Subject: Re: [patch00/05]: Containers(V2)- Introduction
Posted by Christoph Lameter on Wed, 20 Sep 2006 17:38:13 GMT
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On Wed, 20 Sep 2006, Rohit Seth wrote:

> cpusets provides cpu and memory NODES binding to tasks. And I think it
> works great for NUMA machines where you have different nodes with its
> own set of CPUs and memory. The number of those nodes on a commodity HW
> is still 1. And they can have 8-16 CPUs and in access of 100G of
> memory. You may start using fake nodes (untested territory) to

See linux-mm. We just went through a series of tests and functionality
wise it worked just fine.

> translate a single node machine into N different nodes. But am not sure
> if this number of nodes can change dynamically on the running machine or
> a reboot is required to change the number of nodes.

This is commonly discussed under the subject of memory hotplug.

> Though when you want to have in access of 100 containers then the cpuset
> function starts popping up on the oprofile chart very aggressively. And
> this is the cost that shouldn't have to be paid (particularly) for a
> single node machine.

Yes this is a new way of using cpusets but it works and we could fix the
scalability issues rather than adding new subsystems.

> And what happens when you want to have cpuset with memory that needs to
> be even further fine grained than each node.

New node?

> Containers also provide a mechanism to move files to containers. Any
> further references to this file come from the same container rather than
> the container which is bringing in a new page.

Hmmmm... Thats is interesting.

> In future there will be more handlers like CPU and disk that can be
> easily embeded into this container infrastructure.

I think we should have one container mechanism instead of multiple. Maybe
merge the two? The cpuset functionality is well established and working
right.