



KiK: E-Commerce with Superior Security, Availability, and Performance

Executive Summary

With annual sales of around 2.1 billion euros, more than 26,000 employees and over 3,800 stores in eleven European countries, KiK is Germany's largest textile discounter. Since 2013, the company, which is part of the Tengelmann Group, has also operated its own online stores, which have become even more important during the coronavirus pandemic. During the lockdown, e-commerce took over the tasks of bricks-and-mortar retail. If you want to compete successfully against Amazon, eBay and the like in this highly competitive market, you have to ensure that your own services are available at all times and operate at a high level of performance.

This is why KiK opted for the security and performance solutions from Myra Security. The Munich-based security-as-a-service provider has many years of experience in securing and accelerating the delivery of e-commerce platforms. Myra's protection technologies and global content delivery network (CDN) harmonize perfectly with the requirements of online retail: maximum security, availability, and scalability with maximum performance.

Starting Point and Goals

Cyber incidents cause damage in the billions in e-commerce every year. And the number and complexity of digital attacks is constantly increasing. Disruptions to online stores caused by overloads, attacks or malicious traffic can lead to losses in the millions within just a few hours. In the event of an outage, sales are lost from the very first second.

Due to the increased threat of cyber incidents in e-commerce, KiK decided to secure its store system with dedicated protection against the threat of outages. Maximum availability and scalability, as well as high-performance content delivery with low latency were also important target criteria. After all, even slightly higher latency times in online retail lead to abandoned purchases and significantly reduce the conversion rate.

KiK first contacted Myra Security in the first quarter of 2021 following a recommendation from a digital agency. The textile discounter's new Head of IT, Thorsten Gralla, was personally committed to working with the Munich-based security-as-a-service provider: "I had already worked with Myra in my previous position as Head of IT at my previous employer and had nothing but the best experiences." The decision was made very quickly: just two months later, KiK signed a contract with Myra for the use of DDoS protection for web applications (Layer 7), the web application firewall (WAF) and the CDN.

Implementation

As Myra's protection system does not require any additional hardware or software on the customer side, it was quick and easy to implement. There are basically two approaches to choose from for the technical connection: in the first step, either the customer's DNS entry is adapted for Layer 7 protection or the authoritative DNS server is transferred to Myra. The second step involves importing the relevant zones or setting up a CNAME entry, depending on the approach chosen. Finally, the Myra Network Operations Center (NOC) team of experts carries out the configuration and SSL termination to filter the traffic.

The additional protection of the web resources and the store system using WAF was carried out in close coordination with KiK. Together with the IT specialists at the textile discounter, the Myra team of experts defined the optimum firewall rules for its individual web solutions. Myra's 24/7 support also takes care of load balancing configurations, cache rule optimizations, log file adjustments and, of course, the defense against and documentation of attacks.

Summary: Technology Proves Its Worth in Use

Since the start of the contract in the second quarter of 2021, Myra has been securing and accelerating KiK's web resources and store system in particular using DDoS protection for the application layer, Hyperscale WAF and CDN. Myra DDoS Protection protects KiK's online stores fully automatically against DDoS attacks by hiding the infrastructure behind a three-layer filter system that blocks malicious traffic flows and only allows valid requests to pass through.

The Hyperscale WAF also filters, monitors and controls incoming and outgoing HTTP/S traffic to protect KiK's web applications from malicious access, manipulation and sabotage attempts, among other things. The Myra CDN uses RAM caching to ensure fast delivery of all website content even during unforeseen load peaks, thus ensuring low latency, short page load times and stable performance of the store pages – without the need for investment in the IT infrastructure. In addition, the CDN minimizes traffic on the origin servers, which reduces ongoing operating costs.

With the help of Myra's highly certified Security-as-a-Service solutions, KiK has already successfully fended off several DDoS attacks on its web resources.

Thanks to the complete mitigation of malicious traffic, the availability of all store pages and the accelerated delivery of content were ensured at all times despite the attacks, so that KiK was able to continue generating sales. At the same time, the proactive protection prevented any follow-up costs and loss of reputation that would otherwise be associated with attack-related outages and disruptions. The investment therefore paid for itself within a very short time.

"When it comes to protecting our customers, we leave nothing to chance and focus on maximum security, availability, and performance. Myra ensures all of this with outstanding quality and first-class service," concludes IT Manager Thorsten Gralla. Thanks to Myra's scalable protection and performance technology, KiK can continue to offer its customers an all-round secure and convenient shopping experience in the future.

By Working with Myra, KiK Benefits from the Following Advantages:



- High availability thanks to Myra's multi-redundant infrastructure
- Accelerated content delivery with low latency thanks to global CDN – even during peak loads (e.g. on promotional days such as Black Friday)
- Reduce the global load on your own servers by saving bandwidth, computing power and server capacities thanks to automatic filtering of harmful requests (e.g. from bots)
- Low implementation and maintenance costs, as no additional hardware or software is required
- Local 24/7 support from Germany via the Myra-NOC (Network Operations Center) at the headquarters in Munich
- Access to the expertise and industry experience of a highly certified specialist provider
- Certified security in accordance with BSI ISO 27001 based on IT-Grundschutz
- Legally compliant with GDPR

ISO 27001 BSI zertifiziert
auf der Basis von IT-Grundschutz
Zertifikat Nr.: BSI-IGZ-0667-2024



KRITIS
Nachweis gemäß
§ 8a. Abs. 3 BSI G

Certified by the Federal Office for Information Security (BSI) in accordance with ISO 27001 on the basis of IT-Grundschutz | Certified in accordance with Payment Card Industry Data Security Standard (PCI DSS) | Qualified for critical infrastructure in accordance with §3 BSI Act | BSI C5 Type 2 | Certified Trusted Cloud Service | KRITIS operator in accordance with Section 8a (3) BSI Act