

**SAP Composite Application
Framework**



**Creating a Callable
Object: Composite
Application Web
Dynpro Component**



SAP AG
Neurottstraße 16
69190 Walldorf
Germany
T +49/18 05/34 34 24
F +49/18 05/34 34 20
www.sap.com

© Copyright 2005 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, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, and Informix are trademarks or registered trademarks of IBM Corporation 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.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, 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 in several other countries all over the world. 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.

Disclaimer

Some components of this product are based on Java™. Any code change in these components may cause unpredictable and severe malfunctions and is therefore expressly prohibited, as is any decompilation of these components.

Any Java™ Source Code delivered with this product is only to be used by SAP's Support Services and may not be modified or altered in any way.

Typographic Conventions

Icons

Type Style	Represents	Icon	Meaning
<i>Example Text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.		Caution
	Cross-references to other documentation.		Example
Example text	Emphasized words or phrases in body text, graphic titles, and table titles.		Note
EXAMPLE TEXT	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.		Recommendation
Example text	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.		Syntax
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.		
<Example text>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.		
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.		

Contents

Business Scenario	2
About This Document	2
General Prerequisites.....	2
Applicable Release.....	2
Disclaimer.....	2
The Step By Step Solution	3
Approaches to Building Up Our Model.....	3
Top-Down Approach	3
Bottom-Up Approach.....	4
How to Create the Callable Object.....	5
How to Test Your Callable Object (Optional)	8

Business Scenario

The integration of CAF Core and Guided Procedures enables you quickly to develop a complete workflow dealing with and maintaining user defined data objects without writing a single line of code.

In this example the maintenance of the data for a specific employee is embedded into a single workflow step. This step could, for example, be executed as part of a workflow for new employees. Once the data for a new employee has been entered by the human resources department, a workflow could be necessary for each new employee to confirm the data entered.

About This Document

This document shows you how to integrate a *Property Editor UI Pattern* into a new *Composite Application Web Dynpro Component* type Callable Object.

General Prerequisites

- You should either have completed the How-to on “Configuring the Property Editor UI Pattern” (which you can find within the RKT CAF-Core learning map), or you should at least have another configuration for the *Property Editor UI Pattern* available on the same J2EE Engine on which your GP framework resides.
- You need to have finished the CAF Core RKT-Material; otherwise you will not be able to complete this How-to, because the Entity Service will be missing.

Applicable Release

This tutorial is compatible with the following release “Beginning with SAP NetWeaver '04s SPS06”.

Disclaimer

Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, except if such damages were caused by SAP intentionally or grossly negligent.

The Step By Step Solution

To open your Enterprise Portal, enter `http://<Server>:<Port>/irj/portal`. Navigate to tab *Guided Procedures* and choose *Design Time*.



Approaches to Building Up Our Model

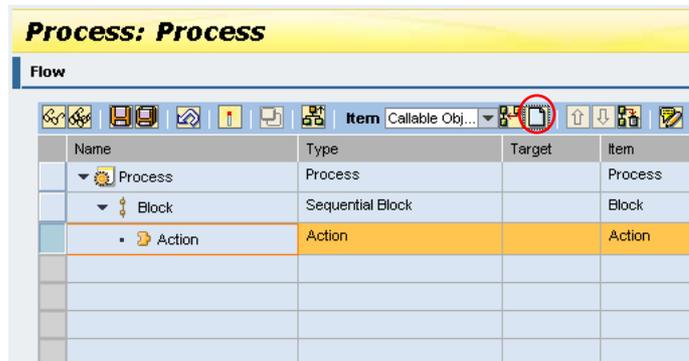
You are free to choose either the top-down approach and create the process, block and action and then insert a new callable object; or you can start with the callable object first without having any other model item.

Top-Down Approach

In this case you first create all design time objects (process, block, and action) that will make use of this callable object.

