
Subject: Re: [PATCH v5 11/18] sl[au]b: Allocate objects from memcg cache
Posted by [JoonSoo Kim](#) on Mon, 29 Oct 2012 15:14:34 GMT
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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>
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> ---
> 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 kmallocl_index(size_t size)
> * This ought to end up with a global pointer to the right cache
> * in kmallocl_caches.
> */
> -static __always_inline struct kmem_cache *kmallocl_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().
