

**SAP Composite Application
Framework**



**Creating a Callable
Object: BI
Application**



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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. | | |

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Scenario

You use the callable object of type BI Application to define a Query or Web application (BEx Web Application) that is displayed immediately when the callable object is executed.

About This Document

This tutorial describes how to create a callable object with which you can integrate the results of a BI Query into a Guided Procedures process.

General Prerequisites

A BI System must be configured in the portal system landscape and the connection test for the Web Application Server (WAS) and for the connector must be successful.

Applicable Releases

This tutorial is compatible with the following release” Beginning with SAP NetWeaver '04s SPS6”.

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

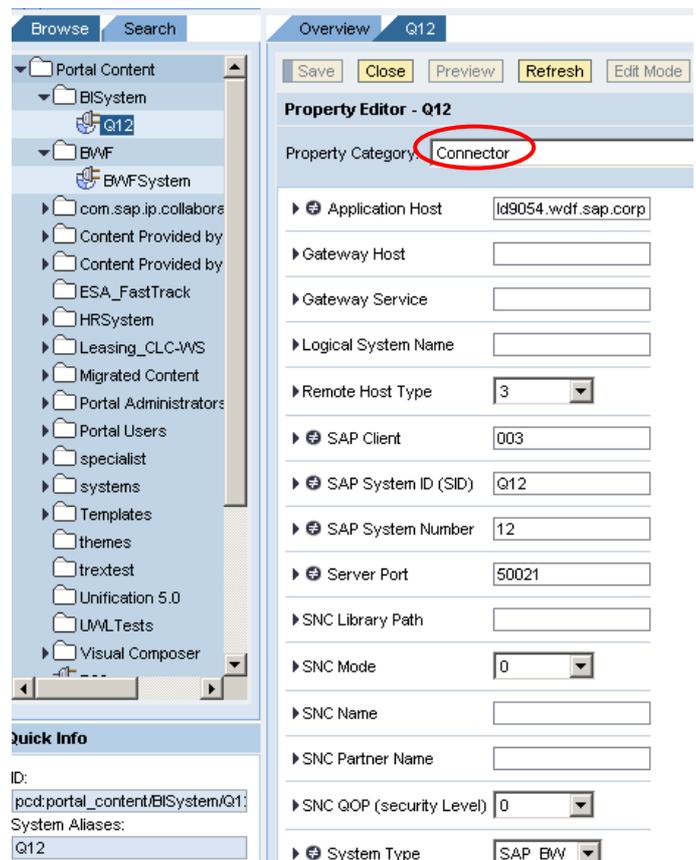
This chapter describes how to create a callable object, provided that the BI system is properly configured in the portal system landscape.

Prerequisites

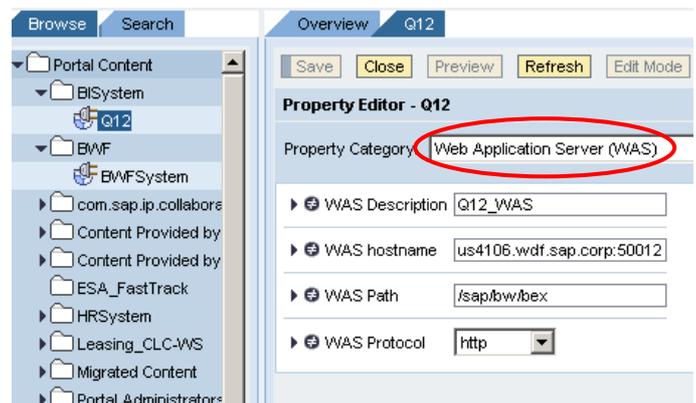
The settings for the BI System within SAP Enterprise Portal must be made in advance. In most cases these settings are already defined, so you should not need to deal with them. The following steps describe the settings that need to be made if an error occurs and you need to check the configuration.

1. Define the BI System in the portal system landscape (*System Administration* → *System Configuration*).

Fill the *Connector* properties with the appropriate values.



