TrueSight Operations Management

Empower your business to thrive on digital change with optimized integration for IT infrastructure and applications

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Executive Summary

IT is driven by the expectations of the user. The mobile revolution has led users to expect an instant, intuitive, and integrated experience. This experience must be dynamic—easily translating from the desktop to the mobile device to satisfy the diverse portfolio of the modern user. User experience is the result, the culmination of everything IT does to support the business.

Satisfying the end-user is becoming more difficult each day and it's driving complexity in IT. Applications are more interconnected, generate more data, and are more difficult to support. Infrastructures are growing increasingly complex and must easily flex to accommodate changing needs. There is nothing static about today's IT.

Something has to change. IT operations staff and managers spend most of their time each day battling issues rather than driving the business forward. IT must keep up with the behind-the-scenes complexity inherent in delivering the ideal user experience or risk losing customers to companies that can.

Enterprise IT needs a new solution for operations management—one that allows them to gain critical business insight, modernize the user experience, and deliver the future of IT operations today.

TrueSight Operations Management gives IT the insight and clarity to manage this complexity by converging the application and infrastructure perspective. Illuminating the entire IT environment from device to application, **TrueSight examines operational norms, automatically reveals abnormalities, measures service impact, and proactively identifies risk to ensure the applications and services the business depends on keep running.**

TrueSight turns data into actionable intelligence. This unprecedented breadth of coverage and depth of insight empowers the business to move at the speed of the digital customer.

IT OPERATIONS MANAGEMENT NEEDS AN UPGRADE

Effective operations management is critical for maintaining a healthy, thriving business. IT operations teams must keep applications, infrastructure, middleware, and services up and running in support of key business processes. They must also find and fix problems quickly to meet service level agreements. Unfortunately, operations teams are struggling to keep up.

Data growth is out of control, and user expectations are outpacing IT infrastructure capabilities. Employees want to utilize mobile-everything, and IT must support their needs. There are already 10 billion connected devices today, and that number is expected to double by 2020, constituting a $1.2 trillion market.[1]

The most concerning part is that 71 percent of IT leaders understand the transformational power of mobile for their business; yet of that group, only 18 percent have a comprehensive mobile strategy.[2]

The Old Way Won't Cut It

IT is responding to issues long after their impact is felt by the business, leading to frustration and a lack of confidence in the organization. There simply aren't enough individuals in the organization with the right skillset, and the experts are occupied with other critical issues. The problem with most management tools is that they fail to capture and preserve troubleshooting techniques. This means operations teams must rely on communal, informal knowledge to resolve basic issues. They not only waste precious time finding the right person, they also suffer the same delays when problems recur. In a recent IDC and Computerworld survey, 33 percent of respondents said a "lack of sufficiently skilled big data and analytics IT staff" was one their biggest challenges.[3]

Many ops teams are stuck with multiple un-integrated management tools, and must constantly transition between them to get the information they need. This "swivel-chair syndrome" makes it difficult to see the big picture or find connections between disparate parts of an end-to-end service. It also leads to operational silos, finger pointing, and issue escalation back and forth between groups.

Big data is growing six times faster than any other IT segment, with an estimated $16.1 billion market in 2014.[4] To keep pace, some operations teams are adding basic or open source monitoring tools on top of their existing solutions. Many are now realizing that these solutions lack cohesiveness or granularity. Although these solutions are capable, managing them together is making their work harder, not easier. Staff may be forced to collect data manually and pursue fragmented troubleshooting strategies. Remediation then becomes time-consuming and archaic, increasing costs and further prolonging the service impact.

The New IT Is Even More Complex

In the era of New IT, cloud services are now firmly entrenched and continue to be rapidly adopted. While cloud computing has its advantages, it also presents new challenges for IT. Easy access to SaaS applications and other cloud services has made it convenient for business units to purchase their own IT solutions, increasing the pervasiveness of shadow IT. This is not only frustrating for operations staff, but also damaging to the business, particularly since these solutions don't always integrate or work with existing IT services. Once these self-procured solutions are in place, business units toss them over the wall for IT to support.

IDC predicts that cloud infrastructure will eventually become the fastest growing sub-segment of the big data market, with a 50 percent compound annual growth rate (CAGR) from 2013 to 2017.[5] As they implement cloud infrastructure, enterprise IT teams must frequently manage hybrid environments comprising both on- and off-premises systems and services. They also continue to add applications and infrastructure on top of heterogeneous physical and virtual systems. These complex, always-changing environments make it more difficult to gain visibility and identify service issues.

