

S4105

Variant Configuration (with AVC) in SAP S/4HANA

COURSE OUTLINE

Course Version: 23

Course Duration:

SAP Copyrights, Trademarks and Disclaimers

© 2023 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

Example text

Window title

Example text

Contents

vii Course Overview

1 Unit 1: Introduction to Variant Configuration

| | |
|---|---|
| 1 | Lesson: Introduction to Variant Configuration |
|---|---|

3 Unit 2: Classification Tools

| | |
|---|-------------------------------------|
| 3 | Lesson: Characteristics Maintenance |
|---|-------------------------------------|

| | |
|---|---------------------------|
| 3 | Lesson: Class Maintenance |
|---|---------------------------|

5 Unit 3: Materials, BOMs and Task Lists

| | |
|---|------------------|
| 5 | Lesson: Material |
|---|------------------|

| | |
|---|----------------------|
| 5 | Lesson: Material BOM |
|---|----------------------|

| | |
|---|-------------------|
| 5 | Lesson: Task List |
|---|-------------------|

7 Unit 4: Configuration Profile

| | |
|---|--|
| 7 | Lesson: Classic and Advanced Variant Configuration |
|---|--|

| | |
|---|-------------------------------|
| 7 | Lesson: Configuration Profile |
|---|-------------------------------|

9 Unit 5: Overview of Object Dependencies

| | |
|---|---------------------------------------|
| 9 | Lesson: Use and Types of Dependencies |
|---|---------------------------------------|

| | |
|---|--|
| 9 | Lesson: Paradigms of the SAP Configurator and Introduction to the Syntax |
|---|--|

| | |
|---|---|
| 9 | Lesson: Variant Tables, Functions and PMEVC |
|---|---|

11 Unit 6: Object Dependencies in BOMs and Task Lists

| | |
|----|--|
| 11 | Lesson: Selection Condition in BOMs and Task Lists |
|----|--|

| | |
|----|---------------------|
| 11 | Lesson: Class Nodes |
|----|---------------------|

| | |
|----|--|
| 11 | Lesson: Procedures with Reference Characteristics (Quantity and Time Change) |
|----|--|

13 Unit 7: Dependencies for the Value Assignment Interface - 1

| | |
|----|---|
| 13 | Lesson: Interface Design, Characteristic Grouping and PMEVC |
|----|---|

| | |
|----|--------------------------------------|
| 13 | Lesson: Constraints: An Introduction |
|----|--------------------------------------|

| | |
|----|------------------------------------|
| 13 | Lesson: Constraints: First Details |
|----|------------------------------------|

15 Unit 8: Dependencies for the Value Assignment Interface - 2

| | |
|----|---|
| 15 | Lesson: Procedures for Value Assignment Interface |
|----|---|

| | |
|----|--|
| 15 | Lesson: Facet Changes with Pre- and Selection Conditions |
|----|--|

| | | |
|-----------|-----------------|---|
| 17 | Unit 9: | Variant Configuration in Pricing |
| 17 | | Lesson: Pricing and Variant Configuration in Sales |
| 17 | | Lesson: Pricing and Variant Configuration in Purchasing |
| 19 | Unit 10: | Material Variants |
| 19 | | Lesson: Material Variants |
| 21 | Unit 11: | VC – Integration Logistic Chain |
| 21 | | Lesson: Processes in SD |
| 21 | | Lesson: Processes in Planning and Production |
| 23 | Unit 12: | Product Structure |
| 23 | | Lesson: Product Structure |
| 25 | Unit 13: | Transfer Classic (LO-VC) Models into Advanced (AVC) Models |
| 25 | | Lesson: Transfer Classic (LO-VC) Models into Advanced (AVC) Model |
| 27 | Unit 14: | Appendix |
| 27 | | Lesson: Knowledge Base and Runtime Version |
| 27 | | Lesson: Master Data Changes with Engineering Change Management |
| 27 | | Lesson: Order Change Management |
| 27 | | Lesson: Data for Exercises, Additional Slides |
| 27 | | Lesson: Data for Exercises |

Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Super / Key / Power User
- Business User
- Business Analyst
- Business Process Architect
- Business Process Owner/Team Lead/Power User
- Solution Architect

UNIT 1

Introduction to Variant Configuration

Lesson 1: Introduction to Variant Configuration

Lesson Objectives

After completing this lesson, you will be able to:

- Give an introduction to Variant Configuration
- Identify four configurable object types
- Create sales order for a configurable material

Lesson 1: Characteristics Maintenance

Lesson Objectives

After completing this lesson, you will be able to:

- Describe characteristics maintenance
- Explain the special features of characteristics maintenance for VC?
- Work with reference characteristics and create a linkage to database tables and fields

Lesson 2: Class Maintenance

Lesson Objectives

After completing this lesson, you will be able to:

