

# Samurai

**Library version:** RENAT 0.1.7  
**Library scope:** test suite  
**Named arguments:** supported

## Introduction

A library provides functions to control Samurai application

The library utilize *Selenium2Library* and adds more functions to control Samurai application easily. Without other further mentions, all of the concepts of `user`, `user group` are Samurai concepts.

By default, RENAT will try to connect to all Samurai nodes defined in active `local.yaml` at the beginning of the test and disconnect from them at the end of the test automatically. Usually user does not need to use `Connect All` and `Close` explicitly.

Currently, this module supposed that Samurai is used in Japanese locale. When Samurai module has error, it tried to make the last snapshot in `result/selenium-screenshot-x.png`. Checking this capture will help to understand the reason of the error.

Some keywords of *Samurai* is using `xpath` to identify elements. See *Selenium2Library* for more details about xpath.

See *WebApp* for common keywords of web applications.

*Selenium2Library* keywords still could be used together within this library. See *Selenium2Library* for more details.

## Shortcuts

**Add Policy** · **Add Policy Group** · **Add User** · **Capture Screenshot** · **Change Policy View Group** · **Click All Elements** · **Close** · **Close All** · **Connect** · **Connect All** · **Delete Policy** · **Delete Policy Group** · **Delete User** · **Edit Policy** · **Left Menu** · **Login** · **Logout** · **Make Item Map** · **Reset Capture Counter** · **Select Items In Table** · **Set Capture Counter** · **Set Capture Format** · **Show Policy Basic** · **Show Policy Mitigation** · **Show Policy Mo** · **Show Policy Monitor** · **Start Mitigation** · **Stop Mitigation** · **Switch**

