



E.C.I.NETWORKS

IXCHARIOT – USER MANUAL

Bell Canada; ATL Lab

Bell

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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
0.1	Arijit Saha	First Draft version	

Review & Approval

Requirements Document Approval History

Approving Party	Version Approved	Signature	Date
Bell Canada: Intissar Harrabi			

Requirements Document Review History

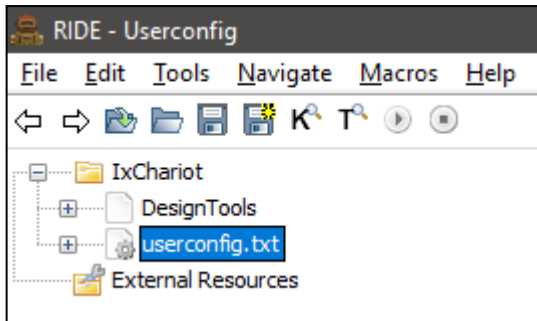
Reviewer	Version Reviewed	Signature	Date
Angelo Virgilio			

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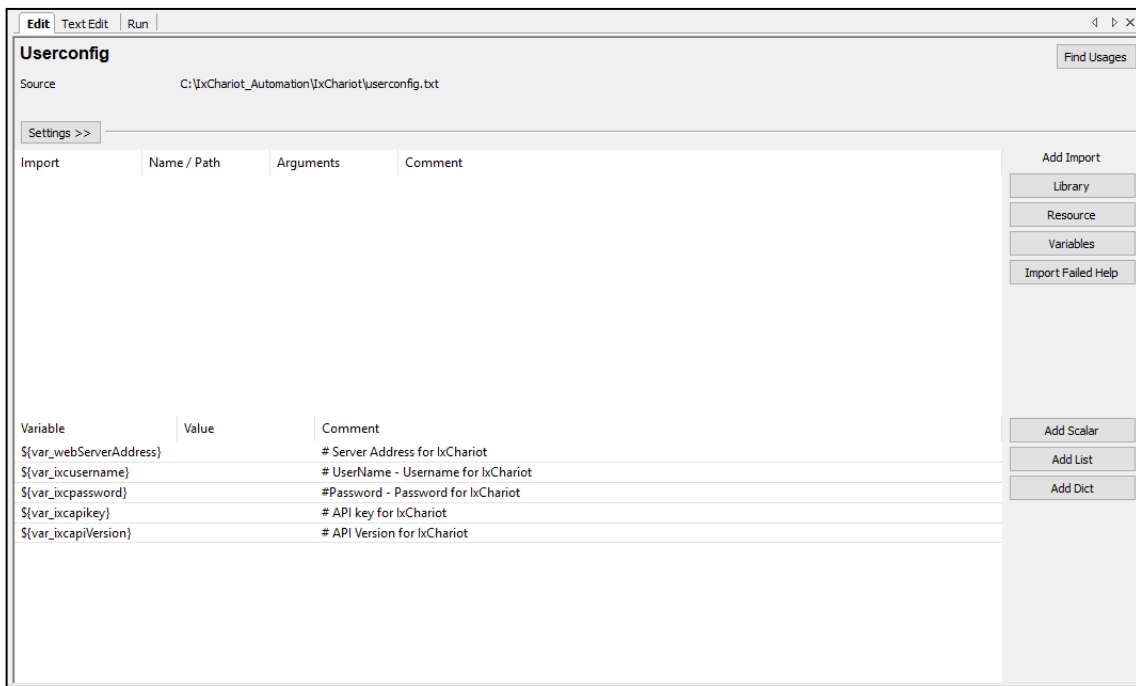
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1. Configuring Common Parameters

1. From the left panel, click on the **userconfig.txt**.



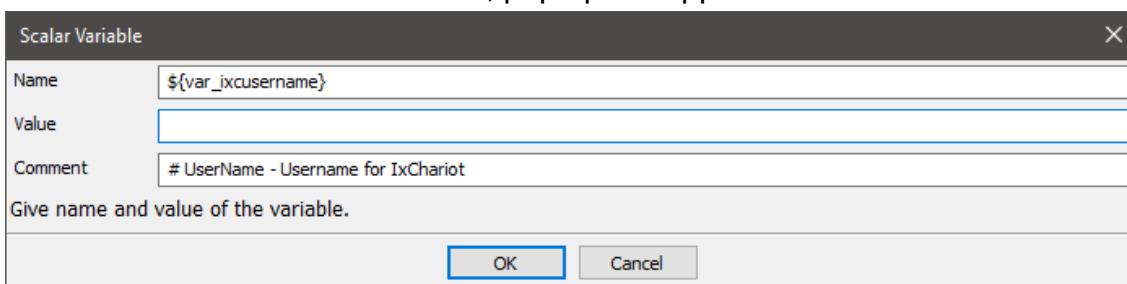
2. On the right, it will open the edit tab of the userconfig.txt. Here the user will find the common parameters and the values for each of them.



- The user has to provide the values for username, password, API key, API version and the IP address for IxChariot web version.

Variable	Value	Comment
<code>\${var_webServerAddress}</code>	https://192.168.2.30	# Server Address for IxChariot
<code>\${var_ixcusername}</code>	cage.noire@gmail.com	# UserName - Username for IxChariot
<code>\${var_ixcpassword}</code>	At112345	# Password - Password for IxChariot
<code>\${var_ixcapikey}</code>	7faf1207-b2ff-4a90-9a70-ea5ec87040f1	# API key for IxChariot
<code>\${var_ixcapiVersion}</code>	v1	# API Version for IxChariot
<code>\${HHUB_Version}</code>	v1	# Version number
<code>\${MAC1}</code>	192.168.2.100	# IP Address of MacBook 1

- Double click on the variable name, pop up will appear.



Scalar Variable

Name: `${var_ixcusername}`

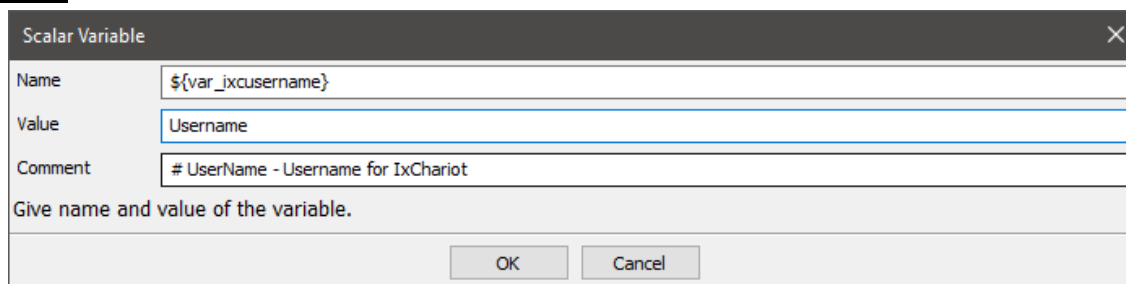
Value:

Comment: # UserName - Username for IxChariot

Give name and value of the variable.

