

IBM DB2 Tools and Solutions for Linux, UNIX and Windows



Highlights

- ***Minimize the implementation time of new regulatory compliance requirements***
- ***Analyze and track mission-critical data for better control over enterprise information***
- ***Reduce risk from security breaches and protect private information in both online and offline environments***
- ***Control data storage costs and improve performance when accessing active data***
- ***Create sterilized test data***
- ***Automate and manage complex DB2 structural changes***

Reducing data center complexity

Managing data centers is becoming more challenging for database administrators (DBAs) as well as DBA managers and line-of-business executives. They must cope with the impact of software and hardware upgrades as well as data migrations. They also must work with auditors and security administrators to analyze and track the growing volume of data that has occurred with the introduction of new regulatory compliance laws. These laws require that data be maintained for longer periods of time and made available for ongoing auditing. As a result, DBAs must find new ways to optimize their time

so they can focus on their core responsibilities: ensuring the delivery of high levels of data availability and database performance to meet business needs.

IBM DB2® Tools and Data Management Solutions for Linux®, UNIX® and Windows® (LUW) can help DBAs stay in control of even the most complex database environments. Revenue-maximizing tools, such as DB2 Change Management Expert, DB2 Recovery Expert and DB2 Performance Expert help DBAs handle more complex tasks that are prone to human error and can compound into larger, more costly business mistakes if not handled promptly. Other high-value tools and solutions, including DB2 High Performance Unload, DB2 Audit Management Expert, Database Encryption Expert, IBM Optim™ Data Growth Solution and Optim Privacy Solution provide capabilities that allow

DBAs to be free from routine or mundane tasks so they can focus on other critical data center issues.

Simplifying change management

Database administrators today face a host of new issues that place a premium on innovation and organizational responsiveness. The pressures come from many different sources: business acquisitions and restructuring, increased competition and new technology architectures and strategies. In addition, organizations must manage data risk to accommodate regulatory compliance as well as prevent intellectual property theft and secure financial integrity. The only constant is change, and for DBAs that means the need to change DB2 structures and data more frequently and under tighter deadlines. Overall, the change management process has been prone to error, tedious and slow. For example, DBAs must often spend hours analyzing objects and dependencies before deciding on a

course of action. And, the need exists to document changes to the database for a better understanding of the changes and their impact. This is where IBM DB2 Change Management Expert can help, whether a DBA is upgrading a standing database or migrating information between databases.

DB2 Change Management Expert is a tool that helps DBAs increase productivity by helping them model the target database, compare two sets of objects to see where they differ, migrate a set of objects to the target or redefine the target objects to be like the source. The tool also allows DBAs to undo all changes, if necessary. The tool is valuable because it:

- *Improves productivity and reduces errors by automating and managing complex DB2 structural changes.*
- *Ensures data integrity by finding schema elements that are related to each change.*

- *Increases reliability with visual modeling through an interactive GUI.*
- *Provides capabilities to manage and track the life cycle of DB2 changes.*

DB2 Change Management Expert supports IBM DB2, Version 8.1 and above, on Linux, UNIX and Windows.

Optimizing performance

In today's competitive business environment, users demand round-the-clock access to enterprise information. To maximize system throughput and the response time of DB2, IBM offers IBM DB2 Performance Expert for LUW, which monitors, analyzes and tunes the performance of DB2 data and DB2 applications. The tool provides a complete, detailed analysis of system performance based on data from DB2 and the operating system to help DBAs more proactively oversee performance management, and identify and resolve database

issues before they impact your business. Additionally, the tool can:

- *Make recommendations to help improve system performance going forward, giving you statistics and graphical views that provide continual updates on the health of your databases.*
- *Define, schedule and run automated processes, recognize trends, and anticipate potential bottlenecks such as locking conflicts and deadlocks, using its Performance Warehouse feature.*
- *Define thresholds and provide warnings or alarms via email when thresholds are met.*

To optimize the performance of your database and keep productivity high, DB2 Performance Expert for LUW is the ideal tool. It supports DB2, Version 8.1 and above, on Linux, UNIX and Windows.

