
Subject: Re: MacOS X woes

Posted by [mirek](#) on Wed, 20 Dec 2006 08:29:12 GMT

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lundman wrote on Wed, 20 December 2006 03:14

Right

```
Breakpoint 1, Upp::RichEdit::SerializeSettings (this=0xbff707c, s=@0xbffe6c20) at
/Users/lundman/src/upp/uppsrc/RichEdit/Editor.cpp:453
453 int version = 1;
(gdb) s
454 s / version;
(gdb) s
Upp::Stream::operator/ (this=0xbffe6c20, i=@0xbffe69b8) at Stream.h:223
223 Stream& operator/(int& i) { dword w = i + 1; Pack(w); i = w - 1; return *this; }
(gdb) s
Upp::Stream::Pack (this=0xbffe6c20, w=@0xbffe6958) at
/Users/lundman/src/upp/uppsrc/Core/Stream.cpp:471
471 if(IsError()) return;
(gdb) n
491 }
(gdb) n
0x0041d410 in Upp::Stream::operator/ (this=0xbffe6c20, i=@0xbffe69b8) at Stream.h:223
223 Stream& operator/(int& i) { dword w = i + 1; Pack(w); i = w - 1; return *this; }
(gdb) n
Upp::RichEdit::SerializeSettings (this=0xbff707c, s=@0xbffe6c20) at
/Users/lundman/src/upp/uppsrc/RichEdit/Editor.cpp:455
455 s % unit;
(gdb) p version
$4 = 1
(gdb) p unit
$5 = 1
(gdb) s
Upp::Stream::operator% (this=0xbffe6c20, d=@0xbfffb67c) at
/Users/lundman/src/upp/uppsrc/Core/Stream.cpp:585
585 SerializeRaw((dword *)&d, 1);
(gdb) s
Upp::Stream::SerializeRaw (this=0xbffe6c20, data=0xbfffb67c, count=1) at
/Users/lundman/src/upp/uppsrc/Core/Stream.cpp:457
457 SerializeRaw((byte *)data, 4 * count);
(gdb) s
Upp::Stream::SerializeRaw (this=0xbffe6c20, data=0xbfffb67c "", size=4) at
/Users/lundman/src/upp/uppsrc/Core/Stream.cpp:442
442 if(IsError()) return;
(gdb) n
447 }
(gdb) n
Upp::Stream::SerializeRaw (this=0xbffe6c20, data=0xbfffb67c, count=1) at
```

```

/Users/lundman/src/upp/uppsrc/Core/Stream.cpp:459
459 EndianSwap(data, count);
(gdb) p data
$6 = (dword *) 0xbfffb67c
(gdb) p *data
$7 = 1
(gdb) n
461 }
(gdb) p *data
$8 = 16777216
(gdb) n
Upp::Stream::operator% (this=0xbffe6c20, d=@0xbfffb67c) at
/Users/lundman/src/upp/uppsrc/Core/Stream.cpp:586
586 return *this;
(gdb)
587 }
(gdb)
Upp::RichEdit::SerializeSettings (this=0xbfff707c, s=@0xbffe6c20) at
/Users/lundman/src/upp/uppsrc/RichEdit/Editor.cpp:456
456 s % showcodes;
(gdb) p unit
$9 = 16777216

```

Seems it is given a default value, then gets EndianSwapped, when maybe it should only be endianswapped when read?

Oops. I am stupid. There must be TWO swaps, one before SerializeRaw, second after it!

```

void Stream::SerializeRaw(word *data, dword count) {
#ifdef CPU_BE
    EndianSwap(data, count);
#endif
    SerializeRaw((byte *)data, 2 * count);
#ifdef CPU_BE
    EndianSwap(data, count);
#endif
}

void Stream::SerializeRaw(dword *data, dword count) {
#ifdef CPU_BE
    EndianSwap(data, count);
#endif
    SerializeRaw((byte *)data, 4 * count);
#ifdef CPU_BE

```

```
    EndianSwap(data, count);
#endif
}

void Stream::SerializeRaw(uint64 *data, dword count) {
#ifdef CPU_BE
    EndianSwap(data, count);
#endif
    SerializeRaw((byte *)data, 8 * count);
#ifdef CPU_BE
    EndianSwap(data, count);
#endif
}
```

(later we most likely should speed optimize that)

Mirek
