
Subject: Reduce Load in VZs

Posted by [me](#) on Wed, 03 Aug 2011 06:55:51 GMT

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Hello,

We have on our Server about 17VZs installed and running. Most of them run simmilar cron jobs, e.g. apticron and this causes very high load at night.

Is there any best practise that we can use to reduce the load with these jobs? I tought about running these cronjobs from outside with vzctl exec (so make a cron at the host and just start the programmes manually) and run only 1 job at once.

In general: Is there a best practise to run things in every VZ and not produce high load?

Thanks!

greetings

Subject: Re: Reduce Load in VZs

Posted by [Tim Small](#) on Wed, 03 Aug 2011 07:11:39 GMT

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On 03/08/11 07:55, me@free-minds.net wrote:

> Hello,

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> simmilar cron jobs, e.g. apticron and this causes very high load at night.

>

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> jobs? I tought about running these cronjobs from outside with vzctl exec
> (so make a cron at the host and just start the programmes manually) and run
> only 1 job at once.

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> In general: Is there a best practise to run things in every VZ and not
> produce high load?

>

>

I patched the openvz scripts to randomise the start-time of these scripts across containers. One of my clients had the same problem - it showed up quite clearly using the openvzcpu munin plugin which I wrote...

I'll dig out the patch later. Bug me if I haven't within 24 hours.

Tim.

--

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Subject: Re: Reduce Load in VZs
Posted by [kir](#) on Wed, 03 Aug 2011 07:47:05 GMT
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On 08/03/2011 11:11 AM, Tim Small wrote:

> On 03/08/11 07:55, me@free-minds.net wrote:

>> Hello,

>> We have on our Server about 17VZs installed and running. Most of them run
>> simmilar cron jobs, e.g. apticron and this causes very high load at night.

>>

>> Is there any best practise that we can use to reduce the load with these
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> showed up quite clearly using the openvzcpu munin plugin which I wrote...

>

> I'll dig out the patch later. Bug me if I haven't within 24 hours.

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> Tim.

>

Interesting. vzctl does crontab randomization, by means of
/etc/vz/dists/scripts/vps-postcreate.sh
script, so the question is why it is not working. I can see a few
reasons why it's not working as it should:

- (1) CT was created not by vzctl
 - (2) CT has been upgraded from the inside, so /etc/crontab was being modified
 - (3) CT has a distro installed which has crontab in some unusual location
 - (4) Some other bug?
-

Subject: Re: Reduce Load in VZs
Posted by [<me](#) on Wed, 03 Aug 2011 08:10:03 GMT

On Wed, 03 Aug 2011 11:47:05 +0400, Kir Kolyshkin <kir@openvz.org> wrote:

> Interesting. vzctl does crontab randomization, by means of
> /etc/vz/dists/scripts/vps-postcreate.sh
> script, so the question is why it is not working. I can see a few
> reasons why it's not working as it should:
>
> (1) CT was created not by vzctl
mh it was, all of them are created by this script
> (2) CT has been upgraded from the inside, so /etc/crontab was being
> modified
yes, the cronjobs are under /etc/cron.{daily,weekly,...}
> (3) CT has a distro installed which has crontab in some unusual location
no its running debian lenny or squeeze or sid
> (4) Some other bug?
mh could be, we try now different things to encounter the problem... seems
very complicated at the moment because we have really no idea whats going
on there

greetings!

Subject: Re: [PATCH] Reduce Load in VZs - stop cron.d thundering herd...

Posted by [Tim Small](#) on Wed, 03 Aug 2011 08:29:32 GMT

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On 03/08/11 08:47, Kir Kolyshkin wrote:

>
> (3) CT has a distro installed which has crontab in some unusual location

Nearly (3)

/etc/cron.d is a standard location, but vps-postcreate.sh didn't deal
with it.

