Integration Framework for SAP Business One

Calling the Service Layer Object

PUBLIC

Global Roll-out

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Note: The example templates in this document are not officially supported by SAP.

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The SAP Business One service layer is a new generation of extension API for consuming SAP Business One data and services, which builds on core protocols such as HTTP and OData. The result is a uniform way to expose business objects on top of a Web server. The service layer is available for SAP Business One, version for SAP HANA.

OData is a standardized protocol for creating and consuming data APIs. It defines entity types, service metadata, and allows for entity relationships.

1 PREREQUISITES

1.1 Create a Scenario Package

To create a scenario package in the integration framework for SAP Business One, please refer to the openSAP course In Action - Integration Framework for SAP Business One.

In the *Week 2* and *Unit 1* chapter, you learn how to create a scenario package.

1.2 Create a Scenario Step

To create a scenario step in the integration framework for SAP Business One, please refer to the openSAP course In Action - Integration Framework for SAP Business One.

In the *Week 2* and *Unit 1* chapter, you learn how to create a scenario step.

2 CONFIGURE THE CONNECTION TO THE SERVICE LAYER

To configure and establish the connection from the integration framework for SAP Business One to the SAP Business One Service Layer, please refer to the document Configure connectivity to SAP Business One Service Layer.

3 ADD – INSERT A BUSINESS PARTNER

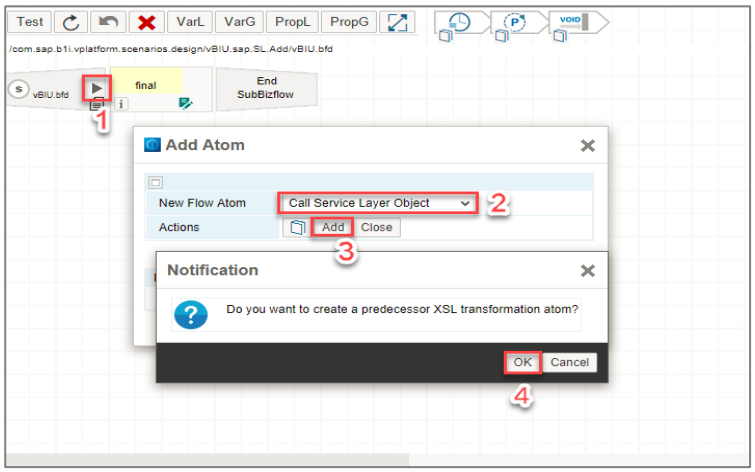
The chapter guides you through the procedure to insert business partner master data into SAP Business One using the SAP Business One Service Layer.

Please refer to the sample Scenario Step **sap.SL.Add**, available in Scenario Package sap.ServiceLayer.

3.1 Add an Atom to Scenario Step Processing

To add the call service layer object atom to the process flow:

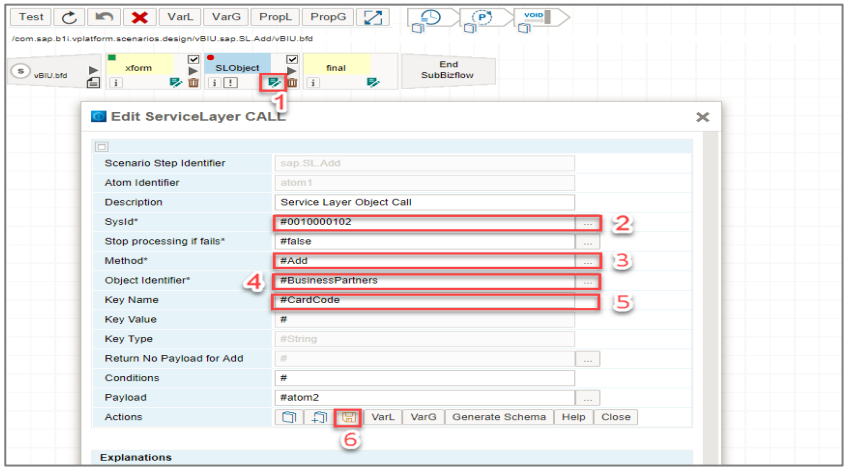
- Press the ▶ [Add] button on the *Start* atom to insert a new functional processing atom.
- In the *New Flow Atom* field, select the **Call Service Layer Object** value.
- Click **Add**.
- Finally, press **OK** to generate the *predecessor XSL transformation* atom.



