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# SAP Signavio Process Manager User Guide

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# 1 Welcome to the SAP Signavio Process Manager User Guide

If you are new to SAP Signavio, we recommend to read the sections [First steps with \[page 11\]](#) and [What kind of SAP Signavio user am I? \[page 12\]](#).

If you are already familiar with SAP Signavio Process Manager, navigate the table of content on the left or use the search to find the sections that are most relevant to you.



*For additional information, take a look at:*

- [Featured Videos](#) 
- [Tutorial Videos](#) 
- [SAP Signavio Blog](#) 
- [White Papers](#) 
- [SAP community page for SAP Signavio](#) 

## 2 Signing Up

Learn how to create and access your SAP Signavio Process Transformation Suite account.

SAP Signavio is a web-based application. Use your existing account email and password to [log in to the SAP Signavio Process Transformation Suite \[page 9\]](#).

- If you need to register for the software at <https://www.signavio.com> , choose  (*more options*) and *Free Trial*.
- If you received an invitation email to the SAP Signavio software, select the link in the email to get to the page.

### Note

- The email address you use to sign up cannot contain the German umlauts (such as ä, ö, ü) as special characters.
- If you register for a trial account with an email address that has been invited to join a SAP Signavio workspace, this license will be automatically added to your new account.
- When you receive an invitation email, use this same email address to sign up with the proper license.

# 3 Log In to SAP Signavio Process Manager

How to log in to SAP Signavio Process Transformation Suite and get access to all SAP Signavio products. How to log in when you received a shared link.

## Browser Compatibility


SAP Signavio supports all popular browsers. For a detailed description of the supported browsers, see [Browser Compatibility](#).

## Log In Using a Shared Link

When SSO is enabled for your workspace, you log in through a shared link. The link is shared with you, for example, in an invitation e-mail or on a wiki page.

### Note

We recommend that you bookmark the shared link for future logins. Depending on your workspace configuration, you might only be able to log in to SAP Signavio Process Transformation Suite through the shared link.


1. Select the link.
2. Follow the steps that you see on the screen. Your account is authenticated by a third-party application.
3. After successful login, the SAP Signavio Process Collaboration Hub launchpad opens.
4. In the top navigation bar, choose the SAP Signavio product that you need, using the  app switcher.

## Log In With Your Account Credentials

After you've created your SAP Signavio Process Transformation Suite account (see [Signing Up](#)), use your account e-mail and password to log in.

In the case that your workspace administrator has created the account for you, you received an e-mail to reset your password. When SSO is enabled for your workspace, you log in using a shared link.

1. Go to the login page:
  - <https://app-au.signavio.com>  (region: Australia)
  - <https://app-ca.signavio.com>  (region: Canada)
  - <https://editor.signavio.com>  (region: Europe)
  - <https://app-jp.signavio.com>  (region: Japan)

- <https://app-kr.signavio.com> (region: Korea)
  - <https://app-sgp.signavio.com> (region: Singapore)
  - <https://app-us.signavio.com> (region: US)
2. Enter your account e-mail and password and click *Login*.  
If you receive the error message that the login with e-mail and password is disabled, SSO is enforced for your workspace and you need to log in using a shared link.
  3. Select your workspace and choose *Login*. SAP Signavio Process Collaboration Hub launchpad opens.
  4. In the top navigation bar, choose the SAP Signavio product that you need, using the  app switcher.

## Related Information

[Customized Launchpad Sections](#)

[Subscription Settings \[page 18\]](#)

[Explorer Overview \[page 19\]](#)

[Modeling \[page 30\]](#)

[Modeling with QuickModel \[page 202\]](#)

[Search \[page 265\]](#)

[Collaboration \[page 275\]](#)

# 4 Getting Started

This chapter provides an overview of the features of SAP Signavio Process Manager.

## The Explorer

After logging in, the explorer opens in your browser. It allows you to navigate through diagrams and files stored in your workspace. Here you can create new diagrams and publish them in SAP Signavio Process Collaboration Hub or share them by other means. As SAP Signavio supports open standards, importing diagrams from other systems is easy. In the explorer, you can adjust your personal settings. Administrators can also configure workspace settings here. For details, see [Explorer Overview \[page 19\]](#).

## The Editor

The editor can be accessed by opening a diagram or creating a new one. Using the editor, you can create and edit all kinds of supported diagrams. For details, see section [Modeling \[page 30\]](#).

## QuickModel

QuickModel gives you the possibility to *create simple BPMN-diagrams in seconds* by use of a spreadsheet-like interface. Diagrams created in this application can be edited in the editor like any other diagram to add complexity or update the process. See section [Modeling with QuickModel \[page 202\]](#) for details.

## The Dictionary

[The dictionary \[page 218\]](#) allows you to manage and re-use specific modeling elements. It also allows you to ensure all your modelers are using the same terms and elements in your organization-specific modeling environment.

## SAP Signavio Process Collaboration Hub

The launchpad of SAP Signavio Process Collaboration Hub provides access to your published process landscape, see section [Your launchpad](#).

## The Diagram and Revision Comparison Tool

The diagram and revision comparison tool helps you to keep track of changes. See section [Comparing revisions \[page 65\]](#) for details.

## BPMN and DMN Simulation

You can run BPMN Simulation and DMN simulation to analyze key performance indicators and bottlenecks and apply your business decision logic directly within the tool. [The DMN Test lab \[page 151\]](#) helps you to continuously check whether your decision logic is consistent with your initial requirements. See sections [BPMN Simulation \[page 240\]](#) and [DMN simulation \[page 173\]](#) for details.

## Support

Our team is constantly improving and extending SAP Signavio Process Manager. You will find the latest version number and our release notes at [What's New](#).

*Do you have any questions?*

Contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

You can also send a support request from the editor. Go to the user menu and select [Send feedback](#) from the drop-down list.

## Related Information

[Explorer Overview \[page 19\]](#)

[Working with Folders and Diagrams \[page 26\]](#)

[Modeling \[page 30\]](#)

## 4.1 What Kind of SAP Signavio User Am I

The following sections explain the different user types of SAP Signavio Process Manager. If you already know in what way you would like to use the software, you can select the topic that is relevant for you.

## I Am a Business Process (BPMN) Modeler

Learn how to collaboratively model business processes in *Business Process Model and Notation (BPMN)* with SAP Signavio Process Manager.

In section [Business Process Modeling and Notation \(BPMN\) \[page 179\]](#), you learn how to create, edit, and work with BPMN diagrams.

## I Am a Business Decision Modeler

Use the Decision Manager to model business decisions in a structured and formalized manner all stakeholders can easily understand using the **Decision Model and Notation (DMN)**. Integrate your DMN diagrams seamlessly into your BPMN process landscape.

In the section [Decision Model and Notation \(DMN\) \[page 112\]](#), you learn about creating, editing and managing decision diagrams.

## I Am an Enterprise Architecture Modeler

Use the ArchiMate Edition to create a visual, business domain-crossing description of your enterprise architecture. Employ ArchiMate together with your BPMN process landscape.

In the section [ArchiMate](#), you learn about creating and editing Enterprise Architecture diagrams.

## I'd Like to Create a Process Diagram, but Don't Know BPMN Very Well

Learn how to use the QuickModel to create valid BPMN processes through a spreadsheet-like interface. Create your first processes in just a couple of minutes or add and maintain element attributes in a fast and well-structured manner.

In the section [QuickModel \[page 202\]](#), you learn how to use the application to quickly create BPMN diagrams.

## I Am a SAP Signavio Process Collaboration Hub User

Get to know SAP Signavio Process Collaboration Hub. View process diagrams and discuss them with your colleagues.

In the section [Your launchpad](#), you learn how to use the tool to work on diagrams together with colleagues and external stakeholders.

## I Want to Review and Approve Diagrams Before They Are Released

Make use of a Approval Workflows to ensure that diagrams have been approved by specific users or user groups before they are published in SAP Signavio Process Collaboration Hub.

In the section [Approval workflows \[page 287\]](#), you learn how to start and work with approval workflows.

## I Am a Workspace Administrator

Learn how to configure your workspace in order to get the most out of SAP Signavio Process Manager and to maximize the benefit considering the unique needs of your organization.

Moreover, learn how to integrate SAP Signavio products into your organization's IT infrastructure and enable smooth and hassle-free process, business decision and enterprise architecture documentation, utilizing your existing IT systems to the fullest extent.

As a workspace administrator, you will find information about configuring the software in the [Workspace Administration \[page 369\]](#) section of the manual.

## 4.2 The BPM Academic Initiative

The [BPM Academic Initiative](#) is a joint program of SAP Signavio and several international universities to support business process management in academic teaching and research. As part of the Academic Initiative, SAP Signavio allows students and teachers to use the academic process modeling platform at [academic.signavio.com](#) for free, given the purpose is *non-commercial* and *non-productive*.

Note the following differences between SAP Signavio's academic platform and the commercial offering:

- It is illegal to use the academic platform for commercial or productive purposes.
- All content users create on the academic platform may be made publicly available for research purposes (if requested, anonymized).
- SAP Signavio doesn't provide any performance or availability guarantees for the academic platform. SAP Signavio may deploy code to the academic platform before it is deemed mature enough for our commercial systems.
- The focus of the academic platform is process modeling. Many advanced process management and collaboration features are not available. The same applies to document uploads and interfaces for system integrations.
- While SAP Signavio generally handles requests from users of our academic platform, questions and issues of paying customers are given a higher priority. SAP Signavio doesn't commit to responding to inquiries of users of the academic platform within a specific timeframe.

If you accidentally registered for the Academic Initiative at [academic.signavio.com](#), please create a new account for one of the following systems:

- <https://app-au.signavio.com> (region: Australia)

- <https://app-ca.signavio.com> (region: Canada)
- <https://editor.signavio.com> (region: Europe)
- <https://app-jp.signavio.com> (region: Japan)
- <https://app-kr.signavio.com> (region: Korea)
- <https://app-sgp.signavio.com> (region: Singapore)
- <https://app-us.signavio.com> (region: US)

If you want to transfer your data from the academic platform to one of our production systems, proceed as follows:

Contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

## 4.3 Navigation Bar

Learn the actions you can take in the navigation bar at the top of your view.






### Check Your Location



The navigation bar displays the label of SAP Signavio Process Manager, helping you easily identify your current product. This is useful if you navigate back and forth between SAP Signavio products and workspaces.

### Check Your Available Actions

The navigation bar allows for quick access to common functions across SAP Signavio products. Each product displays a navigation bar with its own product-specific available icons.

#### Actions for SAP Signavio Process Manager

- SAP Signavio *logo*: Select the logo to navigate back to your current working product's home page.
-  (*Search*): Use the search function to find the content you're looking for.
-  (*Built-In Support*): Search the support knowledge base or create support tickets directly within the application. For more information, see [Help and Support \[page 368\]](#).
-  (*Notifications*): Check a list of your active or past notifications. For more information, see [The Notification and Activity Feed \[page 269\]](#).
-  (*Feedback*): Provide feedback regarding your experience using SAP Signavio products. You may offer feedback on the product that you are currently using by selecting the feedback button. If you wish to comment on another SAP Signavio product, navigate to that product and select the feedback button. Your feedback is invaluable in enhancing the user experience and takes only a minute of your time.
-  (*Help*): Select this icon to choose from a list of help resources.

-  (*Product Switcher*): View the SAP Signavio products you have access to and to which you can navigate. Selecting a product name opens the product in a new tab. Access *User Management* to edit your own profile or, if you are an administrator, to add, edit, or delete users and groups.
-  (*User Profile Menu*): This icon displays your own initials as the logged-in user. The drop-down menu offers the following options:
  - *Personal Settings*: Set the types of events for which you would like to receive notifications and manage cookies.
  - *Workspace*: Check which workspace you are currently using and switch to a different workspace, if needed.
  - *View in Other Applications* (when in editor) or *Process Manager Applications* (when in explorer): Navigate to different applications, such as SAP Signavio Process Collaboration Hub, *Diagram comparison* or *QuickModel*. The options you're seeing depend on your current location in SAP Signavio. The option highlighted in bold indicates where you are right now in the system.
  - *Logout*: Log out of SAP Signavio Process Manager.

#### Note

The legacy functions found in the old navigation bar, such as name editing, draft saved timestamp, and share, are now integrated in the Editor toolbar.

## Related Information

[Log In to SAP Signavio Process Manager \[page 9\]](#)

## 4.4 Frequently Asked Questions

### How can I quickly display diagrams without opening the Editor?

The fastest option is to use the diagram preview (see section [Viewing diagram details \[page 25\]](#)). Select a diagram in the Explorer and hit the space bar or use the arrow symbol at the bottom left of the main window to expand the preview section.

[Preview](#) in SAP Signavio Process Collaboration Hub allows you to quickly navigate the diagrams of your workspace. To open the preview, open the explorer and select ***Share - Preview in SAP Signavio Process Collaboration Hub***.

## How can I disable email notifications?

By default, the system informs you about every change made to a diagram you are working on in a team. There are multiple ways to disable notifications:

- Select the diagram in the explorer, open the activity feed (with the *space bar*) and choose *Don't notify me*.
- Open your profile settings under *Setup - My profile* in the Explorer and scroll down to the notification settings to adjust them.

## My browser does not display SAP Signavio's applications correctly. What can I do?

- Please ensure your browser supports SAP Signavio. Read more in section [Log In to SAP Signavio Process Manager \[page 9\]](#).
- After a system update, in rare cases it is necessary to refresh the internal storage (*cache*) of your browser. For this, open the application in your browser and use one of the following commands (depending on your operating system):
  - *Windows*: Ctrl + F5
  - *Apple*: Cmd + R
  - *Linux* (typically): F5

# 5 Subscription Settings

You can manage your subscriptions to notifications from SAP Signavio Process Manager according to your needs.

## ⓘ Note

If you've registered multiple workspaces with the same e-mail address, the settings for or information about *subscriptions* apply to the current workspace.

Parameter	Description
Subscriptions	All your subscriptions are listed here. You can delete those that are no longer needed by choosing <i>Remove</i> . By default, new users are automatically subscribed to weekly e-mail updates about changes to the <i>Shared documents</i> folder.

## Related Information

[Navigation Bar \[page 15\]](#)

## 5.1 Today's Top Tips

Today's top tip is displayed every day when you first open the explorer.

## 6 Explorer Overview

The explorer is the entry and management point of SAP Signavio Process Manager. In the explorer you can manage folders and diagrams, create new diagrams, export diagrams, generate reports, as well as publish and embed diagrams. You can also edit your subscription settings. You can access the editor, SAP Signavio Process Collaboration Hub and other functions in the software via the explorer.

From the explorer view you have access to all tools that SAP Signavio Process Manager offers.

The explorer is structured as follows:

- *View*

**The central area displays the file contents of the selected folder.**

Double-click diagrams in the editor to open them. Unread diagram comments are displayed as small speech bubbles attached to the corresponding files. You can switch between the views, [The icon view \[page 22\]](#) or [The list view \[page 22\]](#). At the bottom of the central view is the activity feed and the diagram preview.

- *Menu*

The toolbar with a drop-down menu allows you to access different functions. Read more in the section [The Explorer menu \[page 20\]](#).

- *Search function*

The search function is a useful tool to quickly find diagrams. In addition to the full text search, the advanced search option offers you a method to add specific search criteria. You can find a detailed description in the [Search functions \[page 265\]](#) section.

- *Folder tree*

The folder tree on the left allows you to quickly navigate within your workspace. Read more at [Working with folders and diagrams \[page 26\]](#).

- *Diagram details*

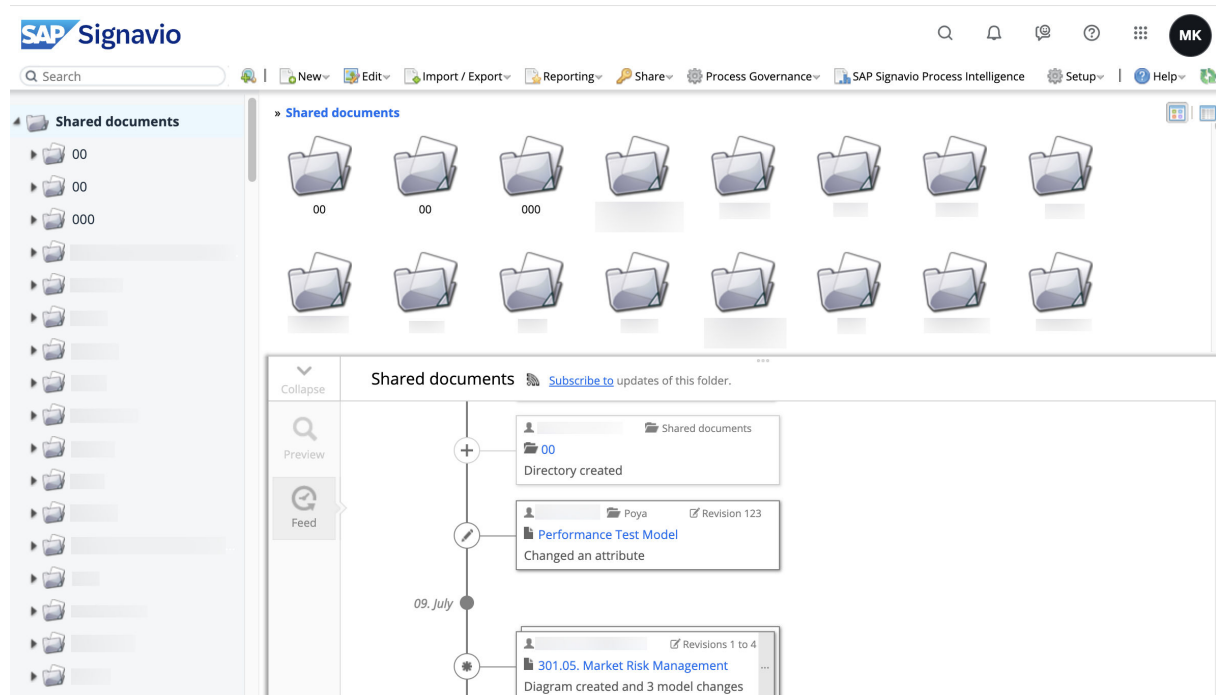
The notification and activity feed allows you to view and manage the history of a diagram and to modify notification settings of diagrams and folders. By pressing the space bar you can open the preview panel (see [Viewing diagram details \[page 25\]](#)) and the version overview (see [The notification and activity feed \[page 269\]](#)) of a diagram at the bottom.

- *Subscriptions*

You can manage your subscriptions, for details see section [Personal profile settings \[page 18\]](#).

## 6.1 The Explorer Menu

Learn how to organize your content in a folder structure using the Explorer.



### New

In the dropdown menu *New*, you can create new folders and diagrams. The new folder is created at the location that is currently open in the explorer. If you create a new diagram, a blank canvas opens in the editor in a new tab. The menu item *QuickModel* opens a new BPMN 2.0 diagram in QuickModel.

### Edit

Here, you can open the editor or QuickModel to edit diagrams, simulate BPMN (see [BPMN Simulation \[page 240\]](#)) and DMN (see [DMN simulation \[page 173\]](#)) diagrams and test DMN diagrams ([The DMN Test lab \[page 151\]](#)). To gain an overview of activities about a specific diagram you can display comments on diagrams in SAP Signavio Process Collaboration Hub and compare versions of diagrams (see [Comparison \[page 65\]](#)). The folder content currently displayed in the explorer can be moved, copied, deleted, and renamed. BPMN 1.2 diagrams can also be migrated to the newer BPMN 2.0 format.

## Import/Export

You can import and export files. This means you are able to upload files to your workspace and also download diagrams from your workspace onto your computer in different formats.

## Reporting

The *Reporting* menu allows you to create different kinds of reports about diagrams. This enables you as a business user to analyze your process hierarchy offline with decision makers and analysts, regardless of your familiarity with BPMN modeling.

To view and export reports analyzing your workspace and process model usage, see section [Process Model Dashboards](#).

## Share

With the *Share* menu, you can publish diagrams to SAP Signavio Process Collaboration Hub and share documents in a variety of ways with your colleagues.

## Process Governance

[Approval workflows \[page 287\]](#) are evaluating processes that diagrams have to go through before they are automatically published to SAP Signavio Process Collaboration Hub. You can start approval workflows as well as edit published diagrams. Approval workflows are managed and executed in SAP Signavio Process Governance. If you are interested in further functionalities of SAP Signavio Process Governance, you can get more information here: <https://www.signavio.com/products/process-governance/> .

## Invitations to comment/edit

You can invite modelers to edit. You can also use it to invite SAP Signavio Process Collaboration Hub users and external stakeholders to comment on diagrams.

## Invite to comment

You can invite anyone to comment on a diagram - all you need is their email address. Everyone you invited receives an email. Anyone you invite who is not already a member of your workspace needs to register and is assigned a commenting license.

## Invite modeler to edit

You can invite modelers registered in your workspace to edit a diagram. As all modelers are able to edit all diagrams in the *Shared documents* folder by default, this function serves as *notification* to let fellow modelers know a diagram needs their attention. You can clarify the reason why you are pointing a modeler towards a certain diagram by editing the text of the email in the invitation dialog. The link you send leads directly to the diagram, open and ready to be edited.

The option to *Invite to edit diagram in QuickModel* follows the same basic concept, only instead of the Editor, the link leads to the diagram in *QuickModel* [page 202].

## Invite to SAP Signavio Process Collaboration Hub

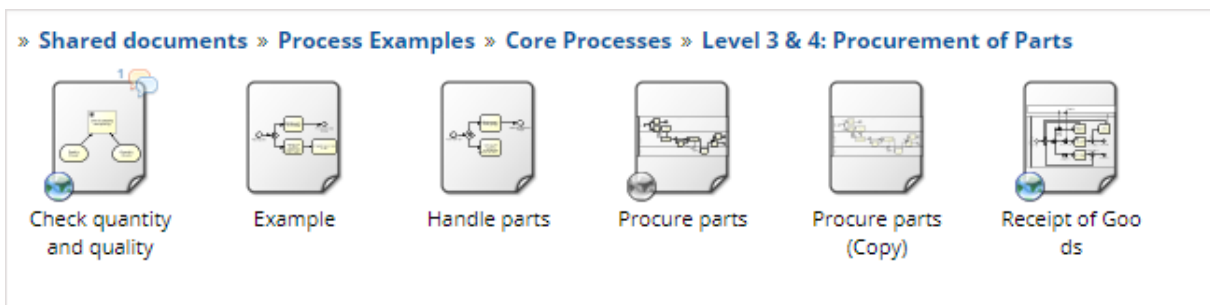
If you select this option, you can send an invitation to any e-mail address.

## Embed diagram

With the dialog that opens, you can embed the corresponding diagram into external systems (see *Embedding diagrams in external systems* [page 361]).

## 6.2 The Explorer View

### The Icon View



In this view, diagrams and folders are represented as icons. For diagrams, a small preview is provided that allows you to find the diagram you're looking for faster.

Details about a selected diagram can be found at the bottom of the Explorer in the activity panel (see *Viewing diagram details* [page 25]).

When working on diagrams collaboratively (in SAP Signavio Process Collaboration Hub, for example), you can comment on diagrams and diagram elements. Unread comments that were created by users who aren't members of your workspace are marked with a little speech bubble symbol in the Explorer.



Purchase requisiti  
on-to-order

### Unread Comments Are Also Displayed in the Icon View

To view your colleagues' comments, open the respective diagram in the Editor. To read more about commenting, go to section [Comments \[page 283\]](#).

## The List View

» <a href="#">Shared documents</a> » <a href="#">Process Examples</a> » <a href="#">Core Processes</a> » <a href="#">Level 3 &amp; 4: Procurement of Parts</a>				
Name	Description	Revision	Last change	Last author
Check quantity and quality		1	2 years ago	System
Example		1	2 years ago	Paula Process
Handle parts		1	2 years ago	Paula Process

Diagrams and folders are listed along with additional information about each file. Selecting an element activates the diagram preview in the preview panel at the bottom if the panel is extended.

Choosing the title of a row sorts the elements by the selected column.

## Managing the List View

You can individually configure which of the diagram attributes are shown as columns in the table view. All attributes on diagram level and the attributes **Revision** , **Last Change** , **Last Author** and **Published** are available.

To configure the list view, proceed as follows:

1. Choose [Setup](#) , then [Edit general configuration](#) . A dialog box opens.
2. In the [Explorer](#) section, you can edit the table columns preferences. Choose [Add attribute](#) to add another attribute to the list view.

**Table Columns:**  
Select the diagram attributes to be shown as columns in the table view of the explorer. After changing this value, the application will be reloaded.

Attribute	Width	
Name	200 px	↓
Description	200 px	🗑️ ↑ ↓
Revision	60 px	🗑️ ↑ ↓
Last change	100 px	🗑️ ↑ ↓
Last author	50 px	🗑️ ↑

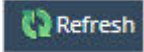
+ Add attribute

You can rearrange the order of the attributes using the arrow icons and configure the size and the position of the attribute column. To delete an attribute from the list view choose the *trash* button.

3. Choose *Save* to save your settings. The list view is updated with the attributes you've configured.

## Refreshing the Explorer View

After saving a diagram in the editor (after renaming it, for example), the explorer view is not up-to-date anymore.

You can refresh the explorer manually: Reload your browser window or use the *Refresh*  button in the top-right corner of the explorer.





### → Tip

Refresh regularly to stay current with changes from other users.

## Display of the Current Path

In both the list and in the icon view, you see the file path on top of the list. If you want to jump to a parent folder, choose the corresponding folder name.

The following example shows how to jump back to the *Shared documents* folder:

» Shared documents » Process Examples » Core Processes » Level 3 & 4: Procurement of Parts	
Name	Description
 Check quantity and quality 	
 Example	
 Handle parts	

## 6.3 Viewing diagram details

The notification and activity feed allows you to view and manage version history, and to edit notification settings for diagrams and folders. If you have selected one or more diagrams or folders, the feed is displayed as a lower bar in the Explorer. When you select a diagram file, the diagram, along with the date and author of the most recent changes, is displayed:

The screenshot displays the SAP Signavio Explorer interface. At the top, there is a breadcrumb navigation: » Shared documents » User assistance examples. Below this is a gallery of diagram files, including 'Build process', 'New process' (which is selected and highlighted with a blue border), 'Process A', 'Process B', 'Process C', 'Process D', and 'Process E'. A second row contains 'Value Chain No. 1, revised', 'Value Chain No. 2', 'Collaboration-Hub-User-Gu...', 'previewch', and 'text'. Below the gallery, a detailed view of the 'New process' diagram is shown. The view includes a 'Collapse' button, the title 'New process', a 'Subscribe to updates of this model.' link, and a timestamp '3 seconds ago' by 'Paula Process'. The diagram itself is a simple flowchart with a start node labeled 'Today' and a task node. The activity feed on the right shows two entries: one from 'Today' by 'Paul...' with the action 'Added an element and cha...' (Revision 2), and another from '01. September' by 'Paul...' with the action 'Diagram created' (Revision 1).

### Notification settings

As soon as changes to a diagram or folder are made, notifications are sent at configurable intervals as emails. In the notification and activity feed, you can configure the notification settings of the selected diagrams or folder.

The following options are available:

- daily
- weekly
- monthly

- cancel subscription

## Preview and version history

The activity feed allows you to get a preview of the selected diagram and to view and manage the version history. You can find detailed information about this feature in the section [The notification and activity feed \[page 269\]](#).

## 6.4 Working with Folders and Diagrams

Folders allow you to organize and structure your workspace, even if you have a large number of diagrams.

Diagrams placed in *Shared documents* can be viewed and edited by all users of a workspace. Workspace administrators can enable the *My documents* folder, which is private. Other users can't view or edit this folder.

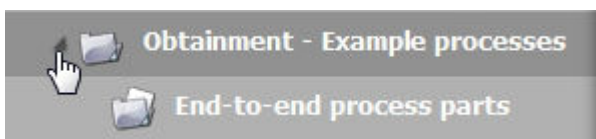
Notes on working with multiple users and workspaces can be found in the section [Manage Users and Access Rights](#).

### The Folder Structure

The main workspace folder is *Shared documents*. The *My documents* folder can additionally be enabled by a workspace admin.

Within these folders, you can create subfolders to organize your diagrams.

Choosing the *arrow* next to the folder/s name or on folder/s name itself will collapse or extend the folder. This way, you can quickly switch between folders and still keep track, even if you have an extensive folder structure.



Expand or collapse a folder by choosing the arrow in front of its name

If the name of a folder is cut off due to the width of the folder column, the full name will appear when hovering over it with your mouse. You can also extend the folder column by dragging its border line to the right.

### The Shared Documents and My Documents Folders

#### ⓘ Note

Workspace administrators can choose to disable the *My documents* folder for every user in the workspace. This prevents documents from being inaccessible. It also fosters collaboration by restricting drafts to

*Shared documents*. For new tenants, the folder *My documents* is disabled by default. The folder can be enabled by an administrator under ► [Setup](#) ► [Edit general configuration](#) ►.

Users can move diagrams from one folder to another.

## Shared Documents

Each registered user has a main folder: *Shared documents*.

This folder contains diagrams you can work on alone and together with other modelers.

There are two ways to collaborate with colleagues: joint modeling within your workspace, and inviting colleagues to comment on diagrams.

- Only colleagues who are registered in your workspace are able to actually edit diagrams. Find out more about defining access rights to diagrams and the dictionary in section [Manage Access Rights](#).
- Each person invited to comment on a diagram is able to do so - also those who have no SAP Signavio Process Manager account. In the section [Sharing a Diagram from the Explorer \[page 278\]](#), you will learn how to invite process stakeholders to comment on a diagram.

## My Documents

Workspace administrators can enable the *My documents* folder for all users under [Setup > Edit general configuration](#). Diagrams in this folder and its subfolders are private. Other users can't view or edit them.

## Creating a New Folder

To create a new folder, proceed as follows:

1. If you want to create a subfolder, first navigate to the folder in which you want to locate the new folder.
2. In the menu bar, choose ► [New](#) ► [Folder](#) ►. A dialog pops up, in which you can enter the folder name.
3. Specify the folder name and then choose [OK](#). The new folder is now visible in the folder structure.

## Renaming a Folder or Diagram

1. In the Explorer select the folder or diagram you want to rename.
2. In the main menu choose ► [Edit](#) ► [Change name/description](#) ►.
3. Change the name. In multi-language workspaces translate the changed name to all available languages.
4. Choose [Rename](#) to save your changes.

## Moving Folders and Diagrams

### Note

To move published folders and diagrams, you need *publish* access rights on the published elements and on the target folder.

1. Select the folder or diagram you want to move to a different location.
2. In the menu bar, choose **Edit > Move**. The corresponding dialog box opens.
3. Now select the new folder.
4. Choose *Move* to complete the moving operation. The view of the folder will then be updated.  
If you don't have *publish* access rights on the published elements and on the target folder, the following dialog opens:
5. Finally, choose *Move*. The folder or diagram is moved to the selected location.

## Copying Diagrams

### Note

You can only copy diagrams and groups of diagrams, not entire folders.

1. Select the diagram you want to copy. To copy several diagrams at once, hold the *Ctrl* key while selecting them. Or, draw a selection frame around the diagrams.
2. In the menu bar, choose *Edit* and then *Copy*. The *Copy* dialog opens.
3. Select which folder you'd like to place the copy in.
4. Optionally, you can select one of the following options by activating the corresponding checkbox:
  - *Copy linked models, too* Please note that BPMN call activities are not copied.
  - *Copy all revisions of the diagram*.

### Note

For system performance reasons, only one option can be selected.

1. Choose *Copy*. The copied file is then located in the selected target folder.

## Removing Folders or Diagrams

1. Select the folder or diagram to be removed in the main area of the explorer. To select multiple folders, keep *Ctrl* pressed while selecting, or drag a selection frame around them.
2. In the menu bar, choose **Edit > Delete**.
3. Choose *Yes* to delete the selected object.

### Note

The selected objects are moved only in *Trash*, from which you can restore objects if necessary. Objects will be permanently deleted after you empty the trash.

4. To delete objects permanently, select the *Trash* folder in the folder navigation.
5. Select the objects you want to delete permanently.
6. In the menu bar, choose *Remove*.
7. Confirm by choosing *Yes*. The selected items are permanently deleted.

## Restoring Diagrams and Folders

Diagrams and folders that have been deleted are moved to *Trash* folder. If you do not explicitly remove them from there, they can be restored.

To restore a diagram or folder from the *Trash* folder, proceed as follows:

1. Go to the *Trash* folder. It can be found in the folder tree on the left.
2. Select the files you want to restore.
3. Choose *Restore* in the menu bar.

# 7 Modeling

This section explains how you create models in all notations in the following sections:

- [Create a diagram \[page 180\]](#)
- [Open and save diagrams \[page 38\]](#)
- [Editor toolbar and keyboard shortcuts \[page 40\]](#)
- [Add and remove elements \[page 42\]](#)
- [Move and change elements \[page 47\]](#)
- [Format diagrams \[page 53\]](#)
- [Use modeling conventions \[page 55\]](#)

For information about modeling with specific notations, see section [Modeling notations \[page 75\]](#).

## 7.1 Create a Diagram

In the SAP Signavio Process Manager editor, you model BPMN processes, value chains, DMN diagrams, and more.

New diagram files are created in the explorer. You edit diagrams in the editor.

To create a new diagram, follow these steps:

1. In the explorer, select *New* and choose a modeling notation from the drop-down list.  
The editor opens with a blank canvas.
2. In the left side panel, under *Shapes*, drag and drop the elements you want to use in your process.

### Note

Each modeling notation has different shapes you can choose from. For instructions on how to create a diagram based on its notation, please refer to the relevant topics under [Modeling Notations \[page 75\]](#)

3. Save your diagram by selecting  (*Save*) in the editor toolbar.

## Related Information

[Model a BPMN Diagram \[page 75\]](#)

[Value Chains \[page 176\]](#)

[Navigation Maps \[page 194\]](#)

## 7.1.1 AI-Assisted Process Modeler

AI-Assisted Process Modeler is a tool that allows you to transform written descriptions into visual workflows, save and refine generated diagrams directly in the tool, and enable continuous improvement. This feature helps you to save time, simplify complex processes, and promote faster collaboration.

Select the links below to learn more about each topic.

### [Prerequisites for AI-Assisted Process Modeler \[page 31\]](#)

The necessary licenses, administrative actions, and feature activation required to use AI-assisted process modeler capabilities. Understanding these requirements ensures proper setup and access to AI-assisted process modeler.

### [Creating a BPMN Model Using Text Input \[page 32\]](#)

Use AI to create a BPMN model (diagram) from a text description of a business process.

### [Tips for Text Input to Create a Model \[page 34\]](#)

Discover some tips to ensure you get the best model (diagram) output when describing the process you want to create.

### [Dictionary Entries in AI-Assisted Process Modeler \[page 36\]](#)

Use **AI-assisted process modeler enhancements, dictionary integration** feature to link dictionary entries to process model elements while reviewing the generated model (diagram).

### 7.1.1.1 Prerequisites for AI-Assisted Process Modeler

The necessary licenses, administrative actions, and feature activation required to use AI-assisted process modeler capabilities. Understanding these requirements ensures proper setup and access to AI-assisted process modeler.

For using AI-assisted process modeler, you need to meet the criteria specified in the prerequisites below.

- You have an SAP Signavio Process Manager license, which allows you to access the SAP Signavio Process Manager editor. For more information, reach out to your workspace administrator.
- Your workspace administrator submitted a one-time provisioning request for the connectivity add-on for SAP Signavio solutions. For more information, see [Provisioning for AI-assisted process modeler, text to process](#).
- Your workspace administrator has read and agreed to the [data protection and privacy](#) policy, which includes data protection in AI and cross-border data transfer.
- Your workspace administrator created an [SAP for Me](#) ticket with the BPI-SIG-CA-AI-T2P label to request the AI-assisted process modeler to be enabled. Once enabled, your workspace administrator must activate this capability for the users. For more information, see [Activate Embedded AI Capabilities and Assign Users](#).
- Your workspace administrator activated the feature set to create and edit BPMN processes for your user to be able to edit models (diagram) and create new revisions, as described in [Activating Feature Sets](#).

## Related Information

[Creating a BPMN Model Using Text Input \[page 32\]](#)

### 7.1.1.2 Creating a BPMN Model Using Text Input

Use AI to create a BPMN model (diagram) from a text description of a business process.

#### Context


With **AI-assisted process modeler**, you can reduce work and enable faster collaboration cycles by converting text into a business process model. You can preview the model and edit the text to create a new model, if needed.

Make further adjustments to the model in SAP Signavio Process Manager editor and save as subsequent revisions.

#### Note

The text to process feature can only create **new** BPMN models.

#### Procedure

1. In SAP Signavio Process Collaboration Hub, choose *Create* and select  *Create with AI* from the drop-down.
2. In the *Select a folder* window, choose a location to store the model and confirm with *Create*.

For the initial use of the text to process feature, a window with a welcome message opens. You can select the option to not show the message again or clear the message by choosing *Start Using*.

3. In the *Create a process* field, write or paste text that follows these instructions:
  - Clearly define the process that you want to model, including its objectives and outcomes.
  - Describe each activity or task in the process.
  - Determine the start and end points of the process, as well as any key milestones.
  - Avoid using personal data.

#### Note

- The character limit for the text is 50000 characters.
- You can enter the process description in any of the languages supported by SAP Signavio and the corresponding model appears in the same language.
- We support the following languages: English, Dutch, German, French, Simplified Chinese, Traditional Chinese, Japanese, Korean, Spanish, Portuguese (Brazil), and Italian.

4. Choose  **Create**.

The model preview window opens. From the preview window, you can do the following:

- **Review dictionary links:** If the generated model includes process elements containing terms that match dictionary entries in your workspace, you see a list of those entries below the model. Review the list and decide which elements you'd like to link to existing entries in the dictionary. For more information, see [Dictionary Entries in AI-Assisted Process Modeler \[page 36\]](#).
- Zoom in and out of the model to see it more clearly.
- Choose to show or hide a mini map of the model.

#### Note

If an error message appears stating that the system was unable to create a model or if you wish to create a new model, edit your text and try again.

The default formatting settings apply to the model, but you can modify them in the next step. For more information about formatting, see [Format models](#) in the *SAP Signavio Process Manager User Guide*.

5. Review the model and choose **Save and Edit**.

#### Example

See how this example text converts to BPMN elements.

## Results

The model opens in the SAP Signavio Process Manager editor.

Documentation for the entire process and each individual task within the model are added automatically in the editor. You can view the documentation for the following:

- Entire process: Select **Attributes** from the right-side panel and check the **Documentation** field in the **Main Attributes** section.
- A specific task: Select the task in the model and review the **Documentation** field again.

#### Note

You can review, edit, or remove this information.

This documentation helps you access the most essential information about the model in textual format, without cluttering the model itself.

You can review the information and choose to save the model using the toolbar. For more information, see [Open and Save Diagrams](#).

### 7.1.1.3 Tips for Text Input to Create a Model

Discover some tips to ensure you get the best model (diagram) output when describing the process you want to create.

When creating a model with AI, the text input field invites you to enter a description of the business process.

For more information on the creation steps, see [Creating a BPMN Model Using Text Input \[page 32\]](#).

The BPMN model result is based on the content provided in the text input field. Consider the following tips for the best results.

Tip	Explanation
Use active voice.	<ul style="list-style-type: none"><li>• Avoid using the passive voice: "HR is notified and initiates the off-boarding process."</li><li>• Use the active voice: "The employee notifies HR, which then initiates the off-boarding process."</li></ul>
Be specific about the subject and object of a sentence.	<p>Using the active voice causes you to specifically mention both the subject and the object of the sentence.</p> <ul style="list-style-type: none"><li>• Avoid letting an implied subject do the action: "The employee's manager is informed."</li><li>• Use the active voice to specifically name the subject and the action: "HR informs the employee's manager."<ul style="list-style-type: none"><li>• Alternatively, if the passive voice is used, name the subject from which the action initiated: "The employee's manager is informed by HR."</li></ul></li></ul>
Keep consistency in the naming of roles and entities.	<p>Follow consistent naming for roles that participate in a business process. For example, avoid referring to the role of the "manager" later as "supervisor". Stick to one identification or name for the initial creation of the model, which can be later modified in the Editor.</p> <p>This tip applies to any other entity such as <i>IT-system</i> or <i>Data Object</i>. Avoid using synonyms for the same entity in the same process description. For example, don't use the term "vendor" and later "supplier" for the same entity in the same process description.</p>
Focus on repetition over AI guesswork.	<p>Repeatedly mentioning a role's name is more effective than letting AI infer whether the role participates in the process activities or not.</p>
Be specific and consistent with entities that are connected to a named activity of the process.	<p>If an entity is connected to a process activity, specifically mention that entity while writing about the activity in the process description.</p> <ul style="list-style-type: none"><li>• Avoid using a shortened form of an entity: "An interview is then arranged on teams."</li><li>• Use the entity's established form consistently: "The manager then arranges an interview with the employee on Microsoft Teams."</li></ul>

Tip	Explanation
Avoid adding unnecessary details.	Keep the description clean, clear, and concise. Including details that aren't critical to the core business process and its flow can result in the creation of unnecessarily complex process models.
Clearly emphasize the start and end events of the process.	<p><b>Start event:</b> Specifies the trigger of the first process activity, it doesn't refer to an activity that is within scope of the process. Start events are usually indicated with phrases like:</p> <ul style="list-style-type: none"> <li>• "The process begins when . . ."</li> <li>• "The process starts with . . ."</li> <li>• "Once the admin enters the . . ."</li> </ul> <p><b>End event:</b> Specifies the final outcome of the process. Clearly indicate the end of a process with sentences like:</p> <ul style="list-style-type: none"> <li>• "The process ends when the final report is generated."</li> <li>• "The process concludes with the submission of the completed form."</li> <li>• "In the end, you receive a confirmation email."</li> <li>• "As a result, system sends confirmation email."</li> </ul>
Add instructions to create the model and specify elements you wish to exclude.	<p>You can enter additional prompts to explore models that reflect the information you'd like to view, such as suggesting which elements can be excluded from a process. For example:</p> <ul style="list-style-type: none"> <li>• "Exclude IT Systems or data objects in the model."</li> <li>• "Make it simpler, exclude IT Systems."</li> </ul>

## Sample Texts

### Payroll

The process starts when a payroll data alert is assigned. First, the agent assesses the alert. Then, if the alert does not require a data change, the agent provides a comment and closes the alert. The process ends with the alert having been processed. If, after assessing the alert, the alert requires data change, the agent aligns with the line manager and/or employee, checks if the data needs to be updated in the source system, and checks if the data needs to be updated in the source system. If the data does not need to be updated in the source system, the agent corrects the payroll-specific data, provides a comment, and closes the alert. Then, the process ends with the alert having been processed. If, after checking if the data needs to be updated in the source system, the data does need to be updated, the agent aligns with the source system administrator, corrects the payroll-specific data, provides a comment, and closes the alert. Then, the process ends with the payroll data alert having been processed.

### HR – Recruitment Process

The process begins with the HR expert scheduling an interview. Then after some time, the hiring manager and HR expert conduct the interview. Together, the hiring manager and the HR expert decide on the candidate prioritization. In parallel, the HR team checks the candidate's criminal record against the criminal database

as well as the employment register to ensure that the candidate's previous employments were in fact correct. Then finally, the process concludes once the candidate is hired.

## Sales Process

The process begins when the sales team records incoming sales orders received via email, phone, or online platforms. The sales team then review each order for completeness and verify it against current inventory to confirm product availability. If the products are in stock, the sales team forwards the order to the warehouse team for picking and packing. The warehouse team arranges shipping to ensure timely delivery. Throughout the process, the sales team updates the order status in the system and communicates progress to the customer. The process ends when the order is successfully delivered and the customer receives the final confirmation.

### 7.1.1.4 Dictionary Entries in AI-Assisted Process Modeler

Use **AI-assisted process modeler enhancements, dictionary integration** feature to link dictionary entries to process model elements while reviewing the generated model (diagram).

The dictionary feature in **AI-assisted process modeler**, allows you to link dictionary entries to process model elements while reviewing the created diagram. For more information about the creation process, see [Creating a BPMN Diagram with AI-Assisted Process Modeler](#).

The model preview window contains a section at the bottom that's meant for you to check the dictionary links. In this section, you can see the following:

- **Identified entry**: Contains a list of model elements (including events, systems, and more) that are exact matches to existing dictionary entries in your workspace.
- **Linked to**: Displays the type (as an icon) and the name of the existing dictionary entry to which the identified element is linked.
- **Category**: Specifies the category of the entry. It includes both the standard categories and any custom categories that you've created.

#### Note

Dictionary terms are identified based on an exact match of the name and type of entries.

To link the entries in the model to your dictionary, follow these steps:

1. From the model preview window, review the identified entries or elements to check which ones you wish to link to your dictionary entries.

#### Note

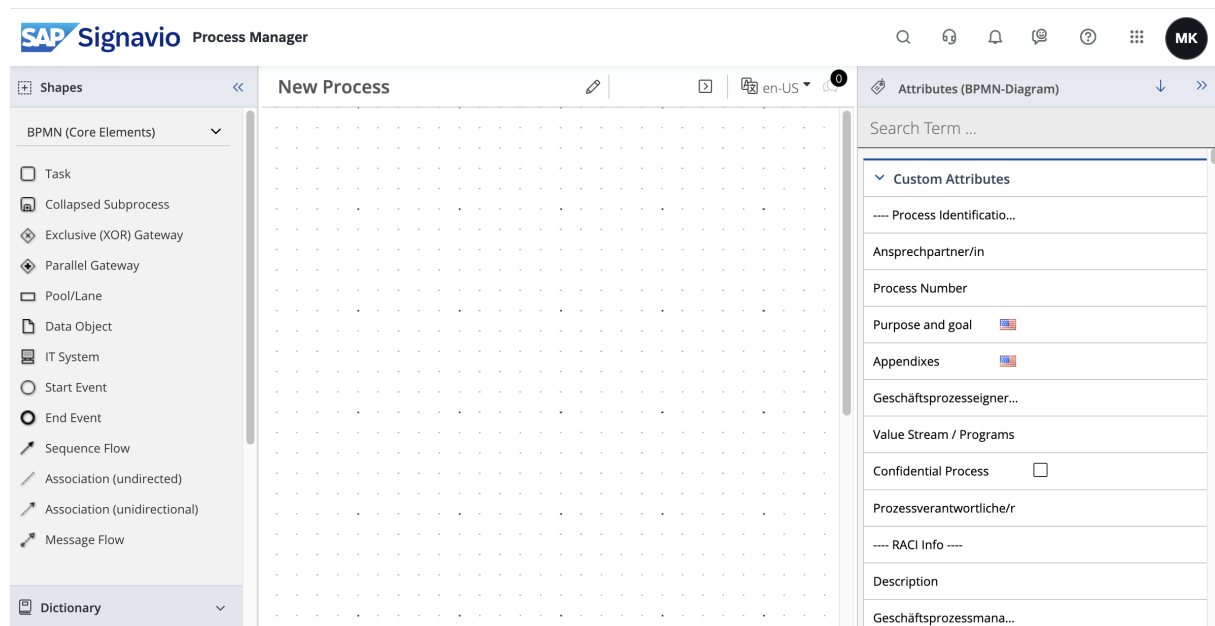
All the identified entries are pre-selected for linking by default. Uncheck any entry that you don't want to link to your dictionary.

2. (Optional) Get more details about the existing entry, including its definition, by selecting the entry under the **Linked to** column. It navigates you to the **Attributes** tab of the specific dictionary entry in SAP Signavio Process Collaboration Hub.
3. Save your changes.

## 7.2 Editor Overview

Get an overview of the SAP Signavio Process Manager editor. In the editor, you model BPMN processes, value chains, DMN diagrams and more.

The editor is the place where you design, edit, and format diagrams. You can also perform checks on your diagrams. This overview can help you find the functions you need.



- [Editor Overview \[page 37\]](#)
- [Editor Overview \[page 37\]](#)
- [Editor Overview \[page 37\]](#)
- [Editor Overview \[page 37\]](#)
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Element	Description	More Information
Shapes	Contains all modeling elements available for a notation.	<a href="#">Add elements from the shape repository [page 42]</a>

Element	Description	More Information
Toolbar	Tools to edit and format diagrams.	<a href="#">Editor toolbar and keyboard shortcuts [page 40]</a>
Canvas	The area on which you design and edit diagrams.	<a href="#">Move and change elements [page 47]</a>
Attributes	Edit attributes of your modeling elements.	<a href="#">Edit attributes [page 47]</a>
Share	Invite users to comment on the diagram.	<a href="#">Sharing a Diagram from the Explorer [page 278]</a>
Product Switcher	Navigate to other SAP Signavio products that you're allowed to access.	<a href="#">Navigation Bar [page 15]</a>
Help	Choose from a list of help resources.	<a href="#">Navigation Bar [page 15]</a>
User Profile Menu	View the current workspace, change the editing mode, or log out of SAP Signavio Process Manager.	<a href="#">Navigation Bar [page 15]</a>
Dictionary	Reuse modeling elements.	<a href="#">The Dictionary [page 218]</a>
Views	Create and edit views.	<a href="#">Creating views [page 92]</a>

## 7.3 Open and Save Diagrams

Learn how to open diagrams in the explorer of SAP Signavio Process Manager, save diagrams, run modeling convention checks, and restore an older version of a diagram.

In SAP Signavio Process Manager, you open diagrams in the explorer. You edit diagrams in the editor.

### Open a Diagram

1. Open the explorer and navigate to the diagram.
2. Select the diagram and choose **► Edit ► Edit diagram ►** in the explorer menu. The diagram opens in the editor in a new browser tab.


### Save a Diagram

While you keep the editor browser tab open, your changes are saved automatically in the background. When you save the diagram, you create a new diagram revision.

All items related to a diagram by links are listed when you save a diagram.

To save a diagram, follow these steps:

1. Choose  (Save) in the toolbar.

2. When you save a diagram for the first time, enter a descriptive name and select the directory for saving the diagram.  
You can edit the diagram name later.
3. Add a comment about your current changes.  
Adding comment helps other modelers and collaborators to understand and track your changes. Your comments are shown in the feed in the explorer.
4. Depending on the modeling notation, you can open the modeling convention checks by choosing  **Review** (*Review*). This closes the *Save* dialog.  
You can save the diagram with errors and warnings.
5. Choose *Save*.  
A new revision of the diagram is saved.

## Restore Older Revisions of a Diagram

You can restore a previous revision of a diagram in the activity feed.

Follow these steps:

1. Select a diagram.
2. Choose *Expand* in the bottom panel of the explorer. Alternately, you can press the space bar.  
The panel expands, showing a preview of the diagram.
3. To access previous revisions, choose *Feed*. The activity feed is displayed.
4. Select the revision you want to restore and choose *Restore revision*.
5. Add a comment and confirm in the dialog.  
The previous revision is restored.

## Related Information

















[Work with Modeling Conventions \[page 55\]](#)












[Compare Revisions \[page 65\]](#)

## 7.4 Editor Toolbar and Keyboard Shortcuts

A reference table containing all the options available in the editor toolbar. To see all the icons, select the arrow to the right, next to the workspace language button.

### Editor Toolbar

	Edit the name of the diagram
	Save diagram <i>Save a copy:</i> You can save the diagram as a copy. The copy is saved in the same directory as its original.
	Export diagram as PDF
	Share the diagram with your colleagues
	Cut selected elements to clipboard
	Copy selected elements to clipboard
	Paste clipboard to canvas
	Delete selected elements
	Undo/ Redo
	Align modeling elements, distribute elements, adjust size of elements to match
	Show or hide the grid on the canvas
	Adjust space between modeling elements
	Zoom in/out of the canvas
	Reset the canvas to its default size
	Fit the diagram to the canvas size
	Change font size in elements

	Bold
	Italic
	Change font color
	Change line color of modeling elements
	Change fill color of modeling elements
	Remove current formatting
	Apply formatting to other elements
	Show all elements with attachments
	Select attribute visualizations (overlays)
 en-US ▾	Change workspace language
	Show all comments

## Keyboard Shortcuts

	Shortcuts for Windows	Shortcuts for Mac
<b>Open diagram</b>	In the explorer, double click the diagram name	In the explorer, double click the diagram name
<b>Open diagram preview</b>	In the explorer, select the diagram and press <i>Space</i>	In the explorer, select the diagram and press <i>Space</i>
<b>Save diagram</b>	<i>Ctrl + S</i>	⌘ + S
<b>Copy selection</b>	<i>Ctrl + C</i>	⌘ + C
<b>Paste selection</b>	<i>Ctrl + V</i>	⌘ + V
<b>Cut selection</b>	<i>Ctrl + X</i>	⌘ + X
<b>Delete selection</b>	<i>Del</i>	<i>Del</i>
<b>Undo</b>	<i>Ctrl + Z</i>	⌘ + Z
<b>Redo</b>	<i>Ctrl + Y</i>	⌘ + Y

	Shortcuts for Windows	Shortcuts for Mac
<b>Zoom</b>	Press <b>Ctrl</b> + <b>+</b> to make everything larger Press <b>Ctrl</b> + <b>-</b> to make everything smaller Press <b>Ctrl</b> + <b>0</b> to reset	Press <b>⌘</b> + <b>+</b> to make everything larger Press <b>⌘</b> + <b>-</b> to make everything smaller Press <b>⌘</b> + <b>0</b> to reset
<b>Full-screen</b>	Press <b>F11</b> to use full-screen mode, press <b>F11</b> again to exit full-screen mode	Press <b>⌘</b> + <b>Ctrl</b> + <b>f</b> to use full-screen mode, press <b>⌘</b> + <b>Ctrl</b> + <b>f</b> again to exit full-screen mode
<b>Resize element</b>	Hold <b>Ctrl</b> and drag the element connector to resize in all directions Hold <b>Shift</b> and drag the element connector to resize proportionally Hold <b>Alt</b> and drag the element connector to resize without snapping	Hold <b>⌘</b> and drag the element connector to resize in all directions Hold <b>Shift</b> and drag the element connector to resize proportionally Hold <b>Alt</b> and drag the element connector to resize without snapping
<b>Move elements</b>	Hold <b>Alt</b> or <b>Ctrl</b> while moving an element to move without automatic snapping or orientation lines Hold <b>Shift+Alt</b> or <b>Shift+Strg</b> to move an element along a horizontal or vertical line, without displayed orientation lines	Hold <b>Alt</b> or <b>⌘</b> while moving an element to move without automatic snapping or orientation lines Hold <b>Shift+Alt</b> or <b>Shift+Strg</b> to move an element along a horizontal or vertical line, without displayed orientation lines
<b>Adjust space between elements</b>	Press <b>Ctrl</b> + <b>M</b> and add or remove space, press <b>Ctrl</b> + <b>M</b> again to deactivate	Press <b>⌘</b> + <b>M</b> and add or remove space, press <b>⌘</b> + <b>M</b> again to deactivate
<b>Select elements of the same type</b>	Select one or more elements and press <b>Ctrl</b> + <b>I</b>	Select one or more elements and press <b>⌘</b> + <b>I</b>

## Related Information

[Format Diagrams \[page 53\]](#)

## 7.5 Add and Connect Elements

How to add elements to a diagram from the shape repository or the interactive shortcut menu, pools, lanes, and gateways. How to connect elements with sequence flows and message flows.

You have the following options to add elements to a diagram:

- You can drag elements from the shape repository onto the canvas.
- You can use the interactive shortcut menu when you click an element on the canvas.

- You can copy and paste elements.

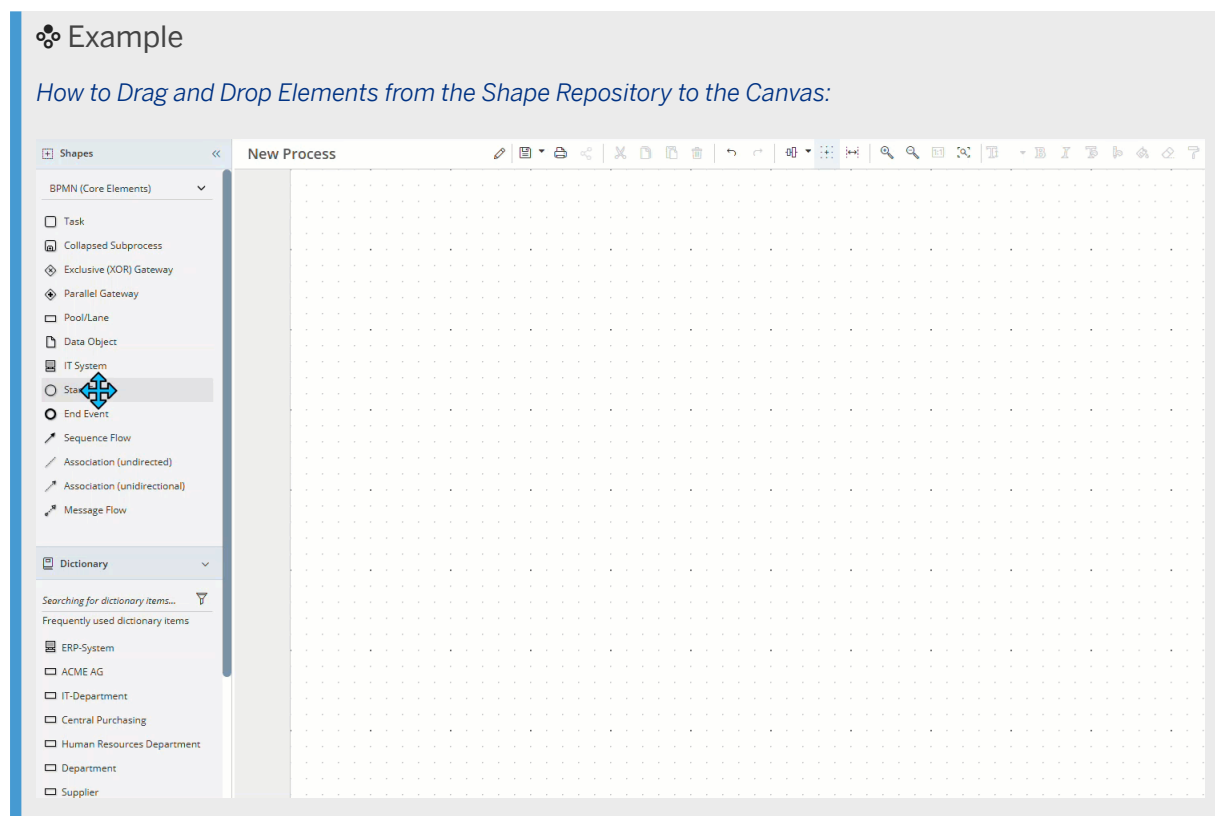
## Add Elements from the Shape Repository

The shape repository in the left panel of the editor lists all modeling elements available for a notation. For notations with lots of elements, elements are grouped into subsets. To change subsets, choose the current subset and select a different subset from the drop-down list.

In a subset, elements are grouped thematically.

To add an element, follow these steps:

1. Choose the element you want to add to your diagram.
2. Hold the mouse button and drag the element onto the canvas. Green ✓ (*checkmarks*) indicate where you can place an element.
3. To label an element, select the element and enter the label text in the text box.  
The label is saved when you choose outside the text box. Available dictionary entries are suggested while you type.



## Add Elements from the Interactive Shortcut Menu

### Note

Which elements are shown in the interactive shortcut menu depends on the selected subset of modeling elements. If you miss an element in the shortcut menu, check which set of modeling elements is selected in the shape repository.

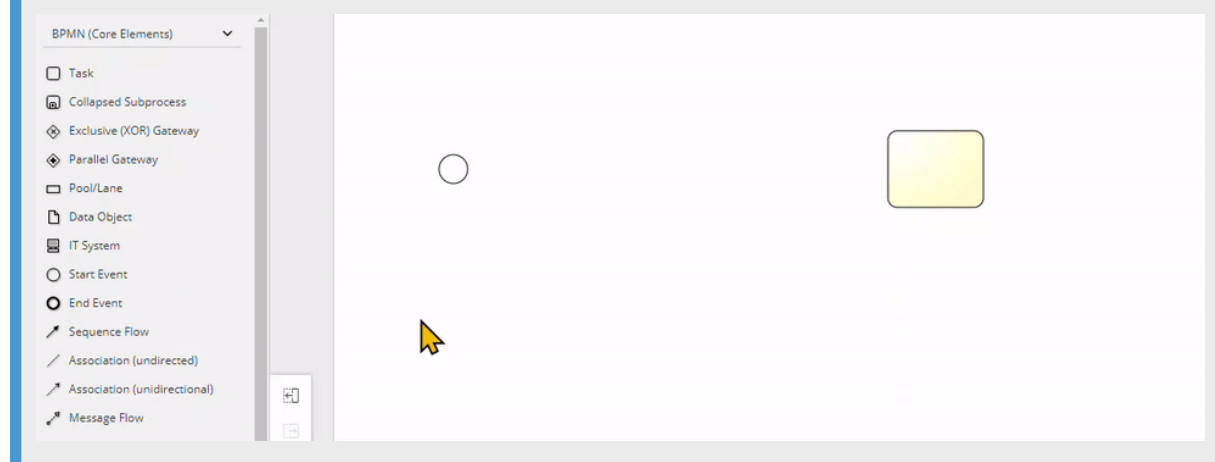
To add an element, follow these steps:

1. Select an element in the diagram.  
The shortcut menu opens. Depending on the selected element, the shortcut menu suggests elements.
2. Choose the icon of the element you want to add. The new element is added to the diagram.  
The connector type between the selected element and the new element is set automatically.

When you want to add an element and set its position, choose the element icon and drag the element to its position. The new element is added to the diagram where you release the mouse button.

### Example

*How to use the shortcut menu:*



## Add Pools and Lanes

Add a pool by dragging the *Pool/Lane* element onto the canvas. Collapsed pools can't contain elements.

Add a lane to a pool by dragging the *Pool/Lane* element onto a pool.

To add more lanes to a pool, drag a *Pool/Lane* element onto the left or right edge of a lane.

To add a sublane, drag a *Pool/Lane* element onto the center of a lane.

To reorder lanes, you have the following options:

- Choose the header and drag the lane to its new location.
- Choose the header and use the arrow icons that are shown in the lane to move a lane up or down.

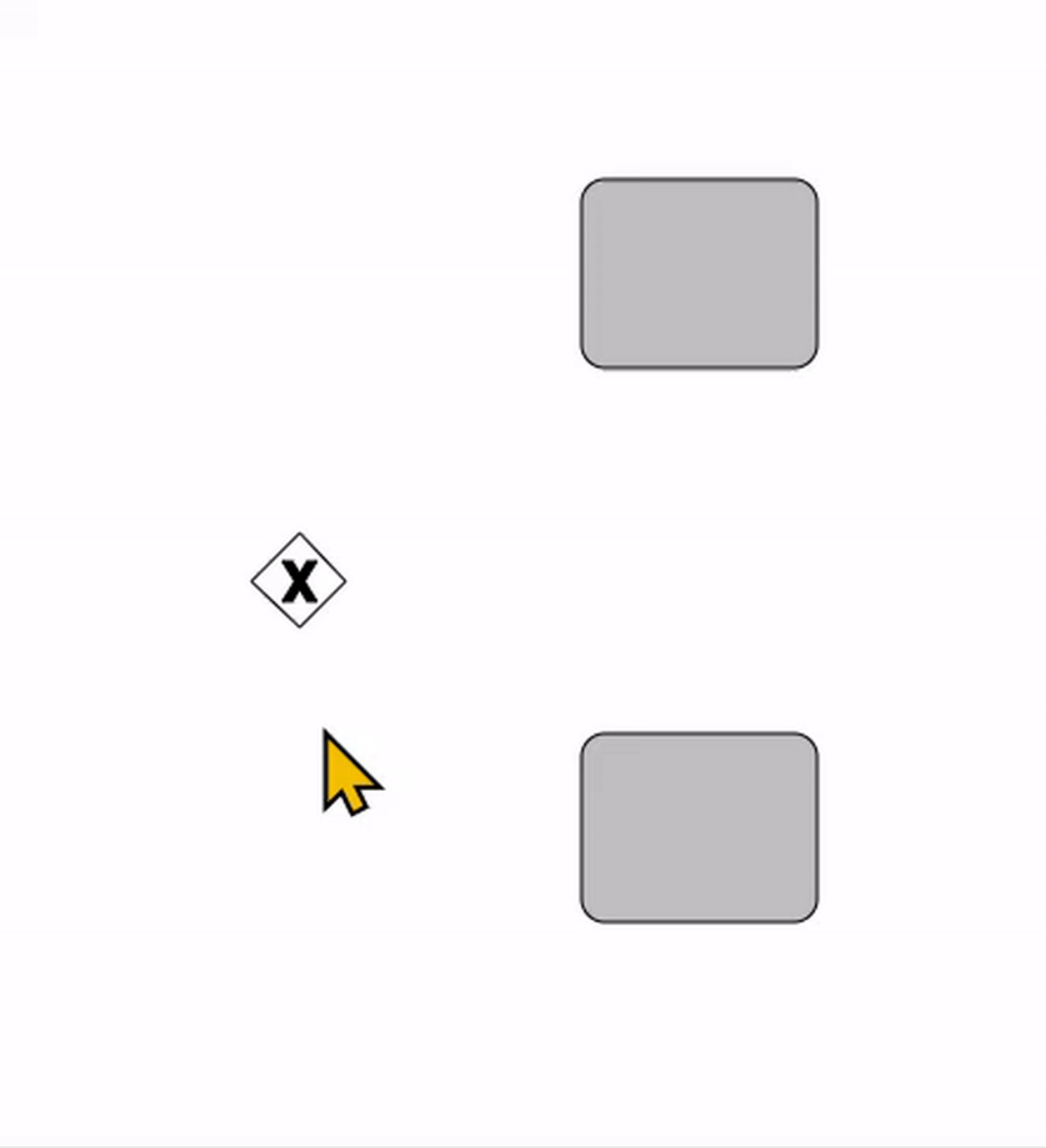
To move lanes up and down the hierarchy, use the arrows.

## Connect Elements with Flows

To connect elements with flows, drag the flow onto the target element. You can also use the flow icons from the interactive shortcut menu.

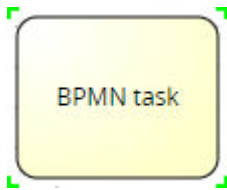
❖ Example

*Example*

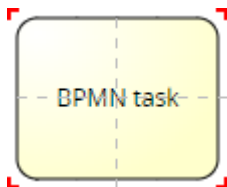


The diagram illustrates the process of connecting elements with flows. It shows a diamond-shaped flow icon with a black 'X' inside, being dragged by a yellow mouse cursor towards two rounded rectangular elements. Green marks are visible on the edges of the elements, indicating a possible connection.

When a connection is possible, green marks are shown on the edges on the element.



When a connection isn't possible, red marks are displayed on the edges of the element.






You can drag a new element onto a connector that already connects two elements. Then, the new element is added and connected automatically.

## Add Gateways to Flows

When you drag a gateway onto a flow, the flow is split and connected to the gateway.

## Copy Elements


You can copy elements to create similar elements. You can also copy parts of old diagrams to reuse in new diagrams.

1. Select the element you want to copy. Hold the *Shift* or *Ctrl* key to select multiple elements.
2. Choose  (*copy*) or *Ctrl + C* to copy,  (*cut*) or *Ctrl + X* to cut, and  (*paste*) or *Ctrl + V* to paste elements.

### Note

- Copying elements between different diagrams can take a while, because they are copied to the server first.
- An internet connection is required for copying elements between diagrams, but not for copying elements inside one diagram.

## Remove Elements

1. Select all elements you want to remove. To select multiple elements, press and hold the left mouse button and draw a frame around the elements, or press and hold the *Ctrl* key while you choose the elements.
2. Press the *Del* key on your keyboard or choose  (*Delete*) in the toolbar.

The elements are deleted.

## Related Information

[Move and Change Elements \[page 47\]](#)

[Format Diagrams \[page 53\]](#)

[Work with Modeling Conventions \[page 55\]](#)

## 7.6 Move and Change Elements

Learn how to edit a diagram while modeling, change elements while modeling, and add space to the canvas wherever you want. Learn how to change element attributes to adapt modeling elements.

While modeling, you can change the position of elements and labels.

You can also adjust the space between elements or change the canvas size.

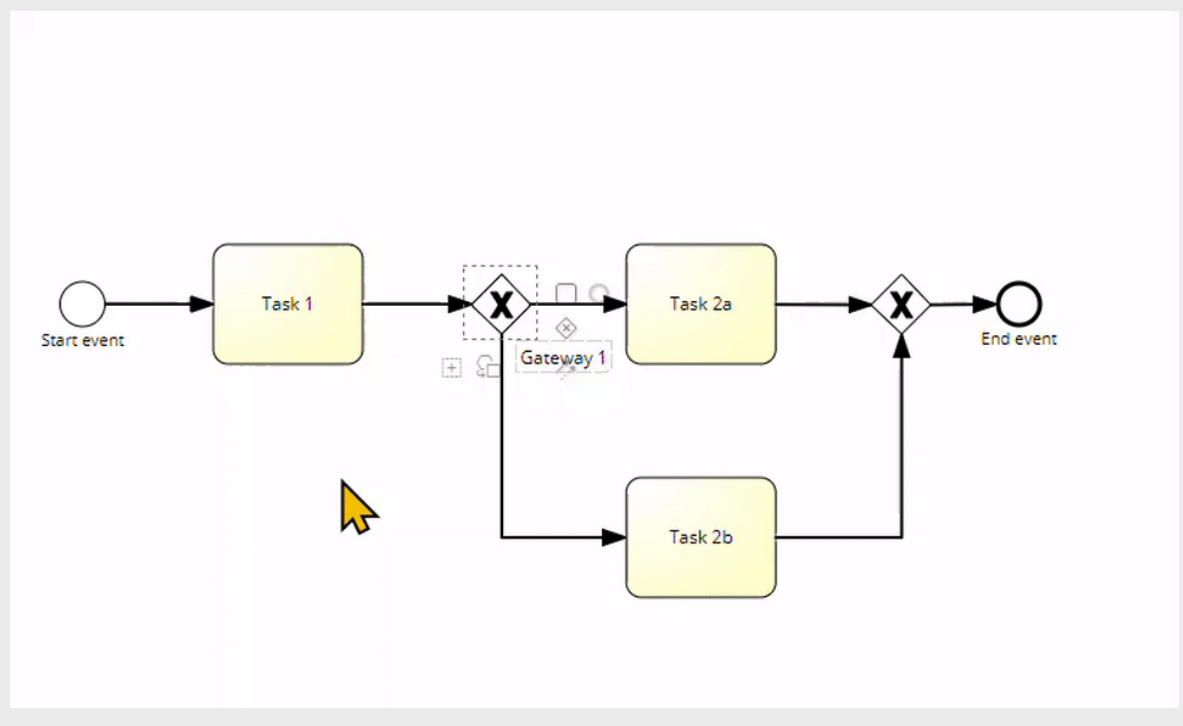
You can change the element type.

### Move Elements and Labels

To move an element or a label to a new position, select and drag it.

#### Example

*Example:*



## Rename Elements

To change the name of a label, select the element. Available dictionary entries are suggested automatically.

## Change Element Size

1. Select the element.
2. Choose the bottom right corner or top left corner and drag the corner.

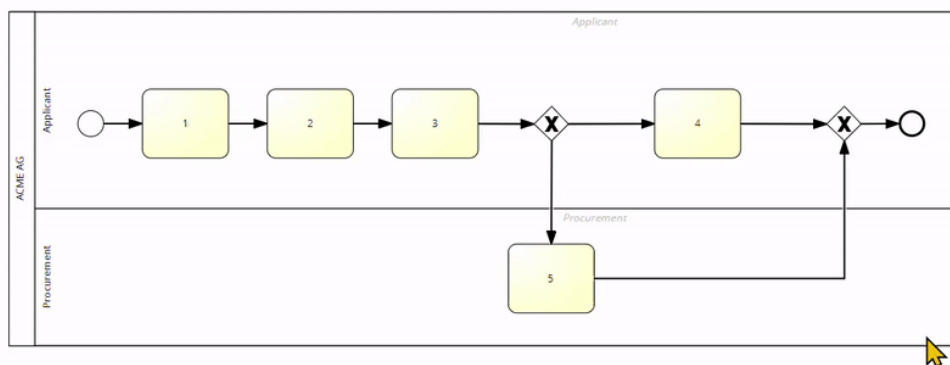
### Note

For more options, keep one or more of the following keys pressed while you drag the element:

- *Alt*: Resize without snapping to other elements and orientation lines
- *Ctrl*: Resize in every direction
- *Shift*: Resize the element proportionally

### Example

Example:



## Adjust Canvas Space

You have two options to adjust the canvas area.


- You can add or remove space between elements.

- You can shrink or extend the whole canvas.

### Note

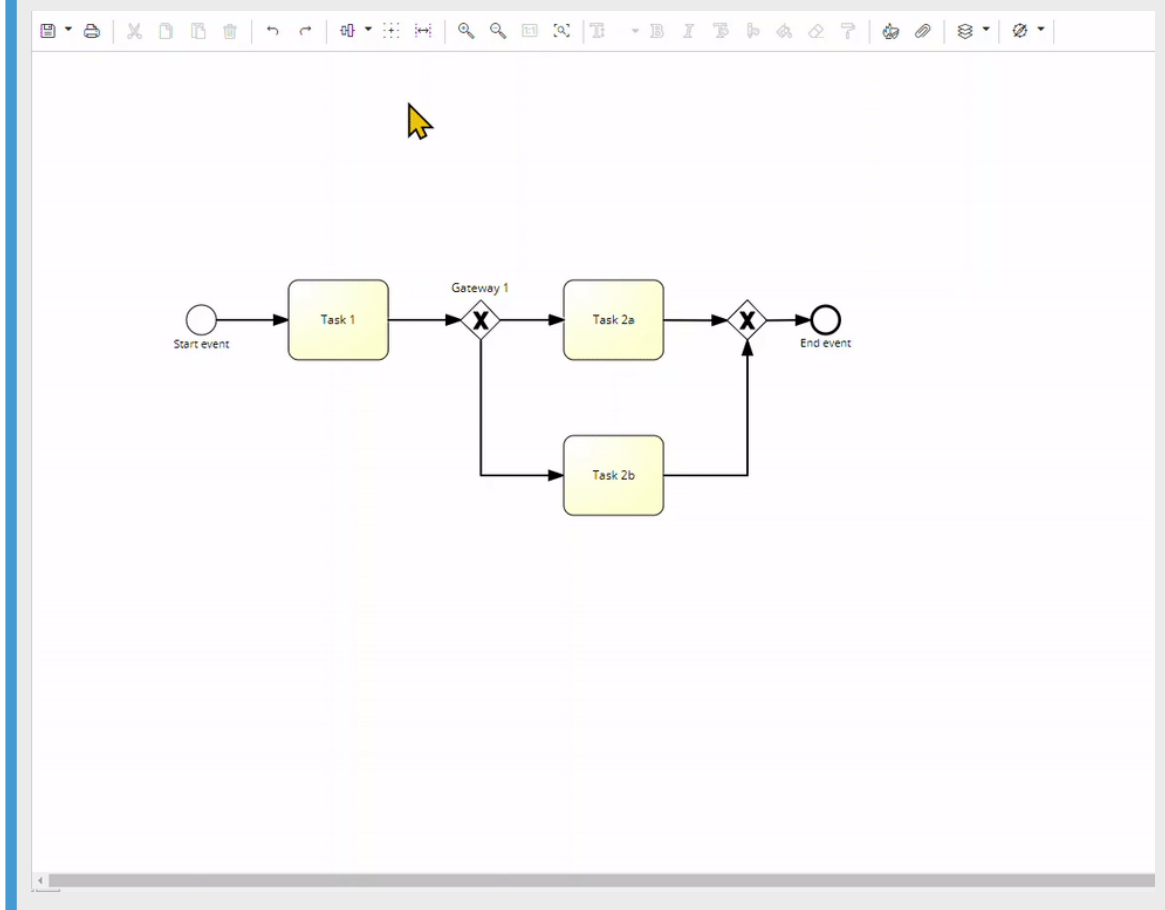
Shrinking the canvas isn't possible if there are elements in the affected area.

To add or remove space between elements, follow these steps:


1. Enable the space adjusting function by choosing  (*adjust space*) in the toolbar, or use the shortcut *Ctrl + M*.  
The mouse cursor turns into a cross and two lines are displayed on the canvas.
2. Where you want to adjust the space, choose, hold and move the cursor.  
Space is added or removed depending on your movements.

### Example

Example:





This works in all directions.

3. Release the mouse button.
4. Disable the space adjusting function by choosing  (*adjust space*) in the toolbar, or use the shortcut *Ctrl + M*.



To shrink or extend the whole canvas, follow these steps:



1. Move your cursor to one edge of the canvas.


Two arrow icons are displayed,  (*inward-pointing arrow*) and  (*outward-pointing arrow*).


2. Choose the  (*inward-pointing arrow*) to shrink the canvas, choose the outward-pointing arrow  (*outward-pointing arrow*) to expand the canvas.

## Zoom

To view the complete diagram on your screen, use the zoom icons,  (*zoom*) and  (*zoom in*).

- To make everything on the canvas larger, choose  (*zoom in*).
- To make everything on the canvas smaller, choose  (*zoom out*).

To return to the standard zoom level and view the diagram in its default size, choose  (*Save*).

To fit the diagram to your canvas size, choose  (*fit*).

## Change the Element Type


### Note

Changes that affect the appearance and behavior of an element, but not its type, can be made in the attribute panel. For example, to change a task into a script task, you set the attribute *Task type* to *Script*.

You can change the element type. For example, in BPMN the following transformations are possible:

- Task to subprocess
- Plain start event to message start event
- Collapsed pool to expanded pool

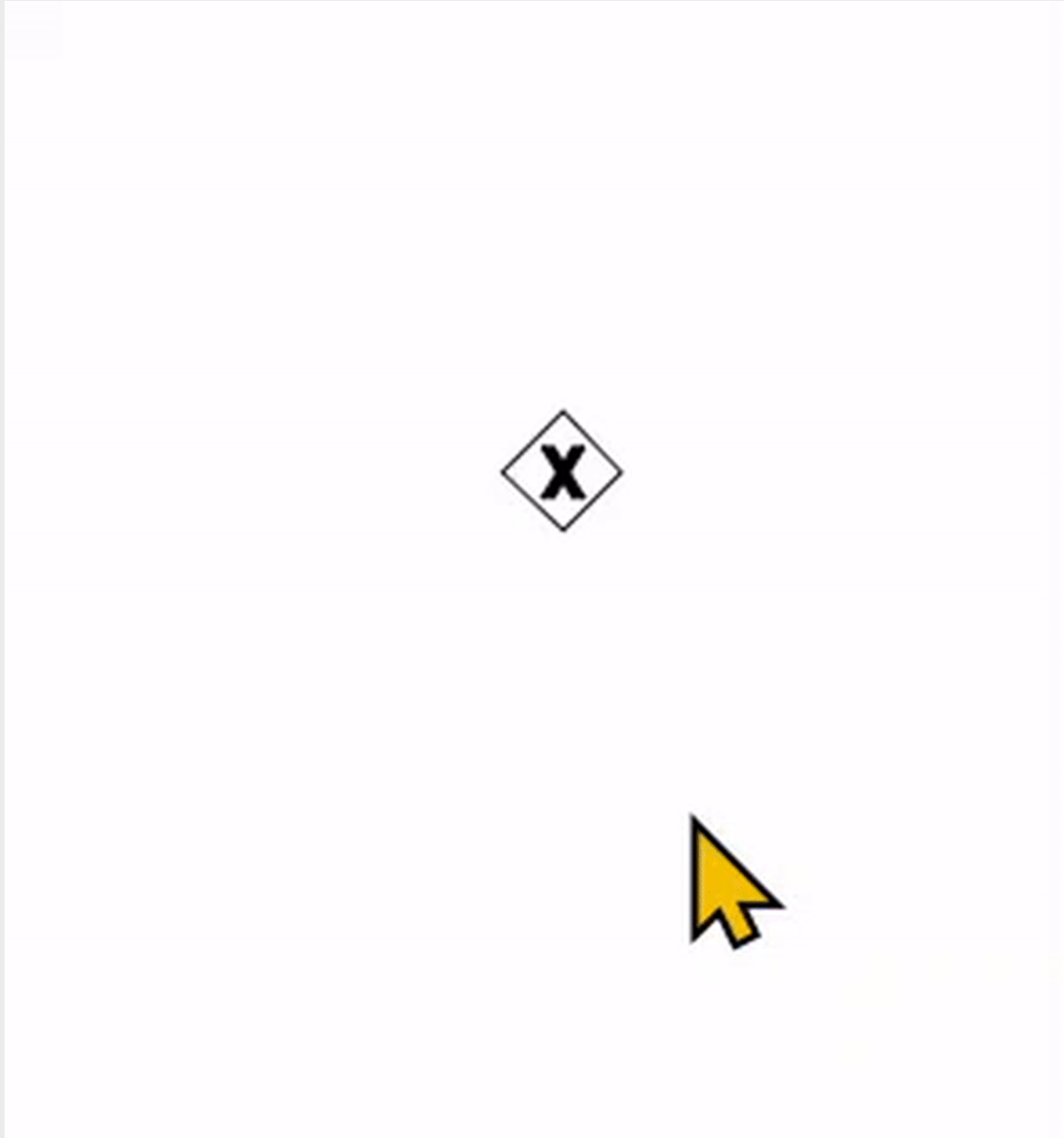
To transform an element, follow these steps:

1. Select the element you want to transform.
2. Choose  (*transform*) below the element.
3. Select the new element type.  
The element is transformed.

In the following example an exclusive gateway is changed into an parallel gateway.

## ❁ Example

*Example:*



## Edit Attributes

Modeling elements have several properties you can edit. These properties are called attributes. You can use attributes to change the appearance of an element (for example the background color or label). Attributes can also be necessary to execute a process, for example the decision logic in a DMN diagram is an attribute.

You edit attributes in the attribute panel on the right side of the editor.

- To change the attributes for one element, select the element and open the attributes panel.
- To change diagram-wide attributes, choose any empty space on the canvas and open the attributes panel.

### Note

The first section of the attribute panel contains custom attributes, which can be defined by your workspace administrators.

You can change attributes for one element and diagram-wide attributes.

### Select all elements of the same type

Select all elements of the same type to change them at once.

- To select all elements of one type, select one element and press **Ctrl + I**. All elements of the same type are selected.
- To select all elements of multiple types, select elements from each type and press **Ctrl + I**. All elements of the chosen types are selected.

### Example

Example:

The screenshot displays a process diagram on the left and an attributes panel on the right. The diagram consists of a start circle, three yellow rounded rectangular tasks labeled '1', '2', and '3', and an end circle, all connected by arrows. A hand cursor is positioned over task '1'. The attributes panel on the right has a search bar at the top. It is organized into sections: 'Custom Attributes' (collapsed), 'Main Attributes' (expanded), 'Diagram relations' (expanded), and 'More Attributes' (collapsed). The 'Main Attributes' section includes fields for Name, Documentation, Process type (set to 'None'), and Diagram orientation (set to 'horizontal'). The 'Diagram relations' section includes fields for Linking Diagrams and Linking Journeys.

## Attributes in SAP Signavio Process Collaboration Hub

Attributes are displayed when diagrams are viewed in SAP Signavio Process Collaboration Hub. Which attributes are shown for SAP Signavio Process Collaboration Hub users depends on visibility settings for their user group.

Attributes can be populated from a linked diagram if an attribute with the same ID is available for both the linking element and the linked diagram. For details, see section [Displayed attributes](#) of SAP Signavio Process Collaboration Hub user guide.

Your workspace administrator can create attributes with the same ID for different elements. The workspace administrator guide explains how to do that in section [Add and manage custom attributes](#).

## Related Information

[Format Diagrams \[page 53\]](#)


[Work with Modeling Conventions \[page 55\]](#)

## 7.7 Format Diagrams

Options to align and distribute elements on the canvas and how to change elements so they match your corporate design.

To add clarity and to customize a diagram, you can re-align and resize elements and change their color, size, label, border and background style.

### Align and Distribute Elements

Use  (*alignment menu*) in the toolbar to align or distribute selected elements.

Select the elements to align or distribute and choose from the following options:

<i>Alignment Left</i>		Aligns elements along their left edges, with the element positioned farthest to the left as the reference element
<i>Alignment Center</i>		Aligns elements vertically through their centers, using the mean value of all centers
<i>Alignment Right</i>		Aligns elements along their right edges, with the element positioned farthest to the right as the reference element
<i>Alignment Top</i>		Aligns elements along their top edges, with the highest element as the reference element
<i>Alignment Middle</i>		Aligns elements horizontally through their middles, using the mean value of all middles
<i>Alignment Bottom</i>		Aligns elements along their bottom edges, with the lowest element as the reference element

*Distribute elements horizontally*



You need to select at least 3 elements for this function.

