



Zadara Release Notes



Release 19.08

Zadara

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SCOPE

This document describes the Zadara Storage Cloud release notes. These release notes contain important information available at the time of the release. New features, important bug fixes, known limitations are addressed here.

1.1 Revision History

Date	Revision	Released packages	Description
August 2019	1	VPSA image: 19.08-169 SN package: 19.08-169	19.08 GA
November 2019	2	VPSA image: 19.08-188 SN package: 19.08-188	Maintenance Release
November 2019	3	VPSA image: 19.08-190 SN package: 19.08-190	Maintenance Release
December 2019	4	VPSA image: 19.08-193 SN package: 19.08-193	Maintenance Release
February 2020	5	VPSA image: 19.08-199 SN package: 19.08-199	Maintenance Release
March 2020	6	VPSA image: 19.08-203 SN package: 19.08-203	Maintenance Release
June 2020	7	VPSA image: 19.08-214 SN package: 19.08-214	Maintenance Release

NEW FUNCTIONALITY AND CHANGE LIST

2.1 Release 19.08

Release 19.08 is an enhancement to previous release 18.11 with some scalability, security, and usability improvements, new features and fixes to issues that were found in 18.11.

2.2 What's new in Zadara Cloud

2.2.1 NVMe SSD Support

7.62TB NVMe SSD's are now supported. These drives provide enhanced performance at lower price per GB.

2.2.2 Cloud-in-a-Box

Zadara now supports a Cloud-in-a-Box configuration based on a 2U device that contains 2 storage nodes and 12 HDDs. This configuration is ideal for small on-prem needs like remote branches.

2.2.3 User Guides

Updated versions of **VPSA Storage Array User Guide** and **VPSA Object Storage User Guide** are available [*http://guides.zadarastorage.com*](http://guides.zadarastorage.com) in HTML format. Users can also download a PDF file.

2.3 What's new in VPSA Storage Array and All Flash Array

2.3.1 VPSA Storage Array – New Engine

New larger Engine was introduced for VPSA Storage Array to serve use cases that need extreme performance.

IO Engine Type	Dedicated Compute Resources	Base Flash Cache	Max Drives	Max Raw Capacity
200 (Baby)	2 CPU, 6 GB RAM	20 GB	5	24 TB
400 (Basic)	4 CPU, 12 GB RAM	20 GB	10	60 TB
600 (Boost)	6 CPU, 20 GB RAM	40 GB	20	100 TB
800 (Blast)	8 CPU, 28 GB RAM	60 GB	30	150 TB
1000 (Blazing)	10 CPU, 36 GB RAM	80 GB	40	200 TB
1200	12 CPU, 52 GB RAM	100 GB	60	240 TB
1600	16 CPU, 68 GB RAM	120 GB	80	300 TB
2400	24 CPU, 100 GB RAM	180 GB	80	360 TB
3600	36 CPU, 144 GB RAM	240 GB	80	360 TB

2.3.2 VPSA All Flash – Engines

Revised VPSA All Flash Engine specifications

IO Engine Type	Dedicated Compute Resources	Max Drives	Max Raw Capacity	Max Customer (Host) Capacity
F800	8 CPU, 48 GB RAM	30	120	60 TB
F1200	12 CPU, 72 GB RAM	60	200	100 TB
F2400	24 CPU, 116 GB RAM	80	320	160 TB
F3600	36 CPU, 176 GB RAM	100	400	200 TB
F4800	48 CPU, 236 GB RAM	120	400	200 TB

2.3.3 Security

12110 - For security reasons User API Tokens are no longer stored in the DB.

✓ **Note:** It is recommended to use the VPSA's user Access-Key for authentication purposes in custom applications which are utilizing the VPSA RestAPI. Application that already authenticates using the VPSA Access-Key prior to version 19.08, will continue to work as expected.

It's not possible anymore to retrieve the existing token by API or GUI.

Starting of VPSA version 19.08, the API token is displayed only once when generated. The API token will not be returned as part of the /api/users/login API response.

In order to get a new token, navigate to the user information section in the VPSA management interface or use /api/users/{id}/access_key API by providing username and password. For additional information: <http://vpsa-api.zadarastorage.com/19.08/#users>



Warning: Upon generating a new Access-Key, the existing token will be revoked!

