
Subject: [PATCH 01/11] memcg: Make it possible to use the stock for more than one page.

Posted by [Glauber Costa](#) on Mon, 25 Jun 2012 14:15:18 GMT

[View Forum Message](#) <> [Reply to Message](#)

From: Suleiman Souhlal <ssouhlal@FreeBSD.org>

Signed-off-by: Suleiman Souhlal <suleiman@google.com>

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

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

mm/memcontrol.c | 21 ++++++++-----

1 file changed, 12 insertions(+), 9 deletions(-)

diff --git a/mm/memcontrol.c b/mm/memcontrol.c

index f72b5e5..9304db2 100644

--- a/mm/memcontrol.c

+++ b/mm/memcontrol.c

@@ -1967,19 +1967,22 @@ static DEFINE_PER_CPU(struct memcg_stock_pcp,
memcg_stock);

static DEFINE_MUTEX(percpu_charge_mutex);

/*

- * Try to consume stocked charge on this cpu. If success, one page is consumed
- * from local stock and true is returned. If the stock is 0 or charges from a
- * cgroup which is not current target, returns false. This stock will be
- * refilled.

+ * Try to consume stocked charge on this cpu. If success, nr_pages pages are
+ * consumed from local stock and true is returned. If the stock is 0 or
+ * charges from a cgroup which is not current target, returns false.
+ * This stock will be refilled.

*/

-static bool consume_stock(struct mem_cgroup *memcg)

+static bool consume_stock(struct mem_cgroup *memcg, int nr_pages)

{

struct memcg_stock_pcp *stock;

bool ret = true;

+ if (nr_pages > CHARGE_BATCH)

+ return false;

+

stock = &get_cpu_var(memcg_stock);

- if (memcg == stock->cached && stock->nr_pages)

- stock->nr_pages--;

+ if (memcg == stock->cached && stock->nr_pages >= nr_pages)

+ stock->nr_pages -= nr_pages;

else /* need to call res_counter_charge */

ret = false;

```

    put_cpu_var(memcg_stock);
@@ -2278,7 +2281,7 @@ again:
    VM_BUG_ON(css_is_removed(&memcg->css));
    if (mem_cgroup_is_root(memcg))
        goto done;
- if (nr_pages == 1 && consume_stock(memcg))
+ if (consume_stock(memcg, nr_pages))
    goto done;
    css_get(&memcg->css);
} else {
@@ -2303,7 +2306,7 @@ again:
    rcu_read_unlock();
    goto done;
}
- if (nr_pages == 1 && consume_stock(memcg)) {
+ if (consume_stock(memcg, nr_pages)) {
/*
 * It seems dangerous to access memcg without css_get().
 * But considering how consume_stok works, it's not
--
1.7.10.2

```
