



E.C.I.NETWORKS

WIFI AUTOMATION – ROBOT AUTOMATION – 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	May 30, 2017
0.2	Angelo Virgilio	Added template, formatted and updated various sections	June 2, 2017
0.3	Angelo Virgilio	Added New Section - Next steps	June 7, 2017
1.0	Arijit Saha	User Manual – Complete description for MySQL Project	Aug 15, 2017
2.0	Arijit Saha	Final Version – Robot Automation Project (Integrated)	Oct 18, 2017

Review & Approval

Requirements Document Approval History

Approving Party	Version Approved	Signature	Date
Bell Canada: Bertrand Camus Intissar Harrabi	0.3		

Requirements Document Review History

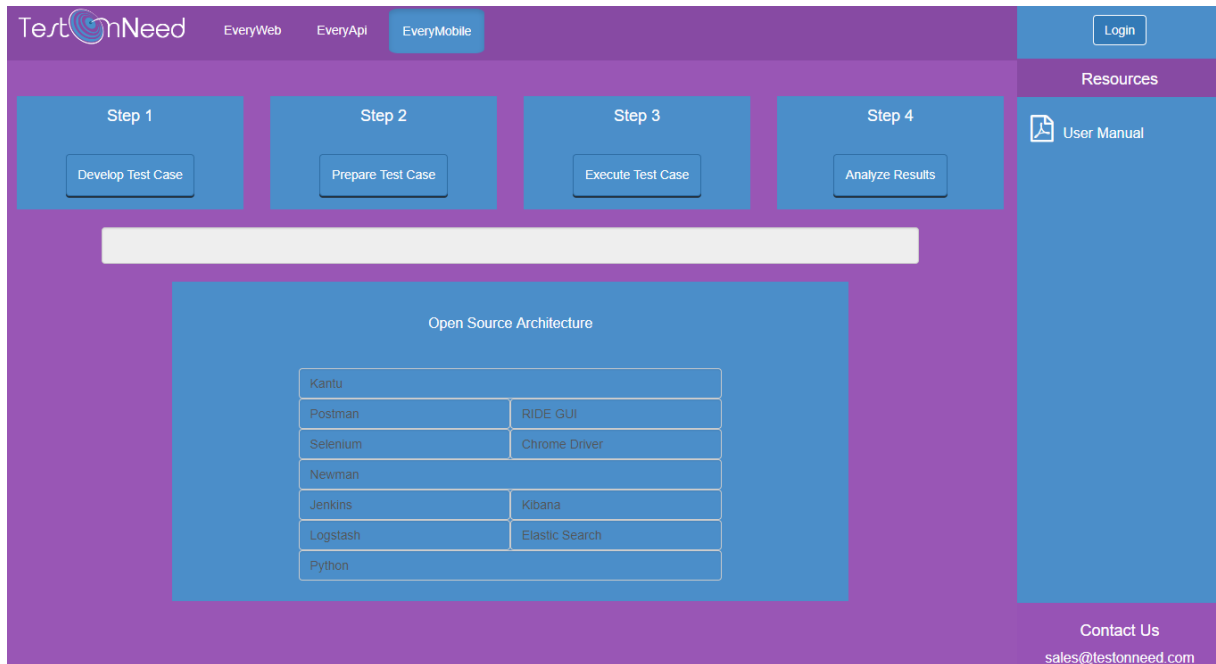
Reviewer	Version Reviewed	Signature	Date
Angelo Virgilio	0.3		June 9, 2017

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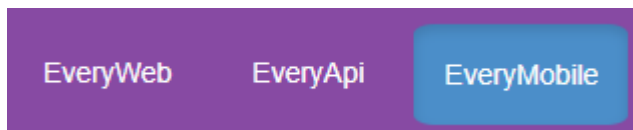
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1. DESCRIPTION OF THE WEB PAGE

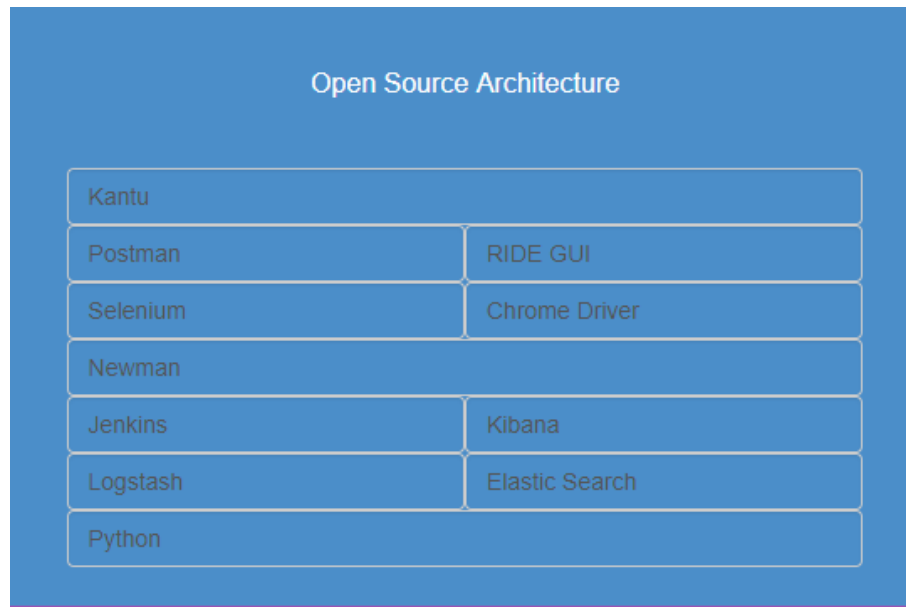
- The outline of the Website looks like below:



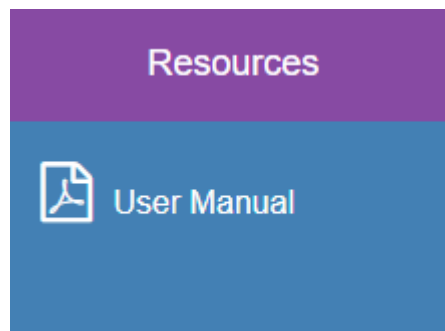
- As the web page opens up, the user will find three tabs namely – EveryWeb, EveryAPI and EveryMobile.



- Things that are common to all the tabs are:
 - In the status bar, the user will get know what is being done next by clicking of any button
- The stack of open sources will contain all the extension and application that are used. On mouse hover on any open source, a pop-up window comes up with a brief description of what it is and how it is being used.

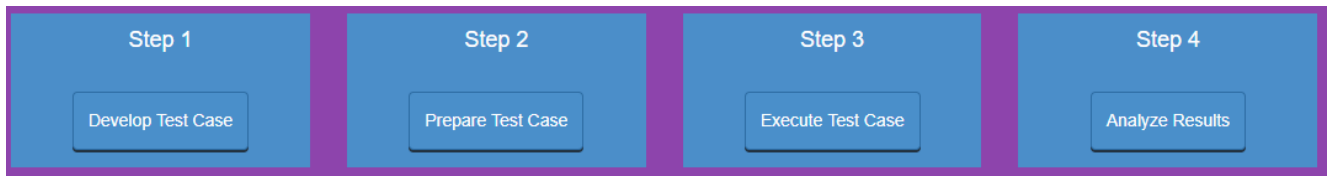


- The user manual guides the user through the web application. The content for the user manual will change based on the current tab being selected. It is a linked text, clicking on which, the respective document opens in .pdf format in a new tab in the browser



2. EVERYMOBILE PAGE

- The EveryMobile tab is the third and the final tab of the website.
- This tab has 4 buttons on the top namely –
 1. Develop Test Case
 2. Prepare Test Case
 3. Execute Test Case
 4. Analyze Results.

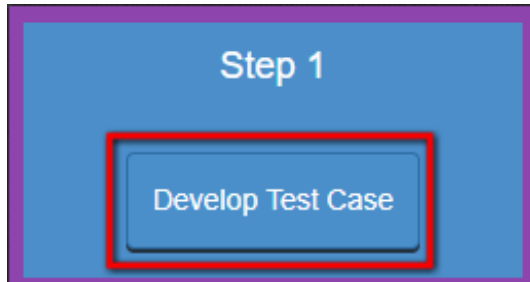


- Each step is explained below

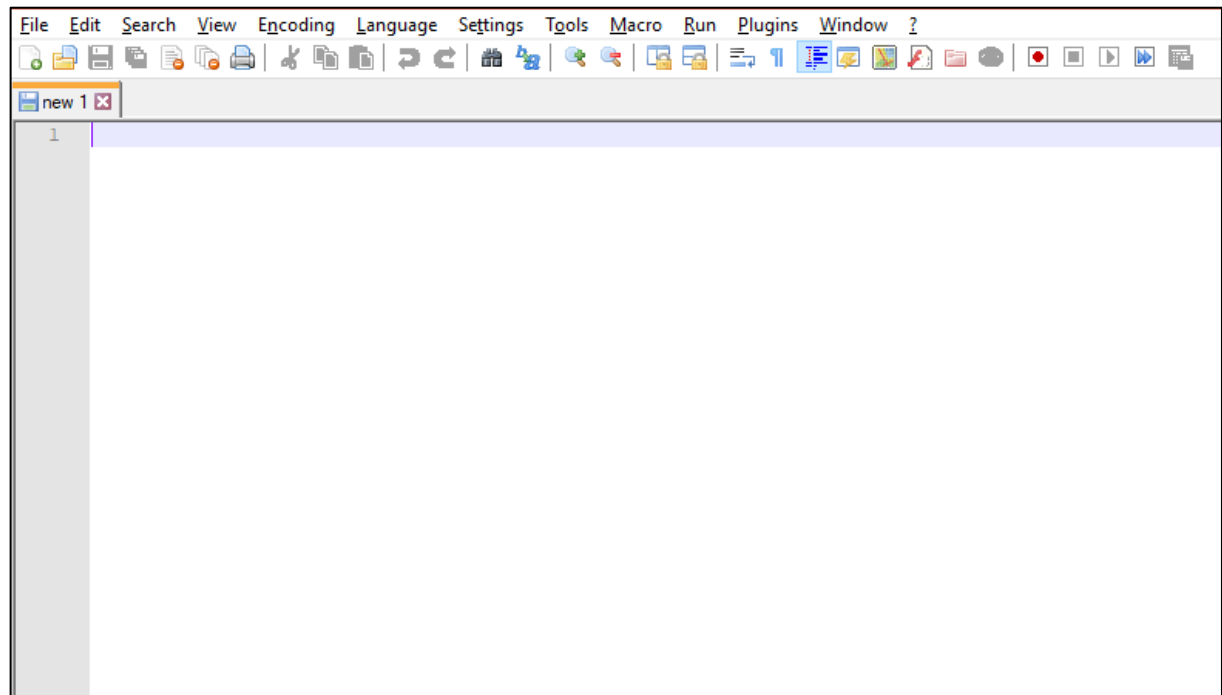
2.1 DEVELOP TEST CASE

The Develop Test Case button when clicked will open Notepad++ for the user. This can be used to write the test scripts for Mobile Application automation by following the guidelines mentioned in the appendix

