

Watching Hard Drive Activity With iotop On Ubuntu 8.10 And Debian Lenny

Version 1.0

Author: Falko Timme <ft [at] falkotimme [dot] com>

Last edited 02/09/2009

This article shows how you can watch your hard drive activity with [iotop](#) on Ubuntu 8.10 and Debian Lenny. iotop watches I/O usage information output by the Linux kernel (requires 2.6.20 or later) and displays a table of current I/O usage by processes or threads on the system. iotop displays columns for the I/O bandwidth read and written by each process/thread during the sampling period. It also displays the percentage of time the thread/process spent while swapping in and while waiting on I/O. In addition the total I/O bandwidth read and written during the sampling period is displayed at the top of the interface.

I do not issue any guarantee that this will work for you!

1 Installing iotop

Both Ubuntu 8.10 and Debian Lenny have iotop packages in their repositories, therefore the installation is very easy:

Ubuntu 8.10:

```
sudo apt-get install iotop
```

Debian Lenny:

```
apt-get install iotop
```

2 Usage

Usage is similar to the top program, you just type iotop and you will get a table of hard drive activity, updated every second:

Total DISK READ:0 B/s				Total DISK WRITE: 706.11 K/s			
PID	USER	DISK READ	DISK WRITE	SWAPIN	IO>	COMMAND	
4288	root	0 B/s	706.11 K/s	0.00%	0.00%	sftp-server	
1	root	0 B/s	0 B/s	0.00%	0.00%	init	
2	root	0 B/s	0 B/s	0.00%	0.00%	[kthreadd]	
3	root	0 B/s	0 B/s	0.00%	0.00%	[migration/0]	
4	root	0 B/s	0 B/s	0.00%	0.00%	[ksoftirqd/0]	
5	root	0 B/s	0 B/s	0.00%	0.00%	[watchdog/0]	
6	root	0 B/s	0 B/s	0.00%	0.00%	[events/0]	
7	root	0 B/s	0 B/s	0.00%	0.00%	[khelper]	
3597	syslog	0 B/s	0 B/s	0.00%	0.00%	syslogd -u syslog	
3758	mysql	0 B/s	0 B/s	0.00%	0.00%	mysqld --basedir=/usr --d	
3909	root	0 B/s	0 B/s	0.00%	0.00%	sshd: root@pts/0	
152	root	0 B/s	0 B/s	0.00%	0.00%	[pdflush]	
153	root	0 B/s	0 B/s	0.00%	0.00%	[pdflush]	

154	root	0	B/s	0	B/s	0.00%	0.00%	[kswapd0]
3760	mysql	0	B/s	0	B/s	0.00%	0.00%	mysqld --basedir=/usr --d
1309	root	0	B/s	0	B/s	0.00%	0.00%	[mpt_poll_0]
3635	messageb	0	B/s	0	B/s	0.00%	0.00%	dbus-daemon --system
3615	root	0	B/s	0	B/s	0.00%	0.00%	dd bs 1 if /proc/kmsg of
3617	klog	0	B/s	0	B/s	0.00%	0.00%	klogd -P /var/run/klogd/k
3901	root	0	B/s	0	B/s	0.00%	0.00%	getty 38400 tty1
3548	root	0	B/s	0	B/s	0.00%	0.00%	getty 38400 tty4
3754	mysql	0	B/s	0	B/s	0.00%	0.00%	mysqld --basedir=/usr -d

To learn more about iotop and additional options, take a look at its man page:

man iotop

3 Links

- Ubuntu: <http://www.ubuntu.com/>
- Debian: <http://www.debian.org/>
- iotop: <http://guichaz.free.fr/iotop/>