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Abstract

Whenever developers do any changes into code base of software, they want to see effect of changes quickly, Continuous Integration can solve this problem. In recent software development where agile methodology is followed turnaround time for software is less, this leads to availability of less time to develop, build and test processes. Test Orchestration methodology can be used to reduce testing efforts and time. Test Orchestration in broad sense is a tests execution step by step in automated fashion, where different type of tests will

executes like Junit tests, Integration tests, Sniff tests, Acceptance tests and so on. Here tests are selected dynamically based on developer's check-ins. For Junit tests, we have extended Buildbot architecture which is a master/slave architecture, with a single central server and multiple build slaves. The objective of this paper is to develop distributed architecture for test orchestration. All higher level tests like functional tests, sniff tests and performance tests will execute in pipeline, finally result of all tests will send to developer through email.

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Index Terms

Computer Science

Applied Sciences

Keywords

Continuous Integration (ci) Agile Methodology Test Orchestration Dynamic Test Selection

Deployment Pipeline (dp)

Pipeline Test Orchestration

Business Works (bw).