StorEdge 1000 Enclosure Test (enctest)

enctest tests the StorEdge 1000 enclosures. The enclosure can support either 12 1" 4GB drives or 8 1.6" 9GB drives and have redundant power and cooling. Two enclosure models are available:

- StorEdge A1000 – Disk Tray with the hardware RAID controller
- StorEdge D1000 – Disk Tray without the hardware RAID controller.

enctest can be used for validation, configuration verification, repair verification, and fault isolation of both models.

The enctest probe detects all the connected StorEdge enclosures and displays the status of the various elements in the enclosure.

enctest sets the StorEdge D1000 LEDs as follows:

TABLE 2 enctest Status LEDs

LED State	Indicated Condition
On	Unrecoverable or critical condition
Blinking	Non-critical condition
Off	Informational or no condition to report

Note – NOTE: The ses driver must be present on the system with the StorEdge enclosure(s). If the ses driver is not present, SunVTS will not detect the StorEdge hardware. Use the following command to see if the ses driver is present:
pkginfo SUNWses
Install the package if necessary.

`enctest` reports the status of the various elements in the enclosure. An error is registered if an unrecoverable or critical condition is detected. Non-critical conditions are reported through warning messages. TABLE 3 describes the information that is reported for each enclosure element.

TABLE 3 `enctest` Enclosure Status Report

Enclosure Element	Information reported (per device slot)
Disk	Present/Not Present Failed/OK
Power supply	Present/Not Present Failed/OK
Fan	Present/Not Present Failed/OK
Temperature	OK/Over temperature
RPA cache Battery (StorEdge A1000 only)	OK/Low Charge

`enctest` Options

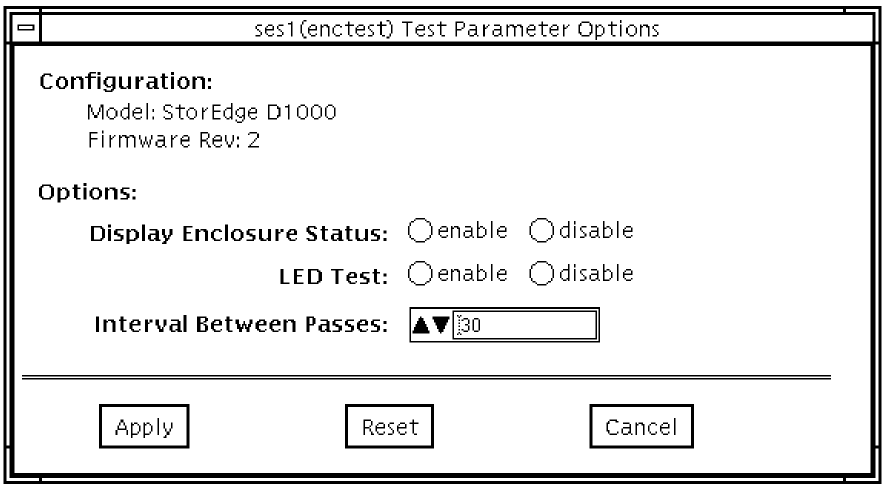

FIGURE 1 `enctest` Options

TABLE 4 `enctest` Options

`enctest` **Options**	**Description**
Display Enclosure Status	When enabled, the status of the enclosure elements are displayed as messages in the SunVTS console. These messages are also logged in the SunVTS info log file.
LED Test	When enabled, the LEDs associated with the disks are flashed for a short period of time.
Interval Between Passes	Sets the minimum delay between successive invocations of the test.

`enctest` Test Modes

TABLE 5 `enctest` Test Modes

Test Mode	Description
Connectivity Mode	The enclosure status summary bits are read. Detailed information is reported only if an unrecoverable or critical condition is detected.
Functional Mode	When started through Symon, the LED test is not allowed and the "Display Enclosure Status" option is disabled by default. When started through the regular SunVTS GUI, all options are allowed.

`enctest` Command Line Syntax

`/opt/SUNWvts/bin/enctest` *standard_arguments* **`-o dev=`***device_name,* **`disp=`***enable|disable,* **`led=`***enable|disable,* **`delay=`***delay_in_seconds*

TABLE 6 `enctest` Command Line Syntax

Argument	Explanation
dev	This is the name of a ses device in the enclosure.
disp	Detailed status information regarding the enclosure elements will be displayed if enabled
l*ed*	Option to enable or disable the LED test.
delay	Minimum delay between successive invocations of the test.

`enctest` Error Messages

TABLE 7 describes the `enctest` error messages, probable causes, and recommended actions.

TABLE 7 `enctest` Error Messages

	Error Message	Probable Cause(s)	Recommended Action
8000	`Failed to open device.`	System error. Cable loose or disconnected or device not configured.	Verify the cable is properly connected and the device configured.Contact your authorized Sun service representative.
8001	`Failed to communicate with the enclosure`	System error. Cable loose or disconnected or device not configured.	Verify the cable is properly connected and the device configured.Contact your authorized Sun service representative.
8002	`Cannot proceed further due to lack of memory`	Heavy system load.	Please try later.
8003	*unrecoverable|critical|non -critical* `informational condition detected in the enclosure`		
8004	`Failed to obtain list of enclosure elements`	System error	Contact your authorized Sun service representative.
8005	`Failed to obtain status of an enclosure element`	System error	Contact your authorized Sun service representative.
8006	`Failed to set the status of an enclosure element`	System error	Contact your authorized Sun service representative.