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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](mailto: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

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```
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

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 Containers@lists.linux-foundation.org  
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