

Native Parser/Compiler Front Ends for Eclipse?

Position Paper for the Eclipse Languages Workshop

Craig Rasmussen
Los Alamos National Laboratory

I work with (or know of) many different tools that do static analysis and source-to-source transformations outside of Eclipse. Many of these tools could take advantage of the resources within Eclipse to better support their users. However, given the complexity of C++ and the rapid advances taking place with the Fortran language, the developers of these tools are concerned that Eclipse-based parsers can not support their requirements. One colleague of mine has stated that "Eclipse will never be able to compile C++ because they don't have a back end that is tested by executing users codes."

I would like to explore ways to import the IR from commercial compilers (for example, EDG) into Eclipse. Perhaps this could be done in a way that is compatible with the persistent DOM effort.