knowledge17

WORK at LIGHTSPEED™

Automated Test Framework – Speed Up Your Testing

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servicenow

Speaker Introduction



NAME: Shrity Verma

TITLE: Senior Product Manager

COMPANY: ServiceNow, Inc.

EXPERIENCE: 1.5 years of experience with ServiceNow as Senior Product Manager, 3 years as Senior Product Manager with Teradata, 12 years as Architect and Developer developing Teradata Database Optimizer

EXPERTISE: Platform Developer Tools

CURRENT PROJECTS: Application Scoping, Delegated Development, Script Debugger, Source Control, Team Development and Automated Test Framework

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Session Overview



Objectives

- To provide brief overview of ServiceNow® Automated Test Framework



What You Will Learn

- High Level understanding of the Product
- What is supported and what's on our roadmap
- How can the tool be used in real world scenarios

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Agenda

- The Problem
- Solution
  - Goals
  - Approach to achieve the goal
  - Solution
- Demo

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Problem – Why Did We Build Automated Test Framework

- Concerns - Upgrade testing consumes over 25% of time and resources for many customers
- Customer test frameworks are ‘completely broken’ by each major upgrade or UI change
- Most customers do not use an automated test framework, and test manually



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Automated Testing Framework - Goals

- Framework to automate most of the manual tests
- Make the Framework UI independent



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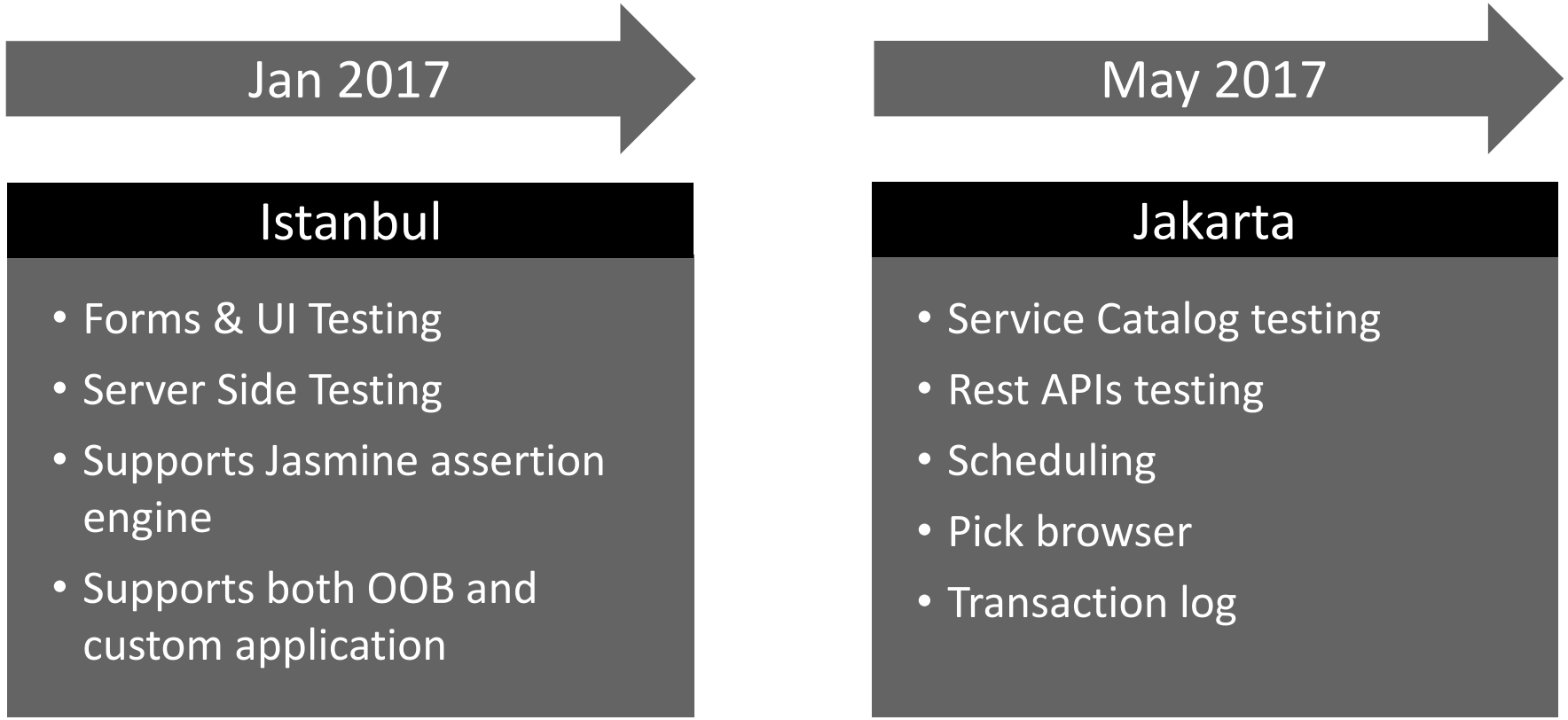
Approach

