

DB2 UDB for z/OS Version 8 Transition (Hands-on)

CDT639

This course teaches the new features and enhancements to DB2 UDB for z/OS Version 8 by dividing the new features and enhancements into more flexible SQL, improved security, enhanced compatibility with DB2 products, scalability and performance, reliability, availability, serviceability, QMF enhancements, boosting application development productivity with DB2 development center, customizing and extending your enterprise data with the XML extenders, managing your enterprise with DB2 control center, and enhancements to DB2 tools.

Audience

- DB2 application programmers, application analysts, database designers, database administrators or anyone else who needs to know about the new features and enhancements to DB2 UDB for z/OS Version 8.

Prerequisites

- This course is intended for those who need to learn about the new features and enhancements to DB2 UDB for z/OS Version 8.

Course Length

- Three days

Learning Objectives

- More Flexibility With SQL
- Improved Security
- Enhanced Compatibility With The DB2 Product Family
- Scalability And Performance
- Reliability, Availability, And Serviceability
- Accessing Your Enterprise Data
- Boosting Application Development Productivity
- DB2 And IMS Tools For Your Database Server

Teaching Methods

- Lecture with examples
- Hands-on exercises

Course Outline

HG5

More Flexibility With SQL

- SELECT FROM INSERT Statement
- Generation Of Unique Sequential Numbers For Applications
- Ability To Alter Identity Column Attributes
- Dynamic Scrollable Cursors
- Scalar Full Selects In SQL Statements
- Integrated XML Publishing Functions In DB2
- Common Table Expressions In SQL Statements
- Recursive SQL
- CURRENT PACKAGE PATH Special Register
- GET DIAGNOSTICS Statement
- Compare Null Values With The DISTINCT Predicate

Improved Security

- New Built-In Functions For Data Encryption And Decryption
- New Data Encryption Tool
- Multilevel Security With Row-Level Granularity
- Easier Identification Of System Users
- CLIENT_ACCTNG Special Register
- CLIENT_APPLNAME Special Register
- CLIENT_USERID Special Register
- CLIENT_WRKSTNNAME Special Register
- Session Variables
- Improved Encrypted Security In Distributed Computing Environments

Enhanced Compatibility With The DB2 Product Family

- Extended Limits For Names And SQL Statements
- Longer Column Names
- Longer And More Complex SQL Statements
- Extensions To SQL Procedure Statements
- Longer Index Keys And Predicates
- Greater Number Of Tables Joined In A Single FROM Clause
- Fewer Restrictions For Column Functions
- Qualified Columns In The INSERT Statement
- ORDER BY Clause For The SELECT INTO Statement
- Expressions In The GROUP BY Clause
- More Than One DISTINCT Keyword Allowed In A Single Query
- Additional Input Format For Timestamp Strings

- Explicitly Defined ROWID Columns Are Not Required For Large Objects
- Descriptions For Plans And Packages In The DB2 Catalog
- Implicit Drop Of Declared Global Temporary Tables At Commit
- Significant Support For Unicode And Long Names In The DB2 Catalog
- Unicode
- Long Names
- Unicode, EBCDIC, And ASCII Columns In The Same SQL Statement
- Network Computing Enhancements
- Increased Portability Of Applications Through Consistent Access To DB2 Family
- Servers
- Improved Performance For Remote Queries
- Improvements In Connectivity
- IBM Z/OS Application Connectivity To DB2 For Z/OS Feature
- ODBC Expands Support For Encoding Schemes

Scalability And Performance

- 64-Bit Virtual Storage
- Materialized Query Tables
- Ability To Use An Index In More Situations
- Capability To Index Predicates That Have Mismatched Data Types
- Stored Variable-Length Index Keys
- Backward Index Scans For Avoiding Sort Operations
- Additional Distribution Statistics For Improved Optimization
- Improved Optimization For Dynamic SQL
- Improved Trigger Performance
- More Parallelism For Sort Operations
- Performance Enhancements For Star Join Qualified Queries
- Multiple Fetches And Inserts Allowed Within A Single Sql Statement
- 4096 Partitions In A Partitioned Table Space
- Greater Resource Control With Stored Procedures And User-Defined Functions
- Reduced Overhead Costs For Data Sharing Workloads
- Reduced Lock Propagation In The Coupling Facility
- Improved Control For Accounting Aggregation
- Improved Package-Level Accounting

Reliability, Availability, And Serviceability

- Greater Availability And Flexibility With Online Schema Evolution
- Change Column Types And Lengths
- Add Columns To An Index

- Add, Rotate, Or Rebalance Partitions Dynamically
- Change The Partitioning And Clustering Of The Data In Your Tables
- Greater Data Availability With Data-Partitioned Secondary Indexes
- More Flexibility And Faster Recovery With System-Level Point-In-Time Recovery
- Improved Utility Functions
- Online REORG Utility
- Online CHECK INDEX Utility
- LOAD And UNLOAD Utilities
- RUNSTATS Distribution Statistics
- Autonomic Restart
- Enhanced LPL Recovery Processing
- Change More Parameters Online Without Recycling DB2
- Increased Maximum Number Of Active And Archive Log Data Sets
- Autonomic Space Allocation

Accessing Your Enterprise Data

- Accessing Your Enterprise Data
- DB2 QMF Family Of Products
- Highlights Of Version 8 Of DB2 QMF
- DB2 QMF For Websphere, Windows, TSO/CICS, High Performance Option
- New Packaging Options For DB2 QMF
- Integrating Your Zseries And Iseries Data With DB2 Connect

Boosting Application Development Productivity

- Boosting Application Development Productivity With DB2 Development Center
- Customizing And Extending Your Enterprise Data With XML Extender
- Managing Your Enterprise
- Managing DB2 UDB For Z/OS Data Sets From The DB2 Control Center
- DB2 Administration Server
- Using Msys For Setup DB2 Customization Center To Customize DB2
- DB2 Visual Explain
- DB2 Estimator

DB2 And IMS Tools For Your Database Server

- Database Administration Tools
- Application Management Tools
- Performance Management Tools
- Recovery Management Tools
- Replication Management Tools
- Utilities Management Tools