



Open2Test Test Automation Framework for SilkTest – Keyword Naming Conventions for Developers (JAVA)

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1. Purpose of the Document

This document provides the naming conventions followed in the Open2Test Test Automation Framework for Java technology.

2. Keyword Naming Conventions

2.1. Naming Convention Used for Keywords

1. **LaunchApp**

'LaunchApp' is used to launch the application under test (AUT). This keyword triggers the driver script to launch the application.

2. **Context**

'Context' is used only on a window or a dialog object. This keyword brings a particular window/dialog to the current context, so that any operation or checking can be performed on that particular window/dialog.

3. **Perform**

'Perform' is used to perform an operation on a particular object (e.g., selecting an item in a combobox, closing an open window, or typing text in a textbox). This keyword should be entered in the corresponding row in the second column if any such operations are to be performed.

4. **Check**

'Check' is used to check if the required property of a particular object is attained at runtime. This is a type of validation step (expected result).

5. **Condition**

'Condition' is used to compare two variables, checking properties, existence of windows, etc.

6. **CallFunction**

'CallFunction' is used to call an external user-defined function. The function can have one or more arguments.

7. **Storevalue**

'Storevalue' is used to store the property values of different objects in different environment variables. These environment variables can later be used as input parameters in various functions and also in scripts. The scope of the environment variable is only for the current script.

8. **PressKeys**

'PressKeys' is used to pass hot keys such as Enter, F3, F10, etc.

9. **Msgbox**

'Msgbox' is used for debugging to display the contents of a variable.

10. **Strsearch**

'Strsearch' is used to search for a 'sub string' inside a 'main string'.

11. **Strreplace**

'Strreplace' is used for replacing a 'sub string' inside a 'main string' with a new 'sub string'.

12. Strconcat

'Strconcat' is used to concatenate any number of strings with each other.

13. Strcompare

'Strcompare' is used to compare two strings.

14. Wait

'Wait' is used to place static waits in the keyword script.

15. Arith

'Arith' is used to perform the arithmetic operations on the variables.

16. Assignvalue

'Assignvalue' is used to assign dynamically generated values from the application to environment variables.

17. Loop

'Loop' is used to loop a set of actions given in the datasheet.

18. Convert

'Convert' is used to typecast from one data type to another.

19. Function

'Function' is used to perform FSO (file system object) operations, such as creating a folder in a specified path, creating a file in a specified path, etc.

20. ExportResult

'ExportResult' is used to export the results to the file path specified in the third column of the keyword script.

2.2. Naming Conventions Used for Objects

The table below provides the naming conventions followed for different Java objects in the Open Source Test Automation Framework.

Sl.No	Java Object Class	Naming Conventions
1.	JavaJFCWindow	Window
2.	JavaJFCDialog	Dialog
3.	JavaJFCPushButton	Button
4.	JavaJFCCheckBox	Checkbox
5.	JavaJFCScrollBar	Scrollbar

6.	JavaJFCListBox	Listbox
7.	JavaJFCComboBox	Combobox
8.	JavaJFCPopupMenu	Popupmenu
9.	JavaJFCStaticText	Statictext
10.	JavaJFCTextField	Textbox
11.	JavaJFCTable	Table
12.	JavaJFCTreeView	Treeview
13.	JavaJFCMenu	Menu
14.	JavaJFCPageList	Pagelist
15.	JavaJFCToggleButton	Togglebutton
16.	JavaJFCRadioList	Radiobutton
17.	JavaJFCToolBar	Toolbar
18.	CustomWindow	Customwin

Table 1: Naming Conventions Used for Objects

2.3. Naming Conventions Used for Actions

1. Click

'Click' is used to perform the click operation on objects. It is used with the perform keyword in keyword scripts (e.g., clicking a JButton, Javalink, etc.)

2. Activate

'Activate' is used for activating the current window to perform other actions on the window. It is used with the perform keyword in keyword scripts.

3. Clear

'Clear' is used to clear the specified text from the Editbox control. It is used with the perform keyword in keyword scripts.

4. Close

'Close' is used to perform the close operation on any open window/dialog. It is used with the perform keyword in keyword scripts (e.g., closing a Window, Dialog, etc).

5. Menu;<menu tag name>

'Menu' is used for selecting a specified menu item from the window. It is used with the perform keyword in keyword scripts.

6. Maximize

'Maximize' is used to perform the maximize operation on any open window. It is used with the perform keyword in keyword scripts.

