

# Integration Framework for SAP Business One Timer-Based Inbound Adapter

PUBLIC



Global Roll-Out

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

THE BEST RUN





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## Timer-Based Inbound (Void- Inbound)

With timer-based inbound, you can use the integration framework to check, for example, if a record is available in a database table. If a record exists, the integration framework triggers the scenario step processing. The integration framework controls the timer-based inbound processing using parameters of the inbound definition of the scenario step.

### 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.

Please refer to the sample **sap.GetCustomerList** scenario step available in the [sap.in.Void](#) scenario package

### 2. DEFINE TIMER-BASED CALL IN INBOUND

To define the inbound definition of the scenario step, select *Scenarios* → *Step Design* → *[Inbound]* → *[Channel]*.

The screenshot shows the 'Scenario Step Design - INBOUND - CHANNEL' configuration window. It contains the following fields and values:

Scenario Step Identifier	sap.GetCustomerList
Inbound Channel (IPO)	INB_AY_TIMR_ASYN_BIU
Inbound Type	Void
Process Mode	Asynchronous
Process Trigger	Timer
Identification Method	Void
Identification Parameter	n.a.
Identifier	sap.GetCustomerList
Identification Namespace	
Actions	Timer Close

The integration framework uses the following parameters to control inbound processing:

- Inbound Type = Void
- Process Mode = Asynchronous
- Process Trigger = Timer

- Identification Method = Void
- Identification Parameter = n.a.
- Identifier = Identifier of the scenario step.
- Identification Namespace = We can additionally provide a namespace.

### 2.1. Scenario Step Design – Inbound – Channel- Timer

Define when and how often the scenario step checks, if the trigger for the scenario step is available. You can adjust the timer settings according to your specific requirements.

Scenario Step Design - INBOUND - CHANNEL - TIMER	
<input type="checkbox"/>	
Scenario Step Identifier	<input type="text" value="sap.GetCustomerList"/>
Scheduler (Minute)	<input type="text" value="5,10,15"/>
Scheduler (Hour)	<input type="text" value="*"/>
Scheduler (Day)	<input type="text" value="*"/>
Scheduler (Month)	<input type="text" value="*"/>
Scheduler (Day of Week)	<input type="text" value="*"/>
Scheduler (Year)	<input type="text" value="*"/>
Actions	<input type="button" value="New"/> <input type="button" value="Save"/> <input type="button" value="Close"/>

Note: This step is triggered every hour at the fifth, tenth and fifteenth minute.

### 2.2. Outbound Chanel

To define the outbound definition of the scenario step, select *Scenarios* → *Step Design* → *[Outbound]* → *Select Void at [Outbound channel]*.

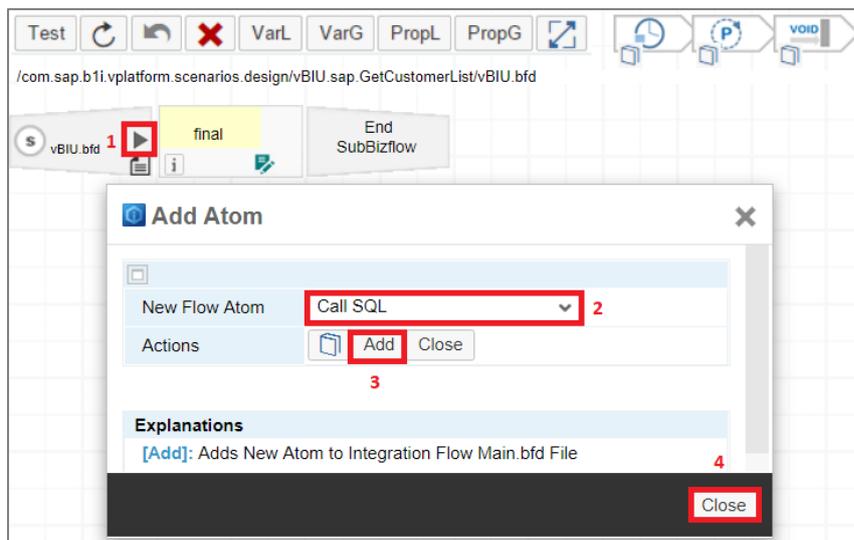
### 3. GET CUSTOMER DATA FROM A DATABASE TABLE

The chapter guides you through the procedure to retrieve customer data from a database table.

