How to Optimally Run and Reinvent Your IT Operations

Leverage BMC’s IT Operations Management solutions to maximize performance, security, and cost efficiency
Executive Summary

Digital transformation represents a vital imperative for your business, one that’s essential to delivering the agility and enhanced customer experiences that fuel growth. As business leadership pursues transformation, your IT teams have to address two key objectives:

**Accelerating innovation through reinvention.** You need to expand, accelerate, and optimize your adoption of innovative technologies and models that support digital transformation, including cloud services, containers, and microservices-based environments.

**Running operations optimally.** While supporting this reinvention is vital, your IT teams also need to continue to run your traditional on-premises environments, and ensure they’re optimized for cost, performance, and security.

The challenge is that legacy IT management platforms don’t fully support IT teams in addressing either of these objectives. Further, the rapidly increasing complexity of hybrid environments is beginning to overwhelm staff, who simply can’t keep pace with the rate of change and the volumes of data generated.

As a result, businesses are being exposed to poor performance, high costs, and significant security risk. Ultimately, these realities stifle digital transformation and diminish the long-term prospects of the business.

Today, your business needs advanced tools that are aligned with your existing data centers and modern hybrid environments. You need artificial intelligence for operations (AIOps) solutions that offer machine learning, advanced analytics, and intelligent automation, so you can streamline, simplify, and improve IT operations. This brief reveals how you can get the AIOps capabilities you need to run your existing data centers optimally, while you carry out the reinvention that is essential in enabling the business to compete successfully. You can discover how IT operations management solutions from BMC can help you optimize performance, boost security, and reduce costs in today’s hybrid IT environments.
Introduction

Addressing Today’s Run and Reinvent Imperatives

Within the past few years, the nature of IT operations in organizations has seen radical change—and the advancements only look to be accelerating. For your IT teams, these realities are leading to dramatically shifting roles and objectives as well as intensifying demands. These teams must address two key objectives in parallel:

Reinvent. For virtually any organization in any industry, digital transformation represents a business imperative. One survey found 96 percent of organizations are pursuing digital transformation in order to realize such objectives as speeding innovation, delivering new digital services, improving customer experience, and fueling growth. Today, the move to the cloud represents a core requirement for successful digital transformation. By 2021, 98 percent of enterprises plan to adopt multi-cloud architectures. Plus, transformation demands are driving widespread adoption of a range of other modern approaches, including containers and microservices. Your IT teams have to navigate these transitions intelligently—but they also have to move quickly.

Run. At the same time, existing data centers aren’t going away. In fact, demands continue to grow. For example, between 2016 and 2021, it is estimated that data center workloads will more than double, increasing by a factor of 2.3. The problem is that budgets aren’t growing by anywhere near that rate, if they’re growing at all. Therefore, it is incumbent upon your IT teams to maximize productivity so they can support growing demands with existing staff and investments.

Your IT teams are confronting unprecedented demands and expectations. Exacerbating matters is that the traditional tools in place are only working against, rather than for, these teams.

These existing tools don’t offer optimal alignment with both traditional and modern environments. Further, the changing nature of IT environments is resulting in a massive increase in the scope, complexity, and volumes of operational data that have to be processed and analyzed. Ultimately, too much data is coming too fast for any human to keep pace.

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Following are just a few of the symptoms that organizations experience as a result of these tool limitations:

**Poor performance.** Teams are ill-equipped to support the rapid adoption of modern technologies and address the business’ need for fast reinvention. They can’t adapt to the continuous evolutions that are the hallmarks of agile and DevOps environments. On a practical level, staff take too long to spot and address issues, which means customers encounter outages and poor performance too often.

**Security risks.** Organizations continue to battle against rising threats of malware, data breaches, and cyber attacks. Despite massive investments, the reality is that legacy security tools and processes are failing in the cloud. Vulnerability scans can’t keep up with changing infrastructure and application environments. In dynamic DevOps and continuous delivery environments, the findings from penetration testing are out of date virtually as soon as they’re delivered. On-premises and IaaS workloads are being left open to attack because operations personnel can’t keep pace. The lack of effective governance capabilities leaves businesses exposed to fines, bad publicity, and other penalties associated with non-compliance.

**High costs.** Within too many organizations, teams battle with disjointed tools, limited visibility, and fragmented automation, and all these problems are fueling spiraling costs. Staff members are forced to grapple with insufficient collaboration and cumbersome processes, and so operate inefficiently. Teams can’t make smart forecasts and maximize resource utilization. This is especially problematic in the cloud, where underutilized resources ultimately diminish or negate the anticipated cost savings that are driving decision makers to move workloads to the cloud in the first place.

