BMC Capacity Management

Comprehensive capacity management for enterprise datacenters

KEY BENEFITS

- Simplified visual guidance through a consolidated view of datacenter utilization puts the power of capacity management within everyone's reach
- Optimize existing IT infrastructure resources to meet current and future capacity requirements
- Boost productivity of existing IT staff while managing capacity and performance based on business priorities
- Confidently virtualize mission-critical business applications using advanced modeling capabilities
- Support for the widest range of physical and virtual platforms enables you to plan for everything

BMC Atrium ACTIVATED

This product integrates with BMC Atrium technologies.

BMC Capacity Management combines simplified views of data center resource utilization and capacity with powerful visualization, sophisticated analysis, and analytic modeling capabilities to provide the most comprehensive capacity management solution available today.

BUSINESS CHALLENGE

Effective capacity management balances cost against capacity and supply against demand to ensure that sufficient IT resources are available to meet current and future business requirements. Unfortunately for the majority of IT organizations with an already over-burdened staff, capacity management remains an unattainable goal.

Organizations remain under intense pressure to optimize data centers by efficiently utilizing capacity to meet business needs. Many organizations are implementing capacity management processes and optimizing existing resources by consolidating servers through server virtualization. In addition to infrastructure changes, virtualization creates additional pressure to improve staff productivity through automation technology.

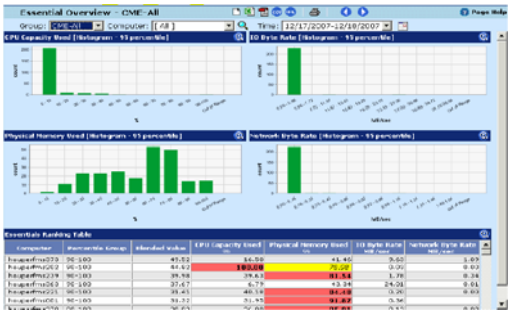
Distributed and mainframe systems, managed with limited staff resources and expertise under tight budget constraints, contribute to an environment where delivering the right capacity at the right time — and doing so cost-effectively — presents a daunting challenge for datacenter managers.

THE BMC SOLUTION

BMC Capacity Management provides the reporting, analysis, modeling and automation tools you need to implement effective capacity management practices. With BMC Capacity Management you can rapidly determine data center resource utilization and capacity to identify under-utilized or over-utilized servers; accurately plan, implement, and manage the consolidation, virtualization, and ongoing optimization of your data center resources, from the perspective of the business – all with your existing IT staff.

Complete and Accurate Data Collection with Minimal Overhead

Effective capacity management begins with accurate data collection. BMC Capacity Management's data collection technology ensures that performance data is complete, so that capacity analysis, reporting, and prediction are accurate. The product's collection process for performance data is fully automated, eliminating the errors and oversights that typically exist with manual collection. Data collection is scalable with low overhead and high granularity. As the number of users increase, applications are added, or infrastructure grows, performance data collection continues without interruption, omission, manual intervention, or increased overhead.



Accurate data collection enables comprehensive views of data center utilization and capacity

BMC Capacity Management can be configured to collect data from remote computers running Microsoft Windows without agents on those systems. This gives you additional flexibility in deploying a comprehensive capacity management methodology throughout your environment. Patented technology ensures a near 100 percent data capture rate that is unique in the industry, providing a business advantage unmatched by any other solution.

ANSWER THE FOLLOWING QUESTIONS

- What is my current datacenter utilization and capacity?
- How much capacity do I really need today?
- How much future capacity do I really need to deliver consistent performance given anticipated business growth?
- Which applications can I consolidate or virtualize to optimize my existing infrastructure?
- When will application response-time become unacceptable given workload increases?
- Where are my performance bottlenecks?

Analyze Business-Service Performance

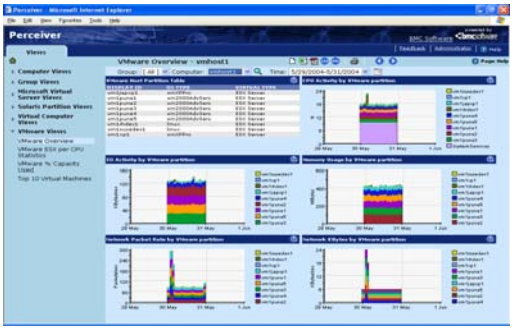
With BMC Capacity Management's analysis capabilities you can rapidly identify business service resource trends and requirements to deliver consistent business service performance that meets or exceeds expectations. Critical performance metrics are continually tracked over time and trends that are influenced by business cycles are automatically identified.

