



# Apache JMeter Feature Specifications

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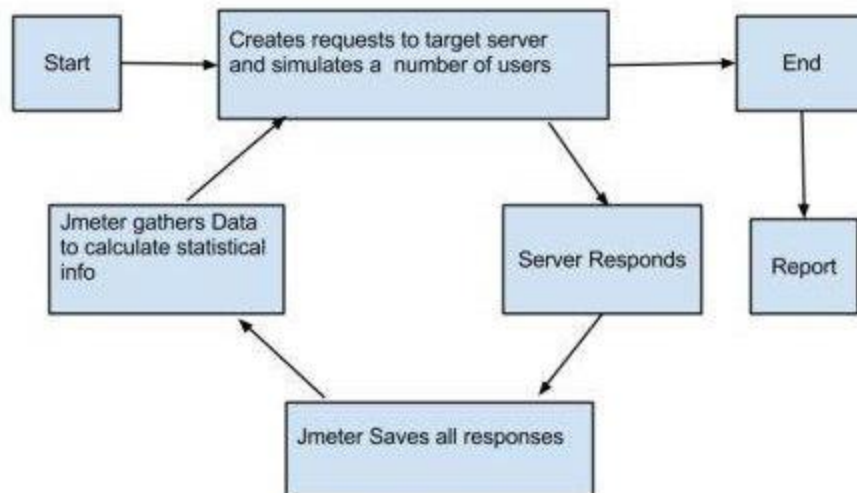
## What is APACHE JMeter?

Apache JMeter is a popular open source system designed for testing applications. It is 100% Java scripted intended to test the functional performance of online applications on the desktop. JMeter used to test applications for dynamic and static resources such as queries, logs, files scripts and servers. This provides users a chance to analyze their strength under various load types. Apache JMeter's simple and fast interface is based on a GUI design. Its interface capabilities are streamlined through the use of multithreading. The software is also highly extensible, meaning that it can support many third-party applications and plug-ins. Adding plug-ins can extend the software's testing abilities. Thus, testing is made easier across platforms, servers, and different browsers.

## How JMeter Works?

JMeter simulates a group of users sending requests to a target server, and returns statistics that show the performance/functionality of the target server/application via tables, graphs, etc.

Take a look at the following figure that depicts how JMeter works –



## **Main features of Apache JMeter are:**

- Multithreading Framework
- Compatible with TCP
- 100% Java scripted
- Compatible with LDAP
- Data Analysis and Visualization
- Pluggable Samplers
- Compatible with Database via JDBC
- GUI Design and Interface
- Dynamic Input
- Compatible with SOAP / REST
- Result Analysis and Caches
- Compatible with Native Commands
- Highly Extensible Core
- Compatible with FTP
- Compatible with Web – HTTP, HTTPS
- Scriptable Samplers
- Compatible with Mail – SMTP(S)
- Compatible with POP3(S) and IMAP(S)
- Compatible with Message-oriented middleware via JMS

## **Main benefits of Apache JMeter:**

The main benefits of Apache JMeter are its extensibility and high portability as well as stable functionalities. Here are the details:

### **Extensible and Highly Portable**

Developers value Apache JMeter for its extensibility and high portability. They can use this to test their online applications' performances and measure their load strength and compatibility across platforms, servers, and browsers. Running tests on servers like Web (HTTPS and HTTP), POP3, SOAP, and JMS can easily be done on Apache JMeter. This makes testing and developing the usability and workability of online applications easier, faster, and more accurate.

The open-source code provides developers an avenue to create applications using various sets of coding techniques. This makes it easier for developers to exercise creativity and generate something novel regarding their applications infrastructure, applications, and design.

## **Community**

The open-source architecture of Apache JMeter is popular among coders as they can share their know-how with other coders. This facilitates the distribution of knowledge and robust tools to increase the skills and knowledge-base of the coding community. This is essential to tech businesses and firms that use IT solutions in order to create more innovations.

## **What we can do with JMeter**

- Using command line parameters in JMeter for load testing.
- Database load testing with JMeter
- Load test TCP protocol services with JMeter
- Run a stress test in JMeter
- Performance and load testing with JMeter
- Test SOAP services with JMeter
- Generate Random variables in JMeter
- Apache Kafka load testing using JMeter
- Build a distributed load testing infrastructure with AWS, Docker and JMeter
- Load testing video streaming with JMeter

## References

<https://jmeter.apache.org/index.html>

[https://www.tutorialspoint.com/jmeter/jmeter\\_overview.htm](https://www.tutorialspoint.com/jmeter/jmeter_overview.htm)

<https://dzone.com/articles/jmeter-tutorial-1>