Your IBM Passport to DB2 Tools

----IBM DB2 Tools for z/OS

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Introduction



The IBM DB2 Tools for z/OS portfolio plays a significant role in the overall IBM data management solution. They provide efficient management of DB2 resources, performance optimization, and reduction of IT expenses.





Database Management Tools

- 1. DB2 Administration Tool
- 2. DB2 Object Comparison Tool
- 3. DB2 High Performance Unload
- 4. DB2 Utilities Suite
- 5. DB2 Sort
- 6. DB2 Automation Tool
- 7. DB2 Utilities Enhancement Tool
- 8. DB2 Cloning Tool
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- 1. Tivoli OMEGAMON XE for DB2 Performance Expert
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- 5. DB2 SQL Performance Analyzer
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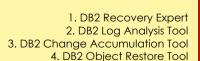
Performance Management Tools



Data Governance Tools

Guardium for z
 DB2/IMS Audit Management Expert
 IBM Data Encryption for DB2 and IMS Databases

nagement Tools



Database Backup and Recovery Tools





DB2 Administration Tool



- Helps users easily alter schema for both batch and online changes
- Helps manage your DB2 subsystems, like displaying and modifying ZPARM parameters, etc.
- Allows users to navigate the DB2 catalog quickly and easily
- Builds and executes dynamic SQL statements without knowing the exact SQL syntax
- Helps build DB2 commands to execute against databases and tables
- Integrated with DB2 utilities to simplify the creation and execution of DB2 utility jobs
- Helps to easily migrate objects, such as existing tables to hash access

Value to you:

DB2 Administration Tool for z/OS enables the day-to-day tasks that are associated with managing a DB2 database efficiently. It simplifies the complex tasks associated with safely managing DB2 objects and schema throughout the application lifecycle with the least possible impact to availability. Whether you're a DB2 novice or an experienced professional, you'll appreciate the easy-to-use comprehensive features that increase your productivity and the reliability of your DB2 objects.

DB2 Object Comparison Tool

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- Compares and synchronizes DB2 structures from different sources
- Generates reports showing compared objects
- Creates jobs that apply or reverse changes
- Offers a comprehensive, easy-to-use change management process that provides an audit trail
- Increases the efficiency with which users can address complex activities
- Allows groups of users to work collaboratively using changes stored in one change management database
- Supports application upgrades and enhancements by keeping multiple database sources in sync

Value to you:

DB2 Object Comparison Tool for z/OS, used in conjunction with DB2 Administration Tool, simplifies the complex tasks associated with safely managing DB2 objects and schema throughout the application lifecycle with the least possible impact to availability.

DB2 High Performance Unload



- Creates multiple output files during a single unload at minimal cost
- Runs outside of DB2, so does not consume competing resources
- Supports efficient migration from non-IBM tools
- Can be launched from IBM DB2 Administration Tool for z/OS
- Increased support for image copies using partitions, including one output file per partition when using a global full image copy

Value to you:

DB2 High Performance Unload for z/OS is a flexible, easy-to-use product that provides a fast and efficient tool to unload and extract data for movement across enterprise systems or for in-place reorganizations.

DB2 Utilities Suite



- Data set level flashcopy support to improve availability and reduce CPU
- Increased availability and consistency for CHECK DATA and CHECK LOB utilities
- When used with DB2 Sort, significant CPU and elapsed time reductions during sort processing
- Increased support for LOB and XML data, increasing availability and removing restrictions
- Toleration, exploitation and support of new DB2 features from day one
- Continued focus on performance enhancements that also reduce complexity and improve productivity

Value to you:

IBM DB2 Utilities Suite for z/OS is a comprehensive set of tools for managing all DB2 maintenance tasks. They help you minimize downtime and reduce costs, while ensuring the highest degree of data integrity.

DB2 Sort



- Significant savings in elapsed time and CPU during utility sort processing, especially LOAD, REORG, and RUNSTATS
- Relief from application constraints of large volumes of data in highly-transactional workload performing numerous insert, update and delete operations
- Increased application availability by reducing the batch window for utility maintenance
- Continued commitment from IBM to deliver a DB2 solution to reduce total cost of ownership (TCO)

Value to you:

DB2 Sort for z/OS provides high speed utility sort processing for data stored in DB2 for z/OS. It helps you improve sort performance, providing significant reductions in elapsed time and CPU usage, while optimizing overall system efficiency by exploiting the advanced facilities of the z/OS operating system and System z.

