



SAP ABAP on HANA

Content Week 1

The topic for week 1 is getting started and this is the content you can look forward to

1. On boarding and introduction to ABAP HANA
2. ABAP Meets SAP HANA
 - A. SAP HANA Ambitions
 - B. Hardware Technology innovations
 - C. SAP Software Technology innovations
 - D. SAP HANA Goals
 - E. Evolution of ABAP for SAP HANA
 - F. Possible Type of SAP HANA Based Applications
 - G. Highlights of SAP NetweaverApplication server ABAP 7.4
3. What we need to know
 - A. Row store
 - B. Column store
 - C. When to use columnar storage
 - D. When to use row storage
 - E. Demo
 - F. Column store dictionary compression
4. Code to data Paradigm
 - A. Implications of an in memory data base
 - B. Over view code to data capabilities
 - C. Performance improvement vs code adjustments
5. Your Development Tools
 - A. System Demo to write "Hello World"
 - B. Short cuts

Course Content week 2

1. Existing code is still valid
 - A. Migration to SAP HANA
 - B. Code Continuity
 - C. Mandatory Adaptations
 - D. ABAP Test cockpit
 - E. Runtime check Monitor
2. What About Performance
 - A. Performance consideration
 - B. Classical performance guidelines and additions
 - C. Code Inspector check variant PERFORMANCE_DB
 - D. Demi
 - E. Static performance check coverage
3. SQL Footprints in your productive System



- A. Example of productive ERP System
 - B. SQL Monitor
 - C. Architecture
 - D. Administration of the SQL Monitor
 - E. Analysis of SQL Monitor Data
 - F. Demo
4. Guided Performance Analysis
- A. Combination of code check results
 - B. SQL Performance Tuning Work list demo
 - C. Recommended procedure
5. Optimized ALV and Other Improvements
- A. Transparent Optimization
 - B. ALV Integrated Data Access demo
 - C. ALV integrated data access
 - D. Search help
 - E. Demo on search help

Course Content week 3

1. Recent Open SQL Enhancements
- A. EPM
 - B. What is Open SQL
 - C. Demo
 - D. What's new in Open SQL
 - E. Literal Value and generic existence check
 - F. Expressions
 - G. Demo
 - H. Conditional Expression
 - I. Expressions in Group by having clauses
 - J. Automatic client handling
2. Core Data Services
- A. Introduction to CDS services
 - B. CDS in ABAP
 - C. Demo
 - D. Simple CDS View and Open SQL Consumption
 - E. CDS views vs. Open SQL
3. Core Data Services : View Definition
- A. Demo
 - B. Projection list
 - C. View-on-view concept
 - D. CDS View Extensions
 - E. CDS view with input parameters
4. Core Data Services : Associations
- A. Demo
 - B. UNION & UNION ALL Statements
 - C. Join statements



- D. Simple association
- E. Association types
- F. Filter associations

Course Content week 4

1. Native SAP HANA Using in ABAP
 - A. ADBC
 - B. DEMO
 - C. ABAP Database Connectivity : Typical code
 - D. Native SQL Pitfalls
 - E. Consumption of an SAP HANA Database procedure with ADBC
 - F. Consumption of an ABAP Managed Database Procedure
2. ABAP Managed DBMS
 - A. Introduction of AMDPs
 - B. Demo
 - C. Class definition
 - D. Class implementation
 - E. Consumption and artifact creation
 - F. Exception Handling
 - G. AMDP Exception Hierarchy
 - H. AMDP BAD
3. Domain Specific Usage of CDS
 - A. CDS Annotation Concept
 - B. Demo
 - C. Consumption of CDS View in SAP Gateway
 - D. Demo