2.3.4 Remote Clone

Make a given snapshot of a source volume, available instantly (before data is copied) on another VPSA, in the same cloud or in a different cloud over any distance. Unlike Mirroring that might take a long time to replicate the data (depending on capacity and the link bandwidth), the cloned new volume is available immediately. Blocks of data are retrieved from the source volume on demand. In addition there is an option to have the system retrieve all the data in the background.

Most common use cases are:

Instant Mobility - Rapid Migration of volumes between VPSAs with minimal downtime for the migrating application.

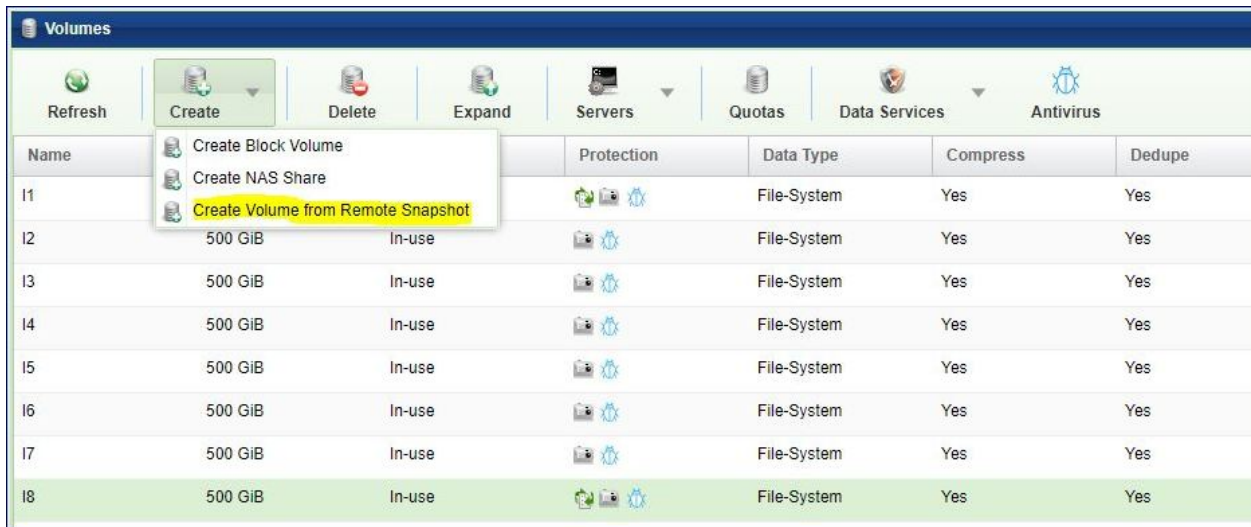
Useful for:

- Volume migration from a VPSA that runs out of capacity into a VPSA that has free capacity
- Volumes migration between VPSA Gen2 and VPSA Gen3
- Volumes migration between sites
- Volumes migration from Private cloud to the public cloud

Offline Processing - Create an instant clone of a volume on another VPSA (local or remote) for offline processing without affecting the original production volume.

Useful for:

- Dev and Test
- Analytics
- Reporting



2.3.5 VPSA All Flash Array - Pool Shrink

New ability to remove drives from a given pool and return them for the cloud resources for re-allocation. This will allow users to stop paying for drives that are no longer needed.



2.3.6 Volume Auto Expand

To avoid situations of volumes running out of capacity, you can set a policy for automatic volume expansion as long as there is free capacity in the pool.

Enable Auto Expand

Emergency Threshold (GiB):* 100

Expand By (GiB):* 200

Maximum Volume Capacity (GiB): 0 (set the value to 0 for no limit)

Update Cancel

2.3.7 Multiple Custom Networks (Virtual Interfaces)

Customer that needs to connect one VPSA to more than one network for hosts access, can now do it with Multiple Custom Networks (Virtual Interfaces). #10033

2.3.8 IPv6

IPv6 is now supported on the FE network, for host and UI connectivity.

Custom networks can be either IPv4-only or IPv6-only. Since IPv6 natively has Global addresses, there is no explicit need to configure additional public IP address for global routing of IPv6 address. Hence Public IP configuration always uses IPv4 addresses.

