

Virtualization Management

Tackle virtual sprawl, virtual performance, and virtual compliance challenges – consistent with your physical environment

ARE YOU?

- » Unable to view or manage your virtual machines (VMs)?
- » Unable to control the creation of new VMs?
- » Struggling with performance issues in your virtualized environment?
- » Reacting to availability and performance problems, rather than proactively addressing them?
- » Finding it difficult or impossible to meet compliance policies?

WITH BMC, YOU WILL:

- » Obtain 100% visibility into all VMs — online, offline, and orphaned
- » Define policy-based processes for complete VM lifecycle management
- » Benefit from a holistic, service-based view that unifies physical and virtual environments
- » Optimize service performance in a dynamic virtual environment
- » Define and enforce VM configuration policies for continuous compliance across physical and virtual infrastructures

EXECUTIVE SUMMARY

Is virtualization growing out of control in your IT environment? Like an overgrown vine, unmanaged virtualization can consume all available IT resources, smothering business-driven initiatives. Without proper controls, it's increasingly difficult for IT to manage the virtualization lifecycle, achieve and maintain compliance in the virtual infrastructure, and define and meet performance commitments (SLAs).

BMC provides a comprehensive solution that unifies the management of physical and virtual environments to help you quickly and efficiently gain control of your virtual environment. With BMC, you can rapidly, reliably, and cost-effectively tame the complexity of virtualization through:

- » Virtual Lifecycle Management — Gain comprehensive visibility of deployed virtual machines and establish policy-based control of VM provisioning, move, change, and retirement processes
- » Virtual Performance Management — Monitor and optimize service performance to meet service level objectives, as well as handle planned consolidation efforts and dynamic VM relocation
- » Virtual Compliance Management — Define and enforce VM configuration policies using a common set of tools and processes across both physical and virtual infrastructure

BMC's virtualization management solution can also be used to stand up and manage private cloud environments.

REAL-WORLD RESULTS

- » Rackspace achieved compliance and eliminated 10,000+ incidents through automation.
- » Blackbaud improved efficiency for monitoring and managing configuration and compliance.
- » LG CNS increased administrator productivity by more than 35 percent.
- » Las Vegas Sands anticipates 50 percent savings in operational IT costs.
- » BMC's own IT organization is saving five million dollars annually through properly managed virtualization.



THE BMC DIFFERENCE

- » Consistent, unified solution for virtual and physical environments
- » Support for multiple virtual infrastructures, including VMware, Microsoft, Solaris™, and IBM® AIX®
- » Complete IT-service view from the BMC Atrium CMDB, automatically reconciled with the changing virtualized environment
- » Comprehensive IT service management suite, enabling agility without sacrificing IT control
- » Chosen by Cisco to be the provisioning and configuration automation component of its Unified Computing System

BUSINESS CHALLENGE

Like many IT organizations, you may be virtualizing your infrastructure in order to reduce capital expenditures and improve agility. However, the very nature of virtualization increases IT scale and complexity. As you deploy more virtual machines, additional dependencies are created and changes become more frequent, thus compounding your management requirements.

Unfortunately, simply adding headcount won't address this issue. Not only is the cost of hiring and training additional staff too high, but managing this complexity requires more than just people. It requires automated tools, skills, and processes if you want to truly leverage virtualization and create a dependable, mission-critical services platform.

In fact, pursuing virtualization initiatives without addressing management implications will likely introduce significant operational problems as your environment grows far more quickly than your ability to control it. That's why you need a virtualization management solution that extends and leverages your physical management solutions, and doesn't introduce additional silos.

HOW BMC CAN HELP

BMC provides a comprehensive solution that unifies the management of physical and virtual environments to help you gain control of your IT infrastructure. With BMC, you can achieve the promised benefits of virtualization, including reduced capital and operating expenses, a more dynamic and responsive IT, and more reliable and consistent operations.

Without a uniform solution, you run the risk of introducing new, disconnected operational islands, which in turn increases the complexity, cost, and effort required to manage your newly virtualized IT environment. BMC offers a much more compelling approach, which can be incrementally implemented in the following areas:

VIRTUAL LIFECYCLE MANAGEMENT

BMC's Virtual Lifecycle Management solution helps you gain 100-percent visibility into deployed virtual machines and implement policy-based control of VM creation, moves, and changes. This level of accuracy, spanning all of IT, is a fundamental requirement for true virtual lifecycle management.

With this solution, VM creation is controlled by an automated process – initiated by an end-user request from a self-service portal, approved through standard IT request management processes, then automatically provisioned based on approved IT service templates (with a pre-assigned decommissioning date). VM retirement is automatically initiated, and handled through a similar process, thus ensuring complete visibility, control, and recovery of VM resources.