1. Click the **Develop Test Case**.

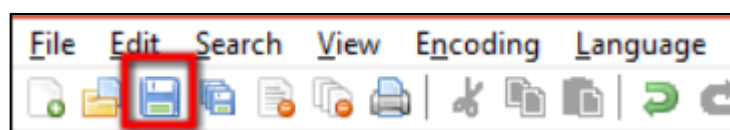


2. On clicking the **Develop Test Case** button, notepad++ opens up.



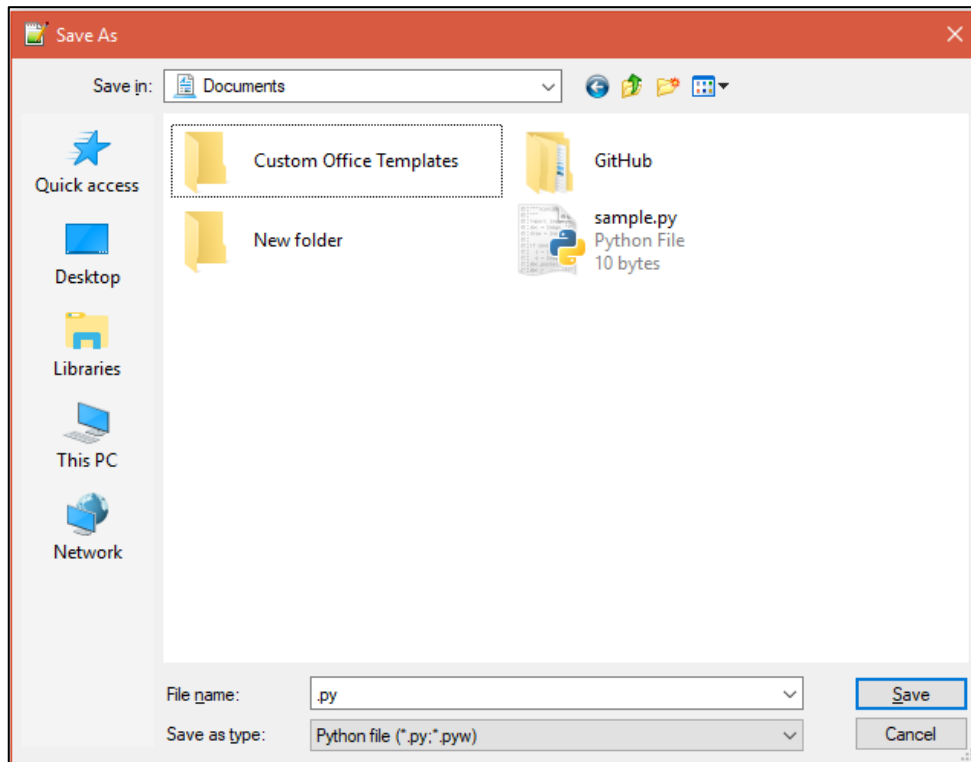
NOTE: The Notepad ++ should be saved in the C: drive then only it will open. For the installation process, please refer the Notepad ++ in the installation manual.

3. Write the Appium code for executing the test case.
4. After writing the code, click Save button.

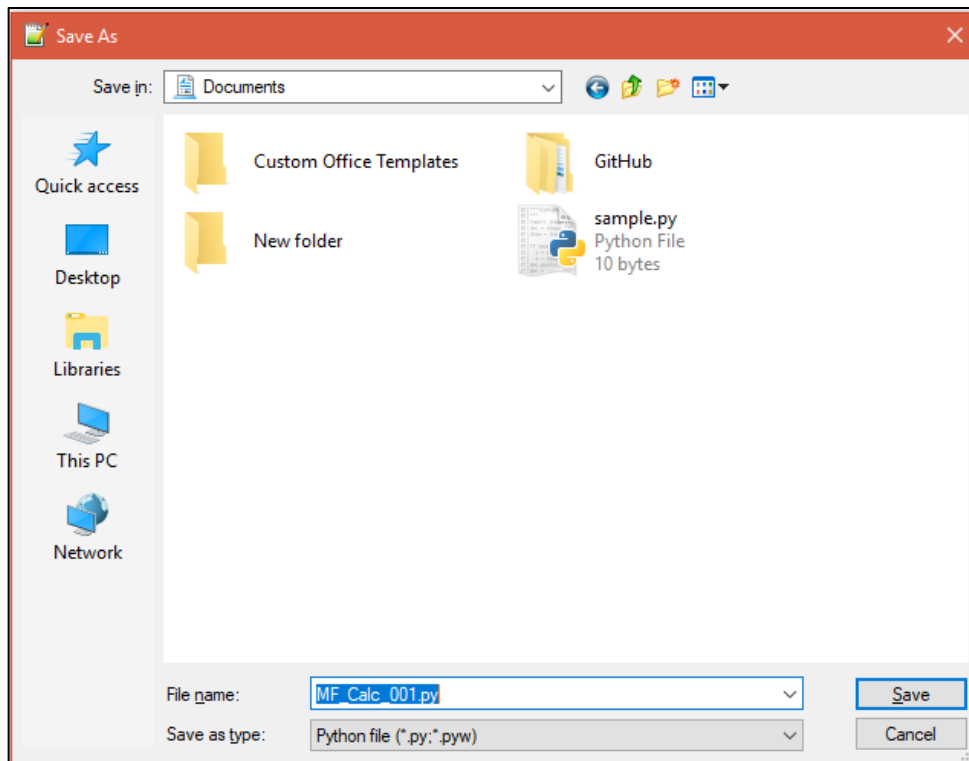


5. Surf to the location where file has to be stored. Example shows folder location as Documents.

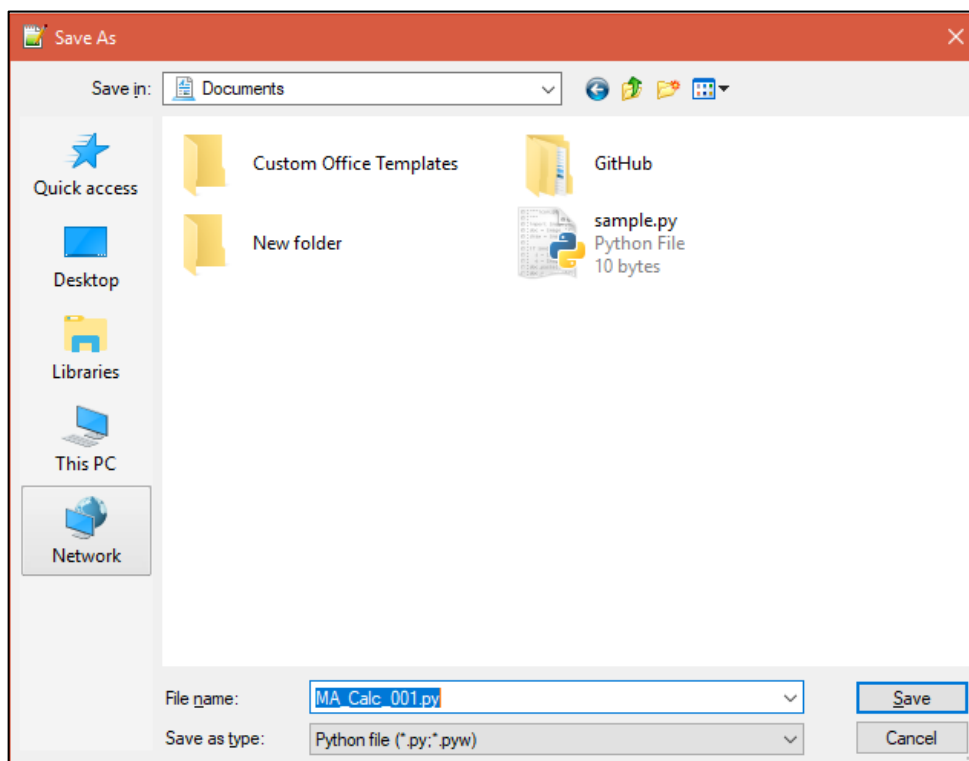
6. In the **file name** text, give the name of the file and in **save as type** drop down, select **Python file**.