## Keywords

Keyword	Arguments	Documentation																																																																																																																
Add Policy	<b>**policy</b>	Adds a new Samurai policy																																																																																																																
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		<table><tr><th>key</th><th>meaning</th><th>mandatory</th><th>sample</th></tr><tr><td>name</td><td>name of the policy</td><td>yes</td><td>test001</td></tr><tr><td>basic_alias</td><td>alias name of the policy</td><td></td><td>test001</td></tr><tr><td>basic_port_id</td><td>another alias</td><td></td><td></td></tr><tr><td>basic_facing</td><td>customer or backbone</td><td></td><td>customer</td></tr><tr><td>basic_intf_list</td><td>list of router and interface pair, separated by comma</td><td>yes</td><td>10.128.18.31:xe-0/0/0.1</td></tr><tr><td>basic_cidr_list</td><td>list of CIDR separate by comma</td><td></td><td></td></tr><tr><td>basic_option_filter</td><td>optinal filter</td><td></td><td></td></tr><tr><td>basic_direction</td><td>direction of the traffic (incoming or outgoing)</td><td></td><td>Incoming</td></tr><tr><td>traffic_enabled</td><td>Enable traffic monitoring or not</td><td>yes</td><td>\${True} or \${False}</td></tr><tr><td>detection_enabled</td><td>Enable detection or not</td><td>yes</td><td>\${True} or \${False}</td></tr><tr><td>mitigation_zone_name</td><td>Name of the zone for mitigation</td><td></td><td>zone001</td></tr><tr><td>mitigation_zone_prefix</td><td>Prefixes that could mitigate</td><td></td><td>1.1.1.1/32</td></tr><tr><td>mitigation_thr_bps</td><td>Upper limit (bps)</td><td></td><td>800,000,000</td></tr><tr><td>mitigation_thr_pps</td><td>Upper limit (pps)</td><td></td><td>54,000,000</td></tr><tr><td>mitigation_mo_enabled</td><td>Using Arbor TMS MO or not</td><td>yes</td><td>\${True} or \${False}</td></tr><tr><td>mitigation_device_list</td><td>Devices used for TMS, separated by comma</td><td></td><td>ArborSP-A</td></tr><tr><td>mitigation_mo_name</td><td>MO name, separated by comma</td><td></td><td>OCN12(ALU)_LOOSE</td></tr><tr><td>mitigation_comm_list</td><td>commna separated peer/community list</td><td>yes</td><td>1.10(180.0.1.10)/2914:666,1.11(180.0.1.11)/2914:777</td></tr><tr><td>nw_monitor_gre1</td><td>1st GRE address for NW monitor</td><td></td><td>210.0.1.1</td></tr><tr><td>nw_monitor_gre2</td><td>2nd GRE address for NW monitor</td><td></td><td>210.0.1.1</td></tr><tr><td>nw_monitor_ce1</td><td>1st CE address for NW monitor</td><td></td><td>210.0.1.2</td></tr><tr><td>nw_monitor_ce2</td><td>2nd CE address for NW monitor</td><td></td><td>210.0.1.2</td></tr><tr><td>nw_monitor_pe1</td><td>1st PE for NW monitor (list)</td><td></td><td>edge01hige-MX2020-15(118.23.176.244)</td></tr><tr><td>nw_monitor_pe2</td><td>2nd PE for NW monitor (list)</td><td></td><td>edge01hige-MX2020-15(118.23.176.244)</td></tr><tr><td>event_name</td><td>name of the message event to make</td><td></td><td>info1</td></tr><tr><td>event_addr</td><td>address to send the events</td><td></td><td>user@mail.com</td></tr><tr><td>view_group</td><td>user group that could view this policy, separated by comma</td><td>yes</td><td>SuperGroup,test_group_007</td></tr></table>	key	meaning	mandatory	sample	name	name of the policy	yes	test001	basic_alias	alias name of the policy		test001	basic_port_id	another alias			basic_facing	customer or backbone		customer	basic_intf_list	list of router and interface pair, separated by comma	yes	10.128.18.31:xe-0/0/0.1	basic_cidr_list	list of CIDR separate by comma			basic_option_filter	optinal filter			basic_direction	direction of the traffic (incoming or outgoing)		Incoming	traffic_enabled	Enable traffic monitoring or not	yes	\${True} or \${False}	detection_enabled	Enable detection or not	yes	\${True} or \${False}	mitigation_zone_name	Name of the zone for mitigation		zone001	mitigation_zone_prefix	Prefixes that could mitigate		1.1.1.1/32	mitigation_thr_bps	Upper limit (bps)		800,000,000	mitigation_thr_pps	Upper limit (pps)		54,000,000	mitigation_mo_enabled	Using Arbor TMS MO or not	yes	\${True} or \${False}	mitigation_device_list	Devices used for TMS, separated by comma		ArborSP-A	mitigation_mo_name	MO name, separated by comma		OCN12(ALU)_LOOSE	mitigation_comm_list	commna separated peer/community list	yes	1.10(180.0.1.10)/2914:666,1.11(180.0.1.11)/2914:777	nw_monitor_gre1	1st GRE address for NW monitor		210.0.1.1	nw_monitor_gre2	2nd GRE address for NW monitor		210.0.1.1	nw_monitor_ce1	1st CE address for NW monitor		210.0.1.2	nw_monitor_ce2	2nd CE address for NW monitor		210.0.1.2	nw_monitor_pe1	1st PE for NW monitor (list)		edge01hige-MX2020-15(118.23.176.244)	nw_monitor_pe2	2nd PE for NW monitor (list)		edge01hige-MX2020-15(118.23.176.244)	event_name	name of the message event to make		info1	event_addr	address to send the events		user@mail.com	view_group	user group that could view this policy, separated by comma	yes	SuperGroup,test_group_007
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Add Policy Group	group_name, policy_list=*, limit_bps=4000000000, limit_pps=2700000	<div>Add a new policy group</div> <div>group_name is the name of the new group. policy_list is a comma separated of existed policy that should be bound to this policy. An asterisk for this parameter (*) means all of the existed policy. limit_bps and limit_pps are the mitigation capacity threshold of this group.</div>																					
