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      stcli services asup recipients add Command 140
      stcli services asup recipients clear Command 141
      stcli services asup recipient remove Command 141
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    stcli services dns remove Command 143
    stcli services dns set Command 144
    stcli services dns show Command 144
  stcli services ntp Commands 145
    stcli services ntp add Command 145
    stcli services ntp remove Command 146
    stcli services ntp set Command 146
    stcli services ntp show Command 146
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New and Changed Information

- New and Revised Information, on page 2
New and Revised Information

The following table provides an overview of the new features and changes made to this guide for this current release.

**Table 1: New Features in HX Release 2.5(1a)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
<th>Date Added</th>
<th>Where Documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Protection commands</td>
<td>Added <code>stcli dp group</code>, <code>stcli dp peer</code>, and <code>stcli dp vm</code> commands.</td>
<td>07/24/2017</td>
<td>See <code>stcli dp (data protection) Commands</code>, on page 55</td>
</tr>
<tr>
<td>Encryption commands</td>
<td>Added <code>stcli security encryption</code> commands.</td>
<td>07/24/2017</td>
<td>See <code>stcli security encryption Commands</code>, on page 131</td>
</tr>
<tr>
<td>Smart Call Home commands</td>
<td>Additional <code>stcli services sch</code> commands.</td>
<td>07/24/2017</td>
<td>See <code>stcli services sch Commands</code>, on page 148</td>
</tr>
</tbody>
</table>

**Table 2: New Features in HX Release 2.1(1a)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
<th>Date Added</th>
<th>Where Documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Call Home commands</td>
<td>Added <code>stcli services sch</code> commands.</td>
<td>04/20/2017</td>
<td>See <code>stcli services sch Commands</code>, on page 148</td>
</tr>
<tr>
<td>Remote Support commands</td>
<td>Added <code>stcli service remotesupport</code> commands.</td>
<td>04/20/2017</td>
<td>See <code>stcli services remotesupport Commands</code>, on page 151</td>
</tr>
</tbody>
</table>
HX Data Platform stcli Commands

- stcli Commands, on page 4
- stcli about Command, on page 6
- stcli -help Command, on page 7
**stcli Commands**

HX Data Platform Command Line Interface (CLI) commands all begin with `stcli`.

```
stcli [-h] {about | services | vm | snapshot-schedule | cluster | appliance | node | disk | cleaner | datastore | file | security | license | rebalance | recovery}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>about</td>
<td>One of set required.</td>
<td>About controller VM service, the storage manager, <code>stMgr</code>.</td>
</tr>
<tr>
<td>appliance</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster appliance namespace.</td>
</tr>
<tr>
<td>cleaner</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster cleaner namespace.</td>
</tr>
<tr>
<td>cluster</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster namespace.</td>
</tr>
<tr>
<td>datastore</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster datastore namespace.</td>
</tr>
<tr>
<td>disk</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster disk namespace.</td>
</tr>
<tr>
<td>file</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster VM file namespace.</td>
</tr>
<tr>
<td>license</td>
<td>One of set required.</td>
<td>Commands supported in the Storage license namespace.</td>
</tr>
<tr>
<td>node</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster node namespace.</td>
</tr>
<tr>
<td>rebalance</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster rebalance namespace.</td>
</tr>
<tr>
<td>recovery</td>
<td></td>
<td>Not supported.</td>
</tr>
<tr>
<td>security</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster security namespace.</td>
</tr>
<tr>
<td>services</td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster system services namespace.</td>
</tr>
<tr>
<td>snapshot-schedule</td>
<td>One of set required.</td>
<td>Enables / disables snapshot schedules for all the objects in this storage cluster.</td>
</tr>
</tbody>
</table>
### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the `stcli` command with one of the positional arguments enclosed in `{ }` or optionally, arguments enclosed in `[ ]`.

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>vm</code></td>
<td>One of set required.</td>
<td>Commands supported in the storage cluster VM namespace.</td>
</tr>
</tbody>
</table>
**stcli about Command**

Displays information about the HX controller VM's service, storage manager, `stMgr`. This is the service that manages the controller VM.

**Command Default**

None.

**Usage Guidelines**

Run the `stcli about` command.

```bash
# stcli about
serviceType: stMgr
instanceUuid:
name: HyperFlex StorageController
locale: English (United States)
serialNumber:
apiVersion: 0.1
modelNumber: X9DRT
build: 2.0.1a-19584 (master)
displayVersion: 2.0(1a)
fullName: HyperFlex StorageController 2.0.1a
productVersion: 2.0.1a-19584
```
stcli -help Command

Help option on all stcli commands.

```
stcli [COMMAND] [-h]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-h, --help</td>
<td>Required</td>
<td>Shows the help message relative to the listed command and exits.</td>
</tr>
</tbody>
</table>

Command Default
None.

Usage Guidelines
Accompany the stcli command with one of the positional commands or arguments and the --help option.
stcli appliance Commands

- stcli appliance Commands, on page 10
- stcli appliance discover Command, on page 11
- stcli appliance list Command, on page 12
### stcli appliance Commands

Appliance operations.

```
stcli appliance [-h] {list | discover}
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>Lists the storage cluster appliances in the storage cluster.</td>
</tr>
<tr>
<td>discover</td>
<td>One of set required.</td>
<td>Discover new storage cluster appliances in the network.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli appliance` command with one of the positional arguments enclosed in `{}`, or optional arguments enclosed in `[]`. 
stcli appliance discover Command

Discover new storage cluster appliances in the network. If none are found, only the time spent searching is returned.

stcli appliance discover [-h]

Command Default

None.

Usage Guidelines

Run the stcli appliance discover command.
stcli appliance list Command

Lists the storage cluster appliances in the storage cluster.

**stcli appliance list [-h]**

**Command Default**

None.

**Usage Guidelines**

Run the `stcli appliance list` appliance command.

This example shows a truncated response:

```bash
# stcli appliance list

ps:
-----------------------------
status: green
name: Power Supply 1 PS1 Status: Power Supply AC lost - Deassert
-----------------------------
status: green
name: Power Supply 2: Running/Full Power-Enabled
-----------------------------
status: green
name: Power Supply 1: Running/Full Power-Enabled
-----------------------------
status: green
name: Power Supply 1 PS1 Status: Predictive failure - Deassert
-----------------------------
status: green
name: Power Supply 2 PS2 Status: Failure status - Deassert
-----------------------------
status: green
name: Power Supply 2 PS2 Status: Predictive failure - Deassert
-----------------------------
status: green
name: Power Supply 2 PS2 Status: Power Supply AC lost - Deassert
-----------------------------
status: green
name: Power Supply 1 PS1 Status: Failure status - Deassert
-----------------------------

serialNumber:
disks:
  EntityRef(type=10, id='5000c500642d17ad:0000000000000000', name='/dev/sde'):
    status: online
    serialNumber: 9XG4XS2V
    capacity: 931.5G
    slotNumber: 1.1.4
    logicalname: /dev/sde
    modelNumber: ST91000640NS
    entityRef:
      type: pdisk
      id: 5000c500642d17ad:0000000000000000
      name: /dev/sde
      version: SN03
      vendor: Seagate
    EntityRef ...

modelNumber: X9DRT
pnics:
```
EntityRef(type=3, id='00000000-0000-0000-0000-002590d423b2', name='cs-002a'):

- device: vmnic2
- pci: 0000:04:00.0
- speedMb: 10000

EntityRef(type=3, id='00000000-0000-0000-0000-002590d42388', name='cs-002c'):

- device: vmnic0
- mac: 00:25:90:d4:23:88
- pci: 0000:02:00.0
- speedMb: 1000

nodes:

A:
- state: online
- upgradeState: ok
- storfsIp:
  - addr: 10.104.48.24
  - stService: stctl
  - vlanId: 311
  - gateway: 10.104.48.1
  - subnetMask: 255.255.240.0
  - method: static

  pNode:
  - about:
    - serviceType: sysmAgent
    - instanceUuid: d8e6ec9a564de28a:9d870ca45456c471
    - name: locale: en-US
    - serialNumber: unset
    - apiVersion: 0.0.1
    - modelNumber: unset
    - build: 2.0.1-release-20569
    - displayVersion: 2.0(1a)
    - fullName: HyperFlex StorageController-2.0.1a
    - productVersion: 2.0.1a-20569
  - retired: False
  - compression: True
  - ip: 10.104.48.24
  - disks:

  - blacklistCount: 0
  - medium: rotational
  - capacity: 931.5G
  - state: ready
  - version: 0
  - entityRef:
    - type: disk
    - id: 5000c500642e0f8f:000000000000000
  - usage: persistence
  - path: /dev/sdd
  - lastModifiedTime: 1484715441000
  - usedCapacity: 9.2G

...
dedup: True
nsPrimary: True
dataWriteThruEnabled: True
state: ready
bootTime: 0
master: False
entityRef:
  type: pnode
  id: d8e6ec9a564de28a:9d870ca45456c471
  name: 10.104.48.24
version: 0
lastModifiedTime: 1484715441000
name: 10.104.48.24

host:
  state: online
  about:
    serviceType: HostAgent
    instanceUuid: 00000000-0000-0000-0000-002590d423b2
    name: VMware ESXi
    locale: English (United States)
    serialNumber: 0123456789
    apiVersion: 6.0
    modelNumber: X9DRT
    build: 3380124
    fullName: VMware ESXi 6.0.0 build-3380124
    productVersion: 6.0.0

stctlvm:
  name: stCtlVM-0123456789 (2)
  ip: 10.104.48.24
  guestHostname:
  mgmtClusterIp: 10.104.32.32
  storageNetworkIp: 10.104.48.24
  moid: vm-885
  role: storage
  entityRef:
    type: virtmachine
    id: vm-885
    name: stCtlVM-0123456789 (2)
  version: 2.1.1
  passthrough: pci
  guestState: running
  mgmtNetworkIp: 10.104.32.28

name: cs-002a
ip:
  addr: 10.104.32.21
  stService: hypervisor
  vlanId: 0
  gateway: 10.104.32.1
  subnetMask: 255.255.240.0
  method: static
  moid: host-879
ipmiSettings:
  addr: 10.104.32.20
  stService: ipmi
  gateway: 10.104.32.1
  subnetMask: 255.255.240.0
  method: dhcp

ioVisor:
  about:
    serviceType: scvmclient
    instanceUuid:
      name: Springpath I/O Visor
locale:
serialNumber:
apiVersion:
modelNumber:
build:
  fullName: Springpath I/O Visor
  productVersion: 2.0.1a-20569
state: offline
bootTime: 0
entityRef:
  type: node
  id: 00000000-0000-0000-0000-002590d423b2
  name: cs-002a
vMotionIp:
  addr: 10.104.48.20
  vlanId: 311
  gateway: 10.104.32.1
  subnetMask: 255.255.240.0
  method: static
enclosureSerialNumber:
entityRef:
  type: node
  id: 00000000-0000-0000-0000-002590d423b2
  name: cs-002a
progress:
  ----------------------------------------
  completion: 100
  parent:
    type: node
    id: 00000000-0000-0000-0000-002590d423b2
    name: 10.104.48.24
  name: Disk Prepare /dev/sdb
  state: succeeded
  entity:
    type: disk
    id: 55cd2e404b6d511e:0000000000000000
    description: Ignored solid state drive /dev/sdb
  ----------------------------------------
  ...
  upgradeVersion: 2.0.1a-20569

C:
  state: online
  upgradeState: ok
  storfsIp:
    addr: 10.104.48.27
    stService: stctl
    vlanId: 311
    gateway: 10.104.48.1
    subnetMask: 255.255.240.0
    method: static
  pNode: ...

---

Cisco HyperFlex Data Platform CLI Guide, 2.5
stcli appliance Commands
stcli appliance list Command
stcli cleaner Commands

- stcli cleaner Commands, on page 18
- stcli cleaner get-schedule Command, on page 20
- stcli cleaner info Command, on page 21
- stcli cleaner report Command, on page 22
- stcli cleaner set-schedule Command, on page 23
- stcli cleaner start Command, on page 24
- stcli cleaner stats Command, on page 25
- stcli cleaner stop Command, on page 26
stcli cleaner Commands

Storage cluster cleaner operations for removing stale data and releasing storage.

```bash
stcli cleaner [-h] {info | start | stop | stats | report | get-schedule | set-schedule}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>get-schedule</td>
<td>One of set required.</td>
<td>Reports storage cluster cleaner high priority schedule.</td>
</tr>
<tr>
<td>info</td>
<td>One of set required.</td>
<td>Provides information about the specified storage cluster cleaner.</td>
</tr>
<tr>
<td>report</td>
<td>One of set required.</td>
<td>Reports storage cluster space reclaimed from cleaner.</td>
</tr>
<tr>
<td>set-schedule</td>
<td>One of set required.</td>
<td>Sets storage cluster cleaner high priority schedule.</td>
</tr>
<tr>
<td>start</td>
<td>One of set required.</td>
<td>Starts storage cluster cleaner.</td>
</tr>
<tr>
<td>stats</td>
<td>One of set required.</td>
<td>Collects storage cluster cleaner stats.</td>
</tr>
<tr>
<td>stop</td>
<td>One of set required.</td>
<td>Stops storage cluster cleaner.</td>
</tr>
</tbody>
</table>

### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the base `stcli cleaner` command with one or more positional arguments, or the optional `--help` option.

The stcli cleaner command typically runs in the background continuously. It goes into sleep mode when it is not needed and wakes when policy defined conditions are met. These conditions include:

- Number of flushes since the last cleaner run.
- Amount of data written since the last cleaner run.
- Amount of data deleted since the last cleaner run.
- Storage cluster space usage. See capacity status.

Priority levels are:

- Normal Priority. The cleaner generates minimum I/O.
- High Priority. The cleaner I/O is increased.

If your storage cluster is experiencing ENOSPC condition, the cleaner automatically runs at High Priority.

Priority is determined by:

- Time of Day (TOD) - Default is 6 AM UTC to 6 AM UTC, which disables the TOD-based High Priority cleaner. Use `stcli cleaner set-schedule`. 

Cisco HyperFlex Data Platform CLI Guide, 2.5
• Cluster Space Usage - If the storage cluster reaches an ENOSPC WARN condition, the cleaner increases its intensity by increasing the number of I/O to garbage collect. With an ENOSPC set condition, it runs at highest priority.

Note

Deleting data alone does not trigger cleaner to run and recover space. The properties and settings govern the cleaner.
**stcli cleaner get-schedule Command**

Returns the cleaner priority schedule state for all the nodes in the storage cluster.

```
stcli cleaner get-schedule [-h] [--id ID | --ip NAME]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command.</td>
</tr>
</tbody>
</table>

**Command Default**

Default applies to all nodes in cluster.

**Usage Guidelines**

Accompany the `stcli cleaner get-schedule` command with one of the optional arguments enclosed in [ ] to return the schedule for a specific node.

- policyActive:False - The cleaner is running at normal Priority.
- policyActive:True - The cleaner is running at high Priority.

```
# stcli cleaner get-schedule

{ 'type': 'node', 'id': '73ab5aa5-cf6e-ef4c-a566-9ec180c2cd9c', 'name': '10.65.10.192' }:
    policyActive: False
    endTime: 6
    startTime: 6
{ 'type': 'node', 'id': '9d772ab3-9992-ce44-8b8a-fd66a970f91b', 'name': '10.65.10.193' }:
    policyActive: False
    endTime: 6
    startTime: 6
{ 'type': 'node', 'id': '1dfc7bd3-0a8c-1547-b0fe-5f7425ca44fc', 'name': '10.65.10.194' }:
    policyActive: False
    endTime: 6
    startTime: 6
```
stcli cleaner info Command

Returns information about the storage cluster cleaner for the specified node.

**stcli cleaner info** [-h] [--id ID | --ip NAME]

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command.</td>
</tr>
</tbody>
</table>

Command Default

Default applies to all nodes in cluster.

Usage Guidelines

Accompany the **stcli cleaner info** command with one of the optional positional arguments enclosed in [ ] to run the cleaner on a specific node.

**ONLINE** - The cleaner (garbage collector) is running as expected in background.

**OFFLINE** - There is no garbage collection on the referenced node.

```bash
# stcli cleaner info

{ 'type': 'node', 'id': '73ab5aa5-cf6e-ef4c-a566-9ec180c2cd9c', 'name': '10.65.10.192' }: ONLINE

{ 'type': 'node', 'id': '9d772ab3-9992-ce44-8b8a-fd66a970f91b', 'name': '10.65.10.193' }: ONLINE

{ 'type': 'node', 'id': '1dfc7bd3-0a8c-1547-b0fe-5f7425ca44fc', 'name': '10.65.10.194' }: ONLINE
```
**stcli cleaner report Command**

Reports space reclaimed for storage cluster through cleaner.

```
stcli cleaner report [-h] [--id ID | --ip NAME] [--start]
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the \texttt{stcli cluster info} command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the \texttt{stcli cluster info} command.</td>
</tr>
<tr>
<td>--start</td>
<td>Optional.</td>
<td>Start the cleaner now.</td>
</tr>
</tbody>
</table>

**Syntax Description**

Command Default

Default applies to all nodes in the cluster.

**Usage Guidelines**

Accompany the \texttt{stcli cleaner report} command with one of the positional arguments enclosed in [ ] to return report on a specific node or start the cleaner now.

This command reports the deduplication and compression savings for each of the nodes in the storage cluster, and an aggregate summary of the deduplication and compression savings for the storage cluster. Relevant fields include:

```
{ 'type': 'cluster', 'id': '' }:
  dedupSavings: 0.0
  compressionSavings: 0.0
```

Compute only nodes show a \texttt{dedupSavings} of -1.0. This means that the node is not contributing to the managed storage.

This example shows:

```
# stcli cleaner report
{ 'type': 'node', 'id': '00000000-0000-0000-0000-002590d42388', 'name': '10.104.48.26' }:
  dedupSavings: 0.0
  totalNodeSavings: 0.0
  compressionSavings: 0.0
  totalUniqueAddressableBytes: 26.2K
  estimated: False
  totalUniqueBytes: 0
  totalAddressableBytes: 26.2K
{ 'type': 'cluster', 'id': '' }:
  dedupSavings: 0.0
  totalNodeSavings: 100.0
  compressionSavings: 100.0
  totalUniqueAddressableBytes: 78.0K
  estimated: False
  totalUniqueBytes: 0
  totalAddressableBytes: 78.0K
```
stcli cleaner set-schedule Command

Sets the cleaner schedule for all the nodes in the storage cluster.

```
stcli cleaner set-schedule [-h] [--id ID | --ip NAME] --starttime STARTTIME --endtime ENDTIME
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--endtime END_HOUR</td>
<td>Required.</td>
<td>Set running time end time. UTC (hours in 24 hour format).</td>
</tr>
<tr>
<td></td>
<td>--starttime BEGIN_HOUR</td>
<td>Required.</td>
<td>Sets running time start time. UTC (hours in 24 hour format).</td>
</tr>
<tr>
<td></td>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command.</td>
</tr>
</tbody>
</table>

**Command Default**
Default is 6 PM UTC to 6 AM UTC, in 24 hours clock that is from 21 to 6. Minutes are not included. The default disables the high priority TOD-based cleaning. Default applies to all nodes in the storage cluster.

**Usage Guidelines**
Use the stcli cleaner set-schedule to specify a non-default --starttime and --endtime for the cleaner schedule. These two parameters cannot both be zero.

Changes are applied immediately. Restarting the server is not needed.

This example command starts the cleaner at 8PM UTC and stops the cleaner at 5AM UTC.

