

SMOKING is not injurious to health! A Process Approach

Introduction

Smoke Testing is usually conducted to ensure that critical functions of the systems are up and running before taking a deep in test execution activity.

Purpose

Test environment downtime is one of the most important and often overlooked aspects of the test execution phase. A simple check between the build and test team could save tremendous downtime and save unnecessary testing efforts.

Problem Statement

Most of the times, organization's existing test execution process goes like this:

Build engineering team/engineer sends a message (mostly informally) to the test team about the server readiness and the test team, which often is waiting for the same jumps on test execution immediately. Soon the team discovers that the though most of the times the application/system is working fine during its initial run and goes haywire as the testing efforts "deepen".

One of the reasons being, the build team is not made aware of the exact issues for which the rebuild has been undertaken in the first place. Also lack of business process/functional knowledge at build and environments team compounds the problem.

Solution

In critical situations, concerned manager from both the teams should be aware of build errors so that he can schedule testing efforts accordingly. Successful build download and clean log should precede the test execution. For this SMOKE testing should be made as an

integral part of test execution methodology specially before starting the test execution in an iterative development environment.

Implementing "**SMOKING is NOT injurious to the health**" culture across the projects can show visible positive changes

How?

After Test environment setup and before start of test execution, a small round of SMOKE testing can be conducted. (**SMOKE testing: verifying if major components of the AUT are working fine and installed ok from the build**). Perhaps a build log can be distributed to the team lead or the Test in-charge before the team takes over the execution task.

As mentioned earlier the whole purpose of SMOKE testing is to verify if major system components are up and running, it can be done by anyone who knows the system/application in general. This can be even done by the build engineer where smoke test cases are generated by test team and validated by engineer. Validating system/application requirements and functionality is done in proper testing process.

Advantages

The main advantages of implementing Smoke Testing are:

1. It saves time of entire test team, as the errors are identified much earlier in test execution process.
2. This will allow the test team to spend more time testing instead of rejecting builds.
3. Developers can focus more on integrating functionality in a planned and controlled manner than "hot fixing" every build.
4. After verifying the system/application performance, team lead/manager is better equipped with information about the testing efforts and activities to be carried out in the testing process to follow.