Subject: Re: [PATCHSET] 2.6.20-lxc8
Posted by Daniel Lezcano on Wed, 21 Mar 2007 09:47:55 GMT
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Herbert Poetzl wrote:
> On Tue, Mar 20, 2007 at 09:53:01PM +0100, Cedric Le Goater wrote:
>
>> All,
>>
>> We've been gathering, porting and testing a whole bunch of patchsets
>> related to namespaces, containers and resource management in what
>> we call the -lxc patchset.
>>
>
> great!
>
[cut]
>> * generic Process containers from Paul Menage <menage@google.com>
>> * namespace entering from Serge E. Hallyn <serue@us.ibm.com>
>> * resource controllers based on process containers from Pavel Emelianov <xemul@sw.ru>
>> * multiple /proc (required for pid namespace) from Dave Hansen <hansendc@us.ibm.com>
>> * pid namespace from Sukadev Bhattiprolu <sukadev@us.ibm.com>
>> * L2 network namespace from Eric W. Biederman <ebiederm@xmission.com>
>> * misc fixes and cleanups from others (sorry for not mentioning)
>>
>> and it's giving some good results on common platforms like i386 and
>> x86_64.
>>
>
> what _are_ the good results? do you have performance
> results or other interesting data on it? if so, where
> can it be found?
>
Hi Herbert,

I played with the L2 namespace patchset from Eric Biederman, I did some
benchmarking with netperf:

With 2 hosts, Intel EM64T bipro HT / 2,4 GHz , 4Go ram and GB network.
Host A is running the netserver on a RH4 kernel 2.6.9-42
Host B is running the netperf client inside and outside the container
with the command:
 netperf -H HostA -c -l 20 -n 2 -p 12865

Results are:
inside the container:
    Throughput : 940.39 Mbit/s CPU usage : 15.80 %

outside the container:
    Throughput : 941.34 Mbits/s CPU usage : 5.80 %

I did the test again with 50 containers. I created them one by one having one running netperf and the other being idle.
Each time I created a container, I rerun netperf. To be more explicit, I created 1 container, run netperf inside it and blocked it on a fifo reading, I created a second container, run netperf inside it and blocked it, and son on ... to 50 containers. The benchmarking result are the same as running one container, so I guess it scales well.

There are a lot of scenarii to do for benchmarking, for example, running netperf in each container in the same time and look how it behaves.
I am profiling the kernel to look where the cpu overhead is.

Regards.

  -- Daniel

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