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Subject: How does one size a HN? Is RAM or CPU more important?

Posted by [jarcher](#) on Thu, 04 Jan 2007 06:49:40 GMT

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Hello...

I have some questions about sizing a hardware node. I read the OpenVZ docs and noted a few things.

First, it says that the low memory, which is 3.6GB when using the enterprise kernel or 382MB when using the Uniprocessor or SMP kernel, is the "most important" RAM area (page 59). Also, on page 60, it says that the number of VPSs can be doubled by using disk swap space.

I don't quite understand the implications of this. Does this mean that installing physical RAM beyond 4GB in the HN is a waste of money, or is that memory used by VPSs? Is this a matter of memory pages being swapped into and out of low memory as needed, and the RAM beyond the first 5.6GB is essentially non-disk swap?

Regarding CPU power, I see that OpenVZ has an app to calculate the "power" of the node in CPU units and we can control the CPU units a VPS is allocated. Is there anywhere a comparison of how many CPU units equates to a specific processor, even roughly? If I had a dual-xenon, how would I know how many VPSs I can cut this into?

I also saw in the manual that it is okay to over commit the HN, but I'm wondering how much over commitment we can get away with. I realize it depends upon how busy each VPS is and there is no hard and fast number for this, but I would appreciate any experience you folks could offer.

Finally, I saw in several places that a HN could be able to run 20 to 50 VPSs, but I'm wondering how much hardware needs to be put in the HN to accomplish that. What tends to be the limiting factor, RAM or CPU? I also seem to recall being told that 100 VPSs are possible on a single HN.

Thanks very much. I would appreciate any insight, as I will be ordering hardware soon.