



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

## Review & Approval

### Requirements Document Approval History

Approving Party	Version Approved	Signature	Date
<b>Bell Canada:</b> <b>Bertrand Camus</b> <b>Intissar Harrabi</b>	0.3		

### Requirements Document Review History

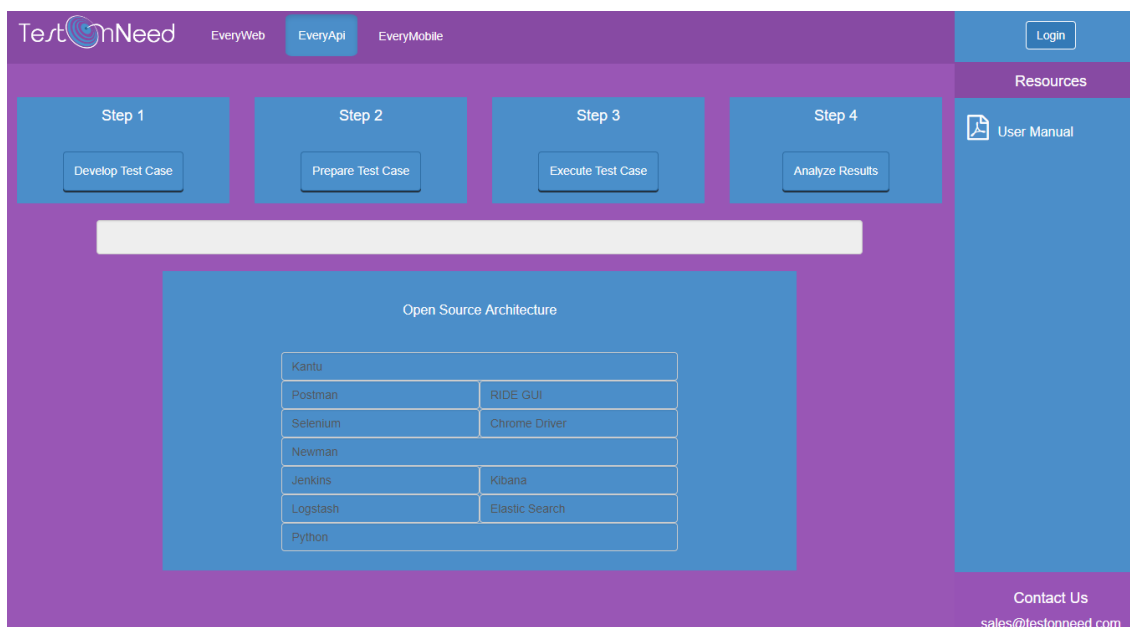
Reviewer	Version Reviewed	Signature	Date
<b>Angelo Virgilio</b>	0.3		June 9, 2017

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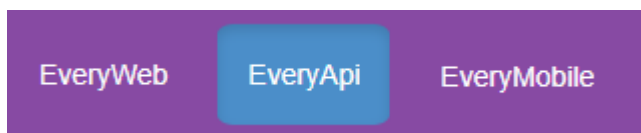
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## 1. DESCRIPTION OF THE WEB PAGE

- The outline of the Website looks like below:



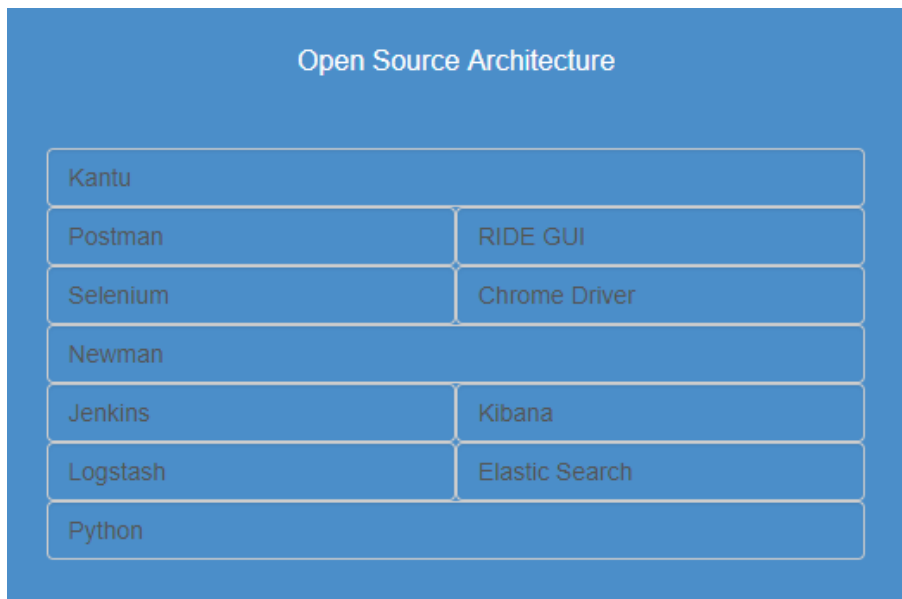
- As the web page opens up, there will be three tabs namely – EveryWeb, EveryAPI and EveryMobile.



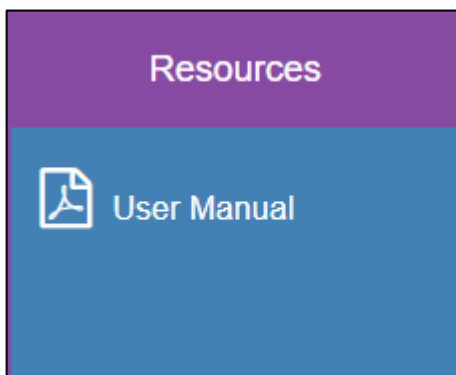
- Things that are common to all the tabs like the stack which contains a blank white space, all the open sources and user manual.
- In the blank space, the user will get know what to be done next by clicking any button.



- 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 installation document and user manual tell the user what and all should have to be installed and how it can be used. It will also change from tab to tab since applications and installation process is different. It is a hyperlink, on clicking it, will open the respective document in pdf format in a new tab in the browser.



## 2. EVERYAPI TAB

- The EveryAPI tab is the second tab.
- This tab has 4 buttons on the top namely –
  1. Develop Test Case
  2. Prepare Test Case
  3. Execute Test Case
  4. Analyze Results

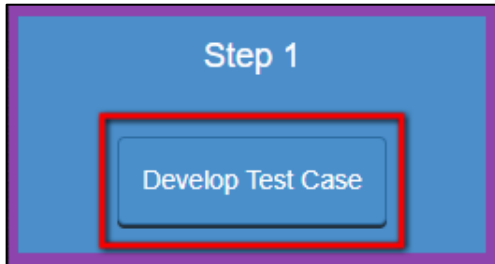


- Each step is explained below

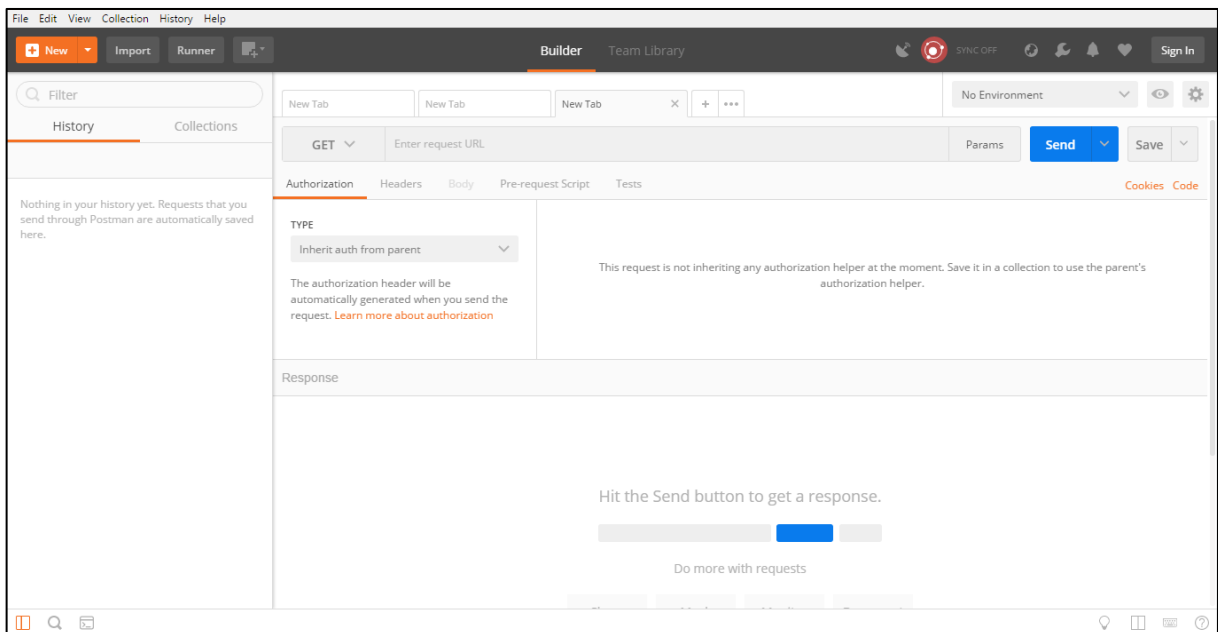
## 2.1 DEVELOP TEST CASE

The Develop Test Case button when clicked will open a new browser window and postman app for the user which can be used to develop the test case for the API.

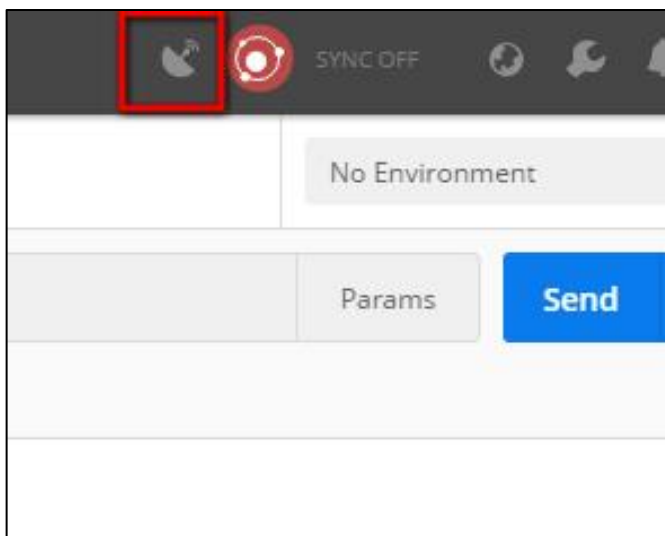
1. Click on **Develop Test Case** button.



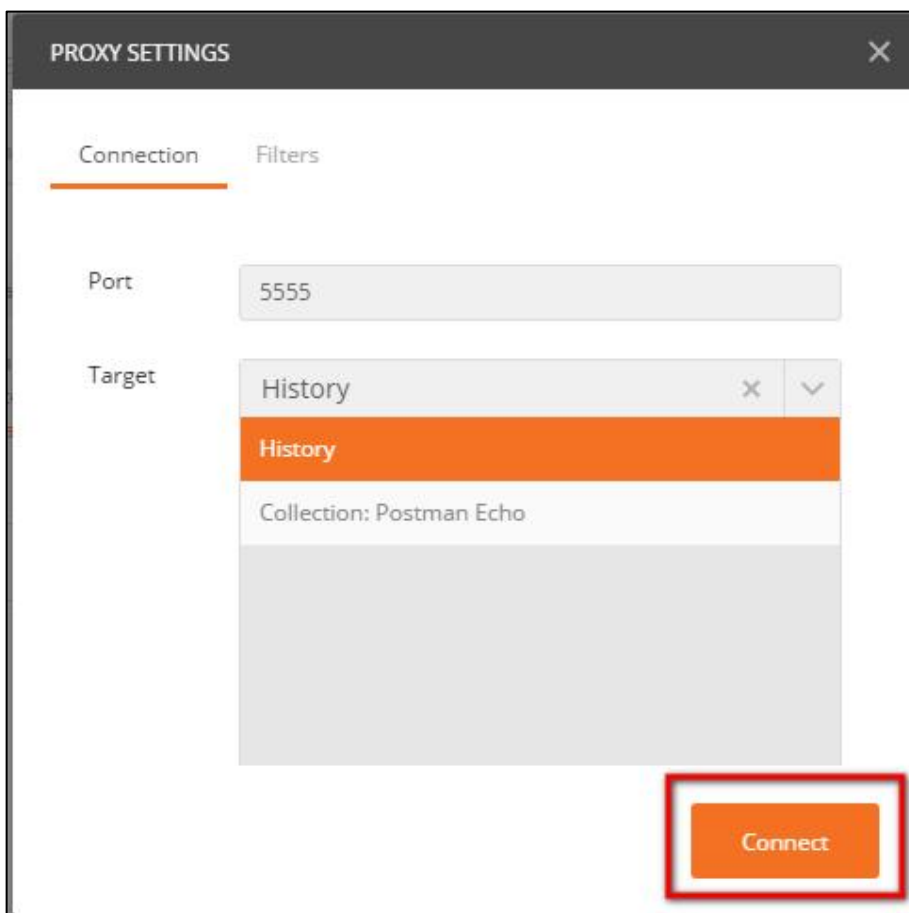
2. The user has to change the folder location of the postman. To change the folder location, click [Here](#).
3. For setting up of proxy in order to record, click [Here](#).
4. On clicking of the button, new browser window and Postman opens up.



5. Start the proxy in postman application.

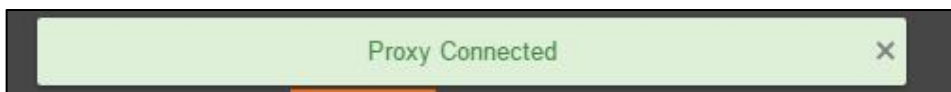


6. On clicking the proxy button, a pop window comes up and click **Connect**.

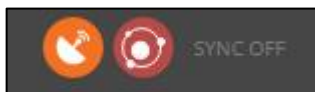


7. Once the connect button is clicked, at the top of the page a message will be displayed as **Proxy Connected** if connected.

