



# **stop ...**

## SANtricity commands

NetApp  
June 07, 2022

# Table of Contents

- stop ... 1
  - Cancel asynchronous mirror group role reversal 1
  - Stop consistency group snapshot rollback 1
  - Stop consistency group snapshot volume 3
  - Stop pending snapshot images on consistency group 4
  - Stop disk pool locate 5
  - Stop drive locate 6
  - Stop drive replace 6
  - Stop drive channel fault isolation diagnostics 8
  - Stop drive channel locate 9
  - Stop snapshot group pending snapshot images 9
  - Stop snapshot image rollback 10
  - Stop snapshot volume 12
  - Stop SSD cache locate 13
  - Stop SSD cache performance modeling 13
  - Stop storage array configuration database diagnostic 15
  - Stop storage array drive firmware download 16
  - Stop storage array iSCSI session 17
  - Stop storage array locate 18
  - Stop tray locate 18
  - Stop volume copy 19
  - Stop volume group locate 20

# stop ...

## Cancel asynchronous mirror group role reversal

The `stop asyncMirrorGroup rolechange` command cancels a pending role reversal operation between asynchronous mirror groups.

### Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, and E5700 arrays, as long as all SMcli packages are installed.

### Roles

To execute this command on an E2800, or E5700 storage array, you must have the Storage Admin role.

### Syntax

```
stop asyncMirrorGroup [asyncMirrorGroupName] rolechange
```

### Parameter

Parameter	Description
<code>asyncMirrorGroup</code>	The name of the asynchronous mirror group for which or which you want to cancel the pending role reversal operation. Enclose the asynchronous mirror group name in square brackets ([ ]). If the asynchronous mirror group name contains special characters or consists only of numbers, you must enclose the name in double quotation marks (" ") inside square brackets.

### Minimum firmware level

7.84

## Stop consistency group snapshot rollback

The `stop cgSnapImage rollback` command stops a rollback operation to member base volumes in a snapshot consistency group.

### Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context



Canceling a consistency group snapshot rollback operation leaves the base volume in an indeterminate state with potentially invalid or inconsistent data. The related consistency group snapshot volume becomes disabled and unusable.

## Syntax

```
stop cgSnapImage["snapCGID:imageID"] rollback  
memberVolumeSet ("memberVolumeName1" ... "memberVolumeNameN")
```

## Parameter

Parameter	Description
cgSnapImage	<p>The name of the consistency group snapshot image for which you want to stop a rollback operation. The name of a snapshot image is comprised of two parts:</p> <ul style="list-style-type: none"><li>• The name of the snapshot group</li><li>• An identifier for the snapshot image in the snapshot group</li></ul> <p>The identifier for the snapshot image can be one of these:</p> <ul style="list-style-type: none"><li>• An integer value that is the sequence number of the snapshot in the snapshot group.</li><li>• <b>NEWEST</b> — Use this option when you want to show the latest snapshot image created in the snapshot group.</li><li>• <b>OLDEST</b> — Use this option when you want to show the earliest snapshot image created in the snapshot group.</li></ul> <p>Enclose the snapshot image name in double quotation marks ( " ") inside square brackets ( [ ] ).</p>

Parameter	Description
memberVolumeSet	<p>The name of one or more member base volumes in a consistency group that you want to stop a rollback operation. Enclose each member base volume name in double quotation marks (" ") inside parentheses.</p> <p>You can enter more than one member base volume name. Enclose all of the member base volume names in one set of square brackets ([ ]). Enclose each member base volume name in double quotation marks (" "). Separate each member base volume name with a space.</p> <p>When the memberVolumeSet parameter is not used stopping the rollback process applies to all member volumes of the consistency group.</p>

## Notes

The name of a snapshot image has two parts separated by a colon (:):

- The identifier of the snapshot group
- The identifier of the snapshot image

For example, if you want to stop a roll back operation for the newest snapshot image in an entire consistency group that has the name CG1, you would use this command:

```
stop cgSnapImage ["CG1:newest"] rollback;
```

To stop a roll back operation for the snapshot image 12345 for base volume members memVol1, memVol2, and memVol3 in a consistency group that has the name CG2, you would use this command:

```
stop cgSnapImage ["CG2:12345"] rollback memberVolumeset=("memVol1 memVol2 memVol3");
```

## Minimum firmware level

7.83

## Stop consistency group snapshot volume

The `stop cgSnapVolume` command stops the copy-on-write operation for creating a consistency group snapshot volume.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context

To restart the copy-on-write operation use the `resume cgSnapVolume` command.



This command does not delete a consistency group snapshot volume. To delete a consistency group snapshot volume use the `delete cgSnapVolume` command.

