

---

Subject: Re: Memory overflow in an OpenVZ VPS  
Posted by [samuli.seppanen](#) on Wed, 26 Sep 2007 07:44:04 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

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!
>

```