OK Cancel

- Here the user can enter the value for each variable. Do not change the variable name.



Scalar Variable

Name: `${var_ixcusername}`

Value: Username

Comment: # UserName - Username for IxChariot

Give name and value of the variable.

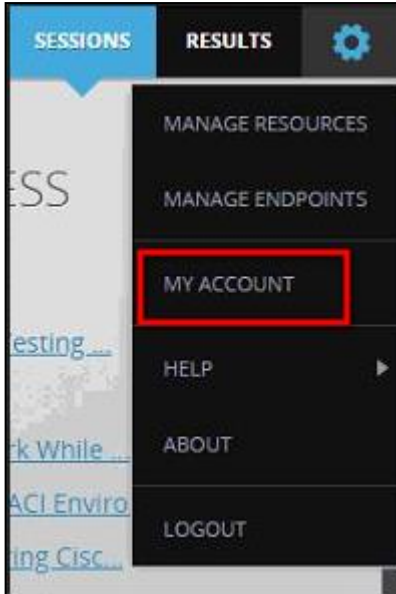
OK Cancel

- The user can give the value of the other variables repeating step 4 and 5.
- The user can find the values of username, password and API Key in the settings of IxChariot WebAPI.
- To find the above values, follow the steps below.

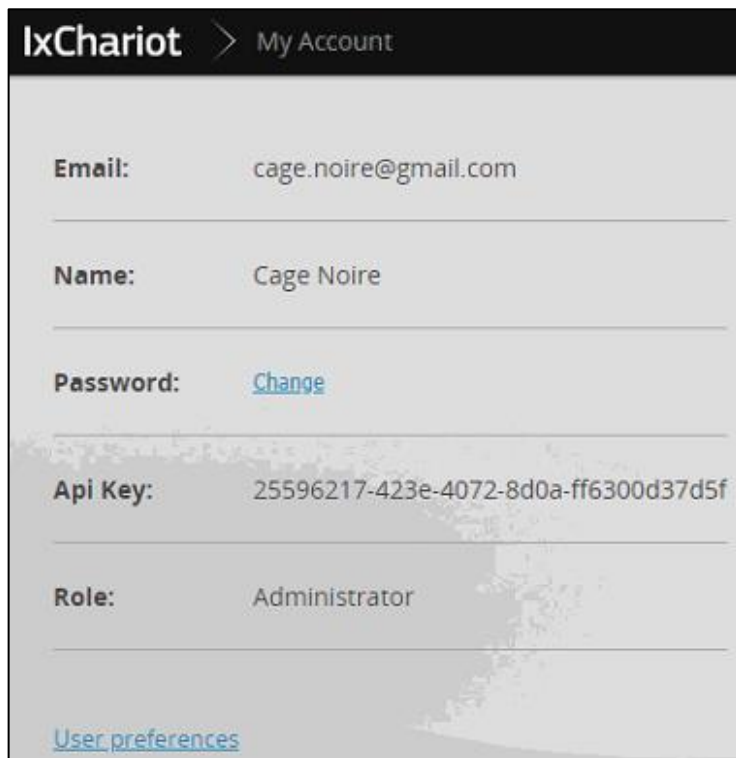
9. After logging into the user account, on the top right side, the user will find the **settings** button.



10. On clicking of that, a drop down will come. Choose **My Account** from the dropdown.



11. From the My Account page, the user can find the values for the username, password, and API key (Click on the Show button to see).



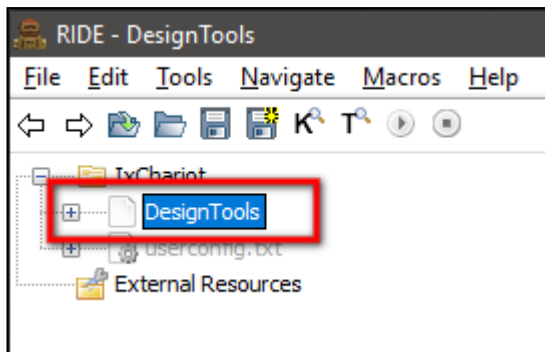
The screenshot shows the 'My Account' page in the IxChariot interface. The page has a dark header with the 'IxChariot' logo and a breadcrumb trail 'My Account'. Below the header, there are five rows of account information, each with a label on the left and a value on the right, separated by a horizontal line. The first row shows 'Email:' with the value 'cage.noire@gmail.com'. The second row shows 'Name:' with the value 'Cage Noire'. The third row shows 'Password:' with a blue 'Change' link. The fourth row shows 'Api Key:' with the value '25596217-423e-4072-8d0a-ff6300d37d5f'. The fifth row shows 'Role:' with the value 'Administrator'. At the bottom of the page, there is a blue link for 'User preferences'.

Email:	cage.noire@gmail.com
Name:	Cage Noire
Password:	Change
Api Key:	25596217-423e-4072-8d0a-ff6300d37d5f
Role:	Administrator

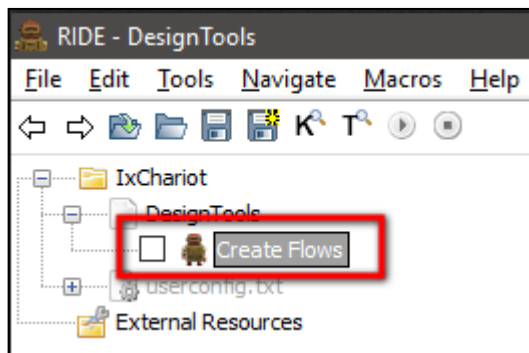
[User preferences](#)

2. Configuring Test Parameters

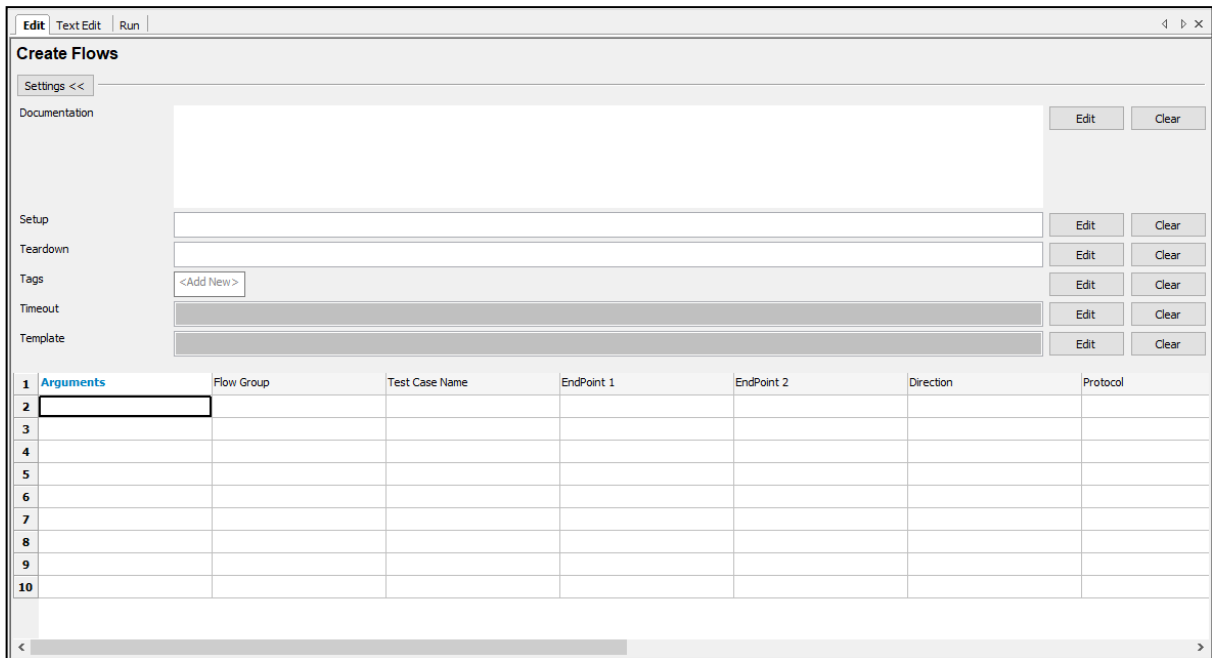
1. Now on the left panel, click on the plus sign next to **DesignTools** to expand.



