

Module Title : **CL213G: DB2 10 for LUW: Basic Administration for AIX**

Duration : **4 days**

Overview

This course teaches you to perform, basic 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.

Training Paths that reference this course are:

- IBM Smart Analytics System
- PureData for Operational Analytics
- Database Administration - Single Partition

Audience

This intermediate course is for system administrators, database administrators, and technical personnel involved in planning, implementing, and maintaining DB2 databases.

Prerequisites

You should be able to:

- 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:
 - Linux Basics and Administration
 - Windows Systems Administration
- DB2 SQL Workshop
- DB2 Fundamentals

Key Topics

- Overview of DB2 on Linux, UNIX and Windows
- Command Line Processor (CLP) and GUI usage
- 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

Agenda

- The planned agenda follows. Here are the considerations:
- The first six units must be taught in the order specified:
- Overview of DB2, Command Line Processor (CLP) and GUI usage
- 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

Day 1

- (00:30) Welcome
- (00:45) Unit 1: Overview of DB2 on Linux, UNIX and Windows
- (00:45) Unit 2: Command Line Processor (CLP) and GUI usage
- (00:45) Unit 3: The DB2 Database Manager Instance
- (00:40) Exercise 1: Create a New DB2 Instance
- (02:00) Unit 4: Creating databases and data placement
- (00:45) Exercise 2: Creating databases and data placement

Day 2

- (01:30) Unit 5: Creating database objects
- (00:45) Exercise 3: Create objects
- (02:00) Unit 6: Moving data

- (01:00) Exercise 4: Moving data

Day 3

- (02:00) Unit 7: Backup and recovery
- (01:00) Exercise 5: Backup and recovery
- (02:00) Unit 8: Database Maintenance, Monitoring and Problem Determination
- (01:00) Exercise 6: Using DB2 Tools for Performance

Day 4

- (01:00) Unit 9: Locking and concurrency
- (01:00) Exercise 7: Investigating DB2 Locking
- (01:30) Unit 10: Security
- (01:00) Exercise 8: Database Security

Objectives

- Administer a DB2 database system using commands and GUI tools
- Compare DMS, SMS and Automatic storage management for table space storage
- 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 autonomic features of DB2
- Examine Explain output to determine access strategy chosen by Optimizer
- Investigate current application activity that might indicate performance problems using SQL statements
- Implement DB2 security