Evolution of Computer systems and OpenMP

The OpenMP specifications are a contract between compiler implementers, application developers, and system designers. However, there is a need to assess the quality of an implementation, running on a given system, to serve as a guarantee for the user that the specification is respected. Our team develops tests using a carefully designed methodology that is compiler independent, and which accounts for possible errors in the specification (interpretation and description) as well as possible errors in the implementations. Our tests are open to the community for use and possible re-evaluation.

Software Infrastructure

Our major focus for testing is offloading features, as they are critical to current ECP applications and systems, as well as the future of OpenMP. We currently have out of the box support for GNU GCC, IBM’s XL, Clang/LLVM, and CCE compilers, and we are working on including other vendors. However, users can leverage our software by creating their own SYSTEM files, which could allow using custom compilers and infrastructures.

Our tests report their results through command line, to JSON files or by creating an HTML interactive results sheet.

How to start?

For More Information visit:
https://crpl.cis.udel.edu/ompvvsolve/