

Documentation
SAP Solution Manager 7.2 SPS 6
Document Version: 3.01 – 2018-01-15

CUSTOMER

Solution Documentation - Graphical Process Editor

Typographic Conventions

Type Style	Description
<i>Example</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	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.
Example	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.
Example	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER .

Document History



Caution

Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location:

https://help.sap.com/viewer/p/SAP_Solution_Manager → *<latest Version>* → *Additional Information* → *Solution Documentation - Graphical Process Editor*.

This is the direct Link to this document: [Solution Documentation - Graphical Process Editor](#)

Version	Date	Change
3.00	2017-10-16	Completely updated version for SAP Solution Manager 7.2 SPS 6
3.01	2018-01-15	Added chapter about the Global Functionalities .

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1 BPMN Diagram Symbols and Notation Documentation

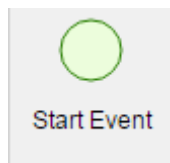
BPMN diagrams use a set of standard symbols. Each shape has a specific meaning and business context where it is most appropriate.

1.1 Flow Objects in a BPMN Diagram

Flow objects are the building blocks of a BPMN diagram; they represent the concepts being modeled. Flow objects can be separated into three areas: events, activities, and gateways.

1.1.1 BPMN Event Types

Events represent an event in a business process.



Start Event Symbol:
Signals the first step of a process.



End Event Symbol:
Signals the final step in a process.



Intermediate Event Symbol:
Represents any event that occurs between a start and end event.

Start Events can only “catch” a trigger. Similarly, End Events can only create “throw” a result. Intermediate events are less constrained and may catch triggers or throw results.

The symbol used for an event is always an unfilled circle. However, there are several other standard attributes of the event symbols that are of importance.

- Internal Markers - many times the circle will have an icon or “marker” within it providing more information about the type of event.
- Filled versus Unfilled Markers - the internal marker may be filled or unfilled. Unfilled internal markers are used to identify that the event is a “catching” event. This means that the event is waiting to receive notification that something has happened. Filled internal markers are used to identify that the event is a “throwing” event. This means that the event is being generated at that point in the process.
- Single, Double, or Filled Outer Circle – the outer border of the event may be a single circle, a double circle, or a filled ring. A single thick circle means that the event is a starting event, used to signify a start of a process. A double circle means that the event is an intermediate event, used for any event which occurs after the start of a process but before its completion. A filled ring means that the event is an end event, used to signify the end of a process.
- Dashed versus Solid Circle – both start and intermediate events can be shown with the outer circles being solid lines or dashed. Solid lines are used to show interrupting events. These are events which are triggered the moment the event occurs regardless of whether the activity has completed. Dashed lines are used to show non-interrupting events. These are events which will wait for the completion of the activity before flow of the process continues.

1.1.2 BPMN Event Symbols

Each of these events can be styled to represent the specific details of their process. Common event symbols represent the following circumstances:

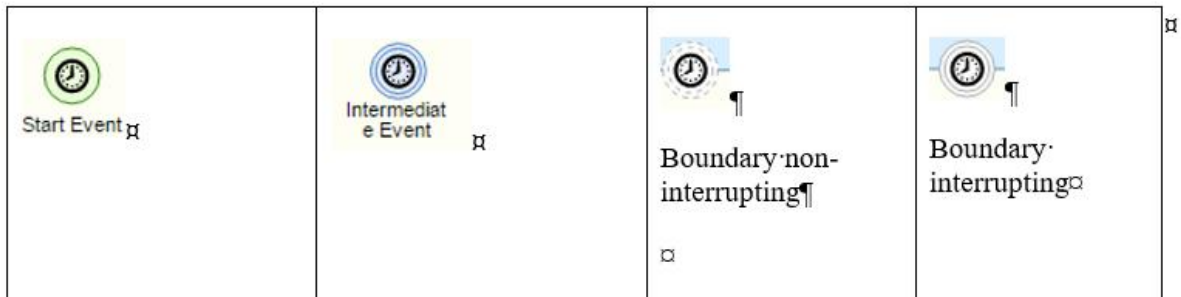
Message Symbol

Triggers the process, facilitates intermediate processes, or finishes the process.



Timer Symbol

A time, date, or recurring time and date triggers the process, aids intermediate processes, or completes the process.



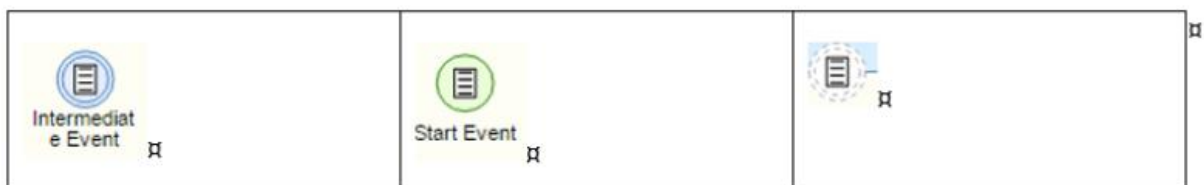
Escalation Symbol

A step reacts on an escalation and flows to another role in the organization. This event is only used within an event sub-process. An escalation occurs when someone at a higher level of responsibility within the organization becomes involved in a process.



Conditional Symbol

A process begins or continues when a business condition or business rule is met.



Link Symbol

A sub-process that is part of a larger process.



Error Symbol

A caught error at the start, middle, or end of a process. An event sub-process with an error trigger will always interrupt its containing process.



Cancel Symbol

Reacts on a transaction that was cancelled within a sub-process. In an end event, the cancel symbol represents the triggered cancellation of a process.



Compensation Symbol

A refund that is triggered when operations partially fail.



Signal Symbol

A signal that communicates across different processes. A signal symbol can begin a process, facilitate it, or complete it.



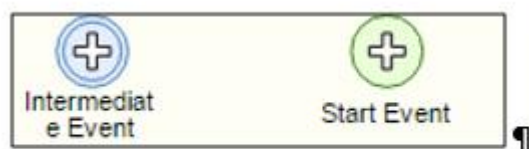
Multiple Symbol

Multiple triggers initiating a process.



Parallel Multiple Symbol

A process instance that doesn't start, continue, or end until all possible events have occurred.










Terminate Symbol

Triggers the immediate termination of a process step. All related instances are terminated at the same time.



1.1.3 BPMN Gateway Symbols

Gateways are symbols that separate and recombine flows in a BPMN diagram. There are several types of gateways:

 Gateway	Parallel-Symbol Differs from other gateways because it's not dependent on conditions or events. Instead, parallel gateways are used to represent two concurrent tasks in a business flow.
 Gateway	Complex-Symbol These gateways are only used for the most complex flows in a business process. An ideal use case for the complex gateway is when you need multiple gateways to describe the business flow.
 Gateway	Exclusive-Symbol Evaluates the state of the business process and, based on the condition, breaks the flow into one or more mutually exclusive paths.
 Gateway	Inclusive-Symbol Breaks the process flow into one or more flows. For example, an inclusive gateway could involve business actions taken based on survey results.
 Gateway	Event-Based-Symbol An event-based gateway is similar to an exclusive gateway—both involve one path in the flow.
 Gateway	Exclusive-Event-Based Starts a new process instance with each occurrence of a subsequent event.
 Gateway	Parallel-Event-Based As the name suggests, this gateway is similar to a parallel gateway. It allows for multiple processes to happen at the same time, but unlike the parallel gateway, processes are event-dependent.

1.1.4 Connecting Objects in a BPMN Diagram

Connecting objects are lines that connect BPMN flow objects. There are three different types: sequence flows, message flows, and associations.



Sequence Flow Symbol

Connects flow objects in proper sequential order.



Message Flow Symbol

Represents messages from one process (pool) to another.







Association Symbol

Shows relationships between artifacts and flow objects.

1.1.5 Artefacts in a BPMN Diagram

Artefacts represent information relevant to the model but not to individual elements within the process.

Data object or Store represent data placed into the process, data resulting from the process, data that needs to be collected, or data that must be stored.

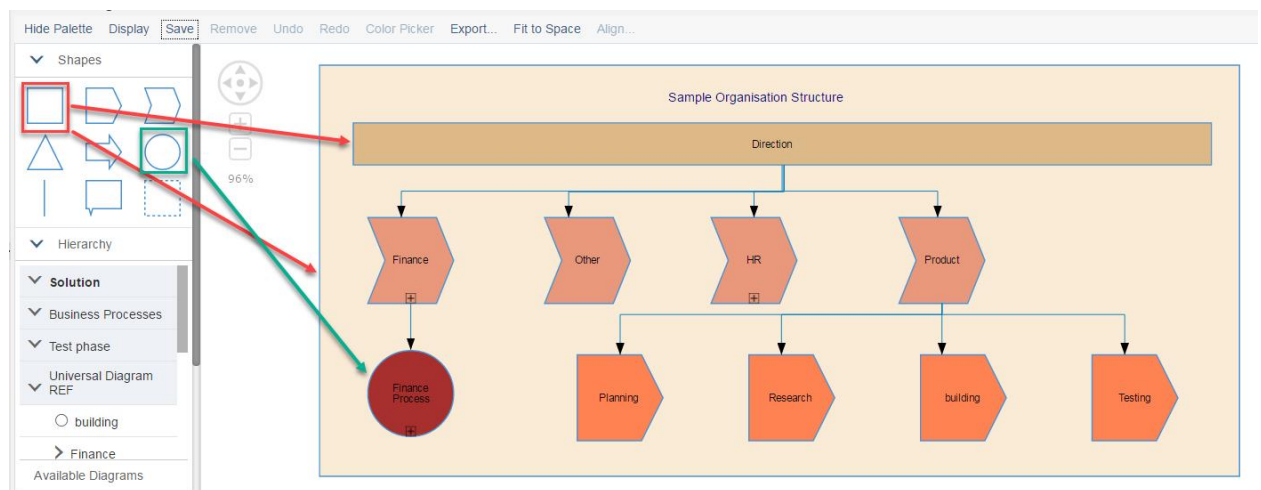
 Data Object	Data Input Symbol Represents data requirements that tasks in the business process depend on.
 Data Object	Data Output Symbol Demonstrates information produced as the result of a business process.
 Data Object	Data Collection Symbol Signifies information collected within a business process.
 Data Store	Data Storage Symbol Represents the ability to store or access data that's associated with a business process.

2 Universal Diagram

In this section, you learn about the creation and addition of different objects in the universal diagram. Universal diagrams help the user to model an effective visual diagram.

Universal diagrams are used to model different sorts of diagrams and allows the user to describe what he want.

When you need a comprehensive drawing and drafting tool to illustrate ideas or diagram, you will find all you need in bread Crumb Palette to help illustrate your diagram.



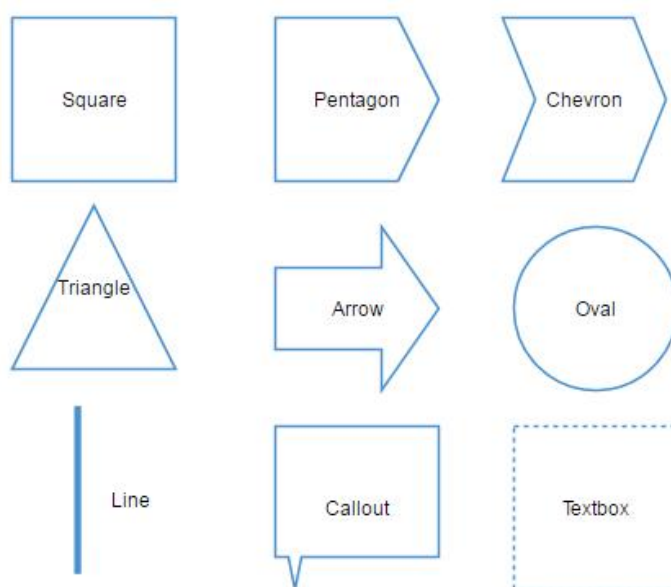
2.1 Bread Crumb Palette

The Bread crumb palette provide you lots of special shapes for you to choose. These shapes will greatly help you when drawing.

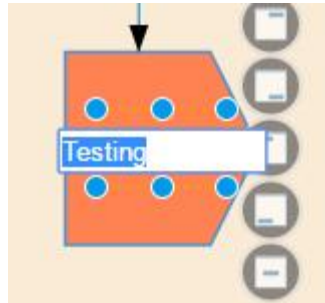


Click on the shape from the Brad Crumb palette.

Click inside the diagram to insert the shape.

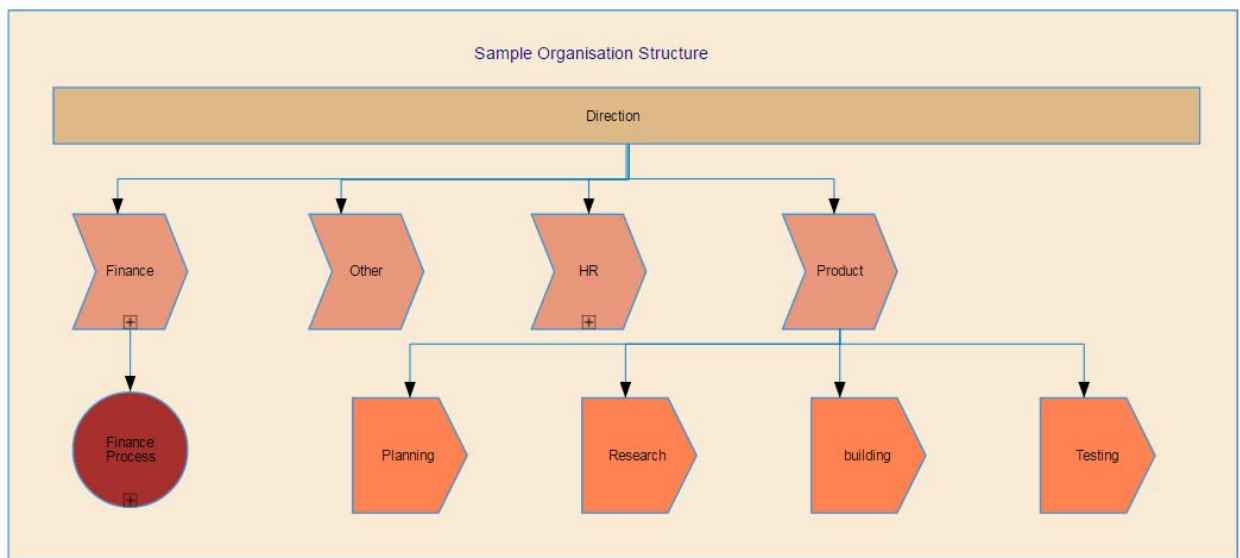


The shapes (Square, Chevron, Triangle, Arrow, Oval, Callout, and Textbox) are added to the diagram. Double Click on the text symbol and you have the possibility to rename the shape.







2.2 Context Menu

In this section, you learn about the context menu options in a diagram.

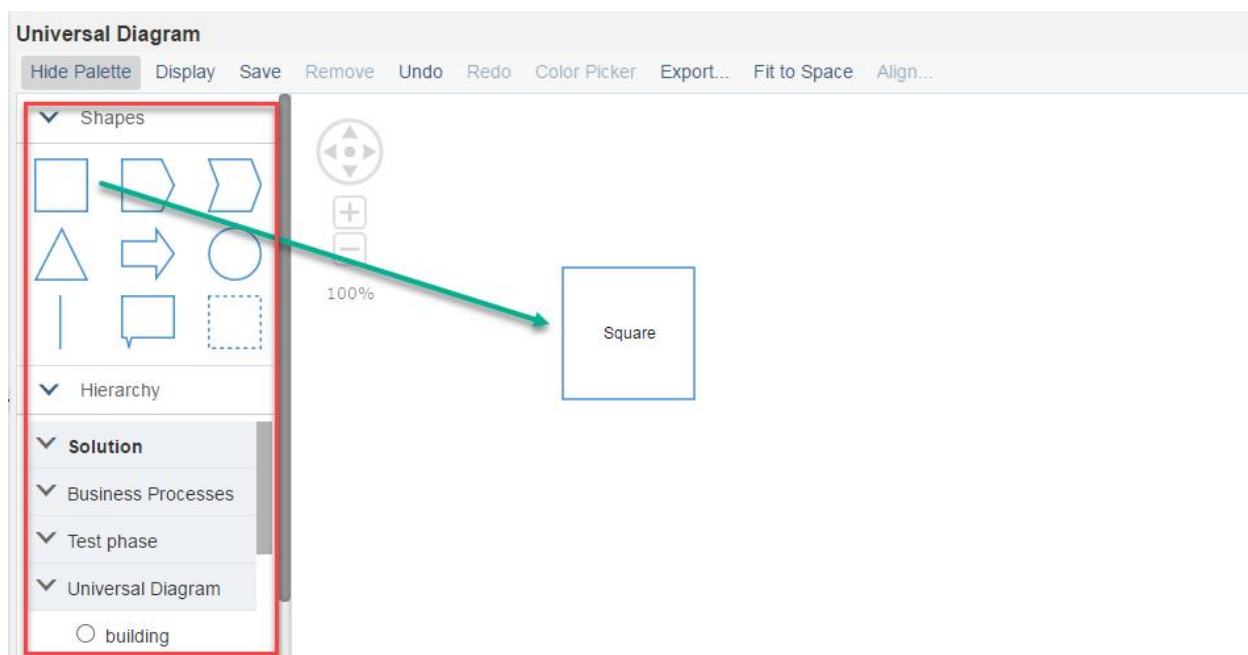


The following descriptions contain four parts of context menu objects that are available.

Part I: When clicking an object	Part II: When right-click an object	Part III: When clicking a text symbol	Part IV: When right-click a text symbol
			

2.2.1 Part I: When clicking an object

To add the first element to the diagram, select it from the palette on the left side of the Editor, drag it onto the diagram.



Once you got started, you can add elements using the context menus of the existing elements. Depending on the shape currently selected, the menu suggests which modeling element might be added next.

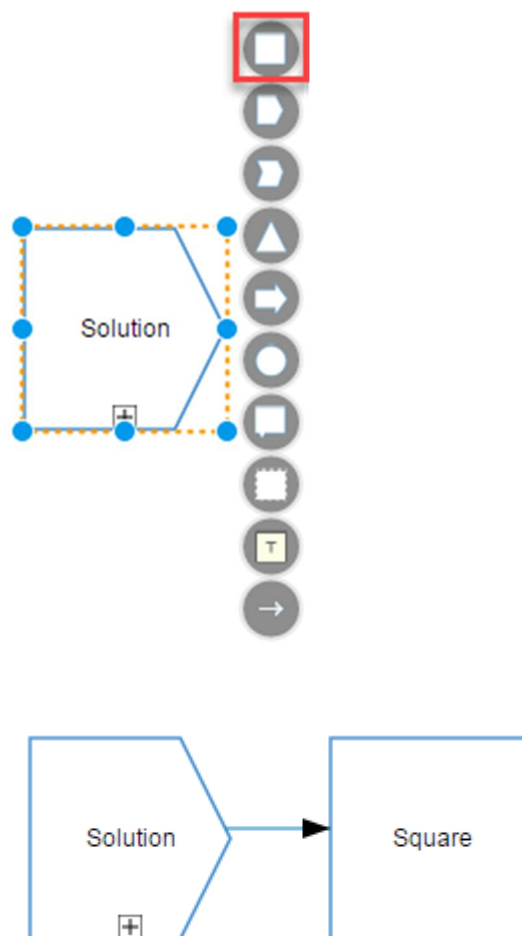
In order to make use of the interactive context menu, proceed as follows:

- Select an element on the diagram. The interactive context menu appears right of the element.
- Click the icon representing the element you want to add.
- The new element appears in the diagram and both element are linked.

Add Square

From the diagram, select an object.

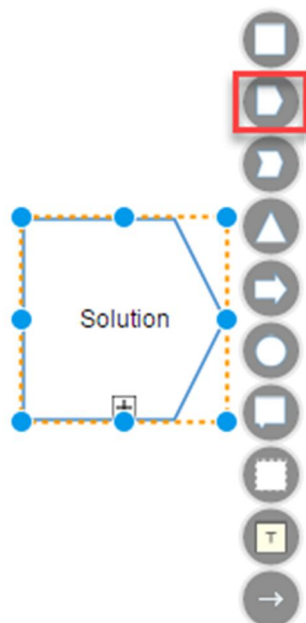
Click on the Square icon.



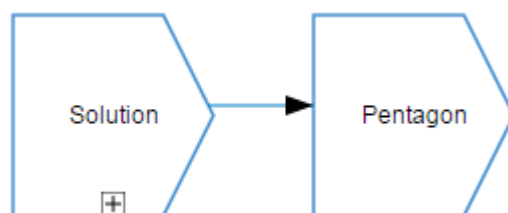
The Square is added to the diagram and both object and square are linked.

Add Pentagon

From the diagram, select an object. The context Menu appears.
Click on the Pentagon icon.

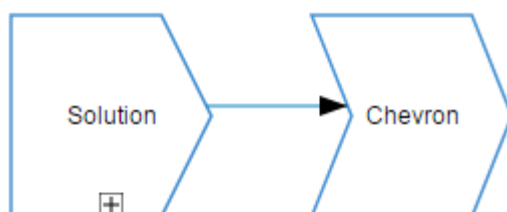


The Pentagon is added to the diagram and both object and Pentagon are linked.



Add Chevron

From the diagram, select an object. The context Menu appears.
Click on the Chevron icon.



The Chevron is added to the diagram and both object and Chevron are linked.

Add Triangle

From the diagram, select an object. The context Menu appears.

Click on the Triangle icon.

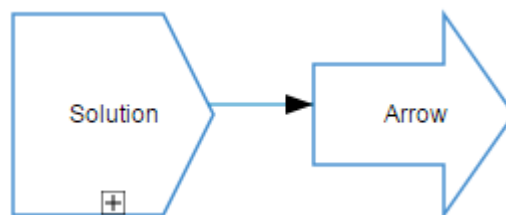


The Triangle is added to the diagram and both object and Triangle are linked.

Add Arrow

From the diagram, select an object. The context Menu appears.

Click on the Arrow icon.

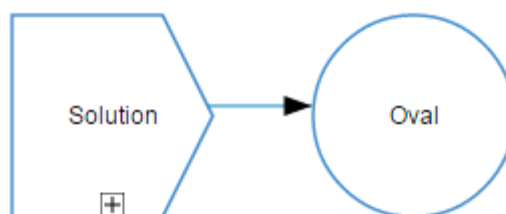


The Arrow is added to the diagram and both object and Arrow are linked.

Add Oval

From the diagram, select an object. The context Menu appears.

Click on the Oval icon.

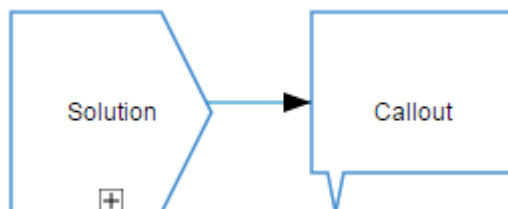


The Oval is added to the diagram and both object and Oval are linked.

Add Callout

From the diagram, select an object. The context Menu appears.

Click on the Callout icon.

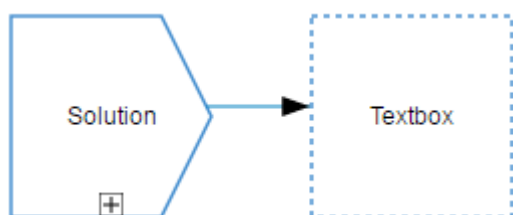


The Callout is added to the diagram and both object and Callout are linked.

Add Textbox

From the diagram, select an object. The context Menu appears.

Click on the Textbox icon.



The Textbox is added to the diagram and both object and Textbox are linked.

Add Notation

From the diagram, select an object. The context Menu appears.

Click on the Add Notation icon.



The Notation is added to the diagram and both object and Notation are linked.

Add Link

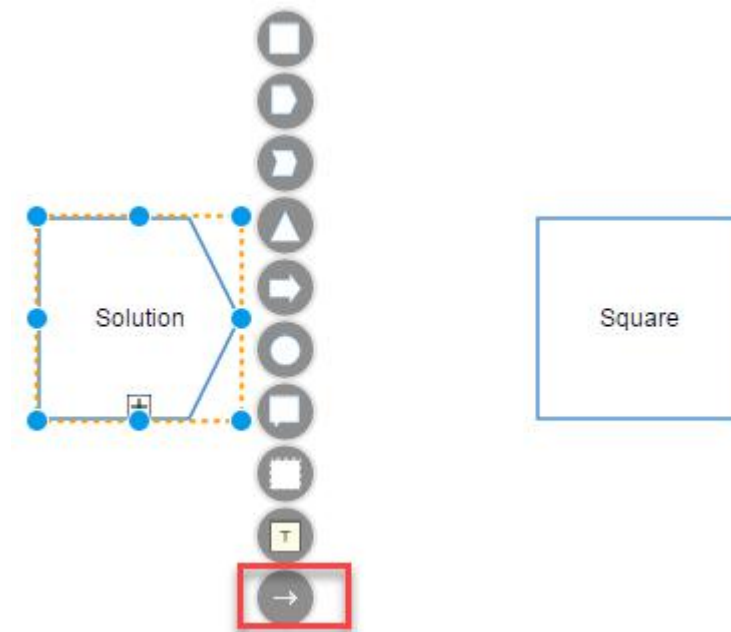
From the diagram, select an object. The context Menu appears.

Click on



to add a link and drag it to the other object without releasing the pointer.

Choose a contact point and release the pointer.



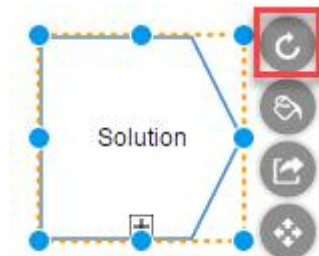
Both objects are linked.



2.2.2 Part II: When right-click an object

Rotate

From the diagram, right-click an object where this option is applicable. The context Menu appears.

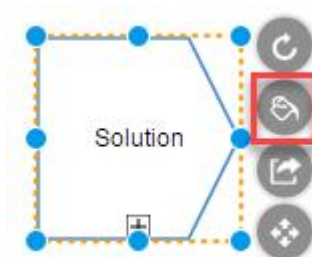


Click on the rotate icon.



Color

From the diagram, right-click an object where this option is applicable. The context Menu appears.

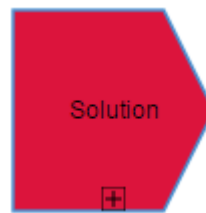


Click on the Color icon.

Color Picker popup appears.

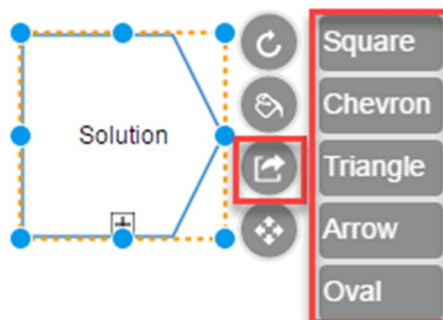


Select Color



Replace

From the diagram, right-click an object where this option is applicable. The context Menu appears.



Click on the Replace icon.

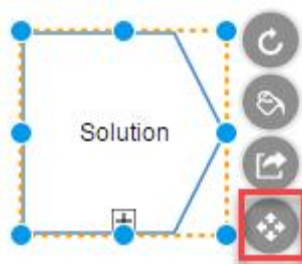
A list of Shapes appears.

Select a Shape

The shape is applied to the object.

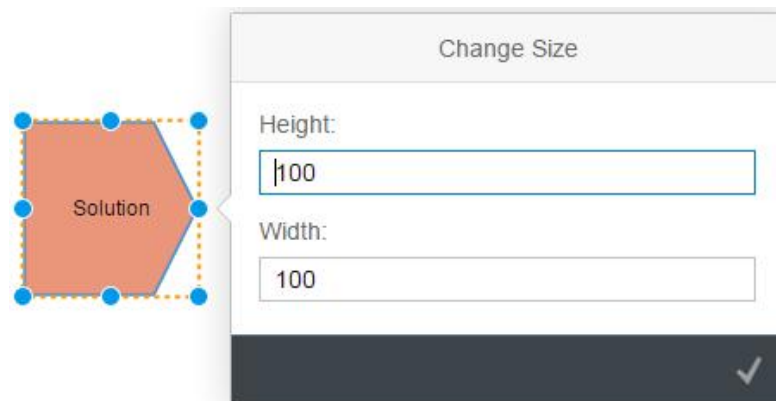
Size

From the diagram, right-click an object where this option is applicable. The context Menu appears.

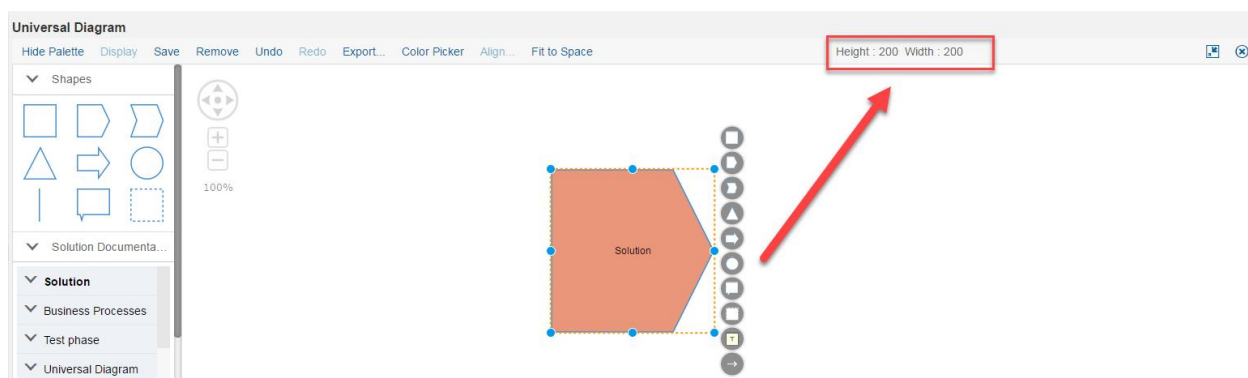


Click on the Change size icon.

Change size popup appears.



Change the height and the width and confirm (for example: Height 200, Width :200)



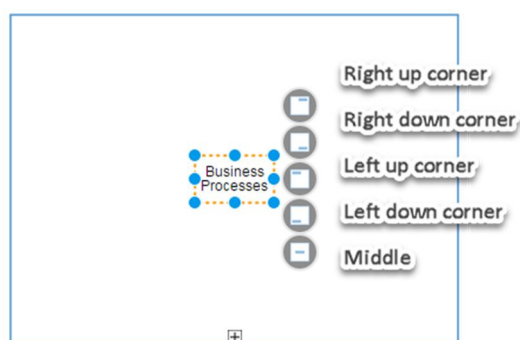
When you click on object the size appear on the toolbar.

2.2.3 Part III: When clicking a text symbol

Right up corner

Add an object from the bread crump palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.



Click on the right up corner icon.

The text symbol move to the shape's right up corner.



Right down corner

Add an object from the bread crump palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.

Click on the right down corner icon.

The text symbol move to the shape's right down corner.



Left up corner

Add an object from the bread crump palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.

Click on the left up corner icon.

The text symbol move to the shape's left up corner.



Left down corner

Add an object from the bread crump palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.

Click on the left down corner icon.



The text symbol move to the shape's left down corner.

Middle

Add an object from the bread crump palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.

Click on the middle icon.

The text symbol move to the shape's middle.

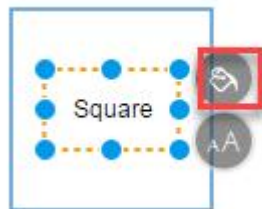


The text symbol can be moved using the mouse or the keyboard.

2.2.4 Part IV: When right-click a text symbol

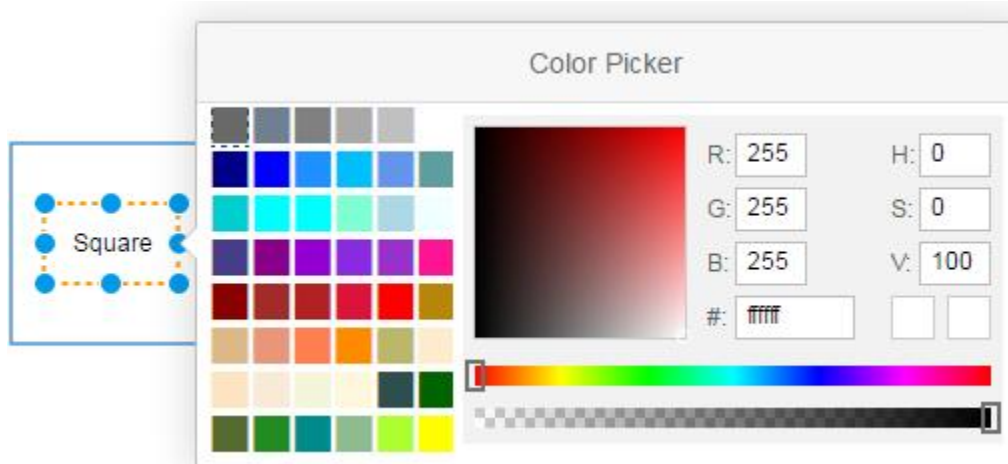
Color

From the diagram, right-click a text symbol. The context Menu appears.

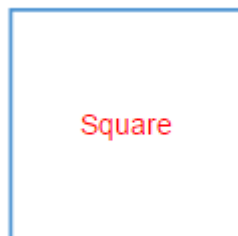


Click on the Color icon.

Color Picker popup appears.

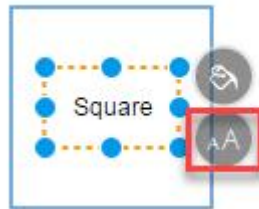


Select color → the text symbol's color changed



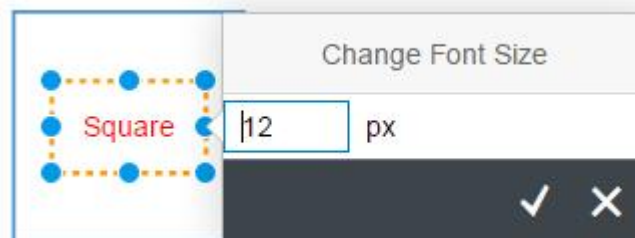
Size

From the diagram, right-click a text symbol. The context Menu appears.

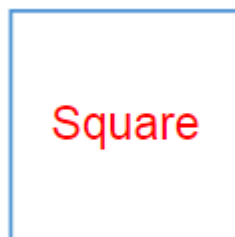


Click on the Change size icon.

Change Font Size popup appears.



Change the font size and confirm (for example 20 px)

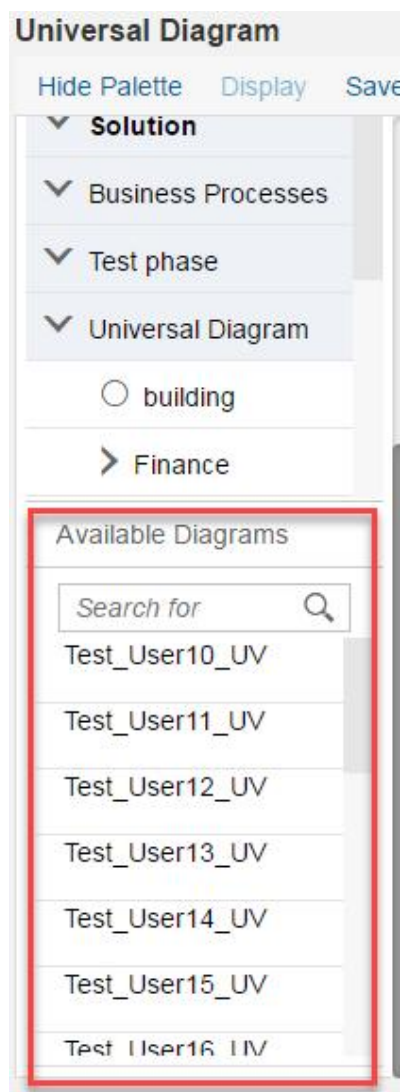


2.3 Diagram Palette

In this section, you learn about the creation and addition of different objects in the diagram.

You have the possibility in a universal diagram to add diagram (the diagram modeled by shapes). That is why it is an effective visual diagram for modelling that displays detailed information in a straightforward manner.

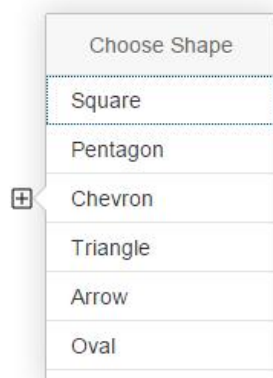
The diagram palette presents the available diagrams under the process.



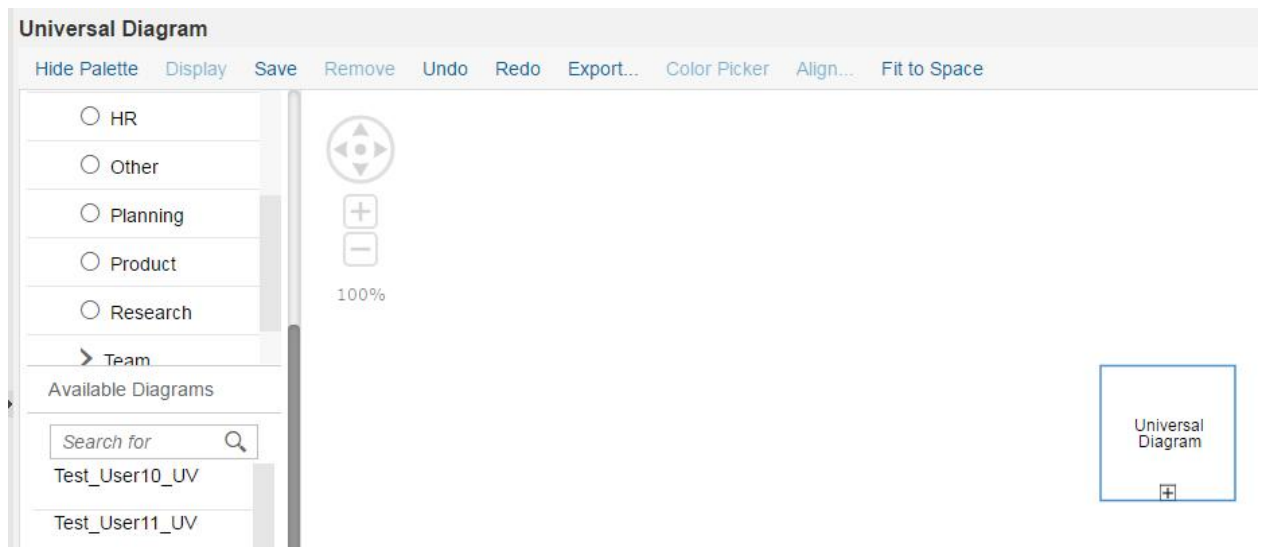
Click on the diagram from the list of available diagrams.

Click inside the diagram.

The Choose Shape popup appears.

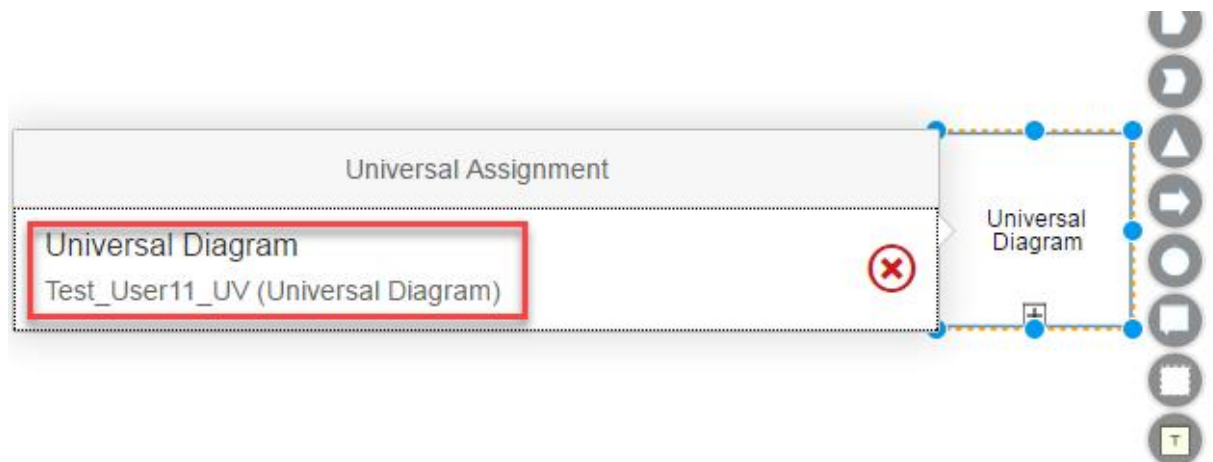


Select Shape from the list (example: Square)



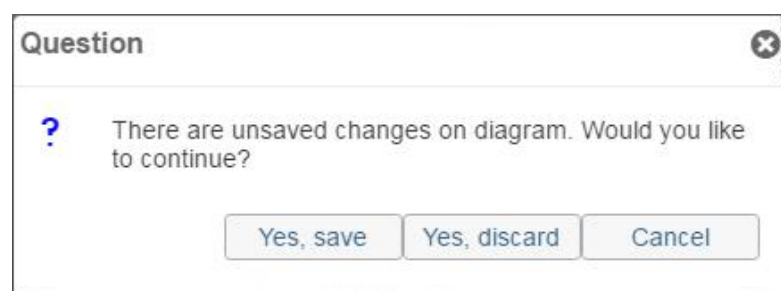
Click on the  icon.

A popup with the referenced diagrams is displayed.



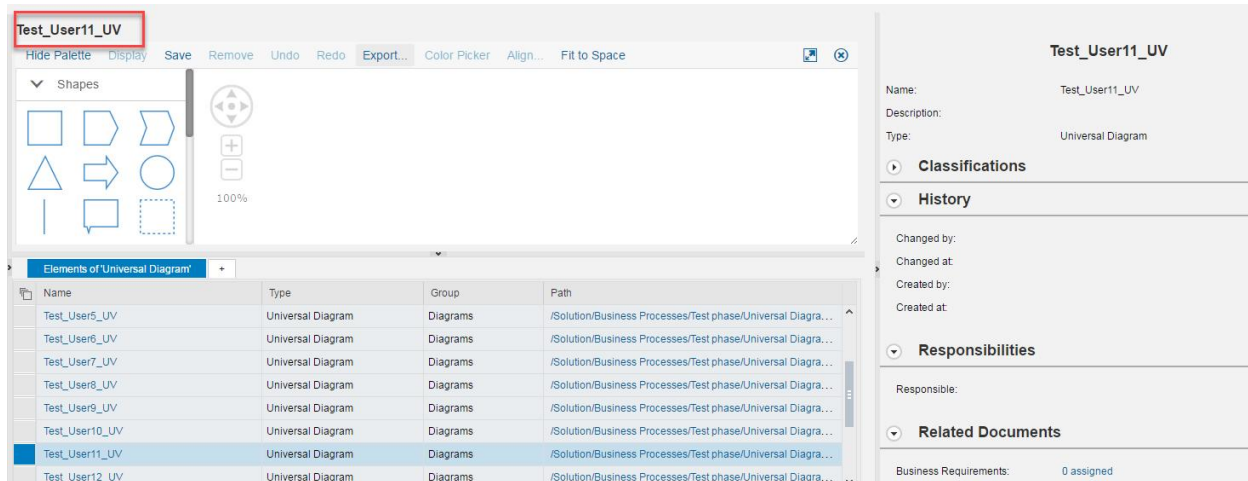
Click on the diagram on the popup.

If some changes are not yet saved in the current diagram, a popup suggesting saving the changes is displayed.

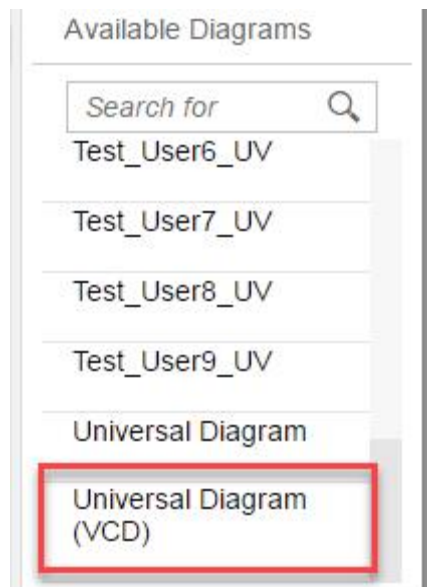


Click Yes, save.

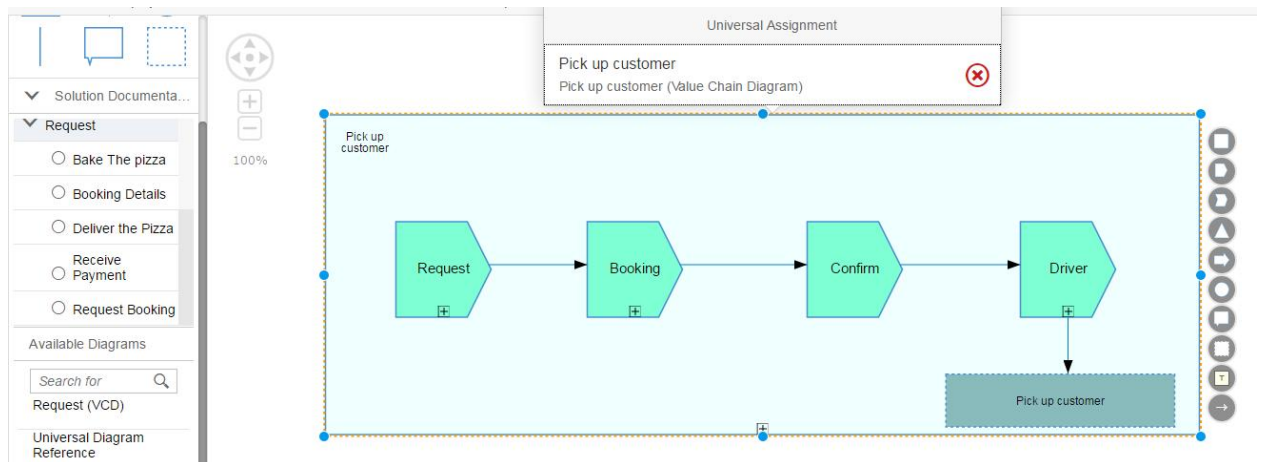
The current diagram is saved and the referenced diagram is displayed.



For each universal diagram, you will find its VCD (value chain diagram) on the list of Diagram Available.

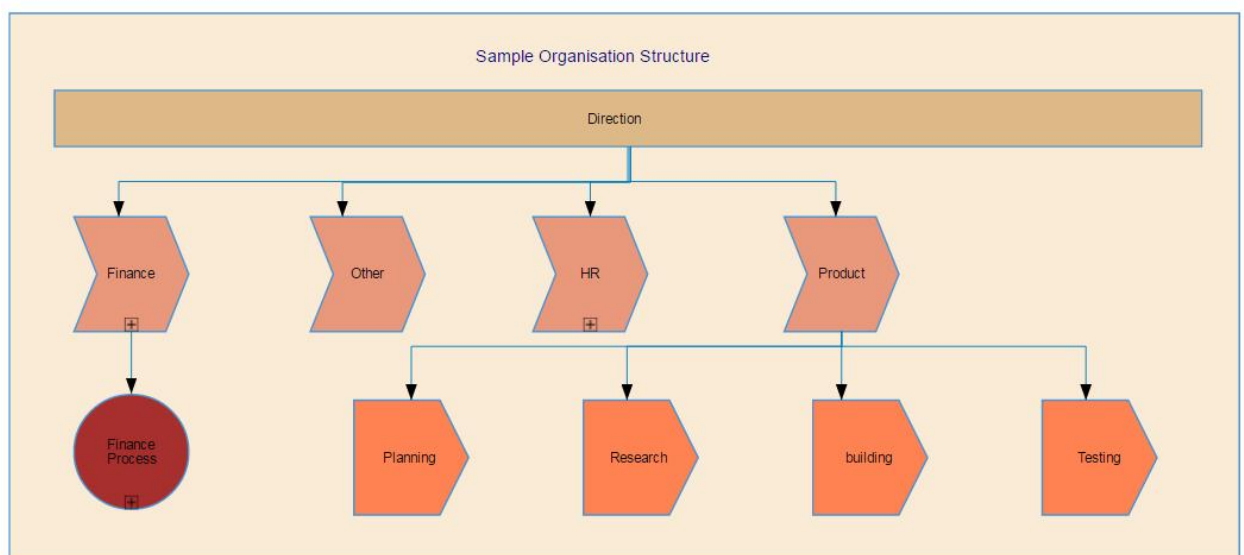


Example:

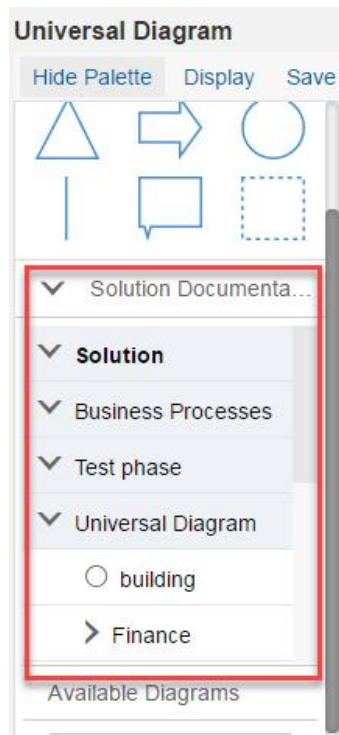


2.4 Section Palette

In this section, you learn about the creation and addition of different objects in the diagram.

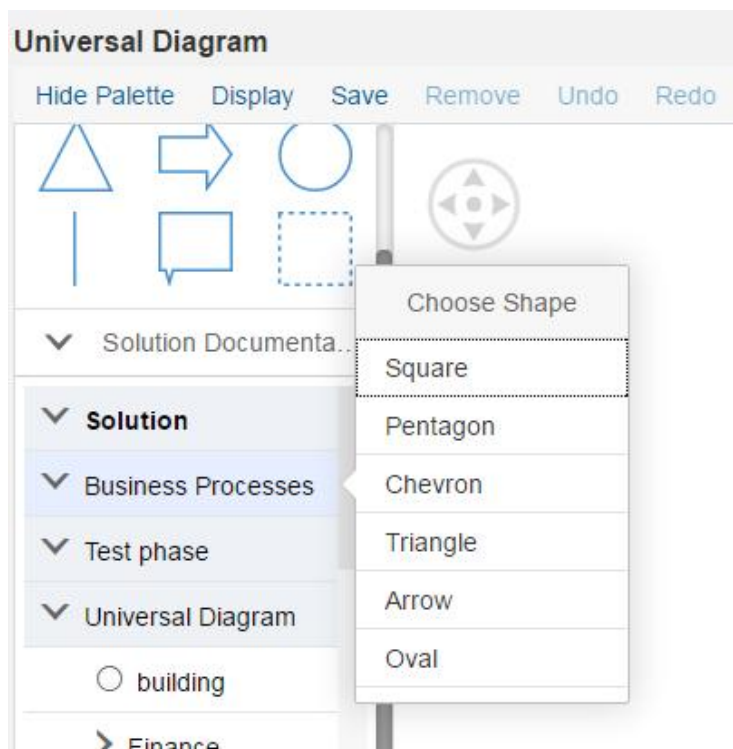


The Section palette show all "Folder", "Master Data", "Organizational Unit" and "Scenario" under the Business Process.

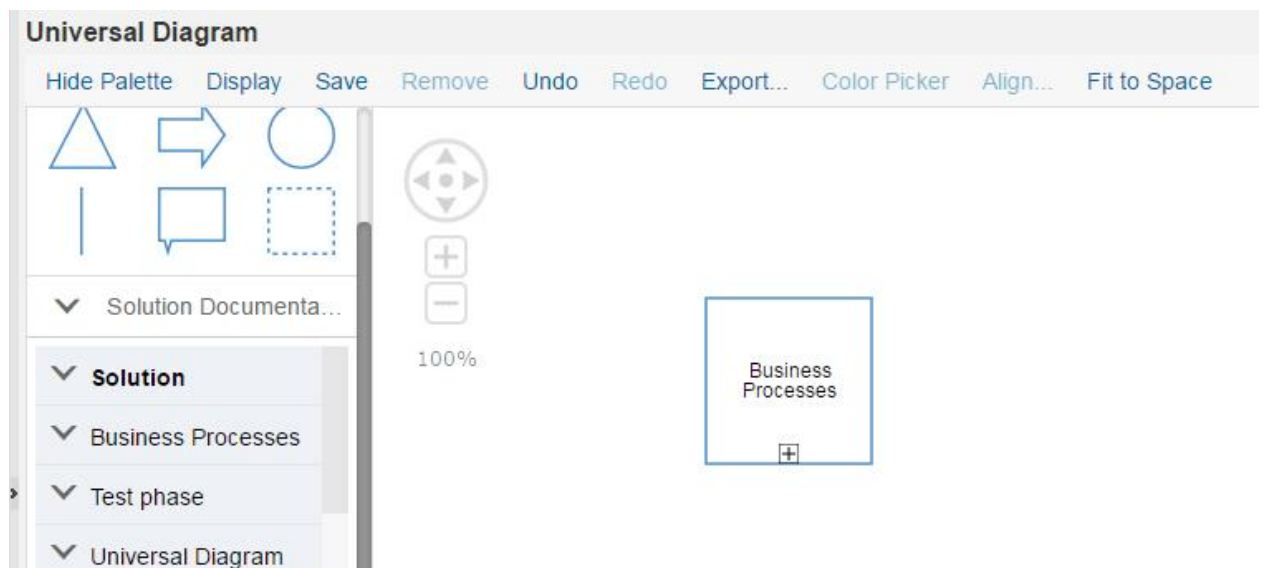


Click on Business process

The Choose Shape popup appears

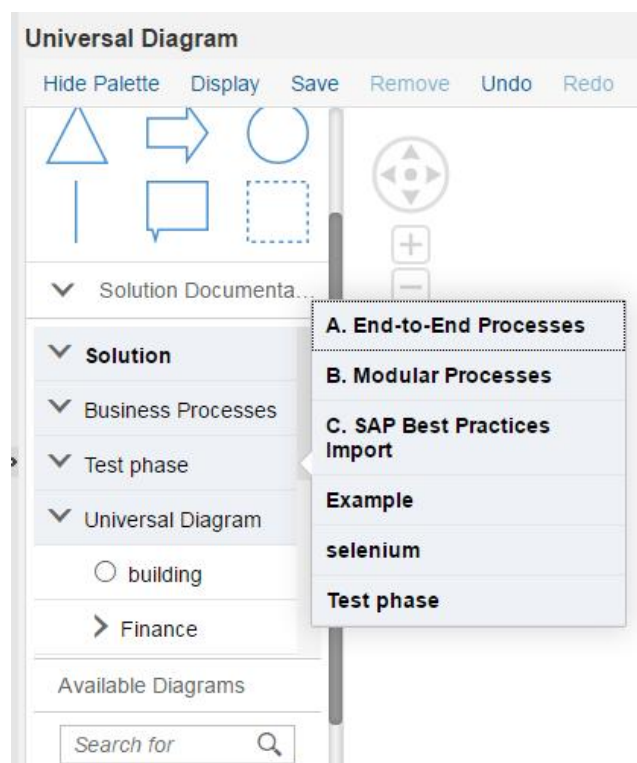


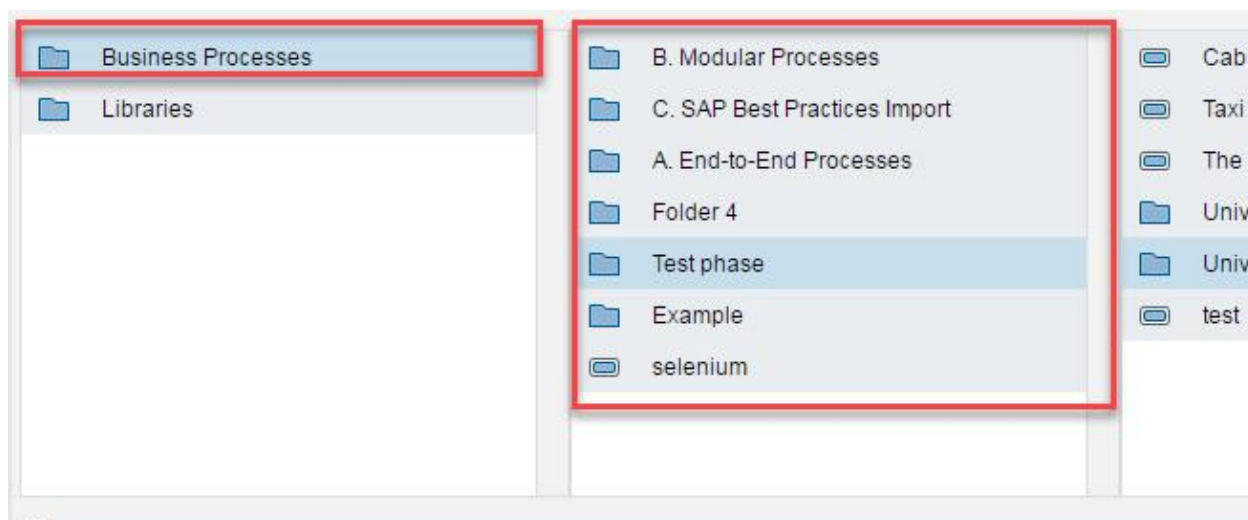
Select Shape from the list (example: Square) and drag it onto the diagram



Move the mouse example on Test phase

A list of element on the same level with Test phase and under Business process appears

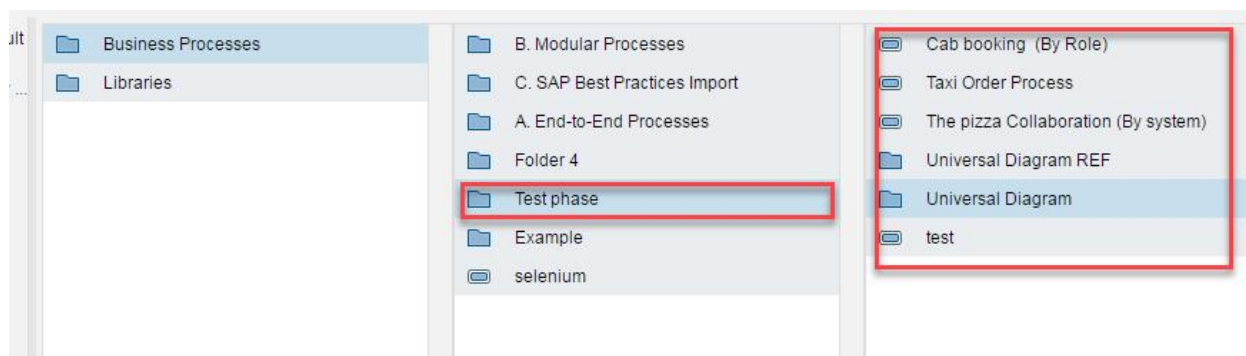
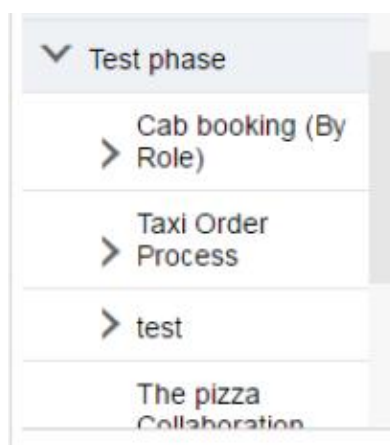




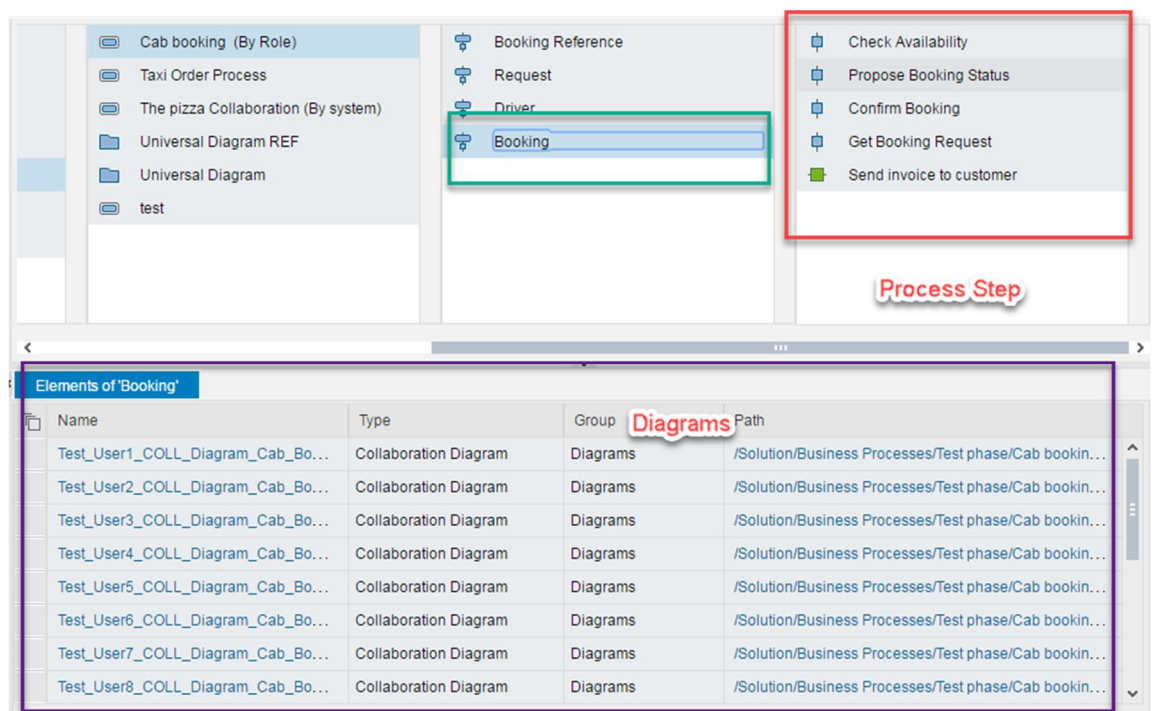
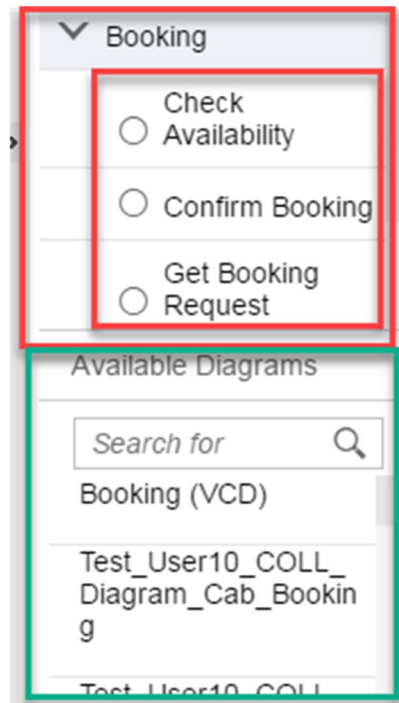
Click on scenario or folder

All the folder under the folder selected appears

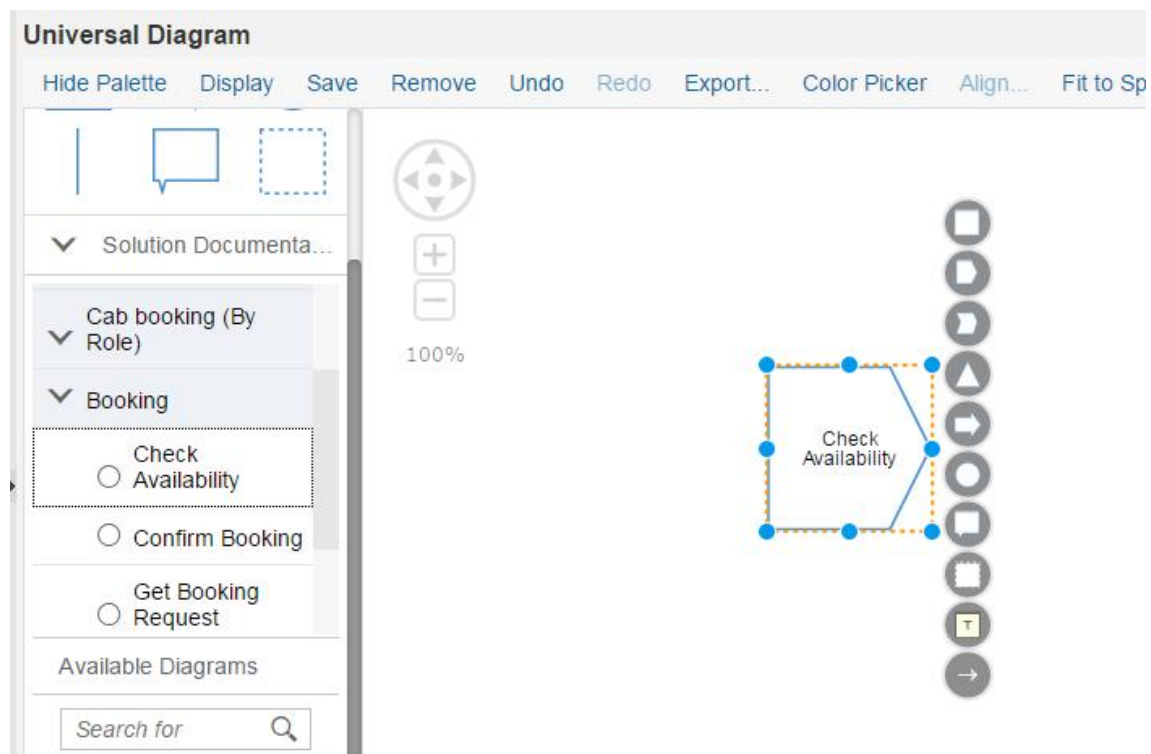
All process under the scenario selected appears



Click on Process all processes step under process displayed and all the diagram under this process displayed in the section "Available Diagram". Example: Booking



Click on process step (example: Check Availability) the Choose Shape popup appears.
 Select Shape from the list (example: Pentagon)



2.5 Application Toolbar

In this section, you learn more about the application toolbar.

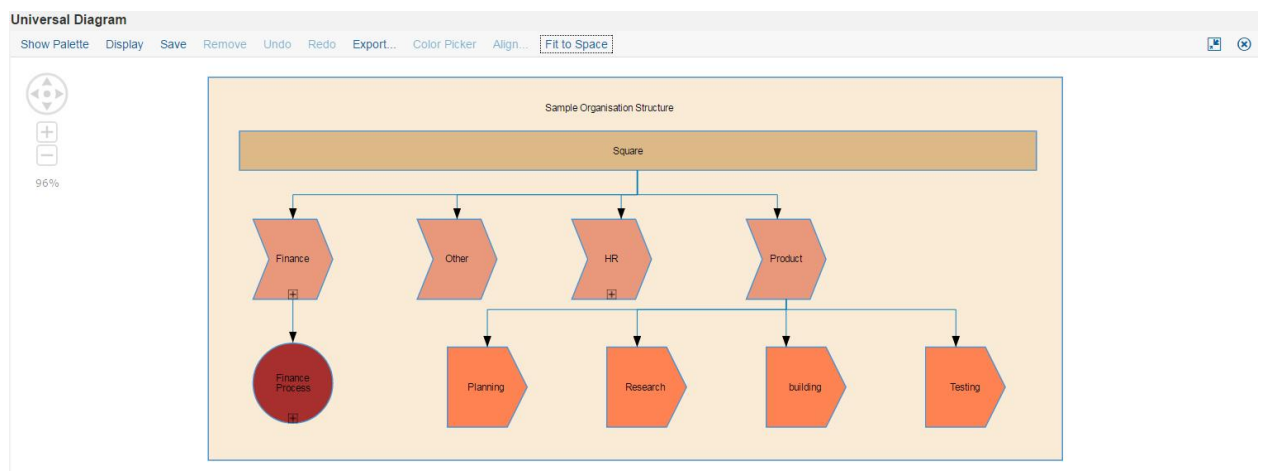
The toolbar has some functions which can be performed on the whole diagram (like edit/display, export, save...), and some functions which can be performed on a selected object, like Align..., and two buttons on the right hand side which allow to maximize/minimize or close the diagram.

Hide Palette

Click the Hide Palette button.



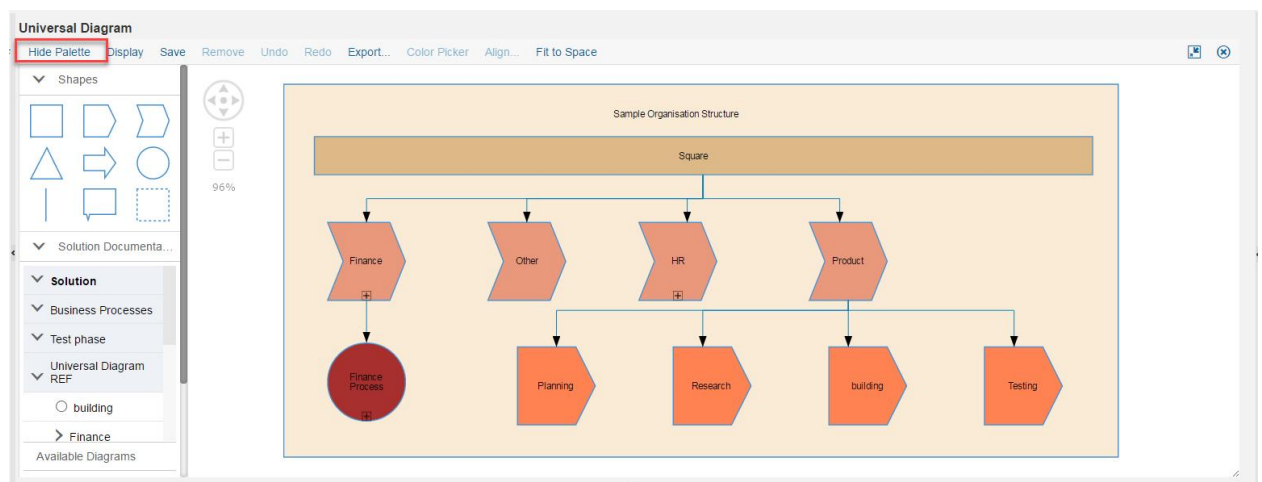
The palette disappears:



Click the Show Palette button.