I thought I'd submitted this patch to debian, but I seem to have dropped
it :-(

Tim.

```
--- postcreate.sh.old 2010-09-14 06:07:31.000000000 +0100
+++ /etc/vz/dists/scripts/postcreate.sh 2011-08-03 09:27:22.490356610 +0100
@@ -24,12 +24,12 @@
```

```
function randcrontab()
{
-   file=${VE_ROOT}"/etc/crontab"
```

```

+   for file in ${VE_ROOT}/etc/cron.d/* ${VE_ROOT}/etc/crontab
+   do
+       [ -f "${file}" ] || return 0
-   [ -f "${file}" ] || return 0
-
-   /bin/cp -fp ${file} ${file}.$$
-   cat ${file} | awk '
+       /bin/cp -fp ${file} ${file}.$$
+       cat ${file} | awk '
BEGIN { srand(); }
{
    if ($0 ~ /^[ \t]*#/ || $0 ~ /^[ \t]+*$/) {
@@ -61,8 +61,9 @@
    }
    print line;
}
-' > ${file}.$$ && /bin/mv -f ${file}.$$ ${file}
-   /bin/rm -f ${file}.$$ 2>/dev/null
+       ' > ${file}.$$ && /bin/mv -f ${file}.$$ ${file}
+       /bin/rm -f ${file}.$$ 2>/dev/null
+   done
}

```

function disableroot()

--

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Subject: Re: Reduce Load in VZs
Posted by [Tim Small](#) on Wed, 03 Aug 2011 08:32:47 GMT
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On 03/08/11 09:10, me@free-minds.net wrote:

```

>
>> (2) CT has been upgraded from the inside, so /etc/crontab was being
>> modified
>>
> yes, the cronjobs are under /etc/cron.{daily,weekly,...}
>

```

Compare /etc/crontab between containers - the entries should have different (randomized) times:

```
# m h dom mon dow user  command
17 * * * * root    cd / && run-parts --report /etc/cron.hourly
25 6 * * * root    test -x /usr/sbin/anacron || ( cd / && run-parts
--report /etc/cron.daily )
47 6 * * 7 root    test -x /usr/sbin/anacron || ( cd / && run-parts
--report /etc/cron.weekly )
52 6 1 * * root    test -x /usr/sbin/anacron || ( cd / && run-parts
--report /etc/cron.monthly )
```

... if they are, then perhaps it's /etc/cron.d/* tabs instead? This was the problem on my client's system.

Tim.

--

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Subject: Re: [PATCH] Reduce Load in VZs - stop cron.d thundering herd...
Posted by [<me>](#) on Wed, 03 Aug 2011 08:33:54 GMT
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awesome thanks, i'll try it. So best is i copy all the stuff from cron.daily to cron.d and add 0 0 * * * ar @daily at the beginning, or is it the same to leave them there and these things will already be called by cron?

On Wed, 03 Aug 2011 09:29:32 +0100, Tim Small <tim@seoss.co.uk> wrote:

> On 03/08/11 08:47, Kir Kolyshkin wrote:

>>

>> (3) CT has a distro installed which has crontab in some unusual location

>

> Nearly (3)

>

> /etc/cron.d is a standard location, but vps-postcreate.sh didn't deal with it.

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> +++ /etc/vz/dists/scripts/postcreate.sh 2011-08-03 09:27:22.490356610
+0100
> @@ -24,12 +24,12 @@
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> function randcrontab()
> {
> -   file=${VE_ROOT}/etc/crontab"
> +   for file in ${VE_ROOT}/etc/cron.d/* ${VE_ROOT}/etc/crontab
> +   do
> +       [ -f "${file}" ] || return 0
>
> -   [ -f "${file}" ] || return 0
> -
> -   /bin/cp -fp ${file} ${file}.$$
> -   cat ${file} | awk '
> +       /bin/cp -fp ${file} ${file}.$$
> +       cat ${file} | awk '
> BEGIN { srand(); }
> {
>     if ($0 ~ /^[ \t]*#/ || $0 ~ /^[ \t]+*$/) {
> @@ -61,8 +61,9 @@
>     }
>     print line;
> }
> -' > ${file}.$$ && /bin/mv -f ${file}.$$ ${file}
> -   /bin/rm -f ${file}.$$ 2>/dev/null
> +       ' > ${file}.$$ && /bin/mv -f ${file}.$$ ${file}
> +       /bin/rm -f ${file}.$$ 2>/dev/null
> +   done
> }
>
> function disableroot()

```

Subject: Re: Reduce Load in VZs
 Posted by [<me](#) on Wed, 03 Aug 2011 08:35:12 GMT
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Hi,
 Ah yes, Im a fool :D - forget the mail from before...

i'll see what i can get there and will try the patch!

thank you both!

greetings

On Wed, 03 Aug 2011 09:32:47 +0100, Tim Small <tim@seoss.co.uk> wrote:

> On 03/08/11 09:10, me@free-minds.net wrote:

>>

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