

SAP HANA Administration & Development Course Content

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4. Backup, Recovery and High Availability
5. Security
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8. Application Development
9. Data Provisioning and Integration
10. Performance Tuning
11. Advanced Features (Concepts)

HANA Architecture & Deployment

- In-Memory Computing, Column Store and Row Store
- HANA Architecture, Index Server, Name Server, Preprocessor
- Deployment Options: On-Premise, Cloud, Tailored Datacenter Integration
- Multitenant Database Containers (MDC)

Installation and Landscape (Hands on)

- HANA Studio, HANA Cockpit, Database Explorer Overview
- HANA Lifecycle Manager (HDBLCM), Installing and Updating Systems
- System Landscape, Tenant Database Creation and Management

Administration (Hands on)

- Starting, Stopping, and Monitoring the Database
- Configuration Parameters and Ini Files
- Users, Roles, and Privileges Management
- Alerts, Diagnosis Files, Trace Management
- Memory and Disk Management, Table Partitioning

Backup, Recovery and High Availability

- Backup Types: Data, Log, Delta, Snapshot
- Point-in-Time Recovery, Backint
- System Replication, Host Auto-Failover

- Scale-Up and Scale-Out

Security

- Authentication Methods, SSO, LDAP Integration
- Encryption: Data at Rest, Data in Transit, Backup Encryption
- Audit Logging, Auditing Policies

SQL and SQLScript (Hands on)

- DDL, DML, and Views in HANA SQL
- SQLScript: Variables, Control Flow, Cursors, Exception Handling
- Stored Procedures, User Defined Functions, Table Functions
- Triggers and Sequences, Performance Optimization Basics

Data Modeling (Hands on)

- Calculation Views: Graphical and Scripted
- Attribute, Analytic, and Calculation Views Overview
- Joins, Unions, Aggregation, Rank, Input Parameters, Variables
- Hierarchies, Currency Conversion, Calculated Columns

Application Development

- SAP HANA XS Advanced and Cloud Foundry Overview
- HDI Containers, Core Data Services (CDS)
- Building Node.js and Java Services on HANA
- Web IDE and SAP Business Application Studio

Data Provisioning and Integration

- SAP SLT, Smart Data Access, Smart Data Integration
- Data Import and Export, Flat Files, CSV
- Remote Sources and Virtual Tables

Performance Tuning

- Plan Visualizer, SQL Plan Cache, Expensive Statement Trace
- Query Optimization, Index Management
- Monitoring Workload and Thread Analysis

Advanced Features (Concepts)

- Spatial, Graph, and Text Analytics Engines
- Predictive Analysis Library (PAL), Machine Learning in HANA
- Dynamic Tiering, Native Storage Extension