
Subject: *SOLVED* Set available memory
Posted by [mdekkers](#) on Wed, 06 Jun 2007 15:44:49 GMT
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Hi all,

I'm a bit confused - I would like to set a VE to have roughly 1.5GB memory and about 5000 processes available. I cant for the life of me work out what values to use.

Any help would be greatly appreciated.

Thanks

Martijn

Subject: Re: Set available memory
Posted by [rickb](#) on Wed, 06 Jun 2007 15:49:13 GMT
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- Is this the only VE on the server?
- How much memory does your node have?
- do you want the VE to have max 1.5GB or guaranteed 1.5GB?

I can help you with your config. There are many memory metrics which can be confusing but also vastly increase efficiency (assuming more then 1 VE) vs. vmware virtualization style of "1.5GB".

Subject: Re: Set available memory
Posted by [mdekkers](#) on Wed, 06 Jun 2007 15:58:54 GMT
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Hi Rick,

Thanks for getting back - appreciated.

- This is the "main" ve on the server. There will be 1 or 2 more, but they can all be tiny, memory-wise as they will run minimal stuff, and none are important.
- The HN has 2048Mb of RAM
- I am not sure if I understand the difference.

heh - yes, I come from a VMWare background, mainly, so a lot of this is more or less new to me.

Thanks

Martijn

Subject: Re: Set available memory
Posted by [mdekkers](#) on Fri, 08 Jun 2007 11:20:42 GMT
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can anyone give me some pointers on how to quickly set the available memory size? I read the beancounter document, but cant seem to get a valid config up and running.

Thanks a lot

Martijn

Subject: Re: Set available memory
Posted by [rickb](#) on Fri, 08 Jun 2007 11:29:56 GMT
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Hi. I would set your privvmpages to 4GB, oomguarpags to 1.5GB, vmguarpags to 1.5GB, numproc to 5000. Add at least 2GB swap on your node just for safety.

remember the UBCs are in pages. 1 page = 4096 byte on 32bit.

This will give your VE the memory capabilities you are looking for.

Subject: Re: Set available memory
Posted by [mdekkers](#) on Fri, 08 Jun 2007 11:53:24 GMT
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Thanks for asnwering - sorry to be a total numpty here, but I am now thoroughly confused about setting these values

output from cat /proc/user_beancounters:

cat /proc/user_beancounters

Version: 2.5

uid resource	held	maxheld	barrier	limit	failcnt	
1001: kmemsize	1178082	2609126	2752512	2936012		0
lockedpages	0	0	32	32	0	
privvmpages	7077	43511	49152	53575	252	
shmpages	181	837	8192	8192	0	

dummy	0	0	0	0	0
numproc	20	51	65	65	0
physpages	3705	14743		0 2147483647	0
vmguarpages	0	0	6144	2147483647	0
oomguarpages	3705	14743	6144	2147483647	0
numtcpsock	2	6	80	80	0
numflock	1	10	100	110	0
numpty	1	4	16	16	0
numsiginfo	0	11	256	256	0
tcpsndbuf	0	60448	319488	524288	0
tcprcvbuf	0	676296	629488	1024288	3224
othersockbuf	2232	17304	132096	336896	0
dgramrcvbuf	0	8376	132096	132096	0
numothersock	1	9	80	80	0
dcachesize	0	0	1048576	1097728	0
numfile	426	979	2048	2048	0
dummy	0	0	0	0	0
dummy	0	0	0	0	0
dummy	0	0	0	0	0
numiptent	14	14	128	128	0

Is this listed in pagesizes, or in KB? also, from my conf file:

```
cat 1001.conf | grep -i privv
PRIVVMPAGES="49152:53575"
```

I am trying to work out how to get the right value to feed to privvmpages, but none of the numbers that come up seem right.

Subject: Re: Set available memory
 Posted by [rickb](#) on Fri, 08 Jun 2007 12:39:11 GMT
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all of the metrics that end in pages, are in pages.

```
PRIVVMPAGES="49152:53575"
```

49152 pages = ~200MB

So, this VE can allocate at most a little over 200MB. this is very low and will cause many problems if you want to run a LAMP deployment or anything other than a basic service.
