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Subject: Re: [PATCH v5 6/8] tcp buffer limitation: per-cgroup limit  
Posted by [Glauber Costa](#) on Wed, 05 Oct 2011 08:08:04 GMT  
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On 10/04/2011 04:48 PM, Eric Dumazet wrote:

> Le mardi 04 octobre 2011 à 16:17 +0400, Glauber Costa a écrit :  
>> This patch uses the "tcp\_max\_mem" field of the kmem\_cgroup to  
>> effectively control the amount of kernel memory pinned by a cgroup.  
>>  
>> We have to make sure that none of the memory pressure thresholds  
>> specified in the namespace are bigger than the current cgroup.  
>>  
>> Signed-off-by: Glauber Costa<glommer@parallels.com>  
>> CC: David S. Miller<davem@davemloft.net>  
>> CC: Hiroyuki Kamezawa<kamezawa.hiroyu@jp.fujitsu.com>  
>> CC: Eric W. Biederman<ebiederm@xmission.com>  
>> ---  
>  
>  
>> --- a/include/net/tcp.h  
>> +++ b/include/net/tcp.h  
>> @@ -256,6 +256,7 @@ extern int sysctl\_tcp\_thin\_dupack;  
>> struct mem\_cgroup;  
>> struct tcp\_memcontrol {  
>> /\* per-cgroup tcp memory pressure knobs \*/  
>> + int tcp\_max\_memory;  
>> atomic\_long\_t tcp\_memory\_allocated;  
>> struct percpu\_counter tcp\_sockets\_allocated;  
>> /\* those two are read-mostly, leave them at the end \*/  
>> diff --git a/mm/memcontrol.c b/mm/memcontrol.c  
>  
> So tcp\_max\_memory is an "int".  
>  
>  
>> +static u64 tcp\_read\_limit(struct cgroup \*cgrp, struct cftype \*cft)  
>> +{  
>> struct mem\_cgroup \*memcg = mem\_cgroup\_from\_cont(cgrp);  
>> + return memcg->tcp.tcp\_max\_memory<< PAGE\_SHIFT;  
>> +}  
>  
> 1) Typical integer overflow here.  
>  
> You need :  
>  
> return ((u64)memcg->tcp.tcp\_max\_memory)<< PAGE\_SHIFT;

Thanks for spotting this, Eric.

>

> 2) Could you add const qualifiers when possible to your pointers ?

Well, I'll go over the patches again and see where I can add them.

Any specific place site you're concerned about?

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