

Module Title : **CL485G-DB2 10.5 for Linux, UNIX, and Windows Quickstart for Experienced Relational DBAs**
Duration : **4 days**

Overview

This course teaches you to perform, basic and advanced, database administrative tasks using DB2 10.5 for Linux, UNIX, and Windows. These tasks include creating and populating databases and implementing a logical design to support recovery requirements. The access strategies selected by the DB2 Optimizer will be examined using the DB2 Explain tools. Various diagnostic methods will be presented, including using various db2pd command options. Students will learn how to implement automatic archival for database logs and how to plan a redirected database restore to relocate either selected table spaces or an entire database. The REBUILD option of RESTORE, which can build a database copy with a subset of the tablespaces, will be discussed. We will also cover using the TRANSPORT option of RESTORE to copy schemas of objects between two DB2 databases. The selection of indexes to improve application performance and the use of SQL statements to track database performance and health will be covered. This course provides a quick start to DB2 database administration skills for experienced relational Database Administrators (DBA). Learning Journeys or Training Paths that reference this course:

- [DB2 for Linux, Unix and Windows - Role: Database Administrator](#)

Audience

This is an intermediate course for experienced DBAs and technical individuals, with experience on other relational database platforms, who plan, implement, and maintain DB2 10.5 for Linux, UNIX, and Windows databases.

Prerequisites

You should be able to:

- Perform basic database administration tasks on a relational database system
- Use basic OS functions such as utilities, file permissions, hierarchical file system, commands, and editor
- State the functions of the Structured Query Language (SQL) and be able to construct DDL, DML, and authorization statements
- Discuss basic relational database concepts and objects such as tables, indexes, views, and joins

These skills can be developed by taking:

- OS Training:
 - AIX Basics

- Linux Basics and Administration
- Windows Systems Administration
- **Or** by having equivalent HP-UX or Solaris administration experience
- DB2 SQL Workshop
- DB2 Fundamentals

Key topics

- Overview of DB2 for Linux, UNIX and Windows
- Command Line Processor (CLP) and GUI Usage
- The DB2 Environment
- Creating Databases and Data Placement
- Creating Database Objects
- Moving Data
- Backup and Recovery
- Locks and Concurrency
- Database Maintenance, Monitoring and Problem Determination
- Security
- Database Rebuild Support
- DB2 Database and Table Space Relocation
- Using Explain Tools
- Using Indexes for Performance
- Advanced Monitoring

Objectives

- Administer a DB2 database system using commands and GUI tools like IBM Data Studio
- Compare DMS and Automatic storage management for table space storage
- Implement a given logical database design using DB2 to support integrity and concurrency requirements
- Compare the features available with different DB2 LUW product editions
- Select the appropriate DB2 client software to support application client or server systems
- Define a DB2 recovery strategy and perform the tasks necessary to support the strategy
- Use autonomic features of DB2 for collection of table and index statistics
- Implement DB2 security
- Select indexes to support application performance requirements

- Explore the DB2 recovery facilities and database configuration options
- Perform the implementation of automated archival and retrieval of database logs
- Plan for supporting database and disaster recovery scenarios using DB2 database and table space backups using the RESTORE command with a REBUILD option
- Select appropriate methods for moving DB2 tables, including ADMIN_MOVE_TABLE, DB2MOVE or the TRANSPORT option of the RESTORE command.
- Utilize the DB2 Explain tools to examine access strategies
- Select the appropriate utility to relocate a database or a portion of a database, including using the RESTORE utility or the db2relocatedb command
- Use the DB2 Design Advisor to analyze SQL statements to suggest new indexes to improve application performance
- Investigate current application activity that might indicate performance problems using SQL statements
- Use the DB2 provided monitor and Functions in SQL to evaluate efficient use of database memory for locks, sorting and package cache