

Salesforce is a widely used Customer Relationship Management (CRM) tool that has proven to provide great business value. It is highly popular due to its easy user experience, cloud hosting, customizability, configurability and open platform. However, the features that make Salesforce so popular can also make it a challenge to test. Configuration, customization and integration of an out-of-the-box product means that once altered to suit an organization's requirements, the Salesforce workflows and connected technologies need to be heavily tested to ensure quality is retained.

## A model-based approach to test automation

TTC's recommended platform Tricentis Tosca is a full enterprise testing solution that enables optimization of testing through an innovative approach to test automation and test case design. Using a model-based approach to test automation, Tosca has proven to be more scalable, robust and maintainable than script-based approaches such as record/replay and test automation frameworks.

A model-based approach involves constructing a model of the system under test that contains all the technical information, and then describing the test cases in a business-based language that does not require scripting. This results in more maintainable test automation than other approaches. It is more scalable because non-technical testers and subject matter experts can contribute to the development of test automation, and more robust because the separation of concerns with the model-based approach addresses the inherent fragility in script-based test automation. It is also more maintainable because there is a single source of truth for test automation maintenance.

## Salesforce is an excellent candidate for model-based test automation

Knowing the testing challenges that organizations can face with highly configurable, highly integrated software such as Salesforce, TTC investigated how a model-based approach to test automation using Tosca could be applied.

Focusing on automating the browser GUI for Salesforce, TTC had a team of two test analysts with no test automation experience up and running automating stable, robust, meaningful test cases within one week. This shows just how quickly and easily the model-based approach to test automation can be implemented, which lends itself well to scalability and becoming part of the test automation effort.

In addition to automating the browser GUI for Salesforce, Tosca is also able to automate Salesforce Classic, Salesforce Lightening, Salesforce API (webservice), mobile interface and other interfaces (e.g. DataBase). By using Tosca, you also have the added advantage of automating all your other connected applications in an end-to-end workflow.

Name		Value	ActionMode	DataType
C TC5.	Create New Contact			
N N	avigate to Contacts Page			
▲ Contacts				
OK	New	X	Input	String
⊿ 🔀 N	ew Contact:- Enter Details			
	First Name Salutation	Prof.	Input	String
ab	First Name	Zim	Input	String
ab	Last Name	10000	Input	String
ab	Account Name	Zim1	Input	String
ab]	Email	zim@r.com	Input	String
ab	Phone	000000000000000000000000000000000000000	Input	String
abI	Mobile	638768723	Input	String
CI CI	ick Save Button_Reference			
Go to Home page				

Example automated test case for Salesforce

## Let's talk

TTC has developed a repeatable approach to automating all Salesforce interfaces using Tosca. Our knowledgeable team can guide you through testing Salesforce using Tosca, with assets that have been developed to be re-used.

