

Advanced Informix Performance Tuning

Course Summary

Description

The focus is on practical skills, procedures, and scripts to improve the performance of your database server. In addition to your new skills, the course will provide a toolkit of scripts and utilities to start monitoring and optimizing your Informix database server. The course is taught by Lester Knutsen and Art Kagel, Principal Database Consultants. This course has been updated for Informix 12.

The course includes 12 hands-on labs with exercises for students to implement and practice the concepts taught in this class. The labs are taught as a performance tuning benchmark where students work on improving the performance of a base system.

Topics

- New Features in Informix 12 and Informix 11
- Introduction to Performance Tuning and Optimizing
- Optimizing the Informix Server Configuration
- Tuning Dbspaces, Chunks and Disk Layouts
- Informix Server Monitoring Utilities
- Managing Logs
- Sizing Tables and Fragmentation
- Using and Tuning Indexes
- Managing and Tuning Update Statistics
- Managing and Tuning Parallel Data Query
- Optimization and Tuning SQL Statements
- Performance Optimization of UNIX for Databases
- Informix Server Monitoring Using the Sysmaster Database

Audience

This course is for Informix database administrators and application developers who will be responsible for installing, managing, optimizing and tuning an Informix Database Server.

Prerequisites

Proficiency in SQL, UNIX commands and the vi editor is required.

Hands-on experience administering an Informix server is helpful, or the following IBM courses or equivalent are strongly recommended:

- IBM Informix Dynamic Server Administration course (L1 846)
- Managing and Optimizing IBM Informix Dynamic Server Databases (FN 848)

Duration

Four days

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Course Outline

- I. New Features in Informix 12 and Informix 11**
 - A. New ONCONFIG Parameters
 - B. New Performance Tuning Guidelines
- II. Introduction to Performance Tuning and Optimizing**
 - A. A Checklist for Troubleshooting Informix Performance
- III. Optimizing the Informix Server Configuration**
 - A. Tuning OLTP Systems
 - B. Tuning Data Warehouse Systems
 - C. Tuning Data Loads
 - D. Managing and Tuning Client Server Database Access
- IV. Tuning Dbspaces, Chunks, and Disk Layouts**
 - A. Enable Large Chunks
- V. Informix Server Monitoring Utilities**
 - A. Using the Onstat Utility for Performance Tuning
 - B. Using the Oncheck Utility for Performance Tuning
- VI. Managing Logs**
 - A. Tuning the Physical Log
 - B. Tuning the Logical Log
- VII. Sizing Tables and Fragmentation**
 - A. Tuning Table Fragmentation
 - B. Improve Performance Using Optimized Informix Data Types
 - C. Improve Performance Through Sizing Tables and Extent Planning
- VIII. Using and Tuning Indexes**
 - A. Tuning Index Builds
- IX. Managing and Tuning Update Statistics**
- X. Managing and Tuning Parallel Data Query**
- XI. Optimization and Tuning SQL Statements – SET EXPLAIN**
 - A. Optimization and Tuning SQL Statements
 - B. Tuning Sorts
- XII. Performance Optimization of Unix for Databases**
- XIII. Informix Server Monitoring Using the Sysmaster Database**