

Webshop Monitoring from the Customer's Perspective

A web shop is a highly business-critical application. A digital sales desk must be reliably online and perform brilliantly, because competition on the internet is only a mouse click away. Germany's leading online supplier of office equipment relies on 24/7 web shop monitoring from the customer's perspective to ensure it keeps its promise of delivering to customers in 24 hours.

Business-critical: The E-Commerce Environment

Being a highly business-critical application, as well as the direct interface to the end customer, the web shop must be reliably available. Problems with online purchases, such as slow page loads and error messages while researching products, shouldn't ever be experienced by visitors to a web shop.



No go: Customer is ready...

... the webshop is not.

In fact, the web shop operator needs to identify and fix bottlenecks and faults quickly enough to avoid them causing potential customers to switch to the competition. The IT managers at Printus GmbH decided to minimize the risk by introducing monitoring of the company's e-commerce environment. The first solution used for shop monitoring was based on Perl scripts developed inhouse. "Unsatisfactory," recalls the manager responsible for monitoring at Printus GmbH. "Developing those scripts demanded time-sapping, specialist programming work – every change on the website meant an enormous effort to adapt the scripts."

"Even though 99% of our items are available from stock, the only way that they can get to the customer asap is if the IT operation is stable and performs well."

Printus GmbH | IT Operations + Monitoring

What's more, the measurements relating to the Printus web shop were unstable, reporting on the availability and performance of the website was impossible, and the procedure could not be extended to incorporate additional systems (such as SAP, Citrix, and in-house software) into the monitoring landscape.



Target Requirements for Webshop Monitoring



Monitoring of the current e-commerce environment needed to be done from the user's perspective.



In the medium term, the new solution would need to be extended to include not just the web shop, but also additional businesscritical applications.



The availability of the website and response times for a wide range of user transactions had to be measured in a variety of browsers.



And, above all else, the IT team at Printus GmbH wanted to get away from scripting, so the monitoring process would have to be easy to define and modify.



... and at different locations.

Simple Solution: The Virtual User

"With these as our target requirements, it didn't take long for the Servicetrace software robotic solution to come into our sights." The "virtual user" is based on a synthetic user simulation: The Servicetrace software robot tests and monitors applications by automatically performing a predefined set of typical user actions, such as desktop content identification, mouse clicks, and keyboard input. In this way, it is able to execute complex business processes extending across multiple systems, for example launching a web shop, searching for products, and ordering items.

During workflow execution in regular intervals and 24 hours a day, Servicetrace Robot measures businesscritical availability and response times, such as how long the web shop content takes to load or the time between submitting a search query and displaying the results. This gives an objective picture of the end-user experience.

High running stability, alongside scalability and suitability for unlimited applications, count "among the highlights of the solution", explains the monitoring manager.

The IT team at Printus is completely sold on the simple setup and adaptation of monitoring processes using the fully graphical Workflow Studio, which needs absolutely no programming knowledge and takes very little time to learn: "Something that none of the competition can offer in this form."

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Script-free zone: Setup end to end measurements graphically



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Broad selection: The Workflow Studio Toolbox provides the Action Steps for the Servicetrace Robot.

High flexibility for specialist requirements

Usually, the "virtual user" works directly on the graphical user interface (GUI) of an application using a patented method for image contour recognition.

However, in case of the Printus web shop, the team decided to implement monitoring at the HTML ID level. An HTML ID was defined for each element with statistical IDs in the shop. This solution, implemented using the WebAutomation plugin, was used in response to the needs of the Sitespect software, which was introduced in parallel to the web shop development: "One requirement of Sitespect is daily reorganization of the shop layout, for example. As such, an image-based search would have been infeasible in practice and the stability of the measurements could not have been guaranteed. With shop monitoring at the HTML ID level, these problems were removed."

The project responsibles at Printus were delighted by the creative approach to finding solutions to specialist requirements: "We were constantly in contact with expert advisors at Servicetrace during every phase of the project – whether it was while gathering requirements, defining the general schedule, implementing the workflows, testing and adapting the automated processes, final acceptance, or configuring alerts." Even after the project was completed, the speed and quality of responses by the Darmstadtbased software house to support calls was exemplary.

High Performance – satisfied Customers

"Ultimately, what it means is that we can keep our promise of ,Ordered by 5 p.m. today, delivered tomorrow", explains the head of Printus GmbH's data center. "Even though 99% of our items are available from stock, the only way that they can get to the customer ASAP is if the IT operation is stable and performs well."

Using Servicetrace software robots for continuous shop monitoring at five-minute intervals makes a significant contribution to the stable and reliable performance of the web shop – and that includes satisfied customers. In short: Servicetrace Robots support the specialist dealer in remaining Germany's number 1 for commercial office supplies.