```
# stcli cleaner set-schedule --starttime 20 --endtime 5
```
stcli cleaner start Command

Restarts the storage cluster cleaner.

stcli cleaner start [-h] [--id ID | --ip NAME]

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command.</td>
</tr>
</tbody>
</table>

Command Default

Default applies to all nodes in the storage cluster.

Usage Guidelines

Accompany the stcli cleaner start command with one of the optional positional arguments enclosed in [ ].

The cleaner starts automatically when the HX Data Platform storage cluster starts. The stcli cleaner start command is used only if the cleaner is manually stopped. When it is manually stopped, it can be manually restarted.
**stcli cleaner stats Command**

Collects cleaner stats.

```plaintext
stcli cleaner stats [-h] [--id ID | --ip NAME] [--start]
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td>--start</td>
<td>Optional.</td>
<td>Start cleaner now.</td>
</tr>
</tbody>
</table>

**Command Default**

If no node is specified, default applies to all nodes in the storage cluster.

**Usage Guidelines**

Accompany the `stcli cleaner stats` command with the optional positional arguments.

```plaintext
# stcli cleaner stats --ip 10.104.48.26
{
    'type': 'node', 'id': '00000000-0000-0000-0000-002590d42388', 'name': '10.104.48.26'},
```

```
curNumDeadKeys: 0
deletedNumSegments: 0
curNumSegments: 0
priorNumSegments: 0
ftVnodeNumber: 44
uniqueBytes: 0
uniqueVBABytes: 912
curNumLiveKeys: 0
priorNumDeadKeys: 0
totalAddressedVBABytes: 624
priorNumLiveKeys: 0
uniqueVBAs: 4
```

---

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# stcli cleaner stop Command

Stops the storage cluster cleaner processes.

```
stcli cleaner stop [-h] [--id ID | --ip NAME]
```

## Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command.</td>
</tr>
</tbody>
</table>

## Command Default

If no node is specified, default applies to all nodes in the storage cluster.

## Usage Guidelines

Accompany the `stcli cleaner stop` command with one of the optional positional arguments.

If the cleaner is manually stopped:

- The cleaner starts automatically after a reboot or restart of a storage cluster node.
- The cleaner can be manually restarted.
stcli cluster Commands

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- stcli cluster create Command, on page 30
- stcli cluster create-config Command, on page 32
- stcli cluster diag Command, on page 33
- stcli cluster disable-data-write-thru Command, on page 34
- stcli cluster enable-data-write-thru Command, on page 35
- stcli cluster get-cluster-access-policy Command, on page 36
- stcli cluster get-data-replication-factor Command, on page 37
- stcli cluster info Command, on page 38
- stcli cluster prepare Command, on page 41
- stcli cluster recreate Command, on page 43
- stcli cluster refresh Command, on page 44
- stcli cluster reregister Command, on page 45
- stcli cluster set-cluster-access-policy Command, on page 46
- stcli cluster shutdown Command, on page 47
- stcli cluster start Command, on page 48
- stcli cluster storage-summary Command, on page 49
- stcli cluster upgrade Command, on page 50
- stcli cluster upgrade-kernel Command, on page 52
- stcli cluster upgrade-status Command, on page 53
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# stcli cluster Commands

HX Data Platform storage cluster operations.

```
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>create</td>
<td>One of set required.</td>
<td>Creates a storage cluster with the name and the given nodes identified by IP addresses.</td>
</tr>
<tr>
<td></td>
<td>create-config</td>
<td>One of set required.</td>
<td>Creates a storage cluster from a configuration file.</td>
</tr>
<tr>
<td></td>
<td>diag</td>
<td>One of set required.</td>
<td>Provides diagnostic messages about the storage cluster.</td>
</tr>
<tr>
<td></td>
<td>disable-data-write-thru</td>
<td>One of set required.</td>
<td>Disables data write through on the storage cluster.</td>
</tr>
<tr>
<td></td>
<td>enable-data-write-thru</td>
<td>One of set required.</td>
<td>Enables data write through on the storage cluster.</td>
</tr>
<tr>
<td></td>
<td>get-cluster-access-policy</td>
<td>One of set required.</td>
<td>Gets storage cluster Cluster Access Policy.</td>
</tr>
<tr>
<td></td>
<td>get-data-replication-factor</td>
<td>One of set required.</td>
<td>Gets storage cluster Data Replication Factor.</td>
</tr>
<tr>
<td></td>
<td>info</td>
<td>One of set required.</td>
<td>Provides information about the currently configured storage cluster.</td>
</tr>
<tr>
<td></td>
<td>prepare</td>
<td>One of set required.</td>
<td>Prepares network configuration for storage cluster for the set of nodes identified by IP addresses.</td>
</tr>
<tr>
<td></td>
<td>recreate</td>
<td>One of set required.</td>
<td>Recreates an existing storage cluster with force option.</td>
</tr>
<tr>
<td></td>
<td>refresh</td>
<td>One of set required.</td>
<td>Refreshes storage cluster status.</td>
</tr>
<tr>
<td></td>
<td>reregister</td>
<td>One of set required.</td>
<td>Reregister an existing storage cluster from one vCenter to another.</td>
</tr>
<tr>
<td></td>
<td>set-cluster-access-policy</td>
<td>One of set required.</td>
<td>Sets storage cluster Cluster Access Policy.</td>
</tr>
<tr>
<td></td>
<td>shutdown</td>
<td>One of set required.</td>
<td>Shuts down storage cluster.</td>
</tr>
<tr>
<td>Option</td>
<td>Required or Optional</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>start</td>
<td>One of set required.</td>
<td>Starts the storage cluster</td>
<td></td>
</tr>
<tr>
<td>storage-summary</td>
<td>One of set required.</td>
<td>Provides storage summary about the currently configured storage cluster.</td>
<td></td>
</tr>
<tr>
<td>upgrade</td>
<td>One of set required.</td>
<td>Upgrades the storage cluster</td>
<td></td>
</tr>
<tr>
<td>upgrade-status</td>
<td>One of set required.</td>
<td>Provides transitional information about storage cluster upgrade status.</td>
<td></td>
</tr>
<tr>
<td>version</td>
<td>One of set required.</td>
<td>Provides information about storage cluster version.</td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli cluster` command with one of the positional arguments enclosed in `{ }`, or optional arguments enclosed in `[ ]`. 
stcli cluster create Command

Creates a storage cluster with the name and the given nodes identified by IP addresses.

```
stcli cluster create [-h] --name NAME --ip IP --mgmt-ip MGMTIP --vcenter-datacenter DATACENTER
|--vcenter-cluster VCENTERCLUSTER| |--vcenter-url VCENTERURL| |--vcenter-sso-url VCENTERSSOURL| --vcenter-user VCENTERUSER| |--vcenter-password VCENTERPASSWORD|
|--controller-root-password CONTROLLERPASSWORD|--node-ips NODEIPS [NODEIPS . . .]
|--cluster-access-policy {strict | lenient}| --data-replication-factor {2 | 3}
|--vdi-only-deployment| |--dryrun| |--esx-username ESXUSERNAME|--esx-password ESXPASSWORD|
```

Table 3: Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--ip IP</td>
<td>Required.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--mgmt-ip MGMTIP</td>
<td>Required.</td>
<td>IP of storage cluster management server.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of storage cluster.</td>
</tr>
<tr>
<td>--node-ips NODEIPS [NODEIPS . . .]</td>
<td>Required.</td>
<td>IPs of all converged nodes to add to storage cluster.</td>
</tr>
<tr>
<td>--vcenter-datacenter DATACENTER</td>
<td>Required.</td>
<td>Name of vCenter datacenter.</td>
</tr>
<tr>
<td>--vcenter-user VCENTERUSER</td>
<td>Required.</td>
<td>User name of vCenter administrator.</td>
</tr>
<tr>
<td>--cluster-access-policy {strict, lenient}</td>
<td>Optional. Default lenient</td>
<td>Cluster Access Policy (strict or lenient).</td>
</tr>
<tr>
<td>--controller-root-password CONTROLLERPASSWORD</td>
<td>Optional. Default Cisco123</td>
<td>Password of controller VM's root user. All nodes must have the same password.</td>
</tr>
<tr>
<td>--data-replication-factor {2, 3}</td>
<td>Optional. Default 3</td>
<td>Data Replication Factor (2 or 3). This can only be set during initial storage cluster creation.</td>
</tr>
<tr>
<td>--dryrun</td>
<td>Optional</td>
<td>Only validate input parameters.</td>
</tr>
<tr>
<td>--esx-password ESXPASSWORD</td>
<td>Optional</td>
<td>Password of ESX administrator.</td>
</tr>
<tr>
<td>--esx-username ESXUSERNAME</td>
<td>Optional</td>
<td>User name of ESX administrator.</td>
</tr>
<tr>
<td>-f, --force</td>
<td>Optional</td>
<td>Force create storage cluster. This ignores network configuration errors and creates the cluster with provided information.</td>
</tr>
<tr>
<td>--vcenter-cluster VCENTERCLUSTER</td>
<td>Optional</td>
<td>Name of vCenter cluster.</td>
</tr>
<tr>
<td>Option</td>
<td>Required or Optional</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>--vcenter-password</td>
<td>Optional</td>
<td>Password of vCenter administrator.</td>
</tr>
<tr>
<td>VCENTERPASSWORD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--vcenter-sso-url</td>
<td>Optional</td>
<td>URL of vCenter SSO server. This is inferred from --vcenter-url, if not specified.</td>
</tr>
<tr>
<td>VCENTERSSOURL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--vcenter-url</td>
<td>Optional</td>
<td>URL of vCenter, &lt;vcentername&gt;. Where &lt;vcentername&gt; can be FQDN or IP.</td>
</tr>
<tr>
<td>VCENTERURL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--vdi-only-deployment</td>
<td>Optional. Default is VSI.</td>
<td>Set Workload Type as VDI.</td>
</tr>
</tbody>
</table>

Command Default
None. See table for list of required and optional parameters.

Usage Guidelines
Accompany the stcli cluster create command with appropriate positional arguments. See the Cisco HyperFlex Systems Getting Started Guide for requirements.
stcli cluster create-config Command

Creates a storage cluster from a configuration file.

```
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>config</td>
<td>Required.</td>
<td>Configuration storage cluster file.</td>
</tr>
<tr>
<td>--controller-root-password CONTROLLERPASSWORD</td>
<td>Optional. Default Cisco123</td>
<td>Password of controller VM's root user. All nodes must have the same password.</td>
</tr>
<tr>
<td>--dryrun</td>
<td>Optional.</td>
<td>Only validate input parameters.</td>
</tr>
<tr>
<td>--esx-password ESXPASSWORD</td>
<td>Optional.</td>
<td>Password of ESX administrator.</td>
</tr>
<tr>
<td>--esx-username ESXUSERNAME</td>
<td>Optional.</td>
<td>User name of ESX administrator.</td>
</tr>
<tr>
<td>-f, --force</td>
<td>Optional.</td>
<td>Force create storage cluster. This ignores network configuration errors and creates the cluster with provided information.</td>
</tr>
<tr>
<td>--vcenter-password VCENTERPASSWORD</td>
<td>Optional.</td>
<td>Password of vCenter administrator.</td>
</tr>
<tr>
<td>--vcenter-user VCENTERUSER</td>
<td>Required.</td>
<td>User name of vCenter administrator.</td>
</tr>
</tbody>
</table>

Command Default

None. See table for list of required and optional parameters.

Usage Guidelines

Accompany the `stcli cluster create-config` command with the appropriate positional arguments.

See the Cisco HyperFlex Systems Getting Started Guide for requirements.
stcli cluster diag Command

Provides diagnostic messages about the cluster.

```
stcli cluster diag [-h] [--id ID | --ip NAME] [--type TYPE]
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--type TYPE</td>
<td>Optional.</td>
<td>Type of storage cluster node. Options are: converged or compute</td>
</tr>
</tbody>
</table>

### Command Default

If no node is specified, default applies to all nodes in the storage cluster.

### Usage Guidelines

Accompany the stcli cluster diag command with optionally, arguments enclosed in [ ].
**stcli cluster disable-data-write-thru Command**

Disable data write through on the storage cluster.

```
stcli cluster disable-data-write-thru [-h] [--id ID | --ip NAME]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command.</td>
</tr>
</tbody>
</table>

**Command Default**

If no node is specified, default applies to all nodes in the storage cluster.

**Usage Guidelines**

Accompany the `stcli cluster disable-data-write-thru` command with optionally positional arguments enclosed in `[]`. 
stcli cluster enable-data-write-thru Command

Enable data write through on the storage cluster.

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>Optional.</td>
<td>ID of storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command.</td>
</tr>
</tbody>
</table>

**Command Default**

If no node is specified, default applies to all nodes in the storage cluster.

**Usage Guidelines**

Accompany the stcli cluster enable-data-write-thru command with optionally positional arguments enclosed in [ ].
**stcli cluster get-cluster-access-policy Command**

Gets storage cluster Cluster Access Policy.

```
stcli cluster get-cluster-access-policy [-h]
```

**Command Default**

Return cluster setting.

**Usage Guidelines**

Enter the `stcli cluster get-cluster-access-policy` command.

```
# stcli cluster get-cluster-access-policy
lenient
```
stcli cluster get-data-replication-factor Command

Gets storage cluster Data Replication Factor.

**stcli cluster get-data-replication-factor [-h]**

<table>
<thead>
<tr>
<th>Command Default</th>
<th>Usage Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns cluster setting.</td>
<td>Run the stcli cluster get-data-replication-factor command.</td>
</tr>
</tbody>
</table>

```bash
# stcli cluster get-data-replication-factor
3
```
stcli cluster info Command

Displays detailed information about the storage cluster and each node in the storage cluster.

stcli cluster info [-h] --summary

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--summary</td>
<td>Optional</td>
<td>Return summary of information only.</td>
</tr>
</tbody>
</table>

Command Default

Returns full cluster information.

Usage Guidelines

Accompany the stcli cluster info command with the optional positional argument enclosed in [] to return a summary of the cluster information.

```bash
# stcli cluster info
```

```
about:
  serviceType: stMgr
  instanceUuid: 345258cf-12d4-4d71-ba9e-b91e47d15e49
  name: HyperFlex StorageController
  locale: English (United States)
  serialNumber: 
  apiVersion: 0.1
  modelNumber: X9DRT
  build: 2.0.1a-20569 (internal)
  displayVersion: 2.0(1a)
  fullName: HyperFlex StorageController 2.0.1a
  productVersion: 2.0.1a-20569

vCluster:
  state: online
  boottime: 0
  entityRef:
    type: virtcluster
    id: domain-c876
    name: cs002-cl
  virtNodes:
    ----------------------------------------
    type: virtnode
    id: 00000000-0000-0000-0000-002590d423a4
    ----------------------------------------
    type: virtnode
    id: 00000000-0000-0000-0000-002590d42388
    ----------------------------------------
    type: virtnode
    id: 00000000-0000-0000-0000-002590d423b2
  virtDatastores:
  upgradeState: ok
  upgradeVersion: 2.0.1a-20569

cluster:
  allFlash: False
  healthState: healthy
  capacity: 5.0T
  state: online
  compliance: 1
```
resiliencyInfo:
    nodeFailuresTolerable: 1
    state: 1
    messages:
        Storage cluster is healthy.
        cachingDeviceFailuresTolerable: 1
        persistentDeviceFailuresTolerable: 1

activeNodes: 3
uptime: 18:53:15
boottime: 1484703014
entityRef:
    type: cluster
    id: 345258cf12d44d71:456146e1b82ea1b7
downtime: 0:00:00
healingInfo:
    inProgress: False
freeCapacity: 5.0T
usedCapacity: 55.0G
config:
    clusterUuid: 345258cf12d44d71:456146e1b82ea1b7
    ip: 10.104.48.28
    dataReplicationFactor: 2
    clusterAccessPolicy: lenient
    size: 3

nodes:
    10.104.48.27
    10.104.48.26
    10.104.48.24

stNodes:
    cs-002a
    cs-002c
    cs-002d
addr: 10.104.32.32
method: dhcp
vCenterDatacenter: cs002-dc
ip:
  addr: 10.104.48.28
  method: dhcp
vCenterClusterName: cs002-cl
dataReplicationFactor: 2
workloadType: 2
vCenterClusterId: domain-c876
nodeIPSettings:
  cs-002d:
  cs-002c:
  cs-002a:
vCenterDatacenterId: datacenter-871
clusterAccessPolicy: lenient
vCenterURL: cs-vc6
dnsServers:
  size: 3
stcli cluster prepare Command

 Prepares network configuration for the storage cluster for the set of nodes identified by IP addresses.

**Note**
This is an advanced command. Do not use without TAC assistance.

```
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--config CONFIG</td>
<td>Required one from set.</td>
<td>Network configuration file.</td>
</tr>
<tr>
<td>--node-ips NODEIPS [NODEIPS . . .]</td>
<td>Required one from set.</td>
<td>IPs of storage cluster nodes to add to configuration. Separate multiple IPs with a space.</td>
</tr>
<tr>
<td>--dns DNS [DNS . . .]</td>
<td>Optional.</td>
<td>IPs of DNS server. Separate multiple IPS with a space.</td>
</tr>
<tr>
<td>--dryrun</td>
<td>Optional.</td>
<td>Only validate input parameters.</td>
</tr>
<tr>
<td>--fromaddress FROMADDRESS</td>
<td>Optional.</td>
<td>Address to send Auto Support emails from.</td>
</tr>
<tr>
<td>--gateway GATEWAY</td>
<td>Optional.</td>
<td>Default gateway.</td>
</tr>
<tr>
<td>--gateway1 GATEWAY1</td>
<td>Optional.</td>
<td>Default gateway1.</td>
</tr>
<tr>
<td>--hypervisor-ips HYPERVISORIPS [HYPERVISORIPS . . .]</td>
<td>Optional.</td>
<td>IPs of hypervisor to be applied. Separate multiple IPS with a space.</td>
</tr>
<tr>
<td>--ipmi-ips IPMIIPS [IPMIIPS . . .]</td>
<td>Optional.</td>
<td>IPs of IPMI to be applied. Separate multiple IPS with a space.</td>
</tr>
<tr>
<td>--netmask NETMASK</td>
<td>Optional.</td>
<td>Subnet mask.</td>
</tr>
<tr>
<td>--netmask1 NETMASK1</td>
<td>Optional.</td>
<td>Subnet mask1.</td>
</tr>
<tr>
<td>--ntp NTP [NTP . . .]</td>
<td>Optional.</td>
<td>IPs of NTP servers. Separate multiple server IDs with a space.</td>
</tr>
<tr>
<td>--smtp SMTPSERVER</td>
<td>Optional.</td>
<td>SMTP server.</td>
</tr>
<tr>
<td>--storefs-ips STORFSIPS [STORFSIPS . . .]</td>
<td>Optional.</td>
<td>IPs of storage cluster to be applied. Separate multiple IPS with a space.</td>
</tr>
<tr>
<td>Option</td>
<td>Required or Optional</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>--timezone TIMEZONE</td>
<td>Optional.</td>
<td>Timezone.</td>
</tr>
<tr>
<td>--vlan VLAN</td>
<td>Optional.</td>
<td>VLAN tag.</td>
</tr>
<tr>
<td>--vlan1 VLAN1</td>
<td>Optional.</td>
<td>VLAN tag1.</td>
</tr>
<tr>
<td>--vmotion-ips VMOTIONIPS</td>
<td>Optional.</td>
<td>IPs of vMotion to be applied. Separate multiple IPS with a space.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli cluster prepare` command with one of the positional arguments enclosed in `{ }` and optionally arguments enclosed in `[ ]`.

**Note**

Do not use this command without TAC assistance.
stcli cluster recreate Command

Recreates an existing storage cluster with force option.

