
Subject: Fuse O_DIRECT support in RHEL6 kernel
Posted by [zitseng](#) on Fri, 07 Mar 2014 06:05:11 GMT
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Hi there,

I'm trying to use Gluster to store OpenVZ containers. When the OpenVZ containers are configured to use Ploop, O_DIRECT is required to be supported by the underlying FS.

Now, I understand Fuse (and thus gluster-fuse) did not support O_DIRECT in the past. However, I notice that there is a patch to add O_DIRECT into fuse from 2.6.32-220.17.1.el6 kernel:

rpm.pbone.net/index.php3/stat/22/idpl/18082292/com/changelog.html

Using the latest testing OpenVZ kernel (wiki.openvz.org/Download/kernel/rhel6-testing/042stab085.12), which is supposed to be rebased from 2.6.32-431.1.2.el6. I presume that the O_DIRECT support is there. However, I tested and found it not the case. Creating files with O_DIRECT on a gluster mounted volume will fail.

Any help with what might be wrong? Thanks.

Regards,

.lzs

Subject: Re: Fuse O_DIRECT support in RHEL6 kernel
Posted by [zitseng](#) on Mon, 10 Mar 2014 08:53:28 GMT
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I forgot to add earlier that I have tested with the plain CentOS kernel 2.6.32-431.5.1.el6, and O_DIRECT works fine.

Anyway, I've figured out that the fuse module in the OpenVZ patch is not quite the same as the plain CentOS 2.6.32-431.5.1.el6. The O_DIRECT support is not enabled by default. Instead, one needs to give the `direct_enable` option to fuse to have the support enabled.

Then, alas, it still does not work. I didn't realise, ploop specifically requires ext4 (maybe ext2 and ext3 too?) or NFS. It will just not work with other FS.

Thought I'd share this in case anyone is looking into OpenVZ with containers in Ploop format stored on a Gluster mount.