Begin your performance analysis with server-level views of performance or add "workloads" consisting of the users, applications, and system resources for a more granular view of performance from a business service perspective. Performance bottlenecks can be rapidly identified and corrected, which streamlines business processes and improves customer satisfaction. Automated data filtering uses a management-by-exception process that enables system managers to quickly focus on the most business-critical information, saving time and improving productivity.

The cross-platform capabilities provide consistent management practices that apply to Windows, UNIX®, Linux® (physical and virtual) and VMware ESX host systems. Correlation of performance information within and across systems reveals dependencies between performance metrics, critical to diagnosing response-time problems for cross-platform applications.

Automate Capacity Reporting

BMC Capacity Management visualization capabilities, powered by a robust capacity database (CDB), enable consistent, common reporting across today's complex, heterogeneous environments. A variety of performance reports and graphs, created either automatically or in response to ad hoc queries, are available for the widest array of physical and virtual platforms. This ability to review system and application-use and performance patterns in a highly visual format expedites problem identification and resolution. Flexible reporting options facilitate communication of performance information to business application owners, system administrators, and stakeholders alike. Graphs and reports can be tailored to answer specific questions or provide exact data views. By focusing on areas of interest, you can refine your data views, isolate the root cause of a problem, and discover potential solutions.

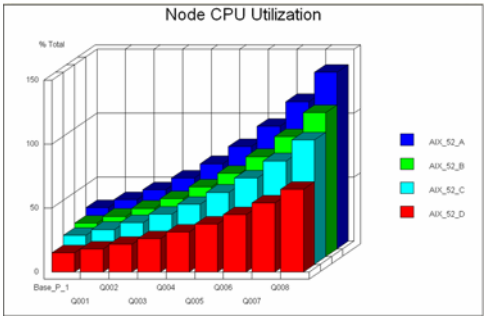


Track the performance and capacity of servers and applications on physical and virtual systems from a single user interface

The BMC solution includes advanced statistical analysis capabilities that examine workloads for long-term patterns, typical use, and response-time peaks and valleys. After understanding normal performance characteristics, the BMC solution delivers exception-reports automatically. All performance reports and graphs immediately can be reviewed and refined through the intuitive interface that provides an interactive, self-service capability for system administrators and for business and application users who want insight into the overall performance of their application servers. This simple web-based interface provides dynamic access to performance information, with best-practice views that foster communication between the performance staff and business application owners.

Deliver Optimal Consolidation and Virtualization Plans

BMC Capacity Management rapidly determines which physical Windows, Linux, and UNIX 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.



Current and future resource requirements for physical and virtual workloads are presented in easy-to-read charts and reports

BMC Capacity Management's advanced predictive modeling capabilities enable you to identify the optimum physical host configuration, which delivers maximum performance, when migrating physical Windows, Linux, or UNIX systems to a virtual infrastructure. You can also model the migration of virtual systems between physical hosts to minimize CPU contention and achieve optimum performance. An overall view of physical utilization at the host-level, and virtual utilization at the virtual machine/partition level, reveals how migrated business applications are performing within the virtual systems.

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Once virtualized systems are deployed, BMC Capacity Management assures that services use system resources efficiently and applications meet end-user expectations. The solution provides key functionality for effective capacity management of your virtual environment including:

- Analytic assessment of production performance issues and trends
- Advanced predictive modeling capabilities that deliver optimal consolidation and virtualization plans
- 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 system performance views
- "Inside" virtual machine views for relative application performance analysis
- "Outside" views for virtual resource analysis to tune or identify when the host system is reaching resource constraints

BMC Capacity Management 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.

Predict and Prevent Performance Problems

Successful system planning requires insight into how changes in the business model will affect performance. BMC Capacity Management prevents potential problems by modeling the impact that business changes will have on the system. A solid capacity plan can then be built by using what-if analysis. BMC Capacity Management answers today's IT questions:

- How do I effectively and efficiently virtualize an IT environment containing thousands of physical servers?
- Which of my mission critical applications can I virtualize?
- Does the IT infrastructure hosting my web site have the capacity to support ten times the normal number of hits per hour?
- Has the deployment of a new application or business service been provided with sufficient resources to meet service level requirements?

