

digital nomad so many ideas – so little time ...

Enabling the watchdog timer on the Raspberry Pi

Posted on [January 29, 2013](#) by [Leo Gaggl](#)

Turns out that the Broadcom BCM2708 chip on the RPi has a hardware watchdog. This can be very useful if your RPi is located remotely and locks up. However, this would not be the preferred method of restarting the unit and in extreme cases this can result in file-system damage that could prevent the RPi from booting. If this occurs regularly you better find the root cause of the problem rather than fight the symptoms.

Enable Watchdog Kernel Module

```
echo 'bcm2708_wdog' >> /etc/modules
sudo modprobe bcm2708_wdog
```

Install Watchdog Daemon

```
sudo apt-get install watchdog chkconfig
chkconfig watchdog on
sudo /etc/init.d/watchdog start
```

```
sudo vim /etc/watchdog.conf
# Uncomment the line watchdog-device = /dev/watchdog
# You might also want to uncomment max-load-1, or add something like "max-load-1 = 24" to reset your Pi if the load
average exceeds 24 in any 1-minute span.
```

```
sudo /etc/init.d/watchdog restart
```

The watchdog daemon will send /dev/watchdog a heartbeat every 10 seconds. If /dev/watchdog does not receive this signal it will brute-force restart your Raspberry Pi.

If you are feeling adventurous you can test the setup by launching one of the [fork-bombs](#) you can find out there. Just make sure you don't have anything of importance running.

```
:(){:|:& }::
```

Thanks to [gadgetoid](#) for the original tip !



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