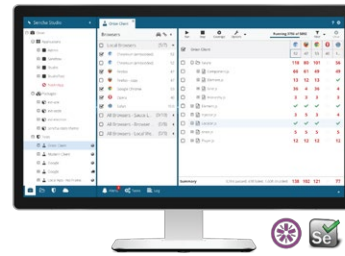![Sencha logo] Sencha

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 functional tests quickly, and execute them on multiple browsers simultaneously. Cross-browser testing is critical to ensuring high-quality apps, and test automation is a requirement to meet delivery timelines. Sencha Test is the only dedicated testing solution for Ext JS apps.

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 Studio is the graphical user interface that allows users 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. Sencha Test allows developers to create tests directly in Sencha Studio, or code in a separate IDE, and execute the test immediately.

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.

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 Sencha Studio to make it easy to understand test results and quickly identify failures.

Key Features

Test Authoring

- Write unit and functional tests in JavaScript (Jasmine)
- Create tests using page object functions and keep test code clean
- Use powerful APIs to target specific Ext JS components in the app, minimizing the code needed to create a test
- Store tests in a source configuration management system

Inspector

- Locate components on the application under test and construct meaningful locators
- Generate the API code and add actions in the editor to complete the test creation process
- Create powerful page objects for the entire application to maintain a centrally accessible location for all locators
- Choose the best locator that matches the component on the page from a list of available options

External Libraries in Test

- Install and leverage node modules by requiring them directly in the test code (WebDriver Scenario)
- Use node modules to expand the scope of testing by connecting to databases
- Perform tests by communicating to web service APIs without invoking the application
- Require external files directly in the test code, which has functions that can be reused across multiple test cases

Application Lifecycle Management (JIRA Only)

- Maintain tests, results, and defects in Sencha Studio
- Save test results in the local archive server, and review the failed tests in Sencha Studio
- Publish failed tests, that are marked as defects, directly to the selected JIRA project
- Get the latest status of bugs directly in Sencha Studio before creating a new bug

Event Recorder

- Automatically grab events while interacting with the app under test rather than trying to code interactions
- Select or find the stable property for a component through a combination of Component Query and DOM query
- 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

Test Automation

- Maximize testing efficiency through automated test runs
- Launch tests within the CI system as soon as app changes and tests are checked into the source control repository
- Use built-in integration with TeamCity and Jenkins
- 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 built-in 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

Supported Platforms

Browser Desktop (PCs & Laptops)		Browser Mobile (Tablets & Smartphones)	Test Framework Integrations	Supported Sencha Applications	Test Automation Integrations
• Internet Explorer 8+ • Microsoft Edge • Chrome	• Firefox • Safari 6+ • Opera 15+	• IE10+ on Windows Phone 8+ • Chrome / Stock Browser on Android 4+ • Safari on iOS 6+	• Jasmine 2.4.1 • Istanbul 0.4.1 • WebdriverIO	• Sencha Ext JS 4.2+ • Sencha Touch 2.0+	• 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 apps
- Shortens testing startup time by delivering pre-authored tests for complex Ext JS example apps
- Automates testing by allowing scheduled, unattended test runs that leverage CI
- Empowers users to develop a large number of tests with an easy-to-use JavaScript built-in editor
- Improves code quality, accelerates time to market, and ensures a consistent end-user experience

Expert Support and Services

Sencha Test is backed by expert services and support, ensuring that developers and test automation engineers get maximum value.

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. Visit us at www.sencha.com.