Subject: How come, that my VDS system uses that much rams?
Posted by newn on Thu, 15 Jul 2010 15:32:09 GMT
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Hi everyone. I have bought a VDS system with 1 gig of rams. I think it uses OpenVZ instead of CentOS 5.

2.6.18-194.3.1.iv.028stab069.6 x86_64 x86_64
centos-release-5-5.el5.centos

I'm not very advanced in linux, but every time i enter my website of WP, it takes a lot of rams. When i surf, i eats even more. Today i went to it to check the ram usage again, and first time i entered, it took 70MBs from 100. Then i went to do something, i get back, i check the free rams availbale, it says it's 60. So +30MB while i was away from the website for a few minutes, then i enter it again. It eats 30 more megabytes. After that i hit admin board link on the site, it eats 20 more. That way, my server has <10 megabytes left.

My server hosts two programs, which eats a lot of rams, but it's not increasing, it eats it stabile. You start it, it takes some amount, it stays that way. It doesn't changes. Maybe +-10mb.

So anyway, how come, that simple website hits takes that much memory? After that, website sometimes doesn't load at all. I mean just a blank page or some contents of the website is blank, of half of the website is loaded only... Plus sometimes people (since those two other perograms are servers) cannot join to these servers.

So anyway, how can i fix this? Expluding adding more rams. I'm a student from a poor country and i get 100$ a year during my birthday. To add 512 megabytes, i would need to pay ~5$ a month more. Si 12*5... Well, doesn't add up too nicely.

Subject: Re: How come, that my VDS system uses that much rams?
Posted by khorenko on Thu, 15 Jul 2010 19:24:22 GMT
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Hi!

could you please check your "free" output? May be there is a lot of memory used for caches and buffers? If yes - then it's not a problem, just check for details:

http://forum.openvz.org/index.php?t=msg&&th=7314&amp ;goto=35283

Hope that helps!

--
Konstantin

Subject: Re: How come, that my VDS system uses that much rams?
Posted by newn on Thu, 15 Jul 2010 21:17:30 GMT
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Yea, free -m tells me, that it has 0 rams free. That's what gives me the problem. Sometimes <10. Sometimes it cannot even be run. And when i restart the server, until i go to the website, it's ~200.

Also it has no swap memory.

As for " May be there is a lot of memory used for caches and buffers?" Sorry, i'm not very advanced Linux user, i don't know how to check for that. :/

Subject: Re: How come, that my VDS system uses that much rams?
Posted by khorenko on Thu, 15 Jul 2010 21:22:21 GMT
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Just check the 2 last columns in "free -m" output - their names are "buffers" and "cached".

Subject: Re: How come, that my VDS system uses that much rams?
Posted by newn on Thu, 15 Jul 2010 21:34:30 GMT
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Oh, sorry. It's all zeros. Here you go the info about just restarted server:

```
             total       used       free     shared    buffers     cached
Mem:          1024        154        869          0          0          0
-/+ buffers/cache:        154        869
Swap:            0          0          0
```

Now i enter the websites:

```
             total       used       free     shared    buffers     cached
Mem:          1024        332        691          0          0          0
-/+ buffers/cache:        332        691
Swap:            0          0          0
```

Subject: Re: How come, that my VDS system uses that much rams?
Posted by khorenko on Fri, 16 Jul 2010 13:35:19 GMT
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Well, but may be all the memory is really allocated? just post here (when you almost have no free

memory):
cat /proc/user_beancounters
ps axfl --sort=-vsize

Thank you.

--
Konstantin

Subject: Re: How come, that my VDS system uses that much rams?
Posted by newn on Fri, 16 Jul 2010 22:24:26 GMT
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Version: 2.5

uid	resource	held	maxheld	barrier	limit	failcnt
309:	kmemsize	11445722	14686333	58720256	67108864	0
	lockedpages	0	0	4096	4096	0
	privvmpages	259626	287663	262144	262144	2175886
	shmpages	1311	5167	262144	262144	0
	dummy	0	0	0	0	0
	numproc	60	76	1024	1024	0
	physpages	142874	151241	0	9223372036854775807	0
	vmguarpages	0	0	229376	229376	0
	oomguarpages	142875	151242	229376	229376	0
	numtcpsock	32	122	4096	4096	0
	numflock	6	12	4096	4096	0
	numpty	3	7	16	16	0
	numsiginfo	0	61	4096	4096	0
	tcpsndbuf	339008	880016	14680064	16777216	0
	tcprcvbuf	541728	2855832	14680064	16777216	0
	othersockbuf	33392	2749624	14680064	16777216	0
	dgramrcvbuf	1288	7376376	14680064	16777216	0
	numothersock	29	62	4096	4096	0
	dcachesize	792516	885477	58720256	67108864	0
	numfile	1788	2259	16384	16384	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0

```
dummy                0        0        0        0        0
numiptent           10       10     4096     4096        0
```

