

## A New Approach for Assertions Processing during Assertion-Based Software Testing

**Authors :** Ali M. Alakeel

**Abstract :** Assertion-based software testing has been shown to be a promising tool for generating test cases that reveal program faults. Because the number of assertions may be very large for industry-size programs, one of the main concerns to the applicability of assertion-based testing is the amount of search time required to explore a large number of assertions. This paper presents a new approach for assertions exploration during the process of Assertion-Based software testing. Our initial exterminations with the proposed approach show that the performance of Assertion-Based testing may be improved, therefore, making this approach more efficient when applied on programs with large number of assertions.

**Keywords :** software testing, assertion-based testing, program assertions, generating test

**Conference Title :** ICSEFM 2014 : International Conference on Software Engineering and Formal Methods

**Conference Location :** Melbourne, Australia

**Conference Dates :** December 11-12, 2014