Subject: A little experiment with smarter debugging
Posted by cbpporter on Fri, 13 Nov 2009 08:47:27 GMT
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I find that String0::Dsyn is quite an ugly hack and it makes understanding string a lot harder, especially because of the macro juggling with _DEBUG and COMPILER_GCC in String and String0. I think this should be addressed by the debugger without bloating up String in debug mode, so I did a little experiment. I removed the "len" fields, and added this to ide/Debuggers/Visulize.cpp:

```
if (t.name == "Upp::String") {
  if(cm)
   result.Cat(", ");
  result.Cat("len");
  result.Cat("=", SColorMark);
  union {
   char   temp[16];
   dword  w[4];
  };
  if(!Copy(val.address, &temp, sizeof(temp)))
   result.Cat("\"Error\"", Green);
  int len = 0;
  if (temp[14] == 0)
   len = temp[15];
  else
   len = w[2];
  result.Cat(IntFormat(len), Cyan);
 }
```

This works well and can be adapted for "s" field. What is you opinion on making the debugger "understand" String? As far as I can tell there are just a few tricky classes like String, so the effort wouldn't be that great. The disadvantage is that outside TheIDE, people would have a harder time debugging strings, so maybe we could keep Dsyn, but only use it if Core is compiled with an option for that.