ASWEC Tutorial Programs

Test Automation Architectures

April 18th 2006, Full Day Tutorial

Description

This tutorial will present a number of different test automation architectures and their respective advantages and disadvantages. The architectures presented will include: capture-playback, scripted, data-driven, action-word driven and model-based test frameworks. You will learn about writing, maintaining and managing tests using each of these architectures and we will discuss a process for the adoption of test automation architectures.

Objectives

- To understand how to develop reusable and extensible automated test suites that are robust enough to survive changes to the application under test.
- To discuss the applicability and maturity of the following test automation framework architectures:
    o Unit test frameworks
    o Scripted automation
    o Capture/playback and data-driven test automation
    o Action word (keyword) driven test automation
    o Model-based testing
- To develop knowledge and guidelines that will be helpful in the selection and use of test automation frameworks and tools.

Discussion of the architectures will be supported through practical examples. Examples will be continuous and extended with the presentation of each successive architecture, illustrating the advantages over the previously presented architectures.

Target Audience

- Test automation engineers wishing to mature their test automation processes
- Test managers and test leads responsible for selecting tools to improve the efficiency and effectiveness of testing
- Software engineers interested in the development of test automation tools

The Speaker

Danny completed a PhD in formal methods for verifying software systems at Griffith University in December 2002 after a brief stint as an Officer in the Royal Australian Navy and a number of years working as a software engineer developing and maintaining large corporate information systems. He is now working as a consultant for K.J. Ross & Associates in Sydney, providing specialist validation and verification services to a number of large companies, mostly in the finance sector. He has an interest and experience in model-based testing, requirements validation, review and inspection, test automation and practical light-weight formal methods.

Online Details

http://www.aswec.org/?Tutorials:Tutorial_1