```
stcli cluster recreate [-h] --vcenter-user VCENTERUSER [--vcenter-password VCENTERPASSWORD] [--controller-root-password CONTROLLERPASSWORD]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vcenter-user</td>
<td>Required.</td>
<td>User name of vCenter administrator.</td>
</tr>
<tr>
<td></td>
<td>VCENTERUSER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>--controller-root-password</td>
<td>Optional. Default Cisco123</td>
<td>Password of controller VM's root user. All nodes must have the same password.</td>
</tr>
<tr>
<td></td>
<td>CONTROLLERPASSWORD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>--vcenter-password</td>
<td>Optional.</td>
<td>Password of vCenter administrator.</td>
</tr>
<tr>
<td></td>
<td>VCENTERPASSWORD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Command Default

None.

Usage Guidelines

Accompany the stcli cluster recreate command with the positional argument and optionally arguments enclosed in [ ].
stcli cluster refresh Command

Refreshes storage cluster status.

stcli cluster refresh [-h]

**Command Default**

Returns refreshed cluster status.

**Usage Guidelines**

Run the `stcli cluster refresh` command to manually refresh the cluster status.
stcli cluster reregister Command

Shift registration of an existing storage cluster from one vCenter to another.

vCenter must be up and running to complete this command.

\[ stcli\ cluster\ reregister\ [-h]\ [\ [--vcenter-datacenter\ NEWDATACENTER]\ [\ [--vcenter-cluster\ NEWVCENTERCLUSTER]\ [\ --vcenter-url\ NEWVCENTERURL]\ [\ --vcenter-sso-url\ NEWVCENTERSSOURL]\ [\ --vcenter-user\ NEWVCENTERUSER]\ [--vcenter-password\ NEWVCENTERPASSWORD] \]

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vcenter-url NEWVCENTERURL</td>
<td>Required.</td>
<td>URL of the new vCenter, (&lt;vcentername&gt;). Where (&lt;vcentername&gt;) can be FQDN or IP.</td>
</tr>
<tr>
<td></td>
<td>--vcenter-user NEWVCENTERUSER</td>
<td>Required.</td>
<td>User name of the new vCenter administrator.</td>
</tr>
<tr>
<td></td>
<td>--vcenter-cluster NEWVCENTERCLUSTER</td>
<td>Required.</td>
<td>Name of the new vCenter cluster.</td>
</tr>
<tr>
<td></td>
<td>--vcenter-datacenter NEWDATACENTER</td>
<td>Required.</td>
<td>Name of the new vCenter datacenter.</td>
</tr>
<tr>
<td></td>
<td>--vcenter-password NEWVCENTERPASSWORD</td>
<td>Optional.</td>
<td>Password of the new vCenter administrator.</td>
</tr>
<tr>
<td></td>
<td>--vcenter-sso-url NEWVCENTERSSOURL</td>
<td>Optional.</td>
<td>URL of the new vCenter SSO server. This is inferred from (--vcenter-url), if not specified.</td>
</tr>
</tbody>
</table>

**Command Default**
None.

**Usage Guidelines**
Accompany the stcli cluster reregister command with the required arguments and optional arguments enclosed in [ ], as needed.

Use when moving a storage cluster from one vCenter server to another vCenter server. Task includes moving the storage cluster, registering the storage cluster with the new vCenter, and unregistering the storage cluster from the old vCenter. See the Cisco HyperFlex Data Platform Administration Guide.
stcli cluster set-cluster-access-policy Command

Sets storage cluster Cluster Access Policy.

stcli cluster set-cluster-access-policy [-h] --name {strict | lenient}

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name {strict, lenient}</td>
<td>Required.</td>
<td>Select the storage cluster Cluster Access Policy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strict - Applies policies to protect against data loss.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lenient - Applies policies to support longer storage cluster availability.</td>
</tr>
</tbody>
</table>

Command Default

No default using the stcli cluster set-cluster-access-policy command line. Using the HX Data Platform Installer, the default is lenient.

Usage Guidelines

Used to change the setting applied during storage cluster creation. Accompany the stcli cluster set-cluster-access-policy command with one of the positional arguments enclosed in { }.

This example shows setting the cluster Access Policy to strict. The command returns the applied setting.

# stcli cluster set-cluster-access-policy --name strict
strict
stcli cluster shutdown Command

Stops storage cluster operations and shuts it down.

```
stcli cluster shutdown [-h] [--formatchange] [--maintenance]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--formatchange</td>
<td>Optional.</td>
<td>Enable disk format change after cluster shutdown.</td>
</tr>
<tr>
<td></td>
<td>--maintenance</td>
<td>Optional.</td>
<td>Enter HX maintenance mode before cluster shutdown.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Run the `stcli cluster shutdown` command with optionally arguments enclosed in `[ ]`. 
stcli cluster start Command

Starts the storage cluster.

stcli cluster start [-h]

**Command Default**

None.

**Usage Guidelines**

The stcli cluster start command does not have any additional options.
stcli cluster storage-summary Command

Provides storage summary about the currently configured the storage cluster.

stcli cluster storage-summary [-h]

Command Default
No additional options available.

Usage Guidelines
Run stcli cluster storage-summary command to display the result.

```bash
# stcli cluster storage-summary
address: 10.104.48.28
name: cs002-cl
state: online
uptime: 0 days 19 hours 28 minutes 38 seconds
activeNodes: 3 of 3
compressionSavings: 83.2387622179
deduplicationSavings: 0.0
freeCapacity: 5.0T
healingInfo:
inProgress: False
resiliencyInfo:
  messages:
    Storage cluster is healthy.
  state: 1
  nodeFailuresTolerable: 1
  cachingDeviceFailuresTolerable: 1
  persistentDeviceFailuresTolerable: 1
spaceStatus: normal
totalCapacity: 5.0T
totalSavings: 83.2387622179
usedCapacity: 55.0G
clusterAccessPolicy: lenient
dataReplicationCompliance: compliant
dataReplicationFactor: 2
```
stcli cluster upgrade Command

Upgrades HX Data Platform software to the latest version.

```
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--checksum CHECKSUM</td>
<td>Optional.</td>
<td>Checksum of the installer.</td>
</tr>
<tr>
<td>--components COMPONENTS</td>
<td>Optional.</td>
<td>Comma separated upgrade components {hxdp, ucs-fw}</td>
</tr>
<tr>
<td>--dryrun</td>
<td>Optional.</td>
<td>Validate cluster upgrade can be possible.</td>
</tr>
<tr>
<td>--info</td>
<td>Optional.</td>
<td>Check for upgrade information.</td>
</tr>
<tr>
<td>--location LOCATION</td>
<td>Optional.</td>
<td>Location of the upgrade package. Best case use /tmp on the controller VM.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Download the upgrade package to your computer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Upload it (using <code>scp</code> or a similar tool) to the controller VM of the appliance on which you run the upgrade command.</td>
</tr>
<tr>
<td>--status</td>
<td>Optional.</td>
<td>Check for upgrade status.</td>
</tr>
<tr>
<td>--ucsmfw-vesion UCSFW-VERSION</td>
<td>Optional.</td>
<td>UCS Server Firmware target version.</td>
</tr>
<tr>
<td>--ucsm-host UCSMHOST</td>
<td>Optional.</td>
<td>Hostname or IP of UCS Manager server.</td>
</tr>
<tr>
<td>--ucsm-pwd UCSMPWD</td>
<td>Conditionally required.</td>
<td>Password of UCS Manager server. Required only if upgrading the UCS Manager component.</td>
</tr>
<tr>
<td>--ucsm-user UCSMUSER</td>
<td>Conditionally required.</td>
<td>User name of UCS Manager server. Required only if upgrading the UCS Manager component.</td>
</tr>
<tr>
<td>--vcenter-password VCENTERPASSWORD</td>
<td>Conditionally required.</td>
<td>Password of vCenter administrator. Required only if upgrading the vCenter component.</td>
</tr>
<tr>
<td>--vcenter-user VCENTERUSER</td>
<td>Conditionally required.</td>
<td>User name of vCenter administrator. Required only if upgrading the vCenter component.</td>
</tr>
</tbody>
</table>

### Command Default

Assumes settings of existing storage cluster if additional options are not provided.
Usage Guidelines

Accompany the `stcli cluster upgrade` command with one or more of the optional arguments enclosed in [ ].

See the Cisco HyperFlex Systems Upgrade Guide.
stcli cluster upgrade-kernel Command

This command is not supported for HyperFlex 2.5.

Note
stcli cluster upgrade-status Command

Displays the last known upgrade status of the HX Data Platform software. If the upgrade is in progress, transitional status is listed. Once the upgrade is complete, the status lists the most recent upgrade. This also lists if an upgrade is available or you are due for an upgrade.

**stcli cluster upgrade-status [-h]**

**Command Default**
No available options.

**Usage Guidelines**
Accompany the stcli cluster upgrade-status command.

This example shows:
```
# stcli cluster upgrade-status
Nodes up to date: [cs-002a(10.104.32.21), cs-002c(10.104.32.25), cs-002d(10.104.32.27)]
Cluster upgrade succeeded.
```
**stcli cluster version Command**

Displays the version number of each node in the storage cluster.

`stcli cluster version [-h]`

**Command Default**

No options available.

**Usage Guidelines**

Run the `stcli cluster version` command.

This example shows:

```
# stcli cluster version
Cluster version: 2.0(1a)
Node cs-002c version: 2.0(1a)
Node cs-002a version: 2.0(1a)
Node cs-002d version: 2.0(1a)
```
stcli dp (data protection) Commands

- stcli dp Commands, on page 56
- stcli dp cluster Commands, on page 57
- stcli dp group Commands, on page 62
- stcli dp peer Commands, on page 69
- stcli dp schedule Commands, on page 75
- stcli dp vm Commands, on page 76
**stcli dp Commands**

Data protection (DP) commands for replication and disaster recovery.

```
stcli dp [-h] (vm | group | cluster | peer | schedule)
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cluster</td>
<td>One of set required.</td>
<td>Unsupported in HyperFlex 2.5.</td>
</tr>
<tr>
<td></td>
<td>group</td>
<td>One of set required.</td>
<td>Data protection group snapshot operations.</td>
</tr>
<tr>
<td></td>
<td>peer</td>
<td>One of set required.</td>
<td>Site replication pairing operations.</td>
</tr>
<tr>
<td></td>
<td>schedule</td>
<td>One of set required.</td>
<td>Pause and resume replication, cluster wide for the sending cluster.</td>
</tr>
<tr>
<td></td>
<td>vm</td>
<td>One of set required.</td>
<td>VM data protection with replication snapshot operations.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli dp` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[]`. 
stcli dp cluster Commands

Data protection cluster operations.

Note

This command and its subcommands are not supported for HyperFlex 2.5. This includes:

stcli dp cluster [-h] {network}
stcli dp cluster network [-h] {bandwidth,configure,info,delete}
stcli dp cluster network bandwidth [-h] {update,info}
stcli dp cluster network bandwidth update [-h] --bw BW
stcli dp cluster network bandwidth info [-h]
stcli dp cluster network configure [-h] [--name NAME] --ip-ranges IP-RANGES [IP-RANGES ...]
--subnet SUBNET --gateway GATEWAY --vlan VLAN [--bw BW]
stcli dp cluster network info [-h]
stcli dp cluster network delete [-h] [--name NAME]

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>network</td>
<td>Required</td>
<td>Hyperflex cluster replication network operations</td>
</tr>
</tbody>
</table>

Command Default

None.

Usage Guidelines

Accompany the stcli dp cluster command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

stcli dp cluster network Commands

HyperFlex virtual machine cluster networking operations.
This command and its subcommands are not supported for HyperFlex 2.5. This includes:

```bash
stcli dp cluster network bandwidth [-h] {update,info}
stcli dp cluster network bandwidth update [-h] --bw BW
stcli dp cluster network bandwidth info [-h]
stcli dp cluster network configure [-h] [--name NAME] --ip-ranges IP-RANGES [IP-RANGES ...]
                                       --subnet SUBNET --gateway GATEWAY --vlan VLAN [--bw BW]
stcli dp cluster network info [-h]
stcli dp cluster network delete [-h] [--name NAME]
```

---

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bandwidth</td>
<td>Required one of set.</td>
<td>Set bandwidth for the replication network on this cluster.</td>
</tr>
<tr>
<td>configure</td>
<td>Required one of set.</td>
<td>Specify replication network parameters for this cluster.</td>
</tr>
<tr>
<td>delete</td>
<td>Required one of set.</td>
<td>Delete the replication network on this cluster.</td>
</tr>
<tr>
<td>info</td>
<td>Required one of set.</td>
<td>List configuration information about the replication network on this cluster.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp cluster network` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

---

**stcli dp cluster network bandwidth Command**

HyperFlex cluster replication network bandwidth operations.

---

This command and its subcommands are not supported for HyperFlex 2.5. This includes:

```bash
stcli dp cluster network bandwidth [-h] {update,info}
stcli dp cluster network bandwidth update [-h] --bw BW
stcli dp cluster network bandwidth info [-h]
```

---

```bash
stcli dp cluster network bandwidth [-h] {update,info}
```
### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>info</td>
<td>Required one of set.</td>
<td>List cluster replication network bandwidth setting.</td>
</tr>
<tr>
<td>update</td>
<td>Required one of set.</td>
<td>Change cluster replication network bandwidth setting.</td>
</tr>
</tbody>
</table>

### Command Default
None.

### Usage Guidelines
Accompany the `stcli dp cluster network bandwidth info` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

### stcli dp cluster network bandwidth info Command

List the HyperFlex cluster replication network bandwidth setting.

**Note**
This command is not supported for HyperFlex 2.5.

### stcli dp cluster network bandwidth info [-h]

Command Default
None.

Usage Guidelines
Accompany the `stcli dp cluster network bandwidth info` command with optionally, the arguments enclosed in `[ ]`.

### stcli dp cluster network bandwidth update Command

HyperFlex cluster replication network bandwidth setting.

**Note**
This command is not supported for HyperFlex 2.5.

### stcli dp cluster network bandwidth update [-h] --bw BW

#### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--bw BW</td>
<td>Required.</td>
<td>Specify the cluster replication network bandwidth value.</td>
</tr>
</tbody>
</table>

Command Default
None.

Usage Guidelines
Accompany the `stcli dp cluster network bandwidth update` command with the required arguments with leading two dashes (`--`) or optionally, the arguments enclosed in `[ ]`.

### stcli dp cluster network configure Command

HyperFlex data protection cluster networking configuration operations.
This command is not supported for HyperFlex 2.5.

```
stcli dp cluster network configure [-h] [--name NAME] --ip-ranges IP-RANGES [IP-RANGES ...] --subnet SUBNET --gateway GATEWAY --vlan VLAN [--bw BW]
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name NAME</td>
<td>Optional.</td>
<td>Referenc name assigned to the replication network.</td>
</tr>
<tr>
<td>--ip-ranges IP-RANGES</td>
<td>Required.</td>
<td>IP ranges to assigned to the cluster nodes, plus one, for configuring the replication network.</td>
</tr>
<tr>
<td>[IP-RANGES ...]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--subnet SUBNET</td>
<td>Required.</td>
<td>Subnet for the replication network.</td>
</tr>
<tr>
<td>--gateway GATEWAY</td>
<td>Required.</td>
<td>Gateway for the replication network.</td>
</tr>
<tr>
<td>--vlan VLAN</td>
<td>Required.</td>
<td>VLAN ID assigned to the replication network.</td>
</tr>
<tr>
<td>--bw BW</td>
<td>Optional.</td>
<td>Aggregate bandwidth for use by the replication network. In kbps</td>
</tr>
</tbody>
</table>

### Command Default

None.

### Usage Guidelines

Accompany the `stcli dp cluster network configure` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

---

### stcli dp cluster network delete Command

Delete HyperFlex data protection cluster network.

This command is not supported for HyperFlex 2.5.

```
stcli dp cluster network delete [-h] [--name NAME]
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name NAME</td>
<td>Optional.</td>
<td>Name of the cluster replication network to delete.</td>
</tr>
</tbody>
</table>

### Command Default

Default is the cluster replication network for the currently logged in cluster.

### Usage Guidelines

Accompany the `stcli dp cluster network delete` command optionally, with the arguments enclosed in [ ].

---

### stcli dp cluster network info Command

HyperFlex data protection cluster networking configuration information.
### stcli dp cluster network info Command

**Note**
This command is not supported for HyperFlex 2.5.

**stcli dp cluster network info [-h]**

**Command Default**
None.

**Usage Guidelines**
Accompany the `stcli dp cluster network info` command optionally, with the arguments enclosed in `[]`. 
stcli dp group Commands

HX Data Platform disaster recovery and native replication commands applied to virtual machine protection groups and not to individual virtual machines.

stcli dp group [-h] {add | list | delete | vm | snapshot | schedule | halt}

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>add</td>
<td>One of set required.</td>
<td>Add data protection group.</td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>List of data protection groups.</td>
</tr>
<tr>
<td>delete</td>
<td>One of set required.</td>
<td>Delete data protection group.</td>
</tr>
<tr>
<td>vm</td>
<td>One of set required.</td>
<td>VM tasks in a data protection group.</td>
</tr>
<tr>
<td>snapshot</td>
<td>One of set required.</td>
<td>Snapshot operations in a data protection group.</td>
</tr>
<tr>
<td>schedule</td>
<td>One of set required.</td>
<td>Schedule replication for a data protection group.</td>
</tr>
<tr>
<td>halt</td>
<td>One of set required.</td>
<td>Halt replication for a data protection group.</td>
</tr>
</tbody>
</table>

Command Default
None. One option from the set is required.

Usage Guidelines
Accompany the stcli dp group command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

stcli dp group add Command

Add data protection group.

stcli dp group add [-h] --groupname GROUPNAME

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--groupname GROUPNAME</td>
<td>Required.</td>
<td>Name of the protection group.</td>
</tr>
</tbody>
</table>

Command Default
None.

Usage Guidelines
Accompany the stcli dp group add command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

stcli dp group delete Command

Delete the specified data protection group.
stcli dp group delete [-h] --groupid GROUPID

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>ID of the protection group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To delete a protection group, all virtual machines must be removed.</td>
</tr>
</tbody>
</table>

Command Default  None.

Usage Guidelines Accompany the stcli dp group delete command with the required arguments with leading two dashes (--), or optionally, the arguments enclosed in [ ].

stcli dp group halt Command

To stop, usually temporarily, the replication processes including taking replication snapshots of virtual machines in protection groups and transmitting the replication snapshots to the target HX Storage Cluster.

stcli dp group halt [-h] --groupid GROUPID [--force]

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>Halt replication of the virtual machines in the protection group with the listed groupid.</td>
</tr>
<tr>
<td></td>
<td>--force</td>
<td>Optional.</td>
<td>Halt replication without validating the arguments.</td>
</tr>
</tbody>
</table>

Command Default  None.

Usage Guidelines Accompany the stcli dp group halt command with the required arguments with leading two dashes (--), or optionally, the arguments enclosed in [ ].

stcli dp group list Command

List data protection group configuration and schedule.

stcli dp group list [-h] [--groupname GROUPNAME] [--groupid GROUPID]

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--groupname GROUPNAME</td>
<td>Optional.</td>
<td>List the protection group with given group name.</td>
</tr>
<tr>
<td></td>
<td>--groupid GROUPID</td>
<td>Optional.</td>
<td>List the protection group with given ID.</td>
</tr>
</tbody>
</table>

Command Default  List all data protection groups.
**Usage Guidelines**

Accompany the `stcli dp group list` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

This example shows a list of data protection groups.

```bash
# stcli dp group list

clusterEr:
  type: cluster
  id: 21038104951568023:6930626691413900957
  name: source17-2.5.1a

vmGroupState: active

vmGroupEr:
  type: dp_vmgroup
  id: 4de5d40f-82d6-40f6-9425-e4942b50b9d9
  name: group1

members:
  ----------------------------------------
  idtype: 2
  type: dp_vm
  id: 423f38fd-9754-a25c-0d60-1ddacacaac60
  ----------------------------------------
  idtype: 2
  type: dp_vm
  id: 423fd732-4841-3a0a-8d75-6c7bdcf8de67

schedules:
  replicationSchedule:
    targetClusterEr:
      type: cluster
      id: 12791911299002762643:7329250794747596775
      name: target17-2.5.1a
    enabled: True
    mode: 2
    startTime: 07/19/17_20:24
    intervalInMinutes: 15

**stcli dp group vm Commands**

Hyperflex data protection group VM operations.

