
Subject: Question about memory usage in openVZ container

Posted by [Slevin](#) on Thu, 02 Apr 2009 07:52:30 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi all,

I've read a lot around here and tried to find something with the search function but I didn't find anything matching this problem... Perhaps someone can help me.

Something about the situation:

<edit>

Sorry, I forgot the versions:

ovzkernel-2.6.18-92.1.18.el5.028stab060.2 (64Bit)

vzctl-3.0.23-1

vzquota-3.0.12-1

vzctl-lib-3.0.23-1

</edit>

We have some openVZ virtual machines running here.

On these machines we are running our own piece of software.

The problem is now that our software is always reserving pretty much virtual memory (that's the default behaviour and that's volitional). Now openVZ seems to declare virtual memory as in-use. Because of this behaviour a small tomcat consumes around 1,2G of memory.

On the HN the memory is displayed correctly so I assume that only inside a container the declaration of memory is wrong?

Here an example with a small zimbra server (without any accounts running yet):

Inside the container:

```
[root@zimbra ~]# free -m
```

	total	used	free	shared	buffers	cached
Mem:	16020	12295	3725	0	0	0
-/+ buffers/cache:		12295	3725			

On the hardware node:

```
[root@openVZ ~]# free -m
```

	total	used	free	shared	buffers	cached
Mem:	16020	7836	8184	0	327	3644
-/+ buffers/cache:		3864	12156			
Swap:	4000	33	3966			

Does anyone have a hint how to handle this? I cannot pass 32G of memory to the container just because it thinks that it's running out of it...

Thanks a lot in advance
Sven

Subject: Re: Question about memory usage in openVZ container
Posted by [maratrus](#) on Thu, 02 Apr 2009 09:02:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello,

"free" command output is based on /proc/meminfo output.

OpenVZ implements calculations inside VE with help of privvmapages values. So, by default the total memory output is the barrier value of privvmapages of the particular VE (expressed in bytes). You can adjust this output a little with "--meminfo" option of vzctl utility (man vzctl).

You can't consider the obtained number as a reliable source data to analyse situation. The correct way is /proc/user_beancounters output. Thus, such behavior of OpenVZ system is convenient one from user space point of view.
