Subject: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Mon, 21 May 2012 18:06:53 GMT
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Hello,

I occasionally get this extreme load on one of our VPS servers. It is quite large, 4 full E31230 cores, 4 GB RAM and hosting ca. 400 websites + parked/addon/subdomains.

The hardware node has 12 active VPS servers and most of the time things are chugging along just fine, something like this.

1401: 0.00 0.00 0.00 1/23 4561
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1414: 0.00 0.00 0.00 1/41 23812
1415: 0.00 0.00 0.00 1/45 9831
1416: 0.05 0.02 0.00 1/59 11332
12 active

The problem VPS is 1407. As you can see below it only uses a bit of the cpu and memory.

top - 17:34:12 up 32 days, 12:21, 0 users, load average: 0.78, 0.95, 1.09
Tasks: 102 total, 4 running, 90 sleeping, 0 stopped, 8 zombie
Cpu(s): 16.3%us, 2.9%sy, 0.4%ni, 78.5%id, 1.8%wa, 0.0%hi, 0.0%si, 0.1%st
Mem: 4194304k total, 2550572k used, 1643732k free, 0k buffers
Swap: 8388608k total, 105344k used, 8283264k free, 1793828k cached

Also iostat and vmstat shows no particular io or swap activity.

Now for the problem. Every once in a while the loadavg of this particular VPS shoots up to like crazy values, 30 or more and it becomes completely sluggish. The odd thing is load goes up for the VPS server, and starts spilling into other VPS serers on the same hardware node - but there are still no particular cpu/memory/io usage going on that I can se. No particular network activity. In this example load has fallen back to around 10 but it was much higher earlier.

16:19:44 up 32 days, 11:19, 3 users, load average: 12.87, 19.11, 18.87

1401: 0.01 0.03 0.00 1/23 2876
1402: 0.00 0.11 0.13 1/57 15334
1404: 0.02 0.20 0.16 1/77 14918
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1408: 0.36 0.52 0.57 1/81 27167
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top - 16:20:02 up 32 days, 11:07, 0 users, load average: 9.14, 14.97, 14.82
Tasks: 135 total, 1 running, 122 sleeping, 0 stopped, 12 zombie
Cpu(s): 16.3%us, 2.9%sy, 0.4%ni, 78.5%id, 1.8%wa, 0.0%hi, 0.0%si, 0.1%st
Mem: 4194304k total, 1173844k used, 3020460k free, 0k buffers
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Notice how cpu is plenty idle, and only 1/4 of the available memory is being used.

http://wiki.openvz.org/Ploop/Why explains "One such property that deserves a special item in this list is file system journal. While journal is a good thing to have, because it helps to maintain file system integrity and improve reboot times (by eliminating fsck in many cases), it is also a bottleneck for containers. If one container will fill up in-memory journal (with lots of small operations leading to file metadata updates, e.g. file truncates), all the other containers I/O will block waiting for the journal to be written to disk. In some extreme cases we saw up to 15 seconds of such blockage.". The problem I noticed last much longer than 15 seconds though - typically 15-30 minutes, then load goes back where it should be.

Any suggestions where I could look for the cause of this? It's not like it happens everyday, maybe once or twice per month, but it's enough to cause customers to complain.

Regards,
Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by svensirk on Tue, 22 May 2012 08:06:15 GMT

Hi Rene,

Since CPU and MEM are fine it's most likely to be Disk-IO.
I have similar Problems with a Cluster Setup based on OpenVZ.
The problem is that our Storage is way to slow.
We have been accessing the storage via NFS and put all our CTs private areas on it.
I noticed many times that one CT was doing a lot of disk IO and all other were suffering from that... that even lead to total system failures.
This has been solved by converting everything to ploop. Since then our system is at least in a stable state.
IO Performance is still an issue but does not bring our system down.

You should give ploop a try :-) I am very happy with it.

best regards,

Sirk

2012/5/21 Rene Dokbua <openvz@dokbua.com>:
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Fax: +49 (0) 40 - 1 888 969 - 200
E-Mail: s.johannsen@satzmedia.de
E-Business-Lösungen: http://www.satzmedia.de
Amtsgericht Hamburg, HRB 71729
Ust-IDNr. DE201979921
Geschäftsführer:
Dipl.-Kfm. Christian Satz
Dipl.-Inform. Markus Meyer-Westphal

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Subject: RE: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Steffan on Tue, 22 May 2012 08:15:40 GMT
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Sorry dont have the answer for you

But can you tell me what command you used to see all loads on your node ?

Thanxs Steffan

Van: users-bounces@openvz.org [mailto:users-bounces@openvz.org] Namens Rene

Dokbua
Verzonden: maandag 21 mei 2012 20:07
Aan: users@openvz.org
Onderwerp: [Users] occasional high loadavg without any noticeable cpu/memory/io load

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Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 09:06:45 GMT
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Actually I made a small shell script that loops through the list of active containers and outputs the content of each containers /proc/loadavg. It started out as a bit more elaborate script that was intended to provide some of the functionality of a script vzstat, that I used to use with Virtuozzo.

You can download both scripts from
https://www.ourhelpdesk.net/downloads/z.tgz

On Tue, May 22, 2012 at 3:15 PM, Steffan <general@ziggo.nl> wrote:

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>
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> *Rene Dokbua
> *Verzonden:* maandag 21 mei 2012 20:07
> *Aan:* users@openvz.org
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Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 09:16:00 GMT
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Hi Sirk,

Thanks for your reply. I'm so pleased having found this mailing list after having tried the forum, which seem to have very little activity!

Ploop is a great idea technically, but I'm a little concerned about the " Warning: This is a new feature, not yet ready for production systems. Use with caution." on the OpenVZ Wiki page, so I'm kinda waiting for the green-light that it's ready for production environments.

It did occur to me that disk-IO could be the cause of the problem, but iostat on the hardware node did not suggest any particular IO problems. I still haven't found a way to see the IO activity within a container - iostat just comes up blank when it's run within a container. Is there a way?