DB2 Automation Tool



- Automates the execution of DB2 utilities such as COPY, REORG, and MODIFY with space reallocation based on user-specified thresholds
- Allows staff to know what maintenance has been applied to which objects without manually checking
- Consume less system resources such as DASD and CPU by automating routine maintenance utilities for only objects that meet defined criteria
- Provides control over utility job generation, including the order of execution of utility tasks to meet application criteria
- Referential Integrity (RI) capabilities that make it easier to select objects for utility consideration and ensure that related objects are included

Value to you:

DB2 Automation Tool for z/OS automates common DB2 maintenance tasks as well as generates JCL for more complex tasks on one or more objects, reducing the use of system and staff resources.

DB2 Utilities Enhancement Tool



- Transparently cancel active threads and block new threads on DB2 objects
- Automatic sizing and creation of mapping tables and mapping-table indexes for REORG TABLESPACE utility
- A policy rule can block additional threads from accessing an object to avoid contention, allowing a maintenance utility to complete
- Increased usability of IBM REORG, LOAD and CHECK DATA utilities by providing additional options that increase productivity and improve availability
- Ability to establish and maintain company-wide DB2 utility syntax standards

Value to you:

DB2 Utilities Enhancement Tool for z/OS helps DBAs to improve the usage of DB2 utilities and better manage threads.

DB2 Cloning Tool



- Clones DB2 subsystems, table spaces, or index spaces to create up-to-date test environments
- Automates the cloning process
- Quickly copies DB2 data sets within a subsystem or to a different subsystem
- Uses storage aware flashcopy technology to minimize system outage and save on CPU consumption by moving unload processes to the storage processor

Value to you:

DB2 Cloning Tool for z/OS enables you to clone DB2 systems or table spaces quickly and easily. It automates the cloning process to provide usable DB2 clones within minutes, boosting efficiency and freeing up DBA time.

DB2 Bind Manager / Path Checker



- DB2 Bind Manager for z/OS automatically eliminates unnecessary binds and processes only necessary DB2 binds
- DB2 Path Checker for z/OS enables you to identify, analyze and document in advance potential access path changes, without initiating bind processing
- Path Checker and Bind Manager assist in all phases of migration to new versions of DB2 for z/OS including providing a performance baseline and identifying functionality changes that affect applications prior to production

Value to you:

DB2 Bind Manager for z/OS helps you minimize bind operations, thus saving resources. DB2 Path Checker for z/OS helps you avoid costly performance issues relating to access path changes before they occur. Together, these products enable a smooth migration from one DB2 version to another.





PERFORMANO





Tivoli OMEGAMON XE for DB2 Performance Expert

- Provides end-to-end response-time measurement capability for SQL metrics as a component of the DB2 application

- Monitors, analyzes and tunes the performance of DB2 subsystems

- Improves productivity with robust views of performance

- Identifies performance bottlenecks quickly and easily by using predefined rules of thumb

- Provides substantial breadth and depth of monitoring DB2 environments by combining batchreporting capabilities with real-time monitoring and historical tracking functions

- Supports an enterprise-wide integrated systems management strategy activated by the IBM Tivoli OMEGAMON XE family

- Stores performance data and analysis tools in a performance warehouse

Value to you:

IBM Tivoli OMEGAMON XE for DB2 Performance Expert is the single most comprehensive DB2 application performance assessment tool in the marketplace. It helps you assess the efficiency of DB2 and optimize its performance, combining sophisticated reporting, monitoring, and buffer pool analysis features, as well as expert database analysis functions.

DB2 Buffer Pool Analyzer

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- Monitors the performance of buffer pools and group buffer pools
- Optimizes use of buffer pools by aligning buffer pool size and object placement
- Simulates buffer pool behavior to test the impact of changes before they are applied
- Long-term analysis of factual performance for improved prediction of future performance and resource need

Value to you:

DB2 Buffer Pool Analyzer for z/OS helps DBAs analyze and monitor the usage of buffer pools and group buffer pools. It helps optimize database performance by helping buffer pools function at their highest efficiency.