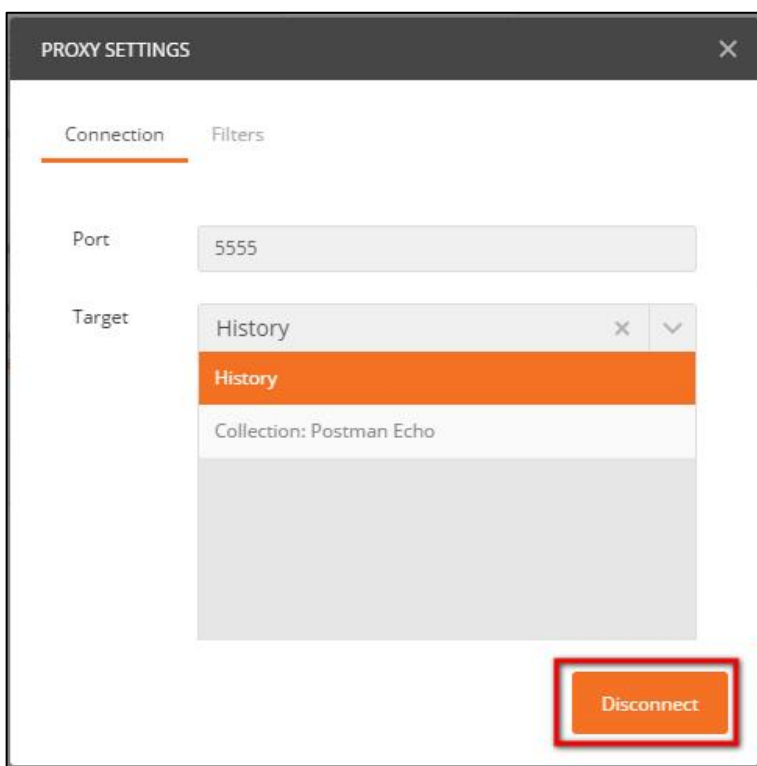




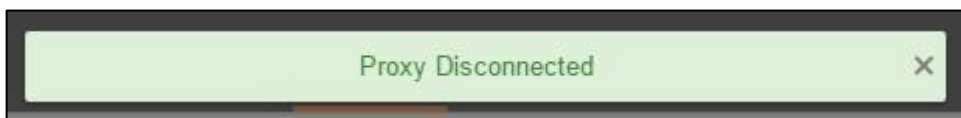
8. If it is connected, the proxy button changes to orange.



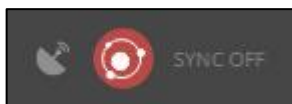
9. Now open the site that has to be record.
10. Now the user can perform the steps.
11. To stop the recording, stop the proxy in the postman application by clicking the proxy button again. The pop-up window comes and click Disconnect.



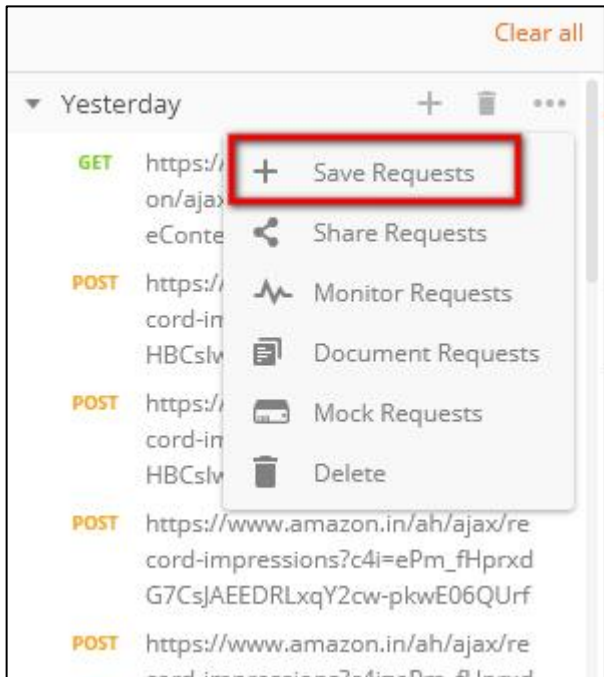
12. Once the disconnect button is clicked, at the top of the page a message will be displayed as **Proxy Disconnected**.



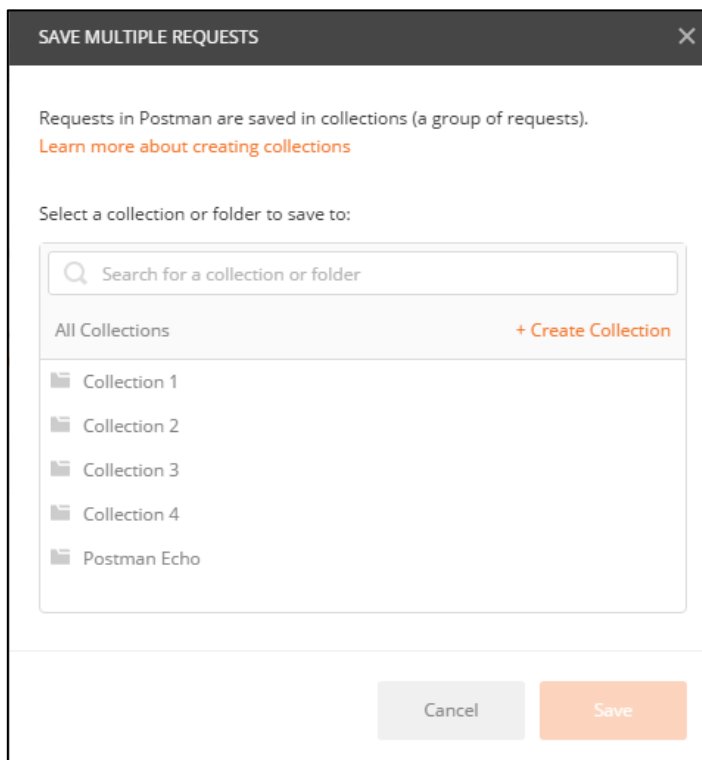
13. After disconnecting the proxy, the proxy button changes back to grey.



14. In the postman application, click Save Request and save in the collection in which the user want to.

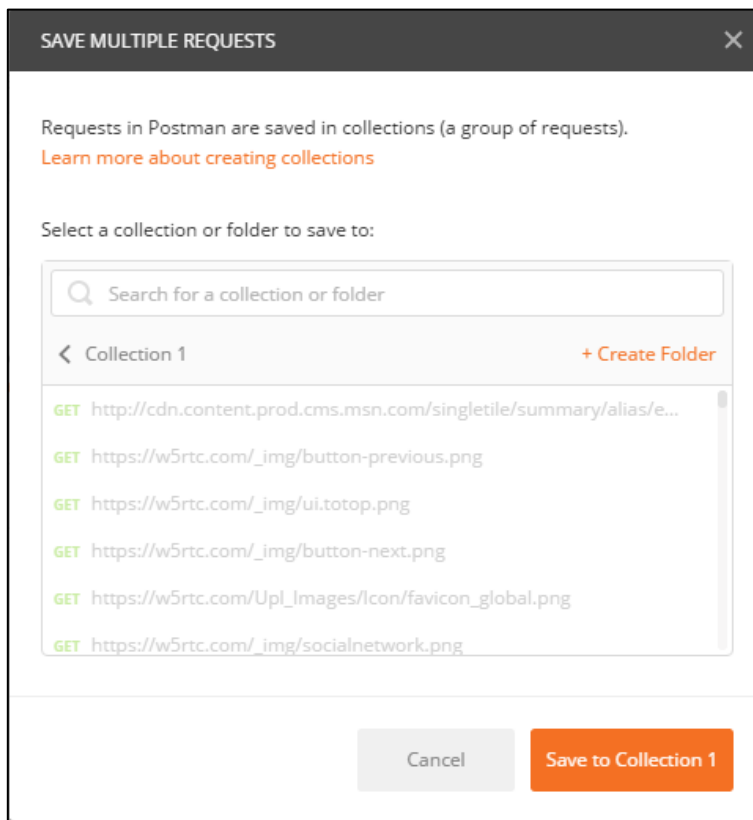


15. On clicking of the Save Requests button, a dialog box appears.



16. At the bottom of the dialog box, select the collection name in which the test cases have to be saved. If the user wants to save under a new collection name click Create Collection.

17. On click of the collection name, the Save button becomes active.



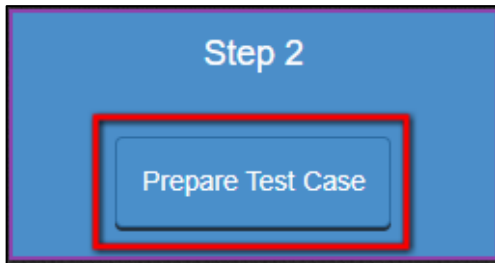
18. Now save the recording based on the type of testing functionality the user has recorded. There are 3 types of testing functionality – **Function, Automation and Load**.
19. Now save the recording based on the type of testing functionality the user has recorded. There are 3 types of testing functionality – **Function, Automation and Load**.
20. Functional Testing is a testing technique that is used to test the features/functionality of the system or Software, should cover all the scenarios including failure paths and boundary cases. In that case, the testcase should be saved as **AF\_TestVNF\_Ve-Vnfm\_<Test Function>\_001** For example, if the user has recorded the scenario of login, then the user has to save the test case as **AF\_TestVNF\_Ve-Vnfm\_Login\_001**.
21. Automation testing makes use of specialized tools to control the execution of tests and compares the actual results against the expected result. In that case, the test case should be saved as **AA\_TestVNF\_Ve-Vnfm\_<Test Function>\_001**. For example, if the user has recorded the scenario of both signup and login, then the user has to save the test case as **AA\_TestVNF\_Ve-Vnfm\_LoginGateways\_001**.

22. Load testing is performance testing technique using which the response of the system is measured under various load conditions. The load testing is performed for normal and peak load conditions. In that case, the test case should be saved as **AL\_TestVNF\_Ve-Vnfm\_<Test Function>001**. For example, if the user wants to test the performance of the login scenario that at a time how many users can log in, in such case the user has to save the test case as **AL\_TestVNF\_Ve-Vnfm\_Login\_001**.
23. Right-click on the saved link, click Export (it will automatically be exported as JSON format).

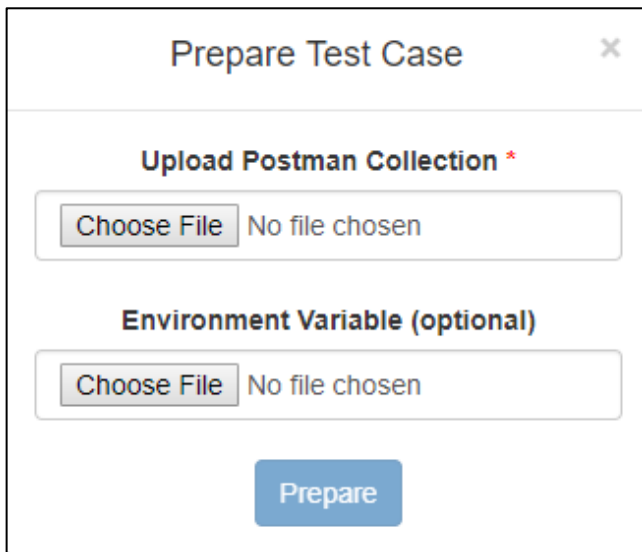
**NOTE: ONLY IN THE CASE OF LOAD TESTING, JSON FILE SHOULD BE DOWNLOADED WHILE DOWNLOADING USING POSTMAN.**

## 2.2 PREPARE TEST CASE

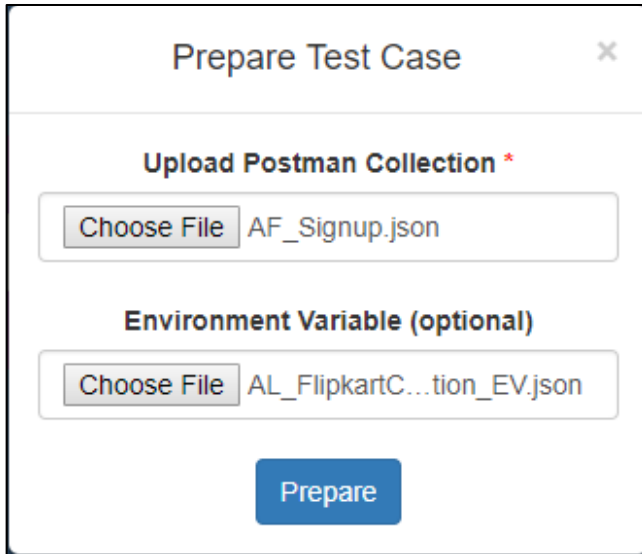
1. Click the **Prepare Test Case** button.



2. On click of the button, a pop-up appears.
3. In the pop-up, the user has to upload 2 files. One is the Postman JSON file and other is the environmental variables file which should also be in JSON format. The postman JSON file **must be uploaded** but the environmental variables JSON file **is optional**.



4. Click on the Choose file button.
5. Surf to the folder location where saved the JSON files that was downloaded in the previous step.
6. Now upload the JSON files.
7. On uploading the respective JSON files, the **Prepare** button becomes active.



**Prepare Test Case** [X]

**Upload Postman Collection \***

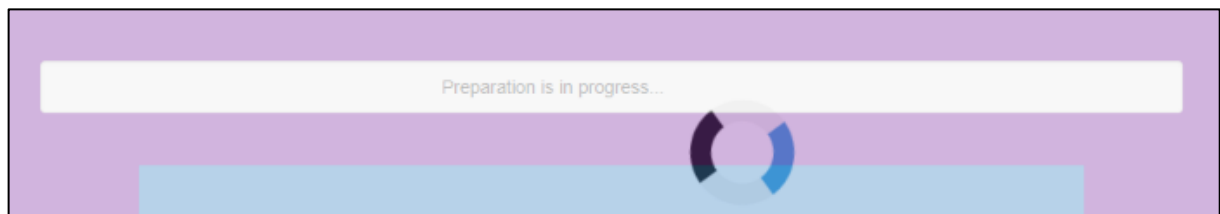
Choose File AF\_Signup.json

**Environment Variable (optional)**

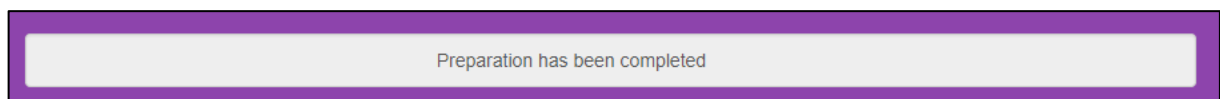
Choose File AL\_FlipkartC...tion\_EV.json

**Prepare**

8. On 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 > WebTesting > Browser > GUI > Demo\_TON > <TestCase\_Name\_Folder>**.
  - In case if the test case name was saved as **AF\_TestVNF\_Ve-Vnfm\_Login\_001** in the previous step then it will create a folder with same.
  - In this folder, the JSON file that was uploaded and its corresponding Python file 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.



