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Subject: Some debugging improvements on linux  
Posted by [mdelfede](#) on Fri, 27 Jan 2012 00:45:10 GMT  
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Hi,

tired of seeing things like this when debugging on GDB:

```
{<Upp::Moveable<Upp::String, Upp::AString<Upp::String0> >> = {<Upp::AString<Upp::String0>>
= {<Upp::String0> = {<Upp::Moveable<Upp::String0, Upp::EmptyClass>> = {<Upp::EmptyClass>
= {<No data fields>}, <No data fields>}, len = 13, s = 0x7fffffffdf70 "a test string", {
    chr = "a test string\000\000\r", ptr = 0x7320747365742061 <Address 0x7320747365742061
out of bounds>, wptr = 0x7320747365742061,
    qptr = 0x7320747365742061, v = {8289, 25972, 29811, 29472, 29300, 28265, 103, 3328},
w = {1702109281, 1931506803, 1852404340,
    218103911}, q = {8295758552588623969, 936749166727098996}}, static voidptr =
{{refcount = 2, alloc = 0}, {refcount = 0,
    alloc = 0}}}, <No data fields>}, <No data fields>}, <No data fields>}
```

Which is all but human-readable, I wrote a small IDE addon to allow embedding of python pretty-printers into debugger; the result above is :

```
"a test string"
```

Which is a bit more clear

I'll attach the IDE patches; it's enough to unpack the code in

```
uppsrc/ide/Debuggers
```

folder, overwriting the old ones.

I plan to extend python scripts and to make small mods to debugging code to encompass most Upp types.

By now, String and an initial Vector support are embedded.

Ciao

Max

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### File Attachments

1) [Debuggers.zip](#), downloaded 396 times

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Subject: Re: Some debugging improvements on linux  
Posted by [dolik.rce](#) on Fri, 27 Jan 2012 06:09:10 GMT  
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Hi Max,

That looks great I'm using pretty printers for STL at work, but it never occurred to me that we could use the same mechanism for U++... Do you have any idea about the compatibility with different gdb versions? I think it should work in gdb 7.0 and newer, but I also remember something important didn't work before 7.4. If 7.0 is the only requirement, it should be safe to add this to U++, as it would work in all currently supported distributions. And it would sure make our life easier

Best regards,  
Honza

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Subject: Re: Some debugging improvements on linux  
Posted by [mdelfede](#) on Fri, 27 Jan 2012 07:15:52 GMT  
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IIRC pretty-printing is supported from GDB 7.0... I really don't know how many gdb versions are used around.

BTW, I was thinking to go a bit further, rewriting from scratch the GDB interface and using python to communicate from upp to gdb.

That should allow to have a more usable and complete debugger in Linux....

Max

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