
Subject: [PATCH 4/5] Define is_global_init() and is_container_init()
Posted by [Sukadev Bhattiprolu](#) on Sun, 15 Jul 2007 04:58:07 GMT
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Subject: [PATCH 4/5] Define is_global_init() and is_container_init().

From: Serge E. Hallyn <serue@us.ibm.com>

is_init() is an ambiguous name for the pid==1 check. Split it into is_global_init() and is_container_init().

A container init has it's tsk->pid == 1.

A global init also has it's tsk->pid == 1 and it's active pid namespace is the init_pid_ns. But rather than check the active pid namespace, compare the task structure with 'init_pid_ns.child_reaper', which is initialized during boot to the /sbin/init process and never changes.

Changelog:

2.6.22-rc4-mm2-pidns1:

- Use 'init_pid_ns.child_reaper' to determine if a given task is the global init (/sbin/init) process. This would improve performance and remove dependence on the task_pid().

2.6.21-mm2-pidns2:

- [Sukadev Bhattiprolu] Changed is_container_init() calls in {powerpc, ppc,avr32}/traps.c for the _exception() call to is_global_init(). This way, we kill only the container if the container's init has a bug rather than force a kernel panic.

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arch/alpha/mm/fault.c		2 +-
arch/arm/mm/fault.c		2 +-
arch/arm26/mm/fault.c		2 +-
arch/avr32/kernel/traps.c		2 +-
arch/avr32/mm/fault.c		6 +++---
arch/i386/lib/usercopy.c		2 +-

```

arch/i386/mm/fault.c          | 2 +-
arch/ia64/mm/fault.c         | 2 +-
arch/m68k/mm/fault.c         | 2 +-
arch/mips/mm/fault.c         | 2 +-
arch/powerpc/kernel/traps.c   | 2 +-
arch/powerpc/mm/fault.c      | 2 +-
arch/powerpc/platforms/pseries/ras.c | 2 +-
arch/ppc/kernel/traps.c      | 2 +-
arch/ppc/mm/fault.c          | 2 +-
arch/s390/lib/uaccess_pt.c    | 2 +-
arch/s390/mm/fault.c         | 2 +-
arch/sh/mm/fault.c           | 2 +-
arch/sh64/mm/fault.c         | 6 +++---
arch/um/kernel/trap.c        | 2 +-
arch/x86_64/mm/fault.c       | 2 +-
arch/xtensa/mm/fault.c       | 2 +-
drivers/char/sysrq.c         | 2 +-
include/linux/sched.h        | 12 ++++++++---
kernel/capability.c         | 3 +-
kernel/exit.c                | 2 +-
kernel/kexec.c               | 2 +-
kernel/pid.c                  | 7 +++++++
kernel/signal.c              | 2 +-
kernel/sysctl.c              | 2 +-
mm/oom_kill.c                | 4 +++-
security/commoncap.c         | 3 +-
32 files changed, 54 insertions(+), 37 deletions(-)

```

Index: lx26-22-rc6-mm1/include/linux/sched.h

```

=====
--- lx26-22-rc6-mm1.orig/include/linux/sched.h 2007-07-13 13:06:52.000000000 -0700
+++ lx26-22-rc6-mm1/include/linux/sched.h 2007-07-13 13:12:18.000000000 -0700
@@ -1219,12 +1219,20 @@ static inline int pid_alive(struct task_
 }

/**
- * is_init - check if a task structure is init
+ * is_global_init - check if a task structure is init
+ * @tsk: Task structure to be checked.
+ *
+ * Check if a task structure is the first user space task the kernel created.
+ *
+ * TODO: We should inline this function after some cleanups in pid_namespace.h
+ */
+extern int is_global_init(struct task_struct *tsk);
+
+/**
+ * is_container_init:

```

```
+ * check whether in the task is init in it's own pid namespace.  
*/
```

```
-static inline int is_init(struct task_struct *tsk)  
+static inline int is_container_init(struct task_struct *tsk)  
{  
    return tsk->pid == 1;  
}
```

