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Subject: Re: [PATCH v4 11/11] memcg: check memcg dirty limits in page writeback  
Posted by [Wu Fengguang](#) on Sun, 31 Oct 2010 20:03:41 GMT  
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On Sat, Oct 30, 2010 at 12:06:33AM +0800, Greg Thelen wrote:

> KAMEZAWA Hiroyuki <kamezawa.hiroyu@jp.fujitsu.com> writes:

>

> > On Fri, 29 Oct 2010 00:09:14 -0700

> > Greg Thelen <gthelen@google.com> wrote:

> >

> >> If the current process is in a non-root memcg, then

> >> balance\_dirty\_pages() will consider the memcg dirty limits

> >> as well as the system-wide limits. This allows different

> >> cgroups to have distinct dirty limits which trigger direct

> >> and background writeback at different levels.

> >>

> >> Signed-off-by: Andrea Righi <arighi@develer.com>

> >> Signed-off-by: Greg Thelen <gthelen@google.com>

> >

> > Acked-by: KAMEZAWA Hiroyuki <kamezawa.hiroyu@jp.fujitsu.com>

The "check both memcg&global dirty limit" looks much more sane than the V3 implementation. Although it still has misbehaviors in some cases, it's generally a good new feature to have.

Acked-by: Wu Fengguang <fengguang.wu@intel.com>

> > Ideally, I think some comments in the code for "why we need double-check system's  
> > dirty limit and memcg's dirty limit" will be appreciated.

>

> I will add to the balance\_dirty\_pages() comment. It will read:

> /\*

> \* balance\_dirty\_pages() must be called by processes which are generating dirty

> \* data. It looks at the number of dirty pages in the machine and will force

> \* the caller to perform writeback if the system is over `vm\_dirty\_ratio'.

~~~~~

To be exact, it tries to throttle the dirty speed so that vm\_dirty\_ratio is not exceeded. In fact balance\_dirty\_pages() starts throttling the dirtier slightly below vm\_dirty\_ratio.

> \* If we're over `background\_thresh' then the writeback threads are woken to

> \* perform some writeout. The current task may have per-memcg dirty

> \* limits, which are also checked.

> \*/

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Containers mailing list

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