New IT is also adding more pressure from the business. Service continuity becomes more important as critical business processes rely more heavily on IT. The quality, performance, and availability of services need to be maintained; and when problems arise, they must be resolved quickly to minimize business impact. Ops teams often lack an understanding of how individual IT issues relate to business priorities and aren't capable of performing business impact analysis.

Customer expectations are also fueling demands. Their use of always-on, always-connected consumer IT services has made them much less tolerant of service outages and degradation. In the last five years alone, the standard perception of good web performance has diminished from a four-second load time to only one second. Google and others have learned this the hard way. A mere half-second delay in search time caused Google to lose 20 percent of its user traffic.[6] Similar results occurred when Amazon delayed web pages in increments of 100 milliseconds.[7] Even small delays resulted in substantial and costly drops in revenue. Without end-to-end monitoring tools, ops teams can't get visibility into end-user experience and can't accommodate these growing expectations. New IT has made it even more difficult for IT ops managers and staff to keep up with business demands. When problems do arise, operations is immediately put under pressure. When service levels are high, ops teams are the unsung heroes, keeping the business running from behind the scenes. Today, IT ops teams need smarter ways to eliminate time-consuming manual processes and reveal their management blind spots. They also need a stronger voice in the business service decision-making process. They have a vision for the future of their organization, and need ways to educate the business on how this insight translates to value.

IT Operations for the New IT

IT is more critical to business success than ever, and operations teams and application developers are no longer just responsible for keeping the lights on. They must also find ways to enhance service reliability and performance, and deliver exceptional quality of experience to end users.

It's time for IT to become leaders within the enterprise, not just firefighters. IT operations can indeed drive business success but is currently held back by time-consuming operational tasks. Ops teams need tools that can manage services according to business priorities and align with business objectives. They also need end-to-end visibility into the performance and availability of their entire IT environment so they can eliminate blind spots. Too many disparate tools can pose a problem here. Without integration, these tools may not be able to correlate logs with event management systems, and may not provide adequate application monitoring capabilities.

IT ops must also continue to improve on the fundamentals by reducing the cost of resolving service issues and lowering mean time to repair (MTTR). To do this, ops leaders must break down operational silos, ditch swivel-chair style management, achieve end-to-end insight, and ultimately take control of their organization.

To successfully manage the challenges of New IT, ops teams must not only be the first to know about service issues, they must actively identify anomalies and prevent them from becoming problems. They need access to tools that can monitor services for actual quality of experience, not just technical indicators. They must extract insights and draw intelligent correlations from data produced by multiple systems across IT silos. And, they must gain full control over operations, harness the benefits of emerging technologies, and take a leading role in driving business success.

BMC TRUESIGHT OPERATIONS MANAGEMENT

BMC TrueSight Operations Management is a flexible solution that monitors complex IT environments and analyzes diverse data to deliver actionable IT insight that solves business problems. In support of the modern user experience, TrueSight provides both application and infrastructure perspectives, from any device, across physical, virtual, and cloud environments.

Illuminating the entire IT environment from device to application, TrueSight examines operational norms, automatically reveals abnormalities, measures service impact, and proactively identifies risk to ensure the applications and services the business depends on keep running. This unprecedented breadth of coverage and depth of insight closes the gap between web, mobile, and on premises application services visibility—empowering the business to move at the speed of the digital customer.

Understanding TrueSight Operations Management

BMC TrueSight Operations Management is an integrated platform for service availability and performance management of your full IT environment, including applications, infrastructure, and middleware. It combines event management, application performance management, impact management, performance monitoring, and data analytics (including baselines, anomaly detection, root-cause-analysis algorithms, and semi-structured log analytics) in a single seamless solution for physical, virtual, and cloud environments.

- Event management provides a real-time solution for automated detection and resolution of IT problems before they impact critical IT systems. BMC TrueSight Operations Management proactively correlates, prioritizes, and resolves events in a real-time business context.

- Simple application models are created with Application Context Views. TrueSight pivots traditional device and event-based viewing to an application-centric view. These models are targeted for use by IT operations and can be built in just five minutes— auto-discovering devices and components as they relate to the application. TrueSight expands the boundaries of traditional application management by allowing IT to group infrastructure components together into an infrastructure application.

- Probable cause analysis helps IT get to the cause of underlying problems faster by automatically scoring and weighting possible causes and eliminating irrelevant noise. TrueSight Operations Management does this better than any other solution—tightening the statistical analysis around the application itself, increasing the level of correlation that can be achieved.

