Subject: Re: - merge-sys\_clone-sys\_unshare-nsproxy-and-namespace.patch removed from -mm tree

Posted by Badari Pulavarty on Mon, 18 Jun 2007 17:35:14 GMT

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On Mon, 2007-06-18 at 14:37 +0200, Cedric Le Goater wrote:
> Herbert Poetzl wrote:
> > On Sun, Jun 17, 2007 at 06:38:30PM +0400, Oleg Nesterov wrote:
>>> On 06/16, Herbert Poetzl wrote:
>>> On Tue, May 08, 2007 at 07:45:35PM -0700, akpm@linux-foundation.org wrote:
>>>> The patch titled
          Merge sys clone()/sys unshare() nsproxy and namespace handling
>>>>
>>>> has been removed from the -mm tree. Its filename was
          merge-sys_clone-sys_unshare-nsproxy-and-namespace.patch
>>>>
>>>>
>>>> This patch was dropped because it was merged into mainline or a subsystem tree
>>>>
>>> .. [zapped] ...
> >>>
>>>> + * Called from unshare. Unshare all the namespaces part of nsproxy.
>>>> + * On sucess, returns the new nsproxy and a reference to old nsproxy
>>>> + * to make sure it stays around.
>>>> + */
>>>> +int unshare_nsproxy_namespaces(unsigned long unshare_flags,
>>>> + struct nsproxy **new_nsp, struct fs_struct *new_fs)
>>>> +{
>>>> this makes sys_unshare leak and nsproxy (reference)
>>>> can be tested with the following command sequence:
>>> vcmd -nu ^17 -- vcmd -nu ^17 -- sleep 10
>>> I know almost nothing about this stuff, could you please explain in
>>> brief what this command does ...
> >
> > yeah, sure, it basically calls sys_unshare() with
> > bit 17 (CLONE_NEWNS) set then invokes the chained
> > command, so we get a sleep which is in a separate
> > namespace, unshared from a namespace != the main
> > one ...
>>> ... and how do you detect a leak?
> >
>>>> (and some nsproxy accounting/debugging as used in
>>>> Linux-VServer)
> >
> > on Linux-VServer, we have accounting for those
> > proxies (and several other namespace related stuff)
> > because we already suspected leakage and reference
> > bugs in this area some time ago ... btw, I also
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> > suggested to put a similar functionality in mainline
> > for the time being, but it was ignored, as usual ...
>>>> we probably want to drop the reference to the old
>>>> nsproxy in sys_unshare() but I do not see a good reason
>>>> to take the reference in the first place (at least not
>>>> with the code in mainline 2.6.22-rc4)
> >> At first glance, sys_unshare() drops the reference to
>>> the old nsproxy,
> >
> > okay, the 'current' task has an nsproxy, and keeps
> > a reference to that (let's assume it is the only
> > task using this nsproxy, then the count will be 1)
> >
> > unshare_nsproxy_namespaces() now does get_nsproxy()
> > which makes the count=2, then it creates a new
> > nsproxy (which will get count=1), and returns ...
> >
>>> old_nsproxy = current->nsproxy;
>>> current->nsproxy = new_nsproxy;
>>> new_nsproxy = old_nsproxy;
> >
> > sys_unshare, now replaces the current->nsproxy with
>> the new one, which will have the correct count=1,
> > and puts the old nsproxy (which has count=2), and
> > thus the nsproxy will not get released, although
> > it isn't referenced/used anymore ...
>
> Herbert,
> Could you give a try to the patch i've sent previously and this one
> which removes an extra get_nsproxy()? It fixes the leak for me. I've
> run the ltp tests we have on namespace unsharing and i could see the
> no leaks in /proc/slabinfo.
>
> Badari,
>
> That extra get_nsproxy() seemed a superfluous remain from the 2.6.20.
> Do you see any issues with it?
>
> If we're all happy with these fixes, i'll send them on lkml@ for review.
> They might deserve to be in 2.6.22.
>
> Thanks,
> C.
```

Cedric, Oleg and Herbert,	
Thanks for working this out. Looks good.	
Thanks, Badari	
> Signed-off-by: Cedric Le Goater <clg@fr.ibm.com></clg@fr.ibm.com>	
Acked.	
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