be applied for the same volume. In such a case, the volume will be capped by the metric reaching the specific threshold at any point in time.

Flash Array Tiered Pools - optimized operations

Zadara is introducing an enhancement to the VPSA Flash array tiered pools feature that will optimize tiered pool operations in general purpose and OLTP use cases. The tiered pool chunk promotion behavior has been enhanced to reduce chunk promotion and demotion traffic in cases of random IO workloads by now taking into consideration the relative heat of specific chunks to be promoted in addition to overall pool capacity considerations.

13.1.2 VPSA Object Storage

Quota limit notifications

VPSA Object Storage administrators can now set quota utilization notifications for their accounts administrator based on a pre-defined custom threshold (system wide).

Rate limiting control

VPSA Object Storage administrators can now set rate limiting control on account basis using a global/account level threshold.

The following section will breakdown the **main** additions and updates to the Zadara Storage Cloud platform.

13.2 Version 21.07-222

13.2.1 VPSA Storage Array

- **ZSTRG-18674** - Fix an issue with tiering periodic promotion.
- **ZSTRG-18463** - Fix an issue where the VPSA IQN was presented truncated in the Virtual Controller properties view.

13.3 Version 21.07-195

13.3.1 VPSA Storage Array

- **ZSTRG-18139** - VPSA can now support up to 64 uniques Virtual Network Interfaces (VNI). Additional VNI support is bounded to the VPSA engine size:
  - Engine 200 - up to 8 VNIs
  - Engine 400 - up to 16 VNIs
  - Engine 600 - up to 32 VNIs
  - Engine 800 and higher - 64 VNIs
  - Flash Array H100-H400 - 64 VNIs
- **ZSTRG-18170** - Flash Array, increase Optane size allocation for all pool types.
- **ZSTRG-15673** - Allow VNI based remote mirroring on different networks. Limitation: Mirror replication over VNIs with different CIDR is applicable only if single VNI is attached to VPSA
- **ZSTRG-18049** - Fix an issue where the management console will not start post a failover
- **ZSTRG-18055** - Fix an issue in which the extended cache expansion operation may not complete as expected.

13.3.2 Storage Node

- **ZSTRG-14067, ZSTRG-7855** - Add MegaRAID 3916 support

13.3.3 Command Center

- **ZSTRG-18369** - TLS certificate for the zadarastorage.com domain was updated.

13.4 Version 21.07-176

13.4.1 VPSA Storage Array

- **ZSTRG-17819, ZSTRG-17802** - Flash array - added **internal** debugging tools

13.4.2 CCVM

- **ZSTRG-17924** - Fix an issue where collecting hourly CCVM configuration dump did not complete as expected

13.5 Version 21.07-174

13.5.1 VPSA Storage Array

- **ZSTRG-14938** - Improve tiering algorithm for general purpose VPSAs
- **ZSTRG-14171** - VPSA Block Volume capping
- **ZSTRG-7807** - Flash Array - Add volume metering of IOs size distribution
- **ZSTRG-10630** - TCPDump was added as a networking diagnostic tool
- **ZSTRG-12900** - Force Recover option was removed from the VPSA management interface
- **ZSTRG-14392** - Improve Virtual Controller failover time
- **ZSTRG-13703** - File access log can be enabled from “Audit Log” menu context

- **ZSTRG-11577** - VPSA IQN and netbios name are now globally unique
- **ZSTRG-12237** - Added a comprehensive volume filtering (VPSA management interface)
- **ZSTRG-13944** - Adjust dashboard's capacity history chart according to the VPSA creation date

