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???