

Verification is a method of increasing reliability of component based applications. Component composition and its verification from the communication point of view, is one of the current research topics. Behavior protocols (BPs) are an abstraction used to describe communication among components. Tools, that are able to verify component composition, have already been developed. These tools concern only the BP level and they implicitly presume that implementation of the components conforms to given BP. The importance of verification of implementation compliance with BP is obvious.

The BP and rules for communication among components are created during the early steps of the development cycle. Various deviations from the original BP (intentional or unintentional) arise during the implementation phase. This approach reflects the importance of a checker tool.

Checker tool, which will ensure conformance of a single component implementation written in Java with given threaded behavior protocol, is the final result of our work. The work also contains an evaluation of the tool in bigger real life examples.