

Integrated use of IBM WebSphere Adapter for Siebel 7.0.0.0 and SAP 7.0.0.0 with WPS Relationship Service

Quick Start Scenarios

1. **Note:** Before using this information and the product it supports, read the information in the “Notices” section, at the end of this document.
2. This edition applies to version 7, release 0, and modification 0 of IBM WebSphere Adapter for Siebel, IBM WebSphere Adapter for SAP and to all subsequent releases and modifications, until otherwise indicated in new editions.
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Chapter 1. Introduction

The Siebel Resource Adapter (RA) enables exchange of data with the Siebel EIS through two types of Siebel objects – Siebel Business Services and Siebel Business Objects.

The SAP Resource Adapter creates integrated processes that include the exchange of information with an SAP server, without special coding.

Learning Objectives

After completing this tutorial, you should be able to perform the following tasks:

- Create an adapter project in WebSphere Integration Developer (WID).
 - Create an integration sample using existing Siebel and SAP imports, invoked using a Plain-Old Java Object (POJO).
 - Create a deployable module that you install on WebSphere Process Server (WPS) or WebSphere Enterprise Service Bus (WESB).
 - Test the module and validate the results.
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Audience

Integration developers who design, assemble, test, and deploy business integration solutions will find this tutorial useful.

Software prerequisites

To use this tutorial, you must install the following applications:

- WebSphere Integration Developer version 7.0
 - WebSphere Process Server version 7.0
 - Siebel EIS
 - SAP EIS
-

Chapter 2. **Preparing to run through the tutorial**

Configuration prerequisites

Before testing this tutorial, make sure you understand how to create an outbound interface for IBM WebSphere SAP Adapter 7.0 and IBM WebSphere Siebel Adapter 7.0.

Chapter 3. **Creating a synchronization application which automatically updates SAP records when the corresponding Siebel record is updated**

This tutorial demonstrates how to use WebSphere Process Server's Relationship Server (static) to lookup linked customer IDs for automatically syncing SAP and Siebel records.

Scenario

This application uses a POJO to initially create records in both Siebel and SAP EISes, and map the created unique IDs to a logical ID using the Relationship Service. When an update is issued to a Siebel record (the unique ID is part of the request), the corresponding SAP ID is looked up using the Relationship Service and the update is completed. Similar strategy can be used for the Retrieve and Delete operations too. A generic interface has been designed to integrate both these applications.

Configuring the adapter for outbound processing

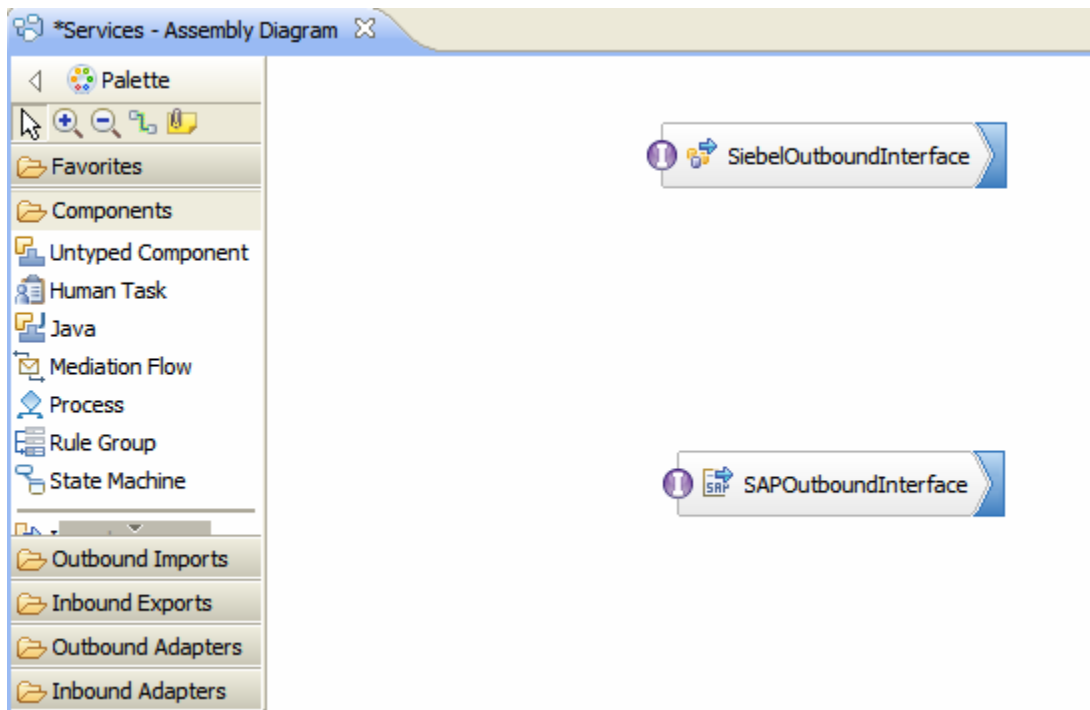
Run the **New External Service** wizard to specify business objects, services, and configuration to be used in this tutorial.

