



IBM Cognos Transformer: Design OLAP Models V10.2

Course ID#: 0370-846-V2-W

IBM ID#:B5282

28 Hrs

Course Content

Course Description:

IBM Cognos Transformer: Design OLAP Models (V10.2) is a four-day, instructor-led course that provides developers with knowledge of OLAP modeling concepts using Transformer. Participants will learn how to design, build, and maintain PowerCubes for use in IBM Cognos BI so that end users can easily analyze data.

This intermediate course is intended for Developers who design OLAP models for use in IBM Cognos BI.

This offering is intended for Developers who:

Understand the business need for ad hoc queries and analysis

Have experience gathering requirements

Have experience analyzing data.

Prerequisites:

IBM Cognos Report Studio: Author Professional Reports Fundamentals (V10.2) course.

Topics:

Overview of IBM Cognos BI

- Discuss IBM Cognos and Performance Management
- Describe IBM Cognos BI components
- Explain how to extend IBM Cognos BI

Transformer Fundamentals

- Discuss the basics of OLAP analysis
- Review Transformer capabilities and its role in IBM Cognos 8 BI
- Discuss Transformer components
- Define categories and members

The Transformer Development Process

- Describe the purpose of a model plan
- Match business requirements to the model
- Discuss an approach for creating a model plan

Data sources in Transformer

- Discuss the types of data used by Transformer
- Create data source files and define properties
- Preview source data and SQL
- Add IBM Cognos data sources to the model
- Discuss data filtering

Building a Model

- Create model structures and modify property sheets
- Confirm the data source origin
- Generate categories to populate the model
- Modify the model using the dimension diagram
- Verify the model and create a PowerCube
- Publish as a data source and package

Considerations for Designing Successful PowerCubes

- Describe model types and data entities
- Define members and member unique names
- Address changes that Impact a MUN
- Discuss when category codes can change

The Time Dimension

- Define a regular time dimension
- Examine standard and nonstandard time dimensions
- Limit the range of valid dates

Relative Time

- Compare trends over time
- Set the current period



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- Create relative time categories
- Customize relative time categories

Use Multiple Data Sources

- Discuss the use of multiple data sources
- Plan the data sources
- Define data source types
- Uniqueness
- Identify and resolve conflicts between data sources
- Validate a multiple data source model
- Discuss a unique move

Working with Measures

- Discuss the purpose and uses of measures
- Describe regular and calculated measures
- Set measure properties
- Compare rollup options
- Create a calculated measure
- Create calculations before or after rollups
- Create a category count

Allocated Measures

- Discuss measure allocation
- Allocate measures as a constant and by another measure
- Check measure distribution

Currency Conversion

- Apply and use currency conversion techniques

Alternate Hierarchies within a Dimension

- Discuss primary and alternate hierarchies
- Describe the benefits of alternate hierarchies
- Create an alternate drill-down path
- Define convergence levels and identify uniqueness issues

Advanced Dimensional Modeling

- Discuss techniques for customizing dimensions
- Add a new source level to an existing dimension
- Create a manual level in a dimension
- Create orphan categories
- Modify a dimension using a subdimension
- Create a special category

- Create a scenario dimension
- Use calculated columns and categories

Customize Cube Content

- Create various types of PowerCubes
- Omit dimensions and exclude measures
- Create and apply dimension views

Examine IBM Cognos Security

- Examine the security environment
- Identify the IBM Cognos BI security model
- Define authentication and authorization
- Identify security policies

Applying Security

- Review model security
- Create custom views
- Assign security to custom views
- Assign custom views to PowerCubes
- Combine custom views with dimension views
- Examine a union of custom views

Maintain Models and PowerCubes

- Maintain models and PowerCubes
- Understand data source, model, cube updates
- Synchronize the model and data source
- Incrementally update PowerCubes
- Copy and activate a newer version of the PowerCube without affecting users

Considerations for Drill Through

- Identify conformed values between data sources
- Discuss using drill through in IBM Cognos BI
- Define a report drill through
- Define a package-based drill through
- Identify drill-through values
- Discuss modeling recommendations

Optimize PowerCubes

- Examine cube groups
- Plan for disk space
- Optimize PowerCube inputs and outputs
- Determine factors that affect PowerCube build time and user response time



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Partition PowerCubes

- Identify the pros and cons
- Develop a partitioning strategy
- Create a time-based partitioned cube
- Automatic vs. manual partitioning
- Understand multi-file PowerCubes

Blank Model Plans (Optional)

Identify Common Data Structures (Optional)