Subject: Re: [PATCH v3] SUNRPC: set desired file system root before connecting local transports
Posted by Stanislav Kinsbursky on Wed, 10 Oct 2012 10:32:28 GMT
View Forum Message <> Reply to Message

> On Tue, Oct 09, 2012 at 03:47:42PM -0700, Eric W. Biederman wrote:
>> "J. Bruce Fields" <bfields@fieldses.org> writes:
>>
>>> On Tue, Oct 09, 2012 at 01:20:48PM -0700, Eric W. Biederman wrote:
>>>> "Myklebust, Trond" <Trond.Myklebust@netapp.com> writes:
>>>>
>>>>> On Tue, 2012-10-09 at 15:35 -0400, J. Bruce Fields wrote:
>>>>>> Cc'ing Eric since I seem to recall he suggested doing it this way?
>>>>
>>>> Yes. On second look setting fs->root won't work. We need to change fs.
>>>> The problem is that by default all kernel threads share fs so changing
>>>> fs->root will have non-local consequences.
>>>
>>> Oh, huh. And we can't "unshare" it somehow?
>>
>> I don't fully understand how nfs uses kernel threads and work queues.
>> My general understanding is work queues reuse their kernel threads
>> between different users. So it is mostly a don't pollute your
>> environment thing. If there was a dedicated kernel thread for each
>> environment this would be trivial.
>>
>> What I was suggesting here is changing task->fs instead of
>> task->fs.root. That should just require task_lock().
>
> Oh, OK, got it--if that works, great.
>

The main problem with swapping fs struct is actually the same as in root swapping. I.e. routines for copy fs_struct are not exported.
It could be done on place, but I don't think, that Al Viro would support such implementation.
Trond?

>>> Sorry, I don't know much about devtmpfs, are you suggesting it as a
>>> model? What exactly should we look at?
>>
>> Roughly all I meant was that devtmpsfsd is a kernel thread that runs
>> with an unshared fs struct. Although I admit devtmpfsd is for all
>> practical purposes a userspace daemon that just happens to run in kernel
>> space.
>
> Thanks for the explanation.

>
> --b.
>

--
Best regards,
Stanislav Kinsbursky