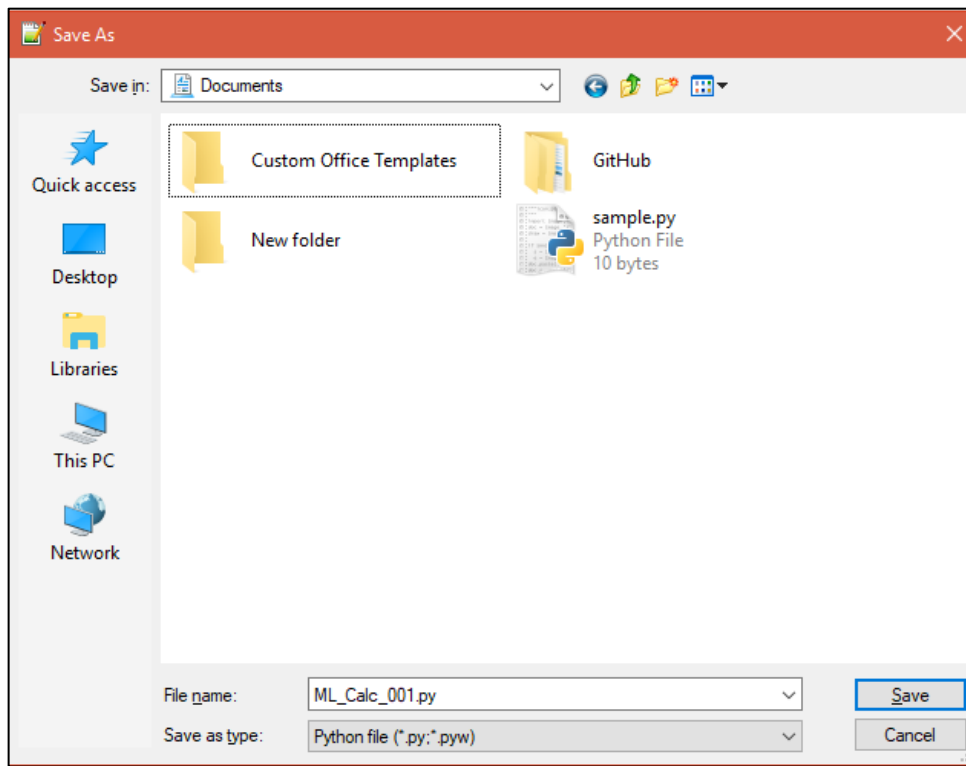
7. Click Save to save the file.
8. Now save the file based on the type of testing functionality. There are 3 types of testing functionality– **Function, Automation and Load**.
9. In the case of **Function**, the test case should be saved as **MF_<TestCase_Name>**. For example, the test case should be saved as **MF_Calc_001**.



10. In the case of **Automation**, the test case should be saved as **MA_<TestCase_Name>**. For example, the test case should be saved as **MA_Calc_001**.



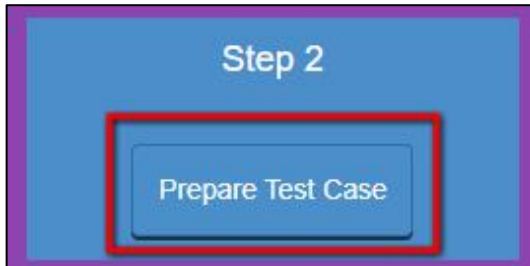
11. In the case of **Load**, the test case should be saved as **ML_<TestCase_Name>**. For example, the test case should be saved as **ML_Calc_001**.



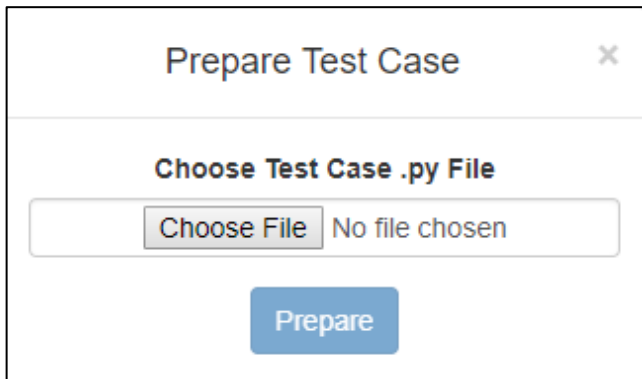
2.2 PREPARE TEST CASE

The Prepare Test Case button is used to convert the file uploaded into Python file and save in the auto created folder.

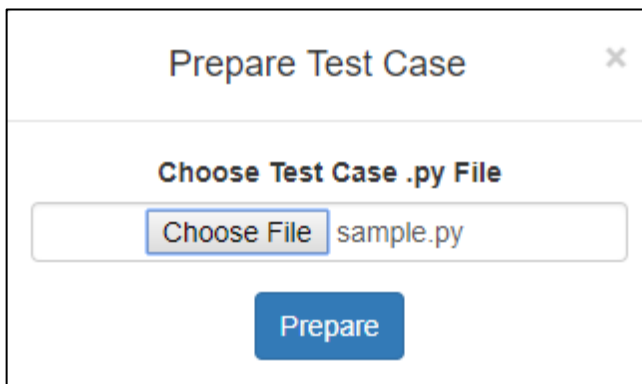
1. Click the **Prepare Test Case** button.



2. On clicking on the button, a pop up appears.

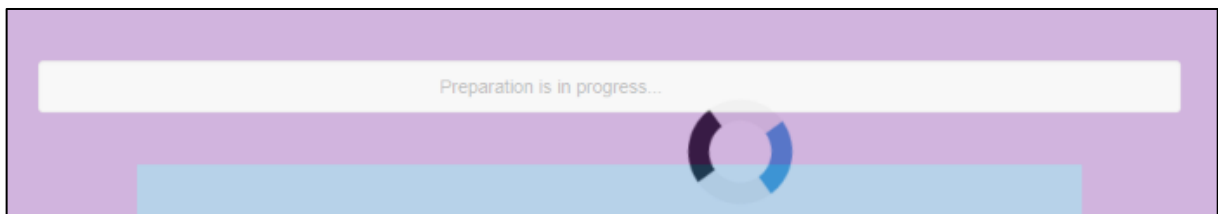


3. Click on the **Choose File** button.
4. Surfing the folder location where saved the Python file that was saved in the previous step.
5. Now upload the Python file.
6. The user can upload **only one file** at a time.
7. On uploading the Python file, the **Prepare** button becomes active.

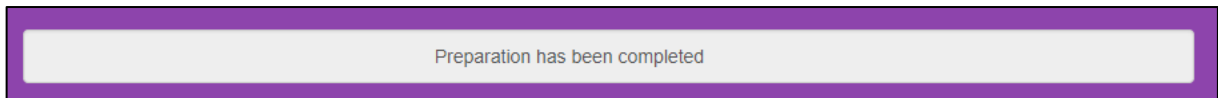


8. On uploading JSON file and clicking the **Prepare** button, the following will happen at the backend.

- It creates a folder in the name of the test case that was mentioned in the previous step.
 - The folder gets stored in:
 - > **TON > MobileTesting > GUI > Demo_TON > <TestCase_Name_Folder>**.
 - In case if the test case name was saved as **MF_Calc _001** in the previous step then it will create a folder with same name **MF_Calc _001**.
 - In this folder, the Python file that was uploaded will be found.
9. On clicking of the **Prepare** button, a message will be shown as “**Preparation is in Progress**” in the status bar. And until the preparation is complete, a spinner will be loading stating that the preparation is still on.



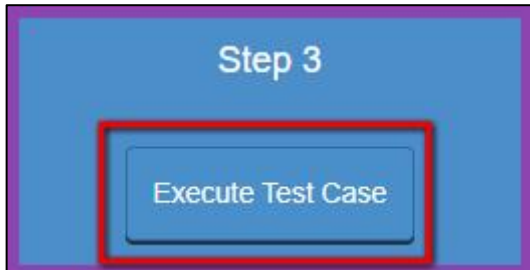
10. Once preparation is finished, a message will be shown as “**Preparation has been completed**” in the status bar.



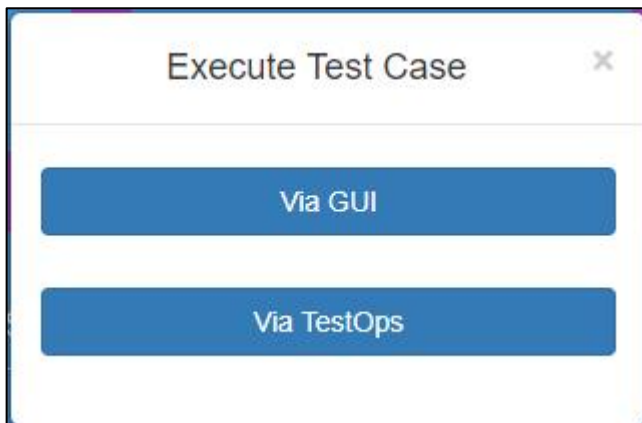
2.3 EXECUTE TEST CASE

The Execute Test Case button is used for the execution process. The execution process takes place using RIDE.

1. Click on the **Execute Test Case** button.

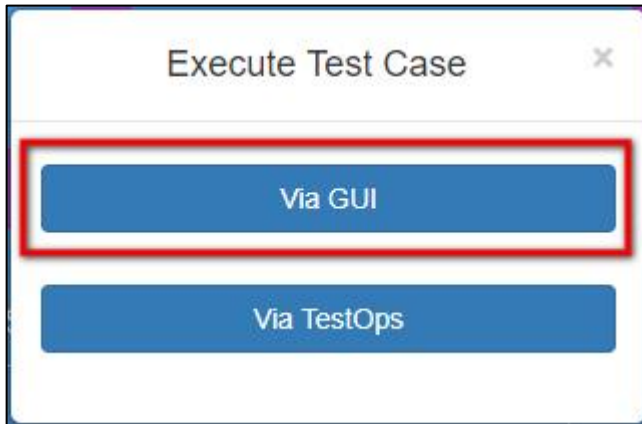


2. On clicking on the button, a pop up appears.
3. From the pop-up, select the button either as **Via GUI**, **Via TESTOPS**.

