



A Test Automation Framework sets unified guidelines and processes to ensure your automation efforts align with your overall testing strategy.

Establish a Test Automation Framework to reduce manual work, test more efficiently, and gain release velocity.

## 10 step checklist to build a mature Test Automation Framework:

With your team (developers, business analysts, and testers) identify which test cases are essential to be executed for a particular build requirement.
Testers and developers should identify the areas affected due to a particula build and execute those related test cases plus a sanity test pass.
Configure specialized code analysis and coverage tools to make sure that you achieve near 100% code coverage.  Xray provides the ability to analyze coverage from multiple perspectives, including an overall project coverage overview (executing all regression test cases becomes obsolete)
Check your strategy around testing new features. They should be formalized into interim builds (this can be supplied by the QA who would create test scripts and run these automation tests on the temporary builds until the code becomes stable enough to be deployed into other environments like production).
Standardize all the environments required for testing and automate the deployments.
Use various techniques to fire automation testing into cross-platform/browser environments. Xray's <u>Test Environments</u> can assist in tracking the results and consolidate progress on each one of them.
Define and arrange the exit criteria for each run so that when the results of the test are fed back into the chain, you can make a go/no-go informed decision.
Whenever you find a blocker, or critical bugs, you need to report, fix and pass them through the same number of continuous actions linked together before the code is deployed again in the next environment.
Set your application monitoring in place in order to detect problems earlier and report them proactively. An example of these could be specialized counters like response times, memory and CPU usages.
Configure monitors to run automatically with rich reporting evidence.