R

SANtricity commands

NetApp
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Recopy volume copy

The `recopy volumeCopy target` command reinitiates a volume copy operation using an existing volume copy pair.

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

> (i) With firmware version 7.83 the `copyType=(online | offline)` parameter is no longer used.

This command is valid for snapshot image volume copy pairs.

This command works with volume copy pairs that you created with a snapshot image volume.

> (i) Starting a volume copy operation overwrites all existing data on the target volume, makes the target volume read-only to hosts, and fails all snapshot image volumes associated with the target volume, if any exist. If you have used the target volume as a copy before, be sure you no longer need the data or have it backed up.

Syntax

```
recopy volumeCopy target [targetName]
[source [sourceName]]
[copyPriority=(highest | high | medium | low | lowest)]
[targetReadOnlyEnabled=(TRUE | FALSE)]
```

Parameters

Parameter	Description
target	The name of the target volume for which you want to reinitiate a volume copy operation. Enclose the target volume name in square brackets ([ ]). If the target volume name has special characters, 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 reinitiate a volume copy operation. Enclose the source volume name in square brackets ([ ]). If the source volume name has special characters, you must enclose the source volume name in double quotation marks (" ") inside square brackets.
copyPriority	The priority that the volume copy has relative to host I/O activity. Valid values are highest, high, medium, low, or lowest.
targetReadOnlyEnabled	The setting so that you can write to the target volume or only read from the target volume. To write to the target volume, set this parameter to FALSE. To prevent writing to the target volume, set this parameter to TRUE.

Notes

Copy priority defines the amount of system resources that are used to copy the data between the source volume and the target volume of a volume copy pair. If you select the highest priority level, the volume copy uses the most system resources to perform the volume copy, which decreases performance for host data transfers.

Minimum firmware level

6.10

7.83 removes the copyType=(online | offline) parameter.

Recover disabled drive ports

The recover disabled drivePorts command recovers disabled drive ports.

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

```
recover disabled drivePorts;
```

Examples

```
recover disabled drivePorts;
```

Recover SAS port mis-wire

The `recover sasPort miswire` command tells a controller that corrective action has been taken to recover from a mis-wire condition.

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 or Support Admin role.

Context

The controller can then re-enable any SAS ports that were disabled because a mis-wire was detected. Run this command after you have corrected any SAS mis-wire conditions.

SAS mis-wire conditions can be one of the following:

- Invalid SAS topologies
- Controller host port to expansion tray connection
- Initiator to drive topology connection
- ESM mis-wire

Syntax

```
recover sasPort miswire
```

Parameters

None.

Notes

When a mis-wire condition is detected the controller firmware reports the following:

- A critical MEL event indicating the presence of a mis-wire condition
- A "Needs Attention" condition
- A Recovery Action indicating the mis-wire

In addition, the controller reports "Redundancy Loss" information for the drives, ESMs, and trays for which it has only one access path due to the mis-wire (for example the bottom two trays in a storage array). The Redundancy Loss information is not unique to SAS topologies.

Following are the event notifications related to SAS port mis-wire:

- SAS mis-wire detected
- HBA connected to drive channel
- Drive channels cross wired

For mis-wire conditions where the controller disables one or more SAS ports to protect the integrity of the SAS domain, take these steps to recover from the condition:

1. Determine which cable is in the wrong place and remove it. If the last action taken was to install a new cable, this is the most likely candidate. If not, look for cables attached to devices that are not part of the storage array or cables attached between channels. The recovery event should report the channel on which the mis-wire was detected, and possibly the tray.

2. After you remove a cable or move the cable to the correct location, run the `recover sasPort miswire` command. The controller will attempt to re-enable any SAS ports that were disabled when the mis-wire was detected.

3. If the cable that you removed or moved to correct for the mis-wire provided the controller its only access to the disabled port, the controller will not be able to re-enable the SAS port that was disabled. To complete the recovery, you must power cycle the trays in the storage array.

Minimum firmware level

8.10

Recover RAID volume

The `recover volume` command creates a RAID volume with the given properties without initializing any of the user data areas on the drives.

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

Parameter values are derived from the Recovery Profile data file (`recovery-profile.csv`) for the storage array. You can create the recover volume in an existing volume group or create a new volume group by using this command.

> (i) You can run this command only from a command line. You cannot run this command from the GUI script editor. You cannot use the storage management GUI to recover a volume.

> (i) You cannot use this command for Dynamic Disk Pool (DDP) volumes.

Syntax

```
recover volume (drive=(trayID,[drawerID,]slotID)) |
(drives=trayID1,pass:quotes[[drawerID1,]slotID1 ... trayIDn,[drawerIDn,
]slotIDn)) |
volumeGroup=volumeGroupName))
[newVolumeGroup=volumeGroupName]
userLabel="volumeName" volumeWWN="volumeWWN"
capacity=volumeCapacity
offset=offsetValue
raidLevel=(0 | 1 | 3 | 5 | 6)
segmentSize=segmentSizeValue
dssPreAllocate=(TRUE | FALSE)
SSID=subsystemVolumeID
[owner=(a|b)]
[cacheReadPrefetch=(TRUE | FALSE)]
[dataAssurance=(none | enabled)]
[hostUnmapEnabled=(TRUE | FALSE)]
[blockSize=blockSizeValue]
```

Parameters

Parameter	Description
`drive` or `drives`	The drives that you want to assign to the volume group that will contain the volume that you want to recover. 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`. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).
`volumeGroup`	The name of an existing volume group in which you want to create the volume. (To determine the names of the volume groups in your storage array, run the `show storageArray profile` command.)
`newVolumeGroup`	The name that you want to give a new volume group. Enclose the new volume group name in double quotation marks (" ").

`userLabel`	The name of the volume that you want to recover. The user label has two parts:
	
	• The volume name. Enclose the volume name in double quotation marks (" ").
	
	• The world wide name of the volume, `volumeWWN`, in the form of a 16 byte identifier, for example, 60080E500017B4320000000049887D77. Enclose the identifier in double quotation marks (" ").
	
	You must enter both the volume name and the world wide name of the volume. You must enter the volume name first. For example:
	
	<pre>userLabel="engdata"
	volumeWWN=60080E500017B43200000000
	49887D77</pre>

Parameter	Description
`capacity`	The size of the volume that you are adding to the storage array. Size is defined in units of `bytes`, `KB`, `MB`, `GB`, or `TB`.
`offset`	The number of blocks from the start of the volume group to the start of the referenced volume.
`raidLevel`	The RAID level of the volume group that contains the drives. Valid values are `0`, `1`, `3`, `5`, or `6`.
`segmentSize`	The amount of data (in KB) that the controller writes on a single drive in a volume group before writing data on the next drive. Valid values are `8`, `16`, `32`, `64`, `128`, `256`, or `512`.
`dssPreAllocate`	The setting to turn on or turn off allocating volume storage capacity for future segment size changes. To turn on allocation, set this parameter to `TRUE`. To turn off allocation, set this parameter to `FALSE`.
`SSID`	The storage array subsystem identifier of a volume. Use the `show volume` command to determine the storage array subsystem identifier.
`owner`	The controller that owns the volume. Valid controller identifiers are `a` or `b`, where `a` is the controller in slot A, and `b` is the controller in slot B. If you do not specify an owner, the controller firmware determines the owner.
`cacheReadPrefetch`	The setting to turn on or turn off cache read prefetch. To turn off cache read prefetch, set this parameter to `FALSE`. To turn on cache read prefetch, set this parameter to `TRUE`.
`hostUnmapEnabled`	When this parameter is set to `True`, a host is allowed to issue unmap commands to the volume. Unmap commands are only allowed on resource-provisioned volumes.
`blockSize`	This setting is the volume block size in bytes.