13.5.2 VPSA Object Storage

- **ZSTRG-14438** - Added a support for asynchronous container deletion
- **ZSTRG-12910** - Added policy metering information for multi-delete operations
- **ZSTRG-11414** - Added connections count metering information
- **ZSTRG-10285** - Added the option to switch timezone in the VPSA Object Storage management interface
- **ZSTRG-14251** - Branding - custom logo can be set directly from the VPSA Object Storage management interface
- **ZSTRG-14466** - container replication wizard can now list remote buckets
- **ZSTRG-15668** - Usage report - fix an issue with the account drop down selection menu
- **ZSTRG-15165** - **SECURITY** Fixed an issue where management interface session termination failed
- **ZSTRG-15165** - **SECURITY** anti-automation mechanism was added
- **ZSTRG-13916** - **SECURITY** upgrade Apache serer to latest version

13.5.3 Storage Node

- **ZSTRG-13576** - Add periodic check for DNS server validity
- **ZSTRG-17749** - Added support to customize cloud's MTU field for internal cloud networks. Supported for new cloud installations only.

13.5.4 Command Center

- **ZSTRG-12523** - Allow SMTP TLS port customization
- **ZSTRG-14079** - VPSA usage report can be submitted to a custom endpoint
- **ZSTRG-14487** - **SECURITY** - harden user uploads wizard to detect unsupported filetypes
- **ZSTRG-14486** - **SECURITY** - protect against redirection phishing attack
- **ZSTRG-14485** - **SECURITY** - protect against user enumeration

13.5.5 Provisioning Portal

- **ZSTRG-13014** - Pricing management APIs were added
- **ZSTRG-14485** - **SECURITY** - protect against user enumeration

13.5.6 Interoperability

- **ZSTRG-14331** - Asigra Data Service is no longer supported
- Zadara VPSA CSI Driver 1.3.7 :
  - Additional *stonith* component to evacuate StatefulSet Pods from unreachable Nodes, for faster failover.
  - Fix an issue with iSCSI sessions teardown in IPv6 environment

13.5.7 Security

ZSTRG-15172 - Upgraded cross cloud components to mitigate the following CVEs

- CVE-2017-8779
- CVE-2018-25009
- CVE-2018-25010
- CVE-2018-25011
- CVE-2018-25012
- CVE-2018-25013
- CVE-2018-25014
- CVE-2018-7738
- CVE-2019-14775
- CVE-2019-19948
- CVE-2019-19949
- CVE-2020-10543
- CVE-2020-10878
- CVE-2020-12723
- CVE-2020-14672
- CVE-2020-14760
- CVE-2020-14765
- CVE-2020-14769
- CVE-2020-14771
- CVE-2020-14773
- CVE-2020-14775
- CVE-2020-14776
- CVE-2020-14777
- CVE-2020-14785
- CVE-2020-14786
- CVE-2020-14789
- CVE-2020-14790
- CVE-2020-14791
- CVE-2020-14793
- CVE-2020-14794
- CVE-2020-14800
- CVE-2020-14804
- CVE-2020-14809
- CVE-2020-14812
- CVE-2020-14814
- CVE-2020-14821
- CVE-2020-14827
- CVE-2020-14828
- CVE-2020-14829
- CVE-2020-14830
- CVE-2020-14836
- CVE-2020-14837
- CVE-2020-14838
- CVE-2020-14839
- CVE-2020-14844
- CVE-2020-14845
- CVE-2020-14846
- CVE-2020-14848
- CVE-2020-14852
- CVE-2020-14853
- CVE-2020-14860
- CVE-2020-14861
- CVE-2020-14866
- CVE-2020-14867
- CVE-2020-14868
- CVE-2020-14869
- CVE-2020-14870
- CVE-2020-14873
- CVE-2020-14878
- CVE-2020-14888
- CVE-2020-14891
- CVE-2020-14893
- CVE-2020-25681
- CVE-2020-25682
- CVE-2020-25683
- CVE-2020-25684
- CVE-2020-25685
- CVE-2020-25686
- CVE-2020-25687
- CVE-2020-25694
- CVE-2020-25694
- CVE-2020-25695
- CVE-2020-25695
- CVE-2020-25696
- CVE-2020-25696
- CVE-2020-27560
- CVE-2020-27619
- CVE-2020-36328
- CVE-2020-36329
- CVE-2020-36330
- CVE-2020-36331
- CVE-2020-36332
- CVE-2021-2002
- CVE-2021-2010
- CVE-2021-2011
- CVE-2021-2014
- CVE-2021-2021
- CVE-2021-2022
- CVE-2021-2024
- CVE-2021-2031
- CVE-2021-2032
- CVE-2021-2036
- CVE-2021-2038
- CVE-2021-2046
- CVE-2021-2048
- CVE-2021-2056
- CVE-2021-2058
- CVE-2021-2060
- CVE-2021-2061
- CVE-2021-2065
- CVE-2021-2070
- CVE-2021-2072
- CVE-2021-2076
- CVE-2021-2081
- CVE-2021-2087
- CVE-2021-2088
- CVE-2021-2122
- CVE-2021-23239
- CVE-2021-23358
- CVE-2021-26937
- CVE-2021-31535
- CVE-2021-3156
- CVE-2021-3177
- CVE-2021-3177

