
Subject: [PATCH v3 13/16] slab: slab-specific propagation changes.
Posted by [Glauber Costa](#) on Tue, 18 Sep 2012 14:12:07 GMT
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When a parent cache does tune_cpucache, we need to propagate that to the children as well. For that, we unfortunately need to tap into the slab core.

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mm/slab.c | 28 ++++++
mm/slab_common.c | 1 +
2 files changed, 28 insertions(+), 1 deletion(-)

diff --git a/mm/slab.c b/mm/slab.c
index d5c196b..bd9928f 100644

--- a/mm/slab.c

+++ b/mm/slab.c

@@ -4104,7 +4104,7 @@ static void do_ccupdate_local(void *info)
{

/* Always called with the slab_mutex held */

-static int do_tune_cpucache(struct kmem_cache *cachep, int limit,
+static int __do_tune_cpucache(struct kmem_cache *cachep, int limit,
+ int batchcount, int shared, gfp_t gfp)

{
+ struct ccupdate_struct *new;

@@ -4147,6 +4147,32 @@ static int do_tune_cpucache(struct kmem_cache *cachep, int limit,
+ return alloc_kmemlist(cachep, gfp);
+ }

+static int do_tune_cpucache(struct kmem_cache *cachep, int limit,
+ int batchcount, int shared, gfp_t gfp)

+{

+ int ret;

+ #ifdef CONFIG_MEMCG_KMEM

+ struct kmem_cache *c;

+ struct mem_cgroup_cache_params *p;

+ #endif

+

+ ret = __do_tune_cpucache(cachep, limit, batchcount, shared, gfp);

+ #ifdef CONFIG_MEMCG_KMEM

+ if (slab_state < FULL)

```

+ return ret;
+
+ if ((ret < 0) || (cachep->memcg_params.id == -1))
+ return ret;
+
+ list_for_each_entry(p, &cachep->memcg_params.sibling_list, sibling_list) {
+ c = container_of(p, struct kmem_cache, memcg_params);
+ /* return value determined by the parent cache only */
+ __do_tune_cpucache(c, limit, batchcount, shared, gfp);
+ }
+ #endif
+ return ret;
+}
+
+ /* Called with slab_mutex held always */
+ static int enable_cpucache(struct kmem_cache *cachep, gfp_t gfp)
+ {
+ diff --git a/mm/slab_common.c b/mm/slab_common.c
+ index c6fb4a7..341c3e1 100644
+ --- a/mm/slab_common.c
+ +++ b/mm/slab_common.c
+ @@ -124,6 +124,7 @@ kmem_cache_create_memcg(struct mem_cgroup *memcg, const char
+ *name, size_t size,
+ #ifdef CONFIG_MEMCG_KMEM
+ s->memcg_params.memcg = memcg;
+ s->memcg_params.parent = parent_cache;
+ + s->memcg_params.id = -1; /* not registered yet */
+ #endif
+ s->name = kstrdup(name, GFP_KERNEL);
+ if (!s->name) {
+ --
+ 1.7.11.4

```