The palette is displayed.



Display/Edit

By default, if the diagram is not locked by another user, it opens in edit mode.

The Display button is enabled.

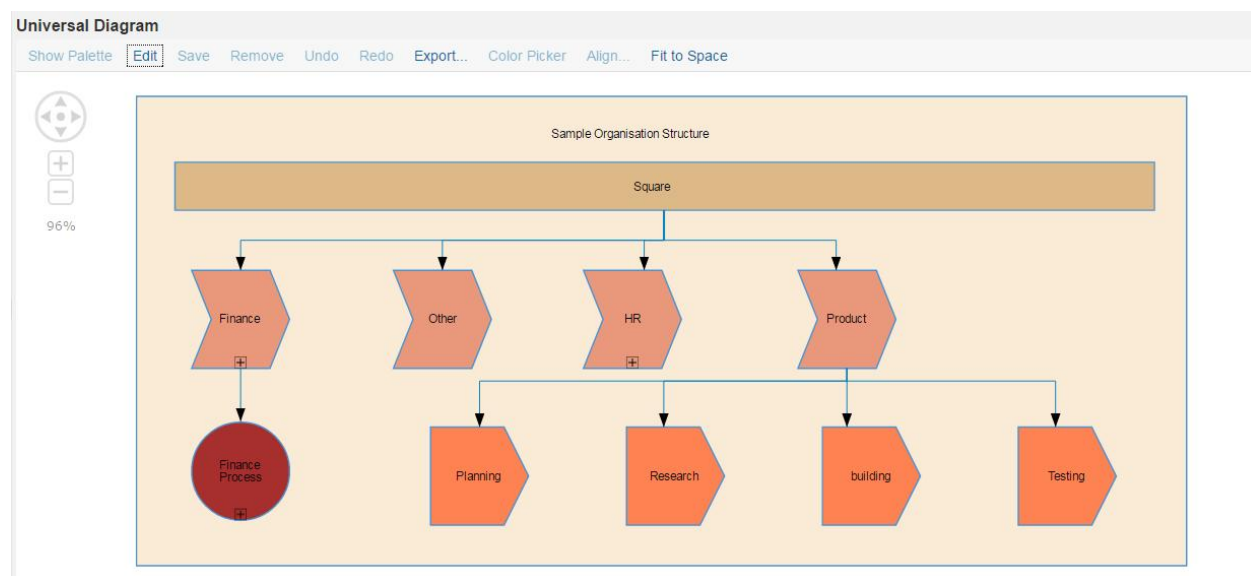


Click the Display button.

The Display button switches to Edit.



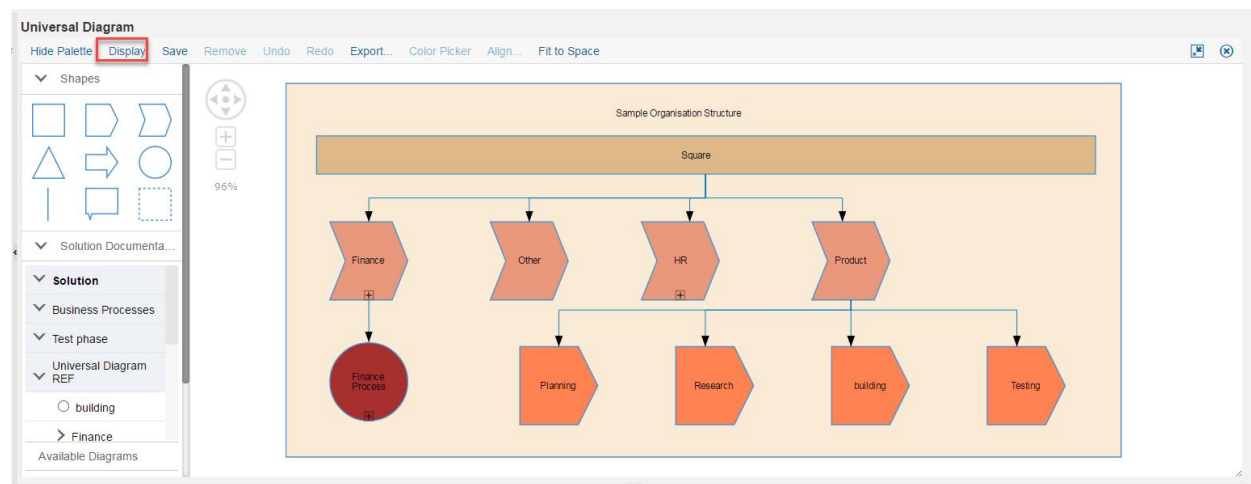
The palette disappears and the diagram cannot be modified.



Click the button Edit.

The Edit button switches to Display.

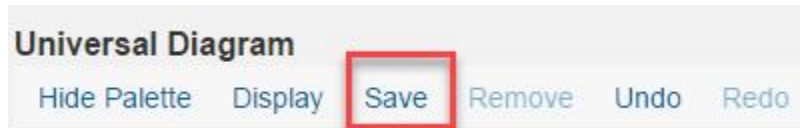
The diagram is editable and the palette is displayed.



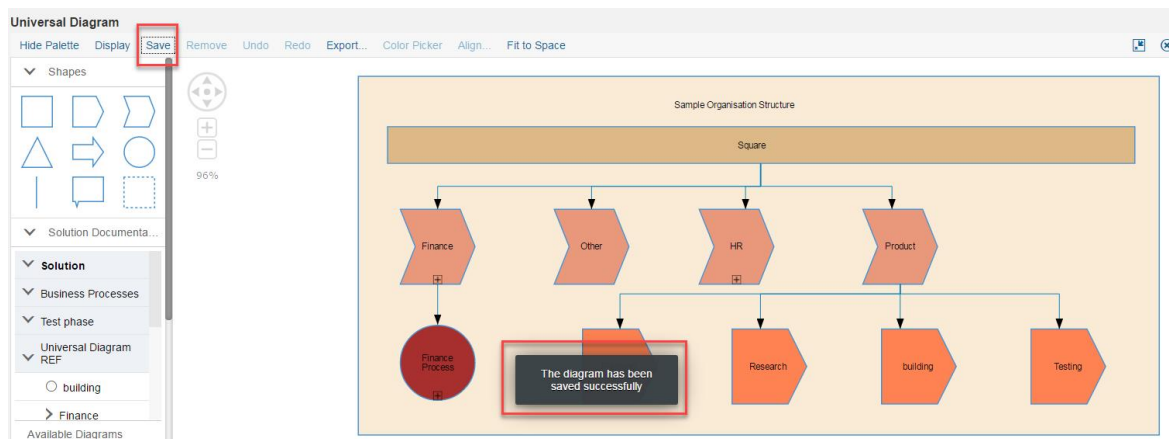
Save

Add an object to the diagram.

Click on "Save" to save the diagram.



The following message is displayed.



Close the diagram and open it again.

The diagram must display all saved objects.

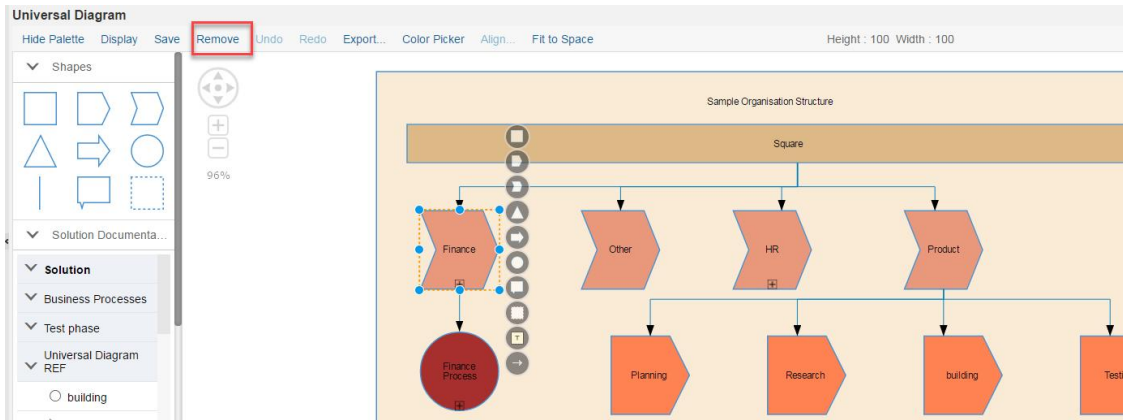
Remove

If no object is selected in the diagram the button Remove is disabled.



Select an object in the diagram.

The button Remove is enabled.



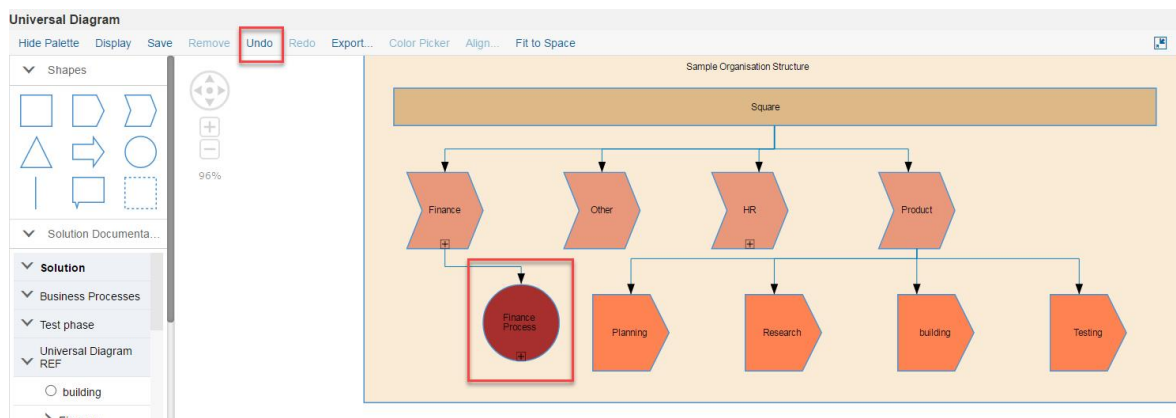
Click on the button Remove.

The object is removed from the diagram.

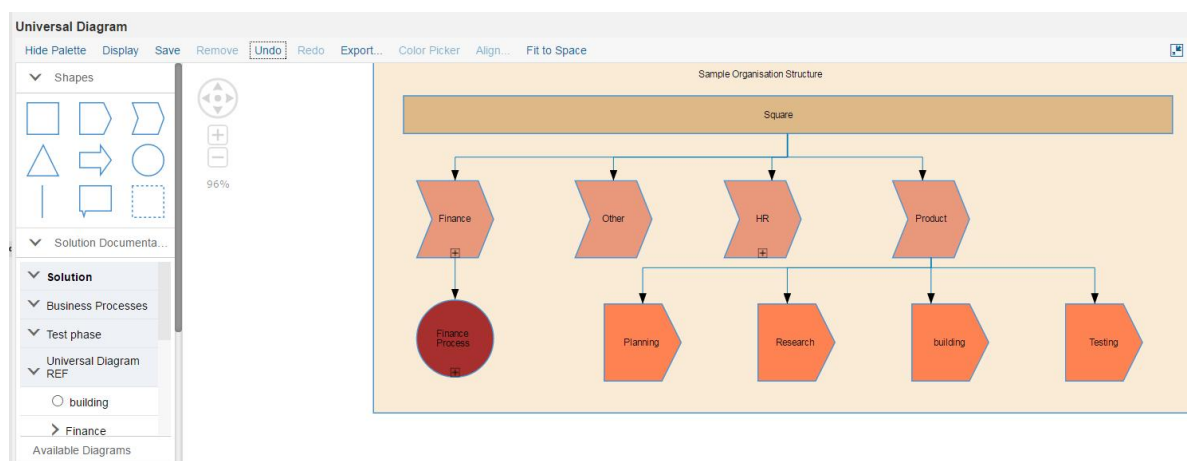
Undo

Select an object in the diagram.

Move the object in the diagram.



Click on the button Undo.



The object will go back to its initial location.

Redo

Select an object in the diagram.

Move or Remove the object in the diagram.

Click on the button Undo.

The object will go back to its initial location.

Click the button Redo.

The object will go back to the previous second location.

Export ...

[Google Chrome](#)

Use the Export as button to export a diagram as PDF or SVG.

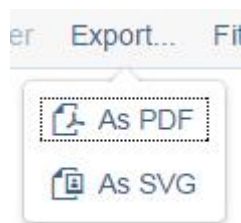


Diagram is imported as PDF or SVG.

[Microsoft Internet Explorer](#)

Use the Export as button to export a diagram as SVG

Use the Print button to export a diagram as PDF

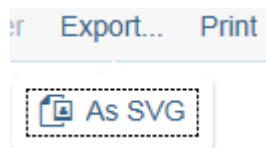
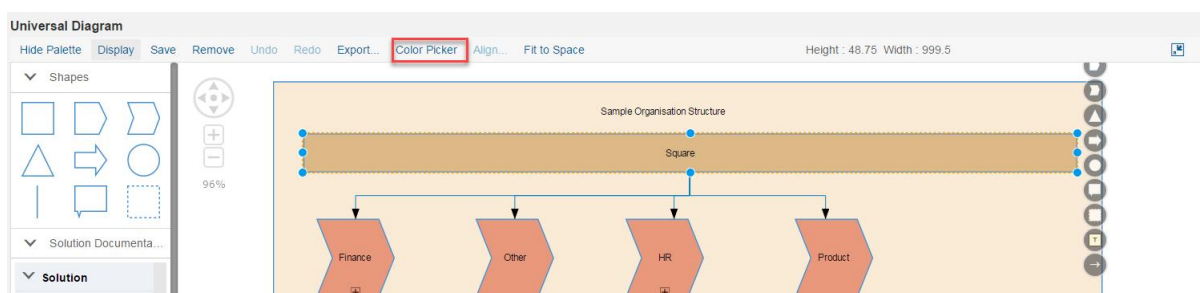


Diagram is imported as PDF or SVG.

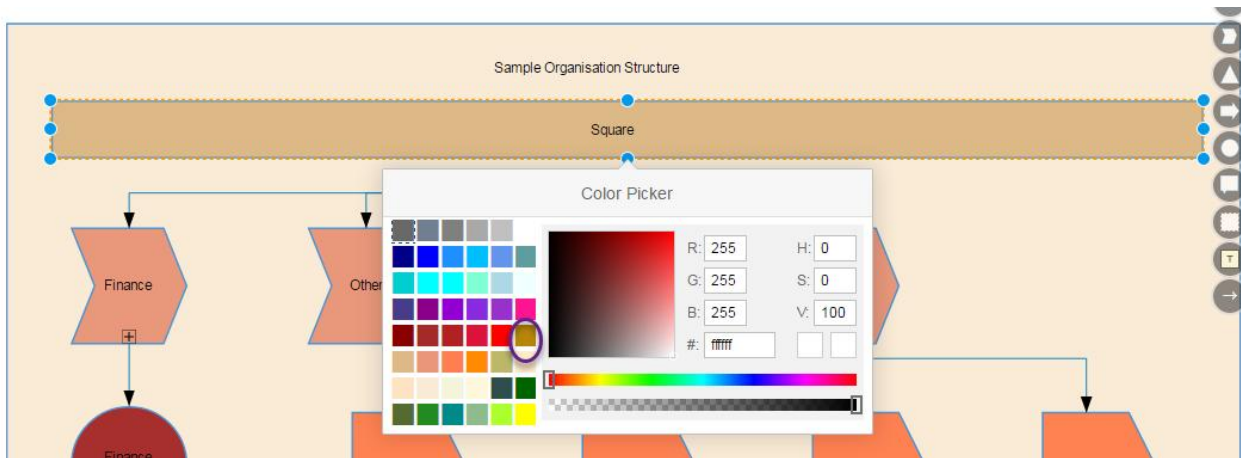
Color Picker

Select an object in the diagram.

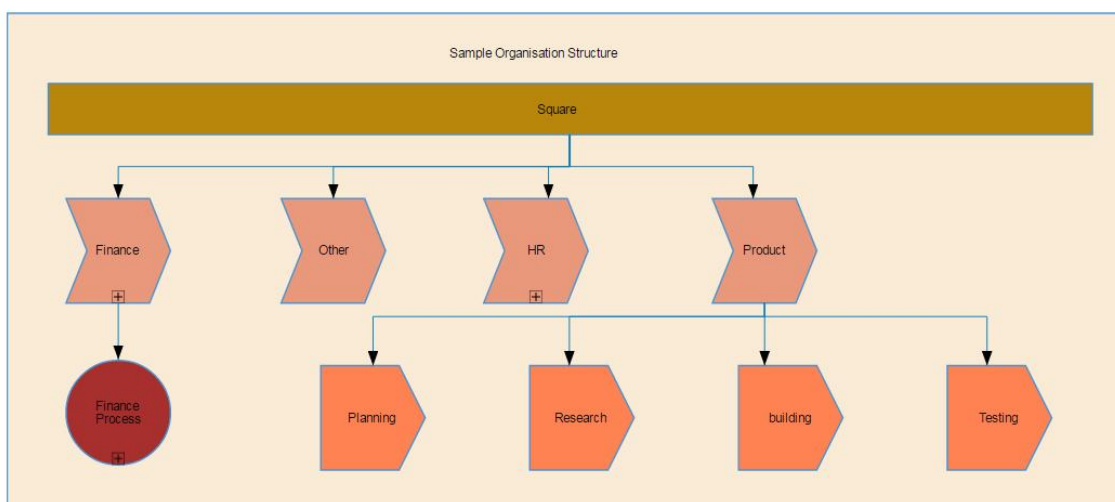
Click on the button Color Picker.



Color Picker popup appears.

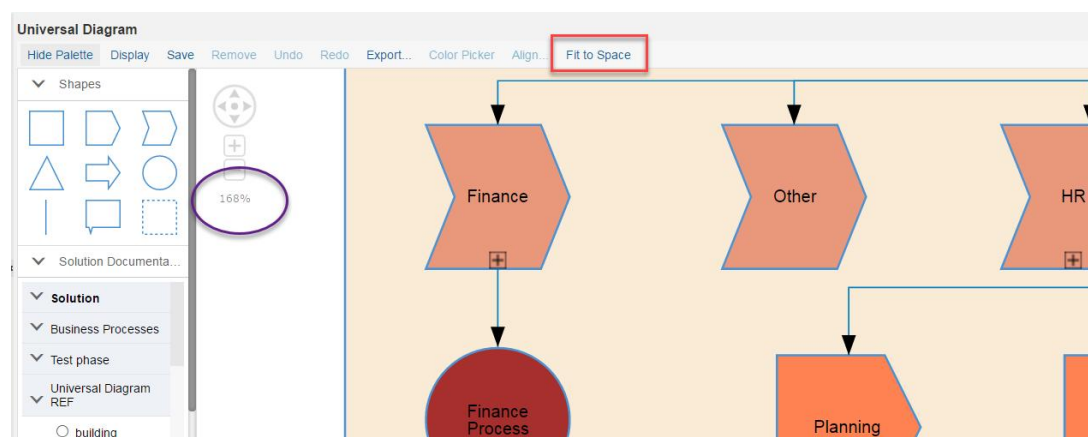


Select Color.

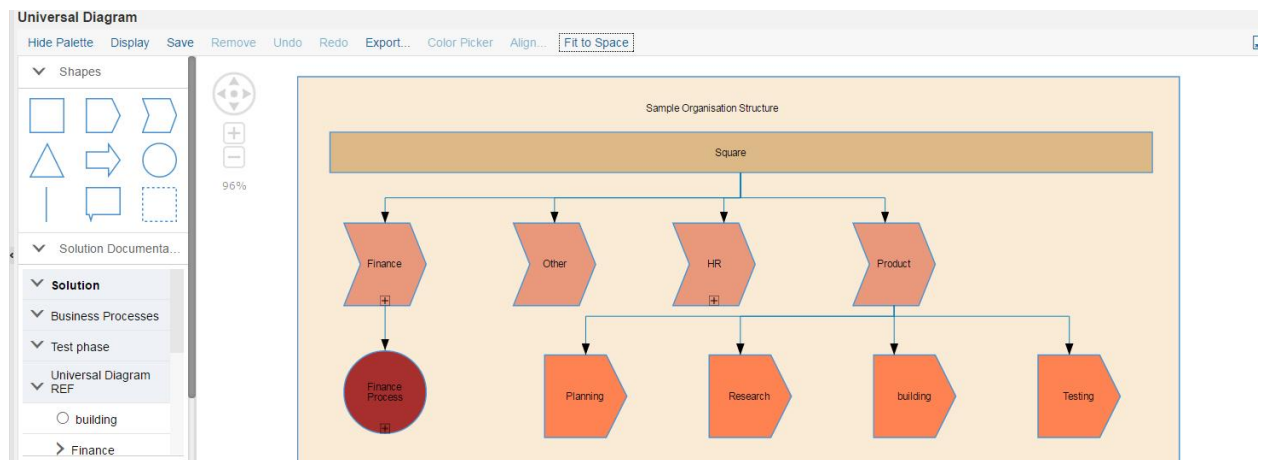


Fit to Space

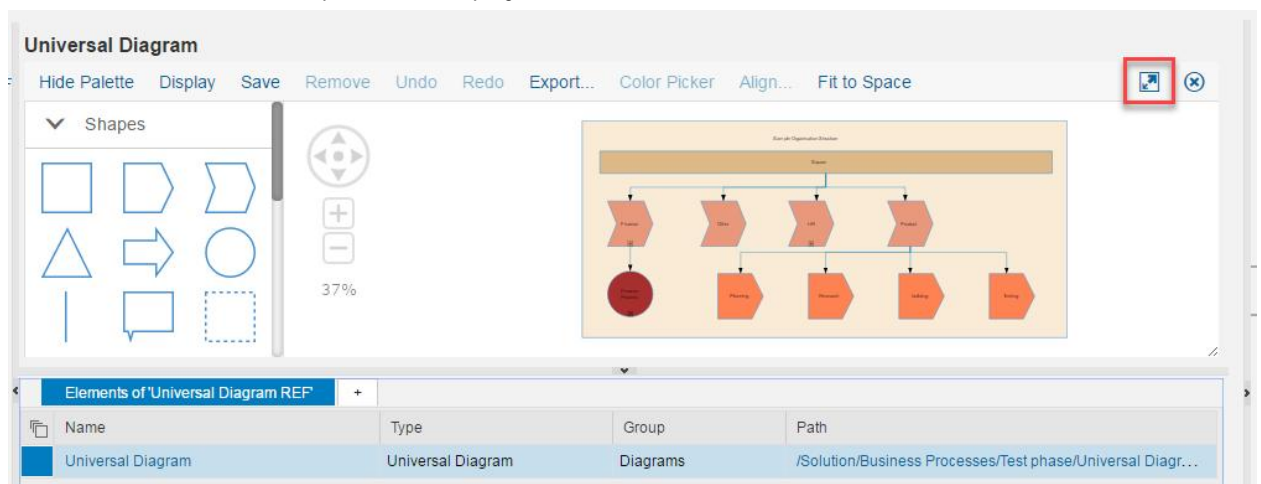
Zoom the diagram with the mouse scroll wheel.



Click on the button Fit to Space.
The diagram is displayed entirely.



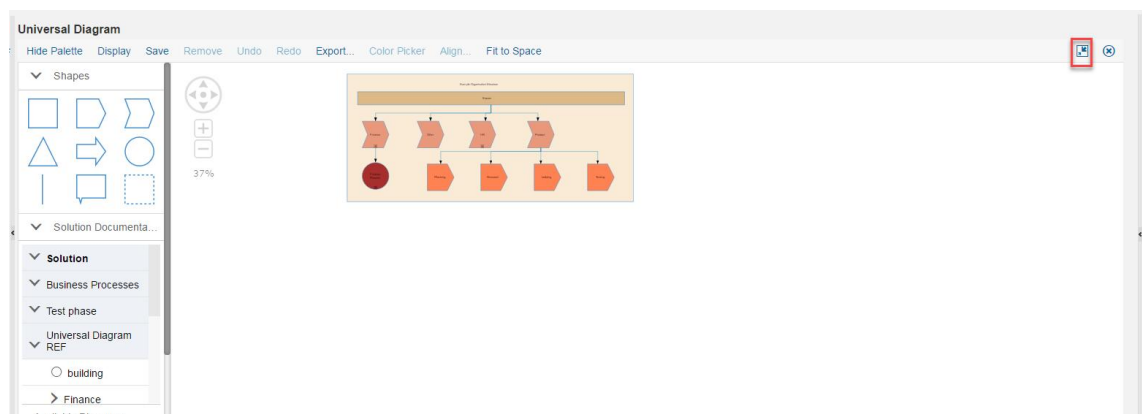
Maximize/ Minimize
The solution documentation panels are displayed.



Click



The panels are hidden.



The button



turns to.



Click



to display the panels back.

Name	Type	Group	Path
Universal Diagram	Universal Diagram	Diagrams	/Solution/Business Processes/Test phase/Universal Diagram REF

Close

While a diagram is open, click on the button close.



The diagram is closed and the Solution Documentation UI is displayed.

Name	Type	Group	Path
Universal Diagram	Universal Diagram	Diagrams	/Solution/Business Processes/Test phase/Universal Diagram REF

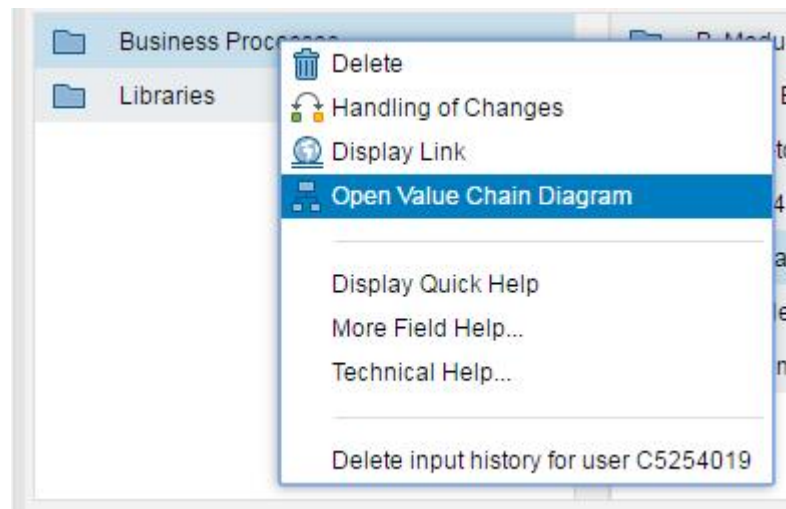
3 Value Chain Diagram

In this section, you learn more about value chain diagrams.

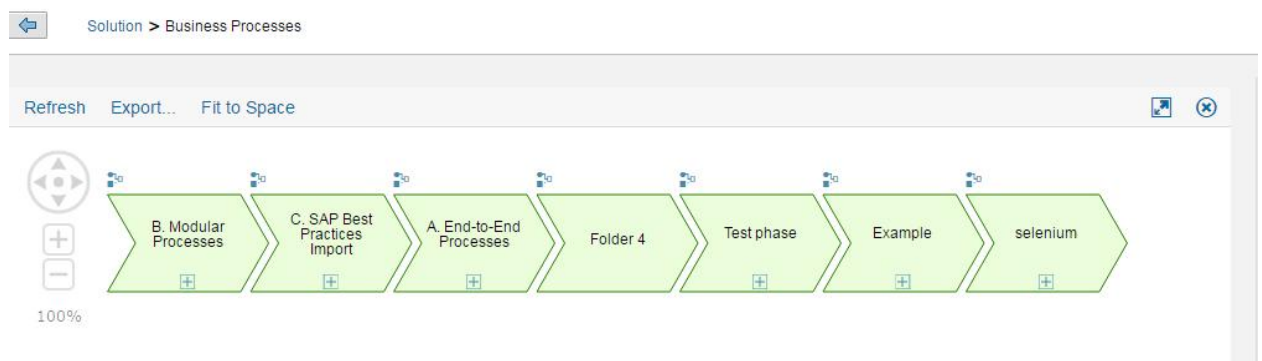
A value chain is a high-level model that categorizes the generic value-adding activities of an organization. Each step in a Level X Value Chain can link to a more detailed one.


3.1 Business Processes

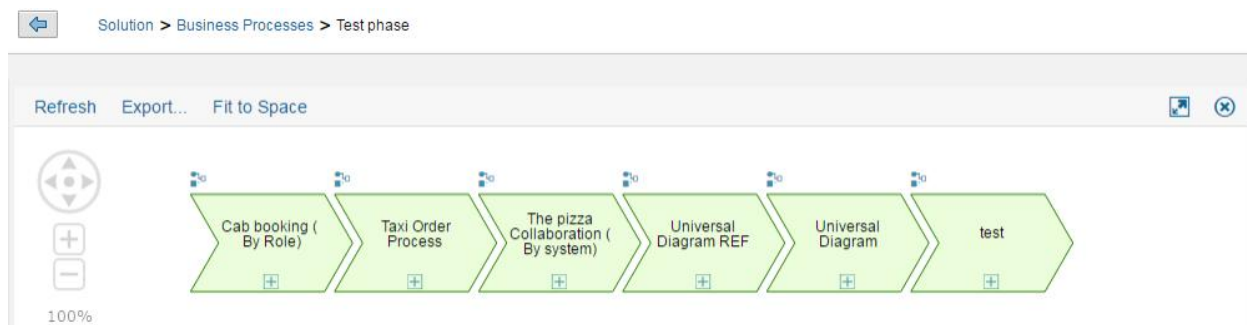
From the solution documentation, right click Business Processes and click Open Value Chain Diagram.




Value chain diagram is open.



Click on the  icon to display all processes under the Test phase.



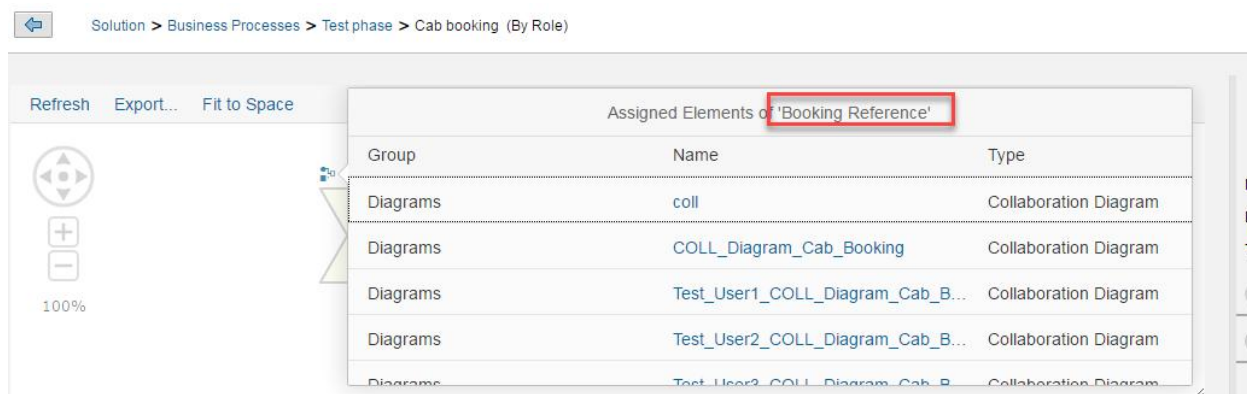
Click on the  icon to display all processes under the Cab Booking.




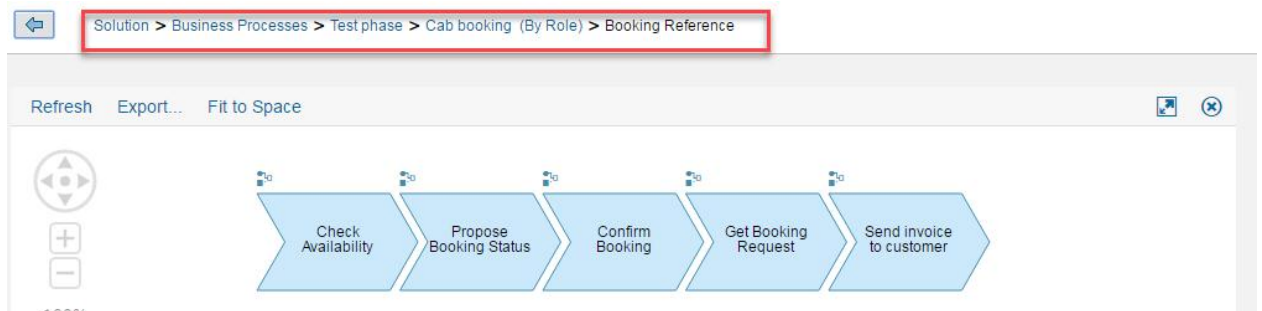
Click the



icon to display all diagrams under the Booking Reference.

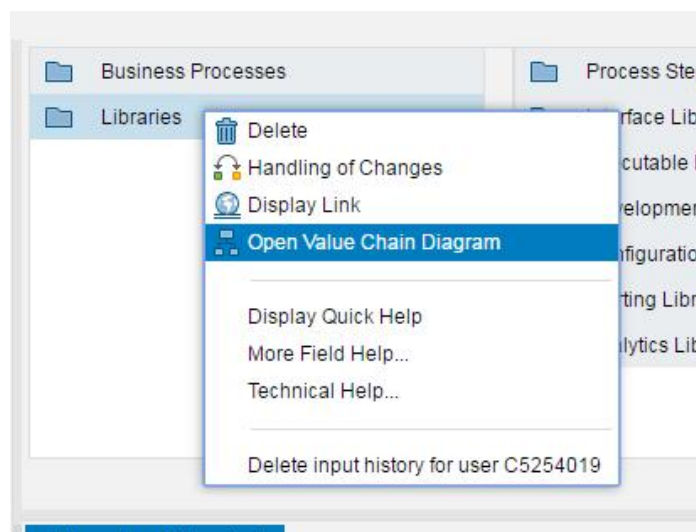


Click on the  icon to display all process steps under the Booking Reference.




3.2 Libraries

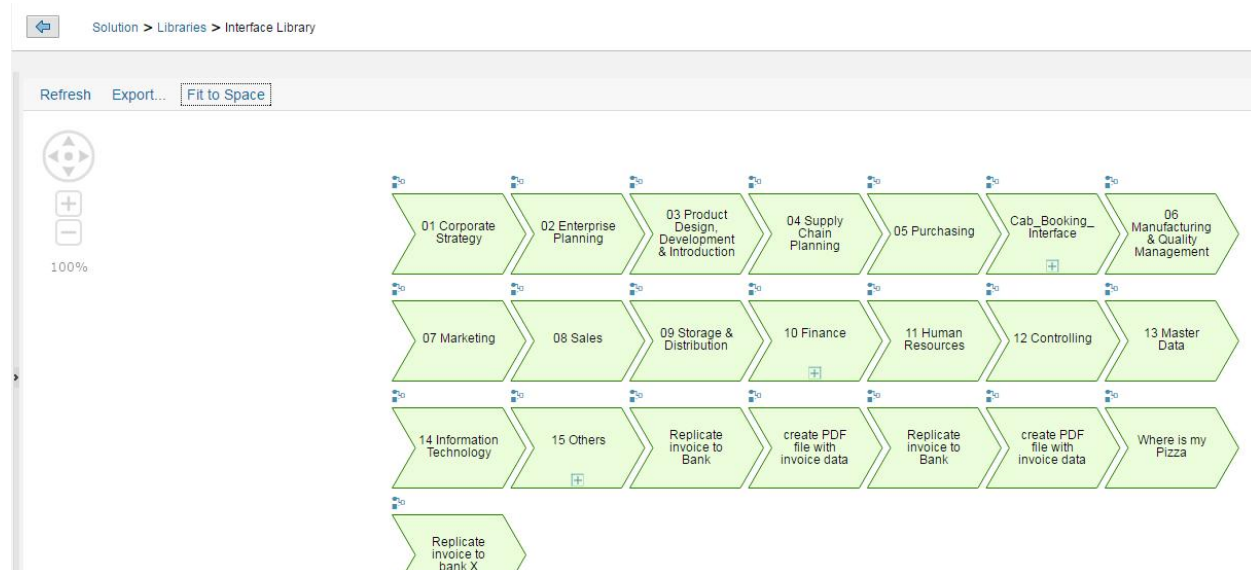
From the solution documentation, right click Libraries and click Open Value Chain Diagram.



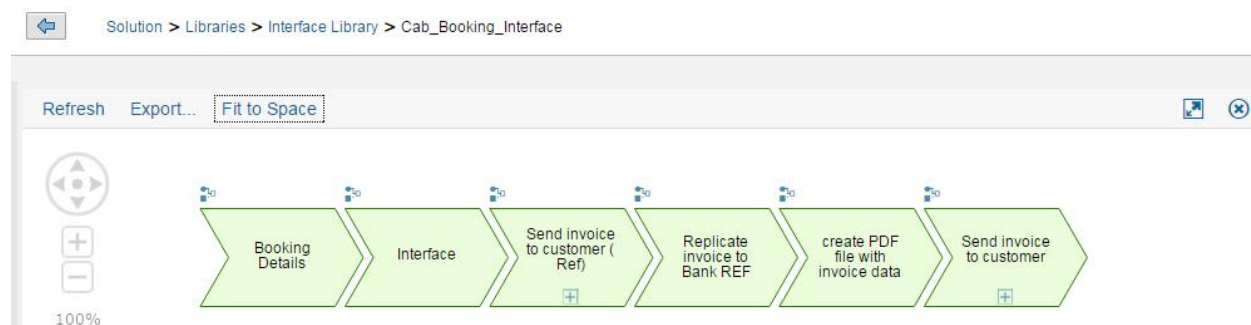
The value chain diagram is displayed.




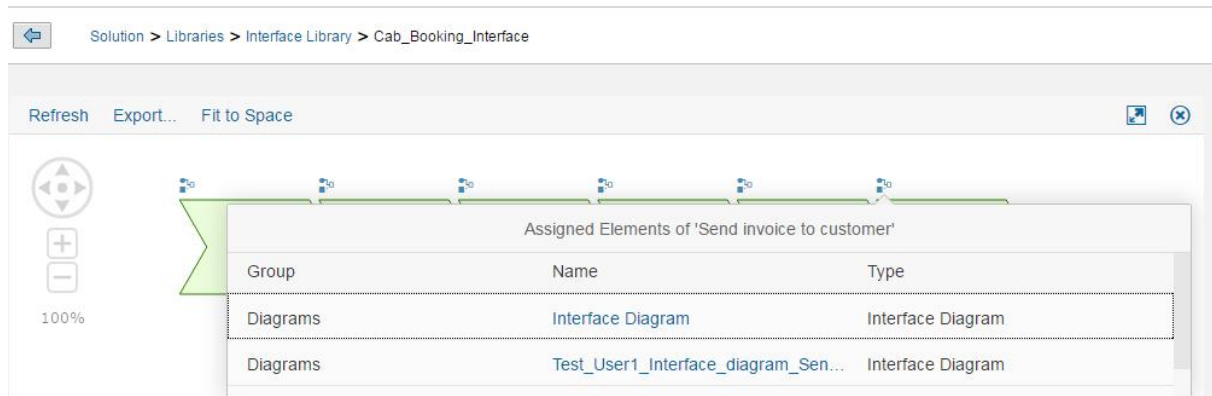
Click on the  icon to display all interfaces under the interface library.




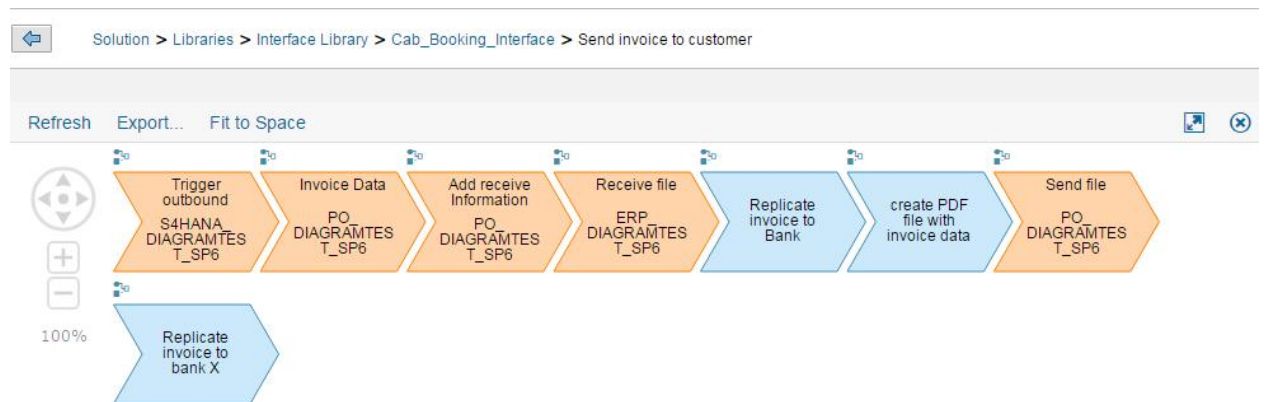
Click on the  icon to display all interfaces under the Cab_Booking_Interface.



Click the  icon to display all diagrams under Composite Interface "Send Invoice to customer ".

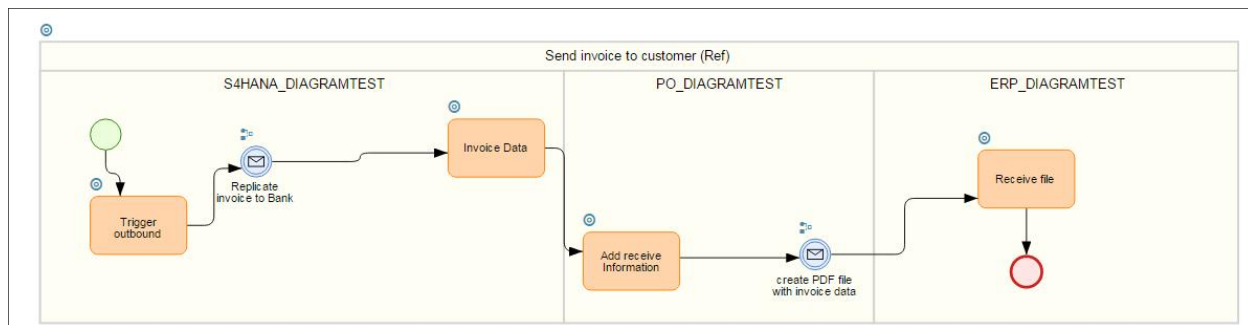


Click on the  icon to display all interfaces and interface steps under the Send Invoice to customer.



4 Interface Diagram

In this section, you learn more about the context menu options in an interface diagram.



4.1 Context Menu

The following descriptions contain three parts of context menu objects that are available.

Part I: When clicking an object	Part II: When right-click an object	Part III: When clicking a text symbol

To add the first element to the diagram, select it from the palette on the left side of the Editor, drag it onto the diagram.

Once you got started, you can add elements using the context menus of the existing elements. Depending on the object currently selected, the menu suggests displayed.

In order to make use of the interactive context menu, proceed as follows:

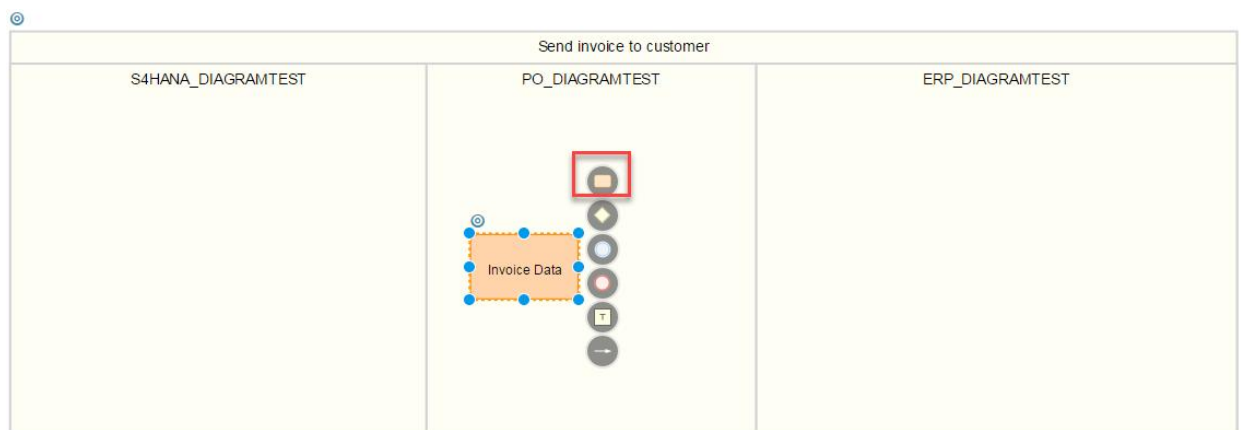
- Select an object on the diagram. The interactive context menu appears right of the object.
- Click the icon representing the element you want to add.
- The new element appears in the diagram and both element are linked.

4.1.1 Part I: When clicking an object

Add Interface Step

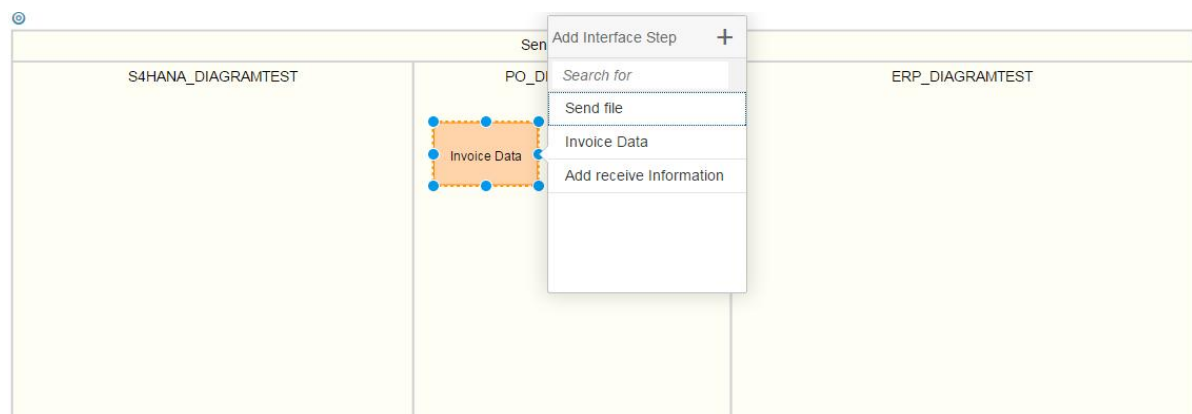
From the diagram, select an Interface Step. The context Menu appears.

Click on the interface step icon.



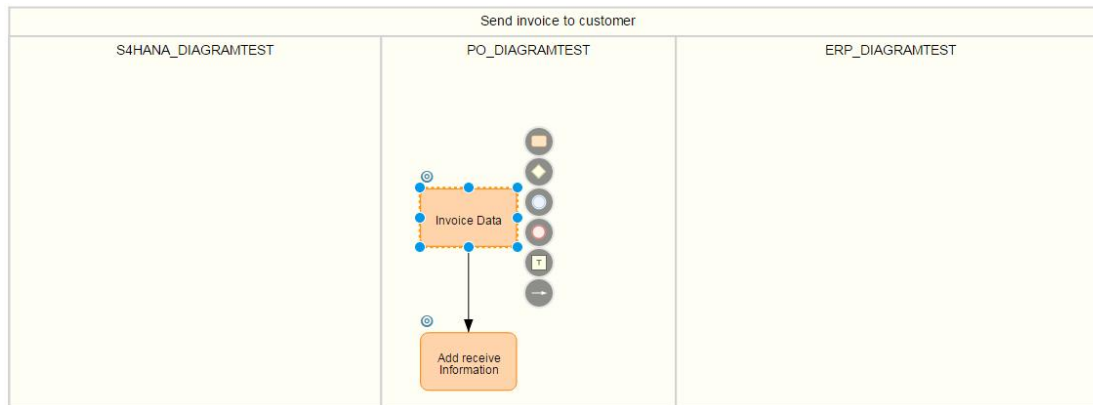
The interface step popup appears.

All interface steps which belong the logical component are displayed.



Select an interface step and added it to the diagram.

The interface step is added to the diagram and both interface steps are linked.



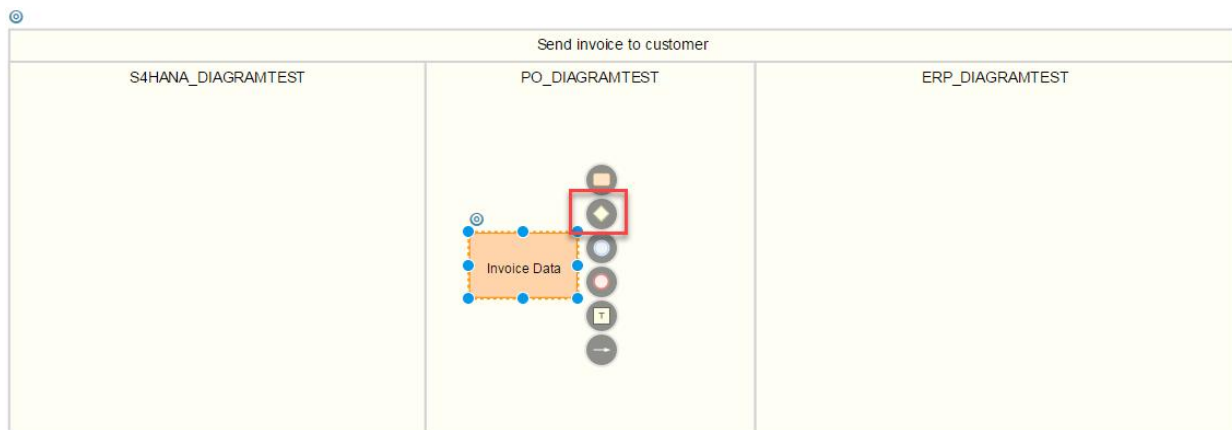
Add Gateway

From the diagram, select an Interface Step. The context Menu appears.

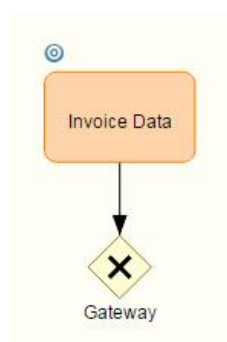
Click on



to add a gateway.



The gateway is added and is linked to the interface step.



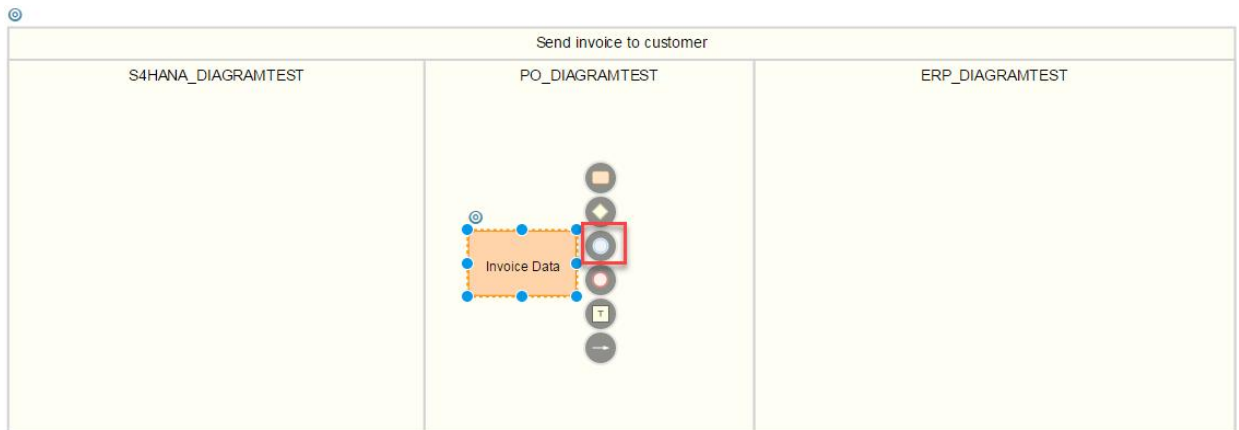
Add Intermediate Event

From the diagram, select an interface step. The context Menu appears.

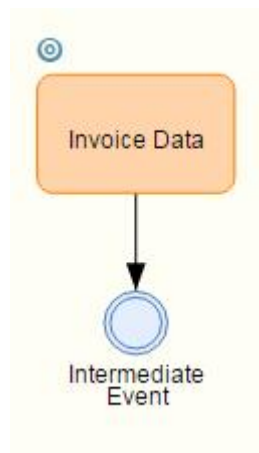
Click on



to add an intermediate event.



The intermediate event is added and is linked to the interface step.



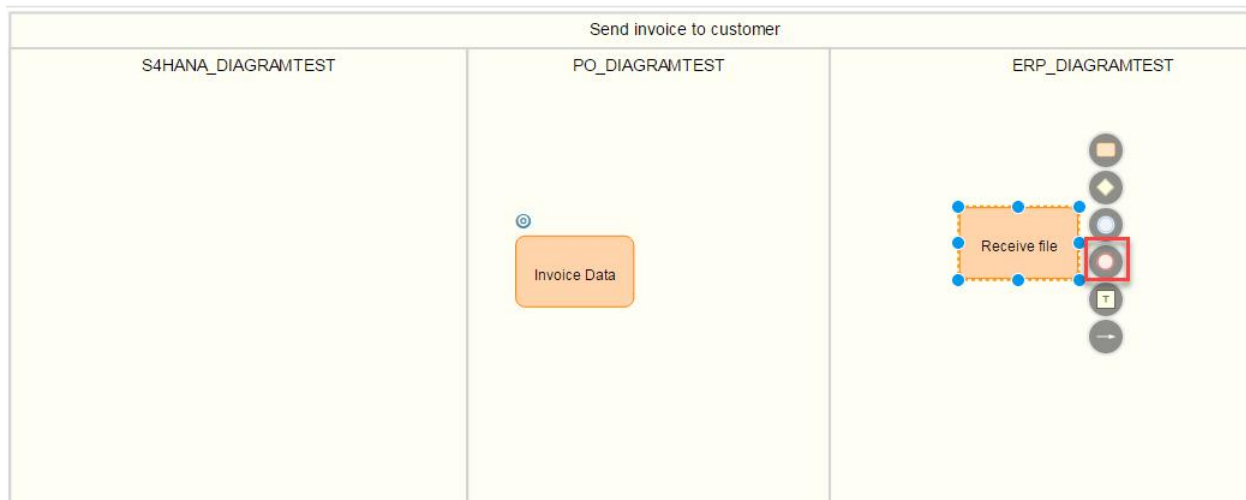
Add End Event

From the diagram, select an interface step. The context Menu appears.

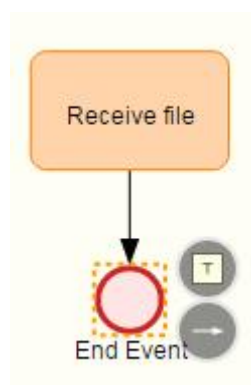
Click on



to add an end event.



The end event is added and is linked to the interface step.



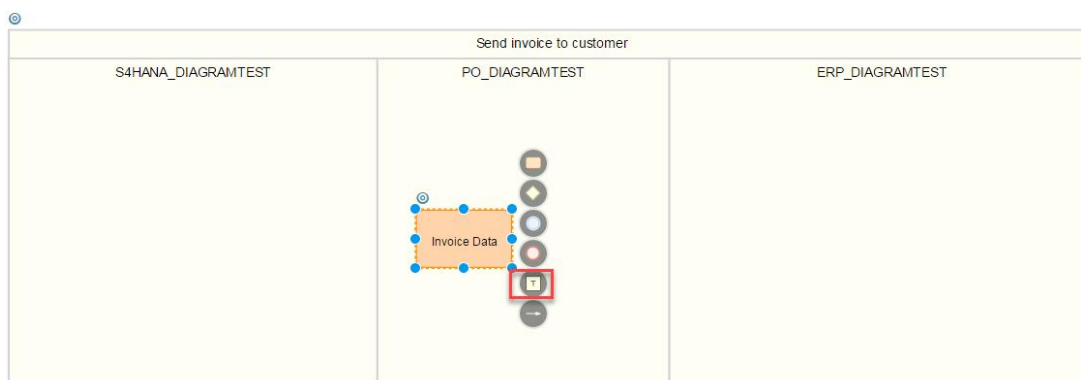
Add Note

From the diagram, select an interface step. The context Menu appears.

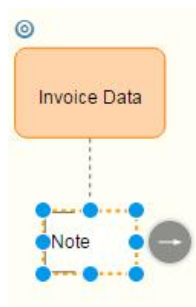
Click on



to add a note.



The note is added and is linked to the interface step.



Double click to add note.



Add Link to an object

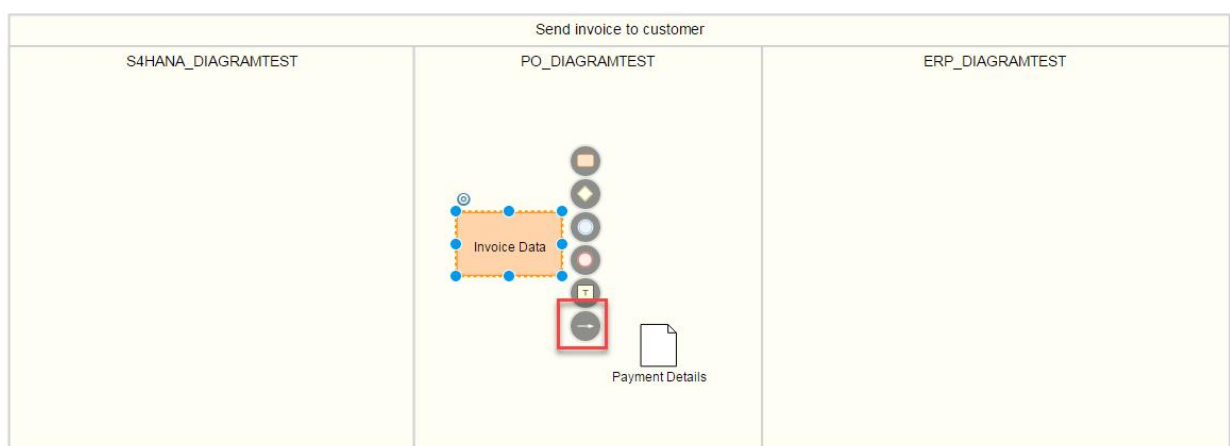
From the diagram, select an object. The context Menu appears.

Click on

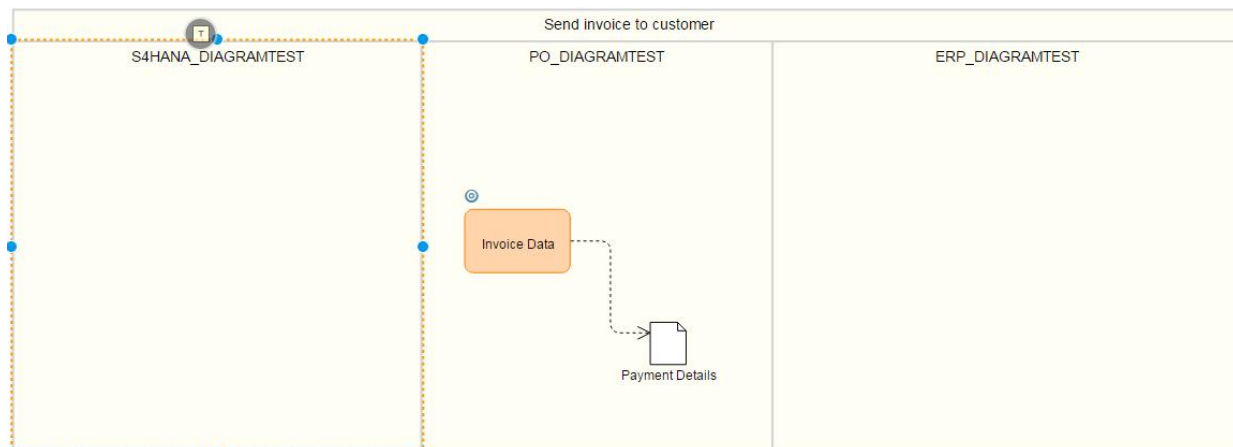


to add a link and drag it to the other object without releasing the pointer.

Choose a contact point and release the pointer.



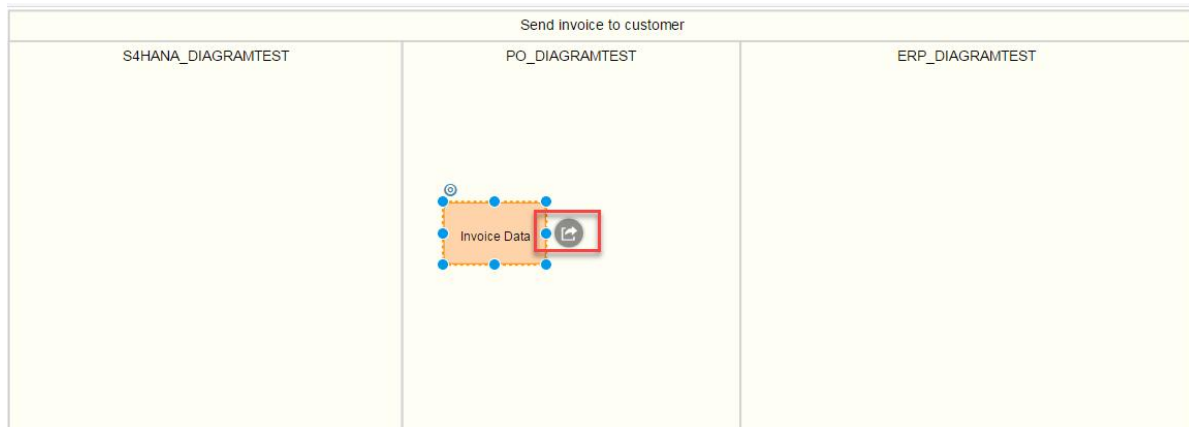
Both objects are linked.



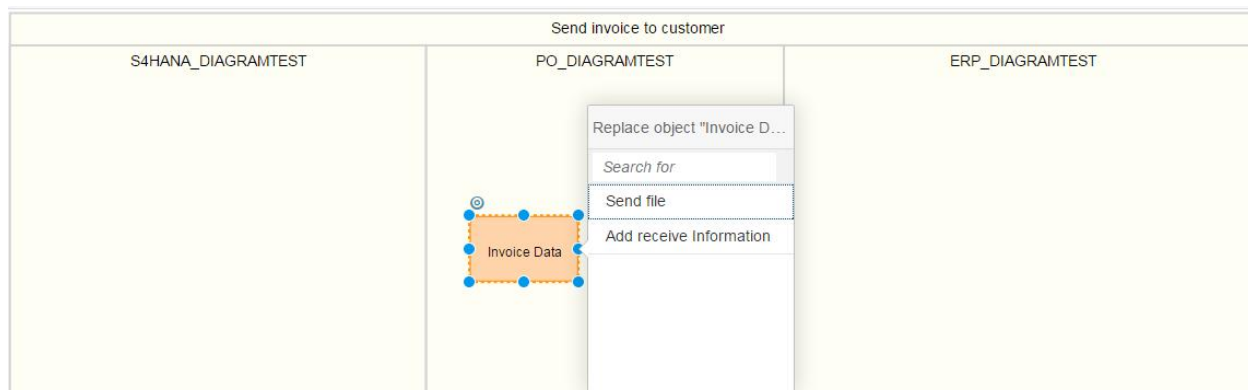
4.1.2 Part II: When right-click an object

Replace

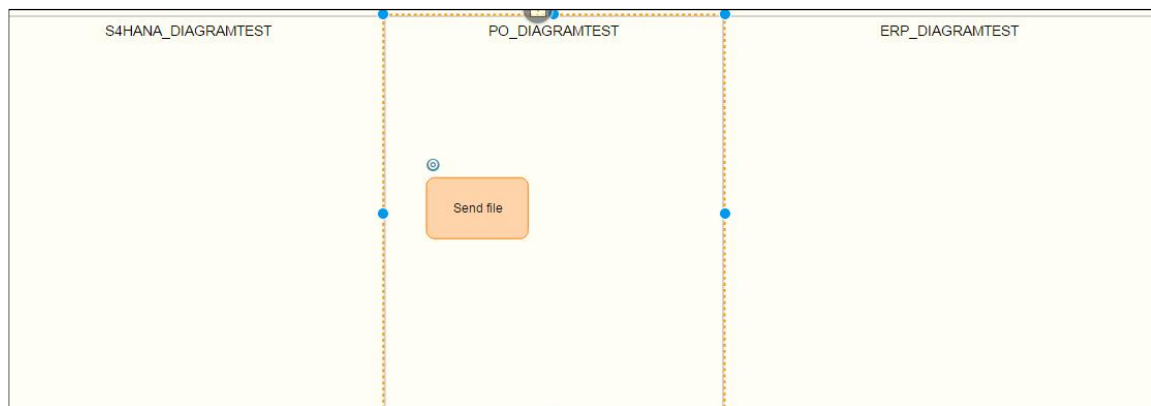
From the diagram, right-click an Interface step where this option is applicable. The context Menu appears.



The interface step popup appears.

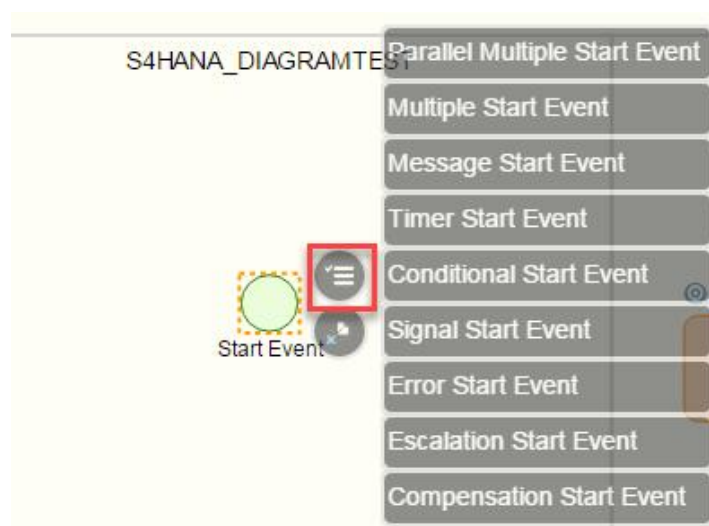


Select an interface step



Start Event / End Event: Decorators

From the diagram, right-click a start event where this option is applicable. The context Menu appears. Click on the decorator icon. A list of decorators appears.



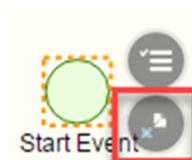
Select a decorator example message Start Event.

The decorator is applied to the object.



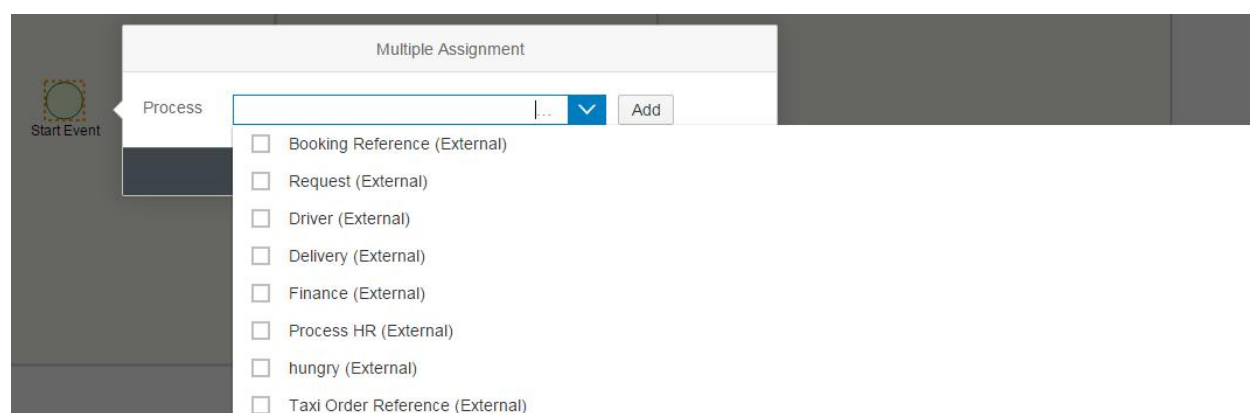
Reference

From the diagram, right-click a start event where this option is applicable. The context Menu appears.



Click on the Navigation icon.

The following popup appears.



Select a process and a diagram.

Confirm.



4.1.3 Part III: When clicking a text symbol

Text Symbol

Add an object (Start event, End event, Gateway, Intermediate, Data object, Data store, System, Free System or Participant) from the palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.



Click on the Left icon. The text symbol move to the shape's left.



Click on the Top icon. The text symbol move to the shape's top.



Click on the Right icon. The text symbol move to the shape's right.



Click on the Bottom icon. The text symbol move to the shape's bottom.



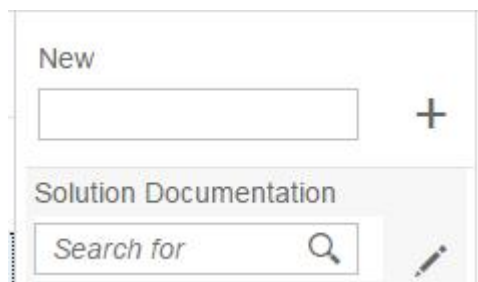
4.2 Palette

In this section, you learn more about the creation and addition of different objects in the interface diagram. This section contains two parts:

Part I



Part II



The palette consists of two types of buttons:

- Some buttons have some “instances” of objects behind them, like process steps. These buttons open a subpalette when pressed, and all objects can be re-used on the same diagram (if allowed logically). On the subpalette, if authorizations and logic allows, you can create new objects, delete objects from repositories and rename objects.
- Others buttons represent objects which are graphical only (like gateways, events). These objects cannot be reused and each time one object is selected, this is just pure simple graphical shape.

To place an object on the diagram, you need to click it once, then it sticks to the mouse, and you can drop it with a second click, and it is placed.

