
Subject: [RFC][PATCH 3/5] Virtualization/containers: UTSNAME

Posted by [dev](#) on Fri, 03 Feb 2006 17:04:50 GMT

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Virtualization of UTSNAME.

As simple as UID hashes, just virtualizes system_utsname variable (diff-vps-uts-name-core) and replaces access to it with vps_utsname in required places (diff-vps-uts-name-kern).

Kirill

```
--- ./include/linux/vps_info.h.vps_uts_core 2006-02-03 16:49:51.000000000 +0300
```

```
+++ ./include/linux/vps_info.h 2006-02-03 16:50:39.000000000 +0300
```

```
@ @ -6,6 +6,7 @ @
```

```
struct task_struct;
struct list_head;
+struct new_utsname;
```

```
struct vps_info {
    u32 id;
@ @ -13,6 +14,7 @ @
    atomic_t refcnt;
```

```
    struct list_head *vps_uid_hash;
+ struct new_utsname *vps_uts_name;
};
```

```
extern struct vps_info host_vps_info;
--- ./include/linux/utsname.h.vps_uts_core 2006-02-03 16:38:17.000000000 +0300
```

```
+++ ./include/linux/utsname.h 2006-02-03 16:50:26.000000000 +0300
```

```
@ @ -1,6 +1,8 @ @
```

```
#ifndef _LINUX_UTSNAME_H
#define _LINUX_UTSNAME_H
```

```
+#include <linux/vps_info.h>
```

```
+
```

```
#define __OLD_UTS_LEN 8
```

```
struct oldold_utsname {
@ @ -31,6 +33,7 @ @
};
```

```
extern struct new_utsname system_utsname;
+#define vps_utsname (*(current_vps()->vps_uts_name))
```

```
extern struct rw_semaphore uts_sem;
#endif
```

```

--- ./init/main.c.vps_uts_core 2006-02-03 16:43:18.000000000 +0300
+++ ./init/main.c 2006-02-03 16:50:26.000000000 +0300
@@ -439,6 +439,7 @@
    .id = 0,
    .init_task = &init_task,
    .refcnt = ATOMIC_INIT(1),
+ .vps_uts_name = &system_utsname,
};

EXPORT_SYMBOL(host_vps_info);

--- ./arch/alpha/kernel/osf_sys.c.vps_uts 2006-02-03 11:56:22.000000000 +0300
+++ ./arch/alpha/kernel/osf_sys.c 2006-02-03 13:35:25.000000000 +0300
@@ -402,15 +402,15 @@

    down_read(&uts_sem);
    error = -EFAULT;
- if (copy_to_user(name + 0, system_utsname.sysname, 32))
+ if (copy_to_user(name + 0, vps_utsname.sysname, 32))
    goto out;
- if (copy_to_user(name + 32, system_utsname.nodename, 32))
+ if (copy_to_user(name + 32, vps_utsname.nodename, 32))
    goto out;
- if (copy_to_user(name + 64, system_utsname.release, 32))
+ if (copy_to_user(name + 64, vps_utsname.release, 32))
    goto out;
- if (copy_to_user(name + 96, system_utsname.version, 32))
+ if (copy_to_user(name + 96, vps_utsname.version, 32))
    goto out;
- if (copy_to_user(name + 128, system_utsname.machine, 32))
+ if (copy_to_user(name + 128, vps_utsname.machine, 32))
    goto out;

    error = 0;
@@ -449,8 +449,8 @@

    down_read(&uts_sem);
    for (i = 0; i < len; ++i) {
- __put_user(system_utsname.domainname[i], name + i);
- if (system_utsname.domainname[i] == '\0')
+ __put_user(vps_utsname.domainname[i], name + i);
+ if (vps_utsname.domainname[i] == '\0')
        break;
    }
    up_read(&uts_sem);
@@ -608,11 +608,11 @@
osf_sysinfo(int command, char __user *buf, long count)
{

