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Subject: Latest change on FileMapping::Map() wrong for win32

Posted by [hans](#) on Thu, 15 Oct 2009 17:36:32 GMT

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Today svn update, file Stream.cpp, line 1342 is changed

from

```
if(!rawbase)
    return false;
```

to

```
if(rawbase == (byte *)~0)
    return false;
```

but the test for ~0 should go into the Linux section only,  
as MapViewOfFile on windows returns NULL on  
error.

greetings, Hans.

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Subject: Re: Latest change on FileMapping::Map() wrong for win32

Posted by [mirek](#) on Sun, 18 Oct 2009 19:25:09 GMT

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Thank you. I have changed to code, please check:

```
bool FileMapping::Map(int64 mapoffset, dword maplen)
{
    ASSERT(IsOpen());
    if(maplen == 0)
        return Unmap();
    mapoffset = minmax<int64>(mapoffset, 0, filesize);
    int gran = sMappingGranularity_();
    int64 rawoff = mapoffset & -gran;
    maplen = (dword)min<int64>(maplen, filesize - mapoffset);
    dword rawsz = (dword)min<int64>((maplen + (dword)(mapoffset - rawoff) + gran - 1) & -gran,
    filesize - rawoff);
    if(rawbase && (mapoffset < rawoffset || mapoffset + maplen > rawoffset + rawsize))
        Unmap();
    if(!rawbase) {
        rawoffset = rawoff;
        rawsize = rawsz;
    }
}
```

```
#ifdef PLATFORM_WIN32
    rawbase = (byte *)MapViewOfFile(hmap, /*write ? FILE_MAP_WRITE :*/ FILE_MAP_READ,
        (dword)(rawoffset >> 32), (dword)(rawoffset >> 0), rawsize);
#else
    rawbase = (byte *)mmap(0, rawsize,
        PROT_READ | (write ? PROT_WRITE : 0),
#ifdef PLATFORM_FREEBSD
        MAP_NOSYNC,
#else
        MAP_SHARED,
#endif
        hfile, (dword)rawoffset);
#endif
#ifdef PLATFORM_POSIX
    if(rawbase == (byte *)~0)
#else
    if(!rawbase)
#endif
        return false;
}
offset = mapoffset;
size = maplen;
base = rawbase + (int)(offset - rawoffset);
return true;
}
```

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Subject: Re: Latest change on FileMapping::Map() wrong for win32  
Posted by [rylek](#) on Sun, 18 Oct 2009 19:55:05 GMT  
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Ah, thanks, sorry, my stupidity .

Tomas

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Subject: Re: Latest change on FileMapping::Map() wrong for win32  
Posted by [hans](#) on Sun, 25 Oct 2009 18:04:33 GMT  
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Hi, the code for the return test is now OK (last SVN version),  
but after some testing I found two other bugs.

In bool FileMapping::Map(int64 mapoffset, dword maplen) there is commented out (on windows  
version only) the write flag, this  
leads to Access violation on write access. Should be

```
#ifdef PLATFORM_WIN32
    rawbase = (byte *)MapViewOfFile(hmap, write ? FILE_MAP_WRITE : FILE_MAP_READ,
        (dword)(rawoffset >> 32), (dword)(rawoffset >> 0), rawsize);
#else
```

More strangely, the  
bool FileMapping::Create(const wchar \*file, int64 filesize\_, bool delete\_share) function is wrong on  
windows too. The created file is zero size, so line

```
hmap = CreateFileMapping(hfile, NULL, PAGE_READWRITE, 0, 0, NULL);
fails.
```

It should set the file size, so please change to:

```
long lo = (dword)filesize_, hi = (dword)(filesize_ >> 32);
hmap = CreateFileMapping(hfile, NULL, PAGE_READWRITE, hi, lo, NULL);
```

Greetings,  
Hans

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Subject: Re: Latest change on FileMapping::Map() wrong for win32  
Posted by [hans](#) on Sun, 15 Nov 2009 18:29:43 GMT  
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Hi,  
change is not in SVN yet.

Anything wrong with my code or thoughts?

greetings,  
Hans

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Subject: Re: Latest change on FileMapping::Map() wrong for win32  
Posted by [rylek](#) on Sun, 15 Nov 2009 20:11:42 GMT  
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Hello Hans!

I've just posted your fixes to the Stream.cpp file.

Regards

Tomas

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