

**SAP Composite Application
Framework**



**Creating a Callable
Object: KM
Resource**



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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

This callable object integrates resources residing in the Knowledge Management repository of SAP Enterprise Portal.

The following KM resources can be used in a process:

- Document (file)
- Folder
- Trex search results

The *Document* and *Folder* refer to the resources in the Knowledge Management repositories of SAP Enterprise Portal. The document and folder callable objects do not have any input parameters. During runtime, they display the contents of the document or folder.

The *Trex* callable object searches the indexed Knowledge Management repositories for specific key words or properties. It has input parameters that must be configured during the callable object design time. The input parameters can be search terms or property values. During runtime, the callable object creates a search URL including the input parameters in order to display the search results.

About This Document

This tutorial contains a step-by-step example for two KM resource types, including an explanation of how to create and use this kind of callable object.

General Prerequisites

Optional: A text file uploaded into a folder contained in the KM repository of the portal

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

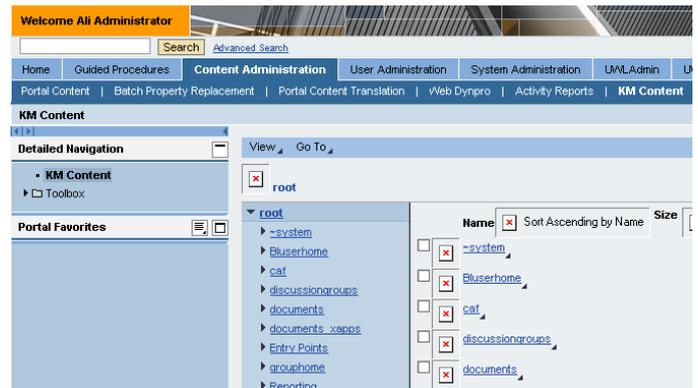
You can choose the type of KM resource you want to create: a *File*, *Folder*, or both. If you do not have a file to use for the callable object, you should also perform the first preparation steps (Section 3.1).

Prepare a Text File (Optional)

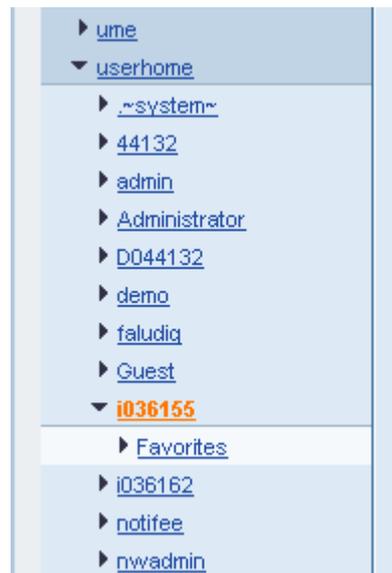
Create a simple text file in the KM repository of SAP Enterprise Portal.

1. Open your SAP Enterprise Portal with `http://<Server>:<Port>/irj/portal`, navigate to tab *Content Administration* and choose *KM Content*.

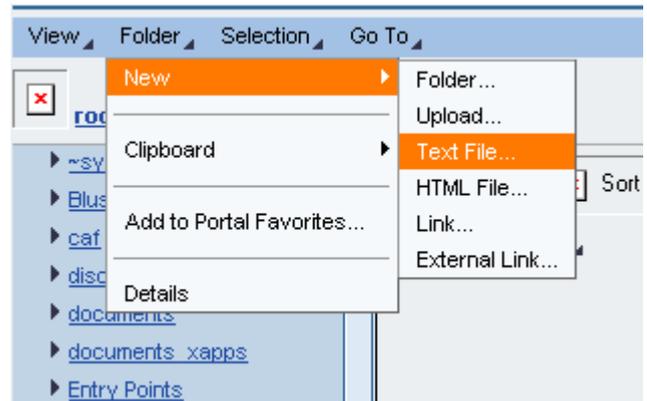
You must have the appropriate portal permissions.



