Subject: Re: [PATCH 11/11] protect architectures where THREAD_SIZE >= PAGE_SIZE against fork bombs
Posted by Glauber Costa on Tue, 26 Jun 2012 08:44:13 GMT
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On 06/26/2012 12:45 PM, David Rientjes wrote:
> On Tue, 26 Jun 2012, Glauber Costa wrote:
>
>>>> diff --git a/include/linux/thread_info.h b/include/linux/thread_info.h
>>>> index ccc1899..914ec07 100644
>>>> --- a/include/linux/thread_info.h
>>>> +++ b/include/linux/thread_info.h
>>>> @@ -61,6 +61,12 @@ extern long do_no_restart_syscall(struct restart_block
>>>> *parm);
>>>> # define THREADINFO_GFP (GFP_KERNEL | __GFP_NOTRACK)
>>>> #endif
>>>>
>>>> +#ifdef CONFIG_CGROUP_MEM_RES_CTLR_KMEM
>>>> +# define THREADINFO_GFP_ACCOUNTED (THREADINFO_GFP | __GFP_KMEMCG)
>>>> +#else
>>>> +# define THREADINFO_GFP_ACCOUNTED (THREADINFO_GFP)
>>>> +#endif
>>>> +
>>>
>>> This type of requirement is going to become nasty very quickly if nobody
>>> can use __GFP_KMEMCG without testing for
CONFIG_CGROUP_MEM_RES_CTLR_KMEM.
>>> Perhaps define __GFP_KMEMCG to be 0x0 if it's not enabled, similar to how
>>> kmemcheck does?
>>>
>> That is what I've done in my first version of this patch. At that time,
>> Christoph wanted it to be this way so we would make sure it would never be
>> used with #CONFIG_CGROUP_MEM_RES_CTLR_KMEM defined. A value of zero will
>> generate no errors. Undefined value will.
>>
>> Now, if you ask me, I personally prefer following what kmemcheck does here...
>>
>
> Right, because I'm sure that __GFP_KMEMCG will be used in additional
> places outside of this patchset and it will be a shame if we have to
> always add #ifdef's. I see no reason why we would care if __GFP_KMEMCG
> was used when CONFIG_CGROUP_MEM_RES_CTLR_KMEM=n with the semantics that it
> as in this patchset. It's much cleaner by making it 0x0 when disabled.
>

What I can do, instead, is to WARN_ON conditionally to the config option
in the page allocator, and make sure no one is actually passing the flag
in that case.