
Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by [Rene Dokbua](#) on Wed, 04 Jul 2012 09:16:54 GMT
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Today I again had a VE that went up to a relative high load for no apparent reason.

Below are the details for the hardware node, followed by the high-load container.

I realize it's not the latest kernel, but a reboot takes half an hour (from first VE goes down to last VE is back up, assuming everything goes well and no FSCK is forced) so we only reboot into new kernels when there is a really serious reason for it or the server crashes - but I don't see anything in the kernel updates since our current kernel that would address this issue anyway.

Why does the load in this container suddenly go up like that? Websites hosted by the container becomes very sluggish, so it is a real problem.

It isn't just a problem with this container - or even this hardware node for that reason, I occasionally see it with containers on other hardware nodes as well. One idea I brought up before was that perhaps it's the file system journal, as suggested in <http://wiki.openvz.org/Ploop/Why> - but I think that would affect all containers on that file system, not just a single container?

--- HARDWARE NODE ---

```
# uname -a
```

```
Linux server15.hardwarenode.com 2.6.32-042stab049.6 #1 SMP Mon Feb 6  
19:17:43 MSK 2012 x86_64 x86_64 x86_64 GNU/Linux
```

```
# rpm -q sl-release
```

```
sl-release-6.1-2.x86_64
```

```
# top -cbn1 | head -17
```

```
top - 21:00:02 up 123 days, 15:31, 1 user, load average: 0.97, 2.70, 2.37
```

```
Tasks: 886 total, 6 running, 880 sleeping, 0 stopped, 0 zombie
```

```
Cpu(s): 8.4%us, 1.7%sy, 0.0%ni, 86.3%id, 3.5%wa, 0.0%hi, 0.1%si,  
0.0%st
```

```
Mem: 16420716k total, 15566264k used, 854452k free, 1477372k buffers
```

```
Swap: 16777184k total, 623672k used, 16153512k free, 4578176k cached
```

```
  PID USER    PR  NI  VIRT  RES  SHR  S  %CPU  %MEM  TIME+  COMMAND  
 94153 27      20   0 164m  41m 3392 S 150.9  0.3 50575:37  
/usr/libexec/mys  
 9178 27      20   0 159m  29m 3000 S 72.6  0.2 1284:50
```

```

/usr/libexec/mysq
567031 apache  20  0 40296 15m 3588 S 17.2  0.1  0:00.09
/usr/sbin/httpd
567382 root    20  0 15672 1820 864 R 5.7  0.0  0:00.04 top -cbn1
  38 root      20  0  0  0  0 S 1.9  0.0  2:55.25 [events/3]
  41 root      20  0  0  0  0 S 1.9  0.0  0:29.00 [events/6]
566362 apache  20  0 43240 19m 4448 R 1.9  0.1  0:01.04
/usr/sbin/httpd
566857 apache  20  0 55248 11m 3456 R 1.9  0.1  0:00.05
/usr/sbin/httpd
566918 apache  20  0 42596 17m 3704 S 1.9  0.1  0:00.15
/usr/sbin/httpd
567033 apache  20  0 39784 14m 3468 S 1.9  0.1  0:00.01
/usr/sbin/httpd

```

```

# vzlist -o ctid,laverage
CTID    LAVERAGE
1501 0.00/0.05/0.02
1502 0.00/0.00/0.00
1503 0.08/0.03/0.01
1504 0.00/0.00/0.00
1505 8.29/6.04/3.67
1506 27.11/16.97/7.89
1507 0.00/0.00/0.00
1508 0.19/0.06/0.01
1509 0.07/0.03/0.00
1510 0.02/0.02/0.00
1512 0.00/0.00/0.00
1514 0.00/0.00/0.00

```

```

# iostat -xN
Linux 2.6.32-042stab049.6 (server15.hardwarenode.com)  07/03/12
_x86_64_      (8 CPU)

```

```

avg-cpu:  %user  %nice %system %iowait  %steal   %idle
           8.41   0.04   1.75   3.51   0.00  86.28

```

```

Device:            rrqm/s  wrqm/s   r/s    w/s  rsec/s  wsec/s avgrq-sz
avgqu-sz  await  svctm  %util
sdd              0.76  56.58   0.59   0.59   20.27  457.28  402.66
  0.25 211.66  4.03  0.48
sdc              1.72  27.94  17.20  16.16  887.30  336.18   36.68
  0.02 12.71  5.23 17.45
sdb              1.65  27.79  19.48  12.95  975.43  318.64   39.91
  0.09 15.22  3.77 12.23
sda              0.01   0.16   0.10   0.24   1.95   2.79  13.79
  0.00  7.06  4.16  0.14
vg01-swap        0.00   0.00   0.00   0.00   0.00   0.00   8.00

