BIC Process Design

GBTEC Software AG

Sep 05, 2024

CONTENTS

QUICK START

Welcome to the BIC Process Design help.

1.1 First steps

Welcome Screen

After successful login, you will be redirected to your welcome screen.

If your user role is *administrator*, *editor* or *author* your welcome screen will look like the following.
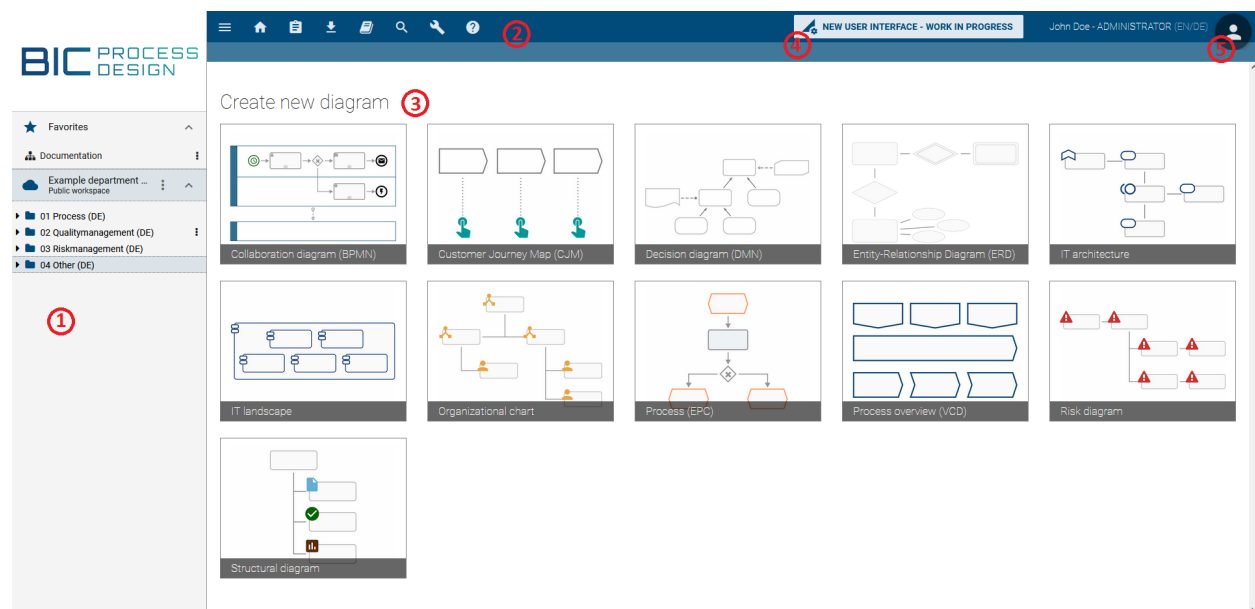
The welcome screen consists of different elements.

(1): In the left sidebar, you can find your *favorite diagrams*, as well as the *categories* and *diagrams* of the currently opened *repository*.

(2): In the menu bar at the top you can access many useful functions such as the *administration* and the *global search*.

(3): In the center of the application, you can *create a new diagram*. If your role is *reader* or *reviewer*, you will see the *MyBIC-Site* here, which presents you useful diagrams and search results.

(4): With the button *NEW USER INTERFACE - WORK IN PROGRESS* you can switch to the *new user interface* of BIC Process Design.

(5): Here you got access to your profile. You can *change your role* or activate the *high contrast theme*. Furthermore, here is the possibility to *sign out*.
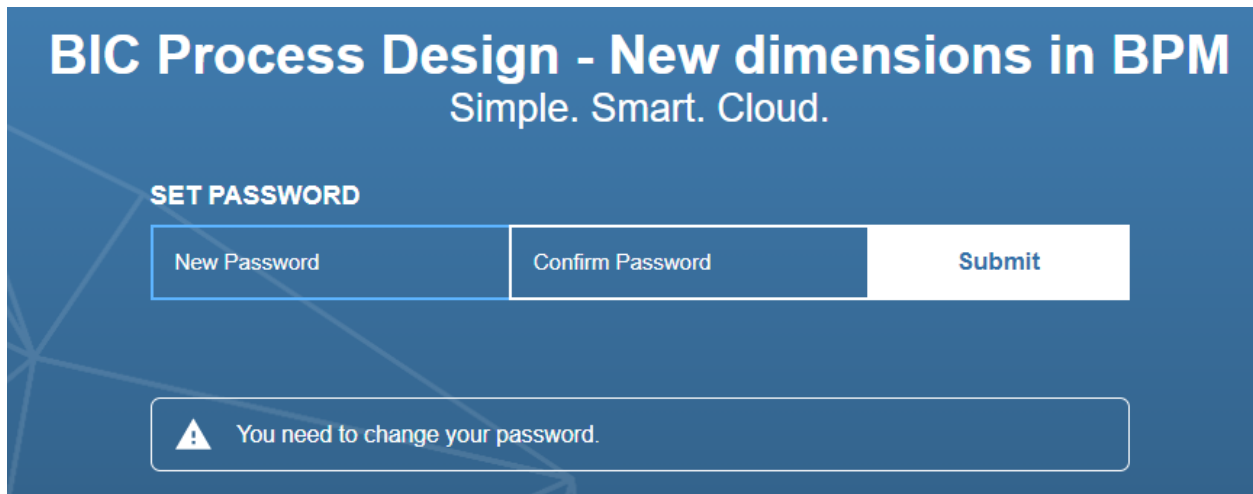
You can always return to your welcome screen by clicking on the logo at the top left of the screen or the repository name.

Note: After successful *login* you will be informed about a software update and new features of BIC Process Design if applicable.

> **Warning:** Do not log in to the system with the same workspace and the same browser and different credentials. This type of operation can lead to inconsistencies and data loss in the worst case. It is not supported by the software.

1.1.1 How do I sign in?

As soon as you are registered as a user in BIC Process Design, you will receive an e-mail with a link to set your password. The link is valid for 24 hours. Open this link and set a password.
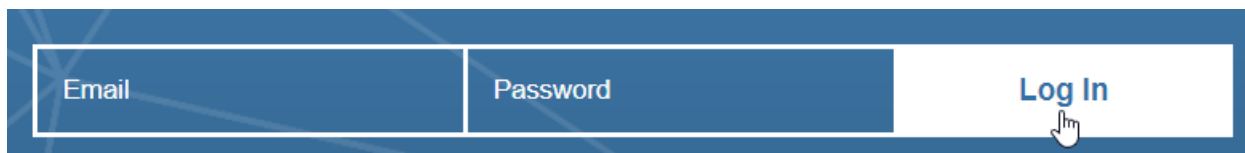
Confirm the password via *Submit*.

You will be informed that the registration was successful. Furthermore a link will appear which you can open to go directly to the login page.

When you have registered once, you can always log in to your BIC Process Design by entering your e-mail address and the password on the login page.

After successful login you will be directed to your *Welcome screen*. Eventually, you will be informed about a software update and new features of BIC Process Design.

> **Warning:** Do not log in to the system at the same workstation and the same browser and different credentials (without clearing the cache). This type of operation can lead to inconsistencies and data loss in the worst case. It is not supported by the software.

As an SSO user, you are directly logged in to BIC Process Design by opening the application if you are logged in to you SSO-system. The login page of the application is no longer usable. Your login data are managed by the SSO-system and you do not receive any e-mails with links to set your password from BIC Process Design. Therefore, you can only change your password in the external system. In addition to SSO users, "normal" users can have access to the application and the login page in the same tenant using the corresponding URL parameter.

1.1.2 How is the login lock configured?

If you make ten consecutive failed login attempts, the account will be locked for one minute. During this lockout period, each login attempt will receive the message *Invalid username or password*. If further failed login attempts are made after the lockout period has expired, the waiting time until the next attempt will be incrementally increased, with a maximum waiting time of up to fifteen minutes.

The login attempt counter is reset every twelve hours or after a successful login. In addition, a one-minute lockout occurs if the time between two consecutive failed login attempts is one second or less.

1.1.3 How do I sign out?

We recommend you to sign out after finishing your work with BIC Process Design.

Press the *Profile* button to the right of your user name.
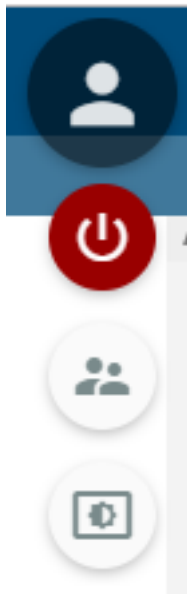
There click on the upper *Logout* button.

If you have checked out diagrams, you will be notified with a dialog. Please keep in mind that local workstations are stored in the "Local Storage" of your browser. According to your browser settings, it is thus possible that local workstations are rejected by closing the browser. Therefore, always check in your changes to unlock the diagram for further processing. Subsequently you are logged out and are forwarded to the logout page of BIC Process Design.

During your next login, BIC Process Design will redirect you to the repository you have worked in last.

Note: If you are inactive for at least 30 minutes by default, your session will expire. You will be logged out and asked to log in again.

1.1.4 Where can I find the help?

A click on the question mark in the upper menu bar opens a menu. Here you can choose to view the user documentation in a new browser tab by a click on *help*. If you click on *Open quick start*, this chapter of the documentation will open.
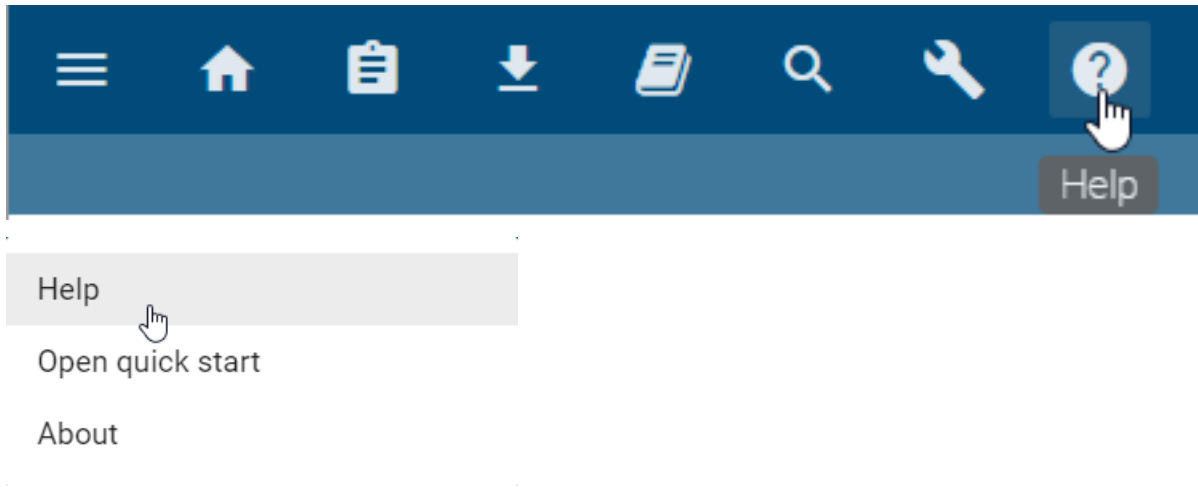
1.1.5 How can I switch to the new user interface?

On your welcome screen and on your *"MyBIC"* page, you can find the button *NEW USER INTERFACE - WORK IN PROGRESS* in the menu bar. Clicking on it will take you directly to the MyBIC page in the new interface.
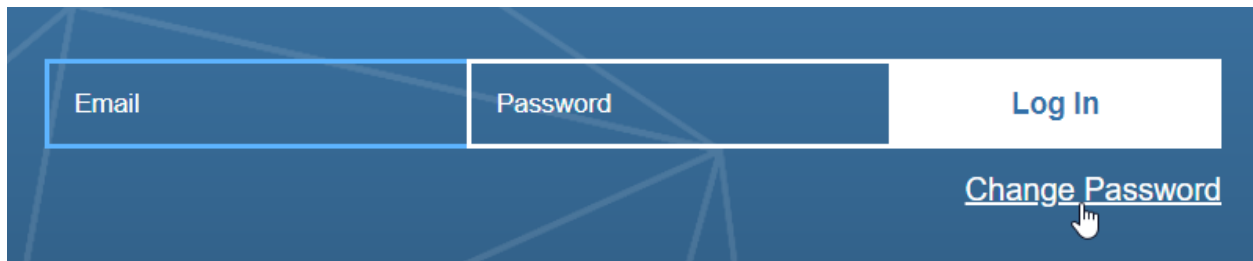
Similarly, you can return to the old user interface from the new one using the button in the header.

Note: If you use Internet Explorer as your browser, you cannot change the user interface because the new interface is not available here.
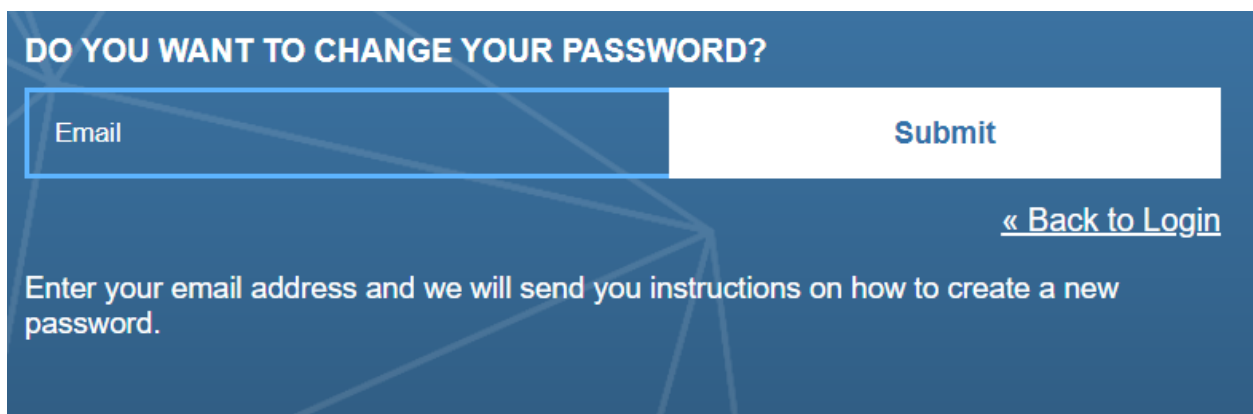
1.1.6 How do I change my password?

You can change your password on the login screen. Log out if you are already logged in. If you have forgotten your password, you can also reset it by following the steps. To do this, click on *Change password* on the login page.
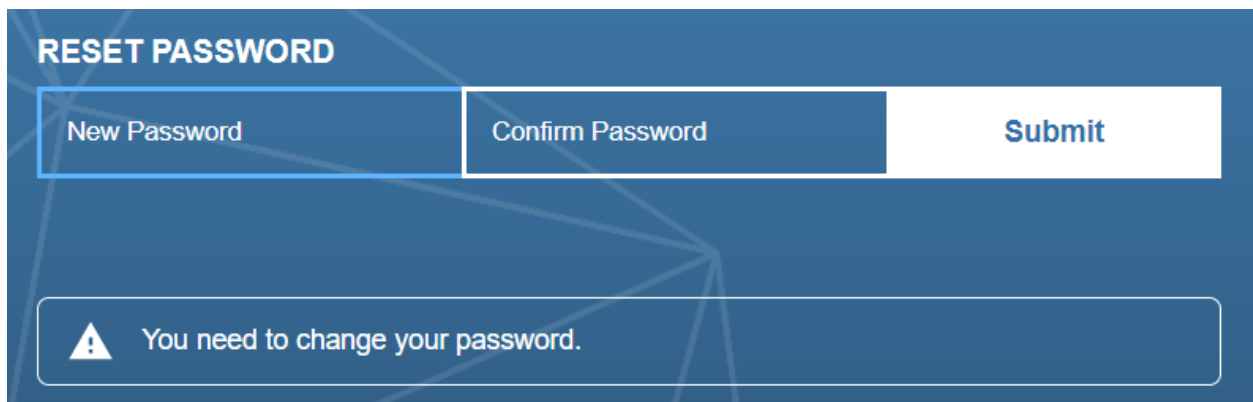
You can then enter your registered e-mail address and click *Submit*.

You will receive an e-mail with a link to set your new password. The link is valid for 5 minutes. Follow this link to the corresponding page where you can enter your new password.

Confirm your input by clicking on *Submit*. Your new password will be saved and you will be redirected to the welcome screen.

Alternatively, administrators can send a *link to change the password* to every user.

Note: Your password must be at least twelve characters long, contain one number, one special character, one lowercase and one uppercase.

1.1.7 How do I create a repository?

Open the context menu by clicking the *context menu*-button in the explorer.
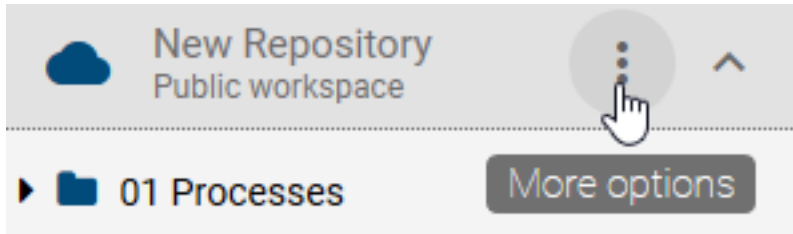
In the context menu, select *New Repository*. An input field appears. Enter the name of the new repository.
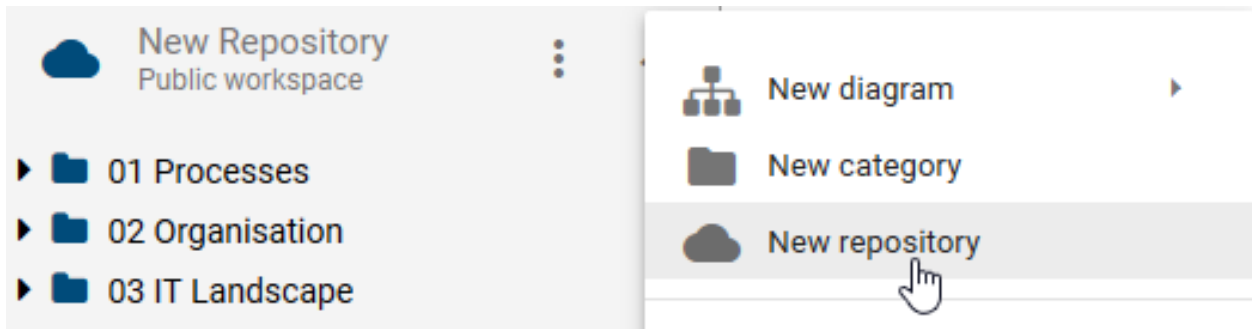
Confirm your input by clicking *Create*.

Note: Note that you can only create repositories if you are in the administrator user role.

1.1.8 How do I rename a repository?

In the explorer, open the context menu by clicking on the *context menu*-button (visualised by three points).
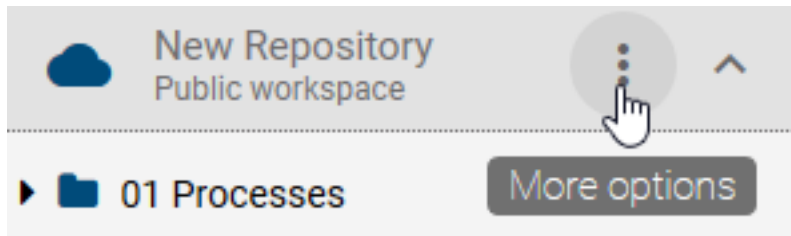
Select *Edit properties* from the context menu.
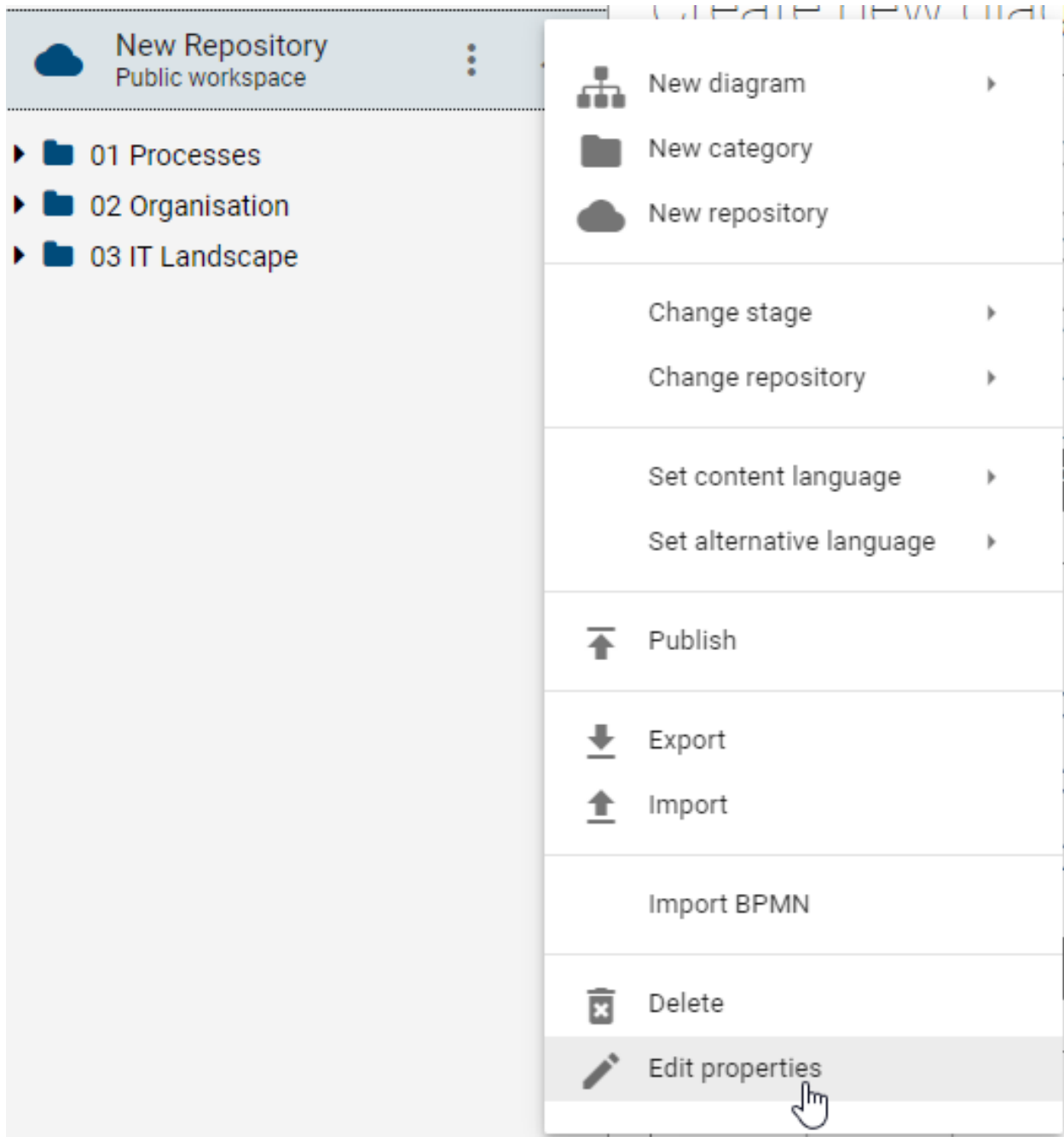
An input field *Please enter name of the repository* appears where you can change the name of the repository. Confirm by clicking *Save*.

Edit properties

Please enter name of repository

Repository

Restricted access

CANCEL   SAVE

Note: Note that you can only rename repositories if you are in the administrator user role.

1.1.9 How can I view different repositories?

If you are working with several repositories, you can switch between them in the explorer, because just one repository is displayed in the explorer at a time.

To display another repository, click the *context menu* button of the current repository. There click on *Change Repository*. An alphabetically sorted list of available repositories opens. If necessary, scroll until the desired repository is displayed. Alternatively, you can enter the name of the repository in the *Filter* input field, which is at the top of the list, and search for your entry using the Enter key.
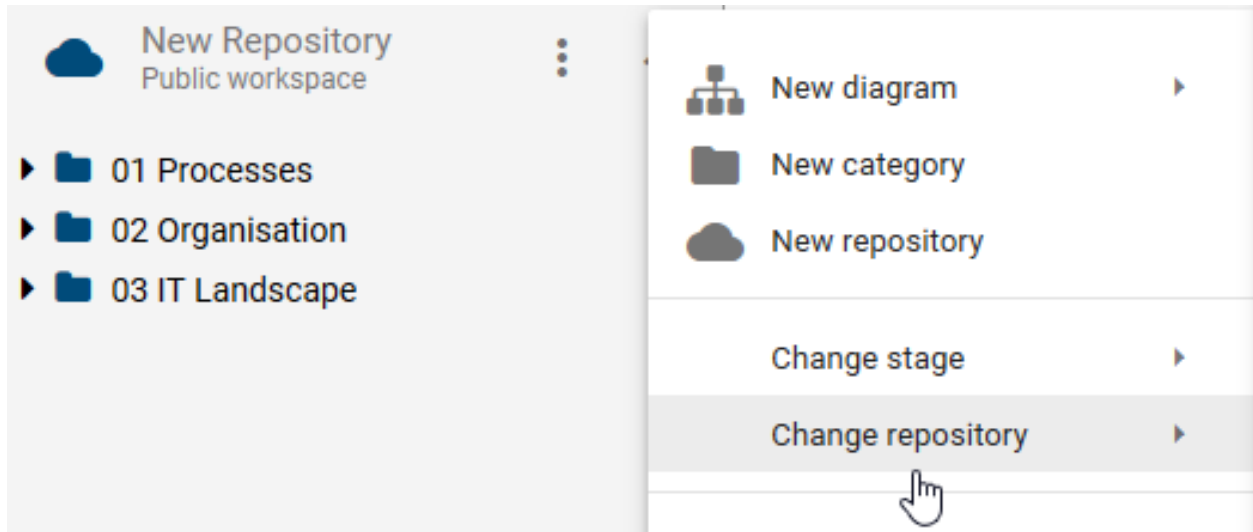
Select the desired repository by clicking its name. The selected repository is now displayed in the explorer.

1.1.10 How do I delete a repository?

Select the repository you want to delete. Now open the context menu in the explorer by clicking the *context menu-*button. There select *Delete*. A dialog appears to confirm the deletion of the repository. Confirm with *Delete* to delete the repository.

New Repository
Public workspace

▶ 📁 01 Processes
▶ 📁 02 Organisation
▶ 📁 03 IT Landscape

⊹ New diagram ▶
📁 New category
☁ New repository

Change stage ▶
Change repository ▶

Set content language ▶
Set alternative language ▶

⬆ Publish

⬇ Export
⬆ Import

Import BPMN

🗑 Delete
✎ Edit properties
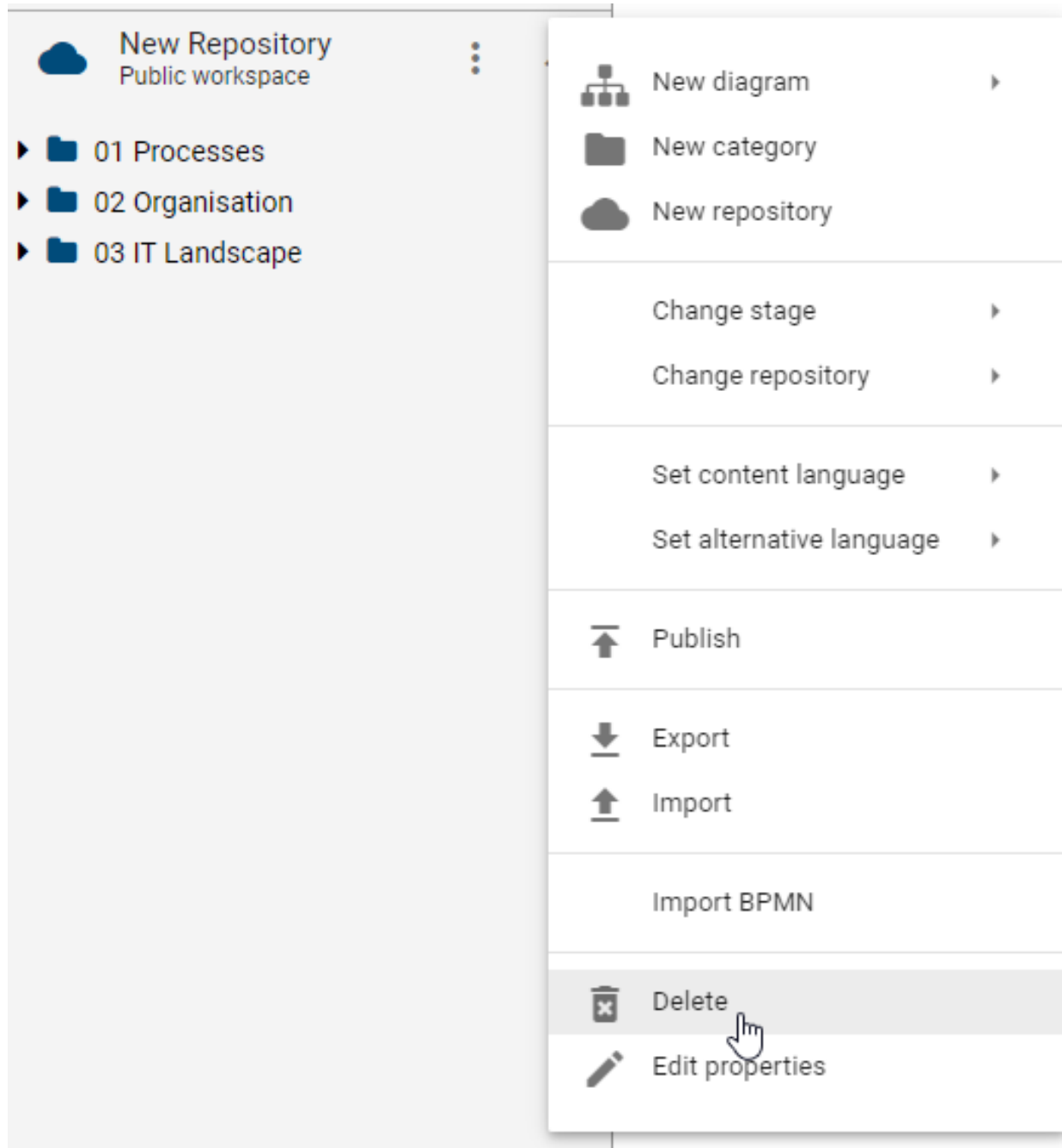
Note: Deleting a repository deletes all diagrams inside in the repository, as well as the catalog, and thus has extensive consequences. Note that you can only delete repositories if you have administrator rights.

1.1.11 How do I create a category?

Categories are helpful to structure logically related elements. You can create categories within a repository and add more categories within a category. Categories are sorted alphabetically within a level.

Open the context menu for the repository or a category by using the context menu button.
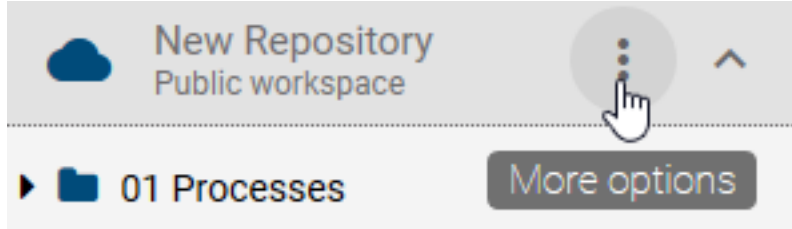
Select the entry *New Category*.
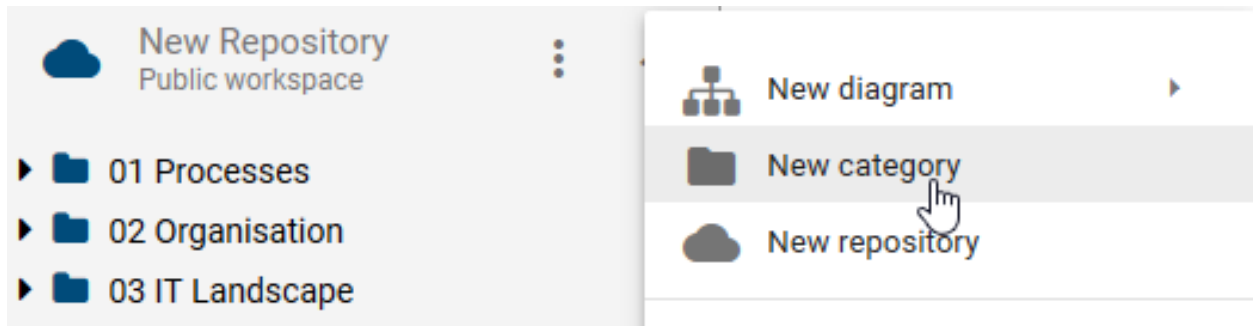
Enter the desired name for the category. Close the input dialog by clicking *Create* or the Return-key.

The new category is now visible in the explorer, either at the repository level (if you have created a new category from the context menu of the repository) or below the selected category (if you have created the new category from the context menu of an existing category).

1.1.12 How to rename a category?

Click the *context menu*-button on the right of the category name to open the context menu for the category.
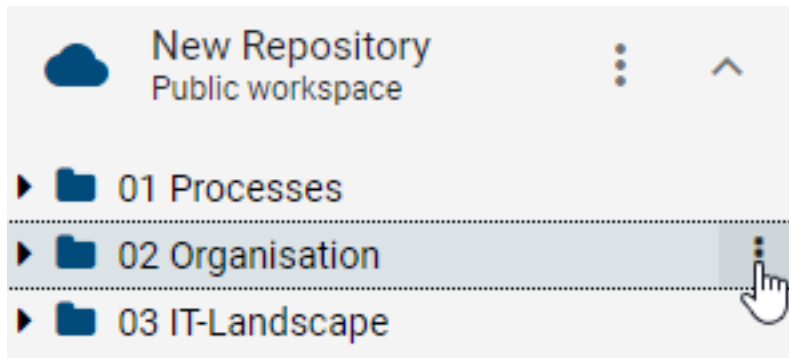
Click the *Rename* entry to rename the category.
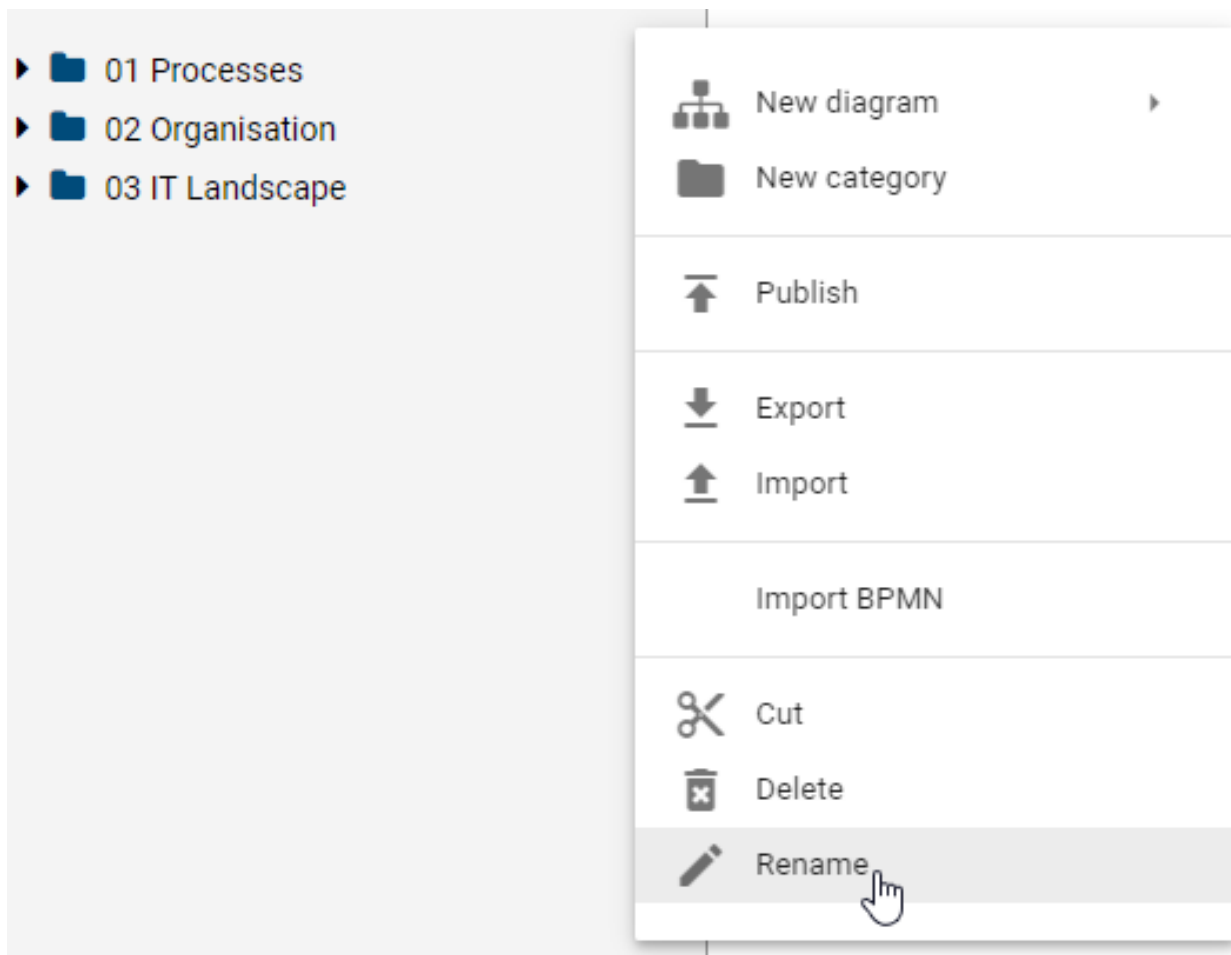
Edit the name of the category. The category is renamed directly after confirmation.

Please enter the name of the Category

01 Processes

CANCEL   RENAME

1.1.13 How do I delete a category?

Categories can include diagrams and subordinate categories with additional diagrams. When you delete a category, all the diagrams and categories associated with the category are also deleted.

Navigate over the explorer to the category that you wish to delete and open the context menu of the category. There select the *Delete* entry.
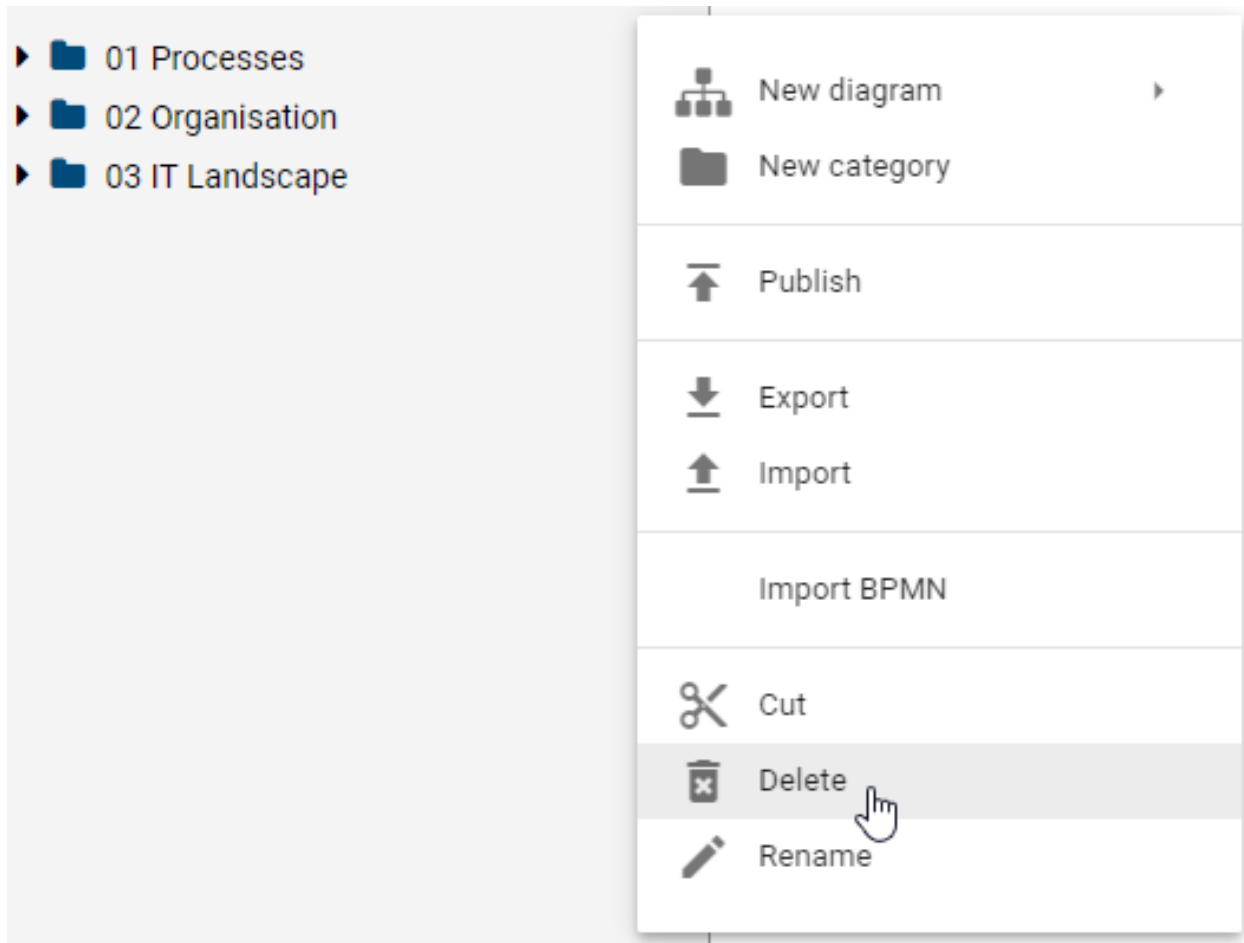
A dialog warns you that your category will be deleted. Confirm the dialog to delete the category.

Note: If necessary, create a backup beforehand to avoid the loss of important data. If a *locked diagram* is part of the category, the category can not be deleted.

1.2 My first diagram

You can *create new diagrams* of different types. Initially, newly created diagrams are not checked in, meaning they are only available in your local workspace. To make a diagram available in the public workspace, you have to *check it in*.

To edit existing diagrams in the public workspace, they have to be *checked out* before. After you have checked out a diagram, you can edit it. It is then locked for other users. Checked out diagrams are also available *without active internet connection*.

After completing the editing, you have to check in the diagram again. After check-in, other users can see the changes and continue to work on the diagram. Checked in diagrams can also be *published*.

The interface of BIC Process Design

The screen of BIC Process Design stores different functionalities and views. It is divided into three areas.

Explorer: On the left side you can see the Explorer in which your repository and the created categories and diagrams are displayed.

Editor: The Editor represents your working area in which you can model and edit your diagrams as well as the necessary *symbol palette*.

Menu bar: The upper area of your screen displays further functionalities that you can use to model and to display different *views of a diagram* or the option to switch to the catalog.
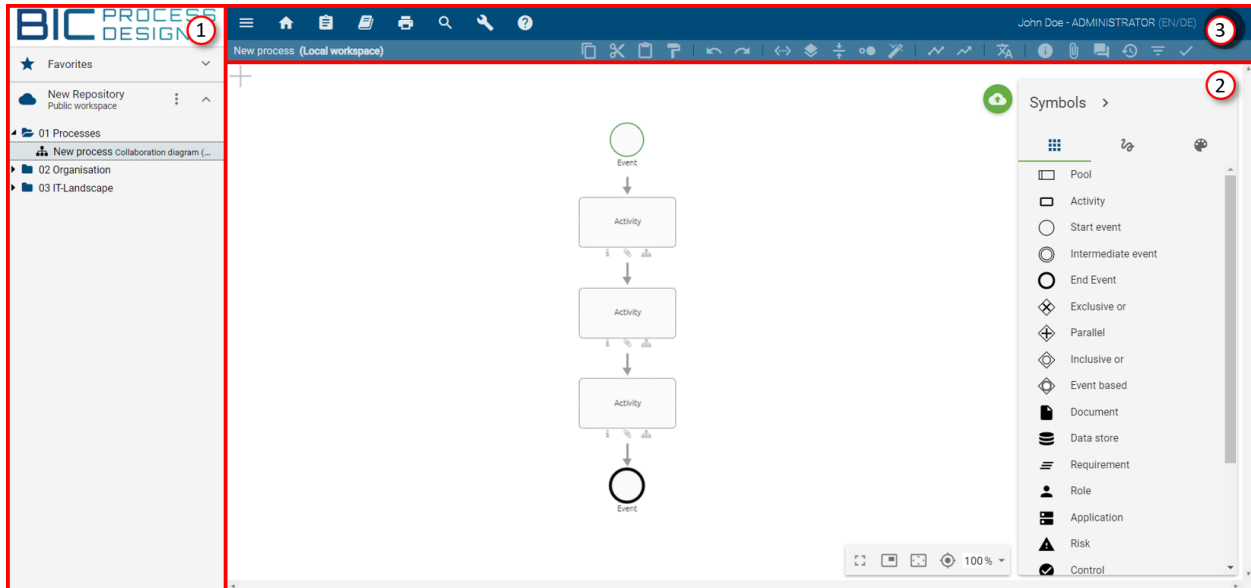
Figure: The interface of BIC Process Design is divided into Explorer (1), Editor (2) and Menu bar (3).

Note: The symbol palette and parts of the menu bar and are only visible when a diagram is selected by modeling.

1.2.1 How do I create a diagram?

You can create a new diagram when you at least have the rights of an editor. Existing diagrams are displayed in the tree structure of the explorer and can be on repository level or nested in a category. Within a level, diagrams are listed below existing categories and sorted alphabetically.

1. Use the tree structure of the explorer to navigate to the level where you want to create a new diagram. There open the context menu of the desired repository or category.
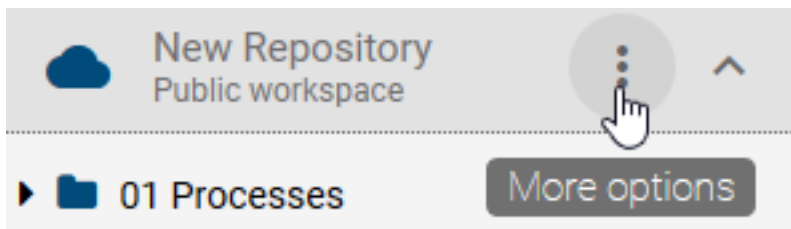
In the context menu, navigate to the *New diagram* entry. Then click on the entry to open a list of available diagram types.
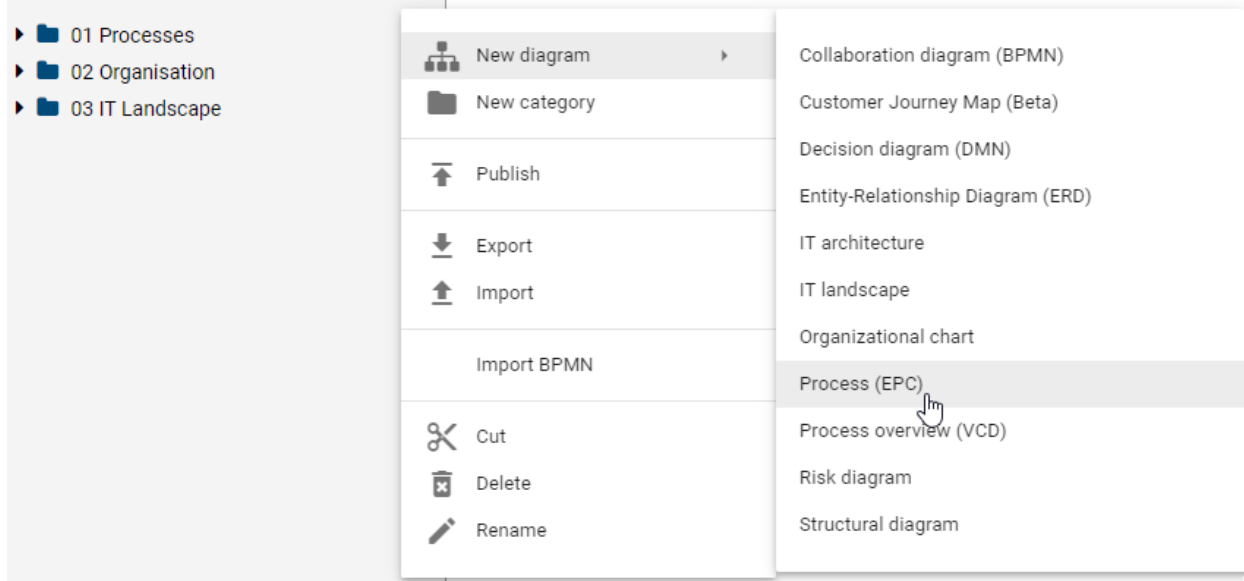
Select the desired diagram type. An input dialog will appear where you can name the diagram.

Close the dialog by pressing the Return-key or by clicking *Create*.

After the new diagram has been created and named, it appears in the explorer and the symbol palette appears with the corresponding modeling objects in the editor. You can now start to model your diagram.

Note: You can also create new diagrams directly from the *welcome screen* by choosing one of the available diagram types.

1.2.2 How do I save changes to a diagram?

In the opened diagram, you will find the circular *Save*-button in the upper right-hand side of the editing window. If there are any changes that are not saved, the button appears.

Click the *Save*-button. Your changes will be saved in the local storage of your browser. Keep in mind, that by saving, diagrams are not automatically available in the public workspace. This is possible if your diagram gets checked-in.

Note: If you are editing diagrams and have not saved them yet, you will be asked if you want to save the diagrams when you exit the Internet Explorer or when you log out (Internet Explorer and Chrome). Saving without check-in locks the diagram to other users and may imply data loss. According to your browser settings, local workstations may be discarded when the browser is closed. Please always check-in local changes.

1.2.3 How do I check-in a diagram?

Checked out diagrams should be checked in after editing and saving them. This is how changes will be made available for other users who have access to the public workspace.

You will see the *check-in*-button in the editor on the upper right-hand side. Click this button to make the diagram available for online usage.

Note: If you have not maintained an *author* in the attributes of the diagram, you will get a notification while checking in that users of the *Author* role can not edit the diagram anymore.

The diagram is now checked in. To edit it, you need to check it out again.

Optionally, you can click on the *context menu*-button right of the diagram name and select the *Check In* entry.

New Repository
Public workspace

▲ 📂 01 Processes

⊞ New Process Collaboration diagram ..

☁ Check in

🔒 Unlock diagram

➖ Discard local changes

⬆ Publish

⬀ Open in a new window

⬇ Export

Export BPMN

✂ Cut

🗑 Delete

✏ Rename

▶ 📁 02 Organisation

▶ 📁 03 IT Landscape
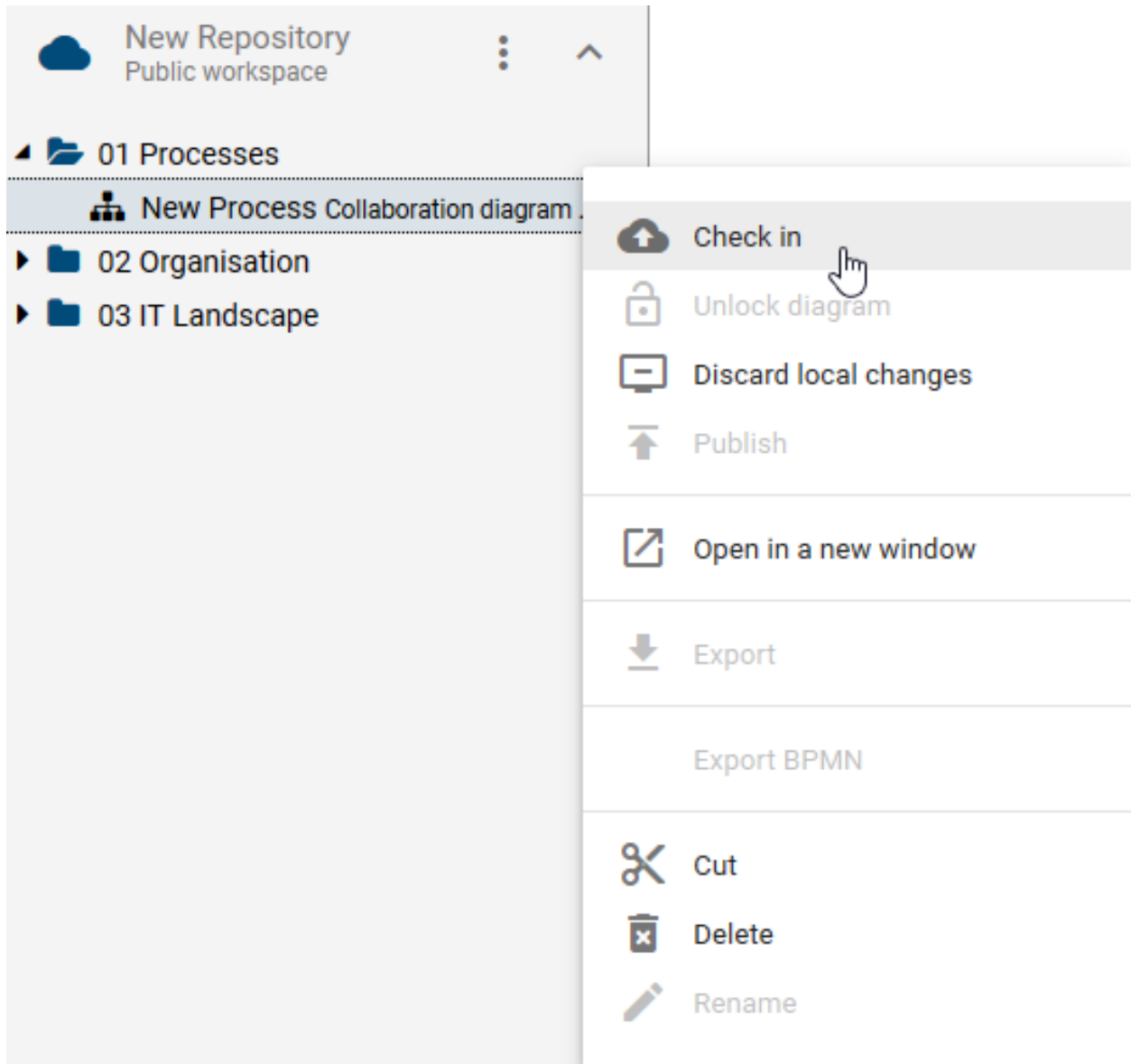
1.2.4 How do I edit / check out diagrams?

Only a *checked out* diagram can be edited. This locks the diagram for other users and is preventing parallel processing of a diagram.

Open the diagram and you can see the *Edit*-Button in the upper right-hand side corner of the editor. Click on this button to edit the diagram and to make it available for offline use.

You can now edit the checked out diagram.

Optionally, you can click on the *context menu*-button right of the diagram name and select the *Check Out* entry.
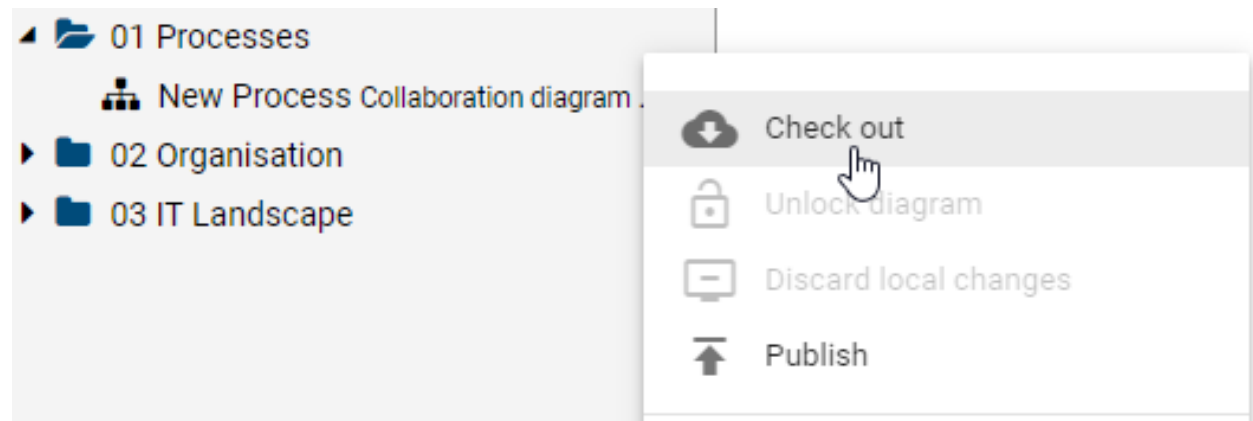
1.2.5 How to rename a diagram?

You can rename a diagram if you have the rights of the user role *Author* and you are entered as author in the diagram attributes.

In Explorer, navigate to the diagram you want to rename and open the context menu. Select *Rename* and enter the desired name in the appearing dialog.
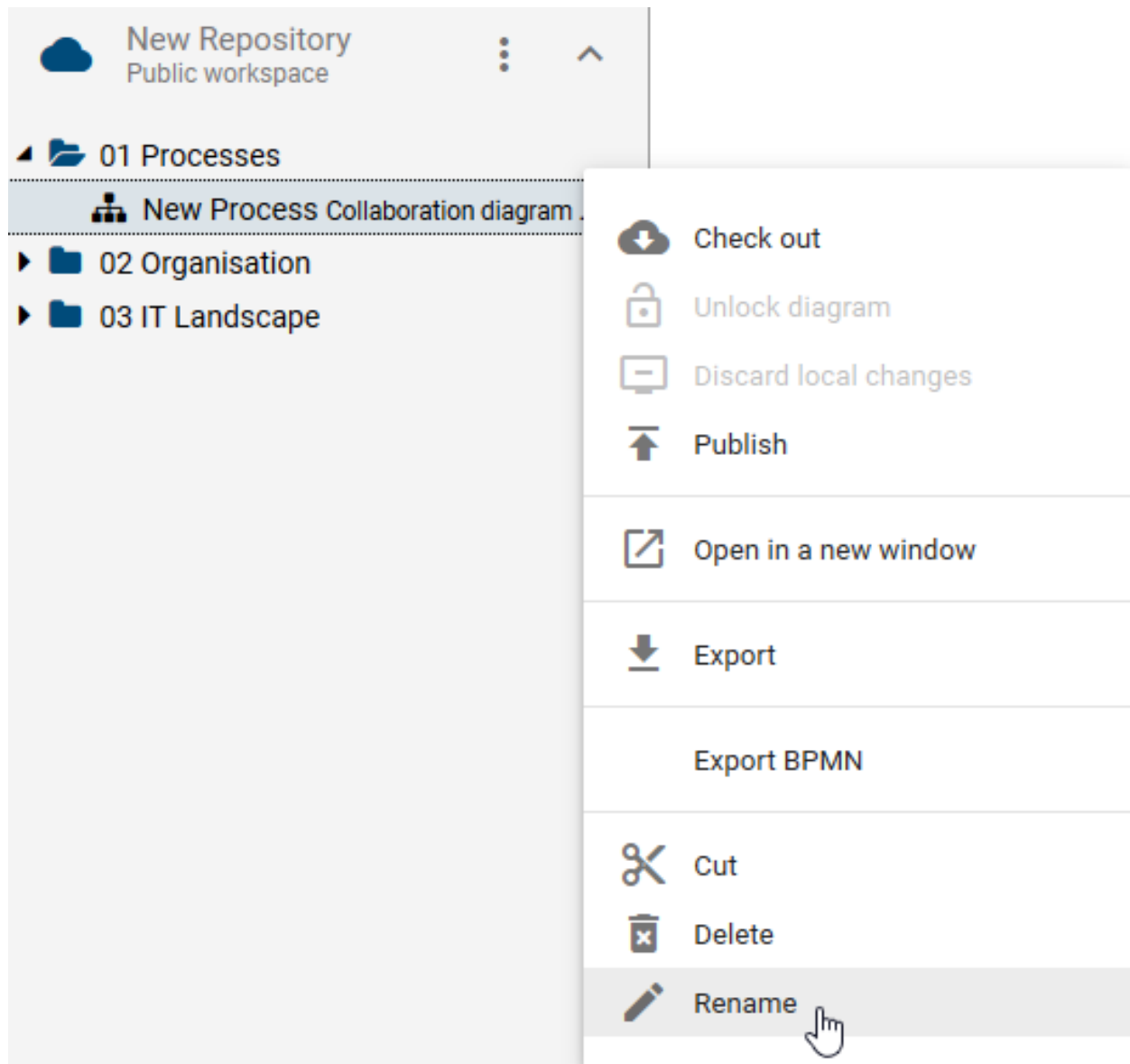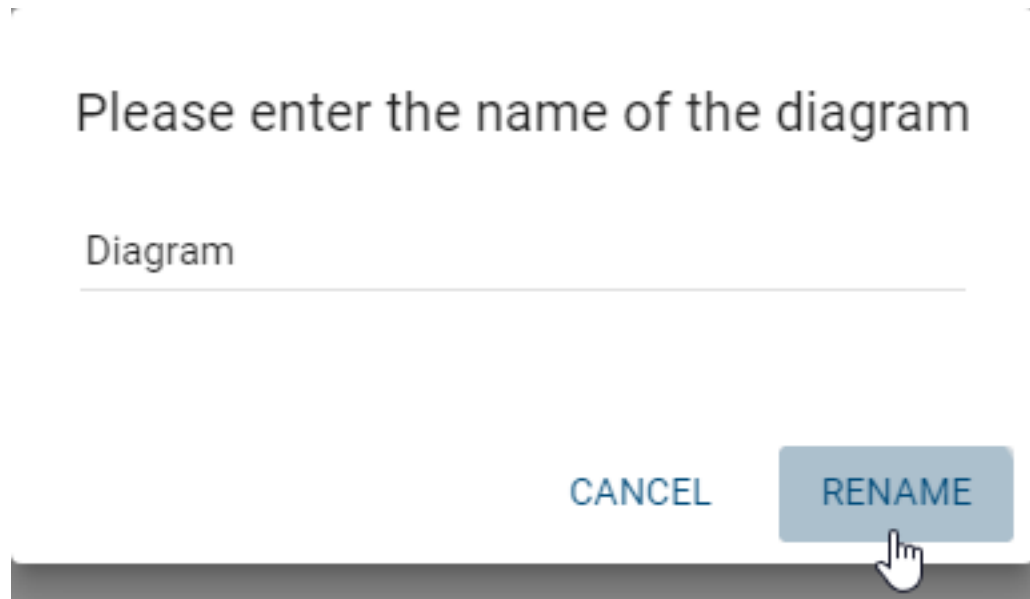
Click on *Rename* to apply your changes.

Please enter the name of the diagram

Diagram

CANCEL   RENAME

Optionally you can rename a diagram in attribute *Name* via the attribute tab. To do that, check out the diagram, rename it and check in your changes.

Attributes
Process (EPC)

Name*
New Process

Identifier

Description

Keywords

Note: A locked diagram, that is checked out by another user, can not be renamed.

1.2.6 How to work offline on diagrams?

Our innovative technology allows you to work in BIC Process Design even if you do not have an active network connection. Log in with an active internet connection. If the connection is lost, you can still use the application offline. You'll be notified that you are working offline, and in addition, the cloud icon in front of your repository is crossed out. Depending on the browser settings, the offline function will continue to exist after closing and opening the application in the browser. In offline mode, you can create new diagrams and edit checked-out diagrams. Only when an internet connection is detected, all functions are again available as usual. In case a new software version is available, an update dialog will automatically inform you about that.
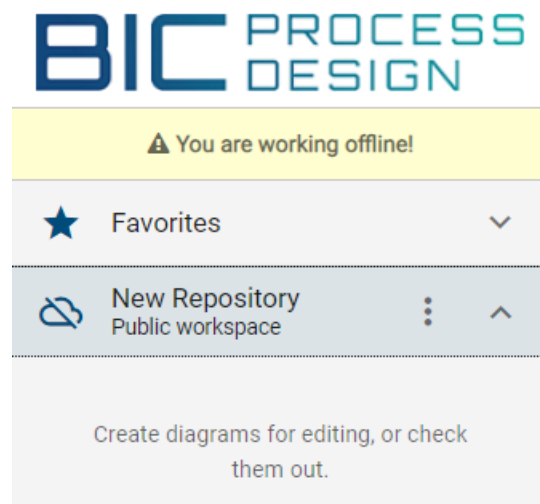
Check-out: You have to check out the intended diagram to edit it offline.

Edit: Your changes are saved locally within the browser and synchronized with the BIC Process Design Server as soon as you are working with an active network connection again.

Check-in: Check in the diagram to allow other users to edit it.

Note: If you've checked out a diagram for offline editing, this diagram will be locked for all other users until check in. Furthermore, the offline mode is not available in the Internet Explorer and after logging out.

1.2.7 How can I view my checked out diagrams?

You can display all locally available. These are all diagrams that you have checked out but not checked in again.

Open the context menu of the repository and click the *Change stage* entry. Afterwards choose *Local Workspace* to see all your local diagrams.
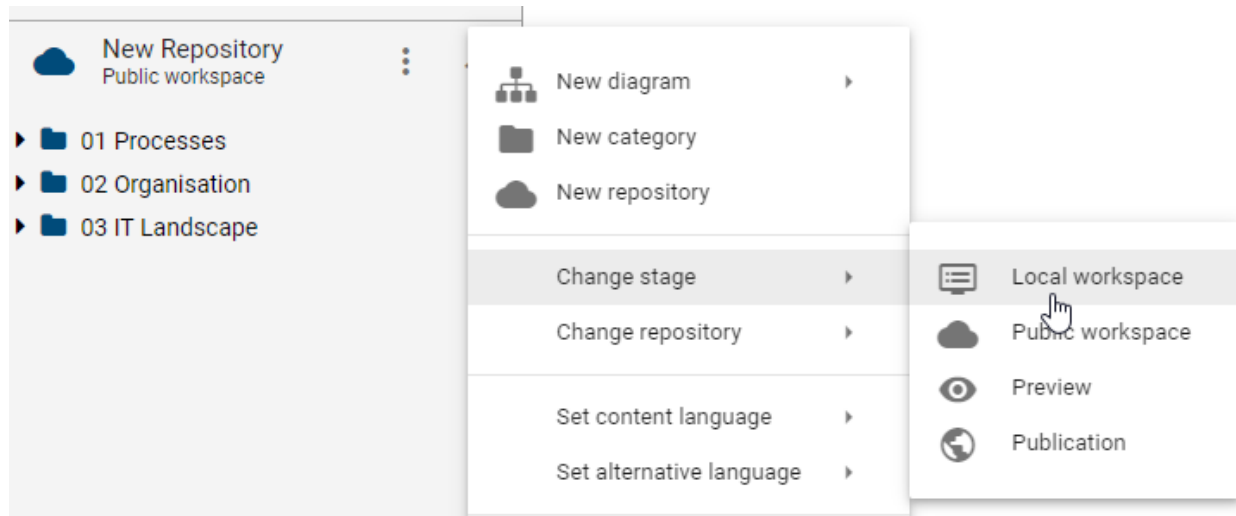
Open the context menu of the repository and choose *Public Workspace* to display all public diagrams or elements again.

