

---

Subject: Re: [PATCH 00/10] Containers(V10): Generic Process Containers  
Posted by [serue](#) on Mon, 04 Jun 2007 20:51:06 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Quoting Paul Menage (menage@google.com):

> On 6/4/07, Serge E. Hallyn <serue@us.ibm.com> wrote:

> >

> >2. I can't delete containers because of the files they contain, and

> >am not allowed to delete those files by hand.

> >

>

> You should be able to delete a container with rmdir as long as it's

> not in use - its control files will get cleaned up automatically.

>

> If you're getting an EBUSY error that means that either there are

> still tasks running in the container (look in the "tasks" file) or

> else there's a reference counting bug somewhere.

>

> Can you post an example to reproduce the problem?

here is an excerpt:

```
[root@linuz11 root]# mount -t container -o cgroup cgroup /containers/
```

```
[root@linuz11 root]# ls /containers/
```

```
cpu_exclusive  memory_pressure  mems            tasks
```

```
cpus           memory_pressure_enabled  notify_on_release
```

```
mem_exclusive  memory_spread_page      releasable
```

```
memory_migrate memory_spread_slab      release_agent
```

```
[root@linuz11 root]# mkdir /containers/1
```

```
[root@linuz11 root]# echo 0 > /containers/1/mems
```

```
[root@linuz11 root]# echo 0 > /containers/1/cpus
```

```
[root@linuz11 root]# sh
```

```
sh-2.05b# echo $$ > /containers/1/tasks
```

```
sh-2.05b# cat /containers/1/tasks
```

```
4325
```

```
4326
```

```
sh-2.05b# exit
```

```
[root@linuz11 root]# ls /containers/1/tasks
```

```
/containers/1/tasks
```

```
[root@linuz11 root]# rm -rf /containers/1
```

```
rm: cannot remove `/containers/1/memory_spread_slab': Operation not permitted
```

```
rm: cannot remove `/containers/1/memory_spread_page': Operation not permitted
```

```
rm: cannot remove `/containers/1/memory_pressure': Operation not permitted
```

```
rm: cannot remove `/containers/1/memory_migrate': Operation not permitted
```

```
rm: cannot remove `/containers/1/mem_exclusive': Operation not permitted
rm: cannot remove `/containers/1/cpu_exclusive': Operation not permitted
rm: cannot remove `/containers/1/mems': Operation not permitted
rm: cannot remove `/containers/1/cpus': Operation not permitted
rm: cannot remove `/containers/1/releasable': Operation not permitted
rm: cannot remove `/containers/1/notify_on_release': Operation not
permitted
rm: cannot remove `/containers/1/tasks': Operation not permitted
```

Ah, I see the second time I typed 'ls /containers/1/tasks' instead of cat. When I then used cat, the file was empty, and I got an oops just like Pavel reported. I bet if I solve the problem he reported, then I solve my problem :)

thanks,  
-serge

---