
Subject: Re: Writing Bits object to disk

Posted by [mirek](#) on Tue, 16 May 2017 08:39:44 GMT

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crydev wrote on Tue, 16 May 2017 09:12Hi Mirek,

How do you feel about adding a Bits::Set function that allows the user to put in packed bools? I was thinking about a function such as the following:

```
void Bits::VectorSet(int i, const dword bits32)
{
    ASSERT(i >= 0 && alloc >= 0);
    int q = i >> 5;

    if(q >= alloc)
        Expand(q);

    i &= 31;

    // Just place the input DWORD in position q in the Bits data buffer.
    bp[q] = bits32;
}
```

Maybe with some checks, this is just an idea. I mean, this function works in my testcase because I only work with multiples of 32. Even though, this could be used as an assumption to make it fast. It accepts a bitset dword and directly sets it. This allows efficient use of the Bits structure while preparing the actual packed bools structure with SSE2 instructions like `_mm_movemask_epi8`.

Thanks!

crydev

I feel good about it, but I definitely think that it should be able to handle boundaries correctly...

I mean, this only works if `i % 32 == 0`. Should work in all other cases too, with variable number of bits.
