BMC Middleware Management

Track transactions, improve the performance and administration of your cross-platform middleware environment, and understand the impact of slowdowns with secure self-service solutions.

Let BMC watch your middleware, so you can watch your business.

Key benefits

» Track transactions from the application to the database, and receive automatic alerts about potential problems

» Find and fix problems faster

» Reduce costs by eliminating the monitoring of silos and providing reliable monitoring, secure self-service, and business alignment

» Enable developers to use self-service for their routine requests, such as checking a queue for message arrival or validating the message format

» Improve overall service delivery by avoiding degradation or outages

» Improve staff productivity by simplifying the management tasks related to complex transactions and middleware

» Generate reports showing configuration changes by time, user, or object for troubleshooting or in response to an audit

» Ensure application performance across mainframe, distributed, virtual, and cloud environments

Business Challenge

Many applications cross computing platforms, share infrastructure and data with other applications, and communicate through middleware. The distributed nature of applications requires that all layers of the application services stack, including transactions, be managed to ensure operational efficiency. Although middleware connects applications with the network and back-end data servers to process transactions, it is often complex and can run through both software and hardware appliances. With so many moving parts, it can be difficult to pinpoint problems and understand the business impact.

To ensure business service delivery, you need an automated and proactive middleware monitoring and management solution. Proactive management enables you to prevent many problems and respond quickly to slowdowns, ensuring that you minimize the impact of problems.

The BMC Solution

BMC Middleware Management ensures application performance and business service delivery through automated management of middleware performance, administration, and transactions across the enterprise. BMC Middleware Management provides immediate access to views showing the status and details of your middleware infrastructure, and it improves productivity and reduces time-to-resolution during root cause analysis.

Simplify and automate

BMC Middleware Management provides a single management console that shows what’s happening with the applications your middleware layer is supporting, and enables you to quickly find and fix problems. BMC Middleware Management provides:

» Application transaction tracing. Quickly identify problems that affect performance (and ultimately your business) by tracking transactions across the enterprise — from the time they are initiated by the end user to the point of completion — through integration with BMC ProactiveNet Performance Management.

» Deep-dive diagnostics Gain insight into transactions as they traverse mainframe subsystems (IBM® CICS®, IMS™, DB2® for z/OS®, and WebSphere® MQ) and distributed systems, particularly message-oriented middleware and enterprise service bus technologies, including the IBM WebSphere DataPower® Integration Appliance. Drill down to find the root cause of the problem.

BMC Middleware Management automates the resolution of common problems. It helps you find and fix problems quickly with real-time performance and availability monitoring and application transaction tracing, and it stores historical data so that you can isolate and resolve chronic issues. Reporting and analysis help you identify process improvements.

With BMC, you can now answer such questions as: What transactions are flowing through our infrastructure? Are we delivering them in a timely manner? What went wrong and why? Are we using our resources optimally? Do we need to adjust resources? Will we have enough availability next year?
BMC Middleware Monitoring

BMC Middleware Monitoring ensures middleware health and availability. BMC provides broad support of middleware technologies for monitoring, including leading messaging-oriented middleware technologies (such as WebSphere MQ and TIBCO EMS), application servers (such as WebSphere Application Server and Oracle® BEA WebLogic), and Enterprise Service Bus (such as WebSphere Message Broker, WebSphere DataPower Appliance, and TIBCO BusinessWorks).

A single console offers complete control over middleware performance monitoring and automation. In addition, real-time views of performance allow you to quickly assess the health and application use of middleware technology. Finally, role-based access and application-specific views improve your efficiency by showing the right information to each user.

BMC Middleware Monitoring provides the functionality previously available in:

» BMC Middleware Management – Performance and Availability (Q Pasa!)
» BMC MainView for WebSphere MQ
» BMC Performance Manager for WebSphere Business Integration

Operations management

BMC Middleware Monitoring provides all the information you need to monitor your middleware environment. All user interactions are logged, providing audit-ready history. Centralized security management allows you to create users and groups and control access to the server and middleware functions with enforcement of your middleware technology's own security. A single look and feel — regardless of platform — maximizes end-user productivity and reduces the need for platform-specific skills.

Problem management

Event detection provides an early warning system. Users are immediately notified of conditions where middleware infrastructure is negatively affecting business operations. Event notification and escalation is available through email, SNMP, logging, or direct integration with systems management consoles, including BMC MainView and BMC ProactiveNet Performance Management. Automation reduces the amount of administrator intervention required to correct problems.

Performance management

BMC Middleware Monitoring provides out-of-the-box views that allow you to assess performance. You can create customized role-based or application-based views that focus on the leading performance indicators. Rules-based capture of historical information, coupled with standard and custom reports and charts, can be used to perform time-based analysis of performance, trending, and capacity planning. Standard plug-and-play templates for immediate use are available for dashboards, reports, and alerts.

