IBM

Information Management software

IBM DB2 SQL Performance Analyzer for z/OS, Version 4.1

Highlights

- *Estimates the anticipated costs of queries without executing them*

- *Provides guidance on writing more efficient SQL statements*

- *Enables developers to improve IBM DB2 application design*

- *Includes an alternate Easy Explain function, fully integrated in time-sharing option and batch mode*

- *Provides modifiable thresholds that can set high-water marks, trigger warnings and alerts, and control advisory messages*

- *Simultaneously supports DB2 for z/OS Versions 10, 9, and 8 in all modes*

- *Fast, easy installation and customization using IBM Tools Customizer for z/OS.*

Performance optimization

Accessing IBM DB2® with structured query language (SQL) requires time and resources. Fortunately, a forecasting tool is available to help improve query performance: IBM DB2 SQL Performance Analyzer (DB2 SQL PA) for z/OS®. The tool takes SQL statements from any input source and provides estimated query costs.

It also offers highly relevant advice, analyses, and guidelines for writing more efficient SQL statements. DB2 SQL PA can be deployed — before consuming any CPU resources — to help locate queries that require enhancement and to better plan for the needed resources.

Improving DB2 application design

DB2 SQL PA enables application developers and database administrators to quickly and economically test drive different "what if" scenarios to determine the performance of various database design alternatives and production volumes. These "what if" analysis capabilities include updating catalog statistics and creating new indexes.

Estimates of the anticipated query costs are available in monetary and query service units (Qunits) as well as in resource consumption terms. DB2 SQL PA generates estimates and places them in concise, detailed reports that can be easily read and assimilated with minimal effort. The tool presents advice in easy-to-find and easy-to-read blocks of information embedded within each report.

Exploiting DB2 versions to the fullest

The latest version of DB2 SQL PA contains full support for DB2 for z/OS, Versions 10, 9, and 8 — from compatibility to new function mode. DB2 SQL PA allows users to fully exploit all product enrichments, including larger SQL statements, longer names, Unicode support, DB2 data types, and SQL/XML constructors.

Some of the most recent enhancements to DB2 SQL PA include:

- *Install and customize DB2 SQL PA with a fast, simple, automated experience.*

- *Begin using DB2 SQL PA with a single point of entry into the product.*

- *Access any report for any input source (DBRM, plan, package, etc.).*

- *Selectively explain at a finer granularity: Drill down to view all the SQL or all the DB2 tables within the given input source (such as plans, packages, and DBRMs). This enables you to explain a single SQL query or all of the SQL for the DB2 table that is selected.*

- *Access embedded SQL from source programs (PL/I, COBOL, C, Assembler).*

- *View summary reports that enable you to access a specific report directly from the summary report. Improved navigation enables quicker access to the information you need most.*

- *Use the DSN8.DSN8EXP procedure to enable application programmers to see SQL performance against tables for which they do not have authority to run SQL.*

- *Apply maintenance faster and easier with package versioning.*

- *Use parameters that enable developers to use materialized query tables as access path choices.*

- *Call DB2 SQL PA as a stored procedure.*

Integration with other IBM tools

DB2 SQL PA is integrated with many IBM information management tools. It is easy to determine the cost of running SQL statements from a Web interface using IBM DB2 Web Query Tool or under TSO/ISPF using IBM DB2 Administration Tool and IBM DB2 Query Monitor. It also interfaces with IBM DB2 Path Checker to provide in-depth analyses for queries that have changed access paths.

IBM Tivoli® OMEGAMON® XE for DB2 Performance Expert and DB2 Performance Monitor are also integrated with DB2 SQL PA, allowing users to launch DB2 SQL PA using the OMEGAMON Classic end-user interface, and permitting them to forward the text to DB2 SQL PA for Explain.

Complete integration with Easy Explain in both TSO and batch modes allows users to compare the costs of old and new plans and to re-explain existing plans stored in any plan table. Programming language data sets can be scanned directly to extract SQL for study.

The DB2 SQL PA stored procedure capabilities come in two versions: one for address spaces managed by DB2 via CAF and another for address spaces controlled by MVS™ Workload Manager via Resource Recovery Services Attachment Facility (RRSAF), which is required for DB2, Version 8.

Getting the greatest value from DB2

DB2 SQL PA comes equipped with resources such as algorithms and estimating methods for predicting resource consumption, sample PL/I and COBOL stored-procedure access programs for DB2 and workload manager stored procedures, and predicate analysis for DB2 Versions 8, 9, and 10 SQL statements.

For more information

For more information about DB2 SQL Performance Analyzer, and other IBM tools for DB2, please contact your IBM representative or IBM Business Partner or visit: **ibm.com**/software/data/db2imstools.

When ordering IBM DB2 SQL PA, Version 4.1, please refer to product order number 5655-W60.

IBM®

TAKE BACK CONTROL WITH Information Management