Sun StorageTek™ Common Array Manager CLI Guide for the J4000 Array Family

Version 6.1.1

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Contents

Preface

The *Sun StorageTek Common Array Manager CLI Guide for the J4000 Array Family* describes the commands in the `sscs` CLI. Consult the hardware installation guide for your array for information about the initial physical installation of an array.

Before You Read This Book

Before you begin to install the Sun StorageTek Common Array Manager software, review late-breaking and release-specific information in the following books:

- *Sun StorageTek Common Array Manager Software Release Notes*
- Release Notes for your array

The books are available from:

`http://www.sun.com/documentation`

How This Book Is Organized

Chapter 1 provides an overview of the `sscs` administration command for the Sun Storage J4000 array family.

Chapter 2 describes each `sscs` subcommand in reference format.

Using Operating System Commands

This document contains information on OS-specific commands and procedures such as shutting down the system, booting the system, and configuring devices. For more information, refer to the following:

- Software documentation that you received with your operating system
- Solaris™ Operating System documentation, which is available from `http://docs.sun.com`

Shell Prompts

Shell	Prompt
C shell	*machine-name*`%`
C shell superuser	*machine-name*`#`
Bourne shell and Korn shell	`$`
Bourne shell and Korn shell superuser	`#`

Typographic Conventions

Typeface*	Meaning	Examples
`AaBbCc123`	The names of commands, files, and directories; on-screen computer output.	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
`AaBbCc123`	What you type, when contrasted with on-screen computer output.	`%` **`su`** `Password:`
AaBbCc123	Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values.	Read Chapter 6 in the *User's Guide*. These are called *class* options. You *must* be superuser to do this. To delete a file, type `rm` *filename*.

* The settings on your browser might differ from these settings.

Related Documentation

Application	Title	Part Number
Late-breaking information not included in the information set	*Sun StorageTek Common Array Manager Software Release Notes*	820-4996-*xx*
	Release Notes for your array	Various

In addition, the Sun StorageTek Common Array Manager includes the following online documentation:

- Sun StorageTek Common Array Manager online help

  Contains system overview and configuration information.

- Service Advisor

  Provides guided, FRU-replacement procedures with system feedback for all arrays, including the Sun Storage J4000 array family. You can access Service Advisor from the Sun StorageTek Common Array Manager software.

- `sscs` man page commands

  Provides help on man page commands available on a management host or on a remote CLI client.

- Documentation for other supported arrays

  All other arrays supported by the software share a common documentation set.

Accessing Sun Documentation

You can view, print, or purchase a broad selection of other Sun documentation, including localized versions, at:

`http://www.sun.com/documentation`

`http://docs.sun.com/app/docs/prod/stor.arrmgr#hic`

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Please include the title and part number of your document with your feedback:

Sun StorageTek Common Array Manager CLI Guide for the J4000 Array Family, Release 6.1.1, part number 820-4419-10.

CHAPTER 1

Overview

This chapter provides an overview of the `sscs` administration command for the Sun Storage J4000 array family. It contains the following sections:

Overview of the `sscs` Command

The **sscs** command line interface (CLI) enables you to manage and monitor disk arrays. The CLI can be installed on a local data host or a remote management host.

Local CLI directory location:

- Solaris: /opt/SUNWstkcam/bin/sscs
- Linux: /opt/sun/cam/bin/sscs
- Windows: Program Files > Sun > Common Array Manager > bin folder

Remote CLI directory location:

- Solaris: /opt/SUNWsesscs/cli/bin/sscs
- Linux: /opt/sun/cam/se6x20/cli/bin/sscs
- Windows: Program Files > Sun > Common Array Manager > bin folder

Additional management options are available. See the *CAM User Guide for the J4000 Array Family* for more information.

Understanding Command Syntax

Type the `sscs` command with its options from a terminal command line. Each subcommand description in this man page includes the options for the subcommand. You can use only the indicated option or options for that subcommand.

The following conventions apply to the subcommands and variables:

- Variables in syntax descriptions are underlined when viewed on a monitor and are enclosed in angle brackets.
- Values that replace variables in examples are not underlined in text, are italicized, and are not enclosed in angle brackets.
- Mutually exclusive options are separated by vertical bars.
- Optional elements of commands are enclosed in square brackets in syntax lines.

To get help with command syntax, use the **--help** command. To display a list of all subcommands use the **sscs --help** command.

