

Monitor And Manage Complex IT Infrastructures With AIOps



IT Operations Teams Face A Difficult Balancing Act

Organizations need to monitor, manage, and optimize the end-to-end performance and availability of infrastructure and applications across increasingly complex and hybrid IT environments.

At the same time, they need to support the agility, speed and scalability required by DevOps initiatives, new technologies, lift and shift cloud migrations, and cloud-native applications.

The importance of optimizing performance and availability of the IT environment has never been greater. New digital business initiatives require consumer-grade experience for end users, while 100% uptime is now table stakes.

To choose a monitoring solution that is the right fit, it's important to understand how AIOps can address the challenges that many organizations face.

*“Complex, distributed applications that employ containers, on-prem and cloud resources, orchestration tools, and microservices are more challenging to manage. They generate large volumes of operations data, and when performance problems occur, they issue a cascading series of events, making it difficult for operations professionals to pinpoint the cause.”**

*451 Research, 'Strong adoption of AI & ML monitoring tools is driven by tech leaders', October 2020

Speed, Data Volume, And Complexity: A Challenging Combination

To try to cope with increased data volumes and IT environment complexity, Operations teams often acquire IT monitoring tools in a tactical and fragmented manner, which results in the following consequences:

Disparate tool implementation – Many organizations find they end up overspending on IT tools, which results in higher spend and overlapping capabilities

Insufficient monitoring strategy – Lack of integration between monitoring tools and dashboards across multiple technology domains slows organizations' ability to identify and remediate issues

Significant visibility gaps – With the adoption of DevOps practices, containerized microservices, and cloud strategies, operations teams can no longer manage the scale and complexity of data to understand service performance

Increased event 'noise' – Existing IT Operations tools are unable to identify actual events, which causes real issues to go undetected, resulting in increased MTTR and higher risk of downtime

*“74% of incidents are detected by customers before IT is aware of them.”**

*“Average MTTR per incident is 3 hours and 7 minutes. 72% of that time is spent identifying the root cause of the problem.”**

*“Cloud-native technologies often require users to update their monitoring tools, and the tools that serve cloud-native environments often use AI/ML.”***

*Digital Enterprise Journal, September 2019

**451 Research, 'Strong adoption of AI & ML monitoring tools is driven by tech leaders', October 2020

What Can You Achieve With AIOps?

AI and machine learning offer more than increased operational efficiency. By implementing AIOps into a monitoring strategy, organizations can realize the following benefits as they strive to eliminate visibility and control gaps across their IT environment.

Rapid deployment – Support for cloud-based, containerized architectures and SaaS deployment enables fast time-to-value for any complex IT infrastructure

Reduced MTTR – Leading-edge AIOps and machine learning technologies perform anomaly detection and event management, so Operations teams can proactively detect and analyze events

Increased productivity – Complete visibility into complex infrastructures provide deep insights and analysis capabilities so Cloud and Operations teams are able to quickly pinpoint and prevent issues

Enhanced business continuity – Flexible scalability allow teams to manage complex, dynamic workloads, which optimizes costs

Operations teams must deploy machine learning and analytics as part of an AIOps strategy to manage the increasing volume, variety and velocity of data across an increasingly hybrid, complex, and fast-moving IT landscape.

*“By 2022, DevOps teams that leverage AIOps platforms to deploy, monitor and support applications will increase delivery cadence by 20%.”**

*Gartner, 'Augment Decision Making in DevOps Using AI Techniques', June 2019

Moving From Concept To Reality

IT Operations teams must adopt a unified monitoring and event management strategy driven by machine learning and advanced analytics across their entire IT environment. They must build monitoring into digital and cloud transformation processes as they aim to maintain high levels of performance and visibility.

Rapid, accurate event collection, consolidation, and analysis – Monitor, manage, and optimize end-to-end performance and availability of infrastructure and applications

Extensive visibility – Analyze all aspects of increasingly complex environments, including on-prem, cloud, hybrid cloud, and containers

Intelligence-driven data management – Manage and support the enormous volumes and types of operational data generated by DevOps, microservices, and cloud-based architectures

Enterprise scalability – Monitor large-scale infrastructures utilizing cloud-based, containerized, microservices-based architecture and SaaS deployment

Application support – Provide complete access and visibility into data and microservices across on-prem, cloud-native, and hybrid environments

IT Operations teams require a solution that is flexible, easy to deploy and upgrade, and supports fast-value realization. As such, a SaaS deployment model is ideal for rapid onboarding and cost optimization across any environment.

The Need to Evolve

Research shows that the majority (83%) of IT Operations teams are ready to upgrade their monitoring capabilities*



*451 Research, 'IT monitoring meltdown: Just 11% of decision-makers are satisfied with their monitoring tools,' August 2020

Work Smarter And Faster

A comprehensive IT Operations Management strategy must be able to support today's modern infrastructures and emerging technologies while leveraging advanced analytics and machine learning techniques.

This helps organizations rapidly establish patterns and identify anomalies so remediation can be performed quickly and seamlessly.