#### 3.1. Add an Atom to Scenario Step Processing

In this example, we have taken Call SQL atom. To add the atom to the process flow:

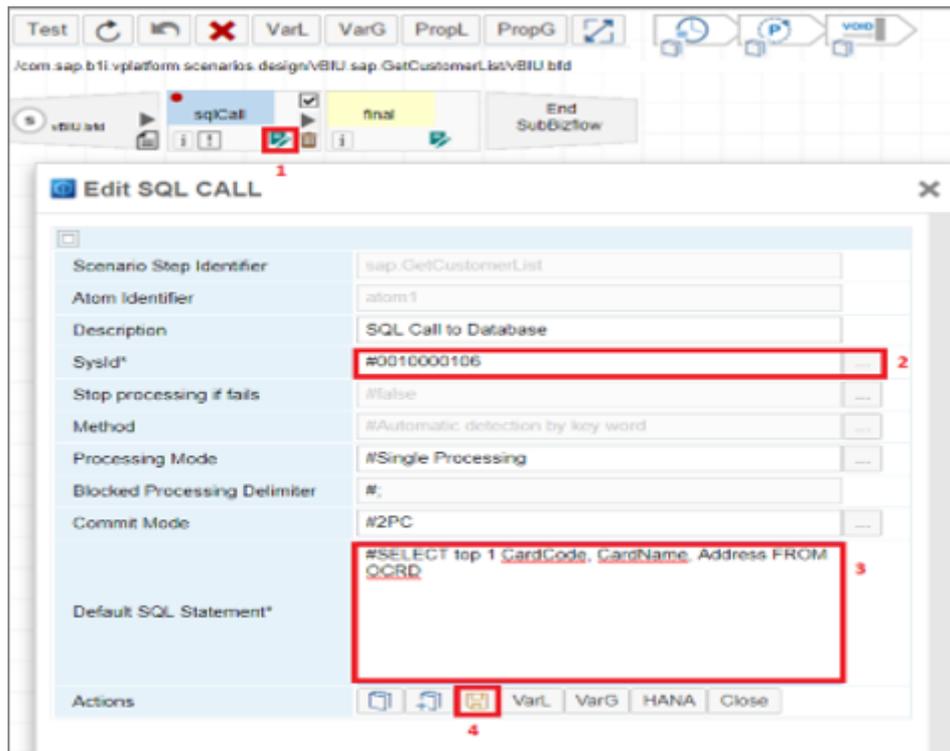
- (1) Press the ► [Add] button on the *Start* atom to insert a new functional processing atom.
- (2) In the *New Flow Atom* field, select the **Call SQL** value.
- (3) Click **Add**.
- (4) Click **Close**.



#### 3.2. Configure the Functional Processing Atom

To configure the processing atom:

- (1) Press the 🛠 [Change Configuration] button.
- (2) In the *SysId* field, select the SAP Business One system entry.
- In the *Default SQL Statement* field, enter the SQL query.
- Finally press the 💾 [Save] button.



