

Automated testing

It is critical to select an automation toolset that will fit your requirements and culture and will best help you achieve your test automation objectives.

Following a rigorous selection process to find the ideal testing partner, we invited STAG Software – one of India's leading testing organisations – to become our strategic partner. STAG Software consistently exceeded expectations at every stage of our selection process, and today enable us to offer a blended delivery model that gives greater flexibility to our clients.

Epicentre understands that each client has a unique set of automation requirements in terms of business focus, technologies, existing test environment and internal skill-sets. It is therefore critical to select an automation toolset that will fit your requirements and culture and will best help you achieve your test automation objectives.

Epicentre support this by offering a vendor-neutral approach that allows us to advise on the best test tools for your requirements, covering both commercial and open source tools. Also, utilising our HBT testing methodology as part of the implementation process has been shown to expedite the ROI in test automation by as much as 50%-300%.

Functional automation

If you have to repeatedly run a set of tests against ever-changing code or across a large test matrix then automation is something to consider. There are certain obvious benefits to automated testing. Test tools don't get tired or accidentally miss aspects of a defined test process. Results can be recorded accurately and processed instantly. Although manual testing will usually uncover more 'reallife' bugs that other users are likely to encounter, automated testing can quickly cover a large range of processes to complement manual testing and help ensure a more robust product. Functional automation also allows the use of enhanced test metrics and over time will increase test coverage of your application and reduce regression costs.

Script building

Test scripts are used to automate the testing process and will involve analysis of and familiarity with the system to provide an effective solution. Our experienced automation experts analyse the system and then devise and build the scripts using the selected test tools. Scripts should be robust, involve low complexity and follow a set pattern. Scripts covering large applications will also be broken down into manageable chunks with commonly used scripts maintained in libraries outside of the main code. This increases reusability and reduces script maintenance.

Load and stress

Load and stress testing is conducted to assess whether an application will remain functional under a specific load. For example, this can involve applying a large number of users to concurrently perform transactions and processes on a system within a specified time to see if the application will withstand heavy use. Load and stress testing determines the stability and robustness of an application and should be designed to exceed the maximum number of expected users and processes. As well as the application itself, any networks or databases interacting with the system may need to be tested independently.

Performance

Performance testing determines how the speed and performance aspects of a system will stand up when placed under certain working conditions and workloads. For example, load and stress testing may prove that the system can still function and withstand 500 concurrent users, but will reductions in speed and response render it effectively unusable?

In all cases Epicentre will work with your team to fully understand the application business process. This allows us to simulate realistic user activity on the system to successfully identify all types of performance related issues.

Regression

Both functional and non-functional regression testing should be carried out at specified points in the test cycle to ensure that no new bugs or issues have been introduced due to previous bug fixes or added functionality. One method of automating regression is to implement a test, or suite of tests, that exposes the previously detected bug. Outputs from the test can then be compared with previous results and any failures or anomalies reported for review.

If you think your product may benefit from an automated testing approach and would like to discuss it further, give us a call and we can explain our processes, tools and methodologies and whether automated testing would be an effective solution for your application.

Next steps

Whatever stage of development your product is at, Epicentre can offer help and advice in making sure you get the most effective strategies and solutions to ensure your product is robust and your users supported. Our testing and support experience and knowledge is second to none, and our tools and talent ensure that your application quality is maintained throughout the lifecycle.

So give us a call to find out how we can help you plan and implement the ideal test solution.

+44 (0) 1273 728686