C++ Club Meeting Notes

Gleb Dolgich

2018-06-28

CLion 2018.2 EAP

Announcement

- **clangd** as an additional (not you Windows!) C++ language engine

Announcement

- ▶ convert basic macros to constexpr
- ▶ experimental code analysis features
- ▶ Template IntelliSense
- ▶ clang-format
- ▶ improved CMake support
- ▶ C++ Quick Info Tooltips (show expanded macros)

What is a good Package Manager for C++?

Reddit thread

No matter which one you use, you'll probably be pretty disappointed.

std::variant Doesn't Let Me Sleep, by Pablo Arias (ht to Gergely Petrik)

▶ Post
▶ The most valuable values – Juanpe Bolívar – Meeting C++ 2017
▶ Overload: Build a Variant Visitor on the Fly
▶ folly/Overload.h

Raffle (C++17, ranges, asio, json)

Fetches the names of all RSVP members of a meetup event and randomly chooses
The Raffle Winner.

- ▶ Code
- ▶ Reddit thread

- ▶ Radiation
  - ▶ Single Event Upset (SEU)
  - ▶ Single Event Latch (SEL)
  - ▶ Error Correcting Code (ECC)
  - ▶ Memory scrubbing
  - ▶ Radiation-hardened components
- ▶ Log or hard error
  - ▶ Log for each requirement
  - ▶ Not all errors are hard errors
  - ▶ Depends on system under test – some systems are more expensive to test than others

▶ Release notes
▶ P0645
▶ Support for ranges, containers and types with tuple interface

{fmt} supports colours

Victor Zverovich
@vzverovich

⤒ 2 Replies, 1 Quote

{fmt} now has experimental RGB color support enabled with FMT_EXTENDED_COLORS macro. Thanks to GitHub user Remotion! #fmtlib #formatting #cpp

23/06/2018, 15:14 (Today)
Twitter Web Client

| 7 Likes | 0 Retweets | Thread ＞ |

```
viz-mbp:fmt viz$ cat color.cc
#define FMT_EXTENDED_COLORS
#define FMT_HEADER_ONLY
#include "fmt/format.h"

int main() {
  fmt::print(fmt::color::steel_blue, "Much color, so steel, wow\n");
}
viz-mbp:fmt viz$ g++ color.cc -std=c++11 -Iinclude -ocolor
viz-mbp:fmt viz$ ./color
Much color, so steel, wow
```

Victor Zverovich
@vzverovich

Wow, Qt Creator shows the actual color in a tooltip when you hover the cursor over fmt::rgb. Very cool. #qtcreator

23/06/2018, 15:42 (Today)
Twitter Web Client

| 1 Likes | 0 Retweets | Thread ＞ |

```
TEST(ColorsTest, Colors) {
  EXPECT_WRITE(stdout, fmt::print(fmt::rgb(255,20,30), "rgb(255,20,30)"),
               "\x1b[38;2;255;020;030mrgb(255,20,30)\x1b[0m");
  EXPECT_WRITE(stdout, fmt::print(fmt::color       ,"blue"),
               "\x1b[38;2;000;000;255mblue\x1b[0m");
}
```

zapcc is a caching C++ compiler based on clang, designed to perform faster compilations.

▶ Code (LLVM)

Getting started with Meson in C++

- ▶ Part 1
- ▶ Part 2
- ▶ Part 3

Using Conan with Premake

- Article

Digital Mars C++ compiler source code

- ▶ Code

NanoRange: a MSVC-compatible Ranges TS implementation for C++14

- ▶ Code (BSL)
- ▶ Reddit thread

Twitter

bcj
@bcjbcjbcj

↑ 6 Replies, 5 Quotes

Nothing can prevent me from writing bad code

Aaron Patterson @tenderlove
Static types don't prevent you from writing
bad code

19/06/2018, 19:34 (Tuesday)
Tweetbot for Mac

Retweeted by @rosyna
21/06/2018, 05:38

657 Likes   165 Retweets   Thread ›