



ArtComputer

Functions User Manual



Automated Test with the Robot

Functions User Manual

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Foreword

This user manual will give you detail on the functions available in the tests and in the rules.

Tests versus Rules

In the Rules, you can use all the available functions for the tests.

However, for the rules, the name of the function is prefixed by # and ended by : (E.g.: #click:)

The parameters are separated by a comma (E.g: #click: @OPSYS_Listbox, 5, 2)

Naming convention

- Dictionary starts always with @
- Dataset starts always with #
- Rule starts always with #
- Variable start always with \$ (but in the case of a rule, it must be §)
- Naming convention can be all in uppercase or lowercase: @URL_ACCEPTANCE
- Naming convention can be a mix @URL_Acceptance
- Naming convention can be with spaces or not: @URL_Environment Acceptance
- Functions name are case sensitive

Functions to start



Function: url

Objectives

Method to browse a website

Parameter(s)

URL	Link to the webpage to open (can be a word in the dictionary)
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Example(s):

url	@URL_OPSYS_ACC EUROPA	Start the application in acceptance
url	https://webgate.acceptance.ec.europa.eu/mwp/home?1fa	

Function: geturl

Objectives

Method to get the current url from the browser

Parameter(s)

Variable	The name of the variable to store the current url (starting with \$)
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Example(s):

geturl	\$currentURL	Store the current url into the variable \$currentURL
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: %

Example: #geturl: % currentURL

Function: **switchToBrowserTab**

Objectives

Method to switch to a specific tab on the browser

Parameter(s)

Tab position	tab position starting by 1 (0 for the last one)
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Example(s):

switchToBrowserTab	0	Switch to the last tab
switchToBrowserTab	2	Switch to the second tab

Function: **newTab** <OBSOLETE>

Objectives

Method to create a new tab on the browser (the tab will become the active one)

Example(s):

newTab		Create a new tab on the browser
---------------	--	---------------------------------

Function: **newWindow** <OBSOLETE>

Objectives

Method to create a new window on the browser (the window will become the active one)

Example(s):

newWindow		Create a new window on the browser
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Function: **loginUser**

Objectives

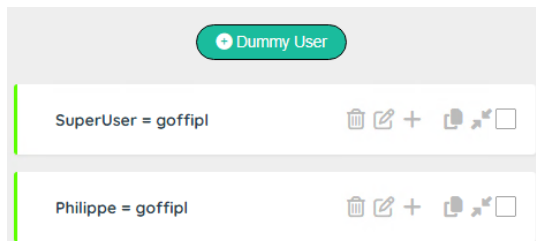
Method to login the user to an application.

Parameter(s)

Dummy user	The dummy user must be defined in the table (see: Tester User Manual)
User tag	Enter the xpath (or dictionary word) to access the user field
Submit tag	[Optional] Enter the xpath (or dictionary word) to access the submit button

Example(s):

The dummy user must be defined in the dummy user entity



loginUser	Philippe, @APP_tagLogin, @APP_tagSubmitLogin	Login the user to a screen with a submit button.
loginUser	Philippe, @APP_tagLogin	Login the user to a screen without a submit button.

Screen with a submit tag	Screen without a submit tag

Function: loginPassword

Objectives

Method to key the password to an application.

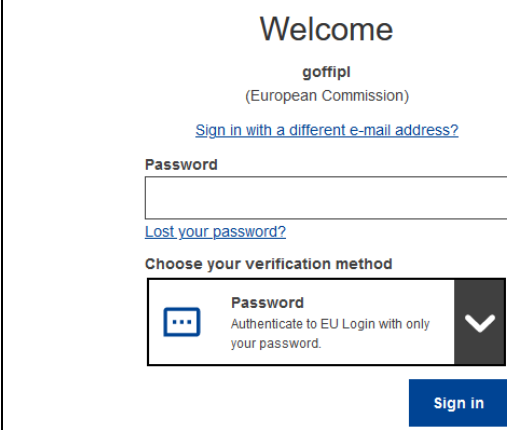
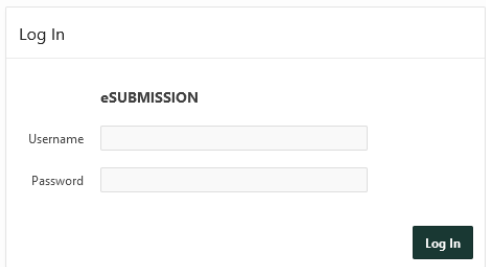
For security reason, the password is decrypted (if necessary) by the server with the information contain in the dummy entity.

