

SV-Load

Comprehensive Load and Stress Testing

When you are expecting a large number of visitors to your website during a sale, a marketing campaign or a seasonal peak you need to be sure that your website will support the increase in traffic. If you are implementing a major web development, a new application, online service or infrastructure change you need to have confidence that it will deliver the best experience to all users, whatever the reason for visiting, at the busiest times.

As a business grows so do the demands on the company website and its underlying infrastructure. These additional loads can impact on performance, and negatively impact customer online experience. Load testing is essential to ensure that

Dynamic User Journeys - key routes that visitors take across a website - can manage high volumes of traffic and concurrent users performing transactions, at the most critical times.

SciVisum's User Journey Load testing is performed from the user's perspective simulating an increasing number of concurrent users carrying out multi-page transactions.

Our bespoke load testing measures the impact of increasing loads on timings and error rates at every step of a journey and also identifies failure criteria, measures recovery after failure and predicts when upgrades will be necessary.



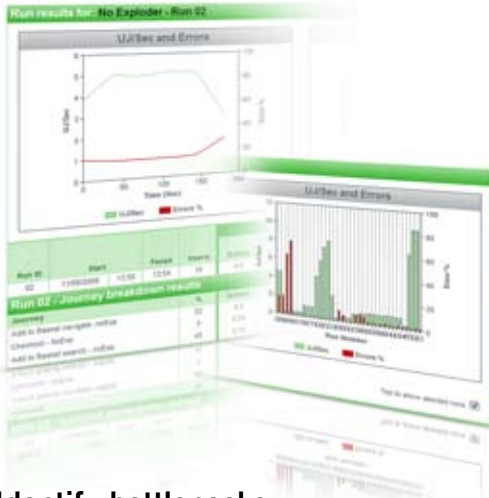
48% of online adults will share their negative online experience with friends and family to discourage them from using that website or company.

Pushing website performance to the limit ...

Greater accuracy through real world conditions

SV-Load tests your website by performing tasks as real users would - rather than simply hitting isolated pages. We provide a number of test variations to replicate real world conditions including:-

- Modelling 'drop off ratios' (the ratio of users that drop out during a journey) rather than testing loads where 100% of users starting a Journey follow it through to the end.
- Testing a mixture of Dynamic User Journeys in line with expected load ratios such as 20% checkouts, 30% add to baskets, 40% product searches and so on.
- Checking that page content is as expected and that the link required to move to the next step in the Journey is functioning - rather than simply checking page headers.



Identify bottlenecks & root causes

A complex test sequence helps uncover route causes that are otherwise difficult to find. For example high simultaneity runs simulate many virtual users following a journey and then stopping before hitting a defined page concurrently. These tests identify a range of race conditions - software coding problems that cause a percent of users to see error pages, but don't typically show in UAT testing.

Reality Based Metrics

The flexibility and multi functionality of sites can make load testing more challenging for organisations determined to ensure that all different types of users and usage patterns have been understood and optimised.

Session lengths, the weight of pages and the speed of processes involved and load for these various kinds of journeys and the systems they run on will most likely differ greatly. In addition to that the proportion of the journey types will likely change at different times of the day or periods of the year.

For an effective load tests it is important to cover not only a mixture of different journeys, but to weight the number of each type of journey within the test by the proportional breakdown of those journeys in different time periods, reflecting the ways the site must be able to handle different kinds of traffic peaks.

Quickly resolve problems with expert advice

Our engineers deliver more than a set of numbers, they spend time understanding your needs and requirements beforehand and provide bespoke insights into root causes, adjusting the test plan as needed during testing, and ensure that your tech team will have actionable results. This helps resolve problems quickly and often provides large performance gains for minimal investment, as minor improvements to web application architecture or coding often deliver more substantial gains than expensive hardware upgrades.

Bridge the gap between Business & Technology teams

Companies are usually dismayed and surprised when a marketing campaign does not produce the online results expected – one contributing factor could be that your website is unable to handle the volume of traffic expected. Don't lose sales, ensure that your site is ready for your online marketing campaigns.

