
Subject: Re: pspace name

Posted by [Herbert Poetzl](#) on Thu, 07 Sep 2006 15:44:26 GMT

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On Thu, Sep 07, 2006 at 10:41:52AM -0500, Serge E. Hallyn wrote:

> Quoting Kirill Korotaev (dev@sw.ru):

> > Cedric Le Goater wrote:

> > > all,

> > >

> > > 'pspace' sounds wrong when you know about the other namespaces :

> > >

> > > struct nsproxy {

> > > atomic_t count;

> > > spinlock_t nslock;

> > > struct uts_namespace *uts_ns;

> > > struct ipc_namespace *ipc_ns;

> > > struct user_namespace *user_ns;

> > > struct namespace *namespace;

> > > };

> > >

> > > 'proc_namespace' might be confusing, what about 'task_namespace' ?

> > yes, I also wanted to point to this, but probably missed in a hurry.

> > task_ns/task_namespace looks fine, doesn't it?

>

> I still think pid_ns is more correct, but task_ns sounds nicer and is

> at any rate unambiguous.

I'd prefer pid_n{s,amespace} too, as it resembles the function more closely ...

best,

Herbert

> > > 'namespace' should probably be renamed to something like 'mnt_namespace' ?

> > struct: mnt_namespace

> > fields: mnt_ns

> >

> > is the patch below ok for you?

>

> Based on a cursory glance, looks good to me.