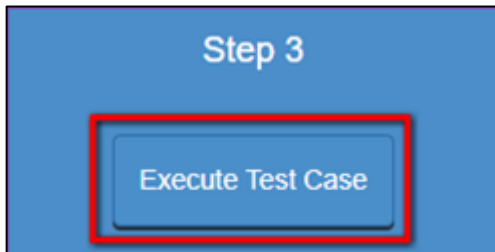
10. Once preparation is finished, a message will be shown as “**Preparation has been completed**” in the status bar.



## 2.3 EXECUTE TEST CASE

The Execute Test Case button is used for the execution process using RIDE, Postman and Jenkins.

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

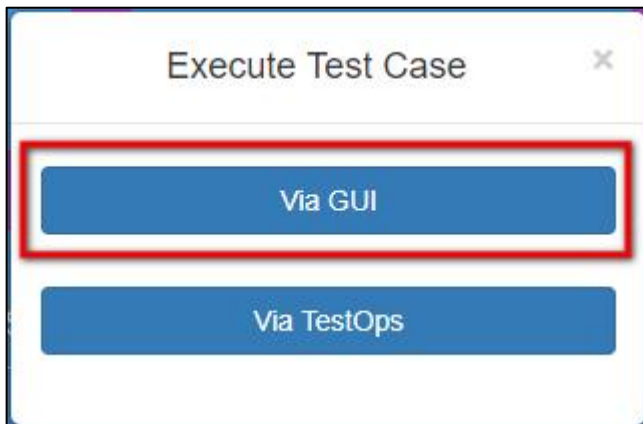


2. On clicking on the button, a pop up appears.
3. From the pop-up, select the button either as **Via GUI**, **Via TESTOPS**.

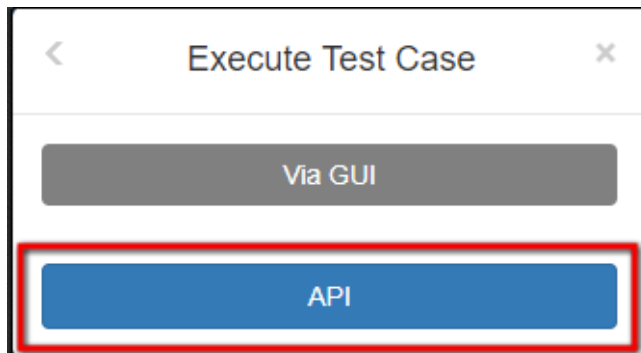


### 2.3.1 EXECUTE – VIA GUI

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

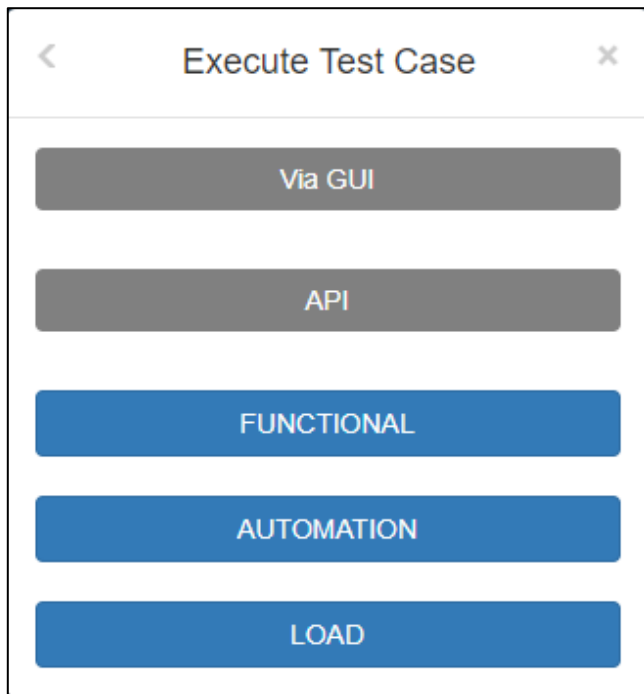


2. On clicking the button, **API** button appears.

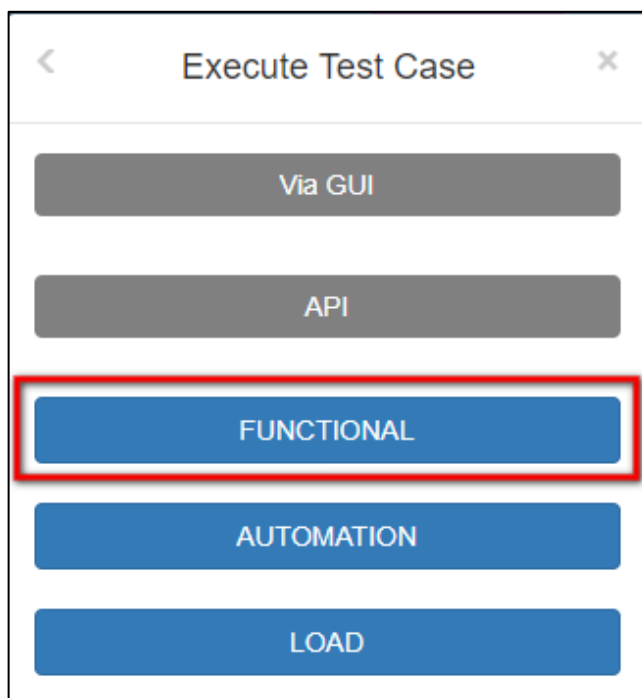




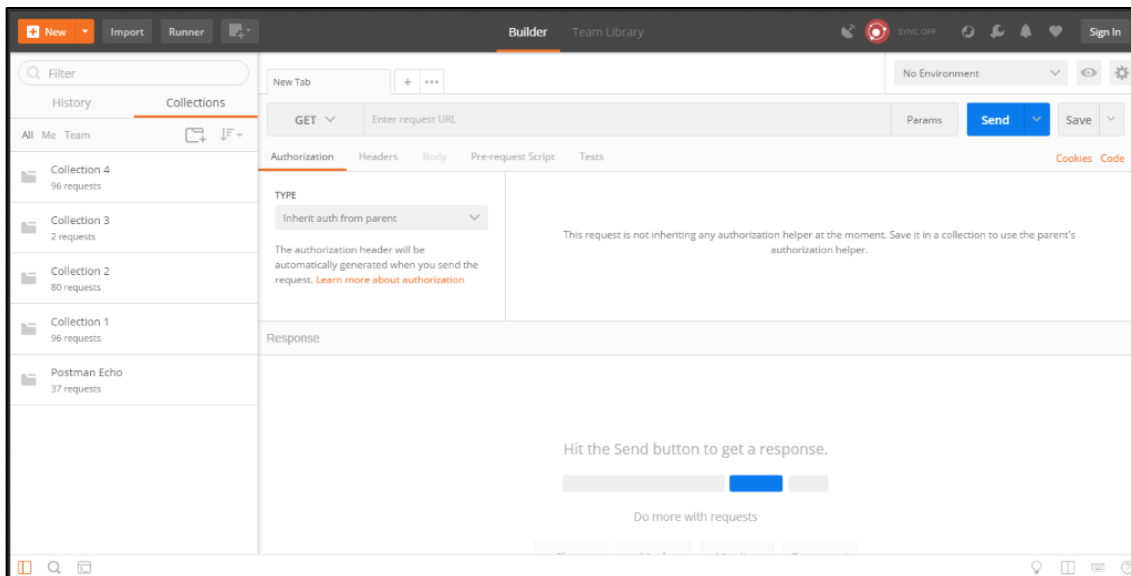
- Under **API** button, 3 buttons will appear namely – **Function, Automation and Load**.



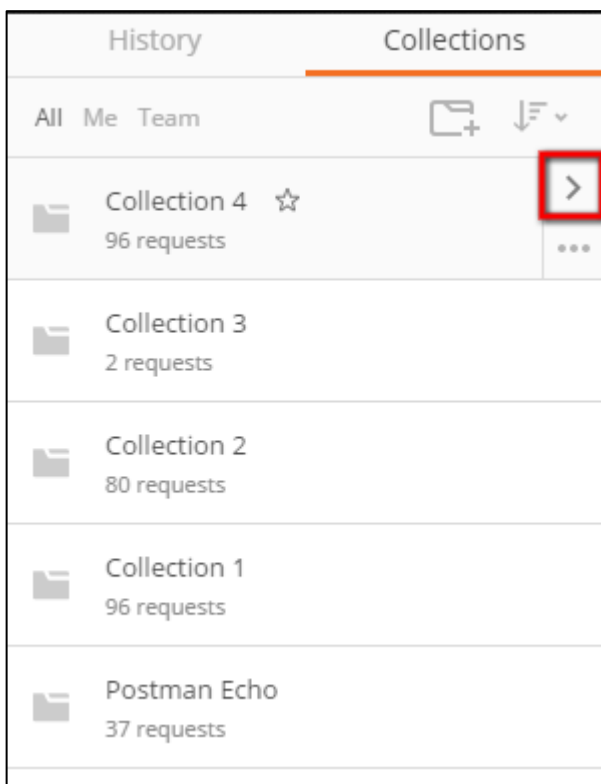
- To perform functional testing, press **Functional** button.



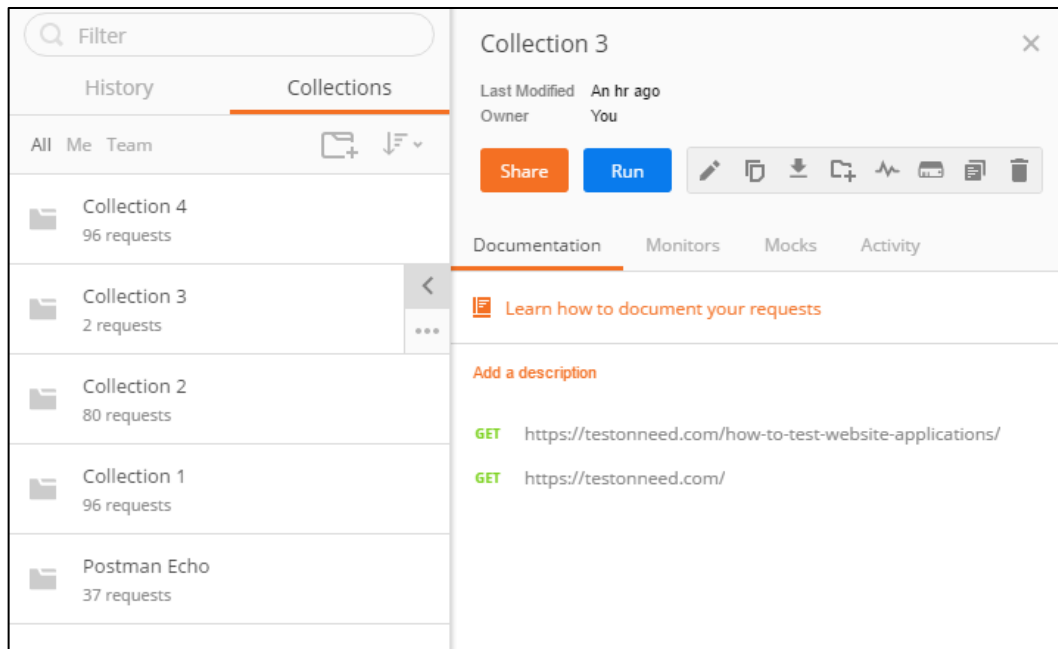
- To perform functional testing, press **Functional** button.
- On click of the button, **Postman** will open.



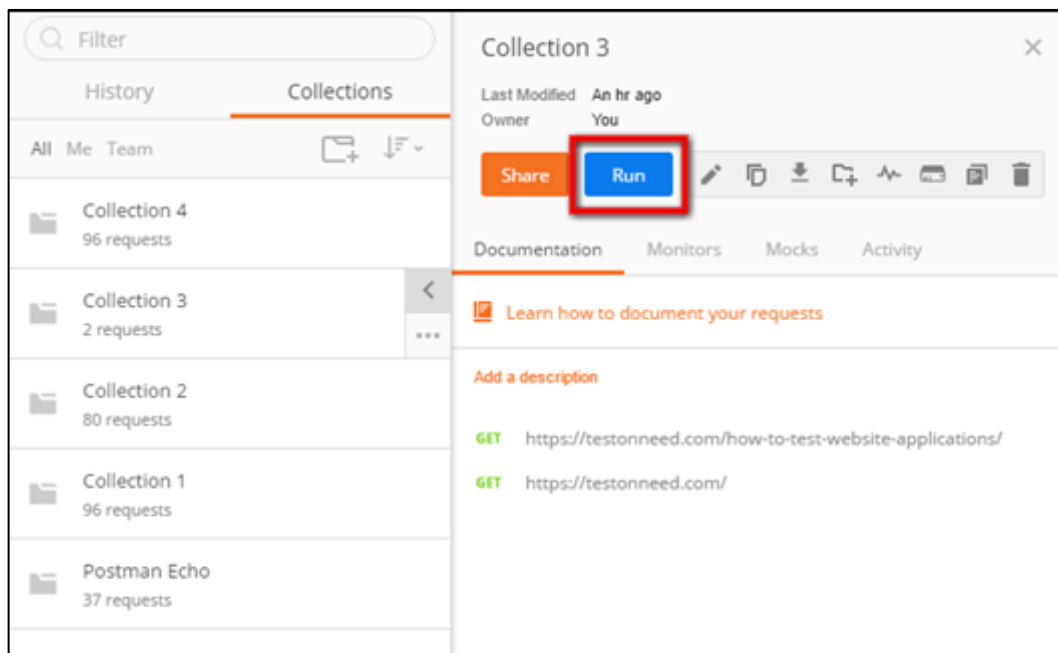
7. On the left, there will be two tabs History and Collections. In the collections tab look for the **Collection** in which the JSON was saved during the **Record Test Case** button.
8. On mouse hover of the **Collection name**, click on the right arrow.