We're not using any network storage with this server so that is not the reason.

The server has 4 SATA-3 drives, with the root partition being on one drive, the problem container alone on a second drive, and the remaining containers on a third.

Best,
Rene

On Tue, May 22, 2012 at 3:06 PM, Sirk Johannsen <s.johannsen@satzmedia.de>wrote:

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> > 1407: 10.95 15.71 15.05 1/128 13950
> > 1408: 0.36 0.52 0.57 1/81 27167
> > 1409: 0.09 0.26 0.43 1/78 17851
> > 1410: 0.09 0.17 0.18 1/61 4344
> > 1413: 0.00 0.03 0.00 1/46 16539
> > 1414: 0.01 0.01 0.00 1/41 22372
> > 1415: 0.00 0.01 0.00 1/45 8404
> > 1416: 0.05 0.10 0.11 1/58 9292
> > 12 active
> >
> > top - 16:20:02 up 32 days, 11:07, 0 users, load average: 9.14, 14.97,
> > 14.82
> > Tasks: 135 total,   1 running, 122 sleeping,   0 stopped, 12 zombie
> > Cpu(s): 16.3%us, 2.9%sy, 0.4%ni, 78.5%id, 1.8%wa, 0.0%hi, 0.0%si,
> > 0.1%st
> > Mem: 4194304k total, 1173844k used, 3020460k free,   0k buffers
> > Swap: 8388608k total,   115576k used, 8273032k free,   725144k cache
> >
> > Notice how cpu is plenty idle, and only 1/4 of the available memory is
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> > used.
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> > Regards,
> > Rene
> >
> >
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> Ust-IDNr. DE201979921
> Geschäftsführer:
> Dipl.-Kfm. Christian Satz
> Dipl.-Inform. Markus Meyer-Westphal
>
> --
>
>

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load

2012/5/22 Rene C. <openvz@dokbua.com>:
> Hi Sirk,
>

Hi Rene,

> Thanks for your reply. I'm so pleased having found this mailing list after
> having tried the forum, which seem to have very little activity!
>

True, but this list has helped me a lot as well :-)

> Ploop is a great idea technically, but I'm a little concerned about the "
> Warning: This is a new feature, not yet ready for production systems. Use
> with caution." on the OpenVZ Wiki page, so I'm kinda waiting for the
> green-light that it's ready for production environments.
>

If you want some practical information on ploop: We are using it in a
highly productive environment.
It was either, try ploop and hope it works, or have the systems fail
every 2nd day.
So we decided to use ploop and are more than happy.
It even solves a lot of issues we had with the private areas directly
on the nfs share.
But of course, thats totally up to you.
I started with only a few "unimportant" CTs and then merged everything
after a while (42 CTs).

> It did occur to me that disk-IO could be the cause of the problem, but
> iostat on the hardware node did not suggest any particular IO problems. I
> still haven't found a way to see the IO activity within a container - iostat
> just comes up blank when it's run within a container. Is there a way?
>

To be honest, I don't know.
iostat ist not working because you do not really have a device.
This ist handled the way with ploop sadly but could be modified I guess.
For ploop you have the ploop-stat command but that dosen't work as
expected for me :-)

> We're not using any network storage with this server so that is not the
> reason.
>
> The server has 4 SATA-3 drives, with the root partition being on one drive,
> the problem container alone on a second drive, and the remaining containers

> on a third.

So you have a different FileSystem for the "problem"-Container that is
even on a different disk ?
If that is the case, this CT should not affect the others at all in terms of IO.

best regards,

Sirk

>
> Best,
> Rene
>
> On Tue, May 22, 2012 at 3:06 PM, Sirk Johannsen <s.johannsen@satzmedia.de>
> wrote:
>>
>> Hi Rene,
>>
>> Since CPU and MEM are fine it's most likely to be Disk-IO.
>> I have similar Problems with a Cluster Setup based on OpenVZ.
>> The problem is that our Storage is way to slow.
>> We have been accessing the storage via NFS and put all our CTs private
>> areas on it.
>> I noticed many times that one CT was doing a lot of disk IO and all
>> other were suffering from that... that even lead to total system
>> failures.
>> This has been solved by converting everything to ploop. Since then our
>> system is at least in a stable state.
>> IO Performance is still an issue but does not bring our system down.
>>
>> You should give ploop a try :-) I am very happy with it.
>>
>> best regards,
>>
>> Sirk
>>
>> 2012/5/21 Rene Dokbua <openvz@dokbua.com>:
>> > Hello,
>> >
>> > I occasionally get this extreme load on one of our VPS servers. It is
>> > quite
>> > large, 4 full E31230 cores, 4 GB RAM and hosting ca. 400 websites +
>> > parked/addon/subdomains.
>> >
>> > The hardware node has 12 active VPS servers and most of the time things
>> > are

