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Subject: Re: [PATCH 2/8] Add container pointer on struct page

Posted by [xemul](#) on Fri, 13 Apr 2007 14:48:00 GMT

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Jean-Pierre Dion wrote:

> Hi Pavel,

>

> I have been implied in the work for the  
> memory controller of res groups a few months ago.

>

> I see that you propose to modify the struct

> page to point to rss container struct.

> This has made some debate because of the struct

> page size increase, but this allows a quicker

> scan to reclaim pages (I mean having per-container  
> lists of active/inactive pages).

> We (here at Bull and others) proposed this implementation  
> for res groups and I am interested in knowing

> if this has a chance of being accepted today (hope so).

So do I :) I'm not the one who makes the final decision ;)

> I know this uses memory for internal management

> and increases a lot the memory size used for

> a large memory configuration, but in that case

> we have lot of memory, so where is the issue ?

> We tested this on a 28 GB server and it worked.

Thank you for additional testing on enterprise servers!

Hope this will be a good argument in favour of the patches.

> Also we can use larger page size to reduce

> the overhead, and I believe this makes sense

> on large servers with big memory.

>

> So we balance between using more memory internally

> and so getting faster access to pages for reclaim,

> or do nothing. ;-)

That's right. I made some small testing which showed that moving this pointer in a mirrored array saves less than 0.1% of performance on 4CPU i386 node. I don't know how this will be on enterprise hardware, but I do believe that the results will be the same (or even better).

>

> jean-pierre

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