



# Zadara Release Notes



Release 18.11

**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         |
|---------------|----------|--|---------------------|
| November 2018 | 1        | VPSA image: 18.11-159<br>SN package: 18.11-159 | 18.11 GA            |
| December 2018 | 2        | VPSA image: 18.11-172<br>SN package: 18.11-172 | Maintenance release |
| January 2019  | 3        | VPSA image: 18.11-174<br>SN package: 18.11-174 | Maintenance release |



## NEW FUNCTIONALITY AND CHANGE LIST

Release 18.11 is an enhancement to previous release 18.07 with some scalability, security, and usability improvements, new features and fixes to issues that were found in 18.07.

### 2.1 What's new in Zadara Cloud

#### 2.1.1 Translations

VPSA GUI and Provisioning Portal are now fully translated to the following languages: English, German, Japanese, Korean and Portuguese.

#### 2.1.2 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.

### 2.2 What's new in VPSA Storage Array

#### 2.2.1 All Flash Array

Zadara is the first vendor to offer All-Flash storage with data reduction capabilities in the cloud.

A new offering of VPSA All-Flash, designed for optimal use of SSD drives, and includes data reduction for affordable price of flash storage.

#### 2.2.2 All Flash Array – New Engines

New Engines were introduced for the All-Flash Arrays

| IO Engine Type | Maximum # of Drives | Maximum Raw Capacity |
|----------------|---------------------|----------------------|
| F800           | 2                   | 12 TB                |
| F1200          | 6                   | 36 TB                |
| F2400          | 12                  | 72 TB                |
| F3600          | 24                  | 144 TB               |
| F4800          | 48                  | 288 TB               |

### 2.2.3 All Flash Array – Storage Pool

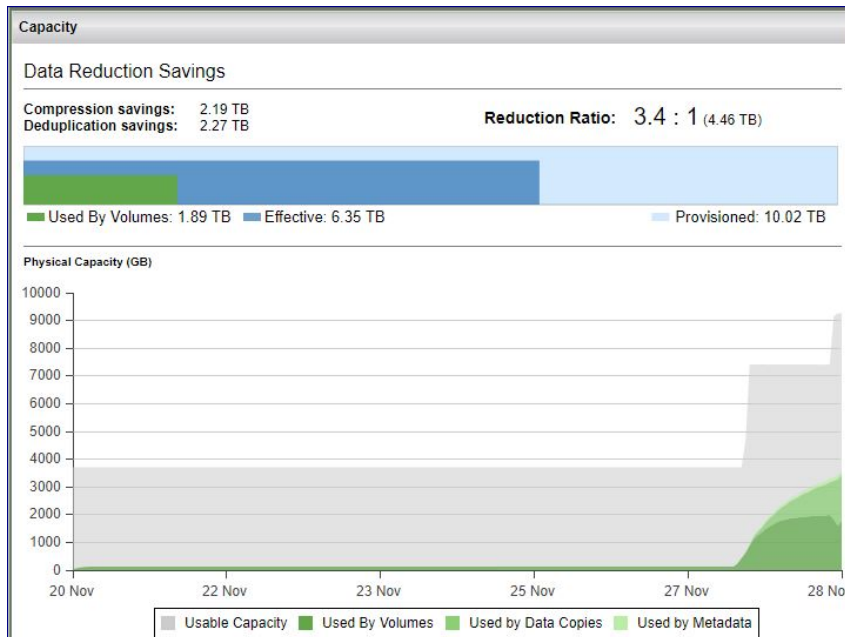
All-Flash Array supports the following pool types designed for different workloads:

