

## Db2 11.1 Administration Workshop for Linux (CL206G)

### Course Summary

#### Description

This course teaches database administrators to perform basic database administrative tasks using Db2 11.1 for Linux, UNIX, and Windows. These tasks include creating database objects like tables, indexes and views, and loading data into the database with Db2 utilities like LOAD and INGEST. Various diagnostic methods will be presented, including using db2pd command options, and monitoring with SQL statements that reference Db2 monitor functions. Students will learn how to implement automatic archival for database logs and how to recover a database to a specific point in time using the archived logs. The course covers using EXPLAIN tools to review the access plans for SQL statements, adding indexes to improve SQL performance. We will cover the locking performed by Db2 and the effect the application isolation level has on locking and lock wait conditions. Students will learn how to implement database security, including adding a security administrator, SECADM user, and implement database roles to simplify security management. We will also describe implementing Db2 native encryption for a database.

The demonstrations and exercises are performed using Db2 LUW 11.1 for Linux. For some lab tasks, students will have the option to complete the task using a Db2 command line processor, or using the graphical interface provided by IBM Data Server Manager.

#### Topics

- Overview of Db2 11 on Linux, UNIX, and Windows
- Db2 Command Line Processor (CLP) and GUI tools
- The Db2 database manager instance
- Creating Databases and Data Placement
- Creating Database Objects
- Moving Data
- Backup and Recovery
- Database Maintenance, Monitoring and Problem Determination
- Locking and concurrency
- Security

#### Audience

This is an intermediate level course for students that will perform Database Administration tasks, who plan, implement, and maintain Db2 10.5 for Linux, UNIX, and Windows databases.

#### Prerequisites

Before taking this course, students should perform basic database administration tasks on a relational database system. They should be able to use basic OS functions such as utilities, file permissions, hierarchical file system, commands, and editor. Students must be able to state the functions of the Structured Query Language (SQL) and be able to construct DDL, DML, and authorization statements. They should also be able to discuss basic relational database concepts and objects such as tables, indexes, views, and joins. These skills can be developed by taking the Db2 SQL Workshop (PT16716) and the Db2 Fundamentals course.

#### Duration

Four days