Subject: Do you have performance issues on the VPS?
Posted by fernandomm on Tue, 01 Dec 2009 11:45:06 GMT
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Hello,

Last weekend i tried to move a high traffic website to a VPS on the same hardware that i was running it before.

I have set the ubc and other parameters like this:

# UBC parameters (in form of barrier:limit)
KMEMSIZE="999999999:999999999"
LOCKEDPAGES="256:256"
PRIVVMPAGES="524288:643072"
SHMPAGES="21504:21604"
NUMPROC="2000:2000"
PHYSPAGES="0:9223372036854775807"
VMGUARPAGES="524288:524288"
OOMGUARPAGES="524288:524288"
NUMTCPSOCK="999999999:999999999"
NUMFLOCK="999999999:999999999"
NUMPTY="16:16"
NUMSIGINFO="1024:1024"
TCPSNDBUF="999999999:999999999"
TCPRCVBUF="999999999:999999999"
OTHERSOCKBUF="999999999:999999999"
DGRAMRCVBUF="262144:262144"
NUMOTHERSOCK="999999999:999999999"
DCACHESIZE="3409920:3624960"
NUMFILE="999999999:999999999"
AVNUMPROC="180:180"
NUMIPTENT="800:800"

# Disk quota parameters (in form of softlimit:hardlimit)
DISKSPACE="211048576:211153024"
DISKINODES="400000:440000"
QUOTATIME="0"

# CPU fair sheduler parameter
CPUUNITS="153424"

After a while running it (it's the same OS, same apache version and conf, same mysql conf etc.) the apache processes stops working and use a lot of CPU (load goes up to 400-500).

If i strace one of the processes, they do not show anything. Also, the apache logs are not updated the this starts to happen.

It is important to note that user_beancounters do not show any failcount, but the system is unusable.

We have about 400 requests per second, but our current hardware was running fine until me moved to a VPS.

Do you see any configuration issues at my ubc parameters? Could the diskinodes limitation be causing this problem (limiting apache access to disk and making it goes crazy?)?

Anyway, any opinions and experiences about this issue are welcome

Thanks!

Subject: Re: Do you have performance issues on the VPS?
Posted by Paparaciz on Tue, 01 Dec 2009 11:59:43 GMT
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what you get if you check in vps:
df -i

Subject: Re: Do you have performance issues on the VPS?
Posted by fernandomm on Tue, 01 Dec 2009 12:51:38 GMT
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I get this:

```
# df -i
Filesystem            Inodes   IUsed   IFree IUse% Mounted on
simfs                 5518274   42517 5475757    1% /
```

This is really weird. If i send 30 concurrent connections my VPS is locked up while the HN is handling more than 500 requests/second current.

```
 ab -n 20000 -c 30 http://myurl.com
```

Top:

```
top - 04:48:25 up  1:52,  0 users,  load average: 84.37, 20.80, 6.94
Tasks: 254 total, 207 running,  47 sleeping,   0 stopped,   0 zombie
Cpu(s):  0.9%us,  0.4%sy,  0.0%ni, 98.7%id,  0.0%wa,  0.0%hi,  0.0%si,  0.0%st
Mem:   2049136k total,   594000k used,  1455136k free,        0k buffers
Swap:        0k total,        0k used,        0k free,        0k cached

  PID USER      PR  NI  VIRT  RES  SHR S %CPU %MEM    TIME+  COMMAND
```

```
 545 apache    20   0  248m 9796 4744 R  3.9  0.5   0:01.74 httpd
 555 apache    20   0  248m 9832 4676 R  3.9  0.5   0:02.42 httpd
 738 apache    20   0  248m 9748 4712 R  3.9  0.5   0:01.76 httpd
1352 apache    20   0  248m 9684 4700 R  3.9  0.5   0:01.44 httpd
3844 apache    20   0  248m 9080 4332 R  3.9  0.4   0:00.42 httpd
3847 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.40 httpd
3850 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.38 httpd
3851 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.42 httpd
3853 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.38 httpd
3862 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.38 httpd
3863 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.36 httpd
3871 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.34 httpd
3887 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.36 httpd
3889 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.36 httpd
3890 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.38 httpd
3891 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.34 httpd
3896 apache    20   0  248m 8444 3784 R  3.9  0.4   0:00.32 httpd
3897 apache    20   0  248m 8444 3784 R  3.9  0.4   0:00.32 httpd
3905 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.32 httpd
3911 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.30 httpd
3915 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.30 httpd
3928 apache    20   0  248m 8944 4248 R  3.9  0.4   0:00.34 httpd
3933 apache    20   0  248m 8444 3784 R  3.9  0.4   0:00.32 httpd
3939 apache    20   0  248m 8444 3784 R  3.9  0.4   0:00.28 httpd
```

