# **■** NetApp

## snaplock events

**ONTAP EMS reference** 

NetApp November 22, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap-ems-9151/snaplock-disk-events.html on November 22, 2024. Always check docs.netapp.com for the latest.

## **Table of Contents**

snaplock events	1
snaplock.disk events	1
snaplock.event events	2
snaplock.invalid events	3
snaplock.legal events	3
snaplock.mcc events	5
snaplock.nse events	5
snaplock.sfo events	6
snaplock.ss events	6
snaplock.state events	1
snaplock.sys events	1
snaplock.trans events	2
snaplock.user events	3
snaplock.vcc events	3
snaplock.vol events	4
snaplock.volume events	4

## snaplock events

## snaplock.disk events

## snaplock.disk.import.7mode

#### Severity

**ERROR** 

#### **Description**

This message occurs when the configuration management detects that an older(7-Mode) version of a SnapLock® disk is attached to a system running a Data ONTAP® release that cannot support it.

#### **Corrective Action**

Remove the SnapLock® disks from the system.

#### **Syslog Message**

File system %s has SnapLock® disks. This version of Data ONTAP® does not support older(7-Mode) SnapLock® versions

#### **Parameters**

disk\_info (STRING): Formatted information about the disk.
shelf (STRING): Shelf identifier where the disk is located.
bay (STRING): Disk bay within the shelf where disk is located.

**vendor** (STRING): Name of the vendor of the disk. **model** (STRING): Model string of the disk drive.

firmware\_revision (STRING): Firmware revision number of the disk.

serialno (STRING): Serial number of the disk.

disk\_type (INT): Type of disk drive.

disk rpm (STRING): Rotational speed of disk in RPM.

failure\_reason (STRING): A text description of storage error leading to disk failure.

carrier (STRING): Unique ID of the carrier in which the disk drive is installed.

**site** (STRING): For a MetroCluster® configuration, indicates the site ("Local" or "Remote") where the disk is located. For non-MetroCluster configurations, the site is "Local".

## snaplock.disk.on.unsupported.version

#### Severity

**ERROR** 

### **Description**

This event is issued when configuration management detects that a SnapLock® disk is attached to a system running ONTAP® release which doesn't support SnapLock®.

#### **Corrective Action**

Install a version of Data ONTAP that supports SnapLock, or remove the SnapLock disks.

#### Syslog Message

File system %s has SnapLock disks. This version of Data ONTAP does not support SnapLock.

#### **Parameters**

disk\_info (STRING): Formatted information of the disk shelf (STRING): Shelf identifier where the disk is located bay (STRING): Disk bay within the shelf where disk is located

**vendor** (STRING): Name of the vendor of the disk **model** (STRING): Model string of the disk drive

firmware\_revision (STRING): Firmware revision number of the disk

serialno (STRING): Serial number of the disk

disk\_type (INT): Type of disk drive

disk\_rpm (STRING): Rotational speed of disk in RPM

failure\_reason (STRING): A text description of storage error leading to disk failure.

carrier (STRING): Unique ID of the carrier in which the disk drive is installed.

**site** (STRING): For a MetroCluster configuration(tm), indicates the site {Local|Remote} where the disk is located. For non-MetroCluster configurations, site is 'Local'.

## snaplock.event events

## snaplock.event.based.retention.op.status

### Severity

**NOTICE** 

#### **Description**

This message occurs on completion of a event based retention apply operation on a SnapLock® volume.

#### **Corrective Action**

(None).

#### Syslog Message

An %s operation with ID %lu ended for policy "%s" and retention period "%s" on path %s in volume %s:%s with status: "%s", details: "%s". The operation passed on %lu files, failed on %lu files, skipped %lu files and ignored %lu inodes.

#### **Parameters**

**operation\_type** (STRING): Type of the event based retention operation.

operation\_id (LONGINT): Operation ID of the event based retention operation.

policy\_name (STRING): Name of the event based retention policy.

retention\_period (STRING): Retention period of the event based retention policy.

**path** (STRING): Path of the form '/(directory path)' relative to volume root.

vserver (STRING): Name of the vserver.

volume (STRING): Name of the SnapLock volume, on which event based retention operation is running.

