



Release 5.1

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Data Driven for AIQ

In Data-driven test, input data can be stored in data sources like xls, csv and the test case which can execute tests for all test data in the xls, csv. I.e - run through multiple data for input in a for-each loop

Earlier this feature was supported only by selenium mode now it is also supported by AIQ mode execution

Note: While generating, only the first loop is used. During execution, all the data will be used and looped through.




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Update Project ✕

Project name *
Iterate|

App URL *
http://ninja.autonomiq.ai

XPATH (optional) +

Scheduling  Smart Retry

Enable smart notifications Show Step Timer

Show full screen images Execute using AIQ Engine

Data Driven Sample Test Case

Test Steps	Data		
open website	http://ninja.autonomiq.ai		
Run \${block1} for all rows			
Begin block block1			
enter username	user4		
enter password	pass4		
end block			



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Report which gives clear understanding of start and end iteration for each block

```
open website
Run ${block1} for all rows
Begin block block1
Start Iteration: 1 of block1
enter username
enter password
End Iteration: 1 of block1
Start Iteration: 2 of block1
enter username
enter password
End Iteration: 2 of block1
Start Iteration: 3 of block1
enter username
enter password
End Iteration: 3 of block1
Start Iteration: 4 of block1
enter username
enter password
End Iteration: 4 of block1
end block
```

Nested Blocks

Nested blocks are blocks within blocks. You can have a single level of nesting, or you can even have multiple levels of nesting blocks

Test Steps	Data		
open website	http://ninja.autonomiq.ai		
Run \${block1} for all rows			
Begin block block1			
enter username	user1		
enter password	pass1		
Run \${block2}			
Begin block block2			
enter username	test		
end block			
end block			



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Flows inside a block is also supported

Here's a sample test case for nested flows

Test Steps	Data
open website	https://login.salesforce.com
run \${main_block} for 3 times	
begin block main_block	
enter username	
run \${loginbasic}	
run \${leadbasic}	
run \${logoutbasic}	
end block	

The corresponding flows - loginbasic, leadbasic and logoutbasic have to be created under the flows tab as per user guide.

Sample report format for nested flows

```
open website
Run ${block1} for 2 times
Begin block block1
Start Iteration:1 of block1
enter username
Run ${login1}
Start Iteration:1 of login1
enter username
End Iteration:1 of login1
End Iteration:1 of block1
Start Iteration:2 of block1
enter username
Run ${login1}
Start Iteration:1 of login1
enter username
End Iteration1 of login1
End Iteration:2 of block1
End block
```

Main Block used to repeat a given section of block/flow a certain number of times or until a particular condition is met. Iteration count of Main Block is shown in the increasing order in the



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report eg: Start Iteration1 of block1, Start Iteration2 of block1 where its respective sub block/flow will always start from count 1

Note: We request user to create test case in below order

```
Run ${block1}
Begin block block1
instructions
End block
```

Decision Making Statement for Blocks/Flows

Note: Decision making statement (i.e) if and the else part will work only for block and flow statement

If statement

if statement is the most simple decision making statement. It is used to decide whether a certain statement or block of statements will be executed or not i.e if a certain condition is true then a block of statements is executed otherwise not.

Syntax

```
if(condition), run ${block}
Begin block blockname
  // Statements to execute if
  // condition is true
End block
```

The condition can be used with flow as below, we can call the flow or can create a block

```
if(condition), run ${flow}
  // Statements to execute if
  // condition is true
```



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Example:

```
if {xpath: "//a[@class='page-title-action']"} is visible, run ${Create_User} for all rows
Begin block Create_User
click "Add New"
enter "Username"
enter "First Name"
enter "Last Name"
click on createusersub
end block
```

If the given xpath is visible then users will be created.

If-else statements

If-else statement, if a condition is true a block of statements will be executed and if the condition is false else part will be executed

Syntax

```
if (condition) run ${block}
Begin block block name
    // Executes this block if
    // condition is true
End Block
Else, run ${else_part}
Begin block else_part
    // Executes this block if
    // condition is false
End Block
```



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Example:

The screenshot shows a software interface with a list of steps on the right and an error message box on the left. The error message reads: "Condition didnt satisfy Element corresponding to the xpath is not found". The list of steps is as follows:

Step Number	Step Description	Status
8	if {xpath:"//select[@id='rolle']*"} is visible, run \${subscribe}	Warning (Yellow Triangle)
12	else, run \${Help}	Success (Green Checkmark)
13	Begin block Help	Success (Green Checkmark)
14	click on "Help"	Success (Green Checkmark)
15	End block	Success (Green Checkmark)

In this example the if condition is not satisfied so else part is executed

Nested if statements

When an if else statement is present inside the body of another "if" or "else" then this is called nested if else.