3.2 Configure the Functional Processing Atom

To configure the processing atom:

- Press the [Change Configuration] button.
- In the *SysId* field, select the SAP Business One system entry.
- In the *Method* field, select the **Add** value.
- In the *Object Identifier* field, select **BusinessPartners**.
- The *Key Name* property is filled automatically based on the *Object Identifier*.
- Finally, press the [Save] button.



3.3 Customize the XSL Transformation

- Click the XSL Transformation Atom (xform). The integration framework opens the *Embedded XML Editor* to edit the XSL file.
- In the XSL file, change the **transform** template accordingly:

```
<xsl:template name="transform">
    <ServiceLayer>
        <io xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:com.sap.b1i.bizprocessor:bizatoms" pltype="json"
xsi:schemaLocation="urn:com.sap.b1i.bizprocessor:bizatoms json_pltype.xsd">
            <object>
                <string name="CardCode">MyBP01</string>
                <string name="CardName">My Business Partner Name 01</string>
            </object>
        </io>
    </ServiceLayer>
</xsl:template>
```

4 GET – RETRIEVE A BUSINESS PARTNER

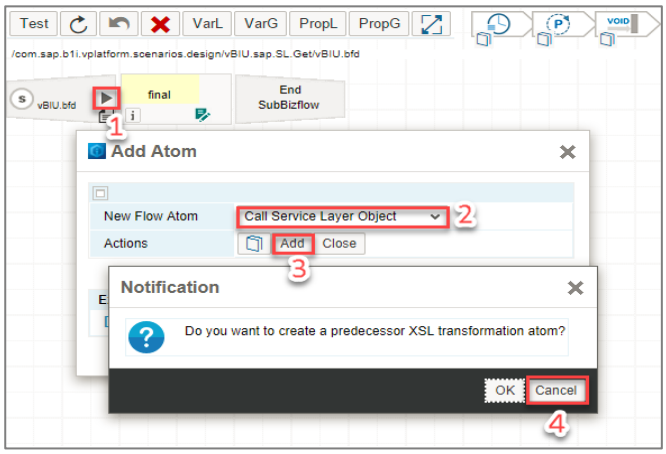
The chapter guides you through the procedure to get business partner master data from SAP Business One using the SAP Business One Service Layer.

Please refer to the sample Scenario Step **sap.SL.Get**, available in Scenario Package sap.ServiceLayer.

4.1 Add an Atom to Scenario Step Processing

To add the call service layer object atom to the process flow:

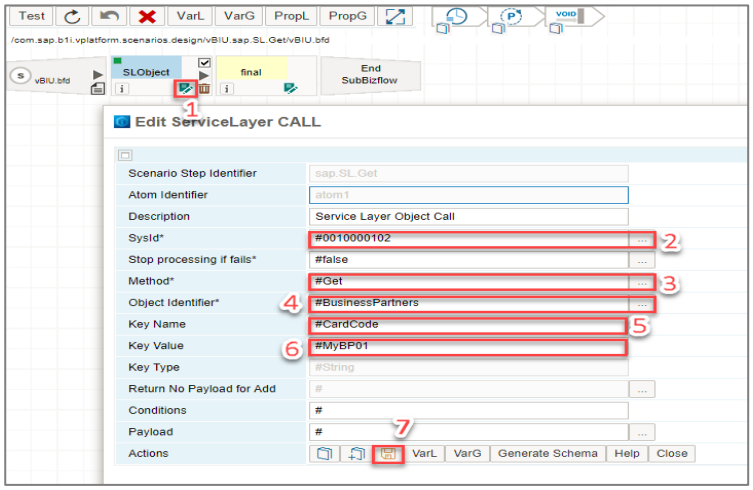
- Press the ▶ [Add] button on the *Start* atom to insert a new functional processing atom.
- In the *New Flow Atom* field, select the **Call Service Layer Object** value.
- Click **Add**.
- Finally, press **Cancel**, because we do not need the *predecessor XSL transformation* atom.