User Journey load testing provides hard facts about your website's ability to support traffic and can be easily interpreted by all departments - protecting technical departments from blame when results don't meet expectations.

Testing To The Limits.

The SciVisum Test Suite comprises two complementary services, both of which are used to best effect in tandem with the on-going monitoring provided by the SV-Monitoring suite:

SV-Load Test Portal

SciVisum Load Testing Portal is a benchmark QA service. allowing easy and flexible tests at each software release. Where the SV Load Test service fully tests your live site the Load Test Portal is used primarily on 'staging' or 'dev environments' or for routine 'health checks' on maintained sites.

From the dashboard you can easily navigate the portal and access full graphs, error tables, statistical analyses and performance comparison. The portal facilitates the ability to run tests on demand, easily schedule tests during out of office hours, and re-run tests ad-hoc after making periodic adjustments to the website code.

SV-Load Test Service

SciVisum Load Testing Service gives you access to expert testers with specialist knowledge to spot problems quickly and provide insights into the root causes of problems. SciVisum's Load Testing Service offers guaranteed expansive and complex testing sessions often unobtainable from self-servicing due to departmental time constraints.

Let us do the hard work; our test engineers deliver Load Testing remotely, we write the scripts and perform the tests – no hardware, software or monitoring agents are necessary and no engineering time is lost.

The service includes an individual, clear analytical report, meaningful to all departments of the business team and includes a telephone debrief.

View the 'Which Service?' Summary overleaf...

Keeping It Real

SciVisum's approach to testing is to reflect as close to a real-life scenario as possible.

This is done through building a realistic set of user journeys, often with complex bespoke weighting calculations, that are based on the latest site usage information.

The results possible with such a representative approach are much more precise than those achievable with traditional load testing.



Fully Comprehensive Testing

SV-Load Test Portal

- Provides ease and flexibility need by QA Testers
- Instant Benchmarking
- Ability to re-run tests ad-hoc after making periodic adjustments the website code
- Ideal for staging' or 'dev environment' tests
- Reports and documentation for Project Managers
- Extends the functionality of the full Load Test Service and Site Release Management tool.

SV-Load Test Service

- Utilize SciVisum's high quality hardware and resources
- Obtain SciVisum's specialist knowledge and proficiency for active results
- Access to the experience of expert testers to spot problems quickly
- Guaranteed expansive and complex testing sessions often unobtainable from self-servicing due to departmental time constraints
- An individual, clear analytical report, meaningful to all departments of the business team

If you would like to schedule a free consultation regarding your website performance concerns, learn more about website Load Testing or arrange a free trial of the SV-Load service please contact us on: **+44 (0) 1227 768276**



powered by
Application Synchronicity

Central to SciVisum's testing ethos is Application Synchronicity; the unique application of Dynamic User Journeys to every testing specification. Web users do not interact with your website by accessing a single page, a single server or an isolated function, but by fluidly travelling through the site from page to page – function to function. It is therefore important to understand how an end user experiences your unique combination of code and applications as they complete their journey. SciVisum's advanced testing approach 'Application Synchronicity' provides user-centric real-life metrics delivering invaluable insights into your entire website delivery on which you can base budget allocations effectively to maximise impact, protect brand image and deliver consistent positive end user experiences.

About SciVisum

SciVisum provides technical teams a uniquely in-depth analysis of how their code and systems are performing, and allows the Business and Marketing managers to take control of the ongoing Customer Experience on the portals. SciVisum's success is the result of the combination of its in-house developed test engine, which provides flexible and fast scripting for complex multi-page User Journey web site testing, together with the experience of

expert web testing staff.

The result is a portfolio of web effectiveness test services, centred around Dynamic User Journeys. This approach helps clients focus on reducing lost sales online, by continual improvement of evidence based User Experience metrics.

Many companies have previously bought testing from other suppliers, and appreciate the fact

that SciVisum's unique approach to emulate realistic, random-walk and complex Dynamic User Journeys provides unique depth of testing, at costs and time scales to suit today's tighter project demands.

SciVisum does not build or host web systems, and is thus able to offer fully independent test and audit services and consultancy.