Instana integration with IBM Z: application tracing and Omegamon

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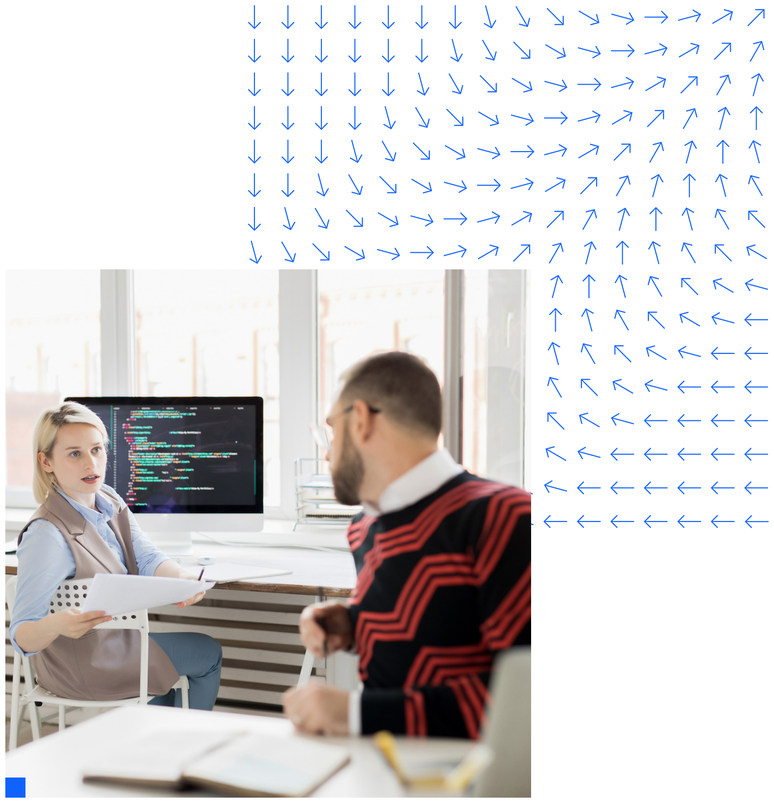


01

The need for observability

As organizations modernize their applications and infrastructure to meet the demands of modern digital business operations and customer expectations, they may realize that their existing tools and processes are costly, time-consuming and have inefficient performance. Delays—even if only for a few seconds—in making requests, searches, or payments can cause frustration and impact customer satisfaction. In worst-case scenarios, system delays may cause reputational damage.

More than ever, organizations depend on *observability* solutions to ensure they can manage applications that use numerous technology stacks. Observability solutions track events, logs, and traces and produce metrics from these sources to build an application performance profile that determines when incidents or issues are prone to happen or are already happening in real time.

When organizations need to maintain critical data on-premises, and deploy fast, customer-facing applications in the public cloud, the reliability, security, and scalability of IBM Z® can be the solution.

IBM Z stands out compared to many of the observability solutions available today, as they either do not offer the necessary tools to track the mainframe or have limited coverage of its functional operation. Without comprehensive monitoring of critical applications, when performance issues affect applications, valuable time is lost to isolate the source of the problem. This reactive approach results in long delays in incident isolation and resolution.