1.2.8 How do I cancel the editing of diagrams?

If you changed a diagram, but you don't want to check in these changes and transfer them to the local workspace, you have the following options to discard the changes:

Open the context menu of the corresponding diagram and select the entry *Discard local changes*.
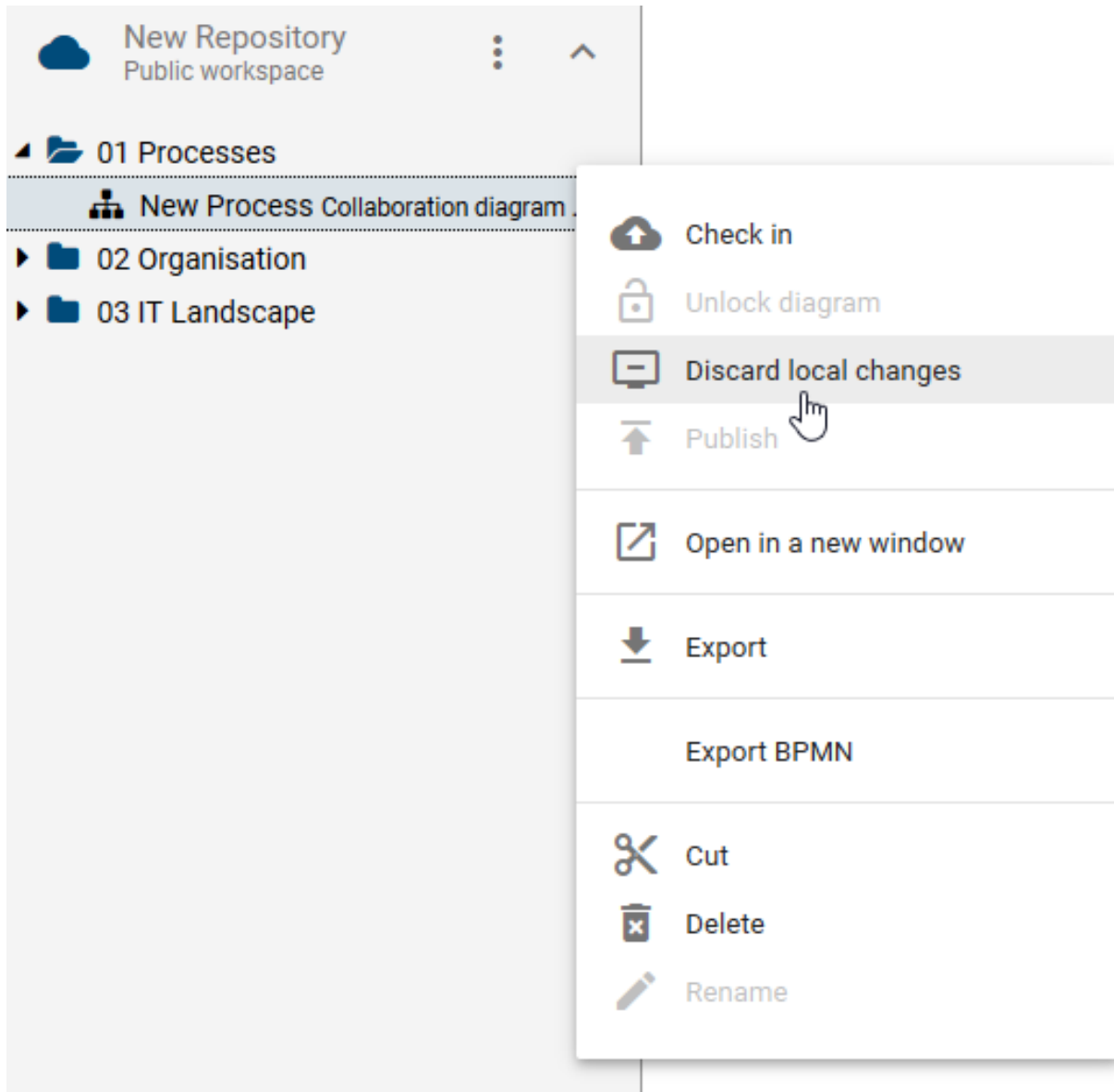
Confirm the subsequent query. Your changes will be irrevocably deleted. The diagram is now unlocked to other users.

1.2.9 How do I delete a diagram?

You can delete diagrams from the public workspace by applying the following steps:

Make sure you are in the *Public Workspace*. Open the context menu of the diagram which you want to delete. Here select the *Delete* entry.
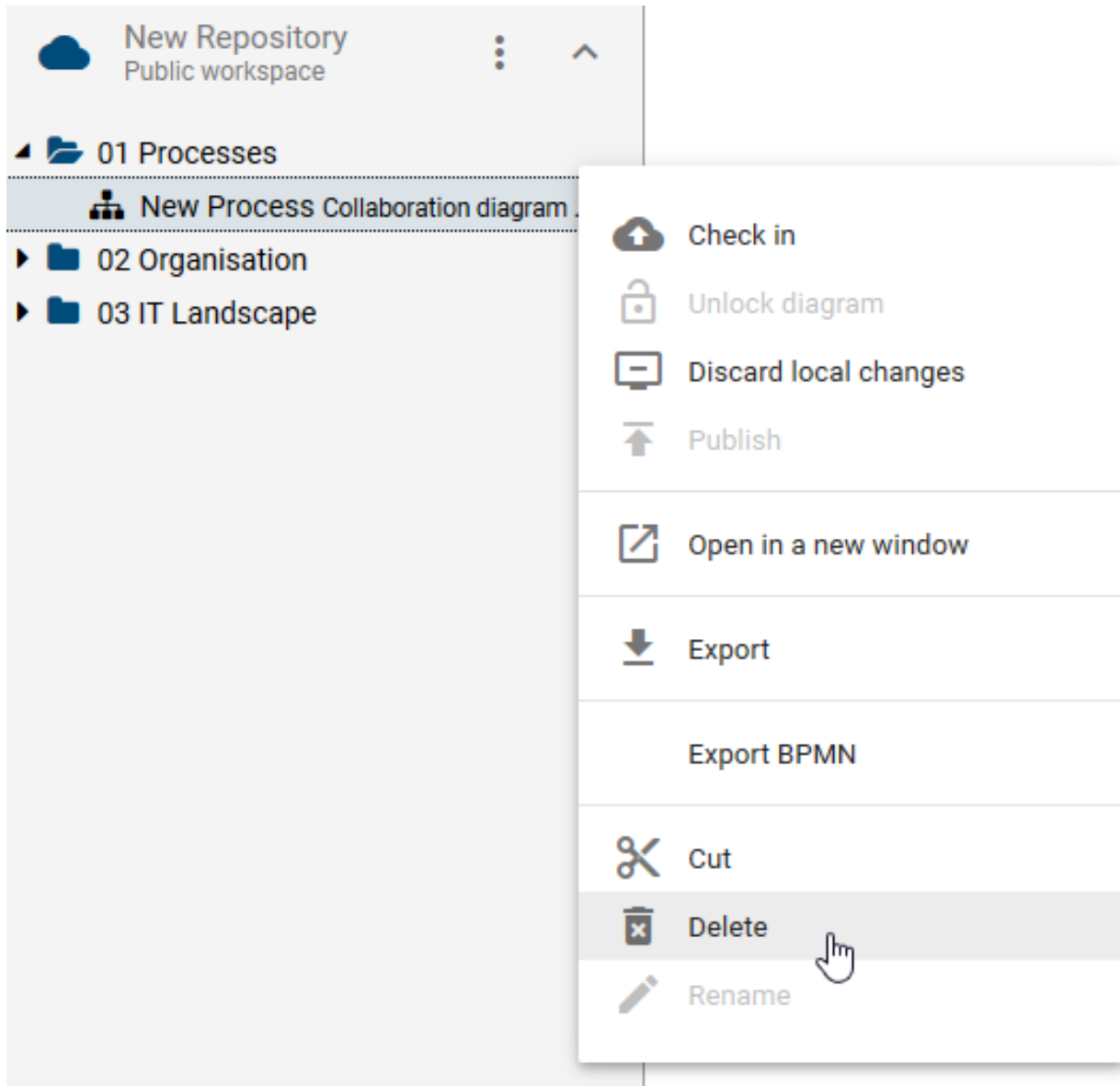
A dialog warns you that your diagram is irrevocably deleted.

Confirm the dialog by clicking on *Delete* or pressing Enter.

The diagram versions in the publication and in the preview remain.

Note: If necessary, create a backup beforehand to avoid the loss of important data, using the *export* for example. You will receive an e-mail if one of your favorite diagrams of the public workspace is deleted. Locked diagrams cannot be deleted.

ADMINISTRATION

In the administration area, you have the option to create, search for, edit or delete users. You can also create user groups and make additional administrative settings. The administration area is only visible if you have administration rights. You can open the *Administration* by selecting it from the top menu bar. The administration area will open in a new tab of your browser.

In the respective categories of the administration area you can navigate to the corresponding section in the help via the *question mark*.

Note: In case a tab containing the administration area already exists in your browser, no new tab will be created when selecting the *Administration* button. Instead you will be redirected to the existing tab.

2.1 User administration

The user administration displays all users ordered by their user names. Depending on your user administration methodology, this can be the e-mail address or for example the UUID of user data. In addition, you can find the assigned role of the user and his e-mail address. Left to the user's name his initials are displayed in a circle icon ("chip").

2.1.1 How do I create a new user?
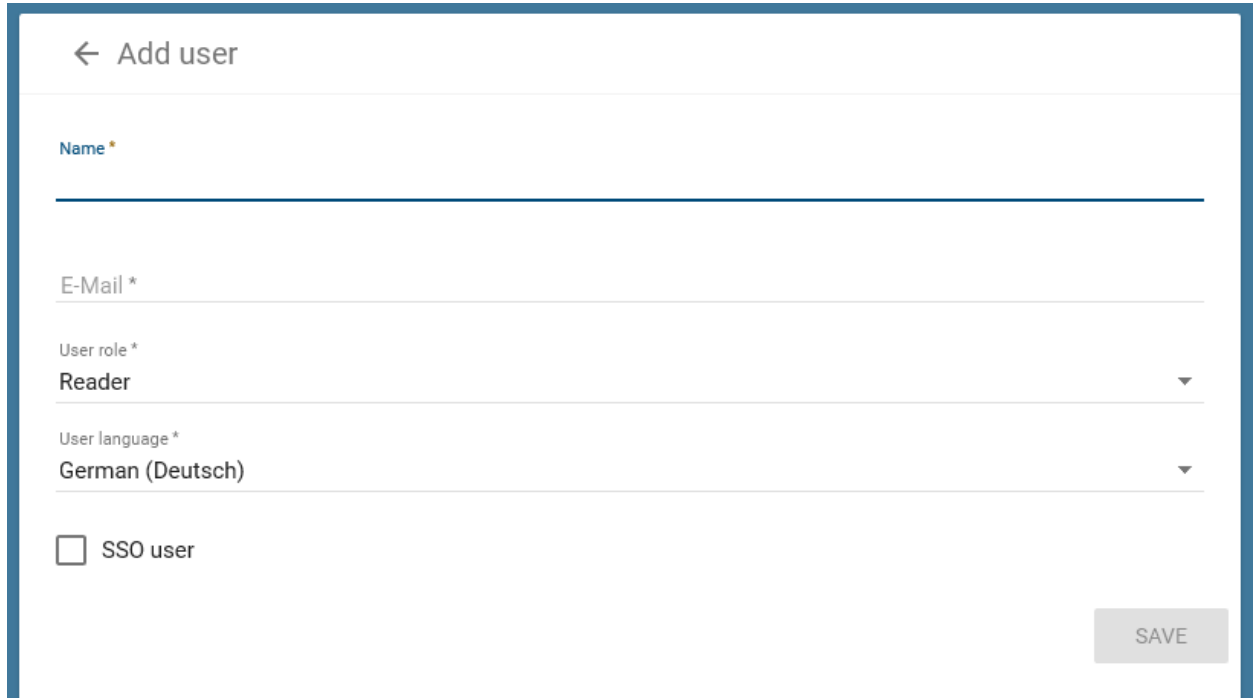
Open the *administration area* and select *Users*. There click on the *Add User*-button to create a new user.
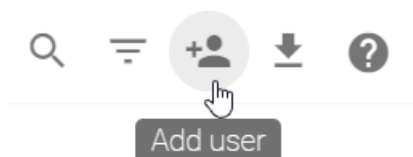
Some input fields with four mandatory fields (name, e-mail, user role, language) appear. There are five user roles, with different authorizations:

- Reader

- Reviewer

- Author

- Editor

- Administrator

← Add user

Name *

E-Mail *

User role *
Reader

User language *
German (Deutsch)

☐ SSO user

SAVE

After you have completed or selected the required fields, click *Save*. The newly created user can now be found in the user administration. He receives an automatically generated e-mail. It contains the information about the successful registration as well as a link to set his password. This link is valid for 24 hours.

2.1.2 Which user roles are available and which permissions do they have?

In general, you have five different user roles for Process Design, with different authorizations that build on each other. Your active user role appears in the upper right corner next to your username.

Reader: Readers only have access to the publication stage. This means these users are able to see published diagrams and all attributes, symbols, catalog entries and documents which are associated with these diagrams. In the publication area readers can create comments and reports and also use the print preview function. In addition they can add diagrams to their favorites.

Reviewer: Reviewers have similar access to the publication stage as Readers and possess the same permissions. Additionally, Reviewers have access to the preview stage and can view and work on assigned governance tasks (publication, depublishing, resubmission) if they are designated as a reviewing authority for a specific diagram or catalog entry. However, Reviewers are unable to initiate a governance workflow themselves.

Author: The user role Author has basically the same rights as the user role Reviewer. The Authors have additionally the right to access the public workspace. Based on this right they have the possibility to see all catalog entries as well as all diagrams of this stage. Therefore Authors may also model diagrams and create automatically generated catalog entries within the modelling process. To use this function they must be set as *author* within the diagram or object attributes of a given diagram. This enables the use of authors for specific diagram modeling or editing individual objects.

Editor: Similar to authors, the role Editor is used to edit and create diagrams. Other than authors, editors do not have to be set within the diagram attributes so that they can model a diagram. In addition Editors are able to make cross-diagram changes. This means users with the role Editor have the right to create, edit or delete catalog entries manually and are authorized to accept or to decline catalog entries. Furthermore, editors have the ability to assume administrative tasks for governance workflows. They have the authority to see and manage all governance workflows. In the governance cockpit, editors have the same rights as administrators, which means they can delegate or cancel workflows.

Administrator: Administrators have all rights that other user roles have. In addition, they have special administration rights. These include access to the administration area, the right to create, delete and rename repositories as well as the possibility to unlock diagrams.

Accessible workspaces	Administrator	Editor	Author	Reviewer	Reader
Public workspace	entitled	entitled	entitled	not authorized(*)	not authorized(*)
Preview	entitled	entitled	entitled	entitled	not authorized(*)
Publication	entitled	entitled	entitled	entitled	entitled

(*)Read-only access can be granted to individual diagrams in the public workspace (view *share diagram from public workspace*)

Tip: You can *connect persons* or *user groups* with diagrams and objects. With that their rights and duties can be enhanced. In addition *access restrictions* can be set for single diagrams or repositories so that only defined users or user groups can access them.

If you use BIC Process Execution, you have the possibility to set the user's role for this application as well.

ProcessApp Administrator: As a *ProcessApp Administrator*, you have access to the administration area and can manage all available options.

ProcessApp Analyst: As a *ProcessApp Analyst*, you have access to the monitoring dashboard and can monitor all processes.

ProcessApp Creator: As a *ProcessApp Creator*, you can model executable processes in Process Design. If you want to further edit a diagram and you have this role, you have the possibility to open the editor by right-clicking an activity in the context menu. Alternatively, you can also open the editor by selecting the activity and choosing the *Editor* section from the *Details* menu. There, you will find a button that allows you to open the editor. Only users with the *ProcessApp Creator* role have the option to use the *Test ProcessApp* button in the preview stage or in the public workspace within the diagram view in Process Design and work on tasks.

ProcessApp User: As a *ProcessApp User*, you can initiate processes and see how far along they are. You can use the *Create Case* button in the diagram view of Process Design at any stage and work on tasks if you have the *ProcessApp User* role.

ProcessApp Participant: As a *ProcessApp Participant*, you can have active tasks and work on them.

Warning: Please note that both the *ProcessApp User* role and the *ProcessApp Participant* role are currently required to edit and manage tasks.

Hint: Please note that these roles are not hierarchical. This means that if, for example, you are assigned the role of *ProcessApp Administrator*, you do not automatically have access to the rights of other roles. To obtain additional rights, you need to select multiple checkboxes of the *Process Execution roles*.

2.1.3 How do I edit user details?

Within the user details you can define or edit user specific attributes. These are the user's name, his e-mail address, the user role and the user language.

Open the *administration* and select *Users*. In the list of users, navigate to the user whose details you want to change.

By clicking on an entry, the user details of the selected user are opened up. In the input fields, you can then change the name, the e-mail address and the user language. It is also possible to declare a user as an *SSO user*. Moreover, a field displays the user role. You can change it after selecting it in a drop-down menu. If you use BIC Process Execution, you have the possibility to set the users role for this application, too. Simply mark the checkbox of the desired role.

If you scroll down, assigned user groups are displayed and you can remove or add the user to existing user groups. Please find out more about user groups *here*.

When finished, click *Save*.

Note: The user language defines the language in which you receive your e-mails from the application. A reconfigured language only becomes effective after the affected user logs off and logs in again.

2.1.4 How can I identify an SSO user?

Users that are created by SSO are marked as such in the user profile. As administrator you can see this in the corresponding *User details*.
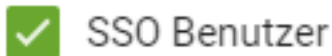
These settings are only available in read mode and cannot be changed via this administration.

2.1.5 How do I delete an existing user?

Open the *administration area* and select *Users*. In the user administration, navigate to a user you want to delete and open the context menu *More options*.

Select *Delete* from the context menu. A confirmation dialog will open, asking if you really want to delete the user.

Select *Delete* if you want to delete the user. The user will be removed from the user administration.

2.1.6 How do I search for a user?

Open the *administration area* and select *Users*.

Click the *Search*-button.
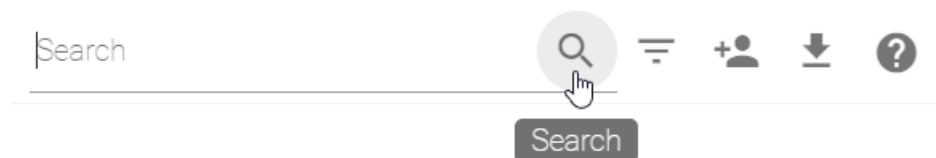
Enter the name or e-mail address of the user you are looking for.

Note: Search results are also displayed when the entered term is only part of the name. For example, the name "Doe" will be found by searching for "oe".

2.1.7 How can I export a list containing all users of my tenant?

Open the *administration area* and select *Users*.

You can find the *Download user report (Excel)* button on top.
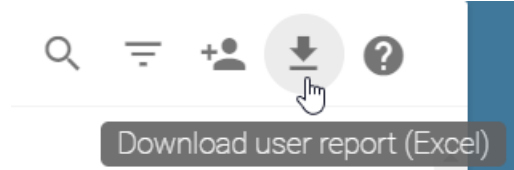
When you select the button, a user export is generated as an Excel file. A message informs about the generation in the bottom of your screen. As soon as the user export is finished, a download option appears in the message. Click this option to start the download of the Excel export.

2.1.8 How can I filter by user roles?

Open the *administration area* and select *Users*.

When you click the *Filter users*-button, all available user roles appear.
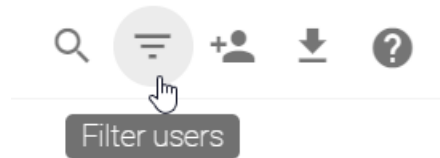
Click on an entry to select the user role you want to filter by. Subsequently, only users of this role are listed.
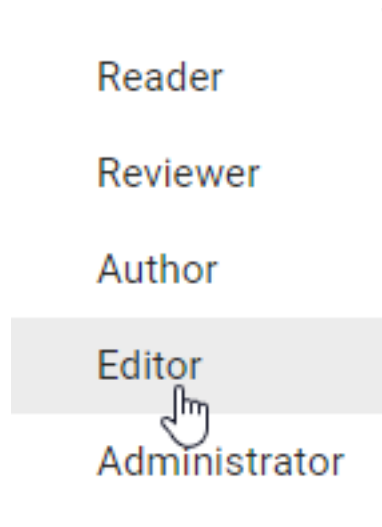
Note: The search still works within the filtered list.

2.1.9 How do I change the user role of a user?

Open the *administration area* and select *Users*.

In the *user administration*, you see a list of administrated users. Navigate to the intended user and click the entry of the user to open details.

John Doe - READER
user@gbtec.de

You will see the user name, his e-mail address, his current role and his interface language. Click the *Process Design Role* field; a list will the available user roles will be expanded.

← User details of John Doe

Name *
John Doe

Email *
user@gbtec.com

Process Design Role

User role
Administrator

Select a user role. The Reader, Reviewer, Author, Editor and Administrator roles are available. Afterwards click on *Save* to adopt the changes. Afterwards you will be notified that your changes have been saved and the affected user will be automatically informed by e-mail about the changes.

If you have upgraded the rights of a user, he will still be in his old role at the next login. This ensures that users know their rights. If a user wants to use his new rights, he needs to *change his role* in the application himself.

Note: If you downgrade the rights of a user, the role will change immediately.

2.1.10 How do I reset the password of a user?

Open the *administration area* and select *Users*.

In the *user administration*, you see a list of administrated users. Navigate to a user. Open the context menu next to the user's name and e-mail address.

Choose the option *reset password* and confirm with *Yes* to automatically send an e-mail with a link to set a new password to the user. This link is valid for 24 hours.
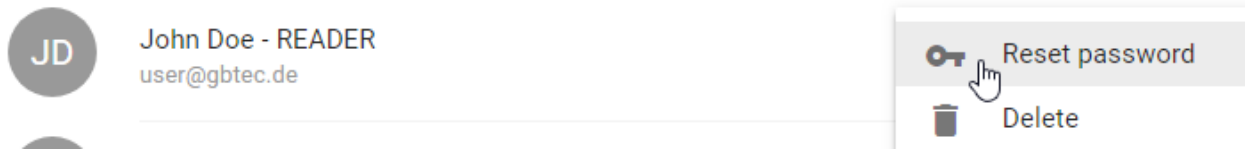
2.1.11 How can I assign a user to a person?

Users need to be linked to a catalog entry of the type person, to be able to use them later on for the respecting diagram attributes. The assignment is created via the e-mail address.

Create a person in the catalog or diagram. Enter in the attribute e-mail address exactly the address that the wanted user has in BIC Process Design. Then save your changes.

Alternatively, this catalog entry with the corresponding name and e-mail address is automatically created by selecting a user in *attributes*, if it does not already exist.

2.2 User groups

In addition to role-based authorization, a group-based authorization is also available to facilitate the administration of users in different areas of your company.

Group-based authorization can be used to enable groups of multiple users to model diagrams or objects, or to restrict the access to those diagrams. Further you can use this system to notify user groups about version changes, or to incorporate them directly into the publishing process.

This authorization is possible by *assigning user groups to specific diagram- or object attributes*. The assignment of user groups works via *organizational units*.

2.2.1 How can I administrate user groups?

As an administrator you can manage user groups. To do that open the *administration area* and select *User groups*.
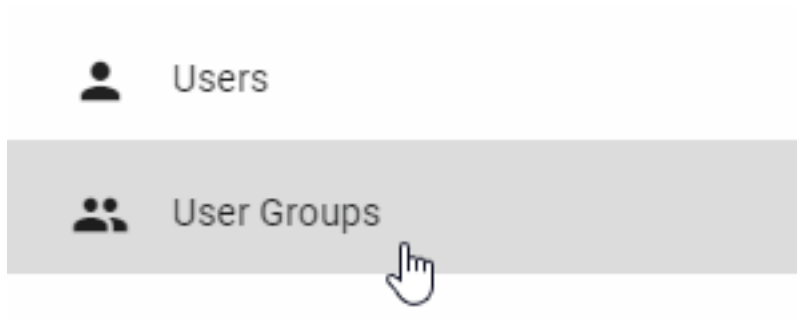
A list of all available user groups is displayed in alphabetical order. Next to the heading *User Groups* the current number of all user groups is displayed.

Overall, you are provided with various functions for administering user groups. This includes creating new user groups and adding users to those groups.

2.2.2 How do I create a new user group?

Navigate to the *user group administration section*. There click the *Add group* button to create a new user group.
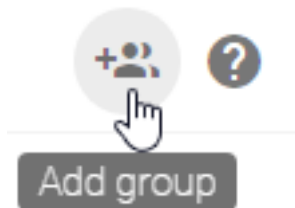
Insert a name for the new user group and click *Save*.
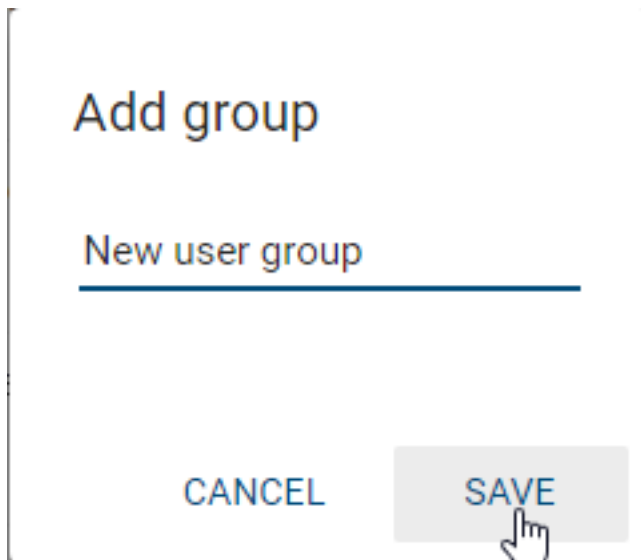
2.2.3 How do I delete a user group?

Navigate to the *user group administration section*. To the right of the user group names, you will see the context menu *More options*.

By clicking on the context menu and select *Delete*. With the confirmation of the appearing dialog the group will be deleted.
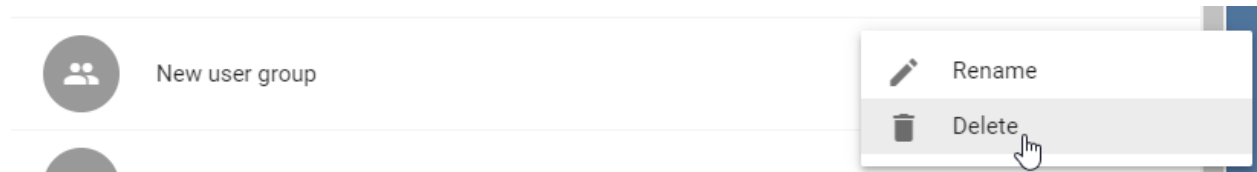
2.2.4 How do I assign users to a user group?

Navigate to the *user group administration section*. There click on the entry of the desired user group to open a list of all associated users.

By clicking on the button *Add users to the group* a pop-up window opens. Here you can add more users to the user group.
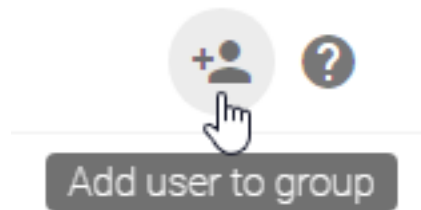
Optionally you can also assign individual users to groups via their *user details* in *users*.

Note: Users can be assigned to multiple user groups at the same time. If user group associations are changed (for example *restricted access* to diagrams), such changes will not take effect until the user *logs out* and logs back in.

2.2.5 How do I remove users from a user group?

Navigate to the *user group administration section*. There click on the entry of the desired user group to open a list of all associated users.

Move the mouse to the user you want to remove. The button *remove*, which you can select with one click, appears on the right side. Confirm the pop-up dialog with *Delete*.

John Doe - READER
doe.user@gbtec.de

Optionally, you can also remove individual users from a user group via their *user details* in *users*.

2.2.6 How do I rename a user group?

Navigate to the *user group administration section*. There click on context menu *More option* of the respecting user group and select the entry *Rename*
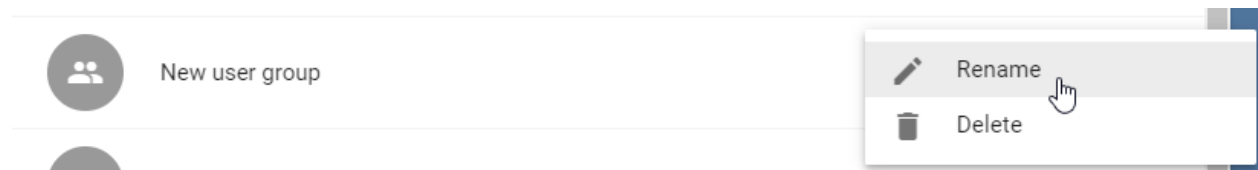
You can now change the name of the group and *Save* your changes in the appearing dialog.
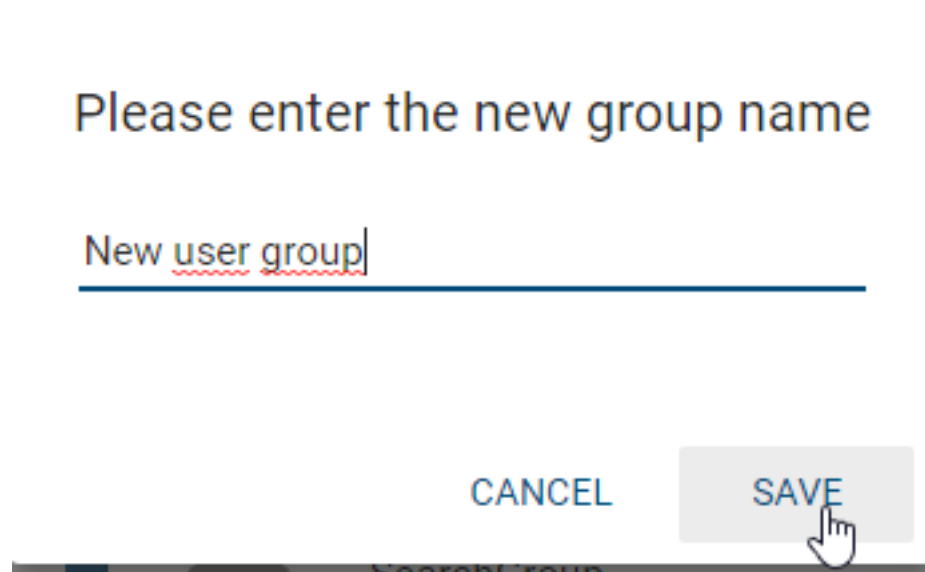
> **Warning:** Please be aware that, if you want to rename a user group which is associated with a *restricted repository* it is possible to exclude yourself as well. For this case we suggest the following best practice. This way the group can be renamed without the possibility of you excluding yourself.

Best practice

1. Open the catalog entry of the associated organizational unit.

2. Edit the attribute *Identifier* to the **new group name**.

3. Rename the group and use the same **new group name** as in step 2.

2.2.7 How can I assign a user group to an organizational unit?

The assignment of a user group to different attributes of a diagram is done via organizational units. Create an organizational unit in the catalog and enter the name of the corresponding user group in the attribute *Identifier*.

Alternatively, this catalog entry with the corresponding *Name* and *Identifier* is automatically created by selecting a user group in *attributes*, if it does not already exist.

Tip: Give the organizational unit the same name as the assigned user group to clearly recognize it.

Tip: The new user group name can simply be updated in the catalog so that you do not have to change the occurrences manually. Alternatively, it is also possible to create a new group and then replace it.

2.3 CI Configuration

Within the CI Configuration area you can adapt BIC Process Design according to your corporate design. You can reach the CI Configuration if you select the option *CI Configuration* in the explorer of the *administration area*.
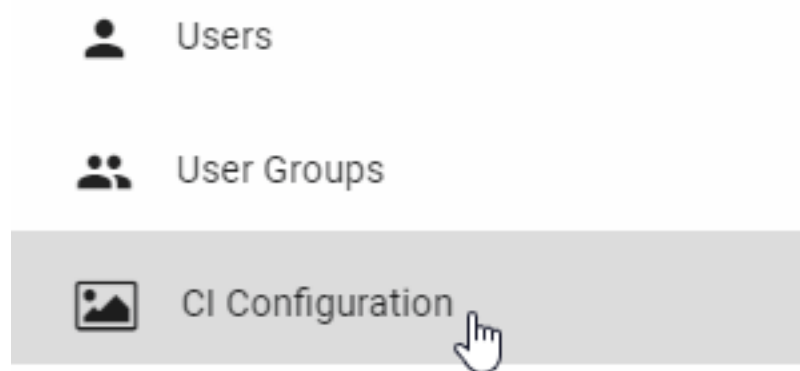
2.3.1 How do I change the colors of BIC Process Design?

First navigate to the *CI Configuration*.

An area is displayed in your workspace, allowing you to set the *Primary color* and the *Accent color*. Click on the appropriate fields and select a color in the appearing window. The changes will be set for each user by reloading BIC Process Design.

Best practice

Note that if you customized your symbol colors, changing the *Primary color* and the *Accent Color* can lead to undesired behaviour of BPMN pools. Customize your CI-Configurations colors first as described above. Afterwards, you can define your *symbol colors*.

CI configuration

Colors

Primary color

#004B7A

Accent color

#66ad44

Application logo

Logo background

#ffffff

Start diagram

 New diagram ✕
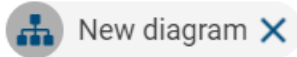
Symbol colors can be *formatted* independently.

Note: The CI colors also define the design of your BIC Process Execution application.

2.3.2 How to set a company-wide start diagram?

First navigate to the *CI Configuration*.

An area is displayed in your workspace, allowing you to set the *Start diagram* from your published diagrams. To do this, enter the name of the diagram in the corresponding field and select the entry from the suggestion list. The changes will be set by reloading BIC Process Design.

CI configuration

Colors

Primary color

#004B7A

Accent color

#66ad44

Application logo

Logo background

#ffffff

Start diagram

 New diagram ✕
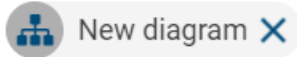
The start diagram, which has been set by the administrator, will then be displayed to every user with the role Reader as *welcome screen*.

2.3.3 How to set a company logo?

First navigate to the *CI Configuration*.

An area is displayed in your workspace, allowing you to set an *Application logo* from your files. Click on the corresponding field to do this. These changes will be applied to all users after reloading BIC Process Design. The selected logo then appears in the upper left corner.

CI configuration

Colors

Primary color

#004B7A

Accent color

#66ad44

Application logo

Logo background

#ffffff

Start diagram

 New diagram ✕
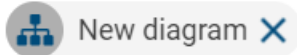
Note: This logo is also shown in your BIC Process Execution application.

2.3.4 How can I set the logo background?

First navigate to the *CI Configuration*.

An area is displayed in your workspace, where you can select the *Logo background*. Click on the corresponding field. The changes will be applied to all users after reloading BIC Process Design. If a transparent logo is set, the background color will appear in the top left corner.

CI configuration

Colors

Primary color

#004B7A

Accent color

#66ad44

Application logo

Logo background

#ffffff

Start diagram

New diagram ✕

2.4 Catalog

2.4.1 How can I edit the details of catalog object types?

Open the *administration area* and select *Catalog*

A click on an item in the list opens the details page for this sort of catalog entries. You can edit the chosen typ here.
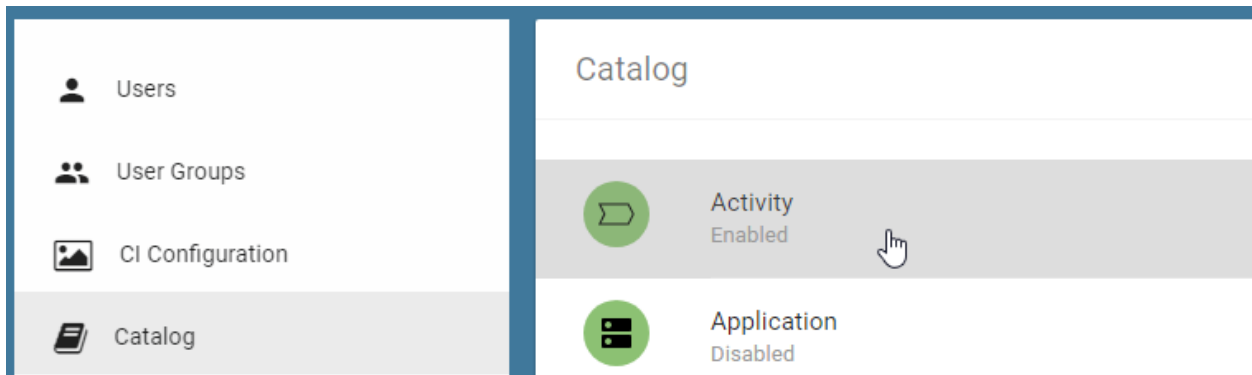
By clicking on the arrow on the top left you get back to the list of all types.

2.4.2 How can I define if catalog suggestions are automatically generated after checking in?

You have the option to decide which object types are automatically included as proposals in the catalog after checking in the modeling.

Navigate to the *administration area* and open the tab *Catalog*. All the object types available in your method are listed here. Click on any entry to open the details page.
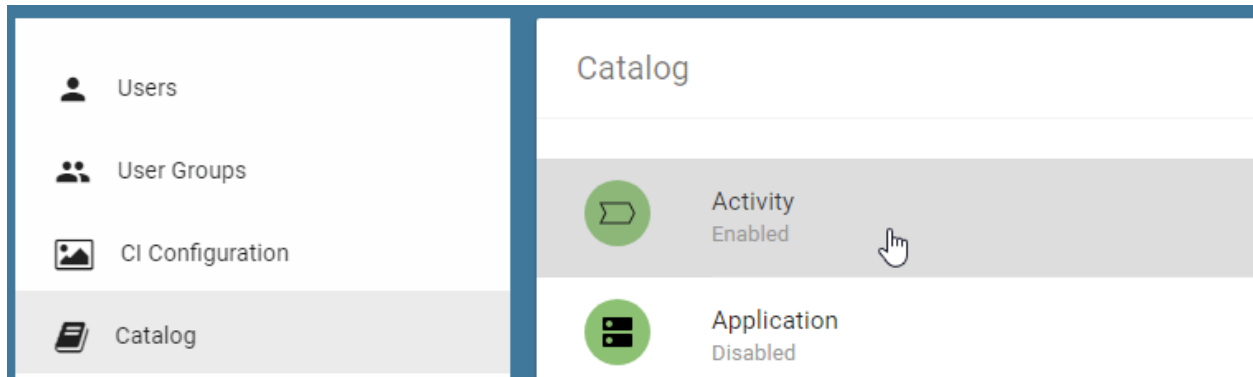
You can deactivate (switch left) and activate (switch right) individual types by clicking on the wrapping switch of the entry *Allow catalog suggestions from modeling*. Activated entries are accepted as suggestions, but not deactivated. The selected behavior is displayed as the subtitle of the button.
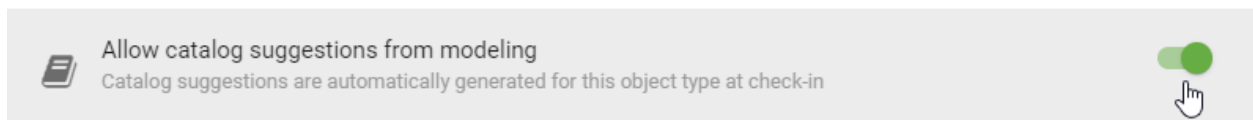
If, for example, you have deactivated an application, they will not be displayed as a proposal in the catalog if you have created them in a diagram and checked-in. You can still create them manually in the catalog and reuse them in the diagram.

The default settings are the settings of the previous BIC Process Design version. These are used if the tenant preferences are not available.

Note: This function also affects the corresponding *filter* visibility in the catalog.

2.4.3 How can I define that only existing catalog entries of a type can be used?

As an administrator, you can prohibit check-in of diagrams that contain objects which do not exist in the catalog yet. With this option you can assure that only already existing objects are used. This prevents the creation of redundancies for example. E.g. if a user models a symbol in the diagram without linking a catalog entry to the symbol via the *suggestion list*, the diagram cannot be checked in.

To do that open the *administration area* and select *Catalog*.

The click on an item in the catalog entity type list opens the details page for this entity type.
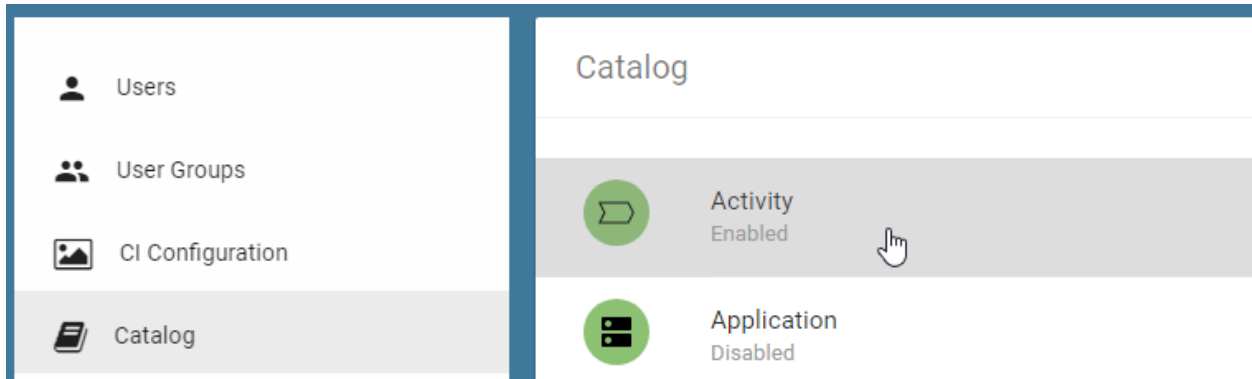
Click on *Allow check-in of catalog suggestions* to activate (switch right) and deactivate (switch left) the permission. The set behavior is displayed as the subtitle of the button.
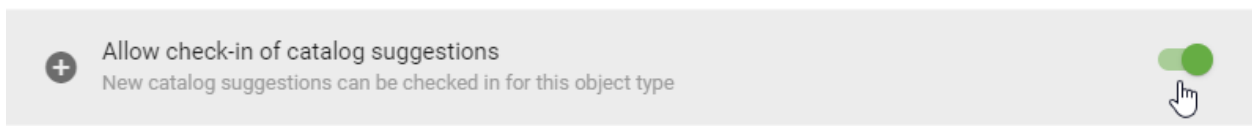
By clicking on the arrow on the top left you get back to the list of all types.

Hint: To perform validation, the *"Allow catalog suggestions from modeling"* option should be enabled.

2.4.4 How can I set facets for the catalog?

In the administration area, you can specify which attributes of an object type are available as facets in the catalog. By default, no facet is enabled. You can activate a facet as follows:

In the *administration area* navigate to the *Catalog* tab. Click on an element in the list of catalog object types to open the details page for this entry.
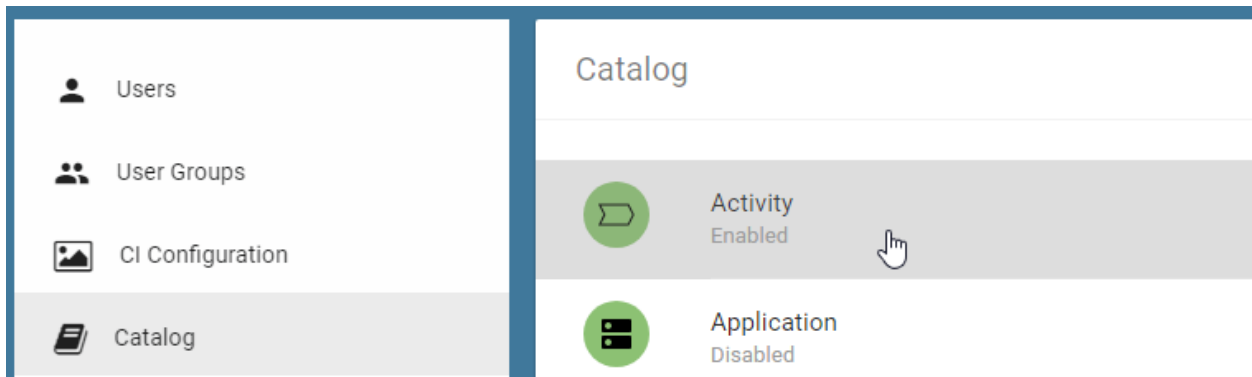
In the details, select *Sub categories*.

All selectable attributes of the object type are then displayed. Click to activate the checkboxes of the attributes that you want to see as facets.

← Catalog - Activity - Sub categories   ❓

ⓘ   Please select the attributes you want to show as sub categories for this object type.

Attributes

- ☐ Allocation model
- ☐ Applicable documents
- ☐ Attachment (URL)
- ☐ Call activity
- ☐ Compensation task
- ☑ Decomposition
- ☑ Identifier
- ☐ Idle time (minutes)
- ☐ Keywords
- ☐ Material costs (Euro)
- ☐ Multiple instance type
- ☑ Name
- ☐ Probability (%)
- ☐ Process time (minutes)
- ☐ Process type
- ☐ Setup time (minutes)
- ☐ Task type
- ☐ Transport time (minutes)
- ☐ Variants

This attribute type is then displayed as a selectable facet of the respective object filter in the catalog as soon as the attribute has been maintained for an object of this type. More information about the catalog filter *can be found here*.

By clicking on the arrow on the top left you get back to the details.

2.4.5 How can I set the visibility of a catalog entity type for publication?

You can configure which entity types appear in the publication catalog. By default, visibility is set for applications, risks, controls, roles, documents and business objects. If the type is disabled for publication, it is not shown in the publication stage as catalog type. Neither in the expanded catalog nor the filter option.

To do that open the *administration area* and select *Catalog*.

The click on an item in the catalog entity type list opens the details page for this entity type.
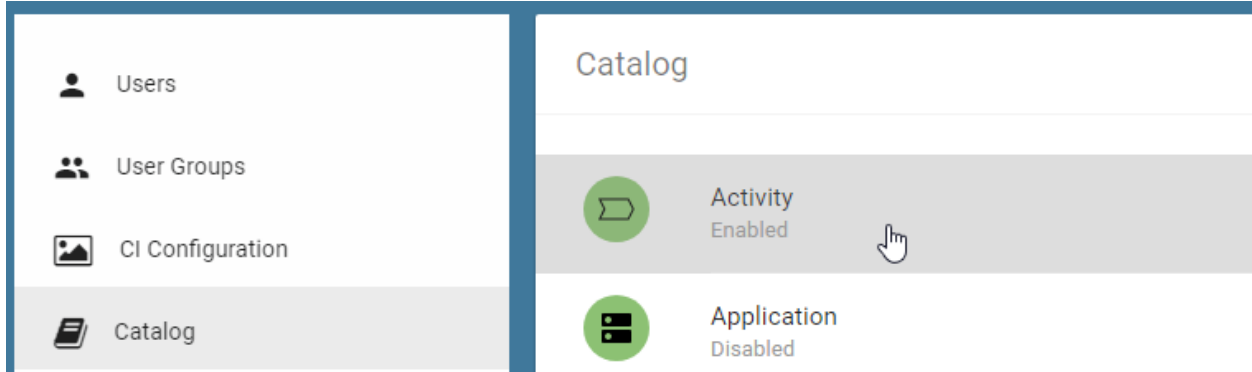
Click on *Display catalog entries in the publication* to activate (switch right) and deactivate (switch left) the visibility. The set behavior is displayed as the subtitle of the button.
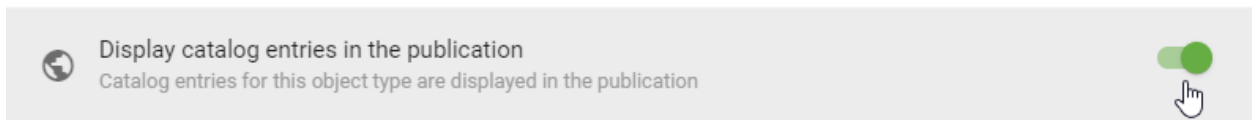
By clicking on the arrow on the top left you get back to the list of all types.

2.5 Languages

2.5.1 How can I set relevant languages?

Go to the *administration area* and select *Languages* in the explorer. All available languages will be listed there.
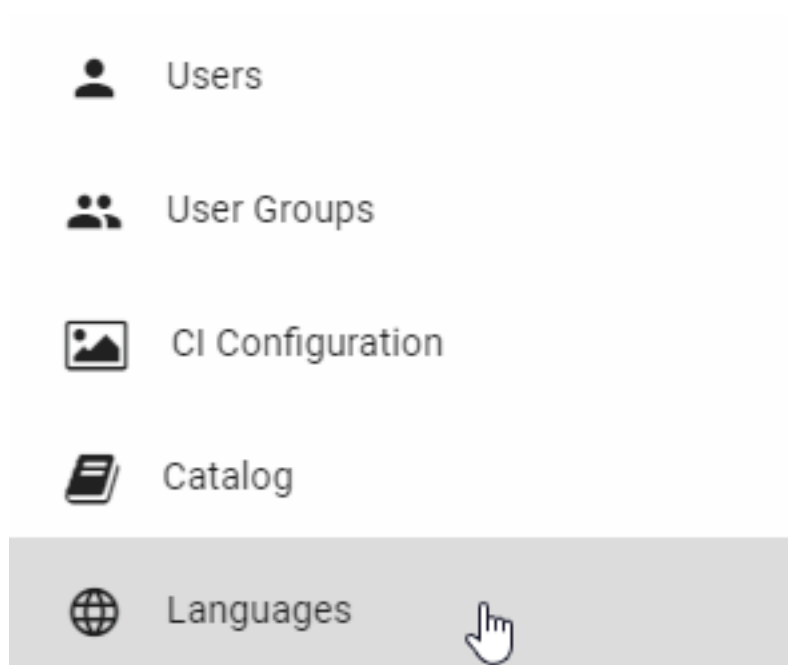
In the language configuration, you have the option to select the languages that are available for users and relevant for your company. These are then selectable as *content and alternative language*. The default language is shown in bold, which is displayed automatically after login. This can also be changed by clicking on *Set as default*.

Languages [3]

☐ Chinese (中文) - ZH

☐ Croatian (Hrvatski) - HR

☐ Czech (čeština) - CS

☐ Danish (dansk) - DA

☐ Dutch (Nederlands) - NL

☑ **English (English) - EN** mark as default

☐ Finnish (suomi) - FI

☐ Flemish (Vlaams) - BE

☐ French (français) - FR

☐ Galician (Galego) - GL

☑ German (Deutsch) - DE

2.6 Archive

2.6.1 How can I change archive settings?

Administrators can set the respective *archive* of the areas *Public workspace*, *Preview* and *Publication* across diagrams. In addition to activating and deactivating the archive, the retention period can also be configured.

To do this, navigate to the *administration area* and select the entry *Archive*. Here you will see the current settings for the individual workspaces.

The changeover switch can be used to activate and deactivate archiving. The activation status is always displayed below the workspaces in the administration. Disabling does not remove existing archive entries. In addition, the existing entry retains the old retention period when reactivated.

If archiving is activated, you can change the retention period by using the number box. For the public workspace and the preview there is a minimum of one day and a maximum of 365 days. For the publication stage there is a minimum retention period of one year and a maximum of 30 years. If you change the retention period the changes will automatically be saved. The retention period starts as soon as the old version of a diagram gets visible in form of an entry within the archive of the corresponding stage. This means if a diagram is deleted, depublished or replaced by a new version within the stage, this version becomes visible as an entry in the archive of the corresponding stage and the retention period begins. The same goes for diagrams which have exceeded their *validity*. When the end of the retention period is reached, the archive entry is finally deleted.

Tip: Note the possibility to set a *special retention period* for diagrams and catalog entries in the governance attributes. You can maintain this attribute in a diagram or catalog entry if the retention period in *publication* stage should deviate from the settings made as described above. By default, the attribute is deactivated which can be changed in the method.

2.7 Method

The Method defines the modeling language of your BIC Process Design application. This means it specifies how structures and processes of your enterprise can be described and displayed within BIC Process Design. It is used to define which diagram types can be used within the modeling process. Also, the available elements of individual diagram types such as symbol or attribute types can be defined via the method.

2.7.1 How can I set up a new method?

You have the option of setting a user-defined method for all users that overwrites the previous method.

Navigate to the *administration area* and select *Method*. Now you can use drag & drop or the *Import* button and the appearing file selection dialog to upload a new method, which applies the changes to the modeling language of your BIC Process Design application.
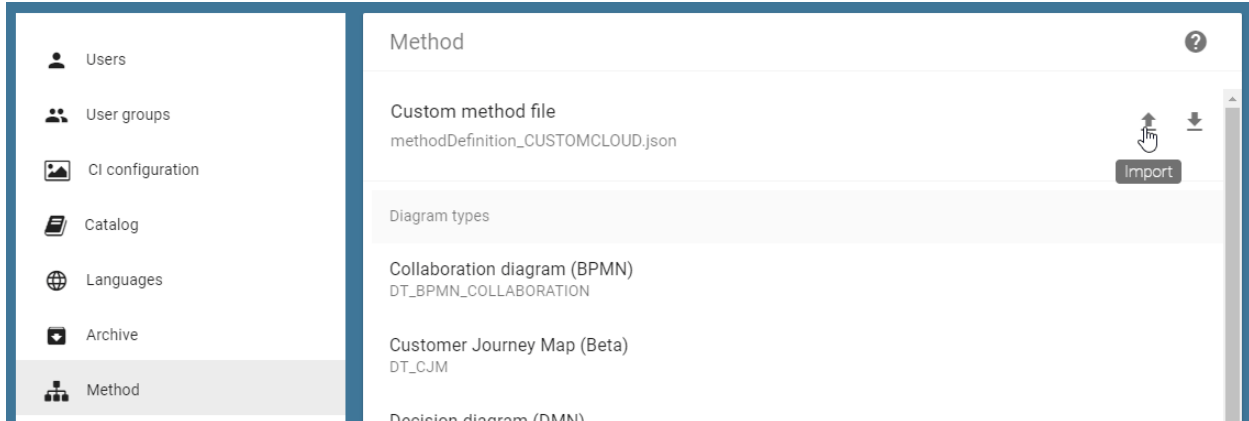
At the moment it is possible to upload a method file (.json). While the method is being uploaded, you cannot perform any actions and the application is grayed out. After the import has been successfully completed, you will receive a corresponding message at the bottom right of the screen. The name of the uploaded method file is also displayed under *Custom method file*. For the new method to be available for the user, the application must be reloaded. Users who log in again use the method directly.

2.7.2 How can I export the current method?

It is possible to download the custom method that is currently set in the application, for example, to save it or edit it in the method editor.

Navigate to the administration area and select *Method*. By clicking on the *Export* button, the current method is downloaded as a JSON file and saved under the displayed name.
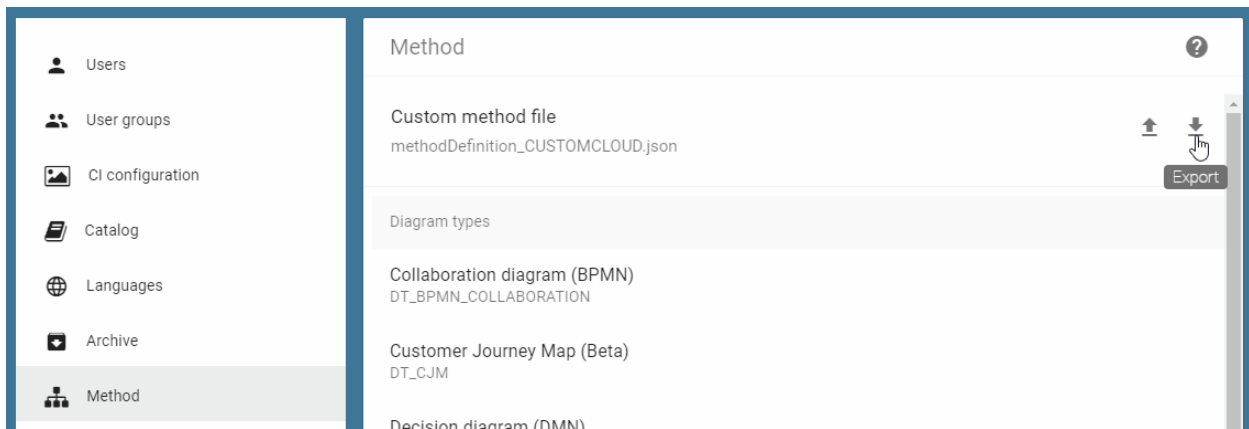
If you have not set a custom method, the base method will be exported under the name "ImportProperties.methodeFile".

2.7.3 How can I set the layout of a diagram type?

The layout assistant helps you to layout the process flow. This means that the sequence flow and activities are in the foreground. In the administration you can configure and customize the settings of the layout assistant for individual diagram types. According to the layout assistant availability you can configure the diagram types BPMN, EPC and VCD by default.

Navigate to the *Administration* area and open the *Method* tab. All diagram types and corresponding diagram IDs are listed here. Click on an entry for editing.
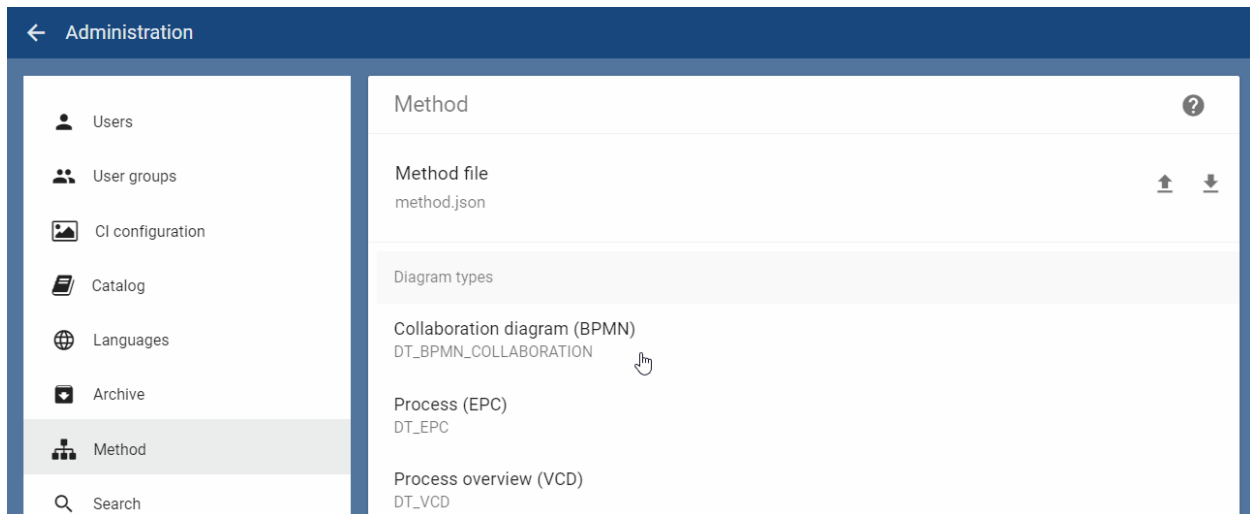
The setting options of the selected diagram type will open and are explained in the following.

Modeling orientation: Here you can choose between *Horizontal* and *Vertical* via the drop-down field, which influences the selection of the starting point of the layout assistant. The orientation refers to the process flow, which is represented by, for example, sequence and message edges between activities.

Horizontal/Vertical distance: The distance in the process flow is defined by the input of numbers. This corresponds to the horizontal and vertical distance between two symbols related by a sequence or message edge.

Horizontal/Vertical satellite distance: These numbers represent the horizontal and vertical distance between the satellites.

Quadrant port: You can set the ports of the satellites on an activity. Click in a quadrant. Two selectable ports will then appear at the activity - the currently selected port is filled in green. Clicking on a port *Choose quadrant port* will save the changes and you will receive a notification at the bottom right of the application.

Satellite positioning: Furthermore, the position of the satellites can be determined. In the input field of the corresponding quadrants you can specify, which object type with which relation to the activity should be moved here automatically during layouting. The maximum number of vertically superimposed symbols can also be specified here. If the number is exceeded during layout, a new column of the vertical arrangement is created. You can save your input by pressing the *enter* key and a corresponding message appears in the lower right corner of the application. The input is now visible as a chip in the quadrant. Via the respective *X* in the chip you can remove the input. In the following example, a maximum of three objects of the type "Role" with the relationship "C - Consulted" are arranged one above the other in the upper left quadrant.

The default settings of the layout assistant are overwritten by these configurations. If no individual behavior is defined, the *layout assistant uses the default*.

Note: Chips can only be generated for object types that exist in the method. There is no further validation of your input. Note the existing *object types and association types*.

Note: The unit of the distances have the following length: 1000 units are equal to 1 cm. This means 1 unit is equal to

---

0.01 mm.

2.7.4 How can I configure the standard colors of the symbols?

You can define the standard coloring of each symbol type for all stages of your BIC Process Design. Diagrams in the archive will always be displayed in the current color settings. You can choose the border, background and symbol color for each symbol type.

> **Warning:** The chosen colors apply to *all* stages. Thus, you change the coloring of **diagrams in publication**. Please also note the hints about the configuration of a few symbol types *in the appendix*.

Best practice

Note that if you customized the color of a BPMN pool, you should not change the color of your CI-Configuration afterwards. This can lead to unwanted behaviour. Therefore, make sure that you set your CI-Color first and only then customize the color of your pools.

To do so, navigate to the *administration area* and open the *Method* tab. All configurable symbol types with 3 color fields each are listed below the diagram types.
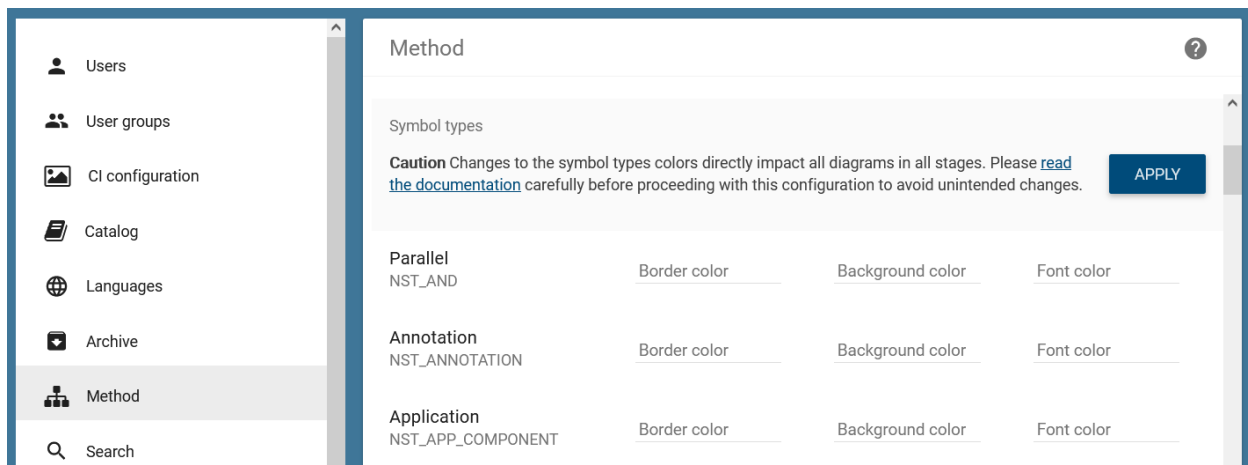
Scroll to the desired symbol type and click on a color field. A color palette opens where you can choose the new color value. Alternatively, enter a hex code.
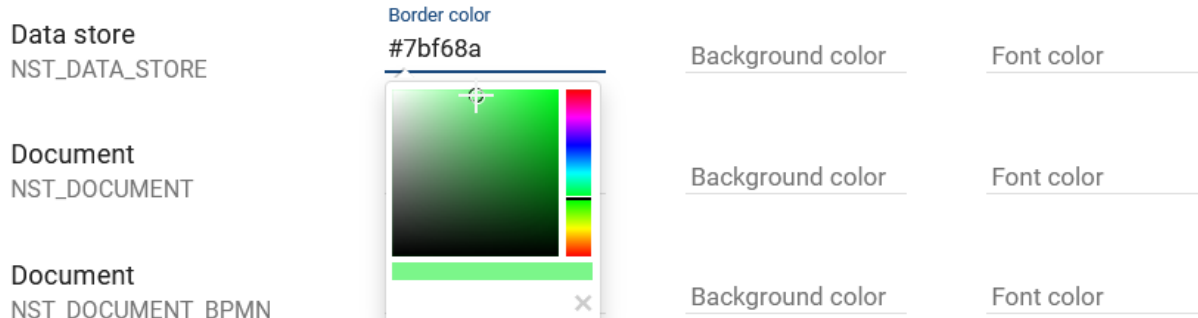
Note: If a color has not been set yet, the symbols are shown in the default color of BIC Process Design. If a value has been entered and you would like to return to the default color, you can delete the value and confirm by clicking *apply* as follows.

