INSTANA
an IBM Company

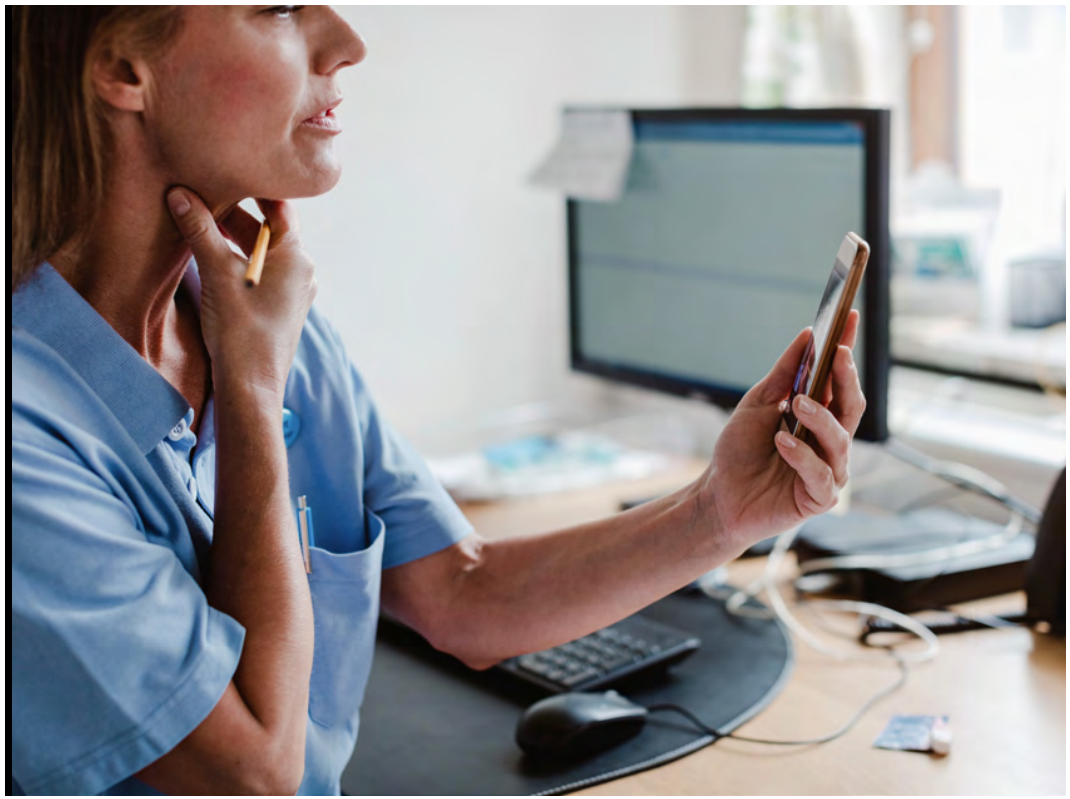
Introducing your digital healthcare assistant

Vivy gives anywhere, anytime access to health information using Instana

Instana, an IBM company

5-minute read

Vivy, a leading German healthcare technology company with experience in health, data security, design and usability, has developed a virtual health assistant. Available for Apple iOS and Android platforms, this security-rich mobile app empowers its users to take charge of their own health, with anywhere, anytime access.



Think of it as your digital health record, giving you access to your personal patient information as well as allowing you to communicate with your doctors and insurance providers.

Being that Vivy is an intermediary between patients and their healthcare providers, it is vital that the application is always available.

To meet this high bar, Vivy runs cloud-native, microservices-based applications. Vivy's virtual health assistant platform runs within an Amazon Web Services Elastic Compute Cloud (EC2) environment running Kafka with Docker containers. Using a cloud infrastructure allows Vivy to operate efficiently with a relatively small team of developers. The environment currently comprises nine EC2 hosts running 14 microservices.

"Instana was fast and easy to deploy, and with zero configuration it was able to discover all of our services and their corresponding dependencies."

Kirill Merkushev, Head of Backend, Vivy

The Vivy app receives

>200

million requests per second

Using Instana, Vivy reduced mean time to repair (MTTR) by

66%

from up to 3 days to 1 day or less

Vivy's success depends upon a seamless experience for its customers. Whether it's slow requests or buggy services, Vivy cannot afford a lag in the time it takes for data to reach its 120,000 users. These lofty expectations are not easily met as the huge volume of data Vivy deals with makes it difficult to identify capacity needs without engaging in time-consuming, manual processes.

As the application continued to gain popularity, receiving more than 200 million requests per second, Vivy's developers realized that some services were running slowly. With frequent changes and deployments, Vivy needed to stabilize and optimize its application services. In July 2019, Vivy turned to Instana®.

"Before Instana, if a bug slipped into production, it could take developers up to three days to find the root cause and permanently fix the issue. With Instana, we're immediately notified with the root cause, and we can resolve the problem in a third of the time or less."

Kirill Merkushev, Head of Backend, Vivy

Automated discovery, end-to-end tracing

Vivy's developers have had past experience with Datadog, New Relic and various open-source tools, so when they needed to find an Application Performance Management (APM) solution that could handle the complexities of monitoring their containerized microservices-based applications, they knew they needed to find something new. Instana became the obvious choice for Vivy as it required zero configuration, automatically discovered all services and traced every request.

