

---

Subject: [Lxc-devel] [RFC] [PATCH] pidspace: is\_init()  
Posted by [Sukadev Bhattiprolu](#) on Fri, 04 Aug 2006 22:41:05 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

This is an updated version of Eric Biederman's is\_init() patch.  
(<http://lkml.org/lkml/2006/2/6/280>). It applies cleanly to 2.6.18-rc2  
and replaces a few more instances of ->pid == 1 with is\_init().

Further, is\_init() checks pid and thus removes dependency on Eric's  
other patches for now.

Couple of questions:

Are there cases where child\_reaper is not pid = 1. Should the  
"tsk == child\_reaper" check in do\_exit() be replaced with is\_init() ?

Looks like, we would need a similar, is\_idle() wrapper for "pid==0"  
checks - although the name is\_idle\_task() maybe more intuitive. If  
so, should we rename is\_init() to is\_init\_task() ?

Eric's original description:

There are a lot of places in the kernel where we test for init  
because we give it special properties. Most significantly init  
must not die. This results in code all over the kernel test  
->pid == 1.

Introduce is\_init to capture this case.

With multiple pid spaces for all of the cases affected we are  
looking for only the first process on the system, not some other  
process that has pid == 1.

Signed-off-by: Eric W. Biederman <[ebiederm@xmission.com](mailto:ebiederm@xmission.com)>

Signed-off-by: Sukadev Bhattiprolu <[sukadev@us.ibm.com](mailto:sukadev@us.ibm.com)>

Cc: Dave Hansen <[haveblue@us.ibm.com](mailto:haveblue@us.ibm.com)>

Cc: Serge Hallyn <[serue@us.ibm.com](mailto:serue@us.ibm.com)>

Cc: Cedric Le Goater <[clg@fr.ibm.com](mailto:clg@fr.ibm.com)>

Cc: [lxc-devel@lists.sourceforge.net](mailto:lxc-devel@lists.sourceforge.net)

```
arch/alpha/mm/fault.c      | 2 +-  
arch/arm/mm/fault.c       | 2 +-  
arch/arm26/mm/fault.c     | 2 +-  
arch/i386/lib/usercopy.c  | 2 +-  
arch/i386/mm/fault.c     | 2 +-  
arch/ia64/mm/fault.c     | 2 +-  

```

```

arch/m32r/mm/fault.c          | 2 +-
arch/m68k/mm/fault.c         | 2 +-
arch/mips/mm/fault.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/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       | 4 +++-
arch/xtensa/mm/fault.c       | 2 +-
drivers/char/sysrq.c         | 2 +-
include/linux/sched.h        | 10 ++++++++
kernel/capability.c          | 2 +-
kernel/cpuset.c              | 2 +-
kernel/exit.c                | 2 +-
kernel/kexec.c               | 2 +-
kernel/ptrace.c               | 1 +
kernel/sysctl.c               | 2 +-
mm/oom_kill.c                | 6 ++++---
security/commoncap.c         | 2 +-
security/seclvl.c            | 9 ++++++---
30 files changed, 48 insertions(+), 36 deletions(-)

```

Index: linux-2.6.18-rc2c/arch/alpha/mm/fault.c

```

=====
--- linux-2.6.18-rc2c.orig/arch/alpha/mm/fault.c 2006-07-28 09:20:03.000000000 -0700
+++ linux-2.6.18-rc2c/arch/alpha/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -193,7 +193,7 @@ 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 (current->pid == 1) {
+ if (is_init(current)) {
  yield();
  down_read(&mm->mmap_sem);
  goto survive;

```

Index: linux-2.6.18-rc2c/arch/arm/mm/fault.c

```

=====
--- linux-2.6.18-rc2c.orig/arch/arm/mm/fault.c 2006-07-28 09:20:04.000000000 -0700
+++ linux-2.6.18-rc2c/arch/arm/mm/fault.c 2006-07-31 17:53:40.000000000 -0700
@@ -197,7 +197,7 @@ survive:
  return fault;
 }

- if (tsk->pid != 1)