13.6 Known issues and limitations

13.6.1 VPSA Storage Array

- **ZSTRG-15330** - Volume performance capping for NAS volume is not supported

13.6.2 VPSA Object Storage

- **19979** - Object replication doesn't support replication for containers with object-lock enabled. Container Replication will not detect versioning nor Object-Lock status of the remote Object Storage. Life cycle policy will not be created on the remote object storage as well.
- **20295** - Object Storage main dashboard operations breakdown display a summary of operations instead of concurrent operation breakdown.

13.7 Revision History

- 21.07-222, January 2022
- 21.07-195, December 2021

- 21.07-176, November 2021
- 21.07-174, October 2021 (GA)

CHAPTER

FOURTEEN

RELEASE 20.12-SP2

14.1 Key Enhancements

14.1.1 New management graphical interface

We're excited to announce the availability of our revised VPSA graphical user interface. The dashboard was redesigned to provide a snapshot to the VPSA Storage Array/Flash-Array/Object Storage state:

- Current workload
- Capacity utilization and trend
- Resources status

14.1.2 VPSA Storage Array

Support Azure BLOB as an Object Storage tier

Azure BLOB can be used in the VPSA Flash-Array as an Object Storage Tier.

Support replacement of KMIP KMS key UUID used in the VPSA

KMS keys that were rotated can now be replaced with a new key in the VPSA management interface.

14.1.3 VPSA Object Storage

Container level replication

Container level replication allows an asynchronously object replication between Zadara's VPSA Object Storage to a remote VPSA Object Storage or other S3 compatible Object Storage.

Zadara's container level replication unblocks a new set of replication scenarios:

- Move the data closer - Container replication can reduce latency for read operations by allowing the data the be consumed from the closest proximity.
- Distribution - post processing, the data can be shifted to additional locations.
- Optimizing cost - replicating the data to a remote location that uses a cheaper protection policy.
- Data redundancy - you can maintain an additional copy of your data in an additional location (VPSA Object Storage, AWS S3 or any other s3 compatible storage)

The container level replication feature will be ready to use on any Zadara VPSA Object Storage that is running version 20.12-SP2 or later.

Configuring replication job may incur additional charges for data transfer, please contact your cloud administrator for additional information.

14.1.4 Interoperability

CSI Driver

Zadara's VPSA Kubernetes CSI driver updated - Version 1.3.6 is now publicly available. The full list of changes is available in the *CSI 1.3.6* section of the release notes. The latest driver installation and usage information can be found at Zadara's CSI Github repository

Release 20.12-SP2 is a service pack release to the previous Zadara 20.12-SP1 release which includes scalability, security, usability improvements, new features and bug fixes.

The following section will breakdown the additions and updates to the Zadara Storage Cloud platform.

