

Customizing Recording Options

This topic explains how to exercise greater control over the way that SOAtest records Web web scenarios.

SOAtest allows you to customize the clickable elements that can be recorded during scenario recording. The scripts to modify are located in the following directories:

- **For Chrome** : `<SOAtest_Installation_Directory>/eclipse/plugins/com.parasoft.xtest.libs.web_<SOAtest_version>/root/browsers/chrome/UserCustomizableOptions.js`
- **For Internet Explorer** : `<SOAtest_Installation_Directory>/plugins/com.parasoft.xtest.libs.web_<SOAtest_version>/root/browsers/ie/UserCustomizableOptions.js`
- **For Firefox** : `<SOAtest_Installation_Directory>/eclipse/plugins/com.parasoft.xtest.libs.web_<SOAtest_version>/root/browsers/ff/user.js`

SOAtest uses the array variables defined in **UserCustomizableOptions.js** (or `user.js`, for Firefox) during recording. The following are the variables currently available in this script; note that variable names for `UserCustomizableOptions.js` are listed first, followed by the `user.js` equivalent in parentheses:

- **ext.options.clickableAttributes (extensions.soatestFirefoxRecorder.clickableAttributes)**: This variable defines the type of attribute of HTML elements that SOAtest is looking for when determining if it should record a click on this element. For example, the `onclick` is used to initiate script execution and is a good candidate in this array.
- **ext.options.clickableTags (extensions.soatestFirefoxRecorder.clickableTags)**: This variable defines the HTML tags that SOAtest will consider when recording click actions. In an Ajax web application, there are cases where tags such as `span` or `li` are clicked that caused certain functionalities to execute on the client side. This variable is used to define such tags.
- **ext.options.clickableInputTypes (extensions.soatestFirefoxRecorder.clickableInputTypes)**: This variable defines the form input types that SOAtest will consider when recording clicks. Types such as `text` and `textarea` are not considered clickable by default because the user usually clicks on it just to gain focus and enter text.
- **ext.options.structuralTags (extensions.soatestFirefoxRecorder.structuralTags)** and **ext.options.containerTags (extensions.soatestFirefoxRecorder.containerTags)**: The following two variables work together to limit cases for which user actions are recorded against elements. User actions are not recorded for elements named in the former variable if those elements have at least one child element (either direct or indirect) that is specified in the latter variable.
 - For example, SOAtest normally records click actions on `div` elements. However, sometimes a `div` element might be used not as a UI element; instead, it could be used as a container element that contains a number of other elements (e.g., it could contain a table that contains many other elements). In this case, SOAtest could potentially record a click action against the container `div` that contains the table—but you might not want a click action recorded here because the `div` is used as a container element and not as a lower-level UI element. To tell SOAtest that it should not record the click action against the `div` in cases where the `div` contains a table element, you would ensure that the `ext.options.structuralTags` array (or equivalent) contains `"div"` and that the `ext.options.containerTags` array (or equivalent) contains `"table"`.
- **ext.options.disallowedTags (extensions.soatestFirefoxRecorder.disallowedTags)**: This variable contains a list of tags that will never be recorded, even if they satisfy other recording criteria.
- **ext.options.locatorBuildersOrder (extensions.soatestFirefoxRecorder.locatorBuilderOrder)**: This variable defines the order in which SOAtest uses to create the locator. A locator is created to identify the HTML element on the page that the user action should take place. It is needed during playback to repeat the user action. The order is constructed such that visual attributes in an element are more favorable when creating the locator.
 - To see which locator builder is used, enable debugging information in the console (Parasoft > Preferences > SOAtest > Browser Playback > print debugging information). With this enabled, the console will show messages such as

```
Locator - /descendant::img[@id='changeing'] [1]. Used id builder. This tells you what locator from  
LocatorBuilders.order is actually used (in the above example, Used id builder is used). See Browser Settings for more information  
about this option.
```
- **ext.options.preferredAttributesOrder (extensions.soatestFirefoxRecorder.preferredAttributesOrder)**:

This field is used by the locator builders `'attributesXPath'` and `'attributesXPathWithIndex'` from the above `ext.options.locatorBuilders.order`. When invoked, this array determines the preferred attributes used. You can add, remove, or reorder attribute names to this array to better customize the locators that get built for elements on your site. Removing an attribute will prevent it from being used by the aforementioned locator builders (which may be important if you know certain attributes on your web page are dynamic and should never be used). Re-ordering the attributes will change the priority of the attributes. The first attributes of the array, like `'id'`, take precedence to be used in locators over the last elements
- **ext.options.displayDialogs (extensions.soatestFirefoxRecorder.displayDialog)**: This variable determines whether SOAtest will display alert, confirm, and prompt dialogs during playback. Note that allowing these dialogs to display during playback requires the user close the dialogs some other way (such as with an AutoIT script).
- **ext.options.xpathLibrary (extensions.soatestFirefoxRecorder.xpathLibrary)**: This variable lets you configure SOAtest to use a specific XPath library for resolving XPath locators used in web scenarios. It applies only to Internet Explorer and Chrome. This option has three possible values: `ajaxIt`, `wgxpath`, and `default`.
 - **ajaxIt**: Uses the Google AjaxIt XPath implementation: <http://code.google.com/p/ajax-slt/>
 - **wgxpath**: Uses the Wicked Good XPath implementation at <https://github.com/google/wicked-good-xpath>
 - **default**: Uses the default implementation (currently, Wicked Good XPath).