



BENEFITS

- **Expose Multithreaded Defects.** Developers are provided with quick and accurate analysis results during development stage.
- **Fix Easier.** Not only does the tool provide quick and accurate results, it enables quick fixes by supplying the details and context information so the issues can be pin-pointed, understood and fixed.
- **Reduce Development Time & Cost.** Gain peace of mind and confidence in developing multithreaded software.

KEY SPECIFICATIONS

- **Support** C/C++, Fortran
- **Support** POSIX Thread, OpenMP, C++ std::thread
- **Compatible** with GCC/Clang/ICC
- **Compatible** with Flang/GFortran/IFORT
- **Support** custom synchronization primitives
- **Support** any build systems
- **Integrate** with GitHub, Jenkins
- **Customize** detection algorithm with granularity

OVERVIEW

Coderrect Scanner is a static analyzer specifically designed for multithreaded software. By providing super fast and accurate results, the tool makes developing high-quality, secure multithreaded applications easy. The tool solves the four most difficult challenges in developing multithreaded software, i.e. errors are difficult to detect, to reproduce, to understand and to fix.

Using Coderrect Scanner, critical multithreaded defects and security vulnerabilities are exposed at the build stage, avoiding the notorious difficulties of having to detect and reproduce in later stages. Detailed reports not only identify issues, but also provide relevant information for developers to easily verify the issues and take actions.

HIGHLIGHTS

Fast & Accurate

- Coderrect has developed a groundbreaking technique, namely Thread-sensitive Data Flow Analysis (TDFA), which allows precisely localizing all possible multithreading errors in the source code, with no need to run the program.
- Super fast, analyzing million-line code bases in minutes.

Comprehensive Reporting & Actionable Information

- Pinpoints multithreaded errors in the source code the moment the project is built.
- Provides detailed information (thread call stacks, shared variables, synchronizations, etc.) to understand and fix the problem.

Enterprise Scalability & Agility

- Coderrect Scanner is designed with large projects in mind, can easily scale to very large enterprise code base.
- The tool is very easy to use, just like a build command.
- Can be easily integrated into existing CI/CD pipelines.