If you have configured the desired symbols, click the *Apply* button and confirm the following dialog via *Apply changes* to save the values.

Apply changes to all diagrams

You made changes to the symbol type colors. The changes are applied directly to all diagrams (in all stages). Do you want to apply the changes now?

APPLY   CLOSE   APPLY CHANGES

If you do not like to save the values, select *Close*. Refresh the browser tab of your BIC Process Design via the key combination *Ctrl* + F5. Then, the diagrams containing symbols of the adapted type(s) are displayed in the new color configuration.

Note: If you refresh your BIC Process Design tab via the button of the browser menu or F5, you have to do this twice to view the new color configuration.

Note: It is also possible to *format a symbol using the symbol palette*. If you set the coloring this way, it is also valid for all stages and will not be overwritten by later changes of the general configuration as explained here.

2.7.5 How can I download or upload my own symbol color settings for symbols?

You have the possibility to *configure your symbol colors*. Furthermore, you can download or upload your own symbol color settings. This allows you to switch between different symbol colors.

Hint: Please be aware that a change in the symbol color affects **all** diagrams in all stages.

To up- or download your symbol color settings you need to navigate to the *Method* tab in the administration area. There you have the possibility to import or export your current settings.

Export

Choose *Export* to export your current symbol settings as a JSON file.
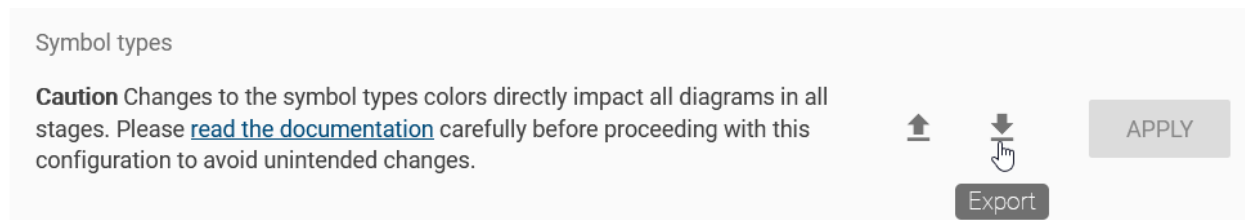
Import

If you have changed your symbol color settings externally or want to upload an older version of your settings, you can upload them here. Choose the button *Import* to import your JSON file.
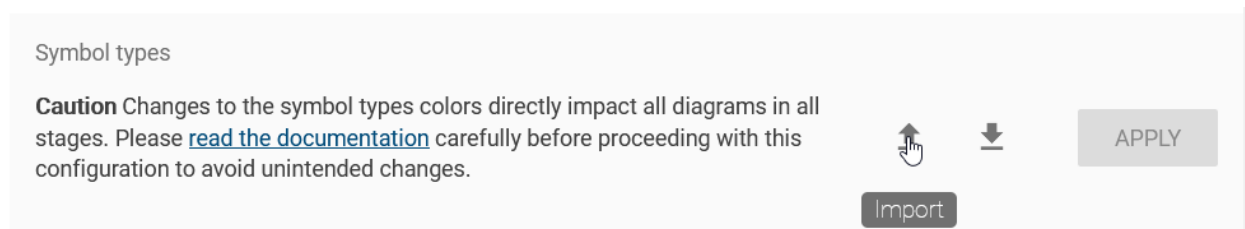
Afterwards you need to select the Button *Apply* to apply your changes.

Warning: If you want to upload your own JSON file you need to make sure that the symbol IDs are correct and available in your method. If you use IDs which are not available in your current method, this can lead to undesired behavior.

2.8 Search

2.8.1 How can I set attributes as search filters?

You have the option of setting additional individual attributes as search facets.

Navigate to the *administration area* and select *Search*. There you will find all attributes listed, which are available in your method.
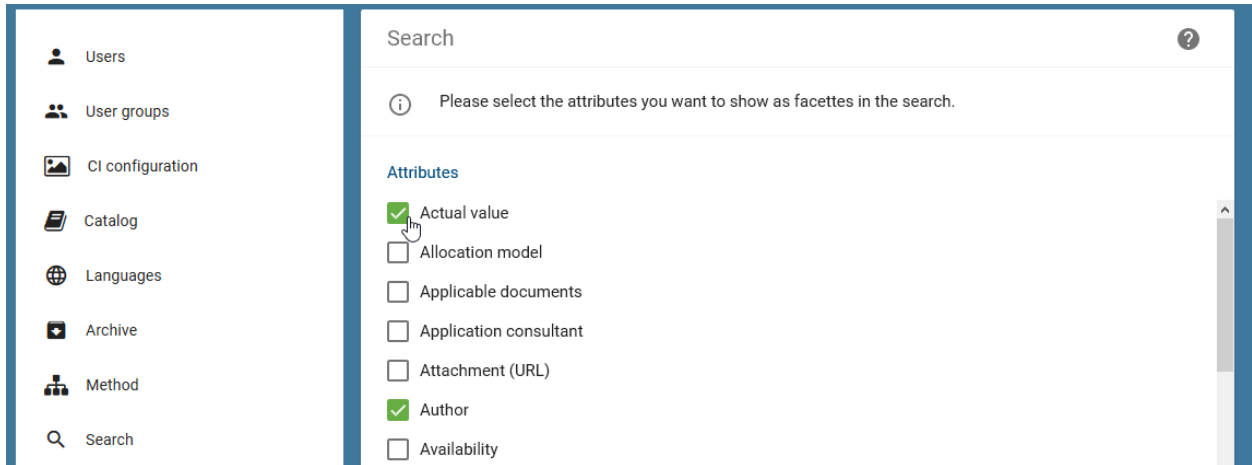
In the search configuration, you have the option to select the user-offered and relevant attribute filters by activating the checkmarks. These are then available as *facets in the search* as soon as a search result contains this attribute filled out.

2.9 Workflows

2.9.1 How can I set reminders for open tasks?

Navigate to the *administration area* and select *Workflows*.
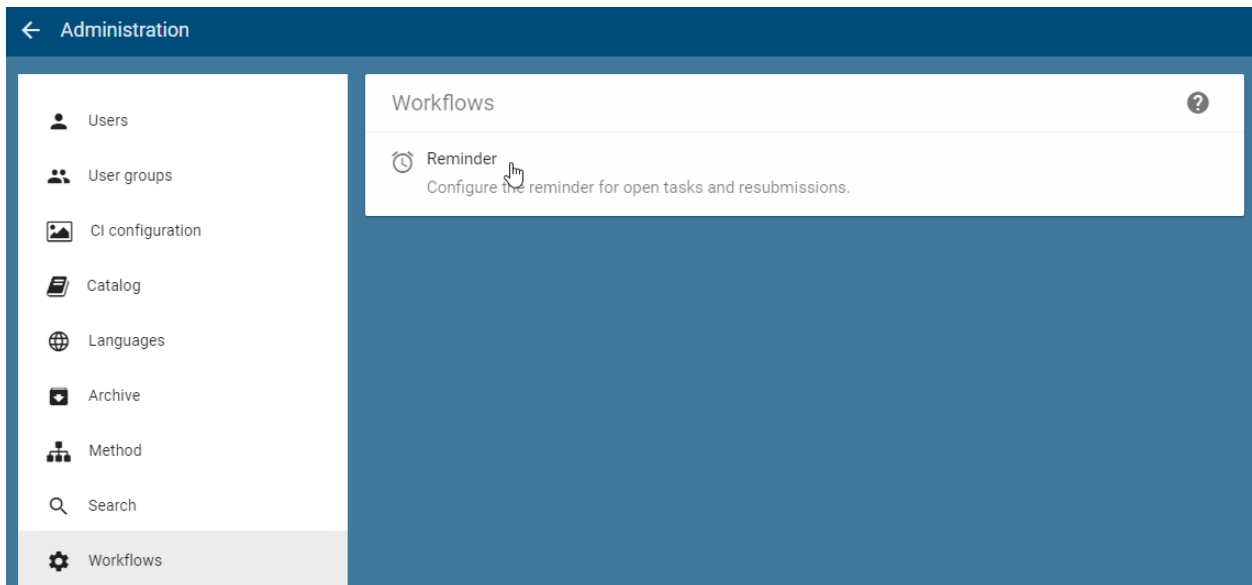
Then click on *Reminder* to display the setting options for reminders for *Tasks*.

Tasks

Set the reminder interval for open workflow tasks. Users with open tasks will be reminded once per interval cycle until the task is completed. The change will be applied for new tasks (already open tasks are reminded based on the former interval).

Enter task reminder interval:

7   days

The reminder interval (in days) for open workflow tasks is defined here. By default, this is 7 days: the affected users are reminded of the open task once within 7 days. The interval can be adjusted as desired. Type the desired reminder interval in days into the corresponding field and confirm it with the *enter* key or a click outside the input field. You will receive a notification at the bottom right of the screen about the successful changes, which will be applied to all new tasks.

2.9.2 How can I set the reminder for resubmissions?

Navigate to the administration area and select *Workflows*.
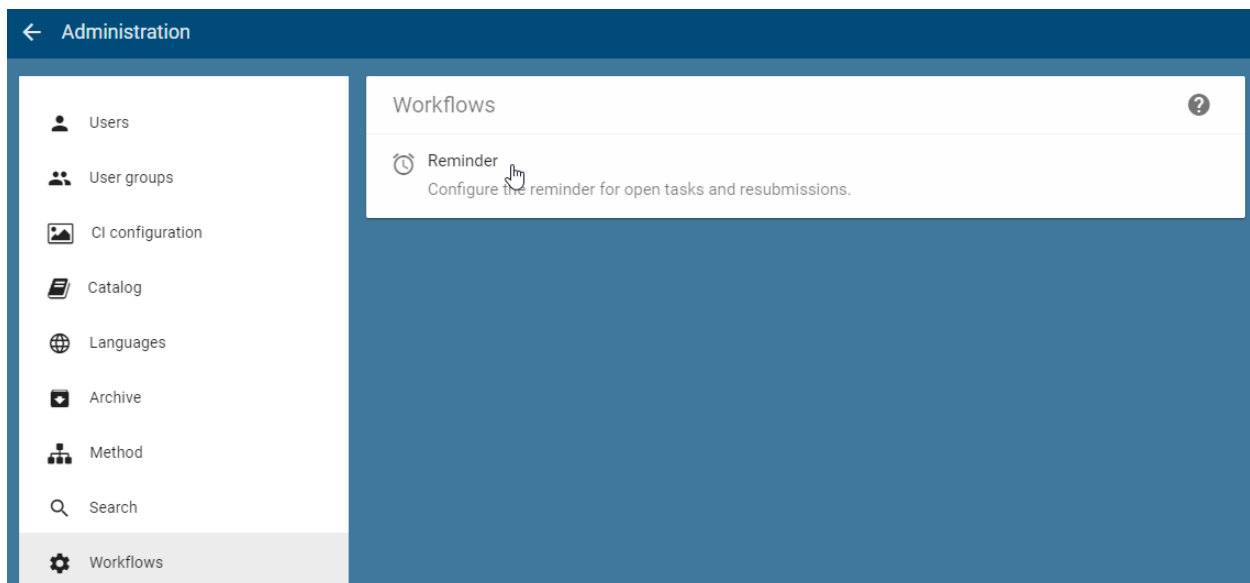
Then click on *Reminder* to display the setting options for reminders for *Resubmissions*.

Resubmission

Set the reminder for resubmissions. Responsible persons will be notified a single time that the validity of a diagram or catalog entry in the publication stage will expire (prior to "valid-to").

Enter the resubmission reminder:

4   weeks

The time (in weeks) for reminding resubmissions is specified here. The default is 4 weeks. This applies to all published diagrams and catalog entries whose "Valid to" date is maintained. The *responsible person or organizational unit* receives a reminder mail and additionally a *resubmission task* for diagrams about the expiring publication 4 weeks before reaching the "Valid to" date. In addition, the resubmission workflow will be displayed within the *list of all workflows*. In case you want to change the *Reminder* setting, type the desired week number into the corresponding field and confirm it with the *enter* key or a click outside the input field. You will receive a notification at the bottom right of the screen about the successful changes, which will be applied to all published diagrams and objects.

Hint: Please note that the upcoming resubmissions, as well as the finished publications of diagrams and catalog items, contain the validity date. Unlike in the workflow list, the dates refer to the *valid to/valid from date* and not to the *start and end dates*.

2.10 MyBIC

2.10.1 How can I set default favorites of MyBIC?

To set a favorite for MyBIC, navigate to the *administration area* and open the *MyBIC* tab. There, enter a new favorite under *Configure default favorites*. First enter the URL of a favorite, for example a search result or a diagram. You must then give a title to the favorite and assign it to a language available in the application using the drop-down field. Click on *Add this title* to confirm your title entry. To maintain a title in all languages, repeat this procedure. You can also remove individual titles in the same way.
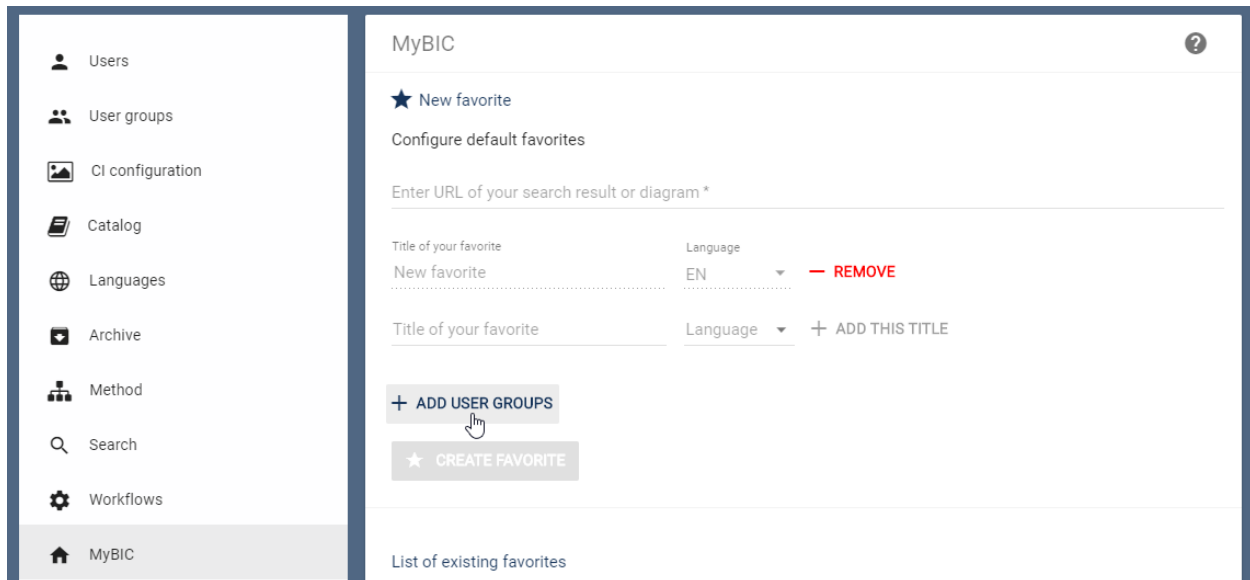
Optionally, you can assign user groups to a favorite, whose members will see that favorite as a tile on their MyBIC page. A click on *Add user groups* opens a window in which all groups are listed. Select one or more user groups, which are marked with a tick. With a click on *Apply* your selection is applied and also displayed above *Add user groups*. Click on *Cancel* to discard your group selection.
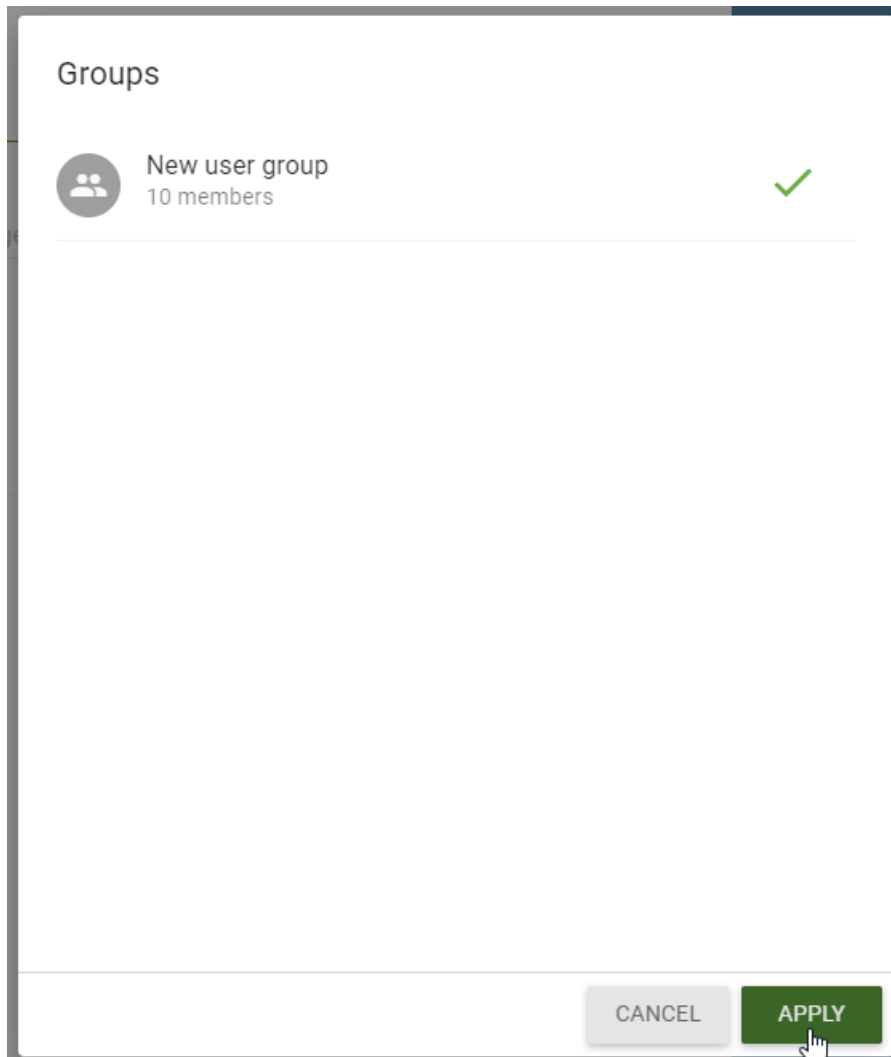
Before you create the favorite, you can also remove individual groups by holding your mouse on the chip of the group and selecting *Delete*.
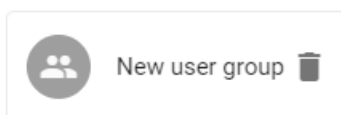
As soon as all mandatory fields are filled in, you can save the new favorites via *Create favorite*.

This will be displayed in the *List of existing favorites* under the title of the current user interface language including the creation date and the number of groups. Move the mouse over the number of groups to see the groups as tooltip.

The favorite then appears on *MyBIC* as a tile between the start diagram and the personal favorites. If no user group has been entered, the favorite is visible for every user.

2.10.2 How can I delete a default favorite for MyBIC?

Existing favorites can be deleted again. Go to the administration area and open *MyBIC*. Navigate to the corresponding entry in the *List of existing favorites* and open the context menu *More options*. A click on *Delete* immediately removes the affected favorite.

2.11 Print

2.11.1 How can I set header and footer centrally for printing?

Administrators can make diagram-wide settings for PDF print of diagrams. Navigate to the *administration area* and select *Print*.
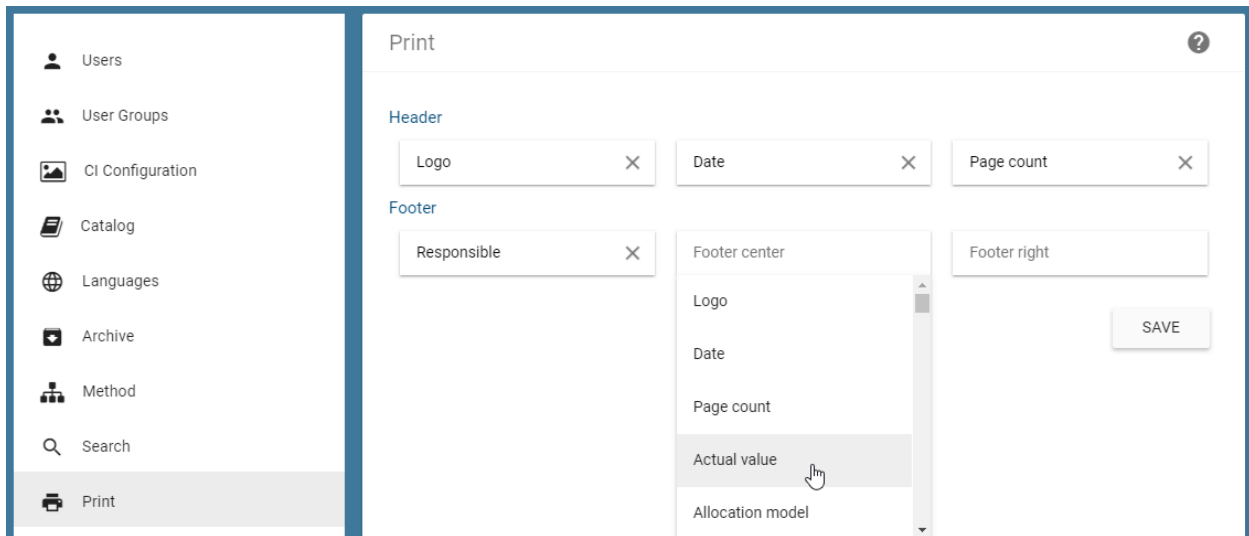
The header and footer can be configured here. For each of the three different areas *left*, *center* and *right*, you can choose between the following outputs via the suggestion list or the individual input:

- **free text:** input of an individual text, which is output unchanged

- **logo:** *company-wide logo*

- **date:** creation date of the print

- **page count**

- **diagram attributes:** the selected attribute is output if it is a filled diagram attribute of the diagram

- **placeholder:** by typing "{{attributeTypeId}}" you can combine the output of free text and chart attributes. The attribute type ID forms the core of the placeholder. Overall, only the first placeholder is evaluated. For example, you can use "Author: {{AT_AUTHOR}}" to display the free text "Author:" followed by persons and organizational units entered in the diagram attribute *Author*.

By clicking on *Save* these settings will be applied to all users. The user does not see the header and footer in the *print preview*, but only in the created PDF file. In the print preview, however, the user can choose whether the PDF file contains the lines.

2.12 Reports

2.12.1 Where can I find all available reports?

With BIC Process Design you can export *diagram or category reports* or additionally a *report of a catalog entry*. As an administrator you have the possibility to administrate them by using the report descriptors.

To do so navigate into the *administration area* and select the tab *Reports*.
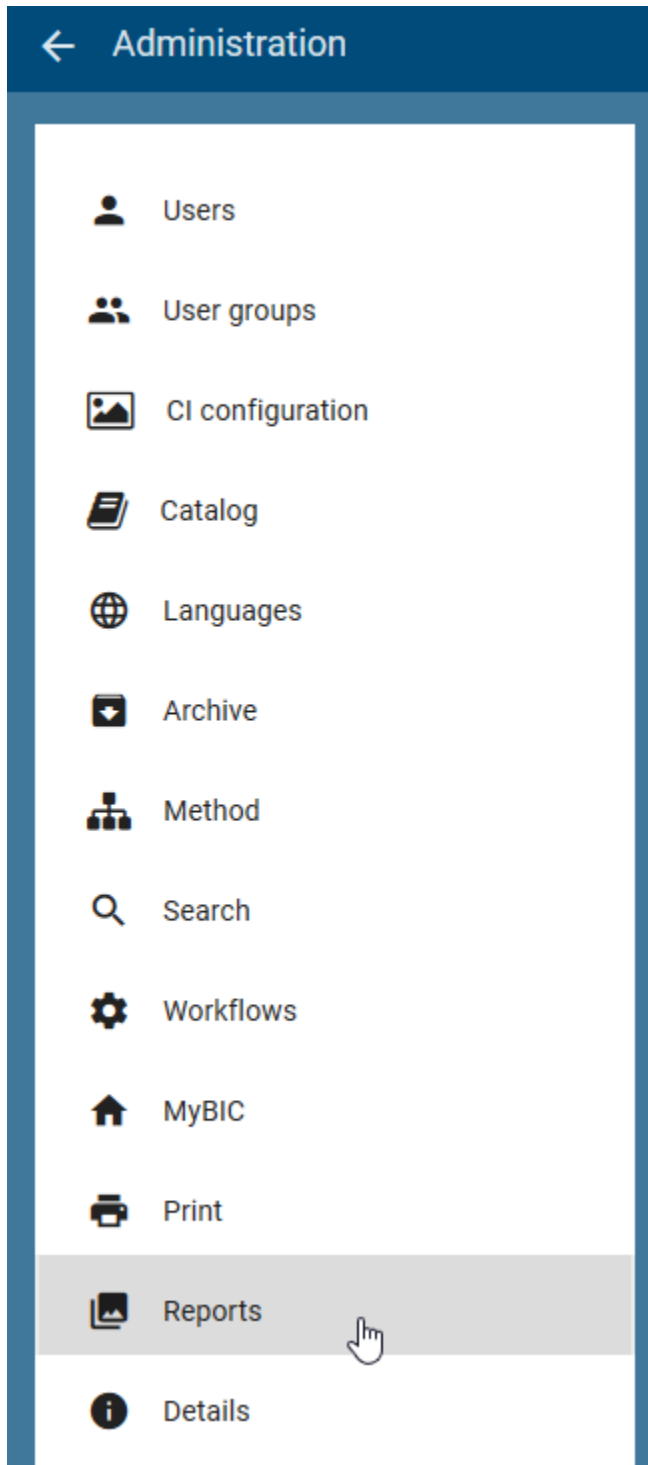
A list of all available report descriptors will be displayed. If it is specified in a descriptor that only individual diagram or object types are allowed for this report, the IDs of these are displayed under the name of the respective report.

Process costs/Simulation
DT_BPMN_COLLABORATION,DT_EPC,DT_VCD

As soon as you have selected an entry, the descriptor editor will be displayed. You can navigate back to the descriptor list by using the arrow above the editor.

2.12.2 How can I configure an available report?

Navigate to the *administration area* and select the tab *Reports*. Then select the report which you would like to change to open the report descriptor.

In the descriptor editor you can change the following settings:

1. *Context*: Here you can specify whether the report is available in the context of a diagram, category, catalog entry or the catalog. You can do so by setting the value of the variable *type* to "diagram", "category", "entity" or "catalog". Within one descriptor there can only be one value for the context variable. Because of that there are two different descriptors for reports which should be available in both contexts. Those can be edited separately. If your report is available for a catalog entry, such as the profile, "catalog" should remain entered here.

```
{
    "domainObjectType": "ReportExecutionDescriptor",
    "id": "084a1ff3-22e3-f81b-b2dc-970589de090d",
    "tid": -1,
    "version": 0,
    "executionContext": {
        "type": "diagram",
        "stereotypes": {
            "include": [
                "DT_BPMN_COLLABORATION",
                "DT_EPC",
                "DT_VCD"
            ]
        }
    },
    "roles": [
        "AUTHOR",
        "ADMINISTRATOR"
    ],
    "descriptions": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
```

2. *Stereotypes*: For reports that are available in the diagram or catalog entry context, you can define which diagram or object types are allowed to use this report. This is possible by writing the IDs of the respecting diagram/object types into the *include* variable. The report is available for all types if no value has been set for this variable or if the variable contains the value "all".

```
{
    "domainObjectType": "ReportExecutionDescriptor",
    "id": "084a1ff3-22e3-f81b-b2dc-970589de090d",
    "tid": -1,
    "version": 0,
    "executionContext": {
        "type": "diagram",
        "stereotypes": {
            "include": [
                "DT_BPMN_COLLABORATION",
                "DT_EPC",
                "DT_VCD"
            ]
        }
    },
    "roles": [
        "AUTHOR",
        "ADMINISTRATOR"
    ],
    "descriptions": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
```

3. *User roles*: With the *roles* variable you can define the user roles which are authorized to export the respective reports.

```
{
    "domainObjectType": "ReportExecutionDescriptor",
    "id": "084a1ff3-22e3-f81b-b2dc-970589de090d",
    "tid": -1,
    "version": 0,
    "executionContext": {
        "type": "diagram",
        "stereotypes": {
            "include": [
                "DT_BPMN_COLLABORATION",
                "DT_EPC",
                "DT_VCD"
            ]
        }
    },
    "roles": [
        "AUTHOR",
        "ADMINISTRATOR"
    ],
    "descriptions": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
```

4. *Names*: The variable *names* specifies the displayed name of the report within the user interface of BIC Process Design. For each language that is supported by BIC Process Design you can set a different value. This difference can be seen as soon as the browser language has been changed.

```
        "ADMINISTRATOR"
    ],
    "descriptions": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
        }
    ],
    "names": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
        }
    ],
    "enabled": true,
    "outputFormat": "xlsx",
    "reportId": "processCostAnalysis",
    "origin": "biccloud-report-service"
}
```

5. *Availability*: You can activate or deactivate a report for diagrams or categories for BIC Process Design by using the variable *enabled*. The report is activated if the value is set to "true". To deactivate the report you have to change the value to "false".

```
        "ADMINISTRATOR"
    ],
    "descriptions": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
        }
    ],
    "names": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
        }
    ],
    "enabled": true,
    "outputFormat": "xlsx",
    "reportId": "processCostAnalysis",
    "origin": "biccloud-report-service"
}
```

6. *Format*: You can use the *outputFormat* variable to specify the format of the output of the report. The following formats are supported for the respective reports:

- Profile (diagram): *docx*, *pdf*, *pdfa*, *pdfa2b*

- Profile (catalog entry): *docx*, *pdf*, *pdfa*, *pdfa2b*

- Manual: *docx*, *pdf*, *pdfa*, *pdfa2b*, *html*, *mhtml*, *txt*, *odt*, *rtf*

- Manual with assignments: *docx*, *pdf*, *pdfa*, *pdfa2b*

- Matrix Report: *xlsx*, *pdf*, *pdfa*, *pdfa2b*

- Process costs/Simulation: *xlsx*, *pdf*, *pdfa*, *pdfa2b*

Here *pdfa* corresponds to the "PDF/A-1b" format and *pdfa2b* to the "PDF/A-2b" format.

Note: The format *pdfa* does not support images with transparency. Therefore it is recommended to use *pdf2b* if images and icons should be present in the report.

```
        "ADMINISTRATOR"
    ],
    "descriptions": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
        }
    ],
    "names": [
        {
            "locale": "de",
            "value": "Prozesskosten/Simulation"
        },
        {
            "locale": "en",
            "value": "Process costs/Simulation"
        }
    ],
    "enabled": true,
    "outputFormat": "xlsx",
    "reportId": "processCostAnalysis",
    "origin": "biccloud-report-service"
}
```

7. *ReportId*: BIC Process Design provides the following default reports: Manual (diagramManual), Manual with assignments (diagramManualWithAssignments), Process costs/simulation (processCostAnalysis), Matrix report (diagramMatrix) and Profile (diagramProfile bzw. entityProfile). The default reports are described in the section about *available exports*.

The reportId defines which default templates will be shown and taken as fallback to generate an export if no customized template has been uploaded for a diagram type. Please note that - currently - there is only a default template for the reportId "diagramManual" as fallback.

```
        "locale": "es",
        "value": "Reporte personalizado"
    },
    {
        "locale": "ar",
        "value": "تقرير مخصص"
    }
],
"names": [
    {
        "locale": "en",
        "value": "Custom report"
    },
    {
        "locale": "de",
        "value": "Benutzerdefinierter Report"
    },
    {
        "locale": "pl",
        "value": "Raport użytkownika"
    }
],
"enabled": true,
"outputFormat": "docx",
"reportId": "diagramManual",
"origin": "biccloud-report-service"
}
```

The changes that have been made will be accepted as soon as the *Save* button has been clicked.

Note: The report descriptors follow the syntax "JavaScript Object Notation" (JSON). If the syntax no longer corresponds to the JSON format at any given time, the *Save* button is greyed out and can no longer be selected. In addition, the processing of the values is sensitive to upper and lower case. Therefore always make sure to choose the correct spelling.

2.12.3 How can I add a new report?

Navigate to the *administration area* and select the tab *Reports*. The list shows all available reports. You can create a new one by selecting the *plus* button in the header.
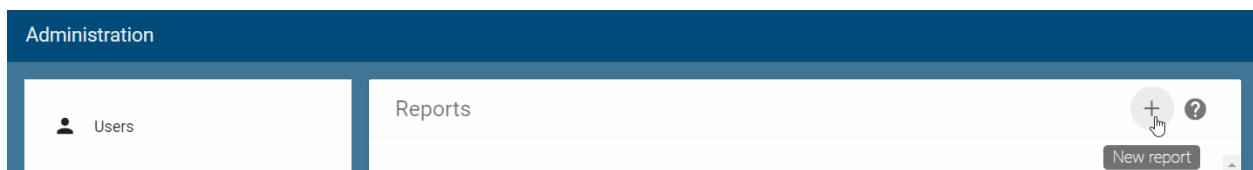
A new report is created and you are navigated to the descriptor of this report. Here you can define your custom report using JSON syntax. Please find help for the possible content *here*. *Save* your definition via the equivalent button. If you navigate back to the report list via the arrow button, your new report will be part of the list now. Opening it again, you can upload all templates for your report. To do so, select the *Upload a report template* button.

Then you can select the desired file (.doc or .docx) in a file selection window and *open* it. In the next dialog, you can set the corresponding diagram type and content language to which this template is dedicated. If this combination does not exist yet, you can add the template by selecting the *Save* button.

The new report template will be displayed at the end of the list as *Custom template* showing the name and possibly the diagram type and the abbreviation of the language.

If you defined your customized report with the *reportId* "diagramManual" or "diagramManualWithAssignments", you can use the download/upload functions afterwards to exchange each template. More information about these functionality is given *here*.

Note: BIC Process Design provides a default templates for reports with the *reportId* "diagramManual". If you did not upload a customized template for a diagram type but want to generate a report of a diagram of this type, the report will be based on the default template. If you change the reportId in the descriptor of your report, no fallback will be available. You need to upload corresponding customized templates to be able to generate reports of the different diagram types.

2.12.4 How can I upload and download report templates for the manual (with assignments)?

For the manual report (with assignments) you can download, customize and upload report templates in the administration. These modified report templates are used when executing and downloading the manual reports.

Note that you can use these function also for *customized reports* if their reportId is defined as "diagramManual" resp. "diagramManualWithAssignments".

First go to the administration, navigate to the menu item *Reports* and click on the entry *Manual* resp. *Manual with assignments* or your customized report.
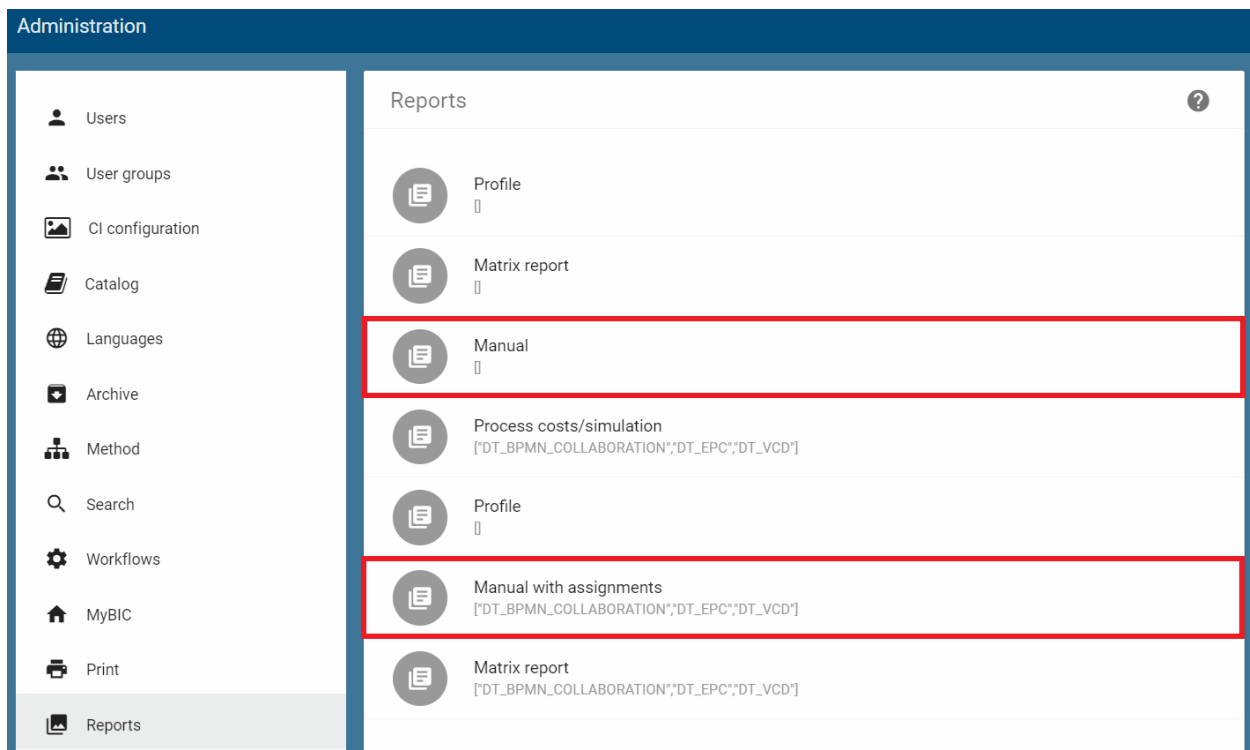
Underneath the *Report descriptor* you will find the *Report templates* for the chosen process manual. Depending on the manual, the following information is shown at each template entry:

- **Manual**: You can provide a manual report template for each diagram type and content language. For each template, the file name, the diagram type (ID), for which the report is available, and the language are displayed.

- **Manual with assignments**: You can provide templates for the manual report with assignments by uploading a zip folder of templates for several diagram types and/ or languages. This is indicated by the Typ *Collection* at a template entry. Moreover, the folder name and possibly the language is shown to you. More information about the zip folder is given below.

The default templates of BIC Process Design are shown with a grey icon and the corresponding hint below the file/ folder name. If a template has been modified, the icon is colored in the CI color of you application and the hint states *Custom template*.

Structure of the folders in the zip folder - diagramManualWithAssignments:

If you download the templates of the *manual with assignemts* or the templates of your custom report with the reportId "diagramManualWithAssignments", they will be exported in a zip folder having the following file path:

```
report-templates-<timestamp>/biccloud-report-service/<report-execution-descriptor-Id>/
↪ <reportId>.<variant>.<lokale>.<fileending>`
```

This means you download a zip folder with a unique numeric code (the download time) in its name. In the zip folder you will find the folder "biccloud-report-service" which contains a folder named by the report-execution-descriptor id of the report. The report-execution-descriptor id is the unique id of the report which is written in the second line in the report descriptor.

Note that you keep the last two **folder names exactly the same** if you want to upload the adapted templates that are included.

File names of the templates - diagramManualWithAssignments:

The folder "<report-execution-descriptor-Id>" contains all templates of the current report. These files are named as follows: diagramManualWithAssignments.<variant>.<lokale>.<fileending>

- <variant>: The variant is the id of the diagram type for which the respective template is defined. The templates with a % sign are the default templates that are used if there is no own template for the respective diagram type.

- <lokale>: This is the abbreviation of the language, for which the respective template is defined. If there is no template for the active content language. If no template for the current content language exists when the report is generated, the corresponding template in English is used.

- <fileending>: The file ending which is .doc or .docx

The *diagramManualSubDiagram* templates are used for subordinated diagrams (allocation diagrams). Analogous to the main templates above, these templates have the partial name <variant>.<local>.<fileending>.

Hint: Please note that it is mandatory to keep the file naming and folder structure if you want to upload customized templates for your report (with assignments).

Download: receive current report templates:

Open the context menu via the three dots at the desired entry and select the *Download* option. This allows you to download the report template(s) and customize it as desired.
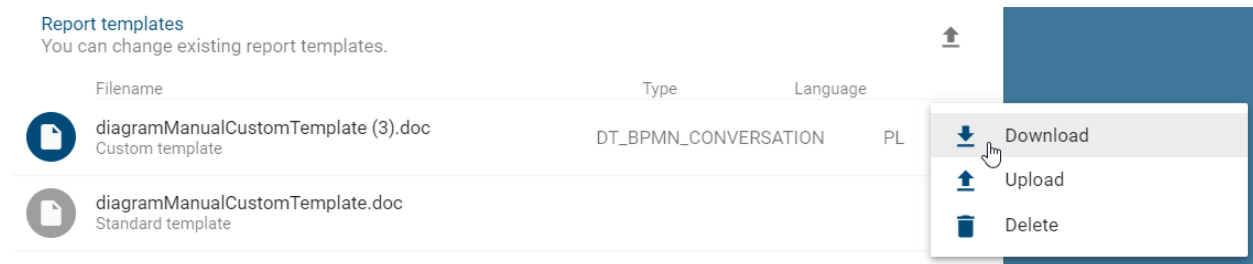
As soon as you click this option, the export is generated for you. A message at the bottom right corner informs you about this process. When the export is available, you will find a link to start the download of the template(s) by a click.

Upload: exchange current report templates:

You can use the *Upload* function at each entry to exchange the current report template(s). For the manual report and your custom reports with the reportId "diagramManual", you can upload single templates for each diagram type and language. If there is no specific template for a diagram type (in a specific language) yet, you can add a new report template for this case via the *Upload a report template* button (see further below).

The manual with assignments report and your custom reports with the reportId "diagramManualWithAssignments" require a zip folder "biccloud-report-service" which contains templates for all diagram types in all languages you want to customize. This ensures that you also provide customized templates for other diagram types that can be assigned to the diagram for which the report is generated. If the template for a diagram type is not available in your zip folder, the default template (i. e. the variant with the % sign) is used for this type. Possible adjustments are presented in the *chapter on report templates*.
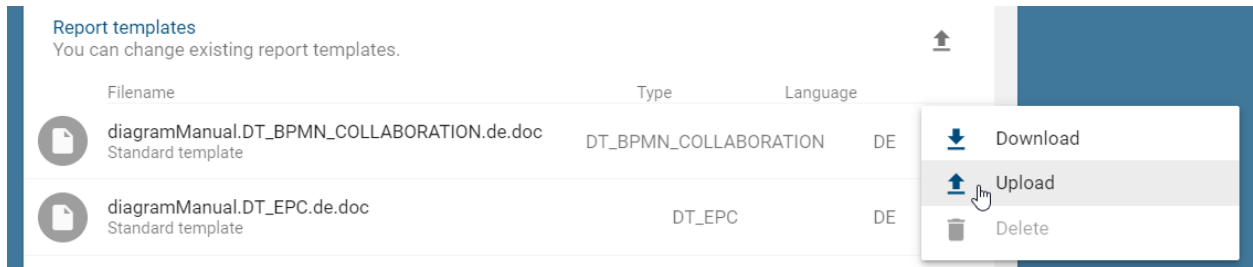
Select the *Upload* option in the context menu. In the appearing file selection window, navigate to your template file (resp. the zipped folder "biccloud-report-service") and click on *Open*. If the selected file is in the correct format (.doc and .docx), the previous template is replaced by the new file. This also applies to the manual with assignments templates. The upload of single files in the folder might be skipped if they do not fulfill the format. Moreover, note that you have to zip the "biccloud-report-service" to upload it. This folder has to contain a folder with all templates and the folder must be named by the report-execution-descriptor id of the report. In addition to the correct format, these templates must also have the correct file name (which is described above at "File names of the templates").

Upload: add a new report template:

For the manual report and your custom reports with the reportId "diagramManual", you can can add a new report template for a specific diagram type (and language) provided that this template does not exist yet. Then, the report of a diagram of this type will be based on this adapted template instead of the default template. To do so, select the *Upload a report template* button and navigate to the template file in the appearing file selection window. Select the file and confirm via *open*. In the the drop-down menus of the appearing dialog window, select the diagram type and the language for which the template is specified. If the combination does not exist yet, you can upload the template via the *save* button.
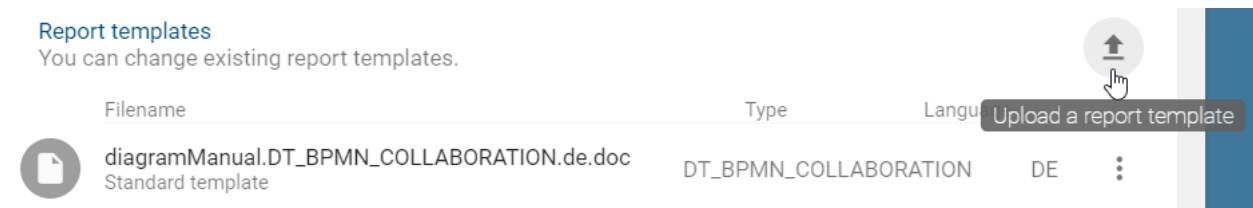
Hint: Be aware that you cannot upload a template which file size does exceed 64 MB.

Warning: Please keep the standard template of the manual with assignments locally in its original state because you cannot automatically restore the standard template in the system at the moment. Furthermore, the uploaded files must be based on the standard templates.

Note: Be aware that in the process of generating a .pdf file only certain fonts are supported by the report engine. The usage of not supported fonts can lead to formatting losses and a change in the total number of pages in your .pdf file. *Here* you will find a detailed list of the fonts, which are supported by the report engine.

2.12.5 How can I delete a custom report template?

You can upload customized report templates for the manual report and for your *customized reports* with the reportId "diagramManual". If you do not want to generate these reports based on the customized template, you can delete the template. If a user generates a report for a diagram and the customized template of the diagram type was deleted, the report will be based on the default template of the manual report.

Navigate to the *Reports* in the administration and open the *Manual* or your customized report.

Underneath the *Report descriptor* you will find the *Report templates*. Open the context menu via the three dots at the customized entry you want to remove. Select the option *Delete*.
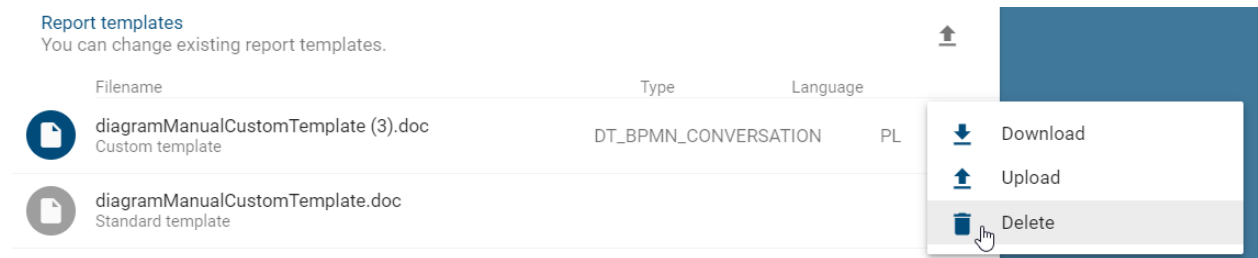
A dialog window appears where you have to confirm the deletion. This action cannot be undone. Alternatively, you can cancel the deletion in the dialog.

2.12.6 Which fonts are supported by the report engine?

Be aware that in the process of generating a .pdf file only certain fonts are supported by the report engine. If a font is used that is not supported, it will be replaced by a fallback font in the .pdf file. This can lead to formatting losses and a change in the total number of pages in your .pdf file. As an example this can be relevant for *the configuration of report templates* or *the provision of attachments in the publication as .pdf files*.

The supported fonts are listed below:

- Arial Black
- Arial (Bold, Italic, Bold Italic)
- Comic Sans MS (Bold)
- Courier New (Bold, Italic, Bold Italic)
- Georgia (Bold, italic, Bold Italic)
- Impact
- Times New Roman (Bold, Italic, Bold Italic)
- Trebuchet (Bold, Italic, Bold Italic)
- Verdana (Bold, Italic, Bold Italic)
- Webdings

Hint: If you like to use fonts that are not listed here, note the possibility to *embed the used fonts in your document*.

2.13 Details

In the administration for details, you can make adjustments to the details bar. In addition to the visibility settings of the attribute bar and the profile, this also includes the configuration of the structure of the profile. The individual functions are described in the following sections.

2.13.1 How can I display the attribute bar in the publication?

For each type of object and diagram type, administrators can set whether the corresponding attribute bar is displayed in the details bar of the *Publication* workspace.

Navigate to the *administration area* and select *Details*. There you will see all available diagram types and object types. Clicking on a list entry will take you to its detail settings.
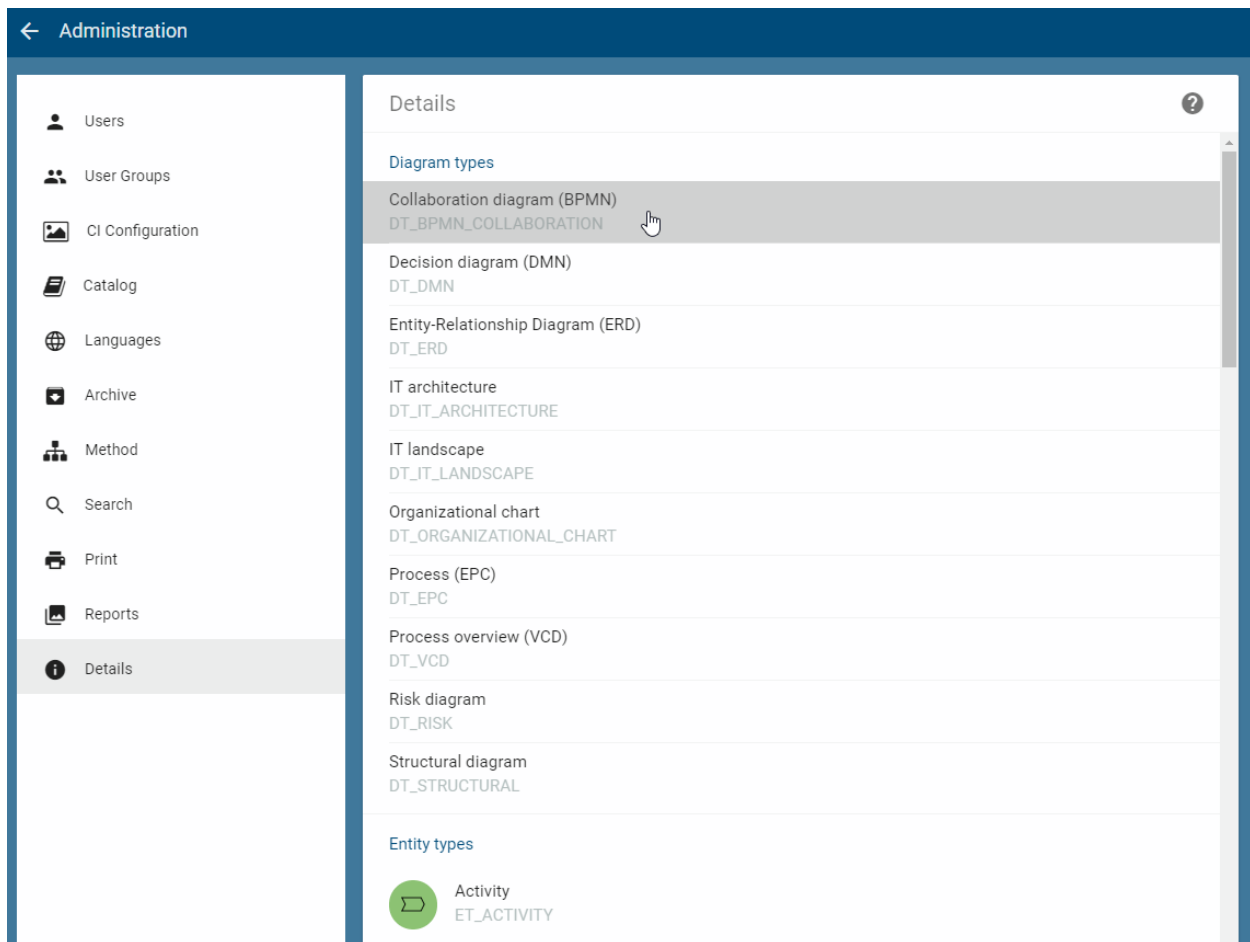
Click the toggle switch of the *Show attribute bar in publication* field to set the visibility of the attributes in the publication. Your changes will be taken over directly. The current status of the visibility is also displayed in this field.
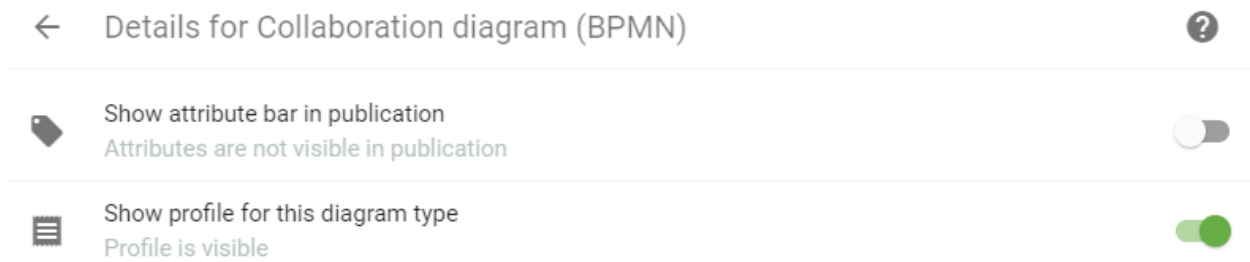
Use the *Back* arrow to return to the overview of object types and diagram types.

2.13.2 How can I change the visibility of the profile?

For object and diagram types, administrators can set whether the corresponding profile is also displayed in the details bar.

Navigate to the administration area and select *Details*. There you will see all available diagram types and object types. Clicking on a list entry will take you to its detail settings.
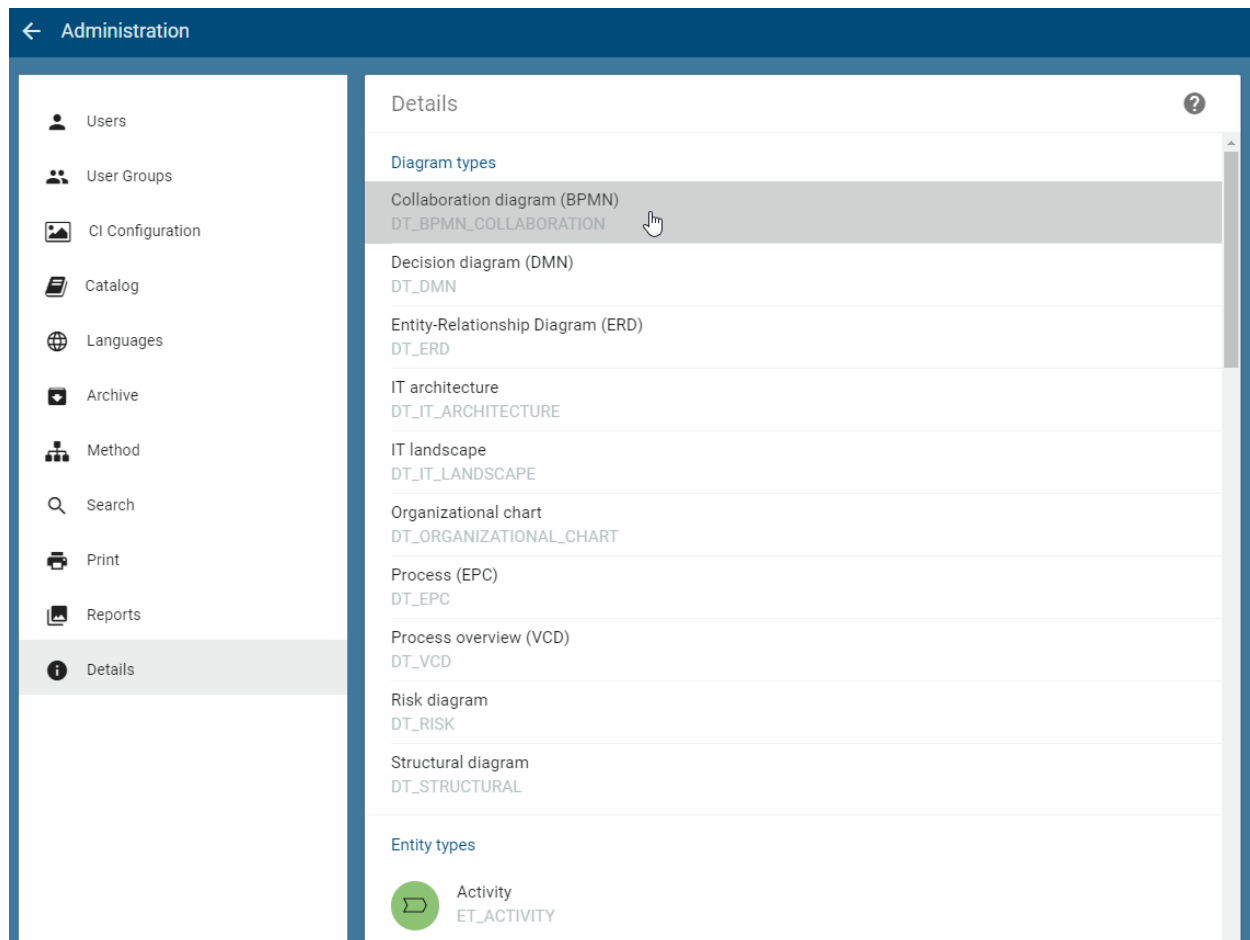
The current status of the visibility is displayed in *Show profile for this type*, where type is replaced by either *object type* or *diagram type*. Click the appropriate toggle switch to change the active setting. Your changes will then be taken over directly.

Use the *Back* arrow to return to the overview of object types and diagram types.

2.13.3 How can I configure the profile?

Administrators can decide on the appearance of the profile for object and diagram types. First, the default settings are displayed, which can then be changed. These include attributes, such as the description, and relationships to other object types, such as responsible and contributing roles, input and output.

Navigate to the administration area and select *Details*. There you will see all available diagram types and object types. Clicking on a list entry will take you to its detail settings.

If the profile for this type is not yet visible, you should set the *visibility*. At least now you can see the configuration in the edit field and make adjustments.

- **Attributes:** You can add or remove diagram or object attributes using the attribute type ID. In the following example, the diagram attribute "Name" is displayed next to the "Description". To do this, the attribute type ID must be added to the `"attributes"` section:

```
"attributes": [
          "AT_DESCRIPTION",
     "AT_NAME"
     ],
```

- **Associations and entities:** In `"sections"`, specific relationships to object types, selected association types

or specific object types can be output individually. Its representation takes place in various subsections named `"titles"`, in which the issues and designations in the profile are defined. The following subsection example looks for "roles" contained in the diagram with "C - Consulted" the relationship to another entity. For this, the ID of the `"entityType"`, in this case `"ET_ROLE"`, and the `"associationType"`, here `"AST_CONSULTED"`, must be specified. These roles are then listed in the profile section named `"Cooperation"` in English browser language and `"Mitwirkung"` in German browser language.

```
{
                "titles": [
                        {
                                "locale": "en",
                                "value": "Cooperation"
                        },
                        {
                                "locale": "de",
                                "value": "Mitwirkung"
                        }
                ],
                "entityType": "ET_ROLE",
                "associationType": "AST_CONSULTED"
},
```

If only one relationship type or entity type is requested, the other type should remain undefined by `""`.

By clicking on *Save Profile* the changes are validated, that means the syntax of the JSON structure is checked and stored after successful verification.

Use the *Back* arrow to return to the overview of object types and diagram types.

Tip: For a list of existing stereotypes and related IDs, see *this section*.

2.14 Access restrictions and scope definitions

2.14.1 How can I set access restrictions for diagrams?

You have the option to restrict a diagram to specific users by using the *Restricted access* diagram attribute. Only members of the selected *user group*, selected users and governance involved users have access. The restrictions are independent of the user role, so administrators can be excluded as well. Access restricted diagrams are not visible in the explorer for these users and they cannot longer be opened. If the attribute is empty, there is no access restriction.

Note: If you have defined a restriction, which does not include yourself, you cannot access this diagram anymore as soon as the diagram has been checked in. Therefore you will get a warning message, which reminds you of this case, as soon as you want to check in your diagram.

2.14.2 How can I restrict access to a repository?

As an administrator, you have the option to set the access restriction for a repository. Proceed as follows.

Open the context menu of the repository and click on *Edit properties*.
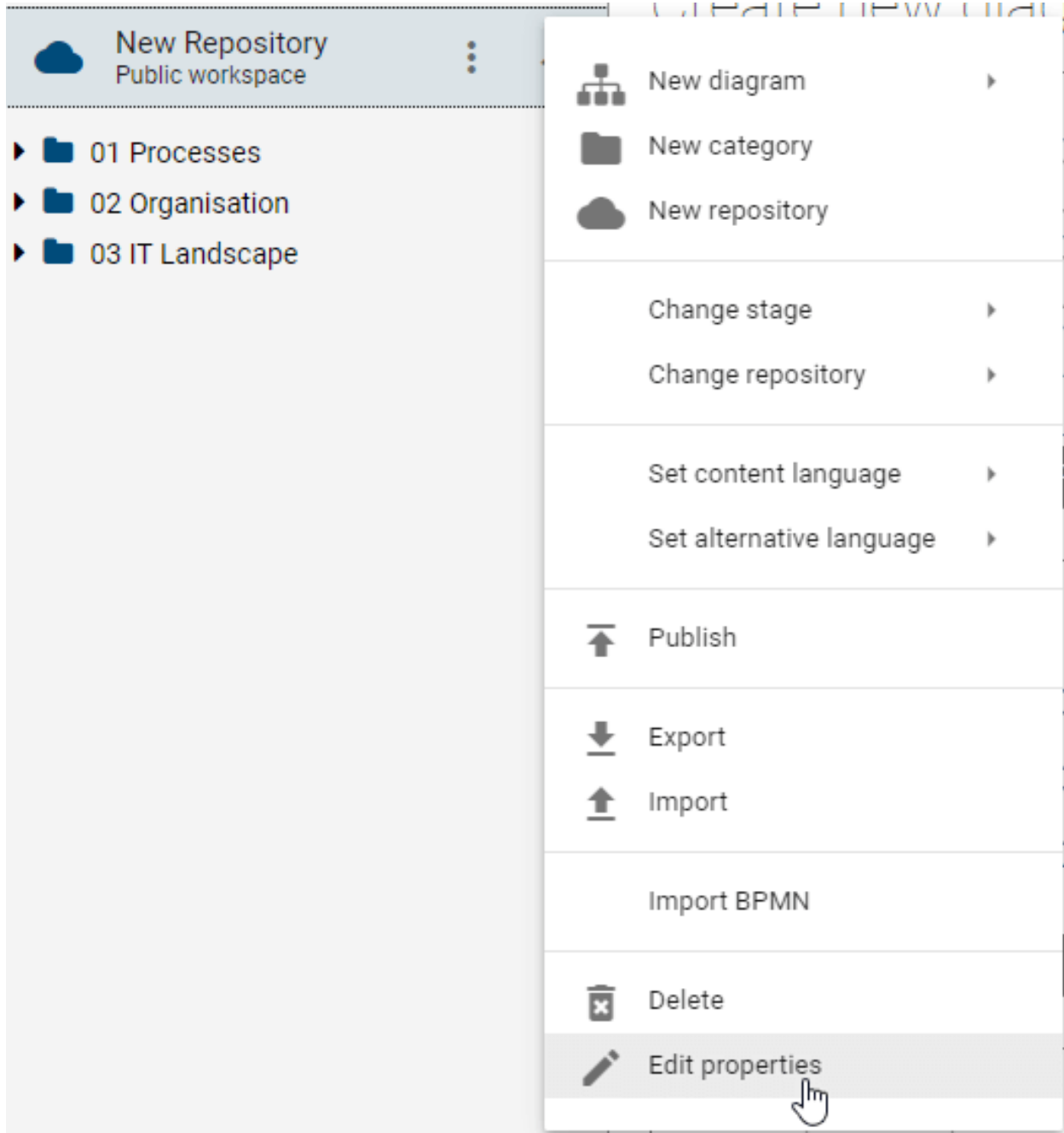
Subsequently, a dialog opens. There you can select different users and user groups via the suggestion list in the *Restricted access* field. The corresponding catalog entry *person* or *organizational unit* will then be set for the access restriction.

Edit properties

Please enter name of repository

New Repository

Restricted access

👤 Person ✕ 🔗 Organizational unit ✕

CANCEL   SAVE

By clicking on *Save*, only the selected persons and organizational units that reflect users and user groups will have access to this repository. The restrictions are independent of the user role, so administrators can be excluded as well.

If the *Restricted access* field is empty, all users have access to the repository, depending on their respective *user role*.

Hint: Please note that the access restrictions set for a repository can prevent navigation to the contents of a repository within the user interfaces. In order to reliably control access to the individual contents of a repository, it is advisable to apply the access restrictions specifically to the content elements such as *diagrams* and *catalog entries*.

Note: If you have defined a restriction, which does not include yourself, you cannot access this repository any more as soon as your setting has been saved. Therefore you will get a warning message, which reminds you of this case, as soon as you want to close the dialog. Please be aware that such a case can also occur when renaming a user group. To prevent that, you can find a short best practice *here*.

Tip: You can also search for the user's e-mail address. If a user is selected from the list and is not linked to a catalog object of the type "person", a new catalog entry will be generated with the name and the e-mail of the given user.

2.14.3 How do I unlock a diagram?

You can manually unlock diagrams using the Administrator user role, for example, if a user has not checked in diagrams and is absent for an extended period of time. This procedure may be associated with data loss, because uninstalled and / or check-in changes to the blocking user are not stored on the server. They are stored in the local storage of the browser. Therefore, first try to *contact the blocking employee*.