Creating the project

1. Switch to the WID Business Integration Perspective by choosing **Window -> Open Perspective -> Business Integration**.
 2. Create a new Module by choosing: **File -> New -> Module**. Enter the Module name as 'Samplev1' and click **Finish**.
 3. Refer to the QSS for Siebel and SAP to create the corresponding Imports.
 4. For Siebel, use the **Contact** object using the Siebel Business Object Interface.
 5. For SAP, use
-

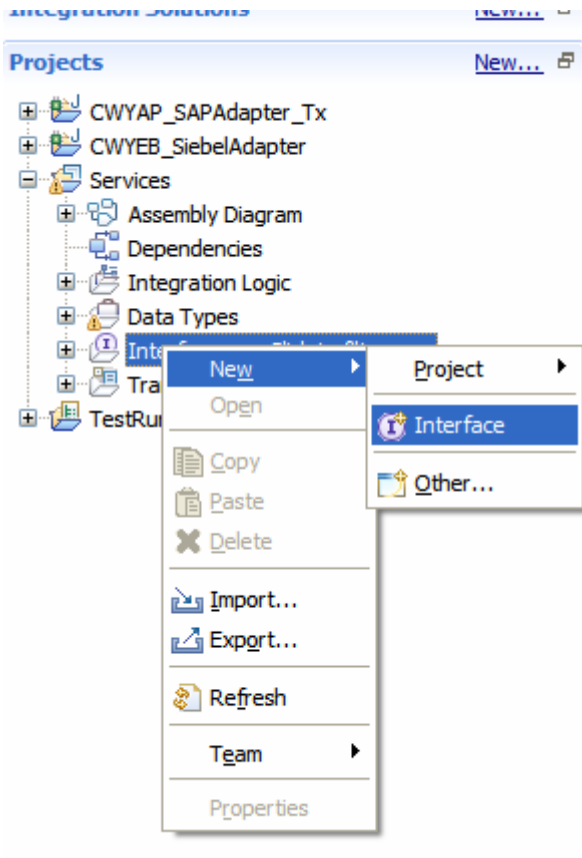
- a. **BAPI_CUSTOMER_CREATEFROMDAT1** to create a new customer
- b. **BAPI_CUSTOMER_CHANGEFROMDATA** to update a customer's information
- c. **BAPI_CUSTOMER_GETDETAIL** to retrieve customer details


