

IUT23

Configuring Billing and Invoicing in SAP S/4HANA Utilities

COURSE OUTLINE

Course Version: 2501

Course Duration:

SAP Copyrights, Trademarks and Disclaimers

© 2026 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

ix Course Overview

1 Unit 1: Introducing the Business Scenario

1 Lesson: Exploring the Business Scenario

3 Unit 2: Understanding Billing in SAP Utilities Data Model

3 Lesson: Understanding Billing Processes and Master Data in SAP Utilities

5 Unit 3: Understanding Billing Master Data

5 Lesson: Identifying Billing Master Data in SAP Utilities

7 Unit 4: Exploring Discounts Surcharges

7 Lesson: Understanding Discounts and Surcharges

9 Unit 5: Analyzing Billing

9 Lesson: Understanding the Billing Process

9 Lesson: Discovering the Data Elements of the Billing Process

9 Lesson: Performing a Billing Simulation

9 Lesson: Managing Billing Documents

9 Lesson: Understanding Outsourcing in Billing

9 Lesson: Understanding Machine Learning for Outsourced Billing Documents

10 Lesson: Performing Billing Reversal

10 Lesson: Defining Parallel Processing

11 Unit 6: Exploring Manual Billing

11 Lesson: Understanding Manual Billing Functions

11 Lesson: Recognizing the Difference Between an Individual Bill and Joint Invoicing

13 Unit 7: Explaining Invoicing

13 Lesson: Understanding Invoicing in SAP Utilities

13 Lesson: Invoicing Functions

13 Lesson: Inclusion of Open Items

13 Lesson: Integration

13 Lesson: Outsourcing in Invoicing

13 Lesson: Invoice Reversal

15	Unit 8:	Understanding Clearing Control
15		Lesson: Understanding Clearing Control in the Invoicing Process
17	Unit 9:	Understanding Budget Billing Amounts
17		Lesson: Budget Billing Procedure
17		Lesson: Budget Billing Functions
17		Lesson: Budget Billing Printout
17		Lesson: Budget Billing Settlement
19	Unit 10:	Explaining Bill Printout
19		Lesson: Bill Printout Functions
19		Lesson: Print Action Records
19		Lesson: Raw Data Interface and Optical Archiving
19		Lesson: SAP S/4 HANA Output Management and New Form Technologies
21	Unit 11:	Explaining Special Billing Features
21		Lesson: Describing the Various Franchise Fee Procedures
21		Lesson: Explaining Gas Billing with SAP Utilities
21		Lesson: Explaining How Reference Values and Street Lighting Are Billed
21		Lesson: Modeling Deregulated Contracts with the Liberalization of New Markets
21		Lesson: Performing Archiving Tasks
21		Lesson: Describing Special Types of Billing
23	Unit 12:	Understanding Sales Statistics - Data and Analytics Integration
23		Lesson: Describing the Data Warehouse Concept
23		Lesson: Modernizing IS-U Sales Statistics Reporting with SAP Data Solutions
25	Unit 13:	Understanding IS-U Billing & Invoicing Enhancement and Extensibility
25		Lesson: Understanding Program Enhancements
27	Unit 14:	Understanding Backbilling - Recommendation for the Billing Schema
27		Lesson: Understanding Billing Commercial and Industrial Contracts
27		Lesson: Explaining Recommendation for the Billing Schema
29	Unit 15:	Introducing Collective Bill
29		Lesson: Understanding Collective Bill

31	Unit 16:	Explaining Real-Time Pricing Billing
31		Lesson: Explaining Real-Time Pricing Billing
31		Lesson: Customizing the RTP Interface
31		Lesson: Exploring Elements of an RTP Interface
31		Lesson: Understanding Real-Time Pricing Billing Dynamic Pricing
33	Unit 17:	Understanding Prepayment
33		Lesson: Understanding Prepayment
35	Unit 18:	Executing a Utilities Meter to Cash Process
35		Lesson: Explaining Utilities Meter to Cash Process

Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Application Consultant
- Business Process Architect
- Business Process Owner/Team Lead/Power User
- Enterprise Architect
- Industry Specialist
- Solution Architect
- System Administrator

UNIT 1

Introducing the Business Scenario

Lesson 1: Exploring the Business Scenario

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the business scenario for billing and invoicing with SAP Utilities.

UNIT 2

Understanding Billing in SAP Utilities Data Model

Lesson 1: Understanding Billing Processes and Master Data in SAP Utilities

Lesson Objectives

After completing this lesson, you will be able to:

- Identify billing process in SAP Utilities and the master data relevant to billing.

Lesson 1: Identifying Billing Master Data in SAP Utilities

Lesson Objectives

After completing this lesson, you will be able to:

- Identify billing master data in SAP Utilities.
- Describe the dependencies between the individual objects.
- Maintain the billing master data in the correct order.

UNIT 4

Exploring Discounts Surcharges

Lesson 1: Understanding Discounts and Surcharges

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the discount and surcharge options, including their associated master data and their impact on the rate structure.

Lesson 1: Understanding the Billing Process

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the data elements of the billing process.

Lesson 2: Discovering the Data Elements of the Billing Process

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the Billing Functions

Lesson 3: Performing a Billing Simulation

Lesson Objectives

After completing this lesson, you will be able to:

- Perform a billing simulation

Lesson 4: Managing Billing Documents

Lesson Objectives

After completing this lesson, you will be able to:

- Explain a Billing Document

Lesson 5: Understanding Outsourcing in Billing

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the concept of outsourcing

Lesson 6: Understanding Machine Learning for Outsourced Billing Documents

Lesson Objectives

After completing this lesson, you will be able to:

- Support detection, classification, and resolution of billing documents that are automatically outsourced due to errors or inconsistencies.