Distributes elements evenly on a horizontal axis, the outer 2 elements keep their position

*Distribute elements vertically*



You need to select at least 3 elements for this function.

Distributes elements evenly on a vertical axis, the outer 2 elements keep their position



*Same Size*



Resizes the elements to the size of the largest element in the selection

## Format Elements and Labels


You can change the attribute values of an element in the attribute panel to change its appearance:


- Change the label either by clicking the element or the attribute *name*.
- Change the element color by choosing  (*element color*) in the toolbar.
- Change the border color by choosing  (*border color*) in the toolbar.
- Change the color gradient of an element's background to a flat design. To do this, enable *Flat design* under *More Attributes* in the attribute panel.

You can change the labels with the following tools in the toolbar:

-  (12) (*font size*): Change the font size
-  (*bold*): Make the font bold
-  (*italics*): Make the font italics
-  (*font color*): Change the font color

## Copy and Apply Formatting

1. Select the element that has the format you want to copy.
2. Choose  (*format*) in the toolbar.
3. Select the element you want to apply the formatting to. The copied formatting is applied.

To apply the default format to an element, select the element and choose  (*default format*).

### Select all elements of the same type

Select all elements of the same type to change them at once.

- To select all elements of one type, select one element and press *Ctrl + I*. All elements of the same type are selected.
- To select all elements of multiple types, select elements from each type and press *Ctrl + I*. All elements of the chosen types are selected.

## 7.8 Work with Modeling Conventions

Learn how to check if your modeling style is consistent with general or company-specific guidelines. Use modeling convention reports to improve your diagrams over time.

### Note


Access to this feature depends on your license. For more information, contact your workspace administrator.

Modeling conventions make it easier to use a consistent modeling style.

A modeling convention consists of modeling guidelines regarding notation set, labeling, process structure and diagram layout.

With modeling convention checks, you can find out if a diagram violates these guidelines. You can run a check while modeling or when you save a diagram. Additionally, you can create a modeling conventions report after a check that contains a summary of the errors. Modeling conventions can be defined by your workspace administrator.


To run the check, you have several options:

- Choose  (*Review*) in the editor toolbar and select the convention.
- Depending on your workspace settings, a prompt for a check when saving a diagram can be integrated. In

this case, choose  *Review* (*Review*) in the save dialog.

- Select **Help > Modeling Conventions** in the menu of the explorer.

Elements which violate conventions are flagged with an exclamation mark. To view a short info about the violation, hover over the exclamation mark. Additionally, the information is summarized in a table below the process diagram.

In the table, choose the element to view it in the diagram. If available, choose  (*Link*) for more information about a guideline.

## Modeling Conventions Report

You can create a modeling convention report for one or multiple diagrams in the explorer. The report contains a summary of violations of modeling conventions and is generated as an XLSX file.

To create a report, follow these steps:

1. Select **Reporting > Modeling Conventions** in the explorer.
2. Select the diagrams and modeling conventions you want to include.
3. Choose *Start analysis*.  
An XLSX file is generated.

## 7.9 Process Hierarchies

Learn about about process hierarchies and the notations you use to create them.

You create process hierarchies to map the processes on all levels of your organization.

With value chain diagrams, you can create high-level perspectives on your process landscape. The diagram elements are linked in chronological order to show the hierarchical relationships between processes and process groups. With the collapsed process element, you can link BPMN diagrams to the value chain diagram.

BPMN is used to map the detailed processes. The processes in BPMN diagrams are also showing different process levels. You create a high-level overview of a main process and in separate diagrams you model subprocesses. Then you link these subprocesses to the main process. We recommend linking subprocesses with the collapsed subprocess element, which links to subprocesses defined in separate models.

### Related Information

[Value Chains \[page 176\]](#)

[Create Subprocesses \[page 56\]](#)

## 7.10 Create Subprocesses

Subprocesses can be modeled in separate diagrams. Link and reuse subprocesses across your process landscape. Add and manage subprocess elements.

When you create a high-level overview of the main process, you model subprocesses in separate diagrams and link these subprocesses to the main process.

There are two ways to add subprocesses to diagrams, as expanded or collapsed subprocesses.

With the expanded subprocess element, subprocesses are shown with the main process. Since this does increase diagram size and visual complexity, we recommend using the collapsed subprocess element, which links to subprocesses defined in separate models.

## When to Use Subprocesses

Subprocesses can be complete processes or partial processes. They can only be executed as parts of a larger process.

You can reuse subprocesses in multiple diagrams. We recommend using a subprocess if a part of the process is:

- The same for several processes
- Changed often
- Executed differently while the main process remains the same

A subprocess needs to be a process, with a start and end event. When you have a complex activity that cannot be meaningfully divided into different tasks, use a task element in your process model.

## Subprocess Elements

The notations in which you use subprocesses are usually value chains and BPMN models. In value chains, you use the *Collapsed Process* element. In BPMN diagrams, you use the *Collapsed Subprocess* element.

Elements that link to other diagrams are marked with a + (*plus*) icon. This is the *Collapsed Subprocess* element in BPMN:



## Add Subprocesses to a Diagram

### Note


The following descriptions apply to BPMN diagrams, linking diagrams to elements is similar for other notations.

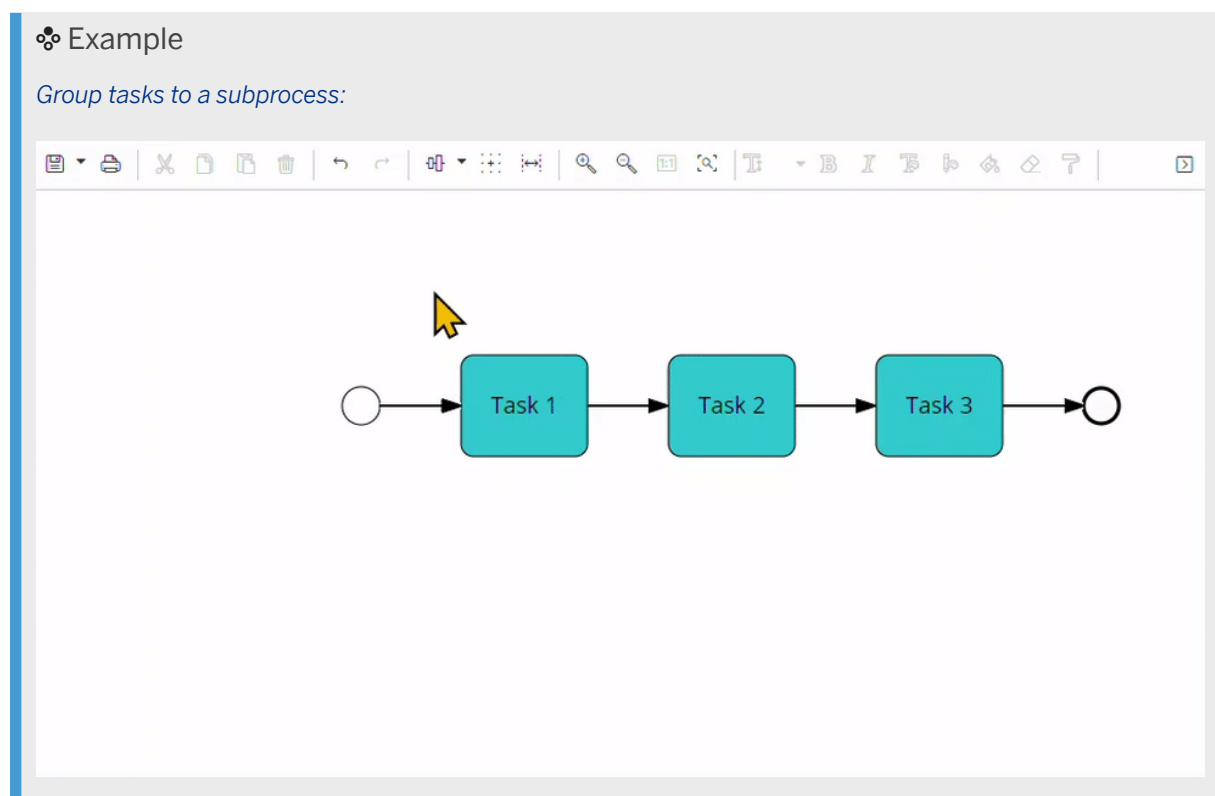
You have the following options to create subprocesses:

- When you have a complex diagram, you can group parts into subprocesses.
- You can add a *Collapsed Subprocess* element to your diagram.

- From the subprocess element, you can create a subprocess diagram that is automatically linked.
- When you already have a subprocess defined, you can add a subprocess element to the main diagram and link your defined subprocess to this element.  
You can link diagrams in your workspace, or diagrams in other locations via URL.

## Group Diagram Elements into a Subprocess

1. Open the BPMN diagram.
2. Select the process elements you want to group. It is possible to select only one element.
3. Choose  (*collapsed subprocess*) below your selection and select *Collapsed subprocess*.
4. Enter a name for the subprocess and choose *Create linked subprocess*.  
The subprocess is saved as a new diagram. In the original diagram, a *Collapsed Subprocess* element replaces the subprocess.



The new diagram is created in the same folder as the original diagram. Refresh the explorer to view it.

## Link a Diagram to a Subprocess Element

1. Select a *Collapsed Subprocess* element in your diagram and choose + (*plus*).  
The dialog for adding a link opens.

2. Select one of the options to add a link:
  - *Use existing diagram*: Select the diagram to link in the folder structure.
  - *Use web link*: Paste the URL to the input field.
3. If the preview is too small, enlarge the dialog.
4. Choose *Link diagram*.  
The diagram is linked to the subprocess element.

## Create a New Subprocess from the Subprocess Element

1. Select a *Collapsed Subprocess* element in your diagram and choose + (*plus*).  
The dialog for adding a link opens.
2. Enter a diagram name in the text field.
3. Select the diagram type.
4. Choose *Link diagram*.  
A diagram is created and opened in a new tab.

## Change Linked Diagrams

Once you have added a linked subprocess to a process, you can open the linked diagram from the subprocess element.

In a *Collapsed Subprocess* element in your diagram, choose the + (*plus*).

A preview of the currently linked diagram is displayed. If the preview is too small, enlarge the *Establish link* dialog.

- To open the diagram in a new browser tab, choose *Open*.
- To select a new diagram to link, choose *Edit link*.
- To remove a diagram link, choose *Remove link*.

## View Linked Elements

You can view all related items in the attribute panel in the section *Diagram relations*.

In addition, all items related to a diagram by links are listed when you save a diagram.

## 7.11 Add Live Insights

Learn how to add insights and KPIs to BPMN diagrams and value chains.

The following *Live Insights* shapes are available:

- Traffic Light
- Progress bar
- Indicator
- Ring chart
- Cockpit
- Trend icon
- Value

With the *Live Insights* shapes, you can add insights and KPIs you want to monitor to BPMN diagrams, value chains, and navigation maps.

For that, you add a *Live Insights* shape to your diagram and link it with a widget from SAP Signavio Process Intelligence. Users can then view the *Live Insights* in SAP Signavio Process Collaboration Hub.

In SAP Signavio Process Intelligence, thresholds need to be defined for the widgets that are linked to *Live Insights* shapes. In SAP Signavio Process Manager and SAP Signavio Process Modeler, the color of the shape indicates how the current result of the widget relates to the defined thresholds. The following example shows how the sentiment shape reflects the current widget result:



The color of a shape is only visible in SAP Signavio Process Collaboration Hub. In SAP Signavio Process Manager and SAP Signavio Process Modeler, the shapes stay grey.

## Access the Live Insights Shapes

For BPMN diagrams and value chains, you find the *Live Insights* shapes in the *Live Insights* shape repository. A workspace administrator can enable this shape repository for you.









For navigation maps, they are available by default.

## Visibility of Live Insights

The visibility of Live Insights in SAP Signavio Process Collaboration Hub is subject to requirements. Read more in section [Display Widgets in Other SAP Signavio Applications](#).

## Overview over Live Insights shapes

The following *Live Insights* shapes are available:

Shape	Description	Example
Indicator	Displays process performance data in form of a plain icon.	
Traffic Light	Displays process performance data in form of a traffic light.	
Cockpit	Displays process performance data in form of an cockpit icon.	
Value	<p>Displays a value including its unit if a unit is configured in the widget.</p> <p>The following applies:</p> <ul style="list-style-type: none"> <li>You can only link a <i>Value</i> widget to this shape.</li> <li>In SAP Signavio Process Intelligence, the widget needs to be configured with SIGNAL code.</li> <li>You can't set a manual value for this shape.</li> </ul>	 498 days
Sentiment	Displays process performance data in the form of a sentiment icon.	
Trend	Displays process performance data in form of a trend icon.	
Progress bar	Displays process performance data in form of a progress bar.	
Ring chart	Displays process performance data in form of a ring chart.	

## Link a Shape to a Widget

Follow these steps:

1. In SAP Signavio Process Intelligence, get the ID of the widget you want to add to your diagram. Read more in section [Display Widgets in Other SAP Signavio Applications](#).

2. In SAP Signavio Process Manager>, open your diagram and add or select a Live Insights shape.
3. Open the attributes panel and paste the widget ID to *Driving widget*.
4. In addition, you have the following options:
  - *Name*: Enter a name for the shape.
  - *Documentation*: Enter a description for the shape.
  - *Additional widget*: Add more widgets by pasting their IDs. The widgets are displayed in the details panel of the diagram when users click the Live Insights shape. Only the driving widget sets the shape color.
5. Save your diagram.

## Use Shape with a Manual Value

Follow these steps:

1. In SAP Signavio Process Manager, open your diagram and add or select a Live Insights shape.
2. Open the attributes panel and enter the value you want to display in *Manual value*.
3. In addition, you have the following options:
  - *Name*: Enter a name for the shape.
  - *Documentation*: Enter a description for the shape.
  - *Additional widget*: Add more widgets by pasting their IDs. The widgets are displayed in the details panel of the diagram when users click the Live Insights shape.
4. Save your diagram.

## Related Information

[Displaying Widgets in Other SAP Signavio Applications](#)

## 7.12 Add Links to SAP Signavio Process Insights Content

Learn how to add links from SAP Signavio Process Insights to diagrams.

Deep links from SAP Signavio Process Insights standard performance indicators can be added to diagrams as links in custom attributes.

### Viewing linked content

To be able to view the linked content, users need the necessary permissions in SAP Signavio Process Insights.

Read more in the following sections of the user guide for SAP Signavio Process Insights:

- [User Management](#)
- [Roles in Default Role Collections](#)

## Related Information

[Move and Change Elements \[page 47\]](#)

## 7.13 Link to Files in Diagrams

From a diagram or from diagram elements, learn how to link to online documents, files in your document management system, or files in your network.



There are two ways of linking documents to diagrams:

- To access documents from different elements or diagrams, link them to dictionary entries.
- To make the document accessible only from one diagram, use a custom attribute.

### Use Dictionary Entries to Link Documents

We recommend creating dictionary entries to link documents to elements. You can reuse dictionary entries throughout your process landscape.

To link a document to a dictionary entry, follow these steps:

1. From the explorer, open the dictionary.
2. Add a new dictionary entry or edit an available entry:
  - To create a new entry, choose  (*New*).
  - To open an existing entry, select the entry and choose  (*Edit*).
3. In *Relevant documents*, add the link.

#### Note

The documents are not uploaded to SAP Signavio Process Manager. Ensure that all users can access the linked documents.

## Use a custom attribute to link documents

Custom attributes are defined by your workspace administrator. The name for the custom attribute used for linking documents is specific to your workspace.


You have several options for adding a file to a diagram:

- Upload a file to the SAP Signavio file storage.
- Link to a file in the SAP Signavio file storage.
- Link to files in your document management system, in your network, or to online documents.

### Note

SAP Signavio Process Manager is not designed as a document management system. We recommend linking to documents instead of uploading documents.

To add a link to a document to your diagram, follow these steps:

1. Select the diagram element to which you want to add a linked document. If you don't select an element, the link is added to the diagram.
2. Open the attribute panel.
3. In the section *Custom Attributes*, select the custom attribute used for linking documents in your workspace.
4. Choose the  (*more options*) icon.
5. Choose *Add a new document*.
6. Select one of the options:
  - To upload a file, enable *Upload a new picture* and select the file.
  - To link to a file in the SAP Signavio file storage, enable *Choose a picture from your file storage* and select the file.
  - To link to a file in your document management system or in your network, enable *Link a file/picture on a web resource or network storage* and add the URL.
7. To save, choose *Add*.

## 7.14 Display Attribute Overlays

Attribute visualization with overlays in SAP Signavio Process Manager.

Attribute overlays are attribute visualization layers. With attribute overlays, you can show attributes directly on the diagram. You can use different icons and colors for overlays.

You can add attribute overlays to diagrams and diagram elements.

Attribute visualization layers are available for the following diagram types:

- BPMN diagrams
- Value chain diagrams
- ArchiMate diagrams

- Organization charts

Attribute overlays are managed by your workspace administrator. They also set the rules that determine when an attribute overlay is displayed.

#### → Tip

Attribute Visualization overlays are designed for reviewing completed diagrams, not for use during active editing. When you change a property (for example, a task name), the overlay deactivates automatically to ensure data accuracy. To make sure the overlays are displayed, finish your edits first, and then activate the overlay.

## Display Attribute Overlays while Modeling

- To select an attribute overlay, click  in the toolbar.

It is possible to display several attribute overlays at once.

## Display Attribute Overlays in SAP Signavio Process Collaboration Hub

If a diagram contains attribute overlays, the number of available overlays and the number of visible overlay categories are displayed.

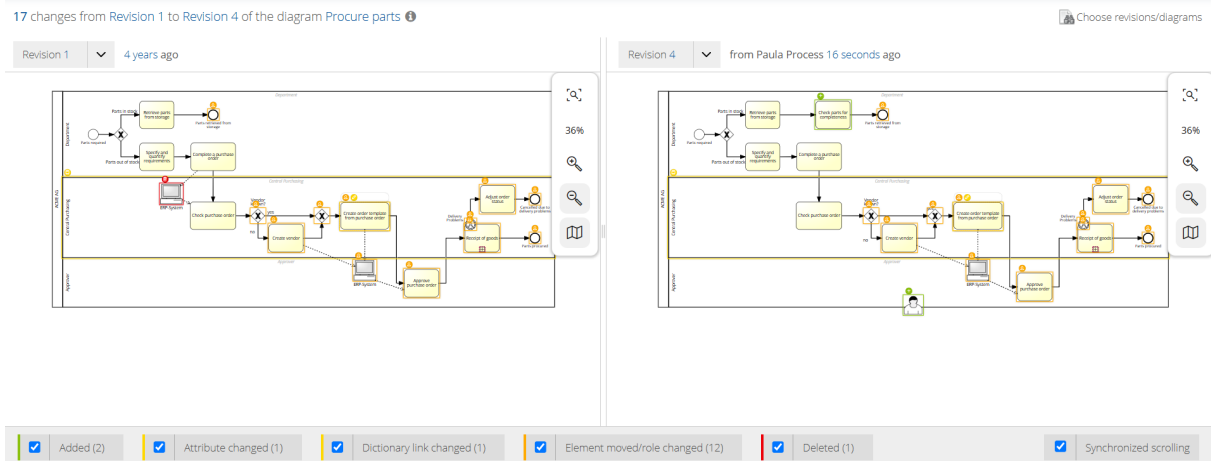
Users can show or hide overlays and select which overlays they want to view.

## 7.15 Compare Revisions

Compare different diagrams and different revisions of the same diagram with this function.

With the diagram and revision comparison tool you can track changes to revisions made to your diagrams. In addition to the Explorer Comparison view, here you can do the following:

- Compare two revisions of the same diagram side by side with revisions such as additions, edits, and deletions.
- View changes made by other users on a diagram.
- Approve and apply changes made by other users on a diagram.
- Improve collaboration between users working on a diagram (see section [Collaboration \[page 275\]](#)).
- Locate duplicate diagrams after you have imported diagrams to your workspace (see section [Imported \[page 318\]](#)).



## Open the Diagram Comparison Tool

You can open the diagram comparison tool in the following components:

- In the explorer, select a diagram or two diagrams you want to compare and choose **Edit** > **Compare revisions/diagrams**.
- In the BPMN simulation, editor, and QuickModel, choose **Diagram comparison** in the user menu.
- In the activity feed, select a diagram revision from the feed and choose **Open to Compare**.
- In SAP Signavio Process Collaboration Hub, open the diagram comparison tool from the diagram actions.

## Display Options

You can change the resolution of a diagram. When you zoom in or out or when you use the mini map, both diagrams adjust simultaneously.

To only adjust the view for one diagram revision, disable the **Synchronized Scrolling** option.



Fit diagram width to screen width.

100%

Current zoom level. For continuous zooming with a slider, select the icon.

(Zoom in)

Zoom in/out.

(Zoom out)

(Mini map)

Show or hide mini map.

## Select revisions

The comparison view displays all edits made to a diagram in your workspace in the form of revisions. You can view revisions of a diagram in two ways:

- Using the revision drop-down menu option.
- Using the choose revisions/diagrams option.

## Using the Revision Drop-Down Menu Option

To view different revisions of your diagrams using the *Revision* drop-down menu, follow these steps:

1. On the first revision window, select the required revision from the *Revision* drop-down menu.
2. On the second revision window, select the required revision from the *Revision* drop-down menu.
3. The comparison and revision tool displays the selected revisions for the diagram side by side.

## Using the Choose Revisions/Diagrams Option





To view different revisions of your diagram using the *Choose revisions/diagram* option, follow these steps:

1. On the diagram and revision comparison tool, select *Choose revisions/diagrams*.
2. On the *Choose revisions/diagrams* page, select the diagram and revision version for Diagram A and Diagram B.
3. Choose *Compare*.

## Diagram Change Information

The diagram comparison displays structural and logic differences between diagrams or diagram revisions. Hover over each icon of an element to get more detailed information.

The following table lists all changes:

Change Icon	Description
	<i>New elements</i> : An element has been added to the diagram.
	<i>Changed attribute</i> : Attributes for the element have been changed.
	<i>Changes in the Dictionary</i> : A Dictionary entry has been added, removed or changed on this element.
	<i>Changes in roles</i> : The role the element was assigned to has changed.

Change Icon	Description
	<i>Deletions:</i> An element has been removed from the diagram.

At the bottom of the window, you find information about the number of changes for every change category. You can select which changes are shown.

#### Note

Changes in sequence flows are not included in the comparison.

## Related Information

[Open and Save Diagrams \[page 38\]](#)

## 7.16 Custom Graphics

#### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

You can upload custom graphics for use in [Customer journey maps](#), [Value chains \[page 176\]](#), BPMN 2.0 diagrams and navigation maps. Uploaded files must be in SVG format. SVG images are vector-based, which means they can scale to any size without losing quality. In contrast, formats like PNG are raster-based and can become pixelated when scaled up. SVG images have smaller file sizes compared to PNG images, allowing for faster loading times on web pages. Additionally, SVG images offer more flexibility and customization options, as they can be easily manipulated and animated using CSS and JavaScript. By using the SVG format for images, websites and other digital platforms can achieve better performance and visual quality.

#### Note

- For images **uploaded in the explorer**, file size is limited to 20 KB for all notations, including navigation maps.
- Images **uploaded with the image manager** while creating navigation maps have a size limit of 50 KB.

The following elements can be customized:

#### BPMN 2.0 diagrams

- IT System
- Additional Participant
- Data object

#### Value chains

- Process
- Collapsed process

### Customer journey maps

- Persona
- Touchpoint
- Moment of truth
- Customer
- Decoration

### Navigation maps

- Images

Custom graphics are tied to the workspace to which they are uploaded. If you have multiple workspaces and want to use custom graphics in each, you must upload them separately to each workspace.

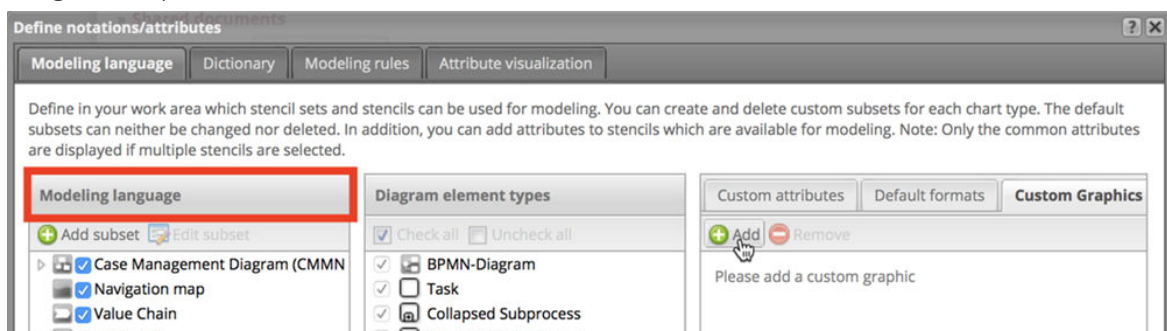
#### Note

Custom graphic files do not count towards the file limit for a workspace.

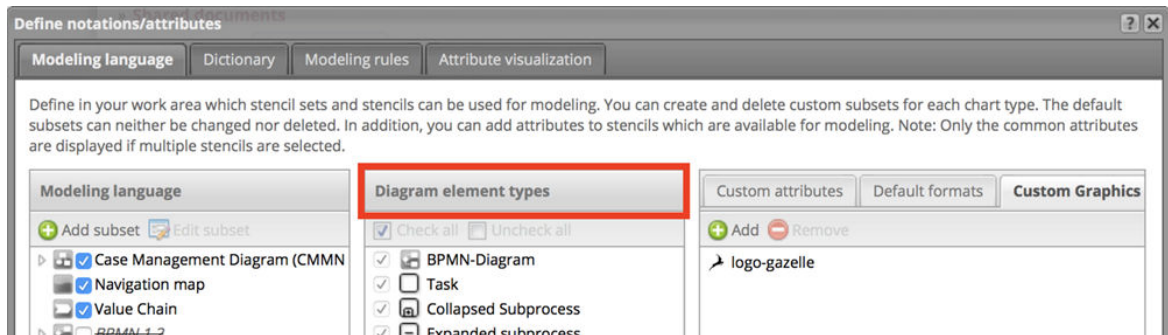
## Upload Custom Graphics

Follow these steps:

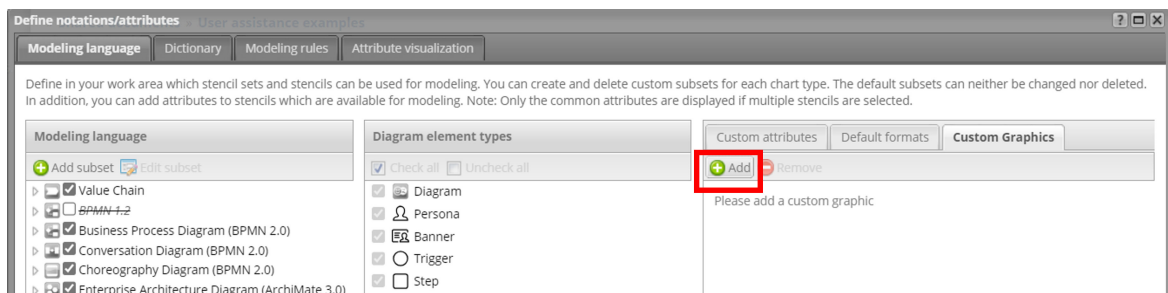
1. Create or save the image you want to use as an SVG file.
2. In the SAP Signavio Process Manager explorer, open ► [Setup](#) ► [Define notations/attributes](#) ►. The *Define notations/attributes* dialog opens.
3. In the *Modeling language* section, select either customer journey map, value chain, BPMN 2.0 diagram, or navigation map.



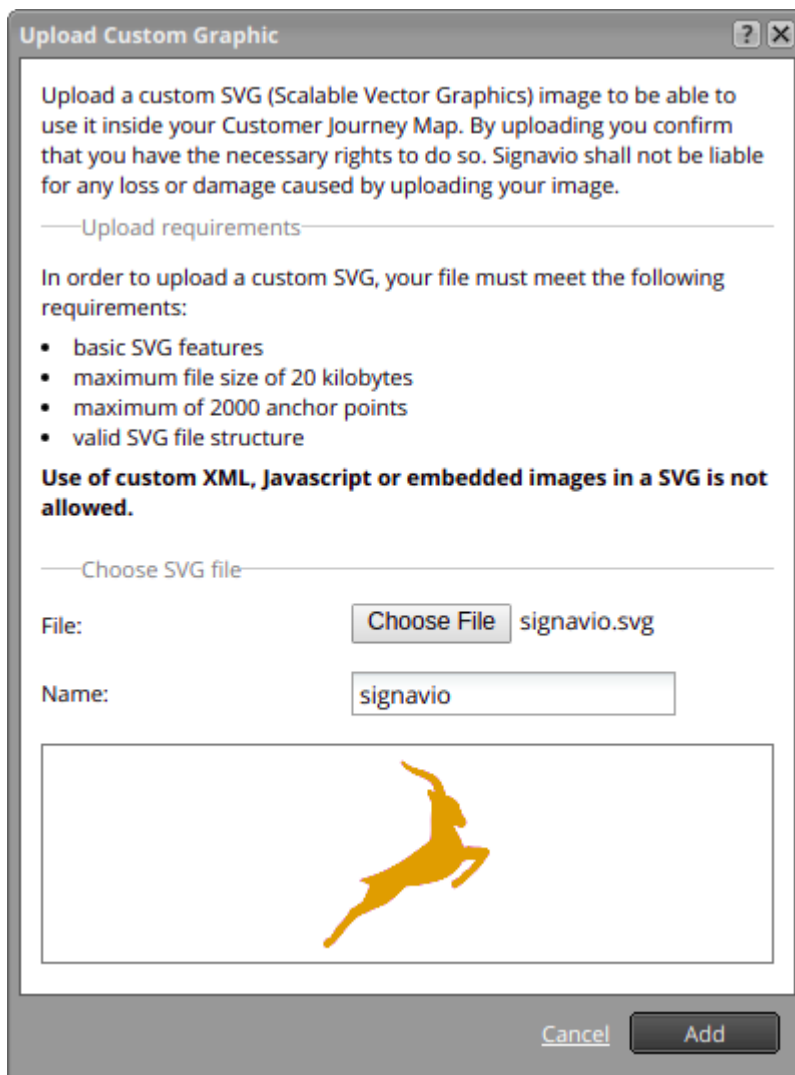
4. In the *Diagram element types* section, select the element type you want to set the custom graphic for. Note that not all elements can be customized.



5. In the *Custom attributes* section, select the *Custom Graphics* tab. Select the *Add* button. The *Upload Custom Graphic* dialog opens, with details about the upload requirements for SVG files.



6. Select *Choose File* and choose the file you want to upload. The *Name* field is prefilled with the file name. A preview of the image is displayed. Edit the name if needed, and select *Add*.



7. SAP Signavio Process Manager performs a validation while your file uploads, to make sure it fits all requirements (see section [Validation criteria \[page 68\]](#) below).
  - If the validation is successful, your custom graphic is displayed in a list in the *Custom Graphics* tab.
  - If the validation fails, a dialog shows you the original image and what the image will look like after being scrubbed. If the scrubbed image is fine, choose *Add scrubbed image*.
  - If the validation fails, it may also be that the uploaded SVG does not meet our requirements.

Your custom graphic is displayed in a list in the *Custom Graphics* tab, where you can now set and use it for modeling.

## Delete Custom Graphics

### Note

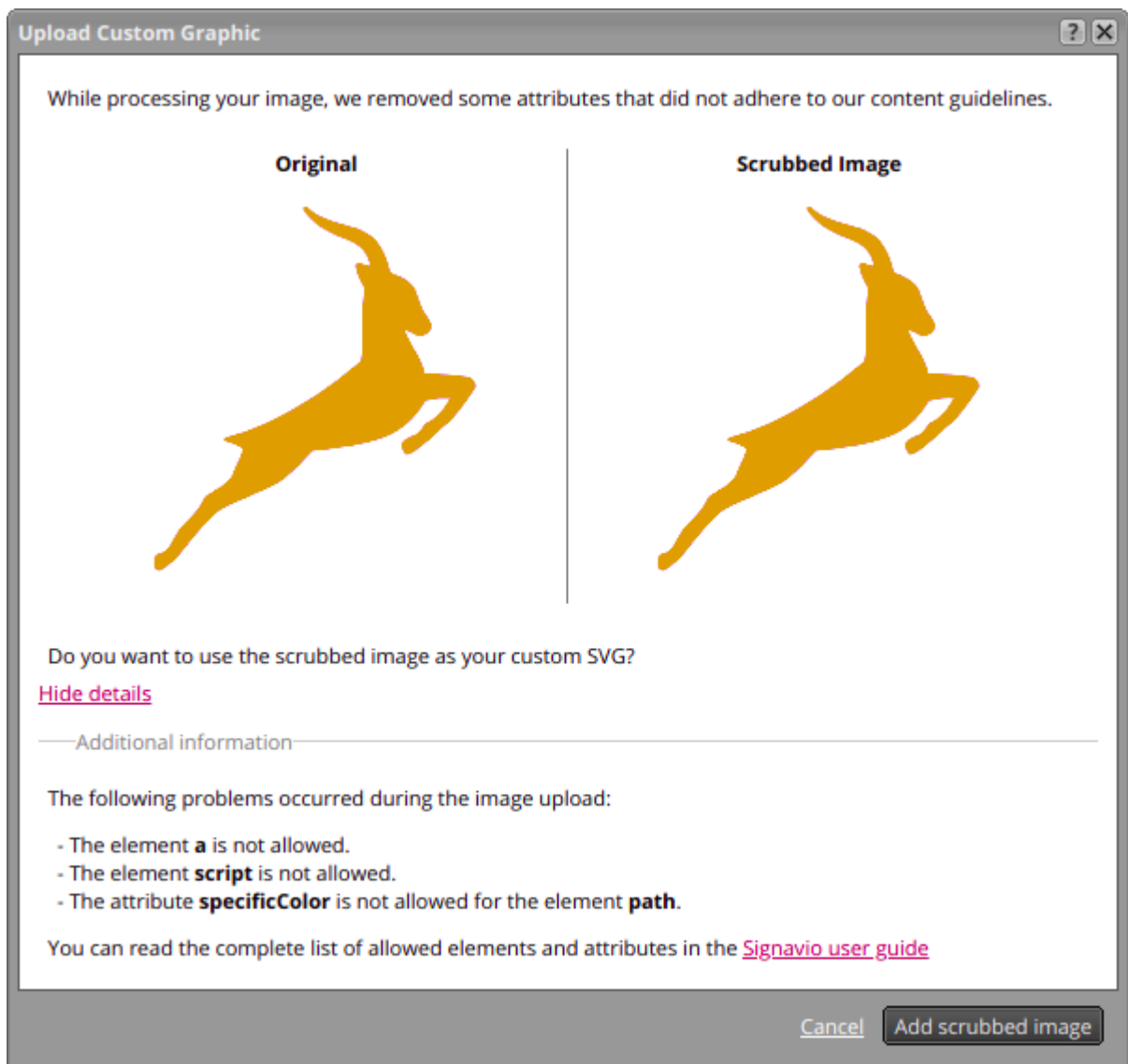
Deleted graphics are removed from diagrams.

Follow these steps:

1. In the SAP Signavio Process Manager explorer, open *Setup > Define notations/attributes*. The *Define notations/attributes* dialog opens.
2. In the *Modeling language* section, select either customer journey map, value chain, BPMN 2.0 diagram, or navigation map.
3. In the *Diagram element types* section, select the element type from which you want to delete the graphic.
4. In the *Custom attributes* section, select the *Custom Graphics* tab. Choose *Remove*.
5. Confirm in the dialog. The graphic is deleted from the workspace and no longer available in any diagram.

## Validation Criteria

SVG is a flexible, powerful file format. However, this flexibility makes it vulnerable to security exploits. To prevent possible security problems, SAP Signavio Process Manager will check each SVG file you try to upload and scrub anything potentially malicious from the file. It will then show you a preview dialog, so you can see the differences between the original and scrubbed file. If the scrubbed file is acceptable to you, you can then continue with the upload.



The requirements for SVG files are:

- The root element of the SVG must contain the required attributes either width and height or viewBox. The width and height attributes must be absolute size.
- The attributes of the SVG file must not contain JavaScript in attributes
- The elements and attributes of the SVG file must not contain URLs
- The SVG file must not exceed the supported complexity of 2000 anchor points

Here is the list of allowed tags and attributes for SVG files:

**Tags:** "svg", "style", "g", "path", "ellipse", "circle", "polygon", "rect", "line", "polyline", "defs", "clipPath", "mask", "use", "radialGradient", "linearGradient", "stop"

**Attributes:** "version", "xmlns", "xmlns:svg", "xmlns:xlink", "xlink:href", "xlink:type", "xlink:actuate", "xlink:show", "viewBox", "zoomAndPan", "xml:space", "contentStyleType", "contentScriptType", "preserveAspectRatio", "id", "class", "name", "style", "transform", "d", "points", "x", "x1", "x2", "y", "y1", "y2", "cx", "cy", "r", "rx", "ry", "width", "height", "fill", "fill-opacity", "fill-rule", "opacity", "offset", "stroke", "stroke-width", "stroke-opacity",

"stroke-dasharray", "stroke-miterlimit", "stroke-dashoffset", "stroke-linecap", "stroke-linejoin", "type", "clip-path", "mask"

## Modeling with Custom Graphics

Once uploaded, custom graphics can be used in customer journey maps, value chains, BPMN 2.0 diagrams and navigation maps.

To use custom graphics in a model, follow these steps:

1. Open an existing diagram, or create a new one.
2. Select an element you have defined a custom graphic for.
3. In the *Attributes* panel under *Main Attribute*, select the arrow next to the *Image* field.
4. Select your custom graphic from the drop-down menu.  
Your element changes from the default graphic to the custom graphic you defined.

### Note

Models with custom graphics can be imported, exported and published to SAP Signavio Process Collaboration Hub the same as standard models.

# 8 Modeling Notations

SAP Signavio Process Manager supports multiple modeling notations: BPMN for business process models, value chains, DMN for decision diagrams and more.

In this section, you find the editing features of the different modeling notations:

- Section [Business Process Modeling and Notation \(BPMN\) \[page 75\]](#) explains how to model business process diagrams in the editor.
- With [Value chains \[page 176\]](#), you create high-level perspectives on the process hierarchy in your organization.
- With [Decision Model and Notation \(DMN\) \[page 112\]](#), you model decision diagrams to describe frequently made decisions of an organization. It is also possible to simulate decisions and define and execute test case for DMN decision logic.
- Enterprise architecture diagrams enable you to visualize your corporate IT system architecture within and across business domains. You can learn how to model in section [ArchiMate \[page 179\]](#).
- In addition, SAP Signavio Process Manager supports a set of [Further notations \[page 200\]](#) that are of lesser importance in practical process management scenarios.

## 8.1 Business Process Modeling and Notation (BPMN)

Learn how SAP Signavio Process Manager uses BPMN, an industry standard for modeling business processes.

The standard is published by the Object Management Group (OMG) and supported by a variety of vendors and consultants.

SAP Signavio Process Manager supports BPMN 2.0, including all modeling elements and attributes. With this version of the standard, you can define activities, control flow, data flow, organizational dependencies, and system dependencies of business processes.

The syntax rules of BPMN are enforced by the editor.

SAP Signavio is committed to BPMN, has been and continues to be involved in the standardization process, and promotes BPMN in industry and academia.

### 8.1.1 Model a BPMN Diagram

This section describes the special features of modeling a BPMN diagram. Find more on modeling instructions that apply to all notations in section [Modeling \[page 30\]](#).

## Select a Notation Subset

By default, multiple subsets for the BPMN notation are available.

### Note

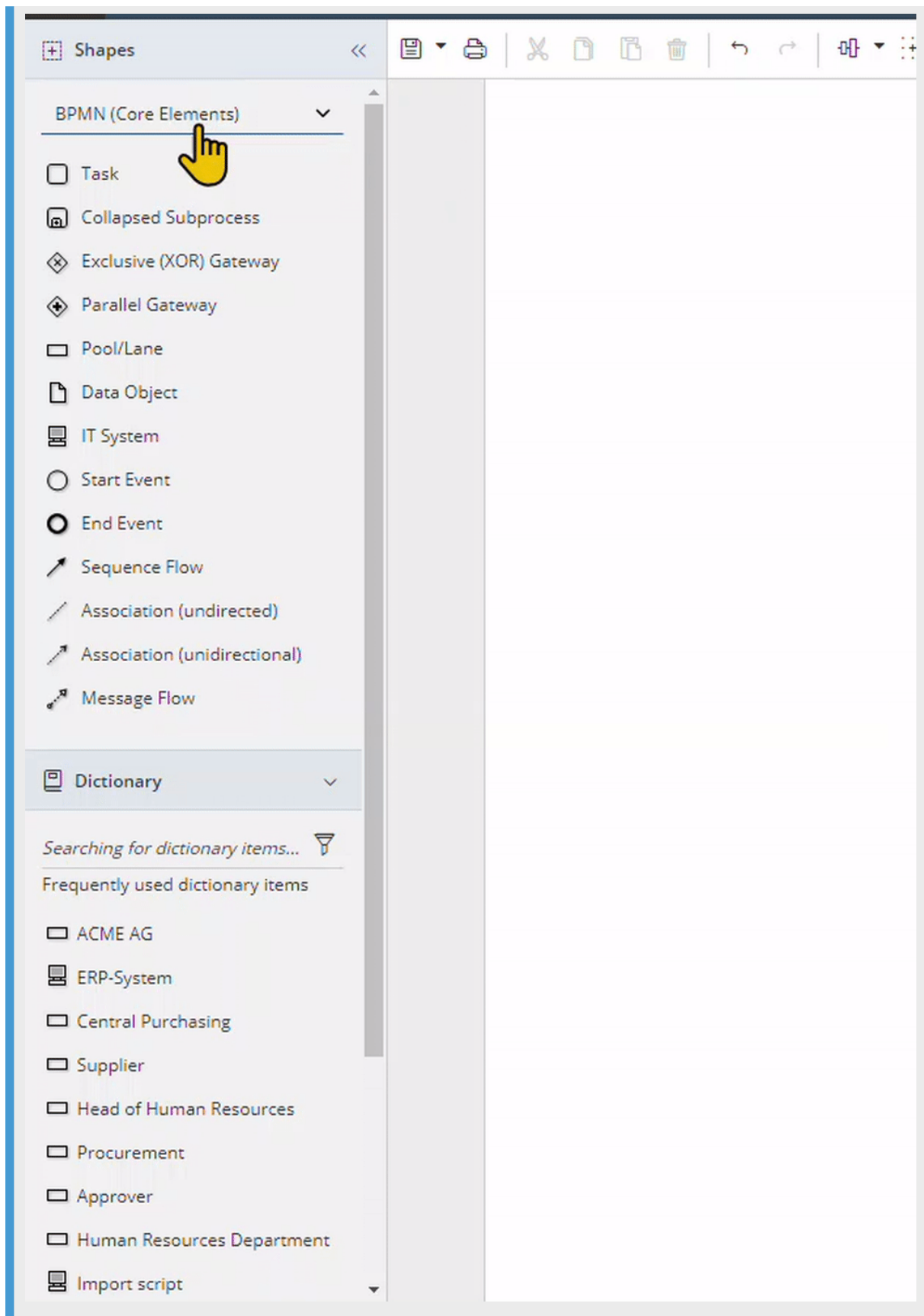
Which subsets or which elements within a subset are available to you depends on the settings of your workspace. Your workspace administrator can customize the subsets.

To select a notation subset, follow these steps:

1. From the explorer, open your diagram.  
The editor opens.
2. In the shape repository on the left, select the subset you want to use.  
The elements of the subset are displayed in the shape repository. You can change the subset any time.

### Example



*Example*



## Modeling Elements

The modeling elements correspond to the BPMN standard. Find an overview in the element guide [Business Process Model and Notation: An introductory guide](#) .

The following elements are additionally available:

- **Live Insights**  
Add insights and KPIs you want to monitor to diagrams, read more in section [Add Live Insights \[page 59\]](#).
- **IT systems**   
Define artifacts as IT systems.
- **Additional participant**   
Add more participants to an activity.

For the following elements, we provide detailed instructions:

- [Create subprocesses \[page 56\]](#)
- [Add pools and lanes \[page 42\]](#)
- [Work with BPMN connectors \[page 78\]](#)
- [Intermediate events and boundary events \[page 80\]](#)

## Work with BPMN Connectors

When connecting two elements, the connector type is automatically determined according to the BPMN standard. For example, connectors between tasks are sequence flows, while connectors to annotations or data objects are associations.

## Add, Move, or Remove Bending Points

To show the bending points of a connector, hover over it. You can drag any existing bending point to a new location.

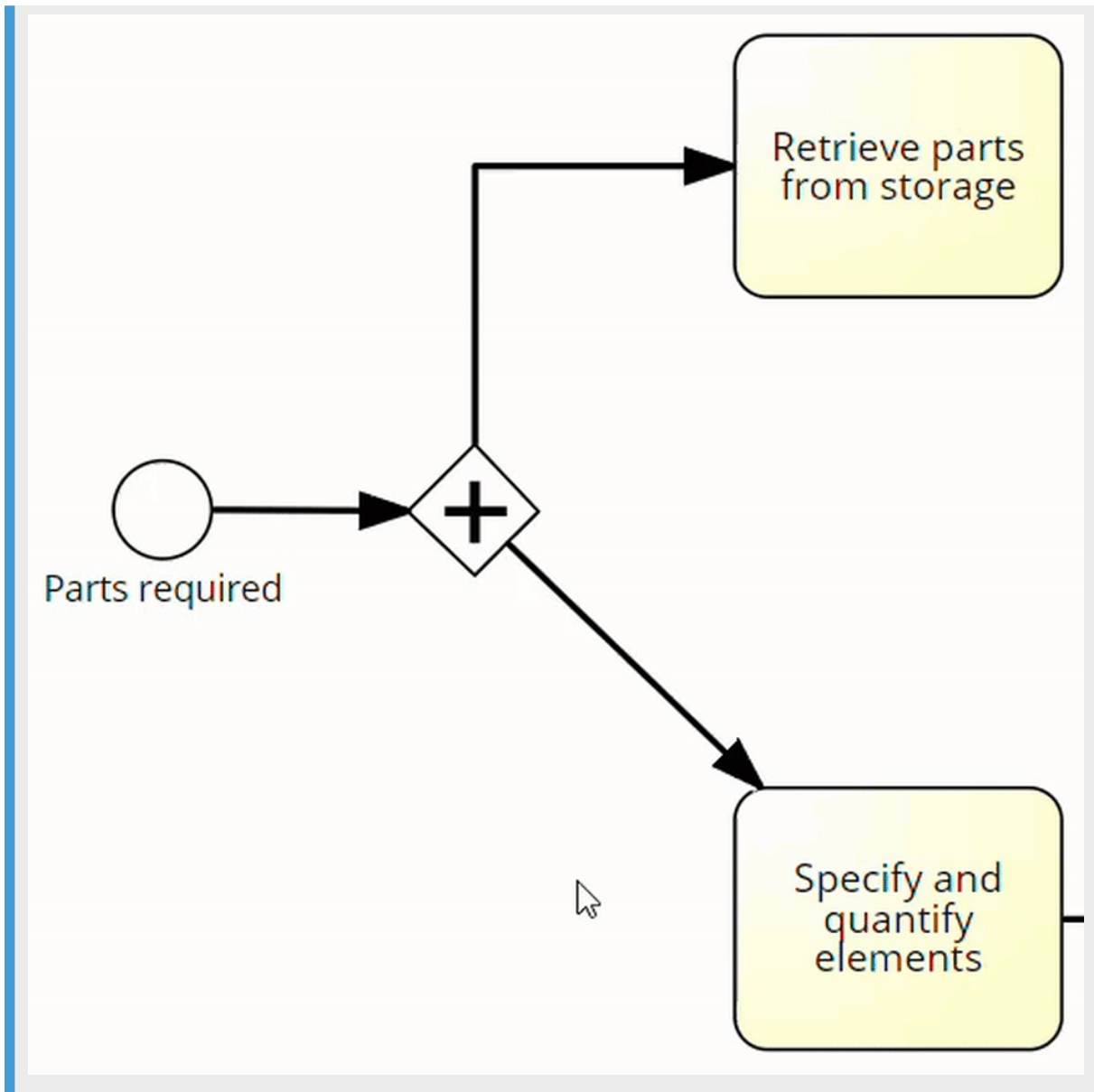
To add a bending point, click the connector and drag the new bending point to its location.

To remove a bending point, you have the following options:

- drag the bending point to a location that is on a line with the two neighboring bending points
- drag the bending point onto a neighboring bending point

### Example

*Example*

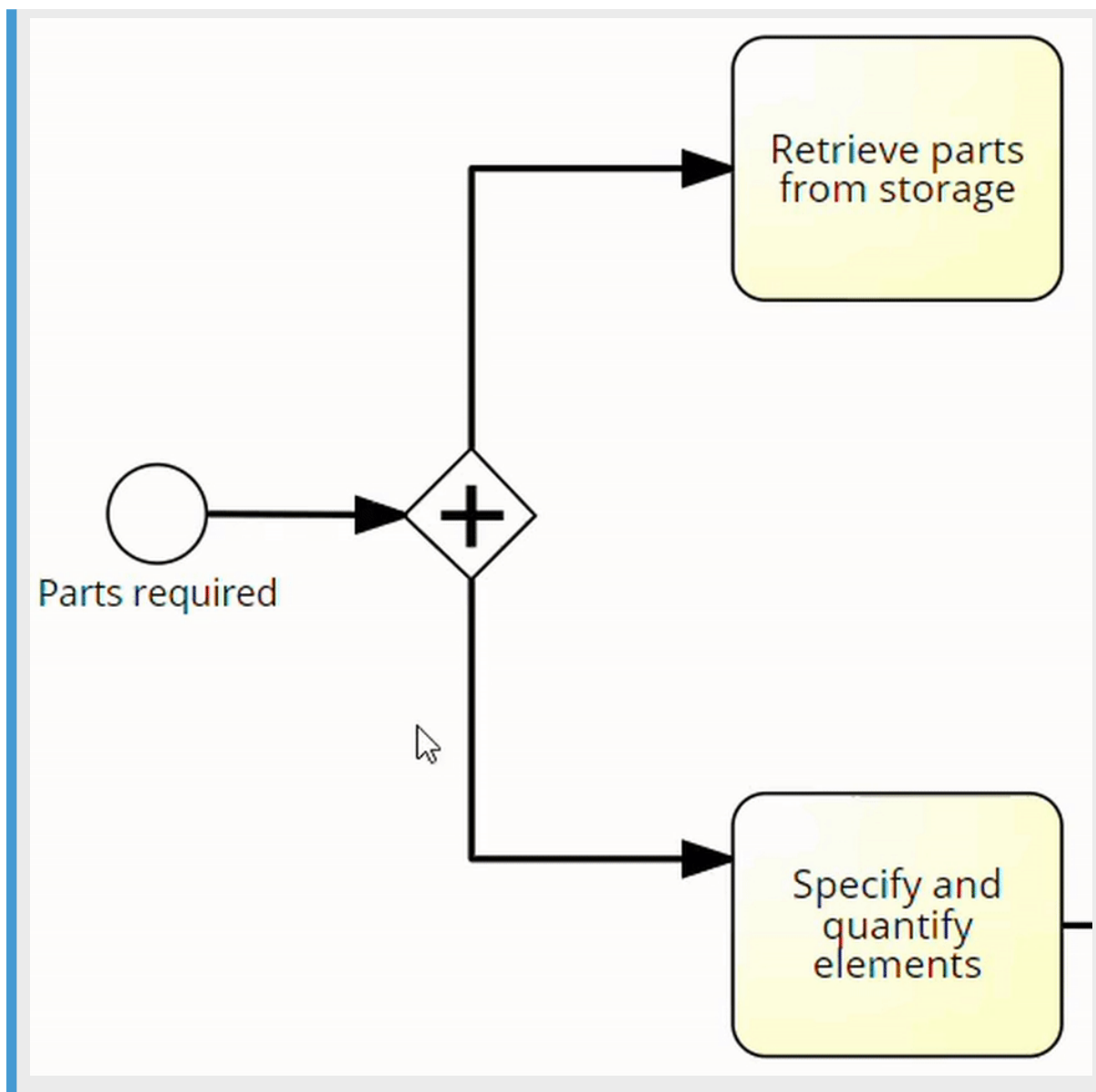


## Move Connector Sections

You can move horizontal or vertical connector sections that are between bending points or between a bending point and another element. To do so, hover over the connector, click the yellow area, and drag it onto its new location.

### ❁ Example

*Example*



## Attached Intermediate Events or Boundary Events

### Note

The BPMN specification uses the term *boundary event* instead of *attached intermediate event*.

With attached intermediate events, you can react on events that occur during the execution of a task. For example, if a customer cancels an order while it is still being processed, the order processing needs to stop and tasks need to be executed that cancel the order.

- To attach an intermediate event to a task, drag it onto a task. A green border in the task indicates that the event can be attached. Some intermediate events, like the link intermediate event, can't be attached to a task.

The following event types are available:

Event type	Description
Canceling	The occurring event cancels the task and determines how to proceed.
Non-canceling	The path defined at the event is executed in addition to the executed task.

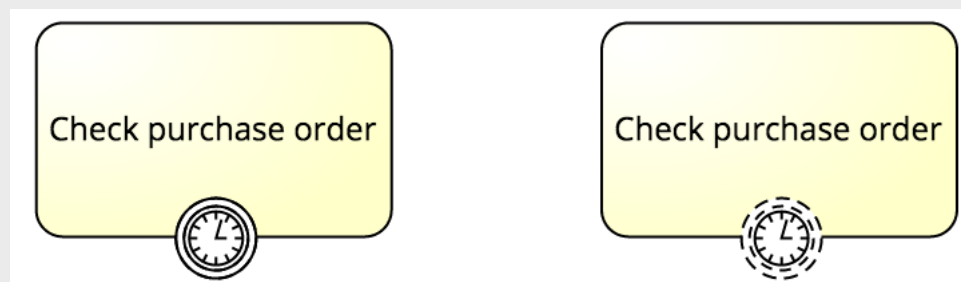
Attached intermediate events are canceling events by default.

- To change an event to non-canceling, select it and disable the option *More Attributes > Cancel activity* in the attributes panel.

Canceling events are displayed with a solid border, the border of non-canceling events is a dotted line.

#### ❖ Example

*Example*



## Change the Diagram Orientation

BPMN diagrams are horizontally oriented by default.

We recommend to set the orientation before you start modeling.

#### 📘 Note


Changing the orientation can change the diagram layout significantly and even break the layout. Previous layout states can't be restored.

To change the orientation, follow this step:

- In the attributes panel, under *Main Attributes > Diagram orientation*, select the horizontal or vertical orientation.

## Check the Diagram Syntax

You can check the syntax of a BPMN diagram.

- In the toolbar, click  > [Check syntax](#). Errors are shown in the diagram. To get more details on an error, hover over it.

### Note

The basic syntax check only checks the following things:

- Element connectivity (every element must have incoming and outgoing flows)
- Gateway direction consistency
- Basic BPMN 2.0 specification compliance

Further checks are available, read more in section [Work with modeling conventions \[page 55\]](#).

## Related Information

[Simulating BPMN Diagrams \[page 240\]](#)

[Inviting Modelers to Edit a Diagram \[page 276\]](#)

[Export a BPMN Diagram as XML \[page 335\]](#)

## 8.1.2 Set BPMN Attributes

Modeling elements have several properties you can edit. These properties are called attributes. You can use attributes to change the appearance of an element (for example the background color or label). Attributes can also be necessary to execute a process, for example the decision logic in a DMN diagram is an attribute.

You edit attributes in the attribute panel on the right side of the editor.

- To change the attributes for one element, select the element and open the attributes panel.
- To change diagram-wide attributes, choose any empty space on the canvas and open the attributes panel.

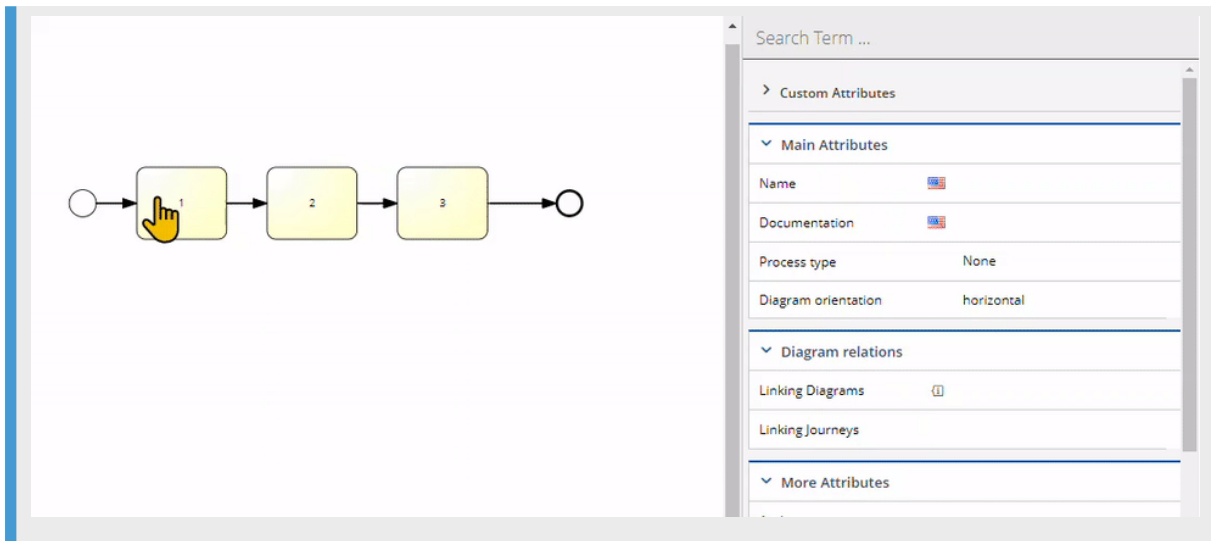
### Note

The first section of the attribute panel contains custom attributes, which can be defined by your workspace administrators.

You can change attributes for one element and diagram-wide attributes.

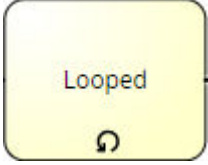

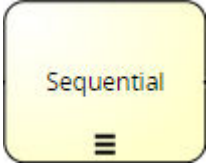









### Example

*Example:*

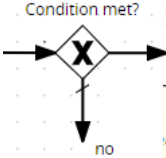
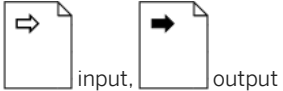


## Frequently Used BPMN Attributes

BPMN includes a range of attributes. The following table lists the most important attributes.

Attribute	Elements	Default	Use
Loop type	task, subprocess	None	<p><i>Standard</i>: task is is executed multiple times</p> 
			<p><i>MI Parallel</i>: task is executed multiple times in parallel</p> 
			<p><i>MI Sequential</i> task is executed multiple times sequentially</p> 
Task type	task	None	<p>Specifies the task</p>  Send,  Receive,  User,  Manual,  Service,  Busi-  ness rule,  Script task
Is for compensation	task, subprocess	false	<p>A compensation activity is used to cancel the result of another activity that has already been completed.</p> 

Attribute	Elements	Default	Use
<b>Is a transaction</b>	subprocess	false	<p>A transaction contains several activities that must be completed successfully for the flow to continue. If any of the activities was not completed successfully, all of them must be reversed to their original state.</p> 
<b>Is ad hoc</b>	subprocess	false	<p>In an ad hoc subprocess, you define the steps, but not the order.</p> 
<b>Is a call activity</b>	task, subprocess, event-subprocess	false	<p>A call activity links to a globally defined process or subprocess. The called process controls the flow. Non-standard start events are ignored.</p> 
<b>Subprocess reference</b>	subprocess, event-subprocess	none	<p>The subprocess linked to the element is listed as the reference. Usually, a BPMN diagram in the same workspace is linked.</p>
<b>Is multi instance participant</b>	pool	false	<p>Multiple similar organizations or process participants can be contacted during a process. For example, project proposals can be requested by multiple companies. </p>

Attribute	Elements	Default	Use
Condition type	sequence flow	Standard	<p>After a gateway, one sequence flow can be the default flow that is followed in case no other condition is true.</p> 
State	data object	none	<p>States can further refine the life cycle of data objects. You can use any label for your states. For example, you can distinguish between 'new', 'completed' and 'rejected'.</p>
Input/Output	data object	none	<p>Data objects can be read (input) or written (output) during a process.</p> 
Instantiate	task	none	<p>Use this when a <i>Receive Task</i> should <b>start a process instance</b> by waiting for an incoming message.</p> <ul style="list-style-type: none"> <li>• Set Instantiate = true if the Receive Task is the <b>first activity</b> (no incoming sequence flows).</li> <li>• With this attribute enabled, the Receive Task behaves like a <b>Message Start Event</b>.</li> <li>• Multiple Receive Tasks in the same process can be set to instantiate the process (each can start a new instance).</li> </ul>

Subprocesses, event-subprocesses and pools can be collapsed and expanded.


## Add Documentation to an Element

You can add documentation to an element to include more details. For example, if a rarely executed task requires instructions, you can add these instructions as documentation.

### Note

The element documentation can also be accessed in SAP Signavio Process Collaboration Hub.

To add documentation to an element, follow these steps:

1. In *Main Attributes*, choose *Documentation*.
2. Choose  (*more options*). The documentation editor opens.
3. Enter and format the documentation.
4. Save with *Ok*.

## 8.1.3 Responsibility assignment according to RACI

The responsibility assignment matrix RACI is used to represent responsibilities for activities.

RACI is an acronym for the key responsibilities:

- *R* for responsible: performs the activity
- *A* for accountable: approves the activity
- *C* for consulted: is consulted for the activity
- *I* for informed: is informed about the activity

Responsibilities can be assigned to diagram elements.

### Assign responsibilities in a diagram

For BPMN diagrams, there are different ways to assign responsibilities:

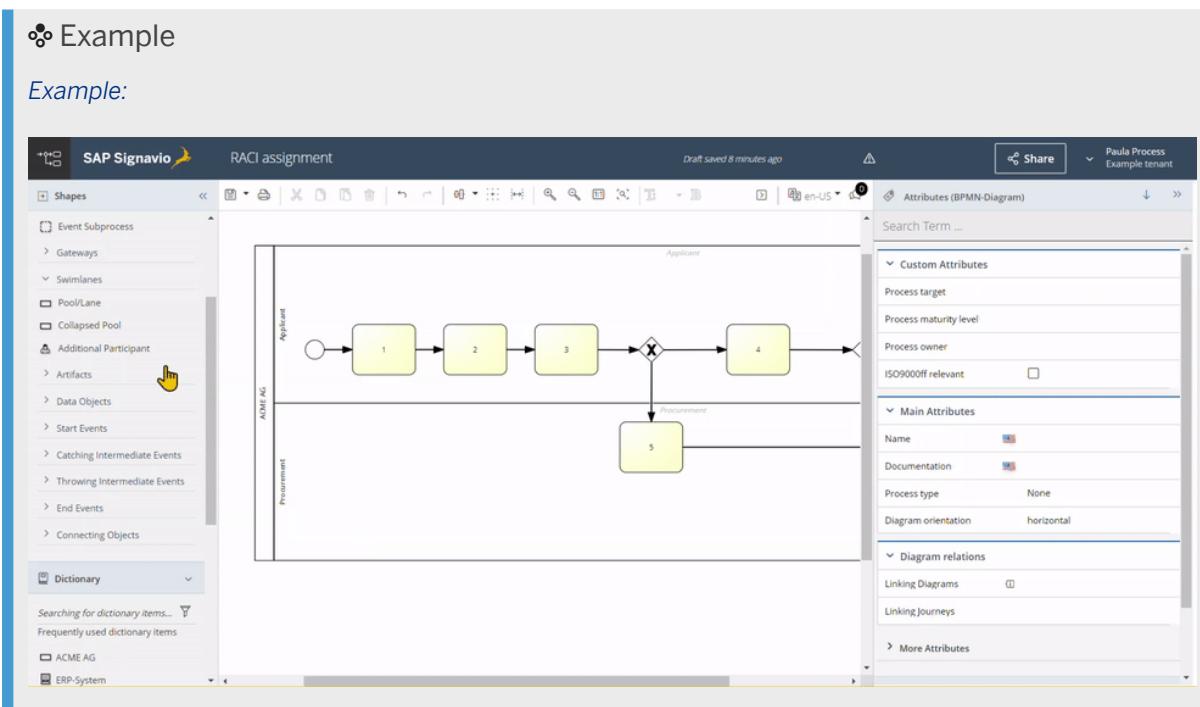
- You can use lanes or the element *Additional participant*.
- You can assign custom attributes to tasks.

### Assign responsibilities with lanes and additional participants

Add a lane to set all activities in this lane as responsible (R) in the RACI matrix. It's not possible to assign additional RACI responsibilities to a lane element.

The element *Additional participant* can be linked to an activity with the connector *Association (undirected)*. The connector has the attribute *Responsibilities* to assign responsibilities.


1. Add an *Additional participant* element to your diagram.
2. Connect the *Additional participant* and the *Task* with an *Association (undirected)* connector.
3. In the *Attributes* panel, assign one of the four RACI *Responsibilities* to the connector.  
The responsibility is displayed as the connector label in the diagram and listed for the activity when you export a RACI matrix.



## Assign responsibilities to tasks as custom attributes

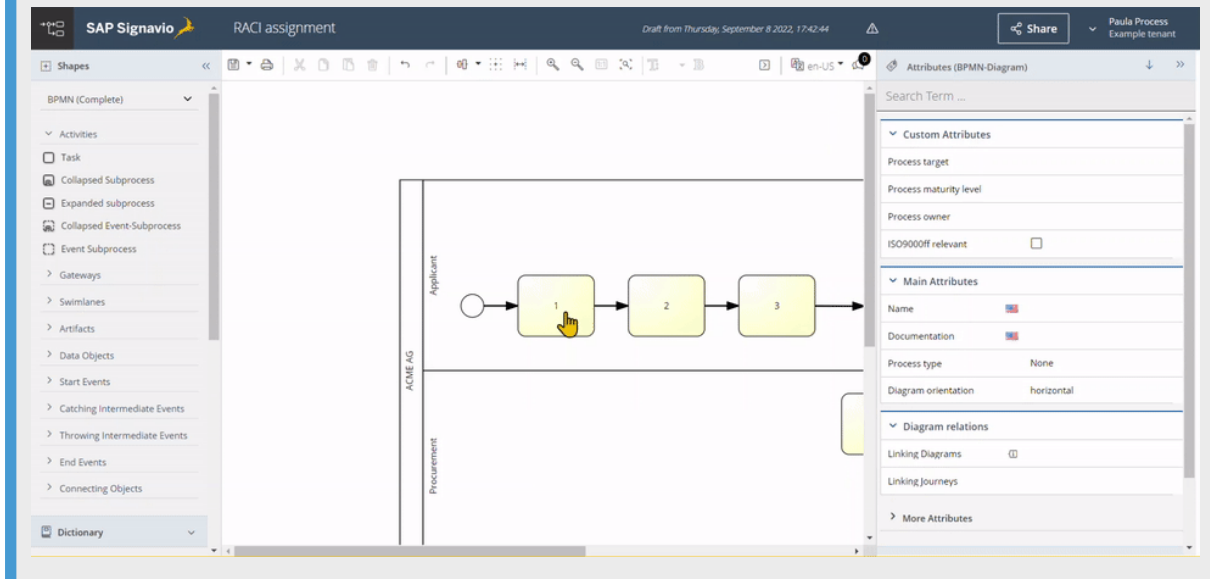
### Note

To assign responsibilities to tasks, custom attributes for RACI need to be available in your workspace. Custom attributes can be defined by your workspace administrator.

1. Select a task in the diagram.
2. Open the attribute panel.
3. In the section *Custom Attributes*, click the responsibility you want to add.
4. Click the  icon.
5. Enter a role. Available dictionary entries are suggested as you type.
6. Select the role from the list. The role is added to the attribute.  
You can add multiple roles for one responsibility. Roles that are already assigned are displayed below the text field.
7. Click *Save*.  
In the diagram, there is no visible change.  
When you export a RACI matrix, the assigned responsibilities are listed.


## Example

Example:



To preview the dictionary entry for a responsible role, click the role.

To open the dictionary entry, click the  icon and click [Open](#).

To remove a role, click the  icon and click [Remove](#).

## Export a RACI matrix

The RACI matrix lists the 4 RACI assignments and an additional responsibility where no RACI category was used:

- **R** - Responsible
- **A** - Accountable
- **C** - Consulted
- **I** - Informed
- **X** - Participates

To export a RACI matrix for one or multiple diagrams, follow these steps:

1. Select [Reporting > Responsibility assignment matrix / RACI \(XLS\)](#).
2. In the dialog, select the diagrams.  
When you select multiple diagrams, one matrix including all diagrams is generated.  
When a diagram has no responsibilities assigned, the matrix remains empty.
3. Click [Start analysis](#).  
An XLS file is generated.

## 8.1.4 Setting Key Performance Indicators (KPIs)

Key performance indicators have to be set for a quantitative analysis. The indicators can be set for task execution probabilities and frequency. They also inform about cost and execution time.

Diagrams have to be structurally and semantically correct to create a quantitative analysis. SAP Signavio Process Manager provides tools that allow you to check the corresponding properties of process diagrams.

KPIs can be set for each element in the *Attributes* section on the right in the Editor. Select an element, then click the two *arrows* above *Attributes* to extend the section on the right. The KPI values for the corresponding analyses are set under *Cost and Resource Analysis* and *More Attributes*. Simply click the corresponding headlines to expand the KPI settings. When you are finished setting the KPI values for one element, simply click the next element in the central section and add the corresponding values on the right. When you are finished adding the necessary values to all elements, you can click the *arrows* on the left of the grey 'Attributes' header to close the *Attributes* menu and proceed with the calculation.

The following attributes are key values for the process cost and resource consumption analyses:

- *Frequency (per year): Start Event*

Denotes how often a process is started via this entry point. Multiple start events that represent alternative entry points for the process are allowed.

e.g. "1000"

- *Execution (minutes): Task (BPMN)*

Denotes how long it takes on average to complete the task. This value is required for a resource consumption analysis.

e.g. "2.5"

- *Execution costs (currency): Task (BPMN)*

Denotes the costs that come up during the activity. This key value is required for a process cost analysis.

e.g. "5"

- *Probability: Sequence Flow*

Denotes the probability for choosing this sequence flow after a decision gateway/XOR-connector. This is supposed to be a value between 0 and 1.

e.g. "0.2"

### ⚠ Caution

'20%' has to be denoted as '0.2'.s

- *Cost center: Task (BPMN)*

This is an optional value and represents the cost center for the activity costs.

e.g. "KS 1008"

- *Apply in calculation: All elements*

Uncheck to exclude an element from the analysis.


"yes" / "no"

## Note

Floating point numbers are accepted either in the form of "2.5" or "2,5" but will be automatically converted to the notation of "2,5".

## Check Completeness

After setting the KPI, you can trigger a check for completeness to ensure that all required values are present for analysis.

Choose  (*check*) from the toolbar and select *Cost and resource analysis check*.

This check might take several seconds.

Some elements may now be marked with one of the following icons:

- The white exclamation mark on *orange* denotes that key values are missing for an element. It is also attached to elements that will be ignored during an analysis, as it is not logically contained in those measurements. (For example, a sending intermediate message event will be ignored during an analysis.)

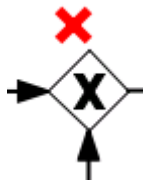
This does not interfere with the analysis calculation, but some of the calculations may not be able to run properly due to missing data.

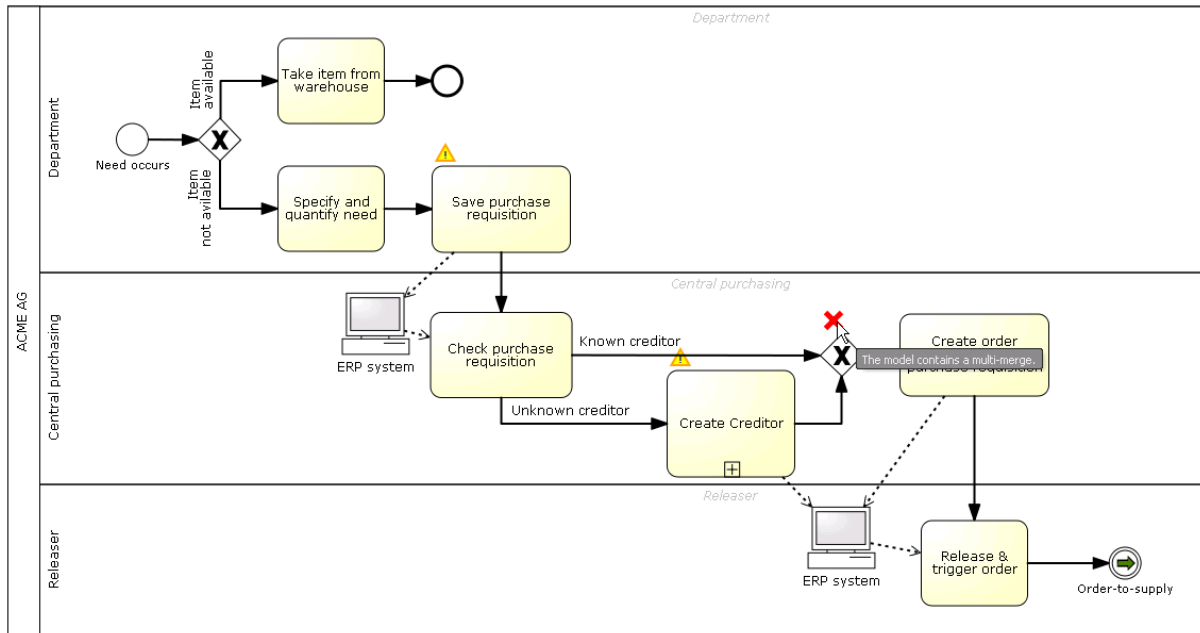


- The white exclamation mark on *red* denotes a heavy structural or logical mistake. Additionally, some modeling elements preventing an analysis are marked with this symbol--for example, a complex gateway cannot be included in a process analysis.

This sign marks that an element interferes with the analysis calculation.

Hover over one of these symbols to get more details about the problem that occurred.





### Get information about an error

An analysis calculation can be triggered only after all severe mistakes (indicated in red) have been removed. After removing them, switch to the Explorer.

## 8.1.5 Create views

You can create different views for different audiences. In a view, you include what you want to show an audience and exclude what the audience does not need to see.

Examples for using different views of process models:

- A model contains both user activities and elements for technical implementation. The audience wants to focus on the technical implementation.
- A model contains different variants of one process. The audience should only view one variant.
- A model contains the expected path of a process and a number of exceptions. The audience doesn't need to see the exceptions.

You can create as many views as you need.

### Create and change views

1. Extend the right panel and scroll to [Views](#). All available views are listed.
  - To create a new view, click [Create new view](#).
  - To configure an existing view, click the view.
 The view configuration opens.

2. In the configuration, select the objects to exclude from a view.  
You can preview the result and the original diagram.
3. Enter a name and a description for your view.
4. Click [Save changes](#).

## Navigate the view configuration

Click and drag a preview to scroll to other areas of the diagram.

Use the zoom slider to zoom in and out of the diagrams.

By default, you move both diagram versions in the preview. To move the diagrams separately, disable [Synchronous Scrolling](#).

## Edit a view

You can exclude all [Comments](#), [Data objects](#), [IT Systems](#), or [Roles](#) above the original view.

- [Data objects](#): contains data objects, data storage and messages
- [IT Systems](#): contains IT systems
- [Roles](#): contains pools, lanes, collapsed pools and additional participants
- [Comments](#) : contains all comments on the diagram

You can show or hide each element. In the original view, disable elements to exclude them from a view.

For pools, you have additional options. Select an option from the drop-down list at the bottom of the pool.

- [Pool is opened](#): The pool and its content are included in the view. You can define view options for all contained elements.
- [Pool is collapsed](#): The pool content is not shown.
- [Only content](#): No roles that are defined by the pool and its lanes are shown. Message flows attached to the pool are hidden.
- [Pool is hidden](#): Neither the pool nor its content is included in the view. Message flows attached to the pool are hidden.

When you uncheck a pool, all elements in that pool are excluded from a view.

To keep the original diagram size and the original placement of the shown elements, disable [Reduce free space](#).

The preview is refreshed after every change.

## Duplicate a view

To create a duplicate view from an existing view, follow these steps:

1. Click the original view to open it.

2. Edit the view.
3. Click *Save as duplicate...*
4. Enter a name for the new view and click *OK*.  
A new view is created.

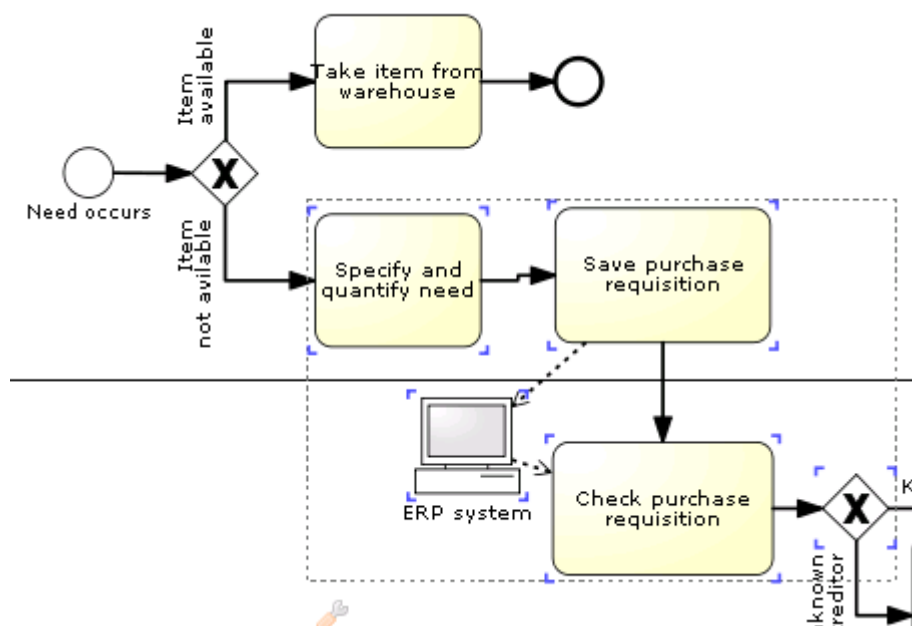
## Delete a view

1. Click the view to open it.
2. Click *Delete view*.
3. Confirm the deletion in the dialog.  
The view is deleted.

## Editing views from within the Editor

It is possible to include or exclude diagram elements from one or multiple views while editing a diagram--without opening the views configuration. This makes it fast and easy to edit existing views.

- Choose one or multiple elements.



Changes in the include option can be applied to single or multiple elements

- Behind each view that is stored in the attribute editor, check boxes will appear. Those can be empty, checked or, if multiple elements were selected, colored green:



Only some of the selected elements are included in the view, but not all.



### Checked

All selected elements are included in the view.



### Empty

None of the selected elements is included in the view.

- Check or uncheck the boxes, to add/remove the elements selected from one of the views.

## Check views while modeling

When you have views available, you can check while modeling if an element is visible in a view.

Open the view panel and click an element. The view which contains the element is marked.

**Example**

*Example:*

The screenshot displays a modeling interface. On the left, a task flow diagram consists of three rounded rectangular boxes labeled 'Task 1', 'Task 2', and 'Task 3', connected by solid arrows pointing from left to right. Above 'Task 1' and 'Task 3' are computer monitor icons connected to the task boxes by dashed lines. A yellow mouse cursor is positioned over the diagram area. On the right, a 'Views' panel is open, showing a 'Create new view' button and a list of selected views: 'No IT systems' and 'Only IT systems', both with unchecked checkboxes. The panel also contains text explaining the view functionality.

## Exporting views

You can include views when you export a diagram as an SVG, PNG, PDF, or a BPMN 2.0 XML file. The SGX export contains all views for a diagram. Read more about exporting diagrams in section [Downloading/exporting diagrams \[page 330\]](#).

## 8.1.6 Risk Management

Learn how to define custom risk management tables in the Dictionary.

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

## Creating Risks and Controls in the Editor

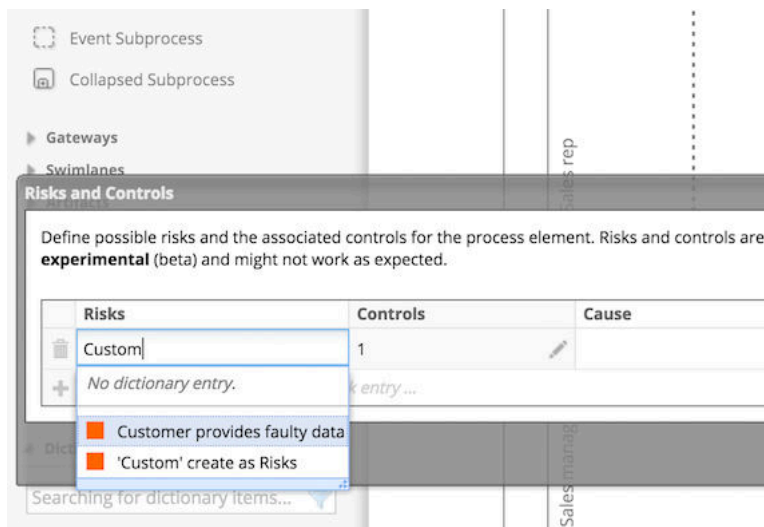
You can document the *risks and controls* directly in your process landscape. This is obtained via the element attribute.

### Caution

To use this feature, you need to configure it first, see section [Managing risks and controls definitions](#) for details.

To add a risk to a diagram element, proceed as follows:

1. Ensure that you defined Risks and Controls as described in [Managing risks and controls definitions](#).
2. Select the element.
3. In the attribute panel under *Custom Attributes* select the defined category. The Risk Management dialog opens.
4. Enter the name for the risk. While typing a name, the system automatically proposes possible names of existing risks.



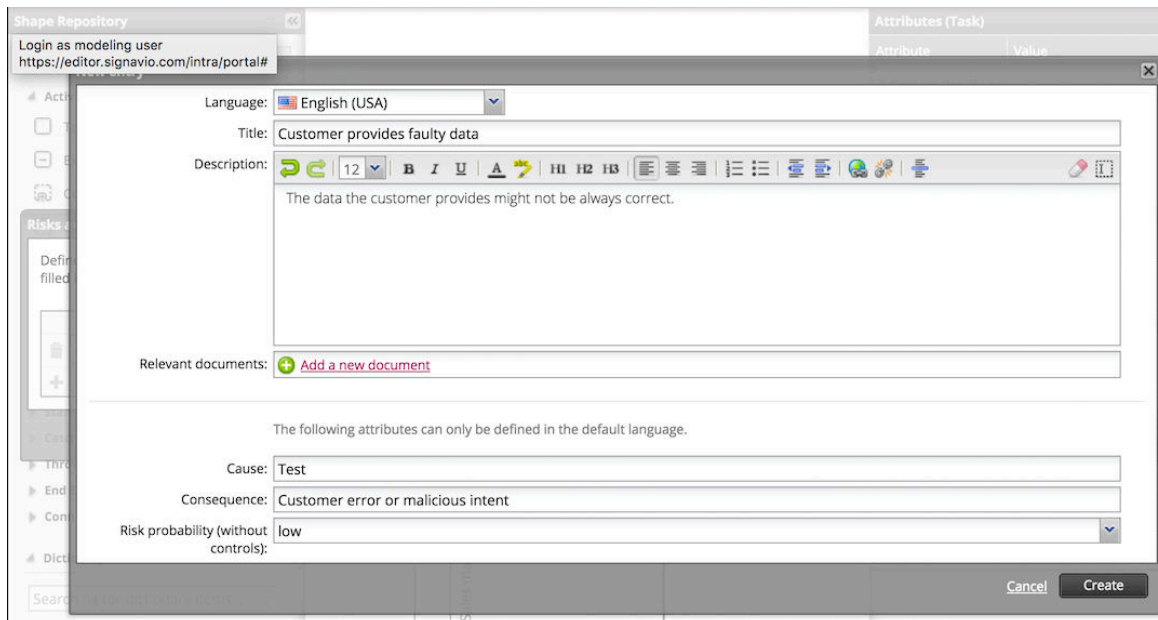
Suggestions pop up as you type

### ⚠ Caution

If you use an already existing risk attribute from the dictionary, you can *change locally* the corresponding value. Please be aware that this could lead to inconsistency and should be avoided. For more detailed information see section [Overwrite dictionary entries locally \[page 226\]](#).

