

10^N

10n Magento 1 & 2 Load Testing

Get *data-driven confidence* in the scalability and performance of your Magento website.

Summary of Service

Get data-driven confidence in the performance and scalability of your Magento website. There are many Magento agencies who know Magento very well. You may be working with one, or may even be one. There are also many different companies that know how to execute well-designed load tests. You may have worked with some. But what many Magento merchants and agencies truly want from a load test is a cost-effective, third party, independent examination of their system from people who know both load testing and Magento. The 10n Load Testing service provides both.

10n Load Testing is designed by Kevin Schroeder who has almost 20 years of industry experience as a developer, system administrator and consultant. This includes 5 years with Zend Technologies Professional Services, a further 3.5 years with the Magento Expert Consulting Group and MagentoU, where he literally built the course on load testing Magento, and is the author of three books on writing PHP applications. The tooling designed for this service is the result of direct experience load testing high-end Magento installations on some of the world's most recognizable brands.

Technology

The 10n Load Testing service is built upon a custom implementation of JMeter and server-side scripts. These tools stream data directly into the load analysis tooling in such a way that we can slice the data any way we need in order to get the best picture of what is actually happening on your system

As part of the load testing practice we watch all pertinent system counters, and Magento log files and report directories and stream that data into our tooling at resolutions down to the millisecond.

Our Approach

Both the Pro and the Basic packages have the same essential approach. Many load testing services simply put load on an infrastructure to test *that* a site can handle a certain amount of load. The 10n Magento Load Testing is designed to test *Magento* websites. We do not presume that past activity will be replicated in future events and so our tests are designed to highlight endpoints and activities where Magento typically has difficulty under load.

We do via our standard approach

1. Conduct a hybrid manual/automated code review of your codebase to discover immediate performance and security concerns

2. Examine any existing instrumentation data to find potential weaknesses and correlate those with source code
3. Build the load test (some activities not included in the Basic package)
 - a. Static test elements, such as a given CMS, product, or category pages
 - b. Dynamic test elements simulating random user traffic through the site
 - c. Including any page elements necessary to generate load on infrastructure servers (CDN services are generally not tested)
4. Evaluate Load Test Data
 - a. Measured response times
 - b. Infrastructure instrumentation counters
 - c. MySQL performance counters
5. Develop a comprehensive report of not only what happened, but why; correlating any documentable issues with the origin in the source code or infrastructure

Package Options

10n Software provides two load testing packages aimed at two types needs. Both packages are priced and designed for quick and actionable information at a price point that is within the realm of almost anyone using Magento professionally.

All load testing packages can be delivered in a white-label format for customers who wish include it as part of their own branding. This is useful for agencies who wish to re-brand the 10n Load Testing service for their own clients. The deliverable for each package is a report that gives you data-driven insights and actionable recommendations.

Packages can be purchased in bulk at a discount.

Basic Package

The Basic package provides a completely custom load test that covers most standard pages, add to cart operations as well as the guest checkout with a concurrency of up to 100 threads, or about 500 simulated users on the site. The load test analysis provides both a technical and management level description of what the test did and any conclusions that can be derived from the gathered data.

The Basic package also includes server level monitoring for up to two servers. This monitoring is executed on a per-second resolution with raw data streamed back to 10n servers for detailed analysis after the load test. Practically every aspect of the load test, internal and external, is recorded for later analysis.

Generally speaking, the Basic package is beneficial for low-scale Magento companies who will have a maximum checkout concurrency of about 2-5 simultaneous customers.

Pro Package

If you need higher levels of concurrency, more advanced load tests, or greater analysis detail, the Pro package is a great option. It has several features in addition to those that are part of the Basic package. It includes multiple product add-to-cart operations, either for multiple product pages or multiple products added to the cart, pagination, and increased page randomization. These features address the positive skew that many load tests exhibit. These features, in turn, provides a more realistic simulation that yields more accurate data.

On top of the additional test complexity the Pro package also provides a much deeper introspection into your environment. Up to ten servers can be monitored with the same one-second resolution time, plus the additional option of using the Magium Performance Monitor (MPM). The MPM is a Magento module that must be deployed to your test environment that uses the Magento event system to capture timings in between important events. The MPM is also integrated with our custom version of JMeter that allows us to track and match individual request to individual captures.

The Pro package is beneficial for any size of Magento company that wants additional detail, deeper insights, or higher levels of test concurrency.

	Basic	Pro
Testing		
Home, Category, Product Pages	✓	✓
Add To Cart (Single Product)	✓	✓
Add To Cart (Multi or Random)		✓
Search	✓	✓
Category/Search Pagination		✓
Guest Checkout	✓	✓
Customer Registration		✓
Customer Checkout		✓
Load Test Execution	1 Test Run	2 Test Runs
Concurrency > 100 threads		✓
Analysis		
Load Test Analysis	✓	✓
Load Test Log Analysis		✓
Basic Static Security Scan	✓	✓
Basic Source Code Security Scan		✓
2 frontend, 1 database monitored	✓	
up to 10 frontend, 2 database monitored		✓
New Relic Analysis *	✓	✓
Magium Load Test Monitor Analysis **		✓
Extended Test and Source Code Analysis		✓
White label option	✓	✓
Full Report	✓	✓

* Requires a New Relic Pro account

** Requires Magium Monitor installed prior to load test

*** Tiered pricing available

Custom service quotes available on request.