Subject: Memory Allocation
Posted by zoom on Wed, 24 Dec 2008 16:28:03 GMT
View Forum Message <> Reply to Message

I have a general question concerning memory allocation. I have a VPS setup to have 256MB guaranteed and 512MB burst, however when I do "free -m" within the container the total memory shown is 512MB? Should it be 256MB?

```
             total       used       free
Mem:           512        132        379
-/+ buffers/cache:        132        379
Swap:            0          0          0
```

Below are my container settings for memory based on a 64 bit host.

```
PRIVVMPAGES="131072:144384"
VMGUARPAGES="65536:9223372036854775807"
OOMGUARPAGES="65536:9223372036854775807"
```

Subject: Re: Memory Allocation
Posted by piavlo on Wed, 24 Dec 2008 18:39:30 GMT
View Forum Message <> Reply to Message

This is since the memory shown is in privvmpages by default
http://wiki.openvz.org/Privvmpages#privvmpages

so 131072*4096/1024/1024=512M

Have a look at --meminfo in vzctl man page.

Subject: Re: Memory Allocation
Posted by techdruid on Wed, 11 Mar 2009 19:32:05 GMT
View Forum Message <> Reply to Message

I have encountered this same problem.

I tried changing vzctl --meminfo in various ways. However, no matter how I set this, the free command and cat /proc/meminfo always show the full amount of memory from the host/hardware system.

Any advice would greatly appreciated.

/proc/users_beancounters

```
resource          held    maxheld    barrier      limit
kmemsize       1055739    1341307   16384000   18022400
privvmpages      11036      11759     262144     292912
shmpages            31         31     131072     131072
physpages         2150       2631          0 2147483647
vmguarpages          0          0     102400     102400
oomguarpages      2150       2631     102400     102400
```

I've tried
vzctl set 1 --meminfo privvmpages:1 --save
vzctl set 1 --meminfo pages:292912 --save

Tried restarting the container stop/start, but I continue to see the following in the container from # free -m

```
total       used       free     shared    buffers     cached
 1009         45        964          0          0          0
-/+ b/c:      45        964
Swap:
    0          0          0
```

Amended. I should point out that I'm using the values defined on this page here.
http://wiki.openvz.org/UBC_configuration_examples_table

Idea's / Thoughts?
Thanks in advance
Richard

Subject: Re: Memory Allocation
Posted by techdruid on Wed, 11 Mar 2009 20:32:05 GMT
View Forum Message <> Reply to Message

It would appear that my mistake here is that I was setting the meminfo value too high. I was assuming this was bytes and not pages.

Correct command for 256MB RAM is...
vzctl set <veid> --meminfo pages:65536 --save

It would seem to me that this page below is incorrect though. It explains that for 248MB of RAM, you should set privvmpages to 262,144 / 292,912 . However, this results in over 1GB of total RAM on the container. Shouldn't this example be closer to 65536?

http://wiki.openvz.org/UBC_configuration_examples_table

Or am I missing something?

Richard

Subject: Re: Memory Allocation
Posted by Rene on Mon, 26 Sep 2011 11:44:11 GMT
View Forum Message <> Reply to Message

Where is --meminfo documented? If I hit vzctl --help it's not listed as an option, nor is it explained in the man page....

```
# vzctl --help
vzctl version 3.0.29.2
Copyright (C) 2000-2010, Parallels, Inc.
This program may be distributed under the terms of the GNU GPL License.

Usage: vzctl [options] <command> <ctid> [parameters]

vzctl create <ctid> [--ostemplate <name>] [--config <name>]
  [--private <path>] [--root <path>] [--ipadd <addr>] | [--hostname <name>]
vzctl start <ctid> [--force] [--wait]
vzctl destroy | mount | umount | stop | restart | status <ctid>
vzctl quotaon | quotaoff | quotainit <ctid>
vzctl enter <ctid> [--exec <command> [arg ...]]
vzctl exec | exec2 <ctid> <command> [arg ...]
vzctl runscript <ctid> <script>
vzctl chkpnt <ctid> [--dumpfile <name>]
vzctl restore <ctid> [--dumpfile <name>]
vzctl set <ctid> [--save] [--force] [--setmode restart|ignore]
  [--ipadd <addr>] [--ipdel <addr>|all] [--hostname <name>]
  [--nameserver <addr>] [--searchdomain <name>]
  [--onboot yes|no] [--bootorder <N>]
  [--userpasswd <user>:<passwd>]
  [--cpuunits <N>] [--cpulimit <N>] [--cpus <N>] [--cpumask <cpus>]
  [--diskspace <soft>[:<hard>]] [--diskinodes <soft>[:<hard>]]
  [--quotatime <N>] [--quotaugidlimit <N>]
  [--noatime yes|no] [--capability <name>:on|off ...]
  [--devices b|c:major:minor|all:r|w|rw]
  [--devnodes device:r|w|rw|none]
  [--netif_add <ifname[,mac,host_ifname,host_mac,bridge]]>]
  [--netif_del <ifname>]
  [--applyconfig <name>] [--applyconfig_map <name>]
  [--features <name:on|off>] [--name <vename>] [--ioprio <N>]
  [--pci_add [<domain>:]<bus>:<slot>.<func>] [--pci_del <d:b:s.f>]
  [--iptables <name>] [--disabled <yes|no>]
  [UBC parameters]

UBC parameters (N - items, P - pages, B - bytes):
Two numbers divided by colon means barrier:limit.
In case the limit is not given it is set to the same value as the barrier.
  --numproc N[:N]      --numtcpsock N[:N]      --numothersock N[:N]
  --vmguarpages P[:P]  --kmemsize B[:B]        --tcpsndbuf B[:B]
  --tcprcvbuf B[:B]    --othersockbuf B[:B]    --dgramrcvbuf B[:B]
```

--oomguarpages P[:P] --lockedpages P[:P] --privvmpages P[:P]
--shmpages P[:P] --numfile N[:N] --numflock N[:N]
--numpty N[:N] --numsiginfo N[:N] --dcachesize N[:N]
--numiptent N[:N] --physpages P[:P] --avnumproc N[:N]
--swappages P[:P]

It's not like it's not recognized though:

vzctl set 1402 --meminfo
vzctl: option `--meminfo' requires an argument
