# **API TESTING TOOLS**

## **Postman:**

Download Link: <https://www.postman.com/downloads/>

Tutorial link: <https://www.guru99.com/postman-tutorial.html>

JSON Formatter: <https://jsonformatter.curiousconcept.com/>

**Parameterize Requests:** Instead of creating the same requests with different data, you can use variables with parameters. Parameters are created through the use of double curly brackets: {{sample}}. e.g.: {{url}}/user. Where **url** variable is defined as a global variable.

## **Rest Assured:**

Rest Assured enables you to test REST APIs using java libraries and integrates well with Maven.

Tutorial Link: <https://www.guru99.com/rest-assured.html>

<https://www.toolsqa.com/rest-assured-tutorial/>

Step 1) Install Java. Refer to this [guide](https://www.guru99.com/install-java.html)

Step 2) Download an IDE to begin: [eclipse](https://www.eclipse.org/downloads/) also can use VS code.

Step 3) InstallMaven and set up your eclipse. Refer [here](https://www.guru99.com/maven-jenkins-with-selenium-complete-tutorial.html).

## **SoapUI:**

we can do functional, load, security and compliance tests on our API using SoapUI.

Tutorial Link: <https://www.guru99.com/soapui-tutorial.html>

<https://www.tutorialspoint.com/soapui/soapui_capabilities.htm>

Installation Process: https://www.tutorialspoint.com/soapui/soapui\_installation\_and\_configuration.htm

Download Link: <https://www.soapui.org/downloads/latest-release/>

We have to create a workspace in Soapui which contain different projects and within projects we have multiple test suite that contain different test cases.

## **JMeter:**

Apache Jmeter is another open-source software for load and performance testing of applications. It is widely used for functional API testing.

Tutorial link: <https://www.guru99.com/jmeter-tutorials.html>

<https://www.tutorialspoint.com/jmeter/index.htm#:~:text=jMeter%20is%20an%20Open%20Source,requires%20JDK%205%20or%20higher>.

Download Link: <http://jmeter.apache.org/download_jmeter.cgi>

Installation guide : <https://www.guru99.com/guide-to-install-jmeter.html>

JMeter includes all the functionality you need to test an API, plus extra features that can enhance your API testing efforts. For example, JMeter can automatically work with CSV files, so your teams can quickly produce unique parameter values for your API tests. It also integrates with Jenkins, so you can include your API tests in your CI pipelines.

## **Karate:**

a Behavior Driven Development (BDD) testing framework for Java.

Tutorial Link: <https://www.baeldung.com/karate-rest-api-testing>

## **Selenium:**

Tutorial link: <https://www.guru99.com/selenium-tutorial.html>

## **Useful Link:**

Maven and Selenium: <https://www.tutorialspoint.com/what-is-maven-in-selenium#:~:text=Maven%20is%20a%20tool%20which,when%20working%20on%20big%20projects>.

Full Tutorials Links: <https://automationstepbystep.com/>