

IBM FlashSystem

*Command Line Interface Guide*





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**Note**

Before using this information and the product it supports, read the information in Safety notices, Notices, the *IBM Systems Safety Notices* manual, G229-9054, and the *IBM Environmental Notices and User Guide*, Z125-5823.

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# Contents

## IBM FlashSystem Command Line

### Interface Guide. . . . . 1

Command syntax. . . . .	1
Connecting to the system . . . . .	1
Commands . . . . .	1
confirm . . . . .	1
diag . . . . .	1
exit . . . . .	2
fc . . . . .	2
fc attached_ports . . . . .	2
fc link_disable . . . . .	2
fc link_enable . . . . .	2
fc link_reset . . . . .	3
fc log . . . . .	3
fc loop_id . . . . .	3
fc reset . . . . .	3
fc reset_log_limits . . . . .	4
fc speed . . . . .	4
fc status . . . . .	4
fc topology . . . . .	4
help . . . . .	5
ib . . . . .	5
ib attached_ports . . . . .	5
ib link_disable . . . . .	5
ib link_enable . . . . .	5
ib link_reset . . . . .	6
ib log . . . . .	6
ib reset . . . . .	6
ib reset_log_limits . . . . .	6
ib status . . . . .	6
license . . . . .	7
license add . . . . .	7
license remove . . . . .	7
log . . . . .	7
log clear . . . . .	7
log event . . . . .	7
log follow . . . . .	8
log hwerr . . . . .	8
log remote . . . . .	8
lu . . . . .	8
lu aca . . . . .	8
lu access . . . . .	9
lu access add . . . . .	9
lu access all . . . . .	9
lu access group . . . . .	9
lu access info . . . . .	10
lu access remove . . . . .	10
lu alias . . . . .	11
lu alias add . . . . .	11
lu alias remove . . . . .	11
lu create . . . . .	11
lu destroy . . . . .	12
lu device_id . . . . .	12
lu info . . . . .	12
lu init . . . . .	12

lu media_errors . . . . .	13
lu name . . . . .	13
lu number . . . . .	13
lu offset . . . . .	13
lu reserve . . . . .	14
lu reserve remove . . . . .	14
lu reserve reset . . . . .	14
lu reserve status . . . . .	14
lu sector_size . . . . .	14
lu size . . . . .	15
mail . . . . .	15
mail notifications . . . . .	15
mail server . . . . .	15
mail targets . . . . .	16
mail test . . . . .	16
network . . . . .	16
network dns . . . . .	16
network dns auto . . . . .	16
network dns domain . . . . .	17
network dns nameserver . . . . .	17
network hostname . . . . .	17
network ip_assignment . . . . .	17
network ldap . . . . .	18
network ldap basedn . . . . .	18
network ldap binddn . . . . .	18
network ldap bindpw . . . . .	19
network ldap bind_timelimit . . . . .	19
network ldap disable . . . . .	19
network ldap enable . . . . .	19
network ldap host . . . . .	20
network ldap port . . . . .	20
network ldap ssl . . . . .	20
network ldap timelimit . . . . .	21
network restart . . . . .	21
snmp . . . . .	21
snmp agent . . . . .	21
snmp resend . . . . .	21
snmp restart . . . . .	22
snmp ro_community . . . . .	22
snmp rw_community . . . . .	22
snmp sinks . . . . .	22
snmp system_contact . . . . .	22
snmp system_description . . . . .	23
snmp system_location . . . . .	23
snmp test_trap . . . . .	23
snmp traps . . . . .	23
stats . . . . .	23
stats info . . . . .	24
stats log . . . . .	24
stats log add . . . . .	24
stats log clear_invalid . . . . .	24
stats log remove . . . . .	24
stats log reset . . . . .	25
stats view . . . . .	25
status . . . . .	25
status battery . . . . .	25

status fan . . . . .	25
status power . . . . .	25
status temperature . . . . .	26
storage . . . . .	26
storage failover (x10 systems only) . . . . .	26
storage failover_cancel (x10 systems only) . . . . .	26
storage format_spare (x20 systems only) . . . . .	26
storage poweroff_spare (x20 systems only) . . . . .	26
storage poweron_spare (x20 systems only) . . . . .	26
storage raid failover (x20 systems only) . . . . .	27
storage report . . . . .	27
support . . . . .	27
support address . . . . .	27
support city . . . . .	27
support clear . . . . .	28
support country . . . . .	28
support email . . . . .	29
support hours . . . . .	30
support location . . . . .	30
support mobile . . . . .	30
support name . . . . .	30
support office . . . . .	31
support state . . . . .	31
support timezone . . . . .	31
support zip . . . . .	31
sync (x20 systems only) . . . . .	31
sync activate (x20 systems only) . . . . .	32
sync config (x20 systems only) . . . . .	32
sync status (x20 systems only) . . . . .	32
system . . . . .	32
system banner . . . . .	32
system battery . . . . .	33
system callhome_config . . . . .	33

system callhome_events . . . . .	33
system callhome_heartbeat . . . . .	33
system callhome_support_config . . . . .	34
system cancel_patch . . . . .	34
system identifier . . . . .	34
system identify . . . . .	34
system messages . . . . .	34
system patch (x20 systems only) . . . . .	35
system patch_spare (x20 systems only) . . . . .	35
system poweroff . . . . .	35
system reboot . . . . .	35
system report . . . . .	35
system services . . . . .	35
system status . . . . .	36
task . . . . .	36
time . . . . .	36
time change . . . . .	36
time ntp . . . . .	36
time ntp server . . . . .	36
time timezone . . . . .	37
time timezone list . . . . .	37
time uptime . . . . .	37
user . . . . .	37
user add . . . . .	37
user remove . . . . .	37
user set_password . . . . .	38
who . . . . .	38

<b>Notices . . . . .</b>	<b>39</b>
Trademarks . . . . .	40
Terms and conditions . . . . .	41

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# IBM FlashSystem Command Line Interface Guide

Learn about command line interface (CLI) commands for an IBM® FlashSystem™ 710, IBM FlashSystem 810, IBM FlashSystem 720, or IBM FlashSystem 820 storage system.

**Important:** Most commands are common to the x10 and x20 systems. Any commands that apply to only x10 or x20 systems are noted.

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## Command syntax

The type of brace enclosing a command argument specifies whether it is required or optional.

**command** <Required Argument> [Optional Argument]

---

## Connecting to the system

### About this task

To connect to the system via telnet or Secure Shell (SSH) to access the command line interface (CLI), complete the following steps:

### Procedure

1. From a telnet or SSH client, access the system by using the system IP address.
2. Log in by using the default username `username` and the default password `password`, or your system's unique username and password.

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## Commands

**Important:** Most commands are common to the x10 and x20 systems. Any commands that apply to only x10 or x20 systems are noted.

### **confirm**

`confirm` - Modify confirmation message behavior

**confirm** [*on* | *off*]

This command turns all confirmation messages on or off for the current user. This setting only lasts for the current session.

### **diag**

`diag` - Run system diagnostics

### **diag**

This command allows access to a diagnostic menu used to run various system stress tests.

**Attention:** Entering the diagnostic menu will interrupt system activity and may affect data currently on the system. Controller links will be taken offline, and data will be synchronized to the backup array (if the system has one). You should backup all data before entering the menu. Upon leaving the diagnostic monitor, the system will return to the previous operating state.

## exit

exit - Exits this shell

## exit

The exit command exits the shell.