Index: lx26-22-rc6-mm1/kernel/pid.c

```
=====  
--- lx26-22-rc6-mm1.orig/kernel/pid.c 2007-07-13 13:08:42.000000000 -0700
```

```
+++ lx26-22-rc6-mm1/kernel/pid.c 2007-07-13 13:12:18.000000000 -0700
```

```
@@ -69,6 +69,13 @@ struct pid_namespace init_pid_ns = {  
    .last_pid = 0,  
    .child_reaper = &init_task  
};
```

```
+EXPORT_SYMBOL(init_pid_ns);
```

```
+  
+int is_global_init(struct task_struct *tsk)
```

```
+{  
+ return tsk == init_pid_ns.child_reaper;  
+}
```

```
+EXPORT_SYMBOL(is_global_init);
```

```
/*
```

```
* Note: disable interrupts while the pidmap_lock is held as an  
Index: lx26-22-rc6-mm1/arch/alpha/mm/fault.c
```

```
=====  
--- lx26-22-rc6-mm1.orig/arch/alpha/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
```

```
+++ lx26-22-rc6-mm1/arch/alpha/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
```

```
@@ -192,7 +192,7 @@ do_page_fault(unsigned long address, uns  
/* We ran out of memory, or some other thing happened to us that  
made us unable to handle the page fault gracefully. */
```

```
out_of_memory:  
- if (is_init(current)) {  
+ if (is_global_init(current)) {  
    yield();  
    down_read(&mm->mmap_sem);  
    goto survive;
```

Index: lx26-22-rc6-mm1/arch/arm/mm/fault.c

```
=====  
--- lx26-22-rc6-mm1.orig/arch/arm/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
```

```
+++ lx26-22-rc6-mm1/arch/arm/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
```

```
@@ -197,7 +197,7 @@ survive:  
    return fault;  
}
```

```
- if (!is_init(tsk))  
+ if (!is_global_init(tsk))
```

```
goto out;
```

```
/*
```

```
Index: lx26-22-rc6-mm1/arch/arm26/mm/fault.c
```

```
=====  
--- lx26-22-rc6-mm1.orig/arch/arm26/mm/fault.c 2007-07-13 13:05:38.000000000 -0700  
+++ lx26-22-rc6-mm1/arch/arm26/mm/fault.c 2007-07-13 13:12:18.000000000 -0700  
@@ -185,7 +185,7 @@ survive:  
}
```

```
fault = -3; /* out of memory */  
- if (!is_init(tsk))  
+ if (!is_global_init(tsk))  
    goto out;
```

```
/*
```

```
Index: lx26-22-rc6-mm1/arch/i386/lib/usercopy.c
```

```
=====  
--- lx26-22-rc6-mm1.orig/arch/i386/lib/usercopy.c 2007-07-13 13:05:38.000000000 -0700  
+++ lx26-22-rc6-mm1/arch/i386/lib/usercopy.c 2007-07-13 13:12:18.000000000 -0700  
@@ -748,7 +748,7 @@ survive:  
    retval = get_user_pages(current, current->mm,  
        (unsigned long)to, 1, 1, 0, &pg, NULL);
```

```
- if (retval == -ENOMEM && is_init(current)) {  
+ if (retval == -ENOMEM && is_global_init(current)) {  
    up_read(&current->mm->mmap_sem);  
    congestion_wait(WRITE, HZ/50);  
    goto survive;
```

```
Index: lx26-22-rc6-mm1/arch/i386/mm/fault.c
```

```
=====  
--- lx26-22-rc6-mm1.orig/arch/i386/mm/fault.c 2007-07-13 13:05:38.000000000 -0700  
+++ lx26-22-rc6-mm1/arch/i386/mm/fault.c 2007-07-13 13:12:18.000000000 -0700  
@@ -595,7 +595,7 @@ no_context:  
*/
```

```
out_of_memory:  
    up_read(&mm->mmap_sem);  
- if (is_init(tsk)) {  
+ if (is_global_init(tsk)) {  
    yield();  
    down_read(&mm->mmap_sem);  
    goto survive;
```

```
Index: lx26-22-rc6-mm1/arch/ia64/mm/fault.c
```

```
=====  
--- lx26-22-rc6-mm1.orig/arch/ia64/mm/fault.c 2007-07-13 13:05:38.000000000 -0700  
+++ lx26-22-rc6-mm1/arch/ia64/mm/fault.c 2007-07-13 13:12:18.000000000 -0700  
@@ -270,7 +270,7 @@ ia64_do_page_fault (unsigned long adres
```

```
out_of_memory:
up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
yield();
down_read(&mm->mmap_sem);
goto survive;
Index: lx26-22-rc6-mm1/arch/m68k/mm/fault.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/m68k/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/m68k/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -181,7 +181,7 @@ good_area:
*/
```

```
out_of_memory:
up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
yield();
down_read(&mm->mmap_sem);
goto survive;
Index: lx26-22-rc6-mm1/arch/mips/mm/fault.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/mips/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/mips/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -174,7 +174,7 @@ no_context:
*/
```

```
out_of_memory:
up_read(&mm->mmap_sem);
- if (is_init(tsk)) {
+ if (is_global_init(tsk)) {
yield();
down_read(&mm->mmap_sem);
goto survive;
Index: lx26-22-rc6-mm1/arch/powerpc/kernel/traps.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/powerpc/kernel/traps.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/powerpc/kernel/traps.c 2007-07-13 13:12:18.000000000 -0700
@@ -191,7 +191,7 @@ void _exception(int signr, struct pt_reg
* generate the same exception over and over again and we get
* nowhere. Better to kill it and let the kernel panic.
*/
```

```
- if (is_init(current)) {
+ if (is_global_init(current)) {
__sighandler_t handler;

spin_lock_irq(&current->sigband->siglock);
Index: lx26-22-rc6-mm1/arch/powerpc/mm/fault.c
```

```
--- lx26-22-rc6-mm1.orig/arch/powerpc/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/powerpc/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -374,7 +374,7 @@ bad_area_nosemaphore:
```

```
*/
out_of_memory:
    up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
```

```
Index: lx26-22-rc6-mm1/arch/powerpc/platforms/pseries/ras.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/powerpc/platforms/pseries/ras.c 2007-07-13 13:05:38.000000000
-0700
+++ lx26-22-rc6-mm1/arch/powerpc/platforms/pseries/ras.c 2007-07-13 13:12:18.000000000
-0700
```

```
@@ -332,7 +332,7 @@ static int recover_mce(struct pt_regs *r
    err->disposition == RTAS_DISP_NOT_RECOVERED &&
    err->target == RTAS_TARGET_MEMORY &&
    err->type == RTAS_TYPE_ECC_UNCORR &&
-   !(current->pid == 0 || is_init(current))) {
+   !(current->pid == 0 || is_global_init(current))) {
    /* Kill off a user process with an ECC error */
    printk(KERN_ERR "MCE: uncorrectable ecc error for pid %d\n",
           current->pid);
```

```
Index: lx26-22-rc6-mm1/arch/ppc/kernel/traps.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/ppc/kernel/traps.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/ppc/kernel/traps.c 2007-07-13 13:12:18.000000000 -0700
@@ -121,7 +121,7 @@ void _exception(int signr, struct pt_reg
```

```
    * generate the same exception over and over again and we get
    * nowhere. Better to kill it and let the kernel panic.
    */
- if (is_init(current)) {
+ if (is_global_init(current)) {
    __sighandler_t handler;
```

```
    spin_lock_irq(&current->sigand->siglock);
```

```
Index: lx26-22-rc6-mm1/arch/ppc/mm/fault.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/ppc/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/ppc/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -292,7 +292,7 @@ bad_area:
```

```
*/
out_of_memory:
    up_read(&mm->mmap_sem);
- if (is_init(current)) {
```

```
+ if (is_global_init(current)) {
  yield();
  down_read(&mm->mmap_sem);
  goto survive;
```