To display a command list specific to the array type, use the **sscs --help -a** <*array-type*> command. For example:

sscs list --help -a j4200

To display the resource types for the commands for a specific array type, use the **sscs** <*subcommand*> **--help -a** <*array-type*> command. For example:

sscs list --help -a j4200

alarm

array

date

device

devices

event

firmware

fru

log

mgmt-sw

notification

registeredarray

site

storage-system

userrole

To display a detailed option list for a command and its resource type for a specific array type, use the **sscs** <*subcommand*> **--help -a** <*array-type*> <*resource-type*> command. For example:

sscs list --help -a j4200 alarm

list [-s|--severity <string>] [-f|--faultdevtype <string>] [-a|--advisor] [-S|--Summary] alarm [string[,string...]]

The **sscs** command can accept short or long names for each subcommand option. A short name option requires a single hyphen (-). A long name option requires a double hyphen (--). This man page shows the short name option and the long name option separated by a comma.

Option arguments can be separated by a comma. To show information for more than one object name separate the object names with a comma. Do not include a space after the comma. For example:

sscs list -a *array01* **storage-system** *system_name1,system_name-name2*

Note – Any characters that you enclose within quotation marks are acceptable for names.

Logging In to the `sscs` Environment

If you are using the local CLI, no login is required; however, you must have root or Administrator privileges depending on your OS.

Follow these steps to log into the remote CLI.

1. **Log in to the management host where sscs resides.**
2. **Enter the following commands:**

```
# cd /opt/SUNWsesscs/cli/bin
# ./sscs login -h localhost -u <user-name>
```

3. **Enter the password for your sscs user account. See the Login command in the man page for your array (for example, sscs-6540) for complete information about logging in to the sscs using the remote CLI.**

Exit Status Codes

The following CLI exit status codes are reported upon command completion:

0 Successful completion

15 Object not found error

25 Command parsing failure

30 Command validation error

50 Application error

75 System error

100 Nonspecific error

Next Steps

You are now ready to execute *sscs* commands.

CHAPTER 2

Command Summary

This chapter describes the `sscs` subcommands and their options.

add notification - Enable remote notification

Synopsis

Add email notification:

add [**-e** <*email-address,...*>] [**-c** <*array_type*>] [**-r** pager | email] [**-m** **down** | **critical** | **major** | **minor**] [**-f**] [**-s**] [**-d**] [**-g**] **notification local_email**

Add an SNMP trap notification:

add **-i** <*IP-address,...*> [**-o** <*port_id*>] [**-t** 1 | 2 | 3 | 4 | 5] [**-l** warning | error | down] [**-m**| <down | critical | major | minor>] [**-c** <*community-string*>] [**-g**] **notification trap**

Add an email filter:

add **-n** <*event-id*> **-s** info | none **notification email-filter**

Turn on the SNMP trap notifier:

add notification trap

Description

Sets up email and SNMP trap notification. You can add one or more email addresses for notifications.

Options

-e, **--email** *<email-address,...>*

Specifies that all notifications are sent to the given email addresses.

-i,--ip *<IP-address,...>*

Specifies the IP address of the host that will receive the SNMP trap data.

-l,--traplevel `warning | error | down`

Specifies the trap level associated with this notification.

-o,--port *<port-id>*

Specifies the port ID used to transfer notifications.

-c,--components *<array_type>*

Specifies the array model number. For example, j4200 or j4400.

-r,--format `pager | email`

Specifies the format of the message: email or pager. If no value is specified, the command defaults to email.

-m,--alarm-level `down | critical | major | minor`

Specifies the minimum priority level of alerts to be sent out. By default, all alerts will be sent out.

-f,--filter `true | false`

Enables or disables email filters. The default is false.

-s, **--skip-aggregated** `true | false`

Skips components of aggregated events if set to true.

-d, **--advisor** `true | false`

Adds Service Advisor information to the email if set to true. The default is false.

-g, **--config-change** `true | false`

Sends configuration event emails as well as alert emails. The default is false.

-n, **--event-number** *<event_id>*

Specifies the event code to filter.

-s, **--severity** `info | none`

Specifies the severity of events to report.

-t, **--trapnumber** `1 | 2 | 3 | 4 | 5`

Specifies the trap number associated with this notification.

notification local_email | email-filter | trap

Specifies that all notifications of the specified type are sent to the given addresses.

local-email - Specifies that you want to receive the notification at your local email address.

email-filter - Specifies that you want to filter the notification.

trap - Specifies that you want to receive notification using the SNMP trap notification.

Examples

sscs add -t *2* **-i** *10.10.10.1* **notification** trap

add registeredarray - Adds an array to the list of registered arrays

Synopsis

add -d registeredarray

add -i [-q] registeredarray

Description

Discovers all arrays on the same subnet as the management host and registers them.

Options

-i,--ipaddress

Specifies the IP address of the device.

