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Subject: Re: [PATCH 8/15] Helpers to find the task by its numerical ids  
Posted by [Pavel Emelianov](#) on Mon, 30 Jul 2007 06:15:22 GMT

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Oleg Nesterov wrote:

> On 07/26, Pavel Emelianov wrote:

>> + #define find\_pid(pid) find\_pid\_ns(pid, &init\_pid\_ns)

>

> Again, I think find\_pid() should use current's active ns, not

> init\_pid\_ns. Just grep for find\_pid/find\_task\_by\_pid.

>

>> --- linux-2.6.23-rc1-mm1.orig/kernel/pid.c 2007-07-26 16:34:45.000000000 +0400

>> +++ linux-2.6.23-rc1-mm1-7/kernel/pid.c 2007-07-26 16:36:37.000000000 +0400

>> @@ -204,19 +221,20 @@ static void delayed\_put\_pid(struct rcu\_h

>> goto out;

>> }

>>

>> -struct pid \*fastcall find\_pid(int nr)

>> +struct pid \*fastcall find\_pid\_ns(int nr, struct pid\_namespace \*ns)

>> {

>> struct hlist\_node \*elem;

>> - struct pid \*pid;

>> + struct upid \*pnr;

>> +

>> + hlist\_for\_each\_entry\_rcu(pnr, elem,

>> + &pid\_hash[pid\_hashfn(nr, ns)], pid\_chain)

>> + if (pnr->nr == nr && pnr->ns == ns)

> ^^^^^^^^^^^^^

> Aha, that is why we need upid->ns.

That's it :)

> I am a bit surprised we don't move the global pid\_hash into the

> "struct pid\_namespace", this could speedup the search, and we

> don't need upid->ns.

Hm... Worth thinking about, but this hash itself is large enough and its size depends on the node's number of pages, so we'll have

1. either to make per-namespace hash (much) smaller;

2. or to give (too) many memory for it.

>> -struct pid \*find\_ge\_pid(int nr)

>> +struct pid \*find\_ge\_pid(int nr, struct pid\_namespace \*ns)

>> {

>> struct pid \*pid;

>>

>> do {

```
>> - pid = find_pid(nr);
>> + pid = find_pid_ns(nr, ns);
>>   if (pid)
>>     break;
>> - nr = next_pidmap(task_active_pid_ns(current), nr);
>> + nr = next_pidmap(ns, nr);
>>   } while (nr > 0);
>>
>>   return pid;
>
> This means we should fix the caller, next_tgid(), but this is done
> in 15/15.
```

Sorry :)

> Oleg.  
>  
>

Thank,  
Pavel

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