>

> -serge

>

> >

> > ---

> >

> > --- ./fs/afs/mntpt.c.mntr 2006-07-14 19:08:29.000000000 +0400

> > +++ ./fs/afs/mntpt.c 2006-09-07 18:47:27.000000000 +0400

```

>> @@ -18,7 +18,7 @@
>> #include <linux/pagemap.h>
>> #include <linux/mount.h>
>> #include <linux/namei.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include "super.h"
>> #include "cell.h"
>> #include "volume.h"
>> --- ./fs/namespace.c.mntr 2006-07-14 19:11:05.000000000 +0400
>> +++ ./fs/namespace.c 2006-09-07 19:28:05.000000000 +0400
>> @@ -20,7 +20,7 @@
>> #include <linux/module.h>
>> #include <linux/sysfs.h>
>> #include <linux/seq_file.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/namei.h>
>> #include <linux/security.h>
>> #include <linux/mount.h>
>> @@ -134,10 +134,10 @@ struct vfsmount *lookup_mnt(struct vfsmo
>>
>> static inline int check_mnt(struct vfsmount *mnt)
>> {
>> - return mnt->mnt_namespace == current->nsproxy->namespace;
>> + return mnt->mnt_ns == current->nsproxy->mnt_ns;
>> }
>>
>> -static void touch_namespace(struct namespace *ns)
>> +static void touch_mnt_namespace(struct mnt_namespace *ns)
>> {
>> if (ns) {
>> ns->event = ++event;
>> @@ -145,7 +145,7 @@ static void touch_namespace(struct names
>> }
>> }
>>
>> -static void __touch_namespace(struct namespace *ns)
>> +static void __touch_mnt_namespace(struct mnt_namespace *ns)
>> {
>> if (ns && ns->event != event) {
>> ns->event = event;
>> @@ -188,19 +188,19 @@ static void commit_tree(struct vfsmount
>> struct vfsmount *parent = mnt->mnt_parent;
>> struct vfsmount *m;
>> LIST_HEAD(head);
>> - struct namespace *n = parent->mnt_namespace;
>> + struct mnt_namespace *n = parent->mnt_ns;

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>>
>> BUG_ON(parent == mnt);
>>
>> list_add_tail(&head, &mnt->mnt_list);
>> list_for_each_entry(m, &head, mnt_list)
>> - m->mnt_namespace = n;
>> + m->mnt_ns = n;
>> list_splice(&head, n->list.prev);
>>
>> list_add_tail(&mnt->mnt_hash, mount_hashtable +
>> hash(parent, mnt->mnt_mountpoint));
>> list_add_tail(&mnt->mnt_child, &parent->mnt_mounts);
>> - touch_namespace(n);
>> + touch_mnt_namespace(n);
>> }
>>
>> static struct vfsmount *next_mnt(struct vfsmount *p, struct vfsmount *root)
>> @@ -321,7 +321,7 @@ EXPORT_SYMBOL(mnt_unpin);
>> /* iterator */
>> static void *m_start(struct seq_file *m, loff_t *pos)
>> {
>> - struct namespace *n = m->private;
>> + struct mnt_namespace *n = m->private;
>> struct list_head *p;
>> loff_t l = *pos;
>>
>> @@ -334,7 +334,7 @@ static void *m_start(struct seq_file *m,
>>
>> static void *m_next(struct seq_file *m, void *v, loff_t *pos)
>> {
>> - struct namespace *n = m->private;
>> + struct mnt_namespace *n = m->private;
>> struct list_head *p = ((struct vfsmount *)v)->mnt_list.next;
>> (*pos)++;
>> return p == &n->list ? NULL : list_entry(p, struct vfsmount, mnt_list);
>> @@ -527,8 +527,8 @@ void umount_tree(struct vfsmount *mnt, i
>> list_for_each_entry(p, kill, mnt_hash) {
>> list_del_init(&p->mnt_expire);
>> list_del_init(&p->mnt_list);
>> - __touch_namespace(p->mnt_namespace);
>> - p->mnt_namespace = NULL;
>> + __touch_mnt_namespace(p->mnt_ns);
>> + p->mnt_ns = NULL;
>> list_del_init(&p->mnt_child);
>> if (p->mnt_parent != p)
>> p->mnt_mountpoint->d_mounted--;
>> @@ -831,7 +831,7 @@ static int attach_recursive_mnt(struct v
>> if (parent_nd) {

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>> detach_mnt(source_mnt, parent_nd);
>> attach_mnt(source_mnt, nd);
>> - touch_namespace(current->nsproxy->namespace);
>> + touch_mnt_namespace(current->nsproxy->mnt_ns);
>> } else {
>> mnt_set_mountpoint(dest_mnt, dest_dentry, source_mnt);
>> commit_tree(source_mnt);
>> @@ -1146,9 +1146,9 @@ static void expire_mount(struct vfsmount
>> */
>> if (!propagate_mount_busy(mnt, 2)) {
>> /* delete from the namespace */
>> - touch_namespace(mnt->mnt_namespace);
>> + touch_mnt_namespace(mnt->mnt_ns);
>> list_del_init(&mnt->mnt_list);
>> - mnt->mnt_namespace = NULL;