## fc

fc - configure a Fibre Channel controller

**fc** [*<option>*] [*<arguments>*]

Use the fc command to read and modify the configuration for a Fibre Channel controller. This command will only be available on systems with Fibre Channel controllers installed. Issuing this command without any subcommands shows a listing of installed Fibre Channel controllers and controller ports.

## fc attached\_ports

fc attached\_ports - display ports that are connected to a Fibre Channel controller port

**fc attached\_ports** *<port name>*

Use this subcommand to display the ports (initiator and target) which are connected to the given Fibre Channel controller port. In direct connection configurations, there will only be at most one port listed. In switched environments, multiple ports may be displayed.

**port** Name of the Fibre Channel controller port; for example, 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

## fc link\_disable

fc link\_disable - Disable the link on a Fibre Channel controller port

**fc link\_disable** *<port name>*

Use this subcommand to disable the link on a Fibre Channel controller port.

**Attention:** This command may cause data integrity issues while data is active and is usually performed under the guidance of Support.

**port** Name of the Fibre Channel controller port; for example, 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

## fc link\_enable

fc link\_enable - Enable the link on a Fibre Channel controller port

**fc link\_enable** *<port name>*

Use this subcommand to enable the link on a Fibre Channel controller port.



**Attention:** This command may cause data integrity issues while data is active and is usually performed under the guidance of Support.

**port** Name of the Fibre Channel controller port; for example, 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

## **fc link\_reset**

fc link\_reset - Reset the link on a Fibre Channel controller port.

**fc link\_reset** <port name>

Use this subcommand to reset the link on a Fibre Channel controller port.

**Attention:** This command may cause data integrity issues while data is active and is usually performed under the guidance of Support.

**port** Name of the Fibre Channel controller port; for example 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

## **fc log**

fc log - Read or configure the log level for a Fibre Channel controller

**fc log** <controller> [log\_level]

Use the log subcommand to display or modify the log level of a Fibre Channel controller. Controllers will not log messages with priority lower than this level. The level value should remain at debug unless instructed by Support to change it.

### **controller**

Name of the Fibre Channel controller; for example 'fc-1' or 'fc-2.' Use the **fc** command to show available controllers.

### **log\_level**

Log level. Levels are 'debug,' 'info,' 'warning,' 'error,' or 'critical.'

## **fc loop\_id**

fc loop\_id - Read or configure the arbitrated loop ID for a Fibre Channel controller port.

**fc loop\_id** <port> [value]

The loop\_id subcommand is used to read or configure the arbitrated loop ID setting for a Fibre Channel controller port. This is useful for some situations where the setup requires a specific loop ID. Usually 'soft' is a sufficient loop\_id setting.

**port** Name of the Fibre Channel controller port; for example 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

**value** Loop ID value to be set. A value of 'soft' indicates that the link negotiation should automatically assign the loop ID. An integer value indicates that the loop ID is to be hard-set to the specified value. Valid values are those from 1 to 126. Use the 'loop\_id' subcommand without a value argument to see the port's current loop ID configuration.

## **fc reset**

fc reset - Reset a Fibre Channel controller

**fc reset** <controller>

Use this command to hard-reset a Fibre Channel controller.

**Attention:** This command may cause data integrity issues while data is active and is usually performed under the guidance of Support.

**controller**

Name of the Fibre Channel controller; for example 'fc-1' or 'fc-2.' Use the **fc** command to show available controllers.

## **fc reset\_log\_limits**

fc reset\_log\_limits - Reset a Fibre Channel controller's log limits.

**fc reset\_log\_limits** <controller>

In an effort to prevent the system log from becoming full, certain event log messages are suppressed if the message is repeated a number of times. Use the reset\_log\_limits subcommand to reset a Fibre Channel controller's log limiting so messages are not suppressed.

**controller**

Name of the Fibre Channel controller; for example 'fc-1' or 'fc-2.' Use the **fc** command to show available controllers.

## **fc speed**

fc speed - Read or configure the link speed for a Fibre Channel controller port.

**fc speed** <port name> [<speed>]

Use the speed subcommand to read or configure the link speed setting for a Fibre Channel controller port.

**port** Name of the Fibre Channel controller port; for example 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

**speed** Speed to set the port to. Use the 'speed' subcommand without a speed argument to see supported speeds.

## **fc status**

fc status - Display status of a Fibre Channel controller port.

**fc status** <port name>

Use the status subcommand to display the status of a Fibre Channel controller port.

**port** Name of the Fibre Channel controller port; for example 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

## **fc topology**

fc topology - Read or configure the topology for a Fibre Channel controller port.

**fc topology** <port name> [<topology>]

Use the topology subcommand to read or configure the topology setting for a Fibre Channel controller port.

**port** Name of the Fibre Channel controller port; for example 'fc-1a' or 'fc-2b.' Use the **fc** command to show available ports.

## topology

Topology to set the port to. Use the 'topology' subcommand without a topology argument to see supported topologies.

## help

help - Display help information.

## help

The help command shows detailed information about a particular command or subcommand. Examples of use are 'help network' or 'help user add.'

## ib

ib - Configure an InfiniBand controller.

**ib** [*<option>*] [*<arguments>*]

Use the ib command to read and modify the configuration for an InfiniBand controller. This command will only be available on systems with InfiniBand controllers installed. Issuing this command without any subcommands shows a listing of installed InfiniBand controllers and controller ports.

## ib attached\_ports

ib attached\_ports - Display ports connected to an InfiniBand controller port.

**ib attached\_ports** *<port name>*

Use the attached\_ports subcommand to display the ports (initiator and target) which are connected to the given InfiniBand controller port. In direct connection configurations, there will only be at most one port listed. In switched environments, multiple ports may be displayed.

**port** Name of the InfiniBand controller port; for example, 'ib-1a' or 'ib-2b.' Use the **ib** command to show available ports.

## ib link\_disable

ib link\_disable - Disable the link on a InfiniBand controller port.

**ib link\_disable** *<port name>*

Use the link\_disable subcommand to disable the link on a InfiniBand controller port.

**Attention:** This command may cause data integrity issues while data is active and is usually performed under the guidance of Support.

**port** Name of the InfiniBand controller port; for example, 'ib-1a' or 'ib-2b.' Use the **ib** command to show available ports.

## ib link\_enable

ib link\_enable - Enable the link on a InfiniBand controller port.

**ib link\_enable** *<port name>*

Use the link\_enable subcommand to enable the link on a InfiniBand controller port.

**port** Name of the InfiniBand controller port; for example, 'ib-1a' or 'ib-2b.' Use the **ib** command to show available ports.

## ib link\_reset

ib link\_reset - Reset the link on an InfiniBand controller port.

**ib link\_reset** <port name>

Use the link\_reset subcommand to reset the link on an InfiniBand controller port.

**port** Name of the InfiniBand controller port; for example, 'ib-1a' or 'ib-2b.' Use the **ib** command to show available ports.

## ib log

ib log - Read or configure the log level for an InfiniBand controller.

**ib log** <controller> [log\_level]

Use the log subcommand to display or modify the log level of an InfiniBand controller. Controllers will not log messages with priority lower than this level. This value should remain at debug unless instructed by Support to change it.

**port** Name of the InfiniBand controller; for example, 'ib-1' or 'ib-2.' Use the **ib** command to show available controllers.

**log\_level**

Log level. Levels are 'debug,' 'info,' 'warning,' 'error,' or 'critical.'

## ib reset

ib reset - Reset an InfiniBand controller

**ib reset** <controller>

Use this command to hard-reset an InfiniBand controller.

**Attention:** This command may cause data integrity issues while data is active and is usually performed under the guidance of Support.

**controller**

Name of the InfiniBand controller; for example, 'ib-1' or 'ib-2.' Use the **ib** command to show available controllers.

