Subject: Re: [DRAFT] Container mini-summit notes v0.01 Posted by Cedric Le Goater on Thu, 06 Sep 2007 11:22:11 GMT View Forum Message <> Reply to Message

```
* possible direction for C/R user api
>>
         . checkpoint/restart syscalls
>>
           . C/R file systems
>>
         solves the set id issue
>>
         elegant but exposes too much the ABI
>>
>
> I vote for the filesystem :) I'd add more details as we did on mini-summit.
>
> tasks
  `- <pid1>
>
    `- <tid1>
>
>
      . . .
      <tidN>
>
      files
>
      -1 - /* made as a symlink */
>
         2 -> /* if socket point to net/ objects */
>
>
      memory
       `- <vma1> -> /* symlink to mm objects */
>
    <pid2>
>
>
>
    <pidN>
> mm
> ipc
> network
>
> and so on and so forth.
```

We need to dig on this idea. RFC ?

C.

Containers mailing list Containers@lists.linux-foundation.org https://lists.linux-foundation.org/mailman/listinfo/containers

Subject: Re: [DRAFT] Container mini-summit notes v0.01 Posted by dev on Thu, 06 Sep 2007 12:00:47 GMT View Forum Message <> Reply to Message

Cedric Le Goater wrote:

- >>> * possible direction for C/R user api
- >>> . checkpoint/restart syscalls
- >>> . C/R file systems

```
>>> solves the set id issue
```

>>> elegant but exposes too much the ABI

```
>>
```

>>I vote for the filesystem :) I'd add more details as we did on mini-summit.

```
>>
>>tack
```

```
>>tasks
>> `- <pid1>
     `- <tid1>
>>
>>
       ...
       <tidN>
>>
>>
      files
       -1 - /* made as a symlink */
>>
         2 -> /* if socket point to net/ objects */
>>
       memory
>>
       `- <vma1> -> /* symlink to mm objects */
>>
     <pid2>
>>
>>
     ...
>>
     <pidN>
>>mm
>>ipc
>>network
>>
>>and so on and so forth.
>
>
```

- resource interrelashionships are much more complicated then a tree.
 e.g. pid can be owned by a number of processes, threads, terminals, etc.
 So I'm not a fan of the idea.
- 2. exposing such a low-level information to the user-space can be undesirable:a) it allows to create non-GPL checkpointing
 - b) significantly hits the performance of checkpoint/restore
 - c) BTW, how do you plan to restore via filesystem? mkdir? create? :)

Thanks, Kirill

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> We need to dig on this idea. RFC ?