Verificar vida útil de um hard disk

Link: https://www.hdsentinel.com/hard_disk_sentinel_linux.php

Hard Disk Sentinel Linux Edition (FREE)	Download Hard Disk Sentinel Linux version

By using Hard Disk Sentinel Linux console edition, it is possible to examine the temperature and health information (and more) of **IDE, S-ATA (SATA II also), SCSI and USB** hard disks connected to motherboard or external controller cards. **The user must be root to use this software or start it with sudo.**

To display hard disk / SSD status in a graphical interface, download Hard Disk Sentinel Linux GUI (Graphical User Interface) package. Thanks for Gregory25!

To simplify starting Hard Disk Sentinel Linux Edition, it is possible to use one of the Linux Desktop Installers for the actual Linux distribution which allows starting directly from the desktop without the need of starting manually from a console. Thanks for Marc Sayer for these packages!

To receive daily status reports, please check the HDSentinel_EmailUtil.zip package. Thanks for Raul del Cid Lopez for this script!

Hard Disk Sentinel Linux version

List of features

- display hard disk / solid state disk information on the terminal
- create comprehensive report about the disk system, including both hard disk and SSD specific features (for example, media rotation rate, TRIM command, etc.)

- display and manage acoustic setting of hard disks (on supported USB disks also)
- offers outputs for both users and scripts/other applications to process

The following information are displayed:

- detected hard disk number and device name (for example /dev/sda)
- size, model ID, serial number, revision and interface of all detected hard disks
- temperature, health and performance values
- power on time (days, hour, minutes - if supported)
  Note: this is for informational purposes only, the value displayed under Windows (after some minutes of testing) may be more accurate
- acoustic management settings (if supported and **-aam** or **-setaam** option is used

Command line switches

The switches are NOT case sensitive. Upper and lower case can be used to specify them.

- **-h** - displays help and usage information
- **-r [report file]** - automatically save report to filename (default: report.txt)
- **-html** - use with -r to save HTML format report (-html -r report.html)
- **-mht** - use with -r to save MHT format report (-mht -r report.mht)
- **-autosd** - detect industrial SD card type and save flag file (see How to: monitor (micro) SD card health and status for more details)
- **-dev /dev/sdX** - detect and report only the specified device without accessing others
- **-devs d1,d2** - detect (comma separated) devices in addition to default ones eg. /dev/sda,/dev/sdb,/dev/sdc
- **-onlydevs d1,d2** - detect (comma separated) devices only eg. /dev/sda,/dev/sdb,/dev/sdc
- **-nodevs d1,d2** - exclude detection of (comma separated) devices eg. /dev/sda,/dev/sdb,/dev/sdc
- **-dump** - dump report to stdout (can be used with -xml to dump XML output instead of text)
- **-xml** - create and save XML report instead of TXT
- **-solid** - solid output (drive, tempC, health%, power on hours, model, S/N, size)
- **-verbose** - detailed detection information and save temporary files (only for debug purposes)
- **-aam** - display acoustic management settings (current and recommended level)
- **-setaam drive_num|ALL level(hex)80-FE|QUIET|LOUD** - set acoustic level on drive 0..n (or all)
  80 or QUIET is the lowest (most silent) setting, FE or LOUD is the highest (fastest) setting
  For example: **hdsentinel -setaam 0 loud** - Configures drive 0 to fastest (loud) setting. Same as **hdsentinel -setaam 0 FE**

Please send saved XML or TXT reports, questions or ideas to info@hdsentinel.com to help improving this tool.

License

Hard Disk Sentinel Linux edition is **FREE**. You can freely distribute and use it to analyse hard disk status. However, if you like this tool and would like to keep it updated, please support further development by registering the Windows version of the software.

Usage of Hard Disk Sentinel Linux version

After downloading the file below, please follow these steps to use it:

- double click to open and decompress it to any folder
- open a terminal window and navigate to the folder
- change file permissions to make it executable by using **chmod 755 HDSentinel**
- launch it by entering **sudo ./HDSentinel [options]**
  sudo is not required if you logged in as "root".