2. Under the DesignTools, the user will find **Create Flows**.
3. Click on the **Create Flows**.

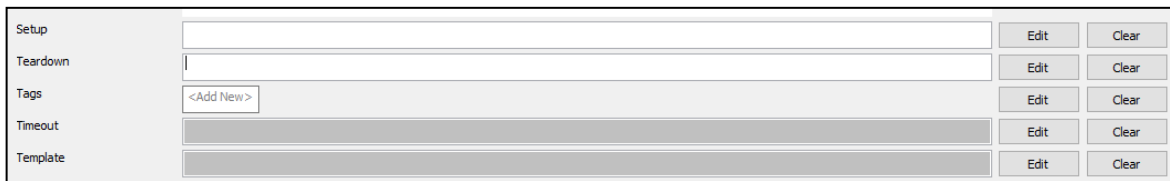


4. It will open the edit tab.

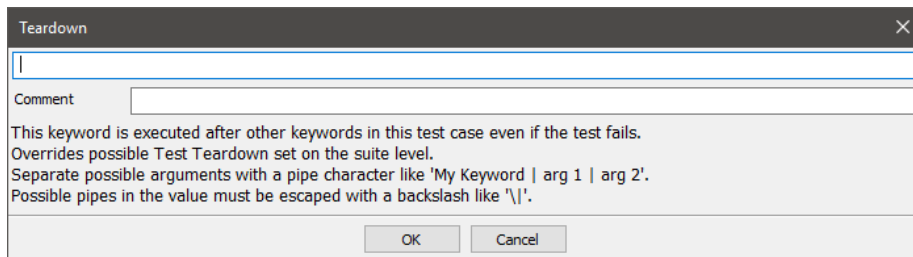


	Arguments	Flow Group	Test Case Name	EndPoint 1	EndPoint 2	Direction	Protocol
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

5. Click on the **Edit** button next to the **Teardown** text box.



6. A pop up will come up.

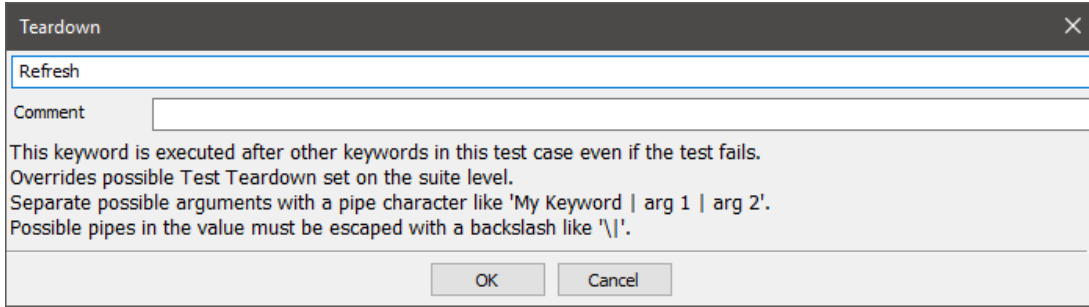


Teardown

Comment

This keyword is executed after other keywords in this test case even if the test fails.
 Overrides possible Test Teardown set on the suite level.
 Separate possible arguments with a pipe character like 'My Keyword | arg 1 | arg 2'.
 Possible pipes in the value must be escaped with a backslash like '\\'.
 OK Cancel

7. From the popup, enter **Refresh** in the first textbox and click OK button.



Teardown

Refresh

Comment

This keyword is executed after other keywords in this test case even if the test fails.
 Overrides possible Test Teardown set on the suite level.
 Separate possible arguments with a pipe character like 'My Keyword | arg 1 | arg 2'.
 Possible pipes in the value must be escaped with a backslash like '\\'.
 OK Cancel

8. Now the user has to configure the parameters. In the first cell of the row, the user has to enter the command name **CreateTestCase**.

1	Arguments
2	CreateTestCase
3	
4	
5	
6	
7	

9. The parameters that the user has to configure for creating the test case files are mentioned below.

Parameters	Comments
Flow Group	User can enter a value for group name. Example: MAC
Test case name	It can be given as the user wants to name the test case. Example: Bell_MAC1
End Point 1	This will be the name of the variable name mentioned in userconfig.txt file for the endpoint IP. T Example: If user has used MAC1 for 192.168.2.100 in userconfig.txt file, then enter MAC1 for EndPoint1.
End Point 2	Similar to End Point 1, this value must match the value that is given in the userconfig.txt. Note: It must not be the same as the value of the End Point 1.
Direction	Must be either DS / US.
Protocol	Must be either TCP / UDP.
Script	Throughput Tests <ul style="list-style-type: none"> • TCP High Performance • TCP Low Performance • TCP Small Packets Performance • TCP Baseline Performance • TCP Small Packets Performance • UDP Low Performance • UDP Baseline Performance • UDP High Performance
Duration (seconds)	The user can enter an integer value.
Create	Must be either Yes / No. Default value is Yes if left blank.
Number of Users	The maximum number of users can be 10 as per the current license at Bell.