14.2 Version 20.12-SP2-247

14.2.1 VPSA Storage Array

- **ZSTRG-18306** - Allow allocation of two VNIs (Virtual Network Interfaces) with a matching VLAN ID

14.2.2 VPSA Object Storage

- **ZSTRG-18306** - Allow allocation of two VNIs (Virtual Network Interfaces) with a matching VLAN ID
- **ZSTRG-18971** - Fix an issue with ZELB IPv6 routing table in a Multi-Zone storage cloud

14.3 Version 20.12-SP2-239

14.3.1 VPSA Storage Array

- **ZSTRG-15673** - Allow VNI based remote mirroring on different networks. **Limitation:** Mirror replication over VNIs with different CIDR is applicable only if single VNI is attached to VPSA
- **ZSTRG-18049** - Fix an issue where the management console will not start post a failover

14.4 Version 20.12-SP2-233

14.4.1 VPSA Storage Array

- **ZSTRG-17452, ZSTRG-17453** - Optimize zCache flush control to allow more affective flushing
- **ZSTRG-17367** - Flash Array Optimize zCache rules
- **ZSTRG-15227** - Fixed an issue where a false alarm HB failure ticket was raised during VC creation/upgrade.

14.4.2 VPSA Object Storage

- **ZSTRG-15227** - Fixed an issue where a false alarm HB failure ticket was raised during VC creation/upgrade.
- **ZSTRG-17427** - Fixed an issue where proxy server return 404 for an existing Object version
- **ZSTRG-15840** - Fixed an issue in which multi-delete request could fail to delete object (Error 412)

14.4.3 Storage Node

- **ZSTRG-15793** - Cloud installer will not upgrade the existing SIOM firmware

14.5 Version 20.12-SP2-229

14.5.1 VPSA Storage Array

- **ZSTRG-16980** - Fixed an issue where name servers entries order prevents connecting to Active Directory.

14.6 Version 20.12-SP2-228

14.6.1 VPSA Flash Array

- **ZSTRG-15797** - Optimize CPU utilization and IO latency on a tiered pool volume.

14.7 Version 20.12-SP2-225

14.7.1 VPSA Storage Array

- **ZSTRG-15800** - Fixed an issue where VMware encrypted NFS shares failed to complete VM vMotion
- **ZSTRG-15701** - Fixed a backward compatibility issue with MIB OIDs

14.8 Version 20.12-SP2-223

14.8.1 VPSA Storage Array

- **20556** - Fixed an issue where released VNI information was not dumped immediately
- **20567** - Fixed a rare issue where MTU changes were not propagated properly to existing VNIs

14.8.2 Storage Node

- **20530** - Fixed a rare issue where scheduled logs collection caused a storage node reboot.

14.9 Version 20.12-SP2-220

14.9.1 VPSA Object Storage

- **20380** - Fixed an issue with container sharding mechanism for V2 versioning enabled containers
- **20406,20418** - Fixed an issue where metadata read request for an object erroneously returned a failure
- **20415** - Fixed an issue where s3 delete bucket request fails

14.9.2 CSI 1.3.6

- **16990** - Added support to CSI snapshot API v1GA
- **16990** - Added support for VPSA IPv6 connectivity
- **20373** - Added support for driver installation using helm repository
- **20254** - Helm chart - support custom docker registry
- **20182** - Added support for custom CA certificate
- **20397** - Fixed an issue when disabling autoExpandSupport
- **20165** - Added support for HTTPS insecure mode

- **17395** - Added support to customize target namespace
- **20166** - Github repository documentation updates

14.10 Version 20.12-SP2-217

14.10.1 VPSA Object Storage

- **20235, 202272** - Improve S3 list-object-versions API performance for versioned containers with a large number of objects
- **20317** - Fixed a rare issue in 20.12-SP2 where closing a GET session prematurely will impact the proxy service