For further details on this top-down approach see **Error! Reference source not found..**

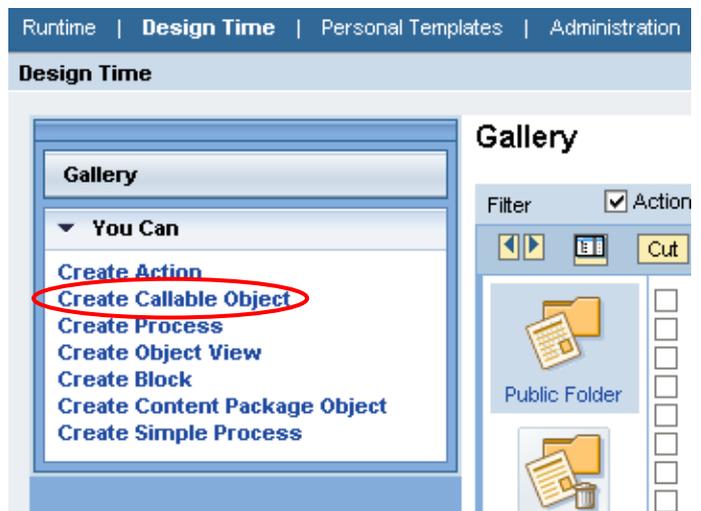
1. Choose  (*Create New*) to embed a new callable object into our existing *Action*.



Bottom-Up Approach

In this case you create the callable object first and insert it in the actions and blocks you create later.

1. In the contextual panel (*You Can*), choose *Create Callable Object* to open the Callable Object design time.



How to Create the Callable Object

2. Select *Composite Application Web Dynpro Component* from the *Type* list.

Enter the following data:

- **Name**, for example **Edit Employee Properties**
- **Description**
- **Language**
- Choose a location for your callable object (*Folder*)

Choose *Next*.

3. From the drop-down box on the *Define Object* screen, select *Property Editor Interface*.

Choose *Select*.

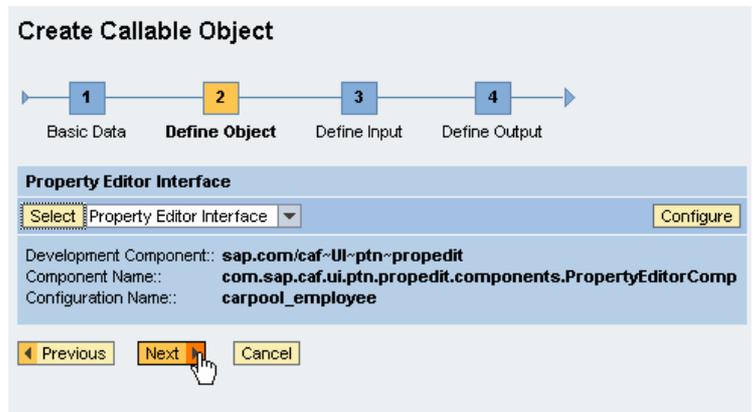
4. In the pop-up window:
 - a. Expand the DC node
`sap.com/caf~UI~ptn~propedit`
 - b. Select the component name
PropertyEditorComp.
 - c. Select the configuration name
carpool_employee or any other available configuration.



If the configuration name is missing, you need to complete

- the CAF core RKT material first.
- d. Choose *OK* to close the pop-up.

5. Choose *Next*.



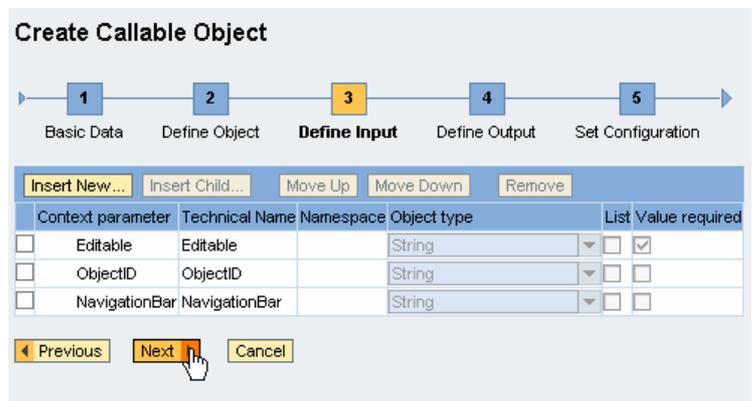
6. In the next steps you do not need to change anything.

