Subject: [PATCH v8 9/9] Display maximum tcp memory allocation in kmem cgroup
Posted by Glauber Costa on Mon, 05 Dec 2011 21:35:03 GMT
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This patch introduces kmem.tcp.max_usage_in_bytes file, living in the
kmem_cgroup filesystem. The root cgroup will display a value equal
to RESOURCE_MAX. This is to avoid introducing any locking schemes in
the network paths when cgroups are not being actively used.

All others, will see the maximum memory ever used by this cgroup.

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---
 net/ipv4/tcp_memcontrol.c | 12 ++++++++++-
 1 files changed, 11 insertions(+), 1 deletions(-)

```
diff --git a/net/ipv4/tcp_memcontrol.c b/net/ipv4/tcp_memcontrol.c
index d438fba..171d7b6 100644
--- a/net/ipv4/tcp_memcontrol.c
+++ b/net/ipv4/tcp_memcontrol.c
@@ -29,6 +29,12 @@ static struct cftype tcp_files[] = {
   .trigger = tcp_cgroup_reset,
   .read_u64 = tcp_cgroup_read,
  },
+ {
+  .name = "kmem.tcp.max_usage_in_bytes",
+  .private = RES_MAX_USAGE,
+  .trigger = tcp_cgroup_reset,
+  .read_u64 = tcp_cgroup_read,
+ },
 };

 static inline struct tcp_memcontrol *tcp_from_cgproto(struct cg_proto *cg_proto)
@@ -205,7 +211,8 @@ static u64 tcp_cgroup_read(struct cgroup *cont, struct cftype *cft)
   val = tcp_read_usage(memcg);
   break;
  case RES_FAILCNT:
-  val = tcp_read_stat(memcg, RES_FAILCNT, 0);
+ case RES_MAX_USAGE:
+  val = tcp_read_stat(memcg, cft->private, 0);
   break;
  default:
   BUG();
@@ -226,6 +233,9 @@ static int tcp_cgroup_reset(struct cgroup *cont, unsigned int event)
  tcp = tcp_from_cgproto(cg_proto);
```

```
  switch (event) {
+ case RES_MAX_USAGE:
+  res_counter_reset_max(&tcp->tcp_memory_allocated);
+  break;
  case RES_FAILCNT:
   res_counter_reset_failcnt(&tcp->tcp_memory_allocated);
   break;
--
1.7.6.4
```