

Silk Test 14.0

Object Recognition
with the Classic
Agent

Micro Focus
575 Anton Blvd., Suite 510
Costa Mesa, CA 92626

Copyright © Micro Focus 2013. All rights reserved. Portions Copyright © 1992-2009 Borland Software Corporation (a Micro Focus company).

MICRO FOCUS, the Micro Focus logo, and Micro Focus product names are trademarks or registered trademarks of Micro Focus IP Development Limited or its subsidiaries or affiliated companies in the United States, United Kingdom, and other countries.

BORLAND, the Borland logo, and Borland product names are trademarks or registered trademarks of Borland Software Corporation or its subsidiaries or affiliated companies in the United States, United Kingdom, and other countries.

All other marks are the property of their respective owners.

2013-04-05

Contents

| | |
|--|----------|
| Construction of Window Declaration Identifiers and Tags | 4 |
| Legend | 4 |
| Relationships and Rules for DOM Processing | 4 |
| HTML Object Recognition | 7 |

Construction of Window Declaration Identifiers and Tags

The object recognition system of Silk Test Classic uses a window declaration identifier as the logical name of an object and a tag or multitag as the attribution to uniquely identify an object. To permit robust operation across browsers, Silk Test Classic uses a complicated system of rules to construct the identifiers and associated attributes.

The window declaration identifiers and tags or multitags are constructed hierarchically from information such as HTML object attributes and closest static text. The class dependent caption and windowID construction rules form the basis for the window declaration identifier, single tag, and multitag construction rules. The Index construction rules are class independent.

Legend

The effectiveness of recognition is usually not affected by the character length restrictions placed on the caption, windowID, and window declaration identifier.

| Term | Description |
|---------------------|---|
| CST | Closest Static Text |
| BNT | Browser Nearest Text Check Box (Agent CST default, Browser CST option) |
| Caption | Restricted to 127 characters |
| WindowID | Restricted to 67 characters |
| HTML Tag Attributes | <ul style="list-style-type: none">• ALT• CONTENT• HREF• HTTP-EQUIV• ID• NAME• SRC• VALUE |
| > | Interpret as "takes precedence over" |
| 4Test | Produces window declaration identifier, single tag, or multitag |
| Agent | Produces index, prior text, or location |
| Extension | Produces WindowID or caption |

Relationships and Rules for DOM Processing

The following table lists the fundamental relationships used during DOM processing.

| Class | Caption Rules | WindowID Rules |
|---|---|------------------------------|
| Browser Child | Title -> Page Location (URL) | Page Location (URL) |
| Browser Child Frame | Title (Frame) -> NAME (Frame) -> Page Location (URL) | None |
| HtmlCheckBox | Browser CST | NAME -> Class Name Counter |
| HtmlColumn | Inner Text -> BNT | ID |
| HtmlComboBox | Not applicable in DOM. | |
| HtmlForm | NAME -> BNT | ID |
| HtmlHeading | Text | ID |
| HtmlHidden | Inner Text -> BNT | NAME |
| HtmlImage | ALT -> BNT | NAME -> HREF |
| HtmlImage <INPUT type=image SRC> | Not applicable in DOM. Mapped to HtmlPushButton. | |
| HtmlLink-text <A>HREF text | Inner Text -> Agent CST | NAME -> HREF |
| HtmlList | Browser CST | NAME |
| HtmlListBox | Browser CST | NAME -> Blank |
| HtmlMarquee | BNT | NAME |
| HtmlPushButton <INPUT type=image SRC> | ALT -> Agent CST | NAME |
| HtmlPushButton <INPUT type=[reset,submit] SRC><BUTTON> | VALUE -> Agent CST (when '<' is first character of VALUE) | NAME |
| HtmlRadioButton | BNT | NAME -> Class Name Counter |
| HtmlRadioList | BNT | NAME -> Class Name Counter |
| HtmlTable | Caption -> BNT | ID |
| HtmlText | Text | ID |
| HtmlTextField | Browser CST | NAME |
| HtmlTextField | Browser CST | NAME -> FILE_INPUT |
| XMLNode | VALUE -> NAME | Internally Generated Integer |

The following table lists the window declaration identifier rules that are used during DOM processing.