Lesson 7: Performing Billing Reversal

Lesson Objectives

After completing this lesson, you will be able to:

- Perform billing reversal

Lesson 8: Defining Parallel Processing

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the concept of parallel processing

Lesson 1: Understanding Manual Billing Functions

Lesson Objectives

After completing this lesson, you will be able to:

- Describe manual billing functions

Lesson 2: Recognizing the Difference Between an Individual Bill and Joint Invoicing

Lesson Objectives

After completing this lesson, you will be able to:

- Recognize the Difference Between an Individual Bill and Joint Invoicing

Lesson 1: Understanding Invoicing in SAP Utilities

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the invoicing process

Lesson 2: Invoicing Functions

Lesson Objectives

After completing this lesson, you will be able to:

- Explain invoicing functions

Lesson 3: Inclusion of Open Items

Lesson Objectives

After completing this lesson, you will be able to:

- Explain item processing

Lesson 4: Integration

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the integration of SAP Convergent Invoicing (CI) into the core Utilities Bill-to Cash processes within SAP S/4HANA.

Lesson 5: Outsourcing in Invoicing

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the outsourcing for invoicing process.

Lesson 6: Invoice Reversal

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the invoicing reversal.

Lesson 1: Understanding Clearing Control in the Invoicing Process

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the purpose of clearing control as used during the invoicing process.

Lesson 1: Budget Billing Procedure

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the different budget billing procedures

Lesson 2: Budget Billing Functions

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the budget billing functions
- Create a budget billing plan and change budget billing amounts

Lesson 3: Budget Billing Printout

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the processes behind the budget billing printout

Lesson 4: Budget Billing Settlement

Lesson Objectives

After completing this lesson, you will be able to:

- Describe budget billing settlements

Lesson 1: Bill Printout Functions

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the concept of bill printout
- Explain the hierarchy for billing forms
- Outline the bill printout process

Lesson 2: Print Action Records

Lesson Objectives

After completing this lesson, you will be able to:

- Describe print action records

Lesson 3: Raw Data Interface and Optical Archiving

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the raw data interface and describe the optical archiving options

Lesson 4: SAP S/4 HANA Output Management and New Form Technologies

Lesson Objectives

After completing this lesson, you will be able to:

- Outline the options for "Output Management and New Form Technologies"

Lesson 1: Describing the Various Franchise Fee Procedures

Lesson Objectives

After completing this lesson, you will be able to:

- Describe how franchise fee procedures are supported by the system

Lesson 2: Explaining Gas Billing with SAP Utilities

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the different types of gas billing

Lesson 3: Explaining How Reference Values and Street Lighting Are Billed

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the functions of reference values and street lighting

Lesson 4: Modeling Deregulated Contracts with the Liberalization of New Markets

Lesson Objectives

After completing this lesson, you will be able to:

- Identify the master data required for billing deregulated contracts

Lesson 5: Performing Archiving Tasks

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the archive billing data

Lesson 6: Describing Special Types of Billing

Lesson Objectives

After completing this lesson, you will be able to:

- Describe special types of billing

Lesson 1: Describing the Data Warehouse Concept

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the Data Warehouse concept.

Lesson 2: Modernizing IS-U Sales Statistics Reporting with SAP Data Solutions

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the new data solution provided by SAP.

UNIT 13

Understanding IS-U Billing & Invoicing Enhancement and Extensibility

Lesson 1: Understanding Program Enhancements

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the program enhancements.

Lesson 1: Understanding Billing Commercial and Industrial Contracts

Lesson Objectives

After completing this lesson, you will be able to:

- Understand Billing Commercial and Industrial Contracts.

Lesson 2: Explaining Recommendation for the Billing Schema

Lesson Objectives

After completing this lesson, you will be able to:

- Explain recommendation for the Billing Schema.

Lesson 1: Understanding Collective Bill

Lesson Objectives

After completing this lesson, you will be able to:

- Understand Master Data for Collective Bill.
- Explain Collective Bill documents.

Lesson 1: Explaining Real-Time Pricing Billing

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the need for the RTP interface within IS-U.
- Explain how the RTP interface can be used to support complex billing.
- Articulate the function of the RTP interface.
- Describe the meaning of the RTP interface within IS-U.

Lesson 2: Customizing the RTP Interface

Lesson Objectives

After completing this lesson, you will be able to:

- Recognize the use of TOU, season and day groups
- Build an RTP Interface.
- Allocate RTP Interfaces to Rates.

Lesson 3: Exploring Elements of an RTP Interface

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the RTP Interface.
- Understand the three elements of the header data.
- Define the results parameter.
- Understand the RTP components define the structure of parameter allocations.

Lesson 4: Understanding Real-Time Pricing Billing Dynamic Pricing

Lesson Objectives

After completing this lesson, you will be able to:

- Understand dynamic pricing.

Lesson 1: Understanding Prepayment

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the prepayment concept and its relevance for utilities.
- Identify customer profiles and key business drivers for prepayment adoption.
- Distinguish between meter-centric and billing-centric prepayment models.
- Describe the key business processes and functionalities of the SAP prepayment solution.
- Understand the architecture and main building blocks of the prepayment framework.
- Recognize configuration and operational considerations within SAP IS-U/S/4HANA.

UNIT 18

Executing a Utilities Meter to Cash Process

Lesson 1: Explaining Utilities Meter to Cash Process

Lesson Objectives

After completing this lesson, you will be able to:

- Execute a Utilities Meter to Cash process.