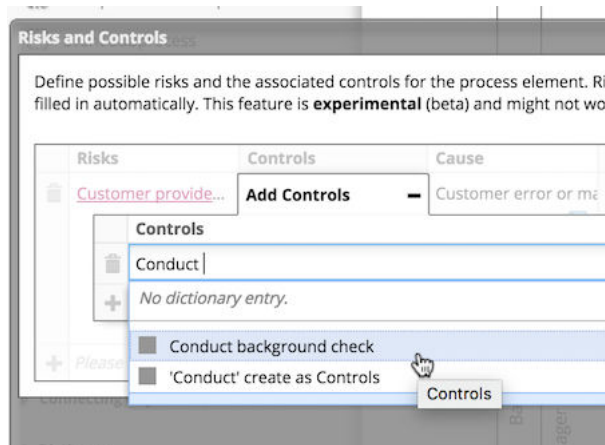
To create a new risk, follow these steps:

1. Enter the risk definition.




The risk definition

2. For each risk, you can add controls:



Add a control

3. Choose  (*visualize*) in the toolbar to visualize controlled and uncontrolled risks:

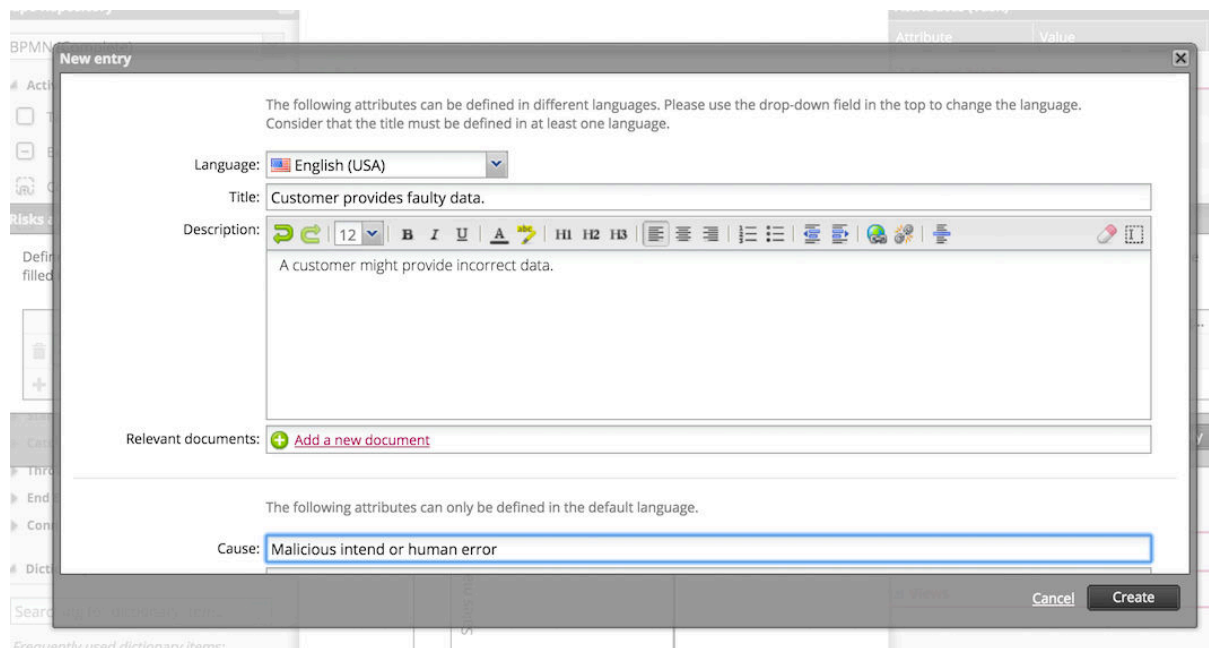
To create an overview over all risks and controls, you can create reports, see section [Generating risks management reports \[page 303\]](#).

## Edit Risks and Controls in the Dictionary

When you need to update a specific risk or control, you can do this centrally in the Dictionary. The update will affect all diagrams that reference this risk or control immediately.

Of course, you can also add new risks and controls in the Dictionary (see [Using the Dictionary in the Editor \[page 223\]](#)).

To add risks and controls to the Dictionary, open the Dictionary and create new entries of the type *Risk* or *Control*:



Create a new risk in the Dictionary

To ensure your risks and controls definitions are updated when a process changes, you can employ approval workflows, see section [Approval workflows \[page 287\]](#), that enforce a review by a risk management specialist before a process revision is published in SAP Signavio Process Collaboration Hub or otherwise released into a production environment.

## 8.1.7 Migrating Diagrams to BPMN 2.0

Learn how to migrate BPMN 1.2 business process diagrams to BPMN 2.0.

Migrating lets you reuse old diagrams modeled in BPMN 1.2 with new elements from BPMN 2.0.

The diagram content is not changed during this migration.

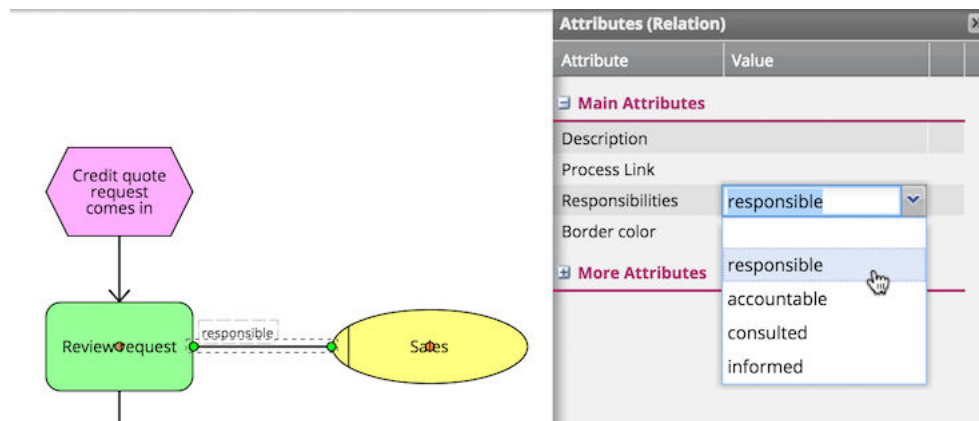
1. Select the diagram you want to migrate.
2. Choose **Edit** > **Migrate to BPMN 2.0** in the Explorer's top drop-down menu.  
The diagram can now be edited and saved as a BPMN 2.0 diagram.

## 8.1.8 Converting EPC diagrams to BPMN 2.0

SAP Signavio Process Manager allows you to automatically convert Event-driven Process Chains (EPCs) to BPMN 2.0 diagrams.

To convert one or multiple diagrams, open the explorer, select the corresponding diagrams and go to **Edit - Migrate EPC to BPMN 2.0**.

Now, you can decide whether to convert *Position/Roles* and *Organizations* to BPMN 2.0 *Pools* and *Lanes*. The system handles the assignment to Pools/Lanes via the custom *Relation* attribute *Responsibility*. To properly assign a function to a Positions/Role or Organization, you need to set the corresponding attribute value to *responsible*:



The system will create empty Pools/Lanes for all Positions/Roles and Organizations that lack a corresponding responsibility assignment.

If you don't activate the corresponding checkbox, the system will convert *Position/Roles* and *Organizations* to the SAP Signavio-specific BPMN extension *Additional Participant* instead.

Click [Migrate](#) to proceed.

Configure the converter and start the conversion.

### ⚠ Caution

EPC and BPMN 2.0 are not entirely congruent notations. The following EPC elements cannot clearly be mapped to BPMN 2.0 elements and are ignored by the converter:

- Letter
- Email
- Fax
- Phone
- Entity
- Form
- Resource

If you use these elements in your EPC diagrams, we strongly recommend you to review and edit the generated BPMN 2.0 diagrams after the conversion.

## 8.1.9 FIM attributes for public administration

### ⚠ Caution

This article introduces the FIM BPMN extensions, which are relevant for the German public administration. The plugin for the editor is accessible on request.

The German Federal Ministry of the Interior created a BPMN extension for structuring BPMN-diagrams: the so called FIM attributes (translates as Federal Information Management). These attributes equip processes in departments and sectors of the public administration with reference attributes, to compare them with more clarity on a national level.

The principle of the FIM initiative is: "The same content should always be described in the same way."

The attributes refer to common activity types like *receive information* or *decide*. These are activities that occur commonly in the processes of the public administration, but different local authorities have different ideas of implementing them. For example: Many local administrations use different forms to *receive information* for public services, although on the basis of these information they have to *decide* over the same factual matters. The FIM initiative strives to standardize the processes to reduce bureaucratic expenditure, using instruments of process management.

In the BPMN extension, these processes are ordered into groups through FIM. The *reference activity groups* are marked with different labels in the top right corner of a subprocess activity. This makes the the FIM groups easy to recognize.









You can also use the add-on outside of the public administration context. It is a useful tool to structure subprocesses and to standardize content that belongs to the same reference group.

## Adding an FIM attribute

1. Add a collapsed sub process to the canvas.
2. Select the subprocess and open the attribute menu.
3. Under main attributes, from *reference activity groups*, select the correct FIM attribute from the drop-down list.

## Overview of FIM-attributes

The attribute labels can be used flexibly, but usually they refer to:

1. *Receive information*  describes the arrival of new information or documents.
2. *Provide Information*  describes the forwarding of information or documents, especially to external participants (for example civilians or other enterprises).
3. *Check formally*  describes proving something on the basis of procedural law.
4. *Check materially*  describes proving something on the basis of substantive law.
5. *Decide*  refers to a decision based on an expert assessment.
6. *Create* , for example a new document.
7. *Execute participation*  involves an external participant into the process.
8. *Execute other activity*  is optional, and can be used if no other type applies.

More information on how to create subprocesses is available in the section [Create subprocesses \[page 56\]](#).

## Creating attributes for FIM reference activities

1. In the *explorer*, select *Setup > Define notations/attributes*.
2. Select *Business Process Diagram (BPMN 2.0)* as the modeling language and *Collapsed Subprocess* as the element type and click *Add* in the *Custom attributes* section.
3. You can define the attribute name and type.

Read more in section [Add and manage notation subsets](#).

## 8.1.10 Frequently asked questions

### How can I add a second lane to a pool?

You can drag lanes from the shape repository in the left panel. Drag the lane onto the head of a pool and a new lane will be created. Find more information about pools and lanes in section [Add pools and lanes \[page 42\]](#).

### How can I change the orientation of a diagram (horizontal/vertical)?

You can change the orientation of a diagram in the attribute column under *Main Attributes*. Simply click the set value ( *horizontal* or *vertical* ) of the attribute *Diagram Orientation* and change it correspondingly. The Editor will automatically re-align the elements in the diagram after you confirm.

### How can I link a document to a task?

Custom attributes can be defined for each modeling element. Open the Explorer, click *Setup* and choose *Define notations/attributes*. Now, select a subset (e.g. Business Process Diagram (BPMN 2.0) and BPMN (complete)), the diagram element type (e.g. Task) and click *Add custom attribute*. Name the attribute and choose the data type Link/URL. Click *Create*.

Whenever a diagram is opened in the Editor, you can select a task and link a document to it using the attribute Editor.

## 8.2 Customer Journey Maps Introduction

Learn about the customer journey map notation, which was introduced in 2017.

Customer journey maps (CJMs) provide customer-centered entry points to your business process landscape. CJMs are high-level intuitively readable diagrams that focus on the *customer experience* instead of internal

processes. They help you understand how your customers perceive your products and services in the context of their everyday lives and how their key decisions, which for example lead to a purchase or churn, are motivated.

## 8.2.1 What are customer journey maps?

### Note

This section describes the customer journey map notation that was introduced in 2017. The user guide for our new SAP Signavio Journey Modeler can be found [here](#) .

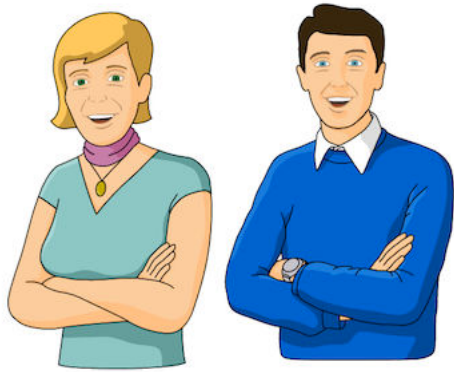
Customer journey maps are graphical representations of the steps a customer absolves when interaction with your organization. They can include a wide variety of information, including things like critical decisions, touchpoints, departments involved, IT systems, or any other points that are specific to your organization. When creating a customer journey map, you model your organization from the **outside in**. Hence, customer journey maps provide customer-centered entry points to your business process and/or enterprise application landscape.

### Customer journey map elements

The following sections explain the customer journey map elements you can use in SAP Signavio Process Manager.

#### Persona

Personas represent typical customers. A persona's attributes and their associated banners define their motivations, goals and pain points, as well as typical characteristics like preferred media channels and IT savviness.



A female and a male persona.

Personas can be either female or male, depending on their *gender* attribute.

## Customer

A customer element represents a persona at a specific step of a customer journey. You can configure customer elements to express their feelings and attitudes as gestures, for example as a **thumbs up**.

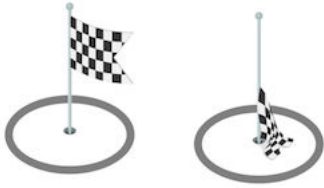


A customer.

As personas, customers can be either female or male, depending on their *gender* attribute.

## Outcome

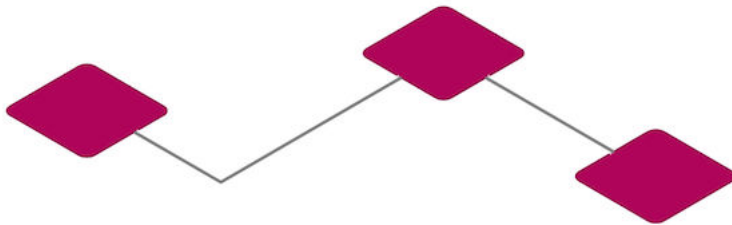
Outcomes define what your customers are trying to get out of their experience. For example, an outcome of the customer journey of a banking customer might be **obtain loan**. Outcomes can be either successes (hoisted flag) or failures (flag on the ground).



Successes and failures.

## Step

Steps (connected through paths) show the sequence of events at a high level and form the backbone of a customer journey map around which supporting elements are arranged.



A sequence of steps.

## Path

Paths connect different steps to define the flow of a customer journey.

## Touchpoints

Touchpoints represent steps where your customer comes into direct contact with your brand. Each touchpoint relates to at least one of your business processes and roles or IT systems. Touchpoints can be either physical (for example: a cash desk) or virtual (for example: social media).



Different touchpoints

## Moment of truth

Moments of truth are key decision points that can make or break your business's chance for succeeding with the customer. They are either barriers (requiring customer empowerment) or signposts (requiring a customer decision).



Moments of truth: barriers and signposts.

## Trigger

Triggers start a customer journey. They can be either *ideas* (inspiration-driven) or *demands* (driven by need).



A trigger.

## Text

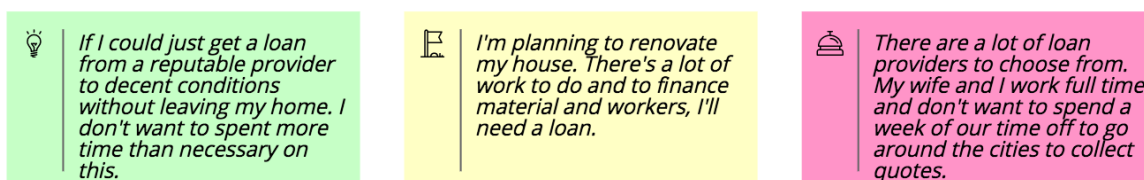
Text labels describe specific customer journey map elements or element groups.



A text describing a customer's thoughts at a specific journey step.

## Banner

Banners are post-it-style notes that contain important textual information about a customer journey map element or about the customer journey in general. The icon and default color of a banner depends on the elements *type* attribute, which can be *idea* (light bulb), *demand* (bell) or *goal* (flag).



Banners of different types.

## Decoration

Decoration elements provide additional visual information to support specific process steps. For example, a **package** decoration element might indicate a delivery.



Different decoration elements.

## 8.2.2 Creating and editing customer journey maps

### Note

This section describes the customer journey map notation that was introduced in 2017. The user guide for our new SAP Signavio Journey Modeler can be found [here](#) .

To create a new customer journey map, open the Explorer and click *New - Customer journey map*:

The system opens the Editor with an empty diagram canvas in a new tab.

You can work on the customer journey map like a diagram of any other type.



### Grouping elements

### Note



In order to create groups, you must include one step element.

Grouping elements makes it easier to model your process landscape, because it lets you move multiple elements together as though they were one single element.

You can group elements in one of three ways. In the Editor:

- Select a set of elements and click  in the left bottom corner of the selection rectangle.
- Select a set of elements and click the  in the toolbar.
- Select a set of elements and press the shortcut "Ctrl + G"

To ungroup elements, do one of the following in the Editor:

- Select a group and click  in the left bottom corner of the selection rectangle.
- Select a group and click the ungroup button  in the toolbar.
- Select a group and press the Shortcut "Ctrl + Shift + G"

After grouping elements in the Editor, open your customer journey map in SAP Signavio Process Collaboration Hub. Click on each group and you will see all information about each element in the group displayed in the annotation.

## Navigating through customer journey maps

If you publish to or preview your customer journey map in SAP Signavio Process Collaboration Hub, you can use the arrow keys on your keyboard to navigate through each step.

To do so, either select a step with your mouse, or simply press the right arrow key on your keyboard. The step you selected will be highlighted, while the rest of the map will be greyed out.

If your step contains grouped elements, an information panel with information about each element will also be displayed for the highlighted step.

## 8.2.3 Integrating customer journey maps into your process landscape

### Note

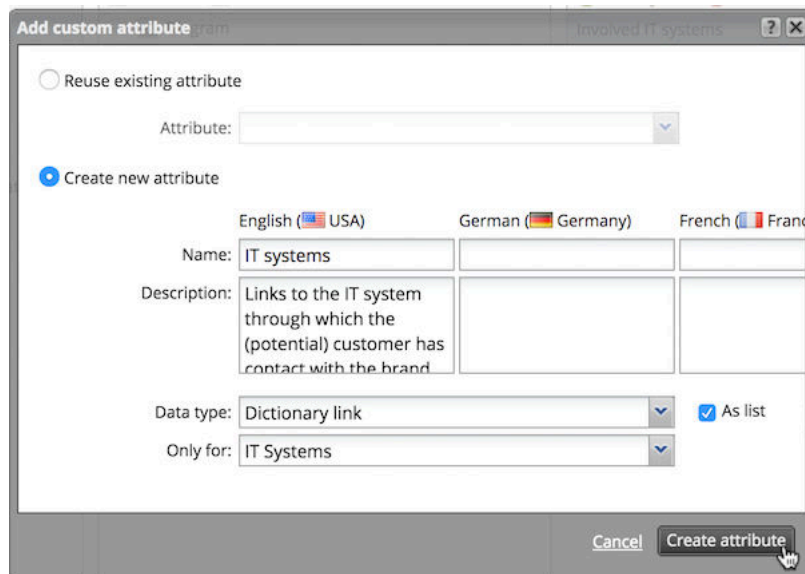
This section describes the customer journey map notation that was introduced in 2017. The user guide for our new SAP Signavio Journey Modeler can be found [here](#) .

In customer journey map diagrams, touchpoints (see section [Touchpoint \[page 179\]](#) ) depict interaction points between your organization and your (potential) customers. In other words, touchpoint elements are entry points to your process and application landscape. When creating touchpoints in customer journey maps, you should reference the business process diagrams, roles and/or IT systems that are involved in the corresponding customer interaction.

## Creating custom attributes for the touchpoint element

To allow referencing process diagrams and - in the form of dictionary entries - roles and IT systems, create a set of custom attributes for the touchpoint element type (see section [Add and manage custom attributes](#)). We recommend creating the following custom attributes:

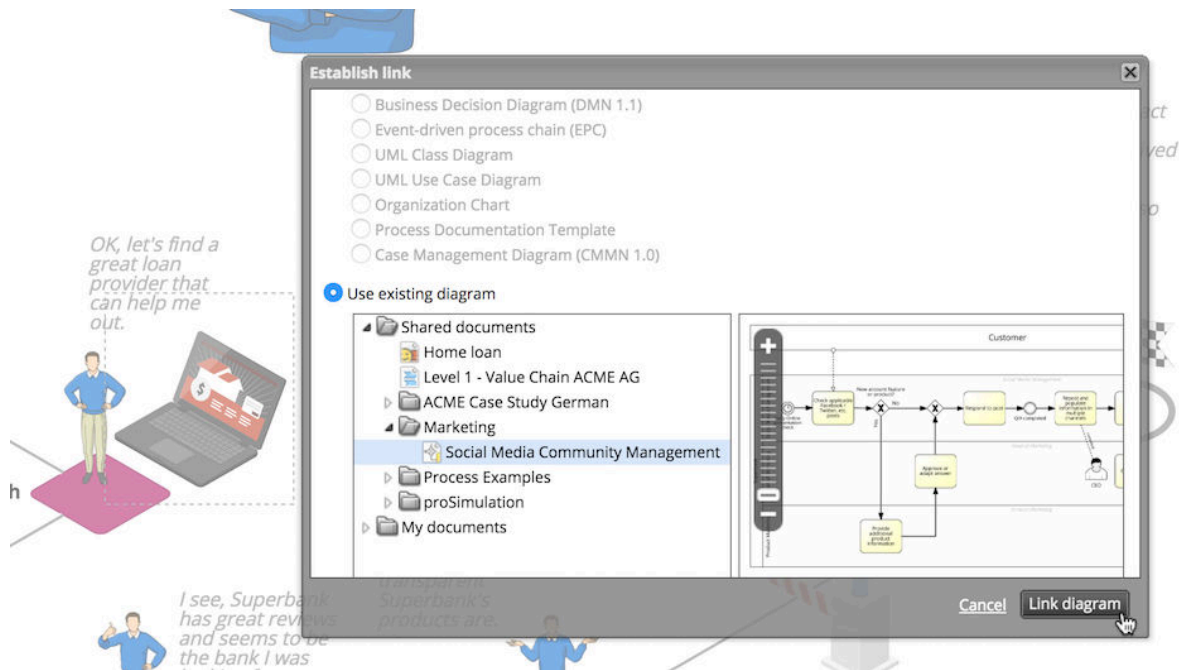
Name	Description	Type	As list?
Process links	Links to the business processes the customer triggers/interacts with	Diagram link	X
IT systems	Links to the IT systems through which the (potential) customer has contact with the brand or organization	Dictionary link (Category: IT systems)	X
Roles	Links to the roles through which the (potential) customer has contact with the brand or organization	Dictionary link (Category: organizational units)	X



Creating a custom attribute to reference IT systems.

## Referencing diagrams and dictionary entries at touchpoint elements

To reference a diagram or dictionary entry at a touchpoint, select the touchpoint element in the Editor and open the attribute panel. Select the attribute you want to edit - for example **Process links** - and add the reference:



Adding a process reference to a touchpoint element.

## 8.3 Decision Model and Notation (DMN)

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

### Note

This feature is available on request.

SAP Signavio Process Manager supports DMN version 1.2.

DMN version 1.2 introduced the diagram element `decision service` to the specification. This element is not supported.

You find the specification at <https://www.omg.org/spec/DMN/1.2/>.

With DMN, you can describe and model frequently made decisions of an organization, which answer the following questions:

- Which information is required for a decision?

- Are there any preceding decisions?
- Are there external or internal guidelines?
- What are the dependencies?

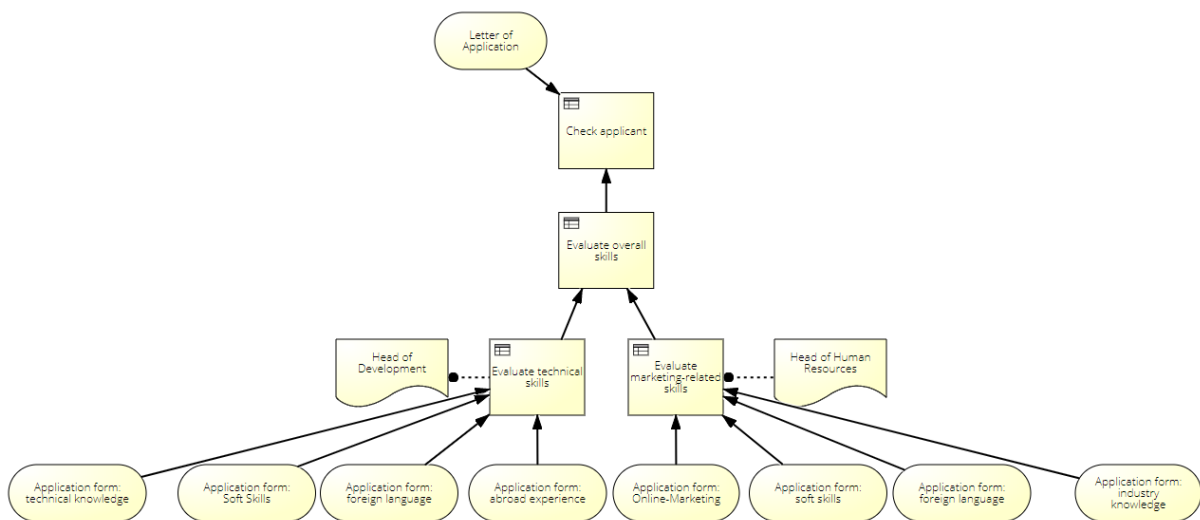
DMN is not suitable for modeling strategic decisions.

The notation is designed to be readable by all types of business users in order to ease collaboration for all stakeholders.

DMN and BPMN diagrams can be linked so that processes can be viewed separately from decisions, with the advantage that the process is streamlined and the decision is traceable.

DMN consists of the decision requirements diagram and the decision table.

The decision requirements diagram is the graphical representation of the decision rule. For example, the diagram below describes what information and decisions are needed to screen an applicant and decide whether to hire or not.



From the decision table, the appropriate decision is read for each supplied input. For example, in the table below it is defined whether or not an applicant must have specific technical knowledge, be fluent in certain foreign languages, and must have gained experience abroad.

C+	...on form: technical knowledge	...ation form: foreign language	...tion form: abroad experience	Application form: Soft Skills
	{BPMN,Java,SQL,ABAP,PHP,UML,HTML,Ja..	{Englisch,French,Spanish}	Boolean	{communicative competence,analytical c...
1	= BPMN	-	-	-
2	= Java	-	-	-
3	= SQL	-	-	-
4	= ABAP	-	-	-
5	= JavaScript	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	= Englisch	-	-
9	-	= French	-	-
10	-	= Spanish	-	-
11	-	€ Spanish, French, Englisch	-	-
12	-	-	= true	-

## Related Information

[Model a Decision \[page 114\]](#)

[Define a decision logic \[page 123\]](#)

### 8.3.1 Model a Decision

Before you start modeling a decision, it is helpful to answer the following questions.

- Which decisions have to be made?
- What is the goal of a decision?
- Can a decision be split into partial decisions?
- Which requirements are needed to make a decision?
- Is the logic for a decision determined by external laws or internal guidelines?

Modeling a decision involves the following steps:

1. Create a DMN diagram.  
To do so, add decision elements and connect them. Read more in section [Available diagram elements \[page 115\]](#).
2. For each decision, add rules to decision table and define a hit policy.  
Read more in section [Define a decision logic \[page 123\]](#). The section also describes how to create simple literal expressions.  
To calculate sums using literal expressions, read more in section [Using advanced literal expressions \(functions in DMN decision elements\) \[page 135\]](#).
3. You can simulate the DMN diagram.  
To do so, apply data to it and check the results. Read more in section [DMN simulation \[page 173\]](#).

In addition, you can run test cases to check whether your DMN diagram meets specific requirements.

Read more in section [The DMN test lab \[page 151\]](#).

4. You can integrate your decision model with a BPMN business process.

Read more in section [Link a DMN diagram to a BPMN diagram \[page 147\]](#).

In this section, the diagram elements and editing functions that are only available for this notation are described.


For general creation and editing options that are available for all notations, read more in section [Modeling \[page 30\]](#).

## Available Diagram Elements

In the shape repository, you can choose whether to use the core elements or a complete set of DMN elements.

### Decision

A decision element determines a result based on input data and a decision logic. Each decision element

provides a table for the decision logic. You can open the decision table by choosing  (*table*) in the decision element.

To describe a decision, use a question-answer-scheme. By default, the attribute panel provides the attributes *Question* and *Answers* for documenting this scheme for each decision.

You can split a decision into one main and several sub decisions. To do this, you link several decision elements in the necessary order. Read more in section [Create sub decisions \[page 119\]](#).

### Input Data

Via the input data element, you provide information for decisions. One input data element can be used by multiple decisions and business knowledge models.

If you must model numerous data input elements, you can simplify this by using the complex data input element. Read more in section [Create complex input data elements \[page 117\]](#).

### Business Knowledge Model

With the business knowledge model element, you add a function containing business knowledge, for example, in form of business rules, an additional decision table, or an analytic model.

Via this element, you can reuse decision logic. Read more in section [Reuse decision logic via business knowledge models \[page 147\]](#).

## Knowledge Source

With the knowledge source element, you describe the source of rules for a decision, for example laws, regulations, and guidelines.

## Multi Instance Decision

A multi instance decision is a sub decisions which is executed several times. The result of a multi instance decision is a value or a list that is used as input for another decision. Read more in section [Create a multi instance decision \[page 121\]](#).

## Group

Use this element to group diagram elements that belong together.

## Text Annotation

Use this element to add information to the diagram or a diagram element.

## Information Requirement

This connector links any input data or decision element to the decision that requires the information.

## Knowledge Requirement

This connector links any business knowledge model that must be used by the decision logic, to the decision.

## Authority Requirement

This connector links any diagram element that acts as a source of guidance or knowledge to another diagram element.

You can connect an input data element with a dependent knowledge source or a knowledge source element with any dependent decision.

## Association (Undirected)

This connector links text annotations to other DMN elements.

## Create Complex Input Data Elements

If a decision requires numerous input data, you must model many input data elements. You can simplify this by creating a complex input data element in which you define all input data as attributes.

### ❁ Example

#### Example:

To determine a discount, you need data on the purchase value and the customer status. Instead of creating an input data element for both pieces of information, you create one complex data input element and configure the purchase value and the customer status as its attributes. In the decision table, both attributes are available.

Decision logic: Determine discount

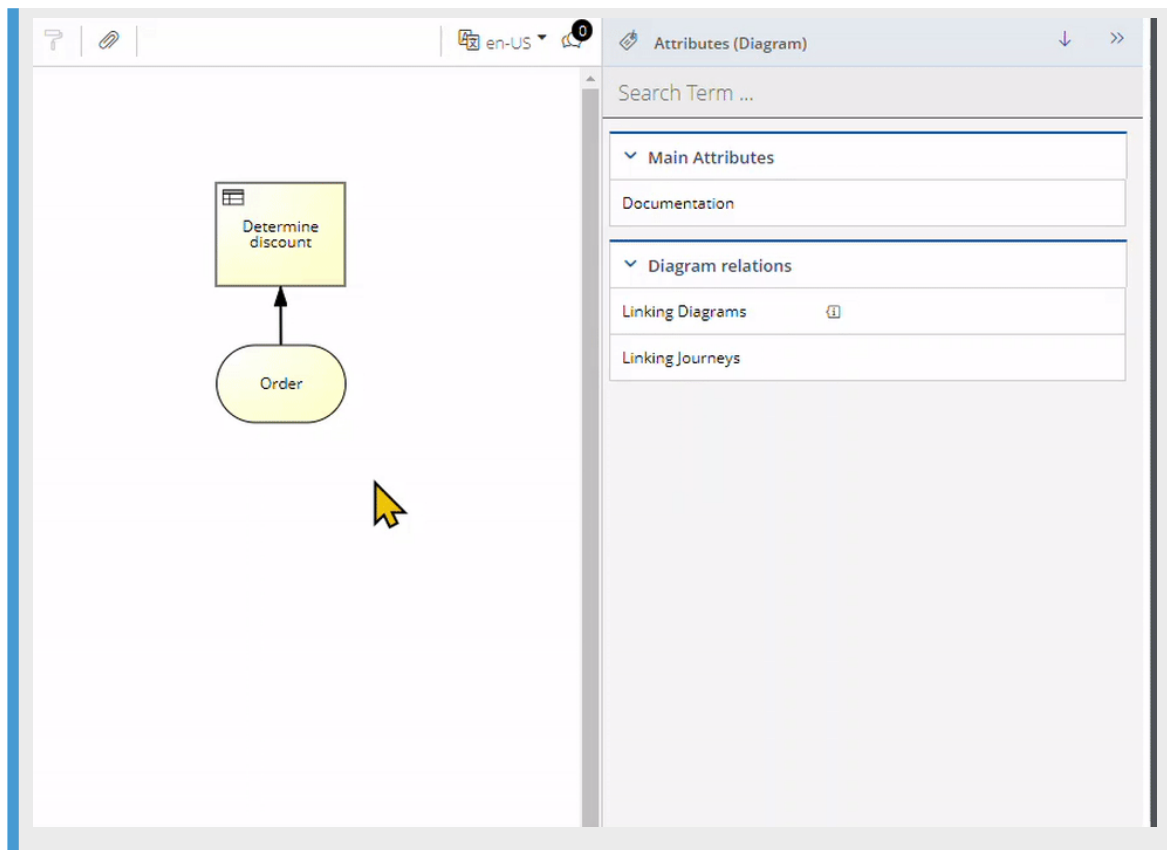
Inputs		Outputs	
U		...ew Output	
		Text	
1		-	
+			


To create a complex input data element, follow these steps:

1. Select the data input element you want to configure as complex.
2. In the attributes panel, set the value of the attribute *Type definition* to *Complex type*.

### ❁ Example

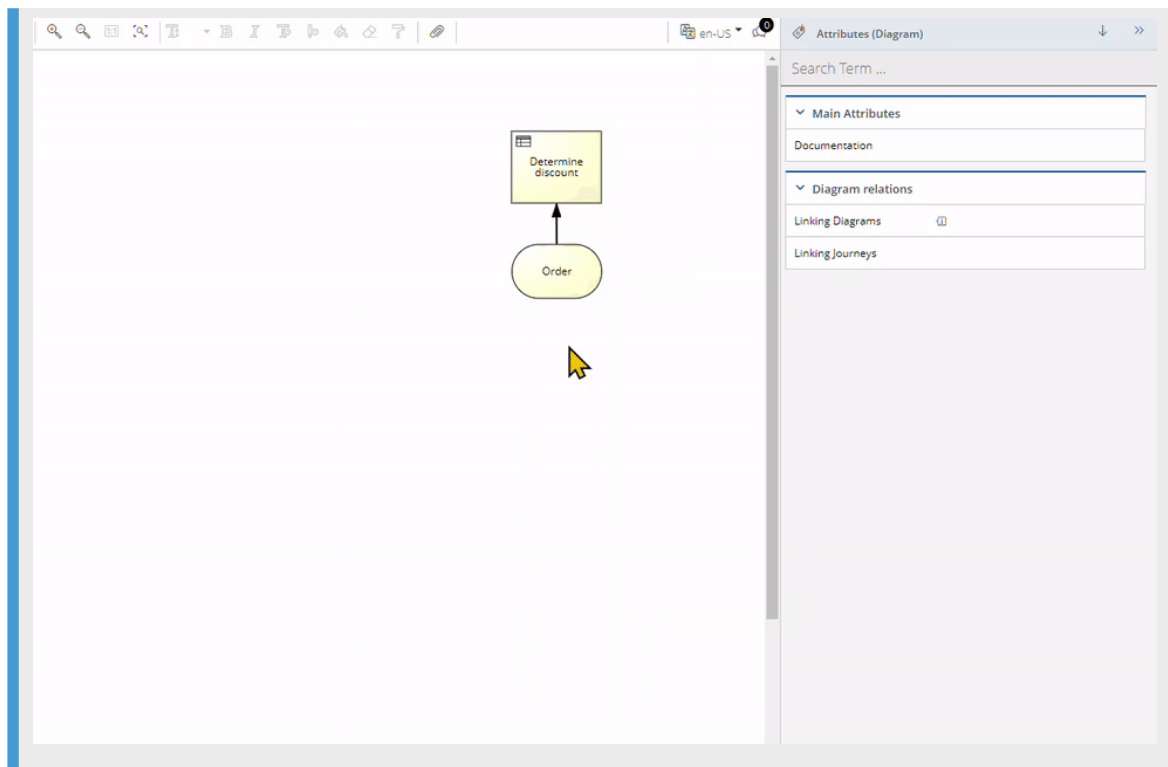
#### Example:




3. To add attributes to the data input element, choose  (*more options*) next to the *Attributes* attribute. The configuration dialog opens.

#### Example

*Example:*



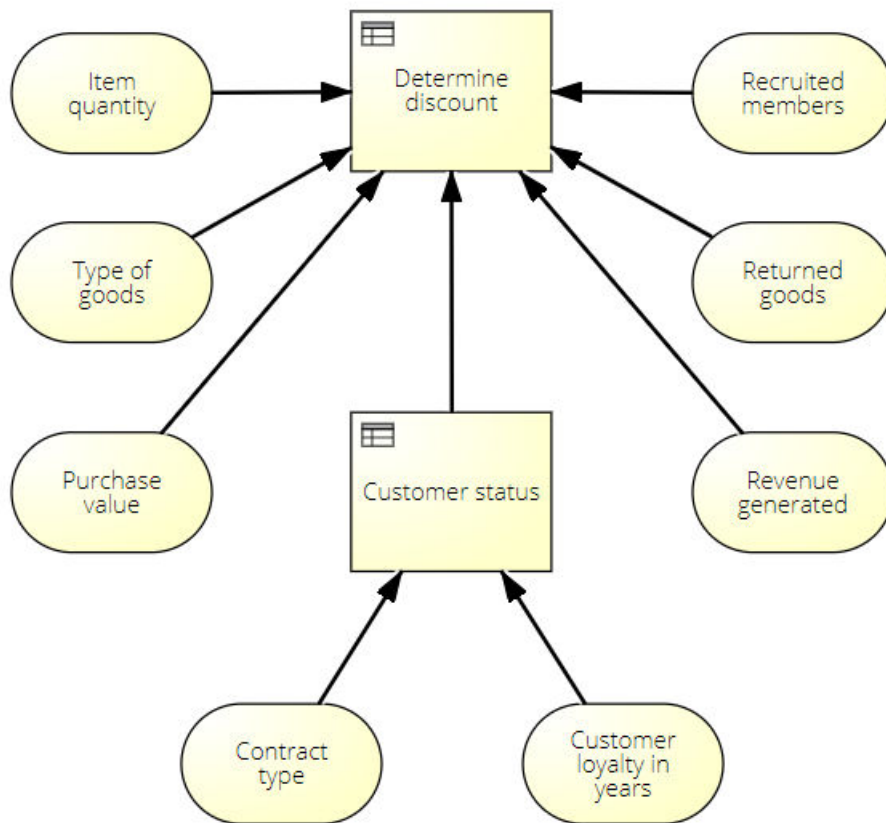
4. Type a name and select a type.  
Depending on the type, you can define further properties.
5. Confirm with [Save](#).  
The attribute is created.
6. To add more attributes, open the configuration dialog again by choosing  ([more options](#)).

## Create a Sub-Decision

When a lot of information has to be considered for a decision, you can outsource part of the information to sub decisions. This makes the diagram easier to understand as the dependencies and input values are easier to see. The logic of each decision is also easier to define.

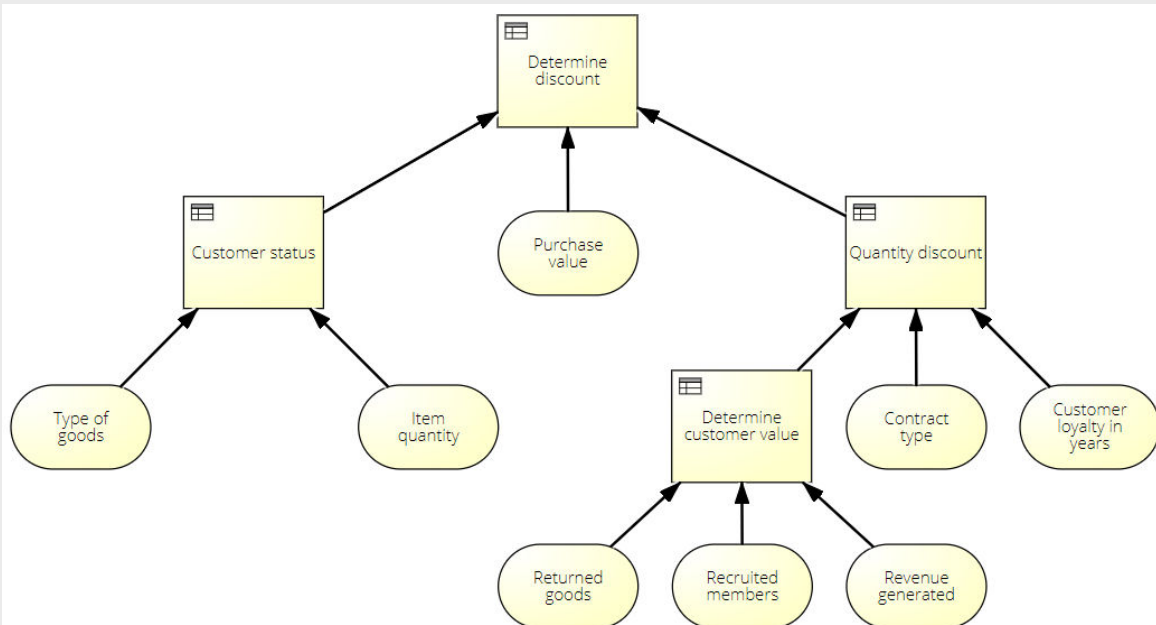
### Example

*Example DMN diagram without sub-decisions:*



### ❁ Example

Example DMN diagram with sub-decisions:



For sub-decisions, the decision element is used. To create a sub-decision, add a decision element and connect it with the decision that needs the result of the sub-decision as input.

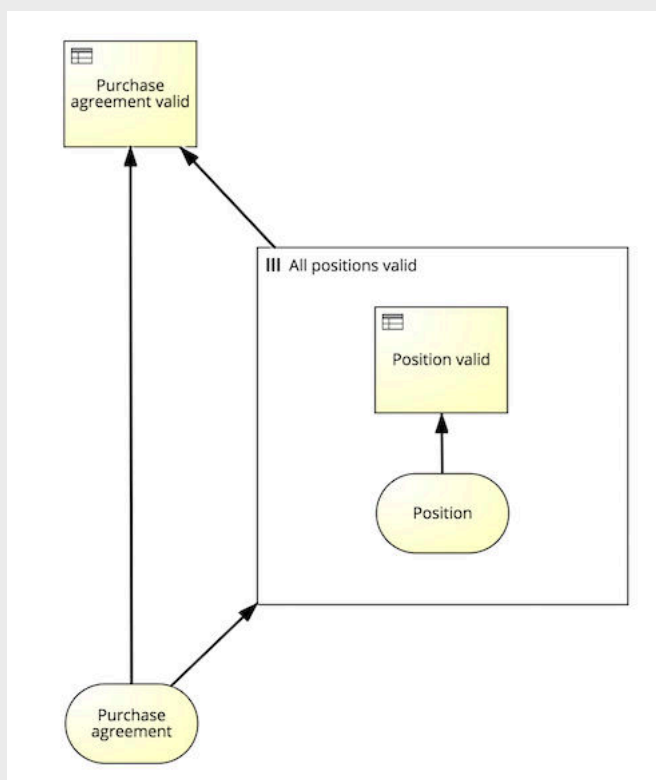
## Create a Multi-Instance Decision

Multi-instance decisions are sub-decisions that provide input for other decisions. They are similar to a for-loop in a computer program: They iterate decisions and expressions over a selected list. The list is contained within the input data where the input data is either a list or a complex input data type.

### Example

#### Example:

Each position of the purchase agreement is validated to determine the validity of the entire agreement.



To create a multi-instance decision, follow these steps:

1. Add a *Multi Instance Decision* element to your diagram and name it.
2. Add an *Input Data* element, which represents the list, and name the element.
3. In the attribute panel, define the input data element as a list in the *Is list* attribute.
4. Connect the two elements.  
To do so, select the multi instance decision element and from its shortcut menu, drag the connector icon to the input data element.
5. To specify the list over which the multi instance decision must iterate, choose **III** (*configuration*) in the element.

The configuration dialog opens.

You can also open this dialog via the *Iteration* attribute in the attribute panel.

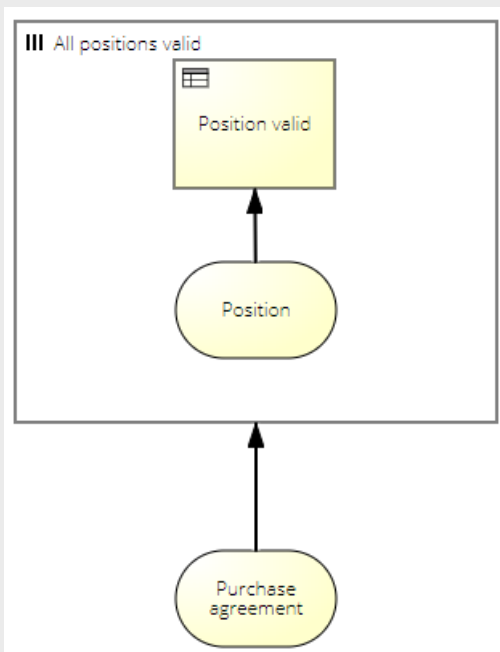
6. Select your input data element as the input list.
7. Select the aggregation to specify what will happen with the result of the multi instance decision.
8. Confirm with *Save*.

In the multi instance decision, an input data element is added representing the values of the list. Don't define this element as a list, otherwise the multi instance decision is set up incorrectly.

9. Define the internal logic of the multi instance decision.  
To do so, add a decision and place it in the multi instance decision. Connect the decision with the input data element that is also located in the multi instance decision.

### ❁ Example

*Example:*

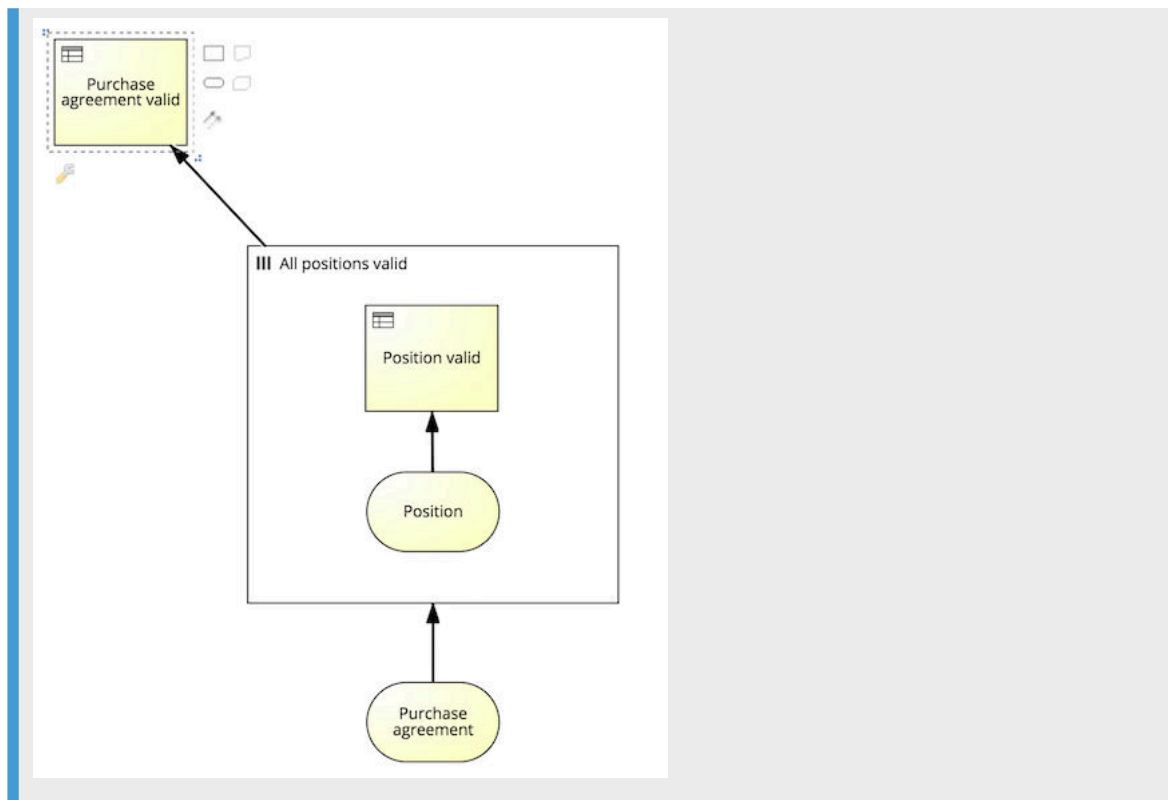


Setting up the multi-instance decision is complete.

Now, you can link it to the decision that needs the result of the multi-instance decision as input.

### ❁ Example

*Example:*



## Related Information

[Define a decision logic \[page 123\]](#)

[Link DMN elements and diagrams \[page 147\]](#)

## 8.3.2 Define a decision logic

Decision logic specifies the details of a decision. This means you define rules in form of a decision table or literal expression to describe which combinations of data lead to certain results. In addition to the rules, you must define what happens when inputs meet multiple or no rules. This is done by specifying a hit policy.

In this section, the options for defining a decision logic are explained.

To learn how to specify the hit policy and set the completeness requirement, read more in section [Define a hit policy and the completeness requirement \[page 129\]](#).

### Define a decision table

Decision logic can be presented as a table. A business rule that exists in your company is represented by a decision rule in the decision table. All cells in a table row form a decision rule.

Table inputs are specified in columns. Each input has a specific data type. The output column shows the result of the applied business rule. Like the inputs, each output also has a data type.

The decision rule then compares input data with the values in the cells.

Decision logic: Evaluate technical skills

		Inputs			Outputs	
C+	...	...ation form: foreign language	...tion form: abroad experience	Application form: Soft Skills	Technical Skill Rating	New Annotation
	(BPMN,Java,SQL,ABAP,PHP,UML,HTML,...	(English,French,Spanish)	Boolean	(communicative competence,analytical c...	Number	Informational
1	=	BPMN	-	-	15	
2	=	Java	-	-	15	
3	=	SQL	-	-	10	
4	=	ABAP	-	-	5	
5	=	JavaScript	-	-	10	
6	-	-	-	-	20	
7	-	-	-	-	15	
8	-	=	English	-	-15	
9	-	=	French	-	10	
10	-	=	Spanish	-	10	
11	-	=	Spanish, French, English	-	5	
12	-	-	=	true	5	

Buttons: Cancel, Apply


## Add rules to a decision table

To create decision rules, you must configure input data in the *Inputs* column and map them to output data in the *Output* column.

Any input data modeled on the canvas is already available when you open decision table. You can add missing input data by defining input columns in the table.

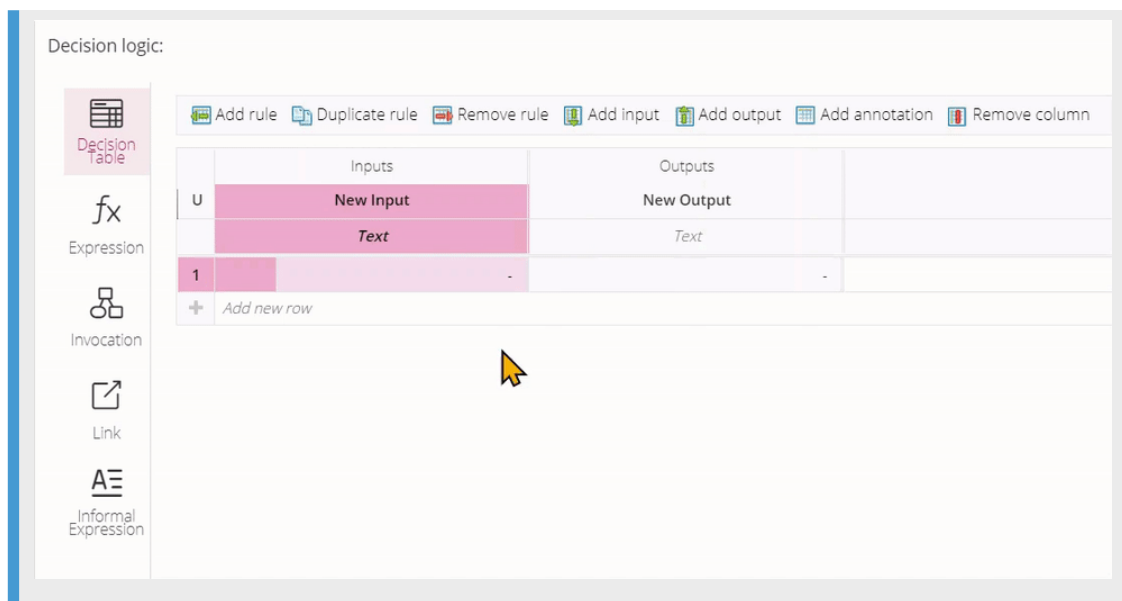
All input data defined via the table is added as input data elements to the canvas when the table is saved. You also need to define decision rules and map the outputs.

To define input data and add decision rules, follow these steps:

1. Open the decision table. To do so, select the decision to which you want to add rules and click  . The decision logic configuration dialog opens. You can also open this dialog via the *Decision logic* attribute in the attribute panel.
2. Configure the input data. To do so, follow these steps:
  1. Double-click *New Input* in the column header, and enter a name for the input data. If a dictionary entry exists, you can select it.

### Example

*Example:*



2. Below the input data name, double-click *Text*, select the type of the input data, and define its options. If you have chosen a dictionary entry as data input, it depends on the entry's configuration whether you need to specify the data type. The following data types are available:
  - *Enumeration*
  - *Text*
  - *Number*
  - *Boolean*
  - *Hierarchy*
  - *Date*
3. In the same way, configure the output data in the *Outputs* column.
4. In the same way, you can configure the *Annotations* column to add information to the decision rules.
5. Define the first decision rule:
  1. Double-click the left area of the first table cell. A list opens.
  2. Select an operator to define the relation between the input and the output. Read more on operators in section [Decision table operators \[page 126\]](#).
  3. Double-click the right area of the same cell. Again, a list opens.
  4. Select or enter an input value.
  5. In the *Outputs* column, double-click the cell and enter an output value.
6. With the buttons at the top of the table, you can add more rules, input data, output data, and annotations.
7. To define more rules, you have the following options:
  - You can continue defining rules cell by cell as described above.
  - With *Add rule > Duplicate rule*, you can copy and paste existing rules.
  - With *Import/Export > Text Import*, you can add text-based decision rules instead of defining the rules cell by cell. Read more in section [Import decision rules \[page 127\]](#).
8. Select a hit policy for the decision table and specify the completeness requirement. In case of a multi hit policy, you can also select an aggregation. Read more in section [Define a hit policy and the completeness requirement \[page 129\]](#).
9. With *Verify*, you can check the logic for completeness and consistency. Below the table, all combinations of input values are displayed that aren't covered by a decision rule.

10. Confirm with [Apply](#).  
Your decision logic is set up.

## Decision table operators

Operator	Symbol	Description
equal For dates: on	=	Returns <code>true</code> if the input value equals the specified value.
not equal For dates: not on	≠	Returns <code>true</code> if the input value doesn't equal the specified value.
less For dates: before	<	Returns <code>true</code> if the input value is less than the specified value.
less or equal For dates: until	≤	Returns <code>true</code> if the input value is less than or equals the specified value.
greater For dates: after	>	Returns <code>true</code> if the input value is greater than the specified value.
greater or equal For dates: from	≥	Returns <code>true</code> if the input value is greater or equal than the specified value.
contains For numbers: included	⊃	Returns <code>true</code> if the input value contains the specified value.
not contains For numbers: not included	⊄	Returns <code>true</code> if the input value doesn't contain the specified value.
begins with	T*	Returns <code>true</code> if the input value begins with the specified value.
ends with	*T	Returns <code>true</code> if the input value ends with the specified value.
element of	∈	Returns <code>true</code> if the input value is also in the list of the decision table.
not element of	∉	Returns <code>true</code> if the input value isn't in the list of the decision table.
elements of and contains only	⊆ and ⊇	Returns <code>true</code> if the input list contains only items the list in the decision table contains as well.

Operator	Symbol	Description
contains any of		Returns <code>true</code> if the input list contains at least one item the list in the decision table contains.
contains none of		Returns <code>true</code> if the input list doesn't contain any item the list in the decision table contains.
valid		Returns <code>true</code> if the input value is defined (not empty) and valid. For example, if you only consider numeric values equal or greater than zero, all numeric values less than zero and all non-numeric values aren't valid.
not valid		Returns <code>true</code> if the input value is defined (not empty), but invalid. For example, if you only consider numeric values equal or greater than zero, all numeric values less than zero and all non-numeric values are invalid.
defined		Returns <code>true</code> if the input value is defined (not empty).
not defined		Returns <code>true</code> if the input value isn't defined (empty).

## Import decision rules to the decision table

Instead of defining the decision rules cell by cell, you can import text-based decision rules into the table. The columns still need to be configured as described above. The individual rules can be in the form of a list, separated by the delimiters tab, semicolon, or comma.

The import function doesn't overwrite or delete existing rules. Imported rules are always added.

Text-based rules must have the following structure:

- Relational operators like `=` and `<=` must be part of the field they relate to.
- For each rule, you need to start a new line.
- The import only supports the following literal expressions:
  - `not (value)`
  - `not (value1, ..., valueN)`
  - `!=value`

To add text-based decision rules, follow these steps:

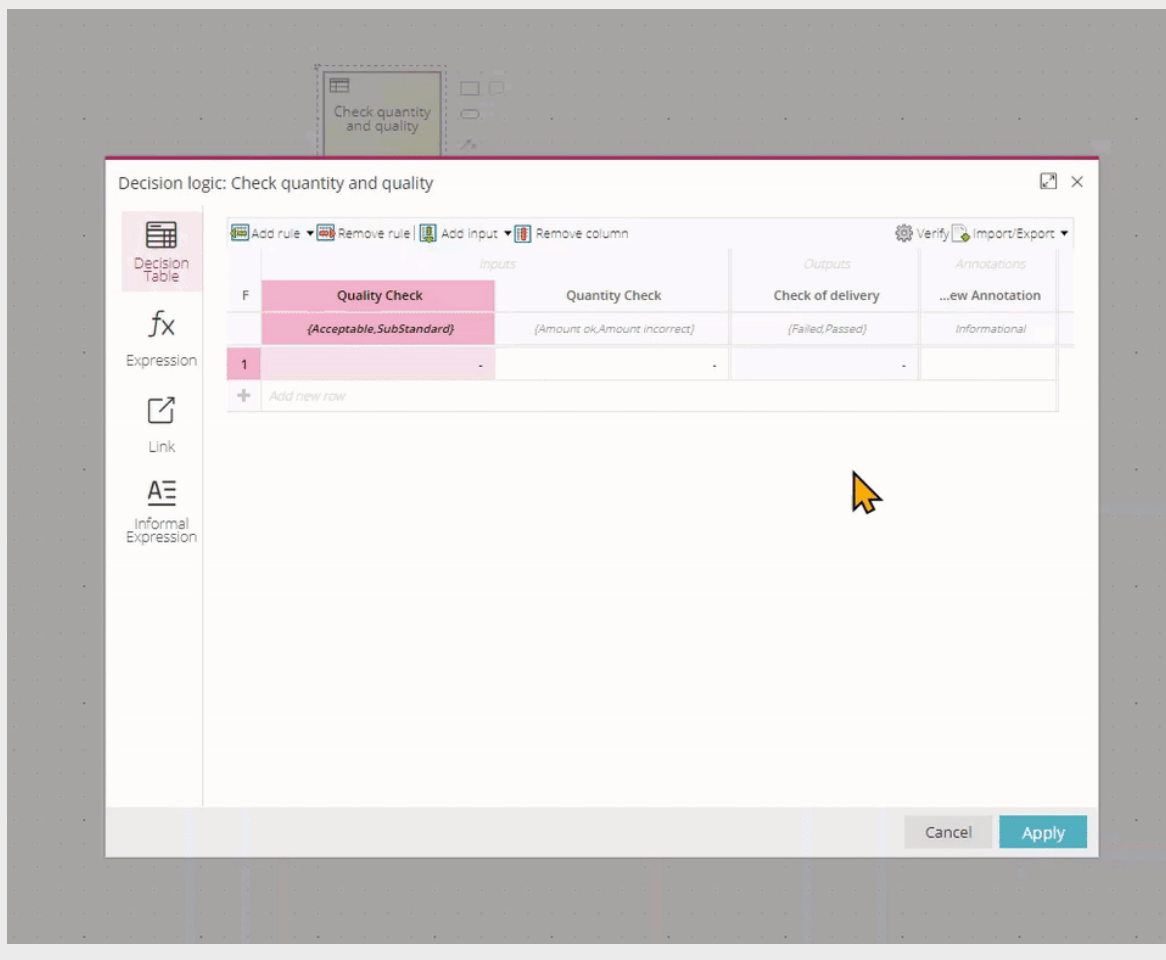
1. Open the decision table and click *Import/Export > Text Import* in the top-right corner. The text import dialog opens.
2. Select a delimiter.
3. Either enter the decision rules or copy them, for example from a text file or spreadsheet, to the editor field.

4. Click *Import*.

The rules are added to the table. You can add more by opening the text import dialog again.

## ❁ Example

*Example:*



## Define a literal expression

As an alternative to the logic in the decision table, you can define logic via a literal expression.


### ⚠ Caution

If a literal expression is defined, it supersedes the decision logic in the decision table.

Literal expressions represent predefined logical algorithms or rules that can be used to automatically create output results for decisions, often but not necessarily in a formal expression language. You can use literal expressions to add logic that can't be expressed in the decision table, for example, function calls, interim values, or list manipulation.

Literal expressions are written in FEEL, the 'friendly enough expression language' specified as part of the DMN standard. You can download the specification along with examples for literal expression use cases at <https://www.omg.org/spec/DMN/1.1/> .

To define a literal expression, follow these steps:


1. Select a decision and click  .  
The decision logic editor opens.
2. Select the *Expression* tab on the left side and add the literal expression.
3. Confirm with *Apply*.

Read more about literal expressions in section [Using advanced literal expressions \(functions in DMN decision elements\)](#) [page 135].

## Define an informal expression

If decision logic can't be expressed formally, you can describe it with natural language. The description doesn't have to be formal or executable.

To define an informal expression, follow these steps:

1. Select a decision and click  .  
The decision logic editor opens.
2. Select the *Informal expression* tab on the left side and add the description of the decision.
3. Select the data type of the decision logic via the *Value domain* list in the upper right corner.
4. Confirm with *Apply*.

## Next steps

[Link the logic of another decision](#) [page 147]

[Reuse decision logic via business knowledge models](#) [page 147]

[Create dictionary entries for input or output data in decisions](#) [page 149]

## 8.3.3 Define a hit policy and the completeness requirement


With the hit policy, you define how your decision table manages inputs that are handled by several rules and inputs for which no rules are defined. There are two types:

- Single hit policies produce one result per input. Here, only one rule is applied at a time, even if several rules exist.
- Multi hit policies produce an array of outputs. Here, all applicable rules are considered regardless of their position in the table. The resulting output can be a list or aggregated to a single value.

With the completeness requirement, you define whether your decision table is only valid if its rules consider all possible inputs. This means, a table is only valid if the modeler added rules for all input data. When checking the decision table with *Verify*, the completeness is checked as well.

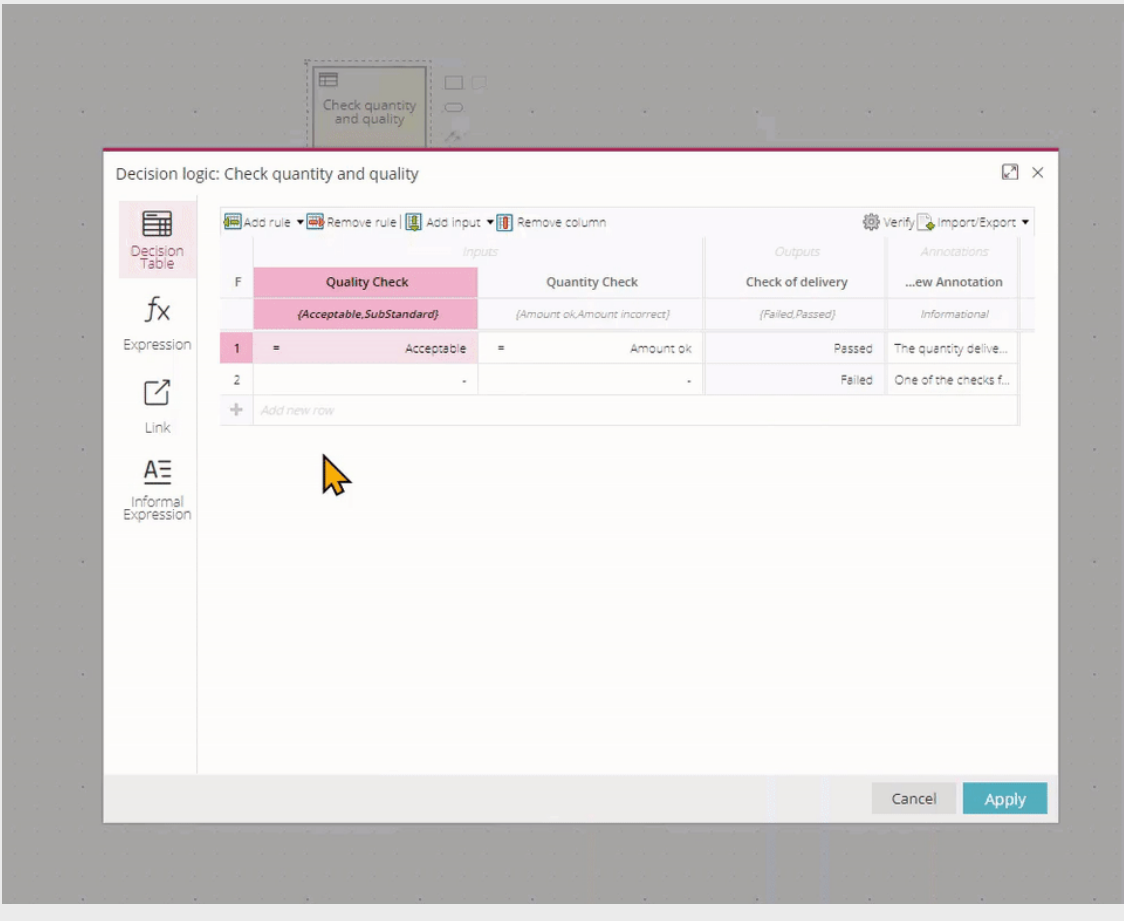
Unique (single) is the default hit policy. Read more in section [Hit policy types \[page 131\]](#).

To select another hit policy for a decision table, follow these steps:

1. In a DMN diagram, click  in the decision element.  
The decision table opens.
2. Click the letter in the upper left corner.  
The configuration dialog opens.

## Example

*Example:*



Decision logic: Check quantity and quality

	Inputs		Outputs	
	Quality Check	Quantity Check	Check of delivery	...ew Annotation
F	(Acceptable, SubStandard)	(Amount ok, Amount incorrect)	(Failed, Passed)	Informational
1	= Acceptable	= Amount ok	Passed	The quantity delive...
2	-	-	Failed	One of the checks f...

3. Select the hit policy. Find details on each hit policy type below.
4. In case of a multi hit policy, select the aggregation:
  - *Collect (multiple)*
  - *Sum*
  - *Minimum*
  - *Maximum*
  - *Count*

5. Select the completeness requirement:
  - *Complete*: A complete decision table is only valid if it considers all possible inputs.
  - *Incomplete*: An incomplete decision table is valid even if it doesn't consider all possible inputs.
6. Confirm with *Save*.  
The hit policy and completeness is set.

## Hit policy types

### Unique (single)

One input combination is covered by exactly one rule. It's assumed that all inputs are independent of each other, so any combination is possible. Overlapping rules are not allowed.

Unique (single) is the default hit policy. In the decision table, it's indicated with the letter U.

#### ❖ Example

##### *Example:*

Depending on the current season, a retailer decides which product group to offer at a reduced price. Only one product group can be offered, since only one season exists at the same time.

Input	Output
<b>Season</b>	<b>Product group</b>
Spring	garden equipment
Summer	beverages
Autumn	clothes
Winter	food

### Any (single)

Multiple rules cover the same combination of input values. This overlap is only allowed if the rules also lead to the same result.

In the decision table, this hit policy is indicated with the letter A.

#### ❖ Example

##### *Example:*

If a credit applicant is younger than 18 years old and is already in debt, the application is rejected. Otherwise the credit applicant gets a credit.

Input		Output
Age	Debt	Result
< 18	yes	rejected
-	no	approved
>= 18	-	approved

## Priority (single)

Multiple rules can apply for one input value. The results are ordered according to their priority. The result with the highest priority is returned.

In the decision table, this hit policy is indicated with the letter P.

### ❁ Example

#### *Example:*

In a decision table, the logic determines at what age customers get certain discount vouchers. Customers aged 18 or over get vouchers for sports equipment, and all customers older than 3 vouchers for toys. Both rules apply to a 30-year-old customer. As the sports equipment has a higher priority, the customer gets a voucher for this. Consequently, the output list is `[sports equipment, toys, clothing]`.

Input	Output
Age	Voucher for
> 18	Sports equipment
> 3	Toys
-	Clothing

## First (single)

Overlapping rules are allowed, but only the first applicable rule is used. As the rules are evaluated from top to bottom, you must sort the rules in the table.

In the decision table, this hit policy is indicated with the letter F.

### ❁ Example

#### *Example:*

In a decision table, the logic determines at what age customers get certain discount vouchers. Customers aged 18 or over get vouchers for clothing, and all customers older than 3 vouchers for sports equipment. Both rules apply to a 30-year-old customer. As the rule for 18-year-old customers is at the top of the decision table, this rule serves as the basis for the decision. The customer receives a voucher for clothing.

Input	Output
Age	Voucher for
> 18	Clothing
> 3	Sports equipment
-	Toys

## Collect (multiple)

By default, the collect hit policy collects the outputs of matching rules, but can be configured to determine the sum, minimum, maximum, or count of matching outputs instead.

In the decision table, this hit policy is indicated with the letter C.

### ❁ Example

#### Example:

An online shop adds a discount coupon to specific orders. The discount depends on the total sum of an order. In the decision table below, the outcome differs depending on the aggregation set for the hit policy. Given a 250\$ purchase order, the following applies:

- Without aggregation set, the hit policy returns two coupons (5% and 25% discount) in no particular order.
- With aggregation set to sum, the hit policy returns one coupon with 30% discount.
- With aggregation set to maximum, the hit policy returns one coupon with 25% discount.
- With aggregation set to minimum, the hit policy returns one coupon with 0% discount and disappoints the customer in this scenario.
- With aggregation set to count, the hit policy returns 2, which doesn't provide any relevant information in this scenario.

Input	Output
Total order sum	Discount coupon
<= 50\$	0%
> 50\$	5%
> 200\$	25%

## Output order (multiple)

Results are ordered by the priority of the output values.

In the decision table, this hit policy is indicated with the letter O.

## ❖ Example

### Example:

An online shop adds small gifts to orders. The gifts a customer receives depend on the total order sum. If the order sum is 50\$ or lower, the customer receives a discount coupon. If the order sum exceeds 50\$, the customer receives a small pack of high-quality coffee in addition to the coupon.

With an output order hit policy, for the total order sum of 250\$ the table below will return the result [Coffee, Discount coupon], sorted according to the order of the specified output list.

Input	Output
<b>Total order sum</b>	<b>Gift = [Coffee, Discount coupon]</b>
-	Discount coupon
> 50\$	Coffee

## Rule order (multiple)

Results are ordered by the order of matching rules.

In the decision table, this hit policy is indicated with the letter R.

## ❖ Example

### Example:

An online shop adds small gifts to orders. The gifts a customer receives depend on the total order sum. If the order sum is 50\$ or lower, the customer receives a discount coupon. If the order sum exceeds 50\$, the customer receives a small pack of high-quality coffee in addition to the coupon.

When applying a rule order hit policy, an input of 250\$ will return the result [Discount coupon, Coffee], sorted according to the order of the applying rules.

Input	Output
<b>Total order sum</b>	<b>Gift = [Coffee, Discount coupon]</b>
-	Discount coupon
> 50\$	Coffee

## Next steps

[Define a decision logic \[page 123\]](#)

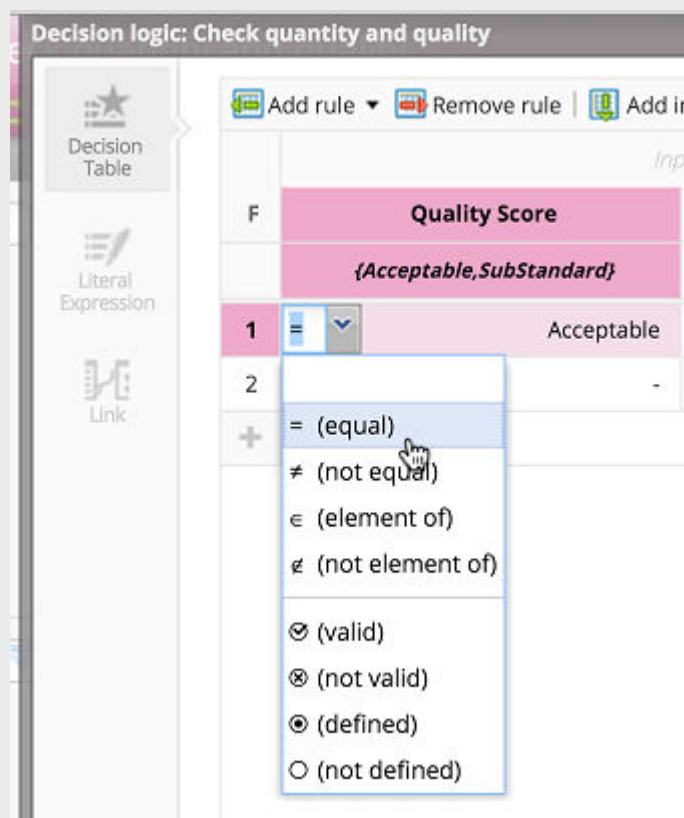
[DMN simulation \[page 173\]](#)

## 8.3.4 Using Advanced Literal Expressions (Functions in DMN Decision Elements)

If you have modeled Decision Model and Notation (DMN) diagrams, you are likely familiar with DMN expressions for decision logic, as explained in [Model a decision \[page 114\]](#).

### ❖ Example

Some basic operators are available from the *Decision Table Editor*'s list.



In addition, you can use SAP Signavio's advanced literal expressions based on friendly enough expression language (**FEEL**) as part of the DMN standard.

For more information, see Chapter 9 in the OMG PDF document: [Decision Model and Notation](#).

### ❖ Example

A simple example is determining a discount based on the total value of a list of purchased objects. Single commands can be combined in a literal expression.

- `Product((1 - DiscountRate) * Sum(ListOfItemPrices)).`

This calculates the total purchase sum of a list of items, considering a discount. The variables used here correspond to the data types defined in input data element's attributes and can be set when simulating the DMN diagram.

You can also use standard operators (+, -, \*, /, and, or) within a literal expression.

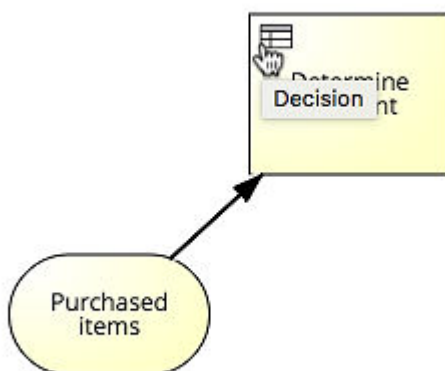
- $(1 - \text{DiscountRate}) * \text{Sum}(\text{ListOfItemPrices})$ .

For more information, see section [Documentation of all literal expressions \[page 139\]](#).

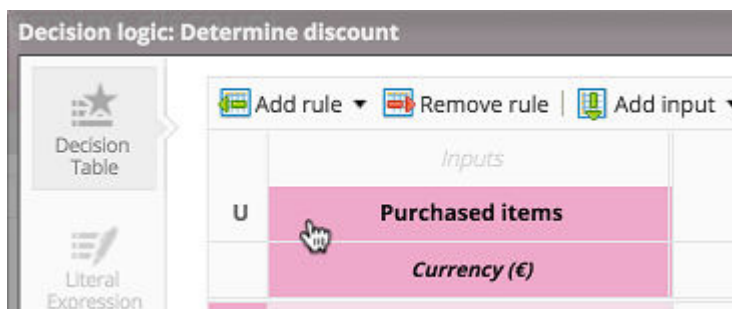
## Using Literal Expressions in Decision Tables

Here are the steps to create decision logic for determining a discount based on the total sum of purchased items.

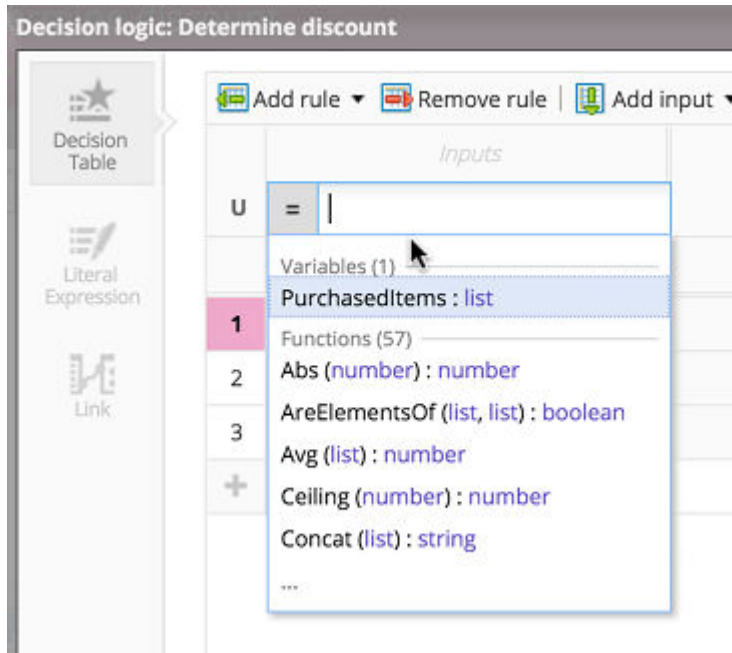
1. Create the *Purchased items* data input element.  
The input should be a list of numbers (type *currency*).
2. Create a decision element and label it *Determine discount*.
3. Connect the decision element to the data input element.
4. Choose the table icon (*Decision*) in the upper left corner of the decision element to open the *Decision Table Editor*.



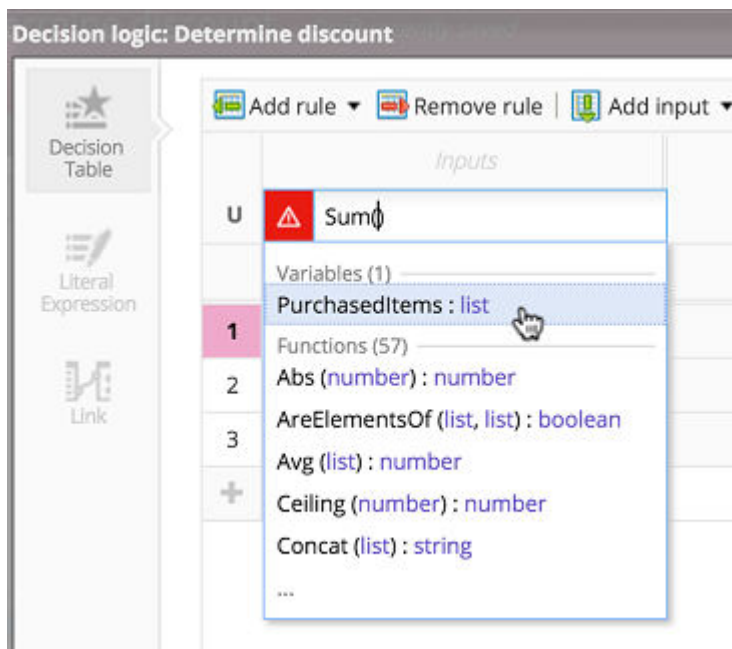
5. Select the header and delete the input reference in the table to be able to insert a literal expression.



6. Type in  $=$ .  
The system displays available variables and functions.



7. Type in *Sum* and select the *Sum* function.
8. Insert the variable *PurchasedItems* as a parameter of *Sum*.

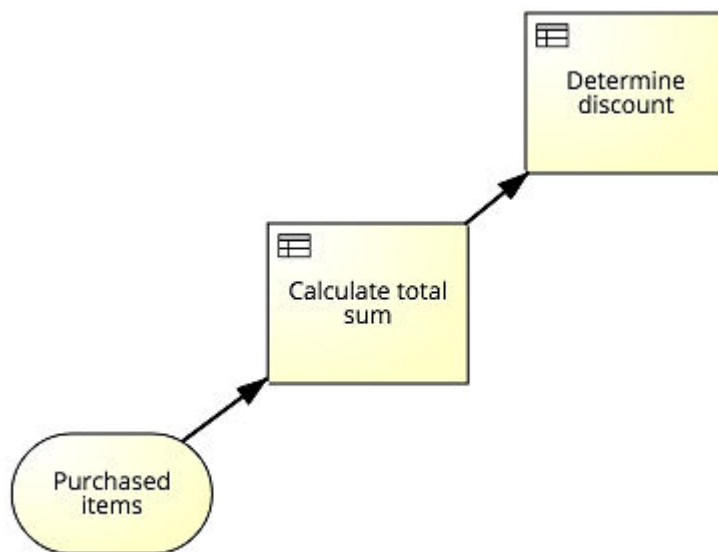


9. Insert the literal expression **Sum(PurchasedItems)**.  
As a result, the decision logic's input data is the sum of all purchased items. You can further define the decision logic.

	<i>Inputs</i>		<i>Outputs</i>
<b>F</b>	<b>= Sum(PurchasedItems)</b>		<b>Discount</b>
	<i>Number</i>		<i>Percentage</i>
<b>1</b>	<	150	0.00 %
<b>2</b>	≥	500	10.00 %
<b>3</b>	≥	150	5.00 %

## Using Literal Expressions Instead of Decision Tables

You can also use literal expressions instead of decision tables. Split a decision into two connected elements: one with a decision table and one with literal expression logic.

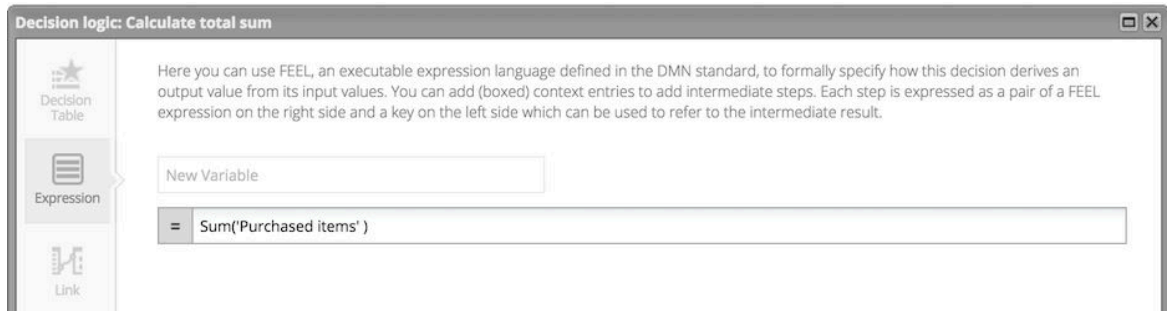


Here, *Calculate total sum* and *Determine discount* are two separate decision elements.

- The first element calculates the total sum of purchased items.
- The second element determines the discount based on the total sum.

