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Subject: Re: [PATCH 2/6] Rename pid\_nr function  
Posted by [Sukadev Bhattiprolu](#) on Fri, 13 Jul 2007 05:55:43 GMT  
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Pavel Emelianov [xemul@openvz.org] wrote:  
| sukadev@us.ibm.com wrote:  
| > Subject: [PATCH 2/6] Rename pid\_nr function  
| >  
| > From: Sukadev Bhattiprolu <sukadev@us.ibm.com>  
| >  
| > Rename pid\_nr() function to pid\_to\_nr() which is more descriptive  
| > and will hopefully cause less confusion with new structure/functions  
| > being added to support multiple pid namespaces.  
|  
| Don't we need at least two convertors:  
| pid\_to\_nr\_as\_it\_seen\_by\_current()  
| and  
| pid\_to\_nr\_as\_it\_seen\_by\_some\_other\_task()

Can you give me an example of where you would use this latter  
(pid\_to\_nr\_as\_it\_seen\_by\_some\_other\_task()) interface ?

I have a similar confusion with following two sets of interfaces  
in your patchset and have been meaning to discuss it further.

pid\_nr() and pid\_vnr()  
find\_pid() and find\_vpid()

I can understand the use of pid\_vnr() and find\_vpid().

Where do you see us using pid\_nr() and find\_pid() - i.e the values  
as seen in init\_pid\_ns ?

Like I pointed out in another thread, sunos\_killpg() for instance  
needs to used find\_vpid(). Similarly, kill\_proc\_info(),  
\_\_set\_special\_pids() etc need find\_vpid().

Thanks,

Suka

|  
| The first one is essentially the second one with "some other  
| task" being current, but it can be optimized...  
|  
| > Signed-off-by: Sukadev Bhattiprolu <sukadev@us.ibm.com>  
| > ---

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| > drivers/char/n_r3964.c | 7 ++++---
| > drivers/char/tty_io.c | 4 +---
| > fs/autofs/root.c | 2 +-
| > fs/fcntl.c | 2 +-
| > fs/proc/array.c | 2 +-
| > fs/smbfs/proc.c | 2 +-
| > include/linux/pid.h | 2 +-
| > ipc/mqueue.c | 2 +-
| > kernel/container.c | 2 +-
| > kernel/fork.c | 2 +-
| > kernel/sysctl.c | 2 +-
| > 11 files changed, 15 insertions(+), 14 deletions(-)
| >
| > Index: lx26-22-rc6-mm1/include/linux/pid.h
| > =====
| > --- lx26-22-rc6-mm1.orig/include/linux/pid.h 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/include/linux/pid.h 2007-07-05 18:54:29.000000000 -0700
| > @@ -98,7 +98,7 @@ extern struct pid *find_ge_pid(int nr);
| > extern struct pid *alloc_pid(void);
| > extern void FASTCALL(free_pid(struct pid *pid));
| >
| > -static inline pid_t pid_nr(struct pid *pid)
| > +static inline pid_t pid_to_nr(struct pid *pid)
| > {
| > pid_t nr = 0;
| > if (pid)
| > Index: lx26-22-rc6-mm1/drivers/char/n_r3964.c
| > =====
| > --- lx26-22-rc6-mm1.orig/drivers/char/n_r3964.c 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/drivers/char/n_r3964.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -771,7 +771,7 @@ static int enable_signals(struct r3964_i
| >
| > if (pClient->pid == pid) {
| > TRACE_PS("removing client %d from client list",
| > - pid_nr(pid));
| > + pid_to_nr(pid));
| > *ppClient = pClient->next;
| > while (pClient->msg_count) {
| > pMsg = remove_msg(plInfo, pClient);
| > @@ -801,7 +801,8 @@ static int enable_signals(struct r3964_i
| > if (pClient == NULL)
| > return -ENOMEM;
| >
| > - TRACE_PS("add client %d to client list", pid_nr(pid));
| > + TRACE_PS("add client %d to client list",
| > + pid_to_nr(pid));
| > spin_lock_init(&pClient->lock);
| > pClient->sig_flags = arg;

