

SCSI TOOLBOX, LLC

Log Page Information

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LOG Page Info

LOG PAGES are used to store performance and error data within a SCSI/FC/SAS device as it is running.

They are read using the LOG SENSE command, and written using the LOG SELECT command.

This information is organized in pairs of LOG PAGE/PARAMETER. Some common LOG PAGES are:

Page Code	Description
0Fh	Application Client page
01h	Buffer Over-run/Under-run page
37h	Cache Statistics page
03h	Error Counter page (Read)
04h	Error Counter page (Read Reverse)
05h	Error Counter page (Verify)
02h	Error Counter page (Write)
3Eh	Factory Log page
0Bh	Last <i>n</i> Deferred Errors or Asynchronous Events page
07h	Last <i>n</i> Error Events page
06h	Non-medium Error page
10h	Self-test Results page
0Eh	Start-stop Cycle Counter page
00h	Supported Log pages
0Dh	Temperature page
08h - 0A	Reserved
0Ch	Reserved
11h - 2Fh	Reserved
3Fh	Reserved
30h - 3Eh	Vendor specific (37h and 3Eh are used above)

Example of LOG PARAMETER

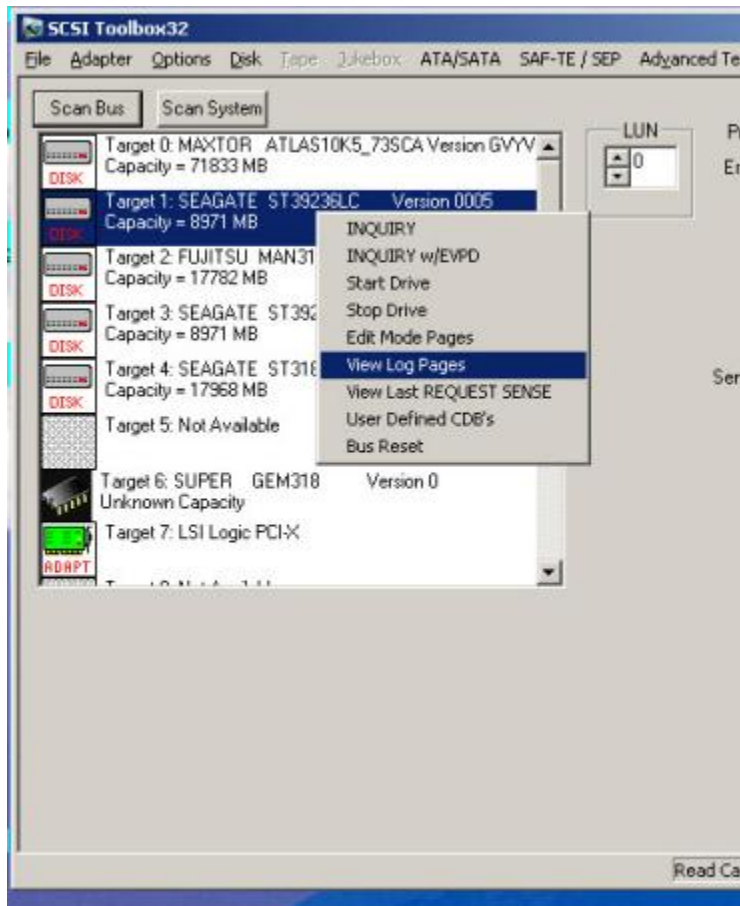
This is an example of typical LOG PARAMETER, for the write and read error pages:

Parameter	Definition	Description	DU	LP	LBIN
0	Errors corrected without substantial delay	Not supported	0	0	0
1	Errors corrected with possible delays	Not supported	0	0	0
2	Total	Not supported	0	0	0
3	Total errors corrected	Total Write Retries less Total Unrecovered Write Errors	0	0	0
4	Total times error correction processed	Total Write Retries	0	0	0
5	Total bytes processed	Total Data Sets Written	0	0	0
6	Total uncorrected errors	Total Unrecovered Write Errors	0	0	0
8000h	Undefined		0	0	0
8001h	Undefined		0	0	0

I recommend getting the manufacturers SCSI documentation for each drive you are interested in so you can see what pages have been implemented and if there are any vendor unique pages.

Viewing LOG PAGES in STB Original mode

Select a drive in the device display, then right-click on it to bring up the Quick Command menu:



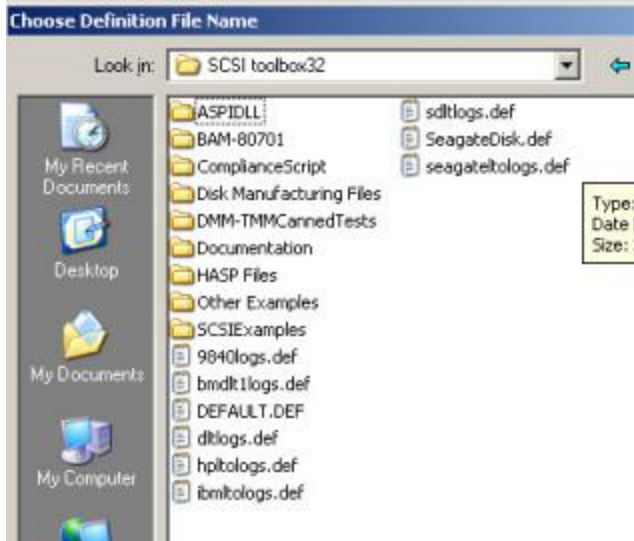
Select View Log Pages

This is what the “raw” page/parameter data will look like – fine if you are comparing with the specs but not so good to read – so click on the **“Browse”** button, navigate to your default STB folder, and select an appropriate “.def” file.