6. The following diagram represents an assembly diagram for a module that was created.

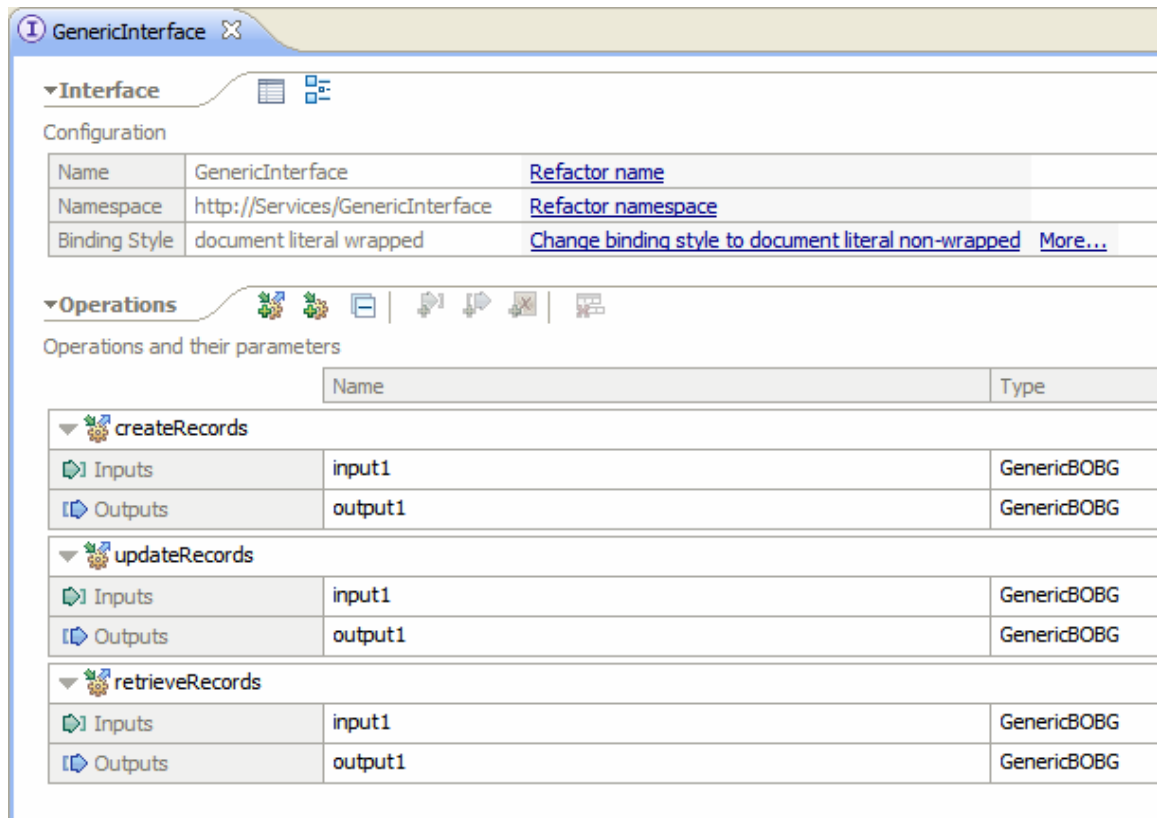


Creating a new Generic Interface

- 7. Right-click **Interfaces** -> **New** -> **Interface**



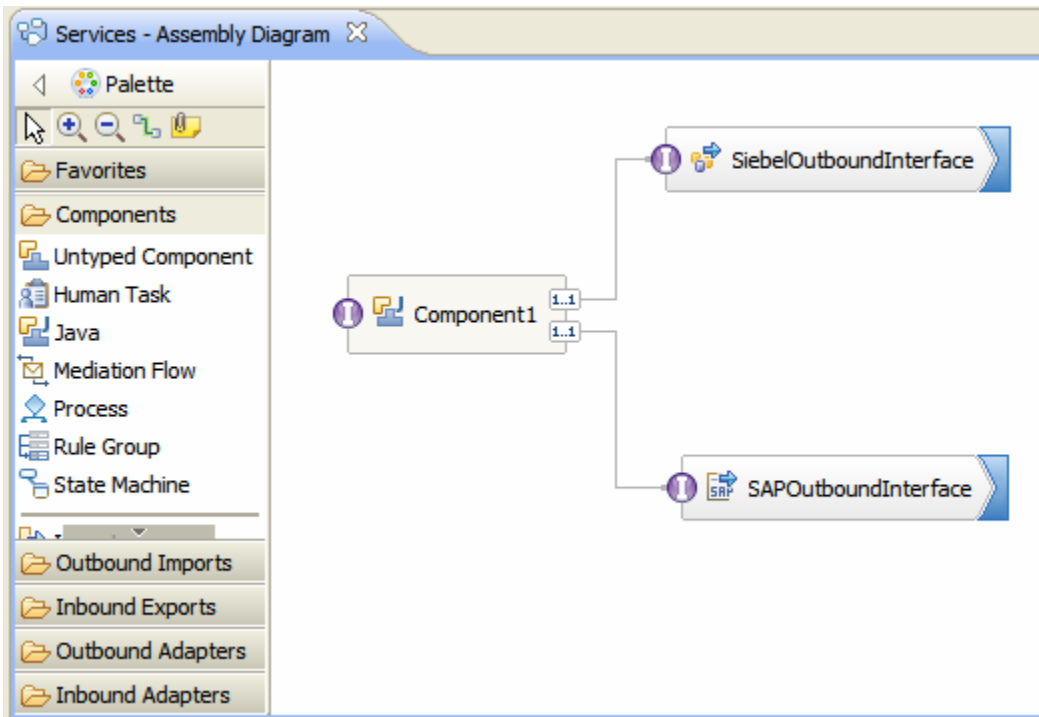