**operation\_status** (STRING): Status of the event based retention operation.

status\_details (STRING): Completion string of the event based retention operation.

**num\_files\_processed** (LONGINT): Total count of files for which event based retention operation was performed.

num\_files\_failed (LONGINT): Total count of files for which event based retention operation failed.

num\_files\_skipped (LONGINT): Total count of files for which event based retention operation was skipped.

**num\_inodes\_ignored** (LONGINT): Total count of inodes which were ignored by event based retention operation because they are not regular files.

## snaplock.invalid events

## snaplock.invalid.autocommit

#### Severity

**ERROR** 

### **Description**

This message occurs when an invalid autocommit period value is found on a SnapLock® volume. ONTAP® 9.4 software and later releases have a maximum autocommit period value of 10 years. If this maximum is exceeded, autocommit is disabled on the volume.

#### **Corrective Action**

Correct the autocommit period on the SnapLock volume by using the "volume snaplock modify" command or the "volume-set-snaplock-attrs" Zephyr API.

#### **Syslog Message**

Disabling autocommit on SnapLock volume %s%s on the Vserver with ID %s because the autocommit period exceeded the maximum of 10 years.

#### **Parameters**

volume (STRING): Name of the SnapLock volume with invalid autocommit period value.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.legal events

## snaplock.legal.hold.dump.files.op.status

### Severity

**NOTICE** 

#### **Description**

This message occurs on completion of a legal-hold dump-files operation on a SnapLock® compliance volume.

#### **Corrective Action**

(None).

#### Syslog Message

A legal-hold dump-files operation with ID %lu ended for litigation %s on volume %s:%s and output path: "%s", with status: "%s", details: "%s". The operation passed on %lu files, failed on %lu files, skipped %lu files and ignored %lu inodes.

#### **Parameters**

**operation\_id** (LONGINT): Operation ID of the legal-hold dump-files operation.

**litigation\_name** (STRING): Name of the litigation.

vserver (STRING): Name of the vserver.

**volume** (STRING): Name of the SnapLock compliance volume, on which legal-hold dump-files operation is running.

output path (STRING): Output path of legal-hold dump-files operation.

operation\_status (STRING): Status of the legal-hold dump-files operation.
status\_details (STRING): Completion string of the legal-hold dump-files operation.
num\_files\_processed (LONGINT): Total count of files for which legal-hold dump-files operation was performed.

num\_files\_failed (LONGINT): Total count of files for which legal-hold dump-files operation failed.
num\_files\_skipped (LONGINT): Total count of files for which legal-hold dump-files operation was skipped.
num\_inodes\_ignored (LONGINT): Total count of inodes which were ignored by legal-hold dump-files operation because they are not regular files.

## snaplock.legal.hold.dump.litigations.job.status

### Severity

**NOTICE** 

#### **Description**

This message occurs on completion of a legal-hold dump-litigations operation.

#### **Corrective Action**

(None).

### **Syslog Message**

A legal-hold dump-litigations operation with ID %s ended for %s with status: "%s", details: "%s".

#### **Parameters**

```
job_id (STRING): Job ID of the legal-hold operation.vserver_and_volume (STRING): Name of the vserver and volume (if any).job_status (STRING): Status of the legal-hold dump-litigations job.status details (STRING): Completion string of the legal-hold dump-litigations job.
```

## snaplock.legal.hold.op.status

#### Severity

**NOTICE** 

#### Description

This message occurs on completion of a legal-hold begin or end operation on a SnapLock® compliance volume.

#### **Corrective Action**

(None).

#### Syslog Message

A legal-hold %s operation with ID %lu ended for litigation %s on path %s in volume %s:%s with status: "%s", details: "%s". The operation passed on %lu files, failed on %lu files, skipped %lu files and ignored %lu inodes.

