
Subject: Re: [PATCH 2/6] Rename pid_nr function
Posted by [Sukadev Bhattiprolu](#) on Fri, 13 Jul 2007 05:55:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

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 *));
| >
| > -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;

```

```

| >     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);
| >     DPRINK(("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_struct
| >     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 file
| >     (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);
| >
| > 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

```

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

| >

Containers mailing list

Containers@lists.linux-foundation.org

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