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Subject: Re: [RFD][PATCH] memcg: Move Usage at Task Move  
Posted by [Balbir Singh](#) on Wed, 11 Jun 2008 13:13:38 GMT  
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kamezawa.hiroyu@jp.fujitsu.com wrote:

> ----- Original Message -----

>> On Wed, 11 Jun 2008 13:57:34 +0530

>> Balbir Singh <balbir@linux.vnet.ibm.com> wrote:

>>

>> (snip)

>>

>>>> 2. Don't move any usage at task move. (current implementation.)

>>>> Pros.

>>>> - no complication in the code.

>>>> Cons.

>>>> - A task's usage is charged to wrong cgroup.

>>>> - Not sure, but I believe the users don't want this.

>>>> I'd say stick with this unless there a strong arguments in favour of

>>>> changing, based on concrete needs.

>>>>

>>>> One reason is that I think a typical usage of memory controller is

>>>> fork()->move->exec(). (by libcg ?) and exec() will flush the all usage.

>>>> Exactly - this is a good reason \*not\* to implement move - because then

>>>> you drag all the usage of the middleware daemon into the new cgroup.

>>>>

>>> Yes. The other thing is that charges will eventually fade away. Please see

> the

>>> cgroup implementation of page\_referenced() and mark\_page\_accessed(). The

>>> original group on memory pressure will drop pages that were left behind by

> a

>>> task that migrates. The new group will pick it up if referenced.

>>>

>> Hum..

>> So, it seems that some kind of "Lazy Mode" (#3 of Kamezawa-san's)

>> has been implemented already.

>>

>> But, one of the reason that I think usage should be moved

>> is to make the usage as accurate as possible, that is

>> the size of memory used by processes in the group at the moment.

>>

>> I agree that statistics is not the purpose of memcg(and swap),

>> but, IMHO, it's useful feature of memcg.

>> Administrators can know how busy or idle each groups are by it.

>>

> One more point. This kinds of lazy "drop" approach canoot works well when

> there are mlocked processes. lazy "move" approach is better if we do in lazy

> way. And how quickly they drops depends on vm.swappiness.

>

- > Anyway, I don't like complicated logic in the kernel.
- > So, let's see how simple "move" can be implemented. Then, it will be just a
- > trade-off problem, IMHO.
- > If policy is fixed, implementation itself will not be complicated, I think.
- >

I agree with you that it is a trade-off problem and we should keep move as simple as possible.

--

Warm Regards,  
Balbir Singh  
Linux Technology Center  
IBM, ISTL

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Containers mailing list  
Containers@lists.linux-foundation.org  
<https://lists.linux-foundation.org/mailman/listinfo/containers>

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