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Subject: RE: Container Test Campaign  
Posted by [mef](#) on Wed, 21 Jun 2006 19:25:04 GMT  
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Hello Clement,

Sorry for the late response, as I have been on vacation.

We are interested in this test campaign. Our work so far has focused on performance, scalability, and isolation properties of vserver compared with xen. My guess is that you cc'd me due to the posting of our paper comparing vserver with xen (attached for those of you who have not seen it yet). In what way can be participate/contribute (i.e., where do we start)? We could share our test setup (except SpecWeb 99) that we used for our paper with everyone. Also, we'd appreciate if the folks participating in this test campaign could skim our paper and give us some feedback wrt the evaluation section and the appendix where we describe in reasonable the kernel vars, lvm partition setup, etc., we've used to eliminate differences between systems.

Best regards,  
Marc

> -----Original Message-----  
> From: Clement Calmels [mailto:[clement.calmels@fr.ibm.com](mailto:clement.calmels@fr.ibm.com)]  
> Sent: Wednesday, June 07, 2006 10:20 AM  
> To: [devel@openvz.org](mailto:devel@openvz.org); [vserver@list.linux-vserver.org](mailto:vserver@list.linux-vserver.org)  
> Cc: [kir@openvz.org](mailto:kir@openvz.org); [dev@openvz.org](mailto:dev@openvz.org); [sam.vilain@catalyst.net.nz](mailto:sam.vilain@catalyst.net.nz);  
> [mef@CS.Princeton.EDU](mailto:mef@CS.Princeton.EDU); [clg@fr.ibm.com](mailto:clg@fr.ibm.com); [serue@us.ibm.com](mailto:serue@us.ibm.com);  
> [haveblue@us.ibm.com](mailto:haveblue@us.ibm.com); [dlezcano@fr.ibm.com](mailto:dlezcano@fr.ibm.com)  
> Subject: Container Test Campaign  
>  
>  
> Hello !  
>  
> I'm part of a team of IBMers working on lightweight containers and we  
> are going to start a new test campaign. Candidates are vserver,  
> vserver context, namespaces (being pushed upstream), openvz, mcr (our  
> simple container dedicated to migration) and eventually xen.  
>  
> We will focus on the performance overhead but we are also interested in  
> checkpoint/restart and live migration. A last topic would be how well  
> the  
> resource management criteria are met, but that's extra for the moment.  
>  
> We plan on measuring performance overhead by comparing the results on  
> a vanilla kernel with a partial and with a complete virtual

> environment. By partial, we mean the patched kernel and a 'namespace'  
> virtualisation.  
>  
> Test tools  
> -----  
> o For network performance :  
>  
> \* netpipe (<http://www.scl.ameslab.gov/netpipe/>)  
> \* netperf (<http://www.netperf.org/netperf/NetperfPage.html>)  
> \* tbench (<http://samba.org/ftp/tridge/dbench/README>)  
>  
> o Filesystem :  
>  
> \* dbench (<http://samba.org/ftp/tridge/dbench/README>)  
> \* iozone (<http://www.iozone.org/>)  
>  
> o General  
>  
> \* kernbench (<http://ck.kolivas.org/kernbench/>) stress cpu and  
> filesystem through kernel compilation  
> \* More 'real world' application could be used, feel free to submit  
> candidates...  
>  
> We have experience on C/R and migration so we'll start with our own  
> scenario, migrating oracle under load. The load is generated by DOTS  
> (<http://ltp.sourceforge.net/dotshowto.php>).  
>  
> If you could provided us some material on what has already been done :  
> URL, bench tools, scenarios. We'll try to compile them in. configuration  
> hints and tuning are most welcome if they are reasonable.  
>  
> Results, tools, scenarios will be published on lxc.sf.net . We will  
> set up the testing environment so as to be able to accept new  
> versions, patches, test tools and rerun the all on demand. Results,  
> tools, scenarios will be published on lxc.sf.net.  
>  
> thanks !  
>  
> Clement,

## File Attachments

1) [paper.pdf](#) , downloaded 835 times

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