|                           | Transactional Pool   | Repository Pool  | Archive Pool   |
|---------------------------|--|--|--|
| Thin Provision Chunk size | 512KB  | 1MB  | 2MB  |
| Deduplication Chunk size  | 8KB  | 16KB   | 32KB   |
| Pros                      | <ul style="list-style-type: none"> <li>• Faster COW operation</li> <li>• Space efficiency on Random writes to Snapshots</li> <li>• Better Deduplication</li> </ul> | <ul style="list-style-type: none"> <li>• Smaller metadata size</li> <li>• Sequential workload performance is similar to transactional</li> </ul> | <ul style="list-style-type: none"> <li>• Allows large pools</li> <li>• Better sequential workload throughput</li> <li>• Better Compression ratio</li> </ul>  |
| Cons                      | <ul style="list-style-type: none"> <li>• Increased metadata size</li> <li>• Lower throughput</li> </ul>  | <ul style="list-style-type: none"> <li>• Slower COW operation</li> <li>• Less space efficient</li> </ul>   | <ul style="list-style-type: none"> <li>• Slower with frequent data modifications</li> <li>• Limited Snapshots frequency (1 hour min)</li> </ul>  |
| Use Case                  | <ul style="list-style-type: none"> <li>• Transactional Workload with Snapshots</li> <li>• High IOPS</li> <li>• Database (OLTP)</li> </ul>                          | <ul style="list-style-type: none"> <li>• Analytics</li> <li>• High Throughput</li> <li>• General Purpose</li> <li>• File System</li> </ul>       | <ul style="list-style-type: none"> <li>• Relatively static data</li> <li>• Archive type workloads</li> <li>• Sequential workloads like Video Streaming</li> <li>• Very large pools/volumes (&gt; 200TB)</li> </ul> |
| Limit                     | Transactional Pools have a maximum size of 100TB   | Repository Pools have a maximum size of 200TB  | Archive Pools have a maximum size of 400TB   |



## 2.2.4 All Flash Array – Data Reduction

All Flash Array supports data reduction techniques to save storage capacity. Both Deduplication and Compression can be activated per volume. Deduplication and Compression are also available for mirrored and cloned Volumes.



## 2.3 What's new in VPSA Object Storage

### 2.3.1 Erasure Coding

In addition to the existing data protection methods of 2-way replication (50% utilization) and 3-way replication (33% utilization), Zadara Object Storage now supports Erasure coding that provides better data protection at 66% capacity utilization. 4+2, 6+3, 8+4 configurations are supported.

## 2.4 Major Changes & bug fixes

### 2.4.1 18.11 Build 241

#### VPSA Storage Array

- 15513 - Fixed an issue with the VC rsyslog daemon

## 2.4.2 18.11 Build 240

### VP SA Storage Array

- **14491** - Fixed an issue that slowed down the VC reboot process
- **14491** - Container Environment variable can now be longer than 2048 bytes
- **15375** - Fixed an issue that prevented volume restore from Object Storage if the original volume was created in a transactional pool

### Cloud Controller

- **14550** - Improved performance of the Cloud Controller REST APIs

### VP SA Object Storage

- **15164** - Authenticate REST API (/api/users/authenticate) now issues a new token on every call

### Command Center

- **15321** - Fixed a 18.11 regression issue that prevented drive FW upgrade

### Installer

- **15268** - Fixed an issue that caused drives to be unavailable after release upgrade

### Provisioning Portal

- **14951** - Fixed an issue with the approve REST API

## 2.4.3 18.11 Build 233

### VP SA Storage Array

- **14820** - Fix an issue in which VC stats in the Performance section does not load for an FC enabled VP SA
- **14780** - Fix an issue in which a VC may failover during volume migration

### VP SA Object Storage

- **14398** - VP SA Object Storage hibernate/restore process improved
- **13955** - Block HTTP listeners, when internal SSL termination is enabled
- **12107** - Fix an issue in which wrong storage policy capacity is displayed
- **14583** - Fix an issue with listing large amount of objects using awscli tool
- **14655** - Improved performance for large objects GET operation
- **14855** - Fix an issue in which delete fails for a non-existing object

## 2.4.4 18.11 Build 222

### VP SA Storage Array

- **13737, 14466** - Collecting metering information from all VP SAs and SNs into a central metering server
- **13904** - Users can now receive events notifications by severity, and can specify the minimal severity to be sent
- **14421** - Default SSE for Backup to Object Storage is set to AES256
- **14504** - Fix an issue in which snapshot policy deletes too many snapshots
- **14624** - Fixed an issue in which FC host may lose its links to the VP SA after a VC failover

**NOTE:** After upgrading a cloud with FC, you will get a ticket that SNs reboot is needed. You can ignore this ticket

### VP SA All Flash

- **13858** - Fixed an issue in which the standby VC might crash during upgrade or model change

### Command Center

- **14309** - Fix an issue in which Command Center log is exhausted with “Command Center failed to sync” errors during Cloud Controller migration procedure

### Storage Node

- **14487** - A new firmware version XCV10110 for Intel SSD S4510 is now available

## 2.4.5 18.11 Build 195

### VP SA Storage Array

- **13884** - Fixed an issue where unplanned failover might occur on a very loaded VP SA
- **13894, 13895** - The option to set the same Anti Virus action as Primary and Secondary was blocked
- **13976** - Expedite VP SA failover time following an unclean shutdown
- **14240** - Fixed an issue where B2OS, that was created on 16.05 using V2 signature, got broken after upgrading to version 18.11-172 (or newer).
- **14263** - Fixed an issue where editing **Remote Object Storage** did not pass the Region value. With this fix it is now possible to move from V2 to V4 signature for AWS S3 Object Storage

### VP SA All Flash

- **14258** - Fixed an issue in which VP SA All Flash might crashes when it is restored from a power failure and the encryption password is entered manually.

