

IBM Informix 12.10 Database Administration

2-Day Intensive Course

FA-0245 · 2-Day

Data & Analytics

Introduction

This intensive 2-day course is designed to equip participants with the essential skills and knowledge needed to proficiently administer an Informix 12.10 database environment. Utilizing hands-on labs and in-depth lectures, the course covers key aspects of database administration, such as installation, configuration, security, backup and recovery, performance tuning, and more. Geared toward database administrators, IT professionals, and developers who interact with Informix databases, this course offers a comprehensive understanding of the core functionalities and best practices to administer Informix 12.10 effectively.

Learning outcomes

Upon successful completion of this course, participants will be able to:

- Install and configure Informix 12.10 Database server.
- Understand and manage the Informix architecture, including system databases and logs.
- Implement effective security measures including user roles and access controls.
- Perform backup, recovery, and restore operations.
- Understand and implement data replication.
- Monitor system performance and execute basic tuning.
- Understand and manage chunks, dbspaces, and extents.
- Troubleshoot common issues and generate diagnostic reports.

Prerequisites

This is an IBM course and as with most IBM courses, a lot of specialized skill sets are required and also trained on. The course is intensive and thus requires the following minimum from the learner:

- Good understanding of relational database concepts.
- Experience with SQL syntax and queries.
- Usage knowledge on UNIX/Linux operating systems and basic commands.
- Some experience with general systems administration tasks.
- Hard working attitude.
- Ability and willingness to learn together.

Training outline

1. Day 1

Module 1: Introduction to Informix 12.10

1. Informix 12.10 Overview
2. Key Features
3. Architecture Components

Module 2: Installation and Configuration

1. Hardware and Software Requirements
2. Installation Steps
3. Configuration Parameters

Lab 1: Installation and Initial Setup

1. Guided lab to walk through the installation and initial configuration.

Module 3: Informix Architecture

1. Understanding On-Disk and In-Memory Architecture
2. System Databases
3. Informix Logs

Module 4: Security and Access Control

1. User Authentication Methods
2. Setting Up Roles and Privileges
3. Implementing Security Policies

Lab 2: Setting Up Users and Security

1. Practical exercises on setting up and managing user roles and privileges.

Module 5: Database Objects Management

1. Working with Tables, Indexes, and Views
2. Managing Constraints and Triggers

2. Day 2

Module 6: Backup and Recovery

1. Backup Types and Strategies
2. Implementing Backup
3. Performing Recovery and Restore Operations

Lab 3: Backup and Recovery Hands-On

1. Demonstrating backup and recovery steps using real-world scenarios.

Module 7: Data Replication

1. Overview of Replication Methods
2. Setting up HDR (High-Availability Data Replication)
3. Managing Replication Nodes

Module 8: Performance Monitoring and Tuning

1. Tools for Performance Monitoring
2. Query Optimization Techniques
3. System Tuning Parameters

Lab 4: Performance Tuning Hands-On

1. Practical exercises on optimizing query performance and system parameters.

Module 9: Advanced Management

1. Chunks, Dbspaces, and Extents
2. Troubleshooting and Diagnostic Tools

Lab 5: Advanced Management and Troubleshooting

1. Working through exercises in chunk management, dbSpaces, and basic troubleshooting.

Module 10: Course Wrap-Up

1. Review of Key Concepts
2. Additional Resources
3. Q&A and Feedback

Each module is designed with a balanced blend of theory and practical exercises, ensuring that participants gain a robust understanding of Informix 12.10 Database Administration.