-d,**--discover**

Automatically discovers all arrays on the same subnet as the management host and registers them. If discover is specified, all other options are ignored and arrays are automatically discovered.

-q,--query-for-password

Queries for the current password for remote proxy for the registered array.

Examples

sscs add -i *10.10.10.1* **registeredarray**

add userrole - Adds a user name to the user access list

Synopsis

add -u <*user-name*> **userrole storage** | **guest**

Description

Adds a user name to the user access list.

Options

-u,**--username** <*user-name*>

Specifies a user name. The <*user-name*> must exist on the system.

userrole storage | guest

Specifies the new user's role.

storage - Provides full storage configuration and monitoring access.

guest - Allows user to view but not change storage configurations.

list alarm - Provides detailed information on the specified alarms

Synopsis

list [**-s** <*1..3*>] [**-f** <*device-type*>] [**-a** <*service-advisor-ID*>] [**-S**] **alarm** [<*alarm_ID*>]

Description

This command provides detailed information on the specified alarms. When alarm IDs are not specified, it provides summary information on all alarms.

Options

-a,**--advisor** *service-advisor-ID*

Lists the Service Advisor ID.

-s,**--severity** *<1..3>*

Specifies a severity level at which to filter alarms so that only the alarms of that severity level are listed.

Severity Levels:

1 – minor

2 – major

3 – critical

-f,**--faultdevtype** *<device-type>*

Specifies the type of device to list.

-S, --Summary

Specifies that the system return a summary of alarm information.

alarm [*<alarm_ID>*]

Specifies the alarm or alarms to display. If no alarm is specified, summary information on all alarms is displayed.

Examples

```
sscs list -f j4200 alarm

sscs list -s 2 alarm

sscs list -s 1 -a alarm
```

Response Format *(when no advisor option is specified)*

Alarm ID: *ID*

Severity: *severity*

Type: *type*

Topic: *topic*

Event Code: *event-code*

Date: *date*

Device: *device-id*

Descrip.: *Description*

Response Format (when the advisor option is specified)

Alarm ID: *ID*

Severity: *severity*

Type: *type*

Topic: *topic*

SERVICE ADVISOR

EventCode: *event-code*

EventType: *event-type*

Severity: *severity-level*

Sample Description: *event-Description*

Information: *event-information*

Probable Cause: *probable-cause*

Recommended Action: *recommended-action*

Date: *date*

Device: *device-ID*

Descrip.: *Description*

list array - Lists detailed information about one or more arrays

Synopsis

list array [<*array-name,...*>]

Description

Lists detailed information about one or more arrays. If you do not specify an array name, then all array names are listed.

Examples

sscs list array

Response Format *(summary of arrays when no <array-name> value is specified)*

Array: *array-name*

. . .

Array: *array-name*

list date - Lists the current date and time in hours, minutes, and seconds

Synopsis

list -a <*array-name*> `date`

Description

Lists the current date and time in hours, minutes, and seconds that is set on the array. The time zone of the management system is assumed to be the time zone of the array.

Options

-a, **--array** <*array-name*>

Specifies the array for which you want to see the date.

Examples

sscs list -a *array00* **date**

Response Format

Date: *weekday month day HH:MM:SS YYYY*

Example

```
Tue Dec 20 16:09:36 2004
```

list device - List the details of a device or the devices being monitored

Synopsis

list [**-n** <*device-name*>] [**-i** <*IP-address*>] **device** [*device-ID* [,*device-ID...*]]

list devices

Description

List the details of a device or the devices being monitored.

Options

-n,**--name** <*device-name*>

Specifies the device name for which you want to see the details. If no device is specified, summary information for all devices is displayed.

-i,**--ip** <*IP-address*>

Specifies the IP address of the connected host when using remote proxy.

device-ID

Specifies one or more device IDs.

Examples

sscs list -n *device1* **device**

sscs list devices

sscs list -i *10.1.1.1* **device**

Response Format

DeviceName: *device-ID*

Type: *type*

IP Address: *IP-address*

Monitored On: *interface*

Key: *device-key*

Active: Y | N

WWN: *WWN cd /opt/se6x20/cli/bin*

MgmtLevel: *management-level*

Said: *Storage-Automated-Diagnostic-Environment-identifier*

Time Added: *time added*

Response Format (all devices)

```
Monitored On    Device           Type  IP Address WWN              Active ASR
cam-gax.east 5080020000467400 j4500 127.0.0.1  5080020000467400 Y      N
```

list disk - Lists disk information

Synopsis

list -a <*array-name*> **disk** [<*disk-name,...*>]

Description

Lists disk information.

Options

-a, **--array** <*array-name*>

Specifies the name of the array where the disk resides.

disk <*disk-name,...*>

This option provides detailed information on the specified disks. When disks are not specified, this option provides detailed information on all the disks in the tray.

