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 acessors. 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.
>
>
> memcq 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 ]
>
>
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