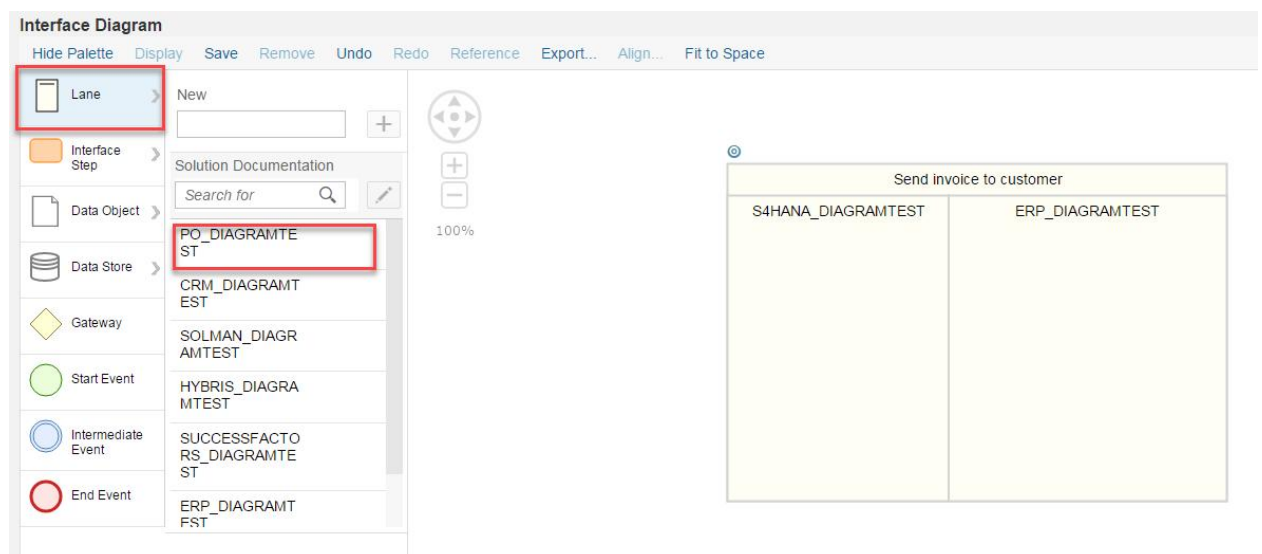
4.2.1 Part I

4.2.1.1 Lane

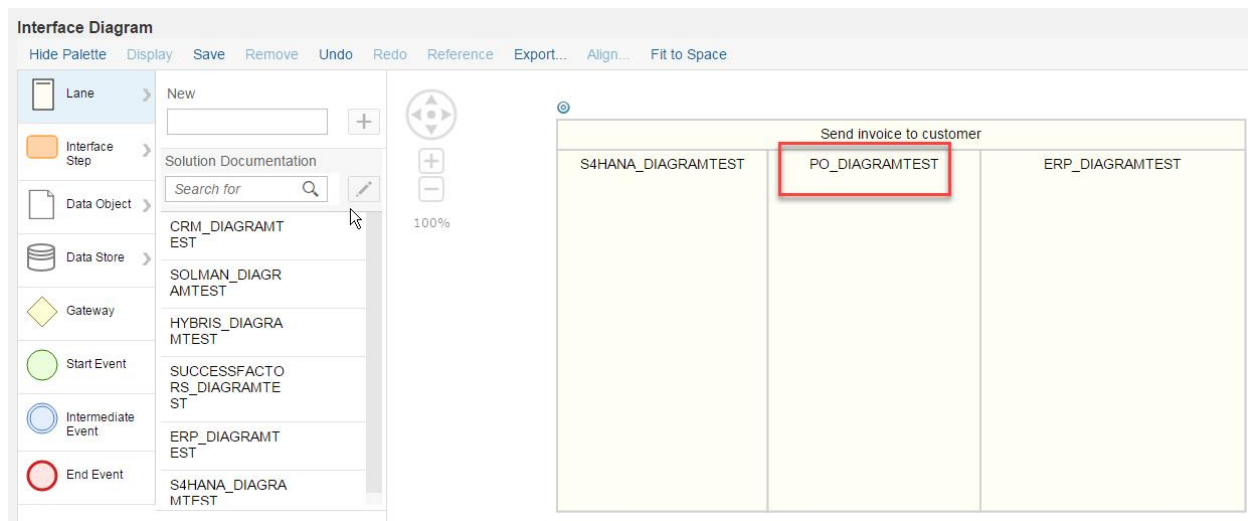
Add a Lane to the Diagram

Click the Lane icon to display the available lanes.

Click a lane from the list.



Click inside the diagram to add the lane.

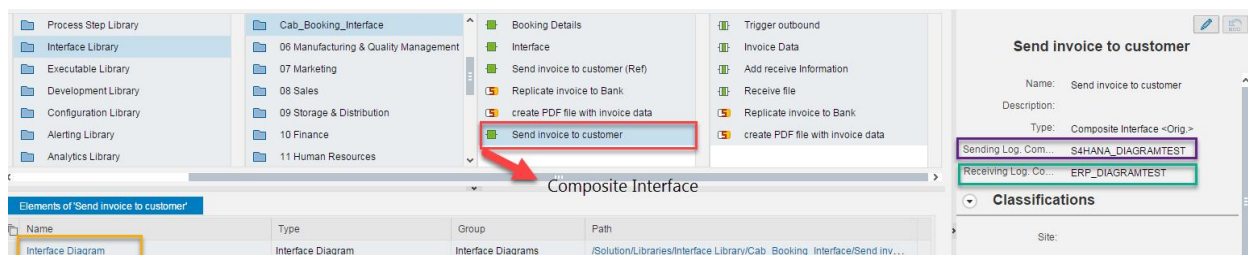


Remove a Lane from the Diagram

Interface diagrams are creating under Composite Interfaces (Send Invoice to customer).

Every Composite Interface has a:

- Sending Logical Component Group.
- Receiving Logical Component Group.



When creating an interface diagram under the composite interface, those two logical component are displayed as lanes and cannot be removed from the diagram.

Use case example:

In our Solution System Landscape, we have as logical component:

Maintain Logical Component Groups

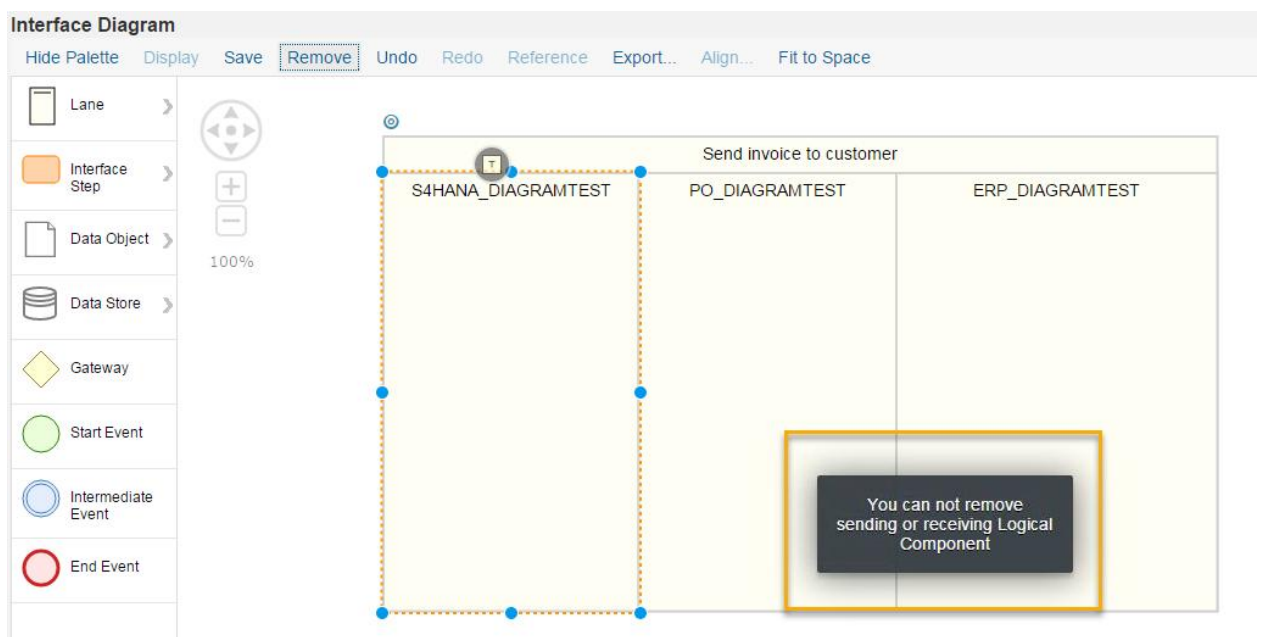
Create Change Delete

Name	Technical System Type
CRM_DIAGRAMTEST	Application Server ABAP
ERP_DIAGRAMTEST	Application Server ABAP
HYBRIS_DIAGRAMTEST	External Service
PO_DIAGRAMTEST	Application Server Java
S4HANA_DIAGRAMTEST	Application Server ABAP
SOLMAN_DIAGRAMTEST	Application Server ABAP
SUCCESSFACTORS_DIAGRAMTEST	External Service

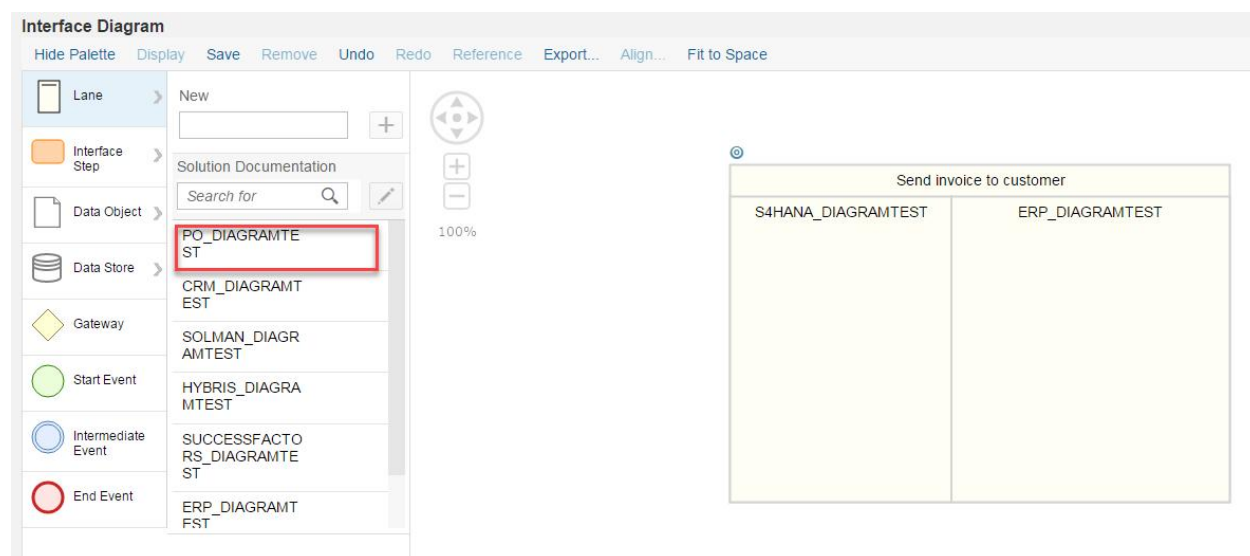
- In our Library, we have a composite interface (Send invoice to customer) with:
 - Sending Logical Component Group S4HANA_DIAGRAMTEST
 - Receiving Logical Component Group: ERP_DIAGRAMTEST
- Under the composite interface, we created a diagram.
- By default, both S4HANA_DIAGRAMTEST and ERP_DIAGRAMTEST are displayed in the diagram since they are the Sending and the Receiving logical components.

Now let's go back to the main purpose of our test case; removing a lane from the diagram.

S4HANA_DIAGRAMTEST and ERP_DIAGRAMTEST cannot be removed from the diagram because they are the Sending and the Receiving logical components. They are present every time.



PO_DIAGRAMTEST can be removed.



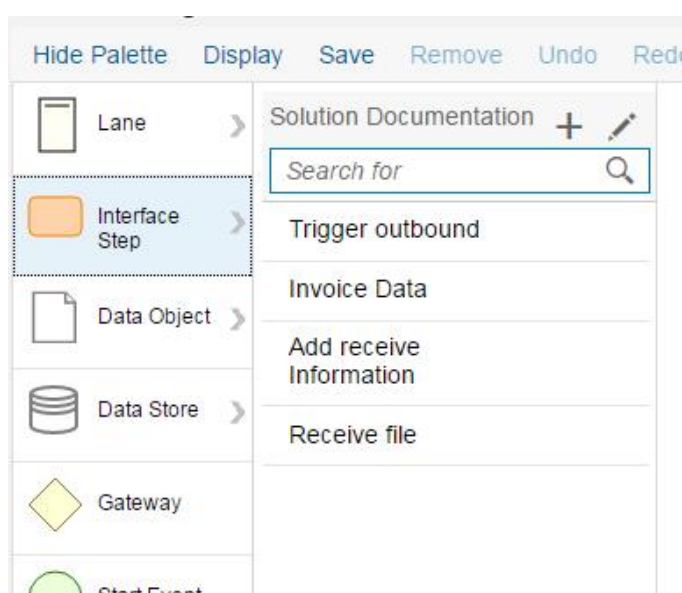
4.2.1.2 Interface Step

Add a new Interface step to the list

Create an Interface Step

Click on the Interface Step icon.

A list of available interface steps will appear.

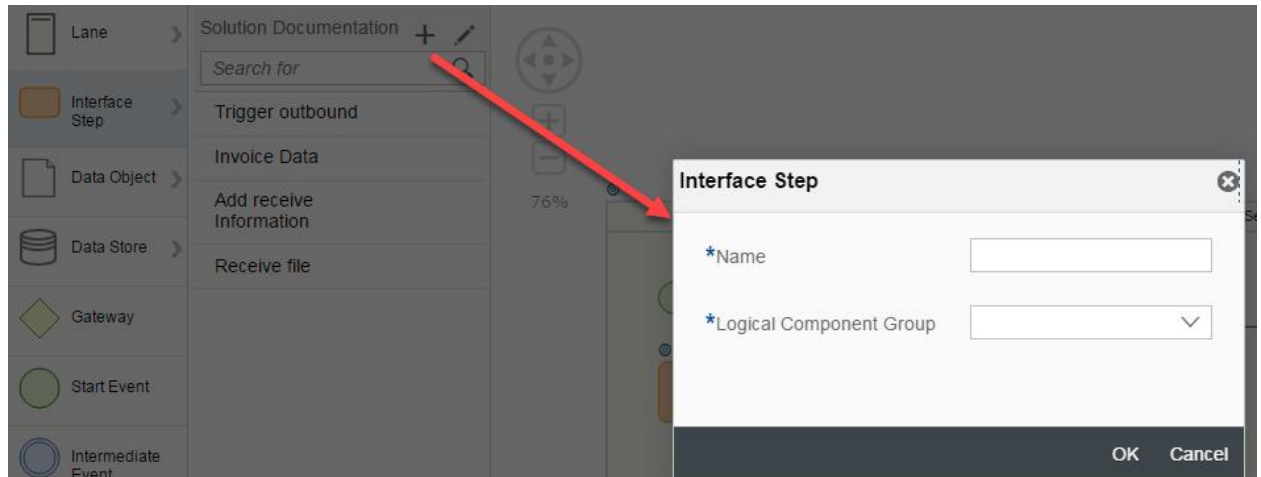


Click on



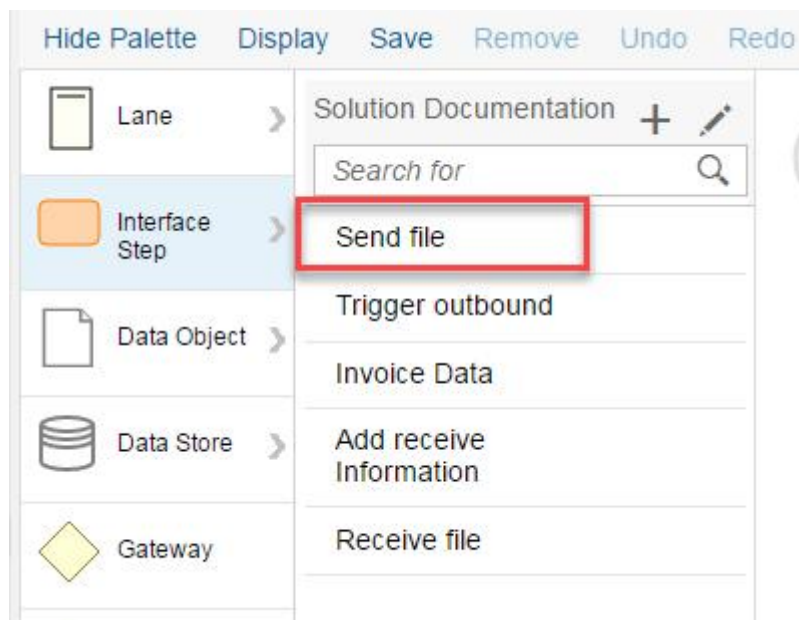
to create a new interface step.

The popup Process Step is open.



Enter a Name and a Logical Component and click on OK (example: "Send file", "PO_DIAGRAMTEST")

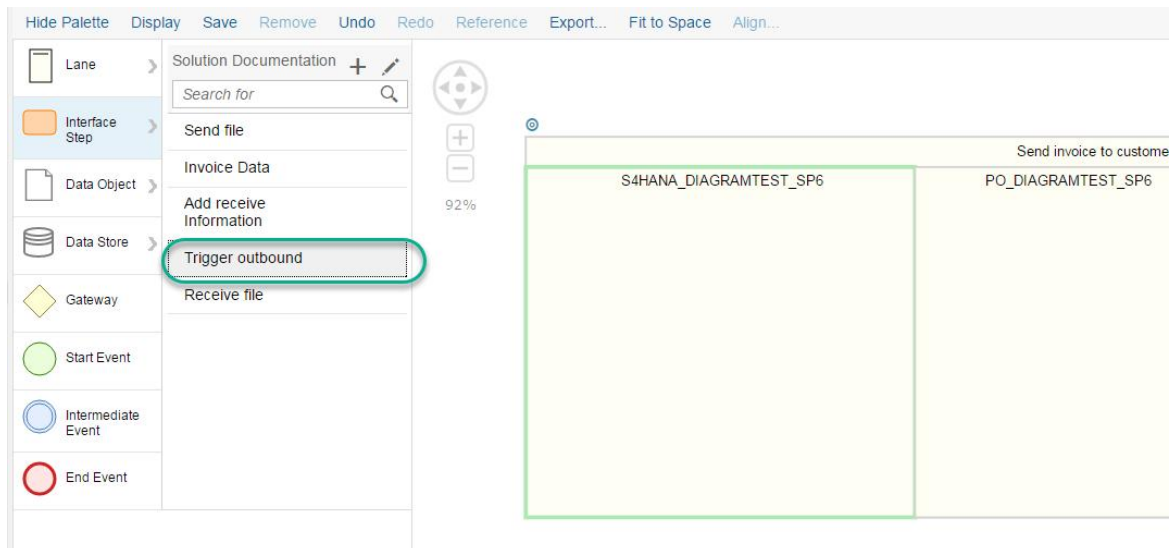
The process step is created.



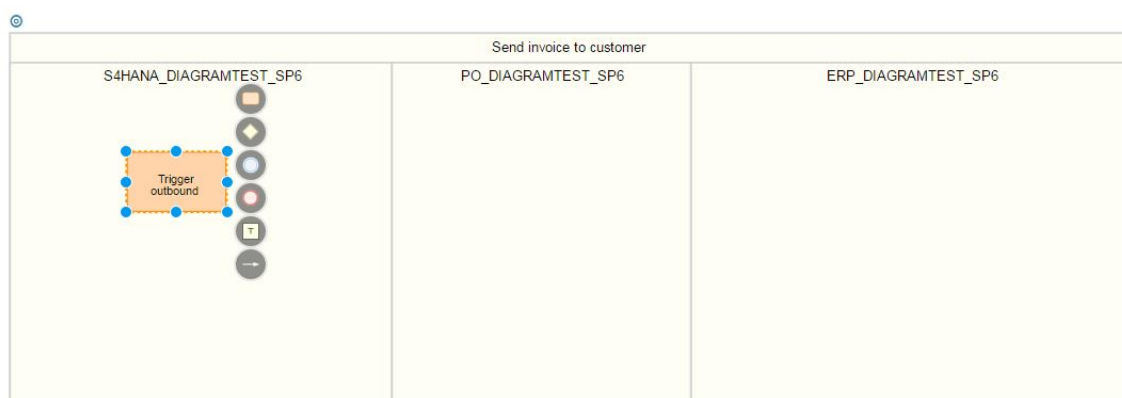
Add an interface step to the diagram

Select an interface step from the list.

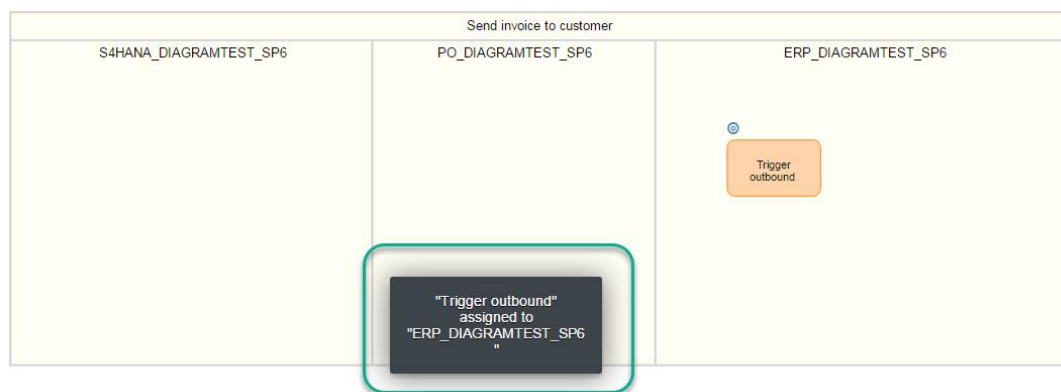
All the lanes where the process-step could be added will be highlighted in green.



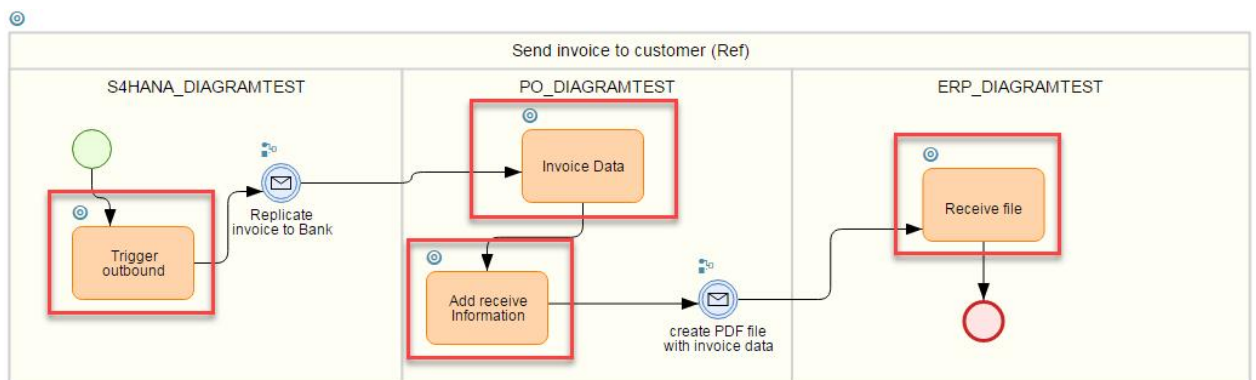
Click inside the diagram to add the interface step.



If you assign an interface step to non-related lane, the process step will be automatically assigned to new lane.

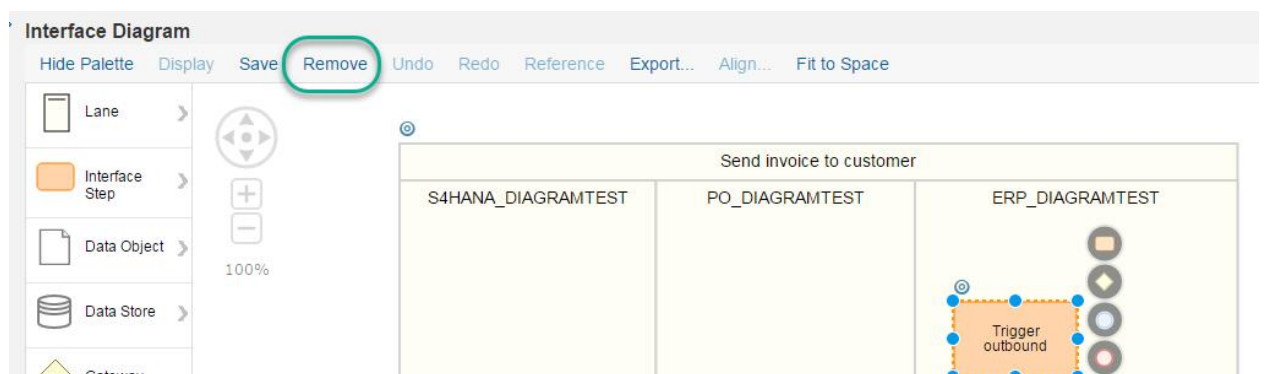


Example:



Remove an Interface Step from the diagram

Select an interface step from the diagram.



The button Remove is highlighted.

Click on the button Remove.

- If the interface step is used in another diagram, it will only be removed from the diagram.
- If the interface step is not used in another diagram, the following pop-up appears:



Click Remove to remove the interface step from the diagram.

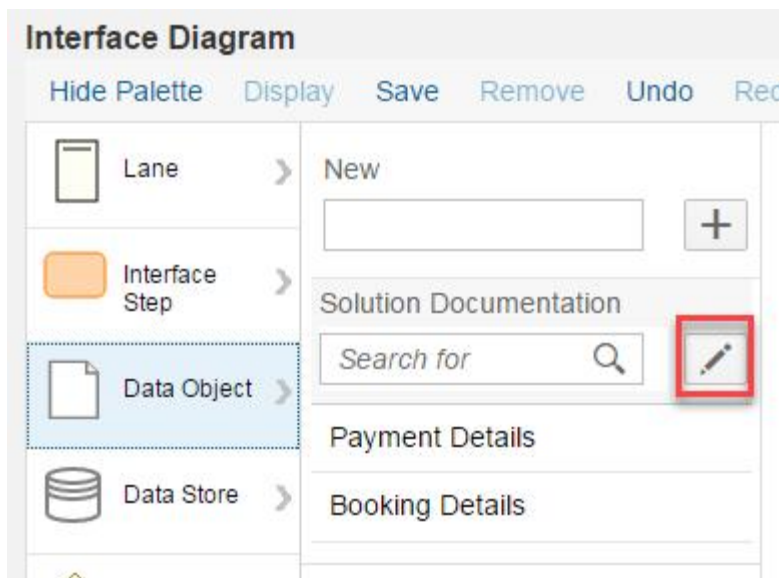
Click Delete to remove the interface step from the diagram and delete it from the system.

Click Cancel to close the pop-up.

4.2.2 Part II

4.2.2.1 Delete object from the palette toolbar

From the palette toolbar, click on the edit button.

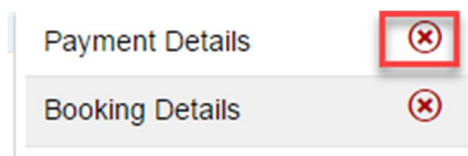


Choose an object to delete and click on the

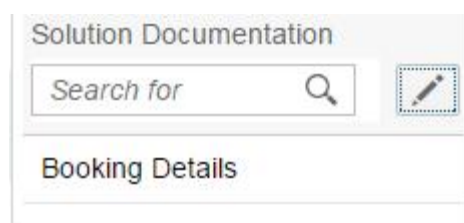


icon.

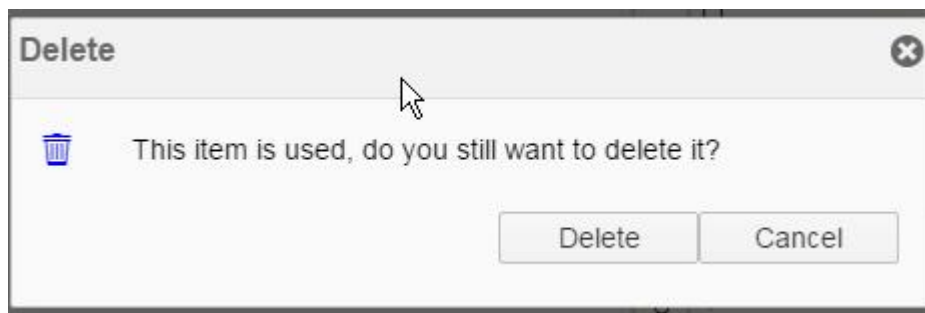
Example: Payment Details



The object is deleted.



If the element is used in another diagram, the following popup appears.



Cancel will not delete the object.

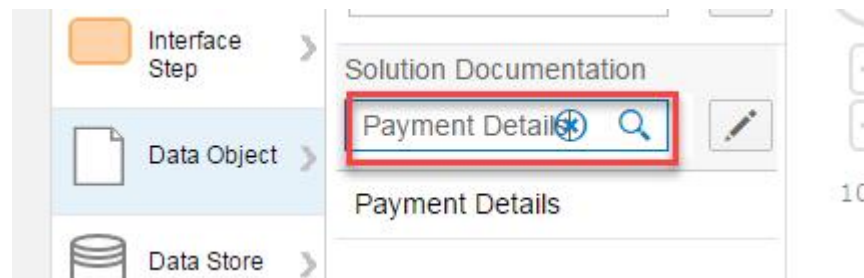
Click on Delete and the object will be deleted.

4.2.2.2 Search Bar

As an example we will try to search for a Data Object in the palette toolbar.

In the search-bar insert a data object name (example "Payment Details").

The search-bar implements a simultaneous filter. As you type in matching objects should appear in the list.



4.3 Sending and Receiving

In this section, you learn more about the intermediate events in an interface diagram.

This section contains two parts:

Part I: The General Sending/receiving Rule.

Part II: The intermediate event behavior with complex diagram modifications.

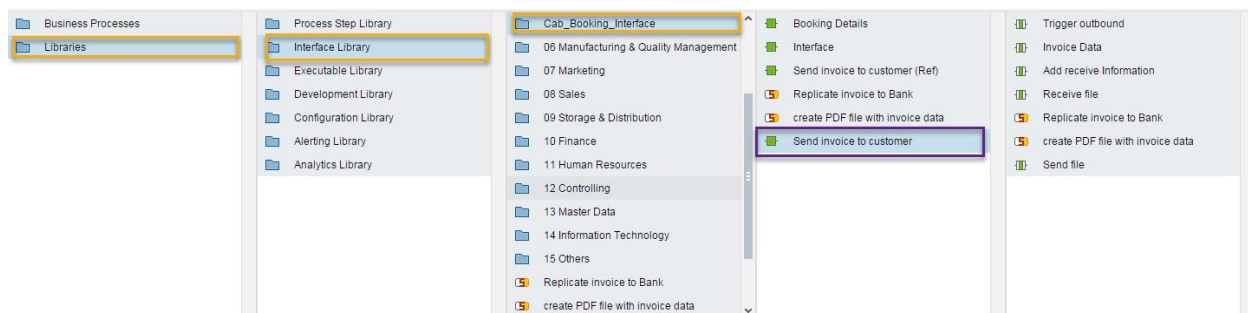
4.3.1 Part I: The General Sending/Receiving Rule.

Interface diagrams can be created for composite interfaces which are defined in interface library section of Solution Documentation.

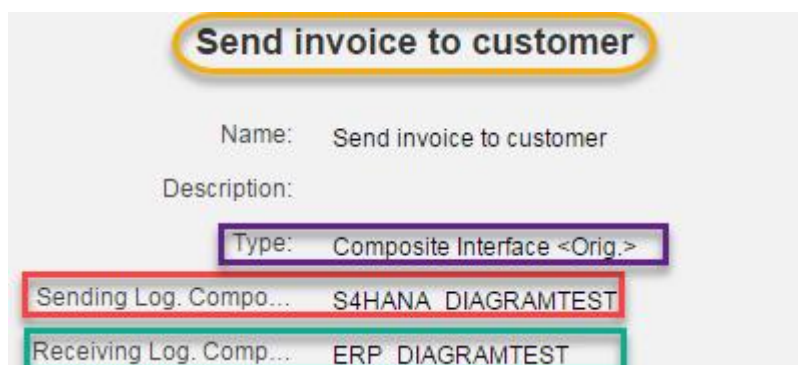
Creating a composite interface

Create a composite interface:

From the solution documentation navigate to Library -> Interface Library. Click Right -> New -> Composite Interface.

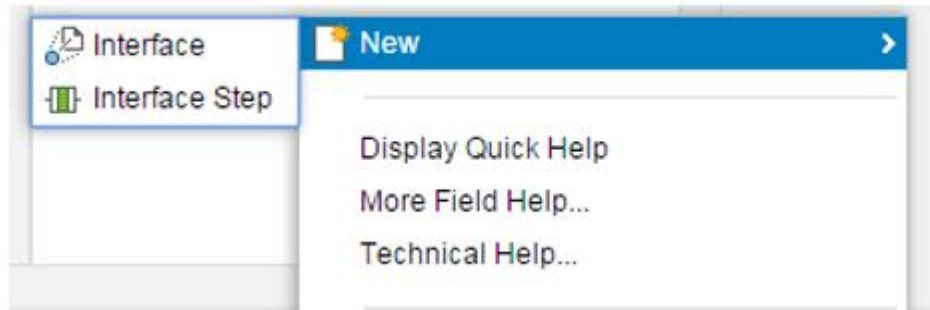


As an example, we will choose the following data info:

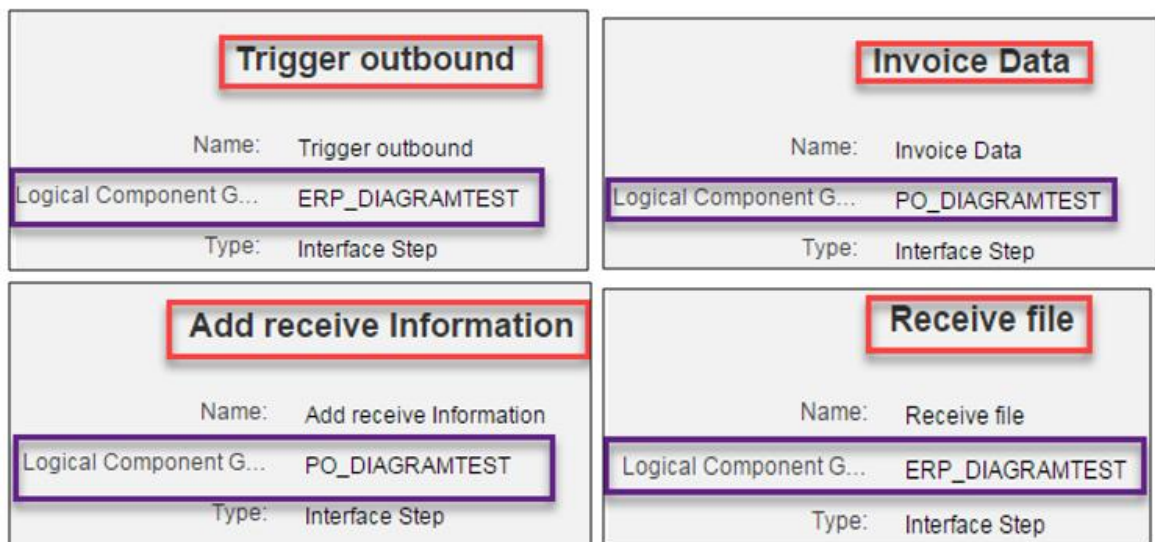


Creating Interface Steps

Now we will add Interface Steps to our Composite Interface.

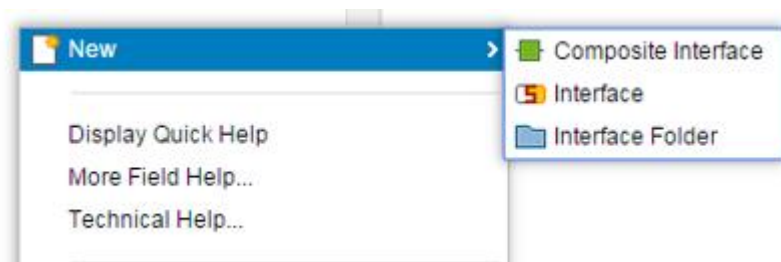


As an example, we will choose the following data info:



Creating Interfaces

Now we will create Interface (not a composite interface).



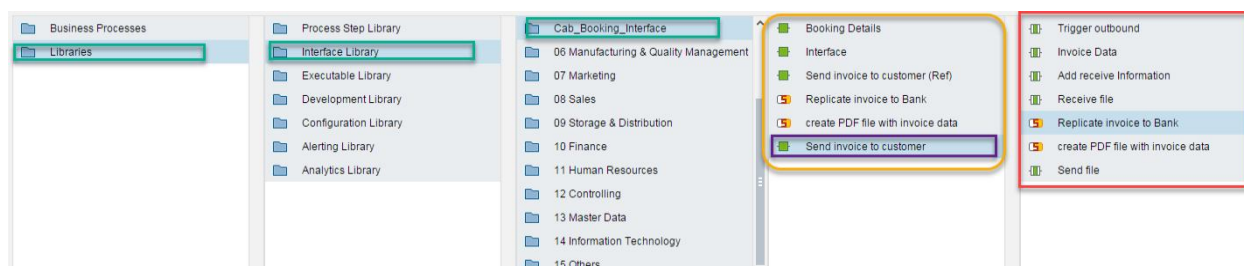
As an example, we will choose the following data info:

The sending and receiving logical component groups are importing in the upcoming steps.

Name:	create PDF file with invoice data
Description:	
Type:	Interface <Orig.>
Sending Log. Comp...	ERP_DIAGRAMTEST
Receiving Log. Comp...	PO_DIAGRAMTEST

Name:	Replicate invoice to Bank
Description:	
Type:	Interface <Orig.>
Sending Log. Comp...	PO_DIAGRAMTEST
Receiving Log. Com...	S4HANA_DIAGRAMTEST

The view will be as following:



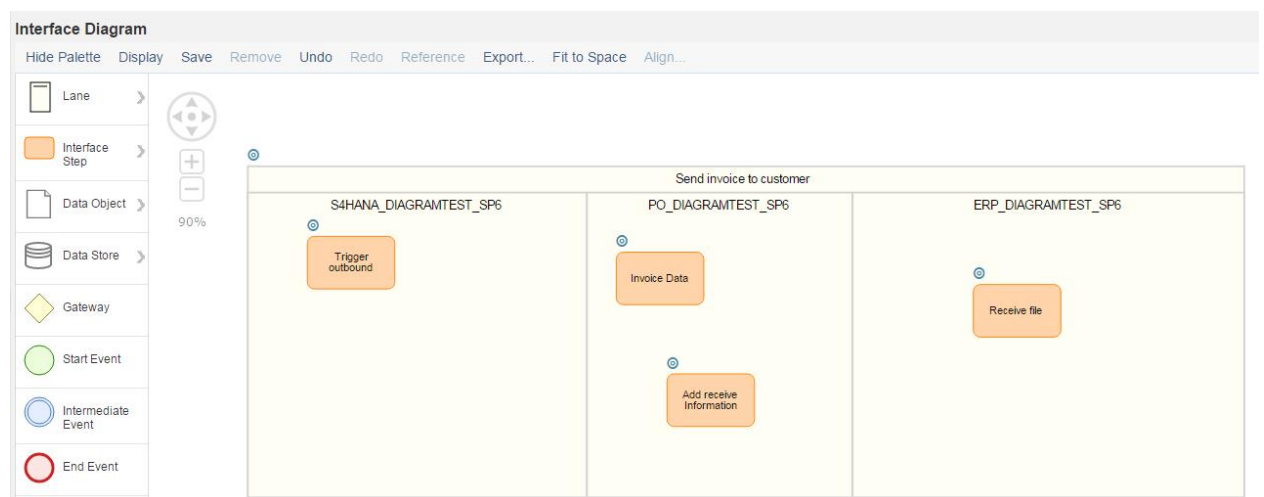
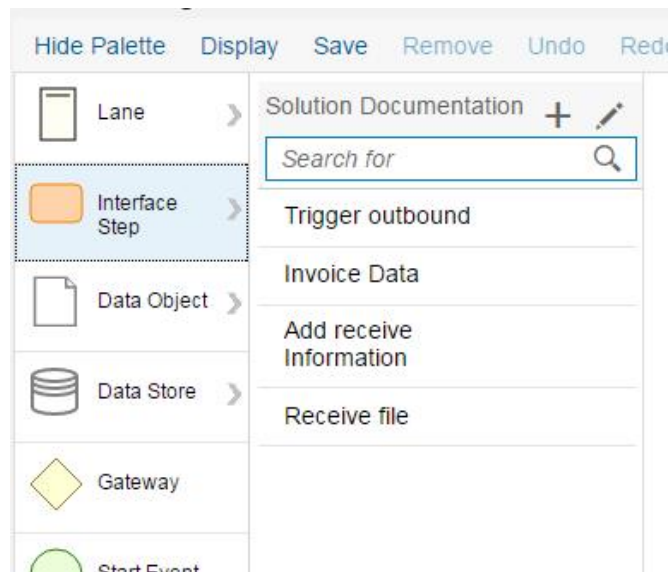
Interface step

Open the interface diagram and add all process interfaces and the lane PO_DIAGRAMTEST.

Add PO_DIAGRAMTEST



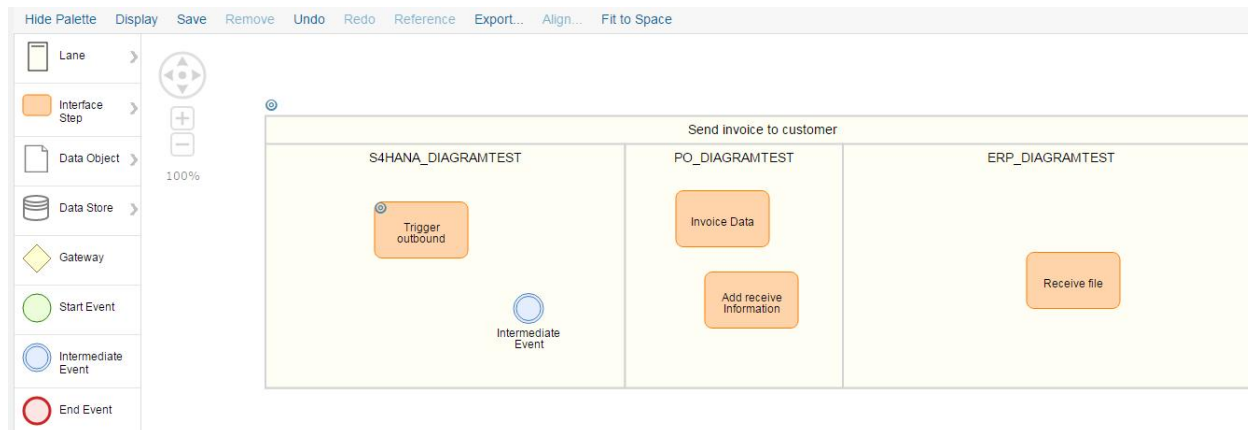
Add Interface steps



Intermediate Event

Insert an Intermediate Event in Logical Component "S4HANA_DIAGRAMTEST".

We will call it "Intermediate Event".

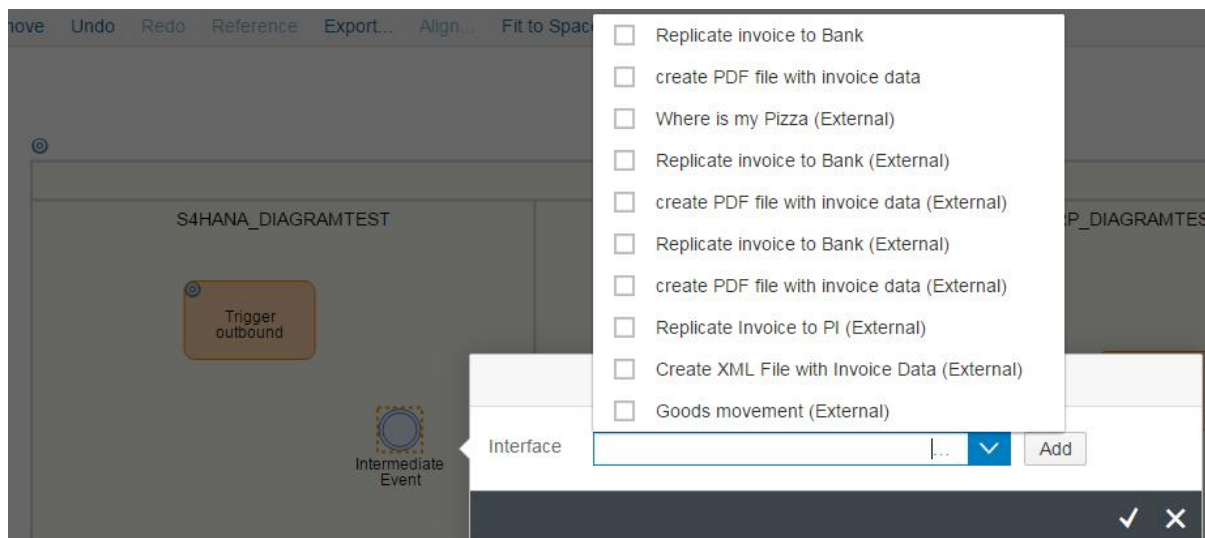


Right click the Intermediate Event.

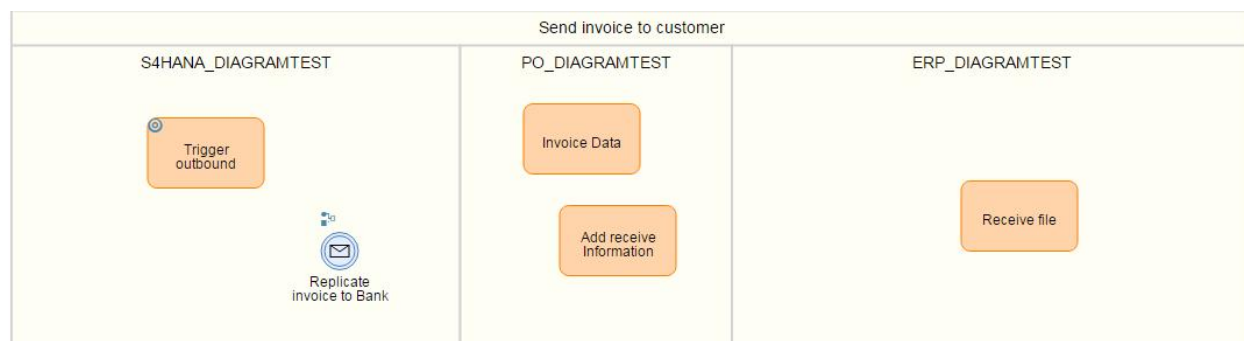
Click on the



and assign "Replicate invoice to Bank".



The message icon is added on top of the Intermediate Event.



Replicate invoice to Bank is referenced in the Intermediate Event.

Now, we must remember that Replicate invoice to Bank has the following information:

Name:	Replicate invoice to Bank
Description:	
Type:	Interface <Orig.>
Sending Log. Comp...	PO_DIAGRAMTEST
Receiving Log. Com...	S4HANA DIAGRAMTEST

PO_DIAGRAMTEST is the sending component to the intermediate event:

The intermediate event receives data from objects in PO_DIAGRAMTEST.

Object (PO_DIAGRAMTEST) ← Intermediate Event.

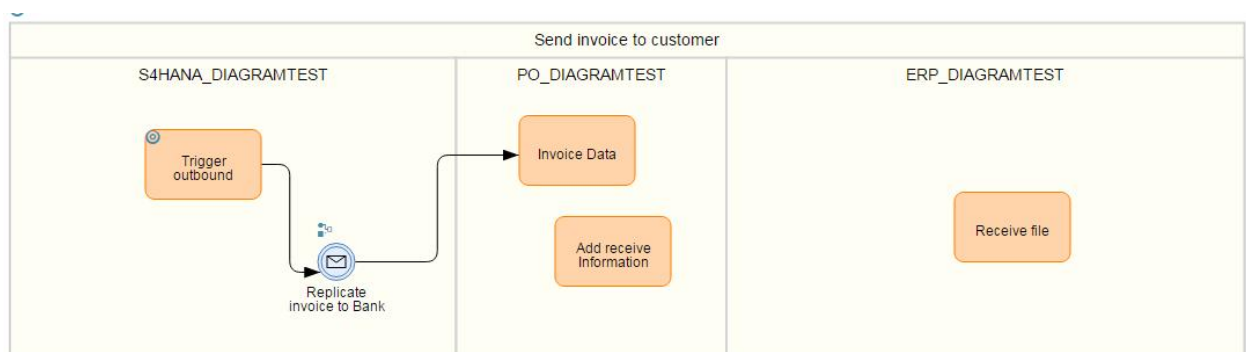
Opposite side is not possible

S4HAN_DIAGRAMTEST is the receiving component from the intermediate event:

The intermediate event sends data to objects in S4HAN_DIAGRAMTEST.

Object (S4HAN_DIAGRAMTEST.) → Intermediate Event.

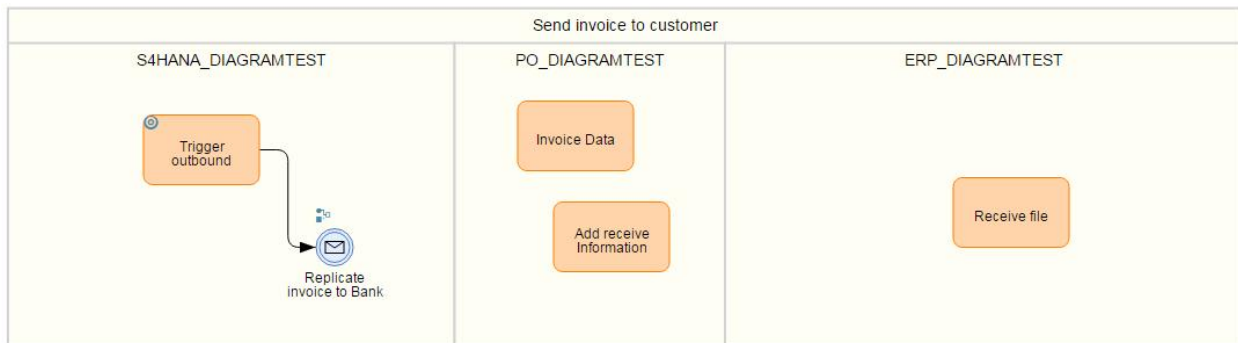
Opposite side is not possible.



Testing the Receiving Criteria:

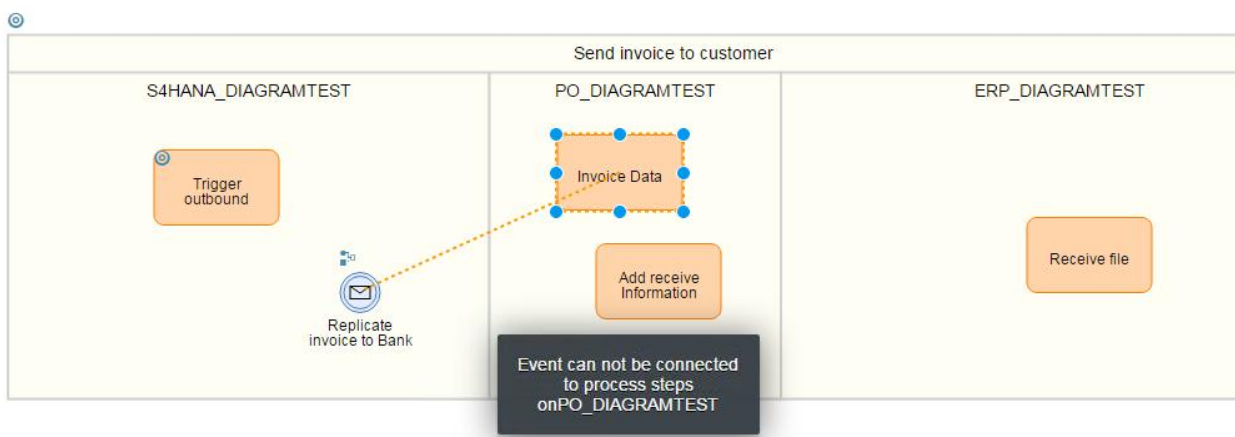
Let's try to link interface step Trigger outbound to our intermediate event.

Interface Step is in S4HANA_DIGRAMTEST so the link Intermediate Event ← Interface Step (Trigger outbound) should be possible since is the S4HANA_DIGRAMTEST the receiving logical component.



Let's try to link Interface Step Invoice Data to our intermediate event.

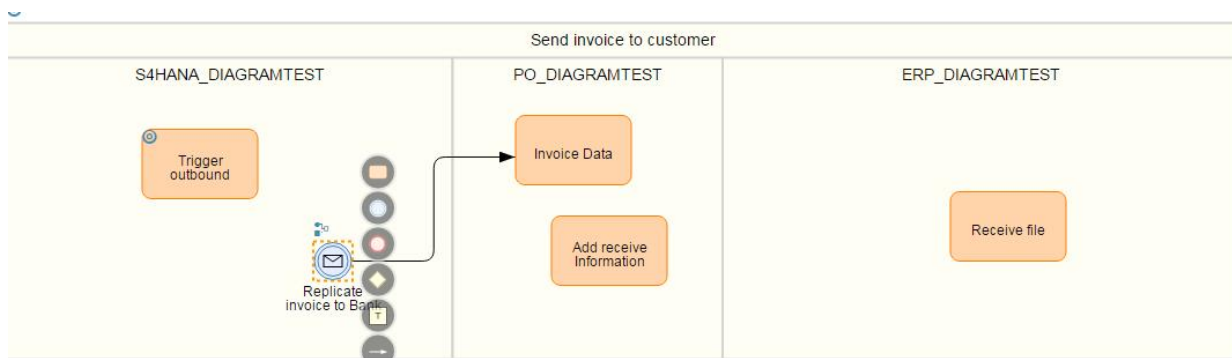
Interface Step is in PO_DIGRAMTEST so the link Intermediate Event ← Interface Step (Invoice Data) should not be possible since PO_DIGRAMTEST is not the receiving logical component.



Testing the Sending Criteria:

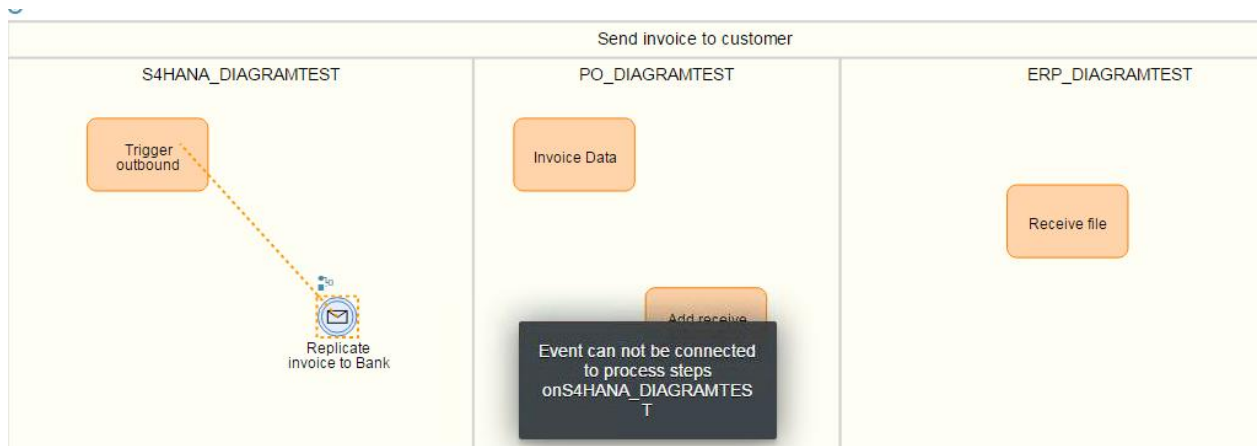
Let's try to link our intermediate event to Interface Step.

Interface Step (Invoice Data) is in Logical Component PO_DIGRAMTEST so the link Intermediate Event → Interface Step should be possible since logical component PO_DIGRAMTEST is the sending logical component.



Let's try to link our intermediate event to Interface Step Trigger outbound.

Interface Step is in Logical Component S4HANA_DIGRAMTEST so the link Intermediate Event → Interface Step should not be possible since logical component S4HANA_DIGRAMTEST is not the sending logical component.

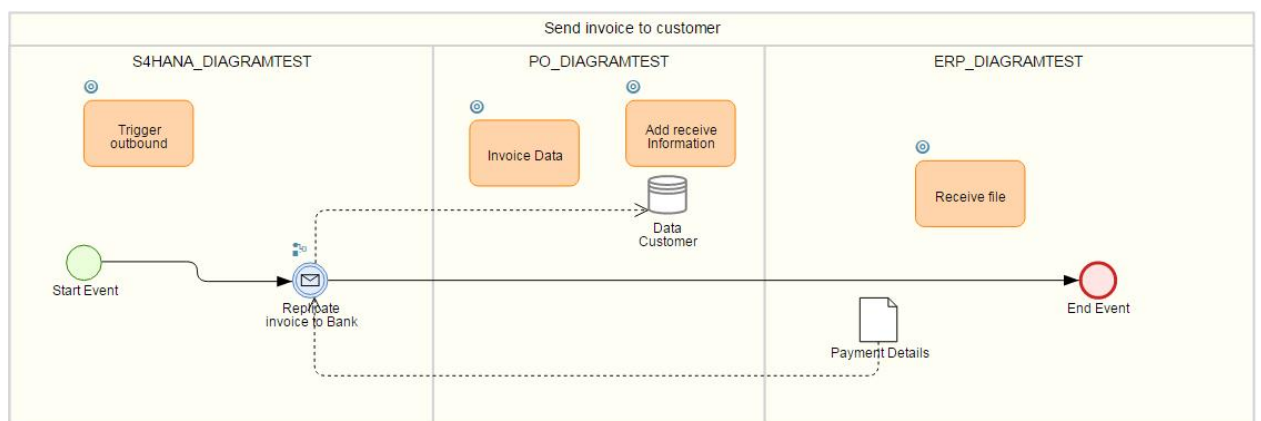


4.3.2 Part II: The intermediate event behavior with complex diagram modifications

Objects not assigned to logical Components

The concept of sending/receiving logical component groups is only applicable for process steps.

Other objects like Data Stores, Data Objects, Start/End Events... can be linked to Intermediate events in a usual manner.



Several Interface Assignment

From the Solution Documentation create another Interface with the same sending & receiving logical components as Replicate invoice to Bank.

Name:	Replicate invoice to bank X
Description:	
Type:	Interface <Orig.>
Sending Log. Comp...	PO_DIAGRAMTEST
Receiving Log. Com...	S4HANA_DIAGRAMTEST

Now we have the following composite diagram:

The same diagram used in PART I

We will try to assign several interfaces to the intermediate event.

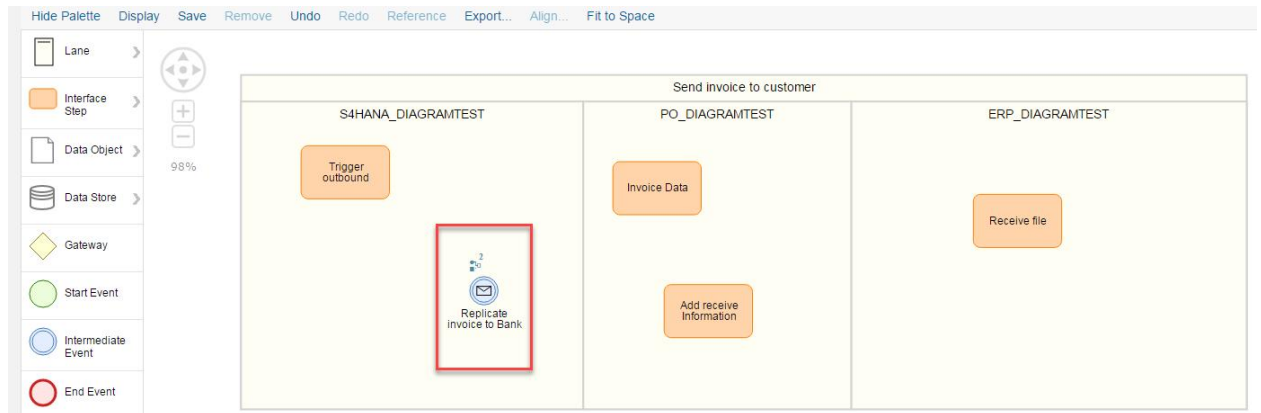
Name:	Replicate invoice to bank X
Description:	
Type:	Interface <Orig.>
Sending Log. Comp...	PO_DIAGRAMTEST
Receiving Log. Com...	S4HANA_DIAGRAMTEST

We can only assign interfaces with the same sending/receiving logical component groups.

	<input type="checkbox"/> Replicate invoice to bank X	
	<input type="checkbox"/> Replicate invoice to Bank	
Interface	<input type="text" value="..."/> <input type="button" value="v"/>	<input type="button" value="Add"/>
Interface		
No data		
<input type="button" value="✓"/> <input type="button" value="✗"/>		

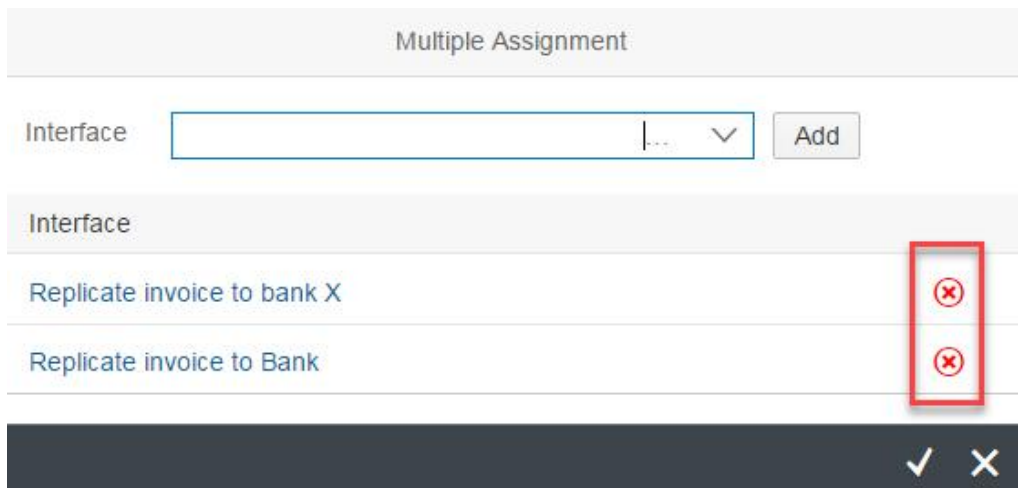
Delete Interface Assignment

Assign both Replicate Invoice to bank X and Replicate invoice to bank to the intermediate event.



The link Intermediate Event ← Interface Step (Trigger outbound) is not possible since both Interfaces have the same Sending/Receiving Log. Component.

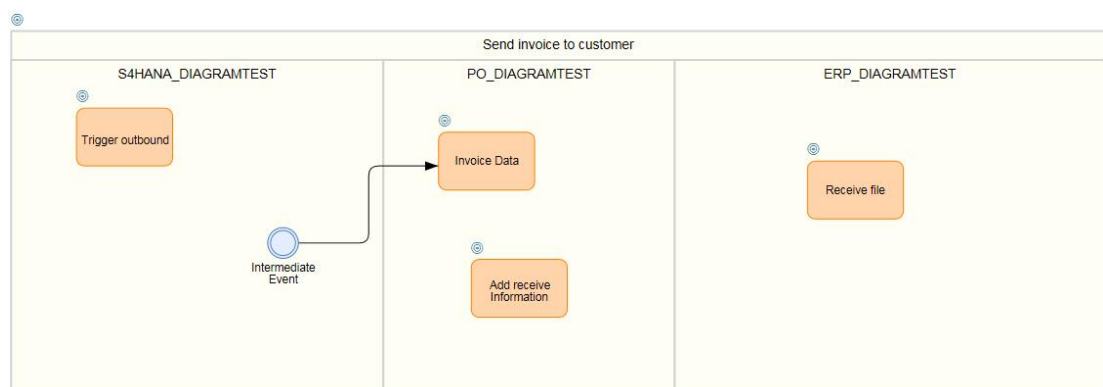
Now, remove both interfaces from the assignment to Intermediate Event.



The link Intermediate Event ← Interface Step (Trigger outbound) is possible now.

Linked Intermediate Event

We have the following diagram.



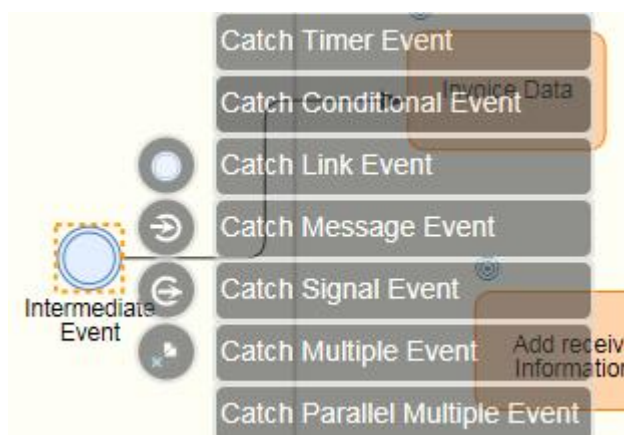
No interface is assigned to the intermediate event.

We have the following link: Intermediate Event → Interface Step Invoice Data.

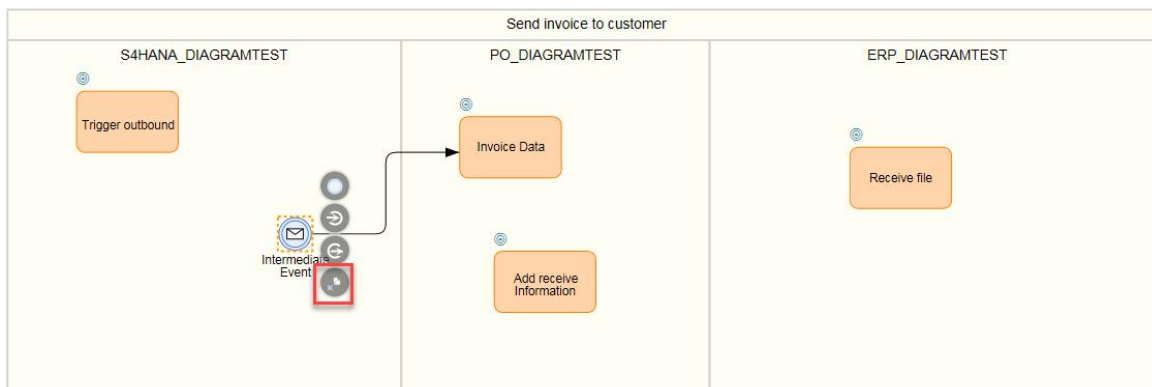


Now we will assign an interface to Intermediate Event.

Right click on Intermediate Event and tag it a "Catch Message Event".



Right click Intermediate Event and assign an interface.

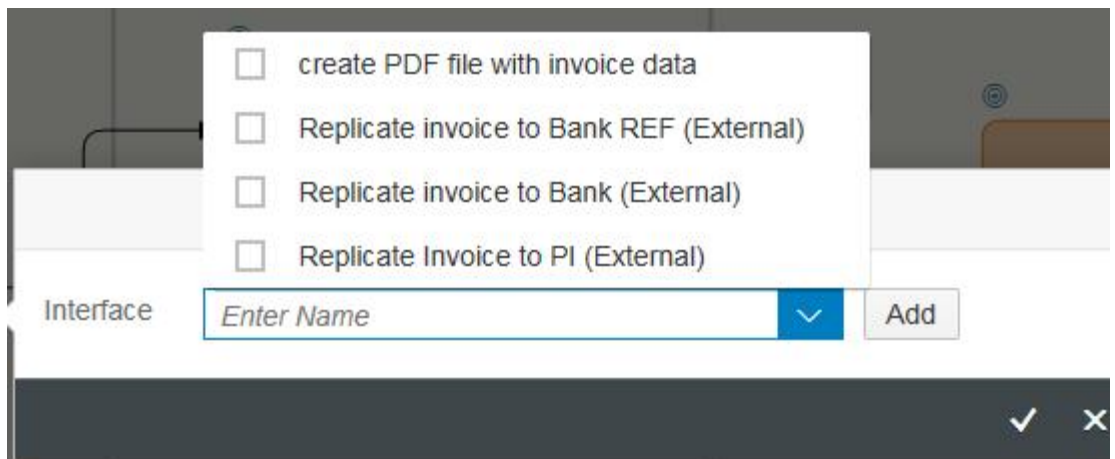


The popup for assigning an interface appears.

Multiple Assignment

Interface ...

✓ ✕



Only interfaces with Receiving Log. Comp = S4HANA_DIAGRAMTEST will be proposed for selection.
If the link is deleted, all the existing interfaces will be available for selection.

5 Collaboration Diagram

5.1 Message Flow and Sequence Flow




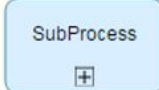



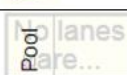













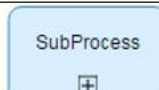




















In this section, you learn more about the message and the sequence flow.

5.1.1 Message Flow

Message Flows are used to represent interactions in BPMN collaboration diagrams.