`stcli dp group vm [-h] {add | list | delete}`

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>add</td>
<td>One of set required.</td>
<td>Add VM to data protection group.</td>
</tr>
<tr>
<td></td>
<td>list</td>
<td>One of set required.</td>
<td>List VMs in data protection group.</td>
</tr>
<tr>
<td></td>
<td>delete</td>
<td>One of set required.</td>
<td>Delete VM from data protection group.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli dp group vm` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`. 
**stcli dp group vm add Command**

Add a VM to a data protection group.

```
stcli dp group vm add [-h] --groupid GROUPID --vmid VMID [--vmidtype {VCMOID,VMBIOSUID}]```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>ID of the data protection group where the VMs reside.</td>
</tr>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>ID of the virtual machine to add to the protection group.</td>
</tr>
<tr>
<td></td>
<td>--vmidtype</td>
<td>Optional.</td>
<td>ID type for the virtual machine to add to the protection group.</td>
</tr>
<tr>
<td></td>
<td>{VCMOID,VMBIOSUID}</td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp group vm add` command with optionally, the arguments enclosed in [ ].

**stcli dp group vm delete Command**

Delete a protection group VM.

```
stcli dp group vm delete [-h] --groupid GROUPID --vmid VMID [--vmidtype {VCMOID,VMBIOSUID}]```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>ID of the data protection group where the VMs reside.</td>
</tr>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>ID of the virtual machine to be removed from the protection group.</td>
</tr>
<tr>
<td></td>
<td>--vmidtype</td>
<td>Optional.</td>
<td>ID type of the virtual machine to be removed from the protection group.</td>
</tr>
<tr>
<td></td>
<td>{VCMOID,VMBIOSUID}</td>
<td></td>
<td>Remove a VM from data protection group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp group vm add` command with optionally, the arguments enclosed in [ ].

**stcli dp group vm list Command**

List the VMs included in the data protection group.

```
stcli dp group vm list [-h] --groupid GROUPID```

---

Cisco HyperFlex Data Platform CLI Guide, 2.5
stcli dp group schedule Commands

Hyperflex protection group schedule operations.

stcli dp group schedule [-h] {set | get}

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>ID of the data protection group where the VMs reside.</td>
</tr>
</tbody>
</table>

Command Default

None.

Usage Guidelines

Accompany the `stcli dp group vm list` command with optionally, the arguments enclosed in [ ].

stcli dp group schedule get Command

List the replication schedule information for a data protection group.

stcli dp group schedule get [-h] --groupid GROUPID [--outgoing OUTGOING]

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>ID of the data protection group where the VMs reside.</td>
</tr>
<tr>
<td>--outgoing OUTGOING</td>
<td>Optional.</td>
<td>ID of the outgoing/target cluster where data is replicated to.</td>
</tr>
</tbody>
</table>

Command Default

Outgoing cluster is the paired remote cluster.

Usage Guidelines

Accompany the `stcli dp group schedule get` command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].
**stcli dp group schedule set Command**

Set the replication schedule for a data protection group.

```
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--groupid GROUPID</td>
<td>Required</td>
<td>ID of the data protection group where the VMs reside.</td>
</tr>
<tr>
<td></td>
<td>--replication-interval REPINTERVALINMINS</td>
<td>Required</td>
<td>Replication interval (frequency) in minutes. This sets how often the VMs are replicated to the target cluster.</td>
</tr>
<tr>
<td></td>
<td>--start-time REPSTARTTIME</td>
<td>Optional</td>
<td>Replication start time in format <code>mm/dd/yy_HH_MM</code>. Specifies when the first replication begins.</td>
</tr>
<tr>
<td></td>
<td>--quiesce-using-tools</td>
<td>Optional</td>
<td>Whether to use VMware Tools to quiesce the VMs before replication. VMware Tools must be installed in all the VMs in the replication group.</td>
</tr>
<tr>
<td></td>
<td>--outgoing OUTGOING</td>
<td>Optional</td>
<td>ID of the outgoing/target cluster where data is replicated to.</td>
</tr>
</tbody>
</table>

**Command Default**

Start time is immediately upon execution of the command. Quiesce is not set. Outgoing cluster is the paired remote cluster.

**Usage Guidelines**

Accompany the `stcli dp group schedule set` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

**stcli dp group snapshot Commands**

HX Data Platform data protection group snapshot operations.

```
stcli dp group snapshot [-h] {create}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>create</td>
<td>Required</td>
<td>Creates a data protection snapshot of all the VMs in the given protection group.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

---

This command is not supported.
Usage Guidelines
Accompany the `stcli dp group snapshot` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

**stcli dp group snapshot create Command**

Creates data protection replication snapshots of the VMs in the given group.

*Note*
This command is not supported.

`stcli dp group snapshot create [-h] --groupid GROUPID --snapshot SNAPSHOT [--desc DESC] [--quiesce]`

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--groupid GROUPID</td>
<td>Required.</td>
<td>ID of the data protection group where the VMs reside.</td>
</tr>
<tr>
<td>--snapshot SNAPSHOT</td>
<td>Required.</td>
<td>Name of the snapshot.</td>
</tr>
<tr>
<td>--desc DESC</td>
<td>Optional.</td>
<td>Description of the snapshot.</td>
</tr>
<tr>
<td>--quiesce</td>
<td>Optional.</td>
<td>Whether to use VMware Tools to quiesce the VMs before replication. VMware Tools must be installed in all the VMs in the replication group.</td>
</tr>
</tbody>
</table>

**Command Default**
Description is blank. Quiesce is not set.

**Usage Guidelines**
Accompany the `stcli dp group snapshot create` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`. 
stcli dp peer Commands

Hyperflex data protection operations on the remote (peer) cluster in a replication pair.

```
stcli dp peer [-h] {get | add | list | query | edit | datastore | delete | forget | schedule}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>get</td>
<td>One of set required.</td>
<td>Get peer cluster details.</td>
</tr>
<tr>
<td>add</td>
<td>One of set required.</td>
<td>Add a pair using given inputs.</td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>Show all pairs.</td>
</tr>
<tr>
<td>query</td>
<td>One of set required.</td>
<td>Query a pair to get pair-details.</td>
</tr>
<tr>
<td>edit</td>
<td>One of set required.</td>
<td>Edit pair description for peer management IP.</td>
</tr>
<tr>
<td>datastore</td>
<td>One of set required.</td>
<td>Edit mapped datastores in existing pair.</td>
</tr>
<tr>
<td>delete</td>
<td>One of set required.</td>
<td>Delete a replication pair.</td>
</tr>
<tr>
<td>forget</td>
<td>One of set required.</td>
<td>Forget peer using given inputs.</td>
</tr>
<tr>
<td>schedule</td>
<td>One of set required.</td>
<td>Peer schedule operations.</td>
</tr>
</tbody>
</table>

### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the `stcli dp peer` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

### stcli dp peer add Command

Add a replication pair using given inputs.

```
stcli dp peer add [-h] --name NAME --description DESCRIPTION --mgmtIp MGMTIP --username USERNAME [---password PASSWORD]
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of cluster-pair.</td>
</tr>
<tr>
<td>--description</td>
<td>Required.</td>
<td>Description of cluster-pair.</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--mgmtIp MGMTIP</td>
<td>Required.</td>
<td>Peer cluster's management IP.</td>
</tr>
<tr>
<td>--username USERNAME</td>
<td>Required.</td>
<td>Peer cluster's user name.</td>
</tr>
</tbody>
</table>
---

**Option** | **Required or Optional** | **Description**
---|---|---
--password PASSWORD | Prompted. | Peer cluster's user password. Recommended: Do not enter passwords in the command string. Respond to the prompt.

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp peer get` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in `[ ]`.

---

**stcli dp peer datastore Commands**

Edit mapped datastores in existing replication pair.

```
stcli dp peer datastore [-h] {edit | editstatus}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>edit</td>
<td>One of set required.</td>
<td>Edit pair description or peer management IP.</td>
</tr>
<tr>
<td>editstatus</td>
<td>One of set required.</td>
<td>Status of datastore edit job.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli dp peer datastore` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

---

**stcli dp peer datastore edit Command**

Edit mapped datastores in existing replication pair.

```
stcli dp peer datastore edit [-h] --name NAME --datastore DATASTORE
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of cluster-pair.</td>
</tr>
<tr>
<td>--datastore DATASTORE</td>
<td>Required.</td>
<td>Datastore pairs with operations. Format is: local_ds:remote_ds:OPERATION Operation choices are: ADD, DELETE.</td>
</tr>
</tbody>
</table>

**Command Default**

None.
Usage Guidelines
Accompany the `stcli dp peer datastore edit` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

This example shows changing the datastores associated with the replication pair.

```bash
# stcli dp peer datastore edit
<local ds 1>:<peer ds 1>:ADD,<local ds 2>:<peer ds 2>:DELETE,..
```

**stcli dp datastore editstatus Command**

View the status of the datastore mapping change for the replication pair.

`stcli dp peer datastore editstatus [-h] [--jobid JOBID]`

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--jobid JOBID</td>
<td>Optional.</td>
<td>Job ID for a datastore change task.</td>
</tr>
</tbody>
</table>

Command Default
Job ID default is all displays status of all datastore edits.

Usage Guidelines
Accompany the `stcli dp peer datastore editstatus` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

This example shows changing the datastores associated with the replication pair.

```bash
# stcli dp peer datastore editstatus
[<jobid>,<jobid>...,<jobid>]
```

**stcli dp peer delete Command**

Delete the peer from the replication pair.

`stcli dp peer delete [-h] --name NAME --username USERNAME [--password PASSWORD] [--mgmtIp MGMTIP]`

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of cluster replication pair.</td>
</tr>
<tr>
<td></td>
<td>--username USERNAME</td>
<td>Required.</td>
<td>Peer cluster's user name.</td>
</tr>
<tr>
<td></td>
<td>--mgmtIp MGMTIP</td>
<td>Optional.</td>
<td>Peer cluster's management IP.</td>
</tr>
</tbody>
</table>

Command Default
Management IP is assumed to be the currently associated peer.
Usage Guidelines

Accompany the `stcli dp peer delete` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

**stcli dp peer edit Command**

Edit pair description or peer mgmtIp

**Note**

This command is not supported.

`stcli dp peer edit [-h] --name NAME [--description DESCRIPTION] [--mgmtIp MGMTIP] --username USERNAME [--password PASSWORD]`

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of cluster-pair</td>
</tr>
<tr>
<td>--description DESCRIPTION</td>
<td>Required.</td>
<td>Description of cluster-pair</td>
</tr>
<tr>
<td>--mgmtIp MGMTIP</td>
<td>Required.</td>
<td>Peer cluster's management Ip</td>
</tr>
<tr>
<td>--username USERNAME</td>
<td>Required.</td>
<td>Peer cluster's user name</td>
</tr>
<tr>
<td>--password PASSWORD</td>
<td>Prompted.</td>
<td>Peer cluster's user password. Do not enter passwords in the command string. Respond to prompt.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp peer edit` command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

**stcli dp peer forget Command**

This removes the pairing between peers: the source and target clusters. Freeing up each cluster to be paired with a different cluster.

`stcli dp peer forget [-h] --name NAME`

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--name NAME</td>
<td>Required.</td>
<td>Remove the pairing between peers, (the source and target clusters), for the cluster pair with the listed name.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp peer forget` command the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].
**stcli dp peer get Command**

List the peer cluster details.

```
stcli dp peer get [-h] --mgmtIp MGMTIP --username USERNAME [--password PASSWORD]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--mgmtIp MGMTIP</td>
<td>Required.</td>
<td>Peer cluster's management IP.</td>
</tr>
<tr>
<td></td>
<td>--username USERNAME</td>
<td>Required.</td>
<td>Peer cluster's user name.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp peer get` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

**stcli dp peer list Command**

Show all replication pairs.

```
stcli dp peer list [-h]
```

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp peer list` command with optionally, the arguments enclosed in [ ].

**stcli dp peer query Command**

Query a replication pair for pair details.

```
stcli dp peer query [-h] --name NAME
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of cluster replication pair.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp peer query` command with optionally, the arguments enclosed in [ ].

**stcli dp peer schedule Commands**

Hyperflex remote (peer) cluster schedule operations.
This command and its subcommands are not supported.

stcli dp peer schedule pause Command

Pause replication. Stop sending data replication bits from the remote cluster.

stcli dp peer schedule pause [-h]

Command Default
None.

Usage Guidelines
Accompany the stcli dp peer schedule pause command with optionally, the arguments enclosed in [ ].

stcli dp peer schedule resume Command

Resume replication. Resume sending data replication bits from the remote cluster.

stcli dp peer schedule resume [-h]

Command Default
None.

Usage Guidelines
Accompany the stcli dp peer schedule resume command with optionally, the arguments enclosed in [ ].

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pause</td>
<td>One of set required.</td>
<td>Pause replication. Stop sending data replication bits from the remote cluster.</td>
</tr>
<tr>
<td>resume</td>
<td>One of set required.</td>
<td>Resume replication. Resume sending data replication bits from the remote cluster.</td>
</tr>
</tbody>
</table>

stcli dp (data protection) Commands

Note
This command is not supported.
stcli dp schedule Commands

Data protection schedule operations.

```
stcli dp schedule [-h] {pause | resume}
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pause</td>
<td>One of set required.</td>
<td>Pause replication. Stop sending replication snapshot bits to the remote cluster.</td>
</tr>
<tr>
<td>resume</td>
<td>One of set required.</td>
<td>Resume replication. Resume sending replication snapshot bits to the remote cluster.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the `stcli dp schedule` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

**stcli dp schedule pause Command**

Pause replication. Stop sending replication snapshot bits to the remote cluster.

```
stcli dp schedule pause [-h]
```

Command Default

None.

Usage Guidelines

Accompany the `stcli dp schedule pause` command optionally, the arguments enclosed in `[ ]`.

**stcli dp peer schedule resume Command**

Resume replication. Resume sending data replication bits from the remote cluster.

```
stcli dp peer schedule resume [-h]
```

Command Default

None.

Usage Guidelines

Accompany the `stcli dp peer schedule resume` command with optionally, the arguments enclosed in `[ ]`.  

Note

This command is not supported.
stcli dp vm Commands

HX Data Platform disaster recovery and native replication commands applied to virtual machines individually and not through the protection group.

stcli dp vm [-h] {snapshot | restore | clone | add | list | info | delete | schedule | recover | halt}

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>add</td>
<td>One of set required.</td>
<td>Add data protection to a virtual machine.</td>
</tr>
<tr>
<td>clone</td>
<td>One of set required.</td>
<td>Unsupported for HyperFlex 2.5. Make a replication ReadyClone of a virtual machine.</td>
</tr>
<tr>
<td>delete</td>
<td>One of set required.</td>
<td>Delete data protection from a virtual machine.</td>
</tr>
<tr>
<td>halt</td>
<td>One of set required.</td>
<td>Halt replication for a virtual machine.</td>
</tr>
<tr>
<td>info</td>
<td>One of set required.</td>
<td>Display information about virtual machines under data protection.</td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>List virtual machines under data protection.</td>
</tr>
<tr>
<td>recover</td>
<td>One of set required.</td>
<td>Recovery operations for a virtual machine.</td>
</tr>
<tr>
<td>restore</td>
<td>One of set required.</td>
<td>Unsupported for HyperFlex 2.5. Restore operations for a virtual machine.</td>
</tr>
<tr>
<td>schedule</td>
<td>One of set required.</td>
<td>Schedule data protection for a virtual machine.</td>
</tr>
<tr>
<td>snapshot</td>
<td>One of set required.</td>
<td>Make a replication snapshot of a virtual machine.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the stcli dp vm command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

stcli dp vm add Command

Add data protection on a virtual machine.

stcli dp vm add [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}]

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
</tbody>
</table>
Option | Required or Optional | Description
---|---|---
--vmidtype  
[VCMOID,VMBIOSUUID] | Optional. | Run the command on the virtual machine that matches the specified ID type.  
The VCMOID option is not supported.

**Command Default**
None.

**Usage Guidelines**
Accompany the stcli dp vm add command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

**stcli dp vm clone Commands**

HyperFlex virtual machine clone operations.

---

**Note**
This command and its subcommands are not supported.

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>now</td>
<td>Required one of set.</td>
<td>Clone and restore as the given virtual machine.</td>
</tr>
<tr>
<td>list</td>
<td>Required one of set.</td>
<td>List clones available on this cluster.</td>
</tr>
</tbody>
</table>

**Command Default**
None.

**Usage Guidelines**
Accompany the stcli dp vm clone command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

**stcli dp vm clone list Command**

List clones available on this cluster.

---

**Note**
This command is not supported.

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
</tbody>
</table>
**stcli dp vm clone now Command**

Clone and restore as the given virtual machine.

---

**Note**

This command is not supported.

```
stcli dp vm clone now [-h] (--snapid SNAPSHOTID | --latest {LATEST,LATESTSNAPSHOT}) --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] --newname NEWVMNAME [--rpid RESOURCEPOOLID | --rpname RESOURCEPOOLNAME] [--fdid FOLDERID | --fdname FOLDERNAME]
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--snapid SNAPSHOTID</td>
<td>Required one of set.</td>
<td>Snapshot ID of the VM to clone from.</td>
</tr>
<tr>
<td>--latest [LATEST,LATESTSNAPSHOT]</td>
<td>Required one of set.</td>
<td>Latest snapshot of the VM to clone from. Options: LATEST or LATESTSNAPSHOT for the snapshot ID.</td>
</tr>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype {VCMOID,VMBIOSUUID}</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type. The VCMOID option is not supported.</td>
</tr>
<tr>
<td>--newname NEWVMNAME</td>
<td>Required.</td>
<td>Assign the new VM clone this name.</td>
</tr>
<tr>
<td>--resourcepool-id RESOURCEPOOL-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed ID. Set either resource pool or folder, not both.</td>
</tr>
<tr>
<td>--resourcepool-name RESOURCEPOOL-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed name. Set either resource pool or folder, not both.</td>
</tr>
</tbody>
</table>
Option | Required or Optional | Description
---|---|---
--folder-id FOLDER-ID | One of optional pair. | Place the recovered VM(s) in the folder with the listed ID.

Set either resource pool or folder, not both.

--folder-name FOLDER-NAME | One of optional pair. | Place the recovered VM(s) in the folder with the listed name.

Set either resource pool or folder, not both.

If using resource pool, rpid or folder, fdid, only use one of rpid or fdid, do not specify both. After the clone completes, then you can add the other grouping, folder or resource pool.

Command Default

None.

Usage Guidelines

Accompany the `stcli dp vm clone now` command with the required arguments with leading two dashes (``), one of the positional arguments enclosed in `{ }`, or optionally, the arguments enclosed in `[ ]`.

**stcli dp vm delete Command**

Delete data protection from a virtual machine.

```
stcli dp vm delete [-h] --vmid VMID [--vmidtype {VCMOID, VMBIOSUUID}]
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype [VCMOID, VMBIOSUUID]</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type. The VCMOID option is not supported.</td>
</tr>
</tbody>
</table>

Command Default

None.

Usage Guidelines

Accompany the `stcli dp vm delete` command with the required arguments with leading two dashes (``) or optionally, the arguments enclosed in `[ ]`.

