BMC Database Management Solutions for IMS®

We’re watching IMS so that you can watch your business.

BMC MAXM Database Advisor

» Get proactive notification of database reorganization needs
» Automate IMS database maintenance: capture statistical information, analyze the statistics, forecast exceptions, and generate optimized JCL for the reorganization
» Leverage a GUI to manage all IMS databases

Business Challenge

Because your data is arguably your organization’s most valuable asset, you must ensure that it is secure, available, and performing at levels required to meet your business goals. At BMC Software, data is our business. We make sure your IMS® databases and systems are secure and recoverable, performing optimally, and available for your applications when they need it. We will treat your data like it is ours.

Whether you need to reduce processing costs, improve availability or productivity, or reduce risk, BMC Database Management Solutions for IMS can help. With BMC, you can manage more data more effectively than ever before.

The BMC Solution

BMC Database Management Solutions for IMS reduce your total cost of ownership, improve performance, increase availability, maximize productivity, and reduce risk for your IMS databases, systems, and applications.

Proactively manage database maintenance

IMS data is growing, IT budgets are shrinking, and IMS experts are retiring. Continuous availability and performance requirements, as well as expensive CPU cycles, strain maintenance schedules. New DBAs need to learn how to manage IMS, but the next generation of IMS DBAs grew up with easy-to-use graphical user interfaces (GUIs) and intuitive tools. How will they be able to manage complex IMS environments to provide optimal performance and continuous availability?

BMC MAXM Database Advisor for IMS proactively manages IMS database maintenance and prevents unplanned outages to improve availability while reducing costs. A GUI enables you to work with full-function, HALDB, and Fast Path databases.

BMC MAXM Database Advisor provides the following features and benefits:

» Reorganizes only the databases that need to be reorganized, enabling substantial savings for CPU, I/O, and storage resources
» Determines what databases need maintenance — and when — and notifies you, so that you can improve productivity
» Eliminates unnecessary maintenance, unplanned outages, manual effort, and errors to maximize availability
» Collects database statistics automatically and generates JCL that takes advantage of your installed products
» Enables less experienced DBAs to manage IMS databases
» Proactively notifies you of database reorganization needs
» Automates IMS database maintenance: captures statistical information, analyzes the statistics, forecasts exceptions, and generates optimized JCL for the reorganization
BMC Reorganization Solutions

» Perform maintenance only on objects that require it
» Maintain near-continuous access to IMS during a reorganization
» Reorganize only the portions of the database that are causing performance problems — with no outage (Online/Defrag feature)
» Discover all IMS systems and underlying databases and ensure that IMS control block source code is available (DBA Toolkit)
» Assess database characteristics and product code to build JCL that will execute the most efficient reorganization
» Enable secondary indexes on Fast Path databases

Automate database maintenance and reorganize with no outage

IMS applications demand optimal performance, and they often require continuous availability. Reorganizing databases improves performance, but reorganizations generally require an outage of some type. How can you ensure optimal performance and keep applications online at the same time?

HALDB and full-function database solutions

» BMC MAXM Reorg/Online for IMS eliminates downtime for performance-related reorganizations and dramatically reduces downtime for complete reorganizations. A complete reorganization requires only a minimal outage (usually less than one minute). The Online/Defrag feature reorganizes just the portion of a database that is causing performance problems.
» BMC Database Restructure for IMS dramatically reduces downtime for database restructuring. You can implement compression, change access methods, and more — in minutes rather than hours.
» BMC POINTER CHECKER PLUS validates, analyzes, and repairs IMS databases — quickly and efficiently. BMC POINTER CHECKER PLUS improves application availability and performance by proactively monitoring database space utilization and identifying problems.

Fast Path database solutions

» BMC Fast Path Online Restructure/EP enables you to make structural changes with no outage.
» BMC Fast Path Enhanced Online Suite maximizes data availability, improves database performance, eliminates recoveries, and enhances application flexibility through indexing. You can perform offline or online maintenance, including reorganization, analysis, image copy, and recovery.
» BMC Fast Path Extend dynamically extends database size to prevent unplanned outages.

Partitioning solution

» BMC Partitioned Database Facility for IMS enables database partitioning without the restrictions of HALDB. You can increase database size by a factor of 100 with no application changes.

BMC Backup and Recovery Solution for IMS provides a comprehensive set of tools to support image copy, change accumulation, and recovery management tasks, and is fully integrated with DBRC.

Backup and Recovery Solution for IMS provides the following features and benefits:

» Snapshot Copy — Virtually eliminates outages for image copies
» Automated Restart — Resubmits failed image copy jobs (with no JCL or syntax changes)
» Recovery Advisor — Proactively notifies you of exceptions to user-defined thresholds to detect and correct problems that affect recoverability of IMS databases and performance of RECON data sets
» Conditional Image Copy — Backs up only the databases that have changed since the last backup, saving significant CPU resources and reducing planned outages

BMC Backup and Recovery

» Get proactive notification of exceptions that affect recoverability of IMS databases and performance of RECON data sets (Recovery Advisor)
» Back up only the databases that have changed since the last backup
» Assess database characteristics and product code to build JCL that will execute backup and recovery tasks most efficiently

Backup and recover IMS data with minimal or no outage

Downtime is expensive, and unplanned outages can have grave consequences. You need to be prepared to recover quickly and get all applications back online. Because about 80 percent of database recoveries are the result of user or application errors, you need a local backup plan, as well as a disaster recovery plan.