Notes

The storage management software collects recovery profiles of the monitored storage arrays and saves the profiles on a storage management station.

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.

If you attempt to recover a volume using the `drive` parameter or the `drives` parameter and the drives are in an unassigned state, the controller automatically creates a new volume group. Use the `newVolumeGroup` parameter to specify a name for the new volume group.

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

The `owner` parameter defines which controller owns the volume. The preferred controller ownership of a volume is the controller that currently owns the volume group.

Preallocating storage capacity

The `dssPreAllocate` parameter enables you to assign capacity in a volume for storing information that is used to rebuild a volume. When you set the `dssPreallocate` parameter to `TRUE`, the storage space allocation logic in the controller firmware pre-allocates the space in a volume for future segment size changes. The pre-allocated space is the maximum allowable segment size. The `dssPreAllocate` parameter is necessary for properly recovering volume configurations that are not retrievable from the controller database. To turn off the preallocation capability, set `dssPreAllocate` to `FALSE`.

Segment size

The size of a segment determines how many data blocks that the controller writes on a single drive in a volume before writing data on the next drive. Each data block stores 512 bytes of data. A data block is the smallest unit of storage. The size of a segment determines how many data blocks that it contains. For example, an 8-KB segment holds 16 data blocks. A 64-KB segment holds 128 data blocks.

When you enter a value for the segment size, the value is checked against the supported values that are provided by the controller at run time. If the value that you entered is not valid, the controller returns a list of valid values. Using a single drive for a single request leaves other drives available to simultaneously service other requests.

If the volume is in an environment where a single user is transferring large units of data (such as multimedia), performance is maximized when a single data transfer request is serviced with a single data stripe. (A data stripe is the segment size that is multiplied by the number of drives in the volume group that are used for data transfers.) In this case, multiple drives are used for the same request, but each drive is accessed only once.

For optimal performance in a multiuser database or file system storage environment, set your segment size to minimize the number of drives that are required to satisfy a data transfer request.

Cache read prefetch

Cache read prefetch lets the controller copy additional data blocks into cache while the controller reads and copies data blocks that are requested by the host from disk into cache. This action increases the chance that a future request for data can be fulfilled from cache. Cache read prefetch is important for multimedia applications that use sequential data transfers. The configuration settings for the storage array that you use determine the number of additional data blocks that the controller reads into cache. Valid values for the

`cacheReadPrefetch` parameter are `TRUE` or `FALSE`.

Minimum firmware level

5.43

7.10 adds RAID 6 Level capability and the `newVolumeGroup` parameter.

7.60 adds the `drawerID` user input.

7.75 adds the `dataAssurance` parameter.

8.78 adds the `hostUnmapEnabled` parameter.

11.70.1 adds the `blockSize` parameter.

Re-create synchronous mirroring repository volume

The `recreate storageArray mirrorRepository` command creates a new Synchronous Mirroring repository volume (also called a mirror repository volume) by using the parameters defined for a previous mirror repository volume.

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.

Context

> ⓘ With firmware version 7.80, the `recreate storageArray mirrorRepository` command is deprecated. This command is no longer supported in either the GUI or the CLI. If you attempt to run this command, an error message returns indicating that this functionality is no longer supported and that no changes will be made to the specified remote mirror repositories.

The underlying requirement is that you have previously created a mirror repository volume. When you use this command, you can define the mirror repository volume in one of three ways: user-defined drives, user-defined volume group, or user-defined number of drives for the mirror repository volume. If you choose to define a number of drives, the controller firmware chooses which drives to use for the mirror repository volume.

Syntax (user-defined drives)

```
recreate storageArray mirrorRepository
repositoryRAIDLevel=(1 | 3 | 5 | 6)
repositoryDrives=(trayID1,pass:quotes[[drawerID1,]slotID1
... trayIDN,[drawerIDN,]slotIDN)
[trayLossProtect=(TRUE | FALSE)]
[dataAssurance=(none | enabled)]
```

Syntax (user-defined volume group)

```
recreate storageArray mirrorRepository
repositoryVolumeGroup=volumeGroupName
[freeCapacityArea=pass:quotes[freeCapacityIndexNumber]
```

Syntax (user-defined number of drives)

```
recreate storageArray mirrorRepository
repositoryRAIDLevel=(1 | 3 | 5 | 6)
repositoryDriveCount=numberOfDrives
(
   [driveMediaType=(HDD | SSD | unknown | allMedia)] |
   [driveType=(SAS | NVMe4K)]
)
[repositoryVolumeGroupUserLabel="userLabel"] |
[trayLossProtect=(TRUE | FALSE)] |
[drawerLossProtect=(true|false)] |
[dataAssurance=(none | enabled)]
```

Parameters

Parameter	Description
repositoryRAIDLevel	The RAID level for the mirror repository volume. Valid values are 1, 3, 5, or 6.

Parameter	Description
`repositoryDrives`	The drives that you want to use for the mirror repository volume. Drawer ID values are `1` to `5`. Slot ID values are `1` to `24`. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]). Enter the names of the repository volumes using these rules: 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`. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]). - Enclose all of the tray ID values, the drawer ID values, and the slot ID value sin square brackets ([ ]). - Separate the tray ID value, the drawer ID value, and the slot ID value with commas. - Separate each of the drive positions with a space.
`repositoryVolumeGroup`	The name of the volume group where the mirror repository volume is located.
`repositoryVolumeGroupUserLabel`	The name that you want to give the new volume group in which the mirror repository volume will be located. Enclose the volume group name in double quotation marks (" ").

Parameter	Description
freeCapacityArea	The index number of the free space in an existing volume group that you want to use to re-create the mirror repository volume. Free capacity is defined as the free capacity between existing volumes in a volume group. For example, a volume group might have the following areas: volume 1, free capacity, volume 2, free capacity, volume 3, free capacity. To use the free capacity following volume 2, you would specify: ``` freeCapacityArea=2 ``` Run the `show volumeGroup` command to determine if a free capacity area exists.
repositoryDriveCount	The number of unassigned drives that you want to use for the mirror repository volume.
driveMediaType	The type of drive media for which you want to retrieve information. The following values are valid types of drive media: • `HDD` indicates that you have hard disk drives in the drive tray • `SSD` indicates that have solid state disks in the drive tray • `unknown` indicates you are note sure of the type of drive media in the drive tray • `allMedia` indicates that you have all types of media in the drive tray
driveType	The type of drive that you want to use for the mirror repository volume. You cannot mix drive types. You must use this parameter when you have more than one type of drive in your storage array. Valid drive types are: • `SAS` • `NVMe4K` If you do not specify a drive type, the command defaults to any type.

Parameter	Description
`trayLossProtect`	The setting to enforce tray loss protection when you create the mirror repository volume. To enforce tray loss protection, set this parameter to `TRUE`. The default value is `FALSE`.
`drawerLossProtect`	The setting to enforce drawer loss protection when you create the mirror repository volume. To enforce drawer loss protection, set this parameter to `TRUE`. The default value is `FALSE`.