7. Minimize

- 'Minimize' is used to perform the minimize operation on any open window. It is used with the perform keyword in keyword scripts.
8. **Restore**
- 'Restore' is used to perform the restore operation on any window. It is used with the perform keyword in keyword scripts.
9. **Select:<name/Item>**
- 'Select' is used to select an item from Combobox, Listbox, Treeview, or Pagelist. It is used with the perform keyword in keyword scripts.
10. **Selectindex:<index>**
- 'Selectindex' is used to select an item from a Pagelist or Combobox based on the index value specified. It is used with the perform keyword in keyword scripts.
11. **Set:<Text>**
- 'Set' is used to set the value to an edit field. It is used with the perform keyword.
12. **Type:<Value>**
- 'Type' is used to assign a value to an edit field. It is used with the perform keyword.
13. **Type_dt**
- 'Type_dt' is used to assign a value to an edit field from the data sheet. It is used with the perform keyword.
14. **Set**
- This is used to select a Radio Button. It is used with the perform keyword in Keyword scripts.
15. **Selected:<text>**
- This is a check operation used to verify whether a Radio Button is selected or not.
16. **State:<True/False>**
- This is a check operation used to verify whether a Checkbox is checked or not.
17. **Enabled:<True/False>**
- This is a check operation used to verify whether the given object is enabled or not.
18. **Exist:<True/False>**
- This is a check operation used to verify whether the object whose name specified exists or not.
19. **Focused:<True/False>**
- This is a check operation used to verify whether the object is focused or not.
20. **ItemCount:<count>**
- This is a check operation used to verify the number of items present or not in a given object.

21. **Text:<Var/Variable_Name>**
This is a check operation that is used to verify whether the required text is present or not in the editfield.
22. **Check**
This is used to select the Checkbox. It is used with the perform keyword.
23. **Uncheck**
This is used to deselect the Checkbox. It is used with the perform keyword.
24. **Toggle**
This is used to toggle the state of the Checkbox. It is used with the perform keyword.
25. **ItemExist:<Item name>:<True/False>**
This is a check operation that is used to verify whether an item is present or not in the Listbox, Combobox or Radiobutton object.
26. **DoubleClick**
'DoubleClick' is used to perform the doubleclick operation on objects. It is used with the perform keyword in keyword scripts.
27. **Expand:< Tree Node Path>**
This is used to expand the treeitem specified. It is used with the perform keyword in keyword scripts.
28. **ExtendSelect:<item>**
'Extendselect' is used to select an additional item from the listbox. It is used with the perform keyword in keyword scripts.
29. **Extendselectindex:<index>**
'Extendselectindex' is used to select an additional item in the listbox based on the index specified. It is used with the perform keyword in keyword scripts.
30. **<convert>:<conversion type;string>:<variable name>**
This is used to convert a variable from one data type to another.
31. **Collapse:< Tree Node Path>**
This is used to collapse the tree item specified. It is used with the perform keyword in keyword scripts.
32. **SelectRange:<start value>:<end value>**
This is used to select the range of items in the listbox.
33. **Create;<Folder Path/Name>/<File Path/Name>**
This is used to create a folder/file in the specified path.
34. **Delete;<Folder Path/Name>/<File Path/Name>**
This is used to delete a folder/file in the specified path.
35. **Copy;<Source Folder Path>;<Destination Folder Path>/<Source File Path>;<Destination File Path>**

This is used to copy a folder/file from source to destination path specified.

36. **Move; <Source Folder Path>;<Destination Folder Path>/<Source File Path>;<Destination File Path>**

This is used to move a folder/file from the source to the destination path.

37. **Write;<File Path/Name>;<The value to be entered>**

This is used to write the file with the data mentioned in the specified path.

38. **Read;<File Path/Name>;<Variable to store data from file>**

This is used to read the contents of a mentioned file and store the values in the specified variable.

39. **Append;<File Path/Name>;<text to be appended to file>**

This is used to append the data specified with the data contained in the file.

40. **Sqlexecute;<query>**

'Sqlexecute' is used for executing the specified SQL query in the database. The server name, username, and password have to be mentioned along with the query. It is used with the perform keyword in keyword scripts.

41. **Sqlvaluecapture;<query>**

'Sqlvaluecapture' is used for capturing the data from the database by executing the specified query and storing it in the variable. The server name, username, and password have to be mentioned along with the query. It is used with the perform keyword in keyword scripts. (e.g., Capture the database value present in employee_name column of employee table and store it in variable "ename".)

42. **Sqlmultiplecapture;<query>**

'Sqlmultiplecapture' is used for capturing multiple data from the database object by executing the specified query and storing it in the variables. The server name, username, and password have to be mentioned along with the query. It is used with the perform keyword in keyword scripts.

43. **Sqlcheckpoint;<query>**

'Sqlcheckpoint' is used for capturing the data from the database and comparing it with the expected value. It is used with the check keyword in keyword scripts.

2.4. Naming Conventions Used for Variables

- To store the property value of an object, a variable is used.

Example:

Storevalue	textbox;<textfield tag name>	text:<Var_Name>
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Here, the text present in the textbox is stored to a variable 'Var_Name'.

- To assign a value to a field from a variable, the variable should be preceded by 'Var:'.

Perform	textbox;<textfield tag name>	set:Var:<Var_Name>
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Here, the value stored in the variable 'Var_Name' is assigned to the textbox.

Note: Variable naming standards to be followed are shown below.

StrVarName -

Example: To store a username, which is a string value in a variable

Storevalue	textbox; \$javax.swing.JTextField	text: strUserName
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IntVarName -

Example: To store an order number, which is an integer value in a variable

Storevalue	textbox; \$javax.swing.JTextField	text: intOrderNo
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2.5. Naming Convention Used for Datasheet

To input a value to a field from an external datasheet, the naming convention used is **dt**.

Syntax:

Perform	Textbox;<textfield tag name>	type_dt:<Row Number>:<Column Name>
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Here the 'dt' signifies to take the value from the datasheet from the column "<Column Name>".

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