Parameter(s)

Dummy user	The dummy user must be defined in the table (see: Tester User Manual)
Password tag	Enter the xpath (or dictionary word) to access the password field
Submit tag	Enter the xpath (or dictionary word) to access the submit button

Example(s):

loginUser	Philippe, @APP_tagPassword, @APP_tagSubmitPassword	Key the password to a login screen.
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Screen with a submit tag	Screen without a submit tag
	

Function: **dummyExtraInfo****Objectives**

Method to get the extra info stored in the dummy user entity.

This information can be useful to complete a login.

It can be useful with the <ME> parameter to get information of the connected person

Parameter(s)

Dummy user	The dummy user must be defined in the table (see: Tester User Manual)
Variable	The name of the variable to store information (starting with \$)

Example(s):

dummyExtraInfo	Philippe, \$PhoneName	Get the phone name of the dummy user.
dummyExtraInfo	<ME>, \$PhoneName	Get the phone name of the connected user.

Note: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #dummyExtraInfo: Philippe, §PhoneName

Function: **dummyLogin****Objectives**

Method to get the login info stored in the dummy user entity.

This information can be useful with the <ME> parameter to get the login of the connected person.

Parameter(s)

Dummy user	The dummy user must be defined in the table (see: Tester User Manual)
Variable	The name of the variable to store information (starting with \$)

Example(s):

dummyLogin	<ME>, §MyLogin	Get the login of the connected user.
------------	----------------	--------------------------------------

Note: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #dummyLogin: <ME>, §MyLogin

Function: **speak**

Objectives

Method to text-to-speech a message

Parameter(s)

Text	Text to say (can be variable starting with \$)
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Example(s):

speak	Hello dear tester	Say a sentence
--------------	-------------------	----------------

Function: **debug**

Objectives

Method to display more or less message to the console

Parameter(s)

Debug level	0: No Debug, 1: Important info, 2: Full detail
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Example(s):

debug	0	No debug message sent to the console
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Basic functions



Function: **detectGUI****Objectives**

Method to detect the signature of an element based on generic patterns.

Patterns are generated by the AI Robot (see specific user documentation on AI Robot).

If detectGUI is successful, the variable **\$GUI** will contain the xpath to access the element

Parameter(s)

Element	Select a selector (Button, Input filed...). selector depends on the project (stored in the entity: Selector in the AI Robot)
Criteria	Enter the criteria (generally the label)
Position	Enter the position/occurrence (1 by default), \$\$ for last record or \$\$-<position>
Stop on Error	[Optional]: Stop on error (otherwise a warning is sent)

Example(s):

detectGUI	Button, Save, 1 Button, Save, 1, 0	Searching for the button 'Save'. If not found, send a warning and continue the tests
detectGUI	Button, Save, 1, 1	Searching for the button 'Save'. If not found, stop all the tests
detectGUI	Button, Save, \$\$	Searching for the last button 'Save'

Function: **pause****Objectives**

Method to wait a few seconds before continuing the next step.

Parameter(s)

Delay	Select a selector (Button, Input filed...). selector depends on the project (stored in the entity: Selector in the AI Robot)
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Example(s):

pause	3	Wait 3 seconds
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Function: **waitFor**

Objectives

Method to wait for the refresh of an element (to be visible).

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait	Waiting time in second(s) (default 5 sec)
Continue	What to do if the element is not ready after the waiting time: 1: Stop all the tests, 0: Continue even with an error, 2: Skip the IT

Example(s):

waitFor	@APP_Save, 5, 1	Wait 5 seconds for the button Save to be visible. If it is not the case, stop all the tests
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Function: **waitForNot**

Objectives

Method to wait for the element to disappear (reverse of waitFor)

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait	Waiting time in second(s) (default 5 sec)
Continue	What to do if the element is still there after the waiting time: 1: Stop all the tests, 0: Continue even with an error, 2: Skip the IT