Notes

If you enter a value for the storage space of the mirror repository volume that is too small, the controller firmware returns an error message, which states the amount of space that is needed for the mirror repository volume. The command does not try to change the mirror repository volume. You can re-enter the command by using the value from the error message for the storage space value of the mirror repository volume.

The `repositoryDrives` 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.

When you assign the drives, if you set the `trayLossProtect` parameter to `TRUE` and have selected more than one drive from any one tray, the storage array returns an error. If you set the `trayLossProtect` parameter to `FALSE`, the storage array performs operations, but the mirror repository volume that you create might not have tray loss protection.

When the controller firmware assigns the drives, if you set the `trayLossProtect` parameter to `TRUE`, the storage array returns an error if the controller firmware cannot provide drives that result in the new mirror repository volume having tray loss protection. If you set the `trayLossProtect` parameter to `FALSE`, the storage array performs the operation even if it means that the mirror repository volume might not have tray loss protection.

Data assurance management

The Data Assurance (DA) feature increases data integrity across the entire storage system. DA enables the storage array to check for errors that might occur when data is moved between the hosts and the drives. When this feature is enabled, the storage array appends error-checking codes (also known as cyclic redundancy checks or CRCs) to each block of data in the volume. After a data block is moved, the storage array uses these CRC codes to determine if any errors occurred during transmission. Potentially corrupted data is neither written to disk nor returned to the host.

If you want to use the DA feature, start with a pool or volume group that includes only drives that support DA. Then, create DA-capable volumes. Finally, map these DA-capable volumes to the host using an I/O interface that is capable of DA. I/O interfaces that are capable of DA include Fibre Channel, SAS, and iSER over InfiniBand (iSCSI Extensions for RDMA/IB). DA is not supported by iSCSI over Ethernet, or by the SRP over

InfiniBand.

> ⓘ When all the drives are DA-capable, you can set the `dataAssurance` parameter to `enabled` and then use DA with certain operations. For example, you can create a volume group that includes DA-capable drives, and then create a volume within that volume group that is DA-enabled. Other operations that use a DA-enabled volume have options to support the DA feature.

If the `dataAssurance` parameter is set to `enabled`, only data assurance capable drives will be considered for volume candidates; otherwise, both data assurance capable and non-data assurance capable drives will be considered. If only data assurance drives are available the new volume group will be created using the enabled data assurance drives.

Minimum firmware level

6.10

7.10 adds RAID Level 6 capability

7.75 adds the `dataAssurance` parameter.

8.60 adds the `driveMediaType`, `repositoryVolumeGroupUserLabel`, and `drawerLossProtect` parameters.

Re-create external security key

The `recreate storageArray securityKey` command regenerates a storage array security key for use with the external security key management feature.

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 Security Admin role.

Context

> ⓘ This command applies only to external key management.

Syntax

```
recreate storageArray securityKey
passPhrase="passPhraseString"
file="fileName"
[deleteOldKey=(TRUE | FALSE)]
```

Parameters

Parameter	Description
passPhrase	A character string that encrypts the security key so that you can store the security key in an external file. Enclose the pass phrase in double quotation marks (" ").
file	The file path and the file name that has the security key. For example: ```file="C:\Program Files\CLI\sup\drivesecurity.slk"``` ⓘ The file name must have an extension of `.slk`.
deleteOldKey	Set this parameter to TRUE to delete the old security key from the external key management server after the new security key is created. The default is FALSE.

Notes

Your pass phrase must meet these criteria:

- The pass phrase must be between eight and 32 characters long.
- The pass phrase must contain at least one uppercase letter.
- The pass phrase must contain at least one lowercase letter.
- The pass phrase must contain at least one number.
- The pass phrase must contain at least one non-alphanumeric character, for example, < > @ +.

ⓘ   If your pass phrase does not meet these criteria, you will receive an error message.

Minimum firmware level

7.70

11.73 adds the `deleteOldKey` parameter.

Reduce disk pool capacity

The `set diskPool` command reduces the capacity of the disk pool by logically removing the drives from the pool.

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 uses the Dynamic Capacity Reduction (DCR) feature, which enables you to remove selected drives from a disk pool and re-use the removed drives as needed.

The maximum number of drives that you can remove from a disk pool in a single DCR operation is 60. You cannot reduce the disk pool to below the minimum disk pool size.

Syntax

```
set diskPool [diskPoolName]
removeDrives=(trayID1,[drawerID1,]slotID1
... trayIDn,[drawerIDn,]slotIDn)
```

Parameter

Parameter	Description
`diskPool`	The name of the disk pool for which you want to reduce capacity. Enclose the disk pool name in square brackets ([ ]).

Parameter	Description
`removeDrives`	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`. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).

Notes

Each disk pool name must be unique. You can use any combination of alphanumeric characters, underscore (_), hyphen (-), and pound (#) for the user label. User labels can have a maximum of 30 characters.

You might want to remove selected drives from a disk pool if you need to create a separate group or remove unneeded capacity from the storage array. The removed drives become unassigned drives and the data that existed on them is redistributed across the remaining drives in the disk pool. The capacity of the disk pool is decreased by the capacity of the drives that you remove. Removing drives from a disk pool is always carried out as a background task and the volumes remain fully accessible during this operation. The progress of the removal operation is reported as part of the long running operations status.

This command fails if there is not enough free capacity on the drives that remain in the disk pool to store all of the data that was on the drives you remove from the disk pool. Reserve capacity in the disk pool might be used to store data that was on the drives you remove from the disk pool. However, if the reserve capacity falls below the critical threshold, a critical event is written to the major event log.

Decreasing the disk pool size might result in a smaller necessary reserve capacity. In some cases, in order to decrease the likelihood that this command will fail, reduce your reserve capacity before running this command in order to increase the amount of space available for disk pool data.

The controller firmware determines how many drives that you can remove and you can then select the specific drives to be removed. The controller firmware bases the count on the amount of free space needed to redistribute the data across the remaining drives without consuming any capacity reserved for reconstructions. If the free capacity of the disk pool is already less than the Reserved Reconstruction Drive Amount, the controller does not allow a DCR operation to begin.

A DCR operation might result in the configured capacity exceeding one or both of the Pool Utilization Thresholds. If so, normal threshold alerts are issued.

Minimum firmware level

8.10

Remove array label

The `Remove array label` command allows you to remove a user-defined label for a storage array.

Supported Arrays

This command applies to the EF600 and EF300 storage arrays.

Syntax

```
delete storageArrayLabel label userDefinedString
delete storageArrayLabel all
```

Parameters

Parameter	Description
userDefinedString	Allows you to specify a user-defined label for the storage array.

Minimum firmware level

8.60

Remove incomplete asynchronous mirrored pair from asynchronous mirror group

The `remove asyncMirrorGroup` command removes an orphaned mirrored pair volume on the storage array.

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

An orphaned mirrored pair volume exists when a member volume in an asynchronous mirror group has been removed on one side of the asynchronous mirror group (either the primary side or secondary side) but not on the other side.

Orphan mirrored pair volumes are detected when inter-controller communication is restored and the two sides of the mirror configuration reconcile mirror parameters.

