

ADM100

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

COURSE OUTLINE

Course Version: 22

Course Duration:

SAP Copyrights, Trademarks and Disclaimers

© 2022 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. Please see <https://www.sap.com/corporate/en/legal/copyright.html> for additional trademark information and notices.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.

National product specifications may vary.

These materials may have been machine translated and may contain grammatical errors or inaccuracies.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP SE or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP SE or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

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>

Contents

vii **Course Overview**

1 Unit 1: Fundamentals of Application Server ABAP

- 1 Lesson: Explaining the Basic Architecture of Application Server ABAP
- 1 Lesson: Describing the Process of a System Logon
- 1 Lesson: Configuring SAP Logon
- 1 Lesson: Setting Up Logon Groups in AS ABAP
- 1 Lesson: Appendix - Executing Basic Administration Transactions

3 Unit 2: Starting and Stopping SAP Systems

- 3 Lesson: Describing the System Start Procedure
- 3 Lesson: Starting and Stopping SAP Systems
- 3 Lesson: Monitoring the System Start Process

5 Unit 3: Tools for System Configuration

- 5 Lesson: Understanding the Parameter Evaluation Sequence
- 5 Lesson: Explaining How Profile Parameters are Set
- 5 Lesson: Set Up Operation Modes
- 5 Lesson: Working with ABAP Task Manager

7 Unit 4: Introduction to Database Administration

- 7 Lesson: Describing the Architecture of Database Systems
- 7 Lesson: Scheduling and Monitoring Database Actions
- 7 Lesson: Performing Regular Database Checks
- 7 Lesson: Appendix - Describing the Concept of SAP Data Archiving

9 Unit 5: Users and Authorizations

- 9 Lesson: Creating, Copying, and Maintaining User Master Records
- 9 Lesson: Maintaining User Authorizations with Roles and Profiles
- 9 Lesson: Defining Login Parameters and Using the User Information System
- 9 Lesson: Appendix - Describing Advanced User Administration Tasks

11 Unit 6: RFC Connections

- 11 Lesson: Communicating between SAP Systems using Remote Function Calls
- 11 Lesson: Setting Up RFC Connections

13 Unit 7: Maintaining SAP Software

- 13 Lesson: Describing Maintenance Levels
- 13 Lesson: Applying SAP Notes
- 13 Lesson: Preparing for Software Maintenance
- 13 Lesson: Describing Support Package Manager (SPAM) and Software Update Manager (SUM)
- 13 Lesson: Importing SAP Support Packages with the Support Package Manager (SPAM)
- 14 Lesson: Importing SAP Support Packages with the Software Update Manager (SUM)
- 14 Lesson: Explaining SAP System Upgrade and SAP S/4HANA Conversion

15 Unit 8: Output Management

- 15 Lesson: Explaining SAP Spool System
- 15 Lesson: Configuring Printers in AS ABAP
- 15 Lesson: Setting Up Logical Spool Servers
- 15 Lesson: Managing Spool Requests
- 15 Lesson: Appendix - Managing Output Devices with Printing Assistant for Landscapes

17 Unit 9: Background Processing

- 17 Lesson: Explaining Background Processing
- 17 Lesson: Scheduling Time-Dependent Jobs
- 17 Lesson: Scheduling Event-Dependent Jobs
- 17 Lesson: Describing Special Options for Background Processing
- 17 Lesson: Appendix - Job Management in SAP Solution Manager

19 Unit 10: System Monitoring and Troubleshooting

- 19 Lesson: Using the Monitoring Architecture of the Computing Center Management System (CCMS)
- 19 Lesson: Explaining the Concept of Monitoring Tools in SAP Solution Manager
- 19 Lesson: Tracing and Logging in the SAP System
- 19 Lesson: Troubleshooting Procedures

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 Application Server ABAP

Lesson Objectives

After completing this lesson, you will be able to:

- Explain SAP systems and their instances
- Describe the basic architecture of Application Server ABAP

Lesson 2: Describing the Process of a System Logon

Lesson Objectives

After completing this lesson, you will be able to:

- Outline the process of an AS ABAP system logon
- Describe the concept of dialog work process multiplexing

Lesson 3: Configuring SAP Logon

Lesson Objectives

After completing this lesson, you will be able to:

- Configure SAP Logon

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
- Configure logon groups in an AS ABAP system

Lesson 5: Appendix - Executing Basic Administration Transactions

Lesson Objectives

After completing this lesson, you will be able to:

- List basic administration transactions

Lesson 1: Describing the System Start Procedure

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the process of starting and stopping an SAP system
- Describe the structure of the file system for SAP instances