14.11 Version 20.12-SP2-204

14.11.1 VPSA Storage Array and VPSA Flash Array

- **18640, 20019, 19239** - Samba upgraded, include misc fixed for service panic
- **19948** - Fixed an issue where a metering DB update issue triggered a failover
- **19499** - Fix an issue with records filtering in the management GUI

14.11.2 VPSA Object Storage

- **20276** - Fixed an issue where Object Storage Virtual Controller failed due to a kernel panic
- **19370** - Add the ability to select the networking interface information that will be used for users email notifications
- **19314** - Added Data Policy accurate breakdown of the data utilization
- **18721** - Added account utilization information in the main account grid
- **19682** - Fix an issue where console was inaccessible if using the VNI network interface
- **19483** - Region field was added to the zios_admin account information page
- **19770** - Fixed an issue with the Usage Report formatting display
- **19737** - Fixed an issue where clients couldn't establish TLS connection while using a custom TLS certificate (found in version 20.12)

14.11.3 Provisioning Portal

- **19537** - Added Provisioning API for Object Storage accounts

14.12 Known issues and limitations

14.12.1 VPSA Storage Array

- **ZSTRG-18222** - Mirror replication over VNIs with different CIDR is applicable only if single VNI is attached to VPSA

14.12.2 VPSA Object Storage

- **19979** - Object replication doesn't support replication for containers with object-lock enabled. Container Replication will not detect versioning nor Object-Lock status of the remote Object Storage. Life cycle policy will not be created on the remote object storage as well.
- **20295** - Object Storage main dashboard operations breakdown display a summary of operations instead of concurrent operation breakdown.

14.13 Revision History

- 20.12-SP2-247, February 2022 (replaced 20.12-SP2-240)
- 20.12-SP2-240, January 2022
- 20.12-SP2-239, November 2021
- 20.12-SP2-233, November 2021
- 20.12-SP2-229, September 2021
- 20.12-SP2-228, September 2021
- 20.12-SP2-225, August 2021
- 20.12-SP2-223, August 2021
- 20.12-SP2-220, July 2021
- 20.12-SP2-217, July 2021
- 20.12-SP2-204, April 2021 (GA)

CHAPTER

FIFTEEN

RELEASE 20.12-SP1

15.1 Key Enhancements

15.1.1 VPSA Storage Array

KMIP Integration (Equinix SmartKeys)

Users can now use their Equinix SmartKeys keys for VPSA Storage Array Volume encryption. A VPSA with a user provided encryption key can switch to a KMIP based encryption.

Azure BLOB storage support

Users can utilize their Azure Blob storage with the VPSA Storage Array Backup to Object Storage. This option is added to the existing support of VPSA Object Storage, AWS S3 and Google Cloud Storage as the remote object storage.

15.1.2 VPSA Object Storage

New object versioning V2 method support

Versioning provides an additional layer of protection for objects. Users can easily recover from unintended user errors or application failures. Users can also use Versioning for data retention and archiving.

The new versioning method is the default versioning option for new containers created in version 20.12-SP1 onwards, This uses symlink and hidden container for implementing versioning rather than the archive container.

Openstack Keystone integration - custom DNS support

VPSA Object Storage administrators can set their private name servers to support private domain names.

15.1.3 Interoperability

VPSA Driver for OpenStack Manila

Zadara VPSA Storage Array & Flash Array share driver for OpenStack Manila is now available with the Wallaby release.

Release 20.12-SP1 is a service pack release to the previous Zadara 20.12 release which includes scalability, security, usability improvements, new features and bug fixes.

The following section will breakdown the additions and updates to the Zadara Storage Cloud platform.