4.2 Configure the Functional Processing Atom

To configure the processing atom:

- Press the [Change Configuration] button.
- In the *SysId* field, select the SAP Business One system entry.
- In the *Method* field, select the **Get** value.
- In the *Object Identifier* field, select **BusinessPartners**.
- The *Key Name* property is filled automatically based on the *Object Identifier*.
- In the *Key Value* field, enter an existing business partner CardCode, for example, **#MyBP01**.
- Finally, press the [Save] button.



5 UPDATE – CHANGE A BUSINESS PARTNER RECORD

The chapter guides you through the procedure to update business partner master data in SAP Business One using the SAP Business One Service Layer.

Please refer to the sample Scenario Step **sap.SL.UpdatePath**, available in Scenario Package sap.ServiceLayer.

A **PUT** request indicates a replacement update. All property values with those specified in the request body will be replaced. Missing properties are set to their default values. Be aware of the potential for data-loss in round-tripping properties that the client may not know about in advance.

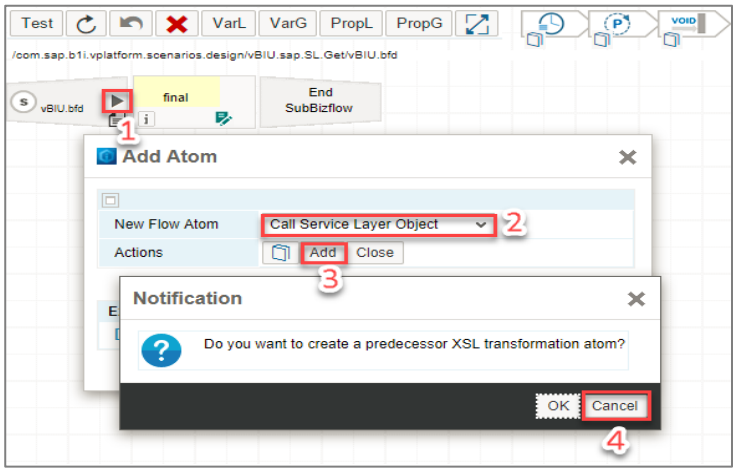
A **PATCH** indicates a differential update. Those property values that are specified in the request body will be exactly replaced. Missing properties are not altered. **PATCH** provides more resiliency between clients and services by directly modifying only those values specified by the client.

Generally, **PATCH** is strongly recommended while **PUT** is deprecated.

5.1 Add an Atom to Scenario Step Processing

To add the call service layer object atom to the process flow:

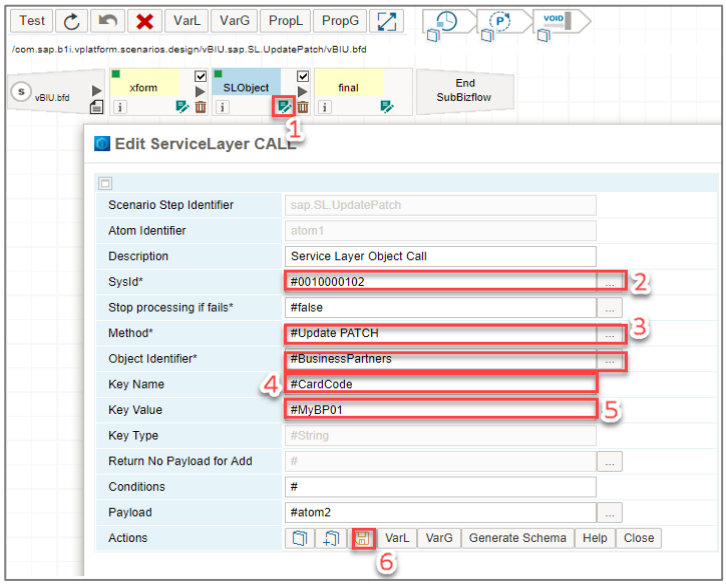
- Press the ▶ [Add] button on the *Start* atom to insert a new functional processing atom.
- In the *New Flow Atom* field, select the **Call Service Layer Object** value.
- Click **Add**.
- Finally, press **Cancel**, because we do not need the *predecessor XSL transformation* atom.