```

```

static char * sysinfo_table[] = {
- system_utsname.sysname,
- system_utsname.nodename,
- system_utsname.release,
- system_utsname.version,
- system_utsname.machine,
+ vps_utsname.sysname,
+ vps_utsname.nodename,
+ vps_utsname.release,
+ vps_utsname.version,
+ vps_utsname.machine,
  "alpha", /* instruction set architecture */
  "dummy", /* hardware serial number */
  "dummy", /* hardware manufacturer */
--- ./arch/i386/kernel/sys_i386.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/i386/kernel/sys_i386.c 2006-02-03 13:35:25.000000000 +0300
@@ -217,7 +217,7 @@
  if (!name)
    return -EFAULT;
  down_read(&uts_sem);
- err=copy_to_user(name, &system_utsname, sizeof (*name));
+ err=copy_to_user(name, &vps_utsname, sizeof (*name));
  up_read(&uts_sem);
  return err?-EFAULT:0;
}
@@ -233,15 +233,15 @@

  down_read(&uts_sem);

- error = __copy_to_user(&name->sysname,&system_utsname.sysname,__OLD_UTS_LEN);
+ error = __copy_to_user(&name->sysname,&vps_utsname.sysname,__OLD_UTS_LEN);
  error |= __put_user(0,name->sysname+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->nodename,&system_utsname.nodename,__OLD_UTS_LEN);
+ error |= __copy_to_user(&name->nodename,&vps_utsname.nodename,__OLD_UTS_LEN);
  error |= __put_user(0,name->nodename+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->release,&system_utsname.release,__OLD_UTS_LEN);
+ error |= __copy_to_user(&name->release,&vps_utsname.release,__OLD_UTS_LEN);
  error |= __put_user(0,name->release+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->version,&system_utsname.version,__OLD_UTS_LEN);
+ error |= __copy_to_user(&name->version,&vps_utsname.version,__OLD_UTS_LEN);
  error |= __put_user(0,name->version+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->machine,&system_utsname.machine,__OLD_UTS_LEN);
+ error |= __copy_to_user(&name->machine,&vps_utsname.machine,__OLD_UTS_LEN);
  error |= __put_user(0,name->machine+__OLD_UTS_LEN);

  up_read(&uts_sem);
--- ./arch/m32r/kernel/sys_m32r.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/m32r/kernel/sys_m32r.c 2006-02-03 13:35:25.000000000 +0300

```

```

@@ -199,7 +199,7 @@
    if (!name)
        return -EFAULT;
    down_read(&uts_sem);
- err=copy_to_user(name, &system_utsname, sizeof (*name));
+ err=copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);
    return err?-EFAULT:0;
}
--- ./arch/mips/kernel/linux32.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/mips/kernel/linux32.c 2006-02-03 13:35:25.000000000 +0300
@@ -1150,7 +1150,7 @@
    int ret = 0;

    down_read(&uts_sem);
- if (copy_to_user(name,&system_utsname,sizeof *name))
+ if (copy_to_user(name,&vps_utsname,sizeof *name))
    ret = -EFAULT;
    up_read(&uts_sem);

--- ./arch/mips/kernel/syscall.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/mips/kernel/syscall.c 2006-02-03 13:35:25.000000000 +0300
@@ -229,7 +229,7 @@
    */
    asmlinkage int sys_uname(struct old_utsname * name)
    {
- if (name && !copy_to_user(name, &system_utsname, sizeof (*name)))
+ if (name && !copy_to_user(name, &vps_utsname, sizeof (*name)))
        return 0;
        return -EFAULT;
    }
@@ -246,15 +246,15 @@
    if (!access_ok(VERIFY_WRITE,name,sizeof(struct oldold_utsname)))
        return -EFAULT;

- error = __copy_to_user(&name->sysname,&system_utsname.sysname,__OLD_UTS_LEN);
+ error = __copy_to_user(&name->sysname,&vps_utsname.sysname,__OLD_UTS_LEN);
    error -= __put_user(0,name->sysname+__OLD_UTS_LEN);
- error -= __copy_to_user(&name->nodename,&system_utsname.nodename,__OLD_UTS_LEN);
+ error -= __copy_to_user(&name->nodename,&vps_utsname.nodename,__OLD_UTS_LEN);
    error -= __put_user(0,name->nodename+__OLD_UTS_LEN);
- error -= __copy_to_user(&name->release,&system_utsname.release,__OLD_UTS_LEN);
+ error -= __copy_to_user(&name->release,&vps_utsname.release,__OLD_UTS_LEN);
    error -= __put_user(0,name->release+__OLD_UTS_LEN);
- error -= __copy_to_user(&name->version,&system_utsname.version,__OLD_UTS_LEN);
+ error -= __copy_to_user(&name->version,&vps_utsname.version,__OLD_UTS_LEN);
    error -= __put_user(0,name->version+__OLD_UTS_LEN);
- error -= __copy_to_user(&name->machine,&system_utsname.machine,__OLD_UTS_LEN);