Example(s):

waitForNot	@APP_In Progress, 15, 1	Wait 15 seconds for the text "in progress..." disappears. If it is not the case, stop all the tests
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Function: **click**

Objectives

Method to click on an element.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait after	Waiting time in second(s) after the click
Focus	1: set the focus on the element, 0: no focus on the element

Example(s):

click	@APP_Save, 3, 1	Set the focus on the button 'Save', click on it and wait 3 seconds
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Function: **doubleClick**

Objectives

Method to double click on an element.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait after	Waiting time in second(s) after the double click

Example(s):

doubleClick	@APP_Save, 3	Double click on the button 'Save' and wait 3 seconds
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Function: JSclick**Objectives**

JavaScript method to click on an element this method is more brutal force).

Can be used, if the click() is not working due to an invalid webpage status (stale)

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait after	Waiting time in second(s) after the click

Example(s):

JSclick	@APP_Save, 3	Click on the button 'Save' (CSS/Xpath in the dictionary) and wait 3 seconds
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Function: enable**Objectives**

JavaScript method to enable an element (by removing disabled attributes)

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
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Example(s):

enable	@APP_Save	Make the button save enabled
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Function: **removeAttribute**

Objectives

JavaScript method to remove attribute of an element.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Attribute	Attribute to be removed

Example(s):

removeAttribute	@APP_Save, color	Remove the attribute: color
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Function: **setAttribute**

Objectives

JavaScript method to remove attribute of an element.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Attribute	Attribute to assign
Value	Value of the attribute

Example(s):

setAttribute	@APP_Save, color, blue	set the attribute color: blue
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Function: **readAttribute**

Objectives

JavaScript method to get the value of an attribute of an element.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Attribute	Attribute to read
Variable	The name of the variable to store information (starting with \$)

Example(s):

setAttribute	@APP_Save, tagElement, \$Tag	get the attribute tag into the variable \$Tag
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #setAttribute: @APP_Save, tagElement, \$Tag

Function: **setFocus**

Objectives

JavaScript method to get the focus on an element.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait after	Waiting time in second(s) after the click

Example(s):

setFocus	@APP_Save, 2	Set the focus on the button save
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Function: JSinput

Objectives

JavaScript method to input a value into an element.

Can be used, if the setValue() is not working due to an invalid webpage status (stale) - this method is a brutal force.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Value	Value to key in the field

Example(s):

JSinput	@APP_Name, Phil	Key 'Phil' into the field 'Name'
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Function: keyboard

Objectives

JavaScript method to key a value to simulate the keyboard.

Parameter(s)

Value	Value to key in the field
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Example(s):

JSinput	Phil	Key 'Phil' into the field 'Name'
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Function: **pressEnter**

Objectives

JavaScript method to send an Enter key

Parameter(s)

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Example(s):

pressEnter		Sent an 'Enter' key
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Function: **pressEscape**

Objectives

JavaScript method to send an Escape key

Parameter(s)

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Example(s):

pressEscape		Sent an 'Escape' key
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Function: **pressTab**

Objectives

JavaScript method to send an tab key

Parameter(s)

Number	Number of tab to send
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Example(s):

pressTab	2	Sent 2 'tab' key
-----------------	---	------------------

Function: `acceptPopup`**Objectives**

JavaScript method to accept a JavaScript popup

Parameter(s)

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Example(s):

acceptPopup	Acknowledge the popup
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Function: `cancelPopup`**Objectives**

JavaScript method to reject a JavaScript popup

Parameter(s)

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Example(s):

cancelPopup	Cancel the popup
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Function: **rule**

Objectives

Method to call a rule

Parameter(s)

Rule	Name of the rule
Parameter 1	Parameter 1 for the rule (will be represented by the variable \$P1)
Parameter 2	Parameter 2 for the rule (will be represented by the variable \$P2)

Example(s):

Rule	Login ECAS, \$DummyUser	Rule to login with a dummy user
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Function: **countElement**

Objectives

Method to call a rule

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	The name of the variable to store information (starting with \$)

Example(s):

countElement	@APP_section, \$NbSection	Count the number of sections on the screen
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #countElement: @APP_section, \$NbSection

Function: **check**

Objectives

Method to check a checkbox (if necessary)

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait after	Waiting time in second(s) after the check

Example(s):

check	@APP_approve, 5	Check the approve checkbox
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Function: **unchecked**

