

It is widely recognized that test automation is an essential component of shifting to Agile and DevOps, but for smaller organizations, the cost of getting set up with test automation tools can be a barrier.

#### Why open source test automation?

Open source test automation uses open source (free!) tools to improve the efficiency of testing efforts by automating the execution of test cases. This means that test cases can be run without human intervention, resulting in decreased test execution time, reduced cost of testing and increased test coverage without the comparatively high upfront costs of commercial tools.

The no-cost, highly integratable nature of open-source test automation tools makes them particularly popular with small organizations and start-ups that have the goal to shift to Agile or DevOps.

## What to consider when looking at open source test automation

While there are a number of different open source test automation tools in market, there are also other considerations to factor in.

Most open source automation tools are code-based and require resources with stronger technical skills than commercial tools. Although open source avoids the upfront costs associated with commercial tools, we generally find there is a higher services cost to implement because it is also typically necessary to build the framework. Plus, it is still essential to adopt a disciplined and structured approach to implementation.

However, even with this in mind, open source test automation is a great option for smaller

organizations that are transitioning to Agile and are struggling to keep up with regression testing. Test automation can reduce the project delivery bottleneck that manual testing can cause, reduce testing costs and increase speed to market.

### TTC's open source test automation framework

To support our clients in their test automation journey, TTC has deployed a Javascript/ Cucumber test automation framework at multiple sites and built out the following functionality to support them:

- JavaScript Selenium functions that enable quick development of end-toend tests regardless of framework
- Includes a simple REST interface for lower level webservice integration testing
- Currently implemented at client sites in a Cucumber-js framework
- Code can be stored in multiple git repositories
- Core functionality updated and maintained by TTC and delivered to the client via an NPM package
- Can be converted to other languages with time and effort
- Methodologies to support continuous testing and CI/CD utilizing Gitflow

Our highly experienced consultants have worked with many of the open source test automation tools available in market, and in fact many

are considered the best in their field. We have invested significant resources into training, research and development in this area and can partner with you to manage your test automation project through to successful implementation.

#### We offer the following services:

- Test automation kick start package
- Test automation strategy and consultation
- Test automation implementation and delivery
- Test automation support
- Test automation training and workshops
- Test automation project management

Open source test automation tools can be a great option because they are free, provide access to the code and can be integrated into your favorite IDE.

# Let's talk

If you're ready to decrease test execution time and the cost of testing while increasing risk coverage and speed to market, speak to a member of the TTC team today.