```

```

+ error -= __copy_to_user(&name->machine,&vps_utsname.machine,__OLD_UTS_LEN);
  error = __put_user(0,name->machine+__OLD_UTS_LEN);
  error = error ? -EFAULT : 0;

@@ -290,10 +290,10 @@
  return -EFAULT;

  down_write(&uts_sem);
- strncpy(system_utsname.nodename, nodename, len);
+ strncpy(vps_utsname.nodename, nodename, len);
  nodename[__NEW_UTS_LEN] = '\0';
- strncpy(system_utsname.nodename, nodename,
-         sizeof(system_utsname.nodename));
+ strncpy(vps_utsname.nodename, nodename,
+         sizeof(vps_utsname.nodename));
  up_write(&uts_sem);
  return 0;
}
--- ./arch/mips/kernel/sysirix.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/mips/kernel/sysirix.c 2006-02-03 13:35:25.000000000 +0300
@@ -904,7 +904,7 @@
  down_read(&uts_sem);
  if (len > __NEW_UTS_LEN)
    len = __NEW_UTS_LEN;
- err = copy_to_user(name, system_utsname.domainname, len) ? -EFAULT : 0;
+ err = copy_to_user(name, vps_utsname.domainname, len) ? -EFAULT : 0;
  up_read(&uts_sem);

  return err;
@@ -1147,11 +1147,11 @@
asmlinkage int irix_uname(struct iuname __user *buf)
{
  down_read(&uts_sem);
- if (copy_from_user(system_utsname.sysname, buf->sysname, 65)
-     || copy_from_user(system_utsname.nodename, buf->nodename, 65)
-     || copy_from_user(system_utsname.release, buf->release, 65)
-     || copy_from_user(system_utsname.version, buf->version, 65)
-     || copy_from_user(system_utsname.machine, buf->machine, 65)) {
+ if (copy_from_user(vps_utsname.sysname, buf->sysname, 65)
+     || copy_from_user(vps_utsname.nodename, buf->nodename, 65)
+     || copy_from_user(vps_utsname.release, buf->release, 65)
+     || copy_from_user(vps_utsname.version, buf->version, 65)
+     || copy_from_user(vps_utsname.machine, buf->machine, 65)) {
    return -EFAULT;
  }
  up_read(&uts_sem);
--- ./arch/parisc/hpux/sys_hpux.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/parisc/hpux/sys_hpux.c 2006-02-03 13:35:25.000000000 +0300