>> > chugging along just fine, something like this.
>> >
>> > 1401: 0.00 0.00 0.00 1/23 4561
>> > 1402: 0.02 0.05 0.05 1/57 16991
>> > 1404: 0.01 0.02 0.00 1/73 18863
>> > 1406: 0.07 0.13 0.06 1/39 31189
>> > 1407: 0.86 1.03 1.14 1/113 31460
>> > 1408: 0.17 0.17 0.18 1/79 32579
>> > 1409: 0.00 0.00 0.02 1/77 21784
>> > 1410: 0.01 0.02 0.00 1/60 7454
>> > 1413: 0.00 0.00 0.00 1/46 18579
>> > 1414: 0.00 0.00 0.00 1/41 23812
>> > 1415: 0.00 0.00 0.00 1/45 9831
>> > 1416: 0.05 0.02 0.00 1/59 11332
>> > 12 active
>> >
>> > The problem VPS is 1407. As you can see below it only uses a bit of the
>> > cpu
>> > and memory.
>> >
>> > top - 17:34:12 up 32 days, 12:21, 0 users, load average: 0.78, 0.95,
>> > 1.09
>> > Tasks: 102 total,   4 running, 90 sleeping,   0 stopped,   8 zombie
>> > Cpu(s): 16.3%us, 2.9%sy, 0.4%ni, 78.5%id, 1.8%wa, 0.0%hi, 0.0%si,
>> > 0.1%st
>> > Mem: 4194304k total, 2550572k used, 1643732k free,   0k buffers
>> > Swap: 8388608k total,   105344k used, 8283264k free, 1793828k cached
>> >
>> > Also iostat and vmstat shows no particular io or swap activity.
>> >
>> > Now for the problem. Every once in a while the loadavg of this
>> > particular
>> > VPS shoots up to like crazy values, 30 or more and it becomes completely
>> > sluggish. The odd thing is load goes up for the VPS server, and starts
>> > spilling into other VPS serers on the same hardware node - but there are
>> > still no particular cpu/memory/io usage going on that I can se. No
>> > particular network activity.   In this example load has fallen back to
>> > around 10 but it was much higher earlier.
>> >
>> > 16:19:44 up 32 days, 11:19, 3 users, load average: 12.87, 19.11,
>> > 18.87
>> >
>> > 1401: 0.01 0.03 0.00 1/23 2876
>> > 1402: 0.00 0.11 0.13 1/57 15334
>> > 1404: 0.02 0.20 0.16 1/77 14918
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--

Subject: RE: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Esm on Tue, 22 May 2012 10:00:25 GMT
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Hi Rene,

load could be caused by buffers that are full.

Hope it helpes you,

Kind Regards,

Esme de Wolf

Van: users-bounces@openvz.org [mailto:users-bounces@openvz.org] Namens Rene Dokbua
Verzonden: maandag 21 mei 2012 20:07
Aan: users@openvz.org
Onderwerp: [Users] occasional high loadavg without any noticeable cpu/memory/io load

Hello,

I occasionally get this extreme load on one of our VPS servers. It is quite large, 4 full E31230 cores, 4 GB RAM and hosting ca. 400 websites + parked/addon/subdomains.

The hardware node has 12 active VPS servers and most of the time things are chugging along just fine, something like this.

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Tasks: 102 total, 4 running, 90 sleeping, 0 stopped, 8 zombie

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Notice how cpu is plenty idle, and only 1/4 of the available memory is being

used.

http://wiki.openvz.org/Ploop/Why explains "One such property that deserves a special item in this list is file system journal. While journal is a good thing to have, because it helps to maintain file system integrity and improve reboot times (by eliminating fsck in many cases), it is also a bottleneck for containers. If one container will fill up in-memory journal (with lots of small operations leading to file metadata updates, e.g. file truncates), all the other containers I/O will block waiting for the journal to be written to disk. In some extreme cases we saw up to 15 seconds of such blockage.". The problem I noticed last much longer than 15 seconds though - typically 15-30 minutes, then load goes back where it should be.

Any suggestions where I could look for the cause of this? It's not like it happens everyday, maybe once or twice per month, but it's enough to cause customers to complain.

Regards,
Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 10:27:20 GMT
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Hi Sirk,

> If you want some practical information on ploop: We are using it in a
> highly productive environment.
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> every 2nd day.
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> on the nfs share.
> But of course, thats totally up to you.
> I started with only a few "unimportant" CTs and then merged everything
> after a while (42 CTs).
>

Thanks for the info, much appreciated!

Maybe a little off topic, but I am curious to know: At the moment I find it very convenient to go directly into a containers filesystem from the hardware node - i.e. something like /vz/private/xxx/var/log/... etc - Would I be correct in presuming that by using ploop this will no longer be possible? I know I could just setup a test system and try it out but if you know already it would save me some time ;)

> So you have a different FileSystem for the "problem"-Container that is
> even on a different disk ?
> If that is the case, this CT should not affect the others at all in terms
> of IO.
>
>
Indeed, this is the only container on that filesystem and that physical drive. This time there were no "spill over" but previous times when load hit 50 or more the load certainly did spill into other containers.

Best,
Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 10:49:20 GMT
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Hi Esme,

> Did you check the /proc/user_beancounters of that VPS? Sometime's a high load could be caused by buffers that are full.

Thanks for the suggestion, much appreciated!

I didn't think of checking at the time I'm afraid. I suppose since the container has not been rebooted since, the beancounters should still show any problems encountered at the time right?

Below is the user_beancounters of the problem CT. I notice physpages and dcachesize have maxheld values very close to limits (even if failcnt is zero) could that have been the cause?

```
      uid  resource                     held              maxheld
     barrier                 limit              failcnt
     1407:  kmemsize                 252703307          1124626432
1932525568          2147483648                    0
           lockedpages                    0                 15
     524288              524288                    0
```

```
        privvmpages             893372             5683554
9223372036854775807  9223372036854775807                   0
        shmpages                  23                7399
9223372036854775807  9223372036854775807                   0
        dummy                      0                   0
      0                  0                  0
        numproc                  136                 480
9223372036854775807  9223372036854775807                   0
        physpages                733468             1048591
      0             1048576                  0
        vmguarpages                0                   0
      0  9223372036854775807                  0
        oomguarpages             137691              676209
      0  9223372036854775807                  0
        numtcpsock                 101                 459
9223372036854775807  9223372036854775807                   0
        numflock                   7                  37
9223372036854775807  9223372036854775807                   0
        numpty                     1                   4
9223372036854775807  9223372036854775807                   0
        numsiginfo                 0                  66
9223372036854775807  9223372036854775807                   0
        tcpsndbuf            4024896            34884168
9223372036854775807  9223372036854775807                   0
        tcprcvbuf            1654784             7520256
9223372036854775807  9223372036854775807                   0
        othersockbuf          195136             3887232
9223372036854775807  9223372036854775807                   0
        dgramrcvbuf                0              155848
9223372036854775807  9223372036854775807                   0
        numothersock             130                 346
9223372036854775807  9223372036854775807                   0
        dcachesize           222868425          1073741824
965738496          1073741824                  0
        numfile                 3853               12765
9223372036854775807  9223372036854775807                   0
        dummy                      0                   0
      0                  0                  0
        dummy                      0                   0
      0                  0                  0
        dummy                      0                   0
      0                  0                  0
        numiptent                197                 197
9223372036854775807  9223372036854775807                   0
```

I'm not that familiar with the nitty-gritties of the beancounters but these are the values I have in the 1407.conf file.