2. Define the correct values for the WAS properties.



3. Add an *Alias* to the system.

System Alias Editor

Create new aliases for this system or delete existing ones. A system alias can be any name you choose. The default system in other interfaces, such as User Mapping.

Alias Name:

| Default | Alias Name |
|-------------------------------------|------------|
| <input checked="" type="checkbox"/> | G12 |
| <input type="checkbox"/> | |
| <input type="checkbox"/> | |
| <input type="checkbox"/> | |

User Mapping Status: (Ready for user mapping configuration)

Alias name: G12

4. Define a user mapping for this alias
(*User Administration* → *Identity Management*).

Details

Account Information | Contact Information | Additional Information | Certificates

System Selection

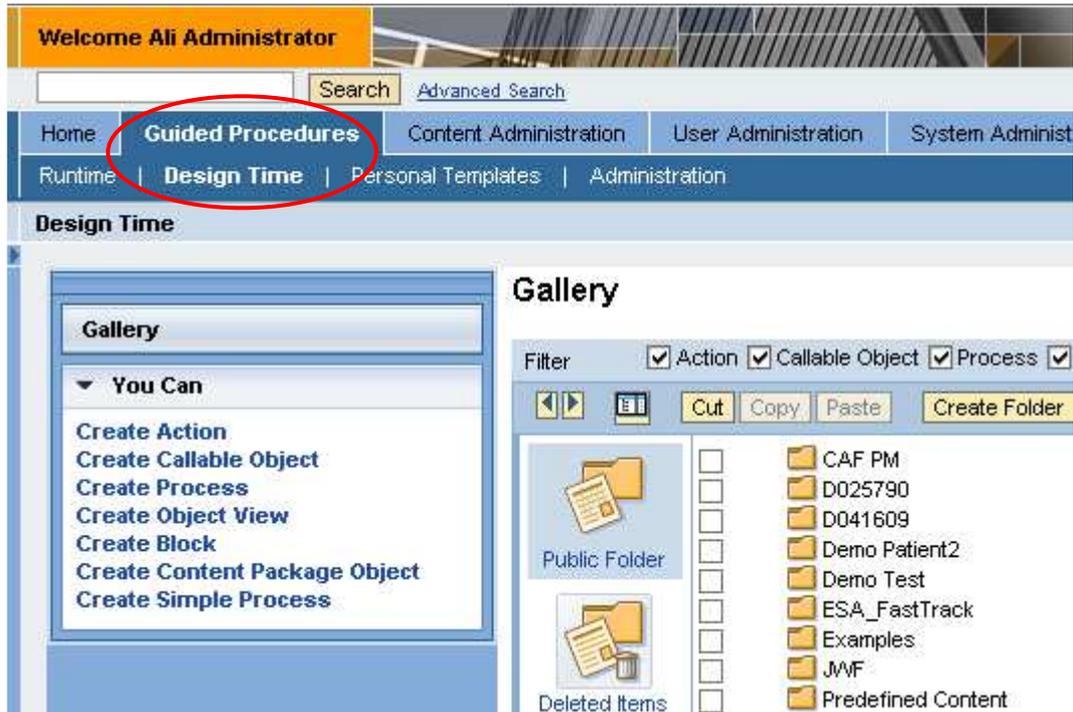
System: [Why are some systems missing?](#)

Mapping Data

Mapped User:

Mapped Password:

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



Approaches to Building a Model

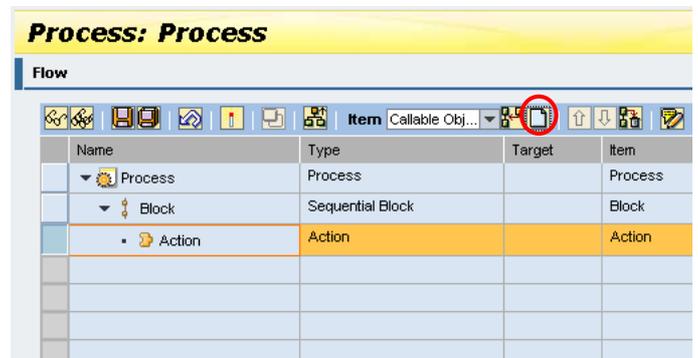
You can choose the top-down approach to create the process, block, and action and then insert a new callable object; alternatively you can use the bottom-up approach to start with the callable object without having any other model item.

