
Subject: Re: OOM didn't save the machine
Posted by [lazy](#) on Tue, 31 Mar 2009 12:34:21 GMT
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maratrus wrote on Tue, 31 March 2009 06:36Hello,

Quote:
It's possible the "leak"

Yes, it might be a leak. Moreover, you said that
Quote:
Same code runs without problems on non openvz kernels 2.6.22 25 27 for months

So, let's try to find out if it's indeed a memory leak.

Quote:
Now it's happening again, apache process is using 100% cpu, I can't enter the vps beancounters bellow

Looks like you have to adjust CPUUNITS/CPULIMITS on the HN. You may read about them in OpenVZ user's guide
<http://download.openvz.org/doc/OpenVZ-Users-Guide.pdf>
this VE has 300% cpulimit, and themachine has 4 cores

Quote:
oomguarpages 50345 59833 35236 9223372036854775807 0

Oomguarpages exceeded barrier value, so this is likely the reason why a process inside that VE was killed.
<http://wiki.openvz.org/Oomguarpages#oomguarpages>
yes, first time when memory run out oom tried to kill some processes but I don't know if the one eating all the cpu was killed

Do you have a single VE on the HN? If no, please show the full user_beancounters output.

Version: 2.5

uid resource	held	maxheld	barrier	limit	failcnt
3001: kmemsize	164187239	168681365	268435456		536870912
0					
lockedpages	0	0	2562	2562	0
privvmpages	750001	863788	1048576	1048576	
0					
shmpages	28	48	15374	15374	0
dummy	0	0	0	0	0

numproc	202	247	2000	2000	0
physpages	667127	774657	0	9223372036854775807	
0					
vmguarpages	0	0	35236	9223372036854775807	
0					
oomguarpages	667127	774657	35236	9223372036854775807	
0					
numtcpsock	134	309	2000	2000	0
numflock	10	32	1000	1100	0
numpty	0	1	200	200	0
numsignifo	0	101	1024	1024	0
tcpsndbuf	1125360	4048272	8388608	10485760	
0					
tcprcvbuf	1046080	2213216	8388608	10485760	
0					
othersockbuf	171680	1371728	4650461	12842461	
0					
dgramrcvbuf	0	8736	4650461	4650461	
0					
numothersock	101	140	2048	3000	0
dcachesize	0	0	11452893	11796480	0
numfile	3896	4609	20480	20480	0
dummy	0	0	0	0	0
dummy	0	0	0	0	0
dummy	0	0	0	0	0
numiptent	10	10	200	200	0
3000: kmemsize	80854359	83363201	125829120	131072000	
0					
lockedpages	0	0	2562	2562	0
privvmpages	135920	171574	512000	537600	
0					
shmpages	284	284	15374	15374	0
dummy	0	0	0	0	0
numproc	65	127	2000	2000	0
physpages	37459	59833	0	9223372036854775807	
0					
vmguarpages	0	0	35236	9223372036854775807	
0					
oomguarpages	37503	59833	30000	30000	
0					
numtcpsock	15	95	2000	2000	0
numflock	2	13	1000	1100	0
numpty	0	1	200	200	0
numsignifo	8	30	1024	1024	0
tcpsndbuf	266800	1460304	9300923	17492923	
0					
tcprcvbuf	1296	286512	638976	1048576	
0					

0	othersockbuf	13136	1270944	4650461	12842461	
0	dgramrcvbuf	0	4368	4650461	4650461	
	numothersock	11	33	8000	9000	0
	dcachesize	0	0	11452893	11796480	0
	numfile	2126	4801	20480	20480	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0
	numiptent	10	10	200	200	0
	0: kmemsize	74806381	74857340	9223372036854775807		
9223372036854775807	lockedpages	0	0	9223372036854775807		
9223372036854775807	privvmpages	8703	20362	9223372036854775807		
9223372036854775807	shmpages	1287	1303	9223372036854775807		
9223372036854775807	dummy	0	0	9223372036854775807	9223372036854775807	
0	numproc	99	109	9223372036854775807		
9223372036854775807	physpages	4995	15435	9223372036854775807		
9223372036854775807	vmguarpages	0	0	9223372036854775807		
9223372036854775807	oomguarpages	5002	15435	9223372036854775807		
9223372036854775807	numtcpsock	6	7	9223372036854775807		
9223372036854775807	numflock	1	7	9223372036854775807	9223372036854775807	
0	numpty	8	8	9223372036854775807	9223372036854775807	
0	numsiginfo	2	6	9223372036854775807	9223372036854775807	
0	tcpsndbuf	125696	698000	9223372036854775807		
9223372036854775807	tcprcvbuf	98304	1312608	9223372036854775807		
9223372036854775807	othersockbuf	9280	24832	9223372036854775807		
9223372036854775807	dgramrcvbuf	0	8464	9223372036854775807		
9223372036854775807	numothersock	25	30	9223372036854775807		
9223372036854775807	dcachesize	0	0	9223372036854775807	9223372036854775807	

```

0
numfile          1935          2135 9223372036854775807
9223372036854775807 0
dummy           0          0 9223372036854775807 9223372036854775807
0
dummy           0          0 9223372036854775807 9223372036854775807
0
dummy           0          0 9223372036854775807 9223372036854775807
0
numiptent       10          10 9223372036854775807
9223372036854775807 0

```

Quote:

Next time this issue will occur try to stop the problem VE (hope CPULIMIT/CPUUNITS adjustment will allow to do that) and look at the user_beancounters again. There should be no usage when VE is stopped. Please, also look at the slab state. If the consumption value is decreased. And show please /proc/slabinfo output after and before stopping the problem VE.

after i tried to set vzctl set 3000 --cpus 1 all other vzctl's got stuck

there was monstrous filp cache usage in slab, (taken at second event at Tue)

```

mnt_cache      44  75  256  15  1 : tunables 120  60  8 : slabdata  5  5  0
inode_cache    1665 1740 608  6  1 : tunables  54  27  8 : slabdata 290 290  0
dentry_cache   896624 896624 240 16  1 : tunables 120  60  8 : slabdata 56039
56039  0
filp           9343650 9343650 256 15  1 : tunables 120  60  8 : slabdata 622910 622910
0
names_cache    33  33 4096  1  1 : tunables  24  12  8 : slabdata  33  33  0
idr_layer_cache 102 105 528  7  1 :

```

Please look at the attached images, there is a lot of kernel activity about 100% i guess this is runaway unkillable httpd which was in some kind of loop which was also eating filp cache thus crashing the machine,

this process had under 20 open files and was sending msgs threw af_unix socket as I mentioned bellow

memory consumption by userspace processes were normal under 4 GB all the time, it looks like filp cache was eating the rest

Today we roll out plain apache on that vps, but later I'll try to trigger this event on a test machine.

File Attachments

1) [ram.png](#), downloaded 361 times

2) [cpu.png](#), downloaded 348 times