## ib reset\_log\_limits

ib reset\_log\_limits - Reset an InfiniBand controller's log limits.

**ib reset\_log\_limits** <controller>

In an effort to prevent the system log from becoming full, certain event log messages are suppressed if the message is repeated a number of times. Use the reset\_log\_limits subcommand to reset a InfiniBand controller's log limiting so messages are not suppressed.

**controller**

Name of the InfiniBand controller; for example, 'ib-1' or 'ib-2.' Use the **ib** command to show available controllers.

## ib status

ib status - Displays status of an InfiniBand controller port.

**ib status** <port>

Use the status subcommand to display the status of an InfiniBand controller port.

**port** Name of the InfiniBand controller port; for example, 'ib-1a' or 'ib-2b.' Use the **ib** command to show available ports.

## license

license - Configure system feature licenses.

**license** [*<option>*] [*<arguments>*]

Use the license command to install system feature licenses by entering license keys. License keys are system-unique, and if correctly installed will enable various advanced features. Entering the license command without arguments will display currently installed system licenses.

## license add

license add - Add system feature licenses

**license add** *<license key>*

Use the add subcommand to add system feature licenses.

**license key**

The license key for the system feature license that will be added.

## license remove

license remove - Remove system feature licenses

**license remove** *<license key>*

Use the remove subcommand to remove system feature licenses.

**license key**

The license key for the system feature license that will be removed.

## log

log - Read system log files.

**log** [*<option>*] [*<arguments>*]

The system logs are useful for tracing system activity and for reading the configuration of the system. Issuing the log command without arguments will display the Event Log. The system maintains a system event log as well as a separate ECC event log. The default log level is info.

## log clear

log clear - Clear the Event Log.

**log clear**

Use the clear subcommand to clear the Event Log.

## log event

log event - Display the current Event Log.

**log event** [*<level>*]

Use the event subcommand to display the current Event Log. Pressing <ctrl+c> during the log output stops the output. You should start a terminal capture before issuing this command as it displays the entire log without user interaction.

**level** Log level. Valid log levels are 'debug,' 'info,' 'notice,' 'warn,' 'err,' and 'crit.' The default log level is 'info.'

## log follow

log follow - Display recent Event Log and follow changes.

### log follow

Use the follow subcommand to follow the Event Log. It will display the last 25 events and then enter follow mode. Any system events emitted during the follow will be displayed as they occur. Press Enter or Esc to escape follow mode.

## log hwerr

log hwerr - View or clear the Hardware Error Log.

### log hwerr [*<clear>*]

Use the hwerr subcommand to view or clear the Hardware Error Log.

**clear** Clears the Hardware Error Log. This option requires administrative privileges.

## log remote

log remote - Configure a remote host for log forwarding.

### log remote [*<host>*]

Use the remote subcommand to configures a remote host to which syslog-based messages are forwarded.

**host** The hostname or IP of the remote logging host, or '-disable' to disable remote logging.

## lu

lu - Configure the Logical Unit (LU) table

### lu [*<option>*] [*<arguments>*]

A Logical Unit is a logical representation of storage. Logical Units can be created and modified using the 'lu' command and modifications made to the Logical Units are immediately applied.

Issuing the 'lu' command without arguments will display currently configured Logical Units

## lu aca

lu aca - Enable ACA support for a Logical Unit.

### lu aca *<LU name>* enable

Use the aca subcommand to enable the logical unit's support for the Auto Contingent Allegiance (ACA) condition. On some host systems, notably AIX, this option must be enabled in order to run multiple concurrent commands. After changing this option, all interface ports which have access to the logical unit need to be reset.

**LU name**

Logical Unit name. This can be retrieved using the 'lu' command.

**lu access**

lu access - Modify or display access policies and access policy groups.

**lu access** [*<option>*] [*<arguments>*]

An access policy determines which controllers and hosts have access to a Logical Unit. Issuing the 'lu access' command without arguments will display the current Access Policies.

**lu access add**

lu access add - Add a new Access Policy for the specified Logical Unit.

**lu access add** *<policy name>* *<LU name>* *<channel>* [*host ID*]

**lu access add group** *<group name>* *<LU name>*

Use the add subcommand to add a new Access Policy or Access Policy Group for the specified Logical Unit.

**policy name**

Name of the new Access Policy.

**LU name**

Logical Unit name. This can be retrieved using the 'lu' command.

**channel**

Name of the controller channel.

**host ID**

ID of the host that should have access to this logical unit or 'open' to allow open access. Only open access is allowed unless the LU Masking feature is enabled.

**group name**

Access Policy Group name.

**lu access all**

lu access all - Display detailed information for all present Access Policies.

**lu access all**

Use the all subcommand to display detailed information about all Access Policies present on the system.

**lu access group**

lu access group - Modify or display Access Policy Groups

**lu access group** [*<action>*] [*<arguments>*]

Use the group subcommand to modify Access Policy Groups by adding new entries, removing entries, or destroying entire groups. Issuing the 'lu access group' command without arguments will display currently configured Access Policy Groups.

**add** Add a new initiator and target pair to a new or existing Access Policy Group and apply it to any existing LU already using the Group. Add requires 4 additional arguments to specify information for the new entry:

**group\_name**  
Name of the new or existing Access Policy Group

**entry\_name**  
Name of the new initiator and target pair

**channel**  
Name of the controller channel

**host\_ID**  
ID of the host that should have access, or 'open' to allow open access. Only open access is allowed unless the LU Masking feature is enabled.

**remove**  
Remove an entry from an Access Policy Group and remove the policy from any existing LU already using the Group. Remove requires 2 additional arguments to specify information for the entry to remove:

**group\_name**  
Name of the new or existing Access Policy Group

**entry\_name**  
Name of the new initiator and target pair

**destroy**  
Destroy an entire Access Policy Group and all related entries. As with the "remove" action, all entries will be removed from any LU currently using the Access Policy Group. Destroy requires 1 additional argument to specify information for the group to destroy:

**group\_name**  
Name of the new or existing Access Policy Group

**LU name**  
Logical Unit name. This can be retrieved using the 'lu' command.

## lu access info

lu access info - Display information about the given Access Policy

**lu access info** <policy name>

Use the info subcommand to display information about the given Access.

**policy name**  
Access Policy name. This can be retrieved using the 'lu access' command.

## lu access remove

lu access remove - Remove the specified Access Policy.

**lu access remove** <policy name>

**lu access remove group** <group name> <LU name>

Use the remove subcommand to remove the given Access Policy or to remove an Access Policy Group from an LU.

**policy name**  
Name of the Access Policy.

**group name**  
Access Policy Group name.



**LU name**

Logical Unit name. This can be retrieved using the 'lu' command.

**lu alias**

lu alias - Modify port aliases

**lu alias** [*<option>*] [*<arguments>*]

A port alias can be used as a text replacement for a host ID in future commands. Issuing the 'lu alias' command without arguments will display the current Port Aliases.

**lu alias add**

lu alias add - Add a new Port Alias

**lu alias add** *<alias name>* *<host ID>*

Use the add subcommand to add a new Port Alias to the system.

**alias name**

Name of the new Port Alias.

**host ID**

ID of the host that connects to the Port Alias.

**lu alias remove**

lu alias remove - Remove a Port Alias

**lu alias remove** *<host ID>*

Use the remove subcommand to remove a Port Alias.

**host ID**

ID of the host to be removed as an alias.

**lu create**

lu create - Create a new Logical Unit.