Examples

Optimize complete system for silence: **hdsentinel -setaam all quiet**

Optimize complete system for high performance (but louder disk access): **hdsentinel -setaam all loud**

Select a balanced level between silence and performance on drive 0: **hdsentinel -setaam 0 C0**
Note: some disks do not support balanced settings and they may select the most silent (80) or high performance (FE) setting instead.
Please start **hsentinel** without parameters to see drive assignments (eg. /dev/sda) to drive indexes.

Due to the high amount of requests, it is possible to create minimal output which can be easily parsed and processed for further use. Some examples are:

List disk drives, temperature (in Celsius), health %, power on hours, disk model, disk serial, size: **hdsentinel -solid**. Sample results:

```
/dev/sda 42   3  4830 WDC_WD800JD-8LSA0   WD-WMAM9F937837   76324
/dev/sdb 30 100  6128 ST3250624A          5ND3J94R         238472
/dev/sdc 46 100 10982 WDC_WD2500JS-00MHB0 WD-WCANK8705209  238475
/dev/sdd  ?   ?     ? GENERIC_CF_READER   9999                  0
/dev/sde  ?   ?     ? GENERIC_SD_READER   9999               1963
```

List only temperature, drive, size:
hdsentinel -solid | awk '{print $2, $1, $7}'

```
42 /dev/sda 76324
30 /dev/sdb 238472
46 /dev/sdc 238475
? /dev/sdd 0
? /dev/sde 1963
```

List only temperature, drive, model ID, highest temperature on top, drives without temperature information (for example card readers) removed:
hdsentinel -solid | awk '{print $2, $1, $5}' | grep -v "^?" | sort -nr

```
46 /dev/sdc WDC_WD2500JS-00MHB0
42 /dev/sda WDC_WD800JD-8LSA0
30 /dev/sdb ST3250624A
```

List only health, temperature, drive, lowest health on top, drives without temperature information (for example card readers) removed:
hdsentinel -solid | awk '{print $3, $2, $1}' | grep -v "^?" | sort -n

```
3 42 /dev/sda
100 30 /dev/sdb
100 46 /dev/sdc
```

Note that the spaces in hard disk model ID and serial number are replaced with underscore (_).

If you have any ideas, thoughts about the automatic processing of output or if you have complete script(s) you want to share with other users, please send a mail and it will be published on this page with the name and credits of the sender of the script.

Download Hard Disk Sentinel Linux

Hard Disk Sentinel 32-bit Linux console version - **executable, gzip-compressed**

Hard Disk Sentinel 64-bit Linux console version - **executable, zip-compressed**

Hard Disk Sentinel Linux console version for Raspberry PI (ARM CPU) - **executable, gzip-compressed**

Hard Disk Sentinel Linux console version for NAS boxes (ARMv5 CPU) - **executable, non-compressed** (see notes below)

Hard Disk Sentinel Linux console version for NAS boxes / Raspberry PI 4 (ARMv7 CPU) - **executable, gzip-compressed**

Hard Disk Sentinel Linux console version for NAS boxes / Raspberry PI 4 64-bit (ARMv8 / ARM64 CPU) - **executable, zip-compressed**

Can be used with Synology D220j and other Synology NAS models with ARMv8 CPU

Compatibility

Kernel support is required to detect and display information about SATA hard disks. This version was successfully tested under the following systems:

- blackPanther OS v16.2 SE
- CentOS 5, 6 and newer
- Fedora 5, 6, 7, 8, 9, 10, 15 and newer
- Ubuntu 8.04 server kernel 2.6.24-16-server, 9.04
- Kubuntu 8.04
- Xubuntu 8.04
- Slackware 11.0
- UHU Linux 2.1
- SuSe 10.2, SuSe 10.3 (SuSe 10.0 - NOT working, reports wanted)
- Debian Lenny 5.0
- Debian GNU/Linux 6.0.1 Squeez
- Raspberry PI (ARM CPU)
- NAS boxes (ARM CPU): WD MyBook Live, D-Link DNS-320LW two bay Sharecenter, D-Link DNS-327L two bay Sharecenter, Seagate FreeAgent DockStar, Zyxel NSA320, Synology DS211. DSM 5.0-4493 update 3

Successfully tested with Adaptec SCSI controllers and SCSI hard disks, and with external enclosures built with different USB-ATA bridge in chips USB Hard disks, hard disk enclosures. Supports LSI / Intel / IBM RAID controllers too.

