

## **SAP BW 7.4 with SAP HANA 1.0**

The 7.0 version of BW was released in June 2006 as part of the SAP Net Weaver 7.0 (also known as 2004s). This release included features such as next-generation reporting and analytical features, data warehousing enhancements, and a memory resident option for improving query performance called "BI Accelerator" (it has since been renamed BW Accelerator). The BW Accelerator comes as an external appliance, i.e. completes hardware with pre-installed software, and requires a separate license fee. BW Accelerator is licensed per blade server and 16 GB increments of memory.

Starting with version 7.3, the SAP Net Weaver Business Warehouse can be run with SAP HANA, the in-memory database management system developed by SAP. The latest released version is 7.4.

**Duration: 50 hours**

### **Objective:**

- Upon completion of the course, participants will be able to:
- Learn the basic concepts of SAP BW (Traditional) & SAP HANA (Architecture, Data Provisioning, Modeling & Reporting).
- Understand the functionality and features of SAP BW 7.3/7.4 with SAP HANA 1.0.
- Learn how to do SAP BW 7.3/7.4 modelling & use reporting tools

### **Course Content:**

#### **Introduction to SAP BW concepts**

- Introduction to SAP R/3, ECC and BW
- BW architecture
- Multi-dimensional Modeling, Star Schema, BW extended Star Schema
- Administrator Work Bench
- Info Objects (attributes and texts and hierarchies)
- InfoCubes, Transactional InfoCubes
- ODS (DSO) – Standard, Transactional and Write Optimized
- PSA, Source Systems
- Info Source, InfoPackage, Transfer Rules, Update Rules, Transformation
- Data Transfer Process
- Loading Master Data using flat files
- Loading transaction data using flat files
- ODS - Change Log, Active Table and New Table
- Managing Delta using ODS

#### **Introduction to SAP HANA concepts**

- SAP HANA Implementation & Modeling concepts – SAP HANA studio, Architecture, Data Provisioning, Modeling & Reporting.



## **Introduction to SAP BW 7.4 on HANA**

- Evolution of HANA Landscape
- SAP HANA Basics
- SAP NetWeaver BW 7.4

### **a) SAP HANA and Business Strategy**

- Identifying Transformational Opportunities
- Understanding Your Needs, Enterprise Needs, Data Needs
- Working with Existing Solutions: SAP HANA versus SAP NetWeaver BWA
- Does SAP HANA Replace BWA?
- Pros and Cons of BWA
- Pros and Cons of SAP HANA

### **b) SAP HANA Architecture**

- In Memory Computing (Row Store, Column Store, Persistency Layer, Architectural Concept)
- HANA based Real-time Operational Analytics
- HANA based Agile Data Marts for Rapid Prototyping with Analytic Models
- New Modelling Paradigm in order to provide agility and flexibility from business question to report

### **c) HANA-optimized DataStore Object and InfoCube**

- HANA-Optimized DataStore Object
- HANA-Optimized InfoCube
- Semantically Partitioned Object

### **d) SAP HANA modelling**

- Purpose of Information Modeller
- Levels of Modeling in SAP HANA
- Attribute Views
- Analytic Views
- Calculation Views
- Export & Import

### **e) MODELING of SAP BW 7.4 with SAP HANA**

- Models in SAP BW 7.4
- Data Extraction and Data Flow within SAP BW 7.4 NW 2004S
- New Data source Concept of BW 7.4
- Transformation in BW 7.4(ETL)
- DTP (Data Transfer Process)
- FROM 3.X TO BW 7.4
- Business Content UPGRADING DATAFLOWS
- Administration of InfoCubes and Aggregates
- DSO (DATA STORE OBJECTS)



- Virtual Cubes and Multi Providers

## **f) Consuming HANA Models in BW**

- Virtual Provider
- Transient Provider
- Composite Provider
- DB Connect
- Importing SAP BW models in SAP HANA
- Importing HANA optimize infocubes
- Importing HANA optimize DSO

## **g) DATA EXTRACTIONS (ETL)**

### **1) ECC Extractions Using BI BW 7.4 Dataflow**

- Overview of ECC6.0 Extractions.
- Generic Extractions
- Business Content Extractions
- CO-PA Extractions (COST PROFITABLE ANALYSIS)
- LO-COCK PIT Extractions (LOGISTICS)
- FI-SL Extractions (Financial special purpose ledger)

### **2) SAP CRM Extractions**

- Delta Management
- Extracting Master Data from CC (Attributes, Text, Hierarchies)
- Data source Enhancement
- Process Chains in Detail covering all process Types
- Upgrading process Chains from 3.x to BW 7.4
- APDS (Analysis Process Designers)
- New Enhancement of SAP BW 7.3,7.4

## **h) REPORTING**

- Introduction to BI Enterprise Reporting
- Navigating in Reports
- First Steps in Query Designer
- Key Figures
- CHARACTERSTICS
- Attributes
- Exceptions and Conditions

## **i) Transporting Objects (CTO)**

### **New Enhancements of SAP BW 7.4**

- Hybrid provider
- New monitors in BW Administration cockpit
- Generic delta functionalities for further types of Data Sources



- Hierarchies
- Data Transfer Process (DTP)
- Open Hub Service
- Transformation
- SAP BODS (New ETL Tool of SAP) Integration

### **SAP hands on practice and mini-project**

- Hands on practice with real life examples
- Mini – project.