Use this command when the mirror relationship is successfully removed on the local or remote storage array, but cannot be removed on the corresponding storage array because of a communication problem.

Syntax

```
remove asyncMirrorGroup ["asyncMirrorGroupName"]
incompleteMirror volume="volumeName"
```

Parameters

Parameter	Description
asyncMirrorGroup	The name of the asynchronous mirror group that contains the orphaned volume that you want to remove. Enclose the asynchronous mirror group name in double quotation marks (" ") inside square brackets ([ ]).
volume	The name of the orphaned volume that you want to remove from the asynchronous mirror group. Enclose the volume name in double quotation marks (" ").

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Remove drives from SSD cache

The `set ssdCache` command decreases the capacity of the SSD cache by removing Solid State Disks (SSDs).

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 Support Admin role.

Syntax

```
set ssdCache [ssdCacheName]
removeDrives=(trayID1,[drawerID1,]slotID1 ... trayIDn,[drawerIDn,]slotIDn)
```

Parameters

Parameter	Description
ssdCache	The name of the SSD cache from which you want to remove SSDs. Enclose the SSD cache name in square brackets ([ ]). If the SSD cache name has special characters or consists only of numbers, you must enclose the SSD cache name in double quotation marks (" ") inside square brackets.
removeDrives	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. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).

Notes

You cannot remove all of the SSDs from the SSD cache using this command; at least one SSD must remain in the SSD cache. If you want to completely remove the SSD cache, use the `delete ssdCache` command instead.

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Remove volume LUN mapping

The `remove lunMapping` command removes the logical unit number (LUN) or namespace ID (NSID) mapping from one or more volumes.

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

```
remove (volume ["volumeName"] | accessVolume) lunMapping
(host="hostName" | hostGroup=("hostGroupName" | defaultGroup)
```

Syntax for removing LUN or NSID mapping from more than one volume LUN or NSID mapping

```
remove (allVolumes | volumes [volumeName1 ... volumeNameN])
lunMapping
```

Parameters

Parameter	Description
volume	The name of a volume from which you are removing the LUN or NSID mapping. Enclose the volume name double quotation marks (" ") inside square brackets ([ ]).
accessVolume	This parameter removes the access volume.
allVolumes	This parameter removes the LUN mapping from all of the volumes.

Parameter	Description
volumes	The names of several volumes from which you are removing the LUN or NSID mapping. Enter the names of the volumes using these rules: • Enclose all of the names in square brackets ([ ]). • Separate each of the names with a space. If the volume names have special characters or consist only of numbers, enter the names using these rules: • Enclose all of the names in square brackets ([ ]). • Enclose each of the names in double quotation marks (" "). • Separate each of the names with a space.
host	The name of the host to which the volume is mapped. Enclose the host name in double quotation marks (" "). This parameter works only when you are removing LUN or NSID mapping from one volume.
hostGroup	The name of the host group that contains the host to which the volume is mapped. Enclose the host group name in double quotation marks (" "). The defaultGroup value is the host group that contains the host to which the volume is mapped. This parameter works only when you are removing LUN or NSID mapping from one volume.

Notes

The access volume is the volume in a SAN environment that is used for communication between the storage management software and the storage array controller. The access volume uses a LUN or NSID address and consumes 20 MB of storage space that is not available for application data storage. An access volume is required only for in-band managed storage arrays.

> ⓘ **Removing an access volume can damage your configuration** — The agent uses the access volumes to communicate with a storage array. If you remove an access volume mapping for a storage array from a host that has an agent running on it, the storage management software is no longer able to manage the storage array through the agent.

You must use the host parameter and the hostGroup parameter when you specify a non-access volume or an access volume. The Script Engine ignores the host parameter or the hostGroup parameter when you use the allVolumes parameter or the volumes parameter.

Minimum firmware level

6.10

Remove member volume from consistency group

The `set consistencyGroup` command removes a member volume from an existing 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

Optionally, you can delete the repository volume members from the consistency group.

Syntax

```
set consistencyGroup ["consistencyGroupName"]
removeCGMemberVolume="memberVolumeName"
[deleteRepositoryMembers=(TRUE | FALSE)]
```

Parameters

Parameter	Description
consistencyGroupName	The name of the consistency group from which you want to remove a member. Enclose the consistency group name in double quotation marks (" ") inside square brackets ([ ]).
removeCGMemberVolume	The name of the member volume that you want to remove. Enclose the member group name in double quotation marks (" ").
deleteRepositoryMembers	Determines whether to remove all of the repository members from the consistency group.

Minimum firmware level

7.83

Remove storage array directory server role mapping

The `remove storageArray directoryServer` command removes the defined role mappings for the specified directory server.

Supported Arrays

This command applies to an individual E2800, E5700, EF600 or EF300 storage array. It does not operate on E2700 or E5600 storage arrays.

Roles

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

Syntax

```
remove storageArray directoryServer [domainId]
    (allGroupDNs | groupDNs=(groupDN1 ... groupDNN))
```

Parameters

Parameter	Description
`directoryServer`	Allows you to specify the domain, using the domain ID, for which to remove the mapping.
`allGroupDNs`	Allows you to remove all group Distinguished Name mappings from the domain.
`groupDNs`	Allows you to specify the groups' distinguished name (DN) to be removed. (i) If you enter more than one group, separate the values with a space.

Examples

```
SMcli -n Array1 -c "remove storageArray directoryServer ["domain1"]
                 groupDNs=("CN=company-distlist,OU=Managed,
                 OU=MyCompanyGroups,DC=hq,DC=mycompany,DC=com");"

SMcli -n Array1 -c "remove storageArray directoryServer ["domain1"]
                 allGroupDNs;"

SMcli completed successfully.
```

Remove synchronous mirroring

The `remove syncMirror` command removes the mirror relationship between the primary volume and the secondary volume in a remote-mirrored pair.

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.

Context

> In previous versions of this command the feature identifier was `remoteMirror`. This feature identifier is no longer valid and is replaced by `syncMirror`.

Syntax

```
remove syncMirror (localVolume [volumeName] |
localVolumes [volumeName1 ... volumeNameN])
```

Parameters

Parameter	Description
localVolume	The name of the primary volume (the volume on the local storage array) that you want to remove. Enclose the volume name in square brackets ([ ]). If the volume name has special characters or consists only of numbers, you must enclose the volume name in double quotation marks (" ") inside square brackets.

Parameter	Description
`localVolumes`	The names of several primary volumes (the volumes on the local storage array) that you want to remove. Enter the names of the primary volumes using these rules: • Enclose all of the names in square brackets ([ ]). • Separate each of the names with a space. If the primary volume names have special characters or consist only of numbers, enter the names using these rules: • Enclose all of the names in square brackets ([ ]). • Enclose each of the names in double quotation marks (" "). • Separate each of the names with a space.

Minimum firmware level

6.10

Remove volume from asynchronous mirror group

The `remove volume asyncMirrorGroup` command removes a member volume from an existing asynchronous mirror 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

Optionally, you can delete the repository volume members from the asynchronous mirror group.

This command is valid only on the local storage array that contains the asynchronous mirror group whose member volume that you want to remove.

