

The aim of this work is to integrate Java PathFinder into Java Platform Debugger Architecture. That is, to allow using Java PathFinder instead of a common Java Virtual Machine for the purpose of debugging Java applications in any modern Java Integrated Development Environment with all its advantages such as various kinds of breakpoints, direct stepping in opened source files, and call stack and object inspection.

The resulting work provides users with all the features they are used to while debugging Java applications. None of this requires any external tools, editors or a complicated setup. Therefore, users are able to view, debug and understand the program state while replaying an error trace in Java PathFinder.

The key part of the study is an implementation of the Java Debug Wire Protocol Agent as an extension for Java PathFinder. That makes JPF more complete as a Virtual Machine in the eyes of the community and the Java users in general.