8. Enter **GenericInterface** as the interface name.
9. Click  to add three Request Response Operations which are: **createRecords**, **updateRecords** and **retrieveRecords**.



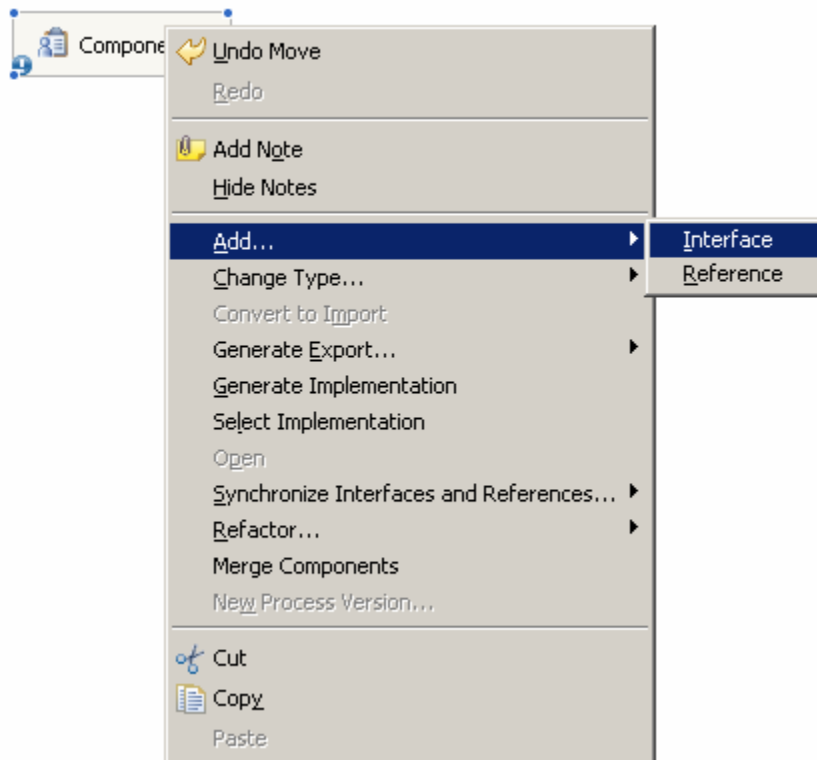
10. Use **GenericBOBG** as the Input and Output types for the three operations.