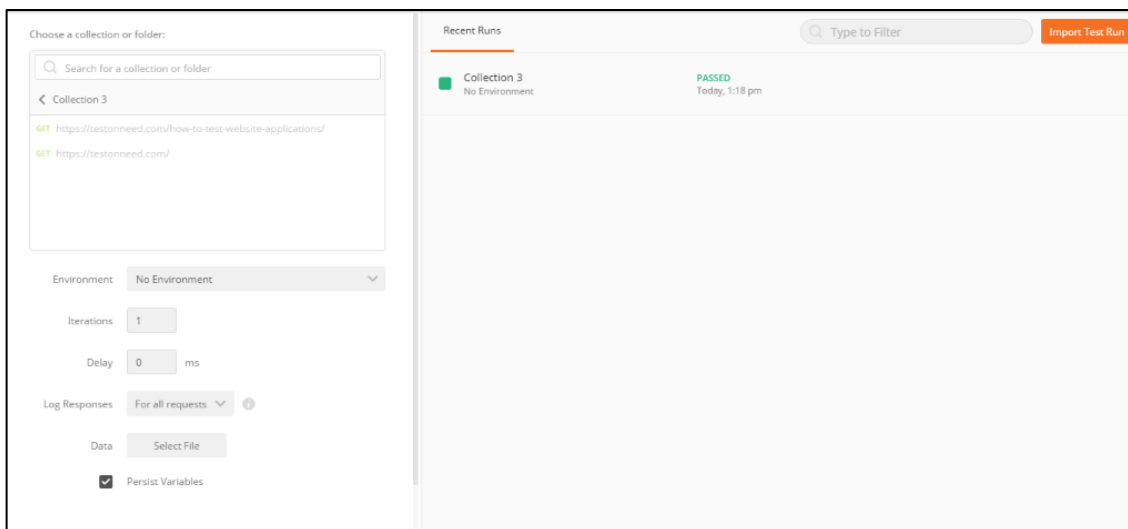
9. On clicking of the arrow button, a small window comes on the right next to the collection selected.



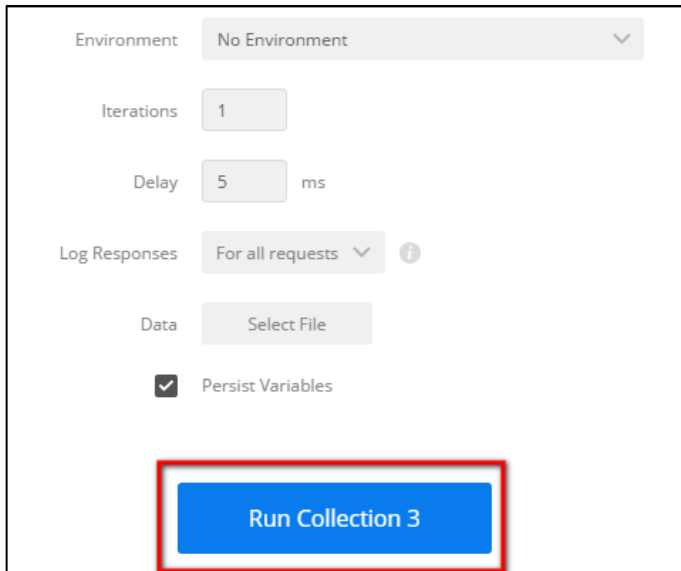
10. From the pop-up, click **Run** button.



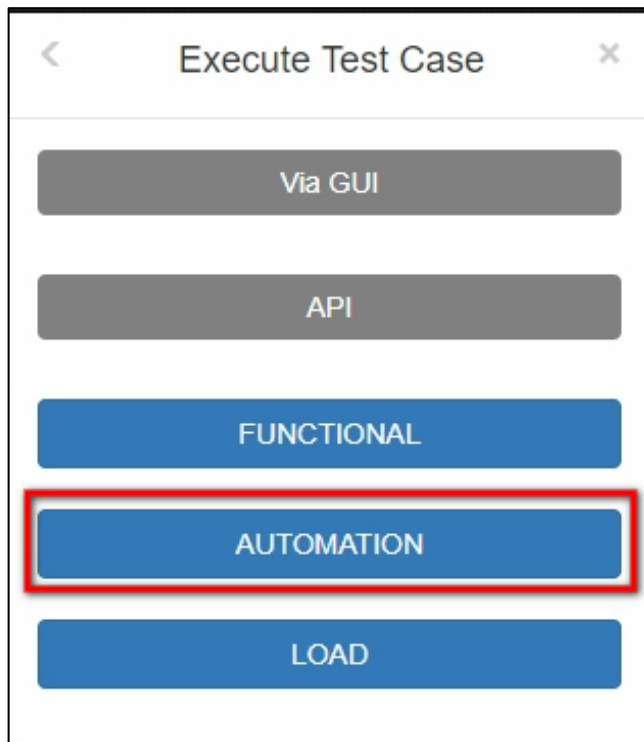
11. On click of **Run** button, a new window will open called **Collection Runner**.



12. In the window, on the left panel, set the parameters and click **Run <Collection\_Name>**.



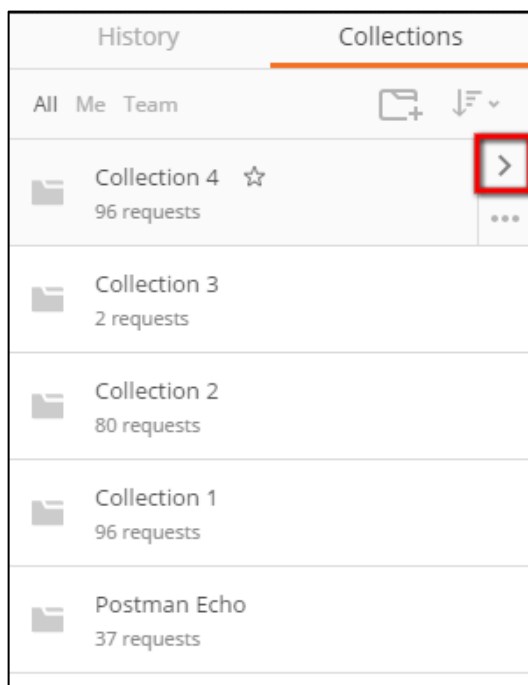
13. To perform automation testing, press **Automation** button.



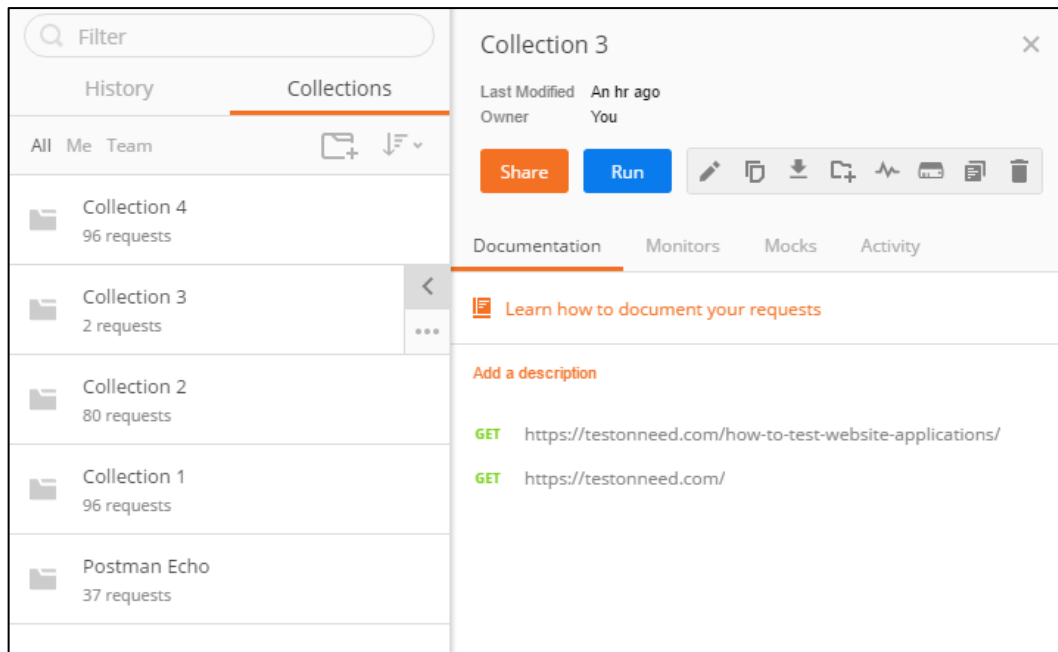
14. On click of the button, **Postman** will open.

15. On the left, there will be two tabs History and Collections. In the collections tab look for the **Collection** in which the JSON was saved during the **Record Test Case** button.

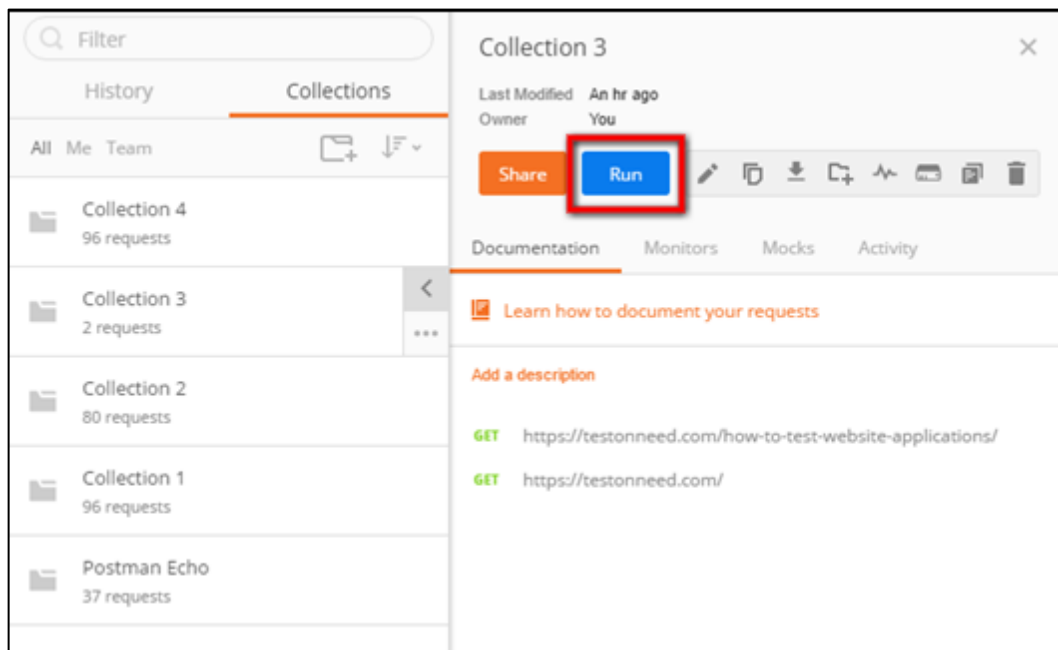
16. On mouse hover of the **Collection name**, click on the right arrow.



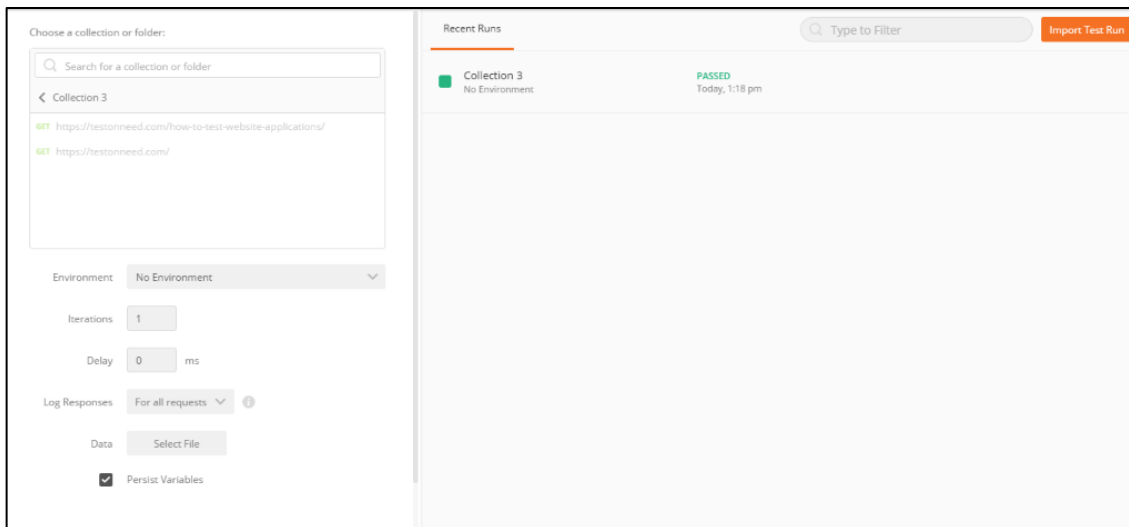
17. On clicking of the arrow button, a small window comes on the right next to the collection selected.



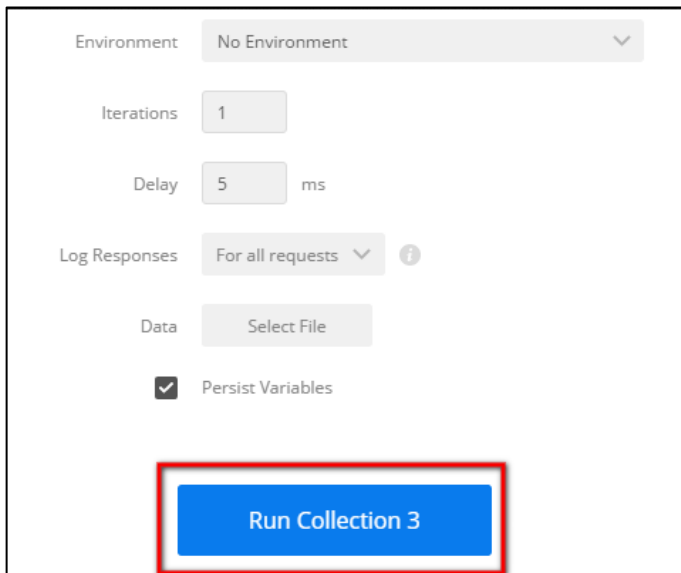
18. From the pop-up, click **Run** button.