Index: lx26-22-rc6-mm1/arch/s390/lib/uaccess_pt.c

```
=====
--- lx26-22-rc6-mm1.orig/arch/s390/lib/uaccess_pt.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/s390/lib/uaccess_pt.c 2007-07-13 13:12:18.000000000 -0700
@@ -65,7 +65,7 @@ out:
```

```
out_of_memory:
  up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
  yield();
  down_read(&mm->mmap_sem);
  goto survive;
```

Index: lx26-22-rc6-mm1/arch/s390/mm/fault.c

```
=====
--- lx26-22-rc6-mm1.orig/arch/s390/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/s390/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -211,7 +211,7 @@ static int do_out_of_memory(struct pt_re
  struct mm_struct *mm = tsk->mm;
```

```
  up_read(&mm->mmap_sem);
- if (is_init(tsk)) {
+ if (is_global_init(tsk)) {
  yield();
  down_read(&mm->mmap_sem);
  return 1;
```

Index: lx26-22-rc6-mm1/arch/sh/mm/fault.c

```
=====
--- lx26-22-rc6-mm1.orig/arch/sh/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/sh/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -191,7 +191,7 @@ no_context:
  */
```

```
out_of_memory:
  up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
  yield();
  down_read(&mm->mmap_sem);
  goto survive;
```

Index: lx26-22-rc6-mm1/arch/sh64/mm/fault.c

```
=====
--- lx26-22-rc6-mm1.orig/arch/sh64/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/sh64/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -276,7 +276,7 @@ bad_area:
```

```

    show_regs(regs);
#endif
}
- if (is_init(tsk)) {
+ if (is_global_init(tsk)) {
    panic("INIT had user mode bad_area\n");
}
    tsk->thread.address = address;
@@ -318,14 +318,14 @@ no_context:
    * us unable to handle the page fault gracefully.
    */
out_of_memory:
- if (is_init(current)) {
+ if (is_global_init(current)) {
    panic("INIT out of memory\n");
    yield();
    goto survive;
}
    printk("fault:Out of memory\n");
    up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
Index: lx26-22-rc6-mm1/arch/um/kernel/trap.c