DB2 Query Monitor



- Monitors SQL activities and provides automatic alerts to exceptional events on a monitored DB2 subsystem in real time
- Monitors DB2 commands, Host variables, SQL CA and SQL Code in real time
- Provides user-friendly ISPF, GUI and Web interfaces with SQL statistics of multiple DB2 subsystems
- Integrates with other DB2 tools to reduce resource consumption

Value to you:

DB2 Query Monitor for z/OS can identify problem SQL activity with low resource consumption, provide robust statistics for SQL tuning, and give users the ability to efficiently customize and tune the SQL workload and DB2 objects to ensure the effectiveness of DB2 subsystems and improve overall performance.

DB2 SQL Performance Analyzer



- Provides performance analysis and recommendations for DB2 plans, packages, DBRMs, and SQL without executing them
- Provides several interfaces: Batch, TSO, ISPF and OMF
- Offers "what-if" scenarios to help determine the performance for various database design alternatives
- Supplies professional performance report
- Analyzes economic cost for each query statement

Value to you:

DB2 SQL Performance Analyzer for z/OS provides DBAs and application developers with an extensive analysis of SQL queries without executing them. This analysis aids them in tuning queries to achieve maximum performance. It can also reduce the escalating costs of database queries by estimating their cost prior to execution.

DB2 Data Governance Tools address a broad spectrum of needs, covering Information Quality, Information Protection and Information Lifecycle.





Guardium for z



- Provides real-time, automated database auditing and activity monitoring
- Allows users to define flexible audit policies
- Gives you visibility into all activity occurring on your database

Value to you:

IBM Guardium for z helps alert you to potential threats based on user-defined policies, helping you stay one step ahead.

IBM Data Encryption for DB2 and IMS Databases



- Provides customizable encryption exists for DB2 rows and IMS segments
- High performance and low overhead by using the crypto hardware available on the platform
- Fast implementation, no changes required to your applications

Value to you:

IBM Data Encryption for DB2 and IMS Databases provides proven technologies to encrypt and protect sensitive data, keeping your company on the right compliance track.

DB2/IMS Audit Management Expert



- Realizes the segregation of duties. Auditors can gather the auditing information independently to ensure complete integrity

- Auditors do not need to be the privileged users on the audited systems, so the database security is

preserved

 Centralization of all data to be audited, eliminating the difficult and time consuming collection of data from other systems

- User-friendly and easy-to-use interfaces eliminating manual auditing process which can be time

consuming and error prone

- Selective auditing policy, in-depth auditing and comprehensive report provide auditors undisputed proof of who, what, where, when, why and how

- Integrates with DB2 Query Monitor for z/OS and shares the same data collector in order to minimize

overhead

Value to you:

DB2/IMS Audit Management Expert for z/OS is an auditing solution that enables customers to segregate duties in an easy, centralized environment. It provides complete automation of the auditing processes, which reduces fraud exposures, and the high costs associated with any manual auditing methods.





DB2 Recovery Expert



- Supports many types of objects and database backup and recovery
- Recommends multiple recovery options to select the fastest, least costly method that is most appropriate to your business
- Supports disaster recovery by building assets that can be moved to a disaster site for rebuilding DB2
- Provides the ability to back up and recover data using DASD flashcopy technology
- Extends the capabilities of the DB2 V8, DB2 9, and DB2 10 backup and restore system utilities
- Clear, straightforward and easy-to-use user interfaces

Value to you:

DB2 Recovery Expert for z/OS is streamlined for ease of use and manageability. It also offers powerful analytical features to protect against data loss or corruption. In light of the constant increase of data entrusted to an organization's data center, this is the ideal tool to get the job done quickly and efficiently.

DB2 Change Accumulation Tool



- Provides the fastest recovery of database objects and most current data for recovery processes
- Allows users to create one to four image copies per existing image copy
- Creates mini-logs for specified objects from the DB2 log, and reduces the frequency of creating image copies
- Offers support for LOBs and XML objects

Value to you:

DB2 Change Accumulation Tool for z/OS provides the fastest recovery for DB2 objects by defining objects that you are interested in and operating on image copies to protect your data and lessen the negative impact on your business.

DB2 Object Restore Tool



- Restores dropped objects and related dependencies even if they no longer exist in DB2 catalog
- Supports dropped databases, table spaces, tables, indexes and data, as well as table authorizations
- Supports DSN1COPY, DB2 Log Analysis Tool and other methods to restore data

Value to you:

DB2 Object Restore Tool for z/OS is an affordable, flexible, easy-to-use tool that provides faster recovery of data assets and ensures lower database maintenance costs.



Learn More http://www.ibm.com/software/data/db2imstools/ products/db2-zos-tools.html