PHYSPAGES="0:4096M"
SWAPPAGES="0:8192M"
KMEMSIZE="1843M:2048M"
DCACHESIZE="921M:1024M"
LOCKEDPAGES="2048M"
PRIVVMPAGES="unlimited"
SHMPAGES="unlimited"
NUMPROC="unlimited"
VMGUARPAGES="0:unlimited"
OOMGUARPAGES="0:unlimited"
NUMTCPSOCK="unlimited"
NUMFLOCK="unlimited"
NUMPTY="unlimited"
NUMSIGINFO="unlimited"
TCPSNDBUF="unlimited"
TCPRCVBUF="unlimited"
OTHERSOCKBUF="unlimited"
DGRAMRCVBUF="unlimited"
NUMOTHERSOCK="unlimited"
NUMFILE="unlimited"
NUMIPTENT="unlimited"

When user_beancounters physpage limit is 1048576, with PHYSPAGES set to 4GB, then the held value of 733468 should correspond to about 3GB, right? But top only shows about 1.5GB used at the same time - how is that possible?

dcachesize I think is filesystem stuff? But there seems to be plenty of resources there;

```
# df -i
Filesystem            Inodes   IUsed   IFree IUse% Mounted on
/dev/simfs          20000000 3046139 16953861   16% /
none                  524288     109  524179    1% /dev
# df -h
Filesystem            Size  Used Avail Use% Mounted on
/dev/simfs            492G  156G  312G  34% /
none                  2.0G  4.0K  2.0G   1% /dev
```

Best,
Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 10:59:33 GMT
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>

>
> When user_beancounters physpage limit is 1048576, with PHYSPAGES set to
> 4GB, then the held value of 733468 should correspond to about 3GB, right?
> But top only shows about 1.5GB used at the same time - how is that
> possible?
>
>
Actually at the time I cat'ed these beans the memory used according to top
was around 2.5GB so that seems right enough. Still doesn't explain how
maxheld is so close to limit when top at the time of the trouble showed
just around 1.5G memory used.

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Kirill Korotaev on Tue, 22 May 2012 11:05:16 GMT
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Looks like in your case you've hit physpages limit.
In such situations VPS behaves as a standalone machine - it starts to swap out (though "virtually")
and process stuck in D state (swap in / swap out),
which contributes to loadavg.

So either increase memory limits for your VPS or kill/tune the memory hungry workload.

Note: loadavg can also increase due to CPU limits as processes are delayed when overuse their CPU.

Thanks,
Kirill

On May 22, 2012, at 14:49 , Rene C. wrote:

Hi Esme,

> Did you check the /proc/user_beancounters of that VPS? Sometime's a high load could be caused by buffers that are full.

Thanks for the suggestion, much appreciated!

I didn't think of checking at the time I'm afraid. I suppose since the container has not been rebooted since, the beancounters should still show any problems encountered at the time right?

Below is the user_beancounters of the problem CT. I notice physpages and dcachesize have maxheld values very close to limits (even if failcnt is zero) could that have been the cause?

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     1407:  kmemsize               252703307           1124626432           1932525568
2147483648                    0
            lockedpages                  0                   15               524288               524288                    0
            privvmpages             893372              5683554  9223372036854775807
9223372036854775807                    0
            shmpages                    23                 7399  9223372036854775807
9223372036854775807                    0
            dummy                        0                    0                    0                    0                    0
            numproc                    136                  480  9223372036854775807
9223372036854775807                    0
            physpages               733468              1048591                    0              1048576
0
            vmguarpages                  0                    0                    0  9223372036854775807
  0
            oomguarpages            137691               676209                    0  9223372036854775807
              0
            numtcpsock                 101                  459  9223372036854775807
9223372036854775807                    0
            numflock                     7                   37  9223372036854775807  9223372036854775807
                 0
            numpty                       1                    4  9223372036854775807  9223372036854775807
                0
            numsiginfo                   0                   66  9223372036854775807  9223372036854775807
                 0
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9223372036854775807                    0
            tcprcvbuf              1654784              7520256  9223372036854775807
9223372036854775807                    0
            othersockbuf            195136              3887232  9223372036854775807
9223372036854775807                    0
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9223372036854775807                    0
            numothersock               130                  346  9223372036854775807
9223372036854775807                    0
            dcachesize             222868425           1073741824            965738496           1073741824
                0
            numfile                   3853                12765  9223372036854775807
9223372036854775807                    0
            dummy                        0                    0                    0                    0                    0
            dummy                        0                    0                    0                    0                    0
            dummy                        0                    0                    0                    0                    0
            numiptent                  197                  197  9223372036854775807
9223372036854775807                    0
```

I'm not that familiar with the nitty-gritties of the beancounters but these are the values I have in the 1407.conf file.

PHYSPAGES="0:4096M"
SWAPPAGES="0:8192M"
KMEMSIZE="1843M:2048M"
DCACHESIZE="921M:1024M"
LOCKEDPAGES="2048M"
PRIVVMPAGES="unlimited"
SHMPAGES="unlimited"
NUMPROC="unlimited"
VMGUARPAGES="0:unlimited"
OOMGUARPAGES="0:unlimited"
NUMTCPSOCK="unlimited"
NUMFLOCK="unlimited"
NUMPTY="unlimited"
NUMSIGINFO="unlimited"
TCPSNDBUF="unlimited"
TCPRCVBUF="unlimited"
OTHERSOCKBUF="unlimited"
DGRAMRCVBUF="unlimited"
NUMOTHERSOCK="unlimited"
NUMFILE="unlimited"
NUMIPTENT="unlimited"

When user_beancounters physpage limit is 1048576, with PHYSPAGES set to 4GB, then the held value of 733468 should correspond to about 3GB, right? But top only shows about 1.5GB used at the same time - how is that possible?

dcachesize I think is filesystem stuff? But there seems to be plenty of resources there;