## Syntax

```
stop cgSnapVolume [snapVolumeName]
```

## Parameter

Parameter	Description
<code>cgSnapVolume</code>	The name of the consistency group snapshot volume that you want to stop creating. Enclose the volume name in square brackets ([ ]). If the volume name has special characters or numbers, you must enclose the name in double quotation marks (" ") inside square brackets.

## Minimum firmware level

7.83

## Stop pending snapshot images on consistency group

The `stop consistencyGroup pendingSnapImageCreation` command stops all of the pending snapshot images that are to be created on a snapshot consistency group.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context

If the snapshot consistency group does not have any pending snapshot images, the storage management software displays an error message and does not run the command.

## Syntax

```
stop consistencyGroup [consistencyGroupName]pendingSnapImageCreation
```

## Parameters

Parameter	Description
<code>consistencyGroupName</code>	The name of the consistency group for which you want to stop any pending snapshot operation. Enclose the name of the consistency group in square brackets ([ ]). If the consistency group name has special characters or numbers, you must enclose the consistency group name in double quotation marks (" ") inside square brackets.

## Minimum firmware level

7.83

## Stop disk pool locate

The `stop diskPool locate` command turns off the indicator lights on the drives that were turned on by the `start diskPool locate` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop diskPool locate
```

## Parameters

None.

## Minimum firmware level

7.83

## Stop drive locate

The `stop drive locate` command turns off the indicator light on the drive that was turned on by the `start drive locate` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop drive locate
```

## Parameters

None.

## Minimum firmware level

6.10

## Stop drive replace

The `stop drive replace` command stops a data copy operation that was started by either a `set drive` command or a `replace drive` command with the **copyDrive** user input.



## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop drive replace ([trayID,[drawerID,]slotID] | <"wwID">)
```

## Parameters

Parameter	Description
drive	<p>For high-capacity drive trays, specify the tray ID value, the drawer ID value, and the slot ID value for the drive. For low-capacity drive trays, specify the tray ID value and the slot ID value for the drive. Tray ID values are 0 to 99. Drawer ID values are 1 to 5.</p> <p>All slot ID maximums are 24. Slot ID values either begin at 0 or 1, depending on the tray model. Drive trays compatible with E2800 and E5700 controllers have slot ID numbers starting at 0. Drive trays compatible with E2700 and E5600 controllers have slot ID numbers starting at 1.</p> <p>Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).</p>
drive	<p>The World Wide Identifier (WWID) of the drive that you want to replace. Enclose the WWID in double quotation marks (" ") inside angle brackets (&lt; &gt;).</p>

## Notes

The `drive` parameter supports both high-capacity drive trays and low-capacity drive trays. A high-capacity drive tray has drawers that hold the drives. The drawers slide out of the drive tray to provide access to the drives. A low-capacity drive tray does not have drawers. For a high-capacity drive tray, you must specify the identifier (ID) of the drive tray, the ID of the drawer, and the ID of the slot in which a drive resides. For a low-capacity drive tray, you need only specify the ID of the drive tray and the ID of the slot in which a drive resides. For a low-capacity drive tray, an alternative method for identifying a location for a drive is to specify the ID of the drive tray, set the ID of the drawer to 0, and specify the ID of the slot in which a drive resides.

## Minimum firmware level

8.20

# Stop drive channel fault isolation diagnostics

The `stop driveChannel faultDiagnostics` command stops the drive channel fault isolation diagnostics, which stops the `start drive channel fault isolation diagnostics` command before it completes.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context



With firmware version 8.10, the `stop driveChannel faultDiagnostics` command is deprecated.

## Syntax

```
stop driveChannel faultDiagnostics
```

## Parameters

None.

## Notes

Use the `start driveChannel faultDiagnostics` command and the `save driveChannel faultDiagnostics` command with the `stop driveChannel faultDiagnostics` command. These commands are needed to start the diagnostic test and save diagnostic test results to a file.

You also can stop the `start driveChannel faultDiagnostics` command at any time by pressing `Ctrl+C`.

## Minimum firmware level

7.15

# Stop drive channel locate

The `stop driveChannel locate` command turns off the indicator lights on the drive trays that were turned on by the `start driveChannel locate` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop driveChannel locate
```

## Parameters

None.

## Minimum firmware level

6.10

# Stop snapshot group pending snapshot images

The `stop pendingSnapImageCreation` command cancels all of the pending snapshot images that are to be created on a snapshot or snapshot consistency group.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context

If the snapshot group does not have any pending snapshot images, the firmware displays an error message and does not run the command. You can run this command on a snapshot group or a snapshot consistency group.