#### **Parameters**

```
operation_type (STRING): Type of the legal-hold operation.
operation_id (LONGINT): Operation ID of the legal-hold operation.
litigation_name (STRING): Name of the litigation.
path (STRING): Path of the form '/(directory path)' relative to volume root.
vserver (STRING): Name of the vserver.
```

**volume** (STRING): Name of the SnapLock compliance volume, on which legal-hold operation is running. **operation\_status** (STRING): Status of the legal-hold operation.

status details (STRING): Completion string of the legal-hold operation.

num\_files\_processed (LONGINT): Total count of files for which legal-hold operation was performed. num\_files\_failed (LONGINT): Total count of files for which legal-hold operation failed.

num\_files\_skipped (LONGINT): Total count of files for which legal-hold operation was skipped.

**num\_inodes\_ignored** (LONGINT): Total count of inodes which were ignored by legal-hold operation because they are not regular files.

## snaplock.mcc events

## snaplock.mcc.veto.worm

## Severity

**ERROR** 

#### **Description**

This message occurs when SnapLock legal-hold or event based retention operations are aborted during a MetroCluster Switchback or a MetroCluster Switchover operation.

#### **Corrective Action**

(None).

#### **Syslog Message**

All SnapLock legal-hold and event based retention operations were aborted because a %s is in progress.

#### **Parameters**

mcc\_op (STRING): Describes the operation i.e. a MetroCluster Switchback or a MetroCluster Switchover.

## snaplock.nse events

## snaplock.NSE.conflict

#### Severity

**NOTICE** 

#### **Description**

This message occurs when any of the following commands could not be run against a SnapLock Compliance disk, since doing so could risk the destruction of compliance data: "storage encryption disk sanitize", "storage encryption disk destroy", "storage encryption disk revert-to-original-state".

## **Corrective Action**

(None).

#### Syslog Message

"storage encryption disk sanitize/destroy/revert-to-original-state" command could not be run on SnapLock Compliance disk '%s' as it could risk the destruction of compliance data.

#### **Parameters**

disk (STRING): Name of the SnapLock Compliance disk.

## snaplock.sfo events

## snaplock.sfo.veto.worm

### Severity

**ERROR** 

#### **Description**

This message occurs when SnapLock legal-hold or event-retention operations are aborted during an aggregate relocation or a sendhome operation.

#### **Corrective Action**

(None).

#### **Syslog Message**

All SnapLock legal-hold and event based retention operations were aborted for aggregate %s because %s is in progress.

#### **Parameters**

**aggr\_name** (STRING): Name of the aggregate for which operations were aborted. **arl\_or\_sendhome** (STRING): Describes the operation i.e. an aggregate relocation or a sendhome.

## snaplock.ss events

## snaplock.ss.lockBadVolume

#### Severity

**ALERT** 

#### **Description**

This event is generated if an attempt is made to lock a snapshot on a SnapLock volume that has previously failed to find or load its SnapLock snapshot state.

#### **Corrective Action**

Run wafliron on the volume.

#### **Syslog Message**

A snapshot on SnapLock volume '%s%s' on the Vserver with ID '%s', could not be locked because the SnapLock snapshot state could not be found or loaded for the volume.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the snapshot could not be locked. **app** (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.badMagic

### Severity

ALERT

#### **Description**

This event is generated if the SnapLock snapshot state on a SnapLock volume is corrupt with an invalid magic file identifier. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### **Syslog Message**

The SnapLock snapshot state is corrupt with an invalid magic file identifier on SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock snapshot state is corrupt with an invalid magic file identifier.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.badSize

### Severity

**ALERT** 

#### Description

This event is generated if the SnapLock snapshot state on a SnapLock volume is corrupt with an incorrect size. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### Syslog Message

The SnapLock snapshot state is corrupt with an incorrect size on SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock snapshot state is corrupt with an incorrect size.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.badState

#### Severity

**ERROR** 

#### **Description**

This message occurs when SnapLock® Snapshot® copies on the volume are corrupted, which prevents updates on the lockvault from succeeding until this is corrected.

#### **Corrective Action**

Run the "snapshot fix-snaplock-state" command on this volume.