Examples

sscs list -a *array00* **-t 1 disk**

Response Format

Tray: *tray-ID* **Disk**: *disk-name*

Capacity: *disk-capacity*

Type: SAS | SATA

Speed (RPM): *speed-in-revolutions-per-minute*

Status: Optimal | In-use | Available | Failed

State: Enabled | Disabled

Role: Data

Firmware: *firmware-version-number*

Serial number: *serial-number*

WWN: *WWN-number*

list event - Lists the Fault Management Service (FMS) event log information

Synopsis

list [**-s** <*1..3*>] [**-d** <*device_id*>] [**-t** <*type*>] [**-a**] [**-f** <*keyword*>] [**-l** <*limit*>] **event** [<*event_Id*>]

Description

Lists the FMS event log information.

Options

-s, **--severity** <*1..3*>

Specifies a severity level at which to filter events so that only the events of that severity level are listed.

Severity Levels:

1 – warning

2 – error

3 – critical

-d,--device *<device_id>*

List only events for the given device.

-t,--type *<type>*

List only events of the given event type.

-a,--aggregated

Specifies that all events are listed and aggregated so that related events are grouped together.

-f, --filter *<keyword>*

Filter output on the event Description by using the given keyword parameter.

-l,--last *<limit>*

Limit the number of events printed by the given number.

event *<event_id>*

Specifies the event ID.

Examples

sscs list -s 3 event

Response Format

```
Severity    : Minor
Date        : Fri Mar 10 10:39:57 MST 2006
Device      : diag-lsi1 (J4200)
Component   : Sim.0
Type        : Problem
Event Code  :
Aggregated  : No
Description : New problem
```

```
REC_NON_FRU_BATTERY_NEAR_EXPIRATION t0ctrl2:39 discovered on diag-
lsi1 "t0ctrl2".
```

list firmware - Lists the firmware versions of field-replaceable units in this device

Synopsis

list [**-a** <*array-name*>] [**-t** <*type*>] [**-x** <*component_type1 [,component_type1...]*>] **firmware**

Description

Lists the firmware versions of the field-replaceable units in this device.

Options

-a,--array <*array-name*>

Shows the firmware revision level of the field-replaceable units for the specified array only.

-t <*component_type*>

Shows the firmware revision level for the specified component type.

-x, --exclude <*component_type*>

Excludes the specified component type from the list of firmware revision levels.

Examples

List the component firmware revisions for all JBODs.

```
sscs list firmware
```

List the component firmware revisions for a specified JBOD.

```
sscs list -a jbod1 firmware
```

list fru - Lists the field-replaceable units in this device

Synopsis

list -d <*device-name*> [**-t disk** | **fans** | **power supplies** | **sim** | **all**] [**-s**] **fru** [*string,...*]

Description

Lists the field-replaceable units in this device.

Options

-d <*device-name*>

The device name or device ID.

-t,--type disk | fans | power supplies | sim | all

Lists the type of field-replaceable units installed in this device.

-s,--summary

Lists a summary of this field-replaceable unit.

fru [*string,...*]

Lists the field-replaceable unit or units in this device.

Examples

sscs list -d jbod1 **fru**

Output includes the component name, FRU type, alarm state, status, revision, and unique ID.

list jobs - Lists firmware jobs for JBODS

Synopsis

list -a *array-name* **jobs** [*job-id* [*,job-id...*]]

Description

Lists job IDs and status associated with the specified JBOD and optionally specified job ID.

Options

-a,--array *<array-name>*

Specifies the name of the JBOD.

job-id

Specifies the job ID.

Examples

sscs list -a jbod1 **jobs**

Job ID: Install:task27 Status: Done

Job ID: Install:task36 Status: Done

Job ID: Install:task32 Status: Done

Job ID: Install:task35 Status: Done

Job ID: Install:task25 Status: Done

Job ID: Install:task24 Status: Done

Job ID: Install:task45 Status: Done

Job ID: Install:task30 Status: Done

Job ID: Install:task33 Status: Done

Job ID: Install:task34 Status: Done

sscs list -a jbod1 **jobs Install:task27**

Job ID: Install:task27

Type: Firmware Upgrade

Status: Done

% Complete: 100

Time to Completion: 00:00:00

Priority: Unknown

list log - Lists user-initiated actions performed for all registered arrays

Synopsis

list [**-s** { [*mmdd*] *HHMM* | *mmddHHMM* [*cc*] *yy* } [*.SS*]] [**-f** { [*mmdd*] *HHMM* | *mmddHHMM* [*cc*] *yy* } [*.SS*]] [**-t** <*number-of-messages*>] **log**

Description

Lists the user-initiated actions performed for all registered arrays. If you do not specify any options, all log messages are displayed.

