

Advanced Data Modeling Using Erwin R7.3

Course Summary

Description

This course is taught in a workshop format, supported by slide presentation and visual tool illustrations. There are daily review sessions, lectures and workshops, supported by a complete case study, augmented by periodic exercises and quizzes.

Topics

- Enterprise Modeling Features
- Advanced Logical Modeling
- Advanced Physical Modeling
- Model Audit and Validation
- Dimensional and Data Warehouse Modeling
- Introduction to ModelMart and Server Based Modeling
- New Erwin 7.3 features

Audience

This course is designed for data modelers, data architects, business analysts, application builders, DBA's, and end users who will be participating in data modeling and database design of OLTP and Data Warehouse applications.

Prerequisites

Students must have at least 4 months experience using ERwin. Sound understanding of Data modeling concepts and Relational Database Design is assumed.

Duration

Three days

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Course Outline

I. Enterprise Modeling Features

- A. Model layers defined
- B. Splitting, deriving, and combining models
- C. Synchronizing model layers

II. Advanced Logical Modeling

- A. Establishing model naming standards
- B. Hardening logical and physical object names
- C. Implementing model object naming options
- D. Using Domains to build model standards

III. Advanced Physical Modeling

- A. Using model transforms
- B. Complete Compare and Synchronization
- C. User Defined Data types
- D. Data Type standard models
- E. ERwin macro review and new 7.3 macros

IV. Model Audit and Validation

- A. Ensuring syntactical completeness
- B. Ensuring conceptual completeness
- C. Practical approach to model auditing
- D. Validating ERwin model objects

V. Dimensional and Data Warehouse Modeling

- A. Data Warehouse modeling concepts
- B. Establishing and implementing metadata standards
- C. Star and Snowflake schema models
- D. Understand aggregates, semi additive facts and slowly changing dimensions
- E. Metadata modeling and management
- F. ETL mapping and synchronization
- G. Warehouse database specifics (Teradata, Oracle, SQLServer, DB2)

VI. Model Manager (ModelMart) and Server Based Modeling

- A. Enterprise modeling architecture and maintenance
- B. Understand Model Manager capabilities
- C. Model Manager functions, actions, conflicts, and resolution
- D. Collaborative modeling best practices and standards
- E. Model Manager database Tuning

VII. Report Publication and Metadata Management

- A. Integrated Crystal Reports defined
- B. Working with existing reports
- C. Custom report definition and export
- D. Meta Integration Bridge new features

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