Updates

0.20

7/7/2023	• added -devs, -onlydevs, -nodevs command line switches to control which drives should be detected • added support of Kingston DataTraveler MAX : detect health, temperature, S.M.A.R.T. status of Kingston DataTraveler MAX series pendrives • added support of DockCase DSWC1P USB-M.2 (NVMe/SATA) adapter • added support of ASUS Tuf Gaming A1 USB 3.2 NVMe adapter • added support of ACOS SATA SSDs, Fanxiang S101, Go-Infinity SSD, ZOZT G3000, SQUARE ES 550, Ramsta R900 SSDs • improved support and reporting of 22 TB WD hard disk drives, Toshiba 18 TB hard disk drives • improved support/health display of SanDisk SDSSDH3 models when new/unused • improved support of various SAS drives • improved compatibility with various USB devices • improved Health % reporting for intensively used Indilinx Barefoot SSD • improved compatibility with GLOWAY SSD, HP SSD 600, Patriot Burst Elite SSD, Patriot P220 SSD, Patriot P210 SSD, PNY SSD, PNY ELITE SSD, Toshiba SATA SSD, Kingston SSD, Swissbit SSD • improved support of some Sandisk, Intel, LiteOn SATA SSDs, Transcend TS120GSSD220S SSD, WDS120G2G0A-00, Lexar SATA SSD, XRAYDISK SATA SSD, KINGSPEC SATA SSD, WALRAM SSD • improved support of Intel Pro 5400s SSDs • improved support and Health % calculation / text reports for various Sandisk SSDs • improved support and Health % calculation / text reports for various Patriot SSDs • improved support and Health % calculation / text reports for various DELL-specific SSDs • added support of Apricorn Fortress L3 and Padlock 3 external hard disk drives and Apricorn ASK3 or ASK3z Secure Key pendrives: in addition to the robust design and security functions the hard disk drives and pendrives supported by Hard Disk Sentinel: complete health, temperature, self-monitoring S.M.A.R.T. status detected and displayed. • added support of SSK USB 3.1 / 3.2 Gen 2 (10 Gbps) NVMe adapter: detect NVMe SSD status • added support of Kingston XS2000 SSD, Goodram CX400 G2, Zadak SSD • improved support of some Acer SSDs, Sandisk SSDs, Lite-on SSDs • added support of Kingston Design-In SSDs (OMSP0S3, OM4P0S3, OM8P0S3, OCP0S3) • improved health/status reporting for PNY SATA SSDs • improved display of power on time, health, status of newer WD / Hitachi SAS hard disk drives • improved text description of NVMe SSDs upon different problems / error conditions

0.19

28/2/2021	• added support of newer SATA, SAS, NVMe M.2 PCie SSDs: detect health, temperature, and complete self-monitoring S.M.A.R.T. status • added support of newer hard disk drives, hybrid drives: detect health, temperature, and complete self-monitoring S.M.A.R.T. status • added support of newer NVMe-USB adapters / converters • added support of ORICO 3559U3 5-bay external USB 3.0 hard disk enclosure • added support of Yottamaster 4-bay and FS5U3 5-bay external USB 3.0 hard disk enclosure • improved **detection of NVMe M.2 SSDs** under Linux. Detect health, temperature and complete self-monitoring S.M.A.R.T. status of NVMe M.2 SSDs connected to motherboard (nvme0, nvme1, etc... devices)

