ADM100

System Administration I of SAP S/4HANA and SAP Business Suite

COURSE OUTLINE

Course Version: 23
Course Duration:

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Typographic Conventions

American English is the standard used in this handbook.

The following typographic conventions are also used.

This information is displayed in the instructor's presentation	
Demonstration	
Procedure	
Warning or Caution	
Hint	
Related or Additional Information	
Facilitated Discussion	
User interface control	*Example text*
Window title	*Example text*

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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Support Consultant
- Technology Consultant
- Project Manager
- Systems Architect
- System Administrator

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UNIT 1 Fundamentals of Application Server ABAP

Lesson 1: Explaining the Basic Architecture of AS ABAP

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basic architecture of the Application Server ABAP

Lesson 2: Configuring SAP Logon

Lesson Objectives

After completing this lesson, you will be able to:

- Configure SAP Logon

Lesson 3: Describing the Process of a System Logon (AS ABAP)

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the process of an AS ABAP system logon using a custom application server
- Describe the concept of dialog work process multiplexing

Lesson 4: Setting Up Logon Groups in AS ABAP

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the benefits of logon groups in an AS ABAP system
- Create a logon group in an AS ABAP based SAP system

Lesson 5: Appendix - Executing Basic Administration Transactions

Lesson Objectives

After completing this lesson, you will be able to:

- List basic administration transactions and explain their use

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UNIT 2 Starting and Stopping Application Server ABAP

Lesson 1: Understanding the Concept of Start and Stop Procedures

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the File System Structure of Application Server ABAP
- Explain the General Mechanism of Starting and Stopping Application Server ABAP
- List Organizational Considerations Before Stopping Application Server ABAP

Lesson 2: Introducing Different Tools for Start and Stop Procedures

Lesson Objectives

After completing this lesson, you will be able to:

- Start the SAP Management Console (SAP MC) Using a Configuration File
- Use SAPControl on Operating System Level
- Start the SAP Microsoft Management Console (SAP MMC)

Lesson 3: Starting and Stopping Application Server ABAP

Lesson Objectives

After completing this lesson, you will be able to:

- Start and Stop Using SAP MC
- Start and Stop Using SAPControl
- Start and Stop Using SAP MMC

Lesson 4: Log and Trace Information for System Start and Stop

Lesson Objectives

After completing this lesson, you will be able to:

- List Log and Trace Information for Troubleshooting
- Use SAP MC and SAPControl to Access Log and Trace Information
- Appendix: Further Analysis Options

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UNIT 3 System Configuration

Lesson 1: Configuring SAP Systems via Profile Parameters

Lesson Objectives

After completing this lesson, you will be able to:

- Describe profiles used for system configuration
- Describe the evaluation sequence of profile parameters
- Display profile parameters and their values
- Maintain profile parameters
- Monitor configuration changes

Lesson 2: Setting Up Operation Modes for Resource Configuration

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the concept of operation modes
- Describe dynamic and reserved work processes
- Set up operation modes
- Switch operation modes
- Outline the meaning of reserved and dynamic work processes
- Explain the options to change the work processes distribution using operation mode switches
- Describe the usage of consistency checks

Lesson 3: Executing ABAP Task Lists for Automated Configuration

Lesson Objectives

After completing this lesson, you will be able to:

- Describe ABAP task manager for lifecycle management automation
- Explain ABAP task lists
- Apply ABAP task lists

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UNIT 4 Introduction to Database Administration

Lesson 1: Describing the Architecture of Database Systems

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the purpose and architecture of databases
- Describe SAP HANA backup and recovery principles

Lesson 2: Scheduling and Monitoring Database Actions

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the use of the DBA Cockpit to centralize database administration tasks
- Schedule and monitor a database backup with DBA Cockpit
- Perform a database backup with SAP HANA Cockpit

Lesson 3: Performing Regular Database Checks

Lesson Objectives

After completing this lesson, you will be able to:

- Describe examples of periodic database checks

Lesson 4: Appendix: Describing the Concept of SAP Data Archiving

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the idea and benefits of data archiving
- Outline the technical process of data archiving and list options for accessing archived data

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UNIT 5 Users and Authorizations

Lesson 1: Creating, Copying, and Maintaining User Master Records

Lesson Objectives

After completing this lesson, you will be able to:

- Outline the different users in the SAP environment
- Explain the elements of user master records
- Describe the different user types
- Explain the importance of user groups
- Create users using the user maintenance transaction

Lesson 2: Maintaining User Authorizations with Roles and Profiles

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the authorization concept of AS ABAP based SAP systems
- Explain the relation between authorization objects and authorization checks
- Use the role maintenance to create authorization roles
- Discuss the SAP Fiori content model
- Explain the authorization concept for SAP Fiori
- Create an authorization role using the role maintenance transaction

Lesson 3: Define Parameters to Secure Passwords and Logins

Lesson Objectives

After completing this lesson, you will be able to:

- Identify system parameters to secure user passwords and user logins
- Implement security policies
- State how to restrict user logons during maintenance work
- Name standard users in the SAP system

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Lesson 4: Evaluate Users and Authorizations

Lesson Objectives

After completing this lesson, you will be able to:

- Use the User Information System to obtain information about authorizations and users
- Execute the system trace for authorization checks to locate authorization problems

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UNIT 6 RFC Communication

Lesson 1: Describing the Communication Between SAP Systems Using RFC

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the principles of remote function calls (RFC)
- List the different types of RFC

