MAKE THE MOVE TO OPEN SOURCE
Migrate HP UFT™ Scripts to Java with Appium or Selenium

Modernize your test automation and save money by adopting open source frameworks to align with your strategy for Continuous Integration (CI).

BENEFITS
- Execute 2x faster
- Eliminate licenses and annual maintenance for propriety tools
- Broader support for desktop browsers and mobile apps
- Reuse desktop browser tests for mobile browsers
- Reduce number of computers or virtual machines through parallel test execution
- Develop and run tests on Windows, MacOS or Linux
- Flexible device selection based on attributes such as manufacturer, OS version, and screen resolution
- Leverage modern frameworks such as TestNG and JUnit
- Use development tools such Eclipse, Git, Maven, Jenkins, TFS, Bamboo™, TeamCity™, etc.
- Option to create BDD scripts in Cucumber
- Modular and easy to maintain object-oriented test scripts
- Can be invoked from HP ALM™ & Quality Center™ Test Lab

REQUIREMENTS
- Team with an understanding of scripting or programming languages, preferably Java
- Existing HP Unified Functional Testing™ or QuickTest Professional™ scripts for desktop web, mobile web, native or hybrid mobile apps
- Able to provide remote to Automation scripts (typically stored in HP ALM or Quality Center)

RELATED SERVICES
- QuickStart
- Continuous Quality Black Belt

TO GET STARTED
- Call +1 (781) 205-4111 or email

Attention QA: Adapt or Die

As enterprises move to Agile software development, quality assurance (QA) is undergoing a dramatic transformation. Driving factors such as cost and shorter release cycles, require problems to be identified and resolved earlier in the development process.

This focus on app quality starting at day one is known as *Continuous Quality*. It requires greater integration of processes and tools between development and QA. Catching problems earlier reduces cost and enables greater velocity. The problem - automated software testing and application lifecycle management tools that once fit a Waterfall development process are now painfully out of step.

Continuous Integration (CI), created for Agile development, requires the team to integrate work frequently. Integrations are verified by the build process that runs automated regression tests to detect errors. The state of quality is always known; issues are immediately identified and addressed. If your automated testing is not tied into the build process, QA starts to make Agile development suddenly look like Waterfall.

Continuous Quality and Mobile Apps

Even if nothing in your mobile app changes, the relentless pace of mobile operating system and device releases will cause it to break. When that happens, your star ratings in the app store take a hit. Aside from your brand at stake, customer acquisition and retention are at risk.

Modern mobile apps are developed using Agile. This has been proven to be more effective at keeping up with the pace of change. Agile puts the development team behind the wheel to select tools that encourage dynamic collaboration. Sadly, the tools that worked well for Waterfall seem awkwardly out of place in this new reality.

Why You Need to Change (ASAP)

Is your team setup for Waterfall in an increasingly Agile world? No one wants to be the last person without a chair when the music stops. QA teams need to adapt and embrace new tools and methodologies to maintain relevance. Quality management must be able to identify what parts of an app are at risk if there is a release next week.

How Perfecto can help

Perfecto's Professional Services engages with your QA team to convert your HP UFT scripts to Java with Selenium, optimize them, and provide enablement to ensure ongoing success. The process reduces software licensing and maintenance costs and realigns QA with development and CI. For more details about how Perfecto delivers this, turn to the next page.

Perfecto's Process to Migrate Your Scripts

1 - Discovery Phase
Perfecto's Professional Services team begins with a review of your mobile device matrix, automated tests, associated assets, and other tools and processes used by both the QA and development teams. The deliverable from the discovery phase is a detailed project plan with costs to convert tests and assets you select, link to your CI tool, and train your team. Transition planning from your current process to the new one is included to minimize impact on existing release cycles.

2 - Script Conversion
HP UFT scripts and libraries are converted from Microsoft VBScript™ to Java with Appium or Selenium. Object repositories are converted and data tables are preserved.

3 - Optimization
Once the scripts are converted, Perfecto engineers optimize them for performance, reliability, and maintainability. This may include conversion of portions of a test from visual analysis to native object identification using XPath. Synchronization is improved to ensure scripts run reliably without negatively impacting execution performance. The optimization process also corrects issues with modularity making it easier to maintain your test code.

> **LET US TELL YOU MORE!**
> Call +1 (781) 205-4111 or email sales@perfectomobile.com

4 - Validation
Converted Java-based tests are executed sideby-side with the original HP UFT scripts to ensure matching results. Any necessary adjustments may be made to the scripts at this time. Test execution performance is included in the validation phase.

5 - CI Tool Integration
The ultimate objective is to make automated mobile testing part of the CI process. This includes automating the process of deploying the latest builds to mobile devices. During the discovery phase, Perfecto examines the CI tools used by your development team. Jenkins, Microsoft Team Foundation Server (TFS), Bamboo, and TeamCity are some of the common ones we encounter. *Have a different CI tool or need test results to integrate with HP ALM / Quality Center?* **We can work with you.**

6 - Training
Perfecto trains your team to support and extend your new Java-based tests and app deployment code. This includes advanced topics such as parallel test execution, native object identification, use of XPath, automated app deployment, and dynamic device selection.

7 - Ongoing Maintenance / Warranty
Customers who order this service receive a special code enabling them to directly access Perfecto Tier 2 Support for 90 days without going through Tier 1.

Feature Comparison	Java	HP UFT
List price per concurrent user + annual maintenance	Free	$15k + 22%
Underlying language	Java (+ many more)	VBScript
CPU and RAM requirements during execution	Low	High
Runs on multiple operating systems	■	
Reuse desktop web scripts for mobile web	■	
Parallel execution of tests on one computer	■	
JUnit and TestNG framework support	■	
Git, Subversion or TFS for source code management	■	
Supports multiple integrated development environments (IDEs)	■	
Support for legacy desktop applications (VB, PowerBuilder, VC++)		■
Jenkins support	■	■
HP ALM / Quality Center support	■	■
Perfecto-supported solution	■	■