

SQS – the world's leading specialist in software quality



[sqs.com](http://sqs.com)

# SQS Test Automation

**Feb 2015**

# Agenda

---



- ☐ Automation Drivers
- ☐ Test Automation Services
- ☐ Successful Projects
- ☐ SQS Group

# Automation Drivers



- Automation is a proven mechanism for improving the **quality, efficiency, risk reduction** and **cost effectiveness of testing**.
- SQS has a proven track record of successful automation delivery in a range of different industries and against a range of different technologies.



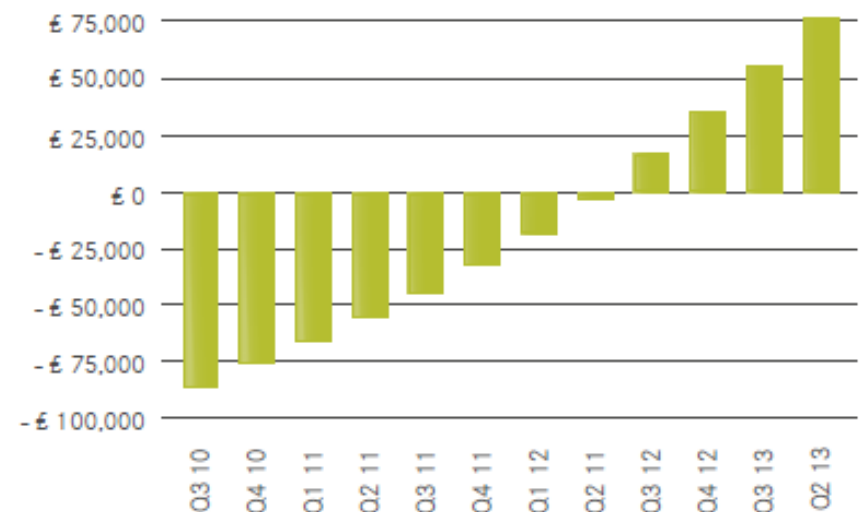
Test automation mitigates business risks improving quality and reducing time to market.

# Readiness Assessment and ROI Calculation



- This service assesses the maturity of your manual test assets and processes and defines a model to calculate your ROI in test automation.
- It provides a cost and benefit business case illustration and an overview of the maturity of the manual test assets before proceeding to test automation.

Test Automation – Projected Return on Investment



SQS uses real scenarios to calculate ROI and best support the investment decision

# Test Automation Proof of Concept



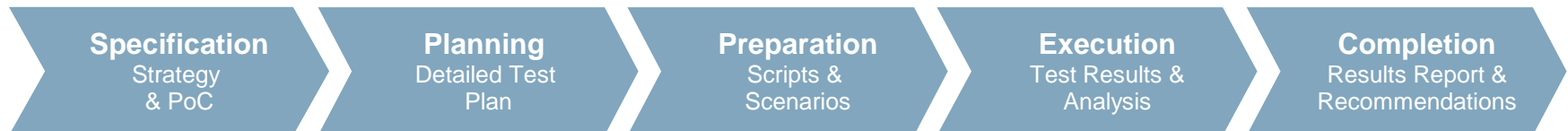
- A technical proof of concept (POC) should be undertaken to ensure that a given automation solution operates well within a technical environment and to ensure the automation solution will provide a Return on Investment in the given circumstances.
- The POC proves the concept first and avoids unnecessary or unsuitable tools. A proposal is submitted detailing the results and findings along with the tool assessment to help determining the best solution.