2.3.9 Interoperability

VMware

- VPSA All Flash is now certified for VMware ESX 6.7 for iSCSI connectivity.
https://www.vmware.com/resources/compatibility/detail.php?deviceCategory=san&productid=47868&releases_filter=428,427,369&deviceCategory=san&details=1&partner=598&isSVA=0&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc
- VPSA Storage Array is now certified VMware ESX 6.7 for NFS connectivity.
https://www.vmware.com/resources/compatibility/detail.php?deviceCategory=san&productid=46452&releases_filter=428,427,369&deviceCategory=san&details=1&partner=598&arrayTypes=3&isSVA=0&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc

Veeam

- VPSA Storage Array is now certified as backup target for Veeam as “Veeam Ready - Repository”
<https://www.veeam.com/kb2961>

2.4 What's new in VPSA Object Storage

2.4.1 Scalability

Zadara object Storage now supports unlimited number of objects per container.

The internal elastic load balancer was extended to scale for larger Object Storage configuration.

2.4.2 Multi Zone

Zadara Object Storage now supports Multi Zone configurations where the data is Synchronously replicated across two zones. |

2.4.3 IPv6

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2.4.4 Deprecation Note

Authentication mechanism for Swift API v2 has been deprecated. Object Storage users which are utilizing Swift API are expected to adjust their clients to use the v3 authentication mechanism.

2.5 Major Changes & bug fixes

2.5.1 19.08 Build 214

VP SA Storage Array and VP SA All Flash

- **17062** - Fixed a regression issue in 19.08 that might result in NFS share locking
- **17167, 17415** - Fixed an issue that might cause out-of-memory situation on SMB shares
- **17342** - Fixed a regression issue that might result in SMB shares not accessible
- **17347** - Fixed an issue with Docker containers that stop the container on memory consumption

2.5.2 19.08 Build 203

VP SA Storage Array and VP SA All Flash

- **16109** - Crash of large-scale VP SA is avoided by improving the metering DB cleanup.
- **16917, 16938** - Upgrade Samba to 4.9.13-02 to fix panic situation on SMB file shares.
- **16923** - Fixed an issue causing a Pool to be in Partial state after upgrading a 200-Engine VP SA created pre-16.05.
- **16957** - Fixed an issue that brings CPU consumption to 100%, and might cause failovers in 200-Engine VP SA.
- **16966** - Fixed an issue where API token was wrongly validated.

2.5.3 19.08 Build 199

VP SA Storage Array and VP SA All Flash

- **16297** - Fixed a regression issue in 19.08 which may result in panic situation on SMB file shares.
- **11888** - Performance improvement on SMB file shares when using DOS attributes.

VP SA Object Storage

- **16149** - Improved performance.

2.5.4 19.08 Build 193

VPSA Storage Array and VPSA All Flash

- **16440** - Fixed a regression issue in 19.08 which may result in data inconsistency if data is read from an NFS share during an orderly VC failover.
- **16304** - Fixed a regression issue in 19.08 FC-only VPSA where UNMAP commands start failing right after the first VC failover.

Command Center

- **16506** - Fixed an issue in which user that enabled MFA Authentication prior to version 19.08 is not able to login to Command Center after the upgrade to 19.08.

2.5.5 19.08 Build 190

VPSA Storage Array and VPSA All Flash

- **16292** - Fixed a backward compatibility issue in mirroring, where a 18.11 to a 19.08 VPSA mirror job resume attempt did not work.
- **16337** - Fixed an issue where internal metering service may crash and lead to a VPSA failover.

2.5.6 19.08 Build 189

VPSA Storage Array and VPSA All Flash

- **16221** - Fixed a regression issue in 19.08 where a very fragmented file in NAS share might cause the VPSA to crash.

2.5.7 19.08 Build 188

Enhancements:

- **14125 - Translations:** VPSA GUI and Provisioning Portal are now fully translated to the following languages: English, German, Japanese, Korean and Portuguese.
- **4097** - Automatic VPSA failed drive replacement. Cloud admin can configure this capability.

