

Load Testing with CloudTest

CloudTest Background

- Load testing tool developed by SOASTA starting in 2006
- Built to address shortcomings of existing tools at the time
 - Scalable architecture
 - Scalable analytics
 - Scalable load servers
 - Reuse of test assets
- Acquired by Akamai in 2017

Key features

- Visual paradigm using Ajax-based user interface
- Supported on major browsers
- Distributed web services architecture
- On demand provisioning of load servers in the cloud
- Real time analytics at scale
- Fast test creation
- Fast test turnaround
- Direct to database
- Test web and mobile app traffic simultaneously
- Network bandwidth simulation

Types of Testing

- Load Testing (also known as Performance Testing) is the use of a coordinated community of virtual users to place "load" on servers or services simulating some future workload for evaluation.
- Stress testing overloads systems until they break, deliberately inducing failures so developers and operations can analyze the risk involved at the breaking points. Provides the insights necessary to design applications to break "more gracefully".
- Duration testing is basically a long running load test with a typical duration of 24hours.
- Spike or Flash Sale testing involves ramping up to an expected load level with very little or no ramp delay

---- Who's using it

Everyone, including:

- Financial institutions
- Universities
- Government institutions
- Media verticals
- TV networks
- Sports leagues
- Mobile phone providers and retailers
- Retail stores
- Gaming industry

Where and why are they using it

- On premises behind the firewall
 - QA and test environments
 - Automated load testing of internal builds
 - Ability to deploy and use internal load generators
- In the cloud in front of the firewall
 - Testing live production sites at scale
 - Testing against origins
 - Testing against CDN's

Tests that we've performed

- Olympics
- Super Bowl
- World Cup
- Mars Rover Landing
- Streaming of new media content from TV networks
- Large ecommerce site running 1 million transactions / second and 8000 orders / minute
- 1.5 Tb/s of traffic using domestic cloud providers for media vertical

Demo

- Overview of CloudTest UI
- Live load test of <u>www.soastastore.com</u> site

Questions and more info

- Documentation <u>https://learn.akamai.com/en-us/products/web_performance/cloudtest.html</u>
- Community - <u>https://community.akamai.com/customers/s/topic/0TO0f00000dufSGA</u> <u>Q/cloudtest?language=en_US</u>
- Feel free to contact me if you have need help or have questions <u>bkirkpat@akamai.com</u>