Enterprise Computing Solutions - Education Services

# OFERTA FORMATIVA

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# DB2 10.5 for LUW Advanced Database Administration with DB2 BLU Acceleration - SPVC

| CÓDIGO: | DURACIÓN: | Precio: |
|---|---|---|
| 2L463G | 40 Hours | €1,100.00 |

## Description

This course is designed to teach you how to:

- Fully use the advanced technical functions and features of DB2 LUW 10.1 and 10.5.
- Implement DB2 BLU Acceleration, column-organized table support, for a new or existing DB2 database.
- Describe how the column dictionaries used for DB2 BLU Acceleration are built and utilized to provide extreme compression for column-organized tables.
- Explain the default workload management used for DB2 BLU Acceleration processing and how you can tailor the WLM objects to efficiently use system resources.
- Monitor a DB2 database or application that uses column-organized tables using SQL monitor functions.
- Create optimization profiles that allow applications to control specific operations included in the access plans selected by the DB2 Optimizer, like which index is used to access a table or which join method to utilize for joining tables.
- Perform advanced monitoring using the DB2 administrative views and routines in SQL queries.
- Configure and manage the implementation of DB2 instance or database level auditing, including using the db2audit command and creation of audit policies which can be assigned to specific tables, users or database roles to perform selective collection of audit records.
- Explore DB2's management of disk space usage in Database Managed Storage (DMS) table spaces, including the activities of the rebalancer. Use SQL queries and utilities to check the high water mark on table spaces and to monitor the rebalance operation.
- Move data from one table to another or from one database to another using utilities like db2move.
- Utilize the ADMIN_MOVE_TABLE procedure to implement table changes with a minimal impact to data availability for applications.
- Implement automatic storage management for table spaces and storage groups or enable automatic resize options for DMS managed table spaces to reduce administration requirements and complexity.
- Exploit and monitor the REORG utility processing for offline and online table, and index reorganization. This includes planning for the disk space and database log space necessary for reorganization.
- Utilize the REORG Utility to implement row compression for large tables, to reduce disk utilization and improve I/O performance for a DB2 database and understand the automatic creation of compression dictionaries.
- For Multidimensional Clustering (MDC) tables, determine how to select the dimension columns and table space extent size for efficient implementation of MDC tables. Compare the block indexes used with MDC tables with rows based indexes. Select the MDC rollout option that best matches application needs and achieves the best performance results.
- Plan and implement range based table partitioning for large DB2 tables. Utilize the ALTER TABLE ATTACH and DETACH options to support roll-in and roll-out operations for range-partitioned tables. Compare the advantages of selecting or combining range partitioning with the hash-based partitioning used in DB2 partitioned databases or the multiple dimensions provided by MDC tables.

You get practical experience in the planning and utilization of a wide variety DB2 LUW utilities and functions by performing a series of lab exercises using DB2 Advanced Enterprise Edition 10.5 installed on a Linux platform. The exercises build skills that can be applied to DB2 database servers on any Linux, UNIX or Windows environment.
The course materials cover DB2 10.5 for Linux, UNIX, and Windows.
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.
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## Objetivos

- Monitor a DB2 LUW database using command line processor queries
- Implement DB2 BLU Acceleration, column-organized table support, for a new or existing DB2 database.

- Configure a DB2 database that uses DB2 BLU Acceleration, column-organized tables, including sort memory and utility heap memory considerations
- Describe the default workload management used for DB2 BLU Acceleration processing and how you can tailor the WLM objects to efficiently use system resources
- Implement DB2 Instance audit data collection using the db2audit command or database level auditing by creating audit policy objects and assigning the policies to objects using the AUDIT command.
- Analyze REORGCHK reports to determine if the table or the index reorganization would improve database efficiency. Invoke and monitor the processing for the REORG utility running offline or online
- Manage the disk space allocated in DMS table spaces using ALTER TABLESPACE to extend or to reduce the containers, and monitor the progress of the DB2 rebalancer process
- Implement automatic resize for DMS table spaces or Automatic Storage management for table spaces to reduce the complexity of managing DB2 LUW databases
- Describe the conditions that would impact selection of the INGEST utility rather than using LOAD
- Set the options for the INGEST utility and monitor ingest processing
- Plan and execute the DB2MOVE utility to copy selected table data for an entire schema for objects from one DB2 database to another
- Implement an optimization profile to control a portion of the access plan selected by the DB2 Optimizer to achieve specific application performance results
- Select options and processing modes for the online table move procedure, ADMIN_MOVE_TABLE, to implement changes to tables with minimal loss of data access by applications
- Plan and implement MDC tables to improve application performance, including selecting the appropriate table space extent size
- Utilize range-based partitioned tables to support large DB2 tables that require very efficient roll-in and roll-out capabilities

## Público

This is an advanced course for DB2 LUW experienced database administrators who support DB2 for UNIX, Windows, and Linux databases.

## Requisitos Previos

You should:

- Complete:
  - *DB2 10 for LUW: Basic Administration for Linux and Windows (CL2X3)* **or**
  - *DB2 10 for LUW: Basic Administration for AIX (CL213)* **or**
  - *DB2 10.1 for Linux, UNIX, and Windows Quickstart for Experienced Relational DBAs (CL484)* or
- Have equivalent experience.

## Programa

- Advanced Monitoring
- Advanced Table Space Management
- DB2 10.5 BLU Acceleration Concepts
- DB2 10.5 BLU Acceleration Implementation and Use
- Using Optimizer Profiles to control Access Plans
- Table Partitioning
- Advanced Data Movement
- Advanced Table Reorganization
- Multiple Dimension Clustering
- DB2 Database Auditing

## Fechas Programadas

A petición. Gracias por contactarnos.

## Información Adicional

Esta formación también está disponible en modalidad presencial. Por favor contáctenos para más información.