Subject: Re: [RFC] Virtualization steps
Posted by Herbert Poetzl on Wed, 29 Mar 2006 17:29:01 GMT
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On Wed, Mar 29, 2006 at 06:47:58PM +0400, Kirill Korotaev wrote:

- >>>I wonder what is the value of it if it doesn't do guarantees or QoS?
- >>>In our experiments with it we failed to observe any fairness.
- > >
- > > probably a misconfiguration on your side ...
- > maybe you can provide some instructions on which kernel version to use
- > and how to setup the following scenario: 2CPU box. 3 VPSs which should
- > run with 1:2:3 ratio of CPU usage.

that is quite simple, you enable the Hard CPU Scheduler and select the Idle Time Skip, then you set the following token bucket values depending on what your mean with 'should run with 1:2:3 ratio of CPU usage':

- a) a guaranteed maximum of 16.7%, 33.3% and 50.0%
- b) a fair sharing according to 1:2:3
- c) a guaranteed minimum of 16.7%, 33.3% and 50.0% with a fair sharing of 1:2:3 for the rest ...

for all cases you would set:
(adjust according to you reserve/boost likings)

- a) VPS1: rate = 1, hard, noidleskip
 VPS2: rate = 2, hard, noidleskip
 VPS3: rate = 3, hard, noidleskip
- b) VPS1: rate2 = 1, hard, idleskip VPS2: rate2 = 2, hard, idleskip VPS3: rate2 = 3, hard, idleskip
- c) VPS1: rate = rate2 = 1, hard, idleskip VPS2: rate = rate2 = 2, hard, idleskip VPS3: rate = rate2 = 3, hard, idleskip

of course, adjusting rate/interval while keeping the ratio might help you depending on the guest load (i.e. more batch load type or mor interactive stuff) of course, you can do those adjustments per CPU so, if you for example want to assign one CPU to the third guest, you can do that easily too ...

- > >well, do you have numbers?
- > just run the above scenario with one busy loop inside each VPS. I was
- > not able to observe 1:2:3 cpu distribution. Other scenarios also didn't
- > showed my any fairness. The results were different. Sometimes 1:1:2,
- > sometimes others.

what was your setup?

best, Herbert

- > Thanks,
- > Kirill