Options

-s,**--start** { [*mmdd*] *HHMM* | *mmddHHMM* [*cc*] *yy* } [*.SS*]

Lists all log messages starting at the date specified by the date options. Use with the **-f**,**--finish** subcommand to specify a date range.

-f,**--finish** { [*mmdd*] *HHMM* | *mmddHHMM* [*cc*] *yy* } [*.SS*]

Lists all log messages ending at the date specified by the date options. Use with the `-s,--start` subcommand to specify a date range.

mmdd

Specifies the month and day. For example, 0331 for March 31.

HHMM

Specifies the hour and minute. The hour is based on a 24-hour clock. For example, 1:30 p.m. is 1330.

cc

Specifies the century part of the year.

yy

Specifies the two-digit year.

.SS

Specifies the seconds of the hour.

-t,**--tail** <*number*>

Lists the most recent log messages as specified by *number*.

Examples

sscs list -t *100* **log**

Lists the last 100 messages.

Response Format

Timestamp : *message*

list mgmt-sw - Lists the management software application that you are logged into

Synopsis

list mgmt-sw

Description

Lists the management software application that you are logged into.

Examples

sscs list mgmt-sw

Response Format

Application Name: "Sun StorageTek(TM) Common Array Manager"

User: storage

Current Logins: 2

Server: 10.8.88.173

Server OS: SunOS

Server OS Version: 5.10

Product Version: 4.2.0.0

Build Date: 2005/12/03

Install Info: 4.2.0.0 Build 61

Critical Alarms: 13

Down Alarms: 0

Major Alarms: 24

Minor Alarms: 0

list notification - Lists the remote notification provider and its status

Synopsis

list notification

Description

Lists the remote notification provider and its status.

Examples

sscs list notification

Response Format

Entry Email/Events Type Device Priority Events
enter-no email-address notification-type device-type priority events

Provider Active Heartbeat (hrs) IP
provider active-flag frequency IP Address

Trap # IP Name/Address Port Min Alert Level
trap-no IP Address and trap level

list registeredarray - Lists registered array information

Synopsis

list -a [<*array-name,...*>] **registeredarray**

Description

Lists registered array information.

Options

-a, **--array** <*array-name,....*>

Specifies the registered array or arrays to list. If no arrays are specified, a list of all array names is provided (optional).

Examples

sscs list -a *array01* **registeredarray**

Response Format (summary if no <array-name> values are specified)

Array Name: *array-name*

...

Array Name: *array-name*

Response Format (detail if <*array-name*> values are specified)

Array Name: *array-name*

IP Address: *IP-address*

...

IP Address: *IP-address*

list site - Lists site information

Synopsis

list site

Description

Lists pertinent information on the site.

Example

sscs list site

```
*Company Name        : Sun Microsystems
*Site Name           : Interop Lab
Address              :
Address 2            :
Mail Stop            :
*City                : Broomfield
State                :
*Country             : USA
*Contact First Name  : Fred
*Contact Last Name   : Jones
Telephone Number     :
Extension            :
*Contact Email       : Fred.Jones@sun.com
```

list storage-system - Lists information about one or more arrays

Synopsis

list storage-system [*<array_name,...>*]

Description

Lists detailed information about one or more arrays. If you do not specify an array name, then all array names are listed.

Examples

sscs list storage-system *array00*

Response Format (summary of arrays when no <array-name> value is specified)

Array: *array-name*

. . .

Array: *array-name*

list userrole - Lists the user name and user role information

Synopsis

list userrole [**storage** | **guest**]

Description

Lists the user name and user role information.

Options

userrole storage | guest

Specifies the role for this user.

Example

sscs list userrole storage

Response Format

User Name: *user-name* **User Role:** *user-role*

...

User Name: *user-name* **User Role:** *user-role*

login - Logs in a user to a remote management host

Synopsis

login -h <*host-name*> *[* **-s CAM | Legacy** *] [* **-t** *] [* **-f** *]* **-u** <*user-name*>

Description

Log in to the **sscs** command-line interface (CLI) on the management system specified by the **-h** <*host-name*>. This command starts a CLI session on the specified host.

Options

-h,**--hostname** <*host-name*>

Specifies the Management Host name.

-s,**--system-type** CAM | *Legacy*

Specifies whether you log into Common Array Manager or legacy management software.

-t,**--http**

Enables you to use the HTTP protocol to connect to the Element Manager (EM) server, instead of HTTPS. An HTTP connector is configured in Tomcat, the servlet container in Java, for the Java Web Console at port 6789. If SSL is not functioning between the client and the server, this might be required.

