splunk>

CASE STUDY

Karavel Enhances Customer Experience With Real-Time Error Identification

Executive summary

Founded in 2001, Karavel is the number one online package holiday provider in France, operating a total of 15 online travel brands. Karavel prides itself on delivering high quality services to its customers and its web presence is critical to this. The company needed a solution that would allow it to gain detailed visibility into its IT infrastructure. Since deploying Splunk Enterprise, Karavel has seen benefits including:

- Increased quality of e-booking services
- Real-time identification of e-booking misconfigurations and errors
- Enhanced SEO

Why Splunk

Karavel runs 15 online travel brands including Promovacances (flagship website), ABCroisière (cruise holidays), Partir Pas Cher (inexpensive holidays), Un Monde à Deux (top-of-the-range holidays) and ClubPrivéVacances (exclusive holiday deals). The company was experiencing challenges due to a lack of visibility into its highly distributed IT infrastructure. Its existing monitoring tools were unable to provide the accuracy of insight needed. For example, Karavel lacked visibility into how many of its users were receiving a service that was under an SLA, nor could it proactively identify when the SLA was about to be breached.

This lack of visibility also impacted the e-booking process as Karavel couldn't detect certain issues—for example, if there was a misconfiguration between the details of a product created by the operator, imported into the Karavel e-commerce platform and then offered to customers. Some errors resulted in the customer being unable to buy the product at checkout, which could lead to 'abandoned shopping carts' and lost revenue.

As a result, Karavel selected Splunk Enterprise to ensure the quality of its e-booking services and better understand and improve web page response times to support internal SLAs. Splunk software is now used by both the technical and business teams at Karavel to improve the service its different sub-brands offer customers.

Industry

- Travel and transportation

Splunk Use Cases

- Application delivery
- Business analytics

Challenges

- Lack of detailed visibility into IT infrastructure
- Inability to identify problems within the e-booking process
- Unable to determine whether internal website SLAs are being met

Business Impact

- Better customer experience with an 82 percent improvement in web page response times
- Enhanced SEO by identifying, and fixing or removing, 'not found' links
- Real-time identification of e-booking misconfigurations prevents revenue loss
- Proactive relationship with operators to rectify errors leads to improved customer satisfaction

Data Sources

- Varnish reverse proxy URL logs
- Application logs from Tomcat

Splunk Products

- Splunk Enterprise

Greater insight into website SLAs improves response time by 82 percent

The Karavel technical team monitors the e-booking process in real time and has alerts set up if an abnormally high number of errors occur. On average, Karavel releases a website update every week, so it's important to know whether there is any impact on response times. Karavel built a Splunk dashboard to display webpage response times to function as a weekly performance report, which allows the company to understand what 'normal' looks like, so any regression can be identified. Insight from this approach has empowered Karavel to increase the amount of data that can be cached so that bots are able to crawl a lot more pages, resulting in the hit ratio of the Varnish cache server jumping from 40 percent to 92 percent and the load time for pages that display product information decreasing by 82 percent.

Proactive real-time error mitigation prevents lost revenue

Booking holidays on Karavel websites is done in real time; once someone hits the 'buy' button, it automatically books the trip with the operator. This reduces the risk of someone buying something that is no longer available. However, sometimes there is a mismatch between what has been imported from the operator and what's displayed to the customer. It's important to detect these mismatches proactively because if an issue prevents the booking going through in real time, the price from the operator might change and Karavel could end up with negative revenue. Splunk Enterprise helps Karavel proactively identify and resolve this issue.

Additionally, Karavel's holiday booking team accesses an error report from Splunk Enterprise on a weekly basis to check if any human errors have occurred on the tour operators' side—for example, if flight or hotel information in the same package is misconfigured for two different locations. The holiday booking team can then take this information back to the operators and proactively get them to fix the error.

"We now offer a better experience across our portfolio of travel websites, with improved web page response times and immediate identification of potentially costly misconfigurations."

Technical Architect
Karavel

Increased understanding of website performance and SEO

By indexing and analyzing its reverse proxy log files, Karavel can identify the top URLs that are 'not found' (404 http code) or in error (500 http code) and could damage Karavel's SEO. A strong SEO is particularly important for online travel because people are likely to search for a destination or a deal and then make their purchasing decision. As a result of using Splunk Enterprise to gain detailed Operational Intelligence into its online infrastructure, Karavel has gained a newfound deep understanding of site performance, enabling it to improve the quality of service it provides its customers across its portfolio of travel websites.