INFOSYS API TEST AUTOMATION

Sharpen your
competitive edge
with automated
API testing

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What's the buzz around API/ services testing?

As innovation, speed and agility become key drivers for business success, enterprises are adopting digital transformation, cloud, container environments, and new application architecture to gain a competitive edge. To enable these capabilities, enterprises must shift from monolithic systems to a microservices and API-based distributed landscape. APIs help organizations monetize core assets so that they can develop new services and extend the reach of existing ones. Thus, ensuring

API quality and preventing outages have become extremely critical.

APIs and microservices are enterprise assets. The microservices and DevOps market1 is expected to have a 15% YoY growth, reaching US $10 billion by 2021. However, enabling API test automation has several challenges:
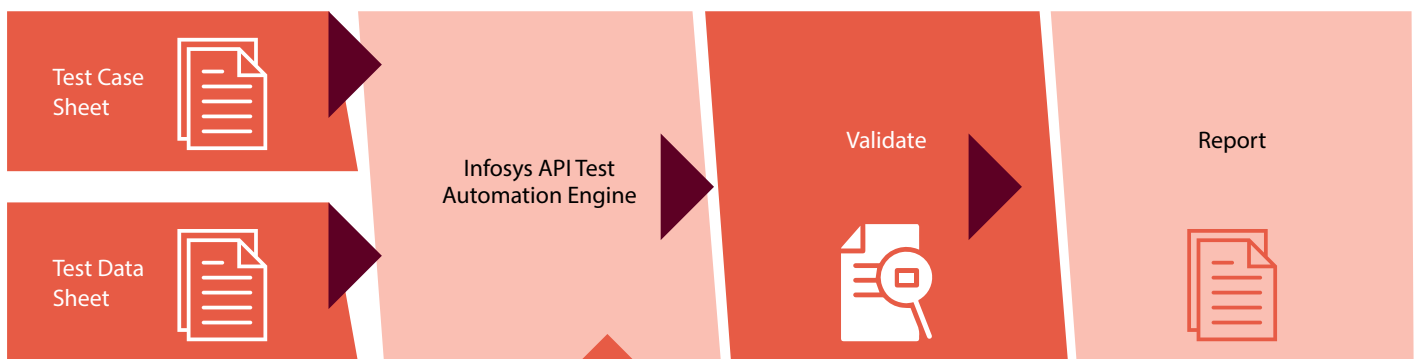
- Implementing APIs and microservices enterprise-wide requires faster automation

- Enabling DevOps mandates on-demand API testing and stable service availability

- Testing solutions must be hybrid, scalable and cost-effective

- Testing solutions should support scriptless and data-driven automation

Infosys solution – Maximize API testing efficiency

Infosys has a comprehensive approach and framework that ensures high-quality APIs for successful digital transformation, DevOps and agile adoption, and continuous validation programs for enterprises.

Based on Hybrid automation approach	Tables/Excel based codless automation script development	Easy to use intuitive GUI for configuration and test modelling	API and Command line based test suite execution support

| Test Case Sheet | | | |
| Test Data Sheet | Infosys API Test Automation Engine | Validate | Report |

Protocols and Technology Support

- Web-based Microservices and API functional testing solution

- Protocols supported – REST, SOAP over HTTP(s) / JMS / Qs

- Message formats – SOAP, XML. JSON, Text, Java Objects

- Message queue – TIBCO EMS, IBM WMQ, SonicMQ, RabbitMQ, MQTT, Kafka

- Middleware – WS and RESTful services

testing hosted on MuleSoft, TIBCO, IIB, OSB, wMs, BizTalk etc

- Infosys solution supports all types of service testing and protocols

- The comprehensive instruction library enables codeless test cases and test suite configuration for API test automation

