Abstract
This document details the set of operations supported by the Common CLI. This command set defines the instructions used to obtain information about a StoreOnce System appliance or to control appliance activity. It is intended for system administrators managing a StoreOnce System. This guide may have more recent updates. Always check http://www.hpe.com/info/storeonce/docs for the most current documentation for your product.
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Using the CLI

Introduction

The Common CLI Command Set provides a method of communication with the StoreOnce appliance which is intuitive, consistent, and easy to use. The command set is broad in scope so that it can be used with the entire StoreOnce portfolio of products. The CLI software embedded in the appliance enables you to manage and monitor storage-system operation.

The commonality of the CLI command set means that some unsupported commands (that are not applicable to your appliance) are present in the CLI online help. Any unsupported commands that are executed return the failure message: Command Failed - This command is not supported on this system.

Control the StoreOnce appliance by entering a command using a specific syntax. The operation defined by the command is executed, and any output associated with the operation is displayed in text or XML output (depending on the configuration settings). After the operation is complete, the command prompt is displayed to allow entry of the next command.

Commands are grouped by function. For example, all commands related to the network configuration are in one group and begin with `net`. This grouping makes it easy to locate the correct command for a given operation.

**NOTE:** Some StoreOnce command line output is limited. When the system is set to languages that use special non-ASCII characters or accents (for example: Chinese, Japanese, Russian, French, German), some or all characters may not be displayed in the command output.

Accessing the CLI

Access the CLI from an SSH terminal using an SSH client application (freely available on the internet). The CLI runs on the management console:

```
ssh <username>@<appliance IP address>
```

The Common CLI command set supports three authorization levels that permit execution of different commands. Administrator level has a unique command prompt. The “Admin” and “Operator” accounts are created at the time of the StoreOnce system installation, and the Administrator can create additional users at any time.
Table 1: Login Information

<table>
<thead>
<tr>
<th>Authorization Level</th>
<th>Can Execute Commands That</th>
<th>User Name</th>
<th>Default Password</th>
<th>Command Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator</td>
<td>Provide information about the state and configuration of the StoreOnce appliance.</td>
<td>Operator</td>
<td>operator</td>
<td>&gt;</td>
</tr>
<tr>
<td>Administrator</td>
<td>Same as Operator, plus commands that configure or change the configuration of the StoreOnce appliance.</td>
<td>Admin</td>
<td>admin</td>
<td>#</td>
</tr>
<tr>
<td>Back Admin</td>
<td>Same as Administrator, but cannot create, delete or modify other user accounts.</td>
<td>No default account</td>
<td></td>
<td>&gt;</td>
</tr>
</tbody>
</table>

Command Entry

Upon log in, the cursor appears after the command prompt. Instruction entry elements are placed after the prompt by entering the appropriate characters and symbols. Pressing Enter directs the Common CLI to interpret the instruction entry and perform the defined operation. After the operation is completed, the command prompt is displayed, and another instruction may be entered.

Useful information:

- Before pressing Enter, the text after the command prompt can be edited by pressing Delete or Backspace and using the right and left arrow keys.
- Use the up and down arrow keys to scroll through previously entered commands; you can then edit and enter previous commands. This capability speeds the entry after entering multiple instances of similar commands.
- A short form exists for each command. The short form comprises at least the first three characters of each command and be unique from other short form commands. For example, for system show repository, shorten the command by entering sys sho repo at the CLI prompt.
- Display help on different levels of each command. For example, entering help (or h) at cifs# lists all of the secondary options available (add, delete, disable, etc.). Entering help at cifs/add# lists user and localadmin. See the examples below.

At cifs#:

cifs# h

Global Commands

----------
help    - List commands or get help for a specific command.
home   - Go to the root level.
exit   - Log out
up     - Go up one level

Paths currently available
-------------------------------------------
add          - add user to CIFS server
delete       - delete user from CIFS server
enable       - enable CIFS user or join Active Directory domain
disable      - disable CIFS user or leave Active Directory domain
modify       - modify CIFS user or CIFS server configuration
show         - show CIFS server configuration or local administrators

Commands currently available
-------------------------------------------
cifs#

At cifs/add#:
cifs/add# h

Global Commands
---------------
help    - List commands or get help for a specific command.
home   - Go to the root level.
exit   - Log out
up     - Go up one level

Paths currently available
-------------------------------------------

Commands currently available
-------------------------------------------
user         - add user to CIFS server
localadmin   - add user to CIFS server BUILTIN\Administrators group
IMPORTANT: The command entry must conform to the command syntax, where [SYNTAX] is the syntax described in the Command Syntax section. All objects and parameters must contain valid values. The command will fail if there are any misspellings, invalid values, references to objects that do not currently exist, etc. If the command fails, an error message is displayed indicating the problem.

Examples of error messages (depending on the command):

- Command Failed - the command does not conform to the required syntax of [SYNTAX]
- Command Failed - Service set ID (SETX) not specified
- Command Failed - Parameter X requires argument
- Command Failed - The node is invalid
- Command Failed - The library <LIBX> does not exist
- Command Failed - The system hardware does not match the configuration file (difference in number of nodes)

Viewing Help

To view brief descriptions of all global commands and commands that are available to the current user level, enter:

help

Additionally, include a command or command group after help to see help specific to that command or command group.

For further assistance in using the Common CLI, the following help features exist:

- If you enter a correct command but use incorrect syntax, information on the correct syntax is displayed.
- If you enter an invalid command, information on valid permutations of the command elements are displayed.

Transferring Files

Transfer of files to and from the StoreOnce appliance is managed with a repository directory within the appliance. Access to the directory is controlled through Secure FTP.

Scripting

Scripting is performed using Expect, a UNIX automation and testing tool. To aid in parsing, the Common CLI can be configured to return XML formatted output (see system set clioutput on page 141).

You can also use the StoreOnce REST API to extract reporting information from and to execute commands on StoreOnce appliances. See the StoreOnce REST API and SDK user guide for details.
A StoreOnce appliance is controlled by operations. An operation:

- Provides configuration information to the appliance
- Requests an action
- Obtains information about the appliance

- The command sequence – up to four command elements representing groups of related operations, actions, or subjects of the action. A command sequence is unique and a defined syntax for every command sequence exists. The command sequence must be present in all entries to define the desired operation. A typical command sequence consists of a command element defining the group of related operations to which the given sequence belongs (for example, `net`). This element is followed by a command element describing the action of the operation (for example, `show`). Then, depending on the operation, a third and possibly fourth element may be included to describe the subject of the action (for example, `config`). In some cases, the command sequence may consist of only one command element describing the action of the operation.

- Objects – represent an item associated with a StoreOnce appliance. It may be a physical item, such as a network interface, or a virtual item, such as a virtual tape cartridge. Not all instructions contain objects, but up to three are possible.

- Parameters – define additional conditions placed on the operation. A parameter consists of a word (or a series of words separated by dashes) followed by a colon; the characters after the colon define the value of the parameter. Not all instructions contain parameters.

**NOTE:** Command entries are not case sensitive; command words, objects, and parameters may be entered in either uppercase or lowercase.

After the command sequence is established, the entry is verified for correct syntax. If the entry is correct, the operation is performed as defined. If a syntax violation exists, the help function is performed to aid you in determining the correct entry.

### Table 2: Command Entry Syntax Common Conventions

<table>
<thead>
<tr>
<th>Character Convention</th>
<th>Examples</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>square parenthesis</td>
<td><code>[object]</code></td>
<td>The object or parameter entry is optional.</td>
</tr>
<tr>
<td></td>
<td>or <code>[parameter]</code></td>
<td></td>
</tr>
<tr>
<td>carat parenthesis</td>
<td><code>&lt;object&gt;</code></td>
<td>User entry is required to define the object or parameter.</td>
</tr>
<tr>
<td></td>
<td>or <code>&lt;parameter&gt;</code></td>
<td></td>
</tr>
<tr>
<td>special parenthesis</td>
<td>`{object1</td>
<td>object2</td>
</tr>
<tr>
<td></td>
<td>or `{value1</td>
<td>value2}`</td>
</tr>
</tbody>
</table>

*Table Continued*
<table>
<thead>
<tr>
<th>Character Convention</th>
<th>Examples</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>parenthesis</td>
<td>(object)</td>
<td>A label for the object is automatically generated by the Common CLI application. No entry is required for this item.</td>
</tr>
<tr>
<td>parenthesis enclosing the phrase default=value</td>
<td>(default=value)</td>
<td>If no value is provided for this parameter, the value within the parenthesis is used.</td>
</tr>
</tbody>
</table>

**Global Defaults**

Global defaults exist to clearly represent groups of objects or specific objects. Unlike the existence of most objects which depend on the StoreOnce appliance or user requirements, global defaults are directly related to the Common CLI and can be used in command entries on any implementation of the Common interface.

<table>
<thead>
<tr>
<th>Default</th>
<th>Represents</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>All objects related to a given command sequence. (Often, the absence of object elements implies all objects. The all default is used to ensure intent. For example, the command entry system disable failover does not include a definition of a node object. Therefore, the operation is performed on all nodes. In contrast, the command entry support del ticket all must include the global default all to delete all the support tickets. Because the user cannot reverse the results of deleting all the support tickets, the global default all must be included to ensure the user’s intent).</td>
</tr>
<tr>
<td>CLI(StoreOnce 6500 and 6600 Systems)</td>
<td>The Common CLI interface. (To support high availability, the instance of the Common CLI can exist on any node, a VIF is used to define the location and, by default, the Common CLI object. Before the VIF assignment, this global default is used to represent the Common CLI.)</td>
</tr>
<tr>
<td>CURRENT</td>
<td>The object currently active.</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>Default settings as defined by Hewlett Packard Enterprise.</td>
</tr>
<tr>
<td>GUI(StoreOnce 6500 and 6600 Systems)</td>
<td>The GUI associated with the StoreOnce appliance supported by the Common CLI. (To support high availability, the GUI instance can exist on any node. A VIF is used to define the location and, by default, the Common CLI object. Before VIF assignment, this global default is used to represent the GUI.)</td>
</tr>
</tbody>
</table>
Alphabetical List of Commands and Details

accounts add

Syntax
accounts add <ACCOUNT> type { local | externaluser | externalgroup } level { admin | backupadmin | user } newpassword <password> <password>

Description
Creates an account that provides access to the StoreOnce appliance using the CLI or GUI.

NOTE: A default account exists with administrator authority level and has the user name, Admin, and the password, admin. You cannot delete that account, but you can and should modify its password. Also note that after the Admin account password is changed, its password cannot be changed back to admin as this password is not sufficiently complex. The only way to revert that password back to admin is through the HPresetpassword account which is only available on the local console of the device.

Specifiers
ACCOUNT
This required object is the username of the account to be created. It must conform to the following rules:

Local accounts can have usernames between 1 and 16 characters in length and contain only alphanumeric characters and the underscore (_) special character.

External names (for example, Active Directory account names or group names) may be up to 256 characters in length and contain alpha-numeric characters and the following symbols: ~, `!, #, $, %, (, ), _, -, {, }, ', ., @, and \

Parameters
type
This required parameter defines the type of account to be created:

If type is not defined, then it defaults to local.

local (default)
Indicates that a local user (default) is being created on the StoreOnce appliance.

externaluser
Indicates that an external user (that is, a Microsoft Active Directory user or an Active Directory group) is being granted login permissions on the device.

externalgroup
Indicates all users of an external group (that is, a Microsoft Active Directory user group) are being granted login permissions on the device.

level
This required parameter defines the account authorization level and is one of the following:

admin
Administrator authority level
backupadmin

Same as Administrator but cannot create, delete or modify other user accounts.

user

User authority level

newpassword

This required parameter defines a password for the added account. The text “newpassword” must be followed by a string which may contain upper case letters, lower case letters, numbers, and the symbols !, @, $, %, ^, &, and *. The password string can be a maximum of 24 characters long. Two identical entries of the password string separated by a space must be entered. To access the account, the user must enter the exact string and defined by this parameter (that is, the password is case sensitive). This parameter is valid only for users of type local; authentication of external accounts is managed by an authentication service, such as Active Directory.

NOTE: Some passwords cannot be created and are rejected if they are based on common words or known, insecure key patterns. Be sure to use valid passwords without using common words or invalid patterns.

accounts del

Syntax
accounts del <ACCOUNT>

Description
Deletes an existing account. The account specified cannot be the only account with admin authorization levels.

Specifiers
ACCOUNT
This required object is a string matching the label of an existing account. The default Administrator account, Admin, cannot be deleted.

Authority
Administrator
Backup Admin not allowed.
Example command and response
This example deletes the account Joe_Operator.

# accounts del Joe_Operator

account Joe_Operator deleted

**accounts modify**

**Syntax**

```
accounts modify <ACCOUNT> <password <password>> <[newpassword <password> <password>] | [level { admin | backupadmin | user } ]>
```

**Description**

Modifies an existing account.

**Specifiers**

**ACCOUNT**

This object is the name of an existing account.

**Parameters**

**password**

Current password of the logged in user.

**newpassword**

This parameter defines the new password for the account. The text "newpassword" must be followed by a string which may contain upper case letters, lower case letters, numbers, and the symbols !, @, #, $, %, ^, &, and *. The password string can be a maximum of 24 characters long. Two identical entries of the password string separated by a space must be entered. This parameter is valid only for users of type local; authentication of external accounts is managed by an authentication service, such as Active Directory.

Some passwords cannot be created and are rejected if they are based on common words or known, insecure key patterns. Be sure to use valid passwords without using common words or invalid patterns.

**level**

This parameter may be modified to change the access level for the specified account. Access level may only be modified by a user with administrator privileges. Access levels can be changed for local users and external users, or groups.

**Authority**

All

**Restrictions**

All nodes in StoreOnce 6500 and 6600 Systems must be powered on and accessible within the cluster network.

**Usage**

- Administrator accounts can change the password or level of any user or group.
- Non Administrator accounts can only change their own password.
Example commands and responses

Modifying the password of an account:
accounts modify Joe_Operator password F00t newpassword F00tB*ll F00tB*ll

Modifying the password of the currently active account:
accounts modify password F00t newpassword F00tB*ll F00tB*ll

accounts show

Syntax
accounts show [current]

Description
Lists all the user accounts and their authority level defined for the StoreOnce appliance.

NOTE: A user with admin permissions sees all accounts on the system, but a user with user permissions sees only their account.

Parameters

current
This optional parameter returns details for only the current logged in user account.

Authority
All

Usage
Upon successful completion of the command, the following is displayed for each account:

- User name
- Type – local user, external user, or external group
- Authority level – admin or operator (user)

Example commands and responses

This example command shows all of the user accounts.

# account show

<table>
<thead>
<tr>
<th>User Name</th>
<th>Type</th>
<th>Authority</th>
<th>SSH Public Keys</th>
<th>Account Locked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>Local User</td>
<td>admin</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Operator</td>
<td>Local User</td>
<td>user</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>User1</td>
<td>Local User</td>
<td>user</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

This example command shows the current user account.

# accounts show current

<table>
<thead>
<tr>
<th>User Name</th>
<th>Type</th>
<th>Authority</th>
</tr>
</thead>
</table>
accounts unlock

Syntax
accounts unlock <user>

Description
Allows an administrator to unlock a locked user account

Parameters
user
Unlocks a locked local user account.

Authority
Administrator

Example command
#accounts unlock test123
Command Successful - Account "<user>" has been unlocked.

alerts show

Syntax
alerts show [verbose] [numofevents <number>]

Description
Lists all events with a severity of "critical" or "error."

Parameters
verbose
When this parameter is included in the command entry, a detailed output is provided.

numofevents
When this parameter is used, an integer must follow numofevents. This parameter indicates the maximum number of events which are listed in the output, starting with the most recent events.

Authority
All

Usage
Upon successful completion of the command, a list of the most recent events up to 20 events is displayed starting with the most recent event. The output includes the event time, level, and description.

If verbose is included, a detailed list of information for each event is output. If numofevents is included, the maximum number of events displayed is defined by the integer provided with this parameter. The list of events starts with the most recent event.

The command logs show events can also be used to show all events or filtered events, not just critical or error events. See logs show events on page 68.
Example command

This example command shows all events.

```bash
# alerts show
```

<table>
<thead>
<tr>
<th>SEQUENCE ID</th>
<th>TIMESTAMP</th>
<th>LEVEL</th>
<th>EVENT TYPE</th>
<th>EVENT CODE</th>
<th>TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>909</td>
<td>May 18 11:26:14</td>
<td>ALERT</td>
<td>System</td>
<td>E01070023</td>
<td>Warning! - failover is disabled on this cluster, please go to Maintenance page to enable failover.</td>
</tr>
<tr>
<td>875</td>
<td>May 17 09:26:48</td>
<td>ALERT</td>
<td>System</td>
<td>E011D0000</td>
<td>Failed login attempt for user username from host 10.154.10.1 (CLI).</td>
</tr>
<tr>
<td>851</td>
<td>May 16 11:26:14</td>
<td>ALERT</td>
<td>System</td>
<td>E01070023</td>
<td>Warning! - failover is disabled on this cluster, please go to Maintenance page to enable failover.</td>
</tr>
<tr>
<td>775</td>
<td>May 15 14:19:29</td>
<td>ALERT</td>
<td>System</td>
<td>E011D0000</td>
<td>Failed login attempt for user Admin from host 16.25.51.156 (GUI).</td>
</tr>
<tr>
<td>773</td>
<td>May 15 14:18:42</td>
<td>ALERT</td>
<td>System</td>
<td>E011D0000</td>
<td>Failed login attempt for user Admin from host 16.25.51.156 (GUI).</td>
</tr>
<tr>
<td>750</td>
<td>May 15 13:30:32</td>
<td>ALERT</td>
<td>System</td>
<td>E010A0025</td>
<td>File system ifsl not mounted on hpb3ccee3861a-1</td>
</tr>
<tr>
<td>749</td>
<td>May 15 13:30:32</td>
<td>ALERT</td>
<td>System</td>
<td>E010A0025</td>
<td>File system ifsl not mounted on hpb3ccee3861a-2</td>
</tr>
<tr>
<td>704</td>
<td>May 15 11:26:14</td>
<td>ALERT</td>
<td>System</td>
<td>E01070023</td>
<td>Warning! - failover is disabled on this cluster, please go to Maintenance page to enable failover.</td>
</tr>
<tr>
<td>698</td>
<td>May 15 11:16:43</td>
<td>ALERT</td>
<td>System</td>
<td>E071D0001C</td>
<td>component:managementProcessor, status:DEGRADED, location:managementProcessor in IOModule S/N:CN8231M078 in Back Upper IOM Slot in driveEnclosure S/N: 2S6233D259, Message: The management processor firmware needs to be upgraded. Management processor services may become unavailable., Diagnostic message: Perform a firmware update using the integrated firmware management capability as soon as possible., uuid:500c0ff15386b000-mp-a,500c0ff15386b000-mp-b, eventName:MGMT_PROCESSOR_FW_MANDATORY_UPGRADE, eventId:001D001C, level:ALERT, category:STORAGE_CLUSTER, overallStatus:OK , name: vs_500c0ff15386b000</td>
</tr>
<tr>
<td>654</td>
<td>May 15 09:32:38</td>
<td>ALERT</td>
<td>System</td>
<td>E07110001</td>
<td>component:server, status:UNKNOWN, location:server hpb3ccee3861a-2, Message: The server status cannot be determined., Diagnostic message: If the condition persists, contact HP technical support for further assistance., uuid:34323536-3832-5A43-3232-3338304A5731, eventName:SERVER_STATUS_UNKNOWN, eventId:00110001, level:ALERT, category:SERVER, overallStatus:DEGRADED , name: ch_6500 , engine name: hpb3ccee3861a-2</td>
</tr>
<tr>
<td>598</td>
<td>May 14 14:30:55</td>
<td>ALERT</td>
<td>System</td>
<td>E010A0025</td>
<td>File system ifsl not mounted on hpb3ccee3861a-1</td>
</tr>
<tr>
<td>597</td>
<td>May 14 14:30:55</td>
<td>ALERT</td>
<td>System</td>
<td>E010A0025</td>
<td>File system ifsl not mounted on hpb3ccee3861a-2</td>
</tr>
<tr>
<td>556</td>
<td>May 14 14:04:37</td>
<td>ALERT</td>
<td>System</td>
<td>E01070023</td>
<td>Warning! - failover is disabled on this cluster, please go to Maintenance page to enable failover.</td>
</tr>
</tbody>
</table>

accounts sync

Syntax

20  Alphabetical List of Commands and Details
accounts sync [ [all] | [key] ]

**Description**

Use the accounts sync key command to sync ssh keys across all passive nodes from active node. Use the accounts sync all command to sync the user accounts on active node and passive nodes.

**Parameters**

- **all**
  - when this parameter is given, all user accounts are synced from active node to passive nodes.
- **key**
  - when this parameter is given, ssh keys are copied from active node to passive nodes.

**Authority**

Administrator

**Usage**

Has to be run from active node to add users/ssh keys to the passive nodes.

**Example command**

```bash
# account sync all
Accounts synced on active node and passive nodes
# account sync key
Accounts synced on active node and passive nodes
```

cifs add localadmin

**Syntax**

cifs add localadmin [SETX] name <username>

**Description**

Use the `cifs add localadmin` command only when CIFS authentication is set to AD. Adds a local administrator to the CIFS server's BUILTIN\Administrators group. The local administrator also allows users that are not Active Directory domain administrators to perform share management on the StoreOnce appliance.

**Specifiers**

- **SETX**
  - This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow `localadmin`). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1

**Parameters**

- **name**
  - This required parameter specifies the CIFS domain user or group.

**Authority**

Administrator
Example command
This example command adds the local administrator name to the server.
# cifs add localadmin name name1@domainname.com

Command Successful

cifs add user

Syntax

cifs add user [SETX] name <username> password <password>

Description

Used when the CIFS server authentication is set to user. Adds a user to the CIFS server.

Specifiers

SETX

This object defines the service set where the NAS share is located. X is the numeric index of the
service set. It must be specified in the exact position as given by the command syntax (i.e., it must
immediately follow user). This object is required for StoreOnce 6500 and 6600 Systems. The object
is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems
(and older models); if omitted, it defaults to SET1.

Parameters

name

This required parameter specifies user name.

password

This required parameter specifies the user password. Passwords must contain at least eight
characters and should not contain the single quotation mark (').

Authority

Administrator

Example command

This example command adds the user to the server.
# cifs add user name newuser password newpassword

Command Successful

cifs delete localadmin

Syntax

cifs delete localadmin [SETX] name <username>

Description

Deletes local administrator from the CIFS server’s BUILTIN\Administrators group. Used only when
the CIFS server authentication mode is set to AD.
Specifiers

SETX

This object defines the service set where the NAS share is located. \( X \) is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow localadmin). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Parameters

name

This required parameter specifies the CIFS user or group name.

Authority

Administrator

Example commands and responses

This example command deletes the local administrator name from the server.

# cifs delete localadmin name domainname\name1

Command Successful

This example command deletes the local administrator name from the server.

# cifs delete localadmin name name1@domainname.com

Command Successful

cifs delete user

Syntax

cifs delete user [SETX] name <username>

Description

Deletes user from CIFS server. Used only when the CIFS server authentication is set to User.

Specifiers

SETX

This object defines the service set where the NAS share is located. \( X \) is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow user). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Parameters

name

This required parameter specifies user name.

Authority

Administrator
Example command and response
This example command deletes the user from the server.
# cifs delete user name newuser
Command Successful

cifs disable domainjoin

Syntax
cifs disable domainjoin [SETX]

Description
Causes the CIFS server to leave the Active Directory domain. Used only when the CIFS server authentication mode is set to AD.

Specifiers
SETX
This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow domainjoin). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Authority
Administrator

Example command and response
This example command disables the CIFS server from the domain.
# cifs disable domainjoin
Command Successful

cifs disable user

Syntax
cifs disable user [SETX] <SHAREX> name <username>

Description
Disables specific user authentication for the CIFS share. Used only when the CIFS server authentication mode is set to User.

Specifiers
SETX
This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow user). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.
SHAREX

Indicates the share index. X is the numeric share ID. This value can be found from the CLI command nas show share SETX all (see nas show share on page 75). This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the user command if the SETX object is omitted); otherwise, it must immediately follow the SETX object.

Parameters
name

This required parameter specifies the user name.

Authority
Administrator

Example command and response
This example command disables specific user authentication for the CIFS share.

# cifs disable user SHARE1 name myuser

Command Successful

cifs enable domainjoin

Syntax
cifs enable domainjoin [SETX] name <username> password <password>

Description
Causes the CIFS server to join to an Active Directory domain. Use this command after switching the CIFS authentication mode to AD and specifying a domain to join using the cifs modify config command.

NOTE: This command may take up to 120 seconds to complete.

Specifiers
SETX

This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow domainjoin). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Parameters
name

This required parameter specifies the Active Directory user name.

password

This required parameter specifies the user password.

Authority
Administrator
Example command and response
This example command enables the CIFS server to join an Active Directory domain.

```
# cifs enable domainjoin name Administrator password abc123
```

Command Successful

cifs enable user

Syntax
```
cifs enable user [SETX] <SHAREX> name <username>
```

Description
Enables specific user authentication for the CIFS share. Used when the CIFS server authentication mode is set to User. Before running this command, the user must be added to the CIFS server users list.

Specifiers
SETX
This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow user). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

SHAREX
Share index. X is the numeric share ID. This value can be found from the CLI command `nas show share SETX all` (see `nas show share` on page 75). This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the user command if the SETX object is omitted; otherwise, it must immediately follow the SETX object).

Parameters
name
This required parameter specifies the user name.

Authority
Administrator

Example command and response
This example command enables a specific user authentication for the CIFS share.

```
# cifs enable user SHARE1 name myuser
```

Command Successful

cifs modify config

Syntax

Description
Modifies CIFS server configuration.
NOTE:

- Because the functionality of the `servername` and `workgroup` parameters are disabled, these parameters should not be used within scripts.
- After changing authentication mode to AD, the `cifs enable domainjoin` command must be run in order to join the domain.

Specifiers

**SETX**

This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow `config`). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to `SET1`.

Parameters

**auth**

This optional parameter specifies the CIFS server authentication type (None, User or Active Directory specifying the AD domain name).

Authority

Administrator

Example commands and responses

This example command modifies server configuration SET1.

```
# cifs modify config SET1 auth AD domain test.com
```

Command Successful

This example command modifies server configuration.

```
# cifs modify config auth None
```

Command Successful

### cifs modify user

**Syntax**

```
cifs modify user [SETX] name <username> password <password>
```

**Description**

Modifies the CIFS user password. Used when the CIFS server authentication mode is set to `User`.

**Specifiers**

**SETX**

This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow `user`). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to `SET1`. 
Parameters

name
   This required parameter specifies the user name.

password
   This required parameter specifies the user’s new password.

Authority

Administrator

Example command and response
This example command modifies the user password.

# cifs modify user name johndoe password abc123

Command Successful

**cifs show config**

**Syntax**

cifs show config [SETX]

**Description**
Displays CIFS server configuration information.

**Specifiers**

**SETX**
This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow config). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Authority

Administrator

Example command and response
This example command shows configuration information for set3.

# cifs show config set3

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIFS Server Name:</td>
<td>StoreOnce-USE337E8RY</td>
</tr>
<tr>
<td>Authentication Mode:</td>
<td>None</td>
</tr>
<tr>
<td>Workgroup:</td>
<td>WORKGROUP</td>
</tr>
<tr>
<td>SMB Signing Required:</td>
<td>false</td>
</tr>
</tbody>
</table>

Command Successful
cifs show localadmin

Syntax

cifs show localadmin [SETX]

Description

Lists the names of local administrators currently in the CIFS server BUILTIN\Administrators group. Used when the CIFS server authentication mode is set to AD.

Specifiers

SETX

This object defines the service set where the NAS share is located. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow localadmin). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Authority

Administrator

Example commands and responses

This example command shows the name of local administrator for set1.

# cifs show localadmin set1

Admin: LOCAL\Administrator

Command Successful

This example command shows the names of local administrators.

# cifs show localadmin

Admin: ApplianceName\Administrator
Admin: ServerName\domain^admins
Admin: ServerName\name1

Command Successful

config delete

Syntax

config delete <ConfigFile>

Description

Deletes a configuration file existing in the config directory.

Specifiers

ConfigFile

This required object is the configuration file which is deleted from the config directory. This file must exist in the config directory.
Authority
Administrator

Usage
The **config show list** on page 33 command lists all valid configuration files in the **config** directory.

Example command and response
This example command deletes the configuration file in the **config** directory.

```
# config delete devconfig_hpd4856476a1fc_Thur_Jul_19_10:33:24_UTC_2012.zip
```

Command Successful

```config restore devices```

Syntax
```
cfg restore devices [SETX[,X]] <ConfigFile> [force]
```

Description
Restores StoreOnce system devices to the condition detailed in the defined device configuration file. If service sets are provided along with the command, then only those service sets will be restored.

**NOTE:** For more information about the configuration save and restore process, see the StoreOnce System user guide for your product. See also **config save devices** on page 31.

Specifiers

**SETX**
This optional object defines the service sets to which the devices will be added. **X** is the numeric index of the service set. Include more than one service set, if necessary. If no service sets are defined, the restore is performed on all the service sets in the cluster.

**ConfigFile**
This required object defines the device configuration file detailing the configuration to which the devices in the system are restored.

Parameters

**force**
This optional parameter overrides any digital signatures or sumchecks.

Authority
Administrator

Example command and response
This example command restores the StoreOnce system devices.

```
# config restore devices saved-devices-config
```

Command Successful
**config restore keystore**

**Syntax**

```
config restore keystore <keystorefile>
```

**Description**

Restores a saved keystore from the file specified to the StoreOnce appliance. This operation requires the password originally given to the `save` command to decrypt the keystore.

⚠️ **WARNING:** This command overwrites the existing system keystore. If an up-to-date backup of the keystore is unavailable, permanent, and unrecoverable access to encrypted data may occur.

**Parameters**

**keystorefile**

This required parameter defines the name of the keystore file to be retrieved. List available configuration files using the CLI command, `config show list keystore`.

**Authority**

Administrator

**Example command and response**

This example command restores a saved keystore.

```
# config restore keystore keystore_HPVM979D0769_2013-06-28T12:27:05Z.kms
```

Command Successful

---

**config save devices**

**Syntax**

```
config save devices
```

**Description**

Saves the device configuration to the `config` directory using the standard naming convention of `devconfig_<cluster ID and serial number> <date and time stamp>.zip`.

⚠️ **IMPORTANT:** Copy the configuration zip file to a local system immediately after creation; this is especially important for StoreOnce 6500 and 6600 Systems. You must manage the configuration files and keep them updated as changes occur to the StoreOnce configuration.

**NOTE:** This command only works if storage systems are in a Good state. If, for example, replication is out of sync and the storage system status is something other than Running state, the `config save devices` command fails.

For more information about the configuration save and restore process, see the StoreOnce System user guide for your product. See also `config restore devices` on page 30.

Use the `config show list` on page 33 command to see the saved configuration files.
**Authority**
Administrator

**Restrictions**
This command does not apply to the StoreOnce VSA System.

**Usage**
Upon successful completion of the command, the following is displayed:

Configuration Save Started

**Example command and response**
This example command saves the device configuration.

```
# config save devices

Configuration Save Started
Enter command "config show list devices" to see the saved configuration files
Command Successful
```

**config save keystore**

**Syntax**

```
config save keystore
```

**Description**
Saves keystore information to a file in the config directory that can be retrieved, if needed.

⚠️ **IMPORTANT:** Copy the keystore file to a local system immediately after creation; this is especially important for StoreOnce 6500 and 6600 Systems. You must manage the keystore files and keep them updated as changes occur to the StoreOnce configuration.

**NOTE:** You are prompted for a password with which to encrypt the keystore after this command is received with the keystore parameter. This password is required to restore the keystore to the device. Keep a copy in a safe place outside of the backup system directory. You will need to re-enter the password to confirm before the command is finally executed.

**Authority**
Administrator

**Example command and response**
This example command saves the keystore information.

```
# config save keystore

Enter password to encrypt keystore:
Reenter password to confirm:
Keystore Save Started
Keystore Save Completed
Enter command "config show list keystore" to see the saved keystores
```

32 Alphabetic List of Commands and Details
config show list

Syntax
config show list [devices|keystore]

Description
Displays a list of saved configuration files or keystores. A saved configuration file is any file located in the config directory with the .zip extension which is accessible through the SFTP. (A configuration file listed by this may not be a valid configuration file. The user must manage the transfer of valid configuration files into the config directory.)

Parameters
devices
   This optional parameter lists available device configuration files stored in the config directory.

keystore
   This optional parameter lists the keystores saved in the config directory.

Authority
Operator and Administrator

Example command and response
This example command displays a list of saved configuration files or keystores.

# config show list

Location: /config
Configuration
---------
devconfig_hpd4856476a1fc_Thur_Jul_19_10:33:24_UTC_2012.zip
devconfig_hpd4856476a1fc_Fri_Jul_13_16:54:24_UTC_2012.zip

Command Successful

# config show list keystore

Keystore files:
   keystore_HPCZ32482R4R_2013-08-02T174433Z.kms

exit

Syntax
exit

Description
Terminates a CLI session.

Authority
Operator and Administrator
Example command and response
This example command terminates the CLI session.
# exit
The CLI session is terminated.

hardware add storage

Syntax
hardware add storage

Description
Adds storage which has been discovered using the hardware discover storage on page 36 command. Before this command can be executed, newly discovered storage must exist as presented using the system show status on page 158) command. At least one storage set must exist with a status of discovered (XXTB), where XX cannot be equal to zero. The discovery process must be complete; no storage set can have the status of “discovering.” After the storage addition process is successfully started, the system show status on page 158 command is used to determine the status and completion of the process. Each storage enclosure must contain drives that are all the same capacity.

Authority
Administrator

Example command and response
This example command adds storage.
# hardware add storage

This command will take several minutes to complete, however it could take up to four hours depending on the amount of storage.

Elapsed time 02:45 mm:ss
storage addition successfully started

hardware beacon

Syntax
hardware beacon <dev-id> [ALL] {on|off}

Description
Turns on or off the beacon for the specified hardware component. (The hardware component must support the beacon feature.)

Specifiers
dev-id

This required object defines the hardware component whose beacon is to be turned on or off. The value is the device identifier as listed using the hardware show status command.
Parameters

ALL
If specified, the beacon turns on or off on the specified component (if it has a beacon LED) and all hardware components that are hierarchically beneath it that support the beacon feature.

on/off
This required parameter defines the state of the beacon on the hardware component; on illuminates the beacon, and off places the beacon in a nonilluminated state.

Authority
Operator and Administrator

Example commands and responses
This example command turns on the beacon on hard disk 5000CCA01C58259C.
# hardware beacon 5000CCA01C58259C on
Command Successful

This example command turns off the beacon on enclosure 5001438022D92060.
# hardware beacon 5001438022D92060 off
Command Successful

This example command illuminates the beacon on controller 01818af9-0000-1000-b002-533442303737 and on all components hierarchically beneath it.
# hardware beacon 01818af9-0000-1000-b002-533442303737 ALL on
This command could take up to 10 minutes to complete execution.
Command Successful

hardware delete storage

Syntax
hardware delete storage {ALL|dev-id}

Description
Deletes data storage volumes associated with the StoreOnce Backup system. This command does not apply to the storage on which the operating system is located.

Parameters
The command requires one of the following parameters:

ALL
When this parameter is specified in the command sequence, the entire storage file system (including all logical volumes (segments), logical volume groups, and physical volumes) are removed. The system is left in a state in which no data storage is configured.

dev-id
This parameter defines a specific invalid physical volume, discovered on storage, to be deleted. Invalid volumes may appear if a hard disk is replaced with a used disk from another system or if an
expansion array with used hard disks is attached to the system. Before these new disks can be used, the invalid volumes on them must be deleted. The device ID of invalid volumes is reported in the output of the `hardware discover storage` command.

**NODEX**

This parameter defines the node id where the storage is configured. X is the node number.

**Authority**
Administrator

**Restrictions**

Before executing the command, the following message is displayed:

Warning - Data WILL be destroyed. Are you sure you want to delete storage? [yes / no]:
Warning - Are you sure you want to continue? [yes / no]:

You must enter yes to both prompts for command execution to continue. Upon successful completion of the command, the following is displayed:

Command Successful

**Example command and response**

This example command deletes the entire storage file system.