#### **Syslog Message**

The SnapLock snapshot state is corrupt on SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): Name of the SnapLock volume on which the SnapLock Snapshot state is corrupt. **app** (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.badVersion

#### Severity

**ALERT** 

#### **Description**

This event is generated if the SnapLock snapshot state on a SnapLock volume has an invalid version number. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### **Syslog Message**

The SnapLock snapshot state has an invalid version number on SnapLock volume '%s%s' on the Vserver with ID '%s'. The bad version number found was %d and the expected version was %d.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock snapshot state has an invalid version number.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

bad\_version (INT): The invalid version number of the SnapLock snapshot state.

**expected\_version** (INT): The expected version number of the SnapLock snapshot state.

## snaplock.ss.state.createFail

#### Severity

**ALERT** 

#### **Description**

This event is generated if SnapLock is unable to create the state for the SnapLock snapshot state on a SnapLock volume. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### Syslog Message

Failed to create the SnapLock snapshot state on SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock snapshot state could not be created.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.dir.createFail

#### Severity

**ALERT** 

#### **Description**

This event is generated if SnapLock is unable to create the SnapLock state directory for storage of SnapLock state on a SnapLock volume.

#### **Corrective Action**

Run wafliron on this volume.

### Syslog Message

Failed to create the SnapLock state directory for storage of SnapLock state on SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock state directory could not be created.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.loadFail

### Severity

**ALERT** 

#### **Description**

This event is generated if the SnapLock snapshot state on a SnapLock volume failed to load. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### Syslog Message

The SnapLock snapshot state could not be loaded from SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume from which the SnapLock snapshot state could not be loaded.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.notFound

#### Severity

**ALERT** 

#### Description

This event is generated if the SnapLock snapshot state cannot be found on a SnapLock volume. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### **Syslog Message**

The SnapLock snapshot state could not be found on SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

volume (STRING): The name of the SnapLock volume on which the SnapLock snapshot state could not be found

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.upgradeFail

#### Severity

**ALERT** 

#### **Description**

This event is generated if SnapLock is unable to upgrade the the SnapLock snapshot state on a SnapLock volume. This volume will not allow SnapLock locking or unlocking of any further snapshots until this erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### Syslog Message

Failed to upgrade the SnapLock snapshot state to SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock snapshot state could not be written

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.ss.state.writeFail

#### Severity

**ALERT** 

#### **Description**

This event is generated if SnapLock is unable to write the SnapLock snapshot state on a SnapLock volume. This volume will not allow SnapLock locking or unlocking of any further snapshots until this

erroneous volume state is corrected.

#### **Corrective Action**

Run wafliron on this volume.

#### **Syslog Message**

Failed to write the SnapLock snapshot state to SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock snapshot state could not be written.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.state events

## snaplock.state.dir.destroyFail

## Severity

NOTICE

### **Description**

This event is generated if SnapLock is unable to destroy the SnapLock state for a SnapLock volume. This will not affect the operation of the reverted volume and does not require any corrective action.

#### **Corrective Action**

(None).

#### Syslog Message

Failed to destroy the SnapLock state for SnapLock volume '%s%s' on the Vserver with ID '%s'.

#### **Parameters**

**volume** (STRING): The name of the SnapLock volume on which the SnapLock state could not be destroyed.

app (STRING): Application Name.

volident (STRING): Unique identifier of the volume when the volume name itself is insufficient.

## snaplock.sys events

## snaplock.sys.compclock.set

### Severity

**NOTICE** 

#### **Description**

This message occurs when the system's compliance clock time and date is set.

#### **Corrective Action**

(None).

#### **Syslog Message**

The compliance clock time of the system has been set to %s. Reason: %s.

#### **Parameters**

**date** (STRING): Human-readable compliance clock date and time. **reason** (STRING): Reason for initialization of the system's compliance clock.

## snaplock.sys.compclock.skew.fixed

#### Severity

NOTICE

#### **Description**

This message occurs when the SnapLock® system compliance clock time is skewed from the storage system's system clock by more than one day and skew is subsequently fixed.

#### **Corrective Action**

(None).

#### **Syslog Message**

The system compliance clock time (%s) was skewed from the system clock (%s) by more than one day. The system compliance clock time has been reset to the system clock time.

#### **Parameters**

**system\_compliance\_clock\_time** (STRING): Human readable system compliance clock time. **system\_time** (STRING): Human readable system time.