>> + mnt->mnt_ns = NULL;
>> umount_tree(mnt, 1, umounts);
>> spin_unlock(&vfsmount_lock);
>> } else {
>> @@ -1169,7 +1169,7 @@ static void expire_mount(struct vfsmount
>> */
>> static void expire_mount_list(struct list_head *graveyard, struct list_head *mounts)
>> {
>> - struct namespace *namespace;
>> + struct mnt_namespace *ns;
>> struct vfsmount *mnt;
>>
>> while (!list_empty(graveyard)) {
>> @@ -1179,10 +1179,10 @@ static void expire_mount_list(struct lis
>>
>> /* don't do anything if the namespace is dead - all the
>> * vfsmounts from it are going away anyway */
>> - namespace = mnt->mnt_namespace;
>> - if (!namespace || !namespace->root)
>> + ns = mnt->mnt_ns;
>> + if (!ns || !ns->root)
>> continue;
>> - get_namespace(namespace);
>> + get_mnt_ns(ns);
>>
>> spin_unlock(&vfsmount_lock);
>> down_write(&namespace_sem);
>> @@ -1190,7 +1190,7 @@ static void expire_mount_list(struct lis
>> up_write(&namespace_sem);
>> release_mounts(&umounts);
>> mntput(mnt);
>> - put_namespace(namespace);
>> + put_mnt_ns(ns);

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>> spin_lock(&vfsmount_lock);
>> }
>> }
>> @@ -1440,14 +1440,15 @@ dput_out:
>> * Allocate a new namespace structure and populate it with contents
>> * copied from the namespace of the passed in task structure.
>> */
>> -struct namespace *dup_namespace(struct task_struct *tsk, struct fs_struct *fs)
>> +struct mnt_namespace *dup_mnt_ns(struct task_struct *tsk,
>> + struct fs_struct *fs)
>> {
>> - struct namespace *namespace = tsk->nsproxy->namespace;
>> - struct namespace *new_ns;
>> + struct mnt_namespace *mnt_ns = tsk->nsproxy->mnt_ns;
>> + struct mnt_namespace *new_ns;
>> struct vfsmount *rootmnt = NULL, *pwdmnt = NULL, *altrootmnt = NULL;
>> struct vfsmount *p, *q;
>>
>> - new_ns = kmalloc(sizeof(struct namespace), GFP_KERNEL);
>> + new_ns = kmalloc(sizeof(struct mnt_namespace), GFP_KERNEL);
>> if (!new_ns)
>> return NULL;
>>
>> @@ -1458,7 +1459,7 @@ struct namespace *dup_namespace(struct t
>>
>> down_write(&namespace_sem);
>> /* First pass: copy the tree topology */
>> - new_ns->root = copy_tree(namespace->root, namespace->root->mnt_root,
>> + new_ns->root = copy_tree(mnt_ns->root, mnt_ns->root->mnt_root,
>> CL_COPY_ALL | CL_EXPIRE);
>> if (!new_ns->root) {
>> up_write(&namespace_sem);
>> @@ -1474,10 +1475,10 @@ struct namespace *dup_namespace(struct t
>> * as belonging to new namespace. We have already acquired a private
>> * fs_struct, so tsk->fs->lock is not needed.
>> */
>> - p = namespace->root;
>> + p = mnt_ns->root;
>> q = new_ns->root;
>> while (p) {
>> - q->mnt_namespace = new_ns;
>> + q->mnt_ns = new_ns;
>> if (fs) {
>> if (p == fs->rootmnt) {
>> rootmnt = p;
>> @@ -1492,7 +1493,7 @@ struct namespace *dup_namespace(struct t
>> fs->altrootmnt = mntget(q);
>> }

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>> }
>> - p = next_mnt(p, namespace->root);
>> + p = next_mnt(p, mnt_ns->root);
>> q = next_mnt(q, new_ns->root);
>> }
>> up_write(&namespace_sem);
>> @@ -1507,16 +1508,16 @@ struct namespace *dup_namespace(struct t
>> return new_ns;
>> }
>>
>> -int copy_namespace(int flags, struct task_struct *tsk)
>> +int copy_mnt_ns(int flags, struct task_struct *tsk)
>> {
>> - struct namespace *namespace = tsk->nsproxy->namespace;
>> - struct namespace *new_ns;
>> + struct mnt_namespace *ns = tsk->nsproxy->mnt_ns;
>> + struct mnt_namespace *new_ns;
>> int err = 0;
>>
>> - if (!namespace)
>> + if (!ns)
>> return 0;
>>
>> - get_namespace(namespace);
>> + get_mnt_ns(ns);
>>
>> if (!(flags & CLONE_NEWNS))
>> return 0;
>> @@ -1526,16 +1527,16 @@ int copy_namespace(int flags, struct tas
>> goto out;
>> }
>>
>> - new_ns = dup_namespace(tsk, tsk->fs);
>> + new_ns = dup_mnt_ns(tsk, tsk->fs);
>> if (!new_ns) {
>> err = -ENOMEM;
>> goto out;
>> }
>>
>> - tsk->nsproxy->namespace = new_ns;
>> + tsk->nsproxy->mnt_ns = new_ns;
>>
>> out:
>> - put_namespace(namespace);
>> + put_mnt_ns(ns);
>> return err;
>> }
>>

