

Db2 11 for z/OS New Features

Course Summary

Description

Db2 11 contains new innovations that lower the total cost of ownership and increase availability, security and scalability. New analytic functions, SQL improvements and enhancements to development functionality allow applications to be built and deployed faster.

The class describes the new features of Db2 11 along with the current best practices for Db2. Hands-on exercises are used to reinforce new features for SQL, application development and utilities.

Course Objectives

After successfully completing this course, you will be able to:

- Understand the scalability, data sharing and availability enhancements in Db2 11
- Use the SQL enhancements in Db2 11
- Understand the connectivity, administration and security enhancements in Db2 11
- Identify and use the utility enhancements in Db2 11
- Identify the performance enhancements in Db2 11
- Know the migration considerations for moving to Db2 11

Topics

- Course overview
- Scalability
- Availability
- System z and data sharing
- SQL Enhancements
- Application enablement and XML
- Connectivity and administration
- Security
- Utilities
- Performance
- Detailed summary of changes
- Migration considerations

Audience

This course is designed for Db2 database administrators and application developers.

Prerequisites

Students should have prior experience with Db2, preferably Db2 10 for z/OS.

Duration

Three days or 5 half-day sessions

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Course Outline

- I. Course overview**
 - A. Subsystem improvements
 - B. New application functions
 - C. Operations and performance
- II. Scalability**
 - A. Extended RBA and LRSN
 - B. NOT LOGGED for DGTT
 - C. More open datasets
 - D. PBG mapping tables
- III. Availability**
 - A. Online schema changes
 - B. Automatic recovery of indexes
 - C. Altering limit keys
 - D. Work file enhancements
 - E. Controlling parallel utility execution
 - F. Break-in to idle and persistent threads
- IV. System z and data sharing**
 - A. Using zIIP specialty processors
 - B. Reduced need for REORG
 - C. DFSMS storage tiers
 - D. Improved data sharing write performance and index availability
- V. SQL Enhancements**
 - A. Global variables and array data type
 - B. New built-in functions
 - C. More temporal support
 - D. CUBE, ROLLUP and GROUPING SETS
 - E. Later table drop column
- VI. Application enablement and XML**
 - A. Ensuring application compatibility
 - B. Transparent archiving of temporal data
 - C. Big data support
 - D. Scoring adapter for predictive analytics
 - E. JSON support
 - F. Suppressing null indexes
 - G. XML enhancements
- VII. Connectivity and administration**
 - A. Cancel thread and SQL improvements
 - B. Continuous block fetching
 - C. Local stored proc enhancements
 - D. ADMIN_COMMAND_MVS stored procedure
 - E. Driver, client, & connectivity requirements
- VIII. Security**
 - A. Exit authorization checking
 - B. Program authorization
 - C. Column masking
- IX. Utilities**
 - A. Online REORG enhancements
 - B. Statistics and USE PROFILE
 - C. Backup and recovery
 - D. Load and unload
- X. Performance**
 - A. System level performance
 - B. Reduced need for Reorg
 - C. Buffer pool simulation
 - D. Optimizer enhancements
 - E. IFCID changes
 - F. Stored procedure monitoring
- XI. Detailed summary of changes**
 - A. Catalog changes
 - B. Command changes
 - C. Utility changes
 - D. Deprecated features
 - E. Removed features
- XII. Migration considerations**
 - A. Currency of versions
 - B. Prerequisites
 - C. Installation changes
 - D. Subsystem parameters
 - E. Release incompatibilities