```
# hardware delete storage all
```

Warning - Data WILL be destroyed. Are you sure you want to delete storage? [yes / no]: yes
Warning - Are you sure you want to continue? [yes / no]: yes

This command will take several minutes to complete, however it could take up to one hour depending on the amount of storage.

Elapsed time 04:37 mm:ss

Command Successful

---

**hardware disable failover**

*NOTE:* This command is obsolete. Use the `system disable failover` on page 131 command instead.

**hardware discover storage**

**Syntax**

```
hardware discover storage
```

**Description**

Discovers storage which has been correctly connected to the StoreOnce appliance. Before this command can be executed, any previous discovery process must be complete. No storage set can have the status of `discovering`. The status of storage sets can be obtained by using the `system show status` on page 158 command. After the discover storage process is successfully started, the `system show status` command is used to determine the status and completion of the process.
Authority
Administrator

Example commands and responses
This example command discovers correctly connected storage:

```
# hardware discover storage
```

This command will take several minutes to complete, however it could take up to two hours depending on the amount of storage.

Elapsed time 06:14 mm:ss
storage discovery successfully completed

This example command attempts to discover unsupported storage:

```
# hardware discover storage
```

This command will take several minutes to complete, however it could take up to two hours depending on the amount of storage.

Error - Couplet 1: com.ibrix.ias.model.BusinessException: Unsupported storage enclosure model

Command Failed.

Elapsed time 00:33 mm:ss

**hardware enable failover**

*NOTE:* This command is obsolete. Use the `system enable failover` on page 134 command instead.

**hardware failback**

*NOTE:* This command is obsolete. Use the `system failback` on page 136 command instead.

**hardware failover**

*NOTE:* This command is obsolete. Use the `system failover` on page 136 command instead.

**hardware poweroff**

**Syntax**

```
hardware poweroff <NODEX>
```

**Description**

Performs a failover and then powers down the specified node. At least one system with an active CLI must exist.

**Specifiers**

**NODEX**

This required object must be used to specify the individual node. X is a unique numeric index. NODEX is a label uniquely defining the hardware component. A complete list of the NODEX labels can be obtained using the `hardware show node status` command. If the node is defined, the node must currently be powered up and only that node is powered down.
**Authority**
Administrator

**Restrictions**
This command only works if failover is enabled. See the `system enable failover` command.

All nodes in the cluster can be powered off except the Active Fusion Manager (AFM). To power off the AFM node, first use the `system move afm` command and then power off the node.

**Usage**
This command only applies to the StoreOnce 6500 and 6600 Systems.

Upon successfully sending the power off request, the following is displayed:
```
poweroff request successfully sent
```

**NOTE:** This message only indicates the success for the shutdown request. The `hardware show node status` command must be entered to verify that the server nodes shut down correctly. Also, if the shutdown applies to the node currently supporting the CLI interface, the session terminates following this command.

**Example commands and responses**

Node 1 has failover disabled.
```
# hardware poweroff node1
poweroff command failed:
    Failover is disabled, cannot safely turn one node off.
```

Node 1 has failover enabled and is not the AFM node.
```
# hardware poweroff node1
Node [node1] is not failed over.
    Do you wish to fail over [node1] now?
    Answering no will terminate this command WITHOUT powering the node down.
    Enter 'y' to continue or 'n' to skip [default='n']:
    y
    Sending failover request for node1...

... node1 has been failed over.
```
```
#hardware poweroff node1
poweroff request successfully sent
```

Node 1 has failover enabled and is the AFM node.
```
# hardware poweroff node1
Can't power off (or reset) engine with active Fusion Manager. Please use "system move afm" before powering off active node
poweroff command failed.
```

**hardware poweron**

**Syntax**
```
hardware poweron [NODEX]
```
Description
Description: powers on the Backup System
If a file server node is defined in the command entry, only this node is powered on.

Specifiers
NODEX
A server node where X is a unique numeric index

Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example command and response
hardware poweron node1
power on request successfully sent

hardware prepare storage

Syntax
hardware prepare storage

Description
An alias for the hardware discover storage command. See hardware discover storage on page 36 for details.

hardware reboot

Syntax
hardware reboot <NODEX>

Description
Performs a failover and then reboots the specified node. At least one system with an active CLI must exist.

NOTE: This command only works if failover is enabled. See the system enable failover on page 134 command.

All nodes in the cluster can be rebooted except the Active Fusion Manager (AFM). To reboot the AFM node, first use the system move afm on page 138 command and then reboot the node.

Specifiers
NODEX
This required object must be used to specify the individual node. X is a unique numeric index. NODEX is a label uniquely defining the hardware component. A complete list of the NODEX labels can be obtained using the hardware show node status on page 44 command. If the node is defined, the node must currently be powered up and only that node is powered down.
Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Usage
This message only indicates the success for the reboot request. The `hardware show node status` on page 44) command must be entered to verify that server nodes rebooted correctly. Also, if the reboot applies to the node currently supporting the CLI interface, the session terminates following this command.

Example commands and responses
Node 1 has failover disabled.

```
# hardware reboot node1
```
reboot command failed:
  Failover is disabled, cannot safely reboot node.

Node 1 has failover enabled and is not the AFM node.

```
# hardware reboot node1
Node [node1] is not failed over.
  Do you wish to fail over [node1] now?
  Answering no will terminate this command WITHOUT rebooting the node down.
  Enter 'y' to continue or 'n' to skip [default='n']:
  y
Send failover request for node1...

... node1 has been failed over.
```

Node 1 has failover enabled and is the AFM node.

```
# hardware reboot node1
Can't reboot engine with active Fusion Manager. Please use "system move afm"
before rebooting active node

reboot command failed.
```

`hardware set ports`

Syntax

```
hardware set ports <NODEX> <PORTX> [speed {auto|2Gbs|4Gbs|8Gbs}] [Connection {Loop|Fabric}]
```

Description
Sets the node’s physical port parameters and parameters for the FC ports. This command is supported on all appliances equipped with Fiber Channel cards.

Specifiers

**NODEX**
This object defines the node containing the port whose parameters are to be set. \( X \) is a numeric index for the node.
This object defines the port whose parameters are to be set. X is a numeric index for the FC port.

**Parameters**

**Speed**

This parameter defines the speed of the port. The possible values are defined in the Command Syntax section.

**Connection**

This parameter defines the connection type. The possible values are defined in the Command Syntax section. For StoreOnce 6500 and 6600 Systems, the only option is fabric.

**Authority**

Administrator

**Example command and response**

This example command sets port parameters.

```bash
# hardware set ports port1 speed 8Gbs
Command Successful
```

**hardware show firmware**

**Syntax**

`hardware show firmware [NODE|storageX|switch|all]`

**Description**

Displays the installed firmware version of the server, storage, and switch, and lists the most recent version that is available.

**Specifiers**

**NODE**

This optional parameter is used to display the node firmware. X is a unique numeric index defining an individual node. X is for StoreOnce 6500 and 6600 Systems only; use NODE without defining X for all other models.

**storageX**

This optional parameter is used to display the storage array firmware. X is a unique numeric index uniquely defining an individual storage array. X is for StoreOnce 6500 and 6600 Systems only; use storage without defining X for all other models.

**switch**

This optional parameter is used to display the firmware of all switches. This parameter is for StoreOnce 6500 and 6600 Systems only.

**all**

This optional parameter is used to display firmware levels for all components of all categories (server, switch and storage) from all nodes of the cluster.

**Authority**

Operator and Administrator
Usage

Upon successful completion of the command, the firmware components on server, storage, and switch are displayed. Included are:

- **Component** – The component label
- **Action** – The required firmware flash operation
- **Current** – The firmware revision currently on the component
- **Available** – The firmware revision available to flash the component
- **FlashSeverity** – The firmware flash requirement and importance

Example command and response

This example command displays firmware version for node1.

```bash
# hardware show firmware node1
Elapsed time 00:33 mm:ss
```

<table>
<thead>
<tr>
<th>Component</th>
<th>Action</th>
<th>Current</th>
<th>Available</th>
<th>FlashSeverity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS</td>
<td>UPGRADE</td>
<td>P70 02/10/2014</td>
<td>P70 07/01/2015</td>
<td>MANDATORY</td>
</tr>
<tr>
<td>CPLD</td>
<td>NONE</td>
<td>23</td>
<td>23</td>
<td>NONE</td>
</tr>
<tr>
<td>CPLD</td>
<td>NONE</td>
<td>23</td>
<td>23</td>
<td>NONE</td>
</tr>
<tr>
<td>FCHBA</td>
<td>UPGRADE</td>
<td>FW:5.03.15;BIOS:2.16;UEFI:2.22</td>
<td>FW:8.01.02;BIOS:3.31;UEFI:6.42</td>
<td>MANDATORY</td>
</tr>
<tr>
<td>ILO4</td>
<td>UPGRADE</td>
<td>1.51</td>
<td>2.30</td>
<td>MANDATORY</td>
</tr>
<tr>
<td>NIC</td>
<td>NONE</td>
<td>BC:1.45;NCSI:1.3.12.0</td>
<td>BC:1.45;NCSI:1.3.12.0</td>
<td>NONE</td>
</tr>
<tr>
<td>PCIeNIC</td>
<td>UPGRADE</td>
<td>10.2.477.10</td>
<td>10.5.155.0</td>
<td>MANDATORY</td>
</tr>
<tr>
<td>PCIeNIC</td>
<td>UPGRADE</td>
<td>10.2.477.10</td>
<td>10.5.155.0</td>
<td>MANDATORY</td>
</tr>
<tr>
<td>PCIeNIC</td>
<td>UPGRADE</td>
<td>10.2.477.10</td>
<td>10.5.155.0</td>
<td>MANDATORY</td>
</tr>
<tr>
<td><strong>Power_Mgmt_Ctrl</strong></td>
<td>UPGRADE</td>
<td>3.3</td>
<td>3.3</td>
<td>NONE</td>
</tr>
<tr>
<td><strong>SERVER_HDD</strong></td>
<td>NONE</td>
<td>HPD8</td>
<td>HPD8</td>
<td>NONE</td>
</tr>
<tr>
<td><strong>SERVER_HDD</strong></td>
<td>NONE</td>
<td>HPD8</td>
<td>HPD8</td>
<td>NONE</td>
</tr>
<tr>
<td><strong>Smart_Array_Ctrl</strong></td>
<td>UPGRADE</td>
<td>5.42</td>
<td>6.68</td>
<td>MANDATORY</td>
</tr>
<tr>
<td><strong>Storage_Ctrl</strong></td>
<td>UPGRADE</td>
<td>2.34 2015031201</td>
<td>2.54 2016021201</td>
<td>MANDATORY</td>
</tr>
<tr>
<td><strong>Storage_Ctrl</strong></td>
<td>UPGRADE</td>
<td>2.34 2015031201</td>
<td>2.54 2016021201</td>
<td>MANDATORY</td>
</tr>
</tbody>
</table>

* = System reboot required to apply firmware updates
** = Coordinated reboot required to apply firmware updates
*** = Power cycle required to apply firmware updates

Hardware show net status

Syntax

```
hardware show net status
```

Description

Provides status on the StoreOnce node’s network interfaces.

Authority

Operator and Administrator

Restrictions

This command only applies to the StoreOnce 6500 and 6600 Systems.
Usage

Upon successful completion of the command, the status of the hardware network interfaces is displayed. The displayed status can be one of the following:

- Up
- LinkUp
- Inactive
- Standby
- LinkDown
- BondsDegraded
- NicsStatusStale

Example command and response

This example command displays network interface status.

```
# hardware show net status
```

```
HOST                                IFNAME   TYPE     STATE                   IP
_ADDRESS   IPv6_ADDRESS  MAC_ADDRESS        BACKUP_HOST     BACKUP_IF  ROUTE  VL
AN_TAG  LINKMON
----------------------------------  -------  -------  ----------------------  --
---------  ------------  -----------------  --------------  ---------  -----  --
------  -------
hp31504d7870-1                      bond1    User     Up, LinkUp              16
.78.8.171                64:31:50:4d:78:70
No
hp31504d7870-1                      bond0    Cluster  Up, LinkUp              10
.154.4.1                 98:4b:e1:33:e2:60
No
hp31504d7870-1                      bond2:1  User     Up, LinkUp              10
.1.5.6                   98:4b:e1:33:e2:64  hp31504d7870-2  bond2:3
No
hp31504d7870-1                      bond2:3  User     Inactive, Standby
No
hp31504d7870-1                      bond2    User     Up, LinkUp              10
.1.5.5                   98:4b:e1:33:e2:64
No
hp31504d7870-2                      bond1    User     Up, LinkUp              16
.78.8.172                64:31:50:4d:53:72
No
hp31504d7870-2                      bond2    User     Up, LinkUp              10
.1.5.7                   98:4b:e1:33:e2:54
No
hp31504d7870-2                      bond2:3  User     Inactive, Standby
No
hp31504d7870-2                      bond2:1  User     Up, LinkUp              10
.1.5.8                   98:4b:e1:33:e2:54  hp31504d7870-1  bond2:3
No
hp31504d7870-2                      bond0    Cluster  Up, LinkUp              10
.154.4.2                98:4b:e1:33:e2:50
```

Alphabetical List of Commands and Details 43
hardware show node status

Syntax
hardware show node status [NODEX]

Description
Provides a status on StoreOnce nodes. If a node object is included in the command entry, the port and component status is only provided for that node.

Specifiers
NODEX

This optional object is used to define an individual node. X is a unique numeric index. NODEX is a label that uniquely defines the hardware component. It is assigned during the initial automatic hardware initialization and configuration.

Authority
Operator and Administrator
Usage

Upon successful completion of the command, the status of the hardware network interfaces is displayed. The displayed status can be one of the following:

- Up
- Down
- Initializing/PoweringUp
- NicsLinkDown
- NicsStatusStale
- FailedOver
- InFailback
- PartialFailover
- BondsDegraded

Example command and response

This example command displays node status.

```
# hardware show node status

SERVER_NAME             BACKUP                  STATE         HA   ID                                    GROUP
----------------------  ----------------------  ------------  ---  ------------------------------------  -----  
d2d78e7d1e6928e_node_1  d2d78e7d1e6928e_node_2  Up            off  68fa0df3-ceed-41f6-9b93-ce86cdf552a3  servers
Pulling down node d2d78e7d1e6928e_node_1... Cannot shut down this node from the management GUI. nodeheartbeat will automatically stop node heartbeat soon.

D2D78E7D1E6928E_NODE_1 is now down.
```

```
# hardware show problems

dev-id of failed hw     status text hardware type   hardware path
--------------------- ----------- --------------- -----------------------------------------------------
msa1                  warn        STORAGE_ARRAY   Couplet_1 > msa1
enclosure-1-1         down        DISK_ENCLOSURE  Couplet_1 > msa1 > enclosure-1-1
hard_disk-1-1-10      down        PHYSICAL_DISK   Couplet_1 > msa1 > enclosure-1-1 > hard_disk-1-1-10
raidset-1-2           warn        RAID_SET        Couplet_1 > msa1 > raidset-1-2
msa2                  warn        STORAGE_ARRAY   Couplet_1 > msa2
controller-2-1        warn        DISK_CONTROLLER Couplet_1 > msa2 > controller-2-1
sas_channel-2-1-1     down        SAS_CHANNEL     Couplet_1 > msa2 > controller-2-1 > sas_channel-2-1-1
controller-2-2        warn        DISK_CONTROLLER Couplet_1 > msa2 > controller-2-2
sas_channel-2-2-1     down        SAS_CHANNEL     Couplet_1 > msa2 > controller-2-2 > sas_channel-2-2-1
switch1_powersupply_2 failure     POWER_SUPPLY    switch1 > switch1_powersupply_2
```
hardware show status

Syntax

hardware show status [detail] [dev-id]

Description

Provides a status on all hardware components in the StoreOnce system.

Parameters

detail

This optional parameter provides a detailed output for the hardware components selected. If not defined, only the device ID and its status are provided.

dev-id

This optional parameter selects a particular device and its immediate children and then shows their status. If not defined, the top level status and device IDs of couplets (with their nodes and storage arrays) and internal network switches are shown. Find the device ID of any component by using the hardware show status command and then using that device’s ID with the same command to view the device IDs of its subcomponents.

Authority

Operator and Administrator

Usage

If CLI paging is enabled, the output of this command is displayed with paging.

Example commands and responses

This example command displays the status on all hardware components.

# hardware show status

<table>
<thead>
<tr>
<th>Name</th>
<th>Dev-id</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ab12cd3efgh0-1</td>
<td>12345678-1111-2222-4533-35304D4C4E45</td>
<td>OK</td>
</tr>
<tr>
<td>ab12cd3efgh0-2</td>
<td>12345678-2222-3333-3233-32343033452</td>
<td>OK</td>
</tr>
<tr>
<td>p1228 Storage System</td>
<td>12f34567-3333-1000-b007-533556303541</td>
<td>FAILED</td>
</tr>
<tr>
<td>p1228 Storage System</td>
<td>0123456f-0000-1000-b000-533457303132</td>
<td>FAILED</td>
</tr>
<tr>
<td>HP 5920AF-24XG Switch</td>
<td>switch1</td>
<td>OK</td>
</tr>
<tr>
<td>HP 5920AF-24XG Switch</td>
<td>switch2</td>
<td>OK</td>
</tr>
</tbody>
</table>

# hardware show status switch1

<table>
<thead>
<tr>
<th>Name</th>
<th>Dev-id</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 5920AF-24XG Switch</td>
<td>switch1</td>
<td>OK</td>
</tr>
<tr>
<td>Fans</td>
<td>switch1_fans</td>
<td>OK</td>
</tr>
<tr>
<td>PowerSupplies</td>
<td>switch1_powerSupplies</td>
<td>OK</td>
</tr>
<tr>
<td>TemperatureSensors</td>
<td>switch1_tempsensors</td>
<td>OK</td>
</tr>
</tbody>
</table>
hardware show storage status

Syntax

hardware show storage status

Description

Acts as an alias for the system show status on page 158 command.

Authority

Administrator

Example command and response

This example command displays the storage status.

# hardware show storage status
Storage Set        Status
-----------------  ------
Service Sets 1, 2  Formatted 77,431.62GB
Service Sets 3, 4  Formatted 418,523.85GB

hardware update firmware

Syntax

hardware update firmware <component|nodeX|storageX|switch|all> [force] [user] [password]

Description

Updates the firmware for the defined hardware type if the installed firmware is not the most current.

Specifiers

component

This optional parameter lists component types to be updated on all nodes of cluster. The component list is comma separated without any whitespaces.

switch

This optional parameter is used to update the switch firmware on all switches. This parameter is for StoreOnce 6500 and 6600 Systems only.

NODE

This optional parameter is used to update the node firmware. X is a unique numeric index defining an individual node. It is assigned during the initial automatic hardware initialization and configuration, and its value resides in the node_config file. A complete list of NODEX labels can be obtained using the hardware show node status on page 44 command. If you do not define X, all nodes are updated.

X is for StoreOnce 6500 and 6600 Systems only. Use NODE without defining X for all other models.

storageX

This optional parameter is used to update the storage array firmware. X is a unique numeric index uniquely defining an individual storage array. Use odd numbers (1, 3, 5, etc.), and it updates the partner nodes (2, 4, 6, etc.) as well. If you do not define X, all storage arrays are updated.
X is for StoreOnce 6500 and 6600 Systems only. Use storage without defining X for all other models.

Parameters

force
This optional parameter forces firmware actions regardless of flash recommendations. This parameter is typically used when downgrading the firmware.

user
This is the user name for flashing switches and is only required for a switch configured with different credentials.

password
This is the password for flashing switches and is only required for a switch configured with different credentials.

all
This optional parameter is used to update firmware levels for all components of all categories (server, switch and storage) on all nodes of the cluster.

Authority

Administrator

Example command and response

This example command updates the firmware.

```
# hardware update firmware node

WARNING - This operation will result in the appliance moving to an offline state and should not be executed if backups or restore operations are in progress. This operation may take up to 3 hours to complete. A reboot (or) power cycle may be required to complete the update process and for some components a co-ordinated reboot of all nodes in cluster is required.

Do you wish to continue? [Y/N]: y
Elapsed time  28:37 mm:ss

Updates Not Attempted:
- Power_Mgmt_Ctlr (Current)
- ILO4 (Current)
- SERVER_HDD (Current)
- FCHBA (Downgrade)
- CPLD (Current)

Failed Updates:
- FCHBA:Flash failed for device: FCHBA : operation timed out, but flash for this component is still in progress. Please wait approximately for 15 minutes and execute flash recommendation to check whether component is up with the updated firmware version. If not, refer to the documentation for more information.

Successful Updates:
- BIOS (P89 1.32 03/05/2015)
- NIC (BC:1.38;NCSI:1.3.5)
- Storage_Ctlr (2.50 2015052701)
- Smart_Array_Ctlr (2.12)
- 12G_SAS_Exp_Card (1.80)
- PCIeNIC (10.2.200.23)
```

Firmware update complete with failures for host HPCZJXXXXXX
Firmware downgrade was not attempted on some components.
Power Cycle is required to complete firmware update. Ensure the system is shutdown for 60 secs before power on.
help

Syntax
help [Command Group|Command]

Description
Provides information to assist in the use of the CLI.

Parameters

Command Group
A command group word may be included in the command entry. If this parameter is included, it appears after help is entered.

Command
A command word may be included in the command entry. If this parameter is included, it appears after help is entered.

Authority
Operator and Administrator

Example command and response
This example command displays the CLI help.

# help

Global commands

- help - List commands or get help for a specific command.
- home - Go to the root level.
- exit - Log out.
- up - Go up one level.

Paths currently available

- accounts - manage user accounts.
- alerts - commands related to display and settings of alerts and events.
- cifs - manage CIFS server.
- config - commands related to save and restore of the configuration.
- hardware - manage Backup System hardware.
- license - manage Backup System licenses.
- logs - commands related to the logs generated by the Backup System.
- nas - manage NAS shares.
- net - commands related to the Backup System network configuration.
- nfs - manage NFS server.
- serviceset - provides information on the D2D serviceset
- snmp - manage snmp related functions.
- support - create, delete or show support tickets.
- system - commands related to configuration and system setup.
- time - manage time related functions.
- vtl - manage vtl-related functions.

Commands currently available
keymanager certificate

Syntax
keymanager/certificate# help show
show

Description
This command displays all certificates. It can be used to display CA or signed certificates.

Example
show

Syntax
keymanager/certificate# help renew
renew

Description
This command renews certificates with the Key Manager. It can be used when existing CA or signed certificates have expired.

NOTE: Customer self-renewal of expired client certificates is supported with ESKM 4.2 (6.2.2) or ESKM 5.0 (7.0.2).

Example
renew <password> - where password is the one used to create the certificate signed request

keymanager create

Syntax
keymanager create <username> <password> ["dnvalue"]

Description
Generates a certificate signing request (CSR) using the same credentials as that of a user created on the external key manager.

Parameters
username
The name of the user created on the external key manager

password
The password of the user created on the external key manager

dnvalue
A string containing the name and location of the company. Use the following abbreviations. The abbreviation should be followed by an equals sign (=) and the value without spaces. Separate the information with a forward slash (/); see the example below.
- O – the legal incorporated name of the company
- OU – the organizational unit
- L – the town/city of the company
- ST – the province, region, county, or state
- C – the two-letter ISO code for the country

**Authority**

**Administrator**

**Example command and response**

This example command creates a certificate signing request.

```
# keymanager create joe_smith mypassword "/O=HP/OU=HP Storage/L=Andover/ST=MA/C=US"
```

```plaintext
-----BEGIN CERTIFICATE REQUEST-----
MIICnzCCAYcCAQAwMEAwMDQwMzAwMjA2NzEwMDAwMDAwDQYJKoZIhvcNAQELBQAD
-----END CERTIFICATE REQUEST-----
```

**keymanager expand**

**Syntax**

```
keymanager# help expand
```

**Description**

This command enrols new nodes of a cluster with the Key Manager. It is used after the nodes have been QR’d and joined to the cluster.

**Example**

```
keymanager expand
```

**keymanager import**

**Syntax**

```
keymanager import <CA CERT> <SIGNED CLIENT CERTIFICATE> <PASSWORD>
```

**Description**

Imports the certificate authority (CA) certificate and signed client certificate. The certificates are copied onto the local StoreOnce appliance via SFTP to /repository.

**IMPORTANT:** You must run this command from the management VIF.
Parameters

CA CERT
The certificate of the CA that has been downloaded from the external key manager

SIGNED CLIENT CERTIFICATE
The signed certificate of this StoreOnce appliance signed by the CA on the external key manager

PASSWORD
The password of the user created on the external key manager

Authority
Administrator

Usage

IMPORTANT: If this command fails, import the certificates again before executing the keymanager mode external on page 52 or keymanager mode local on page 53 commands.

Example command and response
This example command imports the CA certificate and signed client certificate.
# keymanager import CA_CERT.crt SIGNED_Client.crt mypassword
CA and Certificate successfully imported and password has been verified

keymanager mode external

Syntax
keymanager mode external <username> <password> address <IP address[,IP address,...]> type <hp_eskm|safenet> <CA name>

Description
Enrolls the StoreOnce appliance with an external key manager.

Parameters

username
The name of the user created on the external key manager

password
The password of the user created on the external key manager

IP address
The IP address of the external key manager. Additional IP addresses can be added as comma separated values.

type
The external key manager being used. This value can be either hp_eskm or safenet.

CA name
The name of the CA on the external key manager, only required if the type is hp_eskm
Authority
Administrator

Restrictions
You must run this command from the management VIF.

Example command and response
This example command enrolls the StoreOnce appliance with an external key manager.
keymanager mode external test_account password123 address 192.168.0.1 type hp_eskm ESKM_CA

keymanager mode local

Syntax
keymanager mode local [remove]

Description
Transitions the local StoreOnce appliance from an external key manager to a local key manager.

Parameters
remove
  If specified, removes all certificates that were imported.

Authority
Administrator

Restrictions
You must run this command from the management VIF.
All encrypted stores must be deleted before the mode can be changed back to local.

Example command and response
This example command reverts back to local key manager.
# key mode local

Warning: This command will withdraw the StoreOnce appliance from the external key manager and revert back to local key manager mode.

Enter 'y' to continue or 'n' to skip [default='n']: y

Withdraw from EKM Mode successful

keymanager mode show

Syntax
keymanager mode show

Description
Displays the current mode of the external key manager.
Usage
Upon successful completion of the command, the current mode is displayed. The mode will be one of the following:

- EKM – external key manager
- LKM – local key manager
- TRANSITION – transitioning from EKM to LKM or from LKM to EKM

Authority
Operator and Administrator

Example command and response
This example command displays the current key manager mode.

```
# keymanager mode show
```

Node:    EKM
Vendor:  hp_eskm
System:  Single-Node

keymanager update

Syntax
```
keymanager update <IP Address1[, IP Address2,..]>
```

Description
Updates the external key manager IP address information on the StoreOnce appliance.

Parameters
IP Address
The new IP address of the key server. Additional IP addresses can be added as comma separated values.

Authority
Administrator

Example command and response
This example command updates the external key manager.

```
# keymanager update 16.78.10.85,16.78.10.86
```

Update EKM information successful

license add

Syntax
```
# license add
license add <license>
license add <catalyst-demo>
```

Alphabetical List of Commands and Details
license add <replication-demo>
license add <cloudbank-demo>

**Description**
Installs the Backup System license provided as a license key.
Provides for the installation of a StoreOnce appliance license. The license is entered as a 168-character string.

**Example**
license add 9D2C D9AA H9PY 8HVZ UBB5 HW65 Y9JL KMPL JCJC 7FJ4 UVUW JH2E GPUW LAXG ENQG HXBA KFVS D5GM E7W7 D26C HKKA DXYD QSQA Z9QM DRPE AQVB 9WKR NBYY P2ZV RHMQ N43J SGGB JWHG 9UMF L8EW R42A V866 FCYX ZKWC K7AD WRRB JKFK M2VH KMMU 4NMU FGM6"HP StoreOnce Replication 4500 LTU"
License added.
- Installs this license for the Backup System.
Add time limited demonstration licenses:

**Parameters**
**license**
A license string must appear in the command entry after **license add**. The license string is 168 characters in length. White space within the license is ignored. The license is purchased by the customer and provided by Hewlett Packard Enterprise.

**license add catalyst-demo**
Activates a 90 day demo license for the catalyst feature. Not applicable for VSA.

**license add replication-demo**
Activates a 90 day demo license for the replication feature. Not applicable for VSA.

**license add cloudbank-demo**
Activates a 90 day demo license for the Cloud Bank Base Read Write feature.

**Authority**
Administrator

**Example commands and responses**
This example command adds an invalid license:

```bash
# license add XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
XXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
XXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
XXXX"HP StoreOnce 4900 60TB Upgrade Kit"

Invalid License
Command failed.
```

This example command adds a valid license:

```bash
# license add XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
XXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
XXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
```

Alphabetical List of Commands and Details  55
license added.

New license installed:

Description:   HP StoreOnce 4500 Catalyst LTU
Valid From:    May 01, 2014 00:00:00 AM UTC
Expiration:    May 31, 2014 00:00:00 AM UTC
Capacity:      N/A
LTU:           1
Message:

license hardware activate

Syntax

license hardware activate

Description

Activates the installed optional hardware on this StoreOnce appliance and displays a summary of the installed optional hardware and available licenses.

Authority

Administrator

Example commands and responses

This example command activates the hardware license.

# license hardware activate

System Status:    OK to proceed

Fibre Channel

Location:    PCI-E Slot 5
Description:    HP StoreOnce 8Gb FC Expansion
Licence:    HP StoreOnce 8Gb Fibre Channel Expansion

Location:    PCI-E Slot 6
Description:    HP StoreOnce 8Gb FC Expansion
Licence:    HP StoreOnce 8Gb Fibre Channel Expansion

Fibre Channel Unused Licences

HP StoreOnce 8Gb Fibre Channel Expansion

Networking

Location:    PCI-E Slot 1
Description:    HP StoreOnce 10GbE SFP Network Expansion
Licence:    HP StoreOnce 10GbE sfp Network Expansion

Networking Unused Licences

HP StoreOnce 10GbE sfp Network Expansion
Continue to activate the licensed optional hardware? [yes / no]: yes

Mapping accepted and successfully applied. Please wait while the hardware monitoring refreshes (up to 5 minutes) and the GUI is updated.

Command Completed

The activation fails and the system output provides the reasons.

# license hardware activate

System Status: Unlicensed hardware found

Fibre Channel

- Location: PCI-E Slot 5
  Description: HP StoreOnce 8Gb FC Expansion
  Licence: No Licence Found

- Location: PCI-E Slot 6
  Description: HP StoreOnce 8Gb FC Expansion
  Licence: No Licence Found

Networking

- Location: PCI-E Slot 1
  Description: HP StoreOnce 10GbE SFP Network Expansion
  Licence: No Licence Found

The activate operation would not be successful for the following reasons:

- Location: PCI-E Slot 5
  Message: There are insufficient licences to license this hardware

- Location: PCI-E Slot 6
  Message: There are insufficient licences to license this hardware

- Location: PCI-E Slot 1
  Message: There are insufficient licences to license this hardware

Command Failed

license hardware show

Syntax
license hardware show

Description
Displays the current status of the installed optional hardware and of the activated licenses for this StoreOnce appliance.
Authority
Operator and Administrator

Example command and response
This example command shows the hardware license status.

```
# license hardware show

Location:      PCI-E Slot 1
Type:          HP StoreOnce 10GbE SFP Network Expansion
Message:       Valid hardware with valid license

Location:      PCI-E Slot 4
Type:          No Installed Component
Message:       No Optional HW fitted.

Location:      PCI-E Slot 5
Type:          HP StoreOnce 8Gb FC Expansion
Message:       Unlicensed hardware found

Location:      PCI-E Slot 6
Type:          HP StoreOnce 8Gb FC Expansion
Message:       Unlicensed hardware found
```

license load

Syntax
```
license load [filename]
```

Description
Installs StoreOnce appliance licenses that have been uploaded to the "licenses" directory in the StoreOnce appliance repository.

Parameters
filename

This optional entry is the name of a license file in the StoreOnce licenses directory. If specified, only that license is installed. If not specified, all licenses in the licenses directory are installed. The license is purchased by the customer and provided by Hewlett Packard Enterprise; for information on obtaining licenses, see the StoreOnce System user guide for your product.

Authority
Administrator

Example commands and responses
This example command loads two valid license keys:

```
# license load HP_D2D_543467

2 valid license keys were loaded.
Command completed.
```
This example command loads two duplicate/invalid keys along with three good keys:

```
# license load HP_D2D_543467_mix
```

2 keys were rejected.

The following key(s) could not be added:

```
[XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
 XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
 XXXX XXXX XXXX XXXX "HP StoreOnce 10GbE sfp Network Expansion"]
```

Reason:

```
[Invalid License - the key entered is not valid/cannot be decoded.]
```

```
[XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
 XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX
 XXXX XXXX XXXX XXXX "HP StoreOnce 8Gb Fibre Channel Expansion"]
```

Reason:

```
[Invalid License - Duplicate license: a license with this key is already installed]
```

3 valid license keys were loaded.

```
license refresh
```

**Syntax**

```
license refresh
```

**Description**

Refreshes the license state across the cluster, initiating a manual license check cycle that goes through the list of installed licenses and sets the appropriate license status flag on each node in the cluster. Used when the license state on a node is incorrect following a filesystem rebuild.

**Authority**

Administrator

**Example command and response**

This example command refreshes the license state.

```
# license refresh
```

A refresh of the licensing information across the cluster has been initiated.