```

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>> @@ -1755,7 +1756,7 @@ asmlinkage long sys_pivot_root(const cha
>> detach_mnt(user_nd.mnt, &root_parent);
>> attach_mnt(user_nd.mnt, &old_nd); /* mount old root on put_old */
>> attach_mnt(new_nd.mnt, &root_parent); /* mount new_root on / */
>> - touch_namespace(current->nsproxy->namespace);
>> + touch_mnt_namespace(current->nsproxy->mnt_ns);
>> spin_unlock(&vfsmount_lock);
>> chroot_fs_refs(&user_nd, &new_nd);
>> security_sb_post_pivotroot(&user_nd, &new_nd);
>> @@ -1780,27 +1781,27 @@ out3:
>> static void __init init_mount_tree(void)
>> {
>> struct vfsmount *mnt;
>> - struct namespace *namespace;
>> + struct mnt_namespace *ns;
>>
>> mnt = do_kern_mount("rootfs", 0, "rootfs", NULL);
>> if (IS_ERR(mnt))
>> panic("Can't create rootfs");
>> - namespace = kmalloc(sizeof(*namespace), GFP_KERNEL);
>> - if (!namespace)
>> + ns = kmalloc(sizeof(*ns), GFP_KERNEL);
>> + if (!ns)
>> panic("Can't allocate initial namespace");
>> - atomic_set(&namespace->count, 1);
>> - INIT_LIST_HEAD(&namespace->list);
>> - init_waitqueue_head(&namespace->poll);
>> - namespace->event = 0;
>> - list_add(&mnt->mnt_list, &namespace->list);
>> - namespace->root = mnt;
>> - mnt->mnt_namespace = namespace;
>> + atomic_set(&ns->count, 1);
>> + INIT_LIST_HEAD(&ns->list);
>> + init_waitqueue_head(&ns->poll);
>> + ns->event = 0;
>> + list_add(&mnt->mnt_list, &ns->list);
>> + ns->root = mnt;
>> + mnt->mnt_ns = ns;
>>
>> - init_task.nsproxy->namespace = namespace;
>> - get_namespace(namespace);
>> + init_task.nsproxy->mnt_ns = ns;
>> + get_mnt_ns(ns);
>>
>> - set_fs_pwd(current->fs, namespace->root, namespace->root->mnt_root);
>> - set_fs_root(current->fs, namespace->root, namespace->root->mnt_root);
>> + set_fs_pwd(current->fs, ns->root, ns->root->mnt_root);
>> + set_fs_root(current->fs, ns->root, ns->root->mnt_root);

```

```

>> }
>>
>> void __init mnt_init(unsigned long mempages)
>> @@ -1861,11 +1862,11 @@ void __init mnt_init(unsigned long mempa
>> init_mount_tree());
>> }
>>
>> -void __put_namespace(struct namespace *namespace)
>> +void __put_mnt_ns(struct mnt_namespace *ns)
>> {
>> - struct vfsmount *root = namespace->root;
>> + struct vfsmount *root = ns->root;
>> LIST_HEAD(umount_list);
>> - namespace->root = NULL;
>> + ns->root = NULL;
>> spin_unlock(&vfsmount_lock);
>> down_write(&namespace_sem);
>> spin_lock(&vfsmount_lock);
>> @@ -1873,5 +1874,5 @@ void __put_namespace(struct namespace *n
>> spin_unlock(&vfsmount_lock);
>> up_write(&namespace_sem);
>> release_mounts(&umount_list);
>> - kfree(namespace);
>> + kfree(ns);
>> }
>> --- ./fs/pnode.c.mntr 2006-07-14 19:08:29.000000000 +0400
>> +++ ./fs/pnode.c 2006-09-07 18:47:27.000000000 +0400
>> @@ -6,7 +6,7 @@
>> * Author : Ram Pai (linuxram@us.ibm.com)
>> *
>> */
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/mount.h>
>> #include <linux/fs.h>
>> #include "pnode.h"
>> --- ./fs/pnode.h.mntr 2006-06-18 05:49:35.000000000 +0400
>> +++ ./fs/pnode.h 2006-09-07 18:47:27.000000000 +0400
>> @@ -13,7 +13,7 @@
>>
>> #define IS_MNT_SHARED(mnt) (mnt->mnt_flags & MNT_SHARED)
>> #define IS_MNT_SLAVE(mnt) (mnt->mnt_master)
>> -#define IS_MNT_NEW(mnt) (!mnt->mnt_namespace)
>> +#define IS_MNT_NEW(mnt) (!mnt->mnt_ns)
>> #define CLEAR_MNT_SHARED(mnt) (mnt->mnt_flags &= ~MNT_SHARED)
>> #define IS_MNT_UNBINDABLE(mnt) (mnt->mnt_flags & MNT_UNBINDABLE)
>>
>> --- ./fs/proc/base.c.mntr 2006-07-14 19:11:05.000000000 +0400

```



