Subject: Memory Tuning for Containers and Beancounters Posted by darinpeterson on Thu, 04 Apr 2013 13:48:36 GMT

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Hi,

Is there a guide somewhere that discusses performance tuning for OpenVZ?

I am running CentOS 6.4 on a Dell PowerEdge server with 1.3TB disk space in a RAID 10 configuration with 32GB of memory.

I run ISPConfig 3 3.0.5.2 which has five containers: mail.example.com - mail server 7GB RAM and 3GB VSwap

rock.example.com - web server 1 7GB RAM and 3GB VSwap

pb.example.com - web server 2 4GB RAM and 2GB VSwap

ns1.example.com - name server 1 1GB RAM and 512MB VSwap

ns2.example.com - name server 2 1GB RAM and 512MB VSwap

In some of the reading I did, I thought I wouldn't have to tweak beancounter parameters if I used RAM and VSwap settings. Did I misunderstand my reading?

Each container is running Debian Squeeze.

I have successfully installed the system, and have made some adjustments of kmemsize and privympages so all software could be installed. My mail server seems to take the most resources.

My goal is to do my best to have these parameters set well before the servers starts getting loaded, and then fine tuning parameters as needed.

Are there any guides to help me do this?

Here is the /proc/user_beancounters for the mail server.

Version: 2.5

uid resourceheldmaxheldbarrierlimitfailcnt1152: kmemsize15543268200499202874540029580328

0

0	lockedpages privvmpages	0 238896	4 268499	2048 262144	2048 2785	0 528
U	shmpages dummy	438 0	438 0	21504 0	21504 0	0
0	numproc physpages	92 146312	117 208039	240 0	240 1835008	0
0	vmguarpages	0	0	33792 9223372036854775807		
-	oomguarpages 0	103501	112197	26112 9223372036854775807		
	numtcpsock	22	40	360	360	0
	numflock	21	22	188	206	0
	numpty	1	15	16	16	0
	numsiginfo	1	27	256	256	0
0	tcpsndbuf	313920	441520	1720320	27033	60
0	tcprcvbuf	360448	434968	1720320	270336	60
0	othersockbuf	191896	247104	1126080	2097	152
0	dgramrcvbuf	0	21800	262144	262144	
Ü	numothersock	158	182	200	200	0
0	dcachesize	1754782	3624960	3409920) 3624	4960
U	numfile	1195	1410	9312	9312	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0
	dummy	0	0	0	0	0
	numiptent	48	48	128	128	0
	питпріені	40	40	120	120	U

If there is anyone who can help provide guidance, I would really appreciate it.

Thank you, Darin

Subject: Re: Memory Tuning for Containers and Beancounters Posted by darinpeterson on Fri, 05 Apr 2013 18:09:23 GMT View Forum Message <> Reply to Message

I'm going to answer my own question, since there haven't been any replies. I figured this out from another forum, where the moderator tole me to have a look at "vzsplit".

With vzsplit, I was able to create a sample container for my system. What it does is analyze my system and returns a configuration based on the number of servers that I provide it.

All of the bean counter settings were recommended as "unlimited", and the SWAPPAGES and PHYSICALPAGES both contained values.

PHYSPAGES="0:3746426" SWAPPAGES="0:7492852"

KMEMSIZE="unlimited" DCACHESIZE="unlimited" LOCKEDPAGES="unlimited" PRIVVMPAGES="unlimited" SHMPAGES="unlimited" NUMPROC="unlimited" VMGUARPAGES="0:unlimited" OOMGUARPAGES="0:unlimited" NUMTCPSOCK="unlimited" NUMFLOCK="unlimited" NUMPTY="unlimited" NUMSIGINFO="unlimited" TCPSNDBUF="unlimited" TCPRCVBUF="unlimited" OTHERSOCKBUF="unlimited" DGRAMRCVBUF="unlimited" NUMOTHERSOCK="unlimited" NUMFILE="unlimited" NUMIPTENT="unlimited"

DISKSPACE="108958367:119854204" DISKINODES="6970492:7667542" CPUUNITS="1000"

That helped answer my question, so I believe I have what I need.

Regards, Darin