BROADCOM
MAINFRAME SOFTWARE

EDUCATION
COURSE
DESCRIPTION

IDMS™/DB Database Version 19.x: Database Navigation 200

Type	Web-Based Training
Length	5 hours
Code	06IDM2052B

AUDIENCE
- Traditional MF Developer Operator
- Database Administrator
- System Programmer

SUPPRTED PRODUCT RELEASE(S)
- IDMS/DB Database Version 19.x

PREREQUISITE(S)
- IDMS v18: Concepts and Facilities 200
- Four (4) Hours
- 06IDM20140
- A working knowledge of COBOL

Course Overview

IDMS is a web-enabled, mainframe-based database management system. This solution delivers high-performance database management and transactional processing capabilities for existing and new workloads, helping you consolidate business functions on a central data repository. IDMS provides both network and relational access and exploits the latest hardware and software technologies, including the IBM z Systems Integrated Information Processor (zIIP).

This course is designed to introduce the new Database Administrator (DBA) to database navigation so they can safely and efficiently work within the IDMS/DB environment.

What You Will Learn How To

- Describe the characteristics of an IDMS/DB database and the effects of programming in that environment
- Recognize record components on a data structure diagram
- Identify information on a data structure diagram and indicate its importance to a programmer
- Define currency and give examples of how currency is used in database processing
- Describe the requirements for accessing a database
- Write code to retrieve and store data
- Explain how the database is protected from concurrent update or abnormal program termination

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Course Agenda

Course 1

CA IDMS Version 19.x: SQL Virtual Foreign Key Feature 200

- Explain the Virtual Foreign Key features
- Implement Virtual Keys
- Expose Virtual Foreign Keys
- Utilize Virtual Keys to access data
- Utilize Virtual Foreign Keys to access data

Course Two

Module 1: Introduction to IDMS-DB

- Describe the characteristics of the database environment and the effects of programming in that environment

Module 2: Data Relationships

- Explain how data can be described as entities and relationships between those entities
- Identify records, sets, and foreign-key relationships on a data structure diagram

Module 3: Data Storage

- Identify where IDMS stores data
- Recognize record components on a data structure diagram

Module 4: Set Structures

- Explain how IDMS uses embedded pointers to implement the various set structures
- Recognize set characteristics on a data structure diagram

Module 5: Data Structure Diagram

- Recognize all information on a data structure diagram and indicate what information is important to a programmer who needs to access the database

Course Agenda Continued

Course Three

Module 6: Currency

- Define currency and give examples of how currency is used in database processing

Module 7: Preparing for Database Access

- Describe the requirements for accessing a database

Module 8: Verifying Database Access Results

- Verify database access

Course Four

Module 9: Retrieving Data

- Write the code to retrieve data from the database
- Topics Covered:
  - Database retrieval
  - Entering the database
  - Using previously established currency

Module 10: Updating Data

- Write the code to retrieve data from the database
- Topics Covered:
  - Storing database records
  - Connecting records to sets
  - Disconnecting records from sets
  - Updating database records
  - Erasing database records
  - Variations of the ERASE statement

Module 11: Protecting Data Integrity

- Explain how the database is protected from concurrent update or abnormal program termination
- Topics Covered:
  - Data integrity concerns
  - Operating modes
  - Avoiding concurrent update
  - Recovery from program or system failure