HR350

Programming in Human Capital Management

SAP ERP - Human Capital Management

Course Outline

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Course Overview

This course covers how to use HCM logical databases and the Join and Projection views. It outlines the use of HCM-specific statements. In addition, it explains how to import and process payroll results and create customer-specific infotypes.

Target Audience

This course is intended for the following audiences:

* Application Consultants
* Data Consultants
* Data Managers
* Support Consultants
* Unit Testers / Power Users

Course Prerequisites

Required Knowledge

* HR050 Business Processes in Human Capital Management or WNAHRS Structures in HCM
* BC400 ABAP Workbench: Foundation
* Experience of programming in ABAP

Course Goals

This course will prepare the participant to:

* Program your own HCM reports using logical databases and HCM-specific statements
* Create customer-specific infotypes

Course Objectives

After completing this course, the participant will be able to:

* Use the HCM logical databases and the Join and Projection views
* Use HCM-specific statements
* Import and process payroll results
* Create customer-specific infotypes

Unit 1

Introduction to Human Capital Management

Unit Overview

Lesson: Introduction to Human Capital Management

Lesson Objectives
After completing this lesson, the participant will be able to:

- Outline HCM processes
- Define HCM structures
- Outline the use of infotypes to store employee information

Unit 2

Data Structures in Personnel Administration

Unit Overview

This unit explains the technical data structures of the infotypes in Personnel Administration. In addition, it covers how to use the technical information in the check and control tables of HCM infotypes.

Lesson: Data Structures and Infotypes

Lesson Objectives

After completing this lesson, the participant will be able to:

- Explain the structure of transparent tables
- Describe the fields in the structures

Lesson: Check and Control Tables

Lesson Objectives

After completing this lesson, the participant will be able to:

- Use the technical information contained in the check and control tables of HCM infotypes

Unit 3

Logical Databases PNP/PNPCE

Unit Overview

This unit enables you to use the logical database, PNPCE, in the PNP mode. It also describes how to program the selection screen of the logical database to suit customer-specific needs.

Lesson: Overview of Logical Database PNP

Lesson Objectives

After completing this lesson, the participant will be able to:

- List the functions of the logical database PNP
- Retrieve period-based data

Lesson: Data Screening

Lesson Objectives

After completing this lesson, the participant will be able to:

- Use the screening criteria to select data and persons
- Sort data according to the organizational criteria

Lesson: Logical Database PNPCE

Lesson Objectives

After completing this lesson, the participant will be able to:

- Use the logical database, PNPCE, in the PNP mode

Lesson: Report Categories

Lesson Objectives

After completing this lesson, the participant will be able to:

- Create and assign report categories
- Create a selection view

Unit 4

Infotypes and Function Modules

Unit Overview

In this unit, you learn how to process two or more infotypes in a PROVIDE...ENDPROVIDE loop. When you process an infotype, you can use a projection for changes to the content of one or more fields. You can then link both the views and read the time-dependent text entries from the tables. You can also use the HCM-specific macros and function modules in your programs.

Lesson: Joining Infotypes

Lesson Objectives

After completing this lesson, the participant will be able to:

- Understand join and intervals
- Join two or more infotypes in a single PROVIDE - ENDPROVIDE loop

Lesson: Field Projection

Lesson Objectives

After completing this lesson, the participant will be able to:

- Process one or more infotypes
- Combine the logical views of infotype data - join and projection
- Read time-dependent table entries

Lesson: Function Modules

Lesson Objectives

After completing this lesson, the participant will be able to:

- Use macros
- Process infotype records
- Read infotypes without the logical database
- Update infotype records

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Unit 5

Repetitive Structures and List Display

Unit Overview

This unit shows how to process infotypes with repetitive structures and display data with the ABAP List Viewer. In practice, this is used to transfer report lists to applications such as Microsoft Word and Excel.

Lesson: Infotypes with Repetitive Structures

Lesson Objectives

After completing this lesson, the participant will be able to:

- Understand infotypes and repetitive structures
- Create a macro to evaluate repetitive structure

Lesson: List Display with ABAP List Viewer

Lesson Objectives

After completing this lesson, the participant will be able to:

- List the functions of ABAP list viewer
- Explain the ALV data structure
- Create ALV field catalog
- Display the list using ABAP list viewer

Unit 6

Cluster Database Tables in HCM

Unit Overview

This unit shows how to compile payroll results, where the data structures are defined, and how the data is stored in the database. It also covers how to modify the standard evaluation programs to suit the customer requirements and to create your own evaluation reports.

Lesson: Database Tables

Lesson Objectives

After completing this lesson, the participant will be able to:

- Identify the features of PCLn DB tables
- Identify different types of PCLn DB tables
- Describe the structure of PCLn DB tables

Lesson: Importing Data

Lesson Objectives

After completing this lesson, the participant will be able to:

- Import/export data using macros
- Import/export data using buffers

Lesson: Payroll Results

Lesson Objectives

After completing this lesson, the participant will be able to:

- Understand the data flow in payroll
- Create a function module to display payroll results using different parameters

Unit 7

Data Structures in Personnel Planning

Unit Overview

This unit provides an overview of the data model and the relationship among objects. It also describes the Personnel Planning data structures.

Lesson: Functions and Data Structure

Lesson Objectives

After completing this lesson, the participant will be able to:

- Explain the data model
- Identify the relationships between objects
- Explain infotypes and objects/infotype status

Lesson: Personnel Planning Data Structures

Lesson Objectives

After completing this lesson, the participant will be able to:

- Describe the infotypes structures in Personnel Planning
- Explain logical structures and database tables

Unit 8

Logical Database PCH

Unit Overview

This unit covers formatting structures and evaluation paths. It also examines how to evaluate infotypes. In addition, this unit explains structural and sequential evaluations.

Lesson: Structure Formats

Lesson Objectives

After completing this lesson, the participant will be able to:

- Identify structure parameters
- Set structure conditions
- Maintain evaluation paths

Lesson: Evaluations-Source Code

Lesson Objectives

After completing this lesson, the participant will be able to:

- Create reports for sequential evaluations
- Create reports for structural evaluations
- Evaluate table infotypes

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Unit 9

Customer-Specific Infotypes

Unit Overview

This unit discusses the infotypes in Personnel Administration and Personnel Planning. It explains how to enhance and create Personnel Administration and Personnel Planning infotypes.

Lesson: Overview of Infotypes

Lesson Objectives

After completing this lesson, the participant will be able to:

- Identify the components of an infotype
- Explain standard and customer-specific infotypes

Lesson: Personnel Administration Infotypes

Lesson Objectives

After completing this lesson, the participant will be able to:

- Enhance Personnel Administration infotypes
- Create Personnel Administration infotypes

Lesson: Personnel Planning Infotypes

Lesson Objectives

After completing this lesson, the participant will be able to:

- Enhance Personnel Planning infotypes
- Create Personnel Planning infotypes

Unit 10

HCM ABAP Features

Unit Overview

This unit provides an overview of subroutines and selection reports. It covers how to call subroutines using dynamic actions and to call subroutines for specific periods. In addition, it provides an overview of how to select reports for fast entry in the system call features from reports.

Lesson: Subroutine Calls

Lesson Objectives

After completing this lesson, the participant will be able to:

- Call subroutines using dynamic actions
- Call subroutines for specific periods

Lesson: Report Selection

Lesson Objectives

After completing this lesson, the participant will be able to:

- Use selection reports for fast entry
- Call features from reports