```

```

0.00 3.68 2.22 0.00
vg01-root 0.00 0.00 0.11 0.35 1.94 2.78 10.30
0.02 38.30 3.12 0.14
vg04-swap 0.00 0.00 1.30 0.22 10.41 1.80 8.00
0.01 9.28 1.44 0.22
vg04-vz 0.00 0.00 0.05 56.94 9.86 455.49 8.17
0.01 0.18 0.05 0.27
vg03-swap 0.00 0.00 0.00 0.00 0.00 0.00 8.00
0.00 6.72 1.10 0.00
vg03-vz 0.00 0.00 18.98 42.41 887.30 336.18 19.93
0.39 6.33 2.84 17.45
vg02-swap 0.00 0.00 0.00 0.00 0.00 0.00 8.00
0.00 7.03 0.89 0.00
vg02-vz 0.00 0.00 21.19 39.91 975.43 318.64 21.18
0.15 8.99 2.00 12.23
vg01-vz 0.00 0.00 0.00 0.00 0.00 0.00 7.98
0.00 17.73 17.73 0.00

```

--- CONTAINER ---

top -cbn1 | head -100

top - 21:00:04 up 123 days, 15:25, 0 users, load average: 27.11, 16.97, 7.89

Tasks: 86 total, 2 running, 84 sleeping, 0 stopped, 0 zombie

Cpu(s): 1.4%us, 0.2%sy, 0.0%ni, 98.1%id, 0.1%wa, 0.0%hi, 0.0%si, 0.2%st

Mem: 655360k total, 316328k used, 339032k free, 0k buffers

Swap: 1310720k total, 68380k used, 1242340k free, 58268k cached

```

PID USER   PR  NI  VIRT  RES  SHR  S %CPU %MEM  TIME+  COMMAND
916 mysql  20   0 159m  29m 3000  S 79.3  4.6 1284:51
/usr/libexec/mysqld
  1 root    20   0 2156   92   64  S  0.0  0.0  0:36.50 init [3]
  2 root    20   0    0    0    0  S  0.0  0.0  0:00.00 [kthreadd/1506]
  3 root    20   0    0    0    0  S  0.0  0.0  0:00.00 [khelper/1506]
 97 root    16  -4 2244    8    4  S  0.0  0.0  0:00.00 /sbin/udevd -d
634 root    20   0 1812  212  136  S  0.0  0.0  2:39.88 syslogd -m 0
667 root    20   0 7180  268  168  S  0.0  0.0  1:01.55 /usr/sbin/sshd
676 root    20   0 2832  392  304  S  0.0  0.1  0:15.13 xinetd
-stayalive -
690 root    20   0 6040  124   72  S  0.0  0.0  0:02.45
/usr/lib/courier-im
693 root    20   0 4872  252  200  S  0.0  0.0  0:01.94
/usr/sbin/courierlo
701 root    20   0 6040  124   72  S  0.0  0.0  0:06.34
/usr/lib/courier-im
703 root    20   0 4872  256  200  S  0.0  0.0  0:03.09
/usr/sbin/courierlo

