Subject: Re: [ckrm-tech] [PATCH 1/9] Containers (V9): Basic container framework
Posted by Balbir Singh on Wed, 02 May 2007 03:44:01 GMT
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Paul Jackson wrote:
> [[I have bcc'd one or more batch scheduler experts on this post.
> They will know who they are, and should be aware that they are
> not listed in the public cc list of this message. - pj]]
>
> Balbir Singh, responding to Paul Menage's Container patch set on lkml, wrote:
>>> +*** notify_on_release is disabled in the current patch set. It may be
>>> +*** reactivated in a future patch in a less-intrusive manner
>>> +
>> Won't this break user space tools for cpusets?
>
>
> Yes - disabling notify_on_release would definitely break some important
> uses of cpusets. This feature must be reactivated somehow before I'll
> sign up for putting this patch set in the main line.
>
> Actually, after I posted a few days ago in another lkml post:
> http://lkml.org/lkml/2007/4/29/66
>
> that just the simplest cpuset command:
> mount -t cpuset cpuset /dev/cpuset
> mkdir /dev/cpuset/foo
> echo 0 > /dev/cpuset/foo/mems
>
> caused an immediate kernel deadlock (Srivatsa has proposed a fix), it
> is pretty clear that this container patch set is not getting the cpuset
> testing it will need for acceptance. That's partly my fault.
>
> The batch scheduler folks, such as the variants of PBS, LSF and SGE are
> major user of cpusets on NUMA hardware.
>
> This container based replacement for cpusets isn't ready for the main
> line until at least one of those schedulers can run through one of
> their test suites. I hesitate to even acknowledge this, as I might be
> the only person in a position to make this happen, and my time
> available to contribute to this patch set has been less than I would
> like.
>
> But if it looks like we have all the pieces in place to base cpusets
> on containers, with no known regressions in cpuset capability, then
> we must find a way to ensure that one of these batch schedulers, using
> cpusets on a NUMA box, still works.
>

Would it be possible to extract those test cases and integrate them with a testing framework like LTP? Do you have any regression test suite for cpusets that can be made available publicly so that any changes to cpusets can be validated?

The reason I ask for the test suite is that I suspect that the container framework will evolve further and a reliable testing mechanism would be extremely useful.

--
Warm Regards,
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