- Used platform features
- Feature of Now Platform™ no extra license required
- No dependency on any external tool – helped us to be UI independent
- Integrated with platform rollback feature for easy cleanup of intermediate data updates
- Test cases can be moved using update sets or application files
- Framework built to support Test Steps for testing different features of Now Platform™



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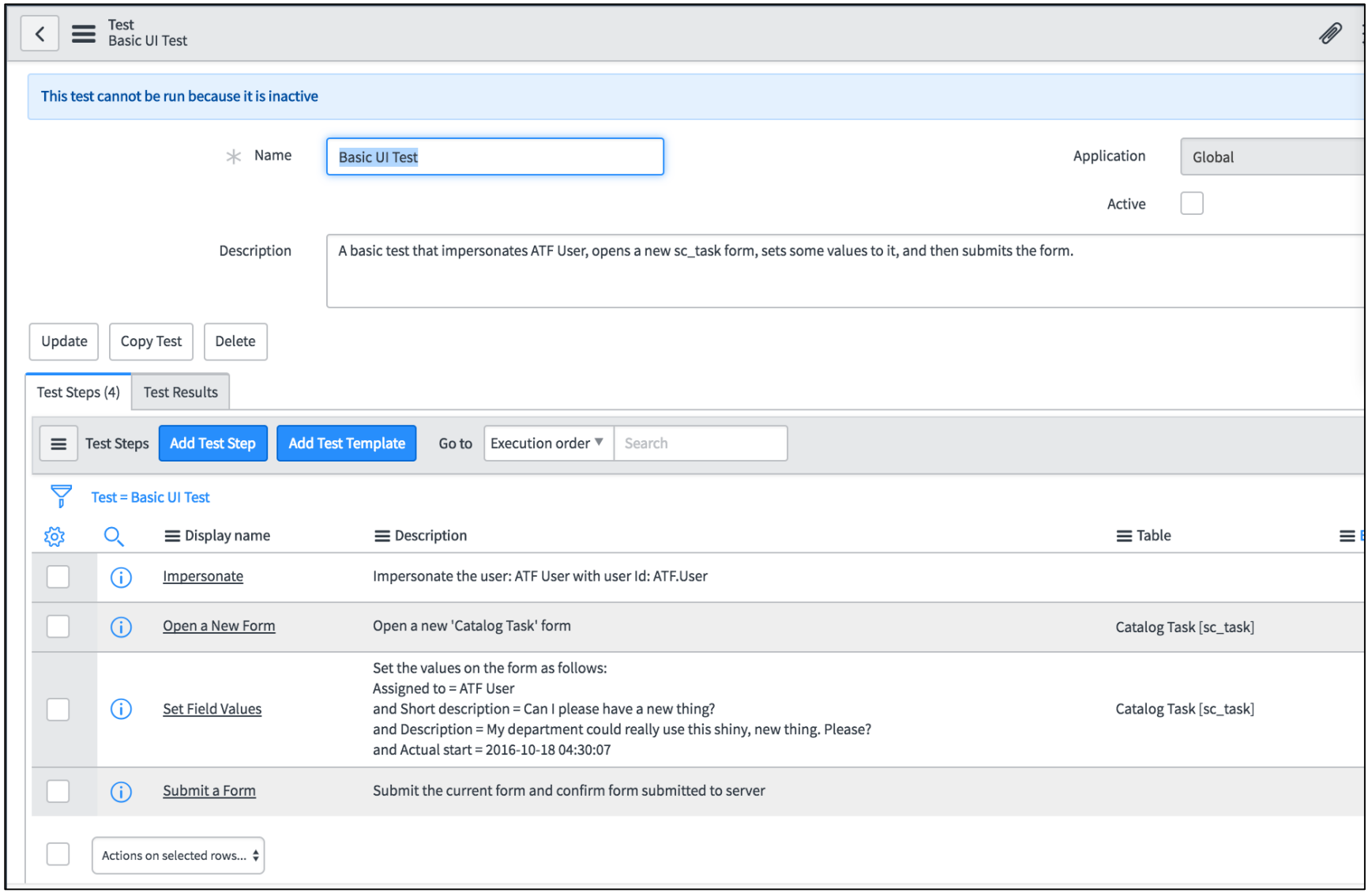
Continuous Customer-Driven Enhancements