Creating a POJO to implement the core interface

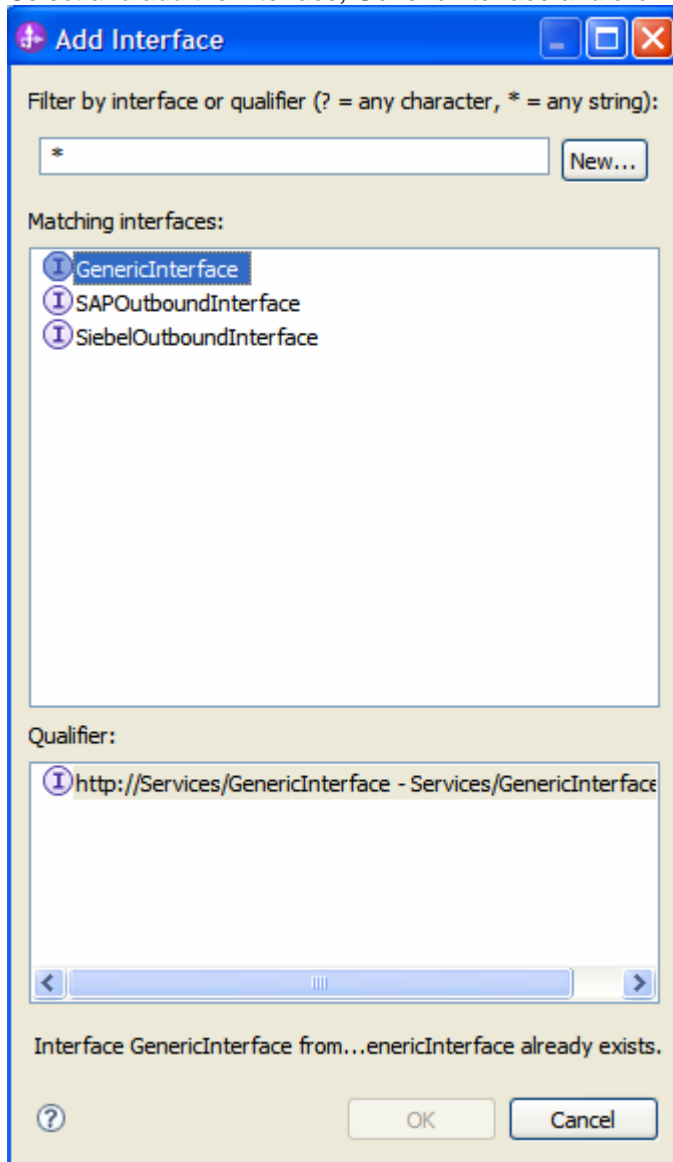
1. Add a POJO to the Assembly diagram and wire it to the SAP and Siebel interfaces.



2. Right-click Human Task component -> **Add** -> **Interface**



3. Select and add the interface, *GenericInterface* and click **OK**.



Implement the POJO

1. Right-click the POJO component -> **Generate Implementation**.

2. Add the code to the Component Implementation and also into your implementation. The following snippet of code is used to invoke the Relationship Service manually and generate a managed ID. The second line of code is used to link the SAP ID with the managed ID.

```
try {
int genId = relService.addParticipantString(relationshipName, siebelRole, siebelID);
relService.addParticipantStringWithID(relationshipName, sapCreateRole, genId, sapID);
} catch (RelationshipServiceException e) {
```

```

        e.printStackTrace();
    } catch (RelationshipUserException e) {
        e.printStackTrace();
    }

    return input1;
}

```

The following snippet of code is used to retrieve the corresponding SAP ID for a Siebel ID that is mapped using a managed ID.