15.2 Version 20.12-SP1-132

15.2.1 VPSA Storage Array and VPSA Flash Array

- **19821** - Fixed an issue where a large demote queue may cause a VC to failover in a tiered VPSA

- **19835** - Fixed an issue where docker container issues an async IO may cause the VC to failover

15.2.2 Provisioning Portal

- **19834** - Fixed an issue where administrator cannot invoke a VPSA operations on behalf of a user

15.3 Version 20.12-SP1-123

15.3.1 VPSA Storage Array and VPSA Flash Array

- **18303** - Added KMIP (Equinix SmartKeys) support for volumes encryption
- **7170** - Added support for Azure Blob storage as a remote destination for "Backup to Object Storage".
- **19398** - Added KDC IP validation
- **19341** - Get Volume/Snapshot API enhancements, additional volumes/snapshots attributes returned

15.3.2 VPSA Object Storage

- **19533** - VPSA Object Storage SSL certificate (zadarazios.com) was updated
- **19263** - Added auto-disable mechanism for detailed performance monitoring
- **19162** - Optimize ring partition power for newly created VPSA Object Storage
- **19145** - Remote authentication provider (Openstack Keystone) now binds all external traffic to the Front End network
- **18867** - Optimize usage report mechanism to support 1000 remote accounts
- **19145** - Added an option to define a custom name server (remote authentication provider name resolution)
- **18901** - New versioning option (v2) was added

15.3.3 Provisioning Portal

- **18179** - Added support for Object Storage account provisioning directly from Zadara Provisioning Portal

15.3.4 Command Center

- **19631** - Fixed an issue where 403 response is return for a custom Command Center role
- **19157** - Fixed an issue where CCVM certificate update via API did not work

15.3.5 Misc

OpenStack Manila VPSA Driver

Wallaby release - a Zadara VPSA (Storage Array & Flash-Array) share driver was introduced.

Manila VPSA driver provides a seamless management capabilities for VPSA volumes, in this case, NFS & SMB volumes without losing the added value provided by the VPSA Storage Array/Flash-Array.

Supported operations:

- Create a share.
- Delete a share.
- Extend a share.
- Create a snapshot.

- Delete a snapshot.
- Create a share from snapshot.
- Allow share access.
- Manage a share.

For additional information/full configuration reference please refer to the official Openstack Manila documentation.

Openstack Cinder VPSA Driver

Wallaby release - The Zadara VPSA block Driver for Openstack Cinder was updated with the following enhancements:

- Added support for manage/unmanage volumes
- Added support for manage/unmanage snapshots
- Added support for multiattach
- Added support for IPv6 VPSA networking

The updated driver requires a VPSA running version 20.12-SP1 or later.

15.4 Known issues and limitations

15.4.1 VPSA Storage Array & VPSA Flash-Array

- **19582** - Azure Blob based remote object storage cannot be used for Tiered pools.

15.4.2 Provisioning Portal

- **19549** - Object Storage account deletion does not generate a confirmation email
- **19539** - Object Storage account console status doesn't change post deletion request
- **19537** - Provisioning Object Storage account via Provisioning Portal API is not supported
- **19490** - Provisioning Portal user email modification will not be populated to the remote object storage

15.5 Revision History

- 20.12-SP1-123, April 2021

CHAPTER

SIXTEEN

RELEASE 20.12

Release 20.12 is an enhancement to previous release 20.01 with some scalability, security, and usability improvements, new features and fixes to issues that were found in previous releases. This zStorage release has many key enhancements that continue to round out the Zadara zStorage enterprise grade feature set!

16.1 Zadara Kubernetes Operator

Containers are an emerging method for running applications. Adoption of Kubernetes (and containers usage in general) is growing in the enterprise. Container based applications require persistent storage that Zadara VPSA provides.

The Zadara Operator provides storage and data management for K8s stateful applications as a cloud-native service, while leveraging Zadara's enterprise grade Storage-as-a-Service VPSA for provisioning and managing persistent storage.

Zadara Operator provides:

- Zadara CSI driver automatic installation and management Automatic K8s application discovery.
- Application protection using an intelligent and efficient snapshots mechanism.
- Custom snapshots scheduling for application protection.
- Instant application clone.
- CLI for centralized management for Zadara's K8s assets.
- Migrate application from one cluster to another.