### VP SA Object Storage

- **13992** - Capacity protection mechanism was enhanced to better protect Data/Metadata policies against out of capacity situations, as well out of drives capacities.
- **13654** - Support for s3api for x-amz-server-side-encryption (AES256) was added
- **13844** - Fixed an issue where data drive replacement failed when there were 12 drives per VC
- **14002** - Policy health status presentation was improved

- **14305** - zadarazios.com certificate was renewed

#### Provisioning Portal

- **13887** - Fixed an issue where metered billing report to Provisioning Portal fail due to incorrect URL. Now in Provisioning Portal there are two separated values: “Domain Name” and “Provisioning Portal Metering URL”
- **14182** - Fixed an issue where admin could not change other users email address
- **13593** - Fixed wrong user in the email sent in case of VPSA deletion

#### Command Center

- **14086** - A new zadarastorage.com wildcard certificate was introduced (Valid until 1/31/2021)

### 2.4.6 18.11 Build 174

#### VPSA Storage Array

- **13170** - Fixed an issue with Clones, where various NFS clients switch between the clone and the original volume as a result of FSID disorder (This issue might happen only when VPSA upgraded from older versions to 18.11-159 or 18.11-172).
- **14034** - Fixed possible crash that might happen during volume creation or deletion

### 2.4.7 18.11 Build 172

#### VPSA Storage Array

- **13242** - Added support for B2OS/S3 KMS encryption
- **13781** - B2OS always uses V4 authentication scheme for backup to AWS
- **13829** - Restore from Object Storage improvement - disable discards on Restore from OS in the Clone mode
- **13880** - Improved VPSA dashboard performance especially in case of many snapshots
- **13963** - Fixed a regression issue that was introduced in release 18.07-116 and 17.11-260 where if there is a network glitch or Mirror is paused and then resumed, the sync starts from the beginning instead from a checkpoint.

#### Provisioning Portal

- **13899** - Fixed an issue where Add Storage to All-Flash Array may fail
- **13941** - VPSA hibernate/restore APIs are now open
- **13593** - Fixed wrong user in the email sent in case of VPSA deletion

#### Command Center

- **13897** - Fix an issue in which Object Storage dashboard was broken when an Object Storage reports a negative capacity value

#### Storage Node

- **13902** - A new F800 Entry level of All-Flash Engine was added. See table above

- **12426** - All Flash Array now supports MultiZone configurations

## 2.4.8 18.11 Build 159

### VP SA All Flash

- **11020** - "Emergency" Volume free capacity alert was added
- **12780** - Added periodically check of connectivity with AD controllers
- **13341, 12927** - Default capacity thresholds were modified:
  - **Alert Threshold:** 600 minutes (10 hours) OR free capacity <= 10% of pool physical capacity
  - **Protection Threshold:** 180 minutes (3 hours) OR free capacity <= 5% of pool physical capacity
  - **Emergency Threshold:** 50GB OR free capacity <= 1% of pool physical capacity
- **13429** - Support for multiple UNC share points to the same volume was added

### VP SA Storage Array

- **11020** - "Emergency" Volume free capacity alert was added
- **12780** - Added periodically check of connectivity with AD controllers
- **13341, 12927** - Default capacity thresholds were modified:
  - **Alert Threshold:** 360 minutes(6 hours)
  - **Protection Threshold:** 60 minutes (1 hour)
  - **Emergency Threshold:** 50 GB
- **13429** - Support for multiple UNC share points to the same volume was added
- **13792** - Windows quick format performance
- **13827** - Added available capacity to Get Volumes REST API

### VP SA Object Storage

- **12793** - Upgrade from 17.11 to 18.11 is now supported
- **13661** - Erasure Coding Policy of 6+3 and 8+4 are now supported for better data protection

### Provisioning Portal

- **13636** - Revert billing CSV file format and align it with 17.11

### Command Center

- **12998** - For VP SA All-Flash both physical and virtual capacity trends are available



## 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