```

```

709 root    20  0 6040 128  72 S 0.0 0.0  0:18.15
/usr/lib/courier-im
711 root    20  0 4872 256 200 S 0.0 0.0  0:09.15
/usr/sbin/courierlo
718 root    20  0 6040 124  72 S 0.0 0.0  0:05.68
/usr/lib/courier-im
720 root    20  0 4872 252 200 S 0.0 0.0  0:02.54
/usr/sbin/courierlo
730 qmails   20  0 1796 224 144 S 0.0 0.0  1:27.21 qmail-send
732 qmail    20  0 1752 244 192 S 0.0 0.0  0:22.64 splogger qmail
733 root     20  0 1780 140  64 S 0.0 0.0  0:07.85 qmail-lspawn |
/usr
734 qmailr    20  0 1776 148  76 S 0.0 0.0  0:14.07 qmail-rspawn
735 qmailq    20  0 1748 104  68 S 0.0 0.0  0:14.01 qmail-clean
781 root     20  0 51880 4364 196 S 0.0 0.7  1:35.02 /usr/sbin/httpd
828 named     20  0 44104 5708 1112 S 0.0 0.9 10:10.53
/usr/sbin/named -u
866 root     20  0 3708   8   4 S 0.0 0.0  0:00.00 /bin/sh
/usr/bin/my
981 root     20  0 33912 3756 916 S 0.0 0.6 10:55.30 /usr/bin/spamd
--us
1107 xfs      20  0 3392  72  40 S 0.0 0.0  0:00.09 xfs -droppriv
-daem
1115 root     20  0 5672   8   4 S 0.0 0.0  0:00.00
/usr/sbin/saslauthd
1116 root     20  0 5672   8   4 S 0.0 0.0  0:00.00
/usr/sbin/saslauthd
1122 root     20  0 22992 1868 1084 S 0.0 0.3  2:09.79
/usr/bin/sw-engine
1123 root     20  0 27328 1508 1160 S 0.0 0.2  6:06.30
/usr/local/psa/admi
7251 root     20  0 4488 192 136 S 0.0 0.0  0:22.85 crond
9463 apache   20  0 59184 14m 4356 S 0.0 2.3  0:05.10 /usr/sbin/httpd
10512 apache  20  0 42316 2504  84 S 0.0 0.4  0:00.91 /usr/sbin/httpd
12090 apache  20  0 56964 14m 4492 S 0.0 2.2  0:04.48 /usr/sbin/httpd
12682 apache  20  0 61060 17m 4516 S 0.0 2.7  0:02.45 /usr/sbin/httpd
13870 sw-cp-se 20  0 7852 1932  16 S 0.0 0.3  1:19.03
/usr/sbin/sw-cp-ser
17443 apache  20  0 62416 17m 4436 S 0.0 2.7  0:05.27 /usr/sbin/httpd
17461 apache  20  0 52788 10m 4480 S 0.0 1.6  0:02.24 /usr/sbin/httpd
20430 apache  20  0 62164 17m 4356 S 0.0 2.7  0:04.25 /usr/sbin/httpd
23539 popuser 20  0 37612 25m 2328 S 0.0 3.9  0:01.50 spamd child
23924 apache  20  0 58004 15m 5536 S 0.0 2.4  0:01.56 /usr/sbin/httpd
26361 apache  20  0 54496 11m 3864 S 0.0 1.8  0:01.35 /usr/sbin/httpd
26366 apache  20  0 52944 9.8m 3892 S 0.0 1.5  0:01.45 /usr/sbin/httpd
26964 apache  20  0 59184 14m 4316 S 0.0 2.3  0:07.26 /usr/sbin/httpd
27096 apache  20  0 53728 10m 3868 S 0.0 1.6  0:00.33 /usr/sbin/httpd
27102 apache  20  0 54736 11m 3780 S 0.0 1.8  0:00.15 /usr/sbin/httpd

```

```

27103 apache 20 0 54480 11m 3784 S 0.0 1.7 0:00.11 /usr/sbin/httpd
27115 apache 20 0 57064 12m 3816 S 0.0 2.0 0:00.32 /usr/sbin/httpd
27118 apache 20 0 53728 10m 3884 S 0.0 1.6 0:01.21 /usr/sbin/httpd
27120 apache 20 0 52184 8376 3120 S 0.0 1.3 0:00.00 /usr/sbin/httpd
27129 apache 20 0 52168 8072 2960 S 0.0 1.2 0:00.00 /usr/sbin/httpd
27139 apache 20 0 53304 9840 3744 S 0.0 1.5 0:01.08 /usr/sbin/httpd
27140 apache 20 0 53000 9.8m 3832 S 0.0 1.5 0:00.66 /usr/sbin/httpd
27144 apache 20 0 52168 8072 2960 S 0.0 1.2 0:00.00 /usr/sbin/httpd
27147 apache 20 0 53252 12m 5536 S 0.0 1.9 0:00.50 /usr/sbin/httpd
27149 apache 20 0 52980 9924 3740 S 0.0 1.5 0:00.17 /usr/sbin/httpd
27153 apache 20 0 53728 10m 3836 S 0.0 1.6 0:00.49 /usr/sbin/httpd
27164 apache 20 0 55224 11m 3812 S 0.0 1.9 0:00.47 /usr/sbin/httpd
27171 apache 20 0 52916 9776 3708 S 0.0 1.5 0:00.16 /usr/sbin/httpd
27172 apache 20 0 52916 9452 3436 S 0.0 1.4 0:00.17 /usr/sbin/httpd
27173 apache 20 0 55340 11m 3720 S 0.0 1.8 0:00.08 /usr/sbin/httpd
27179 apache 20 0 52020 7764 2716 S 0.0 1.2 0:00.00 /usr/sbin/httpd
27182 apache 20 0 52020 7764 2716 S 0.0 1.2 0:00.00 /usr/sbin/httpd
27185 apache 20 0 55224 11m 3824 S 0.0 1.9 0:00.30 /usr/sbin/httpd
27186 apache 20 0 53788 10m 3840 S 0.0 1.7 0:00.11 /usr/sbin/httpd
27187 apache 20 0 52916 9448 3436 S 0.0 1.4 0:00.08 /usr/sbin/httpd
27188 apache 20 0 54628 10m 3504 S 0.0 1.7 0:00.05 /usr/sbin/httpd
27196 apache 20 0 53728 10m 3572 S 0.0 1.6 0:00.36 /usr/sbin/httpd
27200 apache 20 0 54628 11m 3796 S 0.0 1.7 0:00.05 /usr/sbin/httpd
27202 apache 20 0 54480 11m 3796 S 0.0 1.7 0:00.10 /usr/sbin/httpd
27204 apache 20 0 53992 10m 3544 S 0.0 1.6 0:00.09 /usr/sbin/httpd
27207 apache 20 0 52168 8084 2960 S 0.0 1.2 0:00.00 /usr/sbin/httpd
27213 apache 20 0 52020 6464 1788 S 0.0 1.0 0:00.00 /usr/sbin/httpd
27214 apache 20 0 54216 10m 3516 S 0.0 1.6 0:00.05 /usr/sbin/httpd
27215 apache 20 0 52020 6456 1788 S 0.0 1.0 0:00.00 /usr/sbin/httpd
27216 apache 20 0 52020 7860 2804 S 0.0 1.2 0:00.00 /usr/sbin/httpd
27218 root 20 0 9400 1900 1408 S 0.0 0.3 0:00.00 crond
27219 root 20 0 2492 956 848 S 0.0 0.1 0:00.00 /bin/sh -c
/usr/loc
27220 root 20 0 2496 1052 920 S 0.0 0.2 0:00.00 /bin/sh
/usr/local/
27233 root 20 0 2540 1016 892 S 0.0 0.2 0:00.00 /bin/bash -c
top -c
27234 root 20 0 2284 952 724 R 0.0 0.1 0:00.00 top -cbn1
27235 root 20 0 1756 420 352 S 0.0 0.1 0:00.00 head -100
27247 root 20 0 2496 452 320 S 0.0 0.1 0:00.00 /bin/sh
/usr/local/
27248 root 20 0 8280 1504 1120 R 0.0 0.2 0:00.00 /usr/bin/mysql
-uad
27249 root 20 0 1800 448 376 S 0.0 0.1 0:00.00 sed -e 1d
27250 root 20 0 2240 640 540 S 0.0 0.1 0:00.00 awk
{printf("%s", $