All the standard input parameters for the *Property Editor UI Pattern* are listed.



Here we could add further parameters, but as the *Property Editor UI Pattern* would not use them anyway we continue.

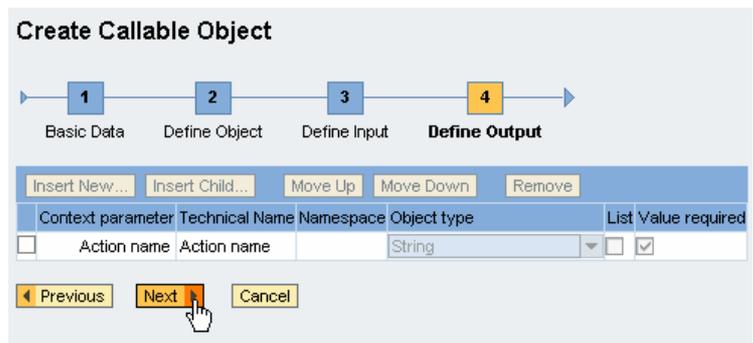
Leave all the input and output parameters for the *Property Editor Pattern* available and choose *Next*.



7. In the next step the output parameters are listed.

Choose *Next*.

To skip the following step that is not required, choose *Next* again.



8. Finally choose *Finish and Open*.

If you started the example using the top-down approach, choose *Finish*.

Create Callable Object



Basic Data Define Object Define Input

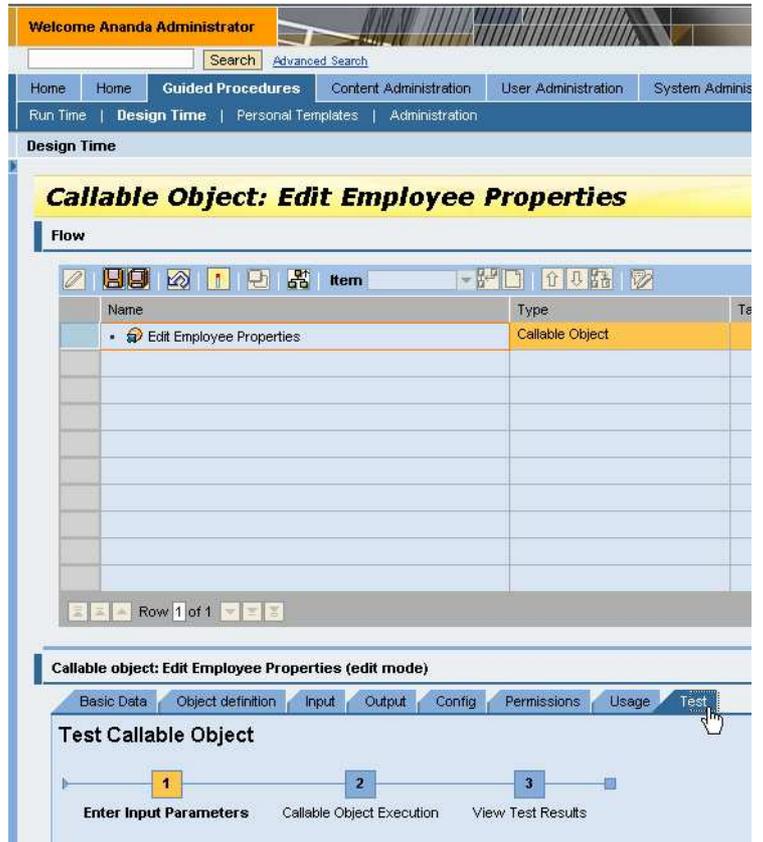
Name: Edit Employee Properties
Type: Composite Application Web Dynpo Component
Description: Edit Employee Properties via Property Editor Pattern

◀ Previous Finish Finish and Open Cancel



How to Test Your Callable Object (Optional)

1. You have created a callable object to configure the *Property Editor Pattern*. You can now test the callable object from the bottom of the *Test* tab screen.



