Concepts for slicing object-oriented programs

ABSTRACT

This paper proposes several concepts that form the basis for slicing object-oriented programs. In the case of object-oriented languages, new relations occur between language constructs such as classes, methods, and messages. Thus new forms of dependencies have to be considered in addition to the traditional control and data dependencies that form the basis of most software maintenance tools that are currently available for maintaining procedure-oriented programs. We show how the proposed slicing concepts can be applied within the software maintenance process by giving an illustration through an example of Java program.

Keyword: Software maintenance; Object-oriented programs; Program slicing; Program understanding