

# TOSCA Testsuite

Automated Software Testing,  
Test Management and Quality Assurance

*Increased Testing Efficiency and Effectiveness*



## Key Benefits of TOSCA

- Achieve test coverage of up to 95%
- Increase test automation up to 90%
- Reduce costs by 50 % or more
- Reduce your time-to-market
- Outsource yet keep control over quality

## The Challenge

The cost-intensive maintenance of scripts and frameworks has always been the show stopper for wide-spread test automation. However this is history now, because TOSCA completely eliminates the root cause of the problem: static test scripts.

## The Solution

Better software quality with minimal effort and easy handling. TOSCA Testsuite makes the fast and cost-effective execution of automated software tests possible.

## Model-Driven Testing with TOSCA

TOSCA is a third-generation technology using a model-based approach, unlike first and second generation technologies such as record/replay tools, or tools that require test automation frameworks (script-based technologies). Some of the core business benefits of model-based testing over script-based testing are:

- Lower total cost of ownership
- Speed to market
- Improved quality
- On demand staffing

TOSCA uses a non-graphical model as an enabler for efficient test automation. The TOSCA model is derived from the software build itself (in particular its interfaces) and presents an abstract interface catalogue (system model), making it possible to write test cases that are independent of the choice of underlying software technology and that are maintained in a human-readable "business" language.

## Business-Based Test Cases

TOSCA's heart and soul is the unique "Business Dynamic Steering" concept, which allows you to design and specify manual and automated test cases in a purely business-based way. And, more importantly, the automated test cases can easily be MAINTAINED non-technically by the testers. TOSCA allows software quality assurance in projects with limited resources tight deadlines and cost pressure – for older and established – as well as for the latest technologies.

## TOSCA OneView: One Universe for Testing Excellence

- One language to describe manual and automated test cases (both UI and non-UI) in plain English!
- One-Click Automation: move quickly from manual to automated tests
- One end-to-end testing process for all types of testing

## The TOSCA Family

**TOSCA Testsuite:** TOSCA Testsuite is the basis for all TOSCA testing solutions and delivers test management and automation, risk-based testing and test case design, reporting, dashboards and much more.

**TOSCA@BigData** enables the quick and cost effective set up of comprehensive, efficient testing of your data warehouse and business intelligence systems.

**TOSCA@data:** Test Case Design and the use of synthetic test data allow you to achieve significant cost reduction.

**TOSCA@SAP** enables highly efficient and advanced test processes in SAP environments.

**TOSCA X-Browser:** With TOSCA you can create test cases for any browser and run them on all supported browsers. We call this „Build once and run.“

**TOSCA Mobile:** Automate Your Mobile Device Testing for over 3,000 Mobile and Smart Devices.

**TOSCA Agile** provides ideal coverage of the key elements of agile development for early automation and meets all the technical challenges.

**ALM Integration:** TOSCA's powerful AddIns enable the integration of ALM systems such as HP, IBM, Polarion etc. and/or defect management systems such as JIRA etc. within days.



## End-to-End Optimized Test Process in TOSCA:

TOSCA Testsuite provides optimal support of the entire testing lifecycle from requirements to reporting with paradigm shifting methodology.

### Paradigm Shift I: From Number of Test Cases to Optimized Test Coverage

Today typically test reports show both, the number of „executed“ and „not executed“ test cases.

Our approach:

- Meaningful test reports showing the business risk of implementation
- Save up to 90% of test cases without any loss of test coverage!

### Paradigm Shift II: Business Dynamic Steering

Today's state of the art: Test automation is a programmer's discipline. Manual test cases cannot be transformed to automated test cases.

Our approach:

- Test cases in plain English empowering non-technical users
- Easy transformation from manual to automated test cases

## Test Management



*TOSCA's OneView Technology provides leap frog advances in software testing, software management and test automation technology and delivers a robust, cost effective, and scalable solution that sets TOSCA apart from its competitors.*

## TOSCA Testsuite Key Features:

### Capabilities:

- Automated and manual tests
- Test data management
- Test management
- Integrated methodical test case design and requirements management
- Business-based test automation
- Automated Web Testing
- Smoke Testing
- Regression Testing
- Automated Cross-Browser Testing
- Automated Mobile/Smart Device Testing
- Flexible reporting functionality creates the appropriate reports for various demands
- Modular architecture: easy to customize and extend
- Web access (via a web-browser) without active-X components
- Multi-user with integrated check-in and check-out mechanism as well as versioning
- Traceability from requirements through test cases to execution results or defect status
- De-coupling of test tracks by allowing business-based test cases on an interface or protocol level
- Calculation of test coverage and risk based testing
- Sophisticated recovery functions

## TOSCA Integration:

- Functional tests for GUI and non-GUI applications and hardware components
- Cross-platform test cases (end-to-end)
- Easy integration with ALM tools (requirements and defect management)
- JAVA Application Testing
- Silverlight Application Testing
- Third party .NET Supported Testing
- WPF Testing
- Bi-directional communication with MS Excel and MS Word
- PDF comparison
- Integration with HP, IBM, JIRA, SAP, and many more