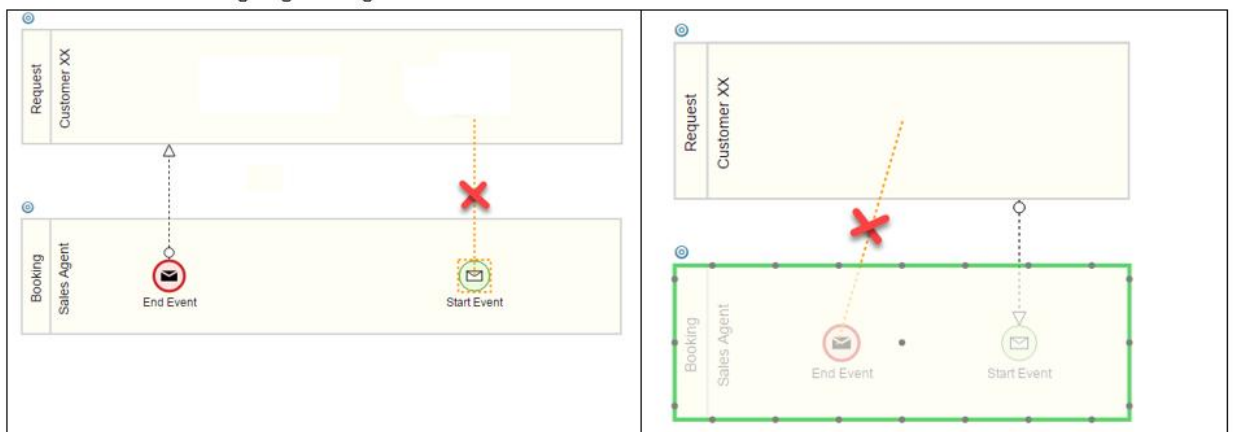
Message Flow Rules

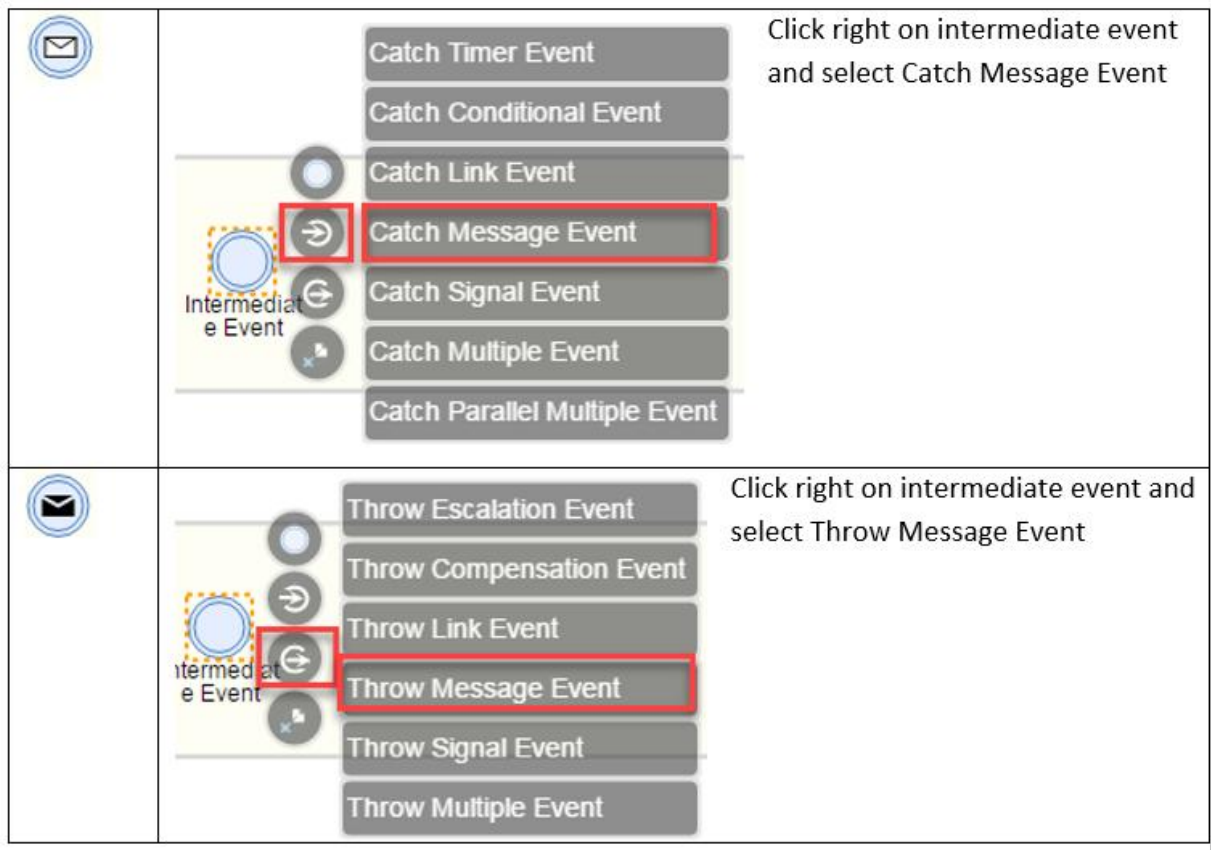
In general, Message Flows can be used only for between Pools interactions (collaborations). Several rules need to be considered when applying Message Flows to business process diagrams, as summarized in the following table:

Several preconditions should be considered when using the basic Message Flow rules table

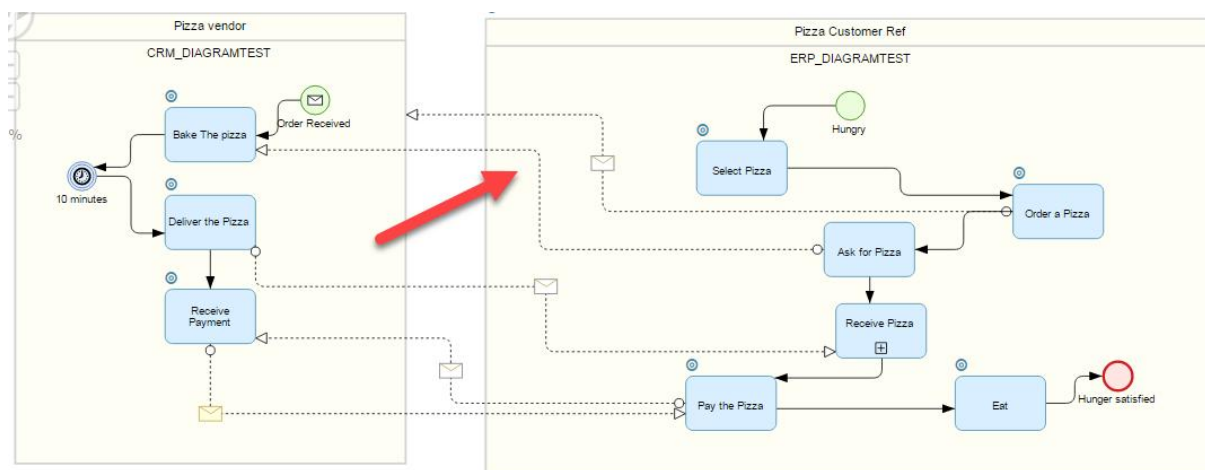
- Message Flows cannot connect to objects that are within the same Pool.
- Only those objects that can have incoming and/or outgoing Message Flows are shown in the table. Lane, Gateway, Data Object, Data Store..., are not listed in the table.
- Start Event / End event Rules: for start event we have just incoming message flow and outgoing message flow for end event.





Maintaining reference of message flow

Example: Add a message flow between "Ask for Pizza" and "Bake the Pizza"

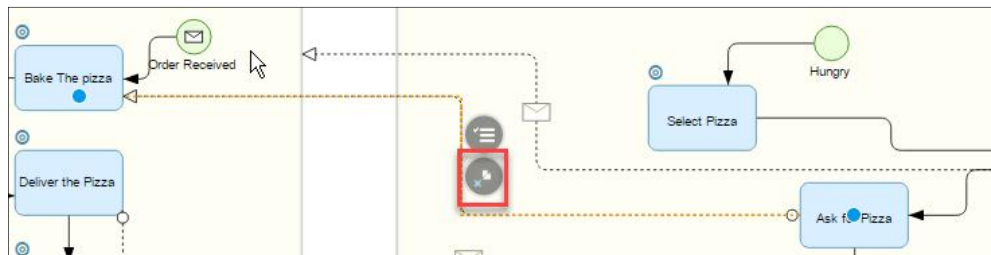


The process step Ask for Pizza belongs to ERP_DIAGRAMTEST so its receiving logical component is LOGICAL COMPONENT "ERP_DIAGRAMTEST".

From the diagram, right-click the message flow which is linked to Ask for Pizza and click the



icon.



A pop-up with list of interfaces is displayed.

Select interface (example "Where is my Pizza?")

Multiple Assignment

Interface

▼

Add

Interface	Diagram	Select Diagram	Default
Where is my ...		<input type="text" value="Select ..."/> <div>▼</div>	<input type="radio"/> <div>✖</div>

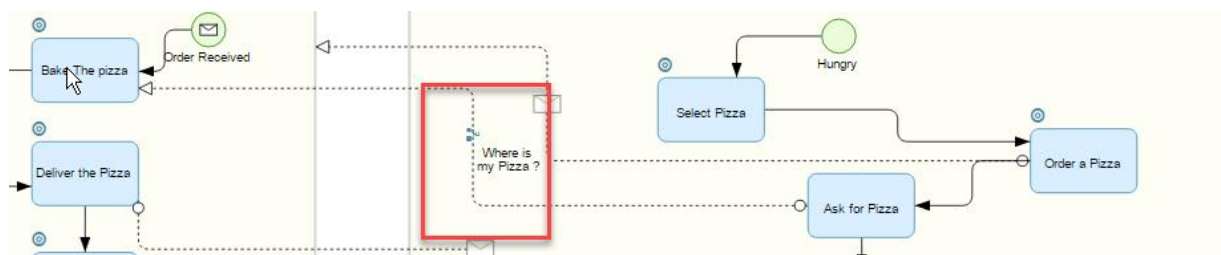
✓

✕

Icon



is added on top of the message flow.



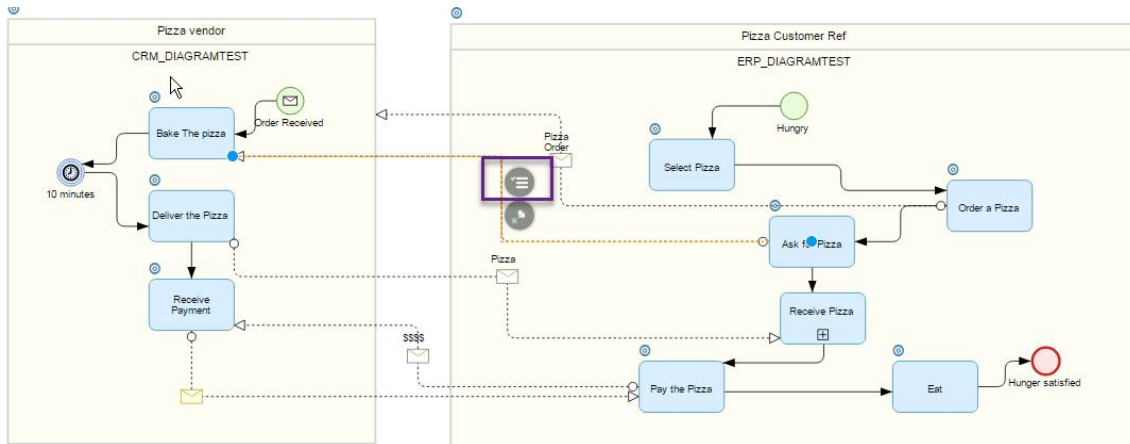
You can assign interface to message flow just in case of:

- Message Flow between two pools.
- Message Flow between pool and draft pool.
- Message Flow between pool and Black pool.

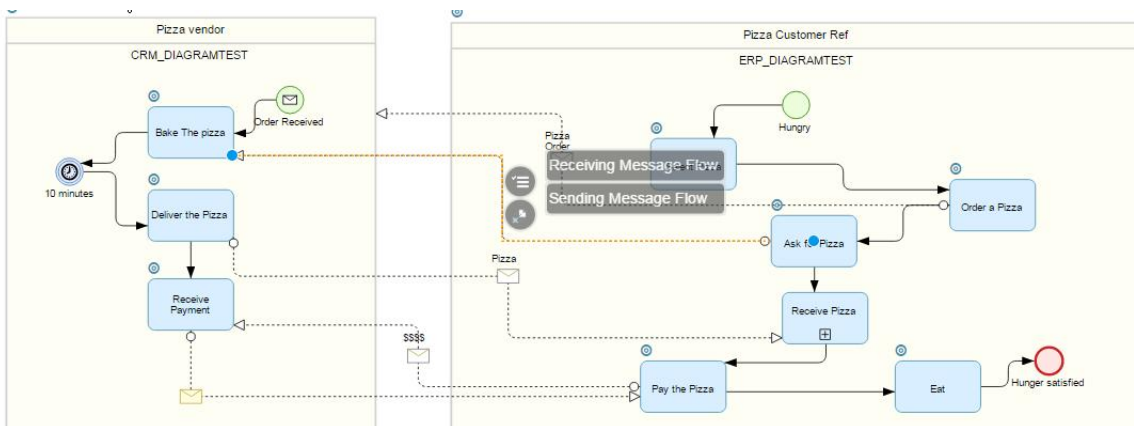
Add Decorators to Message Flow

From the diagram. Right-click, the context Menu appears.

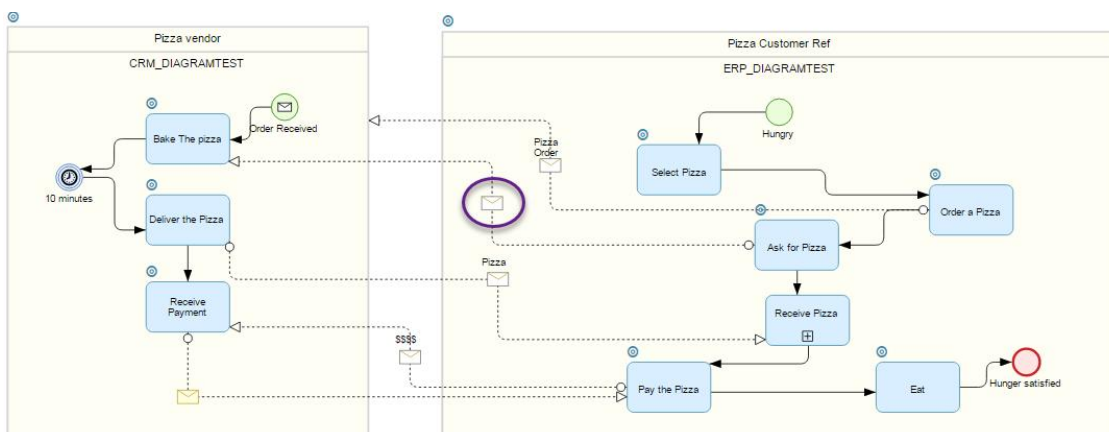
Click on the decorator icon.



A list of decorators appears.

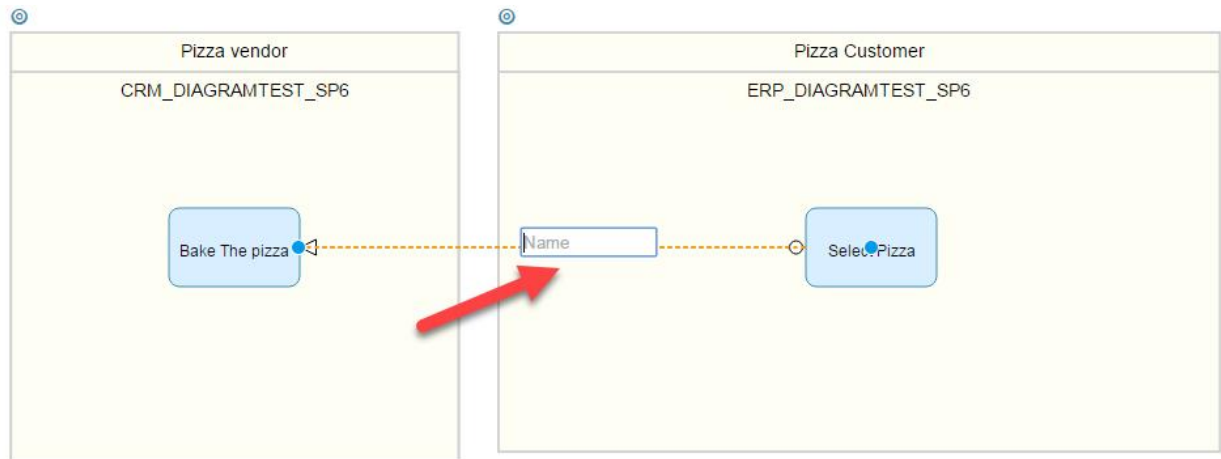


Select a decorator (Sending Message Flow)

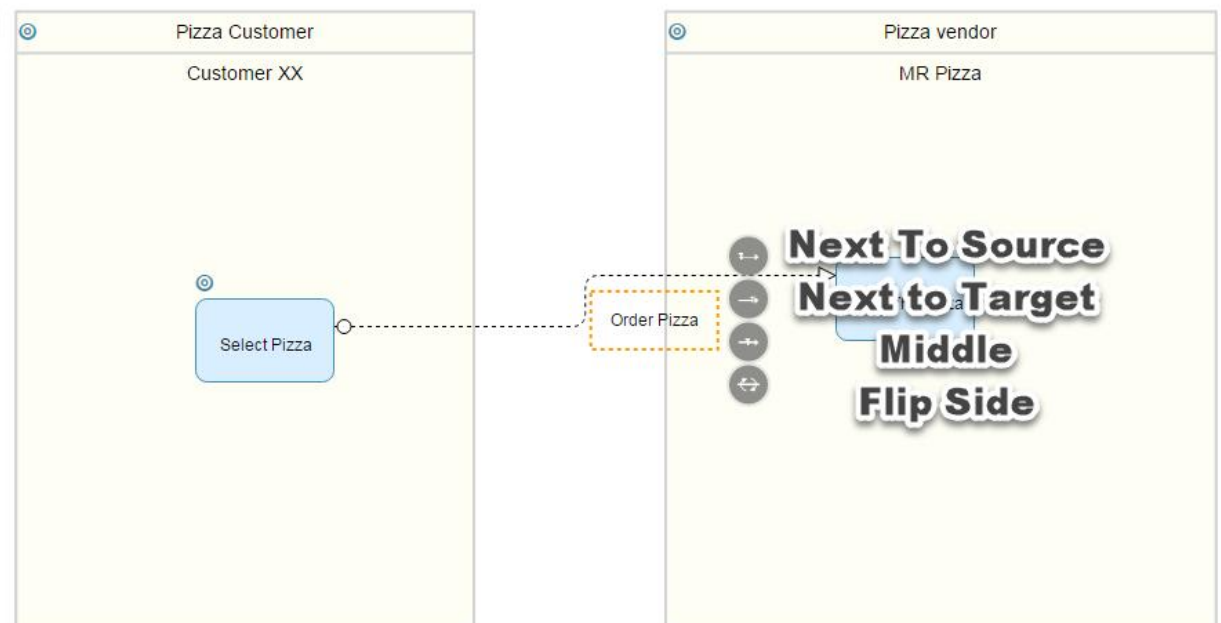


Add Text to message flow

Double click on message flow and insert a text example "Order a pizza"



The text symbol can be moved (next to source, next to target or in the middle) or to flip the side of the text using the context menu.


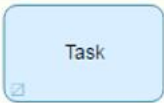
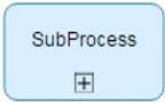









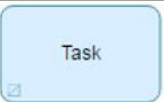





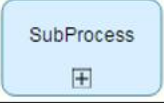




















When you move the message flow, the text symbol follows the message.

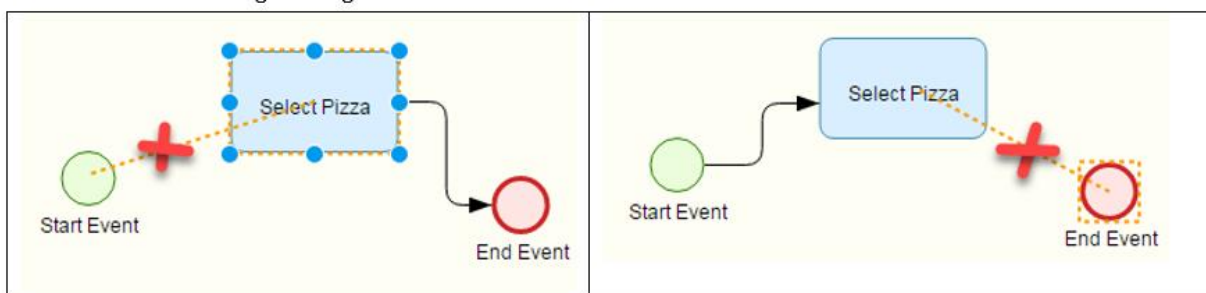
5.1.2 Sequence Flow

Sequence Flow Rules

Sequence Flow is used to show the order of Flow elements in a business process diagram. When connecting Flow elements with Sequence Flows, certain rules need to be followed as presented on the next table.

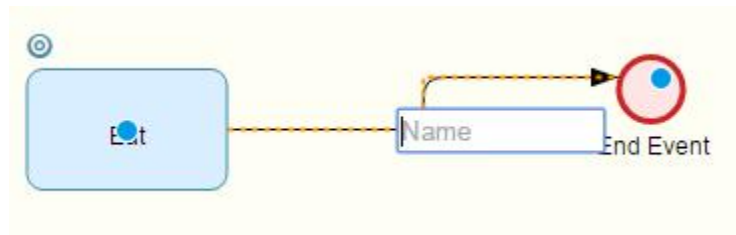
Start Event / End event Rules: for start event we have just outgoing message flow and incoming message for end event.



Sequence Flows are allowed only within a Pool. In the case of cross-Pool interaction, Message Flows should be used.

Add Text to sequence flow

Double click on sequence flow and insert a text.



The text symbol can be moved (next to source, next to target or in the middle) or to flip the side of the text using the context menu.

When you move the sequence flow, the text symbol must follow the sequence flow.

5.2 Palette

In this section, you learn more about the creation and addition of different objects in the diagram with the palette.

The palette consists of two types of buttons:

- Some buttons have some “instances” of objects behind them, like lane, process steps. These buttons open a subpalette when pressed, and all objects can be re-used on the same diagram (if allowed logically). On the subpalette, if authorizations and logic allows, you can create new objects, delete objects from repositories and rename objects.
- Others buttons represent objects which are graphical only (like gateways, events, sub processes). These objects cannot be reused and each time one object is selected, this is just pure simple graphical shape.

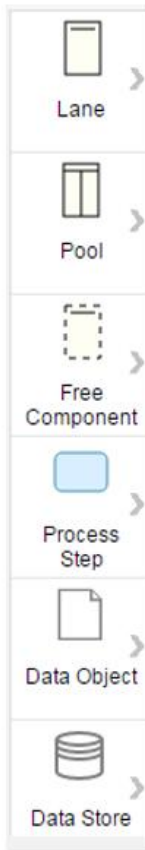
Palettes are different for different diagram types, there are more objects available for collaboration diagrams.

To place an object on the diagram, you need to click it once, then it sticks to the mouse, and you can drop it with a second click, and it is placed.

If it is not possible to place the object in that location, it will disappear. The possible locations are highlighted when you drag an object.

This section contains two parts:

Part I:



Part II:



5.2.1 Part I

Pool

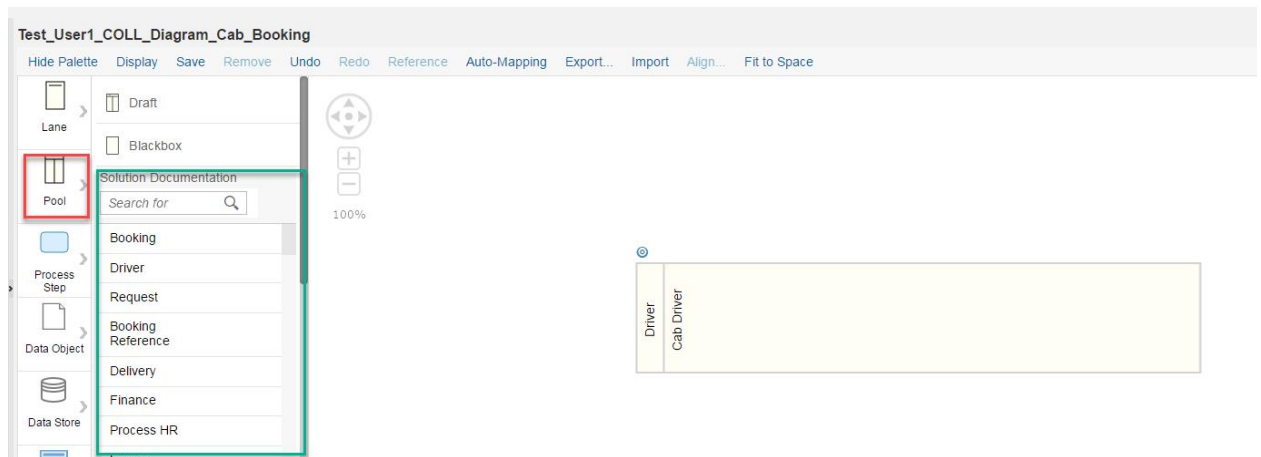
To use pools you can choose from three different flavors of pools. You can use:

- Current Process
- Pool / Draft
- Pool / Blackbox

Add a POOL into the diagram

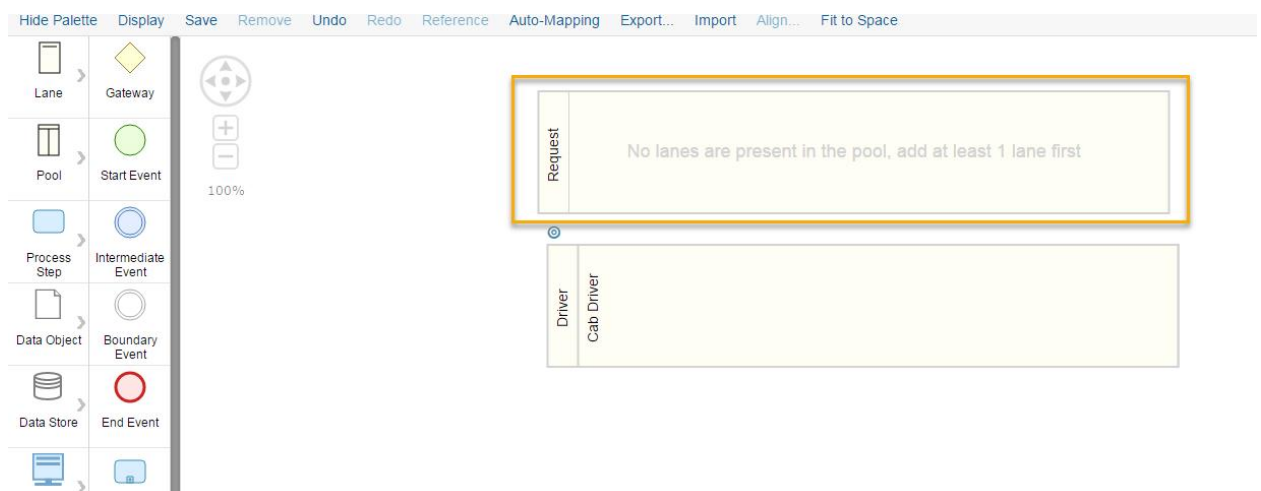
The "Current Process" pool is linked to your current process.

Click on the pool icon, the list of pool appears.



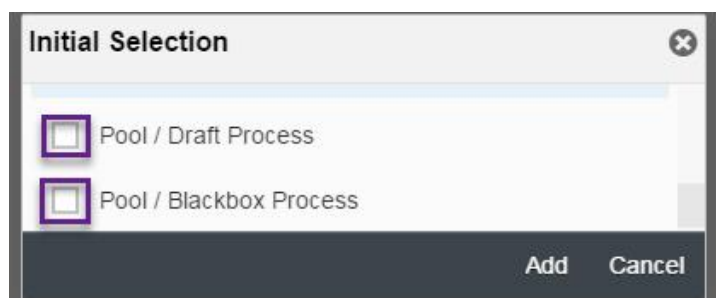
Select a pool from the list and drag and drop it onto diagram.

The Pool is added to the diagram.



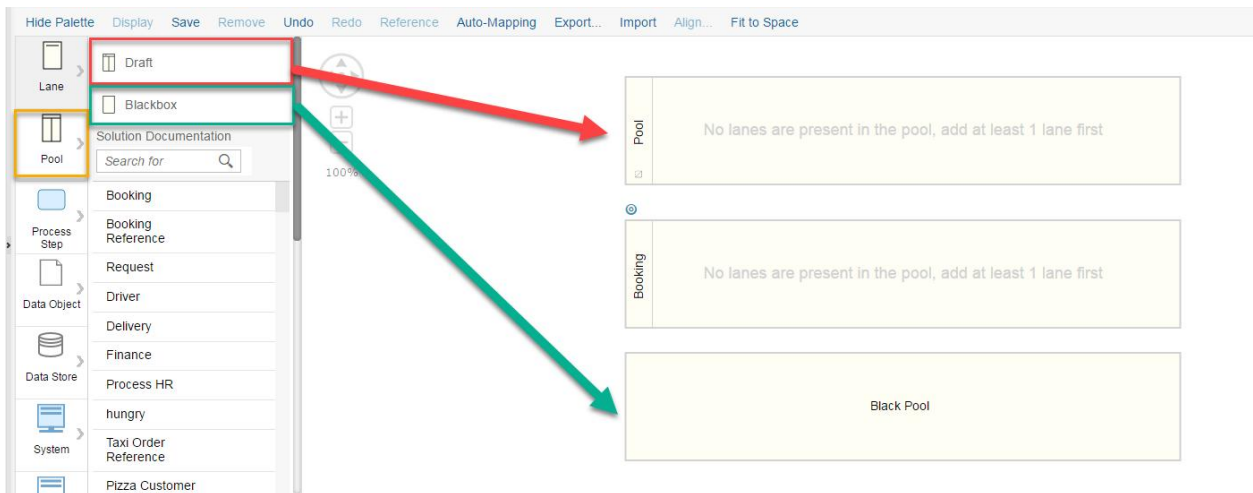
Add a Draft POOL and Black Box into the diagram

You have the possibility to add a draft pool or a Blackbox from the palette toolbar or from the initial select popup.

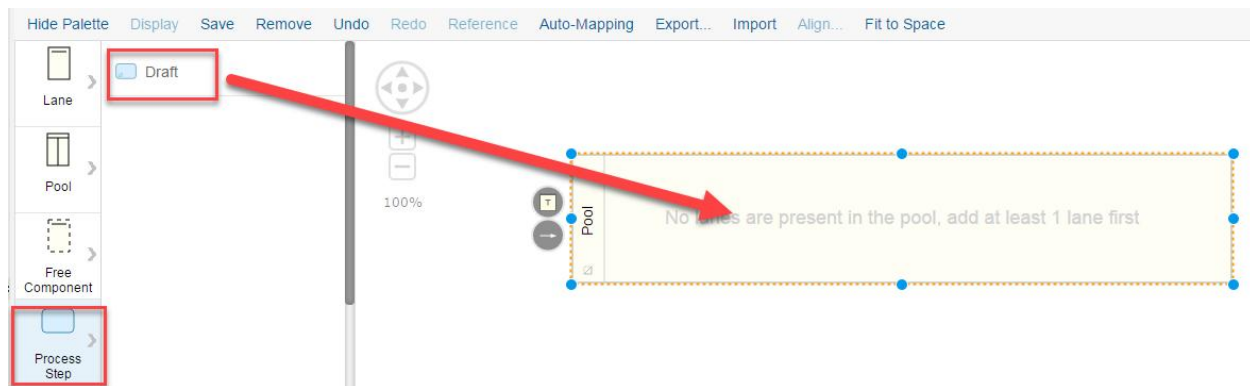


In collaboration diagrams, you can add "Pool / Draft Processes" beside your current pool to model surrounding processes.

The "Pool / Blackbox Process" is usually not used alone. It is like a black box where you want to depict a message flow from your current or draft process to a process you don't know in detail.



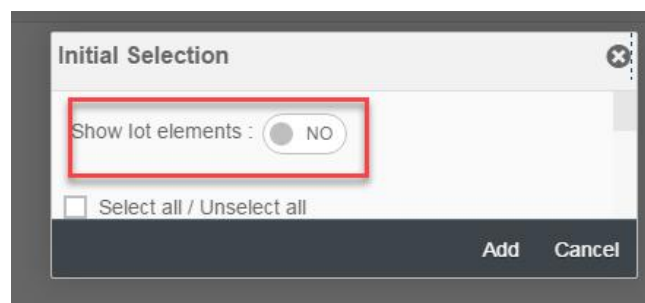
Click Process Step then click on the Draft Pool in the diagram



Just the list of Draft process step appears

Add IOT POOL into the diagram

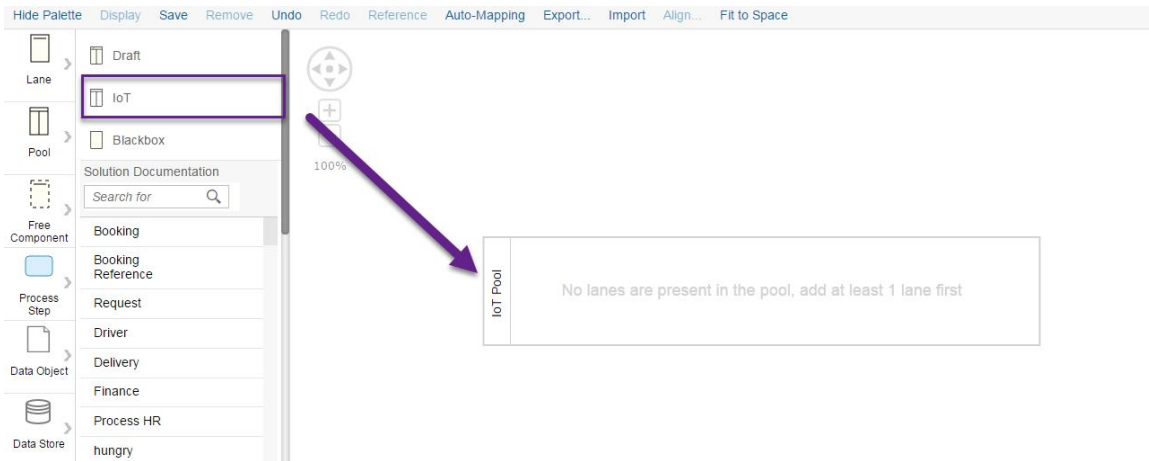
A popup appears when you open the diagram by system for the first time or you don't click save



Switch to YES.

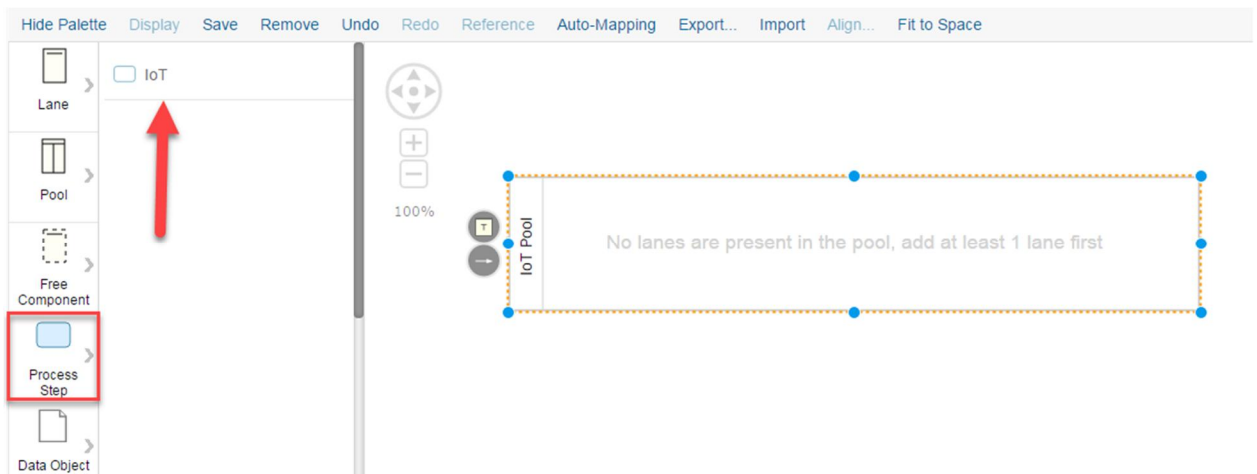
Click on Pool in the palette → list of Pool's type appears.

Select IOT pool from the list and drag and drop it onto diagram.



Click Process Step, then click on the IOT pool in the diagram

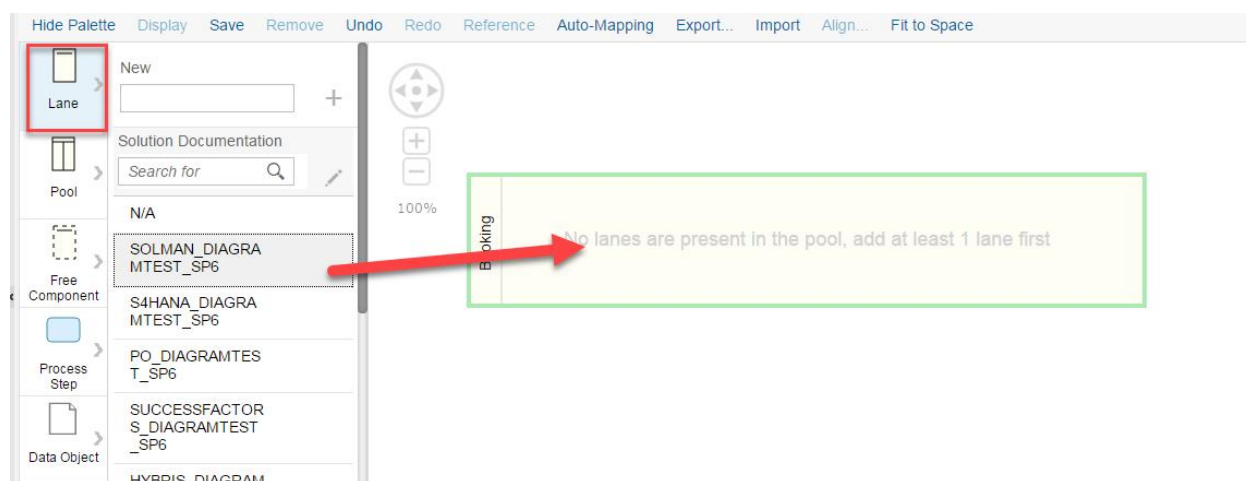
Just the list of IOT process appears.



Lane

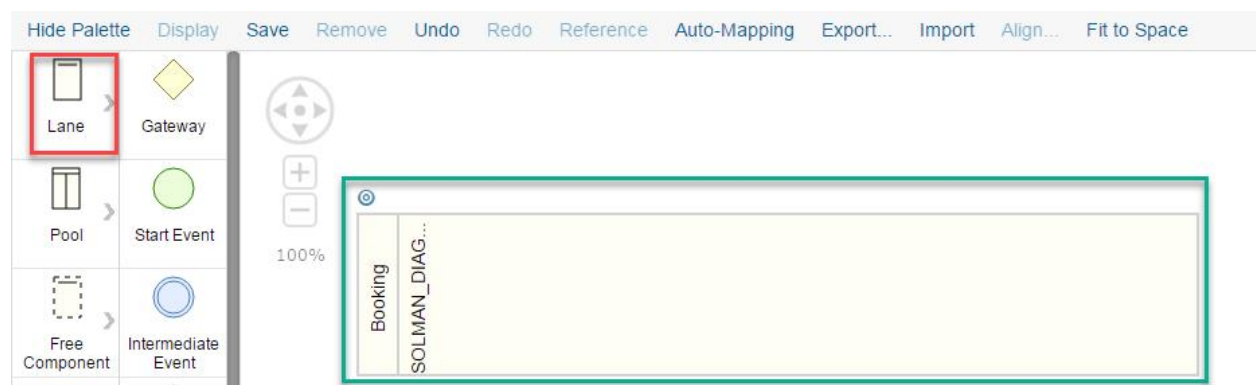
Add a lane into the diagram

Click on a Lane from the list.



Click inside the diagram to insert the lane.

The lane is added to the diagram.



Remove a lane from the diagram

Select a lane from the diagram.



Click on the button link Remove.



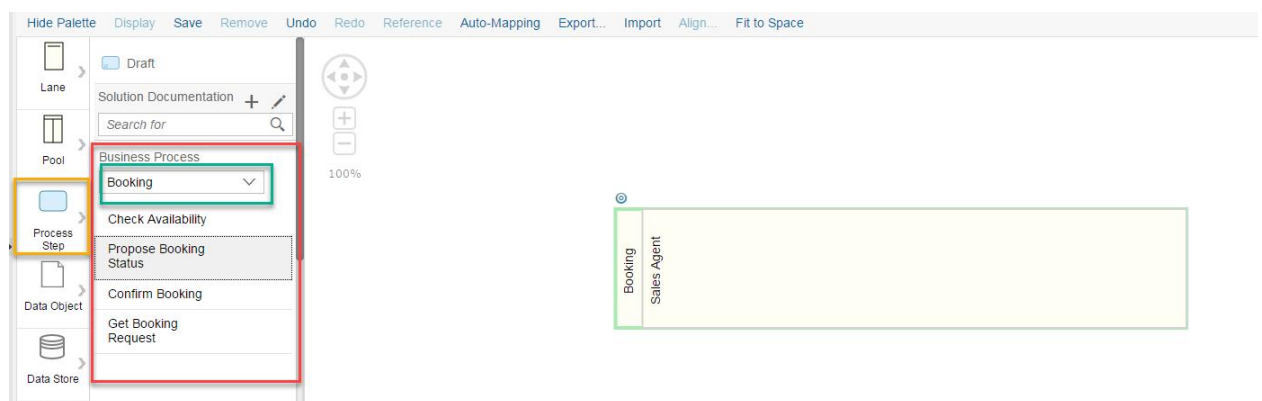
Process steps

Add a process step to the diagram

Select a process-step from the list.

All the lanes where the process-step could be added will be highlighted in green.

If no lanes are highlighted, the respective lane must be added before adding the process step.



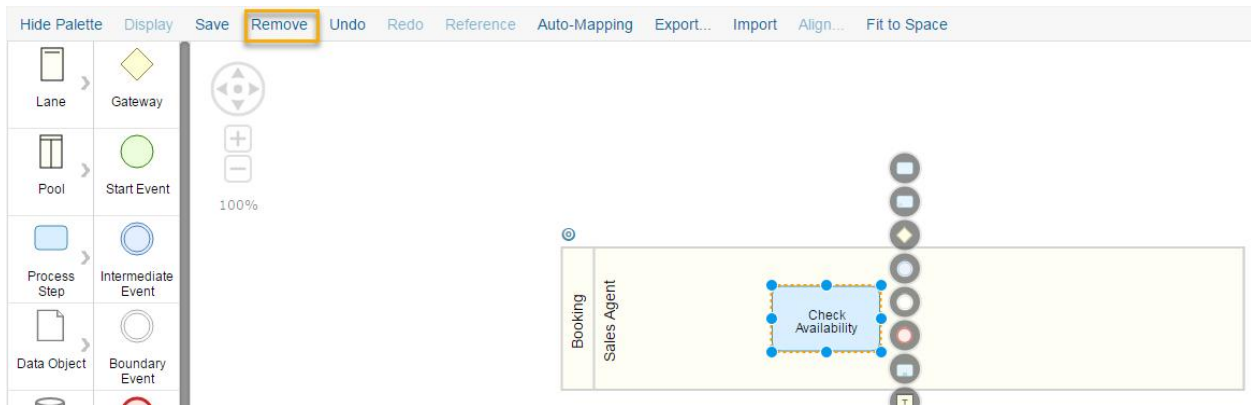
Click inside the diagram to add the process-step.



Remove a process step from the diagram

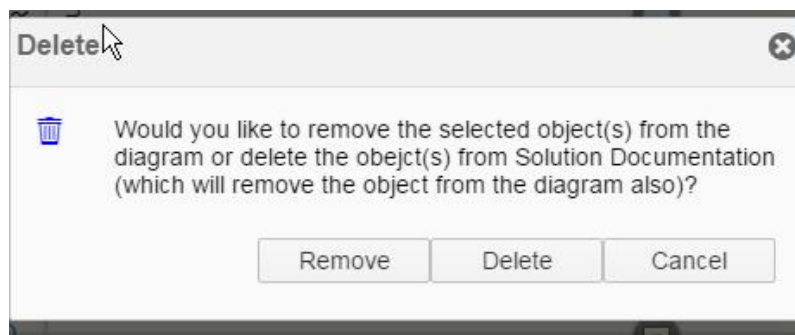
Select a process step from the diagram.

The button Remove is highlighted.



Click on the button Remove.

The following popup appears.

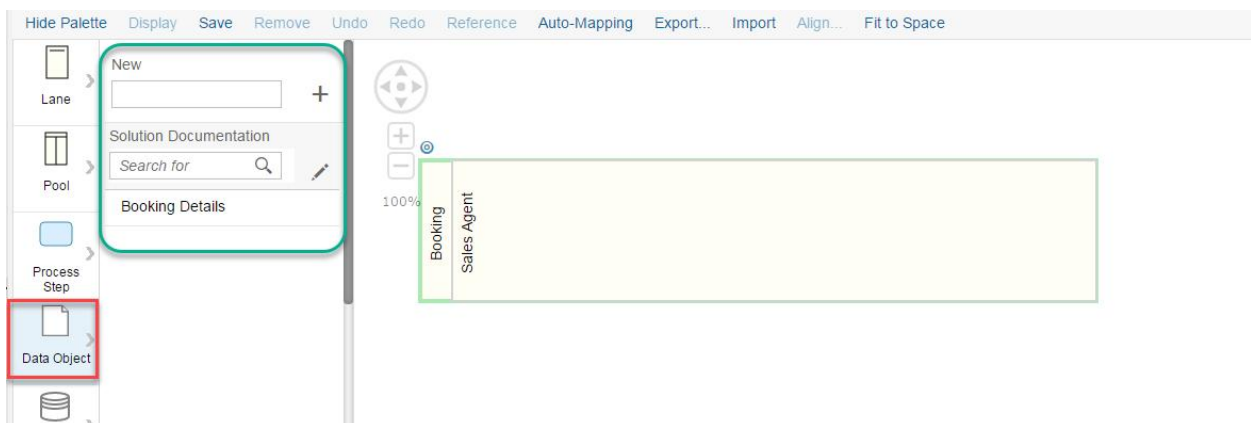


The process step is removed from the diagram.

Data Object

Create a new Data Object

Click on the Data Object icon.

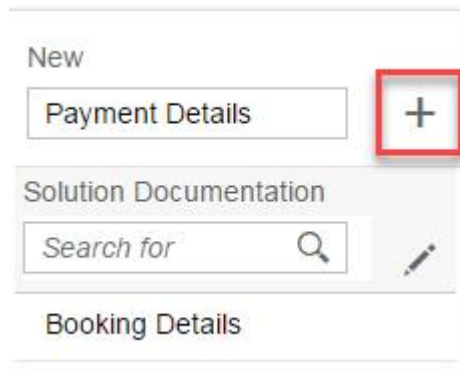


A list of available data objects will appear.

Enter a data object name (example "Payment Details") and click on



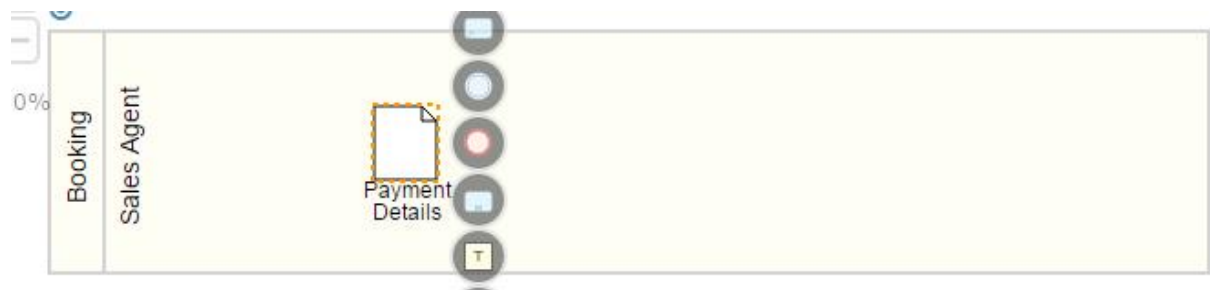
The data object is created and added to the list.



Add a Data Object into the diagram

Select a data object from the list.

Click on the diagram to insert the data object.

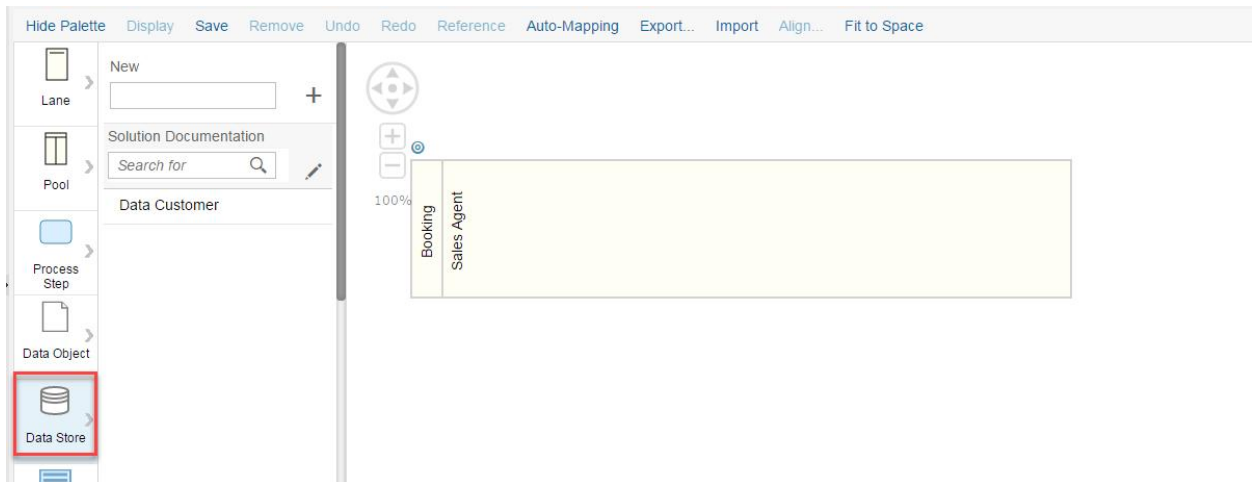


Data Store

Create a Data Store

Click on the Data Store icon.

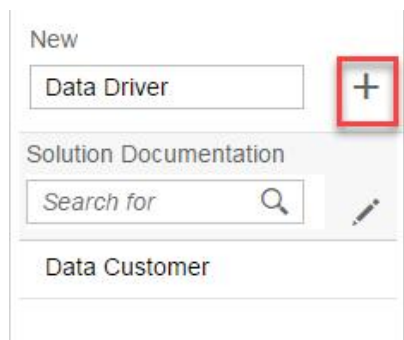
A list of available data stores will appear.



Enter a data store name (example "Data Driver") and Click on



The data store is created and added to the list.



Add a Data Store into the diagram

Select a data store from the list.

Click on the diagram to insert the data store.



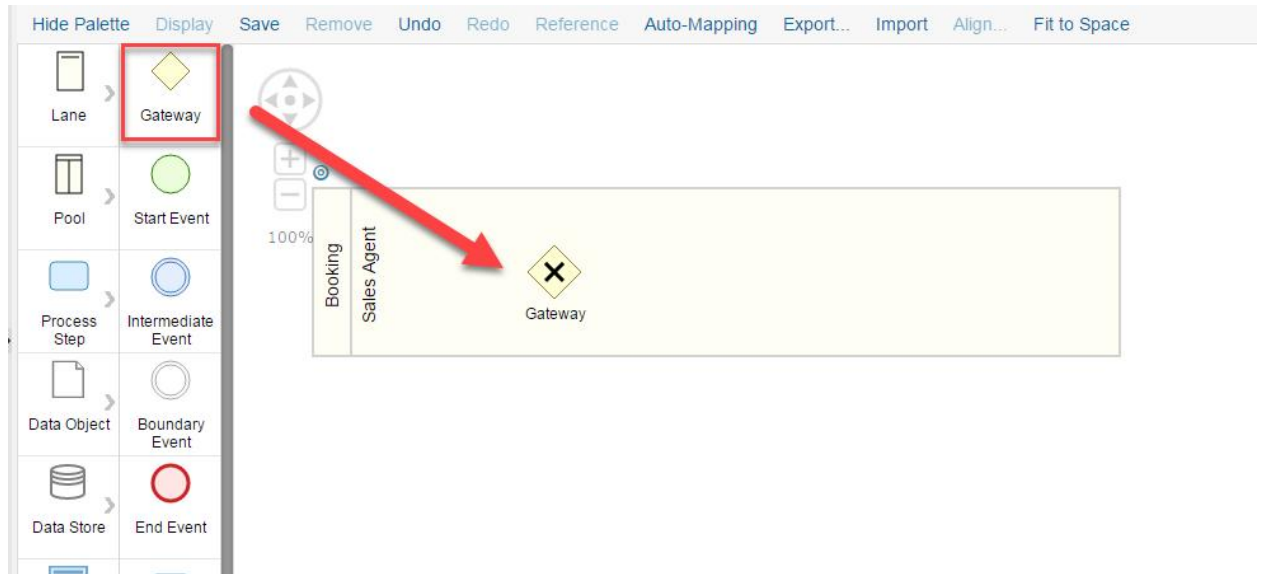
5.2.2 Part II

Gateway

Add a gateway to the diagram

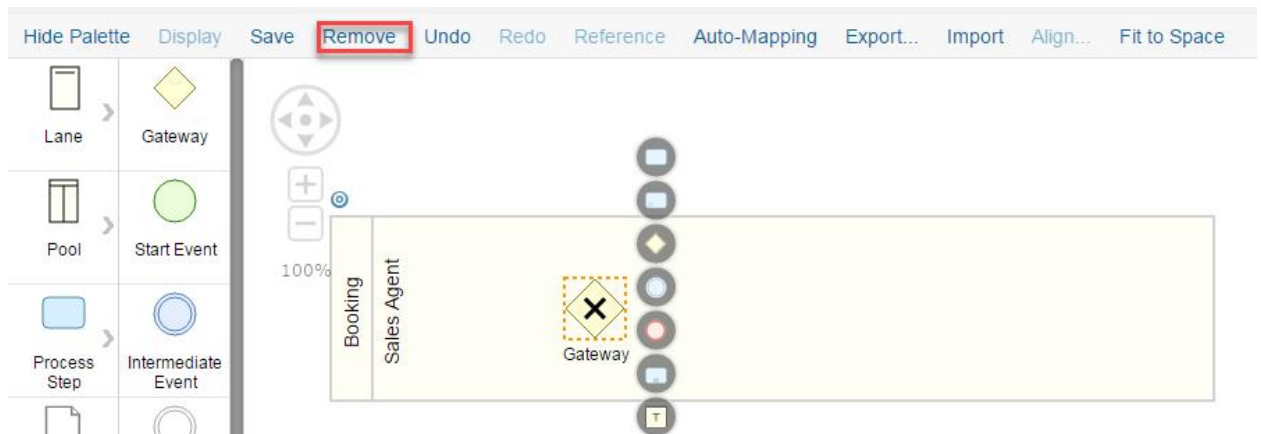
Click on the Gateway icon.

Click on the diagram to insert the gateway.



Remove a Gateway from the diagram

Select a Gateway in the diagram.



Click on the button Remove.

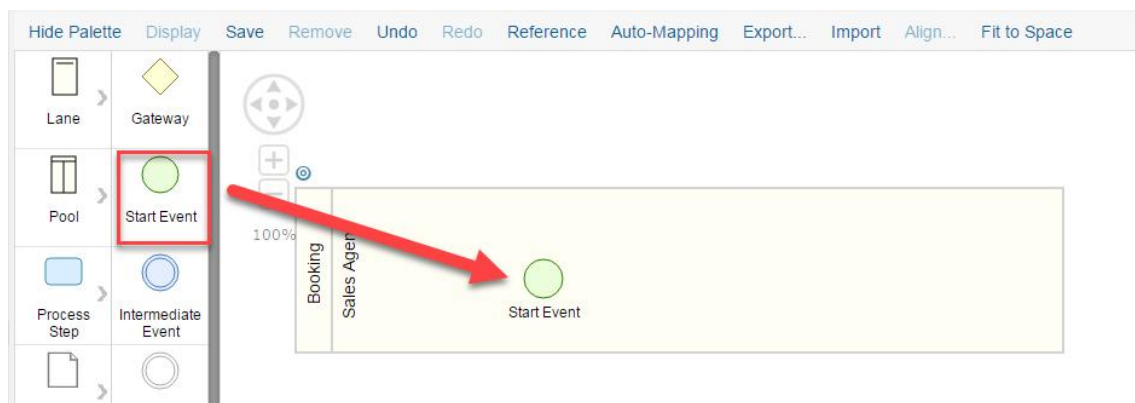
The Gateway is removed from the diagram.



Start Event

Add a Start Event to the diagram

Click on the Start Event icon. Click on the diagram to insert the start event.



Remove a Start Event from the diagram

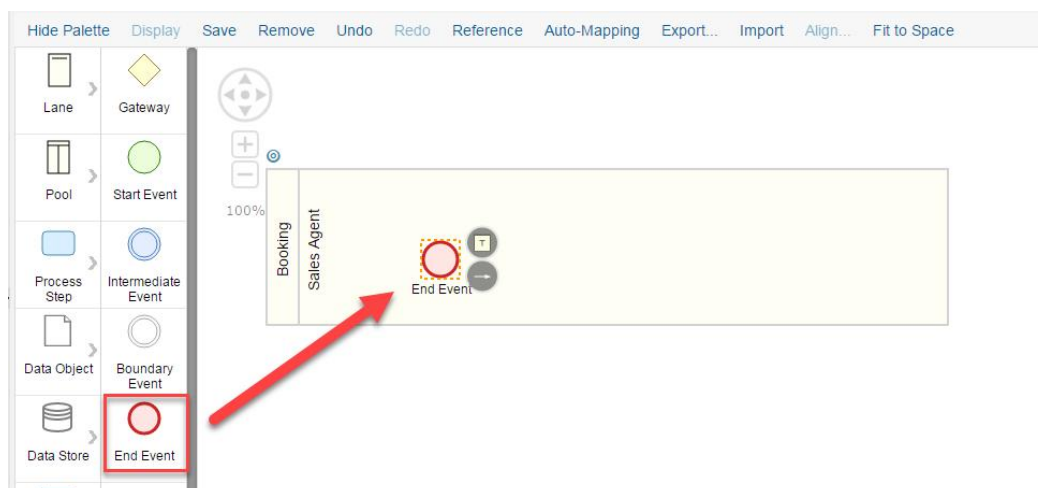
Select a start event in the diagram.

Click on the button Remove. The Start Event is removed from the diagram.

End Event

Add an End Event to the diagram

Click on the End Event icon. Click on the diagram to insert the end event.



Remove AN END Event from the diagram

Select an end event in the diagram.

Click on the button Remove.

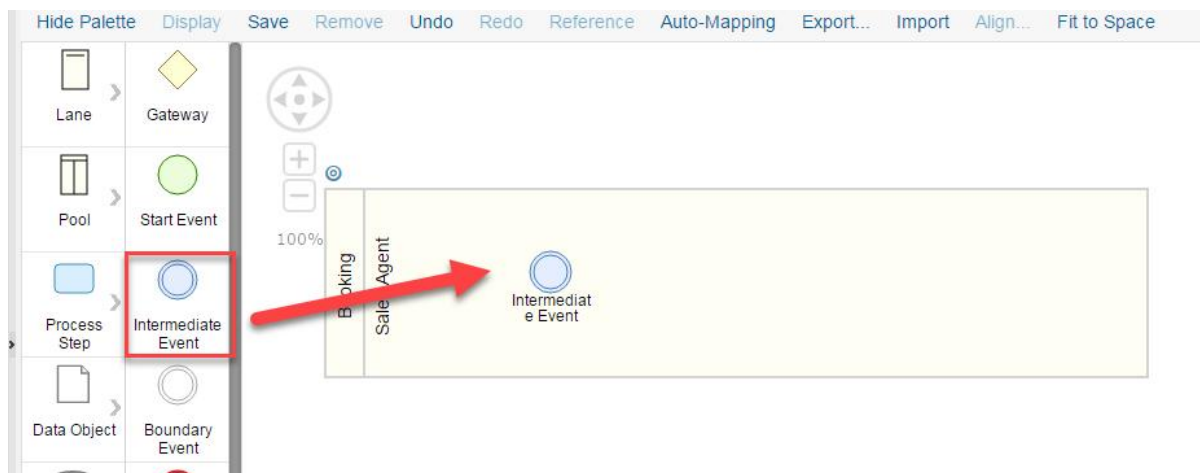
The end event is removed from the diagram.

Intermediate Event

Add an Intermediate Event to the diagram

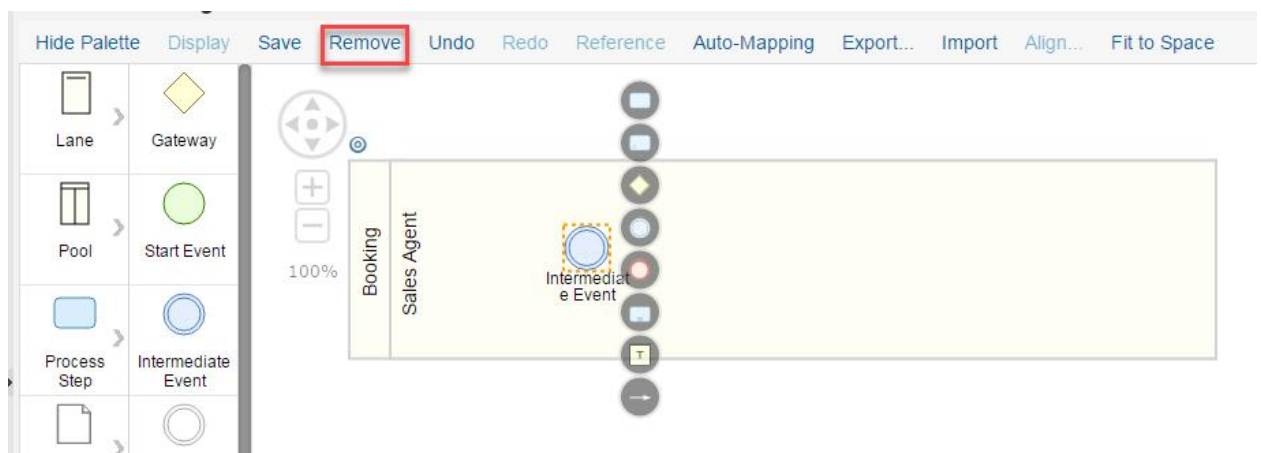
Click on the Intermediate Event icon.

Click on the diagram to insert the intermediate event.



Remove an Intermediate Event from the diagram

Select an intermediate event in diagram.



Click on the button Remove.

The intermediate event is removed from the diagram.



Boundary Event

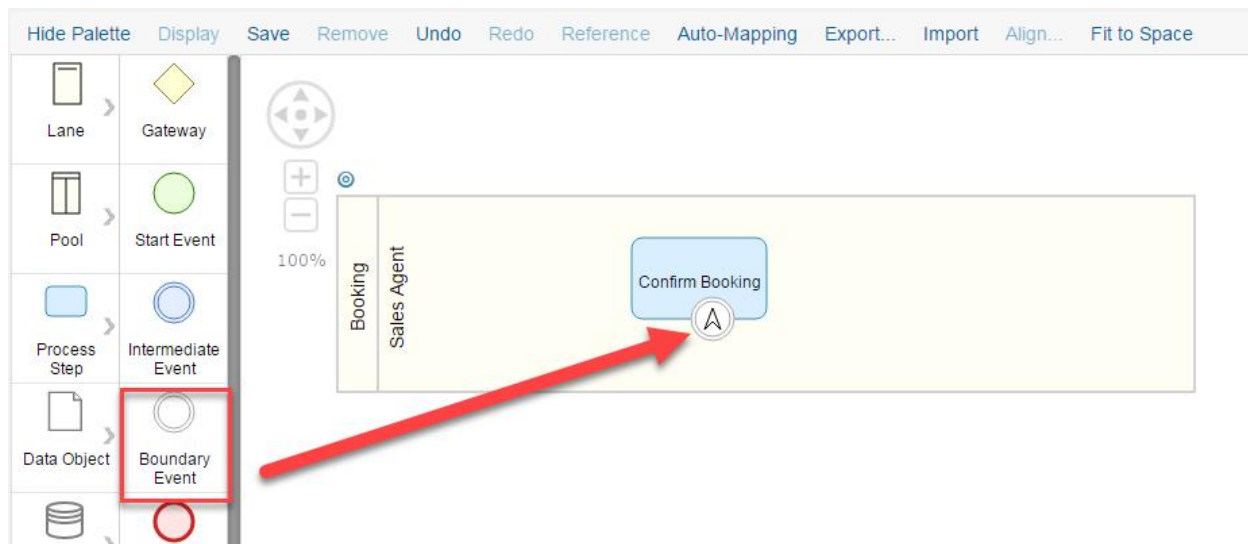
Add a Boundary Event to the diagram

Boundary events are inserted inside process steps.

Add a process step to the diagram.

Click on the Boundary Event icon.

Click inside the process step to insert the end event.



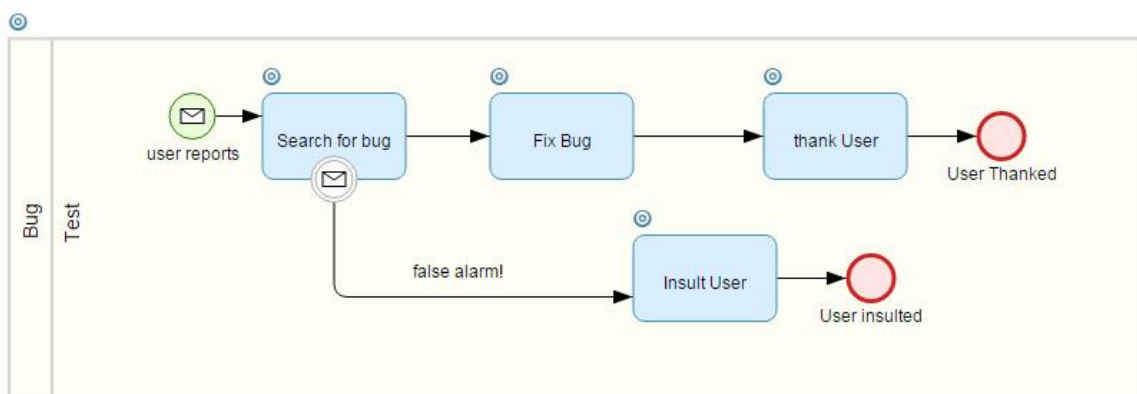
Remove A Boundary Event from the diagram

Select a boundary event in the diagram.

Click on the button Remove.

The boundary event is removed from the diagram

Example:

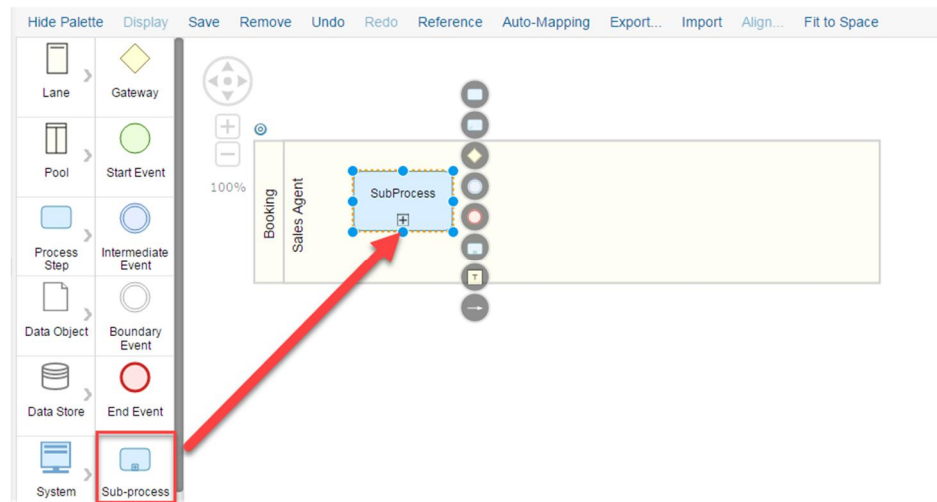


Sub-Process

Add a Sub-Process to the diagram

Click on the Sub-Process icon.

Click on the diagram to add a new Sub-Process.



Double-Click the sub-process to rename it.



Enter a new name for the sub-process.



Remove a Sub-Process from the diagram

Select the Sub-Process in the diagram.

Click on the button Remove.

The process-step is removed from the diagram.







6 Business Process Diagram

6.1 Context Menu

In this section, you learn more about the context menu options in a business process diagrams.

This section contains four parts of context menu objects.

Part I: When clicking an object	Part II: When right-click an object	Part III: When clicking an text symbol	Part IV: When clicking an lane or pool
			

In order to make use of the interactive context menu, proceed as follows:

- Select an element on the diagram. The interactive context menu appears right of the element.
- Click the icon representing the element you want to add.
- The new element appears in the diagram and both element are linked.

6.1.1 Part I: When clicking an object

Add Process Step

Use case example: from a Process Step.

From the diagram, select a Process Step. The context Menu appears.

Click on the process step icon.

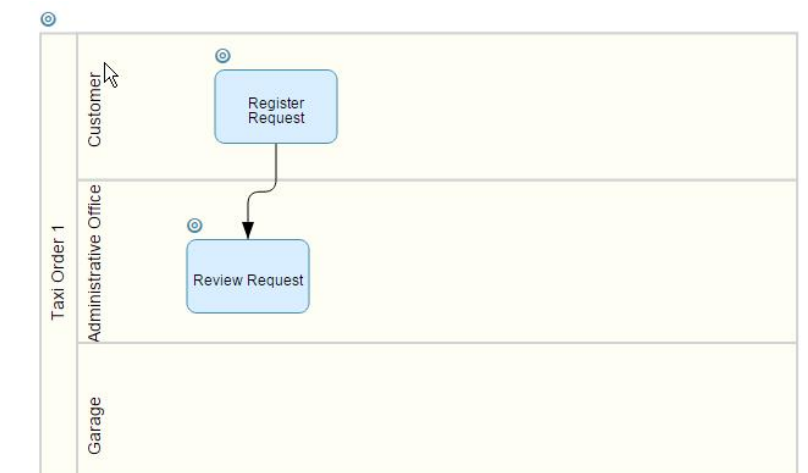


The process step popup appears.



Select a process step and added it to the diagram.

The process step is added to the diagram and both process steps are linked.



