

# Mission-critical automation and data value with AIOps

## For AIOps, data context is crucial

Understanding the background and relationships between data points allows for more accurate diagnosis and shorter time to resolution of IT issues.

Data context provides IT teams the information they need to pinpoint root causes quickly and reduce MTTR.

By using AIOps, you move from a reactive to a predictive state with data context to feed your AI operations and resolve issues before they happen.

## What is event-driven automation?

Event-driven automation is a technology approach that allows IT systems and processes to respond automatically to specific events or triggers and provide self-service.

## Business performance is dependent on IT performance

Businesses rely on IT infrastructure to maximize performance, but as organizations grow and increase in complexity, maintaining responsive and resilient IT services for critical workloads is a challenge.

IBM offers an integrated set of modular observability and automation technologies that provide tremendous operational insight across complex IT operations, including IBM Instana for observability and IBM Turbonomic for resource optimization. Through integration with Event-Driven Ansible®, part of Red Hat® Ansible Automation Platform, you can flexibly design the actions you want to take for more responsive and resilient IT applications and services.

## Manage, automate, and continuously optimize your environment

To maintain always-on application performance, you need to identify when and how resources are used, then meet service level agreements (SLAs). You must also accelerate mean time to resolution (MTTR) even with many dependencies and potential failure points.

Event-Driven Ansible helps teams to create automated response scenarios to changing IT conditions. Together with IBM's Instana and Turbonomic solutions, it is possible to continuously and automatically optimize hybrid cloud environments.

IBM Turbonomic is an application resource management solution. It makes sure that applications receive the resources they need for performance while maximizing the efficiency of the underlying infrastructure. Turbonomic uses artificial intelligence (AI) to continuously analyze application demand, and determine what can be changed or optimized. It helps with provisioning so the right resources are available when needed.

Turbonomic continuously monitors and provides actionable insights that can be used to avert issues. Event-Driven Ansible receives an alert from Turbonomic and executes the desired response, providing value for the organization as it continuously maintains service-level objectives without overspending.

By combining Turbonomic with Event-Driven Ansible, organizations can create a resilient, efficient, and automated IT environment. By adding IBM Instana to the solution, observability data can be included in your optimization solutions. This allows teams to scale and proactively manage performance and resource use, while generating greater value from operational intelligence to improve overall service delivery.

## Generate value from observability data and event-driven automation

By integrating Instana and Turbonomic with Event-Driven Ansible, IT teams can achieve an IT service management (ITSM) closed-loop automation to provide comprehensive visibility along with automated response.

IBM Instana is a real-time full-stack AI-powered observability and application performance management (APM) platform. To provide intelligent incident management including real-time change detection, it

**Event-Driven Ansible** helps teams to codify responses using Ansible EDA Rulebooks with Ansible Playbooks, allowing automation to respond in the same way every time.

[Learn more about Event-Driven Ansible](#)

**AI operations (AIOps)** uses AI and machine learning (ML) to analyze vast amounts of data to identify patterns and anomalies that could indicate potential issues. Automation takes this process a step further to initiate action.

#### **Turbonomic**

IBM Turbonomic software uses AI to optimize the performance, cost, and compliance of hybrid cloud and multicloud environments.

#### **Instana**

IBM Instana Observability provides incident prevention using automated full-stack visibility.

#### **IBM AIOps**

IBM AIOps solutions help organizations control cloud spend, assure application performance, gain full-stack observability and better manage incidents.

automatically and continuously discovers and contextualizes conditions in dynamic and complex applications. It empowers application stakeholders with accurate and contextual high-fidelity data, helping them to rapidly detect and resolve issues while recommending intelligent remediation actions.

Teams can capture and act upon real-time data about application performance, infrastructure health, and user experiences. The Instana integration with Event-Driven Ansible then makes it possible to respond to incidents in less time by triggering a desired action via Event-Driven Ansible.

#### **Operate in new ways for efficiency and responsiveness**

With this rich and in-context insight from Instana and Turbonomic, combined with the ability to act using Event-Driven Ansible, teams gain:

- ▶ In-depth insights about resource use, application dependencies, and performance.
- ▶ Implementation of efficient and accurate automation to improve application resilience and optimize resource management.
- ▶ Accelerated MTTR for detected issues.

#### **Event-driven automation for AI operations addresses time, toil, and churn**

Together, IBM and Red Hat help you detect potential issues and resolve them automatically. For example, if an abnormal increase in memory usage is detected, a predetermined workflow can be triggered to reallocate resources or optimize configurations. This proactive approach allows IT teams to focus on strategic initiatives rather than routine troubleshooting.

Certified content collections for Instana and Turbonomic provide prebuilt automation modules and playbooks that simplify the integration of IBM solutions with Event-Driven Ansible. This makes establishing automated response scenarios more efficient.

#### **Bring it all together**

Together, Red Hat and IBM have created a robust automation framework that enhances the agility and responsiveness of IT operations. By integrating these IBM solutions with Event-Driven Ansible and Red Hat's Certified Content Collections such as the ServiceNow collections, organizations can achieve self-service and automated response while unlocking the full potential of observability data, so IT environments can run at peak efficiency.

#### **Learn more**

Read more about the power of [Event-Driven Ansible](#) and see it in action by accessing the [event-driven automation webinar series](#).



#### **About Red Hat**

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. [A trusted adviser to the Fortune 500](#), Red Hat provides [award-winning](#) support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

#### **North America**

1 888 REDHAT1  
www.redhat.com

#### **Europe, Middle East, and Africa**

00800 7334 2835  
europe@redhat.com

#### **Asia Pacific**

+65 6490 4200  
apac@redhat.com

#### **Latin America**

+54 11 4329 7300  
info-latam@redhat.com

f facebook.com/redhatinc  
X twitter.com/RedHat  
in linkedin.com/company/red-hat