19. On click of **Run** button, a new window will open called **Collection Runner**.



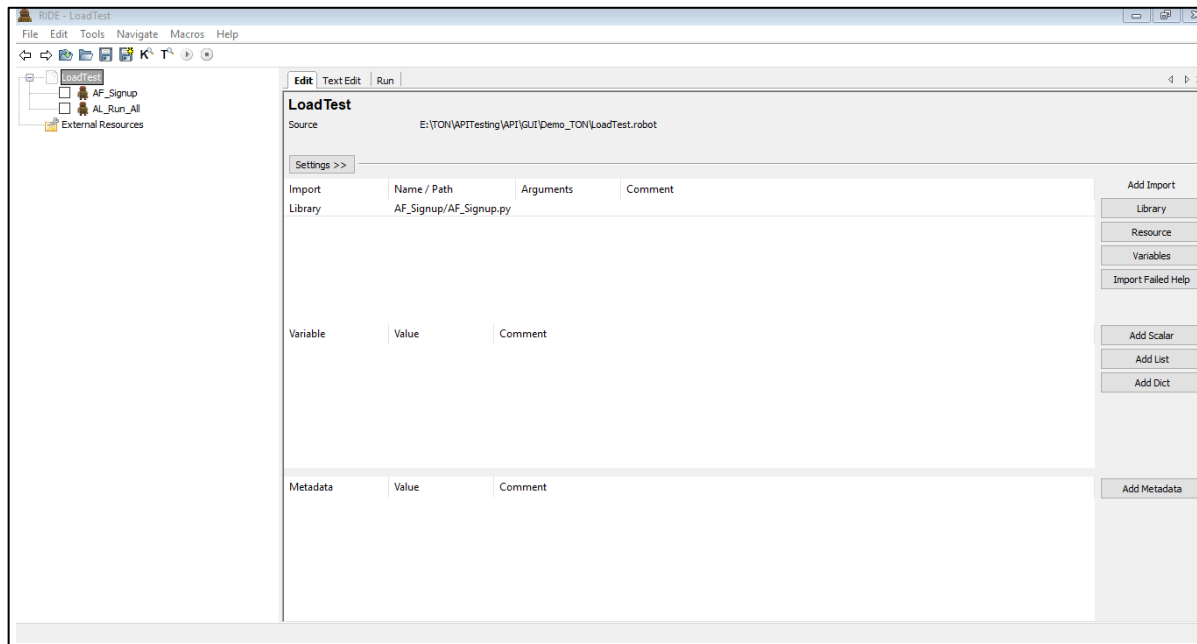
20. In the window, on the left panel, set the parameters and click **Run <Collection\_Name>**.



21. To perform load testing, press **Load** button.

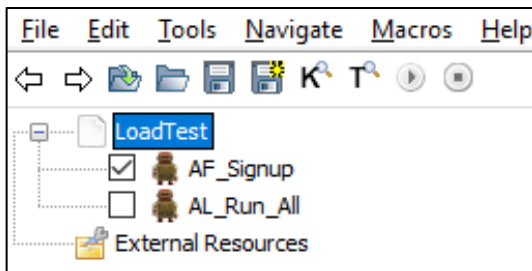


22. On click of the **Load** button, **RIDE** will open.

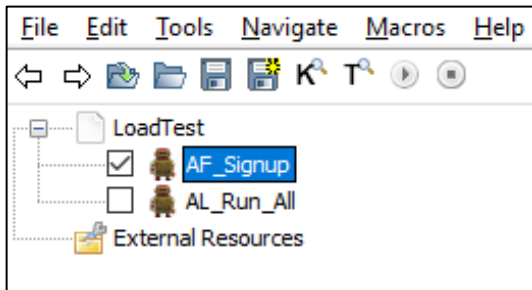


23. On the left panel, select one test case to execute.

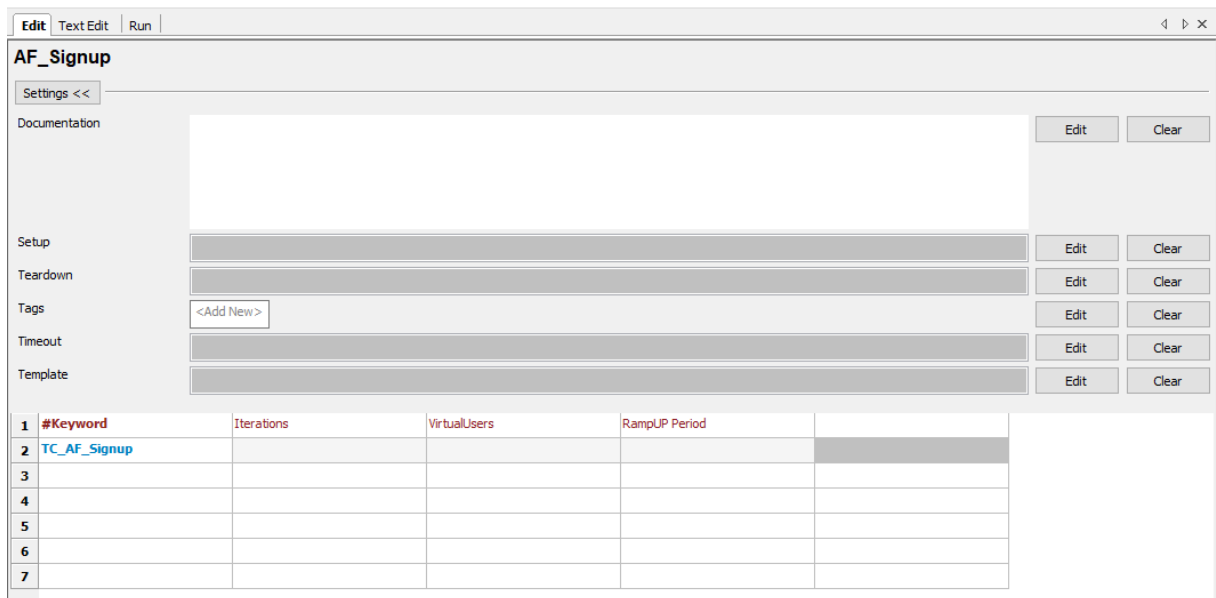




24. To configure the parameter, click on the test case name.



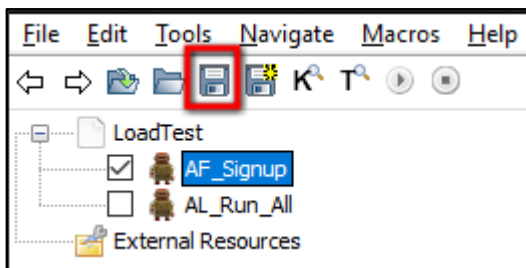
25. On click of the test case name, edit tab changes so that parameters can be configured.



26. To configure the parameter, click on the test case name.
27. On click of the test case name, edit tab changes so that parameters can be configured.
28. The value of the parameters is:  
Iterations, VirtualUsers and RampUP Period.
29. Configure the parameters – **Iterations, VirtualUsers and RampUP Period.**

1	#Keyword	Iterations	VirtualUsers	RampUP Period	
2	TC_AF_Signup	1	1	1	
3					
4					
5					
6					
7					

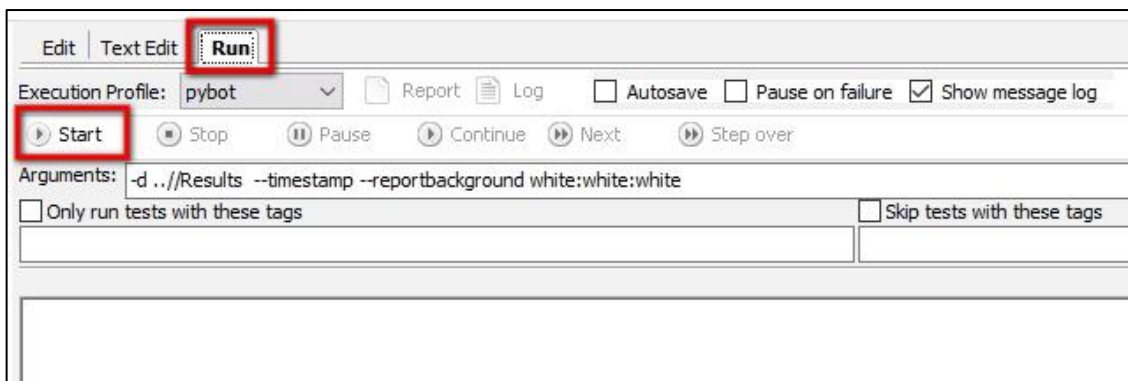
30. Click **Save** button to save the test case.



31. Configure the Arguments textbox by entering:

**-d ..\Demo\_TON\<test\_case\_name>\Results --timestamp --reportbackground white:white:white**

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



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



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

## TestCases Test Report

**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

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

**LOG**

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

**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:\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

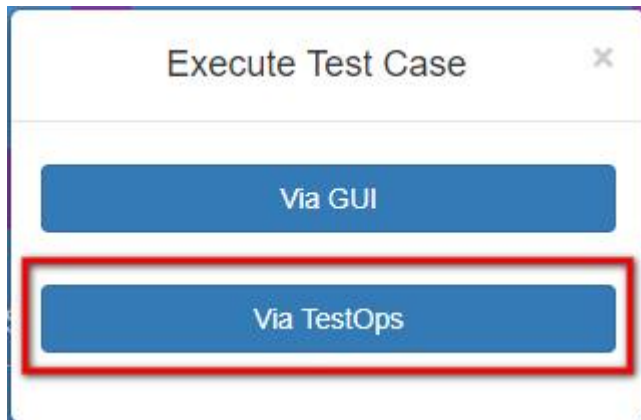
**TEST** BF\_Signup 00:00:55.131

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

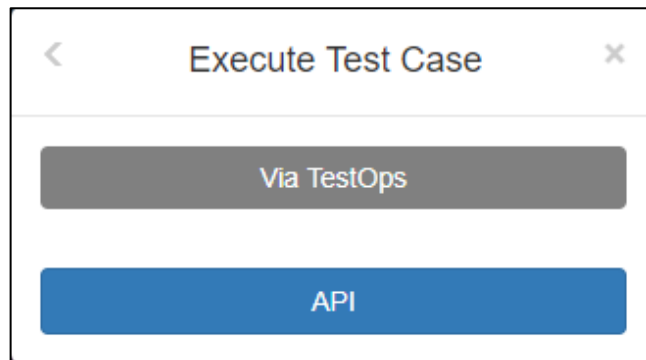
**REPORT**

## 2.3.2 EXECUTE - VIA TESTOPS

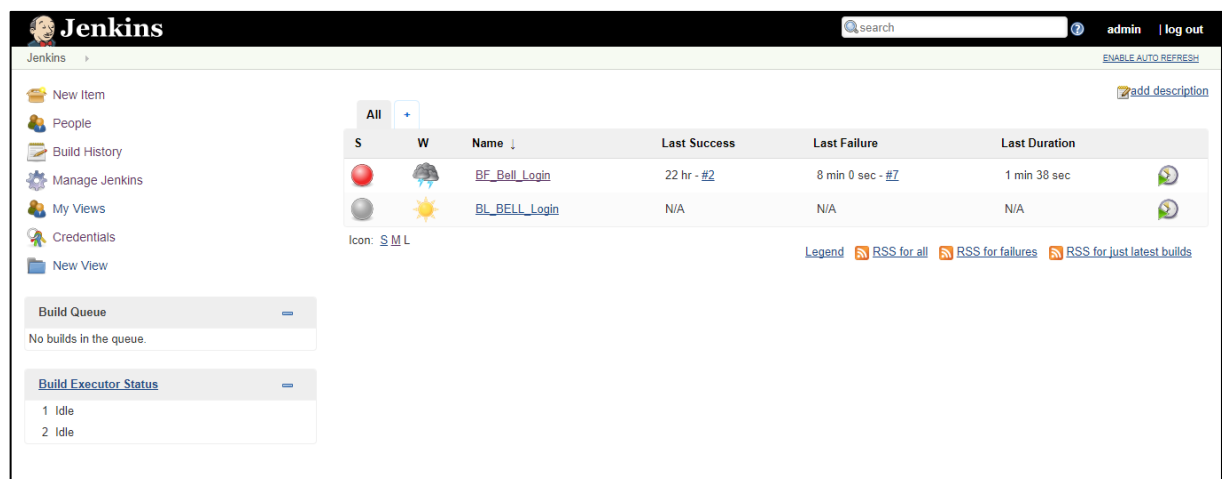
1. Click the Via TestOps button.