-f, **--force**

Exists for backward compatibility with management applications that only allow one login per user. This option forces a login to the Management Host. If another user with the same user name is already logged on, the duplicate user is then logged off.

-u, **--username** *<user-name>*

Specifies the user name that has an assigned role.

logout - Logs out of sscs

Synopsis

logout

Description

Logs out of the remote sscs command-line interface session.

modify agent - Modify the fault management agent parameters

Synopsis

modify [**-a**] [**-d**] [**-r**] [**-i** *<integer>*] **agent** [*<agent_id>*]

Description

Modify the fault management agent parameters. Fault Management Service (FMS) periodically scans devices for new messages and updated health status. This command allows changing the scan interval as well as enabling or disabling the scan. If no options are given the current agent settings are printed out.

Internal agent properties can be set by using name=value for the strings on the agent.

The most common property to be set is debug=0,1,2,3 to turn on agent debugging.

sscs modify agent debug=3

All other properties are for service only.

Options

-a,--activate

Specifies that the system activate the monitoring agent.

-d,--deactivate

Specifies that the system deactivate or turn off the monitoring agent.

-r,--run

Specifies that the system schedule the agent to run either immediately or as soon as the currently scheduled run has finished.

-i,--interval <*integer*>

Specifies the interval, in minutes, before the agent scan runs.

agent [<*agent_id*>]

Specifies the agent that you want to modify. The name of the agent monitoring the device can be retrieved using the `list device` command

Examples

sscs modify -i *5* **agent**

modify array - Modifies an array's name

Synopsis

modify [**-N** <*new-array-name*>] **array** <*array-ID*>

Description

Modifies the name assigned to the array.

Options

-N, **--new-array-name** *<array-name>*

Specifies the new name of the array.

array *<array-ID>*

Specifies the name of the array to be modified.

Examples

```
sscs modify -n array2 array jbod1
```

modify firmware - Modifies the firmware version of the field-replaceable unit of the device

Synopsis

```
modify -a <array-name> [ -f ] -o [ -t sim | disk ] [ -x sim | disk ] [
-p <path>] [ -c <field-name>] [ -w ]  firmware
```

Description

Modifies the firmware versions of the specified field-replaceable units of the specified array.

Options

-a,--array *<array-name>*

Modifies the firmware revision level of the specified field-replaceable units for the specified array only.

-c,--component *<field-name>*

Modies the firmware for the selected components. To get the valid values, execute the sscs list -a *<array-name>* firmware command. Use either the Name or Model field values.

-f,--force

Modifies the firmware revision level of the all field-replaceable units even if the firmware revision level is already at the baseline level.

-o,--offline

Performs an offline upgrade of the specified component(s).

-p,--path *<path>*

Specifies the path of the firmware image file. Loads firmware from a file directly onto the array. Caution should be exercised when using this command because unsupported firmware can be loaded onto a field-replaceable unit. If -p option is provided, the -c option is required.

-t,--type *<fru-type>*

Modifies the firmware revision level of the field-replaceable units of the specified type only.

-w,--no-warn

Modifies the firmware without displaying the standard warning.

-x,--exclude `sim | disk`

Excludes the specified component from being upgraded.

Examples

modify - a `MyArray` **-f firmware**

modify mgmt-sw - Stores the specified storage system name for the session

Synopsis

modify -X *<storage-system-name>* **mgmt-sw**

Description

Stores the specified storage system name for the session. This command is useful for repeated operations with an array. After this command is executed, the -a option for subsequent sscs commands is not necessary.

Options

-X,--storage-system *<storage-system-name>*

Specifies the name of the storage system.

Example

modify -X MyArray **mgmt-sw**

modify registeredarray - Modifies the locally stored password for a registered array

Synopsis

modify -a <*array-name*> **-q registeredarray**

Description

Modifies the locally stored password for a registered array.

Options

-a, **--array** <*array-name*>

Specifies the name of the array to be modified.

-q, **--query-for-password**

Queries for the current password for the registered array.

Examples

sscs modify -a *array00* **-q registeredarray**

New Password: *myregisteredarray*

Re-enter New Password: *myregisteredarray*

modify site - Modifies the site properties for this instance of CAM

Synopsis

modify [**-r** < *site_info* >,...] **site** [< *site_info* = *value* >,...]

Description

Modifies the site properties for this instance of CAM. The site properties contain information about the site and provides information needed for the notification providers.

