
Subject: CPU Cores with Hyper-threading enabled
Posted by [nytros](#) on Sat, 30 Mar 2013 13:56:45 GMT

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Hello,

I have an i7 server with 4 cores and Hyper-threading enabled. /proc/cpuinfo shows 8 logical cores. My question is how to set the CPU cores in OpenVZ (i use SolusVM).

If i need a VPS to use only 2 REAL cores should i set 2 or 4 in CPU Cores field? If i need it to use all cores should i set 4 or 8? etc. What i mean, the CPU cores field in OpenVZ refers to real cores or logical cores enabled by Hyper-threading?

Thanks,

Subject: Re: CPU Cores with Hyper-threading enabled
Posted by [muttled](#) on Mon, 08 Apr 2013 19:36:50 GMT

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Based on (my understanding of) the way OpenVZ does load balancing, the cpus represented by /proc/cpuinfo are the ones allocated (but shift around, making it unpredictable).

That means if you allocate 4 processors for a container that should have had 2 REAL cores, you're giving them between 50-100% of the actual physical processors (closer to 100% depending on processes) instead of the 50% you were expecting since load would shift around from the HT "logical" processors to the physical processors.

I'd say a rule of thumb would be to assign as many processors as you actually want them to have, and assume that the HT might give a bump sometimes overall when containers are competing for the same real cores. Again, this is based on how I interpret the information from the wiki.