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UI Testing

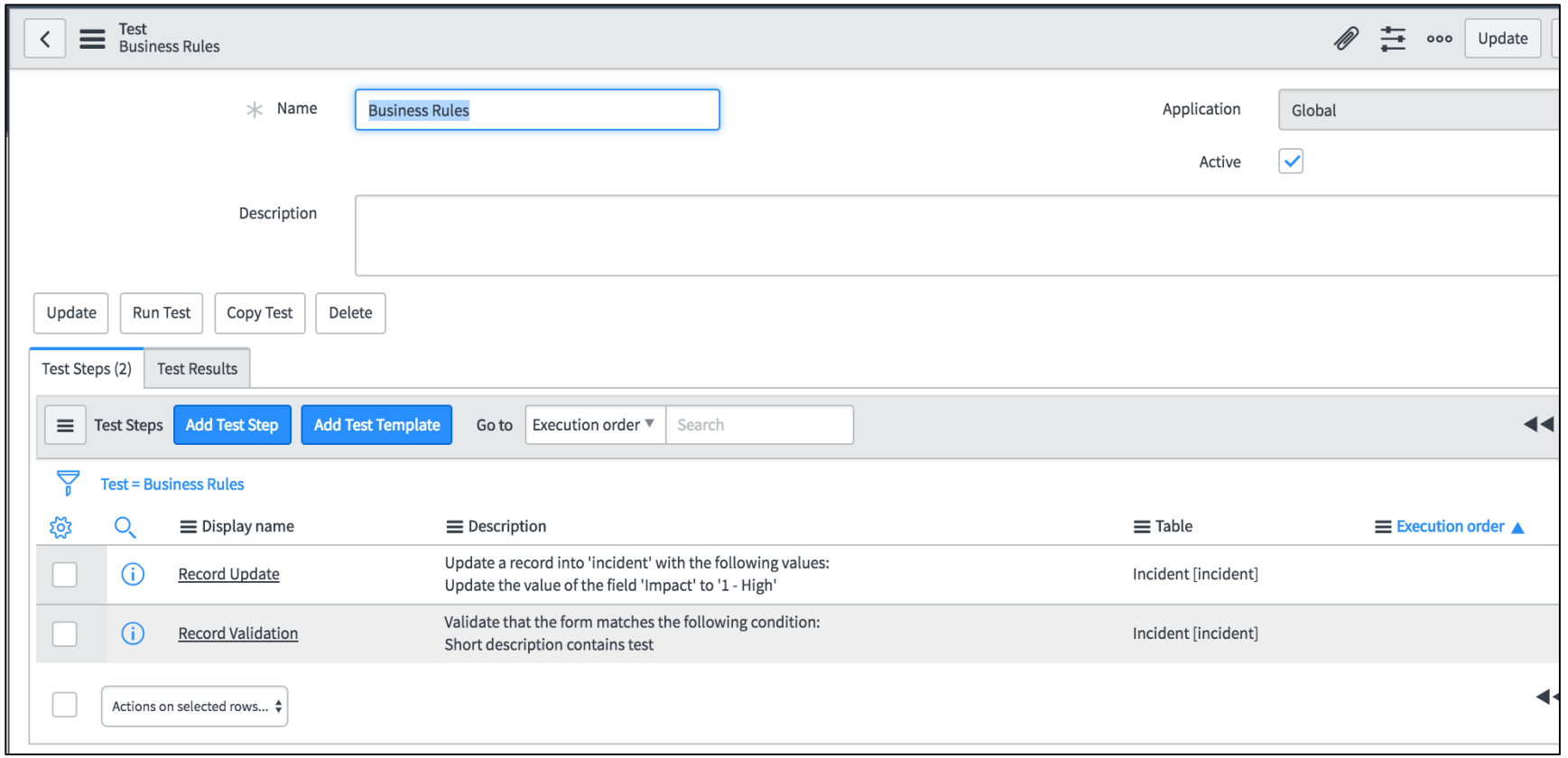
- Test standard forms for proper functionality
- Takes screenshots
- Waits for asynchronous effects
- Captures client side logs, alerts, etc.
- Select Browser



