C++ as a service — rapid software development and dynamic interoperability with Python and beyond

Interactive C++: cling and clang-repl

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## Status. Cling

\* Continuing to rebase cling on top of llvm13, fixing Windows.

## Status. Clang-Repl

- More progress on parsing statements on the global scope: <u>D127284</u>
- Delivered shared memory remote execution facility is progressing: <u>D127491</u>
  D130392
- \* 3 accepted lightning talks and 1 tutorial as part of our GSoC activities
  - More details on the GSoC activities in the next monthly meetings

The goal is to provide better stability and robustness which can later cling can reuse.

## Status. InterOp

- Working on a full surgery of cppyy where we split it into libInterOp
- Working on simplifying CallFunc and moving it in libInterOp: PR10850
- Initial version CallFunc moved to Cling.

### Status. Clad

- \* Ran on a set of benchmarks, overall good results from the error estimation backend which will be submitted to the IPDPS conference
- \* Fixed the Hessian regression
- Fixed the Windows regression
- Preparing a release

#### Documentation

\* Added initial PR for cling documentation using the read the docs setup.

## Upstreaming Patches

- Spreadsheet tracking the progress <u>here</u>.
- Total amount of upstreamed cling patches 23 out of 52 upstreamable.
- The template resugaring work now has an godbolt entry

## CaaS Open Projects

\* Open projects are tracked in our open projects page.

# Next Meetings

- Monthly Meeting 3rd Nov, 1700 CET/0800 PDT
  - Tentative talk by Sunho Kim on orcv2 jit-link infrastructure

If you want to share your knowledge/experience with interactive C++ we can include presentations at an upcoming next meeting

