

# GW100

## SAP Gateway – Building OData Services

### COURSE OUTLINE

Course Version: 24

Course Duration:

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# Preparing for Your SAP Live Class

## Required Equipment for Your SAP Live Class

- PC or Mac
- Integrated or external web cam
- Headset with integrated mic
- Stable internet connection

You can test if your setup is working correctly by using this link: <https://sap.zoom.us/test>

We recommend that you connect two monitors to your PC so that you can manage the course content more efficiently. This will reduce the need for you to switch (alt+tab) between the applications we use in class.

## Getting the Most Out of Your SAP Live Class

- Make sure you have setup and thoroughly tested the SAP Live Class environment and resolved any issues well before the class begins. Refer to the separate instructions that you were sent for setup instructions and support contact information.
- Keep your web cam activated during the training sessions. You can switch it off during breaks if you prefer.
- Use a headset with an integrated mic to ensure a high-quality audio experience for both you and the other participants. Laptop speakers and mic produce poor quality sound and introduce background noise that can disturb the class.
- Make sure you are in a quiet area where you will not be disturbed.
- Be ready to use the mute feature to ensure any background noise does not disturb the class.
- Turn off email, phones, instant messaging tools, and clear other distractions away from your training area.
- Actively participate and prepare to be called on by name.
- Be patient waiting for a response to your chat messages.
- Always ask the instructor for assistance if you need help with an exercise. Don't get left behind.
- Be ready to begin class on time so you do not delay the start of each session.
- During breaks, make sure you take the opportunity to get out of your chair and stretch.
- Please raise any concerns relating to the SAP Live Class experience with your instructor at the time they arise so that they can be quickly addressed.

# 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>

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# Course Overview

## TARGET AUDIENCE

This course is intended for the following audiences:

- Development Consultant
- Developer
- Solution Architect





## Lesson 1: Describing SAP Gateway

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe the benefits of SAP Gateway and OData
- Name SAP products that use SAP Gateway

## Lesson 2: Describing SAP Gateway Deployment Options

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe SAP Gateway components
- Describe SAP Gateway deployment scenarios



## Lesson 1: Explaining Representational State Transfer (REST)

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe Representational State Transfer (REST)

## Lesson 2: Explaining Open Data Protocol (OData)

### Lesson Objectives

After completing this lesson, you will be able to:

- Examine an OData service

## Lesson 3: Performing OData Operations

### Lesson Objectives

After completing this lesson, you will be able to:

- Perform OData read operations

## Lesson 4: Performing OData Queries

### Lesson Objectives

After completing this lesson, you will be able to:

- Perform OData queries



## Lesson 1: Managing an SAP Gateway Service

### Lesson Objectives

After completing this lesson, you will be able to:

- Model an SAP Gateway service
- Implement an SAP Gateway service
- Maintain an SAP Gateway service
- Handle an SAP Gateway service error

## Lesson 2: Defining a Data Model

### Lesson Objectives

After completing this lesson, you will be able to:

- Create an SAP Gateway project
- Define a data model based on a template
- Generate SAP Gateway runtime artifacts
- Register an SAP Gateway service

## Lesson 3: Implementing Reading Operations

### Lesson Objectives

After completing this lesson, you will be able to:

- Implement a query operation
- Implement a read operation

## Lesson 4: Implementing Navigation

### Lesson Objectives

After completing this lesson, you will be able to:

- Define a data model declaratively
- Implement a navigation

## **Lesson 5: Implementing Query Options**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Implement query options
- Implement a paging functionality

## **Lesson 6: Implementing Change Operations**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Implement a create operation
- Implement an update operation
- Implement a delete operation

## Lesson 1: Operating the RFC/BOR Generator

### Lesson Objectives

After completing this lesson, you will be able to:

- Define a data model based on an RFC/BOR interface
- Map Operations to an RFC/BOR implementation

## Lesson 2: Operating the Search Help Generator

### Lesson Objectives

After completing this lesson, you will be able to:

- Operate the search help generator





## Lesson 1: Redefining a Data Service

### Lesson Objectives

After completing this lesson, you will be able to:

- Redefine a data service

## Lesson 2: Redefining an SAP Gateway Service

### Lesson Objectives

After completing this lesson, you will be able to:

- Redefine SAP Gateway services



## Lesson 1: Explaining SAP Gateway Services Based on CDS Views

### Lesson Objectives

After completing this lesson, you will be able to:

- Explain ABAP programming models
- List OData service development options with CDS
- Use ABAP Development Tools

## Lesson 2: Mapping CDS Views as Data Source

### Lesson Objectives

After completing this lesson, you will be able to:

- Operate the CDS/SADL generator

## Lesson 3: Referencing a Data Source

### Lesson Objectives

After completing this lesson, you will be able to:

- Reference a data source

## Lesson 4: Publishing CDS Views as SAP Gateway Services

### Lesson Objectives

After completing this lesson, you will be able to:

- Define SAP Gateway Services via CDS View Annotations
- Define a Navigation Using CDS View Associations

## Lesson 5: Defining Business Services

### Lesson Objectives

After completing this lesson, you will be able to:

- Define Business Services