2. Select the folder in which you want to create your text file.



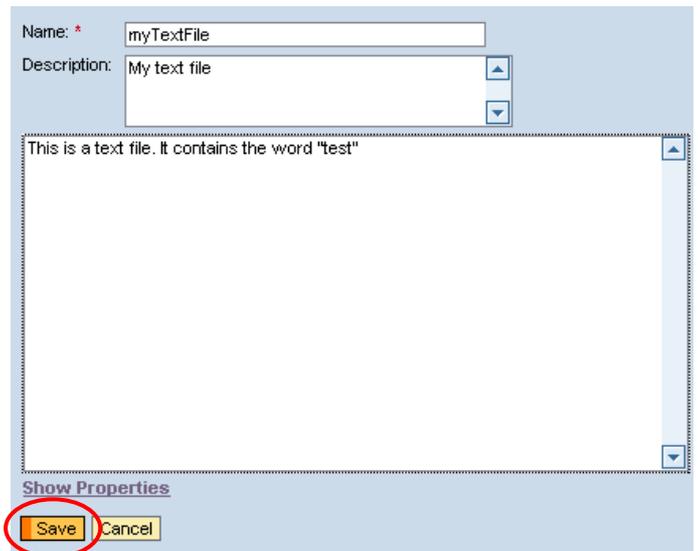
3. Choose *Folder* → *New* → *Text File...*



4. Enter the following values:

- **Name:** myTextFile
- **Description:** My text file
- In the text area (content of file) enter: **This is a text file. It contains the word "test."**

Store this new file with **Save**.

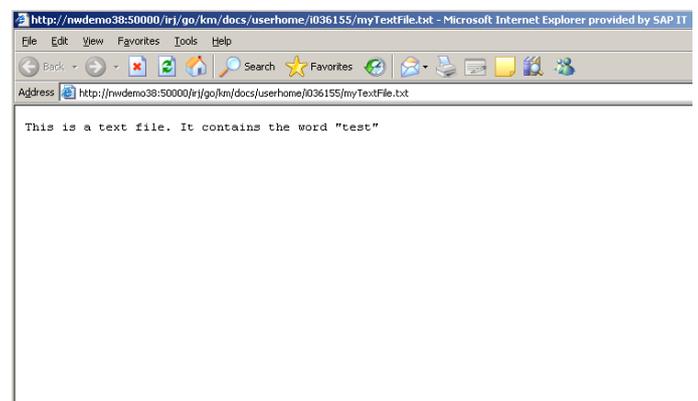


5. Your text file appears in the given folder.



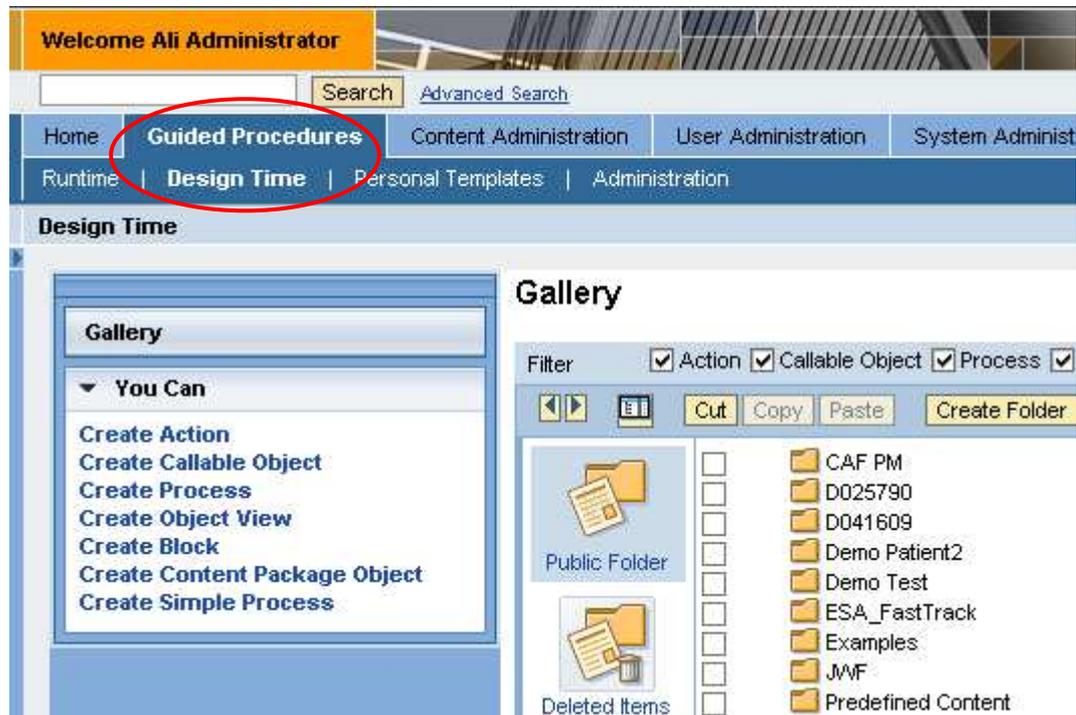
6. Click the *myTextFile* link to open a new browser window showing the contents of the text file.

