Subject: beancounter battle, high failcnt on privvmpages with Zimbra VE
Posted by batfastad on Thu, 17 Dec 2009 18:24:25 GMT
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Hi everyone

I've been tinkering with this for a few days and still not got anywhere.

Our server has 8GB physical memory and an 8GB swap partition running CentOS 5.4 on an Intel E7200 Core2Duo

Got 1 VE up and running which is our Apache/PHP/MySQL intranet... I ran vzsplit -n 8 to generate this config so in theory this VE has 1/8th of the server resources

The 2nd VE is meant to be a Zimbra mail container - I already knew Zimbra was a bit of a memory beast.
But I just can't eliminate or even reduce the failcnt values I'm getting for this VE

I calculated most of the resource parameter values for the zimbra VE by multiplying the apache ones created above by 7... in theory giving me 7/8ths of the physical machine.
I noticed after various runs of vzsplit with different -n values that many of the paramters don't vary with the number of VEs so I kept those constant. I even tried -n 1 to make sure my values were sensible.
vzcfgvalidate said that was ok so I started testing.

The first test I tried I noticed the failcnts on privvmpages
So I decided to up the limit of privvmpages, and again I got roughly the same number of failcnts

Then I decided to try upping the limit to something massive... per this wiki
http://wiki.openvz.org/Zimbra_on_OpenVZ_on_CentOS

I upped the barrier and limit of privvmpages to 2147483647 and still got roughly the same number for failcnt ~17600
Also the failcnt shoots up in the first 1-2mins of VE start

Here's the output of /proc/user_beancounters for that VE
http://www.highbeeches.plus.com/zimbra_beancounters.txt

And here's the zimbra VE conf
http://www.highbeeches.plus.com/zimbra_ve_conf.txt

I'd read up on all this already but thought I'd have a look at the OpenVZ User Guide PDF again and there's this section which is interesting
Quote:vmguarpages: The memory allocation guarantee, in pages (one page is 4 Kb). VPS applications are guaranteed to be able to allocate additional memory so long as the amount of memory accounted as privvmpages (see the auxiliary parameters) does not exceed the configured barrier of the vmguarpages parameter. Above the barrier, additional memory allocation is not guaranteed and may fail in case of overall memory shortage.

Might that be my problem?
Initially my PRIVVMPAGES was set at 1225173:1347690 (see commented out lines of the zimbra_ve_conf linked above) which was above my VMGUARPAGES barrier of 785712

Can anyone suggest sensible values that I should try tweaking these too to get rid of these failcnt?

Just took a look in the conf generated by vzsplit -n 8 and it seems the PRIVVMPAGES barrier was also larger than the VMGUARPAGES barrier... but obviously our intranet VE is underconsuming the resources at the moment as failcnt is all 0

Any advice is appreciated - I really want to use OpenVZ as I've tested so many virt solutions to try and get this going and OpenVZ seems the most flexible and best performing

Cheers, B