Objectives

Method to uncheck a checkbox (if necessary)

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Wait after	Waiting time in second(s) after the uncheck

Example(s):

unchecked	@APP_approve, 5	Uncheck the approve checkbox
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Function: **message**

Objectives

Method to write a message in the log file

Parameter(s)

Message	Message to display in the log file
Category	Info, Message, Warning or Error

Example(s):

message	Test successful, Info	Write a message
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Function: **printscreen**

Objectives

Method to take a print screen and store the image on a slot (up to 5 slots available)

Parameter(s)

slot	From 1 to 5
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Example(s):

printscreen	1	Take a print screen and store it in the slot 1
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Function: **uploadFile****Objectives**

Method to upload a file from the repository uploads of your project.

The repository is managed by the Administrator.

Note: Prior to use the function, the ADMIN must store the document in the Upload section of the project.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
File	Name of the file (without a path)

Example(s):

uploadFile	@APP_Upload, price.pdf	Upload the file price.pdf
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Function: **refreshURL** <OBSOLETE>**Objectives**

Method to refresh the current page (equivalent to F5)

Parameter(s)

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Example(s):

refreshURL		Refresh the screen
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Function: ask **<OBSOLETE>**

Objectives

Method to display a popup window to invite the user to enter a value

Parameter(s)

Message	The message to display to the user
Default value	[Optional] Default value
Variable	Name of the variable to store the value (by default \$Ask)
Timeout	Timeout in seconds (default 30 seconds)

Example(s):

ask	Enter the environment, ACC, \$Env, 20	Ask the user to provide the name of the environment. After 20 seconds the variable \$Env is filled with ACC
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #ask: Enter the environment, ACC, \$Env, 20

Function: email

Objectives

Method to send an email with attachment(s) (optional).

The originator of the message is managed by the Administrator and is stored in the project parameters:

Email Host - smtpmail.cec.eu.int:25

Email From - automated-notifications@nomail.ec.europa.eu (AutoTest)

Parameter(s)

Email To	Recipient (comma separated for multiple people)
Subject	subject of the message
Body	body of the message (keywords: <BLUE><RED>.. <BOLD><ITALIC><NORMAL> Body can contain html tag (E.g.: <table>, <body>, <tr>, <td>....)
Attachment	[optional] Full path name of the attachment(s) - use ';' as a separator

Example(s):

email	\$To, \$Subject, \$Body, \$Attachment	Send an email
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Example of body for a sanity check with an error in one of the environment.

<BOLD><RED>Error detected in \$Environment**<NORMAL><NORMAL>**

Note: a tag **<NORMAL>** must be added after the tags **<BLUE><RED>..**<BOLD><ITALIC>****

In order to use the function, the ADMIN must create two parameters at the project level

Parameter name	Example
Email Host	smtpmail.cec.eu.int:25
Email From	automated-notifications@nomail.ec.europa.eu (AutoTest)

References and Data



Function: **getReference****Objectives**

Method to get a reference by Code. The reference is used by the Robot to exchange (read/write) data between the scenarios.

Parameter(s)

Code	Code of the reference
Variable	Name of the variable to store the value (starting with \$)

Example(s):

getReference	Dataset, \$Dataset	Get the value of the dataset in the reference
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #getReference: Dataset, \$Dataset

Function: **setReference****Objectives**

Method to get a reference. The reference is used by the Robot to exchange (read/write) data between the scenarios.

Parameter(s)

Code	Code of the reference
Value	Value of the reference (can be a variable starting with \$)
Comment	[]Optional If Comment is empty, the value will not be overridden

Example(s):

getReference	Dataset, \$Dataset	Get the value of the dataset in the reference
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Function: **setVariable****Objectives**

Method to set a variable.

