Subject: Re: [RFC][PATCH 6/7] Account for the number of tasks within container Posted by xemul on Sun, 11 Mar 2007 08:34:24 GMT

View Forum Message <> Reply to Message

Paul Menage wrote:

- > On 3/6/07, Pavel Emelianov < xemul@sw.ru> wrote:
- >> The idea is:
- >>
- >> Task may be "the entity that allocates the resources" and "the
- >> entity that is a resource allocated".
- >>
- >> When task is the first entity it may move across containers
- >> (that is implemented in your patches). When task is a resource
- >> it shouldn't move across containers like files or pages do.
- >>
- >> More generally allocated resources hold reference to original
- >> container till they die. No resource migration is performed.
- >>
- >> Did I express my idea cleanly?
- >
- > Yes, but I disagree with the premise. The title of your patch is
- > "Account for the number of tasks within container", but that's not
- > what the subsystem does, it accounts for the number of forks within
- > the container that aren't directly accompanied by an exit.
- >
- > Ideally, resources like files and pages would be able to follow tasks
- > as well. The reason that files and pages aren't easily migrated from
- > one container to another is that there could be sharing involved;
- > figuring out the sharing can be expensive, and it's not clear what to
- > do if two users are in different containers.
- >
- > But in the case of a task count, there are no such issues with
- > sharing, so it seems to me to be more sensible (and more efficient) to
- > just limit the number of tasks in a container.
- >
- > i.e. when moving a task into a container or forking a task within a
- > container, increment the count; when moving a task out of a container
- > or when it exits, decrement the count.

Sounds reasonable.

I'll take this into account when I make the next iteration. Thanks.

- > With your approach, if you were to set the task limit of an empty
- > container A to 1, and then move a process P from B into A, P would be
- > able to fork a new child, since the "task count" would be 0 (as P was
- > being charged to B still). Surely the fact that there's 1 process in A
- > should prevent P from forking?