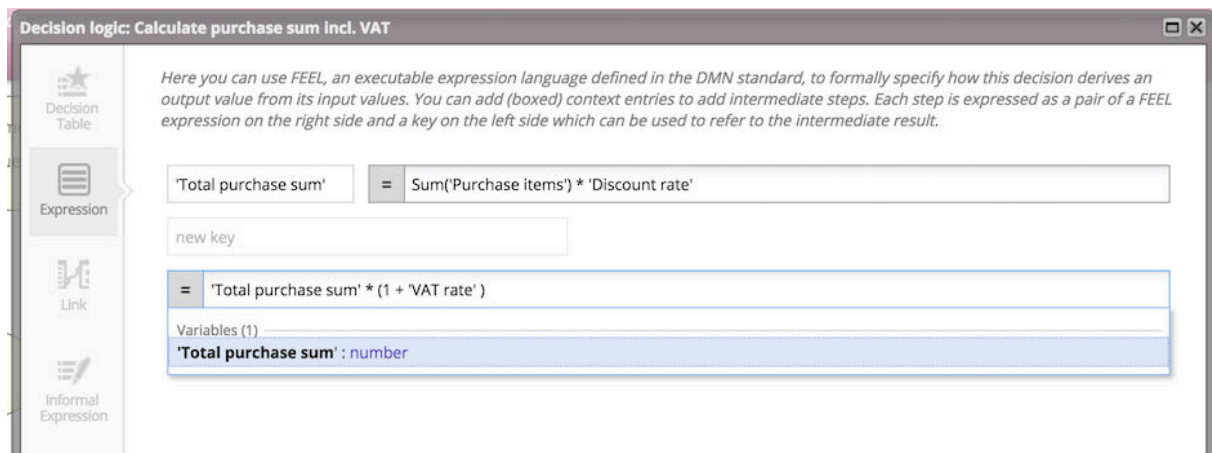
Here are the steps to model the first decision without using a decision table.

1. Open the decision table editor and switch to the *Literal expressions* tab.
2. There, insert the literal expression to calculate the sum of items.



As a result, the decision element returns the sum of items as a data output and can be referenced by the following decision element.

In a complex literal expression, you can define variables, known as *boxed contexts*, and reference them in our decision function to improve the readability of a literal expression.



### ⚠ Caution

If a literal expression is defined, it supersedes the decision logic in the decision table.

## Documentation of all Literal Expressions

This section lists all available literal expressions, grouped by operation type.

### Arithmetic Operations

Name	Literal Expression	Description	Example
Abs	<code>Abs ( number ) : NUMERIC</code>	Returns the absolute value of a number.	<code>Abs ( -5 )</code> returns 5.
Ceiling	<code>Ceiling ( number ) : NUMERIC</code>	Returns a number rounded up to the next integer.	<code>Ceiling ( 1.3 )</code> returns 2.

Name	Literal Expression	Description	Example
Count	<code>Count([num1 ,num2, num3]):NUMERIC</code>	Returns the number of elements of the given list.	<code>daysCount(["item1", "item2", "item3"])</code> returns 3.
Floor	<code>Floor(number):NUMERIC</code>	Returns a number rounded down to the next integer.	<code>Floor(1.6)</code> returns 1.
Integer	<code>Integer(number): NUMERIC</code>	Returns the integer part of a number.	<code>Integer(1.34)</code> returns 1.
Modulo	<code>Modulo(divident, divisor):NUMERIC</code>	Returns the remainder of the dividend divided by the divisor.	<code>Modulo(4, 3)</code> returns 1.
Percent	<code>Percent(number):NUMERIC</code>	Returns the number divided by 100.	<code>Percent(10)</code> returns 0.1.
Power	<code>Power(base, exponent):NUMERIC</code>	Returns the base raised to the power of the exponent.	<code>Power(2, 3)</code> returns 8.
Product	<code>Product([factor1, factor2, factor3]):NUMERIC</code>	Returns the product of a list of factors.	<code>Product([2, 3, 4])</code> returns 24.
Round	<code>Round(number,digits):NUMERIC</code>	Returns a number rounded to the corresponding number of digits.	<code>Round(3.44,1)</code> returns 3.4.
RoundDown	<code>RoundDown(number, digits):NUMERIC</code>	Returns a number rounded down to the corresponding number of digits.	<code>RoundDown(1.3674, 2)</code> returns 1.36.
RoundUp	<code>RoundUp(number, digits):NUMERIC</code>	Returns a number rounded up to the corresponding number of digits.	<code>Abs(1.344, 2)</code> returns 1.35.
Sum	<code>Sum([number1, number2, number3]):NUMERIC</code>	Returns the sum of a list of values.	<code>Sum([1, 2, 3, 4, 5])</code> returns 15.

## Date and Time Operations

Name	Literal Expression	Description	Example
Date	<code>Date(year, month, day):DATE</code>	Returns a date using the standard parameters of a date: year, month, day	<code>Date(2015, 12, 25)</code> returns 2015-12-25.

Name	Literal Expression	Description	Example
DateTime	<code>DateTime(day, month, year, hour, minute, second, hourOffset):DATE</code>	Returns the dateTime using the standard parameters of a data time. The last parameter 'hourOffset' is optional.	<code>DateTime(25, 12, 2015, 12, 15, 0, 1)</code> returns <code>2015-12-24T12:15:00.000+01:00</code> .
Day	<code>Day(dateTime):NUMERIC</code>	Returns the day part of a dateTime.	<code>Day(2015-12-24T12:15:00.000+01:00)</code> returns 24.
DayAdd	<code>DayAdd(dateTime, days to add):DATE</code>	Returns the date plus the provided number of days.	<code>DayAdd(2015-12-24T12:15:00.000+01:00, 1)</code> returns <code>2015-12-25T12:15:00.000+01:00</code> .
DayDiff	<code>DayDiff(dateTime1, dateTime2):NUMERIC</code>	Returns the amount of <b>full</b>	<code>DayDiff(2015-12-24T12:15:00.000+01:00, 2015-12-25T12:15:00.000+01:00)</code> returns 1.
Hour	<code>Hour(dateTime):NUMERIC</code>	Returns the hour part of a dateTime.	<code>Hour(2015-12-24T12:15:00.000+01:00)</code> returns 12.
HourDiff	<code>Hour(time):NUMERIC</code>	Returns the amount of <b>full</b> hours between two dates.	<code>HourDiff(2015-12-24T12:15:00.000+01:00, 2015-12-24T14:15:00.000+01:00)</code> returns 2.
Minute	<code>Minute(time):NUMERIC</code>	Returns the minute part of a dateTime.	<code>Minute(2015-12-24T12:15:00.000+01:00)</code> returns 15.
MinutesDiff	<code>MinutesDiff(dateTime1, date2times):NUMERIC</code>	Returns the amount of <b>full</b> minutes between two dates.	<code>MinutesDiff(2015-12-24T12:15:00.000+01:00, 2015-12-24T13:15:00.000+01:00)</code> returns 60.
Month	<code>Month(dateTime):NUMERIC</code>	Returns the month part of a dateTime.	<code>Month(2015-12-24T12:15:00.000+01:00)</code> returns 12.
MonthAdd	<code>MonthAdd(dateTime, months_to_add):DATE</code>	Returns the dateTime plus the number of months.	<code>MonthAdd(2015-10-10T12:15:00.000+01:00, 1)</code> returns <code>2015-11-10T12:15:00.000+01:00</code> .

Name	Literal Expression	Description	Example
MonthDiff	<code>MonthDiff(datetime1, datetime2):NUMERIC</code>	Returns the amount of <b>full</b> months between two dates.	<code>MonthDiff(2015-10-10T12:15:00.000+01:00, 2015-11-10T12:15:00.000+01:00)</code> returns 1.
Now	<code>Now():DATE</code>	Returns current <code>datetime</code> .	<code>Now()</code> could have returned <code>2015-11-10T12:15:00.000+01:00</code> .
Today	<code>Today():DATE</code>	Returns the current date.	<code>Today()</code> could have returned <code>2015-11-10</code> .
Weekday	<code>Weekday(datetime):NUMERIC</code>	Returns a number (1 to 7) representing the day of the week.	<code>weekday(2016-02-09T12:15:00.000+01:00)</code> returns 3.
Year	<code>Year(datetime):NUMERIC</code>	Returns the year part of a <code>datetime</code> .	<code>Year(2016-02-09T12:15:00.000+01:00)</code> returns 2016.
YearAdd	<code>YearAdd(datetime, years_to_add):DATE</code>	Returns the <code>datetime</code> plus the number of years.	<code>YearAdd(2016-02-09T12:15:00.000+01:00, 1)</code> returns <code>2017-02-09T12:15:00.000+01:00</code> .
YearDiff	<code>YearDiff(datetime1, datetime2):NUMERIC</code>	Returns the amount of <b>full</b> years between two dates.	<code>YearDiff(2016-02-09T12:15:00.000+01:00, 2017-02-09T12:15:00.000+01:00)</code> returns 1.

## List Operations

Name	Literal Expression	Description	Example
Append	<code>Append(list, element):LIST</code>	Adds the element to a copy of the provided list. Returns the manipulated copy.	<code>Append([2.5, 5.8, 4.3], 6.7)</code> returns <code>[2.5, 5.8, 4.3, 6.7]</code> .
AppendAll	<code>AppendAll(list1, list2):LIST</code>	Adds all elements from the second provided list to a copy of the first one. Returns the manipulated copy.	<code>AppendAll([2.5, 5.8, 4.3], [2.1, 3.5, 7.4])</code> returns <code>[2.5, 5.8, 4.3, 2.1, 3.5, 7.4]</code> .
AreElementsOf	<code>AreElementsOf(list1, list2):BOOLEAN</code>	Determines whether <code>list2</code> contains all elements of <code>list1</code> .	<code>AreElementsOf(["item2, item3"], ["item1", "item2", "item3"])</code> returns <code>true</code> .

Name	Literal Expression	Description	Example
ContainsOnly	<code>ContainsOnly(list1, list2): BOOLEAN</code>	Determines whether <code>list1</code> contains only elements of <code>list2</code> .	<code>ContainsOnly(["item1", "item2"], ["item2", "item3"])</code> returns <code>false</code> .
Flatten	<code>Flatten(list): list</code>	Returns a flattened list. Will flatten all nested lists to a single list.	<code>Flatten([[1, 2], [3, 4], [5, 6]])</code> returns <code>[1, 2, 3, 4, 5, 6]</code> .
NotContainsAny	<code>NotContainsAny(list1, list2): BOOLEAN</code>	Determines whether <code>list1</code> contains any element of <code>list2</code> .	<code>NotContainsAny(["item1", "item2"], ["item2", "item3"])</code> returns <code>false</code> .
Remove	<code>Remove(list, element): LIST</code>	Removes the specified element from the specified list.  This expression is available only in the <a href="#">Literal Expressions Editor</a> (not in the <a href="#">Decision Table Editor</a> ).	<code>Remove(["item1", "item2"], "item1")</code> returns <code>["item2"]</code> .
RemoveAll	<code>RemoveAll(list1, list2): LIST</code>	Removes all elements of <code>list2</code> from <code>list1</code> .  This expression is available only in the <a href="#">Literal Expressions Editor</a> (not in the <a href="#">Decision Table Editor</a> ).	<code>RemoveAll(["item1", "item2", "item3"], ["item1", "item2"])</code> returns <code>["item3"]</code> .
SortAsc	<code>SortAsc(list): list</code>	Returns the list sorted in ascending order.	<code>SortAsc([3, 1, 2])</code> returns <code>[1, 2, 3]</code> ; <code>SortAsc(["c", "a", "b"])</code> returns <code>["a", "b", "c"]</code> .
SortDesc	<code>SortDesc(list): list</code>	Returns the list sorted in descending order.	<code>SortDesc([3, 1, 2])</code> returns <code>[3, 2, 1]</code> ; <code>SortDesc(["c", "a", "b"])</code> returns <code>["c", "b", "a"]</code> .
Union	<code>Union(list1, list2,...): list</code>	Merges two or more lists into a single list and removes all duplicate values.	<code>Union([1,2,3,4], [4,5,6]) = [1,2,3,4,5,6]</code> .

Name	Literal Expression	Description	Example
Zip	<code>Zip(attributes, values1, ..., valuesN): LIST</code>	Assembles a list of objects out of a list of <i>attributes and multiple lists of values</i> .	<code>Zip(["id", "value"], [23a3e98, c45da1b], [40, 120])</code> returns <code>[{id: 23a3e98, value: 40}, { id: c45da1b, value: 120}]</code> .

**⚠ Caution**

Before version 10.11.0 of the Decision Manager, the values were passed to the function as a list of lists, for example:

```
Zip(["id", "value"], [[23a3e98, c45da1b], [40, 120]])
```

Literal expressions that used the old `zip` function have been automatically transformed to the new syntax.

## Statistical Operations

Name	Literal Expression	Description	Example
Avg	<code>Avg([number1, number2, number3]):NUMERIC</code>	Returns the average of the values of the given list.	<code>Avg([3, 5])</code> returns 4.
Max	<code>Max([number1, number2, number3]):NUMERIC</code>	Returns the maximum value of the given list.	<code>Max([5, 4, 10])</code> returns 10.
Median	<code>Median([number1, number2, number3]):NUMERIC</code>	Returns the median value of the given list.	<code>Median([2, 5, 10, 12, 34, 35])</code> returns 11.
Min	<code>Min([number1, number2, number3]):NUMERIC</code>	Returns the minimum value of the given list.	<code>Min([5, 4, 10])</code> returns 4.
Mode	<code>Mode([number1, number2, number3]):NUMERIC</code>	Returns the most frequently occurring value of the given list. Returns the first (most left) most frequent value, if several values occur most frequently (e.g. two values appear each two times).	<code>Mode([1, 2, 4, 4, 5, 6])</code> returns 4.

## Text Handling

Name	Literal Expression	Description	Example
Concat	<code>Concat([text1, text2, text3]):TEXT</code>	Returns the concatenation of the given list of text values.	<code>Concat(["Hello ", "World", "!"])</code> returns "Hello World!".
Contains	<code>Contains(text, substring): BOOLEAN</code>	Determines whether <code>text</code> contains the <code>substring</code> .	<code>Contains("Hello World!", "o World")</code> returns <code>true</code> .
EndsWith	<code>EndsWith(text, suffix): BOOLEAN</code>	Determines whether <code>text</code> ends with the <code>suffix</code> .	<code>endsWith("Hello World!", "!")</code> returns <code>true</code> .
IsAlpha	<code>IsAlpha(text): BOOLEAN</code>	Determines whether the text contains only alphabetic characters (A-Z, a-z). Umlauts and similar characters (e.g. <code>Ä</code> , <code>Å</code> ) must not be included.	<code>IsAlpha("abcdefg5")</code> returns <code>false</code> .
IsAlphanumeric	<code>IsAlphanumeric(text): BOOLEAN</code>	Determines whether the text contains only alphanumeric characters (A-Z, a-z, 0-9). Umlauts and similar characters (e.g. <code>Ä</code> , <code>Å</code> ) must not be included.	<code>isAlphanumeric("abcdefg5")</code> returns <code>true</code> .
IsNumeric	<code>IsNumeric(text): BOOLEAN</code>	Determines whether the text is a valid number containing only plus or minus sign, digits, commas, and decimal points.	<code>IsNumeric("2.3.5")</code> returns <code>false</code>
IsSpaces	<code>IsSpaces(text): BOOLEAN</code>	Determines whether the text contains only spaces.	<code>IsSpaces(" ")</code> returns <code>true</code> .
Left	<code>Left(text, num_chars): TEXT</code>	Returns the character sequence of the length <code>num_chars</code> from the start of a text string.	<code>Left("Hello World!", 5)</code> returns "Hello".
Len	<code>Len(text): NUMERIC</code>	Returns the number of characters in a text string.	<code>Len("five")</code> returns 4.
Lower	<code>Lower(text): TEXT</code>	Returns the text string with all letters converted to lowercase.	<code>Lower("UPPER")</code> returns <code>upper</code> .

Name	Literal Expression	Description	Example
Mid	<code>Mid(text, start, num_chars):TEXT</code>	Returns the character sequence of the length <code>num_chars</code> from the corresponding starting position of a text string.	<code>Mid("Hello World!", 6, 5)</code> returns "World".
Number	<code>Number(text):NUMERIC</code>	Returns the numerical value represented in the text string. Only a period (.) is allowed as a separator.	<code>Number("5")</code> returns 5.
Number (Default Value)	<code>Number(text, default_value):NUMERIC</code>	Returns the numerical value represented in the text string. Only a period (.) is allowed as a separator. Returns <code>default_value</code> if unable to convert text into number.	<code>Number("5,5", 10)</code> returns 10 ( <code>Number("5.5", 10)</code> returns 5.5).
Right	<code>Right(text, num_chars):TEXT</code>	Returns the character sequence of the length <code>num_chars</code> from the end of a text string.	<code>Right("Hello World!", 7)</code> returns "World!".
StartsWith	<code>StartsWith(text, prefix): BOOLEAN</code>	Determines whether <code>text</code> starts with the <code>prefix</code> .	<code>StartsWith("Hello World!", "Hello")</code> returns true.
SubstringAfter	<code>SubstringAfter(string, string): string</code>	Returns the part of the first given string that is located after the given second string.	<code>SubstringAfter("Hello World", "Hello ")</code> returns "World".
SubstringBefore	<code>SubstringBefore(string, string): string</code>	Returns the part of the first given string that is located before the given second string.	<code>SubstringBefore("Hello World", " World")</code> = "Hello".
Text	<code>Text(num, format_text):TEXT</code>	Returns a numeric value as a text string in a specific format. The format is specified by the placeholders # and 0 and a decimal point..	<code>Text(1, "#.000")</code> returns "1.000".
TextOccurrences	<code>TextOccurrences(find_text, within_text):NUMERIC</code>	Returns the number of occurrences of <code>find_text</code> within <code>within_text</code> .	<code>TextOccurrences("can", "Can you can a can as a canner can can a can?")</code> returns 6.

Name	Literal Expression	Description	Example
Trim	<code>Trim(text):TEXT</code>	Returns the text string with all spaces removed except single spaces between words.	<code>Trim("Hello World! ")</code> returns "Hello World!".
Upper	<code>Upper(text):TEXT</code>	Returns the text string with all letters converted to uppercase.	<code>Upper("lower")</code> returns "LOWER".

## Logical Operators


Name	Literal Expression	Description	Example
Not	<code>Not(boolean): BOOLEAN</code>	Negates the input boolean.	<i>Example:</i> <code>Not(true)</code> returns false.

## 8.3.5 Link DMN elements and diagrams

### Link a DMN diagram to a BPMN diagram

You can link DMN and BPMN diagrams so that processes can be viewed separately from decisions, with the advantage that the process is streamlined and the decision is traceable.

Follow these steps:

1. Open your BPMN diagram and select the task to which you want to link the decision diagram.
2. In the attribute panel, set the *Task type* attribute to *Business rule*.
3. In the task element, click  .  
The configuration dialog to create a link opens.  
You can also open this dialog via the *Decision reference* attribute in the attribute panel.
4. You can either create a new DMN diagram or link an existing one.
5. Confirm with *Link diagram*.

The DMN diagram is linked. To open a preview of it, click  in the business rule task again.

Once the BPMN process is published to SAP Signavio Process Collaboration Hub, users can open the decision diagram in via the BPMN process. With *Run decision*, they can then add data to the rules defined in the decision diagram and determine the result of the decision. For more on simulation, read [DMN simulation \[page 173\]](#).

## Link the logic of another decision

Instead of adding decision rules to a decision of a DMN diagram, you can integrate the decision logic from another DMN diagram.

To link a decision of another DMN diagram, follow these steps:

1. Open the decision table and click *Link* on the left side of the dialog.  
The configuration dialog to create a link opens.
2. Navigate to the DMN diagram and select the decision you want to link.
3. Confirm with *Link diagram*.  
The decision of the DMN diagram is linked.

### ⚠ Caution

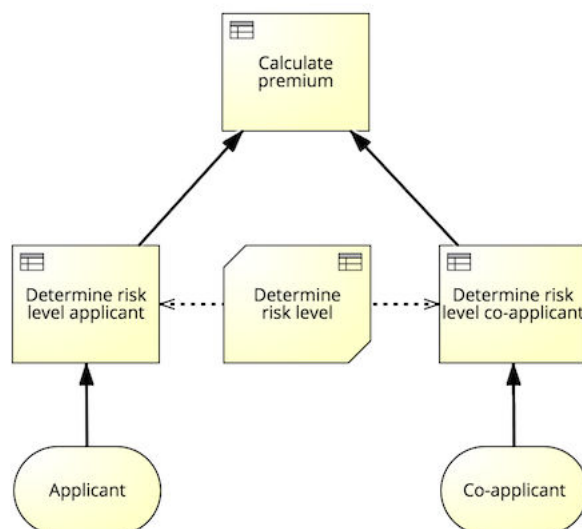
In an older version of the decision logic editor, you were able to link a diagram without selecting a decision. Such a link is incomplete and can't be read out by the simulation and test lab features. If you find such a link, always edit it so that it links the decision.


## Reuse decision logic via business knowledge models

If you want to run a decision multiple times with different data input, you can link it to a business knowledge model. If you then link the business knowledge model to other decisions, they can reuse the logic of the linked decision. This is called a boxed invocation.

Boxed invocations provide decision logic and input type information as a generic function, whereas decisions directly linked to other decisions provide not only the input data types, but the specific input data objects.


In the following example, an insurance premium is calculated based on the applicant's and their spouse's risk level. For each person, the same decision logic determines a different risk level. A link via a business knowledge model allows calling the linked decision model with different data inputs. In contrast, a direct link to a decision diagram will fail to distinguish between the two data sources.



To link a decision to a business knowledge model, click  in the business knowledge model and select the decision you want to link from the configuration dialog.

To reuse the logic of the decision linked to the business knowledge model, follow these steps:

1. Open the decision table and select the *Invocation* tab on the left side.
2. Map the linked and the invoked decision's input data.
3. Confirm with *Apply*.  
The boxed invocation is set up.

You can find more information on boxed invocation in the DMN specification at <https://www.omg.org/spec/DMN/1.1/> .

## Next steps

[Define a decision logic \[page 123\]](#)

[Set BPMN attributes \[page 82\]](#)

[Compare DMN diagrams and revisions \[page 174\]](#)

## 8.3.6 Create dictionary entries for input or output data in decisions

How to create dictionary entries that modeling users can use as input or output data in decisions of DMN diagrams.

### Caution

A workspace administrator needs to set up a dictionary category of which the entries can be used for DMN modeling.

To create a dictionary entry for input or output data in decisions, create an entry in the dictionary as usual. Read more in section [Create new dictionary entries \[page 223\]](#).

You need to create the entry in a dictionary category that is activated for DMN modeling.

You can tell if a category is activated for DMN modeling when its entries have the following settings:

Setting	Description
<b>Technical name</b>	<p>If the dictionary entry is used as a data object for input or output data, you can add a domain-specific export name.</p> <p>This name is used when exporting a DMN diagram as XML or Drools rules. Read more in the sections <a href="#">Export a DMN diagram as XML [page 336]</a> and <a href="#">Exporting DMN diagrams as drools rules [page 338]</a>.</p> <div><p><b>Note</b></p><p>If the technical name and the class name are set, only the class name is exported.</p></div>
<b>Class name</b>	<p>If the dictionary entry is used as a data definition, you can add a java source reference.</p> <p>This name is used when exporting a DMN diagram as Drools rules. Read more in section <a href="#">Exporting DMN diagrams as drools rules [page 338]</a>.</p> <div><p><b>Note</b></p><p>If the technical name and the class name are set, only the class name is exported.</p></div>
<b>Type definition</b>	<p>You can specify the data type, the following options are available:</p> <ul style="list-style-type: none"><li>• <i>Not specified</i> – Modeling users specify the data type in the decision table.</li><li>• <i>Simple Type</i> – Select a type:<ul style="list-style-type: none"><li>• <i>Enumeration</i></li><li>• <i>Text</i></li><li>• <i>Number</i></li><li>• <i>Boolean</i></li><li>• <i>Hierarchy</i></li><li>• <i>Date</i></li></ul></li><li>• <i>Complex Type</i> – Link one or more dictionary entries and add simple data types.</li></ul>

## ❁ Example

*Example:*

New entry

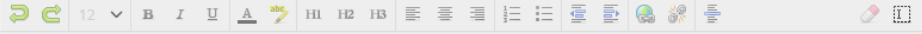
Create a new dictionary entry.

Category: DMN modeling (Type: Others)

The following attributes can be defined in different languages. Please use the drop-down field in the top to change the language. Consider that the title must be defined in at least one language.

Language: English (USA)

Title: Input Data

Description: 

Relevant documents: [Add a new document](#)

You can define a value domain for this dictionary entry and use it as data input or output in decision modeling.

Technical name:

ⓘ If set, this name is used instead of the title when exporting diagrams as DMN XML or Drools files.

Class name:

Type Definition: Not specified

[Cancel](#) [Create](#)

## Next steps

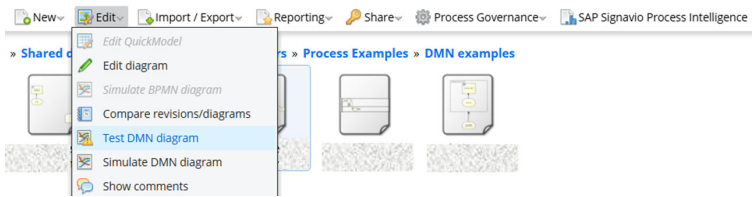
[Define a decision logic \[page 123\]](#)

## 8.3.7 The DMN Test Lab

With the DMN Test Lab, define and run test cases in order to check whether a DMN diagram fulfills certain requirements.

For example, you can ensure that diagrams still comply with the initial decision logic after being extended, and you can control the correctness of specific input combinations and outputs in complex diagrams.

To open the test lab, select the diagram you want to test in the Explorer and choose [Edit](#) [Test DMN diagram](#).



Another option is from the Editor page. Choose  (User Profile Menu - your initials) from the header area and select [Test Lab](#).

### 8.3.7.1 Structure of a Test Case File

Learn how the input and output parameters make up the structure of a test case, reference the definitions of available input and output parameters, and check the different data types of a value.

#### Test case file structure

```
{
  "inputParameterDefinitions": [
    {
      "id": "DIAGRAM_ID/SHAPE_ID",
      "shapeId": "SHAPE_ID",
      "diagramId": "DIAGRAM_ID",
      "modelName": "MODEL_NAME",
      "requirementName": "INPUT_DATA_NAME"
    },
    ...
  ],
  "outputParameterDefinitions": [
    {
      "id": "DIAGRAM_ID/SHAPE_ID",
      "shapeId": "SHAPE_ID",
      "diagramId": "DIAGRAM_ID",
      "modelName": "MODEL_NAME",
      "requirementName": "TOP_LEVEL_DECISION_NAME"
    },
    ...
  ],
  "testCases": [
    {
      "inputValues": [
        {
          "type": "number|string|date|time|datetime|boolean|complex|
enumeration|hierarchy|list",
          "value": "INPUT_VALUE"
        },
        ...
      ],
      "expectedValues": [
        {
          "type": "number|string|date|time|datetime|boolean|complex|
enumeration|hierarchy|list",
          "value": "OUTPUT_VALUE"
        }
      ]
    },
    {
      <ANOTHER TEST CASE>
    }
  ]
}
```

```

    },
    {
      <ANOTHER TEST CASE>
    },
    ...
  ]
}

```

### ⚠ Caution

For convenience, the Test lab export adds name elements, for example `name`, `modelName`, and `requirementName`, to add context to the exported file. The name elements aren't imported. However, you must not change any name element, otherwise the import will fail.

Besides these name elements, all elements in the test cases file are required. Otherwise, the import fails.

## Definition of input and output parameters

Element	Description	Type
<ul style="list-style-type: none"> <li>inputParameterDefinitions</li> <li>outputParameterDefinitions</li> </ul>	Top level	Array of definition objects for input or output parameters
id	<p>Specifies the ID of the parameter definition</p> <p>The ID is composed of the diagram ID and the shape ID as follows:  <code>diagramID/shapeID</code></p>	String
shapeId	<p>Specifies the ID of the shape</p> <p>To find the shape ID, open the DMN diagram in the editor and expand the attributes panel. Under <i>More Attributes</i>, the shape ID is listed as <i>Element ID</i>.</p>	String

Element	Description	Type
diagramId	<p>Specifies the ID of the DMN diagram</p> <p>The diagram ID is part of the URL when opening the DMN diagram in the editor, for example</p> <pre>id=343056b7ce194785b04efab05cfa92a9</pre> <p>from the URL</p> <pre>https://&lt;your_workspace&gt;.signavio.com/p/editor?id=343056b7ce194785b04efab05cfa92a9.</pre>	String
modelName	<p>Specifies the title of the diagram as specified in the editor</p> <p>This element is ignored during import.</p>	String
requirementName	<p>For inputParameterDefinitions: Specifies the shape name of an input data element.</p> <p>For outputParameterDefinitions: Specifies the shape name of the top-level decision element.</p> <p>This element is ignored during import.</p>	String

### List of test cases

Element	Description	Type
testCases	Top level	Test cases object

Element	Description	Type
inputValues	Specifies the input data  inputValues is bound to the input data via the section inputParameterDefinitions. The order defines the binding: the first element in inputValues is passed as value to the input data corresponding to the first element in inputParameterDefinitions.	Array of input value objects, read more in section <i>Objects for input and output values</i> .
expectedValues	Specifies the expected output data  expectedValues is bound to the decision output via the section outputParameterDefinitions. The order defines the binding: the first element in expectedValues is passed as value to the output data corresponding to the first element in outputParameterDefinitions.	Array of output value objects, read more in section <i>Objects for input and output values</i> .

### Objects for input and output values

Element	Description	Type	Notes
<ul style="list-style-type: none"> <li>inputValues</li> <li>expectedValues</li> </ul>	Top level	Array of input or output value objects	

Element	Description	Type	Notes
type	Specifies the data type of the input or output value	String	Valid values: <ul style="list-style-type: none"> <li>• number</li> <li>• string</li> <li>• date</li> <li>• time</li> <li>• datetime</li> <li>• boolean</li> <li>• complex</li> <li>• enumeration</li> <li>• hierarchy</li> <li>• list</li> </ul>

Element	Description	Type	Notes
value	Specifies the actual input or output value	String	<p>The data types "number", "string", and "boolean" correspond to standard JSON data types.</p> <p>Values of type "date" must be represented as ISO formatted strings, for example "2015-12-31".</p> <p>Values of type "time" must be represented as ISO formatted string, for example "T23:59:59Z" or "T23:59:59-02:00".</p> <p>Values of type "datetime" must be represented as ISO formatted string, for example "2015-12-31T23:59:00-02:00".</p> <p>For values of type "list", read more in section <i>List value</i>. Nesting lists is not supported.</p> <p>For values of type "complex", read more in section <i>Complex value</i>.</p> <p>For values of type "enumeration", read more in section <i>Enumeration Value</i>.</p> <p>For values of type "hierarchy", read</p>

Element	Description	Type	Notes
			more in section <i>Hierarchy Value</i> .

## List value

JSON example:

```
{
  "type" : "list",
  "value" : [ {
    "type" : "number|string|date|time|datetime|boolean|complex|enumeration|
hierarchy",
    "value" : "INPUT_VALUE"
  }, {
    "type" : "number",
    "value" : "INPUT_VALUE"
  }, {
    ..
  } ]
}
```

Element	Description	Type
type	Specifies the data type of a value.  Value must be "list".	String
value	Specifies the list value objects	Array of value objects, read more in section <i>Objects for input and output values</i> .

Nesting lists is not supported.

## Complex Value

JSON example:

```
{
  "type" : "complex",
  "slots" : [ {
    "id" : "0",
    "value" : {
      "type" : "number|string|date|time|datetime|boolean|complex|enumeration|
hierarchy|list",
      "value" : "INPUT_VALUE",
    }
  }, {
    "id" : "1",
    "value" : {
```

```

    "type" : "number|string|date|time|datetime|boolean|complex|enumeration|
hierarchy|list",
    "value" : "INPUT_VALUE",
  }
}, {
  ...
}]
}

```

Element	Description	Type
type	Specifies the type of a value  Value must be "complex".	String
slots	Specifies the attributes of the complex type definition	Array of attribute objects
id	Reference to the value of the data type definition  Since attributes can be renamed and reordered, the name or the order as shown in the editor can be misleading. IDs are assigned when a new attribute is created. Renaming and reordering doesn't change the attribute's ID. To determine the correct ID, export an example test case for each value.	String
value	Specifies the actual value for the attribute	Value object, read more in section <i>Objects for input and output values</i>

## Enumeration Value

JSON example:

```

{
  "type" : "enumeration",
  "value" : "0"
}

```

Element	Description	Type
type	<p>Specifies the data type of a value</p> <p>Value must be "enumeration".</p>	String
value	<p>Specifies the ID of the value of the data type definition</p> <p>Since enumeration values can be renamed and reordered, the name or the order as shown in the editor can be misleading. IDs are assigned when a new enumeration value is created. Renaming and reordering doesn't change the enumeration value's ID. To determine the correct ID, export an example test case for each value.</p>	String

## Hierarchy Value

JSON example:

```
{
  "type" : "hierarchy",
  "value" : [ "1", "4" ],
}
```

Element	Description	Type
type	<p>Specifies the data type of a value</p> <p>Value must be "hierarchy".</p>	String

Element	Description	Type
value	<p>Specifies a list of IDs according to the data type definition, constructing the path from the root of the hierarchy to the referenced element</p> <p>Since hierarchy values can be renamed and reordered, the name or the order as shown in the editor can be misleading. IDs are assigned when a new hierarchy value is created. Renaming and re-ordering doesn't change the hierarchy value's ID. To determine the correct ID, export an example test case for each value.</p>	Array of positional IDs

## 8.3.7.2 Creating Test Cases

Learn how to create new test cases and use existing ones as templates for creating additional cases.

### Procedure

1. From the DMN Test Lab, choose *Create* from the action toolbar at the top of the table.
2. Define the values for *Inputs* and *Outputs*.

#### Note

In the *Create* details window, input fields selected here are highlighted in the model diagram.

## Example

The screenshot displays the 'Create' dialog for a test case. The diagram shows 'Discount Eligibility' as the central node, influenced by 'Total Purchase Amount', 'Is Loyalty Member', 'Item Category', 'Customer Location', and 'Last Purchase Date'. The 'Inputs' section contains fields for 'Customer Location' (Set list values), 'Item Category' (Select an enumeration), 'Last Purchase Date' (Enter a date), 'Total Purchase Amount' (Enter a number), 'Is Loyalty Member' (Select a boolean), and 'Coupon Codes' (Select an enumeration). The 'Outputs' section has a dropdown for 'Discount Eligibility' (Select a boolean). A table on the left lists test cases, and a results table on the right shows test execution outcomes.


3. Confirm by choosing *Create*.

## Duplicating Test Cases

### Prerequisites

You have an existing case in the DMN Test Lab table that you would like to use as a template.

### Procedure

1. From the test case table, choose a test case you would like to duplicate, and navigate to the end of its row.
2. Select the *Edit* option's  (*down arrow*) to reveal additional actions, and select *Duplicate*.

## Example

#	Customer Location list	Total Purchase Amount number	Last Purchase Date date	Item Category enumeration	Coupon Codes enumeration	Is Loyalty Member boolean	Expected Output boolean	Result	Actions
3	[EU]	50000	2025/03/19	Electronics	valid coupon code	No	No	Failed	Edit
4	[Asia]	350	2024/12/12	Electronics	valid coupon code	No	No	Failed	Edit
5	[US]	1500	2025/03/19	Electronics	empty	Yes	Yes	Passed	Edit
6	[EU]	120	2025/03/05	Home & Kitchen	empty	No	Yes	Failed	Duplicate
7	[US]	110	2025/02/26	Home & Kitchen	valid coupon code	No	Yes	Failed	Delete

3. Adjust the values for *Inputs* and *Outputs* as needed.
4. Confirm by choosing *Create*.


## 8.3.7.3 Inspecting Test Cases in the Simulation Tool


Learn how to use a simulation to analyze how a test case produces a specific output.

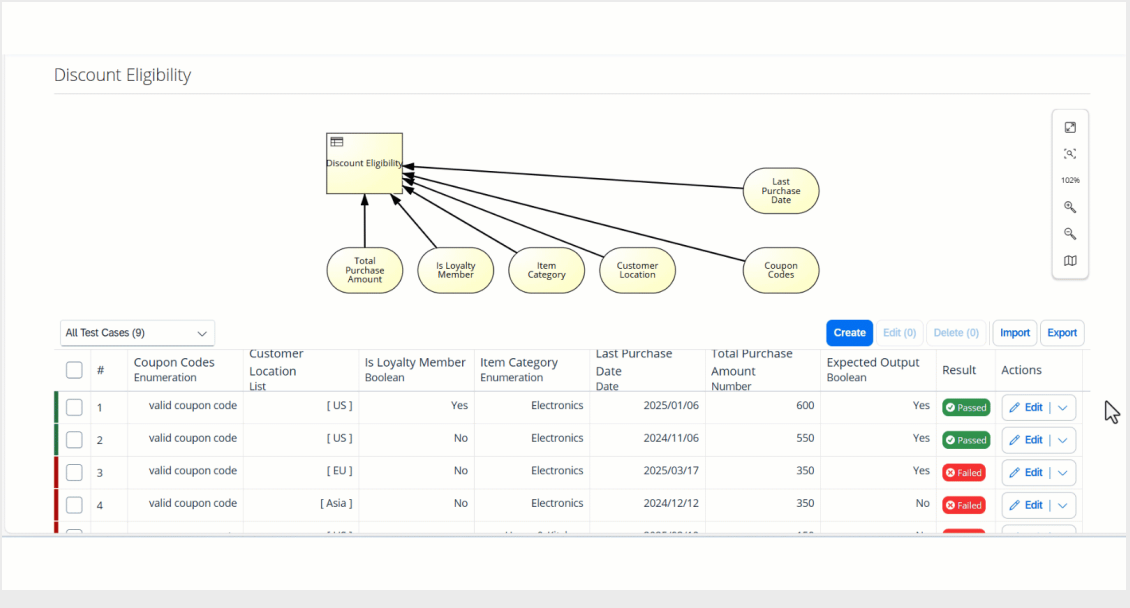
### Context

In the DMN simulation tool, you can simulate business decisions by applying data to the rules that are defined in a decision diagram. For more information, see [DMN Simulation \[page 173\]](#).

### Procedure

1. Open a DMN diagram in the test lab, as described in [The DMN Test Lab \[page 151\]](#).
2. From the test case table, choose a test case you would like to analyze and navigate to *Edit* at the end of its row.
3. Select the *Edit* option's  (*down arrow*) to reveal additional actions, and select *Inspect in Simulation*.  
The simulation window opens, displaying inputs, outputs, and boolean rules for the test case.

 Example



#	Coupon Codes Enumeration	Customer Location List	Is Loyalty Member Boolean	Item Category Enumeration	Last Purchase Date	Total Purchase Amount Number	Expected Output Boolean	Result	Actions
1	valid coupon code	[ US ]	Yes	Electronics	2025/01/06	600	Yes	Passed	Edit   v
2	valid coupon code	[ US ]	No	Electronics	2024/11/06	550	Yes	Passed	Edit   v
3	valid coupon code	[ EU ]	No	Electronics	2025/03/17	350	Yes	Failed	Edit   v
4	valid coupon code	[ Asia ]	No	Electronics	2024/12/12	350	No	Failed	Edit   v

## 8.3.7.4 Importing and Exporting Test Cases as JSON Files

Learn how to import and export JSON files from the [Test Lab](#).

### Prerequisites

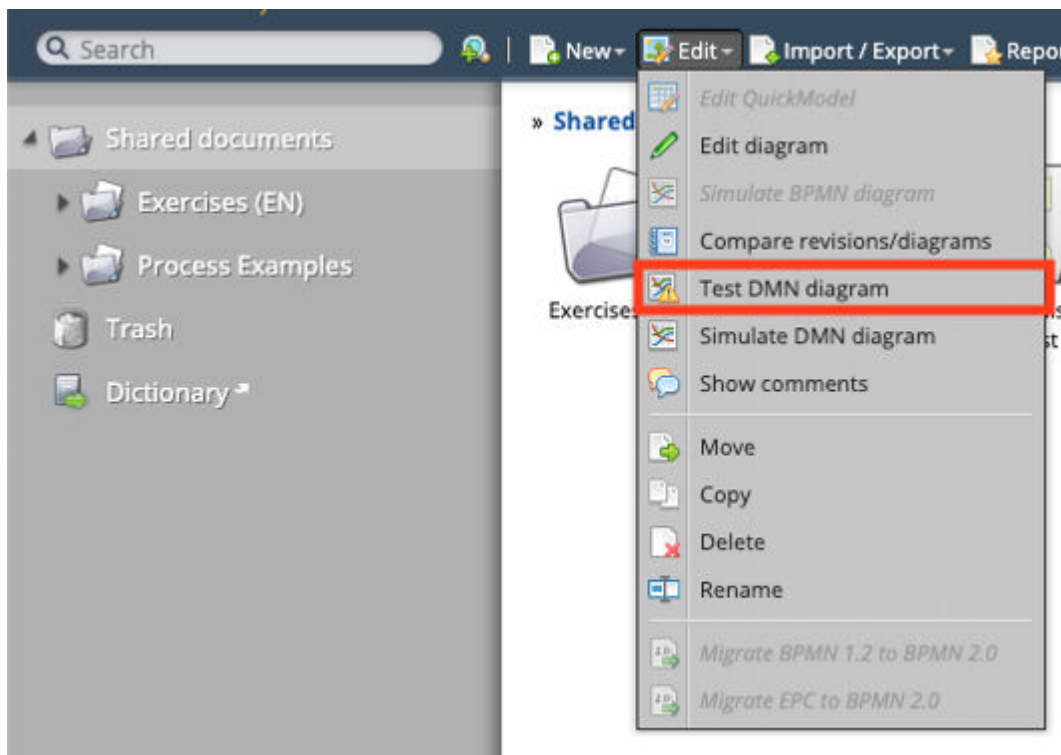
You created a DMN diagram.

### Context

To keep test cases when exchanging diagrams between SAP Signavio workspaces or using the test cases in other tools, you can import and export the test cases as JSON files. To import test cases, follow these steps:

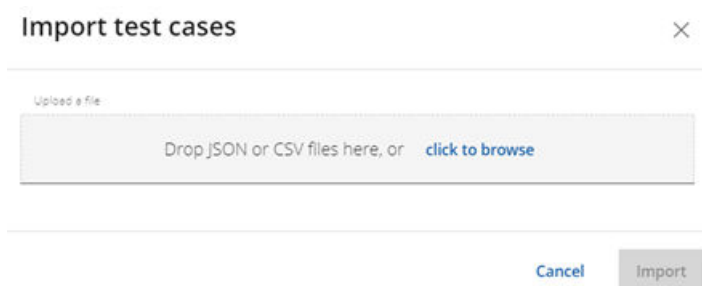
### Procedure

1. From the explorer's side panel, select a DMN process.
2. Choose **Edit** > **Test DMN diagram** from the explorer menu.



The [Test Lab](#) screen opens.

3. Choose *Import*.



The *Import test cases* window opens.

4. Drag and drop a JSON file into the import field. Alternatively, choose *click to browse* and select a JSON file from your folders.
5. Choose *Import* to confirm.

The test cases are imported and added to the test cases you have already created.

## Exporting Test Cases as JSON Files

### Prerequisites

You created a DMN diagram and test cases.

### Context

#### ⚠ Caution

You must first save test cases to be able to export them.

### Procedure

1. From the explorer's side panel, select a DMN process.
2. Choose **► Edit ► Test DMN diagram ►** from the explorer menu.

The *Test Lab* screen opens.

3. Choose *Export test cases*.

The JSON file is saved to your browser's download folder. By default, the file is named after the diagram.

## 8.3.7.5 Importing Test Cases as CSV Files

Learn how to import test cases by uploading an Excel-based CSV file that contains semicolon-separated values.

### Prerequisites

You created a DMN diagram.

You created a CSV file:

- Using **semicolon-separated values**.
- According to the following **guidelines** and **allowed values**:

Guideline	Example
Lists start and end with square brackets, separated by commas	A list of numbers: [1,2,4,5,11]
The value null must be uppercase	NULL
Complex type's column name is separated with a period [.]	Given that complex type name is "Person": Person.name
Header names are case sensitive	testInput ≠ TestInput
Type names are <b>not</b> case sensitive	DateTime = datetime

Type	Allowed Value (example)
<i>Date</i>	Format: YYYY-MM-DD (2024-12-22)
<i>DateTime</i>	Format: YYYY-MM-DDTHH:mm:SS (2024-12-07T16:30:20)
<i>Time</i>	Numerical value immediately preceded by letter T with no space inbetween (T16:30:20)
<i>Hierarchy</i>	Separated by > with order from the top to the bottom (Where A is the root element: A>B>C)
<i>Boolean</i>	<b>True</b> or <b>False</b> only

### Context

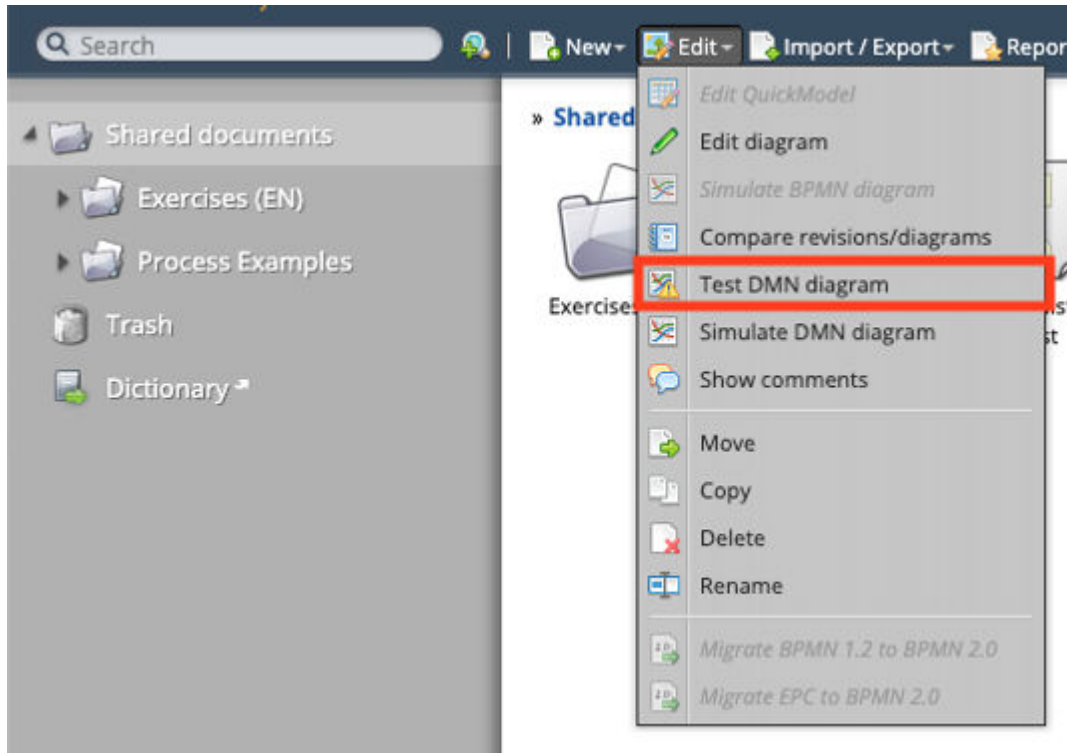
#### 📌 Note

Here are key import conditions:

- Input and output names are unique across the test case and cannot be repeated.
- If the CSV file's column names (output and inputs) are recognized, they are imported.
- If the CSV file's data types are identical to their original definitions, they are imported.
- Missing CSV columns are assumed as null values in the test case.

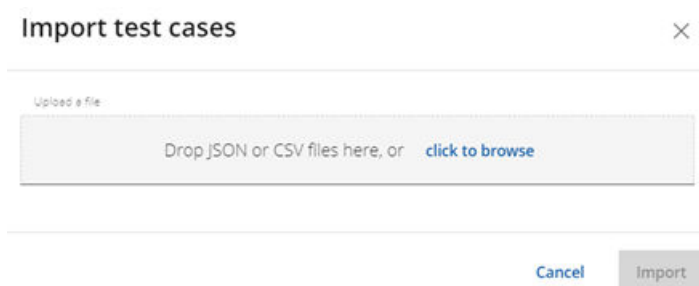
## Procedure

1. From the explorer's side panel, select a DMN process.
2. Choose **Edit** > **Test DMN diagram** from the explorer menu.



The *Test Lab* screen opens.

3. Choose *Import*.



The *Import test cases* window opens.

4. Drag and drop a CSV file into the import field. Alternatively, choose [click to browse](#) and select a CSV file from your folders.
5. Choose *Import* to confirm.

The test cases are imported and added to the test cases you have already created.

### Note

There is no export option for test cases as CSV files.

## 8.3.7.6 Importing Test Cases from Third-Party Tools

Learn how to import test cases created in other software tools.

### Context

To import test cases created in third-party tools, you must convert the test cases into a format supported by the *Test Lab*. We recommend creating a template JSON file for test cases and adding the existing test cases to it.

### Procedure

1. Open the *Test Lab* and create a test case, as described in [Creating Test Cases \[page 161\]](#).
2. To get a format template for a test case, enter one example for inputs and expected outputs.
3. To get the IDs of the values, enter examples for enumerations and attributes of complex data types.
4. To export the template file, choose *Export Test Cases*.

The file is saved to your browser's download folder.

5. Open the template file in any editor and add your test cases to the `testCases` section, as described in [Structure of a Test Case File \[page 152\]](#).

#### Caution

Before you start customizing the template file, we recommend creating a copy as backup.

6. Save your changes in the file and return to the *Test Lab*.
7. To import the file with your test cases, choose *Import*.
8. Select the file to import and confirm.

Your test cases are imported and added to the test cases you have already created.

### Related Information

[The DMN Test Lab \[page 151\]](#)

## 8.3.7.7 Editing Test Cases

Learn how to edit a single test case and how to make uniform changes to multiple test cases at once.

### Procedure

1. From the test case table, choose a test case you would like to edit and navigate to the end of its row.
2. Choose *Edit*.

The inputs and outputs details window opens.

3. Adjust the values for *Inputs* and *Outputs* as needed.
4. Confirm by choosing *Update*.

## Editing Test Cases - Alternative Process

### Context

There is an another method to navigate to edit an existing test case.

### Procedure

1. From the test case table, fill the check box at a test case row so that the row is highlighted.
2. Choose *Edit* from the table header area.

**Example**

Discount Eligibility

All Test Cases (4)

#	Customer Location list	Last Purchase Date date	Coupon Codes enumeration	Is Loyalty Member boolean	Item Category enumeration	Total Purchase Amount number	Expected Output boolean	Result	Actions	
<input type="checkbox"/>	1	2025/03/17	-	-	Yes	Clothing	180	Yes	Failed	Edit   v
<input type="checkbox"/>	2	-	-	-	-	-	-	-	Passed	Edit   v
<input type="checkbox"/>	3	-	-	-	-	-	-	-	Passed	Edit   v
<input type="checkbox"/>	4	2025/03/17	-	-	Yes	Clothing	60000	Yes	Failed	Edit   v

The inputs and outputs details window opens.

3. Adjust the values for *Inputs* and *Outputs* as needed.
4. Confirm by choosing *Update*.

## Editing Multiple Test Cases

### Prerequisites

You have more than one case in the DMN Test Lab table.

### Procedure

1. From the test case table, fill the check box at each row of the test cases you would like to edit.
2. Choose *Edit* from the table header area.

The inputs and outputs details window opens. No specific values are displayed, but the option to *Keep Values* for a field, which can vary among the multiple cases selected.

**Example**

The screenshot displays the 'Discount Eligibility' test case configuration. At the top, a diagram shows a central 'Discount Eligibility' node with five input nodes: 'Total Purchase Amount', 'Is Loyalty Member', 'Item Category', 'Customer Location', and 'Coupon Codes'. Below the diagram is a table of test cases. The table has columns for '#', 'Customer Location list', 'Last Purchase Date date', 'Coupon Codes enumeration', 'Is Loyalty Member boolean', 'Item Category enumeration', 'Total Purchase Amount number', 'Expected Output boolean', 'Result', and 'Actions'. Four test cases are listed, with the first and fourth rows selected (checkboxes checked). The first row shows a failed result, while the second and third rows show passed results.

#	Customer Location list	Last Purchase Date date	Coupon Codes enumeration	Is Loyalty Member boolean	Item Category enumeration	Total Purchase Amount number	Expected Output boolean	Result	Actions
<input checked="" type="checkbox"/>	1	2025/03/17	-	Yes	Clothing	180	Yes	Failed	Edit
<input type="checkbox"/>	2	-	-	-	-	-	-	Passed	Edit
<input type="checkbox"/>	3	-	-	-	-	-	-	Passed	Edit
<input checked="" type="checkbox"/>	4	2025/03/17	-	Yes	Clothing	60000	Yes	Failed	Edit

3. Adjust the values for *Inputs* and *Outputs* as needed.

### Note

When you enter values for a specific field, the change applies to all selected cases.

4. Confirm by choosing *Update*.


## 8.3.7.8 Filtering Test Cases

Learn how to apply filters to view specific test cases in a table. Discover how to sort cases using filtering options in columns.

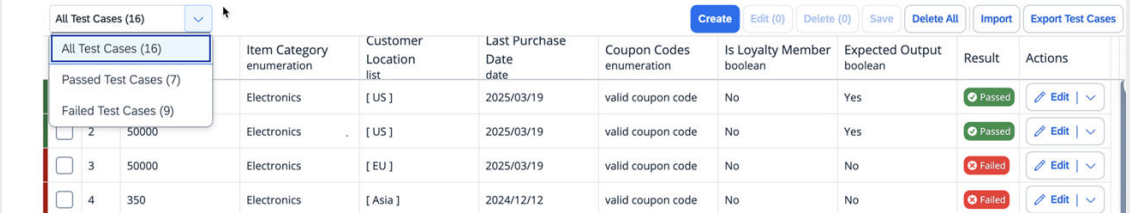
### Context

By default, the table header's *filter view* field shows *All Test Cases*, indicating both passed and failed test cases. This field also displays the number of cases for each filter option.

### Procedure

1. From the test case table's header, select the *All Test Cases* option's  (*down arrow*) to reveal filtered view options.

**Example**



	Item Category enumeration	Customer Location list	Last Purchase Date date	Coupon Codes enumeration	Is Loyalty Member boolean	Expected Output boolean	Result	Actions
<input type="checkbox"/>	Electronics	[ US ]	2025/03/19	valid coupon code	No	Yes	<span>Passed</span>	<a href="#">Edit</a>   <a href="#">↓</a>
<input type="checkbox"/>	Electronics	[ US ]	2025/03/19	valid coupon code	No	Yes	<span>Passed</span>	<a href="#">Edit</a>   <a href="#">↓</a>
<input type="checkbox"/>	Electronics	[ EU ]	2025/03/19	valid coupon code	No	No	<span>Failed</span>	<a href="#">Edit</a>   <a href="#">↓</a>
<input type="checkbox"/>	Electronics	[ Asia ]	2024/12/12	valid coupon code	No	No	<span>Failed</span>	<a href="#">Edit</a>   <a href="#">↓</a>

2. Filter results by choosing either *Passed Test Cases* or *Failed Test Cases*.

The test case table refreshes, displaying only the filtered cases.

## Filtering and Sorting by Column Values

### Procedure

1. In the test case table, select a column header to display its filter and sort options.
2. Choose one of the following options:
  - *Sort Ascending*
  - *Sort Descending*

- *Filter*

### Note

If you choose *Filter*, enter a value in the blank field provided.

### Example


<input type="checkbox"/>	#	Customer Location list	Last Purchase Date date	Coupon Codes enumeration	Is Loyalty Member boolean	Item Category enumeration	Total Purchase Amount number
<input checked="" type="checkbox"/>	1	-	-	Sort Ascending	Yes	Clothing	180
<input checked="" type="checkbox"/>	2	-	-	Sort Descending	-	-	-
<input type="checkbox"/>	3	-	-	Filter	-	-	-

The test case table refreshes, displaying the results of the filter or sort action.

## 8.3.7.9 Deleting Test Cases

Learn how to delete a single test case and how to delete multiple test cases at once.

### Procedure

1. From the test case table, choose a test case you would like to delete and navigate to the end of its row.
2. Select the *Edit* option's  (*down arrow*) to reveal additional actions, and select *Delete*.

### Example

<input type="checkbox"/>	#	Customer Location list	Item Category enumeration	Last Purchase Date date	Total Purchase Amount number	Is Loyalty Member boolean	Coupon Codes enumeration	Expected Output boolean	Result	Actions
<input type="checkbox"/>	1	-	Clothing	2025/03/17	180	Yes	valid coupon code	Yes	Failed	Edit
<input type="checkbox"/>	2	-	-	-	-	-	valid coupon code	-	Passed	Duplicate
<input type="checkbox"/>	3	-	-	-	-	-	-	-	Passed	Delete

The confirmation window opens.

3. Confirm by choosing *Delete*.

## Deleting Test Cases - Alternative Process

### Context

There is an another method to navigate to delete an existing test case.

## Procedure

1. From the test case table, fill the check box at a test case row so that the row is highlighted.
2. Choose *Delete* from the table header area.  
The confirmation window opens.
3. Confirm by choosing *Delete*.

## Deleting Multiple Test Cases

### Procedure

1. From the test case table, fill the check box at each row of the test cases you would like to delete.
2. Choose *Delete* from the table header area.  
The confirmation window opens.
3. Confirm by choosing *Delete*.

## 8.3.8 DMN Simulation

The decision management extension allows you to model, manage and better understand complex business decisions. In the DMN simulation tool, you can simulate business decisions by applying data to the rules that are defined in a decision diagram. The simulation tool helps you to understand dependencies between sub-decisions and to identify scenarios for which no rules have been established.

### Note

To design a DMN model, you need an SAP Signavio Process Manager license. However, you can run an existing DMN model with either an SAP Signavio Process Manager or an SAP Signavio Process Collaboration Hub license.

To open the DMN simulation tool, select the diagram in the explorer and choose *Edit - Simulate DMN diagram*.

Alternatively, you can open the diagram in the editor and use the drop-down menu from the *User Profile Menu* to switch from the *Graphical Editor* to the *Simulation* tool.

Now, you can start using the simulation tool.

Select a decision in the diagram, either by selecting it or by using the dropdown menu in the top right corner. Then, scroll to the *Inputs* section and fill in the data of your simulation scenario. The *Outputs* section shows the decision output as computed by the simulation tool. The *Wildcard mode* toggle affects the evaluation semantics. Wildcard mode turned on means that empty input values are replaced with wildcards, which will, for example, match all conditions in decision tables. When turned off, empty input values will remain undefined during evaluation.

## Note

If the *Wildcard mode* is activated and one or multiple input parameters are not defined, the simulation tool will determine the set of possible output values. This is helpful, for example, if in specific application scenarios some input values remain unknown.

The progress bars in the decision elements indicates the extent to which data inputs are defined so far. When scrolling down, you can see a decision table overview that highlights the rules that apply in the current scenario:

### Determine compliance level

U	Inputs			Outputs	Annotations
	Target group {Freelancer / Sales Partners, Employees of partners / Partners companies / Customers companies, Offi...}	Type of benefit {Business Lunch / Catering, Invitation to events, Gifts in kind}	Value of benefit 0 €.. €	Determine compliance level {Red, Yellow, Green}	Hint Informational
1	= Freelancer / Sales Par...		> € 300	Red	
2	= Freelancer / Sales Par...		< (200 ... 300)€	Yellow	
3	= Freelancer / Sales Par...		≤ € 200	Green	
4	= Employees of partner...	= Business Lunch / Cat...	> € 100	Red	

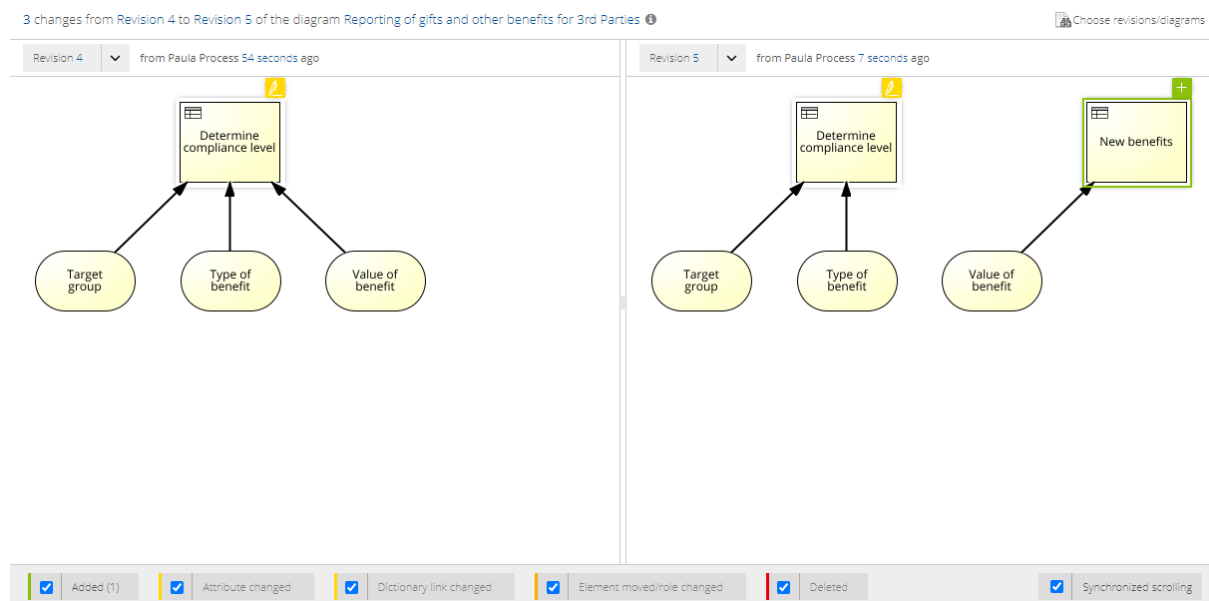
The rules that apply to the provided input data are highlighted in green.

## 8.3.9 Comparing DMN diagrams and revisions

The SAP Signavio diagram comparison tool allows you to easily compare two diagrams, as well as different revisions of one diagram. In the revision comparison, details about all changes in a diagram over time are documented.

To open the comparison tool, select a diagram (or, in case you want to compare two different diagrams and not revisions: two diagrams) and click *Edit*, then *Compare revisions/diagrams* in the top drop-down menu of the explorer.

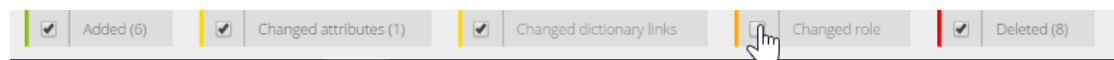
The diagram comparison view opens. The drop-down menu allows you to switch between diagram revisions:



To load a different diagram for comparison, click [Choose revisions/diagrams](#) in the upper right corner of the tool and select both diagrams to be compared in the dialog.

Clicking the [pen](#) icon of a changed element gives you detailed information about the adjusted element properties.

To narrow down the changes, you can deactivate one or multiple check boxes in the panel below the canvas and exclude changes made to attributes or to specific element types:



To learn more about the basic usage of the diagram and revision comparison tool, read the section [Comparison view \[page 65\]](#). The following section explains how to extract DMN-specific information from the comparison tool.

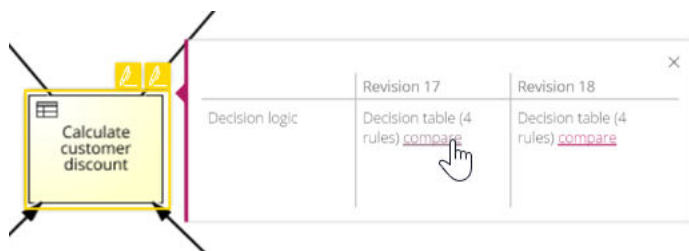
## Comparing Data Inputs

To view the changes made to a Data Input element, select the element to see the exact changes.

## Comparing Decision Tables

To view the changes made to a Decision Table, select the element to access an overview of the changes.

Then, click the [compare](#) link to compare the tables:



In the tables, all changes are highlighted.

Decision table: Calculate discount

U	Inputs		Outputs
	Customer status (Standard, Premium, Gold)	Loyalty card Boolean	Discount 0.00 % .. 30.00 %
1	= Standard	= No	0.00 %
2	= Standard	= Yes	10.00 %
3	= Premium		20.00 %
4	= Gold		30.00 %

U	Inputs		Outputs
	Customer status (Standard Traveler, Frequent Business Traveler, Platinum Business Traveler)	Loyalty card Boolean	Discount 0.00 % .. 32.50 %
1	= Standard Traveler	= No	0.00 %
2	= Standard Traveler	= Yes	5.00 %
3	= Frequent Business Traveler		15.00 %
4	= Platinum Business Traveler		32.50 %

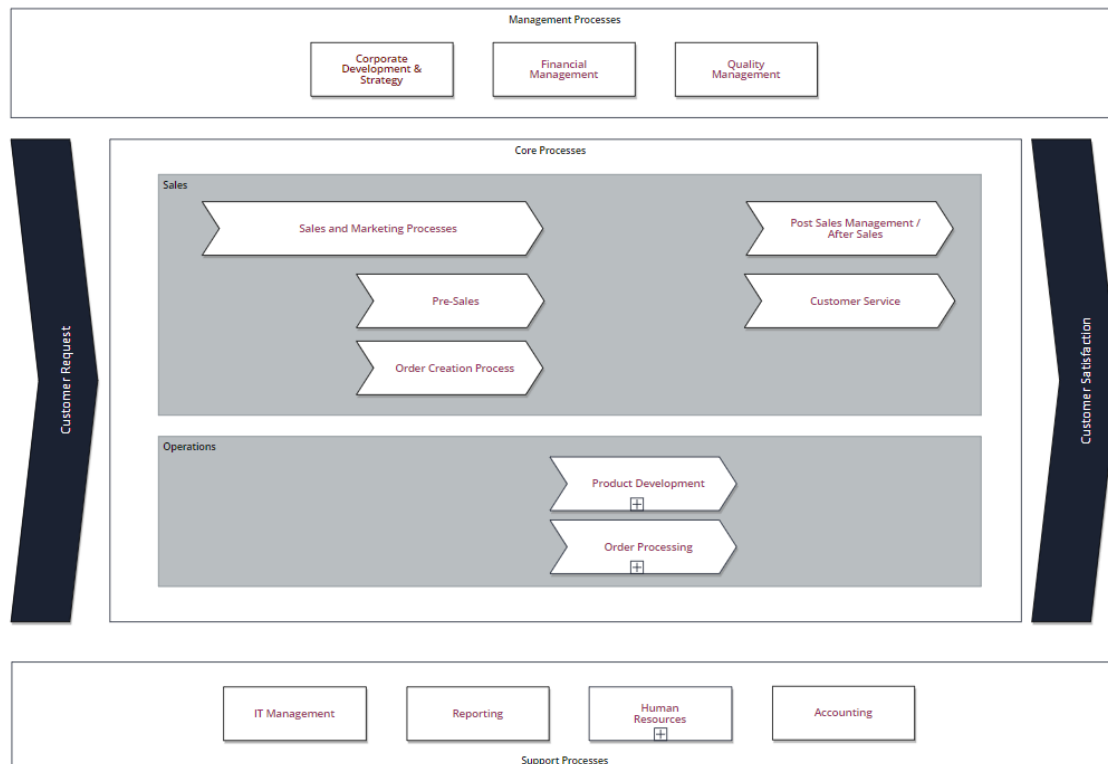
[Close](#)

## 8.4 Value Chains

Learn how to create and edit value chains.

With value chains, you can create high-level perspectives on your process landscape.

Each modeling element in a value chain represents a process or process group of a specific business unit. You can link the elements in chronological order and show the hierarchical relationships between processes and process groups.



For value chains, no official specification or set of syntax rules exist. To keep value chains simple and easy to read, you can link the elements of a value chain to other process models.

In this section, the diagram elements and editing functions that are only available for this notation are described.

For general creation and editing options that are available for all notations, read more in section [Modeling \[page 30\]](#).

## Process

The process element represents a business process within your organization.

## Collapsed Process

The collapsed process element represents a business process that is linked to another process diagram.

You can create links to the following diagram types:

- value chain diagrams
- BPMN diagrams
- event-driven process chains

- customer journey maps

To link the collapsed process element with a new or existing process, click the + symbol in the element.

## Group

Use this element to group processes that belong together.

## Process Link

Use this element to create a hierarchy of process elements and process group elements.


## Text Note

Use the text note to add information to the diagram or a diagram element.

## Association

Use the association to connect a text note to any diagram element.

## Change Element Orientation

To change the orientation of a process element or collapsed process element, select it and choose  (*orientation*) at the bottom. You have the following options:

- *Left to right*
- *Right to left*
- *Top down*
- *Bottom up*
- *Rectangle*

## Rotate Text

To rotate text in a diagram element, select the element and in the attribute panel, choose a rotation value for the *Text direction* attribute.

## Add Live Insights

You can add Live Insights shapes to display the result of a SAP Signavio Process Intelligence investigation in a value chain. Read more in section [Add Live Insights \[page 59\]](#).

## 8.5 ArchiMate

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

In SAP Signavio Process Manager, you can model enterprise architecture diagrams in the ArchiMate notation, an open enterprise architecture modeling language for describing, analyzing, and visualizing enterprise architectures within and across business domains.

### 8.5.1 What is ArchiMate?

#### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

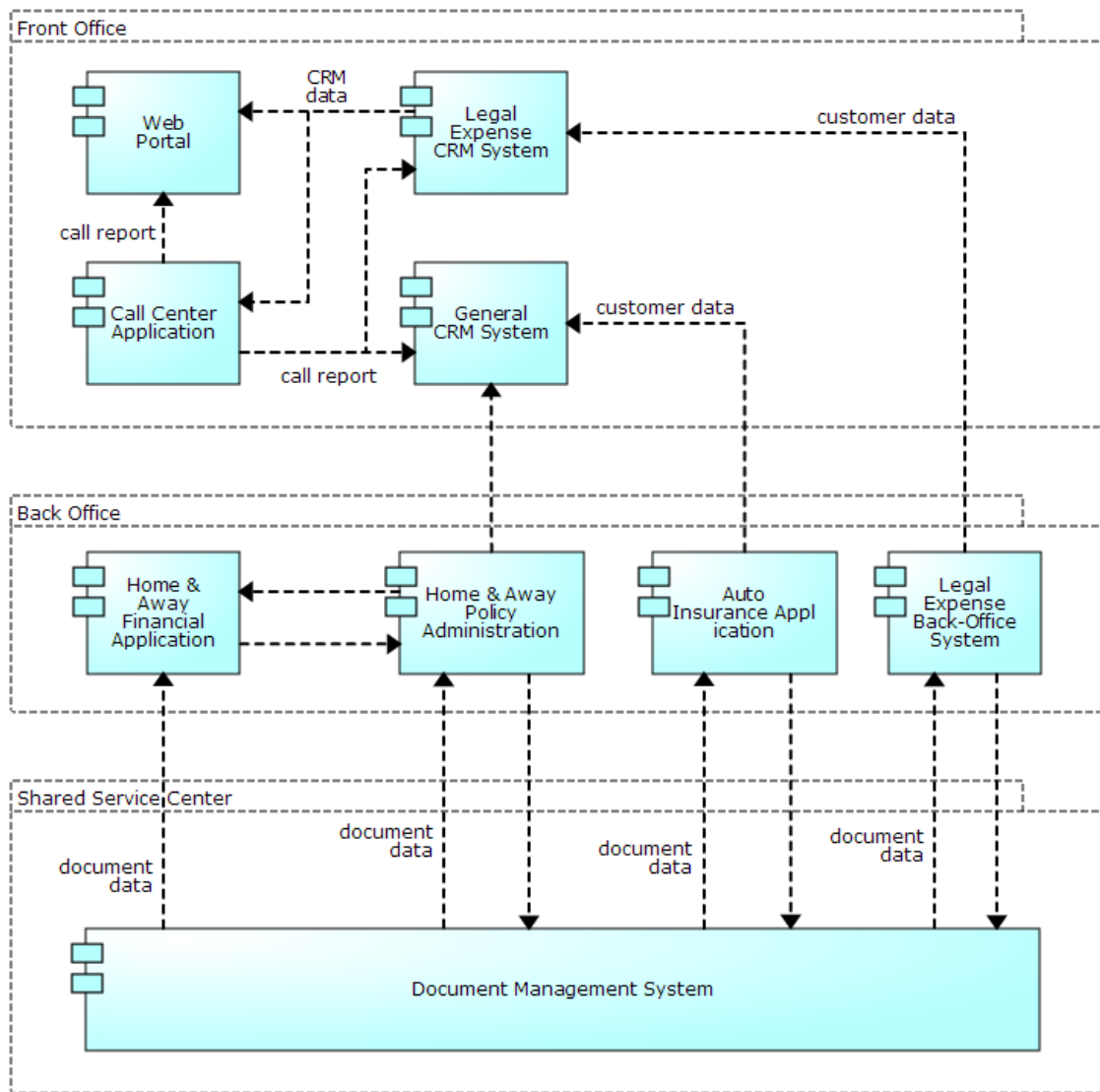
ArchiMate is an open enterprise architecture modeling language for describing and visualizing enterprise architectures within and across business domains.

Developing enterprise architecture descriptions enables you to base requirements and stakeholder concerns regarding your IT and business systems on formal and uniform models.

ArchiMate is a lightweight but comprehensive language that enables you to define the architecture of your business and IT systems using a service oriented view model. It allows you to see your process architectures over time. This is helpful in many areas, such as transformation and migration planning.

The complete ArchiMate specification can be found here:

<https://pubs.opengroup.org/architecture/archimate3-doc/> 



An example of an ArchiMate enterprise architecture diagram

## 8.5.2 Creating and Editing ArchiMate Diagrams

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

To create an ArchiMate diagram, open the Explorer and choose **New > ArchiMate 3.0**. Your browser will open a new tab with the ArchiMate diagram canvas.

You can switch between different ArchiMate element sub sets using the drop-down menu in the shape repository. You can drag and drop elements onto the canvas. You can also use the interactive context menu to add more elements.


To save the diagram, choose  (save) in the toolbar.

Find instructions on how to edit diagrams in the sections [Add and connect elements \[page 42\]](#) and [Move and change elements \[page 47\]](#).

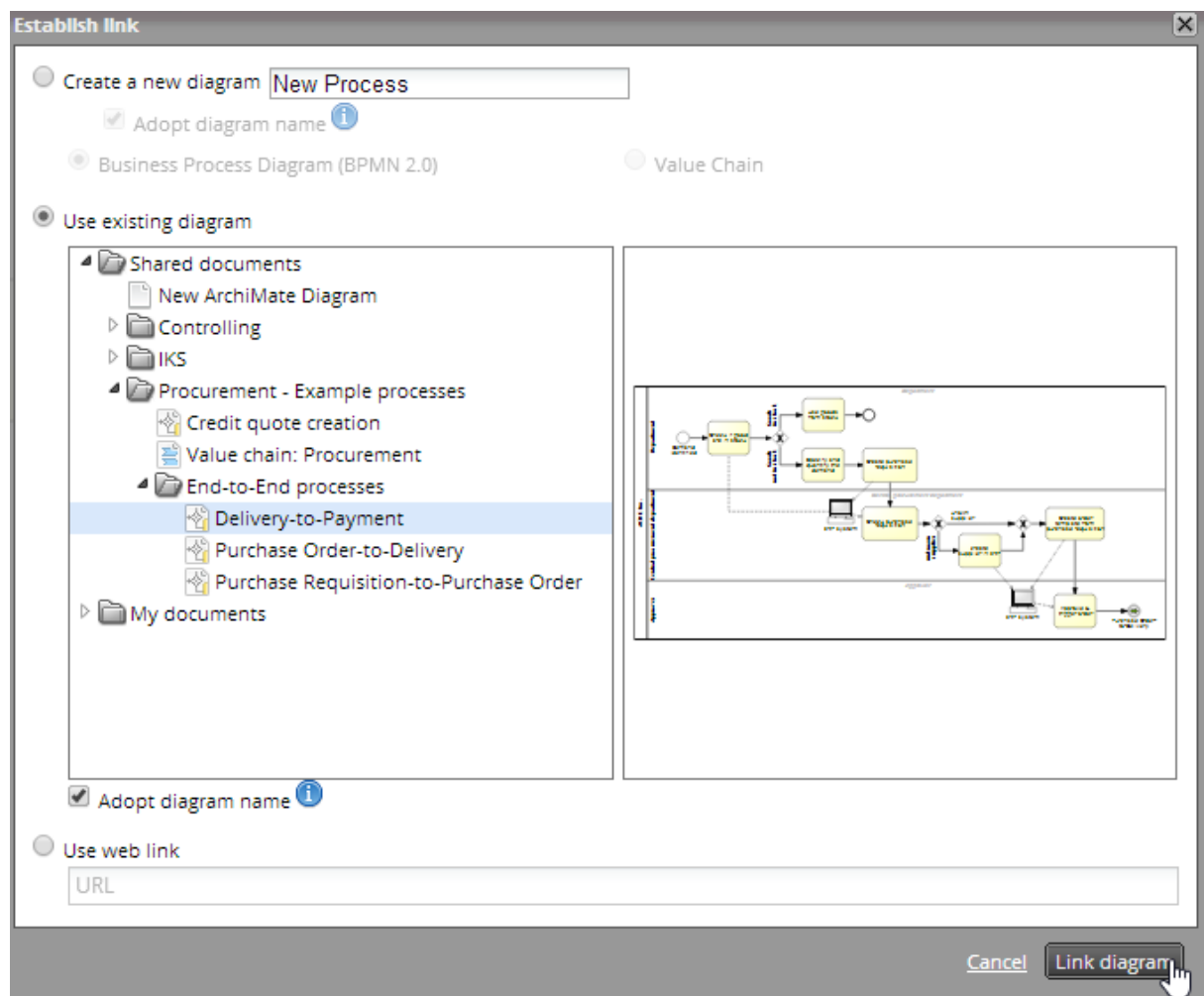
## Linking ArchiMate to BPMN Diagrams

You can easily link BPMN diagrams to ArchiMate's *Business Process* objects.

Once you have created the business process object in ArchiMate, select the element and choose the attribute *Business process reference* in the attribute panel.

Alternatively, you can choose  (reference) in the upper right corner of the Business Process object.

Now, a dialog opens from which you can either create a new diagram or link an existing one:



Link a BPMN diagram to an ArchiMate 'Business Process' Object

## Using the Dictionary with the ArchiMate Editor

Within the ArchiMate Editor it's easy to make use of the dictionary, see [The Dictionary \[page 218\]](#) for details.

The dictionary is modeling language-independent, meaning you can access entries you created from BPMN diagrams in ArchiMate and vice versa.

## 8.6 Case Management Model and Notation (CMMN)

### ⓘ Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

### ⓘ Note

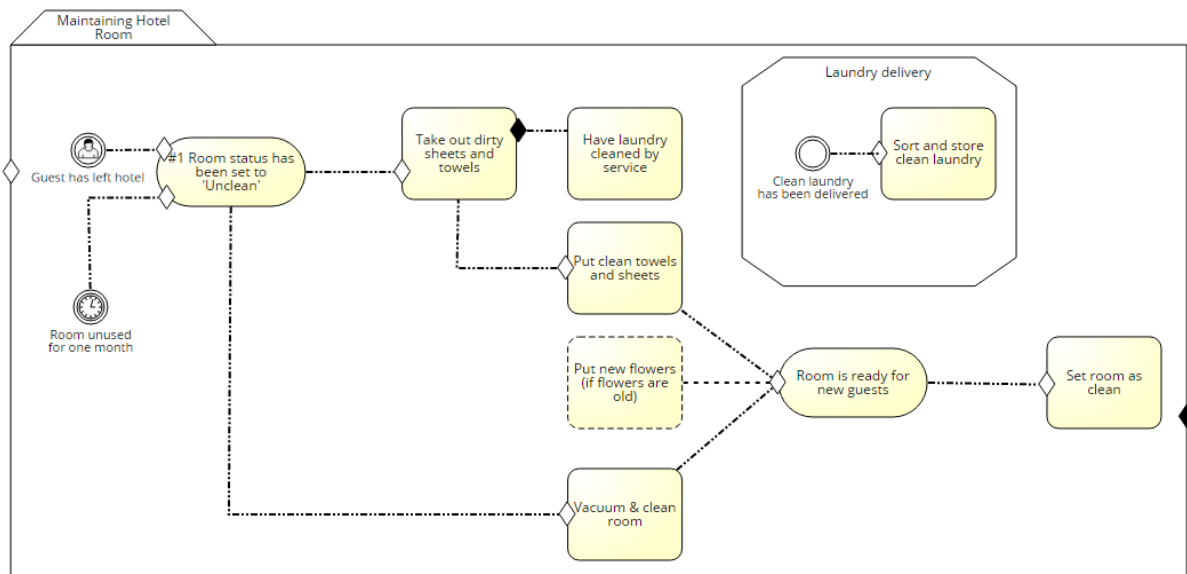
The feature is only available on request.

Contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

CMMN is a notation that was created to allow more flexibility in the business process landscape. SAP Signavio Process Manager supports CMMN version 1.1.

### About CMMN

In a business process that has variation, it may be more efficient for a case worker to determine the sequence in which to perform a set of tasks. For example, a hotel guest may always go through the same process when checking in and checking out, while the regularly tasks to clean the room may vary from day to day.



A CMMN model for maintaining a hotel room

In general, many BPM scenarios include actions that may diverge from the common sequence flow, within a framework of set tasks. CMMN supports the flexibility of these workflows. The notation is designed for scenarios when a case worker can decide in what order tasks or sequence flows shall be performed. A CMMN sequence flow may be triggered by an event (event listener), a state (milestone) or with an action (task).

## CMMN in SAP Signavio Process Manager

In SAP Signavio Process Manager, you can model the standard framework of the corresponding process in a BPMN diagram and then link a BPMN sub-process to a CMMN diagram that defines flexible sequences. You can also change a task in a BPMN diagram to a sub-process that links to a CMMN model, to define a number of flexible actions more accurately.

You can seamlessly integrate CMMN into BPMN and DMN-diagrams, to complement your existing process landscape. CMMN allows you to more accurately model highly variable processes, such as working with patient files or managing customer support processes.

### 8.6.1 Creating and Editing CMMN Diagrams

You can create CMMN diagrams in the explorer like any other diagram and edit them in the editor. This chapter explains the CMMN Elements and their alignment options on the modeling canvas. See [Basic modeling with the Editor \[page 30\]](#) to learn about modeling diagrams with the editor.

## Creating a CMMN Diagram

To create a new CMMN diagram in the explorer, choose **New > Case Management Diagram (CMMN 1.1)**. The editor opens with a blank modeling canvas, ready for you to edit the diagram.

Starting with a blank canvas in the editor, you can add elements from the *Shape Repository*.

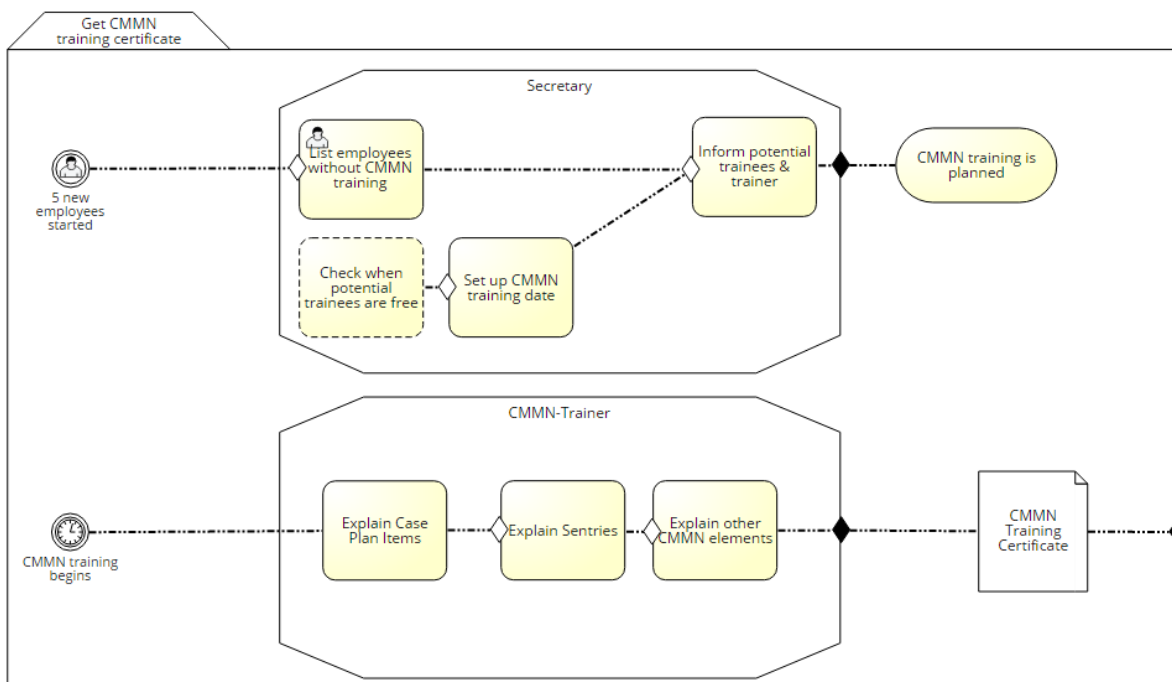
## Case Plan Items

You can use the following elements from the shape repository to model your CMMN diagram.

