



SUMMARY

- 4 skilled test analysts with no previous automation experience
- 9 days of automation technician (<1% total project resource)
- 1012 test scenarios automated in 40 days
- 22 man/days testing performed in 5.5 hours

THE PROJECT

- Under tight deadlines due to EU Savings Tax Directive that came into force on 1st July 2005
- Project initiated to migrate from current banking platform IBIS to Temenos Globus G13
- Lloyds TSB business processes required additional Globus modules to be developed
- Automated testing was essential to meet project deadlines without risk to the business
- A rapid deployment of automation on this scale would not have been possible without Axe and some further technical innovations



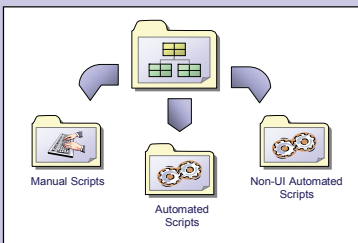
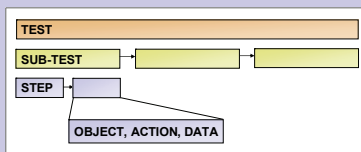
INNOVATIVE USE OF SOFTWARE FROM ODIN TECHNOLOGY



Using Axe for Test Design

The bulk of the work for this automation project was defining the test scenarios. With over 1000 scenarios to define, a simple efficient way of building them was required. By using the Axe Test Design Model, this work was performed by test analysts in Excel® spreadsheets.

In Axe, tests are broken down into Tests, Sub-tests and Steps. At the step level the object, action and data are specified. There are 3 basic actions in Axe: SET GET and VALIDATE



The Axe Test Design Model is used to automatically generate scripts for GUI automation tools, non-UI automation tools, harnesses and manual testers.

How does this differ from a typical project?

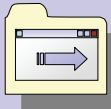
The typical approach to automation is to create scripts through a combination of Capture/Replay and scripting by hand. This approach captures the test design and data in the scripting language of the tool. The creation and maintenance of scripts requires a higher degree of technical skills more often associated with software development.

By building tests using Axe, test analysts can do the work without the requirement to learn technical skills. Building tests in Axe is also a more efficient means for the documentation of tests, making initial implementation and maintenance significantly easier.

Benefits of using Axe

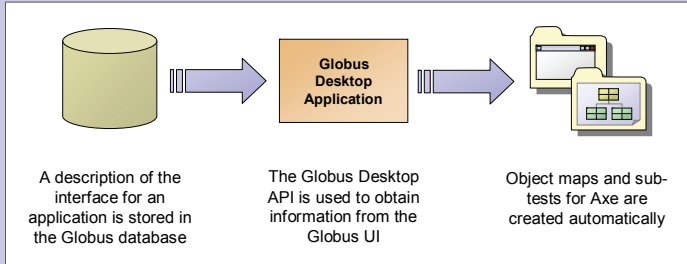
- Proven return on investment on automated testing
- Easy to use by all levels of testing staff
- Quick and simple to implement
- Automate testing throughout the development lifecycle
- Future proof your automation investment

- All 1012 test scenarios designed in Microsoft Excel®
- Over 200 lines of script per test generated by Axe
- Error recovery and reporting added automatically



Automatic Object Map generation

Globus can be made to provide a description of its user interface through the Globus Desktop application. This self-descriptive facility was used to build an Object Map for the test system automatically, containing business names that the test analysts understood and the properties that the test tool required to interact with Globus.

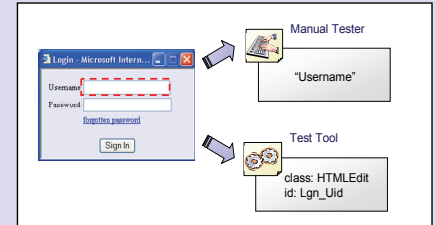


This innovative technique can also be applied to Microsoft .NET applications. Contact Odin Technology for more details.

What is an Object Map?

Automated Test tools need to recognise and locate GUI objects (Fields, Lists etc.) in order to interact with them. The properties they use to recognise objects are very different from the business terms testers use to describe objects. The purpose of an Object map is to link the two.

An example of a GUI object is shown alongside, with the business terms for the object and the types of properties a test tool would require.



How does this differ from a typical project ?

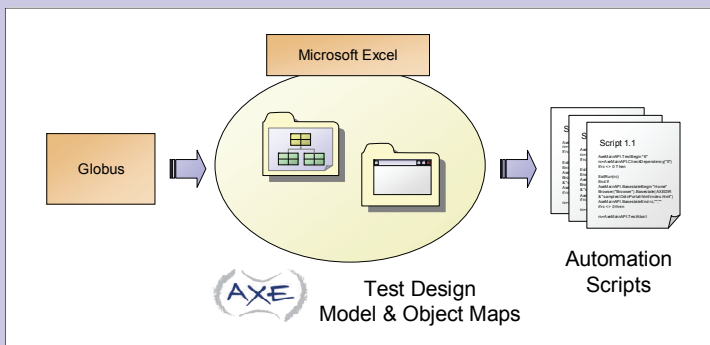
Typically the process of identifying and applying business names to objects is performed manually. Objects are found and selected on screen with the mouse pointer, with an appropriate business name typed by hand. A laborious process for all objects even in a small application.

- Over 1800 Object Map entries created automatically
- 90 test component spreadsheets created automatically
- On average 30-75 test steps per component



The importance of good design

The overall test system design for the project is illustrated in the diagram below:



By focusing on design and using a combination of Axe and innovative technology for automatic Object Map and spreadsheet generation, the project realised substantial efficiency improvements. This reduced the implementation time and allowed the project to benefit from test

Axe - Redefining Test Automation

Axe leads a new generation of automated software testing products. Axe provides a means to rapidly deploy automated testing systems that can be used by all levels of staff with minimal training. This reduces the cost of introducing and maintaining test automation by a factor of four.



Testers design tests in Microsoft® Excel. No code, no scripts, just business logic and data in a simple modular format.

With one click test scripts and documentation are automatically built by Axe.

Execute tests in a range of market leading test automation tools. Axe leverages the strengths of the tools without the complexity.