Subject: Re: [RFC][PATCH][0/4] Memory controller (RSS Control)
Posted by Balbir Singh on Mon, 19 Feb 2007 10:45:01 GMT
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Magnus Damm wrote:
> On 2/19/07, Andrew Morton <akpm@linux-foundation.org> wrote:
>> On Mon, 19 Feb 2007 12:20:19 +0530 Balbir Singh <balbir@in.ibm.com>
>> wrote:
>>
>> > This patch applies on top of Paul Menage's container patches (V7)
>> posted at
>> >
>> > http://lkml.org/lkml/2007/2/12/88
>> >
>> > It implements a controller within the containers framework for limiting
>> > memory usage (RSS usage).
>
>> The key part of this patchset is the reclaim algorithm:
>>
>> Alas, I fear this might have quite bad worst-case behaviour. One small
>> container which is under constant memory pressure will churn the
>> system-wide LRUs like mad, and will consume rather a lot of system time.
>> So it's a point at which container A can deleteriously affect things
>> which
>> are running in other containers, which is exactly what we're supposed to
>> not do.
>
> Nice with a simple memory controller. The downside seems to be that it
> doesn't scale very well when it comes to reclaim, but maybe that just
> comes with being simple. Step by step, and maybe this is a good first
> step?
>

Thanks, I totally agree.

> Ideally I'd like to see unmapped pages handled on a per-container LRU
> with a fallback to the system-wide LRUs. Shared/mapped pages could be
> handled using PTE ageing/unmapping instead of page ageing, but that
> may consume too much resources to be practical.
>
> / magnus

Keeping unmapped pages per container sounds interesting. I am not quite
sure what PTE ageing, will it look it up.

--
 Warm Regards,