Because BMC provides a similarly deep level of visibility and process automation for the physical infrastructure, you can leverage consistent processes, policies, tools, and people for both environments, thus saving time and money and reducing risk.

BMC's Virtual Lifecycle Management solution is delivered as a combination of products and consulting services, centered on a milestone-based value path that includes such capabilities as:

- » VM discovery
- » Automated VM provisioning
- » Policy-based operations



- » Chargebacks
- » Complete VM lifecycle control

VIRTUAL PERFORMANCE MANAGEMENT

BMC's Virtual Performance Management solution provides you with the ability to ensure optimal use of your infrastructure through ongoing management of both performance and capacity. By using the solution's service-based predictive analytics, you can proactively and efficiently ensure that performance and availability SLAs are met — even in a complex, highly virtualized, and dynamic environment.

The BMC solution not only helps you monitor and plan capacity usage, it also automatically adjusts to changes in the virtualized infrastructure, such as VM moves, thus ensuring management continuity and reliable performance.

With BMC, you can deliver predictable, reliable, and efficient operations, even in a large, complex, and heterogeneous environment. Specifically, you will achieve operational savings, reliable operations, and confidence in your ability to successfully embrace virtualization and cloud computing.

BMC's Virtual Performance Management solution is delivered as a combination of products and consulting services, centered on a milestone-based value path that includes such capabilities as:

- » Performance and availability monitoring
- » VM discovery
- » Capacity management
- » Server consolidation
- » Performance and availability optimization

VIRTUAL COMPLIANCE MANAGEMENT

BMC delivers a uniform, closed-loop compliance solution, allowing you to follow consistent policies, processes, and tools across physical, virtual, and cloud environments.

With BMC's Virtual Compliance Management solution, you can quickly achieve and report on compliance with all applicable policies in your environment. Compliance audits are no longer disruptive and expensive, and maintaining compliance becomes a by-product of day-to-day operations, rather than an annual event. Relying on a uniform set of policies and tools across physical and virtual environments ensures consistency, avoids silos, and dramatically improves the ease and effort associated with audits — freeing up your time to innovate and deliver business value.

BMC's Virtual Compliance Management solution is delivered as a combination of products and consulting services, centered on a milestone-based value path that includes such capabilities as:

- » VM discovery
- » Compliance measurement
- » Compliance remediation
- » Policy-based patching
- » Policy-based operations

KEY BENEFITS

- » Detect and correct VM sprawl by automating processes for VM requests, provisioning, and retirement
- » Meet SLAs by reducing downtime and proactively addressing performance issues
- » Achieve and maintain security, process, regulatory, and configuration compliance through policy-based operations
- » Share policies, processes, and people across physical and virtual environments
- » Realize capital savings through optimal use of virtualized hardware

VIRTUALIZATION MANAGEMENT AND BUSINESS SERVICE MANAGEMENT

By addressing the primary virtualization management challenges in a way that leverages your investment in the physical world, you're taking the critical first step toward Business Service Management (BSM).

BSM from BMC is a comprehensive approach and unified platform for running IT that reduces cost and maximizes business impact. BSM is built on a simple but powerful concept: Since business runs on IT, then IT should be run based on business priorities. With BSM from BMC, technologies and processes are executed efficiently and managed based on business needs, so you can deliver new services that create more business value, while also supporting existing services at lower cost.

With BSM from BMC Software, you will deliver measurable results for your business:

- » Deliver services up to 30 percent more efficiently
- » Deliver new services up to 50 percent faster
- » Reduce downtime by 75 percent
- » Reduce the cost of compliance by 30 percent
- » Gain 100-percent visibility into your IT spend

LEARN MORE

BMC can help you efficiently and effectively address both your immediate and long-term virtualization and cloud computing goals. To learn more, please visit [visit www.bmc.com/virtualization](http://www.bmc.com/virtualization).

METRICS THAT MATTER

- » Fewer unmanaged VMs
- » Longer mean time between failures
- » Improved service availability and performance (SLA)
- » Improved incident-to-change ratio
- » Increased server hardware utilization
- » Decrease in the amount of time needed to audit and remediate
- » Increased server-to-admin ratio
- » Increased percentage of applications virtualized

BUSINESS RUNS ON I.T. I.T. RUNS ON BMC SOFTWARE.

Business thrives when IT runs smarter, faster and stronger. That's why the most demanding IT organizations in the world rely on BMC Software across both mainframe and distributed environments. Recognized as the leader in Business Service Management, BMC offers a comprehensive approach and unified platform that helps IT organizations cut cost, reduce risk and drive business profit. For the four fiscal quarters ended June 30, 2009, BMC revenue was approximately \$1.88 billion. Visit www.bmc.com for more information.

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