
Subject: [PATCH 1/3] pid: Remove the child_reaper special case in init/main.c
Posted by [Daniel Lezcano](#) on Mon, 14 Feb 2011 19:16:01 GMT
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From: Eric W. Biederman <ebiederm@xmission.com>

It turns out that the existing assignment in copy_process of the child_reaper can handle the initial assignment of child_reaper we just need to generalize the test in kernel/fork.c

Signed-off-by: Eric W. Biederman <ebiederm@xmission.com>

Signed-off-by: Daniel Lezcano <daniel.lezcano@free.fr>

```
include/linux/pid.h | 11 ++++++++
init/main.c         |  9 -----
kernel/fork.c       |  2 +-
3 files changed, 12 insertions(+), 10 deletions(-)
```

diff --git a/include/linux/pid.h b/include/linux/pid.h

index 49f1c2f..efceda0 100644

--- a/include/linux/pid.h

+++ b/include/linux/pid.h

```
@@ -141,6 +141,17 @@ static inline struct pid_namespace *ns_of_pid(struct pid *pid)
}
```

```
/*
```

```
+ * is_child_reaper returns true if the pid is the init process
+ * of the current namespace. As this one could be checked before
+ * pid_ns->child_reaper is assigned in copy_process, we check
+ * with the pid number.
```

```
+ */
```

```
+static inline bool is_child_reaper(struct pid *pid)
```

```
+{
```

```
+ return pid->numbers[pid->level].nr == 1;
```

```
+}
```

```
+
```

```
+/*
```

```
+ * the helpers to get the pid's id seen from different namespaces
+ *
```

```
+ * pid_nr() : global id, i.e. the id seen from the init namespace;
```

diff --git a/init/main.c b/init/main.c

index 33c37c3..793ebfd 100644

--- a/init/main.c

+++ b/init/main.c

```
@@ -875,15 +875,6 @@ static int __init kernel_init(void * unused)
```

```
+ * init can run on any cpu.
```

```
+ */
```

```
+ set_cpus_allowed_ptr(current, cpu_all_mask);
```

```

- /*
-  * Tell the world that we're going to be the grim
-  * reaper of innocent orphaned children.
-  *
-  * We don't want people to have to make incorrect
-  * assumptions about where in the task array this
-  * can be found.
-  */
- init_pid_ns.child_reaper = current;

cad_pid = task_pid(current);

diff --git a/kernel/fork.c b/kernel/fork.c
index 25e4291..c9f0784 100644
--- a/kernel/fork.c
+++ b/kernel/fork.c
@@ -1289,7 +1289,7 @@ static struct task_struct *copy_process(unsigned long clone_flags,
    tracehook_finish_clone(p, clone_flags, trace);

    if (thread_group_leader(p)) {
-   if (clone_flags & CLONE_NEWPID)
+   if (is_child_reaper(pid))
        p->nsproxy->pid_ns->child_reaper = p;

        p->signal->leader_pid = pid;
--
1.7.1

```

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

Subject: Re: [PATCH 1/3] pid: Remove the child_reaper special case in init/main.c
Posted by [Serge E. Hallyn](#) on Tue, 15 Feb 2011 18:37:07 GMT
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Quoting Daniel Lezcano (daniel.lezcano@free.fr):
> From: Eric W. Biederman <ebiederm@xmission.com>
>
> It turns out that the existing assignment in copy_process of
> the child_reaper can handle the initial assignment of child_reaper
> we just need to generalize the test in kernel/fork.c
>
> Signed-off-by: Eric W. Biederman <ebiederm@xmission.com>
> Signed-off-by: Daniel Lezcano <daniel.lezcano@free.fr>

Acked-by: Serge E. Hallyn <serge@hallyn.com>

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> + * is_child_reaper returns true if the pid is the init process
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> + * pid_ns->child_reaper is assigned in copy_process, we check
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> + */
> +static inline bool is_child_reaper(struct pid *pid)
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> + return pid->numbers[pid->level].nr == 1;
> +}
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> +/*
> + * the helpers to get the pid's id seen from different namespaces
> + *
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> + * init can run on any cpu.
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> + set_cpus_allowed_ptr(current, cpu_all_mask);
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>  tracehook_finish_clone(p, clone_flags, trace);
>
>  if (thread_group_leader(p)) {
> -   if (clone_flags & CLONE_NEWPID)
> +   if (is_child_reaper(pid))
>     p->nsproxy->pid_ns->child_reaper = p;
>
>     p->signal->leader_pid = pid;
> --
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> _____
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