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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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