C++ Club Meeting Notes

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Concepts in-place syntax, by Herb Sutter

P0745

```
Concepts TS and P0694:

1 void sort(Sortable& s);

P0745:

1 void sort(Sortable{}& s);
```

Feedback on the distributed C++ meetup

- Post by Jean Guegant
- ▶ Video
- Lessons:
 - ► Two-city format is best, 3-city is too much
 - Need breaks
 - 15-min talks are ideal
 - Slides need a bigger font
 - Mandatory NDA is bad
 - ► Turn the lights on in the audience

Boost 1.67

- Changes
- New libraries:
 - ▶ Boost.Contract Support for contract-based programming
 - ▶ Boost.HOF Higher-order functions

Blast from the Past: Borland C++ on Windows 98

- Post
- ▶ QEMU
- ► Windows 98SE The Internet Archive
- ▶ Borland C++ 5.02 The Internet Archive

Apple switches from libclang to Clangd

Announcement

We at Apple have decided to switch focus from supporting the libclang-based tooling infrastructure in order to join forces on the Clangd development efforts. We believe that Clangd is the preferred solution for interactive Clang-based tooling. There has been great work on Clangd already, and we're going to start investing effort as well to make Clangd faster, more capable, and more efficient.

The C++ committee has taken off its ball and chain

- ► Post by Derek Jones
 - ► Is C++ a language of exciting new features?
 - ► Is C++ a language known for great stability over a long period?
- ▶ Reddit

Modern C++ isn't memory safe, either

- ▶ Post by Mahmoud Al-Qudsi
 - ► C++ vs. Rust alert!

Original STL Library Documentation Recovered by Robert Ramey

► STL Docs

Boris Schäling - Containers in Boost (C++Now 2013)

- YouTube
- ▶ Boost.Multiindex multiple interfaces (indexes) for item lookup
- ▶ Boost.Bitmap a std::map-like container which supports lookups from both sides
- Boost.Container same containers as in the C++ standard library but with extra comfort:
 - Support for recursive containers
 - ▶ Stable versions of vector, set, map; single-linked list
 - ▶ SSO
- Boost.Intrusive containers that store the original objects instead of their copies

Boris Schäling - Containers in Boost (C++Now 2013) (cont.)

- ▶ Boost.PointerContainer manages dynamically allocated objects (similar to std::vector<std::unique_ptr>)
- Boost.CircularBuffer a fixed-size container that overwrites elements if you add more
- Boost.Lockfree a lock-free queue and stack that can be concurrently modified from different threads
- Boost.PropertyTree a serializable key/value pair container for storing configuration data; supports XML, JSON and INI formats

Boris Schäling - Containers in Boost (C++Now 2013) (cont.)

- Boost.Multiarray a multidimensional array; index-based access returns a subarray; reshaping and resising supported
- Boost.DynamicBitset like std::bitset but the size can be set/changed at run time
- ▶ Boost.Heap like std::priority_queue but with additional functionality
- Boost.Array use std::array instead
- Boost.Unordered use unordered containers from the C++ standard library instead

Twitter



Quote

Edsger Dijkstra:

Program testing can be a very effective way to show the presence of bugs, but is hopelessly inadequate for showing their absence.