```

```

=====
--- lx26-22-rc6-mm1.orig/arch/um/kernel/trap.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/um/kernel/trap.c 2007-07-13 13:12:18.000000000 -0700
@@ -120,7 +120,7 @@ out_nosemaphore:
    * us unable to handle the page fault gracefully.
    */

```

```

out_of_memory:
- if (is_init(current)) {
+ if (is_global_init(current)) {
    up_read(&mm->mmap_sem);
    yield();
    down_read(&mm->mmap_sem);
Index: lx26-22-rc6-mm1/arch/x86_64/mm/fault.c

```

```

=====
--- lx26-22-rc6-mm1.orig/arch/x86_64/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/x86_64/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -558,7 +558,7 @@ no_context:
    */
out_of_memory:
    up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {

```



```
yield();
goto again;
}
```

Index: lx26-22-rc6-mm1/arch/xtensa/mm/fault.c

```
=====
--- lx26-22-rc6-mm1.orig/arch/xtensa/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/xtensa/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
@@ -144,7 +144,7 @@ bad_area:
 */
out_of_memory:
up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
yield();
down_read(&mm->mmap_sem);
goto survive;
```

Index: lx26-22-rc6-mm1/drivers/char/sysrq.c

```
=====
--- lx26-22-rc6-mm1.orig/drivers/char/sysrq.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/drivers/char/sysrq.c 2007-07-13 13:12:18.000000000 -0700
@@ -250,7 +250,7 @@ static void send_sig_all(int sig)
struct task_struct *p;

for_each_process(p) {
- if (p->mm && !is_init(p))
+ if (p->mm && is_global_init(p))
/* Not swapper, init nor kernel thread */
force_sig(sig, p);
}
```

Index: lx26-22-rc6-mm1/kernel/capability.c

```
=====
--- lx26-22-rc6-mm1.orig/kernel/capability.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/kernel/capability.c 2007-07-13 13:12:18.000000000 -0700
@@ -12,6 +12,7 @@
#include <linux/module.h>
#include <linux/security.h>
#include <linux/syscalls.h>
+#include <linux/pid_namespace.h>
#include <asm/uaccess.h>

unsigned securebits = SECUREBITS_DEFAULT; /* systemwide security settings */
@@ -135,7 +136,7 @@ static inline int cap_set_all(kernel_cap
int found = 0;

do_each_thread(g, target) {
- if (target == current || is_init(target))
+ if (target == current || is_container_init(target))
continue;
```

```
        found = 1;
        if (security_capset_check(target, effective, inheritable,
Index: lx26-22-rc6-mm1/kernel/exit.c
```

```
=====
--- lx26-22-rc6-mm1.orig/kernel/exit.c 2007-07-13 13:12:01.000000000 -0700
+++ lx26-22-rc6-mm1/kernel/exit.c 2007-07-13 13:12:18.000000000 -0700
@@ -231,7 +231,7 @@ static int will_become_orphaned_pgrp(str
do_each_pid_task(pgrp, PIDTYPE_PGID, p) {
    if (p == ignored_task
        || p->exit_state
-       || is_init(p->real_parent))
+       || is_global_init(p->real_parent))
        continue;
    if (task_pgrp(p->real_parent) != pgrp &&
        task_session(p->real_parent) == task_session(p)) {
Index: lx26-22-rc6-mm1/kernel/kexec.c
```

```
=====
--- lx26-22-rc6-mm1.orig/kernel/kexec.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/kernel/kexec.c 2007-07-13 13:12:18.000000000 -0700
@@ -42,7 +42,7 @@ struct resource crashk_res = {

int kexec_should_crash(struct task_struct *p)
{
- if (in_interrupt() || !p->pid || is_init(p) || panic_on_oops)
+ if (in_interrupt() || !p->pid || is_global_init(p) || panic_on_oops)
    return 1;
    return 0;
}
Index: lx26-22-rc6-mm1/kernel/sysctl.c
```

```
=====
--- lx26-22-rc6-mm1.orig/kernel/sysctl.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/kernel/sysctl.c 2007-07-13 13:12:18.000000000 -0700
@@ -1924,7 +1924,7 @@ int proc_dointvec_bset(ctl_table *table,
    return -EPERM;
}

- op = is_init(current) ? OP_SET : OP_AND;
+ op = is_global_init(current) ? OP_SET : OP_AND;
    return do_proc_dointvec(table, write, filp, buffer, lenp, ppos,
        do_proc_dointvec_bset_conv, &op);
}
Index: lx26-22-rc6-mm1/mm/oom_kill.c
```

```
=====
--- lx26-22-rc6-mm1.orig/mm/oom_kill.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/mm/oom_kill.c 2007-07-13 13:12:18.000000000 -0700
@@ -222,7 +222,7 @@ static struct task_struct *select_bad_pr
    if (!p->mm)
        continue;
```

```

/* skip the init task */
- if (is_init(p))
+ if (is_global_init(p))
  continue;

/*
@@ -275,7 +275,7 @@ static struct task_struct *select_bad_pr
*/
static void __oom_kill_task(struct task_struct *p, int verbose)
{
- if (is_init(p)) {
+ if (is_global_init(p)) {
  WARN_ON(1);
  printk(KERN_WARNING "tried to kill init!\n");
  return;

