Subject: Questions about vestat measures interpretation
Posted by Atosboy on Thu, 28 May 2009 14:12:54 GMT
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Hi,

We are tyring to analyze the CPU activity of our VPSes by executing a bunch of tests.
To do so:

the CPU states (user, system, idle...) of each VPS are captured every 5 seconds with a "cat" of the /proc/vz/vestat file;
the CPU activity of the host is captured every 5 seconds too but with a "cat" of the /proc/stat file (since vestat does not provide any information about the host, a.k.a. "VPS 0");

We've got the following questions:
1) We found that the 'idle' duration is constant and is about 5 sec. (this has been checked in a test which produces 1200 snapshots...): the 'idle' duration is constant even when the 'user' activity increases strongly.

Since the CPU snapshots are taken every 5 seconds and the processor of our platform is a dual core, we were initially expecting the sum of durations (user+nice+system+idle) to be comprised between 5 and 10 seconds. However, the sum is sometimes far higher because the 'idle' duration never changes.

4) We are wondering if a simple relation exists between the host CPU consumption and the VPSes CPU consumption?
We observe that when the CPU activity of one or more VPSses increases, the host CPU activity increases too, and conversely.
But we do not understand why the host CPU consumption is:

not equal to the sum of all VPSes CPU consumptions;
sometimes, the host CPU consumption (indicated by /proc/stat) is lower than the CPU consumption of one VPS (returned by /proc/vz/vestat)...

Thank you in advance,

Fred

This analyze has been made with:

dual core
host = OpenSUSE 11.1 (64 bits)
4 VPS, OpenSUSE 11.0 32 bits each
OpenVZ for 2.6.27 kernel (kernel-ovz-default-2.6.27.11-aivazovsky.1.43.1.x86_64.rpm)
results have been analyzed according to the following post
http://forum.openvz.org/index.php?t=msg&goto=22953&& amp; amp; amp; amp; amp; amp; amp;

amp; amp; amp; amp; amp; amp; amp;srch=vestat#msg_22953