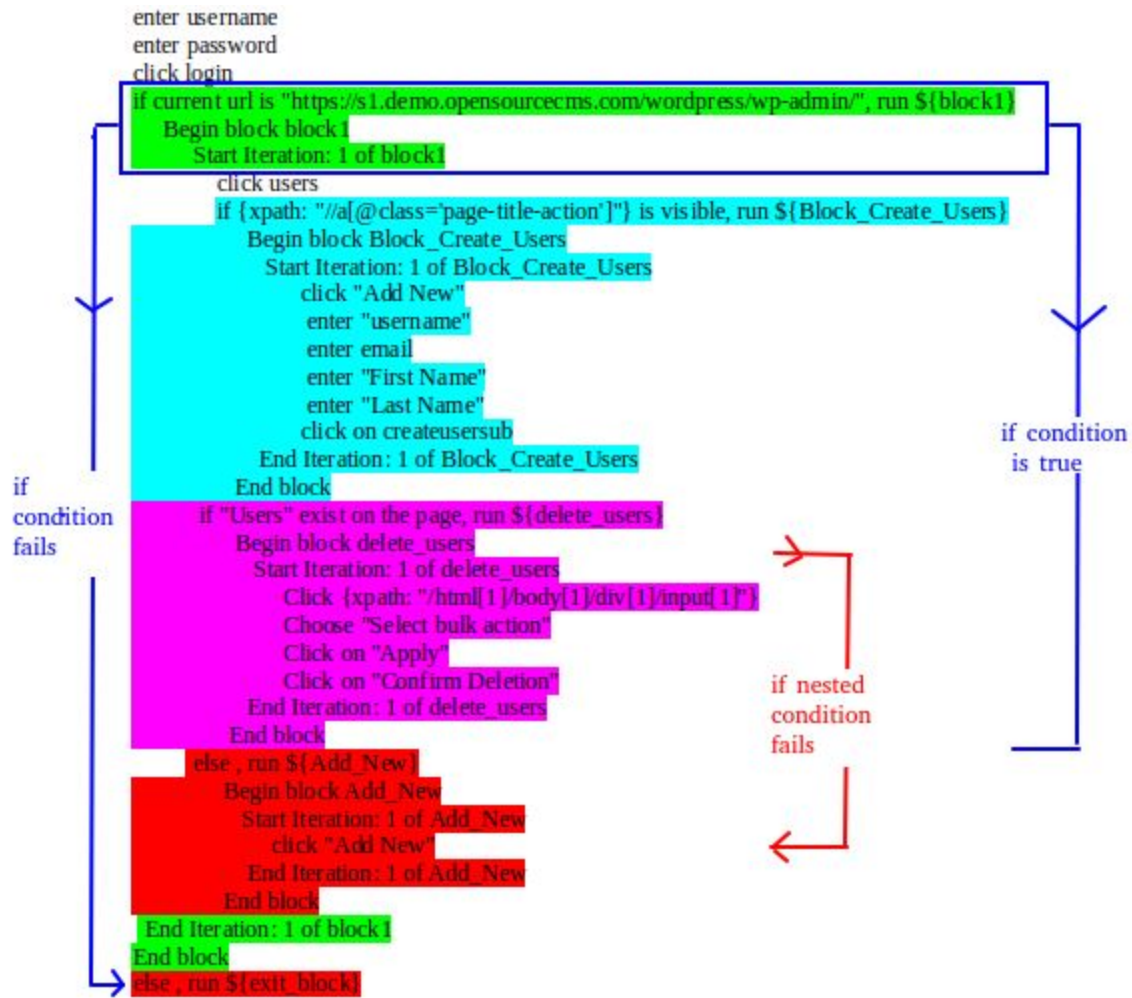
Syntax:

```
if (condition1), run ${block1}
Begin block block1
  //Nested if else inside the body of "if"
  if(condition2), run ${block2}
  Begin block block2
    //Statements inside the body of nested "if"
  End Block
  Else, ${else_part}
    // else_part is the flow here
    //Statements inside the body of nested "else"
Else, ${else_mainblock}
  //Statements inside the body of "else"
```




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Example:





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Else-if (elif)


The elif statement is useful when you need to check multiple conditions, nesting of if-else blocks can be avoided using else..if statement.

Note: instead of **else if** we need to mentioned as **elif**

Syntax:

```
if (condition1) run ${block1}
  //These statements would execute if the condition1 is true
elif(condition2) run ${block2}
  //These statements would execute if the condition2 is true and condition1 is false
End block
.
.
Else, run ${else_block}
  //These statements would execute if all the conditions return false.
End block
End block
```

Example:

	<input type="checkbox"/>	2	if current url is "http://ninja.autonomiq.ai/ssignin", run \${login1}
	<input type="checkbox"/>	5	elif current url is "http://ninja.autonomiq.ai/signin", run \${login2}
	<input type="checkbox"/>	6	begin block login2
	<input type="checkbox"/>	7	enter username appuser
	<input type="checkbox"/>	8	enter password *****
	<input type="checkbox"/>	9

In this example if condition is not satisfied so the block **login1** is not executed, then the control moves to elif here the condition is satisfied and the block **login2** is executed , when at least one condition is passed the else part will be skipped



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Data Driven Parsing when condition satisfied

Data will be parsed when condition is satisfied

✓	<input type="checkbox"/>	1	open website http://ninja.autonomiq.ai
✓	<input type="checkbox"/>	2	run <code>#{block1}</code> <u>for all rows</u>
✓	<input type="checkbox"/>	3	Begin block block1
✓	<input type="checkbox"/>	4	if variable <u><code>#{username}</code></u> is test1 , run <code>#{block4}</code>
✓	<input type="checkbox"/>	5	begin block block4
✓	<input type="checkbox"/>	6	enter username test1

DataFile

username	password
test1	pass1
test2	pass2

Above testcase run`#{block1}` for all rows will iterate through all rows in the data file. When condition matches for the current row that is running now, only that if block will get executed, Subsequent elif/else wont get executed, likewise if the condition did not match for other rows that if wont get executed.