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| > pClient->pid = get_pid(pid);
| > @@ -933,7 +934,7 @@ static void remove_client_block(struct r
| > {
| > struct r3964_block_header *block;
| >
| > - TRACE_PS("remove_client_block PID %d", pid_nr(pClient->pid));
| > + TRACE_PS("remove_client_block PID %d", pid_to_nr(pClient->pid));
| >
| > block = pClient->next_block_to_read;
| > if (block) {
| > Index: lx26-22-rc6-mm1/drivers/char/tty_io.c
| > =====
| > --- lx26-22-rc6-mm1.orig/drivers/char/tty_io.c 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/drivers/char/tty_io.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -3080,7 +3080,7 @@ static int tiocgpggrp(struct tty_struct *
| > */
| > if (tty == real_tty && current->signal->tty != real_tty)
| > return -ENOTTY;
| > - return put_user(pid_nr(real_tty->pgrp), p);
| > + return put_user(pid_to_nr(real_tty->pgrp), p);
| > }
| >
| > /**
| > @@ -3151,7 +3151,7 @@ static int tiocgsid(struct tty_struct *t
| > return -ENOTTY;
| > if (!real_tty->session)
| > return -ENOTTY;
| > - return put_user(pid_nr(real_tty->session), p);
| > + return put_user(pid_to_nr(real_tty->session), p);
| > }
| >
| > /**
| > Index: lx26-22-rc6-mm1/fs/autofs/root.c
| > =====
| > --- lx26-22-rc6-mm1.orig/fs/autofs/root.c 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/fs/autofs/root.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -214,7 +214,7 @@ static struct dentry *autofs_root_lookup
| >
| > oz_mode = autofs_oz_mode(sbi);
| > DPRINTK(("autofs_lookup: pid = %u, pgrp = %u, catatonic = %d, "
| > - "oz_mode = %d\n", pid_nr(task_pid(current)),
| > + "oz_mode = %d\n", pid_to_nr(task_pid(current)),
| > process_group(current), sbi->catatonic,
| > oz_mode));
| >
| > Index: lx26-22-rc6-mm1/fs/fcntl.c
| > =====
| > --- lx26-22-rc6-mm1.orig/fs/fcntl.c 2007-07-05 18:53:43.000000000 -0700

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| > +++ lx26-22-rc6-mm1/fs/fcntl.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -305,7 +305,7 @@ pid_t f_getown(struct file *filp)
| > {
| >   pid_t pid;
| >   read_lock(&filp->f_owner.lock);
| >   - pid = pid_nr(filp->f_owner.pid);
| >   + pid = pid_to_nr(filp->f_owner.pid);
| >   if (filp->f_owner.pid_type == PIDTYPE_PGID)
| >     pid = -pid;
| >   read_unlock(&filp->f_owner.lock);
| > Index: lx26-22-rc6-mm1/fs/proc/array.c
| > =====
| > --- lx26-22-rc6-mm1.orig/fs/proc/array.c 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/fs/proc/array.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -398,7 +398,7 @@ static int do_task_stat(struct task_stru
| >   struct signal_struct *sig = task->signal;
| >
| >   if (sig->tty) {
| >     - tty_pgrp = pid_nr(sig->tty->pgrp);
| >     + tty_pgrp = pid_to_nr(sig->tty->pgrp);
| >     tty_nr = new_encode_dev(tty_devnum(sig->tty));
| >   }
| >
| > Index: lx26-22-rc6-mm1/fs/smbfs/proc.c
| > =====
| > --- lx26-22-rc6-mm1.orig/fs/smbfs/proc.c 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/fs/smbfs/proc.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -972,7 +972,7 @@ smb_newconn(struct smb_sb_info *server,
| >
| >   VERBOSE("protocol=%d, max_xmit=%d, pid=%d capabilities=0x%x\n",
| >     server->opt.protocol, server->opt.max_xmit,
| >     - pid_nr(server->conn_pid), server->opt.capabilities);
| >     + pid_to_nr(server->conn_pid), server->opt.capabilities);
| >
| >   /* FIXME: this really should be done by smbmount. */
| >   if (server->opt.max_xmit > SMB_MAX_PACKET_SIZE) {
| > Index: lx26-22-rc6-mm1/ipc/mqueue.c
| > =====
| > --- lx26-22-rc6-mm1.orig/ipc/mqueue.c 2007-07-05 18:53:43.000000000 -0700
| > +++ lx26-22-rc6-mm1/ipc/mqueue.c 2007-07-05 18:54:29.000000000 -0700
| > @@ -336,7 +336,7 @@ static ssize_t mqueue_read_file(struct f
| >   (info->notify_owner &&
| >     info->notify.sigev_notify == SIGEV_SIGNAL) ?
| >     info->notify.sigev_signo : 0,
| >     - pid_nr(info->notify_owner));
| >     + pid_to_nr(info->notify_owner));
| >   spin_unlock(&info->lock);
| >   buffer[sizeof(buffer)-1] = '\0';