Syntax

```
remove volume ["volumeName"] asyncMirrorGroup="asyncMirrorGroupName"
[deleteRepositoryMembers=(TRUE | FALSE)]
```

Parameters

Parameter	Description
volume	The name of the specific volume that you want to remove from the asynchronous mirror group. Enclose the volume name in double quotation marks (" ") inside square brackets ([ ]).
asyncMirrorGroup	The name of the asynchronous mirror group that contains the member volume that you want to remove. Enclose the asynchronous mirror group name in double quotation marks (" ").
deleteRepositoryMembers	Determines whether to remove all of the repository members from the asynchronous mirror group.

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Remove volume copy

The `remove volumeCopy target` command removes a volume copy pair.

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 is valid for snapshot volume copy pairs.

> (i) With firmware version 7.83 the `copyType=(online | offline)` parameter is no longer used.

Syntax

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

Parameters

Parameter	Description
`target`	The name of the target volume that you want to remove. Enclose the target volume name in square brackets ([ ]). If the target volume name has special characters or consists only of numbers, you must enclose the target volume name in double quotation marks (" ") inside square brackets.
`source`	The name of the source volume that you want to remove. Enclose the source volume name in square brackets ([ ]). If the source volume name has special characters or consists only of numbers, you must enclose the source volume name in double quotation marks (" ") inside square brackets.

Minimum firmware level

5.40

7.83 removes the `copyType=(online | offline)` parameter.

Rename SSD cache

The `set ssdCache` command changes the name of the SSD cache.

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 Support Admin role.

Syntax

```
set ssdCache [old_ssdCacheName] userLabel="new_ssdCacheName"
```

Parameter

Parameter	Description
`ssdCache`	The name of the SSD cache that you want to rename. Enclose the SSD cache name in square brackets ([ ]). If the SSD cache name has special characters or consists only of numbers, you also must enclose the SSD cache name in double quotation marks (" ") inside square brackets.
`userLabel`	The new name for the SSD cache. Enclose the name in double quotation marks (" ").You can use any combination of alphanumeric characters, underscore (_), hyphen (-), and pound (#) for the identifier. Identifiers can have a maximum of 30 characters.

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Repair Data Parity

The `Repair Data Parity` command repairs data parity errors.

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

Before utilizing this command, consult with NetApp Support for guidance on the affected firmware, drives, and RAID stripe.

Syntax

```
repair volume[volumeName] parity
    [startingLBA=LBAvalue]
    [endingLBA=LBAvalue]
    [repairMethods=(repairMethod . . . repairMethod)]
            Space delimited list where possible repair methods are:
reconstruct, unmap, updateP, updateQ, updateData, and writeZeros
    [repairPI=(TRUE|FALSE)]
    [suspectDrives=(trayID1,[drawerID1,]slotID1 . . .
trayIDn,[drawerIDn,]slotIDn)]
    [timeout=(0-65535)]
```

Parameters

Parameter	Description
`volume`	The name of the volume for which you are repairing parity. Enclose the volume name in square brackets ([ ])
`startingLBA`	The starting logical block address.
`endingLBA`	The ending logical block address.
`repairMethods`	The method used to repair the parity error. Available methods include: • reconstruct: Reconstructs drives specified under the `suspectDrives` parameter. • unmap: For R5/R6 dulbe volumes, used to make a R5/R6 RAID stripe unmapped • updateP: Used to fix the data parity mismatch type. • updateQ: Used to fix the data parity mismatch type. • updateData: Used to fix the data parity mismatch type. • writeZeros: For R5/R6 dulbe volumes, used when an unexpected RAID5/6 stripe containing a mix of mapped and unmapped data is found. Takes the unmapped blocks in the stripe and write zeros to it and then updates parity
`repairPI`	Set to TRUE to repair PI in the extent beginning at startingLBA.

Parameter	Description
`suspectDrives`	Used to specify the drives for reconstruction.
`timeout`	The length of time in minutes that you want to run the operation.

Minimum Firmware Level

8.63

Repair volume parity

The `repair volume parity` command repairs the parity errors on a 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

> ⚠️ If volume parity and volume data do not match, volume data might be defective rather than volume parity. Repairing volume parity destroys the ability to repair the defective volume data, if necessary.

Syntax

```
repair volume [volumeName] parity
parityErrorFile="filename"
[verbose=(TRUE | FALSE)]
```

Parameters

Parameter	Description
`volume`	The name of the volume for which you are repairing parity. Enclose the volume name in square brackets ([ ]). If the volume name has special characters or numbers, you must enclose the volume name in double quotation marks (" ") inside square brackets.

Parameter	Description
`parityErrorFile`	The file path and the file name that contains the parity error information that you use to repair the errors. Enclose the file name in double quotation marks (" "). For example: `file="C:\Program Files\CLI\sup\parfile.txt"` ⓘ A `parityErrorFile` is the result of a previous `check volume parity` operation.
`verbose`	The setting to capture progress details, such as percent complete, and to show the information as the volume parity is being repaired. To capture progress details, set this parameter to `TRUE`. To prevent capturing progress details, set this parameter to `FALSE`.

Minimum firmware level

6.10

Replace drive

The `replace drive replacementDrive` command replaces a drive in a volume 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

Replacing a drive in a volume group redefines the composition of a volume group. You can use this command to replace a drive with either an unassigned drive or a fully integrated hot spare.

Syntax

```
replace (drive \[trayID,[drawerID,]slotID\] \|
drives\[trayID1,[drawerID1,]slotID1 ... trayIDn,[drawerIDn,]slotIDn\]
  | <"wwID">)
replacementDrive=trayID,drawerID,slotID
[copyDrive][failDrive]
```

Parameters

Parameter	Description
drive	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. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).
drive	The World Wide Identifier (WWID) of the drive that you want to replace. Enclose the WWID in double quotation marks (" ") inside angle brackets (< >).
replacementDrive	The location of the drive that you want to use for a replacement. 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. Slot ID values are 1 to 24.

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

7.10

7.60 adds the *drawerID* user input.

Reset installed signed certificate

The `reset controller arrayManagementSignedCertificate` command resets the installed signed certificate and root/intermediate certificates on the controller. All root and intermediate certificates as well as any signed certificates will be replaced by a single self-signed certificate.

Supported Arrays

This command applies to an individual E2800, E5700, EF600 or EF300 storage array. It does not operate on E2700 or E5600 storage arrays.

Roles

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

Syntax

```
reset controller [(a|b)] arrayManagementSignedCertificate
```

Parameters

Parameter	Description
controller	Allows the user to specify the controller on which you want to retrieve the root/intermediate certificates. Valid controller identifiers are a or b, where a is the controller in slot A, and b is the controller in slot B. Enclose the controller identifier in square brackets ([ ]).

Examples

```
SMcli -n Array1 -c "reset controller [a]
arrayManagementSignedCertificate;"

SMcli completed successfully.
```

Minimum firmware level

8.40

Reset controller

The `reset controller` command resets a controller, and is disruptive to I/O operations.

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

ⓘ When you reset a controller, the controller is removed from the data path and is not available for I/O operations until the reset operation is complete. If a host is using volumes that are owned by the controller being reset, the I/O directed to the controller is rejected. Before resetting the controller, either make sure that the volumes that are owned by the controller are not in use or make sure that a multi-path driver is installed on all of the hosts that use these volumes.

⚠ If you use in-band management, you cannot control which controller any command is sent to, and this command can have unexpected results.