**lu create** *<name>* *<size>* *<number>* [...]

Use the create subcommand to create a new Logical Unit. Logical Units consist of two identifiers: a name and a Logical Unit number (LUN). The name is the unique name given to a Logical Unit when it is created. The LUN is the number used by SCSI initiators to access the Logical Unit. It is possible for multiple Logical Units to have the same LUN. The name, however, is always unique. Log Lun allows for the overuse of space to increase latency by using fast 512 byte writes.

**name** Name of the new Logical Unit.

**size** Size of the new Logical Unit in bytes. 't,' 'g,' 'm,' and 'k' modifiers are valid; for example, a size of '2g' means 2 GiB.

**number**

LUN for the new Logical Unit.

loglun - Log Lun feature must be enabled

## lu destroy

lu destroy - Destroy a currently configured Logical Unit.

**lu destroy** <LU name>

The destroy subcommand is used to destroy a currently configured Logical Unit. The Logical Unit is immediately destroyed; there is no confirmation.

**Attention:** Destroying a Logical Unit will make all data on that Logical Unit inaccessible. Re-creating the Logical Unit will not necessarily make that same data accessible again.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

## lu device\_id

lu device\_id - Read or configure the device identifier for an LU.

**lu device\_id** <LU name> [clear | set <id>]

The device\_id subcommand is used to read or configure the device identifier for the specified Logical Unit. The device identifier is a user-defined value uniquely identifying the Logical Unit. This value is used in OpenVMS environments.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

**clear** Clear the current device ID value.

**set** Set a new device ID.

**id** New device ID for this Logical Unit. The device ID should be entered as a decimal value.

## lu info

lu info - Display information about the given Logical Unit.

**lu info** <LU name>

Use the info subcommand to display information about the given Logical Unit.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

## lu init

lu init - Initialize a Logical Unit's filesystem header information.

**lu init** <LU name>

Use the init subcommand to initialize the section of a Logical Unit where the filesystem header information usually resides. This command is useful for operating systems or file systems that write Logical Unit size to this area. This area must be overwritten for the operating system to recognize a Logical Unit resize.

**Attention:** This command may destroy filesystems.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

## lu media\_errors

lu media\_errors - Modify media error reporting for a Logical Unit.

**lu media\_errors** <LU name> [action]

Use the media errors subcommand to enable or disable the media error reporting for a logical unit. If disabled, media errors will not be reported to the attached host.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

**action** Possible actions are 'enable' or 'disable.'

## lu name

lu name - Rename a Logical Unit.

**lu name** <LU name> [<name>]

Use the name subcommand to rename a Logical Unit.

### LU name

Current Logical Unit name. This can be retrieved using the 'lu' command.

**name** New Logical Unit name.

## lu number

lu number - Change the logical unit number associated with a Logical Unit.

**lu number** <LU name> [<number>]

Use the number subcommand to change the Logical Unit number associated with a Logical Unit. This is the Logical Unit number which is reported to the attached SCSI host.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

### number

New Logical Unit number for the Logical Unit.

## lu offset

lu offset - Set the offset of a Logical Unit.

**lu offset** <LU name> <offset>

The offset subcommand is used to set the starting alignment offset of a Logical Unit.

**Attention:** Setting the Logical Unit offset may destroy data on the filesystem that is stored on the Logical Unit. Use extreme care when issuing this command.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

**offset** Offset of the Logical Unit in bytes. 'g,' 'm,' and 'k' modifiers are valid; for example, an offset of '2k' means 2 KiB.

## lu reserve

lu reserve - Display the current state of SCSI Reservations.

**lu reserve** [*<option>*] [*<arguments>*]

Issuing the 'lu reserve' command without arguments displays the state of all reservations for all configured Logical Units.

## lu reserve remove

lu reserve remove - Remove the given registration key.

**lu remove** *<LU name>* *<key>* [*Channel*]

Use the reserve remove subcommand to remove the given registration key.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

**key** Registration key. This can be retrieved using the 'lu reserve' command.

### Channel (x20 systems only)

The channel on which the registration exists. This can be retrieved using the 'lu reserve' command.

## lu reserve reset

lu reserve reset - Reset the state of all reservations.

**lu reserve reset** *<LU name>*

Use the reserve reset subcommand to reset the state of all reservations for the given Logical Unit back to the initial power-on state.

**Attention:** This command force-resets reservation states which may confuse any attached hosts and cause reservation conflicts. This command should only be used under the guidance of Support.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

## lu reserve status

lu reserve status - Displays a Logical Unit's SCSI Reservations.

**lu reserve status** *<LU name>*

Use the reserve status subcommand to display states of all SCSI reservations for the given Logical Unit.

### LU name

Logical Unit name. This can be retrieved using the 'lu' command.

## lu sector\_size

lu sector\_size - Set the sector size of a Logical Unit.

**lu sector\_size** *<LU name>*[*<size>*]

Use the sector\_size subcommand to set the sector size of the Logical Unit.

**LU name**

Logical Unit name. This can be retrieved using the 'lu' command.

**size** Sector size of the Logical Unit in bytes. 'g,' 'm,' and 'k' modifiers are valid; for example, a size of '4k' means 4 Kb.

**lu size**

lu size - Resize a Logical Unit.

**lu size** <LU name>[<size>]

The size subcommand is used to resize a Logical Unit. Some Logical Units cannot be resized due to the absence of free space or to their physical location. Shrinking a Logical Unit will remove data from the end of Logical Unit. Growing a Logical Unit will not impact any data currently stored on the Logical Unit.

**Attention:** Making a Logical Unit smaller may destroy data on the filesystem that is stored on the Logical Unit. Use extreme care when issuing this command.

**LU name**

Logical Unit name. This can be retrieved using the 'lu' command.

**size** Sector size of the new Logical Unit in bytes. 'g,' 'm,' and 'k' modifiers are valid; for example, a size of '2g' means 2 Gb.

**mail**

mail - Configure mail settings.

**mail** [<option> [<arguments>]]

The mail command can be used to read the current mail settings and enable or disable the mail service on the system. The mail service sends system notifications to all specified e-mail targets.

**mail notifications**

mail notifications - Read, enable, or disable system event mail notifications.

**mail notifications** [action]

Use the notifications subcommand to read, enable, or disable mail notifications of system events.

**action** Possible actions are 'enable' or 'disable.'

**mail server**

mail server - Read or set the SMTP server used by the system.

**mail server** [server]

Use the server subcommand to read or set the SMTP server used by the system.

**server**

New SMTP server. If the network IP assignment mode is set to DHCP, set the server to 'default' to use the DHCP given SMTP server.

## mail targets

mail targets - Read, add, or remove e-mail targets for the mail service

**mail targets** [*add <e-mail> | remove <e-mail>*]

Use the targets subcommand to read, add, or remove e-mail targets for the mail service on the system. Up to five e-mail targets may be added.

### e-mail

E-mail address that should receive mail.

## mail test

mail test - Test the mail service on the system.

### mail test

Use the test subcommand to test the mail service on the system. Using this command will force the system to send a test message to all specified e-mail targets.

## network

network - View or configure network settings.

**network** <*management\_controller (x20 systems only)*>[<*arguments*>]

The network command configures the management port's Ethernet settings. After changing the network settings, issue the 'network restart' command to apply the changes. Issuing the network command without arguments displays the current network configuration.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

## network dns

network dns - Display the network DNS settings.

**network dns** <*management\_controller (x20 systems only)*>[<*option*> [<*arguments*>]]

Use the DNS subcommand to read or configure the DNS settings on the system.