```

@@ -266,15 +266,15 @@

down_read(&uts_sem);

```
- error = __copy_to_user(&name->sysname,&system_utsname.sysname,HPUX_UTSLEN-1);
+ error = __copy_to_user(&name->sysname,&vps_utsname.sysname,HPUX_UTSLEN-1);
  error |= __put_user(0,name->sysname+HPUX_UTSLEN-1);
- error |= __copy_to_user(&name->nodename,&system_utsname.nodename,HPUX_UTSLEN-1);
+ error |= __copy_to_user(&name->nodename,&vps_utsname.nodename,HPUX_UTSLEN-1);
  error |= __put_user(0,name->nodename+HPUX_UTSLEN-1);
- error |= __copy_to_user(&name->release,&system_utsname.release,HPUX_UTSLEN-1);
+ error |= __copy_to_user(&name->release,&vps_utsname.release,HPUX_UTSLEN-1);
  error |= __put_user(0,name->release+HPUX_UTSLEN-1);
- error |= __copy_to_user(&name->version,&system_utsname.version,HPUX_UTSLEN-1);
+ error |= __copy_to_user(&name->version,&vps_utsname.version,HPUX_UTSLEN-1);
  error |= __put_user(0,name->version+HPUX_UTSLEN-1);
- error |= __copy_to_user(&name->machine,&system_utsname.machine,HPUX_UTSLEN-1);
+ error |= __copy_to_user(&name->machine,&vps_utsname.machine,HPUX_UTSLEN-1);
  error |= __put_user(0,name->machine+HPUX_UTSLEN-1);
```

up_read(&uts_sem);

@@ -373,8 +373,8 @@

/* TODO: print a warning about using this? */

down_write(&uts_sem);

error = -EFAULT;

```
- if (!copy_from_user(system_utsname.sysname, ubuf, len)) {
- system_utsname.sysname[len] = 0;
+ if (!copy_from_user(vps_utsname.sysname, ubuf, len)) {
+ vps_utsname.sysname[len] = 0;
  error = 0;
}
```

up_write(&uts_sem);

@@ -400,8 +400,8 @@

/* TODO: print a warning about this? */

down_write(&uts_sem);

error = -EFAULT;

```
- if (!copy_from_user(system_utsname.release, ubuf, len)) {
- system_utsname.release[len] = 0;
+ if (!copy_from_user(vps_utsname.release, ubuf, len)) {
+ vps_utsname.release[len] = 0;
  error = 0;
}
```

up_write(&uts_sem);

@@ -422,13 +422,13 @@

down_read(&uts_sem);

```
- nlen = strlen(system_utsname.domainname) + 1;
```

```

+ nlen = strlen(vps_utsname.domainname) + 1;

if (nlen < len)
    len = nlen;
if(len > __NEW_UTS_LEN)
    goto done;
- if(copy_to_user(name, system_utsname.domainname, len))
+ if(copy_to_user(name, vps_utsname.domainname, len))
    goto done;
    err = 0;
done:
--- ./arch/powerpc/kernel/syscalls.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/powerpc/kernel/syscalls.c 2006-02-03 13:35:25.000000000 +0300
@@ -259,7 +259,7 @@
    int err = 0;

    down_read(&uts_sem);
- if (copy_to_user(name, &system_utsname, sizeof(*name)))
+ if (copy_to_user(name, &vps_utsname, sizeof(*name)))
    err = -EFAULT;
    up_read(&uts_sem);
    if (!err)
@@ -272,7 +272,7 @@
    int err = 0;

    down_read(&uts_sem);
- if (copy_to_user(name, &system_utsname, sizeof(*name)))
+ if (copy_to_user(name, &vps_utsname, sizeof(*name)))
    err = -EFAULT;
    up_read(&uts_sem);
    if (!err)
@@ -288,19 +288,19 @@
    return -EFAULT;

    down_read(&uts_sem);
- error = __copy_to_user(&name->sysname, &system_utsname.sysname,
+ error = __copy_to_user(&name->sysname, &vps_utsname.sysname,
    __OLD_UTS_LEN);
    error |= __put_user(0, name->sysname + __OLD_UTS_LEN);
- error |= __copy_to_user(&name->nodename, &system_utsname.nodename,
+ error |= __copy_to_user(&name->nodename, &vps_utsname.nodename,
    __OLD_UTS_LEN);
    error |= __put_user(0, name->nodename + __OLD_UTS_LEN);
- error |= __copy_to_user(&name->release, &system_utsname.release,
+ error |= __copy_to_user(&name->release, &vps_utsname.release,
    __OLD_UTS_LEN);
    error |= __put_user(0, name->release + __OLD_UTS_LEN);
- error |= __copy_to_user(&name->version, &system_utsname.version,

