

SAP BusinessObjects 4.x Universe Design

Course Summary

Description

This class is a combination of instructor-led lecture, discussions, and demonstrations with a heavy emphasis on hands-on workshops to teach BusinessObjects 4.x Universe Design Tool concepts. Topics to be covered include universe creation, creating database connections, joins, classes and objects, hierarchies, loop resolution, contexts, table aliases, aggregate awareness, viewing table keys, creating predefined conditions, restrictions, index awareness, universe maintenance, and universe distribution/documentation.

Objectives

At the end of this course, students will be able to:

- Create and Maintain Universes
- Join Database Tables and Set or Detect Join Cardinality
- Create Classes and Objects within Hierarchies
- Define Dimensions, Details, and Measures
- Using Contexts and Aliases
- Create Predefined Conditions
- Use Desktop Reporting 4.x or WebIntelligence 4.x Reporting to Test Universes and SQL Generation

Topics

- Universes (Semantic Layer)
- Classes and Objects
- Dimensions/Details/Measures
- Equi/Outer/Theta Joins
- Lists of Values
- @Functions
- Loop Resolutions
- Join Cardinality
- Fan/Chasm Traps
- Predefined Conditions
- Aggregate Awareness
- Contexts and Aliases
- Hierarchies
- Restrictions
- Security Restrictions
- Saving Documentation to PDF
- Index Awareness

Audience

This class is designed for technical analysts who are required to create the BusinessObjects 4.x semantic layer as an interface to the data in a data warehouse, data mart, or database.

Prerequisites

Before taking this course, students should have basic windows skills, database background, SQL skills, and desktop reporting 4.x or WebIntelligence 4.x Basic Reporting (Recommended).

Duration

Two days

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Course Outline

- I. BusinessObjects Overview**
 - A. Basic Architecture
 - B. Administration
 - C. Semantic Layer
 - D. Definitions Review
 - E. Universe Development Process
- II. Getting Started**
 - A. Using Designer
 - B. Defining Database Connection
 - C. Setting Parameters
 - D. Inserting Database Tables
- III. Joins**
 - A. Defining Joins
 - B. Methods of Creating Joins
 - C. Creating Equi-joins
 - D. Creating Outer Joins
 - E. Creating Theta Joins
 - F. Detecting Joins
- IV. Classes and Objects**
 - A. Defining Classes/Subclasses
 - B. Defining Object Types
 - C. Class and Object Organization
 - D. Creating Classes
 - E. Creating Dimensions/Details
 - F. Object Properties
 - G. List of Values
 - H. Deleting Objects
 - I. Testing Cycle
- V. Measures**
 - A. Creating Measures Class
 - B. Creating Simple Measures
 - C. Creating Measures Using Arithmetic Formula
 - D. Formatting Measures
- VI. Understanding Aliases and Contexts**
 - A. Using Aliases
 - B. Using Contexts
 - C. Checking Universe Integrity
- VII. Restrictions**
 - A. Forced Restrictions
 - B. Object-level Restrictions
 - C. Self-restricting Joins
 - D. Conditional Select Statements
 - E. Additional Inferred Joins
 - F. Optional Restrictions
 - G. Predefined Conditions
 - H. Understanding Index Awareness
- I. Setting Primary and Foreign Key index awareness**
- VIII. @Functions**
 - A. @Prompt
 - B. @Select
 - C. @Where
 - D. @Variable
 - E. @Script
- IX. Hierarchies**
 - A. Hierarchy Types
 - B. Default Hierarchies
 - C. Automatic Time Hierarchies
 - D. Table Based Time Hierarchies
 - E. Custom Hierarchies
- X. Aggregate Awareness**
 - A. Summary Tables
 - B. Creating Aggregate Derived Tables
 - C. Applying Aggregate Awareness
 - D. @Aggregate_Aware
 - E. Detecting & Setting Incompatible Objects
- XI. Resolving Traps**
 - A. Fan Traps
 - B. Chasm Traps
 - C. Procedures for Resolving Traps
- XII. Reviewing Security Restrictions**
 - A. Group and User GroGroup & User Security
 - B. Applying Security Restrictions
 - C. Net Security Restrictions
- XIII. Documenting & Maintaining Universes**
 - A. Documenting Universes
 - B. Creating Hardcopies (Printing)
 - C. Saving As PDF
 - D. Distributing Universe
 - E. Universe Security
 - F. Enterprise Distribution
 - G. Exporting Universes
 - H. Locking Universes
 - I. Incremental Exports
 - J. Version Control
 - K. Maintaining Universes
 - L. Target Database Changes
 - M. Impact Resolution
 - N. Adding New Tables
 - O. Object Revisions
 - P. Efficient Maintenance