

DB2 for z/OS and SQL

Course Summary

Description

First, the concepts of DB2 are presented and discussed. The Structured Query Language (SQL) is presented as the means to access DB2 data (and to create and secure DB2 components). Several guided, hands-on, practice sessions give each attendee an opportunity to use SQL to access data. QMF and/or SPUFI are used to execute SQL statements. Referential Integrity concepts and implementation are covered.

Objectives

At the end of this course, students will be able to:

- Explain DB2 concepts, terminology and components
- Discuss the Primary Key (PK) and Foreign Key (FK) concept
- SELECT rows of data from DB2 tables
- Use QMF and/or SPUFI to "run" SQL statements
- Use the WHERE clause to SELECT specific rows of a DB2 table
- Build queries using the ORDER BY, GROUP BY, HAVING clauses
- JOIN tables together to get information from each
- CREATE Tables, Indexes, Views
- "Change" tables using the INSERT, UPDATE, DELETE statements
- Discuss the major considerations for DB2 Application Performance Tuning
- Identify "good" predicates & "bad" predicates

Topics

- Introduction to DB2
- Structured Query Language (SQL)

Audience

This course is designed for experienced Data Processing personnel who need use SQL to access DB2 data.

Prerequisites

It is recommended that students have at least six months of TSO/ISPF. No previous database experience is needed.

Duration

Two days

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Course Outline

I. Introduction to DB2

- A. Course Introduction
- B. DB2 - Concepts, and Terminology

II. Structured Query Language (SQL)

- A. SQL 1 - The SELECT Statement
- B. Database 2 Interactive
- C. SQL 2 - Special Features
- D. SQL 3 - ORDER BY, GROUP BY, HAVING
- E. SQL 4 - Join, Sub-select, UNION
- F. SQL 5 - Data Definition Language
- G. SQL 6 - INSERT, UPDATE, DELETE
- H. SQL 7 - Data Control Language

III. Appendices

- A. IBM Sample Tables
- B. DB2 for WINDOWS Overview
- C. Bibliography
- D. Additional Features - UDT/UDF, Trigger
- E. EXPLAIN PLAN & Tables
- F. Group By Extensions
- G. Hints to Success
- H. Visual Explain Overview
- I. SQLCODES / SQLSTATES
- J. Changes Summary - DB2 V8
- K. QMF Overview
- L. Changes Summary - DB2 V9
- M. Stored Procedures
- N. DB2 V9 Summary from IDUG Journal