```

```

+ error |= __copy_to_user(&name->version, &vps_utsname.version,
    __OLD_UTS_LEN);
error |= __put_user(0, name->version + __OLD_UTS_LEN);
- error |= __copy_to_user(&name->machine, &system_utsname.machine,
+ error |= __copy_to_user(&name->machine, &vps_utsname.machine,
    __OLD_UTS_LEN);
error |= override_machine(name->machine);
up_read(&uts_sem);
--- ./arch/sh/kernel/setup.c.vps_uts 2006-02-03 11:56:22.000000000 +0300
+++ ./arch/sh/kernel/setup.c 2006-02-03 13:35:25.000000000 +0300
@@ -485,7 +485,7 @@
    seq_printf(m, "machine\t\t: %s\n", get_system_type());

    seq_printf(m, "processor\t: %d\n", cpu);
- seq_printf(m, "cpu family\t: %s\n", system_utsname.machine);
+ seq_printf(m, "cpu family\t: %s\n", vps_utsname.machine);
    seq_printf(m, "cpu type\t: %s\n", get_cpu_subtype());

    show_cpuflags(m);
--- ./arch/sh/kernel/sys_sh.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/sh/kernel/sys_sh.c 2006-02-03 13:35:25.000000000 +0300
@@ -267,7 +267,7 @@
    if (!name)
        return -EFAULT;
    down_read(&uts_sem);
- err=copy_to_user(name, &system_utsname, sizeof (*name));
+ err=copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);
    return err?-EFAULT:0;
}
--- ./arch/sh64/kernel/sys_sh64.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/sh64/kernel/sys_sh64.c 2006-02-03 13:35:25.000000000 +0300
@@ -279,7 +279,7 @@
    if (!name)
        return -EFAULT;
    down_read(&uts_sem);
- err=copy_to_user(name, &system_utsname, sizeof (*name));
+ err=copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);
    return err?-EFAULT:0;
}
--- ./arch/sparc/kernel/sys_sparc.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/sparc/kernel/sys_sparc.c 2006-02-03 13:35:25.000000000 +0300
@@ -470,13 +470,13 @@
    down_read(&uts_sem);

- nlen = strlen(system_utsname.domainname) + 1;

```



```

+ nlen = strlen(vps_utsname.domainname) + 1;

if (nlen < len)
    len = nlen;
if (len > __NEW_UTS_LEN)
    goto done;
- if (copy_to_user(name, system_utsname.domainname, len))
+ if (copy_to_user(name, vps_utsname.domainname, len))
    goto done;
err = 0;
done:
--- ./arch/sparc/kernel/sys_sunos.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/sparc/kernel/sys_sunos.c 2006-02-03 13:35:25.000000000 +0300
@@ -483,13 +483,13 @@
{
    int ret;
    down_read(&uts_sem);
- ret = copy_to_user(&name->sname[0], &system_utsname.sysname[0], sizeof(name->sname) -
1);
+ ret = copy_to_user(&name->sname[0], &vps_utsname.sysname[0], sizeof(name->sname) - 1);
    if (!ret) {
- ret |= __copy_to_user(&name->nname[0], &system_utsname.nodename[0],
sizeof(name->nname) - 1);
+ ret |= __copy_to_user(&name->nname[0], &vps_utsname.nodename[0], sizeof(name->nname)
- 1);
        ret |= __put_user('\0', &name->nname[8]);
- ret |= __copy_to_user(&name->rel[0], &system_utsname.release[0], sizeof(name->rel) - 1);
- ret |= __copy_to_user(&name->ver[0], &system_utsname.version[0], sizeof(name->ver) - 1);
- ret |= __copy_to_user(&name->mach[0], &system_utsname.machine[0], sizeof(name->mach) -
1);
+ ret |= __copy_to_user(&name->rel[0], &vps_utsname.release[0], sizeof(name->rel) - 1);
+ ret |= __copy_to_user(&name->ver[0], &vps_utsname.version[0], sizeof(name->ver) - 1);
+ ret |= __copy_to_user(&name->mach[0], &vps_utsname.machine[0], sizeof(name->mach) - 1);
    }
    up_read(&uts_sem);
    return ret ? -EFAULT : 0;
--- ./arch/sparc64/kernel/sys_sparc.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/sparc64/kernel/sys_sparc.c 2006-02-03 13:35:25.000000000 +0300
@@ -476,13 +476,13 @@

    down_read(&uts_sem);

- nlen = strlen(system_utsname.domainname) + 1;
+ nlen = strlen(vps_utsname.domainname) + 1;

    if (nlen < len)
        len = nlen;
    if (len > __NEW_UTS_LEN)