» BMC Backup and Recovery Solution for IMS provides a comprehensive set of tools to support image copy, change accumulation, and recovery management tasks, and is fully integrated with DBRC.

» BMC Backup and Recovery Solution for IMS provides the following features and benefits:

— Virtually eliminates outages for image copies
— Resubmits failed image copy jobs (with no JCL or syntax changes)
— Proactively notifies you of exceptions to user-defined thresholds to detect and correct problems that affect recoverability of IMS databases and performance of RECON data sets
— Backs up only the databases that have changed since the last backup, saving significant CPU resources and reducing planned outages
BMC System Administration

» Interactively add databases, programs, transactions, and route codes without an IMSGEN

» Enable dynamic changes for IMS Connect

» Implement a group of dependent resource definition changes as a single unit of work

» Provide an audit trail of resource definition changes recorded in a history file

» Eliminate the need to code assembly language exits for IMS Connect

» Continuously track the state of the IMS message queues and compare the queue usage to user-defined thresholds

» Automatically identify invalid messages and notify the processing application program

» Gain a high-level view of application processing for a single IMS or your entire IMS environment and drill down from a logical view of the application flow into detailed views of individual records

Simplify system administration and implement changes with no outage

Managing sysplex environments, exploiting data sharing technology, and opening IMS to the web can present many challenges, including keeping application definitions synchronized, making IMS data available, ensuring availability and integrity around the clock, and preventing increased IMS transactions from overwhelming an IMS system. In this ever-changing environment, how do you implement changes quickly, with integrity, and keep IMS available and performing optimally?

BMC System Administration for IMS enables dynamic, coordinated changes across multiple IMS systems. It simplifies the management of IMS logs, message queues, and IMS Connect. With BMC System Administration for IMS, you can analyze the impact of a change before implementing it, and you can eliminate IMSGENs.

BMC System Administration for IMS includes the following products:

» BMC DELTA PLUS VIRTUAL TERMINAL

» BMC Energizer for IMS Connect

» BMC Log Analyzer for IMS

» BMC Message Advisor for IMS

BMC System Administration for IMS provides the following features and benefits:

» Ensures integrity through coordinated changes (for example: a change executed on a user-defined group of systems must complete successfully on all systems or it will not be applied to any systems)

» Improves availability and prevents costly errors by providing interactive analysis of the impact of a system resource definition change

» Eliminates IMS downtime and improves system programmer productivity by dynamically changing system resource definitions, thereby eliminating IMSGENS

» Allows manipulation of virtual devices

» Improves availability by automating protection against IMS/TM outages due to message queue overflows

» Provides comprehensive message management system-wide, within groups, and even at the individual level

» Synthesizes millions of log records into pertinent workflows and correlates related log records to show a transaction in context with all other activity

» Interactively adds databases, programs, transactions, and route codes without an IMSGEN and enables dynamic changes for IMS Connect

» Implements a group of dependent resource definition changes as a single unit of work

» Provides an audit trail of resource definition changes recorded in a history file

» Eliminates the need to code assembly language exits for IMS Connect

» Continuously tracks the state of the IMS message queues and compares the queue usage to user-defined thresholds

» Automatically identifies invalid messages and notifies the processing application program

» Provides a high-level view of application processing for a single IMS or your entire IMS environment and enables you to drill down from a logical view of the application flow into detailed views of individual records
BMC System Performance

» Trace data in chronological order for each available event — from summary to detailed transaction level

» Gain a centralized view of applications and related subsystems across the z/OS environment

» Experience freedom of choice – you can manage IMS through a web-based interface (BMC MainView Explorer) or ISPF

» Integrate with BMC MainView for z/OS, DB2®, CICS®, IP, VTAM, WebSphere® MQ, and BMC MainView Transaction Analyzer using a single interface

Optimize system performance
IMS doesn’t run in isolation; multiple IMS systems communicate with each other and with other database management systems, transaction managers, and components used in web enablement. Processing a common workload in this multi-system environment presents unique challenges in systems management and performance monitoring.

BMC System Performance for IMS monitors, manages, automates, and optimizes complex IMS environments. It ensures the availability, performance, and throughput of IMS business applications and identifies IMS performance problems so that you can correct them before they cause outages. BMC System Performance for IMS offers extensive transaction level reporting and analysis capabilities that can be used for charge-back. It generates comprehensive response time and resource utilization analysis reports.

BMC System Performance for IMS includes the following products:

» BMC MainView for IMS Online
» BMC MainView for IMS Offline
» BMC MainView for DBCTL

BMC System Performance provides the following features and benefits:

» Provides information about the balance between volume of work and the capacity to process it

» Generates comprehensive reports on response time, resource utilization, user and system activity, and database performance for understanding long-term changes in overall behavioral patterns of IMS systems

» Reduces the risk of costly outages by monitoring and managing application service levels across the IMS environment

» Enables proactive control by identifying and resolving IMS systems management problems before they affect end-user service levels

» Manages traditional and data-sharing environments

» Provides information about the balance between volume of work and the capacity to process it

» Traces data in chronological order for each available event — from summary to detailed transaction level

» Enables a centralized view of applications and related subsystems across the z/OS® environment with Single System Image

» Enables you to manage IMS through a web-based interface (BMC MainView Explorer) or ISPF

Learn more
BMC can help you address both your immediate and long term IT management goals. To learn more, please visit www.bmc.com/ims.