Click the *context menu*-button next to the diagram name. Select the *Unlock diagram* entry to manually unlock the diagram and make it available to other users for editing.
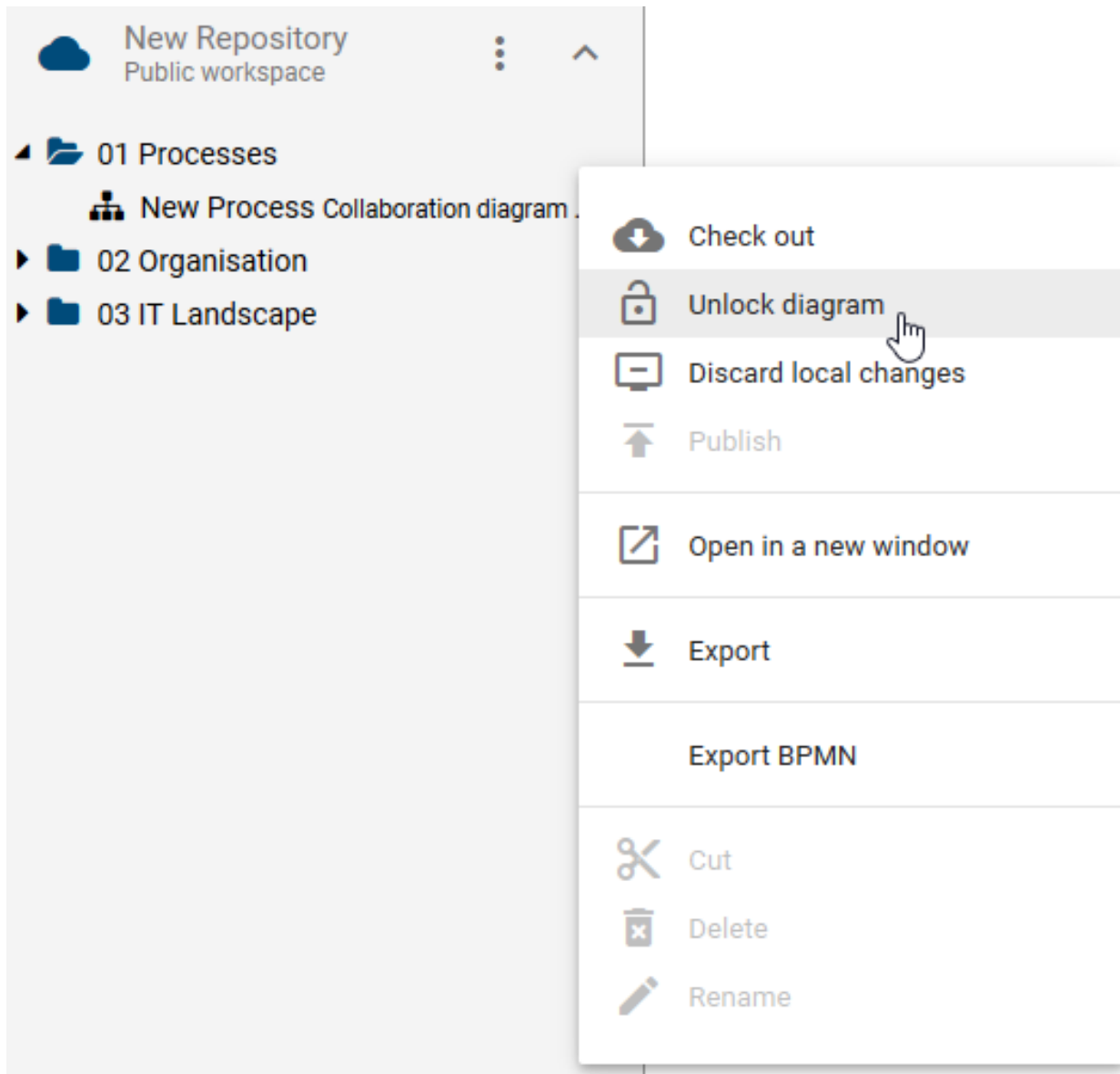
> **Warning:** The previously blocking user can no longer check in the diagram. The user must *discard his local changes* first before he can check out and edit the diagram again.

2.14.4 How can I define the scope?

With the attribute *Scope* you can allocate user groups of your enterprise to diagrams and catalog entries. These units will then be informed as soon as the diagram or the catalog entry has been published, a new version is available or if it has been depublished.

The scope also has an impact on modeling in the diagram. The suggestion list of catalog entries and their attributes only contains entries, that have the same scope as this diagram or that have no scope at all. For a detailed description please refer to the *associated chapter*.

To use these functions you must first *connect* a user group with the *diagram attribute* or *catalog entry attribute Scope*.

Tip: You can find the attribute in the section *Governance*. Depending on the method settings, this attribute exists for objects and therefore catalog entries. In general, a scope can be associated with multiple user groups.

CATALOG

3.1 What is the catalog?

The catalog contains all master data from your diagrams that may be reused; such as roles and IT-Systems. The processing and quality assurance of catalog entries is available to *users with administrator or editor rights* to support a central administration of master data. A distinction is made between accepted catalog entries (displayed in black) and master data which has not been accepted yet (displayed in red and italics). The editing of accepted catalog entries in the catalog can also be enabled for users with the *Author* role by entering them in the *governance attribute Author* of the catalog entry. In general, users with the user role *Author* (not the *Author* attribute) can create entries in the catalog and also edit entries they have created themselves. While modeling, suggested catalog entries appear as usual in red and italics in the modelers' suggestion list, but can be changed in the diagram. As soon as an administrator or editor has accepted catalog entries, they appear in black text (not italics) in the suggestion list and cannot be changed by modelers anymore. This reduces the risk of objects being accidentally changed in individual diagrams, which are reused elsewhere and thereby result in unintended side effects.

You can find the *Catalog* in the menu bar and open it with one click.
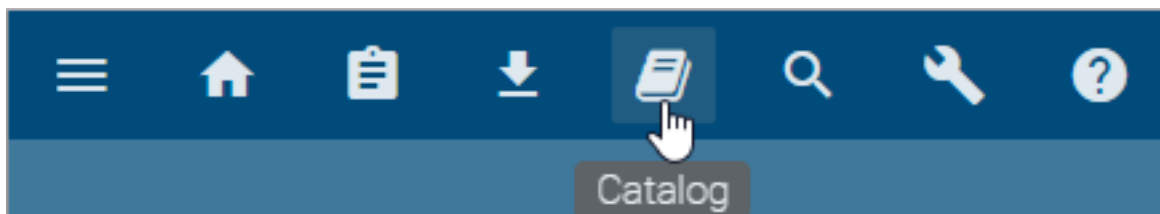
The catalog opens and a list of all catalog entries, that *you can access*, is displayed. This includes the symbol of the type, the name and the description of each catalog entry. In addition, the associated attributes and occurrences can be displayed. If more than 100 catalog entries exist, you can use the pager on the right to navigate through the catalog. You can see the number of currently listed catalog entries in the menu bar next to the "Catalog". With the *dashboard* some of the data from your catalog can be represented graphically.

3.2 Search, filter and sort catalog entries

3.2.1 How do I search for catalog entries in the catalog?

You can search for specific catalog entries. Click on *Search* represented by a magnifier in the menu bar of the catalog and type in the name of the catalog entry you want to search for. To start the search, click on the magnifier or outside the input field or press enter.

You will see all the search results that contain a specific term.

Note: The search results are sorted by relevance. Therefore, it is not possible to sort them by name.

3.2.2 How can I filter catalog entries?

Navigate to the *Catalog*.
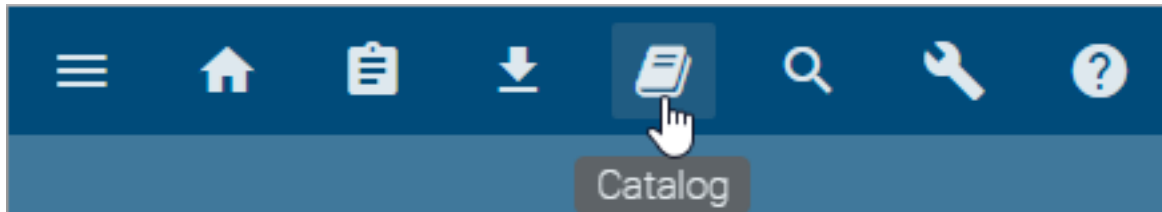
Filters for object types in the catalog are listed in the left sidebar. Next to the name of the object type, the current number of objects of this type in the entire catalog is also displayed. The number is updated when creating and deleting catalog entries. If you click on the desired filter, it will automatically be expanded and applied to the catalog.
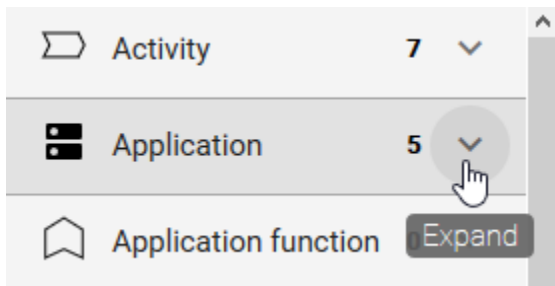
The catalog only displays entries of the selected type, as you can see in the header of the catalog. After expanding the filter, individual facets are displayed for the selected entity type. A facet corresponds to an attribute type of the object type and is listed here as soon as it has been maintained on an object and *activated in the administration area*. The order is alphabetical. Attribute types that include checkboxes or assignments to persons are not taken into account here. The facets can also be expanded. The attribute values of the object type appear and are always listed independently of a search term. Each attribute value has a checkbox and can be selected and deselected to limit the search to that value. The current number of objects in the catalog with the respective attribute value is displayed to the right of the corresponding name.
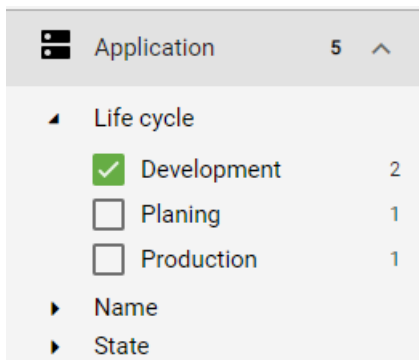
You can now select more facets, search within the filter, or remove the filter. By collapsing the filter or facet, all filter and facet settings are reset. Note, that you cannot select two filters at the same time.

Filters, which have no corresponding catalog entries can be hidden. To do so use *the option to automatically generate catalog entries, when checking in*. In case this option is deactivated the affected filter will be hidden. This filter will then only be displayed in the left sidebar if catalog entries for this object type already exist or in case a new catalog entry has been manually created in the catalog.

3.2.3 How can I filter the catalog for suggestions?

You can have all proposed (red and italic font) catalog entries displayed to *ensure the quality of the catalog*. To do this, select *Only show suggested items* from the catalog menu. The corresponding symbol is then displayed in red and only red and italic entries are listed.
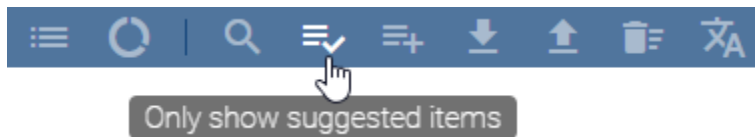
Similarly, you can display all catalog entries again.

3.2.4 How do I sort catalog entries?

You can sort catalog entries alphabetically for a better overview.

Click on the arrow icon *Sort descending* in the catalog menu. The entries are sorted alphabetically.

If you click the icon again, which is now called *Sort ascending*, the entries are sorted alphabetically in reverse order.

3.3 Dashboard

3.3.1 What is the dashboard used for and where can I find it?

Using the dashboard all catalog entries can be displayed in the form of charts. To access the dashboard click on the *Dashboard* icon in the catalog menu.
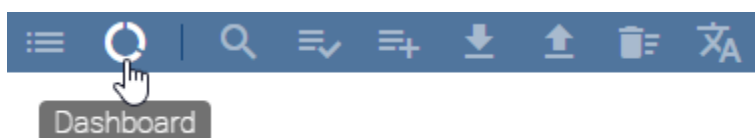
The dashboard opens with a donut diagram in which all catalog entries are sorted according to the object types. To return to the usual list-based view of the catalog entries, select the *Catalog entries* icon next to the dashboard icon.
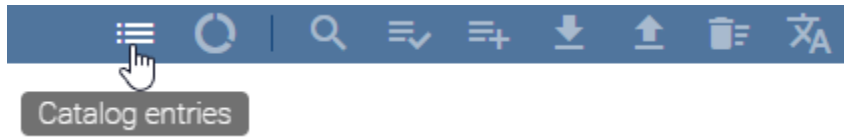
Note: Please note that as long as you are in the dashboard mode not all functions of the catalog are available. For example you cannot use the *reorganize* function.

3.3.2 Which data is offered by the dashboard?

In the dashboard you can decide whether you want to display an overview of all catalog entries of all object types or all facet values of all catalog entries that belong to a specific object type.

If you have not selected a filter in the catalog, all catalog entries will be displayed, sorted by object type. In parentheses after the name of the object type, the number of catalog entries that exist for this type are shown.
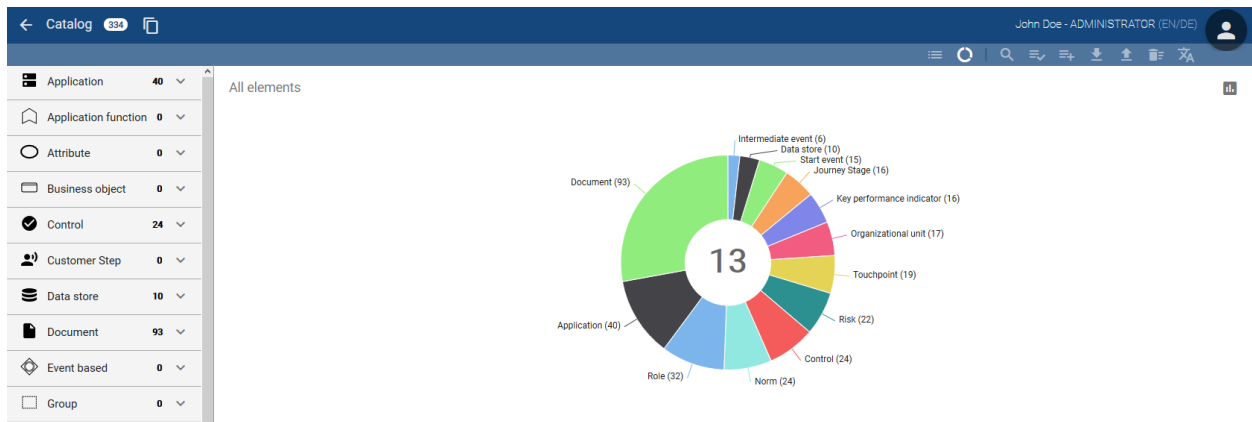
In case you have selected a filter, the facets and their values are displayed for the specific object type. A separate diagram is displayed for each facet. Each of these diagrams shows the different values that exist for the respective facet. Behind each of the values in parentheses you can see the number how often this value was given for the facet.
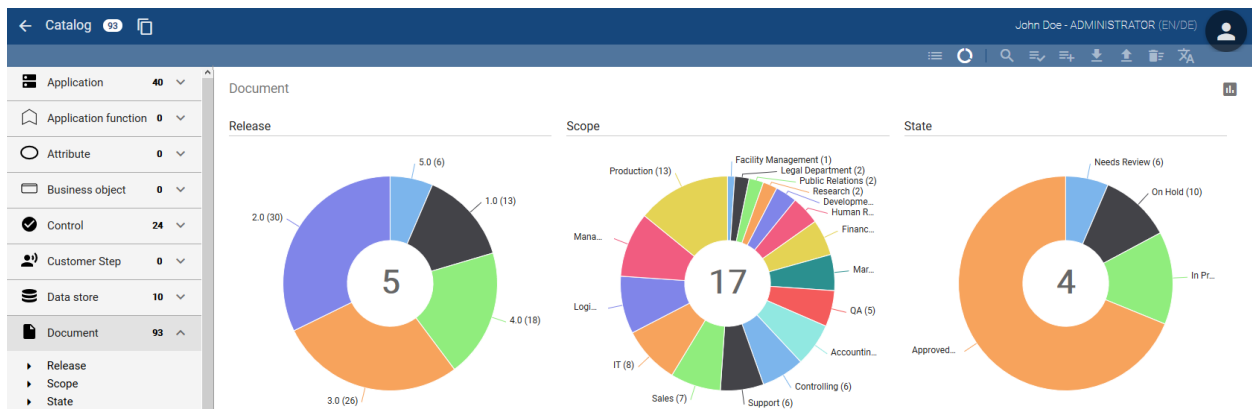
Note: In the administration area you can *set facets* which are displayed for an object type in the catalog.

3.3.3 What options does the dashboard offer to display the data?

You can display all information in form of an donut- or bar chart. To switch between the two views, use the *Use bar chart* or *Use donut chart* button in the upper right corner of the dashboard.
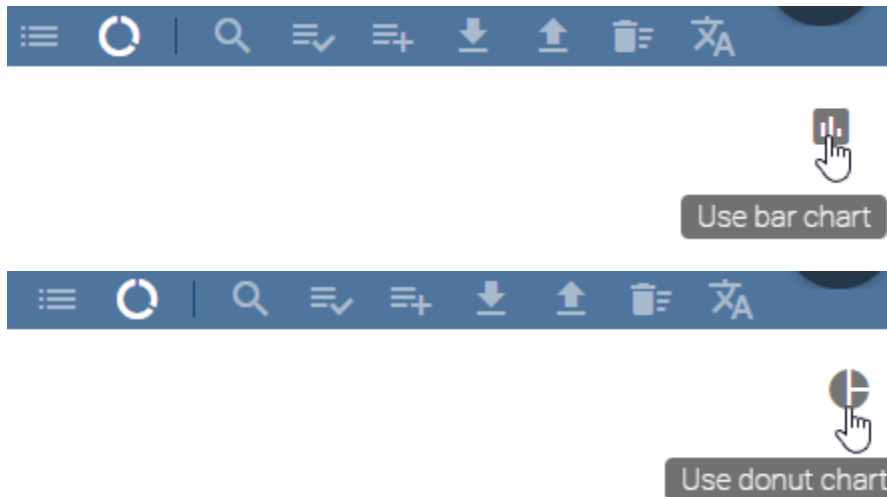
You can have individual elements highlighted by moving the courser over an element in the bar- or donut diagram.

Tip: The number displayed in the center of the donut diagram shows the the number of different entity types within the catalog. Or if a filter has been selected it shows the number of different values which exist for one facet.

3.4 Quality assurance in the catalog

3.4.1 How do I accept suggested entries in the catalog?

Catalog entries can only be accepted by certain user roles. The user roles *Administrator* and *Editor* are authorized to manage catalog entries.

Create a new catalog entry or search for an existing catalog entry in the catalog that has not yet been accepted. You can recognize not yet accepted entries by a highlighted red and italic font.

Click the *Accept or reject an entry*-button.

A dialog with the options *Approve*, *Reject* and *Delete* will be displayed. Select the option *Approve* and confirm your selection.
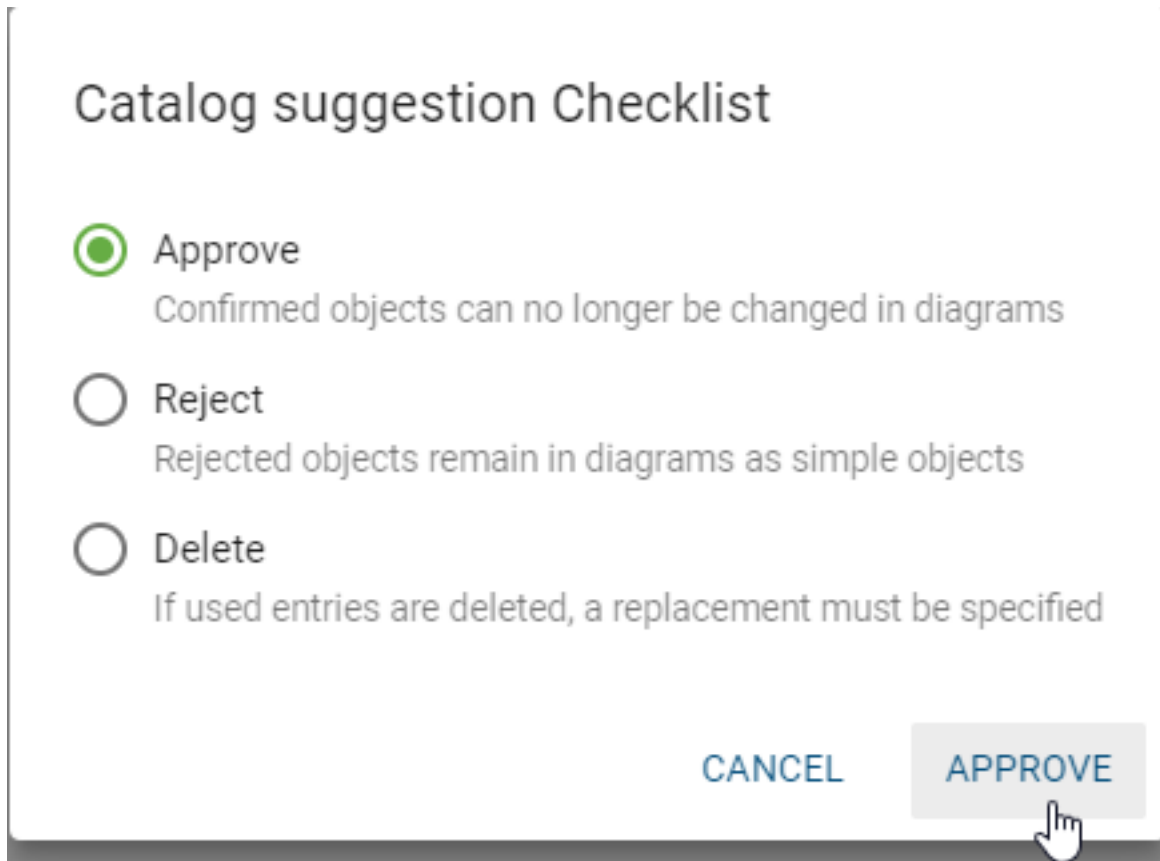
If an object of the approved catalog entry is changed in a diagram, the entry in the catalog is not changed but a new catalog entry is created instead. Changes for reuse of the accepted entry can thus only be made via the catalog itself.

Tip: You can filter suggested catalog entries by selecting the menu item *"Show only suggested items"*.

Note: For ease of use in modeling, suggested catalog entries can also be *accepted directly within the validation*.

3.4.2 How do I reject suggested entries in the catalog?

Items that have been rejected in the catalog are removed and no longer available for reuse in any diagrams (via the suggestion list). You can reject proposed entries from the catalog as follows.

Navigate to the catalog and search for the entry you want to reject. Click the *Accept or reject an entry* button.

A dialog with the options *Approve*, *Reject* and *Delete* will be displayed. Select the option *Reject* and confirm your selection. The entry is then removed from the catalog.

Note: Objects of the rejected entry that were previously modeled in diagrams will not be deleted. They will remain within the diagram as modeling objects and can not be administrated any more through the catalog. In addition they can not be reused in other diagrams.

3.4.3 How do I delete suggested catalog entries?

A proposed catalog entry can be *deleted via the context menu* or by executing the following steps:

Navigate to the catalog and search for the entry you want to delete. Click th *Accept or reject an entry*-button.

A dialog with the options *Approve*, *Reject* and *Delete* will be displayed. Select the option *Delete* and confirm your selection.

If the catalog entries are not used in a diagram or in attributes, the deletion can be done without further side effects and the entry will be directly removed from the catalog. If this catalog entry is used in a diagram, you must select a substitute in the catalog before the entry can be deleted. This works the same for entries, that are only used in the attributes. Additionally, it is possible to delete those entries without selecting a replacement, which automatically remove the attribute chips as well.

Note: If the catalog entries are used, the deletion corresponds to the merge of two catalog entries. In the procedure, the object in the diagram adopts the attributes of the catalog entry that is selected as a substitute.

3.4.4 How do I change the state of an accepted catalog entry?

Catalog entries, that are accepted (black), can be set to the state "catalog suggestion" (red and italic font).

In the catalog, navigate to the desired accepted entry and open the corresponding context menu.

Select the option *Change to suggestion*.

This causes the catalog entry to be displayed in red and italic and interpreted as *catalog suggestion*.

3.5 Edit catalog entries

3.5.1 How do I create new catalog entries?

You can generate new catalog entries in three different ways, which are described below.

Create entries directly in the catalog:

You can create new catalog entries directly in the catalog. To do so click the *New catalog item*-icon.
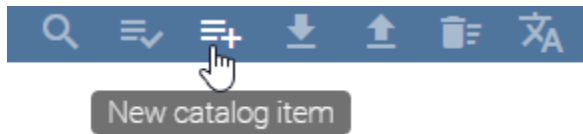
A dialog appears. There, enter the name and select the type (for example, a role) for the new catalog entry. If the checkbox below the catalog type selection filed is activated, the details view of the new catalog entry will open as soon as you confirm your entries. You can then edit the details of the new catalog entry. In case you deactivate the checkbox, you will remain in the catalog's overview after the confirmation.

Adding entries by modeling:

New catalog entries can also be generated when creating new symbols in the diagram. The activation of the object type as *catalog suggestion in the administration area* is required to use this function.

Create a new symbol in a diagram, which can be used in the catalog. (These are reusable symbols, such as roles, risks, etc. Symbols that are not displayed in the catalog by default are symbols which are normally unique, like for example activities and events.) You then have to check in your diagram to make the items available in the catalog. As soon as

you have checked in your diagram, a new catalog entry for each of the symbols is available. Furthermore, they are available in the suggestion list when creating new symbols of the same type in the editor.

Suggest existing symbols as catalog entries

Your diagram may contain symbols for which no catalog entry exists. In this case, you will not see a corresponding label "catalog suggestion" or approved "catalog item" in the attribute bar. You can now create a new catalog suggestion for this symbol from the diagram. The diagram has to be *checked-in*. In addition, catalog suggestions for the respected type *must be allowed*.

Navigate to the diagram in which the object is located. Afterwards open the context menu of the object with a right click and select the option *Suggest to catalog*.
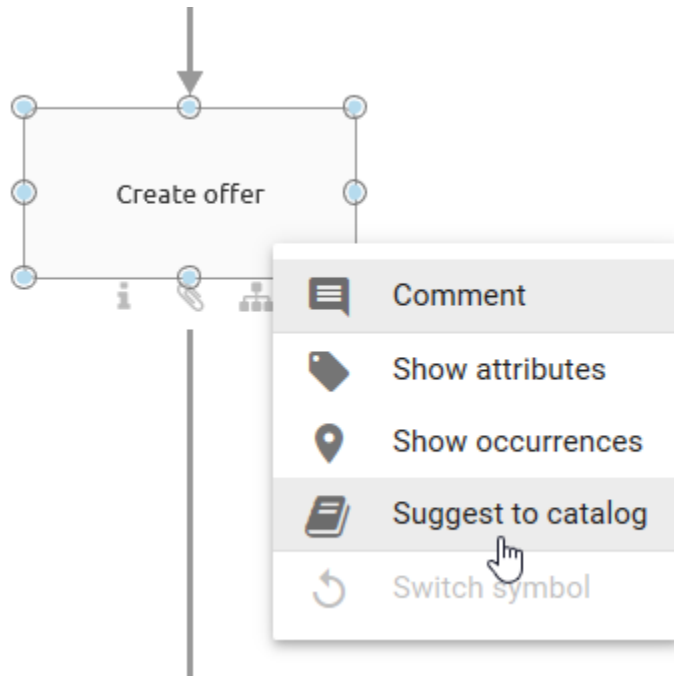
You will receive a notification confirming the creation of the new catalog entry. After updating the attribute bar, you can now see the addition "catalog suggestion" there. If a catalog entry already exists for the symbol in question, the option *Open in catalog* instead of *Suggest to catalog* will be displayed in the context menu.
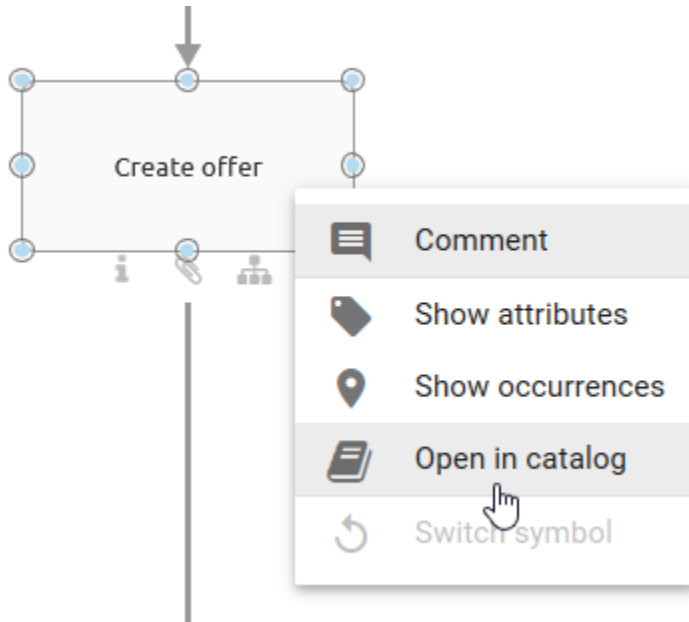
If you select this, you will automatically be taken to the details view of the corresponding catalog entry.

Note: Newly created catalog entries are not initially *confirmed*. This becomes visually clear through their red and italic font.

3.5.2 How do I edit attributes of catalog entries?

Go to the catalog and search for a catalog entry that you want to change. There click on an entry or on the *Details* button for that catalog entry and the attributes will be opened.
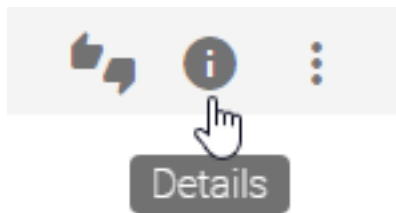
Then select the function *Edit* to enter the edit mode to be able to set values for the individual properties.

Edit the attributes according to your wishes by changing, inserting or deleting values. Read-only and system attributes cannot be edited. You can add links and files in the attribute field *Attachment (URL)*. The attachments can be provided language dependent. An explanation for the functionality can be found in the chapter about the *attribute attachment*. Moreover, note the different *functionality to edit the attribute *Description** whereas tables are also supported.

Confirm your changes by selecting *Save*. You can return to the original catalog view via *Back* in the upper left corner. The corresponding catalog entry is then selected. If there are unsaved changes, you will get a hint when clicking the *Back* arrow. It then gives you the possibility to save your changes or discard them.

Note: In the edit mode you can only see values of properties that have been maintained for the selected *content language*. Outside of the edit mode you will also see values that have been maintained in the alternative language but not in the content language. This behavior enables you to be sure that when being in edit mode you will always set up values for the currently selected content language.

3.5.3 How do I create entities during attribute editing in the catalog?

Organizational units, documents and norms can be created while editing the attributes of certain entities in the catalog.

To do this, the attribute field must be selected. Suggestions of existing catalog entries are shown after the the first letter is entered.

In addition, a new entity can be created and assigned directly. This is done by entering the desired name in the selected field and clicking "create" for the correct option.
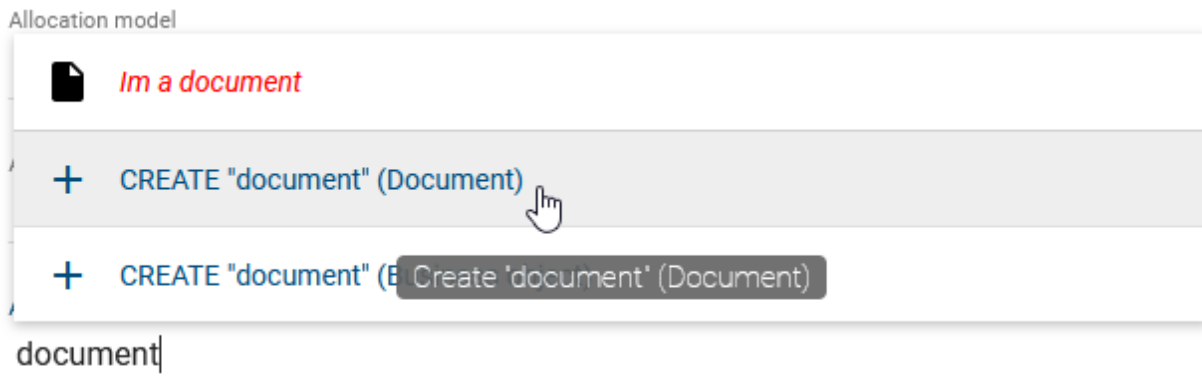
A notification will inform you that the chosen entity has been created and added to the publishing workflow for new catalog entries.
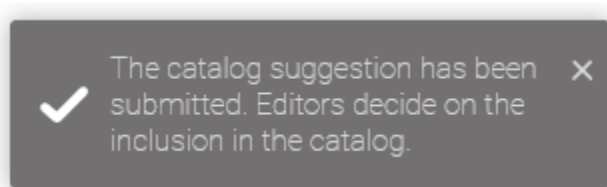
3.5.4 What happens if I change catalog entries in the catalog?

When you save changes that where made to catalog entries in the catalog, they will be automatically applied to all entities of these catalog entries in all checked-in diagrams. For a better understanding you can execute the following steps:

Edit an attribute of a catalog entry. Then open a model that contains an entity of the changed catalog object. You can see that the properties of the attribute in the public workspace are updated according to the changes.

Note: If you have checked out a diagram for editing before you changed the properties in the catalog, the change only becomes visible after *check-in*. If you edit this symbol before you check it in, a new entry is created in the catalog, separately from the previously modified one. The changed catalog entry remains unchanged from this local modification.

3.5.5 What happens if I change symbol attributes in a diagram that are in the catalog?

If you change symbol attributes in a diagram when they have already been accepted in the catalog, a new catalog entry is created for this symbol. This serves to prevent unwanted or accidental changes in the attributes of the same symbol. The creation of new entries allows you to manage changes centrally in the catalog, for example, to decide whether the changes should also apply to other symbols.

Create a new symbol (for example, a role) and select a catalog entry from the suggestion list. The symbol has the same properties as the selected catalog entry. If you change the attributes of this symbol, for example, by renaming it, the following happens.
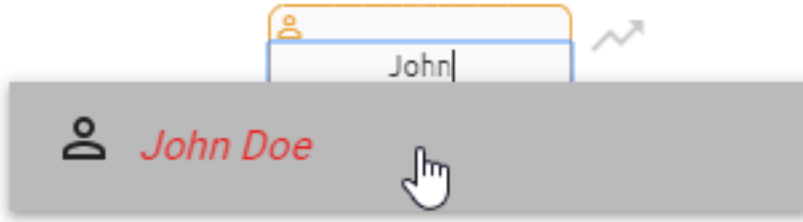
Accepted (black) catalog entry

A new catalog entry containing the changed attributes is created by checking-in the diagram. Other symbols in the same diagram that previously referred to the same catalog entry are also changed and then refer to the new creation mentioned before. However, the symbols of the catalog entry that are used in other diagrams do not change and the reference remains. If you want to replace the selected catalog entry with the newly created entry for these symbols as well, you have to do it *in the catalog*.

Proposed (red and italic) catalog entry

Check in the diagram and the changes will be accepted for the existing catalog entry without creating a new one. These changes also affect all other diagrams in which the proposed catalog entry is used.

Note: Be aware that the *suggestion list of the server* will be updated after you check in your diagram. In other words, if a suggested catalog entry is renamed, this entry will still have the old name in the suggestion list of the server until you have checked in the diagram once.

3.5.6 How do I translate catalog entries?

Users with editor rights can maintain translations of catalog entries directly in the catalog for the content languages selected in the administration. Navigate to the catalog and select a filter for an object type. This is necessary for the diagram translation, as the option *Translate catalog* on the right in the menu bar is now clickable. More filter options, such as the search or facets, can be used additionally.
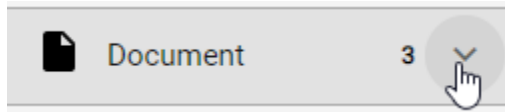
Click on *Translate catalog* to switch to the translation mode of the catalog.
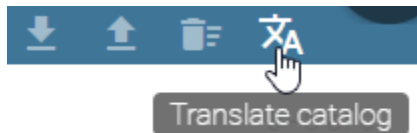
The elements of the filtered object type are still listed and sorted by their names in the current content language. If the catalog list contains more than 100 elements, it will be split to several pages, which you can reach using the upper right pager.

Click on a list entry to expand it and to see all text attributes of this entry in all available content languages. The names of the attribute types, such as "Name" or "Description", are displayed in your UI languages. You can now maintain or change translations in the text input fields.
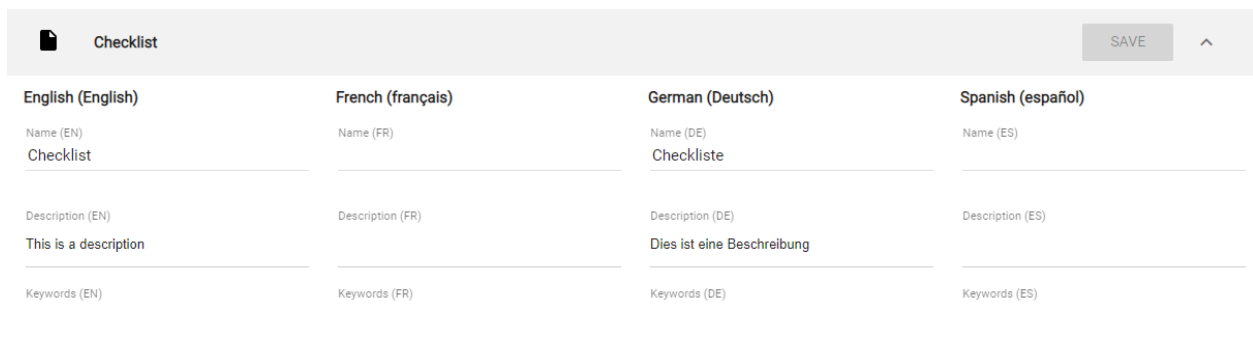
The *Save* button in the header of the expanded list entry will be clickable as soon as you edit the entry. Click on this button to save your changes. Saving is done separately for each expanded and modified list entry. If you do not want to save your changes for the respective entry, click on *Collapse* and select *Discard changes* in the appearing dialog.
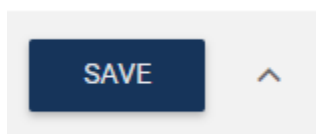
By clicking on *Translate catalog* in the menu bar again, the system will lead you to the usual catalog view. If you have unsaved changes, a respective dialog will appear at this point. Then you can decide, whether you want to *Discard changes* or *Cancel*. Thus, clicking on *Cancel* means you stay in the catalog translation and you can save your changes as described above.
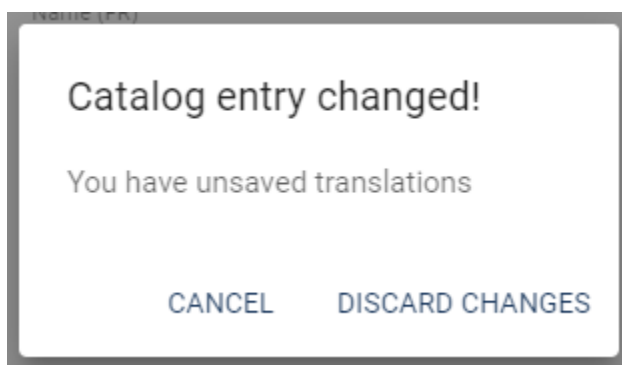
Note: Overall, the translation mode does not distinguish between suggested and accepted catalog entries. This mode is only available for editors and administrators, who are allowed to edit the visible catalog entries. During the catalog

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translation, accessing the other catalog options in the menu bar is not possible.

3.6 Delete catalog entries and reorganize catalog

3.6.1 How do I delete catalog entries?

Select the *More options* button of the catalog entry you want to delete.
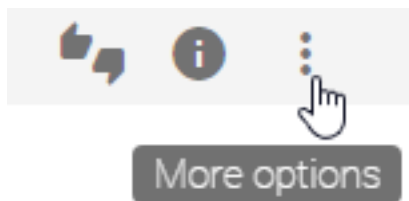
Click on the entry *Delete* and confirm the deletion in the appearing dialog.
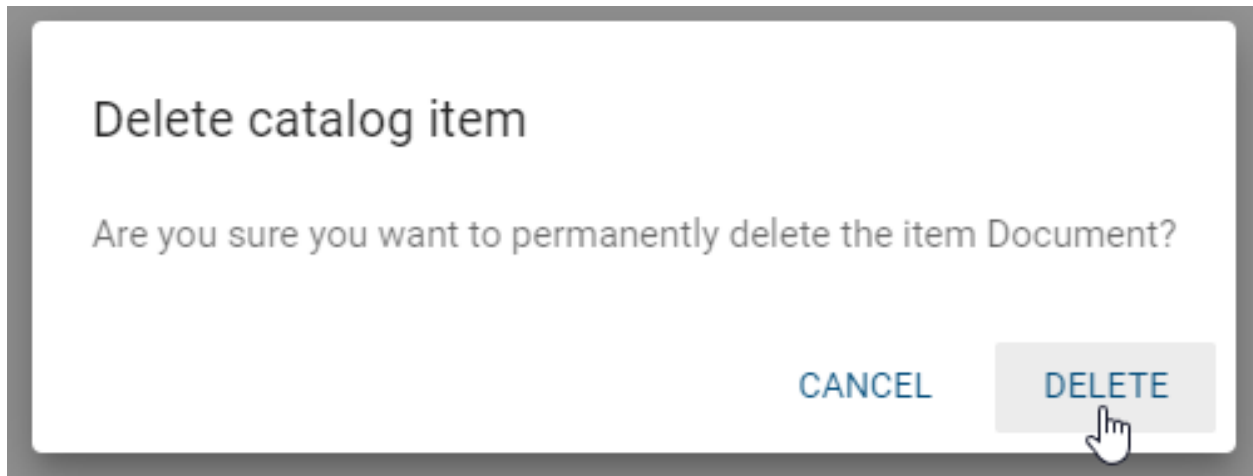
If the catalog entry is not used, the deletion can be done without further side effects. If this catalog entry is used, the following cases are considered:

Diagram: If the catalog is *used in a diagram*, you must select a replacement of the catalog. Therefore, a second dialog appears in which you must select a different catalog entry of the same type via the suggestion list. The entry can be deleted afterwards.

Attribute: If the catalog entry is exclusively used as subprocess in an attribute, a second dialog appears. This applies, for example, to a *person object in the governance attributes*. Here you can use the *Replace* option to select an existing catalog entry from the suggestion list. This then replaces the deleted object. Alternatively, you can irrevocably delete the catalog entry from the catalog by choosing *Remove*. The corresponding deposits in attributes are also removed.

Note: If the catalog entries are used, the deletion and replacement corresponds to the merge of two catalog entries. The object adopts the attributes of the catalog entry selected as a replacement. Proposed catalog entries can also be *removed from the catalog by using the "Accept or reject an entry" function*.

3.6.2 How can all unused catalog entries be deleted?

With the function *Reorganize* all unused catalog entries of a special object type can be deleted. This includes all catalog entries that are neither modeled nor used in attributes as subprocesses.

Open the catalog and select *the object type you want to filter by*. Afterwards click the *Reorganize* button in the menu bar of the catalog.
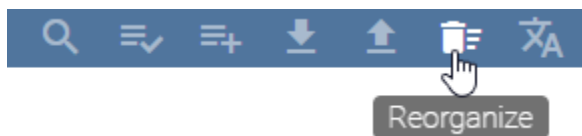
Select *Delete* to delete all unused catalog entries irrevocably from the catalog.
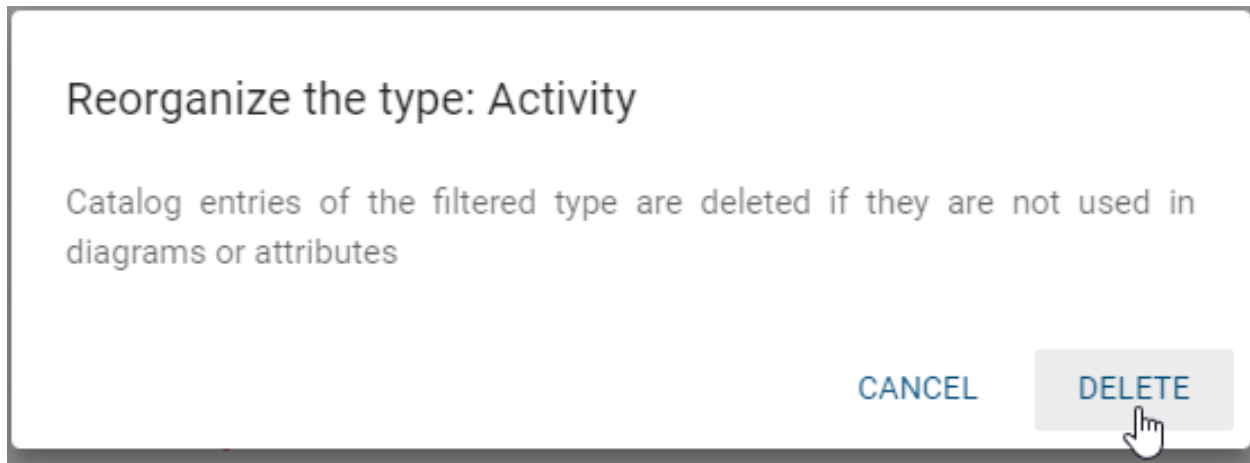
> **Warning:** Please note that the "Reorganize" function affects all unused catalog entries of an object type, regardless of which *facets were selected in addition to the filter*.

3.7 Occurrences

3.7.1 How can I view occurrences of catalog entries in diagrams?

In the catalog, you have the option to view any occurrences of catalog entries. In doing so, all occurrences will be displayed, in which diagrams they are used and the relations they have to other objects.

Select the *Catalog* entry in the menu bar. There click the *Details*-button for a catalog entry.
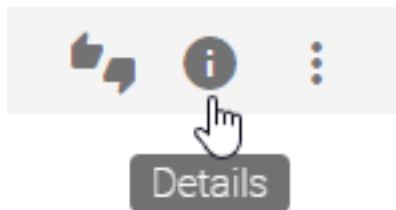
A list of occurrences for the selected catalog entry appears on the right. For occurrences with connections to other symbols, the name of the connected symbol and the name of the diagram are displayed. For objects without connections to other objects, only the diagram name is displayed.
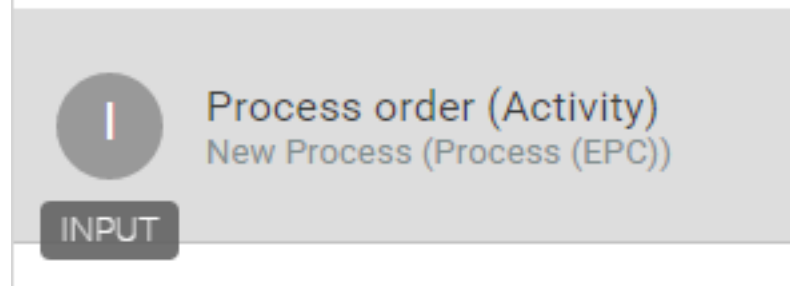
Select an occurrence from the list. The diagram or allocation diagram that contains the occurrence will be opened and the symbol will be pre-selected. Instead, you can return to the catalog by clicking the *Back* in the top left corner.

You can also *display the occurrences of an object* in diagrams.

3.7.2 How do I reuse catalog entries in multiple diagrams?

You can reuse catalog entries in multiple diagrams by using the suggestion list. It does not matter whether the entries have already been accepted in the catalog or not ("suggested").

Create an object type that already exists in the catalog. Edit the name of the object by double-clicking or pressing F2 and type in at least one letter of the catalog entry that you want to reuse. All catalog entries, up to a maximum of five, appear in the suggestion list of the server containing the entered term. For example, the search term "manager" will also find "process manager". In addition, the suggestion list is prefiltered by the *diagram attribute "Scope"*:

- **Scope defined**: Only catalog entries whose scope is not defined or which have the same scope as the diagram are found in the suggestion list. Scopes are considered to be the same as soon as an organizational unit exists in both scopes.

- **Scope not defined**: Only catalog entries whose scope is not defined are found in the suggestion list.
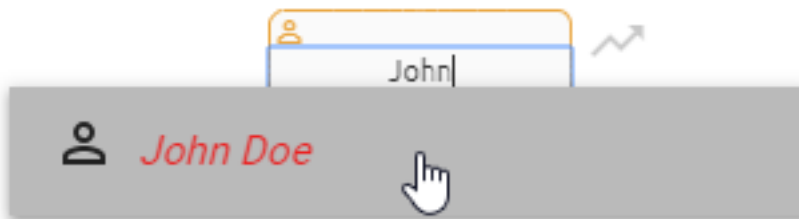
Select the catalog entry that you want to reuse from the suggestion list.

Note: The suggestion list for catalog entries in the *attributes of an object* behaves in the same way. When reusing, note the *differences of editing* suggested and accepted catalog entries.

3.8 Publish catalog entries

3.8.1 With which requirements can I publish a catalog entry?

Administrators, editors and authors have the option to publish a catalog entry independently of a diagram. This is useful for entries changed in the public workspace, so that individual changes are also available in the publication. There are a few points to bear in mind.

You can only publish *accepted catalog entries* of the public workspace. Furthermore, the catalog entries must have governance attributes that are assigned to a *responsible person or organizational unit* and optionally one or more examiners.

Only if these criteria are fulfilled, it is finally possible to *Publish* a catalog entry of the public workspace.

For more details about publication and *depublication workflows* of catalog entries, see the *related governance section*.

Also note the *general reasons* for failed publication workflows.

3.8.2 Where can I find old versions of catalog entries?

Catalog entries, that have an own responsible person, have the *Archive* option in all stages.
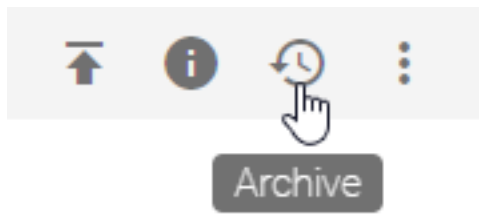
Archive entries are created when catalog entries are changed. The archive lists all obsolete versions, starting with the latest version. The current version of the catalog object is not listed in the archive. Each archive entry is named by the date and time of the last change. Initially, the first entry is selected and thus highlighted in grey. The corresponding details are displayed on the right side. Likewise, the further list entries can be selected so that their attributes are shown.

Additionally, it is possible to download the individual versions of the catalog entry. Hover over the desired archive entry with the mouse or select this entry, so that the *Download* button appears. Click on this button to download the entry as a ZIP file.

Via the *Back* button you can return to the list of all catalog entries where the previously selected entry is marked.

3.9 Reference catalog entries

3.9.1 How can I copy the catalog URL?

If you are in the catalog, you can simply copy the catalog URL to the clipboard to forward it or refer to the search results afterwards. To do this, click on the *Copy* button in the menu bar. At the bottom right of the screen you will see a toast stating that the URL has been copied successfully. The filters, search and sorting you have carried out are taken over.
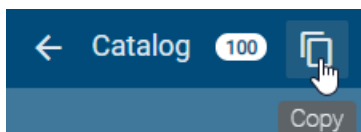
3.9.2 How to inform users about changes to catalog entries?

The Editor and Administrator users have the option to inform the creator of a catalog entry about operations such as *rejecting*, *editing*, and *deleting* the entry by e-mail.

Navigate in the catalog to the context menu *More options* of the corresponding catalog entry. The default e-mail client will open with an empty e-mail addressed to the creator of the catalog entry via *Notify user*.
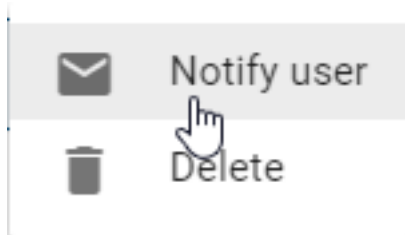
Tip: You can also automatically inform users within a user group about changes in form of de-/publication and if a new version of that catalog entry has been released. To do so use the catalog entry attribute *scope*.

3.10 Catalog Export and Import

3.10.1 How do I create a Process warehouse export in the catalog?

The Process warehouse export contains all currently displayed catalog entries in the form of an Excel table. This means that *filters, facets or search results* can limit the content of the catalog export.

In your menu bar, navigate to the *Catalog*. Then click on *Download report* in the menu bar and select *Process warehouse* in the appearing menu. The export is always created according to the current filtering.
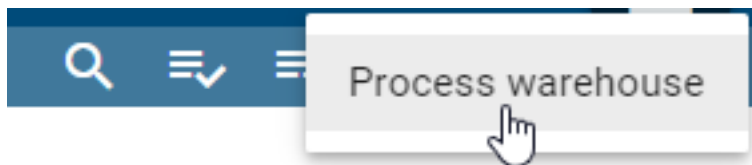
In the export, the first visible row forms the header, that is, the heading of the following rows. In the first column, the unique identifiers of the catalog entries are listed under the heading "Entity ID". The following columns relate to the attributes of the catalog entry. The names of the attribute types represent the headings, for example the name, identifier, description, attachment, keywords, system attributes and the object type. The following rows specify the filled attribute values associated with the catalog entries. Multi-value attributes, like keywords, are listed separated by a semicolon. In general, the attribute types are only part of the export if they have been maintained for at least one catalog entry.

Hint: In older versions, all attribute types were exported, regardless of whether they were deactivated or removed within the method. From now on, only visible attribute types are exported.

Note: Attribute values exceeding 32767 characters will be automatically shortened. A notification will be provided at the end of the shortened value indicating it has been reduced.

Note: The *attribute type IDs*, which are defined in the method, are specified in the initially hidden first row. This allows you to *re-import* the exported data and make changes to catalog entries. However, note the following restriction.

Note: Each cell of the column "Attachment (URL)" contains a comma-separated list of the links maintained in the corresponding attribute field. Maintained titles are specified at the corresponding URLs via URL encoding. If you edit (or add) the title of a URL in the process warehouse, be sure to use URL encoding in order to update the catalog entry successfully.

Note: The date information you find within your exports (e.g., "Valid from", "Valid to", "Created date", and similar) undergo conversion to the time zone of the currently active user. This ensures that the display of date information always aligns with the user's current time zone.

3.10.2 How can I import data into the catalog?

With the rights of the user role "Editor" you can import a (adapted) process warehouse export in csv or xlsx format into the catalog of the public workspace to add or change data. The data is always saved in the current content language.

Navigate to the *Catalog* via the menu bar and select the desired catalog filter. The catalog filter specifies the object type of the subsequently imported catalog entries and must be active for the import. Click on *Import* in the menu bar and open the desired csv or xlsx file via the appearing file selection dialog. The import is then carried out according to the current filtering, recognizable by a corresponding message at the bottom right of the screen.
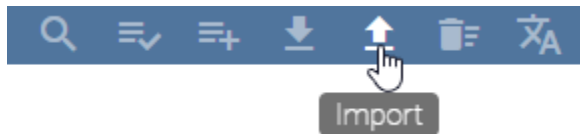
You receive another message about the successful import. Update the catalog by clicking on this message to display the imported entries in the catalog list.
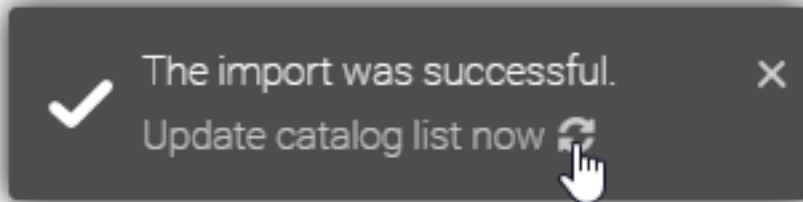
Note: The date information you find within your imports (e.g., "Valid from", "Valid to", "Created date", and similar) undergo conversion to the time zone of the currently active user. This ensures that the display of date information always aligns with the user's current time zone.

Note: Note that the entries of the "Attachment (URL)" column have to be URL-encoded in order to be imported successfully. Thus, if you like to attach URLs with titles to a catalog entry, the titles have to be URL-encoded.

Functionality:

The import process is explained using exported (customized) catalog entries. The import file is then structured as follows: The initially hidden first row specifies the *attribute type ID* for each column, that is defined for an object type in the application and is taken into account for your import (shown in the screenshot). The first visible row, that means the second row in the screenshot, specifies the header. The filled out rows below correspond to the catalog entries. This structure basically applies to an import file. In the following example, two catalog entries are created during import in the same order as in the file.

▲	A	B	C	D	E
1	ENTITY_ID	AT_NAME	AT_IDENTIFIER	AT_DESCRIPTION	AT_KEYWORDS
2	Entity ID ▾	Name ▾	Identifier ▾	Description ▾	Keywords ▾
3	2d9c684c-55bc-4604-bbb0-8d83116ae874	Application form	HR	At veros eos et ac	Application form
4	fc13e46e-d205-4374-992c-8327ec83d351	Vacation request	HR	Lorem ipsum dolor	Application form

Note: Accordingly, when importing in both csv and xlsx format, the catalog entries are read in from the third row onwards.

Attributes listed in the import are adopted for the catalog entries if the attribute is defined for the corresponding object type in the method: the attribute type and its data type. If this is not the case, the respective attribute type is ignored by the import. The system attributes are set or adjusted automatically at the start of the import and cannot be adjusted manually.

By default, the first column of the import file contains the ENTITY_ID if it is an export. However, if you modify the import file or create it yourself to update or create catalog entries, adopt the structure described above and note the following functionality. If the first column of the **import file contains the ENTITY_ID or an attribute type ID of type Text** (as the header, see example above) and corresponding row entries,

- this column is regarded as identifying. It is used for the case-sensitive comparison with catalog entries.

- the row of the file in the import is skipped if no *Universally Unique Identifier* (UUID) is used to define the ENTITY_ID. A UUID is a globally unique identifier of numbers and letters which is defined by time and location stamps. The use of an existing UUID or the generation of a new one is necessary for the import with ID and the update functionalities based on it. You can generate a new UUID using a generator (e.g. using the Online UUID Generator Tool).

- a new catalog entry is created as a suggestion if the ID or text attribute does not already exist in the catalog.

- the existing catalog entry with the exact same ID or text attribute is updated, that means the attribute types contained in the import are reset for the selected content language. Accordingly, empty or filled cells in the import delete or change the attributes of a catalog entry. Attribute types that are not listed in the import remain unaffected in the catalog entry. To update via the ID, the corresponding catalog entry must be available in the filtered catalog.

  - If this is not the case for the **ENTITY_ID**, that means the same ID already exists for a catalog entry of another object type, the affected row is skipped in the import.

  - The adjustment using the **attribute type ID** does not take into account the existing objects of another object type. However, if the selected filter contains several objects with the exact same attribute text, the affected row is skipped in the import.

- the status (suggested/accepted) of the catalog entry is not changed.

If several line entries of the identifying attribute have the same name in the import file, the contents of the first corresponding line entry are updated with the subsequent line entries. Note that using the ENTITY_ID only makes sense in the first column. If the **import file contains neither an ENTITY_ID nor a text attribute**, it will not be imported.

The previous example looks like the following for the attribute type ID "AT_NAME", that is, the identifying ID.

Format:

For certain attributes, you must note the format. These include date values that must be entered in the format of the current content language.

Note: When importing as an xlsx file or via Excel, it is recommended to format date values in Excel as "date". Importing as a csv file or as an xlsx file, in which date values are formatted as "text", allows the following formats per data type.

Attribute value for data type	Format
Date	yyyy-MM-dd
Datetime	yyyy-MM-dd HH:mm:ss
Time	HH:mm:ss

Also note that cell representation of numbers in scientific format, that means in exponential notation, is not supported by the import.

Note: The date information you find within your imports (e.g., "Valid from", "Valid to", "Created date", and similar) undergo conversion to the time zone of the currently active user. This ensures that the display of date information always aligns with the user's current time zone.

Note: The combination of quotation marks and a semicolon (**";**) in attributes with string values (e.g., the attribute *Name*, AT_NAME) is not supported by the import. Instead please use commas to separate these attributes.

HTML tags which are used in the attribute *Description* will be interpreted during the import. The content of the attribute will then be displayed in the desired format after the file has been imported into the catalog. For example, you can specify the description of a document as shown below.

The content of the attribute is then displayed according to the given HTML format after the import into the catalog.

The possibility to convert HTML tags into the desired format only applies to the import. The *export* can not process HTML tags and also the formatting is not converted into HTML tags.

Multi-value text attributes, such as keywords, and links are also supported. The individual attribute values must be separated by a semicolon in the import so that they can also be recognized as multiple values. A space before or after the semicolon is not adopted in the attribute value.

	A	B	C
1	AT_NAME	AT_DESCRIPTION	AT_KEYWORDS
2	Name	Beschreibung	Schlüsselwörter
3	Offer checklist	At veros eos et ac	Checklist; Offer

For example, the import above creates the two keywords "Checklist" and "Offer" for the offer checklist.

Attributes
Document

Name
Offer checklist

Identifier

Description
At veros eos et ac

Keywords
Checklist ✕   Offer ✕   +Keywords

Note: Since all catalog entries are created during the import as object types of the selected filter, the imported file should also contain only this object type. Furthermore, the files (xlsx, csv) should be UTF-8 encoded. When importing an xlsx file, only the first spreadsheet is taken into account.

Hint: Please note that you cannot maintain or update assignments (like an assigned diagram in the subprocess attribute or person/ organizational units in the governance attributes author/examiner/responsible) via the catalog import. If you update existing catalog entries via an import, the current assignments in BIC Process Design are not overwritten (and new ones are not added).

3.10.3 How can I export the profile of a catalog entry?

Go to the *Catalog* and navigate to the catalog entry for which you want to create a profile. Open its context menu by clicking on *More options*.

Type	Name ↑	Description
📄	Checklist	

More options

Afterwards click on *Profile* to start the creation.
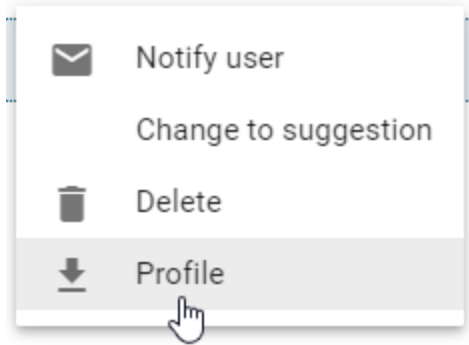
At the bottom right corner of the screen you will get a hint about the creation of the report and another hint as soon as the profile is ready to download. In the second message, click on *Download the report* to start downloading the docx file.
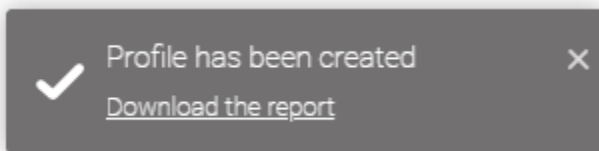
The profile is available in the catalog for the object types *defined in the administration area*. Administrators and editors can retrieve it. It lists all attributes that have an attribute value and the corresponding value in alphabetical order and is created in the current content language of the application. You do not see the values of assignment attributes as titles, but the actual assignment, such as a URL. Furthermore, the profile lists the uses of the catalog entry - grouped by diagram - in the form of tables. A table contains the names and types of the objects associated with the catalog entry and the connection types.

Note: If the report template does not exist in the selected content language, the English template is used. The maintained attribute values remain in the content language.

FOUR

MODELING

The modeling is done in diagrams in the local workspace. To switch from the public to the local workspace, the modeler must *check out* the diagram. The user can now edit the diagram, while it is locked for other users, so that no simultaneous changes can be made. The user can *save* the editing of a diagram, but the changes are not yet available for other modellers. They are stored in the "Local Storage" of the used browser. By *checking in*, the current state is being transferred to the BIC Process Design server and is visible in the public workspace. This gives other modellers access to the diagram and prevents data loss.

> **Warning:** According to your browser settings, local work state may be discarded when the browser is closed or by clearing browser data. Regular check-in is therefore highly recommended.

4.1 Objects

4.1.1 How do I add objects to a diagram?

Symbol palette

You have several options to place symbols from the symbol palette into the editor. The symbols available for modeling vary for each chart type.

Objects can only be modeled in checked out diagrams. There you will see the symbols which are available to the opened diagram type on the right-hand side of the editor (the symbol palette).
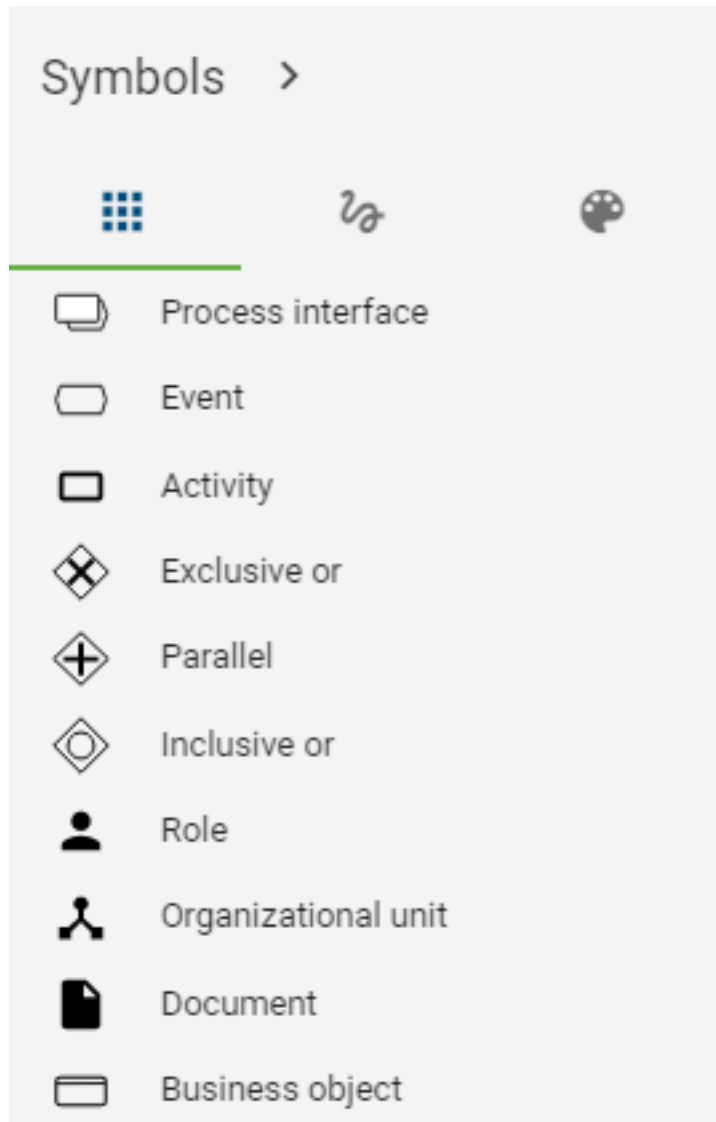
Drag & drop: Select a symbol that you want to place in your model and drag & drop it into the editor. After placement, the text field of the symbol is automatically selected so that the symbol can be named individually. Also note the *Rename* section when naming. Repeat this step for any symbols.