BMC Capacity Management shows the impact that virtualization, configuration changes and anticipated transaction growth requirements will have on performance, and identifies the most cost-effective solution to meet business demands.

Optimize and Justify System Acquisitions

Using BMC Capacity Management's advanced planning capabilities, you can quickly determine the physical or virtual resources needed to ensure business service performance over time. Performance modeling determines whether a proposed configuration is adequate for the anticipated demand or whether an application design change is needed. You can also use your modeling results to justify hardware purchases and assess the best time to upgrade, as well as the consequences of not upgrading. Use predictive modeling to schedule a capacity increase to occur at the optimum time. Upgrading too soon is not cost-effective and waiting too long can result in degraded responsiveness or service interruptions. Just-in-time system upgrade enables you to acquire only what you need, when you need it.

Long Term 'Operational' Capacity Planning

With BMC Capacity Management you can achieve 'operational' capacity management by developing long-term planning scenarios that ensure optimum utilization in both physical and virtual environments, stable service levels, and continued customer satisfaction. Using projected workload growth over time, you can anticipate the resulting system and application response times. This accurate projection of performance issues provides valuable input into hardware budget forecasts so you can schedule upgrades, before users experience degradation in performance, and at a time that is least disruptive to your business processes.

Application Performance Management

BMC Capacity Management includes predefined, out-of-the-box modeling solutions for many popular business applications and databases, such as WebSphere, PeopleSoft, Oracle®, and Microsoft SQL Server. When implementing business-critical applications, stress testing is an optimal, but not always feasible, precursor to deployment. With BMC Capacity Management you can accurately predict the performance of complex multi-tiered applications in a pre-production environment to determine the optimum production configuration that will

deliver the required performance and response-time and support the business workload. Therefore, when you do go live, you can do so with the confidence that your business processes will run efficiently.

ALIGNMENT WITH BEST PRACTICES

BMC Capacity Management incorporates proven best practices that map directly to IT Infrastructure Library® (ITIL®) capacity management processes. It visually identifies opportunities to optimize existing data center resources and improve quality of service. It provides analysis of key performance data to identify trends in performance and response time. Advanced modeling capabilities tune system resources from baseline analysis to optimize system resources or predict future resource capacity requirements. With over 25 years of experience developing comprehensive capacity analysis and planning solutions for enterprise data centers, BMC is uniquely qualified to address today's capacity management issues.

PART OF A COMPREHENSIVE BUSINESS SERVICE MANAGEMENT APPROACH

Business Service Management (BSM) is the most effective approach for managing IT from the perspective of the business. BSM from BMC combines best-practice IT processes (such as support for ITIL), automated technology management, and a shared view of how IT resources directly support the business. BSM brings you a step up in service management maturity level: You transition from managing IT from a technology perspective to managing IT from the perspective of the business.

BMC Capacity Management's integration with BMC Capacity Management Essentials and partner products such as Solution Labs Performance Surveyor, together deliver the features to address any capacity management requirement. BMC Capacity Management also integrates with the BMC Atrium Configuration Management Database (CMDB), which provides system-level capacity reports to other BSM solutions, such as BMC Asset Management, BMC Change Process Management, and more.

TECHNICAL SPECIFICATIONS

Supported Environments Include:

- Operating Systems
  - Microsoft Windows
  - UNIX (IBM AIX®, HP-UX, Sun Solaris™),
  - Linux (Red Hat, SuSE, Oracle Enterprise)
- Virtual and Partitioned Servers
  - VMware ESX
  - Microsoft Windows Virtual Server
  - IBM AIX® (LPAR, DLPAR, SPLPAR/Micropartitions)
  - Sun Solaris™ (DSD, Containers)
  - HP-UX (n/Par, v/Par)

FOR MORE INFORMATION

For more information, please visit www.bmc.com

BUSINESS RUNS ON IT.
IT 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 distributed and mainframe 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 September 30, 2008, BMC revenue was approximately $1.83 billion. Visit www.bmc.com for more information.

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