10. Here is a sample after the user enters the values for the parameters (given in the above table).

<div> Edit Text Edit Run </div> <div> Create Flows </div> <div> Settings >> </div>						
1	Arguments	Flow Group	Test Case Name	EndPoint 1	EndPoint 2	Direction
2	CreateTestCase	MAC	Bell_MAC1	MAC1	DESKTOP	DS
3	CreateTestCase	MAC	Bell_MAC1	DESKTOP	MAC1	US
4						
5						

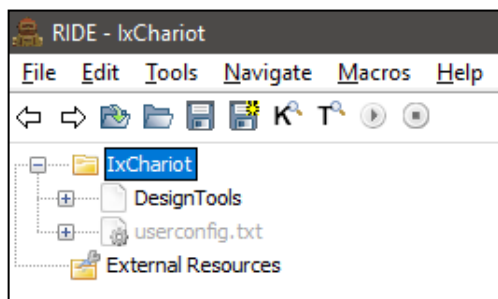
<div> Edit Text Edit Run </div> <div> Create Flows </div> <div> Settings >> </div>						
1	Protocol	Script	Duration (secs)	Channel_UID_3	Create	Number of users
2	TCP	TCP High Performance	10	1,2,3,4		6
3	TCP	TCP High Performance	10	50,51,52		6
4						
5						

11. The user can repeat the steps 8 & 9 for creating multiple test cases.

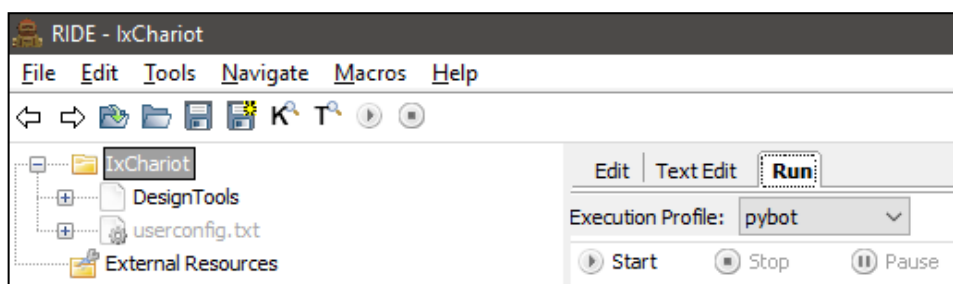
3. Configuring Result Arguments

The section aims to customize the result files name, location and the background color. The above command needs to be inserted in the arguments section, following the steps:

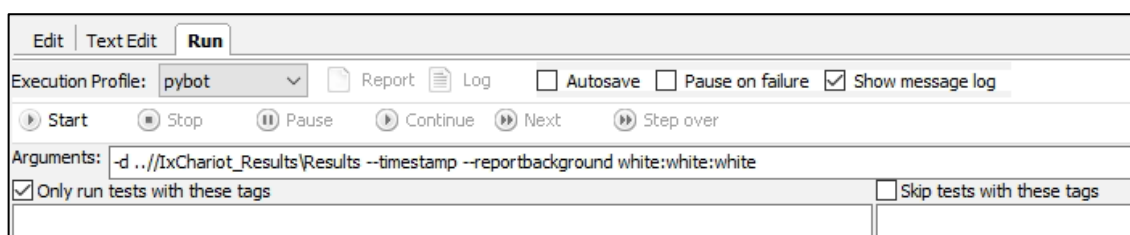
1. Click on project name.



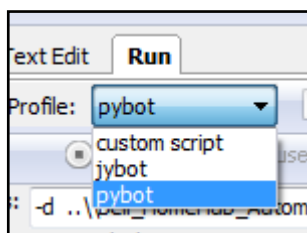
2. Click on **Run** tab.



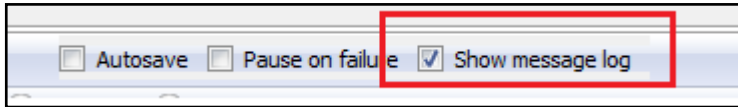
3. Copy the command **“-d ../IxChariot_Results\Results --timestamp --reportbackground white:white:white”** and paste it in arguments text area as shown.



4. Select Execution Profile as **pybot** (if not already selected).

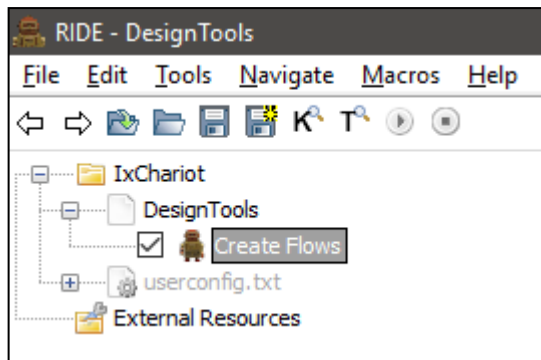


5. Click to checkbox to mark as selected for Show message log (if not already selected).

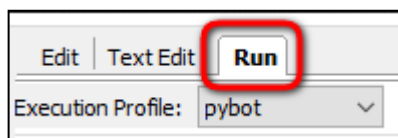


4. Creating Test Case

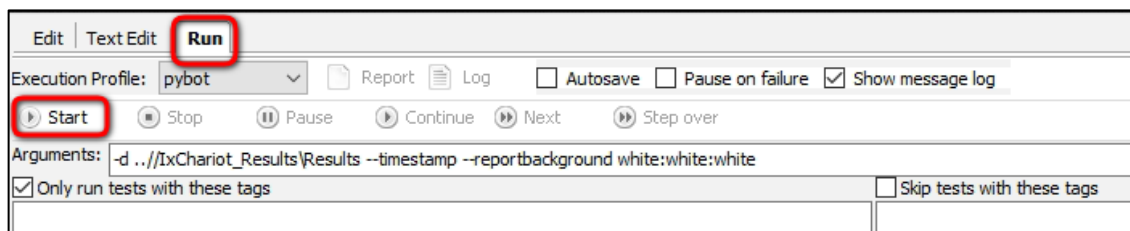
1. To start the execution, click on the checkbox to the left of “**Create Flows**”.



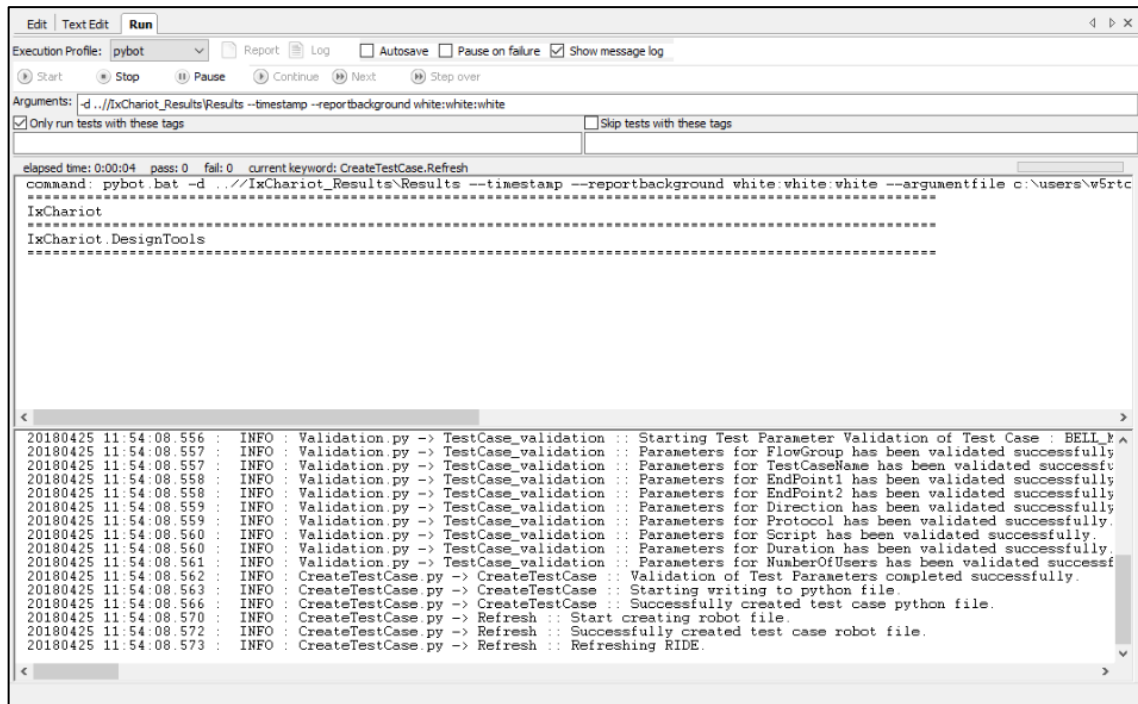
2. Click on the **Run** tab.



