

NAME

`sg_safte` – access SCSI Accessed Fault–Tolerant Enclosure (SAF–TE) device

SYNOPSIS

`sg_safte` [`--config`] [`--devstatus`] [`--encstatus`] [`--flags`] [`--help`] [`--hex`] [`--insertions`] [`--raw`] [`--usage`] [`--verbose`] [`--version`] *DEVICE*

DESCRIPTION

Fetches enclosure status (via a SCSI READ BUFFER command). The *DEVICE* should be a SAF–TE device which may be a storage array controller (INQUIRY peripheral device type 0xc) or a generic processor device (INQUIRY peripheral device type 0x3).

If no options are given (only the *DEVICE* argument) then the overall enclosure status as reported by the option `--config` is reported.

OPTIONS

Arguments to long options are mandatory for short options as well. The options are arranged in alphabetical order based on the long option name.

–c, --config

will issues a *Read Enclosure Configuration* (READ BUFFER ID 0) cdb to the device, which returns a list of the enclosure hardware resources.

–d, --devstatus

will issue a *Read Device Slot Status* (READ BUFFER ID 4) cdb to the device, which returns information about the current state of each drive or slot.

–s, --encstatus

will issue a *Read Enclosure Status* (READ BUFFER ID 1) cdb to the device, which returns the operational state of the components.

–f, --flags

will issue a *Read Global Flags* (READ BUFFER ID 5) cdb to the device, which read the most recent state of the global flags of the RAID processor device.

–h, --help

output the usage message then exit.

–H, --hex

output the response to a READ BUFFER command in ASCII hex to stdout. If used once, output the response to the first READ BUFFER command (i.e. with `buffer_id=0`). This should be the enclosure configuration. If used twice (or more often), the response to subsequent READ BUFFER commands is output.

–i, --insertions

will issue a *Read Device Insertions* (READ BUFFER ID 3) cdb to the device, which returns information about the number of times devices have been inserted whilst the RAID system was powered on.

–r, --raw

output the response to a READ BUFFER command in binary to stdout. If used once, output the response to the first READ BUFFER command (i.e. with `buffer_id=0`). This should be the enclosure configuration. If used twice (or more often), the response to subsequent READ BUFFER commands is output.

–u, --usage

will issue a *Read Usage Statistics* (READ BUFFER ID 2) cdb to the device, which returns the information on total usage time and number of power–on cycles of the RAID device.

–v, --verbose

increase the level of verbosity, (i.e. debug output).

-V, --version

print the version string and then exit.

NOTES

This implementation is based on the intermediate review document dated 19970414 and named "SR041497.pdf". So it is quite old. Intel and nStor are the authors. Intel have a zip archive containing this and related documents in the "SAF-TE: SCSI Accessed Fault Tolerant Enclosures Interface Specification" section of this page:

<http://www.intel.com/content/www/us/en/servers/ipmi/ipmi-technical-resources.html>

Similar functionality is provided by SPC-4 SCSI Enclosure Services (SES) devices (Peripheral device type 0xd), which can be queried with the `sg_ses` utility.

EXAMPLES

To view the configuration:

```
sg_safte /dev/sg1
```

To view the device slot status:

```
sg_safte --devstatus /dev/sg1
```

EXIT STATUS

The exit status of `sg_safte` is 0 when it is successful. Otherwise see the `sg3_utils(8)` man page.

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REPORTING BUGS

Report bugs to <dgilbert at interlog dot com>.

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SEE ALSO

`sg_inq`, `sg_ses` (in `sg3_utils` package); `safte-monitor` (internet)