You now have your own KM resource that you can use in the next steps.



Starting the Guided Procedures Design Time

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



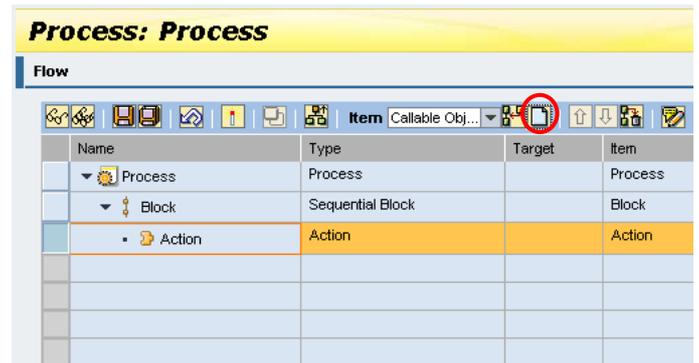
Approaches to Building the Model

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 design time objects (process, block, action) that will make use of this callable object beforehand.

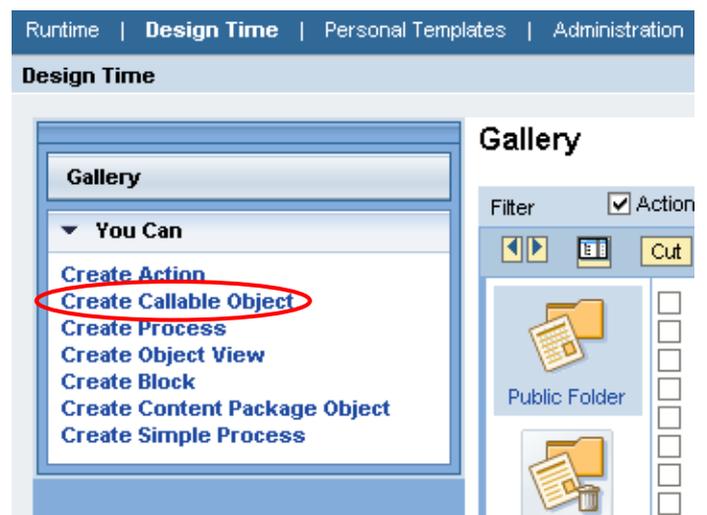
1. Choose  (*Create New*) to embed a new callable object in the existing *Action*.



Bottom-Up Approach

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

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



Create KM Resource of Type *File*

1. Select *KM Resource* from the *Type* list.

Create callable object

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

Type

- BI Application
- External Service
- Web Dynpro Application
- ABAP Web Dynpro Application
- Composite Application Web Dynpro Component
- Composite Application Service
- Interactive Form
- SAP Transaction
- Portal iView or Page
- Web Dynpro Component (GP Interface)
- Content Package
- KM Resource**
- Background Execution
- Business Server Page (BSP)
- Decision Dialog
- Web Pages
- Data Forms
- Process Control
- User Management
- Miscellaneous

Name: *
Description: *
Original Language: *
Folder: *

Next > Cancel

2. Enter the basic data for this callable object:

- *Name* – **FileKMResource**
- *Description* – **KM resource of type: file**
- *Original Language* – **English**
- Define a location (*Folder*) for your callable object