```
Command Succeeded.
```

```
license show all
```

**Syntax**

```
license show all
```

**Description**

Displays all of the installed licenses for this StoreOnce appliance.

**Authority**

Operator and Administrator
Example command and response

This example command shows all of the installed licenses.

This command may take up to 5 minutes to complete.

Licenses:

Name: HPE StoreOnce 3540 24TB Cap Upgrade
Description: HPE StoreOnce 3540 24TB Cap Upgrade
Valid From: August 10, 2017 10:37:37 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: 24
Feature ID: 9376
License Type: Permanent
LTU: 1
Message: You must license all capacity on your system to expand storage.

Key: ADAA CQMA H9P9 8HUY V6B4 HWSV Y9JL KMPL B89H MZVU DXAU 2CSM GHTG L762 TDR3 VAJA KJVT D5KM AFVW DU5J QQA8 P62S JMTK 9G28 E9QE HUNR MW89 Q5G3 DS2R H4UY WF7Y HNEH FRWE 4DGC TVT2 X3M8 5S86 FC4X MK25 W2SL 6R9X AJV8 3HHQ 3ETD 63DD HMDW 4ZUL 795F YJ9A QC88 3EJF 29M5 NVLM EQ9H HTAG VLW5 3JDC ZFQK 3UKH YALE "IPP20170810102114 CAP_UPG_ILR_13 BB943A-StoreOnce 3540 24TB Cap Upg LTU"

Name: HPE StoreOnce 2000/3000 Catalyst LTU
Description: HPE StoreOnce 2000/3000 Catalyst LTU
Valid From: August 10, 2017 10:38:59 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9166
License Type: Permanent
LTU: 1
Message: Feature is fully licensed


Name: HPE StoreOnce 2000/3000 Replication LTU
Description: HPE StoreOnce 2000/3000 Replication LTU
Valid From: August 10, 2017 10:40:43 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9160
License Type: Permanent
LTU: 1
Message: Feature is fully licensed
Name: HPE StoreOnce 2000/3000 Security Pack LTU
Description: HPE StoreOnce 2000/3000 Security Pack LTU
Valid From: August 10, 2017 10:41:32 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9174
License Type: Permanent
LTU: 1
Message: Feature is fully licensed

Name: HPE StoreOnce 10GbE sfp Network Expansion
Description: HPE StoreOnce 10GbE sfp Network Expansion
Valid From: October 27, 2017 09:38:04 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9386
License Type: Permanent
LTU: 1
Message: Please use 'license hardware show' to check optional hardware status.

Name: HPE StoreOnce 16Gb Fibre Channel Expansion
Description: HPE StoreOnce 16Gb Fibre Channel Expansion
Valid From: February 01, 2016 13:56:43 PM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9392
License Type: Permanent
LTU: 1

Alphabetical List of Commands and Details  61
Please use 'license hardware show' to check optional hardware status.

Key: AB9G CQEA H9PY 8HV3 V6B5 HWSV Y9JL KMPL B89H MZVU DXAU 2CSM GHTG L762 HML3 7HR4 KJVT D5KM EFVW TSNJ GX7K 6Q86 SL2L 9EC5 CJZJ EWSR HXMG QGHL S26Z LADY JH7D HNYD GWVX WD75 NK6Y C4GA AVDZ XAQD V8JZ KJPX 9NWM 5PTB JF3D 4LXE H2S9 DNPC 5PKE 2ZDX YJ9Y 4CPA GRZS 6TEF U882 H4L4 NGHL 97D4 "23UCAATTGU4E BB952A HPE StoreOnce 16Gb FC Card LTU"

Name: HPE StoreOnce 10GbE sfp Network Expansion
Description: HPE StoreOnce 10GbE sfp Network Expansion
Valid From: October 27, 2017 09:36:13 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9386
License Type: Permanent
LTU: 1
Message: Please use 'license hardware show' to check optional hardware status.


Name: HPE StoreOnce 16Gb Fibre Channel Expansion
Description: HPE StoreOnce 16Gb Fibre Channel Expansion
Valid From: February 01, 2016 13:24:08 PM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 9392
License Type: Permanent
LTU: 1
Message: Please use 'license hardware show' to check optional hardware status.

Key: QB9E BQEA H9PQ CHUY V6B5 HWSV Y9JL KMPL B89H MZVU DXAU 2CSM GHTG L762 WMX2 F2BE KJVT D5KM EFVW TSNJ KXX8 7Q86 SL2L 9EC5 CJZJ AUSR HXMG 4GFL S26Z LADY JH7D HNYD GWVX WD75 NK6Y C4GA AVDZ XAQD V8JZ KJPX 9NWM 5PTB JF3D 4LXE H2S9 DNPC 5PKE 2ZDX YJ9Y 4CPA GRZS 6TEF U882 H4L4 NGHL 97D4 "23UAAATT6U4E BB952A HPE StoreOnce 16Gb FC Card LTU"

Name: HPE StoreOnce 3100/35xx Mem Upg LTU
Description: HPE StoreOnce 3100/35xx Mem Upg LTU
Valid From: December 05, 2017 09:49:15 AM UTC
Expiration: None
Days Remaining: N/A
Capacity: N/A
Feature ID: 1100000042
License Type: Permanent

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Message: Feature is fully licensed

Name: HPE StoreOnce Cloud Bank RW 1TB LTU
Description: HPE StoreOnce Cloud Bank RW 1TB LTU
Valid From: November 16, 2017 14:42:33 PM UTC
Expiration: None
Days Remaining: N/A
Capacity: 3TB
Feature ID: 1100000046
License Type: Permanent
LTU: 3
Message: Please use 'license show cloudbank' to view all Cloud Bank licenses

Name: HPE StoreOnce Cld Bk Detach 1TB LTU
Description: HPE StoreOnce Cld Bk Detach 1TB LTU
Valid From: November 16, 2017 14:42:32 PM UTC
Expiration: None
Days Remaining: N/A
Capacity: 4TB
Feature ID: 1100000048
License Type: Permanent
LTU: 4
Message: Please use 'license show cloudbank' to view all Cloud Bank licenses

Name: HPE StoreOnce Cld Bk Detach 1TB LTU
Description: HPE StoreOnce Cld Bk Detach 1TB LTU
Valid From: November 16, 2017 14:42:32 PM UTC
Expiration: None
Days Remaining: N/A
Capacity: 4TB
Feature ID: 1100000048
License Type: Permanent
LTU: 4
Message: Please use 'license show cloudbank' to view all Cloud Bank licenses

license show cloudbank

license/show# help

Global Commands
help - List commands or get help for a specific command.
home - Go to the root level.
exit - Log out
up - Go up one level

Paths currently available

-------------------------------------------

Commands currently available

--------------------------------------------

all - shows the installed Backup System licenses.
summary - shows a summary of currently active licenses.
cloudbank - shows the installed Cloud Bank licenses

Syntax
license show cloudbank

Description
Displays descriptions of each installed Cloud Bank license including read/write and detach for this Backup System.

Authority
All

Example command and response
# license show cloudbank

This command may take up to 5 minutes to complete.

Licenses:

Name: HPE StoreOnce Cloud Bank RW 1TB LTU
Description: HPE StoreOnce Cloud Bank RW 1TB LTU
Valid From: November 16, 2017 14:42:33 PM UTC
Expiration: None
Days Remaining: N/A
Capacity: 3TB
Feature ID: 1100000046
License Type: Permanent
LTU: 3

Key: ABYE CQEA P9PY PHX2 VPB5 HG7P Y9JL 2MPL B89H MZVU DXAU 2CSM GHTG L76Z HWR2 EHBA KJVT D5KM GFVW DSNJ WAUK N46W CPSK 9GG6 48RW XVDV B2M8 MG7L SZ6Z LADY JH7D HNYD JV8M M428 T84U R42A G8G3 HGK7 7PBJS BCBM UVE3 98LN ELLM YKSM 5ZS2 HM38 48KN 22BF ZF9Z 4C74 8SBH KLUB TWNS 747A NGGT EHM4 "ESOTERICSTST8 Q8J92A HPE StoreOnce Cloud Bank RW 1TB LTU"

Name: HPE StoreOnce Cld Bk Detach 1TB LTU
Description: HPE StoreOnce Cld Bk Detach 1TB LTU
Valid From: November 16, 2017 14:42:32 PM UTC
Expiration: None
Days Remaining: N/A
license show summary

Syntax
license show summary

Description
Displays a summary of each license category available for this StoreOnce appliance.

Authority
Operator and Administrator

Example command and response
This example command shows a summary of each license.
This command may take up to 5 minutes to complete.

# license show summary

A Summary of installed licenses:

<table>
<thead>
<tr>
<th>Category</th>
<th>LTU Installed</th>
<th>Status</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replication</td>
<td>1</td>
<td>Licensed</td>
<td>Feature is fully licensed</td>
</tr>
<tr>
<td>Catalyst</td>
<td>1</td>
<td>Licensed</td>
<td>Feature is fully licensed</td>
</tr>
<tr>
<td>Security</td>
<td>1</td>
<td>Licensed</td>
<td>Feature is fully licensed</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>2</td>
<td></td>
<td>Please use 'license hardware show' to check optional hardware status.</td>
</tr>
<tr>
<td>Network</td>
<td>2</td>
<td></td>
<td>Please use 'license hardware show' to check optional hardware status.</td>
</tr>
<tr>
<td>Capacity</td>
<td></td>
<td></td>
<td>System is currently licensed to use 48TB of raw storage.</td>
</tr>
</tbody>
</table>

Alphabetical List of Commands and Details  65
logs add recipient

Syntax
logs add recipient <ip> <protocol> [port]

Description
Define a new remote host to receive a specified subset of StoreOnce events using the syslog protocol.

Parameters
ip
This defines IPv4 or IPv6 address of the remote host.
protocol
This defines the network protocol to use when connecting to the remote host can be TCP or UDP.
port
This optional parameter defines the network port to use when connecting to the remote host accepts values 1, 65535. Default value for TCP and UDP is 514.

Authority
Administrator

Example command
This example command adds a new remote host recipient.

# logs add recipient 10.10.1.1 UDP
# logs add recipient 10.10.1.1 tcp 5500

logs delete recipient

Syntax
logs delete recipient <id>

Description
Delete an existing host from the list of remote syslog recipients.

Parameters
id
This defines the id number of the remote host to be removed.
Authority
Administrator

Example command
This example command deletes a remote host recipient.
#logs delete recipient 4

log modify

Syntax
logs$> help modify
logs modify recipient <id> host <ip> protocol <protocol> port [port]

Description
Modifies a fully recipient

Authority
Administrator

Example commands and responses
$id$ - Recipient id (A list of recipients can be obtained using the command 'logs show recipient').
$ip$ - Recipient's IPv4 or IPv6 address.
$protocol$ - Recipient's protocol, supported protocols: tcp|udp.
[port] - Recipient's port, accepts values 1 - 65535.

Examples:
logs modify recipient 1 host 192.168.0.100 protocol tcp port 514
logs modify recipient 1 host 192.168.0.100 port 514
logs modify recipient 1 protocol tcp port 514
logs modify recipient 1 port 514

logs show recipient

Syntax
logs show recipient [id]

Description
Show the details of either all configured remote syslog recipients or an individual remote syslog recipient

Parameters
$id$

This optional parameter can be used to show the details of a specific recipient.

Authority
Operator and Administrator
Example command and response

This example command shows the details of the remote host recipients.

# logs show recipient

<table>
<thead>
<tr>
<th>ID</th>
<th>IP address</th>
<th>Protocol</th>
<th>Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>192.168.1.117</td>
<td>udp</td>
<td>514</td>
</tr>
<tr>
<td>2</td>
<td>10.10.10.3</td>
<td>tcp</td>
<td>514</td>
</tr>
<tr>
<td>3</td>
<td>111.126.14.11</td>
<td>udp</td>
<td>65554</td>
</tr>
<tr>
<td>4</td>
<td>10.10.10.3</td>
<td>tcp</td>
<td>1234</td>
</tr>
</tbody>
</table>

Command Successful

# logs show recipient 3

<table>
<thead>
<tr>
<th>ID</th>
<th>IP address</th>
<th>Protocol</th>
<th>Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>111.126.14.11</td>
<td>udp</td>
<td>65554</td>
</tr>
</tbody>
</table>

logs export events

Syntax

logs export events

Description

Exports all the events to a CSV file. The file is placed in the repository directory from where you can FTP it to another location.

Authority
Operator and Administrator

Restrictions

Each time you export the events file, it overwrites the previously generated events file.

Example command and response

This example command exports log events.

# logs export events

export events request successfully sent
Please wait... Exporting events

logs show events

Syntax

logs show events [severity {alert|warn|info}] [type {audit|system}] [numoevents <number>]
Description
Lists all the items in the event log. If a severity parameter is included in the command entry, only events at or greater than the defined severity are displayed.

Parameters

severity
This optional parameter filters which events are displayed. The parameter appears after `logs show events` in the command entry. It consists of the text `severity` followed by a value of `alerts`, `warn`, or `info`.

type
This optional parameter displays audit events. The values are `System` or `Audit`. If not specified, both system and audit events are displayed.

numofevents
This optional parameter limits the number of events displayed to the number entered. If not included, the number of events listed is limited to 20.

Authority
Operator and Administrator

Example command and response
This example command shows log events.

```
# logs show events
```

<table>
<thead>
<tr>
<th>sequenceId</th>
<th>timestamp</th>
<th>level</th>
<th>type</th>
<th>eventcode</th>
<th>texttP</th>
</tr>
</thead>
<tbody>
<tr>
<td>915</td>
<td>May 18 16:28:30</td>
<td>INFO</td>
<td>Audit</td>
<td>E01070015</td>
<td>Audit event [Login Date: May 18 16:28:30, User Admin, Host 16.25.51.156 (CLI)]</td>
</tr>
<tr>
<td>914</td>
<td>May 18 16:11:27</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>913</td>
<td>May 18 15:11:26</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>912</td>
<td>May 18 14:11:27</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>911</td>
<td>May 18 13:11:27</td>
<td>WARN</td>
<td>System</td>
<td>E01230000</td>
<td>NTP hpcxj51115p3 down</td>
</tr>
<tr>
<td>910</td>
<td>May 18 12:11:27</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>908</td>
<td>May 18 11:11:27</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>906</td>
<td>May 18 11:09:32</td>
<td>INFO</td>
<td>Audit</td>
<td>E01070015</td>
<td>Audit event [Logout Date: May 18 11:09:32, User Admin, Host 16.25.51.156 (CLI)]</td>
</tr>
<tr>
<td>905</td>
<td>May 18 10:39:17</td>
<td>INFO</td>
<td>Audit</td>
<td>E01070015</td>
<td>Audit event [Login Date: May 18 10:39:17, User Admin, Host 16.25.51.156 (CLI)]</td>
</tr>
<tr>
<td>904</td>
<td>May 18 10:11:27</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>903</td>
<td>May 18 09:11:28</td>
<td>WARN</td>
<td>System</td>
<td>E01070008</td>
<td>Replication license violation occurred</td>
</tr>
<tr>
<td>902</td>
<td>May 18 08:57:12</td>
<td>INFO</td>
<td>Audit</td>
<td>E01070015</td>
<td>Audit event [Logout Date: May 18 08:57:12, User Admin, Host 16.25.51.156 (CLI)]</td>
</tr>
<tr>
<td>901</td>
<td>May 18 08:26:56</td>
<td>INFO</td>
<td>Audit</td>
<td>E01070015</td>
<td>Audit event [Login Date: May 18 08:26:56, User Admin, Host 16.25.51.156 (CLI)]</td>
</tr>
</tbody>
</table>

Alphabetical List of Commands and Details  69
logs show update

Syntax

logs show update

Description

Provides logs of all software updates that have occurred on the system.

Authority

Administrator

Example command and response

This example command shows software update logs.

```
# logs show update
14:25:20 Verifying staged package repository integrity.
14:25:23 Package stage area verification successful.
14:25:24 Updating cluster from version '3.9.0-1334.2' to '3.9.0-1336.2'.
14:25:24 Reboot will occur after update completes.
14:25:24 Installing update tool packages. Can take 5 minutes to complete.
14:25:24 node 5 : Installing: D2D_UpdateTools
14:25:24 node 4 : Installing: D2D_UpdateTools
14:25:24 node 2 : Installing: D2D_UpdateTools
14:25:24 node 3 : Installing: D2D_UpdateTools
14:25:24 node 8 : Installing: D2D_UpdateTools
14:25:24 node 6 : Installing: D2D_UpdateTools
14:25:24 node 7 : Installing: D2D_UpdateTools
14:25:24 node 1 : Installing: D2D_UpdateTools
14:25:25 node 5 : Install successful
14:25:25 node 4 : Install successful
14:25:25 node 6 : Install successful
14:25:25 node 8 : Install successful
14:25:26 node 7 : Install successful
14:25:26 node 3 : Install successful
14:25:26 node 2 : Install successful
14:25:26 node 1 : Install successful
14:25:26 Update tool package installation successful.
14:25:27 Updating cluster from version '3.9.0-1334.2' to '3.9.0-1336.2'.
14:25:27 Reboot will occur after update completes.
14:25:27 Verifying status of hardware and services.
14:25:27 Stopping service sets. Can take 30 minutes to complete.
14:27:04 Stop service sets successful.
14:27:04 Disabling service set failover.
14:27:04 Disabling service set failover successful.
14:27:04 Stopping file services.
14:27:18 File service stop successful.
14:27:18 Stopping management service failover. Can take 30 minutes to complete.
14:27:39 Management service failover stopped successful.
14:27:39 Stopping management services.
14:28:16 Management services stop successful.
14:28:31 Cleaning up old packages
14:28:32 Removing test packages
14:28:32 Installing packages. Can take 30 minutes to complete.
14:28:32 node 5 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 1 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 3 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 8 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 7 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 2 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 6 : Installing: D2D_Master-3.9.0-1336.2
14:28:32 node 4 : Installing: D2D_Master-3.9.0-1336.2
```
nas create share

Syntax

nas create share <SETX> [SHAREX] proto {CIFS|NFS} [name <name>] [desc <description>] [readonly {yes|no}] [encryption {yes|no}] [dedupe {yes|no}] [version {1|2}] [PhysicalQuotaEnabled {yes|no}] [LogicalQuotaEnabled {yes|no}] [LogicalQuota <number>]

Description

Creates either a CIFS or NFS share.
Specifiers

SETX

This required object defines the service set where the NAS share is to be created. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow share). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

SHAREX

This optional object defines a share index. X is the numeric index of the share. This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the share command if the SETX object is omitted; otherwise, it must immediately follow the SETX object).

Parameters

proto

This required parameter specifies the NAS share protocol, which is either CIFS or NFS.

name

This optional parameter specifies the NAS share name. If omitted, it defaults to Share_X1_X2 on StoreOnce 6500 and 6600 Systems and Share_X2 on all other models. X1 is derived from the SETX object, and X2 is derived from the SHAREX object.

desc

This optional parameter specifies the NAS share description. If omitted, it defaults to an implementation dependent, short, descriptive name.

readonly

This optional parameter specifies a read-only flag for a NAS share. If omitted, it defaults to no and NAS share sets to read-write.

encryption

This optional parameter specifies NAS the share description. If omitted, it defaults to no.

dedupe

This parameter enables deduplication of share data. It defaults to yes.

version

This optional parameter specifies the version of NAS share. If omitted, it defaults to the latest share version.

PhysicalQuotaEnabled

This optional parameter determines if a physical quota should be set for a NAS share. If not included, no quota is used.

PhysicalQuota

This parameter defines the physical quota in GB. If the physical size of the NAS share exceeds this value, the library becomes read-only. The parameter is only required if PhysicalQuotaEnabled is set to “yes.”

LogicalQuotaEnabled

This optional parameter determines if a logical quota should be set for a NAS share. If not included, no quota is used.
Logical Quota

This parameter defines the logical quota in GB. If the logical size of the NAS share exceeds this value, the library becomes read-only. The parameter is only required if LogicalQuotaEnabled is set to "yes."

Authority

Administrator

Example commands and responses

This example command creates an NFS share.

```
# nas create share SET1 SHARE0 proto NFS

Command Successful
```

This example command creates a read-only CIFS share.

```
# nas create share SET1 SHARE1 proto CIFS name Share1 desc "CIFS share" readonly yes

Command Successful
```

This example command creates a CIFS share with encryption.

```
nas create share SET1 SHARE1 proto CIFS encryption yes dedupe no

Command Successful
```

**nas delete share**

**Syntax**

```
nas delete share <SETX> {SHAREX|ALL}
```

**Description**

Deletes either a CIFS or NFS share.

**Specifiers**

**SETX**

This required object is a service set where the NAS share is to be deleted. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow share). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

**SHAREX**

This optional object defines a share index. X is the numeric index of the library. This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the share command if the SETX object is omitted; otherwise, it must immediately follow the SETX object). Use the nas show share all command for share information.

**ALL**

If this optional object is included in the command sequence, it selects all NAS shares. This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the share command if SETX object is omitted; otherwise, it must immediately follow the SETX object).
Authority
Administrator

Example command and response
This example command deletes a share.
# nas delete share set1 share3
Command Successful

**nas modify share**

**Syntax**
nas modify share <SETX> <SHAREX> [desc <description>] [readonly {yes|no}] [version {1|2}] [PhysicalQuotaEnabled {yes|no}] [PhysicalQuota <number>] [LogicalQuotaEnabled {yes|no}] [LogicalQuota <number>]

**Description**
Allows you to modify existing NAS shares.

**Specifiers**
**SETX**
This required object is a service set where the NAS share is to be modified. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow share). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

**SHAREX**
This optional object defines a share index. X is the numeric index of the library. This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the share command if SETX object is omitted; otherwise, it must immediately follow the SETX object).

**Parameters**
**desc**
This optional parameter specifies the NAS share description.

**readonly**
This optional parameter specifies a read-only flag for a NAS share.

**version**
This optional parameter is used to upgrade the NAS share to the latest version. You cannot downgrade to the previous version.

**PhysicalQuotaEnabled**
This optional parameter determines if a physical quota should be set for a NAS share. If not included, no quota is used.

**PhysicalQuota**
This parameter defines the physical quota in GB. If the physical size of the NAS share exceeds this value, the library becomes read-only. The parameter is only required if PhysicalQuotaEnabled is set to "yes."
LogicalQuotaEnabled

This optional parameter determines if a logical quota should be set for a NAS share. If not included, no quota is used.

Logical Quota

This parameter defines the logical quota in GB. If the logical size of the NAS share exceeds this value, the library becomes read-only. The parameter is only required if LogicalQuotaEnabled is set to "yes."

Authority

Administrator

Example commands and responses

This example command modifies SET1, SHARE0.

# nas modify share SET1 SHARE0 desc "CIFS share 0" readonly yes

Command Successful

This example command modifies SHARE0.

# nas modify share SHARE0 version 2

Command Successful

**nas show share**

**Syntax**

nas show share <SETX> {shareX|all}

**Description**

Displays NAS share details or a list of all NAS shares.

**Specifiers**

**SETX**

This required object indicates the service set where the NAS share is to be shown. X is the numeric index of the service set. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow share). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

**SHAREX**

This optional object defines a share index. X is the numeric index of the library. This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the share command if SETX object is omitted; otherwise, it must immediately follow the SETX object).

**ALL**

If this optional object is included in the command sequence, it selects all NAS shares. This object must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the share command if SETX object is omitted; otherwise, it must immediately follow the SETX object).
Authority
Operator and Administrator

Example commands and responses
This example command displays all share details.

# nas show share all

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Protocol</th>
<th>Status</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>share1</td>
<td>CIFS</td>
<td>Online</td>
<td>OK</td>
</tr>
<tr>
<td>2</td>
<td>MyNFS1</td>
<td>NFS</td>
<td>Online</td>
<td>OK</td>
</tr>
<tr>
<td>3</td>
<td>MyCIFS3</td>
<td>CIFS</td>
<td>Online</td>
<td>OK</td>
</tr>
</tbody>
</table>

This example command displays SHARE0 details.

# nas show share SHARE0

<table>
<thead>
<tr>
<th>ID</th>
<th>Protocol</th>
<th>Name</th>
<th>Network Name</th>
<th>Description</th>
<th>Created On</th>
<th>Modified On</th>
<th>Status</th>
<th>Health</th>
<th>Replication Role</th>
<th>Replication Status</th>
<th>Replication Health</th>
<th>User Bytes</th>
<th>Disk Bytes</th>
<th>Dedupe Ratio</th>
<th>Files</th>
<th>Directories</th>
<th>Read-only</th>
<th>Encryption Enabled</th>
<th>Deduplication Enabled</th>
<th>Share Version</th>
<th>Authentication</th>
<th>Physical Data Size Quota</th>
<th>Logical Data Size Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>NFS</td>
<td>Share_1</td>
<td>/nas/Share_1</td>
<td>HP StoreOnce Share 1</td>
<td>09:10 2014/06/02</td>
<td>09:10 2014/06/02</td>
<td>Online</td>
<td>OK</td>
<td>Non Replicating</td>
<td>Non Replicating</td>
<td>Information</td>
<td>0</td>
<td>380</td>
<td>0.0</td>
<td>0</td>
<td>1</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>2</td>
<td>Host</td>
<td>(No Quota)</td>
<td>(No Quota)</td>
</tr>
</tbody>
</table>

net activate config

Syntax

net activate config <configName>

Description
Configures the external network using an existing configuration file.
Specifiers
configName
This required object identifies the network configuration whose data structure is to be used to configure the external network for the cluster.

Authority
Administrator

Restrictions
If the network being used for the CLI session is modified from this command, the session may terminate.

Requirements for Command Execution
The following list shows some command execution requirements but is not a complete list of checks.

• Verify the configuration structure according to the rules below:
  ◦ One (and only one) default subnet must exist.
  ◦ A gateway is required for the default subnet.
  ◦ If more than one port is defined in a subnet, all the ports must be of the same type.
  ◦ The same port cannot be in two different subnets or defined twice in same subnet.

While not requirements for the command to execute, note the following rules. If there are discrepancies, connectivity is prevented when the configuration is activated.

• If DHCP is defined in any subnet, verify that the DHCP server exists.
• Configure the external network as defined by the configuration data structure.
• If defined, verify that the gateway exists.

Usage
Use the net show config on page 100 command with the list parameter to view valid configuration names.

Example commands and responses
This example command configures the external network using myConfig.

# net activate config myConfig
Command Successful

This example command configures the external network using the Factory_Default_Configuration.

# net activate config Factory_Default_Configuration
Command Successful

net activate status

Syntax
net activate status
Description
Displays the status of the previous network activate operation. Before executing this command, you must execute the `net activate` command.

Authority
Administrator

Example commands and responses
This example command displays the status of the previous network activations.
```
# net activate status

No net activations have occurred.
Command Successful
```

This example command displays the status of the previous network activations.
```
# net activate status

Activation started on 25/04/2014 at 18:29:39-0600
completed successfully on 25/04/2014 at 18:31:22-0600
Total running time was 00:01:43.43814

Command Successful
```

net add encryption

Syntax
```
net add encryption <configName> <subnetName> ipAddr <ipAddr> passPhrase <passPhrase>
```

Description
Adds a new encryption link configuration to a network configuration. This command is used when configuring Data In-Flight Encryption (where encryption is applied to IP transport.). Data In-Flight Encryption requires the Security Pack license.

Specifiers
configName
   This parameter specifies the network configuration name.

Parameters
subnetName
   This parameter specifies the subnet name.
ipAddr
   This parameter specifies the IP address of the remote appliance or client to be encrypted.
passphrase
   This parameter specifies the passphrase to use for setting up the link.

Authority
Administrator
Restrictions

Data In-Flight Encryption is intended to be used to secure network links between data centers for StoreOnce VTL or NAS Replication, or for Low Bandwidth Catalyst Copy operations. Using Data In-Flight Encryption for direct backup operations to the StoreOnce appliance over a local network is not supported due to the performance impact of the encryption.

Data in Flight Encryption is supported on “data” only subnets using static IP addresses.
Multi Node systems only support Data in Flight Encryption when using IPv4 subnets.

Example command and response

This example shows the support for IPv6 address:

```
```

```
net add ipaddr
```

**Syntax**

```
net add ipaddr <configName> <subnetName> <IP Address1[,IP Address2,..]>
```

**Description**

Adds new IP addresses to a subnet in a configuration.

**Specifiers**

**configName**

This parameter specifies the network configuration name.

**Parameters**

**subnetName**

This parameter specifies the subnet name.

**IP Address**

This parameter specifies the comma-separated list of IP addresses to add.

**Authority**

Administrator

**Example command**

This example command adds two new IPv4 addresses to subnet1 in config1.

```
net add ipaddr config1 subnet1 10.0.1.11,10.0.1.12
```

```
net add portset
```

**Syntax**

```
net add portset <configName> <portSetName> ports <portList>
```

**Description**

Adds new ports to an existing port set.
Specifiers
configName
   This parameter specifies the network configuration name.

Parameters
portSetName
   This parameter specifies the port set name.
portList
   This parameter specifies the comma-separated list of ports to add.

Authority
Administrator

Example command and response
This example command adds two new ports to an existing “portset1” in network configuration “config1”:
# net add portset config1 portset1 ports eth1,eth2
Command Successful

net add route

Syntax
net add route <configName> <subnetName> [target <target>] [prefix <number>] [netmask <netmask>] [gateway <gateway>]

Description
Adds a new static route to a network configuration.

Specifiers
Both objects are required.
configName
   Specifies the network configuration name.
subnetName
   Specifies the subnet name.

Parameters
All parameters are optional. However, you must provide either the netmask or the gateway (but not both).
target
   Specifies the target IP address/subnet to add.
prefix
   Specifies the routing prefix as a bit-length (from 1 to 32 inclusive for IPv4, from 1 to 128 inclusive for IPv6).
netmask
   Specifies the IPv4 subnet mask in dotted quad notation (for example, 255.255.0.0).
gateway

Specifies a static IP address for the new route

Authority

Operator and Administrator

Example commands and responses

# net add route myconfig subnet1 target 10.11.12.3 prefix 32 gateway 192.15.32.2
This example command adds a static route to subnet 10.11.0.0/16 via gateway 192.15.32.2:

# net add route myconfig subnet1 target 10.11.0.0 netmask 255.255.0.0 gateway 192.15.32.2
Command Successful

This example command adds a static route to subnet 2001:DB8:: via gateway feed:bead::1:

# net add route myconfig subnet1 target 2001:DB8:: prefix 64 gateway feed:bead::1
Command Successful

net add subnet

Syntax

StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems:

net add subnet <configName> subnet <subnetName> [default {yes|no}] [domain <string>] [ipaddr {DHCP|ipAddr}] [netmask <mask>] [prefix <prefix>] [gateway <gateway>] [portset <portSetName>] [vlanTag <vlanTagID>] [netUsage {mgmt|data|both}]

StoreOnce 6500 and 6600 Systems:

net add subnet <configName> subnet <subnetName> [default {yes|no}] [domain <string>] [netmask <mask>] [prefix <prefix>] [gateway <gateway>] [portset <portSetName>] [vlanTag <vlanTagID>] [netUsage {mgmt|data|both}]

Description

Adds a new subnet to a network configuration.

Specifiers

configName

This object specifies the network configuration name and identifies the network configuration to which the subnet is added. This is not case sensitive.

subnetName

This required object is a label that identifies the subnet configuration object that is created by execution of this command and is then added to the network configuration defined in this command sequence. The object is a data structure which defines a subnet configuration. This must uniquely identify the subnet. If the subnet label is already being used to identify a subnet object within the network configuration, an error message is generated and the execution of the command fails. This label is not case sensitive.
Parameters

default
This optional parameter defines whether the subnet configuration is the default; the default subnet defines the default gateway for the system. The values can be either Yes or No. If not defined, the default value is No.

domain
This optional parameter defines the domain name for the subnet configuration.

ipAddr
This optional parameter defines an IP address of the subnet. The value DHCP can be used to indicate that the IP address is defined by a DHCP server. This parameter is for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems only.

netmask
For IPv4 only. This parameter defines the netmask in dotted quad notation (for example, 255.255.0.0). If the ipAddr value is DHCP, a value is not required for the netmask.

prefix
For IPv6 only. This optional parameter defines the IPv6 network prefix length (as an integer from 1 to 128 inclusive).

gateway
This parameter defines the gateway for the subnet configuration. For IPv4 networks, if the ipAddr value is DHCP a value is not required.

portset
This parameter defines the name of the port set to be used by this subnet. The port set name must be defined before it can be added to the subnet.

vlanTag
This optional parameter specifies the VLAN tag ID as an integer from 2 to 4094 (inclusive).

netUsage
This optional parameter specifies the type of network traffic for this subnet. The default for StoreOnce 6x00 systems is "data" for all other systems it is "both."

Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example commands and responses
This example command adds a new network configuration with no parameters.

# net add subnet myconfig subnet subnet2

Command Successful

This example command adds a new IPv4 network configuration with given parameters.

# net add subnet myconfig subnet new gateway 1.2.3.6 netmask 255.255.0.0 domain demo.com default yes portset ps1

Command Successful
This example command adds a new IPv6 network configuration with given parameters:

```
# net add subnet myconfig subnet new gateway 2001:DB8::ffff prefix 64 domain demo.com default yes portset ps1
Command Successful
```

```
net copy config

Syntax
net copy config from <configName> to <newConfigName>

Description
Creates a new network configuration by copying an existing network configuration.

Specifiers
configName
The data structure in this network configuration is copied to the new network configuration object created by this command.

newConfigName
This is the network configuration object created by this command. The name can contain only letters, numbers, and underscores (_), and cannot be “current” or “Factory_Default_Configuration.”

Parameters
from
This parameter identifies the label of the network configuration whose data structure is to be copied and assigned to a new network configuration with a different label.

to
This parameter identifies the label of the network configuration created by this command. The label must uniquely identify the network configuration. If the label is already being used to identify a network configuration, an error message is generated, and the execution of the command fails.

Authority
Administrator

Example command and response
This example command creates a new network configuration.

```
# net copy config from current to current_new
Command Successful
```

```
net create config

Syntax
net create config <configName> [description <string>] [WriteProtect {Yes|No}] [DNS <IP Address1[, IP Address2,..]>] [mgmtVIF <IP Address>] [subnet <subnetName>] [default {yes|no}] [ipaddr {DHCP|ipAddr}] [domain <domainName>] [netmask <mask>] [prefix <prefix>] [gateway <gateway>] [vlantag <vlanTagID>] [netusage {mgmt|data|both}]
```

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Description

Creates a data structure that defines a network configuration. (A default data structure exists as part of the initial installation.)

Specifiers

cfgName

This value is the label which identifies the network configuration that is to be created by executing this command. The label must uniquely identify the network configuration and contain only letters, numbers, and underscores (_). The label is case insensitive.

current

This is the network configuration which is currently being used to configure the entire cluster or a group of nodes. If the cluster consists of groups of nodes, a current network configuration can exist for each group.

Factory_Default_Configuration

This is the network configuration object that is pre-defined at the initial installation. This default configuration is different, depending on the StoreOnce system.

subnet

Declares a new subnet and provides the new subnet’s name.

Parameters

description

This optional parameter is the user-specified description of the configuration.

WriteProtect

This optional parameter is used to prevent configuration changes. The values for this parameter are Yes or No. Yes means the network configuration cannot be modified (with one exception – the WriteProtect parameter can be modified). If this parameter is not defined in the command sequence, the default value is No.

DNS

Domain Name Servers. This optional parameter uses comma-separated IP addresses with no spaces for a maximum of three. The value DHCP can be used to indicate that the IP address is defined by a DHCP server.

mgmtVIF

This parameter is used to indicate the management VIF IP address. It only applies to StoreOnce 6500 and 6600 Systems.