## Case Plan Model

The *case plan model* contains the case model. The case plan model encloses the whole diagram. You can place the element first and resize it with the growing diagram by dragging its lower right corner, or you can model the case and place the case file element when you have finished adding and connecting the other diagram elements.

To label the file, enter a name into the 'naming slip' at the top left of the element. You can also attach an *exit criterion* to the case plan model to indicate that the incoming sequence flow ends and completes the case.



A CMMN diagram, enclosed in a 'case plan model'

## Task

Tasks are the central elements in CMMN and BPMN notations. A task models a single action that needs to be performed. In addition to the ordinary *task*, there are five different types of task elements in CMMN:

1. *Non-blocking human task*
2. *Blocking human task*
3. *Process task*
4. *Decision task*
5. *Case task*

The model can depict each task as an ordinary *task* element or as a *discretionary task*, which is not obligatory and may be performed at the case worker's discretion.

- A *non-blocking human task* does not stop the sequence flow. In the case model, the task does not take any time to perform. The task is complete at the same moment it starts, and the sequence flow continues unstopped. All other tasks are 'blocking' by default.



A 'non-blocking human task'

- A *blocking human task* stops the sequence flow until it is completed.



A 'blocking human task'

- A *process task* links to a BPMN diagram. To link a diagram, click the symbol in the upper left corner of the element. To learn more, see [Integrating CMMN diagrams \[page 192\]](#).



A 'process task'

- A *decision task* links to a DMN diagram. To link a diagram, click the symbol in the upper left corner of the element. To learn more, see [Integrating CMMN diagrams \[page 192\]](#).



A 'decision task'

- A *case task* links to another CMMN diagram. To link a diagram, click the symbol in the upper left corner of the element. To learn more, see [Integrating CMMN diagrams \[page 192\]](#).

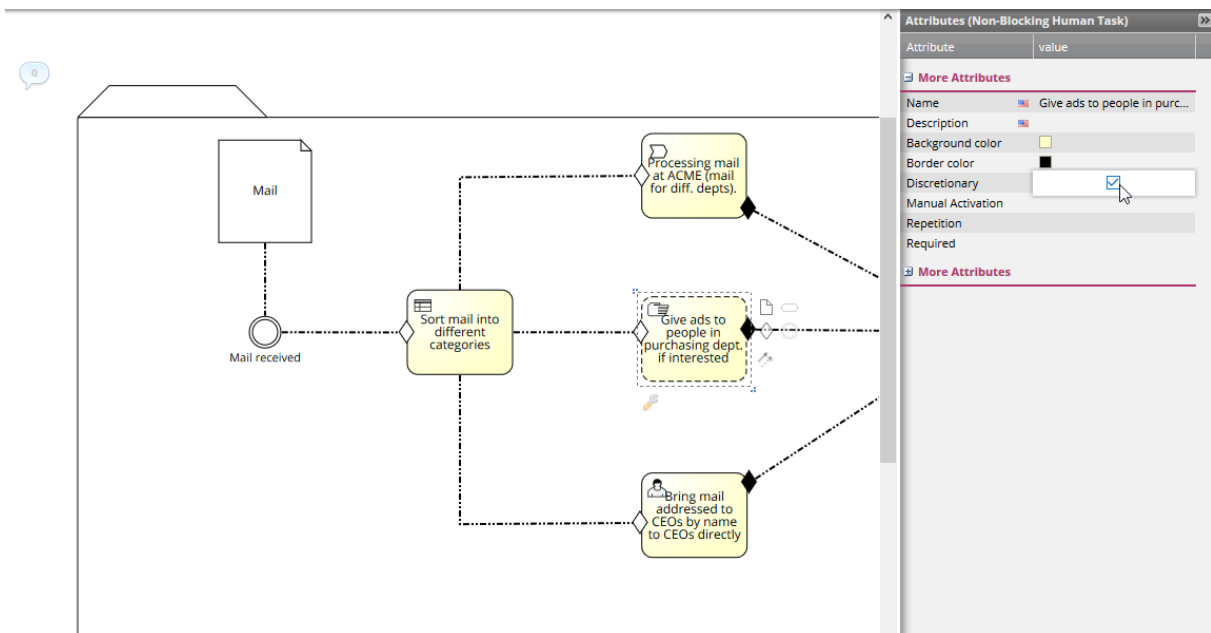


A 'case task'

## Discretionary Task

Every task type mentioned above also exists as *discretionary task* in the CMMN 1.1 definition. This means that the case worker may decide whether to perform the task for that case.

You can create a *discretionary task* by creating an ordinary task of the necessary type, for example a *non-blocking human task* and defining it as discretionary. Select the corresponding task and open the *Attributes* panel on the right. Click the *Discretionary* attribute and activate the checkbox.

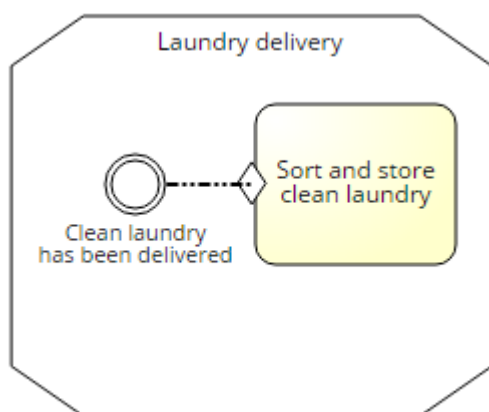


When checking the box, the ordinary task transforms into a discretionary task.

## Stage

*Stages* divide cases into subdivisions. You can group sequence flows, tasks and/or (sub-)stages into a stage.

- You can also define a stage as a *discretionary stage*. Select the corresponding stage and open the *Attributes* panel on the right. Click the *discretionary* attribute and activate the checkbox.
- An *expanded stage* can contain sequence flows of tasks and/or (sub-)stages. You can change a stage's size by dragging its bottom-right corner.
- A *collapsed stage* is linked to another CMMN diagram. In contrast to tasks, collapsed stages' linked diagrams may also just contain single sequence flows that do not define a whole case.



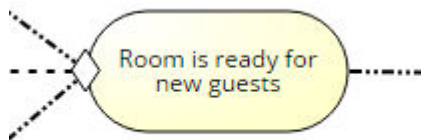
An expanded stage.



A collapsed stage is linked to the 'Procure parts' BPMN diagram.

## Milestone

Milestones are sub-goals within the process model. They indicate that a certain point or stage within a case has been reached or completed.



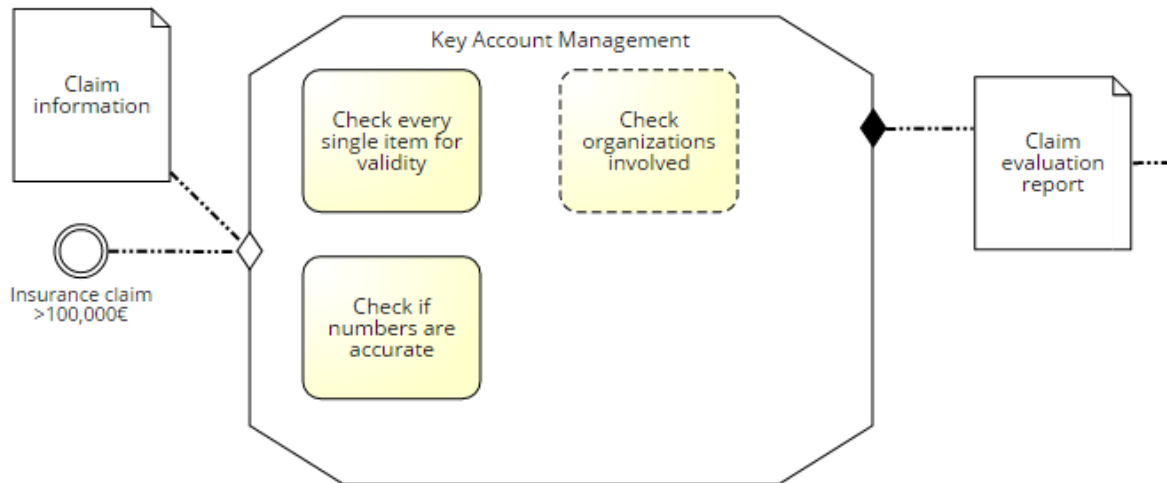
A milestone element

## Sentries

You can attach the diamond shaped *entry criterion* and *exit criterion* symbol (called 'sentries') to any task, milestone, stage or case file. There, they define dependencies or the direction of the sequence flow. Sentries do not need to be attached to other elements - they may also stand alone within a sequence flow.

- The *entry criterion* indicates that the incoming sequence flow(s) directly attached to the sentry is/are necessary to be finished before the sequence flow can continue.
- The *exit criterion* indicates when a plan item is complete and in what direction(s) the sequence can continue. A sequence can continue when the following action is available or a data object has been created. an exit criterion attached to a case plan model indicates that the arriving sequence flow closes the case.

In this example, the claim analysis starts when a claim with more than €100,000 has arrived and the claim information document is available. The check finishes when a claims evaluation report has been created:



The entry and exit criteria mark the beginning and the end of this stage

You can attach several sentries of one type to an element. Each sentry defines its own entry or exit criteria for its element. Two or more sentries of one type attached to one element define a logical 'or' relationship, while several sequence flows attached to one sentry form a logical 'and' relationship.

If all workflows of one entry criterion have arrived at the element, the corresponding task can be performed. If several criteria have to be met, more than one sequence flow can be attached to one sentry element. Similarly, you can attach several exit criteria to an element. All sequence flows that exit one sentry will be executed, unless a discretionary task follows.

## Event Listeners

A *listener* waits for something to happen, usually to then trigger a new sequence flow.

- A *event listener* waits for an event to occur.
- A *timer event listener* waits for a certain amount of time to pass, or until a defined time.
- A *user event listener* waits for user input, such as a completed form in a web user interface.

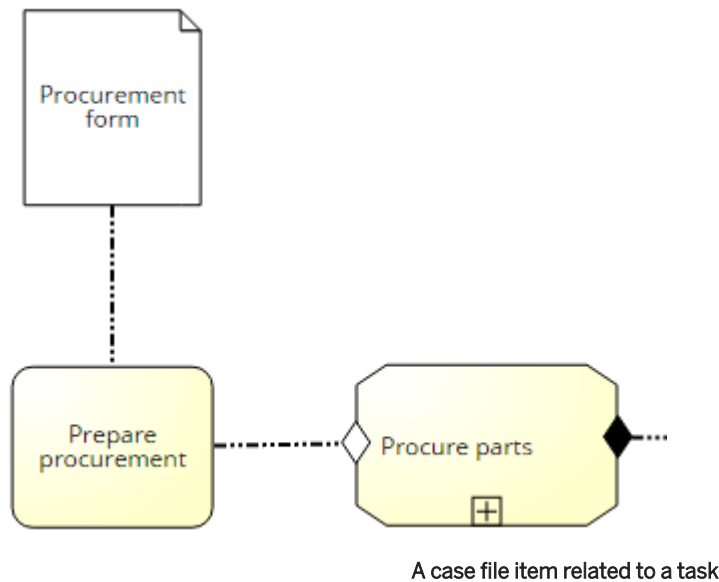


The event listener, timer event listener and user event listener elements (left to right)

## Case file item

A *case file item* represents a data file or document that contains information that is relevant to the case, such as a patient file. Use a connector to attach a case file item to another element, to show that the other element's

execution uses its data. It can also function as a trigger or a result and thus can stand at the beginning or at the end of a sequence.

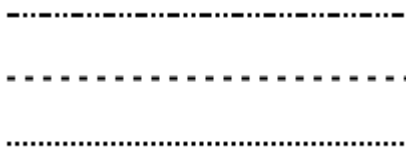


## Other Elements

### Connectors

A connectors between CMMN elements defines a relation. An *entry criterion* or *exit criterion* defines the sequence flow direction or association.

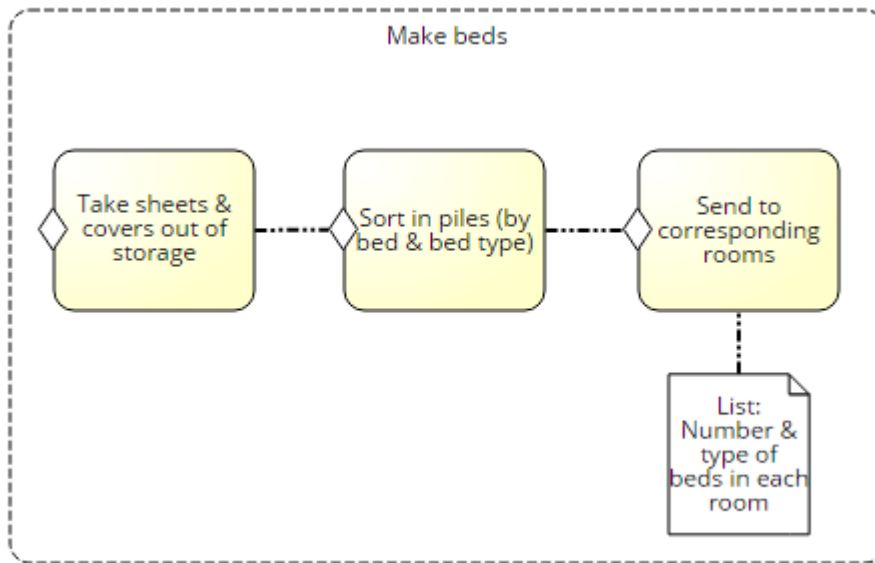
- A simple *connector* links different (non-discretionary) elements together.
- A *discretionary association* links a *discretionary task* to another CMMN element.
- An *annotation association* links a *text annotation* to another CMMN element.



A connector, a discretionary association and an annotation association (top to bottom)

### Plan Fragment

A *plan fragment* contains a group of elements that exist outside the cases' runtime. Plan fragments are discretionary, as indicated by the dotted lines. Also, elements contained inside the plan fragment may contain sentries or be part of a sequence flow, but *a sentry or sequence flow may not be attached to a plan fragment*. A plan fragment essentially contains everything that has no other place but needs to be in the case model.



A plan fragment containing three tasks

## Planning Table

A *planning table* signifies that *discretionary tasks* are present. A *collapsed* planning table indicates that discretionary tasks are not displayed, whereas an *expanded* planning table indicates they are shown.

A (*collapsed*) *planning table* (default) signifies that collapsed (or hidden) discretionary tasks are present in the diagram. The hidden tasks are not modeled in SAP Signavio Process Manager. Instead, the modeler attaches the *planning table* to a *stage*, *human task* (only) or *case plan model* to signify that (hidden) *discretionary tasks* are available.

To hint that modeled, visible *discretionary tasks* are available in the corresponding stage or plan fragment, add an *expanded planning table* to the element by unchecking the box defining the *collapsed* attribute in the attribute panel.

Attribut	value
<b>Main Attributes</b>	
Name	
Description	
Collapsed	<input checked="" type="checkbox"/>
<b>More Attributes</b>	
Element ID	sid-ACA0D8D7-78FE-4D0C...

A (collapsed) planning table attached to a stage

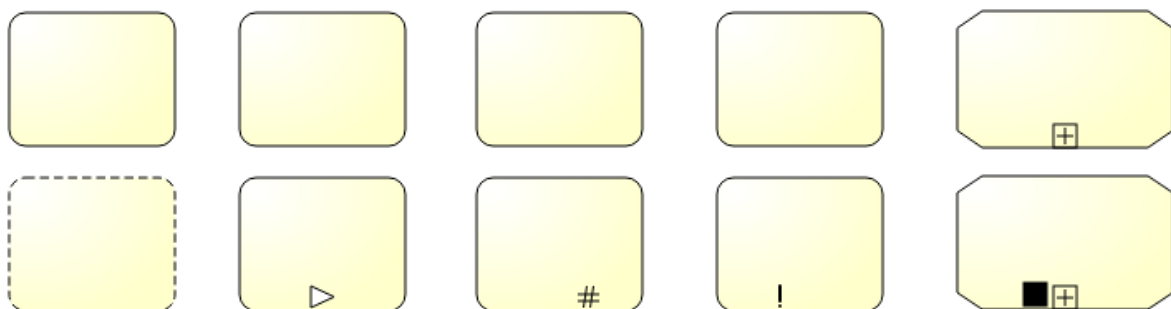
## Text Annotation

A *text annotation* contains additional textual information about the diagram, an element or a group of elements.

## CMMN Attributes

The following attributes can be set in the attribute panel by checking or unchecking the value of the corresponding element. When the value is enabled, an icon will appear on the corresponding element or the elements appearance will change, as depicted below.

- The *discretionary* attribute can be set for all kinds of *tasks and stages*. If the attribute is activated, the task/stage may be performed if the case worker decides it is necessary. Plan fragments are by default discretionary, this cannot be changed as it is a pre-defined condition in CMMN.
- The *autocomplete* attribute can be set for *stages and case plan models*.
- The *manual activation* attribute can be set for all kinds of *stages and tasks*. If the attribute is activated, the corresponding element has to be triggered manually.
- The *repetition* attribute can be set for *milestones, stages and tasks*. If the attribute is activated, the case worker will evaluate if the task needs to be repeated every time it is finished. If the result is 'yes', the task will be repeated.
- The *required* attribute can be set for *milestones, stages and tasks*. If the attribute is activated, the corresponding action needs to be completed for the sequence flow to continue or the containing element to be completed.



Unactivated and activated attributes in SAP Signavio Process Manager (left to right): discretionary, manual activation, repetition, required, autocomplete

## 8.6.2 Integrating CMMN Diagrams

You can seamlessly integrate CMMN diagrams with DMN and BPMN diagrams in your process landscape. You can, for example, embed a CMMN model in a BPMN process by use of the BPMN sub-process as depicted below. This allows you to model the static part of a process in BPMN and only depict the flexible part in a CMMN model.

## Linking to a Diagram in a CMMN Model

To add a diagram link to a CMMN model, first add the corresponding CMMN element:

- [Process Task](#) - to link to a BPMN diagram
- [Decision Task](#) - to link to a DMN diagram
- [Case Task](#) - to link to a CMMN diagram

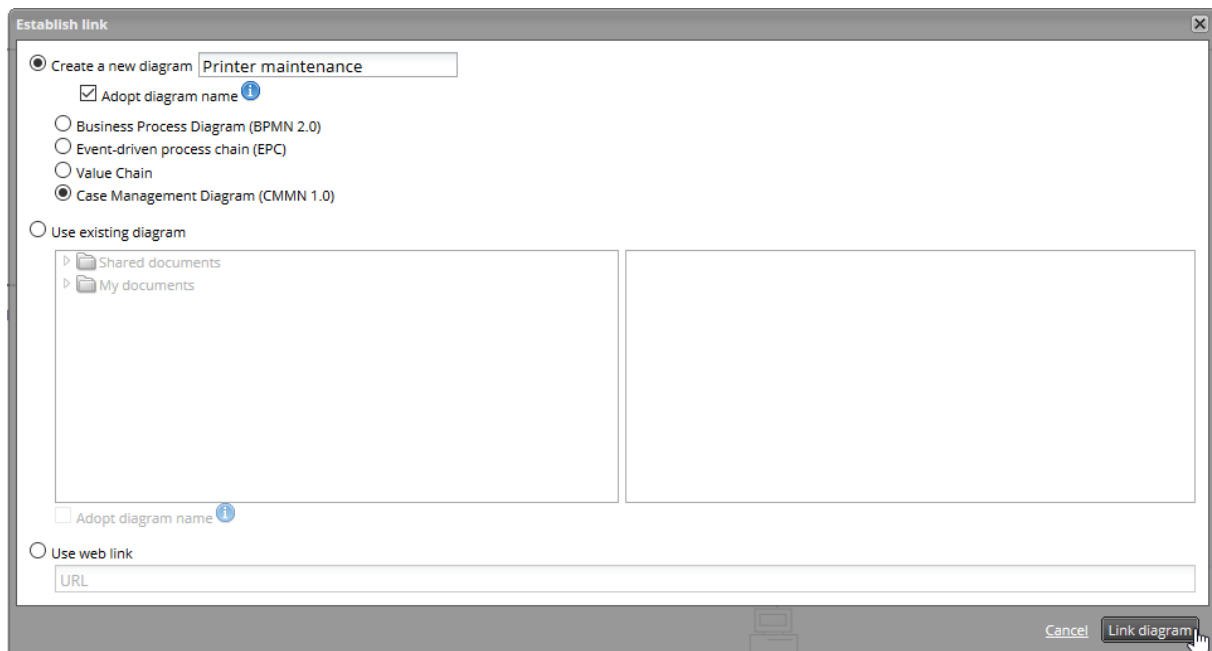
Click the symbol in the top left corner of the diagram element and select a diagram of the corresponding type in the dialog that appears or choose to create a new one. Click [Link diagram](#) to confirm.

If you chose to create a new diagram, the editor opens in a new tab, ready for you to edit the new diagram. After modeling the new diagram, save both the new one and the CMMN model the new diagram is now linked to.

## Linking to a CMMN Model in a BPMN Model

To add to CMMN model link to a BPMN diagram, add a [collapsed subprocess](#) and click the + -symbol at the bottom of the element. In the dialog that opens, choose a CMMN model or create a new one by choosing [Case Management Diagram \(CMMN 1.0\)](#) at the top under [Create new diagram](#). Click [Link diagram](#) to confirm.

If you chose to create a new diagram, the editor opens in a new tab, ready for you to edit the new diagram. After modeling the new diagram, save both the new one and the CMMN model the new diagram is now linked to.



Linking a new CMMN diagram to a BPMN Subprocess

You can also link CMMN diagrams in value chains the same way to create complete process levels that also show in classic SAP Signavio Process Collaboration Hub. For more information on diagram hierarchy levels in your process landscape, see [Creating process hierarchies \[page 56\]](#).

## 8.7 Navigation Maps

Use *Navigation Maps* to provide all users with an overarching linked view of all your processes.

With *Navigation Maps*, you create graphical process views. Similar to value chains, you create high-level perspectives on your process landscape. *Navigation Maps* are more flexible than value chains or other modeling languages and don't follow a strict standard. You can upload custom images to use as modeling elements.

All elements except *Live Insights* can link to diagrams, folders, or URLs.

The most common use case is creating a navigation map that matches your corporate identity as an entry diagram for SAP Signavio Process Collaboration Hub.



### 8.7.1 Manage Navigation Maps

Use *Navigation Maps* to provide all users with an overarching linked view of all your processes.

#### Create a New Navigation Map

You can create a new navigation map in different locations:

- In the explorer of SAP Signavio Process Manager, choose *New* and select *Navigation map* from the drop-down list. The editor opens with a blank canvas.
- In SAP Signavio Process Collaboration Hub, choose *Create* and select *Navigation map*. The editor opens with a blank canvas.

#### Publish Navigation Maps

To make content available for all users in SAP Signavio Process Collaboration Hub, it needs to be published.

You can publish *Navigation Maps* in different locations:

- In the explorer of SAP Signavio Process Manager . See section [Publishing diagrams in SAP Signavio Process Collaboration Hub \[page 279\]](#).
- In SAP Signavio Process Collaboration Hub. See section [Publish and unpublish diagrams](#).

## Related Information

[Open and Save Diagrams \[page 38\]](#)

[Navigation Map Elements \[page 195\]](#)

[Manage Folders and Diagrams](#)

## 8.7.2 Navigation Map Elements

Use *Navigation Maps* to provide all users with an overarching linked view of all your processes.

This section describes the navigation map elements and their options. All elements except *Live Insights* can link to diagrams, folders, or URLs.

### Text

Follow these steps:

1. Drag a text frame onto the canvas.
2. Double-select the frame to add or edit the text.
3. In the *Attributes* panel, you can add an outgoing link to the text element, see section [Add links to elements \[page 197\]](#).
4. To format the complete text, use the toolbar.



Bold



Italic



Change font color

## Shapes

You can add the following shapes:

- Triangle
- Rectangle
- Ellipse
- Arrow
- Line

Some formatting is possible from the toolbar, for details see section [Editor toolbar and keyboard shortcuts \[page 40\]](#).

Additional formatting options are available in the *Attributes* panel, for example border style.

For details how to move and change a shape, see section [Move and change elements \[page 47\]](#).

In the *Attributes* panel, you can add an outgoing link to a shape, see section [Add links to elements \[page 197\]](#).

## Live Insights

With the *Live Insights* shapes, you can add insights and KPIs you want to monitor to BPMN diagrams, value chains, and navigation maps.

For that, you add a *Live Insights* shape to your diagram and link it with a widget from SAP Signavio Process Intelligence. Users can then view the *Live Insights* in SAP Signavio Process Collaboration Hub.

In SAP Signavio Process Intelligence, thresholds need to be defined for the widgets that are linked to *Live Insights* shapes. In SAP Signavio Process Manager and SAP Signavio Process Modeler, the color of the shape indicates how the current result of the widget relates to the defined thresholds. The following example shows how the sentiment shape reflects the current widget result:



The color of a shape is only visible in SAP Signavio Process Collaboration Hub. In SAP Signavio Process Manager and SAP Signavio Process Modeler, the shapes stay grey.

Read more about Live Insights in section [Add Live Insights \[page 59\]](#).

## Images

You can upload custom images to use in navigation maps. All images available for navigation maps are in the *Image Management*.

Images for upload need to be in the SVG format. To prevent possible security problems, each SVG file you want to upload is checked. Read more about the validation criteria in section [Validation criteria \[page 68\]](#).

Images uploaded with the image manager while creating navigation maps have a size limit of 50 kB for each image file.

## Upload images

### Note

- Only images available in the *Image Management* can be added to navigation maps.
- Images that have been uploaded can only be deleted by your workspace administrator.

Follow these steps:

1. Choose *Add image*.
2. Select one or more images to upload.
3. Review your upload in the dialog.
4. Choose *Confirm*.  
The images are available for adding to the *Navigation Map*.

## Add an Image to the Navigation Map

Follow these steps:


1. If necessary, search for the image.
2. Drag the image onto the canvas.
3. To change the size of the image, click the bottom right corner or top left corner and drag the corner. Images are always scaled in proportion.
4. In the *Attributes* panel, you can add an outgoing link to an image, see section [Add links to elements \[page 197\]](#).

## Add Links to Elements

You can add links to all elements in a navigation map except Live Insights. You can link to another diagram or folder in your workspace, or you can link to a URL.

You add the link in the *Attributes* panel.

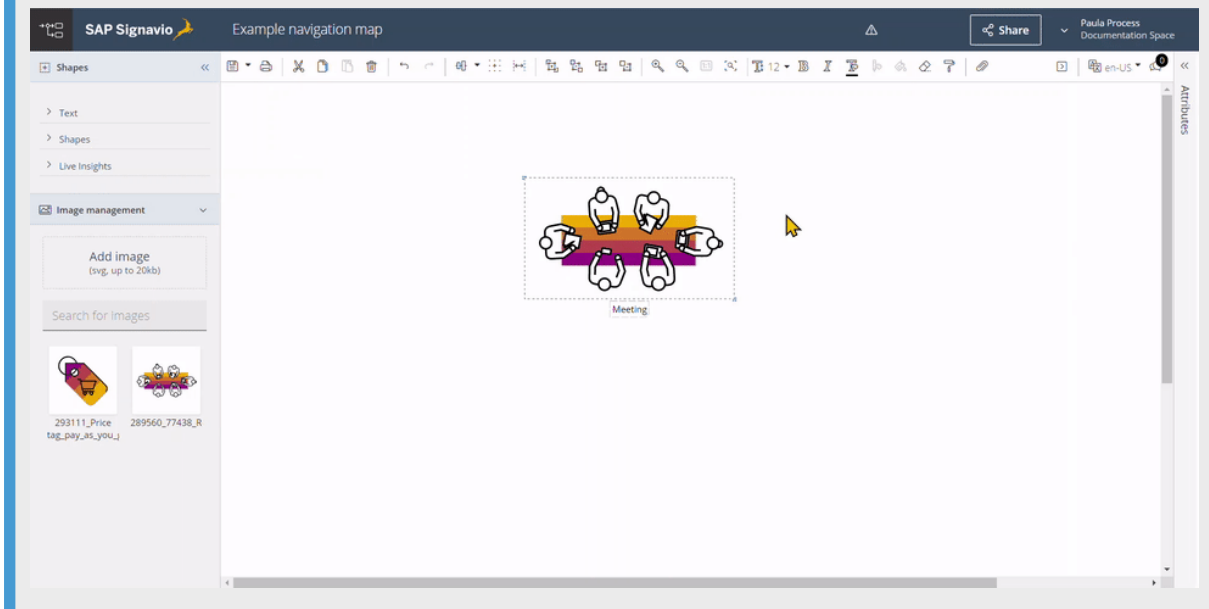
Follow these steps:

1. Open the *Attributes* panel.
2. In the *Link* row, click the right column and then click  (*more options*). The dialog for adding a link opens.
3. Select one of the options:
  - *Create a new diagram*: Select the type of diagram. The editor opens with a blank canvas.
  - *Use existing diagram or directory*: Select a diagram or a folder to link in the folder structure.

- *Use web link*: Paste the URL to the input field.
4. Save with *Link*.

## Example

*Example for linking an existing diagram:*



In SAP Signavio Process Collaboration Hub, elements with a link show a movement effect when users hover over them.

## Example

*This example shows the effect:*

Only the lower image has a link.



Q1



Conference room

## Use the Dictionary

For navigation maps, you can link dictionary entries from all categories to the following modeling elements:

- Text
- Shapes
- Images

## Related Information

[Editor Toolbar and Keyboard Shortcuts \[page 40\]](#)

[Move and Change Elements \[page 47\]](#)

[Format Diagrams \[page 53\]](#)

## 8.8 Further Notations


SAP Signavio Process Manager supports a comprehensive set of modeling notations. This article lists the ones that are typically not relevant for the most common use cases.

### Organizational Charts

Organizational charts outline the internal structure of a company. Illustrating a company this way shows the internal hierarchy and how each role relates to others in the same organization.

### Choreography Diagrams

Choreography diagrams depict the details of complex collaboration between process participants. This allows for an analysis of how information is exchanged and how participants coordinate their actions. Choreography diagrams are part of the BPMN standard, but are not widely used. We recommend staying with BPMN process diagrams.

For more information on choreography diagrams, see the [OMG BPMN specification document](#) .

## Conversation Diagrams

Conversation diagrams focus on communications between process participants. They allow for the viewing of relationships at a glance. Conversation diagrams are part of the BPMN standard, but are not widely used. We recommend sticking to BPMN process diagrams when modeling process participant interactions.

For more information on Collaboration diagrams, see the [OMG BPMN specification document](#) .

## Event-Driven Process Chains

Event-driven process chains (EPC) are used to model business processes. EPCs capture and visualize processes, but are - unlike BPMN - not executable. EPCs generally focus on the lower levels of the process hierarchy (operational sequences of processes). While EPCs were popular in some European countries in the late 90s and early 2000s, they have now been eclipsed by BPMN, which is more appealing to both business users and technical experts. We don't recommend using EPCs.

## UML Use Case Diagrams

Use case diagrams are used to view what actions can be performed collaboratively between systems and users. They are a part of the UML (Unified Modeling Language) standard.

See more information on [UML use case diagrams](#) .

## UML Class Diagrams

Class diagrams show the properties, methods, and relationships of a system's classes. They are commonly used to describe object-oriented programming code. They are a part of the Unified Modeling Language (UML) standard.

For more information, see [UML class diagrams](#) .

# 9 Modeling with QuickModel

## 📌 Note

This section describes all options for this function. Which options are available depends on your license and the settings made by your workspace administrator.

QuickModel makes capturing BPMN processes very fast. With QuickModel, you enter information about a process into a table. A process diagram is dynamically generated from this table.

QuickModel is only available for BPMN processes.

Use QuickModel in the following cases:

- to create BPMN diagrams even if you are unfamiliar with the modeling conventions
- to speed up diagram creation for complex processes by modeling the main path first
- to see at a glance if information is missing in an existing BPMN diagram and to add it with low effort

With QuickModel you can do the following:

- model one sequence of tasks including the start and end events
- specify the organizational unit for the pool and assign participants to tasks in lanes
- specify main attributes for tasks, for example IT systems and data artifacts, as well as custom attribute

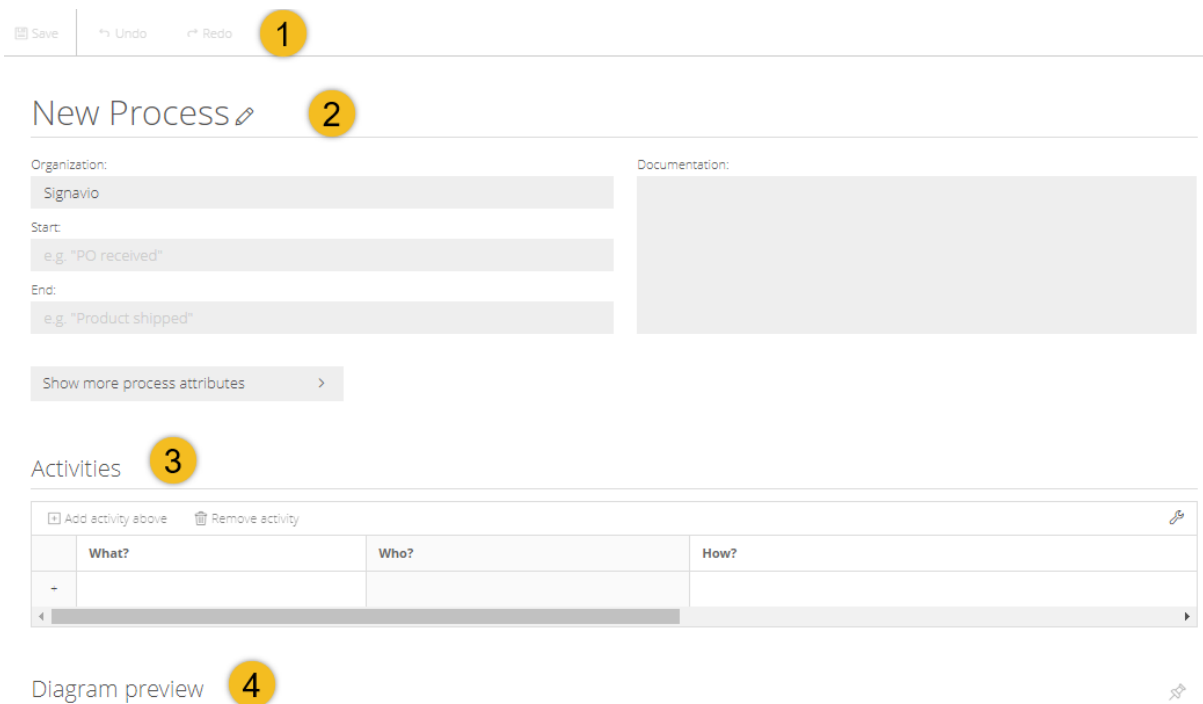
## ⚠️ Restriction

When creating or maintaining diagrams with QuickModel, elements and dictionary entries are available in the main workspace language only. Multi-language support is available in the graphical editor.

Additional BPMN elements, such as decisions and parallel sequences, can be added later in the graphical editor.


## 9.1 QuickModel Editor Overview



In the QuickModel editor, you create BPMN 2.0 diagrams by entering process information into a form and a table.




1	Toolbar	<p>The toolbar provides the following functions:</p> <ul style="list-style-type: none"> <li>• <a href="#">Save</a>: Save the diagram</li> <li>• <a href="#">Undo</a>: Remove last actions</li> <li>• <a href="#">Redo</a>: Redo undone actions</li> </ul>
2	Process details	<p>The main attributes of the diagram are displayed.</p> <p>To display also the custom attributes, click <a href="#">Show more process attributes</a>.</p>
3	Activities	<p>Tasks and some of their main attributes are displayed as columns.</p>


A dynamic preview of the diagram is generated and updates with each change.

To pin the preview area to the bottom of the browser window, select  (*pin*).

You can change the diagram resolution with  (*zoom in*) and  (*zoom out*).

Use the  (*mini map*) to navigate in bigger diagrams.




## Show or Hide Task Attributes

To customize the activities list, click  and select the columns you want to display. To set the selection as your default, use *Save as default*.

## Main Attributes for Tasks

What?	Name of the task
Who?	Participant or role assigned to the task For each role, a lane is created in the diagram.
How?	Description of the task
IT Systems	IT system used when executing the task
Input documents	Required data artifact
Output documents	Created or modified data artifact
Execution costs	Costs required to execute the task
Costs Center	Department to which the task costs are allocated
Execution Time	Time required to execute the task

## 9.2 Create a Diagram with QuickModel

- To create a diagram with QuickModel, you have the following options:
  - In the explorer of SAP Signavio Process Manager, choose  *New*  *QuickModel* .

- In SAP Signavio Process Collaboration Hub, choose **Create** > **QuickModel**.
- The QuickModel editor opens in a new tab.
2. Specify a name for the diagram and its main attributes:
    - **Organization**: Name used for the pool
    - **Start**: Start event of the process
    - **End**: End event of the process
    - **Documentation**: Description of the diagram
  3. With **Show more process attributes**, you can also specify the diagram's custom attributes.

### Note

QuickModel does not support custom attributes of type **table**:

- When you select **Show more process attributes** on diagram level, **table** custom attributes are not listed.
- When you choose **Configure your table** for your activity table, **table** custom attributes cannot be added as a column.

4. Under **Activities**, add the tasks of your process and specify their attributes, read more in section [Add tasks and specify attributes \[page 206\]](#).

The diagram preview updates dynamically.

5. Confirm with **Save**.

The diagram is saved.

You can close the diagram or open it in the editor. To open it, open the user menu and choose **Graphical Editor**.

## Example

### Example

The screenshot shows the QuickModel editor interface. At the top, there is a title bar with 'Save', 'Undo', and 'Redo' buttons. Below the title bar, the process title 'Incident to resolution' is displayed with an edit icon. The main area is divided into several sections:

- Organization:** A text input field containing 'Example Org'.
- Start:** A text input field containing 'Incident received'.
- End:** A text input field containing 'Incident resolved'.
- Documentation:** A text area containing 'Track incident lifecycle'.
- Show more process attributes:** A button with a right-pointing arrow.
- Activities:** A table with columns for 'What?', 'Who?', 'How?', and 'IT Systems'. The first row has 'What?' in the 'What?' column. Above the table are buttons for 'Add activity above' and 'Remove activity'.
- Diagram preview:** A section that is currently empty, with a message: 'Add activities to the activities list to get a diagram preview.'

## Adding Tasks and Specify Attributes

### Note

The order of the tasks in the table corresponds to the order of the tasks in the diagram.

Follow these steps:

1. Double-select a cell in the *What?* column and type the task name.  
Read more on the meaning of the columns in section [Overview over main attributes for tasks \[page 202\]](#).
2. Continue with one of the following options:
  - To add another task, choose *Enter*.
  - To specify an attribute of your first task, press the tab key.

You can customize the columns in the activities list, read more in section [Show or hide task attributes \[page 202\]](#).

## Link Dictionary Entries

While you type the name of tasks and attributes, dictionary entries can be suggested. To link a dictionary entry to the task or attribute, select the entry and press *Enter*.

Linked dictionary entries are indicated with  (*dictionary*).

When a task is linked to a dictionary entry, you can rename the task. This has no effect to the dictionary entry. Renaming doesn't work for attributes.

For more information, see [Working with the Dictionary](#).

## Reorder the Tasks

You can't change the order of tasks in the activities list. You can only add a task between two existing ones. To do so, select the lower task and choose *Add activity above*.

## Remove a Task

To remove a task, select it in the activities list and choose *Remove activity*.

## Related Information

[Add and Connect Elements \[page 42\]](#)

[Model a BPMN Diagram \[page 75\]](#)

[Publishing Diagrams in SAP Signavio Process Collaboration Hub \[page 279\]](#)

[Sharing a Diagram from the Explorer \[page 278\]](#)

## 9.3 Edit a Diagram with QuickModel

You can edit BPMN diagrams in the QuickModel editor even if they weren't created with QuickModel.

The tabular activities view provides an overview of the tasks and attributes. This way, you can quickly check diagrams for completeness and add missing tasks and attributes.

### Note

Some diagrams contain non-linear processes, for example decisions or parallel workflows with gateways, or multilevel roles. You can open these diagrams in QuickModel to edit and complete, but it is not possible to edit them structurally, for example to add or remove tasks or roles. The related buttons are inactive. Columns that are not editable are marked with a star symbol.

## Editing Options

You can add, rename, and remove the following elements in the QuickModel editor:

- diagram attributes
- tasks and collapsed subprocesses
- roles
- task attributes

To add a task, click the plus sign in the first column, double-click the first cell in the new row, and specify the name.

### Example

*Example*

Activities

	What?	Who?	How?
1	Create incident	Support	
2	Assign incident	Support	
3	Incident in progress	IT-Department	
-			

Diagram preview

To edit any element, double-click the cell and apply your change. Confirm with *Enter* or the tab key.

You can't change the order of tasks in the activities list. You can only add a task between two existing ones. To do so, select the lower task and choose *Add activity above*.

To remove a name for a task or an attribute, select the cell and press the *Del* key.

To remove a task with its attributes, click *Remove activity*.

## Collapsed Suprocesses

Existing collapsed subprocesses are displayed and can be edited like tasks.


## Editing Limits for Non-Linear Diagrams

In the QuickModel editor, editing of diagrams with decisions and multiple task flows is limited as follows:

- Roles can't be edited. The *Who?* column is then marked with an asterisk.
- You can only rename tasks, you can't add or remove tasks.

## Open a Diagram in the QuickModel Editor

To open a diagram in the QuickModel editor, you have the following options:

- Select the diagram in the explorer of SAP Signavio Process Manager > and click *Edit > Edit QuickModel*.
- Go to the diagram in SAP Signavio Process Collaboration Hub and click  > *Edit with QuickModel*. Read more in section [Actions](#).

## Toggle between Graphical and QuickModel Editor

To switch from the graphical editor to the QuickModel editor and back, use the options *QuickModel* and *Graphical editor* in the user menu.

Read more on the graphical editor in section [Editor overview \[page 37\]](#).

## Link Dictionary Entries

While you type the name of tasks and attributes, dictionary entries can be suggested. To link a dictionary entry to the task or attribute, select the entry and press *Enter*.

Linked dictionary entries are indicated with  (*dictionary*).

When a task is linked to a dictionary entry, you can rename the task. This has no effect to the dictionary entry. Renaming doesn't work for attributes.

For more information, see [Working with the Dictionary](#).

## Related Information

[Add and Connect Elements \[page 42\]](#)

[Model a BPMN Diagram \[page 75\]](#)

[Publishing Diagrams in SAP Signavio Process Collaboration Hub \[page 279\]](#)

[Sharing a Diagram from the Explorer \[page 278\]](#)

# 10 Variant Management

When organizations start a process initiative, their target audiences have different perspectives, even though it's one initiative with the same goal. Those perspectives could depend on the location, role, department, regulations, and more.

Employee onboarding in Germany, for example, is a little different than in the US. HR personnel, IT staff, the hiring manager, and a new hire could all be involved in this process, and each of them will have a different focus, different needs, and different expectations. Additionally, everyone involved cares about the current state of the process, though not all are as invested in its future development.

In the SAP Signavio Process Transformation Suite, **process variants** represent these different perspectives on a main process. For each variant, you define characteristics that differentiate it from its **process template** and from other variants. These characteristics are implemented as dimensions (dictionary categories) and values (dictionary entries).

Our variant management tools enable process owners and modelers to identify and model variants, control their relationships, reduce redundancy, track and propagate changes, and support users in consuming the required variant depending on the context and their role.

## Note

The current scope is defined as follows:

- Variant management is supported for BPMN diagrams and value chains.
- Administrators and modelers are authorized to manage variants (for example, to create a variant). Only modelers can create dimensions.
- Administrators and modelers can create variants of a process but not second- or deeper-level variants (variants of variants).
- As variant dimensions are based on dictionary categories, they can only be created in English. Dimensions and values that you've enabled for variant management are visible only in English.

## Related Information

[Variant Group \[page 211\]](#)

[Variant Management in the Editor \[page 216\]](#)

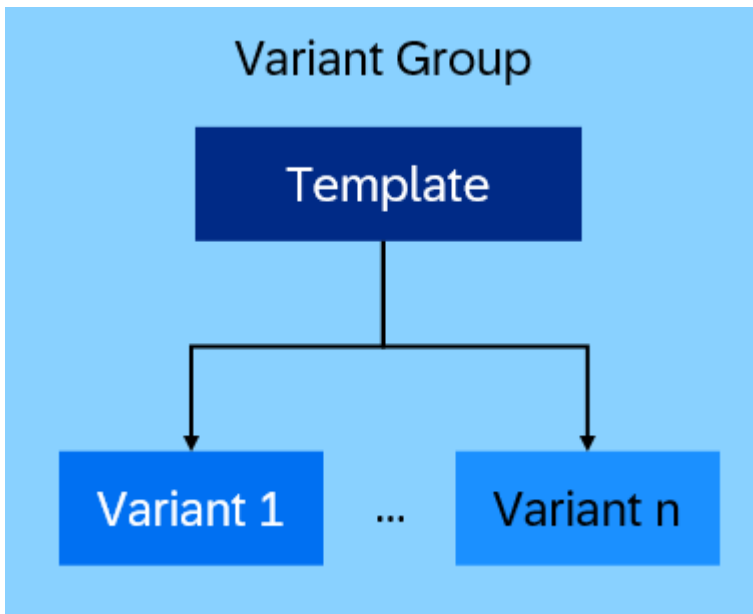
[Variant Management in the Notification and Activity Feed \[page 216\]](#)

[Variant Management](#)

## 10.1 Variant Group

A process template with all its variants.

A variant group consists of exactly one template and at least one variant. Each variant can only be attached to one template.



The variant group carries the same name as its template. You can easily identify a template, a variant, or a variant group as a whole by means of the following labels or icons:

Icon/ Label	Element
	Variant group (with number of variants) In list view: Template (with number of variants)
<i>Template</i>	Template
	Variant

## ☸ Example

### ▼ Variant Group: Onboarding Global [>>>] 14 variants

#### Name

Onboarding Global Template ● Draft

Onboarding Belgium [>>>] ● Draft

## Activities

Most activities related to variant groups are performed in SAP Signavio Process Collaboration Hub. Which actions you are able to perform depends on your role and authorizations, and where you access the diagrams.

## Related Information

[Process Template \[page 212\]](#)

[Process Variant \[page 213\]](#)

[Variant Management](#)

## 10.1.1 Process Template

A process model that has been defined as a main process for creating or attaching process variants.

A process template is associated with at least one variant. However it's possible to make a diagram a template without immediately attaching variants, and to add them later on. Variants can also be detached from a template.

You manage process templates in SAP Signavio Process Collaboration Hub. Which actions you are able to perform depends on your role and authorizations, and where you access the diagrams. For more information, see [Variant Management Access and Authorizations](#).

### ⚠ Caution

Be aware that deleting a process template disconnects the associated variants, and they lose their dimensions and values. You can't undo the deletion and the dissociation of the variants.

## Related Information

[Variant Group \[page 211\]](#)

[Dimensions and Values \[page 214\]](#)

[Variant Management](#)

### 10.1.2 Process Variant

A variation of a process model that differs from its template in at least one dimension or value.

A process variant is a distinct version of how a specific process is executed in diverse setups. These variations may appear due to factors like geographical locations, customer channels, business units, or any unique characteristic that prompts the need for process customization. Variants differ in elements such as process sequence, roles and responsibilities, IT systems, documents, and other process attributes.

To create a process variant:

- Make an existing diagram a variant by attaching it to a process template.

#### Note

You can attach a variant to a template that uses the same modeling notation. To a BPMN model, for example, you can only attach BPMN variants.

- Clone a template to create a variant.
- Clone a variant to create a new variant.

You manage process variants in SAP Signavio Process Collaboration Hub. Which actions you are able to perform depends on your role and authorizations, and where you access the diagrams.

## Related Information

[Variant Group \[page 211\]](#)

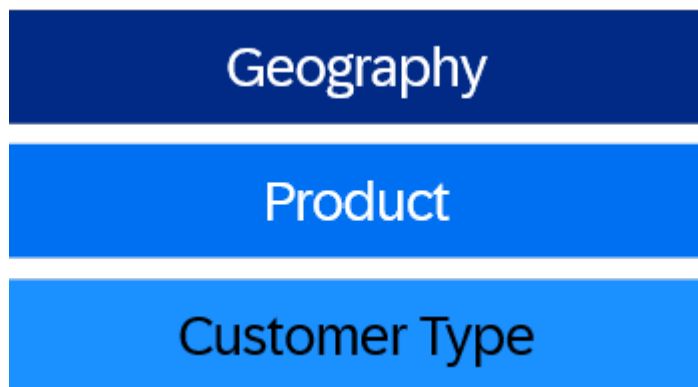
[Dimensions and Values \[page 214\]](#)

[Variant Management](#)

## 10.1.3 Dimensions and Values

Use **dimensions** and **values** within these dimensions to differentiate process templates and variants.

The following diagram is interactive and contains examples of possible dimensions that you can use to define process variants and templates:



- [#unique\\_128/unique\\_128\\_Connect\\_42\\_subsection-im1 \[page 214\]](#)
- [#unique\\_128/unique\\_128\\_Connect\\_42\\_subsection-im2 \[page 214\]](#)
- [#unique\\_128/unique\\_128\\_Connect\\_42\\_subsection-im3 \[page 214\]](#)

Click each element for more information.

### Geography

Multinational companies need to manage processes in different countries and regions while keeping variations in respect to a standard process to a minimum.

### Product

Companies with different product lines and brands need to manage processes related to different products, manufacturing sites, capabilities, and procedures.

### Customer Type

Companies that produce and sell to different kinds of customers need to introduce variants related to the different channels their customers use.

Process variants differ from their template in at least one value. That value either belongs to the same dimension used by the template, or to an additional dimension.

#### ❁ Example

These could be dimensions and values created by a company that produces coffee and tea:

Dimension	Template	Variant 1	Variant 2	Variant 3
Region	Global	Global	Africa	South America
Product Type	Coffee	Coffee	Coffee	Coffee
Department	n/a	Sales	n/a	n/a

## Activities

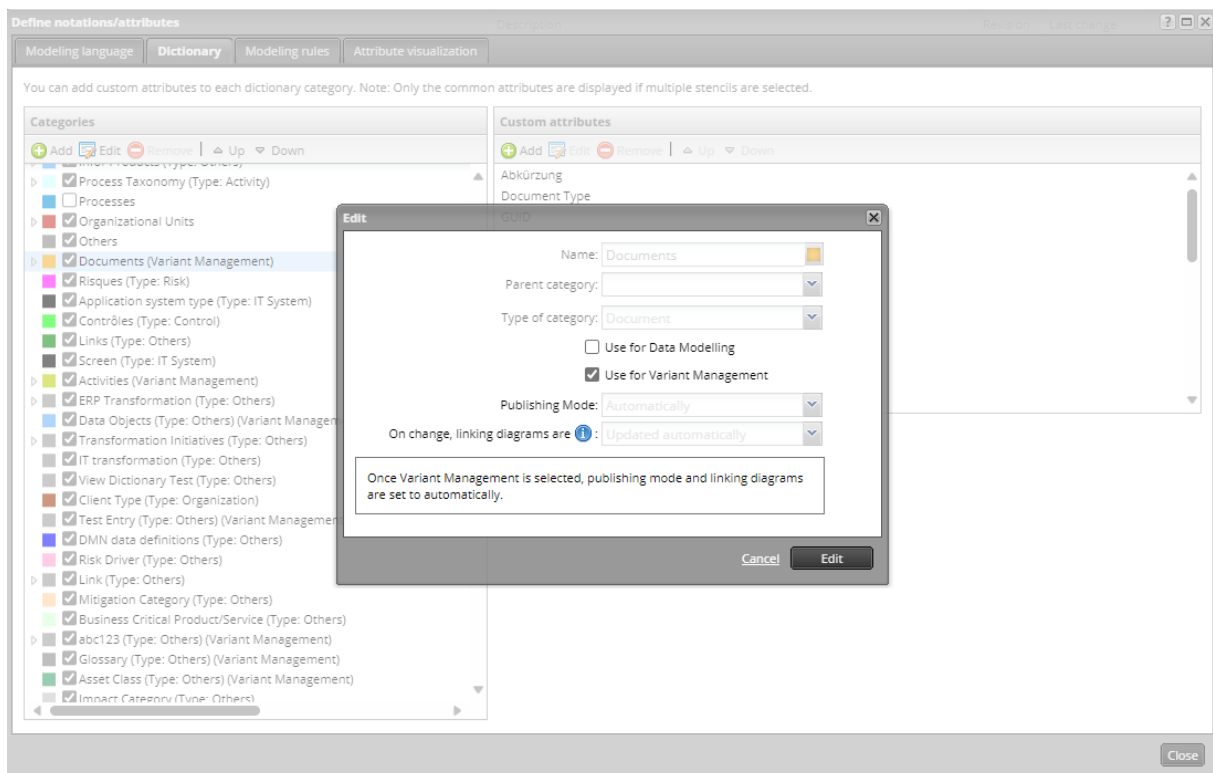
### Note

Suggestion categories for the dictionary do not work when you use Variant Management.

Dimensions are stored as dictionary categories, and values are stored as dictionary entries.

You can add and edit dictionary categories in the editor. Any dictionary category that you want to use as a dimension in variant management needs to be defined as such:

1. Choose **Setup > Define notations/attributes > Dictionary**.
2. Add a new category and fill in the required information.  
To change an existing category, select the category name and choose **Edit**.
3. Select the **Use for Variant Management** checkbox.
4. Save your changes.



## Related Information

[The Dictionary \[page 218\]](#)

[Variant Management](#)

## 10.2 Variant Management in the Editor

Display details about a variant group in the editor.

When you edit a diagram that belongs to a variant group, the system displays details about the template and its variants in the attribute panel.

The following information is available:

- Process template
- Process variants
- Dimensions and values of the edited diagram

When you choose the link to a template or variant, the diagram opens in a new tab.

When you choose [Manage dimensions](#), SAP Signavio Process Collaboration Hub opens, where you can configure the dimensions and values of the diagram.

## Related Information

[Dimensions and Values \[page 214\]](#)

[Variant Management](#)

## 10.3 Variant Management in the Notification and Activity Feed

View information about variant-management-related activities and subscribe to notifications.

Changes to a process variant or a process template are documented in the notification and activity feed. The following actions, among others, are documented in the feed:

- Creating new variants
- Changing dimensions and values
- Attaching variants to a template
- Detaching variants from a template

## Example

Name	Description	Revision	Last change
Onboarding Africa		2	13 days ago
Onboarding Austria		1	3 months ago
Onboarding Belgium		1	2 months ago
Onboarding Czech variant		1	14 days ago
Onboarding Czech)		1	3 months ago
Onboarding Finland		1	2 months ago
Onboarding French France		1	14 days ago
Onboarding Germany (variant)		1	3 months ago
Onboarding Germany Germany		1	14 days ago
Onboarding Global (variant)		1	2 months ago

Onboarding Austria [Subscribe to updates of this model.](#)

22. November

- Template created
- Copied to Onboarding

20. November

- Variant detached from Onboarding Global

12. September

- Copied to Onboarding

If notifications have been enabled by your workspace administrator, you can subscribe to a diagram or a folder to receive email updates.

## Related Information

[The Notification and Activity Feed \[page 269\]](#)

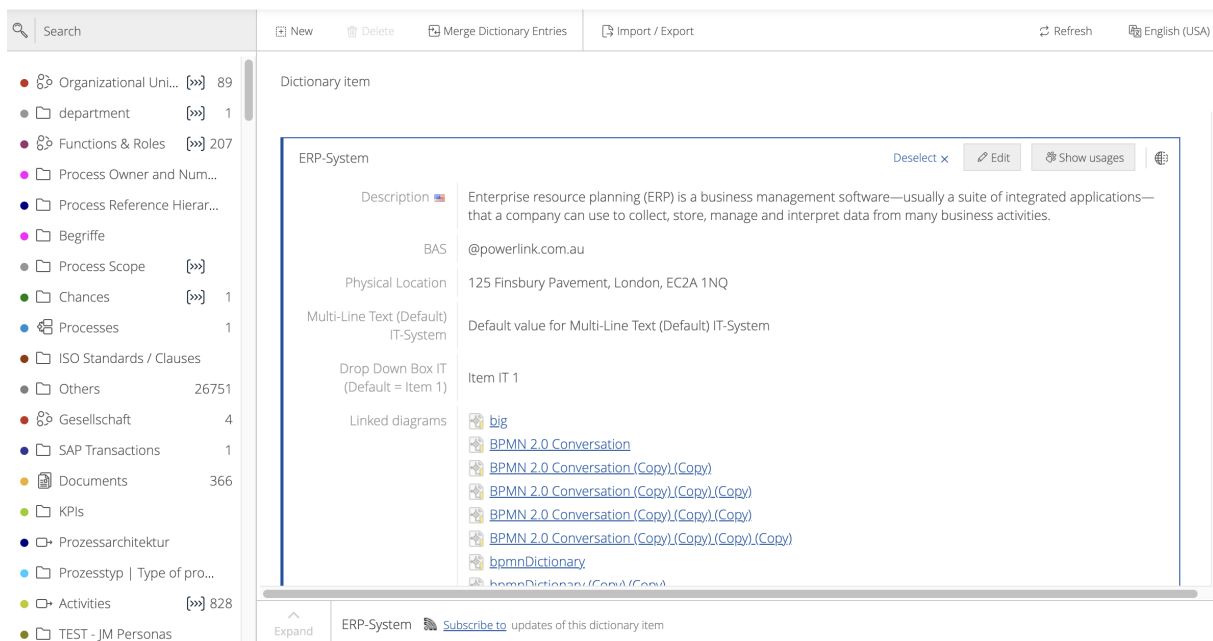
[Variant Management](#)

# 11 The Dictionary

Learn about the central object management repository in SAP Signavio, known as the Dictionary.

The dictionary enables you to use the same terms and the same elements in your organization-specific modeling environment. A dictionary item or entry represents an object that is relevant for one or more of your processes. With the dictionary, you can manage and re-use specific modeling elements.

The dictionary is a crucial component that helps you achieve a consistent and well-structured business object management in your diagrams. Here is an example of a dictionary item:



For more information, see [Working with the Dictionary \[page 218\]](#).

## 11.1 Working with the Dictionary

Learn how to work with the workspace dictionary.

### Note

Access rights for the complete dictionary and dictionary categories are set by your workspace administrator. The actions available to you depend on your access rights.

In the dictionary, you can search, view, create, edit, delete, and publish dictionary entries.

- To open the dictionary, choose the *Dictionary* folder in the navigation tree on the left side of the explorer. The dictionary opens in a new browser tab.

- To view a dictionary entry, select it. Its full description, a list of attached documents, and a list of diagrams referencing that entry is displayed.

## Navigate the Dictionary

You can navigate the dictionary by using the dictionary categories.

1. Select the category that you want to display (for example, *Roles*).
2. Use the alphabet links at the top to navigate to the entry you are looking for faster.


## Show Where a Dictionary Entry is Used

To find out where a specific dictionary entry is referenced in your process landscape, select the entry and choose *Show usages*.

A dialog displays the type and name of the referencing elements, as well as the names of the referencing diagrams.

With *Load next*, you can view links to the referencing elements to analyze the whole chain of references.

## Switch the Language

If there are multiple languages activated for your workspace, you can switch between them by choosing *(language)* .

Dictionary entries that have not been translated into the currently selected language are displayed in their default language and marked with a country flag.

## Full-Text Search

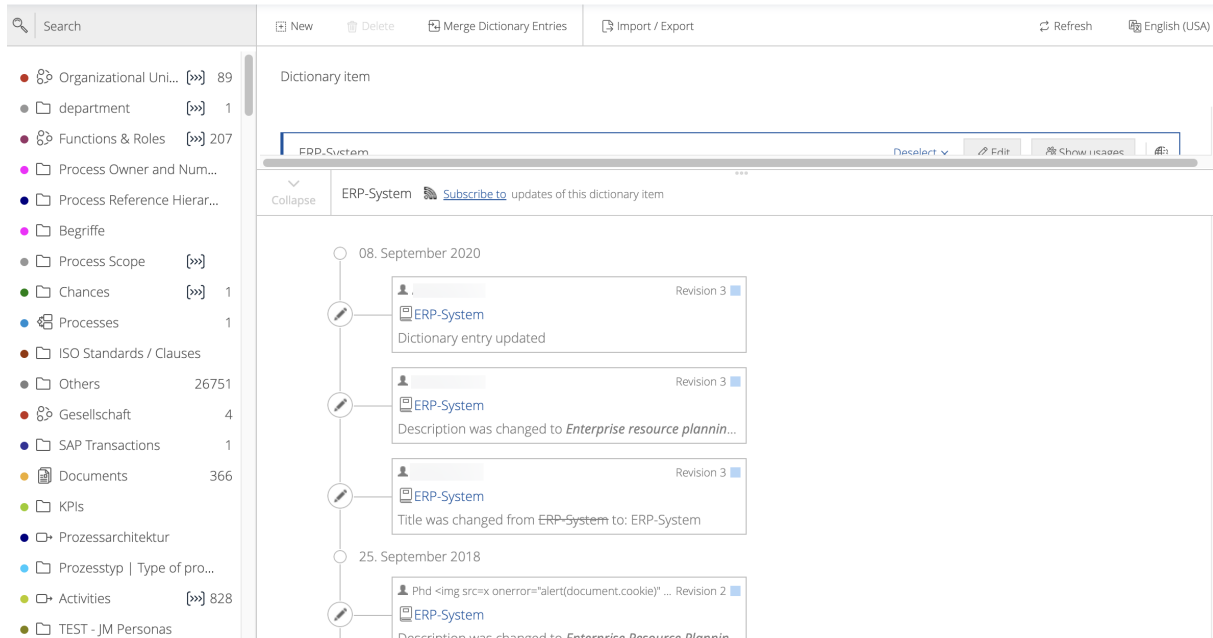
You can find specific entries with the full-text search.

Follow these steps:

1. Enter your search terms in the search field.
2. Choose *Enter*. The search results are listed. The order indicates the entries' relevance regarding the search. For example, an entry with your search terms in the title ranks higher than one with the terms only in the description.

## The Activity Feed

Similar to the activity feed in the explorer, the dictionary feed allows you to manage revisions.



You can expand or collapse the revision feed once you select a dictionary entry. When selecting a revision in the feed, you can trigger the following activities:

- **Restore**  
Restores your entry to a previous version. This does not delete revisions, but lets you to switch between them.
- **Publishing**  
Makes this revision available in SAP Signavio Process Collaboration Hub. By default, the newest revision is automatically published upon creation.
- **Unpublishing**  
Revokes the revision's publication in SAP Signavio Process Collaboration Hub.

### Note

The buttons to publish and unpublish revisions are only active in categories for which *Publishing Mode* has been set to *Manual*. See [Defining custom categories for dictionary entries](#) for details.

## Create New Dictionary Entries

To create a new dictionary entry, follow these steps:

1. Choose *New* in the top toolbar.
2. In the *New Entry* dialog box, add the following information:

Parameter	Description
<b>Category</b>	A number of attributes can be defined for a dictionary entry. Start with selecting a category for the entry, as the category can affect the custom attributes available for the entry. Read more about the configuration of dictionary categories in section <a href="#">Defining custom categories for dictionary entries</a> .
<b>Language</b>	<p>Select a language in the drop-down menu. Attribute values of dictionary entries can be defined in multiple languages. Make sure that the title of the entry is defined in at least one language.</p> <p>You can link dictionary entries by their name by typing the title of the entry to be linked and choosing it from the auto-completion drop-down menu. This is useful if a dictionary entry contains other dictionary entries in its title. For example, the dictionary entry <i>Prepare loan application for check by risk manager</i> can reference <i>loan application</i> and <i>risk manager</i> as further entries. Users who view the diagram in SAP Signavio Process Collaboration Hub users can navigate to these entries via the established references.</p>
<b>Title (mandatory)</b>	Enter the name of the dictionary entry.
<b>Description</b>	Enter a short description. You can format this description.
<b>Relevant documents</b>	<p>You can attach documents or link to files.</p> <p>Documents attached to dictionary items are not updated when the source document is updated. The dictionary item contains the revision that was initially attached.</p>
<b>Class name</b>	<p>This name is not available by default. An administrator must enable it.</p> <p>The class name is relevant when exporting a DMN diagram to Drools files. When modeling, the standard name of the dictionary entry is always used. Read more in section <a href="#">Add java source references to dictionary entries used as data definitions [page 338]</a>.</p>
<b>Technical name</b>	<p>This name is not available by default. An administrator must enable it.</p> <p>The technical name is relevant when exporting a DMN diagram to XML or Drools files. When modeling, the standard name of the dictionary entry is always used. Read more in section <a href="#">Export a DMN diagram to XML [page 336]</a> and <a href="#">Exporting DMN diagrams as drools rules [page 338]</a>.</p>

3. Choose *Create* to save the dictionary entry.

## Edit Dictionary Entries

To edit an existing dictionary entry, follow these steps:


1. Choose the dictionary entry you want to edit and choose *Edit*. The edit dialog for dictionary entries opens.
2. Edit the dictionary entry.
3. Choose *Save*.

### Note

If the category of the dictionary term you are trying to edit is set to automatically update when making changes, the diagram elements that refer to this entry are updated automatically. If there are a lot of diagrams affected, it can take up to thirty seconds to save your changes.

## Delete Dictionary Entries

To delete an existing dictionary entry, follow these steps:

1. Select the dictionary entry you want to delete.
2. Choose  (*Delete*) from the toolbar.  
A confirmation dialog lists the affected diagrams.
3. Confirm with *Yes*.

## Reference Documents

You can reference external documents for a dictionary.

1. Select a dictionary entry and then choose *Edit*.  
The *Edit entry* dialog box opens.
2. In the attribute *Relevant documents*, select *Add a new document*. The dialog *Link files/pictures* opens.
3. Select a file which is already available in your workspace. Alternatively, you can upload a new file or picture from your local file storage or add a link.
4. Choose *Add*. The selected file is added to the dictionary entry.

## Publish Dictionary Entries

### Note

The following section applies to dictionary entries that are set to *manual publishing mode*. By default, dictionary entries are automatically published together with the diagram.

If a dictionary entry was edited without being republished, a warning is displayed when this dictionary entry is used in the editor.

In that case, make sure that the current dictionary entry is also published when publishing the diagram.

To publish a dictionary entry manually, follow these steps:

1. Select the entry you want to publish.
2. Open the activity feed at the bottom by choosing *Expand*.
3. Choose the revision you want to publish in the activity feed.
4. In the dialog, choose *Publish*.  
The dictionary entry is published in SAP Signavio Process Collaboration Hub.

## 11.2 Use the dictionary while modeling

Link dictionary entries to diagram elements and create new dictionary entries while modeling, directly in the editor.

### Note

Access rights for the complete dictionary and dictionary categories are set by your workspace administrator. The actions available to you depend on your access rights.

Most dictionary functions can be used directly in the editor.

While modeling, you can do the following:

- Use suggested dictionary entries
- Search for available dictionary entries
- Create new dictionary entries

### Use suggested dictionary entries


Available dictionary entries are suggested when you enter a label name.

### Note

This feature supports wildcards (\*). For example, typing C\*O may return the entries CIO, CFO, and CEO.

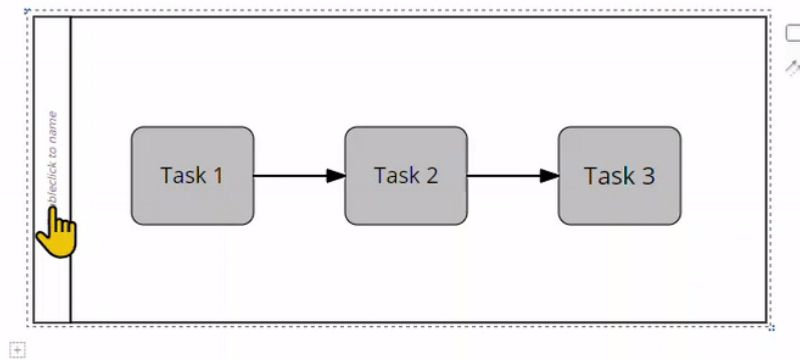
To reuse dictionary entries, follow these steps:

1. Enter a label for the diagram element. While you type, dictionary entries are suggested below the element. By default, only dictionary entries whose category type matches the element type are suggested.
2. Click an entry to link it to the element. The entry's title is now the element's label and the attribute values of the dictionary entry are applied. Elements that reference dictionary entries are marked with the

dictionary icon .

## ❖ Example

Example:



## Search for available dictionary entries

To find available dictionary entries, use the search below the shape repository.


Follow these steps:


1. Enter a search term. Search results are listed as you type.
2. You can apply a filter to include only specific dictionary categories.
3. When the search was successful, drag the dictionary entry onto the diagram canvas. The dictionary entry is referenced and its attribute values are applied to the element.

## Create new dictionary entries

You can add new dictionary entries while modeling.

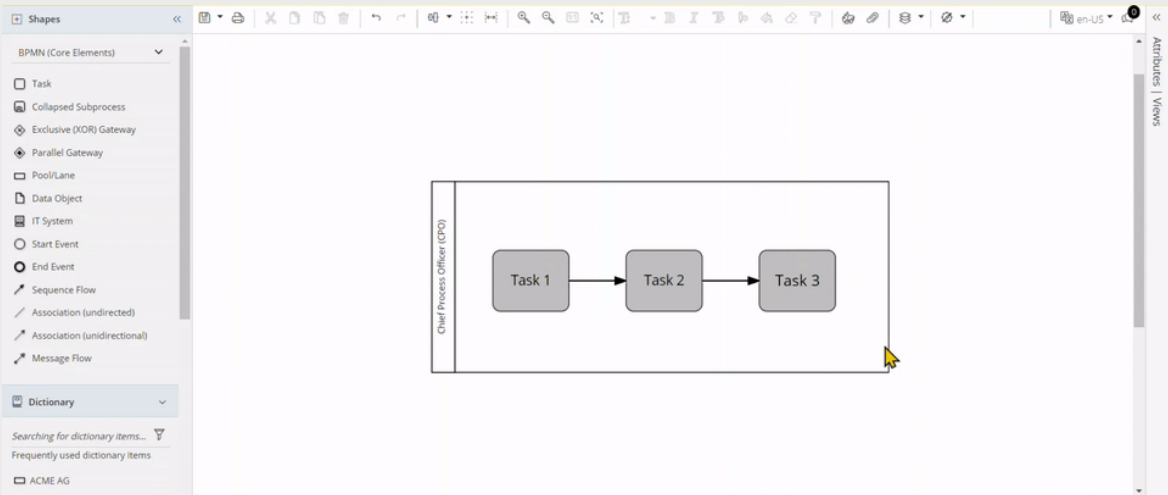
To create a new dictionary entry, follow these steps:

1. Enter the label of a diagram element.
  2. Click . The *New entry* dialog opens.
  3. A category for the dictionary entry is automatically preselected, depending on the element. You can change the category in the drop-down menu.
  4. Enter a short description of the dictionary entry. You can format the text.
  5. To add documents to a dictionary entry, click *Add a new document* and add the link in the dialog. You can add multiple documents.
  6. Click *Create*.
- The dictionary entry is created and the diagram element references this entry. Elements that reference

dictionary entries are marked with the dictionary icon .

### Example


*Example:*



The screenshot shows the SAP Signavio BPMN editor interface. On the left, there is a 'Shapes' palette with various BPMN elements like Task, Gateway, and Event. Below it is a 'Dictionary' section with a search bar and a list of items. The main workspace displays a BPMN diagram with a pool labeled 'Chief Process Officer (CPO)' containing three tasks: 'Task 1', 'Task 2', and 'Task 3', connected by sequence flows. A small dictionary icon is visible on the right side of the diagram.

New entries are created in the language currently selected for the diagram. To translate entries, open them in the dictionary. See section [Working with the dictionary \[page 218\]](#).

## Open dictionary entries


If an element references a dictionary entry, you can view the entry by clicking .

To edit the entry, click *Open in dictionary*. The full dictionary entry opens in a new browser tab.

## Remove links to dictionary entries

When you want to link an element to a different dictionary entry, you first need to remove the current link.

Follow these steps:

1. Open the entry by clicking the dictionary icon .
2. Click *Remove link* and confirm the removal in the dialog.

## Publish dictionary entries

If a dictionary entry is set to *manual publishing mode* and has been altered without being republished, the editor displays a warning.

To avoid this, make sure you publish the current entry dictionary along with the diagram you're creating.

### 11.2.1 Overwrite Dictionary Entries Locally



Learn about applying local changes for dictionary entry attributes.

To specify a value for the current process context, you can overwrite attribute values from a referenced dictionary entry locally.

#### Caution

Local modifications aren't applied to the dictionary. When you overwrite dictionary entries, these changed element properties are no longer managed centrally in the dictionary. These changes can cause inconsistencies between elements that reference the same dictionary entry.

To overwrite the value of an attribute, follow these steps:

1. Open the attribute panel. All attributes that are defined by a dictionary entry are marked with  (*dictionary*).
2. In the diagram, select the element with the attribute you want to change.
3. Select the attribute value in the attribute panel.  
You're warned that local changes don't affect the dictionary entry.
4. Choose *OK* to continue. Depending on the attribute, an editing dialog opens.
5. Enter the attribute value. When the new value is applied, the attribute is marked with a red  (*dictionary*).

#### Note

You can't overwrite a dictionary attribute value with its default value.

## Editing the Label of a Linked Element

When you edit the label of an element linked to a dictionary entry, the system's behavior depends on the scope of the changes you make.

1. Adding a prefix or a suffix:

If you add text before or after the original dictionary term, the link is maintained. The system continues to update the core text from the dictionary while preserving your additions.

### Example

A task is linked to the dictionary entry `Submit report`.

You locally edit the task label to `Submit report for approval`.

Later, the dictionary entry is updated from `Submit report` to `Submit final report`.

Your task label is automatically updated to `Submit final report for approval`.

2. Changing the label text completely:

If you change the label text so that the original dictionary term is no longer part of it, the link to the dictionary entry is broken. The label is no longer automatically updated from the dictionary.

### Example

A task is linked to the dictionary entry `Submit report`.

You rename the label to `Send document for review`.

Later, the dictionary entry is updated from `Submit report` to `Submit final report`.

Your task label doesn't get updated and is still `Send document for review`.

## Remove Local Changes

To undo the local change of an attribute value, follow these steps:

1. Open the attribute panel. All attributes with local changes are marked with a red  (*dictionary*).

2. Choose the red  (*dictionary*).

The dialog *Dictionary entry* opens. Here, the local changes and the attribute in the dictionary entry are shown.

3. To reset the value to the value from the dictionary entry, choose *Revert*.

The reversion is confirmed.

4. Close the dialog with *Close*.

## Preventing Accidental Overwriting

To report and prevent overwriting of attributes, you can use modeling guidelines.

Workspace administrators can activate the necessary checks.

## Related Information

[Working with the Dictionary \[page 218\]](#)

## 11.3 Merging Dictionary Entries

The dictionary allows you to keep all the terms that are often used in your diagrams in one easy-to-reference place. However, over time the use of terms can change. Entries with a similar meaning but different description might be added, and extraneous copies of existing entries might be created when many modelers work together. Duplication can also happen when importing SAP Signavio archive or SGX files, because entries from these files will automatically be added to the dictionary. Regardless of the source, merging entries will help you maintain a well-organized dictionary.

Follow these steps:

1. Open the dictionary by choosing the *Dictionary* folder in the navigation tree on the left side of the explorer.
2. Select the category the entries can be found in.
3. Choose the dictionary entries you want to merge.

### → Tip

Choose the resulting entry first, so that its elements are selected by default.

4. Select *Merge Dictionary Entries*.
5. If you remember that you need to merge more entries than the ones you've already selected, enter the name of the entry into the *Add Dictionary Entry* field. Use the auto-completion feature, then press Enter.
6. Choose the elements to be added to the resulting entry. Attached documents, linked dictionary items, and links are added to the target entry automatically.
7. Choose *Merge* and confirm the warning.  
The entries are merged. The resulting entry will be displayed, and can now be edited.

## Merge Dictionary Entries

Multiple dictionary entries are merged to one entry. Relevant documents, linked dictionary items and links are added to the target entry.

	<input checked="" type="radio"/> Guidelines for Structuring DD	<input type="radio"/> Guidelines for Structuring DD	Add Dict
Title	<input checked="" type="radio"/> Guidelines for Structuring DD	<input type="radio"/> Guidelines for Structuring DD	
Title	<input checked="" type="radio"/> Leitfaden Produktstrukturierung DD	<input type="radio"/> Leitfaden Produktstrukturierung DD	
Description	<input checked="" type="radio"/>	<input type="radio"/>	
Attachments	<input checked="" type="radio"/>	<input type="radio"/>	
granted_revision_user_name	<input checked="" type="radio"/>	<input type="radio"/>	
Linked diagrams			

Cancel Merge

## 11.4 Recommendations: Dictionary Content Management

Learn how to create useful dictionary content for your workspace, how to maintain the dictionary, and how to keep it consistent over time.

The dictionary is part of the SAP Signavio Process Transformation Suite and can be used in SAP Signavio Process Manager, SAP Signavio Process Collaboration Hub, and integrated with SAP Signavio Process Governance.

### Getting Started

The initial dictionary contains the default categories and exemplary entries for most categories. The default categories cannot be deleted. The exemplary entries give you an idea how entries can look like for the different categories.

You can add custom categories and subcategories.

While dictionary entries and categories differ from company to company and between industry sectors, the following four categories are usually useful for all customers:

- Organizational units
  - Roles
  - Departments
  - External participants
- Documents
- IT systems
- Risks & controls

#### Note

Often, activities and events are not suitable for standardization across a workspace and therefore hard to define as dictionary entries. You can leave the default categories *Activities* and *Events* empty.

When you have existing definitions and possible entries for one category or multiple categories, we recommend that you add these existing content to the dictionary. Dictionary entries can be added one by one using the dictionary interface. There are two additional ways to add dictionary entries:

- You can import dictionary entries in batches as Microsoft Excel files.
- Dictionary entries can be created while processes are modeled by your modeling users. We recommend this process when you have no existing definitions to import.

## Importing New Entries as Microsoft Excel (XLS or XLSX) Files

You can import existing definitions into the dictionary as Excel files. You import one category or one subcategory at a time. For a successful import, the structure of the Excel file needs to fulfill certain requirements.

To make sure that the structure of the Excel file matches the requirements, export one of the available dictionary categories and use this file as a template.

## Creating New Entries in the Editor

Every modeling shape provides the option to directly create a new dictionary entry without leaving the current model. When no preexisting definitions to populate the dictionary are available, modelers can fill the dictionary while they are mapping processes.

## Assigning Dictionary Managers

To keep the dictionary consistent and to avoid the creation of duplicates, we recommend that you have designated dictionary managers. Only this group of users should get write permissions to the entire dictionary

or specific categories, for example, you can appoint two managers for IT-systems and two different managers for organizational units.

To enable all modelers to suggest new entries, create suggestion categories. You can give all users writing access to these suggestion categories. Detailed permissions per dictionary category can be set in the user management.

#### Note

Suggestion categories for the dictionary do not work when you use Variant Management.

Every dictionary entry has a unique ID that is used to link the entry to an element. This means the suggested dictionary entries can be used by all modelers while still in the suggestion category. The link between dictionary entries and modeling shapes stay intact when dictionary managers change the category of entries.

The dictionary managers should regularly take over entries from the suggestion categories so that new entries are added to the main categories in reliable intervals. Dictionary managers can subscribe to the suggestion categories to get notified about changes automatically.

## Avoiding Duplicates

There are several ways duplicate entries are created:

- Modeling users create a new entry, but a similar entry already exists.
- When you import Excel files with dictionary entries, the option *Create new entries for all rows* is enabled.
- SGX files are imported, with the enabled option to import the contained dictionary entries.

When several languages are set for your workspace, users can select a language for a dictionary entry. This can result in duplicate entries that are not easily recognized because they are in different languages.

When you use suggestion categories and designated dictionary managers, they should detect duplicates when they move entries out of the suggestion category.

When you import Excel files with dictionary entries, select the options carefully to avoid undesired results.

## Merging Dictionary Entries

When you have duplicate dictionary entries, you can merge entries so that no information gets lost.

## Deleting Dictionary Categories and Entries

You can delete dictionary entries and all dictionary categories you have created. It is not possible to delete the default categories.

Before you can delete a dictionary category, you have to delete all entries in that category, or move them to different categories. You also have to delete all attribute definitions used by this category and all dictionary link attributes that reference the category.

## Related Information

[Import Dictionary Entries \[page 327\]](#)

[Export Dictionary Entries \[page 330\]](#)

[Merging Dictionary Entries \[page 228\]](#)

[Working with the Dictionary \[page 218\]](#)

[Dimensions and Values \[page 214\]](#)

## 11.5 Tutorial: How to Use the Dictionary as a Modeler

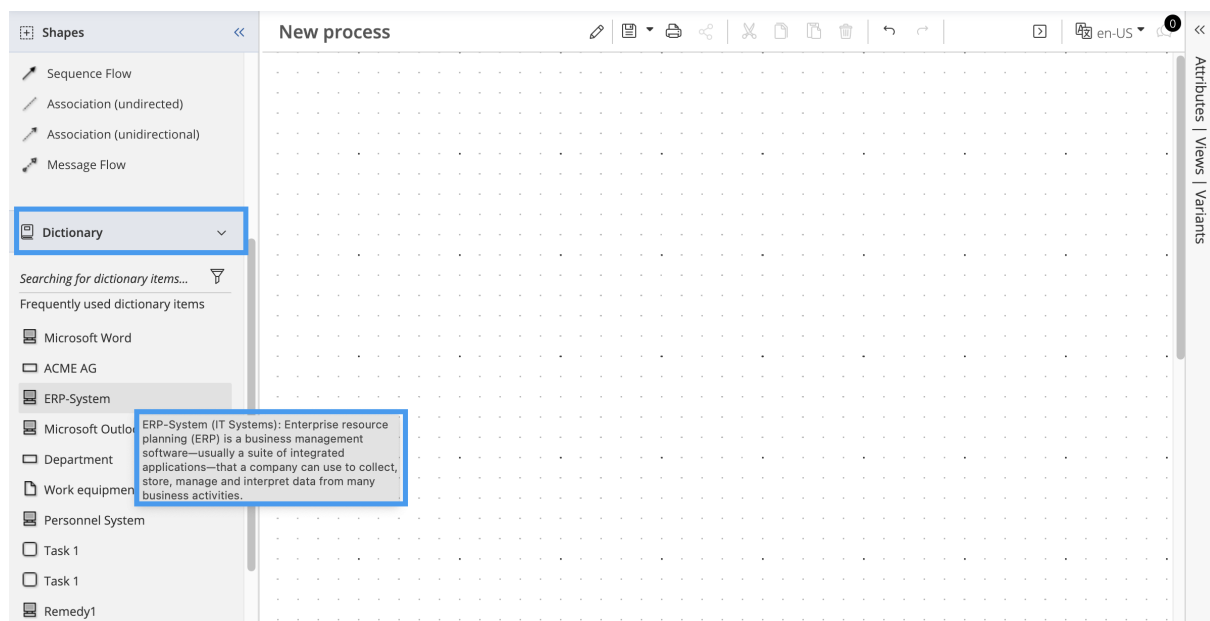
Learn how to use the Dictionary as a business process or a business decision modeler.

- Reference and create dictionary objects directly from the modeling canvas.
- Drag & drop existing dictionary entries as modeling elements from the element repository onto the canvas.
- Manage changes to diagram elements.

Following our recommendations will increase your modeling speed as well as the consistency and completeness of your process landscape.