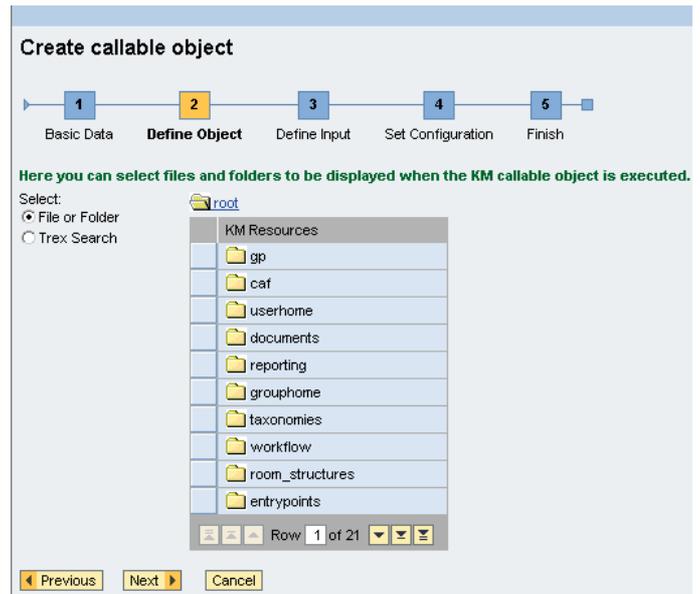
Name: * FileKMResource
Description: * KM resource of type: file
Original Language: * English
Folder: * KM Resource Choose

3. Choose *Next*.

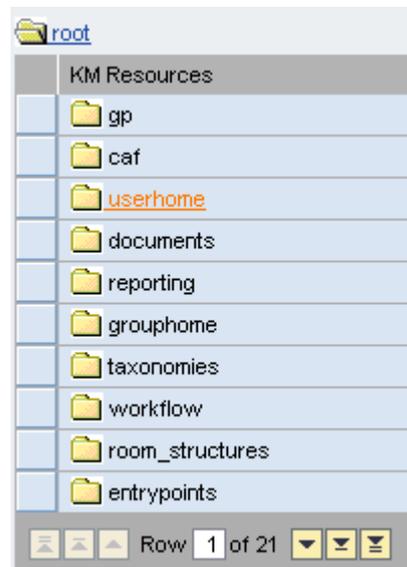
Content Package
KM Resource
Background Execution
Business Server Page (BSP)
Decision Dialog
Web Pages
Data Forms
Process Control
User Management
Miscellaneous

Next > Cancel

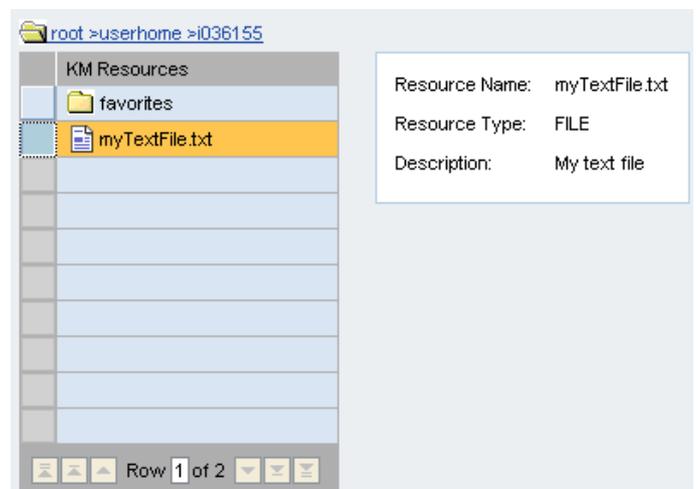
- On the *Define Object* screen select the type of KM resource. The *File or Folder* option is selected by default.



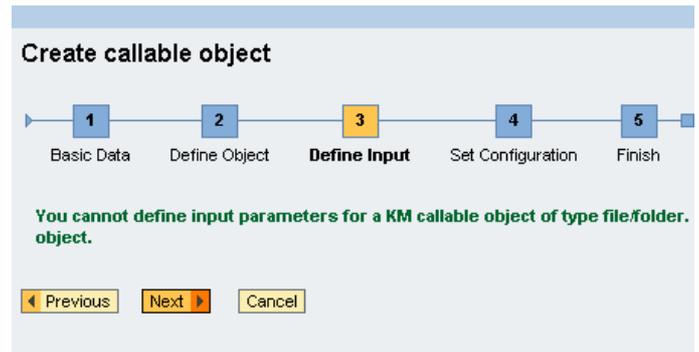
- Select the folder (it may be a subfolder) containing the text file that you want to present??? in the process.



