

Sencha Test

The most comprehensive unit and end-to-end functional testing solution for Ext JS applications. By providing the deepest integration with Ext JS, Sencha Test ensures the highest test accuracy.

Product Overview

Sencha Test helps developers and test automation engineers create unit and end-to-end functional tests quickly, and execute them on multiple browsers simultaneously. Cross-browser testing is critical to ensuring high-quality applications, and test automation is a requirement to meet delivery timelines. Sencha Test is the only dedicated testing solution for Ext JS applications. It provides the deepest integration with Ext JS for faster and more flexible test creation and execution. It helps software development teams build an end-to-end testing plan without having to cobble together testing tools.

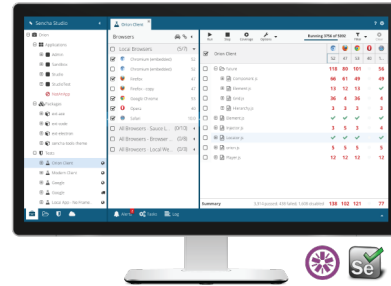
Sencha Test is based on almost a decade of Sencha's experience in testing Ext JS components and apps. Under the hood, Sencha Test leverages the powerful Jasmine framework and WebDriver, so tests can be written in JavaScript and executed along with the source code for effective unit testing. Integration with WebDriver allows users to create end-to-end tests that mimic actual user behavior and execute them on remote browser farms. The many assertions and matchers along with spies, stubs, and mocks can be used to create robust tests that help developers deliver quality apps. Tests are not brittle because Ext JS specific component queries can be used to locate elements on the application under test that are far more stable than DOM IDs or XPATHs. Sencha Test enables developers and test automation engineers to:

- Improve the quality of Ext JS apps through continuous testing
- Leverage unit and end-to-end functional testing to increase productivity and accelerate release cycles
- Create robust tests by leveraging the deep integration between Sencha Test and Ext JS.

Product Components

All of the components work together seamlessly to provide a comprehensive and integrated test environment designed specifically to test Ext JS applications.

Sencha Test Studio is the graphical user interface that allows developers and test automation engineers to write Jasmine tests in a built-in Sencha Test editor. Tests are written using JavaScript and stored in the team's preferred source control system. Test Studio allows developers to create tests directly in Sencha



Test or code in a separate IDE, and execute the test immediately. This iterative unit testing process helps developers to create more robust code by constantly testing it along the way. Developers and test automation engineers can create Jasmine/WebDriver tests for multi-page applications built with Ext JS.

Test Runner enables developers to run selected unit and end-to-end functional tests on any or all of the browsers on a local machine, a connected mobile device, or on a browser farm. The local Test Runner can be used for test creation and debugging. Apart from the local browsers, external browser farms or a Selenium Grid can be accessed from the Test Runner through a one-time configuration in Sencha Studio.

Sencha Test CLI helps teams achieve the full power of automated test runs. Once tests are authored and checked into the source control repository, developers can launch them with their CI system. The CI system can invoke the CLI automatically, once it senses a change to the application code or the test files in the source control repository. An external browser farm or a Selenium grid is used by the Sencha Test Command Line Interface (CLI) to run the same tests on a Continuous Integration (CI) system—allowing teams to schedule automated test runs nightly or at a convenient time, with minimal configuration.

Test Archiver enables teams to store and track historical testing trends in their projects as well as compare results between runs. Automated visual analysis allows them to identify runs where screens do not render correctly or visual glitches are present. The archiver leverages the full power of Sencha Test Studio to make it easy to understand test results and quickly identify failures.

Key Features

Test Authoring

- Write unit and end-to-end functional tests in JavaScript (Jasmine)
- Create tests in the Test Studio built-in test editor or in a separate IDE
- Use powerful APIs to target specific Ext JS components within the application thereby minimizing the code needed to create a test
- Store tests in a source configuration management (SCM) system
- Quickly and easily write and execute tests while coding
- Leverage pre-authored tests for Ext JS

Event Recorder

- Automatically grab events while interacting with the system under test rather than trying to code interactions
- Select or find the stable property for a component such as “check box” or “combo box” through a combination of Component Query and DOM query
- Choose Composite Query, XPATH, or ID as alternatives
- Re-use code generated by event recorder and minimize test creation time

Test Execution

- Run selected tests on any or all browsers on a local machine or browser farm
- Run end-to-end WebDriver tests using the built-in Selenium server and embedded Chrome browser
- Dramatically reduce testing time by executing tests simultaneously on multiple browsers through integration with Selenium grid or leading browser farms including Sauce Labs

Supported Platforms

Browser Desktop (PCs & Laptops)	Browser Mobile (Tablets & Smartphones)	Test Framework Integrations	Supported Sencha Applications	Test Automation Integrations	
<ul style="list-style-type: none">• Internet Explorer 8+• Microsoft Edge• Chrome	<ul style="list-style-type: none">• Firefox• Safari 6+• Opera 15+	<ul style="list-style-type: none">• IE10+ on Windows Phone 8+• Chrome / Stock Browser on Android 4+• Safari on iOS 6+	<ul style="list-style-type: none">• Jasmine 2.4.1• Istanbul 0.4.1• WebdriverIO	<ul style="list-style-type: none">• Sencha Ext JS 4.2+• Sencha Touch 2.0+	<ul style="list-style-type: none">• Browser Farm - Sauce Labs• Continuous Integration - TeamCity/Jenkins

Benefits

- Reduces barriers to testing by providing a professionally designed, documented and supported testing framework for Ext JS
- Leverages Sencha 's extensive expertise in testing Ext JS apps and components
- Shortens testing startup time by delivering pre-authored tests for complex Ext JS examples
- Stores application and test code in one place making it easier to develop and test in parallel
- Automates testing by allowing scheduled, unattended test runs that leverage CI
- Empowers developers and test automation engineers to develop a large number of tests with an easy-to-use JavaScript editor built into the application
- Improves code quality, accelerates time to market, and ensures a consistent end-user experience

Test Automation

- Maximize testing efficiency through automated test runs
- Launch tests within the CI system as soon as application changes and tests are checked into the source control repository
- Integrated with TeamCity and Jenkins out-of-the-box
- Leverage any build tool that can invoke a command-line utility to run tests via Sencha Test CLI

Test Results

- Review results from automated and manual test runs
- View summary-level results and detailed reports of failed tests
- Identify and rectify code coverage gaps through out-of-the-box integration with Istanbul
- View percentage coverage at several levels: Statements, Branches, Functions, and Lines

Visual Screen Comparison

- Minimize time spent verifying images on hundreds of screens
- Review images that are captured from previous test runs and compared to each subsequent test run

Expert Support and Services

Sencha Test is backed by expert services and support, ensuring that developers and test automation engineers get maximum value. The Sencha Web Application Testing Maturity Model is designed to guide organizations as they adopt web application testing in their software development lifecycle. Comprehensive training enables them to get up to speed fast, and support services help to resolve any issues as quickly as possible.

About Sencha

More than 10,000 customers and 60% of the Fortune 100 rely on Sencha to deliver innovative applications that drive their business. The Sencha Web Application Development Platform uses the power of modern web technology to empower the enterprise to seamlessly design, develop, and test cross-platform web applications that deliver the right end user experience on the right screen at the right time. Organizations are using the Sencha Platform to improve productivity and accelerate every stage of the web application development lifecycle. Visit us at www.sencha.com.

