
Subject: task_session() and task->signal->session
Posted by [Sukadev Bhattiprolu](#) on Wed, 15 Nov 2006 23:46:01 GMT
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I am trying to understand the diff between task_session() and task->signal-session and why we have the two notions of session. Are we just phasing out one of them ?

In general each process has a single session id. The only exception being a process that unshares its pid ns. Such process will have exactly two session ids, one for each pid ns. No ?

Thanks,

Suka

Containers mailing list
Containers@lists.osdl.org
<https://lists.osdl.org/mailman/listinfo/containers>

Subject: Re: task_session() and task->signal->session
Posted by [serue](#) on Thu, 16 Nov 2006 16:17:25 GMT
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Looking at fork, it seems that task->group_leader is a thread group leader. If you fork without the CLONE_THREAD flag, then task->group_leader is set to task itself. If with CLONE_THREAD flag, then task->group_leader is set to the parent->group_leader.

The signal->session presumably is what we think of as process session. At fork it is always set to parent->signal->session, and see kernel/sys.c for where it gets tweaked.

-serge

Quoting Sukadev Bhattiprolu (sukadev@us.ibm.com):

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Subject: Re: task_session() and task->signal->session
Posted by [ebiederm](#) on Thu, 16 Nov 2006 23:46:33 GMT
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Sukadev Bhattiprolu <sukadev@us.ibm.com> writes:

> I am trying to understand the diff between task_session() and
> task->signal-session and why we have the two notions of session.
> Are we just phasing out one of them ?

Yes.

> In general each process has a single session id. The only exception
> being a process that unshares its pid ns. Such process will have
> exactly two session ids, one for each pid ns. No ?

Each process has a single session.

That session can potentially have a different session id in each
pid namespace.

So for internal tests we want to compare the struct pid pointers
instead of the numbers visible to user space.

Eric

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Containers@lists.osdl.org
https://lists.osdl.org/mailman/listinfo/containers

Subject: Re: task_session() and task->signal->session
Posted by [Sukadev Bhattiprolu](#) on Fri, 17 Nov 2006 18:15:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks.

Eric W. Biederman [ebiederm@xmission.com] wrote:
| Sukadev Bhattiprolu <sukadev@us.ibm.com> writes:

| > I am trying to understand the diff between task_session() and
| > task->signal-session and why we have the two notions of session.
| > Are we just phasing out one of them ?

| Yes.

I guess we are phasing out task->signal->session.

| > In general each process has a single session id. The only exception
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| Each process has a single session.

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| pid namespace.

both of us used the word "have" above. But do we actually store (in some
data structure) the multiple session ids ? Or will the following work:

Each task refers to another task (possibly itself) as its session
leader (we find this using task_session()).

The session leader, like any other task, has multiple process ids,
one in each namespace.

So to find the session id of a task, we find its session leader
and find the appropriate process id of the session leader

i.e we don't actually store the multiple sids a task

| So for internal tests we want to compare the struct pid pointers
| instead of the numbers visible to user space.

| Eric

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Subject: Re: task_session() and task->signal->session
Posted by [ebiederm](#) on Fri, 17 Nov 2006 18:41:19 GMT
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Sukadev Bhattiprolu <sukadev@us.ibm.com> writes:

> Thanks.
>
> Eric W. Biederman [ebiederm@xmission.com] wrote:
> | Sukadev Bhattiprolu <sukadev@us.ibm.com> writes:
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> |
> | Yes.
>
> I guess we are phasing out task->signal->session.

Largely. There are a couple of cases where it makes sense to optimize queries from the current pid namespace. Keeping some of the pid_t values around for that case helps.

> |
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> and find the appropriate process id of the session leader
>
> i.e we don't actually store the multiple sids a task

struct pid is that data structure. It just needs to be extended a little to handle multiple pid namespaces.

Eric

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