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Schedule in Different Browsers

While scheduling a suite user have option to select platform and browser details so that the scheduled suite will execute in the respective platform, browser.

A screenshot of the 'Update Test Suite' dialog box in AutonomIQ. The dialog has a title bar with a close button (X) in the top right. Below the title, there is a 'Scheduling' toggle switch which is turned on. The main content area contains a 'Start time' field with the value 'October 12, 2019 6:15 PM'. Below this are three buttons labeled 'Month', 'Days', and 'Hours'. A '1 Hours' button with a close icon is also present. At the bottom of the main area, there are two dropdown menus: 'Platform' with 'Linux' selected and 'Browser' with 'Chrome' selected. Red arrows point to these two dropdowns. At the very bottom of the dialog are two buttons: 'Update' (blue) and 'Cancel' (white).


Ability to add multiple emails to a suite for receiving consolidated reports



AutonomIQ

Update Test Suite ✕

Test Suite Name
AIQ

Emails
Email Addresses for suite report 

user1@test.com ✕ user2@test.com ✕

user3@test.com ✕

Scheduling

User can now add multiple email to a suite for receiving consolidated report after the suite execution. Enter valid email and by press tab,comma or enter key multiple emails can be added.

Hide Password in Variable and Data

Password given in the variable and in data will be hidden. That is sensitive data are hidden, only by downloading the variable/data the password details can be seen.



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Note: we now hide only value for statement that have word "password". In the future we will apply this for other common sensitive words "pass", "pwd", "user", "userid", "login", "username", "uid" that are in common.

The screenshot shows the 'VARIABLES' tab in the AutonomIQ interface. It displays a table with three columns: 'Variable', 'Value', and 'Actions'. The 'password' variable is highlighted, and its value is masked with '****'. A red arrow points to the mask.

Variable	Value	Actions
<input type="checkbox"/> index_demo	4	⋮
<input type="checkbox"/> index_iterate	1	⋮
<input type="checkbox"/> password	****	⋮ ←

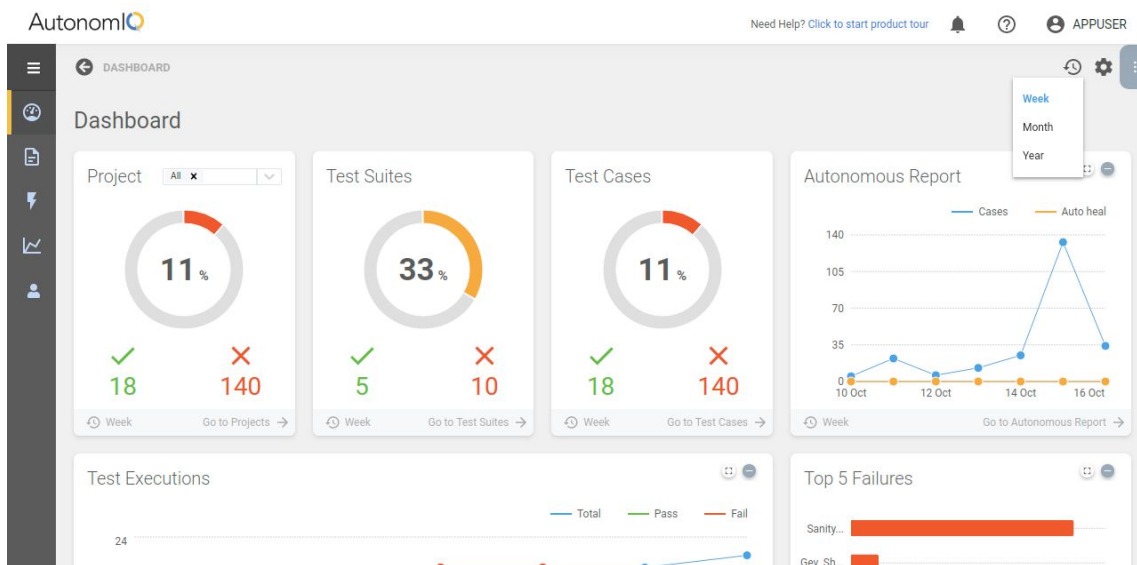


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UI Changes

New Dashboard

Dashboard allows us to check Statistical data for Week, Month and Year with the new UI graphical user interface.





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New Project and other Pages

Modal dialog are redesigned and improved over all application.

