Subject: Re: containers development plans Posted by Herbert Poetzl on Mon, 09 Jul 2007 12:12:57 GMT

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On Mon, Jul 02, 2007 at 11:55:04AM -0500, Serge E. Hallyn wrote:

- > We are trying to create a roadmap for the next year of
- > 'container' development, to be reported to the upcoming kernel
- > summit. Containers here is a bit of an ambiguous term, so we are
- > taking it to mean all of:

>

- > 1. namespaces
- > 2. process containers
- > 3. checkpoint/restart

>

- > Naturally we can't actually predict what will and won't be worked on,
- > let alone what will be going upstream. But the following is a list
- > of features which it seems reasonable to think might be worked on
- > next year:

>

- > 1. completion of ongoing namespaces
- > pid namespace
- > net namespace
- > ro bind mounts
- > 2. continuation with new namespaces
- > devpts, console, and ttydrivers
- > user
- > time

various accounting and limits including disk space and memory

- > namespace management tools
- > namespace entering

well, that is currently covered by the Linux-VServer interfaces (and I assume by the OpenVZ API too), but I guess you are more interested in a mainline tool and interface

- > 3. any additional work needed for virtual servers?
- > i.e. in-kernel keyring usage for cross-usernamespace permissions, etc

nfs and rpc, as well as general security/auth frameworks have to be adjusted ...

- > 4. task containers functionality
- > base features

```
specific containers
>
                poll to see who has plans
>
      5. checkpoint/restart
>
           memory c/r
>
                (there are a few designs and prototypes)
>
                (though this may be ironed out by then)
>
                per-container swapfile?
>
           overall checkpoint strategy
>
                in-kernel vs userspace-driven
>
           overall restart strategy
>
>
> What more needs to be added to this list?
>
> A list of the people we are currently aware of who are showing interest
> in these features follows. What I'd like to know is, from this list, do
> some people know what general or specific areas they plan to or want to
> work on over the next year?
> Stakeholders:
> Eric Biederman
> google
> ibm
> kerlabs
> openvz
> osdl (Masahiko Takahashi?)
> vserver
> Who is missing from the list?
Linux-VServer as usual:)
best,
Herbert
> thanks,
> -serge
> Containers mailing list
> Containers@lists.linux-foundation.org
> https://lists.linux-foundation.org/mailman/listinfo/containers
Containers mailing list
Containers@lists.linux-foundation.org
https://lists.linux-foundation.org/mailman/listinfo/containers
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