



Original Software

## **Agile Test Automation - Can it Really be Possible?**

Original Software Webinar May 12th, 2010

### **Summary**

On May 12th, 2010, Original Software, hosted a webinar on the topic of “Agile Test Automation - Can it Really be Possible?”. During the presentation we were asked a number of pertinent questions on this important topic. These are documented below.

### **Agile Test Automation**

Agile is a methodology that is seeing increasingly widespread adoption, especially amongst users and developers. Yet for the QA professional an Agile approach can cause discomfort. In the ideal world they would have a 'finished' product to verify against a finished specification. To be asked to validate a moving target against a changing backdrop is counter intuitive. It means that the use of technology and automation are much more difficult, and it requires a new approach to testing, in the same way that it does for the users and the developers. Our speaker, George Wilson, explored how to define a test process to ensure application quality within an Agile environment.

### **Questions & Answers**

#### **How can we test with agility?**

Agility by nature means that teams are working in a highly dynamic environment, with applications changing on a daily basis. Typically, organizations are only comfortable with automating the less volatile areas of their applications; i.e. those areas that are less subject to change. The Original Software approach is to firstly ensure you have your testing well organized, and secondly to improve the efficiency of your manual testing (using TestDrive-Assist). This will give you the building blocks to start automation. We would recommend starting with a smaller project first, treating it as a pilot and then expanding the process out to other Agile projects.

#### **Does the standard QA role of process assurance (not including testing) have any place in Agile?**

Absolutely yes. The QA role of process assurance is just as important in Agile, yet a different approach is required. Quality is a team responsibility in Agile, where all undertake the role of QA, and the process must engender this team responsibility. It is up to the traditional QA function to take the lead in this.



## Questions & Answers Continued...

### **Can Original Software support Test Driven Development for agile development?**

We have some interesting support from the market analysts on this subject. The critical item here is in the speed and ease of creating automation. Although the automation scripts cannot be created before the application exists, the creation overhead is minimal and means much shorter timescales for achieving automated testing. There are some very interesting innovations in the works for later on this year which will make pre-written tests much more achievable.

### **Does agility conflict with CMMI ?**

Despite the perception that CMMI best practices and Agile development methods are at odds with each other, we believe that they can co-exist peacefully. In fact, CMMI and Agile champions can benefit from using both methods within organizations - with the potential to dramatically improve business performance and achieve the ultimate goal of developing the highest-quality software in the shortest possible time.

The SEI wrote an interesting piece on the topic recently in a report called: [CMMI or Agile - Why Not Embrace Both!](#) Creating an effective mix of models and methods, with selected techniques to troubleshoot specific challenges, appears to have the highest return on investment.

During March, 2010, Original Software commissioned a survey into the views of Application Development Managers and senior IT Executives. The premise of the study was to find out the key business drivers and requirements for Application Quality Management (AQM) and Automated Software Quality (ASQ) solutions. 72% of respondents stated that their development departments were using combined methodologies of Agile and Waterfall, across different projects.

### **What about test planning and designing in Agile?**

The planning and management of an Agile project is just as important if not more important than traditional Waterfall projects. We advise that the project management platform that is chosen should be flexible enough to manage all types of development projects and quality processes. Original Software's Qualify solution is an Application Quality Management (AQM) solution that unites all aspects of the software quality lifecycle from requirements through to deployment, providing an integrated approach to solving your management challenges.

The difference with Qualify compared with other products like, Quality Center, is that Qualify doesn't straight-jacket you into a single process model when it comes to planning and design. Qualify enables you to map your specific processes, adapt, grow and evolve them easily and without programming. The supporting framework can change with you on your journey to better quality and quicker project delivery. Our solution is methodology and platform agnostic, supporting all methodologies such as Agile, Waterfall, ASAP, TMap® or a combination of all within the flexible solution. Projects are planned, organized, managed and reported on from a single point of control.

We have a webinar on the management of application quality on June 16th. You can register at: [www.origsoft.com/webinars](http://www.origsoft.com/webinars).

### **How do you recommend automating complex GUI products?**

TestDrive is our Automated Software Quality (ASQ) solution that is designed to test browser and legacy applications, as well as GUIs, including Java™, Ajax, Flex®, and Silverlight®. We recommend using this solution for automating the testing of complex GUI products, due to its ability to analyse the GUI level of application automatically.



## Questions & Answers Continued...

**How does the agile process work when you are developing an old product, which did not follow and agile process before, in other words how do you transition to agile from a test perspective, for old products?**

Your first step would be to begin migrating and automating existing test cases for the old product to establish your test assets of the old and perhaps more stable application. The more agile process can then be implemented with further iterations of the product. The capturing of manual tests for use in the automation of the next sprint can then be put in place.

**What happens if you have got a UI which keeps changing because of the agile nature of methodology? Surely the automated scripts will fail, resulting in lots of code maintenance that would take a lot of time**

This may be true of some tools in the market place that require a lot of coding, but the Original Software solution incorporates a unique script technology, allowing users to run existing test scripts over new versions of the application. Any differences are detected and the 'fuzzy' logic maps changes and actions so they can be automatically incorporated in revised scripts for future use. Not only does this minimize maintenance efforts, but just like the 'Track Changes' feature in Word, users are able to accept or reject the script changes made. We call this 'self healing'. Programmer-driven code maintenance is a thing of the past, and with a library of user-friendly scripts that can cope with change, you can now automate areas of your fast changing, business critical applications that pose a bigger risk – an essential requirement for Agile.

**Can the self-healing function adjust scripts to "heal" data changes as well as application changes?**

Yes. It will deal with data changes and application changes. Typically, data changes are incorporated automatically, whereas application changes may require confirmation from the tester.

**What are some of the tools that can be used to set up and tear down data in the database?**

Our solution for this is called TestBench. We have a future webinar on this topic on May 26th. Feel free to register at: [www.origsoft.com/webinars](http://www.origsoft.com/webinars).

**Which is the best automation tool available in market for agile methodology?**

There are a variety of tools on the market. Original Software has a solution called TestDrive for agile test automation. The analyst group, Ovum, has positioned TestDrive as uniquely positioned for agile.

## Next Steps

*Please contact your nearest Original Software office if you would like to learn more about how we can help with your Agile test automation strategy! Or email us at: [solutions@origsoft.com](mailto:solutions@origsoft.com).*

# About Original Software

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With a world class record of innovation, Original Software offers a solution focused completely on the goal of effective quality management. By embracing the full spectrum of Application Quality Management across a wide range of applications and environments, the company partners with customers and helps make quality a business imperative. Solutions include a quality management platform, manual testing, full test automation and test data management, all delivered with the control of business risk, cost, time and resources in mind.

More than 400 organizations operating in over 30 countries use Original Software solutions. Current users range from major multi-nationals to small software development shops, encompassing a wide range of industries, sectors and sizes. We are proud of our partnerships with the likes of Coca-Cola, Cargill, HSBC, Unilever, FedEx, Pfizer, DHL and many others.



**Original Software**

**European Headquarters**  
Basingstoke, UK  
[Solutions.uk@origsoft.com](mailto:Solutions.uk@origsoft.com)  
[www.origsoft.com](http://www.origsoft.com)

**North American Headquarters**  
Chicago, USA  
[solutions.na@origsoft.com](mailto:solutions.na@origsoft.com)  
[www.origsoft.com](http://www.origsoft.com)