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Subject: Re: [PATCH 2/6] Rename pid\_nr function  
Posted by [Pavel Emelianov](#) on Fri, 13 Jul 2007 05:26:18 GMT  
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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()

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(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;
>         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 tiocgpgrp(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
> +++ 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
> =====

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> --- 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';
> 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);
>

```

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> 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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