The following parameters are related to the subnet:

default {yes|no}

This optional parameter must follow a subnet object within the command sequence. This parameter defines whether the preceding subnet configuration is the default subnet. If a subnet label is defined and this parameter is not defined following the subnet label, the default value for the subnet is No.

ipAddr

(StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems) This optional parameter defines an IP address of the subnet. The value DHCP can be used to indicate that the IP address is defined by a DHCP server.
domain
This optional parameter defines the domain name for the subnet configuration.

netmask
For IPv4 only. This parameter defines the netmask in dotted quad notation (for example, 255.255.0.0).
If the ipAddr value is DHCP, a value is not required for the netmask.

prefix
For IPv6 only. This parameter specifies the IPv6 prefix length as an integer from 1 to 128 (inclusive).

gateway
This parameter defines the gateway for the subnet configuration. For IPv4 networks, if the ipAddr
value is DHCP a value is not required.

vlanTag
This optional parameter specifies the VLAN tag ID as an integer from 2 to 4094 (inclusive).

netUsage
This optional parameter specifies the type of network traffic for this subnet. The default for StoreOnce
6x00 systems is "data" for all other systems it is "both."

Authority
Administrator

Example commands and responses
This example command creates a default configuration.
# net create config myconfig description "test1" dns 192.168.10.10,192.168.10.12
Command Successful

This example command creates a configuration for StoreOnce 6500 and 6600 Systems with some
parameters initialized.
# net create config myconfig description "test1" dns 192.168.10.10,192.168.10.12
mgmtvif 172.16.0.2
Command Successful

This example command creates a complete configuration for StoreOnce 6500 and 6600 Systems using
secondary commands.
# net create config myconfig writeprotect no dns 192.168.10.10,192.168.10.12
mgmtvif 192.168.10.20 subnet ALL default yes netmask 255.255.255.0 gateway 192.168.10.1 netusage both

# net create portset myconfig ps1 ports eth0,eth2 bondmode 1
# net modify subnet myconfig subnet ALL portset ps1
# net add ipaddr myconfig ALL 192.168.10.21,192.168.10.22,192.168.10.23,192.168.10.24

This example command creates a complete VLAN config for StoreOnce 6500 and 6600 Systems using
secondary commands.
# net create config myconfig writeprotect no dns 192.168.10.10,192.168.10.12
mgmtvif 192.168.10.20

# net create portset myconfig ps1 ports eth0,eth2 bondmode 1 vlansupport yes

# net add subnet myconfig subnet ALL default yes netmask 255.255.0.0 gateway 192.168.10.1
netusage both vlantag 200
net create portset

Syntax

net create portset <configName> <portSetName> [ports <portList>] [bondMode <bondMode>] [vlanSupport {yes|no}] [framesize <number>]

Description

Creates a new port set in a network configuration.

Specifiers

configName

This required object specifies the network configuration in which to create the port set. This is case insensitive.

portSetName

This required object specifies the port set name. This is case insensitive.

Parameters

ports

This required parameter specifies the ports to add. The ports should be separated by commas but no spaces.

bondMode

This parameter specifies the bond mode. It is required if more than one port is provided. The value can be:

• 1 – (Active/Backup), simple bonding mode that allows network traffic via one active port only. If the active network fails then traffic moves to the backup port.
• 4 – (IEEE 802.3ad Dynamic Link Aggregation), LACP bonding mode that requires a special external switch configuration. Provides a link aggregation solution which increases the bond physical bandwidth.
• 6 – (Active Load Balancing), load balance solution that can be used in a 2–switch configuration. The switch must allow ARP negotiation (but no specific external switch configuration is required).

vlanSupport

This optional parameter specifies vLAN support. The value can be either Yes or No, and the default is No.

framesize

This optional parameter specifies the network packet size (from 1280 to 9000 inclusive).

Authority

Administrator
Example command and response
This example command creates a new port set.
# net create portset myconfig portset1 ports eth0,eth1 bondmode 1 vlansupport yes framesize 1500
Command Successful

net delete config

Syntax
net delete config <configName>

Description
Deletes a network configuration.

Specifiers
configName
This object identifies the network configuration to be deleted. This label is case insensitive.

Authority
Administrator

Example command and response
This example command deletes a network configuration.
# net delete config saved-network1
Command Successful

net delete encryption

Syntax
net delete encryption <configName> <subnetName> [IP Address1[, IP Address2,..]]

Description
Deletes all data in flight encryption links from a subnet configuration.

Specifiers
configName
This object specifies the network configuration name.

subnetName
This object specifies the subnet name.

Parameters
IP Address
This parameter specifies a comma-separated list of IPs to be deleted.
Authority
Administrator

Example commands and responses
This example command deletes all data in flight encryption links from a subnet.
net delete encryption config1 subnet1
Command Successful

This example command deletes specific data in flight encryption links from a subnet.
net delete encryption config1 subnet1 10.0.1.10,10.0.1.11
Command Successful

net delete ipaddr

Syntax
# net delete ipaddr <configName> <subnetName> [IP Address1[, IP Address2,..]]

Description
Deletes a network IP address or all IP addresses in a subnet.

Specifiers
configName
This object specifies the network configuration name.

subnetName
This object specifies the subnet name.

Parameters
IP Address
This parameter specifies a comma-separated list of IPs to be deleted.

Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example commands and responses
This example command deletes all IP addresses from a network configuration.
net delete ipaddr config1 subnet1
Command Successful

This example command deletes specific IPs from a subnet.
net delete ipaddr config1 subnet1 10.0.1.10,10.0.1.11
Command Successful
net delete portset

Syntax
net delete portset <configName> <portSetName> [ports <portList>]

Description
Deletes a port set or ports in a port set.

Specifiers
configName
This object specifies the network configuration name.

portSetName
This object specifies the port set name.

Parameters
portList
This parameter specifies a comma-separated list of ports to delete.

Authority
Administrator

Example commands and responses
This example command deletes a port set from a network configuration.
net delete portset config1 portset1
Command Successful

This example command deletes specific ports from a port set.
net delete portset config1 portset1 ports eth4,eth5
Command Successful

net delete route

Syntax
net delete route <configName> <subnetName> target <ipAddr>

Description
Deletes all static routes with a target IP address in the subnet.

Specifiers
All objects are required.
configName
specifies the network configuration name.
subnetName

specifies the subnet name.

ipAddr

specifies the IP address/subnet to delete.

Upon successful completion of the command, the route is deleted from the subnet.

Authority

Operator and Administrator

Restrictions

If the network configuration is changed in a way that affects the management subnet or a new configuration is created and activated, it will be necessary to reconfigure the static routing information.

Example commands

This example command deletes a specific route from a subnet.

net delete route myconfig subnet1 target 10.11.12.3
net delete route myconfig subnet1 target 10.11.0.0
net delete route myconfig subnet1 target 2001:DB8::

net delete subnet

Syntax

net delete subnet <configName> <subnetName>

Description

Deletes a subnet configuration.

Specifiers

configName

This label identifies the network configuration to which the subnet is to be added. This label is case insensitive.

subnetName

This label identifies the subnet configuration within the defined network configuration that is to be deleted. This label is case insensitive.

Authority

Administrator

Example command and response

This example command deletes a subnet configuration.

# net delete subnet management 10GbE

Command Successful.
net modify config

Syntax
net modify config <configName> [description <string>] [WriteProtect {Yes|No}] [DNS <ipList>] [mgmtvif <ipAddr>]

Description
Modifies the parameters in an existing network configuration.

Specifiers
configName

This value is the label which identifies the network configuration to be modified. This label is case insensitive. (The Factory_Default_Configuration cannot be modified.)

Parameters

IMPORTANT: If a parameter is undefined in the modify command sequence, the current parameter value remains unchanged.

description

This optional parameter describes the network configuration and is contained in quotes ("). There is no limit to the number of characters.

WriteProtect

This optional parameter determines if the network configuration can be modified. The values for this parameter can be Yes or No. Yes means the network configuration cannot be modified (with one exception – the WriteProtect parameter can be modified). If this parameter is not defined in the command sequence, the default value is No. (The Factory_Default_Configuration configuration cannot be modified; the WriteProtect parameter is always Yes.)

DNS

This optional parameter defines the DNS servers used in the network configuration. The value can contain up to three IP addresses separated by commas.

mgmtvif

This optional parameter defines the management virtual interface IP address. This only applies to StoreOnce 6500 and 6600 Systems.

Authority
Administrator

Restrictions
You cannot modify the default or the current network configuration.

For this command to successfully modify the configuration, the WriteProtect parameter of the existing configuration must be set to NO. (The WriteProtect parameter itself can be modified regardless of its current state in the existing configuration.)
Example command and response

This example command modifies the parameters in my_config.

# net modify config my_config dns 13.13.100.8

Command Successful

net modify portset

Syntax

net modify portset <configName> <portSetName> [ports <portList>] [bondMode {1|4|6}] [vlanSupport {yes|no}] [framesize <number>]

Description

Modifies the parameters of an existing port set in a network configuration.

Specifiers

configName

This required object identifies the network configuration containing the port set configuration to be modified. This is case insensitive.

portSetName

This required object identifies the portset configuration that will be modified. This is case insensitive.

Parameters

ports

This required parameter specifies the ports to modify. The ports should be separated by commas but no spaces.

bondMode

This optional parameter specifies the bond mode. The value can be:

• 1 – (Active/Backup), simple bonding mode that allows network traffic via one active port only. If the active network fails then traffic moves to the backup port.

• 4 – (IEEE 802.3ad Dynamic Link Aggregation), LACP bonding mode that requires a special external switch configuration. Provides a link aggregation solution which increases the bond physical bandwidth.

• 6 – (Active Load Balancing), load balance solution that can be used in a 2–switch configuration. The switch must allow ARP negotiation (but no specific external switch configuration is required).

vlanSupport

This optional parameter specifies vLAN support. The value can be Yes or No.

framesize

This optional parameter specifies the network packet size (from 1280 to 9000 inclusive).

Authority

Administrator
Example commands and responses
This example command modifies a named port set:
# net modify portset config1 portset2 ports eth0,eth1 vlansupport yes
Command Successful
This example command modifies a named port set framesize:
# net modify portset myconfig portset2 framesize 9000
Command Successful

**net modify subnet**

**Syntax**

```
net modify subnet <configName> subnet <subnetName> [default {yes|no}] [domain <string>] [ipAddr <IP address>] [netmask <mask>] [prefix <prefix>] [gateway <gateway>] [portset <portSetName>] [vlanTag <vlanTagID>] [netUsage {mgmt|data|both}]
```

**Description**

Modifies parameters in a named subnet of a saved configuration.

**Specifiers**

- **configName**
  This object identifies the network configuration containing the subnet configuration to be modified. This label is case insensitive.

- **subnetName**
  This object identifies the subnet configuration being modified. This label is case insensitive and can include the parameters described below.

**Parameters**

- **default**
  This optional parameter defines whether the subnet configuration is the default; the default subnet defines the default gateway for the system. The values can be either Yes or No. If not defined, the default value is No.

- **domain**
  This optional parameter defines the domain name for the subnet configuration.

- **ipAddr**
  This optional parameter defines an IP address of the subnet. The value DHCP can be used to indicate that the IP address is defined by a DHCP server. This parameter is for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems only.

- **netmask**
  For IPv4 only. This parameter defines the netmask in dotted quad notation (for example, 255.255.0.0). If the ipAddr value is DHCP, a value is not required for the netmask.
prefix
For IPv6 only. This optional parameter defines the IPv6 network prefix length (as an integer from 1 to 128 inclusive).

gateway
This parameter defines the gateway for the subnet configuration. For IPv4 networks, if the ipAddr value is DHCP a value is not required.

portset
This parameter defines the name of the port set to be used by this subnet. The port set name must be defined before it can be added to the subnet.

vlanTag
This optional parameter specifies the VLAN tag ID as an integer from 2 to 4094 (inclusive).

netUsage
This optional parameter specifies the type of network traffic for this subnet. The default for StoreOnce 6x00 systems is "data" for all other systems it is "both."

Authority
Administrator

Restrictions
You cannot modify the default or the current configuration.

Example commands and responses
This example command modifies Subnet2.
net modify subnet save1 subnet Subnet2 ipaddr 1.2.3.4 gateway 5.6.7.8 netmask 255.255.0.0 domain gbr.hp.com default yes bonding 1 port eth0,eth2
Command Successful

This example command modifies mySubnet2.
net modify subnet myConfig1 subnet mySubnet2 ipaddr 1.2.3.4 gateway 1.2.3.5 netmask 255.255.0.0 domain gbr.hp.com default yes portset ps1
Command Successful

net ping

Syntax
net ping [NODEX] [ipAddr <ipAddr>|FQDN <domainName>]

Description
Verifies communication by pinging a defined location.

Specifiers
NODEX
This object defines which node should transmit the “ping” packet. X is the index which uniquely defines each node.
Parameters
One of the following is required:

ipAddr
  This parameter defines the IP address to which the “ping” packet will be transmitted.

FQDN
  This parameter defines the FQDN to which the “ping” packet will be transmitted.

Authority
Operator and Administrator

Example commands and responses
This example command pings a defined location.

StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems:
net ping ipaddr 10.12.13.12
Command Successful.

This example command pings a defined location.

StoreOnce 6500 and 6600 Systems:
net ping node1 ipaddr 10.12.13.12
Command Successful.

net set address

Syntax
net set address

Description
Launches a wizard to set up a basic network configuration. The wizard prompts you to enter a DHCP or IP address, netmask, and gateway.

Authority
Administrator

Example commands and responses
This example command runs the wizard on an unconfigured Default Management Address.

# net set address

StoreOnce Basic Network Wizard:
-------------------------------------
This Wizard will setup a basic network on the eth0 interface. Further configuration is achieved through the web GUI interface.

  For physical port layout details run 'net show ports'.

Type 'quit' + ENTER at any time to exit wizard and 'back' to return to previous question.
Default Management interface is unconfigured.
Do you wish to reconfigure? [y/N]: y

Enter Management IP Address [DHCP]: 16.16.111.16
Enter Netmask [dotted quad or bit mask] : 255.255.255.0
Enter Gateway : 16.24.250.1

Network will be configured with the following:
Management IP Address: 16.16.111.16
Netmask : 255.255.255.0
Gateway : 16.24.250.1

Validation succeeded

Do you wish to proceed? [y/N]: y
Successfully saved network configuration as: net_address
Waiting for network configuration to become active.
Elapsed time 00:09 mm:ss
Please browse to https://16.16.111.16 to continue with setup.

Command Successful

This example command runs the wizard on a currently configured IP address.

# net set address

StoreOnce Basic Network Wizard:
--------------------------------

This Wizard will setup a basic network on the eth0 interface.
Further configuration is achieved through the web GUI interface.

For physical port layout details run 'net show ports'.

Type 'quit' + ENTER at any time to exit wizard and 'back' to return to previous question.
--------------------------------

Current Management IP Address: 14.24.244.24
Do you wish to reconfigure? [y/N]: y

Enter Management IP Address [DHCP]: 16.16.111.16
Enter Netmask [dotted quad or bit mask] : 255.255.255.0
Enter Gateway : 16.24.250.1

Network will be configured with the following:
Management IP Address: 16.16.111.16
Netmask : 255.255.255.0
Gateway : 16.24.250.1

Validation succeeded

Do you wish to proceed? [y/N]: y
Successfully saved network configuration as: net_address
Waiting for network configuration to become active.
Elapsed time 00:09 mm:ss
Please browse to https://16.16.111.16 to continue with setup.

Command Successful

net set wizard

Syntax
net set wizard

Description
Runs a step-based wizard to guide you through the creation of a complete network configuration.

Authority
Administrator

Example command and response
This example command runs a step-based wizard on a currently configured IP address.

```
# net set wizard

StoreOnce Network Configuration Wizard
--------------------------------------
This Wizard will guide you through the configuration of network settings on your StoreOnce Backup System.
If you wish to make additions or modifications to an existing network configuration without having to reconfigure all settings, use the 'net modify' or 'net add' commands instead.

See the User Guide guide for physical port layout details.

The wizard consists of the following steps:
Step 1) Set system wide DNS server addresses (optional)
Step 2) Configure network settings for available network adapters
Step 3) Save and apply all network settings

Type 'quit' + ENTER at any time to exit wizard.

The wizard consists of the following steps:
Step 1.) Set system wide DNS server addresses (Optional)
Step 2.) Configure network settings for available network adapters
Step 3.) Save and apply all network settings

Type 'quit' + ENTER at any time to exit wizard
Step 1.) Set system wide DNS server addresses (optional)
Enter a list (max 3) of DNS servers separated by commas : (eg 192.168.1.100,192.168.3.100)
192.168.1.100,192.168.3.100

Step Complete. Do you want to :
1.) Go to next step: Step 2.) (default)
2.) Go back to start of present step: Step 1.)
3.) Quit wizard and lose all settings

1

Navigation: Go to next step: Step 2)

Step 2.) Configure network settings for available network adapters

Select the type of configuration for this subnet :
1.) Single port (default)
2.) Bonded ports (note ports must be the same speed to bond

-->2

<--Bonded/Single: Bonded ports (note ports must be the same speed to bond)

Select bond configuration :
1 = eth0 and eth1 (1 Gig) (default)
2 = eth0 and eth2 (1 Gig)
```
3 = eth0 and eth3 (1 Gig)
4 = eth1 and eth2 (1 Gig)
5 = eth1 and eth3 (1 Gig)
6 = eth2 and eth3 (1 Gig)
7 = eth4 and eth5 (10 Gig)
8 = eth4 and eth6 (10 Gig)
9 = eth4 and eth7 (10 Gig)
10 = eth5 and eth6 (10 Gig)
11 = eth5 and eth7 (10 Gig)
12 = eth6 and eth7 (10 Gig)

---12
<--Bonding: eth6 and eth7 (10 Gig)

Select the desired bonding mode:
1 = Mode 1 - Active Passive Bonding (default)
2 = Mode 4 - Link Aggregate Control Protocol (LACP) Bonding
3 = Mode 6 - Active Load Balance Bonding

---1
<--Bonding Mode: Mode 1 - Active Passive Bonding

Is this subnet on a Virtual LAN?
1 = Not VLAN (default)
2 = VLAN

---2
<--VLAN/Not VLAN: VLAN

Enter VLAN tag (an integer between 2 and 4094 inclusive):

---444
<--VLAN Tag: 444

Select Static or DHCP addressing:
1 = DHCP (default)
2 = Static

---1
<--DHCP/Static: DHCP

Do you want to configure a static default gateway for this subnet or get the gateway information from DHCP?
1 = Gateway obtained from DHCP server (default)
2 = Set gateway manually

---1
<--Gateway: Gateway obtained from DHCP server

Do you want to configure the network domain name or get the domain name from DHCP?
1 = Domain name obtained from DHCP server (default)
2 = Set domain name manually (e.g. mydomain.local)

---1
<--Domain Name: Domain name obtained from DHCP server

----------------------
Network: subnet_1
----------------------
IP Addresses: dhcp
Net Mask: dhcp
Domain Name: dhcp
Gateway: dhcp
VLAN tag: 444
Port Set: portset_1 with these interfaces: eth6 eth7
Bonding Mode: 1 (Active Passive Bonding)

Is this configuration correct?
1 = Yes (default)
2 = No

---1
<--Configuration okay: Yes

Do you want to configure another subnet?
1 = No (default)
2 = Yes - on a new port set
3 = Yes - on the same VLAN port set
Another subnet: Yes - on the same VLAN port set

Enter VLAN tag (an integer between 2 and 4094 inclusive):

VLAN tag: 555

Select Static or DHCP addressing:
1 = DHCP (default)
2 = Static

DHCP/Static: DHCP

Do you want to configure a static default gateway for this subnet or get the gateway information from DHCP?
1 = Gateway obtained from DHCP server (default)
2 = Set gateway manually

Gateway: Gateway obtained from DHCP server

Do you want to configure the network domain name or get the domain name from DHCP?
1 = Domain name obtained from DHCP server (default)
2 = Set domain name manually (e.g. mydomain.local)

Domain Name: Domain name obtained from DHCP server

Network: subnet 2
IP Addresses: dhcp
Net Mask: dhcp
Domain Name: dhcp
Gateway: dhcp
VLAN tag: 555
Port Set: portset 1 with these interfaces: eth6 eth7
Bonding Mode: 1 (Active Passive Bonding)

Is this configuration correct?
1 = Yes (default)
2 = No

Configuration okay: Yes

Another subnet: Yes - on a new port set

Select the type of configuration for this subnet:
1 = Single port (default)
2 = Bonded ports (note ports must be the same speed to bond)

Bonded/Single: Single port

Select network adapter:
1 = eth0 (1 Gig) (default)
2 = eth1 (1 Gig)
3 = eth2 (1 Gig)
4 = eth3 (1 Gig)
5 = eth5 (10 Gig)

Single Port: eth5 (10 Gig)

Is this subnet on a Virtual LAN?
1 = Not VLAN (default)
2 = VLAN
Select Static or DHCP addressing:
1 = DHCP (default)
2 = Static

Do you want to configure a static default gateway for this subnet or get the gateway information from DHCP?
1 = Gateway obtained from DHCP server (default)
2 = Set gateway manually

Do you want to configure the network domain name or get the domain name from DHCP?
1 = Domain name obtained from DHCP server (default)
2 = Set domain name manually (e.g. mydomain.local)

Is this configuration correct?
1 = Yes (default)
2 = No

Do you want to configure another subnet?
1 = No (default)
2 = Yes - on a new port set

Select a default network (The default network shall be used as the default gateway subnet):
1 = subnet_1 (default)
2 = subnet_2
3 = subnet_3

*Step Complete* Do you want to:
1 = Go to next step: Step 3) (default)
2 = Go back to previous step: Step 1)
3 = Go back to start of present step: Step 2)
4 = Quit wizard and lose all settings

You have successfully configured the network settings on your StoreOnce Appliance.

net show config

Syntax

net show config {configName|all|list}
Description
Shows the network configuration.

Specifiers
configName
This object defines the name of the specific network configuration to be shown. If the object is not included in the command sequence, the parameter all or list must be included in the command sequence.

Parameters
all
This parameter is optional. If included in the command sequence, all templates in the existing network configuration are described. If this command is not included, a network template object must be included in the command sequence.

list
This parameter shows a list of configuration names.

Authority
Operator and Administrator

Example commands and responses
This example command shows the current network configuration.

# net show config current

----------------------
Network Name: current
Network Description: default
Write Protected: no
DNS Servers:
----------------------
Number of Networks: 1
----------------------
Network: subnet_one
----------------------
IP Address: dhcp
Net Mask: dhcp
Domain Name: dhcp
Gateway: dhcp
Bonding Mode: 6 (High Availability)
Default Network: yes
Interfaces: eth0
Framesize: 1500

Command Successful

This example command shows the all network configurations.

# net show config all

----------------------
Network Name: Factory_Default_Configuration
Network Description: default
Write Protected: no
DNS Servers:
Number of Networks:1
----------------------
Network: subnet_one
----------------------
IP Address: dhcp
Net Mask: dhcp
Domain Name: dhcp
Gateway: dhcp
Bonding Mode: 6 (High Availability)
Default Network: yes
Interfaces:eth0
Framesize: 1500

----------------------
Network Name: current
Network Description: default
Write Protected: no
DNS Servers:
----------------------
Number of Networks:1
----------------------
Network: subnet_one
----------------------
IP Address: dhcp
Net Mask: dhcp
Domain Name: dhcp
Gateway: dhcp
Bonding Mode: 6 (High Availability)
Default Network: yes
Interfaces:eth0
Framesize: 1500

Command Successful

**net show ipaddr**

**Syntax**

net show ipaddr <configName> <subnetName>

**Description**
Displays the IP addresses for the configurations subnet.

**Specifiers**

- **configName**
  This object specifies the network configuration name.

- **subnetName**
  This object specifies the subnet name.

**Authority**

Administrator
Example command and response
This example command shows the IP address for subnet_one.
# net show ipaddr current subnet_one

10.12.13.12

Command Successful

net show ports

Syntax
net show ports

Description
Lists the ports that are available to use in subnet configurations.

Authority
Operator and Administrator

Example commands and responses
This example command shows the ports available for the subnet.

net show portset

Syntax
net show portset <configName> {portSetName|list}

Description
Displays the network port set

Specifiers
configName
This object specifies the network configuration name.

portSetName
This object specifies the port set name. Using list displays a list of port set names in the network configuration.

Authority
Administrator

Example commands and responses
This example command shows the current network port set list.
# net show portset current list

eth0portset
eth1portset

Command Successful
This example command shows the current eth0portset information.

```
# net show portset current eth0portset
```

Name: eth0portset
Bond Mode: 
VLAN Enabled: no
Interfaces: eth0
Framesize: 1500

Command Successful

### net show status

**Syntax**

```
net show status [subnet <subnetName>][port <portName|all>|[NODEX]|verbose]| [all]
```

**Description**

Displays information on the current network status.

**Specifiers**

**NODEX**

Specifies the server node to report the status, where X is the node number. Only valid with the port parameter.

**Parameters**

**subnet**

Shows the named subnetwork status.

**port**

Shows the named port status. Use all to show status for all ports.

**verbose**

Shows enhanced port status information. Only valid with the port parameter.

**all**

Shows the status of all subnets or named ports as appropriate.

**Authority**

Operator and Administrator

**Example commands and responses**

This example command shows general network status.

```
# net show status
```

This example command shows subnetwork status.

```
# net show status subnet subnet1
```

This example command shows port status.

```
# net show status port eth0
```
This example command shows all port status.

```bash
# net show status port all
```

This example command shows top level status of all subnets.

```bash
# net show status all
```

**Subnet Status Overview**

- **hp44fd7ebea0-1 Merck status**: up
- **hp44fd7ebea0-1 subnet_1 status**: up
- **hp44fd7ebea0-2 Merck status**: up
- **hp44fd7ebea0-2 subnet_1 status**: up

Node Name: hp44fd7ebea0-1
- **Default Domain Name**: gbr.hp.com
- **Default Gateway**: 16.24.160.1
- **Default Subnet**: subnet_1
- **DNS**: 16.110.135.51 16.110.135.52

**Subnet: Merck**
- **Status**: up
- **IP Address**: 54.51.180.107
- **Netmask/Prefix**: 255.255.252.0
- **Domain Name**: merck.com
- **Gateway**: 54.51.183.254
- **Mac Address**: 01:48:10:64:32:F4
- **Interfaces**: eth5 eth7 bond2 bond2.1180
- **Bonding mode**: 4 (Link Aggregate Control Protocol (LACP) Bonding)
- **Net Usage**: data
- **VLAN tag**: 1180
- **Connection Speed**: 10 Gig
- **Framesize**: 1500
- **Static Routes**: 

Node Name: hp44fd7ebea0-2
- **Default Domain Name**: gbr.hp.com
- **Default Gateway**: 16.24.160.1
- **Default Subnet**: subnet_1
- **DNS**: 16.110.135.51 16.110.135.52

**Subnet: Merck**
- **Status**: up
- **IP Address**: 54.51.180.108
- **Netmask/Prefix**: 255.255.252.0
- **Domain Name**: merck.com
- **Gateway**: 54.51.183.254
- **Mac Address**: 01:44:FD:7E:BE:A0
- **Interfaces**: eth0 eth1 bond1
- **Bonding mode**: 1 (Active / Passive Bonding)
- **Net Usage**: data
- **VLAN tag**: Not used
- **Connection Speed**: 1 Gig
- **Framesize**: 1500
- **Static Routes**: 

```
Command Successful
```
This example command shows subnetwork status.

```
# net show status

Subnet Status Overview
  Subnet ab44xx1abcd0-1 subnet2 status: up
  Subnet ab44xx1abcd0-1 subnet1 status: up
  Subnet ab44xx1abcd0-2 subnet2 status: up
  Subnet ab44xx1abcd0-2 subnet1 status: up

Command Successful
```

**net validate config**

**Syntax**

```
net validate config <configName>
```

**Description**

Validates a configuration. The command checks the data structure according to the rules listed in the `net activate config` command. However, unlike the activate command, the external network is not configured as defined by the data structure. This command exists to allow a newly created configuration to be tested before configuration is actually activated. For example, if the activation is scheduled to take place at a given time when the backup traffic is low, the command provides confidence that the `net activate config` command executes successfully.

**Specifiers**

- **configName**
  
  This label identifies the network configuration object whose data structure is used to configure the external network for the cluster.

**Authority**

Administrator

**Example command and response**

This example command validates a configuration.

```
# net validate config management

Command Successful
```

**nfs add host**

**Syntax**

```
nfs add host [SETX] name <hostname> [desc <description>]
```

**Description**

Adds a host to the NFS server.
**Specifiers**

**SETX**

This object defines an individual service set where the NAS share is to be created. \(X\) is a unique numeric index. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow `host`). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to `SET1`.

**Parameters**

**name**

This parameter is required and specifies the host name. It must be fewer than 100 characters long and cannot contain a forward slash ((`/`).

**desc**

This parameter is optional and specifies a description of the host name. It must be fewer than 84 characters long.

**Authority**

Administrator

**Example command and response**

This example command adds a host to `SET1`.

```
# nfs add host SET1 name Host1
Command Successful
```

**nfs delete host**

**Syntax**

```
nfs delete host [SETX] name <hostname>
```

**Description**

Deletes an existing host from the NFS server.

**Specifiers**

**SETX**

This object defines an individual service set from where the NAS share is to be deleted. \(X\) is a unique numeric index. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow `host`). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to `SET1`.

**Parameters**

**name**

This parameter is required and specifies the host name.

**Authority**

Administrator
Example command and response
This example command deletes the host on SET1.
# nfs delete host SET1 name Host1
Command Successful

nfs disable browsing

Syntax
nfs disable browsing

Description
Prevents NFS clients from viewing the NFS shares.

Authority
Administrator

Example command and response
This example command disables viewing the NFS shares.
# nfs disable browsing
Command Successful

nfs disable host

Syntax
nfs disable host [SETX] <SHAREX> name <hostname>

Description
Disables specific host authentication for an NFS share.

Specifiers

SETX
This object defines an individual service set. X is a unique numeric index. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow host). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

SHAREX
This object is required. X is a unique numeric index of the share. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the SETX object, or if the SETX object is omitted, it must immediately follow the host command).

Parameters

name
This required parameter specifies the host name.
Authority
Administrator

Restrictions
When you create a share with the CLI, by default, other users are unable to access that share. You must enable read/write permissions on the share in order for other users to access the share by using the `nfs enable host` command. To remove those permissions, use this `disable` command.

Example command and response
This example command disables host authentication for SHARE1.

```
# nfs disable host SHARE1 name Host1
Command Successful
```

**nfs enable browsing**

**Syntax**
nfs enable browsing

**Description**
Allows NFS clients to view the NFS shares.

**Authority**
Administrator

**Example command and response**
This example command enables viewing the NFS shares.

```
# nfs enable browsing
Command Successful
```

**nfs enable host**

**Syntax**
nfs enable host [SETX] <SHAREX> name <hostname> [readonly {yes|no}] [rootsquash {yes|no}] [secure {yes|no}] [wdelay {yes|no}]

**Description**
Enables specific host authentication for an NFS share.

In order to change specific authentication parameters, this command may be used repeatedly, even on the same host and share, without the need to call `disable host` or any other command.

**Specifiers**

**SETX**
This object defines an individual service set. X is a unique numeric index. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow `host`). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900,
SHAREX

This object is required. X is a unique numeric index of the share. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow the SETX object, or if the SETX object is omitted, it must immediately follow the host command).

Parameters

name

This required parameter specifies the host name.

readonly

This optional parameter specifies the read-only flag for the specified host on the specified share. If omitted, the parameter is not changed. If specified, the value must be yes or no; the default for a new host is yes.

rdirplus

nfs enable host family is now extended to take extra entry rdirplus to enable or disable READDIRPLUS.

This optional parameter specifies the rdirplus flag for the specified host on the specified share. If omitted, the parameter is not changed. If specified, the value must be yes or no; the default for a new host is no.

Enable RdirPlus only in cases where a system using VMware cannot browse the StoreOnce NAS backups. If enabled, VMware can browse the backup files and returns information about each file. If disabled, VMware returns only the file name and identifier. Enabling RdirPlus can degrade NFS performance for directories with a large number of files. If this parameter is enabled, there will be a performance penalty.

rootsquash

This optional parameter specifies the root_squash flag for the specified host on the specified share. If omitted, the parameter is not changed. If specified, the value must be yes or no; the default for a new host is yes.

secure

This optional parameter specifies the NFS secure flag for the specified host on the specified share. If omitted, the parameter is not changed. If specified, the value must be yes or no; the default for a new host is yes.

wdelay

This optional parameter specifies the NFS write delay for the specified host on the specified share. If omitted, the parameter is not changed. If specified, the value must be yes or no; the default for a new host is yes.

Authority

Administrator
Example command and response
This example command enables host authentication for SHARE0.
# nfs enable host SET1 SHARE0 name Host1 readonly no secure yes wdelay yes
Command Successful

nfs modify host

Syntax
nfs modify host [SETX] name <hostname> desc <description>

Description
Modifies the properties of an NFS host.

Specifiers
SETX
This object defines an individual service set. X is a unique numeric index. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow host). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Parameters
name
This required parameter specifies the host name.
desc
This required parameter specifies the new description for the specified host name. It must be fewer than 84 characters long.

Authority
Administrator

Example command and response
This example command modifies the properties for Host1.
# nfs modify host SET1 name Host1 desc Primary host
Command Successful

nfs show config

Syntax
nfs show config [SETX]

Description
Displays information on the NFS server configuration.
Specifiers
SETX
This object defines an individual service set. X is a unique numeric index. It must be specified in the exact position as given by the command syntax (i.e., it must immediately follow config). This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models); if omitted, it defaults to SET1.

Authority
Operator and Administrator

Example command and response
This example command shows NFS server configuration.
# nfs show config

<table>
<thead>
<tr>
<th>Host Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Allow any host</td>
</tr>
<tr>
<td>10.0.0.5</td>
<td>Main Server</td>
</tr>
<tr>
<td>10.0.0.6</td>
<td>Other Server</td>
</tr>
<tr>
<td>10.1.2.*</td>
<td>Test Workstations</td>
</tr>
</tbody>
</table>

Command Successful

serviceset show status

Syntax
serviceset show status {SETX|all}

Description
Displays information on the selected or all service sets.

Specifiers
SETX
This object defines an individual service set. X is a unique numeric index. On StoreOnce 6500 and 6600 Systems, you must specify either SETX or all (see Command Parameters). On all other systems, neither SETX nor all is needed.

Parameters
all
This parameter is optional. If included in the command sequence, all the service sets in the cluster are restarted. If this command is not included, a service set object must be included in the command sequence.

Authority
Operator and Administrator

Example command and response
This example command shows information on SET1.
# serviceset show status SET1
<table>
<thead>
<tr>
<th>Service Set</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Fault</td>
</tr>
<tr>
<td>StoreOnce Subsystem</td>
<td>Running</td>
</tr>
<tr>
<td>Virtual Tape</td>
<td>Running</td>
</tr>
<tr>
<td>NAS</td>
<td>Running</td>
</tr>
<tr>
<td>StoreOnce Catalyst</td>
<td>Running</td>
</tr>
<tr>
<td>Replication</td>
<td>Fault</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>Running</td>
</tr>
</tbody>
</table>

**serviceset start**

**Syntax**

serviceset start {SETX|all}

**Description**

Starts the service sets. This command either starts the service set defined in the command sequence or, if parameter `all` is included in the command sequence, all the service sets in the cluster are started.