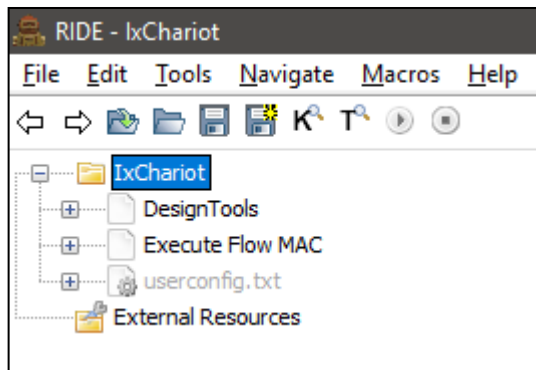
3. Click on the **Start** button to start the execution.



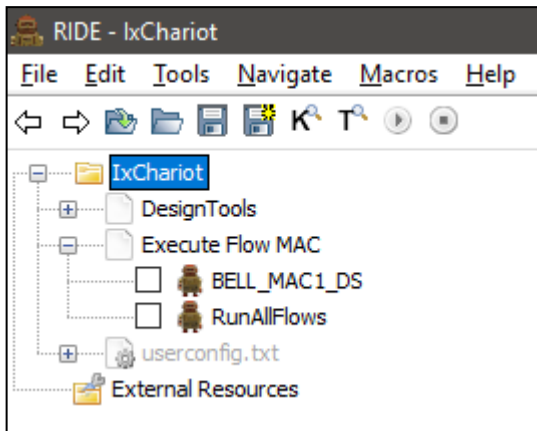
4. On clicking of the button, the execution will start.



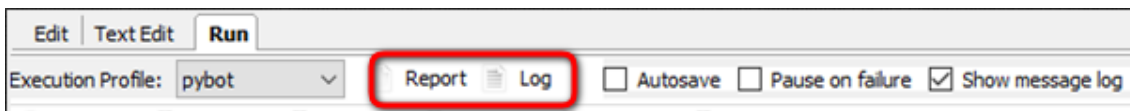
5. On successful execution, RIDE will close and automatically reopen with the Flow group test suites appearing on the left under the Design Tools.



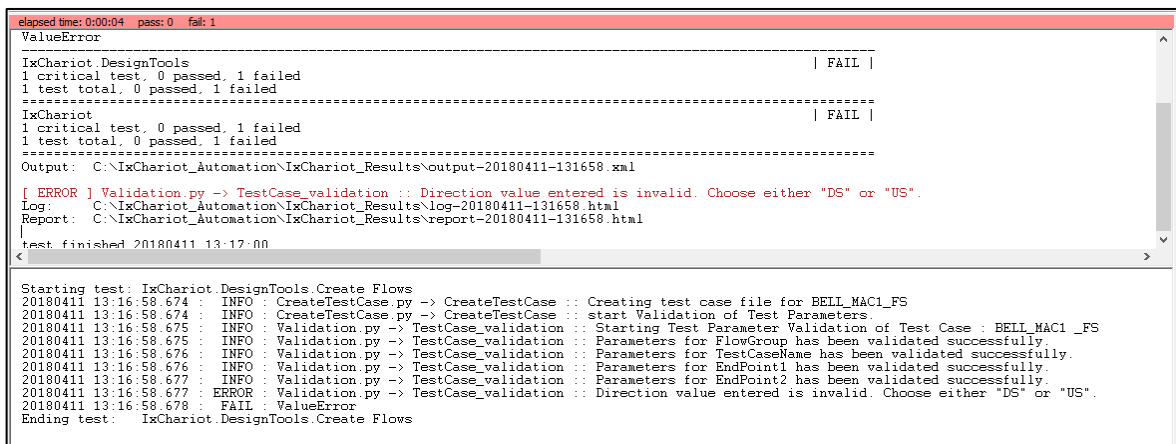
6. It will show all the test case listed under the Flow Group name during creation.



7. Once the test case is executed successfully, then click on the **Log** button to view the log of the executed test case and click on the **Report** button to view the report of the executed test case.



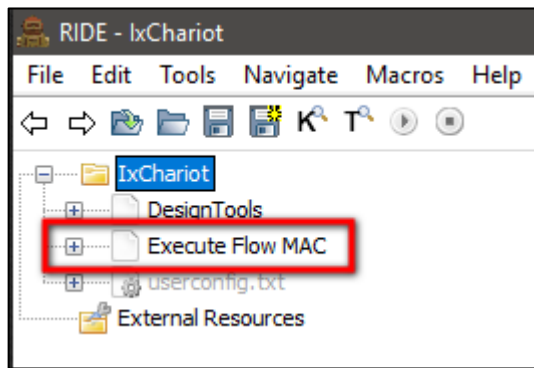
8. RIDE will not close if there is a validation error of the test input parameters and it will show the appropriate error message in the console.



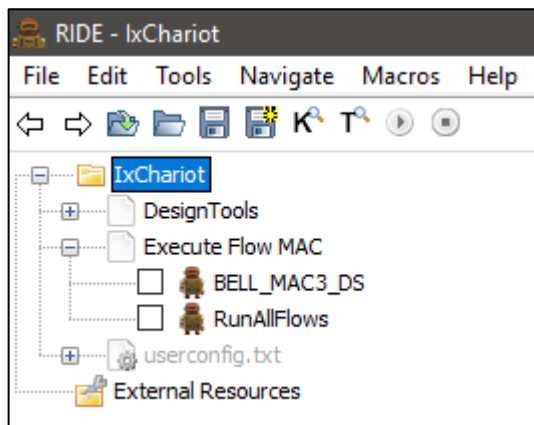
9. After checking and solving the cause of error from the log, the user can re-run the test case.

