Subject: Re: Optimized memcmp for x86

Posted by mr_ped on Sat, 23 Feb 2008 17:56:06 GMT

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Yes, that's the problem.

In good old days of ZX Spectrum I was sure I can read beyond "len" and nothing will happen (except getting weird data).

But nowadays I don't know so much about different platforms and OS to be sure you can read aligned double word without causing some exception or crash of application.

I think x86 works usually with aligned memory allocation, so you basically can NOT allocate like 13 bytes only, but the "THINK" word is the crucial part of this sentence.

The C++ itself does not do any memory read checking, so it's up to OS. So I think the testing application which will allocate memory by OS mem allocator directly would give us the reliable answer.

Than again if such OS allocators allow to allocate only for example 4kB chunks and not 13 bytes, I think it will never raise exception or crash and you may safely read beyond end of buffer.