**Specifiers**

**SETX**

This optional object defines an individual service set. `X` is a unique numeric index. If included, the service set specified must currently be stopped. If not included, the parameter must be included in the command sequence.

**Parameters**

**all**

This parameter is optional. If included, all the service sets in the cluster must be currently stopped and then all are restarted. If not included, a service set object must be included in the command sequence.

**Authority**

Administrator

**Example command and response**

This example command starts the service for SET1.

```
# serviceset start set1
Command Successful
```

**serviceset stop**

**Syntax**

serviceset stop {SETX|all}

**Description**

Stops the service sets. The command either stops the service set defined in the command sequence or, if parameter `all` is included in the command sequence, all the service sets in the cluster are stopped.
Specifiers
SETX

This optional object defines an individual service set. X is a unique numeric index. If the object is not included in the command sequence, the all parameter must be included in the command sequence.

Parameters
all

This parameter is optional. If included in the command sequence, all the service sets in the cluster are stopped. If this command is not included, a service set object must be included in the command sequence.

Authority
Administrator

Restrictions
This command stops the service set independent of the existing state of the service set.

Example command and response
This example command stops the service for SET1.

```
# serviceset stop set1
Command Successful
```

**snmp add trapsink**

**Syntax**

SNMP versions 1 and 2:

`snmp add trapsink {FQDN|IP} [version {1|2}] [port <Number>] [trap-community <"string">] [events {alert|warn|info}]`

SNMP version 3:

`snmp add trapsink {FQDN|IP} version 3 user <"username"> [port <Number>] [events {alert|warn|info}] [authentication-algo {MD5|SHA}] [authauthentication-pwd <authentication-password>] [privacy-algo {DES|AES}] [privacy-pwd <"privacy-password">] [contextname <"contextname">]`

**Description**

Defines a host to which the SNMP agent sends traps. Parameters for SNMP versions 1 and 2 differ from those for SNMP version 3. This command is supported on all versions of SNMP.

**Parameters**

**FQDN or IP**

This is a required parameter. The value is either the fully-qualified name or IP address of the host to receive the SNMP traps (also known as the trap sink).

**user**

(v3 only) This required parameter is an existing authorized SNMP user name.
port

This is an optional parameter which consists of the text, \texttt{port}, followed by the port number of the host. If this parameter is not included, a default port value of 162 is used.

\textbf{NOTE:} Only one port can be defined per trap host.

\textbf{trap-community}

For SNMP versions 1 and 2 only. This optional parameter defines the community name (i.e., password string) for the trap host. The parameter consists of the text, \texttt{trap-community}, followed by the password string. The string is in quotation marks. If this parameter is not used; a default of \texttt{public} is used.

\textbf{events}

This optional parameter filters what traps are transmitted to the defined trap host. The parameter consists of text, \texttt{events}, followed by a filter level of \texttt{alert} or \texttt{warning} or \texttt{info}. The SNMP agent transmits to the trap host all events which are at or higher in severity than the defined event level. If this parameter is not included in the command sequence, a default value of \texttt{info} is used (all events are transmitted).

\textbf{authorization-algo}

(v3 only) This optional parameter specifies the user authentication algorithm used to authorize messages sent or received on behalf of this user (default is \texttt{MD5}).

\textbf{authentication-password}

(v3 only) This optional parameter specifies the user authentication password (default is no password set). Passwords must contain at least eight characters.

\textbf{privacy-algo}

(v3 only) This optional parameter identifies the SNMP version 3 privacy algorithm used to encrypt messages or received on behalf of this user (default is \texttt{DES}).

\textbf{privacy-password}

(v3 only) This optional parameter specifies the privacy password for SNMP version 3 and decryption (default is no password set). Passwords must contain at least eight characters.

\textbf{contextname}

(v3 only) This optional parameter specifies the managed objects that can be accessed by the agent. This parameter is required if the trap receiver has defined subsets of managed objects.

\textbf{Authority}

Administrator

\textbf{Usage}

Upon successful entry of the command sequence, the trap host is added to the StoreOnce appliance’s SNMP agent and the following is displayed:

\textbf{SNMP versions 1 and 2:}

\texttt{Command Successful, host trap FQDN | IP added, where FQDN | IP is the fully-qualified domain name or IP address of the trap host.}

\textbf{SNMP version 3:}

\texttt{Command Successful, host trap FQDN | IP added for “username”, where FQDN | IP is the fully-qualified domain name or IP address of the trap host, and username is the authorized SNMP user provided in the command entry.}
Example commands and responses

This example command adds a trapsink for SNMP version 2.

# snmp add trapsink 16.34.123.44 version 2 event alerts

Command Successful, trapsink 16.34.123.44 added

This example command adds a trapsink for SNMP version 3.

# snmp add trapsink 16.34.123.44 version 3
user john-snmp event alerts authentication-algo SHA
authentication-pwd T3stPwd privacy-algo AES
privacy-pwd Pr!vPwd contextname D2D-SNMP

Command Successful, trapsink 16.34.123.44 added for john-snmp

snmp add user

Syntax

snmp add user <USERNAME> security-level {noAuthNoPriv|authNoPriv|authPriv} [authorization-algo {MD5|SHA}] [authorization-pwd <authorization-password>] [privacy-algo {DES|AES}] [privacy-pwd <privacy-password>]

Description

Creates a new SNMP user. The command is supported on version 3 and earlier versions of SNMP.

Parameters

USERNAME

This parameter defines the user name to be created (in any string format).

security-level

This parameter defines the SNMP version 3 security level assigned to this group:

- noAuthNoPriv
  : no user authorization or privacy encryption performed (default)
- authNoPriv
  : user authorization performed, but no privacy encryption
- authPriv
  : user authorization and privacy encryption performed

authorization-algo

This optional parameter specifies the user authentication algorithm used to authorize messages sent or received on behalf of this user (default is MD5).

authentication-password

This optional parameter specifies the user authentication password (default is no password set). Passwords must contain at least eight characters.

privacy-algo

This optional parameter identifies the SNMP version 3 privacy algorithm used to encrypt messages sent or received on behalf of this user (default is DES).
privacy-password

This optional parameter specifies the privacy password for SNMP version 3 and decryption (default is no password set). Passwords must contain at least eight characters.

Authority
Administrator

Example command and response
This example command creates a new SNMP user.

```
# snmp add user john-snmp security-level noAuthNoPriv authorization-algo SHA authorization-pwd auth798wd privacy-algo AES privacy-pwd priv945wd
```

Command Successful, snmp user john-snmp added

**snmp del trapsink**

Syntax
```
snmp del trapsink {FQDN|IP}
```

Description
Removes a trap host which has already been created using the `snmp add trapsink` command (see `snmp add trapsink` on page 114). This command is supported on v3 or earlier versions of SNMP.

Parameters
FQDN or IP

This is a required parameter. The value is either the fully-qualified name or IP address of the host (also known as the trap sink) to be removed.

Authority
Administrator

Example command and response
This example command deletes a trapsink.

```
# snmp del trapsink 10.10.10.10
```

Command Successful, trap host 10.10.10.10 has been removed.

**snmp del user**

Syntax
```
snmp del user <USERNAME>
```

Description
Deletes an existing SNMP user. This command is supported on v3 or earlier versions of SNMP.

Parameters
USERNAME

This parameter defines the user name to be deleted.
Authority
Administrator

Example command and response
This example command deletes an SNMP user.
# snmp del user john-snmp

Command Successful, snmp user john-snmp deleted

\textbf{snmp disable}

Syntax
snmp disable

Description
Disables the SNMP functionality.

Authority
Administrator

Example command and response
This example command disables SNMP.
# snmp disable

Command Successful, snmp disabled

\textbf{snmp enable}

Syntax
snmp enable <version {1|2|3}> [engine-id <engine-id>] [allownonv3request {yes|no}]

Description
Enables SNMP functionality.

Parameters

version
This is a mandatory parameter which implies which SNMP version the user wants to set. The parameter consists of the text, version, followed by a value of 1, 2, or 3.

description

engine-id
This optional parameter can be provided during version 3 configuration.

allownonv3request
This optional parameter can be provided during version 3 configuration. If the value is yes, versions 1 and 2 are supported along with version 3. If the value is no, only version 3 is supported. If this parameter is not included in the command entry, only version 3 is supported.
**Authority**
Administrator

**Example command and response**
This example command enables SNMP.
```
# snmp enable version 2
```
Command Successful, snmp enabled for version 2

```
**snmp modify trapsink**
```

**Syntax**

SNMP versions 1 and 2:
```
snmp modify trapsink {FQDN|IP} [version {1|2}] [port <Number>] [state {on | off}] help[trap-community <"string">] [events {alert|warn|info}]
```

SNMP version 3:
```
snmp modify trapsink {FQDN|IP} version 3 [user <username>] [port <Number>] [state {on | off}] [events {alert|warn|info}] [authentication-algo {MD5|SHA}] [authauthentication-pwd <authentication-password>] [privacy-algo {DES|AES}] [privacy-pwd <"privacy-password">] [contextname <"contextname">]
```

**Description**
Modifies the host to which the SNMP agent sends traps. This command is supported on v3 or earlier versions of SNMP.

**Parameters**

**FQDN or IP**
This is a required parameter. The value is either the fully-qualified name or IP address of the host to receive SNMP traps (also known as the trap sinks).

**user**
(v3 only) This required parameter is an existing authorized SNMP user name.

**port**
This is an optional parameter. It consists of the text, `port`, followed by the port number of the host.

**state**
This is an optional parameter. The values are either on or off

**trap-community**
For SNMP versions 1 and 2 only. This optional parameter defines the community name (password string) for the trap host. The parameter consists of the text, `trap-community`, followed by the password string. The string is in quotation marks.

**events**
This optional parameter filters what traps are transmitted to the defined trap host. The parameter consists of text, `events`, followed by a filter level of `alert` or `warning` or `info`. The SNMP agent transmits to the trap host all events which are at or higher in severity than the defined event level. If this parameter is not included in the command sequence a default value of `info` is used (all events are transmitted).
authorization-algo

(v3 only) This optional parameter specifies the user authentication algorithm used to authorize messages sent or received on behalf of this user (default is MD5).

authentication-password

(v3 only) This optional parameter specifies the user authentication password (default is no password set). Passwords must contain at least eight characters.

privacy-algo

(v3 only) This optional parameter identifies the SNMP version 3 privacy algorithm used to encrypt messages sent or received on behalf of this user (default is DES).

privacy-password

(v3 only) This optional parameter specifies the privacy password for SNMP version 3 and decryption (default is no password set). Passwords must contain at least eight characters.

contextname

(v3 only) This optional parameter specifies managed objects that can be accessed by the agent. The parameter is required if the trap receiver has defined subsets of managed objects.

Authority

Administrator

Usage

SNMP versions 1 and 2:

Command Successful, host trap FQDN | IP modified, where FQDN | IP is the fully-qualified name or IP address of the trap host.

SNMP version 3:

Command Successful, host trap FQDN | IP added for "username", where FQDN | IP is the fully-qualified name or IP address of the trap host and username is the authorized SNMP user-provided in the command entry.

Example commands and responses

This example command turns on the trapsink for IP 10.11.12.13, and will receive the SNMP traps.

#snmp modify trapsink 10.11.12.13 state on

This example command turns off the trapsink for IP 10.11.12.13, and will not receive any SNMP traps.

#snmp modify trapsink <trap_reciver_IP address> state off

SNMP version 2.

# snmp modify trapsink 16.34.123.44 version 2 port 133 trap-community “passwordstring”

Command Successful, hostsink 16.34.123.44 modified

SNMP version 3.

# snmp modify trapsink 16.34.123.44 version 3
user john-snmp event alerts authentication-algo MD5
authentication-pwd T3stPwd privacy-algo DES
privacy-pwd Pr!vPwd contextname D2D-SNMP
snmp modify user

Syntax
snmp modify user <USERNAME> security-level {noAuthNoPriv|authNoPriv|authPriv} [authorization-algo {MD5|SHA}] [authorization-pwd <authorization-password>] [privacy-algo {DES|AES}] [privacy-pwd <privacy-password>]

Description
Modifies an existing SNMP user.

Parameters
USERNAME
This parameter defines the user name to be modified (in any string format).

security-level
This parameter defines the SNMP version 3 security level assigned to this group:

- noAuthNoPriv
  : no user authorization or privacy encryption performed (default)
- authNoPriv
  : user authorization performed but no privacy encryption
- authPriv
  : user authorization and privacy encryption performed

authorization-algo
This optional parameter specifies the user authentication algorithm used to authorize messages sent or received on behalf of this user (default is MD5).

authentication-password
This optional parameter specifies the user authentication password (default is no password set). Passwords must contain at least eight characters.

privacy-algo
This optional parameter identifies the SNMP version 3 privacy algorithm used to encrypt messages sent or received on behalf of this user (default is DES).

privacy-password
This optional parameter specifies the privacy password for SNMP version 3 and decryption (default is no password set). Passwords must contain at least eight characters.

Authority
Administrator
Example command and response
This example command modifies the SNMP user, john-snmp.

# snmp modify user john-snmp security-level noAuthNoPriv authorization-algo MD5 authorization-pwd auth798wd privacy-algo AES privacy-pwd priv945wd

Command Successful, snmp user john-snmp modified

**snmp reset ro-community**

**Syntax**

snmp reset ro-community

**Description**

Resets the community string (the password to access the StoreOnce Management Information Base) to the default string of public.

**Authority**

Administrator

**Example command and response**

This example command resets the community string is set to the default string of public.

# snmp reset ro-community

Command Successful, ro community string reset

**snmp send testtrap**

**Syntax**

snmp send testtrap

**Description**

Sends an information event called “test event” to IRS and other trap recipients to test if SNMP is set up correctly and that traps are getting to the trapsinks. The command response indicates only if the information event is sent; it does not indicate that trap recipients received the event. Only recipients configured to receive information events will receive the trap.

**Authority**

Operator and Administrator

**Example command and response**

This example command sends a test event to all recipients.

# snmp send testtrap

An SMNP test event has been generated and sent to all SNMP trap recipients. Command Successful.
**snmp set contact**

**Syntax**

snmp set contact <"contact">

**Description**

 Defines a text string indicating the contact person for SNMP agent management of this StoreOnce appliance.

**Parameters**

**contact**

This required parameter consists of a character text string enclosed in quotations. The text string provides information on the contact responsible for the management of the StoreOnce appliance’s SNMP agent.

**Authority**

Administrator

**Example command and response**

This example command defines the SNMP contact.

# snmp set contact “JAdmin”

Command Successful, contact set

**snmp set location**

**Syntax**

snmp set location <"location">

**Description**

 Defines a text string indicating the location of the StoreOnce appliance containing the SNMP agent.

**Parameters**

**location**

This required parameter consists of a character text string enclosed in quotations. The text string provides information on the location for the StoreOnce appliance containing the SNMP agent.

**Authority**

Administrator

**Example command and response**

This example command defines the SNMP location.

# snmp set location “paradise”

Command Successful, location set
snmp set ro-community

Syntax
snmp set ro-community <"community string”>

Description
Defines the community string. In other words, it defines the passphrase for read-only access to the SNMP agent on the StoreOnce appliance.

Parameters
ro-community

This required parameter consists of a character text string enclosed in quotations. The text string defines the community string.

Authority
Administrator

Example command and response
This example command defines the community string.

# snmp set ro-community “password”

Command Successful, ro-community string set

snmp show config

Syntax
snmp show config

Description
Displays information on the StoreOnce appliance’s SNMP configuration.

Authority
Administrator

Usage
• A list of trap hosts grouped by SNMP version consisting of:
  • their fully-qualified name or IP address
  • their port
  • their trap community string

• The StoreOnce appliance’s SNMP agent contact string (or blank if not defined).
• The StoreOnce appliance’s SNMP agent location string (or blank if not defined).
• The StoreOnce appliance’s SNMP agent community string.
**Example command and response**

This example command displays information on the StoreOnce appliance SNMP configuration.

```bash
# snmp show config

SNMP V1/V2 Trapsinks
====================
Trapsink Address  Version  Port  Community  State
----------------            -------      ----    ---------           -----  
16.78.5.182              1              162     public             on
16.78.5.181              1              162     public             on

SNMP V3 Trapsinks
=================
Trapsink Address    Version    Port   User Name    Auth Algorithm   Auth Password    Priv Algorithm    Priv Password    Context    State
----------------    -------    ----   ---------    --------------    -------------    -------------    -------    -----    -----
16.78.5.170         3          162     d2dUser     MD5               authpasswd       DES               privpasswd      on

Snmp agent parameters
=====================  
Version                            :  2
Port                               :  161
SysContact                         :  JAdmin
SysLocation                        :  Paradise
SysDescr                           :  HP StorageWorks D2D Backup System [D2D Serial Number] [D2D hostname] [D2D SKU]
SysObjectID                        :  SEMI-MIB::hp.10.3.1.3.27
Encrypt passwords and communities  :  no
Allow non-V3 read requests         :  yes
Allow non-V3 set requests          :  no
Read community                     :  public
State                               :  on

**snmp show user**

**Syntax**
nsnmp show user [username]

**Description**
Lists the SNMP user settings of all SNMP users unless a specific user name is included.

**Parameters**

**USERNAME**

If this optional parameter is included, the SNMP settings for only that user are displayed.

**Authority**

Administrator
Restrictions
If the command entry includes a specific user, only settings for that user are displayed.

Example command and response
This example command displays the SNMP user settings.

# snmp show user

<table>
<thead>
<tr>
<th>User Name</th>
<th>Security Level</th>
<th>Auth Algorithm</th>
<th>Auth Password</th>
<th>Privacy Algorithm</th>
<th>Privacy Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>user1</td>
<td>noAuthNoPriv</td>
<td>MD5</td>
<td></td>
<td>DES</td>
<td></td>
</tr>
<tr>
<td>user2</td>
<td>authPriv</td>
<td>SHA</td>
<td>Us3r@123</td>
<td></td>
<td>Us3r@456</td>
</tr>
<tr>
<td>AES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# snmp show user user1

<table>
<thead>
<tr>
<th>User Name</th>
<th>Security Level</th>
<th>Auth Algorithm</th>
<th>Auth Password</th>
<th>Privacy Algorithm</th>
<th>Privacy Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>user1</td>
<td>noAuthNoPriv</td>
<td>MD5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

support create ticket

Syntax
support create ticket

Description
Creates a support ticket for the StoreOnce appliance. The support ticket is placed in the tickets directory. You can collect the support ticket using SFTP or from the StoreOnce GUI.

Authority
Operator and Administrator

Usage
No object is required in the command entry, but upon command execution a support ticket object with a date label is created. Where TICKET is the object label of the newly created support ticket.

Example command and response
This example command creates a support ticket.

# support create ticket

Creation of Ticket “tkt_110803_205514” is in progress

support del ticket

Syntax
support del ticket {TICKET|ALL}
Description
Deletes support tickets which exist for the StoreOnce appliance.

Specifiers
TICKET
This object is a support ticket which has already been create and exists for the StoreOnce appliance.

ALL
This is a global default which represents all of the support ticket objects which exist within the StoreOnce appliance.

Authority
Administrator

Usage
Upon successful completion of the command when a support ticket is defined, the following is displayed:
support ticket TICKET deleted, where TICKET is the support ticket label defined in the command entry.

Example command and response
This example command deletes a support ticket.

# support del ticket tkt_110803_205514

support ticket “tkt_110803_205514” deleted

support show ticket

Syntax
support show ticket

Description
Lists the support tickets that exist for the StoreOnce appliance.

Authority
Administrator

Usage
Upon successful completion of the command, all the support tickets which exist within the StoreOnce appliance are listed with their description and time created.

Example command and response
This example command lists the support tickets.

# support show ticket

Name               Description                                         State      Date                 Initiator  Size
-----------------  --------------------------------------------------  ---------  -------------------  ---------  ----
tkt_110803_212227  tkt_110803_212227 collected at 2011-08-03-21-22-29收集 2011-08-03-21-22-29 Manual     209693 KB
tkt_110803_205514  tkt_110803_205514 collected at 2011-08-03-20-55-16收集 2011-08-03-20-55-16 Manual     207011 KB

support warranty show

Syntax
# support warranty show

**Authority**

**Users**

**Example command and response**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Description</th>
<th>Host Name</th>
<th>Type</th>
<th>Disk Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPE StoreOnce 6500 Backup Couplet1</td>
<td>Couplet1-server</td>
<td>hpd3c106b354-1</td>
<td>server</td>
<td></td>
</tr>
<tr>
<td>31343337-3338-5355-4534-3115584E534A</td>
<td>USE418XNSJ</td>
<td></td>
<td>USE418XNSH</td>
<td>BB896A</td>
</tr>
<tr>
<td>Couplet1-networkSwitch</td>
<td>HPE 5920AF-24XG</td>
<td></td>
<td>networkSwitch</td>
<td></td>
</tr>
<tr>
<td>Switch1</td>
<td>CN43FFT055</td>
<td></td>
<td>USE418XNSH</td>
<td>BB896A</td>
</tr>
<tr>
<td>31343337-3338-5355-4534-3113B584E538</td>
<td>USE418XNSH</td>
<td></td>
<td>USE418XNSH</td>
<td>BB896A</td>
</tr>
</tbody>
</table>

# system clear banner

**Syntax**

`system/clear# help banner`

**Description**

Removes the currently configured login banner.

## system clear packages

**Syntax**

`system clear packages`

**Description**

Clears all packages from the queue which have been loaded for update.

**Authority**

Administrator

**Example command and response**

This example command clears all packages from the queue.

```
# system clear packages
   command succeeded
```

## system clear repository

**Syntax**

`system clear repository`
Description
Deletes all the files in the StoreOnce appliance repository directory.

Authority
Administrator

Example command and response
This example command deletes all files in the repository directory.
# system clear repository
repository directory clear of all files

system confidencechecker

Syntax
system confidencecheck <runtest {all|internalNetwork|externalNetwork|fileSystem|sas}>

Description
Runs an appliance “self test” and provides a report listing any faults found. The test result will be Passed, Passed with Warnings, or Failed with additional information is provided where appropriate.

Parameters
runtest
This required parameter defines the type of test to perform:

- all – runs all of the available tests
- internalNetwork – tests connectivity of the hardware components and the switch configuration (StoreOnce 6500 and 6600 Systems only)
- externalNetwork – tests connectivity of the external network including AD and IPSec
- fileSystem – tests the overall health of the file system and the load balancing
- sas – tests SAS connectivity (StoreOnce 4900, 6500 and 6600 Systems only)

Authority
Administrator

Example commands and responses
This example command runs a self test on the appliance (test passed).
# system confidencechecker runtest all
Confidence checks running. Checks will take maximum of 60 seconds. Please wait...

#############################################################################
#                                                                             #
# CONFIDENCE REPORT                                                          #
#                                                                             #
#############################################################################
### FILE SYSTEM REPORT

File System Check:

```
[RESULT]
PASSED
```

### NOTE

For any warning or error messages in this report, please consult the troubleshooting section in the customer user guide and follow the steps to perform corrective action.

### END

This example command runs a self test on the appliance (test passed with warnings).

```
# system confidencechecker runtest fileSystem
```

Confidence checks running. Checks will take maximum of 60 seconds. Please wait...

### FILE SYSTEM REPORT

File System Check:

```
[RESULT]
PASSED WITH WARNINGS
File system ifs1 is not balanced across the nodes hpxxxxxxxx-1 and hpxxxxxxxx-2.
```

This example command runs a self test on the appliance (external network test failed).

```
# system confidencechecker runtest all
```

Confidence checks running. Checks will take maximum of 60 seconds. Please wait...

---

130 Alphabetical List of Commands and Details
### FILE SYSTEM REPORT ########################################################

File System Check:
[RESULT]  
PASSED

### INTERNAL NETWORK REPORT ###################################################

Internal Network Check is supported only on HP StoreOnce multinode products.

### EXTERNAL NETWORK REPORT ###################################################

External Network Check:
[RESULT]  
FAILED  
[FAULTS]  
Could not get current time of Domain Controller. Check if the DNS domain is offline.  
[NOTES]  
AD server status is updated every 300 seconds, and so could be outdated by up to 300 seconds.

### SAS CONFIGURATION REPORT ##################################################

Sas Configuration Check is supported only on HP StoreOnce multinode and 4900 backup products.

### NOTE ######################################################################

For any warning or error messages in this report, please consult the troubleshooting section in the customer user guide and follow the steps to perform corrective action.

### END #######################################################################

**system disable accountlockout**

**Syntax**

`system disable accountlockout`

**Description**

Disable automatic locking of local user accounts after multiple failed login attempts.

**NOTE:** Any user accounts already locked will automatically be unlocked.

**Authority**

Administrator

**Example command**

```
# system disable accountlockout
Command Successful - System lockout disabled on this system
```

**system disable failover**

**Syntax**

`system disable failover`
Description
Disables failover for the entire StoreOnce appliance.

Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Usage
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example command and response
This example command disables failover.
# system disable failover

Disabled failover for all Service Sets

**system disable remoteeventsuppression**

Syntax
system disable remoteeventsuppression

Description
Takes the system out of remote event suppression mode and returns it to normal operation. An event notification is sent indicating remote event suppression has ended.

Authority
Administrator

Example command and response
This example command disables remote event suppression.
# system disable remoteevent

Remote Event Suppression disabled successfully.

**system disable staticciphers**

Syntax
system disable staticciphers

Description
Disables static ciphers for all TLS versions.

Authority
Administrator and Backup Administrator

Example Command and Responses
This example shows a successful result.
```
#system disable staticciphers
Command Successful
```

This example shows a failed result.
```
#system disable staticciphers
Command Failed
```

**system disable tls**

**Syntax**
```
system disable tls
```

**Description**
This command disables the specified TLS version

**Parameters**
Version of the TLS protocol

**Authority**
Administrator

**Usage**
```
system disable tls <version>
```

**Example**
```
system disable tls 1.1
```
Command Successful

System will need to be rebooted via the "system reboot" command for updates to take effect.

**system enable accountlockout**

**Syntax**
```
system enable accountlockout
```

**Description**
Automatically lock a local user account after multiple failed login attempts.
Default number of failed login attempts is 6.
Default interval between failed login attempts is 300 seconds.
Default lock out duration is 30 minutes.
The default values can be configured using the commands:
```
system set accountlockout maxattempts <numberOfAttempts>
system set accountlockout attemptinterval <seconds>
system set accountlockout lockduration <minutes>
```

**Authority**
Administrator

**Example command**
```
# system enable accountlockout
```
Command Successful - System lockout enabled on this system.
# system enable accountlockout
Command Failed - Account locking is already enabled

**system enable failover**

**Syntax**

```
system enable failover
```

**Description**

Enables failover for the entire StoreOnce appliance. To enable failover for a given service set, see `system failover` on page 136.

**Authority**

Administrator

**Restrictions**

This command only applies to the StoreOnce 6500 and 6600 Systems.

**Usage**

This command only applies to the StoreOnce 6500 and 6600 Systems.

**Example command and response**

This example command enables failover:
```
# system enable failover
```

Enabled failover for all Service Sets

**system enable remoteeventsuppression**

**Syntax**

```
 system enable remoteeventsuppression <reason>
```

**Description**

Places the entire system in a remote event suppression (maintenance) mode. During this time, all event notifications indicate that the system is in remote event suppression mode and includes the user-entered reason. If not manually disabled, the remote event suppression mode ends in 24 hours and the system returns to normal operation.

**Parameters**

**reason**

A string explaining why the system was put into maintenance mode (for example, "replacing hard drive 5"). This reason is included in event notifications sent while the system is in remote event suppression mode. The string can only contain numbers, letters, hyphens (-), underscores (_), periods, and spaces. Use quotation marks only if the string is more than one word.

**Authority**

Administrator
Example command and response
This example command enables remote event suppression.

```
# system enable remoteeventsuppression "reconfiguring network"
# system enable remoteeventsuppression "reconfiguring net"
```

Remote Event Suppression enabled successfully.

**system enable staticciphers**

**Syntax**
```
system enable staticciphers
```

**Description**
Enables static ciphers for all TLS versions.

**Authority**
Administrator and Backup Administrator

**Example Commands and Responses**
This example shows a successful result.
```
#system enable staticciphers
Command Successful
```

This example shows a failed result.
```
#system enable staticciphers
Command Failed
```

**system enable tls**

**Syntax**
```
System enable tls <version>
```

**Description**
This command enables the specified TLS version

**Parameters**
Version of the TLS protocol

**Authority**
(non-operator)
Only Admins/Backupadmins and any user with 'admin' level can access

**Usage**
```
system enable tls <version>
```

**Example**
```
system enable tls 1.0
Command Successful
```

System will need to be rebooted via the "system reboot" command for updates to take effect.
system failback

Syntax
system failback <SETX>

Description
Enables failback for a given service set on the StoreOnce appliance. The command stops the service set on the backup node; migrates all configured VTL devices, NAS shares, replication mappings, StoreOnce Catalyst stores, and OST targets to the primary node; and starts the service set on the primary node. To use this command, failover must have already occurred on the service set.

Specifiers
SETX

  Defines the service set to be failed back. X is the numeric index of the service set.

Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example commands and responses
Service set had previously failed over:
# system failback set1

Service Set 1 is failing back from node hpc16e22f36e-2 to node hpc16e22f36e-1

Service set had not previously failed over:
# system failback set1

hpc16e22f36e-1 is not failed over or partially failed over

system failover

Syntax
system failover <SETX>

Description
Enables failover for a given service set on the StoreOnce appliance. The command stops the service set on the primary node; migrates all configured VTL devices, NAS shares, replication mappings, StoreOnce Catalyst stores, and OST targets to the backup node; and starts the service set on the backup node. To enable failover for the entire appliance, see system enable failover on page 134.

Specifiers
SETX

  Defines the service set to be enabled. X is the numeric index of the service set.

Authority
Administrator
Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example command and response
This example command enables failover for a service set:

```
# system failover set1
```

Service Set 1 is failing over from node hpc16e22f36e-1 to node hpc16e22f36e-2

```
system import certificate
```

Syntax
```
system/import# help certificate
```

```
system import certificate name <certificate name> key <private key>
```

Description
Import the given certificate to use for access to the HPE StoreOnce System web interface.

Certificate name: the filename of the certificate to be installed.

key: the filename of the private key of the certificate to be installed.

Example
```
system import certificate name system.crt key system.key
```
- Imports PKCS12 certificate pair 'system'.

```
system load packages
```

Syntax
```
system load packages <file-image>
```

Description
Loads the queue with the software packages for which the StoreOnce appliance is updated. The update package is a file image which must exist in the StoreOnce appliance repository. (See the StoreOnce System user guide for your product for more information on the placement of the files in the repository.)

This command moves the file image from the StoreOnce appliance and into the package update queue. The next time the `system update packages` command is executed, the StoreOnce appliance is updated with the packages in the queue.

Parameters

<table>
<thead>
<tr>
<th>file-image</th>
</tr>
</thead>
<tbody>
<tr>
<td>This parameter is the file names of the packages to be installed. This parameter appears after <code>system load package</code> in the command entry. The package exists in the StoreOnce appliance repository. The CLI command <code>system show repository</code> shows the file-image names available within the repository. (See the StoreOnce System user guide for your product for more information on the means by which the file is placed into the StoreOnce appliance directory.) This parameter can consist of more than one file image name. If so, the names are separated by white space.</td>
</tr>
</tbody>
</table>

Authority

Administrator
Example command and response
This example command loads software packages:
# system load packages D2D_Master-3.11.0-1422.1.x86_64.rpm
Command Successful

system move afm

Syntax
system move afm

Description
Fails over the Active Fusion Manager (AFM) from one node to another; you cannot select the node AFM is moved to. The command can only be executed from the physical IP of the active node or from the Management Console.

Authority
Administrator

Restrictions
This command only applies to the StoreOnce 6500 and 6600 Systems.

Example command and response
This example command fails over the AFM:
# system move afm
This may take some time ...
Command succeeded.

system reboot

Syntax
system reboot

Description
Gracefully shuts down and reboots the entire StoreOnce appliance.

Authority
Administrator

Example commands and responses
The reboot is cancelled.
# system reboot
Warning - Appliance will reboot. Are you sure you want to continue? [yes / no]: no
Command Cancelled
The reboot is continued.
# system reboot

Warning - Appliance will reboot. Are you sure you want to continue? [yes / no]: yes
reboot request successfully sent

# Broadcast message from root@HPCZJ435035T
   (/dev/pts/1) at 10:00 ...

The system is going down for reboot NOW!

**system recover filesystem**

**Syntax**

system recover filesystem

**Description**

Brings up the file system and service sets. Use this command only if indicated by the GUI or SNMP notifications.

**Authority**

Administrator

**Example command**

This example command recover filesystem.

# system recover filesystem

Sent filesystem recover command

Running time: 00:00:00.016
Recovery complete
Command Successful

**system restart remotesupport**

**Syntax**

system restart remotesupport

**Description**

Restarts remote support when remote support processes have stopped and an event alert is reported.

**Authority**

Operator and Administrator
Example command and response
This example command restarts remotesupport.

# system restart remotesupport

Command Successful - restarted Remote Support Agent

**system set accountlockout attemptinterval**

**Syntax**

system set accountlockout attemptinterval [seconds]

**Description**

Configure the number of seconds between failed logins. If the duration between failed login attempts is less than this value, then the failed login attempt will count towards the maximum number of attempts before the account is locked.

**Parameters**

seconds
Optional parameter to set the minimum duration in seconds between failed login attempts.
Supported values 1 to 3600, default 300.

**Authority**

Administrator

**Example command**

#system set accountlockout attemptinterval
Command Successful - Account Lockout Interval set to 300 seconds
#system set accountlockout attemptinterval 30
Command Successful - Account Lockout Interval set to 30 seconds

**system set accountlockout maxattempts**

**Syntax**

system set accountlockout maxattempts [numberOfAttempts]

**Description**

Configure the maximum number of failed login attempts before the account is locked.

**Parameters**

numberOfAttempts
Optional parameter limits the maximum number of failed login attempts to the value entered.
Supported values 3 to 50, default value is 6.

**Authority**

Administrator

**Example command**

#system set accountlockout maxattempts
Command Successful - Account Lockout set to 6 attempts
system set accountlockout lockduration

Syntax
system set accountlockout lockduration [minutes]

Description
Configure the duration a user account will be locked after the number of failed login attempts has been reached.

Parameters
minutes
Optional parameter to set the duration in minutes for account lock out period.
Supported values 0 to 1440, default 30.
A value of 0 will result in the account being locked for 7 days.

Authority
Administrator

Example command
#system set accountlockout lockduration
Command Successful - Account Lockout duration set to 30 minutes
#system set accountlockout lockduration 60
system/set/accountlockout# lockduration 60
Command Successful - Account Lockout duration set to 60 minutes

system set banner

Syntax
system set banner

Description
Set a login banner from file up-loaded to the repository.

Example
system set banner banner.txt

NOTE: Only plain text will be displayed by both the SSH session and Browser windows.
The following combinations are not permitted: \b \d \s \l \m \o \r \t \u \U \v

system set clioutput

Syntax
system set clioutput {text|xml}
**Description**
Defines the format of the command output. The format can be either ASCII text or xml; the default is text. Every time a new terminal session is started, the default output is set.

**Parameters**
- **text or xml**
  The word, *text* or *xml*, must be included in the command entry after `system set clioutput`.

**Authority**
Administrator

**Example commands and responses**
This example command sets the CLI output to xml:

```
# system set clioutput xml
```

Command Complete - CLI output is in xml format.

This example command sets the CLI output to text:

```
# system set clioutput text
```

Command Complete - CLI output is in text format.

**system set clusterid**

**Syntax**

```
system set clusterid <clusterid>
```

**Description**
This command sets the cluster ID on the StoreOnce Backup system. Note that the cluster ID is a global identifier which uniquely identifies the StoreOnce Backup system. The cluster ID is normally automatically generated during initialization of the StoreOnce Backup system. The cluster ID must conform to a specific format and be different from the cluster ID of any other StoreOnce Backup system. The value entered for the cluster ID should have been generated previously by a StoreOnce Backup system during initialization. This original system must be known to no longer exist.

**NOTE:** This command:

- is intended to be used only after replacing physical hardware when cloning previous configuration settings.
- cannot be used on a StoreOnce system that has storage configured and is likely only used after a system is quick restored.

**Parameters**
- **ClusterId**
  This parameter is value of the cluster ID which is assigned to the StoreOnce system.

**Authority**
Administrator, only use this command with guidance from HP Support
Example command and response
This example command sets the cluster ID:
# system set clusterid abc345678d1ef

Command Successful

**system set config**

**Syntax**

system set config

**Description**

Runs a step-based wizard to guide you through a complete series of system configuration steps.

**Authority**

Administrator

**Usage**

This command is intended to act as a setup wizard for installing new StoreOnce systems and groups together operations that would normally be performed by other CLI commands that are useful when first setting up a system.

- Configure network
- Configure time
- Configure licenses
- Verify hardware health
- Configure failover (only available for StoreOnce 6500 and 6600 Systems and is eliminated for all other models)
- Finish configuration and reboot
- Finish configuration

**Example commands and responses**

This example command Runs a step-based wizard for configuration steps.

# system set config

Checking storage status. This may take up to 20 minutes.
Please ensure all nodes have joined the cluster prior to running this command.
Found 4 nodes. All nodes operational.
Disabled failover for all Service Sets
The following configuration steps will be performed:
-Configure Network
  - Configure Time
  - Configure Licenses
  - Verify Hardware health
  - Finish Configuration and reboot
- Finish Configuration

Actions:
  execute) Perform the current step (Default)
On StoreOnce 6500 and 6600 Systems; failover configuration is not supported on other models.

# system set config

Please ensure all nodes have joined the cluster prior to running this command.

Found 2 nodes. All nodes operational.

failover disabled.

The following configuration steps will be performed:

-> Configure Network
   Configure Time
   Configure Licenses
   Verify Hardware health
   Configure Failover
   Finish Configuration and reboot
   Finish Configuration

Actions:
   execute) Perform the current step (Default)
   skip) Skip to the next step
   back) Go back to a previous step
   quit) Exit the configuration immediately

In the above example, the following options can be exercised:

- **Configure Network**
  runs the network wizard which can be run separately from the net set wizard command

- **Configure Time**
  allows configuration of NTP server, time zone and manual time, and date settings. It is equivalent to using the commands:
  - # time add ntpserver
  - # time set timezone
  - # time set utc

- **Configure Licenses**
  allows for the addition of licenses to a system by either entering the license key or loading a license file that has been uploaded through SFTP. It is equivalent to running the commands:
  - # license add
  - # license load
  - # license show all

- **Verify Hardware Health**
runs an appliance-wide check on hardware status, software online status, the filesystem, and StoreOnce devices. The report is presented on the CLI, and a health check file is created in the SFTP folder, health.

•
  • Configure Failover
    [execute]?Failover is currently: disabled
  • There are two options for exiting:
    ◦ Finish Configuration and Reboot
    ◦ Finish Configuration
    Reboot is only required if the changes to the time setting have moved time backwards; otherwise, no reboot is required.

**system set description**

**Syntax**

system set description <appliance-name>

**Description**

Definitions the string used to label and identify the StoreOnce appliance. This label is part of the replication process when the source or target appliance needs to be identified.

**Parameters**

appliance-name

A character string must appear after `config set description` in the command entry. This string may contain upper case letters, lower case letters, numbers, the dash "-" and the underscore "_". The string can contain a maximum of 32 characters.

**Authority**

Administrator

**Usage**

Upon successful completion of the command, the following is displayed:

Description set to: APPLIANCE-NAME, where APPLIANCE-NAME is the string labeling the StoreOnce appliance.

**Example command and response**

This example command sets the description for the appliance:

# system set description "Primary_StoreOnce"

Description set to: Primary_StoreOnce

**system set eventaggregation period**

**Syntax**

system set eventaggregation period <X>
Description
Set event aggregation period to a value within <0 - 30 minutes. This will take effect from the next aggregation window.

Authority
Operator and Administrator

Example command
This example command sets event aggregation period.