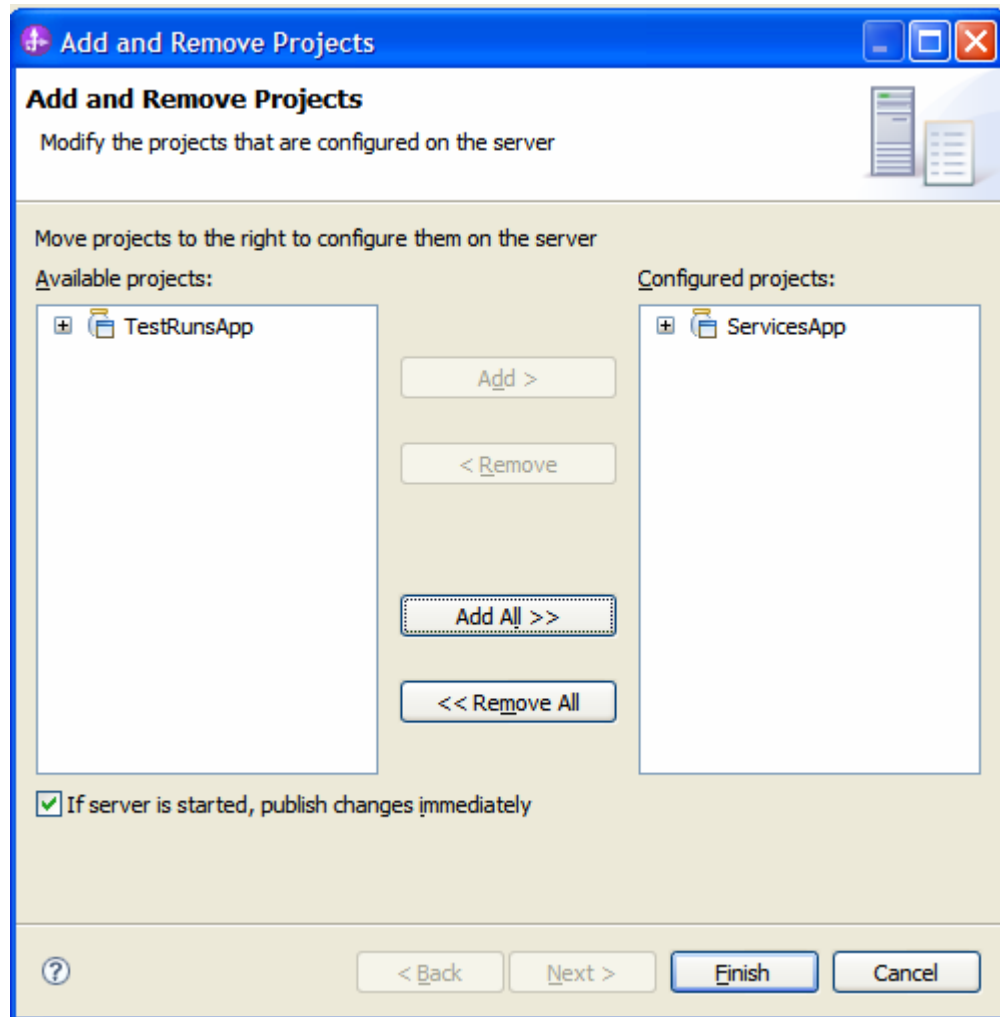
```

/*
 * The SAP ID will be retrieved with the help of the Relationship Service
 */
int[] ids;
try {
    ids = relService.retrieveInstanceIDsByString(relationshipName, siebelRole, siebelID);
    if(ids.length > 0) {
        List codes = relService.retrieveParticipants(relationshipName, sapCreateRole, ids[0]);
        if(!codes.isEmpty()) {
            sapID = ((DataObject)
codes.get(0)).getDataObject("SapBapiCustomerCreatefromdata1").getString("NewCustomerNu
mber");
        }
    }
} catch (RelationshipServiceException e) {
    e.printStackTrace();
} catch (RelationshipUserException e) {
    e.printStackTrace();
} catch (Exception e) {
    e.printStackTrace();
}
}

```

Deploying the module in the test environment

1. When you run the **New External Service** wizard, the SCA module is displayed, with the Enterprise Integration System (EIS) Import or Export feature.
2. Install the SCA module in the WID test client.
3. Add the module that you created earlier to the server using the WID Server Panel.
4. Right-click the server node and select **Add and Remove Projects**.

