How Can I Establish a Solid Foundation for Successful DB2 Database Management?



Database Management solutions from

CA Technologies for DB2™ for z/OS™ provide the

power and flexibility enterprises need to ensure

optimal performance, efficient database

administration and reliable backup and recovery.

These interoperable solution suites offer practical

products that are integrated to improve service

levels, data availability and application

responsiveness across DB2 for z/OS databases.

Executive Summary

Challenge

Enterprises need database management tools that help reduce costs, streamline operations, improve productivity and resolve all issues quickly. CA Database Management for DB2 for z/OS helps ensure successful DB2 database management with three suites that categorize the products according to database administrators' job functions.

Opportunity

The Database Management solutions from CA Technologies provide DB2 for z/OS database performance management, database administration, and database backup and recovery using innovative technology that helps you proactively manage DB2 for z/OS environments and enhance the overall business value provided by your DB2 applications.

Benefits

These solutions optimize database performance for faster data retrieval, automate routine administrative tasks and dramatically reduce their completion time. Use Database Management solutions from CA Technologies to minimize backup and recovery times, migrate more easily to new releases of applications and databases, increase data availability, conserve CPU resources, and provide consistent, secure data that can be recovered in minimal time.



Managing Your DB2 Environment

Enterprises are storing ever-increasing amounts of data that must be accessible around the clock. Downtime or delayed processing due to performance bottlenecks can cause more than a loss of productivity—it can mean losing customers. In today's business environment, organizations must ensure optimal performance for their databases and applications.

Every minute that database maintenance interferes with data access can adversely impact an enterprise's bottom line. Many database administrators (DBAs) are struggling to find time for both maintenance and optimization. DBAs need fast, dependable tools that streamline routine maintenance tasks, allowing more time for proactive database administration.

An enterprise's databases are among its most valuable assets; they can also be among the most vulnerable. Data loss often results in a loss of profits, reputation and customers. For many organizations, data stores are getting larger while backup windows are becoming smaller. Therefore, it is increasingly important to implement dependable backup and recovery routines that protect valuable data assets.

Enterprises need database management tools that help resolve issues quickly, before they become problems that drag down system performance and decrease productivity.

Simplify Database Management

The Database Management solutions from CA Technologies for DB2 for z/OS address database management challenges with solutions that provide flexible options for database management and control. You can utilize full automation where appropriate, powerful manual control when desired, or expert software-quided assistance.

With our database management products, you reduce the cost and risk associated with upgrades. These products also help you streamline workflows, use available skill sets better, make more precise updates and improve responsiveness across complex database and application environments.

Crush Costs and Unlock Savings

Database administration costs can quickly get out of hand in complex DB2 environments. Automating routine tasks helps you streamline operations so they can be completed by your IT staff faster and more cost-effectively, regardless of their experience level. You can increase productivity and capture real savings when you use CA Technologies integrated DB2 tools to automate the following functions:

- Object Migration and Alteration. Make global changes to your and deploy them online more easily.
- Object Comparison. Simplify the way you compare and synchronize your DB2 structures.
- Catalog Navigation. Benefit from an interactive tool that quickly retrieves, integrates, analyzes and presents information from the DB2 catalog in multiple report formats.
- Data Archiving. Automatically archive old or inactive data to increase performance.
- Application Development. Enable easier development by automating complex extraction, copying and moving of related and logically interconnected objects.
- Data Unload, Data Load, and Data Cloning. Perform data unloading and loading at high speed, while allowing data cloning to be accomplished without unloading or loading data.



Database Administration Management

Database Administrators (DBAs) are challenged with the task of managing object and schema changes. These changes require the DBA to navigate the DB2 catalog and understand the impact of a change and all the related objects that may be impacted by the change. This may require the need to unload data, drop and recreate objects, reload data, reapply any associated security authorization, repair dependent applications, backup data and recover data. CA Database Administration Suite for DB2 for z/OS provides intelligent automation designed to safely manage your big data warehouse, ERP/CRM, or internet applications and data.

CA Database Administration Suite for DB2 for z/OS helps reduce costs, simplifies DB2 Object Schema and data management and helps provide for the integrity of your DB2 environments.