3940	apache	20	0	248m	8444	3784	R	3.9	0.4	0:00.30	httpd
3942	apache	20	0	248m	8444	3784	R	3.9	0.4	0:00.30	httpd
3945	apache	20	0	248m	8444	3784	R	3.9	0.4	0:00.28	httpd
3951	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.26	httpd
3953	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.26	httpd
3955	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.26	httpd
3957	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.28	httpd
3961	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.28	httpd
3967	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.26	httpd
3968	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.26	httpd
3981	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.26	httpd
3983	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.24	httpd
3984	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.24	httpd
3985	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.24	httpd
3999	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.22	httpd
4005	apache	20	0	248m	5564	1428	R	3.9	0.3	0:00.22	httpd

Subject: Re: Do you have performance issues on the VPS?
Posted by curx on Tue, 01 Dec 2009 14:33:03 GMT
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Hi,

please report the beancounters (resources), ioacct and vmaux of this container like:

$ cat /proc/bc/<CTID>/{resources,ioacct,vmaux}

Bye,
Thorsten

Subject: Re: Do you have performance issues on the VPS?
Posted by fernandomm on Tue, 01 Dec 2009 14:46:06 GMT
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Here it is. Under a normal situation.

Do you want me to get this when the high load starts too?

```
localhost:~# cat /proc/bc/1052/resources
        kmemsize               16238542          86373554         999999999         999999999
               0
        lockedpages                0                 0               256               256                 0
        privvmpages            36406            121921            524288            643072
     0
        shmpages                4774              4790             21504             21604
0
        numproc                   41               158              2000              2000                 0
        physspages             14042             35860                 0 9223372036854775807
          0
        vmguarpages                0                 0            524288            524288                 0
        oomguarpages           14042             35872            524288            524288
     0
        numtcpsock                10               319         999999999         999999999
   0
        numflock                   4                11         999999999         999999999
0
        numpty                     2                 2                16                16                 0
        numsiginfo                 0                15              1024              1024                 0
        tcpsndbuf             233392          25597408         999999999         999999999
          0
        tcprcvbuf             163840            381192         999999999         999999999
       0
        othersockbuf            6936             17736         999999999         999999999
       0
        dgramrcvbuf                0              4360            262144            262144                 0
        numothersock              27                31         999999999         999999999
     0
        dcachesize             313626            531474           3409920           3624960
     0
        numfile                 1027              2860         999999999         999999999
   0
        numiptent                124               125               800               800                 0
localhost:~# cat /proc/bc/1052/ioacct
 read                 421208064
 write                 24829952
 dirty                 24842240
 cancel                   81920
 missed                       0
 syncs_total                  0
```

```
 fsyncs_total                    80
 fdatasyncs_total                 5
 range_syncs_total                0
 syncs_active                     0
 fsyncs_active                    0
 fdatasyncs_active                0
 range_syncs_active               0
 vfs_reads                   444268
 vfs_read_chars              791196209
 vfs_writes                  222586
 vfs_write_chars             217866428
 io_pbs                           3
localhost:~# cat /proc/bc/1052/vmaux
 unused_privvmpages           17606
 tmpfs_respages                  17
 swap_pages                       0
 swapin                          30
 unmap                           40
```

Subject: Re: Do you have performance issues on the VPS?
Posted by fernandomm on Tue, 01 Dec 2009 17:19:07 GMT
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Here it is, under a high load situation:

```
localhost:/# cat /proc/bc/1052/resources
        kmemsize          52574232          79876595         999999999         999999999
           0
        lockedpages             0                 0               256               256                 0
        privvmpages        103875            177876            524288            643072
    0
        shmpages             4134              4790             21504             21604
0
        numproc               129               233              2000              2000                 0
        physpages           24032             74638                 0  9223372036854775807
       0
        vmguarpages             0                 0            524288            524288                 0
        oomguarpages        32664             87515            524288            524288
    0
        numtcpsock             70               115         999999999         999999999
  0
        numflock                7                12         999999999         999999999
0
        numpty                  0                 2                16                16                 0
        numsiginfo              0               116              1024              1024                 0
        tcpsndbuf         1220800           2027664         999999999         999999999
       0
```

```
        tcprcvbuf       1146880         215304          999999999       999999999
      0
        othersockbuf      43040         184088          999999999       999999999
      0
        dgramrcvbuf           0           4360          262144          262144          0
        numothersock         71            197          999999999       999999999
    0
        dcachesize       492036         689226          3409920         3624960
    0
        numfile            2469           4210          999999999       999999999
  0
        numiptent           124            124             800             800          0
localhost:/# cat /proc/bc/1052/ioacct
 read                 395423744
 write                 3526656
 dirty                 3547136
 cancel                  61440
 missed                      0
 syncs_total                 0
 fsyncs_total               81
 fdatasyncs_total            4
 range_syncs_total           0
 syncs_active                0
 fsyncs_active               0
 fdatasyncs_active           0
 range_syncs_active          0
 vfs_reads              281220
 vfs_read_chars       409438689
 vfs_writes              89204
 vfs_write_chars      16777536
 io_pbs                      5
localhost:/# cat /proc/bc/1052/vmaux
 unused_privvmpages      76180
 tmpfs_respages            471
 swap_pages               8632
 swapin                 383847
 unmap                   87745
```