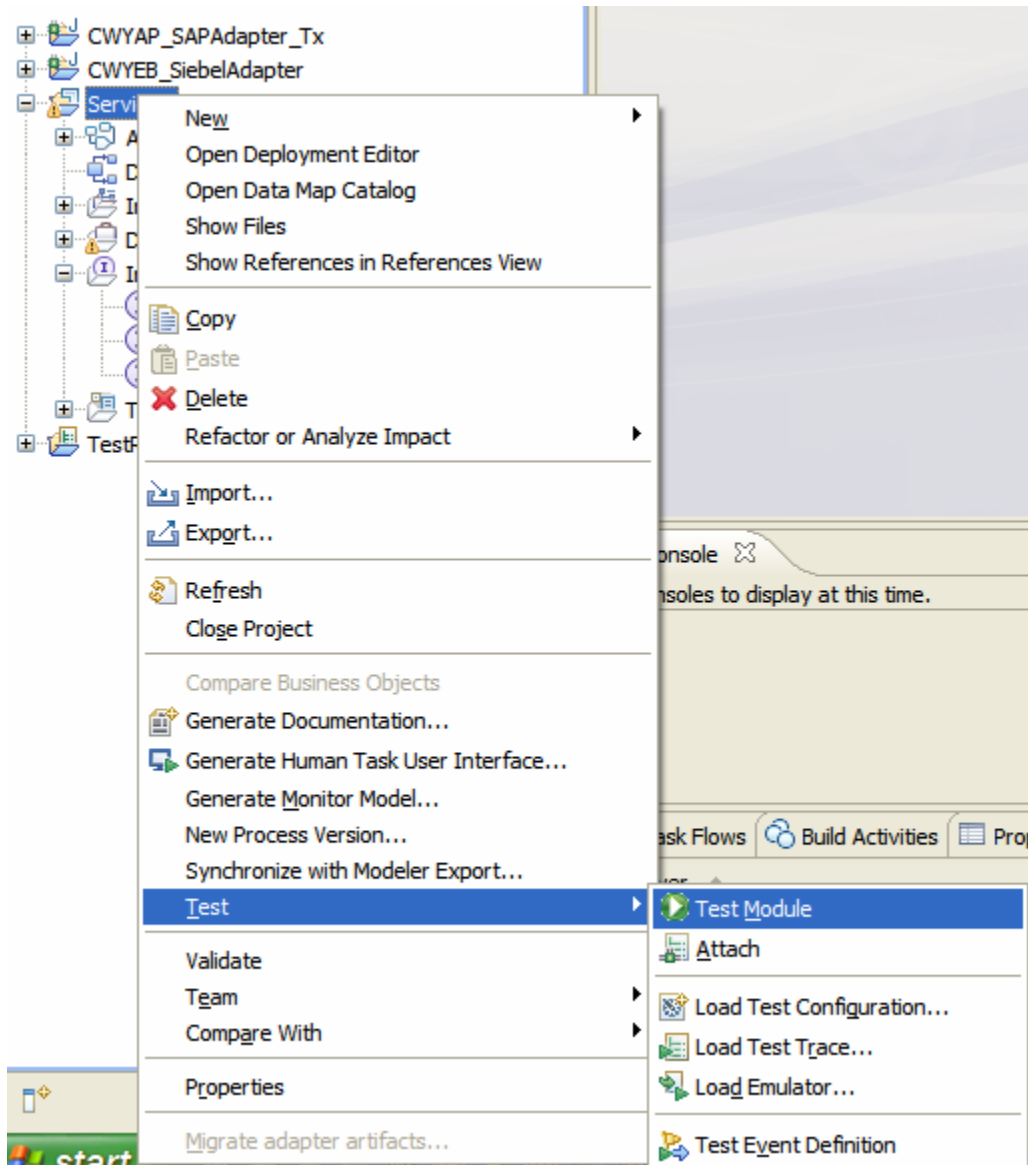


5. Add the SCA module to the **Configured projects** pane.
6. Click **Finish**.

Testing the Web application

This section describes how to test the application, that you created using a web service.

