

# ADM100

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

### COURSE OUTLINE

Course Version: 24

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	<i>Example text</i>
Window title	<i>Example text</i>



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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





## **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



## 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 AS ABAP
- Explain the general mechanism of starting and stopping AS ABAP
- List organizational considerations before stopping AS 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 AS 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



## 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



## 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





## 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
- Create an authorization role using the role maintenance transaction
- Discuss the SAP Fiori content model
- Explain the authorization concept for SAP Fiori

## Lesson 3: Define Profile Parameters to Secure Passwords and Logins

### Lesson Objectives

After completing this lesson, you will be able to:

- Identify profile 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

## 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

## **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 Destinations**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Create an RFC destination



## Lesson 1: Describing Maintenance Levels

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe maintenance levels

## Lesson 2: Implementing SAP Notes

### Lesson Objectives

After completing this lesson, you will be able to:

- Implement 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:

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

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

### **Lesson Objectives**

After completing this lesson, you will be able to:

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

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

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe the idea of importing 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

## 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

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



## 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

## **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

## 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

## Lesson Objectives

After completing this lesson, you will be able to:

- Develop procedures for structured troubleshooting