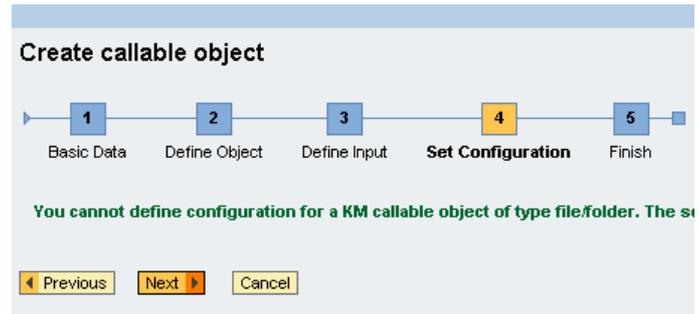
- Select the text file and choose **Next** (Next).



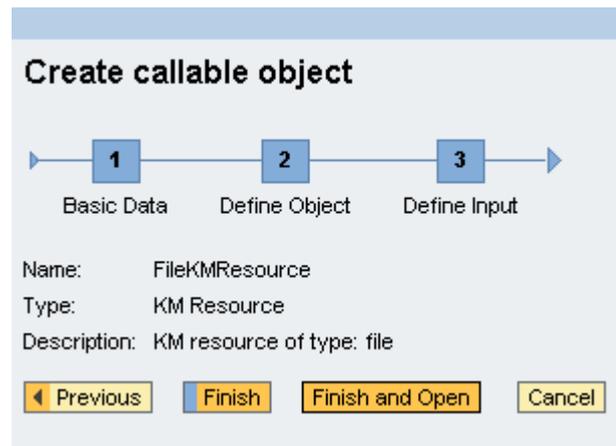
7. Since there are no input parameters for a file, choose *Next*.



8. You cannot define a configuration for a KM resource of type *File*. Choose *Next* to continue.



9. On the final screen, choose *Finish and Open*.



10. The callable object is saved. Now you can test its behavior at runtime.

Choose the *Test* tab at the bottom of the page.

Name	Type	Target	Item
FileKMResource	Callable Object		FileKMResource

Callable object: FileKMResource

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

Name: FileKMResource

Description: KM resource of type: file

Original Language: English

Folder: KM Resource

Callable object has been created

11. There are no input parameters. Choose *Execute*.

Test Callable Object

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

Input Parameters

Callable object does not have any input parameters

Settings

Execution Mode: Execution mode Display mode

Process Instance ID: 181E74C0842011DA83F30050568B1985

Task ID: 181E74C1842011DA9B4E0050568B1985

Callable Object ID: A6D6D280841F11DAA6260050568B1985

Execute

12. The contents of your text file are displayed.

Choose *Complete Step* to finish the test.

The screenshot shows the 'Test Callable Object' interface. At the top, there is a progress bar with three steps: '1 Enter Input Parameters', '2 Callable Object Execution', and '3 View Test Results'. Step 2 is currently active and highlighted in yellow. Below the progress bar, there is a 'Complete Step' button. The main content area displays the text: 'This is my text file. It contains the word "test".'. At the bottom of the interface, there is a 'Cancel Execution' button.

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

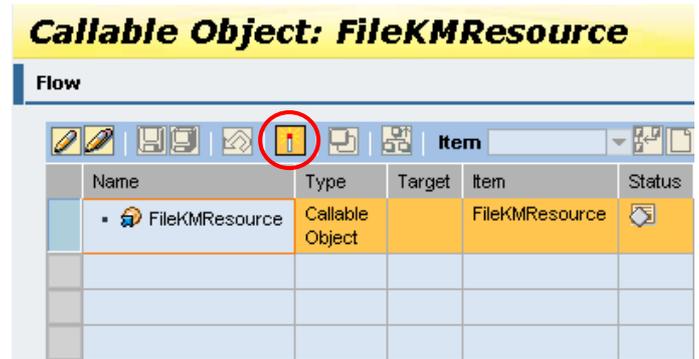
You can run the test again by choosing *Start Over*.

The screenshot shows the 'Test Callable Object' interface. At the top, there is a progress bar with three steps: '1 Enter Input Parameters', '2 Callable Object Execution', and '3 View Test Results'. Step 3 is currently active and highlighted in yellow. Below the progress bar, there is a 'Result' section with a green square icon and the text 'Completed successfully'. Below that, there is a 'Result details' section with the text '[COMPLETE] Complete'. Below the result section, there is an 'Output Parameters' section with the text 'Callable object implementation did not return output parameters'. At the bottom of the interface, there is a 'Start Over' button.