- TrueSight Operations management gives IT a truly user-centric view of their operations. It combines end-user, application, and infrastructure metrics so that IT can gain a true measure of how application services are actually being experienced. Performance monitoring proactively detects, automatically predicts, and resolves IT performance issues and sub-optimal configurations before users and services are negatively impacted.

- Data analytics allow BMC TrueSight Operations Management to learn the behavior of your applications and infrastructure across geographical silos, predicting problems before they occur, automatically pin-pointing probable cause across technology silos, and initiating standardized triage and problem resolution processes.

- Data analytics correlate metrics and events to detect anomalies, predict outages, and provide deep diagnostics. Data analytics also provide visibility into all log files, so you can search and correlate entries with events that impact the business.

BMC TrueSight Operations Management gives IT operations staff the intelligence and efficiency they need to drive business success. By lowering MTTR, increasing time between failures, and proactively preventing service issues, they can improve availability and deliver enhanced service level agreements (SLAs). TrueSight Operations Management increases productivity by preserving troubleshooting techniques, prioritizing issues for service desk staff, and consolidating data and event reporting to reduce administration time and effort. TrueSight Operations Management helps bridge organizational silos by providing synchronized information among teams, and keeps IT staff proactively informed of how well services are meeting the needs of customers and the business.

With BMC TrueSight Operations Management, IT receives benefits that translate to real business value. They can lower the total cost of managing their infrastructure and increase the productivity of existing resources. With patented predictive analytics, operations teams can realize up to a 90 percent reduction in false signaling, and resolve issues before service levels are affected. TrueSight Operations Management is capable of reducing MTTR by more than 75 percent, and helps speed first-time problem resolution. Comprehensive visibility and reporting accelerates remediation by eliminating the need to reproduce problems.

Operations staff can exceed SLAs by focusing on business objectives, and achieve enterprise-wide efficiency by automating their workflows across multiple vendors, platforms, and sources.

THE FUTURE OF IT OPERATIONS TODAY

Comprehensive Visibility

BMC TrueSight Operations Management delivers broad and deep monitoring capabilities for more than 300 different technologies across infrastructure, applications, and middleware. Its data analytics capability brings together information from all systems throughout distributed environments and cross-correlates relevant information with automatic tagging. BMC offers a number of analytics content packs that enhance the product capabilities for specific configurations. For example, the Oracle® content pack comes preconfigured with built-in domain knowledge and best practices that are specific to Oracle, so important data patterns are already defined. Instead of being constrained by a siloed perspective, individual staff members can understand the full environment and see patterns across end-to-end services.

Intelligent Troubleshooting

Analytics-driven troubleshooting helps IT quickly find critical information and proactively prevent issues. Operations staff gain new insight with the end-to-end search functionality of BMC TrueSight Operations Management, which they can use to find patterns among distributed data and identify underlying problems. They can also streamline alert processing by cross-launching within the correct time context to BMC TrueSight IT Data Analytics. TrueSight Operations Management performs dynamic baselining and thresholding on key performance indicators (KPIs) to automatically identify at-risk services—eliminating false positives and helping IT discover problems before end-user impact. Ops staff can use the probable-cause workflow feature to easily identify root causes, and eliminate war room tactics and swivel-chair troubleshooting.

Empowered IT

IT isn't just suffering from a siloed approach. Individuals are being single-threaded within each silo. Without experts to pull in, SLAs slip, downtime lasts longer, and user experience declines. BMC TrueSight Operations Management helps IT accumulate and share knowledge rather than keeping it locked in the minds of a few experts. Operations staff can save data analytics searches and share them with colleagues through a common workspace, greatly increasing productivity and collaboration. For example, this enables level-1 support staff to troubleshoot more issues independently. Ops teams can also proactively look for issues by running scheduled searches. The single-pane-of-glass interface and integrated log analytics provide full visibility to service health, helping reduce MTTR and putting control back where it belongs—in the hands of operations staff.

Business Driven

Business impact analysis helps application owners and service managers resolve issues and prioritize operational tasks according to business priorities. Using BMC TrueSight Operations Management, operations teams can monitor actual user experience, not just the technical indicators of service health. By following users through their experience and seeing firsthand how service impact manifests, operations teams can build better ongoing IT processes. They can also trace patterns back to user interactions to gain additional insight on root causes and proactively prevent issues. Additional capabilities, such as synthetic traffic generation, allow ops teams to test the performance of services before rolling them out. This helps them to demonstrate the viability of new services to the business, and maintain quality throughout the service lifecycle.