## network dns auto

network dns auto - Read or configure the DNS auto negotiation setting

**network dns auto** <*management\_controller (x20 systems only)*>[<*action*>]

Use the auto subcommand to read, enable, or disable the DNS auto negotiation setting. DNS auto negotiation can only be used with a DHCP IP assignment. If you wish to use a DNS server with a statically assigned IP, the name server must be manually configured.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

**Note:** Setting DNS to automatically configure its own settings requires a network restart before those settings will take effect.

**action** Logical Unit name. This can be retrieved using the 'lu' command.

## network dns domain

network dns domain - Read or configure the DNS search domain.

**network dns domain** <management\_controller (x20 systems only)> [clear | <search domain>]

Use the domain subcommand to read or configure the DNS search domain.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### search domain

Domain that all DNS services will use.

**clear** Clear the DNS search domain.

## network dns nameserver

network dns nameserver - Read or configure the DNS name server.

**network dns nameserver** <management\_controller (x20 systems only)> [clear | <ip>]

Use the nameserver subcommand to read or set the IP of the DNS name server.

**ip** Name server IP.

**clear** Clear the DNS name server.

## network hostname

network hostname - Read or configure the hostname.

**network hostname** <management\_controller (x20 systems only)> [<hostname>]

Use the hostname subcommand to read or configure the hostname.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### hostname

New hostname.

## network ip\_assignment

network ip\_assignment - read or set the ethernet device IP assignment mode.

**network ip\_assignment**<management\_controller (x20 systems only)> [<device>]

Use the ip\_assignment subcommand to read or set the IP assignment mode for the Ethernet devices.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### device

The Ethernet device ('eth0').

**mode** 'dhcp' indicates that the Ethernet device should query a DHCP server for network settings. 'static' indicates that it should use the configured network settings. 'none' disables the Ethernet port on the system.

**ip address**

The new IP address. This parameter is only necessary when setting the mode to 'static.'

**gateway**

The new gateway address. This parameter is only necessary when setting the mode to 'static.'

**netmask**

The new netmask. This parameter is only necessary when setting the mode to 'static.'

## network ldap

network ldap - View or configure LDAP settings.

**network ldap** [*option*]

Use the ldap subcommand to display or configure the system's LDAP settings.

## network ldap basedn

network ldap basedn - View or set the LDAP base distinguished name.

**network ldap basedn** <*management\_controller (x20 systems only)*> [<*basedn*>]

Use the basedn subcommand to view or set the LDAP search base distinguished name. The system will authenticate all users under this distinguished name provided that their credentials are correct.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

**basedn**

The search base distinguished name.

## network ldap binddn

network ldap binddn - View or set the LDAP bind distinguished name.

**network ldap binddn** <*management\_controller (x20 systems only)*> [*default* | <*binddn*>]

Use the binddn subcommand to view or set the LDAP bind distinguished name. This is the username that the system will use when trying to bind to the LDAP server in order to authenticate the user that is trying to log in. If left defaulted, the system will attempt an anonymous bind.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

**default**

Bind to the LDAP server anonymously.

**binddn**

The bind distinguished name.



## network ldap bindpw

network ldap bindpw - Set the LDAP bind password

**default** <management\_controller (x20 systems only)> []

Use the bindpw subcommand to set the LDAP bind password. This is the password that the system will use when attempting a bind to the LDAP server with the bind distinguished name. Type the command without any to be prompted to set a new bind password. If the bind password is defaulted, the system will attempt to bind using the configured bind distinguished name without a password. If the bind distinguished name is left defaulted, the value of this has no effect.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### hostname

No password will be used when trying to bind.

## network ldap bind\_timelimit

network ldap bind\_timelimit - View or set the LDAP bind time limit

**network ldap bind\_timelimit** <management\_controller (x20 systems only)> [<bind\_timelimit>]

Use the bind\_timelimit subcommand to configure the bind time limit. This is the maximum number of seconds that the system will wait for a LDAP bind operation to complete.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### bind\_timelimit

The bind time limit.

## network ldap disable

network ldap disable - Disable the LDAP service.

**network ldap disable** <management\_controller (x20 systems only)>

Use the disable subcommand to disable the LDAP service for the system.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

## network ldap enable

network ldap enable - Enable the LDAP service.

**network ldap enable** <management\_controller (x20 systems only)>

Use the enable subcommand to enable the LDAP service for the system.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.'. Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

## network ldap host

network ldap host - View or set the LDAP host.

```
network ldap host <management_controller (x20 systems only)> [<hostname>|<ip>]
```

Use the host subcommand to view or configure the LDAP server that the system should use. This value may be configured with the fully qualified domain name or the IP address of the LDAP server.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### hostname

The fully qualified domain name to the LDAP server.

**ip** The IP address of the LDAP server.

## network ldap port

network ldap port - View or set the LDAP port

```
network ldap port <management_controller (x20 systems only)> [default|<port>]
```

Use the port subcommand to configure the LDAP port that the system should use. If the port is left defaulted, the system will choose which port to use based on the SSL setting. For SSL set to off and start\_tls, port 389 will be used. For SSL set to on, port 636 will be used.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### default

Use the default ports based on the SSL setting (389 or 636).

**port** Use a different port than the default.

## network ldap ssl

network ldap ssl - View or set the LDAP encryption method

```
network ldap ssl <management_controller (x20 systems only)> [on|off|start_tls]
```

Use the ssl subcommand to view or set the LDAP SSL setting. If left off, all communication between the LDAP server and the system will be passed over the network in clear text. When SSL is set to on, the system will attempt to connect to the LDAP server on the secure port. When SSL is set to start\_tls, the clear text port should be used.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

**Note:** Do not attempt to configure the port to the secure port when trying to use TLS encryption.

**on** Use SSL encryption.

**off** Use clear text.

### start\_tls

Use TLS encryption.

## network ldap timelimit

network ldap timelimit - View or set the LDAP search time limit

**network ldap timelimit** <management\_controller (x20 systems only)> [<timelimit>]

Use the timelimit subcommand to view or set the LDAP search time limit. This is the maximum number of seconds that the system will wait for a LDAP search operation to complete.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

### timelimit

The search time limit.

## network restart

network restart - Restart the network

**network restart** <management\_controller (x20 systems only)>

Use the restart subcommand to restart the network, incorporating configuration changes. New network settings will not take effect until a network restart has been performed.

*x20 systems only* - Management controller specifies which controller to communicate with; for example, 'mc-1' or 'mc-2.' Typing 'network' will show configurations for both controllers and display which unit you are currently logged into.

## snmp

snmp - Configure SNMP settings.

**snmp** [<option> [<arguments>]]

SNMP management enables remote monitoring of the system's state through the SNMP facility. If the system's state changes, or important events occur, the system will send SNMP traps describing the event or state change to the configured trap sinks. Issuing the snmp command without arguments will display the current snmp configuration. The 'snmp restart' subcommand must be issued for the changes to take effect

## snmp agent

snmp agent - Enable or disable the SNMP agent.

**snmp agent** [<action>]

The agent subcommand is used to enable or disable the SNMP agent for the system. If the SNMP agent is disabled, no SNMP traps will be sent to configured trap sinks and SNMP polling will be disabled. Issuing the agent subcommand without arguments will display the current status of the SNMP agent.

### action

Possible actions are 'enable' or 'disable.'

## snmp resend

snmp resend - Specify a delay interval for resending traps

**snmp resend** <id> [<hours>]

Use the resend subcommand to specify a delay interval for resending traps. If the delay is set to '0,' the trap will only be sent once when the trap condition occurs. If this value is nonzero, the trap will be resent each time the delay has passed.