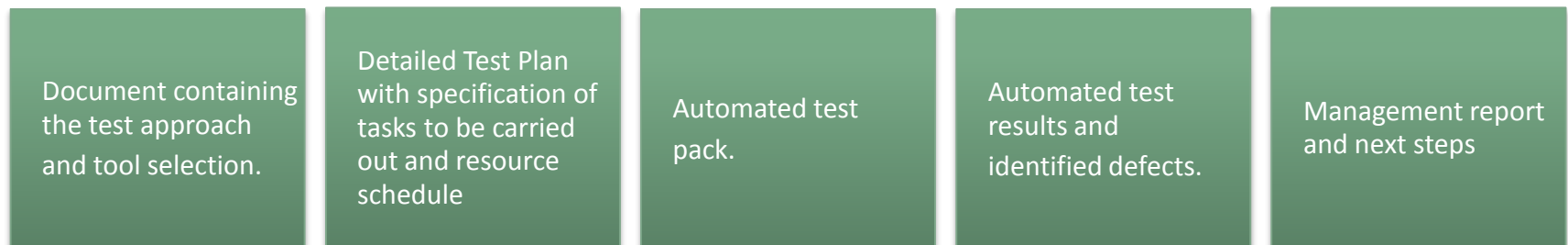
## Expert Automated Testing Services



- The Expert Automated Testing Services will help you wherever you need help. SQS will be there to support you in all aspects of your test process automation.
- This results in the reduction in overall test costs, reduced risk, ability to allow testers to concentrate on challenging areas as well as expanding the regression test pack and increasing test coverage.



### *Deliverables*



# Test Automation Service Models



The following models can all be run as onshore or on/nearshore split resourcing:

- **Resource Based** - This is a outsourcing based model where SQS and the client agree on the number of resources for the project execution.
- **Service Based** – As a service based model, the testing is fully done by SQS based on agreed results with the client. SQS can also provide the tool for the servisse execution.

## Resource Based

- Agreed number of resources
- Long-term commitment

## Service Based

- Testing fully outsourced to SQS
- SQS can provide tool and execute tests remotely

# Test Automation Tools



- Through its extensive experience in different toolkits, SQS is prepared for the best scenarios that fulfil all client needs. From open source tools to top of the industry, SQS helps you to choose the best tool for the project.
- For specific projects, SQS can also provide a specific framework, SQS OpenTest. This is detailed on the next slide.

## Dynamic Toolkit

- Fit to customer needs
- From open source to 'top of the line' tools
- Cucumber, Robot Framework, HP UFT/QTP

## SQS Toolkit

- Supported and maintained by SQS.
- Customizable
- SQS OpenTest.



