SV-Media Streaming

Performance Flow Monitoring & Analysis

Rich internet applications are an increasingly popular function of websites that not only engage the end user but can create a revenue stream either directly or indirectly; for that reason it is vital that you understand the performance of the RIAs within your site from an end user perspective.

Ensure consistent, positive customer experiences with SV-Streaming Media Monitor.

SV-Media Streaming Monitor provides clarity over your website presentation and is essential in increasing performance quality to provide the best experience for your end users. Our objective monitoring service helps to reduce response times and ensure your rich internet applications such as flash elements, images, Java Script features and streaming media are performing.

Poor functionality can negatively affect user experience and revenue; it is therefore essential to use a reputable monitoring service such as SV-Media Streaming Monitor which can provide flexible alerts, instantly informing your business of delivery errors and actionable solutions before your customers find them.

Quality Metrics...

SciVisum provide relevant metrics to analyze stream quality and manages the information into a consolidated easy to read waterfall graph. From an end-user perspective, a successful streaming experience is indicated most closely by the time profile. How long did the user have to wait before the stream began? Many studies have shown how quickly an audience member will give up on content if forced to wait too long. How often was the stream interrupted? Most users will agree that interruptions during playback for re-buffering are a major cause of frustration.

SciVisum Streaming Media Monitoing measures relevant time profiles such as:

Connect Time
Connect time measures the amount of time elapsed between the initial request for data by the media player and the start of buffering. This time includes Domain Name System (DNS) lookup and resolution, metafile actions and resolution, server/player "handshakes," and the transport of the first byte of data to the player.

Buffer Time
Buffer time measures the amount of time used to build up the initial buffer of data for the stream. The time required for initial buffering is determined by the bit rate of the stream, the bandwidth available between server and client, the consistency of that bandwidth, and settings on the server and client.
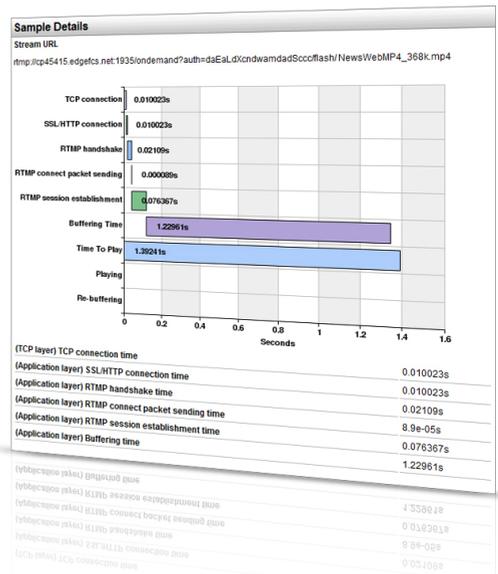
Rebuffer Events/Time
A rebuffer event is when playback is halted to rebuild the buffer. Rebuffering occurs when there is a decrease in the incoming bit rate of the stream. Therefore, rebuffering is an indication of an inconsistent connection.

Rebuffer time equals the total amount of time spent during all rebuffer events. This time represents interruptions of the viewing/ listening experience. With a properly configured serving system, rebuffer time should be zero.

Why Test:

- Accurate, end-to-end measurements of streaming quality are needed in order to make educated decisions on stream-hosting solutions, initially and throughout the term of the contract;
- Measurement allows a content owner to know if a service provider is meeting expectations throughout the contract. This is especially important if a Service Level Agreement (SLA) is part of the contract; and
- Real-time notifications should be part of any professional streaming operation. Complaints from customers should not be the first indication that streams are unreachable.

Sample Details

Stream URL
rtmp://cp45415.edgefcs.net:1935/ondemand?auth=daEaLdXcndwamdadSccc/flash/NewsWebMP4_368k.mp4

TCP connection	0.010023s
SSL/HTTP connection	0.010023s
RTMP handshake	0.02109s
RTMP connect packet sending	0.000089s
RTMP session establishment	0.076367s
Buffering Time	1.22961s
Time To Play	1.39241s
Playing	
Re-buffering	

Seconds (0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6)

(TCP layer) TCP connection time	
(Application layer) SSL/HTTP connection time	0.010023s
(Application layer) RTMP handshake time	0.010023s
(Application layer) RTMP connect packet sending time	0.02109s
(Application layer) RTMP session establishment time	8.9e-05s
(Application layer) Buffering time	0.076367s
	1.22961s

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Experts in website
performance testing

Overview

RIAs can enhance a brand image by creating a direct interaction, and an enjoyable experience for the user. Unfortunately, when applications fail or users reach what they believe is an unacceptable level of delivery and quality; they leave your website frustrated, resulting in poor marketing campaign response and heavy financial wastage due to easily avoidable technical problems. SV-Media Streaming remotely and independently monitors your rich internet applications to give you the confidence that your media content is flawless.

Understanding the dynamics and statistics of your RIA will enable you to improve the user experience and encourage increased visits and revenue.

View:
- Download time
- Buffer rate
- Play time
- Errors and causes
- Overall experiences
- Comprehensive collective set of data to enhance the performance
- Review and analyse performance data
- Receive alerts on preset criteria and errors

Service Features

- Support for both progressive download and true streaming formats for both Windows Media Player™ and Adobe® Flash® Player™ (additional streaming or download formats, including audio formats, may be supported depending on format type and encoding method)
- Instant email/SMS alerts when there are streaming problems (slow buffer times, connection timeouts, or poor quality relative to configurable thresholds)
- Intuitive control panel interface allows for easy administration, problem diagnosis, and more detailed views
- Performance reporting graphs allow quick and easy analysis of "stream quality" and historical trends; reporting graph types include Errors by Type, Throughput, and Frame Rate
- Support for Windows Media, Progressive Flash, streaming Flash, .F4V file formats and H.264 codec
- Support for HTTP, RTMPS, RTMPE transport protocols
- Testing across multiple geographies to measure streaming performance
- Detailed waterfall view of component times for individual test runs
- Monitor Flex and Streaming Flash video and audio content

Service Benefits

- Know exactly when your streaming media or rich internet applications are under performing.
- Ensure positive brand image through seamless experiences of media content.
- Receive an objective, third party evaluation from outside your firewall for real-world results.
- Use dynamic user journey testing to mimic real end user interaction in support of real-time user experience data.
- Benefit from critical risk reduction – protecting revenue loss through instant actionable reports with detailed error cause information.
- Choose from our fine grained alerting for non-intrusive, quick error response.
- Make sure only the individuals responsible for the specific error type are alerted. Fully adjustable alerting system, choose who is alerted by day, by out-of-office hours, and by error type. Choose between SMS, email alerting, or alerting combinations.

Don't let your competitors outshine you in the streaming arena; know your performance is up to the standard you believe your clients deserve.

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If you would like to schedule a free consultation regarding your web site performance concerns, learn more about Streaming Media Monitoring or arrange a free trial, please contact us on: **+44 (0) 1227 768276**

User Journeys

Understand your customer experience by monitoring from your customer's point of view.

Not only is the 'User Journey' a more effective approach, it has the added benefit of providing universal metrics which can be understood by all teams involved with your web site across the business from marketing to IT to the board.

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 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 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.

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