

# SAPTEC

## SAP NetWeaver Application Server - Fundamentals

### COURSE OUTLINE

Course Version: 15

Course Duration: 3 Day(s)

# SAP Copyrights and Trademarks

© 2014 SAP AG. 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 AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

- Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.
- IBM, DB2, DB2 Universal Database, System i, System i5, System p, System p5, System x, System z, System z10, System z9, z10, z9, iSeries, pSeries, xSeries, zSeries, eServer, z/VM, z/OS, i5/OS, S/390, OS/390, OS/400, AS/400, S/390 Parallel Enterprise Server, PowerVM, Power Architecture, POWER6+, POWER6, POWER5+, POWER5, POWER, OpenPower, PowerPC, BatchPipes, BladeCenter, System Storage, GPFS, HACMP, RETAIN, DB2 Connect, RACF, Redbooks, OS/2, Parallel Sysplex, MVS/ESA, AIX, Intelligent Miner, WebSphere, Netfinity, Tivoli and Informix are trademarks or registered trademarks of IBM Corporation.
- Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.
- Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- Oracle is a registered trademark of Oracle Corporation
- UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.
- Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.
- HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.
- Java is a registered trademark of Sun Microsystems, Inc.
- JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.
- SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP BusinessObjects Explorer, StreamWork, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.
- Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects Software Ltd. Business Objects is an SAP company.
- Sybase and Adaptive Server, iAnywhere, Sybase 365, SQL Anywhere, and other Sybase products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Sybase, Inc. Sybase is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.








These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group 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.



# 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

**ix**      **Course Overview**

**1**      **Unit 1:      SAP Systems**

- 1      Lesson: Explaining the Key Capabilities of SAP NetWeaver
- 1      Lesson: Explaining the Architecture of an SAP System, AS ABAP and AS Java

**3**      **Unit 2:      Navigation Basics**

- 3      Lesson: Navigating with SAP GUI for Windows in AS ABAP Systems
- 3      Lesson: Navigating with a Browser in AS Java Systems

**5**      **Unit 3:      System Core**

- 5      Lesson: Explaining AS ABAP and AS Java System Architecture
- 5      Lesson: Identifying the Processes of an AS ABAP System
- 5      Lesson: Processing User Requests in AS ABAP
- 5      Lesson: Explaining Additional Processes of an AS ABAP System
- 5      Lesson: Explaining the Processes of an AS Java System

**7**      **Unit 4:      Software Development in SAP Systems**

- 7      Lesson: Outlining the Data Structure of an AS ABAP System
- 7      Lesson: Managing Transports in the ABAP Environment
- 7      Lesson: Explaining ABAP Workbench Tools
- 7      Lesson: Developing and Transporting an ABAP Repository Object
- 7      Lesson: Developing Applications in AS Java
- 8      Lesson: Developing Applications in Eclipse for ABAP

**9**      **Unit 5:      Communication and Integration Technologies**

- 9      Lesson: Describing Communication with Remote Function Call (RFC) Based Technology
- 9      Lesson: Describing the Basics of Web Services
- 9      Lesson: Describing OData in SAP

**11**      **Unit 6:      Application Lifecycle Management (ALM)**

- 11      Lesson: Explaining Application Lifecycle Management (ALM)
- 11      Lesson: Describing the Installation of an SAP System
- 11      Lesson: Describing the Maintenance of an SAP System

**13      Unit 7:      SAP Portfolio Overview**

- 13      Lesson: Identifying the Platform, Database, and User Experience in the SAP Technology Portfolio
- 13      Lesson: Outlining Additional Components of the SAP Technology Portfolio
- 13      Lesson: Identifying the Components of the SAP Applications Portfolio

**15      Unit 8:      SAP User Interfaces**

- 15      Lesson: Accessing AS ABAP Systems with SAP GUI
- 15      Lesson: Accessing SAP Systems using Other User Interfaces

**17      Unit 9:      Additional Information Sources**

- 17      Lesson: Accessing the SAP Service Marketplace
- 17      Lesson: Accessing the SAP Community Network (SCN)



# Course Overview

## **TARGET AUDIENCE**

This course is intended for the following audiences:

- Database Administrator
- Help Desk/CoE Support
- Program/Project Manager
- System Administrator
- System Architect
- Technology Consultant



