

---

Subject: [PATCH v8 8/9] Display current tcp failcnt in kmem cgroup  
Posted by [Glauber Costa](#) on Mon, 05 Dec 2011 21:35:02 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

This patch introduces kmem.tcp.failcnt file, living in the kmem\_cgroup filesystem. Following the pattern in the other memcg resources, this file keeps a counter of how many times allocation failed due to limits being hit in this cgroup. The root cgroup will always show a failcnt of 0.

Signed-off-by: Glauber Costa <glommer@parallels.com>  
Reviewed-by: Hiroyouki Kamezawa <kamezawa.hiroyu@jp.fujitsu.com>  
CC: David S. Miller <davem@davemloft.net>  
CC: Eric W. Biederman <ebiederm@xmission.com>

---

net/ipv4/tcp\_memcontrol.c | 31 +++++++++++++++++++++++++++++++++++++  
1 files changed, 31 insertions(+), 0 deletions(-)

diff --git a/net/ipv4/tcp\_memcontrol.c b/net/ipv4/tcp\_memcontrol.c  
index 9481f23..d438fba 100644

--- a/net/ipv4/tcp\_memcontrol.c

+++ b/net/ipv4/tcp\_memcontrol.c

@@ -9,6 +9,7 @@

static u64 tcp\_cgroup\_read(struct cgroup \*cont, struct cftype \*cft);

static int tcp\_cgroup\_write(struct cgroup \*cont, struct cftype \*cft,  
const char \*buffer);

+static int tcp\_cgroup\_reset(struct cgroup \*cont, unsigned int event);

static struct cftype tcp\_files[] = {  
{

@@ -22,6 +23,12 @@ static struct cftype tcp\_files[] = {

.read\_u64 = tcp\_cgroup\_read,

.private = RES\_USAGE,

},

+ {

+ .name = "kmem.tcp.failcnt",

+ .private = RES\_FAILCNT,

+ .trigger = tcp\_cgroup\_reset,

+ .read\_u64 = tcp\_cgroup\_read,

+ },

};

static inline struct tcp\_memcontrol \*tcp\_from\_cgproto(struct cg\_proto \*cg\_proto)

@@ -197,12 +204,36 @@ static u64 tcp\_cgroup\_read(struct cgroup \*cont, struct cftype \*cft)

case RES\_USAGE:

val = tcp\_read\_usage(memcg);

break;

+ case RES\_FAILCNT:

```

+ val = tcp_read_stat(memcg, RES_FAILCNT, 0);
+ break;
  default:
    BUG();
  }
  return val;
}

+static int tcp_cgroup_reset(struct cgroup *cont, unsigned int event)
+{
+ struct mem_cgroup *memcg;
+ struct tcp_memcontrol *tcp;
+ struct cg_proto *cg_proto;
+
+ memcg = mem_cgroup_from_cont(cont);
+ cg_proto = tcp_prot.proto_cgroup(memcg);
+ if (!cg_proto)
+ return 0;
+ tcp = tcp_from_cgproto(cg_proto);
+
+ switch (event) {
+ case RES_FAILCNT:
+ res_counter_reset_failcnt(&tcp->tcp_memory_allocated);
+ break;
+ }
+
+ return 0;
+}
+
+ unsigned long long tcp_max_memory(const struct mem_cgroup *memcg)
+ {
+ struct tcp_memcontrol *tcp;
+ --
1.7.6.4

```

---