## Test Case Design

In the Test Case Design section of TOSCA Testsuite you will find, for the first time, all the tools for highly optimized and always comprehensible test case generation:

- Creation of equivalence classes from the most diverse sources
- Automatic generation of combinations
- Modular concept: reusable data and process structures
- Derivation of test coverage of individual test cases
- Filter and search function for the perfect overview
- All of the information is clearly presented on a single screen

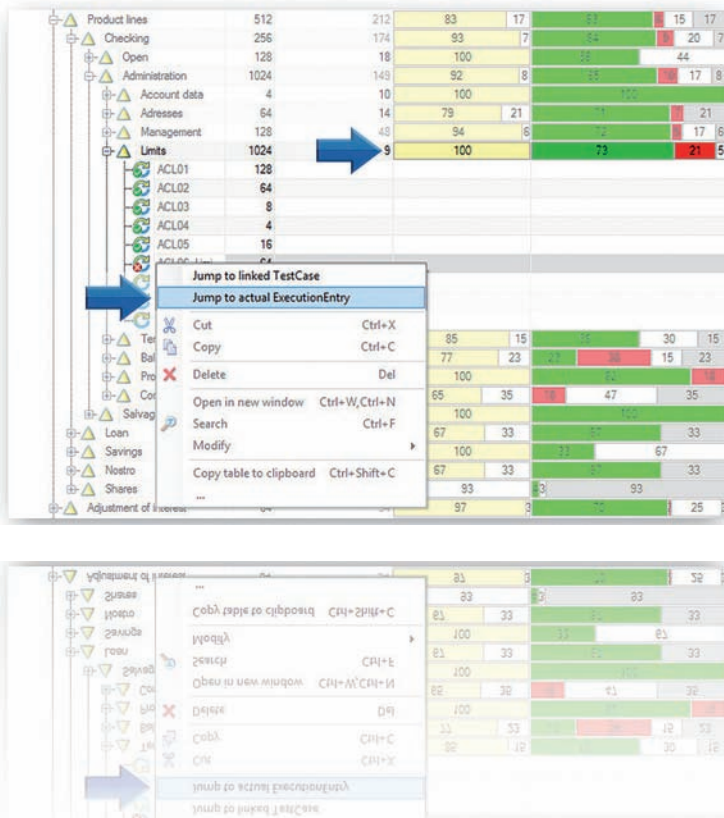
Your benefit: a dramatically reduced number of test cases with optimized efficiency (test coverage).

## Automated Testing Made Easy!

Owing to its unique architecture, TOSCA allows you to automate existing manual test cases – and transform them into automated test cases. By drag & drop an existing manual test case is automated. Automated tests in TOSCA Testsuite can be created and executed without any technical skills.

As a side benefit of dynamic steering, the test becomes what it should always have been: a business-based task. TOSCA OneView allows the creation of automated test cases that can be reused on different platforms, like Mobile/Smart Devices, and provides comprehensible integration with popular ALM systems, such as HP, IBM and others.

## TOSCA Let's You Drill Down to the Test Steps Within Test Cases

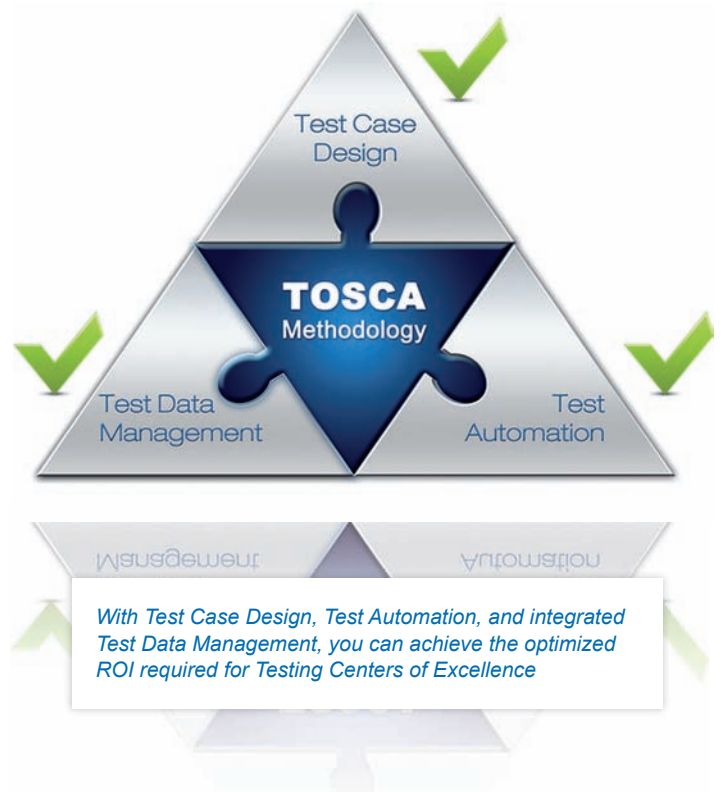


## Integrated Test Data Management

For software tests to be efficient and effective, the required test cases must be determined systematically, and accurate test data is essential for test case execution to yield useful results. To ensure that test data targets the test cases precisely, it should be generated in the test process itself - producing what we call synthetic test data – and offering the test organization the highest level of control:

- Perfect fit
- Low data volume and maintenance costs
- The right test data on demand
- No sanitization required

## The ROI of Testing



## Cross-Technology Steering

TOSCA OneView makes it possible to reuse one test case across multiple technologies and platforms. TOSCA is perfectly suited for automated tests based on various modern technologies, such as:

- HTML (MS Internet Explorer, Mozilla Firefox)
- Win 32 incl. MS Office products
- HOST Terminal Emulations
- SOA WebServices
- Lotus Notes
- Delphi
- SAP
- Visual Basic
- JAVA (Swing /AWT/SWT)
- TextStream Engine
- .Net (WinForms)
- Edifact Engine
- Fabasoft
- WPF Engine
- Oracle Forms/Siebel
- Flash Engine
- Centura Gupta
- Console Engine
- PowerBuilder
- UIA Engine
- PDF documents

Did not find your technology? TOSCA's adapters are flexible and meant to be application specifically amendable. New technology adapters can be developed quickly! For more information, visit us at [www.gotosca.com](http://www.gotosca.com).



The Year's Ten Best Web Support Sites



## TOSCA Services & Education

TRICENTIS offers a complete testing solution, business and technical, including strategy, integration, extension and infrastructure. From the initial installation of TOSCA Testsuite to its implementation into your project and system environment, we support you with technical and business solutions as well as best practices. We provide a comprehensive, multi-stage training and Get Certified program for customers and partners. The content of our training courses will be tailored to your requirements. In addition, see our website for a list of TOSCA Certified Implementation Partners.

## TOSCA Award-Winning Support

Reliable, quick and competent: These are our goals which we have been putting into practice for many years. In addition to free telephone and e-mail support, ticketing system and telephone conferences we provide a Live Chat, which is available for customers, prospects and partners.

- Constant first level solution rate above 88%
- 95% of calls are answered within 5 seconds
- 99% availability during appointed support times
- Qualified first answer within 4 hours
- 99% of our customers prolong their service agreement

## About TRICENTIS

Since 1997, TRICENTIS offers cross-industry expertise in all aspects of software testing and software quality assurance.

TRICENTIS developed and introduced the innovative and technically superior solution for software testing, test automation, and risk assessment - TOSCA Testsuite.

Over 300 TRICENTIS customers worldwide rely on the power of TOSCA Testsuite, its methodologies and Best Practices. For more information, please visit us at [www.tricentis.com](http://www.tricentis.com).

## TRICENTIS Customers

Allianz Suisse, BMW Group, Commerzbank Group, EVN, GBST, Henkel, Huk-Coburg, Otto, SCHUFA, Siemens, TECAN, Vienna Insurance Group, NORDCAPITAL, Barmenia, NT-ware, NETRADA, Nomura, Glencore, SPAR Austria, MAN Finance, Incaeda, HHLA, Tegel, Ministry of Social Development, HealthAlliance, New Zealand Customs, Wellington City Council, TVNZ - Television New Zealand, GBST, Road and Maritime Services NSW, RPDData, Bunnings Warehouse, Medibank Health Care, Suncorp

## Customers About Us

*"TOSCA's excellent support for incremental test automation gives short feedback cycles with real results, which has provided us with clarity and accurate insight into our progress throughout the project. The collaborative and iterative nature of our engagement with TRICENTIS lead to a successful outcome of the project and fitted well with the team oriented culture of our organisation."*

- Charles O'Reilly  
Head of Project Development & Implementation, GBST

*"The ease of use of TOSCA allows our test team to focus on the specification of business-based test cases instead of dealing with technical issues."*

- Jens Einhaus  
Test Automation Project Manager, BMW Group

*"Thanks to TOSCA Testsuite™ the test cases and test results are always available in real time and are fully transparent, interpretable and traceable."*

- Yvonne Schmid  
ICT Testmanager, Allianz Suisse

## Why TOSCA?

- ✓ Model-Based, Next Generation Approach
- ✓ End-to-End Testing Solution
- ✓ Business Dynamic Steering
- ✓ Empowers Non-Technical Users
- ✓ Quickly Create Automated Business Test Cases in Plain English
- ✓ Configure One Test Case for Multiple Operating Systems, Browsers and Smart Devices
- ✓ Reuse One Test Case for Different Technologies and Platforms such as GUI, Non-GUI, JAVA, .NET
- ✓ Certified Integration with SAP®
- ✓ Integration with popular Application Lifecycle Management (ALM) Solutions, such as HP, IBM, Polarion etc., Defect Tracking, and other Testing Solutions