To avoid these urgent problems, your organization needs modern IT operations management solutions.
Today, BMC offers the advanced IT operations management solutions you need to succeed in pursuing your run and reinvent objectives. BMC’s TrueSight and Helix solutions are uniquely equipped to optimize the performance, cost, and security of today’s hybrid environments, including traditional data centers and more modern cloud, microservices, and container-based implementations.

BMC solutions deliver an unparalleled blend of advanced AIOps features, intelligent automation, and service-aware analytics. Combined, these capabilities provide breakthrough value, immediately and over the long term. Leverage these solutions and you can boost staff and cost efficiency, strengthen security and compliance, and deliver more reliable, rewarding digital services.

**IT OPERATIONS**

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**Critical Capabilities**

- Service Aware
- Analytics Driven
- Task & Process Automation

**Data Center**

- Networks
- Servers
- Databases
- Applications
- Containers

**IaaS**

- Cloud Services
- Processes

**Cloud Native**

**COMPANY**

Customer support software vendor

**THE CHALLENGE**

- Delivering cloud service that supports 200,000 global customer service agents in more than 120 large enterprises and government agencies.
- Maintaining uptime of IT environment composed of on-premises data center and AWS.

**THE SOLUTION**

- Selected TrueSight Operations Management for real-time monitoring and alerting to speed issue detection and response.
- Implemented TrueSight Capacity Optimization to effectively align capacity with business demand.

**THE IMPACT**

- Delivered industry’s highest published SLAs, consistently adhering to 99.99 percent availability commitments.
- Based on insights into utilization, improved decision making on virtual machine provisioning, which yielded a 100 percent ROI in nine months.

TrueSight leverages advanced analytics, automation and service views to deliver enterprise-class performance, security and cost optimization capabilities across hybrid IT environments.
The complete solution suite offers these capabilities:

**Operations management.** Leverages advanced AIOps and automation to deliver enterprise-class performance monitoring and event management across hybrid IT environments. Delivers the comprehensive coverage, flexible adaptability, and efficient scalability that can address your evolving requirements in the long term.

**Security, governance, and compliance.** Enables you to establish automated, policy-driven controls that help ensure consistent policy enforcement across hybrid environments, including AWS, Azure, and Google Cloud. Employs machine learning to deliver intelligent, automated vulnerability management, patching, remediation, and more.

**Cost management.** Delivers advanced, AI-driven analytics that provide unparalleled insights into current and forecasted spending on cloud resources. Enables you to compare costs across cloud and on-premises environments and optimize resource utilization across hybrid implementations.

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**COMPANY**
Multinational energy company

**THE CHALLENGE**
- Delivering IT services that support 64 million global users, and managing massive budget that includes more than $20 million in annual expenditures on AWS servers.

**THE SOLUTION**
- Selected TrueSight Capacity Optimization to more intelligently add, remove, or adjust resources based on changing demands.

**THE IMPACT**
- By leveraging insights for more effective capacity utilization, cut cloud server subscription expenses by $1.3 million initially, with estimated savings to total $11 million over three years.

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TrueSight Operations Management leverages advanced AIOps and automation to deliver enterprise-class performance monitoring and event management across hybrid IT environments.
Key Capabilities for Addressing Run and Reinvent Imperatives

Run: Data center optimization

BMC solutions offer a broad range of capabilities that enable you to optimize your existing data centers.

Service-level visibility and management. You can intuitively, intelligently track what’s important: the services that power your business. The solutions offer industry-leading service discovery and flexible service management capabilities. These solutions provide powerful insights, making it easy for administrators to start at the service level, and immediately drill down to the configuration item level to get the details they need. These offerings also provide fully integrated capabilities for vulnerability, configuration, and compliance management.

Advanced analytics and machine learning fuel powerful AIOps. BMC delivers innovative, breakthrough AIOps capabilities that are easy to leverage and purpose-built for IT operations, meaning your teams don’t have to do in-house coding or hire expert data scientists. Further, these capabilities are accessible via an open API, so you can maximize the opportunities for integration and automation.

With the solutions’ advanced AIOps capabilities, you can optimize performance based on past results and predictive analytics. The solutions offer advanced capabilities for capacity planning and optimized utilization of server, network, and storage resources. The solutions’ AIOps capabilities fuel real-time, data-driven decisions, enabling your operators to continuously optimize for performance, security, and cost across your data centers.