1. After the module is deployed, right-click on the Test Component to launch it.



2. Start with the create operation. Refer to the Execution traces for help with sample values.

Events

This area displays the events in a test trace. Select an event to display its properties in the General Properties and Detailed Properties sections. [More...](#)

General Properties

Detailed Properties

Configuration: [Default Module Test](#)

Module: [Services](#)

Component: [Component1](#)

Interface: [GenericInterface](#)

Operation: [createRecords](#)

Invocation parameters:

Value Editor XML Source

Name	Type	
input1	GenericBOBG	[ab]
verb	verb<string>	[ab] Create
GenericBO *	GenericBO	[ab]
ID	string	[ab]
siebelBO	BOContactBCContact	[ab]
Id	string	[ab]
Accomplishr	string	[ab]
Account	string	[ab]
AccountCur	string	[ab]
AccountId	string	[ab]
AccountInte	string	[ab]
AccountLoca	string	[ab]
AccountMod	int	[ab]
AccountOrg	string	[ab]
AccountParl	string	[ab]

3. After executing the create operation, check for the Siebel ID. Execute the update operation on this Siebel ID. Do not specify the value for the SAP ID. The SAP ID will be mapped using the Relationship Service.

Events

This area displays the events in a test trace. Select an event to display its properties in the General Properties and Detailed Properties sections. [More...](#)

General Properties

Detailed Properties

Configuration: [Default Module Test](#)

Module: [Services](#)

Component: [Component1](#)

Interface: [GenericInterface](#)

Operation: [updateRecords](#)

Invocation parameters:

Value Editor XML Source

Name	Type	
input1	GenericBOBG	
verb	verb<string>	
GenericBO *	GenericBO	
ID	string	
siebelBO	BOContactBCContact	
Id	string	
Accomplishr	string	
Account	string	
AccountCur	string	

Events

This area displays the events in a test trace. Select an event to display its properties in the General Properties and Detailed Properties sections. [More...](#)

The Events pane shows a tree view of events:

- Invoke (Component1:createRecords)
- Invoke (Component1:updateRecords)
 - Invoke started
 - Invoke (Component1:updateRecords)
 - Request (Component1 --> SiebelOutboundInterface:updateBOContactBCContact)
 - Response (Component1 <-- SiebelOutboundInterface:updateBOContactBCContact)
 - Request (Component1 --> SAPOutboundInterface:updateSapCustomerWrapper)
 - Response (Component1 <-- SAPOutboundInterface:updateSapCustomerWrapper)
 - Return (Component1:updateRecords)
- Invoke returned

General Properties

Detailed Properties

Configuration: [Default Module Test](#)
 Module: [Services](#)
 Component: [Component1](#)
 Interface: [GenericInterface](#)
 Operation: [updateRecords](#)

Invocation parameters:

[Value Editor](#) [XML Source](#)

Name	Type	
input1	GenericBOBG	[ab]
verb	verb<string>	[ab] Create
GenericBO *	GenericBO	[ab]
ID	string	[ab]
siebelBO	BOContactBCContact	[ab]
sapBO	SapCustomerWrapper	[ab]
SapBapiCustomerCreatefromdata1	SapBapiCustomerCreatefro...	[ab]
SapBapiCustomerDelete	SapBapiCustomerDelete	[ab]
SapBapiCustomerGetdetail	SapBapiCustomerGetdetail	[ab]
SapBapiCustomerChangefromdata	SapBapiCustomerChangefro...	[ab]
CustomerNumberOfTheCustomer	CustomerNumberOfTheCust...	[ab]
DistributionChannel	DistributionChannel<string>	[ab] 01
Division	Division<string>	[ab] 01
SalesOrganization *	SalesOrganization<string>	[ab] 0001

- The SAP System will also be updated but the SAP ID is mapped dynamically using the Relationship APIs.

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