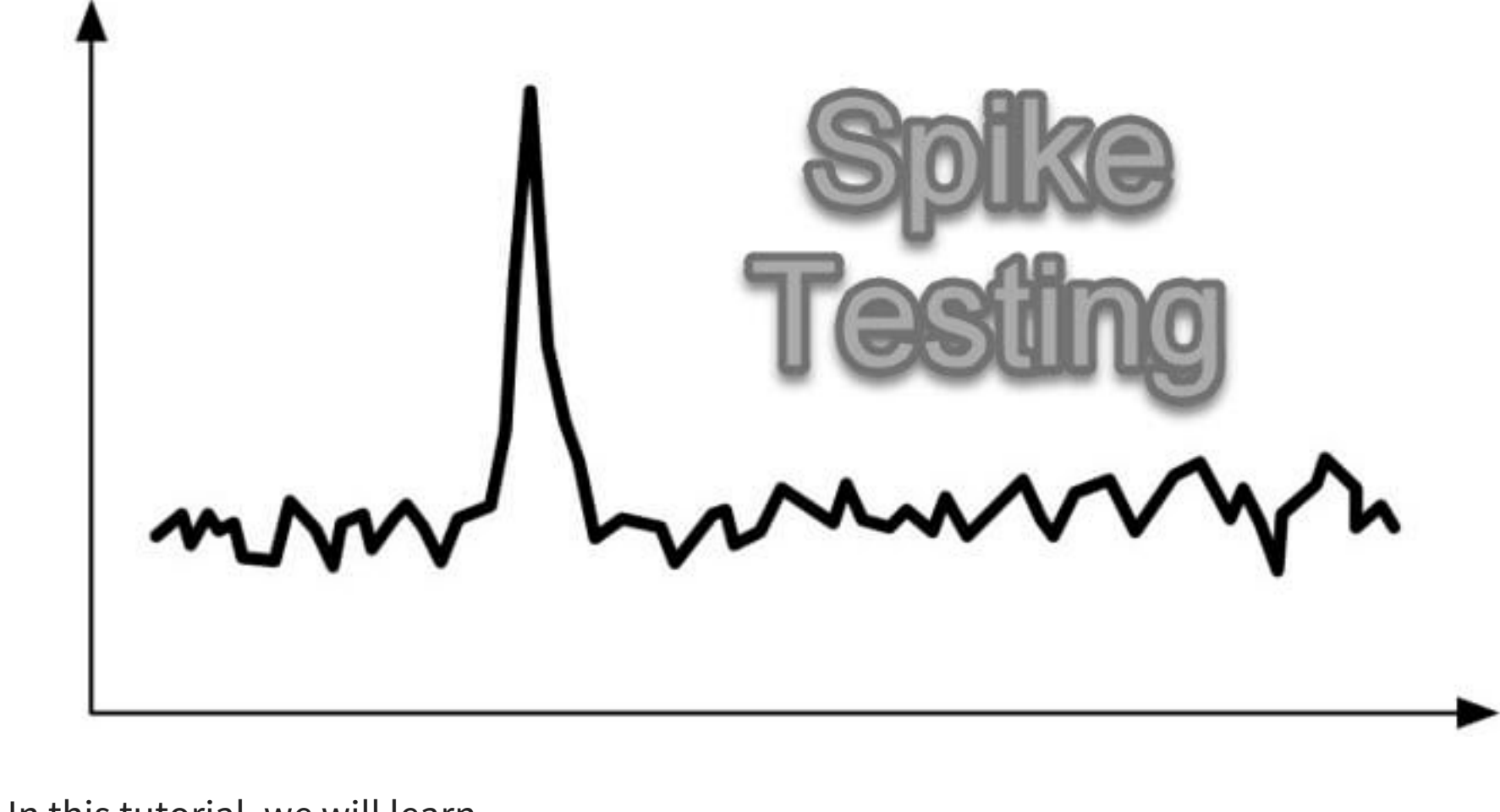


# What is Spike Testing? Learn With Example

## Spike Testing

**Spike Testing** is a performance testing type used to test software applications with extreme increments and decrements in load. The main purpose of spike testing is to evaluate the behavior of software applications under sudden increment or decrement in user load and determine recovery time after a spike of user load. It is performed to estimate weaknesses of

software applications.



