

# Orchestrated Service Virtualization

## Overview

### The Tricentis OSV

For automated tests to execute successfully, all of the dependent systems must be available with the appropriate configuration, functionality and test data—all at the same time, every time the automated test suite executes. However:

- Test environment constraints impact the testing of over 80% of teams
- The average enterprise application has over 50 dependencies
- Only 56% of an application's dependencies can be reliably accessed for testing
- Over 75% of developers and testers experience restricted access to third-party dependencies
- Obtaining and configuring the appropriate test data for a single test run can take weeks—and that test data may be valid only for a single test run

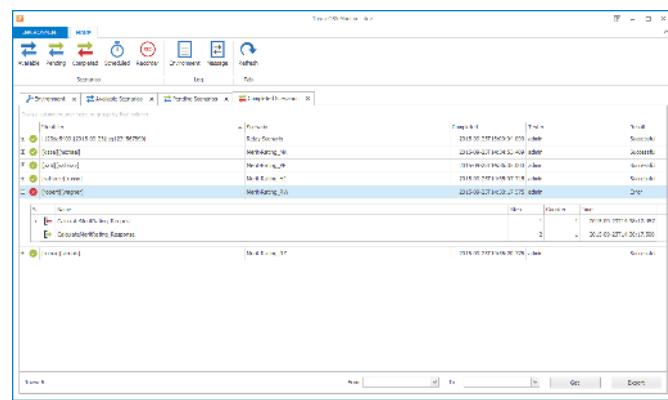
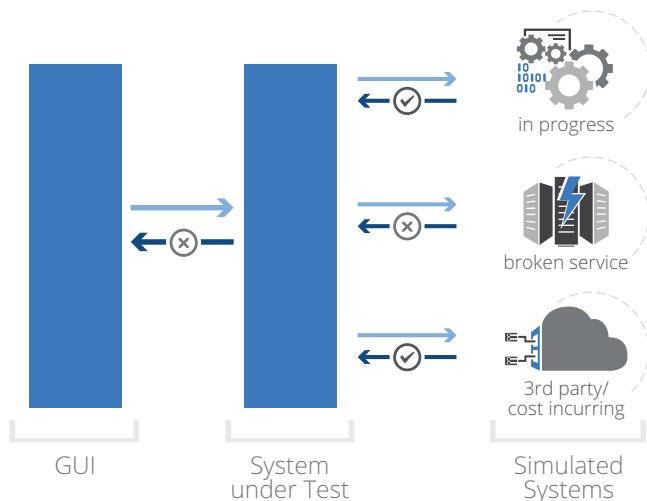
Tricentis Orchestrated Service Virtualization (OSV) helps you stabilize access to dependent systems so that tests can execute completely, reliably, and continuously.

## Key Benefits

### Enable CI and Continuous Testing

Service virtualization is a simulation technology that lets you automatically execute tests even when the Application Under Test's dependent system components cannot be properly accessed or configured for testing. By simulating these dependencies, you can ensure that your tests will encounter the appropriate dependency behavior and data each and every time that they execute. Service virtualization is commonly used when tests need to interact with dependent system components that are:

- Unreliable, evolving, or not yet completed
- Beyond your scope of control (e.g., operated by another company or division)
- Available for testing only in limited capacity or at inconvenient times
- Challenging to provision or configure in a test environment
- Simultaneously needed by different teams with varied test data setup and other requirements
- Too restricted or costly to use for automated regression testing



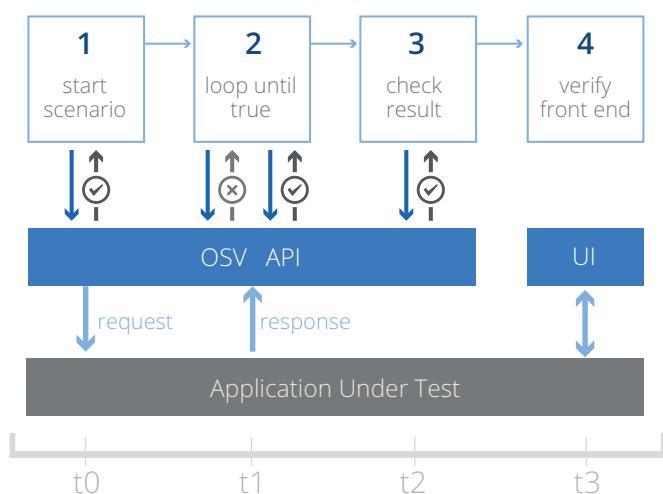
# Key Benefits

## Avoid Delays

Testers are increasingly being asked to test highly interconnected systems with many components evolving in parallel. By simulating interactions with dependent components that are not yet implemented or still evolving, you can start testing whenever your application under test (AUT) is ready. This lets you expose defects when they are fastest, easiest, and cheapest to fix.

## Reduce Costs

Many modern distributed applications interact with third-party services that charge access/transaction fees. Service virtualization lets you simulate the behavior needed to execute your tests—allowing you to integrate automated testing into CI without incurring exorbitant fees.



# Key Features

## Simulate Interactions Required for Testing

Tricentis Tosca simulates the dependent component behavior that's required to execute your tests. We record the messages exchanged between the AUT and its constrained dependencies— automatically learning the expected interactions by listening in on their “conversations.” Object-oriented modeling of messages eliminates the “maintenance trap” of conventional approaches.

## Automated Message Validation

Complex business processes often involve thousands, if not millions, of messages. Manually checking these messages is simply not feasible. OSV can automatically flag messages that are improperly formed or sent in the incorrect order.

## Integration with Tricentis TDM

Obtaining and configuring the appropriate test data for a single test run can take weeks—and that test data may be valid only for a single test run. Tricentis Tosca's TDM helps you populate service virtualization assets with data that's appropriate for automated, continuous test execution. This relieves you from having to find new data for every test run. If the data set is updated, you can easily modify all instances with just one click.

## About Tricentis

With the industry's #1 Continuous Testing platform, Tricentis is recognized for reinventing software testing for DevOps. Through risk-based testing, scriptless end-to-end test automation, and the industry's most extensive technology support, Tricentis breaks through the barriers experienced with conventional software testing methods. Our innovative technologies simplify testing for even the most complex enterprise applications—transforming testing from a roadblock to a catalyst for innovation.