Intelligent Automation. To keep pace with increasingly fast-paced, dynamic environments, it’s vital to maximize the use of automation across your data center operations.

COMPANY
Global financial services company

THE CHALLENGE
• In delivering IT services within one of the world’s largest banks, the IT team was grappling with an excessive amount of manual, labor-intensive tasks.
• Senior staff members spent an inordinate amount of time on mundane tasks, which left little time to focus on higher-value, more strategic efforts.

THE SOLUTION
• Chose TrueSight Orchestration because it offered a seamless, centralized platform that directs automation across the environment.

THE IMPACT
• Established automated response to more than one-quarter of tickets generated by monitoring tools.
• Reduced mean time to repair by 60 percent.
• Cut average time spent per event from 30 minutes to five, which resulted in 20,000 staff hours saved within 10 months.
They offer comprehensive capabilities for establishing automation, including defining, developing, orchestrating, managing, and reporting on a wide range of workflows. You can leverage these capabilities through pre-packaged process content that streamlines initial setup. With these solutions, your teams can automate:

- Maintenance, including provisioning, patching, and software deployment—streamlining ongoing infrastructure support.
- Performance, log, and event management—gaining more efficient administration and more timely insights.
- Incident management, including service desk processes and remediation tasks, so issues can be addressed before they affect the customer experience.

**Reinvent: Cloud optimization**

BMC Helix solutions offer a comprehensive range of capabilities that help your IT teams realize the service levels, price-performance, and security that your organization demands from its multi-cloud implementations. These cloud-native, SaaS solutions offer fast time to value and ease of use.

**Advanced automation and governance**

The solutions deliver advanced, extensive capabilities for cloud governance and automation. With these solutions, you can institute policy-driven automation that effectively establishes “guardrails” that protect and optimize cloud implementations. These solutions deliver the visibility and control your IT team needs, without hindering development teams and business innovation.

**AIOps capabilities fuel intelligent orchestration and insights**

By employing the solutions’ AIOps capabilities, you can use large volumes of telemetry data to make more informed decisions, automate more tasks and processes, and adapt your cloud implementations more quickly and efficiently.

The solutions enable you to optimize existing cloud workloads, featuring automated performance, log, and event management. These solutions also offer critical insights for planning, offering cloud migration simulation and cost forecasting capabilities.

**COMPANY**

IT service provider

**THE CHALLENGE**

- Service provider was tasked with supporting the infrastructures that power the mission-critical workloads of the world’s top enterprises.
- Required the effective monitoring of infrastructures that included 68,000 mainframe MIPS, 10,000 servers, and 10 petabytes of storage.

**THE SOLUTION**

- Deployed TrueSight Operations Management to establish unified monitoring of application and infrastructure.

**THE IMPACT**

- Consolidated 15 tools into one console.
- Reduced monthly ticket volumes from 10,000 per month to 300.
- Scaled to support 2,500 more endpoints over six months, without any increased staffing requirements.
By putting BMC solutions to work in your environments, you can realize a number of significant benefits:

**Boost staff efficiency and productivity.** By leveraging these solutions’ comprehensive automation capabilities, you can significantly reduce the time staff spend on laborious, error-prone, manual efforts. These solutions’ combination of automation and intuitive insights can significantly boost the productivity of your less experienced staff.

**Maximize the business value of IT.** The solutions offer the essential capabilities that enable your IT organization to align with, and deliver against, the most critical business priorities, including accelerating digital transformation, maximizing cost efficiency, and ensuring compliance with security policies and mandates. Rather than focusing on infrastructure, your teams can manage and optimize performance, cost, and security at the business service level.

**Achieve run and reinvent imperatives.** With BMC solutions, your IT and business teams can gain the insights they need to maximize the performance, cost-efficiency, and security of existing environments and services. In addition, you can optimize your cloud and modern application architecture strategies—such as more fully leveraging containers and microservices—so you can maximize operational and business agility.

**COMPANY**
Managed hosting provider

**THE CHALLENGE**

- Scaling the IT infrastructure so the business could grow efficiently and cost effectively.
- Struggled with many manual processes, which were only supported by a handful of homegrown scripts.

**THE SOLUTION**

- Employed TrueSight Orchestration, TrueSight Automation for Servers, and TrueSight Automation for Networks to automate device management, processes, and workflows.