**id** ID of the trap to configure.

**hours** Length of delay, in hours, between trap resends. Valid values are from 0 to 168 (1 week).

## snmp restart

snmp restart - Restart the SNMP service on the system

### snmp restart

Use the restart subcommand to restart the SNMP service on the system. This will apply all outstanding changes to the SNMP configuration.

## snmp ro\_community

snmp ro\_community - Read or configure the 'read only' community

**snmp ro\_community** [*<ro\_community>*]

Use the ro\_community subcommand to read or configure the 'read only' community. This string is used to control the 'read only' access for the system's SNMP information tree.

### ro\_community

New 'read only' community.

## snmp rw\_community

snmp rw\_community - Read or configure the 'read/write' community

**snmp rw\_community** [*<rw\_community>*]

Use the rw\_community subcommand to read or configure the 'read/write' community. This string is used to control the 'read/write' access for the system's SNMP information tree.

### rw\_community

New 'read/write' community.

## snmp sinks

snmp sinks - Read, add, or remove SNMP trap sinks

**snmp sink** [*add <host> <community> | remove <host>*]

Use the sinks subcommand to read, add, or remove SNMP trap sinks for the system. SNMP trap sinks are hosts that are registered to receive SNMP traps from the system. A complete list of available traps can be viewed with the 'snmp traps' command.

**host** Host that should receive SNMP traps.

### community

Community for the SNMP host.

## snmp system\_contact

snmp system\_contact - Read or configure the system contact string.

**snmp system\_contact** [*<system\_contact>*]

Use the `system_contact` subcommand to read or configure the system contact string. This string describes the person or organization responsible for managing the system.

#### **system contact**

New system contact.

### **snmp system\_description**

`snmp system_description` - Read or configure the system description string.

**snmp system\_description** [*<system description>*]

Use the `system_description` subcommand to read or configure the system description string. This string can be used to uniquely describe the system.

#### **system description**

New system description.

### **snmp system\_location**

`snmp system_location` - Read or configure the system location string.

**snmp system\_location** [*<system location>*]

Use the `system_location` subcommand to read or configure the system location string. This string is a description of the physical location of the system.

#### **system location**

New system location.

### **snmp test\_trap**

`snmp test_trap` - Test an individual trap on the system

**snmp test\_trap** *<id>*

Use the `test_trap` subcommand to test an individual trap on the system. Using this command forces the system to send out the specified trap to the registered trap sinks. A complete list of traps and their IDs may be seen with the 'snmp traps' command

**id** ID of the trap to test.

### **snmp traps**

`snmp traps` - Read, enable, or disable individual SNMP traps

**snmp traps** [*<action><id>*]

Use the `traps` subcommand to read, enable, or disable individual SNMP traps on the system.

#### **action**

Possible actions are 'enable' or 'disable.'

**id** ID of the trap to enable or disable.

### **stats**

`stats` - View system component statistics

**stats** *<option>* [*<arguments>*]

Use the stats command to view available system components and the statistics associated with them. The stats command requires a subcommand.

## stats info

stats info - View available statistics

**stats info** [*<system\_component>*]

Use the info subcommand to view all system components with statistics available as well as each statistic available for specific system components.

**system\_component**

System component to see available statistics for.

## stats log

stats log - Display or control the logged statistics

**stats log** *<option>* [*<arguments>*]

Use the log subcommand to display information about statistics logging or update the logged statistics list. Issuing the 'stats log' command without arguments will display the current logged statistics.

## stats log add

stats log add - Add a statistic to the logged statistics list.

**stats log add** *<object>* *<statistic>*

Use the 'add' subcommand to add a statistic to the logged statistics list. Run the 'stats info' command to see loggable statistics.

**object** ID name.

**statistic**

Name of the statistic.

## stats log clear\_invalid

stats log clear\_invalid - Clear invalid stats logs.

**stats log clear\_invalid**

Use the clear\_invalid subcommand to automatically clean up old or out-of-date stats logs such as logs for boards that have been removed from the system. All logs associated with these stats will be permanently destroyed.

## stats log remove

stats log remove - Remove a statistic from the logged statistics list.

**stats log remove** *<object>* *<statistic>*

Use the remove subcommand to remove a statistic from the logged statistics list which was added by the user and not a factory default statistic.

**object** Object ID name.

**statistic**

Name of the statistic.

## stats log reset

stats log reset - Reset all stats logs

### stats log reset

Use the reset subcommand to reset all stats logs. This will erase all log entries and start from zero.

## stats view

stats view - View system component statistics

**stats view** [*<system\_component>* *<statistic\_name>*]

Use the view subcommand to specific system component and statistic\_name combinations. Multiple combinations can be viewed at a time by specifying multiple combinations. The statistic values are refreshed once every second.

### system\_component

System component to see available statistics for.

### statistic\_name

Name of statistic to view.

## status

status - Display environmental sensor values and states.

**status** [*<option>*]

The status command displays a table of environmental sensors in the system. A group option must be given, and it corresponds to a logical group of sensors. For example, to see all temperature sensors, use 'status temperature.'

## status battery

status battery - Display environmental battery sensor values and states

### status battery

Use the battery subcommand to display environmental battery sensor values and states.

## status fan

status fan - Display environmental fan sensor values and states

### status fan

Use the fan subcommand to display environmental fan sensor values and states.

## status power

status power - Display environmental power sensor values and states

### status power

Use the power subcommand to display environmental power sensor values and states.

## status temperature

status temperature - Display environmental temperature sensor values and states

### status temperature

Use the temperature subcommand to display environmental temperature sensor values and states.

## storage

storage - View/modify storage information.

### storage [*<option>*]

Use the storage command for reading information about the storage as well as powering on/off individual flashcards, or force a flashcard failover.

## storage failover (x10 systems only)

storage failover - Force a flashcard failover in Active Spare mode.

### storage failover *<card>*

The failover subcommand will force a failover of the given flashcard.

**card** Name of the flashcard; for example 'flashcard-1' or use the 'storage' command to show available flashcards.

## storage failover\_cancel (x10 systems only)

storage failover\_cancel - Cancel an active flashcard failover

### storage failover\_cancel

The failover\_cancel subcommand cancels a flashcard failover.

## storage format\_spare (x20 systems only)

storage format\_spare - Format the spare flashcard in RAID 5 mode

### storage format\_spare

The format\_spare subcommand formats the spare flashcard.

## storage poweroff\_spare (x20 systems only)

storage poweroff\_spare - Poweroff Spare flashcard.

### storage poweroff\_spare

The poweroff\_spare subcommand will poweroff the spare flashcard.

## storage poweron\_spare (x20 systems only)

storage poweron\_spare - Poweron the spare flashcard.

### storage poweron\_spare

The poweron subcommand will power on the spare flashcard.



## storage raid failover (x20 systems only)

storage raid\_failover - Force a flashcard failover in RAID 5 mode.

**storage raid\_failover** <card>

The failover subcommand will force a failover of the given flashcard.

**card** Name of the flashcard; for example 'flashcard-1' or use the 'storage' command to show available flashcards.

## storage report

storage report - Display the storage report.

**storage report**

Use the report subcommand to display the Storage Report. This report is useful to Technical Support when they are diagnosing system problems.

## support

support - Display contact information for local support team.

**support** <option> [<arguments>]

Use this command to display the contact information of the support team.

## support address

support address - Set/view the "Address" field in Support contact

**support address** [<new\_address> | clear]

Use the support address subcommand to edit the address of the support team. If a single argument consists of multiple words separated by spaces, the entire argument must be enclosed in double quotation marks. Examples of correct arguments include: new, name, "new name."

**new\_address**

New address

**clear** Clear the address field

## support city

support city - Set/view the city field in Support contact.

