## Subject: Re: [RFC][PATCH 0/4] Object creation with a pre-defined id (v2) Posted by Oren Laadan on Sat, 29 Mar 2008 00:13:16 GMT

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On Fri, 28 Mar 2008, Nadia.Derbey@bull.net wrote:

> > Hi,

> п

- > Here is a second version of what has been proposed 2 weeks ago to create
- > an object with a pre-defined id (this feature would be used during the
- > restart operation) see thread

https://lists.linux-foundation.org/pipermail/containers/2008-March/thread.html#10287

>

- > Main changes since last version:
- > . Pavel's suggestion has been integrated; this makes things more readable:
- > alloc\_pidmap() is unchanged and a alloc\_fixed\_pidmap() is added for the
- > predefined ids.
- > . Oren's suggestion has been integrated:
- > We now have a single file under /proc/self (/proc/self/next\_id).
- > When this file is filled, a structure pointed to by the calling task struct
- > is filled with the id(s).
- > Then, when the object is created, the id(s) present in that structure are
- > used, instead of the default ones.
- > The syntax is one of:
- > . echo "LONG XX" > /proc/self/next\_id
- > next object to be created will have an id set to XX
- > . echo "LONG<n> X0 ... X<n-1>" > /proc/self/next\_id
- > next object to be created will have its ids set to XX0, ... X<n-1>
- > This is particularly useful for processes that may have several ids
- > if they belong to nested namespaces.

I suggest that there be a way for the process to reset its task->next\_id discarding previous settings, e.g. to recover from an error condition and prevent subsuquent syscalls from using the task->next\_id unintentionally. Something like "echo RESET > /proc/self/next\_id" (or s/RESET/0/ ... etc).

## Oren.

- > The objects covered here are ipc objects and processes.
- > The patches are still against 2.6.25-rc3-mm1, in the following order:
- > [PATCH 1/4] adds the procfs facility for next object to be created, this > object being associated to a single id.
- > [PATCH 2/4] enhances the procfs facility for objects associated to multiple ids (like processes).
- > [PATCH 3/4] makes use of the specified id (if any) to allocate the new IPC

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> object (changes the ipc_addid() path).
> [PATCH 4/4] uses the specified id(s) (if any) to set the upid nr(s) for a newly
> allocated process (changes the alloc_pid() path).
> Any comment and/or suggestions are welcome.
> Regards,
> Nadia
> ---
> Containers mailing list
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Containers mailing list Containers@lists.linux-foundation.org https://lists.linux-foundation.org/mailman/listinfo/containers