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Server-side Testing

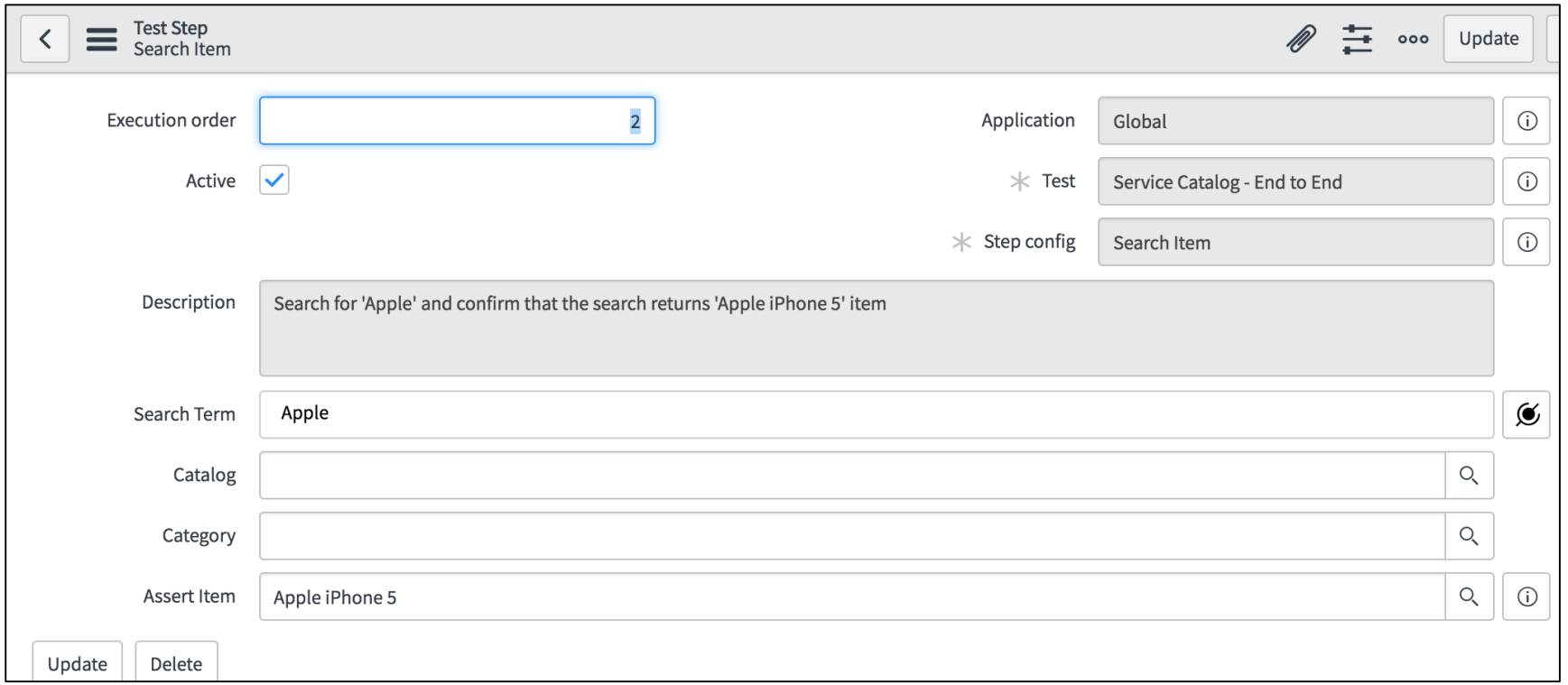
- Extendable by admins
- Runs entirely on the server
- Mix & match with UI steps
- Extensible server-side scripting framework
- Test any record/any table
- Supports Jasmine assertion engine