Stamp mode: You can use the stamp mode (the corresponding symbol is highlighted in the symbol palette), where you can create additional symbols of the same type. Select a symbol with a single click and place it by clicking into the editor. You can exit the stamp mode by pressing the ESC key or by clicking on the symbol in the symbol palette again.

Mini symbol palette

As an alternative to modeling with the symbol palette, it is recommended to use the mini symbol palette which displays all objects that can be connected to your current symbol.

Place or select a symbol in the editor. On the right side of the symbol some symbols will appear, which can be connected to the previously created symbol.
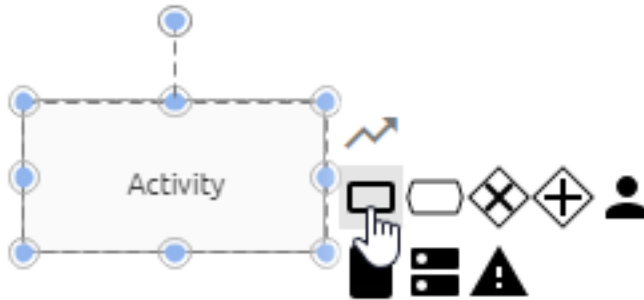
A connection between two symbols will be automatically created by placing a new symbol. The following options are now available. Also note the possible *shortcuts*.

Drag & drop: Select one of the symbols and place it in the editor while pressing the mouse button.

Releasing the mouse button creates the symbol including the connection.
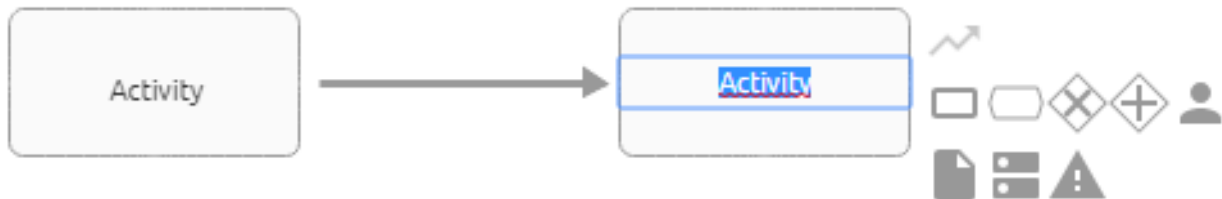
Quick Modeler: If the user simply clicks on an item in the mini symbol palette (no drag), a new object will be created immediately. The new node is placed centered at the same distance from the predecessor to the last symbol. The direction depends on the predecessor, because the new node is placed on the opposite side of the predecessor. If there is no predecessor, then to the right of the node and at a preset distance.

You can create multiple descendants for a node.
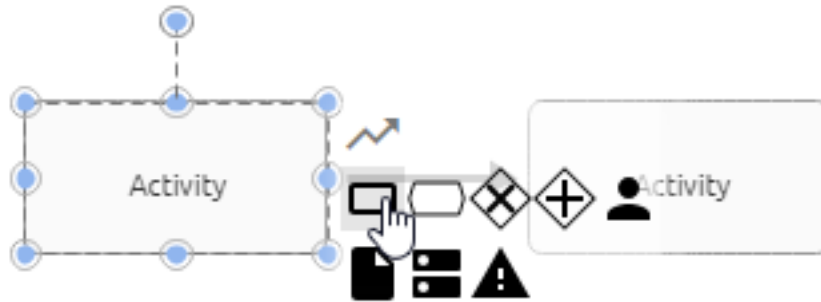
These are automatically created among each other using the Quick Modeler. Since the connection is centered, which means at the center port in the middle of the icon, it may overlap other symbols.
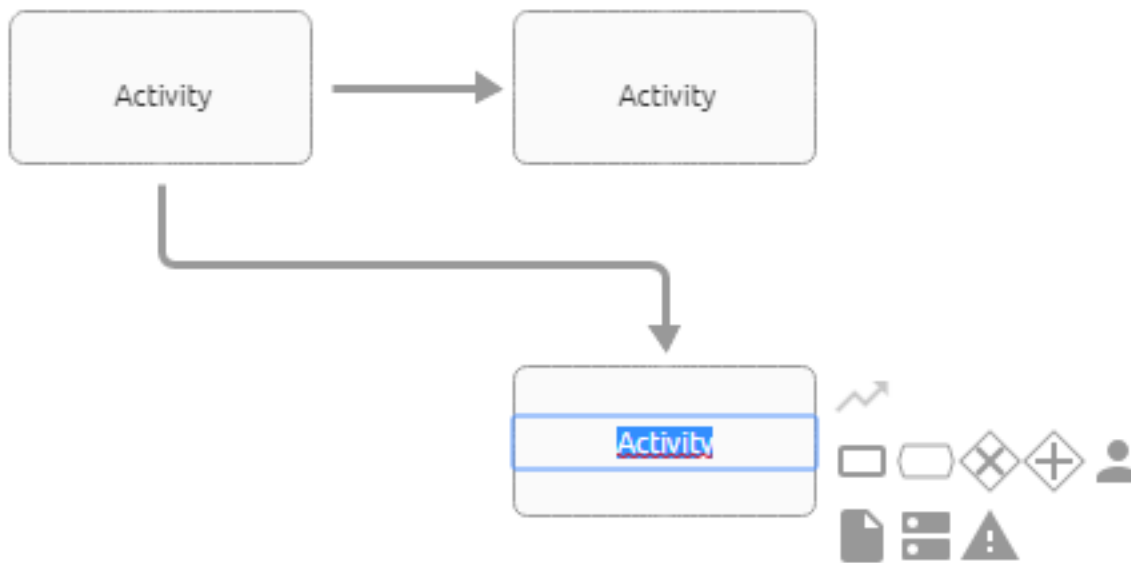
You can then *reposition connections*. Successors of successors are modeled either one below the other or one after the other, depending on the maximum distance to the predecessor in the x- and y-direction of the editor. By changing the position of the symbols you can adjust the behavior of the Quick Modeler.

The text field of the new symbol is selected so that it can be named individually. Also note the *rename* chapter.

Note: Depending on the symbol and on method, a selection menu for the automatically created edge may appear after placement from the mini symbol palette. To create the symbol, a selection must be made in this menu.

4.1.2 How can I create a personalized symbol palette?

In the symbol palette, you can add objects that you frequently model to your personal favorite symbols. Hold the mouse over any entry in the symbol palette in the *Symbols* tab. A star frame appears next to the entry if it has not been marked as a favorite.
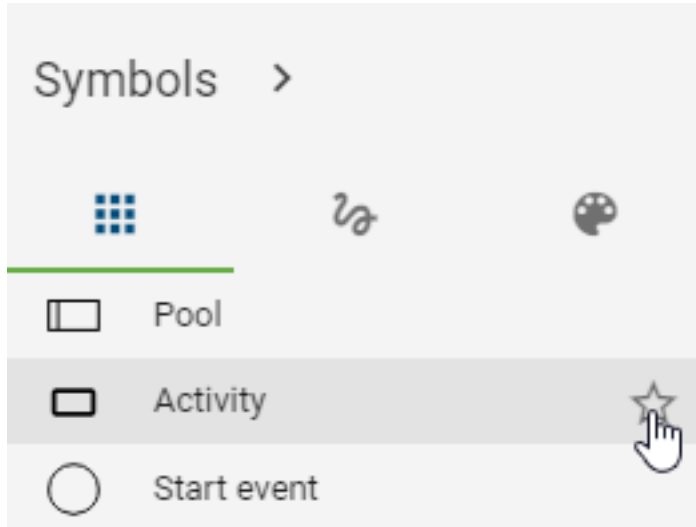
By clicking on the star you can add this object to your personal symbols. The star frame then remains filled in, marking your individually selected symbols.
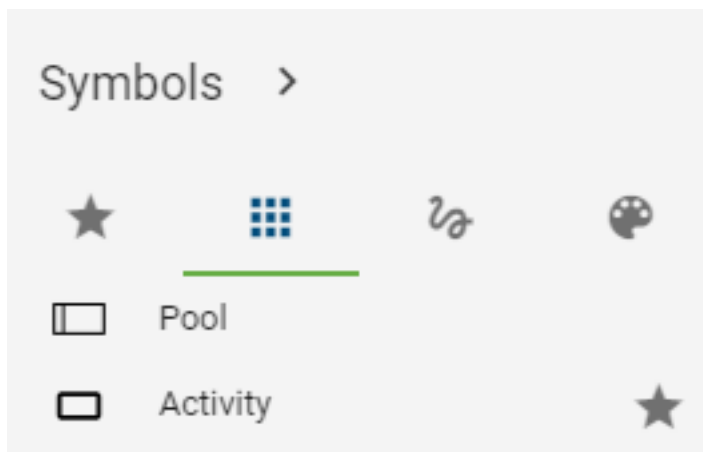
By marking an entry, the tab *Favorite Symbols* appears in the first place in the symbol palette. There, only your personal symbols are filtered and can be modeled from here. The order of entries is taken from the *Symbols* tab.
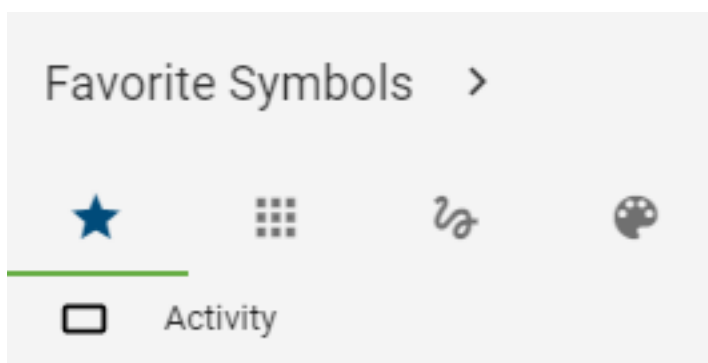
These settings are saved per user and per diagram type, so that each user can determine his or her individual symbol selection in each diagram type.

4.1.3 How can I remove favorites from my personalized symbol palette?

Got to the symbol palette to the tab *Symbols*. Navigate to the entry, which you want to remove from the favorite symbols. These are recognizable by the filled in, permanently visible star.
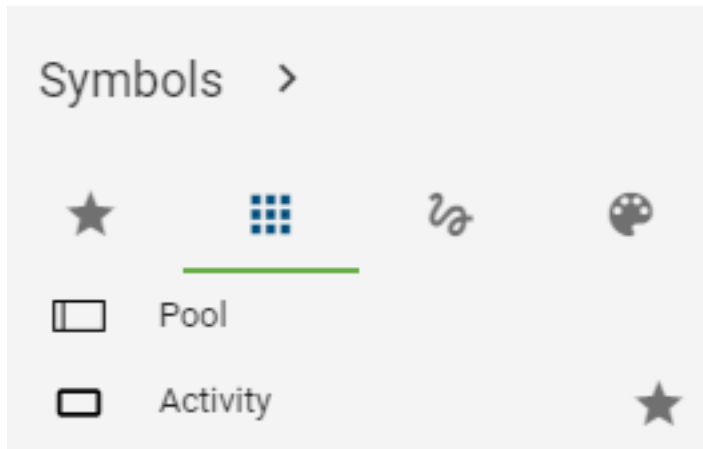
To remove, click on the star. Thus, only the frame of the star is visible, if you hold the mouse over the symbol. If no symbol is then marked as favorite, the *Favorite Symbols* tab disappears in the symbol palette. This tab is only visible if at least one entry is favored.
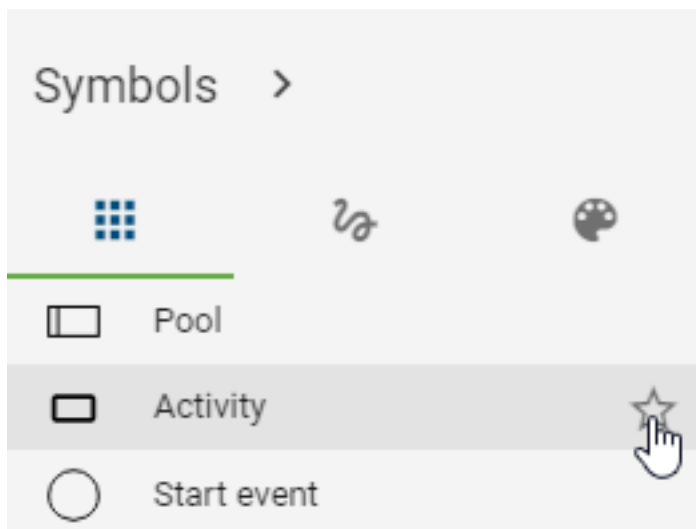
4.1.4 How do I create forms and graphical symbols?

Use the symbol view to navigate to the freeform symbols by selecting the second icon in the *symbol palette*.
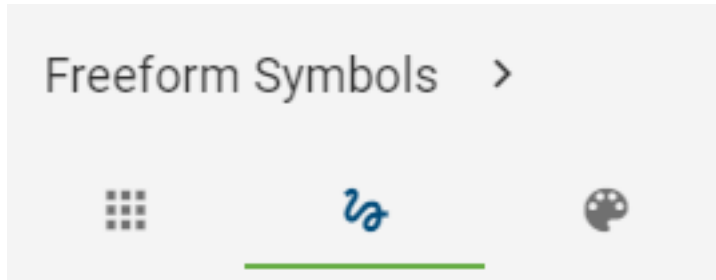
Select a freeform icon from the list and place it in the editor.

For example, the following freeform symbols are available: rectangles, ellipses, text fields, triangles, cubes, arrows, etc.. You can label freeform symbols by using the multilingual text field. By double-click or pressing the F2 key after selecting the symbol, you can also trigger the input field. In addition, freeform symbols have some attributes. You can search for these objects, allow catalog suggestions, which you can configure via the freeform object in the *administration area*. An exception is the line symbol, which does not have these properties.

4.1.5 How can I hide the symbol palette?

The *Favorite Symbols*, *Symbols* and *Freeform Symbols* can be hidden or collapsed with the symbol palette. Click on *Collapse* button next to the title.

Now the symbol palette is collapsed and the associated title is hidden. Only the individual icons of the object types are displayed. If you hover over an entry, you can see the associated object type name as a tooltip.
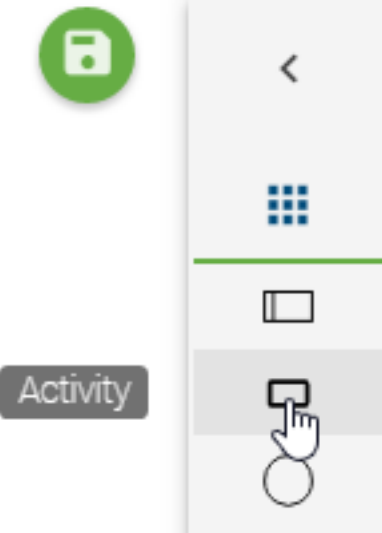
Modeling by drag & drop and stamp mode works unchanged. By clicking the displayed title icon, the tab changes between *Favorite Symbols*, *Symbols* and *Freeform Symbols*.

Click on the *Expand* button to unfold the opened tab of the symbol palette and to show it completely.
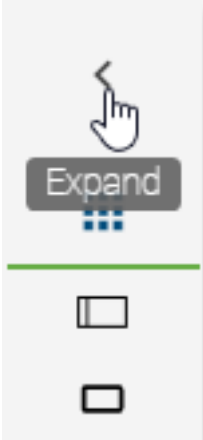
Note: The symbol palette "Format" does not contain symbols. Collapsing this tab is not possible, otherwise the options would not be selectable.

4.1.6 How do I move an object?

You can reposition an object by drag & drop. To do this, select the object with the left mouse button and keep it pressed while you navigate the mouse to the desired position. The object moves with your mouse. If the desired position is outside the current diagram section, you can also *move the diagram view* field by pressing the right mouse button or using the scroll wheel while holding the object with your left mouse button. When you release the left mouse button, your object is placed at the mouse position.

Optionally, you can use the arrow keys on your keyboard to move the object in all directions.

Note: You can also move a *multi-selection of objects* using this procedure.

4.1.7 How do I change the size of an object?

Select the object you want to change with a single click.

Press the left mouse button to alter the size of the object by using the blue points along the edge. Release the mouse at the desired position.
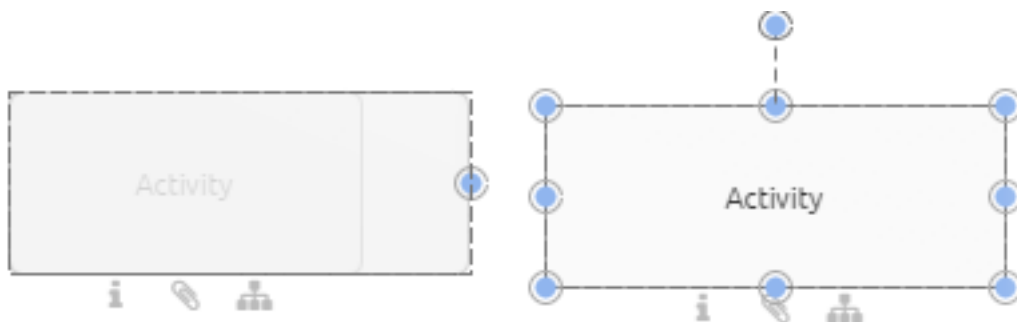
4.1.8 How can I switch the symbol of an object?

Within the modeling process of your diagram you have the possibility to change the symbol of an already modelled object. This can help you to dynamically change the view on single elements in your diagram according to your needs.

To change the symbol of an object within your diagram proceed as follows:

Right click on the symbol you want to change within the checked out diagram. The context menu for the object appears.
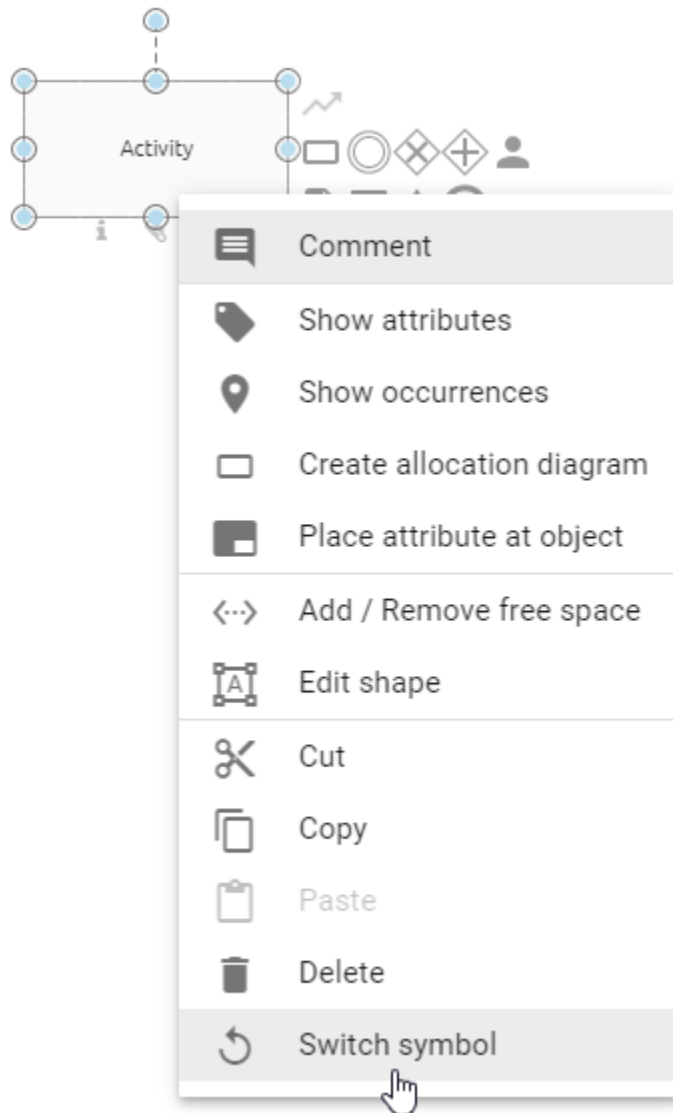
Select the entry "Switch symbol". You will get a list of all symbol types, which are allowed for the given diagram type.
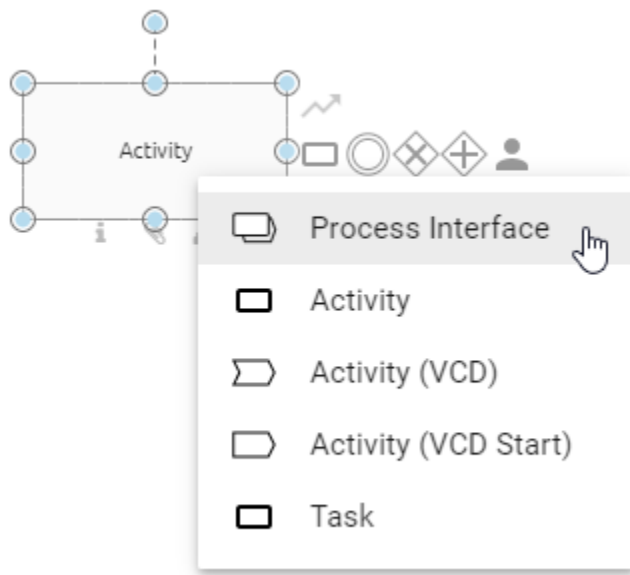
After you have selected the desired symbol type, it will be displayed in your diagram.

Symbols of container objects, such as pools, cannot be changed as soon as the object concerned already contains elements. In this case, the function for changing the symbol for this object is no longer available and is greyed out in the context menu.
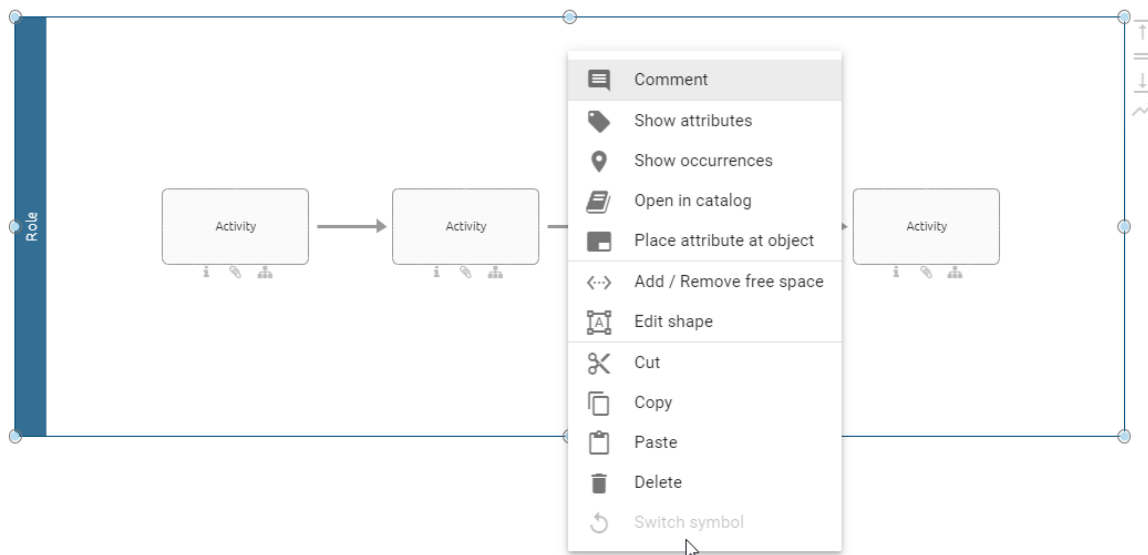
Note: Symbols that are already part of a pool can not be switched into the symbol type pool. By switching the symbol, *placed attributes* will be reset to its default. If no attributes are placed at the symbol by default, then no attribute will be placed after changing the symbol.

4.1.9 How can I label or rename objects in the editor?

The writing area is displayed directly after *modeling an object* or by double-clicking on the object. A suggestion list for all the catalog entries used in the diagram is then displayed. You can now select a proposal with a mouse click or label the object. When labeling, you can also choose from a suggestion list with catalog entries of the server that contain the entered term. Otherwise, end the entry with a single click in the editor.
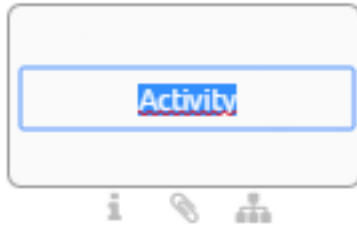
Optionally select the object by clicking on it once and press *F2* so that the writing area is displayed.

You can also rename symbols using the *attribute bar*.

Note: Note some peculiarities when renaming and editing attributes of symbols in diagrams that are *catalog entries*.

4.1.10 How can I name activities in the editor using AI?

Once you have checked out a diagram in the editor, you can select an activity from the context palette and place it on the canvas. Our AI assistant, *Arty*, will then generate a list of various activity names, which will be displayed under *Name suggestions from Arty*. The suggestions are based on the content of the diagram and will be presented in your current content language.
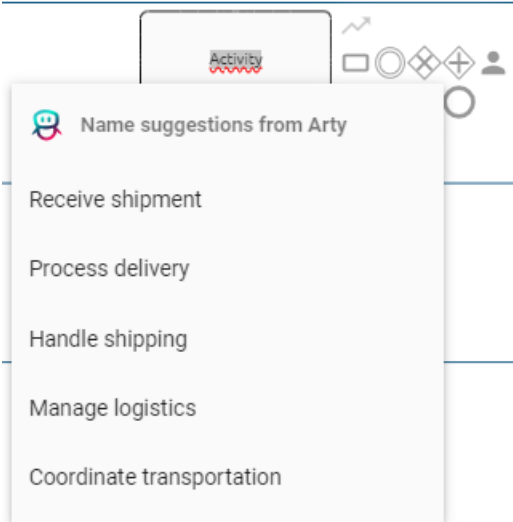
You now have the option to either select a suggestion by clicking on it or manually label the activity. If you prefer to enter a name manually, simply click on the activity's name label. Alternatively, you can select catalog items from a suggestion list of *Catalog objects* that contain or are similarto the entered term. To finalize the entry, click anywhere else in the editor.
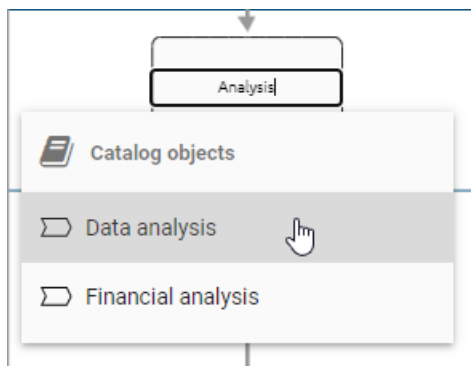
Hint: This function is performed by *Arty*, our AI modeller. It is part of the AI Modeler package, for which a separate licence is required.

4.1.11 How do I change the size, line breaks and the position of text fields (labels)?

You can change the size of some text fields which contains the symbol's name (if the name, for example, is very long, you have the option to display it in two lines (by alerting the size of the label) and to shift automatic line breaks). Alternatively, you can add *manual line breaks*. The text field can be positioned as you like.

Change size

Select a text field by clicking on it.

Alter the size by using the blue points along the edge of the text field. Release the mouse button at the desired position.
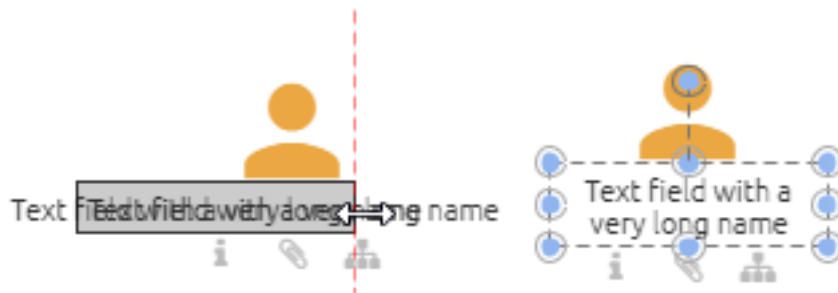
Position

Select a label by clicking on it. Then click again, keep the mouse button pressed, move the field and release the mouse button (drag & drop).
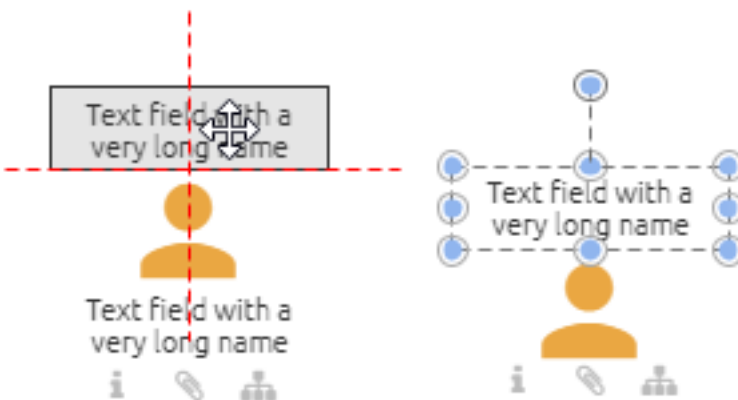
Note: Note that the size and position of the text fields of symbols with block form, such as activities, cannot be changed. For those symbols, the label is located in the respective symbol. Furthermore, manual line breaks can not be seen in the catalog, but are visible in the reports.

4.2 Connections

4.2.1 Where can I place a connection to an object?

All possible options for placing a connection are indicated with a red dot when you hold the connector with the mouse over different points of an object.

If you link objects using the **outer port**, the connector will stay fixed at that side of the object even when you shift it.
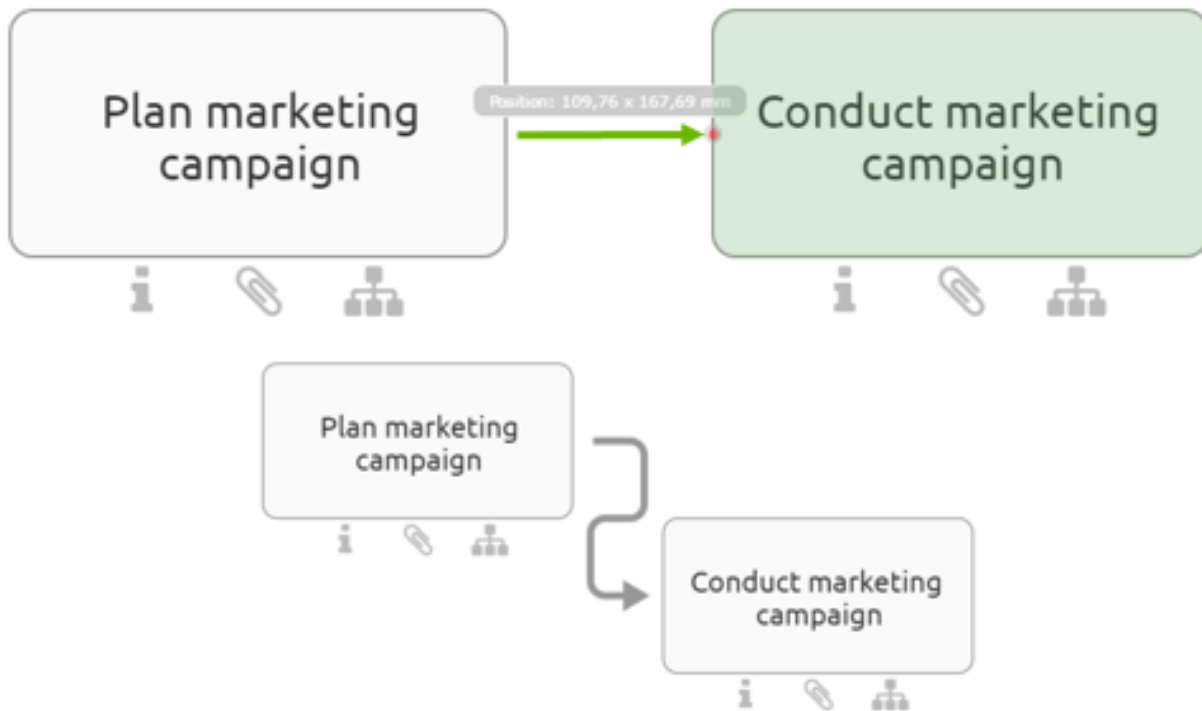
If you link objects using the **centerport**, the connector will move when you shift the object.
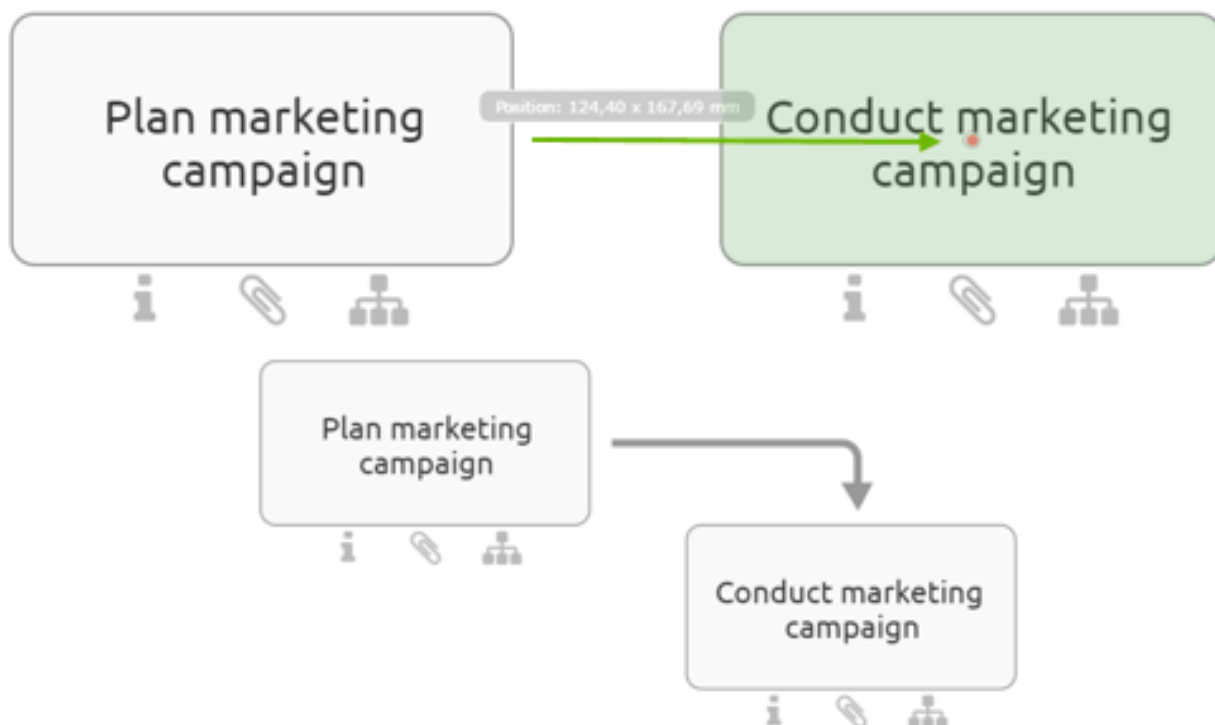
Connection can be added via drag & drop or by selecting the start and end ports (depending on the connection type). This is explained in the following.

4.2.2 How do I change the link type?

You can connect symbols using an *orthogonal* or *diagonal* connection. Orthogonal connections are horizontal or perpendicular resp. they are a combination of such lines. A connection of the type *diagonal* goes straight from the start to the end port without any bending. The active connection type is displayed in the menu bar as *Change link type* button. Select the button to change the type.

The symbol of the button changes accordingly: orthogonal - angled arrow, diagonal - straight arrow. If you draw a new connection between two symbols, the connection will be straight resp. orthogonal.

4.2.3 How can I connect symbols orthogonally?

You have the following options to add an *orthogonal* connection between two symbols. The *connection type* can be switched in the menu bar. If the connection type button shows an angled arrow, the connection will be *orthogonal*

Insert the desired two symbols into the editor or open a diagram with at least two symbols which can be linked (e.g. an event and an activity).

Connection icon

Select one of the symbols in the editor. A connection icon appears in the mini symbol palette (upper right corner next to the symbol).
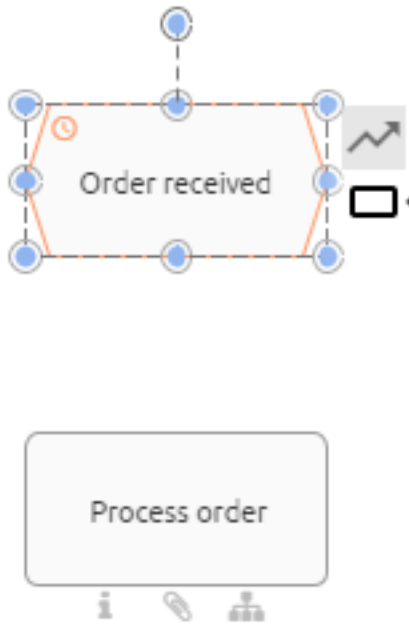
Select the connection icon and afterwards a desired point at the other symbol. A sequence is added between the two symbols.

Connection Mode

If you activate the connection mode, you can add several connections. In the menu bar, click *Connection Mode*. A red dot appears on the edge of the icon when you hold the mouse pointer over it. This dot shows the possible start points. Select the point where you like to start your connection.
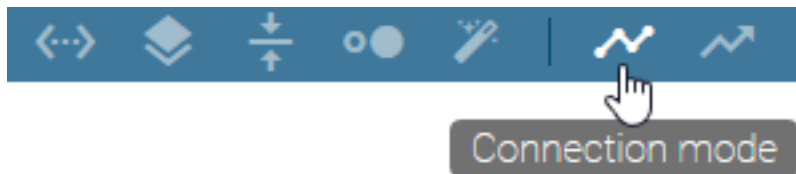
Then hold down the mouse key over the second symbol and select the location where you want to place the end of the connection. A sequence is added between the two symbols. Deselect the symbol afterwards by a click on a free space. Then you can start a new connection.

To terminate the connection mode, click on the *connection mode*-button again.

Port area

Hold the mouse over the edge of a symbol for a while without clicking it. The connection mode becomes active. Now you may add a new connection as described for the connection mode. The connection mode will be deactivated automatically after you added one connection.
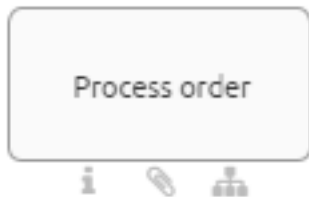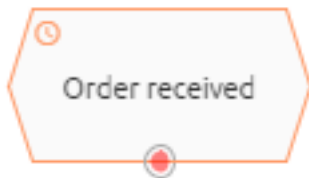
4.2.4 How can I connect symbols diagonally?

You have the following options to add an *diagonal* connection between two symbols. The *connection type* can be switched in the menu bar. If the connection type button shows a straight arrow, the connection will be *diagonal*

Insert the desired two symbols into the editor or open a diagram with at least two symbols which can be linked (e.g. an event and an activity).

Connection icon

Select one of the symbols in the editor. A connection icon appears in the mini symbol palette (upper right corner next to the symbol).
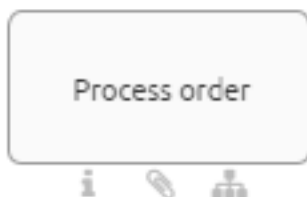
Select the connection icon and draw a connection between the current symbol and another by using the drag & drop function.

Connection Mode

In the menu bar, click *Connection Mode*. A red dot appears on the edge of the icon when you hold the mouse pointer over it. Click on one of the symbols where you want to start the connection.
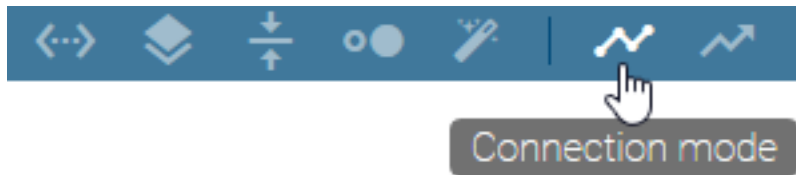
Press and hold down the mouse key and move to the second symbol. Release the mouse key at the location where you want to place the end of the connection. Then click on the *connection mode*-button again to terminate the connection mode.

Port area

Hold the mouse over the edge of a symbol for a while without clicking it. The connection mode becomes active.
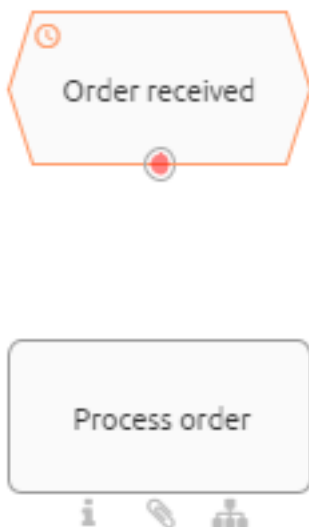
Now you may add a new connection via drag & drop as described for the connection mode. The connection mode will be deactivated automatically after you added one connection.

4.2.5 How do I change an existing link to another link type?

Select an existing connection between two symbols and open the context menu by right-clicking. After that select the *Change to straight connection* or *Change to orthogonal connection* entry. The connection is then changed.
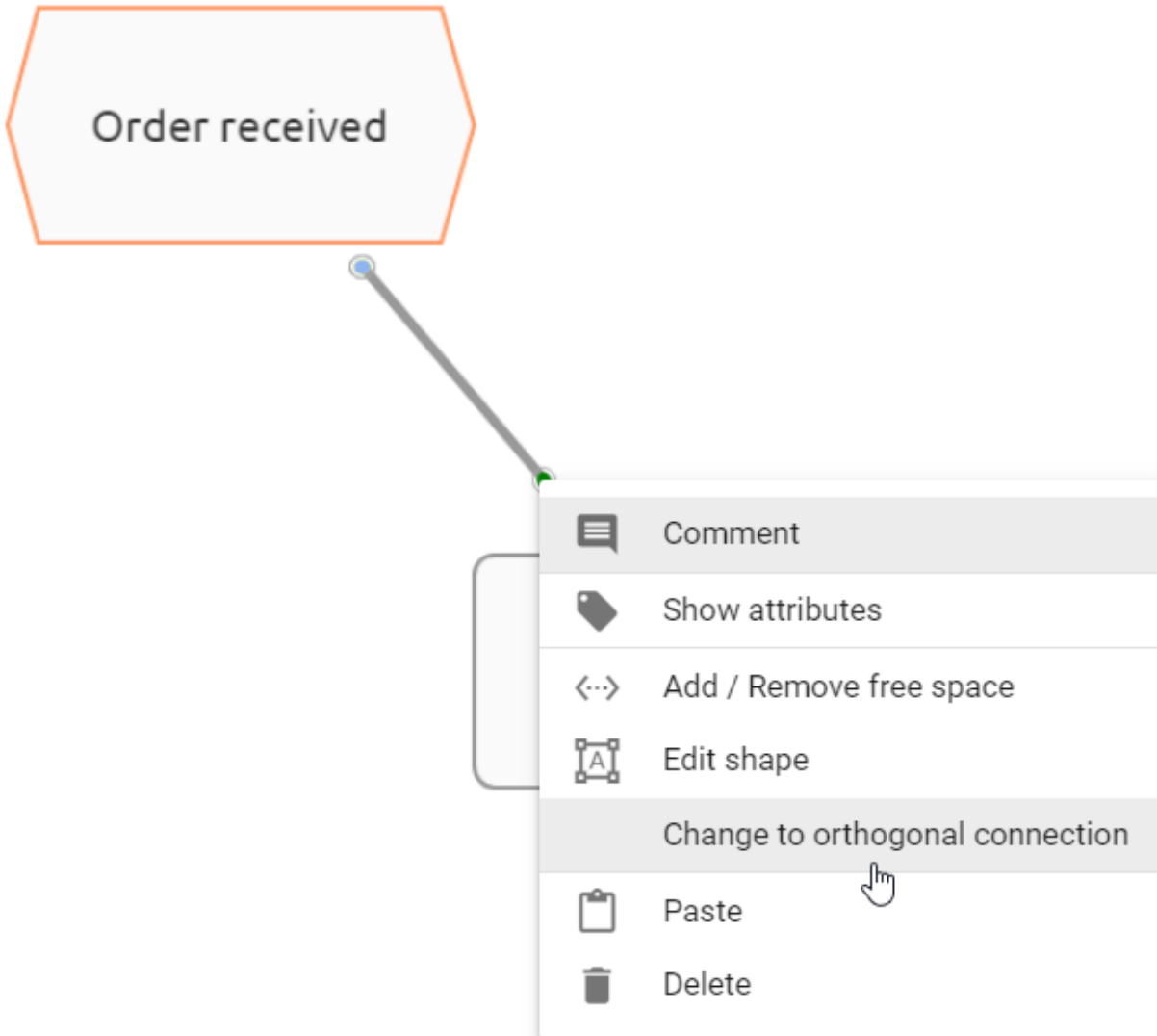
4.2.6 How can I change an existing link?

The connection sequences are created automatically when a connection is created. You can change both its path as well as the input and output.

Select the connection you want to change.
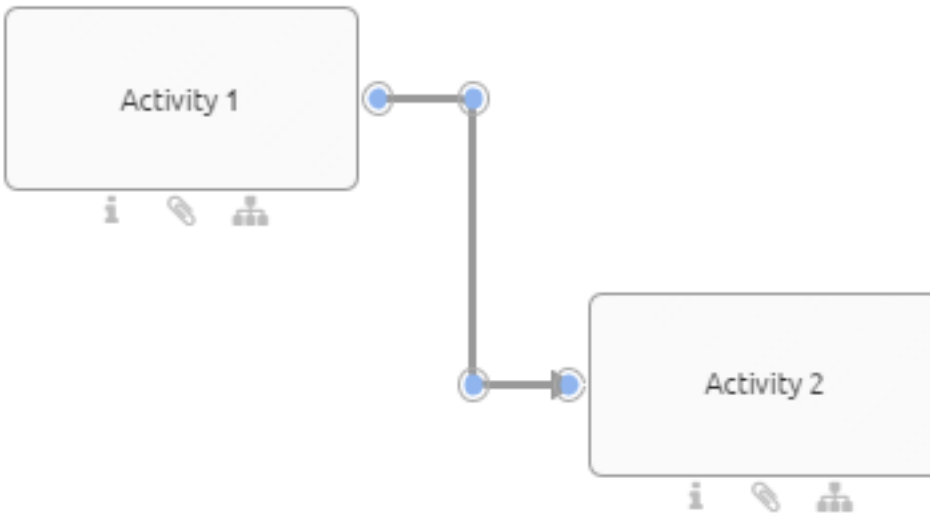
Change path

You can move the blue points of a connection by using the drag & drop function.
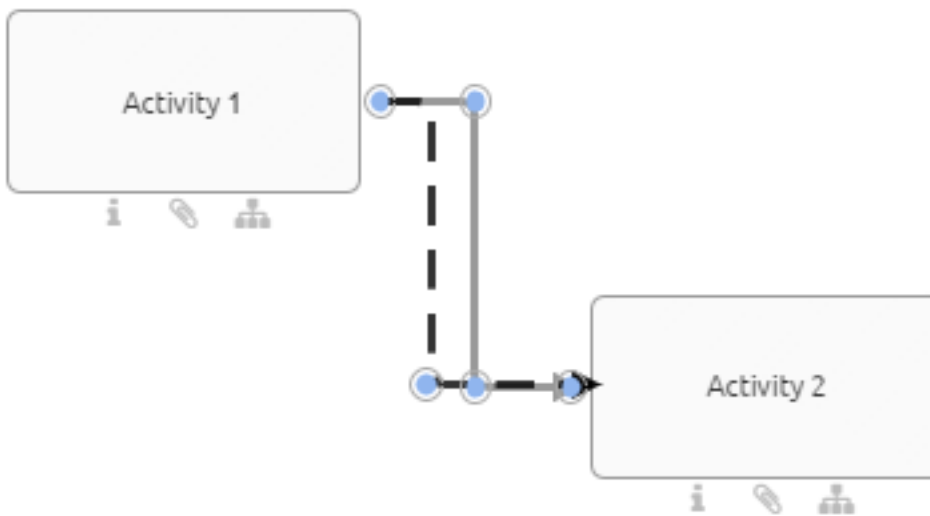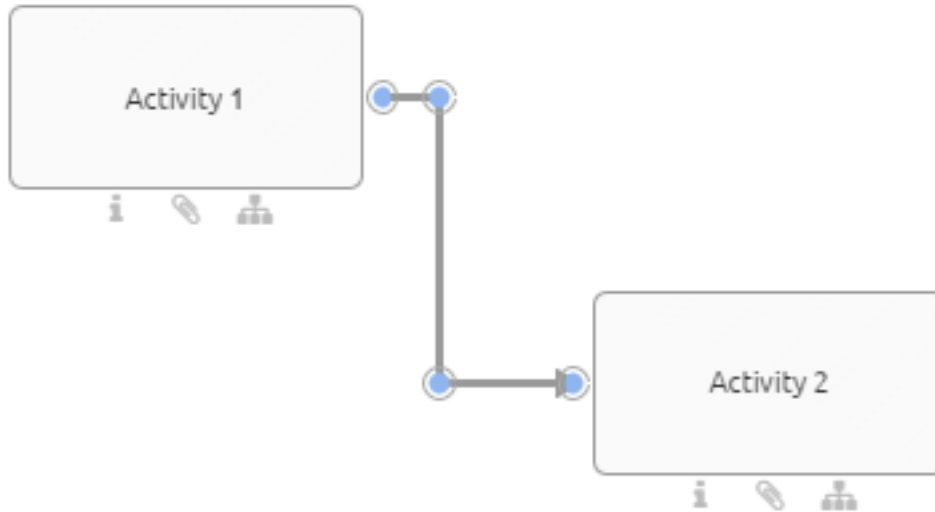
If you want to create a new nook, click on the desired location and drag a corner into the connection.

Change the port of an existing link

Use the blue points on an object to change the location of the connection on the same symbol. Simply drag & drop the existing link to another dot along the edge. Any possible inputs or outputs are indicated by red dots.
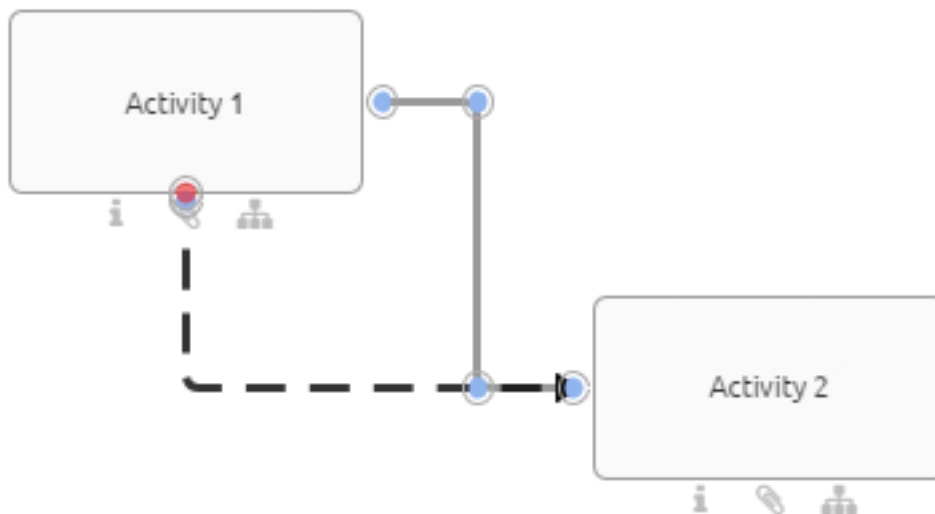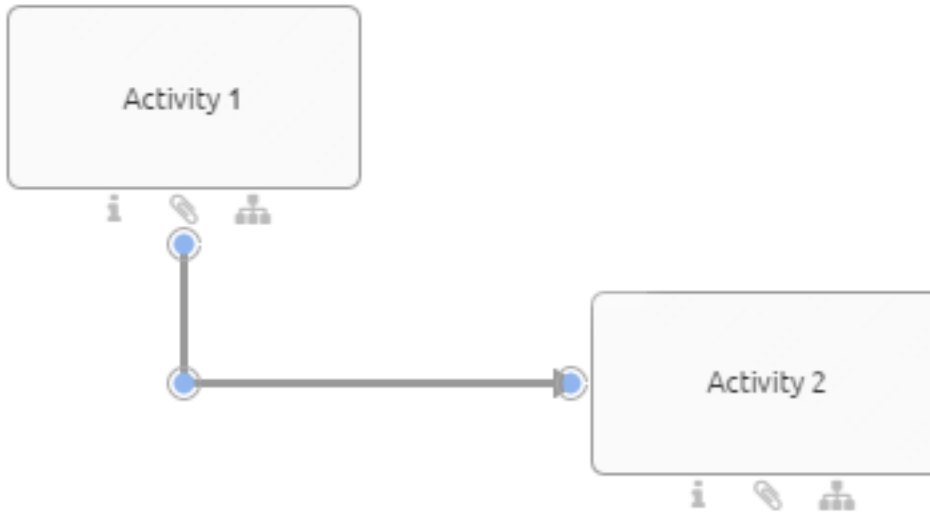
Disconnecting and reattaching connections

An existing connection can be disconnected from one symbol and reattached to another symbol with a drag & drop function. This is possible for both the source and target symbol.

4.2.7 How can I label or rename connections?

The label is directly displayed by double-clicking on the connection. You can now label the object. Click somewhere within the editor to finish the entry.
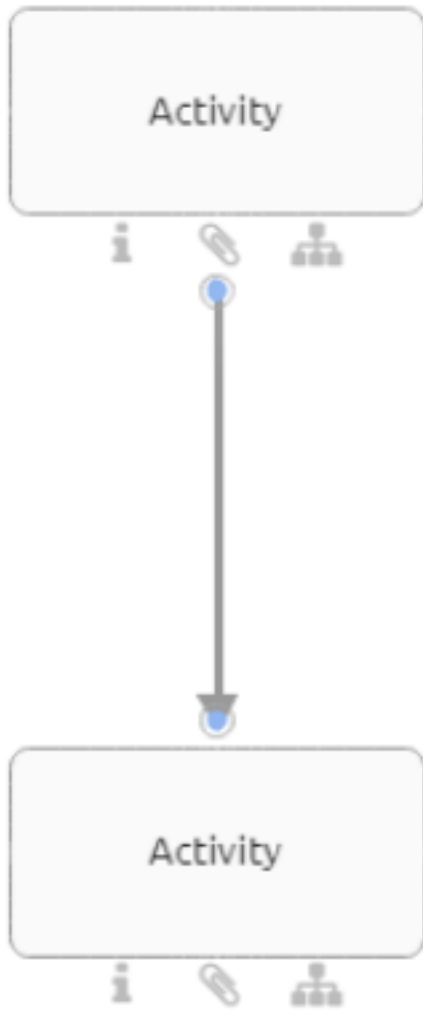
Optionally select the connection by clicking on it once and press F2 so that the label is displayed.
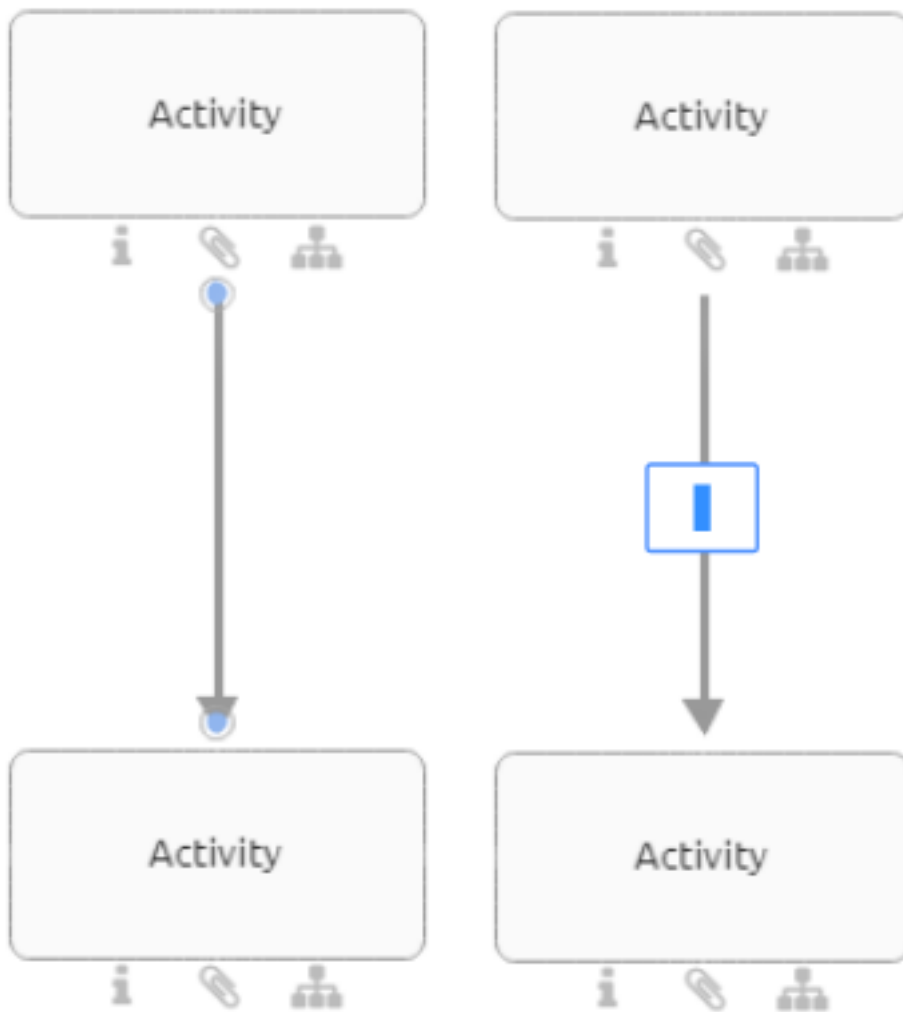
4.2.8 How do I insert an object into a path?

You can insert an object into an existing path using Drag & Drop. The connection between the corresponding objects has to be defined in the method.

Drag a new object from the symbol palette or a free object from the editor to the desired edge. This edge must be of the type sequence flow. When it appears blue and dashed, you can drop the object.
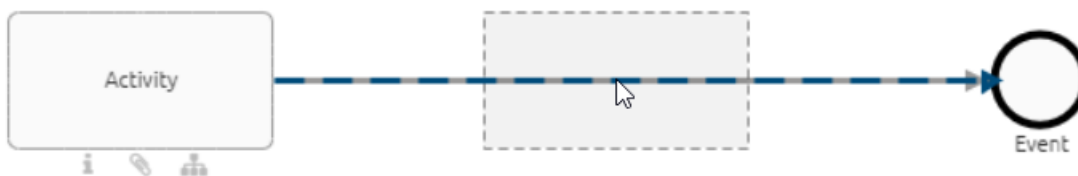
The edge is exchanged by two new edges where the new object is an intermediate node in between the two former

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objects. All attributes and the optional label of the old edge are copied to the newly created edge where the placed node is the target node.

If you remove the new object, the edge returns to its previous state and connects the initial two objects. In case the object types do not allow a connection, the edge does not change its layout as described above. Dropping the new object will place it on top of the edge without any connection.

4.3 Copy, paste and more functions

4.3.1 How do I copy and paste symbols?

Select one or more symbols that you want to copy within a diagram or between diagrams. Then click the *Copy*-button in the menu bar (alternatively CTRL+C).
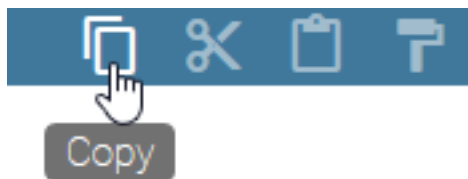
Click on the *Paste*-button in the menu bar (alternatively CTRL+V).
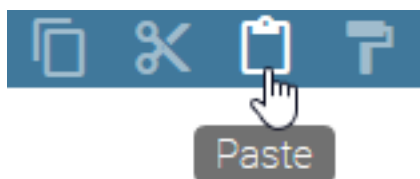
Optionally you can right-click on an object or in the editor to open the context menu and select Copy or Paste.

You can paste objects into another diagram of different type (e.g. EPC to BPMN) if the object is available in the target diagram type. When you copy several objects, each object is checked for this requirement and pasted when applicable. If you want to paste an object which is not allowed in target diagram it will not be pasted. Furthermore, Connections will only be pasted between two pasted objects, i.e. if an object could not be pasted its connections to other objects will also not be pasted. If an object is allowed in the target diagram but the symbol of the object is not, the object will be pasted with the standard symbol. If an element could not be pasted, you will be informed about the reason for that.

Note: Copying catalog entries and symbols that are not part of the catalog differs. Regardless of the object type, copies of catalog entries are always reused. This means that an expression copy is created and the object remains the same. Changes to this copy will also cause changes to the original if the catalog entry has not yet been accepted.

Objects that are not in the catalog are doubled, a *definition copy* is created. Changes to the copy are thus independent of the original.

There are also differences in copying connections. A copied connection is newly created if one of the connected and also copied objects is a definition copy; this is the case if one of the objects is not a catalog entry. A connection is reused if the connected objects were occurrence copies; this is the case if they are both catalog entries.

Note: Please note that when copying elements, relationship attributes are not automatically taken over. This means that if you copy an activity, for example, the associated role is not automatically copied as well. Make sure that you transfer relationship attributes separately if this is necessary.

4.3.2 How can I cut symbols from a diagram?

Click on a symbol that you want to cut. Now use the *Cut*-button in the menu bar to select the desired symbol (alternatively *CTRL+X*).
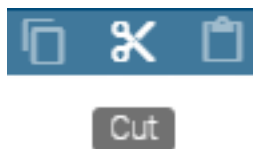
Optionally you can right-click on an object to open the context menu and select Cut.

4.3.3 How can I delete symbols from a diagram?

Right-click on the symbol you want to delete to open the context menu and select *Delete*.

Optionally, you can delete selected symbols via the *"Del"* button on your keyboard.
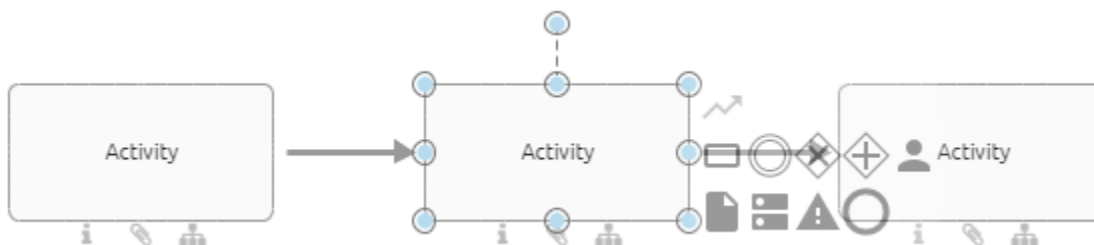
If the object is connected with other objects via exactly one incoming and one outgoing edge of type Sequence Flow, a new edge of the same type is created. This connects the neighboring objects with each other in the same direction. The attributes of the previously incoming edge are adopted for the new connection.

Deleting symbols in the diagram does not automatically delete associated catalog entries in the catalog. This creates unused catalog entries, which can be *reorganized*.

Note: You can also use the *multi-selection* of symbols to delete several symbols at the same time. The new edge is also created here for the neighboring symbols, but without the transfer of attributes.

4.3.4 How can I undo or redo modeling steps?

To undo individual modeling steps, select the *Undo*-button in the menu bar or alternatively *CTRL+Z*.

Use the *Redo*-button to restore steps. Alternatively, press *CTRL+Y*.

The *Redo*-button and *Undo*-button can be used until the diagram has been changed.

4.3.5 How do I add images to a diagram?

You have the option to add images which have the file formats jpg, jpeg, bmp, png and gif (without animation) to a diagram. To do the execution of the following steps is necessary:

Check out the diagram into which you want to insert an image. Now you can navigate to the memory location of the image and drag it into the editor.

Tip: The functions *Edit shape*, *Format* and *Change size* can be used for editing an image. For example, you can crop your picture or set a frame.

Note: Copying images between different browser tabs is not supported.

Note: Files stored in interlace mode, such as available for PNG files, are not fully supported. This includes the *print preview*. In this case, saving the affected file without interlacing and inserting it into the modeling is recommended.

4.3.6 How can I add an image to an activity?

You can add an image to an activity (or any other object). This can be helpful, if you want to create navigation objects and want to highlight them.

To do that, you need to do the following:

Check out the diagram in which you want to add the image. Copy the image which you want to add. Select the activity (or other object) that the image should have as background. Paste the image (*Ctrl+V*).
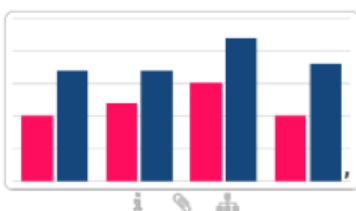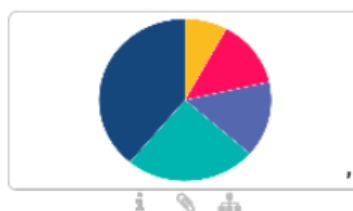
4.4 Formatting

The different formatting options affect not only free-stream symbols but also symbols, such as activities and connections.

