
Subject: Re: [RFC][PATCH 08/16] Define/use pid->upid_list list.

Posted by [xemul](#) on Thu, 24 May 2007 08:57:33 GMT

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```
> +/*
> + * Return the pid_t by which the process @pid is known in the pid
> + * namespace @ns.
> +
> + * Return 0 if:
> + * - @pid is NULL (eg: procfs calls this for task_pgrp(init_task)
> + *   which is NULL).
> +
> + * - process does not have pid_t in the namespace @ns (eg: parent
> + *   process of a child reaper does not exist in the child namespace.
> + *   A getppid() call by the child reaper results in 0).
> +*/
> +pid_t pid_to_nr_in_ns(struct pid_namespace *ns, struct pid *pid)
> +{
> +    int i;
> +    struct upid *upid;
> +
> +    if (!pid)
> +        return 0;
> +
> +    upid = &pid->upid_list[0];
> +    for (i = 0; i < pid->num_upids; i++, upid++) {
> +        if (upid->pid_ns == ns)
> +            return upid->nr;
> +    }
> +}
```

This will make users of the kernel who do not need the pid namespaces suffer from performance loss. Why not introduce a CONFIG_PID_NS option?

```
> + return 0;
> +}
> +EXPORT_SYMBOL_GPL(pid_to_nr_in_ns);
> @@ -2182,6 +2185,8 @@ int proc_pid_readdir(struct file * filp,
>     struct task_struct *reaper = get_proc_task(filp->f_path.dentry->d_inode);
>     struct task_struct *task;
>     int tgid;
> + /* TODO get pid_ns from proc mnt rather than current */
> + struct pid_namespace *ns = task_active_pid_ns(current);
```

IMHO this is not a TODO, but MUSTDO.

When you have one /proc mount accessed from different pid namespaces you may be in situation when one pidnr (like 123) represents different tasks in these namespaces and thus the

inode staying behind the dentry with d_name "123" must reference two tasks. When we scale the model to N namespace inode must reference N tasks. But I don't see it in the patches...

```
>  
> if (!reaper)  
>     goto out_no_task;
```

Containers mailing list
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