```

Index: lx26-22-rc6-mm1/security/commoncap.c

```

=====
--- lx26-22-rc6-mm1.orig/security/commoncap.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/security/commoncap.c 2007-07-13 13:12:18.000000000 -0700
@@ -23,6 +23,7 @@
#include <linux/xattr.h>
#include <linux/hugetlb.h>
#include <linux/mount.h>
+#include <linux/sched.h>

```

```

int cap_netlink_send(struct sock *sk, struct sk_buff *skb)
{
@@ -261,7 +262,7 @@ void cap_bprm_apply_creds (struct linux_
/* For init, we want to retain the capabilities set
 * in the init_task struct. Thus we skip the usual
 * capability rules */
- if (!is_init(current)) {
+ if (!is_global_init(current)) {
  current->cap_permitted = new_permitted;
  current->cap_effective =
  cap_intersect (new_permitted, bprm->cap_effective);

```

Index: lx26-22-rc6-mm1/arch/avr32/kernel/traps.c

```

=====
--- lx26-22-rc6-mm1.orig/arch/avr32/kernel/traps.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/avr32/kernel/traps.c 2007-07-13 13:12:18.000000000 -0700
@@ -89,7 +89,7 @@ void _exception(long signr, struct pt_re
 * generate the same exception over and over again and we get
 * nowhere. Better to kill it and let the kernel panic.
 */
- if (is_init(current)) {
+ if (is_global_init(current)) {
  __sighandler_t handler;

```

```
spin_lock_irq(&current->sigband->siglock);
Index: lx26-22-rc6-mm1/arch/avr32/mm/fault.c
```

```
=====
--- lx26-22-rc6-mm1.orig/arch/avr32/mm/fault.c 2007-07-13 13:05:38.000000000 -0700
+++ lx26-22-rc6-mm1/arch/avr32/mm/fault.c 2007-07-13 13:12:18.000000000 -0700
```

```
@@ -161,7 +161,7 @@ bad_area:
    if (exception_trace && printk_ratelimit())
        printk("%s%s[%d]: segfault at %08lx pc %08lx "
               "sp %08lx ecr %lu\n",
-       is_init(tsk) ? KERN_EMERG : KERN_INFO,
+       is_global_init(tsk) ? KERN_EMERG : KERN_INFO,
        tsk->comm, tsk->pid, address, regs->pc,
        regs->sp, ecr);
    _exception(SIGSEGV, regs, code, address);
@@ -210,7 +210,7 @@ no_context:
    */
    out_of_memory:
    up_read(&mm->mmap_sem);
- if (is_init(current)) {
+ if (is_global_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
@@ -232,7 +232,7 @@ do_sigbus:
    if (exception_trace)
        printk("%s%s[%d]: bus error at %08lx pc %08lx "
               "sp %08lx ecr %lu\n",
-       is_init(tsk) ? KERN_EMERG : KERN_INFO,
+       is_global_init(tsk) ? KERN_EMERG : KERN_INFO,
        tsk->comm, tsk->pid, address, regs->pc,
        regs->sp, ecr);
```

```
Index: lx26-22-rc6-mm1/kernel/signal.c
```

```
=====
--- lx26-22-rc6-mm1.orig/kernel/signal.c 2007-07-13 13:12:01.000000000 -0700
+++ lx26-22-rc6-mm1/kernel/signal.c 2007-07-13 13:12:18.000000000 -0700
@@ -257,7 +257,7 @@ flush_signal_handlers(struct task_struct
```

```
int unhandled_signal(struct task_struct *tsk, int sig)
{
- if (is_init(tsk))
+ if (is_global_init(tsk))
    return 1;
    if (tsk->ptrace & PT_PTRACED)
        return 0;
```

Containers mailing list
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