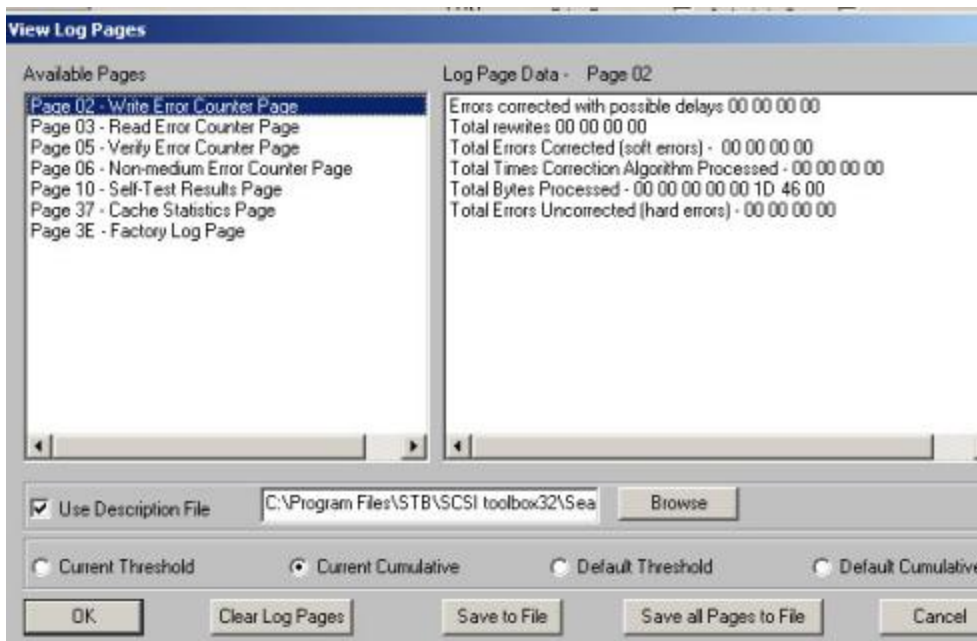
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Default.def is a generic def file for disks. Now things will look like this:



These .def files are text files which you can edit, create custom ones with your company specific page/parameter data.

Clicking **Clear Log Pages** will zero out any valid pages.

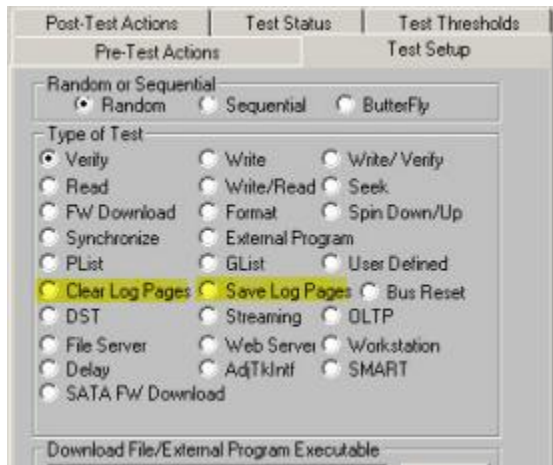
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LOG PAGES and DMM

You can save all LOG PAGE data into the drive log files by specifying the Save Log Pages test type in a test sequence. Use Clear Log Pages to clear them.



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You can also screen (fail) drives using the DMM Thresholds settings. Select the **Test Thresholds** tab,

Then specify either the standard/generic # of Re-Reads or Re-Writes (looking at LOG PAGEs 2 & 3), or specify up to six specific PAGE/PARAMETER pairs with the value that you want to stay under.

The screenshot shows a software interface with four tabs: "Pre-Test Actions", "Post-Test Actions", "Test Status", and "Test Setup". The "Test Setup" tab is active, and within it, the "Test Thresholds" sub-tab is selected. The interface is titled "Fail device if:" and contains several configuration options:

- Transfer Rate < 100 MB/sec
- Re-Reads > 50
- Re-Writes > 25
- Disk G Defects > []
- Log Page/Parameter
Page: 8 Param: 12 Value >: 100
- Log Page/Parameter
Page: 3E Param: 1 Value >: 1
- Log Page/Parameter
Page: [] Param: [] Value >: []
- Log Page/Parameter
Page: [] Param: [] Value >: []
- Log Page/Parameter
Page: [] Param: [] Value >: []
- Log Page/Parameter
Page: [] Param: [] Value >: []

The **Test Thresholds** will be checked after each test sequence step completes.

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