```
# df -i
Filesystem            Inodes   IUsed   IFree IUse% Mounted on
/dev/simfs          20000000 3046139 16953861   16% /
none                  524288     109  524179    1% /dev
# df -h
Filesystem            Size  Used Avail Use% Mounted on
/dev/simfs            492G  156G  312G  34% /
none                  2.0G  4.0K  2.0G   1% /dev
```

Best,
Rene
<ATT00001.c>

Subject: RE: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Esm on Tue, 22 May 2012 11:59:09 GMT
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I also think that these UBC settings are not consistent. Especially when you have all containers configured with these same UBC settings you will have

soon or later problems.

See: http://wiki.openvz.org/UBC_consistency_check and other pages on the WIKI.

Kind Regards,

Esme

Van: users-bounces@openvz.org [mailto:users-bounces@openvz.org] Namens Kirill Korotaev
Verzonden: dinsdag 22 mei 2012 13:05
Aan: users@openvz.org users@openvz.org; Rene C.
Onderwerp: Re: [Users] occasional high loadavg without any noticeable cpu/memory/io load

Looks like in your case you've hit physpages limit.

In such situations VPS behaves as a standalone machine - it starts to swap out (though "virtually") and process stuck in D state (swap in / swap out),

which contributes to loadavg.

So either increase memory limits for your VPS or kill/tune the memory hungry workload.

Note: loadavg can also increase due to CPU limits as processes are delayed when overuse their CPU.

Thanks,

Kirill

On May 22, 2012, at 14:49 , Rene C. wrote:

Hi Esme,

load could be caused by buffers that are full.

Thanks for the suggestion, much appreciated!

I didn't think of checking at the time I'm afraid. I suppose since the container has not been rebooted since, the beancounters should still show any problems encountered at the time right?

Below is the user_beancounters of the problem CT. I notice physpages and dcachesize have maxheld values very close to limits (even if failcnt is zero) could that have been the cause?

```
      uid  resource                     held              maxheld
barrier                 limit              failcnt
    1407:  kmemsize                 252703307          1124626432
1932525568          2147483648                    0
           lockedpages                    0                 15
524288              524288                    0
           privvmpages                893372            5683554
9223372036854775807  9223372036854775807                    0
           shmpages                      23              7399
9223372036854775807  9223372036854775807                    0
           dummy                          0                 0
0                   0                   0
           numproc                      136               480
9223372036854775807  9223372036854775807                    0
           physpages                  733468            1048591
0             1048576                    0
```