**support city** [<new\_city> | clear]

Use the support city subcommand to edit city of the support team. If a single argument consists of multiple words separated by spaces, the entire argument must be enclosed in double quotation marks. Examples of correct arguments include: new, name, "new name".

**new\_city**

New city

**clear** Clear the city field

## support clear

support clear - Clear all the support contact fields.

### clear

Use the support clear subcommand to clear all of the fields of the support team.

## support country

support country - Set/view the ISO Country Code field in Support contact.

**support country** [*<new\_country\_code>* | *clear*]

The support country subcommand is used to edit country code of the support team. If a single argument consists of multiple words separated by spaces, the entire argument must be enclosed in double quotation marks. Examples of correct arguments include: new, name, "new name".

### new\_country\_code

New address

**clear** Clear the country code field

## Valid Country Codes

AD Andorra | AE United Arab Emirates | AF Afghanistan | AG Antigua & Barbuda | AI Anguilla | AL Albania | AM Armenia | AN Netherlands Antilles | AO Angola | AQ Antarctica | AR Argentina | AS American Samoa | AT Austria | AU Australia | AW Aruba | AX Aland Islands | AZ Azerbaijan

BA Bosnia & Herzegovina | BB Barbados | BD Bangladesh | BE Belgium | BF Burkina Faso | BG Bulgaria | BH Bahrain | BI Burundi | BJ Benin | BL Saint Barthelemy | BM Bermuda | BN Brunei | BO Bolivia | BR Brazil | BS Bahamas | BT Bhutan | BV Bouvet Island | BW Botswana | BY Belarus | BZ Belize

CA Canada | CC Cocos Islands | CD Congo, Democratic Rep. | CF Central African Rep. | CG Congo | CH Switzerland | CI Cote d'Ivoire | CK Cook Islands | CL Chile | CM Cameroon | CN China | CO Colombia | CR Costa Rica | CS Deprecated Serbia and Montenegro | CU Cuba | CV Cape Verde | CX Christmas Islands | CY Cyprus | CZ Czech Republic

DE Germany | DJ Djibouti | DK Denmark | DM Dominica | DO Dominican Republic | DZ Algeria

EC Ecuador | EE Estonia | EG Egypt | EH Western Sahara | ER Eritrea | ES Spain | ET Ethiopia

FI Finland | FJ Fiji | FK Falkland Islands | FM Micronesia | FO Faroe Islands | FR France

GA Gabon | GB United Kingdom | GD Grenada | GE Georgia | GF French Guiana | GG Guernsey | GH Ghana | GI Gibraltar | GL Greenland | GM Gambia | GN Guinea | GP Guadeloupe | GQ Equatorial Guinea | GR Greece | GS South Georgia | GT Guatemala | GU Guam | GW Guinea-Bissau | GY Guyana

HK Hong Kong | HM Heard Island | HN Honduras | HR Croatia | HT Haiti | HU Hungary

ID Indonesia | IE Ireland | IL Israel | IM British Isles | IN India | IO British Indian Ocean Territory | IQ Iraq | IR Iran | IS Iceland | IT Italy

JE Jersey | JM Jamaica | JO Jordan | JP Japan

KE Kenya | KG Kyrgyzstan | KH Cambodia | KI Kiribati | KM Comoros | KN Saint Kitts & Nevis | KP Korea Democratic People Republic | KR Korea, Republic of | KW Abu Dhabi, Kuwait | KY Cayman Islands | KZ Kazakhstan

LA Lao People's Democratic Republic | LB Lebanon | LC Saint Lucia | LI Liechtenstein | LK Sri Lanka | LR Liberia | LS Lesotho | LT Lithuania | LU Luxembourg | LV Latvia | LY Libyan Arab Jamahiriya

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VA Holy See | VC Saint Vincent & the Grenadines | VE Venezuela | VG Virgin Islands | Brit VI Virgin Islands-US | VN Viet Nam | VU Vanuatu

WF Wallis & Futuna | WS Samoa

YE Yemen | YT Mayotte

ZA South Africa | ZM Zambia | ZW Zimbabwe

## support email

support email - Set/view the email field in Support contact

**support email** [*<new\_email>* | *clear*]

Use the support email subcommand to edit email address of the support team. If a single argument consists of multiple words separated by spaces, the entire argument must be enclosed in double quotation marks. Examples of correct arguments include: new, name, "new name".

**new\_email**

New email

**clear** Clear the email field

**support hours**

support hours - Set/view the calling hours field in Support contact

**support hours** [*<new\_hours>* | *clear*]

Use the support hours subcommand to edit hours of the support team.

If a single argument consists of multiple words separated by spaces, the entire argument must be enclosed in double quotation marks. Examples of correct arguments include: new, name, "new name."

**new\_address**

New hours

**clear** Clear the Calling Hours field

**support location**

support location - Set/view the location field in Support contact

**support location** [*<new\_location>* | *clear*]

The support location subcommand is used to edit location of the support team.

If a single argument consists of multiple words separated by spaces, the entire argument must be enclosed in double quotation marks. Examples of correct arguments include: new, name, "new name."

**new\_location**

New location

**clear** Clear the Building Location field

**support mobile**

support mobile - Set/view the mobile phone field in Support contact

**support mobile** [*<new\_mobile>* | *clear*]

Use the support mobile subcommand to edit the phone number of the support team.

**new\_mobile**

New mobile phone

**clear** Clear the mobile phone field

**support name**

support mobile - Set/view the name field in Support contact

**support name** [*<new\_name>* | *clear*]

Use the support name subcommand to edit the name of the support team.

**new\_name**

New name

**clear** Clear the name field

## support office

support office - Set/view the "Office Phone" field in Support contact

**support office** [*<new\_office>* | *clear*]

Use the support office subcommand to edit the office phone number of the support team.

**new\_office**

New office phone

**clear** Clear the office phone field

## support state

### Synopsis

support state - Set/view the state field in Support contact.

**support state** [*<new\_state>* | *clear*]

Use the support state subcommand to edit the state of the support team.

**new\_state**

New state

**clear** Clear the state field

## support timezone

support timezone - Set/view the timezone field in Support contact

**support timezone** [*<new\_timezone>* | *clear*]

Use the support timezone subcommand to edit the timezone of the support team.

**new\_timezone**

New timezone

**clear** Clear the timezone field

## support zip

support zip - Set/view the zip field in Support contact

**support zip** [*<new\_Zip/Postal Code>* | *clear*]

Use the support zip subcommand to edit the Zip/Postal Code of the support team.

**new\_zip**

New Zip/Postal Code

**clear** Clear the zip field

## sync (x20 systems only)

sync - View and change various GbE sync properties

**sync** *<option>*

Use the sync command for viewing sync-specific information about the current and partner GbE. In the event of a passive/passive situation, this utility can manually activate one of the GbEs. Configurations can be viewed and compared to help choose between GbEs.

## **sync activate (x20 systems only)**

sync activate - Bring a GbE active

**sync activate** [*partner*]

Use this command to activate a GbE in passive/passive situations.

## **sync config (x20 systems only)**

sync config - View configurations of current and partner GbE

**sync config** [*option*]

Fetch and view differences between the current and partner GbE configurations. This command is useful for determining which GbE you would like to run in passive/passive situations.

### **request**

Ask partner to send configuration files for viewing.

**diff** Generate the differences between the current and partner GbE configurations.

**view** View current and partner GbE configuration files side-by-side.

### **view diff**

View the differences between the current and partner GbE configurations.

## **sync status (x20 systems only)**

sync status - View many sync-related parameters.