```

```
+ if (!lis_init(tsk))
    goto out;
```

```
/*
```

```
Index: linux-2.6.18-rc2c/arch/arm26/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/arm26/mm/fault.c 2006-07-28 09:19:59.000000000 -0700
+++ linux-2.6.18-rc2c/arch/arm26/mm/fault.c 2006-07-31 22:48:32.000000000 -0700
@@ -185,7 +185,7 @@ survive:
 }
```

```
    fault = -3; /* out of memory */
- if (tsk->pid != 1)
+ if (!lis_init(tsk))
    goto out;
```

```
/*
```

```
Index: linux-2.6.18-rc2c/arch/i386/lib/usercopy.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/i386/lib/usercopy.c 2006-07-28 09:19:49.000000000 -0700
+++ linux-2.6.18-rc2c/arch/i386/lib/usercopy.c 2006-07-28 09:35:37.000000000 -0700
@@ -739,7 +739,7 @@ survive:
     retval = get_user_pages(current, current->mm,
        (unsigned long)to, 1, 1, 0, &pg, NULL);
```

```
- if (retval == -ENOMEM && current->pid == 1) {
+ if (retval == -ENOMEM && is_init(current)) {
    up_read(&current->mm->mmap_sem);
    blk_congestion_wait(WRITE, HZ/50);
    goto survive;
```

```
Index: linux-2.6.18-rc2c/arch/i386/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/i386/mm/fault.c 2006-07-28 09:19:49.000000000 -0700
+++ linux-2.6.18-rc2c/arch/i386/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -598,7 +598,7 @@ no_context:
 */
```

```
out_of_memory:
    up_read(&mm->mmap_sem);
- if (tsk->pid == 1) {
+ if (is_init(tsk)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
```

```
Index: linux-2.6.18-rc2c/arch/ia64/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/ia64/mm/fault.c 2006-07-28 09:20:02.000000000 -0700
+++ linux-2.6.18-rc2c/arch/ia64/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -278,7 +278,7 @@ ia64_do_page_fault (unsigned long address
```

```
    out_of_memory:
    up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
Index: linux-2.6.18-rc2c/arch/m32r/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/m32r/mm/fault.c 2006-07-28 09:20:09.000000000 -0700
+++ linux-2.6.18-rc2c/arch/m32r/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -299,7 +299,7 @@ no_context:
```

```
    */
    out_of_memory:
    up_read(&mm->mmap_sem);
- if (tsk->pid == 1) {
+ if (is_init(tsk)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
Index: linux-2.6.18-rc2c/arch/m68k/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/m68k/mm/fault.c 2006-07-28 09:20:00.000000000 -0700
+++ linux-2.6.18-rc2c/arch/m68k/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -181,7 +181,7 @@ good_area:
```

```
    */
    out_of_memory:
    up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
Index: linux-2.6.18-rc2c/arch/mips/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/mips/mm/fault.c 2006-07-28 09:19:54.000000000 -0700
+++ linux-2.6.18-rc2c/arch/mips/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -171,7 +171,7 @@ no_context:
```

```
    */
    out_of_memory:
    up_read(&mm->mmap_sem);
- if (tsk->pid == 1) {
+ if (is_init(tsk)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
Index: linux-2.6.18-rc2c/arch/powerpc/mm/fault.c
```

```
=====
--- linux-2.6.18-rc2c.orig/arch/powerpc/mm/fault.c 2006-07-28 09:20:10.000000000 -0700
+++ linux-2.6.18-rc2c/arch/powerpc/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -386,7 +386,7 @@ bad_area_nosemaphore:
```

```
*/
out_of_memory:
up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
yield();
down_read(&mm->mmap_sem);
goto survive;
```

Index: linux-2.6.18-rc2c/arch/powerpc/platforms/pseries/ras.c

```
=====
--- linux-2.6.18-rc2c.orig/arch/powerpc/platforms/pseries/ras.c 2006-07-28 09:20:10.000000000
-0700
+++ linux-2.6.18-rc2c/arch/powerpc/platforms/pseries/ras.c 2006-07-28 09:35:37.000000000
-0700
```

```
@@ -337,7 +337,7 @@ 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 || current->pid == 1) {
+ !(current->pid == 0 || is_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: linux-2.6.18-rc2c/arch/ppc/kernel/traps.c

```
=====
--- linux-2.6.18-rc2c.orig/arch/ppc/kernel/traps.c 2006-07-28 09:19:52.000000000 -0700
+++ linux-2.6.18-rc2c/arch/ppc/kernel/traps.c 2006-07-28 13:10:05.000000000 -0700
```

```
@@ -119,7 +119,7 @@ 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 (current->pid == 1) {
+ if (is_init(current)) {
__sighandler_t handler;
```

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

Index: linux-2.6.18-rc2c/arch/ppc/mm/fault.c

```
=====
--- linux-2.6.18-rc2c.orig/arch/ppc/mm/fault.c 2006-07-28 09:19:51.000000000 -0700
+++ linux-2.6.18-rc2c/arch/ppc/mm/fault.c 2006-07-28 13:11:06.000000000 -0700
@@ -291,7 +291,7 @@ bad_area:
```

