

Acceptance Testing with Marathon

Santosh S
Subex Systems Ltd.



Workshop Goals

Learn how to automate Acceptance Tests using Marathon

Agenda



- Introduction
- Marathon User Interface
- Marathon Terminology
- Workshop Swing Application
- Workshop Web Application
- Resources



Introduction

Acceptance Testing @ Subex



- Products Client/Server Architecture
- Custom Protocol
- Earlier Mechanisms
 - Spread Sheet
 - Dumper Packet Sniffer
- Problems
 - Maintainability
 - Ease of Use
 - Duplication

Acceptance Testing @ Subex



- Marathon
- Over 3000+ Test Cases across 3 Products
- Advantages
 - Zero Delay Delivery
 - Major Architecture Change
 - No Duplication
 - Tests all the functionality through UI
 - Test and Data together

Marathon



- GUI Testing Tool for Java Swing
- Extended for Web (Windows only)
- Record and Playback
- Jython Scripts (Java Python)
 - Readable by testers, developers, analysts
- Current Version 0.90a
- License GNU LGPL
- Home http://marathonman.sourceforge.net

Marathon



- Usage
 - Smoke Testing
 - Regression Testing
 - Formal Acceptance Testing
- Advantages
 - Ease of Use
 - Non Intrusive(No changes in user code)
 - Position agnostic
 - Simple readable scripts
 - Extendibility Resolvers
 - Semantic Actions (no keypress/mouse events)

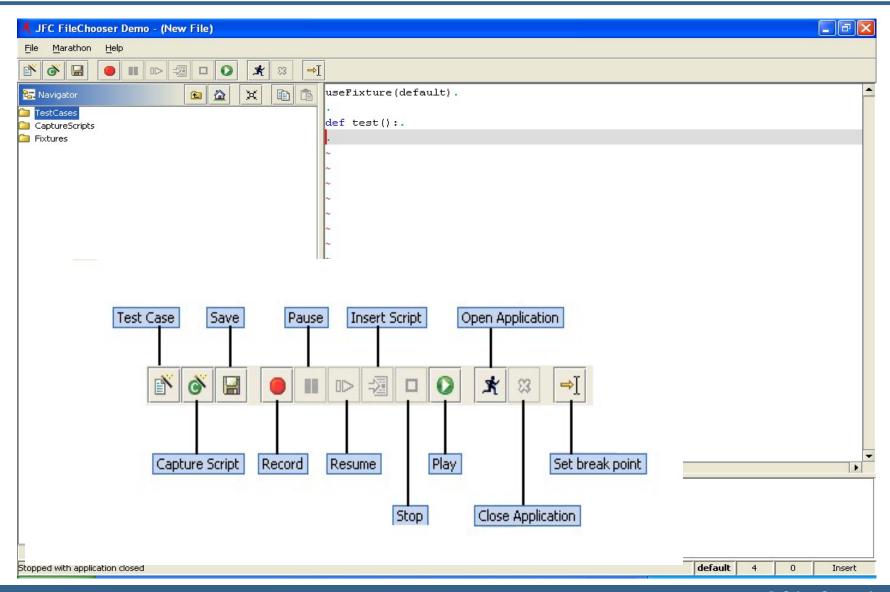
Installation



- Prerequisites
 - Java version 1.4 and above
 - GNU tar and gzip or Winzip
- Copy marathon-0.90a.tar.gz and support-<version>.tar.gz
- Untar marathon-0.90a.tar.gz. Creates marathon-0.90a directory
- Untar support-<version>.tar.gz into the marathon-0.90a directory
- Set the marathon-0.90a in the system path
- Invoke using marathon.bat or marathon(Linux)

Marathon – User Interface





Marathon Terminology



- Application Under Test
 - Java Swing application to be tested
- Fixtures
 - Similar to xUnit Fixtures
 - Mechanism to execute tests in the same environment
 - Provides setup() and teardown()
 - setup() Test teardown()
- Capture Script
 - Reusable piece of recorded code
 - Analogous to Functions

Marathon Terminology



- Marathon Project File
 - Property file defining the structure for a Marathon Project
 - Includes classpath, main class, resolvers for the AUT
 - Provides the testcase, capture script and fixture directory
- Test Cases
 - Recorded script that tests the AUT
 - Jython script with 'test' as the function name

Workshop – Swing Application



- Application Sample App
- Creating a Marathon Project File
- Introducing Jython
- Test Cases
 - Simple Test Case
 - Capture Script Based Test Cases
 - Assertions
 - Resolvers
- Batch Mode Run

Workshop – Web Application



- Application Sample Web App
- Marathon Web vocabulary
- Test Cases
 - Simple Test Case
 - Capture Script Based Test Cases
 - Assertions
- Batch Mode Run

Resources



- Marathon http://marathonman.sf.net
- Junit http://www.junit.org
- Jython http://www.jython.org



Thank you

Questions