



# IBM: DB2 10.1 for Linux, UNIX, and Windows Quickstart for Experienced Relational DBAs (CL484G)

Course ID#: 0370-370-10.1-W

28 Hrs

## Course Content

### Course Description:

This course teaches you to perform, basic and advanced, database administrative tasks using DB2 10.1 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 the db2diag.log file messages to direct your investigation of problems, as well as using the db2pd commands and DB2 traces. You 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 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).

### 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 10.1 for Linux, UNIX, and Windows databases.

### Prerequisites:

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



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## Objectives:

- Administer a DB2 database system using commands or GUI tools
- Create and manage database storage for tables using Automatic Storage management, System Managed Storage (SMS) or Database Managed Storage (DMS) table spaces
- Implement a given logical database design using DB2 to support integrity and concurrency requirements
- List and describe the components of DB2
- Define a DB2 recovery strategy and perform the tasks necessary to support the strategy
- Use DB2 utilities like RUNSTATS to collect table and index statistics and REORG to reorganize tables and indexes to improve access and storage efficiency.
- 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
- Identify 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
- Examine Explain output to determine access strategy chosen by Optimizer
- Investigate current application activity that might indicate performance problems using SQL statements
- Use the DB2 provided Views and Functions in SQL to evaluate efficient use of database memory for locks, sorting and package cache

## Topics:

**Overview of DB2 for Linux, UNIX and Windows**

**Command Line Processor (CLP) and GUI tools**

**The DB2 environment**

**Creating databases and data placement  
Creating database objects**

**Moving data**

**Backup and recovery**

**Locks and concurrency**



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**Problem determination**

**Security**

**DB2 Recovery Log Management**

**DB2 database and table space relocation**

**Using Explain tools**

**Using Indexes for Performance**

**Advanced Monitoring**