**stcli dp vm halt Command**

In the event of a disaster on a cluster, or when you are testing the recovery process, you must halt attempts by the failed cluster to resume replication activity. This prevents the compromised cluster from replicating or introducing potentially corrupted data into the HX Storage Cluster.

```
stcli dp vm halt [-h] --vmid VMID [--force]
```
### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--force</td>
<td>Optional.</td>
<td>Do not validate the arguments and perform recovery.</td>
</tr>
</tbody>
</table>

#### Command Default

Without the --force option, the command validates all the arguments before proceeding.

#### Usage Guidelines

Accompany the `stcli dp vm halt` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

## stcli dp vm info Command

List the data protection virtual machine information.

```
stcli dp vm info [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}]```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td></td>
<td>--vmidtype</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td></td>
<td>{VCMOID,VMBIOSUUID}</td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
</tbody>
</table>

#### Command Default

None.

#### Usage Guidelines

Accompany the `stcli dp vm info` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

## stcli dp vm list Command

List virtual machines with data protection. Display includes replication schedule.

```
stcli dp vm list [-h] [--vmname VMNAME] [--vmid VMID] [--brief]```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmname VMNAME</td>
<td>Optional.</td>
<td>Lists the protected virtual machine that matches the specified name.</td>
</tr>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Optional.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td></td>
<td>--brief</td>
<td>Optional.</td>
<td>Display brief summary only.</td>
</tr>
</tbody>
</table>
**Command Default**

Default lists all protected virtual machines.

**Usage Guidelines**

Accompany the `stcli dp vm list` command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

This example shows a summary list of protected virtual machines.

```
# stcli dp vm list --brief

vmInfo:
----------------------------------------
  name: dslvm-2
  uuid: 423f11c4-20c9-893b-0dd8-2a0ad59ad634
----------------------------------------
  name: dslvm-1
  uuid: 423f1d85-990a-4e06-ebef-a215c0ec4cf8
```

---

**stcli dp vm recover Commands**

To recover individual virtual machines from the recovery HX Storage Cluster. Where the recovery HX Storage Cluster is the target cluster for the replication pair protecting the virtual machines.

```
stcli dp vm recover [-h] {test | failover | status}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>test</td>
<td>One of set required.</td>
<td>Test recovery for the given VM.</td>
</tr>
<tr>
<td>failover</td>
<td>One of set required.</td>
<td>Failover recovery for the given VM.</td>
</tr>
<tr>
<td>status</td>
<td>One of set required.</td>
<td>Recovery status for the given job or all jobs.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli dp vm recover` command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

**stcli dp vm recover failover Command**

To failover the individual virtual machines from the recovery HX Storage Cluster. Where the recovery HX Storage Cluster is the target cluster for the replication pair protecting the virtual machines.

This command outputs the JOB-ID that is used for monitoring by the status command.

```
```
Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--resourcepool-id RESOURSEPOOL-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed ID.</td>
</tr>
<tr>
<td>--resourcepool-name RESOURSEPOOL-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed name.</td>
</tr>
<tr>
<td>--folder-id FOLDER-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) in the folder with the listed ID.</td>
</tr>
<tr>
<td>--folder-name FOLDER-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) in the folder with the listed name.</td>
</tr>
<tr>
<td>--network-mapping NETWORKMAPPING</td>
<td>Optional.</td>
<td>Map the source to destination network. Format source_network:destination_network. For example: --network-mapping &quot;source_network1:destination_network1&quot;,&quot;source_network2:destination_network2&quot;</td>
</tr>
<tr>
<td>--poweron</td>
<td>Optional.</td>
<td>Power on the VM after recovery</td>
</tr>
<tr>
<td>--force</td>
<td>Optional.</td>
<td>Do not validate the arguments and perform recovery</td>
</tr>
</tbody>
</table>

Command Default

Location defaults to command execution path.

Usage Guidelines

Accompany the stcli dp vm recover failover command with the required arguments with leading two dashes (--) or optionally, the arguments enclosed in [ ].

stcli dp vm recover status Command

To list the status of all recovery jobs that are currently running. If a JOB-ID (or multiple JOB-IDs) are specified, then the recovery status of only those jobs are displayed.

stcli dp vm recover status [-h] [--id JOBID [JOBID ...] | --list]

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id JOBID [JOBID ...]</td>
<td>Optional.</td>
<td>Display the recovery status of the jobs with the listed job IDs.</td>
</tr>
<tr>
<td>--list</td>
<td>Optional.</td>
<td>List all ongoing recovery jobs.</td>
</tr>
</tbody>
</table>

Command Default

Default lists all open recovery jobs.

Usage Guidelines

Accompany the stcli dp vm recover status command with optionally, the arguments enclosed in [ ].
**stcli dp vm recover test Command**

To test recovery of individual virtual machines from the recovery HX Storage Cluster. Where the recovery HX Storage Cluster is the target cluster for the replication pair protecting the virtual machines.

This command outputs the JOB-ID that is used for monitoring by the status command.


<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Lists the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td></td>
<td>--resourcepool-id RESOURCEPOOL-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed ID.</td>
</tr>
<tr>
<td></td>
<td>--resourcepool-name RESOURCEPOOL-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed name.</td>
</tr>
<tr>
<td></td>
<td>--folder-id FOLDER-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) in the folder with the listed ID.</td>
</tr>
<tr>
<td></td>
<td>--folder-name FOLDER-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) in the folder with the listed name.</td>
</tr>
<tr>
<td></td>
<td>--test-network TESTNETWORK</td>
<td>Optional.</td>
<td>Test network to be used for test recovery. All source networks are assigned to this network after recovery.</td>
</tr>
<tr>
<td></td>
<td>--poweron</td>
<td>Optional.</td>
<td>Power on the VM after recovery.</td>
</tr>
<tr>
<td></td>
<td>--force</td>
<td>Optional.</td>
<td>Perform recovery without validating the arguments.</td>
</tr>
<tr>
<td></td>
<td>--newname NEWNAME</td>
<td>Optional.</td>
<td>New name for the test recovered VM.</td>
</tr>
</tbody>
</table>

**Command Default**

By default test recovery recovers the VM with the same name in the HxTestRecovery folder.

**Usage Guidelines**

Accompany the `stcli dp vm recover test` command with the required arguments with leading two dashes (--), or optionally, the arguments enclosed in [ ].

**stcli dp vm restore Commands**

Data protection virtual machine restore operations.
This command and its subcommands are not supported.

```
stcli dp vm restore [-h] {now,list}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>now</td>
<td>One of set required.</td>
<td>Restore the given virtual machine.</td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>List restores available on this cluster.</td>
</tr>
</tbody>
</table>

### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the `stcli dp vm restore` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[]`.

---

**Note**

This command is not supported.

```
stcli dp vm restore list [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] [--restore-id RESTORE-ID]
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype {VCMOID,VMBIOSUUID}</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
<tr>
<td>--restore-id RESTORE-ID</td>
<td>Optional.</td>
<td>Restore the ID of the VM.</td>
</tr>
</tbody>
</table>

### Command Default

Default does not restore the ID for the restored VM.

### Usage Guidelines

Accompany the `stcli dp vm restore list` command with the required arguments with leading two dashes (`--`), one of the positional arguments enclosed in `{ }`, or optionally, the arguments enclosed in `[]`.

---

**Note**

This command is not supported.

```
stcli dp vm restore now Command
```

Restore the given virtual machine.
This command is not supported.

stcli dp vm restore now [-h] [--snapid SNAPSHOTID | --latest {LATEST,LATESTSNAPSHOT}] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] [--rpid RESOURCEPOOLID | --rpname RESOURCEPOOLNAME] [--fdid FOLDERID | --fname FOLDERNAME]

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--snapid SNAPSHOTID</td>
<td>Optional.</td>
<td>Snapshot ID of the VM to restore from.</td>
</tr>
<tr>
<td>--latest</td>
<td>Optional.</td>
<td>Latest snapshot of the VM to restore from. Options are: LATEST or LATESTSNAPSHOT for the snapshot ID.</td>
</tr>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
<tr>
<td>--rpid RESOURCEPOOL-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed ID.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set either resource pool or folder, not both.</td>
</tr>
<tr>
<td>--rpname RESOURCEPOOL-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) on the resource pool with the listed name.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set either resource pool or folder, not both.</td>
</tr>
<tr>
<td>--fdid FOLDER-ID</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) in the folder with the listed ID.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set either resource pool or folder, not both.</td>
</tr>
<tr>
<td>--fname FOLDER-NAME</td>
<td>One of optional pair.</td>
<td>Place the recovered VM(s) in the folder with the listed name.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set either resource pool or folder, not both.</td>
</tr>
</tbody>
</table>

If using resource pool, rpid or folder, fdid, only use one of rpid or fdid, do not specify both. After the clone completes, then you can add the other grouping, folder or resource pool.

Command Default
None.

Usage Guidelines
Accompany the stcli dp vm restore now command with the required arguments with leading two dashes (--), one of the positional arguments enclosed in { }, or optionally, the arguments enclosed in [ ].
**stcli dp vm schedule Commands**

HyperFlex data protection VM schedule operations.

```
stcli dp vm schedule [-h] {set,get}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--set</td>
<td>Required one of set.</td>
<td>Set VM schedule operations.</td>
</tr>
<tr>
<td></td>
<td>--get</td>
<td>Required one of set.</td>
<td>Get VM schedule.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp vm schedule` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

**stcli dp vm schedule get Command**

Get the VM replication schedule information.

```
stcli dp vm schedule get [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}]```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td></td>
<td>--vmidtype</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td></td>
<td>{VCMOID,VMBIOSUUID}</td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp vm schedule get` command with the required arguments with leading two dashes (`--`), or optionally, the arguments enclosed in `[ ]`.

**stcli dp vm schedule set Command**

Set the VM replication schedule.

```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
</tbody>
</table>
### Option Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmidtype [VCMOID,VMBIOSUUID]</td>
<td>Optional</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
<tr>
<td>--replication-interval REPINTERVALINMINS</td>
<td>Required.</td>
<td>Replication interval in minutes</td>
</tr>
<tr>
<td>--start-time REPSTARTTIME</td>
<td>Optional</td>
<td>Description of the replication snapshot.</td>
</tr>
<tr>
<td>--quiesce-using-tools</td>
<td>Optional</td>
<td>Whether to use VMware Tools to quiesce the VMs before replication. VMware Tools must be installed in all the VMs in the replication group.</td>
</tr>
<tr>
<td>--outgoing OUTGOING</td>
<td>Optional</td>
<td>ID of the outgoing/target cluster where data is replicated to.</td>
</tr>
</tbody>
</table>

### Command Default

None.

### Usage Guidelines

Accompany the `stcli dp vm snapshot create` command with the required arguments with leading two dashes (--), or optionally, the arguments enclosed in [ ].

### stcli dp vm snapshot Commands

Data protection virtual machine replication snapshot operations.

This command and its subcommands are not supported.

```
stcli dp vm snapshot [-h] {create | replicate | list | info | delete}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>create</td>
<td>One of set required.</td>
<td>Creates a replication snapshot for a virtual machine.</td>
</tr>
<tr>
<td>replicate</td>
<td>One of set required.</td>
<td>Replicates a replication snapshot for a virtual machine.</td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>List replication snapshots available on this cluster.</td>
</tr>
<tr>
<td>info</td>
<td>One of set required.</td>
<td>Show info for a replication snapshot.</td>
</tr>
<tr>
<td>delete</td>
<td>One of set required.</td>
<td>Delete the specified replication snapshot.</td>
</tr>
</tbody>
</table>

### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the `stcli dp vm snapshot` command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].
**stcli dp vm snapshot create Command**

Creates a replication snapshot for a virtual machine.

This command is not supported.

```
stcli dp vm snapshot create [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] --snapname SNAPSHOTNAME [--desc DESCRIPTION] [--quiesce]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td></td>
<td>--vmidtype {VCMOID,VMBIOSUUID}</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
<tr>
<td></td>
<td>--snapname SNAPSHOTNAME</td>
<td>Required.</td>
<td>Name of the replication snapshot.</td>
</tr>
<tr>
<td></td>
<td>--desc DESCRIPTION</td>
<td>Optional.</td>
<td>Description of the replication snapshot.</td>
</tr>
<tr>
<td></td>
<td>--quiesce</td>
<td>Optional.</td>
<td>Whether to use VMware Tools to quiesce the VMs before replication. VMware Tools must be installed in all the VMs in the replication group.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli dp vm snapshot create` command with the required arguments with leading two dashes (`--`), one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

**stcli dp vm snapshot delete Command**

Delete the specified replication snapshot.

This command is not supported.

```
stcli dp vm snapshot delete [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] --snapshot-id SNAPSHOTID
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
</tbody>
</table>
stcli dp (data protection) Commands

stcli dp vm snapshot info Command

Show info for a replication snapshot.

Note
This command is not supported.

stcli dp vm snapshot info [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] --snapshot-id SNAPSHOTID

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required.</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype [VCMOID,VMBIOSUUID]</td>
<td>Optional.</td>
<td>Run the command on the virtual machine that matches the specified ID type. The VCMOID option is not supported.</td>
</tr>
<tr>
<td>--snapshot-id SNAPSHOTID</td>
<td>Required.</td>
<td>Snapshot ID of the VM to replicate.</td>
</tr>
</tbody>
</table>

Command Default
None.

Usage Guidelines
Accompany the stcli dp vm snapshot info command with the required arguments with leading two dashes (--), one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

stcli dp vm snapshot list Command

List replication snapshots available on this cluster.

Note
This command is not supported.
**stcli dp vm snapshot list Command**

```
stcli dp vm snapshot list [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}]```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype</td>
<td>Optional</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td>{VCMOID,VMBIOSUUID}</td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
</tbody>
</table>

**Command Default**
None.

**Usage Guidelines**
Accompany the `stcli dp vm snapshot list` command with the required arguments with leading two dashes (`--`), one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

---

**stcli dp vm snapshot replicate Command**

Replicates a replication snapshot of a virtual machine to a remote cluster.

```
stcli dp vm snapshot replicate [-h] --vmid VMID [--vmidtype {VCMOID,VMBIOSUUID}] --snapshot-id SNAPSHOT-ID --outgoing OUTGOING```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--vmid VMID</td>
<td>Required</td>
<td>Run command on the virtual machine that matches the specified BIOS UUID.</td>
</tr>
<tr>
<td>--vmidtype</td>
<td>Optional</td>
<td>Run the command on the virtual machine that matches the specified ID type.</td>
</tr>
<tr>
<td>{VCMOID,VMBIOSUUID}</td>
<td></td>
<td>The VCMOID option is not supported.</td>
</tr>
<tr>
<td>--snapshot-id</td>
<td>Required</td>
<td>Snapshot ID of the VM to replicate.</td>
</tr>
<tr>
<td>SNAPSHOT-ID</td>
<td></td>
<td>ID of the outgoing/target cluster where data is replicated to.</td>
</tr>
<tr>
<td>--outgoing OUTGOING</td>
<td>Required</td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**
None.

**Usage Guidelines**
Accompany the `stcli dp vm snapshot replicate` command with the required arguments with leading two dashes (`--`), one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`. 
stcli datastore Commands

- stcli datastore Commands, on page 92
- stcli datastore create Command, on page 93
- stcli datastore delete Command, on page 94
- stcli datastore info Command, on page 95
- stcli datastore list Command, on page 96
- stcli datastore mount Command, on page 97
- stcli datastore unmount Command, on page 98
- stcli datastore update Command, on page 99
stcli datastore Commands

Operations for storage cluster datastores.

stcli datastore [-h] {list | create | info | update | delete | mount | unmount}

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>create</td>
<td>One of set required.</td>
<td>Creates a storage cluster datastore with the name and size.</td>
<td></td>
</tr>
<tr>
<td>delete</td>
<td>One of set required.</td>
<td>Deletes a storage cluster datastore.</td>
<td></td>
</tr>
<tr>
<td>info</td>
<td>One of set required.</td>
<td>Provides information about the specified storage cluster datastore.</td>
<td></td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>Lists the storage cluster datastores.</td>
<td></td>
</tr>
<tr>
<td>mount</td>
<td>One of set required.</td>
<td>Mounts a storage cluster datastore.</td>
<td></td>
</tr>
<tr>
<td>unmount</td>
<td>One of set required.</td>
<td>Unmounts a storage cluster datastore.</td>
<td></td>
</tr>
<tr>
<td>update</td>
<td>One of set required.</td>
<td>Updates a storage cluster datastore's name and/or size.</td>
<td></td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the stcli datastore command with one of the positional arguments enclosed in { } or optional arguments enclosed in [ ].
### stcli datastore create Command

Creates a storage cluster datastore with the provided name and size.

```
stcli datastore create [-h] --name NAME --size SIZE [--unit {kb | mb | gb | tb}] [--blocksize {8k,4k}]
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--blocksize</td>
<td>Optional.</td>
<td>Block size for stored data. Default 8K for all datastores. In VDI workloads, 4K is default.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of storage cluster datastore.</td>
</tr>
<tr>
<td>--size SIZE</td>
<td>Required.</td>
<td>Size of storage cluster datastore.</td>
</tr>
<tr>
<td>--unit {kb,mb,gb,tb}</td>
<td>Optional.</td>
<td>Unit for size. Default GB.</td>
</tr>
</tbody>
</table>

**Command Default**

ID or NAME must be specified. Default unit of measure is GB. Default blocksize is 8K.

**Usage Guidelines**

Accompany the `stcli datastore create` command with both of the required parameters, and the optional parameter, if needed.
stcli datastore delete Command

Deletes a storage cluster datastore.

stcli datastore delete [-h] {--id ID | --name NAME}

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of datastore.</td>
</tr>
<tr>
<td></td>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of the datastore.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the `stcli datastore delete` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in [ ].
stcli datastore info Command

Provides information about the specified storage cluster datastore.

```
stcli datastore info [-h] {--id ID | --name NAME}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of datastore.</td>
</tr>
<tr>
<td></td>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of datastore.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the `stcli datastore info` command with one of the positional arguments enclosed in { } or optional arguments enclosed in [ ].
stcli datastore list Command

Lists the storage cluster datastores.

stcli datastore list [-h]

Command Default
No available options.

Usage Guidelines
Run the stcli datastore list command or add the optional argument enclosed in [ ].
**stcli datastore mount Command**

Mounts a storage cluster datastore.

```
stcli datastore [-h] {--id ID | --name NAME}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of datastore.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of datastore.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli datastore mount` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
## stcli datastore unmount Command

Unmounts a storage cluster datastore.

```
stcli datastore unmount [-h] {--id ID | --name NAME}
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of datastore.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of datastore.</td>
</tr>
</tbody>
</table>

### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the `stcli datastore unmount` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
stcli datastore update Command

Updates a storage cluster datastore's name and/or size.

```
stcli datastore update [-h] [--id ID | --name NAME] [--newname NEWNAME] [--size SIZE] [--unit {kb | mb | gb | tb}]
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of datastore.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of datastore.</td>
</tr>
<tr>
<td>--newname NAME</td>
<td>Optional.</td>
<td>New name of storage cluster datastore.</td>
</tr>
<tr>
<td>--size SIZE</td>
<td>Optional.</td>
<td>New size of storage cluster datastore.</td>
</tr>
<tr>
<td>--unit {kb,mb,gb,tb}</td>
<td>Optional.</td>
<td>Unit for size. Default GB.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required. Default unit is GB.

Usage Guidelines

Accompany the `stcli datastore update` command with the required parameters, and any of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
stcli disk Commands

- stcli disk Commands, on page 102
- stcli disk add Command, on page 103
- stcli disk list Command, on page 104
# stcli disk Commands

Operations on the storage cluster disks.

`stcli disk [-h] {list | add}`

## Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>add</td>
<td>One of set required.</td>
<td>Adds discovered new disks and specified blacklisted disks to the storage cluster.</td>
</tr>
<tr>
<td>list</td>
<td>One of set required.</td>
<td>Lists the storage cluster disks in the node.</td>
</tr>
</tbody>
</table>

## Command Default

None. One option from the set is required.