```
        vmguarpages                0               0
0  9223372036854775807                0
        oomguarpages           137691            676209
0  9223372036854775807                0
        numtcpsock                 101               459
9223372036854775807  9223372036854775807                0
        numflock                     7                37
9223372036854775807  9223372036854775807                0
        numpty                       1                 4
9223372036854775807  9223372036854775807                0
        numsiginfo                   0                66
9223372036854775807  9223372036854775807                0
        tcpsndbuf              4024896          34884168
9223372036854775807  9223372036854775807                0
        tcprcvbuf              1654784           7520256
9223372036854775807  9223372036854775807                0
        othersockbuf            195136           3887232
9223372036854775807  9223372036854775807                0
        dgramrcvbuf                  0            155848
9223372036854775807  9223372036854775807                0
        numothersock               130               346
9223372036854775807  9223372036854775807                0
        dcachesize             222868425         1073741824
965738496          1073741824                 0
        numfile                   3853             12765
9223372036854775807  9223372036854775807                0
        dummy                        0                 0
0                0                0
        dummy                        0                 0
0                0                0
        dummy                        0                 0
0                0                0
        numiptent                  197               197
9223372036854775807  9223372036854775807                0
```

I'm not that familiar with the nitty-gritties of the beancounters but these are the values I have in the 1407.conf file.

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DCACHESIZE="921M:1024M"

LOCKEDPAGES="2048M"

PRIVVMPAGES="unlimited"

SHMPAGES="unlimited"

NUMPROC="unlimited"

VMGUARPAGES="0:unlimited"

OOMGUARPAGES="0:unlimited"

NUMTCPSOCK="unlimited"

NUMFLOCK="unlimited"

NUMPTY="unlimited"

NUMSIGINFO="unlimited"

TCPSNDBUF="unlimited"

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df -i

Filesystem Inodes IUsed IFree IUse% Mounted on

/dev/simfs 20000000 3046139 16953861 16% /

none 524288 109 524179 1% /dev

df -h

Filesystem Size Used Avail Use% Mounted on

/dev/simfs 492G 156G 312G 34% /

none 2.0G 4.0K 2.0G 1% /dev

Best,
Rene

<ATT00001.c>

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by svensirk on Tue, 22 May 2012 12:01:27 GMT
View Forum Message <> Reply to Message

2012/5/22 Rene C. <openvz@dokbua.com>:
> Hi Sirk,
>
>>
>> If you want some practical information on ploop: We are using it in a
>> highly productive environment.
>> It was either, try ploop and hope it works, or have the systems fail
>> every 2nd day.
>> So we decided to use ploop and are more than happy.
>> It even solves a lot of issues we had with the private areas directly
>> on the nfs share.
>> But of course, thats totally up to you.
>> I started with only a few "unimportant" CTs and then merged everything
>> after a while (42 CTs).
>
>
> Thanks for the info, much appreciated!
>
> Maybe a little off topic, but I am curious to know: At the moment I find it
> very convenient to go directly into a containers filesystem from the
> hardware node - i.e. something like /vz/private/xxx/var/log/... etc - Would
> I be correct in presuming that by using ploop this will no longer be
> possible? I know I could just setup a test system and try it out but if you

> know already it would save me some time ;)

Only partially correct :-)
You can enter the filesystem of a CT when it's mounted. Meaning - you
can enter the root directory when the CT is running.
If the CT is shut down you always have the possibility to mount the
ploop file to any directory you desire.

>
>>
>> So you have a different FileSystem for the "problem"-Container that is
>> even on a different disk ?
>> If that is the case, this CT should not affect the others at all in terms
>> of IO.
>>
>
> Indeed, this is the only container on that filesystem and that physical
> drive. This time there were no "spill over" but previous times when load
> hit 50 or more the load certainly did spill into other containers.
>
> Best,
> Rene
>
>
--
Satzmedia GmbH

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Fax: +49 (0) 40 - 1 888 969 - 200
E-Mail: s.johannsen@satzmedia.de
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Amtsgericht Hamburg, HRB 71729
Ust-IDNr. DE201979921
Geschäftsführer:
Dipl.-Kfm. Christian Satz
Dipl.-Inform. Markus Meyer-Westphal

--

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 12:17:29 GMT
View Forum Message <> Reply to Message

On Tue, May 22, 2012 at 6:59 PM, Esmé de Wolf <esme@elements.nl> wrote:

> I also think that these UBC settings are not consistent. Especially when
> you have all containers configured with these same UBC settings you will
> have soon or later problems.****
>
> ** **
>
> See: http://wiki.openvz.org/UBC_consistency_check and other pages on the
> WIKI.****
>
> ** **
>
> Kind Regards,****
>
>
> Esme
>

I read that UBC page already and used it to set these values.

No, all my containers do not have the same UBC settings, they were set depending on how much resources each container should have.

Please let me know where any of the values in my conf file conflicts with the UBC recommendations.

I do understand that they may need to be fine tuned in each case, but that's basically what this question is about :)

So basically at this time I have two questions I don't understand:

1) how is it possible to have physpages hit the limit when top never shows more than about 75-80% of the memory used?
2) how did dcachesize hit limit when both df -i and df -h shows plenty of resources - and haven't been close to limits?

Could the values in the beancounter file be old? Is there a way to reset them (without restarting the CT) ?

Best,
Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Kirill Korotaev on Tue, 22 May 2012 12:35:33 GMT
View Forum Message <> Reply to Message

On May 22, 2012, at 16:17 , Rene C. wrote:

On Tue, May 22, 2012 at 6:59 PM, Esmé de Wolf
<esme@elements.nl<mailto:esme@elements.nl>> wrote:
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So basically at this time I have two questions I don't understand:

1) how is it possible to have physpages hit the limit when top never shows more than about 75-80% of the memory used?

once again: top shows current (immedeate) values.
maxheld in user_beancounters shows you *maximum* over time.
There is an API for resetting it AFAIR, but no user-space tool in OpenVZ :(((

2) how did dcachesize hit limit when both df -i and df -h shows plenty of resources - and haven't been close to limits?

dcachesize has nothing to do with df.
it's kernel memory used for paths and pinned by opened files and CWD.
You can safely increase it if needed. It's just DoS protection.

Could the values in the beancounter file be old? Is there a way to reset them (without restarting the CT) ?

Best,
Rene

<ATT00001.c>

Subject: RE: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Esm on Tue, 22 May 2012 12:54:09 GMT
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You could check your <VEID>.conf with vzcfgvalidate. But I think there is

http://wiki.openvz.org/UBC_failcnt_reset There is no need to reset the

Van: users-bounces@openvz.org [mailto:users-bounces@openvz.org] Namens Rene C.
Verzonden: dinsdag 22 mei 2012 14:17
Aan: users@openvz.org
Onderwerp: Re: [Users] occasional high loadavg without any noticeable cpu/memory/io load

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Could the values in the beancounter file be old? Is there a way to reset them (without restarting the CT) ?

Best,

Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 22 May 2012 17:09:05 GMT
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On Tue, May 22, 2012 at 7:54 PM, Esmé de Wolf <esme@elements.nl> wrote:

> You could check your <VEID>.conf with vzcfgvalidate. But I think there is
> quite a risk when giving one of your CT’s unlimited resources. If you want
> to read-out the UBC’s from the node and see when one fails I could
> recommend you a very good script I’m using myself;
> http://wiki.openvz.org/UBC_failcnt_reset There is no need to reset the

> value’s inside your CT.****
>
>
>
Apparently no problems with the file:

vzcfgvalidate -v yes 1407.conf
Validation completed: success

Thank you to everyone who provided suggestions, ideas and insight. I've added the user_beancounters to my loadmonitoring script. Next time there is a problem I'll check if any values are hitting the limit and see if increasing them may fix the problem.

Best,
Rene

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Martin Dobrev on Wed, 23 May 2012 07:14:21 GMT
