Subject: Re: Optimized memcmp for x86

Posted by mirek on Wed, 12 Mar 2008 20:27:08 GMT

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mr_ped wrote on Wed, 27 February 2008 05:43I was thinking about it a bit more, and I think some serious profiling data should be gathered, i.e. how often it is called with aligned pointers.

I think this function itself is rarely used? And if it is, it may often be used to search trough strings? And in such case the pointers will be not aligned very often?

I mean, is this really worth of effort? Only some profiling of real applications can tell.

But it was nice mental exercise anyway.

Well, the primary motivation was the speedup for small strings - there data definitely are aligned and even the number of characters is fixed.

This optimization seems to bring in about 5% improvement to container benchmark where Sort is used. That is not bad.

Anyway, for non-small strings, we do have guarantee that data are always aligned, so I will probably directly use even unaligned version For String alone, this optimization is worthwhile.

Mirek