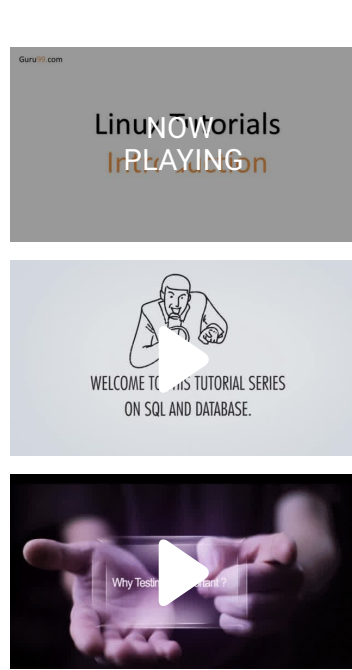
In this tutorial, we will learn-

- [What is Spike Testing?](#)
- [Goal of Spike Testing](#)
- [How to do Spike Testing?](#)
- [Examples Spike Testing Scenarios:](#)
- [Recovery Scenarios on Spike Loads](#)
- [Advantages and Disadvantages of Spike testing](#)
- [Tools for Spike Testing:](#)

## Goal of Spike Testing

The goal of Spike testing is to see how the system responds to unexpected rise and fall of the user load. In Software Engineering Spike testing helps determine system performance will deterioration when there is a sudden high load.

### FEATURED VIDEOS



LinuxTutorials  
LinuxTutorials

Another goal of Spike Testing is to determine the recovery time. Between two successive spikes of user load, the system needs some time to stabilize. This recovery time should be as low as possible.

## How to do Spike Testing?

Here are six simple steps to perform spike testing

**Step 1)** Determine the Max User Load capacity of your software application

**Step 2)** Prepare the Testing Environment and configure it to record performance parameters.

**Step 3)** Apply expected maximum load to your Software Application using a Performance Tool of your choice

**Step 4)** Rapidly increase in load, to the system for a set period.

**Step 5)** Gradually reduce the load back to its original level.

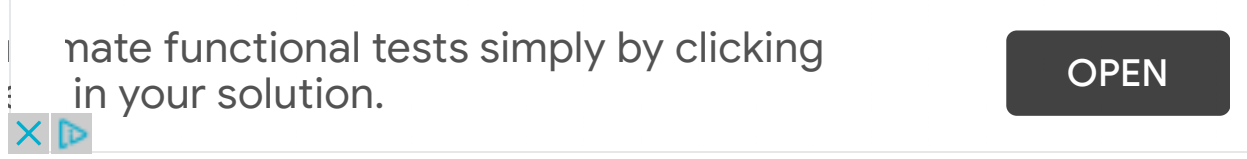
**Step 6)** Analyze the performance graphs. Metric to be considered are Failures, Time Taken, Virtual Users, etc.

## Example Spike Testing Scenarios:

- When an eCommerce store is launching special deals with great discounts such as on Black Friday.
- When a web application is live streaming a favorite TV program.
- When a flash sale is going on a daily deal site.
- When the certain content of a site goes viral over the Internet.
- A new system is released for production, and multiple users want to access the system.
- A power outage may cause all users to lose access to a system. After the outage issue resolved all users then log back onto the system simultaneously.

## Recovery Scenarios on Spike Loads

Three main recovery scenarios can be configured to guard against spikes



1. Use cloud platforms like AWS, Azure to dynamically increase server capacity in tandem with the user load
2. Do not allow the application-access to some users, so that system does not face heavy load. This stops people above the maximum designed load from entering into the system. Thus protects the system from the threat of an excessive load.
3. The site admin allows users to join the system. However with warning that they may face slow response because of heavy load. This may result in the adverse effect on the system performance. However, the user will be able to work with the system.