0.18

7/11/2019	• added **detection of NVMe M.2 SSDs** under Linux. Detect health, temperature and complete self-monitoring S.M.A.R.T. status of NVMe M.2 SSDs connected to motherboard (nvme0, nvme1, etc... devices) • added detection of NVMe M.2 SSDs with USB-NVMe adapters based on ASMEDIA ASM236x and JMicron JMS583 chipsets • added detection of SAS hard disk drives and SSDs configured as RAID with LSI, Intel, Dell SAS RAID controllers • added support for new hard disk and SSD models, identify self-monitoring status of Kingston, Intel, Samsung, KingDian, Sandisk, LiteOn, ADATA, Crucial, Corsair, Lenovo, Apacer, WD SSDs • added/improved support of various Western Digital, Hitachi, Seagate, Toshiba hard disk drives • added/improved support of Helium (He) filled hard disk drives • added/improved support of numerous external USB adapters, USB-ATA bridges, docking stations • fixed bug with empty memory card readers

Hard Disk Sentinel Linux NVMe SSD detection
Hard Disk Sentinel Linux detection SAS hard disk in RAID configuration

0.17

30/8/2017	• added **detection of industrial micro SD cards** under Linux. Detect status immediately if the detection method of the micro SD card previously configured under the Windows - or if **-autosd** command line parameter specified to detect and save the detection method and use in all sub-sequent detections under Windows or Linux. Note: with Raspberry PI, it is not possible to detect internal memory card status, just status of card in external USB memory card reader. • added support of ASMedia ASM1352R dual drive (RAID) enclosures: detection of complete status of both hard disks • added **-html** command line option to save HTML format report (-html -r reportfile.html) • added **-mht** command line option to save MHT format report (-mht -r reportfile.mht) • added support of more than 26 drives, detection of additional drives when required • added support for new hard disk and SSD models, identify self-monitoring status

Hard Disk Sentinel Linux industrial SD memory card status
Hard Disk Sentinel Linux industrial SD memory card status in HTML report
Hard Disk Sentinel Linux industrial SD memory card status and S.M.A.R.T. self monitoring values

0.16

13/9/2016	• added support for Intel, IBM, LSI RAID controllers • experimental support of JMicron external USB RAID boxes (contact for assistance) • added support for 4000+ hard disk and SSD models, interpreting and displaying their self-monitoring status • displaying lifetime writes for SSDs

0.08 - Download Hard Disk Sentinel Linux 0.08 version

6/3/2012	• more hard disk drive / solid state disk details saved to report • improved compatibility with USB hard disks and various disk controllers • true 64 bit version released

0.03 - Download this version

21/7/2009	• more hard disk drive / solid state disk details saved to report • -aam and -setaam commands to modify acoustic level of disk drives • -dump to dump report to stdout • -solid option to create solid output for further processing • improved power on time detection for Samsung, Maxtor, Toshiba, Fujitsu models • improved detection of SCSI and USB drives • detection of SCSI and USB drive capacities

0.02 - Download this version

25/7/2008	• added support for SCSI and USB hard disks • improved temperature detection on Fujitsu hard disks

0.01 - Download this version

29/4/2008	• first initial version

Raspberry PI

Hard Disk Sentinel Linux version running on Raspberry PI

NAS boxes with ARM CPU

Hard Disk Sentinel Linux version running on D-Link DNS-320LW

The Linux version of Hard Disk Sentinel also available for NAS boxes built with ARM CPUs. The NAS box should have telnet / SSH access in order to download and use this tool.

To get Telnet / SSH access, special firmware version(s) or additional packages (like the fun_plug may be required. **Putty** tool is also required to connect the NAS box and access its console.

Usage:

- get Telnet / SSH access to the NAS box and log-in to your device by using putty.exe
- enter **wget http://www.hdsentinel.com/hdslin/armv5/hdsentinelarm** to download the latest ARMv5 CPU build.
  To simplify things, the file is not compressed.
- enter **chmod 755 hdsentinelarm** to set the proper permission (executable). You may use **chmod +x hdsentinelarm** instead.
- enter **./hdsentinelarm** to start the Hard Disk Sentinel on the NAS and get hard disk status information.

Tested on:

- WD MyBook Live
- D-Link DNS-320LW two bay Sharecenter
- Seagate FreeAgent DockStar

Revision #1
Created 2024-09-18 13:20:35 UTC by Administrador
Updated 2025-05-16 11:49:54 UTC by Administrador