## Usage Guidelines

Accompany the `stcli disk` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 

---

Cisco HyperFlex Data Platform CLI Guide, 2.5
stcli disk add Command

Adds discovered new disks and specified blacklisted disks to the storage cluster.

stcli disk add [-h] {--id ID | --name NAME} --blacklisted-disk-ids [DISKIDS [DISKIDS . . .]]

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of storage cluster node.</td>
</tr>
<tr>
<td></td>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of storage cluster node.</td>
</tr>
<tr>
<td></td>
<td>--blacklisted-disk-ids</td>
<td>Required.</td>
<td>Blacklisted disks to add to storage cluster. Separate multiple IDs with a space.</td>
</tr>
<tr>
<td></td>
<td>[DISKIDS [DISKIDS . . .]]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the stcli disk add command with one of the positional arguments enclosed in { } plus required --blacklisted-disk-ids option, or optional arguments enclosed in [ ].
stcli disk list Command

Lists the storage cluster disks in the node.

`stcli disk list [-h] {-id ID | --name NAME} [--rescan]`

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of storage cluster node. The ID is listed in the <code>stcli cluster info</code> command. <em>local</em> defaults to the local node.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>One of set required.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command. <em>localhost</em> defaults to the local node.</td>
</tr>
<tr>
<td>--rescan</td>
<td>Optional.</td>
<td>Rescan disks.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required. Defaults for the options are: *local* for ID and *localhost* for NAME.

**Usage Guidelines**

Accompany the `stcli disk list` command with one of the positional arguments or optional arguments enclosed in [].

**Note**

Sometimes when a disk is removed, it continues to be listed in cluster summary information. To refresh this, restart the HX cluster.
stcli node Commands

- stcli node Commands, on page 106
- stcli node add Command, on page 107
- stcli node discover Command, on page 108
- stcli node disk Command, on page 110
- stcli node disks Command, on page 111
- stcli node identify Command, on page 112
- stcli node info Command, on page 113
- stcli node list Command, on page 114
- stcli node maintenanceMode Command, on page 117
- stcli node remove Command, on page 118
**stcli node Commands**

Operations performed on the storage cluster nodes.

----

**Note**

Do not perform conflicting actions simultaneously. For example, do not run node add and node remove at the same time: `stcli node add --node-ips NODEIPS remove --id=1 ID1`

----

```
stcli nodes [-h] {discover | list | info | identify | disks | disk | add | remove | maintenanceMode}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>add</td>
<td>One of set required.</td>
<td>Adds the set of nodes to the storage cluster.</td>
</tr>
<tr>
<td></td>
<td>discover</td>
<td>One of set required.</td>
<td>Lists the storage cluster nodes discoverable on the same subnet as this node.</td>
</tr>
<tr>
<td></td>
<td>disk</td>
<td>One of set required.</td>
<td>Locate a physical disk in the node.</td>
</tr>
<tr>
<td></td>
<td>disks</td>
<td>One of set required.</td>
<td>Provides information about the physical disks of the storage cluster node.</td>
</tr>
<tr>
<td></td>
<td>identify</td>
<td>One of set required.</td>
<td>Turns on/off the node beacon to identify a node.</td>
</tr>
<tr>
<td></td>
<td>info</td>
<td>One of set required.</td>
<td>Provides information about the specified storage cluster node.</td>
</tr>
<tr>
<td></td>
<td>list</td>
<td>One of set required.</td>
<td>Lists the storage cluster nodes in the storage cluster.</td>
</tr>
<tr>
<td></td>
<td>maintenanceMode</td>
<td>One of set required.</td>
<td>Enter or exit maintenance mode.</td>
</tr>
<tr>
<td></td>
<td>remove</td>
<td>One of set required.</td>
<td>Removes the node from the storage cluster.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli node` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
stcli node add Command

Adds the specified nodes to the storage cluster.

**Note**

Only use the `stcli node add` command when the storage cluster is online and healthy.

Do not perform conflicting actions simultaneously. For example, do not run node add and node remove at the same time:

```
stcli node add --node-ips NODEIPS remove --id-1 ID1
```

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>--node-ips NODEIPS [NODEIPS ...]</code></td>
<td>Required.</td>
<td>IP addresses of nodes to add to the storage cluster.</td>
</tr>
<tr>
<td><code>--controller-root-password CONTROLLERPASSWORD</code></td>
<td>Optional.</td>
<td>Password of the added controller’s root user.</td>
</tr>
<tr>
<td><code>--dryrun</code></td>
<td>Optional.</td>
<td>Only validate input parameters.</td>
</tr>
<tr>
<td><code>--esx-username ESCUSERNAME</code></td>
<td>Optional.</td>
<td>User name of ESX administrator.</td>
</tr>
<tr>
<td><code>--esx-password ESXPASSWORD</code></td>
<td>Optional.</td>
<td>Password of ESX administrator.</td>
</tr>
</tbody>
</table>

Command Default

None. Node identification is required.

Usage Guidelines

Accompany the `stcli node add` command with the `--node-ips` and optionally, the arguments enclosed in `[]`.

**Note**

When you add a new node to a storage cluster, if the storage cluster is in an Out of Space condition, the system automatically rebalances the storage cluster. Otherwise, it schedules a nightly rebalance.
**stcli node discover Command**

Lists the storage cluster nodes discoverable on the same subnet as this node.

**stcli node discover [-h]**

**Command Default**

None. No additional parameters.

**Usage Guidelines**

Run the `stcli node discover` command on the storage cluster.

```bash
# stcli node discover
state:
storfsIp:
  addr:
stService:
gateway:
subnetMask:
  method:
host:
state:
about:
  serviceType:
  instanceUuid:
  name:
  locale:
  serialNumber:
  apiVersion:
  modelNumber:
  build:
  fullName:
  productVersion:
stctlvm:
  name:
ip:
guestHostname:
storageNetworkIp:
moid:
role:
entityRef:
  type:
  id: v
  name:
version:
passthrough:
guestState:
mgmtNetworkIp:
name:
ip:
  addr:
stService:
  vlanId:
gateway:
subnetMask:
  method:
moid:
ipmiSettings:
```
addr:
stService:
gateway:
subnetMask:
method:

ioVisor:
about:
  serviceType:
  instanceUuid:
  name:
  locale:
  serialNumber:
  apiVersion:
  modelNumber:
  build:
    fullName:
    productVersion:
    state:
  bootTime:
entityRef:
  type:
  id:
  name:
vMotionIp:
  addr:
  vlanId:
  gateway:
  subnetMask:
  method:
  enclosureSerialNumber:

entityRef:
  type:
  id:
  name:
  progress:
stcli node disk Command

Locate a physical disk in the node.

```
stcli node disk [-h] {--id ID | --ip NAME} [--lighton | lightoff]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>One of set required.</td>
<td>A unique ID number for the storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>One of set required.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command under the stNode field NAME.</td>
</tr>
<tr>
<td></td>
<td>--lighton</td>
<td>Optional.</td>
<td>Turn the ID light on the disk on.</td>
</tr>
<tr>
<td></td>
<td>--lightoff</td>
<td>Optional.</td>
<td>Turn the ID light on the disk off.</td>
</tr>
</tbody>
</table>

Command Default: None. One option from the set is required.

Usage Guidelines: Accompany the stcli node disk command with one of the positional arguments enclosed in { }, and optionally arguments enclosed in [ ].
**stcli node disks Command**

Provides information about the physical disks of the storage cluster node.

```
stcli node disks [-h] {--id ID | --ip NAME}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>One of set required.</td>
<td>A unique ID number for the storage cluster node. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>One of set required.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command under the <code>stNode field NAME</code>.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli node disks` command with one of the positional arguments enclosed in `{ }`. 

Cisco HyperFlex Data Platform CLI Guide, 2.5
**stcli node identify Command**

Turns on/off the node beacon to identify a node.

```bash
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--ipmiIp IPMIIP</td>
<td>Required.</td>
<td>IPmi IP address</td>
</tr>
<tr>
<td>--interval INTERVAL</td>
<td>Optional.</td>
<td>Number of seconds to turn the beacon on. If not specified, turns the beacon off</td>
</tr>
<tr>
<td>--user USER</td>
<td>Optional.</td>
<td>The IPMI Admin user name.</td>
</tr>
<tr>
<td>--password PASSWORD</td>
<td>Optional, Prompted</td>
<td>The IPMI Admin user name.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli node identify` command with the required arguments with leading two dashes (``), and optionally, one or more of the positional arguments enclosed enclosed in [ ].

See the Cisco HyperFlex Systems Upgrade Guide.
## stcli node info Command

Provides information about the specified storage cluster node.

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id ID</td>
<td>One of set required</td>
<td>A unique ID number for the storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--ip NAME</td>
<td>One of set required</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command under the stNode field NAME. The --ip option is currently not supported.</td>
</tr>
<tr>
<td>--summary</td>
<td>Optional</td>
<td>Display summary only.</td>
</tr>
</tbody>
</table>

### Command Default

None. One option from the set is required.

### Usage Guidelines

Accompany the stcli node info command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
stcli node list Command

Lists the nodes in the storage cluster.

stcli node list [-h] --summary

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--summary</td>
<td>Optional.</td>
<td>Display summary only.</td>
</tr>
</tbody>
</table>

Command Default

None.

Usage Guidelines

Run the stcli node list command and optionally include arguments enclosed in [ ].

```bash
# stcli node list
```

upgradeState:
state:
storfsIp:
addr:
stService:
vlanId:
gateway:
subnetMask:
method:
pNode:
about:
 serviceType:
 instanceUuid:
 name:
 locale:
 serialNumber:
 apiVersion:
 modelNumber:
 build:
 displayVersion:
 fullName:
 productVersion:

retired:
 compression:
ip:
dedup:
nsPrimary:
dataWriteThruEnabled:
state:
bootTime:
master:
entityRef:
type:
id:
name:
version:
lastModifiedTime:
name:
stcli node Commands

host:
  state:
  about:
    serviceType:
    instanceUuid:
    name:
    locale:
    serialNumber:
    apiVersion:
    modelNumber:
    build:
    fullName:
    productVersion:

stctlvm:
  name:
  storageClusterIp:
  ip:
  guestHostname:
  mgmtClusterIp:
  storageNetworkIp:
  moid:
  role:
  entityRef:
    type:
    id:
    name:
    version:
    passthrough:
  guestState:
  mgmtNetworkIp:

name:
  ip:
    addr:
    stService:
    vlanId:
    gateway:
    subnetMask:
    method:

moid:
ipmiSettings:
    addr:
    stService:
    gateway:
    subnetMask:
    method:

ioVisor:
  about:
    serviceType:
    instanceUuid:
    name:
    locale:
    serialNumber:
    apiVersion:
    modelNumber:
    build:
    fullName:
    productVersion:
  state:

bootTime:
  entityRef:
  type:
**stcli node maintenanceMode Command**

Puts the ESX server in the storage cluster into HX maintenance mode.

```
stcli node maintenanceMode [-h] [--id ID | ip NAME] --mode MODE {enter | exit} [--timeout TIMEOUT]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--id ID</td>
<td>One of set required.</td>
<td>A unique ID number for the storage cluster node. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td></td>
<td>--ip NAME</td>
<td>One of set required.</td>
<td>IP address of storage cluster node. The IP is listed in the <code>stcli cluster info</code> command under the <code>stNode field NAME</code>.</td>
</tr>
<tr>
<td></td>
<td>--mode MODE</td>
<td>Required</td>
<td>Mode to set <code>enter</code> or <code>exit</code> HX maintenance mode.</td>
</tr>
<tr>
<td></td>
<td>--timeout TIMEOUT</td>
<td>Optional.</td>
<td>Set timeout in seconds for HX maintenance mode.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required and the `--mode` type

**Usage Guidelines**

Accompany the `stcli node maintenanceMode` command with one of the positional arguments enclosed in `{ }` and the `--mode` type, plus optionally arguments enclosed in `[ ]`. 
stcli node remove Command

Removes up to two specified nodes from the storage cluster.

**Note**
Do not perform conflicting actions simultaneously. For example, do not run node add and node remove at the same time:

```
stcli node add --node-ips NODEIPS remove --id-1 ID1
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--id-1 ID1</td>
<td>One of set required.</td>
<td>A unique ID number for the storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--ip-1 NAME1</td>
<td>One of set required.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command under the stNode field NAME.</td>
</tr>
<tr>
<td>--id-2 ID2</td>
<td>Optional.</td>
<td>A unique ID number for the storage cluster node. The ID is listed in the stcli cluster info command.</td>
</tr>
<tr>
<td>--ip-2 NAME2</td>
<td>Optional.</td>
<td>IP address of storage cluster node. The IP is listed in the stcli cluster info command under the stNode field NAME. The --ip option is currently not supported.</td>
</tr>
<tr>
<td>-f, --force</td>
<td>Optional.</td>
<td>Forcibly remove storage cluster nodes.</td>
</tr>
</tbody>
</table>

**Command Default**
None. One option from the set is required.

**Usage Guidelines**
Accompany the stcli node remove command with one of the positional arguments enclosed in { }, plus optionally, second node IP information, or optional arguments enclosed in [ ].

- Before you remove a node from a storage cluster, ensure that DRS is enabled. DRS migrates only powered-on VMs.
- If your network has powered-off VMs, you must manually migrate them to the storage cluster. Otherwise, they are inaccessible after you remove the node.
- If DRS is not enabled, manually migrate the VMs.
- Removing a node requires that the storage cluster is healthy and that removing the node will not reduce the number of available nodes below the minimum 3 nodes which would make the storage cluster unhealthy.
- You can only remove a maximum two nodes at a time and only from a cluster that has 5 or greater number of nodes.
stcli rebalance Commands

- stcli rebalance Commands, on page 120
- stcli rebalance disable Command, on page 121
- stcli rebalance enable Command, on page 122
- stcli rebalance get-node-timeout Command, on page 123
- stcli rebalance set-node-timeout Command, on page 124
- stcli rebalance status Command, on page 125
- stcli rebalance stop Command, on page 126
- stcli rebalance start Command, on page 127
stcli rebalance Commands

Rebalance related operations.

```
stcli rebalance [-h] {enable | disable | start | stop | status}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>enable</td>
<td>One of set required.</td>
<td>Enables storage cluster rebalance.</td>
</tr>
<tr>
<td></td>
<td>disable</td>
<td>One of set required.</td>
<td>Disables storage cluster rebalance.</td>
</tr>
<tr>
<td></td>
<td>start</td>
<td>One of set required.</td>
<td>Starts storage cluster rebalance.</td>
</tr>
<tr>
<td></td>
<td>stop</td>
<td>One of set required.</td>
<td>Stops storage cluster rebalance.</td>
</tr>
<tr>
<td></td>
<td>status</td>
<td>One of set required.</td>
<td>Gets storage cluster rebalance status.</td>
</tr>
</tbody>
</table>

None. One option from the set is required.

Accompany the `stcli rebalance` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
stcli rebalance disable Command

Disables storage cluster rebalancing so that the system ignores events, cron jobs, or commands that trigger rebalance.

**stcli rebalance disable [-h]**

**Command Default**

None.

**Usage Guidelines**

Run the `stcli rebalance disable` command, optionally include arguments enclosed in [].

If there is a rebalance process in progress when you run this command, then the system does not stop the current rebalancing. To stop rebalancing, use the `stcli rebalance stop` command.

The impact of the `stcli rebalance disable` command persists even after a storage cluster or node power cycle, until you enable it again using the `stcli rebalance enable` command.
## stcli rebalance enable Command

Enables you to rebalance the storage cluster.

```
stcli rebalance enable [-h]
```

### Command Default

The default value for `stcli rebalance` is `enable`.

### Usage Guidelines

Run the `stcli rebalance enable` command to re-enable a cluster rebalance or optional arguments enclosed in `[]`. 
**stcli rebalance get-node-timeout Command**

Gets storage rebalance/auto healing node timeout.

```
stcli rebalance get-node-timeout [-h]
```

<table>
<thead>
<tr>
<th>Command Default</th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage Guidelines</td>
<td>Accompany the <code>stcli rebalance set-node-timeout</code> command with optionally, the arguments enclosed in <code>[]</code>.</td>
</tr>
</tbody>
</table>
stcli rebalance set-node-timeout Command

Sets storage rebalance/auto healing node timeout.

`stcli rebalance set-node-timeout [-h] --timeout TIMEOUT`

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--timeout TIMEOUT</td>
<td>Optional.</td>
<td>Set node timeout in minutes before auto healing starts.</td>
</tr>
</tbody>
</table>

Command Default

None.

Usage Guidelines

Accompany the `stcli rebalance set-node-timeout` command with optionally, the arguments enclosed in `[]`. 
stcli rebalance status Command

Displays the status of the storage cluster rebalance process.

stcli rebalance status [-h]

Command Default
No additional options available.

Usage Guidelines
Run the `stcli rebalance status` command, optionally include arguments enclosed in [ ].

The following example shows the status when rebalance is enabled and running.

```bash
# stcli rebalance status
rebalanceStatus:
rebalanceState: online
percentComplete: 10
rebalanceEnabled: True
```

The following example shows the status when rebalance is enabled, but it is not running.

```bash
# stcli rebalance status
rebalanceStatus:
rebalanceState: cluster_rebalance_not_running
rebalanceEnabled: True
```

The following example shows the status when rebalance is disabled, and it is not running.

```bash
# stcli rebalance status
rebalanceStatus:
rebalanceState: offline
rebalanceEnabled: False
```
stcli rebalance stop Command

Halts any ongoing rebalance that you start using the `stcli rebalance start` command or the system starts due to rebalancing events or schedules.

The rebalance process might not stop immediately.

`stcli rebalance stop [-h]`

**Command Default**

No additional option available.

**Usage Guidelines**

- Run the `stcli rebalance stop` command, optionally with arguments enclosed in [ ].
- Use the `stcli rebalance status` command to find the current status or progress of the rebalance process.
- If there is no rebalance in progress, this command does not have any impact.
stcli rebalance start Command

Starts rebalancing storage cluster resources immediately instead of waiting for events or other schedules.

```
stcli rebalance start [-h] [-f]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-f, --force</td>
<td>Optional.</td>
<td>Force to start rebalance.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Run the `stcli rebalance start` command with optionally arguments enclosed in `[ ]`.

This command attempts to restore storage cluster availability (if there are storage cluster failures and the storage cluster is not healthy) or balance space utilization evenly across all nodes in the storage cluster.

However, if the storage cluster is in an ENOSPACE condition, the rebalance does not start. Analyze and correct the ENOSPACE condition, then run the `stcli rebalance start` command.
stcli security Commands

- stcli security Commands, on page 130
- stcli security encryption Commands, on page 131
- stcli security password Command, on page 133
- stcli security ssh Command, on page 134
- stcli security whitelist Commands, on page 135
stcli security Commands

Security related operations.

stcli security [-h] {password | whitelist | ssh}

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>password</td>
<td>One of set required.</td>
<td>Commands supported in the Storage security password manipulation namespace.</td>
</tr>
<tr>
<td></td>
<td>ssh</td>
<td>One of set required.</td>
<td>Commands supported in the Storage security ssh namespace.</td>
</tr>
<tr>
<td></td>
<td>whitelist</td>
<td>One of set required.</td>
<td>Commands supported in the Storage security ip whitelist namespace.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the stcli security command with one of the positional arguments enclosed in {} or optional arguments enclosed in [].
**stcli security encryption Commands**

Encryption management operations.

```
stcli security encryption [-h] {ucsm-ro-user}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ucsm-ro-user</td>
<td>Required.</td>
<td>Commands supported in the security encryption UCSM RO user namespace.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli security encryption` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

---

**stcli security encryption ucsm-ro-user Commands**

Encryption UCSM read only (RO) user operations.

