Course SIDIFT48: SAS Data Integration Studio: Fast Track

Length : 5 days
Audience(s) : Data integration developers, data integration architects
Delivery Method : Instructor-led (classroom)

Course Overview

About this Course

This course is a 5-day boot camp that covers the content of both SAS Data Integration Studio: Essentials and SAS Data Integration Studio: Additional Topics. It introduces and expands the knowledge of SAS Data Integration Studio and includes topics for registering sources and targets; creating and working with jobs; and working with transformations. This course also covers information on working with slowly changing dimensions, working with the Loop transformations, and defining new transformations.

Audience Profile

- Data integration developers and data integration architects

Prerequisites

Before attending this course, students must have:

- SAS programming basics
- SQL processing
- The SAS macro facility.

Course Objectives

After completing this course, students will be able to:

- Register source data and target tables
- Create jobs and explore the functionality of the job editor
- Work with many of the various transformations
- Work with slowly changing dimensions
- Work with loop transformations
- Create new transformations
- Examine impact analysis
- Examine exporting and importing of metadata
- Establish checkpoints in job flow
- Deploy jobs for scheduling
- Deploy jobs as SAS stored processes.
Course Outline

Module 1: Introduction
- Exploring the platform for SAS Business Analytics
- Introducing the data integration applications
- Introducing change management

Module 2: Introduction to the Course Data and Course Scenario
- Exploring the classroom environment and course data
- Exploring the course tasks

Module 3: Creating Metadata for Source Data
- Setting up the environment
- Registering metadata for sas source tables
- Registering metadata for oracle source tables
- Registering metadata for an odbc data source
- Registering metadata for external files

Module 4: Creating Metadata for Target Data
- Registering target data metadata
- Importing metadata

Module 5 Creating Metadata for Jobs
- Introduction to jobs and the job editor
- Using the join transformation

Module 6: Orion Star Case Study
- Define and load several dimension tables
- Define calculated columns
- Work with join types and the join transformation
- Work with the table loader transformation
- Work with the user written code transformation

Module 7: Additional Features for Jobs
- Importing SAS code
- Mapping and propagation
- Chaining jobs
- Examining performance statistics
- Exploring pre-defined metadata reports (self-study)

Module 8: Working with Transformations
- Using the Extract and Summary Statistics transformations
- Exploring SQL transformations
- Establishing status handling
- Using the Data Validation transformation
- Using the Transpose, Sort, Append, Rank, and List Data transformations
• Using the Apply Lookup Standardization, Standardize with Definition and One-Way Frequency transformations (self-study)

Module 9: Working with Loop Transformations
• Introducing the Loop transformations
• Using the Loop transformations to iterate a job
• Using the Loop transformations to iterate a single transformation (self-study)

Module 10: Working with Slowly Changing Dimensions
• Defining slowly changing dimensions
• Using the scd type 2 loader and lookup transformations
• Using the scd type 1 loader transformations
• Introducing the change data capture transformations (self-study)

Module 11: Defining Generated Transformations (self-study)
• Exploring SAS code transformation templates
• Using the new transformation wizard

Module 12: Working with the Table Loader Transformations
• Exploring the basics of the Table Loader transformations
• Exploring the load styles of the Table Loader transformation
• Managing indexes and constraints during loading
• Exploring bulk loading for DBMS tables

Module 13: Working with Databases (self-study)
• Introducing In-Database processing
• Using In-Database processing
• Exploring ELT processing
• Using Oracle functions

Module 14: Additional Topics for SAS Data Integration Studio Users
• Analyzing metadata using impact analysis
• Comparing tables
• Exploring metadata promotion
• Exploring version control
• Establishing checkpoints

Module 15: Deploying Jobs
• Introduction
• Deploying jobs for scheduling
• Deploying jobs in batch (self-study)
• Deploying jobs as stored processes

Module 16: Implementing Data Quality Techniques (self-study)
• Exploring SAS and data quality opportunities
• Exploring some basics of dataflux Data Management Studio profiles and data jobs
- Using the dataflux Batch Job transformation
- Using the dataflux Data Service transformation