View Forum Message <> Reply to Message

Hi,

?? 22.5.2012 ?. 13:27 ?., Rene C. ??????:
> Hi Sirk,
>
>
> If you want some practical information on ploop: We are using it in a
> highly productive environment.
> It was either, try ploop and hope it works, or have the systems fail
> every 2nd day.
> So we decided to use ploop and are more than happy.
> It even solves a lot of issues we had with the private areas directly
> on the nfs share.
> But of course, thats totally up to you.
> I started with only a few "unimportant" CTs and then merged everything
> after a while (42 CTs).
>
>
> Thanks for the info, much appreciated!
>
> Maybe a little off topic, but I am curious to know: At the moment I
> find it very convenient to go directly into a containers filesystem
> from the hardware node - i.e. something like
> /vz/private/xxx/var/log/... etc - Would I be correct in presuming
> that by using ploop this will no longer be possible? I know I could
> just setup a test system and try it out but if you know already it

> would save me some time ;)
>
It's not very practical to access the containers from the VZ/private
mount point, as it breaks for example the quota stats of the container.
If you still want to do things there better go for the VZ/root mount
point. (Advice given to me by one of the now-a-days developer of
Viruozzo) And as you already mentioned ploop, as far as I know the
ploop-container will be mounted to VZ/root of the CT and you'll still
have access to the info in there.

>
> So you have a different FileSystem for the "problem"-Container that is
> even on a different disk ?
> If that is the case, this CT should not affect the others at all
> in terms of IO.
>
>
> Indeed, this is the only container on that filesystem and that
> physical drive. This time there were no "spill over" but previous
> times when load hit 50 or more the load certainly did spill into
> other containers.
> Best,
> Rene
>
>

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Aleksandar Ivanisevic on Thu, 24 May 2012 14:32:34 GMT
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"Rene C." <openvz@dokbua.com> writes:

> Thank you to everyone who provided suggestions, ideas and insight. I've
> added the user_beancounters to my loadmonitoring script. Next time there
> is a problem I'll check if any values are hitting the limit and see if
> increasing them may fix the problem.

Well, all your failcnt's were zero so there was nothing hitting the
limit.

I'm also interested in what you found since I'm having the same
problems on one of my clusters: unexplained high load that goes away
as it came: unexplained and suddenly ;)

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load

Posted by kir on Wed, 30 May 2012 15:07:16 GMT
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On 05/22/2012 09:09 PM, Rene C. wrote:
>
>
> On Tue, May 22, 2012 at 7:54 PM, Esmé de Wolf <esme@elements.nl
> <mailto:esme@elements.nl>> wrote:
>
> You could check your <VEID>.conf with vzcfgvalidate. But I think
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>
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> I've added the user_beancounters to my loadmonitoring script. Next
> time there is a problem I'll check if any values are hitting the limit
> and see if increasing them may fix the problem.
>

Try vzubc -q or something, it might help.

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by kir on Wed, 30 May 2012 15:09:20 GMT
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On 05/22/2012 01:06 PM, Rene C. wrote:
>
> Actually I made a small shell script that loops through the list of
> active containers and outputs the content of each containers
> /proc/loadavg. It started out as a bit more elaborate script that was
> intended to provide some of the functionality of a script vzstat, that
> I used to use with Virtuozzo.
>
> You can download both scripts from
> https://www.ourhelpdesk.net/downloads/z.tgz

vzlist have laverage field that might be of use. I.e.

vzlist -o ctid,laverage

>
>
>
> On Tue, May 22, 2012 at 3:15 PM, Steffan <general@ziggo.nl
> <mailto:general@ziggo.nl>> wrote:
>
> Sorry dont have the answer for you
>
> But can you tell me what command you used to see all loads on your
> node ?
>
> Thanxs Steffan
>
> *Van:*users-bounces@openvz.org <mailto:users-bounces@openvz.org>
> [mailto:users-bounces@openvz.org
> <mailto:users-bounces@openvz.org>] *Namens *Rene Dokbua
> *Verzonden:* maandag 21 mei 2012 20:07
> *Aan:* users@openvz.org <mailto:users@openvz.org>
> *Onderwerp:* [Users] occasional high loadavg without any
> noticeable cpu/memory/io load
>
> Hello,
>
> I occasionally get this extreme load on one of our VPS servers. It
> is quite large, 4 full E31230 cores, 4 GB RAM and hosting ca. 400
> websites + parked/addon/subdomains.
>
> The hardware node has 12 active VPS servers and most of the time
> things are chugging along just fine, something like this.
>
> 1401: 0.00 0.00 0.00 1/23 4561
>
> 1402: 0.02 0.05 0.05 1/57 16991
>
> 1404: 0.01 0.02 0.00 1/73 18863
>
> 1406: 0.07 0.13 0.06 1/39 31189
>
> 1407: 0.86 1.03 1.14 1/113 31460
>
> 1408: 0.17 0.17 0.18 1/79 32579
>
> 1409: 0.00 0.00 0.02 1/77 21784
>
> 1410: 0.01 0.02 0.00 1/60 7454

>
> 1413: 0.00 0.00 0.00 1/46 18579
>
> 1414: 0.00 0.00 0.00 1/41 23812
>
> 1415: 0.00 0.00 0.00 1/45 9831
>
> 1416: 0.05 0.02 0.00 1/59 11332
>
> 12 active
>
> The problem VPS is 1407. As you can see below it only uses a bit
> of the cpu and memory.
>
> top - 17:34:12 up 32 days, 12:21, 0 users, load average: 0.78,
> 0.95, 1.09
>
> Tasks: 102 total, 4 running, 90 sleeping, 0 stopped, 8 zombie
>
> Cpu(s): 16.3%us, 2.9%sy, 0.4%ni, 78.5%id, 1.8%wa, 0.0%hi,
> 0.0%si, 0.1%st
>
> Mem: 4194304k total, 2550572k used, 1643732k free, 0k
> buffers
>
> Swap: 8388608k total, 105344k used, 8283264k free, 1793828k
> cached
>
> Also iostat and vmstat shows no particular io or swap activity.
>
> Now for the problem. Every once in a while the loadavg of this
> particular VPS shoots up to like crazy values, 30 or more and it
> becomes completely sluggish. The odd thing is load goes up for the
> VPS server, and starts spilling into other VPS serers on the same
> hardware node - but there are still no particular cpu/memory/io
> usage going on that I can se. No particular network activity.
> In this example load has fallen back to around 10 but it was much
> higher earlier.
>
> 16:19:44 up 32 days, 11:19, 3 users, load average: 12.87,
> 19.11, 18.87
>
> 1401: 0.01 0.03 0.00 1/23 2876
>
> 1402: 0.00 0.11 0.13 1/57 15334
>
> 1404: 0.02 0.20 0.16 1/77 14918
>

> 1406: 0.01 0.13 0.10 1/39 29595
>
> 1407: 10.95 15.71 15.05 1/128 13950
>
> 1408: 0.36 0.52 0.57 1/81 27167
>
> 1409: 0.09 0.26 0.43 1/78 17851
>
> 1410: 0.09 0.17 0.18 1/61 4344
>
> 1413: 0.00 0.03 0.00 1/46 16539
>
> 1414: 0.01 0.01 0.00 1/41 22372
>
> 1415: 0.00 0.01 0.00 1/45 8404
>
> 1416: 0.05 0.10 0.11 1/58 9292
>
> 12 active
>
> top - 16:20:02 up 32 days, 11:07, 0 users, load average: 9.14,
> 14.97, 14.82
>
> Tasks: 135 total, 1 running, 122 sleeping, 0 stopped, 12 zombie
>
> Cpu(s): 16.3%us, 2.9%sy, 0.4%ni, 78.5%id, 1.8%wa, 0.0%hi,
> 0.0%si, 0.1%st
>
> Mem: 4194304k total, 1173844k used, 3020460k free, 0k
> buffers
>
> Swap: 8388608k total, 115576k used, 8273032k free, 725144k cache
>
> Notice how cpu is plenty idle, and only 1/4 of the available
> memory is being used.
>
> http://wiki.openvz.org/Ploop/Why explains "One such property that
> deserves a special item in this list is file system journal. While
> journal is a good thing to have, because it helps to maintain file
> system integrity and improve reboot times (by eliminating fsck in
> many cases), it is also a bottleneck for containers. If one
> container will fill up in-memory journal (with lots of small
> operations leading to file metadata updates, e.g. file truncates),
> all the other containers I/O will block waiting for the journal to
> be written to disk. In some extreme cases we saw up to 15 seconds
> of such blockage.". The problem I noticed last much longer than
> 15 seconds though - typically 15-30 minutes, then load goes back
> where it should be.

>
> Any suggestions where I could look for the cause of this? It's
> not like it happens everyday, maybe once or twice per month, but
> it's enough to cause customers to complain.
>
> Regards,
> Rene
>
>
> _____
> Users mailing list
> Users@openvz.org <mailto:Users@openvz.org>
> https://openvz.org/mailman/listinfo/users
>
>

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Wed, 30 May 2012 16:54:46 GMT
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Hi Kir,

Both the vzubc command and the laverage option to vzlist were new to me
(the laverage options seems undocumented?)

Thanks much, this is VERY useful information!!

Regards,
Rene

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 qmaill    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 held maxheld
barrier limit 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
```