```
stcli security encryption ucsm-ro-user [-h] {show,create}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>show</td>
<td>Required one of set.</td>
<td>Show UCSM RO user credentials.</td>
</tr>
<tr>
<td>create</td>
<td>Required one of set.</td>
<td>Create UCSM RO user.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Accompany the `stcli security encryption ucsm-ro-user` command with one of the positional arguments enclosed in `{ }` or optionally, the arguments enclosed in `[ ]`.

---

**stcli security encryption ucsm-ro-user create Command**

Encryption UCSM read only (RO) user create operations.

```
stcli security encryption ucsm-ro-user create [-h] --hostname HOSTNAME [--username USERNAME] --password PASSWORD
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--hostname HOSTNAME</td>
<td>Required.</td>
<td>UCSM host name.</td>
</tr>
<tr>
<td>--username USERNAME</td>
<td>Optional.</td>
<td>UCSM user name. Must be UCSM admin level user.</td>
</tr>
<tr>
<td>--password PASSWORD</td>
<td>Required.</td>
<td>UCSM user password. Must be UCSM admin level user password.</td>
</tr>
</tbody>
</table>
Username default is `admin`.

Accompany the `stcli security encryption ucsm-ro-user create` command with the required arguments with leading two dashes (`--`), or optionally, the arguments enclosed in `[ ]`.

**stcli security encryption ucsm-ro-user show Command**

Encryption UCSM read only (RO) show users.

`stcli security encryption ucsm-ro-user show [-h]`

None.

Accompany the `stcli security encryption ucsm-ro-user show` command optionally, the arguments enclosed in `[ ]`. 
**stcli security password Command**

SSH key management operations. Sets user password for all the controller VMs in the storage cluster.

```
stcli security password set [-h] [--user USER] [--password PASSWORD]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>set</td>
<td>Required.</td>
<td>Sets user password for all the controller VMs in the storage cluster.</td>
</tr>
<tr>
<td></td>
<td>--user USER</td>
<td>Optional.</td>
<td>User must be either admin or root. User root is assumed if not specified.</td>
</tr>
<tr>
<td></td>
<td>--password PASSWORD</td>
<td>Optional.</td>
<td>Password, if not supplied, it is prompted for without echoing keystrokes.</td>
</tr>
</tbody>
</table>

**Command Default**

Default controller VM username, `root` and password, `Cisco123`.

**Usage Guidelines**

Accompany the `stcli security password set` command with one of the optional arguments enclosed in `[ ]`. 
**stcli security ssh Command**

SSH key management operations. Resyncs SSH keys in storage cluster.

`stcli security ssh [-h] resync`

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>resync</td>
<td>Required.</td>
<td>Resyncs SSH keys in storage cluster.</td>
</tr>
</tbody>
</table>

**Command Default**

None.

**Usage Guidelines**

Run the `stcli security ssh` command with the `resync` positional argument, or include the optional arguments enclosed in `[ ]`. 
stcli security whitelist Commands

IP tables white-listing operations.

```
stcli security whitelist [-h] [list | add | remove | clear]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>add</td>
<td>One of set required.</td>
<td>Adds IP addresses to IP table white-list.</td>
</tr>
<tr>
<td></td>
<td>clear</td>
<td>One of set required.</td>
<td>Clears IP addresses from IP table white-list.</td>
</tr>
<tr>
<td></td>
<td>list</td>
<td>One of set required.</td>
<td>List IP table white-listed entries.</td>
</tr>
<tr>
<td></td>
<td>remove</td>
<td>One of set required.</td>
<td>Removes IP addresses from IP table white-list.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli security whitelist` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

**stcli security whitelist add Command**

Adds IP addresses to the IP table white list.

```
stcli security whitelist add [-h] --ips IP [IP . . .]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--ips</td>
<td>Required.</td>
<td>The IP addresses to add to white list.</td>
</tr>
</tbody>
</table>

**Command Default**

None. IP addresses required.

**Usage Guidelines**

Accompany the `stcli security whitelist add` command with the IPs of the servers to add.

```
# stcli security whitelist add --ips 10.1.2.3 10.3.4.5
```

**stcli security whitelist clear Command**

Deletes the entire list of IP addresses in the IP table white list.

```
stcli security whitelist clear [-h]
```

**Command Default**

None.

**Usage Guidelines**

Run the `stcli security whitelist clear` command to delete IP addresses from the white list.
**stcli security whitelist list Command**

Displays the list of white list entries in the IP table.

```
stcli security whitelist list [-h]
```

**Command Default**
None.

**Usage Guidelines**
Accompany the `stcli security whitelist list` command, or include optional arguments enclosed in [ ].

```
# stcli security whitelist list
10.1.1.2
10.1.2.3
```

**stcli security whitelist remove Command**

Deletes the specified IP addresses from the IP table white list.

```
stcli security whitelist remove [-h] --ips IP [IP . . .]
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--ips IP [IP . . .]</td>
<td>Required.</td>
<td>IP addresses to remove from white list.</td>
</tr>
</tbody>
</table>

**Command Default**
None.

**Usage Guidelines**
Accompany the `stcli security whitelist remove` command with the IP addresses to remove from the white list.

```
# stcli security whitelist remove --ips 10.1.2.3
```
stcli services Commands

• stcli services Commands, on page 138
• stcli services asup Commands, on page 139
• stcli services dns Commands, on page 143
• stcli services ntp Commands, on page 145
• stcli services sch Commands, on page 148
• stcli services remotesupport Commands, on page 151
• stcli services smtp Commands, on page 153
• stcli services timezone Commands, on page 155
stcli services Commands

System services related operations.

```
stcli services [-h] [smtp | dns | ntp | asup | sch | remotesupport | timezone]
```

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>asup</td>
<td>One of set required.</td>
<td>Commands supported in the autosupport (ASUP) configuration namespace.</td>
</tr>
<tr>
<td>dns</td>
<td>One of set required.</td>
<td>Commands supported in the storage DNS configuration namespace.</td>
</tr>
<tr>
<td>ntp</td>
<td>One of set required.</td>
<td>Commands supported in the storage NTP configuration namespace.</td>
</tr>
<tr>
<td>remotesupport</td>
<td>One of set required.</td>
<td>Commands supported for support remote access.</td>
</tr>
<tr>
<td>sch</td>
<td>One of set required.</td>
<td>Commands supported in the Smart Call Home configuration namespace.</td>
</tr>
<tr>
<td>smtp</td>
<td>One of set required.</td>
<td>Commands supported in the storage SMTP for autosupport configuration namespace.</td>
</tr>
<tr>
<td>timezone</td>
<td>One of set required.</td>
<td>Commands supported in the timezone configuration namespace.</td>
</tr>
</tbody>
</table>

Command Default

None. One option from the set is required.

Usage Guidelines

Accompany the `stcli services` command with at least one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`. 
**stcli services asup Commands**

This section lists and describes the Cisco Automatic Support (ASUP) commands. ASUP enables you to proactively obtain information about failures and responds immediately. It also helps in planning system performance and capacity.

---

**Note**

ASUP relies on SMTP. Before you enable ASUP, ensure that you configure SMTP in your network.

---

**stcli services asup [-h] {enable | disable | show | recipients}**

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>disable</td>
<td>One of set required.</td>
<td>Disables ASUP.</td>
</tr>
<tr>
<td>enable</td>
<td>One of set required.</td>
<td>Enables ASUP.</td>
</tr>
<tr>
<td>recipients</td>
<td>One of set required.</td>
<td>Commands to support ASUP recipients list configuration.</td>
</tr>
<tr>
<td>show</td>
<td>One of set required.</td>
<td>Shows the ASUP configuration.</td>
</tr>
</tbody>
</table>

---

**Command Default**

None. One option from the set is required.

---

**Usage Guidelines**

Accompany the `stcli services asup` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

---

**stcli services asup disable Command**

Disables HX auto support (ASUP) support.

```bash
stcli services asup disable [-h]
```

---

**Command Default**

No additional options.

---

**Usage Guidelines**

Run the `stcli services asup disable` command.

```
# stcli services asup disable
```

---

**stcli services asup enable Command**

Enables HX auto support (ASUP) support.

```bash
stcli services asup enable [-h]
```

---

**Command Default**

No additional options.
Usage Guidelines

1. Ensure SMTP is configured. See the `stcli services asup smtp` command.
2. Run the `stcli services asup enable` command.

```
# stcli services asup enable
```

**stcli services asup recipients** Commands

HX auto support (ASUP) recipient configuration operations.

```
stcli services asup recipients [-h] {set | clear | add | remove}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>add</td>
<td>One of set required.</td>
<td>Adds ASUP email recipients to an existing list of ASUP recipients.</td>
<td></td>
</tr>
<tr>
<td>clear</td>
<td>One of set required.</td>
<td>Deletes the entire ASUP recipient list. To remove individual recipients, use <code>asup recipients remove</code>.</td>
<td></td>
</tr>
<tr>
<td>remove</td>
<td>One of set required.</td>
<td>Deletes the specified ASUP email recipients from an existing list.</td>
<td></td>
</tr>
<tr>
<td>set</td>
<td>One of set required.</td>
<td>Sets the ASUP recipient list. Replaces previously set list of recipients. To add recipients to an existing list, use <code>asup recipients add</code>.</td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli services asup recipients` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

- Use `clear` option to delete all recipients from an existing list of recipients.
- Use `remove` option to delete specific email addresses from the list of recipients.
- Use `add` option to add new email addresses to the list of recipients.
- Use `set` option to replace the previous list of recipients with a new list of recipients.

**stcli services asup recipients add Command**

Adds ASUP email recipients to an existing list of ASUP recipients. The existing list can be currently empty. Use this command to add one or more recipients.

```
stcli services asup recipients add [-h] --recipients RECIPIENTS [RECIPIENTS . . .]
```
### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--recipients</td>
<td>Required</td>
<td>Add one or more email addresses to the current list of recipients that receive ASUP notifications.</td>
</tr>
<tr>
<td>RECIPIENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[RECIPIENTS . . .]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Command Default
None. At least one recipient is required.

#### Usage Guidelines
Accompany the `stcli services asup recipients add` command with at least one recipient. Separate multiple recipients with a space between email addresses.

```bash
# stcli services asup recipients add --recipients user1@mycompany.com user2@mycompany.com
```

### stcli services asup recipients clear Command

Deletes the entire ASUP recipient list. To remove individual recipients, use `asup recipients remove`.

`stcli services asup recipients clear [-h]`

#### Command Default
No additional options.

#### Usage Guidelines
Run the `stcli services asup recipients clear` command to delete all email addresses from the recipient list.

### stcli services asup recipient remove Command

Deletes the specified individual email recipients from an existing list of ASUP recipients.

`stcli services asup recipients remove [-h] --recipients RECIPIENTS [RECIPIENTS . . .]`

#### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--recipients</td>
<td>Required</td>
<td>Delete individual email addresses from the current list of recipients that receive ASUP notifications.</td>
</tr>
<tr>
<td>RECIPIENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[RECIPIENTS . . .]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Command Default
None. At least one recipient is required.

#### Usage Guidelines
Accompany the `stcli services asup recipients remove` command with at least one recipient. Separate multiple recipients with a space between email addresses.

```bash
# stcli services asup recipients remove --recipients user1@mycompany.com user2@mycompany.com
```

### stcli services asup recipients set Command

Replaces an existing list of ASUP email recipients with a provided list of email addresses. This deletes all recipients on the existing list. To add recipients to an existing list and not deleted the existing recipients, use `asup recipients add`.

stcli services asup recipients set [-h] --recipients RECIPIENTS [RECIPIENTS . . .]

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--recipients</td>
<td>Required.</td>
<td>Add one or more email addresses to replace the existing list of recipients to receive ASUP notifications. Separate email recipients with a space.</td>
</tr>
<tr>
<td>RECIPIENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[RECIPIENTS . . .]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Command Default

None. At least one recipient is required.

### Usage Guidelines

Accompany the `stcli services asup recipients set` command with at least one recipient. Separate multiple recipients with a space between email addresses.

```
# stcli services asup recipients set --recipients user1@mycompany.com user2@mycompany.com
```

---

**stcli services asup show Command**

Shows the ASUP configuration, this includes the ASUP recipient list and whether ASUP is enabled or disabled.

```
stcli services asup show [-h]
```

### Command Default

No additional options available.

### Usage Guidelines

Run the `stcli services asup show` command to list the applied ASUP settings.

```
# stcli services asup show

recipientList:
enabled: False
```
stcli services dns Commands

Domain Name Server (DNS) server configuration operations. DNS is a hierarchical distributed naming system for computers, services, or any resource connected to the Internet or a private network.

**stcli services dns [-h] {show | set | add | remove}**

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>add</td>
<td>One of set required.</td>
<td>Adds servers to the DNS server list.</td>
</tr>
<tr>
<td></td>
<td>set</td>
<td>One of set required.</td>
<td>Replace the DNS server list with this new list.</td>
</tr>
<tr>
<td></td>
<td>show</td>
<td>One of set required.</td>
<td>Show the DNS server list.</td>
</tr>
<tr>
<td></td>
<td>remove</td>
<td>One of set required.</td>
<td>Delete a server from the DNS server list.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli services dns` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

**stcli services dns add Command**

Adds servers to the DNS server list.

**stcli services dns add [-h] --dns DNSSERVER [DNSSERVER . . .]**

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--dns</td>
<td>Required.</td>
<td>List at least one server to add to the list of DNS servers.</td>
</tr>
<tr>
<td></td>
<td>DNSSERVER</td>
<td>[DNSSERVER . . .]</td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**

None. At least one server ID is required.

**Usage Guidelines**

Accompany the `stcli services dns add` command with at least one DNS server ID. Separate servers with a space.

```bash
# stcli services dns add --dns 10.60.8.9
```

**stcli services dns remove Command**

Removes one or more or all servers from the existing list of servers in the DNS server list.

**stcli services dns remove [-h] --dns DNSSERVER [DNSSERVER . . .]**
**stcli services dns remove Command**

List at least one server to delete from the current list of DNS servers.

```
# stcli services dns remove --dns 10.60.6.7
```

**stcli services dns set Command**

Replaces existing list of servers in the DNS server list. Deletes current list To add servers to an existing list, use `dns add`.

```
stcli services dns set [-h] --dns DNSSERVER [DNSSERVER ...]
```

**stcli services dns show Command**

Displays the DNS server list.

```
stcli services dns show [-h]
```

# stcli services Commands

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--dns DNSSERVER</td>
<td>Optional.</td>
<td>List at least one server to delete from the current list of DNS servers.</td>
</tr>
<tr>
<td></td>
<td>[DNSSERVER ...]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**

Default removes all DNS servers from the list.

**Usage Guidelines**

Accompany the `stcli services dns remove` command with none, one, or more DNS server IDs. Separate servers with a space.

```
# stcli services dns remove --dns 10.60.6.7
```

**Command Default**

None. At least one server ID is required.

**Usage Guidelines**

Accompany the `stcli services dns set` command with at least one DNS server ID. Separate servers with a space.

```
# stcli services dns set --dns 10.60.1.1
```

**Command Default**

No additional options.

**Usage Guidelines**

Run the `stcli services dns show` command.

```
# stcli services dns show
10.64.1.8
10.64.1.9
```
stcli services ntp Commands

The HX Data Platform Network Time Protocol (NTP) configuration operations.
NTP is a protocol that is used to synchronize computer clock times in a network of computers so that you can correlate events when you receive system logs and other time-specific events from multiple network devices.
NTP uses the User Datagram Protocol (UDP) as its transport protocol. All NTP communications use Coordinated Universal Time (UTC).

```
stcli services ntp [-h] {add | set | show | remove}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>add</td>
<td>One of set required.</td>
<td>Add one or more servers to the list of storage NTP servers.</td>
</tr>
<tr>
<td></td>
<td>set</td>
<td>One of set required.</td>
<td>Replace the existing list of NTP servers with the listed DNS servers.</td>
</tr>
<tr>
<td></td>
<td>show</td>
<td>One of set required.</td>
<td>Display the list of storage NTP servers.</td>
</tr>
<tr>
<td></td>
<td>remove</td>
<td>One of set required.</td>
<td>Remove one or more servers from the list of storage NTP servers.</td>
</tr>
</tbody>
</table>

Command Default
None. One option from the set is required.

Usage Guidelines
Accompany the `stcli services ntp` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

stcli services ntp add Command

Add one or more servers to the list of storage DNS servers.

```
stcli services ntp add [-h] --ntp NTPSERVER [NTPSERVER ...]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--ntp</td>
<td>Required.</td>
<td>Add one or more servers to the list of storage NTP servers.</td>
</tr>
<tr>
<td></td>
<td>NTPSERVER [NTPSERVER ...]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Command Default
None. At least one server ID is required.

Usage Guidelines
Accompany the `stcli services ntp add` command with at least one server ID.

```
# stcli services ntp add --ntp 136.158.1.0
```
**stcli services ntp remove Command**

Delete one or more servers from the list of storage DNS servers.

`stcli services ntp remove [-h] --ntp NTPSERVER [NTPSERVER ...]`

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--ntp NTPSERVER</td>
<td>Optional.</td>
<td>Remove one or more servers from the list of storage DNS servers.</td>
</tr>
<tr>
<td></td>
<td>[NTPSERVER ...]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**
Default removes all NTP servers from the list of storage NTP servers.

**Usage Guidelines**
Accompany the `stcli services ntp remove` command with at least one server ID.

```
# stcli services ntp remove --ntp 136.158.1.0
```

**stcli services ntp set Command**

Replaces existing list of NTP servers with new list. To add servers to an existing list, use `ntp add`.

`stcli services ntp set [-h] --ntp NTPSERVER [NTPSERVER ...]`

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--ntp NTPSERVER</td>
<td>Required.</td>
<td>Provide one or more servers to replace the current the list of storage NTP servers.</td>
</tr>
<tr>
<td></td>
<td>[NTPSERVER ...]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Command Default**
None. At least one server ID is required.

**Usage Guidelines**
Accompany the `stcli services ntp set` command with at least one server ID.

```
# stcli services ntp set --ntp 10.12.1.1
```

**stcli services ntp show Command**

Display the list of storage DNS servers.

`stcli services ntp show [-h]`

**Command Default**
No options available.

**Usage Guidelines**
Run the `stcli services ntp show` command.

```
# stcli services ntp show
```
0.company.pool.ntp.org
ntp.ubuntu.com
**stcli services sch Commands**

This section lists and describes the Cisco Smart Call Home (SCH) commands. Smart call home provides continuous monitoring, proactive diagnostics, alerts, service ticket notifications, and remediation recommendations about the HX storage cluster to the designated ASUP customer contacts. It also provides a means to provide the information through HTTPS and a proxy server, if needed.

---

**Note**

If your HX storage cluster is behind a firewall, a proxy server is required for access.

```bash
stcli services sch [-h] {enable | disable | show | ping | clear | set}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clear</td>
<td>clear</td>
<td>One of set required.</td>
<td>Clears the smart call home configuration.</td>
</tr>
<tr>
<td>disable</td>
<td>disable</td>
<td>One of set required.</td>
<td>Disables smart call home.</td>
</tr>
<tr>
<td>enable</td>
<td>enable</td>
<td>One of set required.</td>
<td>Enables smart call home.</td>
</tr>
<tr>
<td>ping</td>
<td>ping</td>
<td>One of set required.</td>
<td>Pings the smart call home endpoint.</td>
</tr>
<tr>
<td>set</td>
<td>set</td>
<td>One of set required.</td>
<td>Commands for smart call home registration, including proxy server for HTTPS access</td>
</tr>
<tr>
<td>show</td>
<td>show</td>
<td>One of set required.</td>
<td>Shows the smart call home configuration.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli services sch` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

---

**stcli services sch clear Command**

Removes the smart call home email and proxy settings from the storage cluster configuration.

