

IBM Db2 12.1: Advanced Data Management and Recovery for Relational DBAs

OEM: IBM • Code: CLA92G

COURSE DESCRIPTION

This course provides learners with a comprehensive exploration of advanced techniques for managing and recovering data in Db2 12.1 environments. It begins with methods for efficiently moving and loading data, enabling database administrators to migrate schemas, relocate data, and integrate with external sources while maintaining system stability. The course covers advanced backup and recovery strategies, from incremental backups and redirected restores to dropped table recovery and logical backups. Learners will also explore Db2 features that support high availability and disaster recovery, as well as specialized tools such as split mirror technology and the Db2 Advanced Recovery Feature. Through a series of hands-on exercises, learners will practice applying these advanced techniques in real-world scenarios. Activities include using the LOAD utility with advanced options, moving data between databases with db2move and schema copy procedures, executing redirected restores, and recovering dropped tables. Participants will also gain practical experience with database maintenance tasks such as running RUNSTATS, reorganizing tables and indexes with REORG, and applying autonomic features to automate recurring maintenance operations. By the end of this course, learners will be able to confidently manage complex data movement, implement robust backup and recovery procedures, and use Db2's autonomic features to sustain database performance and availability. They will be equipped with the expertise needed to reduce downtime, optimize efficiency, and safeguard critical enterprise data in advanced Db2 deployments.

AUDIENCE PROFILE

- This course is intended for experienced database administrators, system administrators, and technical professionals who manage Db2 environments and need to expand their expertise in advanced data movement, backup, recovery, and maintenance. It is also suitable for application developers and data engineers who work closely with Db2 databases and want to strengthen their understanding of utilities, schema handling, and performance optimization.

PREREQUISITES

- Completion of CLA90G: IBM Db2 12.1 Essentials for Relational DBAs or equivalent knowledge
- Completion of course CLA91G/2LA91G: Data Management and Recovery for Relational DBAs
- Prior experience with Db2 database administration
- Familiarity with Db2 utilities such as BACKUP, RESTORE, LOAD, and RUNSTATS
- Working knowledge of SQL and database objects (tables, indexes, and schemas)
- Basic understanding of database recovery concepts
- Hands-on practice in managing Db2 environments

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- Summarize the role of advanced Db2 utilities in data movement, recovery, and database maintenance.
- Apply advanced LOAD options and external table techniques to optimize data import and exchange.
- Use tools such as db2look and db2move to export structures and move data between Db2 databases.
- Execute administrative procedures, including DB2_ADMIN_COPY_SCHEMA and DB2_ADMIN_MOVE_TABLE, to streamline schema and table management.
- Perform incremental backups, redirected restores, and dropped table recovery to strengthen data protection strategies.
- Implement logical backups, split mirror technology, and Db2 Advanced Copy Services for high-performance recovery.
- Configure and manage Db2 High Availability and Disaster Recovery (HADR) and leverage the Db2 Advanced Recovery Feature.
- Apply statistics profiles and autonomic features to enhance performance tuning and reduce manual administration.
- Automate recurring maintenance tasks using the Administrative Task Scheduler and autonomic management of backups, statistics collection, and reorganizations.

COURSE OUTLINE

Module 1: Unit 1: Data Movement and Loading

- Db2 Utilities Recap
- LOAD Performance and more
- Using db2move
- Using RESTORE
- Using db2relocatedb
- Using ADMIN_COPY_SCHEMA and ADMIN_MOVE_TABLE
- db2look
- Using External Tables
- 3 Hands-on Exercises

Module 2: Unit 2: Backup and Recovery

- Incremental Backup and Recovery
- Table Space Recovery
- Db2 Database Rebuild Support
- Db2 RESTORE with REDIRECT
- Dropped Table Recovery
- Logical Backup and Restore
- Split Mirrors and Db2 Advanced Copy Services
- Db2 High Availability and Disaster Recovery (HADR)
- Db2 PureScale
- Db2 Merge Backup
- Db2 High Performance Unload
- Db2 Recovery Expert
- 3 Hands-on Exercises

Module 3: Unit 3: Database Maintenance, Monitoring, and Problem Determination

- Using Statistics Profiles
- Autonomy Features: Configuration
- Autonomy Features: Administrative Task Scheduler
- Autonomic Utility Execution
- Autonomic Statistics Details
- 1 Hands-on Exercise