Inbuilt Instruction Library for API/Service Test Automation

Instruction Library

Select Instructions

- ReadFile
- Applydatatoinputreq
- InvokeSOAPRequest
- InvokeSOAPRequestviaProject
- AssertContains
- AssertNotContains
- AssertXpath
- fetchnstorefromXML
- AssertNotSoapFault
- AssertSoapFault
- AssertHTTPCode
- AssertXMLagainstSchema

Add Actions

Fast-track testing and reduce effort with Infosys solution

As an easy-to-use and state-of-the-art testing tool, it offers:

- Codeless automation that reduces API testing effort by 50% and cost by 30%

- A scalable hybrid framework that supports keyword-driven instruction library and data-driven testing

- CI/CD and DevOps to accelerate API test automation and deployment by 50%

- Linear and intuitive UIs that build automation suites without needing scripting skills

- Infosys solution supports all types of service testing and protocols

- The comprehensive instruction library enables codeless test cases and test suite configuration for API test automation

Why choose Infosys API Test Automation solution?

Why choose Infosys API Test Automation solution?

Achieve test automation without scripting and navigations
Parameterize data from DB, config files and Excel sheets
Provides easily extensible functionality with custom features

Shift-left with functional automation

Automate tests during the test case preparation phase
Reduce functional execution effort by 40%

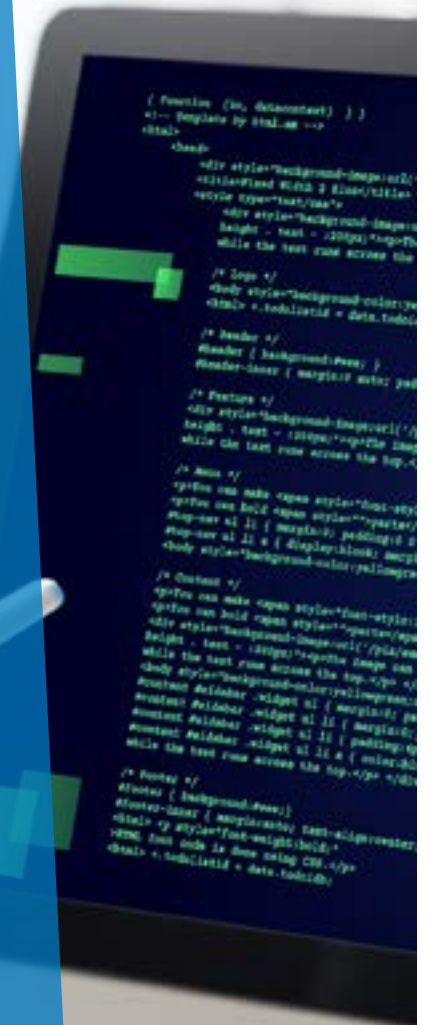### Simplify test automation process

Automate REST APIs, web services, JMS and MQ based services with pre-defined templates
Get 100% reusability with granular components and instructions
Dynamic data inputs help componentize test cases with variable nature

Automate scripting even without APIs

Begin test case design as early as the requirements phase
Automate test suites independently, without live APIs

Easy portability, creation and maintenance

Ensure multiple environment support with simple configuration changes
Create test cases using pre-built test case templates and test assertions
Provides easy maintenance and extendable automation scripts

Success story
UK-based water service provider validates over 350 services with 80% less effort

SOA Regression Automation

Client context

A leading UK-based water service provider had undertaken an extensive service oriented architecture (SOA) implementation program. It involved building and validating over 100 legacy and 250 non-legacy services. Owing to manual test execution, the implementation was effort-intensive and repetitive, resulting in longer test execution cycles.

Infosys solution

• Infosys API Test Automation solution helped to build service-level automation, thereby testing scripts faster

• The framework enabled 80% re-usability granular instructions to build (process) orchestration test scripts using the solution's workflow feature

Benefits

40% effort reduction by automating scripting effort using Infosys solution compared to SoapUI/Groovy automation

80% effort reduction in regression test execution

For more information, contact askus@infosys.com

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