"Instana understands the interconnectedness of everything,"

says Kirill Merkushev, Head of Backend at Vivy. With Instana in place, all of Vivy's components and services along with their dependencies are automatically discovered and every request is traced end to end. Vivy was able to eliminate manual processes and now has full visibility into its applications and services with precise information about service dependencies, stack traces per service and request timings of each individual service.

With Vivy's customers' need for always-on, on-demand mobile access, Vivy can't afford for its application or services to be slow or down for any period of time. With Instana's Automatic Root Cause analysis, any time there is a slow service or problematic request, a single incident is raised that includes all of the corresponding events along with the identification of the most likely root cause. Armed with this actionable data, Vivy's engineers are quickly able to assess the situation and resolve issues without hesitation. According to Merkushev, "Before Instana, if a bug slipped into production, it could take developers up to three days to find the root cause and permanently fix the issue. With Instana, we're immediately notified with the root cause, and we can resolve the problem in a third of the time or less."

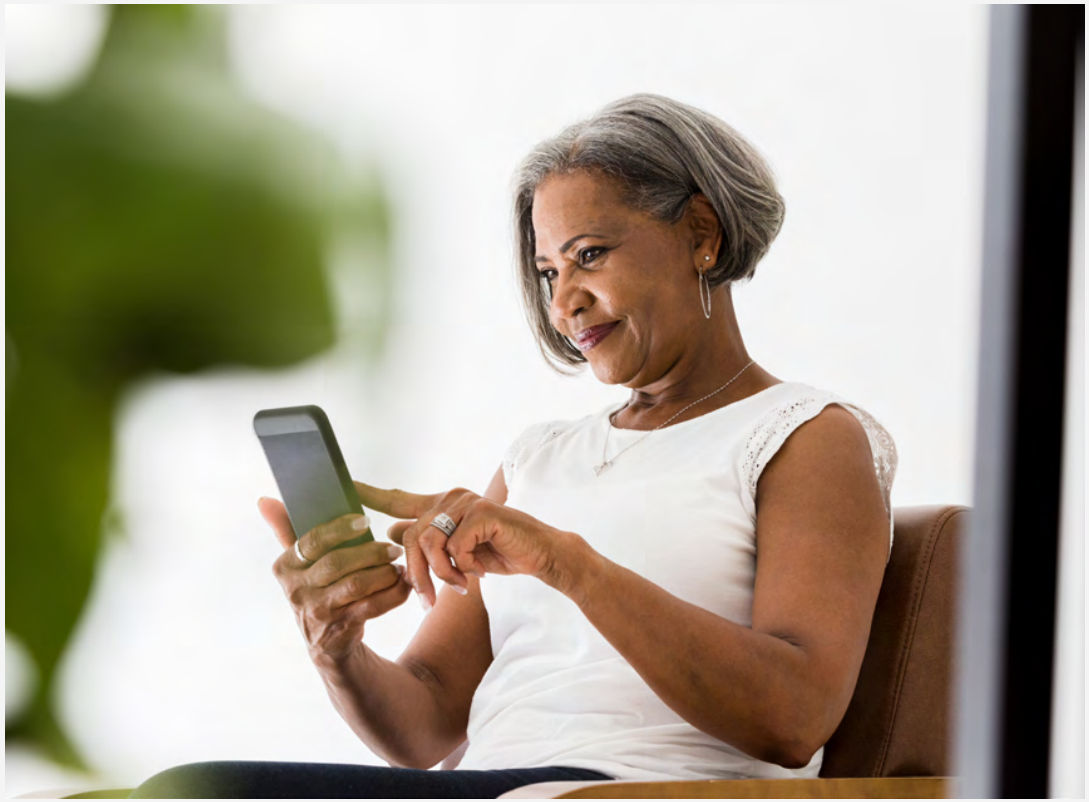
Being that Vivy deals with sensitive healthcare data, it is vital that the company complies with all applicable data privacy laws. Vivy's application handles an assortment of sensitive data, from medical records to financial information. As such, it's Vivy's top priority to protect all data from unauthorized third-party access. By using ultramodern encryption technology and complying with the strictest privacy policies, Vivy helps ensure that only the user has access to his or her data.

In addition, Vivy must ensure it's not sending any sensitive identifiable information to third-party tools. Vivy has been able to seamlessly configure Instana and parse data to help ensure that the company meets all privacy compliance needs, while still getting the value it needs from Instana's automatic monitoring capabilities. Instana has also made it easier for Vivy to know when hackers are trying to access patient data. "Since Instana traces all requests through the Vivy infrastructure," explains Merkushev, "we're able to instantly see when we get a surge in requests. With Instana we're able to quickly decipher if the spike is caused by errors or by hackers."

Satisfied users and peace of mind

Instana is designed to monitor highly dynamic and complex containerized, microservices-based applications. With nearly no time invested, Instana was able to trace all application requests, understand service dependencies, and correlate events so Vivy could take action on degradation of service.

When asked what advice he has for other mobile application developers, Merkushev says: “Don’t build your own tracing or waste your time with open-source tools. Instana gives us peace of mind, and the outcome of using Instana is very satisfied users of our virtual health assistant.”



About Vivy GmbH

Vivy (external link), based in Berlin, is a leading German healthcare technology company with experience in health, data security, design and usability. Through its digital health platform, Vivy aims to help people around the world change their behavior for better health.

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.

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