- Maintain classes
- Assign objects to classes and search objects in classes

Lesson 1: Material

Lesson Objectives

After completing this lesson, you will be able to:

- Work with Materials and perform the necessary settings for VC

Lesson 2: Material BOM

Lesson Objectives

After completing this lesson, you will be able to:

- Work with Bill of Materials and perform the necessary settings for VC
- Do the necessary settings for VC

Lesson 3: Task List

Lesson Objectives

After completing this lesson, you will be able to:

- Maintain a Task List and perform the necessary settings for VC
- Do the necessary settings for VC

Lesson 1: Classic and Advanced Variant Configuration

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the differences and similarities between classic and advanced variant configuration

Lesson 2: Configuration Profile

Lesson Objectives

After completing this lesson, you will be able to:

- Define a configuration profile and use different configuration scenarios

Lesson 1: Use and Types of Dependencies

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the use, types and function of object dependencies

Lesson 2: Paradigms of the SAP Configurator and Introduction to the Syntax

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the paradigms of the SAP configurator
- Give an introduction the syntax

Lesson 3: Variant Tables, Functions and PMEVC

Lesson Objectives

After completing this lesson, you will be able to:

- Understand variant tables and functions
- Explain the benefits of the product modeling environment PMEVC

Lesson 1: Selection Condition in BOMs and Task Lists

Lesson Objectives

After completing this lesson, you will be able to:

- Define selection conditions in BOMs and task lists

Lesson 2: Class Nodes

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the benefits of class nodes
- Define and work with class nodes

Lesson 3: Procedures with Reference Characteristics (Quantity and Time Change)

Lesson Objectives

After completing this lesson, you will be able to:

- Define procedures with reference characteristics (quantity and time change)
- Change time and quantity with procedures

Lesson 1: Interface Design, Characteristic Grouping and PMEVC

Lesson Objectives

After completing this lesson, you will be able to:

- Define an interface design / a characteristic group and work with PMEVC
- Work again with the product modeling environment

Lesson 2: Constraints: An Introduction

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the benefits of constraints

Lesson 3: Constraints: First Details

Lesson Objectives

After completing this lesson, you will be able to:

- Define your own constraints
- Edit formulas and tables

Lesson 1: Procedures for Value Assignment Interface

Lesson Objectives

After completing this lesson, you will be able to:

- Define and work with Procedures
- Define variant tables in simple dependencies to interfere values
- Use additional functionalities of procedures

Lesson 2: Facet Changes with Pre- and Selection Conditions

Lesson Objectives

After completing this lesson, you will be able to:

- Pre- and selection conditions for value assignment interface
- Work with selection conditions for characteristics, declared to required characteristics

Lesson 1: Pricing and Variant Configuration in Sales

Lesson Objectives

After completing this lesson, you will be able to:

- Do the pricing for your variant configuration scenario
- Add factors to pricing

Lesson 2: Pricing and Variant Configuration in Purchasing

Lesson Objectives

After completing this lesson, you will be able to:

- Define the pricing for variant configuration in purchasing

Lesson 1: Material Variants

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the benefits of working with material variants
- Create material variants

Lesson 1: Processes in SD

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the processes in sales and distribution
- Define dependencies depending on sales document category or type

Lesson 2: Processes in Planning and Production

Lesson Objectives

After completing this lesson, you will be able to:

- Define processes for planning and production

Lesson 1: Product Structure

Lesson Objectives

After completing this lesson, you will be able to:

- Explain Product Structure in IPPE
- Use the product structure inside Product Structure Management (PSM)

UNIT 13

Transfer Classic (LO-VC) Models into Advanced (AVC) Models

Lesson 1: Transfer Classic (LO-VC) Models into Advanced (AVC) Model

Lesson Objectives

After completing this lesson, you will be able to:

- Explain and execute the transformation from classic (LO-VC) models to advanced (AVC) models

Lesson 1: Knowledge Base and Runtime Version

Lesson Objectives

After completing this lesson, you will be able to:

- Define knowledge base and runtime version
- Define configuration models in SAP S/4 HANA backend
- Understand the benefits of a knowledge base and runtime version

Lesson 2: Master Data Changes with Engineering Change Management

Lesson Objectives

After completing this lesson, you will be able to:

- Perform master data changes with Engineering Change Management (ECM)

Lesson 3: Order Change Management

Lesson Objectives

After completing this lesson, you will be able to:

- Define the benefits of Order Change Management
- Define a release key for OCM
- Perform OCM changes

Lesson 4: Data for Exercises, Additional Slides

Lesson Objectives

After completing this lesson, you will be able to:

- Read additional data which is used in our exercises
- Understand the additional slides

Lesson 5: Data for Exercises

Lesson Objectives

After completing this lesson, you will be able to:

- Get an overview of the used exercise data