FLANG UPDATE
Steve Scalpone, LLVM Developers’ Meeting, October 7, 2020
FLANG

- Flang started as a multi-year collaboration between the NNSA labs and NVIDIA
  - Open-source Fortran compiler since May 2017
  - Currently supported by the NNSA labs and the DOE ECP project
  - And supported by many more people, individuals and organizations
- Flang as an LLVM subproject
  - Flang was accepted as an LLVM subproject over a year ago
  - The source code was added to the monorepo last spring, led by Arm
  - Over 100k lines of code initially, now over 160k lines, including tests
CMakefiles upgraded and evolved yet preserving the features important to flang such as out-of-tree builds and the ability to treat warnings as errors.

Lit infrastructure and tests
  - Replaced the original ctest framework
  - New suites and tests added; every commit gets a test

Build bots
  - Flang is not part of the default build for most developers and build bots
  - Several build bots created specifically for flang to keep the project “green”
FLANG
Communications

- Phabricator
- Doxygen configuration and automation
- Web page content and automation to create the web pages
- Mailing lists for flang-dev and flang-commits
- Regular meetings
  - Flang Project Discussion bi-weekly meeting
  - Flang Technical Community bi-weekly meeting
FLANG

Related Projects

- OpenMP MLIR dialect
- OpenACC MLIR dialect
- OpenMP IR Builder to share lowering code between clang and flang
- LLVM Alias Analysis Technical Call for people working on LLVM alias analysis.
THE FLANG PROJECT

SOURCE CODE
https://github.com/llvm/llvm-project/flang

MAILING LIST
flang-dev@lists.llvm.org

PROJECT CALL
Every other Wednesday 8:30am Pacific
See the mailing list for details

TECHNICAL CALL
Every other Monday 8:30 Pacific
See the mailing list for details