```

>> +++ ./fs/proc/base.c 2006-09-07 18:55:01.000000000 +0400
>> @@ -59,7 +59,7 @@
>> #include <linux/string.h>
>> #include <linux/seq_file.h>
>> #include <linux/namei.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/mm.h>
>> #include <linux/smp_lock.h>
>> #include <linux/rcupdate.h>
>> @@ -561,33 +561,33 @@ struct proc_mounts {
>> static int mounts_open(struct inode *inode, struct file *file)
>> {
>>     struct task_struct *task = get_proc_task(inode);
>>     - struct namespace *namespace = NULL;
>>     + struct mnt_namespace *ns = NULL;
>>     struct proc_mounts *p;
>>     int ret = -EINVAL;
>>
>>     if (task) {
>>         task_lock(task);
>>         - namespace = task->nsproxy->namespace;
>>         - if (namespace)
>>         -     get_namespace(namespace);
>>         + ns = task->nsproxy->mnt_ns;
>>         + if (ns)
>>         +     get_mnt_ns(ns);
>>         task_unlock(task);
>>         put_task_struct(task);
>>     }
>>
>>     - if (namespace) {
>>         + if (ns) {
>>             ret = -ENOMEM;
>>             p = kmalloc(sizeof(struct proc_mounts), GFP_KERNEL);
>>             if (p) {
>>                 file->private_data = &p->m;
>>                 ret = seq_open(file, &mounts_op);
>>                 if (!ret) {
>>                     - p->m.private = namespace;
>>                     - p->event = namespace->event;
>>                     + p->m.private = ns;
>>                     + p->event = ns->event;
>>                     return 0;
>>                 }
>>                 kfree(p);
>>             }
>>         - put_namespace(namespace);

```

```

>> + put_mnt_ns(ns);
>> }
>> return ret;
>> }
>> @@ -595,15 +595,15 @@ static int mounts_open(struct inode *ino
>> static int mounts_release(struct inode *inode, struct file *file)
>> {
>> struct seq_file *m = file->private_data;
>> - struct namespace *namespace = m->private;
>> - put_namespace(namespace);
>> + struct mnt_namespace *ns = m->private;
>> + put_mnt_ns(ns);
>> return seq_release(inode, file);
>> }
>>
>> static unsigned mounts_poll(struct file *file, poll_table *wait)
>> {
>> struct proc_mounts *p = file->private_data;
>> - struct namespace *ns = p->m.private;
>> + struct mnt_namespace *ns = p->m.private;
>> unsigned res = 0;
>>
>> poll_wait(file, &ns->poll, wait);
>> @@ -633,20 +633,20 @@ static int mountstats_open(struct inode
>>
>> if (!ret) {
>> struct seq_file *m = file->private_data;
>> - struct namespace *namespace = NULL;
>> + struct mnt_namespace *ns = NULL;
>> struct task_struct *task = get_proc_task(inode);
>>
>> if (task) {
>> task_lock(task);
>> - namespace = task->nsproxy->namespace;
>> - if (namespace)
>> - get_namespace(namespace);
>> + ns = task->nsproxy->mnt_ns;
>> + if (ns)
>> + get_mnt_ns(ns);
>> task_unlock(task);
>> put_task_struct(task);
>> }
>>
>> - if (namespace)
>> - m->private = namespace;
>> + if (ns)
>> + m->private = ns;
>> else {

```

