



TEST AUTOMATION

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Who Am I?

- Working in Test Automation since 2008 at WorkCoverSA
- 18 years in Software Testing / Quality Assurance
- Previously have worked at Adelaide Bank, Australian Taxation Office, Aspect Computing and others
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What is Test Automation?

- Test Automation is the use of a third party (or internally developed) product to interact with the software under test to replicate the interactions of “real users”
- Good automation provides stable, reliable and repeatable testing with little human interaction
- However, it is NOT the answer to everything – some things are not suitable for test automation

How can Test Automation be used?

- Execution of test scripts / test cases
- Data creation
- Checking the flow of data from one system to another (System Integration Testing)
- Functional and Performance Testing
- Output / storage of test data
- Results Analysis and Comparisons

Reasons to use Test Automation

- Repeatability, Reliability, Consistency, Accuracy
- Test Scripts can be executed by anybody with access to the Automated Testing Tool
- Can be scheduled to run overnight / weekends
- Extremely cost-effective over the medium to long term
 - Regression Testing time can be significantly reduced
 - Massive amounts of data can be created as required

Which Automation Tool to use?

- Open Source Tools
 - Selenium
 - Tosca
 - SoapUI
 - Many more
- Licensed Tools
 - HP Quick Test Pro (QTP) / HP Unified Functional Testing (UFT)
 - IBM Rational Suite
 - Compuware Tools (QARun)

Where to begin?

- What testing, if automated, would benefit you the most?
- Develop an Automation Strategy document, outlining cost v benefit analysis
- Consider which Automation Tools would best fit your needs

Selecting an Automated Test Tool

- Depends on many factors, including:
 - Technology
 - Cost
 - Available Support
 - Automation skills available in the market

Attributes of successful Automation

- Has management support
- Has an initial Proof of Concept
- Is documented
- Must be easy to use
- Has a development AND test phase (if possible)
- Uses “Quick Wins” to show early benefits to the organisation
- Automated Test Scripts and Test Data are created AND owned by manual testers

Attributes of successful Automation..more

- Has re-usable data
- Uses a central object repository to store information about screens/controls etc
- Uses a central code library to reduce code duplication
- Uses common naming conventions
- Is promoted by the Automation Testing Team when possible

What NOT to do.....

- Don't assume that Test Automation is a "silver bullet"
- Know and understand it's limitations
- Don't jump in as soon as you get the tool – a Proof of Concept can save you a lot of pain later on
- Don't shut yourself off – there is a wealth of information out there
- Don't assume your Automation Framework is perfect – there is always room for improvement.

Questions?