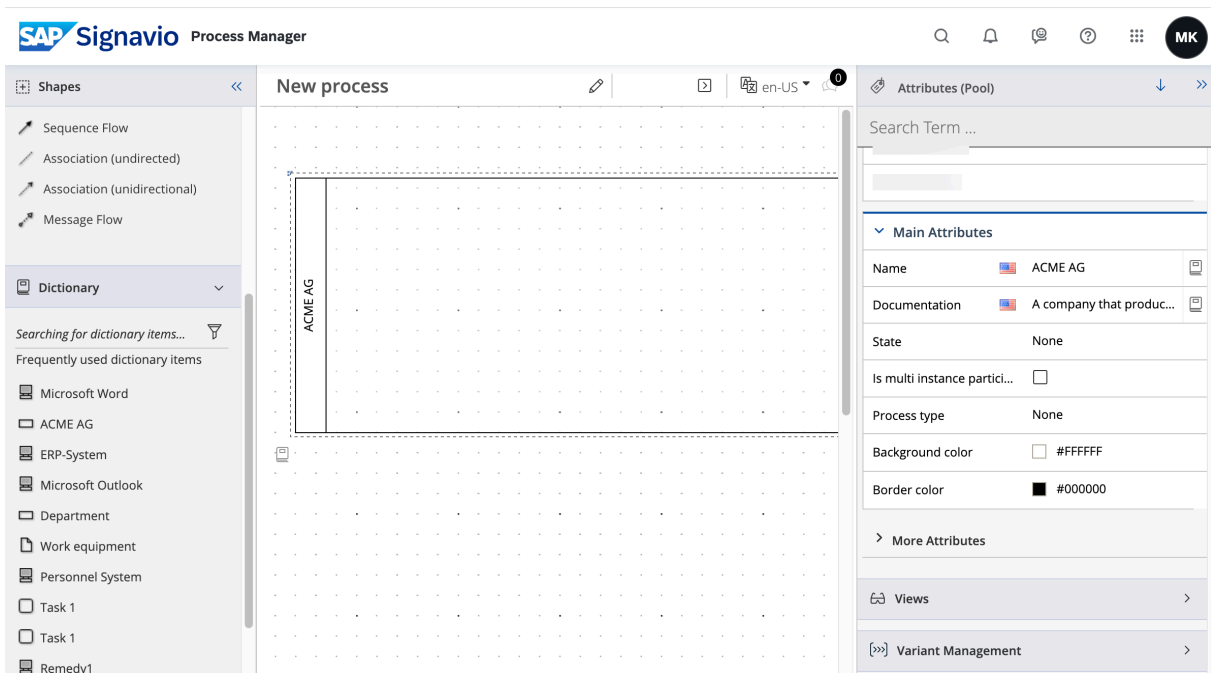
Let's start by creating a new process as part of our example process landscape.

First, we create a pool for our company. The pool *ACME AG* can be dropped from the dictionary entry repository on the left side of the modeling canvas. It is directly available under *Frequently used dictionary items* :



**Drag & drop from the element the dictionary entry repository**

In the attribute panel on the right-hand side we can see that element attributes have been filled in automatically, based on the attribute values of the dictionary item:

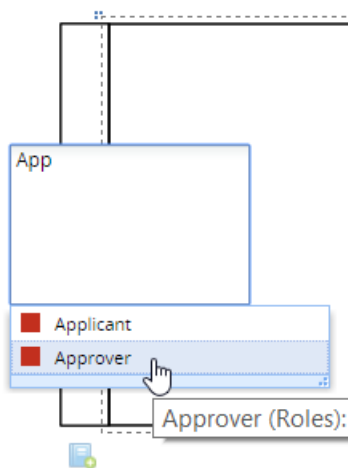


### The attribute values are fetched from the referenced dictionary entry

Subsequently, we want to add the organizational role *Approver* as a lane.

We are not sure if a corresponding dictionary entry exists, so we simply start to fill in the corresponding label. As we type, the dictionary entry *Approver* is suggested as a reference.

We select the entry to assign it to the lane:



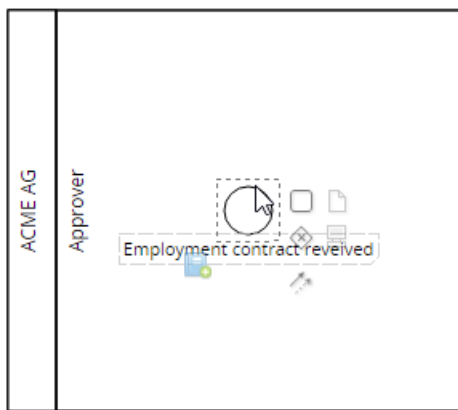
### Select the dictionary entry you want to reference

## Note

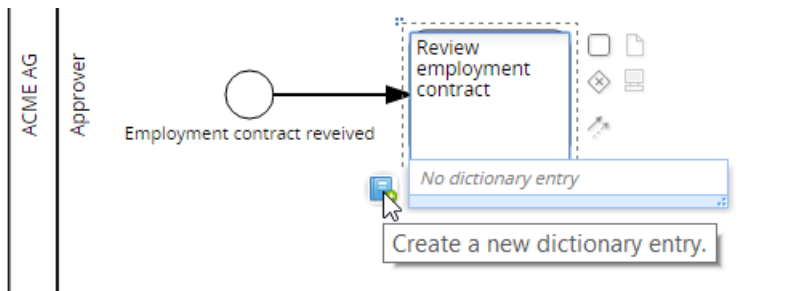
If the default Dictionary settings have not been changed, only dictionary items that match the corresponding element type are suggested. In our case, only organizational units and IT systems are suggested and e.g. no events or activities. IT systems can be referenced from pools and lanes because they are similar to organizational units in their ability to execute tasks. For example, the task *Send email* can be executed by both an employee and an IT system.

Now we add a start event and name it *Employment contract received*

We can assume that this event is only occurring in this one diagram, so we don't need to create a dictionary entry for it.



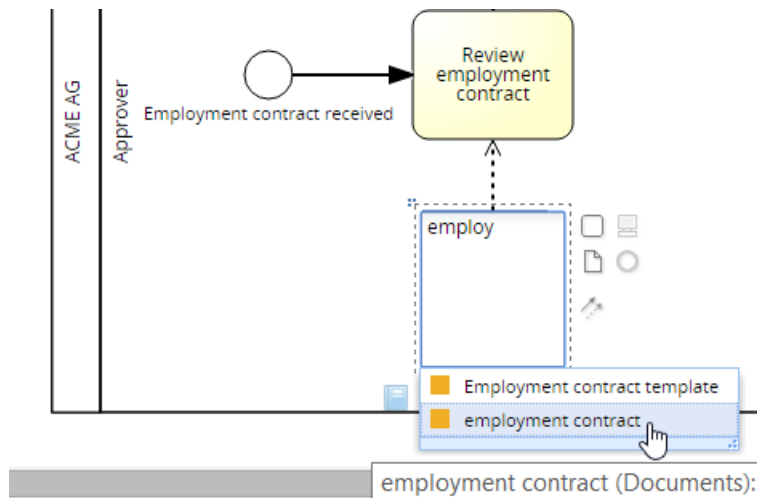
Subsequently, we create the task *Review employment contract*. No dictionary entry is suggested by the system. Let's now assume that we need to create the same task in a different process later on. Thus, we create a new dictionary entry by clicking the dictionary icon at the lower left corner of the element:



Create a new dictionary entry

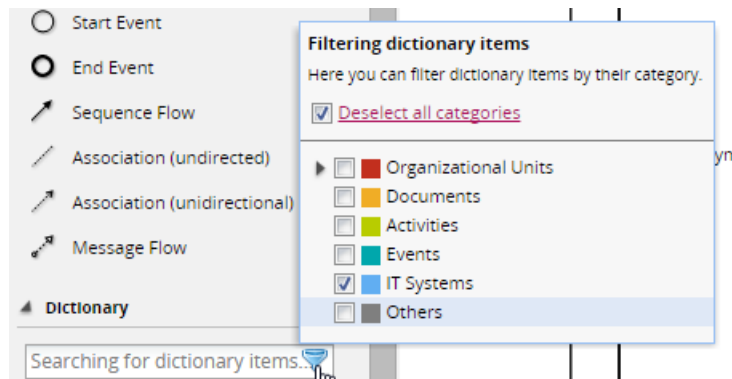
The dictionary entry is now available in the dictionary element repository.

The document *employment contract* already exists:



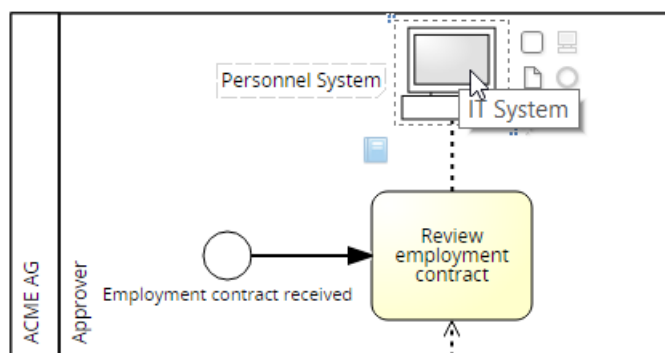
Reference the dictionary item *employment contract*.

Now, we want to link the IT system that the approver needs to use. We don't know which system to use exactly, so we use the filter function of the dictionary element repository to gain an overview over our IT systems:



Filter the dictionary for IT systems

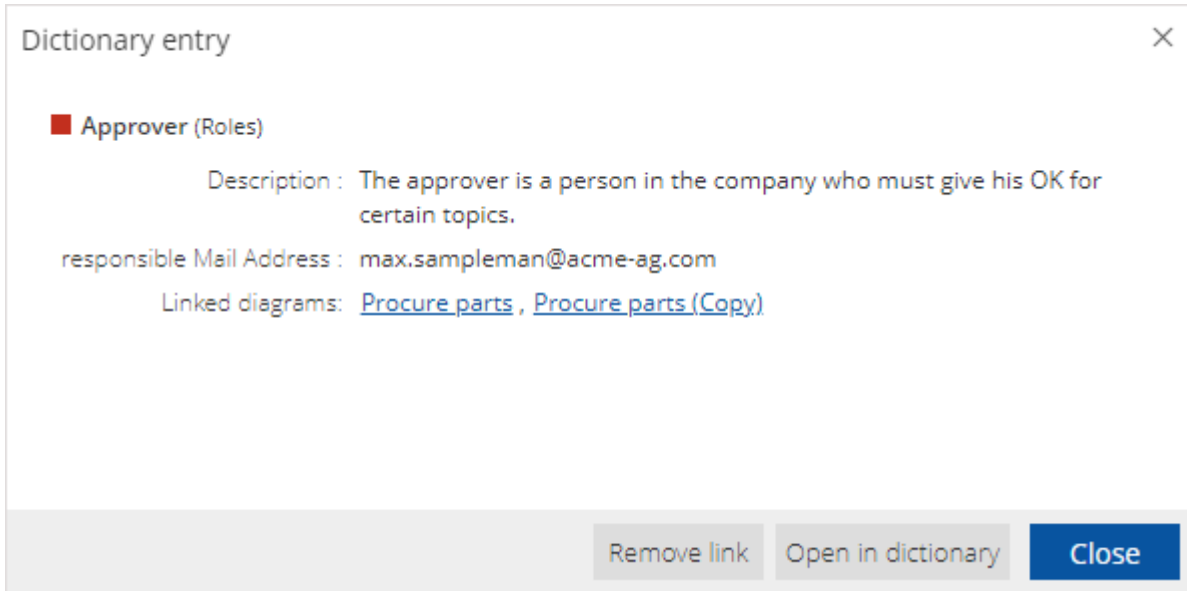
We identify *Personnel System* as the correct IT System and drag it onto the modeling canvas:



We can refer to the steps described above to continue adding elements to our model.

Generally, we recommend to *re-use dictionary entries wherever it makes sense* and to create or reference dictionary entries for all elements that are likely to be re-used. This prevents duplicates and inconsistent information in your SAP Signavio workspace.

However, when revising the process, we find that the role *Approver* is too generic for our purpose:



Dictionary entry ✕

■ Approver (Roles)

Description : The approver is a person in the company who must give his OK for certain topics.

responsible Mail Address : max.sampleman@acme-ag.com

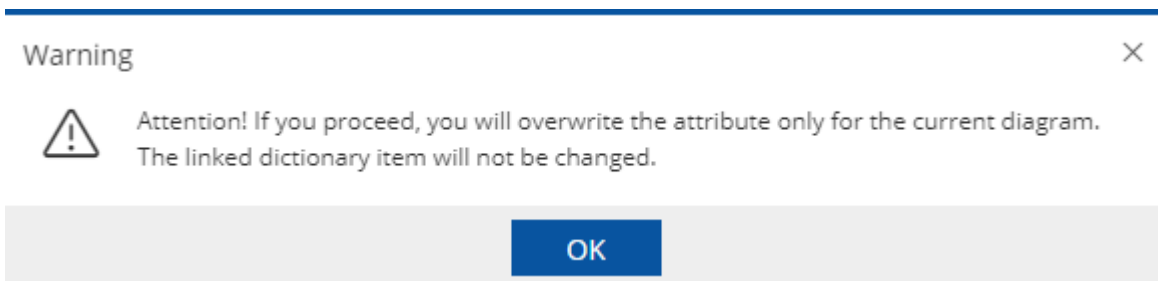
Linked diagrams: [Procure parts](#) , [Procure parts \(Copy\)](#)

Remove link Open in dictionary Close


The dictionary entry does not provide specific information

To adjust the element, we have three options:

- Edit the element ( *not recommended* ):  
We can edit the attribute documentation and adjust it to a more specific description.  
Before editing the attribute, a warning will appear:



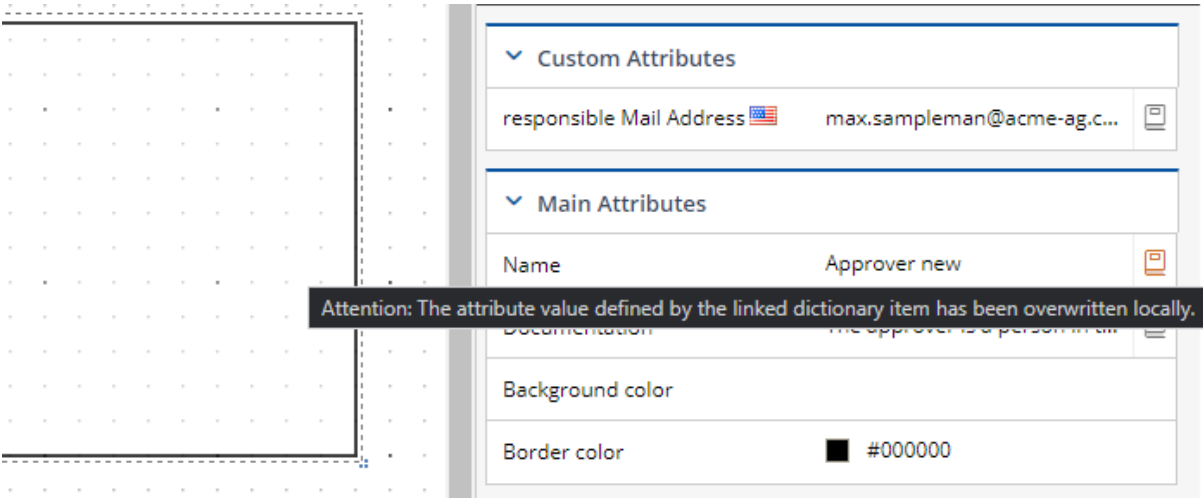
Warning ✕

 Attention! If you proceed, you will overwrite the attribute only for the current diagram.  
The linked dictionary item will not be changed.

OK

A warning is displayed, as element attribute and dictionary item attribute will no longer be consistent.

After the attribute was edited, a warning icon next to the attribute indicates that the value is not consistent with the corresponding value of the referenced dictionary item:

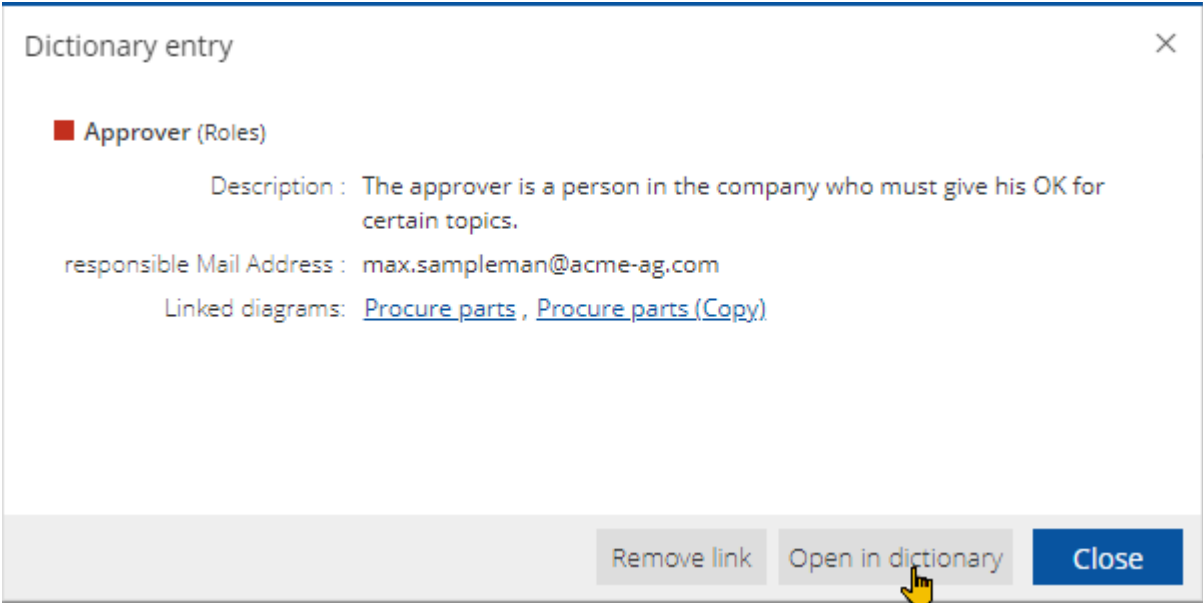


The warning sign indicates the inconsistency between element attribute and dictionary item attribute.

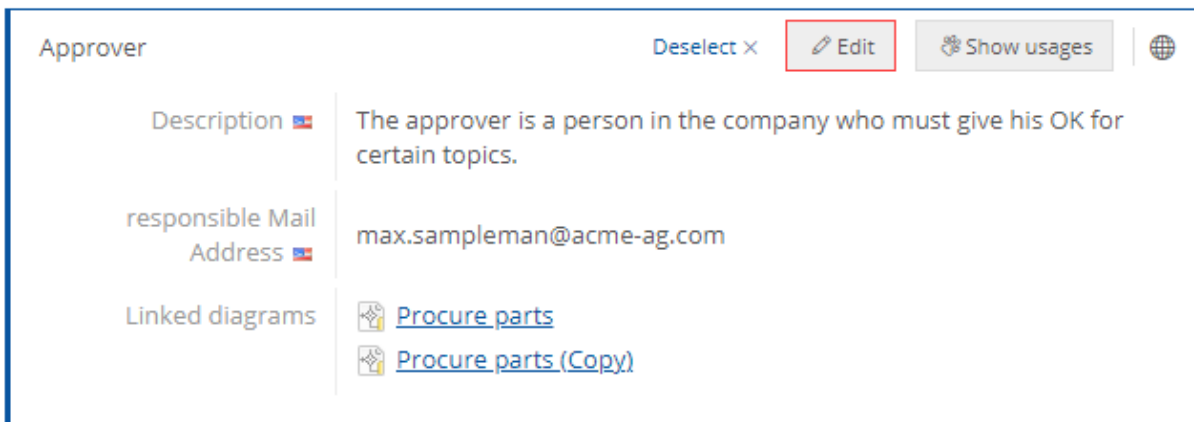
However, this procedure is not recommended, as it makes it very hard to detect the difference between the approver in our current lane and other lanes referencing the approver object. Moreover, it is no longer possible to centrally manage the attribute value via the dictionary.



### Adjust the Dictionary Entry:

We can select the dictionary item and choose *Open in dictionary*:



Now, we can choose *Edit* and adjust the dictionary entry our needs:

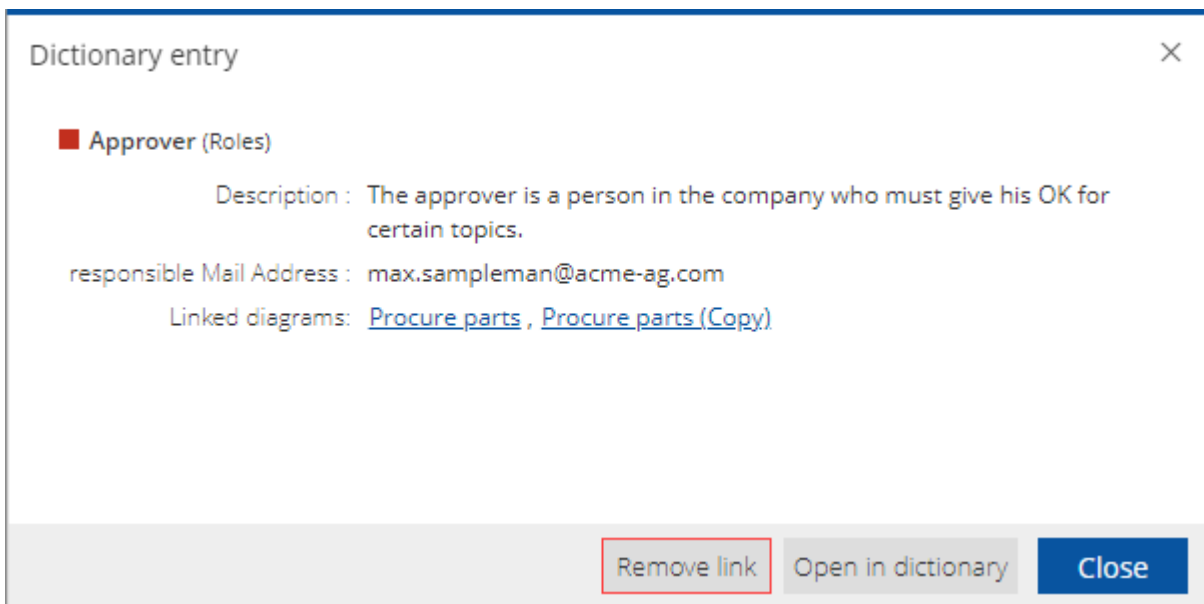


Approver		Deselect x	Edit	Show usages	🌐
Description	🇩🇪	The approver is a person in the company who must give his OK for certain topics.			
responsible Mail Address	🇩🇪	max.sampleman@acme-ag.com			
Linked diagrams		 <a href="#">Procure parts</a>  <a href="#">Procure parts (Copy)</a>			

This option is recommended if the dictionary entry is generally not correct or lacks information. This does not apply in our case.

## Create a New Dictionary Entry (Recommended)

As our approver is a human resource/legal specialist, we need to add more specific information. However, we can assume that the approver reference in other diagrams doesn't match our new specification. In that case, we will need to select the dictionary icon next to the entry and choose *Remove link*:



Dictionary entry ✕

■ Approver (Roles)

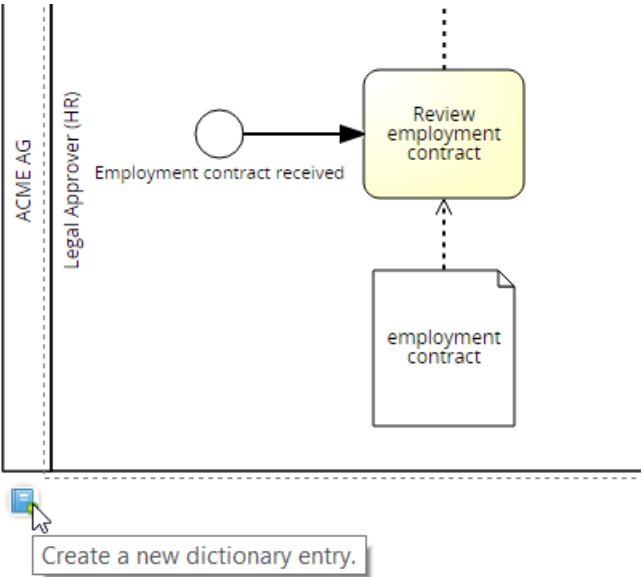
Description : The approver is a person in the company who must give his OK for certain topics.

responsible Mail Address : max.sampleman@acme-ag.com

Linked diagrams: [Procure parts](#) , [Procure parts \(Copy\)](#)

[Remove link](#) [Open in dictionary](#) [Close](#)

We confirm the action and rename the lane with a more specific term, for example *Legal approver (HR)*. Subsequently, we add a new dictionary entry:



**Note**

We recommend avoiding inconsistencies between dictionary entries and referencing elements and to avoid re-purposing dictionary entries because of one specific reference. In such cases, the creation of a new Dictionary is usually the best alternative.

# 12 Simulating BPMN Diagrams

Get an overview of the AI-assisted BPMN simulation insights feature and the SAP Signavio Process Manager BPMN Simulation tool. BPMN simulation lets you run and analyze processes based on various scenarios. It provides information about cost, cycle times, resources, and bottlenecks.

With the BPMN simulation tool you can visualize process runs and analyze processes based on step-by-step, configurable one-case, and multiple-case scenarios. The simulation provides insights into costs, cycle times, resource utilization, and bottlenecks in your processes.

In addition to the simulation tool, you can run BPMN simulations using Joule.

## Note

- Access to these features depends on your license and access rights.
- The simulation tool only works with BPMN 2.0 diagrams.

Simulating BPMN diagrams can help increase process awareness and answer specific questions like:

- How much does a process run cost on average?
- How are costs distributed over roles and tasks?
- How much would 10% more of case X instead of case Y affect the cost?
- Where is the bottleneck in this process?
- How much of everyone's time is consumed in this process?
- How would 20% more requests affect the cycle time?
- Would another risk analyst speed up the cycle time?

## Access the BPMN Simulation Tool

You can access the BPMN simulator in two ways:

- Open the explorer, select a model and choose **Edit** > [Simulate BPMN Diagram](#).
- When you've opened a diagram in QuickModel or the diagram comparison tool, expand the user menu and click [Simulation](#).

## BPMN Simulation Tool Functions

The simulation tool has the following functions:

- [Step-by-step simulation \[page 241\]](#): Step through the process element by element and focus completely on the process flow.
- [One-case simulation \[page 242\]](#): Simulate one specific case to analyze costs and time consumption for the case.

- [Multiple-case simulation \[page 244\]](#): Simulate multiple process runs, taking into account configured probabilities and analyzing quantitative data and bottlenecks.

To create and manage simulation scenarios, read the [Managing simulation scenarios \[page 251\]](#) section.

You can export the results of the multiple-case simulation as an XLS spreadsheet, read the [Exporting simulation results \[page 255\]](#) section.

If you're unsure what specific metrics in the simulation results mean, read the [Simulation metrics result \[page 244\]](#) section.

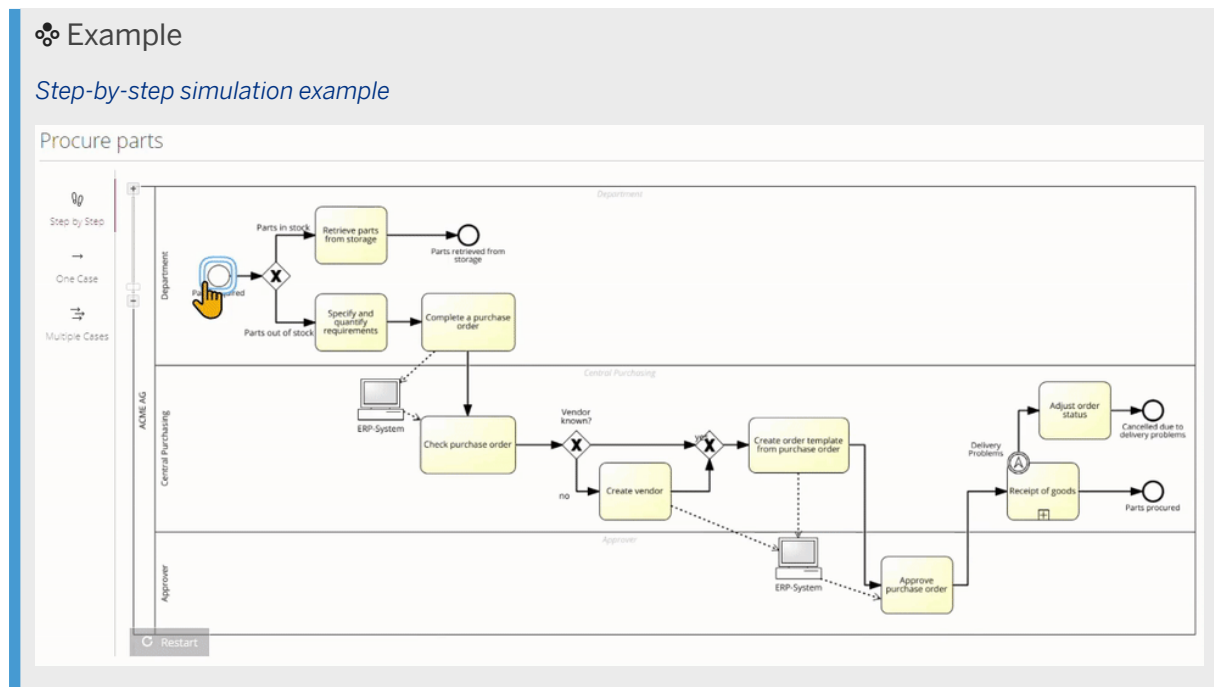
In case you encounter issues with the BPMN simulation tool, read the [Troubleshooting issues with the BPMN simulation feature \[page 262\]](#) section.

## 12.1 Step-by-Step Simulation

Read how to use the Step-by-step simulation function in SAP Signavio Process Manager. With Step-by-step simulation function you can go through a process element by element and focus completely on the process flow.

With the step-by-step simulation function you can go through a process element by element and focus completely on the process flow.

You can start the step-by-step simulation without any configuration.



## Run the Step-by-Step Simulation

Follow these steps:

1. Open the BPMN simulation tool. Read the [Access the BPMN simulation tool \[page 240\]](#) section.
2. Select the *Step by Step* function.
3. Choose *Play*.
4. Choose through the process flow step-by-step.  
When passing an exclusive (XOR) gateway, determine the next sequence flow, by clicking the required path.
5. Choose *Restart* to restart the step-by-step simulation.

## 12.2 One-Case Simulation

Read how to use the one-case simulation function in SAP Signavio Process Manager. With the One-case simulation function you can simulate one specific case and analyze costs and the time consumption for that case.

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

With the one-case simulation function you can simulate one specific case and analyze costs and the time consumption for that case.

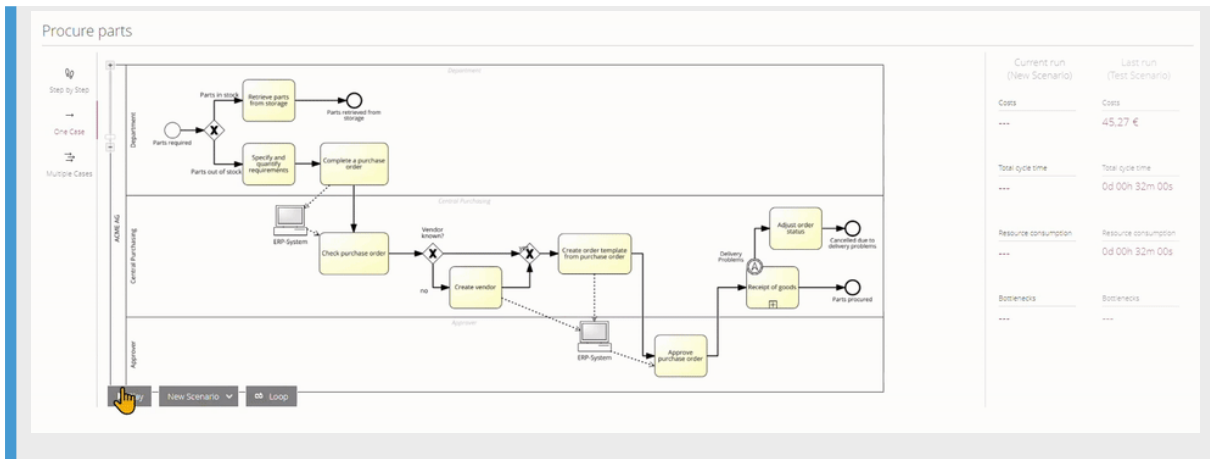
Before running the one-case simulation, configure a scenario on which the simulation is based on. Read the [Managing simulation scenarios \[page 251\]](#) section.

During the simulation, the simulation tiles display the overall costs, total cycle time and resource consumption at the current position in the process (left column) and of the complete previous run (right column). The bottleneck tile is only relevant for multiple-case simulations.

- *Cycle time*: Refers to the amount of time between start and completion of a process while
- *Resource consumption* is the overall time process participants committed to process execution.

### Example

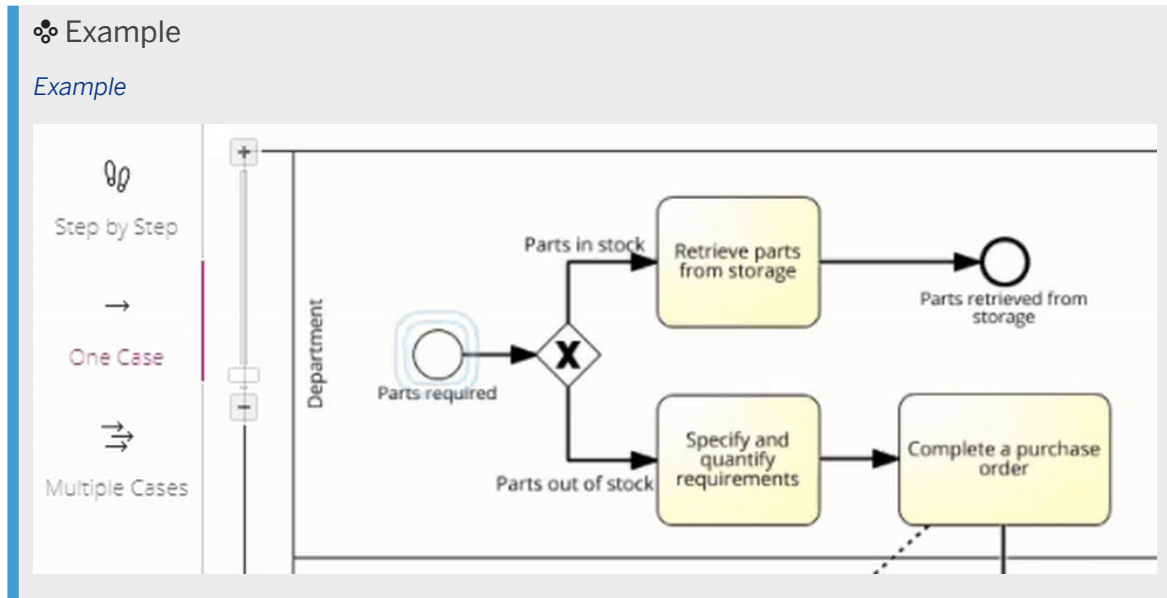
[One-case simulation example](#)



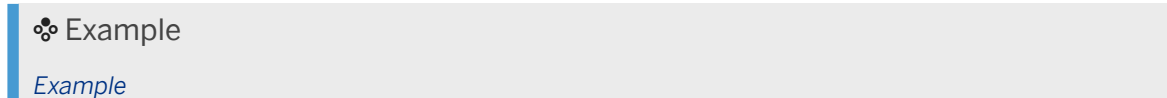
## Run the One-Case Simulation

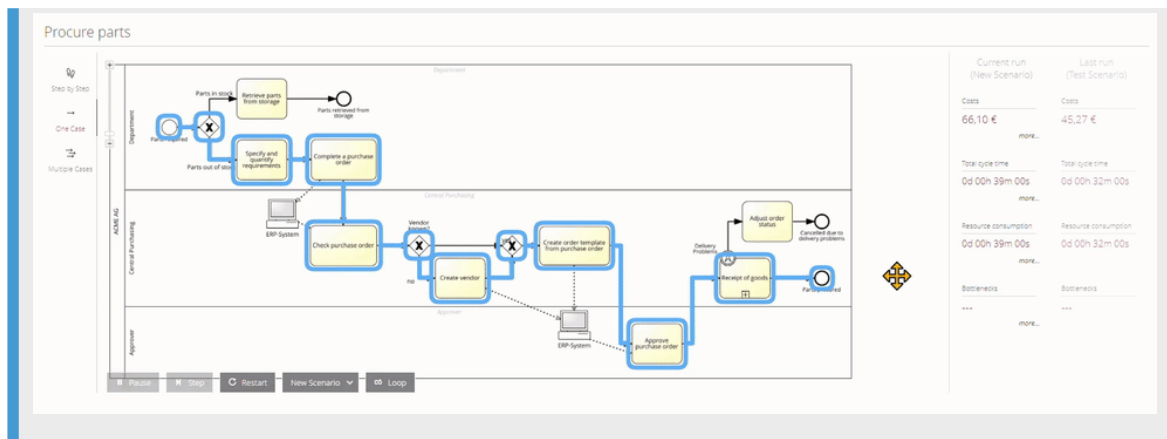
Follow these steps:

1. Open the BPMN simulation tool. Read the [Access the BPMN simulation tool \[page 240\]](#) section.
2. Select the *One case* function.
3. Select a scenario and click *Play*.  
The BPMN Simulator automatically goes through the process flow step-by-step.
4. When passing an exclusive (XOR) gateway, select the next sequence flow. If you don't select the next path, the simulation continues and selects a path automatically (based on the probabilities given) when the timer symbol on the top right of the element completes.



5. For detailed quantitative information on the current run, click [More](#).





## 12.3 Multiple-Case Simulation

Read how to use the Multiple-case simulation function in SAP Signavio Process Manager. With the Multiple-case simulation function you can simulate multiple process runs which take into account the configured quantitative figures and analyzing quantitative data and bottlenecks.

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

With the multiple-cases simulation function you can simulate multiple process runs which take into account the configured quantitative figures and analyzing quantitative data and bottlenecks.

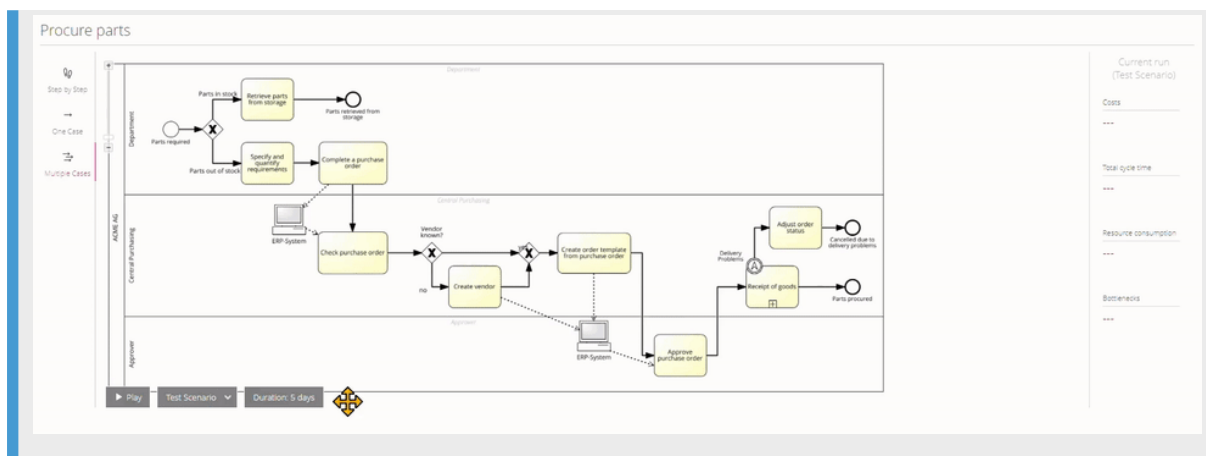
Before running the multiple-case simulation, configure a scenario on which the simulation is based on. Read the [Managing simulation scenarios \[page 251\]](#) section.

During the simulation, the simulation tiles display the overall costs, total cycle time, resource consumption, and bottlenecks at the current position in the process (left column) and of the complete previous run (right column).

- **Cycle time:** Refers to the amount of time between start and completion of a process.
- **Resource consumption** is the overall time process participants committed to process execution.

### Example

*Multiple case simulation example:*



## Run the Multiple-Case Simulation

Follow these steps:

1. Open the BPMN simulation tool. Read the [Access the BPMN simulation tool \[page 240\]](#) section.
2. Select the *Multiple Cases* function.
3. To configure the duration of the simulation, click *Duration*.
4. Enter the required number of days and click *Save*.
5. Select a scenario and click *Play*.

The BPMN Simulator analyzes the selected scenario and displays the results in the process diagram and on the simulation tiles.

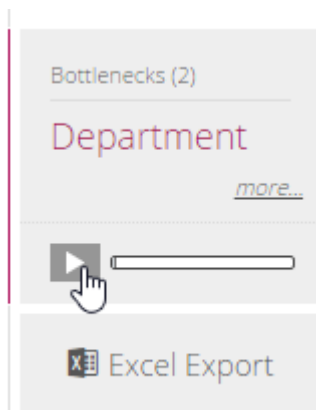
6. For detailed quantitative information on the current run, click *More*.

**Example**

*Example:*


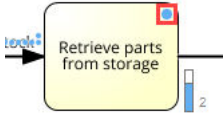
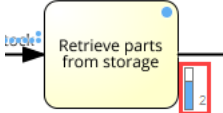
Current run (New Scenario)	Last run (Test Scenario)
Costs	Costs
168.97 €	168.97 €
more...	more...
Total cycle time	Total cycle time
0d 19h 09m 53s	0d 19h 09m 53s
more...	more...
Resource consumption	Resource consumption
0d 01h 47m 00s	0d 01h 47m 00s
more...	more...
Bottlenecks (2)	Bottlenecks (2)
Department	Department
more...	more...

7. To simulate the another run through of all process instances in the previously calculated scenario, click *Play*.



## Simulation Outcomes

The following table shows simulation outcomes on a diagram after running the multiple-case simulation:

Simulation outcomes	Description
<p>Waiting instances</p> 	<p>Waiting instances display as blue dots placed above the incoming sequence flow.</p>
<p>Running instances</p> 	<p>Running instances display as blue dots within the border of a task.</p>
<p>Completed instances</p> 	<p>Completed instances display as a stack next to corresponding task.</p>

## Simulation Result Metrics

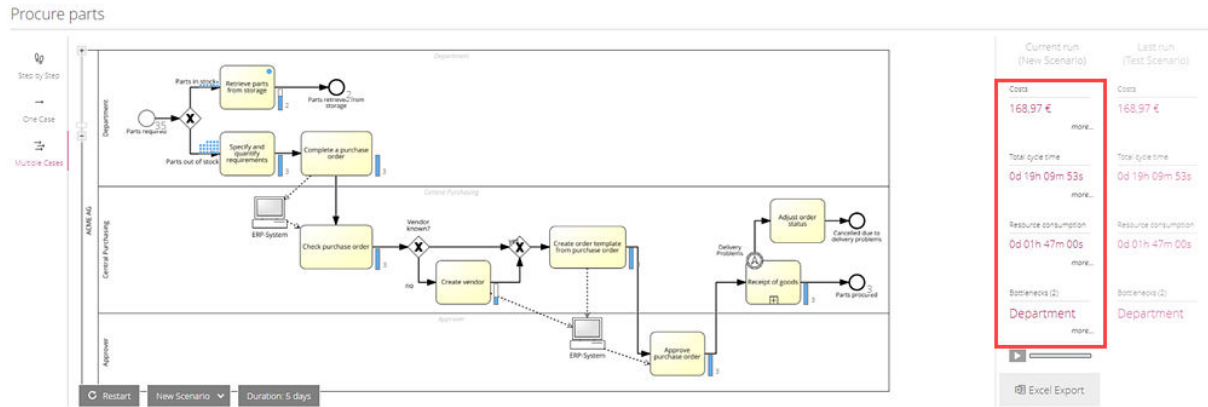
After running the multiple case simulation, result metrics are available for the current run of the simulation.

The following metrics are available:

- Costs

- Total cycle time
- Resource consumption
- Bottlenecks

To access the metrics, select the required metrics simulation tile.

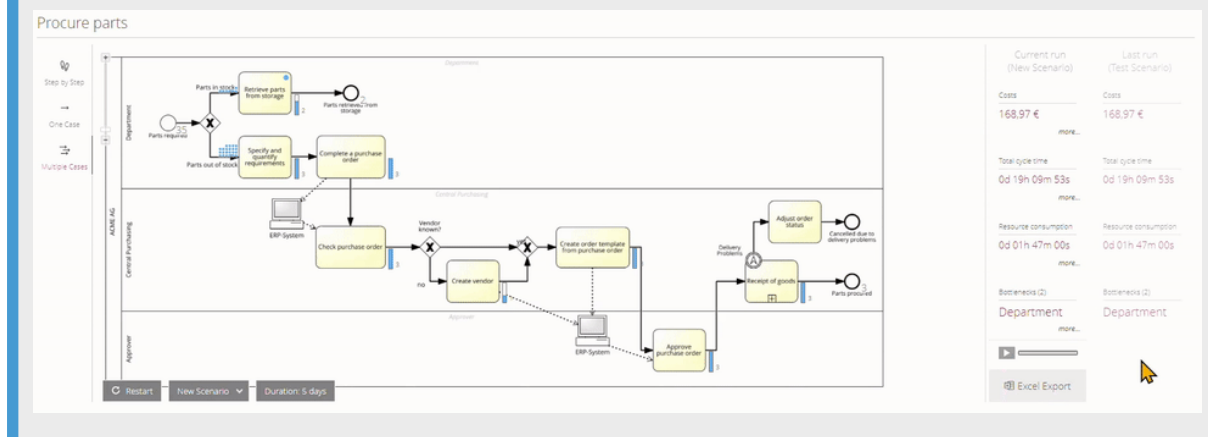


## Costs

The multiple case simulation calculates the average, minimum, maximum, and total costs. The simulation determines all cost types based on the simulation result. To access the [Costs](#) metrics, click the [Costs](#) tile.

### Example

Example:



The following table discusses the descriptions for each table in the [Costs](#) tile:

Table	Description
Costs	The table displays the average, minimum, maximum and total costs for selected process instance.

Table	Description
Costs per task	The table displays the costs for every task of your process. It includes average, minimum, maximum and total costs for each task.

## Total Cycle Time

The multiple case simulation calculates the average, minimum, maximum and total cycle times. As for the costs, the simulation determines the cycle times based on the simulation result. To access the *Total cycle time* metrics, click the *Total cycle time* tile.

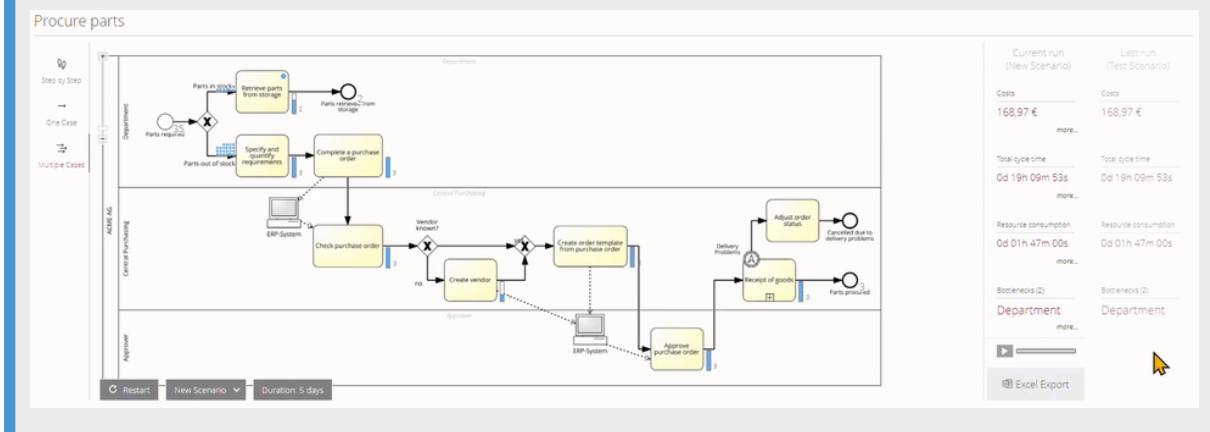
### Note

The total cycle time can exceed the simulation time span. This can happen for two reasons:

- Your resources can't handle cases fast enough and process instances get delayed.
- The cases that occur in the last hours / minutes of your simulation time frame exceed the time frame before they are completed.

### Example

Example:



The following table discusses the descriptions for each table in the *Total cycle time* tile:

Table	Description
Cycle Time	The cycle time of a process instance is overall time needed for each process instance to complete from start to finish. The table shows the selected process instance's cycle times as well as the total sum of all run cycles.

Table	Description
<b>Execution times incl. resources and waiting times</b>	The execution times of activities executed within a process instance can be influenced by the availability of resources as well as working schedules. The table shows the pure execution time taken for each activity including the time waiting for missing resources and the time taken due to working schedules. Waiting times due to missing resources are listed as bottlenecks and are available under <a href="#">Bottlenecks [page 250]</a> tile.
<b>Execution times incl. waiting times</b>	The table shows how long the execution time took for each activity including the working schedules and excluding all available resources. The values are the pure execution times of tasks in addition to the time a task had to wait because the assigned resource were unavailable.  For example, If a task with a duration of 60 minutes was assigned to a user, then while executing the task the user takes a 30 minute break, the execution time incl. waiting times would increase to 90 minutes instead of 60 minutes.
<b>Pure execution times</b>	Within a process instance, several activities are executed. These values are the actual execution times of tasks where someone is actively working on the tasks. The execution can occur sub-sequentially, delayed or in parallel. The table displays how long the pure execution time took for each task.

## Resource Consumption

The resource consumption lists the consumed time and the workload for each process resource.

The consumed time is the total time a resource spends on executing activities. The workload is the percentage of the available time a resource is occupied with executing activities.

To access the *Resource consumption* metrics, click the *Resource consumption* tile.

**Example**

*Example:*

The screenshot displays a BPMN diagram for the 'Procure parts' process. The process is divided into three swimlanes: Department, Vendor, and Supplier. Key activities include 'Specify and specify requirements', 'Complete a purchase order', 'Check purchase order', 'Create vendor', 'Create order template from purchase order', 'Approve purchase order', 'Adjust order status', and 'Storage of goods'. The diagram also shows various events like 'Parts in stock', 'Parts out of stock', and 'Vendor known?'. A summary table on the right provides performance metrics for the current and last runs.

Current run (New Scenario)	Last run (Test Scenario)
Costs 168.97 €	Costs 168.97 €
Total cycle time 0d 19h 09m 53s	Total cycle time 0d 19h 09m 53s
Resource consumption 0d 01h 47m 00s	Resource consumption 0d 01h 47m 00s
Bottlenecks (2)	Bottlenecks (2)
Department	Department

The following table discusses the description for the table in the *Resource consumption* tile:

Table	Description
<b>Resource consumption</b>	The execution of activities is performed by resources. The table shows the workload of all resources in your scenario. For each resource the consumed time and workload information is displayed.

## Bottlenecks

A bottleneck occurs when a resource's limited availability increases the waiting times of cases. Waiting times describe how long cases are idle because no resource is available to execute the current activity.

To access the *Bottlenecks* metrics, click the *Bottlenecks* tile.

**Example**

*Example:*

Current run (New Scenario)	Last run (Test Scenario)
Costs	Costs
168.97 €	168.97 €
more...	more...
Total cycle time	Total cycle time
0d 19h 09m 53s	0d 19h 09m 53s
more...	more...
Resource consumption	Resource consumption
0d 01h 47m 00s	0d 01h 47m 00s
more...	more...
Bottlenecks (2)	Bottlenecks (2)
Department	Department
more...	more...

The following table discusses the description for the table in the *Bottlenecks* tile:

Table	Description
<b>Bottlenecks</b>	The execution of a process instance might be delayed due to a shortage of resources. When an activity is ready for execution but all resources are already allocated, the execution has to wait. The table shows all resources and activities with their total waiting time that were delayed. The total waiting time is the overall time activities have to wait for a specific resource, because the resource was occupied by another task.

## 12.4 Managing Simulation Scenarios

Read how to create and manage scenarios in the SAP Signavio Process Manager Simulation tool. With scenarios you can configure the data sets used when running the One-case and Multiple-case simulation functions.

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

Before running a one-case or multiple-case simulation, configure the data that the simulation is based on by creating a scenario.

When you open a diagram in the simulator for the first time, it automatically contains one scenario based on the diagram's Cost & Resource Analysis attribute. Read the [Configure the cost & resource analysis attribute \[page 255\]](#) section to configure the Cost & Resource Analysis attribute.

With scenarios you can manage different data sets for simulating one process. You can edit the scenario data by clicking on the corresponding tabs.

The scenario data is categorized by four different tabs:

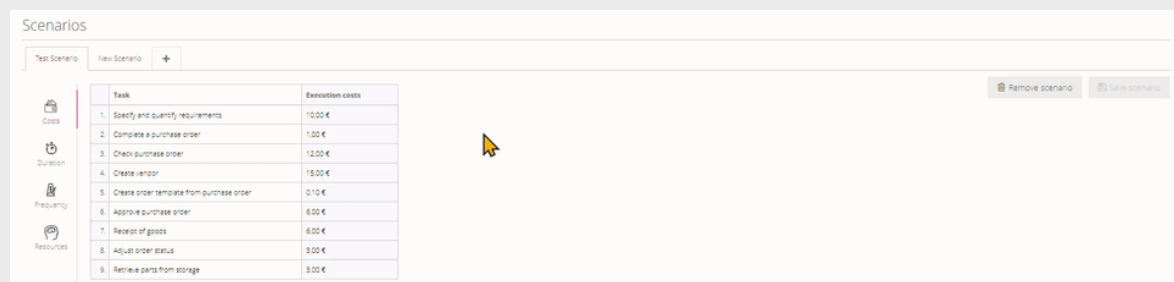
- **Costs:** contains granular costs of activities.
- **Duration:** contains granular execution durations of activities.
- **Frequency:** contains frequency and probabilities of start events, of junctions after gateways, and of boundary events.
- **Resources:** define availabilities and costs of process participants.

## Costs

In the costs tab you can configure the execution costs for each task in the scenario.

### Example

*Example:*



Task	Execution costs
1. Specify and quantify requirements	10.00 €
2. Complete a purchase order	1.00 €
3. Check purchase order	12.00 €
4. Create vendor	15.00 €
5. Create order template from purchase order	0.10 €
6. Approve purchase order	6.00 €
7. Receipt of goods	6.00 €
8. Adjust order status	3.00 €
9. Retrieve parts from storage	3.00 €

## Duration

In the duration tab you can configure the execution time for each task in the scenario.

You can configure the execution time in two ways:

- Entering a duration in the execution time column for a task.
- Defining task execution time as distribution functions. Distribution functions simulates non-deterministic task execution times.

### Example

Example:

Scenarios

Test Scenario\* New Scenario +

Remove scenario Save scenario

Task	Execution time (Format: hh:...
1. Specify and quantify requirements	00:01:30
2. Complete a purchase order	00:05:00
3. Check purchase order	00:04:30
4. Create vendor	00:07:00
5. Create order template from purchase order	00:01:00
6. Approve purchase order	00:03:00
7. Receipt of goods	00:17:00
8. Adjust order status	00:04:00
9. Retrieve parts from storage	00:02:00

## Configure duration with distribution functions

Follow these steps:

1. Select the *Duration* tab and choose **...** (*more options*).  
The execution time dialog opens.
2. Enter a *Proportion* value.  
Add a single or multiple proportions. All proportion values must equal to **100%**
3. Select a *Method*. You can select the following methods:
  - Constant: defines an execution time that has a specific probability. With the help of several probability-constant mappings, you can create a discrete probability distribution.
  - Uniform distribution: defines an execution time which is equally distributed within a range of two values.
  - Normal distribution: defines an execution time which concentrates around a certain value.

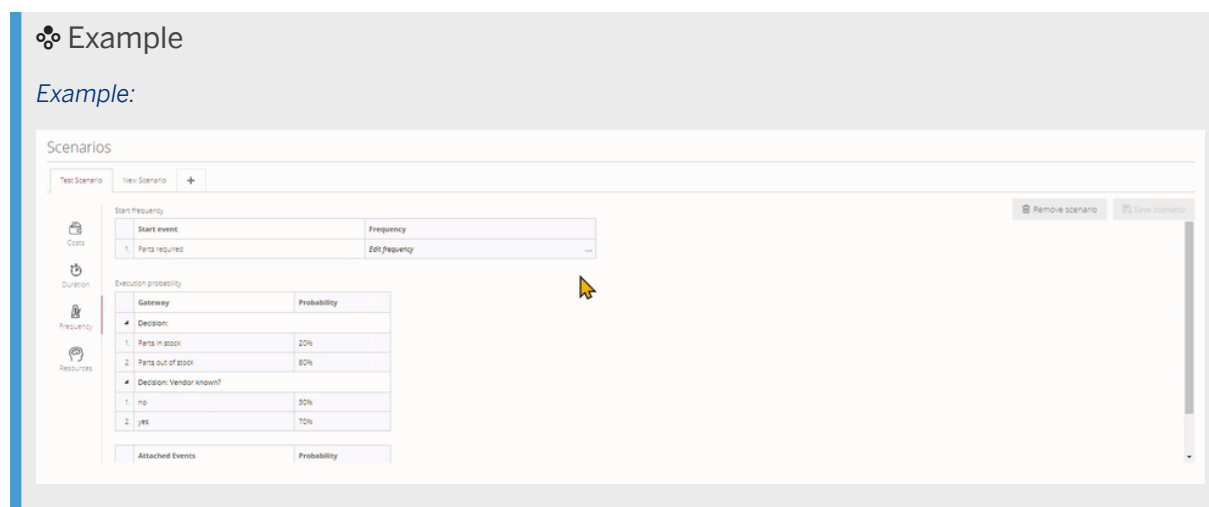
### Note

We recommend a *Normal distribution* in case the task execution times are likely concentrated around a certain value.

4. Enter an *Execution time* value in *hh:mm:ss* and click *Accept*.
5. Choose *Save Scenario*.

## Frequency

In the frequency section you can configure the start frequency of the start event and the execution probability of gateways and events in your scenario.



## Configure the Start Event Frequency

Follow these steps:

1. Select the *Frequency* tab.
2. On the start event, choose **...** (*more options*).
3. Configure the *Day*, *From*, *To* and *Frequency* fields.
4. Add multiple frequencies for the start event if required by choosing *Add new row*.
5. Choose **■** then *Save Scenario*.

## Configure the Execution Probability of Gateways and Events

Follow these steps:

1. Select *Frequency* tab.
2. Expand the gateway or event and enter the required probability values.  
All probability values must equal to *100%*.
3. Choose *Save Scenario*.

## Resources

In the resources tab you can define a roles work schedule and cost per hour.

Example

Example:

Scenarios

Test Scenario\* New Scenario +

Role	Work schedules	Costs / hour
1. Approver	1 resource, 08:00:00 hours per week	50,00 €
2. Central Purchasing	1 resource, 08:00:00 hours per week	50,00 €
3. Department	1 resource, 08:00:00 hours per week	50,00 €

Remove scenario Save scenario

Costs  
Duration  
Frequency  
Resources

### Configure Work Schedules for a Role

Follow these steps:

1. Select the *Resources* tab.
2. In the *Work schedules* column, choose **...** (*more options*).  
The edit schedules page open.
3. Specify the *Numbers of resources* value.
4. In the *Work schedules* column, choose **...** (*more options*).
5. Configure the *Day, From,* and *To* values.  
The *Hours* value updates according to your configuration.
6. Choose **■** then *Save Scenario*.

### Configure the Costs Per Hour for a Role

Follow these steps:

1. Select the *Resources* tab.
2. In the *Costs / hour* column, enter a value.
3. Choose *Save Scenario*.

You can create an additional scenario by choosing **+** (*add*). Choose between creating a scenario based on the Cost & Resource Analysis attributes (*Create from template: None*) or using the data of another scenario as a starting point.

When starting a new simulation, select the required scenario from the drop-down menu.

## Configure the Cost & Resource Analysis Attribute

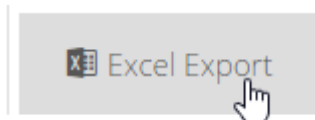
To configure the Cost & Resource Analysis attribute, follow these steps:

1. Open a diagram in the editor.
2. Select an element on the canvas.
3. Expand the *Attributes|Views* section.
4. Edit the values in the *Cost & Resource Analysis* section.
5. Repeat the above steps for all elements in your diagram.
6. Confirm with *Save*.

## 12.5 Exporting Simulation Results

In SAP Signavio Process Manager use the Export Excel feature to export the results of a Multiple-case simulation to an Excel XLS file.

You can export the results of a [Multiple-case simulation \[page 244\]](#) as XLS (Microsoft Excel) files. To export the results, click the *Excel Export* button below the simulation tiles. An Excel (XLS) file is generated. The file is saved to your browser's download folder.



The following tabs are available in the Excel file:

- Overview
- Costs
- Total cost charts
- Total time charts
- Resource consumption
- Bottlenecks
- Bottleneck charts
- If more than one simulation scenario was executed, the Excel file includes two extra tabs, one for each scenario run in the simulation.

### Note

If you are using Microsoft Excel 2010, make sure to deactivate the Protected View, by clicking [Enable Editing](#) to make sure the spreadsheet is displayed correctly.



The following table shows the costs caused by every activity of your process:

Task	Used scenario	Duration in days	Completed instances	Average	Minimum	Maximum	Total costs
check purchase invoice formally	Scenario: Should	5d	286	1.87€	1.87€	1.87€	533.87€
	Scenario: Is	5d	242	1.87€	1.87€	1.87€	451.73€
check for factually correct purchase	Scenario: Should	5d	285	13.00€	13.00€	13.00€	3,705.50€
	Scenario: Is	5d	239	25.50€	25.50€	25.50€	6,111.53€
approve purchase invoice	Scenario: Should	5d	82	17.47€	17.47€	17.47€	1,432.27€
	Scenario: Is	5d	70	17.47€	17.47€	17.47€	1,222.67€
trigger payment	Scenario: Should	5d	285	8.17€	8.17€	8.17€	2,327.50€
	Scenario: Is	5d	239	8.17€	8.17€	8.17€	1,951.83€

Values that are especially high are highlighted according to the layout displayed below the calculation table in the sheet.

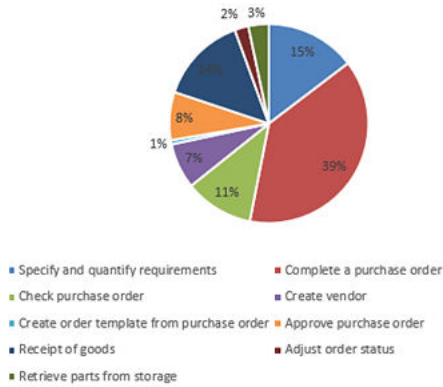
Legend	
All values are relative to the highest value	
Latest run	Previous run
100%	100%
>87.5%	>87.5%
>75%	>75%
>62.5%	>62.5%
>50%	>50%
<=50% or smallest value	<=50% or smallest value

The same layout applies to the other calculation tables as well.

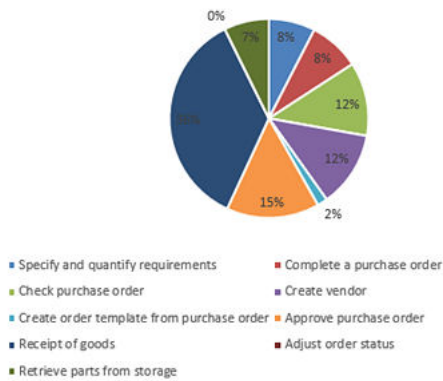
## Total Costs Charts

The *Total cost charts* tab visualizes the cost relation of executed tasks in the latest runs. If multiple runs were executed the latest and previous runs of total costs data display in the tab.

Latest run Total costs



Previous run Total costs



## Total Cycle Time

The *Total cycle time* of a process instance measures the time between process start and process completion. The tab shows process instance cycle times and activity execution times:

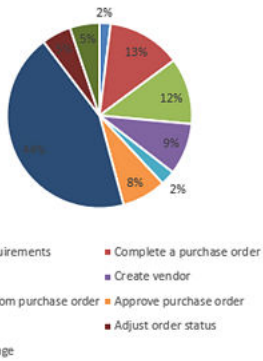
Within a process instance, several activities are executed. This happens sub-sequentially, delayed or in parallel. The following table shows for every activity how long its executions took. Please note that waiting times are not displayed here, as they are analyzed under "Bottlenecks".

Task	Used scenario	Duration in days	Completed instances	Average	Minimum	Maximum	Total cycle time
check purchase invoice formally	Scenario: Should	5d	286	00:02h	00:02h	00:02h	09:32h
	Scenario: Is	5d	242	00:02h	00:02h	00:02h	08:04h
check for factually correct purchase	Scenario: Should	5d	285	00:15h	00:15h	00:15h	2d 23:15h
	Scenario: Is	5d	239	00:30h	00:30h	00:30h	4d 23:49h
approve purchase invoice	Scenario: Should	5d	82	00:20h	00:20h	00:20h	1d 03:20h
	Scenario: Is	5d	70	00:20h	00:20h	00:20h	23:20h
trigger payment	Scenario: Should	5d	285	00:05h	00:05h	00:05h	23:45h
	Scenario: Is	5d	239	00:05h	00:05h	00:05h	19:55h

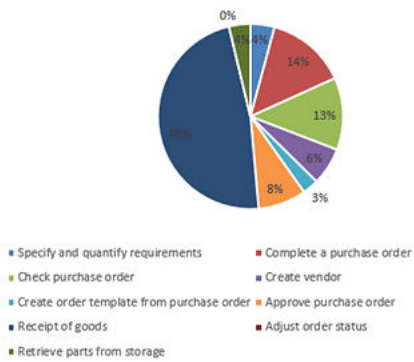
## Total Time Charts

The *Total time charts* tab visualizes the data of the *Total cycle time* tab. If multiple runs were executed the latest and previous runs of the total cycle time data display in the tab.

Latest run Total cycle time



Previous run Total cycle time



## Resource Consumption

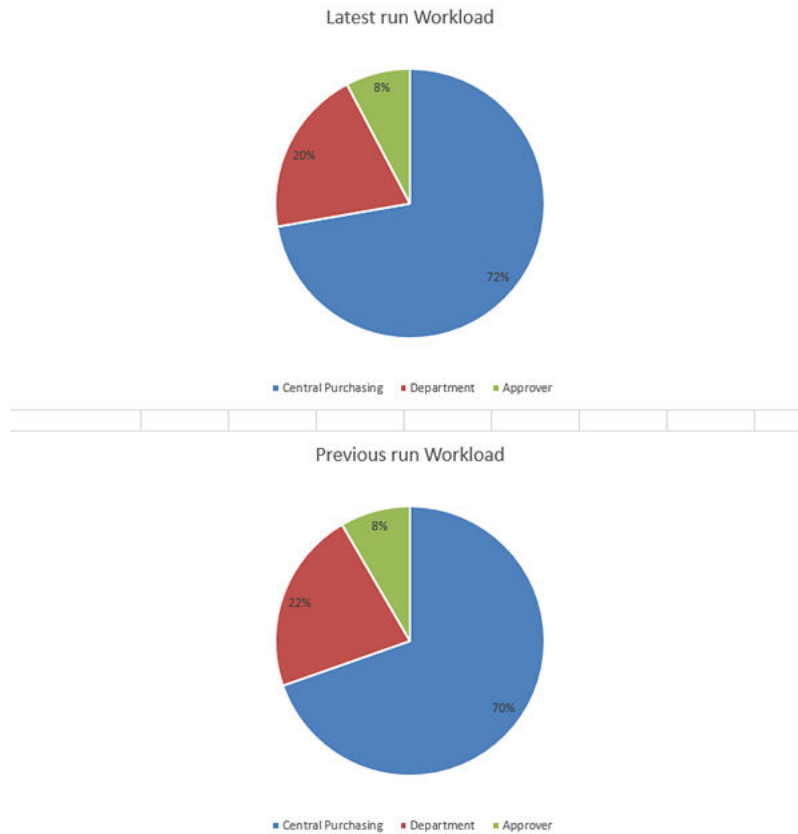
The *Resource consumption* tab contains information about all *Resources* (lanes) which were occupied with a task and displays their workloads in relation to each other:

The execution of a process instance might be delayed due to a shortage of resources: When an activity is ready for execution but all resources are already allocated, the execution has to wait. The following table shows activities that were delayed:

Resource	Used scenario	Duration in days	Consumed Time	Workload
Department	Scenario: Should	5d	2d 23:15h	59.47%
	Scenario: Is	5d	4d 23:49h	99.97%
Finance	Scenario: Should	5d	1d 09:17h	27.78%
	Scenario: Is	5d	1d 03:59h	23.35%
Department head	Scenario: Should	5d	1d 03:20h	22.81%
	Scenario: Is	5d	23:20h	19.47%

## Resource Consumption Charts

The *Resource consumption charts* tab visualizes the data of the *Resource consumption* tab. If multiple runs were executed the latest and previous runs of the resource consumption data display in the tab.



## Bottlenecks

The *Bottlenecks* tab contains information about process bottlenecks:

Resources	Task	Used scenario	Duration in days	Total waiting time	Instances waiting at termination
Department	Complete a purchase order	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	0h:06m 30s	0
	Specify and quantify requirements	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	1154h:10m 10s	22
	Retrieve parts from storage	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	245h:47m 21s	7
Central Purchasing	Adjust order status	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	0h:00m 00s	0
	Create order template from purchase order	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	0h:00m 00s	0
	Check purchase order	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	0h:00m 30s	0
	Receipt of goods	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	0h:01m 30s	0
	Create vendor	Test Scenario	5	0h:00m 00s	0
		New Scenario	5	0h:17m 00s	0

## Bottlenecks Charts

The *Bottlenecks charts* tab visualizes the data in the *Bottlenecks* tab:



## Scenario Tabs

The last two tabs contain information about each scenario's properties:

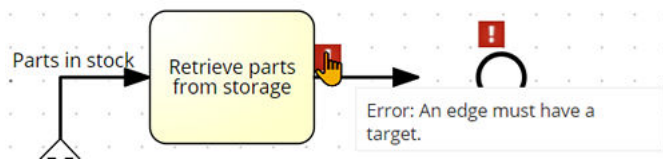
Costs and Duration		
Task	Execution costs	Execution time
Specify and quantify requirements	3.00 €	00h 01m 30s
Complete a purchase order	0.50 €	00h 05m
Check purchase order	3.00 €	00h 04m 30s
Create vendor	15.00 €	00h 07m
Create order template from purchase order	0.10 €	00h 01m
Approve purchase order	6.00 €	00h 03m
Receipt of goods	6.00 €	00h 17m
Adjust order status	3.00 €	00h 04m
Retrieve parts from storage	3.00 €	00h 02m
Frequency and probabilities		
Start event	Frequency	
Parts required	On Mon-Sun; overall 49 times	
Gateway	Decision	Probability
Gateway	Parts in stock	20.00%
	Parts out of stock	80.00%
Vendor known?	no	30.00%
	yes	70.00%
Resources		
Role	Work schedules	Costs/hour
Approver	1 employees; 8 hours per week	50.00 €
Central Purchasing	1 employees; 8 hours per week	50.00 €
Department	1 employees; 8 hours per week	50.00 €

## 12.6 Troubleshooting Issues with the BPMN Simulation Feature

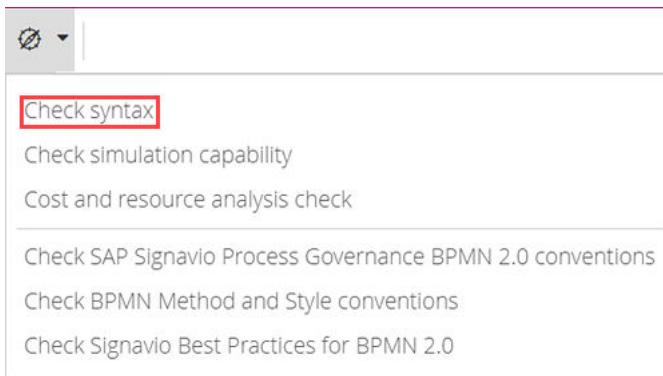
When using the SAP Signavio Process Manager Simulation tool certain process conditions are required. If those conditions are not met, issues may occur when using the simulation tool. If you experience any issues when using the Simulation tool, read this section to troubleshoot those issues.

In order for a simulation to execute, the below conditions are required:

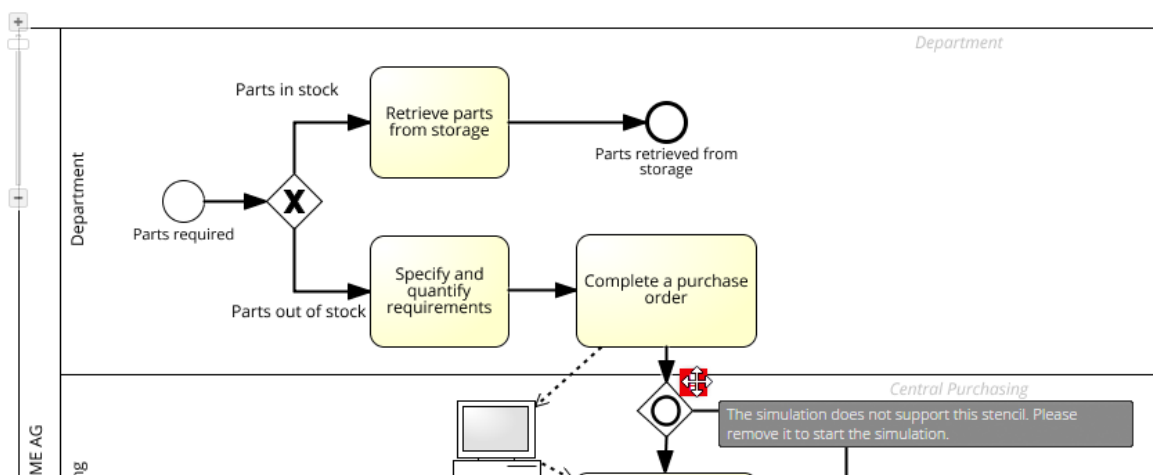
- The syntax of the diagram must follow BPMN 2.0 syntax rules. The process flow mustn't be interrupted.



- To check if a diagram follows BPMN 2.0 syntax rules, use the [Check syntax](#) option in the Editor.



- Elements that affect the process flow, but cannot be clearly specified regarding their impact on the process flow, mustn't be used. Example elements are the inclusive gateways, non-interrupting boundary events, conditional sequence flows, message flow and subprocess.



## 12.7 Using AI-Assisted BPMN Simulation Insights

Learn how to run BPMN simulations using Joule. Leverage AI to analyze and optimize your processes.

### Prerequisites

- You have an SAP Signavio Process Manager license and sufficient access rights.
- Your workspace administrator has Joule integrated with SAP Signavio solutions.
- Your workspace administrator created an [SAP for ME](#) ticket with the BPI-SIG-PM-MOD-SIM label to request the AI capability to be enabled. Once enabled, your workspace administrator must activate this capability for the users. For more information, see [Activate Embedded AI Capabilities and Assign Users](#).

### Context

Simulating BPMN diagrams helps you improve processes by evaluating costs, cycle times, resource utilization, and potential bottlenecks. The AI-assisted BPMN simulation insights feature offers a simple and intuitive way to run and analyze process simulations with Joule.

### Procedure

1. Enter a request in the Joule chat window using natural language.  
For example: **run a simulation**.  
Joule prompts you to specify the following in order to run a simulation:
  - Process - the BPMN process you want to simulate
  - Scenario - defines a set of specific parameters for simulating the process, such as activity costs and durations, event frequencies and probabilities, and resource availability
  - Duration - defines the time period over which the business process is simulated
2. Enter the process ID or ask Joule to find the process by name.
3. Enter the scenario ID or select one of the proposed scenarios.

#### Note

Joule displays the list of scenarios previously created in SAP Signavio Process Manager. If there are no preconfigured scenarios, Joule uses a default scenario based on the data defined directly in the BPMN diagram.

4. Specify the simulation duration using any common time unit (for example, days).

## Results

Once all the required parameters are provided, Joule runs the simulation and displays aggregated results and average metrics.

After reviewing the results, you can continue the conversation with Joule to request more details and to further analyze and improve the process.

# 13 Search

The standard search is a full text search. With  (*advanced search*), you can filter results.

## Full Text Search

- To search, enter the search terms into the search box and choose *Enter*.

The following content is considered in the standard search:

- Diagram titles
- Attributes of diagrams and elements
- Element labels
- Comments
- Revision information
- Content of uploaded files
- Dictionary entry links

The following operators are available:

Search operators	Description
Wildcard (*)	<p>The wildcard character (*) is a placeholder for one or more characters.</p> <p>For example, the search term <code>lab*r</code> returns results for both British English (<code>labour</code>) and American English (<code>labor</code>).</p>
AND	<p>Connect search terms with AND to only get results that contain all terms.</p>
Phrases	<p>Put a phrase in quotation marks ("...") to get an exact match.</p> <p>For example, "<code>Process Manager</code>" lists all results that contain the complete phrase <code>Process Manager</code>, and not items that only include the term <code>Manager</code>.</p> <p>Use quotation marks when you search for hyphenated terms, for example "<code>e-learning</code>".</p> <p>This search does not include partial matches, the phrase needs to consist of complete words.</p>



### Note

- It is possible to combine search operators in one query.
- If you expect that certain keywords are part of many possible results, leave them out of the search. Only search for the distinguishing keywords.

## Advanced Search

With the advanced search, you can limit the search to a specific attribute. Attributes on diagram and element level can be selected.


To execute an advanced search, follow these steps:

1. Choose  (*advanced search*) next to the search box.
2. Select the attribute from the drop-down list. When *Search within any field* is selected, this is equivalent to the standard search.
3. Enter the search terms and choose *Search*. The search results are displayed.
4. You can add additional search criteria to filter by diagram properties and values. The following filter criteria can be used:
  - Element name
  - Last modified
  - Last author
  - Revision comment
  - Publishing date
  - Publishing state
  - Commenting state
  - SAP Signavio ID
  - Type (diagram, file, folder, or comment)
5. To filter the search results, choose *Add & Search*.
6. To remove a filter, choose  (*close*).

## Smart Folders

With smart folders, you can save your advanced searches.

To save a search query as a smart folder, follow these steps:

1. Execute an advanced search as described above.
2. Choose  (*save*). The *Create Smart Folder* dialog opens.
3. Label the smart folder. You can also add a description.


4. Confirm with [Save](#).

The  (*smart folder*) is created in the *Smart Folders* directory in the navigation panel of the explorer.

### ⚠ Caution

The content of a smart folder changes dynamically according to the content of your workspace.

## Manage smart folders

When you select  (*smart folder*) and choose [Edit](#), the following actions are available:

- [Move](#)
- [Delete](#)
- [Change name/description](#)


## Search Results


The results are categorized by location:

- Found in title or directly in diagram
- Found in diagram elements
- Found in comments

You can collapse or extend the categories.

If a search returns many hits, they are displayed over several pages. To navigate the result pages, use the arrow buttons next to the page number.

By default, search results are displayed in icon view. For list view, choose  (*list view*) in the top right corner.

To return to icon view, choose  (*icon view*).

For dictionary entries, the category shown is *Linked diagrams of dictionary item*. To search for dictionary entries, use the search function in the dictionary. See section [Full-text search \[page 218\]](#) for details.

To access the folder in which an item is located, select the item and click [Go to parent](#).

## Return to the Default Explorer View

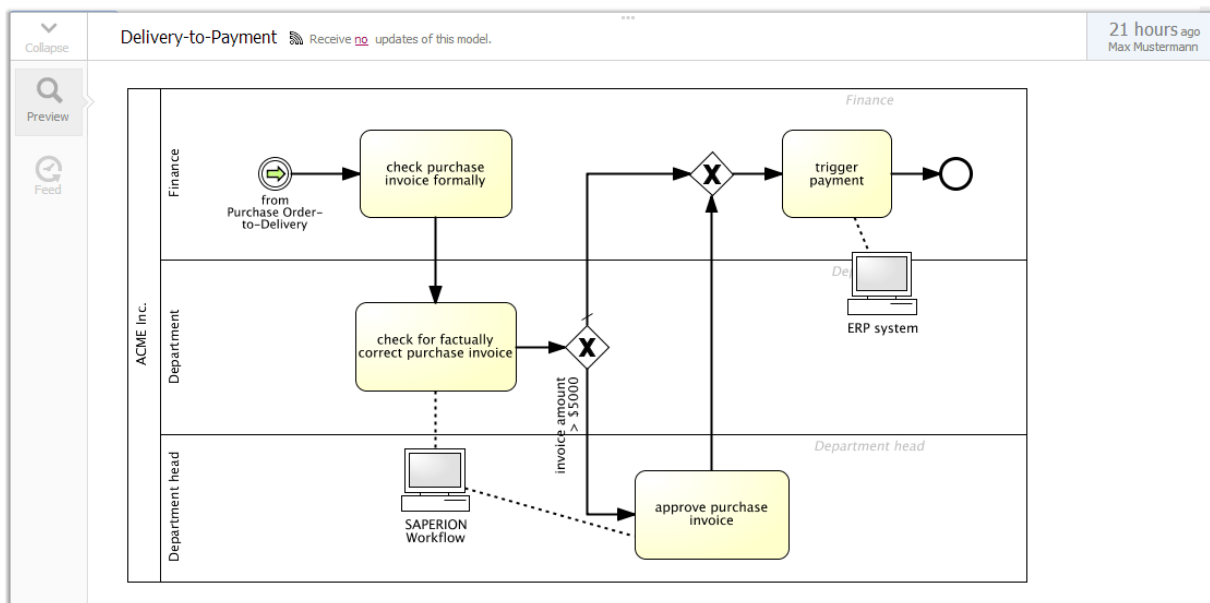
To leave the search results view, select any folder in the directory.

# 14 Organizing Diagrams

SAP Signavio offers a variety of functionalities for organizing diagrams.

Find out more about

- [Working with Folders and Diagrams \[page 26\]](#)
- [Search \[page 265\]](#)
- [Viewing diagram details \[page 25\]](#)
- [Migrating Diagrams to BPMN 2.0 \[page 99\]](#)
- [Work with Modeling Conventions \[page 55\]](#)
- [Display Attribute Overlays \[page 64\]](#)

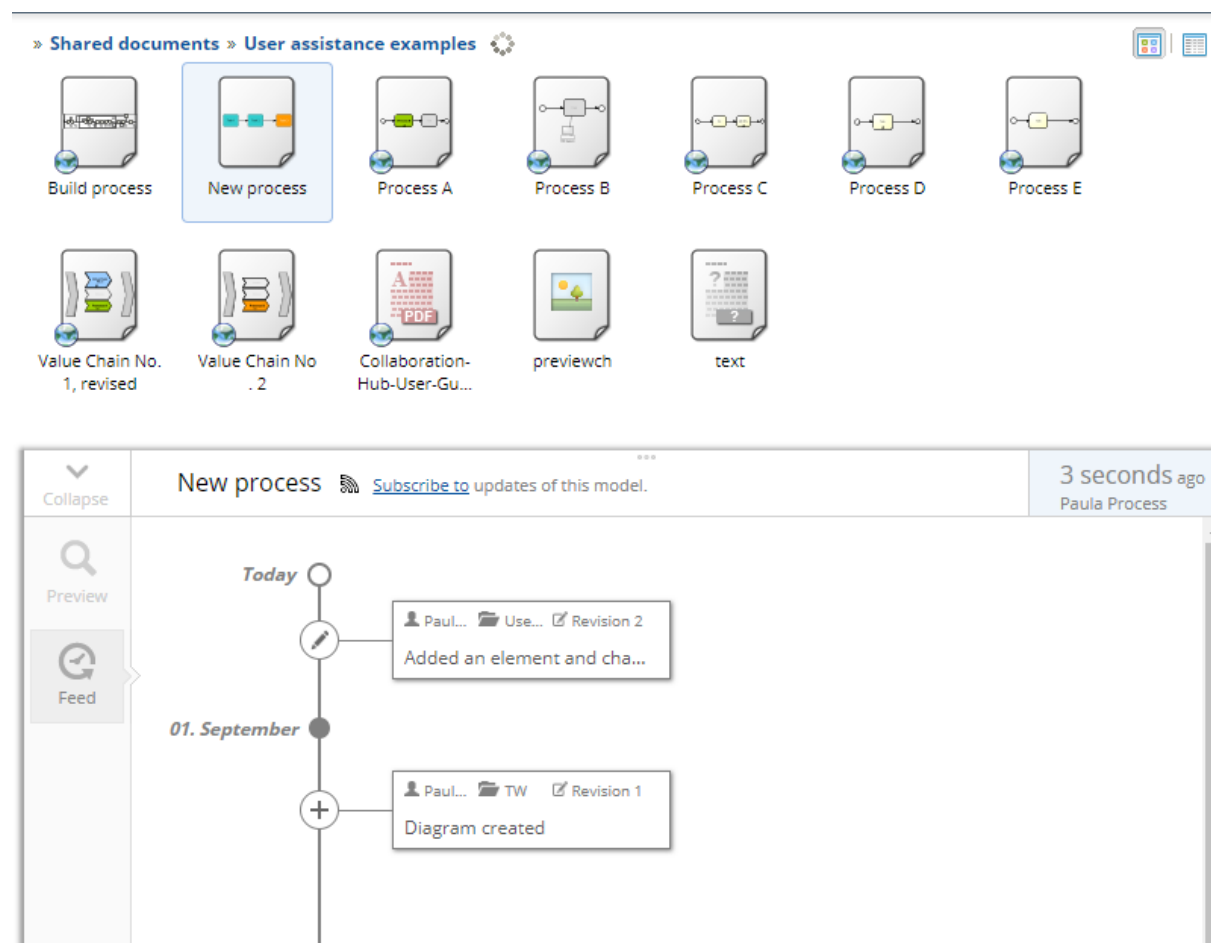


The diagram preview provides information about a diagram and its revisions in the Explorer.