Seamless Integration

BMC TrueSight Operations Management offers seamless integration with the broader IT ecosystem, including BMC IT service management (ITSM) solutions that provide out-of-the-box event and CLI integrations. For example, BMC Remedy Service Desk integration enables intelligent ticketing, while CMDB and change management integrations streamline the remediation process. End-to-end integration enables ops teams to visualize and manage their heterogeneous environments using a single set of tools, and automate workflows across multiple processes and technologies for greater efficiency.

Future Ready

With BMC TrueSight Operations Management, IT can easily add support for new technologies as they emerge, without reinvesting in a new management stack. TrueSight Operations Management is based on a flexible and modular architecture, so operations teams get support for the latest requirements—whether related to mobile, social, cloud, or still-to-arrive technologies—in a timely fashion. IT can easily keep pace with data growth and changes in their environment, and can pursue new initiatives with confidence, such as implementing an offsite DR facility or adding new cloud services. TrueSight Operations Management not only supports the latest technology, it also scales to grow with the business. By integrating with TrueSight Capacity Optimization and other TrueSight tools, ops teams can stay ahead of the curve and future-proof their management processes.

TrueSight Operations Management also equips today's on-the-go operations staff with the capabilities they need to work from anywhere. Mobility is not just a consumer trend. Mobile technology empowers IT to be more productive, more often. With support for Apple®iPad®, Apple® iPhone®, and Google Android™, TrueSight Operations Management allows ops managers and staff to address issues from any location with internet access, so they aren't tied down to an on-premises command center. Finally, ops teams have the tools to keep pace with the ongoing development of new technologies.

CONCLUSION

Enterprises rely on IT more than ever, and their success depends on the ability of IT operations to effectively monitor, maintain, and troubleshoot applications and services. To face increasing complexity and growing expectations, IT operations management needs an upgrade.

BMC TrueSight Operations Management delivers the future of IT today by providing unique value in each of these areas:

COMPREHENSIVE VISIBILITY: IT operations teams receive end-to-end visibility across heterogeneous infrastructure, apps, middleware, and business services.

INTELLIGENT TROUBLESHOOTING: Analytics-driven troubleshooting helps IT find patterns and identify service issues before they happen.

EMPOWERED IT: Operations teams can accumulate and share knowledge, enabling non-experts to quickly find information and achieve a faster MTTR.

BUSINESS DRIVEN: Real-time analytics allow IT to measure, baseline, and predict end-user experience to determine the business impact of performance issues, and respond according to business priorities.

SEAMLESS INTEGRATION: IT can seamlessly integrate BMC TrueSight Operations Management with other systems and services, including BMC ITSM solutions.

FUTURE READY: Support for new technologies, and the ability to integrate new products and services, gives IT the tools and confidence to innovate.

TrueSight Operations Management is the end-to-end solution for IT Operations. It monitors and manages the entire infrastructure—from device to application—and spans all data types for the holistic view required by the digital economy.

TrueSight has the power to transform IT. To reinvent the relationship between business services and end-user experience. To modernize IT operations with comprehensive data insight and proactively manage the digital landscape. TrueSight gives businesses the power to reflect the mobile, modern user experience across every application and every service. TrueSight helps infrastructure and applications work better together—empowering your business to thrive on digital change.

(i) FOR MORE INFORMATION

To learn more about this amazing product, please visit **www.bmc.com/truesightitops**

1   "Let's Talk Connected Devices Infographic," Mobile Future, http://mobilefuture.org/resources/lets-talk-connected-devices-infographic/, (Oct 11, 2013)

2   Eric Lai, "Infographic: The Three Things Confounding CIOs Going Mobile," ZDNet, http://www.zdnet.com/blog/sap/infographic-the-three-things-con-founding-cios-going-mobile/3217, (May 23, 2012)

3, 4, 5 Gil Press, "$16 .1 Billion Big Data Market: 2014 Predictions from IDC and IIA," Forbes, http://www.forbes.com/sites/gilpress/2013/12/12/16-1-billion-big-data-market-2014-predictions-from-idc-and-iia/, (Dec 12, 2013)

6   Marissa Mayer, Google, Presented at Web 2 .o Summit, San Francisco, Nov 9, 2006

7   Greg Linden, "Marissa Mayer at Web 2 .0," Geeking with Greg, http://glinden.blogspot.com/2006/11/marissa-mayer-at-web-20 .htm

BMC delivers software solutions that help IT transform digital enterprises for the ultimate competitive business advantage. From mainframe to cloud to mobile, we pair high-speed digital innovation with robust IT industrialization—allowing our customers to provide amazing user experiences with optimized IT performance, cost, compliance, and productivity. We believe :

• **Technology is the heart of every business**   • **IT drives business to the digital age**

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