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

Posted by [Vasily Tarasov](#) on Mon, 18 Jun 2007 07:41:12 GMT

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On Fri, 2007-06-15 at 17:24 +0200, Arnd Bergmann wrote:

> On Friday 15 June 2007, Vasily Tarasov wrote:

> > I just noticed that we can not avoid the addition of packed attribute.

> > Look, for example:

> >

```
> > struct if_dqblk {  
> >     __u64 dqb_bhardlimit;  
> >     __u64 dqb_bsoftlimit;  
> >     __u64 dqb_curspace;  
> >     __u64 dqb_ihardlimit;  
> >     __u64 dqb_isoftlimit;  
> >     __u64 dqb_curinodes;  
> >     __u64 dqb_btime;  
> >     __u64 dqb_itime;  
> >     __u32 dqb_valid;
```

```
> > };
```

> >

```
> > sizeof(if_dqblk) = 0x48
```

```
> > On 32 bit: 0x44
```

> >

> > If I replace __u64/__u32 with compat equivalents - it will not help!

> > aligned attribute can only increase the size of structure, but not

> > decrease it.

>

> No, the gcc documentation isn't quite clear there, see the discussion about

> compat_u64 and compat_s64 types. It actually does the right thing when

> you use 'typedef __u64 __attribute__((aligned(64))) compat_64', as my

> patch does.

>

> Arnd <><

>

Wow!... Thank you for the explanation.

I'll resend the patch soon.

Vasily
