ⵛ **gaul** / **mbpfan**

forked from linux-on-mac/mbpfan

A simple daemon to control fan speed on all Macbook/Macbook Pros (probably all Apple computers) for Linux 3.x.x

⚖ GPL-3.0 License

☆ **0** stars   ⵛ **115** forks

☆ Star	⊙ Watch ▾

Code	Pull requests	Actions	Projects	Security	Insights

ⵛ master ▾   •••

This branch is 1 commit ahead, 32 commits behind linux-on-mac:master.

ᕧ Pull request   ± Compare

🧔 **gaul**   ...   on Aug 29, 2019   🕐

View code

☰ **README.md**

mbpfan

`build` `passing`

This is an enhanced version of Allan McRae mbpfan

mbpfan is a daemon that uses input from coretemp module and sets the fan speed using the applesmc module. This enhanced version assumes any number of processors and fans (max. 10).

- It only uses the temperatures from the processors as input.
- It requires coretemp and applesmc kernel modules to be loaded.
- It requires root use
- It daemonizes or stays in foreground
- Verbose mode for both syslog and stdout
- Users can configure it using the file /etc/mbpfan.conf

Table Of Contents

Supported GNU/Linux Distributions

We provide scripts to to load mbpfan daemon at system boot for many distros. Please note that the support is provided by volunteers. mbpfan needs tests and bug reports.

Supported distributions:

- Ubuntu
- Debian
- Archlinux
- Fedora
- RedHat
- CentOS
- Gentoo
- Alpine
- Trisquel
- Solus

Tested MacBook Models

This section reports those models where mbpfan was tested successfully. It does not necessarily mean that the daemon does not work on non-listed models.

- MacBook Pro 12,1 13" (Intel i5 - Linux 4.20)
- MacBook Pro 11,4 15" (Intel i7 - Linux 4.9.41)
- MacBook Pro 11,1 13" (Intel i5 - Linux 3.14, Linux 3.15)
- MacBook Pro 9,2 13" (Intel i5/i7 - Linux 3.10)
- MacBook Pro 8,2 15" (Intel i7 - Linux 3.6.2)
- MacBook Pro 8,1 13" (Intel i5 - 2435M Linux 5.0.9 Fedora 30)
- MacBook Pro 8,1 13" (Intel i7 - Linux 3.2.0)
- MacBook Pro 7,1 15" (Intel Core 2 Duo - Linux 3.13)
- MacBook Pro 6,2 15" (Intel i7 - Linux 3.5.0)
- MacBook Pro 6,2 15" (Intel i7 - Linux 3.2.0)
- MacBook Pro 3,1 17" (Intel Core 2 Duo - Linux 5.0.7)
- MacBook Pro 2,2 15" (Intel Core 2 Duo - Linux 3.4.4)
- MacBook Air 6,1 13" (Intel i7 - Linux 3.13)
- MacBook Air 5,2 13" (Intel i5 - Linux 3.16)
- MacBook Air 1,1 13" (Intel Core Duo - Linux 4.4, Linux 4.8)
- MacBook Air 7,2 13" (Intel Core Duo - Linux 4.10)
- MacBook 1,1 (Intel Core Duo - Linux 3.16)

Tested iMac/Mac mini Models

This section reports the iMac/Mac mini models where mbpfan was tested successfully.

- iMac Retina 16.2 21.5" (Intel i5 - Linux 4.4.0 Ubuntu 16.04)
- iMac 12,1 21.5" (Intel i7 - Linux 4.6.4)
- iMac 5,1 17" (Intel T7400 (Core 2 Duo) - Linux 14.04 Ubuntu)
- Mac mini 2,1 (Core 2 Duo - Linux 4.4.0)
- Mac mini 5,3 (Core i7 2.0 - Linux 4.4.0 elementary/Ubuntu)
- Mac mini 6,1 (Core i7 2.3 - Linux 4.7.3-4-ck Archlinux)

Tested Mac Pro Models

This section reports the Mac Pro models where mbpfan was tested successfully.

- Mac Pro 3,1
- Mac Pro 4,1 (with 5,1 firmware and hex-core Xeon X5690 mod - Linux 4.14)

Requirements

Be sure to load the kernel modules **applesmc** and **coretemp**.

These modules are often automatically loaded when booting up GNU/Linux on a MacBook. If that is not the case, you should make sure to load them at system startup.

