Subject: Re: [Q] missing unused dentry in prune_dcache()?
Posted by vaverin on Fri, 27 Oct 2006 11:50:59 GMT
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David,

David Howells wrote:
> Vasily Averin <vvs@sw.ru> wrote:
>> Therefore I believe that my patch is optimal solution.
> I'm not sure that prune_dcache() is particularly optimal.

I means that my patch is optimal for problem in subject. I would like to ask you
to approve it and we will go to next issue.

> If we're looking to
> prune for a specific superblock, it may scan most of the dentry_unused list
> several times, once for each dentry it eliminates.
>
> Imagine the list with a million dentries on it. Imagine further that all the
> dentries you're trying to eliminate are up near the head end: you're going to
> have to scan most of the list several times unnecessarily; if you're asked to
> kill 128 dentries, you might wind up examining on the order of 100,000,000
> dentries, 99% of which you scan 128 times.

I would note that we (Virtuozzo/OpenVZ team) have seen similar issue on praxis.
We have kernel that handles a few dozens Virtual servers, and each of them have
the several isolated filesystems. We have seen that umount (and remount) can
work very slowly, it was cycled inside shrink_dcache_sb() up to several hours
with taken s_umount semaphore.

We are trying to resolve this issue by using per-sb lru list. I'm preparing the
patch for 2.6.19-rc3 right now and going to send it soon.

thank you,
Vasily Averin