

(2012/05/12 5:11), Glauber Costa wrote:

> We call the destroy function when a cgroup starts to be removed,
> such as by a rmdir event.
>
> However, because of our reference counters, some objects are still
> inflight. Right now, we are decrementing the static_keys at destroy()
> time, meaning that if we get rid of the last static_key reference,
> some objects will still have charges, but the code to properly
> uncharge them won't be run.
>
> This becomes a problem specially if it is ever enabled again, because
> now new charges will be added to the staled charges making keeping
> it pretty much impossible.
>
> We just need to be careful with the static branch activation:
> since there is no particular preferred order of their activation,
> we need to make sure that we only start using it after all
> call sites are active. This is achieved by having a per-memcg
> flag that is only updated after static_key_slow_inc() returns.
> At this time, we are sure all sites are active.
>
> This is made per-memcg, not global, for a reason:
> it also has the effect of making socket accounting more
> consistent. The first memcg to be limited will trigger static_key()
> activation, therefore, accounting. But all the others will then be
> accounted no matter what. After this patch, only limited memcgs
> will have its sockets accounted.
>
> [v2: changed a tcp limited flag for a generic proto limited flag]
> [v3: update the current active flag only after the static_key update]
> [v4: disarm_static_keys() inside free_work]
> [v5: got rid of tcp_limit_mutex, now in the static_key interface]
>
> Signed-off-by: Glauber Costa <glommer@parallels.com>
> CC: Tejun Heo <tj@kernel.org>
> CC: Li Zefan <lizefan@huawei.com>
> CC: Kamezawa Hiroyuki <kamezawa.hiroyu@jp.fujitsu.com>
> CC: Johannes Weiner <hannes@cmpxchg.org>
> CC: Michal Hocko <mhocko@suse.cz>

Thank you for your patient works.

Acked-by: KAMEZAWA Hiroyuki <kamezawa.hiroyu@jp.fujitsu.com>

BTW, what is the relationship between $1/2$ and $2/2$?

Thanks,
-Kame