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> slen = strlen(buffer)+1;
> Index: lx26-22-rc6-mm1/kernel/fork.c
> =====
> --- lx26-22-rc6-mm1.orig/kernel/fork.c 2007-07-05 18:53:43.000000000 -0700
> +++ lx26-22-rc6-mm1/kernel/fork.c 2007-07-05 18:54:29.000000000 -0700
> @@ -1032,7 +1032,7 @@ static struct task_struct *copy_process(
> p->did_exec = 0;
> delayacct_tsk_init(p); /* Must remain after dup_task_struct() */
> copy_flags(clone_flags, p);
> - p->pid = pid_nr(pid);
> + p->pid = pid_to_nr(pid);
> INIT_LIST_HEAD(&p->children);
> INIT_LIST_HEAD(&p->sibling);
> p->vfork_done = NULL;
> Index: lx26-22-rc6-mm1/kernel/sysctl.c
> =====
> --- lx26-22-rc6-mm1.orig/kernel/sysctl.c 2007-07-05 18:53:43.000000000 -0700
> +++ lx26-22-rc6-mm1/kernel/sysctl.c 2007-07-05 18:54:29.000000000 -0700
> @@ -2313,7 +2313,7 @@ static int proc_do_cad_pid(ctl_table *ta
> pid_t tmp;
> int r;
>
> - tmp = pid_nr(cad_pid);
> + tmp = pid_to_nr(cad_pid);
>
> r = __do_proc_dointvec(&tmp, table, write, filp, buffer,
> lenp, ppos, NULL, NULL);
> Index: lx26-22-rc6-mm1/kernel/container.c
> =====
> --- lx26-22-rc6-mm1.orig/kernel/container.c 2007-07-05 18:53:43.000000000 -0700
> +++ lx26-22-rc6-mm1/kernel/container.c 2007-07-05 18:54:29.000000000 -0700
> @@ -1600,7 +1600,7 @@ static int pid_array_load(pid_t *pidarra
> while ((tsk = container_iter_next(cont, &it)) {
> if (unlikely(n == npids))
> break;
> - pidarray[n++] = pid_nr(task_pid(tsk));
> + pidarray[n++] = pid_to_nr(task_pid(tsk));
> }
> container_iter_end(cont, &it);
> return n;
>
> _____
> Containers mailing list
> Containers@lists.linux-foundation.org
> https://lists.linux-foundation.org/mailman/listinfo/containers
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> _____
> Devel mailing list
> Devel@openvz.org

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| > <https://openvz.org/mailman/listinfo/devel>  
| >

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Containers mailing list

[Containers@lists.linux-foundation.org](mailto:Containers@lists.linux-foundation.org)

<https://lists.linux-foundation.org/mailman/listinfo/containers>

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