

Pentaho Course Content

Module 1 – Basic Conceptual Architecture & Architectural Components

- Dimensional modeling
- Dimensional design
- Star schema-what and by (model)
- Star schema –what and by (language)
- Conformed dimensions
- Additive vs. semi-additive facts
- Snow flake schema
- Star vs. Dimensional schema
- Slowly changing dimensions

Module 2 – Clustering in Pentaho

- Files in pentaho
- Spoon.bat
- Pan.bat
- Kitech.bat
- Carte.bat
- Encr.bat
- Spoon transformation and its steps of transformation
- How to create a connection in DB
- How to move a data from CSV file input to table output
- How to move the data from CSV file input to the Microsoft excel output
- How to move the data from Microsoft excel input to write to log
- Data Grid
- Generate rows

Module 3 – Data Transformation-Changing the Data from one form to another form

- How to add constant
- How to add sequence
- Add value field changing sequence
- How the calculator work in pentaho
- No. range in pentaho
- Replace in string

- Select values-select field value
- Select field value to constant
- Sort rows
- Split field to rows
- String operation-string cut
- Unique rows
- Unique rows (hash set)
- Value mapper

Module 4 – Flow

- Revision of SSH command
- How to handle the null value in pentaho
- Mail in pentaho
- Error handling in pentaho
- Filter rows
- Priorities stream

Module 5 – Implementation of SCD & Jobs

- Revision of SCD type 2
- Jobs
- Differences between jobs and transformation
- How to make ETL dynamic
- How to make transformation dynamic
- File management
- Create folder
- Conditions
- Scripting
- Bulk loading
- XML
- Utility
- Repository
- File transfer
- File encryption

Module 6 – Types of Repository in Pentaho

- How to make ETL dynamic
- Difference between parameter and variable

- How to pass a variable from a job to transformation
- How to use a parameter within a transformation
- How to set and get the value from a job to a transformation
- Environmental variable
- Functionality of repository in pentaho
- Data base connection
- Repository import

Module 7 – Pentaho Repository & Report Designing

- Basic operational report/dashboard
- Row bending effect in pentaho
- Report designing
- How to public the report/dashboard
- How pentaho server BI looks like
- How to create Bar chart, Pi chart and Line chart in pentaho
- Limitation of design the product
- Sub report/dashboard in pentaho

Module 8 – Adhoc Reporting/Dashboard

- How to pass parameter in report/dashboard?
- Drill down report/dashboard
- How to create report/dashboard using cubes?
- How to create report/dashboard using excel sheet?
- How to create report/dashboard using Pentaho Data Integration

Module 9 – What is Cube

- What are the benefit of cube?
- How to create the cube?
- How to deploy a cube?
- How to create a report/dashboard using a cube?

Module 10 – What is MDX?

- MDX basics
- MDX in practice
- Cells
- Tuple implicit added aggregation member

- Tuple
- Tuple implicit dimensions
- Sets in MDX
- Selects
- Referencing dimensions,level members
- Member referencing
- Positional
- Hierarchical navigation
- Hierarchical navigation MISC
- Functions
- Meta data

Module 11 – ETL Connectivity with Hadoop Ecosystem

- How ETL tools work in Big data Industry
- Connecting to HDFS from ETL tool and moving data from Local system to HDFS
- Moving Data from DBMS to HDFS
- Working with Hive with ETL Tool
- Creating Map Reduce job in ETL tool
- End to End ETL PoC showing Hadoop integration with ETL tool

Module 12 – Creating Pentaho Analyzer Report

Module 13 – Creating dashboards in Pentaho with 5.3.x Version

Module 14 – Creating Pentaho Interactive Report