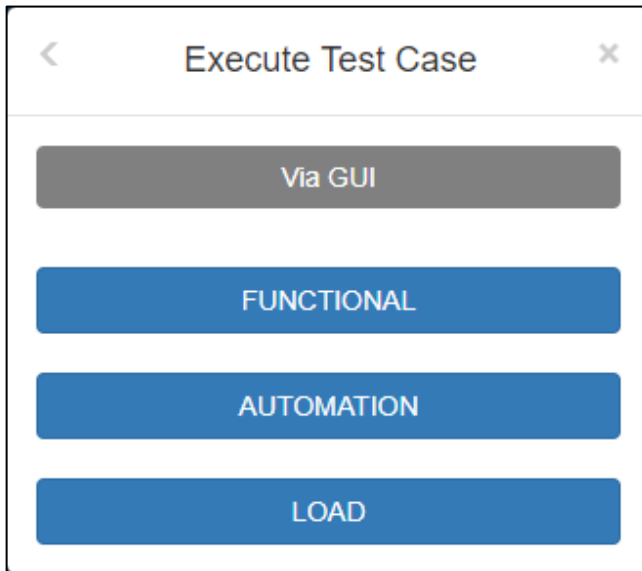


2.3.1 EXECUTE – VIA GUI

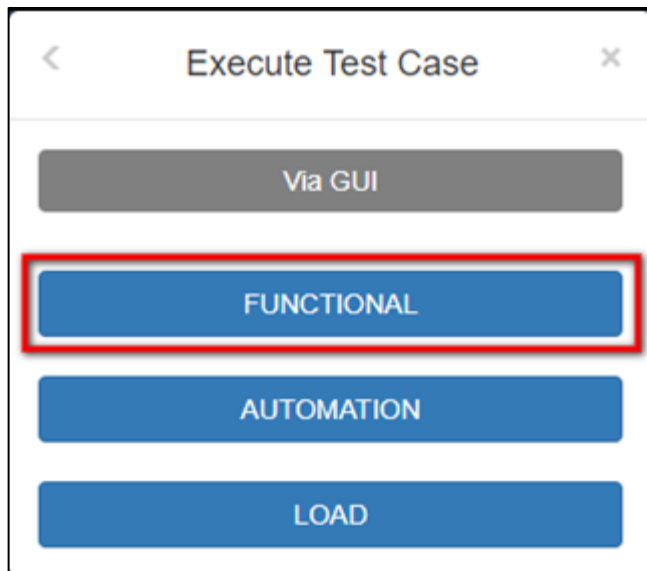
1. Click the **Via GUI** button.



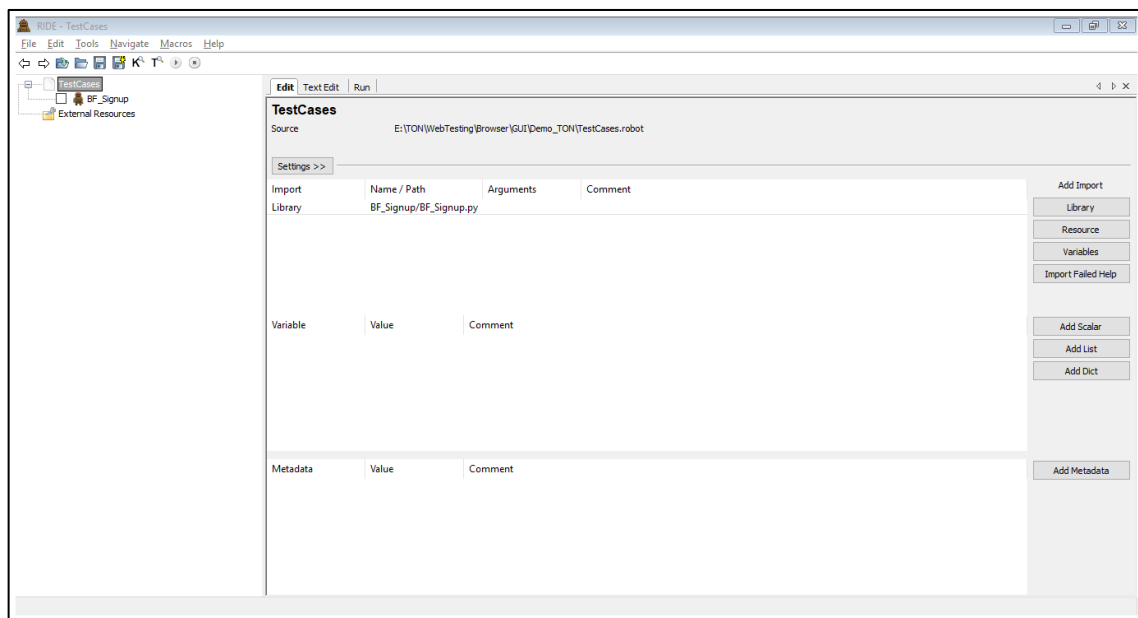
2. On clicking the button, 3 buttons appear – **Functional**, **Automation** and **Load**.



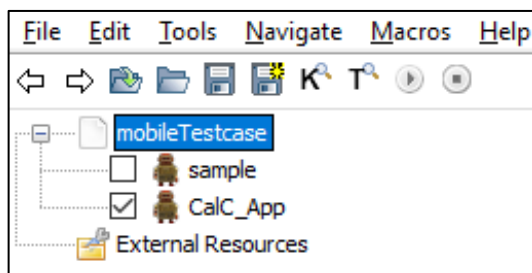
3. To perform functional testing, press Functional Button.



4. On click of the button, **RIDE** will open.

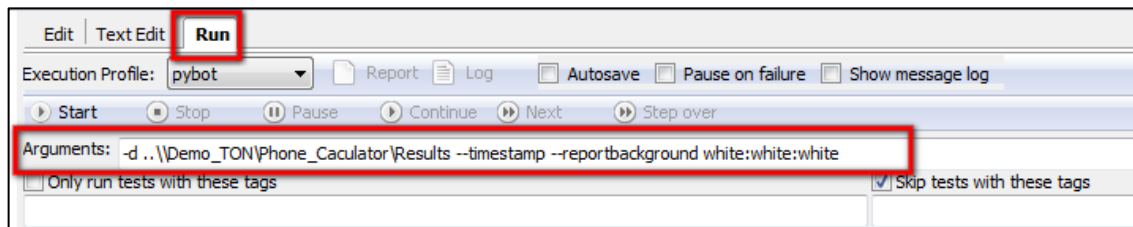


5. On the left panel, select one test case to execute.

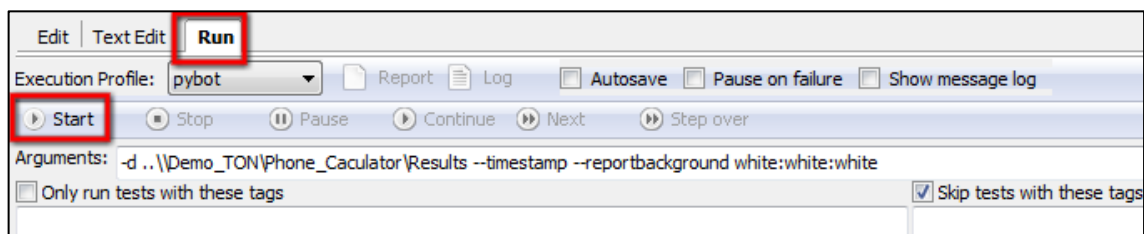


6. To configure the parameters, click on the test case name.
7. On click of the test case name, the **Edit** tab opens.

8. On the top, click **Run** Tab.
9. At the top of the Run tab, configure the **Arguments** textbox by entering:
-d ..\Demo_TON\<test_case_name>\Results --timestamp --reportbackground white:white:white -t



10. Under Run tab, click **Start** button to start the execution.



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



12. On click of the Report button, the report opens in the browser.

TestCases Test Report

Generated: 20180112 15:20:15 GMT+05:30
4 minutes 25 seconds ago

Summary Information

Status: All tests passed
 Start Time: 20180112 15:19:20.224
 End Time: 20180112 15:20:15.772
 Elapsed Time: 00:00:55.548
 Log File: [log-20180112-152015.html](#)

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>
All Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>

Test Details

Totals Tags Suites Search

Type: ☐ Critical Tests ☒ All Tests

LOG

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

TestCases Test Log

Generated
20180112 15:20:15 GMT+05:30
5 minutes 11 seconds ago

REPORT

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>
All Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>

Statistics by Tag	Total	Pass	Fail	Elapsed	Pass / Fail
No Tags					

Statistics by Suite	Total	Pass	Fail	Elapsed	Pass / Fail
TestCases	1	1	0	00:00:56	<div style="width: 100%; height: 10px; background-color: green;"></div>

Test Execution Log

SUITE TestCases
00:00:55.548

Full Name: TestCases

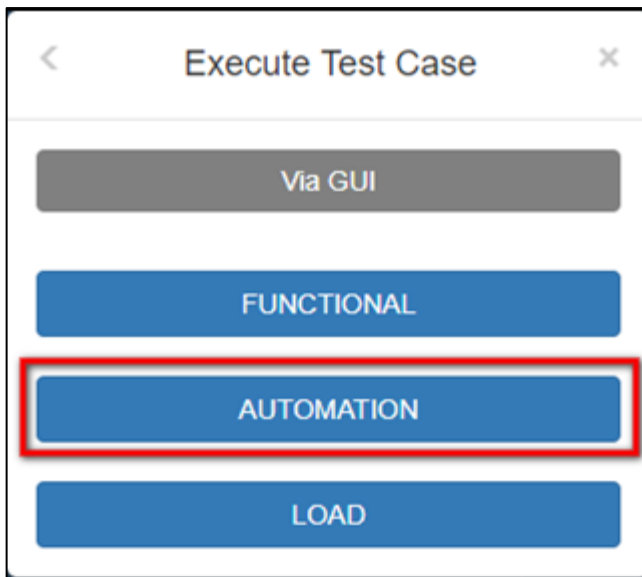
Source: E:\TONI\WebTesting\Browser\GUI\Demo_TONI\TestCases.robot

Start / End / Elapsed: 20180112 15:19:20.224 / 20180112 15:20:15.772 / 00:00:55.548