# SQS Test Automation Tool - OpenTest



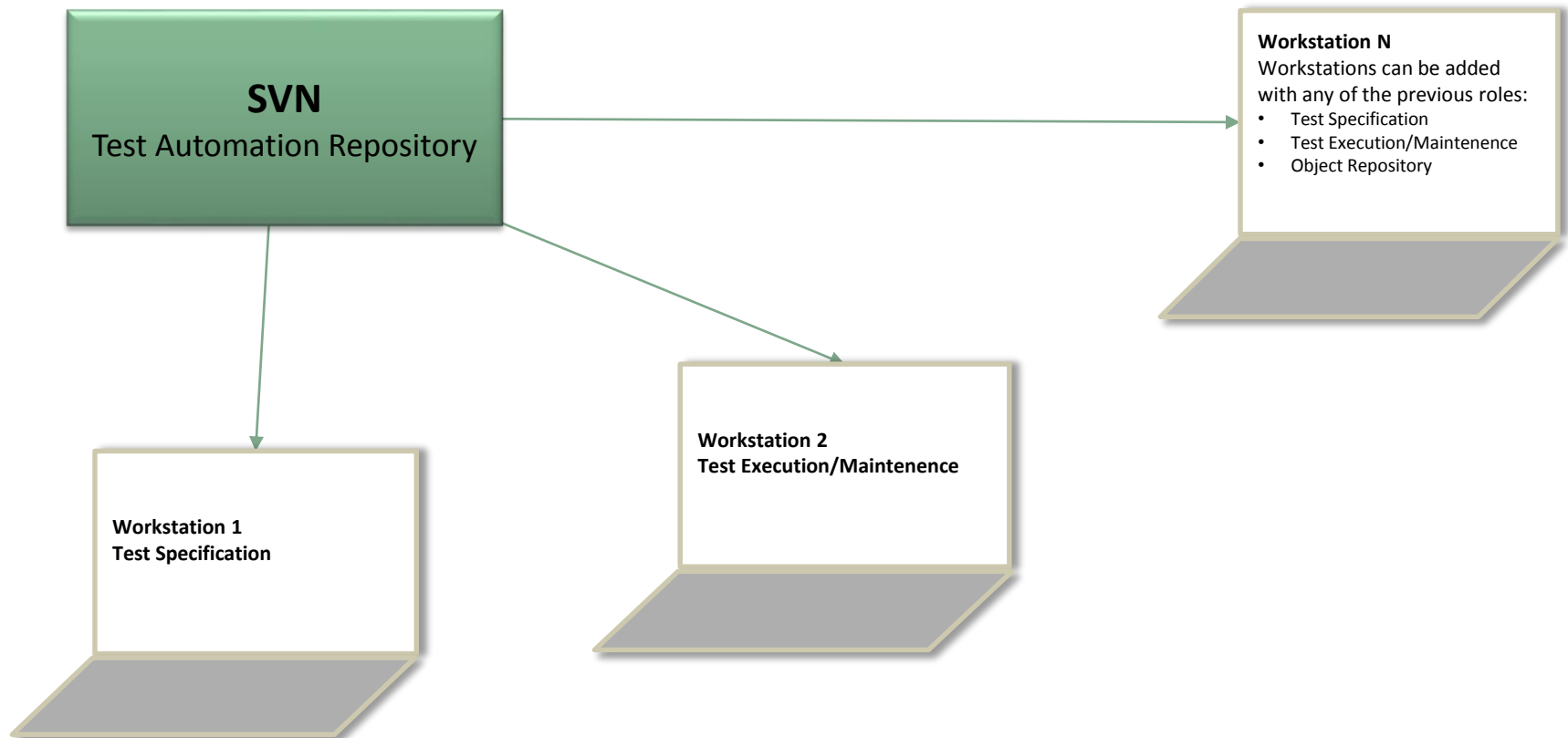
## SQS OpenTest

- SQS OpenTest is a ruby/selenium based framework that has been extended and supported by SQS. It's primary target are web tests and can be extended to suite specific needs.
- **Its key features are:**
  - **Easy Test Specification** – Tests are specified in Microsoft Excel using a Keyword Driven approach.
  - **Smart Object Repository** – Keep up to 3 physical references for each object in a repository making script maintenance easier.
  - **Multi-Browser** – Supports the 4 major browsers (Internet explorer, Firefox, Google Chrome and Safari).
  - **3 Types of Test Report** – Summary, detailed and screenshot report.

# SQS Test Automation Tool - OpenTest



SQS uses version control software for all the code and its structure is completely flexible as presented in the figure below. Besides this, several working stations with different roles can be configured ex: Testers design/execute scripts, developers maintain the object repository.



# SQS Test Automation Tool - OpenTest



## Object Repository

	A	B	C
1	ObjectName	ObjectIdentification1	ObjectIdentification2
2	Link_sobreasqs	id=menu474	
3	Link_servicos	id=me123er	id=menu473
4	Link_mercados	id=efdgthtyrjyhg	id=adsdasdsad
5	Link_pesquisa_avancada	link=Pesquisa avançada	//a[contains(text(),'Pesquisa avançada')]
6	Txt_marca	name=ma	//select[@name='ma']
7	Txt_modelo	id=mo	name=mo
8	Txt_versao	id=ty	name=ty
9	Dropdown_versao	id=1.9 TDI	//div[@id='1.9 TDI']
10	Txt_preco_minimo	name=pv	//div[@id='fsea']/div[4]/div/div[2]/div/select
11	Txt_preco_maximo	name=pb	//div[@id='fsea']/div[4]/div[3]/div/div/select
12	Btn_pesquisar	//img[@id='img_search_submit']	xpath=//img[contains(@src,'http://s.imgrap.com/b.gif')][37]
13	Link_primeiro_anuncio	xpath=//a[contains(text(),'Audi A4 1.9 TDI')][3]	//div[@id='ibox_p7891347']/div/a