Top-Down Approach

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

For further details on this approach see [1].

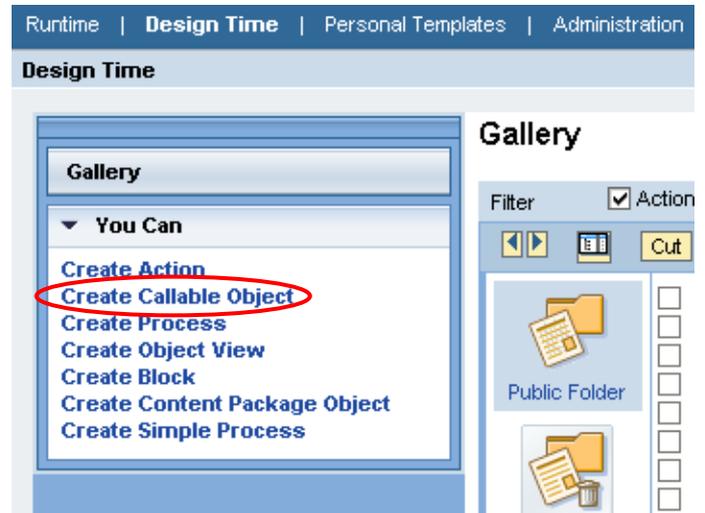
1. Choose  (*Create New*) to embed a new callable object in the existing *Action*.



Bottom-Up Approach

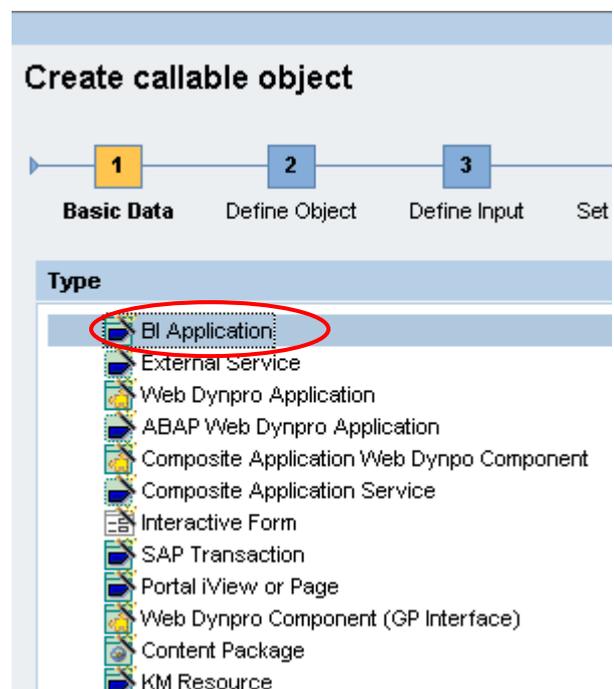
In this case you create the callable object first and insert it in the actions and blocks you create later.

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



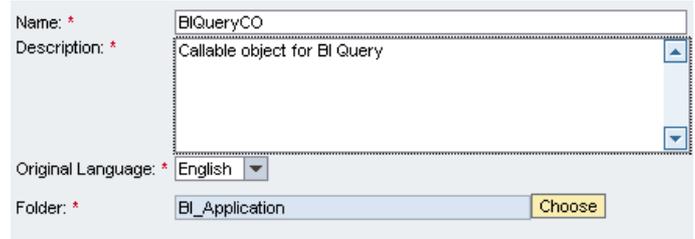
Create a Callable Object of Type BI Application in Guided Procedures Design Time