Add Sub-Process

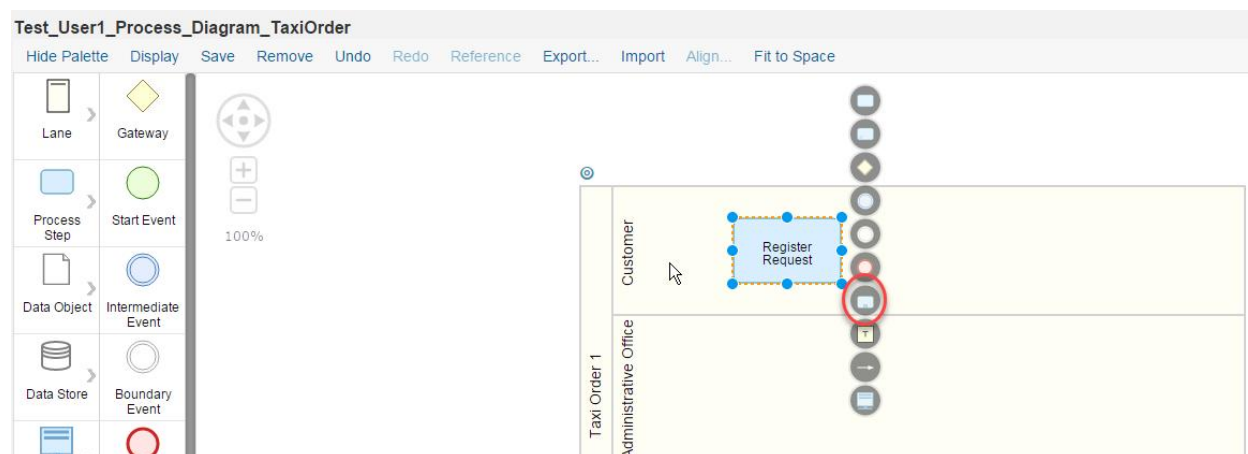
Use case example: from a process step

From the diagram, select an object where this option is applicable (example: process step). The context Menu appears.

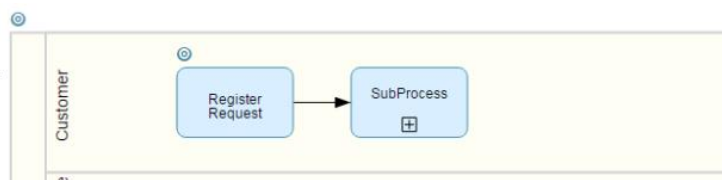
Click on



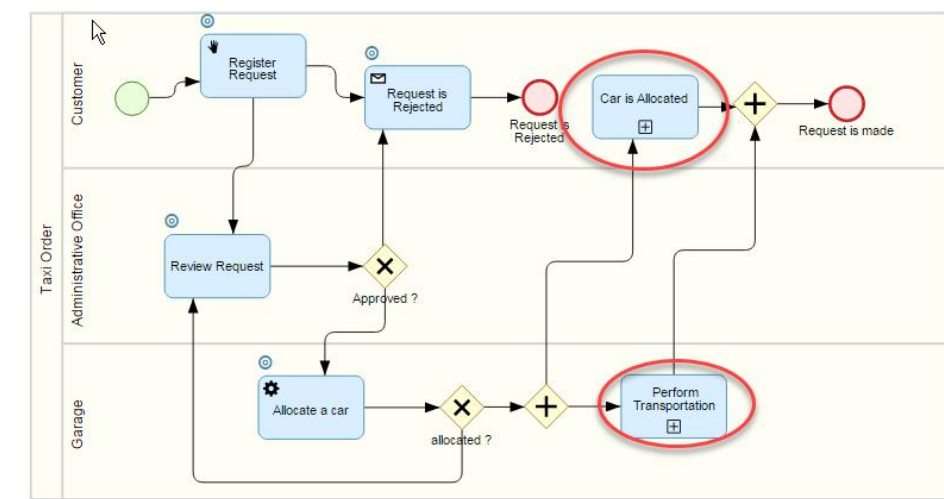
to add a sub-process.



The sub-process is added and is linked to the process step.



Example:



Add Intermediate Event

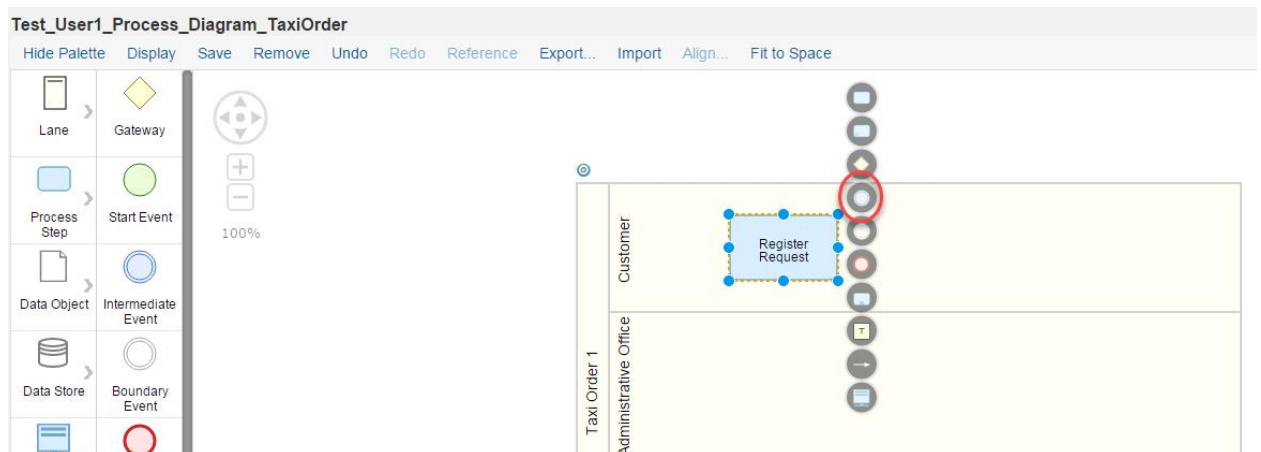
Use case example: from a Process Step

From the diagram, select an object where this option is applicable (example: process step). The context Menu appears.

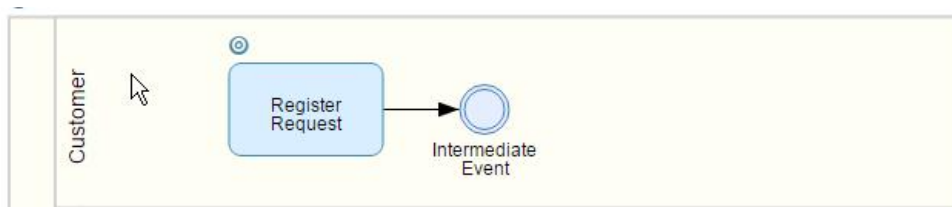
Click on



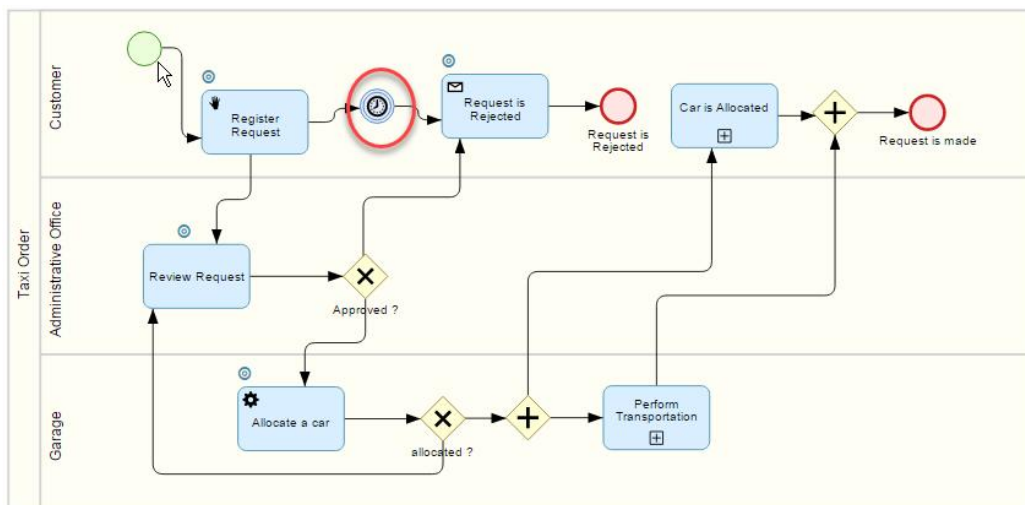
to add an intermediate event.



The intermediate event is added and is linked to the process step.



Example:



Add End Event

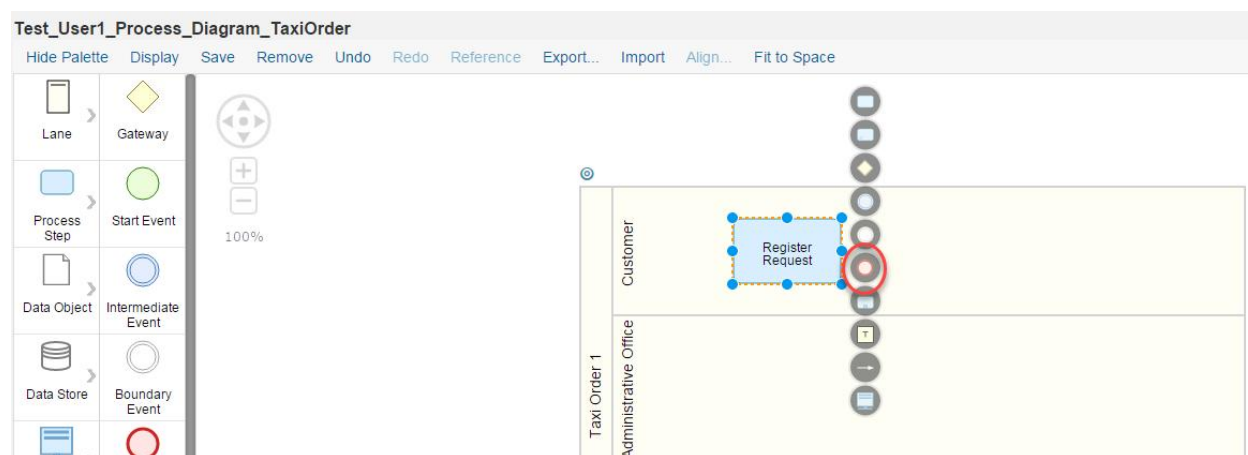
Use case example: From a process step

From the diagram, select an object where this option is available (example: process step). The context menu appears.

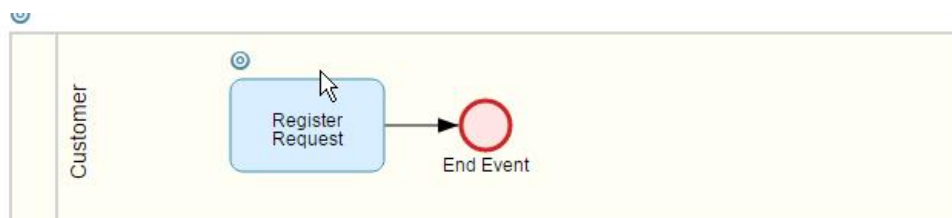
Click on



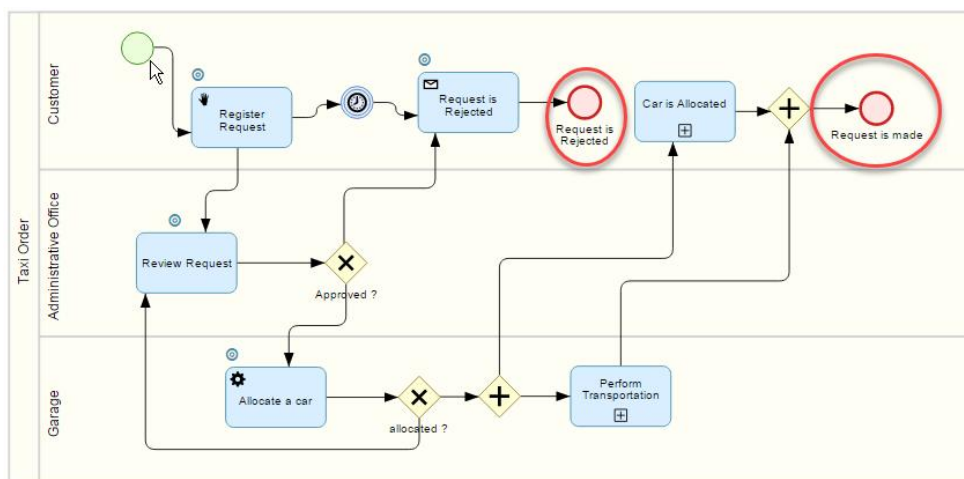
to add an end event.



The end event is added and is linked to the process step.



Example:



Add Gateway

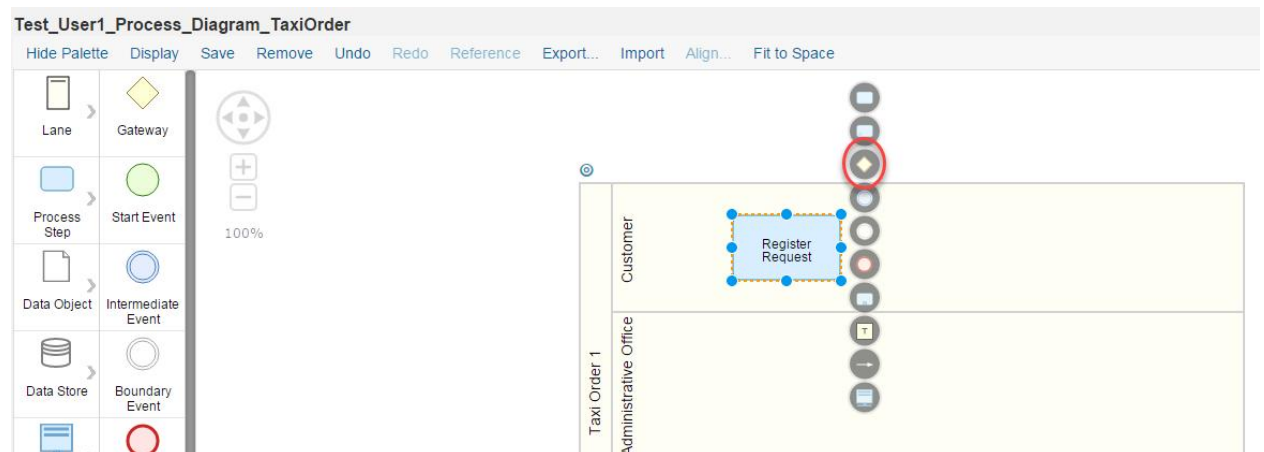
Use case example: From a process step

From the diagram, select an object where this option is applicable (example: Process Step). The context Menu appears.

Click on

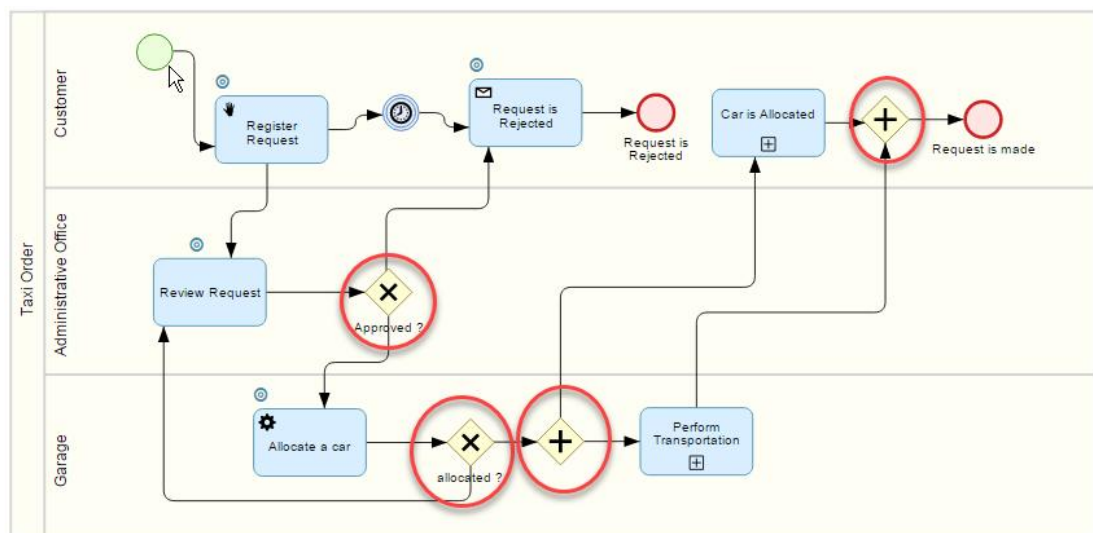


to add a gateway.



The gateway is added and is linked to the process step.

Example:



Add Note

Use case example: From a process step

From the diagram, select an object. The context Menu appears.

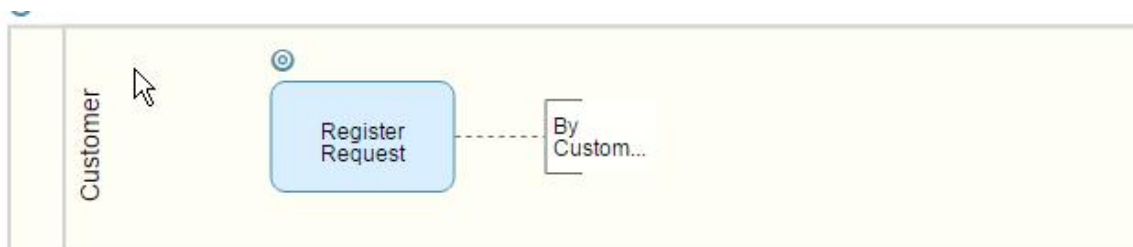
Click on



to add a note.



The note is added and is linked to the process step.



Add Link to an object

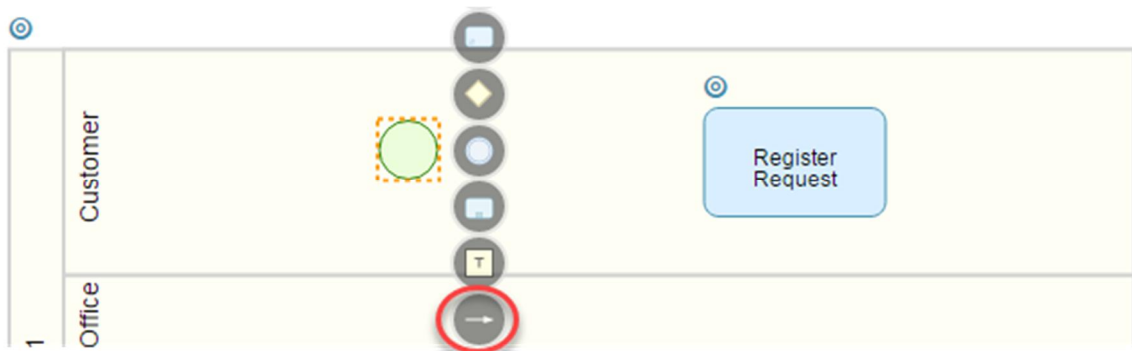
Use case example: link a process step to a data object

From the diagram, select an object. The context Menu appears.

Click on

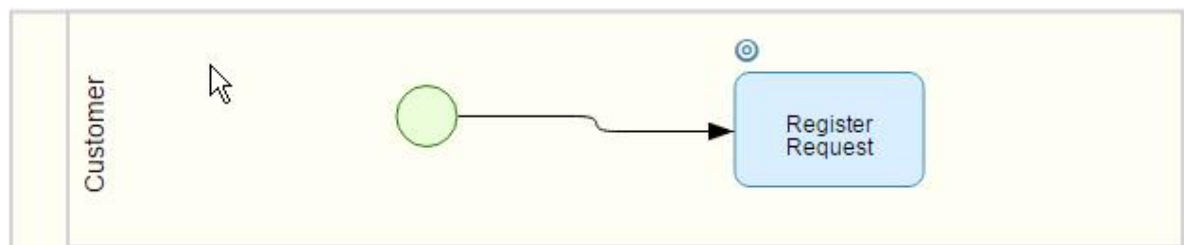


to add a link and drag it to the other object without releasing the pointer.



Choose a contact point and release the pointer.

Both objects are linked.



Add a boundary event

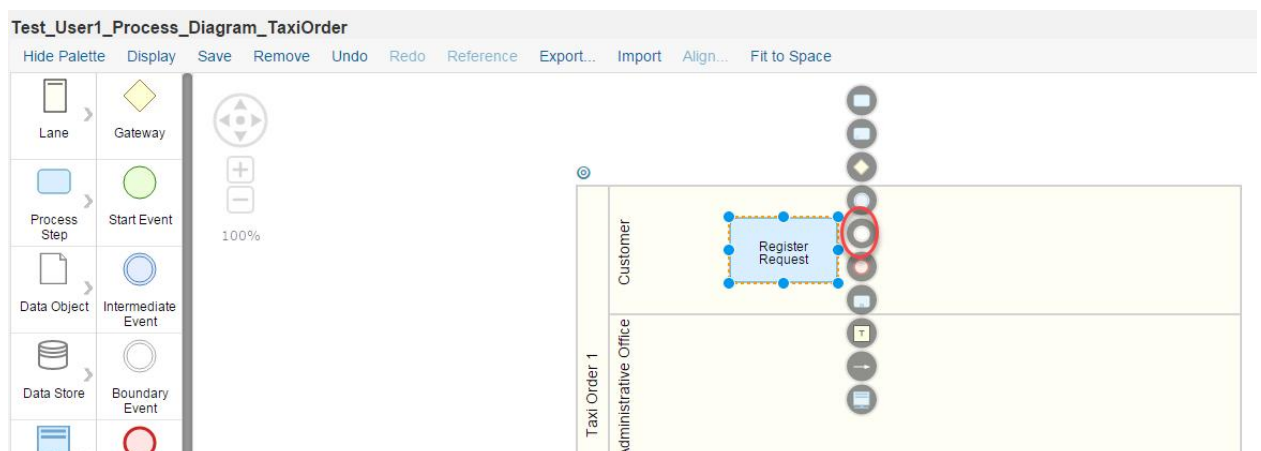
Use case example: Applicable only for process steps

From the diagram, select a process step. The context Menu appears.

Click on the



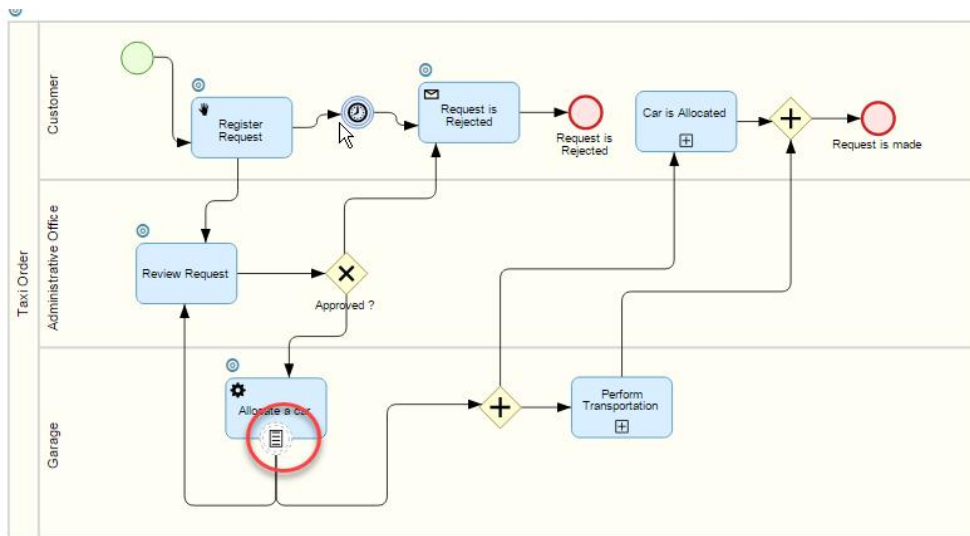
icon to add a boundary event.



The boundary event is added to the diagram.



Example:



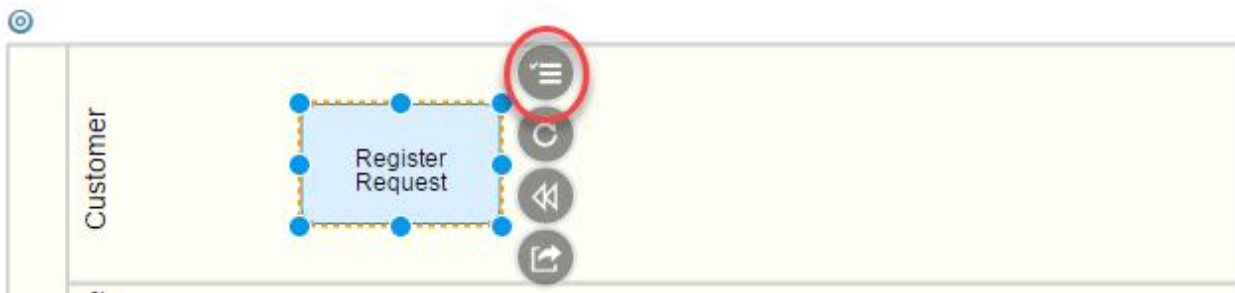
6.1.2 Part II: When right-click an object

Decorators

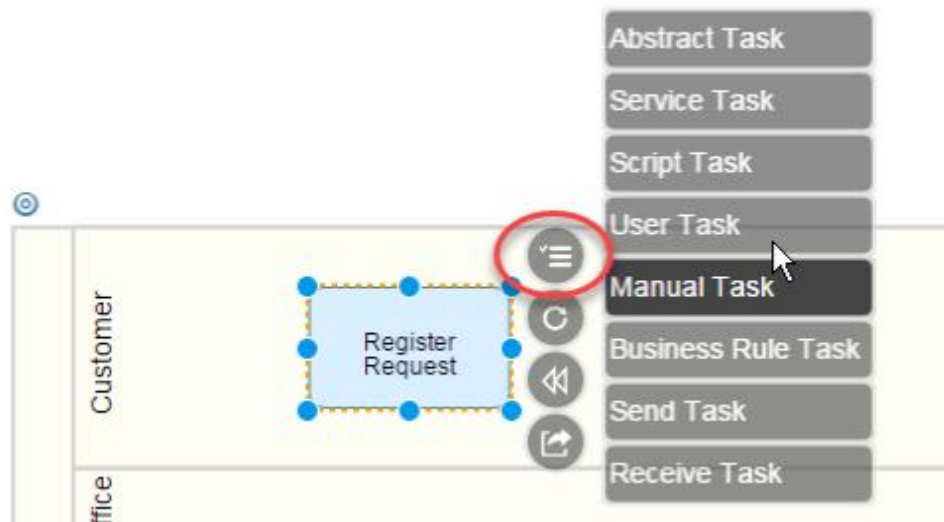
Use case example: Process Step

From the diagram, right-click an object where this option is applicable (example: process step). The context Menu appears.

Click on the decorator icon.



A list of decorators appears.



Select a decorator. (Example: Manual Task)

The decorator is applied to the object.

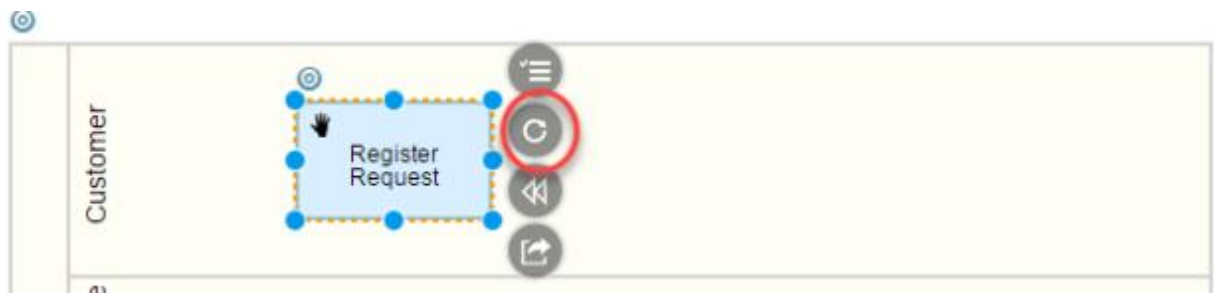


Loops

Use case example: Process Step, Sub-Process

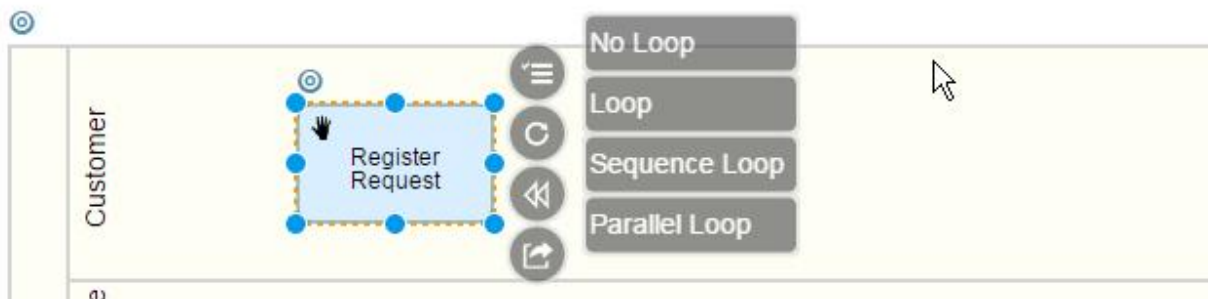
From the diagram, right-click a process step or a sub-process. The context Menu appears.

Click on the loop icon.



A list of loops appears.

Choose a loop type. (example: Loop)



The loop is applied to the object.



For Compensation

Use case example: Sub-Process or Process step

From the diagram, right-click a process step or a sub-process. The context Menu appears.

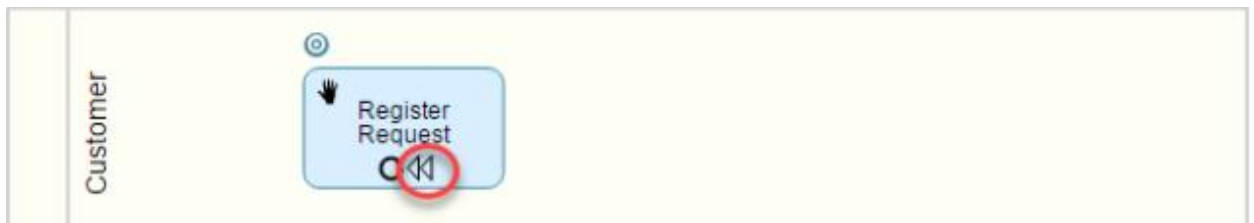
Click on the "For Compensation" icon.



Select "For compensation".



For Compensation icon is added.



Now we will remove the "For Compensation" option.

Right-click on object and click on:



Select "Not for Compensation".



The "For Compensation" icon disappears.



Reference

Single Reference

Applicable only for: Sub-Process

From the diagram, right-click an object where this option is applicable (example: Sub-Process). The context Menu appears.



Click on the Navigation icon.
The following popup appears.

Single Assignment

Select Process

Process

Diagram	Select Diagram	Default
No data		
+ Add Item		

✓ ✕

Select a process and a diagram.

Confirm.

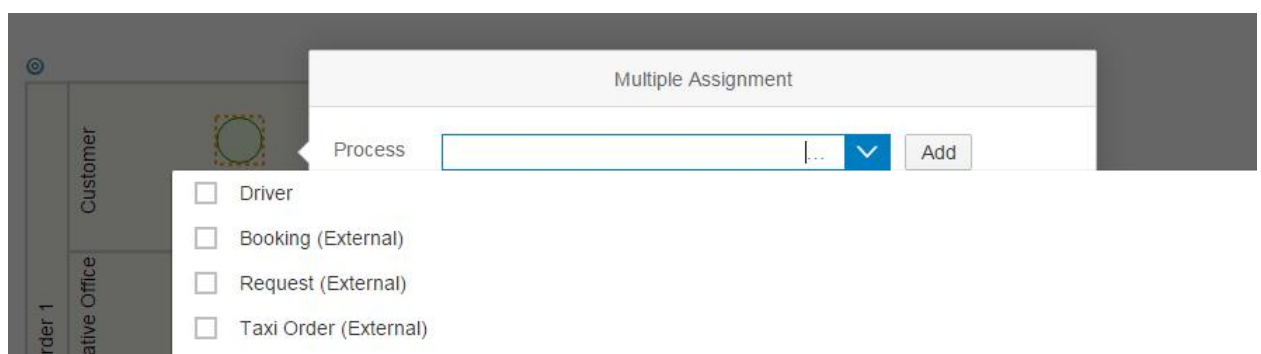
A navigation icon is added on top of the sub-process.



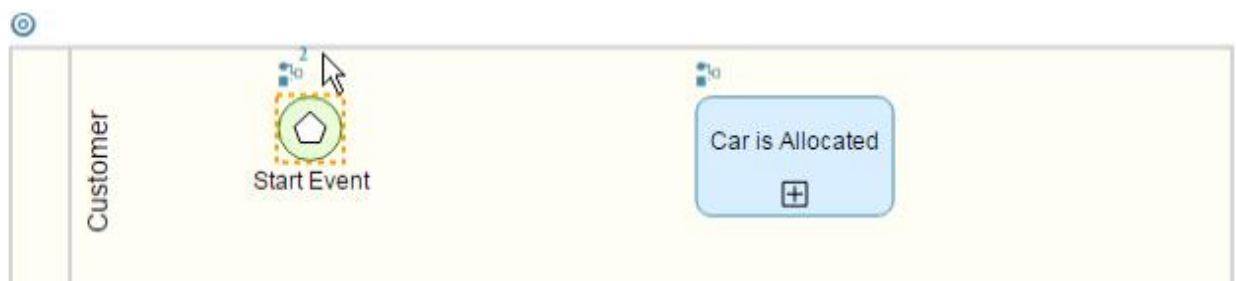
Multiple References

Use case example: Start Event

For these objects, it is possible to assign more than one reference.



Only one Process/Diagram can be tagged as Default



Replace Object

Use case example: Data Object

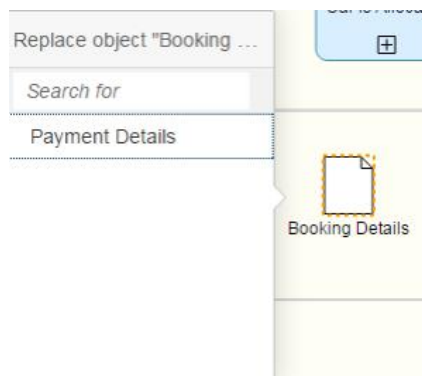
From the diagram, right-click an object. The context Menu appears.



Click on Replace Object icon.



A popup appears containing all available objects with same type as the one to be replaced.



Select an object (Payment Details).

The object is replaced by the new one.



When you replace element, you replace with it its decorators.

Is a Collection

Use case example: Data Object

From the diagram, right-click a Data Object. The context Menu appears.

Click on the "Collection" icon.

Set the Data object to "Is a Collection".



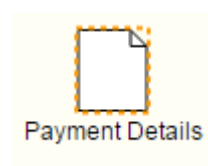
The collection icon is added to the data object.



Right-click the data object and click on the Collection icon again.
Set the data object to "Not a Collection".



The collection icon is removed from the data object.



Catch

Use case example: Intermediate Event

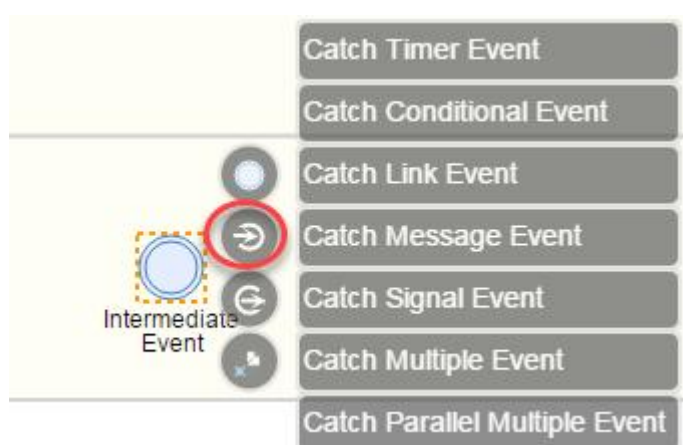
From the diagram, right-click an Intermediate Event. The context Menu appears.



Click on the Catch icon.



A list of catch options is displayed.



Select an option (example: Catch Time Event). An icon is added to the intermediate event.



When you choose an option, for example Catch Time Event, the icon assign disappear.

Throw

Use case example: Intermediate Event

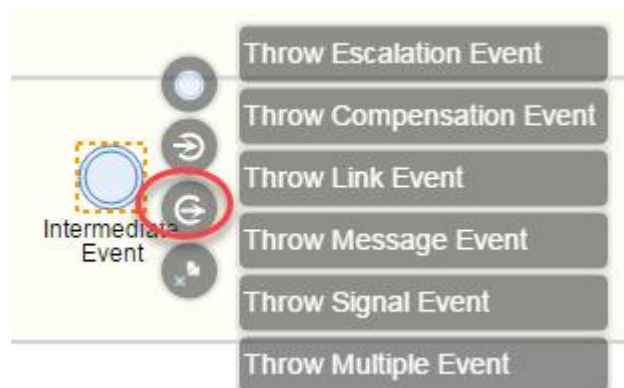
From the diagram, right-click an Intermediate Event. The context Menu appears.



Click on the Throw icon.



A list of throw options is displayed.



Select an option (example: Throw Escalation Event). An icon is added to the intermediate event.



When you choose an option, for example Throw Escalation Event, the icon assign disappear.

6.1.3 Part III: When clicking a text symbol

Text Symbol

Add an object (Start event, End event, Gateway, Intermediate, Data object, Data store, System, Free System or Participant) from the palette or select an object from the diagram.

Click on the text symbol. The context Menu appears.



Click on the Left icon. The text symbol move to the shape's left.



Click on the Top icon. The text symbol move to the shape's top.



Click on the Right icon. The text symbol move to the shape's right.



Click on the Bottom icon. The text symbol move to the shape's bottom.

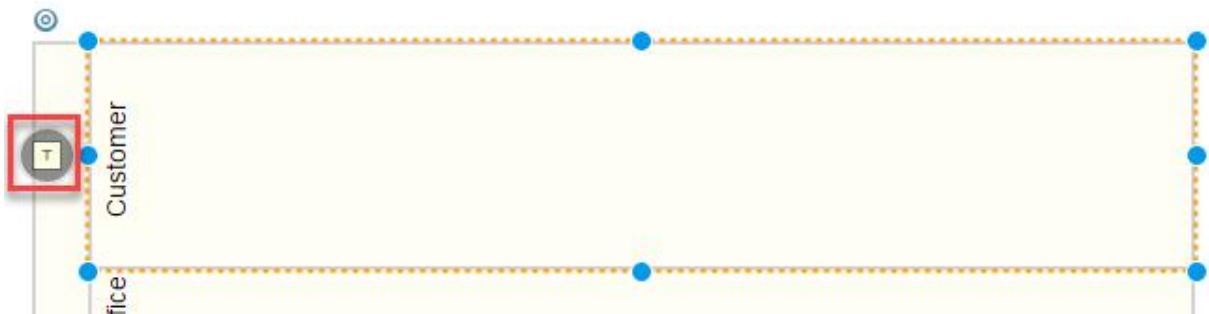


6.1.4 Part IV: When clicking a lane or pool

Lane

Add a lane from the palette or select a lane from the diagram.

Click on the lane. The context Menu appears.



Click on the note icon



The note is added and is linked to the Lane.

Double click to add note



Right-click on Lane. The context Menu appears.



Click on replace lane icon.

A popup appears containing all available lane with same type as the one to be replaced.



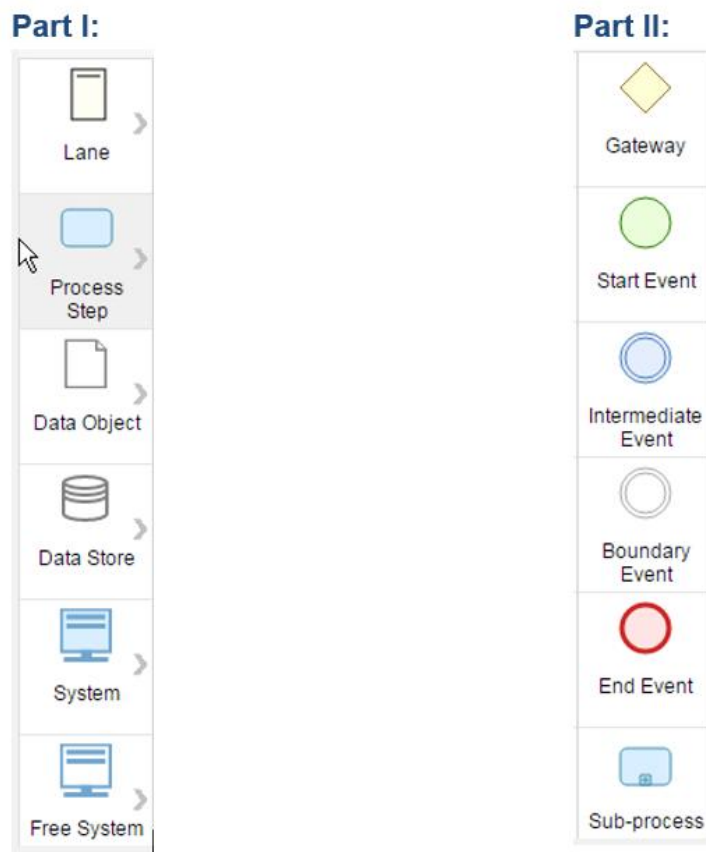
Select a lane.

The lane is replaced by the new one.

6.2 Palette

In this section, you learn more about the creation and addition of different objects in the Business Process diagram with the palette toolbar.

This section contains two parts:



The palette consists of two types of buttons:

Some buttons have some “instances” of objects behind them, like lane, process steps.

Others buttons represent objects which are graphical only (like gateways, events, sub processes).

To place an object on the diagram, you need to click it once, then it sticks to the mouse, and you can drop it with a second click, and it is placed.

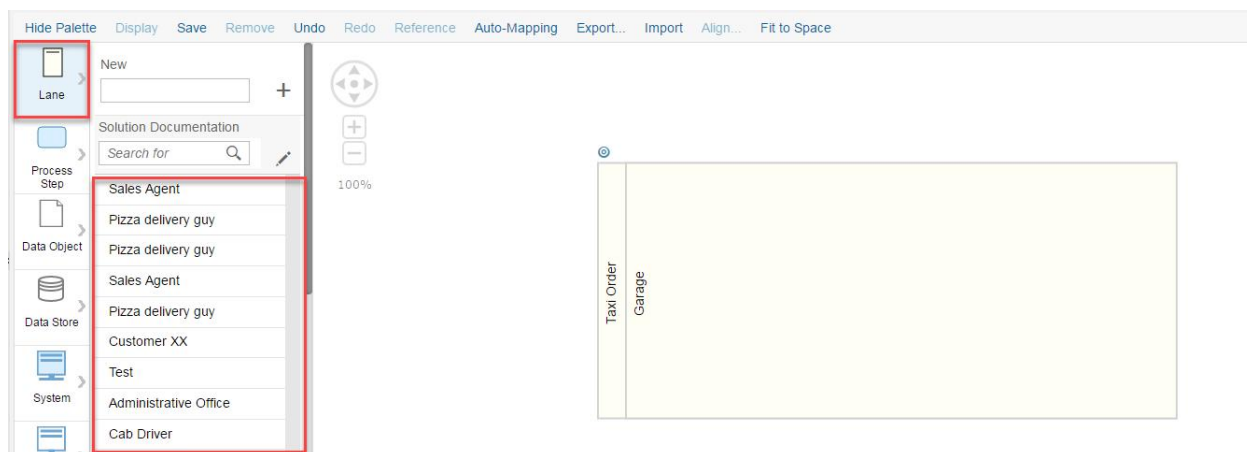
If it is not possible to place the object in that location, it will disappear. The possible locations are highlighted when you drag an object.

6.2.1 Part I

Lanes

Add a lane into the diagram

Click on a Lane from the list.



Click inside the diagram to insert it.

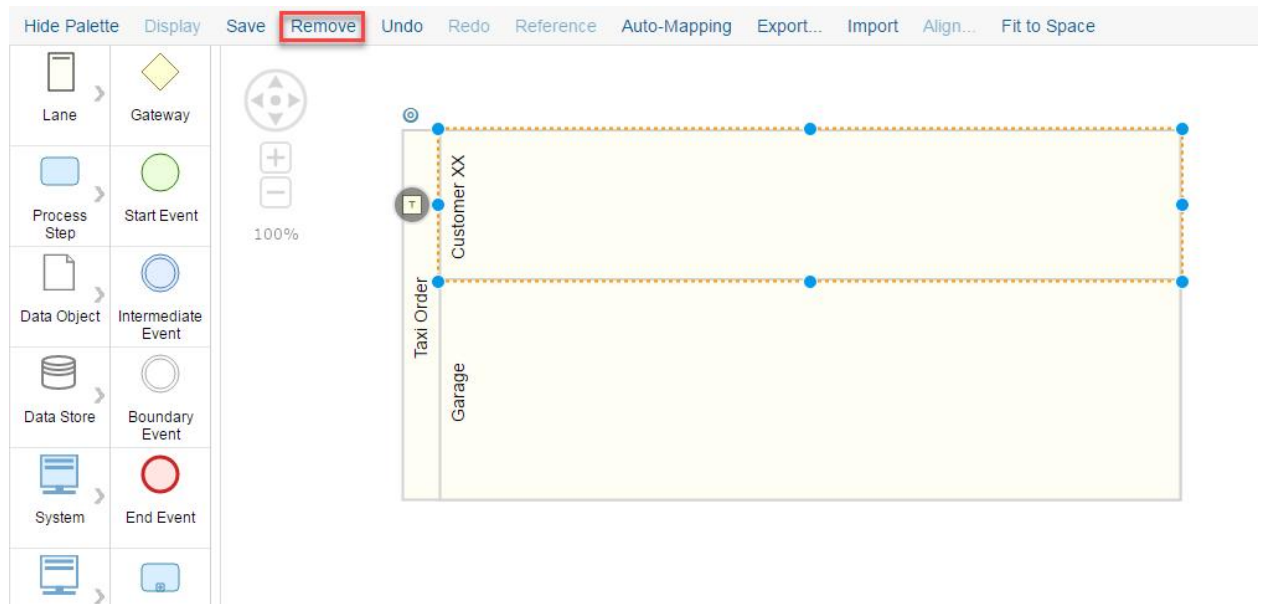


The lane is added to the diagram.

The lane is removed from the list of available lanes.

Remove a lane from the diagram

Select a lane from the diagram.

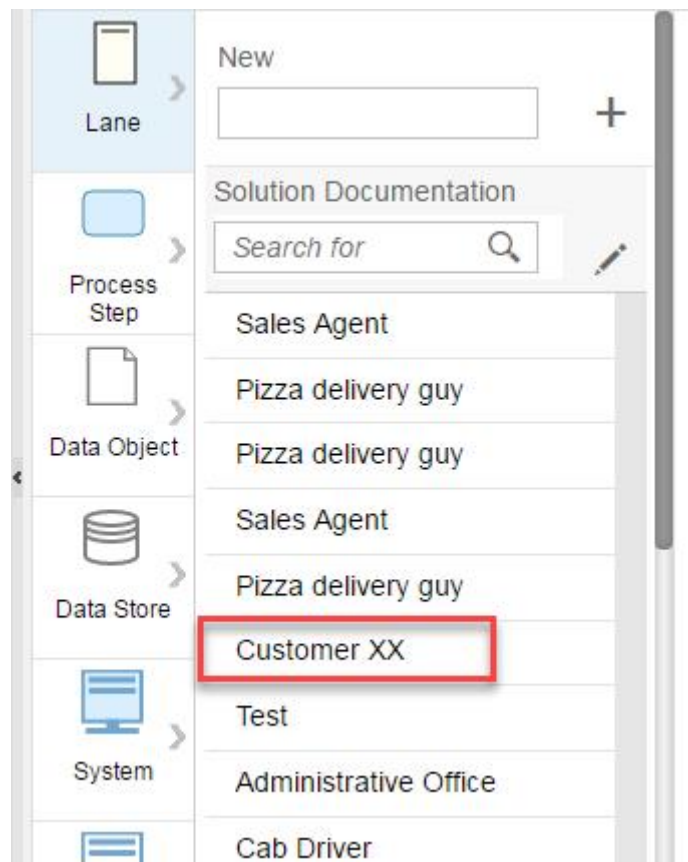


Click on the button Remove.

The lane is removed from the diagram.



The lane is added to the list of available lanes.

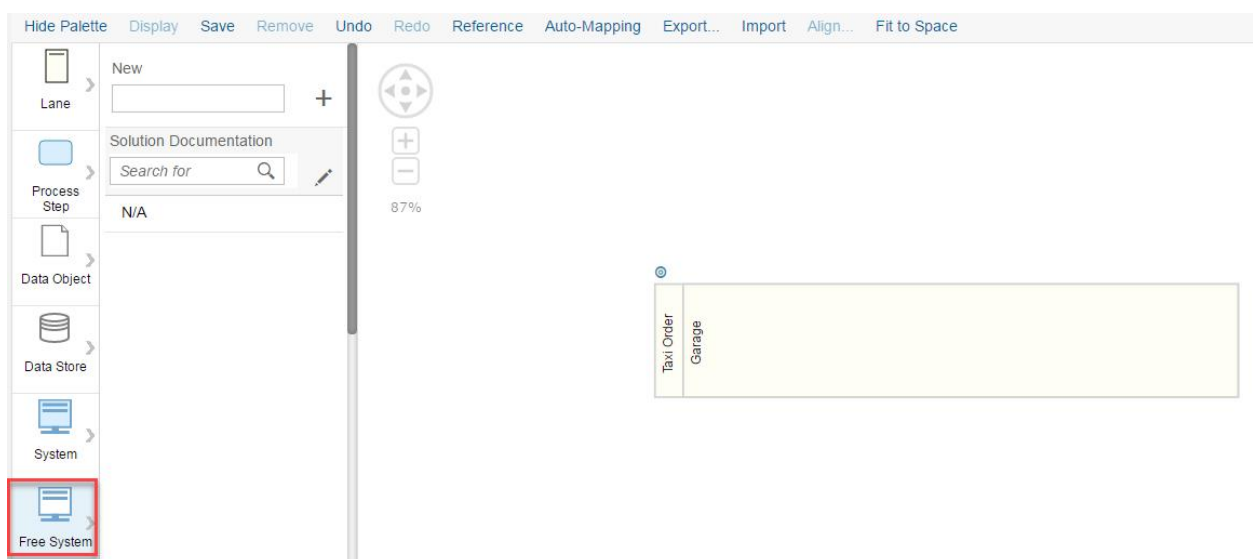


Free System

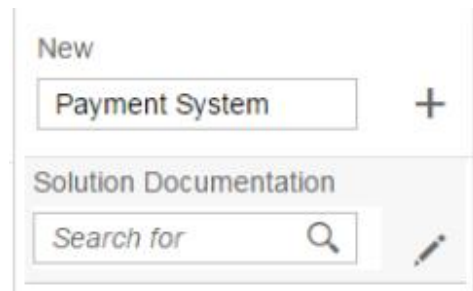
Applicable for: Business Process Diagram by Role.

Create a new Free System

Click on the free system icon.



A list of available free system will appear.



Enter a name and click on

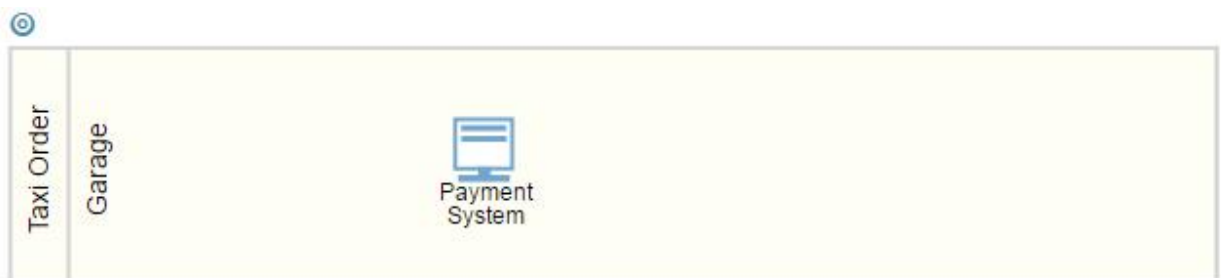


The new free system is added to the list.

Add a free system into the Diagram

Select a free system from the list (Payment System).

Click inside the diagram to insert the free system.

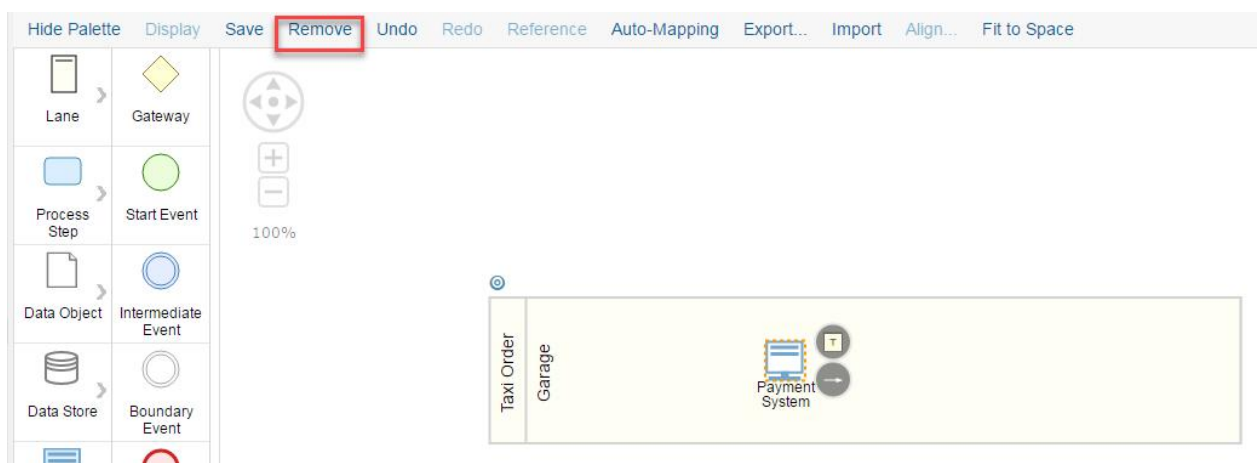


The free system is added the diagram.

The free system is removed from the list.

Remove a free system from the diagram

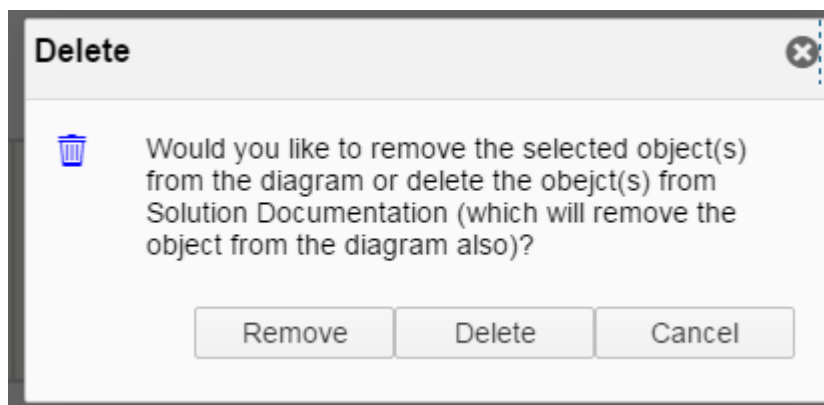
Select a free system from the diagram.



The button Remove is Enabled.

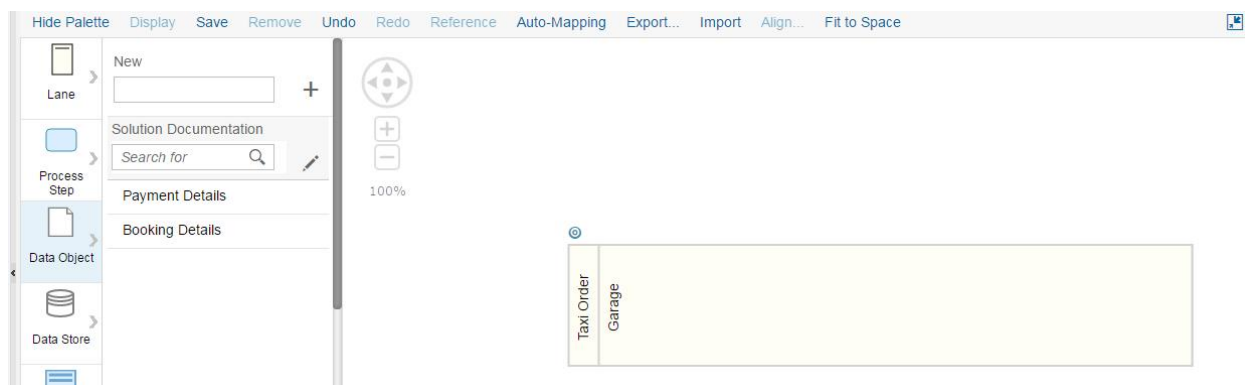
Click on the button Remove.

The following popup appears.



Click Remove.

The free system is removed from the diagram and is added to the free system list in the palette toolbar.



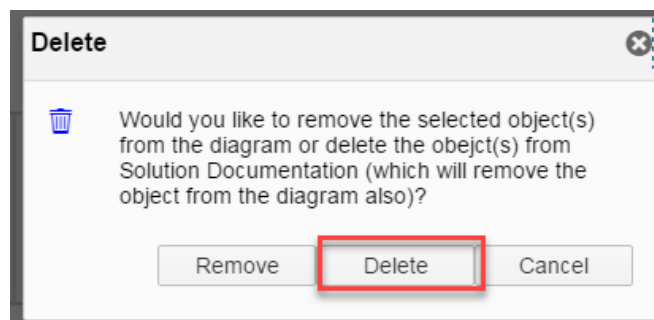
Delete a free System

Select a free system from the diagram.

The button Remove is Enabled.

Click on the button Remove.

The following popup appears.



Click Delete.

The free system is deleted completely, if isn't used in another diagram

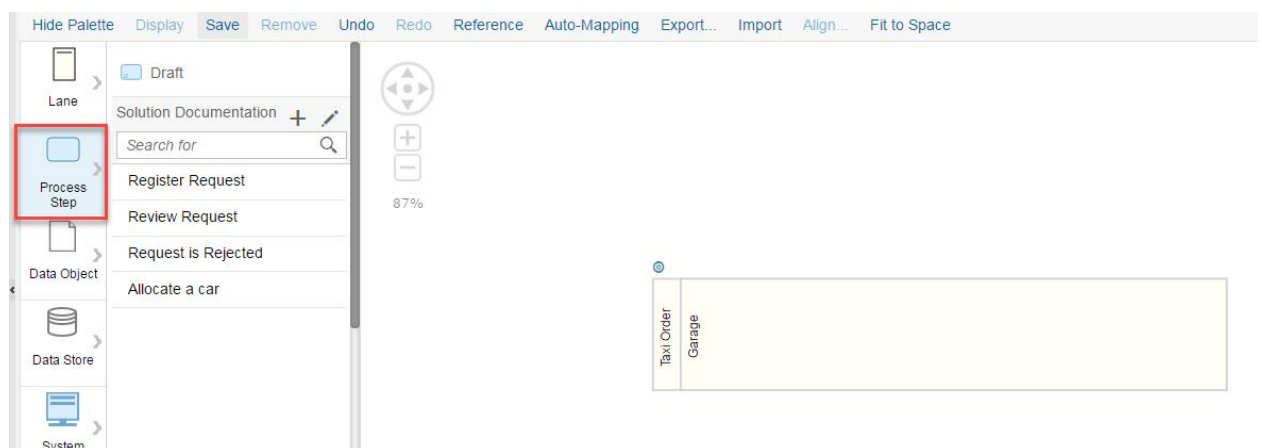
The free system is removed from the diagram and will not be displayed in the palette toolbar.

Process steps

Add a new process step to the list

Create a new Process Step

Click on the Process Step icon.



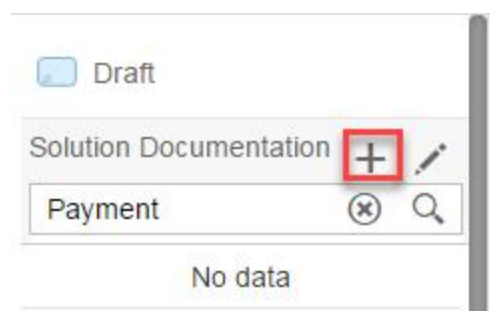
A list of available activities will appear.

All process steps created from the Solution Documentation should be available in the list.

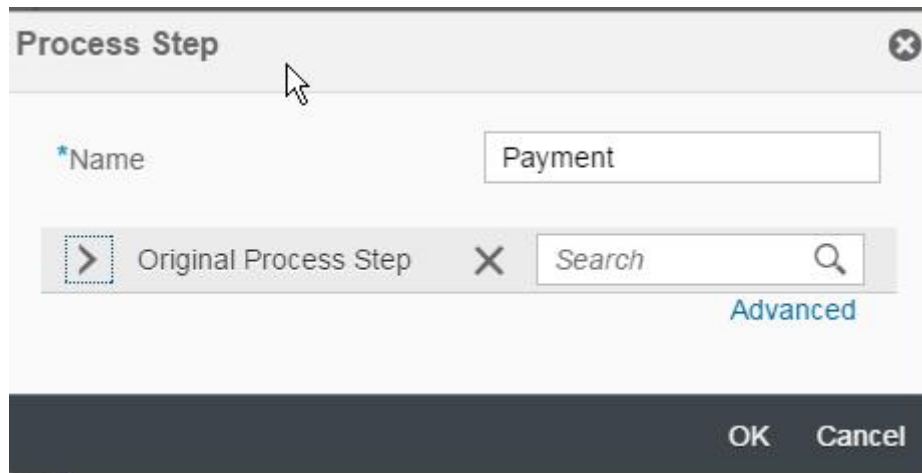
Enter a Name (Example: "Payment") and click on



to create a new process step.



The popup Process Step is open.



Click Ok or you can select Original Process Step and Click Ok
The process step is created.

Add a process step to the diagram

Select a process-step from the list.

All the lanes where the process-step could be added will be highlighted in green.

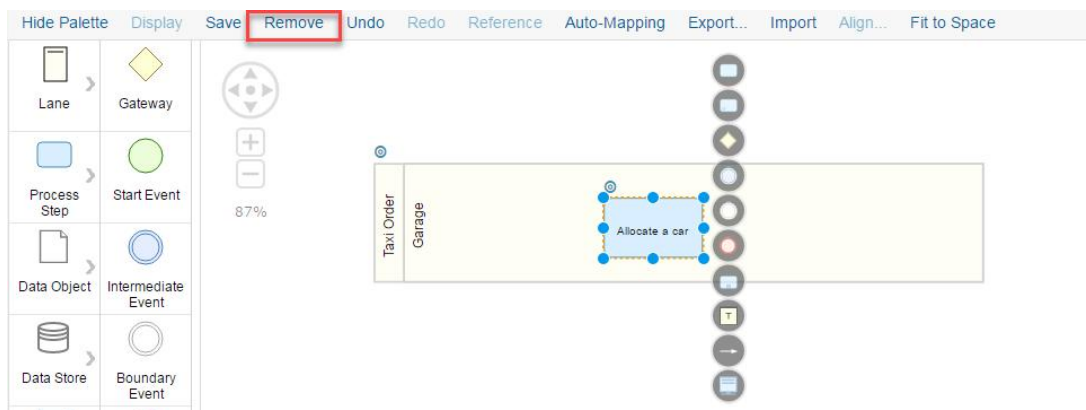
If no lanes are highlighted, the respective lane must be added before adding the process step.

Click inside the diagram to add the process-step.



Remove a process step from the diagram

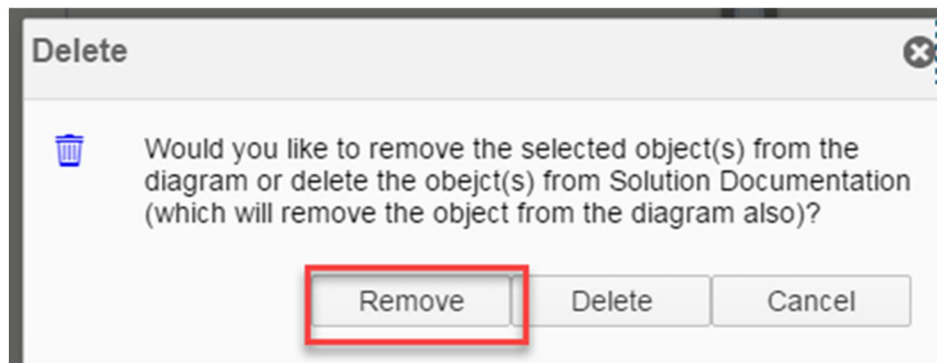
Select a process step from the diagram.



The button Remove is highlighted.

Click on the button Remove.

The following popup appears.



Click on Remove.

The process step is removed from the diagram.

Delete a process step from the diagram

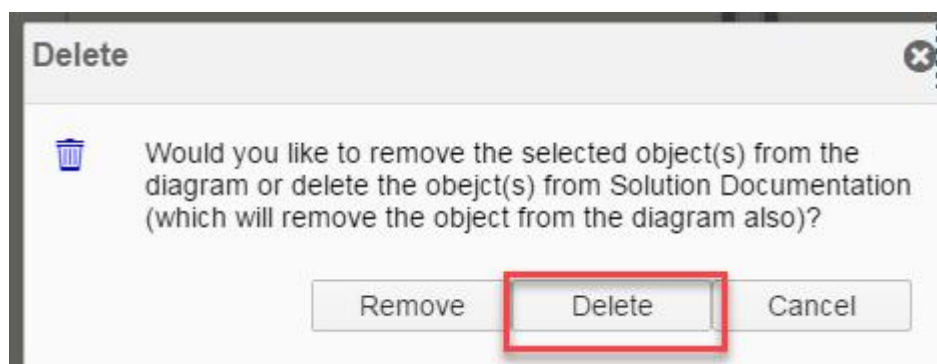
Process Step not used in another diagram

Select a process step from the diagram (example: Payment)

The button Remove is highlighted.

Click on the button Remove.

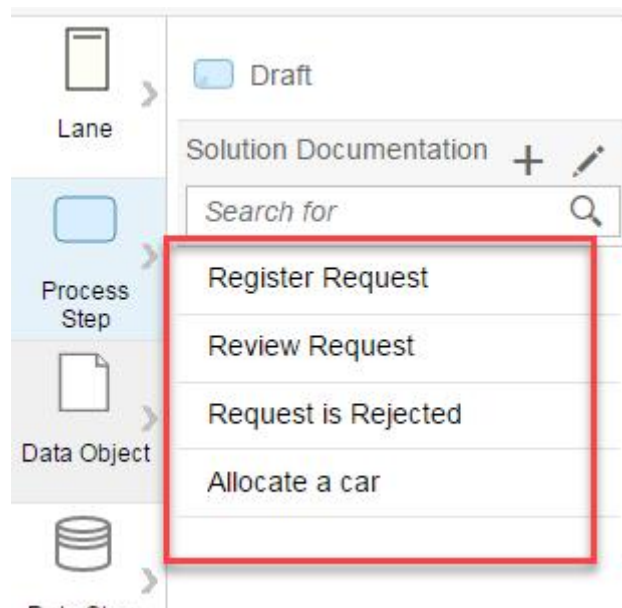
The following popup appears.



Click on Delete.

The process step is removed from the diagram.

The deleted Process Step (Payment) shouldn't exist in the Process Step list.



Process Step used in another diagram

When removing a process step from a diagram, if the process step is used in another diagram the popup Remove/Delete will not be displayed.

The process step will be removed from the diagram and the message "Process Step is used in another diagram(s) and cannot be deleted, it will be removed from the current diagram" will be displayed.

→ Process steps used in other diagrams cannot be deleted and only removed from the displayed diagram.

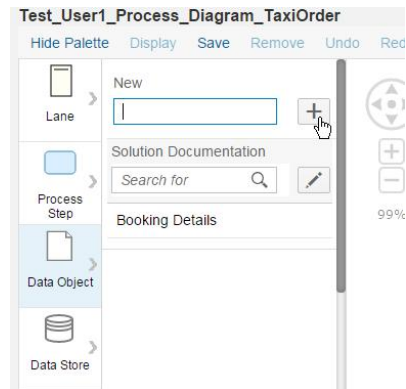
You have the possibility to add a draft process step



Data Object

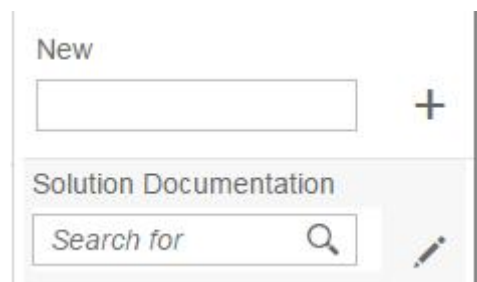
Create a new Data Object

Click on the Data Object icon.

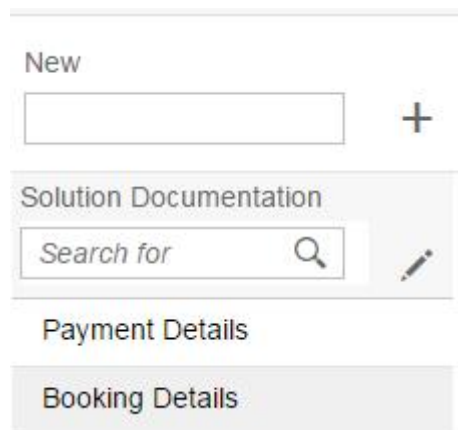


A list of available data objects will appear.