```

>> seq_release(inode, file);
>> ret = -EINVAL;
>> --- ./fs/reiserfs/super.c.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./fs/reiserfs/super.c 2006-09-07 18:47:27.000000000 +0400
>> @@ -23,7 +23,7 @@
>> #include <linux/blkdev.h>
>> #include <linux/buffer_head.h>
>> #include <linux/vfs.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/mount.h>
>> #include <linux/namei.h>
>> #include <linux/quotaops.h>
>> --- ./include/linux/init_task.h.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./include/linux/init_task.h 2006-09-07 19:10:28.000000000 +0400
>> @@ -76,7 +76,7 @@ extern struct nsproxy init_nsproxy;
>> .count = ATOMIC_INIT(1), \
>> .nslock = SPIN_LOCK_UNLOCKED, \
>> .uts_ns = &init_uts_ns, \
>> - .namespace = NULL, \
>> + .mnt_ns = NULL, \
>> INIT_IPC_NS(ipc_ns) \
>> }
>>
>> --- /dev/null 2003-04-26 02:10:32.000000000 +0400
>> +++ ./include/linux/mnt_namespace.h 2006-09-07 18:58:48.000000000 +0400
>> @@ -0,0 +1,42 @@
>> +#ifndef _NAMESPACE_H_
>> +#define _NAMESPACE_H_
>> +#ifdef __KERNEL__
>> +
>> +#include <linux/mount.h>
>> +#include <linux/sched.h>
>> +#include <linux/nsproxy.h>
>> +
>> +struct mnt_namespace {
>> + atomic_t count;
>> + struct vfsmount * root;
>> + struct list_head list;
>> + wait_queue_head_t poll;
>> + int event;
>> +};
>> +
>> +extern int copy_mnt_ns(int, struct task_struct *);
>> +extern void __put_mnt_ns(struct mnt_namespace *ns);
>> +extern struct mnt_namespace *dup_mnt_ns(struct task_struct *,
>> + struct fs_struct *);
>> +

```

```

>> +static inline void put_mnt_ns(struct mnt_namespace *ns)
>> +{
>> + if (atomic_dec_and_lock(&ns->count, &vfsmount_lock))
>> + /* releases vfsmount_lock */
>> + __put_mnt_ns(ns);
>> +}
>> +
>> +static inline void exit_mnt_ns(struct task_struct *p)
>> +{
>> + struct mnt_namespace *ns = p->nsproxy->mnt_ns;
>> + if (ns)
>> + put_mnt_ns(ns);
>> +}
>> +
>> +static inline void get_mnt_ns(struct mnt_namespace *ns)
>> +{
>> + atomic_inc(&ns->count);
>> +}
>> +
>> +#endif
>> +#endif
>> --- ./include/linux/mount.h.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./include/linux/mount.h 2006-09-07 18:47:27.000000000 +0400
>> @@ -20,7 +20,7 @@
>> struct super_block;
>> struct vfsmount;
>> struct dentry;
>> -struct namespace;
>> +struct mnt_namespace;
>>
>> #define MNT_NOSUID 0x01
>> #define MNT_NODEV 0x02
>> @@ -52,7 +52,7 @@ struct vfsmount {
>> struct list_head mnt_slave_list; /* list of slave mounts */
>> struct list_head mnt_slave; /* slave list entry */
>> struct vfsmount *mnt_master; /* slave is on master->mnt_slave_list */
>> - struct namespace *mnt_namespace; /* containing namespace */
>> + struct mnt_namespace *mnt_ns; /* containing namespace */
>> int mnt_pinned;
>> };
>>
>> --- ./include/linux/namespace.h.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./include/linux/namespace.h 2006-09-07 18:57:03.000000000 +0400
>> @@ -1,42 +0,0 @@
>> -#ifndef _NAMESPACE_H_
>> -#define _NAMESPACE_H_
>> -#ifdef __KERNEL__
>> -

```