# 15 The Notification and Activity Feed

Once you have created diagrams and then updated or changed them at least once, you have the option to see what was changed by whom at what time in the activity panel.

When you select folders or diagrams, the explorer displays the activity panel at the bottom of the screen:



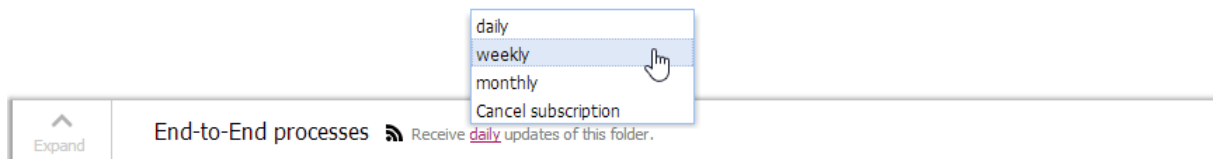
The activity panel provides diagram details.

## Notification Configuration

### Note

Notifications need to be enabled by your workspace administrator.

In the activity panel, you can set how frequently you receive email updates about specific diagram(s) or folder(s). If you subscribe to a folder, you will receive updates regarding all the diagrams and sub-folders contained within. You can *daily*, *weekly* or *monthly* notifications. Alternately, you can *unsubscribe* from notifications entirely.



Manage email notifications about updates of the selected diagram or folder.

### Note

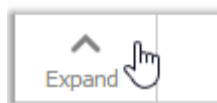
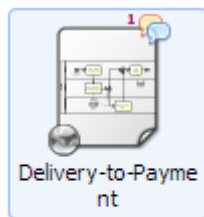
Your notifications are sent in a single email.

## Additional Functions

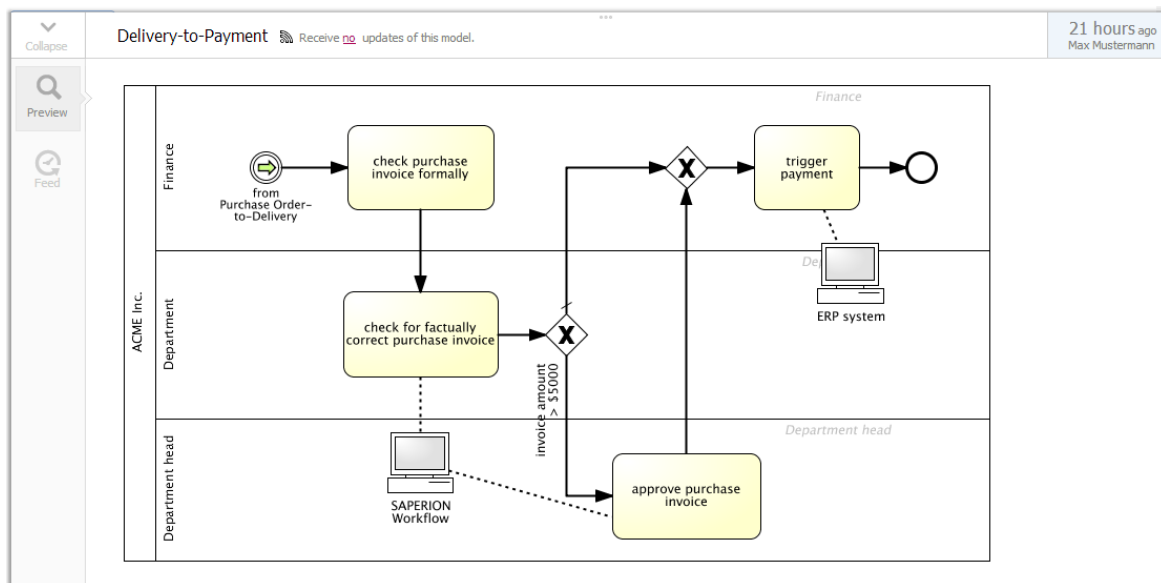
The activity panel provides a preview of the diagram/folder as well as detailed information and management options regarding its version history.

To access this preview, proceed as follows:

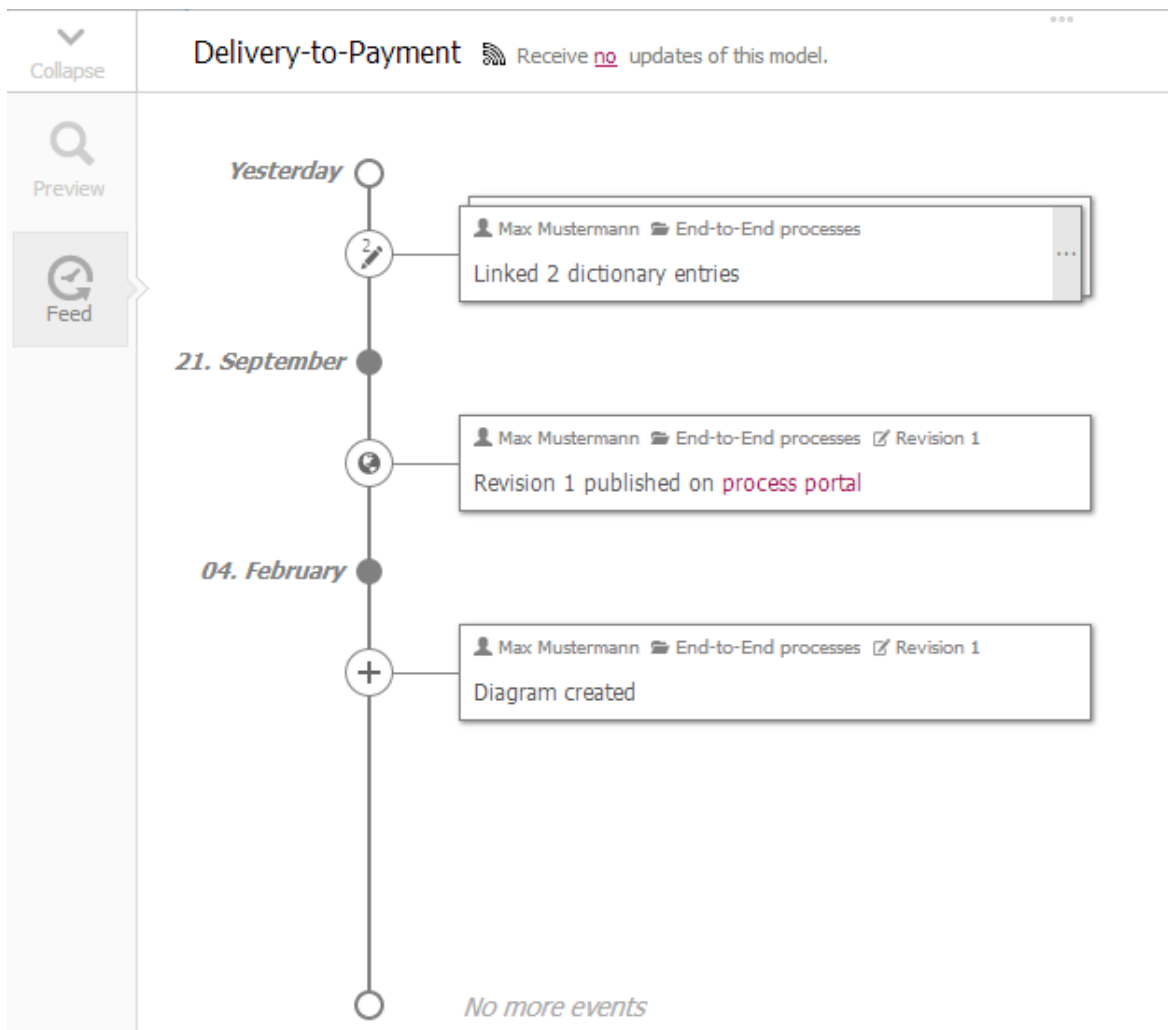
1. Select a diagram/folder.
2. Choose *Expand* in the lower left corner of the Explorer. Alternately, you can use the *space bar* on your keyboard:



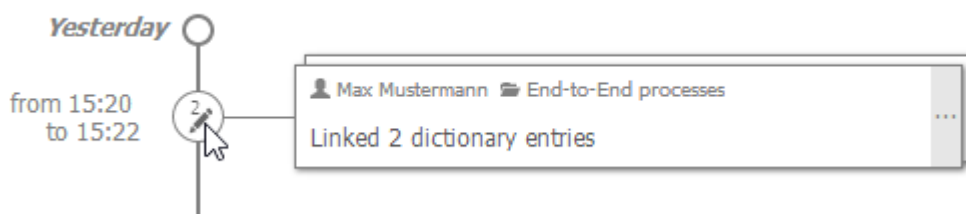
3. The panel expands, providing a visual overview of the diagram:



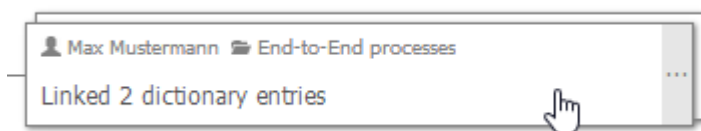
4. To view the activity feed and manage the change and version history of the diagram, choose [Feed](#) button. The activity feed will now be displayed.



5. Hovering over the timeline provides you with specific time spans.

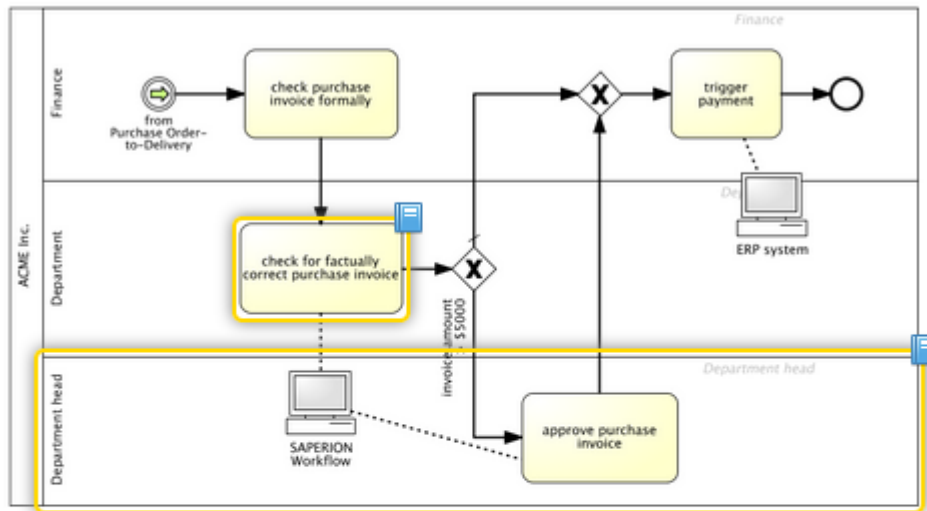


6. To gain a visual overview over an activity, choose *Activity description*.



The visualization will highlight the elements that have been changed.

## Delivery-to-Payment

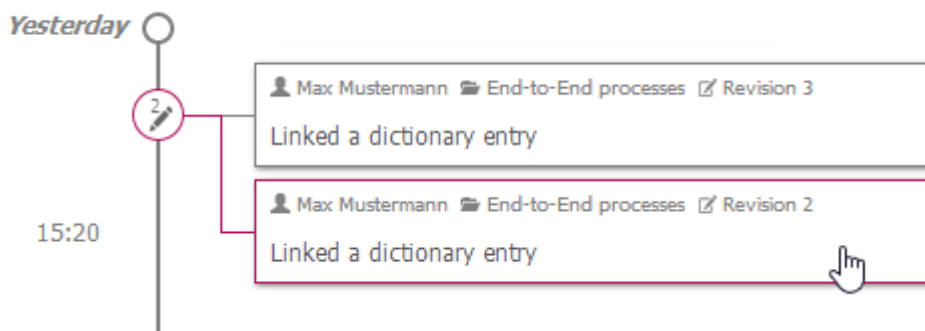


[Publish revision](#) · [Open to comment](#) · [Restore revision](#) · [Open to compare](#) ·  
 Max Mustermann 22 hours ago

- The overview also provides links to publish or comment the revision and to switch to the diagram comparison (see section [Comparison \[page 65\]](#)).
- If the selected revision is not the latest revision of the diagram, it is also possible to *restore the revision* (see section [Restore older revisions of a diagram \[page 38\]](#)):

[Publish revision](#) · [Open to comment](#) · [Restore revision](#) · [Open to compare](#) ·  
 Max Mustermann 22 hours ago

9. To get a more detailed view on an activity set, it can be opened to show all its single activities by clicking the *dots* on the grey stripe at the right side. Each activity will be displayed separately:



10. To hide the panel again, choose the *space bar* or choose *Collapse*.

# 16 Collaboration

In SAP Signavio Process Manager, there are several ways to enable collaborators to contribute to your business process and business decision landscape.

## Inviting Modelers

Fellow modelers in your workspace can by default edit and comment on all diagrams in the workspace's *Shared documents* folder. You can also invite modelers to edit to call attention to a diagram. They can also preview diagrams in SAP Signavio Process Collaboration Hub which also provides a reader-friendly diagram presentation, with its full screen view and detailed documentation.

## Inviting Stakeholders

### Note

Invited collaborators with no account have to create an account first.

Exporting diagrams and sharing, saving or printing them is another collaborative option for modelers. This way, diagrams can be transferred between SAP Signavio workspaces (SGX) and SAP Signavio and other modeling softwares (BPMN 2.0 conform XML), saved locally, sent by email (PDF, SVG or PNG), or printed out.

## Simplified Views on Diagrams

You can create simplified views of diagrams.

Simplified views make reading a diagram easier, especially if the colleague you invited is not a modeling expert. You can also hide irrelevant information. When your stakeholders view diagrams in SAP Signavio Process Collaboration Hub, they can select the view suitable for them.

### [Inviting Modelers to Edit a Diagram \[page 276\]](#)

After you created or updated a diagram you can notify your fellow modelers and invite them to further refine the diagram. If you noticed that a diagram has not been updated for a long time, you can invite your colleagues to check and make updates if necessary.

### [Sharing a Diagram from the Editor \[page 277\]](#)

You can share any diagram you are working on directly in the editor.

### [Sharing a Diagram from the Explorer \[page 278\]](#)

You can share any diagram to which you have access.

[Publishing Diagrams in SAP Signavio Process Collaboration Hub \[page 279\]](#)

[Inviting Users to Access a Diagram in SAP Signavio Process Collaboration Hub \[page 282\]](#)

[Comments \[page 283\]](#)

Learn how to view, write, or edit comments, mention others, and delete comments.

[Creating Views \[page 283\]](#)

You can create different views for different audiences. In a view, you include what you want to show an audience and exclude what the audience does not need to see.

[Granting Read-Only Access to Diagrams \[page 286\]](#)

SAP Signavio allows you to share diagrams with collaborators in read-only mode. For *read only* access **without** the commenting option, create a link to send to your colleagues via the *embedding* function.

[Execute Processes in SAP Signavio Process Governance \[page 286\]](#)

[Working with Approval Workflows \[page 287\]](#)

[Translating Diagrams \[page 290\]](#)

## 16.1 Inviting Modelers to Edit a Diagram

After you created or updated a diagram you can notify your fellow modelers and invite them to further refine the diagram. If you noticed that a diagram has not been updated for a long time, you can invite your colleagues to check and make updates if necessary.

With *Invite modeler to edit*, you can send registered workspace users an invitation to edit diagrams. Unless configured otherwise, all modelers in your workspace can edit diagrams that are stored in the *Shared documents* folder. If you try to open a diagram while it is being edited by someone else, a warning is shown. You can still edit the diagram, but if you save, you override the changes made by your colleagues.

To send an invitation email, proceed as follows:

1. Select a diagram.
2. Choose ► *Share* ► *Invite modeler to edit* ► in the menu bar.
3. In the dialog, all registered users with editing rights are displayed on the left. Select the people you want to invite.
4. Optional: Customize the invitation message.
5. Send the invite.

An invitation email is sent to all selected users.

### ⓘ Note

You cannot grant additional access rights to people using this dialog. It only sends notifications. If you want to add users to your workspace, ask your workspace administrator. To discuss your diagrams with colleagues, you can also invite them to comment.

## Related Information

[Inviting Users to Access a Diagram in SAP Signavio Process Collaboration Hub \[page 282\]](#)

## 16.2 Sharing a Diagram from the Editor

You can share any diagram you are working on directly in the editor.

### Prerequisites

A diagram can be shared after it was saved for the first time.


### Context

One of the most powerful features in collaborative process design is inviting stakeholders to review and comment on diagrams. This function lets you involve contributors who don't need to be modeling experts. Anyone you invite who isn't already a member of your workspace needs to register and receives a commenting license.

#### Note

You cannot grant additional access rights to people using this dialog, you only send out email invites to comment.

### Procedure

1. Open your diagram in the editor.
2. In the toolbar, select  (*Share*).
3. In the dialog, select users from the list or add email addresses for new users you want to invite.
4. **Optional:** Add a message.
5. Send your invite.  
Everyone you invited receives an email. Anyone you invite who is not already a member of your workspace needs to register and is assigned a commenting license.

## Related Information

[Commenting License](#)

### 16.3 Sharing a Diagram from the Explorer

You can share any diagram to which you have access.

#### Context

One of the most powerful features in collaborative process design is inviting stakeholders to review and comment on diagrams. This function lets you involve contributors who don't need to be modeling experts. Anyone you invite who isn't already a member of your workspace needs to register and receives a commenting license.

##### Note

- You cannot grant additional access rights to people using this dialog, you only send out email invites to comment. Sharing a diagram from the explorer is available on request; sharing a diagram from the editor is available by default.
- The links in the invitation email expire after 7 days. You can resend the invitation to provide a new link.

#### Procedure

1. Select your diagram in the explorer.
2. In the toolbar, go to ► *Share* ► *Invite Anyone for Feedback* 📄.
3. In the dialog, select users from the list or add email addresses for new users you want to invite.
4. **Optional:** Add a message.
5. Send your invite.  
Everyone you invited receives an email. Anyone you invite who is not already a member of your workspace needs to register and is assigned a commenting license.

## Related Information

[Commenting License](#)

[Sharing a Diagram from the Editor \[page 277\]](#)

## 16.4 Publishing Diagrams in SAP Signavio Process Collaboration Hub

Every modeler who has the access rights for publishing a diagram can publish it in SAP Signavio Process Collaboration Hub. You can also define and use approval workflows to publish diagrams. Read about this in the section [Approval workflows \[page 287\]](#).

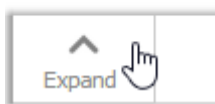
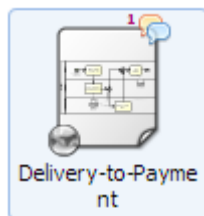
Apart from diagrams, pictures and files stored in your SAP Signavio file storage can be made available in SAP Signavio Process Collaboration Hub too. Publishing those files is similar to publishing diagrams. Depending on your configuration settings, you might need to explicitly publish dictionary entries. Read more about publishing dictionary entries in the section [Publishing dictionary entries \[page 218\]](#).

### Note

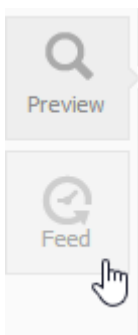
Administrators can grant users the right to *publish*, *edit* or *delete* diagrams in the *Shared documents* folder. Please contact an administrator and ask them for the corresponding rights if you cannot access these options.

To publish a diagram, proceed as follows:

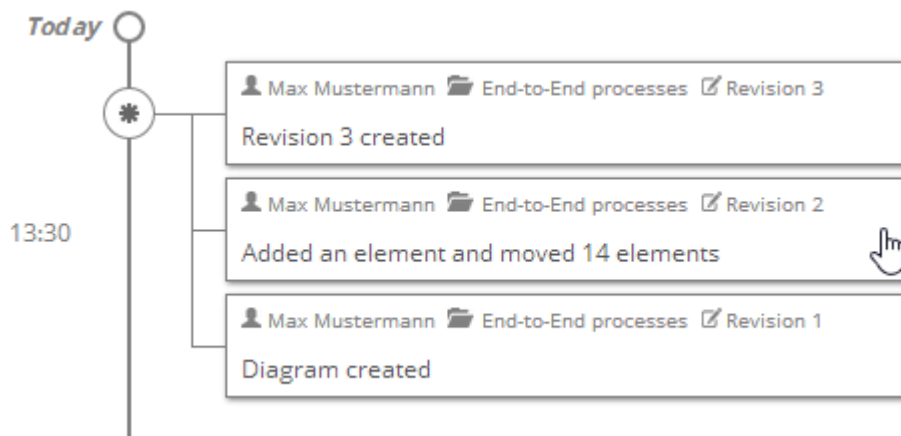
1. In the menu bar, choose *Share* then **Publish to SAP Signavio Process Collaboration Hub**.
2. In the dialog, select the diagrams you want to publish. You can publish up to 1024 diagrams at once.
3. To publish an older revision of the diagram or to revert changes of a published diagram, use the activity feed of the diagram. Select a diagram and choose *Expand* in the lower left corner of the explorer. Alternatively, you can select the space bar on your keyboard.



4. In case the feed tab is not opened by default, choose *Feed* button.



5. In the activity feed, select the revision you want to publish.



6. Choose *Publish revision*.

7. Confirm in the dialog. Your diagram is published to SAP Signavio Process Collaboration Hub.

#### Note

Only one revision of a diagram can be published. To publish multiple revisions, save a copy of the diagram and then publish the corresponding revision.

#### Note

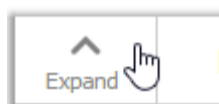
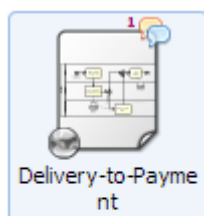
To make sure that the icon shows the current state, select *Refresh* in the upper right corner.

## Revoke a Published Diagram

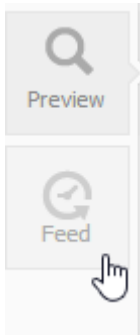
1. Select the diagrams you want to unpublish.
2. Choose *Share* and then **Unpublish from SAP Signavio Process Collaboration Hub**. The selected diagrams are now unpublished.

To revoke a single published diagram, you can also use its activity feed.

1. Select a diagram and choose *Expand* in the lower left corner of the explorer. Alternatively, you can hit the space bar on your keyboard.



- In case the feed tab is not opened by default, choose *Feed*.



- Select the publish event in the activity feed.



- Choose *Unpublish*:

**Delivery-to-Payment**

[Unpublish](#) · [Open to comment](#) · [Restore revision](#) · [Open to compare](#) · [Open revision 2 in editor](#)

Max Mustermann 9 months ago

The diagram is no longer available in SAP Signavio Process Collaboration Hub.

## Opening a Diagram's Published Revision

It is often useful to know what the published version of a particular diagram looks like in SAP Signavio Process Collaboration Hub. To find this out, select the diagram in the explorer and select *Share - Open published version*.

## 16.5 Inviting Users to Access a Diagram in SAP Signavio Process Collaboration Hub

In many situations, you may want to point one or several readers to a specific diagram.

For this purpose, you can send emails containing the link to a diagram in SAP Signavio Process Collaboration Hub and additional information via the explorer invite.

To invite users to access published diagrams, proceed as follows:

1. Select a published diagram.
2. Choose *Share*, then **Invite to SAP Signavio Process Collaboration Hub** in the menu bar.
3. Insert the email addresses of the recipients.
4. (Optional) Edit the message text.
5. You can also send a copy of the invitation email to yourself.
6. Send your invite. All invited users receive a message with the link to the diagram.


### Note

You can also use this feature to encourage somebody to have a look at SAP Signavio Process Collaboration Hub in general. Open the **Invite to SAP Signavio Process Collaboration Hub** dialog without selecting a diagram. The link in the email will lead to the entry point of SAP Signavio Process Collaboration Hub.

## New SAP Signavio Process Collaboration Hub Users

When you invite collaborators who do not have an account for SAP Signavio Process Collaboration Hub, they have to create an account first.

## Sharing a Diagram

You can also share a diagram from the explorer or the editor. Anyone you invite with the  *Share* functions who isn't already a member of your workspace needs to register and receives a commenting license. For more information, see sections [Sharing a Diagram from the Editor \[page 277\]](#) and [Sharing a Diagram from the Explorer \[page 278\]](#).

## Related Information

[Commenting License](#)






## 16.6 Comments

Learn how to view, write, or edit comments, mention others, and delete comments.

### Adding, Editing, and Deleting Comments



To add a comment, select  (*Comments*). A side panel opens, displaying all comments.

You have the following options:

- To add a comment, enter your comment in the text field and select *Add Comment*. Your most recent comment appears at the top of the list.
- To mention someone in a comment, use @ and choose their name from the suggestions.
- To enhance your comment, you can format your text and add attachments.
- To attach one or more files, select  (*Attachment*), then select *Upload Files* or drag and drop your files into the field. Uploaded files appear below the text field, where you can open or delete them. You can upload up to 10 files per comment.
- To manage a specific comment, select the  (*More*) icon. You have the following options:
  -  *Reply*. To see all the replies in a thread, select *Show 2 Replies* (or the relevant number). To collapse the replies, select *Hide*.
  -  *Edit*.
  -  *Delete*.
- Filter comments by status: Open, Resolved and Rejected.

#### Note

You can only delete your own comments. Deleting a comment cannot be undone.

-  *Resolve*.
-  *Reject*.

#### Note

Users with the Write (W) access can resolve, reject, and reopen comments.

## 16.7 Creating Views

You can create different views for different audiences. In a view, you include what you want to show an audience and exclude what the audience does not need to see.

When viewing a diagram in SAP Signavio Process Collaboration Hub, available views can be selected.

Examples for using different views of process models:

- A model contains both user activities and elements for technical implementation. The audience wants to focus on the technical implementation.
- A model contains the expected path of a process and a number of exceptions. The audience doesn't need to see the exceptions.

You can create as many views as you need.

## Creating and Editing Views

1. Open the diagram to which you want to add a view.
2. In the right panel, go to [Views](#). All available views are listed.
  - To create a new view, choose [Create new view](#).
  - To configure an existing view, select the view.
3. In the view configuration, select the objects to exclude from a view.  
You can preview the result and the original diagram.
4. Enter a name and a description for your view.
5. Save your changes

## Navigate the View Configuration

Select and drag a preview to scroll to other areas of the diagram.

You can zoom in and out of the diagrams and use the minimap.

By default, you move both diagram versions in the preview. To move the diagrams separately, disable synchronous scrolling.

## Editing a View

You can exclude all [Comments](#), [Data objects](#), [IT Systems](#), or [Roles](#).

- [Data objects](#): contains data objects, data storage and messages
- [IT Systems](#): contains IT systems
- [Roles](#): contains pools, lanes, collapsed pools and additional participants
- [Comments](#): contains all comments on the diagram

You can show or hide each element. In the original view, disable elements to exclude them from a view.

For pools, you have additional options. Select an option from the drop-down list at the bottom of the pool.

- [Pool is opened](#): The pool and its content are included in the view. You can define view options for all contained elements.
- [Pool is collapsed](#): The pool content is not shown.

- *Only content*: No roles that are defined by the pool and its lanes are shown. Message flows attached to the pool are hidden.
- *Pool is hidden*: Neither the pool nor its content is included in the view. Message flows attached to the pool are hidden.

When you uncheck a pool, all elements in that pool are excluded from a view.

To keep the original diagram size and the original placement of the shown elements, disable *Reduce free space*.

The preview is refreshed after every change.

## Duplicate a View

To create a duplicate view from an existing view, follow these steps:

1. Choose the original view to open it.
2. Edit the view.
3. Choose *Save as duplicate*.
4. Enter a name for the new view and choose *OK*.  
A new view is created.

## Delete a View

1. Select the view to open it.
2. Choose *Delete view*.
3. Confirm the deletion in the dialog.  
The view is deleted.

## Export Views

You can include views when you export a diagram as an SVG, PNG, PDF, or a BPMN 2.0 XML file. The SGX export contains all views for a diagram. Read more about exporting diagrams in section [Downloading/exporting diagrams \[page 330\]](#).

## Related Information

[Diagram views](#)

[Create views \[page 92\]](#)

## 16.8 Granting Read-Only Access to Diagrams

SAP Signavio allows you to share diagrams with collaborators in read-only mode. For *read only* access **without** the commenting option, create a link to send to your colleagues via the *embedding* function.

The system allows you to generate a link to a PNG-picture representation of your diagram.

Follow these steps:

1. Choose *Share*, then *Embed diagram* in the menu bar.
2. If the embedding function for this diagram has been activated, you can copy the link in the *Simple image* tab using the key combination *CTRL+C*.
3. Now you can paste this link in an email and send it to the desired recipient.

When opening the diagram via this link, the most recent version of it will be displayed.

### Note


To revoke link access and at the same time stop all sharing and embedding of a diagram, click *Stop sharing the diagram for read-only access* in the *Embed diagram* window.

## 16.9 Execute Processes in SAP Signavio Process Governance

### Note

SAP Signavio Process Governance is a platform for process governance. To use the SAP Signavio Process Governance integration, you need to purchase [SAP Signavio Process Governance](#) licenses. For more information, contact [sales@signavio.com](mailto:sales@signavio.com).

To switch from the explorer to SAP Signavio Process Governance, choose **Process Governance** > *Open workflows in SAP Signavio Process Governance*.

Alternatively, choose  (*Product Switcher*) from the header area and select *Process Governance*.

## Related Information

[SAP Signavio Process Governance Integration with SAP Signavio Process Manager](#)  
[SAP Signavio Process Governance](#)

## 16.10 Working with Approval Workflows

### Note

We are working on expanding and improving the functions related to process governance.

For more information about SAP Signavio Process Governance, contact [sales@signavio.com](mailto:sales@signavio.com).

For this function, a license for SAP Signavio Process Governance is necessary in addition to the license for SAP Signavio Process Manager.

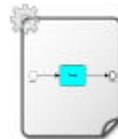
Approval workflows enable you to control validation of diagrams before publishing. Approval workflows ensure that decision makers and BPM experts review and approve the quality and factual correctness of a diagram before it is published in SAP Signavio Process Collaboration Hub.

Approval workflows make sure that diagrams have been approved by a list of users before they are published in SAP Signavio Process Collaboration Hub.

Approval workflows can be configured to automatically publish an approved diagram to SAP Signavio Process Collaboration Hub, or to send rejected diagrams back for editing.

In the explorer, diagrams are marked as follows:

a diagram currently being approved is marked with a cogwheel



a rejected diagram is marked with a red X



an approved diagram with a green check mark



a published diagram with a globe icon.



### Note

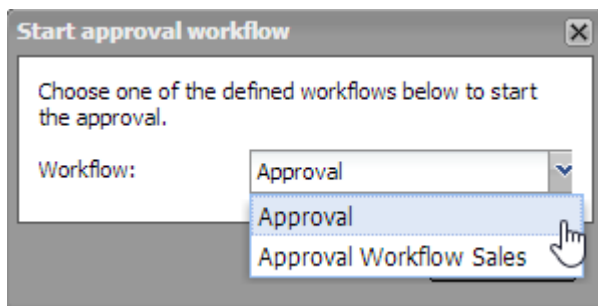
To make sure that the icon shows the current state, select *Refresh* in the upper right corner.

## Start an approval workflow

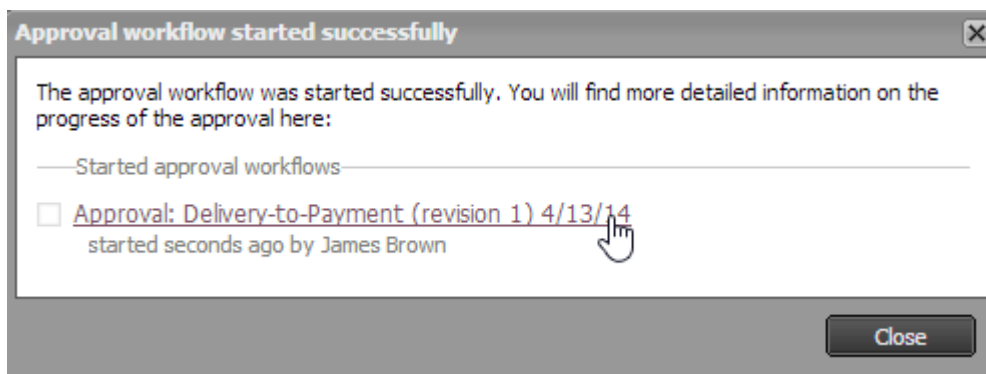
You can start approval workflows for diagrams of all types.

Follow these steps:

1. Select the diagram you want to have approved in the explorer.
2. In the menu bar, select *Share > Start approval workflow*.
3. In the dialog, click the link to open the workflow instance in SAP Signavio Process Governance.
4. In case there is more than one approval workflow for your workspace, select the approval workflow you want to start from the drop-down menu and then click *Start*.



5. You receive a confirmation that the approval workflow has been started successfully. This dialog also contains a link to the workflow instance.



If the diagram is approved, you can see that the approval status of the diagram has been updated in the explorer.



## Work on approval tasks assigned to you

This section describes how you work as a recipient of an approval workflow task.

As soon as a modeler requests an approval from you, you receive an email with a link to the case in SAP Signavio Process Governance.

Follow these steps:

1. Click the link to open the approval task. The approval task opens in SAP Signavio Process Governance.
2. Check whether the corresponding diagram fulfills your requirements.
3. Click the [Show comments](#) link to open the diagram in the commenting view.
4. Click the [Compare revisions](#) link to get a better overview over recent changes via the [Comparison \[page 65\]](#) tool.
5. Open the explorer to access further functions:
  - To open the diagram again, double-click it or select it and click [Show comments](#), then [Compare revisions/diagrams](#).
  - To check whether a diagram complies with modeling conventions, select [Modeling conventions \(XLSX\)](#). The report is especially helpful when you conduct a formal approval with focus on BPMN quality.
  - To point a colleague to a diagram, select the diagram you want to share and select **Invite to SAP Signavio Process Collaboration Hub**.
  - [Start approval workflow](#) triggers a new approval workflow case for the selected diagram.
  - To get an overview of all pending approval workflows, you can either click [Show started approval WFs](#) or [Open approval task list](#) in the upper panel. [Show started approval WFs](#) provides a basic overview in the explorer, whereas [Open approval task list](#) opens a more detailed, filterable view in SAP Signavio Process Governance.
6. Once you have finished the review, go back to the approval case in SAP Signavio Process Governance to approve or reject the change.  
In the explorer, a rejected diagram is marked with a red *X*, an approved diagram with a green *check mark*, and a published diagram with a *globe* icon.

## Processing open approval tasks

Follow these steps:

1. In the menu bar, select [Share >Open approval task list](#).  
You are redirected to your SAP Signavio Process Governance workspace. Here you can see your tasks.
2. Click a task to open it.
3. Click the corresponding buttons to complete the task.
4. In the menu bar, select [Share >](#), then [Show started approval WFs](#). A dialog with an overview of running (and completed) approval workflows opens.
  - If you have selected a diagram before opening the dialog, all approval workflows for this diagram are displayed.
  - If you have selected a folder, all approval workflows for diagrams in the selected folder are displayed.
  - If you haven't selected anything, all approval workflows of the folder that is open are displayed.
5. You can activate the check box [Show completed approval workflows](#) to include completed workflows in the list.  
The entries are sorted by creation date. Approval requests that are in progress are shown first, followed by completed approval requests.

## 16.11 Translating Diagrams

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.


You can model your diagrams in multiple languages. This allows viewers and modelers who do not understand your standard diagram language to collaborate with you.

Multilingualism is a feature which is available in the Editor, SAP Signavio Process Collaboration Hub and in the Dictionary. You need to configure languages in the Explorer (see section [Configure language settings for all users](#)) to use this feature.

The following explains how to translate a diagram and the modeling elements. Note that you need to have already defined your desired language in the Explorer.

### Changing the Language

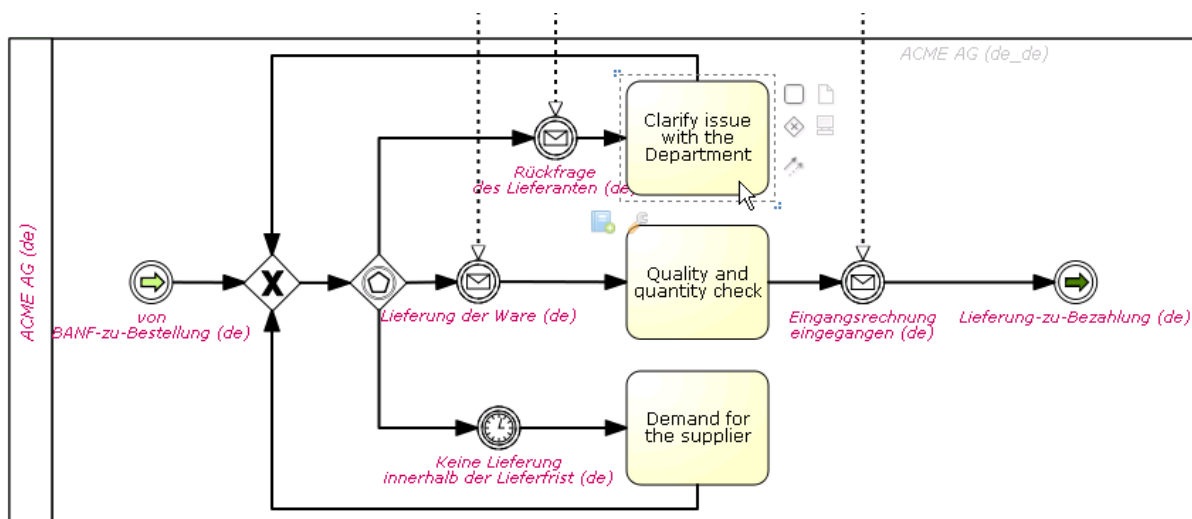
When creating a new diagram, it will be displayed in the default language of the workspace. To change the default language, read the section [Set a default language](#).

The current language of a diagram can be switched in the editor via the drop-down list  en-US on the right side of the upper toolbar.

### Note

If the list is not visible for you, it is possible that there are no languages defined for your workspace. As a workspace administrator, you can define a set of available languages in the Explorer's configuration dialog, which is described in the section [Configure language settings for all users](#).

Select one of the available languages. The diagram will adapt to the language immediately and may look like the following:



The highlighted elements have not been translated into English, yet.

Diagram elements that were already translated are displayed normally. In our example, the task 'Problem lösen' was already translated. If the label was formatted, this formatting will be kept.

Diagram elements that are not yet translated are highlighted in red--in this example, the incoming message event 'Lieferung der Ware' is only available in German (thus, the "de" in brackets).

The following chapter describes how diagram elements can be translated.

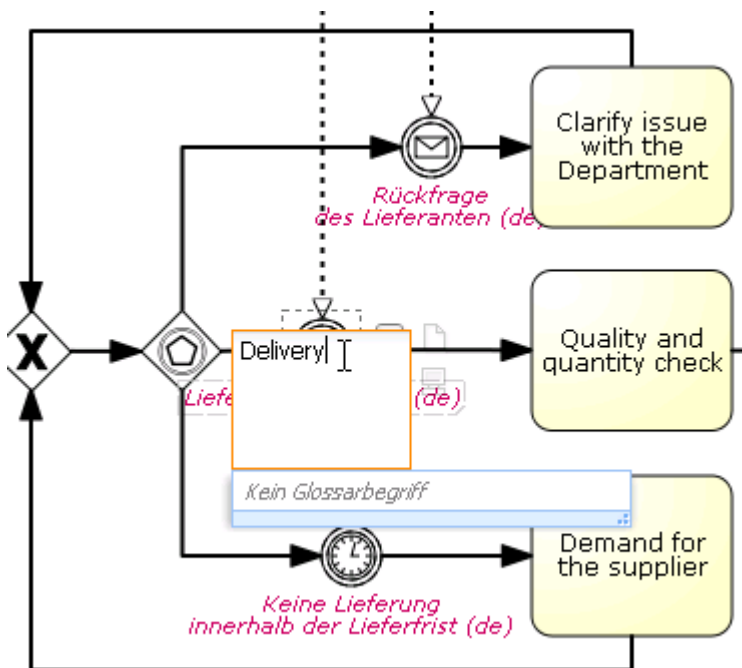
## Translating Diagrams

Translating diagrams means defining a translation for each diagram element in each required language, which can include all element labels and documentation.

This chapter describes how diagrams can be translated into other languages. This is especially useful when multiple people are involved on the translation, each translated into one language. Later in this chapter, you will learn how to translate a diagram in different languages at the same time.

The following example shows a translation from English to German:

1. First, select which language you want to translate. Proceed as explained above. Elements that were not yet translated are highlighted in red.
2. Double-click an element to define its label.



3. Select somewhere on the canvas to accept the new label. The translation will now be stored in the attribute panel on the right.

Properties (Intermediate Message Event)	
Name	Value
<b>Custom Attributes</b>	
via IT-System	
<b>Main Attributes</b>	
Name	🇩🇪 Lieferung der Waren
Documentation	🇩🇪 Bitte die Lieferung mit der beilie
Message name	
Operation name	
BackgroundColor	<input type="checkbox"/>
Border color	<input checked="" type="checkbox"/>

4. In the attribute panel, you can also add documentation in the current language.

Translate the remaining diagram elements in the same way. After saving the diagram, it will be accessible in all languages of the workspace.

## Translating Diagrams into Multiple Languages at the Same Time

Sometimes, a modeler might want to define a diagram in multiple languages while modeling the diagram. In this case, it is recommended to have the required languages set available while modeling.

1. Add languages to the diagram via the language tool of the Editor toolbar.
2. Select all the languages you want to work with in your diagram. They will appear in the attribute panel on the right hand side.

Properties (Task)	
Name	Value
<b>Custom Attributes</b>	
External document	
Risk level	
<b>Main Attributes</b>	
Name	Solve problem
Name	Problem lösen
Name	
Documentation	Die Rückfragen müssen absch
Documentation	
Documentation	
Is a call activity	
Tasktype	None
Background color	
Loop type	None
Border color	

3. Now you translate diagram elements into the desired languages simultaneously in the attribute panel by simply entering the translations into the corresponding columns and lines.
4. To view the result in the other languages, switch the display language on the flag icon in the toolbar.

## Migrating Diagrams to a Different Language

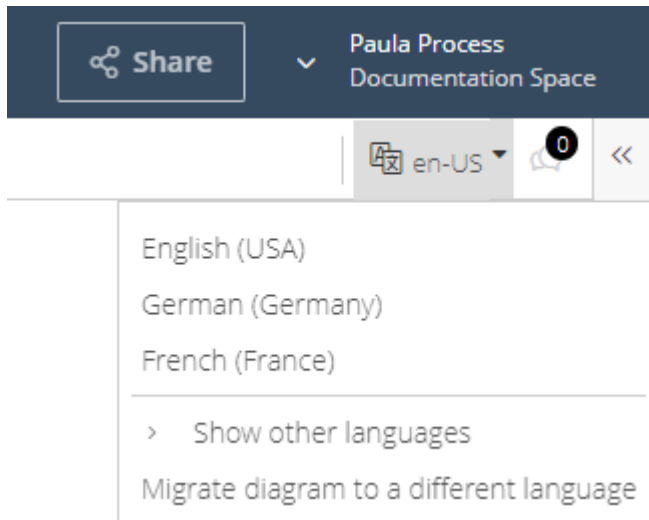
You can migrate the contents of a diagram from one language to another. This is especially helpful when switching between dialects of a specific language (for example, British English to American/Canadian English), or if the diagram was created in the wrong language and you want to correct this.

### Note

When opening a diagram, the system will ask you for the diagram language if no default is defined.

To migrate a diagram into another language, proceed as follows:

1. Choose the language drop-down list, then select *Migrate diagram to a different language*. The corresponding dialog box opens.



2. Now choose the source and the target language for the migration. You can choose between all languages that are defined for the workspace.
3. Optionally, you can delete information in the source language. Activate the checkbox *Delete original texts* to do so.
4. Choose *OK*. A confirmation prompt is displayed.
5. Confirm with *Yes*.

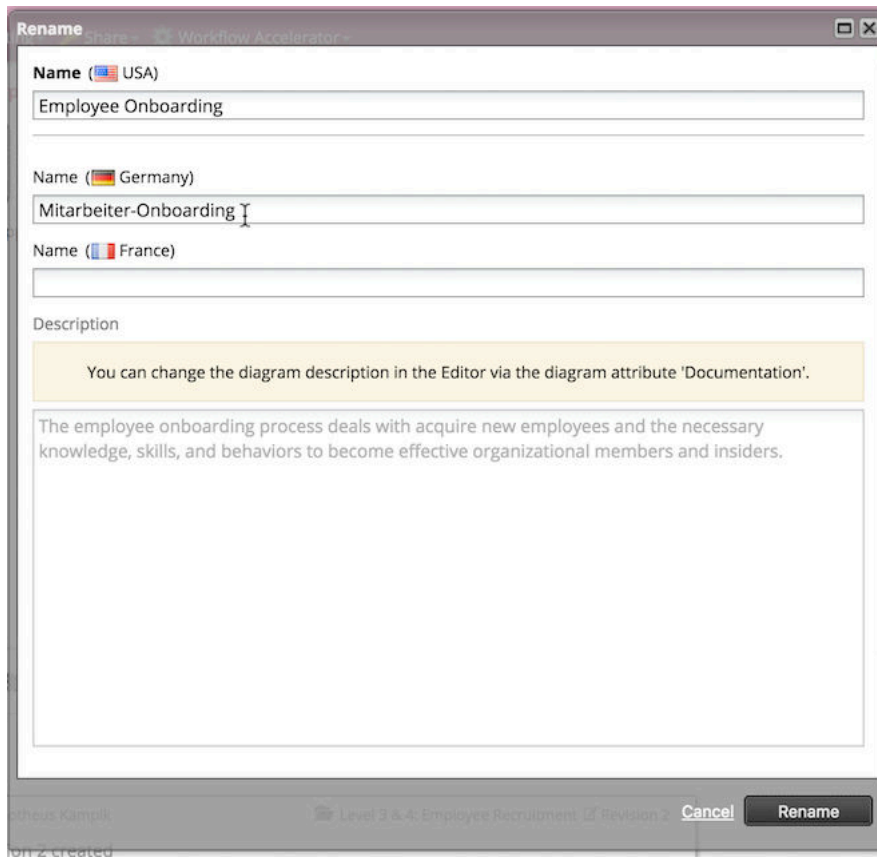
In this example a diagram was created without language definitions. The content was defined in German. As the workspaces' default language is English, the diagram was configured to be in English when the language tools were activated. The content is now supposed to be migrated from German to English and the German contents are supposed to be removed.

## Translating Diagram, Folder, and File Names

### ⚠ Caution

Keep in mind that translations that you make within the framework of this feature are only visible in SAP Signavio Process Collaboration Hub.

1. Select the name of a diagram, folder or file name you want to translate in the Explorer.
2. Open the *Edit* menu and choose *Change name/description* (for files and folders) or *Rename* (for diagrams).
3. Now you can add translations of the name in all available languages.



4. Choose *Change name/description* or *Rename* to save your settings.

## Related Information

[Translate Content with PO Files \[page 342\]](#)

# 17 Reports

SAP Signavio Process Manager allows you to create various customizable reports in the form of spreadsheets or as PDF files. This enables business users to analyze your process hierarchy offline, and in formats decision makers and analysts are already familiar with.

For reports in spreadsheet format, you can include up to 50,000 diagrams.

The standard reports that are accessible via the explorer's *Reporting* dropdown menu cover most business use cases. If you require a special kind of report that is not provided by the tool, you can ask one of your workspace administrators to create a custom template.

## Note

Many of the reports access default dictionary categories during the generation process. In case you suspect that your dictionary configuration causes problems during the generation of a report, take a look at the section [Defining custom categories for dictionary entries](#).

## Process Documentation and Templates

It is possible to export process documentation documents as PDF and Microsoft Word files. Process documentation documents are comprehensive documents that contain both diagram graphics as well as relevant diagram attributes, such as description and responsibilities.

As a workspace administrator, you can create individual templates for process documentation reports. A guide on how to create new templates can be found in the corresponding chapter of this manual. Once created, a custom template can then be selected during the creation of a process documentation report.

Read more about:

- [Generating process documentation reports \[page 297\]](#)
- [Managing and creating process documentation templates](#)

## Analysis

SAP Signavio Process Manager lets you set key performance indicators (KPI) in event-driven process chains (EPC) and BPMN 2.0 process diagrams, which allows detailed process analyses.

Read more about:

- [Creating quantitative process analysis reports \[page 308\]](#)
- [Creating process cost analysis reports \[page 309\]](#)
- [Creating resource consumption analysis reports \[page 310\]](#)

Furthermore, qualitative reports can be created:

- [Generating responsibility handovers matrices \[page 300\]](#)
- [Generating IT system usage matrices \[page 302\]](#)
- [Generating job profile reports \[page 303\]](#)
- [Generating risks management reports \[page 303\]](#)
- [Generating modeling convention reports \[page 304\]](#)
- [Generating document usage matrices \[page 305\]](#)

## Process Model Metric and Process characteristics

A process model metric contains information about the usage of diagram element types and can be created for any diagram type:

- [Generating process model metrics \[page 307\]](#)

To create a summary of element details that are used in your diagrams, read the following chapter:

- [Generating process characteristics reports \[page 306\]](#)

## User and Group Assignment

Workspace administrators can create reports that list for each user the groups the user is a member of:

- [Generating user group reports \[page 311\]](#)

## Governance Report

Workspace administrators can access usage data of your workspace with the governance report. For example, you can see at a glance how many process models have been created.

- [Viewing governance reports \[page 311\]](#)

# 17.1 Generating Process Documentation Reports

With the process documentation report you can generate a report that includes information about diagrams, element descriptions and dictionary entries in your organization. The process documentation report comes in PDF or Microsoft Word format.

### Note

This section describes all options for this function. Which options are available depends on your license and the settings made by your workspace administrator.

You can generate process documentation reports containing all your diagrams, including all element descriptions, and dictionary entries.

You can generate process documentation report in a PDF or Microsoft Word format.

## Generate a Process Documentation (PDF) Report

Follow these steps:

1. Open the explorer and choose **Reporting > Process documentation (PDF)**.  
The process documentation (PDF) dialog opens.
2. Select the required diagrams.
3. To add a filter, choose **Add filter**.  
The edit filters dialog opens.
4. Select a folder from the drop-down list where you want to search in.
5. Define the rules for the filter query.
6. Confirm with **OK**.  
Diagrams discovered by the filter query are selected for the process documentation (PDF) report.  
The Edit filters dialog opens and displays the number of results returned from your filter query.
7. Choose **OK**.
8. In the **Configuration** section, select a template for the report from the **Template** drop-down list.  
If there are existing custom process documentation templates, you can use them when creating a process documentation report. Otherwise, the SAP Signavio template is set by default.
9. Select the required language for the report from the **Language** drop-down list.
10. Enter information for the **Title**, **Organization**, **Author**, **Date**, and **Version** fields.
11. In the **Export linked subprocesses** section, select which linked subprocesses must be included in the report from the drop-down list.  
The following options are available:
  - No linked subprocesses
  - Linked subprocesses of all levels
  - Linked subprocesses of the first level
12. Choose **Generate documentation**.

The process documentation report in PDF format generates. Access the report from your browser's downloads folder.

## Generate a Process Documentation (Word) Report

Follow these steps:

1. Open the explorer and choose **Reporting > Process documentation (Word)**.  
The process documentation (Word) dialog opens.
2. Select the required diagrams.
3. To add a filter, choose **Add filter**.  
The edit filters dialog opens.

4. Select a folder from the drop-down list where you want to search in.
5. Define the rules for the filter query.
6. Choose *OK*.  
Diagrams discovered by the filter query are selected for the process documentation (Word) report.  
The edit filters dialog opens and displays the number of results returned from your filter query.
7. Choose *OK*.
8. In the *Configuration* section, select a template for the report from the *Template* drop-down list.  
If there are existing custom process documentation templates, you can use them when creating a process documentation report. Otherwise, the SAP Signavio template is set by default.
9. Select the required language for the report from the *Language* drop-down list.
10. Enter information for the *Title*, *Organization*, *Author*, *Date*, and *Version* fields.
11. In the *Export linked subprocesses* section, select which linked subprocesses must be included in the report from the drop-down list.  
The following options are available:
  - No linked subprocesses
  - Linked subprocesses of all levels
  - Linked subprocesses of the first level
12. Choose *Generate documentation*.  
The Important information dialog opens.
13. The dialog indicates that the table of contents won't be up-to-date when opening the generated report.  
Choose *OK* and follow the steps described below after the report generation is complete.



The process documentation report in Word format generates. Access the report from your browser's downloads folder.

## Updating the table of contents in Microsoft Word

Follow these steps:

1. Open the process documentation (Word) report.
2. Select the table of contents and choose *F9* or right-select each table of contents entry and choose *Update Field*.

The table of contents updates with the correct page numbers.

## 17.2 Responsibility Assignment Matrix / RACI Report

Generate the responsibility assignment matrix / RACI report for your diagrams.

The responsibility assignment matrix / RACI report creates an XLSX file which displays the responsibilities for activities in the selected BPMN diagrams. Read [Responsibility assignment according to RACI \[page 87\]](#) for more information.

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

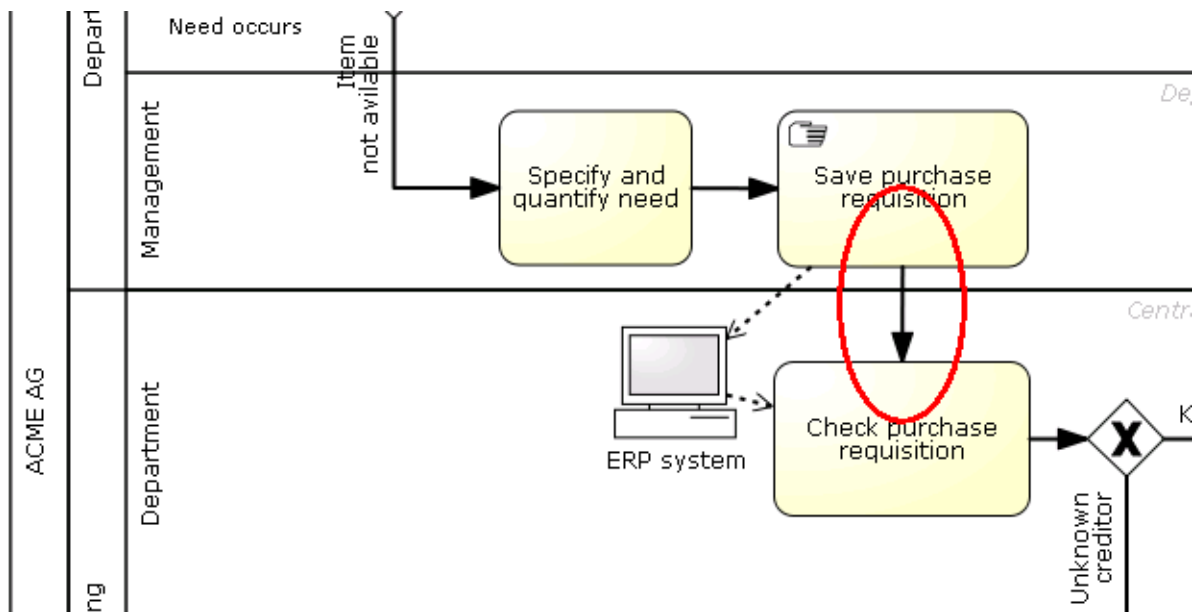
This section explains how to generate the responsibility assignment matrix / RACI report.

1. Open the explorer and choose *Reporting > Responsibility assignment matrix / RACI*. The *Responsibility assignment matrix / RACI* dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose *Start analysis*.
5. The responsibility assignment matrix / RACI report generates. The file is saved to your browser's download folder.

## 17.3 Responsibility Handovers Matrix Report

See how to generate the responsibility handovers matrix report.

When different roles or organizations participate on processes, the process flow gets handed over from one participant to another at defined places. These roles are represented as pools and lanes in BPMN 2.0 process diagrams. Event-driven process chains (EPC) use attached roles, positions and organizations. A responsibility handover can be either a sequence or an information flow.



The Responsibility handovers matrix report creates an Excel file that contains information for each diagram that is included in the report. The responsibility handovers matrix calculation considers pools, lanes, and in case of Event-driven process chains (EPC), the attached roles, as well as links to organizational dictionary entries.

#### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

1. Open the explorer and choose **Reporting > Responsibility handovers matrix**. The *Responsibility handovers matrix* dialog opens.
2. Select one or more diagrams to include in the report.
3. Select the required language of the report.
4. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
5. Choose *Start analysis*. The responsibility handovers matrix report generates. The file is saved to your browser's download folder.
6. The responsibility handovers matrix report displays the *Responsibility Handovers*, *Internal Handovers*, and *External Handovers* for the selected diagrams. Select the required tabs to view the information.

#### Note

If custom attributes linking to organizational dictionary entries were defined, they are included in the calculation.

## 17.4 IT System Usage Matrix Reports

BPMN 2.0 process diagrams can attach IT systems information to a task. Those IT systems can be tagged as an 'Input' or an 'Output'.

The *IT system usage matrix* reports creates an assignment matrix that shows which IT systems data is read from during an activity, and which IT system data is written to. You can choose whether the assignments refer to diagrams or roles. The report also includes IT systems that are linked as dictionary entries from a custom defined attribute.

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

### Generate the IT System Usage Matrix (by Diagrams) Report

1. Open the explorer and choose *Reporting > IT system usage matrix (by diagrams)*. The *IT system usage matrix (by diagrams)* dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose *Start analysis*.

The IT system usage matrix (by diagrams) report generates. The file is saved to your browser's download folder.

### Generate the IT System Usage Matrix (by Roles) Report

Follow these steps:

1. Open the explorer and click *Reporting > IT system usage matrix (by roles)*. The *IT system usage matrix (by roles)* dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose *Start analysis*.

The IT system usage matrix (by roles) report generates. The file is saved to your browser's download folder.

### ⓘ Note

If custom attributes linking to organizational dictionary entries were defined, those will also be included in the calculation.

## 17.5 Job Profile Report

You can automatically create *job profiles* based on your documented process landscape. The Job Profile report allows you to view all activities that an organizational role is involved in..

In contrast to the diagram-centered RACI report, the Job Profile report creates a role-specific matrix over all workspace diagrams.

### ⓘ Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

1. Open the explorer and choose *Dictionary*.  
The dictionary opens in a new tab.
2. Select the required organizational roles and choose *Import / Export > Export Job Profile Report*.  
The Job Profile report generates. The file is saved to your browser's download folder.

## 17.6 Risk & Controls Report

With the integrated risk management feature, you can define risks and controls directly at any step of a process within the process model. These risks and controls can be defined and then associated with the corresponding activities.

### ⓘ Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

You can use the risk & controls report to view an overview of potential risks and related controls. This report summarizes all information about the risks and controls in the selected process models.

### ⓘ Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

1. Open the explorer and choose **Reporting > Risk & controls report**.  
The *Risk & controls report* dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel97)
4. Expand the *Show additional attributes in the report* option. The following attribute options are available:
  - Documentation
  - Process target
  - Process maturity level
  - Process owner
  - IOS9000ff relevant
  - Responsible

### Note

It isn't possible to include table attributes. You can't select risk management attributes on diagram level as the report includes them by default.

5. Choose *Start analysis*.
6. The risk & controls report generates. The file is saved to your browser's download folder.

## 17.7 Modeling Conventions Report

With the modeling conventions report you can create a report that checks if the selected diagrams are compliant according to a specified modeling convention..

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

Report:	Modeling Conventions					
Date:	04.02.2013					
Time:	18:40:43					
		Architecture	Notation	Naming	Process	Layout
		Summarized	Summarized	Summarized	Summarized	Summarized
Folder	Diagram					
Procurement - Example processes / End-to-	Purchase Requisition-to-Purchase Order	OK	3 Hints	1 Warning	OK	4 Warnings
Procurement - Example processes / End-to-	Delivery-to-Payment	OK	4 Hints	1 Warning	OK	3 Warnings
Procurement - Example processes / End-to-	Purchase Order-to-Delivery	OK	8 Hints	OK	OK	2 Warnings
<b>Summarized Result</b>		<b>OK</b>	<b>15 Hints</b>	<b>2 Warnings</b>	<b>OK</b>	<b>9 Warnings</b>

1. Open the explorer and choose **Reporting > Modeling conventions**.

The *Modeling conventions dialog* opens.

2. Select one or multiple diagrams to include in the report.
3. Choose *Add filter* to add filters to the report.  
The *Edit filters* dialog opens.
4. Specify the folder you want the report to search in for diagrams using the *Please choose folder* drop-down.
5. Specify the filter conditions. You can configure the *Diagram information* and *Custom diagram attributes* filter conditions.
6. Choose *OK*.
7. Select a modeling convention from the *Modeling conventions* section. The following default conventions are available:
  - SAP Signavio Process Governance BPMN 2.0 conventions
  - BPMN Method & Style conventions
  - SAP Signavio Best Practices for BPMN 2.0

#### Note

Custom modeling conventions are also available in the *Modeling conventions* section. Read [Managing modeling conventions](#) for more information.

8. Choose *Start analysis*.  
The modeling conventions report generates. The file is saved to your browser's download folder.

## 17.8 Document Usage Matrix Report

Data objects can be attached to an activity in BPMN 2.0 and are indicated as an input or output. The *Documents usage matrix* report creates an Excel file for one or multiple diagrams describing the assignment of documents to tasks. Linked dictionary entries representing a document are also included in the report..

#### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

The Documents usage matrix report displays the documents that are attached to an element as a BPMN attribute as either 'Input' or 'Output' documents.

#### Note

If there are custom attributes defined which link to dictionary entries that represent documents, they are included in the calculation.

1. Open the explorer and choose **Reporting > Documents usage matrix**.  
The *Documents usage matrix* dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet

- Export file as XLS (Excel 97)
4. Choose *Start analysis*.
  5. The Documents usage matrix report generates. The file is saved to your browser's download folder.

## 17.9 Process Characteristics with Element Details Report

The *Process characteristics with element details* report is an Excel file that contains an overview of elements and attribute values found in the selected models (diagrams). Attributes without any values are not listed in the report.

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

The following model types can be used in the *Process characteristics with element details* report:

- BPMN 2.0
- DMN 1.1
- ArchiMate
- EPC
- Value chain
- Organization chart

This section explains how to generate a *Process characteristics with element details* report.

1. Open the explorer and choose **Reporting** > *Process characteristics with element details*.
2. Select one or multiple models to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose *Export options* to configure which elements and attributes you want to include in the report. The following options are available:
  - *Include IDs*  
Include the unique identifier for each element.
  - *Included elements*
    - *Core elements (without edges)*: Include only those model elements that belong to the *BPMN (Core Elements)* set. Connectors (edges) won't be included.
    - *All elements (without edges)*: Include all model elements except connectors.
    - *All elements*: Include all model elements, including connectors.
  - *Included attributes*
    - *Custom attributes*: Include only custom attributes created by the tenant owner or administrator.
    - *Custom & main attributes*: Include custom attributes as well as the main attributes provided by the system.

- *All attributes*: Include custom attributes and all of the attributes provided by the system.
5. Choose *Start analysis*.

The *Process characteristics with element details* report generates. The file is saved to your browser's download folder.

## 17.10 Process Model Metrics Report

With the process model metrics report, you can generate a statistics report for your diagrams..

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

The following statistics are included in the report:

- Type
  - Number of Elements
  - Number of Edges
  - Number of Forks
  - Operators
  - Number of Subprocesses
  - Ration of linked subprocesses
  - Number of linked Files
  - Number of Dictionary Links
  - Number of Process Steps without Responsibility Definition
  - Number of Responsibility Handovers
  - Publishing state
  - Last Modification Date (CET)
  - Path
  - ID
  - Revision
  - Last saved by
  - Date of last publication
  - Date of approval expiration
  - Approval state of the latest revision
  - Approval state of the published revision
  - Open in Explorer link. The column contains a link that opens the selected diagram in the Explorer.
  - Open in SAP Signavio Process Collaboration Hub Preview. The column contains a link that opens the selected diagram in the SAP Signavio Process Collaboration Hub Preview.
1. Open the explorer and choose **Reporting > Process model metrics**.  
The *Process model metrics* dialog opens up.

2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose *Start analysis*.

The process model metrics report generates. The file is saved to your browser's download folder.

## 17.11 Creating Quantitative Process Analysis Reports

You can run quantitative analyses of your processes. After setting KPI on diagram elements, you can generate the process cost analysis and resource consumption analysis reports for BPMN diagrams.

**Quantitative analysis** ✕

Please select a report mode:

Process cost analysis

€ **Cost centers**

	1	2	3
Task 1			
Task 2			

Calculation of process costs (euro per cost center) based on the execution frequency and costs per activity.

Use resource consumption attributes for the calculation (if provided)

Resource consumption analysis

🕒 **Resources**

	1	2	3
Task 1			
Task 2			

Calculation of resource consumption (hours per resource) based on the execution frequency and execution time per activity.

Include subprocesses in calculation

<< Back
Start Calculation

The *process cost analysis* report assigns process costs to processes and tasks and lists them in cost centers. Based on the key process indicators set, the report creates a table that shows costs for certain tasks and named cost centers. Read [Process cost analysis report \[page 309\]](#) for more information.

The *resource consumption analysis* report allows for the computing of time consumption per task or process. Read [Resource consumption analysis report \[page 310\]](#) for more information.

Both reports consider the execution probability and frequency before computing the actual resource consumption or costs.

## Related Information

[Setting Key Performance Indicators \(KPIs\) \[page 90\]](#)

## 17.12 Process Cost Analysis Report

Process cost analysis reports displays the computed costs that occur in a process. The report displays the costs, tasks, and cost centers in a table.

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

This section explains how to generate the Process cost analysis report.

1. Open the explorer and choose **Reporting** > **Process cost analysis** .  
The *Process cost analysis* dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose *Next*.  
The *Quantitative analysis* dialog opens.
5. Select the report mode. The following report modes are available:
  - Process cost analysis: Calculates the process costs (€ per cost center) based on the execution frequency and costs per activity. You can also select the *Use resource consumption attributes for the calculation (if provided)* option.
  - Resource consumption analysis: Calculates the resource consumption (hours per resource) based on the execution frequency and execution time per activity. Read the [Resource consumption analysis report \[page 310\]](#) for more information.For the purpose of these steps the *Process cost analysis mode* is selected.
6. Select the *Include subprocesses in calculation* option if required.
7. Choose *Next*.
8. Specify the resource costs. This dialog only appears if you selected the *Use resource consumption attributes for the calculation (if provided)* option.
9. Choose *Start Calculation*.  
If there are structural or logical mistakes in the diagrams, the system informs you. If errors occur, the program asks you to go back to check the diagram in the editor. Choose *Open diagram* to open the diagrams in the editor to correct any logical mistakes, structural mistakes, and errors.

10. If there are no errors, the Resource consumption analysis report generates. Choose [Please click here to open the Excel file](#) to download the report. The file is saved to your browser's download folder. This Excel file contains the analysis. The values are based on functions, so changing one value may change the values in other fields accordingly. If multiple diagrams were included in the report, each diagram will have its own tab in the Excel file.

## 17.13 Resource Consumption Analysis Report


A resource consumption analysis report calculates the time consumed for a process or a task. It can help you find complex and time consuming tasks and plot out the resource consumption of process participants..

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

### Note

You can include up to 50,000 models (diagrams). Depending on the number of models, report generation can take up to an hour. Keep the browser tab where you started the report generation open until the process is finished.

1. Open the explorer and choose **Reporting** > [Resource consumption analysis](#) . The [Resource consumption analysis](#) dialog opens.
2. Select one or multiple diagrams to include in the report.
3. You can select the following options:
  - Use merged cells in output spreadsheet
  - Export file as XLS (Excel 97)
4. Choose [Next](#). The [Quantitative analysis](#) dialog opens.
5. Select the report mode. The following report modes are available:
  - Process cost analysis: Calculates the process costs (€ per cost center) based on the execution frequency and costs per activity. You can also select the [Use resource consumption attributes for the calculation \(if provided\)](#) option. Read the [Process cost analysis report \[page 309\]](#) for more information.
  - Resource consumption analysis: Calculates the resource consumption (hours per resource) based on the execution frequency and execution time per activity.For the purpose of these steps the [Resource consumption analysis mode](#) is selected.
6. Select the [Include subprocesses in calculation](#) option if required.
7. Choose [Next](#).
8. Add further information for the resource calculation. The following options are available:
  - Personal allowance time (% of total work time)
  - Technical allowance (% of total work time)
  - Nominal value of work days / year
  - Nominal value of work hours / day

9. Select the [Save for future calculation](#) options if you want to use the personal and nominal values in a future calculation.
10. Choose [Start Calculation](#).  
If there are structural or logical mistakes in the diagrams, the system informs you. If errors occur, the program asks you to go back to check the diagram in the editor. Choose [Open diagram](#) to open the diagrams in the editor to correct any logical mistakes, structural mistakes, and errors.
11. If there are no errors, the Resource consumption analysis report generates. Choose [Please click here to open the Excel file](#) to download the report. The file is saved to your browser's download folder.  
This Excel file contains the analysis. The values are based on functions, so changing one value may change the values in other fields accordingly.  
If multiple diagrams were included in the report, one new tab will be created for each diagram in the Excel file. An additional [Sum](#) tab is created as a front page that shows the data for the processes.

## 17.14 User/Group Assignment Report

The user/group assignment report generates a list of users and their group memberships in your workspace. The users and groups displayed in the report are pulled from the users and groups defined in the User Management .

### Note

To generate a user/group assignment report, you need to be a workspace administrator.

For each user, the report lists all user groups the user is a member of as a [direct member](#). If a user is a member of group and that group is a member of a group listed in the report they are listed as an [indirect member](#).

- Open the explorer and choose ► [Reporting](#) ► [User/Group assignment](#) ▾  
The user/group assignment report generates. The file is saved to your browser's download folder.

## Related Information

[Manage Users and Groups](#)

## 17.15 Viewing Governance Reports

### Note

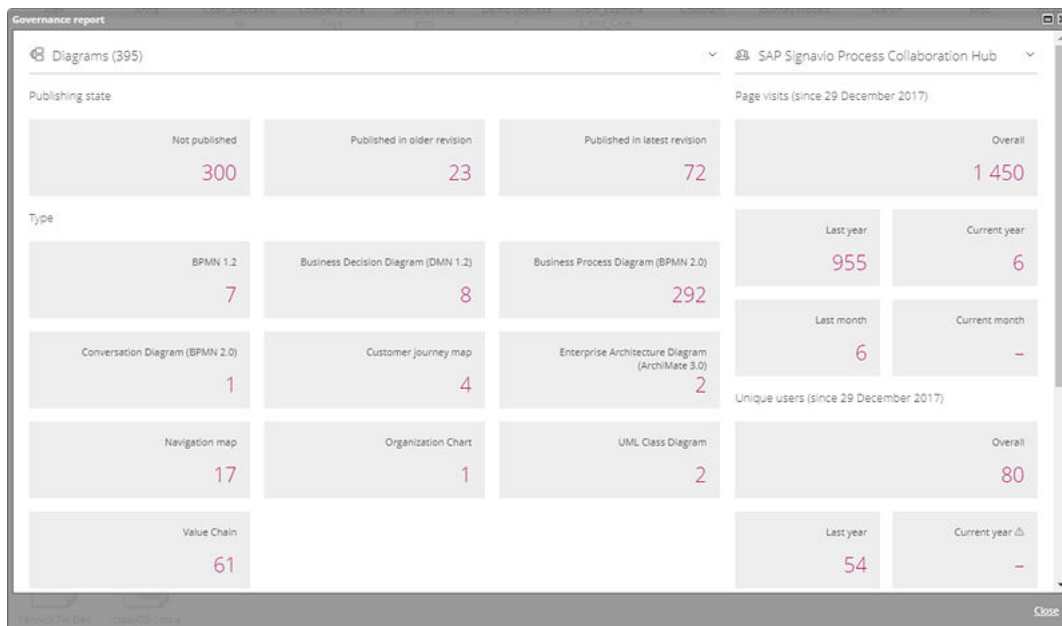
Access to this feature depends on your license. For more information, contact your workspace administrator.

## Note

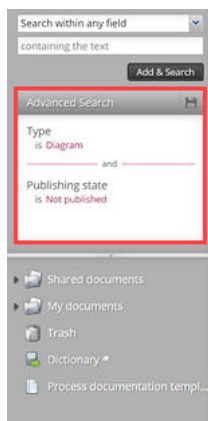
You need an administrator account to use this function.

The governance report provides an overview of the user activity in your workspace. You can view aggregate metrics (for example, the number of unpublished diagrams). You can use these metrics to draw conclusions regarding the success of your process modeling initiative.

1. Open the explorer and choose **Reporting > Governance report**.  
The *Governance report* dialog opens.
2. Each tile displays a different usage metric.



3. Select the required tile to access detailed information.  
A new browser tab opens and displays the results list of an advanced search filter corresponding to the selected usage metric.



## The Governance Report's Usage Metrics

### ⚠ Caution

The aggregates in the governance reports also consider diagrams you don't have permission to access. Your current access rights are taken into account for the linked search.

In the overview, the following usage metrics are available:

Data	Description
<b>Diagrams</b>	<p>The total number of diagrams in your workspace displays in brackets.</p> <p>The number of diagrams grouped by <i>publishing state</i> and <i>type</i> (for example, value chain, and organization chart) is shown in each corresponding tile.</p>
<b>Comments</b>	<p>The total number of existing comments displays in brackets.</p> <p>The number of comments grouped by <i>commenting state</i> is shown in each corresponding tile.</p>
<b>Dictionary items</b>	<p>The total number of existing dictionary items displays in brackets.</p> <p>The number of dictionary items grouped by <i>publishing state</i> and <i>dictionary category type</i> (for example, events, and requirements) displays in each corresponding tile.</p>
<b>Files</b>	<p>The total number of existing files displays in brackets.</p> <p>The number of file grouped by <i>publishing state</i> and the <i>type</i> (for example, PDF , and JPG) displays in each corresponding tile.</p>

Data	Description
SAP Signavio Process Collaboration Hub	<p>The number of <i>Page visits</i> represent a single user opening any published object (diagram, file, or Dictionary item) in SAP Signavio Process Collaboration Hub. Every time someone opens one of these items in SAP Signavio Process Collaboration Hub, it's counted as a view and displays in the report.</p> <p>Time ranges are based on calendar month and year, starting from the first day of the previous month at 00:00:00 and counting up until the last day of the current month at 23:59:59. Times are based on local server time. On an EU server, it's in CEST, on an US server it's in EST and on an Australian server it's in AEST.</p> <p><i>Unique users</i> refers to the total amount of visitors to SAP Signavio Process Collaboration Hub in the given time span. It only displays once more than 10 users have accessed SAP Signavio Process Collaboration Hub, due to data protection. If a single user visits SAP Signavio Process Collaboration Hub several times in the given time span, only their first visit is reflected in the unique users count.</p>

## 17.16 Workspace and Process Model Usage Reports

Learn how to view and export reports analyzing your workspace and process model usage with [Process Model Dashboards](#).

### Note

To access [Process Model Dashboards](#), you need to have workspace administration privileges.

[Process Model Dashboards](#) are pre-defined dashboards accessible within SAP Signavio Process Collaboration Hub. These dashboards use the data from SAP Signavio Process Manager to provide you with detailed analysis of your workspace and process model usage.

You can add filters to your data, and export your reports as CSV files.

Learn more in section [Process Model Dashboards](#) in the SAP Signavio Process Collaboration Hub user guide.

# 18 SAP Signavio Value Accelerators

SAP Signavio Value Accelerators specific for a theme (such as product or industry) may include one or a combination of the following:

- Best-practice process models
- Business capability and solution maps
- Benchmarks, metrics, and dashboards
- SAP best-practice and product-innovation recommendations
- Thought leadership papers, how-to manuals, and videos
- Connectors, integrations, data transformation templates, and other technical enablers

## ⓘ Note

Using value accelerators is optional and not part of the business functionality of the products of SAP Signavio Process Transformation Suite. Value accelerators are subject to change and may be changed, discontinued, or replaced by SAP at any time for any reason without notice.

You can access value accelerators in the value accelerator library for SAP Signavio solutions.

## Related Information

[Value Accelerator Library for SAP Signavio Solutions](#)

## 18.1 Value Accelerator Library for SAP Signavio Solutions

The value accelerator library for SAP Signavio solutions, an embedded platform within SAP Signavio Process Transformation Suite, functions as a central repository for value accelerators.

With the value accelerator library, you can explore available value accelerators, install them in SAP Signavio Process Intelligence, SAP Signavio Process Manager, SAP Signavio Process Modeler, or SAP Signavio Journey Modeler and tailor them as per your needs in your workspace.

## ⓘ Note

Using value accelerators is optional and not part of the business functionality of the products of SAP Signavio Process Transformation Suite. Value accelerators are subject to change and may be changed, discontinued, or replaced by SAP at any time for any reason without notice.

## Required Licenses to Access Value Accelerator Library

The library is accessible from within SAP Signavio Process Collaboration Hub. For more information, see [Required Licenses and Authorization](#).

## Related Information

[Value Accelerator Library for SAP Signavio Solutions](#)

## 18.2 Accessing and Deleting Installed Accelerators in SAP Signavio Process Manager



Learn how to access the content that was imported from the value accelerator library into SAP Signavio Process Manager and how to delete it.

### Finding Installed Value Accelerators

1. Log into SAP Signavio Process Manager.  
The *Shared documents* screen appears with the list of folders.
2. Open a folder.

#### Note

By default, the newly created processes are displayed first in the list. The sorting indicator next to the *Last change* column name uses the process creation date and time to determine the ascending or descending order of the list.

3. Select  next to the *Last change* column name to view the processes from oldest to newest.
4. Select  next to the *Last change* column name to view the processes from newest to oldest.


For more information about the explorer, see [Explorer Overview](#).

### Deleting Installed Value Accelerators

To delete entities that were installed with a value accelerator in SAP Signavio Process Manager, you have the following options:

- Delete a process model or folder  
For more information, see [Working with Folders and Diagrams](#).

- Delete dictionary categories  
For more information, see [Recommendations: Dictionary Content Management](#).
- Delete dictionary entries  
For more information, see [Recommendations: Dictionary Content Management](#) and [Working with the Dictionary](#).
- Delete custom attribute definition  
For more information, see [Add and Manage Custom Attributes](#).
- Delete a file (document or picture)  
For more information, see [Upload Documents and Pictures](#).
- Delete custom graphics  
For more information, see [Custom Graphics](#).

See also SAP Note [3493063](#) 

### Note

After you've deleted a value accelerator from your workspace, all entries referring to previous installations or installation attempts will still be displayed in the SAP Signavio Process Collaboration Hub settings under [Installed Accelerators](#).

# 19 Importing

This section discusses how to share diagrams and dictionary entries using import features:

- [Import a SAP Signavio archive \(SGX\) file \[page 318\]](#)
- [Import a BPMN 2.0 XML diagram \[page 319\]](#)
- [Import the APQC Process Classification Framework \[page 320\]](#)
- [Import a ARIS Markup Language \(AML\) diagram \[page 323\]](#)
- [Import a Microsoft Visio diagram \[page 323\]](#)
- [Upload documents and pictures \[page 324\]](#)
- [Import dictionary entries \[page 327\]](#)

For export features, read the [Exporting \[page 330\]](#) section.

## 19.1 Import an SAP Signavio Archive (SGX) File

### ⓘ Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

With this feature you can import diagrams that were exported as SAP Signavio archive (SGX) to your workspace.

The following applies:

- You can add dictionary entries to the dictionary or merge with existing entries. You can also import custom attributes and modeling language configurations.
- You can only run one import at a time in a workspace. When trying to run an import, all users in a workspace with the necessary rights can see if an import is in progress.
- There is a 500 MB import file size limit.
- On the *History* tab of the import dialog, you can view the details of the last 50 imports, for example the import time, the import status, and which items imported successfully.

### → Tip

If an import runs longer than 20 minutes, it is aborted. We recommend transferring larger packages as value accelerators, see section [Transferring a Value Accelerator](#) .

## Importing a SAP Signavio Archive (SGX) File

Follow these steps:

1. Open the explorer and choose **Import / Export > Import SAP Signavio archive (SGX)**. The *Import Signavio archives (SGX)* dialog opens.
2. On the *Import* tab, choose *Choose File* and select the archive you want to import.
3. You can customize the import with the following options:

Options	Notes
Import contained Files/Pictures	If you disable this option, no linked documents and files are imported.
Import dictionary entries	
Overwrite existing dictionary entries with the same title	
Import custom attributes and modeling language configurations	This option is only available for administrators.
Import custom graphics	<ul style="list-style-type: none"><li>• This option is only available for administrators.</li><li>• If you disable this option, default graphics are used in the diagrams.</li></ul>

4. Confirm with *Import*.  
The diagrams and folders imports into your workspace.

### Note

Import an SAP Signavio archive (SGX) file containing all the process models of a package that is published on SAP Signavio Process Explorer, read more in SAP Note [3329491](#).

## Related Information

[Export a Diagram as a SAP Signavio Archive \(SGX\) \[page 334\]](#)

## 19.2 Import a BPMN 2.0 XML Diagram

### Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

The BPMN 2.0 standard includes an XML notation and enables the platform with independent exchange of BPMN 2.0 diagrams. To get more information about the BPMN 2.0 specifications, go to <https://www.bpmn.org>.

You can update your BPMN 2.0 model by importing a new XML file. The import updates each process and subprocess in your model, and creates a new diagram if a subprocess doesn't exist.

To import a BPMN 2.0 XML diagram, follow these steps:

1. Open the explorer and choose **Import / Export > Import BPMN 2.0 XML**.  
The *Import BPMN 2.0 diagrams from .bpmn files* dialog opens.
2. Choose *Choose File*.
3. Select a XML file that complies with the BPMN 2.0 XML standard.  
The diagram imports.

## Import Errors and Warnings

If the imported file is not standard-compliant, the system displays errors and warnings. Some elements won't import due to errors in the BPMN 2.0 XML file.

- *Errors* prevent the diagram from importing.
- *Warnings* display which diagram elements won't be available after the import. Diagrams with warnings still import.

Each element requires bpmndi information such as process flow and graphical information.

Elements with no bpmndi information still import but display warnings. For example, if an element doesn't contain graphical information during import, the import completes but elements without the graphical information are excluded from the import.

Opening a diagram with warnings after import can contain missing elements.

Sometimes the import of BPMN 2.0 XML files is impossible due to errors unknown to the system. For example, the imported file isn't a valid BPMN 2.0 XML. For further assistance, proceed as follows:

Contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

## Related Information

[Export a Diagram as a SAP Signavio Archive \(SGX\) \[page 334\]](#)

## 19.3 Import the APQC Process Classification Framework

With this feature, you can import APQC frameworks into your workspace.

### Note

This feature is only available on request.

For more information, you as an S-user can contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

## The Representation of the APQC Framework in SAP Signavio Process Manager

The hierarchy structure of the APQC framework is represented by a folder tree in SAP Signavio Process Manager.

Once the import is done, every element in the sheet "Combined" is represented in the workspace in different forms (depending on the hierarchy level of the element):

- level 1 (X.0): a folder and inside of it a value chain with the same name including / linking to all direct child elements
- level 2 (X.X): a folder and inside of it a value chain including / linking to all direct child elements
- level 3 (X.X.X): depending on whether the hierarchy for this part goes down to level 4 (only one more level of direct children) or level 5 (two more levels)
  - stops at level 4: a BPMN diagram including all direct child elements as activities
  - stops at level 5: a folder and inside of it a value chain including / linking to all direct child elements
- level 4 (X.X.X.X): depending on whether the hierarchy for this part goes down to level 4 (no more children) or level 5 (one more level of child elements)
  - stops at level 4: activity elements in a BPMN model (see above)
  - stops at level 5: a BPMN diagram including all direct child elements as activities
- level 5 (X.X.X.X.X; optional): activity elements in a BPMN model (see above)
- A single, top-level value chain is created linking to all imported level 1 value chains.

The diagram's *Description* attribute contains the corresponding APQC glossary term.

If you already have a workspace, proceed as follows:

Contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

## Import Requirements

To import a framework as an Microsoft Excel spreadsheet, the spreadsheet must have a specific structure. Official APQC files always already have this structure, but custom documents might need adjustments.

