

Prove the Value of AlOps by Focusing on These 5 Use Cases

By applying AlOps to these common IT operations responsibilities, ITOps teams can reduce event noise, avoid downtime, optimize application performance, address infrastructure complexity, and keep customers happy

Introduction

Digital transformation encompasses so much more than adopting innovative technologies such as agile, cloud, DevOps, or the Internet of Things. True digital transformation reaches across an enterprise organization to its foundation: IT operations. That's why AIOps must be adopted by IT operations (ITOps) teams looking to reduce manual efforts through automation, streamline operations, and contribute more strategic innovation to the business.

As businesses continue to accelerate adoption of hybrid cloud environments and leading-edge technologies, ITOps teams can be challenged to keep pace with the complexity and volume of data generated across systems. With AIOps, ITOps becomes a strategic player for the business, freeing up skilled staffers to work on innovative projects while smart software keeps the alerts, logs, events, and data in check while working for the business.

"Yet, there is no doubt: There is no future of IT Operations that does not include AIOps."

Source: Gartner® Market Guide for AIOps Platforms, Pankaj Prasad, Padraig Byrne, Gregg Siegfried, May 30, 2022

"Al and ML has become the real need of the hour. Bringing all data together, analyzing it, and bringing the intelligence on proactively—that is what is required and we are really happy at the current state and what we are seeing."

Debashis Singh, Senior VP and CIO, Mphasis Source: BMC

What was once considered just a back-office fundamental now has the opportunity to shine in the business spotlight by shifting IT's focus from chasing alerts to intelligently solving problems with what industry experts are calling AIOps. Essentially, AIOps is the advanced approach to optimizing the performance of infrastructure, applications, and services by applying artificial intelligence and machine learning to volumes of data generated from everyday systems across hybrid on-premises and cloud environments.

AlOps takes IT professionals from reactive to proactive to predictive by identifying problems before they happen. More specifically, it helps IT departments support the innovative digital experiences the business has created for customers and end users by reducing event noise, preventing problems from impacting customers, identifying and solving incidents more quickly, and accurately allocating the infrastructure resources needed to meet business demand.

AIOps at Work

While the promise of AIOps is to elevate IT, the real value of AIOps can be found in the details ITOps manages daily.

Often, innovative technology is seen as an industry disruptor—for instance, the advent of cloud or IoT—yet for AIOps, the real benefit is in how it is a natural evolution for ITOps. It is about working smarter with the tools available, gathering, analyzing and acting upon the data the business generates, and thinking strategically about how the technology infrastructure can better support and build the business.

IT operations teams can start to see the results of AlOps across several critical areas of focus in the enterprise today. Consider these proven successful use cases of AlOps.

Event Correlation

One of the major headaches for IT is the sheer volume of alerts from the many monitoring tools installed across the environment. These alerts could indicate a critical problem to a customer-facing app or service, or they could indicate a false positive.

It is difficult to separate the wheat from the chaff and prioritize which events to focus on—creating unnecessary work, slowing response times, and sometimes causing events to be missed altogether.

AIOps reduces the noise of myriad events across an environment. It breaks down data silos, ingesting data in the form of logs, events, traces, and metrics. It then takes this data through a set of algorithms to identify correlated incidents that point to the probable root cause, resulting in faster decision-making.

AlOps automates the identification of clusters of incoming incidents that are related to the same underlying situation in real time. As a result, incident managers and service desk supervisors can address significant disruptions quickly, reducing or eliminating service downtime and negative business impact.



Anomaly Detection

AIOps intelligently learns how the environment behaves in busy and slow times. It can then apply its knowledge of the behavior to the alerts that systems generate to determine if, in fact, this alert indicates a bigger incident with potential service impact. Utilizing the machine learning and pattern recognition functionality within AlOps, a business can reduce the likelihood of anomalous behavior becoming a service-impacting incident.

AlOps-powered advanced anomaly detection finds outliers in the data, which helps to proactively alert the operator if there is an issue with a service or multiple services based on the events coming into the system. It supports both univariate anomaly detection and multivariate anomaly detection for all the metrics in the system. With the resulting insights, you can reduce the number of incidents and increase service availability.