Lesson 2: Starting and Stopping SAP Systems

Lesson Objectives

After completing this lesson, you will be able to:

- Start and stop an SAP system using the appropriate tools

Lesson 3: Monitoring the System Start Process

Lesson Objectives

After completing this lesson, you will be able to:

- Analyze logs written during the startup of AS ABAP

Lesson 1: Understanding the Parameter Evaluation Sequence

Lesson Objectives

After completing this lesson, you will be able to:

- Explain how system parameters are created and evaluated

Lesson 2: Explaining How Profile Parameters are Set

Lesson Objectives

After completing this lesson, you will be able to:

- Adjust system parameters using profiles

Lesson 3: Set Up Operation Modes

Lesson Objectives

After completing this lesson, you will be able to:

- Set up a dynamic switch of work process types using operation modes

Lesson 4: Working with ABAP Task Manager

Lesson Objectives

After completing this lesson, you will be able to:

- Explain 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

Lesson 2: Scheduling and Monitoring Database Actions

Lesson Objectives

After completing this lesson, you will be able to:

- Centralize database administration tasks with the DBA Cockpit
- Determine the success of database backups

Lesson 3: Performing Regular Database Checks

Lesson Objectives

After completing this lesson, you will be able to:

- Schedule periodic checks of the database

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

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the idea of data archiving
- Explain the benefits of data archiving
- Outline the technical process of data archiving
- 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:

- Create master records for users
- Assign users to user groups

Lesson 2: Maintaining User Authorizations with Roles and Profiles

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the SAP authorization concept
- Copy, create, and maintain user roles
- Maintain the assignment of users to roles
- Understand the authorization concept for SAP Fiori
- Describe the difference between authorization roles and UI roles

Lesson 3: Defining Login Parameters and Using the User Information System

Lesson Objectives

After completing this lesson, you will be able to:

- Set system parameters for user logins
- Name standard users in the SAP system
- Work with user information system
- Locate authorization problems

Lesson 4: Appendix - Describing Advanced User Administration Tasks

Lesson Objectives

After completing this lesson, you will be able to:

- Describe how to streamline user administration with CUA
- Describe how to connect users to Directory Services
- Describe how to streamline user administration with SAP IdM

Lesson 1: Communicating between SAP Systems using Remote Function Calls

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the principles of RFC
- Manage RFC resources
- List the different types of RFC

Lesson 2: Setting Up RFC Connections

Lesson Objectives

After completing this lesson, you will be able to:

- Set up RFC connections

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

Lesson 3: Preparing for Software Maintenance

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the functions of the Maintenance Planner and perform a maintenance transaction

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 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

Lesson 1: Explaining SAP Spool System

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the information flow from print document to printout

Lesson 2: Configuring Printers in AS ABAP

Lesson Objectives

After completing this lesson, you will be able to:

- Create output devices
- Use different printing methods
- Outline specialized print scenarios
- Add device types
- Activate Unicode Printing Enhancement

Lesson 3: Setting Up Logical Spool Servers

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the concept of logical spool servers
- Set up logical spool servers

Lesson 4: Managing Spool Requests

Lesson Objectives

After completing this lesson, you will be able to:

- Manage spool and output requests

Lesson 5: Appendix - Managing Output Devices with Printing Assistant for Landscapes

Lesson Objectives

After completing this lesson, you will be able to:

- List the prerequisites for using PAL
- Describe the PAL environment
- Configure and operate a PAL landscape

Lesson 1: Explaining Background Processing

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the benefits of background processing
- Schedule and monitor jobs

Lesson 2: Scheduling Time-Dependent Jobs

Lesson Objectives

After completing this lesson, you will be able to:

- Schedule time-dependent jobs
- Schedule standard jobs

Lesson 3: Scheduling Event-Dependent Jobs

Lesson Objectives

After completing this lesson, you will be able to:

- Schedule event-dependent jobs
- Define and trigger events

Lesson 4: Describing Special Options for Background Processing

Lesson Objectives

After completing this lesson, you will be able to:

- Optimize background processing with specialized functions

Lesson 5: Appendix - Job Management in SAP Solution Manager

Lesson Objectives

After completing this lesson, you will be able to:

- Describe job management options like scheduling and monitoring using SAP Solution Manager

Lesson 1: Using the Monitoring Architecture of the Computing Center Management System (CCMS)

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the CCMS monitoring architecture
- Monitor your SAP system with the CCMS Alert Monitor

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

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the monitoring and alerting tools available in MAI

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