02

Expanding application tracing visibility into IBM Z

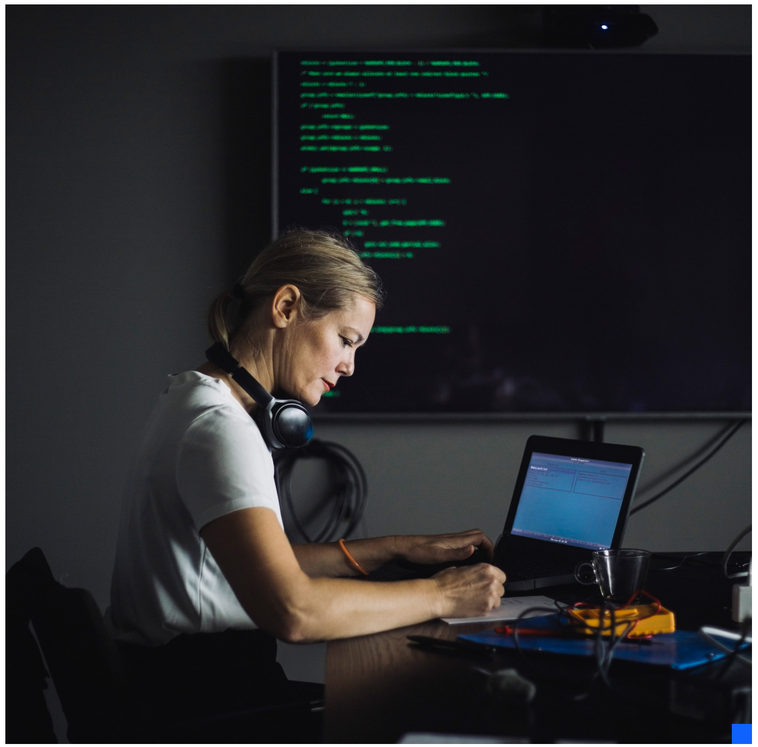
To address the challenge of managing hybrid cloud applications that include the mainframe, IBM® Instana® gives you full, end-to-end tracing capabilities that cover IBM z/OS® and the major operating subsystems in mainframes. Transaction flows extend into z/OS and avoid hidden spots within the application by deploying data collection agents onto the LPAR traces.

For example, CICS or IMS workloads that use z/OS Connect or MQ as a means of being called from applications outside of z/OS can now be automatically stitched to these calling applications without complex instrumentation processes or the need to rewrite applications.

End-to-end monitoring provides insights into the business applications, so there are no hidden spots, and when issues occur, the right subject matter experts are engaged immediately. Incident investigations and “war room” calls are mitigated before a system failure impacts end-users.

03

Integration with IBM Omegamon



For decades, monitoring z/OS-based resources has been a critical task of IT operations teams, which explains the existence of several specialized tools available that provide deep-dive metrics into z/OS and the subsystems such as CICS, IMS, and Db2. The good news is that the integration of Omegamon® into IBM Instana architecture can support IMS, CTG, and MQ on z/OS to provide mainframe subject matter experts with the metrics they need to investigate performance issues, take timely action to correct problems, and verify solutions for incidents.

The need to track and analyze application performance metrics does not change in the era of observability solutions. These tools are complementary to IBM Instana, and by working together, application issues can be detected, isolated, and resolved faster than before. IBM Instana integrates key performance metrics sourced directly from Omegamon agents into the infrastructure perspective within the IBM Instana UI.

End-to-end observability
An example business case might be an application that makes API calls into z/OS via z/OS Connect. When it invokes multiple CICS transactions and updates within DB2 on z/OS, the tracing capabilities provided by IBM Instana enable the end-to-end view of the application flow of these critical services.

As an operator investigates the causes of the delay, it takes only a few seconds to determine that there are longer than expected periods spent within one of the CICS regions. With metric data about this region collected by Omegamon for CICS and fed directly into IBM Instana, IT professionals can link directly to infrastructure metrics within the user interface to see if there are known problems that could help solve the issue. Once the incident is confirmed, a CICS specialist can use Omegamon to address the root cause before it impacts end users.

By integrating IBM Instana with the existing Omegamon agents, we ensure consistency of information between teams and keep processing overheads in check through collection from a single source. If you're new to IBM Instana, sign up for a free 14-day trial.

Your free trial includes using the full capabilities of IBM Instana observability with your cloud-based and mainframe applications.

04

About IBM Instana

IBM Instana provides a real-time, automated enterprise observability platform that includes 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. With IBM Instana, users can control modern hybrid applications with precise metrics, full end-to-end traces for all transactions, and AI-powered contextual dependencies discovery inside hybrid applications.

IBM Instana helps system reliability engineers improve the reliability and resiliency of cloud-native applications by preventing issues from turning into incidents and by providing faster remediation times when incidents occur. IBM Instana also provides visibility into development pipelines to help enable closed-loop DevOps automation with actionable feedback for optimizing application performance, enabling innovation, mitigating risk, and managing cloud technology expenditures.

For more information, visit IBM Instana.

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