```
*/
out_of_memory:
up_read(&mm->mmap_sem);
```

```
- if (current->pid == 1) {
+ if (is_init(current)) {
  yield();
  down_read(&mm->mmap_sem);
  goto survive;
Index: linux-2.6.18-rc2c/arch/s390/mm/fault.c
```

```
-----
--- linux-2.6.18-rc2c.orig/arch/s390/mm/fault.c 2006-07-28 09:20:08.000000000 -0700
+++ linux-2.6.18-rc2c/arch/s390/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -315,7 +315,7 @@ no_context:
*/
```

```
out_of_memory:
  up_read(&mm->mmap_sem);
- if (tsk->pid == 1) {
+ if (is_init(tsk)) {
  yield();
  goto survive;
}
Index: linux-2.6.18-rc2c/arch/sh/mm/fault.c
```

```
-----
--- linux-2.6.18-rc2c.orig/arch/sh/mm/fault.c 2006-07-28 09:19:59.000000000 -0700
+++ linux-2.6.18-rc2c/arch/sh/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -160,7 +160,7 @@ no_context:
*/
```

```
out_of_memory:
  up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
  yield();
  down_read(&mm->mmap_sem);
  goto survive;
Index: linux-2.6.18-rc2c/arch/sh64/mm/fault.c
```

```
-----
--- linux-2.6.18-rc2c.orig/arch/sh64/mm/fault.c 2006-07-28 09:20:08.000000000 -0700
+++ linux-2.6.18-rc2c/arch/sh64/mm/fault.c 2006-07-28 09:35:37.000000000 -0700
@@ -277,7 +277,7 @@ bad_area:
  show_regs(regs);
#endif
}
```

```
- if (tsk->pid == 1) {
+ if (is_init(tsk)) {
  panic("INIT had user mode bad_area\n");
}
tsk->thread.address = address;
@@ -319,14 +319,14 @@ no_context:
* us unable to handle the page fault gracefully.
*/
```

```
out_of_memory:
```

```

- if (current->pid == 1) {
+ if (is_init(current)) {
    panic("INIT out of memory\n");
    yield();
    goto survive;
}
printk("fault:Out of memory\n");
up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;

```

Index: linux-2.6.18-rc2c/arch/um/kernel/trap.c

```

=====
--- linux-2.6.18-rc2c.orig/arch/um/kernel/trap.c 2006-07-28 09:19:53.000000000 -0700
+++ linux-2.6.18-rc2c/arch/um/kernel/trap.c 2006-07-28 09:42:26.000000000 -0700
@@ -120,7 +120,7 @@ out_nosemaphore:
 * us unable to handle the page fault gracefully.
 */

```

```

out_of_memory:
- if (current->pid == 1) {
+ if (is_init(current)) {
    up_read(&mm->mmap_sem);
    yield();
    down_read(&mm->mmap_sem);

```

Index: linux-2.6.18-rc2c/arch/x86\_64/mm/fault.c

```

=====
--- linux-2.6.18-rc2c.orig/arch/x86_64/mm/fault.c 2006-07-28 09:20:06.000000000 -0700
+++ linux-2.6.18-rc2c/arch/x86_64/mm/fault.c 2006-07-28 13:35:51.000000000 -0700
@@ -250,7 +250,7 @@ static int is_errata93(struct pt_regs *r

```

```

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

```

```

@@ -586,7 +586,7 @@ no_context:
 */

```

```

out_of_memory:
    up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
    yield();
    goto again;
}

```

Index: linux-2.6.18-rc2c/arch/xtensa/mm/fault.c

=====  
--- linux-2.6.18-rc2c.orig/arch/xtensa/mm/fault.c 2006-07-28 09:20:09.000000000 -0700

+++ linux-2.6.18-rc2c/arch/xtensa/mm/fault.c 2006-07-28 09:35:37.000000000 -0700

@@ -144,7 +144,7 @@ bad\_area:

```
*/
out_of_memory:
    up_read(&mm->mmap_sem);
- if (current->pid == 1) {
+ if (is_init(current)) {
    yield();
    down_read(&mm->mmap_sem);
    goto survive;
```

Index: linux-2.6.18-rc2c/drivers/char/sysrq.c

=====  
--- linux-2.6.18-rc2c.orig/drivers/char/sysrq.c 2006-07-28 09:19:35.000000000 -0700

+++ linux-2.6.18-rc2c/drivers/char/sysrq.c 2006-07-31 17:54:38.000000000 -0700

@@ -208,7 +208,7 @@ static void send\_sig\_all(int sig)