5. Executing Test Case

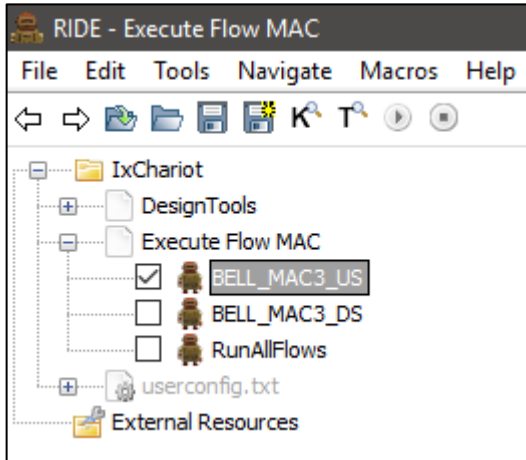
1. After the RIDE gets refreshed, the user can see the Flow group test suites appearing on the left under the Design Tools.



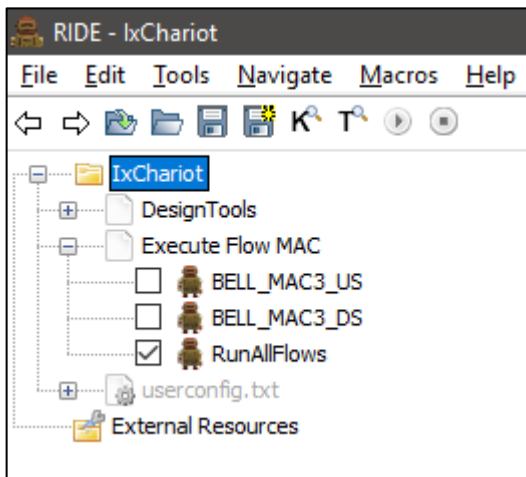
2. It will show all the test case listed under the Flow Group name during creation.



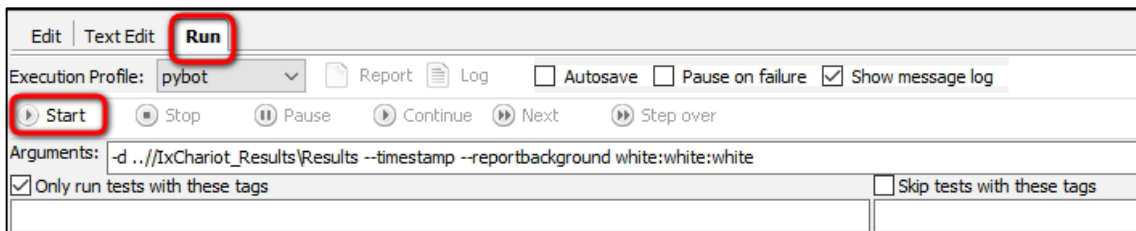
3. Select one or more test cases by checking the check box on the left of test case name.



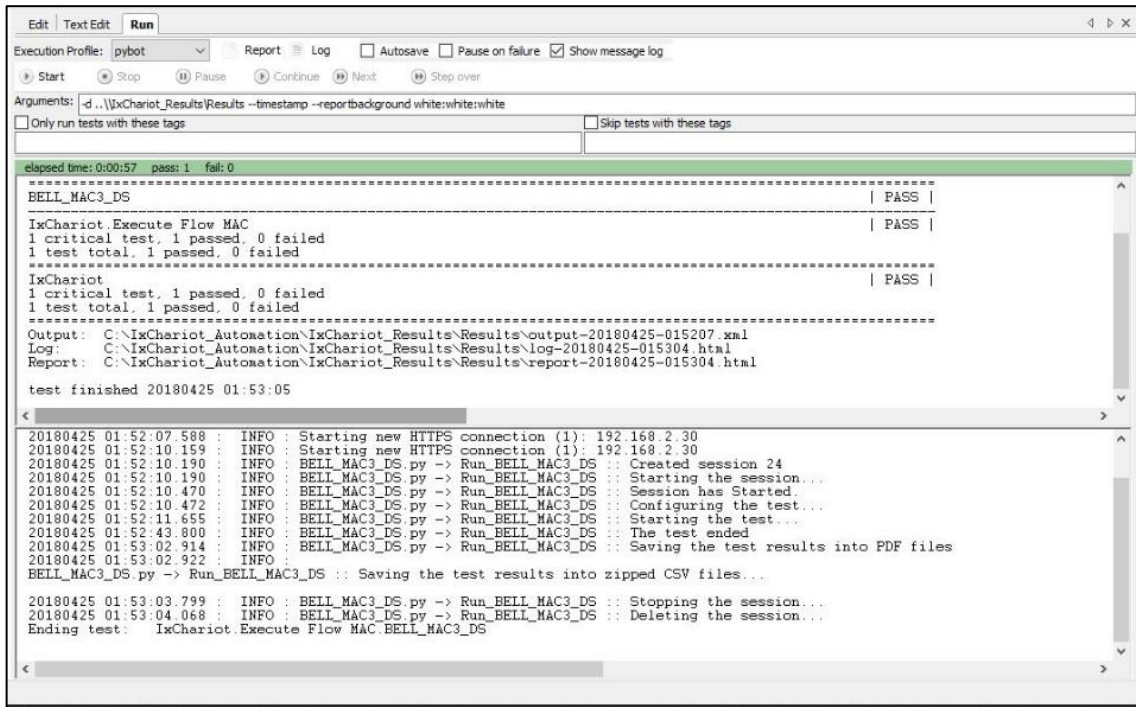
4. If the user wants to run all the test cases, then the user must ONLY check the check box next to the RunAllFlows.



5. After selecting the test cases which has to be executed, go to the Run and click on the Start button.



6. It will start the execution. Wait till it is complete.



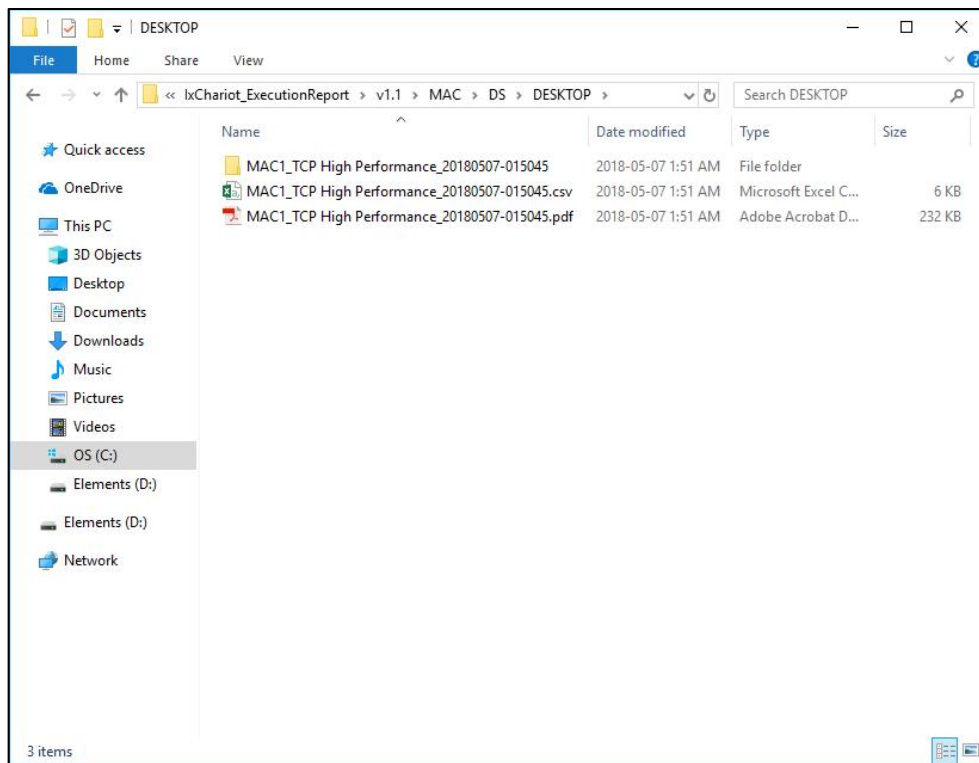
The screenshot shows the IxChariot Run window with the following details:

- Execution Profile:** pybot
- Buttons:** Start, Stop, Pause, Continue, Next, Step over
- Arguments:** -d..\\IxChariot_Results\\Results --timestamp --reportbackground white:white:white
- Options:** ☐ Only run tests with these tags, ☐ Skip tests with these tags
- Status:** elapsed time: 0:00:57 pass: 1 fail: 0
- Test Results:**
 - BELL_MAC3_DS | PASS |
 - IxChariot.Execute Flow MAC | PASS |
 - 1 critical test, 1 passed, 0 failed
 - 1 test total, 1 passed, 0 failed
 - IxChariot | PASS |
 - 1 critical test, 1 passed, 0 failed
 - 1 test total, 1 passed, 0 failed
- Output:** C:\\IxChariot_Automation\\IxChariot_Results\\Results\\output-20180425-015207.xml
- Log:** C:\\IxChariot_Automation\\IxChariot_Results\\Results\\log-20180425-015304.html
- Report:** C:\\IxChariot_Automation\\IxChariot_Results\\Results\\report-20180425-015304.html
- test finished** 20180425 01:53:05
- Log Details:**
 - 20180425 01:52:07.588 : INFO : Starting new HTTPS connection (1): 192.168.2.30
 - 20180425 01:52:10.159 : INFO : Starting new HTTPS connection (1): 192.168.2.30
 - 20180425 01:52:10.190 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Created session 24
 - 20180425 01:52:10.190 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Starting the session...
 - 20180425 01:52:10.470 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Session has Started...
 - 20180425 01:52:10.472 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Configuring the test...
 - 20180425 01:52:11.655 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Starting the test...
 - 20180425 01:52:43.800 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: The test ended
 - 20180425 01:53:02.914 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Saving the test results into PDF files
 - 20180425 01:53:02.922 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Saving the test results into zipped CSV files...
 - 20180425 01:53:03.799 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Stopping the session...
 - 20180425 01:53:04.068 : INFO : BELL_MAC3_DS.py -> Run_BELL_MAC3_DS :: Deleting the session...
 - Ending test: IxChariot.Execute Flow MAC BELL_MAC3_DS

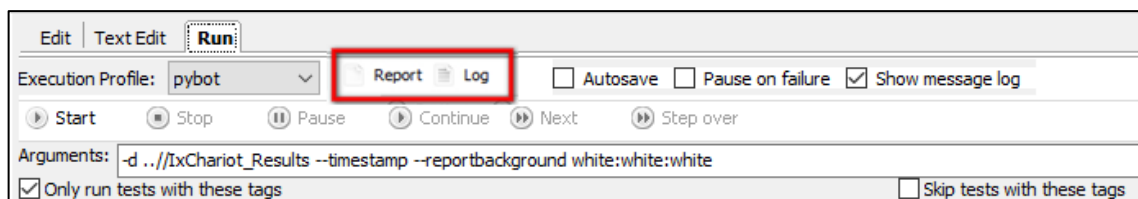
6. Execution Reports

- The user will be able to view the results of the executions in a specific folder as shown below. The result file will have a timestamp and will be named as

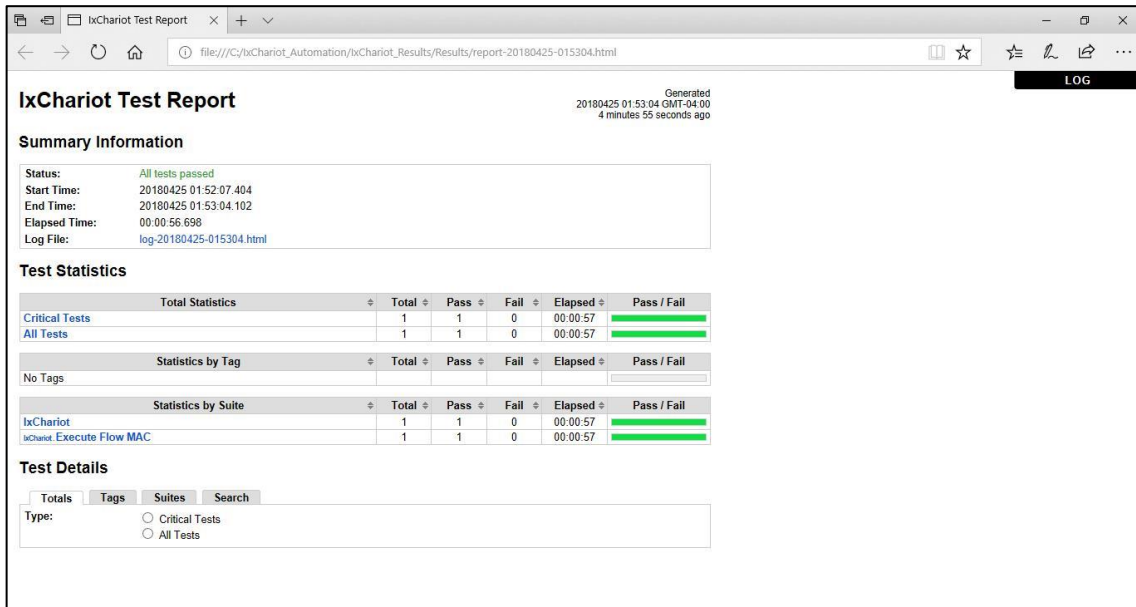
- “C:/ IxChariot_Automation/ IxChariot_ExecutionResults/<HomeHub Version>/<FlowGroup>/<Direction>/<EndPoint1>/<EndPoint2>_<Script>_<Timestamp>.pdf”.
- “C:/ IxChariot_Automation/ IxChariot_ExecutionResults/<HomeHub Version>/<FlowGroup>/<Direction>/<EndPoint1>/<EndPoint2>_<Script>_<Timestamp>.csv”.
- “C:/ IxChariot_Automation/ IxChariot_ExecutionResults/<HomeHub Version>/<FlowGroup>/<Direction>/<EndPoint1>/<EndPoint2>_<Script>_<Timestamp>”.