**sync status**

View parameters critical to syncing.

## **system**

system - Read system information or perform system commands.

**system** <*option*> [*<arguments>*]

Use the system command to read general system information and perform system level commands. This command requires a subcommand.

## **system banner**

system banner - View/set the system banner message.

**system banner** [*clear*]

Use the system banner command to view or set the system banner.

**clear** Clear the system banner message.

## system battery

system battery - Read or set the schedule for the periodic battery test

**system battery** [*<day\_of\_month>* *<hour>*]

Use the battery subcommand to display or set the periodic battery test

### day of month

Day of the month to run periodic tests (1-28).

**hour** Hour of the day to run periodic tests (0-23).

## system callhome\_config

system callhome\_config - Read or set the the call home email settings

**system callhome\_config** [*<email gateway>* | *<email gateway>* *<from email address>*]

Use the callhome\_config subcommand to display or configure the email settings used by call home when contacting support.

### email\_gateway

Email server or gateway to send emails to support (external).

### from\_email\_address

Email address to use as sender.

## system callhome\_events

system callhome\_events - Read or enable/disable/test the events call home

**system callhome\_events** [*enable* | *disable* | *test*]

Use the callhome\_events subcommand to display or enable/disable or test support notification of system events.

### enable

Enables the support notification

### disable

Disables the support notification

**test** Sends a test report

## system callhome\_heartbeat

system callhome\_heartbeat - Read or set the schedule for the call home heartbeat

**system callhome\_heartbeat** [*<day\_of\_month>* *<hour>*]

The callhome\_heartbeat subcommand is used to display or set the call home heartbeat schedule. The periodic call home heartbeat is meant to run once a day either regular or full to check the support problem reporting path. The regular heartbeat contains system health monitoring data while the full heartbeat contains in addition more static information such as part numbers. The full heartbeat is weekly while the regular heartbeat is sent daily.

### full\_heartbeat\_day

Day of the week to send the full heartbeat (0-6 with 0=Sunday).

**hour** Hour of the day to send the heartbeat e-mail (0-23).

## **disable**

Disables the call home heartbeat feature.

## **system callhome\_support\_config**

system callhome\_support\_config - Read or set the support email address call home uses

**system callhome\_support\_config** [*<email address>*]

Use the system\_callhome\_support\_config subcommand to display or set the email address call home is using to send heartbeats and events to support.

### **email address**

support email address handling the heartbeats/events

## **system cancel\_patch**

system cancel\_patch - Remove a patch that is scheduled to be applied

**system cancel\_patch**

Use the cancel\_patch subcommand to remove any system patches that are scheduled to be applied on the next reboot.

## **system identifier**

system identifier - Set/view the system identifier

**system identifier** [*<system\_id>*]

Use the identifier subcommand to set the system identifier. Changing this value will affect the VPD presented by the system's controllers which could impair connectivity. The system must be restarted for a new system identifier to take effect.

### **system\_id**

New system identifier as a hexadecimal number.

## **system identify**

system identify - Identify a device via the front panel display.

**system identify** [*<action>*]

Use the identify subcommand to enable or disable a system's 'Identify Device' functionality. When enabled, the front panel LEDs and LCD screen will flash so the system may be more easily found. callhome\_events subcommand to display or enable/disable or test support notification of system events.

**action** Possible actions are 'enable' or 'disable.'

## **system messages**

system messages - View various system status messages

**system messages**

Use the messages subcommand to view various status messages associated with the system.



## **system patch (x20 systems only)**

system patch - Update system with an uploaded patch file.

### **system patch**

Running this command after uploading a patch file will apply the patch to the system. The patch it will try to apply is /tmp/system\_patch.

## **system patch\_spare (x20 systems only)**

system patch\_spare - Update spare flashcard with a saved patch file.

### **system patch\_spare**

Running this command will apply the last saved patch file to the spare flashcard. If a patch was uploaded, it will be applied instead.

## **system poweroff**

system poweroff - Poweroff the system

### **system poweroff**

Use the poweroff subcommand to poweroff the system.

## **system reboot**

system reboot - Reboot the system

### **system reboot**

Use the reboot subcommand to reboot the system.

## **system report**

system report - Display the system report.

### **system report**

Use the report subcommand to display the System Report. This report is useful to Support when they are diagnosing system problems.

## **system services**

system services - Show the status of the various system access services.

**system services** [*<service>*] [*<action>*]

The services subcommand shows the status of the various system access services. It can also be used to enable or disable those services.

**Attention:** Disabling services will disable the ability to connect to the system using that service. If all services become disabled, the only available connection will be through the serial port.

### **service**

Available services include 'telnet,' 'ssh,' 'web,' and 'discovery.'

**action** You can 'enable' or 'disable' any service. You may also 'secure' the web service. Securing the web service will only allow connections through port 443 (ssl).

## system status

system status - View general system information and status.

### system status

Use the status subcommand to view general system information and the overall status of the system.

## task

task - View information about tasks issued

### task

Use the task command to view information about tasks issued. Issuing this command without any arguments will display a table of all tasks. Specifying a 'task\_id' will display detailed information for the given task.callhome\_events subcommand to display or enable/disable or test support notification of system events.

## time

time - Configure system time

**time** [*<option>*] [*<arguments>*]

Use the time command to read or configure the internal system clock. Setting the clock will allow log messages to be generated with accurate times. The system uptime is also accessible through this command. Issuing the time command without arguments will display the current system time.

The system also supports NTP (Network Time Protocol) time synchronization. If the network has an NTP server configured, the system can be set to synchronize with it for precise timing.

## time change

time change - Change the system time

**time change** *<date>* *<time>*

Use the change subcommand to change the system time.

## time ntp

time ntp - Enable/disable ntp time synchronization

**time ntp** [*<action>*] | *server <server name>*

Use the ntp subcommand to enable/disable ntp time synchronization. This command can also be used to set the ntp server used by the system.

## time ntp server

time ntp server - Set the ntp server used by the system

**time ntp server** [*<server>*]

Use the server subcommand to set the ntp server used by the system.

**server** New NTP synchronization server. If the network IP assignment mode is set to DHCP, set the server to 'default' to use the DHCP given NTP server.

## time timezone

time timezone - Read or set the system's timezone.

**time timezone** [**<timezone>** | **list**] [*<timezone>* | *list*]

Use the timezone subcommand to read or set the system's timezone.

### timezone

New timezone for the system.

## time timezone list

time\_timezone list - List all possible timezones

**time timezone list**

Use the list subcommand to list all possible timezones.

## time uptime

time uptime - Display the unit uptime

### uptime

Use the uptime subcommand to display the amount of time that has elapsed since the unit was last powered on.

## user

user - Configure the user table

**user** [*<option>* [*<arguments>*]]

The user table is a representation of all the users that can log in to the system. Each user has a name, a password, and a group level. Each group level has specific permissions. Available group levels include 'users' and 'admins.' Issuing the user command without arguments will display the current user table.

## user add

user add - Add a new user

**user add** *<username>* *<group>*

Use the add subcommand to add a new user. A new user may be put into either the 'users' or 'admins' group.

### username

User name for the new user.

**group** Group for the new user.

## user remove

user remove - Remove a user.

**user remove** *<username>*

Use the remove subcommand to remove a user.

**username**

User name of the user to remove.

**user set\_password**

user set\_password - Change a user's password

**user set\_password** [*enable* | *disable* | *test*]

Use the set\_password subcommand to change a user's password.

**username**

User name for the user whose password will be changed.

**who**

who - List users currently logged into the system

**who**

who lists users that are currently logged into the system.

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