A screenshot of the AutonomIQ web application interface. The main view is a dashboard titled 'Projects' with 228 items. It displays several project cards, each showing a percentage of completion (e.g., 100%, 0%) and a 'Quality Trend' line graph for the last 3 test executions. A 'New Project' modal dialog is open in the center, featuring a clean, modern design with a white background and a grey border. The dialog contains two text input fields: 'Project name *' and 'App URL *'. Below the inputs is a blue link labeled 'Show Advanced Settings'. At the bottom of the dialog are two buttons: 'Save' and 'Cancel'. The background interface includes a top navigation bar with a search bar, a user profile 'APPUSER', and a sidebar with navigation icons. The dashboard also shows pagination information: 'Projects per page: 12', 'Page 1 of 19', and navigation arrows.





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Set Variable Value Formatting and access Variable in the list

We can store variable as a list and fetch based on index starting as 1

Variable ^	Value	Actions
var	{"key": ["value", "value2"]}	✓ ✗

- ✓ 1  open website
http://ninja.autonomiq.ai
- ✓ 2  enter username
`\${var.key[1]}`



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Smart Retry Timeout

Update Project

Project name *

Check_Issue_fixes|

App URL *

http://ninja.autonomiq.ai

XPATH (optional)



Scheduling 



Smart Retry



Enable smart notifications



Show Step Timer



Show full screen images



Execute using AIQ Engine

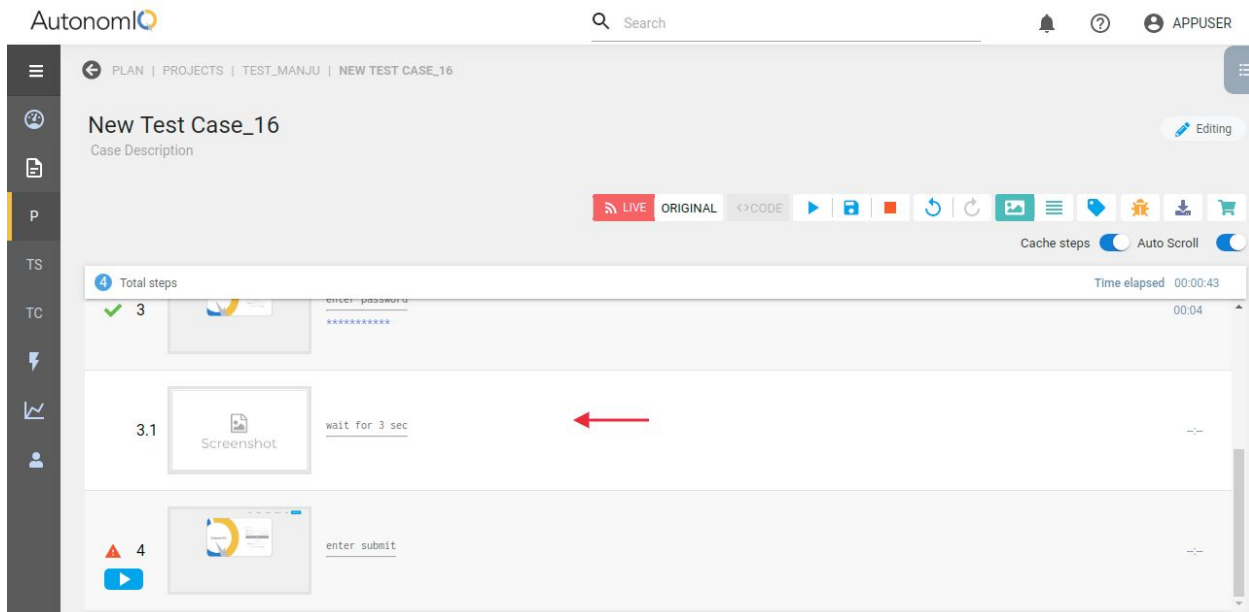
Save

Cancel

Enable Smart Retry from Update Project page



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When the project is in the smart retry mode, and suppose test steps fails at step 4, smart retry button will be visible on step 4, and if user edited/added in between

eg: at step 3.1 now click on smart retry icon. the step start generating from 3.1

Smart Retry Timeout (Configurable)

We have a variable called "smart_retry_timeout" we can set the number of minutes for smart retry.. Default value will be 2 minutes, but if user changes variable, it can be whatever the number of minutes the user wants.



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Variable	Value	Actions
<input type="checkbox"/> change_user_agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.14; rv:69.0) Gecko/...	⋮
<input type="checkbox"/> enable_download	True	⋮
<input type="checkbox"/> smart_retry_timeout	300	✓ ✖
<input type="checkbox"/> user_agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.14; rv:69.0) Gecko/...	⋮

We can specify a value in seconds, here 300 secs will make smart retry button visible for 5 min so user get enough time to debug the error thrown step

Network Call Timeout

Network call timeout feature will wait for network API calls to get over. This is to ensure that page has loaded properly. By default we have Selenium waits but sometimes it does not give reliable results so using network calls feature we wait for request calls to get over and ensure that page loading has been completed. To enable network call feature, we need to set a variable named `network_call_timeout` in the variables tab and assign some time (in seconds).

