Subject: Dstat plugin for OpenVZ CPU statistics
Posted by Dag Wieers on Sat, 14 Oct 2006 12:58:21 GMT
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Hi,

I've just written a small dstat plugin to monitor CPU usage per VE. You can find the plugin in the dstat subversion repository linked from:

http://dag.wieers.com/home-made/dstat/

Dstat is much like vmstat, but modular and versatile. So you can extend it with whatever counters you want to visualize, next to other counters. This helps to relate counters and find/troubleshoot bottlenecks.

This plugin can help to find the most consuming VE, or visualize how VE's are matching up to each other (and the system CPU usage).

I don't know whether the nice-value in /proc/vz/vestat is ever used (maybe I shouldn't add it in the list of counters).

I also don't know what other information in /proc/vz would be interesting to vizualise (over a timeframe). I'm willing to add more plugins in dstat for openvz if I know how to make more sense of the current counters (and their usefulness). Feedback from developers welcome :)

Visually it looks like this (without colors though):

```
[root@itmphys01 dstat]# ./dstat -M cpu,vz -f 5
Module dstat_vz is still experimental.
-------cpu0-usage-------------cpu1-usage------ --ve-301-usage----ve-302-usage-
usr sys idl wai hiq siq:usr sys idl wai hiq siq|usr sys idl nic:usr sys idl nic
  0   0  99   0   0   0:  0   0  99   1   0   0|  0   0 100   0:  0   0 100   0
 25  15  50  10   0   0:  1   1  76  22   0   1| 26  15  60   0:  0   0 100   0
 31  18  12  40   0   0:  2   2  70  25   0   1| 33  19  49   0:  0   0 100   0
 16  14  35  35   0   0:  0   1  53  46   0   0| 16  14  70   0:  0   0 100   0
  5   5  59  30   0   0: 16  28  30  26   0   0| 20  32  47   0:  0   0 100   0
  0   0 100   0   0   0:  3   5  88   5   0   0|  2   5  93   0:  0   0 100   0
  0   0  98   1   0   0:  0   0  99   1   0   0|  0   0 100   0:  0   0 100   0
  0   0 100   0   0   0:  0   0  98   1   0   0|  0   0 100   0:  0   0 100   0
  0   0  96   4   0   0:  0   3  97   0   0   0|  0   0 100   0:  0   0 100   0

[root@itmphys01 dstat]# ./dstat -M cpu,vz -C total -f 5
Module dstat_vz is still experimental.
----total-cpu-usage---- --ve-301-usage----ve-302-usage-
usr sys idl wai hiq siq|usr sys idl nic:usr sys idl nic
  0   0  99   1   0   0|  0   0 100   0:  0   0 100   0
  0   0  97   2   0   0|  0   0 100   0:  0   0 100   0
```

```
 19  12  61   8   0   0| 37  23  40   0:  0   0 100   0
 12   8  41  38   0   0| 25  15  61   0:  0   0 100   0
 14  14  35  37   0   0| 28  26  46   0:  0   0 100   0
  4  10  84   3   0   0|  7  20  73   0:  0   0 100   0
  0   0  99   1   0   0|  0   0 100   0:  0   0 100   0
  0   0  99   1   0   0|  0   0 100   0:  0   0 100   0
  0   0  99   1   0   0|  0   0 100   0:  0   0 100   0
  0   0 100   0   0   0|  0   0 100   0:  0   0 100   0
```

All feedback welcomed.

Kind regards,
-- dag wieers, dag@wieers.com, http://dag.wieers.com/ --
[all I want is a warm bed and a kind word and unlimited power]