Syntax

```
reset controller [(a|b)]
```

Parameters

Parameter	Description
`controller`	The controller that you want to reset. Valid controller identifiers are `a` or `b`, where `a` is the controller in slot A, and `b` is the controller in slot B. Enclose the controller identifier in square brackets ([ ]). If you do not specify a controller, the storage management software returns a syntax error.

Notes

The controller that receives the reset controller command resets the controller specified. For example, if the reset controller command is sent to controller A to request a reset of controller A, then controller A reboots itself by doing a soft reboot. If the reset controller command is sent to controller A to request a reset of controller B, then controller A holds controller B in reset and then releases controller B from reset, which is a hard reboot. A soft reboot in some products only resets the IOC chip. A hard reboot resets both the IOC and the expander chips in the controller.

Minimum firmware level

5.20

Reset drive

The `reset drive` command power cycles a drive in a volume group or a disk pool to aid in the recovery of a drive that is exhibiting inconsistent or non-optimal behavior.

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

By power cycling a drive, you can clear some errors that cause inconsistent or non-optimal behavior. This avoids replacing a drive when it is experiencing only a transient, non-fatal error, and the drive can remain operational. Resetting a drive in this way reduces disruptions and avoids replacing a drive.

If the problem cannot be corrected by power cycling the drive, the data is copied from the drive and the drive is powered down for replacement.

> (i) This command cannot be used for SSD drives manufactured by Pliant. Use the `show storageArray profile` command or the `show drive` command to display the manufacturer of the drive(s).

Syntax

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

Parameters

Parameter	Description
`drive`	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`. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).
`drive`	The World Wide Identifier (WWID) of the drive that you want to replace. Enclose the WWID in double quotation marks (" ") inside angle brackets (< >).

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.

After power cycling the drive, the controller must verify the drive to be functional before it can be placed back into use. If the drive cannot be verified it is marked as a failed drive. Power cycling a failed drive requires global hot spare drives and full copy back to a replacement drive after it is brought into service.

Failed drives cannot be reset by a power cycle more than once in a 24 hour period, and in some cases cannot be reset more than once. Thresholds and counters for drive power cycles are kept in persistent storage, and are included in state capture data. Informational events are logged when a drive is power cycled.

Minimum firmware level

8.20

Reset iSCSI IP address

The `reset iscsiIpAddress` command resets the IP address of the remote storage array to re-establish connection with the local storage array.

Supported Arrays

This command applies to any individual storage array, with some restrictions. If you are running the command on the E2700 or E5600 array, there are no restrictions.

> ⓘ If you are running the command on the E2800, E5700, EF600, and EF300 array, the client type must be set to `symbol`. This command will not execute if they client type is set to `https`.

Roles

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

Context

You can use this command to notify the local storage array that the iSCSI IP address of the remote storage array has changed and needs to be updated.

When establishing an asynchronous mirroring relationship with an iSCSI connection, both the local and the remote storage arrays store a record of the IP address of the remote storage array in the asynchronous mirroring configuration. If the IP address of an iSCSI port changes, the remote storage array that is attempting to use that port encounters a communication error.

The storage array with the changed IP address sends a message to each remote storage array associated with the asynchronous mirror groups that are configured to mirror over an iSCSI connection. Storage arrays that receive this message automatically update their remote-target IP address.

If the storage array with the changed IP address is unable to send its inter-controller message to a remote storage array, the system sends you an alert of the connectivity issue. Use the `reset` command to re-establish connection with the local storage array.

Syntax

```
reset (remoteStorageArrayName="storageArrayName" |
remoteStorageArrayWwid=<wwID>)
iscsiIpAddress
```

Parameters

Parameter	Description
remoteStorageArrayName	The name for the remote storage array for which you are resetting the iSCSI IP address. Enclose the storage array name in double quotation marks (" ").

Parameter	Description
`remoteStorageArrayWwid`	The World Wide Identifier (WWID) of the storage array for which you are resetting the iSCSI IP address. You can use the WWID instead of the storage array name to identify the storage array. Enclose the WWID in angle brackets (< >).

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Reset asynchronous mirror group statistics

The `reset storageArray arvmStats asyncMirrorGroup` command resets the synchronization statistics for one or more member volumes in an asynchronous mirror group to a relative 0.

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

```
reset storageArray arvmStats asyncMirrorGroup [asyncMirrorGroupName]
volume="volumeName" sampleType=(all | mostRecent | longestSyncTime |
errors)
```

Parameters

Parameter	Description
`asyncMirrorGroup`	The name of the asynchronous mirror group for which you are resetting the synchronization statistics. Enclose the asynchronous mirror group name in square brackets ([ ]). If the asynchronous mirror group name has special characters or numbers, you must enclose the asynchronous mirror group name in double quotation marks (" ") inside square brackets.

Parameter	Description
volume	This parameter is optional. The name of the specific member volume in the asynchronous mirror group for which you are resetting the synchronization statistics. If no volume is specified, the statistics for every member volume in the asynchronous mirror group are reset. Enclose the volume name in double quotation marks (" ").
sampleType	This parameter is optional. The default value for `sampleType` is `all`. `all`-- Data for all three sample types are reset. `mostRecent` — Statistics are reset for the most recent 50 resynchronization samples. `longestSyncTime` — Statistics are reset for the most recent 20 longest resynchronization samples. `errors`-- Statistics are reset for the most recent 20 failed resynchronization samples.

Notes

Statistics are reset for mirrored volumes in the Primary role. The statistics that are reset include the following data:

- Synchronization start time
- Synchronization type (manual or periodic)
- Synchronization duration
- Number of bytes sent
- Maximum and minimum write time (for a single write)
- Maximum and minimum synchronization data rate
- Total write time
- Repository utilization (%)
- Recovery point age

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Reset AutoSupport message collection schedule (for individual E2800 or E5700 arrays)

The `reset storageArray autoSupport schedule` command resets the daily and weekly times and days of the week that AutoSupport messages are sent back to the random values generated by the management software.

Supported Arrays

This command applies to an individual E2800, E5700, EF600 or EF300 storage array. It does not operate on E2700 or E5600 storage arrays.

Roles

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

Context

- The management software randomly selects a time of day for both daily and weekly messages and a day of the week for weekly messages.
- The management software makes all attempts to ensure that no two storage arrays within a management domain send scheduled AutoSupport messages at the same time.

Syntax

```
reset storageArray autoSupport schedule
```

Parameters

None.

Examples

```
SMcli -n Array1 -c "reset storageArray autoSupport schedule;"

SMcli completed successfully.
```

Verification

Use the `show storageArray autoSupport` command to see the resulting change to the schedule.

Minimum firmware level

8.40

Reset storage array diagnostic data

The `reset storageArray diagnosticData` command resets the NVSRAM that contains the diagnostic data for the storage array.

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 delete the diagnostic data. This command replaces the Needs Attention status with the Diagnostic Data Available status. The old diagnostic data is written over automatically when new data is captured. The memory that contains the diagnostic data is also cleared when the controllers reboot. Before you reset the diagnostic data, use the `save storageArray diagnosticData` command to save the diagnostic data to a file.

> ⓘ   Run this command only with the assistance of technical support.

Syntax

```
reset storageArray diagnosticData
```

Parameters

None.

Minimum firmware level

6.16

Reset storage array host port statistics baseline

The `reset storageArray hostPortStatisticsBaseline` command resets the storage array host port statistics baseline.