Add User	group, **user_info	<div>Adds user to the current group user_info is a dictionary contains user information that has following keys: name, password, privilege and policy</div> <div>privilege is existed privilege that has been created (e.g: system_admin.</div> <div>policy could be * for all current policies or a list of policy names that are binded to this user.</div> <div>group is the user group. Dot(.) means current group</div> <div>Examples:</div> <table><tr><td>Samurai.Add User</td><td>OCNDDoS</td><td>name=user000</td><td>password=Test12345678</td></tr><tr><td>...</td><td>privilege=system_admin</td><td>policy=*</td><td></td></tr><tr><td>Samurai.Add User</td><td>OCNDDoS</td><td>username=user001</td><td>password=Test12345678</td></tr><tr><td>...</td><td>privilege=system_admin</td><td>policy=OCN11,OCN12</td><td></td></tr></table>	Samurai.Add User	OCNDDoS	name=user000	password=Test12345678	...	privilege=system_admin	policy=*		Samurai.Add User	OCNDDoS	username=user001	password=Test12345678	...	privilege=system_admin	policy=OCN11,OCN12						
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Capture Screenshot	filename=None, extra=	<div>Captures the current screen to file</div> <div>Using the internal counter for filename if filename is not specified. In this case, the filename is defined by a pre-set format. Set Capture Format could be used to change the current format.</div> <div>An extra information will be add to the filename if extra is defined</div> <div>Examples:</div> <table><tr><td>Samurai.Capture Screenshot</td><td></td><td># samurai_0000000001.png</td></tr><tr><td>Samurai.Capture Screenshot</td><td>extra=_list</td><td># samurai_0000000002_list.png</td></tr><tr><td>Arbor.Capture Screenshot</td><td></td><td># arbor_0000000001.png</td></tr><tr><td>Arbor.Capture Screenshot</td><td>extra=_xxx</td><td># arbor_0000000001_xxx.png</td></tr><tr><td>Samurai.Capture Screenshot</td><td>file_name=1111.png</td><td># 1111.png</td></tr></table>	Samurai.Capture Screenshot		# samurai_0000000001.png	Samurai.Capture Screenshot	extra=_list	# samurai_0000000002_list.png	Arbor.Capture Screenshot		# arbor_0000000001.png	Arbor.Capture Screenshot	extra=_xxx	# arbor_0000000001_xxx.png	Samurai.Capture Screenshot	file_name=1111.png	# 1111.png						
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Change Policy View Group	name, *group_name	<div>Changes the groups that could see this policy</div> <div>name is the policy name. group_name is a list of policies</div> <div>Example:</div> <table><tr><td>Samurai.Change Policy View Group</td><td>super_admin</td><td>test_group001</td></tr></table>	Samurai.Change Policy View Group	super_admin	test_group001																		
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Click All Elements	xpath	<div>Click all element in current page defined by xpath</div> <div>Returns the number of elements that have been clicked</div>																					
Close		Closes the current active browser																					
Close All		Closes all current opened applications																					
Connect	app, name	<div>Opens a web browser and connects to application and assigns a name.</div> <div>If not defined in local.yaml those following key will have default values:</div> <table><tr><td>browser</td><td>firefox</td><td>optional</td></tr><tr><td>login_url</td><td>/</td><td>optiona</td></tr><tr><td>proxy:</td><td></td><td>optional</td></tr><tr><td>http: 10.128.8.210:8080</td><td>optional</td><td></td></tr><tr><td>ssl: 10.128.8.210:8080</td><td>optional</td><td></td></tr><tr><td>socks: 10.128.8.210:8080</td><td>optional</td><td></td></tr><tr><td>profile_dir</td><td>./config/samurai.profile</td><td>optional</td></tr></table>	browser	firefox	optional	login_url	/	optiona	proxy:		optional	http: 10.128.8.210:8080	optional		ssl: 10.128.8.210:8080	optional		socks: 10.128.8.210:8080	optional		profile_dir	./config/samurai.profile	optional
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Connect All		<div>Connects to all applications defined in local.yaml</div> <div>The name of the connection will be the same of the webapp name</div>																					
Delete Policy	*policy_names	<div>Deletes poilcies by their names</div> <div>Returned the number of deleted users</div> <div>Notes: If the policy does not exists, the system will not report any error.</div> <div>Examples:</div> <table><tr><td>Samurai.Delete Policy</td><td>test001</td><td>test002</td></tr></table>	Samurai.Delete Policy	test001	test002																		
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Delete Policy Group	*group_list	<div>Deletes policy groups</div> <div>Returns the number of deleted policy groups Example:</div> <table><tr><td>Samurai.Delete Policy Group</td><td>test_group001</td><td>test_group002</td></tr></table>	Samurai.Delete Policy Group	test_group001	test_group002																		
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Delete User	group, *user_list	<div>Deletes user from the user group</div> <div>group is the user group. And . means current group Returns the number of deleted users</div> <div>Examples:</div> <table><tr><td>Samurai.Delete User</td><td>SuperGroup</td><td>user001</td><td>user002</td></tr><tr><td>Samurai.Delete User</td><td>.</td><td>user002</td><td></td></tr></table>	Samurai.Delete User	SuperGroup	user001	user002	Samurai.Delete User	.	user002														
