

Data Management, Security and Warehousing

Madrid -

23-11-2026

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Course code: BI26 From: 23-11-2026 Venue: Madrid - Course Fees: 5000 £

Introduction

This training course is intended for professionals and businesses that want to fully capitalize on Big Data. Companies are increasingly relying on adequate Data Analytics and Data Science to properly plan, prepare, and react to business challenges, as well as to innovate the way they conduct business and increase the level of service to their customers while reducing costs and streamlining their processes, as the Big Data phenomenon has emerged. It has become so common that the term "Industrial Revolution 4.0" has become a household term.

Data Management is defined as an administrative process that includes acquiring, validating, storing, protecting, and processing required data to ensure the data's accessibility, reliability, and timeliness for its users. This training course focuses on the need to properly warehouse data because, in the age of big data, there are numerous data warehousing and security solutions available, and choosing the right approach is the most difficult decision that businesses must make.

This Training Course will highlight:

- Operational vs. Decision Support Systems
- Strategic Information from the Data Warehouse
- Significance of Data Management in the Big Data era
- Data Security Strategies for Next-Generation Data Warehouses
- Extract-Transform-Load (ETL) Process

Course Objectives of Data Management, Security and Warehousing

This training course focuses on presenting the delegates with the opportunity to learn how to plan and prepare a data warehousing project, data warehouse architecture, and how to safely store, communicate and use the company data.

At the end of this training course, you will:

- Learn how to plan the steps in data warehousing project
- Acquire the knowledge to determine why there is an escalating need for strategic information
- Get acquainted with the fundamental problem of data management and data warehousing
- Learn the strategies of data security
- Be able to determine what methods and tactics you should use in the Big Data era

Course Methodology of Data Management, Security and Warehousing

This training course adopts a problem□based learning approach, in which delegates are presented with a series of real problems drawn from the widest possible range of applications □ they range from economy models to supply chain and logistics, from oil and gas to civil engineering, and from production optimization to financial risk assessment. Each problem presents and exemplifies the need for a different modeling or analytical approach.

This training course is en

with the focus on Data Management and Data Security.

Organizational Impact of Data Management, Security and Warehousing

Data warehousing is now a well-known phenomenon. Companies gain an incredible competitive advantage when they properly manage, store, and secure their data. However, simply collecting and storing data and putting it under several layers of IT protection is not enough, as this approach usually ends up drying out the patience of stakeholders, clients, and developers. In theory, an enterprise data warehouse can be extremely valuable to the sponsoring organization, but in practice, it cannot be implemented quickly enough or at a reasonable cost. As a result, data must be properly managed, with adequate security features that adequately protect the data while also making it easily accessible for the benefit of the company. and stored (warehoused) in the enterprise data warehouse.

This training course will highlight:

- How to adequately manage the company data
- What are the main differences between traditional and agile software development?
- Standard and modern data security issues and measures
- How to determine if you can trust your data
- Modern approaches to Big Data problem solving and implementation in different fields

Personal Impact of Data Management, Security and Warehousing

The delegates will learn from the experiences of real projects, get insight into the success stories, problems, and even failures in order to be able to avoid mistakes and harness the lessons learnt from companies that have successfully implemented data management, security, and warehousing projects.

The delegates will take:

- Big Data Mining Technology and Techniques
- Enterprise Database Warehouse Project Steps
- Challenges with Implementing Data Security Strategies to Protect Data
- Knowledge of Data Warehousing Building Blocks
- Introduction to Trends in Data Warehousing

This training course has been designed for professionals whose jobs involve data gathering, data analysis, decision-making.

Target Audience of Data Management, Security and Warehousing

This training course is fitting for a wide range of professionals but will greatly benefit:

- Systems Analysts
- Programmers
- Data Analysts
- Database Administrators
- Project Leaders
- Software Engineers
- Managers
- Any Professional involved in Data Analytics

Course Outlines of Data Management, Security and Warehousing

DAY 1

Agile Enterprise Data Warehousing

- Agile Manifesto

- The Scrum Method
- Extreme Programming Approach
- Lean Software Development
- Sources for Data Warehousing Standards

DAY 2

Data Security Strategies

- How to determine if you can trust your data?

- ISO Standard ISO/IEC 17728
- EU General Data Protection Regulation (GDPR)
- Protecting the Data Warehouse
- The Lifecycle of a Dataset

DAY 3

Data Warehouse: The Building Blocks

- Data Defining Features

- Data Warehouse Components Overview
- Dimensional Analysis of Data
- Requirements as the Driving Force for Data Warehousing

DAY 4

Data Warehouse: Architecture and Infrastructure Requirements for Data Warehousing

- Hardware and Operating Systems

- Database Software
- Automation of Warehousing Tasks
- Data Warehouse Architecture
    - Business Conceptual Model
    - Logical Data Model
    - Physical Data Model

DAY 5

Data Management, Security and Warehousing Implementation

- Data Extraction, Transformation, and Loading

- Data Design and Data Preparation-data Dimensional Modeling
- Key Elements of Data Quality
- Matching Information with the User
- On-Line Analytical Processing (OLAP)
- Big Data Processing in Cloud Environments