
SoapUI Pro On Demand Class Topics

Course Overview

- Goals and objectives
- Class structure
- Preparing for SoapUI Pro certification
- About the sample services
- Prerequisites
 - SOAP testing
 - REST testing

SoapUI Pro Architecture

- Embedded technology
 - Jasper
 - Jetty
 - Saxon
 - Logging
 - JDBC drivers
 - Hermes
 - Scripting
 - Monitoring
 - API
- Protocols
 - XML
 - SOAP
 - HTTP
 - JDBC
 - AMF
 - Supporting additional protocols
- Knowledge assessment

SoapUI Projects

- Overview and major project objects
- Preferences
- Workspaces and environments
- Events
- Properties
- Generating artifacts
- Composite projects

- Knowledge assessment

Manual Service Interaction

- Connecting to services
- Running basic tests
- Understanding the user interface
 - Requests & responses: SOAP
 - Requests & responses: REST
- Creating multiple requests
- Validating requests
 - WSDL for SOAP
 - WADL/XML for REST
- Reusing requests
- Knowledge assessment

TestSuites

- Overview
- Best practices
- Creating TestSuites
 - SOAP
 - REST
- Configuring TestSuites
 - Disabling individual TestSuites
 - Measuring coverage
 - Reporting
- Running TestSuites
 - Individually or in parallel
 - Within SoapUI or from the command line
- Knowledge assessment

TestCases

- Overview
- Creating TestCases
 - SOAP
 - REST
- Configuring TestCases
 - Recovering from errors
- Functional tests
- Generating load tests and security scans

- Running and debugging TestCases
 - Individually
 - In groups
- Knowledge assessment

TestSteps

- Protocol TestSteps
 - TestRequest
 - REST Test Request
 - HTTP Request
 - JDBC Request
 - AMF Request
 - Mock Response
- Flow-control TestSteps
 - Properties
 - Property Transfer
 - Conditional Goto
 - Delay
 - Groovy Script
 - Manual
 - Assertions
- Data TestSteps
 - DataSource
 - DataSource Loop
 - DataSink
 - Datagen
- Knowledge assessment

Assertions

- Overview
- Property content
 - Contains
 - Not Contains
 - XPath Match
 - XQuery Match
 - Message Content
- Compliance, status, and standards
 - Schema Compliance
 - SOAP Fault
 - Not SOAP Fault

- SOAP Request/Response
- WS-Security Status
- Valid/Invalid HTTP Status Codes
- WS-Addressing Request/Response
- Script
- Service Level Agreement (SLA)
- JMS
- JDBC
- Security
- Creating dynamic assertions
- Knowledge assessment

Data-driven Testing

- Why using real data is so important
- DataSource types
 - Grid
 - File
 - XML
 - Groovy
 - Data connection
 - Excel
 - Directory
 - JDBC
- Configuring DataSources
- Generating queries and properties from databases
- Creating random data with Datagen
- Data-driven testing and RESTful services
- Using data to create dynamic assertions
- Knowledge assessment

Mock Services

- Overview
- Mock service, operation, and response
 - SOAP prerequisites
 - REST prerequisites
- Routing mock service requests
- Scripting
- Deploying mock services
 - Locally
 - Remotely

- Invoking mock services
 - Sharing among multiple users
- Knowledge assessment

Security

- SoapUI Pro security standards support
 - HTTPS
 - WS-Security
 - SAML
 - Creating multiple security profiles
- SoapUI security scans
 - Invalid Types
 - XPath Injection
 - Boundary Scan
 - SQL Injection
 - XML Bomb
 - Malformed XML
 - Malicious Attachment
 - Cross Site Scripting
 - Fuzzing Scan
- Best practices for security scans
- Knowledge assessment

Groovy

- Groovy fundamentals
- Context-based object access
- Running Groovy within SoapUI
 - TestStep
 - Setup/teardown scripts
 - Mock service scripts
 - Script assertions
- Knowledge assessment

Refactoring

- Overview
- Reloading vs. refactoring
- Refactoring messages
- Refactoring schema
- The role of developers in refactoring

- Knowledge assessment

Reporting

- Overview
- Goals of reporting
- SoapUI reporting options
 - JUnit-style reports
 - Data export
 - Jasper reports
- Customizing reports
- Launching reports
 - Within SoapUI
 - From the command line
- Knowledge assessment