
Subject: [RFC][for -mm] memory cgroup enhancements take3 [7/9] add memory.stat file

Posted by [KAMEZAWA Hiroyuki](#) on Tue, 30 Oct 2007 11:19:44 GMT

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

Show accounted information of memory cgroup by memory.stat file

Changelog v1->v2

- dropped Charge/Uncharge entry.

Signed-off-by: YAMAMOTO Takashi <yamamoto@valinux.co.jp>

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

mm/memcontrol.c | 50 +++
1 file changed, 50 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

@@ -28,6 +28,7 @@

#include <linux/swap.h>

#include <linux/spinlock.h>

#include <linux/fs.h>

+#include <linux/seq_file.h>

#include <asm/uaccess.h>

@@ -824,6 +825,51 @@ static ssize_t mem_force_empty_read(stru
{

+static const struct mem_cgroup_stat_desc {

+ const char *msg;

+ u64 unit;

+} mem_cgroup_stat_desc[] = {

+ [MEM_CGROUP_STAT_PAGECACHE] = { "page_cache", PAGE_SIZE, },

+ [MEM_CGROUP_STAT_RSS] = { "rss", PAGE_SIZE, },

+};

+

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

+{

+ struct cgroup *cont = m->private;

+ struct mem_cgroup *mem_cont = mem_cgroup_from_cont(cont);

+ struct mem_cgroup_stat *stat = &mem_cont->stat;

+ int i;

+

+ for (i = 0; i < ARRAY_SIZE(stat->cpustat[0].count); i++) {

```

+ unsigned int cpu;
+ s64 val;
+
+ val = 0;
+ for (cpu = 0; cpu < NR_CPUS; cpu++)
+   val += stat->cpustat[cpu].count[i];
+ val *= mem_cgroup_stat_desc[i].unit;
+ seq_printf(m, "%s %lld\n", mem_cgroup_stat_desc[i].msg, val);
+ }
+ return 0;
+}
+
+static const struct file_operations mem_control_stat_file_operations = {
+ .read = seq_read,
+ .llseek = seq_lseek,
+ .release = single_release,
+};
+
+static int mem_control_stat_open(struct inode *unused, struct file *file)
+{
+ /* XXX __d_cont */
+ struct cgroup *cont = file->f_dentry->d_parent->d_fsdata;
+
+ file->f_op = &mem_control_stat_file_operations;
+ return single_open(file, mem_control_stat_show, cont);
+}
+
+
+
+static struct cftype mem_cgroup_files[] = {
+ {
+   .name = "usage_in_bytes",
@@ -851,6 +897,10 @@ static struct cftype mem_cgroup_files[]
+   .write = mem_force_empty_write,
+   .read = mem_force_empty_read,
+ },
+ {
+   .name = "stat",
+   .open = mem_control_stat_open,
+ },
+ };
+
+static struct mem_cgroup init_mem_cgroup;

```