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# cling goes public!

Submitted by axel on Tue, 30/08/2011 - 21:08

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Hi,

We, the cling team, have [announced](#) [4] [cling](#) [5], our C++ interpreter prototype! (note: its SVN repository has changed compared with the announcement email; see [the build instructions](#) [6])

To a large extend thanks to Vassil's impressive commitment, cling now behaves like a good C++ interpreter: it runs C++ code that's entered, and prints the results.

```
[cling]$ #include <cmath>
[cling]$ double x = std::sin(3.1)
(double) 4.158066e-02
[cling]$ .L libz
[cling]$ #include "zlib.h"
[cling]$ zlibVersion()
(const char * const) "1.2.3.4"

$ echo 'extern "C" const char* zlibVersion();
      zlibVersion()' | cling -lz

(const char * const) "1.2.3.4"
```

We have of course already added a few features that we liked from CINT - but cling is a completely new development, based on [clang](#) [7] and [llvm](#) [8], a set of compiler libraries (to simplify the matter a bit :-). Vassil will present the innards of cling probably in October; I will post the slides here.

So what's special about cling? It's based on a production-grade compiler and it's designed taking decades of experience with CINT into account. And it doesn't need dictionaries! (Disclaimer: that does not mean that ROOT can do without, automatically. But that's our goal, of course.)

The next steps will be the ones most relevant for High Energy Physics: integration into ROOT (Paul is already working on that) and reloading of changed code (.x myCode.C, edit, .x myCode.C). That latter part is *horrible* for a compiler.

If you want to check cling out you can simply [compile](#) [6] it yourself - it's really easy. I'd love to have an interactive, web-based interface once, but an online C++ interpreter is an invitation for script kiddies to hack the server :-). (If you have an idea how to do it please let me know!)

Cheers,



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**Source URL:** <http://root.cern.ch/drupal/content/cling-goes-public>

## Links:

- [1] <http://root.cern.ch/drupal/category/package-context/c>
- [2] <http://root.cern.ch/drupal/category/package-context/cling>
- [3] <http://root.cern.ch/drupal/category/package-context/interpreter>
- [4] <http://lists.cs.uiuc.edu/pipermail/cfe-dev/2011-July/016325.html>
- [5] <http://cern.ch/cling>
- [6] <http://root.cern.ch/drupal/content/cling-build-instructions>
- [7] <http://clang.llvm.org>
- [8] <http://llvm.org>