
Subject: Re: first stable release of OpenVZ kernel virtualization solution

Posted by [dev](#) on Tue, 06 Dec 2005 15:48:25 GMT

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> * Kirill Korotaev <dev@sw.ru> wrote:

>>>but what you have right now is an in essence swapless system, correct?

>>>Do you support swapping at all in OVZ instances?

>

>>Yes, swap is supported and processes are swapped in/out as in usual

>>kernel. The only difference in comparison with std kernel is that UBC

>>limits the amount of swappable memory VPS can have.

>

> i mean, the only way to protect a high-prio instance against a low-prio

> instance doing heavy swapout is by making the low-prio instance

> swapless, correct? (either by not enabling it to swap at all, or by

> tweaking the UBC limits in a way that can never lead to swapping).

correct. But not active/big swapping is ok, as it usually leads system
to some equilibrium... only swap hog is bad.

> how about the 'dirty data creator' scenario: an instance filling up all

> of the RAM with dirty data, at which point a highprio instance is

> significantly impacted.

yes, this can be a problem which should be solved yet.

This can also be limited by UBC settings, but in general your point is
valid.

> my point is, that such a swap or writeout related slowdown of a highprio

> instance can be just as bad as a real DoS - and it brings us essentially

> back to where we started with vserver. (and writeout related slowdowns

> of unrelated instances cannot be avoided even with the most conservative

> UBC settings, correct?)

We plan to use CFQv2 in some near future, but currently writeout is not
controlled by UBC anyhow.

The only note is that currently used disk I/O scheduler (anticipatory)

behaves quite well when one VPS is doing massive writes...

Disk I/O is a kind of problem for any of existing virtualization
solutions and OpenVZ is not different here...

Kirill