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<b>Edit Policy</b>	<i>**policy</i>	Edits a Samurai policy policy contains information about the policy. See <a href="#">Add Policy</a> for more details about policy format							
<b>Left Menu</b>	<i>menu</i>	Chooses the left panel menu by its displayed name Return a list of 1st meaningful column Example: <table><tr><td>Samurai.<a href="#">Left Menu</a></td><td>Traffic</td></tr><tr><td>Samurai.<a href="#">Left Menu</a></td><td>Detection</td></tr><tr><td>Samurai.<a href="#">Left Menu</a></td><td>ポリシー管理</td></tr></table>	Samurai. <a href="#">Left Menu</a>	Traffic	Samurai. <a href="#">Left Menu</a>	Detection	Samurai. <a href="#">Left Menu</a>	ポリシー管理	
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<b>Login</b>		Logs-in into the application User and password is set by the template and authentication methods in the master files							
<b>Logout</b>		Logs-out the current application, the browser remains							
<b>Make Item Map</b>	<i>xpath</i>	Makes a item/webelement defined <i>xpath</i> The map is a dictionary from <i>item</i> to the <i>WebElement</i> Items name found by <i>xpath</i> are used as keys							
<b>Reset Capture Counter</b>		Resets the counter of the screen capture							
<b>Select Items In Table</b>	<i>xpath, xpath2, *item_list</i>	Checks items in Samurai table by xpath <i>xpath</i> points to the column that used as key and <i>xpath2</i> is the relative xpath contains the checkbox column. <i>item_list</i> is a list of item that need to check. Item in the list could be a regular expresion with the format <code>reg=&lt;regular expression</code> . The keyword is called with assuming that the table is already visible. Returns the tuple of all items and selected items <b>Note:</b> Non-width-space (\u200b) will be take care by the keyword. <b>Note:</b> if the first <i>item_list</i> is * then the keyword will try to click a link named <code>すべてを選択</code> .							
<b>Set Capture Counter</b>	<i>value=0</i>	Sets the counter of the screen capture to <i>value</i>							
<b>Set Capture Format</b>	<i>format</i>	Sets the format for the screen capture file The format does not include the default prefix <code>.png</code> The default format is <code>&lt;mod&gt;_%010d</code> . <i>mod</i> could be <code>samurai</code> or <code>arbor</code> See <a href="https://docs.python.org/2/library/string.html#format-specification-mini-language">https://docs.python.org/2/library/string.html#format-specification-mini-language</a> for more details about the format string. Examples: <table><tr><td>Samurai.<a href="#">Set Capture Format</a></td><td><code>\${case}_%010d</code></td><td># <code>\${case}</code> is a predefined variable</td></tr></table>	Samurai. <a href="#">Set Capture Format</a>	<code>\${case}_%010d</code>	# <code>\${case}</code> is a predefined variable				
Samurai. <a href="#">Set Capture Format</a>	<code>\${case}_%010d</code>	# <code>\${case}</code> is a predefined variable							
<b>Show Policy Basic</b>	<i>policy_name</i>	Makes the virtual browser show basic setting of the policy <i>name</i> . A following Samurai. <a href="#">Capture Screenshot</a> is necessary to capture the result.							
<b>Show Policy Mitigation</b>	<i>policy_name</i>	Make the virtual browser show the mitigation setting of a policy A following Samurai. <a href="#">Capture Screenshot</a> is necessary to capture the result.							
<b>Show Policy Mo</b>	<i>policy_name</i>	Make the virtual browser show the MO setting of a policy Automatically expand the MO section of other devices if necessary. A following Samurai. <a href="#">Capture Screenshot</a> is necessary to capture the result.							
<b>Show Policy Monitor</b>	<i>policy_name</i>	Make a virtual browser show the mitigation setting of a policy A following Samurai. <a href="#">Capture Screenshot</a> is necessary to capture the result.							
<b>Start Mitigation</b>	<i>policy, prefix, comment=mitigation started by RENAT, device=None, force=False</i>	Starts a mitigation with specific <i>prefix</i> <i>device</i> is used for matching real device name configured by Samurai If <i>force</i> is <code>TRUE</code> then the keyword will fail if selected device does not contain <i>device</i> Returns mitigation <i>id</i> and selected <i>arbor device</i> Example: <table><tr><td><code>\${id}</code></td><td><code>\${device}=</code></td><td>Samurai.<a href="#">Start Mitigation</a></td><td><code>211.1.12.1/32</code></td><td>mitigation by RENAT</td><td>SP-A</td><td><code>\${TRUE}</code></td></tr></table>	<code>\${id}</code>	<code>\${device}=</code>	Samurai. <a href="#">Start Mitigation</a>	<code>211.1.12.1/32</code>	mitigation by RENAT	SP-A	<code>\${TRUE}</code>
<code>\${id}</code>	<code>\${device}=</code>	Samurai. <a href="#">Start Mitigation</a>	<code>211.1.12.1/32</code>	mitigation by RENAT	SP-A	<code>\${TRUE}</code>			
<b>Stop Mitigation</b>	<i>id</i>	Stops a mitigation by its ID Example: <table><tr><td>Samurai.<a href="#">Stop Mitigation</a></td><td><code>700</code></td></tr></table>	Samurai. <a href="#">Stop Mitigation</a>	<code>700</code>					
Samurai. <a href="#">Stop Mitigation</a>	<code>700</code>								
<b>Switch</b>	<i>name</i>	Switches the current browser to <i>name</i>							