More information can be found at the Zadara Operator Github repository.

16.2 IPv6

Zadara storage now fully supports IPv6 for both hosts connectivity and management purposes.

16.3 Security

TLSv1.1 protocol was disabled for all Zadara Web Applications, TLSv1.2 and TLSv1.3 are the supported TLS protocols.

16.3.1 What's new in VPSA Storage Array and Flash Array

16.4 Auto Tiering

With the VPSA Flash Array, customers can now have primary storage pools consisting of both flash (SSD) and hard disk drives (HDD) or flash (SSD) and object storage (Zadara or other S3 compatible object storage). With these new hybrid primary storage zStorage Flash Array deployments, data is automatically placed on the higher performing flash drives if frequent access is needed, and the less frequently accessed data is placed on the lower cost hard disks/object storage .

The business value of Auto Tiering lies in the fact that it enables efficient use of the underlying storage media/resources.

16.5 Max Volume Size increase

With the 20.12 release, the maximum capacity supported per a VPSA (and a single volume allocated on it) increases from 200TB / 250TB to 500TB in VPSA Storage Array, and VPSA Flash Array. This will be very appealing to customers using large file systems for backup repositories, media repositories and/or large file archives.

16.6 File Analytics

This release introduces the new built in file analytics capabilities for VPSA NAS shares. Zadara File Analytics helps customers navigate through data and gives them better visibility to manage their data more effectively. File Analytics helps solve data challenges around ownership, storage consumption, storage optimization, and data protection. It also reports on key growth trends and capacity utilization trends

16.7 File Access Audit

THis release keeps full access log per file system. Users can now have access to a secure log of any file operation (read/write/rename/etc… for auditing purposes.

16.8 File History

This release adds File History capabilities to NFS shares, as it is supported for SMB shares. File History allows quick restore of any specific version of a given file.

16.8.1 Major Changes & bug fixes

16.9 20.12 Build 317

VPSA Storage Array and VPSA Flash Array

- **4069, 17314** - File access audit Logging was added to NFS and SMB shares
- **12992** - Server Monitoring Capability was added
- **13037** - The ability to Mirror via a Proxy server was added
- **13244** - External KMS was added as an alternative for manual encryption password
- **13877** - Fixed an issue where user mapping is invalid on Mirror destination in the sub-domain environment
- **15104** - It is now possible to change a volume export name irrespective of its state
- **15126** - Added the option to set individual shares (NFS/SMB) as Read Only or Read Write
- **16038** - Connecting to Remote VPSA over VNI (Secondary Network) is now supported
- **16331** - Ability for a single NFS file recovery from a snapshot was added (NFS File History)
- **16340** - Improved SMB signing performance
- **16484** - fixed an issue where Destination VPSA was deleted, and there was no option to break the remote clone from source VPSA
- **16642** - Fixed Low SMB performance issue as result of "case sensitive" that was set to "no" by default
- **16717** - Changing Password does not reset API Token
- **16823** - Provided the ability to toggle "mangled names" on SMB shares
- **16830** - Blocking Servers deletion if there are open iSCSI connections to it
- **17175** - New pool types, with 500TB limit, were added. **Depot** pool on Storage Array, **Throughput Optimized** pool on Flash Array
- **17951** - "Linux iSCSI Connect Script" now supports both curl and wget
- **18096** - New pool types for Flash Array. IOPS-Optimized, Balanced, Throughput Optimized
- **18276, 18506** - File Analytics is now supported for file shares
- **18877** - VPSA volume 'protection' column is now 'Attributes', icons display for FLC indexing, encryption and automatic expansion
- **18940** - Fixed an issue where User that belongs to ignored sub-domain can access files on the SMB volume
- **18980** - Fixed an issue where SMB Volume is still accessible after it was detached from the Server
- **17387** - TLSv1.1 protocol was disabled for all Zadara Web Applications, TLSv1.2 and TLSv1.3 are the supported TLS protocols