Enter a data object name (example "Payment details") and click on



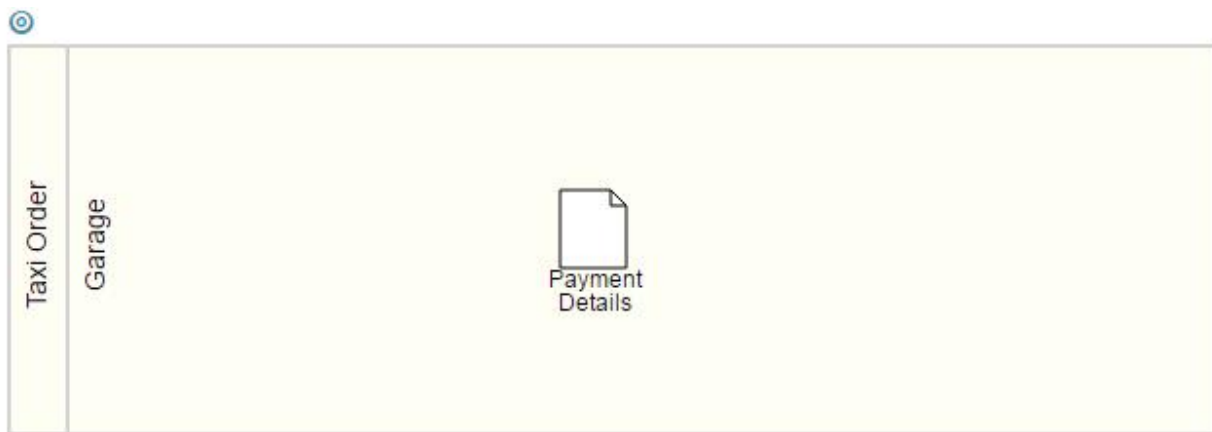
The data object is created and added to the list.



Add a Data Object into the diagram

Select a data object from the list.

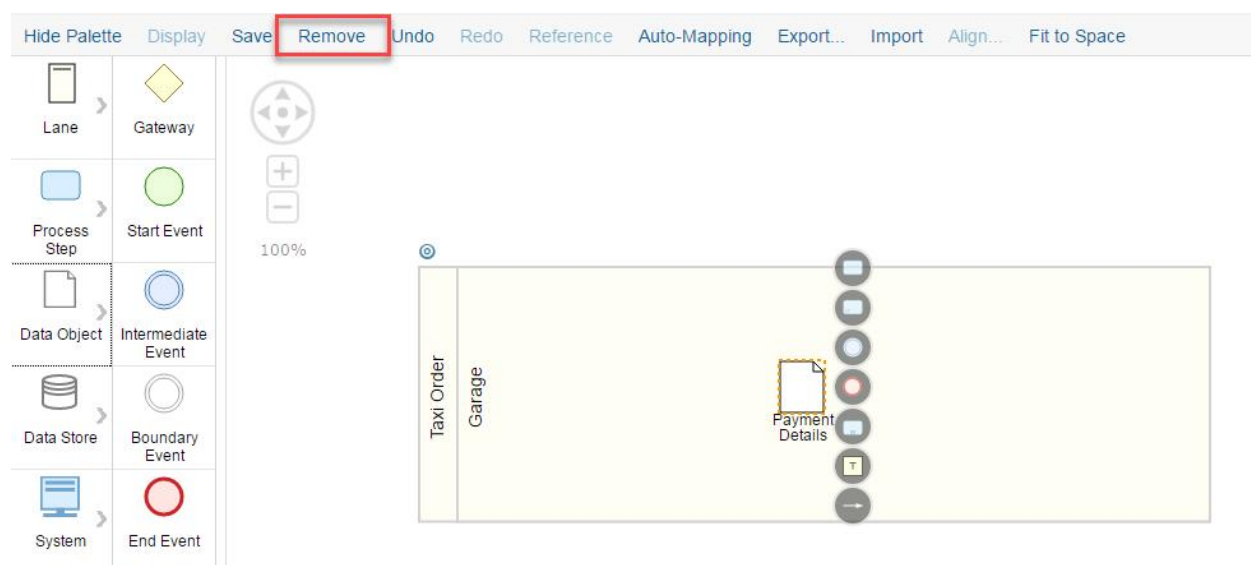
Click on the diagram to insert the data object.



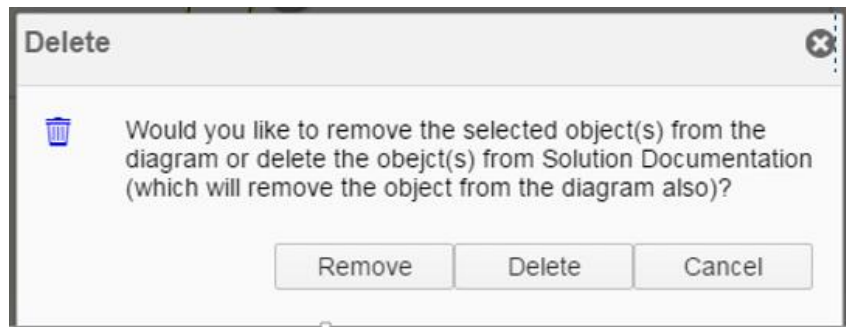
Remove a Data Object from the diagram

Select a data object in the diagram.

Click on the button Remove.



If the data object is not used in another diagram the following popup appears.



Click on Remove.

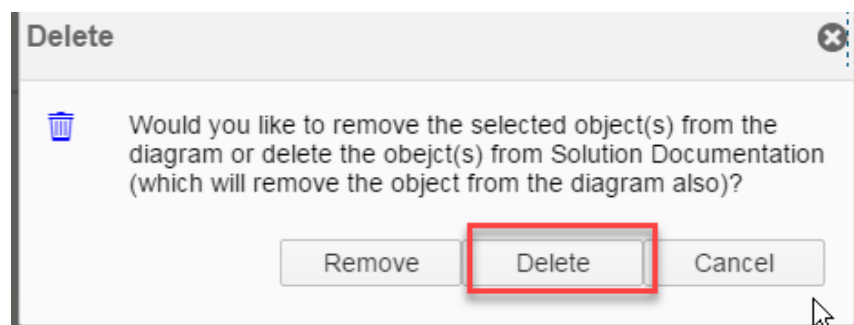
The data object is removed from the diagram but remains available in the data object list

Delete a Data Object

Select a data object in the diagram.

Click on the button Remove.

If the data object is not used in another diagram the following popup appears.



Click on Delete.

The data object is deleted from the diagram (the data object is removed from the diagram and from the data objects list).

If the data object is used in another diagram, it cannot be deleted, it will only be removed from the diagram.

Data Store

Create a Data Store

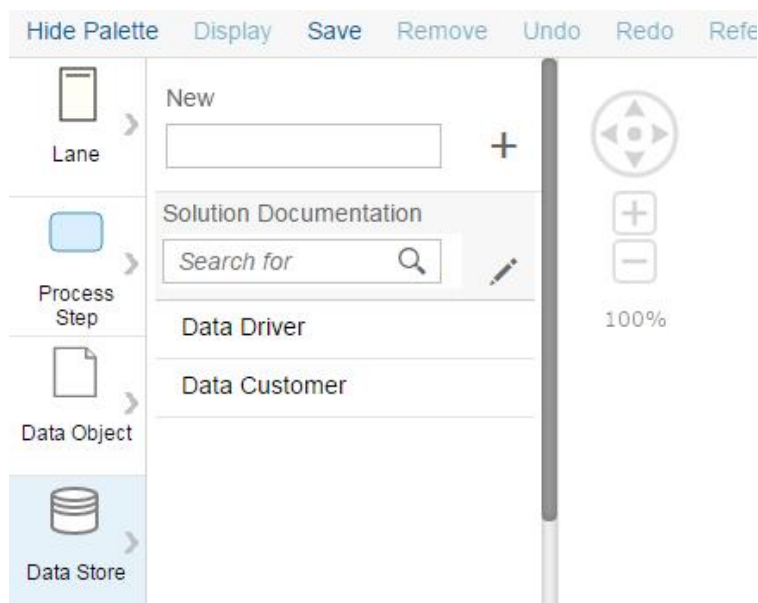
Click on the Data Store icon.

A list of available data stores will appear.

Enter a data store name (example "Data Driver") and Click on



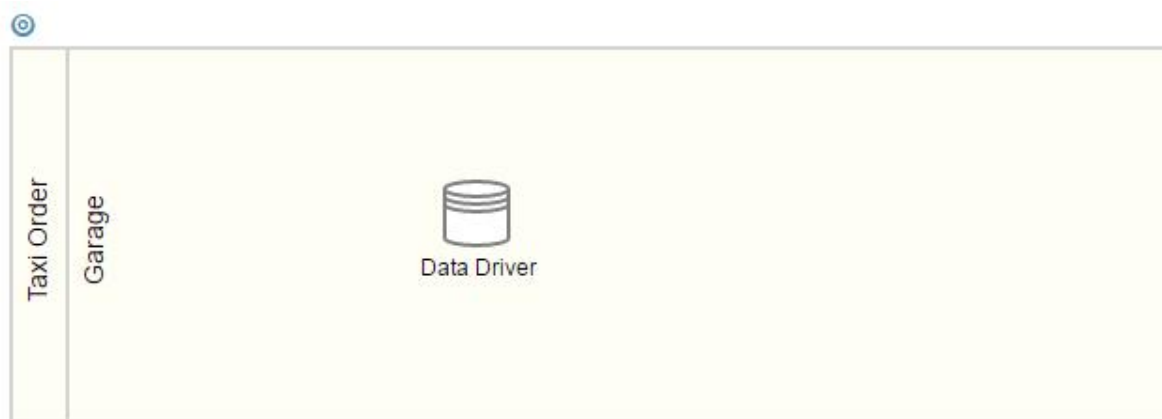
The data store is created and added to the list.



Add a Data Store into the diagram

Select a data store from the list.

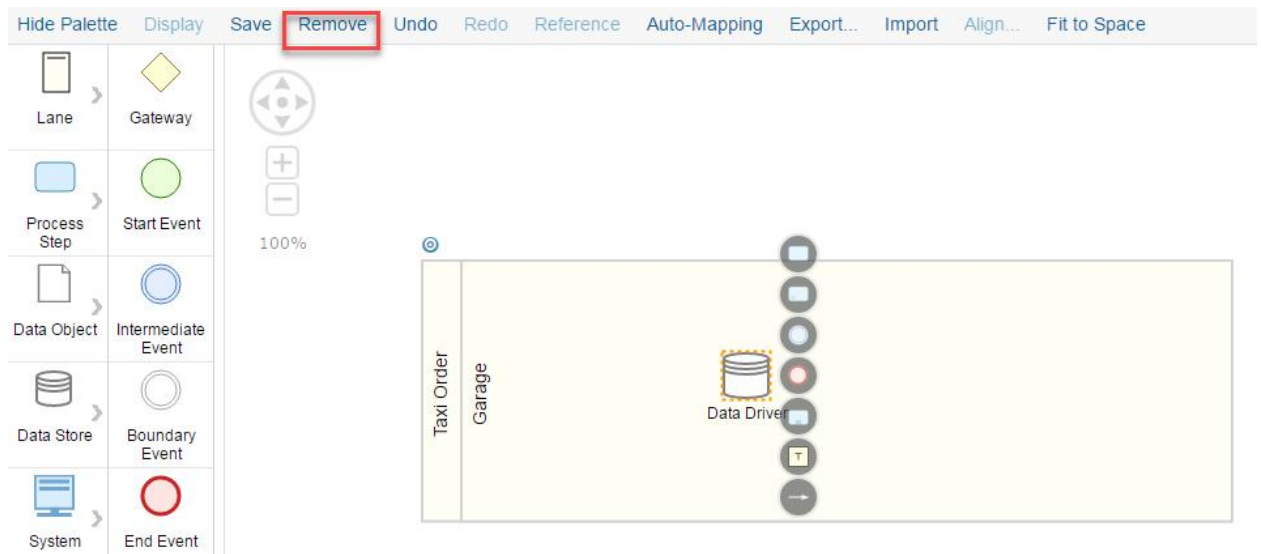
Click on the diagram to insert the data store.



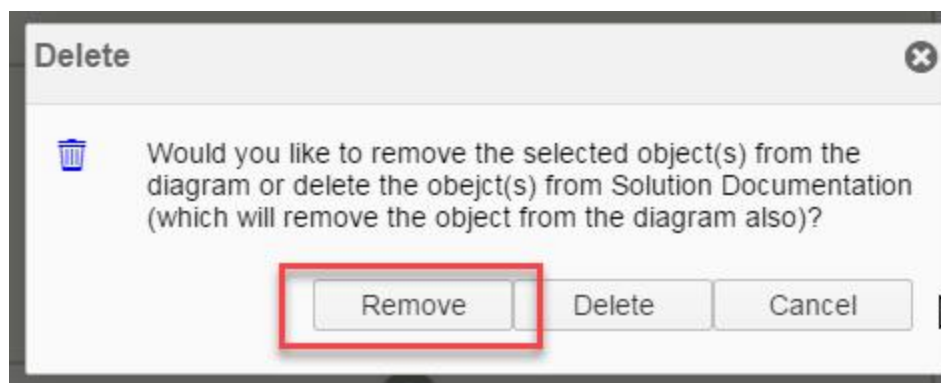
Remove a Data Store from the diagram

Select a data store in the diagram.

Click on the button Remove.



A popup appears.



Click on Remove.

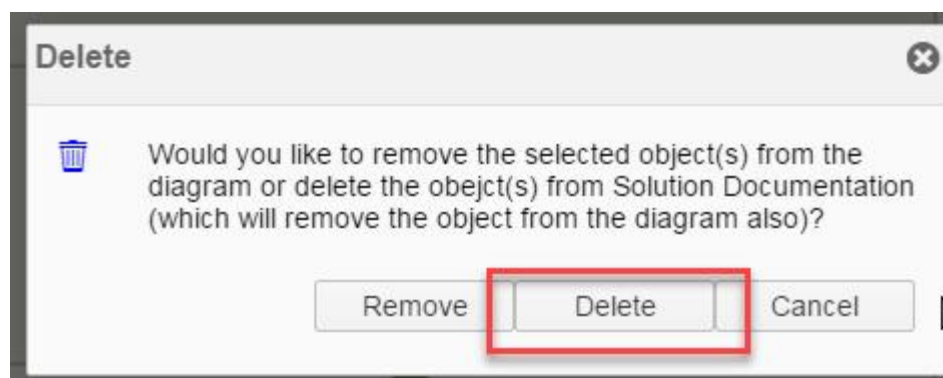
The data store is removed from the diagram but remains available in the data stores list.

Delete a Data Store

Select a data store in the diagram.

Click on the button Remove.

A popup appears.



Click on Delete.

The data store is deleted from the system (the data store is removed from the diagram and from the data stores list).

If the data store is used in another diagram, it cannot be deleted, it will only be removed from the diagram.

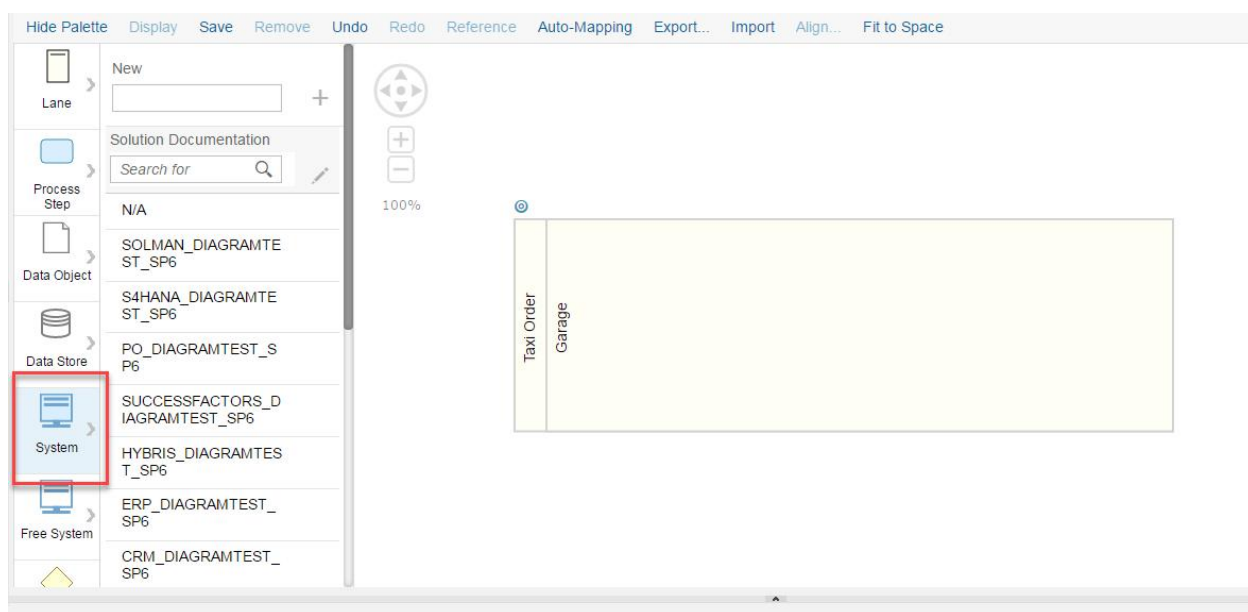
System

Applicable for: Business Process Diagram By Role.

Create a new System

Click on the System icon.

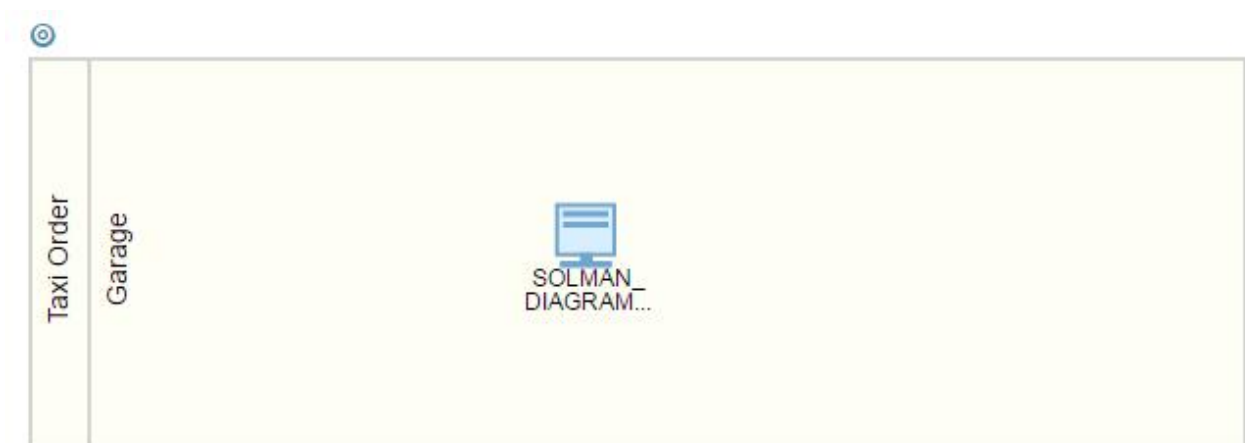
A list of available systems will appear.



Add a system to the diagram

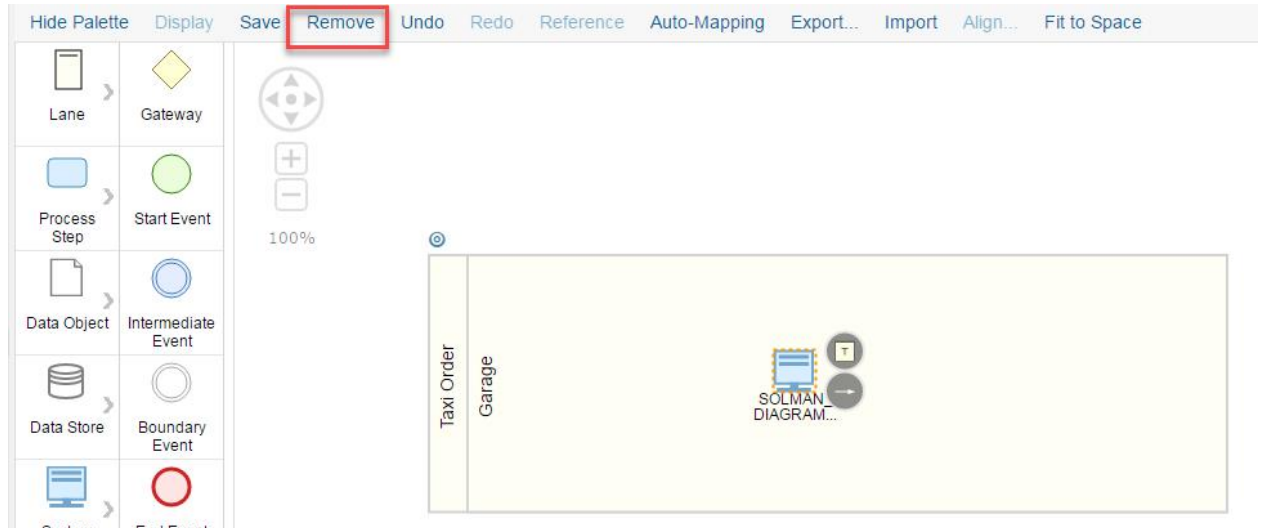
Select a system from the list.

Click on the diagram to insert the system.



Remove a system from the diagram

Select a system in the diagram.



Click on the button Remove.

The system is removed from the diagram but remains available in the system list.

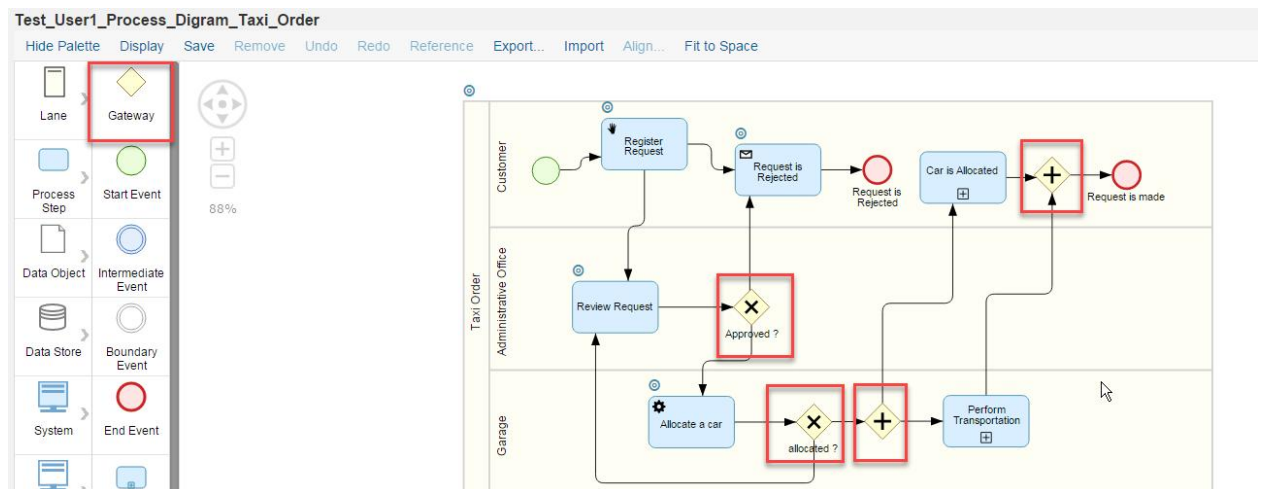
6.2.2 Part II

Gateway

Add a gateway to the diagram

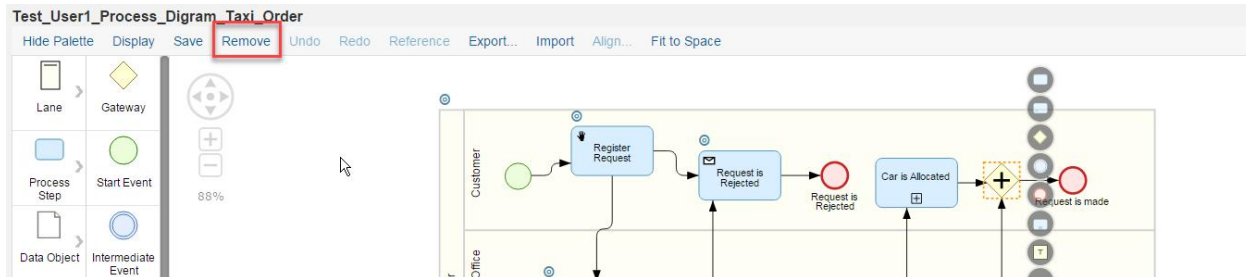
Click on the Gateway icon.

Click on the diagram to insert the gateway.



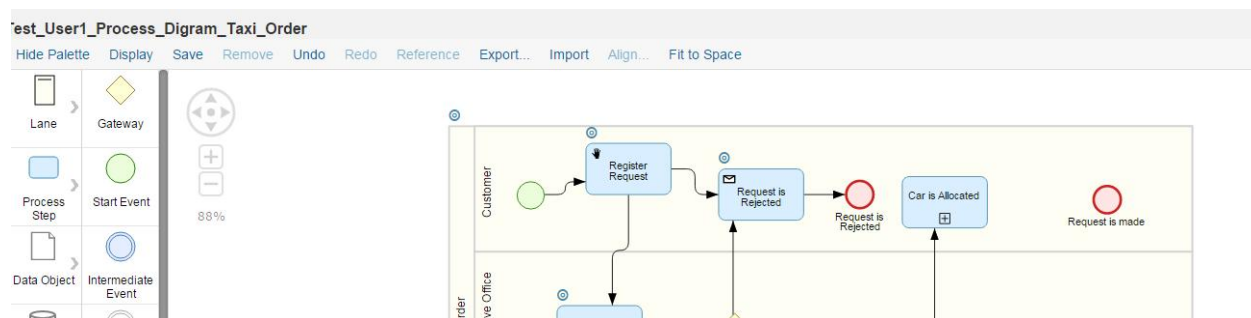
Remove a Gateway from the diagram

Select a Gateway in the diagram.



Click on the button Remove.

The gateway is removed from the diagram.

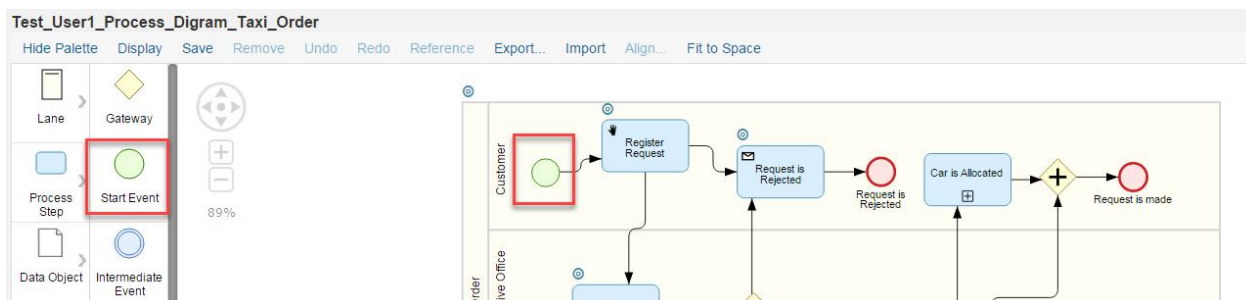


Start Event

Add a Start Event to the diagram

Click on the Start Event icon.

Click on the diagram to insert the start event.



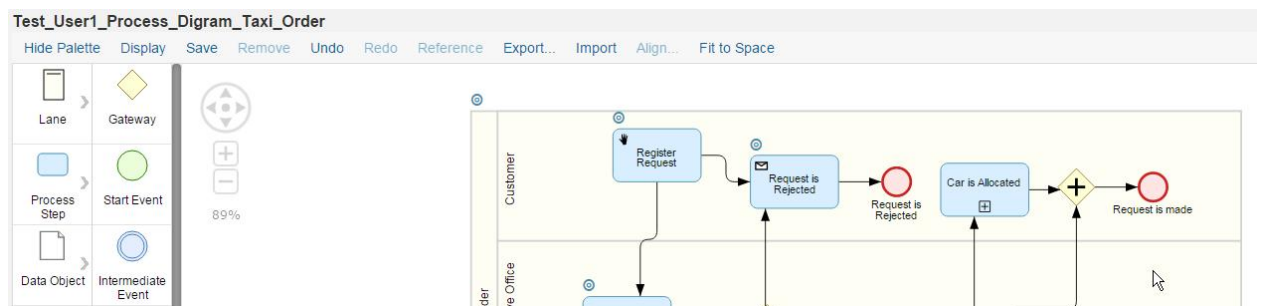
Remove a Start Event from the diagram

Select a start event in the diagram.

Click on the button Remove.



The Start Event is removed from the diagram

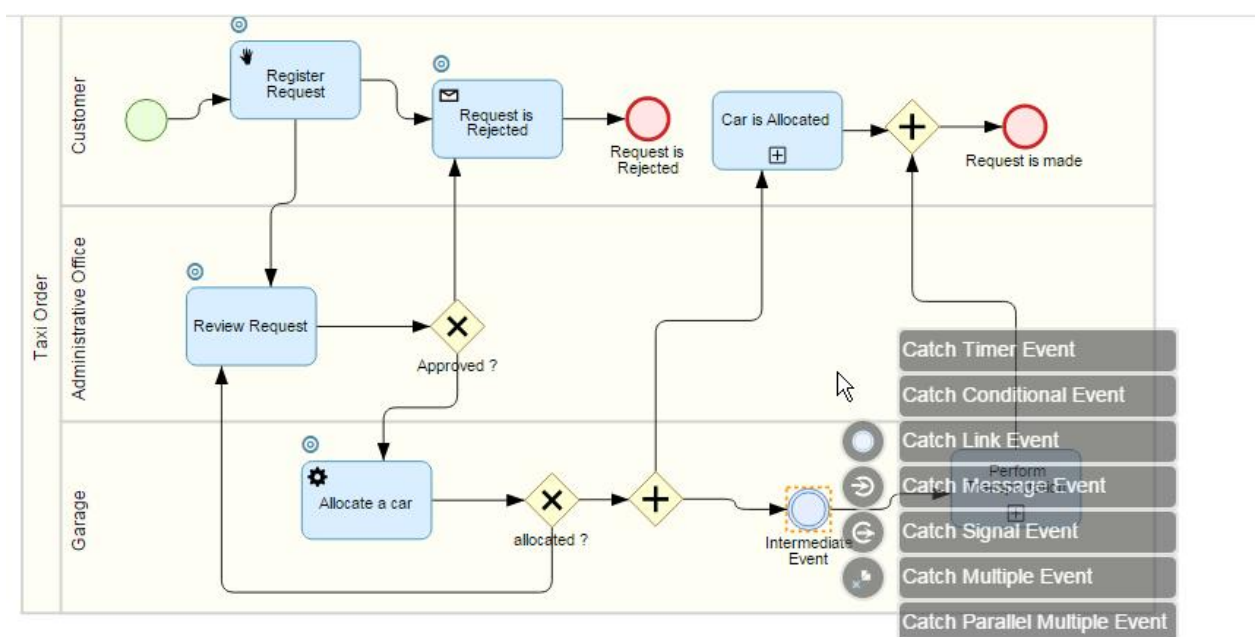


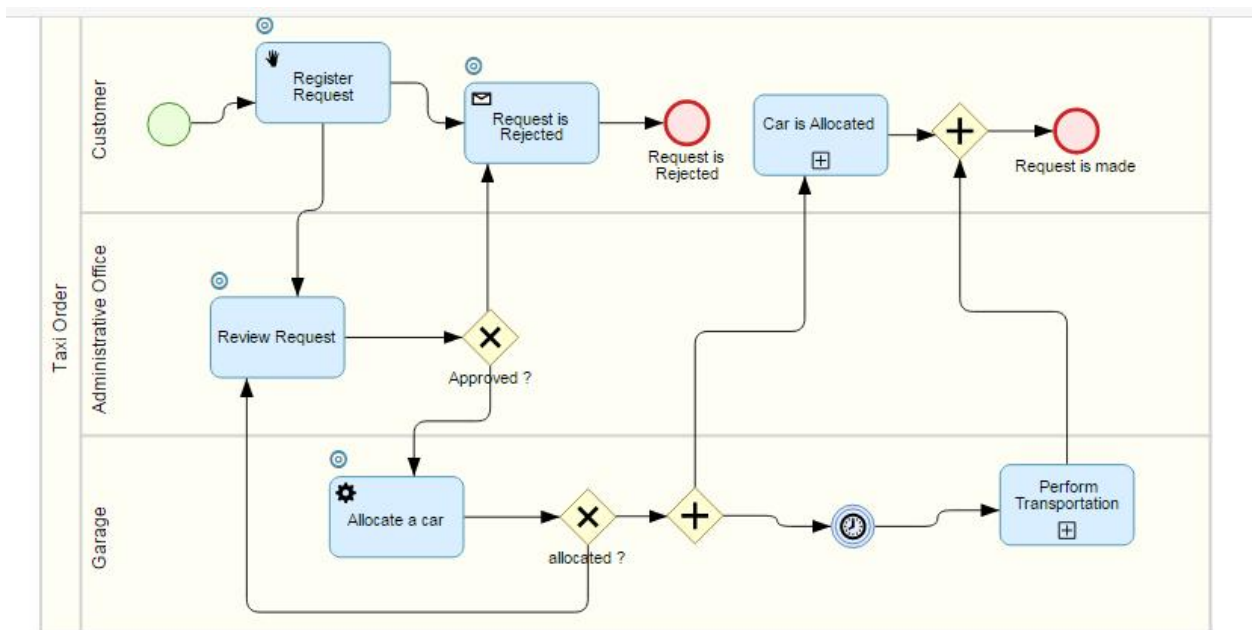
Intermediate Event

Add an Intermediate Event to the diagram

Click on the Intermediate Event icon.

Click on the diagram to insert the intermediate event.





Remove an Intermediate Event from the diagram

Select an intermediate event in the diagram.

Click on the button Remove.

The intermediate event is removed from the diagram.

Boundary Event

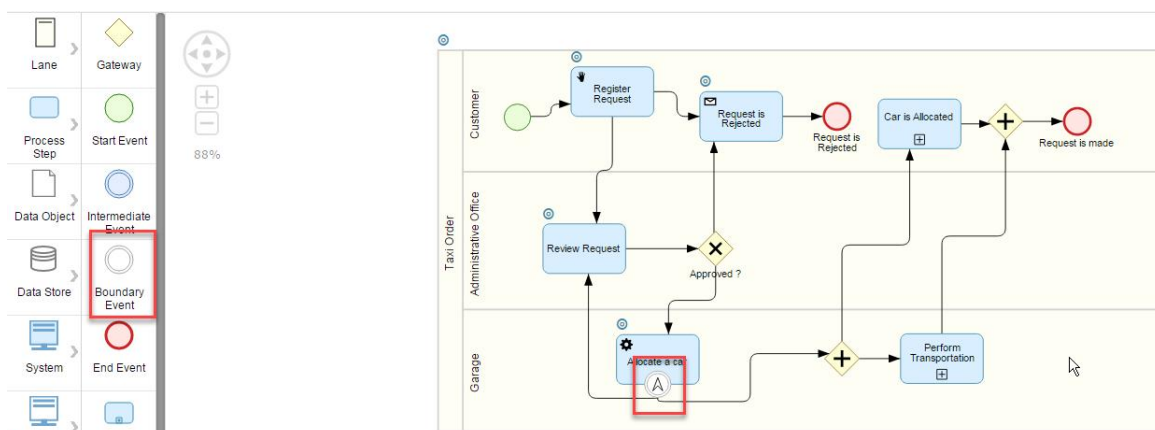
Add a Boundary Event to the diagram

Boundary events are inserted inside process steps.

Add a process step to the diagram.

Click on the Boundary Event icon.

Click inside the process step to insert the Boundary event.



Remove A Boundary Event from the diagram

Select a boundary event in the diagram.

Click on the button Remove.

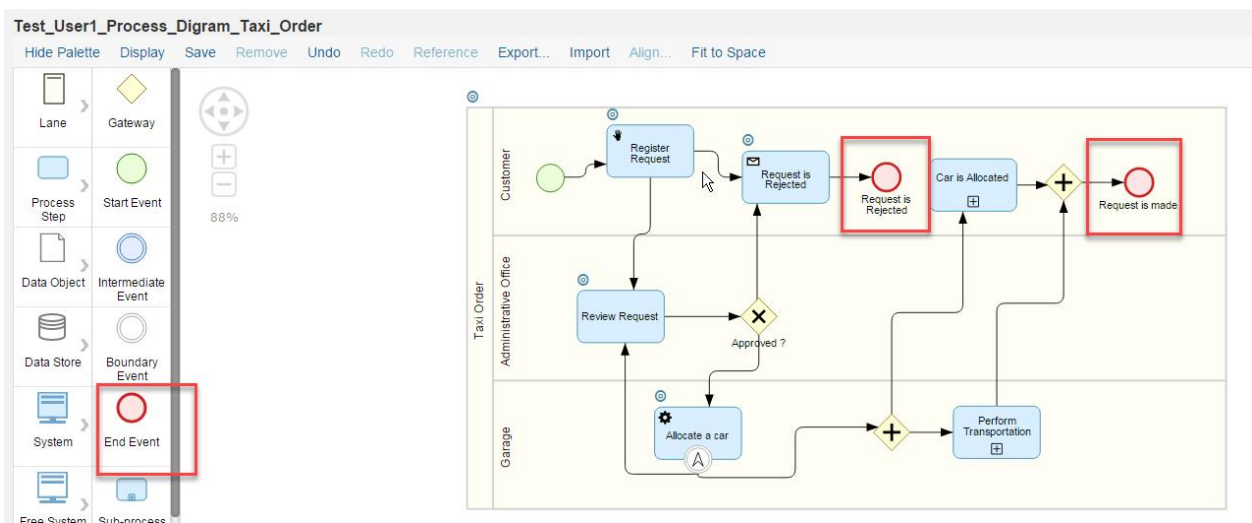
The boundary event is removed from the diagram.

End Event

Add an End Event to the diagram

Click on the End Event icon.

Click on the diagram to insert the end event.



Remove an End Event from the diagram

Select an end event in the diagram.

Click on the button Remove.

The end event is removed from the diagram.

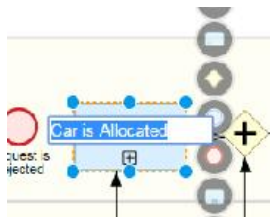
Sub-Process

Add a Sub-Process to the diagram

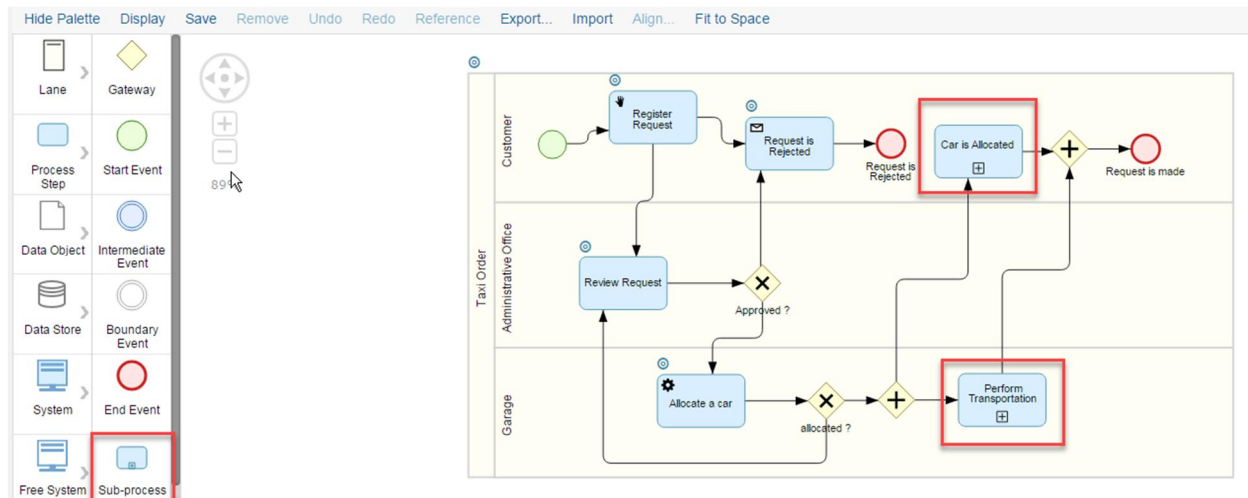
Click on the Sub-Process icon.

Click on the diagram to add a new Sub-Process.

Double-Click the sub-process to rename it.



Enter a new name for the sub-process.



Remove a Sub-Process from the diagram

Select the Sub-Process in the diagram.

Click on the button Remove.

The process-step is removed from the diagram.

7 Global Functionalities

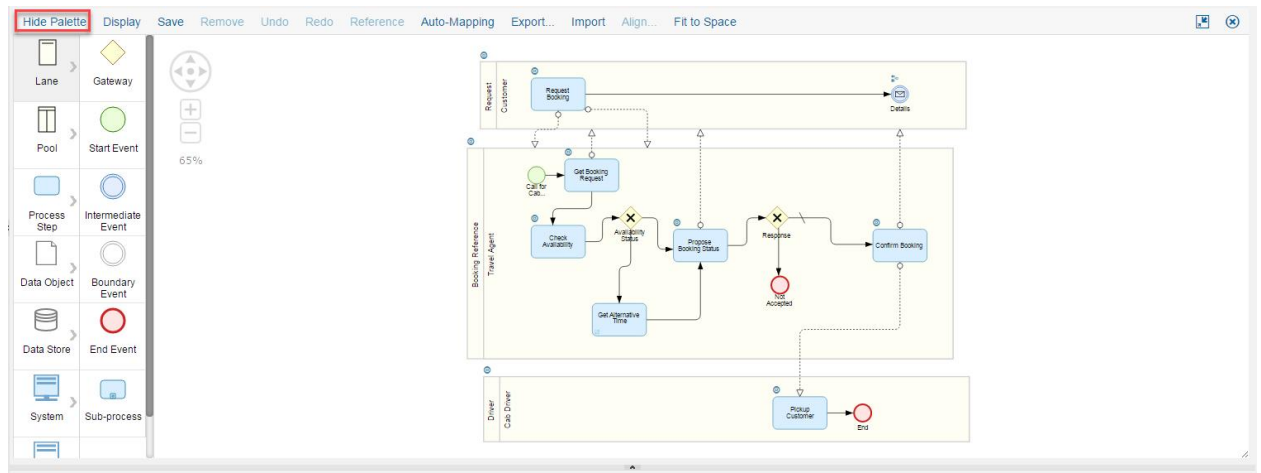
7.1 Application Toolbar

In this section, you learn more about the application toolbar.

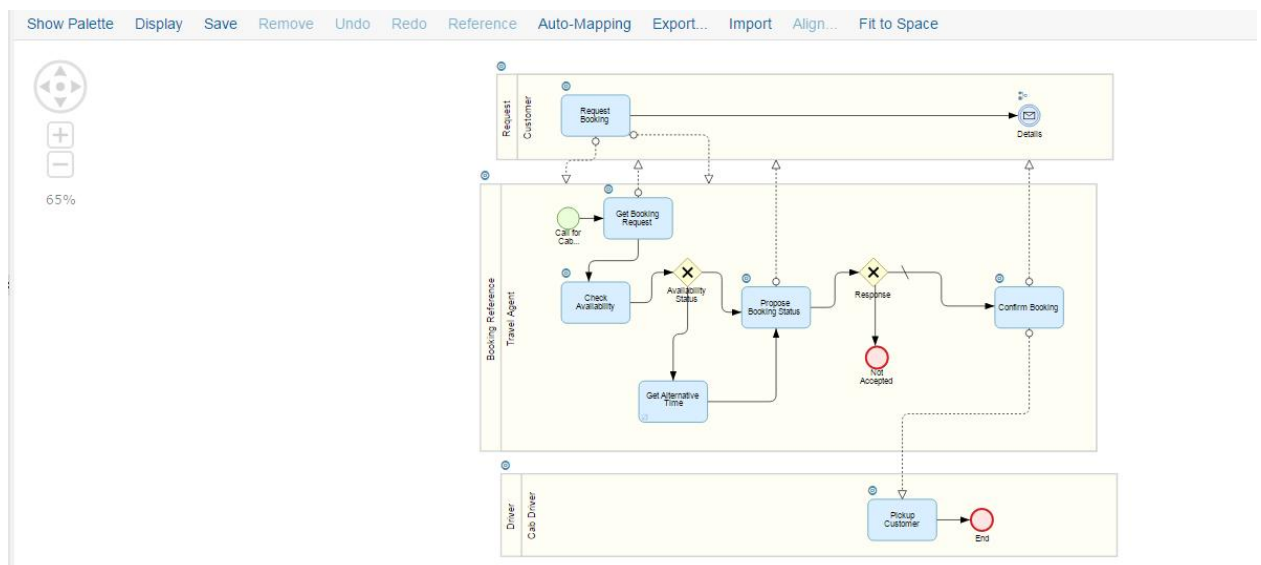
The application toolbar has some functions which can be performed on the whole diagram (like [Edit/Display](#), [Save](#)) and some functions which can be performed on a selected object, like [References](#) or [Remove](#), and two buttons on the right side which allow to maximize/minimize or close the diagram.

Hide Palette

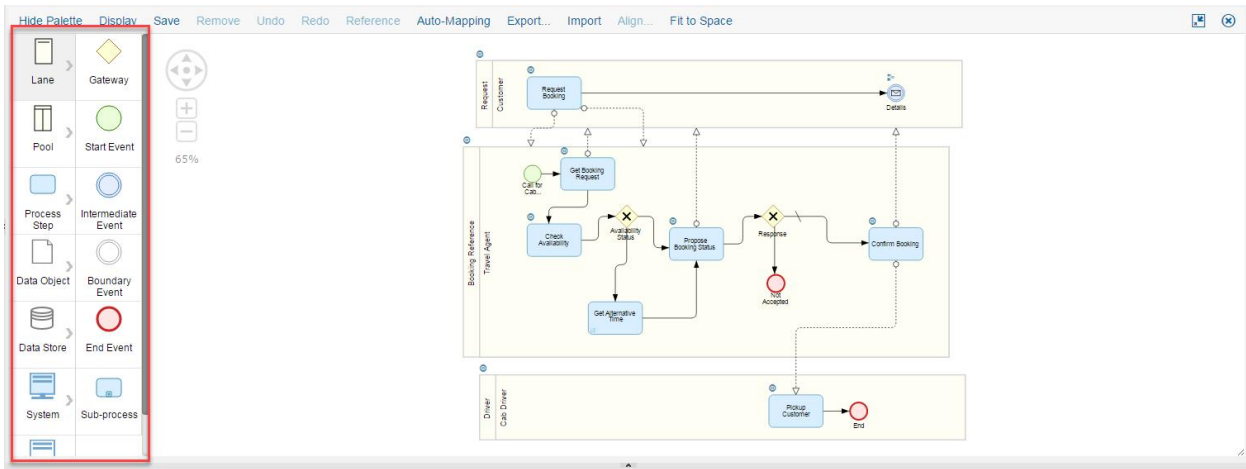
Click the Hide Palette button.



The palette disappears



Click the Show Palette button. The palette is displayed again.



Display/Edit

By default, if the diagram is not locked by another user, it opens in edit mode.

The Display button is enabled.

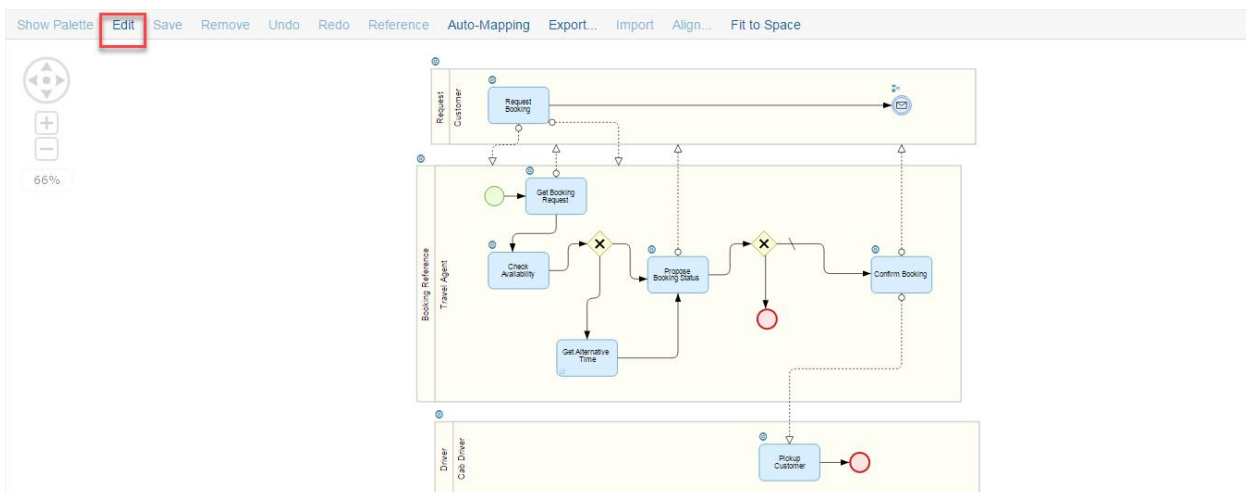


Click the Display button.

The Display button switches to Edit.

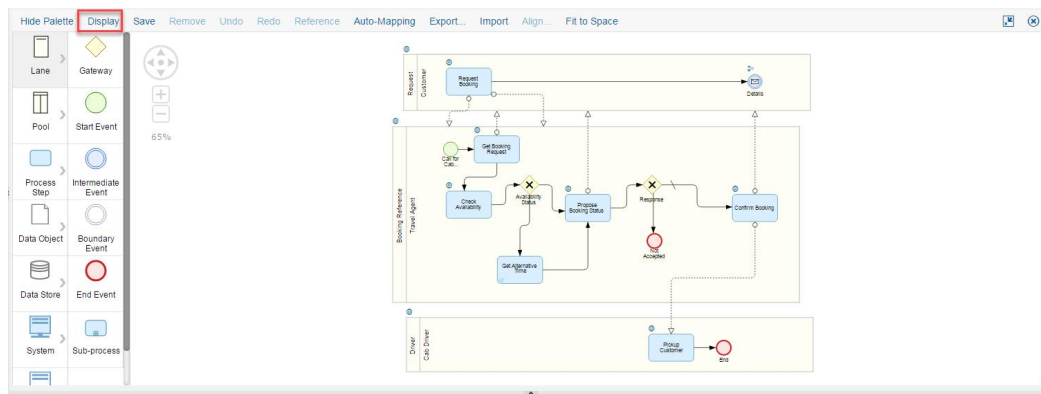


The palette disappears and the diagram cannot be modified.



Click the button Edit. The Edit button switches to Display.

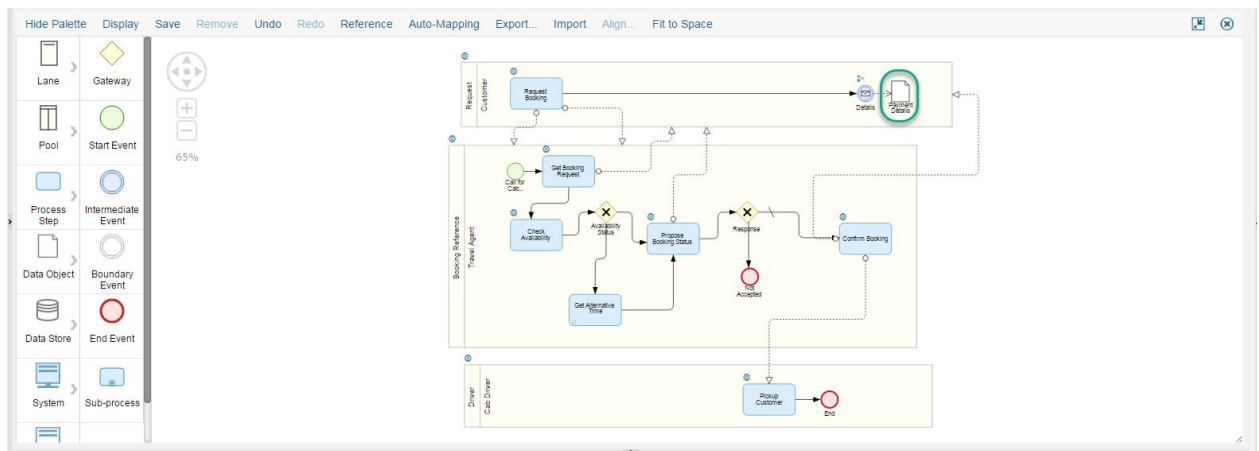
The diagram is editable and the palette is displayed.



If a diagram is edited by someone else, then you cannot change it to edit mode. Depending on the user authorizations and in which mode the diagram is opened, the tool bar is adjusted to perform only possible actions.

Save

Add an object to the diagram. Example Data Object “Booking Details”



Click on Save to save the diagram.

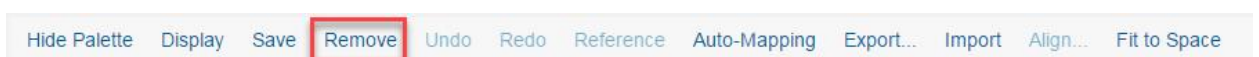


The system displays the message that the diagram has been saved successfully.

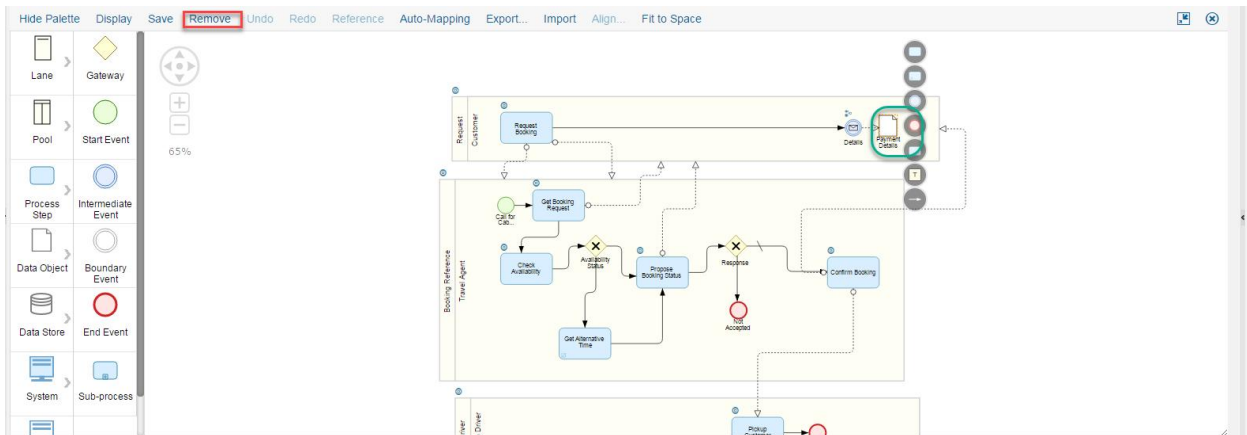
Close the diagram and open it again. The diagram displays all saved objects.

Remove

If no object is selected in the diagram the button Remove is disabled.

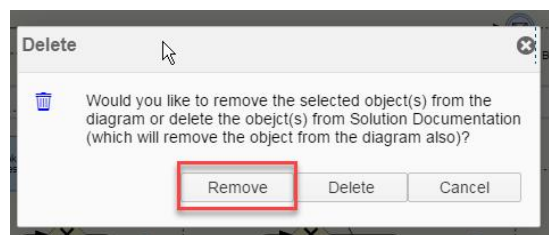


Select an object in the diagram. Example the data object "Booking Details". The button Remove is enabled.



Click on the button Remove.

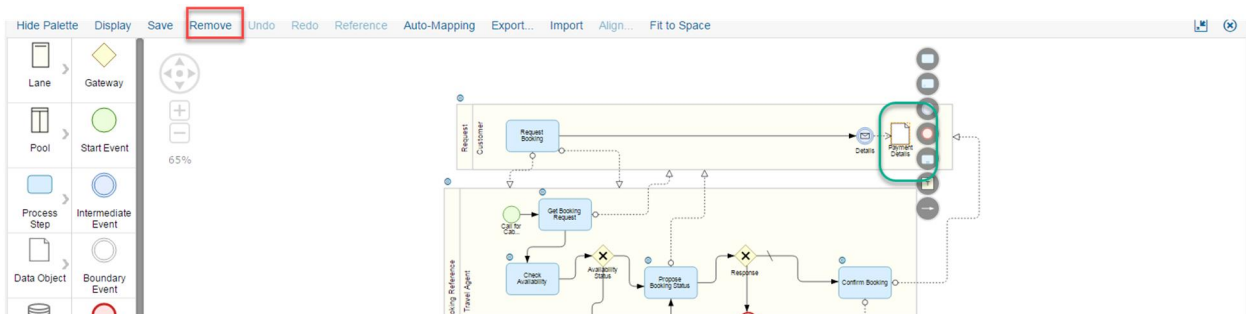
The following popup appears. Click Remove.



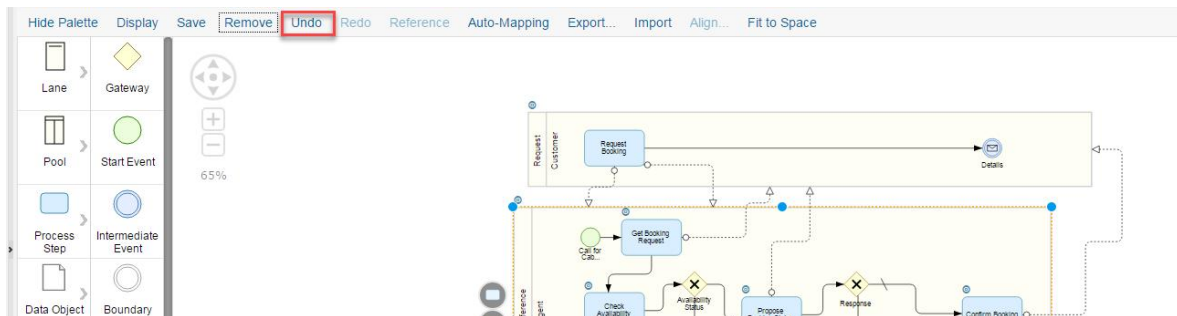
The object is removed from the diagram.

Undo

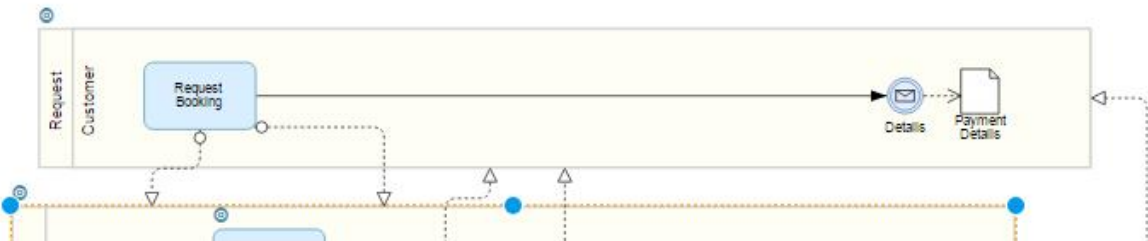
Select an object in the diagram. Example the data object



Move or Remove the object in the diagram. (Example: Remove the data object)



Click on the button Undo. The object will go back to its initial location.



Redo

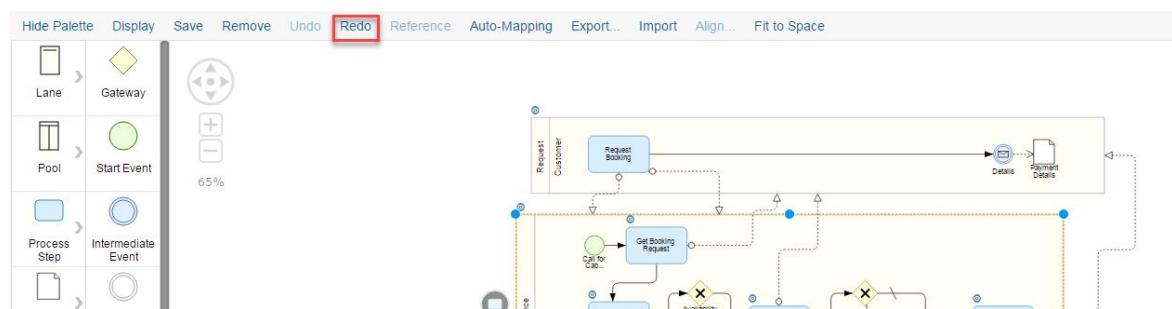
Select an object in the diagram.

Move or remove the object in the diagram.

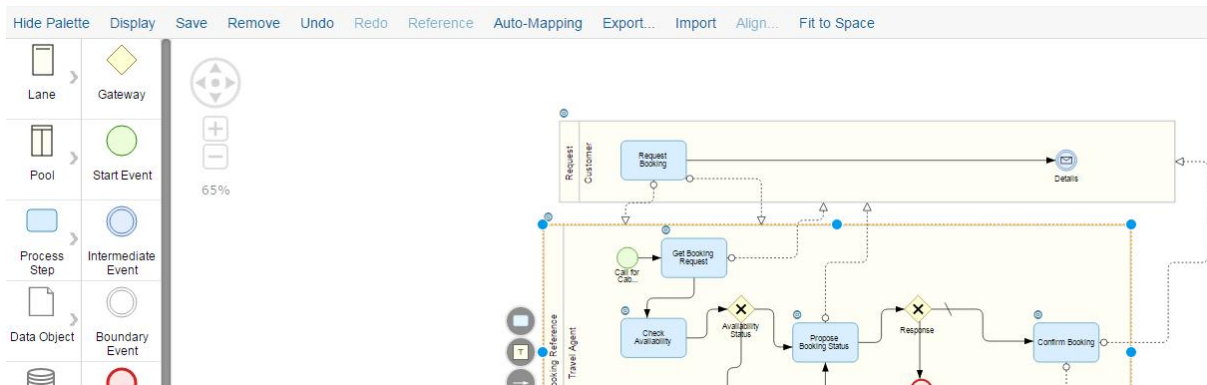
Click on the button Undo.

The object will go back to its initial location.

Click the button Redo.

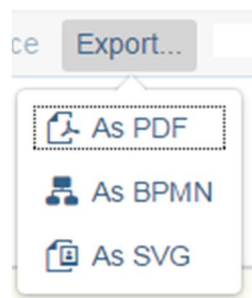


The object will go back to the previous second location.



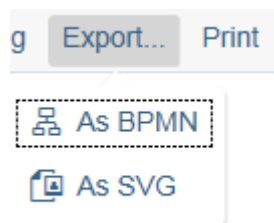
Export

Use the Export as button to export a diagram to PDF, BPMN or SVG.



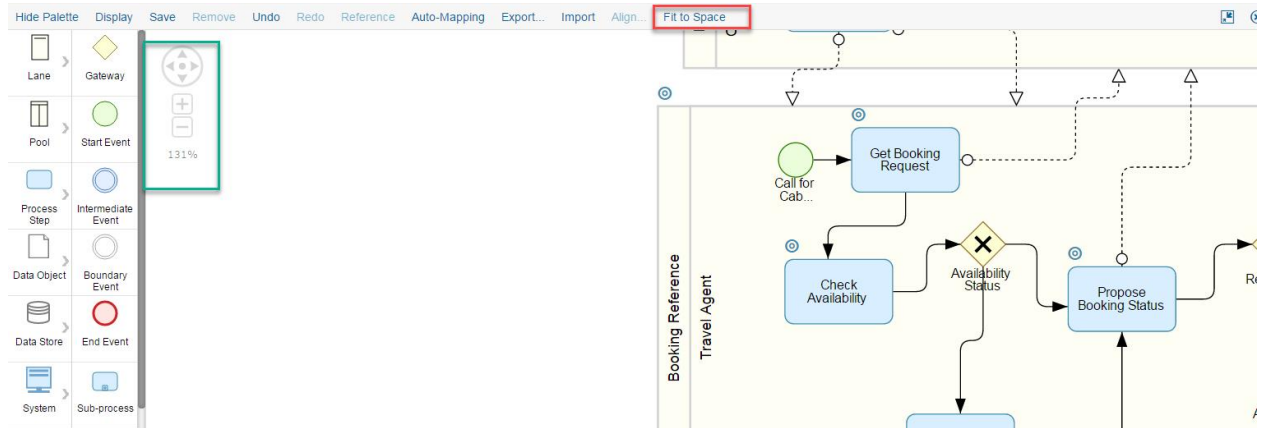
The Diagram will be exported to PDF, BPMN or SVG.

Note that "Save as PDF" works differently on Internet Explorer compared to other browsers. In Internet Explorer, we name it "Print", as we use the print functionality of the browser to be able to save as PDF. In other browsers, you can save as pdf directly.



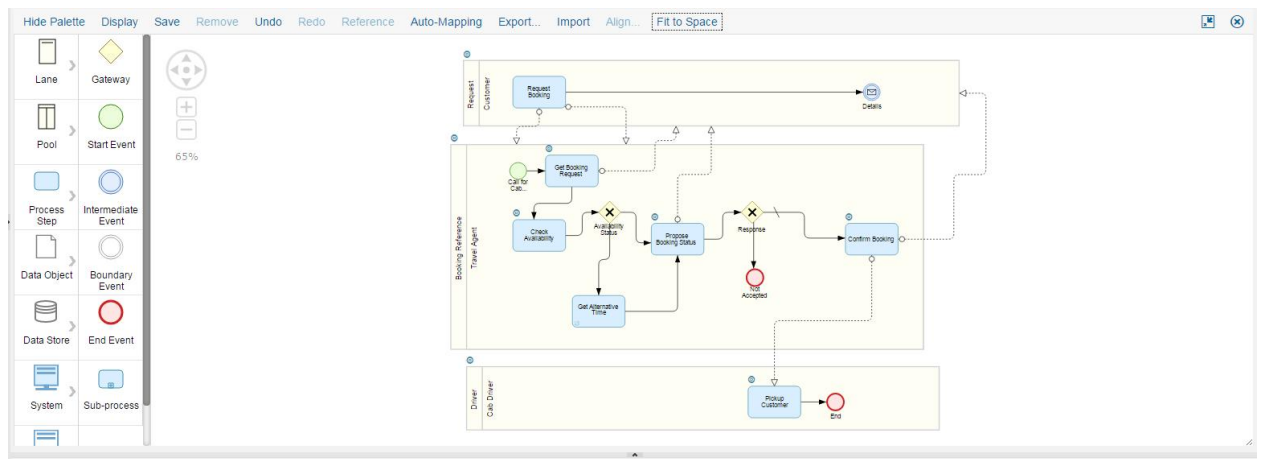
Fit to Space

Zoom the diagram with the mouse scroll wheel.



Click on the button Fit to Space.

The diagram is displayed entirely.



Maximize / Minimize

The solution documentation panels are displayed.

The screenshot shows the same BPMN diagram "Booking Reference" in the "Travel Agent" pool. The "Fit to Space" button is now disabled. The zoom level is 65%. The right sidebar shows the "Booking Reference" documentation panel with details like Name, Description, Type, Classifications, History, Responsibilities, and Related Documents. The bottom left shows a table of elements.

Name	Type	Group	Path
COLL_Diagram_Cab_Booking	Collaboration Diagram	Diagrams	/Solution/Business Processes/Test phase/Cab booking (B...
Test_User1_COLL_Diagram_Cab_Booking	Collaboration Diagram	Diagrams	/Solution/Business Processes/Test phase/Cab booking (B...
Test_User2_COLL_Diagram_Cab_Booking	Collaboration Diagram	Diagrams	/Solution/Business Processes/Test phase/Cab booking (B...

Booking Reference

Name: Booking Reference
Description:
Type: Process

Classifications

History

Changed by: Faten Karoui (C5254019)
Changed at: 04.05.2017 12:49:05

Responsibilities

Responsible:

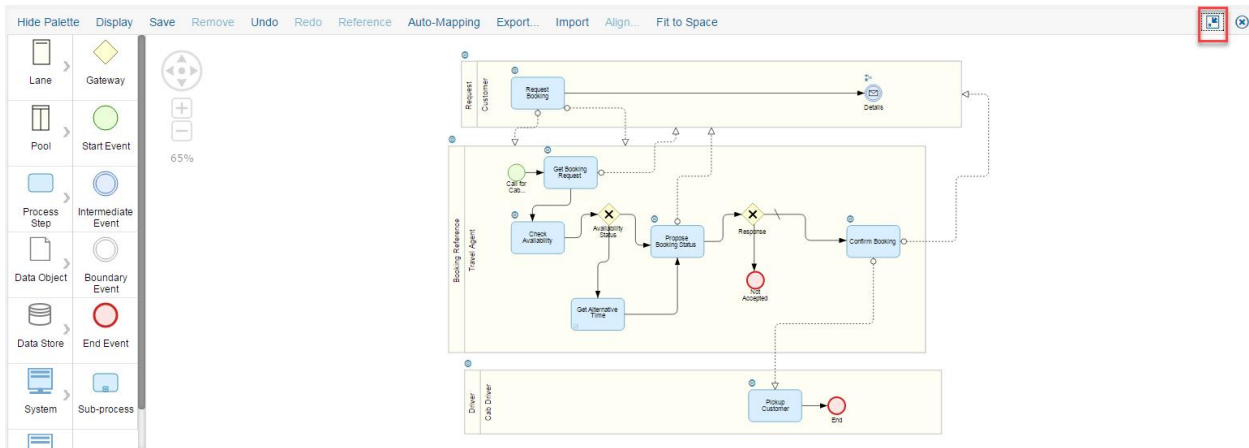
Related Documents

Incidents: 0 assigned
Business Requirements: 0 assigned
Requests for Change: 0 assigned

Click:



The panels are hidden.



The button



turns to



Click



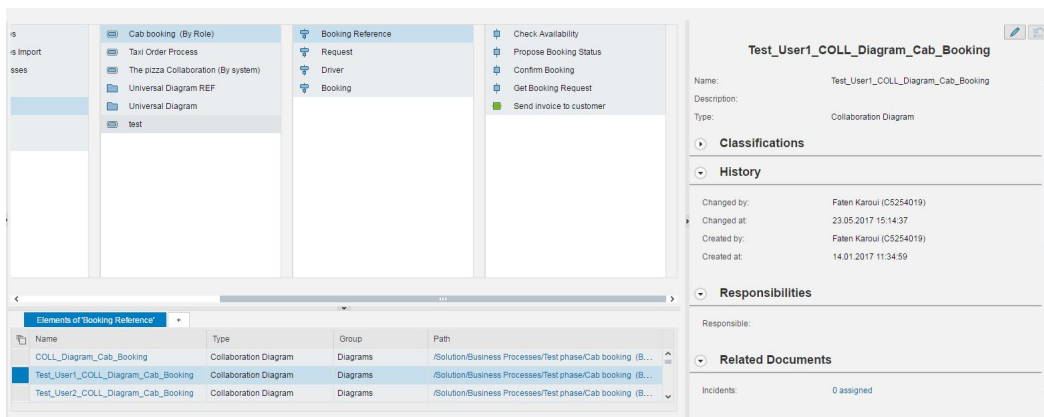
to display the panels back.

