

# Debugging corrupted memory

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*Source:* [http://coding.derkeiler.com/Archive/C\\_CPP/comp.lang.c/2008-05/msg01383.html](http://coding.derkeiler.com/Archive/C_CPP/comp.lang.c/2008-05/msg01383.html)

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  - *Date:* Sun, 11 May 2008 00:02:20 +0200
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Hello,

i allocated a pointer to a user-defined struct. The value of the pointer is something like 0x000002aaaa (can't remember actually, I don't have the computer running the code with me). Then I perform some stuff on the allocated structure which must be buggy since after its execution the value of the pointer is something like 0xfffff2aaaa, i.e. same lsb, different msb. I don't know where to start to debug this. Obviously, when I run the program I get a SIGSEGV when dereferencing the pointer and valgrind shows no indication of invalid memory access. Do you have any clue on how to start debugging this. Below is the template of my code.

```
static int do_stuff()
{
obj_t res = *calloc((size_t)1, sizeof(obj_t));
// res is 0x000000..
obj_iterate(res);
// res is 0xfffff..
do_other_stuff(res->field); <-- SIGSEGV
}
```

Julien

PS: my architecture is X86\_64, Linux, gcc-4; code is compiled without optimization, debugging symbols activated

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