



# **volume encryption commands**

ONTAP 9.12.1 commands

NetApp

February 12, 2024

# Table of Contents

- volume encryption commands . . . . . 1
  - volume encryption conversion pause . . . . . 1
  - volume encryption conversion resume . . . . . 1
  - volume encryption conversion show . . . . . 2
  - volume encryption conversion start . . . . . 3
  - volume encryption rekey pause . . . . . 3
  - volume encryption rekey resume . . . . . 4
  - volume encryption rekey show . . . . . 4
  - volume encryption rekey start . . . . . 5
  - volume encryption secure-purge abort . . . . . 6
  - volume encryption secure-purge show . . . . . 6
  - volume encryption secure-purge start . . . . . 7

# volume encryption commands

## volume encryption conversion pause

Pause a running volume encryption conversion operation

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `volume encryption conversion pause` command pauses the running encryption conversion operation on a volume.

### Parameters

**-vserver <vserver name> - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume Name**

This parameter specifies the name of the volume being encrypted.

**[-ignore-warning {true|false}] - Ignore Warning for Conversion Pause**

If this parameter is set, the command ignores the confirmation message.

### Examples

## volume encryption conversion resume

Resume a paused volume encryption conversion operation

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `volume encryption conversion resume` command resumes the paused encryption conversion operation on a volume.

### Parameters

**-vserver <vserver name> - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume Name**

This parameter specifies the name of the volume being encrypted.

### Examples

# volume encryption conversion show

Show status of a volume encryption conversion

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

## Description

The `volume encryption conversion show` command displays information about volume encryption conversion in the cluster. By default, with no parameters, it only shows volume encryption operations that have failed or are currently running. The command display output depends on the parameters passed. If `-vserver` and `-volume` are specified, the following information is displayed:

- **Vserver Name:** The Vserver on which the volume is located.
- **Volume Name:** The volume that is part of a completed or running volume move operation.
- **Start Time:** The date and time when the volume encryption operation was started.
- **Status of Operation:** The status of the operation.
- **Percentage Completed:** The amount of work to encrypt the volume completed thus far in terms of percentage.

## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-vserver <vserver name>] - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**[-volume <volume name>] - Volume Name**

This parameter specifies the name of the volume being encrypted.

**[-start-time <MM/DD/YYYY HH:MM:SS>] - Start Time**

If this parameter is specified, the command displays encryption operations that match the specified date and time in the cluster time zone when the volume move operation started.

**[-status <text>] - Status**

If this parameter is specified, the command displays encryption operations that match the specified status of the encryption operation.

## Examples

The following example shows a sample output for this command:

```
cluster1::> volume encryption conversion show
```

Vserver	Volume	Start Time	Status
vs1	p2	9/18/2017 17:44:36	Phase 2 of 2 (redirect scan) is in progress.

## volume encryption conversion start

Start a volume encryption conversion operation

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `volume encryption conversion start` command converts a non-encrypted volume to encrypted volume.

### Parameters

**-vserver <vserver name> - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume Name**

This parameter specifies the name of the volume being encrypted.

**[-ignore-warning {true|false}] - Ignore Warning for Conversion Start**

If this parameter is set, the command ignores the confirmation message.

### Examples

## volume encryption rekey pause

Pause a running volume encryption rekey operation

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `volume encryption rekey pause` command pauses the running encryption rekey operation on a volume.

### Parameters

**-vserver <vserver name> - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume Name**

This parameter specifies the name of the volume being encrypted.

**[-ignore-warning {true|false}] - Ignore Warning for Rekey Pause**

If this parameter is set, the command ignores the confirmation message.

## Examples

# volume encryption rekey resume

Resume a paused volume encryption rekey operation

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

## Description

The `volume encryption rekey resume` command resumes the paused encryption rekey operation on a volume.

## Parameters

**-vserver <vserver name> - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume Name**

This parameter specifies the name of the volume being encrypted.

## Examples

# volume encryption rekey show

Show status of a volume encryption rekey

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

## Description

The `volume encryption rekey show` command displays information about volume encryption rekey in the cluster. By default, with no parameters, it only shows volume encryption rekey operations that have failed or are currently running. The command display output depends on the parameters passed. If `-vserver` and `-volume` are specified, the following information is displayed:

- Vserver Name: The Vserver on which the volume is located.
- Volume Name: The volume that is part of a completed or running volume move operation.
- Start Time: The date and time when the volume encryption operation was started.
- Status of Operation: The status of the operation.
- Percentage Completed: The amount of work to encrypt the volume completed thus far in terms of percentage.

## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>`, ... parameter, the command output also includes the specified field or fields. You can use `-fields ?` to display the fields to specify.

**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-vserver <vserver name>] - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**[-volume <volume name>] - Volume Name**

This parameter specifies the name of the volume being encrypted.

**[-start-time <MM/DD/YYYY HH:MM:SS>] - Start Time**

If this parameter is specified, the command displays encryption operations that match the specified date and time in the cluster time zone when the volume move operation started.

**[-status <text>] - Status**

If this parameter is specified, the command displays encryption operations that match the specified status of the encryption operation.

## Examples

The following example shows a sample output for this command:

```
cluster1::> volume encryption rekey show
```

Vserver	Volume	Start Time	Status
vs1	vol2	9/18/2017 17:51:41	Phase 2 of 2 (redirect scan) is in progress.

## volume encryption rekey start

Start a volume encryption rekey operation

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `volume encryption rekey start` command changes the encryption key of a volume.

## Parameters

**-vserver <vserver name> - Vserver Name**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume Name**

This parameter specifies the name of the volume being rekeyed.

**[-ignore-warning {true|false}] - Ignore Warning for Rekey Start**

If this parameter is set, the command ignores the confirmation message.

## Examples

# volume encryption secure-purge abort

Abort secure deletion of trash in existing volume

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

## Description

The `volume encryption secure-purge abort` command aborts the secure purge operation on a volume.

## Parameters

**-vserver <vserver name> - Vserver (privilege: advanced)**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume (privilege: advanced)**

This parameter specifies the name of the volume being encrypted.

## Examples

# volume encryption secure-purge show

Show status of secure-purge operation on a volume

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

## Description

The `volume encryption secure-purge show` command displays information about volume encryption securepurge operation in the cluster.

## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.



**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-vserver <vserver name>] - Vserver (privilege: advanced)**

This parameter specifies the Vserver on which the volume is located.

**[-volume <volume name>] - Volume (privilege: advanced)**

This parameter specifies the name of the volume being secure purged.

**[-status {invalid|initializing|snapshots-deleting|snapshots-deleted|zombies-draining|zombies-drained|batched-free-log-draining|batched-free-log-drained|finishing-trash-purge|finished-trash-purge|reencrypting|aborting|aborted|success|failure|blocks-reclaim-scan-in-progress|blocks-reclaim-scan-completed|updating-blocks-used}] - Status (privilege: advanced)**

This parameter displays the status of the secure purge operation.

## Examples

The following example shows a sample output for this command:

```
cluster1::> volume encryption secure-purge show
Vserver      Volume      Secure Purge Phase
-----
vs1          vol1        reencrypting
```

## volume encryption secure-purge start

Start secure deletion of trash in existing volume

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

### Description

The `volume encryption secure-purge start` command performs secure purge of encrypted volume.

### Parameters

**-vserver <vserver name> - Vserver (privilege: advanced)**

This parameter specifies the Vserver on which the volume is located.

**-volume <volume name> - Volume (privilege: advanced)**

This parameter specifies the name of the volume being encrypted.

**{ [-delete-all-snapshots {true|false}] - Delete all Snapshot Copies? (privilege: advanced)**

This parameter specifies if it is required to delete all the snapshots in the volume.

**[`-re-encryption-method {volume-move|in-place-rekey}`] - Method to Use for Re-keying the Volume (privilege: advanced)**

Specifies the re-encryption method of the secure-purge operation. Possible values are:

- volume-move
- in-place-rekey

The volume-move method is faster compared to in-place-rekey method. The volume-move method requires additional space in the same aggregate. The volume-move method will cause unforced MetroCluster switchovers to be blocked while it is running. The volume-move operation involves cut-over phase in which client I/O operations are temporary blocked for short duration - less than 45 seconds. There is no cut-over phase for in-place-rekey method.

**| [`-prepare <true>`] - Method to Use for Preparing Secure Purge (privilege: advanced) }**

This parameter specifies if it is required to prepare secure purge of encrypted volume.

## Examples

## Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.