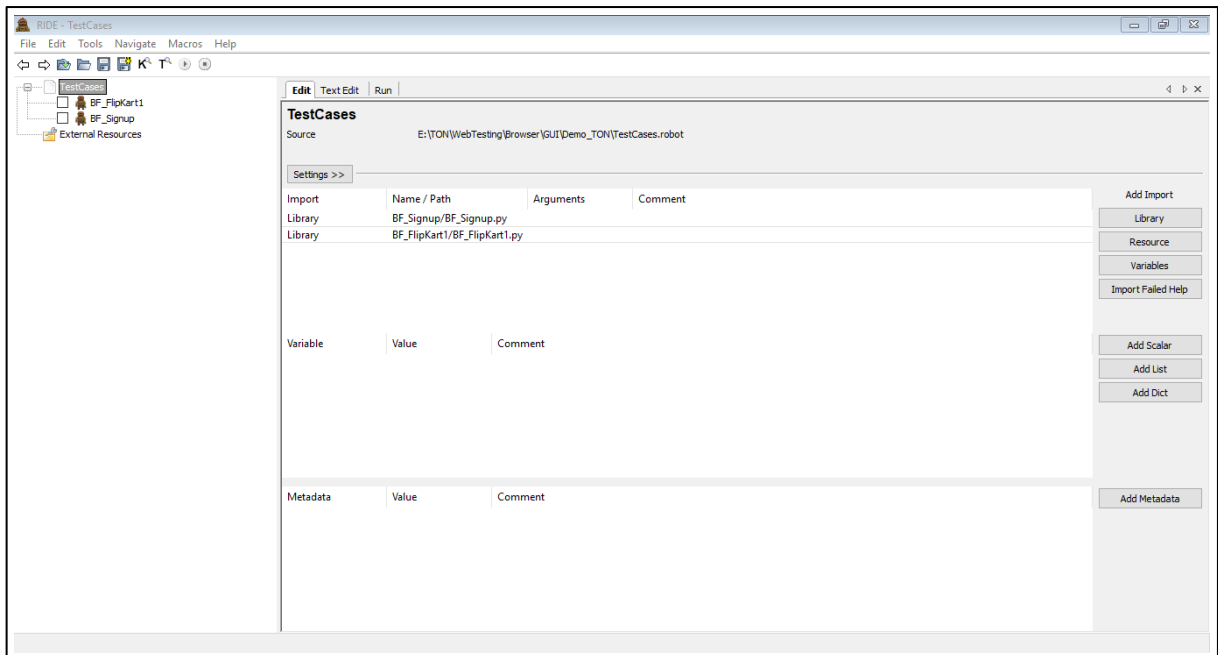
Status: 1 critical test, 1 passed, 0 failed
1 test total, 1 passed, 0 failed

TEST BF_Signup
00:00:55.131

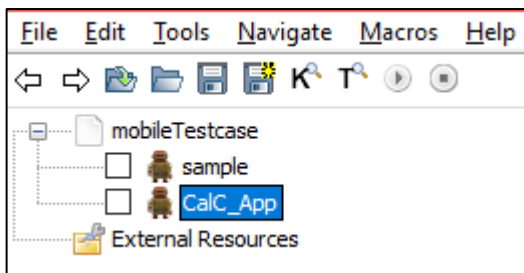
14. To perform automation testing, click **Automation** button.



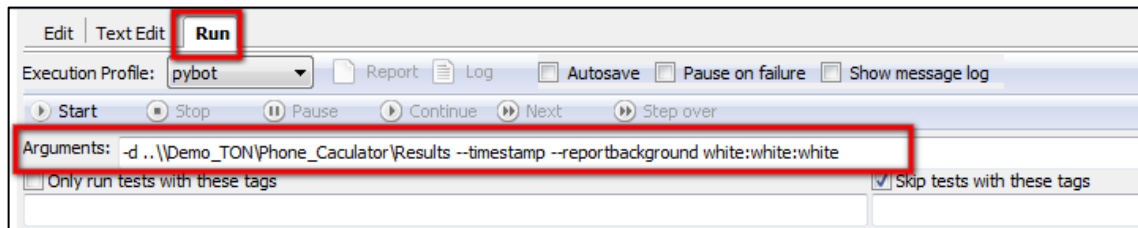
15. On click of the button, **RIDE** will open.



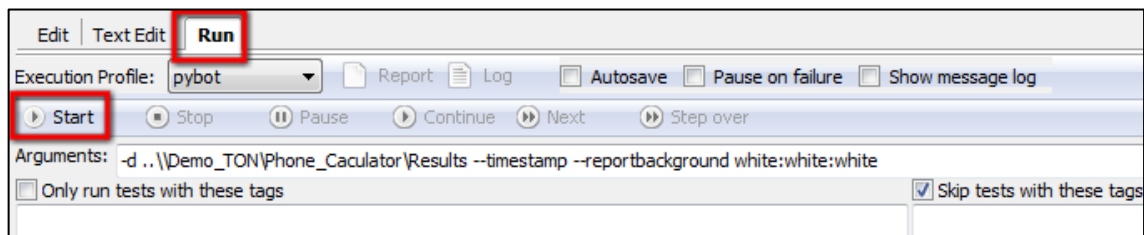
16. On the left panel, select multiple test cases to execute.



17. To configure the parameters, click on the test case name.
18. On click of the test case name, the **Edit** tab opens.
19. On the top, click **Run** Tab.
20. At the top of the Run tab, configure the **Arguments** textbox by entering:
-d ..\Demo_TON\<test_case_name>\Results --timestamp --reportbackground white:white:white -t



21. Under Run tab, click **Start** button to start the execution.



22. Click on the **Log / Report** button to view the result.



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

TestCases Test Report

Generated 20180112 15:20:15 GMT+05:30
4 minutes 25 seconds ago

Summary Information

Status: All tests passed
Start Time: 20180112 15:19:20.224
End Time: 20180112 15:20:15.772
Elapsed Time: 00:00:55.548
Log File: log-20180112-152015.html

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>
All Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>

Statistics by Tag

Total	Pass	Fail	Elapsed	Pass / Fail
No Tags				

Statistics by Suite

Total	Pass	Fail	Elapsed	Pass / Fail	
TestCases	1	1	0	00:00:56	<div style="width: 100%; height: 10px; background-color: green;"></div>

Test Details

Totals Tags Suites Search
 Type: ☐ Critical Tests ☒ All Tests

LOG

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

TestCases Test Log

Generated
20180112 15:20:15 GMT+05:30
5 minutes 11 seconds ago

REPORT

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>
All Tests	1	1	0	00:00:55	<div style="width: 100%; height: 10px; background-color: green;"></div>

Statistics by Tag	Total	Pass	Fail	Elapsed	Pass / Fail
No Tags					

Statistics by Suite	Total	Pass	Fail	Elapsed	Pass / Fail
TestCases	1	1	0	00:00:56	<div style="width: 100%; height: 10px; background-color: green;"></div>

Test Execution Log

SUITE TestCases
00:00:55.548

Full Name: TestCases

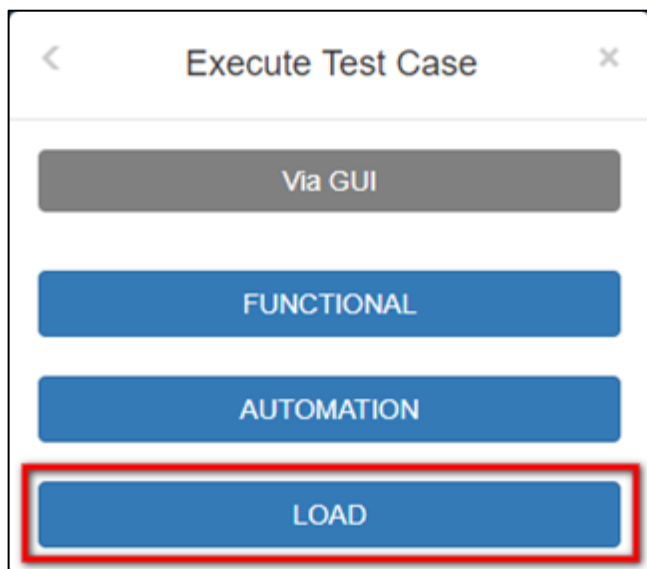
Source: E:\TONI\WebTesting\Browser\GUI\Demo_TONI\TestCases.robot

Start / End / Elapsed: 20180112 15:19:20.224 / 20180112 15:20:15.772 / 00:00:55.548

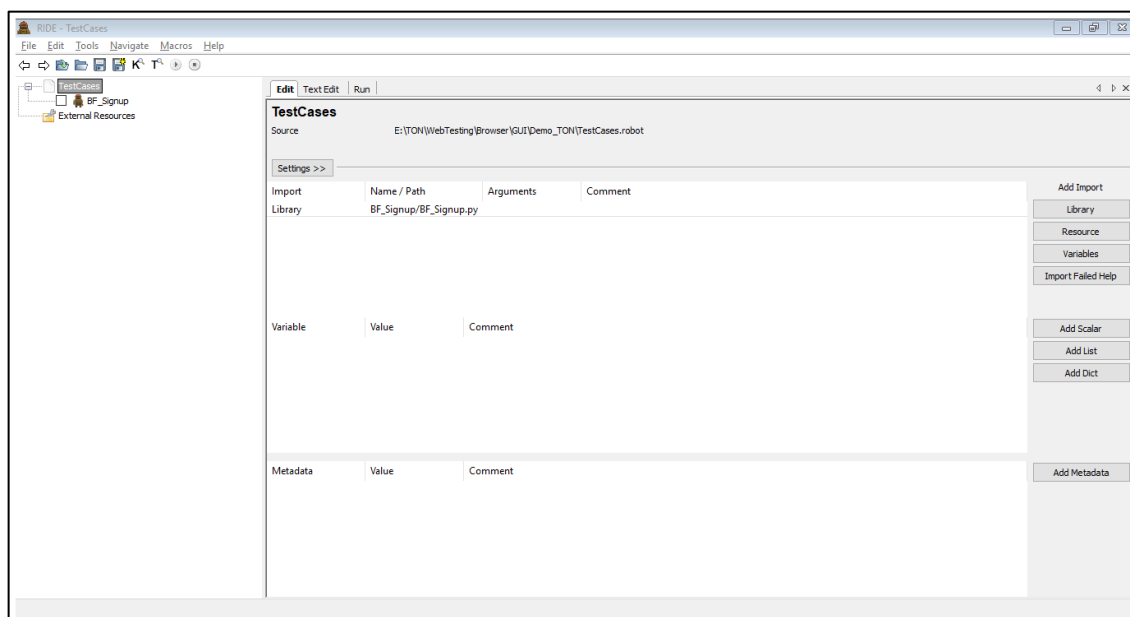
Status: 1 critical test, 1 passed, 0 failed
1 test total, 1 passed, 0 failed

TEST BF_Signup
00:00:55.131

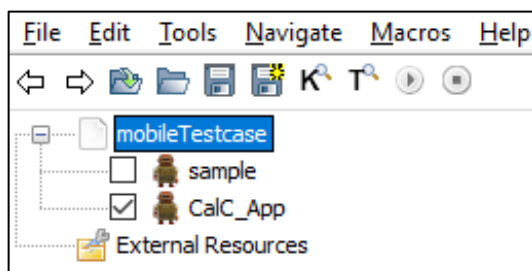
25. To perform load testing, click **Load** button.