Analysis management

BMC Middleware Monitoring provides charts and reports that expose historical performance information on an hourly, daily, weekly, monthly, or annual basis. Charts and reports can be used to find trends or peak hours of operation and develop strategies to manage these trends, predict future requirements, and analyze system issues. What's more, you can collect and store historical performance data for any object or technology monitored. Fully configurable, easy-to-use templates are included to meet your needs. Data is stored in a relational database and may be optionally integrated with enterprise reporting engines.
BMC Application Transaction Tracing

BMC Application Transaction Tracing provides complete visibility and improves your control over business applications and service levels. It provides “hop to hop” visibility of transactions throughout your IT infrastructure. BMC Application Transaction Tracing proactively identifies problems and pinpoints the specific technology tier where the problems are occurring. Real-time information on performance and business impact is visible on transaction dashboards, allowing users to react quickly and minimize disruption.

BMC Application Transaction Tracing provides the functionality previously available in:

- BMC Middleware Management – Transaction Monitoring (Q Nami!)
- BMC Middleware Management – Transaction Analytics for WebSphere MQ (StatWatch)
- BMC MainView Transaction Analyzer

BMC Application Transaction Tracing collects and records transactions as they move through the IT infrastructure. With its robust transaction latency capabilities, it pinpoints trouble and provides a proactive path toward process optimization. Information on transaction traffic sent, as well as business data within each transaction, facilitates charge-back reporting and meets audit and compliance requirements.

Pinpoint performance problems

Troubleshooting composite applications with multiple technology dependencies is daunting. When performance degrades, it typically requires several administrative groups to identify the location of the problem before root cause analysis can begin. BMC Application Transaction Tracing dashboards clearly show the location of application latency so that the appropriate team can begin root cause analysis. Both real-time and historical data is available to support problem determination and performance analysis.

Finding the missing transaction

IT is often tasked with providing reports based on transactions that have been committed to the database. What value does the report have if some transactions never completed? BMC Application Transaction Tracing not only shows you what transactions have completed, it also tracks and provides visibility to all the in-flight and failed transactions.

Monitor service level agreements

When service level agreements involve other organizations, vendors, or business partners, BMC Application Transaction Tracing can show you when a transaction arrives at your “border” and account for the time taken to process and return that request. You can quickly generate audit reports with detailed timestamps for every transaction to show that you are meeting SLAs. If latencies or failures are affecting service delivery, BMC Application Transaction Tracing can help. With trending analysis and capacity reports, you have information to support needs for additional resources.

Monitor high-value transactions

While every transaction is important, some have higher value than others. Your organization may have established different processing criteria based on the value or contents of a transaction. BMC Application Transaction Tracing can expose the contents of a transaction and allow you to monitor and create events based on the transaction’s content. End-to-end message tracking reports show when the message was first written, the route it took, and time it was delivered to its final destination. Requests can be correlated with responses so that you can compare response time to business objectives. BMC Application Transaction Tracing captures statistics that are useful for chargeback models and capacity planning.

Root cause analysis

BMC Application Transaction Tracing helps you determine the root cause for operational and performance problems by correlating the components of complex transactions. It provides basic metrics on each component and enables you to hyperlink to other installed BMC products for detailed analysis.
BMC Middleware Administration

BMC Middleware Administration is a Web-based tool that enables you to view and manage the full set of middleware objects with WebSphere MQ and TIBCO Enterprise Message Service (EMS) environments. With defined projects, you can group infrastructure objects to provide secure profiles of objects to users and to make navigation to objects associated with a particular business service or application faster and easier. Built-in security mechanisms ensure that only authorized users have access to the product and applicable projects.

BMC Middleware Administration provides secure self-service through a Web interface. Project-based access ensures your users can access only the objects relevant to their role or application.

BMC Middleware Administration provides the functionality previously available in:

» BMC Middleware Management – Administration for WebSphere MQ (AppWatch)
» BMC Middleware Management – Administration for TIBCO EMS (AppWise)

Authorized users can perform all administrative and configuration tasks for WebSphere MQ and TIBCO EMS from a Web browser, eliminating the need to log on to each host and significantly reducing the mean time to resolution of middleware problems.

Authorized users can inspect and even manipulate individual queues and messages. Depending on defined authorization level, users are able to browse the messages on a queue, put new messages to a queue, copy messages from queue to queue, or even delete messages.

BMC Middleware Administration addresses the problems that large-scale WebSphere MQ and TIBCO EMS users commonly experience: there is no easy way to provide developers with secure and safe access to their own messages or queue and channel status. Using BMC Middleware Administration, developers can safely troubleshoot their applications without having to call on a central administrative group to provide assistance.

BMC Middleware Administration runs on a single server and provides users access to all of the product’s functions from their desktops — even the administration/control functions. All that’s required is a standard Web browser. An agentless architecture eliminates the burden of software distribution and minimizes the requirement for lengthy change control processes. The server-based approach means that upgrades are localized to the server rollouts and upgrades can be done quickly.

For More Information

To learn more, please visit www.bmc.com/middleware.

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