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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>  
| > ---

```

|> 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(pInfo, 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 tiocgprp(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
| >
| > _____
| > 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)

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