Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

Kronborgsgränd 7, 164 46 Kista

Email: edu.ecs.se@arrow.com
Phone: +46 8 555 188 00

Db2 12 for z/OS SQL Performance and Tuning

CODE:	LENGTH:	PRICE:
CV964G	24 Hours (3 days)	kr24,285.00

Description

This course is designed to teach the students how to prevent SQL performance problems and how to improve the performance of existing SQL.

Objectives

After completing this course, students will be able to:

- Understand and design better indexes
- Determine how to work with the optimizer (avoid pitfalls, provide guidence)
- Optimize multi-table access
- Work with subqueries
- Avoid locking problems
- Use accounting traces and other tools to locate performance problems in existing SQL
- and more

Audience

This course is for Db2 12 for z/OS application developers, Db2 12 for z/OS DBAs, and anyone else with a responsibility for SQL performance and tuning in a Db2 12 for z/OS environment.

Prerequisites

- Familiarity with SQL
- Familiarity with Db2 12 for z/OS
- Familiarity with Db2 12 for z/OS application programming

Programme

Introduction to SQL performance and tuning Performance issues Simple example Visualizing the problem SummaryPerformance analysis tools Components of response time Time estimates with VQUBE3 SQL EXPLAIN The accounting trace The bubble chart Performance thresholdsIndex basics Indexes Index structure Estimating index I/Os Clustering index Index page splitsAccess paths Classification Matching versus Screening Variations Hash access Prefetch CaveatMore on indexes Include index Index on expression Random index Partitioned and partitioning, NPSI and DPSI Page range screening Features and limitationsTuning methodology and index cost Methodology Index cost: Disk space Index cost: Maintenance Utilities and indexes Modifying and creating indexes Avoiding sortsIndex design Approach Designing indexesAdvanced access paths Prefetch List prefetch Multiple index access Runtime adaptive indexMultiple table access Join methods Join types Designing indexes for joins Predicting table orderSubqueries Correlated subqueries Non-correlated subqueries ORDER BY and FETCH FIRST with subqueries Global query optimization Virtual tables Explain for subqueriesSet operations (optional) UNION, EXCEPT, and INTERSECT Rules More about the set operators UNION ALL performance improvementsTable design (optional) Number of tables Clustering sequence Denormalization Materialized query tables (MQTs) Temporal tables Archive enabled tablesWorking with the optimizer Indexable versus non-indexable predicates Boolean versus non-Boolean predicates Stage 1 versus stage 2 Filter factors Helping the optimizer PaginationLocking issues The ACID test Reasons for serialization Serialization mechanisms Transaction locking Lock promotion, escalation, and avoidanceMore locking issues (optional) Skip locked data Currently committed data Optimistic locking Hot spots Application design Analyzing lock waitsMassive batch (optional) Batch performance issues Buffer pool operations Improving performance Benefit analysis Massive deletes

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
22 Apr 2024	Virtual Classroom (GMT+1)	CEDT	English	Instructor Led Online		kr24,285.00
29 Jul 2024	Virtual Classroom (GMT+1)	CEDT	English	Instructor Led Online		kr24,285.00
11 Nov 2024	Virtual Classroom (GMT+1)	CET	English	Instructor Led Online		kr24,285.00

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.