Options

-r,--remove < *site_info* >

Removes the specified site information.

site < *site_info* = *value* >

Modifies existing site settings or adds new site information. Possible values for *site_info* are: **customer, contract, name, address, address2, mailStop, city, state, country, contact, phone, email.** Possible values for *value* consist of an alphanumeric string. If the string includes spaces, enclose the values in quotes.

Examples

```
sscs modify site name="Development Lab"

sscs modify -r name site
```

modify storage-system - Modifies array information

Synopsis

modify [**-N** <*storage-system-name*>] [**-d** <*Description-text*>] [**-u** <*user-name*>] [**-q**] [**-U** <*user-name*>] [**-Q**] **storage-system** <*storage-system-name*>

Description

Modifies the array information.

Options

-d,--Description

Provides a textual description of the array.

-N,--new-name

Changes the array name.

-q,--query-for-password

Changes the array password.

-u,--user-name

Changes a username on the array.

storage-system *<storage-system-name>*

Specifies the array where the changes will take effect.

Example

```
sscs modify -q storage-system MyArray
Enter the array password:
Confirm password:
```

modify userrole - Modifies a user role

Synopsis

sscs modify -u *<user-name>* **-p** *<password>* **-i** ANY | *<IP-address,...>* **userrole** [**storage** | **guest**]

Description

Modifies a user role.

Options

-u,**--username** *<user-name>*

Specifies the user name that has an assigned role (storage or guest).

-p,**--password-required** true | false

Specifies whether to require user login with a password.

-i,**--ip-address** ANY | *<IP-address,...>*

Specifies the IP addresses from which the user can log in.

userrole storage | guest

Specifies the role assigned to the user.

Examples

```
sscs modify -u bsmith -p true -i ANY userrole guest
```

register storage-system - Registers a storage system with the host

Synopsis

register -i <*ip-address*> [**-p** <*port-id*>] [**-u** <*user-name*>] [**-q**] [**-U** <*user-name*>] [**-Q**] **storage-system**

register -d storage-system

Description

Registers a storage system with the host.

Options

-d,--discover

Specifies that the host will discover a registered array.

-i,--ipaddress <*ip-address*>

Specifies the IP address of the storage system that you want to register.

-p,--port <*port-id*>

Specifies the port ID of the storage system that you want to register.

-u,--user storage | root | guest

Specifies the user name that has an assigned role.

-q,--query-for-password

Specifies whether to query for a password for this registered storage system.

-U,--device-specific-user <*user-name*>

Specifies a specific name for this device.

-Q,--query-for-device-specific-password

Specifies whether to query for a specific password for this registered device.

register sun-connection - Registers CAM software and all monitored arrays with Auto Service Request

Synopsis

register [**-u** <*sun_online_account_username*>] [**-H** <*proxy-host-name*>] [**-P** <*proxy-port_number*>] [**-U** <*proxy_username*>] [**-e all** | **telemetry**] [**-d** <**all** | **telemetry**>] **sun-connection**

Description

Registers CAM software and all monitored arrays with Auto Service Request. Auto Service Request monitors the array system health and performance and automatically notifies the Sun Technical Support Center when critical events occur. Critical alarms generate an Auto Service Request case. The notifications enable Sun Service to respond faster and more accurately to critical on-site issues. All newly discovered arrays will also be registered with the saved registration options.

Options

-d,**--disable** all | telemetry

Disables all telemetry mechanisms.

-e,**--enable** all | telemetry

Enables all telemetry mechanisms.

-H,**--proxyHost** <*proxy-host-name*>

Specifies the proxy host name.

-P,**--proxyPort** <*proxy-port_number*>

Specifies the proxy port number.

-U, **--proxyUser** <*username*>

A proxy host authenticated user name.

-u,**--user** <*sun_online_account_username*>

Specifies a valid Sun online account user name. To get one go to: https://portal.sun.com/portal/dt/

sun-connect

Specifies that you are registering the CAM software and all monitored arrays with Auto Service Request.

Examples

```
sscs register -H Proxy1 -P 8080 -u MySunAcctId -e telemetry sun-
connect
```

remove alarm - Removes the current alarms

Synopsis

remove [**-f** <*device-type*>] [**-s 1** | **2** | **3**] [**-A**] **alarm** [<*alarm-ID,...*>]

Description

Removes the current alarms.

Options

-f,**--faultdevtype** <*device-type*>

Removes alarms by the device type using a device key filter.

-s,**--severity** *string*

Specifies the severity level for which you want to remove alarms.

-A,**--All** <*alarm*>

Removes all of the alarms.

alarm <*alarm-ID,...*>

Specifies the alarm ID or alarm IDs you want to remove.

