Subject: Kernel cache dentry leak?
Posted by insider on Sun, 15 Jan 2012 17:56:49 GMT

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Hello,

After setup node server with Centos 6 and 64bit latest openvz kernel 2.6.32-042stab044.11 we have noticed, that even on empty node after the two days node memory usage is shown 40-50%! After the inspection of running processes we have not noticed any process which uses significant amount of memory.
After the searching google we found that there may be kernel cache problem, so we executed command:
sync && echo 2 >/proc/sys/vm/drop_caches
And all used memory is freed.
The problem is, that these in cache used memory is reported as "used" memory, not a reusable cache or etc?
Does someone exeperience this kind of problem? If yes, maybe there is any solution?
Or maybe this is an incorrect memory usage reporting problem, or this is memory leak?
We have no such problem in all our centos 5 32bit kernel nodes. On Centos 5 32bit nodes there is no incressing memory usage (by cache or etc).

Also, on other forum we have an answer that someone else got this problem too:
Quote:We are experiencing the same thing.
Linux xxxxx.yyyyyy.com 2.6.32-042stab044.11 #1 SMP Wed Dec 14 16:02:00 MSK 2011 x86_64 x86_64 x86_64 GNU/Linux

Current RAM usage:
free -m

	total	used	free	shared	buffers	cached
Mem:	23971	13559	10411	0	330	12444
-/+ buffers/cache:		784	23187			
Swap:	26622	6	26616			

After sync:
free -m

	total	used	free	shared	buffers	cached
Mem:	23971	1068	22902	0	330	458
-/+ buffers/cache:		279	23691			
Swap:	26622	6	26616			

There is currently 1 VM running on this node. Why in the world would the server use 12 GB RAM as cache?

slabtop command shows big and incressing "dentry" usage.
I see by running "slabtop", that "dentry" value is very big and incressing continually. After cache clear it drops, but then incresses and incresses again and again.
For example, on our nominal loaded Centos 5 32 bit node there is around 700k objects in "dentry" and uses around 106MB.

In this time, on the empty node with Centos 6 64 bit kernel "dentry" holds 7000k objects (x10 more than on our loaded node!) and uses 1.5GB RAM and incresses...

Thank you for any help and answers.