Variable	Value	Actions
<input type="checkbox"/> name	appuser	⋮
<input type="checkbox"/> network_call_timeout	5	✓ ✖



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New Instruction Support

Add more synonyms for Open website

Test Steps	Data
Open site	http://ninja.autonomiq
Open web page	http://ninja.autonomiq
Open page	http://ninja.autonomiq
Navigate to web site	http://ninja.autonomiq
Navigate to site	http://ninja.autonomiq
Navigate to web page	http://ninja.autonomiq
Navigate to page	http://ninja.autonomiq
Navigate web site	http://ninja.autonomiq
Navigate site	http://ninja.autonomiq
Navigate web page	http://ninja.autonomiq
Navigate page	http://ninja.autonomiq
Navigate to	http://ninja.autonomiq
Navigate	http://ninja.autonomiq
Go to web site	http://ninja.autonomiq
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Goto web site	http://ninja.autonomiq
Goto website	http://ninja.autonomiq
Goto site	http://ninja.autonomiq
Goto web page	http://ninja.autonomiq
Goto page	http://ninja.autonomiq
Goto	http://ninja.autonomiq

Switch to Alert box and save the Alert

Since few releases we have instructions

```
switch to alert box and save message as alert_set1  
switch to alert and click on ok
```

Now we also support instruction

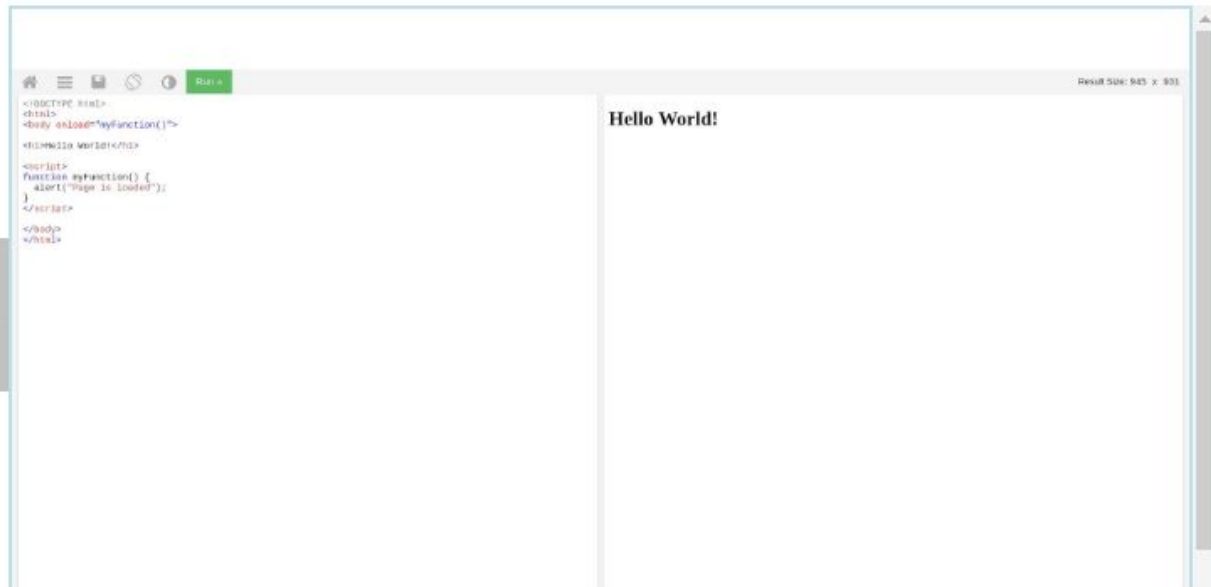
```
switch to alert box and save message as alert_set2 and click OK
```



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✓ 2 switch to alert box and save message as alert_set3 and click OK

Show full screen images



Set screen size to Standard Resolution

User can set the screen to standard resolution with following instructions

Test Steps	Data		
open website	https://www.wikipedia.org/		
Set screen to hd			
Set screen to mobile phone			
Set screen to tablet			
Set screen to tablet landscape			
Set screen to 1080			
Set screen to 1080p			
Set screen to 720			
Set screen to 900			
Set screen to Full HD			
Set screen size - 200 * 200			