2. On clicking the button, **API** will appear.






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



**For creation of new View and Job, refer the Reference Section below.**

4. Click on the job that has to be executed.

[add description](#)








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

Icon: [S](#) [M](#) [L](#)

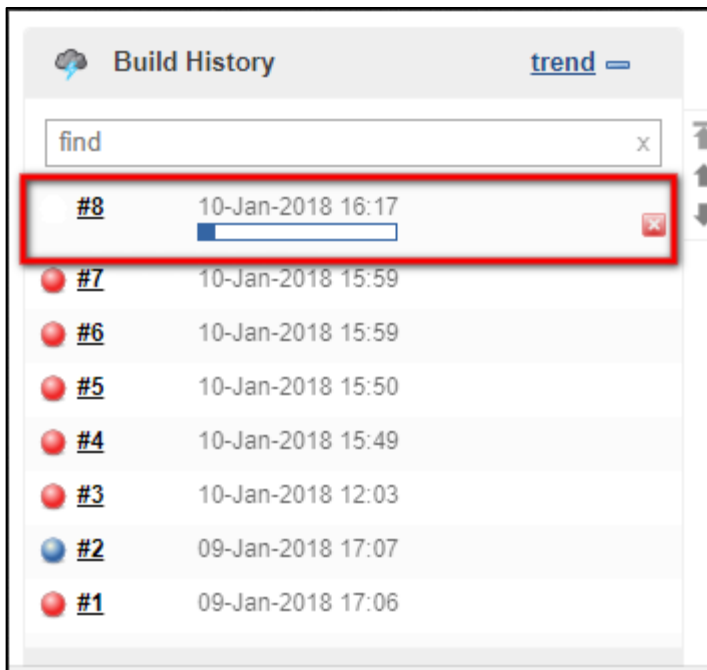
[Legend](#)
[RSS for all](#)
[RSS for failures](#)
[RSS for just latest builds](#)

5. On the left side, select Build Now.

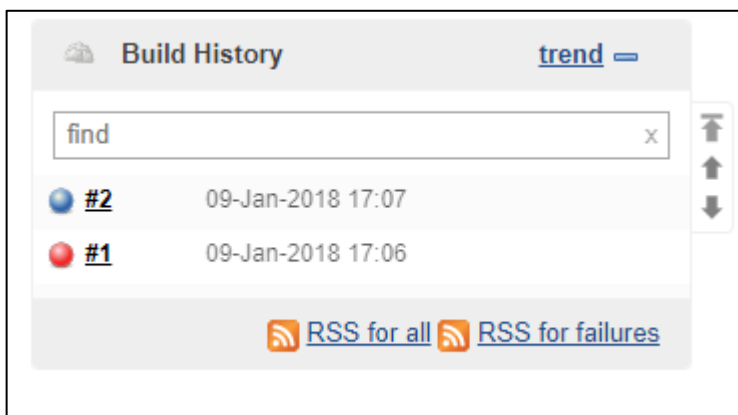
Jenkins > BF\_Bell\_Login >

-  [Back to Dashboard](#)
-  [Status](#)
-  [Changes](#)
-  [Workspace](#)
-  [Build Now](#)
-  [Delete Project](#)
-  [Configure](#)

6. 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>**

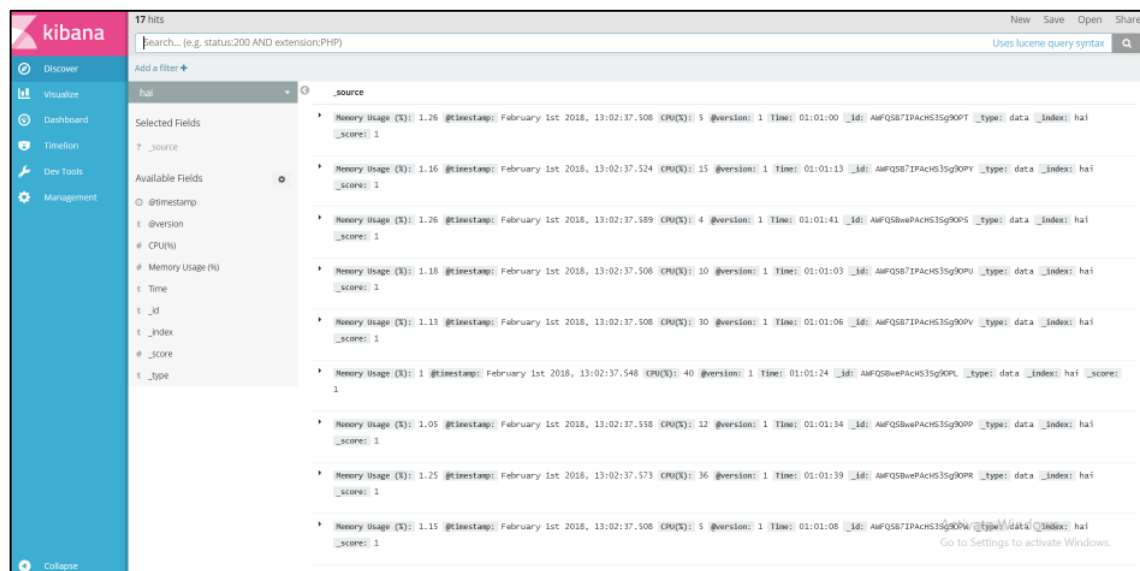
## 2.4 ANALYZE RESULTS

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

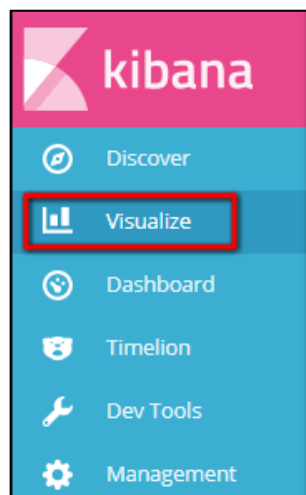
1. Click on the **Analyze Results**.



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



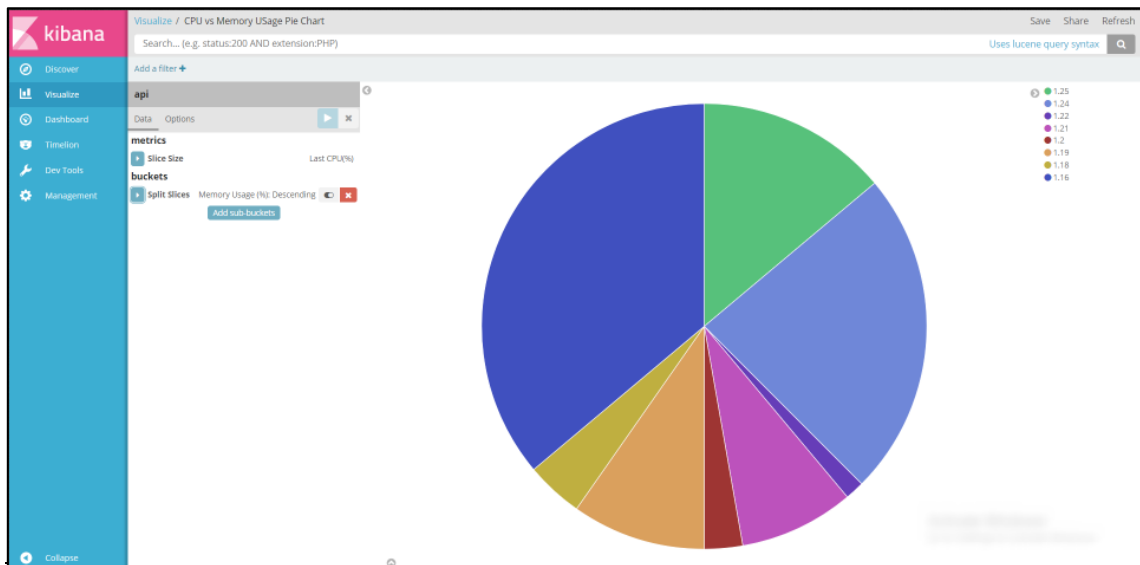
3. On the left panel, click Visualize.



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..."/> <span>+</span> <span>1-5 of 5</span>	
<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
<span>1-5 of 5</span> <span>&lt;</span> <span>&gt;</span>	

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)

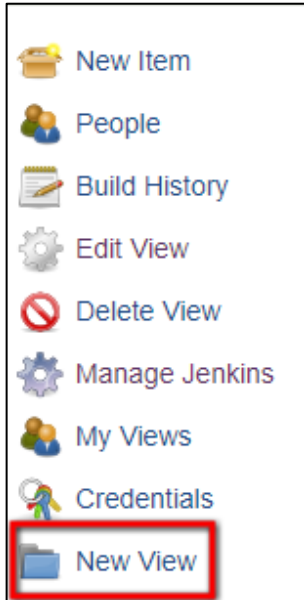




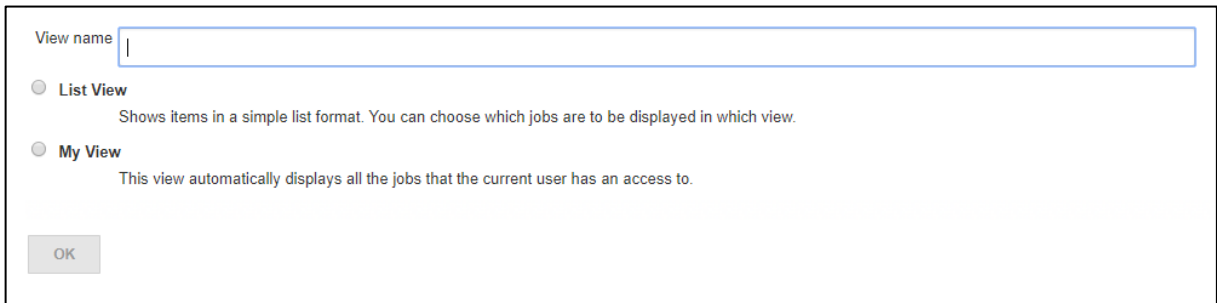
### 3. References

#### 3.1 CREATION OF NEW VIEW

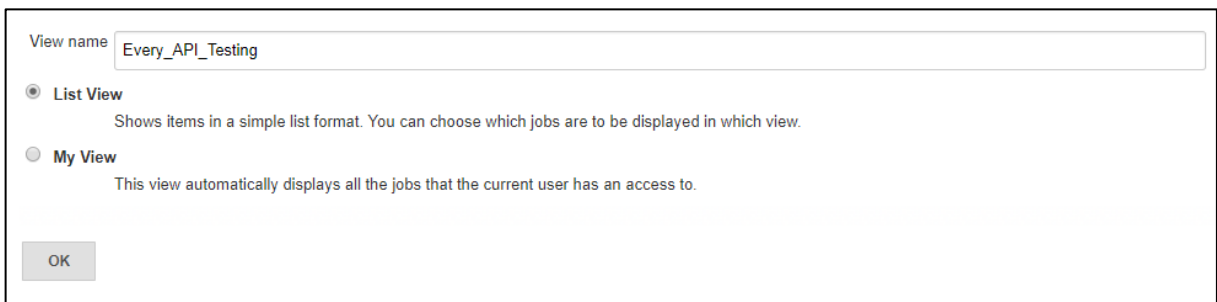
- To create a new view, on the left panel, click **New View**.



- On clicking, give the name of the tab as **Every\_API\_Testing** and select the type of view.

A screenshot of the 'New View' dialog box. It has a text input field for 'View name' containing 'Every\_API\_Testing'. Below it are two radio button options: 'List View' (selected) and 'My View'. The 'List View' option has a description: 'Shows items in a simple list format. You can choose which jobs are to be displayed in which view.' The 'My View' option has a description: '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, similar to the previous one, but with the 'OK' button now active (highlighted in grey). The 'View name' field contains 'Every\_API\_Testing', 'List View' is selected, and the descriptions for both options are visible.

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

Name:

Description:

[Plain text] [Preview](#)

Filter build queue: ☐

Filter build executors: ☐

**Job Filters**

Status Filter: 

All selected jobs

Recurse in subfolders: ☐

Jobs:

- ☒ AL\_FlipKartCollection
- ☐ BF\_Bell\_Login
- ☐ BL\_BELL\_Login

☐ Use a regular expression to include jobs into the view


Add Job Filter ▼


Columns


- 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


BL\_BELL\_Login

» Required field




**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.




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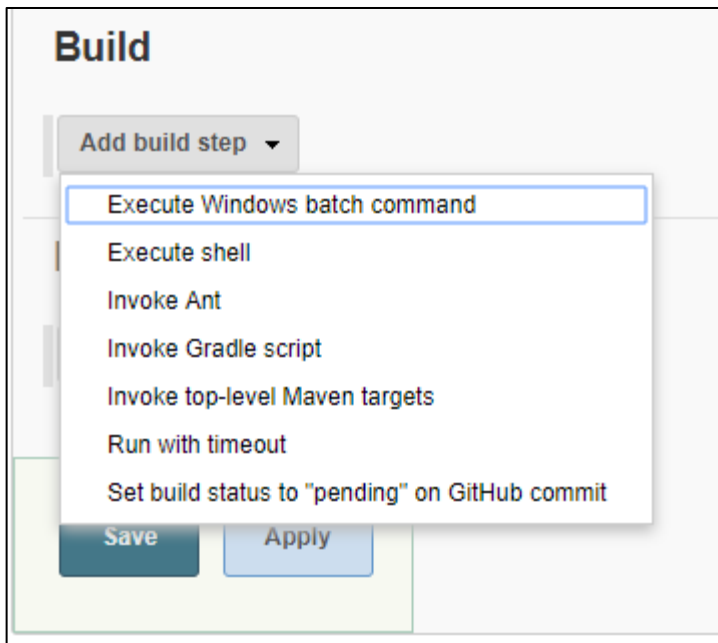
OK

- On click of Ok button, job configuration page will appear.
- Scroll down and look for Build.

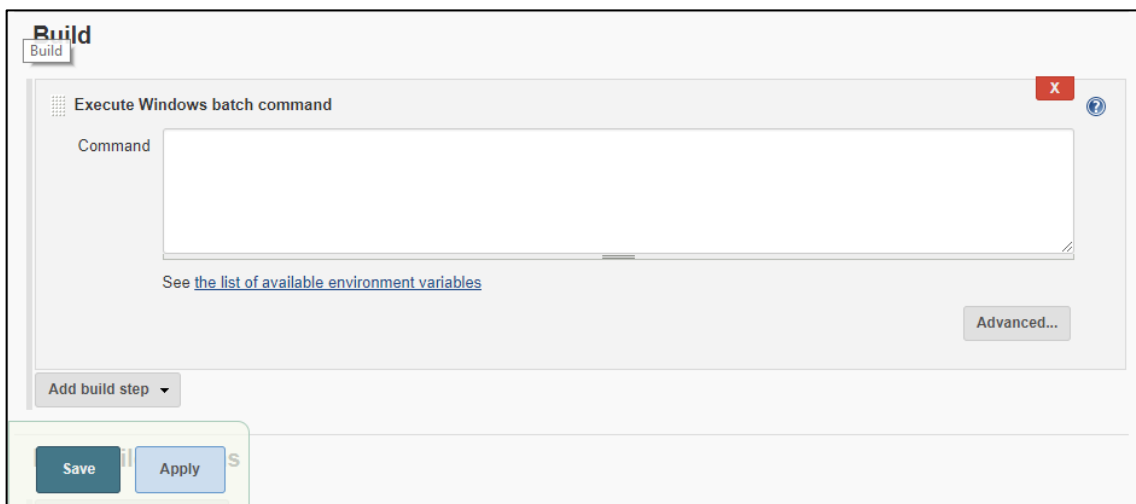
## Build

Add build step ▼

- Under build, click Add Build Setup drop down.