4.4.1 How do I change the format of symbol and diagram?

Navigate to the format settings in the *symbol palette* by selecting the third icon on the symbols menu.
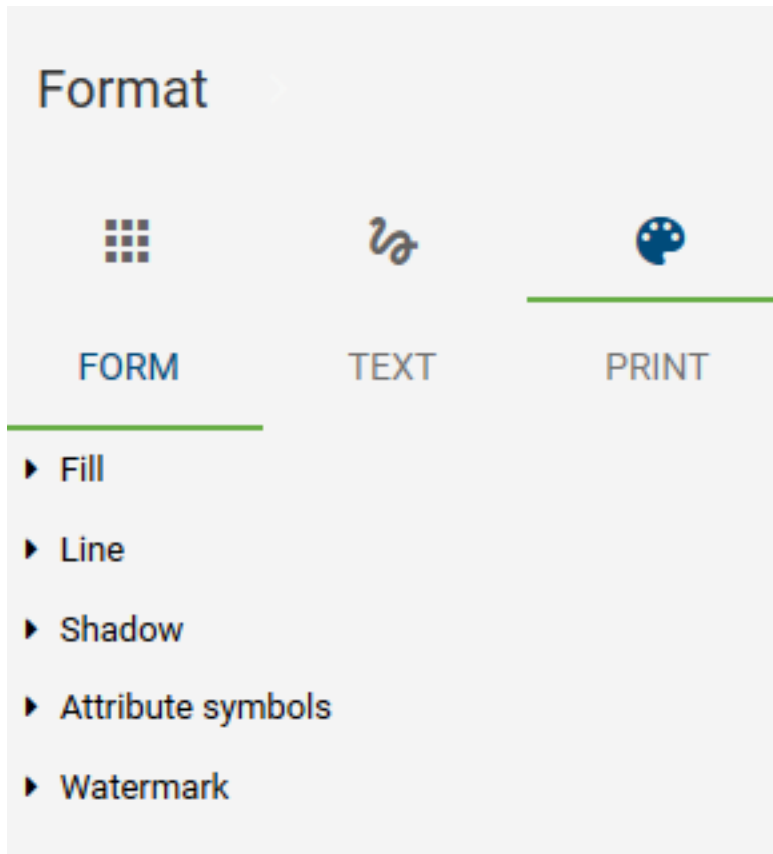
Select an existing symbol (or several symbols at a time) in the editor. You can now choose between *Form*, *Text* and *Print*.
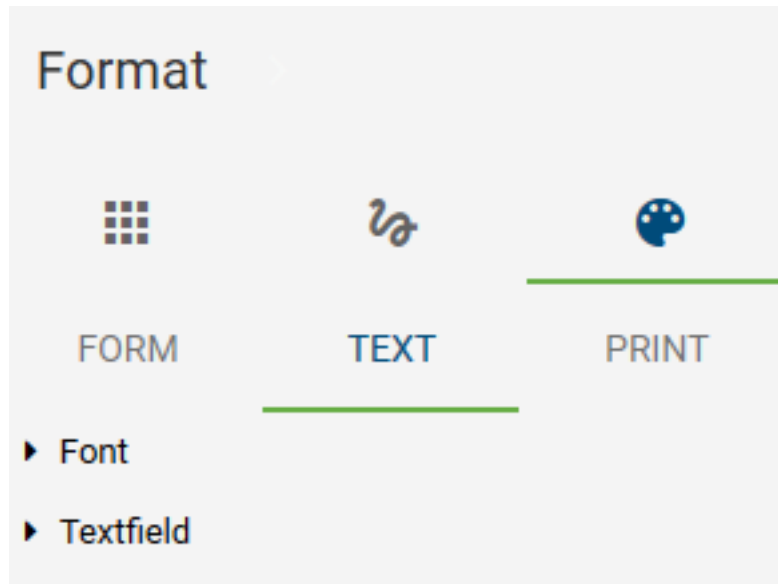
If you select the *Form* menu item, you can format fill, line, shadow, attribute symbols and watermarks for the selected symbol.

4.4.2 What options do I have to format objects?

Available settings for the form of symbols:

- *Fill:* You can choose between the following options for the filling of a symbol: None, Solid or Gradient. You can also adjust the color and transparency of the filling.

- *Line:* For the line of a symbol, you can select whether there is no line or a solid line. Furthermore, the transparency and the color can also be set. In addition, you can set the style of a line (for example: dotted line, etc.) and the line width. With open symbols, such as *connection* or the freeform symbol *line*, you can change the edge shape as well as the arrow type. To adapt these characteristics the following options are available: *Line End*, *Line Join*, *Start Arrow Type* and *End Arrow Type*.

- *Shadow:* You can choose different shadow types for a symbol. The color can also be set here.

- *Attribute symbols:* You can enable or disable the display of attribute symbols for an object. *Attribute symbols* are the icons that appear below an object, for example when a description has been maintained.

- *Watermark:* You can enable or disable the display of watermarks and create them for symbols. In this case, there is a wide range of adjustment options, such as, for example, the adaptation of the size and color of the watermark.

- *Background:* You can use an image as a background for an object.

Note: In the administration, you can configure the *coloring of the symbols in the local workspace* for all diagrams in your BIC Process Design.

4.4.3 What are the options to format text?

Available settings for the text in symbols:

- *Font:* The font, size, color and style of texts can be changed.

- *Textfield:* Defines the behaviour of the text field, e.g.: do not resize form, etc. Furthermore, you can define the position of the text field. Your options are: at the left, right, upper and lower text margins.

4.4.4 How can I save print settings in the diagram?

Use the symbol palette to navigate to *Format* and select the menu item *Print*. The editor then changes to the print preview (including sheets and page margin). There you can make some print settings for your diagram.
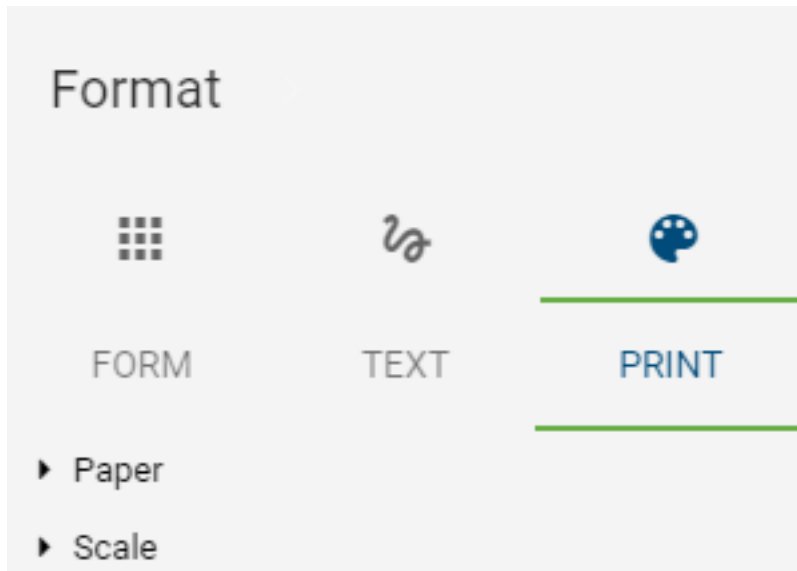
- *Paper:* Different format and orientation settings can be selected here.
- *Scale:* Page limits and the factor of scale can be set here.

When saving and checking in, these settings are taken over for the diagram, just like other formatting. Thus, users with the rights of an author can set user-independent presets for printing. These are then automatically displayed in the *print preview*. They can also be individually changed there, but not saved across the board.

4.4.5 How can I transfer a formatting?

The copying of a specific formatting is available to modelers as a functionality in the menu bar. This allows you to transfer *formatting* from one object to the next.

Select your formatted object by clicking on it once. Then, in the menu bar, select *Copy format*. Once you click on the button, you can transfer the format to another object. If you double-click, you can edit several objects.

Click on the object to which you want to transfer the formatting. With a click somewhere in the empty editor or pressing ESC you can cancel/exit the *Copy format* mode.

4.4.6 How do I change the shape of symbols?

You can change the shape of existing symbols.

Select a symbol in the editor that you want to modify and select *Editing* by right-clicking in the context menu. It is now possible to edit individual points of the symbol, which allows you to change the shape of the predefined icons.
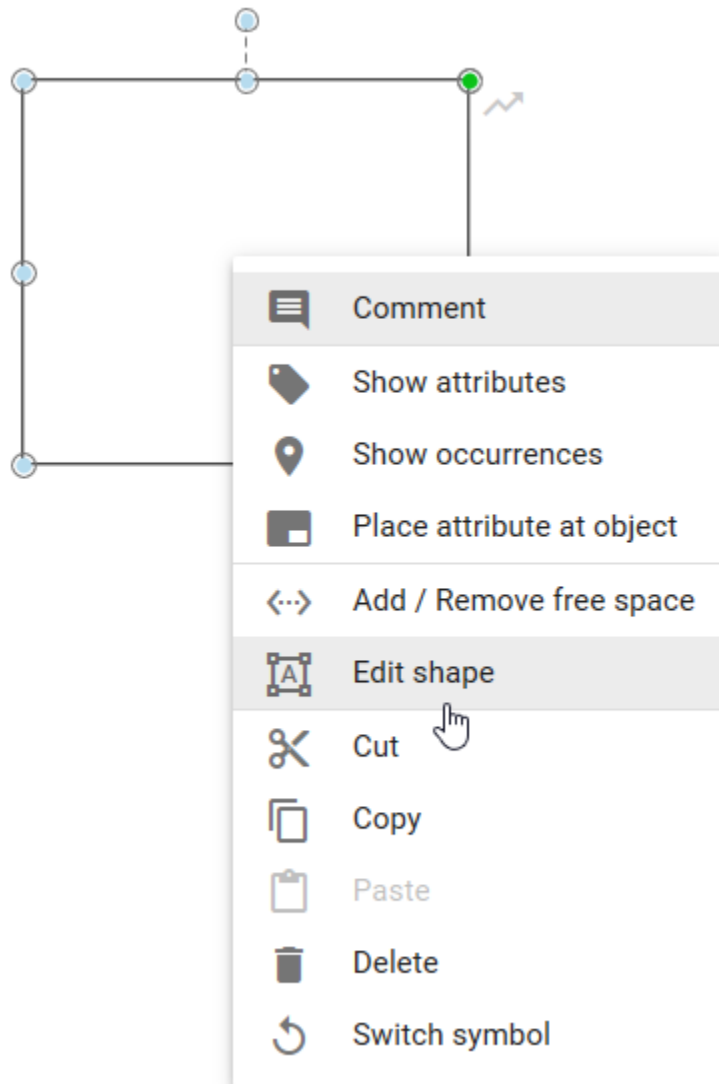
Change the symbol by moving an editing point to a different position while holding down the mouse key. You can repeat this for further processing points. The editing mode is active until you click somewhere in the editor. The same processing also applies to *connections*.
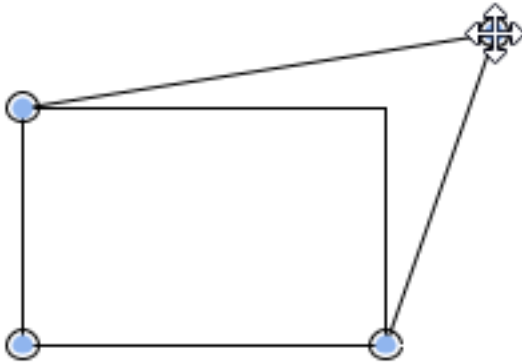
4.5 Support for visual adjustments

4.5.1 How do I rotate symbols?

You can change the orientation of symbols in the editor. That means it is possible to rotate symbols to any position you like. Analogous to the *position and size*, it is also possible to change the orientation of symbol names independently of the orientation of their symbols.

Click on a symbol in the editor. If you only want to change the orientation of the name, click on the symbol twice. A circle appears above the symbol. Select the circle above the symbol by mouse click and drag it to the left or right to change the orientation of the symbol. This allows you to rotate the symbol for example by 90 degrees.
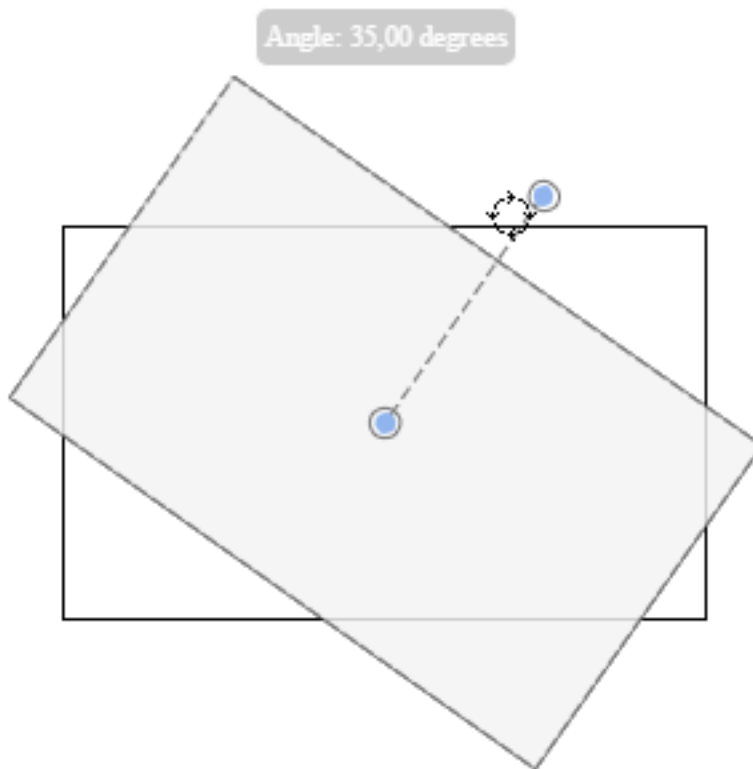
4.5.2 How do I change the order of symbols?

You can define the order of overlapping objects in the editor. This applies to all objects you can use in the editor, including free forms and connections.

Select the object. Then navigate to the *Order*-button in the menu bar.
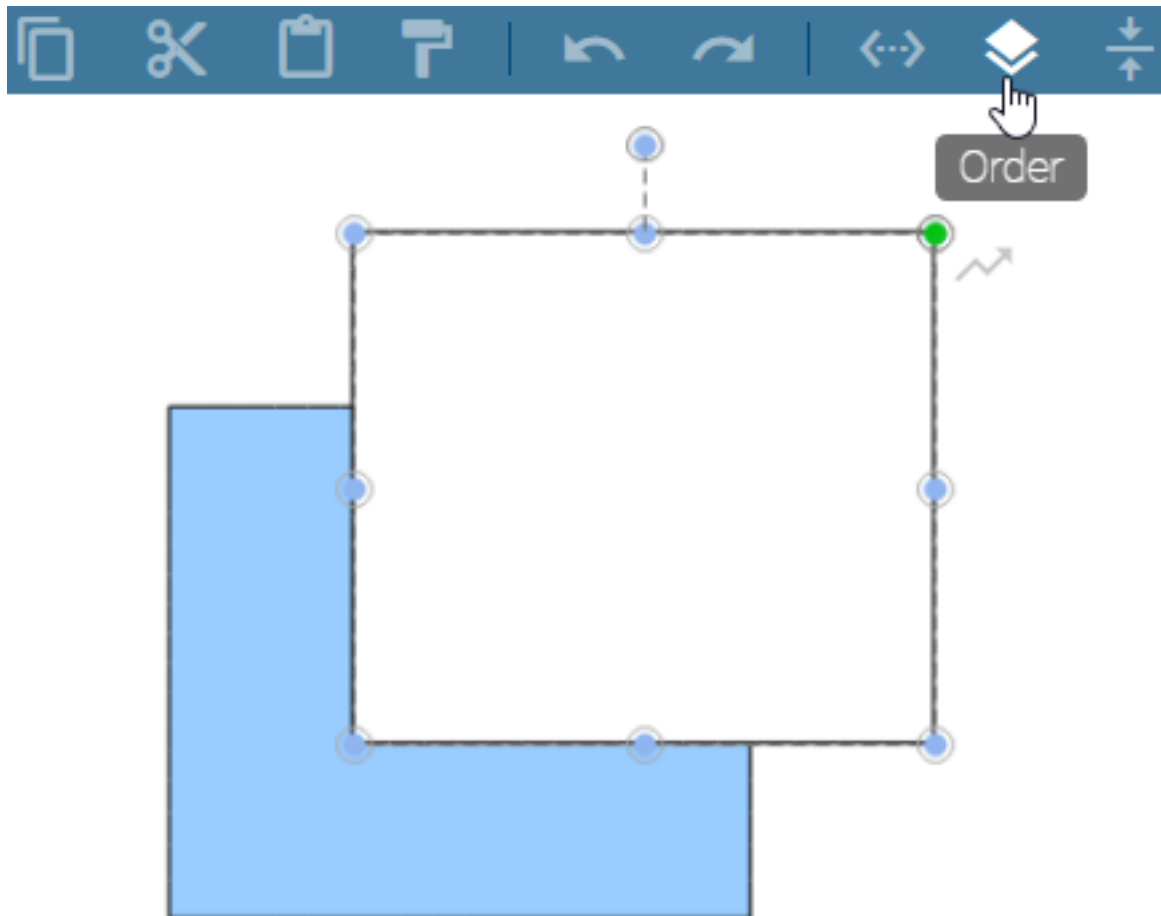
Four options are available:

- *Foreground:* The selected object becomes the top level of the overlapping objects.
- *Background:* The selected object becomes the lowest level of the overlapping objects.
- *Move up:* The selected object is set one level higher.
- *Move down:* The selected object is placed one level lower.

Once one of the options is selected, the arrangement of the symbol changes accordingly.
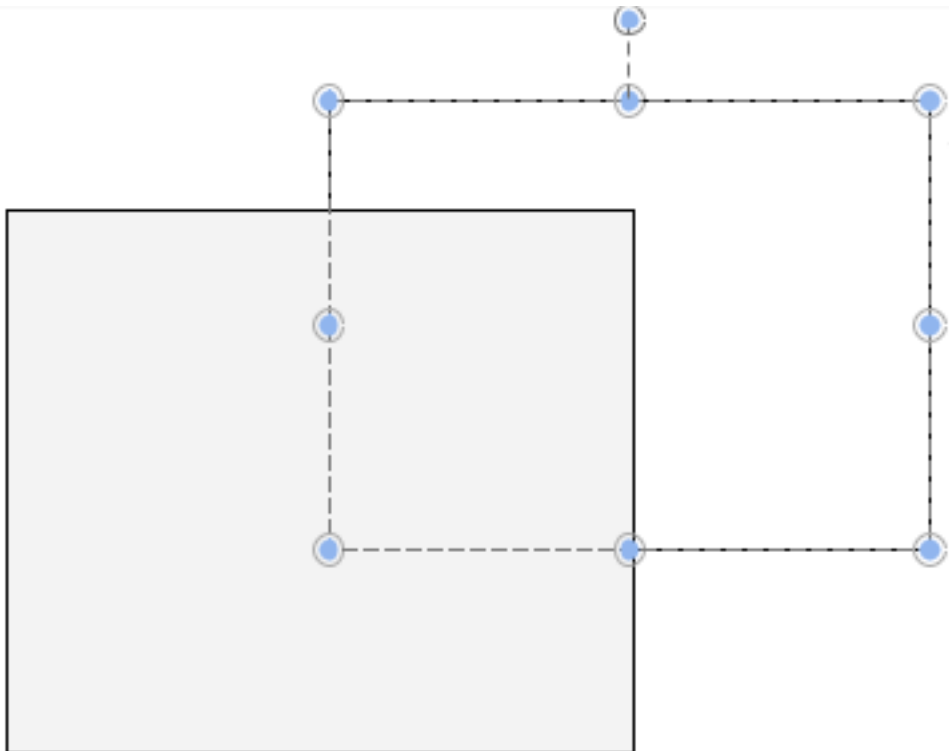
Note: Recently created objects always lie within the topmost plane of arrangement. This layer can still be changed later. Pools always lie within the lowermost plane of arrangement due to their technical meaning.

4.5.3 How do I use the alignment tool?

To simplify the positioning of symbols, you can use the alignment tool, both for existing symbols as well as for the creation of new symbols in the editor.

Open an existing diagram that contains symbols and drag a symbol from the symbols view into the editor. Afterwards, align the symbol with other symbols by placing it beneath another one. You will see that alignment lines are displayed. They can appear at the outer edges of symbols as well as through the center of a symbol, depending on the position to other symbols.
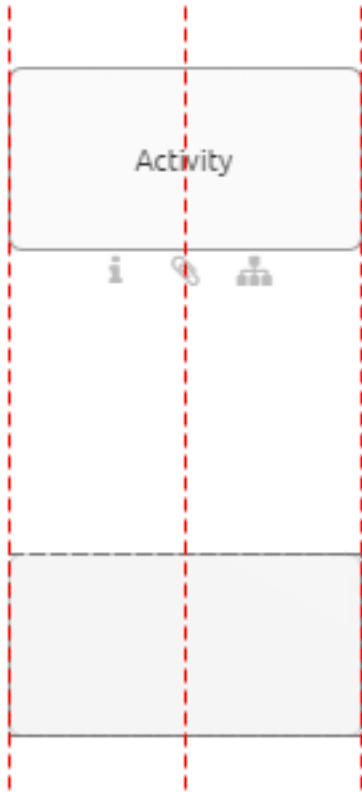
You can turn off the alignment tool by pressing the *Alt GR* key while positioning the symbol.

> **Warning:** In the Google Chrome browser you can turn off the alignment tool with *Alt* and *Alt GR*. When using Internet Explorer, keep in mind that the *Alt* key opens the menu bar of the browser. So please only press *Alt GR* for turning off.

4.5.4 How do I align symbols to each other?

You can use an *Alignment* function to align symbols to each other.

To do so open a checked out diagram that contains elements that you want to align to each other. Select several elements at the same time, either by dragging the mouse with pressed key over the area in which these elements are located, or by using the Shift key and clicking on the symbols. To finish, select *Align* from the menu bar and select an entry (for example, *Top align*). The elements are aligned to each other according to the first selected entry.

4.5.5 How do I match the size of symbols to each other?

Open a checked-out chart that contains items whose size you want to match. Then, select several elements at the same time, either by dragging with pressed mouse key over an area in which these elements are located or by using the Shift key and clicking on the corresponding symbols.

Select *Resize* from the menu bar and select an entry (for example, *Fit to largest Shape*). The size of the elements is adjusted accordingly.
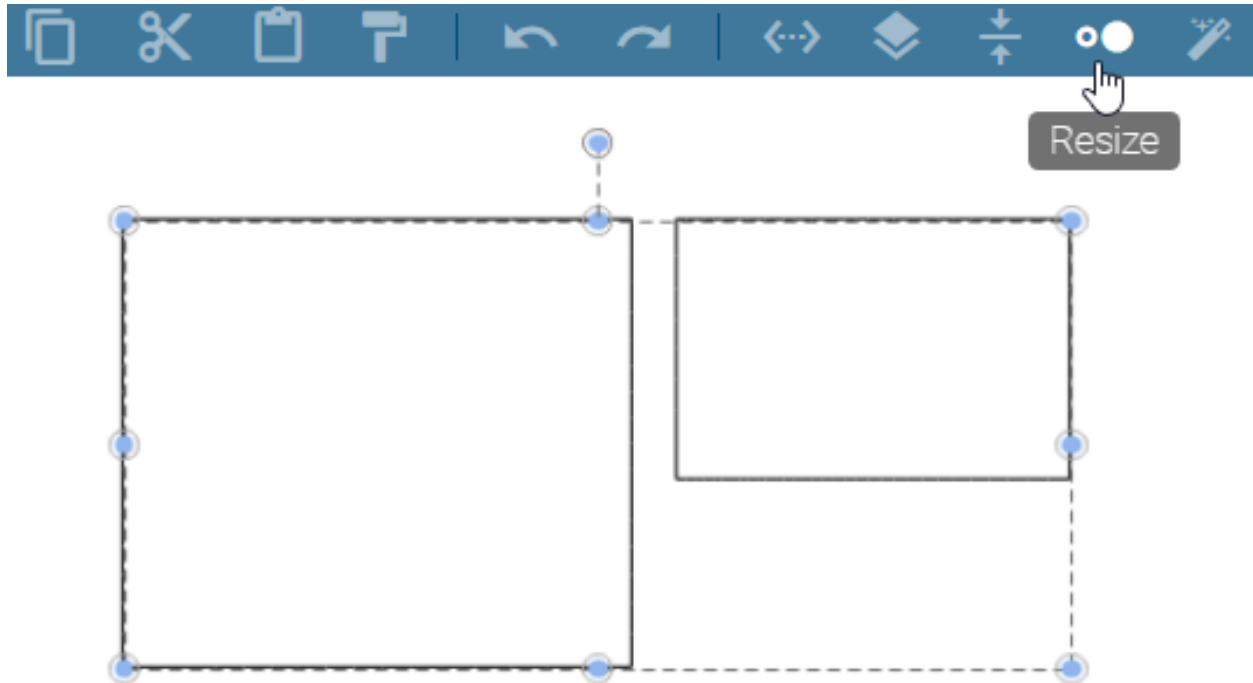
4.5.6 How do I add or remove space?

With the function *Add/ Remove Free space*, you have the option to insert or remove space between symbols when being in the editing mode.
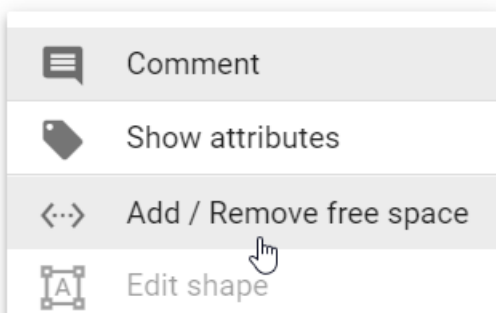
Open the context menu by right-clicking in the editor and select the entry *Add/ Remove Free space* there or in the menu bar. Alternatively, you can access the function by a click on the option *Add/ Remove Free space* in the menu bar. Two blue dashed lines appear, one running horizontally and the other vertically through the diagram.

Click on a point in the diagram to set the start point where you want to start removing or adding free space.

Add space

Click on a point in the diagram that is located on the right side or underneath the start point to add free space.

Remove space

Click on a point in the diagram that is located on the left side or above the start point to remove free space.
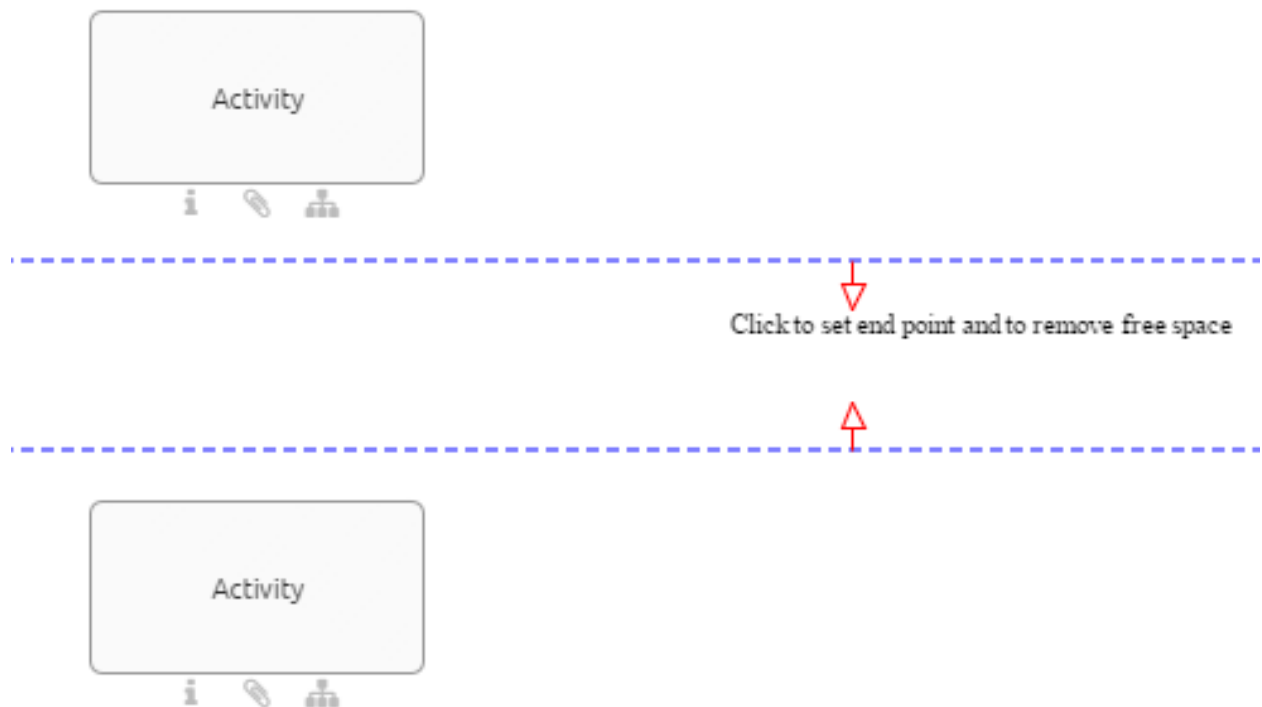
4.5.7 How do I use the layout assistant?

The layout assistant helps you to layout the process flow. This means that the sequence flow and activities are in the foreground. The layout assistant is by default only available for the diagram types BPMN, EPC and VCD. In edit mode, of these diagrams you can layout the selection of a container object, multi-selections as well as the entire modeling. After layouting, the diagram is positioned at the 0/0 corner. In order to layout the whole modeling, you should not select anything in the diagram or select a symbol, which is not a container symbol. Your selection persists after layouting.

Navigate to the menu bar and click *Layout* in edit mode. This will automatically layout the objects involved in the process. In the meantime, the editor is overlaid by the corresponding message. It is distinguished between satellites and sequence flow.
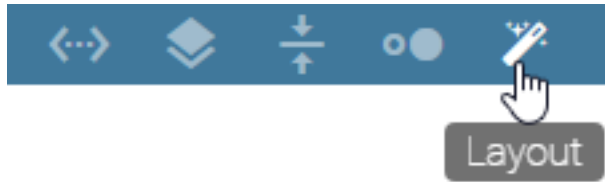
Satellites: The various satellites associated with an activity, such as roles and documents, are divided into quadrants according to their modeled position. Within this quadrant, the satellite is automatically positioned uniformly depending on the modeling. Furthermore, the edge ports are reassigned here. The arrangement of the edges in EPK diagrams takes place on the right and left side of activities. In BPMN diagrams, the ports are created at the top and bottom of activities.

Sequence flow: Mainly underlying activities are assigned to a column. In the same way, adjacent activities are assigned to rows. Within these rows and columns, the activities are arranged in a straight line using the layout assistant. An activity including satellites is considered as one related object. This affects the height and width of columns and rows. Sequence and message edges between activities reassigned if necessary.

Note when layouting containers in the diagram:

- If you want to layout the whole diagram with a container in it, the size of the containers is adjusted in addition to the changes described. The containers thus keep a configured distance from the internal elements. When resizing, however, the header side of pools is excluded, so that no configured distance is kept there.

- If a container, such as a horizontal or vertical pool or lane, is selected, the layout assistant takes the symbols within this container into account. The layout of the elements in any container always follows the same rules, while the container size remains unchanged.

This chapter describes the default settings. The layout may behave differently, if the settings for the corresponding diagram type have been *adjusted in the administration area*.

Note: The layout assistant does not support the simultaneous use of horizontal and vertical pools within a diagram.

4.5.8 How can new symbols be automatically layouted?

The *layout assistant* is permanently activated by pressing *CTRL* -key and simultaneously clicking on *Layout*. The associated icon remains highlighted in the menu bar. When creating new symbols with one click via the mini symbol palette, the symbols are directly routed and placed in the corresponding position.
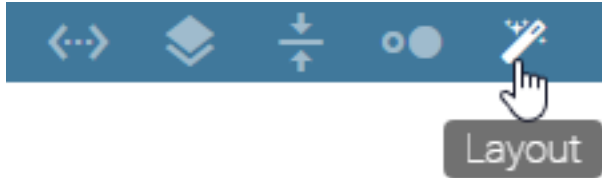
With *CTRL* and left mouse button, the permanent setting can be deselected again. A single click on *Layout* still corresponds to the *Layout described above*.

Note: The "Undo" and "Redo" modeling features exclude these layout assistant changes.

4.6 BPMN Collaboration

4.6.1 How do I work with pools and lanes?

This chapter explains the modeling of a BPMN collaboration diagram. In contrast to other objects, lanes are not dragged from the symbol palette into the editor, but can be generated via a pool. This prevents lanes from being loosely modeled (i.e., outside of pools), which is not allowed according to the BPMN standard of OMG.

Create a pool:

Open your BPMN diagram and check it out or create a new BPMN diagram. Afterwards, use drag & drop or stamp mode to model a pool from the symbol palette.
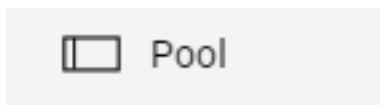
A selection menu for the pool opens. In this case, you may decide whether the pool will represent a *Role* or an *Application*. Please note that this decision can not be changed afterwards.
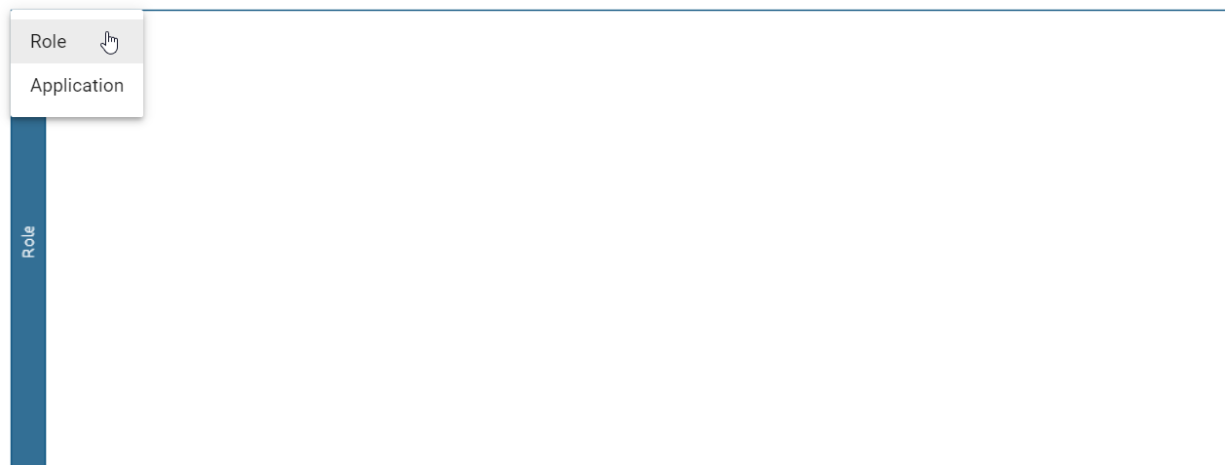
Create a lane:

Select the pool located in the editor (a further subdivision of lanes can be made accordingly). There are some icons at the top right-hand side of the object.

If you click on the two horizontal strokes, two lanes are generated in the object.

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Select a lane with a left-click. If you click on the arrow pointing upwards or downwards on a horizontal line, you can insert additional lanes above or below.

Select a lane with a left-click. If you click on the arrow pointing upwards or downwards on a horizontal line, you can insert additional lanes above or below.

To change the position of the selected lane, click on the up or down arrow. The lane is moved up or down.

Note: A pool which is containing lanes can be selected by clicking on the blue header.

4.6.2 How do I change watermarks of pools and lanes?

Watermarks are visible by default in the background of pools and lanes. These watermarks are repeatedly shown from a certain width of the symbol and automatically display the name of the pool or lane in the selected content language. You can adjust the watermark yourself as follows.

Navigate to the format settings via the *symbol palette* by selecting the third icon on the symbols menu.
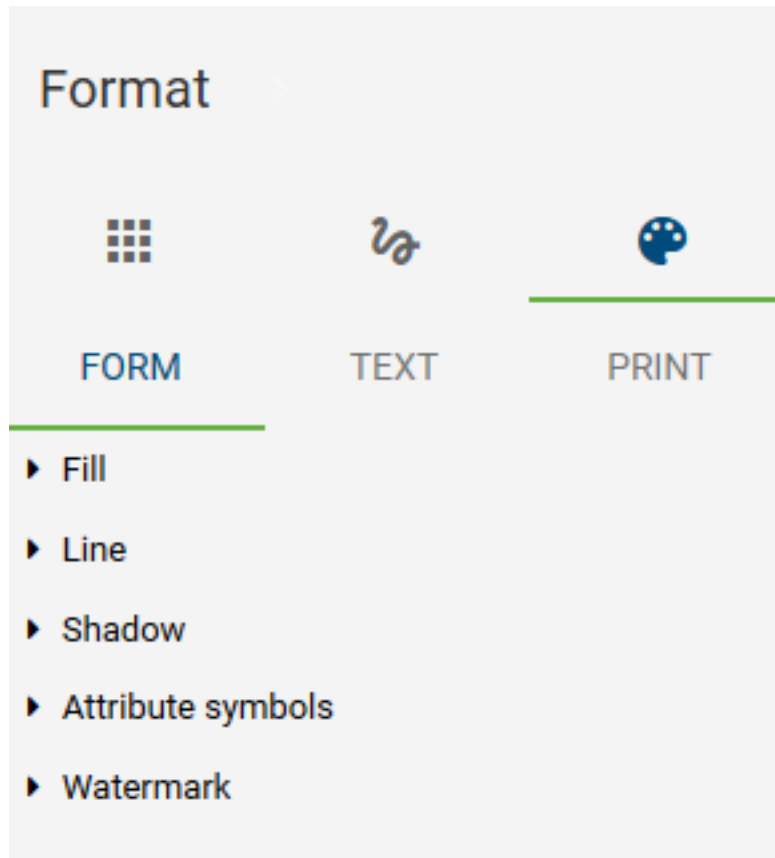
Select the pool or lane including the watermark you want to edit.
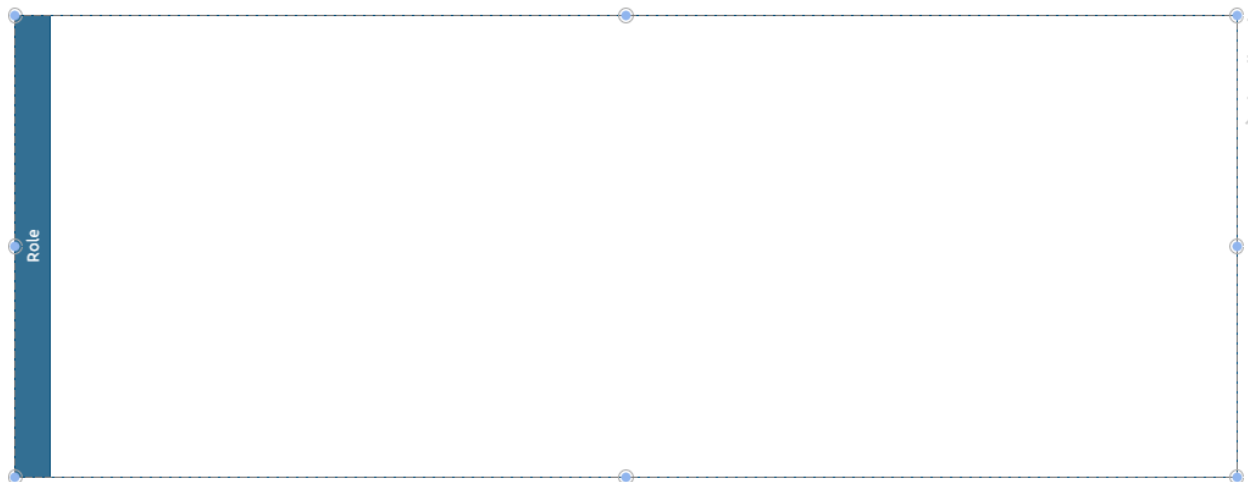
Select the menu button *Form* and open the entry *Watermark*. There you can remove the watermark by deselecting the checkbox *Visible* or you can rename the watermark and adjust it to your needs. Customization options include font size and color, as well as the location of the watermark within the pool or lane.
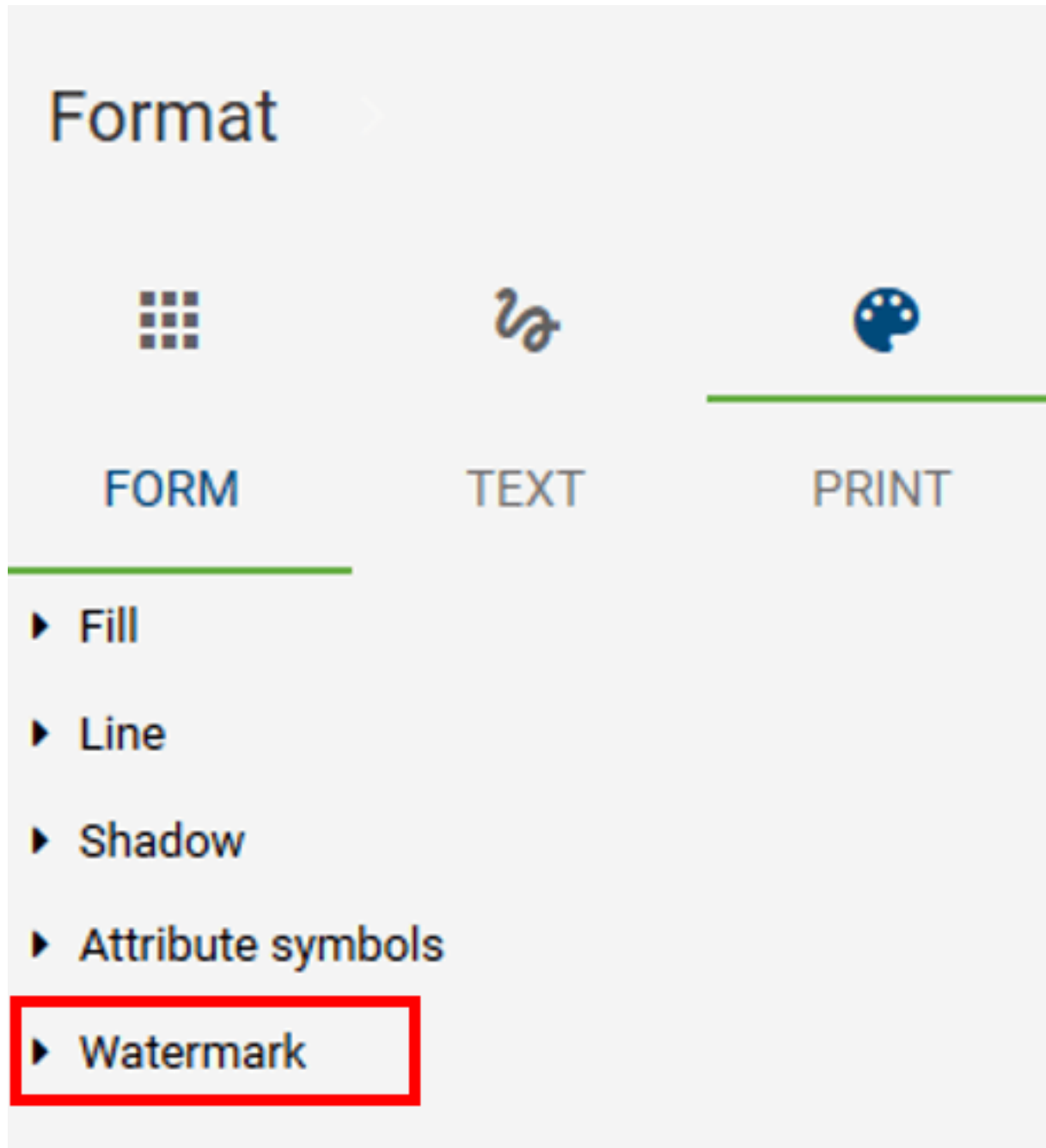
Note: If you rename the watermark itself in the symbol palette in the *Text* field, it will no longer initially display the name of the object. To have the name of the object automatically adopted again, you only have to remove your input in the symbol palette under *Text* or leave the input field empty.

4.6.3 How can I model inside and between pools?

As soon as you want to connect two pools, the connection type *Message Flow* is selected automatically. This applies also for connections between activities and connections between activities and events, which lie in different pools.

In addition, connections can be modeled using the *mini symbol palette*. When creating a new object from the mini symbol palette of an existing object that is in the pool, the following is considered: If the new object is placed outside the pool and not in another pool, the pool is automatically enlarged. Thus, the pool contains the new object, which is connected to the other object via the type *Sequence*. If the new object is stored within another pool, no connection is initially created. This can subsequently be modeled again as a *Message Flow* via the *connection symbol*.

If those objects are connected within a pool the connection type *Sequence* will be selected automatically.

Please note that the connection type does not change by moving an object from another pool into the pool of the connected entity. This may cause *validation errors*.

4.6.4 What kind of task types exist in a BPMN diagram?

You have the possibility to change the activity type of an activity in your BPMN diagram. This provides two advantages. Firstly, the selected activity type will be displayed with an icon, which makes your diagram more readable. Secondly, BIC Process Execution allows you to provide templates for the specific types that can reduce the workload of your users.

If you want to change the task type of an activity you need to select the corresponding activity first. After that go to its *attributes*.
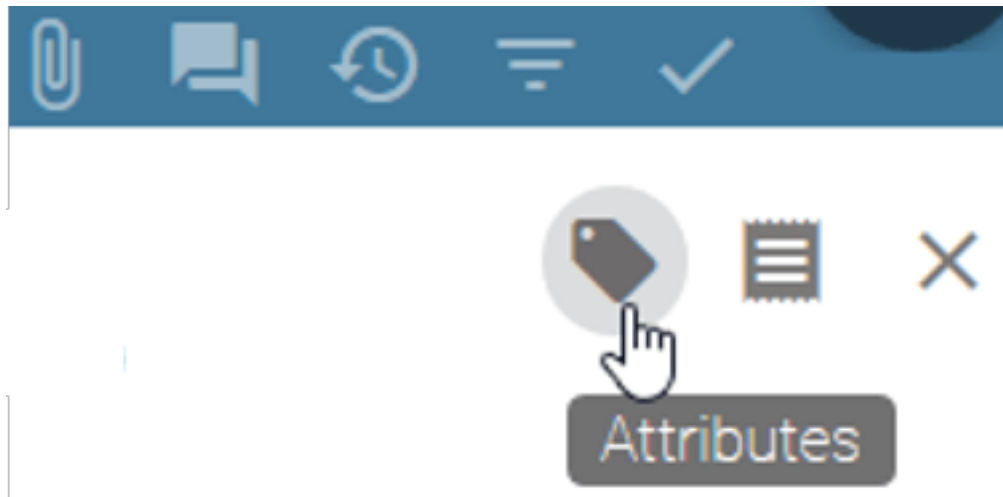
In the group *Typing* you can change the attribute *Task type*. To do that change the type as desired using a selection menu. It opens by a click on the marked arrow. The changes are also noticeable at the object itself through different icons that show up.

Task Type   ▼

You can choose from the following options. But be aware that some template editors only work in combination with BIC Process Execution. Therefore your process must be marked as *executable* as well.

- **None**: This is the default type for an activity. It does not allow the creation of any additional templates.

- **Send**: This task type defines that an user has to send a message. BIC Process Execution allows the creation of an *e-mail template* and the automatic sending of emails. It is symbolized by a filled envelope.

- **Receive**: This task type expects that your user will receive a message. It is symbolized by an envelope.

- **User**: A user task is a task which will be executed by one of your users (if necessary with software support). BIC Process Execution allows the possibility to define own *user forms*, where a user can input or calculate values and get output values.

- **Manual**: The task type manual is characterized by the fact that it must be performed manually by a user. Therefore, it has no form of integration with BIC Process Execution. It is symbolized by a hand.

- **Business Rule**: A business rule allows you to define certain rules and conditions to calculate an output value or to set a variable to a certain value. *This chapter* gives you more details about how to use the DMN editor. This type is symbolized by a table.

- **Service**: You can use a service task to use *REST Calls* in your process. This means you can integrate other software components or web services with BIC Process Execution. The symbol of this type is a gear.

- **Script**: With the help of a *script task* you can include your own scripts so this process step can run automatically. It is symbolized by a computer chip.

Note: In addition to the *Task type*, you also have the option of further typing your activities using the attribute selection fields *Process type* and *Multiple Instance Type*. With the *Process type* for example you can define a *call activity*. Through the function of *Multiple Instances Type*, you can, for example, mark activities as *parallel multiple instances*.

4.6.5 How do I change the event type in a BPMN diagram?

Select the event whose event type you want to change.
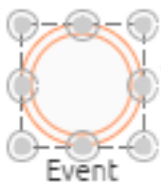
Display the attributes.
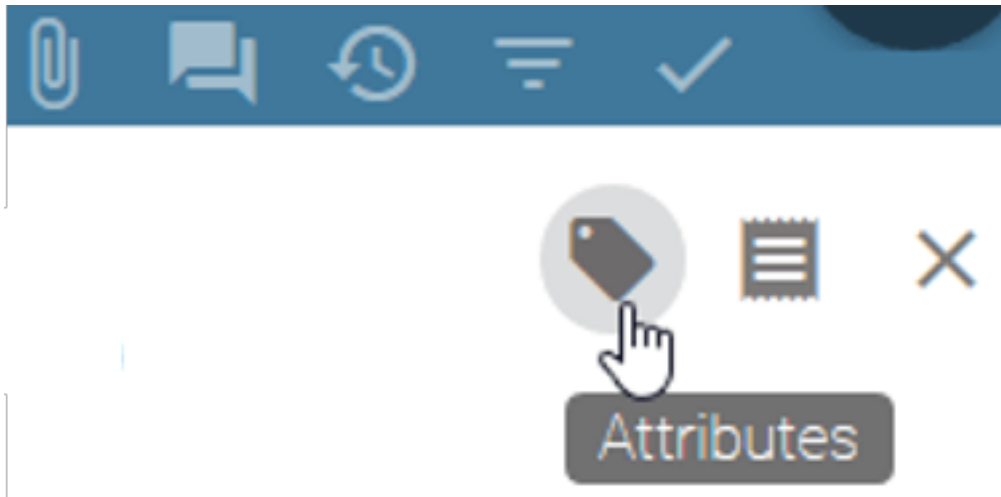
In the *Event type* attribute field, you can change the type as desired using a selection menu. To do this, click on the marked arrow. The changes are also noticeable at the object itself through different icons that show up. There are different event types available for the start, intermediate and end event, according to the OMG standard.

4.6.6 How do I attach an Intermediate Event to an Activity?

In BPMN diagrams you have the possibility to attach an intermediate event to an activity:

First, you need an activity. Then, drag & drop the intermediate event that you want to attach over the edge of the activity. The appearing orange edge means that you can attach the event to the activity. One half of the intermediate event is always placed inside the activity.

If you want to remove the intermediate event from the activity, simply drag & drop it back into the editor.
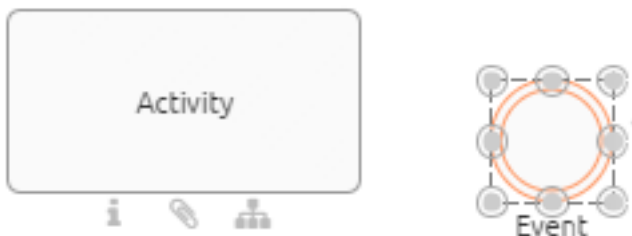
Note: When you move or change the size of the activity, the intermediate events remains attached to it.

4.7 DMN Editor

The DMN Editor gives you the option to add business rules to your diagram. Based on these rules, business processes can determine what action should be taken in different decision making situations.

Note: Decision tables can be created for objects of the type decision or for activities.

4.7.1 Where do I find the DMN Editor?

In the relevant diagram, navigate to the decision or activity for which you want to set rules. The object must have the *task type Business Rule*. You can find the *Task type* in the attribute group *Typing* within the *attributes* of the corresponding object.
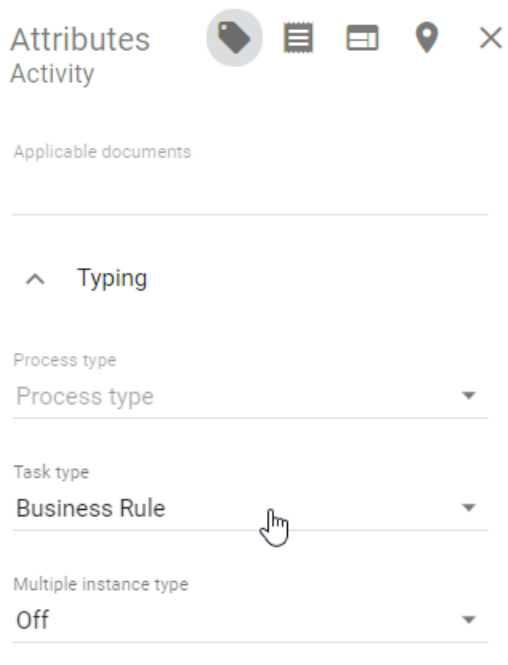
To run the DMN editor open the context menu of the corresponding object with a right click on its symbol. Select the entry "Open DMN editor".
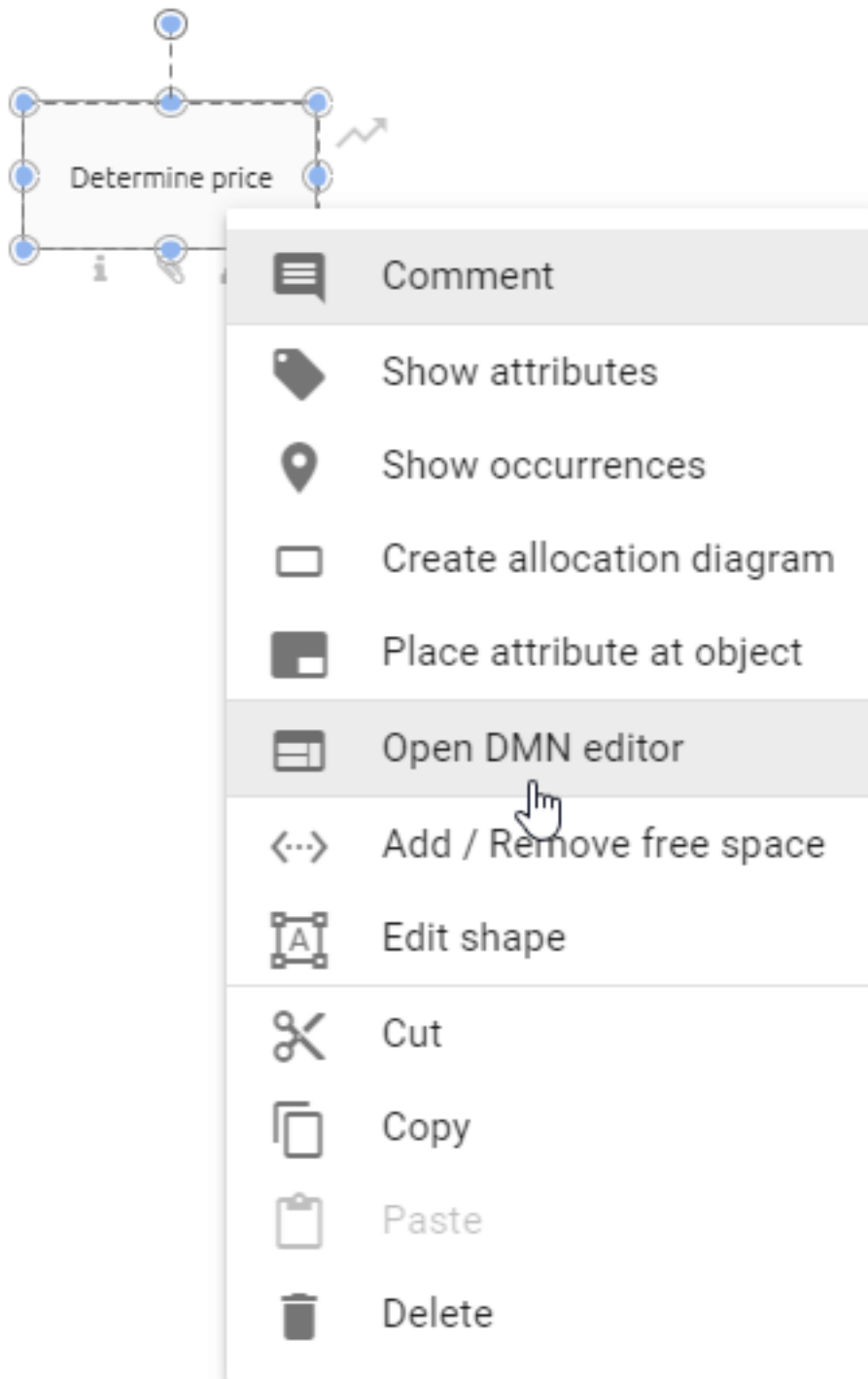
Alternatively, you can open the editor by selecting the activity and choosing *Editor* in the *Details* menu. There you will find the button *Open Editor*. Select it and the DMN editor will be opened.

The DMN editor opens in the form of a table. Here you can set and edit rules, input and output values. Alternatively, you can *import* whole decision tables. To get back to your diagram choose the option *Save* in the top right corner if you want to save your changes. If you do not want to save your changes select *Cancel*.

4.7.2 How is the DMN editor structured?

The available functions of the DMN editor are arranged within a table. The table can be divided into the following sections:

1. *Hit Policy*: Here you can see the selected *hit policy*.

2. *Input/Output*: The column *Input* includes all possible input values, which should be considered by the user. Analogously, the *Output* column returns the respective output values of the defined rules.

3. *Rules*: In this section you will find all *decision rules*, after which the respective decisions are later evaluated.

4.7.3 How can I change the selected hit policy?

With the help of the hit policy you can determine how your decision rules will be executed. You can change the policy with the following steps:

Navigate to the respecting business rule and *open the DMN editor*. Then, click on the field which displays *the actual hit policy*.

A list opens, that contains all available policies. Here you can select the desired hit policy.
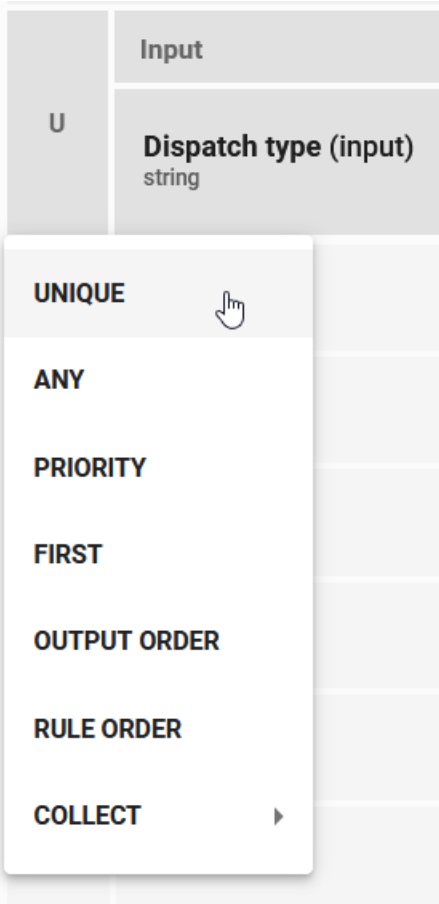
4.7.4 Which hit policies exist and how can I use them?

With the DMN-Editor you can create rules that may overlap. Below you can see an example of that. Hit Policies are used to determine which output shall be returned.

A distinction is made between hit policies that return only one value and those which can return multiple values.

If you want only one output out of your decision table, you can use the following hit policies.

- *UNIQUE*: The rules are not allowed to overlap. Only a single rule can be matched and return its output.

- *ANY*: Rules may overlap, but if they do they have the same output. Any match can be returned. If the outputs are not the same there will be an error while using the decision table.

- *PRIORITY*: This hit policy is currently not supported.

- *FIRST*: Rules may overlap. If they do, the first rule who matches returns its output. That means that the order of the rules in the DMN-Editor is important.

If you want to get more than one output, you can use the following hit policies.
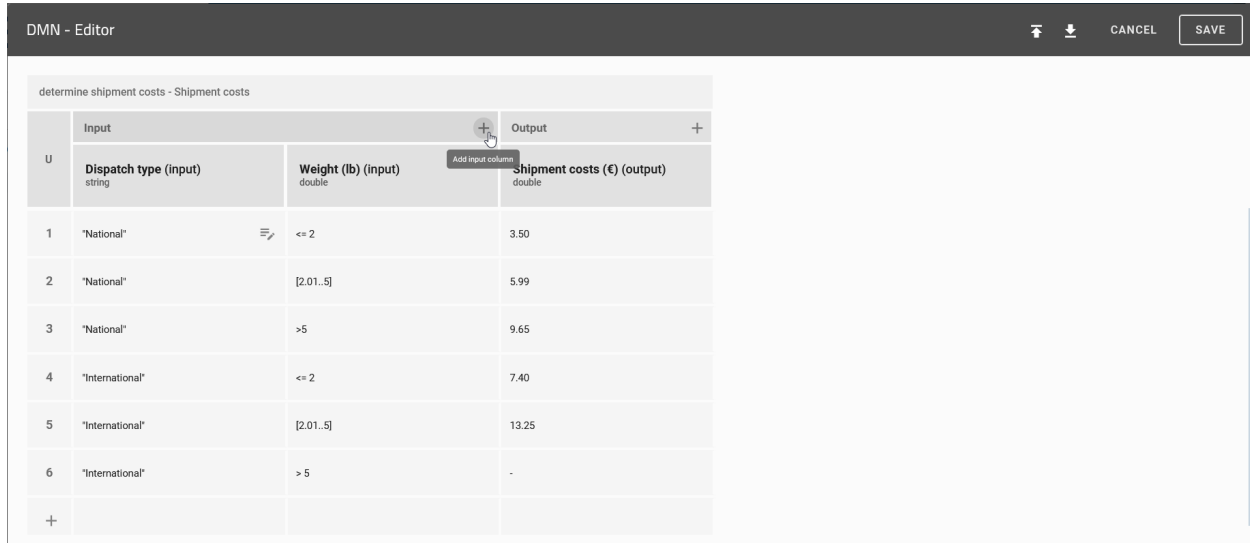
- *OUTPUT ORDER*: This hit policy is currently not supported.

- *RULE ORDER*: All outputs of matched rules will be returned, in order of the rules in the DMN-Editor. That means that the order in the DMN-Editor is important.

- *COLLECT*: All outputs of matched rules will be returned in an arbitrary order. Optionally, you can add an operator to manipulate your result:

- *no aggregation*: All values will be returned.

- *sum*: The sum of all numeric outputs will be returned.

- *min*: The smallest value of all numeric outputs will be returned.

- *max*: The biggest value of all numeric outputs will be returned.

- *count*: The number of rules matched will be returned.

4.7.5 How do I add input and output values to my decision table?

If you want to use additional input or output values for your decision rules you can add them to your decision table by executing the following steps:

Open the DMN editor of the respecting activity.

Click on the plus button next to *Input* or *Output*, within the *section "Input/Output"* to add a new input or output value to your table. The new input/output value then appears in the corresponding column.

4.7.6 How can I edit the input values?

Within the decision table, the properties of your input values can be edited comprehensively for all decision rules. To change these properties *open the DMN editor* of the desired object and then click on the input value in the *"Input/Output" section*. A dialog box opens in which you can adjust the selected input value.

You can edit the following properties:

- *Label*: Here you can specify the name under which the respective input value is displayed in the *attributes of the object*. If you do not specify a label, it gets automatically generated (e.g. Input1).

- *Input variable*: As soon as you evaluate input values they are stored in variables. These should have a unique identification for further processing by the DMN engine. The identification is defined within the property *Input variable*. Be aware that for the value of the *Input variable* only a combination of the following characters is allowed: lower- and uppercase letters, underscores and numbers. Numbers are only allowed as subsequent characters. If no value has been set it is automatically generated by the DMN editor. This generated value is based on the given value set in the property *Input label*. You also can use pre defined process variables here.

- *Expression*: This property allows you to define expressions for each input value. As a result, the input values of the decision rules can be additionally specified and changed.

- *Data type*: With the drop-down menu you can specify the data type for the respective input value. You can choose from the following data types: *string*, *boolean*, *integer*, *long*, *double* and *date*.

- *Predefined values*: You have the following options for input values of type String: Enter strings in the *Define new value* field and add them to the list of predefined values using the *plus icon*. Existing list entries can be deleted via the corresponding *trashcan icon*. Finally, this list serves as a suggestion list for possible input values for the *evaluation of the decision*. The predefined values can therefore reflect the cells entered in the *section*

"Rules" for the respective input. Be aware that this list is only a suggestion list. Users can still enter different input.

Edit input

Label
Dispatch type

Input variable
dispatch_type

Expression

Data type
String   ▾

Predefined values

Define new value   +

National

International

                                                                CLOSE

After you have completed your changes, you can save them by clicking the *CLOSE* button.

Note: You can use the variables defined here in other activities, e.g. as a process variables in BIC Process Execution.

4.7.7 How can I edit the output values?

Within the decision table, the properties of your output values can be edited comprehensively for all decision rules. To change these properties *open the DMN editor* of the desired object and then click on the output value in the *"Input/Output" section*. A dialog box opens in which you can adjust the selected output value.

You can edit the following properties:

- *Label*: Here you can specify the name under which the respective output value is displayed in the *attributes of the object* after the evaluation of the input values.

- *Output variable*: As soon as you evaluate the decision rules, the output values are stored in variables. These should have a unique identification for further processing by the DMN engine.

- *Data type*: With the drop-down menu you can specify the data type for the respective output value. You have the option to choose between the following data types: *String*, *Boolean*, *Integer*, *Long*, *Double* und *Date*.