5.2 Configure Functional Processing Atom

To configure the processing atom:

- Press the [Change Configuration] button.
- In the *SysId* field, select the SAP Business One system entry.
- In the *Method* field, use the **Update PATCH** value.
- In the *Object Identifier* field, select **BusinessPartners**.
- The *Key Name* property is filled automatically based on the *Object Identifier*.
- In the *Key Value* field, enter an existing business partner CardCode, for example, **#MyBP01**.
- Finally, press the [Save] button.



5.3 Customize the XSL Transformation

- Click the XSL transformation atom (xform). The integration framework opens the *Embedded XML Editor* to edit the XSL file.
- In the XSL file, change the **transform** template accordingly:

```
<xsl:template name="transform">
        <ServiceLayer>
                <io xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:com.sap.b1i.bizprocessor:bizatoms" pltype="json"
xsi:schemaLocation="urn:com.sap.b1i.bizprocessor:bizatoms json_pltype.xsd">
                        <object>
                                <string name="CardName">My Business Partner Name 01 new</string>
                        </object>
                </io>
        </ServiceLayer>
</xsl:template>
```

6 DELETE – REMOVE A BUSINESS PARTNER ENTRY

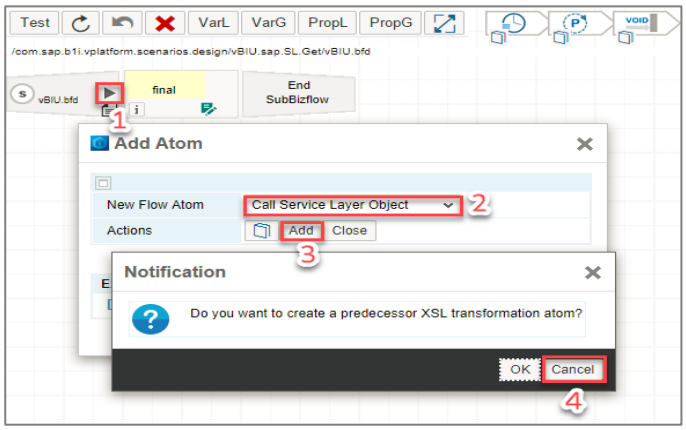
The chapter guides you through the procedure to delete business partner master data from SAP Business One using the SAP Business One Service Layer.

Please refer to the sample Scenario Step **sap.SL.Delete**, available in Scenario Package sap.ServiceLayer.

6.1 Add an Atom to Scenario Step Processing

To add the call service layer atom to the process flow:

