

The Data Warehousing and BI training provides in-depth knowledge about the business intelligence and data warehousing tools and technologies. Data Warehousing is the collection of business data and that is transformed into business information which is used for profitability. Data Warehousing using for Business intelligence and that helps to provide a coherent picture of the business at any time. The training also helping the stakeholders arrive at decisions that are important for the running the business.

Throughout the training, the delegates will enhance their design and data manipulation skills. With the help of Data Warehousing and BI training, the delegates will learn to integrate and visualise data by using the Visual Analytics and dashboards. At the end of the Data Warehousing and BI training, the delegates will be able to design and build a data warehouse for BI incorporating all the advanced concepts, tools and technologies that they have learned.

The Data Warehousing and BI training introduces the delegates to create and work with leading ETL & BI tools such as:

1. Talend 5.x to create, monitor, implement and schedule ETL processes. It will cover the advanced concepts including Migration, Integration Operations and Data Replication.
2. Tableau 9.x for data visualisation to understand how easy and reliable data visualisation can become for representation with dashboards
3. Data Modeling tool ERwin r9 to create a Data Warehouse or Data Mart

## Prerequisites

For attending this training, the delegates should have basic knowledge of SQL, Microsoft Windows GUI, General Relational Database (Oracle), Windows Command line and Basic Unix.

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## Course Objectives

After the completion of Data Warehousing and BI Certification Training at Silicon Beach Training, the delegates will be able to:

- Understand the fundamentals of Database management, the foundation for Data Warehousing and Business Intelligence
- Understand the Master SQL coding for answering business intelligence questions
- To design data warehouses
- Understand how to build data integration workflows
- Learn how to use the features of relational database management systems in Business Intelligence reporting
- Understand about the Tools and Applications of Business Intelligence
- Understand about the DW Architecture, Data Modeling, ETL fundamentals, ERwin, Data Visualisation and Business Reporting and

## Introduction to Data Warehouse & Business Intelligence

- An overview of Data Warehousing
- Inmon Vs Ralph Kimball
- Data Warehousing tools
- Schema Modeling Tools
- CA and Erwin
- About the Dell Toad Data Modeler
- Oracle Data Modeler
- ETL Tools:
- Informatica Power Center
- SAS
- IBM Data Stage and categories of Data Warehousing
- Talend DI Open Studio
- Introduction to Business Intelligence?
- Tools of Business Intelligence
- Classification of BI Tools

## Data Warehouse Architecture

- Relational Vs Analytical
- Introduction to OLTP and OLAP
- Categories of OLAP - MOLAP, HOLAP and ROLAP
- Data Warehouse Vs Data Mart
- Dependent and Independent Data Mart
- About the Data Warehouse Architecture
- Source System, ETL Extraction and Transformation
- Introduction to cube?
- Advantages of the cube
- How to create a report using a cube?
- How to create and deploy the cube?

## Data Warehouse Dimension & Fact Tables

- About Dimension table
- Dimension table categories
- Introduction to Fact Table
- Fact Table Granularity
- Categories of Fact table

## Data Modeling

- Introduction to Data Normalization?
- Overview of the Data Normalization Rules - 1NF, 2NF, 3NF
- Data De-Normalization
- What is Dimensional Modeling
- Principles and Benefits of Dimensional Modeling
- Dimensional Modeling type and technique

## **Building Data Warehouse with Erwin**

- Source System Understanding
- Understand of Future Data Requirement
- Designing and Developing Fact Table, Dimension Table and Entity Relationship Modeling
- Designing and Developing ER Model With Erwin

## **Introduction to Open Source ETL Tool Talend DI Open Studio 5.x**

- Open source ETL Talend DI Open Studio
- Difference between Licensed and Open Source ETL Tools
- What are Open Source ETL Tools and Licensed
- Working with ETL Transformation in Talend Open DI Studio

## **Building ETL Project with Talend DI Open Studio 5.x**

- Building ETL Project Talend DI Open Studio
- Understanding the Data Source System
- Identify Business Requirement Gathering
- Building the ETL Talend Technical Design Document, Building an ETL Project

## **Introduction to Data Visualization BI Tool Tableau 9.x**

- Data Visualization BI Tool: Tableau 9.x-Introduction to Data Visualization with Tableau and Exploring Data Visualization with Tableau
- Introduction to the Data Visualization
- Exporting Data and Working With Tableau

## **Building Data Visualization BI Project with Tableau 9.x**

- Building Data Visualization BI Project With Tableau 9.x,
- Understanding of BI Reporting
- Report and Dashboard Template Document
- Development Database Source Connection

## **An Integrated Data Warehousing & BI Project**

- An Integrated Data Warehousing & BI Project, Developing a Data Warehouse and BI Project
- Source System understanding today's data that will be the future data requirement
- Identify the Business Requirement Gathering
- Report and Dashboard Template Document
- Designing and Developing Models and the Staging Area

- Designing and Developing Dimension Modeling
- Designing and Developing Finalizing the Dimension Modeling Type

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