

# SAP S4 HANA ADMINISTRATION





# About Course

Experience in monitoring, tuning, and troubleshooting of SAP HANA systems. HANA system administration using SAP HANA Cockpit and HANA Studio. Experience in managing users and roles in SAP HANA system.



# SAP S/4 HANA ADMINISTRATION

## CURRICULUM

### 1 SAP HANA Technology Overview

SAP HANA Introduction

Understanding the need of In Memory Technologies

Understanding High performance Analytics

In-Memory Computing

SAP HANA row store vs Columnar store

### 2 SAP HANA Edition

Software Packaging

SAP HANA Platform Edition

SAP HANA Enterprise Edition

### 3 SAP HANA Deployment Scenarios

HANA as DataMart

Non-Native HANA Applications

Native HANA Applications

SAP HANA Architecture

Simplified Architecture of SAP HANA

SAP HANA Memory Management and Data Persistence



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## **Preparing Installation**

**Sizing of SAP HANA**

**Quick sizer**

**Sizing Requirements and assumptions**

**Experiencing HANA Appliance Models**

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## **Operating Systems**

**Operating Systems Supported (SLES&RHEL)**

**Linux Operating System Requirements**

**File System Preparation**

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## **Installation**

**Introduction SAP HANA Lifecycle Management Tools**

**Install a Single-Host SAP HANA System**

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## **Post Installation**

**Post-Installation Steps**

**SAP HANA Studio installation**

**SAP HANA Client Installation**

**Admin Tools for SAP HANA**

**SAP HANA Studio and SAP HANA Cockpit**

**Connect to the SAP HANA Database Using SAP HANA Studio**

**DBA Cockpit**

**HDBSQL Command Line Tool**



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## **Database Administration**

**Starting and Stopping SAP HANA**

**Use Different Methods to Start and Stop the SAP HANA Database**

**HANA database services and their significance**

**Understanding Service Instances**

**Understanding the Run level parameter**

**Configuring the SAP HANA Database**

**Change SAP HANA Configuration Parameters**

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## **Backup And Recovery**

**Concept of Backup and Recovery**

**Need of Backup**

**Data Area Backup**

**Understanding Backup Destinations**

**Understanding BACKINT**

**Performing Data backup using HANA Studio, Sql Commands, DBA**

**Cockpit, HANA Cockpit**

**Scheduling backups using DBA Cockpit, HANA Cockpit, Backup script**

**Log Area Backup**

**Understanding the concept of Log area backup**

**Handling LOGFULL situations**



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## Security

Security Overview

Understanding levels of security

Understanding security in different scenarios

Authentication and Authorization

Encryption

Auditing and audit policy

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## Maintaining Users And Authorization

User Management

Creating users using HANA Studio and Web IDE

Types of Privileges

Working with Analytic privileges

Roles

Creating runtime Roles

Creating Repository Roles using Web IDE

Administrative Tasks

Information Sources for Administrators

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## Hana Application Life Cycle Management

Concept of HANA Development

Understanding Catalog and Content objects

Transporting using Export and Import

Concept of Deliver Unit



Setting up Transportation landscape  
Configuring Transport Routes  
Concept of CTS in SAP HANA

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## Multi Tenant Database Containers

Architecture and Technology  
Installing MDC  
Creating and Configuring Tenant Databases  
Administration of Multi tenant Database Containers  
Backup and Recovery of Multi tenant Database Containers  
Convert a Single container to a multitenant System

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## Higher Availability And Disaster Tolerance

Need of Scalability  
SAP HANA Scale up and Scale Out  
Understanding Distributed database  
High availability concept  
Disaster Recovery  
Configuring system replication

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## Database Operations

SAP HANA Table Administration  
Periodic Tasks  
Housekeeping activities



Delta Merge  
SQL Console

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## Monitoring And Troble Shooting

Memory Monitoring  
Understanding the Processing  
Analyzing Queries  
Working with Plan Visualizer  
Load Monitoring  
Alert Configuration  
Configuring Traces  
Working with Diagnosis Information and Diagnosis Files  
Trouble shooting unresponsive system

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## Monitor And Administration Of SAP HANA Using

Installing SAP HANA Cockpit 2.0  
Working with Cockpit Manager  
Creating Resource Groups and adding Resources  
Monitoring activities using Cockpit 2.0  
Understanding new features of Cockpit 2.0






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