Edit output

Label
Shipment costs (€)

Output variable
versandkosten

Output values

Data type
Double

CLOSE

After you have completed your changes, you can save them by clicking the *SAVE* button. Click the button *CANCEL* to discard your changes.

Note: Possible functions of the property *Output Values* are currently not supported.

4.7.8 How do I delete input and output values from my decision table?

To remove an input or output value, execute the following steps:

Open the DMN editor of the respective activity. Choose the Option *Delete column* in the column you want to delete. This option is displayed with a *trashcan-icon*.

Note: Note that there must always be at least one input or output value for each decision table. If, for example, there is only one input value, it cannot be removed from the table.

4.7.9 How do I administrate my decision rules?

Within *the section "Rules"* of the DMN editor you will find all decision rules for this decision. Every row represents a rule. It is defined by the specified input and output values. You can change these values with a click on the cell, that contains the value you want to change.

You can use the following functions to administrate the the decision rules:

Add row

Through a click on the plus symbol under the last row you can add a new rule to your table.
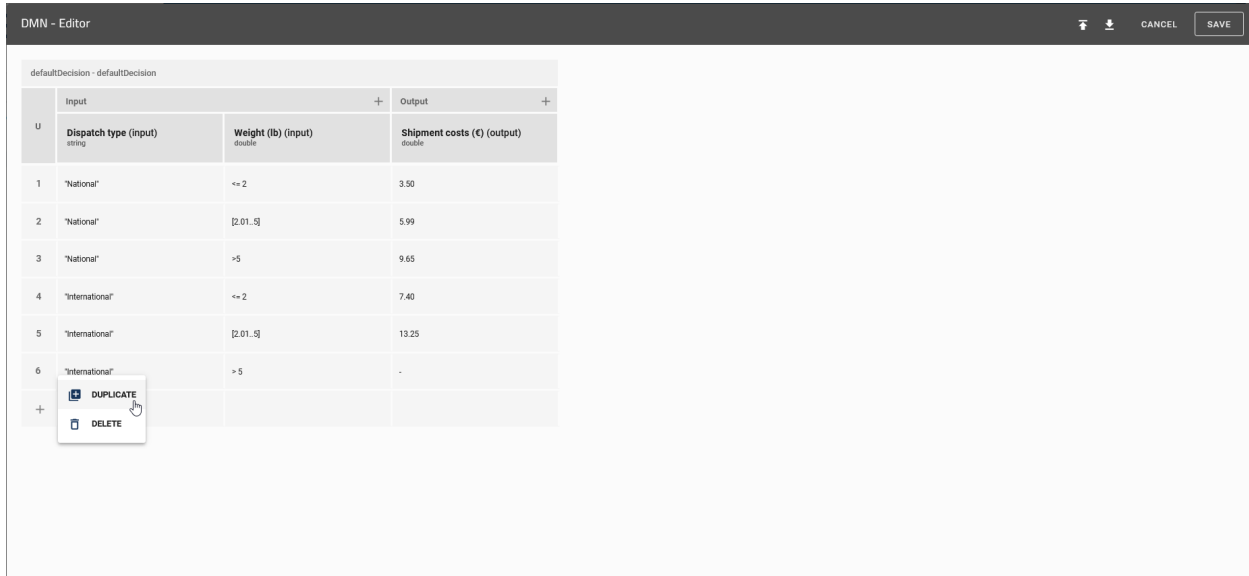
Duplicate row

For easier handling, you can also duplicate entire rows. To do so, click on the number of the rule you want to duplicate, then select the option *Duplicate* from the context menu.

After that, a new rule will be created under the selected row. The new rule has the same values as the selected one.

Delete row

To delete a rule, click on the number of the respecting row and select the option *Delete* in the context menu. The line then disappears from the table.

Note: The semantics of the defined values are based on the DMN standard FEEL ("Friendly Enough Expression Language").

4.7.10 Where can I use the decision tables?

To use a decision table, navigate to the details of the respecting object and click on the *Decision* icon.
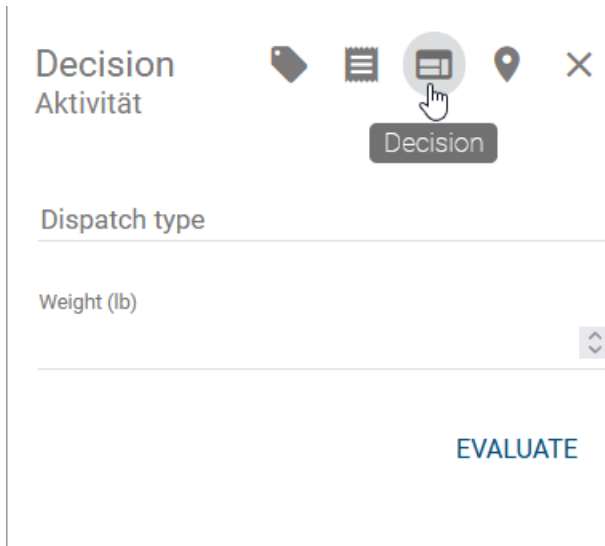
Here you can specify the specific input values. If *predefined values* have been maintained previously, a suggestion list appears when clicking on the respective input field. Click on *Evaluate* to start the evaluation. The results will then be displayed below the input values.
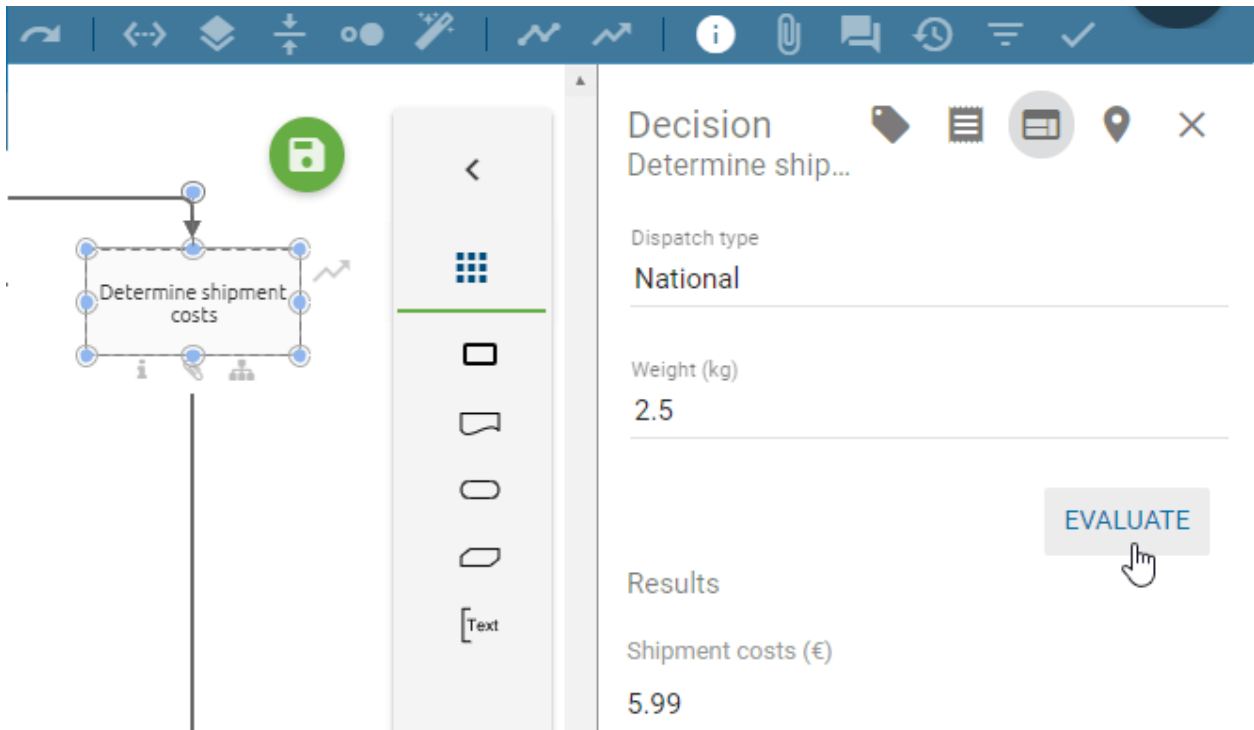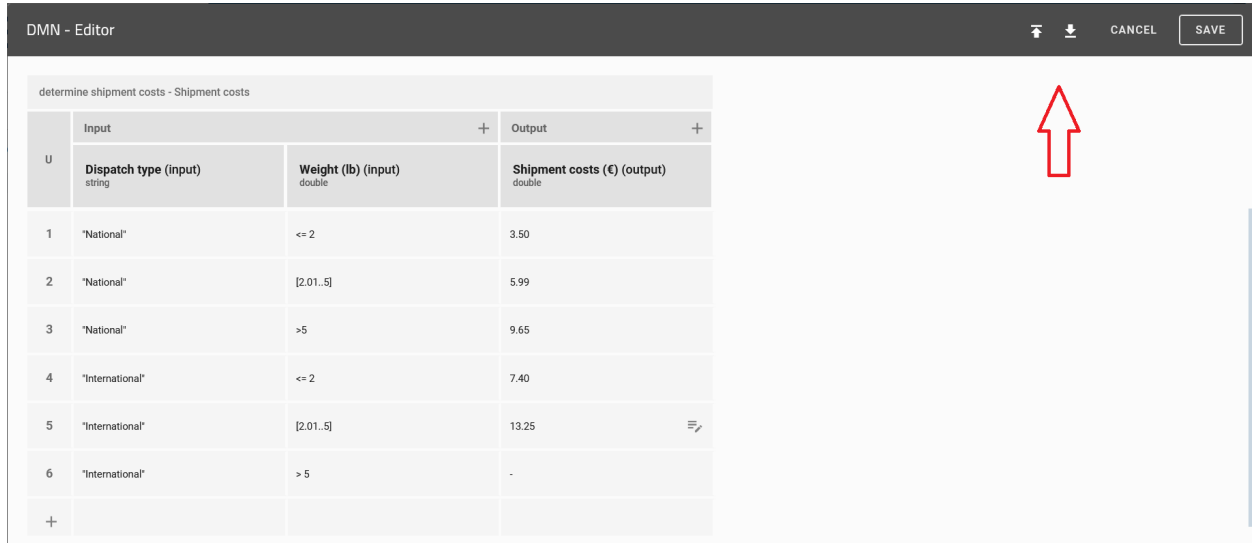
Note: When entering the values within a text field, pay attention to the capitalization!

4.7.11 How can I import/export decision tables?

Using the DMN editor, you can import existing DMN tables or export DMN tables from BIC Process Design. Both options are explained below. *Open the DMN editor* of the activity

Choose the option *Import* or *Export*.

Import

If you select the *Import* option, a dialog box opens in which you can select the desired file. By clicking on *Open* the file will be imported afterwards.

Note: Note that the file, which should be imported, must be a .dmn file.

Export

Select the option *Export*. Your table will be exported as a .dmn file ans automatically downloaded.

4.8 Validation

4.8.1 How can I validate my modeling?

You can determine whether your modeling is valid for the settings selected by the administrator. To do this, open the *Validation* tab from the menu bar.

During modeling, you can display messages about validation errors in the diagram in the validation tab. When you *Save* the modeling or reopen the validation bar, it is updated.
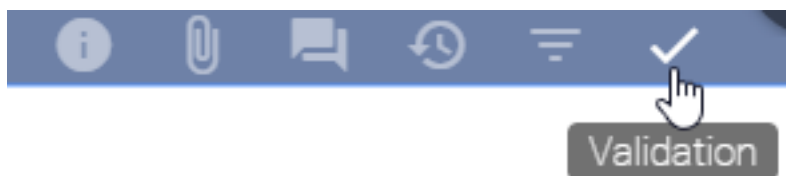
At check-in, the consistency check is automatically activated. A note informs you about OCL rule violations that prevent check-in (severity *blocker*) and existing catalog suggestions in the modeling that are not allowed. With a click on *Ok* you can display these in the validation bar. Further validation errors are not automatically reported during check-in.

In both cases, you can see a list of *unapproved* or *not published* catalog entries regarding this diagram or *entities for which check-in is prohibited* in the right sidebar. If *OCL rule violations* or *invalid sequence flows* are existing in the diagram, the corresponding list is displayed here, too. In addition, catalog entries will be displayed if their *Valid to* date is reached. In the diagram, when clicking on a list entry, the associated symbols are highlighted in color. Furthermore, you can collapse the lists by clicking on the list header, which also shows the number of entries. At the top right you can *Close* the validation bar.

4.8.2 How do I handle not allowed catalog suggestions?

As long as some inadmissibility is displayed in the validation list *Not allowed catalog suggestions*, you will be not able to check in the diagram. The affected symbols that are additionally marked red in the validation should therefore be linked to an existing catalog entry via the *suggestion list*. If no suitable catalog entry exists, you can remove the symbol from the diagram. On the other hand, users can create a suitable new catalog entry with the rights of an editor. As soon as no more inadmissibility exists after saving, check-in is possible.
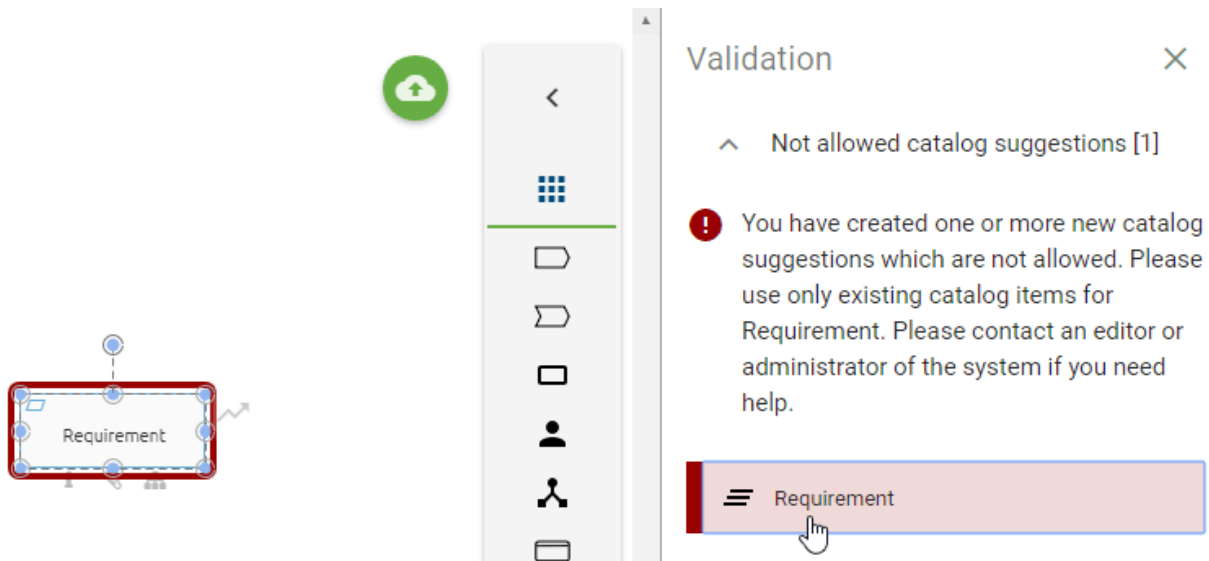
Note: Users who have the appropriate permissions can still *create objects in the catalog* for reuse in diagrams.

4.8.3 How do I deal with unapproved catalog suggestions?

In the validation you can see the list *Used catalog suggestions*. Entities in the opened diagram are listed here if they are not yet accepted in the catalog. This applies to newly created, existing symbols or symbols that are linked to catalog entries via attributes. When the validation bar is open, modeled entities are listed in yellow and marked in the editor by clicking on the entry. Entities, that are accepted in the catalog but are linked to unaccepted entities in the attributes, are also marked. It is indicated by the addition *Object attribute* in the list entry. If this behavior also occurs in the diagram attributes, the listed entity is labeled with *Diagram attribute*.
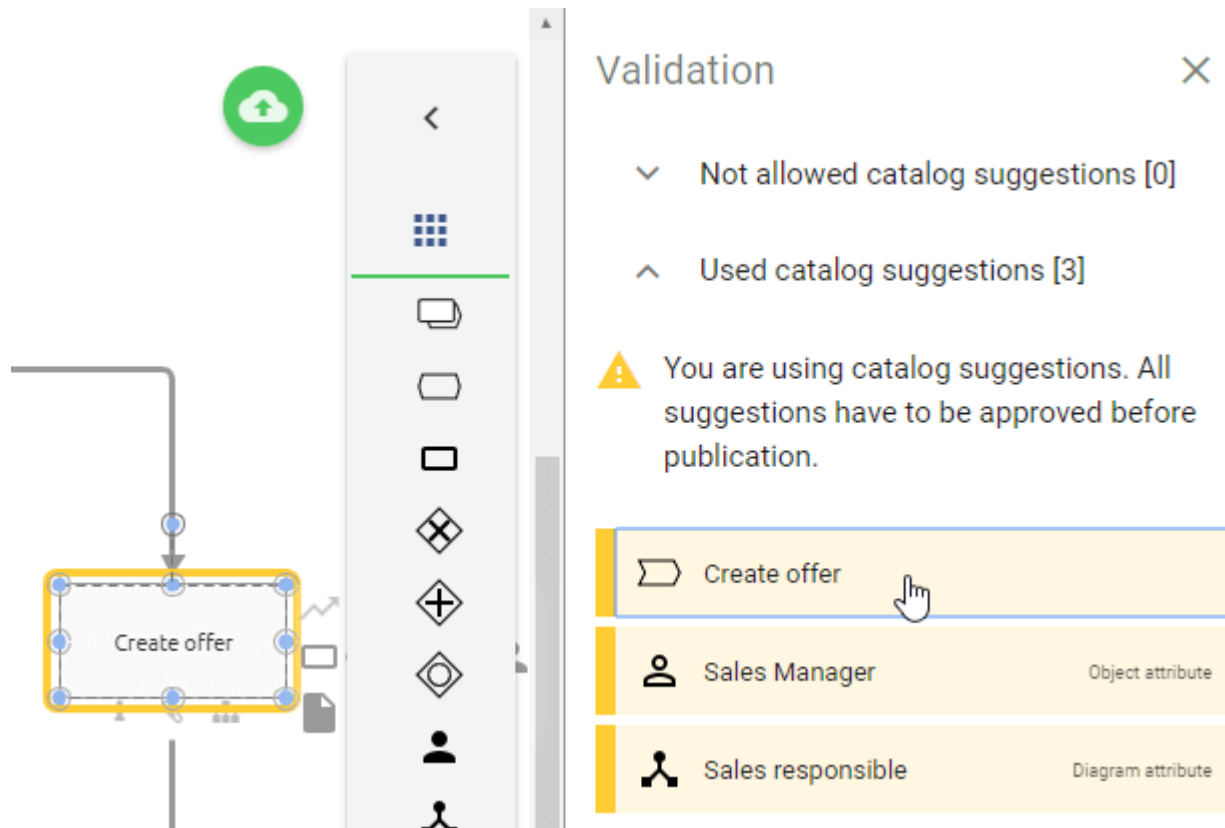
Check-in is not restricted by this feature. However, before publishing the diagram, the catalog suggestions listed here should be approved in the catalog of the public workspace. Otherwise publication is not possible and by starting the workflow, the initiator receives a corresponding message in the application. Users which have editor rights are able to approve those entries *within the catalog* or directly in the validation.

The diagram has to be checked in to approve these entries in the validation. If you then move the cursor over the respective entry, the *Accept* button appears to the right of the entry's name. By clicking that button, the proposed catalog entry will be automatically accepted.

Note: Entries referring to objects or attributes within an *allocation diagram* will not automatically open this diagram after being clicked on. Open the allocation diagram to see the corresponding selection.

4.8.4 How do I deal with unpublished catalog suggestions?

In the validation, you can see the list of *Not published catalog items*. Entities of the selected diagram are listed here if they have their own responsible person (lifecycle) but have not yet been published.
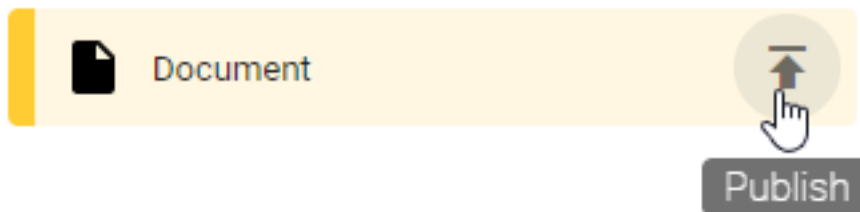
This applies to newly created, existing symbols or symbols that are linked to catalog entries via attributes. When the validation bar is open, modeled entities are listed in yellow and marked in the editor by clicking on the entry. Entities, that are linked to not published entities in the attributes, are also marked.

The user receives a corresponding message concerning unpublished catalog entries when initializing the publication of the diagram. The diagram can therefore only be published once all contained catalog entries with their own life cycle have already been published or the publishing process has been initiated. If a catalog entry is already in the preview stage but has not been published yet, a draft version of this entity is created in the published diagram. This draft version only contains the name and access restrictions of the entity. Once the catalog entry is published, the draft version is replaced by the correct version.

Users with author rights can publish the *catalog entries in the catalog* or directly in the validation tab. To start the publication directly, the diagram must be checked in. Use the mouse to navigate to the list entry so that the *Publish* button appears next to its name. You can initiate the workflow as usual by clicking this button.

4.8.5 How are OCL rule violations displayed?

The OCL (Object Constraint Language) is supported on the method side and is also used for validating the model. This allows you to set various modeling restrictions that help users to design valid diagrams. Rules defined with OCL for modeling are checked during modeling and/ or afterwards (during check-in). Rule violations are displayed in the validation mode and can be defined in the method with appropriate notes for the modeler. Both connected and unconnected modeling objects can be validated. By clicking on the list entry in the validation, the corresponding object is marked in the diagram.

This is for example used in BPMN Collaboration diagrams to prevent invalid message flows. In this case, a message flow was modeled between two objects that are placed in the same pool. This is not permitted here by the method and is displayed as follows in the validation.

Moreover, OCL rules concerning diagram attributes, so called *semantic checks*, can be defined in the method. Depending on the setting, the check is done when the diagram is modeled or when it is checked-in. For example, semantic checks can be useful to ensure that modellers always maintain a specific diagram attribute or set a meaningful validity period. If you model a diagram and a semantic check fails for a diagram attribute, you will be informed about it in the validation hub. The hint is - depending on the concerning method setting - either a *warning* (yellow), an *error* (red) or a *blocker*. If a modeled diagram violates a blocker, the check-in is not possible. You need to correct the modeling to be able to transfer the diagram from your local storage to the public workspace via the check-in.

Hint: Please be aware that users who utilize customized OCL rules do not receive the diagram attribute checks automatically. They need to integrate these manually into their customized method.

In the method of the following example, a rule has been defined which states that the attribute scope (AT_SCOPE) of a BPMN diagram has to be maintained. In case of a violation, a customized message will be shown. A violation of this rule is estimated as an error. Thus, the following error hint is displayed to the modeller of the diagram "Onboarding" because the scope attribute is empty.

OCL rules can be adjusted in customizing.

4.8.6 How is an invalid sequence flow displayed?

In the validation of BPMN diagrams, objects with invalid sequence flows are listed under the heading *Sequence flow*, if these exist in your modeling. In the following cases you will receive a corresponding note in the validation bar:

- Intermediate events have no incoming and/or outgoing sequence flow
- Activities have no incoming and/or outgoing sequence flow
- Start events have no or more outgoing sequences
- End events have no or several incoming sequences

- Gateways have several incoming and outgoing sequence flows simultaneously

- Gateways have exactly one incoming and one outgoing sequence flow

As an example, the message for an end event without an incoming sequence is displayed here.
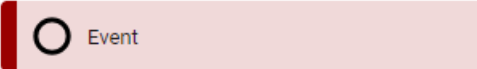
4.9 Allocation diagrams

Allocation diagrams allow you to add subgraphs to the main graph of your diagram. By using these allocation diagrams you can model subdiagrams in a manner, so that your main diagram is not overloaded with details.

Note: Allocation diagrams can only be created for activities because the resources used in this activity are represented in this diagram type. A diagram can contain multiple allocation diagrams, depending on the number of existing activities. To create or edit an allocation diagram, the diagram in which the activity is located must be checked out.

4.9.1 How can I create a new allocation diagram?

Open the context menu of the corresponding activity by right-clicking on the symbol. Select the option *Create allocation diagram*.
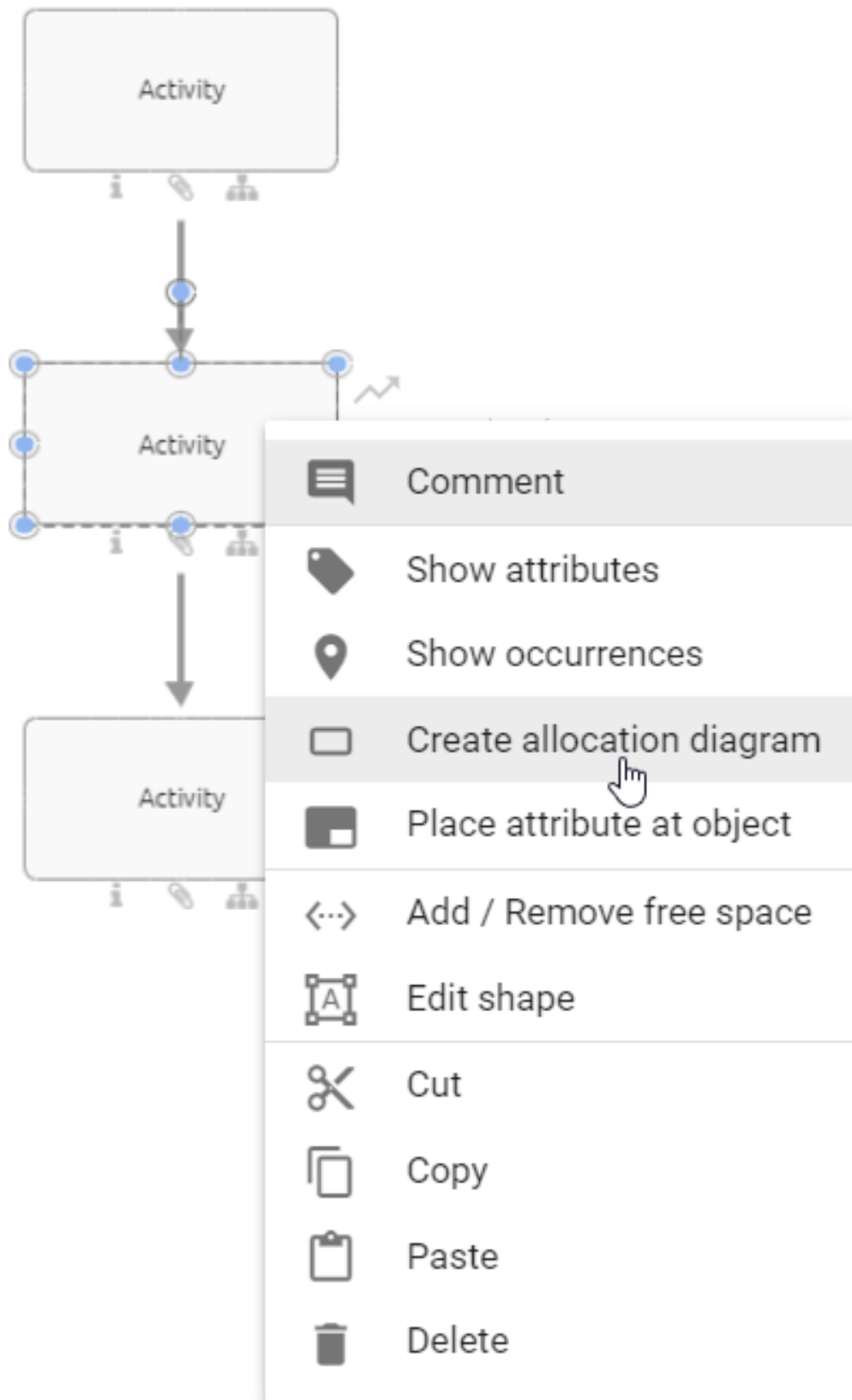
You will get to the editor of the allocation diagram where you will find the symbol of the respecting activity. Within this editor you can now model as usual.

If you want to return to your main diagram click on the *Close* button on the upper right corner of your editor. When changes have been made you must save first before you can use the *Close* function. You will then see the main diagram at the same position with the same zoom settings as before and the corresponding activity is selected.

Note: Only one allocation diagram can be created per activity, as this ensures a clear assignment.

4.9.2 How can I edit an allocation diagram?

To open an allocation diagram for editing you have two possibilities:

1. Navigate to the diagram in which the associated allocation diagram is located. Open the context menu of the corresponding activity by right-clicking on the symbol. Select the option *Open allocation diagram*.
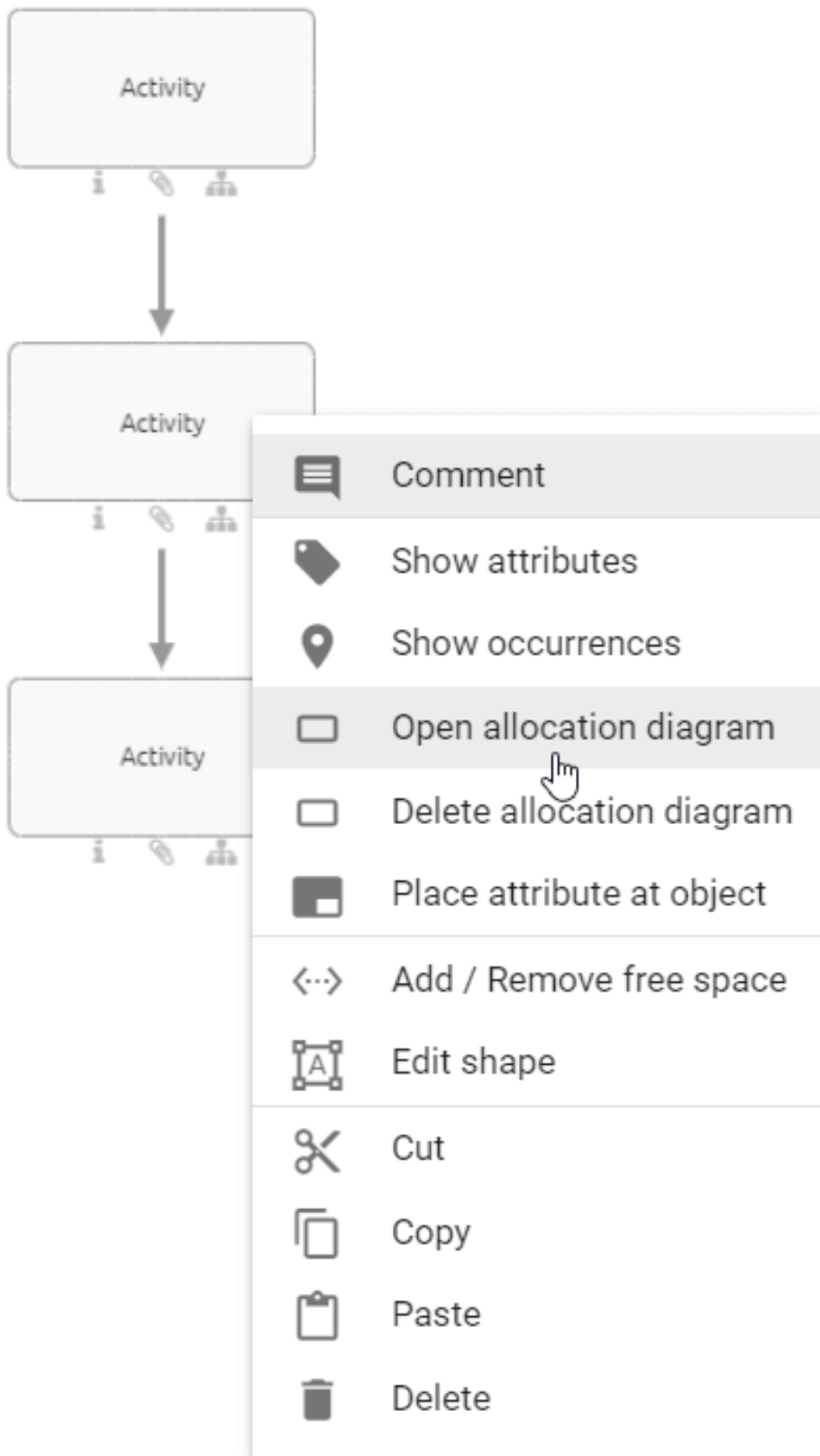
2. Navigate to the diagram in which the associated allocation diagram is located. In the explorer you can find all associated allocation diagrams subordinated to the respecting diagram.
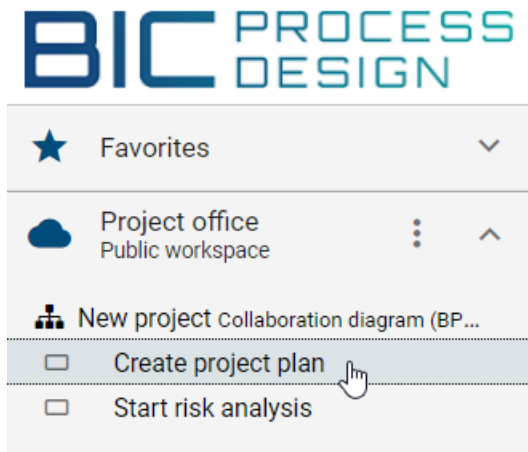
To apply the changes, click on the *Save* button on the upper right corner of your editor after editing your allocation diagram.

Note: Symbols created in the allocation diagram are only displayed there. Changes you make to the activity for which the allocation diagram was created are visible in the main diagram and also in the corresponding allocation diagram. It does not matter if the changes have been made in the main graph or the allocation diagram itself, or if there is a catalog entry for this activity. Note that it is not possible to edit an activity with an allocation diagram using the suggestion list.

4.9.3 How can an allocation diagram be deleted?

To delete an allocation diagram execute the following steps:

Navigate to the diagram in which the the associated allocation diagram is located. Then, open the context menu of the corresponding activity by right-clicking on the symbol. Select the option *Delete allocation diagram*.
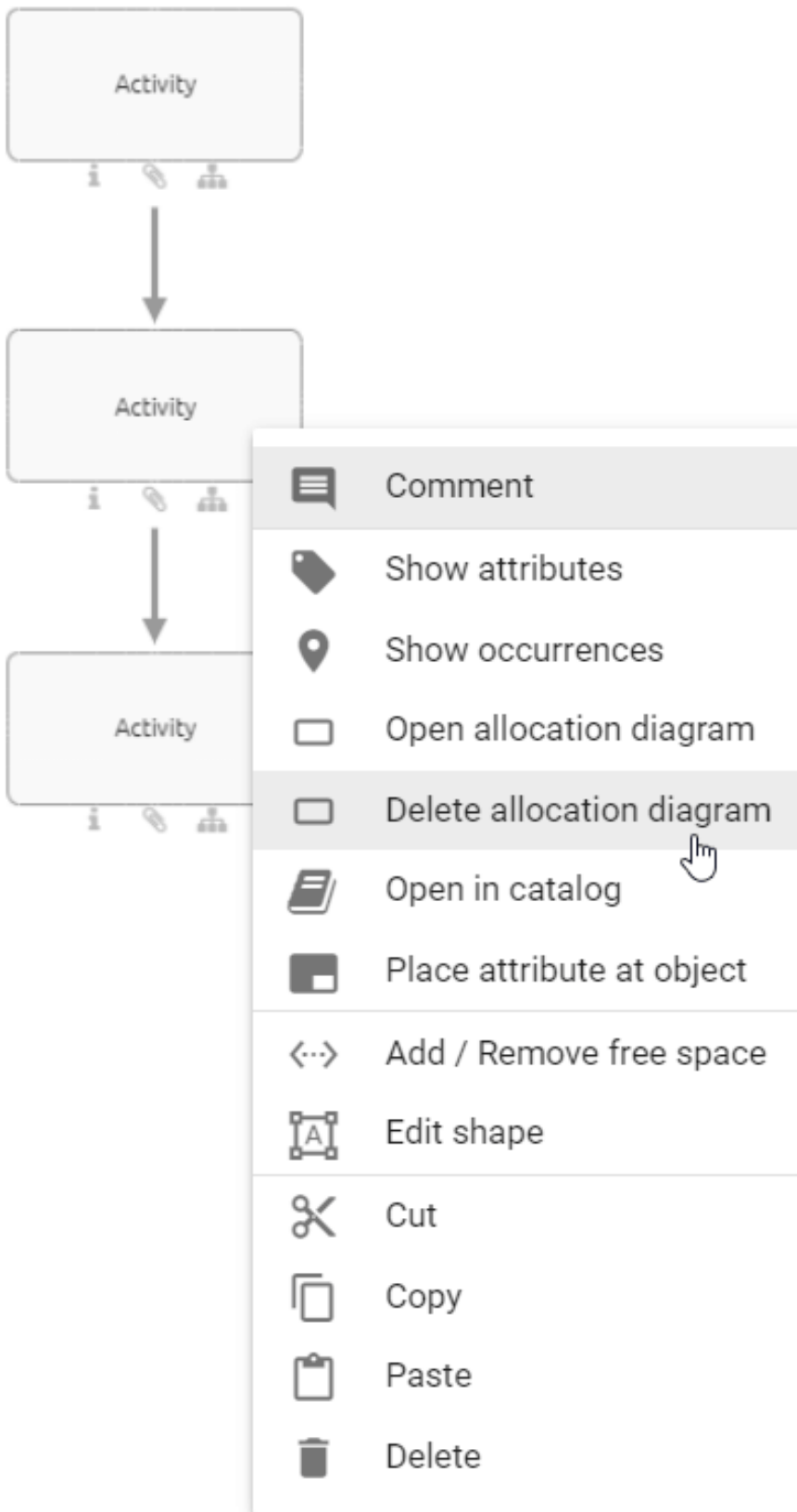
The allocation diagram has been removed and is no longer displayed in the explorer under the corresponding diagram.

4.9.4 Where do I see the allocation diagram's information?

Allocation diagrams belong always to the diagrams, where they were created in. This means that all information of the allocation diagrams, which are important for the context of the main diagram, are also displayed at the respecting places. Such information are mainly objects and their associations and attributes. So places where they will be included are for example the *available exports*, the *different diagram views* and the *profile*.

Note: In some reports illustrations of diagrams are displayed, here only the main graph is shown.

4.9.5 What are external function allocation diagrams (FAD) and how can I use them?

External function allocation diagrams (FAD) are analogous to *allocation diagrams* diagrams, which you can allocate to activities in order to describe a subordinated part of your diagram more precisely. Unlike the allocation diagrams, external FADs are not created via the context menu of an activity. An external FAD is an already existing diagram which is assigned to another activity in another diagram using the *Allocation model* attribute.

Analogous to the subprocess, simply *link a diagram* to an activity within its attribute *Allocation model* in order to assign the diagram to the activity as an external FAD.

The external FAD continues to exist as an independent diagram, which can also be seen from the arrangement in the repository.

However, analogous to the allocation diagram, all relevant objects of the external FAD are also listed in the reports of the diagram that contains the relevant activity with the assigned FAD. In addition, by simply clicking on the external FAD in the activity's attributes, you are automatically directed to the relevant diagram.

Note: Only one FAD can be created per activity, as this ensures a clear assignment.

Note: Please note that in the old UI unlike allocation diagrams, objects from the external FADs, are not listed in the *different diagram views*, e.g. the *Matrix*. In the *new UI* however, these are also listed in the diagram views.

DETAILS

This section explains various display settings of diagrams and symbols used in diagrams. These options are each part of the *Details* bar on the right or are directly related to attributes of objects and diagrams. Depending on the *administration settings* the bar can contain the attributes, occurrences and the profile. In the publication stage, the *details* bar is displayed by default when you open a chart. If you close (re-open) the bar, this setting is stored in your account and the bar will always remain closed (opened) until you change it manually. This applies to any view changes, such as diagram switching or switching to *Matrix* or *Process execution*. For more information on the *Details* bar, see the following chapters.

5.1 Attributes

5.1.1 How do I display attributes in diagrams?

In the open diagram, you can view diagram or symbol attributes in the sidebar on the right. Note the *administration for the attribute bar* in the different stages.

Click on a symbol or diagram and click the *Attributes*-button in the menu bar.

Optionally, you can right-click on a symbol and select the entry *Show attributes* of the appearing context menu to display the attributes of the currently selected symbol.

Comment

Show attributes

Show occurrences

Create allocation diagram

Open in catalog

Place attribute at object

Add / Remove free space

Edit shape
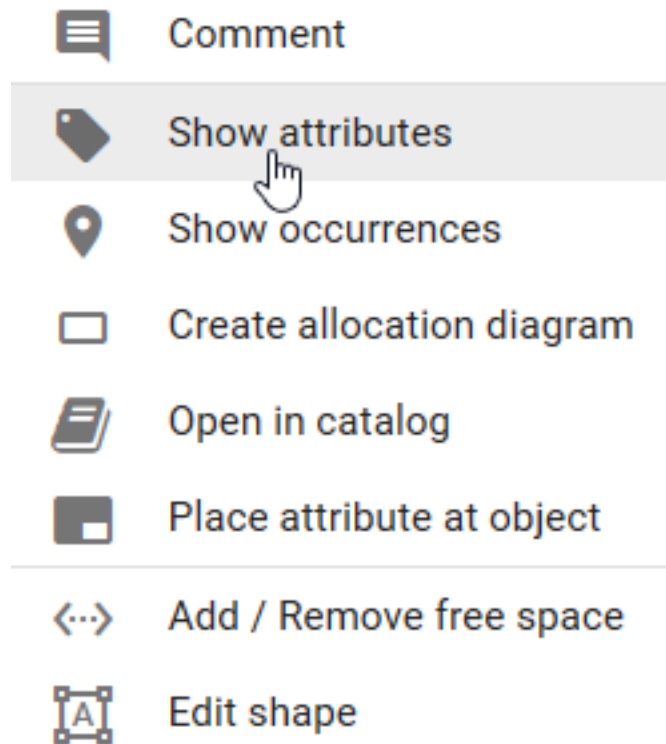
The *Details* side bar appears on the right-hand side, displaying the diagram or object type above and below the attributes of the currently selected diagram or symbol. Objects that are "catalog suggestions" or an approved "catalog item", have this additional information in the attribute bar next to the object type. If you look at a checked in diagram, you can see all attributes, that are maintained in the selected *content or alternative language*.

As soon as you check out the diagram, all attributes of the diagram or of the selected object are displayed. This is independent of whether an attribute is maintained or not. However, you are only shown values of those attributes that have been maintained for the selected content language. By default, further attribute groups, such as *Governance*, are hidden in the attribute bar. By clicking on the respective heading, you can display those attributes.

In the attributes of an object other objects, such as persons, can be used. You can navigate to the attributes of the used object by clicking on the corresponding entry. Clicking on the arrow in the attribute bar brings you back to the original view.

Furthermore, you can *display the occurrences* of a symbol in the opened attribute bar.

Tip: If no subprocess and no attachment has been maintained for a symbol, the attribute tab opens by double-clicking on the symbol.

Note: If you want to edit the attributes, you have to *check out* the diagram first.

5.1.2 How do I create a link to another diagram?

You can place links to other diagrams to create subprocesses of diagrams. These subprocesses allow you to map diagram hierarchies.

Create an activity in a diagram and open the attributes of this activity. Then, in the attributes, click the *Subprocess* attribute. Afterwards insert the name of the diagram you want to save. You will receive a suggestion list of diagrams containing the entered term in the name.

Keywords

Subprocess

Onboar

Onboarding
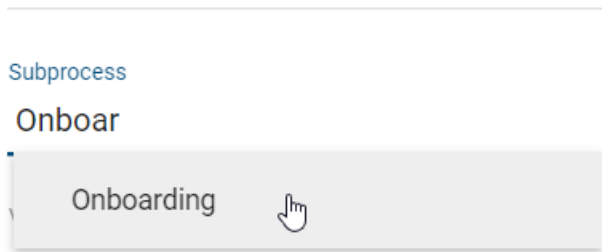
Select the diagram from the suggestion list. The subprocess is saved and is made visible in the diagram by the attribute symbol showing up below the activity.

Note: Variants and *allocation models* can be linked in the same way. Only existing diagrams can be linked as they are added via the suggestion list.

Tip: If you also maintain the process type of the activity as *Call activity*, a *subcase in BIC Process Execution* will be started for the subprocess.

5.1.3 How can I connect users to diagrams and objects?

The attributes of diagrams and objects can be used to connect to users and user groups. This is possible using the attributes author, reviewer, responsible, *scope*, and *restricted access* for various functions.

Navigate to the appropriate attribute in the attribute bar in the catalog or diagram. Then enter a term and you will get a suggestion list of all users or user groups that contain this term in their name. You can select a suggested user or user group by clicking on it. The corresponding *person* or *organizational unit* from the catalog will then be entered in the respecting attribute. Finally, save your changes.

Tip: You can also search for the user's e-mail address. If a user is selected from the list and is not linked to a catalog object of the type "person", a new catalog entry will be generated with the name and the e-mail of the given user. If more than one person exists with the e-mail address you are looking for, the catalog entry found first will be taken by selection of the user.

5.1.4 How can I maintain governance attributes?

You can maintain governance attributes for diagrams and some catalog entries. To do this, check out the affected diagram or navigate to the corresponding catalog entry and open the attributes. In the *Governance* attribute group, you can use a suggestion list to select users and user groups. The corresponding catalog object *person* or *organizational unit* will be set for the attribute, when the user or user group has been selected from the suggestion list. When you save the catalog entry or additionally check in the diagram, your changes are taken over. The different governance attributes and their functions are presented below.

Author: Users of the role *Author* only have the permission to edit diagrams if they are entered as author in the diagram attributes. This is possible for both users and user groups. In addition, you can enter authors in governance attributes of catalog entries. Then not only creating and editing suggested catalog entries is allowed, but registered authors can also edit accepted master data. An author of a published diagram or catalog entry is (by default) *informed via e-mail* about a resubmission.
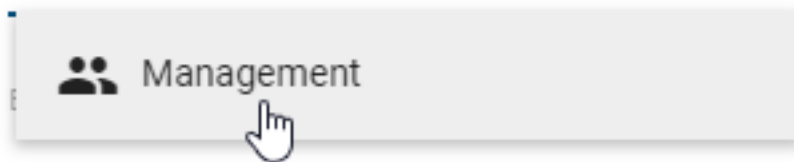
Examiner: Users who are registered in the diagram (or catalog object) attribute *Examiner* execute the release step of a publication and will be notified of the pending release step. The examiner role can be assigned to individual users as well as user groups per diagram and per catalog entry. Per entry, that means per person and per organizational unit, one approval is required in the examine step to initiate the next workflow step. The first three examiners of a published diagram or catalog entry are (by default) *informed via e-mail* about a resubmission.

Responsible: A maximum of one user or user group can be entered in the *Responsible* attribute. This entry is required if a catalog entry is to be published individually or the diagram is to be published. The responsible user or user group is finally notified at the release step of the publication and can confirm it. Moreover, they receive a notification and a *resubmission task* before the validity period of a diagram or catalog object is reached. The attribute *responsible (resubmission)* can be used instead. In this case, the responsible will receive the *information mail* about the scheduled

resubmission.

Responsible

Joh

Responsible (resubmission): The *Responsible (resubmission)* attribute is available for diagrams and catalog entries. Either an individual user or a user group can be entered here. The responsible persons then receive the notification and a *resubmission task* before the validity period of a diagram or catalog entry is reached. If this attribute is empty, the *Responsible* receives the corresponding notification (and task in case of diagrams).

Responsible (resubmission)

Joh

Tip: You can also search for the user's e-mail address. If a user or user group is selected from the list and is not linked to a catalog object of the type "Person" or "Organizational unit", a new catalog entry will be generated. This will have the name and e-mail of the corresponding user or the name of the user group as name and identifier.

Special retention period (in years): This attribute enables you to define an individual retention period for the archive entries of the concerning diagram or catalog entry. The retention period determines for how long an entry is saved in the archive. A general setting can be made *in the administration*. In case the period of archive entries in *publication* stage should differ for your diagram or catalog entry, you can set the desired value here. Maintaining an integer greater than zero leads to an archiving of new entries for the corresponding number of years whereas negative values will be ignored (i.e. the time set in the administration is applied). If no archive entries should be created for this object (in publication stage), simply enter the number zero.

Hint: Please note that the attribute *Special retention period* is deactivated by default. If it should appear in the governance attributes, it can be activated in the method. However, the special retention period is only applied to a diagram or catalog entry if the general archiving has been activated for the corresponding type *in the administration*.

5.1.5 How do I attach files to objects?

Modelers have the option to upload their own files (up to max. 64 MB) and link them to an object in a diagram. The file can optionally depend on the users' language settings.

Navigate to the attributes of the object to which you want to attach a file. In the *Attachment (URL)* attribute, you can select a file from your folders by clicking on *Upload file*. BIC Process Design supports the following file formats:

- .ods, .xls, .xlsb, .xlsx, .xltm

- .pdf

- .potm, .potx, .pps, .ppsm, .ppsx, .ppt, .pptx
- .doc, .docm, .docx, .dot, .potm, .dotx, .odt

Attachment (URL)

Upload file

After you selected, a dialog window opens where you can rename your file. Via the checkbox *Upload for all languages* you have to decide if the attachment is intended for all languages (select checkbox) or only for your current content language (unselect checkbox).

Please enter a name for the file

Attachment01.txt

✅ Upload for all languages

CANCEL   UPLOAD FILE

Click on *Upload file* to confirm your input and to attach the file to the object as a chip with the name of your input.

In case you uploaded an attachment only for your current language, you can *change your content language* and add an attachment for other languages as explained before. A clear administration of language dependent attachments is also recommended *in translation mode*.

The uploaded file can be downloaded by other users by clicking on the attribute entry whereas the linked file is depending on the users' content language. Further options for downloading these files are also provided in the *Profile* and in the Matrix view, for example for inputs and outputs.

Attachment (URL)

📄 Attachment01.txt ✏️

Optionally you can also insert your file into the attribute field *Attachment (URL)* of an object by using the drag & drop

function and name it.

If you want to remove the attachment, click in the input field of the attribute, use the arrow keys to navigate to the chip (until it is highlighted) and press the backspace key on your keyboard to delete it.

Tip: URLs like *links to documents on network drives* can also be added as attachments.

Tip: Note the *document stamping* applied to files during publication of the associated catalog object. In addition, it is possible to convert files to a *.pdf format* within the publication.

Note: "/" characters cannot be included in the file name and are automatically removed when uploading. Moreover, the same URL cannot be added twice.

Hint: Please note that the PDF document will open in a new tab if you use the key combination Ctrl + click on a link. However, if you click directly on the link, the download dialogue will open. Additionally, you can access attachments through the paperclip symbol in the associated activity. Alternatively, you can use the Details bar on the right to view the attachments of the specific attributes. If a file is not supported in the application, automatic downloading will take place.

5.1.6 How can I maintain language dependent attachments?

If you *upload a file*, you have the choice to link this file for your current content language or for all content languages which are selected in the administration. The translation mode offers a clear overview of the attribute *Attachment* compared in all content languages. You can enter the translation mode by clicking the option *Diagram translation* in the menu bar.

By a click on *Upload file* in the column of an arbitrary language, you can select and open a file as usual.

English (English)

Name (EN)

My diagram

Description (EN)

Keywords (EN)

Attachment (URL) (EN)

📄 Attachment02.txt ✏

⬆
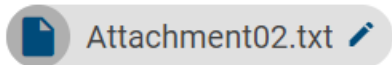
Upload file

Via the checkbox *Upload for all languages* you can decide whether you want to link the file for all or only the selected language.

Please enter a name for the file

Attachment01.txt

✅ Upload for all languages

CANCEL   UPLOAD FILE

The function *Edit* enables you to change or rename the attachment also in translation mode.
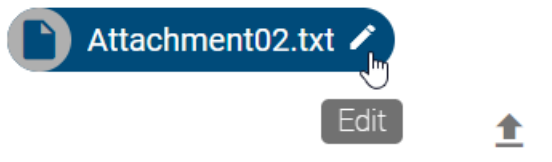
Note: If you import a diagram containing an attachment that is not linked to languages, the attachment is maintained in every content language. Therefore no data will be lost. In case you would like to link the attachment to only one content language, you can adapt this attribute afterwards, for example *using the translation mode*.
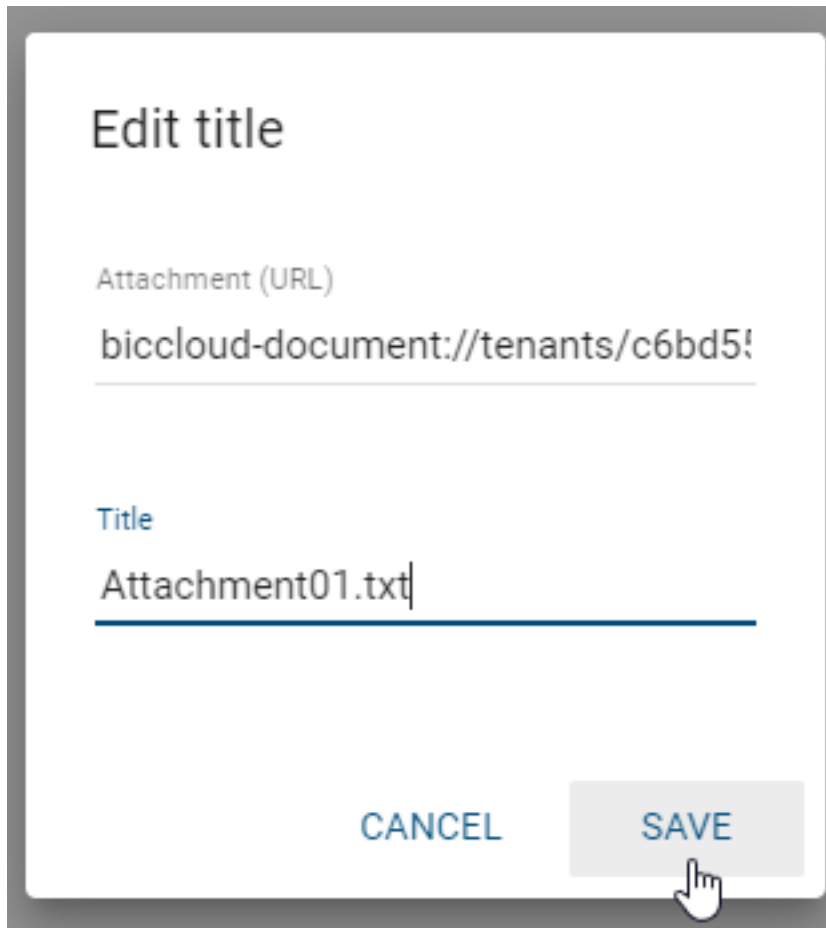
5.1.7 How can I rename attachments (URLs)?

If the attribute *"Attachment (URL)"* is maintained, you can rename the corresponding attached file or URL language-independently. Navigate to the attachment, represented by a chip, in the attributes of the desired object. At the right edge of the chip you can select the option *Edit*, represented by a pen symbol.

This will open the dialog *Edit title*. In the field *Attachment (URL)* the URL, or the BIC Process Design-internal file path, is displayed but cannot be edited. In the *Title* input field, you can rename the attachment. Click on *Save* to take over the new title and display it in the chip.

If you do not want to save your changes, click *Cancel*.

5.1.8 Which functions are available for the attribute description?

Each symbol and diagram has a description attribute. When you edit the description attribute for an object, some object types show a description icon by default.

Click on the description attribute of a symbol (e.g. an activity). Various formatting options are available for the description attribute. These are:

- Bold

- Italic

- Underline

- Strikethrough

- Table

- Numbered list

- Bulleted list

- Add links

- Remove format

Description

The **text of the description field** can be formatted.
It is also possible to include a link here.

Column 1	Column 2
The rows and columns change dynamically according to the context.	You can format this text aswell.

Set the formatting according to your requirements and finish the editing by clicking in the diagram.

Add a link:

You have the possibility to link documents or URLs within the description field. To create a link, click on the link symbol.

Description

B I U S ▦, ☰ ☰ 🔗 I_x 😀

A dialog opens where you can enter the link and optionally a title, i.e. a text which is displayed.

Insert Link   ✕

Text to display

Homepage

To what URL should this link go?

www.gbtec.com

☑ Open in new window
☑ Use default protocol

Insert Link

You can also mark a piece of text in the description field and click on the link symbol to fill the title automatically and attach the link to the existing text. In the dialog, you have two further options. First, you can choose whether the link is opened in a new tab (activate checkbox) or in the current tab when it is selected. If you select the second option, the default protocol `http://` is used for your URL. Deselect the checkbox in case you use another protocol, like

`mailto://`. Both options are initially activated. When the configuration is implemented according to your wishes, select the button *Insert Link*. Your configuration will be saved and the dialog closes. To discard the data instead, close the dialog via the cross button in the upper right corner.

The title of the link is displayed in blue color afterwards. If you select it once, a pop-up will show the link and two buttons. Selecting the right one removes the link (the displayed text remains). The left button can be used to re-open the configuration dialog for further editing.

Table:

In order to insert a table, click the table icon to open a selection field. You can define the size of the table by hovering over the grid and confirming the desired columns x rows numbers by a click. The table is pasted into the description field. If you mark the table, you can move it to a desired place using drag & drop. To adapt the formatting of text inside the table, simply use the functions mentioned above. If you place the cursor in a cell, further functions are displayed to insert new rows and columns. You can also delete the current row/column. The bin icon enables you to remove the whole table. The table is removed instantly after selecting this function and there is no further confirmation necessary. Therefore, be sure about the deletion before selecting the function!

Note: Please note that if you use a description attribute that contains an HTML table and place it on the modeling canvas, the table borders may not be visible. In addition, when copying a table from PowerPoint, it may appear twice, once without formatting and once with formatting.

The maintained description attribute is indicated by an **i** under the symbol. Descriptions of your process steps and other symbols are displayed in a tooltip as soon as you move your mouse over the highlighted information icon of the object.

If you view descriptions of checked-in diagrams that contain more than 3 lines, they are displayed collapsed by default. You can see the entire description by clicking on *Show more* and minimize it by choosing *Show less*.
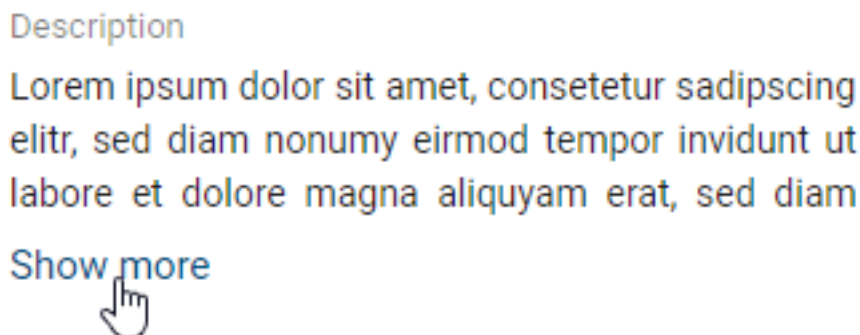
Note: For some object types the icon for maintained description attributes is not visible by default. It is possible to change this in the formatting options for a selected symbol.

Hint: The table formatting is not fully supported in exports. If you use a table in a description attribute, the content is still copied to the document as a table and appears in the defined formatting. But the table is displayed without a frame and border lines of the rows and columns.

5.1.9 What is a mandatory attribute and how can I detect it?

In the attribute tab, an asterisk marks a mandatory attribute. This applies both to the attribute tab in the diagram view and to the object details in the catalog. Entering such an attribute is mandatory to publish the diagram resp. catalog object. If these are not maintained, you will get a corresponding message in the application when initiating the release workflow. If you create or edit an entity, you do not have to maintain the mandatory attributes yet. Attributes can be defined as mandatory in the method.

For example, the attribute "Responsible" always is a mandatory attribute.

Responsible *

👤 John Doe ✕

Note: The following exceptions will be applied to mandatory attributes that are multi-valued or language localized when the release workflow is initiated. The workflow engine checks if at least one value has been maintained for all mandatory multi-value attributes. There is no further check about the amount of values. The check for language localized attributes is successful if a value has been maintained for at least the *default language* of the tenant. If this attribute value has not been set, the initiator of the release workflow receives a notification about the missing translation in the diagram resp. catalog object.

5.1.10 What are occurrence attributes?

If you have multiple copies of an object, typically, the value of an attribute (for example, the name of the object) is the same for each of these copies. In contrast, the values of occurrence attributes can be set independently for each copy. If an object is copied, initially each attribute value is identical to the original value. These can, however, be subsequently modified without the other copies / the original being altered.

BIC Process Design uses a small symbol to indicate whether it is an occurrence attribute (see figure below).

Risk owner 📍

Root cause 📍

- Occurrence attributes are defined in the *method* and cannot be defined in the application itself.

- If the occurrence attribute has to be of identical type in all variants of the object, then it must be maintained individually for each object.

- The contents and the identifiers of the occurrence attributes are not included in the catalog.

5.1.11 How can I place attributes at objects?

Some attributes of objects can be placed in the diagram. This includes all text attributes of the object that were maintained in the attribute bar.

Right-click on the symbol in the diagram to open the context menu and select *Place attribute at object*.
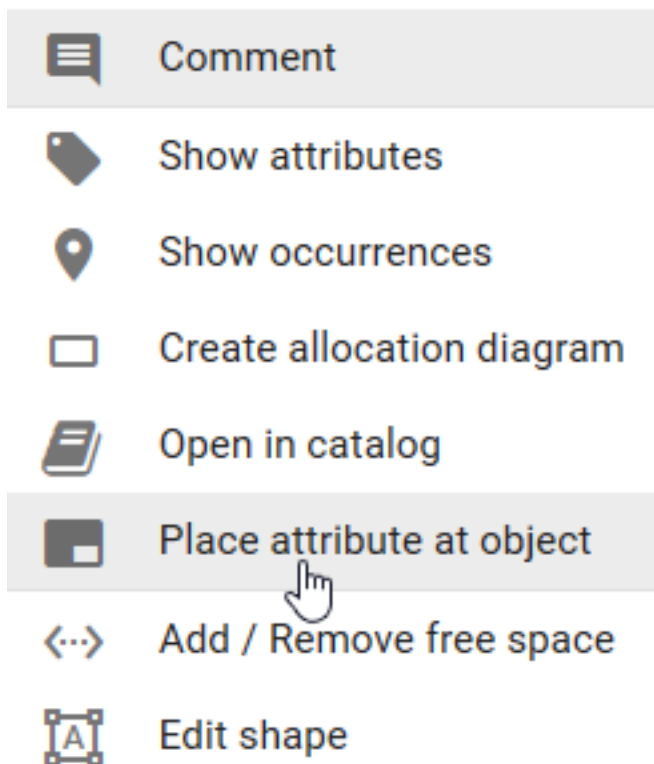
A window *Attribute placement* opens, in which you can select the desired attribute. All text and assignment attributes that are already maintained at the object are displayed here. If you want to select a text attribute that is not listed, you must first complete it in the attribute bar and repeat the first step.

Attribute placement

Please select the attribute that you want to display in the diagram. Only maintained text attributes are offered. If necessary, first enter a value so that the attribute is available for selection. The attribute is displayed at the bottom right of your symbol after your selection and can be positioned with the mouse afterwards.

Description

Identifier

Name

The selected attribute then appears at the bottom right of the icon. You can *change the position* and edit the text field by double-clicking it, if it is not an assignment. The changes are applied to the attributes of the object. The placement also gets updated, if the attributes are changed in the attribute tab. Assigned persons, organizational units and diagrams are displayed as text, with several assignments in an attribute separated by a comma.
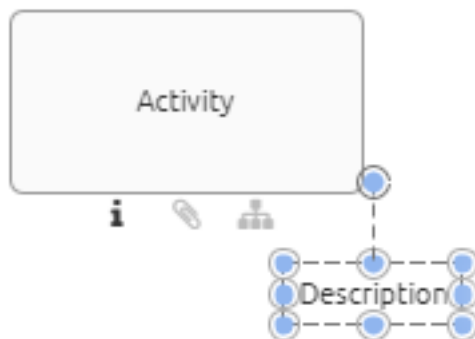
Note: Please note that tables you have used in the description attribute cannot be displayed in the diagram. In addition, the table border of a description is not rendered on mouseover pop-up when you move the mouse pointer over the *i-symbol* on the activity in the diagram.

5.1.12 How can I set the access restriction for objects?

You can use the *Restricted access* attribute to limit an object for specific users. To do this, you must edit the attributes of the object *in the diagram* or *in the catalog*. This has an effect if the object exists in the catalog. Only members of the selected user group, registered users and *governance participants* can see the object in the catalog or reuse it via the suggestion list. The restrictions apply regardless of the user role, so administrators can also be excluded. If the object attribute *Restricted access* is empty, there is no access restriction.

> **Warning:** Reuses of the catalog entries with access restriction are still visible in diagrams. This applies to the entire entry with all attributes, like attachments. Moreover, this data is for example also part of a diagram version in the archive.

5.1.13 How can I create entities while editing Attributes?

Organizational units, documents and norms can be created while editing the attributes during diagram creation. To do this, the attribute field has to be selected accordingly. After the first symbol is entered, suggestions for existing entities are shown.