Lesson 2: Managing RFC Resources

Lesson Objectives

After completing this lesson, you will be able to:

- Identify profile parameters for RFC configuration
- Outline the tools for RFC resource management and monitoring

Lesson 3: Creating RFC Connections

Lesson Objectives

After completing this lesson, you will be able to:

- Create an RFC connection

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UNIT 7 Maintaining SAP Software

Lesson 1: Describing Maintenance Levels

Lesson Objectives

After completing this lesson, you will be able to:

- Describe maintenance levels

Lesson 2: Applying SAP Notes

Lesson Objectives

After completing this lesson, you will be able to:

- Apply SAP Notes in the development environment and transport them into the production system
- List the features of System Recommendation
- Describe the technical realization of System Recommendation
- Use System Recommendation to find a SAP correction note to resolve a program error

Lesson 3: Preparing Software Maintenance using Maintenance Planner

Lesson Objectives

After completing this lesson, you will be able to:

- List the goals of Maintenance Planner
- List the key features of Maintenance Planner
- Describe the Landscape Management Process
- Prepare a maintenance transaction
- Perform a maintenance transaction
- Describe the additional features of Maintenance Planner

Lesson 4: Describing Support Package Manager (SPAM) and Software Update Manager (SUM)

Lesson Objectives

After completing this lesson, you will be able to:

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- Describe Support Package Manager (SPAM) and Software Update Manager (SUM)

Lesson 5: Importing SAP Support Packages with the Support Package Manager (SPAM)

Lesson Objectives

After completing this lesson, you will be able to:

- Import SAP Support Packages with the Support Package Manager (SPAM)

Lesson 6: Importing SAP Support Packages with the Software Update Manager (SUM)

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the idea of importing SAP Support Packages with the Software Update Manager (SUM)

Lesson 7: Explaining SAP System Upgrade and SAP S/4HANA Conversion

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the idea of an SAP System Upgrade and an SAP S/4HANA Conversion

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UNIT 8 Printing

Lesson 1: Exploring SAP Spool System

Lesson Objectives

After completing this lesson, you will be able to:

- Illustrate the information flow from the print document to printout
- Explain central terms in SAP Printing and explain their meaning

Lesson 2: Creating Output Devices

Lesson Objectives

After completing this lesson, you will be able to:

- Classify Printing Methods
- Create Output Devices

Lesson 3: Working with Device Types

Lesson Objectives

After completing this lesson, you will be able to:

- Select a suitable device type
- Illustrate the idea of Unicode Printing Enhancement

Lesson 4: Working with Spool Servers

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the use of logical spool servers
- Create a logical spool server
- Summarize the classification of spool servers and output devices

Lesson 5: Monitoring and Troubleshooting Printing Issues

Lesson Objectives

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After completing this lesson, you will be able to:

- Use monitoring transactions for printing
- Perform housekeeping activities for spool
- Analyze printing errors

Lesson 6: Planning the SAP Print Architecture

Lesson Objectives

After completing this lesson, you will be able to:

- Develop a Printing Concept

Lesson 7: Appendix: Managing Output Devices with Printing Assistance for Landscapes (PAL)

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basic idea of Printing Assistance for Landscapes (PAL)
- List the steps to set up PAL
- Describe the distribution of printer groups to target system groups

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UNIT 9 Background Processing

Lesson 1: Understanding the Concept of Background Processing

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the basic concepts of background processing

Lesson 2: Monitoring Background Processing

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the status flow of a job
- Use the Job Overview to monitor jobs

Lesson 3: Setting Up the Background Processing Environment

Lesson Objectives

After completing this lesson, you will be able to:

- Evaluate the need for reserving work processes for high-priority jobs
- Create Job Server Groups and explain their use
- Create RFC groups for the parallel processing of jobs
- Schedule housekeeping jobs
- Perform simple tests to check the consistency of the background processing environment

Lesson 4: Scheduling Background Jobs

Lesson Objectives

After completing this lesson, you will be able to:

- Create a time-based job
- Create an event and a job based on that event
- Create a job that contains external commands or external programs
- List options to extend the standard background system

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Lesson 5: Troubleshooting Background Issues

Lesson Objectives

After completing this lesson, you will be able to:

- List utility programs and tables for background processing
- Analyze problems in background processing

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UNIT 10 System Monitoring and Troubleshooting

Lesson 1: Using local Monitoring Tools

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the reasons for System Monitoring
- Describe the local Monitoring Architecture
- Use SAP MC for System Monitoring
- Use Alert Monitor for System Monitoring
- Outline how to use CCMS as a Central Monitoring System
- Use SAP command line programs to monitor, test and solve events

Lesson 2: Explaining the Concept of Monitoring Tools in SAP Solution Manager

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the technical prerequisites to use Monitoring and Alerting Infrastructure (MAI)
- List the System and Application Monitoring Use Cases
- Understand the cross-application Alert Functions
- Use the System Monitoring Application
- Describe the Interface Monitoring

Lesson 3: Tracing and Logging in the SAP System

Lesson Objectives

After completing this lesson, you will be able to:

- List the options available for tracing and logging in the SAP system
- Perform simple traces in the SAP system

Lesson 4: Troubleshooting Procedures

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Lesson Objectives

After completing this lesson, you will be able to:

- Develop procedures for structured troubleshooting

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