Supported Arrays

This command applies to an individual E2800, E5700, EF600 or EF300 storage array. It does not operate on E2700 or E5600 storage arrays.

Roles

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

Context

ℹ️ This command replaces the deprecated Reset storage array InfiniBand statistics baseline, Reset storage array iSCSI baseline, and Reset storage array iSER baseline commands.

Syntax

```
reset storageArray hostPortStatisticsBaseline type=(ISCSI| ISER | SRP |
NVMEOF)
```

Parameters

Parameter	Description
type	Allows you to indicate which statistics type to collect. Valid choices are: ISCSI, ISER, SRP, and NVMEOF.

Minimum firmware level

8.41

Reset storage array InfiniBand statistics baseline

The `reset storageArray ibStatsBaseline` command resets the InfiniBand statistics baseline to 0 for the storage array.

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.

ℹ️ This command is deprecated and is replaced by the Reset storage array host port statistics baseline command.

Syntax

```
reset storageArray ibStatsBaseline
```

Parameters

None.

Notes

This command does not actually reset the raw counts maintained in the hardware and firmware. Instead, the firmware creates a snapshot of the current counter values and uses these values to report differences in the counts when the statistics are retrieved. The new baseline time is applied to both controllers so that the controller counts are synchronized with each other. If one controller resets without the other controller resetting, the counters are no longer synchronized. The client becomes aware that the controllers are not synchronized because the timestamp data reported along with the statistics is not the same for both controllers.

Minimum firmware level

7.10

8.41 This command is deprecated.

Reset storage array iSCSI baseline

The `reset storageArray iscsiStatsBaseline` command resets the iSCSI baseline to 0 for the storage array.

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.

> (i) This command is deprecated and is replaced by the Reset storage array host port statistics baseline command.

Syntax

```
reset storageArray iscsiStatsBaseline
```

Parameters

None.

Notes

This command resets the baseline to 0 for both controllers in the storage array. The purpose of resetting both of the controller baselines is to help make sure that the controller counts are synchronized between the controllers. If one controller resets but the second controller does not reset, the host is informed that the controllers are out of synchronization. The host is informed by the time stamps that are reported with the statistics.

Minimum firmware level

7.10

8.41 This command is deprecated.

Reset storage array iSER baseline

The `reset storageArray iserStatsBaseline` command resets the iSER baseline to 0 for the storage array.

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.

> ⓘ This command is deprecated and is replaced by the Reset storage array host port statistics baseline command.

Syntax

```
reset storageArray iserStatsBaseline
```

Parameters

None.

Notes

This command does not actually reset the raw counts maintained in the hardware and firmware. Instead, the firmware creates a snapshot of the current counter values and uses these values to report differences in the counts when the statistics are retrieved. The new baseline time is applied to both controllers so that the controller counts are synchronized with each other. If one controller resets without the other controller resetting, the counters are no longer synchronized. The client becomes aware that the controllers are not synchronized because the timestamp data reported along with the statistics is not the same for both controllers.

Minimum firmware level

8.20

8.41 This command is deprecated.

Reset storage array RLS baseline

The `reset storageArray RLSBaseline` command resets the read link status (RLS) baseline for all devices by setting all of the RLS counts to 0.

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

```
reset storageArray RLSBaseline
```

Parameters

None.

Minimum firmware level

5.00

Reset storage array SAS PHY baseline

The `reset storageArray SASPHYBaseline` command resets the SAS physical layer (SAS PHY) baseline for all devices, and removes the list of errors from the `.csv` file.

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

The `.csv` file is generated when you run the `save storageArray SASPHYCounts` command.

> ⓘ The previous release of the `reset storageArray SASPHYBaseline` command cleared error counts for all devices except the drives. The `reset storageArray SASPHYBaseline` command now resets the SAS PHY baseline for the drives as well as the other devices. All errors are deleted from the `.csv` file.

Syntax

```
reset storageArray SASPHYBaseline
```

Parameters

None.

Minimum firmware level

6.10

7.83 resets the SAS PHY baseline for drives.

Reset storage array SOC baseline

The `reset storageArray SOCBaseline` command resets the baseline for all switch-on-a-chip (SOC) devices that are accessed through the controllers.

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 resets the baseline by setting all of the SOC counts to 0. This command is valid only for Fibre Channel devices in an arbitrated loop topology.

Syntax

```
reset storageArray SOCBaseline
```

Parameters

None.

Minimum firmware level

6.16

Reset storage array volume distribution

The `reset storageArray volumeDistribution` command reassigns (moves) all of the volumes to their preferred controller.

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

```
reset storageArray volumeDistribution
```

Parameters

None.

Notes

If you use this command on a host without a multi-path driver, you must stop I/O operations to the volumes until this command has completed to prevent application errors.

Under certain host operating system environments, you might be required to reconfigure the multi-path host driver. You might also need to make operating system modifications to recognize the new I/O path to the volumes.

Minimum firmware level

5.20

Resume asynchronous mirror group

The `resume asyncMirrorGroup` command resumes data transfer between all mirrored pairs in an asynchronous mirror 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

Data written to the primary volumes while the asynchronous mirror group was suspended is written to the secondary volumes immediately. Periodic synchronization resumes if an automatic synchronization interval has been set.

Syntax

```
resume asyncMirrorGroup ["asyncMirrorGroupName"]
[deleteRecoveryPointIfNecessary]
```

Parameters

Parameter	Description
asyncMirrorGroup	The name of the asynchronous mirror group for which you want to start synchronization. Enclose the asynchronous mirror group name in double quotation marks (" ") inside square brackets ([ ]").
deleteRecoveryPointIfNecessary	The parameter to delete the recovery point if the recoverable synchronization data has exceeded time threshold for recovery. Recovery point age is measured from the time the data was frozen on the primary storage array.

Minimum firmware level

7.84

8.10 adds the `deleteRecoveryPointIfNecessary` parameter

11.80 adds EF600 and EF300 array support

Resume consistency group snapshot volume

The `resume cgSnapVolume` command restarts a copy-on-write operation for creating a consistency group snapshot volume that you stopped using the `stop cgSnapVolume`

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

```
resume cgSnapVolume ["snapVolumeName"]
cgSnapImage="snapImageName"
```

Parameters

Parameter	Description
cgSnapVolume	The name of the consistency group snapshot volume that you want to resume. Enclose the name of the consistency group snapshot volume in double quotation marks (" ") inside square brackets ([ ]).
cgSnapImage	The name of the snapshot image in a consistency group that you are restarting. The name of a snapshot image is comprised of two parts: • The name of the consistency group • An identifier for the snapshot image in the consistency group The identifier for the snapshot image can be one of these: • An integer value that is the sequence number of the snapshot in the consistency group. • NEWEST - Use this option when you want to show the latest snapshot image created in the consistency group. • OLDEST - Use this option when you want to show the earliest snapshot image created in the consistency group. Enclose the snapshot image name in double quotation marks (" ").

Notes

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

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

For example, if you want to restart a copy-on-write operation for snapshot image 12345, which is in snapshot consistency group snapgroup1 in a consistency group snapshot volume that has the name snapVol1, you would use this command:

```
resume cgSnapVolume ["snapVol1"] cgSnapImage=["snapgroup1:12345"]
```

Minimum firmware level

7.83

Resume snapshot image rollback

The `resume snapImage rollback` command resumes a rollback operation that has entered a paused state.

