
Subject: [PATCH -mm] task_struct: move ->fpu_counter and ->oomkilladj
Posted by [Alexey Dobriyan](#) on Thu, 27 Sep 2007 09:55:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

There is nice 2 byte hole after struct task_struct::ioprio field
into which we can put two 1-byte fields: ->fpu_counter and ->oomkilladj.

[cc'ing Arjan just in case ->fpu_counter placement wasn't completely random :^)]

Signed-off-by: Alexey Dobriyan <adobriyan@sw.ru>

include/linux/sched.h | 20 ++++++-----
1 file changed, 10 insertions(+), 10 deletions(-)

```
--- a/include/linux/sched.h
+++ b/include/linux/sched.h
@@ -960,6 +960,16 @@ struct task_struct {
 #endif

    unsigned short ioprio;
+ /*
+  * fpu_counter contains the number of consecutive context switches
+  * that the FPU is used. If this is over a threshold, the lazy fpu
+  * saving becomes unlazy to save the trap. This is an unsigned char
+  * so that after 256 times the counter wraps and the behavior turns
+  * lazy again; this to deal with bursty apps that only use FPU for
+  * a short time
+  */
+ unsigned char fpu_counter;
+ s8 oomkilladj; /* OOM kill score adjustment (bit shift). */
# ifdef CONFIG_BLK_DEV_IO_TRACE
    unsigned int btrace_seq;
# endif
@@ -1044,16 +1054,6 @@ struct task_struct {
    struct key *thread_keyring; /* keyring private to this thread */
    unsigned char jit_keyring; /* default keyring to attach requested keys to */
# endif
- /*
-  * fpu_counter contains the number of consecutive context switches
-  * that the FPU is used. If this is over a threshold, the lazy fpu
-  * saving becomes unlazy to save the trap. This is an unsigned char
-  * so that after 256 times the counter wraps and the behavior turns
-  * lazy again; this to deal with bursty apps that only use FPU for
-  * a short time
-  */
- unsigned char fpu_counter;
- s8 oomkilladj; /* OOM kill score adjustment (bit shift). */
```

```
char comm[TASK_COMM_LEN]; /* executable name excluding path
- access with [gs]et_task_comm (which lock
it with task_lock())
```

Subject: Re: [PATCH -mm] task_struct: move ->fpu_counter and ->oomkilladj
Posted by [Arjan van de Ven](#) on Thu, 27 Sep 2007 13:56:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Thu, 27 Sep 2007 13:55:57 +0400
Alexey Dobriyan <adobriyan@sw.ru> wrote:

> There is nice 2 byte hole after struct task_struct::ioprio field
> into which we can put two 1-byte fields: ->fpu_counter and
> ->oomkilladj.
>
> [cc'ing Arjan just in case ->fpu_counter placement wasn't completely
> random :^)]

fpu_counter was more or less random, but it does get written to
frequently (making the cacheline dirty)