```

```

    goto done;
- if (copy_to_user(name, system_utsname.domainname, len))
+ if (copy_to_user(name, vps_utsname.domainname, len))
    goto done;
    err = 0;
done:
--- ./arch/sparc64/kernel/sys_sunos32.c.vps_uts 2006-02-03 11:56:03.000000000 +0300
+++ ./arch/sparc64/kernel/sys_sunos32.c 2006-02-03 13:35:25.000000000 +0300
@@ -439,16 +439,16 @@
    int ret;

    down_read(&uts_sem);
- ret = copy_to_user(&name->sname[0], &system_utsname.sysname[0],
+ ret = copy_to_user(&name->sname[0], &vps_utsname.sysname[0],
        sizeof(name->sname) - 1);
- ret |= copy_to_user(&name->nname[0], &system_utsname.nodename[0],
+ ret |= copy_to_user(&name->nname[0], &vps_utsname.nodename[0],
        sizeof(name->nname) - 1);
    ret |= put_user('\0', &name->nname[8]);
- ret |= copy_to_user(&name->rel[0], &system_utsname.release[0],
+ ret |= copy_to_user(&name->rel[0], &vps_utsname.release[0],
        sizeof(name->rel) - 1);
- ret |= copy_to_user(&name->ver[0], &system_utsname.version[0],
+ ret |= copy_to_user(&name->ver[0], &vps_utsname.version[0],
        sizeof(name->ver) - 1);
- ret |= copy_to_user(&name->mach[0], &system_utsname.machine[0],
+ ret |= copy_to_user(&name->mach[0], &vps_utsname.machine[0],
        sizeof(name->mach) - 1);
    up_read(&uts_sem);
    return (ret ? -EFAULT : 0);
--- ./arch/sparc64/solaris/misc.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/sparc64/solaris/misc.c 2006-02-03 13:35:25.000000000 +0300
@@ -239,7 +239,7 @@
    /* Let's cheat */
    err = set_utsfield(v->sysname, "SunOS", 1, 0);
    down_read(&uts_sem);
- err |= set_utsfield(v->nodename, system_utsname.nodename,
+ err |= set_utsfield(v->nodename, vps_utsname.nodename,
        1, 1);
    up_read(&uts_sem);
    err |= set_utsfield(v->release, "2.6", 0, 0);
@@ -263,7 +263,7 @@
    /* Why should we not lie a bit? */
    down_read(&uts_sem);
    err = set_utsfield(v->sysname, "SunOS", 0, 0);
- err |= set_utsfield(v->nodename, system_utsname.nodename, 1, 1);
+ err |= set_utsfield(v->nodename, vps_utsname.nodename, 1, 1);
    err |= set_utsfield(v->release, "5.6", 0, 0);

