

Open Source Software: Easy to contribute

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The Question

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- ▶ How many of you opened at least one bug, which was fixed by upstream?

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- ▶ How many of you opened at least one bug, which was fixed by upstream?
- ▶ How many of you sent at least one patch, which was accepted by upstream?
- ▶ Others, why are you don't contribute?

Open Source waiting for you

Open Source waiting for your

- ▶ mails
- ▶ documentation
- ▶ bugs
- ▶ patches

It is easy and fun



Take your favorite software

Take your favorite software: systemd-cgtop

| Path | Tasks | %CPU |
|------------------------------------|-------|------|
| / | 477 | 27.0 |
| /system | 1 | 26.5 |
| /system/kdm@.service | - | 25.2 |
| /system/rabbitmq-server.service | 44 | 0.7 |
| /system/dbus.service | 12 | 0.3 |
| /system/NetworkManager.service | 4 | 0.2 |
| /system/mysqld.service | 16 | 0.1 |
| /system/avahi-daemon.service | 2 | 0.0 |
| /system/console-kit-daemon.service | 65 | - |
| /system/rtkit-daemon.service | 3 | - |
| /system/systemd-journald.service | 1 | - |
| /system/systemd-logind.service | 1 | - |
| /system/udev.service | 3 | - |

Bug 49778 - systemd-cgtop depth=3 better default than depth=2

Maksim Melnikau 2012-05-11 00:26:26 UTC [Description](#) [\[reply\]](#) [-]

I think systemd-cgtop default should be changed to 3 by default.
May be even more (depth=4).
Depth=3 (and more) still fits 79 on my system.
It will give more useful info by default, especially on multi user systems.

Lets compare (depth=2):

| Path | Tasks | %CPU | Memory | Input/s | Output/s |
|------------------------------------|-------|-------|--------|---------|----------|
| / | 88 | 193.8 | 5.1G | 0B | 1002.7K |
| /system | 1 | 175.5 | 32.7M | - | - |
| /system/getty@.service | - | 155.1 | - | - | - |
| /system/kdm@.service | - | 18.3 | - | - | - |
| /system/dbus.service | 9 | 1.3 | 11.3M | - | - |
| /system/rabbitmq-server.service | 44 | 0.5 | 42.1M | - | - |
| /system/mysqld.service | 16 | 0.0 | 54.5M | - | - |
| /system/NetworkManager.service | 5 | 0.0 | 21.4M | - | - |
| /system/avahi-daemon.service | 2 | 0.0 | 1.2M | - | - |
| /system/console-kit-daemon.service | 65 | - | 1.7M | - | - |
| /system/fck@.service | - | - | 44.0K | - | - |
| /system/rtkit-daemon.service | 3 | - | 332.0K | - | - |
| /system/systemd-journald.service | 1 | - | 38.9M | - | - |
| /system/systemd-logind.service | 1 | - | 392.0K | - | - |
| /system/udev.service | 3 | - | 9.1M | - | - |
| /system/upower.service | 3 | - | 4.4M | - | - |

1. getty@.service consumes much CPU, and I don't know how much RAM
2. total memory consumption big (5.1G), and I should calculate how much kdm exactly

Lets compare (depth=3):

| Path | Tasks | %CPU | Memory | Input/s | Output/s |
|------------------------------------|-------|-------|--------|---------|----------|
| / | 86 | 164.0 | 5.3G | 0B | 1.4M |
| /system | 1 | 136.9 | 32.7M | - | - |
| /system/getty@.service | - | 117.2 | - | - | - |
| /system/getty@.service/tty1 | 6 | 116.3 | 135.2M | - | - |
| /system/kdm@.service | - | 17.1 | - | - | - |
| /system/kdm@.service/tty7 | 236 | 17.2 | 4.5G | - | - |
| /system/dbus.service | 9 | 2.0 | 11.3M | - | - |
| /system/getty@.service/tty2 | 3 | 0.0 | 2.5M | - | - |
| /system/rabbitmq-server.service | 44 | 0.2 | 42.1M | - | - |
| /system/mysqld.service | 16 | 0.1 | 54.5M | - | - |
| /system/avahi-daemon.service | 2 | 0.0 | 1.2M | - | - |
| /system/NetworkManager.service | 5 | - | 21.4M | - | - |
| /system/console-kit-daemon.service | 65 | - | 1.7M | - | - |
| /system/fck@.service | - | - | 44.0K | - | - |
| /system/rtkit-daemon.service | 3 | - | 332.0K | - | - |
| /system/systemd-journald.service | 1 | - | 38.9M | - | - |
| /system/systemd-logind.service | 1 | - | 392.0K | - | - |
| /system/udev.service | 3 | - | 9.1M | - | - |
| /system/upower.service | 3 | - | 4.4M | - | - |