```
    struct task_struct *p;

    for_each_process(p) {
- if (p->mm && p->pid != 1)
+ if (p->mm && !is_init(p))
        /* Not swapper, init nor kernel thread */
        force_sig(sig, p);
    }
```

Index: linux-2.6.18-rc2c/include/linux/sched.h

=====  
--- linux-2.6.18-rc2c.orig/include/linux/sched.h 2006-07-28 09:20:13.000000000 -0700

+++ linux-2.6.18-rc2c/include/linux/sched.h 2006-07-31 17:55:09.000000000 -0700

@@ -1017,6 +1017,16 @@ static inline int pid\_alive(struct task\_

```
    return p->pids[PIDTYPE_PID].pid != NULL;
}
```

+/\*\*

+ \* is\_init - check if a task structure is the first user space

+ \* task the kernel created.

+ \* @p: Task structure to be checked.

+ \*/

+static inline int is\_init(struct task\_struct \*tsk)

```
+{
+ return tsk->pid == 1;
```

```
+}
```

+

extern void free\_task(struct task\_struct \*tsk);

```
#define get_task_struct(tsk) do { atomic_inc(&(tsk)->usage); } while(0)
```

Index: linux-2.6.18-rc2c/kernel/capability.c



```

=====
--- linux-2.6.18-rc2c.orig/kernel/capability.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/kernel/capability.c 2006-07-28 13:12:12.000000000 -0700
@@ -133,7 +133,7 @@ static inline int cap_set_all(kernel_cap
    int found = 0;

    do_each_thread(g, target) {
-       if (target == current || target->pid == 1)
+       if (target == current || is_init(target))
            continue;
        found = 1;
        if (security_capset_check(target, effective, inheritable,
Index: linux-2.6.18-rc2c/kernel/cpuset.c
=====
--- linux-2.6.18-rc2c.orig/kernel/cpuset.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/kernel/cpuset.c 2006-07-28 13:13:04.000000000 -0700
@@ -240,7 +240,7 @@ static struct super_block *cpuset_sb;
 * A cpuset can only be deleted if both its 'count' of using tasks
 * is zero, and its list of 'children' cpusets is empty. Since all
 * tasks in the system use _some_ cpuset, and since there is always at
- * least one task in the system (init, pid == 1), therefore, top_cpuset
+ * least one task in the system (init), therefore, top_cpuset
 * always has either children cpusets and/or using tasks. So we don't
 * need a special hack to ensure that top_cpuset cannot be deleted.
 *
Index: linux-2.6.18-rc2c/kernel/exit.c
=====
--- linux-2.6.18-rc2c.orig/kernel/exit.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/kernel/exit.c 2006-07-31 17:58:58.000000000 -0700
@@ -219,7 +219,7 @@ static int will_become_orphaned_pgrp(int
    do_each_task_pid(pgrp, PIDTYPE_PGID, p) {
        if (p == ignored_task
            || p->exit_state
-           || p->real_parent->pid == 1)
+           || is_init(p->real_parent))
            continue;
        if (process_group(p->real_parent) != pgrp
            && p->real_parent->signal->session == p->signal->session) {
Index: linux-2.6.18-rc2c/kernel/kexec.c
=====
--- linux-2.6.18-rc2c.orig/kernel/kexec.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/kernel/kexec.c 2006-07-28 09:35:37.000000000 -0700
@@ -40,7 +40,7 @@ struct resource crashk_res = {

int kexec_should_crash(struct task_struct *p)
{
- if (in_interrupt() || !p->pid || p->pid == 1 || panic_on_oops)
+ if (in_interrupt() || !p->pid || is_init(p) || panic_on_oops)

```

```
    return 1;
    return 0;
}
```

Index: linux-2.6.18-rc2c/kernel/ptrace.c

```
=====
--- linux-2.6.18-rc2c.orig/kernel/ptrace.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/kernel/ptrace.c 2006-07-31 18:05:06.000000000 -0700
@@ -494,6 +494,7 @@ struct task_struct *ptrace_get_task_stru
    child = find_task_by_pid(pid);
    if (child)
        get_task_struct(child);
+
    read_unlock(&tasklist_lock);
    if (!child)
        return ERR_PTR(-ESRCH);
```

Index: linux-2.6.18-rc2c/kernel/sysctl.c