How do I know if applesmc and coretemp are loaded?

In most distributions, you can run the following command:

```
lsmod | grep -e applesmc -e coretemp
```

If you see `coretemp` and `applesmc` listed, you are all set.

If you do not see `coretemp` and `applesmc` listed, you must load them.

This is *usually* achieved by inserting the following two lines in the file `/etc/modules`

```
coretemp
applesmc
```

Please check the relevant documentation of your GNU/Linux distribution.

Installation

Arch Linux

See mbpfan-git at AUR. Otherwise, please refer to the Generic Instructions.

CRUX Linux

Follow the instructions on jolupalabs REPO for installation.

Debian

On Debian 10 or later install via:

```
sudo apt-get install mbpfan
```

Gentoo

Install the `mbpfan` package with:

```
sudo emerge -av app-laptop/mbpfan
```

Solus

On Solus, install the package with:

```
sudo eopkg install mbpfan
```

then enable the service.

Ubuntu

On Ubuntu 18.04 or later install via:

```
sudo apt-get install mbpfan
```

Generic Install Instructions (All Other Operating Systems)

Compile with

```
make
```

Install with

```
sudo make install
```

It copies mbpfan to /usr/sbin, mbpfan.conf to /etc (and overwrites existing files), README.md to /usr/share/doc/mbpfan, and mbpfan.8.gz to /usr/share/man/man8

If you would like to compile with Clang instead of GCC, simply set your system's default compiler to be Clang. Tested with Clang 3.8 and 3.9. Tested with Clang 4.0 along with llvm-lld (The LLVM Linker).

Run The Tests (Optional)

Users may run the tests after installing the program. Please run the following command *from within the source directory*.

```
sudo ./bin/mbpfan -t
```

or

```
sudo make tests
```

Note that this only works on MacBook and not desktop computers due to different environment expectations.

Run Instructions

If not installed, run with

```
sudo bin/mbpfan
```

If installed, manually run with

```
sudo mbpfan
```

If installed and using the init file, run with (Ubuntu example)

```
sudo service mbpfan start
```

Starting at boot

Ubuntu

For systemd based init systems (Ubuntu 16.04+), see the systemd section below.

For upstart based init systems (Ubuntu before 16.04), an example upstart job has been provided. For using it, execute:

```
sudo cp mbpfan.upstart /etc/init/mbpfan.conf
sudo start mbpfan
```

Debian An init file suitable for /lib/lsb/init-functions (Debian) is located in the main folder of the source files, called mbpfan.init.debian Rename it to mbpfan, give it execution permissions (chmod +x mbpfan) and move it to /etc/init.d Then, add it to the default runlevels with (as root):

```
sudo update-rc.d mbpfan defaults
```

Redhat, CentOS, Fedora An init file suitable for /etc/rc.d/init.d/functions (RHEL/CentOS & Fedora) is also located at the same place, this file is called mbpfan.init.redhat. Also rename it to mbpfan, give it execution permissions and move it to /etc/init.d To add the script to the default runlevels, run the following as root:

```
chkconfig --level 2345 mbpfan on && chkconfig --level 016 mbpfan off
```

Gentoo

To automatically run mbpfan at boot, run as root:

```
rc-update add mbpfan default
```

systemd As a special bonus, a service file for systemd is also included. To use it, execute the following (as root):

```
sudo cp mbpfan.service /etc/systemd/system/
sudo systemctl enable mbpfan.service
sudo systemctl daemon-reload
sudo systemctl start mbpfan.service
```

Usage

```
Usage: ./mbpfan OPTION(S)

-h Show the help screen
-f Run in foreground
-t Run the tests
-v Be (a lot) verbose
```

License

GNU General Public License version 3

This Project Is Based On:

- http://allanmcrae.com/2010/05/simple-macbook-pro-fan-daemon/
- http://allanmcrae.com/2011/08/mbp-fan-daemon-update/
- https://launchpad.net/macfanctld
- http://paste2.org/p/862259
- http://www.lobotomo.com/products/FanControl/

Credits

This Project uses following library:

- ANSI C Application Settings Management by Per Ola Kristensson.

Releases

🏷 **12** tags

Packages

No packages published

Languages

- ● **C** 95.0%
- ● **Shell** 3.6%
- ● **Makefile** 1.4%