```
system set eventaggregation period 15
```

### system set pagecontrol

**Syntax**
```
system set pagecontrol {on|off}
```

**Description**
Enables or disables the page control feature.

Any command outputs information greater than one page long only shows one page at a time, if this setting is set to `on`. To view the current setting, execute the `system show config` command. As with `system set clioutput`, the command is reset on each new terminal session.

**Parameters**
- **on/off**
  - This required parameter defines the state of page control. `on` means the page control feature is enabled, and `off` means the page control feature is disabled.

**Authority**
Administrator

**Usage**
Upon successful completion of the command, the following is displayed:

Paging of CLI output is set to [on or off] (as defined during command execution)

**Example command and response**
This example command sets the page control to on:
```
# system set pagecontrol on
```

Command Successful - paging of CLI output is set to on.

### system set remotesupport customerinfo

**Syntax**
```
system set remotesupport customerinfo
```

**Description**
This command collects the customer contact information required to register the device with HPE.
Identify a technical contact for communication from HPE when a system issue in need of attention has been detected. Personal data will be used only for the purposes of providing support and optimization. For further information about HPE's privacy practices, please visit http://www.hpe.com/privacy.

Type 'quit' and press ENTER to exit without saving.

Refer to the Admin Guide for further information.

**Authority**
Administrator

**Parameters:**

**Mandatory Parameters:**
1. Mailing address
2. City
3. Postal code
4. E-mail address
5. Country name
6. Company name
7. First name
8. Last name
9. Phone number

**Optional Parameters:**
1. State
2. HPE Passport Id
3. Customer Delivery Id
4. Support from
5. Partner Id

**Example command and response**

```
# system set remotesupport customerinfo
```

This command collects the customer contact information required to register the device with HPE.

Identify a technical contact for communication from HPE when a system issue in need of attention has been detected. Personal data will be used only for the purposes of providing support and optimization. For further information about HPE's privacy practices, please visit http://www.hpe.com/privacy.

Type 'quit' and press ENTER to exit without saving.

Refer to the Admin Guide for further information.

**Mailing Address Street (Mandatory):**
An entry is required to continue, null data not allowed.

---->123 hpe way

**City (Mandatory):**
An entry is required to continue, null data not allowed.

---->calabasas
Postal Code (Mandatory):
An entry is required to continue, null data not allowed.

--->95776

Email Address for Service Alert Notification (Mandatory):
Expected format: user@domain.com
An entry is required to continue, null data not allowed.

--->joe.smith@hpe.com

Country Name: enter the 2 digit code country code from the Admin guide (Mandatory):
An entry is required to continue, null data not allowed.

--->US

You have selected: US=United States

Please Confirm:
1. Yes
2. No

--->1

Company Name (Mandatory):
An entry is required to continue, null data not allowed.

--->HPE

Technical Contact First Name (Mandatory):
An entry is required to continue, null data not allowed.

--->joe

Technical Contact Last Name (Mandatory):
An entry is required to continue, null data not allowed.

--->smith

Phone Number (Mandatory):
An entry is required to continue, null data not allowed.

(530) 123–4567

State (Optional):
Null data allowed.

--->

HPE Passport Id (Optional):
Null data allowed.

--->

Choose the Support From Option (Mandatory):
1. HPE Direct (Default)
2. HPE Partner

Please type the corresponding option number and press ENTER.

--->2
Partner Id (Mandatory):
An entry is required to continue, null data not allowed.
 ---> Test

Summary of Customer Information entered:
Mailing Address Street ---> 123 hpe way
City ---> calabasas
Postal Code ---> 95776
Email Address ---> joe.smith@hpe.com
Country Name ---> US-United States
Company Name ---> HPE
Last Name ---> smith
Phone Number ---> (530)123-4567
State ---> CA
HPE Passport Id ---> passportID
Custom Delivery Id ---> customdeliveryID
Support From ---> HPE Partner
Partner Id ---> Test

To continue please select one of the below options (Mandatory):
1. Save the above configuration and exit (Default).
2. Discard the above configuration and restart.
3. Discard the above configuration and exit.
Please type the corresponding option number and press ENTER.
 --->

Selection 1:
Saving and exiting.
If you have not already registered for Remote Support please run the "system set remotesupport register" command.

Selection 2:
It discards values and repeats the process

Selection 3:
It quits the command

**system set remotesupport register**

Syntax

system set remotesupport register
Description

For Choosing "No Support"
By using this Set command, you will be entering the Registration Information.

HPE Remote Support enables your storage system to communicate hardware health and log files back to HPE to help provide improved support and system health monitoring in order to minimize data outages and optimize your storage system. Data is managed according to the HPE Data Privacy policy.

Type 'quit' and press ENTER to exit without saving.

Parameters
1. Remote support Level
2. Reason for disabling Remote Support

Authority
Administrator

Example command and response
# system set remotesupport register

By using this Set command you will be entering the Registration Information

HPE Remote Support enables your storage system to communicate hardware health and log files back to HPE to help provide improved support and system health monitoring in order to minimize data outages and optimize your storage system. Data is managed according to the HPE Data Privacy policy.

Type 'quit' and press ENTER to exit without saving.

Refer to the Admin Guide for further information.

Remote support Level (Mandatory):
1. Passive (Recommended): Your device will be connected to HPE
2. No Support

Please type the corresponding option number and press ENTER.

An entry is required to continue, null data not allowed.

---2

HPE strongly recommends enabling Remote Support.

Please confirm that you do not want to enable Remote Support? (Mandatory)

1. Yes
2. No

Please type the corresponding option number and press ENTER.

---1

Please explain why you have disabled Remote Support (Mandatory):

HPE does not receive any backed up data, IP addresses, user names or other sensitive data. The data gathered is used to trigger support cases for you earlier (e.g. failed drive alerts) for faster resolution times. It is also used at an install base level to calculate trends and averages that helps improve the product design (such as the average workloads that customers generate). HPE strongly recommends that you enable passive monitoring to allow faster support resolution for you.

1. This HPE StoreOnce appliance cannot communicate with HPE due to network connectivity constraints.
2. The HPE StoreOnce appliance cannot communicate with HPE due to restrictions imposed by the security policies of my organization.
3. I have concerns about how the data will be used by HPE.
4. I do not understand the benefits of having this feature switched on.
5. I do not want improved support and system health monitoring from HPE.

An entry is required to continue, null data not allowed.

Please type the corresponding option number and press ENTER.

---2

**Summary of Registration inputs entered:**

Remote support Level ---> No Support

Reason for disabling Remote Support ---> The HPE StoreOnce appliance cannot communicate with HPE due to restrictions imposed by the security policies of my organization.

**To continue please select one of the below options (Mandatory):**

1. Save the above configuration and exit (Default).
2. Discard the above configuration and restart.
3. Discard the above configuration and exit.

Please type the corresponding option number and press ENTER.

---1

Selection 1

Saving and exiting.

Selection 2

It discards values and repeats the process

Selection 3

It quits the command

**Syntax**

```
system set remotesupport register
```

**Description**

**For Choosing "Passive"**

By using this Set command you will be entering the Registration Information.

HPE Remote Support enables your storage system to communicate hardware health and log files back to HPE to help provide improved support and system health monitoring in order to minimize data outages and optimize your storage system. Data is managed according to the HPE Data Privacy policy.

Type 'quit' and press ENTER to exit without saving.

**Parameters**

1. Remote support Level
2. HPE and partners may contact you for support or for optimization of your storage system
3. Enterprise Server
4. Proxy Server Protocol
5. Proxy Server URL
6. Proxy Server Port
7. Login Id
Authority
Administrator

Example command and response

```
#system set remotesupport register
```

By using this Set command you will be entering the Registration Information.

HPE Remote Support enables your storage system to communicate hardware health and log files back to HPE to help provide improved support and system health monitoring in order to minimize data outages and optimize your storage system. Data is managed according to the HPE Data Privacy policy.

Type ‘quit’ and press ENTER to exit without saving.
Refer to the Admin Guide for further information.

Parameters

Remote Support Level (Mandatory)
1. Passive (Recommended): Your device will be connected to HPE
2. No Support

Type the corresponding option number and press ENTER.
An entry is required to continue, null data not allowed.

HPE and partners may contact you for support or for optimization of your storage system (Mandatory):
1. Yes
2. No

Type the corresponding option number and press
An entry is required to continue, null data not allowed.

Proxy Server Protocol (Mandatory):
1. No Proxy (Default)
2. http
3. https
4. socks

Type the corresponding option number and press ENTER.

```
system set timeout
```

Syntax

```
system set timeout {GUI|CLI} {1|2|5|10|15|30|60}
```

Description
Sets the time period after which, without user activity, the user is logged off. The new timeout will persist over software upgrades and power cycles.

Specifiers
The command requires one of the following:
GUI
The GUI session

CLI
The CLI session

Parameters
The command requires one of the following (in minutes) – 1, 2, 5, 10, 15, 30, or 60.

Authority
Administrator

Example command and response
This example command sets the system timeout.

```
# system set timeout cli 60

Command Successful - cli timeout set to 60 minute(s)
The new timeout will take effect after the next cli session
```

system show accountlockout

Syntax
system show accountlockout

Description
Displays information about the account lockout configuration.

Parameters
None.

Authority
Operator and Administrator

Example command

```
system show accountlockout

Account lockout enabled : YES
Maximum allowed failed attempts : 6
Minimum interval between failed attempts : 300 seconds
Account lockout duration : 30 minutes
```

system show config

Syntax
system show config

Description
Displays information on the StoreOnce appliance system configuration.
**system show packages**

**Syntax**

system show packages

**Description**

Displays information on the software packages currently installed on the StoreOnce appliance and packages that have been added to the queue for installation.

**Authority**

Operator and Administrator

**Example command and response**

This example command shows information for the installed software:

```
# system show packages
```

<table>
<thead>
<tr>
<th>Package</th>
<th>Version</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2D_Master</td>
<td>3.11.0-1415.1</td>
<td>installed</td>
</tr>
<tr>
<td>D2D_Master</td>
<td>3.11.0-1415.1</td>
<td>staged</td>
</tr>
</tbody>
</table>

**system show performance**

**Syntax**

system show performance [SETX]

**Description**

Provides a snapshot of the StoreOnce appliance’s real-time performance. If a service set object is included in the command entry, the information is only provided for that service set.

**Specifiers**

SETX

This optional object is a service set. It is the software operations which reside on a given node and support the StoreOnce function. SETX is a label for a given service set where X is a unique index.

**Authority**

Operator and Administrator
Example commands and responses

This example command shows the system performance for Service Set 1.

```
# system show performance
```

**Service Set 1**

*Storage Usage*
- Current: 0.236468 TB
- Maximum: 6.9 TB

*Throughput*
- VTL Read: 0 MB/s
- VTL Write: 0 MB/s
- NAS Read: 0 MB/s
- NAS Write: 0 MB/s
- Catalyst Read: 0 MB/s
- Catalyst Write: 0 MB/s

*Replication*
- Inbound: 0 MB/s
- Outbound: 0 MB/s

**Service Set 2**

*Storage Usage*
- Current: 0.6 TB
- Maximum: 15118.859374756 TB

*Throughput*
- VTL Read: 0 MB/s
- VTL Write: 0 MB/s
- NAS Read: 0 MB/s
- NAS Write: 18122268 MB/s
- Catalyst Read: 0 MB/s
- Catalyst Write: 38316714 MB/s

*Replication*
- Inbound: 0 MB/s
- Outbound: 0 MB/s

This example command shows the system performance for Service Set 1 and Service Set 2.

```
# system show performance
```

**Service Set 1**

*Storage Usage*
- Current: 0.6 TB
- Maximum: 15118.859374756 TB

*Throughput*
- VTL Read: 0 MB/s
- VTL Write: 0 MB/s
- NAS Read: 0 MB/s
- NAS Write: 18122268 MB/s
- Catalyst Read: 0 MB/s
- Catalyst Write: 38316714 MB/s

*Replication*
- Inbound: 13450032 MB/s
- Outbound: 13450032 MB/s

**Service Set 2**

*Storage Usage*
- Current: 0.6 TB
- Maximum: 15118.859374756 TB

*Throughput*
- VTL Read: 0 MB/s
- VTL Write: 0 MB/s
- NAS Read: 0 MB/s
- NAS Write: 0 MB/s
- Catalyst Read: 0 MB/s
- Catalyst Write: 0 MB/s

*Replication*
- Inbound: 0 MB/s
- Outbound: 0 MB/s

Catalyst
**system show remoteeventsuppression**

**Syntax**

system show remoteeventsuppression

**Description**
Displays the current status of maintenance mode, when it was started, and when it will expire.

**Authority**
Operator and Administrator

**Example command**
This example command shows the system maintenance mode.

```
# system show remoteeventsuppression
```

<table>
<thead>
<tr>
<th>Mode</th>
<th>Expiry Date</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>19/05/2015 at 10:55:00+0000</td>
<td>test</td>
</tr>
</tbody>
</table>

**system show remotesupport customerinfo**

**Syntax**

system show remotesupport customerinfo

**Description**

**Authority**
Administrator

**Example command**
This example command shows the Customer Information of the RemoteSupport.

**Customer Details**

<table>
<thead>
<tr>
<th>Street</th>
<th>123 hpe way</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>calabasas</td>
</tr>
<tr>
<td>Postal Code</td>
<td>95776</td>
</tr>
<tr>
<td>State\Province</td>
<td>CA</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Company Name</td>
<td>HPE</td>
</tr>
<tr>
<td>First Name</td>
<td>joe</td>
</tr>
<tr>
<td>Last Name</td>
<td>smith</td>
</tr>
<tr>
<td>Phone Number</td>
<td>(530)123-4567</td>
</tr>
<tr>
<td>Email ID</td>
<td><a href="mailto:joe.smith@hpe.com">joe.smith@hpe.com</a></td>
</tr>
<tr>
<td>PassportId</td>
<td>passportID</td>
</tr>
<tr>
<td>Support From</td>
<td>HPE Direct</td>
</tr>
<tr>
<td>PartnerId</td>
<td>partnerID</td>
</tr>
<tr>
<td>Custom Delivery Id</td>
<td>customdeliveryID</td>
</tr>
</tbody>
</table>
system show remotesupport register

Syntax
system show remotesupport register

Description

Authority
Administrator

Example command
This example command shows the Proxy Information of the RemoteSupport.

Proxy Server Type          :
Proxy Server               :
Proxy Server Port          :
Proxy UserId               :
Remote Support Level       :  No Support
Can Register               :  false
Enterprise Server          :  https://remote3par-itg.itcs.hp.com
Device Registered          :  true
Registered Serial Number   :  STOBNG1001
Registered Product Number  :  EJ022A
Status Message             :  ALRT:Enterprise Server is not reachable.
INFO:Product Model is available.
INFO:Customer Information is available.
INFO:All Hardware SKU Warranties are available.
INFO:The device is registered successfully.
ALRT:Remote Support level is set to 'No Support.' Device is not able to communicate with Enterprise Server.

system show repository

Syntax
system show repository

Description
Displays the files which have been transferred into the repository.

Authority
Operator and Administrator

Example command and response
This example command displays a list of packages in the repository directory:

```
# system show repository

File
-----
D2D_Master-3.2.0-1219.42.x86_64.rpm
```
system show staticciphers

Syntax
system show staticciphers

Description
Displays the status of TLS static ciphers on the StoreOnce appliance for all TLS versions. Default status will be enabled for all TLS versions.

Authority
Administrator, Backup Administrator, and User

Example command and response
#system show staticciphers

<table>
<thead>
<tr>
<th>TLS Version</th>
<th>Static Ciphers State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>enabled</td>
</tr>
<tr>
<td>1.1</td>
<td>enabled</td>
</tr>
<tr>
<td>1.2</td>
<td>enabled</td>
</tr>
</tbody>
</table>

system show status

Syntax
system show status

Description
Provides a status on the StoreOnce appliance system.

Authority
Operator and Administrator

Usage
Upon successful completion of the command, the status of the storage assigned to each storage set is displayed. The storage status can be one of the following:

- Discovered XX GB
- Adding XX GB
- Needs Finalization (...)  
- Finalizing (mounting)
- Formatted XX GB
- Miscellaneous errors that can be reported

where XX represents the number of GB of data discovered or formatted.

The Service Set status can be one of the following:
Example commands and responses

This example command shows correctly connected storage on a StoreOnce 5100.

```bash
# system show status

Status
------
Formatted 3,659.88GB

Service Sets Status Notes
------------ ------ -----
Set 1 Running
```

This example command shows correctly connected storage on a StoreOnce 6600.

```bash
# system show status

Storage Set Status
----------------- ------
Service Sets 3, 4 Not Started
Service Sets 7, 8 Formatted 30,543.25GB
Service Sets 1, 2 Needs Finalization (mounting)
Service Sets 5, 6 Formatted 30,543.25GB

Service Sets Status Notes
------------ ------ -----
Set 1 Not Started
Set 2 Not Started
Set 3 Not Started
Set 4 Not Started
Set 5 Running
Set 6 Running
Set 7 Running
Set 8 Running
```

This example command attempts to show alien (not recognized) storage:

```bash
# system show status

One or more alien volumes found:

Volumewwid: 6A682F29270000108040533753303649 on NodeId : 1

Please delete and try again
```

**system show timeout**

Syntax
system/show/timeout# help gui
system show timeout gui [param]

Description
show timeout for gui to [1 | 2 | 5 | 10 | 15 | 30 | 60] minute(s)

Example
system show timeout gui 15

Syntax
system/show/timeout# help cli
system show timeout cli [param]

Description
show timeout for cli to [1 | 2 | 5 | 10 | 15 | 30 | 60] minute(s)

Example
system show timeout cli 15

**system show tls**

Syntax
system show tls

Description
This command shows status of all available TLS versions.

Parameters
NONE

Authority
Administrator

Usage
System show tls

Example

# sys show tls

<table>
<thead>
<tr>
<th>Version</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>disabled</td>
</tr>
<tr>
<td>1.1</td>
<td>disabled</td>
</tr>
<tr>
<td>1.2</td>
<td>enabled</td>
</tr>
</tbody>
</table>

**system shutdown**

Syntax
system shutdown
Description
Gracefully shuts down the entire StoreOnce appliance. On StoreOnce 6500 and 6600 Systems, failover must be disabled.

Authority
Administrator

Example commands and responses
This example command shuts down the entire StoreOnce appliance.

```bash
# system shutdown
Warning - Appliance will shutdown. Are you sure you want to continue? [yes / no]: no
Command Cancelled
# system shutdown
Warning - Appliance will shutdown. Are you sure you want to continue? [yes / no]: yes
shutdown request successfully sent
```

```bash
# Broadcast message from root@HPCZJ435035T
(/dev/pts/1) at 10:00 ... 

The system is shutting down NOW!
```

**system update packages**

Syntax
```
system update packages [FILE-IMAGE]
```

Description
Updates the system with the packages existing in the update queue or optionally defined in the command entry. Parameters in this command force the update process to be performed for packages the system already believes exist.

Parameters

**FILE-IMAGE**

The name of a package to install, optional. If not defined, all packages in the update queue are installed.

Authority
Administrator

Example command and response
This example command updates the system.

```bash
# system update packages
Initializing.
Verifying staged package repository integrity.
Package stage area verification successful.
Updating from version '3.14.0-1546.1' to '3.14.1-1551.5'.
Reboot will occur after update completes.
```
Installing update tool packages. Can take 5 minutes to complete.
Installing: D2D_UpdateTools
Install successful
Update tool package installation successful. 0 minutes elapsed.
Updating from version '3.14.0-1546.1' to '3.14.1-1551.5'.
Reboot will occur after update completes.
Performing Pre Upgrade health checks...
Verifying status of hardware and services.
Pre Upgrade : Hardware and services status verification successful.
Stopping service sets. Can take 30 minutes to complete.
Stop service sets successful. 1 minute elapsed.
Stopping file services.
File service stop successful.
Starting management service maintenance. Can take 30 minutes to complete.
Management service maintenance started successful. 0 minutes elapsed.
Stopping management services.
Management services stop successful.
Cleaning up old packages
Removing test packages
Installing packages. Can take 30 minutes to complete.
Installing: D2D_Master-3.14.1-1551.5
Install successful
Package installation successful. 36 minutes elapsed.
Removing update tools packages.
Start reboot of the system.
Processing ... -
Broadcast message from root@HPMXQ436042D
(unknown) at 11:30 ...

The system is going down for reboot NOW!
System rebooting to complete the update process.
Update will complete after rebooting.
Ssh connection will be lost. Allow 15-20 minutes for reboot to complete before reconnecting.

**system update remotesupport customerinfo**

**Syntax**

system update remotesupport customerinfo

**Description**

This command allows the update of customer contact information previously provided.

Identify a technical contact for communication from HPE when a system issue in need of attention has been detected. Personal data will be used only for the purposes of providing support and optimization.
For further information about HPE’s privacy practices, visit [http://www.hpe.com/privacy](http://www.hpe.com/privacy).

Modification of the fields is optional. If you do not wish to modify any existing value, then enter ‘n’ or ‘ENTER’. Type ‘quit’ + ENTER at any time to exit without saving.

User can modify below parameters:

**Parameters**

Mailing Address Street: 123 hpe way

City: calabasas
Postal Code: 95776
Email Address: joe.smith@hpe.com
Country Name: US-United States
Company Name: HPE
First Name: joe
Last Name: smith
Phone Number: (530)123-4567
State: CA
HPE Passport Id: passportID
Support From:
1. HPE Direct
2. HPE Partner
Authority
Administrator

Example command and response

```
# system update remotesupport customerinfo
```

This command allows the update of customer contact information previously provided.
Identify a technical contact for communication from HPE when a system issue in need of attention has been detected. Personal data will be used only for the purposes of providing support and optimization. For further information about HPE's privacy practices, visit [http://www.hpe.com/privacy](http://www.hpe.com/privacy).
Modification of the fields is optional. If you do not wish to modify any existing value, then enter 'n' or 'ENTER'. Type 'quit' + ENTER at any time to exit without saving.
Refer to the Admin Guide for further information.

**Mailing Address Street:** 123 hpe way

Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

--->

**City:** calabasas

Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

--->

**Postal Code:** 95776

Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

--->
Email Address for Service Alert Notification: joe.smith@hpe.com
Expected format user@domain.com
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Country: US-United States
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Company Name: HPE
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Technical Contact First Name: joe
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Technical Contact Last Name: smith
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Phone Number: (530)123-4567
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Phone Number:
If you do not wish to modify this value just press ENTER.

State: california
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.
HPE Passport ID: passportID
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

Support From: HPE Direct
Do you wish to modify this existing value? (y/n)
Type 'y' and press ENTER to modify.

Summary of Customer Information entered:
Mailing Address Street ---> 123 hpe way
City ---> calabasas
Postal Code ---> 95776
Email Address ---> joe.smith@hpe.com
Country Name ---> US-United States
Company Name ---> HPE
First Name ---> joe
Last Name ---> smith
Phone Number ---> (530)123-4567
State ---> CA
HPE Passport Id ---> passportID
Custom Delivery Id ---> customdeliveryID
Support From ---> HPE Direct

To continue select one of the below options (Mandatory):
1. Save the above configuration and exit (Default).
2. Discard the above configuration and restart.
3. Discard the above configuration and exit.
Type the corresponding option number and press ENTER.

On selection of 1
Saving and exiting.
On selection of 2
It discards values and repeats the process
On Selection of 3
It quits the command
system update remotesupport register

Syntax

system update remotesupport register

Description

No Support Option

This command allows the update of the registration information previously provided.

HPE Remote Support enables your storage system to communicate hardware health and log files back to HPE to help provide improved support and system health monitoring in order to minimize data outages and optimize your storage system. Data is managed according to the HPE Data Privacy policy.

Modification of the fields is optional. If you do not wish to modify any existing value, then please enter 'n' or 'ENTER'. Type 'quit' + ENTER at any time to exit without saving.

If "No Support" option was selected then you can modify the below parameters:

Parameters

1. Remote support level
2. Reason for disabling Remote Support: The HPE StoreOnce appliance cannot communicate with HPE due to restrictions imposed by the security policies of my organization.

Authority

Administrator

Example command and response

# system update remotesupport register

This command allows the update of the registration information previously provided.

HPE Remote Support enables your storage system to communicate hardware health and log files back to HPE to help provide improved support and system health monitoring in order to minimize data outages and optimize your storage system. Data is managed according to the HPE Data Privacy policy.

Modification of the fields is optional. If you do not wish to modify any existing value, then please enter 'n' or 'ENTER'. Type 'quit' + ENTER at any time to exit without saving.

Refer to the Admin Guide for further information.

Remote Support Level: No Support

Do you wish to modify this existing value? (y/n)

Please type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

--->

HPE strongly recommends enabling Remote Support.

Please confirm that you do not want to enable Remote Support (Mandatory):

1. Yes
2. No

Please type the corresponding option number and press ENTER.

--->1
Reason for disabling Remote Support: The HPE StoreOnce appliance cannot communicate with HPE due to restrictions imposed by the security policies of my organization.

Do you wish to modify this existing value? (y/n)

Please type 'y' and press ENTER to modify.

Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

---y

Please explain why you have disabled Remote Support:

HPE does not receive any backed up data, IP addresses, user names or other sensitive data. The data gathered is used to trigger support cases for you earlier (e.g. failed drive alerts) for faster resolution times. It is also used at an install base level to calculate trends and averages that helps improve the product design (such as the average workloads that customers generate). HPE strongly recommends that you enable passive monitoring to allow faster support resolution for you.

1. This HPE StoreOnce appliance cannot communicate with HPE due to network connectivity constraints.
2. The HPE StoreOnce appliance cannot communicate with HPE due to restrictions imposed by the security policies of my organisation.
3. I have concerns about how the data will be used by HPE.
4. I do not understand the benefits of having this feature switched on.
5. I do not want improved support and system health monitoring from HPE.

An entry is required to continue, null data not allowed.

Please type the corresponding option number and press ENTER.

---5

Summary of Registration inputs entered:

Remote support Level ---> No Support

Reason for disabling Remote Support ---> I do not want improved support and system health monitoring from HPE.

To continue please select one of the below options (Mandatory):

1. Save the above configuration and exit (Default).
2. Discard the above configuration and restart.
3. Discard the above configuration and exit.

Please type the corresponding option number and press ENTER.

On selection of 1

Saving and exiting.

On selection of 2

It discards values and repeats the process

On Selection of 3

It quits the command

Syntax

system update remotesupport register

Description
Passive
This command allows the update of the registration information previously provided.
HPE Remote Support enables your storage system to communicate hardware health and log files back to
HPE to help provide improved support and system health monitoring in order to minimize data outages and
optimize your storage system. Data is managed according to the HPE Data Privacy policy.
Modification of the fields is optional. If you do not wish to modify any existing value, then please enter ‘n’ or
‘ENTER’. Type ‘quit’ + ENTER at any time to exit without saving.

Parameters:
1. Remote Support Level
2. HPE and partners may contact the customer for support or for optimization of your storage system
3. Enterprise Server
4. Proxy Server Protocol
   - No Proxy (Default)
   - http
   - https
   - socks
5. Proxy Server:
6. Proxy Server Port:
7. Proxy UserId:
8. Proxy Password:

Authority
Administrator

Example command and response
# system update remotesupport register

This command allows the update of the registration information previously provided.
HPE Remote Support enables your storage system to communicate hardware health and log files back to
HPE to help provide improved support and system health monitoring in order to minimize data outages and
optimize your storage system. Data is managed according to the HPE Data Privacy policy.
Modification of the fields is optional. If you do not wish to modify any existing value, then please enter ‘n’ or ‘ENTER’. Type ‘quit’ + ENTER at any time to exit without saving.
Refer to the Admin Guide for further information.

Remote Support Level: No Support
Do you wish to modify this existing value? (y/n)
Please type ‘y’ and press ENTER to modify.
Leave blank or type ‘n’ and press ENTER to go to the next entry without modifying.

---
y

Remote Support Level:
1. Passive (Recommended): Your device will be connected to HPE.
Please type the corresponding option number and press ENTER.
If you do not wish to modify this value just press ENTER.

---1

**HPE and partners may contact you for support or for optimization of your storage system:** yes

Do you wish to modify this existing value? (y/n)
Please type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

---y

**HPE and partners may contact you for support or for optimization of your storage system:**

1. Yes
2. No
Please type the corresponding option number and press ENTER.
An entry is required to continue, null data not allowed.
If you do not wish to modify this value just press ENTER.

---1

**Enterprise server:** [https://remote3par-itg.itcs.hp.com](https://remote3par-itg.itcs.hp.com)

Do you wish to modify this existing value? (y/n)
Please type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

---

**Proxy Server Protocol:**

Do you wish to modify this existing value? (y/n)
Please type 'y' and press ENTER to modify.
Leave blank or type 'n' and press ENTER to go to the next entry without modifying.

---y

**Proxy Server Protocol:**

1. No Proxy (Default)
2. http
3. https
4. socks
Please type the corresponding option number and press ENTER.
An entry is required to continue, null data not allowed.
If you do not wish to modify this value just press ENTER.

---http

**ERROR:** Invalid option entered, http
Please select an option number from the displayed list and press ENTER.
Proxy Server Protocol:
1. No Proxy (Default)
2. http
3. https
4. socks

Please type the corresponding option number and press ENTER.
An entry is required to continue, null data not allowed.
If you do not wish to modify this value just press ENTER.

--> 1

Summary of Registration inputs entered:
Remote support Level --> Passive
HPE and partners may contact you for support or for optimization of your storage system --> Yes
Enterprise Server --> https://midway.ext.hpe.com

To continue please select one of the below options (Mandatory):

1. Save the above configuration and exit (Default).
2. Discard the above configuration and restart.
3. Discard the above configuration and exit.

Please type the corresponding option number and press ENTER.

On selection of 1
Saving and exiting.

On selection of 2
It discards values and repeats the process

On Selection of 3
It quits the command

**system set remotesupport restore_customerinfo**

**Syntax**

system set remotesupport restore_customerinfo "Mailing Address Street" "City" "PostalCode" EmailId "Country" "CompanyName" "FirstName" "LastName" "PhoneNumber" "StateorProvince" "PassportId" "CustomDeliveryID" "SupportFrom" "PartnerId"

**Description**

Command to restore customer information.

**NOTE:** This command should be used to restore the customer information saved using the "config save devices" command.

**Authority**

Administrator

**Example command and response**
system set remotesupport restore_customerinfo "123 hpe way" "calabasas" "95776"
"joe.smith@hpe.com" "US-United States" "HPE" "joe" "smith" "(530)123-4567" "CA" "123488" "null" "HPE Partner" "53433"

system set remotesupport restore_register

Syntax
system set remotesupport restore_register "remoteSupportLevel" "canContact" "enterpriseUrl"
"proxyServerProtocol" "proxyServer" "proxyServerPort" "userId" "password" "Reason for disabling RemoteSupport"

This command should be used to restore the registration information generated by the "config save devices" command.

Authority
Administrator

Example command and response
system set remotesupport restore_register "Passive" True https://storage-support http web-proxy 8080
"null" "null" "null"

Known Issues:
If you are restoring information from StoreOnce version 3.15.x the restore_register command created by the "config save devices" command may need to be modified before it can be restored.
If the web proxy value was originally set then it will need to be added to the generated command.

time add ntpserver

Syntax
time add ntpserver {FQDN|IPv4 Address|IPv6 Address} 
{FQDN|IPv4 Address|IPv6 Address}

Description
Adds a network time protocol server to use if NTP is enabled. Up to two NTP servers may be defined for the StoreOnce Backup system.

Parameters
ntp server ID
At least one NTP server ID must appear in the command entry. This parameter appears after time add ntpserver and consists of either a fully-qualified domain name (FQDN), or an IPv4 or IPv6 address in the xx.xx.xx.xx format. Depending on the number of NTP server objects currently existing for the StoreOnce appliance, up to two NTP server ID parameters may exist within the command entry. (No more than two NTP server objects can exist for a given StoreOnce appliance.)

Authority
Administrator

Example command and response
This example command adds an NTP server:
# time add ntpserver 16.110.124.123 - Adds an ntp4 server
time add ntpserver fe80::0202:b3ff:fele:8329 - Adds an ntp6 server
time del ntpserver

Syntax

time del ntpserver {FQDN|IPv4 Address|IPv6 Address} [{FQDN|IPv4 Address|IPv6 Address}]

Description

Removes an NTP server which exists for the StoreOnce appliance. If NTP is enabled, execution of the command cannot remove all the timeserver objects.

Parameters

ntp server ID

At least one NTP server ID must appear in the command entry. This parameter appears after time del ntpserver and consists of either a fully-qualified name (FQDN), or an IPv4 or IPv6 address in the xx.xx.xx.xx format. Depending on the number of NTP server objects which currently exist for the StoreOnce appliance, up to two NTP server ID parameters may exist within the command entry. (No more than two NTP server objects can exist for a given StoreOnce appliance.)

Authority

Administrator

Usage

Upon successful completion of the command, the following is displayed:

NTP deleted, where NTP is the time server object defined in the command entry.

Example command and response

This example command deletes the NTP server:

```
# time del ntpserver 16.110.124.123 - Deletes the ntp server
```

```
time del ntpserver fe80::0202:b3ff:fe1e:8329 - Deletes the ntp server
```

NTP deleted

time reset timezone

Syntax

time reset timezone

Description

Resets the time zone for the StoreOnce appliance to the default of UTC. Local time is the same as UTC.

Authority

Administrator
Example command and response

This example command resets the time zone:

```
# time reset timezone
```

Timezone reset to default of UTC

**time set timezone**

**Syntax**

`time set timezone <timezoneLabel>`

**Description**

Sets the time zone for the StoreOnce appliance.

**Parameters**

**timezone**

Defines the time zone for the StoreOnce appliance, required. This string matches one of the time zone labels defined in the Linux directory, `/usr/share/zoneinfo`.

If omitted, the command executes a menu-driven list allowing you to select a time zone.

**Authority**

Administrator

**Usage**

Upon successful completion of the command, the following is displayed:

```
timezone set to TIMEZONE, where TIMEZONE is the label for the time zone defined within the command entry.
```

**Example command and response**

This example command sets the time zone:

```
# time set timezone
```

Please identify a location so that time zone rules can be set correctly.

Please select a continent or ocean.

1) Africa    4) Arctic Ocean   7) Australia    10) Pacific Ocean

2) Americas  5) Asia          8) Europe       11) Exit

3) Antarctica 6) Atlantic Ocean 9) Indian Ocean

Please select a country.

1) Aaland Islands 18) Greece 35) Norway

2) Albania 19) Guernsey 36) Poland

3) Andorra 20) Hungary 37) Portugal

4) Austria 21) Ireland 38) Romania

5) Belarus 22) Isle of Man 39) Russia

6) Belgium 23) Italy 40) San Marino

7) Bosnia & Herzegovina 24) Jersey 41) Serbia

8) Britain (UK) 25) Latvia 42) Slovakia

9) Bulgaria 26) Liechtenstein 43) Slovenia

10) Croatia 27) Lithuania 44) Spain
11) Czech Republic  28) Luxembourg  45) Sweden  
12) Denmark  29) Macedonia  46) Switzerland  
13) Estonia  30) Malta  47) Turkey  
14) Finland  31) Moldova  48) Ukraine  
15) France  32) Monaco  49) Vatican City  
16) Germany  33) Montenegro  
17) Gibraltar  34) Netherlands  
18) Greece  35) Morocco  40) Vanuatu  
19) Greenland  36) Mozambique  41) Vietnam  
20) Guernsey  37) Namibia  42) Venezuela  
21) Guiana (French)  38) Nauru  43) Yemen  
22) Guiana (Spanish)  39) Nebraska  44) Zambia  
23) Guadalcanal  40) New Caledonia  
24) Guatemala  41) New Zealand  
25) Guinea  42) Nigeria  
26) Guyana  43) Nicaragua  
27) Guinea-Bissau  44) Netherlands Antilles  
## 8

The following information has been given:

Britain (UK)

Therefore TZ='Europe/London' will be used.

Local time is now: Thu May 9 12:12:58 BST 2013.

Universal Time is now: Thu May 9 11:12:58 UTC 2013.

Is the above information OK?
1) Yes
2) No
3) ??

`timezone set to :Europe/London`

**time set UTC**

**Syntax**

```
time set UTC <mm/dd/yyyy hh:mm:ss>
```

**Description**

Sets the value of the system clock on the cluster to the value defined within the command entry. NTP must be disabled for this command to execute.

**Parameters**

date time

This parameter must appear in the command entry after `time set UTC`. The parameter is entered in the 24-hour format, MM/DD/YYYY hh:mm:ss, where MM represents the numeric value of the month, DD represents the day, YYYY represents the year, hh represents the UTC hours, mm represents the UTC minutes and ss represents the UTC seconds.

**Authority**

Administrator

**Usage**

Upon successful completion of the command, the following is displayed:

The Backup System UTC has been set to MM/DD/YYYY hh:mm:ss, where MM/DD/YYYY hh:mm:ss is the UTC value defined in the command entry.
**Example command and response**

This example command sets the value of the clock system:

```bash
# time set utc 06/02/2014 17:57:00
```

Command Successful. The Backup System UTC has been set to 06/02/2014 17:57:00.

**time show config**

**Syntax**

```bash
time show config
```

**Description**

Displays the time configuration and the StoreOnce appliance’s UTC and local times.

**Authority**

Operator and Administrator

**Example command**

This example command shows the time configuration:

```bash
# time show config
```

**Example response**

```
NTP Server(s)
-------------------
10.10.10.10
ntp.hp.net

TimeZone: MDT

UTC        : 8/22/2011 21:12:39
LocalTime    : 8/22/11 15:12:39
```

**Example response**

```
NTP Server(s)
-------------------
No NTP Servers – NTP is disabled

TimeZone: MDT

UTC        : 8/22/2011 21:15:14
LocalTime    : 8/22/11 15:15:14
```

**vtl create cartridge**

**Syntax**

```
vtl create cartridge <SETX> <LIBX> {ALL|slot <number>|mail <number>}
[WriteProtect {yes|no}] [barcode <string>] [CartSize {10|25|50|100|200|400|800|1000|1200|1400|1600|3200}]
```

**Description**

Adds a cartridge to an existing virtual tape library.
Specifiers

**SETX**

This object defines the service set containing the virtual tape library into which the cartridge is added. **X** is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

**LIBX**

This required object is the virtual tape library into which the cartridge is added. **X** is the numeric index of the library.

**CARTX**

This object is not used within the command sequence. It represents the virtual cartridge created by the command. **X** is a numeric index.

Parameters

**ALL**

This global default is optional. If used, a cartridge is created in every empty slot within the virtual tape library. Either this global default, the slot parameter, or the mail parameter must exist in the command sequence.

**slot**

This parameter defines the slot into which the cartridge is added after creation. The value for this parameter consists of an integer corresponding to an empty slot location in the virtual tape library defined by this command. The slot value assigned to parameter must exist within the library to which the cartridge is being added. Either ALL, slot parameter or mail parameter must exist in the command sequence.

**mail**

This parameter defines the mail slot into which the cartridge is added after creation. The value is an integer corresponding to an empty mail slot location in the virtual tape library defined by this command. Either ALL, slot parameter or mail parameter must exist in the command sequence.

**WriteProtect**

This optional parameter defines if data can only be read from cartridge. The value is either **yes** or **no**. If not included, a default value of **no** is used.

- **Yes**
  - data cannot be written to the cartridge
- **No**
  - data can be written to the cartridge.

**barcode**

This optional parameter consists of a string of characters defining the barcode on the cartridges created by this command. The string of characters must conform to the barcode parameters defined for the library into which the cartridge is being added and must not match any existing barcode in the library. If not included, a unique barcode string is created automatically according to the virtual library barcode template. The parameter cannot be used when the global default **ALL** is used to create cartridges in the empty slots.
CartSize

This optional parameter defines the size in GB of the cartridges to be created in the virtual library by this command. The values are defined in the Command Syntax. If not included, the default value is that defined by the library emulation parameter value.

Authority

Administrator

Example commands and responses

This example command adds a cartridge to SET1, LIB1, ALL.

# vtl create cartridge SET1 LIB1 ALL

Command Successful

This example command adds a cartridge to LIB1, slot 2.

# vtl create cartridge LIB1 slot 2

Command Successful

vtl create library

Syntax

vtl create library [SETX] [name <string>] [interface {None|iSCSI|FC}]
[LibEmulation {Generic|MSL2X24|MSL4X48|MSL8X96|EML|ESL|IBM-TS3500|IBM-TS3500
IBM}] [DriveEmulation {LTO2|LTO3|LTO4|LTO5|LTO6|UltriumVT|IBM-LTO3|IBM-LTO5
IBM}] [NoOfSlots <number>] [CartSize {10|25|50|100|200|400|600|800|1000|
1200|1400|1600|3200}] [NoOfDrives <number>] [Port <number>] [,<num>]
[iSCSIname <string>] [iAuthenticationEnable {yes|no}] [iUsername <string>]
[iSecret <string>] [tAuthenticationEnable {yes|no}] [tUsername <string>]
[tSecret <string>] [BarcodeType {random|template}] [BarcodeLength {6|8}]
[BarcodePrefix {none|<number>}] [BarcodeSuffix {none|number}]
[BarcodeStartValue <string>] [PhysicalQuotaEnabled {yes|no}] [PhysicalQuota
<number>] [LogicalQuotaEnabled {yes|no}] [LogicalQuota <number>] [encrypt
{true|false}] [Application {Unspecified|Other|DataProtector| NetBackup|
BackupExec|Networker|TSM|Simpana|Veeam|vRanger|BridgeHead}] [ApplicationOther
<string>] [Datatype {Unspecified|Other|File|Oracle|SQL|SAP|Exchange|Domino|
VMWare|Hyper-V}] [DatatypeOther <string>]

Description

Creates a virtual tape library. In addition, a virtual tape cartridge is created in every slot in the virtual library.

Specifiers

SETX

This object defines the service set into which virtual tape library is added. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

LIBX

This object is not used within the command sequence; it is created by the command. The object represents the virtual tape library created by the command. X is a numeric index.
Parameters

name

This optional parameter is used to create a human readable label for the virtual tape library created by this command. The value is a text string of up to 30 characters. If the value contains spaces, the value must be enclosed within quotations. If not included in the command, the label is defined by the text, Library, followed by the numeric index X defined for the LIBX object created by this command.

Interface

This optional parameter defines the physical interface to be used by the virtual library created by this command. The value is either FC (default for StoreOnce 6500 and 6600 Systems) or iSCSI (default for all other models). If you enter iSCSI, you must enter values for all parameters related to iSCSI (for example, iSCSIName). If you enter FC, you must enter values for all parameters related to Fibre Channel (for example, Port).

LibEmulation

This optional parameter defines the type of physical library to be emulated by the virtual tape library created by this command. The values are defined in the Command Syntax. If the parameter is not defined, the default Generic is used. The characteristics for the different emulation types are described in the following table.

<table>
<thead>
<tr>
<th>Emulation Type</th>
<th>Drive Emulation</th>
<th>No. of Drives</th>
<th>No. of Slots</th>
<th>No. of Mail Slots</th>
<th>Size of Cartridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic</td>
<td>LTO4</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>MSL2X24</td>
<td>LTO4</td>
<td>2</td>
<td>24</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>MSL4X48</td>
<td>LTO4</td>
<td>4</td>
<td>48</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>MSL8X96</td>
<td>LTO4</td>
<td>8</td>
<td>96</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>EML</td>
<td>LTO4</td>
<td>1</td>
<td>96</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>ESL</td>
<td>LTO4</td>
<td>1</td>
<td>96</td>
<td>1</td>
<td>800 GB</td>
</tr>
</tbody>
</table>

Note also that options exist for IBM tape emulation as well.

DriveEmulation

This optional parameter defines the type of physical drive the virtual tape drive emulates. The values are defined in the Command Syntax. If the parameter is not defined, the default value corresponds to the default drive type defined by the library’s emulation type.

NoOfSlots

This optional parameter defines the number of cartridge slots in the virtual library created by this command. The number of slots must conform to the library emulation type. The value has a maximum of 16,384 characters. If not included, the default value is defined by the library emulation type.

CartSize

This optional parameter defines the size in GB of the cartridges to be created in the virtual library by this command. The values are defined in the Command Syntax. If not included, the default value is that defined by the library emulation parameter value.
NoOfDrives

This optional parameter defines the number of drives in the virtual library created by this command. The number of drives must conform to the library emulation type. The value has a maximum of 192 characters. If not included, the default value is defined by the library emulation type.

Port

This optional parameter defines the physical Fibre Channel ports which are assigned to the library’s robotic arm and virtual drives and is only valid if the library interface is Fibre Channel. The value is defined by a number or a set of numbers (separated by commas) corresponding to the ports as defined by the vtI show ports on page 201 command. All the ports listed are assigned to the robotic arm. If only one port value is assigned to this parameter, the port is assigned to all the virtual drives in the library. If more than one port number is defined, the ports are alternatively assigned to the drives in the library in a round robin fashion. If not defined, the value is set to the default for Fibre Channel libraries. The default depends on the Fibre Channel configuration of the service set’s current node.

iSCSIName

This parameter defines the iSCSI initiator name and is required if the interface is iSCSI. If the VTL’s interface is not iSCSI, defining this generates an error. The value is a text string with a maximum of 224 characters. If not defined, the default is a null string.

iAuthenticationEnable

This optional parameter defines if the CHAP (challenge handshake authentication protocol) initiator log on is enabled. The value for this parameter is either yes or no. If not defined, the default value is no.

iUserName

This optional parameter defines the initiator user name for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the initiator log on is enabled. If the initiator log on is enabled and this is not defined, an error is generated. The value is a text string with a maximum of 224 characters.

iSecret

This parameter defines the initiator secret for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the initiator log on is enabled. If the initiator log on is enabled and this parameter is not defined, an error is generated.

tAuthenticationEnable

This optional parameter defines if the CHAP (challenge handshake authentication protocol) target log on is enabled. The value for this parameter is either yes or no. If not defined, the default value is no.

tUserName

This optional parameter defines the target user name for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the target log on is enabled. If the target log on is enabled and this is not defined, an error is generated. The value is a text string with a maximum of 224 characters.

tSecret

This parameter defines the target secret for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the target log on is enabled. If the target log on is enabled and this parameter is not defined, an error is generated.

BarcodeType

This optional parameter determines how the barcode labels are generated. Use random (default) to have the system create the labels using a predefined pattern. If you use template you must specify the BarcodeStartValue; BarcodeLength, BarcodePrefix, and BarcodeSuffix are optional.
BarcodeLength

This optional parameter defines the total number of characters in the barcode used by the cartridges in the virtual tape library created by this command. The value is either 6 or 8. If not included, a default value of 8 is used.

BarcodePrefix

This optional parameter defines characters which form the barcode prefix. The value is an alphanumeric string from 0 to 3 characters; special characters (for example, #, @, &) are not permitted. You cannot use any of the following reserved prefixes: C, CL, D. If not included, no prefix is used.

BarcodeSuffix

This optional parameter defines characters which form the barcode suffix. The value is an alphanumeric string from 0 to 3 characters; special characters (for example, #, @, &) are not permitted. If not included, no suffix is used.

BarcodeStartValue

This parameter defines the starting value used to generate barcodes when the automatic barcode generation is enabled. This parameter is only required if the BarcodeType is set to "template." If the generated barcode is fewer than 8 characters long, it will be padded with zeros. The entire barcode including the prefix and suffix cannot exceed 8 characters.

PhysicalQuotaEnabled

This optional parameter determines if a physical quota should be set for a library. If not included, no quota is used.

PhysicalQuota

This parameter defines the physical quota in GB. If the physical size of the library exceeds this value, the library becomes read-only. The parameter is only required if PhysicalQuotaEnabled is set to "yes."

LogicalQuotaEnabled

This optional parameter determines if a logical quota should be set for a library. If not included, no quota is used.

Logical Quota

This parameter defines the logical quota in GB. If the logical size of the library exceeds this value, the library becomes read-only. The parameter is only required if LogicalQuotaEnabled is set to "yes."

encrypt

This optional parameter defines whether the tape library should be encrypted at creation. The default value is false.

Application

This optional parameter defines what backup application is used to back up to the new library.

ApplicationOther

This optional parameter defines a custom backup application or one that is not in the Application list. This parameter is ignored unless Application is set to "Other."

Datatype

This optional parameter defines what data the new library will hold.

DatatypeOther

This parameter is ignored unless Datatype is set to "Other."
Authority
Administrator

Example commands and responses
This example command creates a virtual tape library.
# vtl create library
Command Successful

This example command creates a virtual tape library with specific parameters.
# vtl create library set1 name MyLib1 interface FC libemulation Generic driveemulation LTO4 noofslots 40 cartsize 800 noofdrives 4 port 1,2 encrypt true
Command Successful

This example command creates a virtual tape library with specific parameters.
# vtl create library BarcodeLength 8 BarcodeType template BarcodePrefix AB BarcodeStartValue 39 BarcodeSuffix M
Command Successful

Running the vtl show cartridges on page 195 command returns the following:

Library: LIB4
Name: Library 4
Object Location Slot Barcode  Max Size User Data Protected Mapped
------- -------- ---- -------  -------- --------- --------- ------
CART25 SLOT1  1  AB00039M 800 GB   0 GB      no        no
CART26 SLOT2  2  AB0003AM 800 GB   0 GB      no        no
CART27 SLOT3  3  AB0003BM 800 GB   0 GB      no        no
CART28 SLOT4  4  AB0003CM 800 GB   0 GB      no        no
CART29 SLOT5  5  AB0003DM 800 GB   0 GB      no        no
CART30 SLOT6  6  AB0003EM 800 GB   0 GB      no        no
CART31 SLOT7  7  AB0003FM 800 GB   0 GB      no        no
CART32 SLOT8  8  AB0003GM 800 GB   0 GB      no        no

Command Successful

vtl delete cartridge

Syntax
vtl delete cartridge [SETX] <LIBX> [CARTX|ALL][barcode <string>] [mail <number>] [slot <number>]

Description
Deletes a single cartridge or all cartridges from a virtual tape library. This command can take up to 30 minutes to complete execution.

Specifiers
SETX
This object defines the service set containing the virtual tape library from which the cartridge is deleted. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700,
4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

**LIB**<sub>X</sub>

This required object is the virtual tape library from which the cartridge is deleted. <sub>X</sub> is the numeric index of the library.

**NOTE:** This is the library object name, not the user-defined name of the library. Locate the LIB<sub>X</sub> object name for a library using the `vtl show library list` command (see `vtl show library list` on page 201 for more information).

**CART**<sub>X</sub>

This object is the virtual cartridge to be deleted. <sub>X</sub> is a numeric index which uniquely defines the cartridge. Use the global default, ALL, to delete all the cartridges in the defined virtual library. If not defined, use another parameter to define the cartridge to delete.

**Parameters**

- **barcode**
  
  This optional parameter defines the barcode label of the cartridge to be deleted. The value is a character string which matches a barcode label of a cartridge in the virtual library. If this parameter is not defined, another parameter must be used to define the cartridge to be deleted from the virtual library.

- **mail**
  
  This optional parameter defines the mail slot location of the cartridge to be deleted. The value is a number which matches a mail slot location which contains a cartridge in the virtual library. If this parameter is not defined, another parameter must be used to define the cartridge to be deleted from the virtual library.

- **slot**
  
  This optional parameter defines the slot location of the cartridge to be deleted. The value is a number which matches a slot location which contains a cartridge in the virtual library. If this parameter is not defined, another parameter must be used to define the cartridge to be deleted from the virtual library.

**Authority**

Administrator

**Example command and response**

This example command deletes a cartridge in LIB1, slot 3.

```
# vtl delete cartridge LIB1 slot 3
```

Warning - The cartridge(s) to be deleted may contain data, continue? y/n  y

Command Successful

**vtl delete cartridges**

**Syntax**

```
vtl delete cartridges [SETX] <LIBX> from SLOT<num> to SLOT<num> [DeleteData {Yes|No}]
```
Description
Deletes a range of cartridges from a given tape library. No slots in the range can be replication targets. This command can take up to 30 minutes to complete execution.

Specifiers
SETX
This object defines the service set containing the virtual tape library from which the cartridge(s) are deleted. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

LIBX
This object is the virtual tape library from which the cartridge(s) is deleted. X is the numeric index of the library.

Parameters
from SLOT<num>
This required parameter defines the first slot in the range of slots to be erased. The value is a slot identifier, and the range is inclusive. No slots in the range can be part of a replication target mapping.

to SLOT<num>
This required parameter defines the last slot in the range of slots to be erased. The value is a slot identifier, and the range is inclusive. No slots in the range can be part of a replication target mapping.

DeleteData {Yes|No}
This optional parameter defines whether or not to include cartridges which have data and defaults to No. If set to Yes, cartridges within the provided range that have data will be deleted; if set to No, they will be ignored. The command will still delete the other, empty cartridges.

Authority
Administrator

Example command and response
This example command deletes a range cartridge in LIB1 from SLOT1 to SLOT8.

# vtl delete cartridges LIB1 from SLOT1 to SLOT8

Warning – Any data on the cartridges will be lost, continue? (y/n) y

Command Successful

vtl delete library

Syntax
vtl delete library <SETX> <LIBX>

Description
Deletes a virtual tape library.
**Specifiers**

**SETX**

This object defines the service set containing the virtual tape library that is to be deleted. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

**LIBX**

This required object is the virtual tape library that is to be deleted. X is the numeric index of the library.

**NOTE:** This is the library object name, not the user-defined name of the library. Locate the LIBX object name for a library using the `vtl show library list` command (see `vtl show library list` on page 201 for more information).

**Authority**

Administrator

**Example command and response**

This example command deletes LIB4.

```bash
# vtl delete library LIB4
Command Successful
```

**vtl erase cartridge**

**Syntax**

```
vtl erase cartridge [SETX] <LIBX> [CARTX|ALL] [barcode <string>] [mail <num>] [slot <num>]
```

**Description**

Erases data on a cartridge from a given virtual tape library or erases all the cartridges from a given library. This operation leaves the cartridge configuration intact.

**Specifiers**

**SETX**

This object defines the service set containing the virtual tape library from which cartridges is deleted. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

**LIBX**

This object is the virtual tape library from which the cartridges are erased. X is the numeric index of the library.

**CARTX**

The optional object defines the virtual cartridge erased by the command. X is a numeric index which uniquely defines the cartridge. Instead of this object, the global default ALL may be used. If ALL is used, all the cartridges in the defined virtual library are erased. If the object is not defined, a parameter must be used to define the cartridge to be deleted.
Parameters

barcode
This optional parameter defines the barcode label of the cartridge to be erased. The value is a character string which must match a barcode label of a cartridge in the virtual library defined by LIBX. If this parameter is not defined, another parameter must be used to define the cartridge to be erased from the virtual library.

mail
This optional parameter defines the mail slot location of the cartridge to be erased. The value is a number which must match a mail slot location which contains a cartridge in the virtual library defined by LIBX. If this parameter is not defined, another parameter must be used to define the cartridge to be erased from the virtual library. The slot cannot be a replication target.

slot
This optional parameter defines the slot location of the cartridge to be erased. The value is a number which must match a slot location which contains a cartridge in the virtual library defined by LIBX. If this parameter is not defined, another parameter must be used to define the cartridge to be erased from the virtual library. The slot cannot be a replication target.

Authority
Administrator

Example command and response
This example command erases data on cartridge LIB1, slot 3.

# vtl erase cartridge LIB1 slot 3

Warning – Any data on the cartridge(s) will be lost, continue?  (y/n) y

Command Successful

vtl erase cartridges

Syntax

vtl erase cartridges [SETX] <LIBX> from SLOT<num> to SLOT<num>

Description
Erases a range of cartridges within a given virtual tape library.

Specifiers

SETX
This object defines the service set containing the virtual tape library from which cartridges are erased. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

LIBX
This object is the virtual tape library from which cartridges are deleted. X is the numeric index of the library.
Parameters

from SLOT<num>

This required parameter defines the first slot in the range of slots to be erased. The value is a slot identifier, and the range is inclusive. No slots in the range can be part of replication target mapping.

to SLOT<num>

This required parameter defines the last slot in the range of slots to be erased. The value is a slot identifier, and the range is inclusive. No slots in the range can be part of a replication target mapping.

Authority

Administrator

Example command and response

This example command erases data on cartridge LIB1 from SLOT1 to SLOT8.

# vtl erase cartridges LIB1 from SLOT1 to SLOT8

Warning – Any data on the cartridge(s) will be lost, continue?  (y/n) y

Command Successful

vtl modify cartridge

Syntax

vtl modify cartridge <SETX> <LIBX> [{CARTX|ALL}] [slot <num>] [WriteProtect {yes|no}] [barcode <string>] [CartSize {10|25|50|100|200|400|800|1000|1200|1400|1600|3200}]

Description

Modifies the parameters of an existing cartridge.

Specifiers

SETX

This object defines the service set containing the virtual tape library that contains the cartridge to be modified. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

LIBX

This required object is the virtual tape library that contains the cartridge to be modified. X is the numeric index of the library.

NOTE: This is the library object name, not the user-defined name of the library. Locate the LIBX object name for a library using the vtl show library list command (see vtl show library list on page 201 for more information).

CARTX

This optional object is the cartridge to be modified. X is a numeric index which uniquely defines the cartridge. If not defined, the cartridge to be modified must be defined by the slot parameter. Alternatively use the global default, ALL, to modify all the cartridges in the defined virtual library.
Parameters

slot
This optional parameter defines the slot in which the cartridge to be modified is located. The value for this parameter consists of an integer corresponding to the slot location in the virtual tape library. If not defined, the cartridge to be modified must be defined by the CARTX object or the global default ALL.

WriteProtect
This optional parameter determines if data can only be read from the cartridge. The value is either yes or no. Yes indicates that data cannot be written to the cartridge, and no indicates that data can be written to the cartridge. If not included, the current value remains unchanged.

barcode
This optional parameter consists of a string of characters defining the new barcode to replace the existing barcode on the cartridge. The barcode string must conform to the barcode parameter of the virtual tape library containing the cartridge. If not included, the current value remains unchanged. The parameter cannot be used when the global default ALL is used to define all the cartridges in the library.

CartSize
This optional parameter defines the size in GB to which the cartridge is modified. The values are defined in the Command Syntax. If not included, the current value remains unchanged. If the cartridges to be modified contain more user data than the defined cartridge size, an error is generated.

Authority
Administrator

Example command and response
This example command modifies parameters on cartridge LIB1 CART5 barcode ABC123.

# vtl modify cartridge LIB1 CART5 barcode ABC123

Command Successful

vtl modify drive

Syntax
vtl modify drive <SETX> <LIBX> <DRVX> [Drive Emulation {LTO2|LTO3|LTO4|LTO5|UltriumVT|IBM-LTO3|IBM-LTO5 IBMi}] [DrivePort <number>] [iSCSIname <string>] [iUsername <string>] [wwpn <wwpn>] [wwnn <wwnn>]

Description
Modifies a drive which already exists within a library.

Specifiers

SETX
This object defines the service set containing the virtual tape library that contains the drive to be modified. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.
LIBX
This required object is the virtual tape library that contains the drive to be modified. X is the numeric index of the library.

NOTE: This is the library object name, not the user-defined name of the library. Locate the LIBX object name for a library using the vtl show library list command (see vtl show library list on page 201 for more information).

DRVX
This required object is the drive to be modified. X is a numeric index which uniquely defines the drive.

Parameters

DriveEmulation
This optional parameter defines the type of physical drive the virtual tape drive emulates. The values are defined in the Command Syntax. If not defined, the current value remains unchanged.

DrivePort
This optional parameter defines which physical port on the node is used by the virtual drive and is only valid if the library interface is Fibre Channel. If the virtual drive interface is not Fibre Channel, defining this generates an error. The value is a number corresponding to the ports as defined by the vtl show ports on page 201 command. If not defined, the current value remains unchanged.

iSCSIName
This optional parameter defines the iSCSI initiator name and is only valid if the interface is iSCSI. If the VTL’s interface is not iSCSI, defining this generates an error. The value is a text string with a maximum of 224 characters. If not defined, the current value remains unchanged.

iUserName
This optional parameter defines the initiator user name for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the initiator log on is enabled. If the initiator log on is enabled and this is not defined, an error is generated. The value is a text string with a maximum of 224 characters.

WWPN
This optional parameter defines the worldwide port name if the virtual drive uses Fibre Channel ports. If the virtual drive interface is not Fibre Channel, defining this generates an error. The value must be a worldwide port name. If not defined, the current value remains unchanged.

WWNN
This optional parameter defines the worldwide node name of the drive if the virtual drive uses Fibre Channel ports. If the virtual drive does not use Fibre Channel, defining this generates an error. The value must be a valid worldwide name. If not defined, the current value remains unchanged.

Authority
Administrator

Example command and response
This example command modifies drive LIB2 DRV3 DrivePort 1.

# vtl modify drive LIB2 DRV3 DrivePort 1

Command Successful
vtl modify library

Syntax

StoreOnce 6500 and 6600 Systems:

```
vtl modify library [SETX] <LIBX> [name <string>] [interface {None|FC}]
[LibEmulation {Generic|MSL2X24|MSL4X48|MSL8X96|EML|ESL|IBM-TS3500|IBM-TS3500IBM}]
[DriveEmulation {LTO2|LTO3|LTO4|LTO5|LTO6|UltriumVT}] [IBM-LTO3|IBM-LTO5IBM}]
[NoOfSlots <number>] [CartSize {10|25|50|100|200|400|600|800|1000|1200|1400|1600|3200}] [NoOfDrives <number>] [Port <number> [,<num>]]
[iAuthenticationEnable {yes|no}] [iUsername <string>] [iSecret <string>]
[tAuthenticationEnable {yes|no}] [tUsername <string>] [tSecret <string>]
[BarcodeType {random|template}] [BarcodeLength {6|8}] [BarcodePrefix {none|<number>}] [BarcodeSuffix {none|number}] [BarcodeStartValue <string>]
[PhysicalQuotaEnabled {yes|no}] [PhysicalQuota <number>] [LogicalQuotaEnabled {yes|no}] [LogicalQuota <number>] [Application {Unspecified|Other|DataProtector|NetBackup|BackupExec|Networker|TSM|Simpana|Veeam|vRanger|BridgeHead}] [ApplicationOther <string>] [Datatype {Unspecified|Other|File|Oracle|SQL|SAP|Exchange|Domino|VMWare|Hyper-V}] [DatatypeOther <string>]
```

StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems:

```
vtl modify library <LIBX> [name <string>] [interface {None|iSCSI|FC}]
[LibEmulation {Generic|MSL2X24|MSL4X48|MSL8X96|EML|ESL|IBM-TS3500}]
[DriveEmulation {LTO2|LTO3|LTO4|LTO5|LTO6|UltriumVT}] [NoOfSlots <number>]
[CartSize {10|25|50|100|200|400|600|800|1000|1200|1400|1600|3200}]
[NoOfDrives <number>] [Port <number> [,<num>]] [iSCSIname <string>]
[iAuthenticationEnable {yes|no}] [iUsername <string>] [iSecret <string>]
[tAuthenticationEnable {yes|no}] [tUsername <string>] [tSecret <string>]
[BarcodeType {random|template}] [BarcodeLength {6|8}] [BarcodePrefix {none|<number>}] [BarcodeSuffix {none|number}] [BarcodeStartValue <string>]
[PhysicalQuotaEnabled {yes|no}] [PhysicalQuota <number>] [LogicalQuotaEnabled {yes|no}] [LogicalQuota <number>] [Application {Unspecified|Other|DataProtector|NetBackup|BackupExec|Networker|TSM|Simpana|Veeam|vRanger|BridgeHead}] [ApplicationOther <string>] [Datatype {Unspecified|Other|File|Oracle|SQL|SAP|Exchange|Domino|VMWare|Hyper-V}] [DatatypeOther <string>]
```

Description

Modifies an existing library.

Specifiers

**SETX**

This object defines the service set containing the virtual tape library to be modified. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

**LIBX**

This required object is the virtual tape library to be modified. X is the numeric index of the library.

**NOTE:** This is the library object name, not the user-defined name of the library. Locate the LIBX object name for a library using the vtl show library list command (see vtl show library list on page 201 for more information).
Parameters

name

This optional parameter is used to create a human readable label for the virtual tape library modified by this command. The value is a text string of up to 30 characters. If the value contains spaces, the value must be enclosed within quotations. If not included in the command, the label is defined by the text, Library, followed by the numeric index X defined for the LIBX object modified by this command.

Interface

This optional parameter defines the physical interface to be used by the virtual library modified by this command. The value is either FC (default for StoreOnce 6500 and 6600 Systems) or iSCSI (default for all other systems).

LibEmulation

This optional parameter defines the type of physical library to be emulated by the virtual tape library modified by this command. The values are defined in the Command Syntax. If the parameter is not defined, the default Generic is used. The characteristics for the different emulation types are described in the following table.

<table>
<thead>
<tr>
<th>Emulation Type</th>
<th>Drive Emulation</th>
<th>No. of Drives</th>
<th>No. of Slots</th>
<th>No. of Mail Slots</th>
<th>Size of Cartridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic</td>
<td>LTO4</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>MSL2X24</td>
<td>LTO4</td>
<td>2</td>
<td>24</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>MSL4X48</td>
<td>LTO4</td>
<td>4</td>
<td>48</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>MSL8X96</td>
<td>LTO4</td>
<td>8</td>
<td>96</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>EML</td>
<td>LTO4</td>
<td>1</td>
<td>96</td>
<td>1</td>
<td>800 GB</td>
</tr>
<tr>
<td>ESL</td>
<td>LTO4</td>
<td>1</td>
<td>96</td>
<td>1</td>
<td>800 GB</td>
</tr>
</tbody>
</table>

Note also that options exist for IBM tape emulation as well.

DriveEmulation

This optional parameter defines the type of physical drive the virtual tape drive emulates. The values are defined in the Command Syntax. If the parameter is not defined, the default value corresponds to the default drive type defined by the library’s emulation type.

NoOfSlots

This optional parameter defines the number of cartridge slots in the virtual library modified by this command. The number of slots must conform to the library emulation type. The value has a maximum of 16,384 characters. If not included, the default value is defined by the library emulation type.

NoOfDrives

This optional parameter defines the number of drives in the virtual library modified by this command. The number of drives must conform to the library emulation type. The value has a maximum of 192 characters. If not included, the default value is defined by the library emulation type.
Port

This optional parameter defines the physical Fibre Channel ports which are assigned to the library’s robotic arm and virtual drives and is only valid if the library interface is Fibre Channel. The value is defined by a number or a set of numbers (separated by commas) corresponding to the ports as defined by the vtl show ports on page 201 command. All the ports listed are assigned to the robotic arm. If only one port value is assigned to this parameter, the port is assigned to all the virtual drives in the library. If more than one port number is defined, the ports are alternatively assigned to the drives in the library in a round robin fashion. If not defined, the value is set to the default for Fibre Channel libraries. The default depends on the Fibre Channel configuration of the service set’s current node.

iSCSIName

This parameter defines the iSCSI initiator name and is required if the interface is iSCSI. If the VTL’s interface is not iSCSI, defining this generates an error. The value is a text string with a maximum of 224 characters. If not defined, the default is a null string.

iAuthenticationEnable

This optional parameter defines if the CHAP (challenge handshake authentication protocol) initiator log on is enabled. The value for this parameter is either yes or no. If not defined, the default value is no.

iUserName

This optional parameter defines the initiator user name for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the initiator log on is enabled. If the initiator log on is enabled and this is not defined, an error is generated. The value is a text string with a maximum of 224 characters.

iSecret

This parameter defines the initiator secret for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the initiator log on is enabled. If the initiator log on is enabled and this parameter is not defined, an error is generated.

tAuthenticationEnable

This optional parameter defines if the CHAP (challenge handshake authentication protocol) target log on is enabled. The value for this parameter is either yes or no. If not defined, the default value is no.

tUserName

This optional parameter defines the target user name for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the target log on is enabled. If the target log on is enabled and this is not defined, an error is generated. The value is a text string with a maximum of 224 characters.

tSecret

This parameter defines the target secret for the CHAP (challenge handshake authentication protocol) and is only valid if the interface is iSCSI, and the target log on is enabled. If the target log on is enabled and this parameter is not defined, an error is generated.

BarcodeType

This optional parameter determines how the barcode labels are generated. Use random (default) to have the system create the labels using a predefined pattern. If you use template you must specify the BarcodeStartValue; BarcodeLength, BarcodePrefix, and BarcodeSuffix are optional.

BarcodeLength

This optional parameter defines the total number of characters in the barcode used by the cartridges in the virtual tape library modified by this command. The value is either 6 or 8. If not included, a default value of 8 is used.
**BarcodePrefix**

This optional parameter defines characters which form the barcode prefix. The value is an alphanumeric string from 0 to 3 characters; special characters (for example, #, @, &) are not permitted. You cannot use any of the following reserved prefixes: C, CL, D. If not included, no prefix is used.

**BarcodeSuffix**

This optional parameter defines characters which form the barcode suffix. The value is an alphanumeric string from 0 to 3 characters; special characters (for example, #, @, &) are not permitted. If not included, no suffix is used.

**BarcodeStartValue**

This parameter defines the starting value used to generate barcodes when the automatic barcode generation is enabled. This parameter is only required if the BarcodeType is set to “template.” If the generated barcode is fewer than 8 characters long, it will be padded with zeros. The entire barcode including the prefix and suffix cannot exceed 8 characters.

**PhysicalQuotaEnabled**

This optional parameter determines if a physical quota should be set for a library. If not included, no quota is used.

**PhysicalQuota**

This parameter defines the physical quota in GB. If the physical size of the library exceeds this value, the library becomes read-only. The parameter is only required if PhysicalQuotaEnabled is set to “yes.”

**LogicalQuotaEnabled**

This optional parameter determines if a logical quota should be set for a library. If not included, no quota is used.

**Logical Quota**

This parameter defines the logical quota in GB. If the logical size of the library exceeds this value, the library becomes read-only. The parameter is only required if LogicalQuotaEnabled is set to “yes.”

**Application**

This optional parameter defines what backup application is used to back up to the new library.

**ApplicationOther**

This optional parameter defines a custom backup application or one that is not in the Application list. This parameter is ignored unless Application is set to “Other.”

**Datatype**

This optional parameter defines what data the new library will hold.

**DatatypeOther**

This parameter is ignored unless Datatype is set to “Other.”

**Authority**

Administrator

**Example command and response**

This example command modifies library LIB2, name newlib port 2.