## Syntax

```
stop (snapGroup [snapGroupName] |
consistencyGroup [snapConsistencyGroupName])
pendingSnapImageCreation
```

## Parameters

Parameter	Description
snapGroup	The name of the snapshot group for which you want to stop pending snapshot images. Enclose the snapshot group name in square brackets ([ ]). If the snapshot group name has special characters or numbers, you must enclose the snapshot group name in double quotation marks (" ") inside square brackets.
consistencyGroup	The name of the snapshot consistency group for which you want to stop pending snapshot images. Enclose the snapshot consistency group name in square brackets ([ ]). If the snapshot consistency group name has special characters or numbers, you must enclose the snapshot group name in double quotation marks (" ") inside square brackets.

## Minimum firmware level

7.83

## Stop snapshot image rollback

The `stop snapImage rollback` command stops a snapshot image rollback operation that was initiated by the `start snapImage rollback` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context



Canceling a snapshot image rollback operation leaves the base volume in an indeterminate state with potentially invalid or inconsistent data. The related snapshot image volume becomes disabled and unusable.

## Syntax

```
stop snapImage [snapCGID:imageID rollback]
```

## Parameter

Parameter	Description
snapImage	<p>The name of the snapshot image for which you want to stop a rollback operation. The name of a snapshot image is comprised of two parts:</p> <ul style="list-style-type: none"><li>• The name of the snapshot group</li><li>• An identifier for the snapshot image in the snapshot group</li></ul> <p>The identifier for the snapshot image can be one of these:</p> <ul style="list-style-type: none"><li>• An integer value that is the sequence number of the snapshot in the snapshot group.</li><li>• <b>NEWEST</b> — Use this option when you want to show the latest snapshot image created in the snapshot group.</li><li>• <b>OLDEST</b> — Use this option when you want to show the earliest snapshot image created in the snapshot group.</li></ul> <p>Enclose the snapshot image name in double quotation marks (" ") inside square brackets ([ ]).</p>

## Notes

The name of a snapshot image has two parts separated by a colon (:):

- The identifier of the snapshot group
- The identifier of the snapshot image

For example, if you want to stop a rollback operation for snapshot image 12345 in a snapshot group that has the name snapGroup1, you would use this command:

```
stop snapImage ["snapGroup1:12345"] rollback;
```

To stop a rollback operation for the most recent snapshot image in a snapshot group that has the name snapGroup1, you would use this command:

```
stop snapImage ["snapGroup1:newest"] rollback;
```

## Minimum firmware level

7.83

## Stop snapshot volume

The `stop snapVolume` command stops a snapshot volume operation.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop snapVolume ["snapVolumeName"]
```

## Parameters

Parameter	Description
snapVolume	The name of the snapshot volume that you want to stop. Enclose the snapshot volume name in double quotation marks ( " ") inside square brackets ( [ ] ).

## Notes

You can use any combination of alphanumeric characters, underscore ( \_ ), hyphen ( - ), and pound ( # ) for the names. Names can have a maximum of 30 characters.

## Minimum firmware level

7.83

## Stop SSD cache locate

The `stop ssdCache locate` command turns off the indicator lights on the Solid State Disks (SSDs) that were turned on by the `start ssdCache locate` command.

### Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, and E5700 arrays, as long as all SMcli packages are installed.

### Roles

To execute this command on an E2800 or E5700 storage array, you must have the Support Admin role.

### Syntax

```
stop ssdCache locate
```

### Parameters

None.

### Minimum firmware level

7.84

## Stop SSD cache performance modeling

The `stop ssdCache performanceModeling` command stops the performance modeling operation and displays the performance modeling data for the SSD cache.

### Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, and E5700 arrays, as long as all SMcli packages are installed.

### Roles

To execute this command on an E2800 or E5700 storage array, you must have the Support Admin role.

### Context

Before running this command, you must start the performance modeling operation with the `start ssdCache performanceModeling` command. Optionally, you can save the data to a file.

## Syntax

```
stop ssdCache [ssdCacheName] performanceModeling [file="filename"]
```

## Parameters

Parameter	Description
ssdCache	The name of the SSD cache for which you want to stop modeling performance. Enclose the SSD cache name in square brackets ([ ]). If the SSD cache name has special characters or numbers, you must enclose the SSD cache name in double quotation marks (" ") inside square brackets.
file	The file path and the file name to which you want to save the performance modeling data. Enclose the file name in double quotation marks (" "). For example:  file="C:\Program Files\CLI\logs\ssdcacheperf.csv"  You can use any file name, but you must use the .csv extension.

## Notes

This command returns the performance modeling information similar to this example. The size of your monitor determines how the information wraps and will affect how the information appears.

