Subject: Re: [RFC PATCH] posix timers: allocate timer id per task
Posted by Stanislav Kinsbursky on Tue, 16 Oct 2012 08:00:06 GMT
View Forum Message <> Reply to Message

> 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);
>
> but but but.. isn't this what namespaces were invented for to solve? Why
> not use the regular namespace infrastructure?
>

The reason is that CRIU have to support single processes within existent namespaces.

--
Best regards,
Stanislav Kinsbursky