## Advantages and Disadvantages of Spike testing

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• The performance of the software must be maintained at any costs. However, when there is an extreme increase in the load of any system, there are high chances of the issues. Spike Testing helps test such scenario.</li></ul>	<ul style="list-style-type: none"><li>• The only disadvantage of Spike Testing is that it is an expensive testing process. So, it needed setting up special test conditions. However, over the longer duration, it will surely give a positive ROI.</li></ul>
<ul style="list-style-type: none"><li>• In the standard testing method, the bad to worst-case scenarios may not be addressed. However, ignoring them does not mean that they will never occur. Therefore, every software should be ready for such possibilities. One such worst case scenario is loading which can be judged and minimized with the help of spike testing.</li></ul>	

## Tools for Spike Testing:

1) [Jmeter](#)

The Apache JMeter is a java open source spike testing tool. It is specially designed to load functional test behavior and measure performance. This performance testing tool can be used to analyze and measure the performance of web application or a variety of services. Today, it is widely used for the functional test, database server test.

2) [Loadrunner](#)

Loadrunner is a load testing tool for Windows and Linux, which allows spike testing of web and other apps. It helps to determine the performance and result of the application even under the heavy load.

## Conclusion:

- Spike Testing is a software testing method. In this method, applications are tested with unusual increment and decrements in the load.
- The right approach to do spike testing is to unexpectedly increase the number of users followed by an immediate decrease in the load.
- The unexpected load is the main attribute of the deal.
- Examples of real-life Spike testing scenarios are - when an eCommerce store is launching special deals with great discounts such as on Black Friday. Alternatively, when a web application is live streaming a favorite TV program.
- Jmeter is one such useful tool to do spike testing.



### YOU MIGHT LIKE:

<div></div> <div><b>Waterfall vs. Spiral vs. Rad Model: Key Difference</b></div> <div>To manage the level of complexity during the software development cycle, various SDLC model is...</div> <div><a href="#">Read more »</a></div>	<div></div> <div><b>Load Testing vs Stress Testing vs Performance Testing</b></div> <div>What is Performance testing? Performance testing is a type of testing for determining the speed of...</div> <div><a href="#">Read more »</a></div>	<div></div> <div><b>How to create Test Strategy Document (Sample Template)</b></div> <div>Test Strategy A Test Strategy is a plan for defining an approach to the Software Testing Life...</div> <div><a href="#">Read more »</a></div>
<div></div> <div><b>What is TEST HARNESS? Tools &amp; Examples</b></div> <div>Test Harness in Software Testing Test Harness in Software Testing is a collection of stubs, drivers...</div> <div><a href="#">Read more »</a></div>	<div></div> <div><b>Top 34 Agile Testing Interview Questions &amp; Answers</b></div> <div>Download PDF 1) As a tester what should be your approach when requirements change continuously? When...</div> <div><a href="#">Read more »</a></div>	<div></div> <div><b>What is RAD Model? Phases, Advantages and Disadvantages</b></div> <div>What is RAD Model? RAD Model or Rapid Application Development model is a software development process...</div> <div><a href="#">Read more »</a></div>

## Top Tutorials



### About

[About Us](#)  
[Advertise with Us](#)  
[Write For Us](#)  
[Contact Us](#)

### Career Suggestion

[SAP Career Suggestion Tool](#)  
[Software Testing as a Career](#)

### Interesting

[eBook](#)  
[Blog](#)  
[Quiz](#)  
[SAP eBook](#)

### Execute online

[Execute Java Online](#)  
[Execute Javascript](#)  
[Execute HTML](#)  
[Execute Python](#)



Selenium



Testing



Hacking



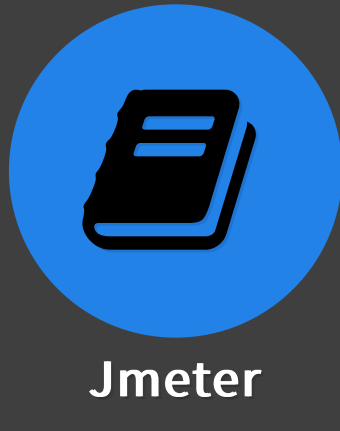
SAP



Java



Python



Jmeter



Informatica