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

A rollback operation can enter a paused state due to processing errors, which causes a Needs Attention condition for the storage array.

If the rollback operation cannot be resumed, the selected snapshot image reverts to a paused state, and the Needs Attention condition is displayed.

ⓘ You cannot use this command for snapshot images involved in online volume copy.

Syntax

```
resume snapImage [snapImageName] rollback
```

Parameter

Parameter	Description
`snapImage`	The name of the snapshot image for which you want to restart a rollback operation. The name of a snapshot image is comprised of two parts: • The name of the snapshot group • An identifier for the snapshot image in the snapshot group The identifier for the snapshot image can be one of these: • An integer value that is the sequence number of the snapshot in the snapshot group. • `NEWEST` - Use this option when you want to show the latest snapshot image created in the snapshot group. • `OLDEST` - Use this option when you want to show the earliest snapshot image created in the snapshot group. Enclose the snapshot image name in double quotation marks (" ") inside square brackets ([ ]).

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 restart a rollback operation for snapshot image 12345 in a snapshot group that has the name snapgroup1, you would use this command:

```
resume snapImage ["snapgroup1:12345"] rollback;
```

Minimum firmware level

7.83

Resume snapshot volume

The `resume snapVolume` command resumes a snapshot volume operation that was stopped.

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

```
resume snapVolume ["snapVolumeName"] snapImage="snapCGID:imageID"
```

Parameters

Parameter	Description
snapVolume	The name of the snapshot volume for which you want to resume operations. Enclose the snapshot volume name in double quotation marks (" ") inside square brackets ([ ]).
snapImage	The name of the snapshot image for which you want to resume snapshot volume operations. The name of a snapshot image is comprised of two parts: • The name of the snapshot group • An identifier for the snapshot image in the snapshot group The identifier for the snapshot image can be one of these: • An integer value that is the sequence number of the snapshot in the snapshot group. • NEWEST - Use this option when you want to show the latest snapshot image created in the snapshot group. • OLDEST - Use this option when you want to show the earliest snapshot image created in the snapshot group. Enclose the snapshot image name in double quotation marks (" ").

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 resume snapshot volume operations for snapshot image 12345 in a snapshot group that has the name snapGroup1, you would use this command:

```
resume snapVolume ["snapVol1"] snapImage="snapGroup1:12345";
```

To resume snapshot volume operations for the most recent snapshot image in a snapshot group that has the name snapGroup1, you would use this command:

```
resume snapVolume ["snapVol1"] snapImage="snapGroup1:newest";
```

Minimum firmware level

7.83

Resume SSD cache

The `resume ssdCache` command restarts the caching for all of the volumes using the SSD cache that was temporarily stopped with the `suspend ssdCache` 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 Support Admin role.

Syntax

```
resume ssdCache [ssdCacheName]
```

Parameter

Parameter	Description
ssdCache	The name of the SSD cache for which you want to resume caching operations. Enclose the SSD cache name in square brackets ([ ]). If the SSD cache name has special characters or consists only of numbers, you must enclose the SSD cache name in double quotation marks (" ") inside square brackets.

Minimum firmware level

7.84

11.80 adds EF600 and EF300 array support

Resume synchronous mirroring

The `resume syncMirror` command resumes a suspended synchronous mirroring operation.

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.

Context

> ⓘ In previous versions of this command, the feature identifier was `remoteMirror`. This feature identifier is no longer valid and is replaced by `syncMirror`.

Syntax

```
resume syncMirror (primary [volumeName] |
primaries [volumeName1 ... volumeNameN])
[writeConsistency=(TRUE | FALSE)]
```

Parameters

Parameter	Description
primary	The name of the primary volume for which you want to resume a Synchronous Mirroring operation. Enclose the primary volume name in square brackets ([ ]). If the primary volume name has special characters or numbers, you must enclose the primary volume name in double quotation marks (" ") inside square brackets.
primaries	The names of several primary volumes for which you want to resume a Synchronous Mirroring operation. Enter the names of the primary volumes using these rules: • Enclose all of the names in square brackets ([ ]). • Separate each of the names with a space. If the primary volume names have special characters or consist only of numbers, enter the names using these rules: • Enclose all of the names in square brackets ([ ]). • Enclose each of the names in double quotation marks (" "). • Separate each of the names with a space.
writeConsistency	The setting to identify the volumes in this command that are in a write-consistency group or are separate. For the volumes to be in the same write-consistency group, set this parameter to TRUE. For the volumes to be separate, set this parameter to FALSE.

Notes

If you set the writeConsistency parameter to TRUE, the volumes must be in a write-consistency group (or groups). This command resumes all write-consistency groups that contain the volumes. For example, if volumes A, B, and C are in a write-consistency group and they have remote counterparts A', B', and C', the resume syncMirror volume ["A"] writeConsistency=TRUE command resumes A-A', B-B', and C-C'.

Minimum firmware level

6.10

Revive drive

The revive drive command forces the specified drive to the Optimal state.

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 or Support Admin role.

Context

ⓘ **Possible loss of data access** — Correct use of this command depends on the data configuration on all of the drives in the volume group. Never try to revive a drive unless you are supervised by technical support.

Syntax

```
revive drive [trayID,[drawerID,]slotID]
```

Parameter

Parameter	Description
drive	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. 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. Enclose the tray ID value, the drawer ID value, and the slot ID value in square brackets ([ ]).

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

5.43

7.60 adds the `drawerID` user input.

Revive snapshot group

The `revive snapGroup` command forces the specified snapshot group to the Optimal state.

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 or Support Admin role.

Context

If the snapshot group is not in a Failed state, the firmware displays an error message and does not run this command.

Syntax

```
revive snapGroup [snapGroupName]
```

Parameter

Parameter	Description
`snapGroup`	The name of the snapshot group that you want to set to the Optimal state. Enclose the snapshot group name in square brackets ([ ]). If the snapshot group name has special characters or consists only of numbers, you must enclose the snapshot group 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

Revive snapshot volume

The `revive snapVolume` command forces a specified snapshot volume to the Optimal state.

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 or Support Admin role.

Context

The snapshot volume can be one of the following:

- A standalone snapshot volume
- A snapshot volume that is a member of a consistency group

If the snapshot volume is not in a Failed state, the firmware displays an error message and does not run this command.

> ⓘ   You cannot use this command for a snapshot volume that is used in online volume copy.

Syntax

```
revive snapVolume [snapVolumeName]
```

Parameter

Parameter	Description
`snapVolume`	The name of the snapshot volume that you want to set to the Optimal state. Enclose the snapshot volume name in square brackets ([ ]). If the snapshot volume name has special characters or consists only of numbers, you must 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

Revive volume group

The `revive volumeGroup` command forces the specified volume group and its associated failed drives to the Optimal state.

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 or Support Admin role.

Context

> ⓘ **Possible loss of data access** — Correct use of this command depends on the data configuration on all of the drives in the volume group. Never try to revive a drive unless you are supervised by technical support.

Syntax

```
revive volumeGroup [volumeGroupName]
```

Parameter

Parameter	Description
volumeGroup	The name of the volume group to be set to the Optimal state. Enclose the volume group name in square brackets ([ ]).

Minimum firmware level

6.10