

WG21/N2605 = J16/08-0115  
WG14/N1309

April 28, 2008  
Thomas Plum, tplum@plumhall.com

### **Changing some “undefined behavior” into “ill-formed”**

C++ paper WG21/N1627 anticipated that a number of current undefined behaviors would be converted to ill-formed status, after consultation with WG14. However, further discussion has led to a different conclusion.

All of these compile-time undefined behaviors permit severe compile-time diagnosis already; that’s one of the options for any undefined behavior. Any static-analysis tool that targets the software-security or safety-critical markets is already free to severely diagnose any undefined behavior.

Therefore, given that WG21 and WG14 have significant workloads, the small group reviewing this topic chose to leave the status quo, closing all action items on this issue.

Here are some references to the paper trail:

Core Issue 195. “Converting between function and object pointers” in  
[http://www.open-std.org/jtc1/sc22/wg21/docs/cwg\\_defects.html](http://www.open-std.org/jtc1/sc22/wg21/docs/cwg_defects.html)

WG21/N1627, William M. Miller, “Conditionally-Supported Behavior (Rev. 1)”,  
<http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2004/n1627.pdf>

WG21/N1564, William M. Miller, “Core Issue 195 and ‘Conditionally-Supported Behavior’”, <http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2004/n1564.pdf>