

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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CODE: LENGTH: PRICE:

2L235G 32 Hours £960.00

# **Description**

Contains: PDF course guide, as well as a lab environment where students can work through demonstrations and exercises at their own pace.

This course teaches database administrators to perform basic database administrative tasks using DB2 10.5 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. Implementing DB2 native encryption for a database is also described.

The lab exercises are performed using DB2 LUW 10.5 for Windows. For some exercise 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. If you are enrolling in a Self Paced Virtual Classroom or Web Based Training course, before you enroll, please review the Self-Paced Virtual Classes and Web-Based Training Classes on our Terms and Conditions page, as well as the system requirements, to ensure that your system meets the minimum requirements for this course. http://www.ibm.com/training/terms

# **Objectives**

- •Administer a DB2 database system using DB2 commands or GUI tools IBM Data Server Manager
- •Explain the differences between DMS and Automatic storage management for table space storage
- •Compare the features available with different DB2 LUW product editions
- •Select the best DB2 utility to load data into tables, including LOAD, INGEST or IMPORT
- •Define a DB2 recovery strategy and perform the tasks necessary to support the strategy
- •Implement DB2 security including special DB2 user authorities like SYSADM and DBADM.
- •Plan the use of RUNSTATS, REORGCHK and REORG utilities for maintaining database efficiency
- •Create and configure a DB2 instance to set the location for diagnostic data and message severity levels for basic problem analysis
- •Describe the methods that can be used for monitoring database and application activity including db2pd commands, Event Monitors and using SQL statements to access statistics
- •Perform the implementation of automated archival and retrieval of database logs
- •Investigate current application activity that might indicate performance problems using SQL statements and db2pd commands

#### **Audience**

This is an entry 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**

- Participants should have the following skills:
  - 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
  - Discuss basic relational database concepts and objects such as tables, indexes, views, and joins
  - These skills can be developed by taking:

- DB2 SQL Workshop
- DB2 Fundamentals

# **Programme**

- Overview of DB2 10 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

## **Session Dates**

On request. Please Contact Us

## **Additional Information**

This training is also available as onsite training. Please contact us to find out more.