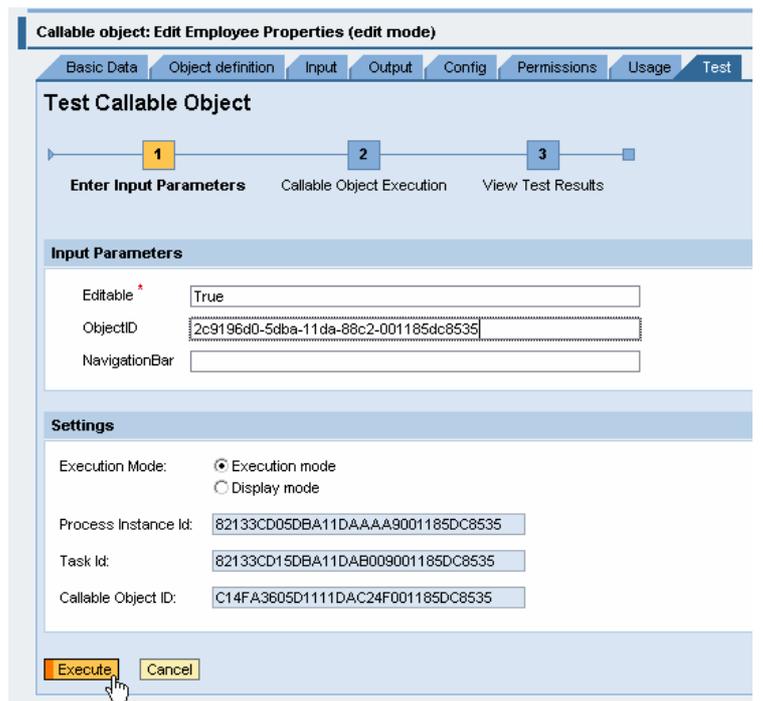
The screenshot shows the SAP GUI interface for configuring a callable object. The title bar reads "Welcome Ananda Administrator". The main menu includes "Home", "Guided Procedures", "Content Administration", "User Administration", and "System Administration". The "Design Time" section is active, showing a table with one row: "Edit Employee Properties" of type "Callable Object". Below the table, the "Test" tab is selected, displaying a process flow with three steps: "Enter Input Parameters", "Callable Object Execution", and "View Test Results".

2. The only input parameter that is mandatory is "Editable". Here you can define whether the data shown by the *Property Editor UI Pattern* should be editable. Enter **True**.



If you know the internal key of an entity service that is shown by the *Property Editor Pattern* (in our example the internal key for an employee), then you can enter this key in the *ObjectID* field. The object ID ensures that only one specific entity will be shown. Otherwise you will be able to browse all entities.

3. Choose *Execute* to execute your callable object for testing.



This screenshot shows the configuration details for the "Test Callable Object". The "Input Parameters" section includes:

- Editable ***: True
- ObjectID**: 2c9196d0-5dba-11da-88c2-001185dc8535
- NavigationBar**: (empty)

 The "Settings" section includes:

- Execution Mode**: Execution mode, Display mode
- Process Instance Id**: 82133CD05DBA11DAAA9001185DC8535
- Task Id**: 82133CD15DBA11DAB009001185DC8535
- Callable Object ID**: C14FA3605D1111DAC24F001185DC8535

 At the bottom, the "Execute" button is highlighted with a mouse cursor, and the "Cancel" button is also visible.

THE BEST-RUN BUSINESSES RUN SAP



www.sap.com/netweaver