```bash
stcli services sch clear [-h]
```

**Command Default**

No additional options.

**Usage Guidelines**

Run the `stcli services sch clear` command to remove the smart call home notification email and proxy settings from storage cluster configuration.

```bash
# stcli services sch clear
```
**stcli services sch disable Command**

Disables HX smart call home.

```bash
stcli services sch disable [-h]
```

**Command Default**
No additional options.

**Usage Guidelines**
Run the `stcli services sch disable` command.

```bash
# stcli services sch disable
```

**stcli services sch enable Command**

Enables HX smart call home. See `stcli services set set` to configure the notification email address.

```bash
stcli services sch enable [-h]
```

**Command Default**
No additional options.

**Usage Guidelines**
Run the `stcli services sch enable` command.

```bash
# stcli services sch enable
```

**stcli services sch ping Command**

Pings the Smart Call Home endpoint.

```bash
stcli services sch ping [-h]
```

**Command Default**
No options.

**Usage Guidelines**
Run the `stcli services sch ping` command.

This example shows:

```bash
# stcli services sch ping
ping to callhome endpoint was successful
```

**stcli services sch set Command**

Configures the smart call home service required contact and proxy server.

```bash
```
### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>--email EMAILADDRESS</code></td>
<td>Required.</td>
<td>Add an email address for someone to receive email from Cisco support. Recommendation is to use a distribution list or alias.</td>
</tr>
<tr>
<td><code>--portal-url PORTALURL</code></td>
<td>Optional.</td>
<td>Specify an alternative Smart Call Home portal url, if applicable</td>
</tr>
<tr>
<td><code>--proxy-url PROXYURL</code></td>
<td>Optional.</td>
<td>Specify the HTTP proxy URL, if applicable.</td>
</tr>
<tr>
<td><code>--proxy-port PROXYPORT</code></td>
<td>Optional.</td>
<td>Specify the HTTP proxy port, if applicable.</td>
</tr>
<tr>
<td><code>--proxy-user PROXYUSER</code></td>
<td>Optional.</td>
<td>Specify the HTTP proxy user, if applicable.</td>
</tr>
<tr>
<td><code>--proxy-password PROXYPASSWORD</code></td>
<td>Optional.</td>
<td>Specify the HTTP proxy password, if applicable.</td>
</tr>
</tbody>
</table>

### Command Default

None. Email address is required. Proxy server is not configured by default.

### Usage Guidelines

Accompany the `stcli services sch set` command with an email recipient address. Set the proxy server if your HX storage cluster is behind a firewall.

To use the smart call home service, ensure it is enabled. See the `stcli services sch show` and `stcli services sch enable` commands.

```
# stcli services sch set --email alias@mycompany.com
```

### `stcli services sch show` Command

Shows the smart call home configuration, this includes configured notification email and proxy settings, and whether smart call home is enabled or disabled.

```
stcli services sch show [-h]
```

### Command Default

No additional options available.

### Usage Guidelines

Run the `stcli services sch show` command to list the applied smart call home settings.

This sample response indicates that smart call home is enabled, but the email addresses and proxy settings are not configured.

```
# stcli services sch show
proxyPort: 0
proxyUser: 
enabled: True
proxyPassword: 
cloudEnvironment: devtest
proxyUrl: 
emailAddress: 
portalUrl: 
cloudAsupEndpoint: https://diag-devtest.hyperflex.io/
```
stcli services remotesupport Commands

This section lists and describes the remote support commands. This command allows Cisco support to access your HX storage cluster to collect information about cluster operations, for example, configured notification email and proxy settings and support triggered support bundles.

This is enabled by default.

```
stcli services remotesupport [-h] {set | show}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>set</td>
<td>One of set required.</td>
<td>Commands to configure remote support.</td>
</tr>
<tr>
<td></td>
<td>show</td>
<td>One of set required.</td>
<td>Shows the remote support configuration.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli services remotesupport` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

### stcli services remotesupport set Command

Set configuration for remote support access and actions.

```
stcli services remotesupport set [-h] --enable ENABLE_RS_VALUE [--enable-support-bundle-action ENABLE_RSB_VALUE]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><code>--enable</code> ENABLE_RS_VALUE</td>
<td>Required.</td>
<td>Enable or disable remote support. Specify either value <code>true</code> or <code>false</code>.</td>
</tr>
<tr>
<td></td>
<td><code>--enable-support-bundle-action</code> ENABLE_RSB_VALUE</td>
<td>Optional.</td>
<td>Enable or disable support bundle actions. Specify either <code>true</code> or <code>false</code>. Allows TAC to remotely trigger building a support bundle.</td>
</tr>
</tbody>
</table>

**Command Default**

Remote support is enabled by default.

**Usage Guidelines**

Accompany the `stcli services remotesupport set` command with the required parameter.

```
# stcli services remotesupport set --enable false
```
**stcli services remotesupport show Command**

Shows the remote support configuration, this includes configured notification email and proxy settings, and whether remote support is enabled or disabled and if support triggered support bundles are enabled or disabled.

```
stcli services remotesupport show [-h]
```

**Command Default**

No additional options available.

**Usage Guidelines**

Run the `stcli services remotesupport show` command to list the applied settings.

This sample response indicates that remote access by support and remotely triggering support bundles are enabled.

```
# stcli services remotesupport show
enableSupportBundleAction: True
enabled: True
```
stcli services smtp Commands

The HX Data Platform Simple Mail Transfer Protocol (SMTP) configuration options. SMTP is an Internet standard for email transmission. The SMTP servers are used with the HX ASUP feature.

```
stcli services smtp [-h] {show | set | clear}
```

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clear</td>
<td>One of set required.</td>
<td>Removes all SMTP servers from the storage cluster configuration settings.</td>
</tr>
<tr>
<td>set</td>
<td>One of set required.</td>
<td>Add all SMTP servers to the storage cluster configuration.</td>
</tr>
<tr>
<td>show</td>
<td>One of set required.</td>
<td>Lists all SMTP servers configured for the storage cluster.</td>
</tr>
</tbody>
</table>

Command Default
None. One option from the set is required.

Usage Guidelines
Accompany the `stcli services smtp` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[]`.

**stcli services smtp clear Command**

Removes all SMTP servers from the storage cluster configuration settings.

```
stcli services smtp clear [-h]
```

Command Default
No additional options.

Usage Guidelines
Run the `stcli services smtp clear` command to remove all SMTP servers from storage cluster configuration.
To verify the SMTP servers are removed, check that the `/etc/msmtprc` file is missing.

```
# stcli services smtp clear
```

**stcli services smtp set Command**

Adds SMTP servers to the storage cluster configuration settings.

```
stcli services smtp set [-h] --smtp SMTPSERVER --fromaddress FROMADDRESS
```

Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--smtp SMTPSERVER</td>
<td>Required.</td>
<td>The hosting address of the SMTP server.</td>
</tr>
</tbody>
</table>
### Option | Required or Optional | Description
--- | --- | ---
--fromaddress
FROMADDRESS | Required. | Email address to send Auto Support emails from. The address used by the SMTP server to send email notifications to the recipients.

**Command Default**
None. Server information is required.

**Usage Guidelines**
Accompany the `stcli services smtp set` command with the required parameters.

To verify the SMTP servers are configured, check the `/etc/msmtprc` file.

```bash
# stcli services smtp set --smtp mailhost.eng.mycompany.com --fromAddress smtpnotice@mycompany.com
```

---

**stcli services smtp show Command**
Displays the storage cluster configured SMTP servers.

```bash
stcli services smtp show [-h]
```

**Command Default**
No additional options.

**Usage Guidelines**
Run the `stcli services smtp show` command to view all SMTP servers in storage cluster configuration.

```bash
# stcli services smtp show
smtpServer: mailhost.eng.mycompany.com
fromAddress: admin@mycompany.com
```
stcli services timezone Commands

HX Data Platform timezone configuration operations.

```
stcli services timezone [-h] {show | set}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>set</td>
<td>One of set required.</td>
<td>Specifies the time zone for the controller VMs.</td>
</tr>
<tr>
<td></td>
<td>show</td>
<td>One of set required.</td>
<td>Displays the system time zone that is currently set.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli services timezone` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

stcli services timezone set Command

Specifies the time zone for the controller VMs.

```
stcli services timezone set [-h] --timezone TIMEZONE
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--timezone TIMEZONE</td>
<td>Required.</td>
<td>Specify a value for the time zone.</td>
</tr>
</tbody>
</table>

For a list of valid time zone values, go to:

[http://manpages.ubuntu.com/manpages/jaunty/man3/DateTime::TimeZone::Catalog.3pm.html](http://manpages.ubuntu.com/manpages/jaunty/man3/DateTime::TimeZone::Catalog.3pm.html)

- Ensure that you specify a (case-sensitive) value for the time zone only from this list; for example: Europe/Paris or America/Los_Angeles.
- Any value that is not in this list is invalid.
- If you specify an invalid time zone, the system reverts to GMT.

**Command Default**

None. Timezone is required.

**Usage Guidelines**

Accompany the `stcli services timezone set` command with a valid timezone.

```
# stcli services timezone set --timezone America/Los_Angeles
```
**stcli services timezone show Command**

Displays the system time zone that is currently set for the controller VMs.

```
stcli services timezone show [-h]
```

**Command Default**

No additional options.

**Usage Guidelines**

Run the `stcli services timezone show` command to view the timezone currently set.

```
# stcli services timezone show
America/New_York
```
stcli license Commands

• stcli license Commands, on page 158
stcli license Commands

Smart licensing operations.

stcli license [-h] {register | deregister | show | renew}

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>register</td>
<td>One of set required.</td>
<td>Register with an ID token.</td>
</tr>
<tr>
<td>deregister</td>
<td>One of set required.</td>
<td>Renew smart licensing operations.</td>
</tr>
<tr>
<td>show</td>
<td>One of set required.</td>
<td>Deregister smart licensing.</td>
</tr>
<tr>
<td>renew</td>
<td>One of set required.</td>
<td>Show smart licensing options.</td>
</tr>
</tbody>
</table>

Command Default
None. One option from the set is required.

Usage Guidelines
Accompany the stcli license command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

stcli license deregister Command

Deregister smart licensing.

stcli license deregister [-h]

Command Default
None.

Usage Guidelines
Accompany the stcli license deregister command with optionally, the arguments enclosed in [ ].

stcli license register Command

Register a smart license with an ID token.

stcli license register [-h] --idtoken IDTOKEN [--force]

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--idtoken</td>
<td>Required.</td>
<td>Registration ID token.</td>
</tr>
<tr>
<td>--force</td>
<td>Optional.</td>
<td>Force the registration when the cluster is already registered.</td>
</tr>
</tbody>
</table>

Command Default
None.
Usage Guidelines
Accompany the `stcli license register` command with the required arguments with leading two dashes (--), or optionally, the arguments enclosed in [ ].

```bash
# stcli license register --token
ZmM2YTVhZjMtZTQxNi00...1LTE0ODg0NzkppYmF...A3OD0%3D%0...8caERE
```

**stcli license renew Command**
Renew smart licensing operations.

```
stcli license renew [-h] {id | auth}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>auth</td>
<td>One of set required.</td>
<td>Renew license authorization.</td>
</tr>
<tr>
<td>id</td>
<td>One of set required.</td>
<td>Renew registration and registration ID certificate information.</td>
</tr>
</tbody>
</table>

**Command Default**
None. One option from the set is required.

**Usage Guidelines**
Accompany the `stcli license review` command with one of the positional arguments enclosed in { } or optionally, the arguments enclosed in [ ].

**stcli license show Command**
Show smart license information based on option selected.

```
stcli license show
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>all</td>
<td>Optional.</td>
<td>Show all license information.</td>
</tr>
<tr>
<td>auth-status</td>
<td>Optional.</td>
<td>Show smart licensing authorization status.</td>
</tr>
<tr>
<td>inst-name</td>
<td>Optional.</td>
<td>Show cluster instance name.</td>
</tr>
<tr>
<td>reg-status</td>
<td>Optional.</td>
<td>Show smart licensing registration status.</td>
</tr>
<tr>
<td>status</td>
<td>Optional.</td>
<td>Show smart licensing registration, authorization, and license status.</td>
</tr>
<tr>
<td>summary</td>
<td>Optional.</td>
<td>Show smart licensing summary.</td>
</tr>
<tr>
<td>tech-support</td>
<td>Optional.</td>
<td>Show smart licensing technical support details.</td>
</tr>
<tr>
<td>udi</td>
<td>Optional.</td>
<td>Show smart licensing unique device identifier (UDI).</td>
</tr>
</tbody>
</table>
### stcli license show Command

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>usage</td>
<td>Optional</td>
<td>Show smart licensing usage count.</td>
</tr>
</tbody>
</table>

#### Command Default

None.

#### Usage Guidelines

Accompany the `stcli license show` command with the required option, no leading dashes (--) required. Optionally, include the arguments enclosed in [ ].

**An example when license not registered**

```bash
# stcli license show status

Smart Licensing is ENABLED
Registration: Status: UNREGISTERED
Export-Controlled Functionality: Not Allowed
License Authorization: Status: EVAL MODE
Evaluation Period Remaining: 89 days, 23 hr, 57 min, 3 sec
Last Communication Attempt: NONE
```

**An example when license is registered**

```bash
# stcli license show summary

Smart Licensing is ENABLED
Registration:
  Status: REGISTERED
  Smart Account: HyperFlex License Test
  Virtual Account: derek
  Last Renewal Attempt: None
  Next Renewal Attempt: Aug 1 17:47:06 2017 PDT
License Authorization:
  Status: AUTHORIZED
  Last Communication Attempt: SUCCEEDED
  Next Communication Attempt: Mar 4 16:47:11 2017 PST
License Usage:
  License Entitlement Tag
  Count Status
```

Cisco Vendor String XYZ  regid.2016-11.com.cisco.HX-SP-DP-S001,1.0_1c06...d45203
InCompliance
stcli vm clone and snapshot Commands

• stcli file clone Command, on page 162
• stcli snapshot-schedule Command, on page 163
• stcli vm Commands, on page 164
**stcli file clone Command**

Creates a HX ReadyClone for the given VM file.

```
stcli file clone [-h] --name NAME --clone CLONE [--readonly] [--thick]
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--name NAME</td>
<td>Required.</td>
<td>Name of the file to be cloned.</td>
</tr>
<tr>
<td></td>
<td>--clone CLONE</td>
<td>Required.</td>
<td>Name to assign to the ReadyClone.</td>
</tr>
<tr>
<td></td>
<td>--readonly</td>
<td>Optional.</td>
<td>Read only ReadyClone.</td>
</tr>
<tr>
<td></td>
<td>--thick</td>
<td>Optional.</td>
<td>Thick ReadyClone.</td>
</tr>
</tbody>
</table>

**Command Default**

None. File name and clone name required.

**Usage Guidelines**

Accompany the `stcli file clone` command with the positional arguments and optionally the arguments enclosed in `[ ]`. 
**stcli snapshot-schedule Command**

Enables or disables native snapshot schedules for all the objects in this cluster.

```
stcli snapshot-schedule [-h] {--enable | --disable}
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--enable</td>
<td>One of set required.</td>
<td>Enable the native snapshot schedule.</td>
</tr>
<tr>
<td></td>
<td>--disable</td>
<td>One of set required.</td>
<td>Disable the native snapshot schedule.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli snapshot-schedule` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

Use the HX Data Platform plug-in to create the native snapshot schedule. This command allows you to disable the schedule and re-enable it without requiring you to rebuild the schedule.


**stcli vm Commands**

HX Data Platform VM ReadyClone and Native Snapshot operations.

```
stcli vm [-h] {clone | snapshot}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clone</td>
<td>One of set required.</td>
<td>Creates a specified number of ReadyClones for the given VM.</td>
</tr>
<tr>
<td>snapshot</td>
<td>One of set required.</td>
<td>Creates a native snapshot for the given VM.</td>
</tr>
</tbody>
</table>

**Command Default**

None. One option from the set is required.

**Usage Guidelines**

Accompany the `stcli vm` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

### stcli vm clone Command

Creates a specified number of ReadyClones for the given VM.

```
```

### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--clone CLONE</td>
<td>Required.</td>
<td>Name of the ReadyClone.</td>
</tr>
<tr>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of source VM. The ID is listed in the <code>stcli cluster info</code> command.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of the source VM.</td>
</tr>
<tr>
<td>-number NUMBER</td>
<td>Required.</td>
<td>Number of ReadyClones to create.</td>
</tr>
<tr>
<td>--custspec CUSTSPEC</td>
<td>Optional.</td>
<td>Guest customization spec for the ReadyClones. See vCenter Customize Guest OS feature.</td>
</tr>
<tr>
<td>--guestname GUESTNAME</td>
<td>Optional.</td>
<td>Specify a guest name for the ReadyClones so it can be different from source VM name. Default is the DNS name for the host. This name must be DNS resolvable before specifying it.</td>
</tr>
<tr>
<td>--increment INCREMENT</td>
<td>Optional.</td>
<td>Suffix to use for incrementing the ReadyClone names.</td>
</tr>
<tr>
<td>--poweron</td>
<td>Optional.</td>
<td>Power on the created ReadyClone after cloning.</td>
</tr>
</tbody>
</table>
### Option

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--resourcepool-id RP-ID</td>
<td>Optional.</td>
<td>ID of the resource pool to place the ReadyClones.</td>
</tr>
<tr>
<td>--resourcepool-name RP-NAME</td>
<td>Optional.</td>
<td>Name of the resource pool to place the ReadyClones.</td>
</tr>
<tr>
<td>--startnumber STARTNUMBER</td>
<td>Optional.</td>
<td>Starting number for the incrementing suffix for the ReadyClone names.</td>
</tr>
</tbody>
</table>

**Command Default**

None. Specified options are required.

**Usage Guidelines**

Accompany the `stcli vm clone` command with one of the required positional arguments listed and optionally, arguments enclosed in [ ].

---

### stcli vm snapshot Command

Creates a native snapshot for the given VM.

```
stcli vm snapshot [-h] [id ID | --name NAME | --folder-id FOLDER-ID | --folder-name FOLDER-NAME | --resourcepool-id RP-ID | --resourcepool-name RP-NAME] --snapshot SNAPSHOT [--desc DESC] [--memory | --quiesce]
```

#### Syntax Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--snapshot SNAPSHOT</td>
<td>Required.</td>
<td>Name of the native snapshot.</td>
</tr>
<tr>
<td>-folder-id FOLDER-ID</td>
<td>One of set required.</td>
<td>ID of the folder used to create the native snapshot.</td>
</tr>
<tr>
<td>--folder-name FOLDER-NAME</td>
<td>One of set required.</td>
<td>Name of the folder used to create the native snapshot.</td>
</tr>
<tr>
<td>--id ID</td>
<td>One of set required.</td>
<td>ID of the source VM used to create the native snapshot.</td>
</tr>
<tr>
<td>--name NAME</td>
<td>One of set required.</td>
<td>Name of the source VM used to create the native snapshot.</td>
</tr>
<tr>
<td>--resourcepool-id RP-ID</td>
<td>One of set required.</td>
<td>ID of the resource pool used to create the native snapshot.</td>
</tr>
<tr>
<td>--resourcepool-name RP-NAME</td>
<td>One of set required.</td>
<td>Name of the resource pool used to create the native snapshot.</td>
</tr>
<tr>
<td>--desc DESC</td>
<td>Optional.</td>
<td>Description of the native snapshot.</td>
</tr>
<tr>
<td>--memory</td>
<td>One of pair optional.</td>
<td>Memory for the native snapshot.</td>
</tr>
<tr>
<td>--quiesce</td>
<td>One of pair optional.</td>
<td>Quiesce the file system in the virtual machine.</td>
</tr>
</tbody>
</table>

**Command Default**

None. Specified options are required.
Usage Guidelines

Accompany the `stcli vm snapshot` command with one of the required positional arguments listed and optionally, arguments enclosed in [ ].