
Subject: Re: [PATCH v4 09/14] memcg: kmem accounting lifecycle management
Posted by [Glauber Costa](#) on Fri, 12 Oct 2012 07:47:17 GMT

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On 10/11/2012 05:11 PM, Michal Hocko wrote:

> On Mon 08-10-12 14:06:15, Glauber Costa wrote:

>> Because kmem charges can outlive the cgroup, we need to make sure that
>> we won't free the memcg structure while charges are still in flight.

>> For reviewing simplicity, the charge functions will issue

>> mem_cgroup_get() at every charge, and mem_cgroup_put() at every
>> uncharge.

>>

>> This can get expensive, however, and we can do better. mem_cgroup_get()

>> only really needs to be issued once: when the first limit is set. In the

>> same spirit, we only need to issue mem_cgroup_put() when the last charge
>> is gone.

>>

>> We'll need an extra bit in kmem_accounted for that: KMEM_ACCOUNTED_DEAD.

>> it will be set when the cgroup dies, if there are charges in the group.

>> If there aren't, we can proceed right away.

>>

>> Our uncharge function will have to test that bit every time the charges

>> drop to 0. Because that is not the likely output of

>> res_counter_uncharge, this should not impose a big hit on us: it is

>> certainly much better than a reference count decrease at every
>> operation.

>>

>> [v3: merged all lifecycle related patches in one]

>>

>> Signed-off-by: Glauber Costa <glommer@parallels.com>

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>

> OK, I like the optimization. I have just one comment to the

> memcg_kmem_dead naming but other than that

>

> Acked-by: Michal Hocko <mhocko@suse.cz>

>

> [...]

>> +static bool memcg_kmem_dead(struct mem_cgroup *memcg)

>

> The name is tricky because it doesn't tell you that it clears the flag

> which made me scratch my head when reading comment in kmem_cgroup_destroy

>

memcg_kmem_finally_kill_that_bastard() ?
