
Subject: Re: [PATCH, v3 2/2] cgroups: introduce timer slack subsystem
Posted by [jacob.jun.pan](#) on Wed, 02 Feb 2011 22:56:05 GMT
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On Wed, 2 Feb 2011 22:47:36 +0200

"Kirill A. Shutemov" <kirill@shutemov.name> wrote:

```
> From: Kirill A. Shutemov <kirill@shutemov.name>
>
> Provides a way of tasks grouping by timer slack value. Introduces per
> cgroup max and min timer slack value. When a task attaches to a
> cgroup, its timer slack value adjusts (if needed) to fit min-max
> range.
>
> It also provides a way to set timer slack value for all tasks in the
> cgroup at once.
>
> This functionality is useful in mobile devices where certain
> background apps are attached to a cgroup and minimum wakeups are
> desired.
>
> Signed-off-by: Kirill A. Shutemov <kirill@shutemov.name>
> Idea-by: Jacob Pan <jacob.jun.pan@linux.intel.com>
> ---
> include/linux/cgroup_subsys.h | 6 +
> include/linux/init_task.h    | 4 +-
> init/Kconfig                  | 10 ++
> kernel/Makefile               | 1 +
> kernel/cgroup_timer_slack.c   | 242
> ++++++
>
> +
> +static int cgroup_timer_slack_check(struct task_struct *task,
> + unsigned long slack_ns)
> +{
> + struct cgroup_subsys_state *css;
> + struct timer_slack_cgroup *tslack_cgroup;
> +
>
> use rcu_read_lock()/unlock?
> lockdep complains unprotected rcu dereference check.
>
> + css = task_subsys_state(task, timer_slack_subsys.subsys_id);
> + tslack_cgroup = container_of(css, struct timer_slack_cgroup,
> + css); +
> + if (slack_ns < tslack_cgroup->min_slack_ns)
> + return -EPERM;
> + if (slack_ns > tslack_cgroup->max_slack_ns)
```

```
> + return -EPERM;
> + return 0;
> +}
> +

> +
> +static struct cftype files[] = {
> + {
> + .name = "set_slack_ns",
> + .write_u64 = tslack_write_set_slack_ns,
> + },
should we also allow reading of the current slack_ns?
```

```
> + {
> + .name = "min_slack_ns",
> + .private = TIMER_SLACK_MIN,
> + .read_u64 = tslack_read_range,
> + .write_u64 = tslack_write_range,
> + },
> + {
> + .name = "max_slack_ns",
> + .private = TIMER_SLACK_MAX,
> + .read_u64 = tslack_read_range,
> + .write_u64 = tslack_write_range,
> + },
> +};
> +
```

Containers mailing list
Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>
