Subject: Re: containers development plans Posted by serge on Tue, 10 Jul 2007 20:33:26 GMT View Forum Message <> Reply to Message

Quoting Herbert Poetzl (herbert@13thfloor.at):

- > 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

Is it fair to leave that under task container subsystems?

- >> 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

I'm interested in anything someone is willing to try to push upstream :)

- >> 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 :)

I stand corrected as usual.

-serge

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