

## Re: [patch 4/6] Convert PDA into the percpu section

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  - *Date:* Sat, 31 Mar 2007 12:54:17 +1000
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On Sat, 2007-03-31 at 04:35 +0200, Andi Kleen wrote:

On Saturday 31 March 2007 04:00, Jeremy Fitzhardinge wrote:

Currently x86 (similar to x84-64) has a special per-cpu structure called "i386\_pda" which can be easily and efficiently referenced via the %fs register. An ELF section is more flexible than a structure, allowing any piece of code to use this area. Indeed, such a section already exists: the per-cpu area.

Hmm, I'm a little reluctant. This moves i386 more away from x86-64 again. If we ever merge them it would mean more work. Do you really need it?

Well, I think the merge should go the other way in this case: this really does simplify things.

The only thing stopping x86-64 from doing the same as i386 is the stack-protector stuff. And that can be fixed (unfortunately requires a gcc patch to change the %gs:40 to %gs:\_\_gcc\_stack\_protector\_offset and emit a weak absolute symbol \_\_gss\_stack\_protector\_offset = 40).

I shall prepare a patch for that next week; I've been busy Kleening up lguest 8)

Rusty.

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