Subject: setting memory allocation
Posted by Markus Hardiyanto on Wed, 02 May 2007 08:25:55 GMT
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Hello,

I have a computer with P4 2,4Ghz processor and 1GB of RAM. I'm planning to split it into 3 VEs with this memory allocation:
VE1: 512MB
VE2: 256MB
VE3: 256MB

as I understand openvz allow a VE to use RAM more than the amount allocated to a VE, so I want the VEs able to use RAM upto:
VE1: 768MB
VE2: 384MB
VE3 384MB

how to set this? what configuration I must change? kmemsize? privvmpages?

thanks

Best Regards,
Markus

Subject: Re: setting memory allocation
Posted by Gregor Mosheh on Wed, 02 May 2007 14:46:52 GMT
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I'd like to take a shot at answering this, to "quiz myself" on how well I understand this stuff. So if my answers are incorrect or incomplete, please speak up!

> I have a computer with P4 2,4Ghz processor and 1GB of RAM. I'm planning to
> split it into 3 VEs with this memory allocation:
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If by "memory allocation" you mean "the amount of RAM they're guaranteed to have available for use by apps" then try this:

```
# RAM is 4k pages, so 131072*4k = 512M
```

vzctl set 1 --save --vmguarpages 131072
vzctl set 1 --save --oomguarpages 131072
vzctl set 1 --save --privvmpages 131072:196608

But, if you really have only 1 GB of RAM, it may not be wise to allocate
all of it. If all of the VEs really use all their RAM, the system will
start swapping to make up more RAM (e.g. for the HN's own use) and nobody
enjoys a system that's swapping.

-Gregor

Subject: Re: setting memory allocation
Posted by Markus Hardiyanto on Thu, 03 May 2007 03:05:40 GMT
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i thought all the numbers in beancounters was in bytes.. so why you divided it with 4k?
Best Regards,
Markus

----- Original Message ----
From: Gregor Mosheh <gregor@hostgis.com>
To: users@openvz.org
Sent: Wednesday, May 2, 2007 9:46:52 PM
Subject: Re: [Users] setting memory allocation

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-Gregor

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Subject: Re: setting memory allocation
Posted by Cranky on Thu, 03 May 2007 04:23:53 GMT
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On x86 and x86-64 systems pages are measured in 4k - OVZ uses this these pages
for resource allocation.

I believe you can also use M and G suffixes on recent OVZ package releases to
set privvmpages/oomguarpages/vmguarpages. For example, "vzctl set $veid
--vmguarpages 512M:600M" will translate to 131072:153600 (barrier:limit) pages
automatically so you don't need to do to the math.

Regards,

Andrew Cranson
Layershift Limited
www.layershift.com

ICQ: 161813538
MSN: andrew@transnexis.com
AIM: cransona

>>> Virtuozzo Virtual Private Servers now available from $12.95/mo (US-based)

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EU VAT number: (application in progress)

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Layershift Limited, c/o Cranleys Chartered Accountants
24 Finns Business Park, Mill Lane, Crondall, Farnham, Surrey, GU10 5RX

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> Subject: Re: [Users] setting memory allocation
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> -Gregor
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---

Subject: Re: setting memory allocation
Posted by Gregor Mosheh on Thu, 03 May 2007 04:30:56 GMT
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Andrew Cranson (Layershift Limited) wrote:

> I believe you can also use M and G
> suffixes on recent OVZ package releases

Good to hear someone else saying this; I wondered if I was just crazy for thinking M and G, that I'm imagined seeing them somewhere. ;)

On my very-outdated test system for my initial experiments, those didn't work at all. But I'd love to see it work using a modern version of OpenVZ on modern hardware. :)

-gregor

Subject: Re: setting memory allocation
Posted by kir on Thu, 03 May 2007 09:06:03 GMT
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Those UBC params that end in -pages are measured in pages.
For more details, see
http://wiki.openvz.org/UBC_parameter_units
http://wiki.openvz.org/Memory_page
