

# Struq | Customer Story



When Struq, a global ad personalization platform, needed to upgrade its infrastructure to meet variable traffic demands, it turned to SoftLayer's high-performance cloud infrastructure.

Founded in 2008 by CEO Sam Barnett, Struq is a leading ad personalization platform that enables e-commerce businesses to increase their sales through highly targeted and personalized retargeting and prospecting ad campaigns across display, video and social media channels. Struq's proprietary technology enables brands to create, control, optimize and measure truly personalized ad campaigns at every stage of the sales funnel. The London headquartered company's clients include Nike, Easyjet, Play.com, Topshop, Debenhams, Virgin Mobile, Hertz and many more.

## Making Split Second Decisions

A complex technical operation happens instantaneously whenever an advertisement is displayed on a Web page. When a Web site visitor clicks a link to load a page, advertising networks such as Google Ad Network, AppNexus or Rubicon auction the advertising space on that page to the highest bidder. This means that in the time it takes the page to load, the auction concludes and the winning bidder's advertisement is selected and served to the site visitor.

Struq adds a higher level of strategy and effectiveness to this process. Struq tracks an individual's behavior on a website, such as what content they have looked at or orders they might have placed. It then uses this data to inform the advertising auction, helping advertisers target (and pay an optimized price for) specific visitors and serve an ad they will mostly likely click. Struq can even use the data to let sites serve specific content to selected guests. All in the blink of an eye.

## The Need for Low Latency

Since ad purchasing and display activity takes place as a Web page loads, Struq's systems must operate at high speed and high volume. According to Aaron McKee, chief technology officer, "We need to

make sure that 98 percent of requests are processed within 100 milliseconds. We have over two terabytes of raw event data coming in every day. Our probability engines analyze tens of thousands of features for every online transaction — for example: the time of day, whether the individual was using an iPad and what the weather was like — to find the optimal advert for every person. In practice, Struq has been able to process over 95 percent of requests in fewer than 30 milliseconds."

A company built and based on high speed technology, Struq needs to ensure that the hardware it uses can support large and variable volumes of transactional data. It requires flexible scalability because, although it can predict the volume of traffic for a given campaign quite accurately, it may acquire a new customer or launch a new campaign instantaneously. Struq, therefore, needs the ability to provision new infrastructure as quickly as possible.

## Moving to Europe

Struq was introduced to SoftLayer through Struq's participation in Microsoft® BizSpark®. SoftLayer deployed infrastructure for Struq in SoftLayer's Washington D.C. facility. For the next 18 months Struq continued to operate out of



## Industry

Digital Advertising

## Business Driver

The need to provision new infrastructure as quickly as possible based on demand

## Why SoftLayer

SoftLayer provides the robust, flexible platform required by Struq to support real-time processing of high-volumes of transactional data. The ability to provision physical servers in hours and virtual instances in minutes lets Struq easily handle seasonal changes in demand and scale cost-effectively to meet the performance requirements demanded by instantaneous, complex operations.

that data center until customer demand necessitated a European presence to ensure maximum performance.

At that time SoftLayer did not have a presence in Europe, so Struq engaged an alternate provider to provide a co-location facility. However, this company could only provision new physical servers in ten days, severely limiting Struq's ability to meet customer demand. McKee comments, "The ten-day window was killing our business and we knew we needed to do something about it."

Fortunately, SoftLayer was on the verge of opening a facility in Amsterdam and Struq was soon able to migrate its European IT infrastructure to this new location. SoftLayer was able to offer Struq on-demand provisioning as well as the low latency required

by customers. McKee comments, "We're able to get bare metal devices up in under two hours, ordering these directly through SoftLayer's Web portal."

### Using Virtual Servers

Struq uses a combination of bare metal servers and virtual compute instances, along with SoftLayer's unique Flex Images technology to migrate seamlessly between server type. Flex Images allow users to capture, replicate and store an image of a cloud or dedicated server and deploy it on either type of system. This extends capabilities traditionally associated with virtual infrastructure to physical servers, including the ability to quickly clone and reload servers, along with cross-platform compatibility and simple migration between physical and virtual environments. McKee continues,

"Flex Images have been a massive time saver. We love being able to effortlessly scale and manage our infrastructure. This really sets SoftLayer apart from the competition because traditional cloud systems just don't have this type of flexibility and performance. The feature has cut down new server deployment by several hours per server which has made recent expansion bursts at Struq much easier."

### Moving Forward

Today Struq has more than 100 servers provisioned by SoftLayer, and this number is growing daily as Struq expands into the U.S. and looks for future expansion into emerging Asian and South American markets. The ad personalization experts will be taking advantage of SoftLayer data centers in these regions to support its growing business.