

# INFORMATICA POWERCENTER 9.6.1 TRAINING

## DATAWAREHOUSE BASICS

- What is Data warehouse?
- What is Business Intelligence?
- Online Transaction Processing System (OLTP)
- OLTP Vs Data warehouse (OLAP)
- Architecture of Data warehouse
- Data mart
- Top Down (Immon) Vs Bottom Up (Kimball)
  - ROLAP, MOLAP and HOLAP

## DATA MODELING

- What is data Model?
- E-R Modeling
- Dimensional Modeling
- Dimension table
- Fact Table
- SURROGATE KEY
- SCD Type 1
- SCD Type 2
- SCD Type 3
- Types Measures or Facts or Metrics
- What is Schema?
- STAR Schema
- SNOWFLAKE SCHEMA
- GALAXY SCHEMA
- Confirmed Dimension
- Junk Dimension
- Degenerated Dimension
- Types of Fact Tables
  - Fact less fact

## Informatica PowerCenter 9.6.1 Informatica Architecture Components

What is ETL?

- ETL Tools
- Different Informatica Products
- Informatica PowerCenter Architecture
- PowerCenter Repository database
- PowerCenter Repository Service
- PowerCenter Integration Service
- Domain, Node

PowerCenter Client Tools

- PowerCenter Repository Manager
- PowerCenter Designer
- PowerCenter Workflow Manager
- PowerCenter Workflow

Monitor

- Informatica Administrator
- Home Page
- Informatica Analyst

Developer Client

- Informatica  
developer
- ETL Project Life  
Cycle

Understanding Real Time Case Study Architecture

- OLTP Source Tables
- Staging Tables

- Dimension and Fact Tables

## **Basic Mapping, Sessions & Workflows**

- How to Create Straight Load mapping (One to One Mapping)
- Concatenating FIRST\_NAME and LAST\_NAME using the Expression Transformation
- How to filter the data from Flat File using Filter Transformation and Expression
  - Fixed with flat files
  - Delimited Flat Files
  - Different Row Level Functions
- Populating the Source File Name into the Target Table

## **Understanding Router, Joiner, Sorter and Aggregator**

How to Divide the data into multiple target tables using the Router Transformation

- Need of Router Transformation
- Filter Vs Router

How to generate the Target File Name with Timestamp using Expression Transformation

- How to write the data to Target file
- How to generate the Header in Flat file with UNIX Command
- How to generate the Footer in Flat file with UNIX Command

Joiner, Sorter and Aggregator Transformation using Flat File and Relation table

- Heterogeneous Joins
- Homogeneous Joins
- Incremental Aggregation

Populating Unique Records into one Target and Duplicates into another Target Eliminating Duplicate Records from Flat File

## **Understanding Lookup & Update Strategy**

- Usage of lookup Transformation
- Diverse types caches
- Static Vs Dynamic Vs Persistent
- Usage of Unconnected Lookup Transformation
- Difference between Connected and Unconnected Lookup Update Strategy Transformation
- Insert, Update, Delete and Reject at mapping Level
- Update Else Insert at Session Level
- Updating the Target Table which does not have Primary Key

## **Data Pivoting (Rows to Columns & Columns to Rows Conversion)**

- Converting Columns into Rows by using Normalizer Transformation Processing Multiple Flat Files into Target using Indirect Method
- Direct Vs Indirect Method
- Creating the List File
- Converting Rows into Columns using Expression and Aggregator Transformation
- Finding TOP and BOTTOM ranked products by revenue using UNION and RANK Transformation
- Combining Multiple Pipelines using Union Transformation
- Combining Heterogeneous Sources

## **Implementation of SCD's**

- Implementing Slowly Changing Dimension –Type 1
- Implementing Slowly Changing Dimension –Type 2
- Implementing Slowly Changing Dimension –Type 3
- Loading data into STAR schema Dimensions
- How to create Shortcuts for Reusable Mappings
- What is Versioning?
- Create Reusable Sessions
- Sequential Workflow
- Creating Link Task Conditions
- Parallel Workflow
- Error Logging at Session level
- Error Logging Types
- Tracing level

## **Stored Procedure & Transaction Control Transformations**

Splitting the target file dynamically based on the Content

- Transaction Control Transformation
- Source and Target Based Commit Interval
- User Defined Commit Interval

Invoking the Stored Procedure Transformation from Informatica PowerCenter

- Connected Vs Unconnected Stored Procedure
- Drop indexes using Stored Procedure
- Create Indexes using Stored Procedure
- Analyze Fact Tables Using Stored Procedure

Loading First Half Records into One Target and Another half into another Target  
Generating the Row Based on the Column Value Reversing the Contents of File

How to Skip the Header and Footer Record in Source Files

## **Job Scheduling**

Scheduling Workflows

- Informatica Scheduler
- Third party Scheduling Tools
- PMCMD
- PMREP
- INFACMD

How to Create the List file using the UNIX Shell script

How archive the Files using UNIX shell script

Reading the data from XML File

Preparing Unit Test cases, Unit Test Scripts (SQL Query's)

Performance Tuning Informatica

Partitioning in Informatica

- Range Partition
- Pass Through Partition
- Hash Auto Key Partition
- Hash User Key Partition
- Dynamic Partition
- Pushdown Optimization
- Migration of the Informatica Code Using Repository Manager
- Database Migration
- Export/Import of Informatica Objects
- Deployment Groups

## **DWH Project Lifecycle**

- Project Overview
- Project Implementation
- Overview of other ETL & BI Tools
- ETL & BI Testing Overview
- Use of Quality Center /Test Director

## **Who can take this course?**

Suggested attendees for Informatica Powercenter Course may be: Fresh Graduates, Software Developers, Analytics Professionals, BI/ETL/DW Professionals, Mainframe developers and Architects who are looking to upgrade their resume and career.

## **Prerequisite**

- Basic knowledge of databases
- Knowledge of SQL or Oracle

## **Key-Takeaways**

- 30 Hours of training with Lab Exercises with remote access to Informatica Powercenter
  - 9.6.1 Server
- Lab exercises for each module.
- Well-Experienced and Real Time Trainers
- Best in Class Infrastructure
- Real time case studies and project integrated into the Curriculum
- 24\*7 Support from our team of administrators
- Course Material and Lab guides for student's reference
- Placement assistance for those who are looking out for a career in Informatica Powercenter

## **Trainer Profile**

- 10+ Years odd experience in IT Industry
- 8+ Years of experience in DWH
- 5+ Years of experience in On-line and Class Room Training
- Trained more than 800+ students
- A cogent speaker and a lucid communicator
- Good at providing real time examples and practical scenarios while explaining concepts.
- Possess positive attitude and ability to meet customer requirements