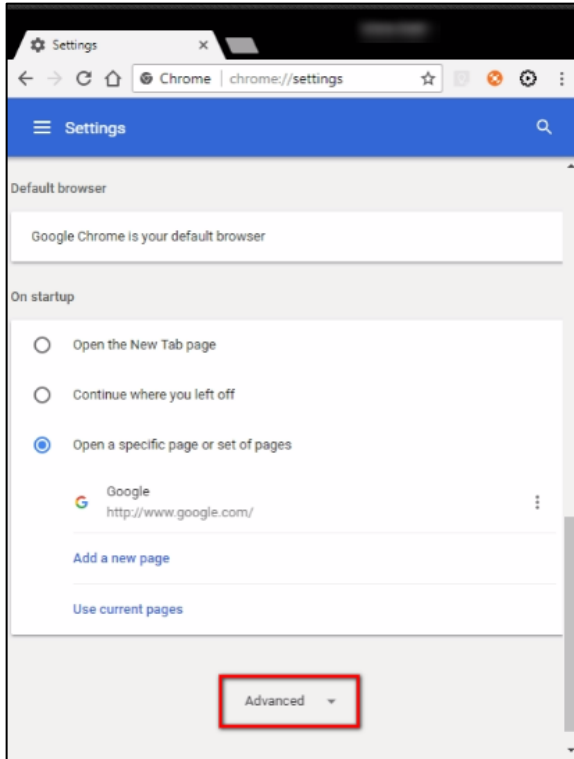


- From the drop down, select **Execute Windows Batch Command**.
- On selecting, a text area appears.

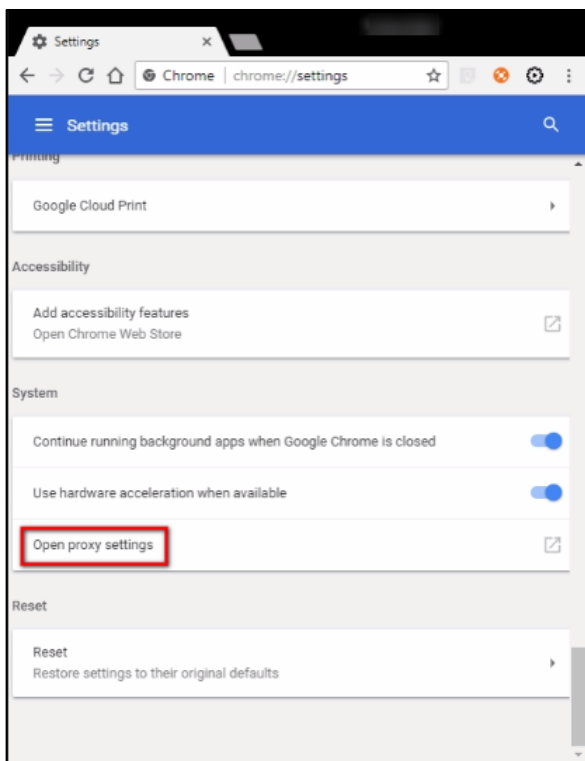


### 3.3 SETTING UP OF PROXY IN CHROME

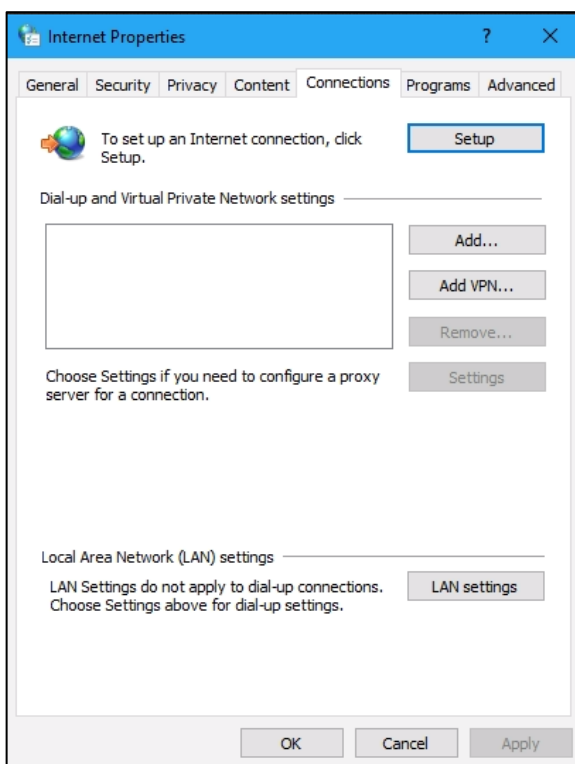
- In the chrome, open Chrome settings.
- Scroll down and click Advanced.



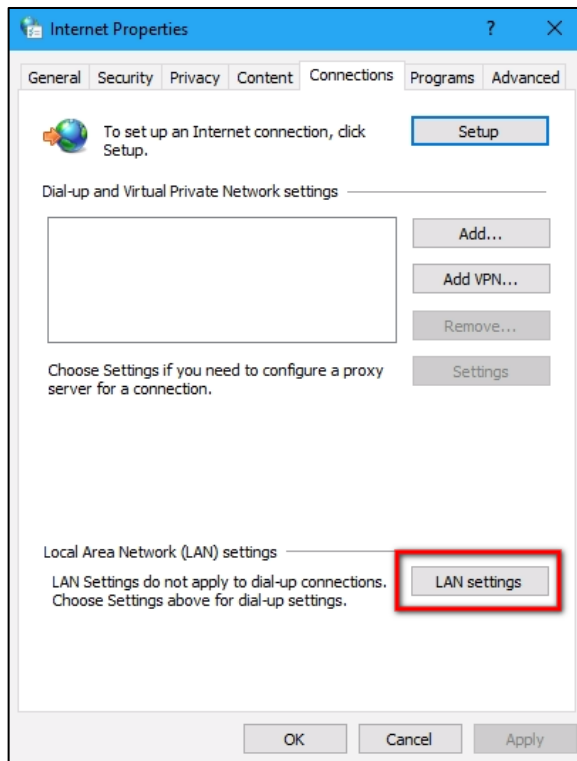
- Again, scroll down and click “Open Proxy Settings”.



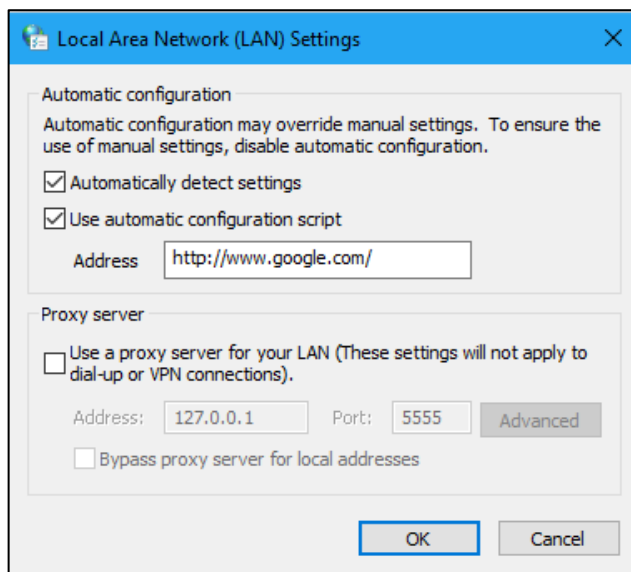
- A dialog box will appear.



- In the dialog box, click LAN Settings.

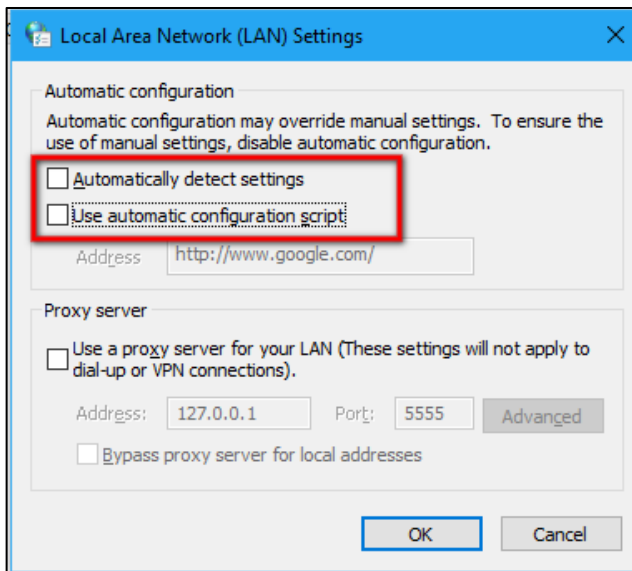


- It will display another dialog box.

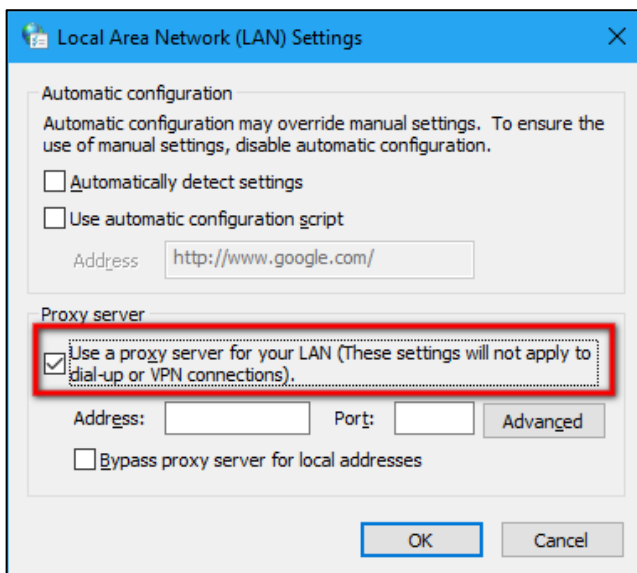


- In the dialog box, uncheck the Automatically detect settings and Use automatic configuration script under Automatic configuration.

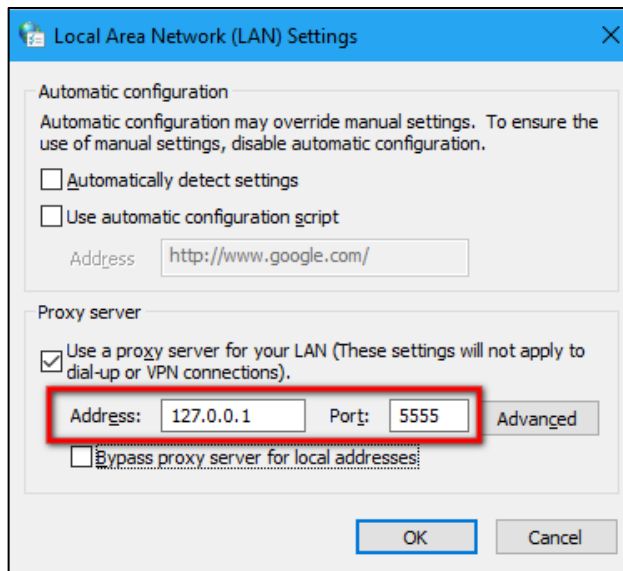




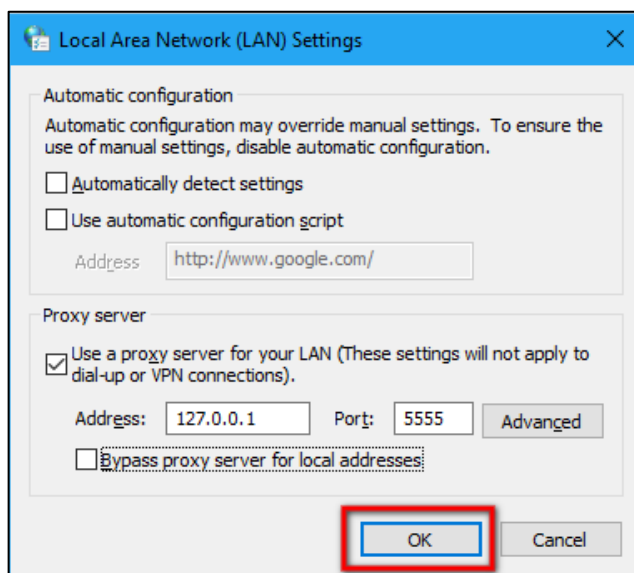
- In the same dialog box, check the box under Proxy server.



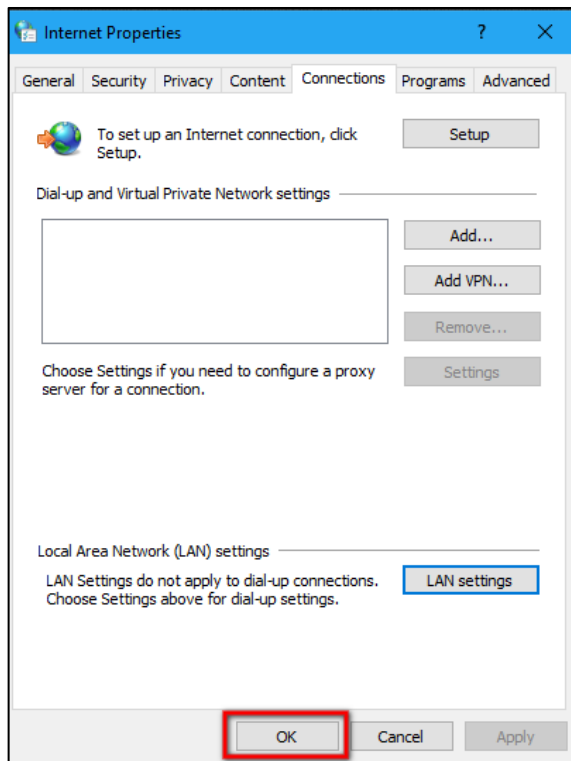
- On checking the box, the Address and Port text boxes becomes active.
- In the address text box, enter the ip address as "127.0.0.1" and in the port text box, enter the port number as "5555".



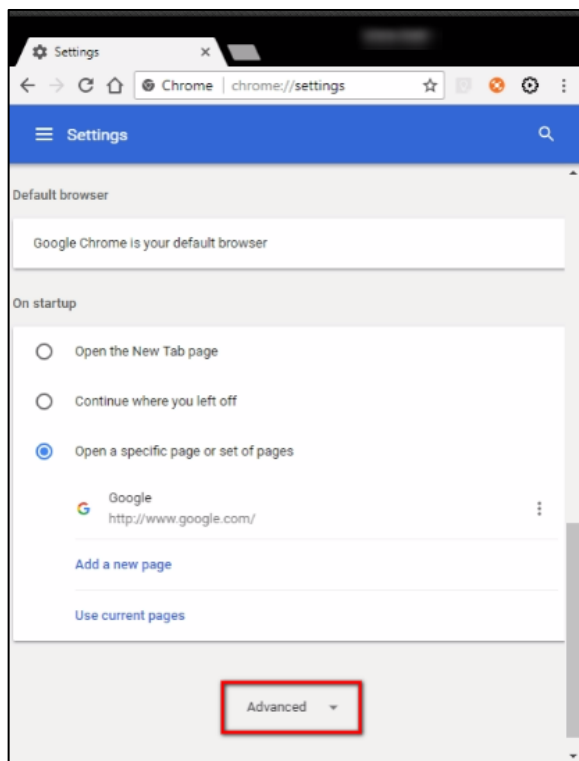
- After entering the address and port number, click Ok.