```

```

err |= set_utsfield(v->version, "Generic", 0, 0);
err |= set_utsfield(v->machine, machine(), 0, 0);
@@ -295,7 +295,7 @@
case SI_HOSTNAME:
    r = buffer + 256;
    down_read(&uts_sem);
- for (p = system_utsname.nodename, q = buffer;
+ for (p = vps_utsname.nodename, q = buffer;
    q < r && *p && *p != '!'; *q++ = *p++);
    up_read(&uts_sem);
    *q = 0;
--- ./arch/um/kernel/syscall_kern.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/um/kernel/syscall_kern.c 2006-02-03 13:35:25.000000000 +0300
@@ -110,7 +110,7 @@
    if (!name)
        return -EFAULT;
    down_read(&uts_sem);
- err=copy_to_user(name, &system_utsname, sizeof (*name));
+ err=copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);
    return err?-EFAULT:0;
}
@@ -126,19 +126,19 @@

    down_read(&uts_sem);

- error = __copy_to_user(&name->sysname,&system_utsname.sysname,
+ error = __copy_to_user(&name->sysname,&vps_utsname.sysname,
    __OLD_UTS_LEN);
    error |= __put_user(0,name->sysname+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->nodename,&system_utsname.nodename,
+ error |= __copy_to_user(&name->nodename,&vps_utsname.nodename,
    __OLD_UTS_LEN);
    error |= __put_user(0,name->nodename+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->release,&system_utsname.release,
+ error |= __copy_to_user(&name->release,&vps_utsname.release,
    __OLD_UTS_LEN);
    error |= __put_user(0,name->release+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->version,&system_utsname.version,
+ error |= __copy_to_user(&name->version,&vps_utsname.version,
    __OLD_UTS_LEN);
    error |= __put_user(0,name->version+__OLD_UTS_LEN);
- error |= __copy_to_user(&name->machine,&system_utsname.machine,
+ error |= __copy_to_user(&name->machine,&vps_utsname.machine,
    __OLD_UTS_LEN);
    error |= __put_user(0,name->machine+__OLD_UTS_LEN);

--- ./arch/um/sys-x86_64/syscalls.c.vps_uts 2006-01-03 06:21:10.000000000 +0300

```

```

+++ ./arch/um/sys-x86_64/syscalls.c 2006-02-03 13:35:25.000000000 +0300
@@ -21,7 +21,7 @@
{
    int err;
    down_read(&uts_sem);
- err = copy_to_user(name, &system_utsname, sizeof (*name));
+ err = copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);
    if (personality(current->personality) == PER_LINUX32)
        err |= copy_to_user(&name->machine, "i686", 5);
--- ./arch/x86_64/ia32/sys_ia32.c.vps_uts 2006-02-03 11:56:04.000000000 +0300
+++ ./arch/x86_64/ia32/sys_ia32.c 2006-02-03 13:35:25.000000000 +0300
@@ -868,13 +868,13 @@

    down_read(&uts_sem);

- error = __copy_to_user(&name->sysname, &system_utsname.sysname, __OLD_UTS_LEN);
+ error = __copy_to_user(&name->sysname, &vps_utsname.sysname, __OLD_UTS_LEN);
    __put_user(0, name->sysname+__OLD_UTS_LEN);
- __copy_to_user(&name->nodename, &system_utsname.nodename, __OLD_UTS_LEN);
+ __copy_to_user(&name->nodename, &vps_utsname.nodename, __OLD_UTS_LEN);
    __put_user(0, name->nodename+__OLD_UTS_LEN);
- __copy_to_user(&name->release, &system_utsname.release, __OLD_UTS_LEN);
+ __copy_to_user(&name->release, &vps_utsname.release, __OLD_UTS_LEN);
    __put_user(0, name->release+__OLD_UTS_LEN);
- __copy_to_user(&name->version, &system_utsname.version, __OLD_UTS_LEN);
+ __copy_to_user(&name->version, &vps_utsname.version, __OLD_UTS_LEN);
    __put_user(0, name->version+__OLD_UTS_LEN);
    {
        char *arch = "x86_64";
@@ -897,7 +897,7 @@
    if (!name)
        return -EFAULT;
    down_read(&uts_sem);
- err=copy_to_user(name, &system_utsname, sizeof (*name));
+ err=copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);
    if (personality(current->personality) == PER_LINUX32)
        err |= copy_to_user(&name->machine, "i686", 5);
--- ./arch/x86_64/kernel/sys_x86_64.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/x86_64/kernel/sys_x86_64.c 2006-02-03 13:35:25.000000000 +0300
@@ -148,7 +148,7 @@
{
    int err;
    down_read(&uts_sem);
- err = copy_to_user(name, &system_utsname, sizeof (*name));
+ err = copy_to_user(name, &vps_utsname, sizeof (*name));
    up_read(&uts_sem);

