

PRODUCT INFORMATION

EZ- XOP (Index Optimizer) for DB2 on z/OS



How do you ensure that you have the optimum indexes for your SQL Workload?

Benefits

- Starting from a "clean slate" determine the optimal indexes for your SQL workload
- Show relative cost of SQL with existing indexes compared to the EZ-XOP recommended indexes
- Perform "what-if" index analysis
- Uses unique patented methodology to optimize entire workload allowing for execution frequency and index maintenance costs

Solution Description

Starting with a "clean slate", automatically derive the optimal Index Design for your SQL Workload. Compare the optimal Index Design to your existing Index design, and determine which Indexes should remain as is, which Indexes should be added, which Indexes should be modified and which Indexes are not needed at all.

Business Opportunity

It is commonly recognized that Index Design is the most powerful tool available to improve SQL and overall system performance. However, most sites do not have the resource available to maintain the optimum design or to continually re-evaluate the index design against a constantly changing application environment. Indeed, it would not be feasible for a DBA team to consider all of the possible index permutations within a reasonable time-frame. Therefore, automated index design tools are a recognized necessity. Our tools are the industry leading tools using patented technology to ensure the correct index design for new and existing applications.

Better Indexes means:-

- Better Performance
- Reduced resource consumption
- Reduce DBA effort

Detailed Solution Description

Analyze an *SQL workload* that has been previously created in the EZ-DB2 SQL Warehouse (see note).

An *SQL workload* may comprise:-

- SQL loaded from the DB2 catalog for selected Plans or Packages and/or
- Static or Dynamic SQL collected using the EZ-Tracer or EZ-Cache components and/or
- SQL entered in free-form.

You may therefore perform Index Analysis for:-

- Single applications
- Multiple applications
- An entire Workload
- Static and Dynamic SQL

EZ-XOP uses patented technology to optimize your DB2 indexes for DB2 running on IBM z/OS. Implementation of EZ-XOP recommended indexes will provide a dramatic improvement in system performance and resource utilization.

EZ-XOP is workload-centric - ie, it arrives at the optimal index configuration that will benefit the entire workload, rather than focusing on individual SQL statements.

- EZ-XOP Utilizes the DB2 Optimizer - It does not try to "second-guess" the Optimizer. Rather, it actually harnesses the power of the Optimizer to determine the optimal indexes.
- Patented algorithms and evolutionary techniques are used to establish and evaluate possible index combinations.

EZ-XOP Interacts with the optimizer to re-cost the SQL in the workload with different index combinations and, through a complex sequence of iterations, the optimal set of indexes for the workload is evolved.

- The DBA can view the original and new access paths for each statement and recommended indexes, and can easily identify which Index recommendations will give the greatest cost saving for the Workload.
- EZ-XOP "What-If" Analysis - allows the DBA to experiment with different combinations of the recommended indexes. The DBA can now easily CREATE and DROP different combinations of Indexes and immediately see the impact on the whole workload.

Competitive Advantage

- Only Index Design Tool that addresses needs of Dynamic SQL
- Only Index Design Tool that addresses needs of entire Workload taking into account execution frequencies and index maintenance costs.
- Only Index Design Tool licensed to utilize the advanced patented evolutionary heuristic index design algorithm in conjunction with the DB2 optimizer.

About Cogito

Cogito is a leading supplier of software tools for DB2® and CA-IDMS®. Cogito software is used by many of the worlds leading Fortune 1000 companies and other large organizations to support their enterprise systems. For further information and to find your local distributor visit www.cogito.co.uk



Everyone's talking about EZ-DB2 ®. Find out what the Buzz is about at www.ez-db2.com

Notes: Requires EZ-DB2 SQL Warehouse Manager as a pre-requisite. EZ-XOP® has been developed under a patent license from British Telecommunications PLC, European Application No: 96944107.0 including its foreign counterparts.

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