OBIEE Data Mining

Course Summary

Description

This course provides training and hands on practically to introduce the principles and practical skills needed to understand and deploy Oracle Data Mining techniques using the OBIEE toolset. The course builds upon students understanding of the Oracle toolset enabling them to return to their workplace with essential principal techniques and theory of Oracle Data Mining design, modelling and deployment including outline design alternatives, data modelling and OBIEE deployment.

The class provides students with theory, techniques and practical labs to test the knowledge through applied learning. The course instructor will guide students through a range of specially designed labs that will allow students to test what they have learnt, try different techniques and learn best practice data mining techniques.

The first day concentrates on data mining models and how data can be manipulated through modelling techniques. The second day provides a detail modelling workshop specifically designed to support data mining requirements within the storage structures, the database and the metadata tier in OBIEE. The third day fuses the applied knowledge within the OBIEE toolset to demonstrate best practice outcomes for applied OBIEE Data Mining.

Topics

- Overview of data mining
- Various Data Models
- Data Mining Objects in the Database
- Oracle Data Mining in Practice
- Data Mining and OBIEE

Audience

This course is designed for OBIEE Analyst/Designers and OBIEE Developers.

Prerequisites

Before taking this course, students should take ProTech's OBIEE Reports and Dashboards course.

Duration

Three days

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Course Outline

I. Overview of data mining
- A. What is data mining?
- B. Predictive models and data scoring
- C. Real-world issues
- D. Core algorithms and processes
- E. Oracle data mining Presentation & Understanding
- F. Data visualization: More than eye candy
- G. Build trust in analytic results

II. Various Data Models
- A. Data Warehousing, Business Intelligence, OLAP, and Data Mining
- B. Data Warehouse Definition and Properties
- C. Data Warehouses, Business Intelligence, Data Marts, and OLTP
- D. Typical Data Warehouse Components
- E. Warehouse Development Approaches
- F. Extraction, Transformation, and Loading (ETL)
- G. The Dimensional Model and Oracle OLAP
- H. Oracle Data Mining Structures

III. Data Mining Objects in the Database
- A. Data Objects Available
- B. Data Object choices
- C. Object Management
- D. Using Summaries to Improve Performance
- E. Using Materialized Views for Summary Management
- F. Types of Materialized Views
- G. Build Modes and Refresh Modes
- H. Query Rewrite: Overview
- I. Cost-Based Query Rewrite Process
- J. Working With Dimensions and Hierarchies
- K. Creating Basic Calculations

IV. Oracle Data Mining in Practice
- A. Data Mining in the Database Kernel
- B. Data Mining Functions
- C. Oracle Data Mining Functions
- D. Data Mining Algorithms
- E. Oracle Data Mining:
- F. Supervised Algorithms
- G. Oracle Data Mining: Unsupervised Algorithms
- H. Data Preparation
- I. Supermodels
- J. How Do I Use Oracle Data Mining?
- K. Oracle Data Miner
- L. PL/SQL Packages
- M. SQL Functions
- N. Java API - overview
- O. Oracle Spreadsheet Add-In for Predictive Analytics
- P. Oracle Data Mining Resources
- Q. Oracle Data Mining and Oracle Database Analytics in OBIEE

V. Data Mining and OBIEE
- A. OBIEE Structures
- B. Integration with Data Mining Functions
- C. Integration with Data Mining Algorithms
- D. OBIEE Modeling
- E. OBIEE Reports and Dashboards
- F. OBIEE Data Mining Best Practice
- G. OBIEE Data Mining Workshops
- H. OBIEE Data Mining Summary

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