This suite includes the following products:

- CA RC/Query® for DB2 for z/OS. CA RC/Query provides catalog management capabilities and alleviates the time consuming task of manually developing and testing specialized queries. CA RC/Query enables you to take immediate action—whether that means executing a command, invoking a utility or moving to another Database Management product for DB2 for z/OS from CA Technologies.
- CA RC/UpdateTM for DB2 for z/OS. CA RC/Update automates labor-intensive tasks related to
 changing DB2 objects and data. It provides a development environment for the application
 developer, an editor and data copy feature for the end user, and sophisticated object management
 facilities for the DBA. These features result in simplified database administration tasks, reduced
 database downtime and increased DBA productivity.
- CA RC/Migrator[™] for DB2 for z/OS. CA RC/Migrator provides automation that increases database availability and helps you to reduce the time and risk of human error involved with complex database administration tasks.
- CA RC/Compare[™] for DB2 for z/OS. CA RC/Compare helps you to compare and synchronize DB2 structures that reside on different subsystems.
- CA Fast Unload® for DB2 for z/OS. CA Fast Unload helps you reduce the time required to unload DB2 data, thus improving the availability of corporate data.
- CA Fast Load for DB2 for z/OS. CA Fast Load is a high speed utility that helps you load large amounts of data into DB2 tables.
- CA RC/Secure[™] for DB2 for z/OS. CA RC/Secure is a comprehensive online security administration tool for DB2 for z/OS that helps you streamline and automate the tasks of DB2 security administration.
- **CA Quick Copy for DB2 for z/OS.** CA Quick Copy provides you with backups of DB2 data bymaking single or multiple image copies at high speeds.
- CA Fast Recover[™] for DB2 for z/OS. CA Fast Recover provides the ability to quickly recoverDB2 data (table spaces and indexes) after a disaster or system failure, while minimizingCPU cycles, service units and EXCPs. CA Fast Recover offers significant performanceadvantages over other utilities, incorporating multiple advanced features that differentiate it from competitive offerings.



Database Performance Management

CA Database Performance Suite for DB2 for z/OS helps increase database administrator (DBA) productivity by leveraging existing DB2 Real-Time Statistics (RTS), collecting new statistics on DB2 objects, and using them to automate DB2 housekeeping, utility scheduling and execution, and perform space management following user-defined thresholds. The included high-speed reorganization utility is designed to increase data availability and performance and save resources.

CA Database Performance Suite for DB2 for z/OS analyzes and proactively takes corrective actions, helping to improve database performance and increase DBA productivity.

This suite includes the following products:

- CA Database AnalyzerTM for DB2 for z/OS. CA Database Analyzer has a sophisticated analysis engine that uses real-time statistics to provide graphs, trending, forecasting information as well as a flexible scripting language to proactively take corrective actions.
- CA Rapid Reorg® for DB2 for z/OS. CA Rapid Reorg performs quick and effective DB2 data reorganizations to help increase data availability and performance and save resources.

SQL Performance Management

CA SQL Performance Suite for DB2 for z/OS will help you quickly identify poor running SQL statements and recommend changes to these statements based on expert rules. The access path, SQL performance and DB2 object usage history can be stored for future trending and analysis. Application change control procedures can automatically detect and stop an inefficient SQL statement from moving into production, saving the company money due to high CPU usage and improving customer experience by reducing the risk of slow performing applications.

CA SQL Performance Suite for DB2 for z/OS provides analysis capabilities that help identify the programs and SQL statements that impact your DB2 system performance.

This suite includes the following products:

CA Detector® for DB2 for z/OS. Provides in-depth analysis capabilities that enable you to identify the programs and SQL statements that most significantly affect your DB2 system performance.

CA Subsystem Analyzer for DB2 for z/OS. Designed to save your database administrators (DBAs) time by consolidating information into a clear, concise view.

CA Plan Analyzer® for DB2 for z/OS. Designed to improve DB2 performance by efficiently analyzing SQL and utilizing expert rules to offer SQL performance improvement recommendations.



Database Recovery Management

Database Administrators (DBAs) are responsible for ensuring your critical business data is recoverable regardless of the data corruption caused by an errant application change or storage device failure. CA Database Recovery Management Suite for DB2 for z/OS provides a comprehensive solution designed to automate and streamline the process to recover data thus reducing the risk of a prolonged outage due to manual creation of recover jobs.

CA Database Recovery Management Suite for DB2 for z/OS helps you simplify and streamline DB2 recovery, whether it is simply a few application objects, a complete ERP application, or an entire DB2 system.

