

NAME

`sg_bg_ctl` – send SCSI BACKGROUND CONTROL command

SYNOPSIS

`sg_bg_ctl` [`--ctl=CTL`] [`--help`] [`--time=TN`] [`--verbose`] [`--version`] *DEVICE*

DESCRIPTION

Sends a SCSI BACKGROUND CONTROL command to the *DEVICE*. This command was first found in the SBC-4 draft standard revision 8 (sbc4r08.pdf). It can be used to start and stop 'advanced background operations' on the *DEVICE*. Only resource or thin provisioned devices (logical units which are typically (solid state) disks) support this command. Those advanced background operations often include garbage collection type operations which may degrade the disk's performance while they are being performed.

OPTIONS

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

-c, --ctl=CTL

CTL is the value placed in the *BO_CTL* field of the BACKGROUND CONTROL command (cdb). It is a two bit field so has 4 variants: 0 does not change the host initiated advanced background operations; 1 starts these operations; 2 stops these operations and 3 is reserved. The default value is 0.

-h, --help

output the usage message then exit.

-t, --time=TN

TN is a maximum time (with a unit of 100 ms or 1/10 second) that advanced background operations can occur. This value is ignored if the *CTL* argument is other than 1. The default value is 0 which means there is no maximum time limit. Only values 0 to 255 (which is 25.5 seconds) can be given. This value is place in the *BO_TIME* field of the BACKGROUND CONTROL command.

-v, --verbose

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

-V, --version

print the version string and then exit.

NOTES

According to T10, support for 'background control operations' is indicated by the BOCS bit being set in the Block device characteristics VPD page [0xb1]. The setting of the BOCS bit can be checked with the `sg_vpd` and `sdparm` utilities (and it is read only). There is a Background operations control mode page [0xa, 0x6] with a *BO_MODE* field for modifying the action of this operation. The *BO_MODE* field can be accessed and possibly modified with the `sdparm` utility. The *BO_STATUS* field can be found in the Background operation log page [0x15, 0x2] and that can be viewed with the `sg_logs` utility.

The current draft describing this area is SBC-4 revision 10 (sbc4r10.pdf) in clause 4.33 . That contains the following example of a background operation: "Advanced background operation may include NAND block erase operations, media read operations, and media write operations (e.g., garbage collection), which may impact response time for normal read requests or write requests from the application client."

EXIT STATUS

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

AUTHORS

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REPORTING BUGS

Report bugs to <dgilbert at interlog dot com>.

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SEE ALSO

sg_vpd,sg_logs(sg3_utils); sdparm(sdparm)