## Test Script

A	B	C	D	E	
Step	Operation	Object	Action/Value	ScreenShot	Description
r	launchapp	http://www.standvirtual.com		Y	Acess standvirtual home page
	importdata	Test_Data\Global_Test_Data			Store new page name
	assignvalue				Store new entity data source type
r	wait		2		
r	perform	Link_pesquisa_avancada	click	Y	click Link_pesquisa_avancada
r	waitfor	elementpresent	Txt_marca	Y	Txt_marca elementpresent
r	perform	Txt_marca	selectAudi	Y	selectAudi Txt_marca
r	perform	Txt_modelo	selectA4	Y	selectA4 Txt_modelo
r	perform	Txt_versao	set:1.9	Y	set:1.9 Txt_versao
r	waitfor	elementpresent	Dropdown_versao	Y	Dropdown_versao elementpresent
r	perform	Dropdown_versao	click	Y	click Dropdown_versao
r	perform	Txt_preco_minimo	select:4 000	Y	select:4 000 Txt_preco_minimo
r	perform	Txt_preco_maximo	select:10 000	Y	select:10 000 Txt_preco_maximo
r	perform	Btn_pesquisar	mouseclick	Y	mouseclick Btn_pesquisar
r	waitfor	elementpresent	Link_primeiro_anuncio	Y	Link_primeiro_anuncio elementpresent
r	perform	Link_primeiro_anuncio	click	Y	click Link_primeiro_anuncio
r	perform	Img_anuncio	click	Y	click Img_anuncio

## Test Reports

### Resultado dos testes automáticos

#### Detalhes da execução:

Data de Execução: 16 Jan 2015  
 Iniciou às: 16 Jan 2015 10:41:06  
 Terminou às: 16 Jan 2015 10:41:16  
 Ambiente de testes: QA  
 Releases: 1.0

#### Resumo dos testes:

Total de testes : 3  
 Testes OK : 2  
 Testes NOK : 1

#### Relatório de Teste Detalhado:

Script de Testes	Caso de Teste	Estado	Screen Shot	Executado às:
1	TC001_sqs_navigation	Passed	TC001_sqs_navigation.doc	16 Jan 2015 10:41:06
2	TC002_standvirtual_search	Failed	TC002_standvirtual_search.doc	16 Jan 2015 10:41:16
3	RIMTC001_website_navigation	Passed	RIMTC001_website_navigation.doc	16 Jan 2015 10:41:40

## Successful Test Automation Projects



**SQS has conducted several Test Automation projects for different clients with different automation goals. Below are presented two successful examples conducted in the Portuguese market**

### WeDo Technologies

- 3 different frameworks analysed
- QA assessment results gave the client the best tool for his needs
- Proof of concept conducted with the chosen tool
- Final demo of the automated test cases met the clients expectations

### PT Group

- 2 different frameworks used, from open source to a commercial tool
- Proof of concept conducted with the Open Source framework
- Critical test cases automated in the scope of a major CRM project with the commercial tool

## At a glance: SQS is the world's leading specialist in software quality.



» *The global leader in independent software testing and quality management services – majority of its business in Europe* «

Financial Times, 21 August 2007

- More than 30 years of prosperous operations
- Over 7,000 completed projects
- The customer base includes 20 FTSE-100 companies, half of the DAX 30 companies and nearly a third of the STOXX-50 companies
- The SQS philosophy is to help our customers improve the quality of their business solutions.



SQS is listed on the AIM London





[sqs.com](http://sqs.com)

Thank you for your attention.