# **ADM940**

# **Authorization Concept for SAP S/4HANA and SAP Business Suite**

#### **COURSE OUTLINE**

Course Version: 20 Course Duration:

## SAP Copyrights, Trademarks and Disclaimers

© 2020 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 <a href="http://global12.sap.com/corporate-en/legal/copyright/index.epx">http://global12.sap.com/corporate-en/legal/copyright/index.epx</a> 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	<b>—</b>
Demonstration	<b>&gt;</b>
Procedure	2 3
Warning or Caution	1
Hint	
Related or Additional Information	<b>&gt;&gt;</b>
Facilitated Discussion	•—
User interface control	Example text
Window title	Example text



### **Contents**

vii	Course Overview	
1	Unit 1:	Authorizations in General
1		Lesson: What Are Authorizations?
1		Lesson: Creating and Implementing an Authorization Concept
2	11-2-2-0	Design Transition Is an ext Antiboxic attack
3	Unit 2:	Basic Terminology of Authorizations
3		Lesson: Elements and Terminology of the Authorization Concept (ABAP)
3		Lesson: Authorization Checks in the SAP System
5	Unit 3:	User Settings
5		Lesson: Maintaining and Evaluating User Data
_		
7	Unit 4:	Working with the Role Maintenance
7		Lesson: Role Maintenance and Standard Roles
7		Lesson: Special ABAP Roles
7		Lesson: Subtleties of Authorization Maintenance
9	Unit 5:	Basic Settings
9		Lesson: Role Maintenance: Installation and Upgrade
9		Lesson: Access Control and User Administration
11	Unit 6:	Using Traces
11		Lesson: Troubleshooting and Administration Aids
11		Lesson: Using Trace Evaluation to maintain Menus and Authorizations
13	Unit 7:	Transporting Authorizations
13		Lesson: Transporting Authorization Components
15	Unit 8:	Integration into the Company Landscape
15		Lesson: Central User Administration (CUA)
15		Lesson: SAP NetWeaver Identity Management
15		Lesson: Integration into Organizational Management



### **Course Overview**

#### TARGET AUDIENCE

This course is intended for the following audiences:



### **UNIT 1** Authorizations in General

#### **Lesson 1: What Are Authorizations?**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe the SAP authorization concept as part of a comprehensive security concept
- Explain the access control mechanisms
- Explain how users, roles, and authorizations are related
- Describe the technical implementation of a role-based authorization concept

#### **Lesson 2: Creating and Implementing an Authorization Concept**

#### **Lesson Objectives**

- Explain the structure of an authorization concept
- List the steps required to implement a concept
- Describe the activities for the individual implementation steps
- Use the presented procedure model for implementing an authorization concept for your own projects
- Explain the strategy for user and authorization administration



### **UNIT 2** Basic Terminology of **Authorizations**

#### **Lesson 1: Elements and Terminology of the Authorization Concept** (ABAP)

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe and differentiate between the individual elements of the authorization concept
- Describe the relationships between the elements in the overall concept
- Explain the differences between roles and authorization profiles
- · Find out the meaning of an authorization object
- Explain the relationship between roles and the Easy Access Menu

#### **Lesson 2: Authorization Checks in the SAP System**

#### **Lesson Objectives**

- · Explain when authorization checks are performed
- Describe the difference between the authorization check when a transaction is started and the authorization check performed by a program
- Define the function of the user buffer and evaluate the buffered user authorizations
- Control some additional checks without "modifying" the system



### **UNIT 3 User Settings**

### **Lesson 1: Maintaining and Evaluating User Data**

#### **Lesson Objectives**

- Create and change user master records
- Set the values on the tab pages of the user master record
- Define the differences between the user types
- Operate and implement mass maintenance
- Display and archive change documents for authorization assignment

### UNIT 4

# Working with the Role Maintenance

#### **Lesson 1: Role Maintenance and Standard Roles**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe and explain the basic steps for assigning authorizations with the Role Maintenance
- Create new roles, change and copy roles, and specify their activities
- Display and maintain authorizations that were generated automatically
- Compare user master records directly in role maintenance "PFCG" or in user maintenance "SU01"
- Describe how to perform a mass comparison and state which report you can schedule for an automatic comparison

### **Lesson 2: Special ABAP Roles**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe the use of Customizing roles
- Explain the advantages and disadvantages of composite roles
- Define the relationship between reference roles and derived roles
- · Bundle frequently used transactions and map them with different instances using derived roles
- Describe how to perform a mass comparison and state, which report you can schedule for an automatic comparison

#### **Lesson 3: Subtleties of Authorization Maintenance**

#### **Lesson Objectives**

- Interpret the red, yellow, and green traffic lights for different field contents
- Describe the meaning of the icons in the PFCG authorization maintenance
- Define the hierarchy of status terms, and explain when which term is used
- Distinguish between the expert mode and simple maintenance for authorizations



• List additional functions that are accessible through the menu

## **UNIT 5** Basic Settings

#### **Lesson 1: Role Maintenance: Installation and Upgrade**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Perform the steps necessary to install the Role Maintenance
- Find default values and check indicators in the system
- Modify, delete, or extend the default values of the Role Maintenance
- Perform the necessary steps after an upgrade for postprocessing old and new authorization values
- Describe new functionality in transaction SU25

#### **Lesson 2: Access Control and User Administration**

#### **Lesson Objectives**

- Define password rules and system profile parameters
- Protect special users in the SAP system
- Protect SAP functions with authorization object S\_TCODE
- Protect tables and views using authorization groups
- Protect programs with authorization groups
- Describe tasks in user and authorization administration
- List options for separating functions of user and authorization administration
- Describe options for decentralization of user administration
- Create user and authorization administrators with limited rights (using authorization objects)



### **UNIT 6 Using Traces**

### **Lesson 1: Troubleshooting and Administration Aids**

#### **Lesson Objectives**

After completing this lesson, you will be able to:

- Analyze authorization checks in various ways
- Use transaction SU53 to find missing authorizations (also for other users)
- Run the system trace for authorization checks
- Apply the features of the information system and use them for different tasks

#### Lesson 2: Using Trace Evaluation to maintain Menus and **Authorizations**

#### **Lesson Objectives**

- Use the system trace to maintain the menu and authorization data for roles
- Use the system trace to maintain authorization default values



## **UNIT7** Transporting Authorizations

### **Lesson 1: Transporting Authorization Components**

#### **Lesson Objectives**

- Copy user master records to other clients
- Transport roles and describe the behavior in the system: With and without profile information, with and without user assignments, in a CUA landscape or without CUA
- Transport check indicators using Transaction SU25
- Describe the transport behavior of composite, reference, and derived roles
- List other transport options



UNIT 8

# **Integration into the Company Landscape**

#### **Lesson 1: Central User Administration (CUA)**

#### Lesson Objectives

After completing this lesson, you will be able to:

- Explain how the central user administration functions
- Specify the most important steps for setting up the central user administration
- Define distribution rules for user data
- · Create, maintain and distribute users centrally
- Perform system comparisons for users that are not yet maintained centrally

#### **Lesson 2: SAP NetWeaver Identity Management**

#### Lesson Objectives

After completing this lesson, you will be able to:

- understand what SAP NetWeaver Identity Management is
- estimate the effort switching from CUA to SAP NetWeaver Identity Management

### **Lesson 3: Integration into Organizational Management**

#### **Lesson Objectives**

- Create organizational units in HR Organizational Management
- Link roles with the organizational plan objects
- · Link users with the organizational plan objects
- Perform a comparison of the indirect role and user assignments
- Compare user master record
- Assign roles for a specific period of time