### 3.3. Customize the final atom 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">
  <xsl:attribute name="pltype">htm</xsl:attribute>
  <xsl:for-each
select="/vpf:Msg/vpf:Body/vpf:Payload[./@id=&apos;atom1&apos;]/jdbc:ResultSet/jdbc:Row[string-length (./jdbc:Address)&gt;0]">
    <Result>
      <xsl:value-of select="./jdbc:CardCode"/>
      <xsl:value-of select="./jdbc:CardName"/>
      <xsl:value-of select="./jdbc:Address"/>
    </Result>
  </xsl:for-each>
</xsl:template>

```

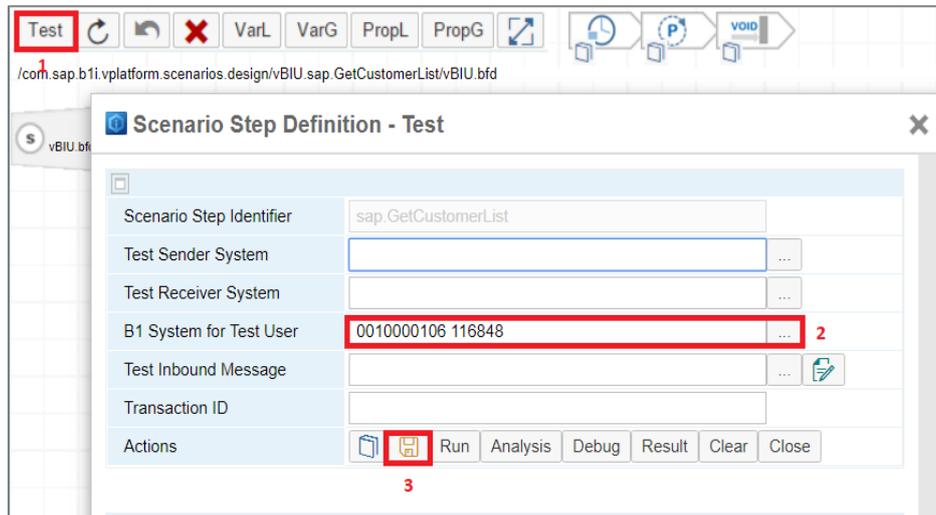
The final transformation atom provides CardCode, CardName and Address of the retrieved database record.

## 4. SCENARIO STEP DEFINITION – TEST CONFIGURATION

Follow the procedure for the scenario step test:

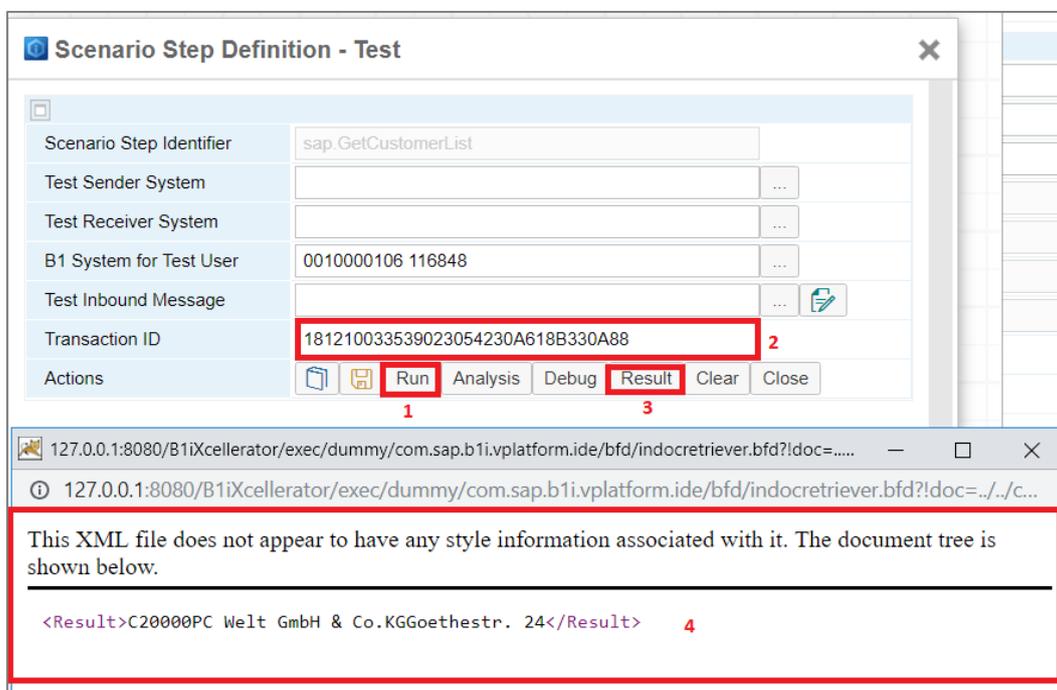
- Click *Test* button to open the *Scenario Step Definition -Test*.

- In the *B1 System for Test User* field, select an SAP Business One system from SLD.
- Press the  [Save] button.



#### 4.1. Scenario Step Definition Test- Result

- (1) Click the **Run** button.
- (2) The transaction ID is generated
- (3) Click the **Result** button.
- (4) We can see the result of the final atom XSL conversion.



## 5. ACTIVATE SCENARIO PACKAGE

Follow the steps to activate the scenario package.

- (1) In the *Scenario Package Identifier* field, select your scenario package.
- (2) Click the **Steps** button.
- (3) Select the *Activate* checkbox for the selected scenario steps.
- (4) Press the  [Save] button.

**Scenario Package Setup**

Scenario Package Identifier: sap.InboundVoid 1

Version Number: 1.0.0

Status: design

Scenario Steps: 1 of 1

Sender System Types:

Receiver System Types:

Activate Job List:

Actions: **Steps** 2 Sender Receiver **Activate** 5 Data Mgt. Setup Tools

**Setup - Select Scenario Steps**

4 All Activate No Activate All Generate No Generate

Scenario Step Identifier	Activate	Generate
<input type="checkbox"/> sap.GetCustomerList	<input checked="" type="checkbox"/> <span style="color: red;">3</span>	<input checked="" type="checkbox"/>

Explanations

**Scenario Package Identifier:** Scenario Package Identifier

**Version Number:** Scenario Version Number

**Status:** Scenario Status Design

**Scenario Steps:** Number of Scenario Steps

**Sender System Types:** List of Sender System Types

**Receiver System Types:** List of Receiver System Types

- (5) Click the **Activate** button to activate the scenario.

## 6. TRIGGERING THE SCENARIO STEPS

- Once the scenario package is activated, the integration framework provides the trigger of the scenario steps. To display the trigger of the scenario steps, choose *Scenarios* → *Control*, and for your scenario package, click the [Trigger] button. After triggering the scenario step, you can see the corresponding message log in *Monitoring* → *Message Log*.

Integration Framework - Triggers

Scenario Package Identifier: sap.InboundVoid | Version Number: 1.0.0

Info Docu Status Overview Reports Setup **Trigger** 1 Check

Scenario Step	Sender System	Inbound Type	Trigger
<b>Trigger</b> <span style="color: red;">2</span>	sap.GetCustomerList	Integration Sen	Timer
			Timer triggered: 0!/*!/*!/*!/*

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