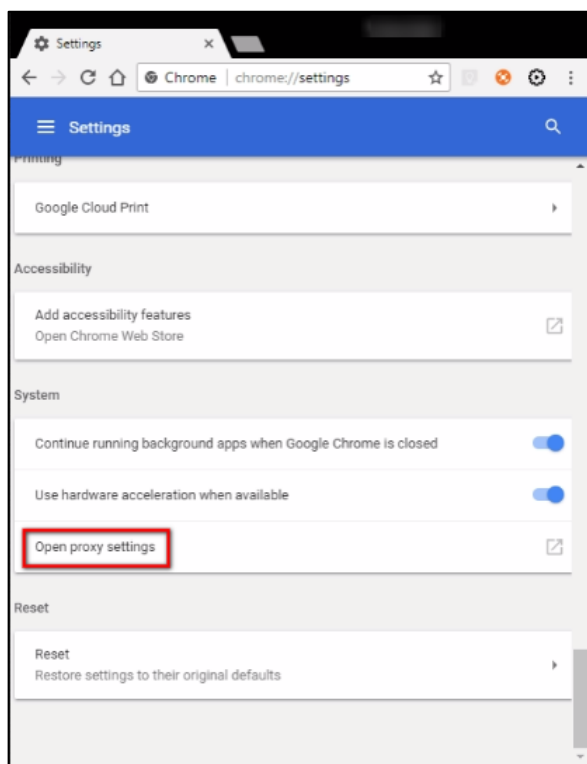
- Again, in the internet properties dialog box, click Ok.



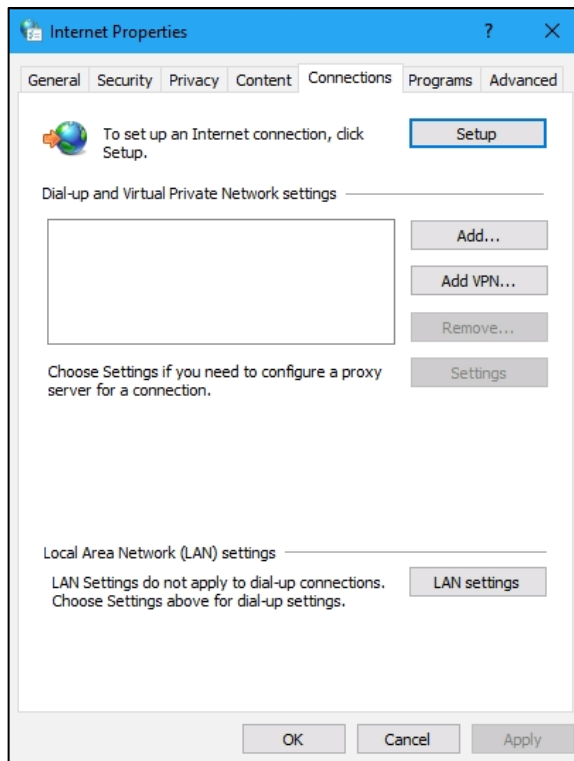
- When the user has finished the recording, the user has to revert back the changes in order to connect to the internet.
- To connect the revert the changes back, open Chrome Settings.
- Scroll down and click Advanced.



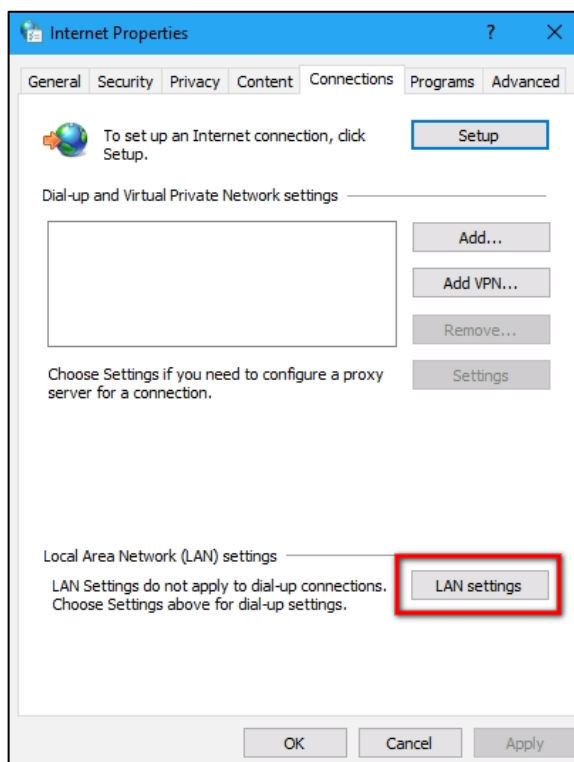
- Again, scroll down and click “Open Proxy Settings”.



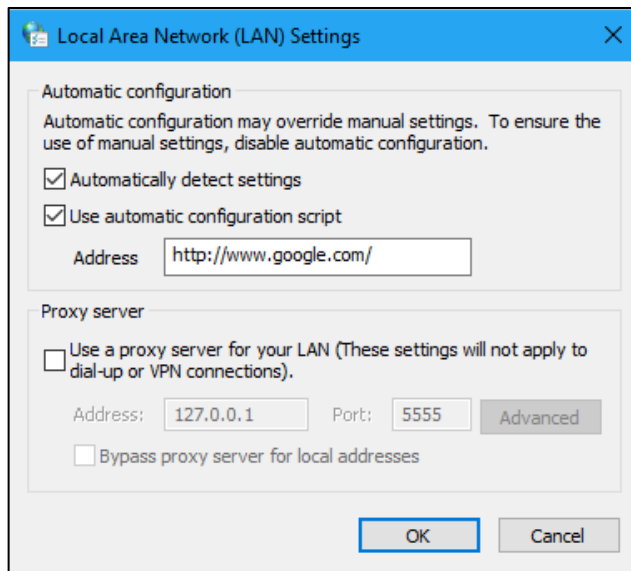
- A dialog box will appear.



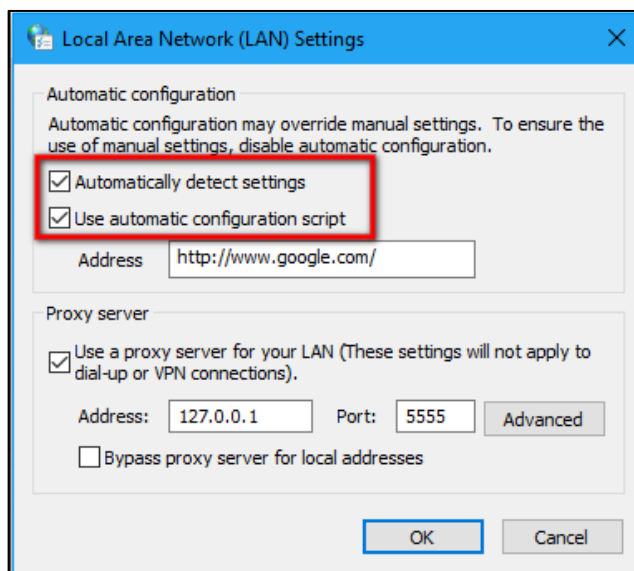
- In the dialog box, click LAN Settings.



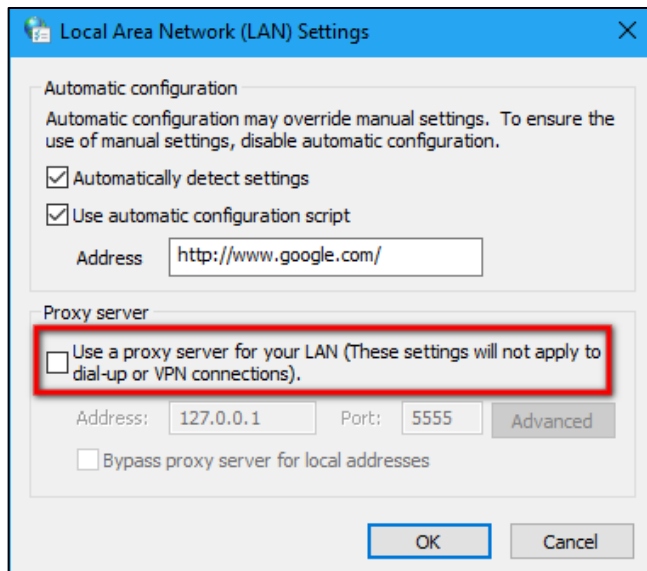
- It will display another dialog box.



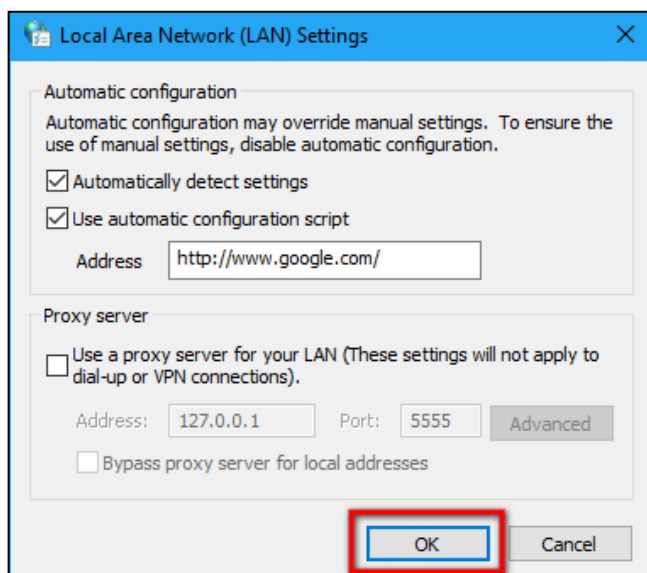
- In the dialog box, check the Automatically detect settings and Use automatic configuration script under Automatic configuration which will be unchecked earlier.



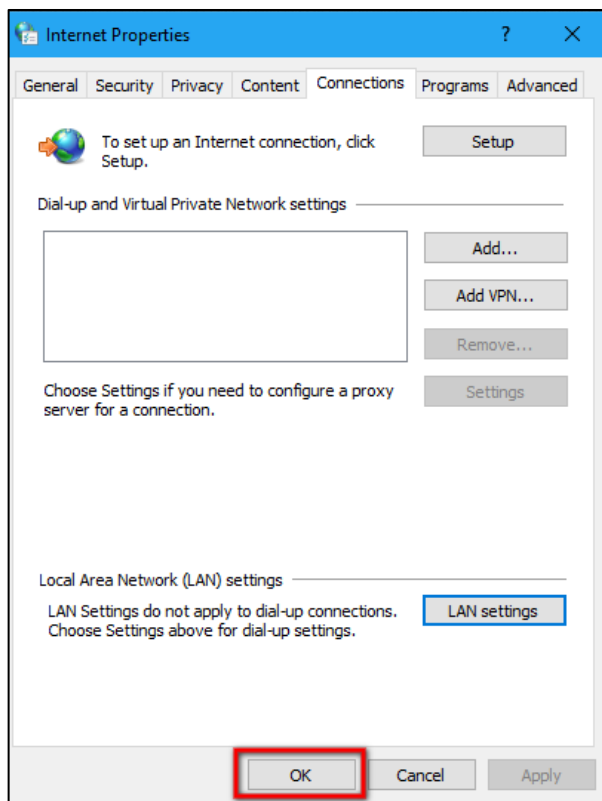
- In the same dialog box, uncheck the box under Proxy server which will be checked earlier.



- After checking and unchecking the boxes, click Ok.



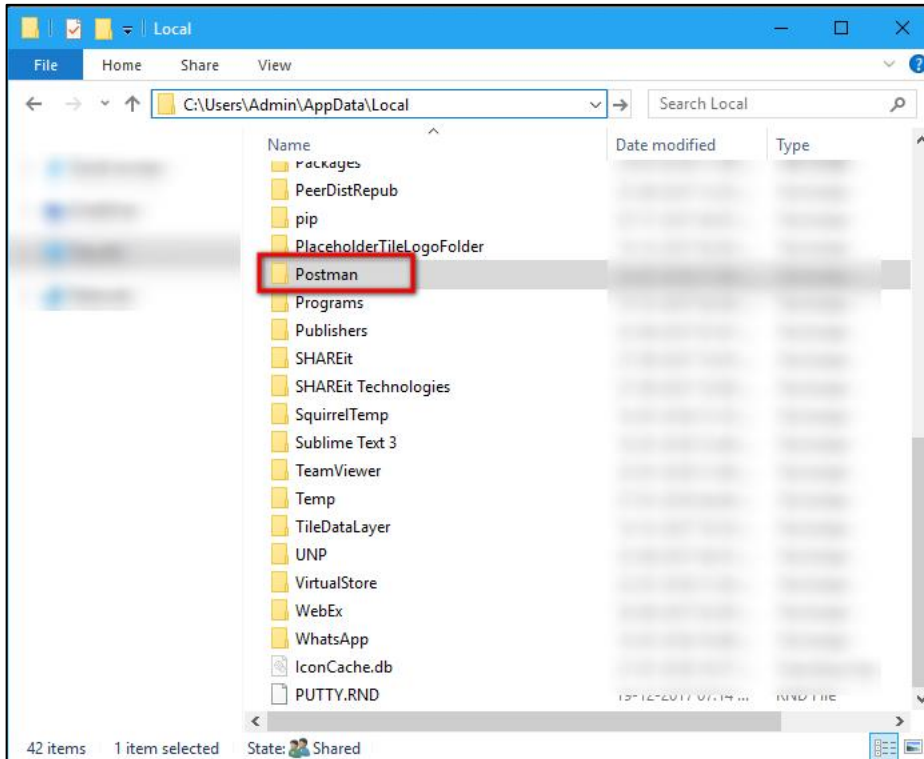
- Again, in the internet properties dialog box, click Ok.





### 3.4 CHANGING FOLDER LOCATION OF POSTMAN

- The default folder location of Postman will be in C: > Users > <System\_Name> > AppData > Local.



- The user has to remove the folder from the above location and paste under C: drive directly.