- 14.** You can activate your callable object by choosing  (Activate) or do so implicitly by activating the process which encapsulates this CO.

Callable Object: FileKMResource

Flow



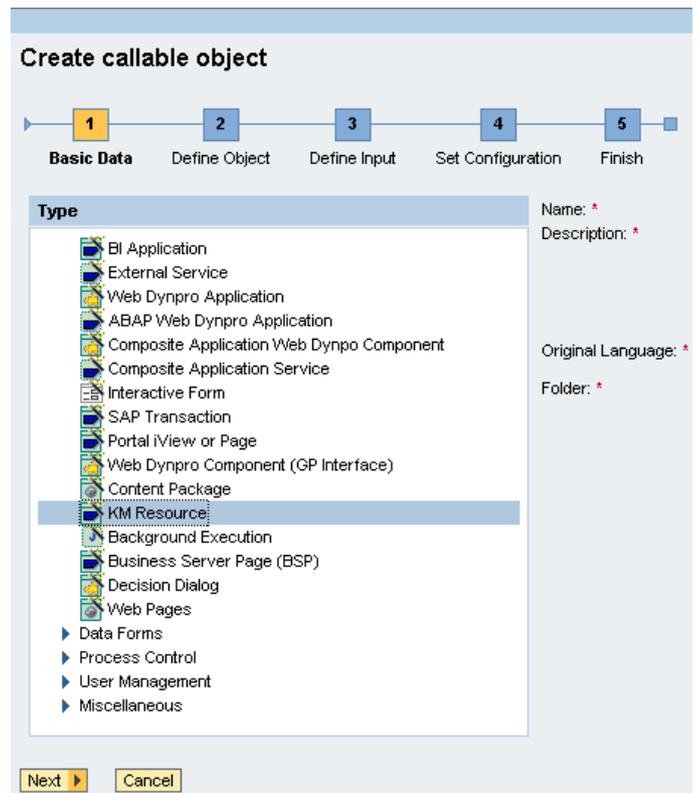
Name	Type	Target	Item	Status
▪ FileKMResource	Callable Object		FileKMResource	

Create KM Resource of Type Folder

1. Select the folder where you want to store your items (create it if necessary). In the contextual *You Can* panel, choose *Create Callable Object* to start the callable object design time.

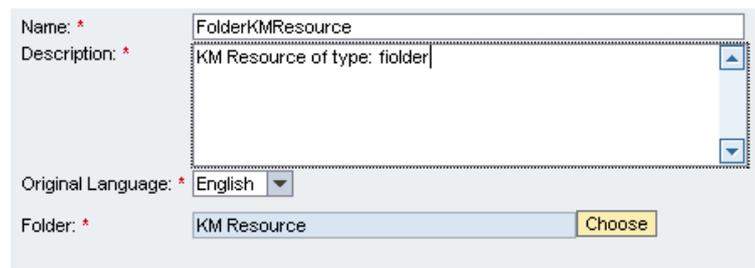


2. Select *KM Resource* from the *Type* list.



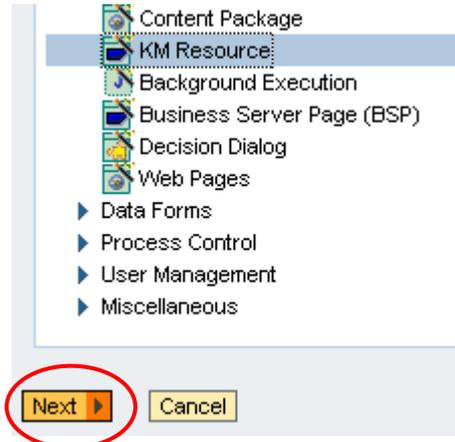
3. Enter the basic data for this callable object:

- *Name* – **FolderKMResource**
- *Description* – **KM resource of type: folder**
- *Original Language* – **English**

