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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'sg_read_buffer.8' command

\$ man sg_read_buffer.8

SG_READ_BUFFER(8) SG3_UTILS SG_READ_BUFFER(8)

NAME

sg_read_buffer - send SCSI READ BUFFER command

SYNOPSIS

sg_read_buffer [--help] [--hex] [--id=ID] [--inhex=FN] [--length=LEN]
[--mode=MO] [--offset=OFF] [--raw] [--readonly] [--specific=MS] [--ver?
bose] [--version] DEVICE

DESCRIPTION

Sends a SCSI READ BUFFER command to the DEVICE, and if there is a re? sponse either decodes it, prints it in hexadecimal or sends it in bi? nary to stdout. If a response is received for a "descriptor" mode then, in the absence of --hex and --raw, it is decoded. Response for non-de? scriptor modes are output in hexadecimal unless the --raw option is given.

This utility may be called without a DEVICE but with a --inhex=FN op? tion instead. FN is expected to be a file name (or '-' for stdin). The contents of the file (or stdin stream) is assumed to be hexadecimal (or binary) data that represents a SCSI READ BUFFER command response and is decoded as such.

OPTIONS

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

-h, --help

output the usage message then exit. If used multiple times also

prints the mode names and their acronyms.

-H, --hex

output the response in hexadecimal. When given twice the response is output in hex with the corresponding representation in ASCII to the right of each line.

-i, --id=ID

this option sets the buffer id field in the cdb. ID is a value between 0 (default) and 255 inclusive.

-l, --inhex=FN

FN is expected to be a file name (or '-' for stdin) which contains ASCII hexadecimal or binary representing a READ BUFFER response. If known this utility will then decode that response. It is preferable to also supply the --mode=MO and --specific=MS options, since these are not present in the response. The hexadecimal should be arranged as 1 or 2 digits representing a byte each of which is whitespace or comma separated. Anything from and including a hash mark to the end of line is ignored. If the --raw option is also given then FN is treated as binary.

-l, --length=LEN

where LEN is the length, in bytes, that is placed in the "allocation length" field in the cdb. The default value is 4 (bytes). The device may respond with less bytes.

-m, --mode=MO

this option sets the mode field in the cdb. MO is a value between 0 (default) and 31 inclusive. Alternatively an abbreviation can be given. See the MODES section below. To list the available mode abbreviations use an invalid one (e.g. '--mode=xxx'). As an example, to fetch the read buffer descriptor give '--mode=desc'.

-o, --offset=OFF

this option sets the buffer offset field in the cdb. OFF is a value between 0 (default) and $2^{24}-1$. It is a byte offset.

-r, --raw

if a response is received then it is sent in binary to stdout.

-R, --readonly

open the DEVICE read-only (e.g. in Unix with the O_RDONLY flag).

The default is to open it read-write.

-S, --specific=MS

this option sets the mode specific field in the cdb. MS is a value between 0 and 7 as this is a 3 bit field.

-v, --verbose

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

-V, --version

print the version string and then exit.

MODES

Following is a list of READ BUFFER command settings for the MODE field.

First is an acronym accepted by the MO argument of this utility. Fol?

Following the acronym in square brackets are the corresponding decimal and hex values that may also be given for MO. The following are listed in numerical order.

hd [0, 0x0]

Combined header and data (obsolete in SPC-4).

vendor [1, 0x1]

Vendor specific.

data [2, 0x2]

Data.

desc [3, 0x3]

Descriptor: yields 4 bytes that contain an offset boundary field (1 byte) and buffer capacity (3 bytes).

echo [10, 0xa]

Read data from echo buffer (was called "Echo buffer" in SPC-3).

echo_desc [11, 0xb]

Echo buffer descriptor: yields 4 bytes of which the last (lowest) 13 bits represent the echo buffer capacity. The maximum echo buffer size is 4096 bytes.

rd_microc_st [15, 0xf]

Read microcode status. Added in spc5r20 .

en_ex [26, 0x1a]

Enable expander communications protocol and Echo buffer. Made obsolete in SPC-4.

err_hist [28, 0x1c]

Error history. Introduced in SPC-4.

NOTES

All numbers given with options are assumed to be decimal. Alternatively numerical values can be given in hexadecimal preceded by either "0x" or "0X" (or has a trailing "h" or "H").

EXIT STATUS

The exit status of `sg_read_buffer` 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](mailto:dgilbert@interlog.com)>.

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SEE ALSO

`sg_write_buffer(sg3_utils)`

`sg3_utils-1.45`

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`SG_READ_BUFFER(8)`