Subject: Re: Memory overflow in an OpenVZ VPS
Posted by samuli.seppanen on Wed, 26 Sep 2007 07:44:04 GMT
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Forgot to mention that I have monit watching the memory usage of the VPS
and it goes up steadily, for example:

1:30 PM: mem usage = 75%
2:30 PM: mem usage = 78%
3:25 PM: mem usage = 80%
16:10 PM: mem usage = 100%

At which point memory allocations probably fail and privvmpages
failcount goes up.

> Hello everybody!
>
> I'm having problems with OpenVZ memory management. I have (probably)
> read all the Wiki articles there are that touch that subject, and
> browsed through the mailing list archives to no avail.
>
> Most of my OpenVZ VPS'es work just fine after a bit of fiddling, but one
> of them is misbehaving constantly. It always runs out of memory, no
> matter how much I give it. It is running 10 instances of a same server
> to give better interactive responsiveness. I was just wondering if the
> server program is leaking memory and causing this erratic behavior, or
> if there is something wrong with my OpenVZ VPS's configuration.
>
> The physical server runs only this one VPS. The hardware node has 2GB of
> RAM plus 2GB of swap. The VPS is given roughly 3.5GB of that if
> available (privvmpages limit). It is guaranteed 2.5GB (vmguarpages
> barrier). This is FAR more than the server software in question needs,
> but still it occasionally (and predictably) runs out of memory.
>
> The strange thing about the VPS is that the HELD values in oomguarpages
> and privvmpages are _much_ lower than the MAXHELD values - almost
> triple. There should be no usage peaks that should cause this kind of
> asymmetry, unless an instance of the server software goes amok.
>
> The VPS's resource information is shown below. The parameters are not
> optimized, as you can see, but that not my biggest problem right now :).
> So can you see anything wrong with these settings, or should I take a
> look at the server software that is running on the VPS?
>
> [root@VPS_NODE ~]# cat /proc/user_beancounters
> Version: 2.5
> uid resource   held   maxheld   barrier   limit   failcnt

```
> 103: kmemsize     19265157  40765738  183079731  201387704        0
>     lockedpages        0        0      8939      8939        0
>     privvmpages   383368   930126   917504   930000      153
>     shmpages      21647    24239    31099    31099        0
>     dummy            0        0        0        0        0
>     numproc        229      524     8000     8000        0
>     physpages    236810   485688        0 2147483647        0
>     vmguarpages       0        0   655360 2147483647        0
>     oomguarpages  382472   874046   310999 2147483647        0
>     numtcpsock     532      793     8000     8000        0
>     numflock        18      594     1000     1100        0
>     numpty           1        4      512      512        0
>     numsiginfo       0       39     1024     1024        0
>     tcpsndbuf    3524644  4236356  28258577  61026577        0
>     tcprcvbuf    3530300  6528712  28258577  61026577        0
>     othersockbuf  190060  1737340  14129288  46897288        0
>     dgramrcvbuf       0    41836  14129288  14129288        0
>     numothersock   204     1169     8000     8000        0
>     dcachesize       0        0  39977755  41177088        0
>     numfile      11106    22346    71488    71488        0
>     dummy            0        0        0        0        0
>     dummy            0        0        0        0        0
>     dummy            0        0        0        0        0
>     numiptent       10       10      200      200        0
>
> [root@HOST_NODE ~]# free
>            total     used     free   shared   buffers    cached
> Mem:     2073344  2017716    55628        0    66928   954828
> -/+ buffers/cache:    995960  1077384
> Swap:    2031608   586508  1445100
>
>
> Anyways, thanks for a great Open Source virtualization project!
>
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