Subject: privvmpages vs oomguarpages Posted by mose on Mon, 05 Mar 2012 17:42:44 GMT

View Forum Message <> Reply to Message

Debian 6.0.4 2.6.32-5-openvz-amd64 vzctl 3.0.24

RAM: 48GB Swap: 50GB

I am seeing numbers for privvmpages and oomguarpage that don't make sense. According to

wiki.openvz.org/Setting_UBC_parameters

privvmpages is the allocated but possibly unused memory and swap. oomguarpage is the allocated memory and swap. That would imply that if the oomguarpage maxheld reaches the privvmpages barrier, then things will run out of memory (assuming the host has sufficient memory for the container as a whole).

There are times when memory requirements seem to double, and I have not been able to catch when it happens, yet. privvmpages skyrockets, and processes cannot be forked. oomguarpage, on the other hand, is about 1/10 the size of privvmpages.

Is my understanding is correct? If so, what kind of situation would cause a huge amount of memory or swap to be allocated but never used (i.e., privvmpages maxheld of 7309502 but oomguarpage maxheld of only 863096)? Why would that cause processes to run out of memory if oomguarpage maxheld has not reached privvmpages barrier (and there is plenty of memory on HN)? Thanks for your insight to this mystery.

Version: 2.5 uid resource held maxheld barrier limit failcnt 260: kmemsize 341018600 343188622 536870912 603979776 0 256 256 0 lockedpages 0 0 4242756 7309502 6291456 privvmpages 6815744 52 shmpages 10974 49876 262144 262144 0 0 0 0 dummy 0 0 3072 numproc 1054 1058 3072 0 physpages 862616 863096 0 9223372036854775807 0 131072 9223372036854775807 vmguarpages 0 oomquarpage 862616 0 863096 131072 9223372036854775807 numtcpsock 5865 6261 16384 16384 0 2 0 numflock 1 188 206 0 numpty 1 1 16 16 numsiginfo 0 323 1024 1024 0 tcpsndbuf 24281872 28622640 41943040 62914560 0 tcprcvbuf 1047400 1126480 8388608 29360128 0 othersockbu 3511440 4558040 8388608 18874368 0

dgramrcvbu	f 0	4360	262	2144		2621	44	0	
numotherso	c 2143	238	6	4096		40	96	0	
dcachesize	6801366	7133	412	104857	'60		1572	28640	0
numfile	15067	16100	40	960		4096	0	0	
dummy	0	0	0		0	0			
dummy	0	0	0		0	0			
dummy	0	0	0		0	0			
numiptent	30	30	128	3	1.	28	0		