Subject: *SOLVED* 4GB problem
Posted by kku9213 on Thu, 25 Jan 2007 20:43:01 GMT
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Hi!

I have small problem with RAM in my server.

The system is debian etch.

When using "standart" 2.6.19.2 i686 linux kernel I have:
pi@debian:~$ cat /proc/meminfo
MemTotal: 4133384 kB

When using vmlinuz-2.6.18-openvz-686 or vmlinuz-2.6.18-openvz-k7 I have:
debian:~/openvz# cat /proc/meminfo
MemTotal: 3612916 kB

Is it normal? If so, why?

Is it wrong kernel? Should I use -enterprise kernel? If so, have you packaged -enterprise kernel for debian?

Thanks in advance,
Krzysztof

Subject: Re: 4GB problem
Posted by youp on Thu, 25 Jan 2007 20:45:21 GMT
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use the entreprise kernel to have more 3G Ram

Subject: Re: 4GB problem
Posted by kku9213 on Thu, 25 Jan 2007 21:34:05 GMT
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thx

Subject: Re: 4GB problem
Posted by dev on Tue, 30 Jan 2007 13:44:46 GMT
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or better entnosplit enterprise has additional overhead due to 4GB/4GB split.

Subject: Re: 4GB problem
Posted by kku9213 on Tue, 30 Jan 2007 16:21:15 GMT
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thx

I use dso repo and there is no entnosplit version there at this moment.

How big is this overhead?

Subject: Re: 4GB problem
Posted by dev on Tue, 30 Jan 2007 16:23:00 GMT
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it depends on the load and system calls.
on most test cases <5%. system call overhead itself is AFAIR about 20%.

Subject: Re: 4GB problem
Posted by curx on Tue, 30 Jan 2007 20:56:34 GMT
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Hi dev,

there's no entnosplit kernel-config for an 2.6.18 (current 028test010.1), still missing ?

Regrads,
Thorsten
--
tsd@debian.systs.org

Subject: Re: 4GB problem
Posted by kku9213 on Tue, 30 Jan 2007 21:43:35 GMT
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It would be gr8 if you add this package to dso

Subject: Re: 4GB problem
Posted by dev on Wed, 31 Jan 2007 09:01:22 GMT
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ouch, if talking about 2.6.18 - it has no 4GB Split patch yet, so enterprise kernel is the same as entnosplit.
in mainstream kernel it will continue to be the same.
for RHEL5 kernel we will ship as redhat does:
2.6.18 (w/o smp suffix, but smp (<=4GB RAM))
2.6.18-PAE (smp with PAE (64GB RAM) support)

plus
2.6.18-enterprise (smp with PAE and 4GB split)