The BMC Helix Operations Management Advantage

- ✔ Predict and proactively address potential issues using advanced analytics and machine learning to detect anomalies, identify root causes, and manage events to ensure performance and availability across today's complex IT environments.
- ✔ Enhance collaboration and speed development time by leveraging BMC Helix Operations Management's scalable implementation to monitor today's cloud-native, containerized applications and microservices. Rapidly ingest, analyze, and process the large volumes of data that these DevOps development processes produce.

Look for

- ✔ **A single monitoring solution** that acts as a 'manager of managers,' which consolidates third-party monitoring and event data, to provide a unified view of complex IT infrastructures
- ✔ **Elastic, containerized microservices architecture** that enables enterprise scalability, performance, and availability for any on-prem, hybrid, or cloud-based environment
- ✔ **SaaS deployment**, which enables rapid onboarding and the ability to manage complex, dynamic workloads
- ✔ **Leading-edge AIOps and machine learning techniques**, which trigger events and notifications based on abnormal behavior
- ✔ **Advanced analytics capabilities** that have the ability to manage and process the ever-increasing volume, variety, and velocity of data from multiple sources

Today's BMC Helix Operations Management

Intelligent monitoring for faster problem detection and resolution

BMC Helix Operations Management, a key member of the BMC Helix Monitor family, helps Operations teams predict and proactively address potential issues across complex IT infrastructures using advanced analytics and machine learning to detect anomalies and identify root causes.

BMC Helix Operations Management provides the visibility needed to optimize service levels, reduce downtime, and deliver a seamless customer experience.



Scalable platform

- Machine learning and advanced analytics
- Univariate, multivariate anomaly detection
- Advanced policy management



Advanced analytics

- Effectively articulates key goals for different audiences
- Instructs with clear and concise language
- Identifies solutions or key contacts to resolve issues



Extensive data access

- Extensive monitoring
- Knowledge-based optimization
- RestAPI support for data and event ingestion



Intuitive design

- Seamless onboarding
- Persona-based dashboards
- BMC Helix platform launch

BMC Helix Operations Management is the only end-to-end, AI-driven, SaaS platform that gives organizations the ability to manage the complexity and scale of IT operations while delivering fast time-to-value, ease of use, integration via open APIs, and reduced operational costs.



Leading Analysts Agree: BMC Is A Leader

The judgments are in

BMC earns high ranking among Infrastructure and Operations (I&O) solution providers on a consistent basis and across multiple dimensions.

Gartner Magic Quadrant, October, 2020

In Gartner's Magic Quadrant for IT Service Management Tools, BMC was categorized as a Leader, with the highest ranking in completeness of vision among the 11 ranked providers thanks to its broad IT operations management portfolio, flexible deployment options, and advanced I&O use case maturity.

EMA Radar Report: AIOps, Q3 2020

Enterprise Management Associates (EMA) scored BMC at the top of the charts for Business Impact and Business Alignment use-case categories in EMA's recent AIOps Radar report. According to the report, BMC "offers a rich variety of automation options that are well evolved, well integrated, and central to its vision of the Autonomous Digital Enterprise."

Find out why BMC ranks so highly

To learn more, download the full analyst reports

[Gartner Magic Quadrant for ITSM Tools, October 2020](#)

[EMA Radar Report: AIOps, Q3 2020](#)

Compare BMC Helix Operations Management

CAPABILITY	BMC HELIX OPERATIONS MANAGEMENT	VENDOR A	VENDOR B
AIOps and machine learning	✓		
Anomaly detection (Univariate, Multivariate)	✓		
Behavioral learning	✓		
Monitoring and event management	✓		
External event ingestion	✓		
Event noise reduction	✓		
Proactive alerts and notifications	✓		
Agent-based/agent-less collection	✓		
Event analytics including clustering	✓		
Elastic scalability	✓		
Containerized architecture	✓		
External data ingestion	✓		
Multi-tenancy	✓		

BMC understands your journey towards the adoption of AIOps

Through BMC Helix Operations Management and complementary products across the BMC portfolio, we can help you achieve the essential benefits of IT operations management.

- ☑ **Rapid deployment** – Containerized, microservices architecture with SaaS-based deployment enables fast time to value for any complex IT infrastructure
- ☑ **Reduced MTTR** – Leading-edge AIOps and machine learning technologies proactively detect and analyze events
- ☑ **Increased productivity** – Deep insights into complex infrastructures enable Cloud and Operations teams to quickly pinpoint and prevent issues
- ☑ **Enhanced business continuity** – Flexible scalability for managing complex, dynamic workloads

Continue your exploration. [Contact us](#) for a detailed demonstration of what BMC Helix Operations Management can do for you.



About BMC

BMC delivers software, services, and expertise to help more than 10,000 customers, including 92% of the Forbes Global 100, meet escalating digital demands and maximize IT innovation. From mainframe to mobile to multi-cloud and beyond, our solutions empower enterprises of every size and industry to run and reinvent their businesses with efficiency, security, and momentum for the future.

Run and Reinvent

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