Close

While a diagram is open, click on the button close:



The diagram is closed and the Solution Documentation UI is displayed.



Auto-Mapping

You can use the auto-Mapping to map different objects to be created inside the diagram.

Click on the Auto-Mapping button from the application toolbar.

The Auto-Mapping Pop-up is open.

Element	Element Type	Map To	New Element Name
Booking	Business Process Business Object	Existing Busin... ▼	Booking ▼
Driver	Business Process Business Object	Existing Busin... ▼	Driver ▼
Pool	Draft Pool Graphical Object	Graphical Ele... ▼	Pool
Task	Process Step Graphical Object	Graphical Ele... ▼	Task

Reset View Proposals Apply Cancel

The table contains 4 columns:

- Element: The elements existing in process
- Element Type: the type of the elements existing in process
- Map To: the available mapping options depending on the element type to be mapped.
- New Element Name: the element will be created by that name.

The filter allows the user to narrow the auto mapped elements list to a particular type.

Auto Mapped Elements (4) ▼

- All Objects
- Business Process
- Draft Pool
- Process Step

If you change the filter to a specific auto mapped elements type, the content of the table will change according to the displayed items.

Auto-Mapping

Auto Mapped Elements (4) Draft Pool ▾

Element	Element Type	Map To	New Element Name
Pool	Draft Pool Graphical Object	Graphical Ele... ▾	<input style="width: 100%;" type="text" value="Pool"/>

Reset View Proposals Apply Cancel

The button Reset will reset any changes to the initial status.

The button Cancel will cancel close the pop-up.











The button Apply, will create a diagram based on the mapping options from the table.

Instead of mapping the elements manually (Free Element), you can also click the button View Proposals. This button will try to propose the best element-mapping option available depending on the objects existing inside the solution.

7.2 Boundary Event

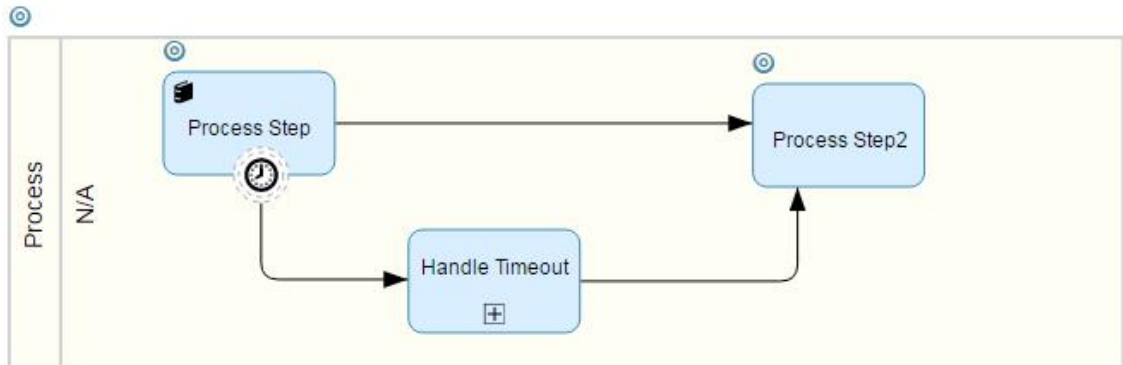
In this section, you learn more about boundary events in a diagram.

We use the following symbols:

	Message
	Timer
	Escalation
	Error
	Cancel
	Conditional
	Multiple
	Multiple Parallel
	Compensation
	Signal

The difference between an interrupting event and non-interrupting event in BPMN (Boundary Event):

A boundary event is an event shown on an activity boundary that can be triggered or thrown at any time while the associated task or activity is being performed. Some boundary events are time based while others are based on a condition which must resolve to 'True' in order for the branch of the flow to proceed.



When an activity is being performed and a boundary event is triggered or thrown, a token is sent along the path defined by the boundary event. However, the question remains as to what should happen with the existing activity that was being performed.

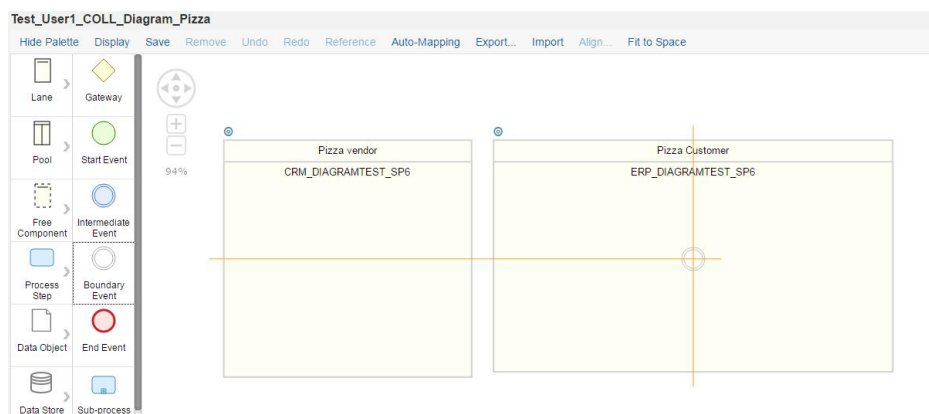
In the case of an Interrupting Event, the activity which was being performed will immediately be canceled.

In the case of a Non-Interrupting Event, the activity which was being performed will continue in parallel along with the new flow that was initiated by the boundary event.



Boundary event in diagram

In an empty diagram, try to insert a boundary event directly inside the diagram:



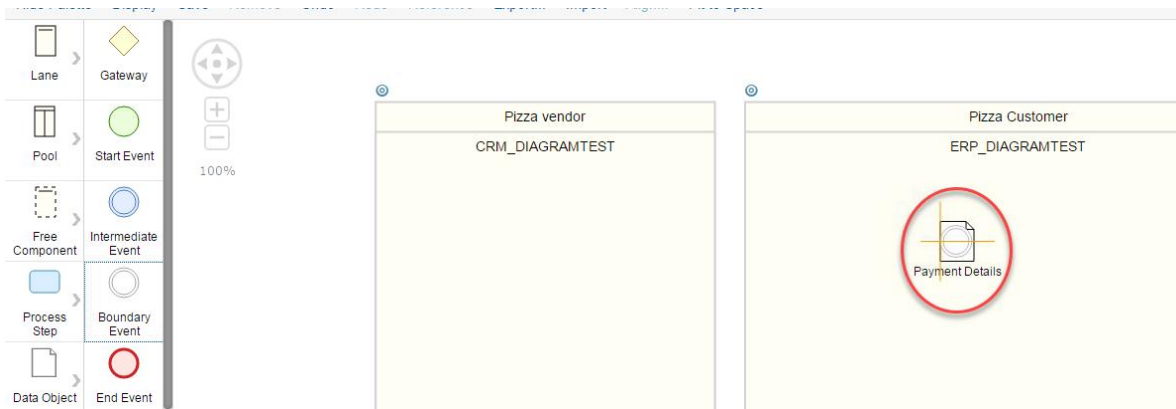
The boundary event will not be inserted into the diagram.

Boundary event are only applicable for Process Steps or Sub Processes.

In the diagram, insert an object which is not a Process Step or a Sub-Process. Example: use a Data Object.

Try to associate the data object with a boundary event.

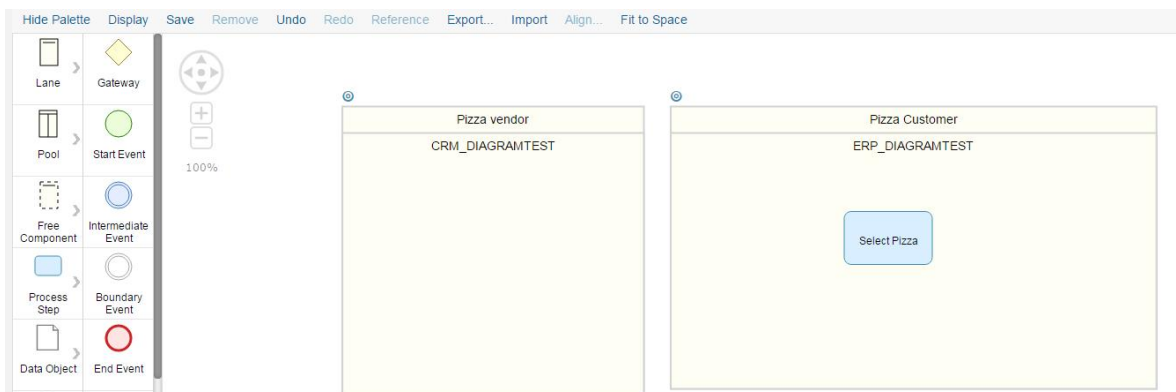
The boundary event will not be inserted because Boundary Events are only applicable for Process Steps or Sub-Processes.



Process Step

Boundary events are applicable for process steps.

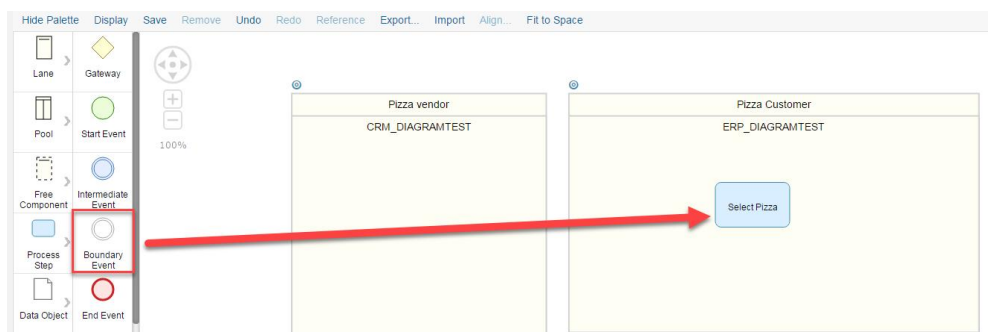
Insert a process step into the diagram:



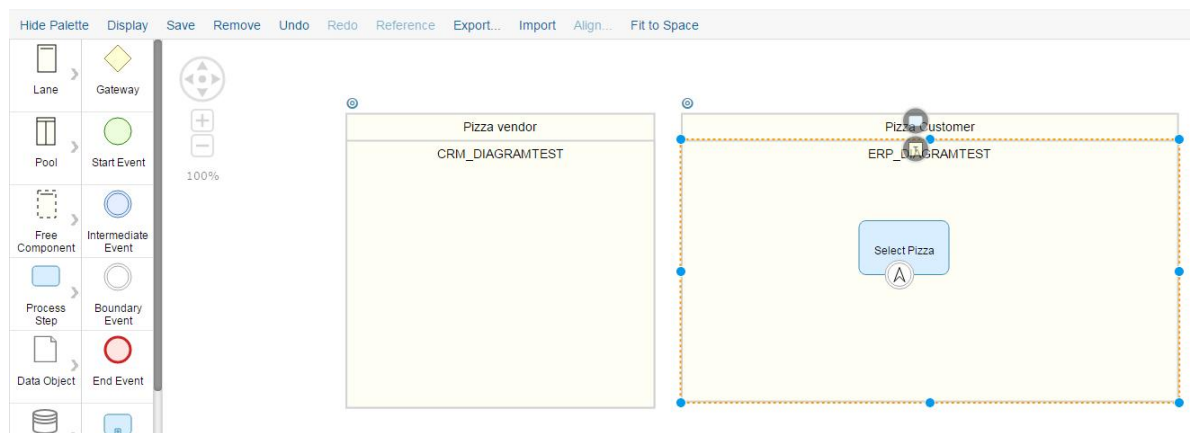
For a business process step, boundary events can be associated with two ways:

From the palette toolbar

Select the boundary event icon, click on the process step in the diagram:



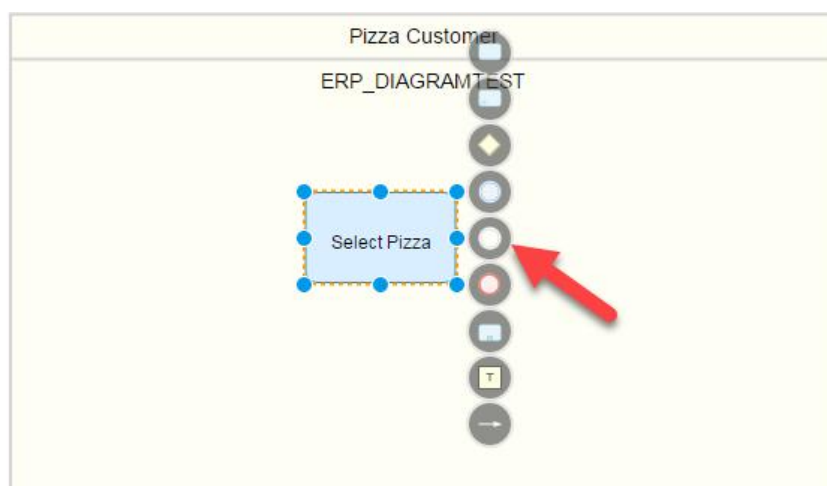
The boundary event is linked to the process step.



From the context menu

Click on the process step in the diagram → the context menu appears.

Click on the boundary event icon.



The boundary event is linked to the process step.



By the default the boundary event has a type: Interrupting Escalation



The boundary event type can be changed. Right click on the boundary event and choose a different type.



Sub-Process

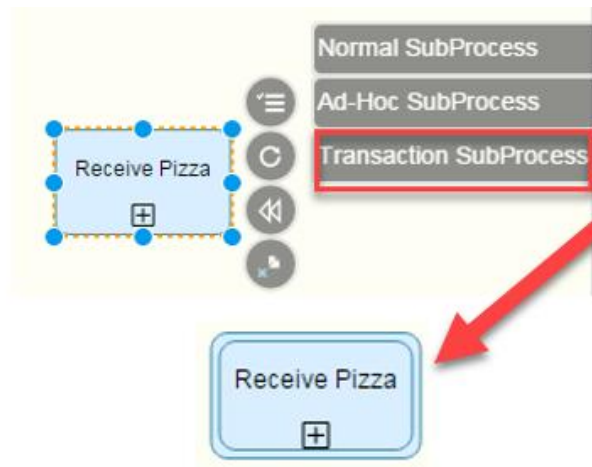
Boundary events are applicable for sub-process with type Transaction Sub Process.

Insert a sub-process into the diagram



Try to associate a boundary event for it → the boundary event won't be associated because it's not a Transaction Sub Process.

Right click on sub process and change its type to Transaction Sub Process.



For a sub process, boundary events can be associated with two ways:

- From the palette toolbar:
Select the boundary event icon and click on the sub-process in the diagram.
The boundary event is linked to the sub-process.
- From the context menu
Click on the sub-process in the diagram → the context menu appears.
Click on the boundary event icon.
The boundary event is linked to the business process step.

By default, the boundary event has a type: Cancel

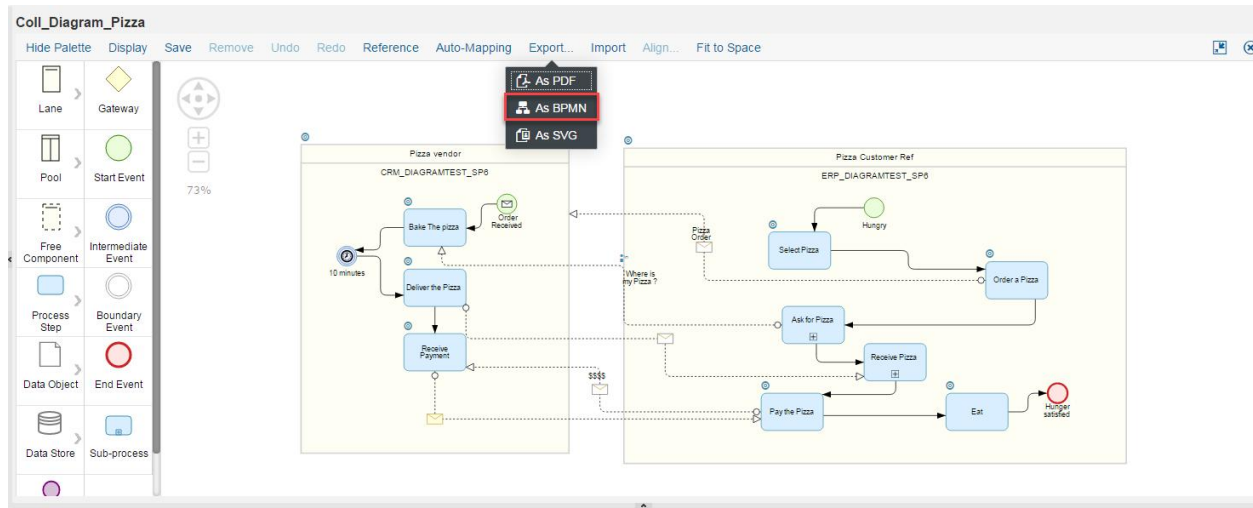


For sub process, the boundary event type cannot be changed. It is always Cancel.

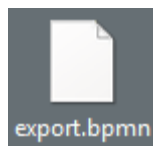
7.3 BPMN Import

In this section, you learn more about the diagram import.

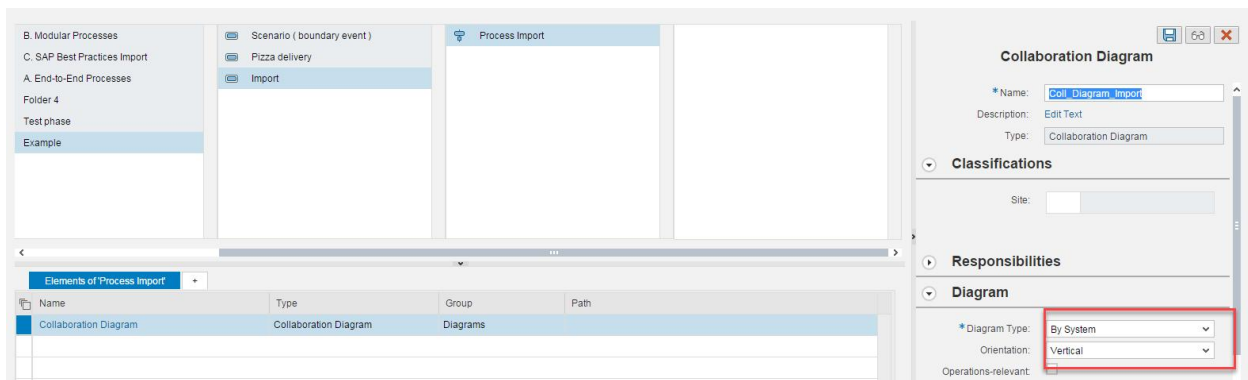
As an example, we import a vertical collaboration diagram by system.



Our diagram is exported as a BPMN file.

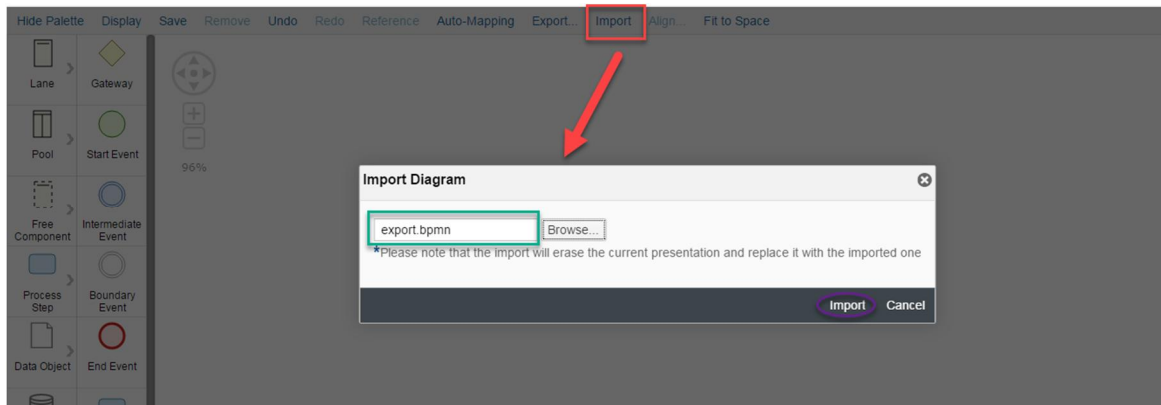


We create a diagram by system (same type as diagram exported) where we will import our BPMN file.

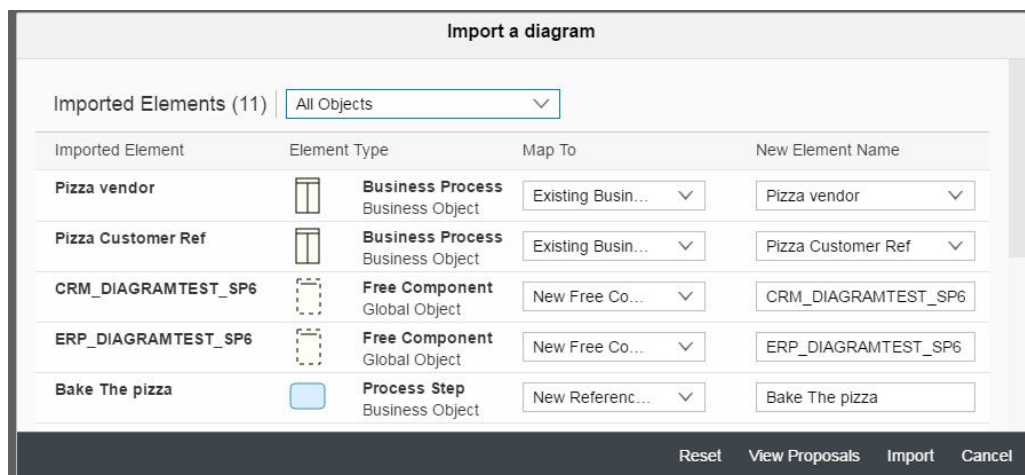


Open the created diagram.

Now click on the Import button from the application toolbar and select the BPMN file to be imported



The Import Mapping Pop-up is open.

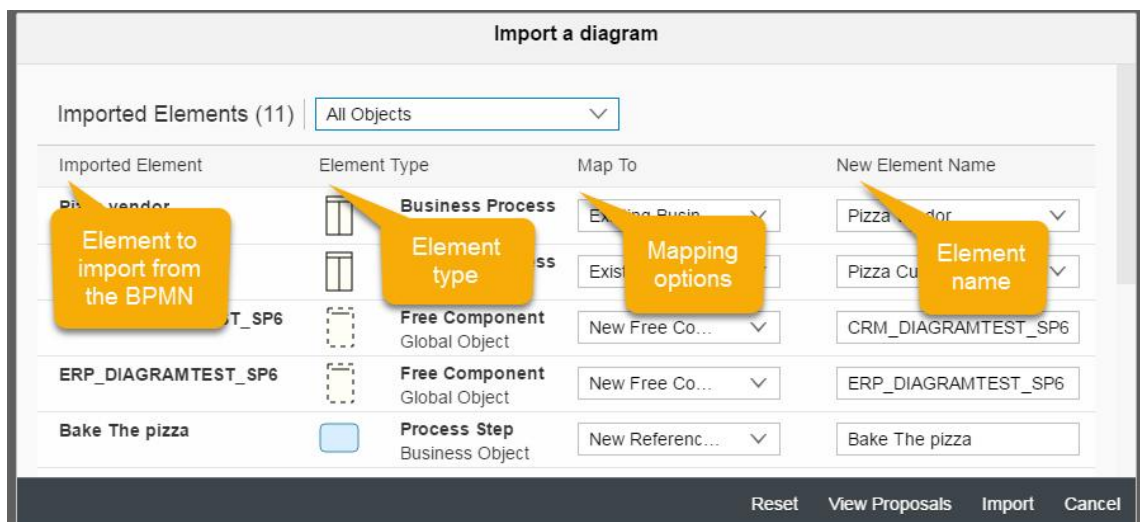


From this interface, you can map elements from the imported file.

First, let us understand what the mapping table does.

You can use the table to map different objects from the imported BPMN file to be created inside the diagram.

The table contains 4 columns, every column has a purpose.



Column Imported Element:

The elements existing in the BPMN file.

Column Element type:

The type of the elements existing in the BPMN file. The element type can be:

- Business Process
- Free Component
- Draft Process Step
- Data Object
- Data Store
- Role
- System

See the following table to know which element corresponds to which element type.

Element Type	Corresponding Element
Business Process	Pool, Draft Pool and Black Pool
Free Component	Lane and Free Lane
Draft Process Step	Process Step, Task
Data Object	Data Object
Data Store	Data Store
Role	Role
System	System

For example, if the BPMN file contains a Pool, Draft Pool or Black Pool, their element type is Business Process.

Column Map To: the available mapping options depending on the element type to be mapped.

Element Type	Mapping Option	Meaning of the mapping option
Business Process	Graphical Element	The element will be created as a Draft Pool
	Existing Business Process	Map the element to an existing Pool
Free Component	New Free Component	The element will be created as a Free Lane
	Existing Logical Component Group	Map the element to an existing Lane
	Existing Free Component	Map the element to an existing Free Lane
Process Step	Graphical Element	The element will be created as a Task
	Existing Process Step	Map the element to an existing Process Step
	New Reference to existing library Process Step	Map the element to an existing process step from the Library and create an instance of that Process Step in the diagram.
	New Reference to new library Process Step	The element will be created as a Process Step in the library then an instance of that process step will be created in the diagram.
Data Object	New Data Object	The element will be created as a Data Object
	Existing Data Object	Map the element to an existing Data Object
Data Store	New Data Store	The element will be created as a Data Store
	Existing Data Store	Map the element to an existing Data Store
Role *Diagram by system	New Role	The element will be created as a Role
	Existing Role	Map the element to an existing Role
System *Diagram by role	New System	The element will be created as a System
	Existing System	Map the element to an existing System

Column New Element Name: the element will be created by that name. (Press ENTER after rename.)

Instead of mapping the elements manually, the user can also click the button View Proposals. This button will try to propose the best element-mapping option available depending on the elements to be imported and the objects existing inside the solution where the diagram will be imported.

Import a diagram

Imported Elements (11) | All Objects ▾

Imported Element	Element Type	Map To	New Element Name
Pizza vendor	Business Process Business Object	Existing Busin... ▾	Pizza vendor ▾
Pizza Customer Ref	Business Process Business Object	Existing Busin... ▾	Pizza Customer Ref ▾
CRM_DIAGRAMTEST_SP6	Free Component Global Object	New Free Co... ▾	CRM_DIAGRAMTEST_SP6
ERP_DIAGRAMTEST_SP6	Free Component Global Object	New Free Co... ▾	ERP_DIAGRAMTEST_SP6
Bake The pizza	Process Step Business Object	New Referenc... ▾	Bake The pizza

Reset **View Proposals** Import Cancel

The button Reset will reset any changes to the initial status.

The button Cancel will cancel close the pop-up.

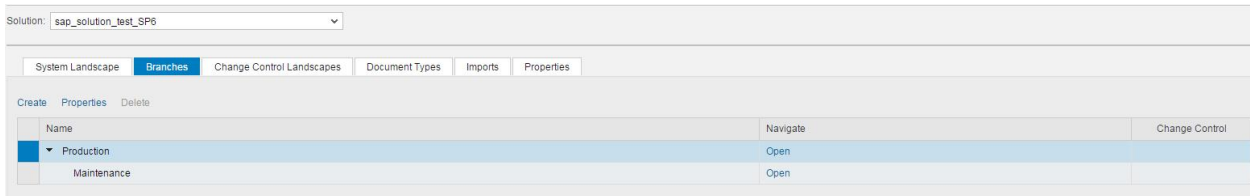
The button Import, will import the BPMN file based on the mapping options from the table.

Import the diagram. The result of the import is the same as the imported diagram. (Widget is not imported)

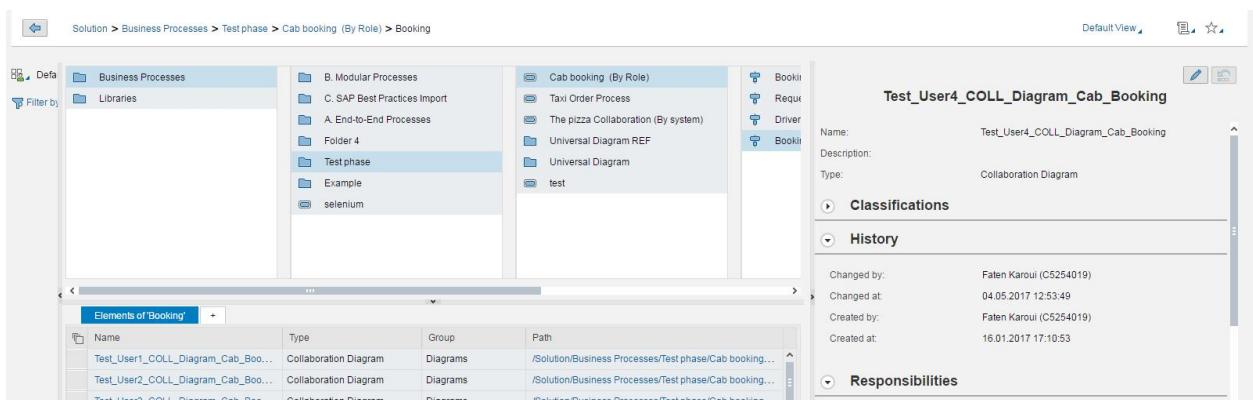
7.4 Change Management

In this section, you learn more about Change Management while processing a business process diagram.

Open a solution.



Open a branch (maintenance).

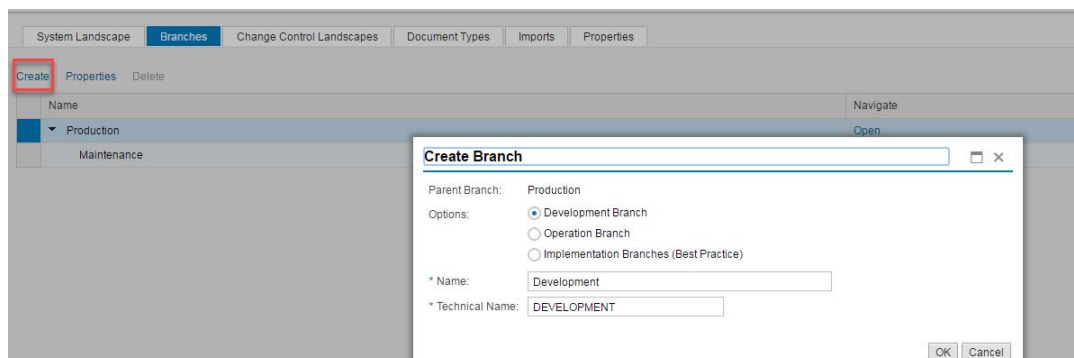


The branch contains:

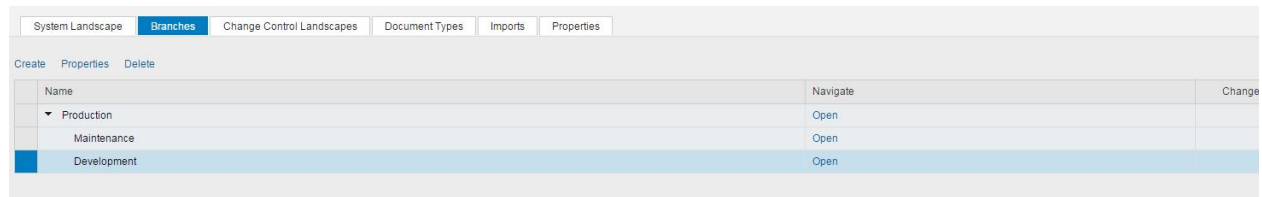
- Business Processes
- Process Steps
- Interface Steps
- Diagrams...

Close the branch and go back to the solution home page.

Right click on the branch and create a new branch. Enter a branch name. Example: Development



The branch is created under the parent branch.



System Landscape Branches Change Control Landscapes Document Types Imports Properties			
Create Properties Delete			
Name	Navigate		Change
▼ Production	Open		
Maintenance	Open		
Development	Open		

All objects (diagrams, business processes, process steps) are copied from the parent branch into the created branch)

Objects that are deleted from parent branch are not deleted from the new child-branch.

Delete a diagram from the new branch.

Go to the parent branch and open it.

The same diagram is not deleted from the parent branch.

Go to the parent branch. Open a diagram and edit it, for example:

Add a process step or delete a lane

Save the diagram and close.

Go to the created child-branch and open the diagram with the same name.

The diagram does not contain the changes from the other diagram. That means that changes in diagrams from the parent branch are not propagated to new child-branch.

Go to the new child branch. Open a diagram and edit it, for example:

Add a process step or delete a lane

Save the diagram and close.

Go to the parent-branch and open the diagram with the same name.

The diagram does not contain the changes from the other diagram. That means that changes in diagrams from the child branch are not propagated to parent branch.

After editing the diagram in the child branch, the changes are saved in the change request.

When the change request is released, then the changes are propagated to the parent branch. That means that changes in diagrams from child-branch are propagated to parent-branch after releasing the change request.

7.5 Inconsistency

In this section, you learn more about the inconsistency check between intermediate events and process steps.

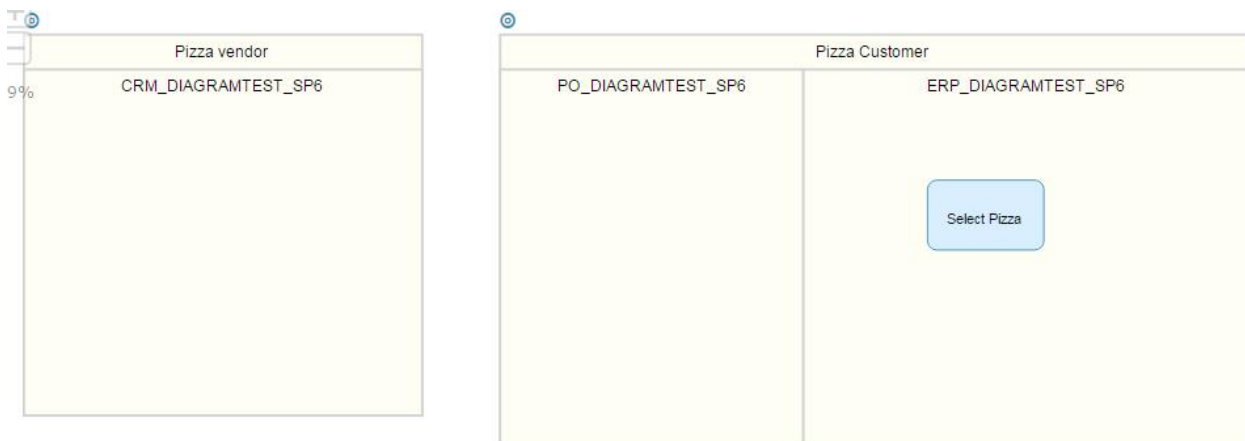
In the following used abbreviations:

- PS refers to Process Step
- IE refers to Intermediate Event

Move PS from lane to lane

Add the lane PO_DIAGRAMTEST

Diagram:



Process step Select Pizza is assigned to ERP_DIAGRAMTEST.

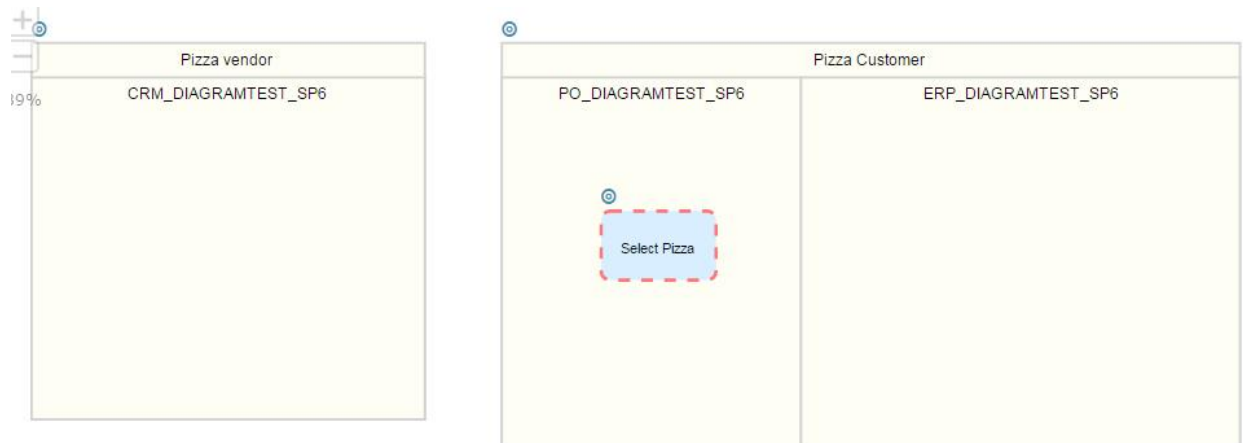
Original: Select Pizza	
Name:	Select Pizza
Description:	
Logical Component Group:	ERP_DIAGRAMTEST_SP6

Move the process step Select Pizza to the lane LOGICAL COMPONENT: PO_DIAGRAMTEST.

Select Pizza is now inconsistent because:

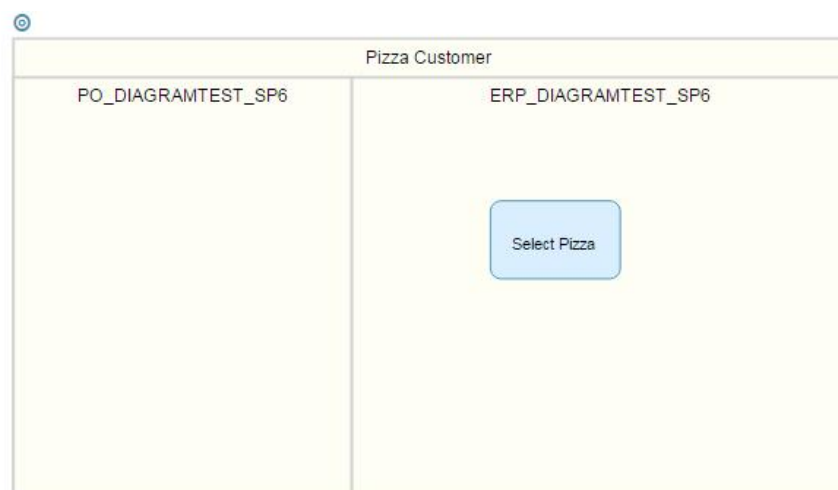
- It is assigned to ERP_DIAGRAMTEST.
- It exists in lane PO_DIAGRAMTEST.

The Process Step Select Pizza is highlighted in red because it became inconsistent.



Move back Select Pizza to the lane ERP_DIAGRAMTEST.

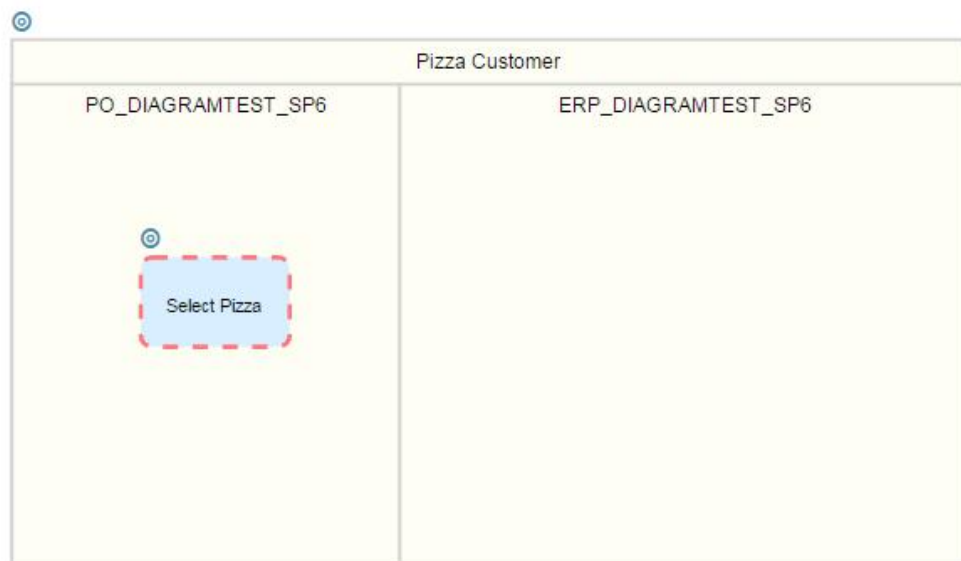
The process step Select Pizza is consistent and is not highlighted in red any more.



Display diagram with inconsistent PS

Select Pizza is in lane PO_DIAGRAMTEST.

Select Pizza is inconsistent and is highlighted in red.



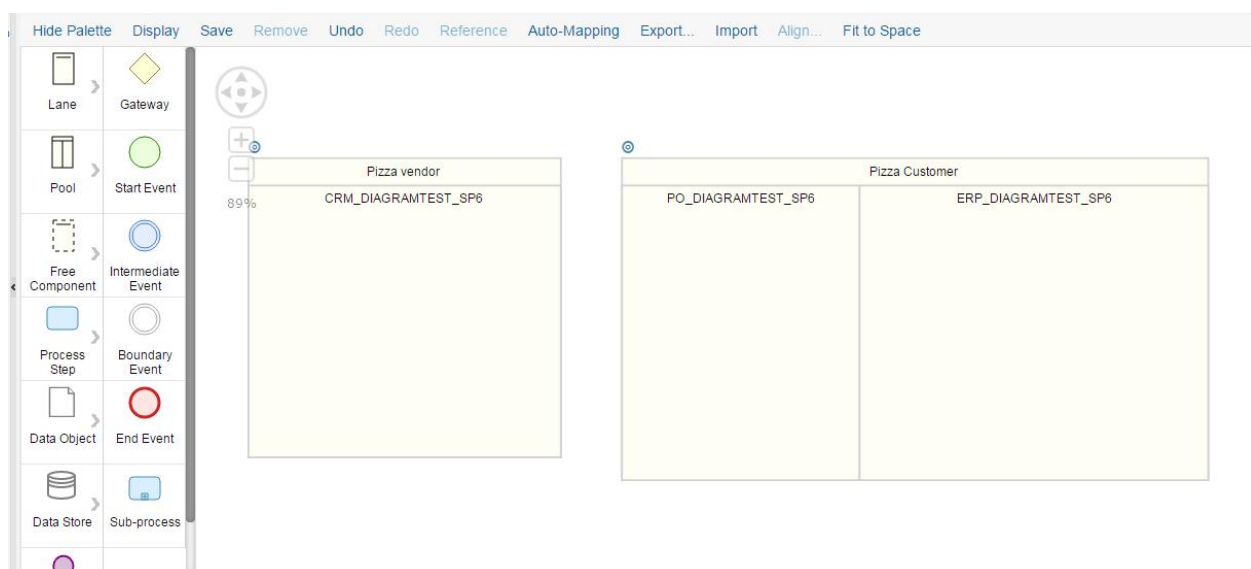
Save the previous diagram and close it.

Open the diagram again.

The inconsistent process step should stay highlighted in red.

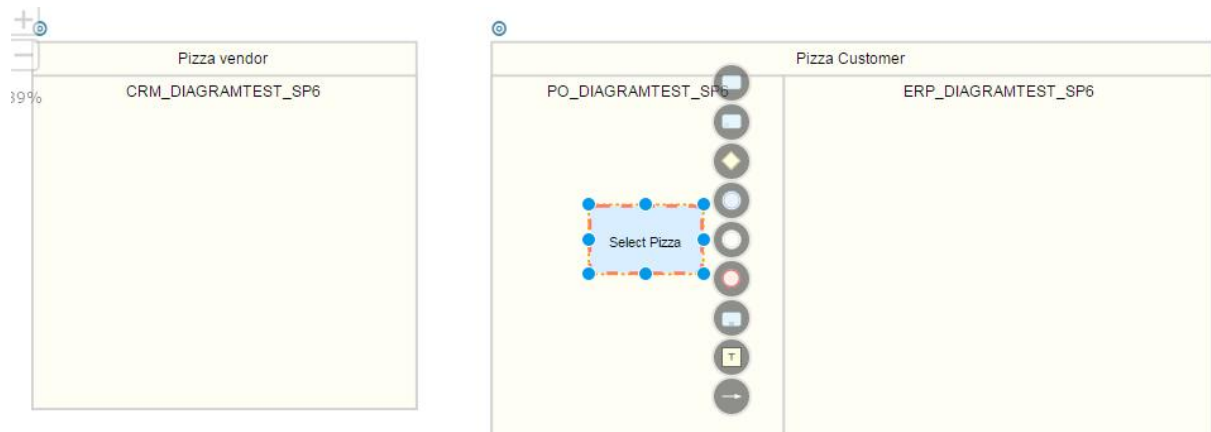
Drag and drop a PS into a lane

The diagram is empty.



Drag and drop Select pizza into the lane PO_DIARGRAMTEST.

Select pizza is inconsistent and is highlighted in red.



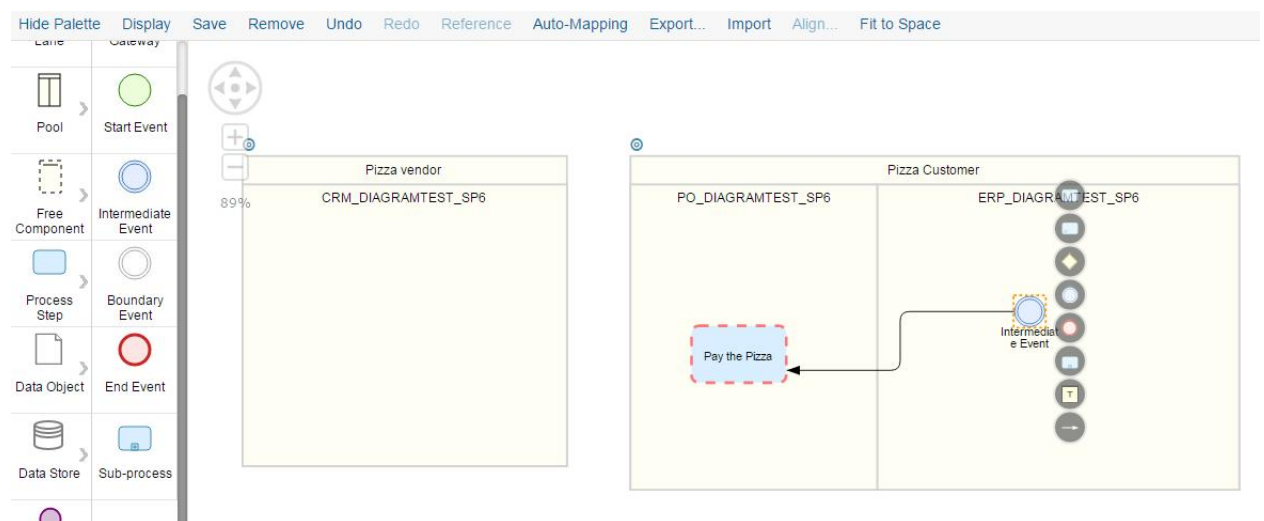
PS linked to IE without reference

Pay the pizza is linked to Intermediate Event.

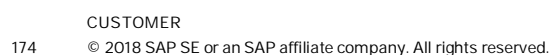
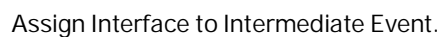
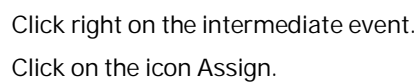
Move Process Step to the lane PO_DIARGRAMTEST.

Pay the pizza is highlighted in red.

Intermediate Event is NOT highlighted in red.

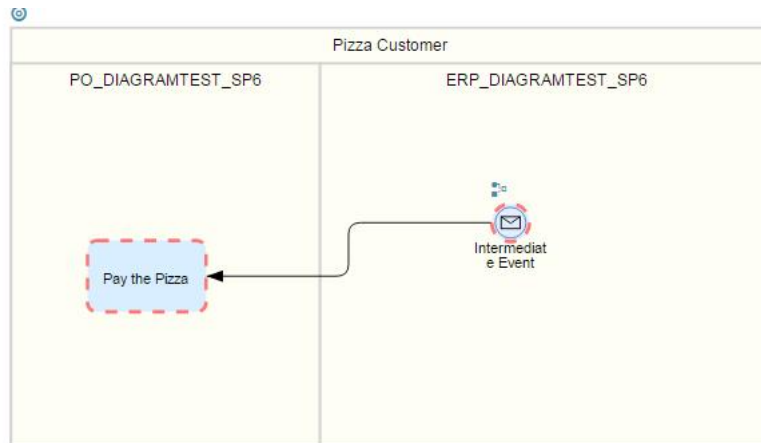


Delete the link between PS Pay the Pizza and the Intermediate event.



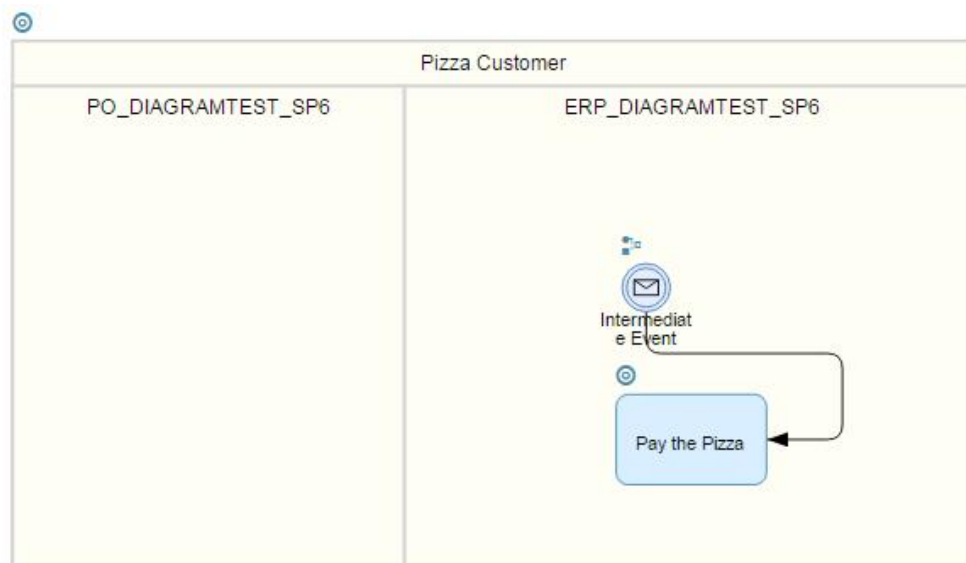
Add link: Intermediate Event → PS: Pay the Pizza

Both Pay the Pizza and Intermediate Event become inconsistent and are highlighted in red.



Move Pay the Pizza to the lane ERP_DIAGRAMTEST.

Pay the Pizza and Intermediate Event become consistent and are NOT highlighted in red anymore.



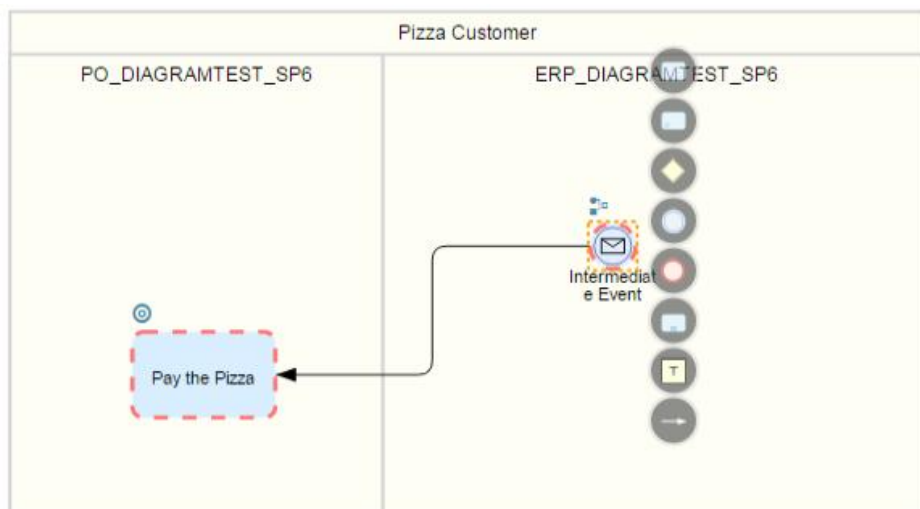
Link between PS and IE with reference

We have the following diagram:

- Pay the pizza is in lane PO_DIARGRAMTEST.
- Intermediate Event is assigned to Interface.



Link Intermediate Event to Pay the pizza.
Intermediate Event become inconsistent and is highlighted in red.

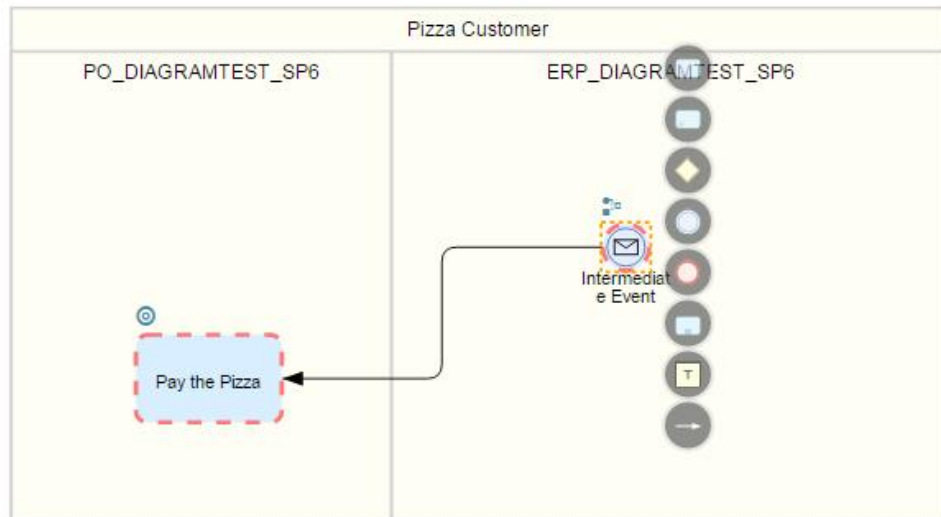


Delete the link between Intermediate Event and Pay the pizza.
Intermediate Event is NOT highlighted in red anymore BUT Pay the Pizza stays inconsistent.

Delete PS linked to IE with reference

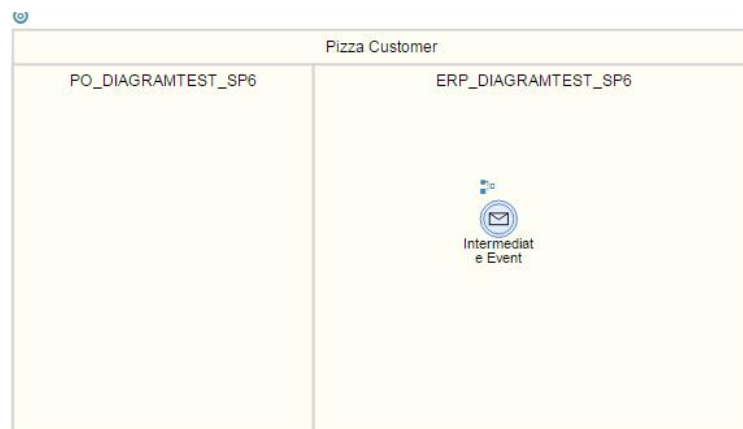
We have the following diagram:

Both Intermediate Event and Process Step: Pay the Pizza are inconsistent and are linked to each other.



Remove Process Step (pay the pizza) from the diagram.

Intermediate Event become consistent and is NOT highlighted in red anymore.

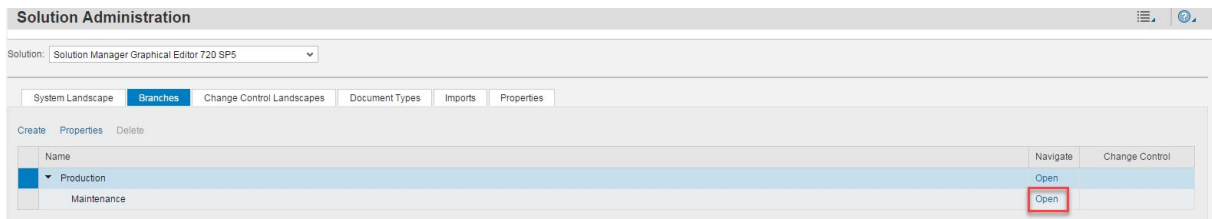


7.6 Mass Maintenance

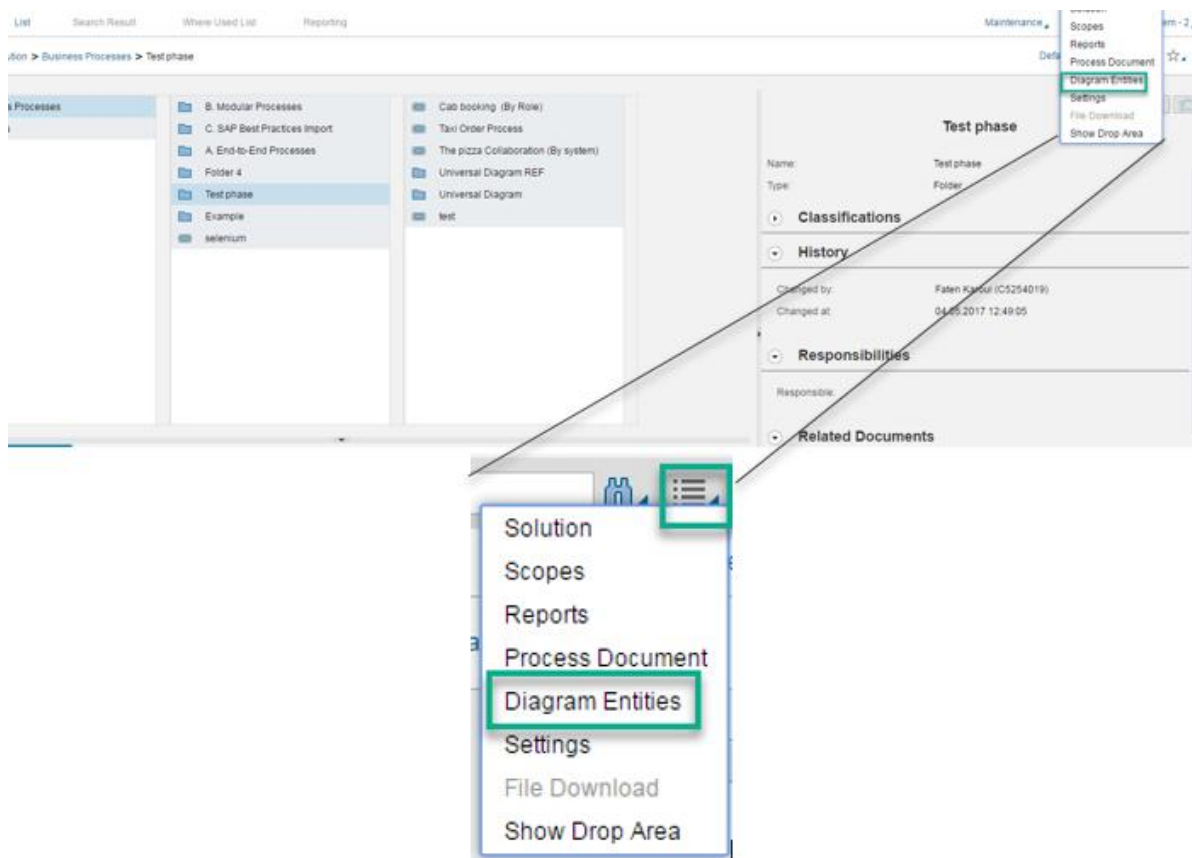
In this section, you learn more about global object mass maintenance.

In the Diagram Entities dialog, you can create, release, merge, and identify unused elements.

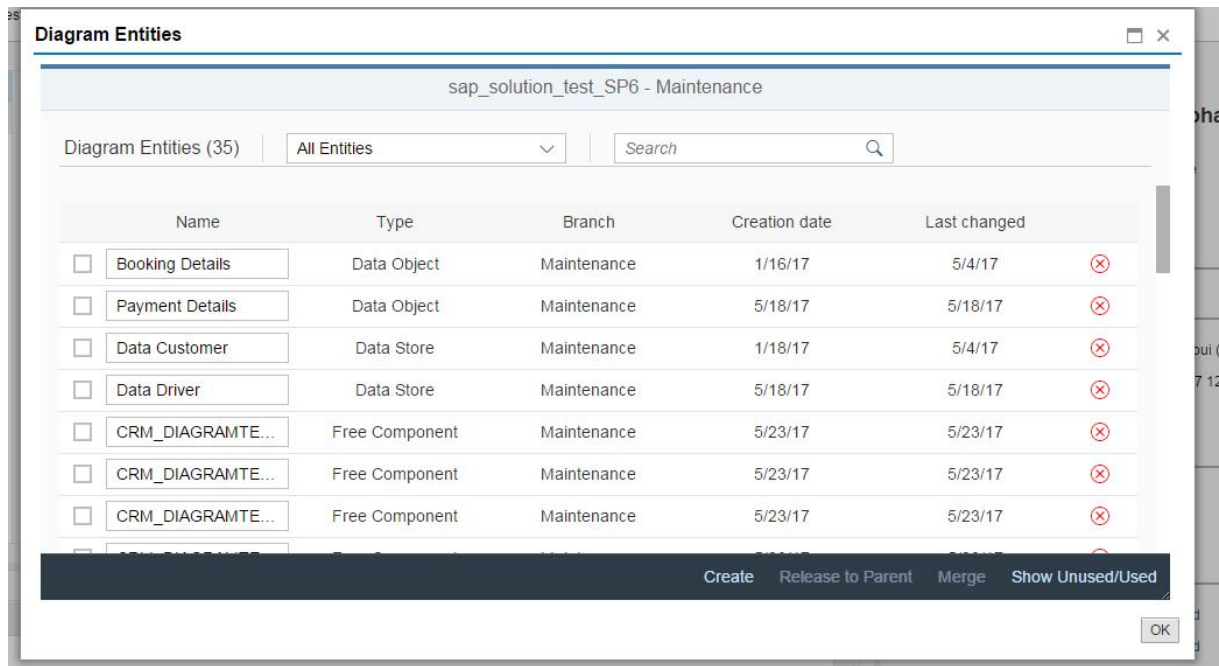
From the solution documentation, open a branch.



From the branch, click the Global Functions icon and select Diagram Entities.

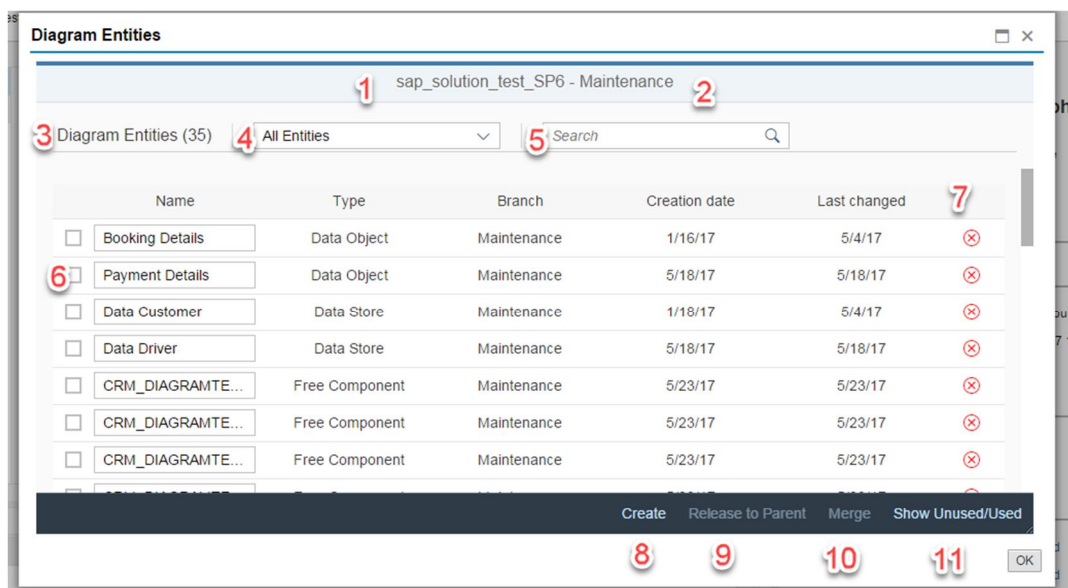


The Diagram Entities window is opened.



Window overview

The window displays the following items:

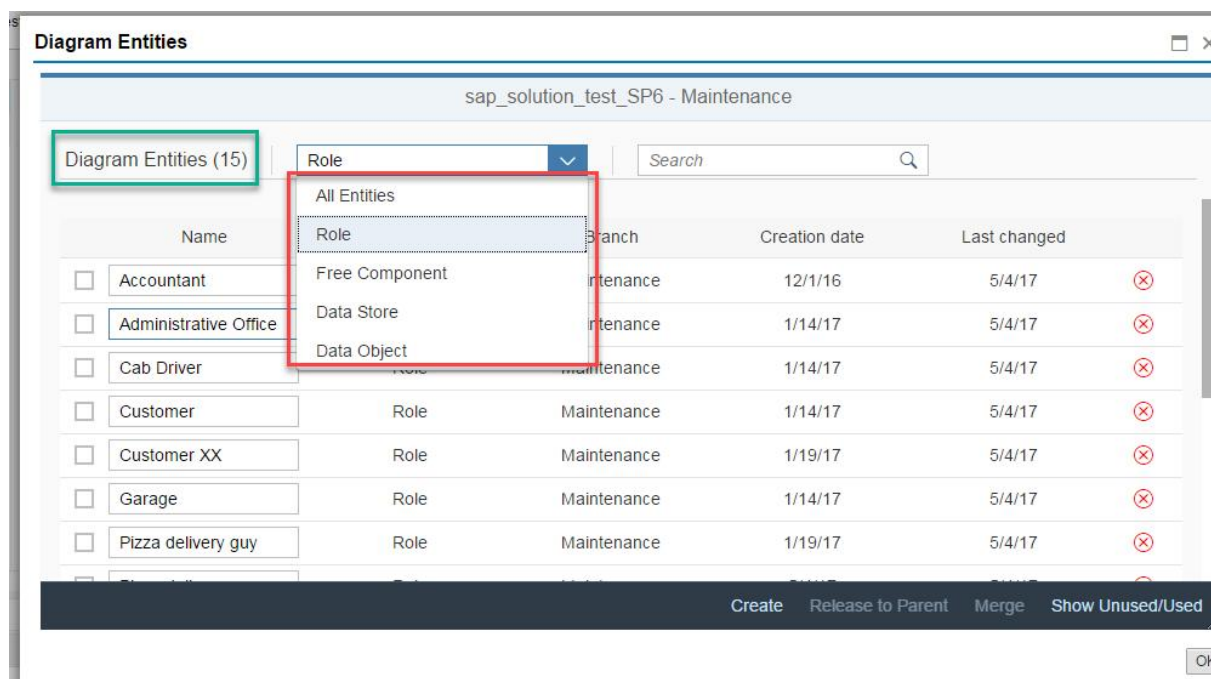


1	Solution Name
2	Branch Name
3	Sum of objects
4	Filter
5	Search Field
6	Select/Unselect objects from the table.
7	Delete object
8	Create new objects
9	Release objects to parent branch
10	Merge several objects into one.
11	Display unused or used objects.

Filter Objects

The filter allows the user to narrow the object list to a particular type.

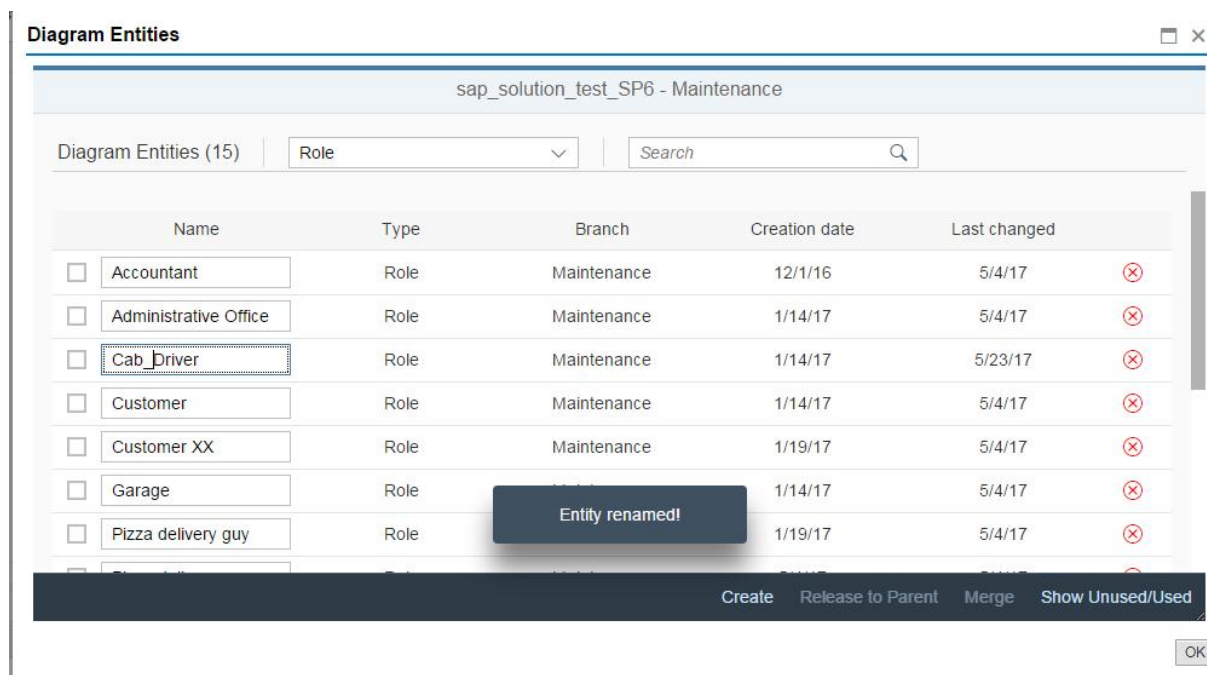
If you change the filter to a specific object type, the SUM of objects will change according to the displayed items.



