Hddtemp

hddtemp (https://savannah.nongnu.org/projects/hddtemp/) is a small utility (with daemon) that gives the hard-drive temperature via S.M.A.R.T. (for drives supporting this feature).

Related articles

lm sensors

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Installation

Install `hddtemp (https://www.archlinux.org/packages/?name=hddtemp)` from the **official repositories**.

Usage

Hddtemp requires root privileges. The command `hddtemp` must be followed by at least one drive's location, with several directories separated by spaces:

```
# hddtemp /dev/sdX1 /dev/sdX2 ... /dev/sdXn
```

Daemon

Running the daemon allows to access the temperature via TCP/IP, to use for example with scripts.

The daemon is **controlled** by `hddtemp.service`.

Note: Arguments to `hddtemp` are directly given in `/usr/lib/systemd/system/hddtemp.service`. This is especially important with multiple disks, as the default configuration only monitors `/dev/sda`. Change `ExecStart` **to override** `hddtemp.service`:

- Create a directory in `/etc/systemd/system`:

```
# mkdir /etc/systemd/system/hddtemp.service.d
```

- Create `customexec.conf` inside and add the drives you want to monitor, e.g.:

```
/etc/systemd/system/hddtemp.service.d/customexec.conf
```

```
[Service]
ExecStart=
ExecStart=/usr/bin/hddtemp -dF /dev/sda /dev/sdb /dev/sdc
```

You can also use the **auto-generate (https://github.com/AndyCrowd/auto-generate-configuration-files/blob/master/gen-customexec.conf-hddtemp.sh)** script that detects with help of **smartmontools (https://www.archlinux.org/packages/?name=smartmontools)** all supported by **hddtemp (https://www.archlinux.org/packages/?name=hddtemp)** hard-drives and generates to the stdout the `customexec.conf` pattern file.

- **Reload** *systemd*'s unit files.
- **Restart** the `hddtemp` service.

To get the temperature, connect to the daemon which listens on port 7634. With **inetutils (https://www.archlinux.org/packages/?name=inetutils)**:

```
$ telnet localhost 7634
```

With **gnu-netcat (https://www.archlinux.org/packages/?name=gnu-netcat)**:

```
$ nc localhost 7634
```

Both outputs are similar to:

```
|/dev/sda|ST3500413AS|32|C||/dev/sdb|ST2000DM001-1CH164|36|C|
```

For a better looking statistic:

```
$ nc localhost 7634 |sed 's/|//m' | sed 's/||/ \n/g' | awk -F'|' '{print $1 " " $3 " " $4}'
```

```
/dev/sda 32 C
/dev/sdb 36 C
```

Refer to the manpage for more information:

```
$ man hddtemp
```

Monitors

Hddtemp can be integrated with **system monitors**.

Solid State Drives

Hddtemp usually reads field `194` from the smart data of the drive. In SSDs temperature information is usually stored in field `190`. To obtain this information, one can run:

```
$ smartctl -a /dev/sdX
```

or

```
$ hddtemp --debug /dev/sdX
```

where X is a character (e.g. a,b,c...) representing the drive. Use `lsblk` to check this.

Alternatively, add a new entry in `/usr/share/hddtemp/hddtemp.db`. For example:

```
$ echo '"Samsung SSD 840 EVO 250G B" 190 C "Samsung SSD 840 EVO 250GB"' >> /usr/share/hddtemp/hddtemp.db
```

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