2. Select *BI Application* from the *Type* list.

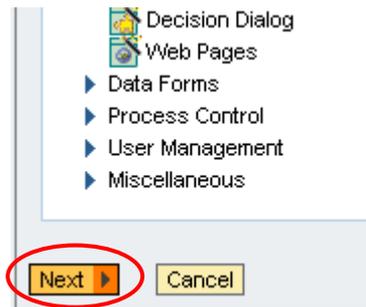


3. Enter the basic data for this callable object:

- *Name*, for example **BIQueryCO**
- *Description*
- *Language*
- Define a location for the callable object (*Folder*)

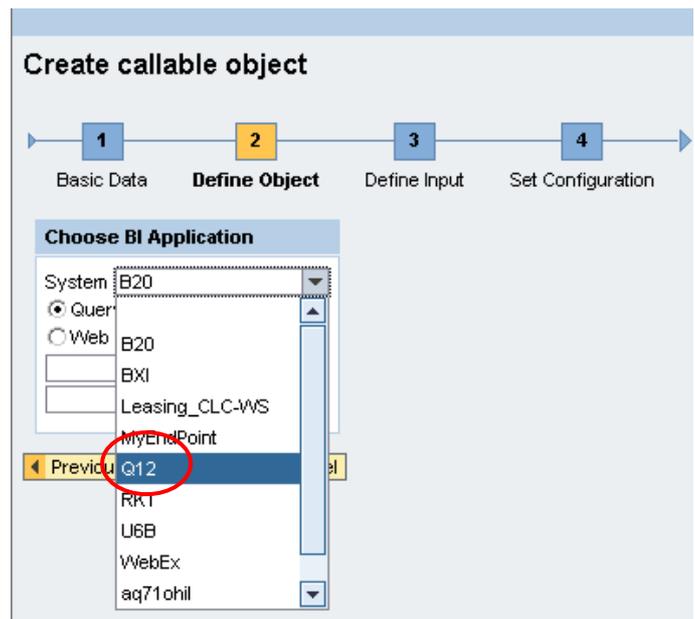


4. Choose *Next*.



5. On the *Define Object* screen, choose the BI System configured in the portal system landscape.

In the *System* dropdown box, select the configured BI System.



6. Select type *Query*.

Create callable object

1 Basic Data 2 **Define Object** 3 Define Input

Choose BI Application

System Q12

Query

Web Application

Previous Next Cancel

7. Enter the name of the query to be executed by this callable object at runtime.

Choose *Next*.

Create callable object

1 Basic Data 2 **Define Object** 3 Define Input

Choose BI Application

System Q12

Query

Web Application

FABCUBES

Previous Next Cancel

8. The *Define Input* screen appears.

The query contains input parameters to be used as a filter that defines the initial state.

Table *Query / Template Parameter* shows some standard options.

In the example, choose *Filter by Distribution Channel*.

Create callable object

1 Basic Data 2 Define Object 3 **Define Input** 4 Set Configuration 5 Finish

Callable Object Parameter

| Description | Parameter Type | Mandatory | Data Type | Data Length | Mapped Parameter |
|-------------|----------------|-----------|-----------|-------------|------------------|
| | | | | | |
| | | | | | |
| | | | | | |

Remove Show Query Parameters

Query / Template Parameter

| Description | Data Type | Data Length |
|---------------------------------------|-----------|-------------|
| Filter by Country key | CHARACTER | 3 |
| Filter by Distribution Channel | CHARACTER | 2 |
| Filter by Ship to customer | CHARACTER | 10 |
| Filter by Order Number | CHARACTER | 12 |

Transfer Hide Query Parameters

9. Choose *Transfer*.

Query / Template Parameter

| Description | Data Type | Data Length |
|---------------------------------------|-----------|-------------|
| Filter by Country key | CHARACTER | 3 |
| Filter by Distribution Channel | CHARACTER | 2 |
| Filter by Ship to customer | CHARACTER | 10 |
| Filter by Order Number | CHARACTER | 12 |

Transfer Hide Query Parameters

10. The parameter type specifies the possible format of the parameter, for example an interval or a single value.

Open the dropdown box in the *Parameter Type* field and select *Single Value*, then choose *Next*.