Protecting data

Data is your organization's most valuable asset, and protecting the integrity of that data is crucial. When data is unexpectedly lost, it is imperative to quickly recover those assets before the situation compounds into a more costly business mistake.

To help deal with even the most complex data recovery situations, there is IBM DB2 Recovery Expert for LUW. The tool assists the DBA with recovering data objects—including tables and table spaces—and provides recommendations to help determine the fastest and least costly recovery method. In addition, the tool:

- *Recovers a dropped table to a point in time, including all of the dependent objects such as authorizations, views, indexes and, optionally, related tables.*
- *Uses its Log Analysis to provide more granular recovery options to easily back out or redo transactions.*

- *Assists with data auditing by pinpointing DB2 data that was changed, when the change occurred and who made the change.*
- *Recovers from DB2 online and offline backups. DB2 compressed backups are also supported.*

There's no better way to ensure the integrity and availability of your organization's data than by offering precise and efficient data recovery. DB2 Recovery Expert for LUW supporting DB2 Universal, Version 8.1 and above, on Linux, UNIX and Windows, allows you to do just that.

Reducing maintenance windows

Running high-volume data unloads can take time—time you can't afford. If you need to reduce batch maintenance run times and improve database availability, IBM DB2 High Performance Unload for LUW can help.

The tool significantly speeds up DB2 data unloads and can run data unloads from your backup systems (including backups of SMS or DMS table spaces or backups of the database) to keep your production systems running at optimum levels. You can also do selective unloads, partitioned unloads as well as data transformations during an unload. This high-speed utility:

- *Can extract a single table from a backup.*
- *Supports multiple output formats including XML, delimited and undelimited ASCII, and DSNTIAUL.*
- *Provides built-in DB2 Splitter functionality so you can unload and split in a single operation at high speed.*
- *Uses DB2 authorization checking so users with SELECT authority can also take advantage of DB2 High Performance Unload capabilities.*

- *Exploits the following DB2 9 features: Table partitioning, DB2 Storage Optimization Feature and DB2 Advanced Access Control Feature.*

For faster, more efficient data unload and repartitioning operations that help you put your data where you want it, look to DB2 High Performance Unload for LUW. The tool supports DB2, Version 8.1 and above, on Linux, UNIX and Windows.

Controlling data growth

As a result of mergers, acquisitions and market growth, data volumes continue to grow at an unprecedented rate. Add the fact that new regulatory compliance laws require DBAs to keep information longer, and suddenly your IT environment is overwhelmed by its data.

Without an effective strategy, large amounts of data can slow application performance, limit availability and ultimately impact your organization's bottom line. IBM Optim Data Growth Solution can help manage your enterprise application data, enabling you to operate more efficiently and gain the most business value from mission-critical applications.

IBM Optim can:

- *Provide a single, scalable solution that keeps pace with business growth.*
- *Deliver proven archiving capabilities, allowing users to segregate historical from current data and save it to a secure archive to help simplify maintenance and speed disaster recovery.*
- *Enable unparalleled accessibility with the capability to query, browse and generate reports for audit or discovery requests.*

- *Streamline data disposal through automated or manual processes when retention periods expire.*

In today's business environment, properly managing and storing data is more important than ever since it helps DBAs more easily access and analyze information to comply with data regulations. IBM Optim Data Growth Solution can help DBAs stay on top of business expansion through innovative, automated processes. It supports DB2, Version 8.1 and above, on Linux, UNIX and Windows platforms.

Protecting vulnerable information

Protecting client data is becoming more of a necessity for IT environments—not only because it's a smart business practice, but also because it guards against legal

vulnerability. De-identifying confidential data is an ideal way to protect privacy and support legal compliance.