## snaplock.trans events

## snaplock.trans.autocommit

#### Severity

**NOTICE** 

#### **Description**

This message occurs when autocommit period is adjusted on a Snaplock volume upon transition. When a 7 mode SnapLock volume is transitioned to Data ONTAP® 9.4 and later, if we find the autocommit period to be greater than 10 years, we change it to 10 years, which is the maximum supported value for autocommit period in Data ONTAP® 9.4.

#### **Corrective Action**

(None).

#### Syslog Message

Autocommit period on SnapLock volume %s%s on the Vserver with ID %s is changed from %s to 10 years upon transition.

#### **Parameters**

**volume** (STRING): Name of the SnapLock volume on which autocommit period was adjusted upon transition.

app (STRING): Application Name.

**volident** (STRING): Unique identifier the volume in cases where the volume name itself is insufficient. **old\_autocommit\_period** (STRING): Autocommit period of the SnapLock volume in 7 mode.

## snaplock.user events

## snaplock.user

### Severity

**NOTICE** 

#### **Description**

This message occurs when the SnapLock® logging system fails to securely log either the addition or deletion of the compliance admin role to or from a user account. The actual operation might have succeeded.

#### **Corrective Action**

No corrective action is necessary. However, a secure log of the request might not exist and the SnapLock log volume should be checked for correct operation.

#### **Syslog Message**

There was a problem securely logging the %s of the "%s" role %s the user "%s" by "%s". Reason: %s

#### **Parameters**

event (STRING): Identifies whether the role was added or deleted.

role (STRING): Name of the compliance admin role.

tofrom (STRING): Describes whether the role is being added to or deleted from the user account.

username (STRING): User name to or from which the role is being added or deleted.

whodidit (STRING): Name of the user performing the operation.

reason (STRING): Reason for the logging failure.

## snaplock.vcc events

## snaplock.vcc.assoc.mismatch

#### Severity

**INFORMATIONAL** 

#### Description

This message occurs when the system detects mismatch in the SnapLock® volume compliance clock association with the system compliance clock. This can happen when the volume compliance clock's node ID is different from system's node ID or when volume compliance clock's scc ID is different from system compliance clock's ID or when both differ from each other.

#### **Corrective Action**

(None).

#### Syslog Message

Volume compliance clock association on volume %s does not match the system compliance clock at %s and its compliance clock is now reassociated with the system compliance clock.

#### **Parameters**

**volume** (STRING): Name of the volume that had the compliance clock association mismatch. **date** (STRING): Human readable system compliance clock time at which the VCC-SCC association mismatch is detected.

## snaplock.vol events

## snaplock.vol.compclock.skewed

### Severity

**NOTICE** 

### Description

This event is generated when the SnapLock® volume compliance clock time is skewed from the SnapLock system compliance clock by more than one day.

#### **Corrective Action**

(None).

#### Syslog Message

The compliance clock time (%s) of volume '%s' is skewed from the system compliance clock (%s) by more than one day.

#### **Parameters**

```
volume_compliance_clock_time (STRING): Human readable volume compliance clock time.
volume_name (STRING): Volume name.
system_compliance_clock_time (STRING): Human readable system compliance clock time.
```

## snaplock.volume events

### snaplock.volume.repair

#### Severity

NOTICE

#### **Description**

This message occurs when wafliron is run on a SnapLock® volume. If inconsistency is detected, wafliron will repair SnapLock volume. File system data before inconsistency occurred and the file system data after repair, may be different. WORM protected data may be changed. Administrator must ensure that the data on the volume is verified and restored, if needed, from backup copy or replica.

#### **Corrective Action**

(None).

#### **Syslog Message**

%s repair such as wafliron has been issued on SnapLock %s '%s'. %s data may be changed.

#### **Parameters**

```
vtype1 (STRING): type of volume. vtype2 (STRING): type of volume.
```

**volume** (STRING): The name of the SnapLock volume on which volume repair is issued. **vtype3** (STRING): type of volume.

#### 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 <a href="http://www.netapp.com/TM">http://www.netapp.com/TM</a> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.