

# Tricentis Tosca

P Aparna  
*Mscs(DA)*  
*Dept. Computer Science*  
*Rajagiri College of Social Sciences*  
*(Autonomous), Rajagiri PO*  
*Kalamassery, Kochi-683104, India*

## Abstract

Tosca is a software testing tool which provides a model-based approach to testing, and also allows automated testing of complex systems. This can lead to faster and more efficient testing. Tosca allows for end-to-end testing of the entire system, which means that all critical aspects of the application will be tested. This will also ensure that the application will meet all the required standards.

## Introduction

**TOSCA** expands to Topology and Orchestration Specification for Cloud Applications. Tricentis Tosca is a software testing tool developed by the company Tricentis, which specializes in software testing and also quality assurance. This tool provides an end-to-end testing solution that enables software testers to automate their testing efforts across a huge variety of different platforms and also technologies. The test suite supports the test project during its entire lifecycle. Transferring and syncing requirements from the requirement management system is the first step.

In addition to acting as an executive assistant and summarising the test findings in various reports, TOSCA assists its users in developing effective test cases on a methodologically solid basis. Tricentis Technology together with Consulting GmbH created TOSCA Testsuite TM .

Tosca helps in reducing the overall cost of testing by automating many of the testing processes. This will reduce the need for manual testing, that can be time consuming and very costly.

Tosca uses a model-based testing methodology and builds a model of the application being tested in place of scripting for test automation. Test case logic, test data, and technical information about the application being tested are all saved separately and combined at test execution time. The technical information is updated once in the central model whenever an element in the

application being tested changes. The numerous test cases that test the updated element do not need to be explicitly rewritten to reflect the change because they inherit from this model.

The key feature of Tosca is that its model-based testing approach allows testers to produce a visual representation of their business processes and also their applications. This model can be used as a foundation for creating automated test cases, that can be run on various platforms and multiple technologies.

Test data management, test case design and execution, and reporting and analysis are some of the features provided by Tosca which helps the testers in managing the test cases and results.

Other than testing automation functions, TOSCA has many functions, including

- Integrated Test Management
- Command Line Interface (CLI)
- Application Programming Interface (API)
- The Graphical User Interface (GUI)

Details	Test configuration				
	Name	Value	ActionMode	DataType	WorkState
TestCases					
▶ Run Me! [Click Me...					COMPL...
▶ Manual Tests					
▶ Automated Tests					
▶ Data-Driven Tests ...					
▶ Helpers					

Configure Workspace

Common Repository

Select type of Repository:

None (creates single user workspace)

Workspace

Create new workspace in:

C:\Tosca\_Projects\Tosca\_Workspaces

Select name for new workspace:

☐ Use workspace template

☐ Create slim workspace

Enter name for new workspace!

## Working of the tool

Tricentis Tosca is a test automation tool that will allow the users to automate the testing of software applications across a wide range of platforms, architectures and technologies. The below gives a brief idea of how Tricentis Tosca works:

1. **Test Creation:** Tricentis Tosca's drag-and-drop interface lets users create automated test cases without having to know any programming. Using a variety of pre-built modules, users may construct test stages, enter test data, and establish expected results.
2. **Test Execution:** Users of Tricentis Tosca can run automated test cases on a variety of platforms, such as desktop, online, mobile, and API. Users can quickly and readily spot problems with the tool's real-time data capturing, which includes pictures and videos while tests are being executed.
3. **Test Management:** Users can manage test cases, requirements, and defects all in one place thanks to Tricentis Tosca's unified test management platform. Users have the ability to make test plans, distribute test cases to team members, and track development in real time.
4. **Continuous Integration:** As a result of Tricentis Tosca's integration with well-known CI/CD systems like Jenkins and Bamboo, users may automate testing as a part of their whole software delivery process.
5. **Reporting and Analytics:** Users can check the status of tests, spot patterns, and create custom reports with Tricentis Tosca's extensive reporting and analytics features. The application enables

teams to make informed judgements regarding the calibre of their software by providing real-time information into the state of testing activities.

## Conclusion

Tricentis Tosca is an all-around strong and adaptable testing solution that may assist businesses in enhancing their software testing initiatives and achieving greater standards of quality and dependability in their software products. With the help of Tricentis Tosca, teams can automate their testing processes across a variety of platforms and technologies, which boosts the quality and efficiency of software delivery.

Tosca offers a model-based testing strategy that enables automated testing of complicated systems, resulting in testing that is quicker and more effective.

Moreover, Tosca acts as a powerful solution for continuous testing and integration by providing integration with popular DevOps tools. Tosca offers a single platform for both teams to work on, facilitating greater communication between the development and testing teams. Tosca assists in ensuring that the application satisfies the necessary quality standards and is error-free by conducting thorough testing of the programme.

Finally, both technical and non-technical team members can have easy access to Tosca thanks to its user-friendly interface.

Tricentis Tosca includes tools for exploratory testing, business intelligence and data warehouse testing, API testing, mobile testing, service virtualization, test data creation and generation, and GUI testing. It is used to automate testing for SAP technologies including SAP S/4HANA, SAP Fiori 2.0, SuccessFactors, SAP CRM, Concur Technologies, SAP Ariba, and SAP Business Information Warehouse. It has SAP-certified connectivity with SAP applications.

## References

1. <https://www.tricentis.com/products/automated-testing-tosca>
2. <https://academy.tricentis.com/page/tosca>
3. <https://www.softwaretestinghelp.com/tosca-automation-tool/>
4. [https://documentation.tricentis.com/tosca/1410/en/content/installation\\_tosca/installation.htm](https://documentation.tricentis.com/tosca/1410/en/content/installation_tosca/installation.htm)
5. <https://mindmajix.com/tosca-tutorial>