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Subject: Re: Is privvmpages's MAX limited to the amount of RAM on a computer  
Posted by [CatDaaaady](#) on Fri, 20 Feb 2009 19:04:10 GMT  
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Another interesting note.

I created some code to malloc and take up about 2G worth of memory.

I set the VE to 4G of memory to match the RAM on the hardware node.

Then I run the program. As you can see below I can only run the program 2 times before I get a malloc error.

```
vzctl set 33503 --privvmpages 4G
```

\*Inside the VE\*

```
$ free -m
```

	total	used	free	shared	buffers	cached
Mem:	3926	73	3853	0	0	0
-/+ buffers/cache:		73	3853			
Swap:	0	0	0			

```
$
```

```
$ ./allocateandfill &
```

```
[1] 32375
```

```
$ ./allocateandfill &
```

```
[2] 32376
```

```
$ Success
```

```
./allocateandfill &
```

```
[3] 32377
```

```
$ malloc: Cannot allocate memory
```

```
$ free -m
```

	total	used	free	shared	buffers	cached
Mem:	3926	3926	0	0	0	0
-/+ buffers/cache:		3926	0			
Swap:	0	0	0			

```
$
```

So the above error is expected.

Then I set the VE to something over the amount of physical ram on the hardware node...

```
vzctl set 33503 --privvmpages 6G
```

\*Inside the VE\*

```
$ free -m
```

	total	used	free	shared	buffers	cached
Mem:	3926	73	3853	0	0	0
-/+ buffers/cache:		73	3853			
Swap:	0	0	0			

```
$
```

NOTICE no change in the total memory!!?!?

```
$ ./allocateandfill &  
[1] 32483  
$ ./allocateandfill &  
[2] 32484  
$ ./allocateandfill &  
[3] 32485  
$
```

NOTICE no errors!

```
$ free -m  
      total    used    free   shared  buffers   cached  
Mem:    3926    3926      0      0        0        0  
-/+ buffers/cache:    3926      0  
Swap:      0      0      0  
$
```

Memory is totally used up. And it shows just 4Gs. "top" shows the same.

\*On the Hardware node\*

```
free -m  
      total    used    free   shared  buffers   cached  
Mem:    3926    3810    116      0        0        8  
-/+ buffers/cache:    3800    125  
Swap:    4094    1678    2415
```

Notice the hardware node is using all its ram and half the swap. As expected. It needs to grab 6G from somewhere.

So my question: What's up? Why does the VE not show all the memory it has available to it???

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