With AIOps, IT will only be alerted when the environment's behavior indicates anomalous behavior indicative of app or service degradation or system downtime. This also helps prioritize which issues need immediate attention and which can be addressed in a less timely manner or suppressed to free up the time of ITOps and drive efficiencies.

attention because those events in the past have contributed to a larger issue. This type of real-time predictive alerting saves IT from potentially hearing from end users first about a problem, and it enables the business to keep any service outages far from customers.

problem in the making. In this case, AIOps will call

out somewhat innocuous-looking events for more

Predictive information can also help IT departments evolve from a reactive state of response to proactively stopping problems before any stakeholders outside of the group become aware of them.

AlOps in Action

For inContact, predictive alerting and anomaly detection capabilities available via AlOps enabled the Call Center as a Service provider to speed proactive problem identification and corrective action, resulting in 100 percent uptime.



Service Outage Prediction

The same intelligence gathered from data collected across the environment can be applied to predictive alerting. In this scenario, AlOps tools let technicians know that there is an event or series of events that directly relate to a known

"91% of organizations say a single hour of downtime costs more than \$300k; 44% say it can cost more than \$1M."

Source: ITIC's 2022 Global Server Hardware Security Survey



Root Cause Isolation

Experienced IT experts understand the time and energy spent on root cause analysis, and how long it can take to parse through logs and events to better understand why an issue originally happened.

This type of triage can be lessened with the help of AIOps. AIOps can speed the time it takes to identify the source of issues by 60 percent with event correlation and log analytics capabilities, leading to reduced service impact to customers.

When an alert occurs, AIOps will rank the events by their relationship to the initial alert, the timeline in question, and any anomalies captured by the previously mentioned behavioral learning.

By applying advanced analysis to operational metrics across infrastructure and applications, AIOps will zero in on the true problem, saving IT teams time and energy that could be spent better elsewhere and reducing operational costs to the business.

AlOps in Action

Through the use of probable cause analysis across infrastructure and applications, multinational IT services and consulting firm Mphasis has been able to reduce mean time to repair (MTTR) and root cause isolation by 50 percent. This advanced analysis of operational metrics greatly reduces the time needed for IT to pinpoint the true source of a problem.



Intelligent Automation

Predicting issues before they occur or identifying them in real time is great; automated remediation without the need for human intervention is better. Intelligent automation is driven by AI and machine learning (ML) algorithms, policies, and insights that continuously detect the state of the infrastructure and service desk activity to take or recommend automated actions.

AlOps makes complex automated decisions by collecting, analyzing, and leveraging data to help speed up problem solving and deployment and predict future availability and performance events before they become an issue. Over time, it learns how successful automation has been in different situations to proactively recommend automation opportunities. End users can then identify the ones that make sense for the business and define policies or implement Runbooks to trigger automated remediation moving forward.

According to IDC, "By 2026, 90% of Global 2000 CIOs will use AIOps solutions to drive automated remediation and workload placement decisions that include cost and performance metrics, improving resiliency and agility."

AlOps in Action

Mphasis reduced the amount of time spent on manual issue management by 80 percent using intelligent automation, freeing up its IT staff for more meaningful work.

Why AIOps Now

Today's digital businesses require IT to keep pace with the technology needed to support everincreasing customer demand—and to do that, enterprise IT organizations must also embrace the promise of AIOps. Businesses cannot deliver digital experiences on the front-end without also putting the right tools in place to digitally transform the back-end.

Savvy CIOs today recognize that they must digitally transform the entire IT environment to support a

smart enterprise ready to meet the needs of a more demanding than ever digital market.

AIOps will enable this digital evolution of ITOps from at times being at the mercy of a complex distributed environment to intelligently orchestrating infrastructure, applications, and services across hybrid cloud ecosystems to align with the business and address customer needs on demand.

62% of organizations saw a "very high" or "high" ROI from their investment in AlOps. The rest broke even or said it was too soon to tell.

Source: Al(work)Ops 2021: The State of AlOps



For more information

Learn how BMC powers these AlOps use cases and more at: bmc.com/AlOps

About BMC

BMC works with 86% of the Forbes Global 50 and customers and partners around the world to create their future. With our history of innovation, industry-leading automation, operations, and service management solutions, combined with unmatched flexibility, we help organizations free up time and space to become an Autonomous Digital Enterprise that conquers the opportunities ahead.

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