Abstract

The software product line approach to the development of software intensive systems has been used by organizations to improve quality, increase productivity and reduce cycle time. These gains require different approaches to a number of the practices in the development organization including testing. The objective is to analyze the existing approaches to testing in software product lines. A suitably organized and executed test process can contribute to the success of a product line organization. Testing is used to identify defects during construction and to assure that completed products possess the qualities specified for the products. Test-related activities are organized into a test process that is designed to take advantage of the economies of scope and scale that are present in a product line organization. These activities are sequenced and scheduled so that a test activity occurs immediately following the construction activity whose output the test is intended to validate. Test-related activities that can be used to form the test
process for a product line organization are described. Product line organizations face unique challenges in testing.

References


Index Terms

Computer Science

Emerging Trends in Technology

Keywords

Software Product Line  Testing  Spl Architecture Testing