# TABLE OF CONTENTS

*INSTALLING SMARTMONTOOLS* ..... 4
*CHECKING HARD DRIVE HEALTH* ..... 4
*RUNNING TESTS ON THE STORAGE DEVICE* ..... 5
*CONCLUSION* ..... 5
*TAGSLINUXTUTORIALSTUTORIALS/LINUXHARD_DRIVEHEALTH_CHECKSMARTSMARTMONTOOLSCOMMAND-LINESYSTEM_MAINTENANCESTORAGESMARTCTLSYSTEM_MONITORINGDATA_SAFETY* ..... 6




# HOW TO CHECK A HARD DRIVE HEALTH FROM THE COMMAND-LINE

**Author(s)**: Louis Ouellet

Monitoring the health of your hard drive is a crucial aspect of maintaining your system's integrity and performance. On Linux, the `smartmontools` package includes the `smartctl` utility, which allows you to inspect your hard drive's SMART (Self-Monitoring, Analysis, and Reporting Technology) data to predict drive failure and perform checks.

## INSTALLING SMARTMONTOOLS

Before you can use `smartctl`, you must install the `smartmontools` package. On most Linux distributions, you can install it via the package manager.

For Ubuntu/Debian-based systems:

```
sudo apt update
sudo apt install smartmontools
```

For Fedora/RHEL-based systems:

```
sudo dnf install smartmontools
```

For Arch Linux:

```
sudo pacman -S smartmontools
```

## CHECKING HARD DRIVE HEALTH

To check the health of your hard drive, use the `-H` or `—health` option with `smartctl`:

```
sudo smartctl -H /dev/sda
```

Replace `/dev/sda` with the path to your actual hard drive device.

## RUNNING TESTS ON THE STORAGE DEVICE

You can perform different types of tests on your hard drive using `smartctl`. To run a short test, which typically takes a few minutes:

```
sudo smartctl -t short /dev/sda
```

To run an extended test, which is more thorough and takes more time:

```
sudo smartctl -t long /dev/sda
```

After starting a test, you can check its progress with:

```
sudo smartctl -a /dev/sda
```

This command also displays detailed SMART information about the drive.

## CONCLUSION

Regularly checking your hard drive's health with `smartmontools` can help you detect potential drive failures before they happen, allowing you to back up data and replace the drive proactively. The SMART data provides a wealth of information about the state of your hardware and can be a valuable resource in ensuring the longevity and reliability of your system. With `smartctl`, you have a powerful tool at your disposal for monitoring the well-being of your storage devices directly from the command line.

Remember to perform these checks periodically and especially if you notice any unusual behavior from your hard drive, such as noise, slowness, or errors. Being vigilant about your hardware's health is an essential part of maintaining a stable and secure Linux environment.

**TAGS**LINUXTUTORIALSTUTORIALS/LINUXHARD_DRIVEHEALTH_CHECKSMARTSMARTMONTOOLSCOMMAND-LINESYSTEM_MAINTENANCESTORAGESMARTCTLSYSTEM_MONITORINGDATA_SAFETY

- Twitter
- Facebook
- LinkedIn
- Reddit
- Telegram
- Email

View the discussion thread.

From:
https://laswitchtech.com/ - **LaswitchTech**

Permanent link:
**https://laswitchtech.com/en/blog/2024/02/01/how-to-check-an-hard-drive-health-from-the-command-line**

Last update: **2026/02/16 13:26**