VPSA Object Storage

- **12433** - Domain registration process for public IP was automated
- **15132, 16185, 18779** - Performance Dashboard was added
- **15419** - Virtual host style URL is now supported. It enables using the bucket name as part of host name
- **15907** - Added support for CORS (Cross Origin Resource Sharing)
- **16093** - Object level ACL support was added for the default policy permissions
- **16358** - "s3" default region name set to us-east-1
- **16543** - GUI enhancement that displays locked user information, and provides an option to unlock
- **17466** - Immutability support was added for the multipart objects
- **17515** - added the ability to restore previous object versions using s3browser on versioning enabled containers
- **17689** - It is now possible to use an external identity provider (Openstack Keystone) as the authentication engine
- **17753, 18465** - Object Storage now supports multiple VNIs. All configured networks can be either IPv4 or IPv6
- **18157** - A fix for handling swift API HTTP response code properly
- **18194** - Storage Policies offering was modified (Added: EC 2+1 and 2-Way MZ, removed 3way and EC 6+3)
- **18799** - Added metering statistics for s3api calls
- **18958** - Modified gradual policy expansion default value from 10% to 25%
- **18977** - The Capacity alert mechanism was improved to give better prediction for potential capacity shortage
- **17387** - TLSv1.1 protocol was disabled for all Zadara Web Applications, TLSv1.2 and TLSv1.3 are the supported TLS protocols

Provisioning Portal

- **14368** - Encourage users to enable MFA for their Zadara accounts
- **18576** - An entire new "white labeling" to the Provisioning Portal has been implemented
- **17387** - TLSv1.1 protocol was disabled for all Zadara Web Applications, TLSv1.2 and TLSv1.3 are the supported TLS protocols

Command Center

- **14784, 18040** - It is now possible to set any support ticket attributes (priority, to_user, rate limit, etc…) per VPSA
- **16847** - Active FE IP presentations across Command Center Tabs are now aligned
- **17002** - Block VPSA upgrade from a version that is more than 2 major releases behind, and block version downgrade
- **17292** - Noticeable indication was added on node display when a service is not available
- **17323** - Data reduction metrics for VPSA Flash Array added to the VPSA dashboard
- **17416** - When VPSA GUI is not accessible and GUI cannot be launched an error is shown
- **18041** - Event-log messages of addremove cache were modified to include cache capacity

- **18591** - An option to change the command center logo was added for White labeling purposes
- **17387** - TLSv1.1 protocol was disabled for all Zadara Web Applications, TLSv1.2 and TLSv1.3 are the supported TLS protocols

16.9.1 Known issues and limitations introduced in 20.12

Zadara Cloud

- **19250** - Asigra VPSA creation might fail with DVM state EXECUTING_REBOOT

16.9.2 Known issues and limitations introduced in 19.08

Zadara Cloud

- **15397** - “Edge device” (Cloud-in-a-Box) with 10GBase-T RJ45 hosts connectivity can be expanded to a full cloud by connecting BE Mellanox switches.

VPSA

- **13626** - Volume or clone deletion may result in misleading effective capacity.
- **15104** - Can’t rename volumes in “failed” state.
- **15700** - VPSA with IPv6 GUI cannot be opened using domain name with Chrome browser if IPv6 address is not global. This is a chrome issue.
- **15888** - Encrypted volume cannot be remote cloned as non-encrypted volume, and vice versa.
- **15943** - IO may fail during model upgrade of VPSA model 200 if the CPU is highly utilized.
- **15969** - Non admin users are unable to activate/deactivate their own dual factor authentication.

16.9.3 Known issues and limitations introduced in 18.11

VPSA All Flash

- **12388** - Capacity saving by zero pattern matching is not counted in the savings calculation.
- **13509** - Removing of Master Encryption Password is possible only after deleting the pools.