| Class | Rule | |
|-------|----------------------------|------------------------------|
| All | Use WindowID option | WindowID -> Caption -> Index |
| | Use Caption option | Caption -> WindowID -> Index |

| Class | Rule |
|-------|---|
| All | The same CST is used for multiple objects of the same class. Postpend WindowID with Index, postpend Caption with Index in brackets. |
| All | Same CST used for multiple objects of different classes. Postpend WindowID with Index. |
| All | Only Index exists. Postpend class with Index. |

The following table lists the index rules that are used during DOM processing.

| Class | Rule |
|-------|--|
| All | Relative to parent. Left to right, then top to bottom. |

The following table lists the single tag rules that are used during DOM processing.

| Class | Rule |
|-------|--|
| All | User Interface controls Tag selection. |

The following table lists the multitag rules that are used during DOM processing.

| Class | Rule |
|-------------------------------------|---|
| Browser Child | Caption is not selectable through user interface. |
| Browser Child Frame | Caption is not selectable through user interface. |
| HtmlCheckBox | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlColumn | Selectable through the user interface. |
| HtmlComboBox | Not applicable in DOM. |
| HtmlForm | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlHeading | Selectable through the user interface. |
| HtmlHidden | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlImage | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlImage <INPUT type=image SRC> | Not applicable in DOM. Mapped to HtmlPushButton. |
| HtmlLink-text <A>HREF text | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlList | Selectable through the user interface. |
| HtmlListBox | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlMarquee | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlMeta | Caption, Index, and WindowID are not selectable through the user interface. |

| Class | Rule |
|--|---|
| HtmlPopupList | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlPushButton <INPUT type=image SRC> | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlPushButton <INPUT type=[reset,submit] SRC><BUTTON> | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlRadioList | Caption, Index, and WindowID are not selectable through the user interface. |
| HtmlTable | Selectable through the user interface. |
| HtmlText | Selectable through the user interface. |
| HtmlTextField | Caption, Index, and WindowID are not selectable through the user interface. |
| XMLNode | Selectable through the user interface. |

HTML Object Recognition

The following table lists the rules for mapping 4Test objects to HTML objects. For additional information about the attribute tags of HTML objects, refer to the *Silk Test Classic Help*.

| 4Test Class | HTML Tag |
|---------------|--|
| HtmlCheckBox | <input type=checkbox> |
| HtmlColumn | <th>,<td> is column if the <td> is in the first row and there is no <th> |
| HtmlForm | <form> |
| HtmlHeading | <ul style="list-style-type: none"> • <h1> • <h2> • <h3> • <h4> • <h5> • <h6> • <th> |
| HtmlHidden | <input type=hidden> |
| HtmlImage | |
| HtmlLink-text | <area> |
| HtmlList | <ul style="list-style-type: none"> • • • <dl> • <dir> • <menu> |

| 4Test Class | HTML Tag |
|----------------|---|
| HtmlListBox | <select size=1> |
| HtmlMeta | <meta> |
| HtmlPopupList | <select size= > if size is larger than 1 |
| HtmlPushButton | <ul style="list-style-type: none"> • <button> • <input type=button> • <input type=file> • <input type=image> • <input type=reset> • <input type=submit> |
| HtmlRadioList | <input type=radio> |
| HtmlTable | <table> |
| HtmlText | <ul style="list-style-type: none"> • <a> without <href> • <abbr> • <acronym> • • <bdo> • <big> • <blockquote> • • <center> • <cite> • <code> • <dd> • <dfn> • <div> • <dt> • • • <kbd> • < > • <label> • <left> • <legend> • • <nobr> • <p> • <pre> • <q> • <right> • <s> • <samp> • <small> • • <strike> • |

| 4Test Class | HTML Tag |
|---------------|---|
| | <ul style="list-style-type: none"> • <sub> • <sup> • <tt> • <u> • <var> • <xmp> |
| HtmlTextField | <ul style="list-style-type: none"> • <input type=file> • <input type=password> • <input type=text> • <textarea> |
| XMLNode | |

Index

O

- object recognition
 - DOM processing rules 4
 - DOM relationships 4
 - terms 4

T

- tags

- constructing 4

W

- window identifiers
 - constructing 4