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Subject: containers development plans

Posted by [serge](#) on Mon, 02 Jul 2007 16:55:04 GMT

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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
  - namespace management tools
  - namespace entering
3. any additional work needed for virtual servers?
  - i.e. in-kernel keyring usage for cross-namespace permissions, etc
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?

thanks,

-serge

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