

INSTANA  
an IBM Company

# Supplying the world's electronics, without fail

Conrad Electronic monitors global  
multichannel sales

Instana, an IBM company  
5-minute read

The E-Commerce Platform team at Conrad Electronic International GmbH & Co. KG has to maintain 24/7 availability of more than 450,000 items across the company's online, telephone and API sales channels.

To keep their platform cutting edge, and to provide a unique and fast experience for customers, automation is a core part of the team's strategy. The platform is a pure microservices architecture, built on top of Java, deployed using Jenkins and hosted on Google Cloud Platform (GCP).

With millions of product updates and requests that must be processed in real time, Conrad Electronic needs everything operating cohesively to maintain fast



response times and to stay on top of its service-level objectives (SLOs).

“Application performance really matters to us, and most importantly to our B2C and B2B customers,” says Tobias Baumgart, Conrad Electronic’s E-Commerce Platform Director. “They want to get their shopping done quickly, so Conrad Electronic needs to be the fastest and simplest solution available—without errors.”

To support these efforts, Conrad Electronic has begun its journey into implementing Kubernetes container technology. As Baumgart explains, “We want to harmonize our entire infrastructure within a central Kubernetes cluster, where we offer our teams namespaces within a centrally managed cluster. This provides a solid foundation for operations and helps the team streamline processes.”

“Instana’s one of the core tools that manage our operations. All of our metrics, SLOs, and SLIs are defined within Instana and trigger our alerting chain. It’s the backbone of our SRE team and the whole platform operation.”

**Tobias Baumgart**, Director, E-Commerce Platform, Conrad Electronic International GmbH & Co. KG

Conrad Electronic offers global, multichannel sales of more than

450,000

components and devices

It processes

millions

of updates and requests in real time

# Integrated observability in a containerized environment

“When it comes to big workloads and the complexity that Kubernetes presents, which is much more than just deploying on Google Compute Engine instances, we are quite confident that we can overcome this,” says Baumgart. “We have a good approach to performance testing, and with GCP, we have a lot of flexibility for bringing Kubernetes into production.”

Before this, with no dedicated observability solution in place, Conrad Electronic’s approach to monitoring was segmented based on certain components



such as CPU, RAM, or JVM metrics. But after implementing DevOps practices and migrating to a microservices-based architecture, Conrad Electronic realized the need for a fully integrated observability platform that serves as a single source of truth.

“Because our teams and strategies were changing, we needed a solution that brought all the pieces together, creating transparency for a successful digital transformation,” says Baumgart.

When Conrad Electronic migrated from on-premises to GCP, it applied the [Instana® observability](#) solution to gain integrated insights into how the applications and services behaved. From deploying Instana’s agent into Google App Engine to utilizing Google Cloud Functions, instrumenting Instana in Google services provided a comprehensive view of the entire platform.

“We have more transparency, which gives the development teams more responsibility. As we drive the platform with more and more confidence, we are seeing that our systems are working and that the teams are fixing issues that they’re responsible for.”

**Tobias Baumgart**, Director, E-Commerce Platform, Conrad Electronic International GmbH & Co. KG

# Faster incident resolution, greater resilience

To reduce SLO breaches, the E-Commerce Platform team creates custom service-level indicator (SLI) and SLO dashboards that display and analyze the performance of services over time.

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With Instana in place, Conrad Electronic has complete visibility and understanding of its containerized microservices in GCP, reducing the amount of time previously required to monitor, pinpoint, troubleshoot and resolve application performance issues.

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our systems are working and that the teams are fixing issues that they’re responsible for.”

This transparency enabled Conrad Electronic to introduce a post-mortem culture, which helps it overcome production issues, improve team communication and reduce finger-pointing. Overall, the success and productivity of the teams have increased, which has a positive impact on resolving incidents quickly.



### About Conrad Electronic International GmbH & Co. KG

A multichannel retailer of electronics and technology, [Conrad Electronic](#) (external link) provides many of the items that make our day-to-day life easier, more efficient and more comfortable. Continuously developing new product concepts for the world of technology, Conrad Electronic acts as an inspiration to everyone involved in electronics both professionally and privately.

#### Solution component

- Instana®



### About Instana, an IBM Company

Instana, an IBM Company, provides an [Enterprise Observability Platform](#) with [automated application performance monitoring](#) capabilities to businesses operating complex, modern, cloud-native applications no matter where they reside—on premises or in public and private clouds, including mobile devices or IBM Z® mainframe computers.

Control modern hybrid applications with Instana’s AI-powered discovery of deep contextual dependencies inside hybrid applications. Instana also provides visibility into development pipelines to help enable closed-loop DevOps automation.

These capabilities provide actionable feedback needed for clients as they optimize application performance, enable innovation and mitigate risk, helping DevOps increase efficiency and add value to software delivery pipelines while meeting their service and business level objectives.

For more information, visit [instana.com](https://instana.com).