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 10 Jul 2012 14:40:17 GMT
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No takers for this one?

If I missed to provide any important information please let me know. The issue happens regularly on several hardware nodes so if I missed anything I can check it next time it happens.

On Wed, Jul 4, 2012 at 4:16 PM, Rene C. <openvz@dokbua.com> wrote:

> 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 qmaill   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 held maxheld
> barrier limit 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
>

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Kirill Korotaev on Tue, 10 Jul 2012 16:34:23 GMT
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I can take a look if you give me access to node.
If agree - send it privately, w/o users@ on CC.

Kirill

On Jul 10, 2012, at 18:40 , Rene C. wrote:

No takers for this one?

If I missed to provide any important information please let me know. The issue happens regularly on several hardware nodes so if I missed anything I can check it next time it happens.

On Wed, Jul 4, 2012 at 4:16 PM, Rene C. <openvz@dokbua.com<mailto:openvz@dokbua.com>> wrote:
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<http://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<http://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 qmaill    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<http://77.87.207.166:21863/>
ESTABLISHED 23924/httpd
tcp        0      0 ::ffff:xx.xx.xx.xx:80   ::ffff:95.165.204.26:62259<http://95.165.204.26:62259/>
ESTABLISHED 27144/httpd
tcp        0      0 ::ffff:xx.xx.xx.xx:80   ::ffff:193.151.105.100:4059<http://193.151.105.100:4059/>
```

ESTABLISHED 27200/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:109.169.207.68:50087<http://109.169.207.68:50087/>
ESTABLISHED 27185/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:31.131.70.135:57017<http://31.131.70.135:57017/>
ESTABLISHED 27179/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:95.165.204.26:62220<http://95.165.204.26:62220/>
ESTABLISHED 27103/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:188.134.61.1:60732<http://188.134.61.1:60732/>
ESTABLISHED 27215/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:193.151.105.100:4112<http://193.151.105.100:4112/>
ESTABLISHED 26964/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:109.169.207.68:50043<http://109.169.207.68:50043/>
ESTABLISHED 27164/httpd
tcp 0 0 ::ffff:xx.xx.xx.xx:80 ::ffff:31.131.70.135:56976<http://31.131.70.135:56976/>
ESTABLISHED 27153/httpd

cat /proc/user_beancounters
Version: 2.5

uid	resource	held	maxheld	barrier	limit	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
```

<ATT00001.c>

Subject: Re: occasional high loadavg without any noticeable cpu/memory/io load
Posted by Rene Dokbua on Tue, 10 Jul 2012 18:36:29 GMT
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Thanks, that'd be very cool. Access to the hardware node is limited by IP
but if you send me (privately if you prefer) the IP address you will use to
access I'll add that to allowed hosts and reply with the login coordinates.

Rene

On Tue, Jul 10, 2012 at 11:34 PM, Kirill Korotaev <dev@parallels.com> wrote:

> I can take a look if you give me access to node.
> If agree - send it privately, w/o users@ on CC.
>
> Kirill
>
>
> On Jul 10, 2012, at 18:40 , Rene C. wrote:
>
> No takers for this one?
>
> If I missed to provide any important information please let me know. The
> issue happens regularly on several hardware nodes so if I missed anything I
> can check it next time it happens.
>
> On Wed, Jul 4, 2012 at 4:16 PM, Rene C. <openvz@dokbua.com> wrote:
>
>> 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 qmaill 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 held maxheld
>> barrier limit 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
>>
>
> <ATT00001.c>
>
>
>