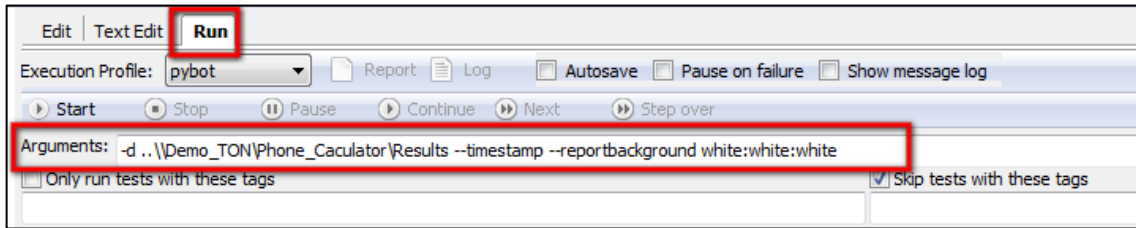
26. On click of the button, **RIDE** will open.



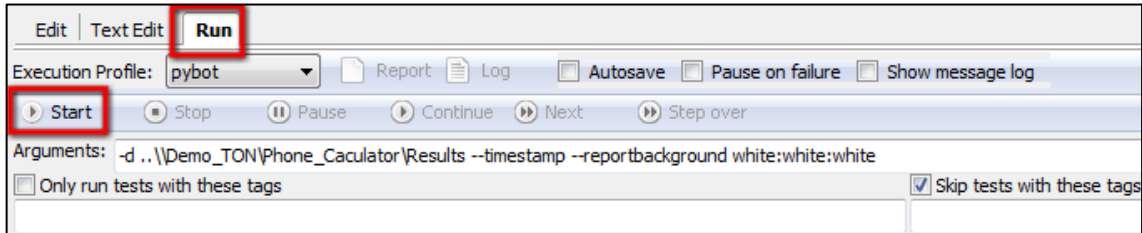
27. On the left panel, select one test case to execute.



28. To configure the parameters, click on the test case name.
29. On click of the test case name, the **Edit** tab opens.
30. On the top, click **Run** Tab.
31. At the top of the Run tab, configure the **Arguments** textbox by entering:
-d ..\Demo_TON\<test_case_name>\Results --timestamp --reportbackground white:white:white -t



32. Under Run tab, click **Start** button to start the execution.



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



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

TestCases Test Report

Generated
20180112 15:20:15 GMT+05:30
4 minutes 25 seconds ago

LOG

Summary Information

Status:	All tests passed
Start Time:	20180112 15:19:20.224
End Time:	20180112 15:20:15.772
Elapsed Time:	00:00:55.548
Log File:	log-20180112-152015.html

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:55	<div style="width: 100%;"></div>
All Tests	1	1	0	00:00:55	<div style="width: 100%;"></div>

Statistics by Tag	Total	Pass	Fail	Elapsed	Pass / Fail
No Tags					

Statistics by Suite	Total	Pass	Fail	Elapsed	Pass / Fail
TestCases	1	1	0	00:00:56	<div style="width: 100%;"></div>

Test Details

Totals
Tags
Suites
Search

Type:
☐ Critical Tests
☐ All Tests

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

TestCases Test Log

Generated
20180112 15:20:15 GMT+05:30
5 minutes 11 seconds ago

REPORT

Test Statistics

Total Statistics	Total	Pass	Fail	Elapsed	Pass / Fail
Critical Tests	1	1	0	00:00:55	<div style="width: 100%;"></div>
All Tests	1	1	0	00:00:55	<div style="width: 100%;"></div>

Statistics by Tag	Total	Pass	Fail	Elapsed	Pass / Fail
No Tags					

Statistics by Suite	Total	Pass	Fail	Elapsed	Pass / Fail
TestCases	1	1	0	00:00:56	<div style="width: 100%;"></div>

Test Execution Log

SUITE

TestCases

00:00:55.548

Full Name: TestCases
Source: E:\TON\WebTesting\Browser\GUI\Demo_TON\TestCases robot
Start / End / Elapsed: 20180112 15:19:20.224 / 20180112 15:20:15.772 / 00:00:55.548
Status: 1 critical test, 1 passed, 0 failed
1 test total, 1 passed, 0 failed

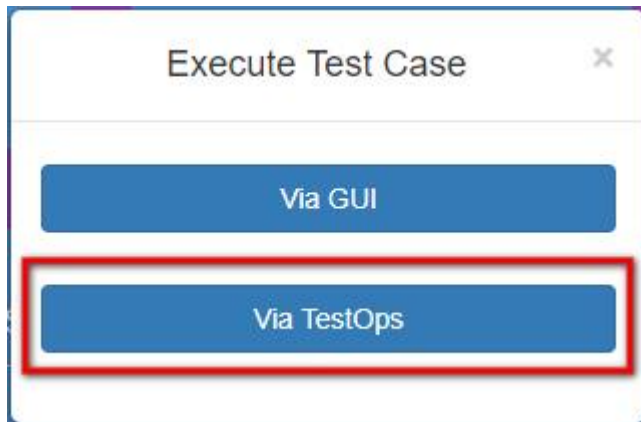
TEST

BF_Signup

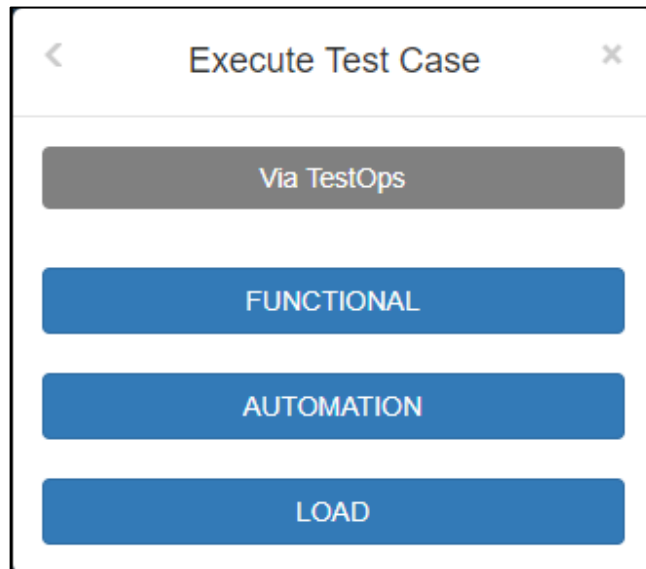
00:00:55.131

2.3.2 EXECUTE - VIA TESTOPS

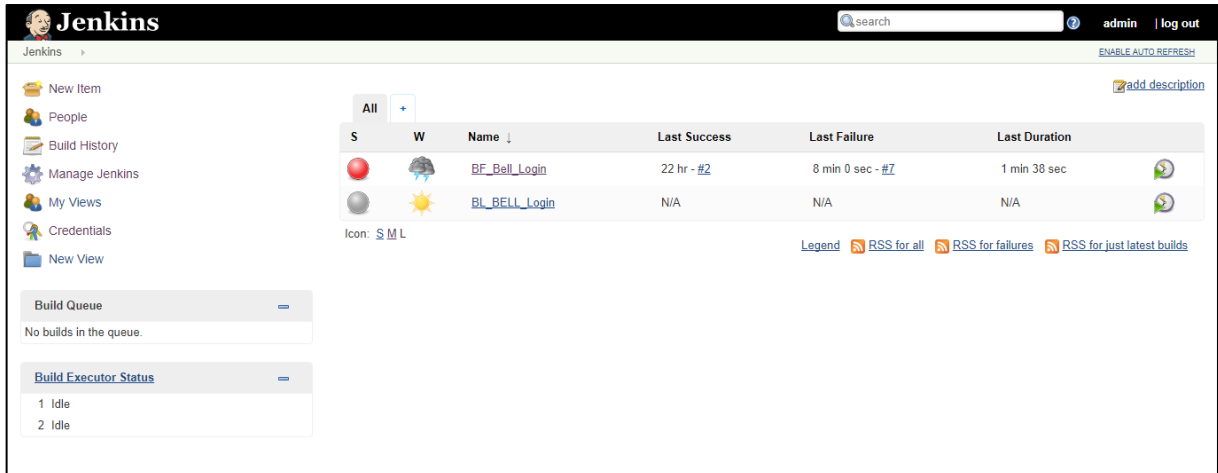
1. Click the **Via TestOps** button.



2. On clicking the button, 3 buttons will appear – **Functional**, **Automation** and **Load**.



3. On click of any one button, the **Jenkins** will open.



The screenshot shows the Jenkins dashboard. On the left is a sidebar with navigation links: New Item, People, Build History, Manage Jenkins, My Views, Credentials, and New View. The main area displays a table of jobs. Below the table are sections for 'Build Queue' (showing 'No builds in the queue') and 'Build Executor Status' (showing '1 Idle' and '2 Idle').

