In this course, students will learn the basic concepts of data management with Informix 12.10. They will learn how to create, manage, and maintain tables and indexes; how the Informix Optimizer works; and how to use the SET EXPLAIN feature to determine query effectiveness.

Skills Gained

Please refer to course overview

Who Can Benefit

The main audience for this course is Informix Database Administrators. It is also appropriate for Informix System Administrators and Informix Application Developers.

Prerequisites

Students in this course should satisfy the following prerequisites:

- IX101 - Introduction to Informix terminology and data types (or equivalent experience or knowledge)
- Knowledge of Structured Query Language (SQL)
- Experience using basic Linux functionality

Course Details

Course Outline

Unit 1 - Creating databases and tables
  - Databases
  - Tables
  - DBSCHEMA, ONCHECK, and ONSTAT
  - Sysmaster
Unit 2 - Altering and deleting databases and tables
  - ALTER
- Data space reclamation
- Renaming
- Dropping
Unit 3 - Creating, altering, and dropping indexes
- Indexes
- Sysmaster
- Forest of trees
Unit 4 - Managing and maintaining indexes
- Benefits and costs
- Guidelines
- Calculating size
Unit 5 - Table and index partitioning
- Fragmentation
- Distribution schemes
- Sysmaster
Unit 6 - Maintaining table and index partitioning
- ALTER FRAGMENT
Unit 7 - Cost-based query optimizer
- Access plan
- Join methods
- EXPLAIN
- Scans
Unit 8 - Updating statistics and data distributions
- UPDATE STATISTICS
- Distribution information
- Process
- Updating statistics
Unit 9 - Managing the optimizer
- Optimization options
- Directives
Unit 10 - Referential and entity integrity
- Integrity
- Constraints
Unit 11 - Managing constraints
- Transaction modes
- Dropping a constraint
Unit 12 - Modes and violations detection
- Object modes
- Disabling an object
- Recording violations
- Sysmaster
Unit 13 - Concurrency control
- Isolation
- Locks
- Row versioning
Unit 14 - Data security
- Levels of data security
- Privileges
- Roles
Unit 15 - Views
- Working with views
- WITH CHECK OPTION
- Sysmaster
Unit 16 - Introduction to stored procedures
- Stored procedures
- Sysmaster
Unit 17 - Triggers
- Working with triggers
- Triggers and stored procedures
- Dropping a trigger
- Cursors and triggers
- Triggers and constraint checking
- Sysmaster
- Managing triggers
Appendix A - Terminology
- Terminology
Appendix B - Data types
- Data types
Appendix C - XML publishing
- XML publishing
Appendix D - Basic Text Search DataBlade Module
- BTS DataBlade Module
Appendix E - Node DataBlade Module
- Node DataBlade Module
Appendix F - Using Global Language Support
- Using GLS