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Service Catalog Testing

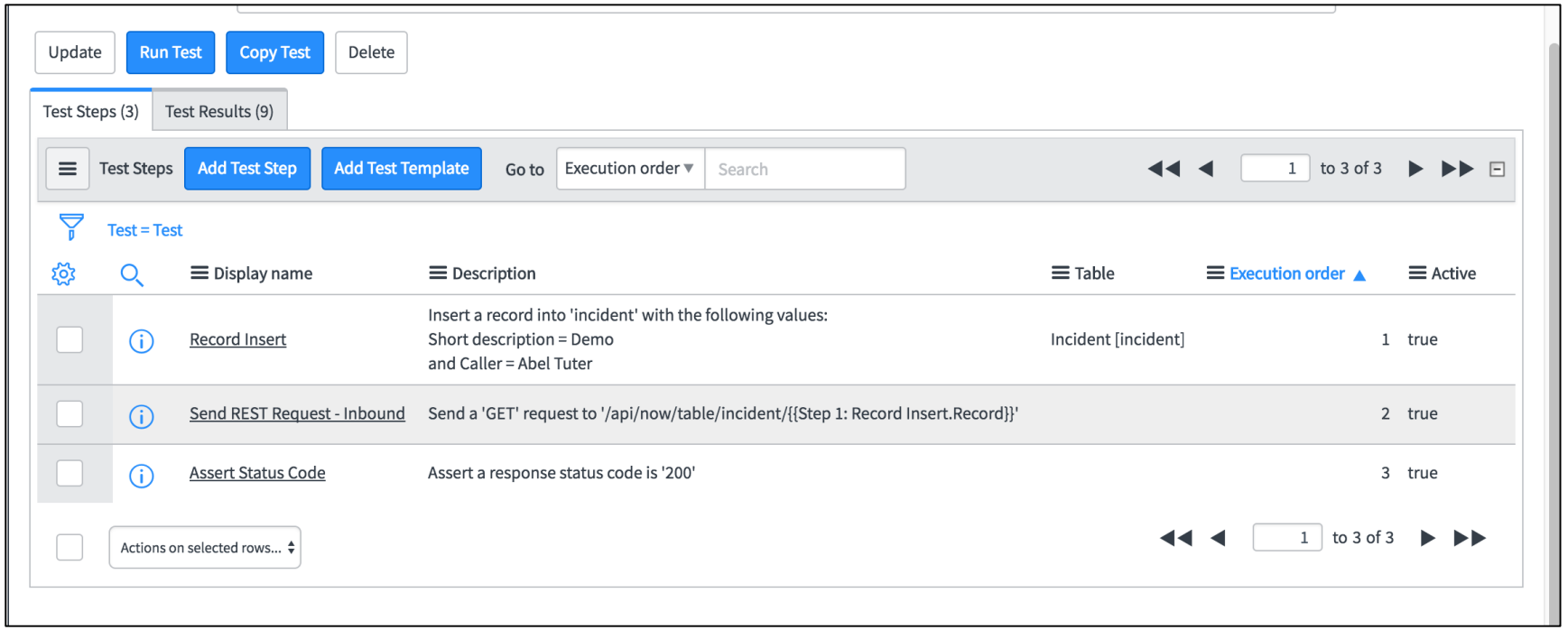
- End to End Service Catalog Testing, searching catalog items, process approvals,
- Take screenshots
- Asserts on items



