



SoapUI

SOAP UI Training Curriculum



1. Introduction - SoapUI WebServices Testing Tool

- What is Webservice
- Why Webservice
- Significance of Webservice
- WebServices Description Language
- Webservice Architecture
- Xml Messaging
- Overview on Soap Protocol

2. Exploring WSDL

- WSDL Introduction
- WSDL Elements
- WSDL Definition
- WSDL Types
- WSDL Message
- WSDL Port type
- WSDL Binding
- WSDL Ports
- WSDL Service

3. Soap Messaging

- Simple Access Object Protocol
- Soap Messages
- Soap Envelope
- Soap Header
- Soap Body
- Soap Fault
- Soap Encoding
- Soap Transport
- Soap Standards

4. Started with Soap UI

- Creating the Project
- Adding WSDL
- Project Operations
- Request Pane & Response Pane
- Invoking and getting results
- Creation of Test Suites

- Creation of Test Case
- Running testcases from project level
- TestSteps explanation
- Cloning the TestCase/suite
- Brief explanation of the local Webservice
- Reading SoapUI Logs, Error Logs, Memory Logs and Other Logs

5. Assertions

- Why Assertions
- Types of Assertions
- Soap UI pro Assertions
- AssertionXpath,XQuery Match Assertion
- Point and click xpathAssertion with Soap Ui pro
- Writing own xpath
- Assert dropdown
- Count,exist Xpath Assertions
- Message Content Assertion
- Contains Assertion
- SLA Assertion
- Not Contains Assertion
- Soap Faults Assertions
- Security Assertions
- HTTP Status Codes
- Compliance, status and standards
- Challenges/drawbacks of SoapUI open source in Assertions
- Properties
- Properties Usage with SoapUI Features
- Property Levels
- Defining properties
- Project Level Properties
- Test Suite level Properties
- Test Case Level Properties
- Accessing properties from different levels
- Writing own step for Accessing Properties
- Accessing Properties from External file
- Properties Transfer step
- Usage of Properties Transfer step
- Examples using above methods
- Moving the test steps across each other

- Properties Step
- End to end Example using properties from all levels

6. Groovy Scripting

- What is Groovy Scripting?
- Similar to JVM
- Printing logs
- Defining Variable
- Operators
- Loosely Coupled Data types
- if else Simulator
- For loop
- For enhanced loop
- While loop
- Arrays
- Assert
- Arrays
- Exceptions
- List
- ArrayList
- Hashtable
- Map
- Set
- Exercises
- Context
- Context TestCase
- SetProperty Method
- GetProperty Method
- Accessing properties from Context
- Accessing request and response from Context variable
- Xml Holder
- Accessing nodevalues with Xml Holder
- Exercises on above functionalities
- Parsing Xml With XmlHolder
- Groovy Utils Xml Holder |
- SetNodeValue property
- getXml Method
- Update the XML
- TestRunner

- Scope of testRunner
- Traverse to Project level using TestRunner
- Traverse to Test Suite level using TestRunner
- Accessing the project level properties from TestRunner

7. Restfull Webservices

- Introduction to Rest
- Overview of Rest Architecure
- Rest Advantages
- Difference between SoapProtocol/Rest
- Http Methods Get,Post
- Crud Operations
- Rest Services Exposed by Google/Twitter
- Rest Resources
- Multiple Representations
- Rest methods/Requests

8. Webservice Extensions

- Soap Protocol Standards
- WS Schema
- WS Addressing
- WS Security
- WS Adressing in Soap requests
- WS Security in Soap requests
- Validating WS Specifications in response
- Checking WS Compliance
- Validating SOAP Services

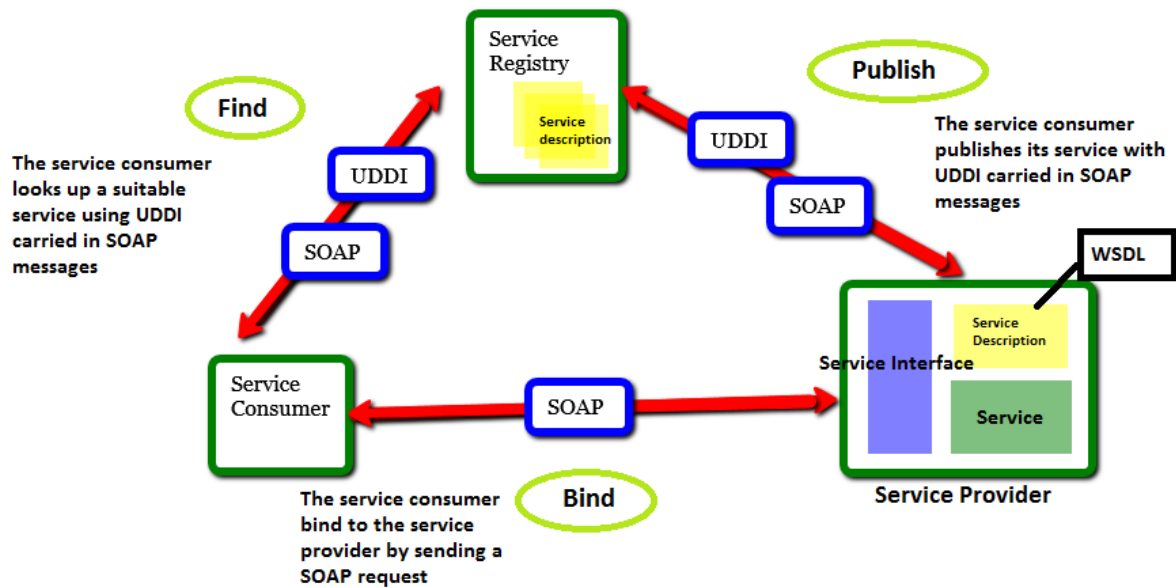
9. Testing Databases with SoapUI

- Testing data in isolation
- Setting up SoapUI to connect to the database
- JDBC Request TestStep
- JDBC Request properties
- JDBC test assertions
- Stored procedures with JDBC Request TestStep
- Accessing SoapUI properties from SQL query

10. File Reading

- Reading Properties File
- Advantages of Properties File
- Reading/Writing Xls Files
- Storing data in Xls Files
- Importing Custom Jars in Soap UI
- Using Log Object inside the Groovy Class

SoapUI Architecture and Process Flow



Protocols Supported By SoapUI



- SOAP - Simple Object Access Protocol
- WSDL - Web Service Definition Language
- REST - Representational state transfer
- HTTP - Hyper Text transmission protocol
- HTTP - Hyper Text transmission protocol Secured
- AMF - Action Message Format
- JDBC - Java Database Connectivity
- JMS - Java Messaging Service



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