```

> > -#include <linux/mount.h>
> > -#include <linux/sched.h>
> > -#include <linux/nsproxy.h>
> > -
> > -struct namespace {
> > - atomic_t count;
> > - struct vfsmount * root;
> > - struct list_head list;
> > - wait_queue_head_t poll;
> > - int event;
> > -};
> > -
> > -extern int copy_namespace(int, struct task_struct *);
> > -extern void __put_namespace(struct namespace *namespace);
> > -extern struct namespace *dup_namespace(struct task_struct *, struct fs_struct *);
> > -
> > -static inline void put_namespace(struct namespace *namespace)
> > -{
> > - if (atomic_dec_and_lock(&namespace->count, &vfsmount_lock))
> > - /* releases vfsmount_lock */
> > - __put_namespace(namespace);
> > -}
> > -
> > -static inline void exit_namespace(struct task_struct *p)
> > -{
> > - struct namespace *namespace = p->nsproxy->namespace;
> > - if (namespace) {
> > - put_namespace(namespace);
> > - }
> > -}
> > -
> > -static inline void get_namespace(struct namespace *namespace)
> > -{
> > - atomic_inc(&namespace->count);
> > -}
> > -
> > -#endif
> > -#endif
> > --- ./include/linux/nsproxy.h.mntr 2006-07-14 19:11:06.000000000 +0400
> > +++ ./include/linux/nsproxy.h 2006-09-07 18:59:51.000000000 +0400
> > @@ -4,7 +4,7 @@
> > #include <linux/spinlock.h>
> > #include <linux/sched.h>
> >
> > -struct namespace;
> > +struct mnt_namespace;
> > struct uts_namespace;
> > struct ipc_namespace;

```

```

>>
>> @@ -25,7 +25,7 @@ struct nsproxy {
>> spinlock_t nslock;
>> struct uts_namespace *uts_ns;
>> struct ipc_namespace *ipc_ns;
>> - struct namespace *namespace;
>> + struct mnt_namespace *mnt_ns;
>> };
>> extern struct nsproxy init_nsproxy;
>>
>> --- ./kernel/exit.c.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./kernel/exit.c 2006-09-07 18:47:28.000000000 +0400
>> @@ -13,7 +13,7 @@
>> #include <linux/completion.h>
>> #include <linux/personality.h>
>> #include <linux/tty.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/key.h>
>> #include <linux/security.h>
>> #include <linux/cpu.h>
>> --- ./kernel/fork.c.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./kernel/fork.c 2006-09-07 19:13:50.000000000 +0400
>> @@ -18,7 +18,7 @@
>> #include <linux/module.h>
>> #include <linux/vmalloc.h>
>> #include <linux/completion.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/personality.h>
>> #include <linux/mempolicy.h>
>> #include <linux/sem.h>
>> @@ -1497,17 +1497,18 @@ static int unshare_fs(unsigned long unsh
>> }
>>
>> /*
>> - * Unshare the namespace structure if it is being shared
>> + * Unshare the mnt_namespace structure if it is being shared
>> */
>> -static int unshare_namespace(unsigned long unshare_flags, struct namespace **new_nsp,
struct fs_struct *new_fs)
>> +static int unshare_mnt_namespace(unsigned long unshare_flags,
>> + struct mnt_namespace **new_nsp, struct fs_struct *new_fs)
>> {
>> - struct namespace *ns = current->nsproxy->namespace;
>> + struct mnt_namespace *ns = current->nsproxy->mnt_ns;
>>
>> if ((unshare_flags & CLONE_NEWNS) && ns) {

```