Parameter(s)

Variable	Name of the variable (starting with \$)
Value	Enter a value or <EMPTY> or an expression (must start with =)

Example(s):

setVariable	\$Test, A simple test	Set a text into the variable
setVariable	\$Test, = 1 + 1	Set 2 into the variable
setVariable	\$Test, <EMPTY>	Reset the variable
setVariable	\$Test, <TODAY>	Use a keyword to get the current date

Note 1: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #setVariable: §Test, A simple test

Note 2: Special keywords are:

With **nn** as a numeric value

<TODAY>, <TODAY+nn>, <TODAY-nn> to get the current date + or – days(s) – Format: DD/MM/YYYY

<NOW>, <NOW+nn>, <NOW-nn> to get the current date + or – day(s) - Format: DD/MM/YYYY HH:mm

<YEAR>, <YEAR+nn>, <YEAR-nn> to get the current year + or – year(s) – Format: YYYY

<MONTH>, <MONTH+nn>, <MONTH-nn> to get the current month + or – month(s) – Format: MM

<DAY>, <DAY+nn>, <DAY-nn> to get the current day + or – days(s) – Format: DD

<HOURS>, <HOUR+nn>, <HOUR-nn> to get the current hour + or – hour(s) – Format: HH

<SEQUENCE> to get a unique number – Format: YYYYMMDD_hmmss

Function: **getData****Objectives**

Method to get a data by its code. Data are store in a dataset and are managed by the Tester.

Parameter(s)

Code	Code of the data Code of the data (format: #<dataset>_<data>)
Variable	Name of the variable to store the value (starting with \$)

Example(s):

getData	#Data_Dataset, \$Dataset	Get a value from the dataset
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #getData: #DATA_DirectLink, \$DirectLink

Function: **setData****Objectives**

Method to set a data with a value. Data are store in a dataset and are managed by the Tester.

Parameter(s)

Code	Code of the data Code of the data (format: #<dataset>_<data>)
Value	Name of the variable to store the value (starting with \$)
Comment	Comment for the data

Example(s):

setData	#Data_Dataset, SEA-2023, Contract SEA-2023	Set a value in the dataset
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Condition



Function: **stopTest****Objectives**

Method to stop all the tests if a condition is true.

Parameter(s)

Condition	Any valid JavaScript expression that returns true or false (or a variable)
Message	Message to display when the condition is true

Example(s):

stopTest	\$Error == 1, Error detected stop the tests	Error detection
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Note: Condition is a JavaScript expression so: equal is ==, not equal is !=

Function: **skipDescribe****Objectives**

Method to skip the Describe section if the expression is true.

Parameter(s)

Condition	Any valid JavaScript expression that returns true or false (or a variable)
Message	Message to display when the condition is true

Example(s):

skipDescribe	\$Action != 'Document', Skip the document section	Skip a Describe section
--------------	---	-------------------------

Note: Condition is a JavaScript expression so: equal is ==, not equal is !=

Function: **skiplt**

Objectives

Method to skip the IT section if the expression is true.

Parameter(s)

Condition	Any valid JavaScript expression that returns true or false (or a variable)
Message	Message to display when the condition is true

Example(s):

skiplt	\$Exits == 0, Skip the test, no field detected !	Skip a IT section
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Note: Condition is a JavaScript expression

Function: **isCheck**

Objectives

Method to detect if an element is checked. 1: if element is checked, otherwise 0

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result: 1 or 0 (starting with \$)
Wait for element	Waiting time in second(s) for the element to be ready

Example(s):

isCheck	@APP_checkbox, \$Agree, 5	Check if the checkbox is checked
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #isCheck: @APP_checkbox, 5, \$Agree

Function: **isExist**

Objectives

Method to detect if an element exists. 1: if element exists, otherwise 0

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result: 1 or 0 (starting with \$)
Wait for element	Waiting time in second(s) for the element to be ready

Example(s):

isExist	@APP_checkbox, \$Exist, 5	Check if the checkbox exists
---------	---------------------------	------------------------------

Note: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #isExist: @APP_checkbox, 5, §Exist

Function: **isEnabled**

Objectives

Method to detect if an element is enabled. 1: if element is enabled, otherwise 0

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result: 1 or 0 (starting with \$)
Wait for element	Waiting time in second(s) for the element to be ready

Example(s):

isEnabled	@APP_checkbox, §Enabled, 5	Check if the checkbox is enabled
-----------	----------------------------	----------------------------------

Note: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #isEnabled: @APP_checkbox, 5, §Enabled

Function: isVisible

Objectives

Method to detect if an element is visible. 1: if element is visible, otherwise 0

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result: 1 or 0 (starting with \$)
Wait for element	Waiting time in second(s) for the element to be ready

Example(s):

isVisible	@APP_checkbox, \$Visible, 5	Check if the checkbox is visible
-----------	-----------------------------	----------------------------------

Note: in the rule, the sign \$ for the variable must be replaced by the sign: §

Example: #isVisible: @APP_checkbox, 5, §Visible

Functions to manage an element



Function: **switchToFrame****Objectives**

Method to get a value from a field.

