

# SAP - S/4 HANA ABAP

## **Introducing the development environment**

- Introduction to SAP HANA and SAP HANA Studio
- Understand the impact of SAP HANA on ABAP application development
- Introduction to ABAP Development Tools (ABAP in Eclipse)
- Advanced Techniques for ABAP Programming for SAPHANA
- ABAP and ABAP Project in eclipse

## **ABAP Development Tools (ADT)**

- Installation of ABAP Development tools
- ADT in Development System

## **SQL Basics for ABAP ON HANA**

- Basic Concepts of SQL
- Fetching Data from Tables / Views
- Retrieving Data from Multiple Tables
- Modification of Data from Tables
- Data Storage techniques
- Accessing Data using Views

## **SAP HANA- OOPS ABAP - concepts**

- Visibility (public/protected/private)
- Static instance/variables, constants
- Static /instance methods, method parameters
- Inheritance
- Interface, interface methods

## **Taking ABAP to SAP HANA**

- SAP HANA as Secondary Database– Access via Open SQL
- Preparing ABAP Code for SAP HANA
- Code push down

## **ABAP Core Data services and annotations**

- Enhanced ABAP Development with Core Data Services (CDS)
- CDS Views created inner join to display the data
- Associations in Core Data Services
- Core Data Services with Input Parameters

## **SAP HANA specific Code-to-Data**

- ABAP Database Connectivity (ADBC)
- Native SQL Syntax
- ABAP Report with new data declaration syntaxes on 7.40
- ABAP Report on HANA using ADBC

## **Consuming HANA Views in ABAP (no real time)**

- Working with Views in SAP HANA Studio
- Consuming Attribute View using External View
- Consuming Attribute View using Native SQL
- Consuming Analytic View/Calculation View in ABAP

## **Consuming HANA Procedures in ABAP**

- ABAP connectivity and integration
- Working with Database Procedures in SAP HANA Studio
- Integrating Native Procedures with ABAP
- Consuming HANA artifact Stored Procedure using ABAP Proxy Procedure
- Consume HANA artifact Stored Procedure by Calling it in ABAP Code

## **ABAP Managed Database Procedures in ABAP HANA**

- Top-down and Bottom-up Approach
- ABAP-Managed Database Procedures
- AMDP Methods in CDS Views
- Creating, using and debugging ABAP Managed Database Procedures
- Debugging ABAP-Managed Database Procedures with select-options & parameters display ALV report
- AMDP with select options



## **Database Independent Code-to-Data**

- Classical Open SQL and Its Limitations
- New Open SQL
- Improve Open SQL Statements Using the SQL Trace (ST05)