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Subject: [RFC][PATCH] memory cgroup enhancements updated [7/10]  
RSS/CACHE failcnt  
Posted by [KAMEZAWA Hiroyuki](#) on Fri, 19 Oct 2007 09:34:52 GMT  
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cgroup's resource has "failure" counter. But I think memory cgroup has 2 types of failure

- failure of cache
- failure of RSS

This patch adds above 2 information to stat file.  
Above information is shown in "byte". But I wonder showing just counter is better or not...rather than PAGE\_SIZE.

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

mm/memcontrol.c | 13 ++++++++  
1 file changed, 13 insertions(+)

Index: devel-2.6.23-mm1/mm/memcontrol.c

```
=====
--- devel-2.6.23-mm1.orig/mm/memcontrol.c
+++ devel-2.6.23-mm1/mm/memcontrol.c
@@ -50,6 +50,11 @@ enum mem_cgroup_stat_index {
    */
    MEM_CGROUP_STAT_ACTIVE, /* # of pages in active list */
    MEM_CGROUP_STAT_INACTIVE, /* # of pages on inactive list */
+ /*
+  * precise failcnt
+  */
+ MEM_CGROUP_STAT_FAIL_RSS, /* # of failure in RSS charging */
+ MEM_CGROUP_STAT_FAIL_CACHE, /* # of failure in CACHE charging */

    MEM_CGROUP_STAT_NSTATS,
};
@@ -486,6 +491,12 @@ retry:
    */
    while (res_counter_charge(&mem->res, PAGE_SIZE)) {
        bool is_atomic = gfp_mask & GFP_ATOMIC;
+ if (is_cache)
+ mem_cgroup_stat_inc(&mem->stat,
+ MEM_CGROUP_STAT_FAIL_CACHE);
+ else
+ mem_cgroup_stat_inc(&mem->stat,
+ MEM_CGROUP_STAT_FAIL_RSS);
    /*
     * We cannot reclaim under GFP_ATOMIC, fail the charge
```

```
*/
@@ -850,6 +861,8 @@ static const struct mem_cgroup_stat_desc
 [MEM_CGROUP_STAT_RSS] = { "rss", PAGE_SIZE, },
 [MEM_CGROUP_STAT_ACTIVE] = { "active", PAGE_SIZE, },
 [MEM_CGROUP_STAT_INACTIVE] = { "inactive", PAGE_SIZE, },
+ [MEM_CGROUP_STAT_FAIL_RSS] = { "rss_failure", PAGE_SIZE, },
+ [MEM_CGROUP_STAT_FAIL_CACHE] = { "cache_failure", PAGE_SIZE, },
};

static int mem_control_stat_show(struct seq_file *m, void *arg)
```

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Containers mailing list  
Containers@lists.linux-foundation.org  
<https://lists.linux-foundation.org/mailman/listinfo/containers>

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