



BMC Performance Assurance Suite for Virtual Servers

Proactively and effectively manage your virtual server environment

The BMC Performance Assurance Suite for Virtual Servers:

- > Effectively manages VMware performance and server capacity
- > Minimizes risks in deploying virtual servers
- > Facilitates planning for cost-effective consolidation of business services
- > Proactively manages virtual server performance to ensure service level agreements are met
- > Assures virtualization project success
- > Identifies and resolves performance issues before they impact the end user

Virtualization technology is becoming more accepted as an option for effectively managing and maintaining the infrastructure. By creating a set of logical resources that share underlying physical resources, and centralizing common services, virtual servers promise the benefits of reduced costs through higher utilization, improved service levels through dynamic tuning, and increased flexibility through rapid provisioning.

Successful IT providers need a capacity management solution that lets them address business goals by exploiting virtualization technologies when appropriate. However, to use the technology most effectively and reap the anticipated ROI, you must seamlessly transition your business users from the real to the virtual world. Ultimately, the challenge of matching system resources to user requirements only can be met by a comprehensive toolset that leverages appropriate resources while minimizing costs and service level risks.

Virtualization technologies, such as VMware ESX, can be effective tools for consolidating physical Microsoft Windows and Linux servers, while enabling the application flexibility that makes those servers attractive to business users. BMC® Performance Assurance Suite for Virtual Servers is a capacity management solution for distributed systems that lets users accurately measure, manage, and improve system and application performance on UNIX, Linux, and Microsoft Window servers.

BMC Performance Assurance Suite for Virtual Servers extends the range of supported applications and servers to VMware ESX environments. The product suite provides the foundation for a key BMC Route-to-Value™ in achieving best practice Business Service Management with measurable benefits.

Virtualization Benefits

Virtualization software creates a server image that shares resources with other server images to improve overall utilization and eliminate redundant expenses (such as network interface hardware and Fibre Channel bus adapters). Consolidating many servers from single CPU hardware to four-way or eight-way architectures can reduce hardware cost by as much as 50 percent over a three-year period. Such hardware consolidation can also reduce power consumption and space requirements, further improving ROI.

Managing multiple servers from a central point can reduce administrative overhead for system maintenance activities and allow scarce IT resources to be redeployed to higher-value business services. Aside from cost reduction through server consolidation, virtualization lets you rapidly install and deploy server resources as needed by business requirements.

Short-term systems requirements for development, testing, quality assurance, and short-lived business initiatives can be addressed by drawing on underutilized servers without adding additional clutter or cost to the IT department. The virtual server provides fault tolerance and isolation so that individual users may be unaware that they are running on shared resources.



Historical reporting with exception isolation spanning all key resources quickly identifies performance issues, saving time and effort

Successful Virtualization via Performance Assurance

BMC Performance Assurance Suite for Virtual Servers effectively determines which Windows and Linux systems are suitable candidates for virtualization and helps quantify the initial capacity requirements for server sizing. As part of the process, users can determine if enough physical resources are available to support virtual servers, establish a business oriented application asset profile through workload characterization and identify potential bottlenecks before deployment.

BMC Performance Assurance Suite for Virtual Servers advanced predictive capabilities let you model the migration of physical Windows or Linux systems to a VMware ESX server and achieve higher utilization rates for x86 servers. You can also model migration of VMware virtual machines (VMs) between VMware ESX hosts to minimize CPU contention and achieve optimum performance. An overall view of physical-utilization at the VMware ESX host level, and virtual-utilization at the VM level, reveals how migrated business applications are performing within the VMs.

Once virtualized systems are deployed, BMC Performance Assurance Suite for Virtual Servers assures that services use system resources efficiently and applications meet end-user expectations. The product provides key functionality for effective capacity management of VMware ESX servers:

- > Analytic assessment of production performance issues and trends
- > Advanced predictive capability to accurately model migration of physical Windows or Linux systems to VMware VMs
- > Flexible reporting options for a complete picture of system and application health, from a resource requirements perspective
- > Graphical and analytic tools for insight into problems, causes, and solutions
- > Aggregate host system and individual virtual machine performance views
- > Inside views for relative application performance analysis
- > Outside views for VM resource analysis to tune or identify when the host system is reaching resource constraints

BMC Performance Assurance Suite for Virtual Servers is built on a foundation of complete, accurate, and automated data collection to accurately track critical performance metrics over time. The product combines trending with advanced mathematical techniques to enhance your understanding of what is normal in your virtualized system environment. It identifies hot spots of abnormal or unusual activity that can be corrected long before they might impact business service.



Ensure compliance with service level requirements and report results directly to business users through flexible reporting tools

Performance Views

An intuitive graphical user interface lets you manage your Windows, UNIX, Linux, and VMware ESX system resources. This cross-platform capability enables consistent best-practice capacity management across heterogeneous environments. Data is consolidated in a single performance repository, enabling easy analysis and reporting of all elements (both real and virtual) that interoperate in a distributed application environment. The inside VM views show key consumers of application processes, while the outside VMware ESX views help accurately manage the server resources needed to support those consumers. These features let you quickly identify and correct performance bottlenecks, streamlining IT processes and improving customer satisfaction.

Visualization and communication are essential in the virtual world, especially to the end business consumer. BMC Performance Assurance Suite for Virtual Servers provides a rich set of performance graphs that can be tailored and published through a corporate intranet for viewing on any Web browser.

Data filtering saves time and improves productivity by allowing systems managers to focus on the most critical information through a management-by-exception process. Correlation of performance information within and across systems reveals dependencies among application elements that span platforms — a key requirement for diagnosing response-time performance issues.

Supported Environments

BMC Performance Assurance Suite for Virtual Servers is licensed per managed VMware ESX host and supports Linux and Microsoft Windows guest operating systems.

The user interface is supported on Microsoft Windows and UNIX systems and provides a comprehensive performance management solution for both real and virtual distributed systems.

For a full list of supported platforms, contact your BMC Software representative or visit www.bmc.com.

Helping You Maintain Advantage

BMC Software Professional Services helps your company maintain its competitive advantage through a comprehensive suite of services that includes service level management consulting, installation, implementation, configuration, and customization. Our professional services and education offerings are designed to ensure the ongoing availability of critical business applications, maximize product potential, reduce project risk, deliver IT value to your business, and improve your operations. For more information about BMC Software Professional Services, visit www.bmc.com/profserv.

About BMC Software

BMC Software helps IT organizations drive greater business value through better management of technology. Our industry-leading Business Service Management solutions ensure that everything IT does is prioritized according to business impact, so IT can proactively address business requirements to lower costs, drive revenue, and mitigate risk. BMC solutions share BMC® Atrium™ technologies to enable IT to manage across the complexity of diverse systems and processes — from mainframe to distributed, databases to applications, service to security. Founded in 1980, BMC has offices worldwide and fiscal 2005 revenues of more than \$1.46 billion. BMC Software. Activate your business with the power of IT. For more information, visit www.bmc.com.



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