

---

Subject: Re: Swap Usage

Posted by [kir](#) on Thu, 22 Jun 2006 13:26:45 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Quote:That's not entirely correct. It is indeed teh machine that crashes. It is killing off my application.

Most probably your application is not killed, but just crashes because it can not cope well with the out-of-memory situation. In some cases, though, it's indeed the kernel which kills your application in order for your VE to stay within the boundaries specified by User Beancounters limits.

Quote:I contacted my provider, and spoke to them, but they said that per vps swap is not possible, and that swap is global.

That's correct.

Quote:My question is: If so, how can we ensure quality of service. A provider can use large amount of swap and sell it as memory. If you don't distinguish between RAM and Swap, how can a company make sure that the Service Levels Agreements are met?

Quality of service is implemented via User Beancounters. A physical box is divided into multiple partitions (VEs), that are granted a subset of its resources. There are some explicit guarantees (see `*guar*` parameters in `/proc/user_beancounters`) and some implicit guarantees (if the physical resources are not oversold you'll be able to use resources up to the limits specified in `/proc/user_beancounters`).

What your provider can do is to use `vzmemcheck` and `vzcpucheck` utilities to check if they are overselling or not, and `vzcfgvalidate` utility to check if a set of User Beancounters for a VE is consistent.

What you can do in this situation is to check `/proc/user_beancounters` output, and see if you have some non-zero values in `failcnt` column (as described in wiki: Resource management). If there are some, then you require more than the current hosting plan offers you -- and in that case you either tune your apps to ask for less resources, or ask your provider to give more resources to you (probably by switching to a better hosting plan, or tuning the individual resources).

So, at the end, this is a question of money, not the technology. Believe me, the technology (OpenVZ and it's User Beancounters) is doing its best both for you as a VE owner, and for other VEs on the same box (by not letting you to abuse the physical server resources).

Hope that helps.

---