1. current kdm session consumes 4.5G RAM, count of running processes 236
2. I have 2 getty/tty sessions
3. first consumes a lot of CPU and 100Mb RAM
4. seconds tty consumes almost nothing

Bug 49778 upstream fix

[Lennart Poettering](#) 2012-05-21 16:49:03 UTC

[Comment 1](#) [[reply](#)] [-]

OK, changed!

```
diff --git a/man/systemd-cgtop.xml b/man/systemd-cgtop.xml
index 9322fb0..14d4735 100644
--- a/man/systemd-cgtop.xml
+++ b/man/systemd-cgtop.xml
@@ -166,7 +166,7 @@
-           the root group is monitored, for 1
+           only the first level of control groups
+           is monitored, and so on. Defaults to
-           2.</para></listitem>
+           3.</para></listitem>
+           </varlistentry>
+
+       </variablelist>
diff --git a/src/cgtop/cgtop.c b/src/cgtop/cgtop.c
index cc7a99f..ddb5709 100644
--- a/src/cgtop/cgtop.c
+++ b/src/cgtop/cgtop.c
@@ -54,7 +54,7 @@ typedef struct Group {
     uint64_t io_input_bps, io_output_bps;
 } Group;

-static unsigned arg_depth = 2;
+static unsigned arg_depth = 3;
 static usec_t arg_delay = 1*USEC_PER_SEC;

static enum {
```

systemd-cgtop -help

systemd-cgtop [OPTIONS...]

Show top control groups by their resource usage.

| | |
|-------------------|---------------------------------------|
| -h --help | Show this help |
| --version | Print version and exit |
| -p | Order by path |
| -t | Order by number of tasks |
| -c | Order by CPU load |
| -m | Order by memory load |
| -i | Order by IO load |
| -d --delay=DELAY | Specify delay |
| -n --iterations=N | Run for N iterations before exiting |
| -b --batch | Run in batch mode, accepting no input |
| --depth=DEPTH | Maximum traversal depth (default: 2) |

[systemd-devel] [PATCH] cgtop --help: default depth is 3 not 2

Maksim Melnikau [maxposedon at gmail com](mailto:maxposedon@gmail.com)

Fri Mar 29 05:55:50 PDT 2013

- Previous message: [\[systemd-devel\] How to get "log_debug" from logind?](#)
- Next message: [\[systemd-devel\] \[PATCH\] cgtop --help: default depth is 3 not 2](#)
- Messages sorted by: [\[date\]](#) [\[thread\]](#) [\[subject\]](#) [\[author\]](#)

use default depth from variable for --help

Signed-off-by: Maksim Melnikau <[maxposedon at gmail.com](mailto:maxposedon@gmail.com)>

```
src/cgtop/cgtop.c | 4 ++-
1 file changed, 2 insertions(+), 2 deletions(-)
```

```
diff --git a/src/cgtop/cgtop.c b/src/cgtop/cgtop.c
```

```
index f80d51e..eebebf0 100644
```

```
--- a/src/cgtop/cgtop.c
```

```
+++ b/src/cgtop/cgtop.c
```

```
@@ -522,8 +522,8 @@ static void help(void) {
     " -d --delay=DELAY    Specify delay\n"
     " -n --iterations=N    Run for N iterations before exiting\n"
     " -b --batch            Run in batch mode, accepting no input\n"
     " --depth=DEPTH        Maximum traversal depth (default: 2)\n",
     program_invocation_short_name);
+   " --depth=DEPTH        Maximum traversal depth (default: %d)\n",
+   program_invocation_short_name, arg_depth);
+ }
}
```

```
static void version(void) {
```

```
--
```

```
1.8.1.5
```

[systemd-devel] [PATCH] cgtop --help: default depth is 3 not 2

Lennart Poettering lennart@poettering.net

Fri Mar 29 07:48:20 PDT 2013

- Previous message: [\[systemd-devel\] \[PATCH\] cgtop --help: default depth is 3 not 2](#)
- Next message: [\[systemd-devel\] snapshots not isolatable?](#)
- Messages sorted by: [\[date \]](#) [\[thread \]](#) [\[subject \]](#) [\[author \]](#)

On Fri, 29.03.13 15:55, Maksim Melnikau (maxposedon@gmail.com) wrote:

> use default depth from variable for --help

Thanks! Applied!

Lennart

--

Lennart Poettering - Red Hat, Inc.

Conclusion

Don't afraid - contribute! It's easy!

Ask me

- ▶ `maxposedon@gmail.com`
- ▶ `https://bugs.freedesktop.org/show_bug.cgi?id=49778`
- ▶ `http://lists.freedesktop.org/archives/systemd-devel/2013-March/010005.html`
- ▶ `http://lists.freedesktop.org/archives/systemd-devel/2013-March/010009.html`
- ▶ `https://github.com/max-posedon/talk-easy-contribute`