## **Lesson 1: Explaining the Key Capabilities of SAP NetWeaver**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- List the key capabilities of SAP NetWeaver

## **Lesson 2: Explaining the Architecture of an SAP System, AS ABAP and AS Java**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Explain the architecture of SAP systems



## **Lesson 1: Navigating with SAP GUI for Windows in AS ABAP Systems**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Navigate SAP systems using the SAP GUI

## **Lesson 2: Navigating with a Browser in AS Java Systems**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Navigate AS Java systems using a browser



## **Lesson 1: Explaining AS ABAP and AS Java System Architecture**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Access system status information

## **Lesson 2: Identifying the Processes of an AS ABAP System**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Identify the processes of an AS ABAP system

## **Lesson 3: Processing User Requests in AS ABAP**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Process requests in AS ABAP
- Process transactions in AS ABAP

## **Lesson 4: Explaining Additional Processes of an AS ABAP System**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Process a print request
- Schedule a background job
- Communicate through the gateway
- Process a web request

## **Lesson 5: Explaining the Processes of an AS Java System**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Explain the processes of an AS Java system
- Process user requests in AS Java



## Lesson 1: Outlining the Data Structure of an AS ABAP System

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe the data structure of the ABAP stack in an SAP system

## Lesson 2: Managing Transports in the ABAP Environment

### Lesson Objectives

After completing this lesson, you will be able to:

- Create a transport request
- Assign an object to a package
- Release a transport request

## Lesson 3: Explaining ABAP Workbench Tools

### Lesson Objectives

After completing this lesson, you will be able to:

- Explain ABAP workbench tools in the software development cycle

## Lesson 4: Developing and Transporting an ABAP Repository Object

### Lesson Objectives

After completing this lesson, you will be able to:

- Create an ABAP program
- Outline the components of the ABAP dictionary

## Lesson 5: Developing Applications in AS Java

### Lesson Objectives

After completing this lesson, you will be able to:

- Develop applications in AS Java

- Plan transports using NetWeaver Development Infrastructure (NWDI) and Enhanced Change and Transport System (CTS)

## **Lesson 6: Developing Applications in Eclipse for ABAP**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Develop applications in Eclipse for ABAP

## **Lesson 1: Describing Communication with Remote Function Call (RFC) Based Technology**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe communication with remote function call (RFC) based technology
- Explain Application Link Enabling (ALE)

## **Lesson 2: Describing the Basics of Web Services**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Explain Web services on SAP NetWeaver AS

## **Lesson 3: Describing OData in SAP**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Describe OData in SAP



## Lesson 1: Explaining Application Lifecycle Management (ALM)

### Lesson Objectives

After completing this lesson, you will be able to:

- Utilize the ALM tools

## Lesson 2: Describing the Installation of an SAP System

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe the installation of an SAP system
- Utilize SAP's installation tools

## Lesson 3: Describing the Maintenance of an SAP System

### Lesson Objectives

After completing this lesson, you will be able to:

- Describe the maintenance of an SAP system



## **Lesson 1: Identifying the Platform, Database, and User Experience in the SAP Technology Portfolio**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Identify the core application platform
- Identify the database products supporting SAP
- Identify additional SAP user experiences

## **Lesson 2: Outlining Additional Components of the SAP Technology Portfolio**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Identify the components of integration and process orchestration
- Identify SAP content and collaboration solutions
- Identify analytic solutions from SAP
- Outline virtualization and cloud management solutions from SAP
- Outline mobile solutions from SAP

## **Lesson 3: Identifying the Components of the SAP Applications Portfolio**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Identify the components of the SAP applications portfolio





## **Lesson 1: Accessing AS ABAP Systems with SAP GUI**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Navigate AS ABAP systems with SAP GUI for Windows
- Personalize the user interface
- Access AS ABAP systems using SAP GUI for Java
- Access AS ABAP systems using SAP GUI for HTML

## **Lesson 2: Accessing SAP Systems using Other User Interfaces**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Access a portal system
- Access AS ABAP using SAP NetWeaver Business Client
- Access SAP systems using Screen Personas



## **Lesson 1: Accessing the SAP Service Marketplace**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Access the SAP Service Marketplace

## **Lesson 2: Accessing the SAP Community Network (SCN)**

### **Lesson Objectives**

After completing this lesson, you will be able to:

- Access the services of the SAP Community Network (SCN)