- Click on the **Log / Report** button to view the result in the RIDE. The button becomes active on executing the test case.



- On click of the Report button, in the browser, the report appears.



IxChariot Test Report

Generated: 20180425 01:53:04 GMT-04:00
4 minutes 55 seconds ago

Summary Information

Status: All tests passed
Start Time: 20180425 01:52:07.404
End Time: 20180425 01:53:04.102
Elapsed Time: 00:00:56.698
Log File: log-20180425-015304.html

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:57	100%
All Tests	1	1	0	00:00:57	100%

Statistics by Tag

Total	Pass	Fail	Elapsed	Pass / Fail
No Tags				

Statistics by Suite

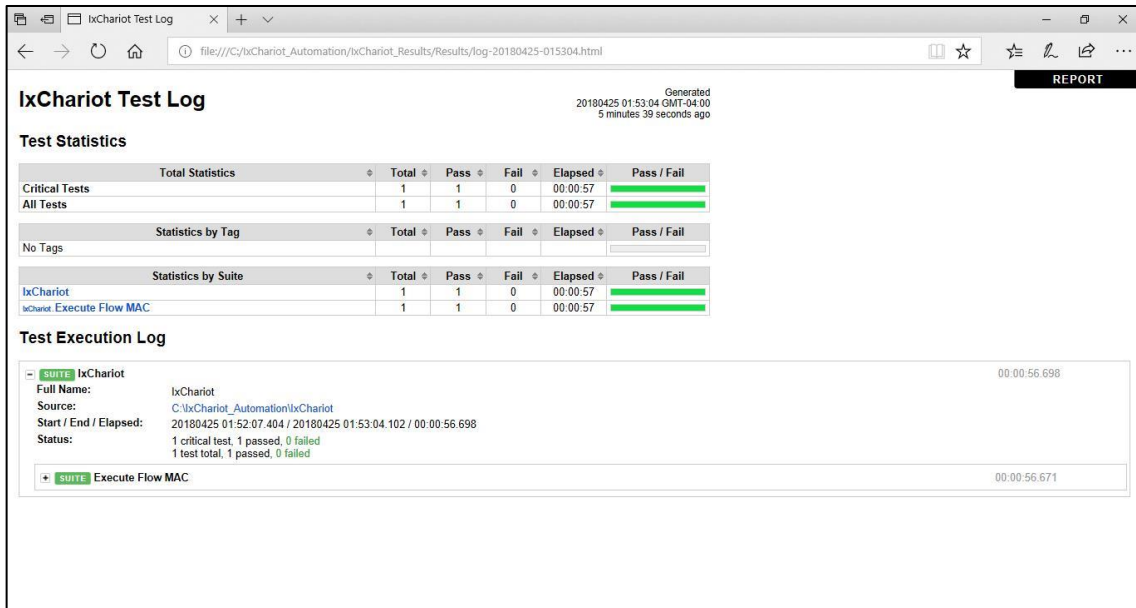
Total	Pass	Fail	Elapsed	Pass / Fail
IxChariot	1	1	0	00:00:57
IxChariot.Execute Flow MAC	1	1	0	00:00:57

Test Details

Totals Tags Suites Search

Type: ☐ Critical Tests ☐ All Tests

- In the browser on the top right corner, the log button is there. Clicking on it, will show the log report and vice versa.



IxChariot Test Log

Generated: 20180425 01:53:04 GMT-04:00
5 minutes 39 seconds ago

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:57	100%
All Tests	1	1	0	00:00:57	100%

Statistics by Tag

Total	Pass	Fail	Elapsed	Pass / Fail
No Tags				

Statistics by Suite

Total	Pass	Fail	Elapsed	Pass / Fail
IxChariot	1	1	0	00:00:57
IxChariot.Execute Flow MAC	1	1	0	00:00:57

Test Execution Log

SUITE IxChariot 00:00:56.698

Full Name: IxChariot
Source: C:\IxChariot_Automation\IxChariot
Start / End / Elapsed: 20180425 01:52:07.404 / 20180425 01:53:04.102 / 00:00:56.698
Status: 1 critical test, 1 passed, 0 failed
1 test total, 1 passed, 0 failed

SUITE Execute Flow MAC 00:00:56.671

- The user can find the Log files in the file location:
"C:/ IxChariot_Automation/ IxChariot_Results/ Results/log - <Timestamp>.html".
- The user can find the report files in the file location:
"C:/ IxChariot_Automation/ IxChariot_Results/ Results/report - <Timestamp>.html".

7. Execution Logs

1. The user can find the log of the executed flow group test case in 2 places – RIDE and Detailed Log file
2. The user can see the log in the RIDE after execution.

```
Starting test: IxChariot Execute Flow MAC_BELL_MAC1_DS
20180507 01:50:45.173 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Connecting to https://192.168.2.30
20180507 01:50:45.317 : INFO : Starting new HTTPS connection (1): 192.168.2.30
20180507 01:50:46.625 : INFO : Starting new HTTPS connection (1): 192.168.2.30
20180507 01:50:46.656 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Created session 34
20180507 01:50:46.656 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Starting the session...
20180507 01:50:46.901 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Session has Started...
20180507 01:50:46.902 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Configuring the test...
20180507 01:50:47.809 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Starting the test...
20180507 01:51:30.803 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: The test ended
20180507 01:51:51.698 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Saving the test results into PDF files
20180507 01:51:51.705 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Saving the test results into zipped CSV files...
20180507 01:51:52.294 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Stopping the session...
20180507 01:51:52.518 : INFO : BELL_MAC1_DS.py -> Run_BELL_MAC1_DS :: Deleting the session
```

3. The user can find the Detailed Log Report in the folder:
“C:/ IxChariot_Automation/ IxChariot_Results/DetailedLog<Timestamp>”.

This file will be created every day and is stored in the above location.

```
1 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Creating test case file for BELL_MAC3_DS
2 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Starting validation of Test Parameters.
3 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Starting Test Parameter Validation of Test Case : BELL_MAC3_DS
4 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for FlowGroup has been validated successfully.
5 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for TestCaseName has been validated successfully.
6 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for EndPoint1 has been validated successfully.
7 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for EndPoint2 has been validated successfully.
8 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for Direction has been validated successfully.
9 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for Protocol has been validated successfully.
10 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for Script has been validated successfully.
11 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for Duration has been validated successfully.
12 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for NumberOfUsers has been validated successfully.
13 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Validation of Test Parameters completed successfully.
14 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Starting writing to python file.
15 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Successfully created test case python file.
16 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Creating test case file for BELL_MAC3_US
17 2018-04-27 05:20:17 AM - INFO - CreateTestCase.py -> CreateTestCase :: Starting validation of Test Parameters.
18 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Starting Test Parameter Validation of Test Case : BELL_MAC3_US
19 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for FlowGroup has been validated successfully.
20 2018-04-27 05:20:17 AM - INFO - Validation.py -> TestCase_validation :: Parameters for TestCaseName has been validated successfully.
```