Subject: Re: [ANNOUNCE] first stable release of OpenVZ kernel virtualization solution
Posted by Andrew Morton on Tue, 06 Dec 2005 03:20:53 GMT
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Kirill Korotaev <dev@sw.ru> wrote:
>
> Hello,
>
> We are happy to announce the release of a stable version of the OpenVZ
> software, located at http://openvz.org/.
>
> OpenVZ is a kernel virtualization solution which can be considered as a
> natural step in the OS kernel evolution: after multiuser and
> multitasking functionality there comes an OpenVZ feature of having
> multiple environments.

Are you able to give us a high-level overview of how it actually is
implemented? IOW: what does the patch do?

> ...
>
> As virtualization solution OpenVZ makes it possible to do the same
> things for which people use UML, Xen, QEmu or VMware, but there are
> differences:
> (a) there is no ability to run other operating systems
>   (although different Linux distros can happily coexist);
> (b) performance loss is negligible due to absense of any kind of
>   emulation;
> (c) resource utilization is much better.

What are OpenVZ's disadvantages wrt the above?

> The dynamic assignment of resources in OpenVZ can significantly improve
> their utilization. For example, a x86_64 box (2.8 GHz Celeron D, 1GB
> RAM) is capable to run 100 VPSs with a fairly high performance (VPSs
> were serving http requests for 4.2Kb static pages at an overall rate of
> more than 80,000 req/min). Each VPS (running CentOS 4 x86_64) had the
> following set of processes:
>
> [root@ovz-x64 ~]# vzctl exec 1043 ps axf
>   PID TTY   STAT   TIME COMMAND
>   1 ?   Ss   0:00 init
> 11830 ?   Ss   0:00 syslogd -m 0
> 11897 ?   Ss   0:00 /usr/sbin/sshd
> 11943 ?   Ss   0:00 xinetd -stayalive -pidfile ...
> 12218 ?   Ss   0:00 sendmail: accepting connections
> 12265 ?   Ss   0:00 sendmail: Queue runner@01:00:00

```
> 13362 ?        Ss     0:00 /usr/sbin/httpd
> 13363 ?        S      0:00  \_ /usr/sbin/httpd
> 13364 ?        S      0:00  \_ /usr/sbin/httpd
> 13365 ?        S      0:00  \_ /usr/sbin/httpd
> 13366 ?        S      0:00  \_ /usr/sbin/httpd
> 13370 ?        S      0:00  \_ /usr/sbin/httpd
> 13371 ?        S      0:00  \_ /usr/sbin/httpd
> 13372 ?        S      0:00  \_ /usr/sbin/httpd
> 13373 ?        S      0:00  \_ /usr/sbin/httpd
> 6416 ?         Rs     0:00 ps axf
```

Do the various kernel instances share httpd text pages?