S	W	Name ↓	Last Success	Last Failure	Last Duration
		BF_Bell_Login	22 hr - #2	8 min 0 sec - #7	1 min 38 sec
		BL_BELL_Login	N/A	N/A	N/A

Below the table, there are links for 'Icon: S M L' and 'Legend' with RSS feeds for 'all', 'failures', and 'just latest builds'.

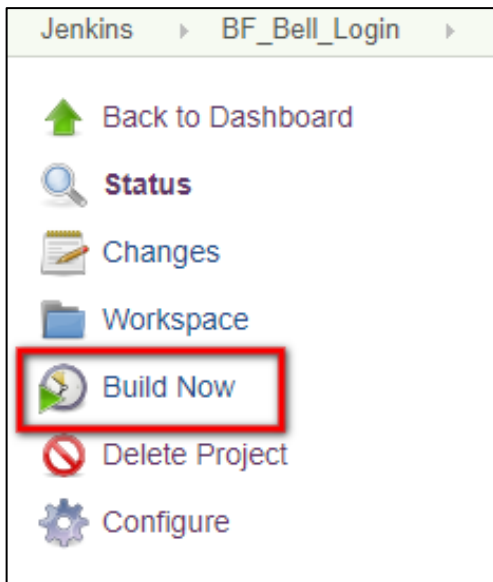
For creation of new [View](#) and [Job](#), refer the Reference Section below.

- Click on the job that has to be executed.



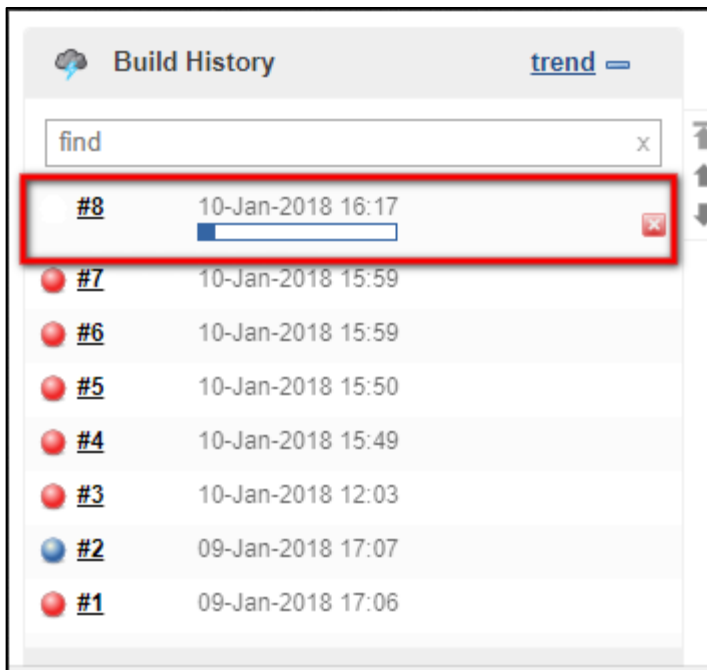
This screenshot is a zoomed-in view of the job list from the previous image. The first row, corresponding to the 'BF_Bell_Login' job, is highlighted with a red rectangular border. The table structure and data are identical to the previous screenshot.

- On the left side, select Build Now.

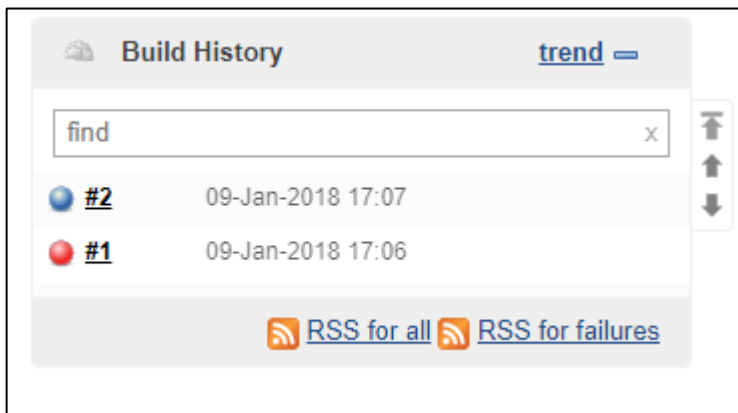


The screenshot shows the action menu for the 'BF_Bell_Login' job. The menu items are: Back to Dashboard, Status, Changes, Workspace, Build Now, Delete Project, and Configure. The 'Build Now' option, which includes a green play button icon, is highlighted with a red rectangular border.

- On the left side, under Build History, the progress of the job is shown.



7. If the job is successfully built, it will show the built time, number of times of build and status of the built.



8. All the jobs of the Jenkins will be saved in:
- > TON > WebTesting > Browser > TestOps > Demo_TON > <Job_Name_Folder>**

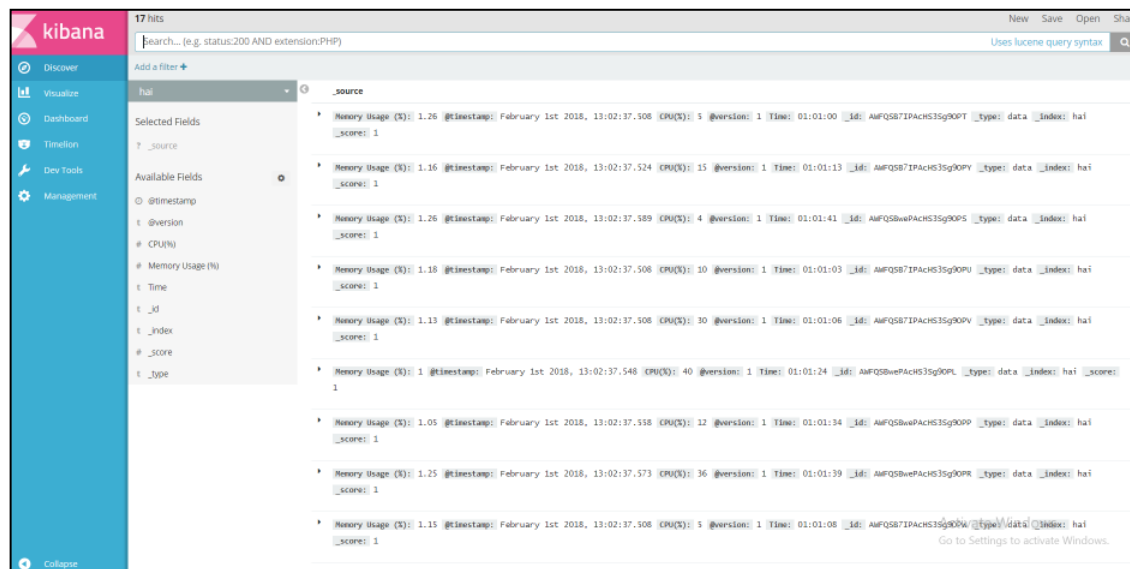
2.4 ANALYZE RESULTS

The **Analyze Results** button is used to analyze the final result of the test case that had been recorded and executed in the previous steps. The final result will be displayed in the form of graphs

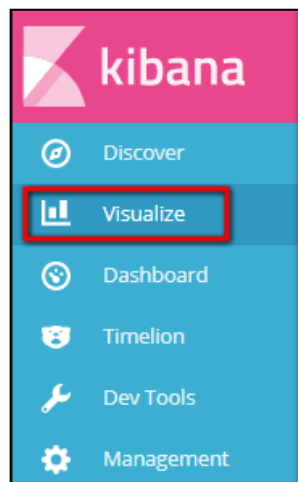
1. Click on the **Analyze Results**.



2. On clicking on the **Analyze Results** button, Kibana opens up in a new window.



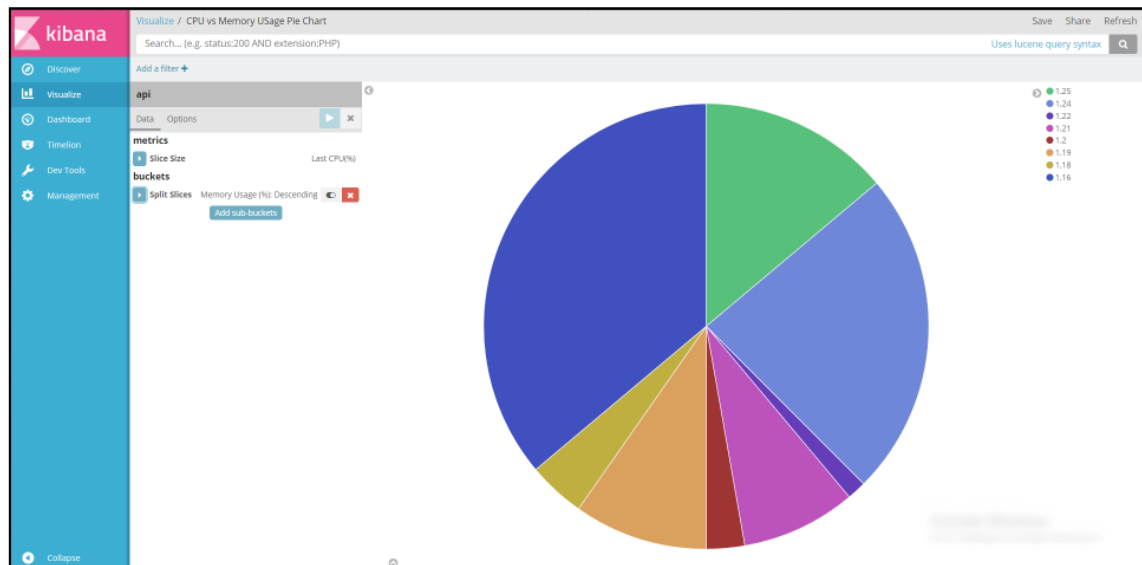
3. On the left panel, click Visualize.



4. The user will find charts of different forms with different combinations like CPU vs Time, CPU vs Memory Usage vs Time etc.