```

```

if (personality(current->personality) == PER_LINUX32)
    err |= copy_to_user(&name->machine, "i686", 5);
--- ./arch/xtensa/kernel/syscalls.c.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./arch/xtensa/kernel/syscalls.c 2006-02-03 13:35:25.000000000 +0300
@@ -129,7 +129,7 @@

```

```

int sys_uname(struct old_utsname * name)
{
- if (name && !copy_to_user(name, &system_utsname, sizeof (*name)))
+ if (name && !copy_to_user(name, &vps_utsname, sizeof (*name)))
    return 0;
    return -EFAULT;
}

```

```

--- ./include/asm-i386/elf.h.vps_uts 2006-01-03 06:21:10.000000000 +0300
+++ ./include/asm-i386/elf.h 2006-02-03 13:35:25.000000000 +0300
@@ -108,7 +108,7 @@

```

For the moment, we have only optimizations for the Intel generations,
but that could change... */

```

#define ELF_PLATFORM (system_utsname.machine)
#define ELF_PLATFORM (vps_utsname.machine)

```

```

#ifdef __KERNEL__
#define SET_PERSONALITY(ex, ibcs2) do { } while (0)
--- ./kernel/sys.c.vps_uts 2006-02-03 11:56:24.000000000 +0300
+++ ./kernel/sys.c 2006-02-03 13:35:25.000000000 +0300
@@ -1518,7 +1518,7 @@
    int errno = 0;

```

```

    down_read(&uts_sem);
- if (copy_to_user(name,&system_utsname,sizeof *name))
+ if (copy_to_user(name,&vps_utsname,sizeof *name))
    errno = -EFAULT;
    up_read(&uts_sem);
    return errno;
@@ -1536,8 +1536,8 @@
    down_write(&uts_sem);
    errno = -EFAULT;
    if (!copy_from_user(tmp, name, len)) {
- memcpy(system_utsname.nodename, tmp, len);
- system_utsname.nodename[len] = 0;
+ memcpy(vps_utsname.nodename, tmp, len);
+ vps_utsname.nodename[len] = 0;
    errno = 0;
    }
    up_write(&uts_sem);
@@ -1553,11 +1553,11 @@
    if (len < 0)

```

```

    return -EINVAL;
    down_read(&uts_sem);
- i = 1 + strlen(system_utsname.nodename);
+ i = 1 + strlen(vps_utsname.nodename);
    if (i > len)
        i = len;
    errno = 0;
- if (copy_to_user(name, system_utsname.nodename, i))
+ if (copy_to_user(name, vps_utsname.nodename, i))
    errno = -EFAULT;
    up_read(&uts_sem);
    return errno;
@@ -1582,8 +1582,8 @@
    down_write(&uts_sem);
    errno = -EFAULT;
    if (!copy_from_user(tmp, name, len)) {
- memcpy(system_utsname.domainname, tmp, len);
- system_utsname.domainname[len] = 0;
+ memcpy(vps_utsname.domainname, tmp, len);
+ vps_utsname.domainname[len] = 0;
        errno = 0;
    }
    up_write(&uts_sem);

```
