



Test Automation Services

AppLabs' Test Automation Services help clients apply best practices, and implement automation effectively to achieve optimum return on their investment and provide real benefit to the projects in which they are implemented. Test automation reduces manual testing efforts and accelerates regression testing.

AppLabs' experience indicates that projects succeed when the choice of automation tool is based on realistic estimation of their capabilities and strategic and active implementation across the business. A critical aspect of any tool implementation is to develop a realistic plan for

implementation, establishing a business case that sets measurable expectations in terms of time, quality and cost.

Test automation also provides challenges to less experienced test organizations, due to its requirement for a separate development lifecycle to produce a well structured, easily maintainable and reusable script environment. AppLabs has many years of experience in automation tools evaluation, implementation and script development. This, combined with its extensive knowledge in building high quality testing harnesses and frameworks, provides you with an expert partner to make your project a success.

Customer Speaks

on AppLabs' Services

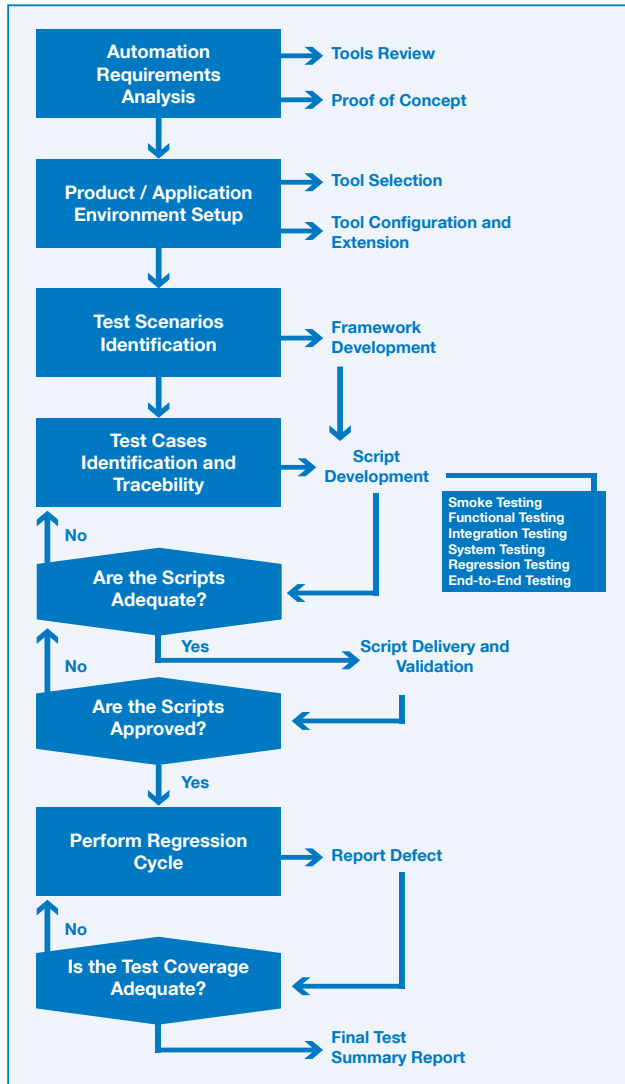
“90 percent of our clients renew annually, and we have seen a significant increase in the number of clients that adopt our product immediately after release. We attribute much of this to the solidity of the testing and quality assurance program. The success of our testing program and our partnership with AppLabs has had a direct impact on our bottom line.”

Marc Nadeau, Senior Director of Quality Assurance, Blackboard



Test Automation Services Summary

AppLabs' Test Automation services are an integrated set of components that provide coverage to organizations that are in the process of selecting tools, through to those who want to implement them strategically and effectively across the business.



The services are aimed at addressing each of the scenarios listed individually below or as a total solution.

Tool Review

There are a multitude of test automation tools and tool suites available in the market, both commercial and open source. Each has its strengths and weaknesses. Some are general user level tools aimed at non-technical users while others are specialist tools which can be used by technical testers and developers. AppLabs will help you align tool selection with your specific requirements and integration needs with test management tools.

Proof of Concept

The AppLabs Proof of Concept service validates the tool or tools selected in the Tool Review phase. The large scale rollout of one specific test automation tool, or a suite of automation tools, is not to be undertaken lightly. A selected tool needs to be shown to work with the development technologies, platforms and to integrate with

the development methodology. Until this task is done there is significant risk that the tools will not deliver the promised return on investment.

Tool Configuration and Extensibility

All test automation tools have configurable operating parameters. The main reason for configuration is to ensure that the tool works reliably and efficiently with the technologies used to develop software applications. Some of the areas that configuration and extensibility addresses are: synchronization methods, verification points, object recognition (especially for third party controls), exception handling, results logging and reporting.

Automation Scripting

To achieve their maximum capability, all automation tools require some form of automation scripting support. Essential automation scripting can be identified during the configuration phase but it is best implemented after all other configuration changes have been applied as the configuration can affect the actual form that the scripting may take. Scripting support can take the form of actually translating manual testing scripts into tool scripts or the development of support function libraries written in the native scripting language of the test tool. It can also be extended to include another language such as C/C++ and integrated into the tool as a shared library, DLL or COM component.

Framework Development

Despite the flexibility inherent in commercial test automation tools, each has a preferred mode of working; through direct scripting, using a graphical interface or via typical office productivity tools such as spreadsheets. AppLabs' Framework Development service provides an enhanced automation script development framework for almost any preferred automation tool.

Framework Development requires an extensive understanding of the needs and objectives from the test planning phase and the knowledge and skills of a developer to implement the framework. AppLabs has extensive experience in building frameworks: Keyword Driven Framework, Data Driven Framework, Hybrid Framework, XML based Framework and Specialized Frameworks for SOA / Web-Services testing framework.

Automation Framework can span across multiple platforms and technologies while integrating with test management, defect management and test data management tools.

Regression Pack Testing

Once test automation is integrated into the development and test cycle, automation of regression test suite should be considered. Automating regression testing can deliver huge savings in time and costs but the process must be planned and managed correctly to maximize the coverage and benefits.

For complex enterprises, AppLabs' Regression Pack service can provide an appropriate approach, technical framework, tools, processes and governance for optimum solution. These Regression Packs for traceability are mapped with release types and requirements.