

PowerCenter: Data Integration for Developers

Course Overview

Applicable for software versions 9.5 through 10.x. Provides students with the skills and knowledge necessary to design, build, test, and maintain real-world data integration systems with PowerCenter's workbench tools. Students will learn how to create and combine PowerCenter objects such as source and target definitions, data transformations, mappings, sessions, and workflows in order to accomplish their project goals while using best-practice methodology.

Objectives

After successfully completing this course, students should be able to:

- Use the PowerCenter Designer interface to design data transformations.
- Manage a variety of source and target definitions.
- Filter, join, aggregate, categorize, merge, and apply expression logic to data without writing SQL.
- Monitor and repair PowerCenter Sessions and Workflows.
- Troubleshoot mapping problems with the debugger.
- Leverage object reusability (build-once, use everywhere)
- Benefit from specific Agile Data Integration best practice techniques.

Target Audience

- Developer

Agenda

Module 1: Introduction to PowerCenter

- How PowerCenter performs data integration
- Advantages of code-free and SQL-free development

- Informatica architecture
- PowerCenter components and applications
- PowerCenter object types

Module 2: Folders, Sources, and Targets

- PowerCenter folder types
- Folder best practices
- Source definition types and methods of creation
- Target definition types and methods of creation
- Benefits of object shortcuts

Module 3: Design Objects

- Fundamental mapping components
- Transformation types
- Mapping types
- PowerCenter expressions and port types
- Filtering records

Module 4: File Lookups

- Fundamentals of the Lookup transformation
- How to create a lookup on file data
- Joining heterogeneous data
- Multi-return lookups
- Bypassing transformations

Module 5: Relational Lookups

- How to create a lookup on relational data
- Understanding lookup connectivity
- Port default values
- Variable ports
- Refreshing mapping metadata

Module 6: Database Joins in PowerCenter

- Getting the database to join data

- Reusable transformations
- Target Load Plan
- Multi-pipeline mappings
- Workflow link conditions

Module 7: Workflow Logic

- Using Session pre-defined variables
- Using Decision Tasks
- Using Email Tasks
- Sending email from within a Session

Module 8: Merging, Routing, and Sorting Data

- Merging mapping pipelines
- Removing duplicate records
- Classifying data with the Router transformation
- Renaming Source Qualifier ports

Module 9: Command Tasks

- Running command line statements within a Workflow
- Lookup caching properties
- Persistent lookup caches
- Aliasing a lookup port

Module 10: Debugging

- When to use the debugger utility
- Launching and configuring the debugger
- Debugger features and techniques

Module 11: Parameterization

- How and when to parameterize values and properties
- Using a parameter file
- When to use an unconnected lookup
- Using a Sequence Generator transformation

Module 12: Updating Database Tables

- How to update and delete from relational database tables
- Perform insert-else-update logic with the Update Strategy transformation
- Understanding built-in connection variables
- Creating and using Worklets
- Timer Tasks
- Control Tasks

Module 13: Maplets

- Creating and using Maplets
- Maplet types and limitations
- Aggregator transformations

Module 14: Mapping Design Workshop

- Students independently design and test their own transformations based on supplied business rules.

Module 15: Addendum

- Autolink
- Changing the order of ports
- Using a file list
- Creating sources from targets
- Switching between transformations for efficient editing
- Source Qualifier overrides to filter data at a relational source