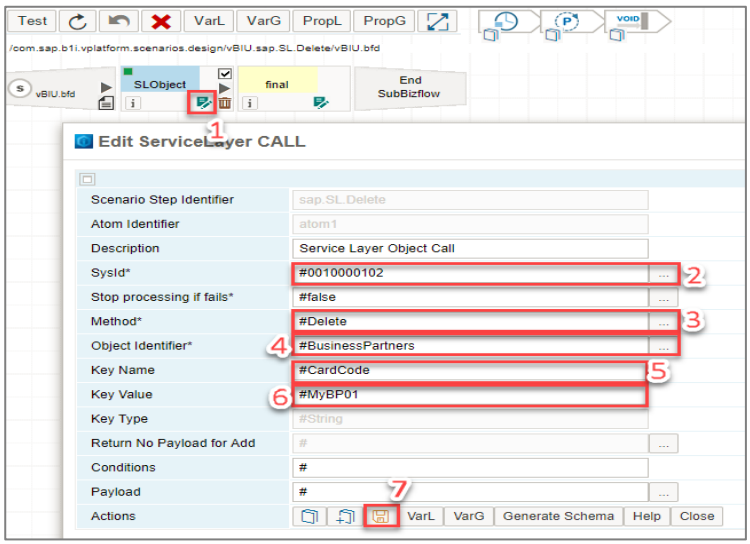
- Press the ▶ [Add] button on the *Start* atom to insert a new functional processing atom.
- In the *New Flow Atom* field, select the **Call Service Layer Object** value.
- Click **Add**.
- Finally, press **Cancel**, because we do not need the *predecessor XSL transformation* atom.



6.2 Configure the Functional Processing Atom

To configure the processing atom:

- Press the [Change Configuration] button.
- In the *SysId* field, select the SAP Business One system entry.
- In the *Method* field, use the **Delete** value.
- In the *Object Identifier* field, select **BusinessPartners**.
- The *Key Name* property is filled automatically based on the *Object Identifier*.
- In the *Key Value* field, enter an existing business partner CardCode, for example, **#MyBP01**.
- Finally, press the [Save] button.



7 CLOSE A SALES ORDER

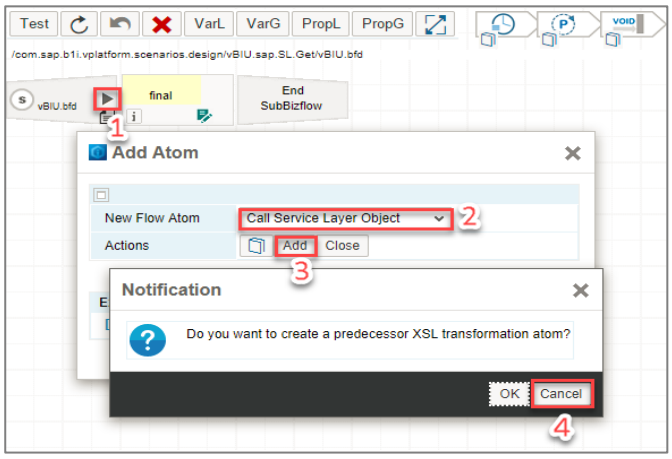
The chapter guides you through the procedure to close a sales order document in SAP Business One using the SAP Business One Service Layer.

Please refer to the sample Scenario Step **sap.SL.Close**, available in Scenario Package sap.ServiceLayer.

7.1 Add an Atom to the Scenario Step Processing

To add the call service layer atom to the process flow:

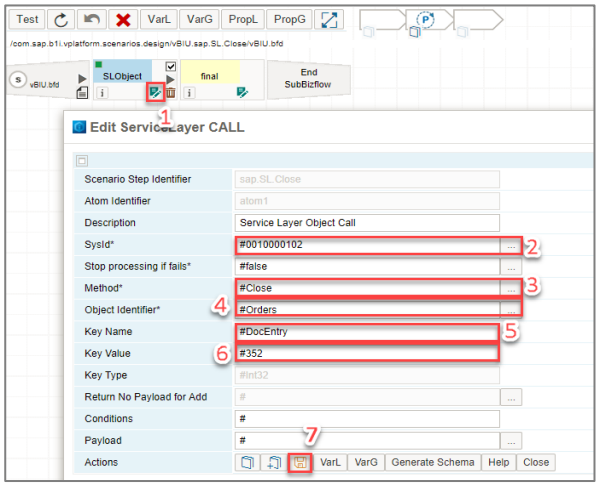
- Press the ▶ [Add] button on the *Start* atom to insert a new functional processing atom.
- In the *New Flow Atom* field, select the **Call Service Layer Object** value.
- Click **Add**.
- Finally press **Cancel**, because we do not need the *predecessor XSL transformation* atom.