The following requirements apply:

- The file needs to include a sheet called **Combined** which contains the list of folders and diagrams to be created
- The first three columns of this sheet need to represent the following information in this exact order:
  - PCF ID, Hierarchy ID, and Name
- These first three columns need to have non-empty values in all rows to be imported

	Hierarchy			Difference		Metrics
1	PCFID	ID	Name	Index	Change details	available?
2	10002	1.0	<b>Develop Vision and Strategy</b>	8		Y
3	17040	1.1	Define the business concept and long-term vision	1		N
4	10017	1.1.1	Assess the external environment	1	+21421	Y
5	19945	1.1.1.1	Identify competitors	0		N
6	10021	1.1.1.2	Analyze and evaluate competition	0		N
7	21421	1.1.1.3	Identify potential product or service substitutions	1	NEW	N
8	10022	1.1.1.4	Identify economic trends	0		N
9	10023	1.1.1.5	Identify political and regulatory issues	0		N
10	10024	1.1.1.6	Assess new technology innovations	0		N
11	10025	1.1.1.7	Analyze demographics	0		N
12	10026	1.1.1.8	Identify social and cultural changes	0		N
13	10027	1.1.1.9	Identify ecological concerns	0		N
14	16790	1.1.1.10	Identify intellectual property concerns	0		N
15	16791	1.1.1.11	Evaluate IP acquisition options	0		N
16	10018	1.1.2	Survey market and determine customer needs and wants	0		Y
17	10028	1.1.2.1	Conduct qualitative/quantitative research and assessments	0		N
18	19946	1.1.2.2	Capture customer needs and wants	0		N
19	19947	1.1.2.3	Assess customer needs and wants	0		N
20	10019	1.1.3	Assess the internal environment	0		N
21	10030	1.1.3.1	Analyze organizational characteristics	0		N
22	19948	1.1.3.2	Analyze internal operations	0		N
23	10031	1.1.3.3	Create baselines for current processes	0		N
24	10032	1.1.3.4	Analyze systems and technology	0		N

## Import an APQC Spreadsheet

To import the APQC framework into your workspace, follow these steps:

1. Download the framework as a Microsoft Excel spreadsheet from the [APQC web site](#) . Modify the spreadsheet as required.
2. Open the explorer and choose **Import/Export > Import APQC Excel** . The *Import APQC diagram structure from .xls file* dialog opens.
3. Choose *Choose File* and select an APQC framework Excel spreadsheet.
4. Choose *Import*.

### Note

The framework imports into the folder that is selected in the explorer.

The import can take several minutes.

Now, you are able to use the APQC framework as the beginning of your business process management initiative in SAP Signavio Process Manager.

## 19.4 Importing an ARIS Diagram

Learn how to import diagrams from ARIS Markup Language (AML) into your workspace.

### Context

#### ⓘ Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

This feature is available on request.

The ARIS modeling interface uses AML to create the XML export format compatible with SAP Signavio Process Manager. Using AML XML files, you can import the following diagrams types into your workspace:

- Event-driven Process Chain (EPC)
- Organization chart
- Value chain

### Procedure

1. Open the explorer and choose **Import /Export > Import ARIS markup language**.

The *Import diagrams from AML file* dialog opens.

2. Select *Choose File* and select the AML XML file you want to import.

#### ⓘ Note

The following restrictions apply for a successful import:

- A single import file does not exceed 30 MB. (Compressed ZIP archives are supported.)
- A single import file contains no more than 100.000 XML entity expansions.
- BPMN models are not supported.

3. Confirm with *Import*.

## 19.5 Import a Microsoft Visio Diagram

#### ⓘ Note

This feature is only available on request.

For more information, you as an S-user can contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

To import Visio diagrams, follow these steps:

1. Open the explorer and choose **Import / Export > Import Visio**.
2. Choose *Choose Files* and select the Visio files for import.
3. Select the notation the files use.

#### Note

The importer supports VDX, VSD, VSDX files, and ZIP archives that contain such file types. Elements that are not part of the BPMN 2.0 standard are excluded.

4. Choose *Import*.

The Visio diagrams imports into your workspace.

## 19.6 Upload Documents and Pictures

You can upload documents and pictures into your SAP Signavio file storage.

These files can be linked to diagrams and, when published in SAP Signavio Process Collaboration Hub, are available to team members who have read access.

### Limitations

Embedding images that are not accessible to all users can display as broken image links when viewed without the necessary permissions or log-ins.

We recommend to embed images only as follows:

- As unlisted images (with hidden names and implicit authentication tokens, HTTPS only)  
Example URL: `https://external.domain.com/files/hidden-file-name-nobody-guesses?possibleToken=123nekot321`
- As publicly hosted images (without access or authentication restrictions, HTTPS only)  
Example URL: `https://external.domain.com/files/my_image.png`

#### Note

When you host images externally, be aware that these image can possibly be accessed by third parties.

## Considerations

If the SAP Signavio file storage is enabled for your workspace, its size and the maximum upload file size are displayed in the [workspace configuration](#) dialog accessible via the top drop-down menu of the Explorer in the header [Setup](#). To configure those limits according to your requirements, proceed as follows:

Contact SAP Support by creating a support case in SAP for Me. For more information, see [Reporting an Issue](#) in the *SAP Signavio Support Guide*.

If the file quota is exhausted or the size limit for a single file is exceeded, a warning displays.

In those cases, you can try to upload a smaller version of the file or delete unused pictures or documents from your file storage. To increase your storage space, please contact your workspace administrator.

## Uploading a Document or Picture to the SAP Signavio File Storage

To upload a document or picture file, follow these steps:

1. In the explorer, choose [Import / Export](#) > [Upload document/picture](#) .  
The [Choose or upload a file/picture](#) dialog opens.
2. Choose [Choose File](#) to search for the file you want to upload.

### Note


- Take note that there must be enough free space left in your file storage to upload the whole file.  
The total space for file storage is 10 GB.
- Make sure not to exceed the maximum single file size.  
The maximum single file size is 32 MB.
- These file size limits cannot be adjusted.

3. Choose [Save to](#) and select [Choose a different folder](#).  
Select a folder in your workspace. After selecting the new target folder, click [OK](#).
4. Confirm with [Save](#).

The document or picture is uploaded into your workspace.

## Editing a File Name

To edit the name and description of a file after upload, follow these steps:

1. Choose [Edit](#) > [Change name/description](#) .  
The [Change name/description](#) dialog opens.
2. Add a new file name and description. Choose [Change name/description](#).

## Updating a Document or Picture

You can update a file in the SAP Signavio file storage by uploading a newer version of the file. Each link to this file opens the updated version as well.

To update a picture or document, follow these steps:

1. Select a picture or document.
2. Choose ► *Import / Export* ► *Update picture* ► or *Update document*.  
The *Update picture* or *Update document* dialog opens.
3. Choose a file, then select a folder from the drop-down menu.
4. Select a recent folder or a different folder.
5. Select a folder in your workspace. After selecting the new target folder, choose *OK*.
6. Confirm with *Save*.

The file is updated.

## Deleting Documents and Pictures

To delete a document or picture, follow these steps:

1. In the main area of the explorer, select the document or picture to be removed. To select multiple files, keep Ctrl pressed while selecting, or drag a selection frame around them.
2. In the menu bar, select ► *Edit* ► *Delete* ►, and confirm the deletion.

### Note

The selected files are moved only in the explorer trash, from which you can restore them if necessary. Files will be permanently deleted after you empty the trash.

3. To delete files permanently, select the *Trash* folder in the folder navigation.
4. Select the files you want to delete permanently.
5. In the menu bar, select *Remove*.
6. Confirm by selecting *Yes*. The selected items are permanently deleted.

## Downloading Documents and Pictures

To download a document or picture, follow these steps:

1. Select the document or picture in the explorer.
2. Choose ► *Import / Export* ► *Download document* ► or *Download picture*.
3. The document or picture is downloaded and saved in the browsers download folder.

## Supported File Types

You can upload the following file types:

- doc
- docx
- ppt
- pptx
- xls
- xlsx
- odt
- ogg
- zip
- rar
- pdf
- audio/mpeg
- audio/ogg
- image/gif
- image/apng
- image/flif
- image/webp
- image/x-mng
- image/jpeg
- image/png
- multipart/form-data
- text/css
- text/csv
- text/php
- text/plain
- text/xml

## 19.7 Import Dictionary Entries

You can import dictionary entries from Microsoft Excel files (XLS or XLSX) to add multiple entries at once or to update existing entries. The import can't be used to delete existing entries from the dictionary.

In a workspace, it's not possible to perform multiple imports simultaneously. If you start an import while another user is running one, the import tool shows a message and you have to wait until the other import is finished.

## Note

The import is limited to 500 records per Excel spreadsheet. Importing a file with more than 500 records, causes the import to fail. If you need to import more than 500 entries, you can distribute the data over multiple sheets in one file or split up the data to create multiple files.

Below is an example of an Excel file that contains dictionary entries:

	A	B	C	D
1	Title en_us	Def en_us	Title de_de	Def de_de
2	ACME AG	A company that manufactures everthing.	ACME AG	Eine Firma, die alles herstellt.
3	Creditor	A creditor, which is documented in the ERP system and utilized when triggering the procurement process.	Kreditor	Kreditor, der im ERP-System hinterlegt ist und der bei der Auslösung einer Bestellung verwendet werden kann.
4	Purchasing	Department for the central procurement of common goods.	Zentraleinkauf	Abteilung für die Zentrale Beschaffung von Gütern für den Verbrauch.
5				
6				
7				
8				

Organizational Units | Documents | Activities | IT Systems | +

For the Excel file structure, the following applies:

### Spreadsheet

A spreadsheet can contain entries for only one category of the dictionary, no matter if main or subcategory. This means that for each dictionary category, you must import the entries individually.

If a file has multiple spreadsheets, all of them need at least a header column.

### Column header

The column header contains the dictionary attributes. You can choose any names for the headers. During the import process, you map the columns to the dictionary attributes.

If your dictionary entries are multilingual, we recommend adding language codes to all column headers as language codes make the mapping easier for you.

The import tool interprets the first row with text as the header.

You must start your dictionary file with the first column and fill in at least three columns. If you fill fewer columns with a header or have empty columns in between, the import fails.

### Rows


Rows contain the actual dictionary entries and the information you want to add, for example descriptions or statuses.

You can either create such a file or you export available dictionary entries and use the export file as a template. Read more about exporting dictionary entries in the section [Export dictionary entries \[page 330\]](#).

To import dictionary entries, follow these steps:

1. In the explorer, choose *Dictionary*.
2. Choose **► Import / Export ► Import Excel ▾**.  
The *Import Excel* dialog opens.
3. Choose *Choose File*.
4. Select the file you want to import from the file selection dialog and choose *Open*.
5. Choose *Import*.  
The import mapping dialog opens.
6. In the first section, select an import mode:
  - Update existing entries only, ignore other rows
  - Create new entries for all rows
  - Update existing entries and create new ones
7. In the second section, select the spreadsheet you want to import and the dictionary category.
8. In the third section, which is active when updating entries, map the Excel column and the dictionary entry attribute, which are used to identify existing entries.
9. In the fourth section, map the file headers with the dictionary attributes.
10. Choose *Import*.  
When all entries are imported, you're prompted with a summary including a download link to the imported Excel file, which additionally contains the import details. Open this file to verify the changes made by the import. Once you've closed this prompt, the import of dictionary entries completes.

#### Note

More troubleshooting information in SAP note [3240904](#)

## Related Information

[Export Dictionary Entries \[page 330\]](#)

# 20 Exporting

List of all export functions, for diagrams (export as PDF, export as image, export as SAP Signavio archive(SGX), export as XML) and for dictionary entries.

In this section, it is described how to share diagrams and dictionary entries using the export functions:

- [Export dictionary entries \[page 330\]](#)
- [Export a diagram as PDF \[page 331\]](#)
- [Export a diagram as an image \[page 333\]](#)
- [Export a diagram as a SAP Signavio archive \(SGX\) \[page 334\]](#)
- [Export a BPMN diagram as XML \[page 335\]](#)
- [Export a diagram as XML \[page 336\]](#)
- [Export a DMN diagram as XML \[page 336\]](#)
- [Exporting DMN diagrams as drools rules \[page 338\]](#)
- [Exporting diagrams to Red Hat Decision Manager projects on GitHub \[page 341\]](#)

For the import functions, read more in section [Importing \[page 318\]](#).

## 20.1 Export Dictionary Entries

How to export all dictionary entries or a specific entry set from the dictionary to an Excel file.

You can export dictionary entries to an Excel file, for example to print them, for offline review, or for further processing in third-party systems.

If you want to import dictionary entries from an Excel file to your workspace, read more in section [Import dictionary entries \[page 327\]](#).

### Partial Export

To export specific dictionary entries, follow these steps:

1. Before you start the export, select the entries you want to export in the dictionary  
You can export the following entry sets:
  - All entries in a category.
  - All entries in a category that begin with a specific letter.
  - All entries that are returned by a search.
2. Choose **Import / Export > Export Excel**.
3. Select an export option. It depends on your previous selection which option is available:
  - [Export the entire dictionary](#)

- [Export entries with the selected initial in the current category](#)
  - [Export the current category](#)  
This option is selected by default.
  - [Export the current search result](#)
4. If multiple languages are set up for the workspace, select the language for the export.  
For each language, you must run an individual export.
  5. Choose [Export Excel](#).  
The dictionary entries are exported. The file is saved to your browser's download folder.

## Completing Export

### Note

In one Excel export you can export 300.000 dictionary items. If your complete dictionary contains more than 300.000 entries, we recommend to split the export by exporting entries per dictionary category.

To export the entire dictionary, follow these steps:

1. In the explorer, open the dictionary.
2. Choose ► [Import / Export](#) ► [Export Excel](#) 📄.
3. Select the option [Export the entire dictionary](#).
4. If multiple languages are set up for the workspace, select the language for the export.  
For each language, you must run an individual export.
5. Choose [Export Excel](#).  
The dictionary entries are exported. The file is saved to your browser's download folder.

## 20.2 Export a Diagram as PDF

How to export one or more diagrams and folders as PDF to share with colleagues or keep track of the current status.

With this function, you can export a diagram as a PDF file from the explorer.

You can either select a single diagram for export, or a folder. When selecting a folder, all diagrams contained are combined into one PDF document.

To export diagrams, follow these steps:

1. In the explorer, select the diagram or the folder you want to export.  
You can change your selection via the export options described below.
2. In the toolbar, choose ► [Import / Export](#) ► [Export PDF](#) 📄.  
The export configuration dialog opens.
3. Configure the export. Read more in section [Export options \[page 332\]](#).
4. If you want to save your export configuration as default for your workspace, enable [Save as defaults](#) at the bottom of the dialog.

### Note

- You need an administrator account to have this option available.
- The export configuration is only saved when you export a PDF. If you cancel the export, your settings aren't saved.

#### 5. Choose *Export*.

The PDF is exported. The file is saved to your browser's download folder.

To export a diagram as PDF from the editor, use the print function in the toolbar. Read more in section [Editor toolbar and keyboard shortcuts \[page 40\]](#).

## Export options

In the *General* section, the following options are available:

- *Language*  
If multiple languages are set up for the workspace, select the language for the diagram you want to export.
- *Print in black and white*  
Specify whether to print the diagram in color or black and white.
- *Show additional information*  
Enable this option if you want to add printing attributes to the PDF document, for example the author, creation date, or page number. You can also add diagram attributes.  
The preview area shows how many attributes you can add and where they are positioned.  
To add diagram attributes, choose *Own attribute* and select up to 3 diagram attributes for each attribute position.
- *Paper size*  
Select a paper size for your PDF. The default is set to the international standard size A4.
- *Stretch small diagrams to whole page*  
Specify whether small diagrams are enlarged to fit the full page.

In the *Logo* section, the following options are available:

- *Logo*  
Add a custom logo. You can upload a new file or choose an image that already exists in your workspace.  
The maximum size for a logo file is 5 MB.
- *Use original size*  
Specify whether to use the original size of the image file.

In the *Orientation* section, the following options are available:

- *Landscape* or *Portrait*  
For the PDF pages, select landscape orientation or portrait orientation.
- *Diagram rotation*  
Specify whether the diagram rotation is managed automatically or not.  
With *Automatic*, the internal diagram rotation is used.  
With *Always*, the diagram rotation you choose below is used.  
With *Never*, the diagram isn't rotated.
- *Diagram orientation*

If you've selected *Always* for the diagram rotation above, select whether to rotate the diagram clockwise or counterclockwise.

In the *Distribution* section, the following options are available:

- *Single page* or *Multiple pages*  
Specify whether to have the diagram fitted to one page or, if necessary distributed over several pages. For printing on multiple pages, the diagram size and width will be automatically adjusted to the paper size.

In the *Attribute visualization* section, the following options are available:

- *Rule sets*  
Select which attributes should be visible.
- *Risks and controls*  
Specify whether to show the configured attributes for risks and controls.
- *Show attachment icon*  
Specify whether to mark attachments by adding a paper clip icon.

In the *Selected diagrams* section, the following option is available:




- Choose *Configure* to add diagrams to your export or remove them.
- If different views exist for the diagram, click *Select a view* to select the view you want to export. By default, the original view is selected.

## 20.3 Export a Diagram as an Image

How to export a diagram as an image in PNG or SVG format to share it with colleagues or embed it in documents.

In the explorer, there are two export functions that transform diagrams into images: The PNG export creates pixel graphics, the SVG export creates vector graphics.

To export diagrams, follow these steps:

1. In the explorer, select the diagram you want to export.
2. In the toolbar, choose  *Import / Export*  *Export PNG (pixel graphics)*  or *Export SVG (vector graphics)*.  
The export configuration dialog opens.
3. Configure the export. Read more in section [Export options \[page 334\]](#).
4. Choose *Export*.  
The image is exported. The file is saved to your browser's download folder.

If you want to embed the image of a diagram in web pages, which means the image updates automatically with each change on the diagram, read more in section [Embed a diagram as an image \[page 363\]](#).

## Export options

In the export configuration dialog, the following options are available:

- [Language](#)  
If multiple languages are set up for the workspace, select the language for the diagram you want to export.
- If different views exist for the diagram, select the view you want to export. By default, the original view is selected.

## 20.4 Export a Diagram as a SAP Signavio Archive (SGX)

How to export diagrams and folders to a SAP Signavio archive file, in SGX format, to exchange diagrams between multiple workspaces.

### Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

With this function, you can export one or more diagrams as a SAP Signavio archive from the explorer.

SAP Signavio archives, these are SGX files, allow you to exchange diagrams and folders between workspaces. SGX is a SAP Signavio-specific file format, which can't be used by third-party systems.

We recommend to use the SGX export only to exchange diagrams between different workspaces. If users are registered in the same workspace, use the shared documents folder and collaboration functions to work together on diagrams. Read more in [Working with folders and diagrams \[page 26\]](#) and [Collaboration \[page 275\]](#).

To export diagrams, follow these steps:

1. In the explorer, select the diagram or folder you want to export.
2. In the toolbar, choose **► Import / Export ► Export SAP Signavio archive (SGX) ▼**.  
The export configuration dialog opens.
3. Select more diagrams or folders if you want.
4. Specify whether to export the latest or all revisions of diagrams with *Export only the latest revision of each diagram*.
5. Choose *Export*.  
Your selection is exported. The file is saved to your browser's download folder.

## 20.5 Export a BPMN Diagram as XML

How to export a BPMN 2.0 diagram as an XML file to exchange it between multiple workspaces.

### Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

With this function, you can export a BPMN 2.0 diagram as an XML file from the explorer.

The BPMN 2.0 standard includes an XML notation which enables the platform-independent exchange of BPMN 2.0 diagrams. For more information about this XML standard or the BPMN 2.0 specifications, go to <https://www.bpmn.org>.

You can export the following diagram types to BPMN 2.0 XML:

- business process diagrams (BPMN 2.0)
- conversation diagrams (BPMN 2.0)
- choreography diagrams (BPMN 2.0)

If you want to export diagrams of other modeling notations, use the XML export as described in section [Export a diagram as XML \[page 336\]](#).

To export diagrams, follow these steps:

1. In the explorer, select the diagram you want to export.
2. In the toolbar, choose **Import / Export** > **Export BPMN 2.0 XML**.  
The export configuration dialog opens.
3. Configure the export. Read more in section [Export options \[page 335\]](#).
4. Choose **Export**.  
The XML file is exported. The file is saved to your browser's download folder.

### Export options

In the export configuration dialog, the following options are available:

- **Language**  
The language selected here is the language displayed as the default, all translations of standard attributes are exported.
- **Include linked subprocesses**  
Specify whether to also export linked subprocesses. If the same diagram is linked multiple times in a diagram, the export file contains this diagram multiple times.
- If different views exist for the diagram, select the view you want to export. By default, the original view is selected.

### → Remember

Translations of custom attributes are not exported. For translations of existing models and dictionary items we recommend importing and exporting PO files instead, as described here [Translate Content with PO Files \[page 342\]](#).

## 20.6 Export a Diagram as XML

How to export a diagram to an XML file to exchange it between multiple workspaces.

### ⓘ Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

With this function, you can export a diagram as an XML file from the explorer, for example for further processing in third-party systems.

### ⓘ Note

Use this export for diagrams of any modeling notation, except for BPMN 2.0 diagrams. If you want to export BPMN 2.0 diagrams, use the BPMN 2.0 XML export as described in section [Export a BPMN diagram as XML \[page 335\]](#).

The SAP Signavio-specific XML format produced by this export is a special form of RDF, the Resource Description Framework which is used for conceptual description or modeling of information that is implemented in web resources. You can use XML transformation tools to generate other XML formats from the export file.

To export diagrams, follow these steps:

1. In the explorer, select the diagram you want to export.
2. In the toolbar, choose **Import / Export** >> **Export XML** .  
The diagram is exported. The file is saved to your browser's download folder.

## 20.7 Export a DMN Diagram as XML

How to export a DMN 1.2 diagram as an XML file to exchange it between multiple workspaces.

### ⓘ Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

With this function, you can export a DMN 1.2 diagram as an XML file from the explorer.

The DMN 1.2 standard includes an XML notation. This notation enables the platform-independent exchange of DMN 1.2 diagrams. For more information about this XML standard or the DMN 1.2 specifications, go to <https://www.omg.org/spec/DMN/1.2> .

To export diagrams, follow these steps:

1. In the explorer, select the diagram you want to export.
2. In the toolbar, choose **Import / Export > Export DMN 1.2 XML** .  
The export file is created and prepared for download.
3. To download the export file, select the link [Click here to download the XML file](#).  
The file is saved to your browser's download folder.  
The file extension of the exported diagram is DMN.
4. Confirm with *OK*.  
The export is complete.

## Permitted element names

Names of all elements in the exported file, like decisions, inputs, or input items, can only contain alphanumeric characters (a-z, 0-9).

Other characters are automatically removed, for example underscores (\_) and dashes (-).

If the removal of characters would create a duplicate name, a number is appended to the new name.

## Customize the export

If dictionary entries are used as data input objects, you can add export names. This way, you can provide domain-specific vocabulary when executing the exported XML file.

- To add an export name, specify a technical name for the dictionary entry.

The field *Technical name* is not available by default in the dictionary. An administrator must enable the use for data modeling for the respective dictionary category. Read more in section [Managing input and output data for DMN Data Input elements](#).

The technical name is only used when exporting a DMN diagram as XML. In SAP Signavio Process Manager and SAP Signavio Process Collaboration Hub, the standard dictionary name is always used.

The rules for permitted element names also apply to the *Technical name*.

## Related Information


[Export DMN Diagrams as Drools Rules \[page 338\]](#)

## 20.8 Export DMN Diagrams as Drools Rules

How to export DMN diagrams as Drools (DRL files)

### Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

SAP Signavio Process Manager enables you to model decision logic with the easy-to-use editor and to subsequently export DMN diagrams as DRL files to transfer them into the open source business rules management solution Drools (<https://www.drools.org/> ). Thus, you can easily transfer DMN diagrams into automated business logic.

You can either export multiple diagrams, one diagram, or just one decision table and its sub-decisions. The Drools export supports four different export types: *Production*, *Development*, *Test*, and *Cases*. In contrast to *Production*, *Development* adds additional comments and logging behavior.

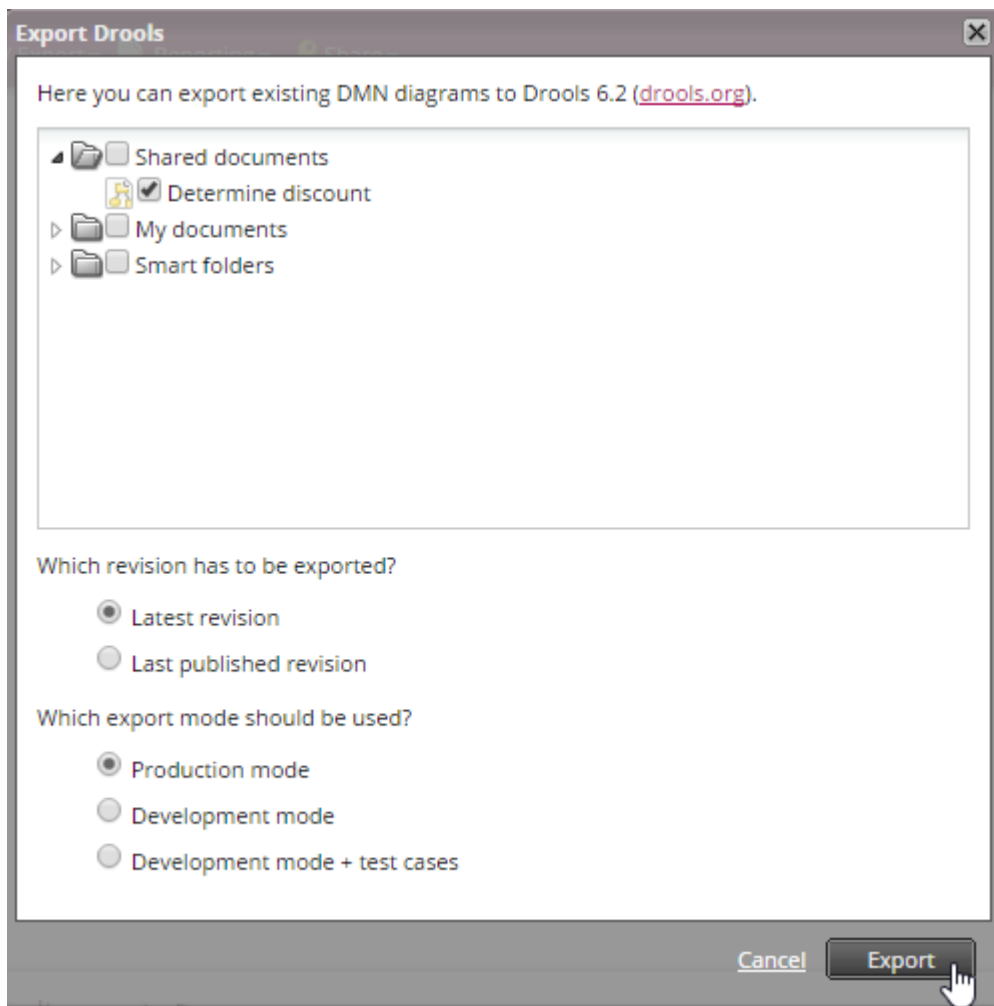
You can select which diagram revision to export.

Permissions for the Drools export can be limited to users of specific user groups.

To export decision logic to Drools, open the Explorer. Select one or multiple diagrams and go to *Import/Export*, then *Export Drools*.

Now you can adjust your selection and set the following export properties:

- *Export revision*  
You can choose whether to export the latest revision of the diagram that has been saved in the Editor or the latest revision that was published in SAP Signavio Process Collaboration Hub.
- *Export mode*
  - The option *Production mode* exports the decision logic to drools. It does not include comprehensive comments, support for detailed logging, and test cases.
  - *Development mode* provides additional comments and logging behavior.
  - *Development mode + test cases* provides additional test cases in the form of .csv files (one .csv file for each top level decision). The .csv files contain all combinations of all relevant sub-decisions.



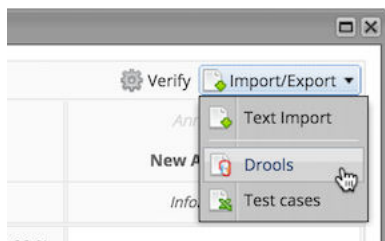
discount Subscribe to updates of this model.

In the export dialog, you can configure the export options in detail.

Choose *Export* to trigger the export process.

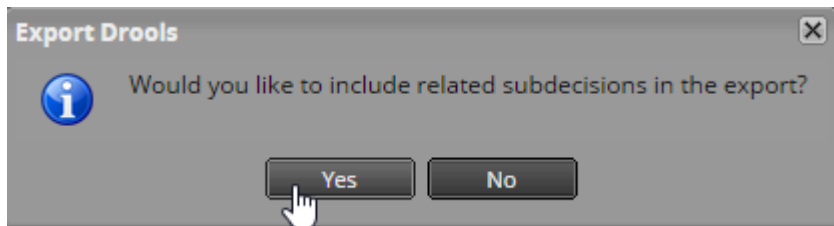
Alternatively, you can export a decision table and its sub-decisions directly from the Editor.

In the Editor, open a decision table and choose *Import/Export* in the top-right corner of the dialog. There you can choose between generating the Drools export or the test cases (as described above):



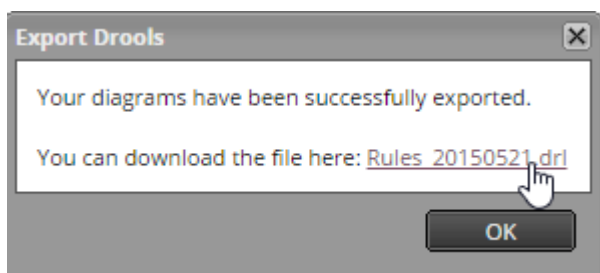
Click 'Import/Export' in the decision table dialog.

Before starting the export, you can choose whether to include related sub-decisions (if applicable):



Choose if you want to include related sub-decisions.

As soon as the files are generated, you can download them in you browser:



## Customize the Export

If dictionary entries are used as data input objects and data definitions, you can add information to export.

For that, an administrator must enable the use for data modeling for the respective dictionary category. Then, the configuration dialog for dictionary entries has two fields more to specify the information:

- Technical name
- Class name

### Note

If both names are set in one dictionary entry, only the class name is exported.

Both names are only used when exporting a DMN diagram as Drools rules. In SAP Signavio Process Manager and SAP Signavio Process Collaboration Hub, the standard dictionary name is always used.

Read how to enable the fields in section [Managing input and output data for DMN Data Input elements](#).

## Add Export Names to Data Input Objects

For dictionary entries that are used as data input objects, you can add export names. This way, you can provide domain-specific vocabulary when executing the exported DRL file.

- To add an export name, specify a technical name for the dictionary entry.

## Add Java Source References to Data Definitions

For dictionary entries that are used as data definitions, you can reference existing java sources. This way, you can integrate exported DMN Drools rules into existing execution environments.

- To add a reference, specify a class name for the dictionary entry, for example `com.signavio.dmn.example.DataDefinition`. The exported DRL file then contains an import statement, for example `import com.signavio.dmn.example.DataDefinition`.

## 20.9 Exporting Diagrams to Red Hat Decision Manager Projects on GitHub

### Note

Access to this feature depends on your license. For more information, contact your workspace administrator.

SAP Signavio allows you to export process and decision models directly to Red Hat Decision Manager projects at GitHub. Like this, you can seamlessly integrate diagrams that have been modeled with SAP Signavio into your Red Hat Decision Manager projects.

Process models are exported and uploaded as BPMN 2.0 XML files and all linked decision models are exported and uploaded as DRL files.

1. To start an export, select a BPMN diagram in the explorer and choose **Import/Export** > **Export RedHat files to GitHub**.
2. You need to select exactly one diagram. The export will include all linked DMN and BPMN diagrams.
3. In case you haven't configured the GitHub integration yet, you need to authorize SAP Signavio to push to your GitHub repositories.  
Otherwise, proceed at section [Pushing diagrams to Red Hat Decision Manager projects \[page 341\]](#).
4. Choose **Authorize**.
5. You are forwarded to GitHub, where you need to grant SAP Signavio permission to push to your repositories.
6. Re-enter your password to confirm. Upon successful authorization, the following page will be displayed. Now you can go back to the explorer and export the diagrams to GitHub.

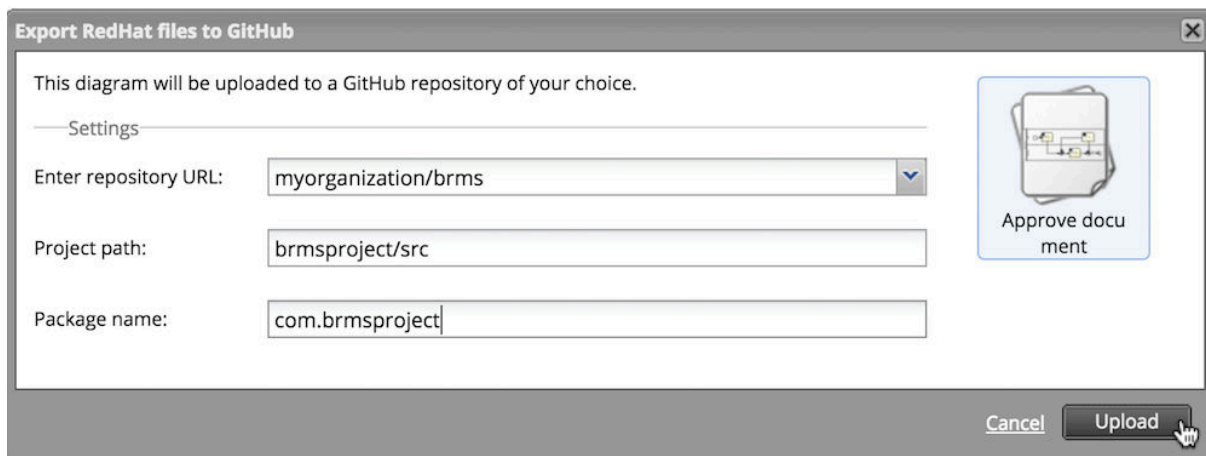
## Pushing Diagrams to Red Hat Decision Manager Projects

To start an export, select a BPMN diagram in the explorer and choose **Import/Export** > **Export RedHat files to GitHub**.

Now, configure the following parameters:

- The repository you want to push to
- The project path (within the repository)
- The name of the Java package that will be created

Choose [Upload](#) to push the files to your repository:



The files are pushed by your user to the default branch (for example `main`). The commit message is `signavio upload`.

An information dialog will inform you about the successful export.

## 20.10 Translate Content with PO Files

Export user-created content in your workspace, send it to translators and import the translated files.

### Note

Access to this feature depends on your license.

You can translate user-created content into all languages that are activated in your workspace.

You can translate content directly, as described in section [Translating diagrams \[page 290\]](#). You can also export the content to be translated outside of SAP Signavio Process Manager.

The following content can be exported for translating:

- regular and custom attributes of the following types:
  - single-line text
  - multi-line text
- diagram elements
- linked dictionary entries
- diagram names
- folder names

Not included in the export:

- names of multi-language custom attributes (their values are included)
- text formatting (the text itself is exported)
- nested links

The source language for all translations is always the default language of the workspace.

You export the content and send it to translators. To make the translation available in your workspace, you import the translated files.

## Exported Files

The files are exported as a ZIP archive.

The ZIP archive contains the following files:

Type	Number	Content	Created	Action
CSV	1	The file <b>summary.csv</b> lists all exported items.	Always	No action necessary
POT	1	The file <b>template.pot</b> contains all translatable strings in the default workspace language and their location in the content. It doesn't contain any translations.	Always	<p>This file can be used as a source file for all languages.</p> <ul style="list-style-type: none"> <li>• Use this file for languages for which no PO file is created.</li> <li>• For the import, save every language as a separate PO file.</li> </ul>
PO	1 per language	<p>The content of a PO file is language-specific.</p> <p>Each PO file contains the translatable strings and the translations already available for the language.</p> <p>There's no PO file for the default workspace language, as its strings are already included in the POT file.</p>	<p>Is created for a language if</p> <ul style="list-style-type: none"> <li>• translations are already available</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• the export includes attributes with default values</li> </ul>	<p>A PO file shows the existing translations for the language specified.</p> <p>We recommend to always use the POT file as the source file for translations.</p>

Ensure that the original file names and the folder structure are maintained during translation.

## Export Content for Translation

### Note

- You can export up to 100 diagrams.
- You can't update content in the default language of your workspace by changing PO files.
- The source language for all translations is always the default language of the workspace.

Follow these steps:

1. In the explorer, open **Import/Export > Export Diagram Translations**.
2. Select the diagrams and folders to be translated.
3. To include linked dictionary entries, enable *Include directly linked Dictionary items*.
4. Choose *Export*.  
The selected content is downloaded as a ZIP archive. The file is saved to your browser's download folder.

## Import Translated Content

### Note

- Existing translations are overwritten by a new import.
- You can't update content in the default language of your workspace by changing PO files.
- A maximum of 100 diagrams can be updated in one import. If more than 100 diagrams would be affected, the import fails. In that case, split the PO files into several smaller files.

Once the PO files are translated, you can import them to SAP Signavio Process Manager.

Follow these steps:

1. In the explorer, open **Import/Export > Import Diagram Translations**.
2. Select *Choose file*.
3. In the dialog, select one translated PO file per language and choose *Import*.  
The PO files are uploaded. The content is available for all languages that are activated for the workspace.

For each target language, you can upload one translated PO file at a time. If you have more than one file for a language, repeat the import. You can't upload PO files for the default language of the workspace.

## Related Information

[Translating Diagrams \[page 290\]](#)

# 21 Synchronization with SAP Cloud ALM

This section explain how you can manually or automatically synchronize the latest available revision of Business Process Modeling and Notation (BPMN) diagrams from SAP Signavio Process Manager to SAP Cloud ALM.

Select the links below to learn more about each topic.

## [Manually Syncing BPMN Models to SAP Cloud ALM \[page 345\]](#)

Learn how to manually synchronize any available revision of Business Process Modeling and Notation (BPMN) models from the SAP Signavio Process Transformation Suite to SAP Cloud ALM.

## [Enabling Automatic Syncing to SAP Cloud ALM \[page 350\]](#)

Sync models from SAP Signavio to SAP Cloud ALM upon approval in SAP Signavio Process Governance.

## [BPMN Objects Supported for Synchronization \[page 352\]](#)

Check the following tables for all BPMN elements created in the SAP Signavio Process Transformation Suite. Unless specifically noted, the BPMN elements are supported 1:1 when synchronizing to SAP Cloud ALM.

## [Viewing Requirements in SAP Signavio \[page 356\]](#)

View requirements from SAP Cloud ALM in SAP Signavio Process Collaboration Hub.

## [Navigating Between Synchronized Models \[page 358\]](#)

Learn how to switch from your model (diagram) view in SAP Signavio to the synchronized model in SAP Cloud ALM and vice versa.

## [Viewing the Log for Models Synced to SAP Cloud ALM \[page 359\]](#)

View the synchronization log for models (diagrams) synced to SAP Cloud ALM to monitor and troubleshoot the sync process.

## 21.1 Manually Syncing BPMN Models to SAP Cloud ALM

Learn how to manually synchronize any available revision of Business Process Modeling and Notation (BPMN) models from the SAP Signavio Process Transformation Suite to SAP Cloud ALM.

### Prerequisites

- You subscribed to SAP Connectivity Platform and added SAP Cloud ALM under *Integrations*, as described in [SAP Cloud ALM for Implementation](#).
- You've checked that your SAP Cloud ALM and SAP Signavio tenants are already provisioned in [SAP for Me](#).

- To be able to edit models and create new revisions, your workspace administrator activated the feature set [SAP Signavio Process Manager - create and edit BPMN processes](#) for your user, as described in [Activating Feature Sets](#).
- To be able to sync model revisions, your workspace administrator activated the feature set [General - Diagram Import/Export](#) for your user, as described in [Activating Feature Sets](#).
- You have an Enterprise Plus license assigned to your user.

## Context



The SAP Signavio Process Transformation Suite is integrated with SAP Cloud ALM to enhance solution documentation and process design capabilities across connected systems. Access your BPMN model from SAP Signavio Process Collaboration Hub. You can make edits and keep your models in sync when you export model revisions from the SAP Signavio Process Transformation Suite to SAP Cloud ALM.

### Note

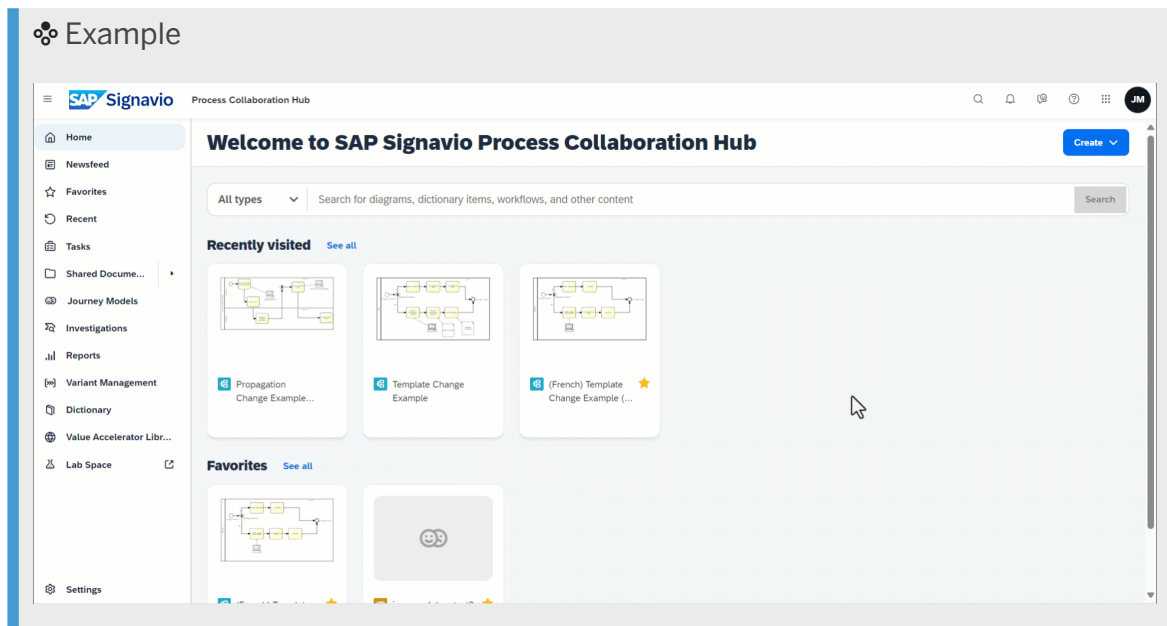
SAP Signavio checks whether a process model already exists in SAP Cloud ALM as a result of synchronization from other systems, like SAP Solution Manager. This prevents creation of duplicate process models in SAP Cloud ALM, regardless of the systems from they were originally synchronized.

- If a model from SAP Signavio already exists in SAP Cloud ALM, it is updated in SAP Cloud ALM when it's synchronized.
- If a model from SAP Signavio doesn't already exist in SAP Cloud ALM, it is added to SAP Cloud ALM.
- Every solution process in SAP Cloud ALM has a unique external reference link or ID. The solution process gets this reference ID either from an external system, like SAP Solution Manager, or it's created in SAP Cloud ALM when a model is synchronized from SAP Signavio. If an existing solution process doesn't already have a reference link or ID from an external system, it still gets one when the model is synchronized or first updated with SAP Signavio.

## Procedure

1. From the header area of SAP Signavio Process Collaboration Hub, choose  ([User Profile Menu - your initials](#)).
2. Select .

The [Preview](#) banner opens to confirm that you're working in preview mode.



3. Navigate to and open your BPMN model's folder.

A table displays a list of any models previously saved in the folder.

### Note

If the model is already synchronized, a status icon appears showing the revision number and synchronization date.

4. From the table, you can sync your model one of the following two ways:

- **Sync the latest revision:** Find your model's row, choose **More**, and select *Sync with SAP Cloud ALM*. You can only sync the latest available revision of the model using this method.
- **Sync any available revision:** Select your model's name to open the model and choose the revision you'd like to sync to SAP Cloud ALM. Select **More** and choose *Sync with SAP Cloud ALM*. You can synchronize any revision of a model using this method.







### Caution

The *Sync with Cloud ALM* menu option is **available only** under the following conditions:

- The feature set *General - Diagram Import/Export* is active for your user.
- You're working in *Preview* mode.
- Your SAP Cloud ALM and SAP Signavio tenants are already provisioned in *SAP for Me*.

5. Choose *Confirm and sync*.

## Results

Scenario	Details
The synchronization is in progress	<p>A dialog shows that the synchronization is in progress. If you refresh the page, the badge  <a href="#">SAP Cloud ALM</a> appears on top of the model. Select the badge to get more details about the synchronization status.</p> <p>You can also view which revision of the model is getting synchronized by selecting the revision switcher on top of the model page. The revision in synchronization shows the  <a href="#">In progress</a> icon.</p> <p>The synchronization can take up to two minutes.</p> <p>You can't start a new sync for any revision of the model until the existing synchronization is complete.</p>
The synchronization is successful	<p>Once synchronization is complete, a confirmation message appears with a link for navigating to the synced model in SAP Cloud ALM.</p> <p>Once you refresh the page, you see the badge  <a href="#">SAP Cloud ALM</a> on top of the model. Select the badge to navigate to the model in SAP Cloud ALM.</p> <p>You can also view which revision of the model is synchronized in one of the following two ways:</p> <ul style="list-style-type: none"><li>• Hover over the badge.</li><li>• Select the revision switcher on top of the model page.</li></ul> <div><p><b>Note</b></p><p>If you receive an error message instead of a confirmation message, or if you run into other synchronization issues, see troubleshooting help in SAP Note <a href="#">3538316</a> .</p><p>For more information, see <a href="#">Reporting an Issue</a> in the <i>SAP Signavio Support Guide</i>.</p></div>
The synchronization fails	<p>You see the badge  <a href="#">SAP Cloud ALM</a> on top of the model. Select the badge to view the reason for failure.</p> <div><p><b>Note</b></p><p>The sync failure badge appears only when all syncing attempts for a model fail. If any revision of the model was successfully synced previously, you only see the badge  <a href="#">SAP Cloud ALM</a> on top of the model page.</p><p>To view which specific revision of the model failed to sync, you can select the revision switcher on top of the model page.</p></div>

## Example

**After Synchronization**

Sync diagram with SAP Cloud ALM

Synchronization successful  
The diagram "Example - Purchase Order" is now available in SAP Cloud ALM.

Success message opens:

- Select the link to view the diagram in SAP Cloud ALM.
- Close the message to continue viewing the diagram in SAP Signavio.

Synced diagram in SAP Cloud ALM

SAP Cloud ALM

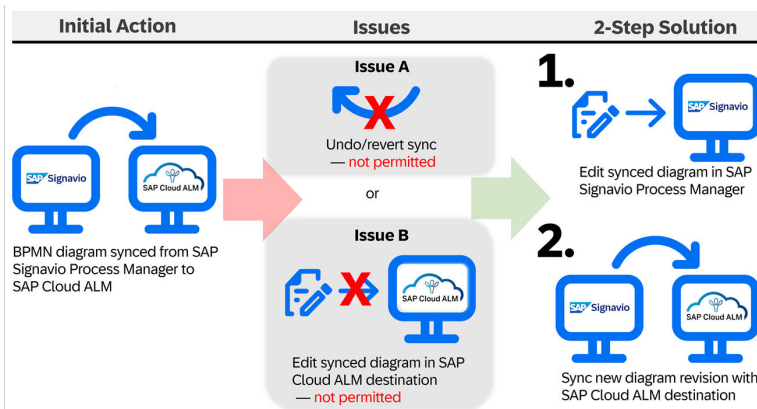
New sync label displayed

Example - Purchase Order

Synced diagram in SAP Signavio Collaboration Hub

## Next Steps

(Optional) If you want to undo the sync or change the synchronized model in SAP Cloud ALM, edit the synchronized model in SAP Signavio Process Manager, then sync the new revision with SAP Cloud ALM.



## Related Information

[SAP Cloud ALM - Application Help](#)

[SAP Cloud ALM for Implementation](#)

[SAP Note 3538316](#)

[SAP Note 3554476](#)

[BPMN Objects Supported for Synchronization \[page 352\]](#)

[Navigating Between Synchronized Models \[page 358\]](#)

## 21.2 Enabling Automatic Syncing to SAP Cloud ALM

Sync models from SAP Signavio to SAP Cloud ALM upon approval in SAP Signavio Process Governance.

### Prerequisites

- You have licenses for both SAP Signavio Process Manager and SAP Signavio Process Governance.
- Automatic synchronization is already enabled by the workspace administrator in SAP Signavio Process Collaboration Hub. For more information, see [SAP Cloud ALM Synchronization](#).

### Submit Models for Approval

To automatically sync models to SAP Cloud ALM, you need to send them for approval first. Once the models are approved in SAP Signavio Process Governance, the synchronization begins automatically.

To submit models for approval, follow these steps:

1. From the header area of SAP Signavio Process Collaboration Hub, choose *User Profile Menu - your initials*.
2. Select **View** > *Preview*.
3. Choose *Shared folders* from the sidebar. From here, you can either:
  - **Sync a single model:** Open the model, choose **More options** and select *Submit for approval*. You can synchronize any revision of a model using this method.
  - **Sync multiple models:** Select the models from the table, choose **More options** and select *Submit for approval*. You can only synchronize the latest available revision of the model using this method.

#### Note

If the model is already synchronized, a status icon appears showing the revision number and synchronization date.

4. Choose the SAP-recommended standard workflow, called *Approval with Sync to SAP Cloud ALM* and select *Confirm*.  
A new approval case is created in SAP Signavio Process Governance.

### Submit a model for approval in SAP Signavio Process Manager

You can also directly submit a process model for approval from SAP Signavio Process Manager. To learn more, see [Start an approval workflow](#).

#### Note

We recommend against publishing a model that you've submitted for approval. The model can only be published after it has been synchronized and implemented in SAP Cloud ALM.


## Approval Process in SAP Signavio Process Governance

### ⓘ Note

The model approver can access the approval task either from [Tasks](#) in the sidebar of SAP Signavio Process Collaboration Hub or directly from the task inbox in SAP Signavio Process Governance.


To learn how you or other assigned users can work as recipients of an approval workflow task, see [Work on approval tasks assigned to you \[page 288\]](#).

## Results after Process Model Approval

Scenario	Details
The synchronization is in progress	While the approval process begins, you see a badge stating <i>Approval: In progress</i> on top of the model. Select the badge to get more details about the status.
The synchronization is successful	<p>In SAP Signavio Process Collaboration Hub you see a badge on top of the model stating <i>Approval: Approved</i>. This badge means that the sync has started.</p> <p>Once the syncing is complete, the badge  <i>SAP Cloud ALM</i> appears on top of the model. Select the badge to navigate to the model in SAP Cloud ALM.</p> <p>You can also view which revision of the model is synchronized in one of the following two ways:</p> <ul style="list-style-type: none"><li>• Hover over the badge.</li><li>• Select the revision switcher on top of the model page.</li></ul>

### ⓘ Note

You can't start a new sync for any revision of the model until the current synchronization is complete.

Scenario	Details
The synchronization fails but the process model is approved	In SAP Signavio Process Collaboration Hub, you still see a badge on top the model stating <i>Approval: Approved</i> , which means the sync has started. If syncing fails for some reason, you see another badge that's titled <i>Sync failed</i> . Select the badge to view the reason for the synchronization failure.
	<p><b>Note</b></p> <p>The <i>Sync failed</i> badge appears only when all synchronization attempts for a model fail. If any revision of the model was successfully synced previously, you only see the badge  <i>SAP Cloud ALM</i> on top of the model page.</p> <p>To view which specific revision of the model failed to sync, you can select the revision switcher on top of the model page.</p>
The process model is rejected	In SAP Signavio Process Collaboration Hub, you see a badge on top the model stating <i>Approval: Rejected</i> . You can contact the model approver for further clarification.






## Related Information







[External Activities - Sync to SAP Cloud ALM](#)

## 21.3 BPMN Objects Supported for Synchronization










Check the following tables for all BPMN elements created in the SAP Signavio Process Transformation Suite. Unless specifically noted, the BPMN elements are supported 1:1 when synchronizing to SAP Cloud ALM.

### Activities / Gateways / Connecting Objects



















Activities	Gateways	Connecting Objects
 (Task)	 (Exclusive (XOR) Gateway)	 (Sequence Flow)
	 (Parallel Gateway)	 (Association (undirected) )

Activities	Gateways	Connecting Objects
	 (Event-based Gateway)	 (Association (unidirectional))
	 (Inclusive Gateway)	 (Message Flow)
	 (Complex Gateway)	 (Association (bidirectional))





## Swimlanes / Data Objects / Artifacts











Swimlanes	Data Objects	Artifacts
 (Pool)	 (Data Object)	 (IT System)  <b>Note</b> When synced to SAP Cloud ALM, <i>IT System</i> is received as <i>Text Annotation</i> .
 (Collapsed Pool)	 (Data Store)	 (Group)  <b>Note</b> Synchronization of <i>Group</i> from the SAP Signavio Process Transformation Suite to SAP Cloud ALM is currently not supported.
 (Additional Participant)  <b>Note</b> When synced to SAP Cloud ALM, <i>Additional Participant</i> is received as <i>Text Annotation</i> .	 (Message)  <b>Note</b> Synchronization of <i>Message</i> from the SAP Signavio Process Transformation Suite to SAP Cloud ALM is currently not supported.	 (Text Annotation)

## Catching / Throwing Intermediate Events

Catching Intermediate Events	Throwing Intermediate Events
 (Intermediate Parallel Multiple Event)	 (Intermediate Escalation Event)
 (Intermediate Escalation Event)	 (Intermediate Event)
 (Intermediate Message Event)	 (Intermediate Message Event)
 (Intermediate Timer Event)	 (Intermediate Compensation Event)
 (Intermediate Error Event)	 (Intermediate Signal Event)
 (Intermediate Cancel Event)	 (Intermediate Multiple Event)
 (Intermediate Compensation Event)	 (Intermediate Link Event)
 (Intermediate Conditional Event)	
 (Intermediate Signal Event)	
 (Intermediate Multiple Event)	
 (Intermediate Link Event)	






## Start / End Events




Start Event	End Event
 (Start Event)	 (End Event)
 (Start Message Event)	 (End Escalation Event)

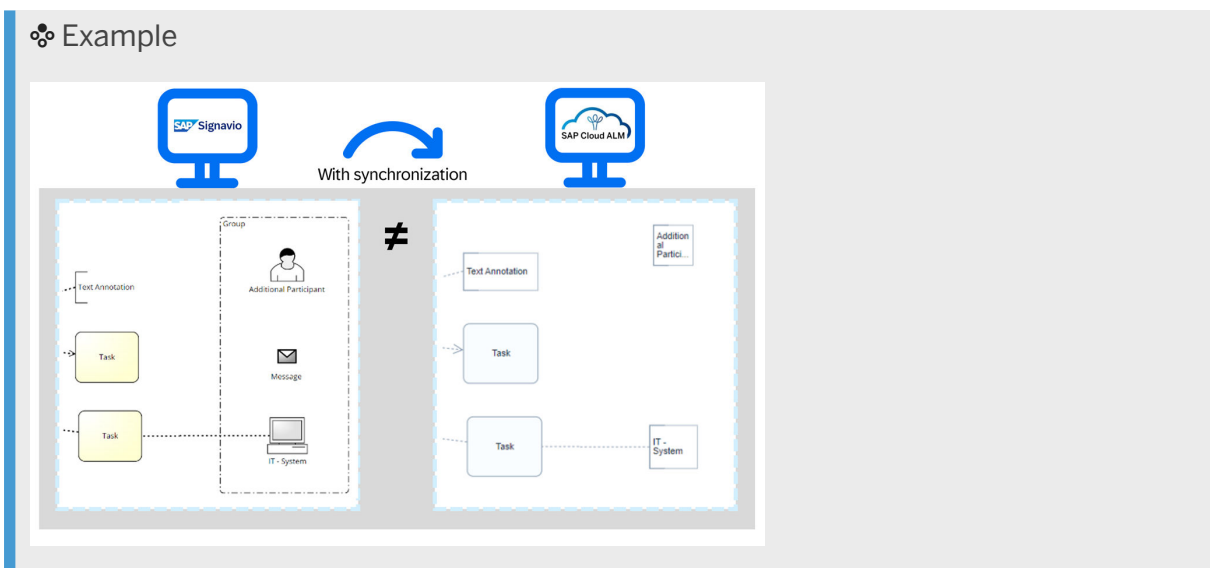
Start Event	End Event
 (Start Timer Event)	 (End Message Event)
 (Start Error Event)	 (End Error Event)
 (Start Compensation Event)	 (Cancel End Event)
 (Start Parallel Multiple Event)	 (End Compensation Event)
 (Start Escalation Event)	 (End Signal Event)
 (Start Conditional Event)	 (End Multiple Event)
 (Start Signal Event)	 (Terminate End Event)
 (Start Multiple Event)	

## Exceptions: BPMN Elements Not Supported for Synchronization

The following BPMN elements created in the SAP Signavio Process Transformation Suite editor do not have equivalents in SAP Cloud ALM. As a result, the elements are not directly synced with SAP Cloud ALM:

BPMN Element	Substitution
 (Group)	No substitute available.
 (Additional Participant)	Received as <i>Text Annotation</i> in SAP Cloud ALM.
 (IT System)	Received as <i>Text Annotation</i> in SAP Cloud ALM.
 (Message)	No substitute available.
 (Collapsed Subprocess)	No substitute available. SAP Cloud ALM doesn't support BPMN subprocesses currently.

BPMN Element	Substitution
 (Event Subprocess)	No substitute available. SAP Cloud ALM doesn't support BPMN subprocesses currently.
 (Collapsed Event-Subprocess)	No substitute available. SAP Cloud ALM doesn't support BPMN subprocesses currently.
 (Expanded Subprocess)	No substitute available. SAP Cloud ALM doesn't support BPMN subprocesses currently.



## Related Information

[SAP Signavio Business Process Model and Notation: An Introductory Guide](#)

## 21.4 Viewing Requirements in SAP Signavio

View requirements from SAP Cloud ALM in SAP Signavio Process Collaboration Hub.

### Prerequisites

- You have synchronized a diagram (model) from SAP Signavio Process Collaboration Hub to SAP Cloud ALM either manually or automatically. For more information, see [Manually Syncing BPMN Models to SAP Cloud ALM \[page 345\]](#) or [Enabling Automatic Syncing to SAP Cloud ALM \[page 350\]](#).

- Your workspace administrator has enabled synchronization of requirements from SAP Cloud ALM. For more information, see [Synchronizing Requirements from SAP Cloud ALM](#).
- Your workspace administrator has enabled the Business Process Diagram (BPMN 2.0) notation set in two places:
  - In SAP Signavio Process Manager in the *Setup* section *Define notations/attributes*, your workspace administrator has to enable Business Process Diagram (BPMN 2.0) as the modeling language.
  - In SAP Signavio Process Collaboration Hub, in the *Diagram Page* section, your workspace administrator has to enable the *Requirements* element for Business Process Diagram (BPMN 2.0). For more information, see [Manage Diagram Page](#).
- You have published the solution process in SAP Cloud ALM. For more information, see [Publishing a Process in SAP Cloud ALM](#) in the *SAP Cloud ALM - Application Help* guide.
- You have assigned the solution process to a project and scope in SAP Cloud ALM. The scope needs to have Custom Solution scenarios enabled. For more information, see [Creating Projects](#) and [Managing Scopes](#) in the *SAP Cloud ALM - Application Help* guide.
- You have created requirements in SAP Cloud ALM and assigned them to the solution process. For more information, see [Creating Requirements in SAP Cloud ALM](#) in the *SAP Cloud ALM - Application Help* guide.

#### Note

Requirements and the solution process must belong to same project and scope.

## Context

A requirement defines a business expectation that must be fulfilled. Requirements represent business needs from a customer perspective that the standard solution does not meet. For more information, see [Requirements in SAP Cloud ALM](#).

You can use the synchronized models to view a list of *Requirements* from SAP Cloud ALM in SAP Signavio, grouped by project and scope. This list gives you an overview of all the important information from SAP Cloud ALM in one place. You can also go directly to SAP Cloud ALM to create more requirements or update the existing ones.

## Procedure

To view requirements from SAP Cloud ALM in SAP Signavio Process Collaboration Hub, follow these steps:

1. Select *Shared Documents* from the navigation panel in SAP Signavio Process Collaboration Hub.
2. Select the synchronized model for which you want to view the requirements.  
The display page for the model opens.
3. Select *Requirements* to expand the section.  
Any requirements assigned to a solution process in SAP Cloud ALM appear in this section. You can see information such as the scope, ID, title, the process element to which the requirement is assigned, status, and the responsible person.

### Note

If the solution process is available in multiple projects in SAP Cloud ALM, you can use the [Project](#) drop-down to switch between different projects and view their requirements.

4. Select a requirement to view more details. The requirement opens in a side panel.
5. (Optional) Select [View details](#) to view or edit the requirement in SAP Cloud ALM.

## Next Steps (Optional)

After you review the list of existing requirements, you can create new requirements using the [Create](#) button. The system navigates you to the SAP Cloud ALM page for requirements.

You can also view the timestamp of the last synchronization of the requirements from the upper right corner of the [Requirements](#) table.

### Remember

If you haven't published the solution process in SAP Cloud ALM, haven't assigned a project and scope to it, or haven't created any requirements, you are redirected from the model display page in SAP Signavio Process Collaboration Hub to SAP Cloud ALM to complete the necessary steps.

## 21.5 Navigating Between Synchronized Models

Learn how to switch from your model (diagram) view in SAP Signavio to the synchronized model in SAP Cloud ALM and vice versa.

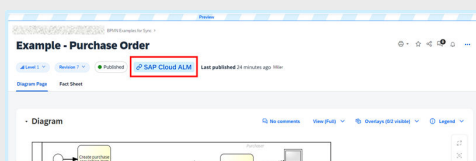
### Prerequisites

You synchronized a model from the SAP Signavio Process Transformation Suite to SAP Cloud ALM as described in [Manually Syncing BPMN Models to SAP Cloud ALM \[page 345\]](#).

### Context

After successful synchronization, the model page in SAP Signavio Process Collaboration Hub displays a label in the header area that links to SAP Cloud ALM. Select the label to view the synced model in SAP Cloud ALM.

#### Example



For [SAP Cloud ALM](#) > [SAP Signavio](#) navigation, follow the procedure below.

## Procedure

1. From your model display page in SAP Cloud ALM, select the *General Information* tab.
2. Under the *Accelerators* heading, select: *Open diagram in SAP Signavio Process Collaboration Hub*.

### Note

Navigating to a synchronized model page opens a second window, but does not close the first model window.

## Related Information

[SAP Note 3554378](#)

## 21.6 Viewing the Log for Models Synced to SAP Cloud ALM

View the synchronization log for models (diagrams) synced to SAP Cloud ALM to monitor and troubleshoot the sync process.

## Prerequisites

You've started a synchronization process for a model as described in [Manually Syncing BPMN Models to SAP Cloud ALM \[page 345\]](#) or [Enabling Automatic Syncing to SAP Cloud ALM \[page 350\]](#).

## Context

After you sync your BPMN model to SAP Cloud ALM, you can use the synchronization log to do the following:

- View the status of the synchronization.
- Access the model directly from SAP Signavio Process Collaboration Hub.
- If the sync fails, view the error message to troubleshoot the issue.

### Note

The *SAP Cloud ALM Synchronizations* tab is only available if your SAP Cloud ALM and SAP Signavio tenants are already provisioned in [SAP for Me](#). For more information, see [Connecting an SAP Signavio Workspace to SAP Cloud ALM](#).

## Procedure

1. In the SAP Signavio Process Collaboration Hub sidebar, select *Reporting*.
2. Select the *SAP Cloud ALM Synchronizations* tab.
3. Review the table that contains detailed synchronization information, including:
  - a. The date and time of syncing
  - b. Links to the models

### Note

Select the model name to open the model page in a second window.

- c. Synchronized revision
- d. The source and type of the sync
- e. Sync status
- f. A description containing the error message (in the case of sync failure)

## 22 Publishing Diagrams to External Systems

### Note

Access to this feature depends on your workspace settings. For more information, contact your workspace administrator.

You can publish single diagrams to any intranet or Internet website using the embedding feature. This chapter describes how to embed a diagram into a blog post or web page.

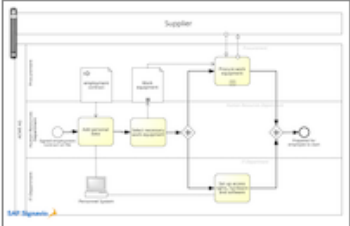
**Embed diagram**

Click on 'Share read access' and use the displayed HTML code for your wiki or blog. Follow the link 'Preview' to view the result. Attention: At the same time you grant read access to the diagram 'Send price quotation' beyond your Signavio workspace.

[Stop sharing the diagram for read-only access](#)

**Embedding** Simple image

Use the displayed HTML code for your wiki or blog. On the Signavio website you can find a [list of supported blog and wiki systems](#).



Width (pixel) **i**:

Height (pixel) **i**:

[Preview](#)

**HTML code (copy and embed)**

```
<h3 class="signavio-title"><a href="https://www.signavio.com">Send price quotation</a></h3>
<script type="text/javascript"
src="https://signavio.com/mashup/signavio.js"></script>
<script type="text/plain">
{
  url:
  "https://signavio.com/p/model/a7e1bcf23ee34391abb8419b17b494fe",
  authToken:
  "bbf0e93a3b5e9cbc8256be72d51f035a4268414a23179bbc22bf7766afc1_29246d
597fdb8ef5a9336e2aec39fc9f3654b9ec7a75336a41b5b9344d62_8d25c99942ac2
7e5d4a2139e8d56e9b91ca9a4849601b77111bbb82a7e7ec33",
```

### The embedding functionality of the Explorer

You can embed diagrams in other systems that SAP Signavio Process Manager supports.

### Note

You can embed up to three diagrams on the same page.

## 22.1 Enabling Diagram Embedding

### Note

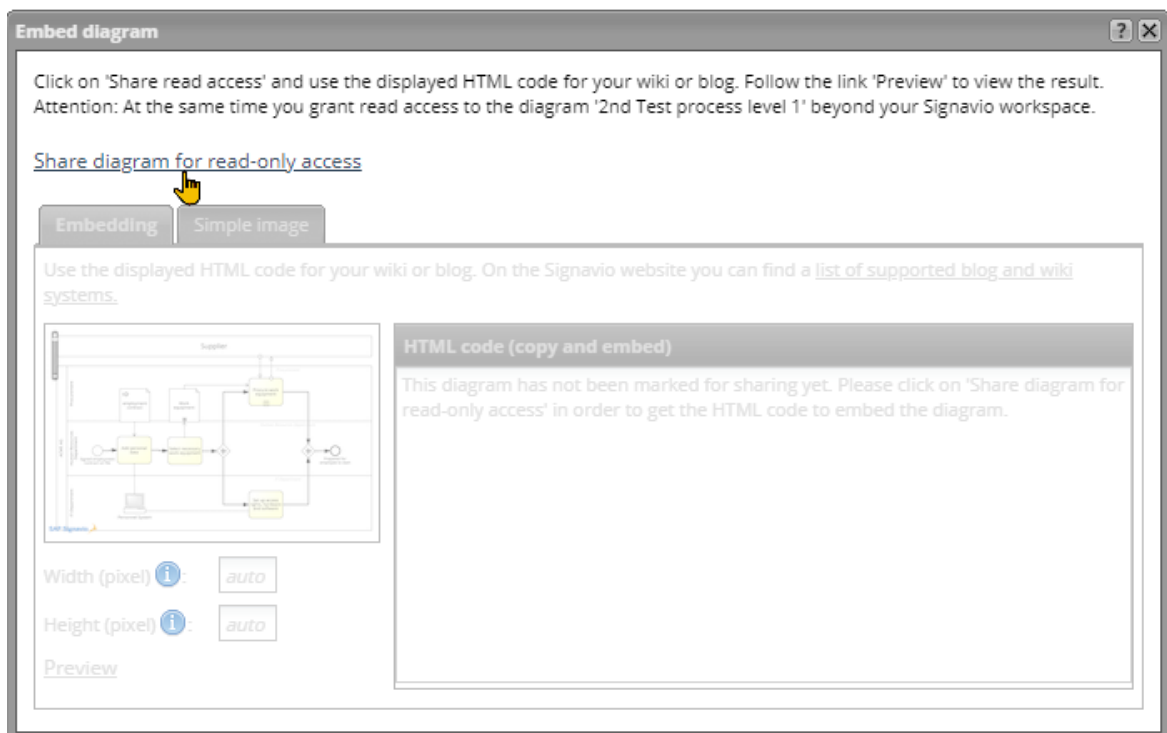
You need the access right **Publish** to embed a diagram. Access rights are set by your workspace administrator.

Since you cannot publish a model yourself, you also cannot activate the embedding.

If you want to share diagrams publicly, enable diagram embedding.

To enable diagram embedding, proceed as follows:

1. Select the diagram you want to embed in the Explorer.
2. Select *Share* > *Embed diagram*. The *Embed diagram* dialog opens.
3. If you haven't already, enable embedding by clicking *Share diagram for read-only access*. The read-access for this diagram is activated.



You have now the following options to embed the diagram:

- as an interactive element (embedding)
- as a simple image

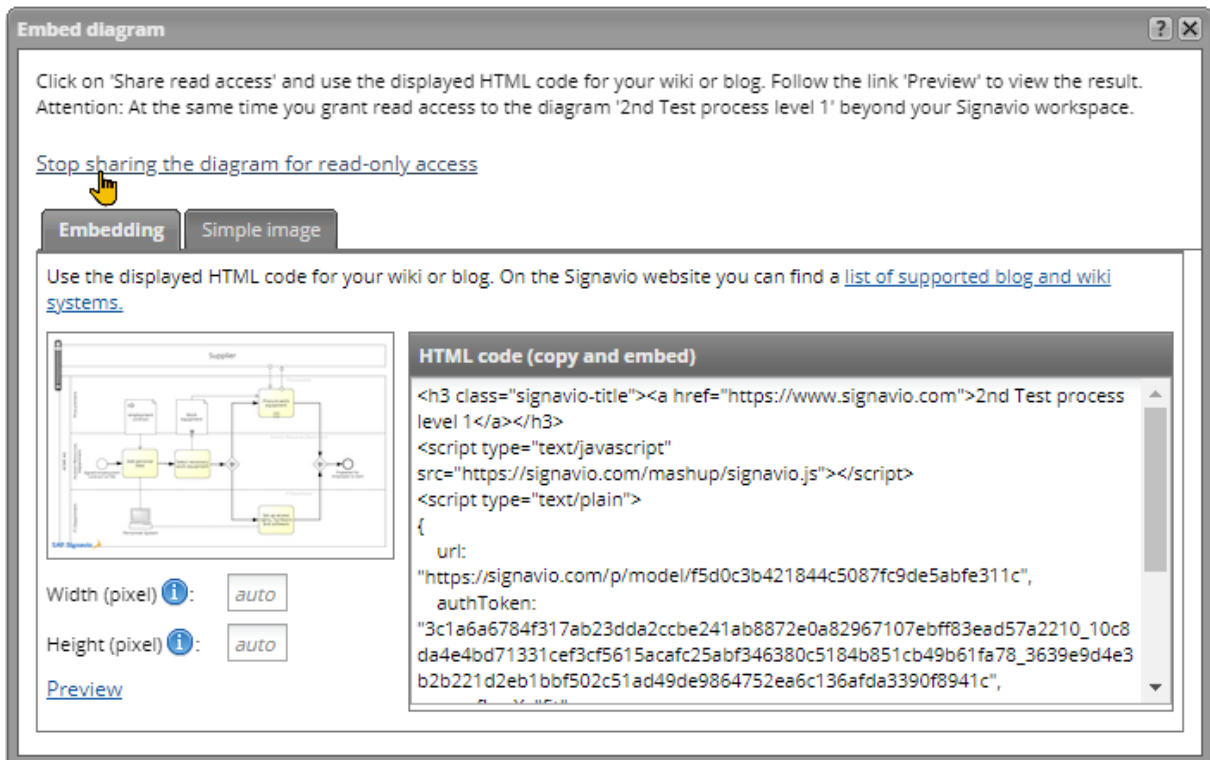
To embed a diagram in an external system, you have to explicitly allow the embedding. This can be reverted later on - in this case, all existing integrations of SAP Signavio diagrams will be deactivated.

Diagrams can be published on web pages by embedding them with HTML.

Several use cases for embedding are listed and explained in the following chapters.

## Disabling diagram embedding

Embeddings of diagrams can be disabled at any time by withdrawing read access for these diagrams. This can also be set in the *Embed diagram* dialog. Select the link *Stop sharing the diagram for read-only access* :



Revoking read access disables all embeddings.

Via this link all embeddings become inactive, so that your diagram are no longer viewed on pages which previously have linked such a link.

## 22.2 Embed a Diagram as an Image

How to embed a diagram as an image in web pages, whereby the image is automatically updated whenever the diagram is changed.

You can embed diagrams as images in web pages and this way share the diagrams with users outside your workspace. Users can see the diagram image, but can't edit or comment on it.

Follow these steps:

1. In the explorer, select the diagram you want to embed.
2. In the toolbar, choose **Share** **Embed diagram**.  
The *Embed diagram* dialog opens.
3. If the embedding options are disabled, select the link *Share diagram for read-only access* to enable them.
4. On the *Simple image* tab, you'll find a diagram preview and the link containing the image in PNG format.

- To embed the image, paste the link into your web page.

The embedded diagram image is automatically updated when a change is made to the diagram.

If you want to use a specific diagram version as an image which never changes, you can export the diagram in PNG or SVG format and use it in any context. Read more in section [Export a diagram as an image \[page 333\]](#).

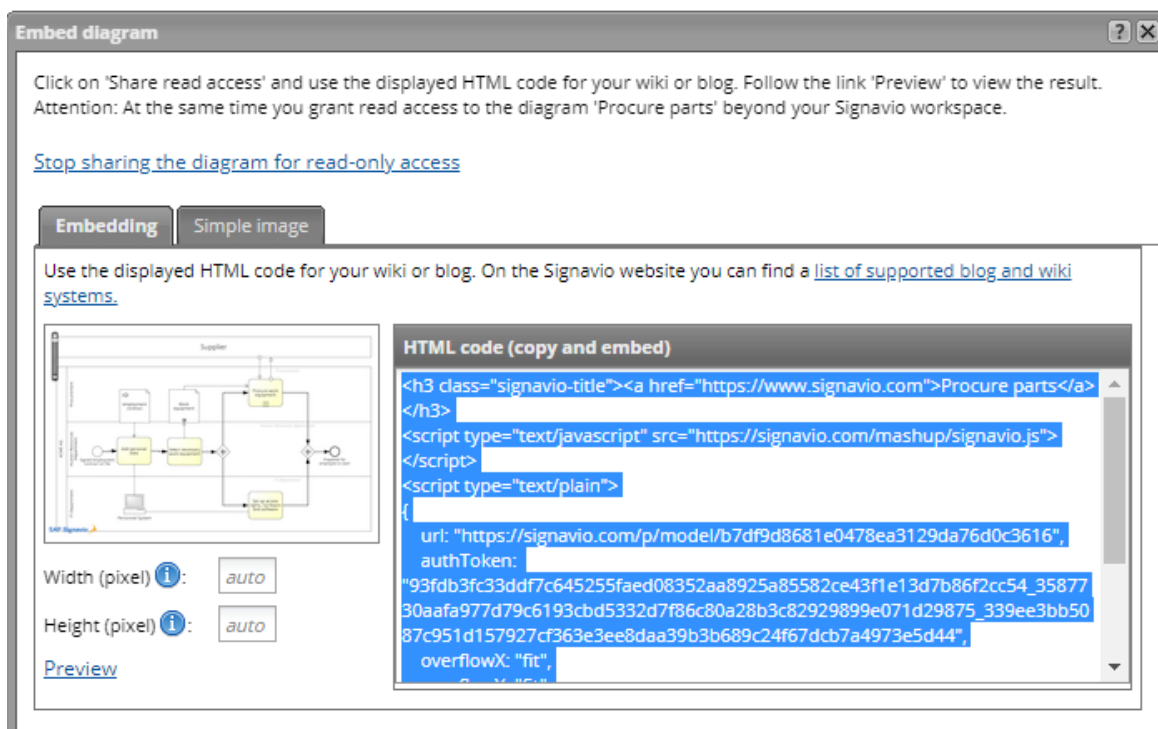
## 22.3 Embedding Diagrams as HTML Code

You can embed a diagram using a HTML code snippet in a website or blog as an interactive element. The advantage of this method over a picture export is that the most current version of the diagram is always available on your page.

The following paragraph explains how to embed diagrams as an HTML code snippet into a blog or a web page like Blogger, TypePad, or WordPress.

To embed a diagram in your website or blog, proceed as follows:

- Select the diagram you want to embed in the Explorer.
- Select **Share** > **Embed diagram**. The *Embed diagram* dialog opens.
- Open the *Embedding* tab and copy the HTML code snippet.



- Paste the copied snippet in the desired location of the HTML code of your page or blog posts.
- If the diagram is not shared for read access yet, choose *Share document for read-only access*. If you select *Stop sharing the diagram for read-only access* in the embedding menu, the diagram will not be available on the web page and on any other pages it was embedded in.
- See a list of [Supported blog and content management systems \[page 367\]](#) to get an overview of supported systems.

## Note

The embedded diagram does not allow navigation to linked diagrams or linked documents. If you need the viewers to be able to navigate to linked diagrams and documents, please use SAP Signavio Process Collaboration Hub.

## The Diagram Preview

To embed your diagram optimally in your website, you have to option to alter the diagram's size and then to check size and aspect ration in a preview.

1. Specify the desired *Width* and *Height* . By default, it is set to *auto* , so the size of the interactive element adapts to the system it is embedded in.
2. Choose *Preview* to check the changes.

Embed diagram

Click on 'Share read access' and use the displayed HTML code for your wiki or blog. Follow the link 'Preview' to view the result. Attention: At the same time you grant read access to the diagram '2nd Test process level 1' beyond your Signavio workspace.

[Stop sharing the diagram for read-only access](#)

**Embedding** Simple image

Use the displayed HTML code for your wiki or blog. On the Signavio website you can find a [list of supported blog and wiki systems](#).

Width (pixel) **i**:

Height (pixel) **i**:

[Preview](#)

**HTML code (copy and embed)**

```
<h3 class="signavio-title"><a href="https://www.signavio.com">2nd Test process level 1</a></h3>
<script type="text/javascript"
src="https://signavio.com/mashup/signavio.js"></script>
<script type="text/plain">
{
  url:
  "https://signavio.com/p/model/f5d0c3b421844c5087fc9de5abfe311c",
  authToken:
  "3c1a6a6784f317ab23dda2ccbe241ab8872e0a82967107ebff83ead57a2210_10c8da4e4bd71331cef3cf5615acafc25abf346380c5184b851cb49b61fa78_3639e9d4e3b2b221d2eb1bbf502c51ad49de9864752ea6c136afda3390f8941c",
  ...
}
```

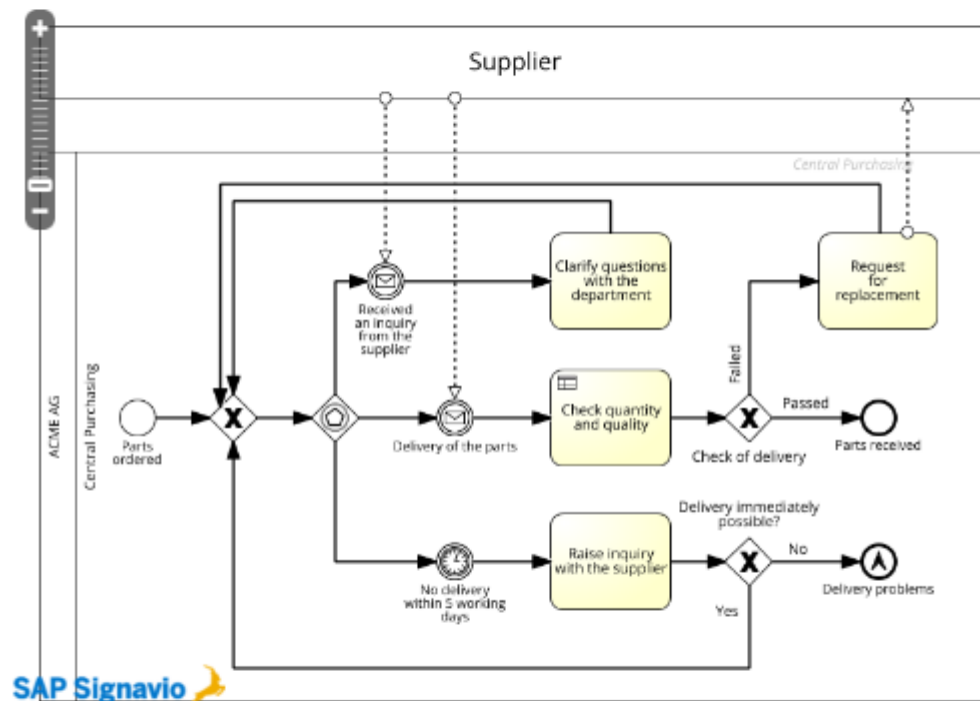
In the preview, HTML code is displayed in addition to the interactive element. A zoom slider and scrollbars are added automatically.

# Preview

## Preview

This sub-process will take place during the procurement of production parts and was outsourced for reasons of complexity.

### Receipt of Goods



Use the generated HTML code to embed the diagram in your wiki or blog:

```
<h3 class="signavio-title"><a href="https://www.signavio.com">Receipt of Goods</a></h3>
<script type="text/javascript" src="https://signavio.com/mashup/signavio.js"></script>
<script type="text/plain">
{
  url: "https://signavio.com/p/model/0d0f63e09cf449cdae671a6d91832df9",
  authToken: "c628050dcf85a5754209b6d21b5c416f38ce1632cc5943ec474e291f1f967c7_ca313530cf41c7f5",
  overflowX: "fit",
  overflowY: "fit",
  zoomSlider: true
}
</script>
<a class="signavio-logo" href="https://www.signavio.com" rel="external">

</a>
```



## 22.4 Supported Blog and Content Management Systems

You can embed SAP Signavio diagrams in all blog and content management systems that allow the embedding of HTML snippets.

### Note

You can embed up to three diagrams on the same page.

For example:

- [Jira](#) 
- [Confluence](#) 



You can also embed a diagram view of SAP Signavio Process Collaboration Hub in 3rd-party applications. These applications includes any system that allows embedding of [HTML iframes](#)  .

## 23 Help and Support

There are several ways to find more information and get support for SAP Signavio Process Manager.

### Built-In Support

Built-In Support helps you get real-time support and find context-sensitive information. It provides simplified guided support that allows you to search for knowledge directly within the application.

When you're signed in, you can open the Built-In Support panel by choosing  (*Built-In Support*) at the top right of the screen. Enter one or more key words and choose from the results displayed in the right-side panel. Filter the results by selecting .

### SAP Help Portal

You can find an overview of all related documentation at [SAP Signavio Process Transformation Suite](#).

### SAP Signavio Support

To learn how to get your questions answered when using SAP Signavio products and how to create a support case, see [SAP Signavio Support](#).

### SAP Support Portal

You can find onboarding and support information here:

- [SAP Signavio Suite](#) 
- [SAP Signavio Process Manager](#) 

# 24 Workspace Administration

Workspace administrators have several tasks:

- managing workspace settings and user access
- enabling features
- integrating third party systems

The first user registering for a workspace is by default an administrator.

## Administrator Profile

Workspace administrators have extensive rights and can make profound changes to the workspace. We recommend to grant this role to users with solid IT skills who are familiar with both the SAP Signavio products and BPMN.

Only users with a license for SAP Signavio Process Manager can create administrator accounts.

It is important to communicate and document changes in workspace settings among your administrative team, so that all administrators are up to date and can give accurate responses to user queries.

## Add Administrators

To add or remove administrator permissions, add or remove the user to or from the user group [Administrators](#). Read more in section [Create workspace administrators](#).

## Get Started

To get started as a workspace administrator, see section [Prepare your workspace - overview](#).

You find an overview of the most popular integration scenarios at [System integration scenarios](#).

An overview of the SAP Signavio Process Manager APIs is available in section [API access](#).

You can learn how to view reports analyzing your workspace and process model usage in section [Process Model Dashboards](#).

## Next steps

- [Prepare your workspace - overview](#)
- [Create workspace administrators](#)
- [System integration scenarios](#)

## Related Information

[Prepare the workspace - overview](#)

[User Administration, Authentication, and Authorization](#)



[System Integration Scenarios](#)

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