BVT – Build Verification Testing

**Build Verification Testing** (BVT), also known as **Smoke Tests** or **Build Acceptance Testing** (BAT), is a type of software testing that is aimed at ensuring the most essential functions work correctly when you push new code. The results of this testing are used to decide if a build is stable enough to proceed with further testing. Typically, the BVT process is automated.

**A few facts to know about BVT:**

* Build Verification Tests are used for verifying main functionality
* They run on daily builds
* They save the efforts of a test team

BVT should be designed carefully and not take more than 30 minutes to run. This type of regression testing should be done on each and every new build making them important for the consistent functionality of your software. BVT checks for project integrity as well as verifying all the modules are integrated properly.

The primary purpose of BVT is to check initial build health, basic checks like whether all file formats are correct, all the new and modified files are included in the release, etc. By performing these checks prior to sending the build the test team you will save time and money discovering build flaws at the very beginning.

Deciding which test cases should be included in BVT can be difficult. A few guidelines for what test case you include are:

* Critical functionality test cases
* Stable test cases
* Test cases where the results are known

Using regular BVT with quality standards for basic critical test cases on every build should be automated for ease of regular execution. The automation suite needs to be maintained and updated routinely for new stable project modules.

**Tips for BVT success:**

* Spend time writing BVT test cases
* Log as much detail as possible to diagnose the BVT pass or fail
* Again, select stable test cases to include in BVT
* Automate the BVT process as much as possible
* Have some penalties for breaking the build

**Conclusion:**

Build Verification Testing is an important set of regression test cases that are executed for each new build. BVT can be run by developer or tester and the BVT results are communicated throughout the team for smoother collaboration and faster fixes if something breaks. These tests are very effective for daily as well as long-term builds. They save time, cost, resources and arguments from the test team for an incomplete build.

For BVT testing, there are so many free and commercial tools are available.

Like **Selenium web driver, QTP, Soap UI, HP ALM, Appium, Test Grid,** etc.,

Team, please perform required tests properly before release or deploy the application into clients’ server. It saves a lot of time, as well as money.

Ensure that **20%** of efforts gives **80%** of results.