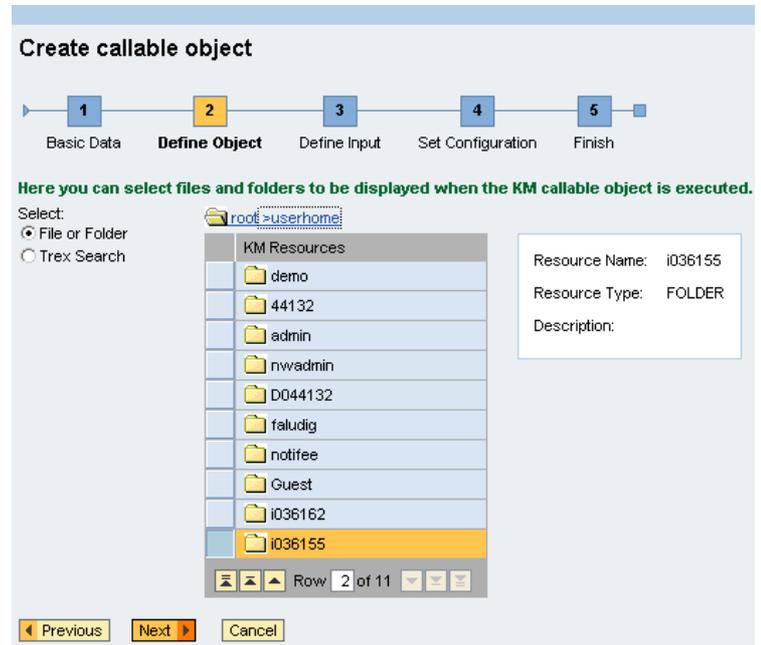


- Define a location (*Folder*) for your callable object

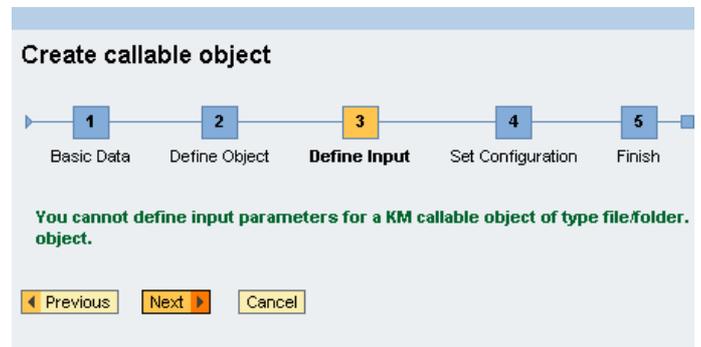
4. Choose *Next*.



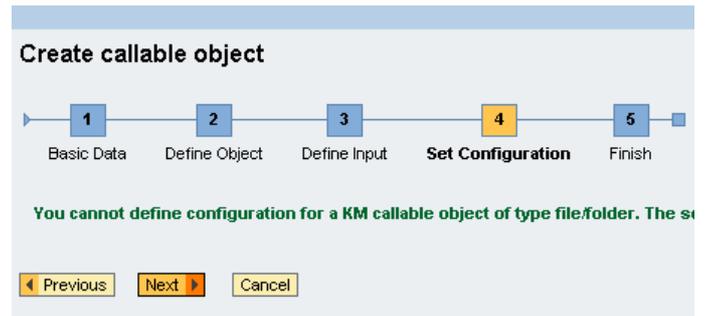
5. On the *Define Object* screen, select the type of KM resource. The *File or Folder* option is selected by default.



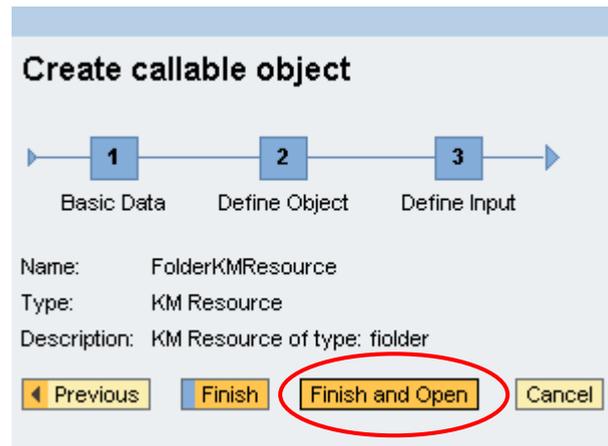
6. Since there are no input parameters for a folder, choose *Next*.



