
Subject: Re: [patch 0/8] unprivileged mount syscall
Posted by [Ram Pai](#) on Wed, 11 Apr 2007 18:28:36 GMT
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On Wed, 2007-04-11 at 12:44 +0200, Miklos Szeredi wrote:

```
> > 1. clone the master namespace.  
> >  
> > 2. in the new namespace  
> >  
> > move the tree under /share/$me to /  
> >   for each ($user, $what, $how) {  
> >     move /share/$user/$what to /$what  
> >   if ($how == slave) {  
> >     make the mount tree under /$what as slave  
> >   }  
> > }  
> >  
> > 3. in the new namespace make the tree under  
> >   /share as private and unmount /share  
>  
> Thanks. I get the basic idea now: the namespace itself need not be  
> shared between the sessions, it is enough if "share" propagation is  
> set up between the different namespaces of a user.  
>  
> I don't yet see either in your or Viro's description how the trees  
> under /share/$USER are initialized. I guess they are recursively  
> bound from /, and are made slaves.
```

yes. I suppose, when a userid is created one of the steps would be

```
mount --rbind / /share/$USER  
mount --make-rslave /share/$USER  
mount --make-rshared /share/$USER
```

RP

> Miklos

Containers mailing list
Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>

Subject: Re: [patch 0/8] unprivileged mount syscall
Posted by [Miklos Szeredi](#) on Fri, 13 Apr 2007 11:58:59 GMT
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```
> On Wed, 2007-04-11 at 12:44 +0200, Miklos Szeredi wrote:
> > > 1. clone the master namespace.
> > >
> > > 2. in the new namespace
> > >
> > > move the tree under /share/$me to /
> > >     for each ($user, $what, $how) {
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> > >     }
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> > > }
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> > under /share/$USER are initialized. I guess they are recursively
> > bound from /, and are made slaves.
>
> yes. I suppose, when a userid is created one of the steps would be
>
> mount --rbind / /share/$USER
> mount --make-rslave /share/$USER
> mount --make-rshared /share/$USER
```

Thinking a bit more about this, I'm quite sure most users wouldn't even want private namespaces. It would be enough to

```
chroot /share/$USER
```

and be done with it.

Private namespaces are only good for keeping a bunch of mounts referenced by a group of processes. But my guess is, that the natural behavior for users is to see a persistent set of mounts.

If for example they mount something on a remote machine, then log out from the ssh session and later log back in, they would want to see their previous mount still there.

Miklos

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Subject: Re: [patch 0/8] unprivileged mount syscall

Posted by [Karel Zak](#) on Fri, 13 Apr 2007 20:07:20 GMT

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On Fri, Apr 13, 2007 at 01:58:59PM +0200, Miklos Szeredi wrote:

> > On Wed, 2007-04-11 at 12:44 +0200, Miklos Szeredi wrote:

> > > 1. clone the master namespace.

> > >

> > > 2. in the new namespace

> > >

> > > move the tree under /share/\$me to /

> > > for each (\$user, \$what, \$how) {

> > > move /share/\$user/\$what to /\$what

> > > if (\$how == slave) {

> > > make the mount tree under /\$what as slave

> > > }

> > > }

> > >

> > > 3. in the new namespace make the tree under

> > > /share as private and unmount /share

> > >

> > > Thanks. I get the basic idea now: the namespace itself need not be

> > > shared between the sessions, it is enough if "share" propagation is

> > > set up between the different namespaces of a user.

> > >

> > > I don't yet see either in your or Viro's description how the trees

> > > under /share/\$USER are initialized. I guess they are recursively

> > > bound from /, and are made slaves.

> >

> > yes. I suppose, when a userid is created one of the steps would be

> >

> > mount --rbind / /share/\$USER

> > mount --make-rslave /share/\$USER

> > mount --make-rshared /share/\$USER

>

> Thinking a bit more about this, I'm quite sure most users wouldn't

> even want private namespaces. It would be enough to

>

> chroot /share/\$USER

>

> and be done with it.

I don't think so. How to you want to implement non-shared /tmp directories? The chroot is overkill in this case. See:

<http://www.coker.com.au/selinux/talks/sage-2006/PolyInstantiatedDirectories.html>
<http://danwalsh.livejournal.com/>

> Private namespaces are only good for keeping a bunch of mounts
> referenced by a group of processes. But my guess is, that the natural
> behavior for users is to see a persistent set of mounts.
>
> If for example they mount something on a remote machine, then log out
> from the ssh session and later log back in, they would want to see
> their previous mount still there.

They can mount to /mnt where the directory is shared ("mount --make-shared /mnt") and visible and all namespaces.

I think /share/\$USER is an extreme example. You can found more situations when private namespaces are nice solution.

Karel

--

Karel Zak <kzak@redhat.com>

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Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>

Subject: Re: [patch 0/8] unprivileged mount syscall
Posted by [Miklos Szeredi](#) on Sun, 15 Apr 2007 20:21:05 GMT
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> > Thinking a bit more about this, I'm quite sure most users wouldn't
> > even want private namespaces. It would be enough to
> >
> > chroot /share/\$USER
> >
> > and be done with it.
>
> I don't think so. How to you want to implement non-shared /tmp
> directories?

mount --bind /.tmp/\$USER /share/\$USER/tmp

or whatever else this polyunsaturated thingy does within the cloned

namespace.

> The chroot is overkill in this case.

What do you mean it's an overkill? clone(CLONE_NS) duplicates all the mounts, just as mount --rbind does.

> > Private namespaces are only good for keeping a bunch of mounts
> > referenced by a group of processes. But my guess is, that the natural
> > behavior for users is to see a persistent set of mounts.
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> > If for example they mount something on a remote machine, then log out
> > from the ssh session and later log back in, they would want to see
> > their previous mount still there.
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> They can mount to /mnt where the directory is shared ("mount
> --make-shared /mnt") and visible and all namespaces.
>
> I think /share/\$USER is an extreme example. You can find more
> situations when private namespaces are nice solution.

Private to a single login session? I'd like to hear examples.

Thanks,
Miklos

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Subject: Re: [patch 0/8] unprivileged mount syscall
Posted by [Ram Pai](#) on Mon, 16 Apr 2007 07:59:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Fri, 2007-04-13 at 13:58 +0200, Miklos Szeredi wrote:
> > On Wed, 2007-04-11 at 12:44 +0200, Miklos Szeredi wrote:
> > > 1. clone the master namespace.
> > >
> > > 2. in the new namespace
> > >
> > > move the tree under /share/\$me to /
> > > for each (\$user, \$what, \$how) {
> > > move /share/\$user/\$what to /\$what
> > > if (\$how == slave) {
> > > make the mount tree under /\$what as slave
> > > }
> > > }

```

> > > >
> > > 3. in the new namespace make the tree under
> > > /share as private and unmount /share
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> > > Thanks. I get the basic idea now: the namespace itself need not be
> > > shared between the sessions, it is enough if "share" propagation is
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> > > and be done with it.
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> > > If for example they mount something on a remote machine, then log out
> > > from the ssh session and later log back in, they would want to see
> > > their previous mount still there.

```

They will continue see their previous mount tree.
 Even if all the namespaces belonging to the different sessions of the user get dismantled when all the sessions exit, the a mirror of those mount trees continue to exist under /share/\$USER in the original namespace. So I don't think we have a issue.

NOTE: when I say 'original namespace' I mean the admin namespace; the first namespace that gets created when the machine boots.

RP

```

>
> Miklos

```

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