# Introduction to JMeter and Taurus

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## Overview

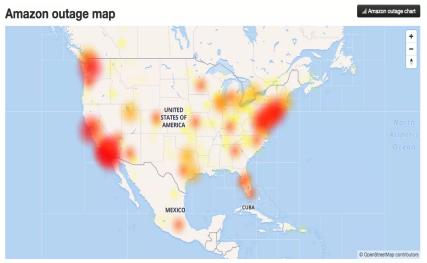
- Why Performance Engineering?
- Holiday Readiness and Holiday Outages
- Load Testing and Performance Engineering
- JMeter and Taurus
- Demo
- Questions

## Why Performance Engineering?

To ensure that your application/product is:

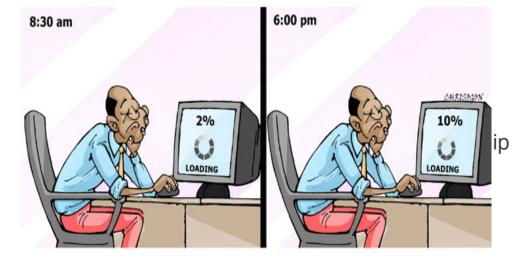
- Scalable The ability of a computer application or product to continue to function well when it is changed in size or volume in order to meet a user need.
- Reliable The ability of a system or component to function under stated conditions for a specified period of time.
- Meets Service Level Agreements(SLAs) for Response Time,
  Throughput and Utilization.

## Holiday Readiness and Outages



Amazon is an online store which sells both physical as well as digital goods. Amazon also develops the Kindle, which is available as an e-book reader as well as a tablet computer. Amazon Web Services is a provider of cloud computing services.





#### Holiday Readiness and Outages





#### temporary shopping jam!

Sorry, shoppers! We're currently experiencing heavier traffic than normal. To make sure everyone gets the best shopping experience possible, we're asking new shoppers to wait approximately  ${f 10}$  seconds, and then we'll refresh your browser and welcome you in.

Thanks for your patience!

If you'd like to order by phone or to speak with one of our Customer Service representatives, please call 1-800-BUY-MACYS (1-800-289-6229).

find a store near you

### What is Performance Engineering?

- Techniques applied during a systems development life cycle to ensure the non-functional requirements for performance like
  - Throughput,
  - Latency, or
  - Resource Utilization

#### Some Facts Around Response Times

- 47% of consumers expect a web page to load in 2 seconds or less.
- 40% of people abandon a website that takes more than 3 seconds to load.
- A 1 second delay in page response can result in a 7% reduction in conversions.
- If an e-commerce site is making \$100,000 per day, a 1 second page delay could potentially cost you \$2.5 million in lost sales every year.

## Load Testing and Performance Engineering

- 1. Understand the traffic patterns.
- 2. Design the workload.
- 3. Write load test scripts.
- 4. Run the load tests.
- 5. Monitor and Analyze.
- Optimize.
- 7. Repeat 3 through 6!

To complete this cycle, knowledge of at least one load testing tool is necessary.

### Load Testing/Performance Testing Tools

Tools that can simulate a heavy load on a server, group of servers, network or object to test its strength or to analyze overall performance under different load types.

#### **Popular Load Testing Tools**

- JMeter
- Blazemeter
- NeoLoad
- LoadRunner
- Gatling
- WebLoad

#### **JMeter and Taurus**

- Load Testing tool that supports dynamic and static web testing.
- Ability to load and performance test many different protocol types:
  - Web HTTP, HTTPS
  - SOAP / REST Webservices
  - FTP
  - Database via JDBC
  - LDAP
  - Mail SMTP(S), POP3(S) and IMAP(S)

#### **Taurus**

- Automation friendly framework to run JMeter tests more efficiently.
- Supports tools like:
  - JMeter
  - Gatling
  - Locust
  - Selenium
  - And many more.

# Demo

#### **Session Details**

#### **5 Weeks Series**

Starting from July 22nd every wednesday and Thursday

Time: 8am - 9am PST

# Questions?