**THE IMPACT**

- Within the first two years of employing TrueSight solutions, the company doubled the profitability of its hosting business.
- Increased the number of servers managed by more than 250 percent, while the number of full-time engineers has remained steady.
The BMC IT Operations Management (ITOM) Portfolio

Performance

BMC Operations Management. Delivers end-to-end performance monitoring and event management. Offers coverage of physical and virtual environments as well as a range of cloud services, including AWS, Azure, and Google Cloud. Features capabilities for monitoring services and end-user experience. Uses AIOps to dynamically learn behavior, correlating, analyzing, and prioritizing event data. Enables your IT operations teams to quickly identify the root cause of problems and focus on the most business-critical issues. Enables you to establish automated, closed-loop incident management and service desk integration.

BMC TrueSight Orchestration. Helps you automate routine and critical IT processes, including remediation efforts, across applications, platforms, and tools. Delivers the capabilities you need to establish event-driven IT automation, closed-loop change and configuration management, and service request fulfillment. Offers 5,500 packaged workflows and an intuitive workflow design interface that help you to realize value quickly.

Security, Governance, and Compliance

BMC Helix Cloud Security. Provides advanced capabilities that enable you to automate testing and remediation for multi-cloud resources and containers, facilitating consistent, auditable compliance with security policies and mandates. Equips you with an extensive array of pre-packaged policies that are based on best practices, and makes it easy to create custom policies. Offers support for containers, and any cloud asset across AWS, Azure, and Google Cloud environments.

BMC TrueSight Automation for Servers. Enables you to automatically provision, configure, patch, and maintain your servers, whether they’re physical, virtual, or in the cloud. Helps you more quickly, efficiently, and consistently enforce policies. Offers a consistent platform for leveraging templates, applying rules-based policies, and reporting, so your teams can be much more productive. Provides comprehensive coverage, featuring support for 90 different versions of OSs and a wide variety of hypervisors. Includes automated vulnerability management to rapidly analyze security vulnerabilities, obtain necessary patches, and take corrective action.
**BMC TrueSight Automation for Networks.** Equips your network operations teams with the capabilities they need to detect vulnerabilities across thousands of devices in less than a minute—and quickly take corrective action to reduce the risk of breaches and outages. Helps accelerate reliable network configuration changes, so your teams can increase agility, reduce costs, and strengthen security. Integrates with security notifications from the National Institute of Standards and Technology (NIST) and other organizations to enable the automated identification of vulnerabilities, and then triggers automated remediation and upgrade workflows. Helps you make fast configuration changes across thousands of network devices, and employ automated roll-back and change tracking. Includes automated vulnerability management to analyze vulnerabilities, enhance visibility, and respond to threats across network devices.

**Cost**

**BMC Helix Cloud Cost.** Offers capabilities for effectively tracking and controlling the costs of multiple cloud environments, including AWS, Azure, and Google Cloud. Offers powerful insights, enabling you to visualize actual and forecasted cloud expenditures, compare cloud and on-premises costs, simulate application migrations, and conduct what-if analyses. Provides the insights you need to optimize your management of cloud budgets and resources, including right-sizing over-provisioned assets and releasing idle VMs.

**BMC TrueSight Capacity Optimization.** Enables you to more effectively align IT resources with service demands, so you can reduce costs and maximize utilization of such resources as computing, storage, and networking. Provides comprehensive visibility into the entire IT landscape—including physical, virtual, cloud, and container-based environments—so you can more intelligently add, remove, or adjust resources based on changing demands. Delivers capabilities for tracking services, modeling and forecasting, and reserving resources. Gives you better insights into future resource requirements, so you can more intelligently manage the timing and scope of new capital and operating expenditures.
Conclusion

The management of IT services has never been more difficult, or more critical. To succeed, today’s IT teams must run their existing data centers optimally while accelerating reinvention, which means maximizing the organization’s use of modern technologies and cloud services.

BMC’s ITOM solutions are uniquely equipped to help your IT teams meet these key objectives. With these solutions, your organization can optimize performance, boost security, and reduce costs in today’s data centers and hybrid cloud environments.

To learn more, be sure to visit www.bmc.com/itom

About BMC
BMC helps customers run and reinvent their businesses with open, scalable, and modular solutions to complex IT problems. Bringing both unmatched experience in optimization and limitless passion for innovation to technologies from mainframe to mobile to cloud and beyond, BMC helps more than 10,000 customers worldwide reinvent, grow, and build for the future success of their enterprises.

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