```
# vtl modify library LIB2 name newlib port 2

Command Successful
```
vtl move cartridge

Syntax

vtl move cartridge <SETX> <LIBX> [CARTX] [from {drive <number>|mail <number>|slot <number>}] [barcode <string>] to {drive <number>|mail <number>|slot <number>}

Description

Moves a cartridge within a virtual tape library.

Specifiers

SETX

This object defines the service set containing the virtual tape library into which the cartridge is moved. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models. If used on these models it must be defined as SET1.

LIBX

This required object is the virtual tape library in which the cartridge is moved. X is the numeric index of the library.

CARTX

This optional object is the cartridge to be moved. X is a numeric index which uniquely defines the cartridge. If not defined, the location of the cartridge to be moved must be defined in the from or barcode parameter.

Parameters

barcode

This optional parameter identifies the cartridge to be moved by its barcode. If not defined, the cartridge to be moved must be defined with the cartridge object or the from parameter.

from

This parameter defines the location from which the cartridge is moved. The value for this parameter is text defining a slot, drive, or mail slot location. The location must exist within the defined library. If the cartridge object (CARTX) and barcode parameter are not defined, this parameter is required. If defined, this parameter must appear before the to parameter. (If this parameter is defined but the text from is missing from the command sequence, there will not be a command syntax violation.)

to

This required parameter defines the location to which the cartridge is moved. The value is a slot type followed by an integer defining a slot location, drive location, or mail slot. It must be a location within the given library at which a cartridge does not already exist.

Authority

Operator and Administrator

Example command and response

This example command moves a cartridge.

# vtl move cartridge SET2 LIB1 from slot 3 to slot 112

Command Successful
vtl show capacity

Syntax

vtl show capacity [SETX] [LIBX]

Description

Displays details on the library storage used and available at the cluster, service set, or library level. The level of information displayed depends on the objects defined within the command sequence.

Specifiers

SETX

This optional object defines the service set to be displayed. X is the numeric index of the service set.

LIBX

This optional object is the virtual tape library to be displayed. X is the numeric index of the library. If defined, capacity information for the library is displayed.

Authority

Operator and Administrator

Example commands and responses

This example command shows the library storage:

# vtl show capacity

<table>
<thead>
<tr>
<th>Object</th>
<th>Space Used</th>
<th>User Data</th>
<th>Dedupe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>----------</td>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>SET1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIB1</td>
<td>4 TB</td>
<td>20 TB</td>
<td>5:1</td>
</tr>
<tr>
<td>LIB2</td>
<td>5 TB</td>
<td>75 TB</td>
<td>15:1</td>
</tr>
<tr>
<td>Lib3</td>
<td>1 TB</td>
<td>5 TB</td>
<td>5:1</td>
</tr>
<tr>
<td>SET2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIB1</td>
<td>10 TB</td>
<td>20 TB</td>
<td>2:1</td>
</tr>
<tr>
<td>LIB2</td>
<td>5 TB</td>
<td>75 TB</td>
<td>15:1</td>
</tr>
<tr>
<td>Lib3</td>
<td>1 TB</td>
<td>100 TB</td>
<td>100:1</td>
</tr>
</tbody>
</table>

Command Successful

This example command shows the library storage for SET1:

# vtl show capacity SET1

<table>
<thead>
<tr>
<th>Object</th>
<th>Space Used</th>
<th>User Data</th>
<th>Dedupe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>SET1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIB1</td>
<td>4 TB</td>
<td>20 TB</td>
<td>5:1</td>
</tr>
<tr>
<td>LIB2</td>
<td>5 TB</td>
<td>75 TB</td>
<td>15:1</td>
</tr>
<tr>
<td>Lib3</td>
<td>1 TB</td>
<td>5 TB</td>
<td>5:1</td>
</tr>
</tbody>
</table>

Command Successful

This example command shows the library storage for LIB1:

# vtl show capacity LIB1
vtl show cartridges

Syntax

vtl show cartridges <SETX> <LIBX>

Description

Displays information about the cartridges in a given library. This command can take up to 30 minutes to complete execution.

Specifiers

SETX

This object defines the service set containing the virtual library to be displayed. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems; if not defined, the capacity information is provided at the cluster level. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

LIBX

This required object is the virtual tape library that contains the cartridge to be displayed. X is the numeric index of the library.

Authority

Operator and Administrator

Example commands and responses

This example command shows the virtual cartridges in SET1, LIB1:

# vtl show cartridges SET1 LIB1

Library : LIB1
Name: Gregslib
Object | Location | Slot | Barcode | Max Size | User Data | Protected | Mapped |
------- | -------- | ---- | ------- | -------- | --------- | --------- | ------ |
CART1 |         | 1    | ABC001YZ | 800 GB   | 745 GB    | yes       | no     |
CART2 |         | 2    | ABC002YZ | 800 GB   | 712 GB    | yes       | no     |
CART3 | Drive2  | 3    | ABC003YZ | 800 GB   | 799 GB    | yes       | no     |
CART4 |         | 4    | ABC004YZ | 800 GB   | 785 GB    | yes       | no     |
CART5 |         | 5    | ABC005YZ | 800 GB   | 455 GB    | yes       | no     |
CART6 |         | 6    | ABC006YZ | 800 GB   | 601 GB    | yes       | no     |
CART7 |         | 7    | ABC007YZ | 800 GB   | 100 GB    | yes       | no     |
CART8 |         | 8    | ABC008YZ | 800 GB   | 767 GB    | yes       | no     |
CART9 |         | 9    | ABC009YZ | 800 GB   | 35 GB     | yes       | no     |

Command Successful

This example command shows the virtual cartridges in LIB1:

# vtl show cartridges LIB1

Library : LIB1
Name: Gregslib
Object | Location | Slot | Barcode | Max Size | User Data | Protected | Mapped |
------- | -------- | ---- | ------- | -------- | --------- | --------- | ------ |
CART1 |         | 1    | ABC001  | 800 GB   | 745 GB    | yes       | no     |
CART2 |         | 2    | ABC002  | 800 GB   | 712 GB    | yes       | no     |
CART3 | Drive2  | 3    | ABC003  | 800 GB   | 799 GB    | yes       | no     |
CART4 |         | 4    | ABC004  | 800 GB   | 785 GB    | yes       | no     |

Command Successful

Alphabetical List of Commands and Details
**vtl show drive info**

**Syntax**

```bash
vtl show drive info <SETX> <LIBX> [DRVX]
```

**Description**

Displays information about a given virtual drive or all the virtual drives in a given library.

**Specifiers**

**SETX**

This object defines the service set containing the virtual library drives to be displayed. X is the numeric index of the service set. This object is required for StoreOnce 6500 and 6600 Systems, if not defined, the capacity information is provided at the cluster level. The object is optional for StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (and older models). If used on these models it must be defined as SET1.

**LIBX**

This required object is the virtual tape library that contains the drive to be displayed. X is the numeric index of the library.

**DRVX**

This optional object is the drive to be described. X is the numeric index of the library. If not defined, information about all drives in the library is displayed.

**Authority**

Operator and Administrator

**Example commands and responses**

This example command shows the virtual drives in SET1, LIB1:

```bash
# vtl show drive info SET1 LIB1
```

```
Drive Object           : DRV1
Library                : LIB1
Library Name           : Gregslib
Emulation Type         : LTO4
Protocol               : Fibre Channel
  Serial Number        : H123D45E00
  WWNN                 : 5001438017871D33
  Port                 : 1
  FC Address         : 0x9F1723
  WWPN               : 5001438017871D34

Drive Object           : DRV2
Library                : LIB1
Library Name           : Gregslib
Emulation Type         : LTO4
Protocol               : Fibre Channel
  Serial Number        : H123D45E01
  WWNN                 : 5001438017871D36
  Port                 : 2
```

196   Alphabetical List of Commands and Details
FC Address : 0x9F1623
WWPN : 5001438017871D38

Command Successful

This example command shows the virtual drives in LIB2, DRV1:

# vtl show drive info LIB2 DRV1

Drive Object : DRV1
Library : LIB1
Library Name : GregsNextlib
Emulation Type : LTO4
Protocol : iSCSI
  Serial Number : CR2058t021
  WWNN : 500143874B5B68A0
  iSCSI Target Name : ign-1986-03.com.hp.storage.d2dbs.cr206f12e.500143874b5b68a0.library2.drive1
  iSCSI Target Alias : D2DBS.CR206F1F2E.library2.Drive

Command Successful

This example command shows the virtual drives in SET1, LIB1, DRV1:

# vtl show drive info SET1 LIB1 DRV1

Drive Object : DRV1
Library : LIB1
Library Name : Gregslib
Emulation Type : LTO4
Protocol : Fibre Channel
  Serial Number : H123D45E00
  WWNN : 5001438017871D33
  Port : 1
  FC Address : 0x9F1723
  WWPN : 5001438017871D34

Command Successful

vtl show drive list

Syntax

vtl show drive list [SETX] [LIBX]

Description

Lists the drives in a library.

Specifiers

SETX

This optional object defines the service set containing the drives to be listed. X is the numeric index of the service set. If used on StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (or older models), the object must be defined as SET1. If not defined, all drives are listed.
LIBX

This optional object is the virtual tape library that contains the drives to be listed. \(X\) is the numeric index of the library. If defined, a service set must be defined, and only drives within this library are listed.

Authority
Operator and Administrator

Example commands and responses
This example command shows the drives in the library:

```
# vtl show drive list
```

<table>
<thead>
<tr>
<th>Object</th>
<th>Type</th>
<th>Service Set</th>
<th>Library</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB1</td>
<td>Gregslib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB1</td>
<td>Gregslib</td>
</tr>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB2</td>
<td>GregsNextlib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB2</td>
<td>GregsNextlib</td>
</tr>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET2</td>
<td>LIB1</td>
<td>Robslib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET2</td>
<td>LIB1</td>
<td>Robslib</td>
</tr>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET2</td>
<td>LIB2</td>
<td>RobsNextlib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET2</td>
<td>LIB2</td>
<td>RobsNextlib</td>
</tr>
</tbody>
</table>

Command Successful

This example command shows the drives in SET1:

```
# vtl show drive list SET1
```

<table>
<thead>
<tr>
<th>Object</th>
<th>Type</th>
<th>Service Set</th>
<th>Library</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB1</td>
<td>Gregslib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB1</td>
<td>Gregslib</td>
</tr>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB2</td>
<td>GregsNextlib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB2</td>
<td>GregsNextlib</td>
</tr>
</tbody>
</table>

Command Successful

This example command shows the drives in SET1, LIB1:

```
# vtl show drive list SET1 LIB1
```

<table>
<thead>
<tr>
<th>Object</th>
<th>Type</th>
<th>Service Set</th>
<th>Library</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRV1</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB1</td>
<td>Gregslib</td>
</tr>
<tr>
<td>DRV2</td>
<td>LTO4</td>
<td>SET1</td>
<td>LIB1</td>
<td>Gregslib</td>
</tr>
</tbody>
</table>

Command Successful

**vtl show library info**

Syntax

```
v.hl show library info [SETX] [LIBX]
```
Description
Displays library configuration information. The number of library configurations displayed depends on whether a service set and specific library object is defined in the command sequence.

Specifiers
SETX
This optional object defines the service set containing the libraries to be displayed. X is the numeric index of the service set. If used on StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (or older models), the object must be defined as SET1. If not defined, all libraries are displayed.

LIBX
This optional object is the virtual tape library to be displayed. X is the numeric index of the library. If defined, a service set must be defined, and only this library is displayed.

Authority
Operator and Administrator

Example commands and responses
This example command shows the library configuration information:

```
# vtl show library info lib1
```

```
Object                      :  LIB1
Name                        :  bobslib
Creation Time               :  20:19 2012/05/06
Replication Role            :  Non Replicating
Deduplication               :  Enabled
Emulation Type              :  MSL G3 Series (2x24)
Default Drive Emulation     :  LTO4
Protocol                    :  Fibre Channel

Media Changer
  Serial Number              :  H1B600B50J
  WWNN                       :  5001438011A18944
  Port                       :  1
    FC Address               :  0x971623
    WWPN                     :  5001438011A18945
  Port                       :  2
    FC Address               :  0x971623
    WWPN                     :  5001438011A18946

No. of Drives               :  1
No. of Slots                :  24
No. of Cartridges           :  24
  Default Cartridge Size    :  800 GB
  Default Barcode Length    :  8
  Barcode Type              :  Random
  Physical Data Size Quota  :  10 GB
  Logical Data Size Quota   :  10 GB

Command Successful
```
This example command shows the library configuration information for set2, lib2:

```bash
# vtl show library info set2 lib2
```

Object: LIB2
Name: Gregslib
Creation Time: 20:19 2012/05/06
Replication Role: Non Replicating
Deduplication: Enabled
Emulation Type: MSL G3 Series (2x24)
Default Drive Emulation: LTO4
Protocol: iSCSI

Media Changer
Serial Number: H1B600B50J
iSCSI WNN: 5001438011A18947
iSCSI Name: ign.1986-03.com.hp:storage.d2dbs.nre0a6b83d.5001438011a18947.library2.robotics
iSCSI Alias: D2DBS.nre0a6b83d.0.Library2.Robotics

Initiator
iSCSI Name: my.iscsi.initiator
Authenticate Initiator: Yes
User Name: iusertname
Authenticate Target: Yes
User Name: tusername

No. of Drives: 1
No. of Slots: 24
No. of Cartridges: 24
Default Cartridge Size: 800 GB
Default Barcode Length: 8
Barcode Type: Template
Barcode Prefix: ZYX
Barcode Suffix: AB
Barcode Start Value: ZYX123AB
Barcode Next Value: ZYX123AB
Physical Data Size Quota: (No Quota)
Logical Data Size Quota: (No Quota)

Command Successful

StoreOnce 6500 and 6600 Systems example:

```bash
# vtl show library
```

Service Set 1:

Object: LIB1
Name: Gregslib

>>>Additional Information<<<

Object: LIB2
Name: GregsNextlib

>>>Additional Information<<<

Service Set 2:

Object: LIB1
Name: Robslib

>>>Additional Information<<<

Object: LIB2
Name: RobsNextlib

>>>Additional Information<<<

Command Successful

---

200 Alphabetical List of Commands and Details
vtl show library list

Syntax

vtl show library list [SETX]

Description

Lists the libraries in a cluster.

Specifiers

SETX

This optional object defines the service set containing the libraries to be listed. X is the numeric index of the service set. If used on StoreOnce 2700, 2900, 3100, 3520, 3540, 4500, 4700, 4900, 5100 and 5500 Systems (or older models), the object must be defined as SET1.

Authority

Operator and Administrator

Example commands and responses

This example command shows the library list:

# vtl show library list

<table>
<thead>
<tr>
<th>Object</th>
<th>Service Set</th>
<th>Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIB1</td>
<td>SET1</td>
<td>Library1-1</td>
<td>Online</td>
</tr>
<tr>
<td>LIB2</td>
<td>SET1</td>
<td>Library2-2</td>
<td>Online</td>
</tr>
<tr>
<td>LIB1</td>
<td>SET2</td>
<td>Library1-2</td>
<td>Online</td>
</tr>
<tr>
<td>LIB2</td>
<td>SET2</td>
<td>Library2-2</td>
<td>Online</td>
</tr>
<tr>
<td>LIB3</td>
<td>SET2</td>
<td>Library3-2</td>
<td>Online</td>
</tr>
</tbody>
</table>

Command Successful

This example command shows the library list for SET1:

# vtl show library list SET1

<table>
<thead>
<tr>
<th>Object</th>
<th>Service Set</th>
<th>Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIB1</td>
<td>SET1</td>
<td>Library1</td>
<td>Online</td>
</tr>
<tr>
<td>LIB2</td>
<td>SET1</td>
<td>Library2</td>
<td>Online</td>
</tr>
</tbody>
</table>

Command Successful

vtl show ports

Syntax

vtl show ports

Description

Provides information on the Fibre Channel ports that can be used when creating a VTL without leaving the vtl group of commands. The layout and status of the Fibre Channel ports varies depending on the StoreOnce model and the installed optional hardware cards.
Authority
Operator and Administrator

Usage
Upon successful completion of the command, information on the physical Fibre Channel ports is displayed. The configuration values can be:

- Speed: Auto, 2 Gbs, 4 Gbs, or 8 Gbs
- Connection: Loop, Fabric, or pnt-to-pnt

Example commands and responses
This example command provides information on the Fibre Channel ports.
StoreOnce websites

Hewlett Packard Enterprise Information Library for StoreOnce products
www.hpe.com/info/storeonce/docs

HPE StoreOnce Support Matrix
www.hpe.com/storage/StoreOnceSupportMatrix

HPE StoreOnce Systems QuickSpecs
www.hpe.com/support/StoreOnceQuickSpecs

HPE StoreOnce Data Protection Backup Appliances information page
www.hpe.com/storage/storeonce

General websites

Storage white papers and analyst reports
www.hpe.com/storage/whitepapers

Enter “StoreOnce” into the keyword search box.
Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
  [http://www.hpe.com/info/assistance](http://www.hpe.com/info/assistance)
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:

Information to collect
- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates:
  Hewlett Packard Enterprise Support Center
  [www.hpe.com/support/hpesc](http://www.hpe.com/support/hpesc)
  Hewlett Packard Enterprise Support Center: Software downloads
  [www.hpe.com/support/downloads](http://www.hpe.com/support/downloads)
  Software Depot
  [www.hpe.com/support/softwaredepot](http://www.hpe.com/support/softwaredepot)
- To subscribe to eNewsletters and alerts:
  [www.hpe.com/support/e-updates](http://www.hpe.com/support/e-updates)
- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center More Information on Access to Support Materials page:
IMPORTANT: Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

http://www.hpe.com/support/selfrepair

Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

Remote support and Proactive Care information

HPE Get Connected

www.hpe.com/services/getconnected

HPE Proactive Care services

www.hpe.com/services/proactivecare

HPE Proactive Care service: Supported products list

www.hpe.com/services/proactivecaresupportedproducts

HPE Proactive Care advanced service: Supported products list

www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information

Proactive Care central

www.hpe.com/services/proactivecarecentral

Proactive Care service activation

www.hpe.com/services/proactivecarecentralgetstarted

Warranty information

To view the warranty information for your product, see the links provided below:

HPE ProLiant and IA-32 Servers and Options

www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise and Cloudline Servers

www.hpe.com/support/EnterpriseServers-Warranties

HPE Storage Products

www.hpe.com/support/Storage-Warranties

HPE Networking Products

www.hpe.com/support.Networking-Warranties
Regulatory information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

www.hpe.com/info/reach

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

www.hpe.com/info/ecodata

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

www.hpe.com/info/environment

Documentation feedback

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hpe.com). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.
Default Enterprise URL

storage-support.glb.itcs.hpe.com
List of Country Codes Supported:

AD=AD-Andorra;
AE=AE-United Arab Emirates;
AF=AF-Afghanistan;
AG=AG-Antigua and Barbuda;
AI=AI-Anguilla;
AL=AL-Albania;
AM=AM-Armenia;
AN=AN-Netherlands Antilles;
AO=AO-Angola;
AQ=AQ-Antarctica;
AR=AR-Argentina;
AS=AS-American Samoa;
AT=AT-Austria;
AU=AU-Australia;
AW=AW-Aruba;
AZ=AZ-Azerbaijan;
BA=BA-Bosnia and Herzegovina;
BB=BB-Barbados;
BD=BD-Bangladesh;
BE=BE-Belgium;
BF=BF-Burkina Faso;
BG=BG-Bulgaria;
BH=BH-Bahrain;
BI=BI-Burundi;
BJ=BJ-Benin;
BL=BL-Saint Barthelemy;
BM=BM-Bermuda;
BN=BN-Brunei;
BO=BO-Bolivia;
BR=BR-Brazil;
BS=BS-Bahamas;
BT=BT-Bhutan;
BV=BV-Bouvet Island;
BW= BW-Botswana;
BY=BY-Belarus;
List of Country Codes Supported:

BZ=BZ-Belize;
CA=CA-Canada;
CC=CC-Cocos Islands;
CD=CD-The Democratic Republic Of Congo;
CCF=F-Central African Republic;
CG=CG-Congo;
CH=CH-Switzerland;
CI=CI-Cote d’Ivoire;
CK=CK-Cook Islands;
CL=CL-Chile;
CM=CM-Cameroon;
CN=CN-China;
CO=CO-Colombia;
CR=CR-Costa Rica;
CS=CS-Serbia and Montenegro;
CU=CU-Cuba;
CV=CV-Cape Verde;
CX=CX-Christmas Island;
CY=CY-Cyprus;
CZ=CZ-Czech Republic;
DE=DE-Germany;
DZ=DJ-Djibouti;
DK=DK-Denmark;
DM=DM-Dominica;
DO=DO-Dominican Republic;
DZ=DZ-Algeria;
EC=EC-Ecuador;
EE=EE-Estonia;
EG=EG-Egypt;
EH=EH-Western Sahara;
ER=ER-Eritrea;
ES=ES-Spain;
ET=ET-Ethiopia;
FI=FI-Finland;
FJ=FJ-Fiji;
FK=FK-Falkland Islands;
FM=FM-Micronesia;
FO=FO-Faroe Islands;
FR=FR-France;
GA=GA-Gabon;
GB=GB-United Kingdom;
GD=GD-Grenada;
GE=GE-Georgia;
GF=GF-French Guiana;
GG=GG-Guernsey;
GH=GH-Ghana;
GI=GI-Gibraltar;
GL=GL-Greenland;
GM=GM-Gambia;
GN=GN-Guinea;
GP=GP-Guadeloupe;
GQ=GQ-Equatorial Guinea;
GR=GR-Greece;
GS=GS-South Georgia And The South Sandwich Islands;
GT=GT-Guatemala;
GU=GU-Guam;
GW=GW-Guinea-Bissau;
GY=GY-Guyana;
HK=HK-Hong Kong;
HM=HM-Heard Island And McDonald Islands;
HN=HN-Honduras;
HR=HR-Croatia;
HT=HT-Haiti;
HU=HU-Hungary;
ID=ID-Indonesia;
IE=IE-Ireland;
IL=IL-Israel;
IM=IM-Isle Of Man;
IN=IN-India;
IO=IO-British Indian Ocean Territory;
IQ=IQ-Iraq;
IR=IR-Iran;
IS=IS-Iceland;
IT=IT-Italy;
JE=JE-Jersey;
JM=JM-Jamaica;
List of Country Codes Supported:

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JO=JO-Jordan;
JP=JP-Japan;
KE=KE-Kenya;
KG=KG-Kyrgyzstan;
KH=KH-Cambodia;
KI=KI-Kiribati;
KM=KM-Comoros;
KN=KN-Saint Kitts And Nevis;
KP=KP-North Korea;
KR=KR-South Korea;
KW=KW-Kuwait;
KY=KY-Cayman Islands;
KZ=KZ-Kazakhstan;
LA=LA-Laos;
LB=LB-Lebanon;
LC=LC-Saint Lucia;
LI=LI-Liechtenstein;
LK=LK-Sri Lanka;
LR=LR-Liberia;
LS=LS-Lesotho;
LT=LT-Lithuania;
LU=LU-Luxembourg;
LV=LV-Latvia;
LY=LY-Libya;
MA=MA-Morocco;
MC=MC-Monaco;
MD=MD-Moldova;
ME=ME-Montenegro;
MF=MF-Saint Martin;
MG=MG-Madagascar;
MH=MH-Marshall Islands;
MK=MK-Macedonia;
ML=ML-Mali;
MM=MM-Myanmar;
MN=MN-Mongolia;
MO=MO-Macao;
MP=MP-Northern Mariana Islands;
MQ=MQ-Martinique;
List of Country Codes Supported:

MR=MR-Mauritania;
MS=MS-Montserrat;
MT=MT-Malta;
MU=MU-Mauritius;
MV=MV-Maldives;
MW=MW-Malawi;
MX=MX-Mexico;
MY=MY-Malaysia;
MZ=MZ-Mozambique;
NA=NA-Namibia;
NC=NC-New Caledonia;
NE=NE-Niger;
NF=NF-Norfolk Island;
NG=NG-Nigeria;
NI=NI-Nicaragua;
NL=NL-Netherlands;
NO=NO-Norway;
NP=NP-Nepal;
NR=NR-Nauru;
NU=NU-Niue;
NZ=NZ-New Zealand;
OM=OM-Oman;
PA=PA-Panama;
PE=PE-Peru;
PF=PF-French Polynesia;
PG=PG-Papua New Guinea;
PH=PH-Philippines;
PK=PK-Pakistan;
PL=PL-Poland;
PM=PM-Saint Pierre And Miquelon;
PN=PN-Pitcairn;
PR=PR-Puerto Rico;
PS=PS-Palestine;
PT=PT-Portugal;
PW=PW-Palau;
PY=PY-Paraguay;
QA=QA-Qatar;
RE=RE-Reunion;
RO=RO-Romania;
RS=RS-Serbia;
RU=RU-Russia;
RW=RW-Rwanda;
SA=SA-Saudi Arabia;
SB=SB-Solomon Islands;
SC=SC-Seychelles;
SD=SD-Sudan;
SE=SE-Sweden;
SG=SG-Singapore;
SH=SH-Saint Helena;
SI=SI-Slovenia;
SJ=SJ-Svalbard And Jan Mayen;
SK=SK-Slovakia;
SL=SL-Sierra Leone;
SM=SM-San Marino;
SN=SN-Senegal;
SO=SO-Somalia;
SR=SR-Suriname;
ST=ST-Sao Tome And Principe;
SV=SV-El Salvador;
SY=SY-Syria;
SZ=SZ-Swaziland;
TC=TC-Turks And Caicos Islands;
TD=TD-Chad;
TF=TF-French Southern Territories;
TG=TG-Togo;
TH=TH-Thailand;
TJ=TJ-Tajikistan;
TK=TK-Tokelau;
TL=TL-Timor-Leste;
TM=TM-Turkmenistan;
TN=TN-Tunisia;
TO=TO-Tonga;
TR=TR-Turkey;
TT=TT-Trinidad and Tobago;
TV=TV-Tuvalu;
TW=TW-Taiwan;
List of Country Codes Supported:

TZ=TZ-Tanzania;
UA=UA-Ukraine;
UG=UG-Uganda;
UM=UM-United States Minor Outlying Islands;
US=US-United States;
UY=UY-Uruguay;
UZ=UZ-Uzbekistan;
VA=VA-Vatican;
VC=VC-Saint Vincent And The Grenadines;
VE=VE-Venezuela;
VG=VG-British Virgin Islands;
VI=VI-U.S. Virgin Islands;
VN=VN-Vietnam;
VU=VU-Vanuatu;
WF=WF-Wallis And Futuna;
WS=WS-Samoa;
YE=YE-Yemen;
YT=YT-Mayotte;
ZA=ZA-South Africa;
ZM=ZM-Zambia;
ZW=ZW-Zimbabwe;
Additional regulatory information

Belarus Kazakhstan Russia marking

EAC

Manufacturer and Local Representative Information

Manufacturer information:

Hewlett Packard Enterprise Company, 3000 Hanover Street, Palo Alto, CA 94304 U.S.

Local representative information Russian:

• Russia:
  ООО «Хьюлетт Паккард Энтерпрайз», Российская Федерация, 125171, г. Москва,
  Ленинградское шоссе, 16А, стр.3, Телефон/факс: +7 495 797 35 00

• Belarus:
  ИООО «Хьюлетт-Паккард Бел», Республика Беларусь, 220030, г. Минск,
  ул. Интернациональная, 36-1, Телефон/факс: +375 17 392 28 20

• Kazakhstan:
  ТОО «Хьюлетт-Паккард (К)», Республика Казахстан, 050040,
  г. Алматы, Бостандыкский район, проспект Аль-Фараби, 77/7,
  Телефон/факс: + 7 727 355 35 52

Local representative information Kazakh:

• Russia:
  ЖШС "Хьюлетт Паккард Энтерпрайз", Ресей Федерациясы, 125171,
  Мәскеу, Ленинград тас жолы, 16А блок 3, Телефон/факс: +7 495 797 35 00

• Belarus:
  «HEWLETT-PACKARD Бел» ЖШС, Беларусь Республикасы, 220030, Минск қ.,
  Интернациональная көшесі, 36/1, Телефон/факс: +375 17 392 28 20

• Kazakhstan:
  ЖШС «Хьюлетт-Паккард (К)», Қазақстан Республикасы, 050040, Алматы қ.,
  Бостандық ауданы, Өл-Фараби даярлық, 77/7, Телефон/факс: +7 727 355 35 52

Manufacturing date:

The manufacturing date is defined by the serial number.

CCSYWWZZZZ (serial number format for this product)
Valid date formats include:

- **YWW**, where Y indicates the year counting from within each new decade, with 2000 as the starting point; for example, 238: 2 for 2002 and 38 for the week of September 9. In addition, 2010 is indicated by 0, 2011 by 1, 2012 by 2, 2013 by 3, and so forth.

- **YYWW**, where YY indicates the year, using a base year of 2000; for example, 0238: 02 for 2002 and 38 for the week of September 9.

**Turkey RoHS material content declaration**

Türkiye Cumhuriyeti: AEEE Yönetmeliğine Uygundur

**Ukraine RoHS material content declaration**

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057
Glossary

C

CLI
Command-line interface. An interface comprised of various commands which are used to control operating system responses.

command
elements entered into the Common CLI by the user to convey instructions

command sequence
a sequence of commands which uniquely defines an instruction for the StoreOnce appliance

command set
the entire list of unique command sequences and their associated syntax which provides a clear, unambiguous method for a user to provide instructions to control the operation of a StoreOnce appliance

common CLI
a text-based terminal interface by which you enter instructions for StoreOnce appliances

E

element
a grouping of characters surrounded by white space (typically a word)

F

FTP
file transfer protocol

G

GUI
graphical user interface

I

instruction
a sequence of elements uniquely defining an intended operation

N

NTP
Network Time Protocol. A protocol that enables the storage system’s time and date to be obtained from a network-attached server, keeping multiple hosts and storage devices synchronized.

O

object
an element representing an item in a StoreOnce appliance
object store
    a data backup transfer protocol and standard which allows metadata to be included with the data
    being backed up. This allows further control of the backed up data during its storage.

operation
    an event to control a StoreOnce appliance or to provide/obtain information

parameter
    an element which provides details to refine an operation

TCP
    Transmission Control Protocol

user
    a person interfacing with the Common CLI (can also be an account accessing a CIFS share)

UTC
    Universal Time Coordinate (time definition protocol)

VIF
    Virtual interface.

white space
    any combination of spaces, tabs and carriage returns

word
    an element whose characters having meaning in the natural language of the user. The meaning of the
    word is directly related to the intended operation defined by the words in the command sequence