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set_screen_size

Case Description

11 Total steps

✓ 3



Set screen to hd

✓ 4



Set screen to mobile phone

✓ 5



Set screen to tablet

✓ 6



Set screen to tablet landscape



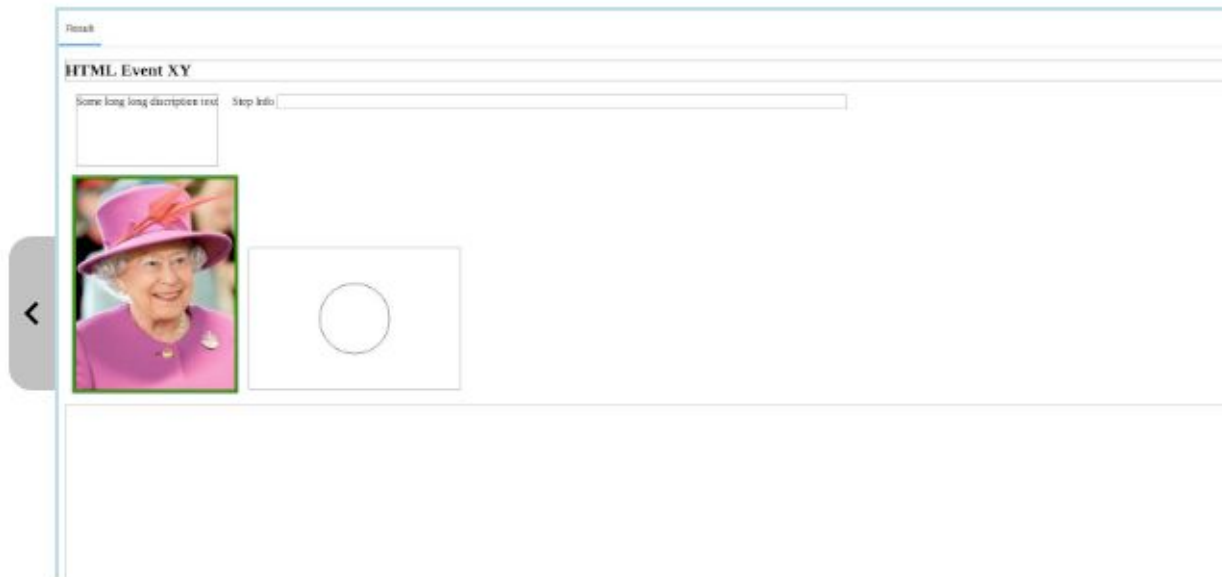
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Command to click at (x,y)

We can now give XY coordinate on any HTML node and ask system to click at that position. It uses the syntax `_xy{}`

✓ 2 Click on `_xy{50, 50}` of `_xpath{"/img"}`

Show full screen images



Below are the sample instructions that are supported

Click on `_xy{20, 30}` of `_css{#some_html_node_id}`

Hover on `_xy{20, 30}` of `_xpath{"/img[@id='some_html_node_id']"}`

Double Click on `_xy{20, 30}` of "Photo of Eiffel Tower"



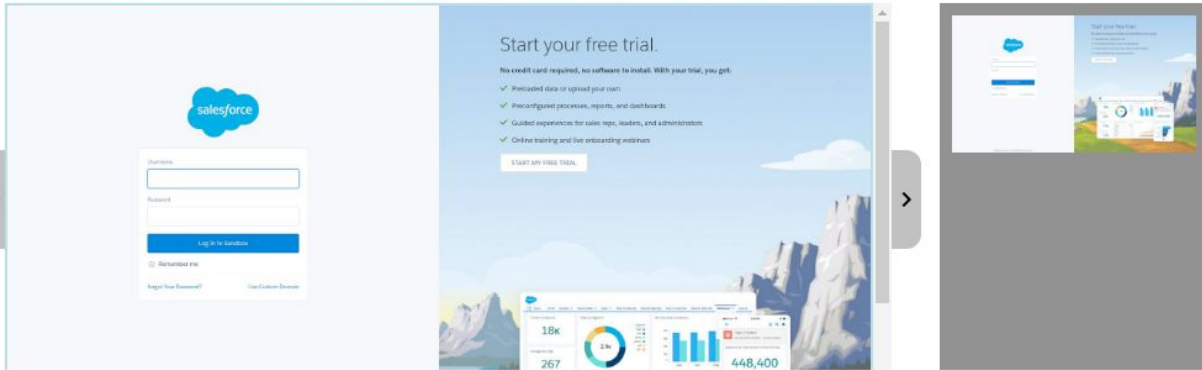
AutonomIQ

Bug Fixes

Basic _py, _js instruction works now

✓ 4 `Exec_js(return aiq_1) with ${a_ip} returning ${a_op}`

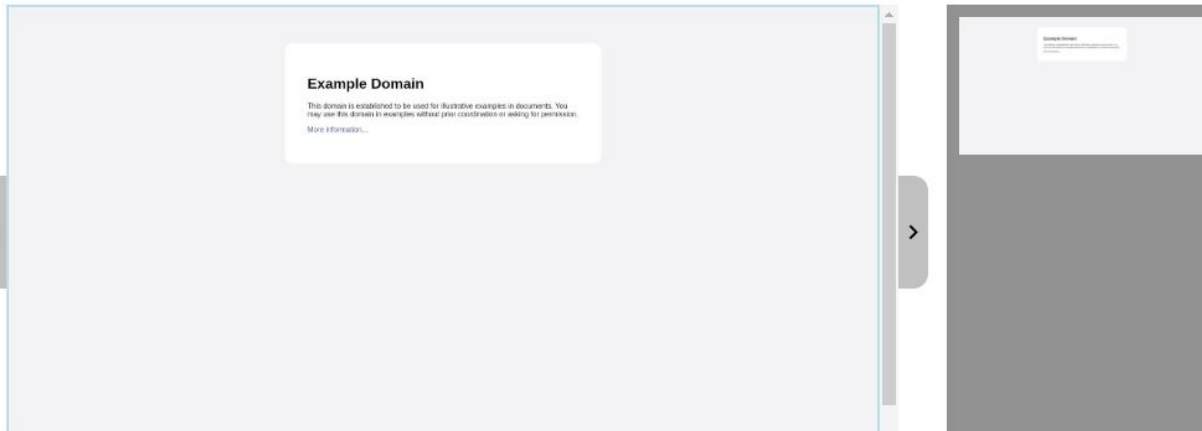
Show full screen images



Close

✓ 3 `Exec_js(return Math.random().toString(36).substring(aiq_1)); with ${max_character} returning ${var_name1}`