Previous Next Cancel

Callable Object Parameter

| Description | Parameter Type | Mandatory | Data Type | Data Length |
|--------------------------------|----------------|--------------------------|-----------|-------------|
| Filter by Distribution Channel | Interval | <input type="checkbox"/> | CHARACTER | 2 |
| | Single Value | | | |
| | Multiple Value | | | |
| | Interval | | | |

Remove Show Query Parameters

11. On the *Set Configuration* screen you can define additional technical options.

- Option *Show Documents* defines whether documents are displayed in the query.
- If option *Accessibility Mode* is selected, the Query (or Web) Application starts in this mode.
- Option *URL Appendix* allows you to add commands to the Query (or Web) Application as described in the BI documentation.

Choose *Next* as we do not need these options in this example.

Create callable object

1 Basic Data 2 Define Object 3 Define Input

Configuration Parameters

Show Documents

Accessibility Mode

URL Appendix

◀ Previous **Next ▶** Cancel

12. Choose *Finish and Open*.

Create callable object

1 Basic Data 2 Define Object 3 Define Input

Name: BIQueryCO

Type: BI Application

Description: Callable object for BI Query

◀ Previous Finish **Finish and Open** Cancel

13. Open the *Test* tab page to display the testing dialog at the bottom of the page.

Callable object: BIQueryCO

Basic Data Object Definition Input Config Permissions Usage **Test**

Name: BIQueryCO

Description: Callable object for BI Query

Original Language: English

Folder: BI_Application

14. Enter any input parameter(s).

In the example, you want to filter the query result by distribution channel 01.

To start the test, choose *Execute*.

Test Callable Object

1 Enter Input Parameters 2 Callable Object Execution 3 View Test Results

Input Parameters

I_CHA_ODISTR_CHAN 01

Settings

Execution Mode: Execution mode
 Display mode

Process Instance ID: 3CE933A08CBB11DA9D2B0050568B1985

Task ID: 3CE933A18CBB11DA90DD0050568B1985

Callable Object ID: DE7050508CB611DAB6CE0050568B1985

Execute

15. The filtered query result is displayed in another browser window.

At runtime, the result appears in the same browser window.

BEx Ad-hoc Analysis

Data Analysis Graphical display Information Information Broadcasting

Fabcube5 Last Data Update: 18.01.2005 13:46:54

| Country | Ship to customer | Order Number | Net value of credit memos | Credit memos quantity | Invoiced quantity |
|---------|------------------|----------------|---------------------------|-----------------------|-------------------|
| DE | Germany | FABSHP_035 | 89 89 | 0,00 EUR | 0 ST 103 ST |
| | | Result | | 0,00 EUR | 0 ST 103 ST |
| | | FABSHP_065 | 967 967 | 0,00 EUR | 0 ST 95 ST |
| | | Result | | 0,00 EUR | 0 ST 95 ST |
| | | FABSHP_066 | 854 854 | 0,00 EUR | 0 ST 10 ST |
| | | Result | | 0,00 EUR | 0 ST 10 ST |
| | | Overall Result | | 0,00 EUR | 0 ST 208 ST |

16. Close the window containing the result of the query and choose *Complete Step*.

Test Callable Object

1 Enter Input Parameters 2 Callable Object Execution 3 View Test Results

Complete Step

Cancel Execution

17. Upon normal completion, the result is: *Completed successfully*.

You can repeat the test by choosing *Start Over*.

Test Callable Object

1 Enter Input Parameters 2 Callable Object Execution 3 View Test Results

Result

Result: Completed successfully

Result details: [COMPLETE] No state text available

Output Parameters

Callable object implementation did not return output parameters

Start Over

- 18.** You can activate your callable object by choosing  (Activate) or implicitly by activating the process that encapsulates this CO.