<input type="text" value="Search..."/> + 1-5 of 5	
<input type="checkbox"/> Name ▲	Type
<input type="checkbox"/> CPU vs Memory Usage Pie Chart	Pie
<input type="checkbox"/> CPU vs Memory Usage vs Time Pie Chart	Pie
<input type="checkbox"/> CPU vs Memory Usage bar chart	Vertical Bar
<input type="checkbox"/> CPU vs Time Pie Chart	Pie
<input type="checkbox"/> CPU vs Time bar chart	Vertical Bar
1-5 of 5 < >	

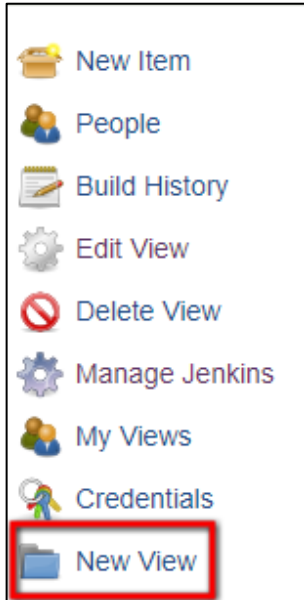
5. On click of the chart name, the user can see the graph based on the type of the chart. (The example shows for Pie Chart)



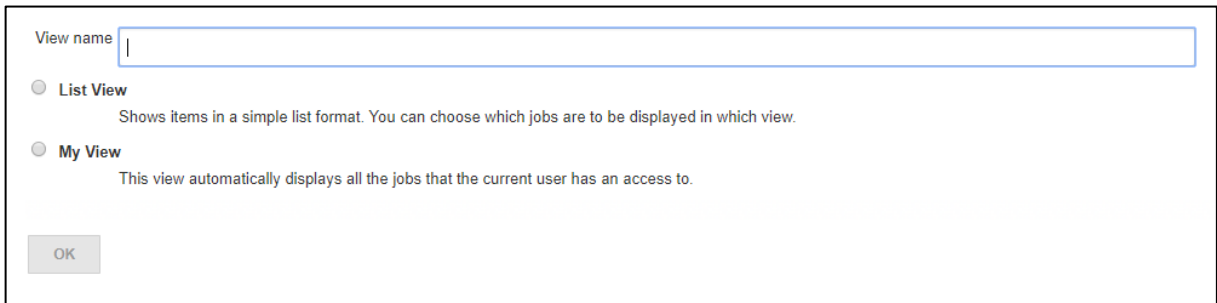
3. REFERENCES

3.1 CREATION OF NEW VIEW

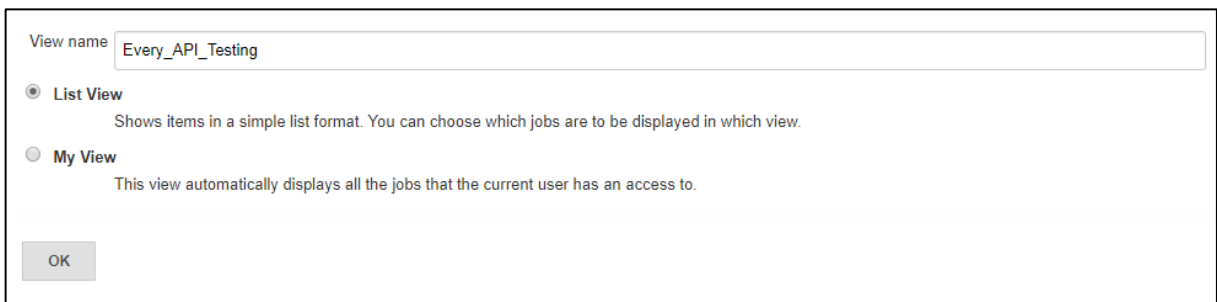
- To create a new view, on the left panel, click **New View**.



- On clicking, give the name of the tab as **Every_Mobile_Testing** and select the type of view.

A screenshot of the 'New View' dialog box. It has a text input field for 'View name' which is currently empty. Below the field are two radio button options: 'List View' and 'My View'. The 'List View' option is selected. Below the radio buttons are two lines of descriptive text: 'Shows items in a simple list format. You can choose which jobs are to be displayed in which view.' and 'This view automatically displays all the jobs that the current user has an access to.' At the bottom left is an 'OK' button.

- On entering the name and selecting the view type, the OK button becomes active. Click Ok.

A screenshot of the 'New View' dialog box. The 'View name' field now contains the text 'Every_API_Testing'. The 'List View' radio button is still selected. The 'OK' button is now active (highlighted in grey).

- In the next page, select the jobs that are to be added to this tab.

View name


☒ **List View**
Shows items in a simple list format. You can choose which jobs are to be displayed in which view.


☐ **My View**
This view automatically displays all the jobs that the current user has an access to.


- Once done, click Apply and Ok to save and Close the creation.


3.2 CREATION OF NEW JOB


- To create a new job, on the left panel, click **New Item**.


 **New Item**


 People


 Build History


 Edit View

 Delete View

 Manage Jenkins

 My Views


 Credentials

 New View


- Give a name for the new job that is going to be created and select the tab in which it is to be stored.

Enter an item name


» This field cannot be empty, please enter a valid name


Freestyle project


This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.


Pipeline


Orchestrates long-running activities that can span multiple build slaves. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.


Multi-configuration project


Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.


Folder

Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.


GitHub Organization

Scans a GitHub organization (or user account) for all repositories matching some defined markers.


Multibranch Pipeline

Creates a set of Pipeline projects according to detected branches in one SCM repository.


OK

- Then select the type of the job that is to be created.
- Click Ok to save the job.


Enter an item name

MF_Calc_001


» Required field


Freestyle project


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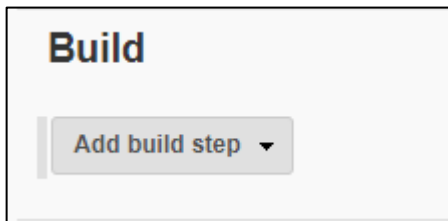

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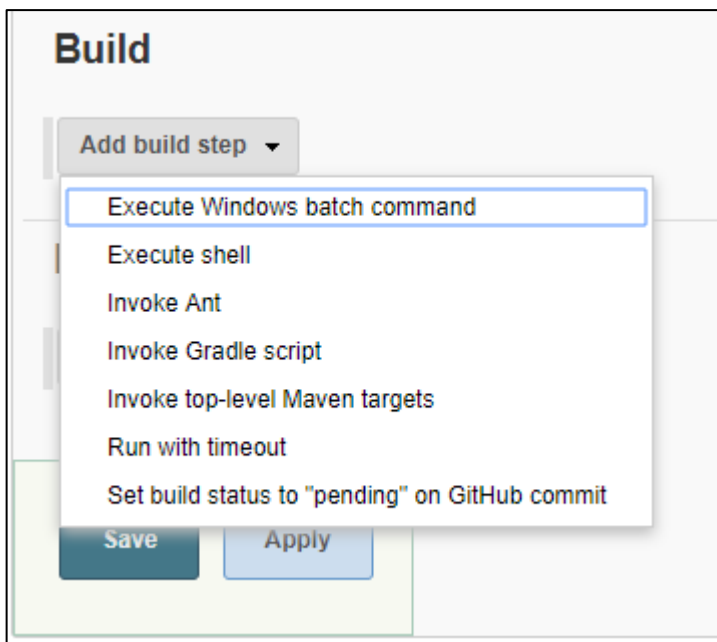
OK

- On click of Ok button, job configuration page will appear.

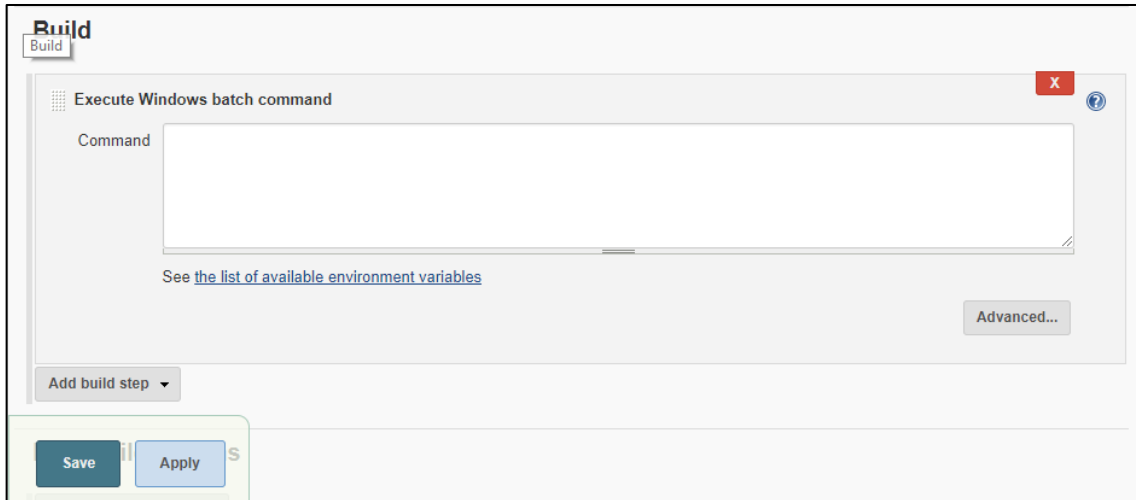
- Scroll down and look for Build.



- Under build, click Add Build Setup drop down.



- From the drop down, select **Execute Windows Batch Command**.
- On selecting, a text area appears.



The screenshot shows a web-based interface for building a project. At the top left, there is a tab labeled 'Build'. Below it, a section titled 'Execute Windows batch command' contains a large text area for entering a command. A link below the text area reads 'See [the list of available environment variables](#)'. To the right of the text area is an 'Advanced...' button. Below the command section is a dropdown menu labeled 'Add build step'. At the bottom of the interface are two buttons: 'Save' and 'Apply'.

- In the text area, write the following command.