Show full screen images



Close



AutonomIQ

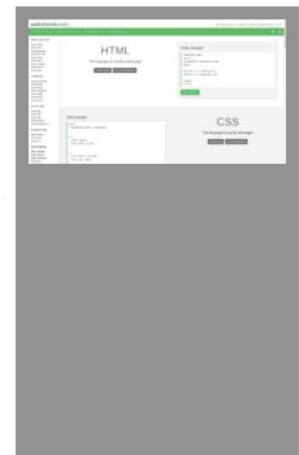
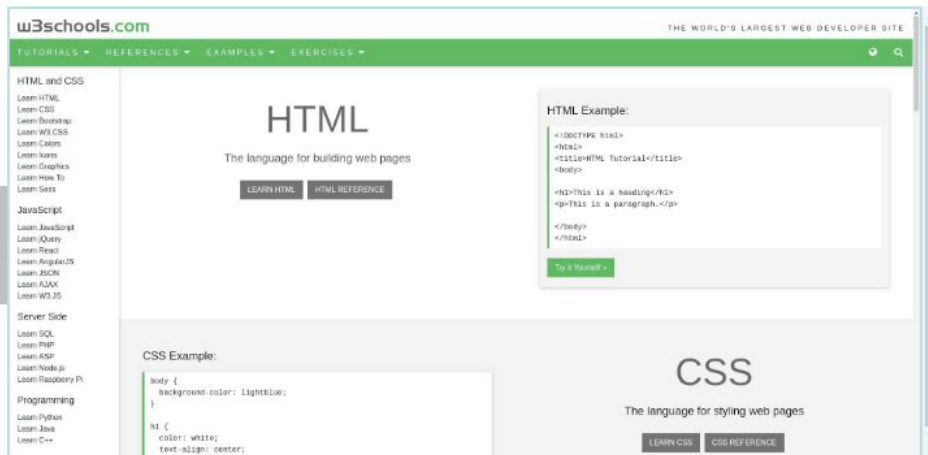
Switch with title instruction

We can now switch to a window by providing its title.

switch to window with title "title1"

✓ 5 switch to window with Title "W3Schools"

Show full screen images



Close

click on "Learn Html"



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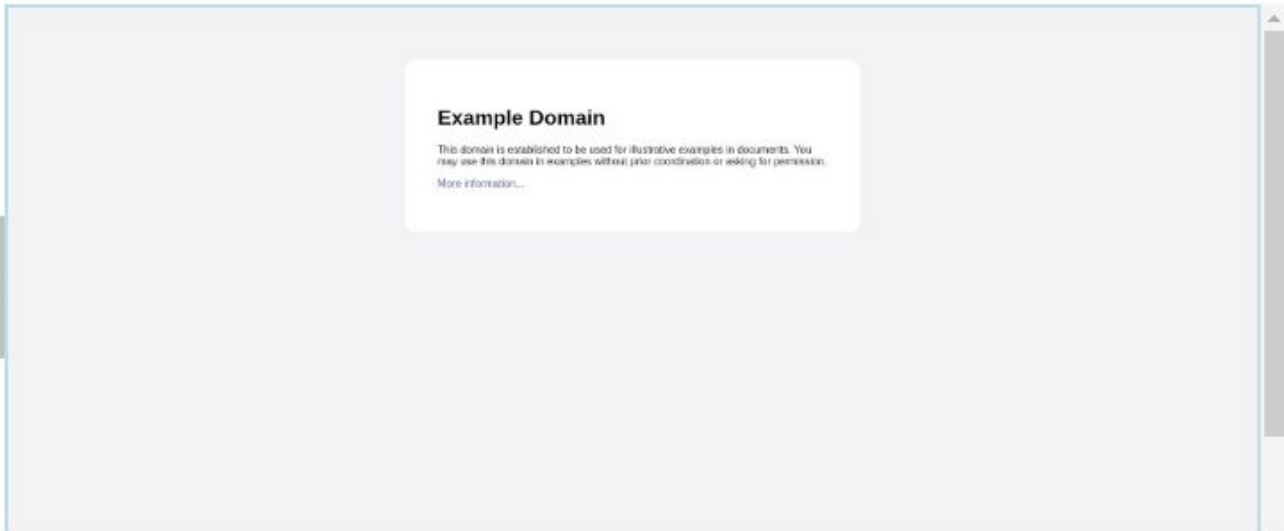
Take Screenshot



7

take screenshot

Show full screen images



Statements "take screenshot" and "capture screenshots" works now



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Same model size in upload

Upload



Test Case

Test Data

Artifacts

↓
Drag & Drop
OR
SELECT XLS, XLSX, OR CSV FILE

No files are selected!