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REST APIs & Web Servicesxa Testing

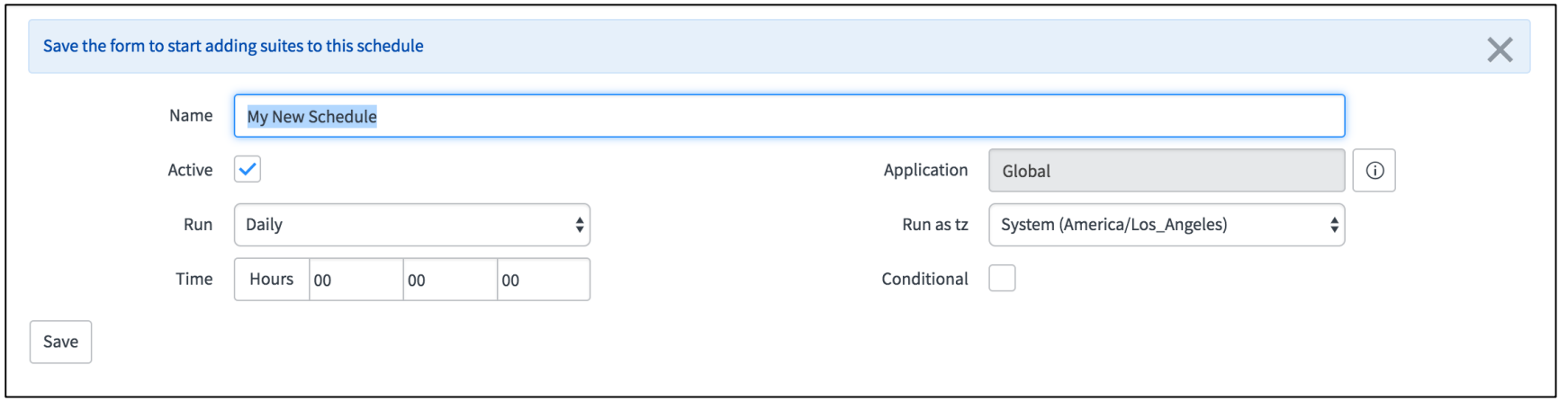
- Supports inbound REST only
- Create test from form or use Rest API explorer
- Have to provide Authentication for non public API
- Rest API explorer can be used to create tests but not edit the test

