Subject: Re: [RFC PATCH] posix timers: allocate timer id per task
Posted by Stanislav Kinsbursky on Tue, 16 Oct 2012 07:57:58 GMT
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> On Mon, 2012-10-15 at 20:17 +0400, Stanislav Kinsbursky wrote:
>> This patch is required CRIU project (www.criu.org).
>> To migrate processes with posix timers we have to make sure, that we can
>> restore posix timer with proper id.
>> Currently, this is not true, because timer ids are allocated globally.
>> So, this is precursor patch and it's purpose is make posix timer id to be
>> allocated per task.
>>
>> Patch replaces global idr with global hash table for posix timers and
>> makes timer ids unique not globally, but per task. Next free timer id is type
>> of integer and stored on signal struct (posix_timer_id). If free timer id
>> reaches negative value on timer creation, it will be dropped to zero and
>> -EAGAIN will be returned to user.
>> Hash table is size of page (4KB).
>> Key is constructed as follows:
>> key = hash_ptr(current->signal) ^ hash_32(posix_timer_id);
>>
>> Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>
>
>
> Hmm, it seems you removed idr, rcu friendly, and reinstated a fixed size
> hash table, protected by a _single_ spinlock ? Oh well.
>
> Please take a look at commit 8af088710d1e, and make sure you fix your
> problem and keep performance as good as before.
>

Thanks, Eric.
I'll update.

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>

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Best regards,
Stanislav Kinsbursky