Rename an Object

Only objects which belongs to the current branch can be renamed.

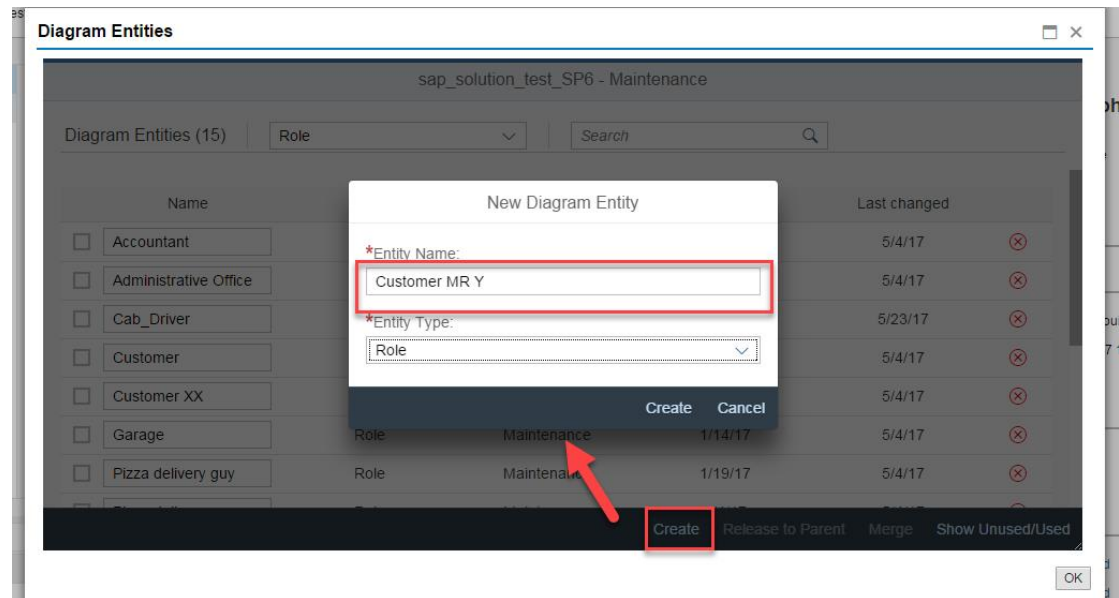
Click an object from the list. Rename it and hit the keyboard Enter button.



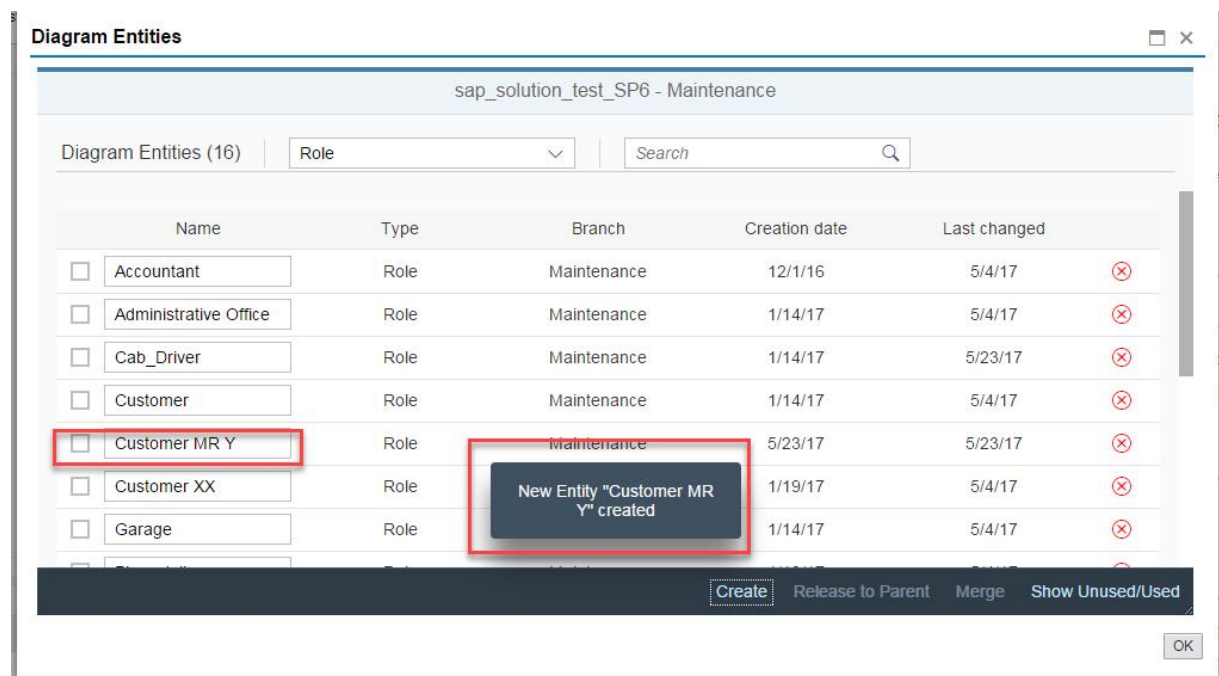
Create an Object

Click the create button.

Specify an element name and type and click create.



The object is created.

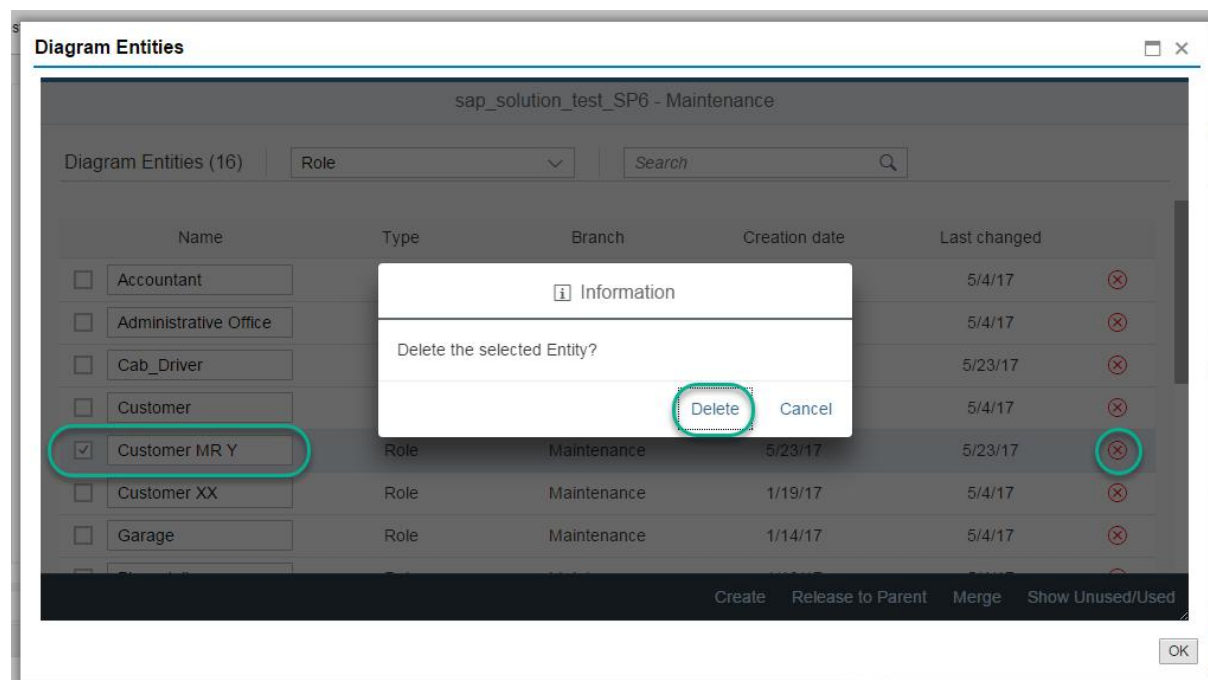


Deleting an object

Select an object from the list.

Click the delete button

A pop-up appears.



If you click Cancel, the object will not be deleted.

If you click Delete, the object will be deleted.

In case the object is used in another diagram a popup appear.



Release to parent

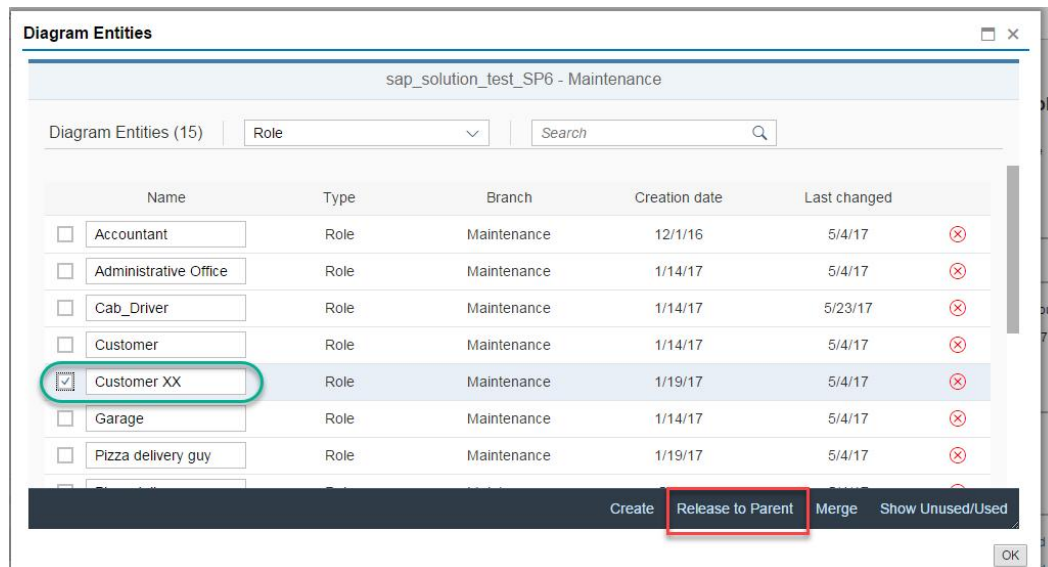
We open the Maintenance branch as an example.

The Maintenance branch is a sub branch for Production.

Production is the parent of the Maintenance branch.

When releasing an object from maintenance to parent, the released object will be released to the Production branch in this example.

Select an object.



The Release to Parent is enabled.

Click Release to Parent.

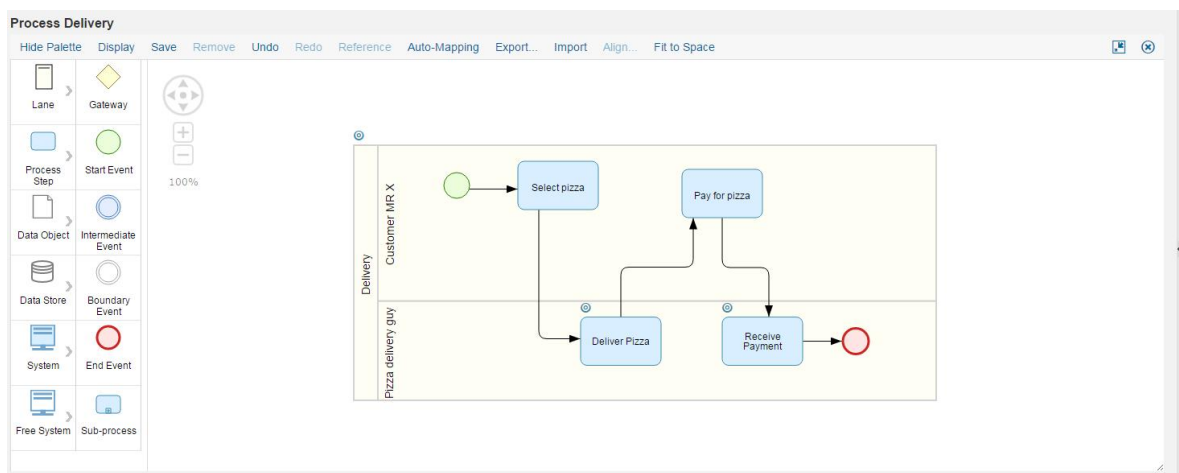
The object is released and is linked to the Production branch.

It cannot be deleted. A popup informs you that the element cannot be deleted because it is used in diagrams.

If the object in the production branch not used in another diagram, you can delete it.

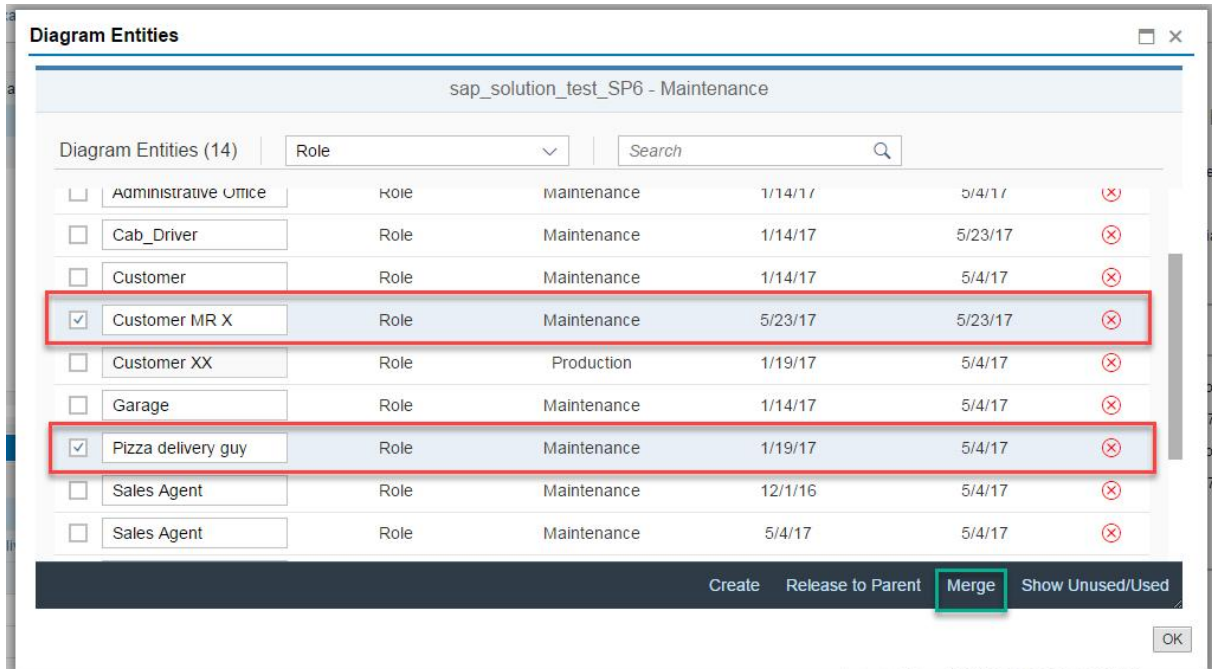
Merge

We have the following Process Diagram by Role as an example.



In this example, we will merge the 2 lanes Role 1: Customer MR X and Role 2: Pizza delivery guy into one lane, say, Role 1: Customer MR X. Without forgetting that in diagrams by role, lanes are Roles.

From the diagram entities, select both roles:



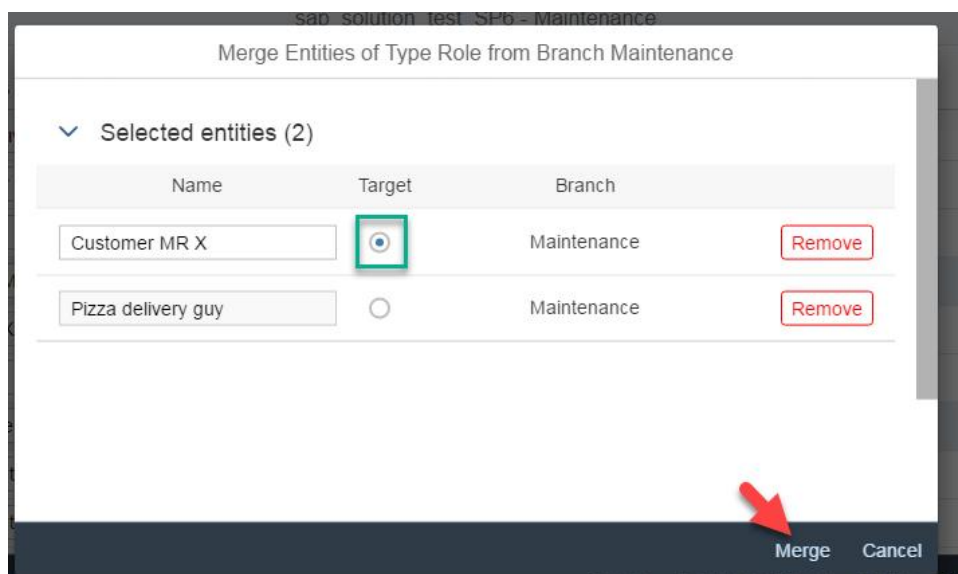
Click Merge.

The following pop up appears.

Target: Role 1: customer MR X

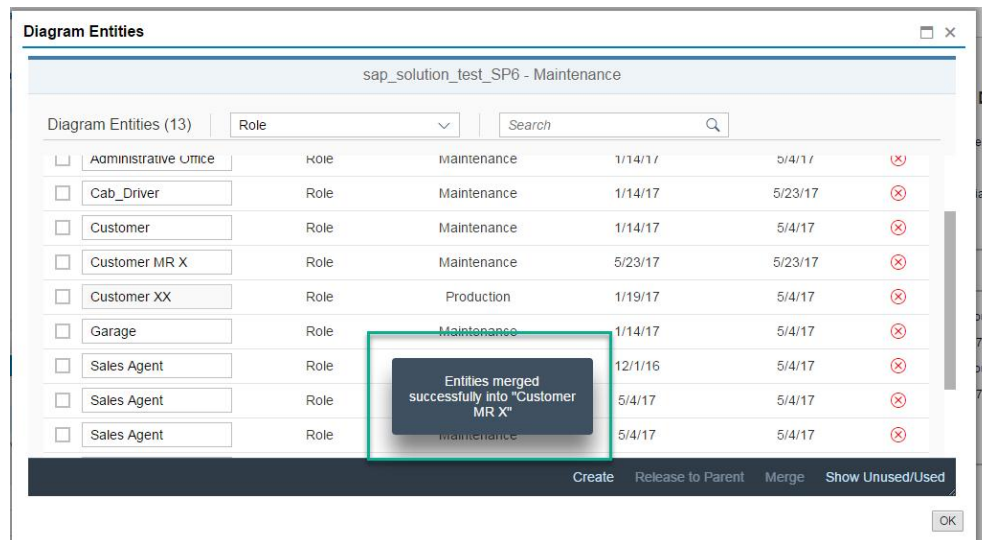
Role 2: Pizza delivery guy will be merged into Role 1: Customer MR X.

You can choose a different role name if you desire.



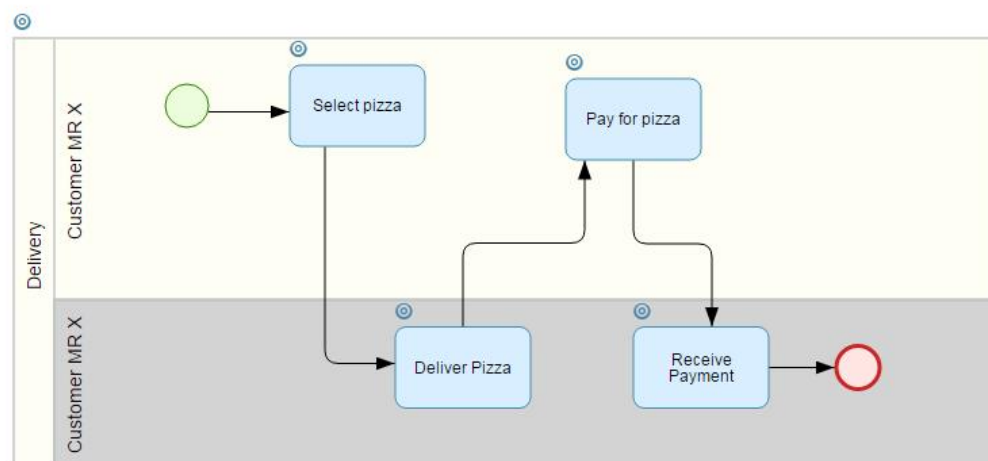
Click Merge.

Both roles are merged and Role 2: Pizza delivery guy disappears.



Open the diagram.

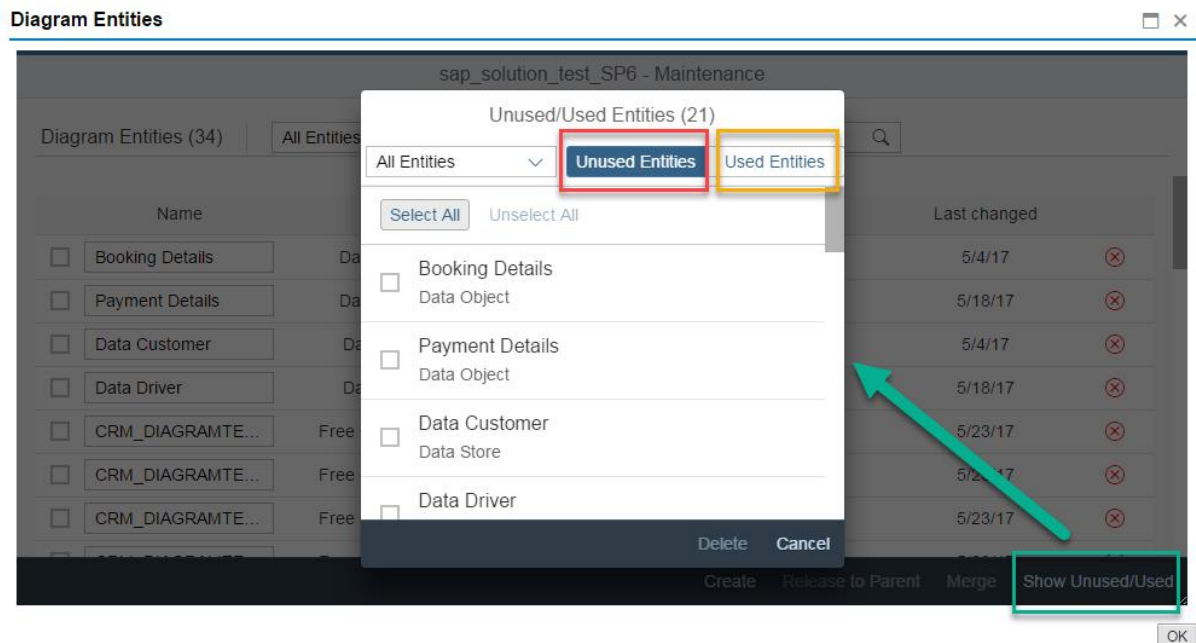
Both roles customer MR X and Pizza delivery guy are merged into Role customer MR X.



Show Unused/Used

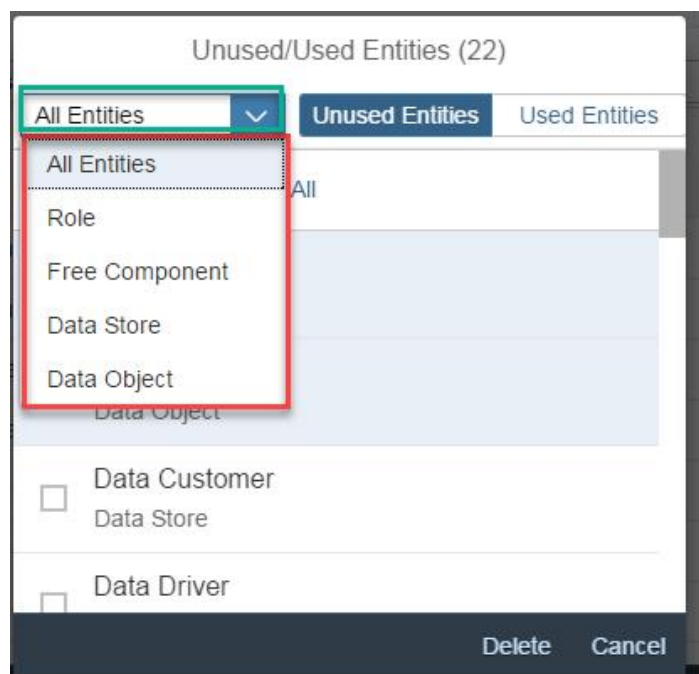
Click on the button Show Unused/Used allows user to have an idea about the used and unused entities.

The following pop up appears.



The filter allows you to select the object type.

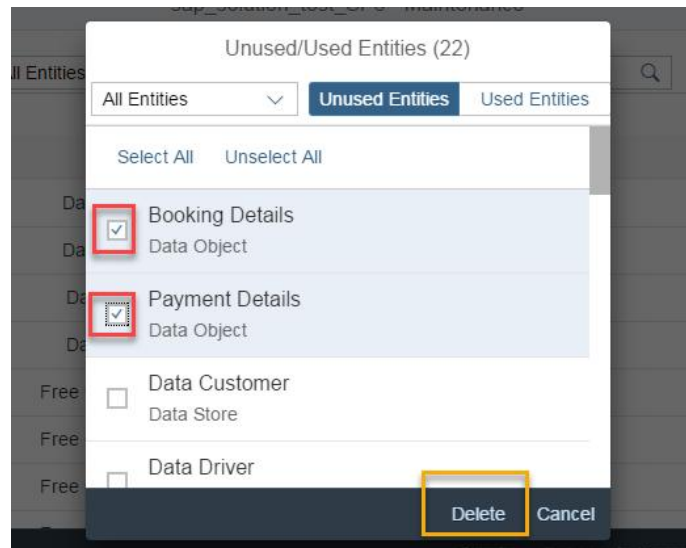
If you change the filter to a specific object type, the list will be changed accordingly.



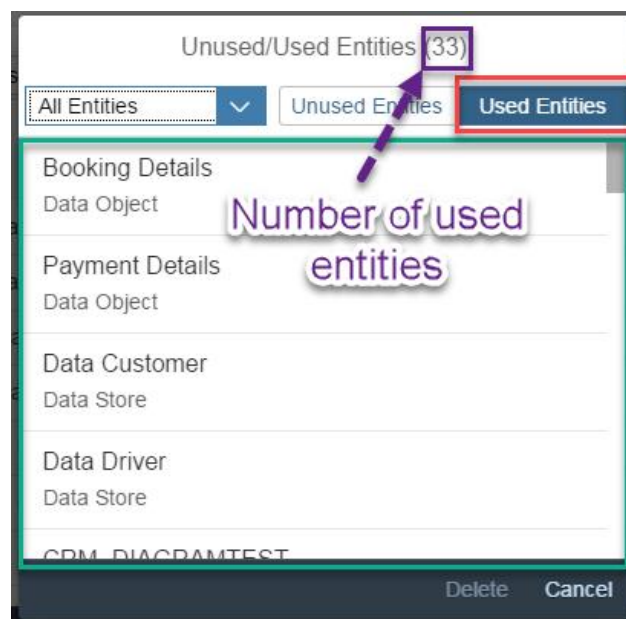
You can delete unused objects.

By default, all elements are unselected.

Select entities from the list and click Delete.



Click Used Entities. The list of used entities is displayed.



7.7 Multi Language

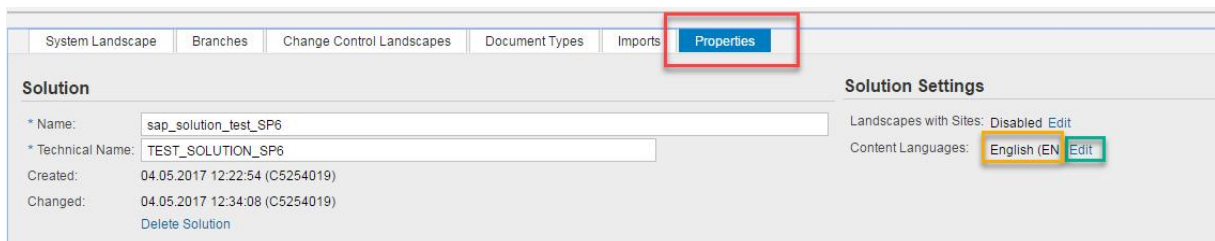
In this section, you learn more about the multi-language support.

General concept:

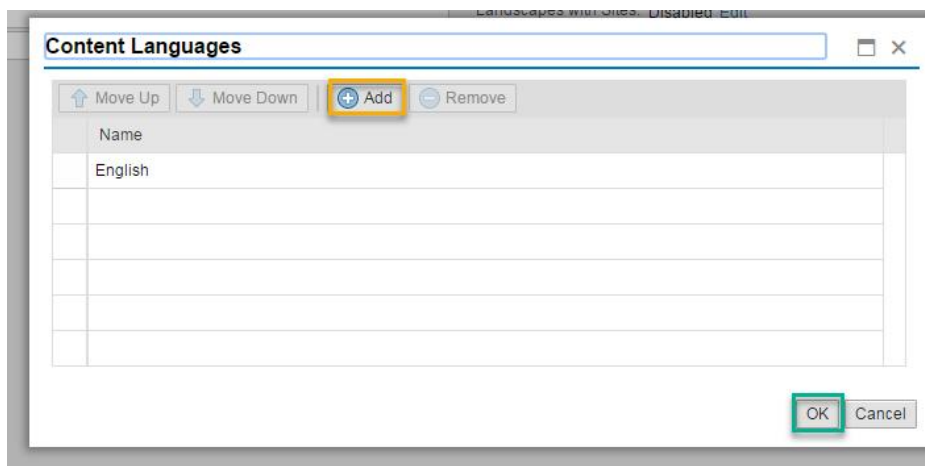
- The graphical editor can be opened in several languages.
- If we open the graphical editor with language X, all object names will be displayed in that language X.
- If an object name is not available in language X, its name will be displayed in a different language Y and will be highlighted in red color.
- Multi-language support must be enabled in your solution in order to use the graphical editor in multi-languages.
- The highlight option is also configurable for the solution.

Enable Multi-language support

Go to the Properties tab of your solution.



Click on the Edit button of the Content Language. Add some languages and click OK.



Now your solution supports English and German.

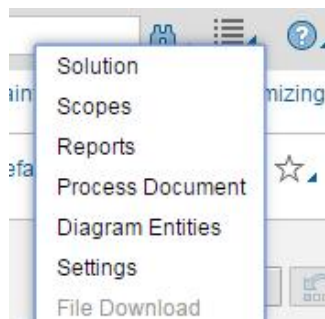
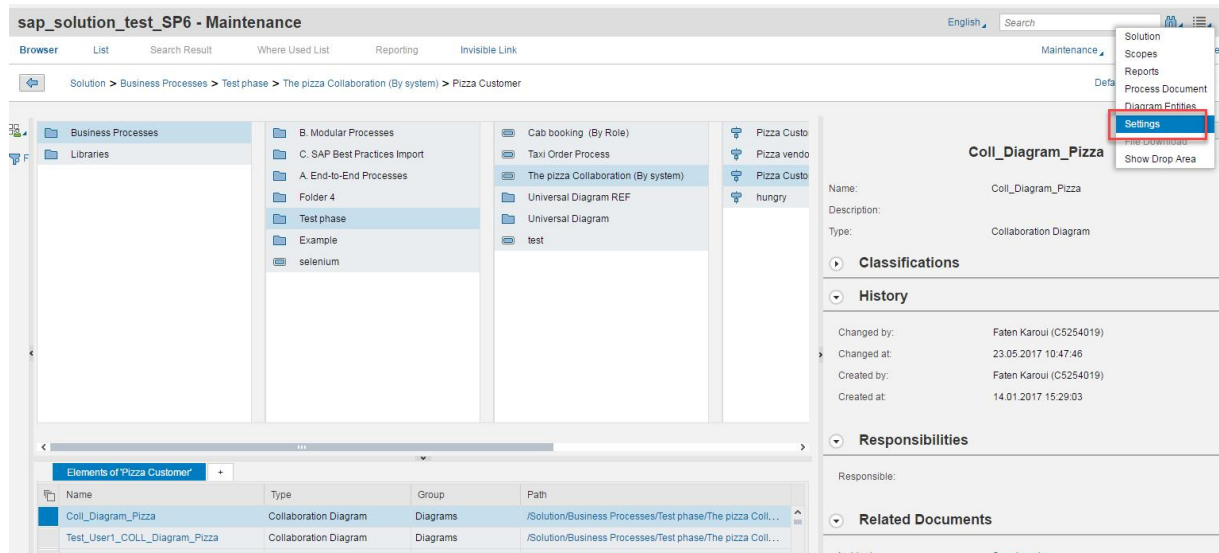


Enable Translation Mode

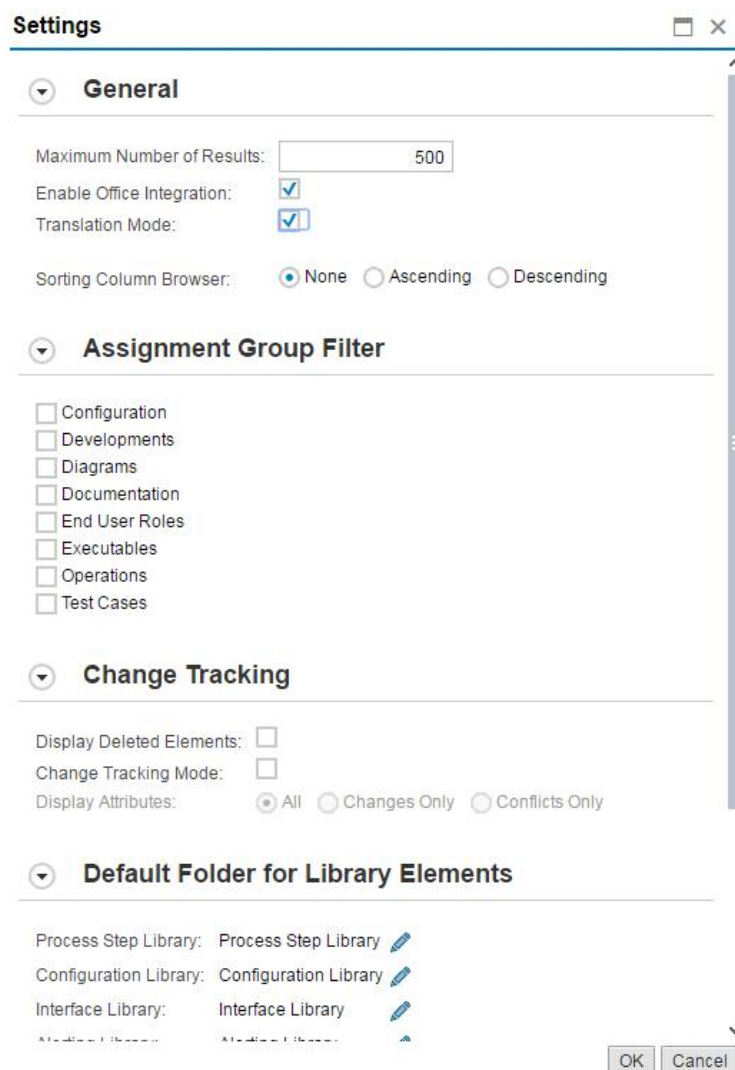
For the translation of object names in different languages that are highlighted in red, the translation mode must be enabled.

Open a branch (Maintenance).

Click the Global Functions icon and open the settings.



Enable the translation mode and click OK.

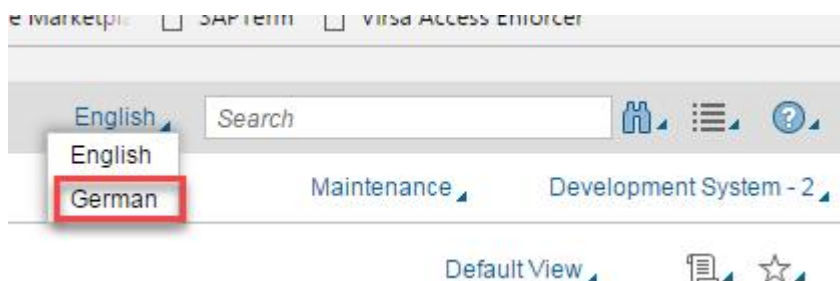


The image shows a 'Settings' dialog box with a title bar containing a minimize icon and a close icon. The dialog is divided into four sections, each with a dropdown arrow and a title:

- General**:
 - Maximum Number of Results: 500
 - Enable Office Integration: ☒
 - Translation Mode: ☒
 - Sorting Column Browser: ☒ None ☐ Ascending ☐ Descending
- Assignment Group Filter**:
 - Configuration ☐
 - Developments ☐
 - Diagrams ☐
 - Documentation ☐
 - End User Roles ☐
 - Executables ☐
 - Operations ☐
 - Test Cases ☐
- Change Tracking**:
 - Display Deleted Elements: ☐
 - Change Tracking Mode: ☐
 - Display Attributes: ☒ All ☐ Changes Only ☐ Conflicts Only
- Default Folder for Library Elements**:
 - Process Step Library: Process Step Library
 - Configuration Library: Configuration Library
 - Interface Library: Interface Library
 - Attachment Library: Attachment Library

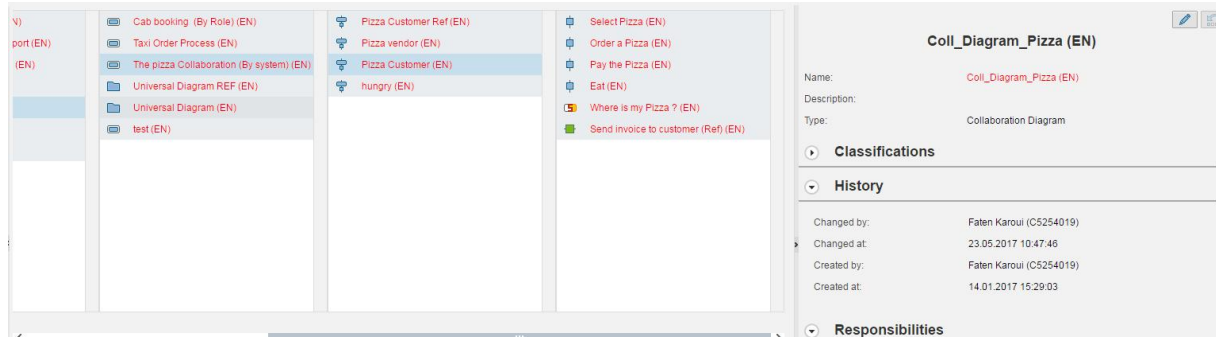
At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

Now set the content language to German.



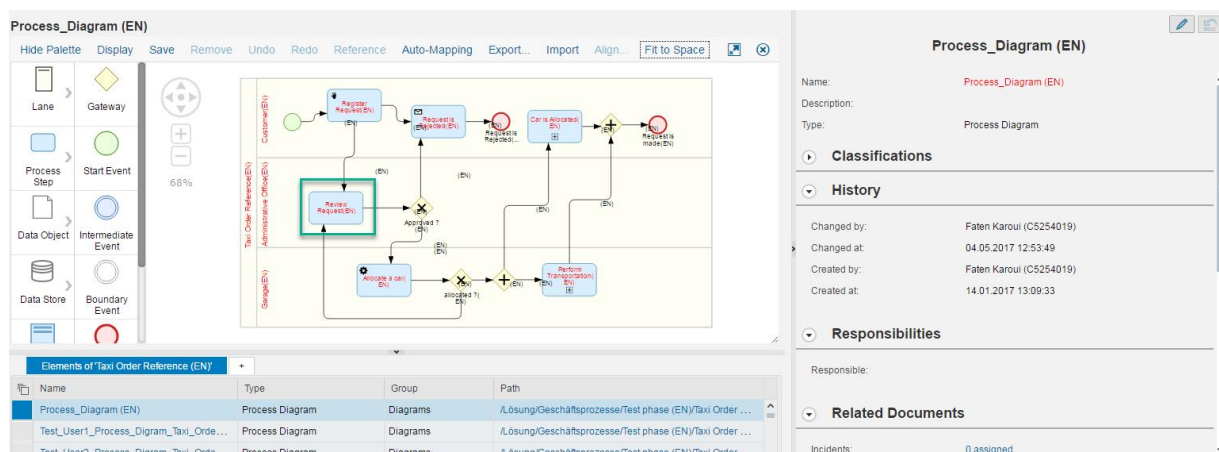
Translation Support

After changing the language to German, we will have the following display:



The objects are displayed in Red because they are displayed in the English language while the chosen language is German.

Open a diagram.

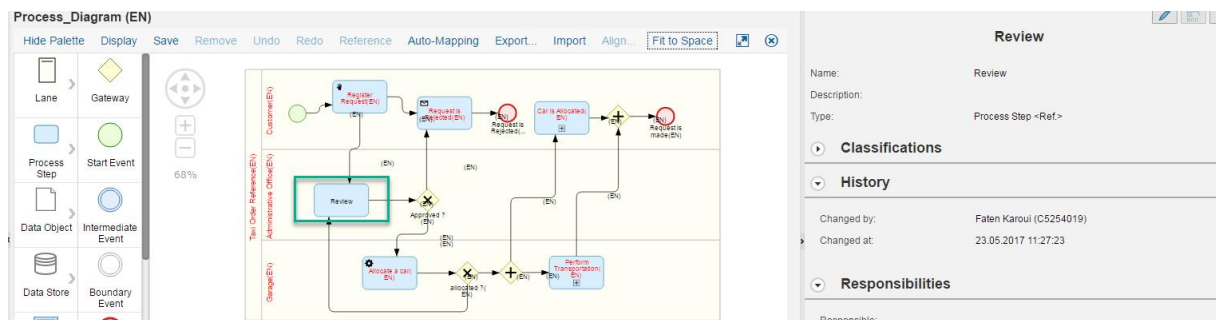


Every object NOT in the German language will be displayed in RED.

The original language will be displayed between brackets next to the object name. Example (EN) for English.

Double click a process step to rename it. (Example: Review Request)

Change the process step name (Review).



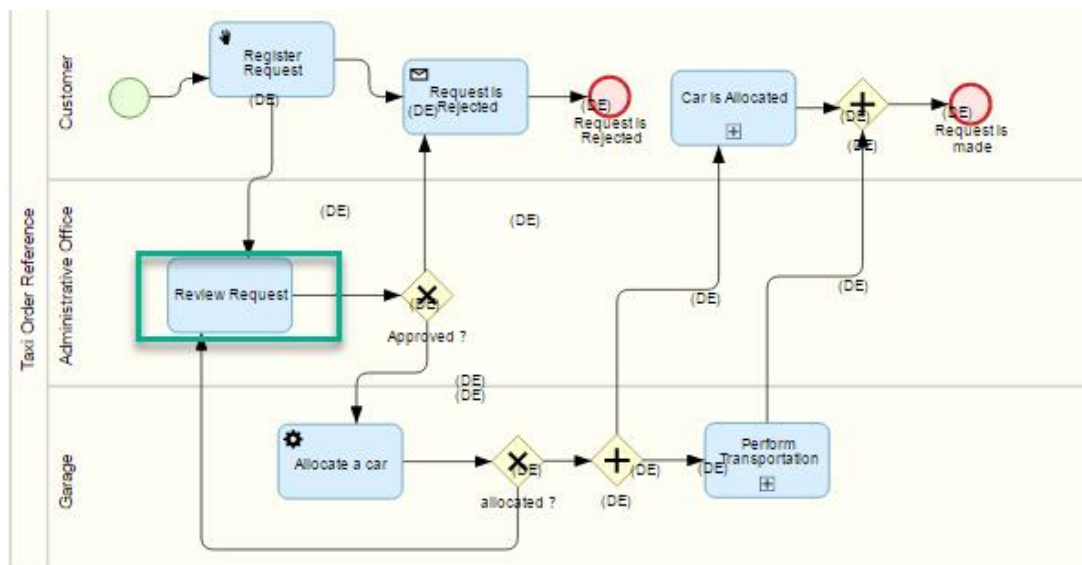
The process step name is no longer highlighted in red and the (EN) disappeared because it is registered as German.

So, this process step is now available in both the English and the German language.

Opening the diagram in German will display this process step name.

Opening the diagram in English will display the other process name.

From the branch, change the language to English and open the diagram.

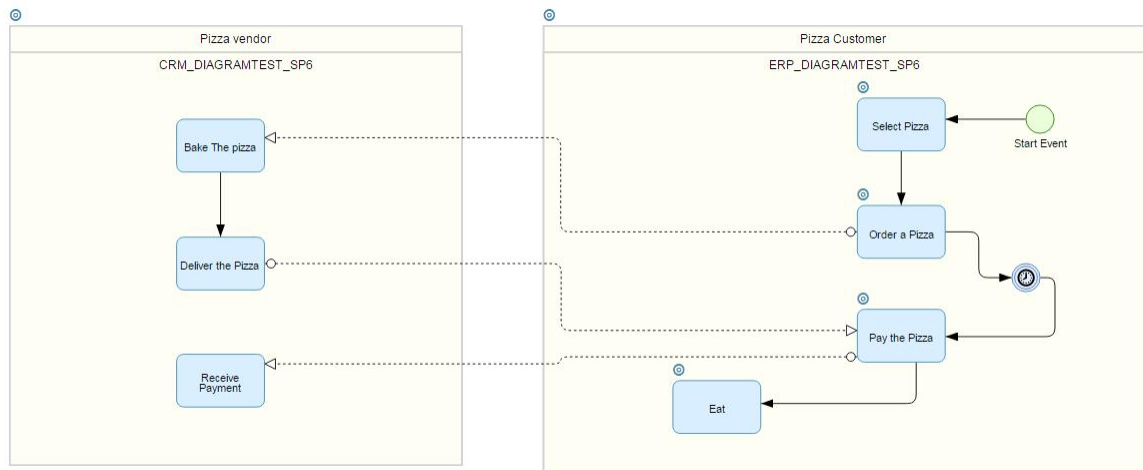


7.8 Navigation

In this section, you learn more about the navigation in the Value Chain Diagram, Business Process Diagram and the Collaboration Diagram.

The following examples are applicable for both Business Process Diagram and Collaboration Diagram.

We take the Collaboration Diagram as an example.



Assignment

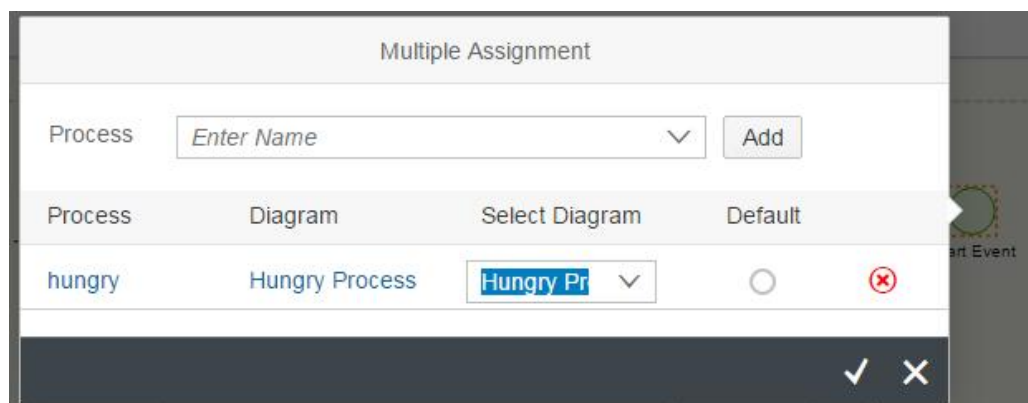
Use case example: Start Event

Right-click the start event and click on the Assign Reference icon.

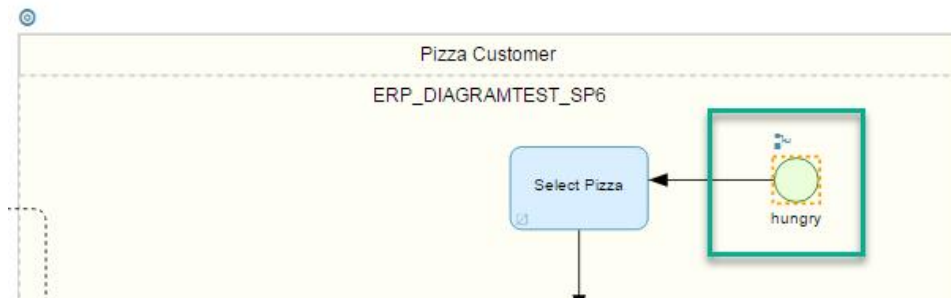


Select process (Hungry) and click Add.

Assign a diagram to the process. And confirm.



The diagram widget is visible on-top of the start event.

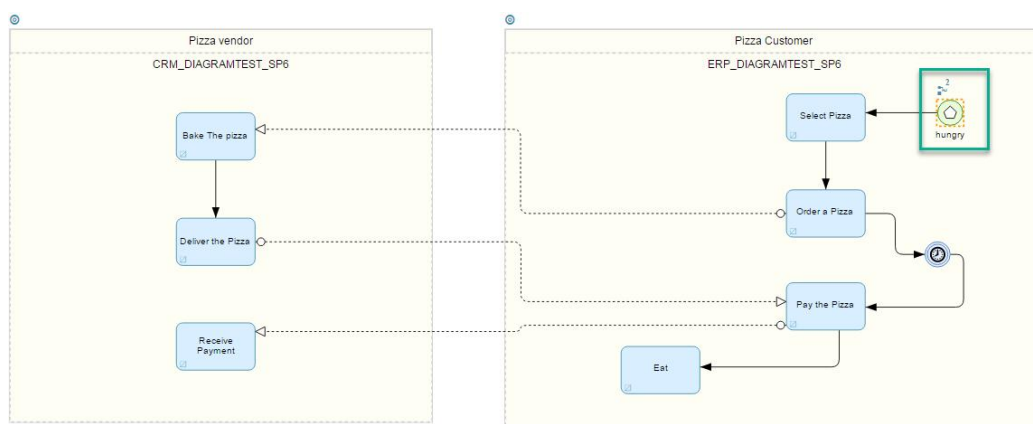


If we, for example, would assign two processes to the start event then the icon will be like



Multiple Assignment			
Process	Enter Name		Add
Process	Diagram	Select Diagram	Default
hungry	Hungry Process	Hungry ...	<input type="radio"/>
Booking Refer...		Select ...	<input type="radio"/>

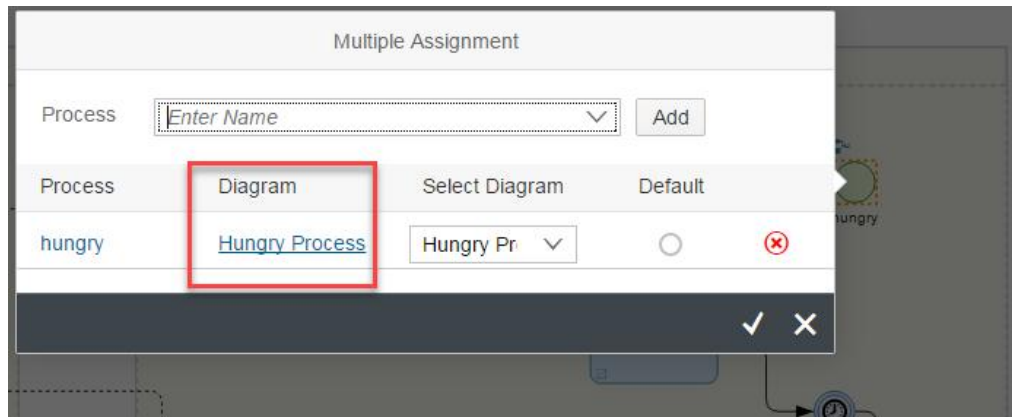
✓ ✕



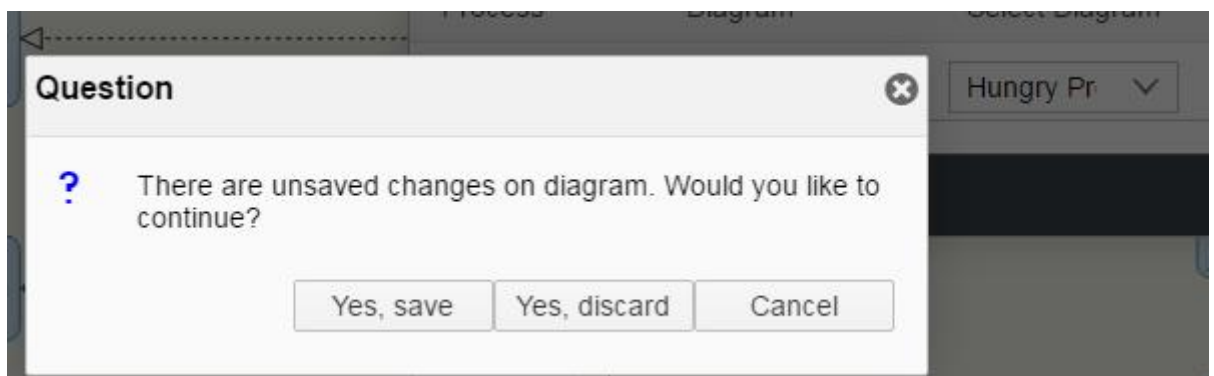
Click on



Click on the diagram Hungry Process

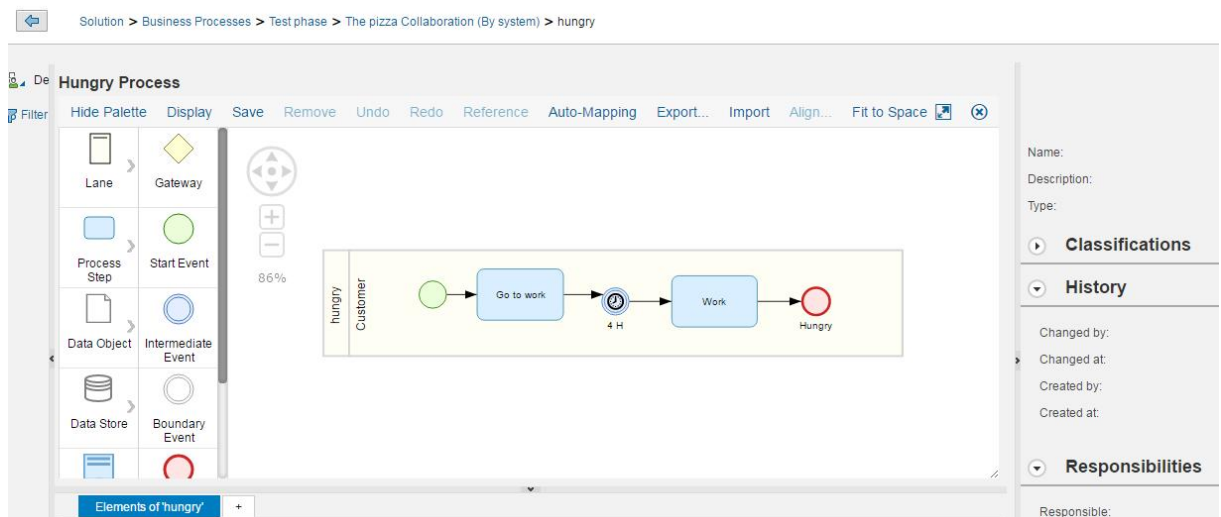


If some changes are not yet saved in the current diagram, a popup suggesting saving the changes is displayed.



Click Yes, save.

The current diagram is saved and the referenced diagram is displayed.



Click on the back button.



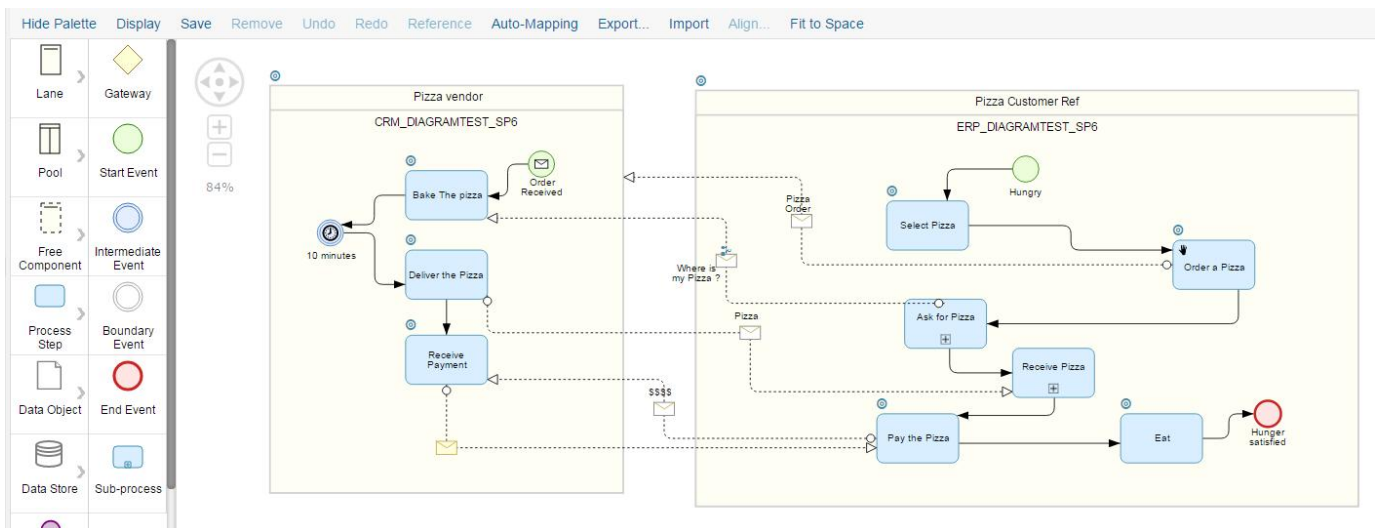
The display goes back to the initial diagram with the added saved objects.

7.9 Recovery

In this section, you learn how the recovery mode works.

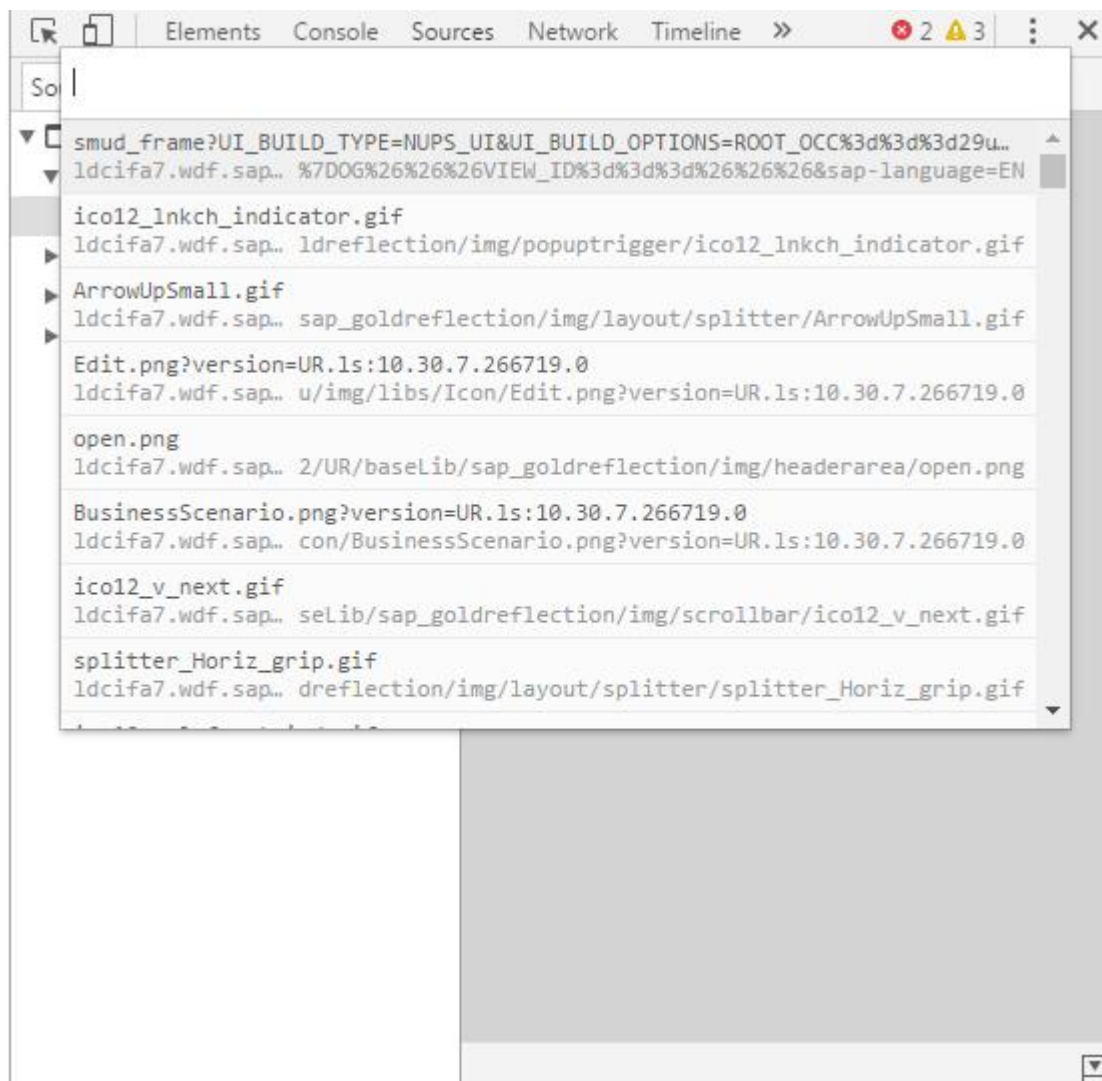
In the following example, we enter the recovery mode through the browser debugging mode. (The steps below are performed on Google Chrome.)

Open a diagram.



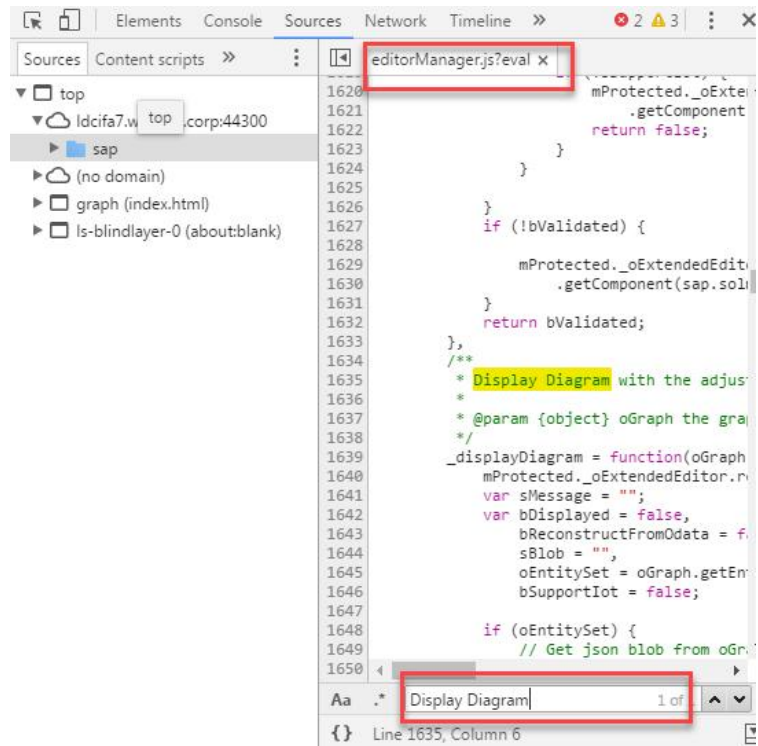
Click F12 to open.

Click Ctrl+O and open the file editorManager.js.



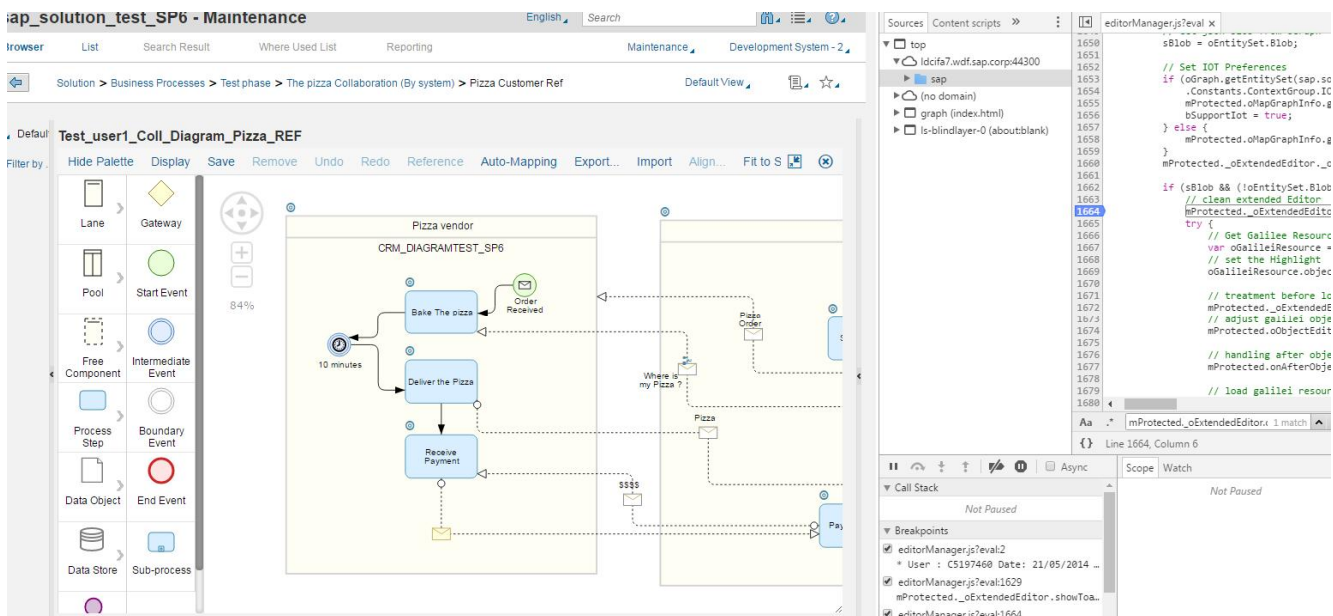
The file editorManager.js is open.

Hit Ctrl+F and look for "Display Diagram".

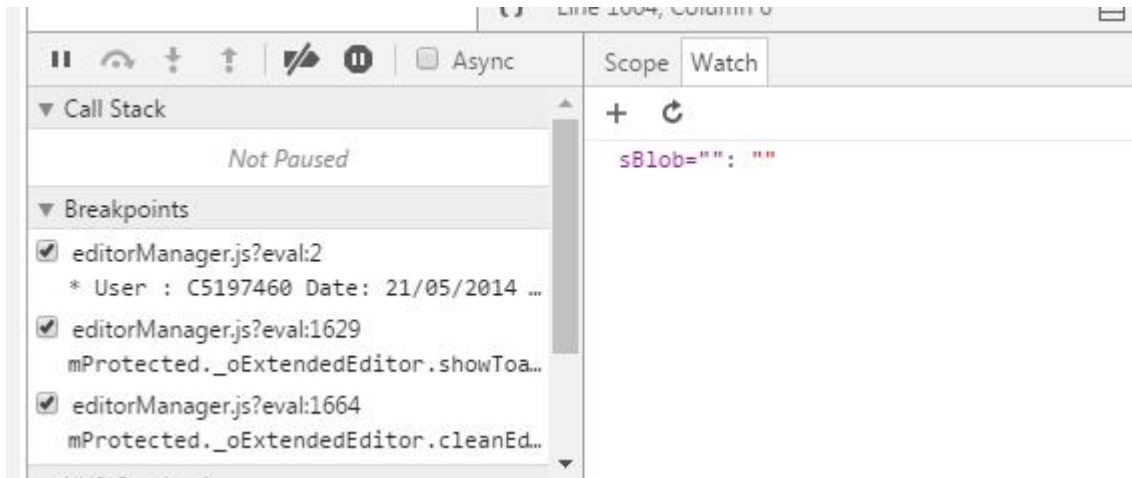


Put a break point in the following line: "mProtected._oExtendedEditor.cleanEditor();"

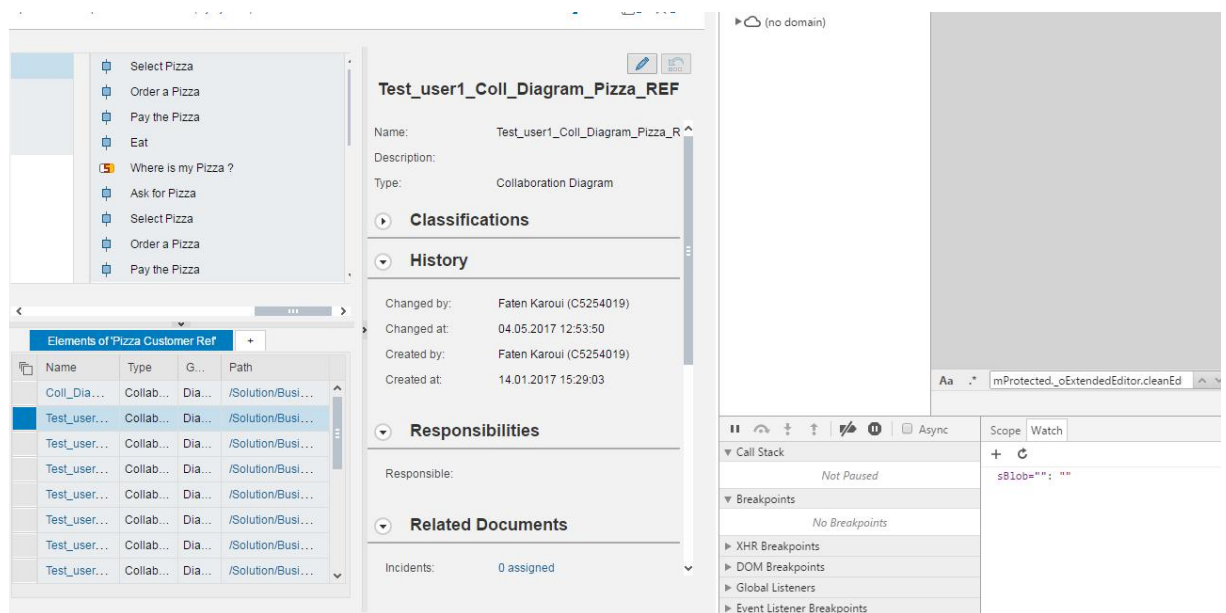
Click on the line number to put the break point




Go the tab Watch and add the value sBlob=""



Without closing the window, refresh the page and open the same diagram again.
The debugger has stopped in the break point.



Press F8 to resume.
The diagram is opened in recovery mode.



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