Note: the Robot is able to manage automatically the frame and the iFrame. This function is there only in case you need to perform a special operation.

Parameter(s)

Frame	Frame 0 is the default one
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Example(s):

switchToFrame	1	Switch to frame 1
---------------	---	-------------------

Function: **getValue****Objectives**

Method to get a value from a field.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result (starting with \$)

Example(s):

getValue	@APP_Name, \$Name	Get the value of the field Name
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: &

Example: #getValue: @APP_Name, &Name

Function: **setValue****Objectives**

Method to set a value into a field.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Value	Value to key (by default closed by TAB), or use <ENTER> or a variable
Delay	[Optional] Delay in second(s) before the <TAB> or <ENTER> or after keying the value – Very useful, when you have to wait for the construction of a list

Example(s):

setValue	@APP_Name, \$Name	set the value in the field Name
setValue	@APP_Decision, \$Decision<TAB>, 3	Enter a decision, wait for 3 sec and key a Tab

If the value is <N/A> or <EMPTY> the function will not be executed but will return with the status success.

In the logfile, the info will be <N/A> or <EMPTY> (Skipped!)

Step	[43] Enter the abbreviation
Info	<N/A> (Skipped!)

Function: **select****Objectives**

Method to select a value from a list.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Value	Value to key or a variable or a position (@<position>)
Wait after	Waiting time in second(s) after the click (default 2 sec)

Example(s):

select	@APP_Country, \$Country, 3	Select a country
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Note 1: Only the standard html <select><option> is recognized.

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Note 2: Value is by default searched with a contains (approximate matching).

For compliance reason, you can use <*> but it has no impact!

To force an exact match: use = as the first character - Example: =Dupond

To get a specific option: use @<position> - Example @2 to get the second option

<Aa> is not a valid option. Value is always case sensitive.

Note 3: \$Value contains the item selected from the list (useful when using position: E.g. @1)

If the value is <N/A> or <EMPTY> the function will not be executed but will return with the status success.

In the logfile, the info will be <N/A> or <EMPTY> (Skipped!)

Step	[43] Enter the abbreviation
Info	<N/A> (Skipped!)

Function: **selectCount****Objectives**

Method to count the number of values in a list.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result: 1 or 0 (starting with \$)

Example(s):

selectCount	@APP_Country, \$Countries	Count the number of countries
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Note 1: Only the standard html <select><option> is recognized.

Epoch Date Functions



Function: **epoch**

Objectives

Method to get a date converted into epoch (Unix) date and time.

Parameter(s)

Date	A date in any valid format
Format	Any valid format (E.g.: 'DD/MM/YYYY HH:mm:ss')
Variable	Name of the variable to store the result (starting with \$)

Example(s):

epoch	22/05/2024, DD/MM/YYYY, \$EpochDate	Convert a date
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #epoch: 22/05/2024, DD/MM/YYYY, \$EpochDate

Function: **epochDate**

Objectives

Method to convert an epoch date into a date.

Parameter(s)

Epoch Date	An epoch date
Format	Any valid format (E.g.: 'DD/MM/YYYY HH:mm:ss')
Variable	Name of the variable to store the result (starting with \$)

Example(s):

epochDate	\$EpochDate, DD/MM/YYYY, \$Date	Convert an epoch date
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #epochDate: \$EpochDate, DD/MM/YYYY, \$Date

Function: **epochAddHour****Objectives**

Method to get a date + hour(s) converted into epoch (Unix) date and time.

Parameter(s)

Date	A date in any valid format or NOW for the current date time
Format	Any valid format (E.g.: 'DD/MM/YYYY HH:mm:ss')
Hour	Number of hour(s) to add to the date
Variable	Name of the variable to store the result (starting with \$)

Example(s):

epochAddHour	NOW, DD/MM/YYYY, 2, \$Date	Add 2 hours and convert in epoch
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #epochAddHour: NOW, DD/MM/YYYY, 2, \$Date

Function: **epochAddMinute****Objectives**

Method to get a date + minute(s) converted into epoch (Unix) date and time.