7.2 Configure the Functional Processing Atom

To configure the processing atom:

- Press the [Change Configuration] button.
- In the *SysId* field, select the SAP Business One system entry.
- In the *Method* field, use the **Close** value.
- In the *Object Identifier* field, select **Orders**.
- The *Key Name* property is filled automatically based on the *Object Identifier*.
- In the Key Value field, enter an existing document entry for a sales order with status **open**.
- Finally, press the [Save] button.



8 CANCEL A SALES ORDER

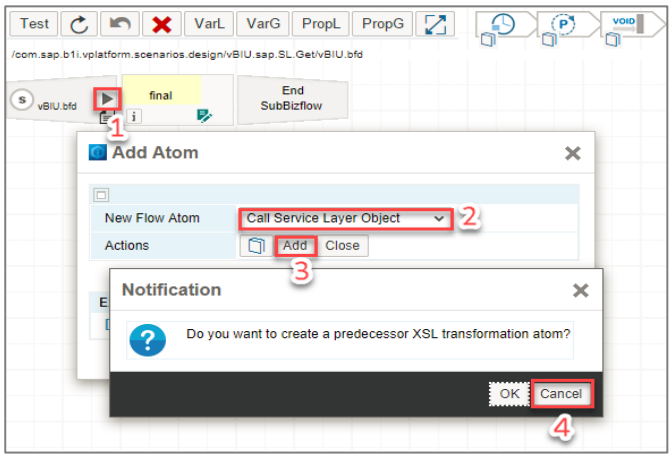
The chapter guides you through the procedure to cancel a sales order document in SAP Business One using the SAP Business One Service Layer.

Please refer to the sample Scenario Step **sap.SL.Cancel**, available in Scenario Package sap.ServiceLayer.

8.1 Add an Atom to Scenario Step Processing

To add the call service layer atom to the process flow:

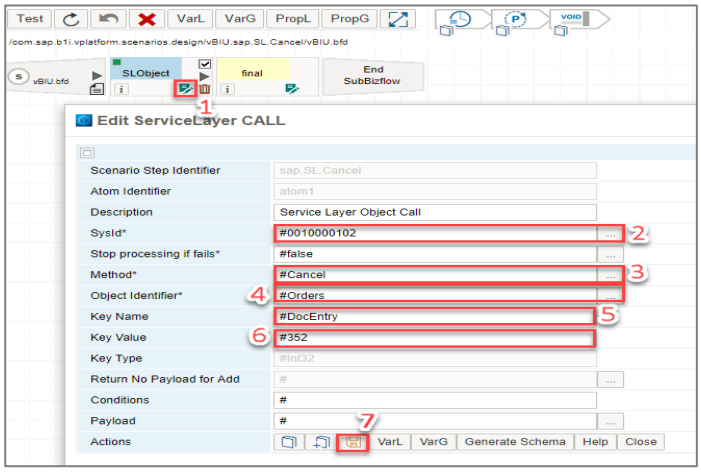
- Press the ▶ [Add] button on the *Start* atom to insert a new functional processing atom.
- In the *New Flow Atom* field, select the **Call Service Layer Object** value.
- Click **Add**.
- Finally, press **Cancel**, because we do not need the *predecessor XSL transformation* atom.



8.2 Configure the Functional Processing Atom

To configure the processing atom:

- Press the [Change Configuration] button.
- In the *SysId* field, select the SAP Business One system entry.
- In the *Method* field, select the **Cancel** value.
- In the *Object Identifier* field, select **Orders**.
- The *Key Name* property is filled automatically based on the *Object Identifier*.
- In the *Key Value* field, enter an existing document entry for a sales order with status **open**.
- Finally press the [Save] button.



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