IBM Optim Data Privacy Solution enables organizations to mask personal information through powerful data transformation capabilities. DBAs can either apply simple data masking techniques or incorporate detailed transformation algorithms to protect information. The solution can:

- *De-identify data to mask or remove personally identifying information without compromising data test results.*
- *Propagate key masked data elements to all related tables to preserve the integrity of data relationships.*
- *Integrate test data from multiple database management systems and platforms.*
- *Integrate relational data and hierarchical data into the test environment.*

The need to protect private data goes beyond simply masking information—it also must be realistic enough for a development or quality assurance team to accurately test applications. Optim provides a means to remove personally identifying information while still providing data that is valid in the context of the application. It supports DB2, Version 8.1 and above, on Linux, UNIX and Windows platforms.

Tracking and analyzing data

As a result of government regulations like Sarbanes-Oxley, an organization's IT staff must work to fulfill auditors' requests for data reports. Until recently, there had been no reliable, automated ways for auditors to access the data they need—but now there's the IBM DB2 Audit Management Expert.

The tool gives auditors and DBAs the capability to deliver accurate, timely data and reports for use in auditing activities. From this one centralized audit management tool you can:

- *Selectively audit inserts, updates, deletes and reads in DB2 databases using automatic processes.*
- *View all reported activity on specific DB2 objects.*
- *Generate reports on the data collected in the audit repository.*
- *Input the information needed for log analysis using a selection capability that allows you to refine the amount of information returned.*

With the help of DB2 Audit Management Expert, auditors can have their own channel for viewing and analyzing data. The tool supports IBM DB2, Version 8.1 and above on AIX®.

Simplifying data security

Now more than ever, organizations must protect sensitive data-at-rest from both external and internal malicious activity. Encrypting the data is the best way to guard against security breaches—and it's also what most regulatory compliance laws either require or recommend. Information is susceptible to both internal and external security threats, but with security solutions like encryption—which renders stored data unreadable—organizations can better protect their assets. Developing software applications, limiting access to computing resources and implementing logging mechanisms also help keep data secure.

IBM Database Encryption Expert for LUW helps organizations protect and secure confidential and sensitive data in both online and offline environments. The tool can:

- *Enable DB2 database file and tablespace-level encryption without affecting database structure and schema.*
- *Encrypt DB2 backups to both disk and tape, ensuring offline data cannot be compromised.*
- *Provide a unified policy and key management system to centralize and simplify data security management from a single database to multiple databases.*

The tool easily integrates into a DB2 environment to protect data backups and database files. It supports IBM DB2, Version 8.1 and above, on Linux, UNIX and Windows.

Latest DB2 versions supported

IBM updates DB2 Tools for every new database release, so you can quickly complement all the new features and functions of DB2.

Tools include DB2 Recovery Expert, DB2 Performance Expert, DB2 High Performance Unload, IBM DB2 Audit Management Expert and IBM Database Encryption Expert for LUW. Data solutions include Optim Data Growth Solution and Optim Privacy Solution for LUW.

When ordering IBM DB2 Tools for LUW, please refer to the following Passport Advantage part numbers:

- *IBM DB2 Change Management Expert for LUW, Version 1 (D590YLL)*
- *IBM DB2 Performance Expert for LUW, Version 2.2 (D55KALL)*
- *IBM DB2 Recovery Expert for LUW, Version 2.1 (D55NELL)*
- *IBM DB2 High Performance Unload for LUW, Version 3.1 (D55JYLL)*

- *IBM Optim Data Growth Solution*
- *IBM Optim Privacy Solution*
- *IBM DB2 Audit Management Expert*
- *IBM Database Encryption Expert for LUW (D61KCLL)*

When ordering DB2 Tools for Workgroups, available for Linux, AIX® and Windows, please refer to the following Passport Advantage part numbers:

- *IBM DB2 Performance Expert for Workgroups, Version 2.2 (D55IQLL)*
- *IBM DB2 High Performance Unload for Workgroups, Version 3.1 (D55HDLL)*

For more information

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