```

```
# netstat -ptan | grep ESTABLISHED
```

```

tcp    0    0 ::ffff:xx.xx.xx.xx:80 ::ffff:77.87.207.166:21863
ESTABLISHED 23924/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80 ::ffff:95.165.204.26:62259
ESTABLISHED 27144/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80
::ffff:193.151.105.100:4059ESTABLISHED 27200/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80
::ffff:109.169.207.68:50087ESTABLISHED 27185/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80 ::ffff:31.131.70.135:57017
ESTABLISHED 27179/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80 ::ffff:95.165.204.26:62220
ESTABLISHED 27103/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80 ::ffff:188.134.61.1:60732
ESTABLISHED 27215/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80
::ffff:193.151.105.100:4112ESTABLISHED 26964/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80
::ffff:109.169.207.68:50043ESTABLISHED 27164/httpd
tcp    0    0 ::ffff:xx.xx.xx.xx:80 ::ffff:31.131.70.135:56976
ESTABLISHED 27153/httpd

```

cat /proc/user_beancounters

Version: 2.5

uid	resource	limit	held	maxheld	
barrier			failcnt		
1506:	kmemsize		27735306	179081216	
304087040		335544320		0	
	lockedpages		0	0	
81920		81920	0		
	privvmpages		393683	430195	
9223372036854775807		9223372036854775807			0
	shmpages		823	21639	
9223372036854775807		9223372036854775807			0
	dummy		0	0	
0		0	0		
	numproc		128	204	
9223372036854775807		9223372036854775807			0
	physpages		79702	163840	
0		163840	0		
	vmguarpages		0	0	
0		9223372036854775807		0	
	oomguarpages		74734	75707	
0		9223372036854775807		0	
	numtcpsock		59	153	
9223372036854775807		9223372036854775807			0
	numflock		46	62	
9223372036854775807		9223372036854775807			0
	numpty		0	1	

9223372036854775807	9223372036854775807	0
numsiginfo	0 33	
9223372036854775807	9223372036854775807	0
tcpsndbuf	1037680 11426176	
9223372036854775807	9223372036854775807	0
tcprcvbuf	966656 2867584	
9223372036854775807	9223372036854775807	0
othersockbuf	53824 838688	
9223372036854775807	9223372036854775807	0
dgramrcvbuf	0 502224	
9223372036854775807	9223372036854775807	0
numothersock	114 273	
9223372036854775807	9223372036854775807	0
dcachesize	10070617 167772160	
150994944	167772160 0	
numfile	1634 1865	
9223372036854775807	9223372036854775807	0
dummy	0 0	
0	0 0	
dummy	0 0	
0	0 0	
dummy	0 0	
0	0 0	
numiptent	20 20	
9223372036854775807	9223372036854775807	0
