

# S4D425

## Extensibility for SAP S/4HANA

### 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 <http://global12.sap.com/corporate-en/legal/copyright/index.epx> 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.

This course 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: SAP S/4HANA Extensibility Overview

1	Lesson: Explaining the Smart Enterprise, Dealing With the Business Technolog Platform
1	Lesson: Explaining Extensibility, an Introduction
1	Lesson: Explaining InApp Extensibility, a Birds View
1	Lesson: Explaining Side-By-Side Extensibility, a Birds View
1	Lesson: Explaining the Extensibility Possibilities, Depending on the SAP S/4HANA Version
2	Lesson: Presenting the Murphy Oil Corporation Example

### 3 Unit 2: SAP Fiori Launchpad Adaptation

3	Lesson: Personalizing the SAP Fiori Launchpad
3	Lesson: Managing the SAP Fiori Launchpad Content
3	Lesson: Using SAP Fiori Launchpad Plugins

### 5 Unit 3: Key User Extensibility

5	Lesson: Using Variant Management
5	Lesson: Adapting SAP Fiori UIs at Runtime
5	Lesson: Using Custom Fields and Logic
5	Lesson: Creating Custom Business Objects
5	Lesson: Creating Custom Reusable Elements
6	Lesson: Transporting Extensions

### 7 Unit 4: InApp Extensions With Classic Development Tools

7	Lesson: Using ABAP-Managed Database Procedures Enhancements
7	Lesson: Enhancing a CDS View
7	Lesson: Redefining a Data Service
7	Lesson: Redefining Gateway Services
7	Lesson: Explaining Extension Points in SAPUI5
8	Lesson: Describing Other Types of Extensibility in SAPUI5

### 9 Unit 5: Side-by-Side Extensibility

9	Lesson: Explaining Side-by-Side Extensibility, Overview
9	Lesson: Explaining the Main Scenarios of the Side-By-Side Extensibility
9	Lesson: Categorizing Extension Archetypes
9	Lesson: Creating New User Interfaces
9	Lesson: Creating Custom Applications
9	Lesson: Creating Event Driven Extensions



# Course Overview

## **TARGET AUDIENCE**

This course is intended for the following audiences:

- Application Consultant
- Development Consultant
- Technology Consultant
- Super / Key / Power User
- Developer
- Solution Architect





## **Lesson 1: Explaining the Smart Enterprise, Dealing With the Business Technolog Platform**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Explain the Smart Enterprise, dealing with the Business Technology Platform

## **Lesson 2: Explaining Extensibility, an Introduction**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Get to know about the extensibility concept in SAP S/4HANA

## **Lesson 3: Explaining InApp Extensibility, a Birds View**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Explain InApp Extensibility

## **Lesson 4: Explaining Side-By-Side Extensibility, a Birds View**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Explain Side-By-Side Extensibility, a Birds View

## **Lesson 5: Explaining the Extensibility Possibilities, Depending on the SAP S/4HANA Version**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Realize which extensions, in-App and side-by-side, are available depending on the SAP S/4HANA versions

## **Lesson 6: Presenting the Murphy Oil Corporation Example**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Present the Murphy Oil Corporation Example

## Lesson 1: Personalizing the SAP Fiori Launchpad

### Lesson Objectives

After completing this lesson, you will be able to:

- Personalize the SAP Fiori Launchpad

## Lesson 2: Managing the SAP Fiori Launchpad Content

### Lesson Objectives

After completing this lesson, you will be able to:

- Manage the SAP Fiori Launchpad Content

## Lesson 3: Using SAP Fiori Launchpad Plugins

### Lesson Objectives

After completing this lesson, you will be able to:

- Extend the SAP Fiori Launchpad



## Lesson 1: Using Variant Management

### Lesson Objectives

After completing this lesson, you will be able to:

- Use variant management

## Lesson 2: Adapting SAP Fiori UIs at Runtime

### Lesson Objectives

After completing this lesson, you will be able to:

- Use SAP Fiori runtime authoring

## Lesson 3: Using Custom Fields and Logic

### Lesson Objectives

After completing this lesson, you will be able to:

- Create data source extensions
- Create custom fields
- Enable custom database fields for usage in SAP Fiori applications
- Create custom logic

## Lesson 4: Creating Custom Business Objects

### Lesson Objectives

After completing this lesson, you will be able to:

- Create custom business objects
- Create a UI for a custom business object
- Add custom logic to a custom business object

## Lesson 5: Creating Custom Reusable Elements

### Lesson Objectives

After completing this lesson, you will be able to:

- Create custom libraries and methods
- Create custom code lists

## **Lesson 6: Transporting Extensions**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Transport extension items

## Lesson 1: Using ABAP-Managed Database Procedures Enhancements

### Lesson Objectives

After completing this lesson, you will be able to:

- Explain ABAP-Managed Database procedures
- Create an ABAP-Managed Database procedure
- Call an ABAP-Managed Database procedure in ABAP
- Impart knowledge how AMDP enhancements work

## Lesson 2: Enhancing a CDS View

### Lesson Objectives

After completing this lesson, you will be able to:

- Explain the Concept of CDS view enhancements
- Enhance a CDS view
- Explain metadata extensions

## Lesson 3: Redefining a Data Service

### Lesson Objectives

After completing this lesson, you will be able to:

- Redefine a data service

## Lesson 4: Redefining Gateway Services

### Lesson Objectives

After completing this lesson, you will be able to:

- Redefine gateway services

## Lesson 5: Explaining Extension Points in SAPUI5

### Lesson Objectives

After completing this lesson, you will be able to:

- Explain Extension Points in SAPUI5

## **Lesson 6: Describing Other Types of Extensibility in SAPUI5**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe other types of extensibility in SAPUI5 applications



## Lesson 1: Explaining Side-by-Side Extensibility, Overview

### Lesson Objectives

After completing this lesson, you will be able to:

- Comprehend the three main uses cases

## Lesson 2: Explaining the Main Scenarios of the Side-By-Side Extensibility

### Lesson Objectives

After completing this lesson, you will be able to:

- Get an overview of the four main side-by-side scenarios

## Lesson 3: Categorizing Extension Archetypes

### Lesson Objectives

After completing this lesson, you will be able to:

- Categorize application types into archetypes

## Lesson 4: Creating New User Interfaces

### Lesson Objectives

After completing this lesson, you will be able to:

- Retrace how to create new user interfaces on SAP Cloud Platform

## Lesson 5: Creating Custom Applications

### Lesson Objectives

After completing this lesson, you will be able to:

- Retrace how to create a new custom application on SAP Cloud Platform

## Lesson 6: Creating Event Driven Extensions

## Lesson Objectives

After completing this lesson, you will be able to:

- Explain, how to create a new event driven extension between SAP S/4HANA cloud and SAP Cloud Platform