
Subject: Re: [PATCH] diskquota: 32bit quota tools on 64bit architectures

Posted by [Arnd Bergmann](#) on Sat, 21 Oct 2006 16:28:32 GMT

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On Friday 20 October 2006 08:10, Vasily Tarasov wrote:

> Christoph Hellwig wrote:

>

> <snip>

>

> > Please allocate the structure using `compat_alloc_userspace` and copy

> > with `copy_in_user` instead of the `set_fs` trick.

>

> <snip>

>

> Good idea, thank you for your tip, I'll do it.

I think it would be even better to integrate this into `fs/quota.c` and get rid of the extra copy entirely. The only thing you need to do differently in case of 32 bit `Q_GETQUOTA` is the size of the `copy_{from,to}_user`.

On a related topic, I just noticed

```
typedef struct fs_qfilestat {
    __u64 qfs_ino; /* inode number */
    __u64 qfs_nblks; /* number of BBs 512-byte-blks */
    __u32 qfs_nextents; /* number of extents */
} fs_qfilestat_t;
```

```
typedef struct fs_quota_stat {
    __s8 qs_version; /* version number for future changes */
    __u16 qs_flags; /* XFS_QUOTA_{U,P,G}DQ_{ACCT,ENFD} */
    __s8 qs_pad; /* unused */
    fs_qfilestat_t qs_uquota; /* user quota storage information */
    fs_qfilestat_t qs_gquota; /* group quota storage information */
    __u32 qs_incoredq; /* number of dqots incore */
    __s32 qs_btlimit; /* limit for blks timer */
    __s32 qs_itlimit; /* limit for inodes timer */
    __s32 qs_rtbtlimit; /* limit for rt blks timer */
    __u16 qs_bwarnlimit; /* limit for num warnings */
    __u16 qs_iwarnlimit; /* limit for num warnings */
} fs_quota_stat_t;
```

This one seems to have a more severe problem in `x86_64` compat mode. I haven't tried it, but isn't everything down from `gs_gquota` aligned differently on `i386`?

Arnd <><
