

DB2 Concepts and Facilities – z OS

Length: 2 Days

Course Description: First, the concepts of DB2 are presented and discussed. The major features of the Structured Query Language (SQL) are presented as the means to access DB2 data (and to create and secure DB2 components). Several of the “special features” of SQL are presented.

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. DB2 database design and Referential Integrity (RI) are discussed.

An overview of DB2 (SQL) programming concepts is presented and discussed. DB2 performance guidelines are discussed. The use of the SQL statement EXPLAIN PLAN is used to help to evaluate the efficiency of SQL statements. A demonstration is provided of DB2 for WINDOWS to show “future” features for DB2 for OS/390. These features include Recursive SQL, the WITH SQL feature, GROUPING SETS, ROLLUP and Visual Explain.

Audience: Experienced personnel who need an overview of the Concepts and Terminology of DB2.

Prerequisites: At least six months of Data Processing experience is recommended. No previous database experience is needed.

Topics:

Day 1

- DB2 concepts, terminology and components
- Primary Key (PK), Unique Key (UK) and Foreign Key (FK) concept
- SELECT statement can retrieve rows of data from DB2 tables
- WHERE clause can SELECT specific rows of a DB2 table
- ORDER BY, GROUP BY, HAVING clauses
- CASE expressions and SCALAR / COLUMN FUNCTIONS Access multiple tables - JOIN, UNION, sub-queries, and nested tables Tables, Indexes, Views
- Changed using the INSERT, UPDATE, and DELETE

Day 2

- Security provided by the GRANT and REVOKE
- Design considerations of Referential Integrity
- Program Preparation process
- “quirks” of DB2 Application programming
- Importance of the SQL code and how to test for it



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- DB2 performance considerations
- EXPLAIN PLAN SQL statement and analyze results
- Version 8 Overview
- Version 9 Overview
- Version 10 Preview