VPSA Storage Array and VPSA All Flash

- **9424** - VPSA now creates support ticket in case of unexpected VC failover.
- **16070** - Allow Anti-Virus scan to take no action on virus detection.
- **16075** - Fixed a problem that prevented updates to NAS quotas.
- **16085** - Fixed a problem where virus detection ticket was not sent.
- **16111** - Support for Linux “quota” command over NFS was added.
- **16128** - Fixed an issue in which Container images were not deleted from Docker database.
- **16135** - Fixed an issue where attaching FC volume to a server, that already have VPSA volumes, failed.
- **16144** - Fixed an issue where files cannot be deleted from Anti-Virus quarantine volume

VPSA Object Storage

- **15874** - Fixed an issue in which upload object using s3-cmd with “x-amz-server-side-encryption” header failed.
- **16080** - Fixed a billing issue where usage was reported as 0.
- **16092** - Fixed an issue in upgrade of 18.11 to 19.08 that affected S3 APIs.

2.5.8 19.08 Build 169

VPSA Storage Array and VPSA All Flash

- **3868** - LDAP integration for Authentication (password) and Authorization (UID mapping)
- **4254** - MTU size of 9K is now supported.
- **9009** - New feature for network diagnostics to check for servers connectivity from the VPSA GUI.
- **10538** - Handling large number of mirrors on a single destination VPSA was improved.

- **11551** - AWS Access Key ID is now displayed in the Remote Object Storage properties.
- **11720,15103** - Multiple enhancements to improve mirroring performance introduced.
- **12005** - All capacities display was changed from TB (decimal) to TiB (binary).
- **12151** - Non-readwrite NAS operations were added to the Volume metering.
- **12547** - Role Based Access Control was extended to add a role for volume quota management.
- **12784** - Files Share properties now list the number of files stored.
- **13192** - Alerts on FC ports disconnections were added.
- **13425** - IOPs and Bandwidth performance charts changed to be line-charts.
- **14080** - Added alerts on IO latency above the given threshold.
- **14275** - Filtering by text and date was added to VPSA event log.
- **14371** - Color-code objects status (red - Failed, Yellow - Degraded).
- **14402** - Block-device metering was added to the performance page per volume.
- **14509** - A new option to create Zendesk ticket with or without zsnap (logs).
- **14849** - Identity mapping for mixed compute environment (Linux and Windows). where LDAP UIDs are mapped to Active Directory users.
- **15595** - Microsoft IE11 is now supported.

VPSA Object Storage

- **13221** - Unlimited number of Objects per container is now supported.
- **14812** - Jumbo frames (9k MTU) are now supported.
- **14968** - Object Storage admins can now create users with access to all accounts.
- **15038** - Object Storage admins can now set the expiration time of tokens used to access objects via the REST API.
- **15043** - Support tenant_name and uuid in the keystone URL to access the object.
- **15231** - Added support for 9+3 erasure coding over 4 fault domains.
- **15532** - Object Storage now support Keystone API v3 only.
- **15591** - Object Storage now displays activity statistics per user.

Provisioning Portal

- **12139** - Access log was added for auditing purposes.
- **13436** - The Provisioning Portal now lists the FC WWPNS for VPSAs with FC hosts connectivity.
- **13927** - VPSA type was added to sort between **Storage Array** and **All Flash Array**.
- **14930** - API was added for downloading billing report in CSV format.

- **15017** - Marketplace users are registered as such, marketplace subscriber identifier and last AWS billing report are listed.
- **15595** - Microsoft IE11 is now supported.

Command Center

- **11266** - The reason for “Degraded” VPSA state is now displayed.
- **11435** - Access Log event was added for VPSA GUI launch.
- **11818** - CIDR for Frontend IP and public IP is now displayed.
- **12005** - All capacities display was changed from TB (decimal) to TiB (binary).
- **12382** - Drive UUID is now displayed.
- **12747** - Central log messages were added when a VPSA is purged and when a VPSA is moved to recycle Bin.
- **13457** - Protection Zone in VPSA details is now displayed.
- **13687** - SN status (NormalOfflineMaintenance) is now displayed.
- **14198** - Containers were added to the VPSA dashboard.
- **14656** - Performance charts of a specific Cache/AFA drive partition were added.
- **14869** - Storage node OS and kernel version are now displayed.
- **14888** - The number of VLANs per tenant was increased to 256.

KNOWN ISSUES AND LIMITATIONS

3.1 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.

3.2 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.