Parameter(s)

Date	A date in any valid format or NOW for the current date time
Format	Any valid format (E.g.: 'DD/MM/YYYY HH:mm:ss')
Minute	Number of minute(s) to add to the date
Variable	Name of the variable to store the result (starting with \$)

Example(s):

epochAddMinute	NOW, DD/MM/YYYY, 10, \$Date	Add 10 seconds and convert in epoch
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #epochAddMinute: NOW, DD/MM/YYYY, 10, \$Date

Function: **epochAddSecond****Objectives**

Method to get a date + second(s) converted into epoch (Unix) date and time.

Parameter(s)

Date	A date in any valid format or NOW for the current date time
Format	Any valid format (E.g.: 'DD/MM/YYYY HH:mm:ss')
Second	Number of second(s) to add to the date
Variable	Name of the variable to store the result (starting with \$)

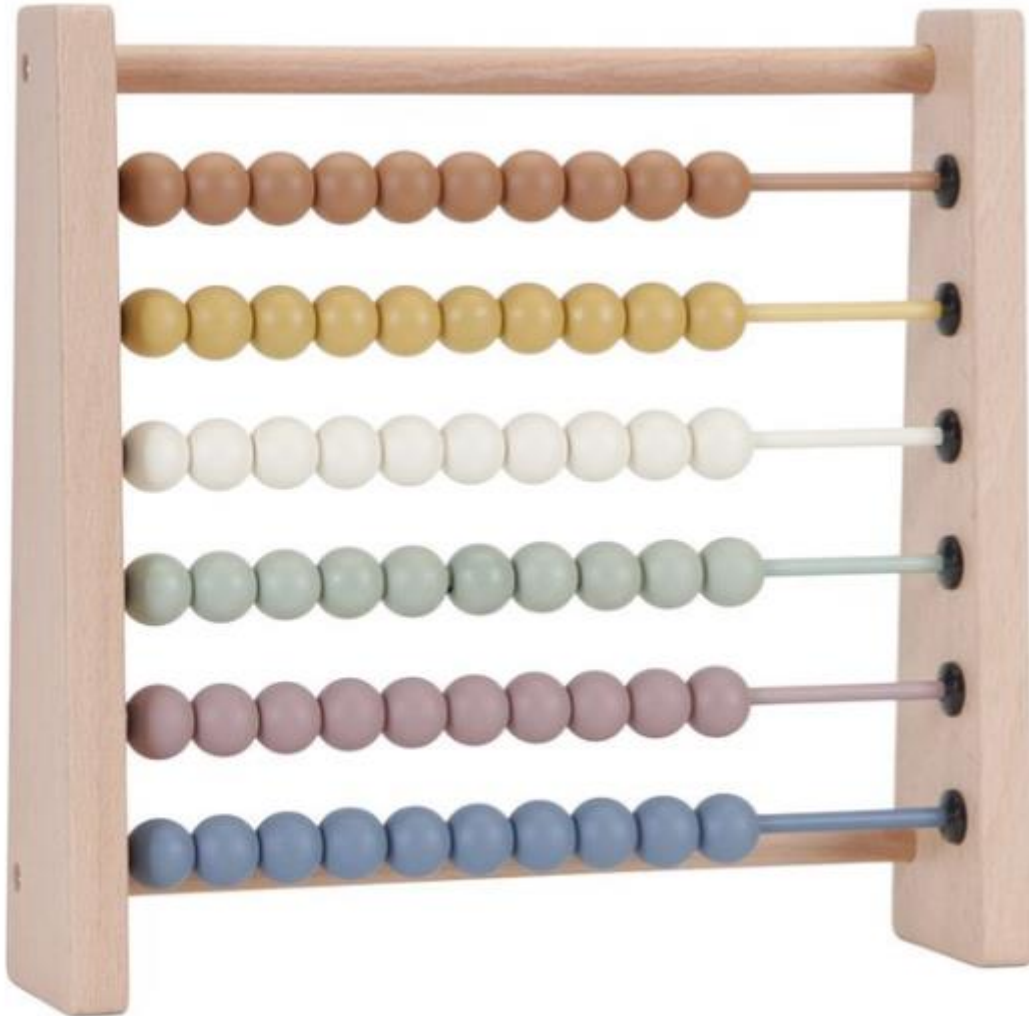
Example(s):

epochAddSecond	NOW, DD/MM/YYYY, 5, \$Date	Add 5 minutes and convert in epoch
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #epochAddSecond: NOW, DD/MM/YYYY, 5, \$Date