7. You cannot define a configuration for a KM resource of type file. Choose *Next* to continue.

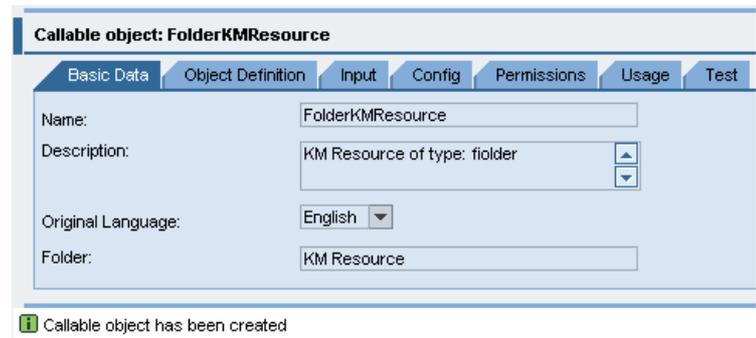


8. On the final screen choose *Finish and Open*.



9. The callable object is saved. Now you can test its behavior at runtime.

Choose the *Test* tab at the bottom of the page.



10. There are no input parameters.
Choose *Execute*.

The screenshot shows the 'Test Callable Object' interface. At the top, there is a progress bar with three steps: 1. Enter Input Parameters (highlighted in yellow), 2. Callable Object Execution, and 3. View Test Results. Below the progress bar, the 'Input Parameters' section states 'Callable object does not have any input parameters'. The 'Settings' section includes 'Execution Mode' with radio buttons for 'Execution mode' (selected) and 'Display mode'. It also shows 'Process Instance ID', 'Task ID', and 'Callable Object ID' with their respective values in input fields. At the bottom, the 'Execute' button is circled in red.

11. The contents of the given folder are displayed (files or subfolders included). You can also navigate in the folders and open the documents.

Choose *Complete Step* to finish the test.

The screenshot shows the 'Test Callable Object' interface. The progress bar now has step 2, 'Callable Object Execution', highlighted in yellow. Below the progress bar, the 'Complete Step' button is circled in red. The main area displays a file explorer view with columns for Name, Size Rating, Annotations, and Modified. The files listed are 'i036155', 'Favorites', and 'myTextFile'.

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

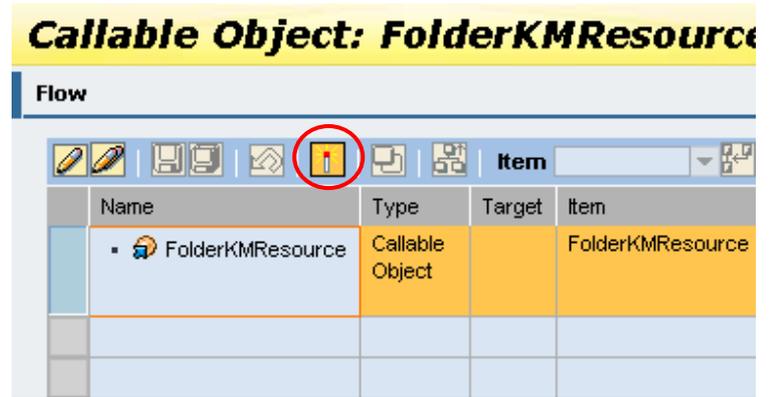
You can run the test again by choosing *Start Over*.

The screenshot shows the 'Test Callable Object' interface. The progress bar now has step 3, 'View Test Results', highlighted in yellow. Below the progress bar, the 'Result' section shows 'Result: Completed successfully' with a green checkmark icon. The 'Result details' section shows '[COMPLETE] Complete'. The 'Output Parameters' section states 'Callable object implementation did not return output parameters'. At the bottom, the 'Start Over' button is visible.

- 13.** You can activate your callable object by choosing  (Activate) or do so implicitly by activating the process which encapsulates this CO.

Callable Object: FolderKMResource

Flow



The screenshot shows a software interface with a toolbar and a table. The toolbar contains several icons, with the 'Activate' icon (a yellow lightning bolt) circled in red. The table below has the following data:

Name	Type	Target	Item
▪ FolderKMResource	Callable Object		FolderKMResource