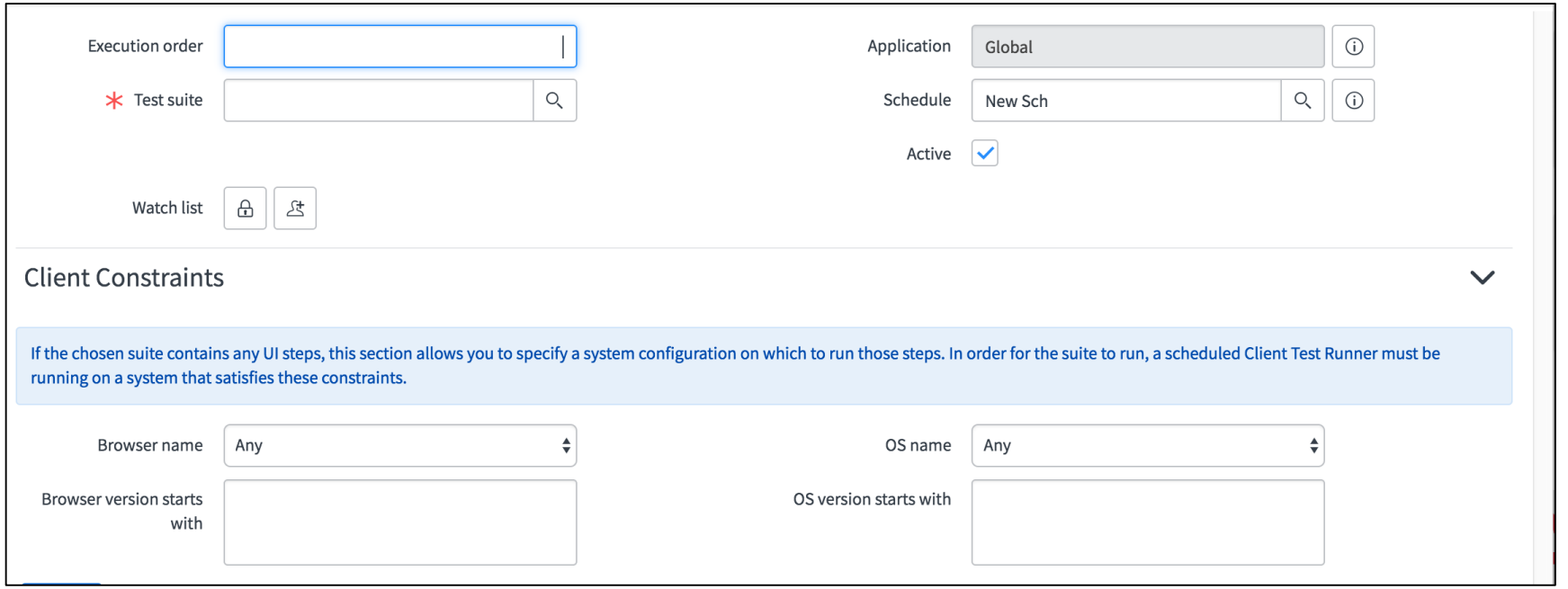


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Scheduling

- Scheduxle any test suite any time of the day
- Schedule test to run on different view
- E-mail and view test results
- View reports





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Use Case – Form Testing

I just upgraded to new version of ServiceNow and want to check if opening of Incident form, setting some values etc works

I want to make sure if any other user opens the same form it works

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Use Case – Business Rule & Data Policy

I need to test a business rule which runs before updating an incident table and updates the short description.

I need to have a test case which makes sure that assignment group is mandatory when impact is high for any incident

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Use Case – Rest API & Service Catalog

I need to test my scripted Rest inbound table API

I need to test ordering and processing of service catalog

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Use Case – Scheduling Test

I need to create suite of test for an application

I need to schedule test

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Automated Testing Framework - Benefits

PRODUCTIVITY

- Reduced upgrade cycle times
- Create tests once to test different versions of software.
- Expects 40%-60%+ of test are covered

EASE OF USE

- Create tests right from the UI
- Create Tests using scripts
- Supports jasmine assertion engine

COMPREHENSIVE

- Forms, Service Catalogs, REST APIs and Server Side Testing
- Test scheduling
- Browser selections

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Top Takeaways for Automated Testing Framework

1

Automates most of the manual testing done on Now Platform™

2

Built for both Technical and non-Technical users and supports scheduling of tests

3

Allows Server side, Forms, Service Catalog and Rest API testing

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Thank You

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