Table Functions



Function: `getTableHeader`

Objectives

Method to get a header from a table.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Row	The row position in the table
Column	The column position in the table
Variable	Name of the variable to store the result (starting with \$)

Example(s):

<code>getTableHeader</code>	<code>@APP_Amount, 1, 3, \$AmountID</code>	Get the value of the header (1,3)
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: `#getTableHeader: @APP_Amount, 1, 3, $AmountID`

Function: `getTableData`

Objectives

Method to get a value from a cell of a table.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Row	The row position in the table
Column	The column position in the table
Variable	Name of the variable to store the result (starting with \$)

Example(s):

<code>getTableData</code>	<code>@APP_Amount, 1, 3, \$Amount</code>	Get the value of the cell (1,3)
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: `#getTableData: @APP_Amount, 1, 3, $Amount`

Function: **setTableData****Objectives**

Method to set a value into a cell of a table.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Row	The row position in the table
Column	The column position in the table
Value	Value or variable (starting with \$)

Example(s):

setTableData	@APP_Amount, 1, 3, \$Amount	set the amount into the cell (1,3)
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Function: **clickCell****Objectives**

Method click on a cell of a table.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Row	The row position in the table
Column	The column position in the table
Delay	Duration (in second(s) after the click)

Example(s):

clickCell	@APP_Amount, 1, 3, 5	Click in the cell (1,3)
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Function: **countTableRow****Objectives**

Method count the row(s) of a table.

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Variable	Name of the variable to store the result (starting with \$)

Example(s):

countTableRow	@APP_Table, \$Row	Count the number of row(s) of a table
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Note: in the rule, the sign \$ for the variable must be replaced by the sign: \$

Example: #countTableRow: @APP_Table, \$Row

Function: **searchTableData****Objectives**

Method search for a value in a table at a specific column.

Result is stored in the variable \$Row (-1 if not found).

Parameter(s)

Name	Xpath or dictionary word (starting with @) of the element or \$GUI
Column	The column position in the table
Search Value	Value to search in the table
Occurrence	Occurrence of the search (default 1)

Example(s):

searchTableData	@APP_Table, 3, Belgium, 1	Search for Belgium in a table
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Advanced functions



Function: **callScenario**

Objectives

Method to execute a scenario based on its id

Parameter(s)

Scenario ID	Id of the scenario (visible in the detail of the scenario)
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Example(s):

callScenario	126	Execute the tests of the scenario 126
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Function: **callSuite**

Objectives

Method to execute a suite based on its id

Parameter(s)

Suite ID	Id of the suite (visible in the detail of the suite header)
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Example(s):

callSuite	25	Execute the tests of the suite 25
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Function: **startTimer**

Objectives

Start a timer to measure a performance

Parameter(s)

Topic	A short name to identify the timer
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Example(s):

startTimer	login	Start a timer to measure the performance of the login
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Function: **stopTimer**

Objectives

Stop a timer and store the elapsed time in the database.

Note: The timer is global to an application (not specific to a user)

Parameter(s)

Environment	Name of the environment
Topic	The identifier of the timer (must be the same name as in the startTimer)

Example(s):

stopTimer	PROD	login	Store the elapsed time in the database
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Note: See also the chapter on the performance in the Designer manual

Function: `promptAI`**Objectives**

Thanks to the library @zerostep, we can use a ChatGPT prompt to request something.

Unfortunately, this function is not working in a REST API environment to request testing operation like 'click on the submit button'

Parameter(s)

Prompt	A sentence to request something to chatGPT
Variable	Name of the variable to store the result

Example(s):

promptAI	Generate a realistic first name for a French people	\$Name	ChatGPT prompt
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Note: The library is free for only 500 requests per month (after, it's 40\$ per month)

This function is experimental and cannot be used for production.

In June 2025: I sent a email to the @zerostep team to ask for a solution with a REST API.

Until now, no answer received!