Subject: Re: [ckrm-tech] [RFC] [PATCH 00/12] CKRM after a major overhaul Posted by KUROSAWA Takahiro on Mon, 24 Apr 2006 07:12:46 GMT

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On Mon, 24 Apr 2006 10:45:59 +0400 Kirill Korotaev <dev@openvz.org> wrote:

- >>>>Yes, it is effective, and the reclamation is O(1) too. It has couple of
- >>>>problems by design, (1) doesn't handle shared pages and (2) doesn't
- >>>>provide support for both min shares and max shares.
- > >>>
- >>>Right. I wanted to show proof-of-cencept of the pzone based controller
- >>>and implemented minimal features necessary as the memory controller.
- >>>So, the pzone based controller still needs development and some cleanup.
- > >>
- >>>Just out of curiosity, how it was measured that it is effective?
- > >
- >> I don't have any benchmark numbers yet, so I can't explain the
- >> effectiveness with numbers. I've been looking for the way to
- >> measure the cost of pzones correctly, but I've not found it out yet.
- > >
- >>>How does it work when there is a global memory shortage in the system?
- > >
- > > I guess you are referring to the situation that global memory is running
- >> out but there are free pages in pzones. These free pages in pzones are
- > > handled as reserved for pzone users and not used even in global memory
- > > shortage.
- > ok. Let me explain what I mean.
- > Imagine the situation with global memory shortage. In kernel, there are
- > threads which do some job behalf the user, e.g. kjournald, loop etc. If
- > the user has some pzone memory, but these threads fail to do their job
- > some nasty things can happen (ext3 problems, deadlocks, OOM etc.)
- > If such behaviour is ok for you, then great. But did you consider it?
- >
- > Also, I can't understand how it works with OOM killer. If pzones has
- > enough memory, but there is a global shortage, who will be killed?

I understand.

IMHO, only the system processes should use global memory. User processes that may cause such memory shortage should be enclosed in pzones first.

Thanks.

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KUROSAWA, Takahiro