

# **BUSINESS REQUIREMENTS SPECIFICATION**

## **APPOINTMENT OF A SERVICE PROVIDER FOR THE PROVISION OF MAINTENANCE AND SUPPORT OF SMARTBEAR TESTCOMPLETE TESTING TOOLS**

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# BUSINESS REQUIREMENTS SPECIFICATION

## 1. INTRODUCTION

SQM&T currently makes use of SmartBear TestComplete and Micro Focus Unified Functional Tester.

These are automated user interface-testing tools that make it faster and easier to create, maintain and execute functional tests across desktops and mobile applications. A wide range of application types and technologies, including Windows, .NET, WPF, Visual C++, Visual Basic, Delphi, C++Builder, Java and Web applications and services are catered for.

## 2. BUSINESS REQUIREMENT SUMMARY

SARS first purchased the testing tools in 2008 / 2009 and since that time, SARS has only ever renewed the existing toolset selected at that time on an annual basis. However, the technology landscape is ever changing and during the past 13 / 14 years, significant technological improvements have been made within the testing space as it has matured and grown in importance. In addition to new and enhanced functionality, significant cost reductions have often accompanied technology changes.

The current SmartBear TestComplete Licences that SQM&T has will expire 31 March 2024 and due to multiple resellers in the market a new service provider must be considered.

The following licences are currently being used:

- TestComplete Desktop Module – Fixed User licenses: 6
- TestComplete Platform – Fixed User Licenses: 6
- TestComplete PRO - Floating Licenses: 3
- TestComplete Web Module – Fixed User Licenses: 4
- TestExecute All Modules – Floating Licenses: 12

### 2.1. Automation

Automation is forming an increasingly important role within SARS to ensure that our complex and integrated solutions are efficiently and completely tested before they are implemented.

The automation tool should be able to:

- Import and use all existing keyword tests, projects and scripts.
- Support user scripting as well as record and playback functionality.
- Integrate record and playback with scripting.
- Execute a selection of scripts/recordings from one central point.

- Support (at least) the following scripting languages: JavaScript; VBScript; Python; Jscript; C#; C++; Delphi Script.
- Write code in IDE.
- Support Windows, JAVA, AJAX, WPF and HTML5.
- Access custom elements and tags in HTML5.
- Support frameworks such as React, Angular and jQuery.
- Support Flex and Flash.
- Support DevExpress.
- Execute on Virtual Machine (VMware).
- Call and interact with .jar files.
- Support Data driven testing as well as Keyword driven testing.
- Create custom names for elements/objects.
- Work with object properties.
- Support multiple browsers.
- Support web services.
- Allow users to connect to databases to read and write and use web services to write to custom reports.
- Create logs with screenshots.

### **3. SOLUTION SUMMARY**

SARS needs to renew the current contract for SmartBear TestComplete to ensure that there is no impact in day-to-day operations for automation testing.