```
SSD Cache Name: my_cache
Start time: 4/18/12 2:38:26 PM IST
Stop time: 4/18/12 2:38:45 PM IST
Duration : 00:00:19
```

SSD Cache Performance Modeling Data (Response Time):

Writes	SSD Reads			HDD Reads		HDD
	Overall Response Time	Avg. Response Time	% of I/Os	Avg. Response Time	% of I/Os	Avg. Response Time
Cache % of Capacity	186 GB	0 ms	0.0 %	0 ms	0.0 %	0 ms
I/Os	372 GB	0 ms	0.0 %	0 ms	0.0 %	0 ms



```

0.0 %
557 GB *      0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
558 GB        0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
744 GB        0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
931 GB        0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
1117 GB       0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
1303 GB       0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
1489 GB       0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
1675 GB       0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %
1862 GB       0 ms      0 ms      0.0 %      0 ms      0.0 %      0 ms
0.0 %

```

\* = Current SSD cache physical capacity.

SSD Cache Performance Modeling Data (Cache Hit %):

```

Cache Capacity      Cache Hit %
186 GB              0 %
372 GB              0 %
557 GB *            0 %
558 GB              0 %
744 GB              0 %
931 GB              0 %
1117 GB             0 %
1303 GB             0 %
1489 GB             0 %
1675 GB             0 %
1862 GB             0 %

```

\* = Current SSD cache physical capacity.

## Minimum firmware level

7.84

## Stop storage array configuration database diagnostic

The `stop storageArray configDbDiagnostic` command stops the diagnostic test

to validate the configuration database in the controller firmware that was started by the `start storageArray configDbDiagnostic` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop storageArray configDbDiagnostic
```

## Parameters

None.

## Notes

The controller firmware returns a confirmation that the diagnostic test was cancelled.

In addition, you can start the database configuration diagnostic test through the storage management software GUI; however, you cannot stop the database configuration diagnostic test through the storage management software GUI. If you want to stop a running diagnostic test, you must use the `stop storageArray configDbDiagnostic` command.

If you try to use the `stop storageArray configDbDiagnostic` command after validation of the storage array configuration has finished, you do not receive any message that the validation has finished. This behavior is expected.

## Minimum firmware level

7.75

7.77 refines usage.

## Stop storage array drive firmware download

The `stop storageArray driveFirmwareDownload` command stops a firmware download to the drives in a storage array that was started with the `download storageArray driveFirmware` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Context

This command does not stop a firmware download that is already in progress to a drive. This command stops all firmware downloads to drives that are waiting for the download.

## Syntax

```
stop storageArray driveFirmwareDownload
```

## Parameters

None.

## Minimum firmware level

6.10

## Stop storage array iSCSI session

The `stop storageArray iscsiSession` command forces the termination of a storage array iSCSI session.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop storageArray iscsiSession [essionNumber]
```

## Parameter

Parameter	Description
<code>iscsiSession</code>	The identifier number of the iSCSI session. Enclose the identifier number of the iSCSI session in square brackets ([ ]).

## Minimum firmware level

7.10

## Stop storage array locate

The `stop storageArray locate` command turns off the indicator lights on the storage array that were turned on by the `start storageArray locate` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop storageArray locate
```

## Parameters

None.

## Minimum firmware level

6.10

## Stop tray locate

The `stop tray locate` command turns off the indicator light on the tray that was turned on by the `start tray locate` command.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and

EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop tray locate
```

## Parameters

None.

## Minimum firmware level

6.10

## Stop volume copy

The `stop volumeCopy target source` command stops a volume copy operation. This command is valid for snapshot volume copy pairs.

## Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

## Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

## Syntax

```
stop volumeCopy target [targetName] source [sourceName]
```

## Parameters

Parameter	Description
target	The name of the target volume for which you want to stop a volume copy operation. Enclose the target volume name in square brackets ([ ]). If the target volume name has special characters or numbers, you must enclose the target volume name in double quotation marks (" ") inside square brackets.
source	The name of the source volume for which you want to stop a volume copy operation. Enclose the source volume name in square brackets ([ ]). If the source volume name has special characters or numbers, you must enclose the source volume name in double quotation marks (" ") inside square brackets.

## Stop volume group locate

The `stop volumeGroup locate` command turns off the indicator lights on the drives that were turned on by the `start volumeGroup locate` command.

### Supported Arrays

This command applies to any individual storage array, including the E2700, E5600, E2800, E5700, EF600 and EF300 arrays, as long as all SMcli packages are installed.

### Roles

To execute this command on an E2800, E5700, EF600, or EF300 storage array, you must have the Storage Admin role.

### Syntax

```
stop volumeGroup locate
```

### Parameters

None.

### Minimum firmware level

6.16

## Copyright Information

Copyright © 2022 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## 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.