
Subject: [PATCH v6 08/10] Display current tcp failcnt in kmem cgroup

Posted by [Glauber Costa](#) on Fri, 25 Nov 2011 17:38:14 GMT

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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.

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```
net/ipv4/tcp_memcg.c | 31 ++++++++++++++++++++++++++++++++++++++
1 files changed, 31 insertions(+), 0 deletions(-)
```

```
diff --git a/net/ipv4/tcp_memcg.c b/net/ipv4/tcp_memcg.c
```

```
index a1ab613..da8d9c0 100644
```

```
--- a/net/ipv4/tcp_memcg.c
```

```
+++ b/net/ipv4/tcp_memcg.c
```

```
@@ -8,6 +8,7 @@
```

```
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[] = {
```

```
{
```

```
@@ -21,6 +22,12 @@ 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)
```

```
@@ -188,12 +195,36 @@ 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

```
