
Subject: Re: [PATCH v5 11/18] sl[au]b: Allocate objects from memcg cache
Posted by [Glauber Costa](#) on Mon, 29 Oct 2012 15:19:53 GMT
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On 10/29/2012 07:14 PM, JoonSoo Kim wrote:

> Hi, Glauber.

>

> 2012/10/19 Glauber Costa <glommer@parallels.com>:

>> We are able to match a cache allocation to a particular memcg. If the
>> task doesn't change groups during the allocation itself - a rare event,
>> this will give us a good picture about who is the first group to touch a
>> cache page.

>>

>> This patch uses the now available infrastructure by calling
>> memcg_kmem_get_cache() before all the cache allocations.
>>

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

>> CC: Christoph Lameter <cl@linux.com>

>> CC: Pekka Enberg <penberg@cs.helsinki.fi>

>> CC: Michal Hocko <mhocko@suse.cz>

>> CC: Kamezawa Hiroyuki <kamezawa.hiroyu@jp.fujitsu.com>

>> CC: Johannes Weiner <hannes@cmpxchg.org>

>> CC: Suleiman Souhlal <suleiman@google.com>

>> CC: Tejun Heo <tj@kernel.org>

>> ---

>> include/linux/slub_def.h | 15 ++++++++-----

>> mm/memcontrol.c | 3 +++

>> mm/slab.c | 6 +++++-

>> mm/slub.c | 5 +++--

>> 4 files changed, 21 insertions(+), 8 deletions(-)

>>

>> diff --git a/include/linux/slub_def.h b/include/linux/slub_def.h

>> index 961e72e..ed330df 100644

>> --- a/include/linux/slub_def.h

>> +++ b/include/linux/slub_def.h

>> @@ -13,6 +13,8 @@

>> #include <linux/kobject.h>

>>

>> #include <linux/kmemleak.h>

>> +#include <linux/memcontrol.h>

>> +#include <linux/mm.h>

>>

>> enum stat_item {

>> ALLOC_FASTPATH, /* Allocation from cpu slab */

>> @@ -209,14 +211,14 @@ static __always_inline int kmalloc_index(size_t size)

>> * This ought to end up with a global pointer to the right cache

>> * in kmalloc_caches.

>> */

```
>> -static __always_inline struct kmem_cache *kmalloc_slab(size_t size)
>> +static __always_inline struct kmem_cache *kmalloc_slab(gfp_t flags, size_t size)
>> {
>>     int index = kmalloc_index(size);
>>
>>     if (index == 0)
>>         return NULL;
>>
>> -    return kmalloc_caches[index];
>> +    return memcg_kmem_get_cache(kmalloc_caches[index], flags);
>> }
>
```

> You don't need this,
> because memcg_kmem_get_cache() is invoked in both slab_alloc() and
> __cache_alloc_node().
>

Indeed, I had noticed this already, and fixed myself - to be sent in the next version I intend to get out in the open tonight or tomorrow.
