Subject: Re: Re: Optimizing resources from /proc/user_beancounters
Posted by Brad Alexander on Sat, 15 Oct 2011 14:11:28 GMT
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Thank you, JR. As it turns out, I was *severely* starving my VMs. vzsplit
worked like a charm...

--b

On Fri, Oct 14, 2011 at 5:35 PM, JR Richardson <jmr.richardson@gmail.com>wrote:

> > I know this is has probably been discussed ad nauseum, but I haven't
> found
> > what I'm looking for yet, so I thought I would ask here.
> >
> > I have been running OpenVZ for a few years, but in the last couple of
> weeks,
> > I have noticed over the past couple of weeks that several VMs were
> getting
> > out of spec settings, mainly dcachesize growing too large.
> >
> > These VMs started on a Debian openvz box, and as my virtual
> infrastructure
> > grew, I started using a pair of proxmox-ve machines (which is
> Debian-lenny
> > based as well), which are clustered.
> >
> > I have 8 VMs that were created over time, some on 32-bit host machines,
> some
> > on 64-bit. Thus, some have /proc/user_beancounters that look like:
> >
> >   1: kmemsize   13775736
> > 15028224   48811846   51254098   63446
> >   lockedpages   0
> > 447   393216   393216   0
> >   privvmpages   15152
> > 105895   426752   439252   0
> >   shmpages   648
> > 1304   21504   21504   0
> >   dummy   0
> > 0   0   0   0
> >   numproc   47
> > 72   240   240   0
> >   physpages   166345
> > 425143   0   2147483647   0
> >   vmguarpages   0
> > 0   426752   2147483647   0
> >   oomguarpages   6374

> > 97683 426752 2147483647 0
> > numtcpsock 44
> > 48 360 360 0
> > numflock 1
> > 7 188 206 0
> > numpty 0
> > 2 16 16 0
> > numsiginfo 1
> > 27 256 256 0
> > tcpsndbuf 525744
> > 1026352 4212558 6014798 0
> > tcprcvbuf 524552
> > 3052984 4212558 6014798 0
> > othersockbuf 46240
> > 65808 1126080 2097152 0
> > dgramrcvbuf 0
> > 101600 262144 262144 0
> > numothersock 75
> > 82 360 360 0
> > dcachesize 9997638
> > 10000000 8000000 10000000 0
> > numfile 508
> > 695 9312 9312 0
> > dummy 0
> > 0 0 0 0
> > dummy 0
> > 0 0 0 0
> > dummy 0
> > 0 0 0 0
> > numiptent 20
> > 20 128 128 0
> >
> > While others have effectively unlimited barrier and limit settings:
> >
> > 7: kmemsize 93292551 107253760
> > 9223372036854775807 9223372036854775807 0
> > lockedpages 0
> > 16 393216 393216 0
> > privvmpages 299033
> > 413214 524288 536788 0
> > shmpages 68 724
> > 9223372036854775807 9223372036854775807 0
> > dummy 0
> > 0 0 0 0
> > numproc 86
> > 108 1024 1024 0
> > physpages 321589
> > 496217 0 9223372036854775807 0

> > vmguarpages 0
> > 0 524288 9223372036854775807 0
> > oomguarpages 155305
> > 180405 524288 9223372036854775807 0
> > numtcpsock 13 17
> > 9223372036854775807 9223372036854775807 0
> > numflock 3 9
> > 9223372036854775807 9223372036854775807 0
> > numpty 0
> > 2 255 255 0
> > numsiginfo 1
> > 15 1024 1024 0
> > tcpsndbuf 226720 329312
> > 9223372036854775807 9223372036854775807 0
> > tcprcvbuf 277072 5662864
> > 9223372036854775807 9223372036854775807 0
> > othersockbuf 43928 66680
> > 9223372036854775807 9223372036854775807 0
> > dgramrcvbuf 0 5648
> > 9223372036854775807 9223372036854775807 0
> > numothersock 63 69
> > 9223372036854775807 9223372036854775807 0
> > dcachesize 88045648 101016538
> > 9223372036854775807 9223372036854775807 0
> > numfile 360 605
> > 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
> >
> > I have three questions. First, I know that leaving everything unlimited
> is a
> > quick path to running out of resources on the host machine. That said,
> I've
> > been having troubles recently with the VMs with "normal" settings. It
> > started out with dcachesize going out of spec, which, when I adjusted it,
> > within an hour, I started getting out of memory errors, requiring me to
> up
> > the kmemsize...This then caused problems on another "normal" VM, and so
> > forth.
> >
> > As I said, I know setting everything to unlimited is probably not
> > recommended, so what is the recommended way to set the proper values for

> > user_beancounters? Every time I change values in user_beancounters,
> > something else comes unglued, except for the ones that have unlimited
> > kmemsize and dcachesize.
> >
> > Is there a tool to set up the values based on the use of the particular
> VM?
> > Is there any more information I need to provide?
> >
> > Thanks,
> > --b
> Try using vzsplit to segment your VE's equally, start there and
> increase/decrease resources per the demand of each VE. Once you
> adjust your config conf files, use vzcfgvalidate to ensure your beans
> are adjusted propperly.
>
> Good luck.
>
> JR
> --
> JR Richardson
> Engineering for the Masses
>