```

>> if (!capable(CAP_SYS_ADMIN))
>> return -EPERM;
>>
>> - *new_nsp = dup_namespace(current, new_fs ? new_fs : current->fs);
>> + *new_nsp = dup_mnt_ns(current, new_fs ? new_fs : current->fs);
>> if (!*new_nsp)
>> return -ENOMEM;
>> }
>> @@ -1597,7 +1598,7 @@ asmlinkage long sys_unshare(unsigned lon
>> {
>> int err = 0;
>> struct fs_struct *fs, *new_fs = NULL;
>> - struct namespace *ns, *new_ns = NULL;
>> + struct mnt_namespace *ns, *new_ns = NULL;
>> struct sighand_struct *sigh, *new_sigh = NULL;
>> struct mm_struct *mm, *new_mm = NULL, *active_mm = NULL;
>> struct files_struct *fd, *new_fd = NULL;
>> @@ -1619,7 +1620,7 @@ asmlinkage long sys_unshare(unsigned lon
>> goto bad_unshare_out;
>> if ((err = unshare_fs(unshare_flags, &new_fs)))
>> goto bad_unshare_cleanup_thread;
>> - if ((err = unshare_namespace(unshare_flags, &new_ns, new_fs)))
>> + if ((err = unshare_mnt_namespace(unshare_flags, &new_ns, new_fs)))
>> goto bad_unshare_cleanup_fs;
>> if ((err = unshare_sighand(unshare_flags, &new_sigh)))
>> goto bad_unshare_cleanup_ns;
>> @@ -1660,8 +1661,8 @@ asmlinkage long sys_unshare(unsigned lon
>> }
>>
>> if (new_ns) {
>> - ns = current->nsproxy->namespace;
>> - current->nsproxy->namespace = new_ns;
>> + ns = current->nsproxy->mnt_ns;
>> + current->nsproxy->mnt_ns = new_ns;
>> new_ns = ns;
>> }
>>
>> @@ -1728,7 +1729,7 @@ bad_unshare_cleanup_sigh:
>>
>> bad_unshare_cleanup_ns:
>> if (new_ns)
>> - put_namespace(new_ns);
>> + put_mnt_ns(new_ns);
>>
>> bad_unshare_cleanup_fs:
>> if (new_fs)
>> --- ./kernel/kmod.c.mntr 2006-07-14 19:08:32.000000000 +0400
>> +++ ./kernel/kmod.c 2006-09-07 18:47:28.000000000 +0400

```

```

>> @@ -27,7 +27,7 @@
>> #include <linux/kmod.h>
>> #include <linux/smp_lock.h>
>> #include <linux/slab.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/completion.h>
>> #include <linux/file.h>
>> #include <linux/workqueue.h>
>> --- ./kernel/nsproxy.c.mntr 2006-07-14 19:11:06.000000000 +0400
>> +++ ./kernel/nsproxy.c 2006-09-07 19:16:18.000000000 +0400
>> @@ -16,7 +16,7 @@
>> #include <linux/module.h>
>> #include <linux/version.h>
>> #include <linux/nsproxy.h>
>> -#include <linux/namespace.h>
>> +#include <linux/mnt_namespace.h>
>> #include <linux/utsname.h>
>>
>> static inline void get_nsproxy(struct nsproxy *ns)
>> @@ -59,8 +59,8 @@ struct nsproxy *dup_namespaces(struct ns
>> struct nsproxy *ns = clone_namespaces(orig);
>>
>> if (ns) {
>> - if (ns->namespace)
>> - get_namespace(ns->namespace);
>> + if (ns->mnt_ns)
>> + get_mnt_ns(ns->mnt_ns);
>> if (ns->uts_ns)
>> get_uts_ns(ns->uts_ns);
>> if (ns->ipc_ns)
>> @@ -96,7 +96,7 @@ int copy_namespaces(int flags, struct ta
>>
>> tsk->nsproxy = new_ns;
>>
>> - err = copy_namespace(flags, tsk);
>> + err = copy_mnt_ns(flags, tsk);
>> if (err)
>> goto out_ns;
>>
>> @@ -116,8 +116,8 @@ out_ipc:
>> if (new_ns->uts_ns)
>> put_uts_ns(new_ns->uts_ns);
>> out_uts:
>> - if (new_ns->namespace)
>> - put_namespace(new_ns->namespace);
>> + if (new_ns->mnt_ns)
>> + put_mnt_ns(new_ns->mnt_ns);

```



```
> > out_ns:
> > tsk->nsproxy = old_ns;
> > put_nsproxy(new_ns);
> > @@ -126,8 +126,8 @@ out_ns:
> >
> > void free_nsproxy(struct nsproxy *ns)
> > {
> > - if (ns->namespace)
> > - put_namespace(ns->namespace);
> > + if (ns->mnt_ns)
> > + put_mnt_ns(ns->mnt_ns);
> > if (ns->uts_ns)
> > put_uts_ns(ns->uts_ns);
> > if (ns->ipc_ns)
> >
> > _____
> > Containers mailing list
> > Containers@lists.osdl.org
> > https://lists.osdl.org/mailman/listinfo/containers
>
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