This suite includes the following products:

- CA Log Analyzer™ for DB2 for z/OS. A powerful product that analyzes DB2 log and SMF records to aid in auditing data changes.
- CA Recovery Analyzer™ for DB2 for z/OS. Simplifies complex DB2 recovery situations by automating the generation of efficient recovery jobs.
- CA Fast Recover™ for DB2 for z/OS. Provides the ability to quickly recover DB2 data (table spaces and indexes) after a disaster or system failure, while minimizing CPU cycles, service units and EXCPs.
- CA Merge/Modify™ for DB2 for z/OS. Accelerates image copy and recovery processes to help you reduce the drain on valuable CPU resources and streamline backup and recovery procedures.
- CA Quick Copy for DB2 for z/OS. Provides you with backups of DB2 data by making single or multiple image copies at high speeds.

intuitive access and reporting of business data on DB2

If your organization stores decision support data in DB2 for z/OS databases, your end users need an easy way to access that data both online and in batch.

CA Report Facility is a full function DB2 for z/OS reporting environment that provides users with easy access to business information. The product offers a robust yet easy-to-use reporting environment that combines a SQL creation system with multiple diverse and flexible report formatting styles.

It provides users with intuitive access to business data, builds the queries designed to obtain that data, and formats the data into business information documents designed to meet operational and management requirements without forfeiting any measure of control.

CA Report Facility provides the following features to simplify and facilitate data requisition:

- Building queries. The Query Build facility allows non-technical users to construct a SQL SELECT statement, helping them Learn SQL as the product forms the query. Technical users have the additional capability to enter the SQL syntax themselves and leverage the full SQL SELECT language.
- Using non-DB2 data sources. CA Report Facility natively obtains the catalog information for DB2 stored data and provides users with meta-information. Users can also define the contents of sequential and VSAM stored data, allowing CA Report Facility to provide its full information environment inside and outside of DB2 with the same SQL SELECT language.



Why CA Technologies?

Ultimately, you need to eliminate inefficiencies and costs from your DB2 for z/OS operations so you can move closer to functioning as a dynamic data center. Because when you do, you'll be able to respond with agility and velocity to business demands, so your company can grow and prosper. We can help you achieve results faster through:

A robust portfolio of integrated products that enable you to simplify DB2 management, administration and backup and recovery activities.

"[We achieved] task consolidation via a suite of integrated products...plus solid performance and quality of service with CA DB2 Tools."

IT Director, Large Enterprise Transportation Services Company¹

Unique technologies that help experienced DBAs, mainframers and newcomers alike function at peak performance in your IT environment.

"CA DB2 for z/OS Tools were easy to use which allowed us to train newer team members at a much faster rate and also assisted us with better client service."

IT Specialist, Large **Enterprise Computer** Services Company²

A proven approach to help you simplify your cross-platform DB2 environment via mainframe software rationalization and consolidation.

"We replaced IBM with CA DB2 for z/OS Tools and achieved 20% in cost reductions."

Procurement Director, Global 500 Computer Services Company³

Our experience as a worldwide marketing leader in Mainframe DBMS Management



Achieving Measurable Savings, With Less Risk

Using a complicated mix of DB2 tools from different vendors quickly becomes ineffective and expensive. But replacing them – and potentially jeopardizing the availability of mission-critical applications during the transition – seems just too risky.

However, there are ways to streamline your DB2 tools, while minimizing the risks and complexities and achieving measurable savings. But you need the assurance of a proven methodology, such as what you can find with the CA Technologies Core Systems Consuting Program (CSCP). Following this program, you'll be able to:

- More rapidly analyze and assess the usage of your current DB2 tools to pinpoint redundancies and inefficiencies
- Identify particular DB2 tools to be converted, and then use an automated process to quickly migrate them to comparable (often higher-performing), but lower-cost replacements
- Rely on an auditing capability to confirm a successful migration

This proven end-to-end approach is designed to reduce risk and speeds business results so you can reap savings faster.

Save Big Bucks.

On average, 11 customers who participated in CSCP achieved an impressive \$904,545 in estimated annual savings.*

Improve Service, Keep Costs Down.

The Navy Federal Credit Union, serving more than over 3.6 million U.S. military and Department of Defense personnel, needed to keep its services highly available but without added cost.

By consolidating on CA Technologies DB2 performance solutions, DB2 transaction throughput increased by 30%. Meanwhile, DB2 distributed CPU usage decreased by 40% for cost control and efficiency.



To learn more about our market-leading technology solutions, and how they can help you achieve real savings in your DB2 for z/OS environment, please visit us today: ca.com/db2



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