Total Accepted Test Data : 0

Attach test data to the uploaded test case file (optional)

Next

Back

Before this model size was not even when clicking Next



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Dont discover when if condition don't satisfy

When the if condition won't satisfy, it won't discover the next instruction .

ex. For instruction if "login" is on the page, enter username if login is not there , we won't discover enterable username at all. And system will simply just move to next instruction

The screenshot shows a test case execution interface with three steps. Step 1 is successful. Step 2 is failed, with a tooltip indicating 'Condition didnt satisfy Assertion failed: Element was not found'. Step 3 is successful.

Step	Status	Description	Instruction
1	Success	open website	http://ninja.autonomiq.ai
2	Failure	if "support" is on the page, enter username	appuser
3	Success	enter password	*****

Table header out of scroll

Now header will stay when the list is scrolled

Suite	Created	Last Run	Last Status	Actions
1 check	Sep 11, 2019	Sep 11, 2019	NA	⋮
1 lte_1	Sep 3, 2019	Sep 18, 2019	SUCCESS	⋮
1 lte_2	Sep 3, 2019	Oct 16, 2019	SUCCESS	⋮
0 test3	Sep 4, 2019	Sep 4, 2019	SUCCESS	⋮

Rows per page: 50 | 1-6 of 6



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Upload file with Artifact extension

Earlier below instruction i.e artifact for upload file name is allowed without giving file name extension

upload file to "upfile"	ArtifactForUploadFile
-------------------------	-----------------------

Now the same is supported only by giving file name extension refer below

upload file to "upfile"	ArtifactForUploadFile.xls
-------------------------	---------------------------

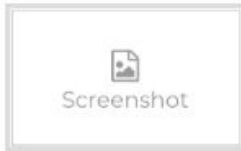
If we allow filenames without extensions, and if multiple files of the same name but different extensions are uploaded, there's no way for Autonomiq's script generation engine to identify the right file to be used.

The Compound statement works after Add/Edit the test step



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✓ 10



click on leads tab\click on new button\enter name in the last nam
#[a-z][a-z][a-z][a-z][a-z][a-z][a-z][a-z][a-z]\#[a-z][a-z]



✓ 10.1



click on leads tab

✓ 10.2



click on new button

The Compound statement creation during Test Step Add/Edit when separated with "." NLP break's down the test steps accordingly

Performance Improvement

We have reduced the message size to improve performance and fix message passing for huge script, Check whether content first page is updated

Known Bugs

1. When bulk uploading test cases, the script generation for uploaded tc's is not supposed to start automatically. However one of the test cases will display the status as In Progress, although the script is not generating.
2. The alert box/pop-up won't be captured in the screenshot if it is present in the page/application at the current step.

Enhancement

1. Provide support for instruction "set screen size 600* 600". Now the same works when we give "set screen size - 600* 600"



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Version Details

Following are the version changes in the version 5.1

Mozilla Firefox 62.0.3
Geckodriver 0.25.0
Google Chrome 75.0.3770.80
ChromeDriver 75.0.3770.90
Selenium 3.12.0

Following are the version changes in the version 5.0

Mozilla Firefox 62.0.3
Geckodriver 0.20.1
Google Chrome 75.0.3770.80
ChromeDriver 75.0.3770.90
Selenium 3.8.0



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Optional Arguments

Optional arguments can be provided to a test step as described below.

Ignore Alert

By default, Autonomiq will check if a browser alert is present on the screen before interacting with any element on the screen. If an unhandled alert is present (alerts can be handled by – switch to alert and click on OK/Cancel), it'll purposely fail the test step with an error message stating that the alert is unhandled. If the user doesn't want for the test step to fail, they can use the ignoreAlert option as shown below

Click on "login" button `--ignoreAlert`

Dynamic Xpath

By default, Autonomiq caches xpath's for every test step so that subsequent script generations will be faster. However, if the user doesn't want to use the cached xpath for a certain step, they can provide the dynamicXpath option as shown below

Click on `${order_id}` `--dynamicXpath`

Note: If a certain xpath is not valid due to it being dynamic or an application change, it will be auto-healed which guarantees that the plain English step will not fail due to invalid xpath's.



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Dealing with disabled elements (visually grayed out)

By default, Autonomiq will only interact with elements that are enabled. If the user wants to interact with a disabled element, they can use the Force option as shown below

Force click on “login”
where login button is grayed out.

Using Actions chain click

By default, Autonomiq uses selenium click and if selenium click fails, it'll switch to javascript click. However, if the user wants to specifically use action-chain click, they can provide it as shown below

Click on “login” --moveAndClick

Provide spinner/progress bar information

If the application under test has progress bars/spinners as a part of the UI design, Autonomiq provides the capability for users to specify the spinner information as a variable as shown below under “variables” tab. Once this information is provided, Autonomiq will dynamically wait until the progress bar/spinner disappears before proceeding with the next step.

Variable name : spinner_xpath
Variable value : xpath_of_the_spinner