Examples

```
sscs remove -f 6140 alarm
```

```
sscs remove -s 2 alarm

sscs remove -A alarm
```

remove notification - Removes a local or remote notification provider

Synopsis

remove [**-e** <*string*[,*string...*]>] **notification local_email** | **email-filter** | **trap**

remove [**-i** <*IP-address*>] [**-o** <*string*>] [**-t 1** | **2** | **3** | **4** | **5**] **notification local_email** | **email-filter** | **trap**

remove -d <*string*[,*string...*]> **notification local_email** | **email-filter** | **trap**

remove [**-c** <*category-id*>] [**-e** <*event-id*>] [**-a**] **notification** <*emailAddress*[,*emailAddress...*]>

Description

Removes a local or remote notification.

Options

-a, **--all**

Specifies that all notifications should be removed.

-c, **--category** <*category-id*>

Specifies to remove the specified category ID notification.

-d, **--id** <*string,string...*>

Specifies to remove the specified device ID.

-e,**--email** <*string*[,*string...*]>

Specifies that notifications should no longer be sent to the specified recipient.

-e, **--event** <*event-id*>

Specifies the event ID to be filtered from email notifications.

-i, **--ip** <*IP-address*>

Specifies the IP address of the host that will no longer receive the SNMP trap data.

-t,**--trapnumber** 1 | 2 | 3 | 4 | 5

Specifies the trap number associated with this notification.

-o,--port *<port-id>*

Specifies the port ID used to transfer notifications.

local-email

Removes the notification from your local email address.

email-filter

Removes the email filter from the notification.

trap

Removes the SNMP trap notification.

Examples

sscs remove -e *john.doe@address.com* **notification local_email**

sscs remove notification nscc_email

sscs remove -t 2 notification trap

remove registeredarray - Removes an array from the list of registered arrays

Synopsis

remove -a *<array-name,...>* **registeredarray**

Description

Removes one or more arrays from the list of registered arrays.

Options

-a,**--array** *<array-name,...>*

Specifies the registered arrays to remove.

registeredarray

Removes the array registration.

Example

sscs remove -a *array00* **registeredarray**

remove userrole - Removes user names from a user role (storage and guest)

Synopsis

remove -u <*user-name,...*> **userrole storage** | **guest**

Description

Removes user names from a user role (storage and guest).

Options

-u, **--username** <*user-name,...*>

Specifies the user name to remove.

userrole storage | guest

Specifies the user's role.

Examples

sscs remove -u *jf39992* **userrole guest**

service - Performs service on a specified array

Synopsis

service -a <*array-name*> [**contact** | **locate** [**-o**] | **print** [**-t** <**arrayprofile** | **log** | *drive_id*>] **enable** | **disable** | **set name=**<*new-name*> | **syncTime**]

Description

Use this command to perform inband communication tests, locate an array by turning its LED on or off, print the contents of the array profile or log file, change the name of the array, and synchronize the time of the JBOD with the attached data host.

Options

-a,**--array** <*array-name*>

Specifies the array to perform a service.

-t,**--target** arrayprofile | log

Specifies the target file to print.

-o,**--off**

Turns off the locator LED.

contact

Tests connectivity to the array (inband communication test).

disable

Disables the specified target drive.

enable

Enables the specified target drive.

locate

Locates the array by turning LED on.

name=<*new-name*>

Changes the name of the JBOD to the specified name.

print

Prints all physical information available for the specified array.

syncTime

Synchronize the time of the JBOD with the attached host.

Examples

Turn off all LED locate indicators on the specified JBOD.

```
sscs service -d "JBOD(2029QTF0802QCK00E)" -t off locate
```

Set the JBOD name to J4200_box1

```
sscs service -d "JBOD(2029QTF0802QCK00E)"  name=J4200_box1 set
```

Disable drive00 on the array named J4400_box3.

```
sscs service -a j4400_box3 -t drive00 disable
```

unregister storage-system - Unregisters an array

Synopsis

unregister storage-system <*storage-system-name,...*>

Description

Unregisters an array from the list of registered storage systems.

Options

storage-system <*storage-system-name,...*>

Specifies the storage system or storage systems that you want to unregister from the list of registered storage-systems.

Example

sscs unregister storage-system *array19*

unregister sun-connection - Unregisters CAM software and all monitored arrays from Auto Service Request (ASR)

Synopsis

unregister sun-connection

Description

Stops sending system health and performance information on monitored arrays back to Sun. Newly discovered arrays will not be activated with ASR.

Examples

sscs unregister sun-connect

version - Shows the versions of software that you are running on this array and the client

Synopsis

-V, --version

Description

Shows the versions of software that you are running on this array and the client.

Examples

sscs -V

```
Sun StorageTek(TM) Common Array Manager v6.1.1.0

sscs client v1.1.4
```