

Db2 for LUW Database Administration

Course Summary

Description

This course makes your life as a Db2 LUW DBA more productive. Over four days, this course covers the roles of the DBA and the activities that are important to your success with Db2. Extra time is spent on performance topics. This class uses hands-on and paper exercises to reinforce the topics covered. This class is current to DB2 11.5 and new fix packs.
Platform: Db2 for Linux, UNIX, Windows

Topics

- Object Management
- Utilities
- Key System Parameters
- Buffer Pool Optimization Techniques
- Table Space Design
- Index Design
- Access Path Selection
- Evaluating SQL Performance
- Security
- Backup and Recovery

Audience

This course is designed for database administrators and senior development staff.

Prerequisites

There are no prerequisites for this course.

Duration

Three days

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Course Outline

I. Object Management

- A. Types of objects and their relationships
- B. Test and production
- C. Alter and migration

II. Utilities

- A. Loading and moving data
- B. Reorganizing tables and indexes
- C. RUNSTATS
- D. Integrity checking

III. Key System Parameters

- A. Heaps, Servers, and Thresholds
- B. Optimizing Sort performance
- C. Using the snapshot monitor for system monitoring

IV. Buffer Pool Optimization Techniques

- A. Types of physical I/O
- B. A buffer pool tuning methodology
- C. Number and size of buffer pools
- D. Object placement

V. Table Space Design

- A. DMS, SMS & Automatic storage
- B. Table design
- C. Data compression

VI. Index Design

- A. Index structure and MDC indexes
- B. When to use indexes
- C. Index redesign

VII. Access Path Selection

- A. Types of access paths
- B. Range delimiting and sargable predicates
- C. Factors used in access path selection
- D. DB2 catalog statistics used
- E. Join methods and subselects

VIII. Evaluating SQL Performance

- A. Explain tables, db2expln, db2exfmt
- B. Monitoring using DB2 catalog information
- C. Design Advisor
- D. Event Monitors

IX. Security

- A. Interfaces to OS security
- B. Security administration

X. Backup and Recovery

- A. Recovery concepts
- B. Backup strategies
- C. Recovery planning
- D. HADR