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Subject: Re: [PATCH v5 06/14] memcg: kmem controller infrastructure  
Posted by [KAMEZAWA Hiroyuki](#) on Wed, 17 Oct 2012 06:40:46 GMT  
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(2012/10/16 19:16), Glauber Costa wrote:

> This patch introduces infrastructure for tracking kernel memory pages to  
> a given memcg. This will happen whenever the caller includes the flag  
> \_\_GFP\_KMEMCG flag, and the task belong to a memcg other than the root.  
>  
> In memcontrol.h those functions are wrapped in inline accessors. The  
> idea is to later on, patch those with static branches, so we don't incur  
> any overhead when no mem cgroups with limited kmem are being used.  
>  
> Users of this functionality shall interact with the memcg core code  
> through the following functions:  
>  
> memcg\_kmem\_newpage\_charge: will return true if the group can handle the  
> allocation. At this point, struct page is not  
> yet allocated.  
>  
> memcg\_kmem\_commit\_charge: will either revert the charge, if struct page  
> allocation failed, or embed memcg information  
> into page\_cgroup.  
>  
> memcg\_kmem\_uncharge\_page: called at free time, will revert the charge.  
>  
> [ v2: improved comments and standardized function names ]  
> [ v3: handle no longer opaque, functions not exported,  
> even more comments ]  
> [ v4: reworked Used bit handling and surroundings for more clarity ]  
> [ v5: simplified code for kmemcg compiled out and core functions in  
> memcontrol.c, moved kmem code to the middle to avoid forward decls ]  
>  
> Signed-off-by: Glauber Costa <glommer@parallels.com>  
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