```
=====
--- linux-2.6.18-rc2c.orig/kernel/sysctl.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/kernel/sysctl.c 2006-07-28 09:35:37.000000000 -0700
@@ -1867,7 +1867,7 @@ int proc_dointvec_bset(ctl_table *table,
    return -EPERM;
}

- op = (current->pid == 1) ? OP_SET : OP_AND;
+ op = is_init(current) ? OP_SET : OP_AND;
    return do_proc_dointvec(table,write,filp,buffer,lenp,ppos,
        do_proc_dointvec_bset_conv,&op);
}
```

Index: linux-2.6.18-rc2c/mm/oom\_kill.c

```
=====
--- linux-2.6.18-rc2c.orig/mm/oom_kill.c 2006-07-28 09:20:50.000000000 -0700
+++ linux-2.6.18-rc2c/mm/oom_kill.c 2006-07-28 09:35:37.000000000 -0700
@@ -191,8 +191,8 @@ static struct task_struct *select_bad_pr
    unsigned long points;
    int releasing;

- /* skip the init task with pid == 1 */
- if (p->pid == 1)
+ /* skip the init task */
+ if (is_init(p))
    continue;
    if (p->oomkilladj == OOM_DISABLE)
        continue;
@@ -227,7 +227,7 @@ static struct task_struct *select_bad_pr
    */
    static void __oom_kill_task(struct task_struct *p, const char *message)
    {
- if (p->pid == 1) {
```

```
+ if (is_init(p)) {
    WARN_ON(1);
    printk(KERN_WARNING "tried to kill init!\n");
    return;
}
```

Index: linux-2.6.18-rc2c/security/commoncap.c

```
=====
--- linux-2.6.18-rc2c.orig/security/commoncap.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/security/commoncap.c 2006-07-31 18:05:35.000000000 -0700
@@ -169,7 +169,7 @@ 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 (current->pid != 1) {
+ if (!is_init(current)) {
    current->cap_permitted = new_permitted;
    current->cap_effective =
        cap_intersect (new_permitted, bprm->cap_effective);
}
```

Index: linux-2.6.18-rc2c/security/seclvl.c

```
=====
--- linux-2.6.18-rc2c.orig/security/seclvl.c 2006-07-28 09:20:49.000000000 -0700
+++ linux-2.6.18-rc2c/security/seclvl.c 2006-07-31 18:06:33.000000000 -0700
@@ -287,7 +287,7 @@ static struct file_operations passwd_fil
 */
static int seclvl_ptrace(struct task_struct *parent, struct task_struct *child)
{
- if (seclvl >= 0 && child->pid == 1) {
+ if (seclvl >= 0 && is_init(child)) {
    seclvl_printk(1, KERN_WARNING, "Attempt to ptrace "
        "the init process disallowed in "
        "secure level %d\n", seclvl);
@@ -305,7 +305,7 @@ static int seclvl_capable(struct task_st
    int rc = 0;

    /* init can do anything it wants */
- if (tsk->pid == 1)
+ if (is_init(tsk))
    return 0;

    if (seclvl > 0) {
@@ -413,7 +413,8 @@ static void seclvl_bd_release(struct ino
static int
seclvl_inode_permission(struct inode *inode, int mask, struct nameidata *nd)
{
- if (current->pid != 1 && S_ISBLK(inode->i_mode) && (mask & MAY_WRITE)) {
+ if (!is_init(current)
+ && S_ISBLK(inode->i_mode) && (mask & MAY_WRITE)) {
    switch (seclvl) {
        case 2:

```

```
    seclvl_printk(1, KERN_WARNING, "Write to block device "
@@ -465,7 +466,7 @@ static void seclvl_file_free_security(st
*/
static int seclvl_umount(struct vfsmount *mnt, int flags)
{
- if (current->pid != 1 && seclvl == 2) {
+ if (!is_init(current) && seclvl == 2) {
    seclvl_printk(1, KERN_WARNING, "Attempt to unmount in secure "
        "level %d\n", seclvl);
    return -EPERM;
}
```

---

Take Surveys. Earn Cash. Influence the Future of IT  
Join SourceForge.net's Techsay panel and you'll get the chance to share your  
opinions on IT & business topics through brief surveys -- and earn cash  
<http://www.techsay.com/default.php?page=join.php&p=sourceforge&CID=DEVDEV>

---

Lxc-devel mailing list  
[Lxc-devel@lists.sourceforge.net](mailto:Lxc-devel@lists.sourceforge.net)  
<https://lists.sourceforge.net/lists/listinfo/lxc-devel>

---