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
Pipeline Orchestration for Test Automation using Extended Buildbot Architecture

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.

References

- J. Humble and D. Farley, "Continuous delivery: reliable software releases through build, test, and deployment automation," Addison-Wesley.
- Continuous Delivery with Jenkins – Deliver Software more quickly with Jenkins Workflow by ClodBees Enterprise:

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).