







Target Audience: You are working as an ABAP consultant in companies. Now you see there is a shift in industry where most of the SAP products are now shifting to HANA database and S/4HANA. SAP ERP Suite is getting transformed to S/4 HANA.

Duration: 40+ Hours – A promise of no copy paste

# ABAP ON HANA TRAINING S/4HANA TECHNICAL TRAINING

- Will you existing code work, when we migrate to HANA?
- Will you be able to optimize the code for performance?
- What are all different roles you need to know?
- How to build new style applications with optimized stack S/4HANA?
- What's new in NetWeaver 7.4 ABAP syntax and SAP HANA?

We will cover HANA modeling, CDS Views, SQL Scripting, AMDP, ADBC, Performance tuning and all new concepts required, At the end we will build Fiori app on top of these artifacts. We will build an end to end Open Item Analysis scenario on all the topics. Finally a dashboard application and smart filter app using S/4HANA VDM and @UI annotations in CDS. Also a transactional app using CDS-BOPF integration.

http://www.onlinefioritrainings.com

### **Introduction to SAP HANA**

- Introduction to IMCE (In-Memory Computing Engine)
- Row v/s Column Store
- Software and Hardware advancements
- Evolution to SAP HANA 1.0 to 2.0
- Usage of SAP HANA with SAP Products
  - As secondary DB
  - o BW on HANA
  - ABAP on HANA
- Setup you SAP ABAP on HANA instance in CAL
- Connection to your HANA system via HANA Studio
- SQL Console
- Introduction to HANA Users
- SAP HANA Information Modeling
  - Attribute Views
  - Analytic Views
  - Calculation Views
    - Graphical Calculation Views
    - Scripted Calculation Views
  - Decision Table
    - With value update
    - Without value update
- Concept of currency conversion
- Concept of Dimensions and Measures
- SQL Scripting in SAP HANA
- SAP HANA Anonymous blocks
- Scripted procedures in SAP HANA
- Procedures with parameters
- User Defined functions in SAP HANA
- Reuse functions for SQL queries

### **ABAP on HANA**

- Introduction to ADT (ABAP Development Tools)
- ABAP on eclipse
- ABAP project in eclipse
- Working with ADT shortcuts, inline view
- Optimizing developer efficiency with ADT
- Introduction to schema of ABAP in SAP HANA

### http://www.onlinefioritrainings.com

- Evolution of SAP NetWeaver and capabilities
- Open SQL Enhancements in SAP HANA
- Introduction to DDL, DML, DCL, DQL
- New syntax in ABAP
  - Inline data declaration
  - Dynamic memory references
  - SQL statements with escaping of host variables
- Introduction to EPM Data model
- Consumption of SAP HANA Objects in ABAP
  - View Proxies
  - Procedure proxies
- Transporting of dependent objects
  - Lifecycle management
  - HANA transport container
- New tooling updates in ABAP
  - SQL monitor SQLM
  - Code inspector variants
  - Data migration points
  - Static checks with SQL performance SWLT
  - SQL Performance worklist monitor

## Advanced features of SAP ABAP on HANA

- Introduction to code-to-data paradigm
- Code push down to Database
- Integration cloud system to HANA Cloud Platform using Cloud Connector
- Performance improvement using SAP HANA
- ABAP Database Connectivity API (ADBC)
- Open Item analysis scenario using ADBC
- ABAP Managed Database Procedures (AMDP)
- Core Data Services (CDS) Views
  - o CDS Introduction
  - CDS Associations
  - o CDS View on View
  - S/4 HANA CDS VDM (Virtual Data Model)
    - Basic/Interface Views
    - Composite Views
    - Consumption Views
  - CDS Annotations
    - ObjectModel Annotations
    - OData Annotations
    - Analytical Annotations

### http://www.onlinefioritrainings.com

- End User annotations
- UI Annotations
- CDS View Table Functions
- CDS DCL (Authorizations and secure programming)
- Consuming CDS in Analytical Tools
- CDS-BOPF integration
- o Create your own OData services on top of CDS views
- SAP ABAP Improved ALV IDA (Integrated Data Access)
- Full Text Search with SAP HANA
- Fuzzy search for search helps with SAP HANA

# **End to End Implementation**

- Implementation of End to end OIA (Open Item Analysis) scenario using all techniques in ABAP on HANA
- Implementation of Smart filter Fiori Application
- Create your OVP (Overview Page) Fiori Elements to show Analytical dashboard
- Transactional Fiori App with CDS and BOPF
- Complementary OOPS ABAP Session on RTTS

http://www.onlinefioritrainings.com