and

```
4     0     1     0  15   0  10348   740 -      Ss   ?          0:00 init [3]
1     0  7590     1  15   0 289228 10272 -      Ss   ?          0:00 /usr/sbin/httpd
5    48 22099  7590  15   0 335580 52096 -      S    ?          0:03  \_ /usr/sbin/httpd
5    48 14123  7590  15   0 334128 52216 -      S    ?          0:25  \_ /usr/sbin/httpd
5    48 14150  7590  15   0 332508 50356 -      S    ?          0:23  \_ /usr/sbin/httpd
5    48 22005  7590  15   0 328616 46688 -      S    ?          0:04  \_ /usr/sbin/httpd
5    48 17647  7590  15   0 324252 41996 -      S    ?          0:19  \_ /usr/sbin/httpd
0     0  9512     1  15   0  94008 21148 -      S    ?          0:39 /usr/bin/perl ./hlstats.pl --port=PORT
0     0  9516     1  15   0  94008 21072 -      S    ?          0:13 /usr/bin/perl ./hlstats.pl --port=PORT
5     0  7466     1  15   0  62624  1204 -      Ss   ?          0:00 /usr/sbin/sshd
4     0 32454  7466  15   0  86060  3332 -      Ss   ?          0:00  \_ sshd: root@pts/0
4     0 32466 32454  15   0  12064  1728 wait   Ss   pts/0      0:00  |   \_ -bash
4     0 12169 32466  17   0   8628   844 -      R+   pts/0      0:00  |      \_ ps axfl --sort=-vsize
4     0  9334  7466  15   0  86056  3364 -      Ss   ?          0:00  \_ sshd: root@notty
4     0  9336  9334  15   0  53872  2056 -      Ss   ?          0:00      \_
/usr/libexec/openssh/sftp-server
5     0 24109     1  15   0  23004  1500 -      Ss   ?          0:00 SCREEN -A -m -d -S
4     0 24110 24109  21   0   9968  1404 wait   Ss+  pts/1      0:00  \_ /bin/sh ./srcds_run
0     0 24112 24110  15   0 326644 136368 stext Sl+  pts/1    103:48      \_ ./srcds_linux
5     0 30518     1  15   0  22824  1320 -      Ss   ?          0:00 SCREEN -A -m -d -S
4     0 30519 30518  18   0   9972  1420 wait   Ss+  pts/2      0:00  \_ /bin/sh ./srcds_run
0     0 11772 30519  15   0 323824 137004 stext Sl+  pts/2      2:56      \_ ./srcds_linux
1     0  7478     1  25   0  21644   880 -      Ss   ?          0:00 xinetd -stayalive -pidfile
/var/run/xinetd.pid
1     0  7599     1  15   0  20868  1168 -      Ss   ?          0:00 crond
5     0  7175     1  21  -4  12604   672 -      S<s  ?          0:00 /sbin/udevd -d
4     0  7512     1  25   0  11928  1408 wait   S    ?          0:00 /bin/sh /usr/bin/mysqld_safe
--datadir=/var/lib/mysql --socket=/var/lib/mysql/mysql.sock --log-error=/var/lo
4    27  7564  7512  15   0 269784 39912 stext  Sl   ?          3:18  \_ /usr/libexec/mysqld
--basedir=/usr --datadir=/var/lib/mysql --user=mysql --pid-file=/var/run/mysqld/mysq
1     0  7454     1  15   0   5908   608 -      Ss   ?          0:00 syslogd -m 0
```

9 megabytes of free memory.

Subject: Re: How come, that my VDS system uses that much rams?
Posted by khorenko on Mon, 19 Jul 2010 09:22:56 GMT
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Well, looks like your applications really allocate all the memory available on the node:

you can see this by failcounters for "privvmpages" parameter.

If you cannot do anything with processes running inside the Container, the only way left is to increase the privvmpages value (read - buy an account with more memory).

Alternatively you can try somehow to optimize the processes inside CT in order not to ALLOCATE a lot of RAM while real USE of that memory is not so high.

According to "oomguarpages" usage value all processes really USE only 140Mb of RAM, all the other memory (1Gb-140Mb) is just allocated, but not really used.

You can check the processes one by one from your "ps" output and check "VSZ" and "RSS" values: the first one is how much is ALLOCATED, the later - how much is used. After that just take a look at applications configurations - if you can somehow tell them not to PREALLOCATE too much memory, for example for some application internal buffers/caches, etc.

Hope that helps.

--
Konstantin
