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Subject: Re: [patch 0/8] mount ownership and unprivileged mount syscall (v4)

Posted by [serue](#) on Fri, 20 Apr 2007 12:42:49 GMT

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Quoting Miklos Szeredi ([miklos@szereadi.hu](mailto:miklos@szereadi.hu)):

> This patchset has now been bared to the "lowest common denominator"  
> that everybody can agree on. Or at least there weren't any objections  
> to this proposal.

>

> Andrew, please consider it for -mm.

>

> Thanks,

> Miklos

> ----

>

> v3 -> v4:

>

> - simplify interface as much as possible, now only a single option

> ("user=UID") is used to control everything

> - no longer allow/deny mounting based on file/directory permissions,

> that approach does not always make sense

>

> ----

> This patchset adds support for keeping mount ownership information in

> the kernel, and allow unprivileged mount(2) and umount(2) in certain

> cases.

>

> The mount owner has the following privileges:

>

> - unmount the owned mount

> - create a submount under the owned mount

>

> The sysadmin can set the owner explicitly on mount and remount. When

> an unprivileged user creates a mount, then the owner is automatically

> set to the user.

>

> The following use cases are envisioned:

>

> 1) Private namespace, with selected mounts owned by user.

> E.g. /home/\$USER is a good candidate for allowing unpriv mounts and

> unmounts within.

>

> 2) Private namespace, with all mounts owned by user and having the

> "nosuid" flag. User can mount and umount anywhere within the

> namespace, but suid programs will not work.

>

> 3) Global namespace, with a designated directory, which is a mount

> owned by the user. E.g. /mnt/users/\$USER is set up so that it is

> bind mounted onto itself, and set to be owned by \$USER. The user  
> can add/remove mounts only under this directory.  
>  
> The following extra security measures are taken for unprivileged  
> mounts:  
>  
> - usermounts are limited by a sysctl tunable  
> - force "nosuid,nodev" mount options on the created mount

Very nice. I like these semantics.

I'll try to rework my laptop in the next few days to use this patchset as a test.

thanks,  
-serge

---

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

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Subject: Re: [patch 0/8] mount ownership and unprivileged mount syscall (v4)  
Posted by [ebiederm](#) on Fri, 20 Apr 2007 16:33:13 GMT  
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"Serge E. Hallyn" <serue@us.ibm.com> writes:

> Quoting Miklos Szeredi (miklos@szeredi.hu):  
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>> that everybody can agree on. Or at least there weren't any objections  
>> to this proposal.  
>>  
>> Andrew, please consider it for -mm.  
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>> Miklos  
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> Very nice. I like these semantics.  
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> I'll try to rework my laptop in the next few days to use this patchset  
> as a test.

Agreed. It appears the approach of adding ownership information to  
mount points and using that to control what may happen with them  
in regards to mount/unmount is the only workable approach in the  
unix environment.

Now to dig into the details and ensure that they are correct.

Eric

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Containers mailing list

