

NAME

`sg_turs` – send one or more SCSI TEST UNIT READY commands

SYNOPSIS

`sg_turs` [`--help`] [`--low`] [`--number=NUM`] [`--num=NUM`] [`--progress`] [`--time`] [`--verbose`] [`--version`] *DEVICE*

`sg_turs` [`-n=NUM`] [`-p`] [`-t`] [`-v`] [`-V`] *DEVICE*

DESCRIPTION

This utility sends one or more SCSI TEST UNIT READY commands to the *DEVICE*. This may be useful for timing the per command overhead. Note that TEST UNIT READY has no associated data, just a 6 byte command (with each byte a zero) and a returned SCSI status value.

This utility supports two command line syntaxes, the preferred one is shown first in the synopsis and explained in this section. A later section on the old command line syntax outlines the second group of options.

OPTIONS

Arguments to long options are mandatory for short options as well.

-h, --help

print out the usage message then exit.

-l, --low

when [`--progress`] is not being used, this utility tries to complete the SCSI TEST UNIT READY command(s) as quickly as possible. Usually it calls a library function to do each TUR (`sg_ll_test_unit_ready`). With this option it uses the lower level `sg_pt` interface (see `sg_pt.h`) to save a little time on each TUR.

-n, --number=NUM

performs TEST UNIT READY *NUM* times. If not given defaults to 1. These suffix multipliers are permitted: c C *1; w W *2; b B *512; k K KiB *1,024; KB *1,000; m M MiB *1,048,576; MB *1,000,000; g G GiB *1,073,741,824; and GB *1,000,000,000 . Also a suffix of the form "x<n>" multiplies the leading number by <n>. Alternatively a hex number may be given, prefixed by either '0x' or has a trailing 'h'.

--num=NUM

same as `--number=NUM`. Added for compatibility with `sg_requests` which has taken over the role of polling the progress indication.

-O, --old

Switch to older style options. Please use as first option.

-p, --progress

show progress indication (a percentage) if available. If `--number=NUM` is given, *NUM* is greater than 1 and an initial progress indication was detected then this utility waits 30 seconds before subsequent checks. Exits when *NUM* is reached or there are no more progress indications. Ignores `--time` option. See NOTES section below.

-t, --time

after completing the requested number of TEST UNIT READY commands, outputs the total duration and the average number of commands executed per second.

-v, --verbose

increase level or verbosity.

-V, --version

print version string then exit.

NOTES

The progress indication is optionally part of the sense data. When a prior command that takes a long time to complete (and typically precludes other media access commands) is still underway, the progress indication can be used to determine how long before the device returns to its normal state. Around SPC-3 T10

changed the preferred command for polling the progress indication from TEST UNIT READY to REQUEST SENSE (see the `sg_requests` utility).

The SCSI FORMAT command for disks used with the IMMED bit set is an example of an operation that takes a significant amount of time and precludes other media access during that time. The IMMED bit set instructs the FORMAT command to return control to the application client once the format has commenced (see SBC-3). Several long duration SCSI commands associated with tape drives also use the progress indication (see SSC-3).

The *DEVICE* is opened with a read-only flag (e.g. in Unix with the `O_RDONLY` flag).

Early standards suggested that the SCSI TEST UNIT READY command be used for polling the progress indication. More recent standards seem to suggest the SCSI REQUEST SENSE command should be used instead.

EXIT STATUS

The exit status of `sg_turs` is 0 when it is successful (e.g. in the case of a mechanical disk, it is spun up and ready to accept commands). For this utility the other exit status of interest is 2 corresponding to the "not ready" sense key. For other exit status values see the `sg3_utils(8)` man page.

OLDER COMMAND LINE OPTIONS

The options in this section were the only ones available prior to `sg3_utils` version 1.23 . Since then this utility defaults to the newer command line options which can be overridden by using `--old` (or `-O`) as the first option. See the ENVIRONMENT VARIABLES section for another way to force the use of these older command line options.

`-n=NUM`

performs TEST UNIT READY *NUM* times. If not given defaults to 1. Equivalent to `--number=NUM` in the main description.

`-N, --new`

Switch to the newer style options.

`-p` show progress indication (a percentage) if available. Equivalent to `--progress` in the main description.

`-t` after completing the requested number of TEST UNIT READY commands, outputs the total duration and the average number of commands executed per second. Equivalent to `--time` in the main description.

`-v` increase level of verbosity.

`-V` print out version string then exit.

ENVIRONMENT VARIABLES

Since `sg3_utils` version 1.23 the environment variable `SG3_UTILS_OLD_OPTS` can be given. When it is present this utility will expect the older command line options. So the presence of this environment variable is equivalent to using `--old` (or `-O`) as the first command line option.

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SEE ALSO

`sg_inq`, `sg_requests` (`sg3_utils`)