Attributes
Activity

Name

Example Activity 1

Identifier

Description

B *I* U S ▦▾ ≔ ≡ ⬮ T̶ₓ

Keywords

Decomposition

Variants

Allocation model

Im a document

╋ CREATE "d" (Document)

d

If a new entity needs to be created, the desired name can be entered into the attribute field and the correct "create"-option can be chosen.
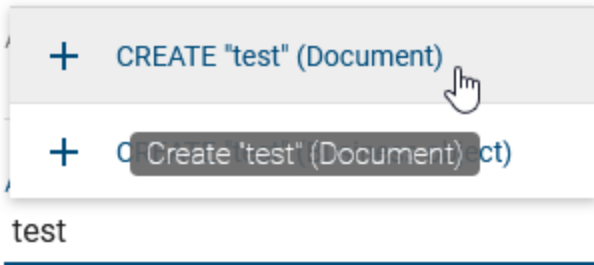
After entity creation, a notification will inform you about the addition of a new catalog entry.
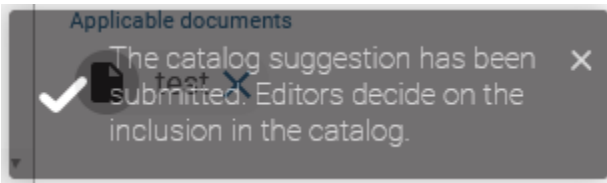
5.1.14 What are System attributes?

System attributes give the user in the Public Workspace information about the creator, the person who last edited the diagram and the associated timestamps of the diagram. These attributes are generated by the system and users can only read them.

You have selected a diagram. Now open the *Details* by clicking on the button in the menu bar.

If you scroll down the tab, you can see the associated information by clicking on the heading *System Attributes*.

▼ System Attributes

Created by

Administrator

Created date

5/31/17 3:58 PM

Last modified by

Max Mustermann

Last modified date

5/31/17 4:30 PM

Note: When a diagram is published by the workflow engine, the system attribute "Last Modified By" of the diagram is set to "Workflow" in all stages.

5.2 Occurrences

5.2.1 How can I view the occurrences of symbols in diagrams?

If you have opened a diagram and want to display the occurrences of a symbol, proceed as follows.

Right-click the desired symbol. A context menu opens. Select *View occurrences*. This opens a bar on the right-hand side, listing all uses of this object.
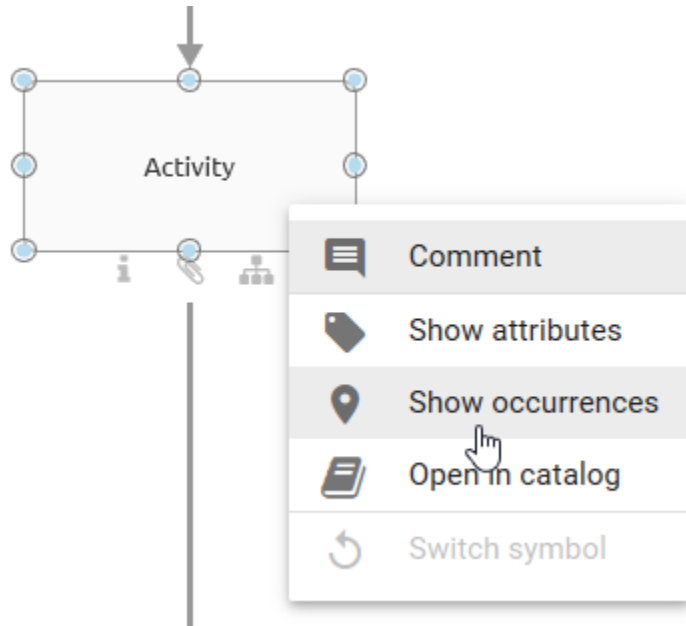
By clicking on a list entry, you can then navigate to another diagram in which the object is reused, or display the occurrences in the current diagram.

Optionally you can also navigate from the *attribute bar* to the *occurrences* of an object by clicking on the button represented by a pin. The selected button is visually highlighted.
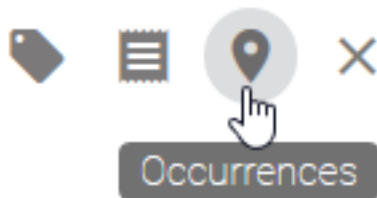
Note: Depending on the stage in which you are looking at the diagram, the context menu varies.

5.3 Profile

5.3.1 How can I display the profile?

The *Profile* is available in all stages for all diagrams and for objects contained in diagrams. To view the Profile, follow these steps:

Select a diagram in the repository for which you want to view the profile. To display the profile of a symbol, select it in the opened diagram.

Open the *Details* in the menu bar, indicated by an "i". Then, the details bar is opened, in which you can click on *Profile* to display the profile of the diagram or the selected symbol.
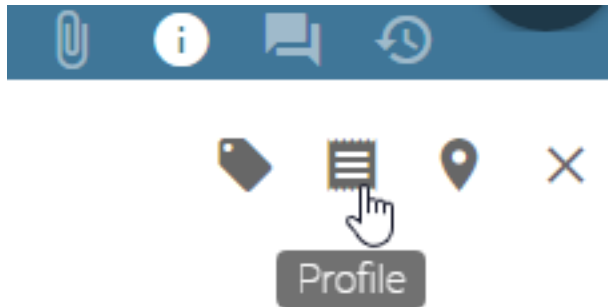
Default diagram profile: The profile view shows in default the name and the description of the diagram, responsible and contributing roles, used IT systems, documents and business objects, as well as the risks and controls in a diagram. In addition, information about the responsible person as well as release and expiry dates are visible.

Default activity profile: The profile view of an activity contains the following information in default, if these are directly related to the selected activity in the diagram or are maintained in the attribute bar: name and description of the symbol, responsible and contribution roles, IT systems, inputs, outputs, risks and key performance indicators.

Objects, such as roles, may be shown as chips in the profile. Click on this chip to navigate to the profile of the corresponding object. If the profile is not available for this object, you are navigated to its attributes or otherwise to occurrences. Click on the arrow in the details bar to return to the original view.

Click on the *Close*-button to exit the profile view.
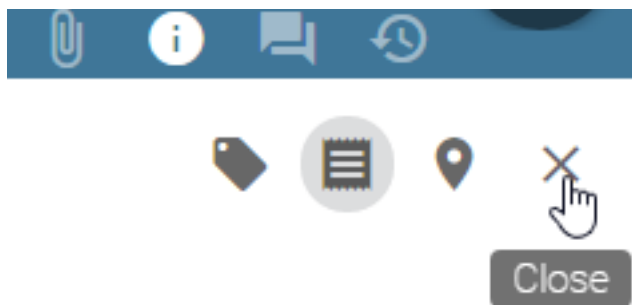
Note: Please note that the button *Profile* in the details bar can only be selected if this was *specified in administration*. Furthermore, *the content of the profile* may vary depending on the configuration, object type and diagram type.

5.3.2 How can I access attachments of entries in the profile?

If a profile lists objects that have maintained a file or URL in the *attribute "Attachment (URL)"*, they can be accessed directly.

Navigate to the *Profile* of a diagram or object. If the chip of an entry contains a paperclip, an attachment is maintained. Clicking on the paperclip opens the attachment directly or instead a selection menu if several attachments are available.
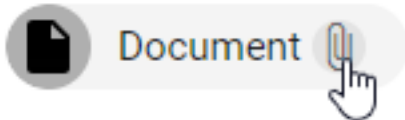
MULTILINGUALISM

The following language settings are distinguished for the multilingualism of the application.

User interface language (UI language): This is the language of the user interface, which depends on your browser settings. The user interface includes all displayed dialogs, the administration interface, buttons, context menus and the displayed names of diagram, object and attribute types. The UI language depends on the first language in the list of preferred languages in the respective browser settings. Depending on the browser these lists can be found at different places:

- *Internet Explorer*: Section "Preferred Language" in the Windows language settings
- *Mozilla Firefox*: Section "Choose your preferred language for displaying pages" in the browser language settings
- *Google Chrome*: Section "Order languages based on your preference" in the browser language settings

Content language: The content language refers to the representation of the contents of diagrams and attribute values. The content in the content language is displayed in the diagram itself, in the attribute bar, in reports and in the catalog in the form of catalog entries. The content language is set *in the application* and can therefore differ from the UI language.

Alternative language: The *alternative language* can be set to display another language if an attribute has not been maintained in the content language. In this case, the attribute in alternative language and its abbreviation are displayed in brackets.

User language: The user language defines the language in which you receive your e-mails from the application. This language is set per user in the *administration*.

The following sections describe the content language and the maintenance of translations in more detail.

6.1 What languages are displayed for the content language and the alternative language when logging in for the first time?

When you first log in to BIC Process Design, the default language set by the administrator at that time is displayed as the content language by default. The alternative language will correspond to the language of your browser (UI language).

You have the option to *adjust* your content language and alternative language at any time.

Hint: If your browser language is not activated as a language in the administration, the alternative language corresponds to the default language.

6.2 How do I change the content language and the alternative language?

You have the possibility to select a content language as well as an alternative language to display your diagrams, which have been set in the *administration*. Attributes of the diagrams and symbols are displayed according to the content language. The alternative language can be set to display a different language in the public workspace, the preview or the publication stage, if an attribute or label is not maintained in the content language. In this case the attribute and the abbreviation are displayed in the alternative language and in brackets. The labels of symbols remain empty if they were not maintained in the selected content language or the selected alternative language. In the editing mode of a diagram only values that have been maintained for the selected content language are displayed within the details of an object or the diagram.

In order to select a content language open the context menu in the explorer. Select *Set content language* in the context menu. A list of available content languages appears. Select a language, such as English.
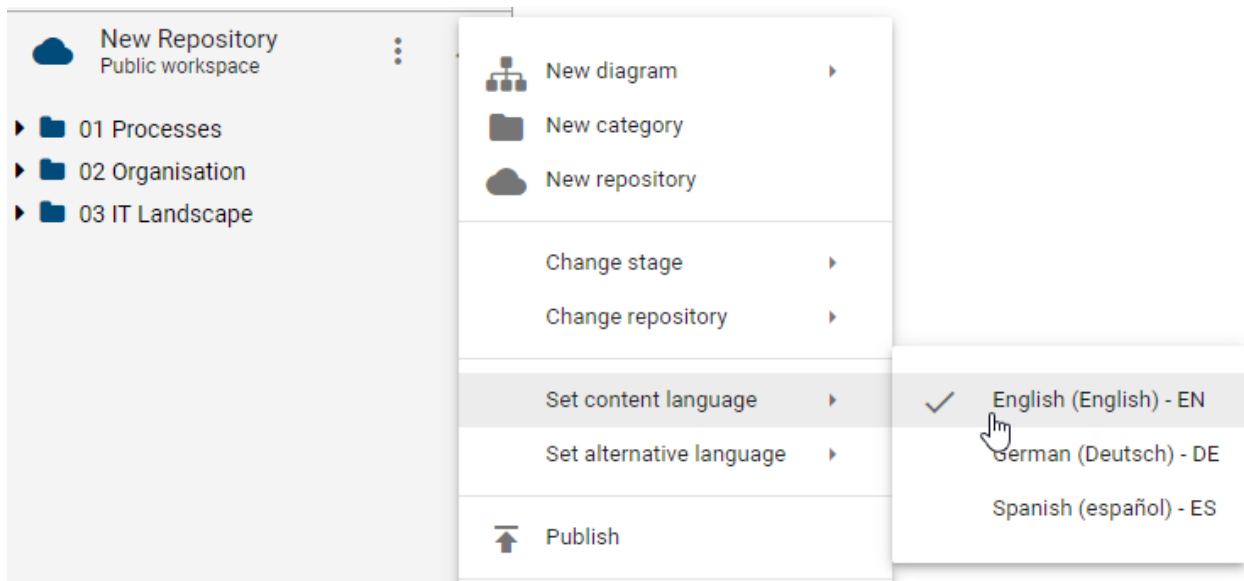
In the context menu you can as well select *Set alternative language*. A list of available alternative languages appears. Select a language, such as *German*.
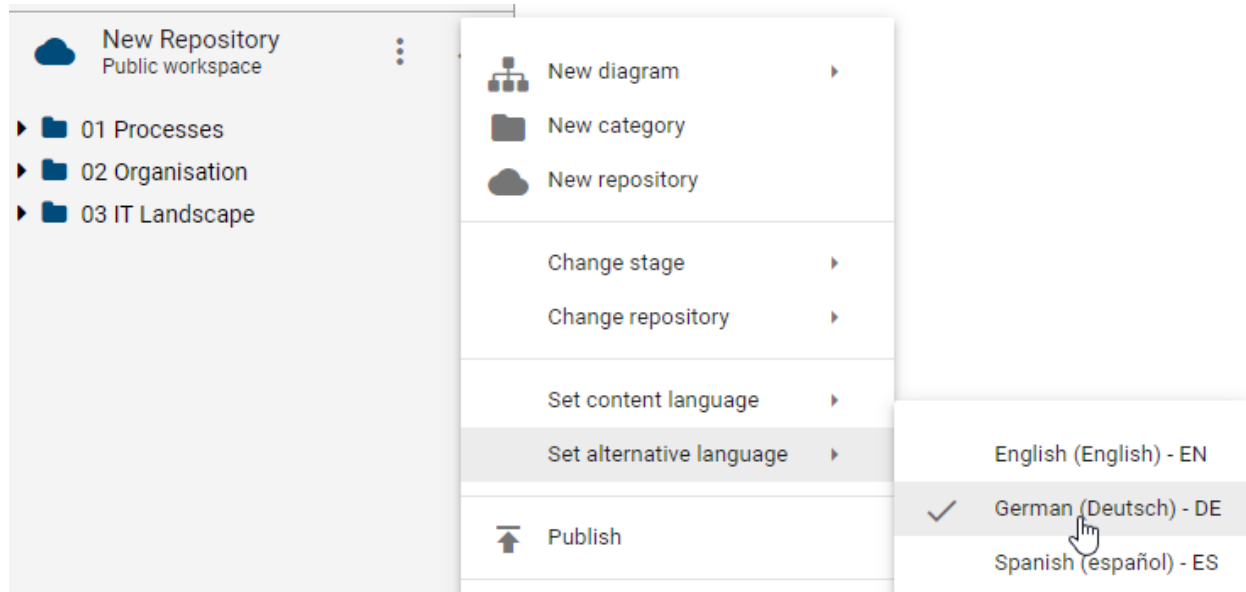
Now you have set your content and alternative language. Your changes will also be visible in the upper right corner next to your user name. Here you will find the abbreviations for the content and the alternative language in brackets (e.g. (EN/DE)).
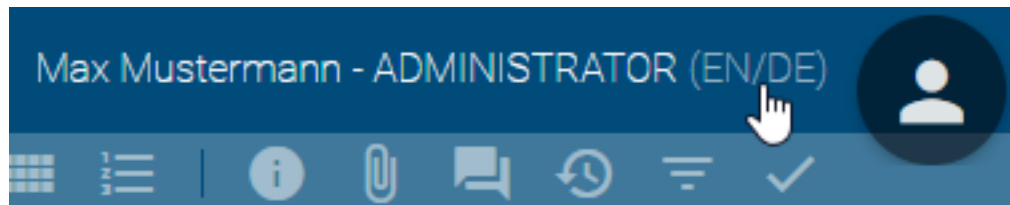
Optionally, with a click on (EN/DE) you can easily change the content and alternative language, so that the application is displayed in (DE/EN).

Note: If you change an attribute which has only been maintained in the alternative language, this change only applies to the content language. If you only use one language, the content language equals the alternative language. Note, that some attributes are independent of the content and alternative language such as the e-mail address.

Tip: For a clear view, which gives you a conclusion about which values have been maintained for which language, use the translation mode in the *diagram* or *catalog*.

6.3 How do I maintain translations of contents?

You have several options to translate the content of your diagram: within the catalog itself, the catalog translation mode, the diagram view or the diagram translation mode. In general, translations of existing symbols that have already been *accepted in the catalog* should be edited in the catalog. If you maintain those changes directly in the diagram, new catalog entries are created. The alternative way is to use the "Diagram translation mode" or the "Catalog translation mode".

Direct change within the catalog or diagram view: Select the content language you want to maintain the translation for. As alternative language, set the one for which the attributes have already been maintained. Go to the *diagram*

---

or to the *catalog*. If you are already in the respective view, you can swap the set content and alternative language by clicking on the display at the top right next to your user name. Now you can edit the corresponding *attributes* or press the *Details* symbol in the catalog to go to the *details view*.
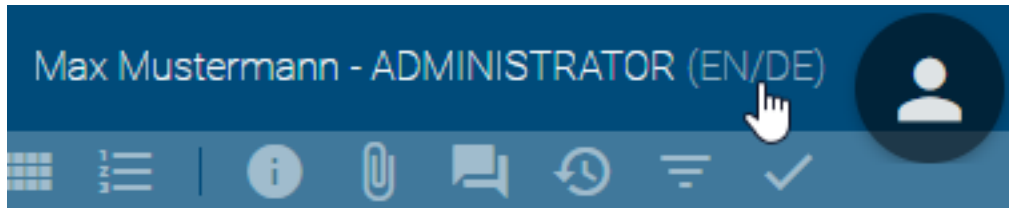
While editing, you can only see values of attributes that have been maintained for the selected *content language*. Therefore you can directly see if an attribute is not translated yet. If the diagram or catalog entry *is checked in*, you will also see values that have been maintained in the alternative language but not in the content language. This is marked by the abbreviation of the alternative language.

The attributes are maintained in the content language (EN):
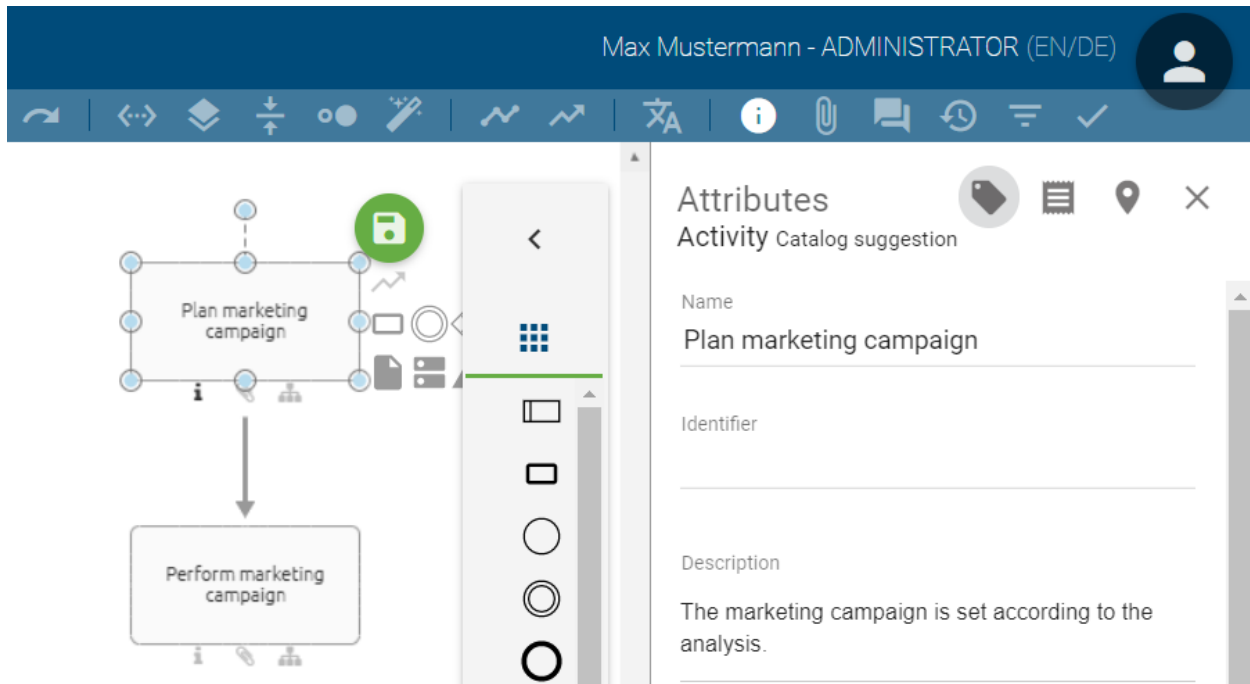
The attributes are not maintained in the content language (DE):
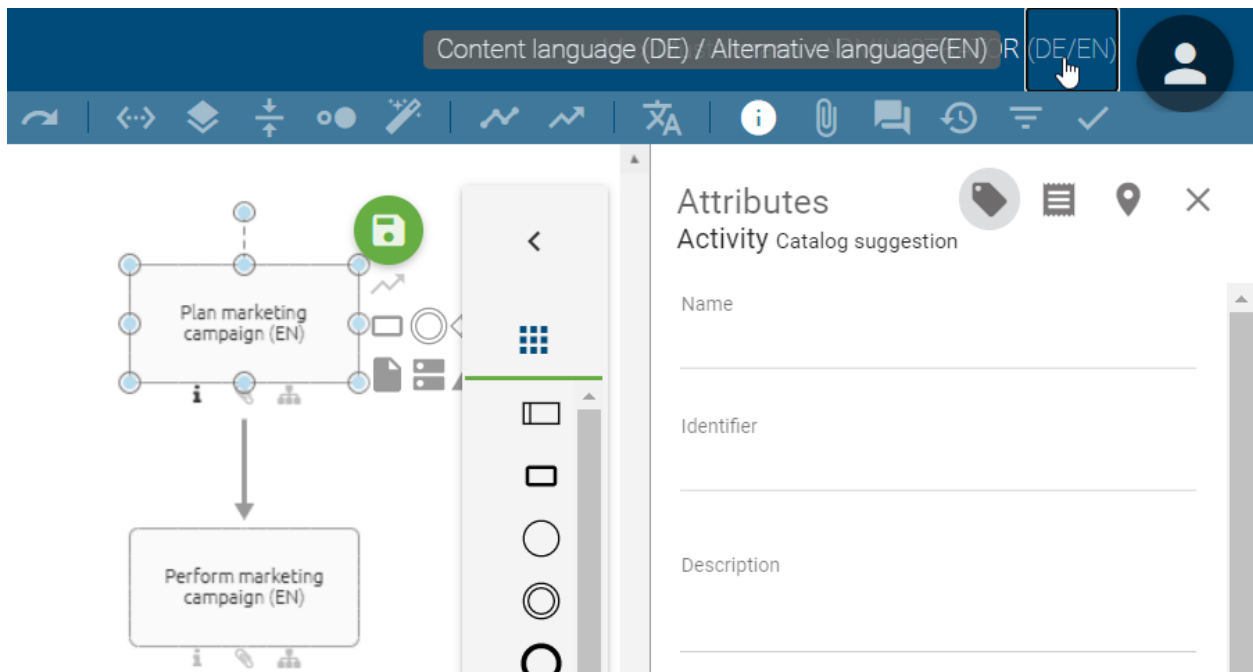
Translation mode for diagrams and catalog entries: Navigate to the corresponding diagram, check it out and open the *diagram translation mode*. Or navigate to the catalog, select an object type filter and open the *catalog translation mode*. There you can translate several symbols in several content languages in the same view. For more information, please go to the corresponding chapters.

Tip: Due to a ease of use and better clarity, it is recommended to use the translation mode when it comes maintain multiple languages.

6.3.1 How do I translate a diagram?

When modeling diagrams, modelers can directly maintain the corresponding translation for the content languages selected in the administration. The navigation to the catalog is not necessary.

Check out the diagram, save it if necessary and click on *Diagram translation* in the menu bar. All elements of the diagram that have at least one maintained text attribute are listed here. In addition to the diagram itself, all modeled symbols can therefore be included. Several versions of the same catalog entry are therefore listed several times. The diagram is always the first list entry. The objects are then grouped alphabetically according to their object types. They are furthermore displayed in alphabetical order in its group, depending on their object names in the current content language. If the name attribute is not maintained, you see the object type instead.
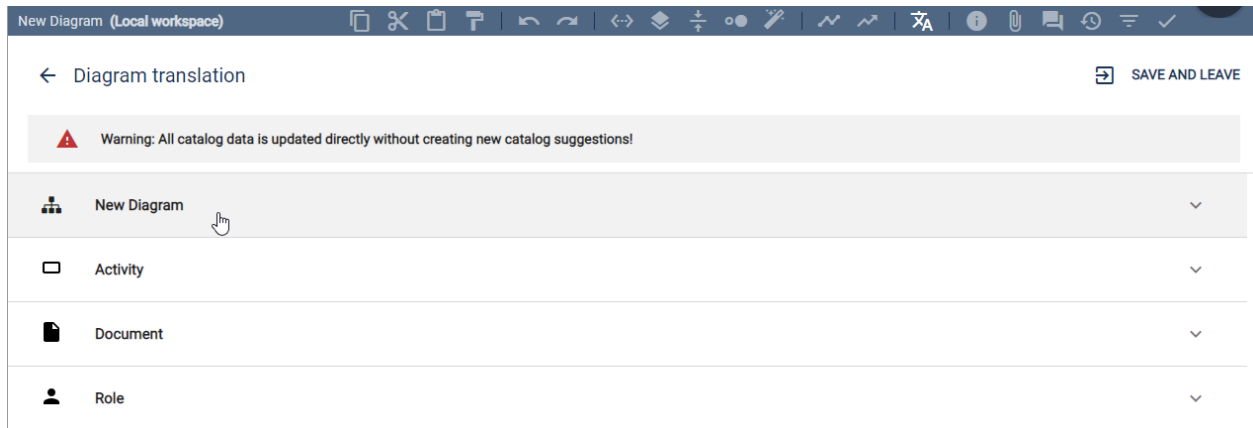
Click on a list entry to expand it and see all text attributes of this entry in the available content languages. The attribute type names are displayed in the UI language. You can now maintain your translations in the text fields.
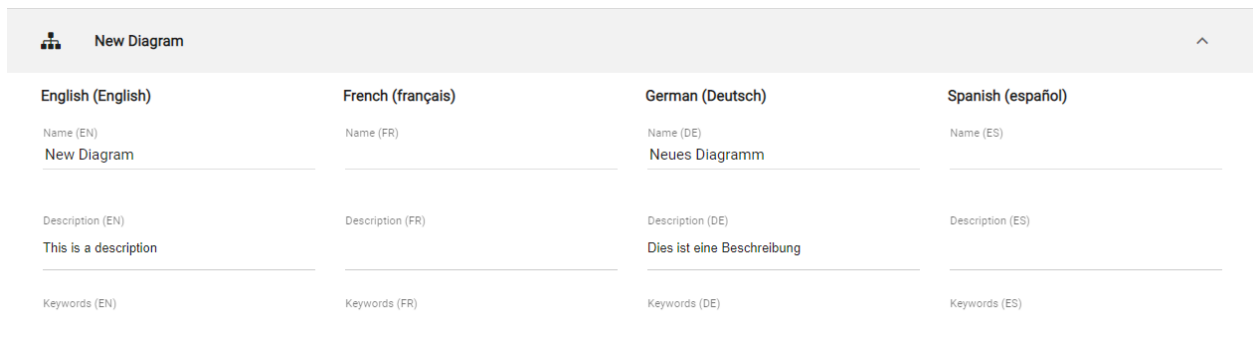
Click on *Save and leave* to save your changes and to return to the diagram view. Note the warning message on top of the list. As administrator and editor, your changes will be saved for all catalog entries without creating new entries, even if they are already accepted in the catalog. If you are an Author, your list will be filtered, so that the accepted catalog data used in the diagram is not listed and cannot be changed here.
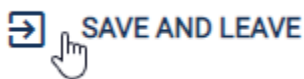
If you do want to take over your changes, click on *Diagram translation* or go *Back to process view* and select *Discard changes* in the dialog.

Note: While translating a diagram, accessing the modeling options or opening the sidebar via the menu bar is not

possible.

DIAGRAM VIEWS

7.1 Which alternative views on diagrams are available?

In addition to the diagram view, you can view the matrix and the process execution. The RACI matrix and process execution are available in the Public workspace, the Preview, and in the Publication. Both views are limited to the diagram types *BPMN* and EPC. The matrix also exists for VCD process overviews.

Note: Please note that the different views for diagrams are not available in edit mode.

7.1.1 Diagram

To display the *Diagram*, proceed as follows:

This view is initially set. It presents the diagram or the modeling. Depending on the workspace, you can, for example, edit the diagram or check it out. The graphical representation of the diagrams differs by the *diagram versions* for the editor (local and public workspace) and the preview and publication stages, which give modelers additional operation functions.

If the diagram view is not opened, you can display it by clicking on *Diagram* in the menu bar.
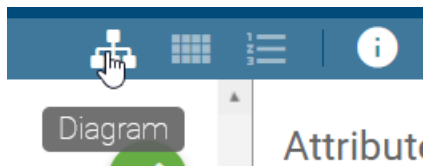
7.1.2 Matrix

To display the *Matrix*, follow these steps:

Select an VCD, EPC or BPMN diagram in the repository for which you want to view the RACI Matrix. Click the *Matrix*-button in the menu bar.
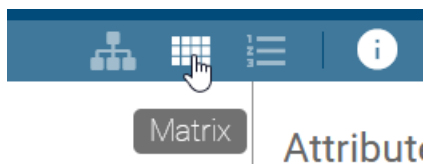
Depending on the process flow, the matrix displays all the activities of a diagram in rows. All actors, such as roles and responsible applications (e.g. pools), form the columns in alphabetical order. In the matrix cells, the association type between the activity and the resource is displayed (R-Responsible, I-Informed, C-Consulted, A-Accountable). The following columns are about inputs, outputs, applications and risks of the diagram. You can see an alphabetical list of the objects, that are associated with an activity, in each cell. Click on an entry to display its details. If the entry has an attachment, you can see a paperclip icon in the chip. By clicking on this paperclip, attachments can be accessed directly. See the *profile* for a more detailed description.

Matrix

Activities / Actors	IT-System 1	Role 1	Role 2	Role 3	Role 4	Input	Output	Application	Risk
Activity 1		R							⚠ Risk 1
Activity 2	R		A					▤ IT-System 1	
Activity 3				C		▪ Input 1	▪ Output 1		
Activity 4					I		▪ Output 2		

Click on the *Diagram*-button to return to the diagram view.

7.1.3 Process execution

To display the *Process Execution*, follow these steps:

Select an EPC or BPMN diagram in the repository for which you want to view the "To Do"-List. Click the *Process execution*-button in the menu bar.
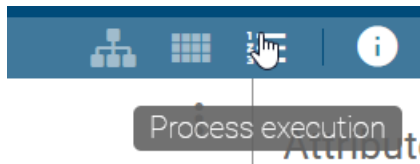
Based on your modeling in the Diagram view, you can now see the process execution in the middle of your screen. The activities, decisions and related events are listed here.

The activities represent the individual tasks in the process. Below each activity name, the responsible resource is displayed if it has been modeled in the diagram. When you select an activity, the attribute view on the right-hand side provides more information about this task.

The process flow means the sequence of activities and is initially determined by the software for the user. The decisions corresponding to the gateways in the diagram are made based on the probability of the process flow. The most probable process flow is automatically displayed. You can maintain the *Probability* for each activity in its attributes. If no probability has been maintained, the position of the node is decisive instead. Loops are not considered for automatic decisions. Overall, only the sequence flow forms the basis for the path.

The process flow is thus divided by the decisions into segments or sections, in which successive activities are placed. The activities are consecutively numbered starting with 1. The segments displayed depend on the decisions made. Each segment has its own background color for the activity numbers. The respective segment can also be identified by its heading, which includes the name of the gateway and the sequence of the selected path in the process. If a gateway was not named there, only the name of the sequence is displayed. If the sequence also has no name, the heading corresponds to the name of the subsequent activity. In front of the heading you can always see the route icon belonging to the segment and you can make a decision yourself that has an impact on the subsequent tasks. The icon therefore signals a gateway in the process flow, whereby a distinction is made between the following gateways:

- *Exclusive or:* By clicking on the route icon, a menu shows you the possible decisions. Here you can just select one alternative, which adjusts the list of subsequent activities. The section of an "Or" decision ends with the last activity before the next gateway or the end of the process. The background color of the numbering does not change within this segment.
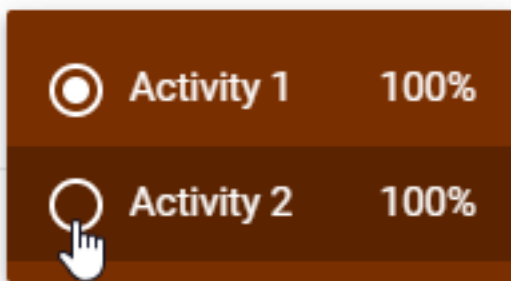
- *Inclusive or:* In this case, one route of the process is listed initially. With a click on the route icon you can select another route or several routes at the same time. A path then corresponds to a subsegment. Within this segment, each subsegment has the same background color of the numbering in different transparency levels.

- *Parallel:* In the case of an "And" gateway, all parallel paths of the process are listed one below the other, since all paths are executed. A path corresponds to a subsegment. Within this segment, each subsegment has the same background color of numbering in different levels of transparency. The numbering is continuous across all segments and subsegments. Nevertheless, a decision can be made here by clicking on the route icon to highlight individual segments.
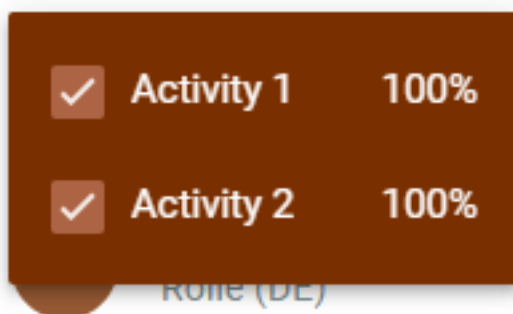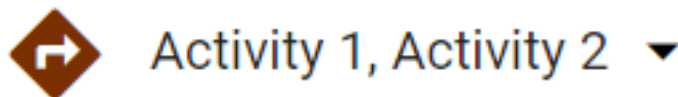
Note: Multiple starting points for the path are also displayed as an exclusive gateway above all activities.

Overall, the numbering is continuous across all segments and subsegments. The end of the process flow is marked by the corresponding event and by a flag instead of the numbering. If there is no end event but an activity, the end of the process is inserted virtually and named accordingly, as shown below.
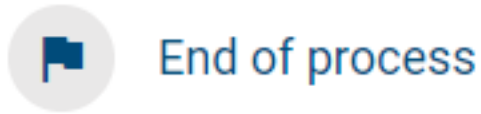
Click on the *Diagram*-button to return to the diagram view. Further options to work with the process execution are described in the *following chapter*.

7.2 How can I perform process execution tasks?

To obtain an overview of the progress of a running process instance, you can mark the individual activities as completed in the process execution. This is only visible to you.

Navigate to the *Process execution* of the desired BPMN or EPC diagram. There you can see the activities to be executed and make decisions at gateways. For a detailed description please refer to the *associated chapter*.
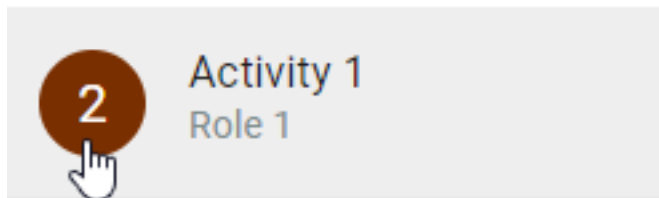
If you have completed a task, you can mark it by clicking on the number in the corresponding activity. There you will then see a check mark for the status "Done".
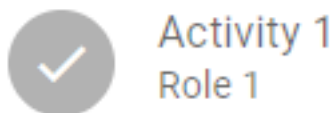
The tasks can be marked as completed in any order. To reset the status of the tasks, for example, after a complete run of the process, navigate to the context menu *More Options* and choose *Reset*.
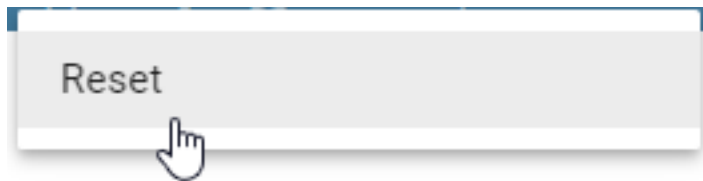
In addition, when a decision is changed in the process, the status of all subsequent and possibly already completed tasks is reset.

Tip: For an optimal work with process execution and extensive functionalities in dealing with process instances we refer to our product BIC Process Execution! You can find the corresponding documentation *here*.

7.3 How can I filter the RACI matrix?

Open the RACI matrix of an EPC or BPMN diagram. You can display the filter in the right sidebar by clicking on *Filter* in the menu bar. There, all columns of the matrix are listed as filter options. This includes actors, such as roles and applications. The filters are initially activated.

Click on one or more "eye" symbols to hide the corresponding columns of the matrix. Only activities or rows that are not related to the filtered column, are displayed. The hidden entries are grayed out in the filter tab and the icon is crossed out.

Similarly, you can remove the filters to display the entire matrix. Activities that are not related to an actor are now displayed again.

7.4 How can I hide entities in the diagram?

In the diagram view, you can open the *Filter* bar via the menu bar.

In the sidebar, all symbol types that are modeled in the open diagram are listed in alphabetical order. Initially, each list entry is selected, which implies that modeled objects of all object types are visible.
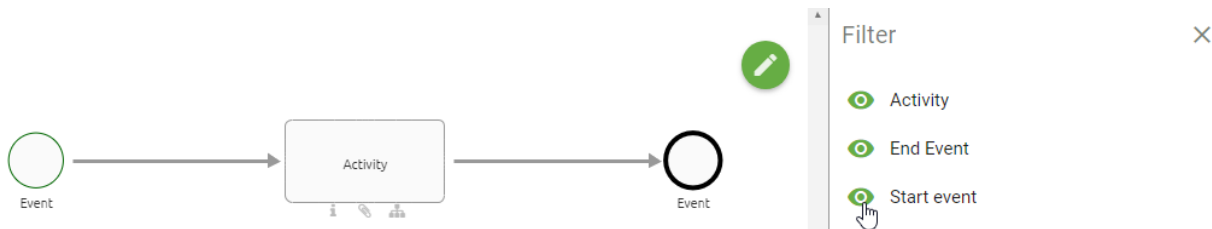
To hide a specific symbol type and its connections to other entities (or display it transparently), click on the corresponding entry in the list. The entry is then grayed out and the "eye" icon is crossed out.
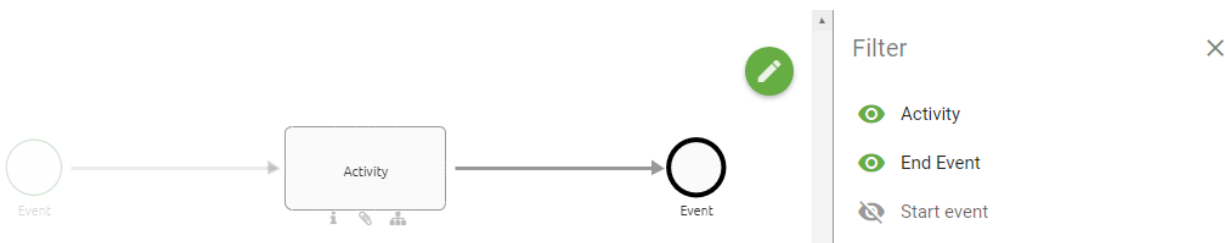
Similarly, you can also hide or show several symbol types at the same time with another click.

After closing the filter bar, all symbols are automatically displayed. As long as you have opened the diagram, the filter selection remains. Therefore, the previously made selection becomes active again when the filter bar is opened again without changing the diagram.

Note the difference between symbol types and object types. This becomes clear, for example, in activities in process overviews (VCD). Two activities can represent different symbol types, such as "Value chain" and "Value chain start". In addition, a *pool in BPMN diagrams* is not available as a filter.

Note: For a high-performance modeling with an open filter bar, changed filter options are taken over when saving.

DOCUMENTS

8.1 How can I view documents contained in a diagram?

Open a diagram from the Explorer. Then, display the document view by selecting *Documents* from the menu bar.
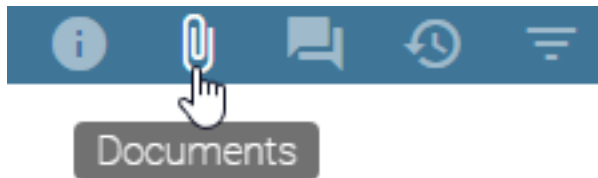
The document view shows all documents contained in the diagram.
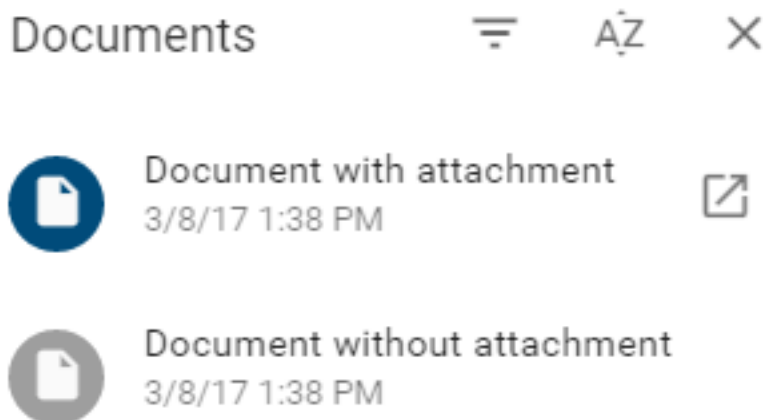
8.2 How can I sort the document view?

In the opened document view, click on the button *Switch alphabetical order* to sort the documents alphabetically.
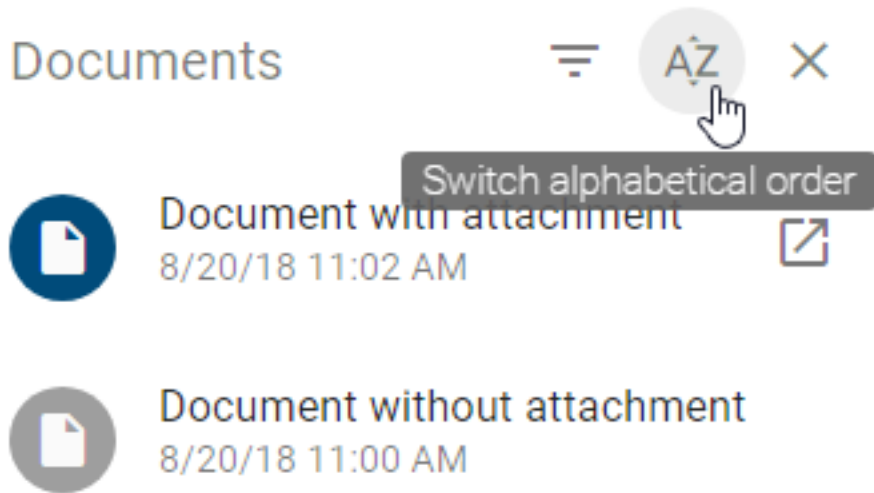
8.3 How can I view documents with attachments?

In the opened document view, click the button *Show only documents with attachments*.
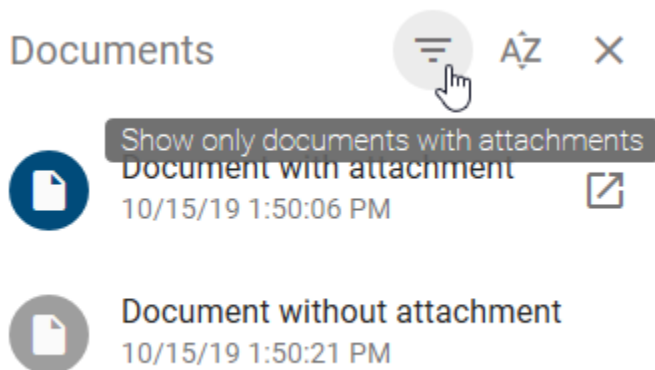
Documents without attachments are not longer displayed in the list. To undo the selection, click the button *Show only documents with attachments* again.

8.4 How can I open attachments of documents?

In the *document view*, a *document with an attachment* can be identified by an additional button *Show links* on the right side of the entry.
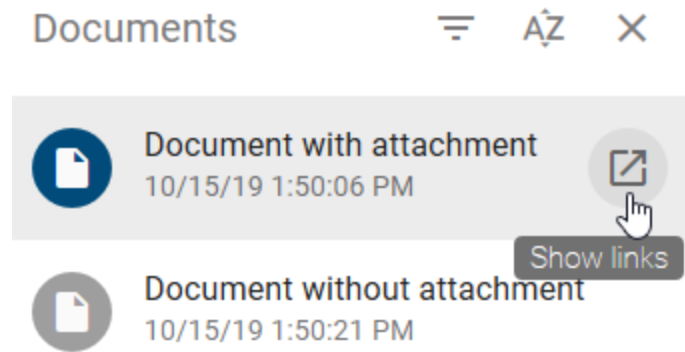
Select the desired entry to open a list of attachments belonging to the document. You can also use the button *Show links* to do this. A click on a list entry starts the download of the corresponding attachment resp. the attachment opens. If there is only one attachment at the document, it is directly opened without showing the selection list.

Attachments of documents can also be displayed or accessed via chips in the *profile* or in the *matrix* view.

8.5 How can I link documents and folders on local and network drives in BIC Process Design?

You have the option to link documents and folders on local and network drives online. This allows you, for example, to add PDF files to documents in BIC Process Design or to access their containing folder directly.

In general, web applications must not access local or network resources, because browsers protect them. In order to be able to follow a mentioned link without being restricted by the security settings of a browser, the individual browsers must be adapted differently. An example solution could be the use of a plug in. These adjustments for the different browsers are briefly explained below and links are provided for helpful information on how to proceed. These links to third parties and their contents may change and are not monitored by us. If a link is no longer accessible, we would be pleased to receive your assistance. Alternatively you have the possibility to inform yourself, for example directly from the browser provider.

Internet Explorer: In order to access network drives, you must add the URL of BIC Process Design to "Trusted Sites". The procedure is explained on this support site in chapter "Add or remove a site from a security zone".

Google Chrome: To use links to documents, you can install a plug-in for Google Chrome. The "Unsandboxed plugin access" is explained on this website. Possible plug-in-downloads for reaching local links can be found here.

Microsoft Edge: On Microsoft Edge you can use the same plug-ins as in Google Chrome, which can be found here.

Mozilla Firefox: For file links in the Mozilla Firefox browser, you must change the configuration for Firefox. These refer to the user.js file, which is explained on this website.

In the following example it will be shown how such a link can than be embedded. For this example the browser Google Chrome has been used with a plug in for local links.

Navigate to the attribute *Attachment (URL)* of the object where you want to add the link. There enter the prefix *file://* followed by the path of the desired document or folder. Then confirm your entry by clicking Enter. A possible link to the following document F:\ExampleFolder\ExampleDocument.docx on a network drive might look like this: file://F:/ExampleFolder/ExampleDocument.docx. As an alternative you could also access the folder directly like this: file://F:/ExampleFolder.

Attributes

Document Catalog item

Name

Document

Identifier

Description

Keywords

Decomposition

Attachment (URL)

file://F:/ExampleFolder ✏

file://F:/ExampleFolder/ExampleDo... ✏

⬆

A download of the respecting document will be started via the browser, as soon as the respecting link has been selected. In case you are accessing a folder, a new tab will open. There you can see and access every content of that folder.

Index of F:\ExampleFolder\

📁 [parent directory]

Name	Size	Date Modified
📄 ExampleFile.docx	11.6 kB	1/25/21, 7:38:16 PM

Note: In general, we support the access on local and network drives. But please note that it depends on your browser, your browser settings, and the used browser extensions whether our improvements work for your configuration. These settings and extensions are not part of the scope of our feature and their functionality can thus not be ensured by our

services.

Tip: You can additionally *attach files to objects*. Please note that a reader must have at least read rights to a network drive in order to retrieve a document there.

COMMENTS

9.1 How can I comment on a diagram?

In the opened diagram, you will find the *Comment*-button in the menu bar. By clicking on the *Comment*-button, the comment bar opens on the right-hand side. Alternatively, you can also open the *Comments* via the context menu. This appears by a right-click in the editor. In the comment bar you can now see comments, if already submitted.

Click on the *green plus* to add a new comment. An input field will open where you can enter your comment.
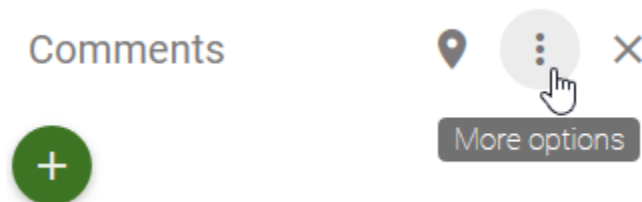
Click *Send* and your comment will appear in the comment bar. In addition the submission date and the name of the commentator will be displayed.

If you do not want to submit a comment, cancel the process with the *ESC*-key or a click on the comment bar outside the comment field.

Some users receive an e-mail notification of the new comment. This is described for each stage below:

- **Local workspace:** No notification is sent here. Modelers can see comments in this stage, if they have checked out the diagram, and use them for example as a to-do list.

- **Public Workspace**: A notification is sent to the *Author* and to users involved in the conversation.

- **Preview**: A notification is sent to the *Examiner* and to users involved in the conversation.

- **Publication**: A notification is sent to the user or user group mentioned in the attribute *Responsible* and to users involved in the conversation.

Note: Please note that you do not receive notifications about your own comments.

Note: Comments are dependent on the area. This is caused by different work statuses and versions in each area. For example, users in the publication can not see comments from the public workspace. Regarding *allocation diagrams* comments can always be seen. It does not matter if you are currently in an allocation diagram or the main diagram.

9.2 How can I comment on an object?

Objects can be commented independently in each version of a diagram. These comments are not diagram overlapping.

Right-click on the object you want to comment on. Select *Comment* in the context menu.

The comment window opens. Here you can see existing comments and *Add a new comment*.

Confirm the entry by clicking on the *Send*-button. The comment will now be visible for other users with access to the current stage.

If you do not want to submit a comment, cancel the process with the *ESC*-key or a click on the comment bar outside the comment field.

Some users receive an e-mail notification of the new comment. This is described for each stage below:

- **Local workspace:** No notification is sent here. Modelers can see comments in this stage, if they have checked out the diagram, and use them for example as a to-do list.

- **Public Workspace**: A notification is sent to the *Author* and to users involved in the conversation.

- **Preview**: A notification is sent to the *Examiner* and to users involved in the conversation.

- **Publication**: A notification is sent to the user or user group mentioned in the attribute *Responsible* and to users involved in the conversation.

Note: Please note that you do not receive notifications about your own comments.

Note: Comments are dependent on the stage. This is caused by different work statuses and versions in each stage. For example, users in the publication can not see comments from the public workspace.

9.3 How do I edit or delete a comment?

Diagram comments:

Open the *comment bar* and navigate to the comment you want to edit or delete. Afterwards, open the context menu of the desired comment.
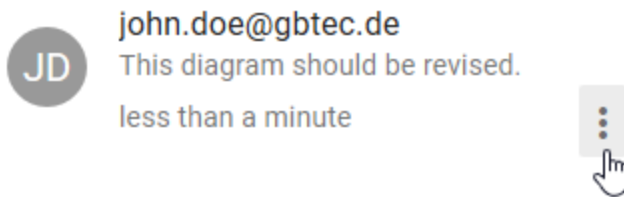
Select the *Edit* or *Delete* entry if you want to edit or delete the comment.

Object comments:

Open the comments by right-clicking on the object and selecting the entry *Comment*.

Navigate to the comment you want to edit or delete. Select one of the appearing icons to *Edit* (pen) or *Delete* (trashcan) the comment.

Note: Administrators and Editors are able to edit or delete all comments. All other user roles can use these features only for their own comments.

9.4 How can I see which objects have already been commented?

You can activate the comment marker in the local and public workspace. Open the comment bar by clicking on the *Comment*-button in the menu bar.

Select the button *Show comments on objects*.

A yellow flag with the number of existing comments appears at an object, if it has already been commented.
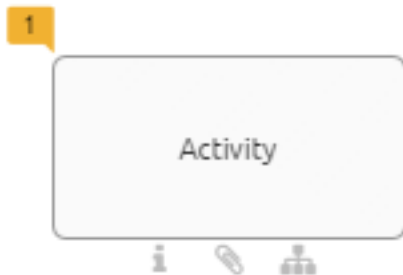
Clicking on a flag displays the corresponding comments of an object.
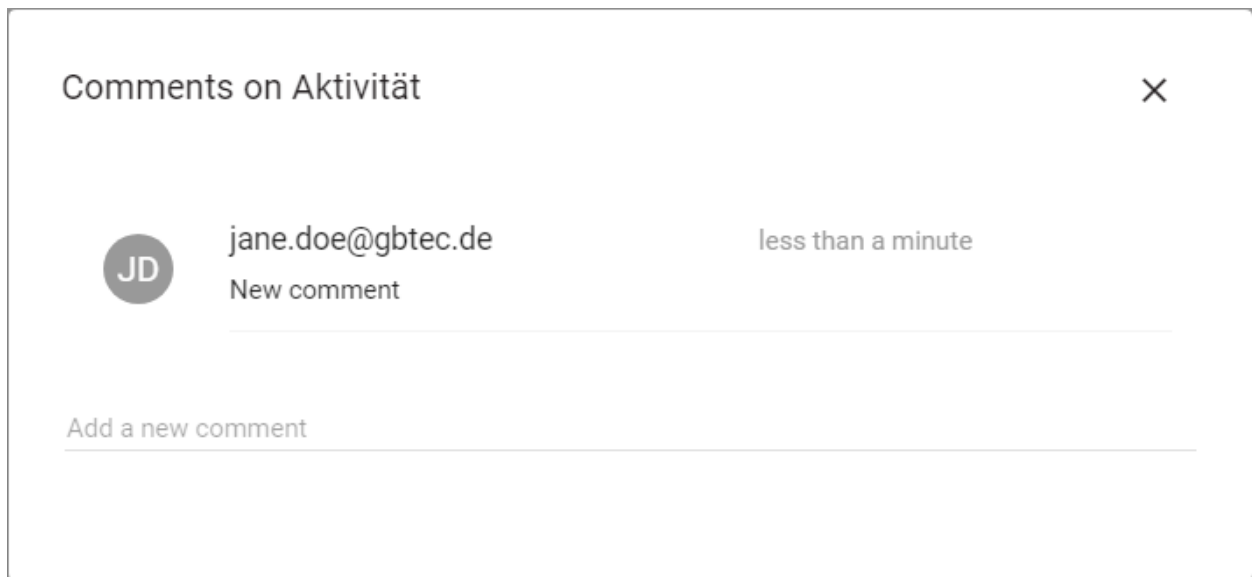
Similarly, the comments can also be hidden.

9.5 How can I delete all comments?

Navigate to the comment bar and open the context menu *More options* by clicking the three overlapping dots.
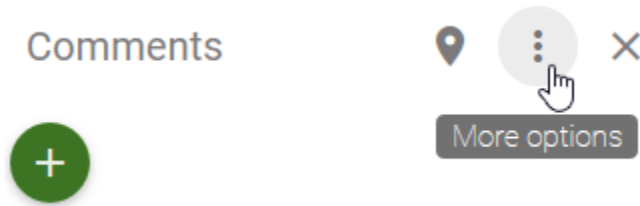
Select the *Delete all comments* option.

Afterwards a safety query appears, which you can confirm by clicking on *Delete comments*. In the displayed diagram **all** diagram and object comments are then deleted.

Note: Since comments are stage-dependent, deleting comments only refers to the currently displayed version of the diagram.

GOVERNANCE

Created, edited, and checked-in diagrams are available in the public workspace. These diagrams are only visible for users with access to this workspace, such as modelers and administrators. A model must be visible in the publication, so that other users, like Readers, are able to see them. This means they have to be published, which starts in the public workspace. The currently displayed version of the diagram is copied to the stages preview and publication using a release workflow. The different *versions of a diagram* are thus formed.

In general, you have two different releases for publishing diagrams: *editorial release* and publication via a *multi-level publication workflow*. By using the editorial release, a diagram is directly published without requiring an explicit approval. The publication via the multi-level release workflow requires confirmation by a responsible person. Optionally, a review by one or more examiners can be required in addition to the responsible, before a diagram becomes visible in the "Publication" stage.

10.1 Diagrams

10.1.1 How can I publish a diagram?

The publication via the multi-level release workflow requires confirmation by a responsible person. Optionally, a review by one or more examiners can be required in addition to the responsible, before a diagram becomes visible in the "Publication" stage.

Users and user groups can be entered in the *attribute "Examiner"*, using their catalog object *person* or *organizational unit*. Per entry, that means per person and per *organizational unit*, only one approval is required in the examine step.

The attribute *Responsible* can only be set uniquely. Therefore, only a single person or organizational unit is eligible. This attribute is a *mandatory attribute* and has to be maintained for the publication.

^ Governance

Author

_____

Examiner

_____

Responsible

👤 John Doe ✕

_____

📅 Valid from
    Valid from ▼
    _____

📅 Valid to
    Valid to ▼
    _____
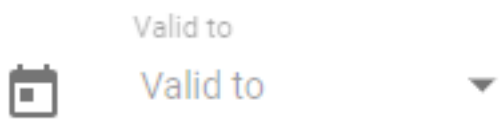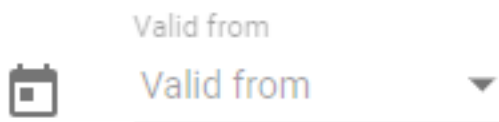
Initiation

To start the publication workflow, you can open the *Versions* in the menu bar and click the button *Publish* next to the Public Workspace heading. Alternatively, you can open the context menu in the explorer and select the entry *Publish*.
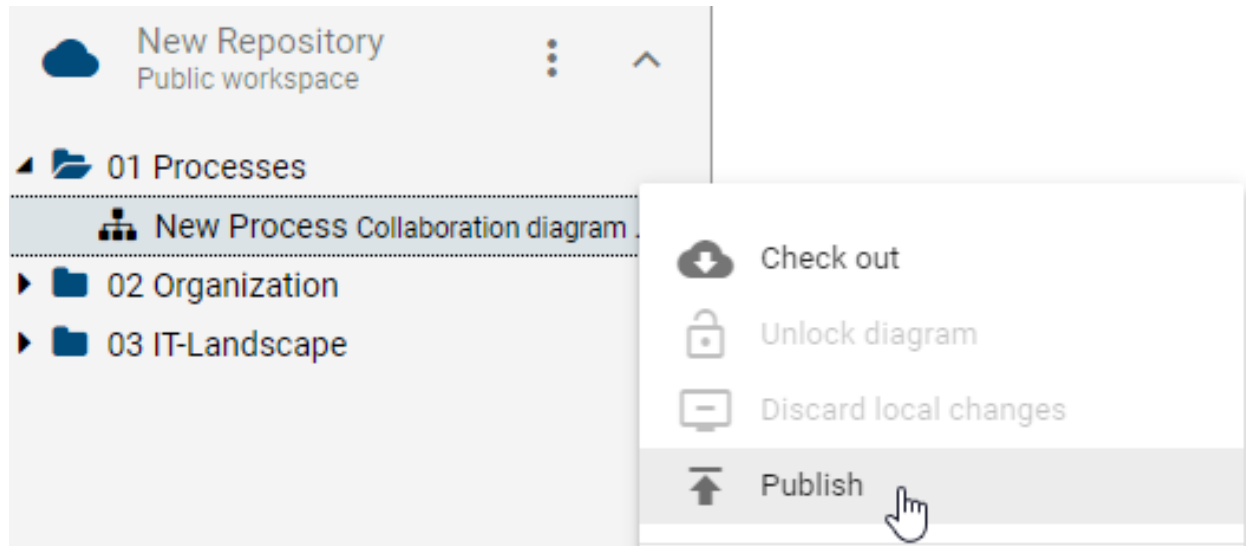
A dialog will open and request to provide a reason for the publication. Type in a reason and click *Publish*. You will then receive a notification in the application that the workflow will be started. If the launch was successful, you will also be notified by a toast. For *various reasons*, however, it is possible that a workflow cannot be started. You will also be informed about this in the application or by e-mail, depending on the reason. The publication always affects the version of the diagram at the time of the workflow start. Changes made to the diagram after initiation are not taken into account. This can lead to differences between the diagram in the public workspace and its version in the preview.

Examine step

The optional examine step is reached if at least one examiner has been set. After the release workflow has been triggered, examiners receive a notification by e-mail and in the application about the pending *examine task*, that can be done in the versions tab.

The examiner can reject or approve the diagram.

- If an examiner rejects the diagram, he must comment his rejection and the diagram will not be published. The initiator receives an e-mail and *Task* about the *Rework* on this diagram instead. Then the publication can be aborted here, or the diagram can be edited and published again by clicking on the entry *Publish* in the versions tab.

- If the examiners approve the diagram, the responsible user or user group is informed by e-mail and requested to check the diagram. To approve the examine step, all registered persons must approve the diagram. Furthermore, only one member of a registered organizational unit or user group must confirm the release.
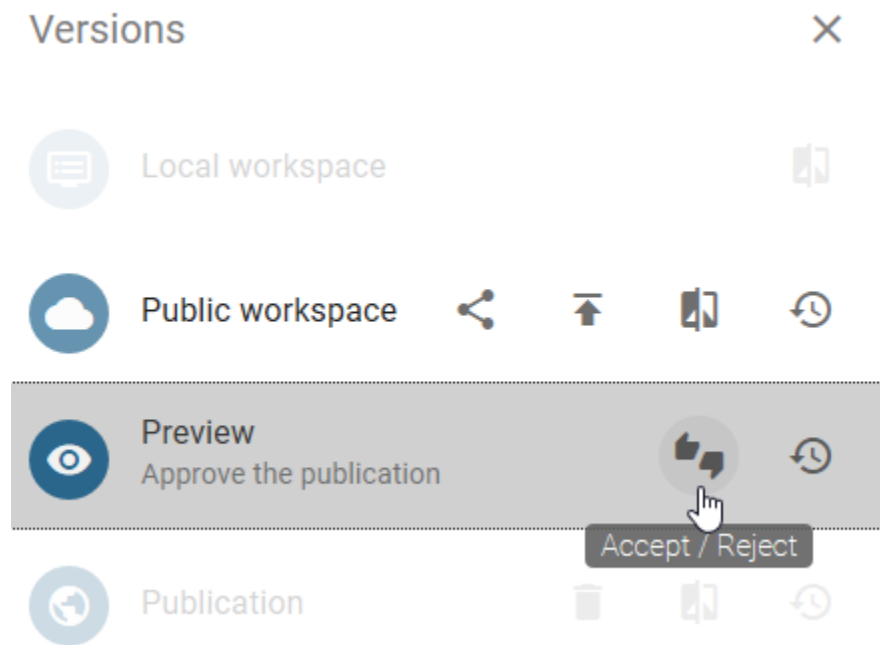
Release step

The responsible user or user group also receives a *task*. The diagram can be approved or rejected. If a user group is entered, the processing of one group member is sufficient.

- If a responsible rejects the release of the diagram, he needs to write a suitable comment. Afterwards the initiator and examiner are informed by task and e-mail that the workflow is terminated.

- If a responsible approves the diagram, for example the author and initiator are informed, the diagram is published (publication), and the publication workflow is terminated.
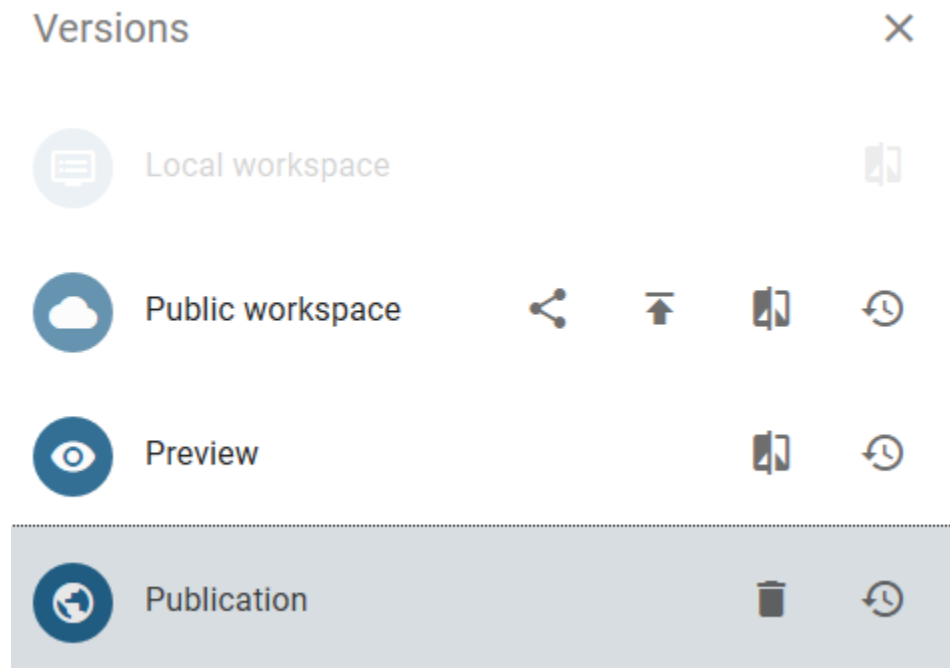
The symbols and catalog entries contained in the diagram and in attributes are also published with the diagram. Catalog entries with an own life cycle are an exception. These are not updated by the diagram publication, but exclusively via the *object publication independent* of this.

Note: The responsible and the examiner have to be assigned at least to the user role "Reviewer", since they require access to the corresponding areas. Also note, that a new workflow can only be started if no publication is already running for the affected diagram.

Note: When the diagram is published by the workflow engine, the system attribute "Last Modified By" of the diagram is set to "Workflow" in all stages.

10.1.2 How can I directly publish a diagram?

In the case of the editorial release, a diagram is published directly without requiring an explicit approval by a responsible person or examiner. This workflow can be started by users with the role *Editor* or *Administrator*.

In order to be able to use the editorial release, the governance attribute *Responsible* has to be maintained. To set a responsible user or user group, you have to ensure that a *person* or *organizational unit* was created in the catalog and filled in the attribute. Please note that the names of the persons must be entered individually in *all languages used* when manually created.

∧ Governance

Author

Examiner

Responsible

👤 John Doe   ✕

📅 Valid from
    Valid from   ▾

📅 Valid to
    Valid to   ▾
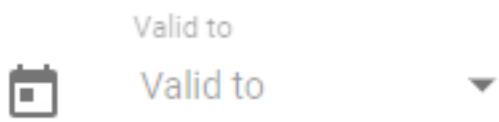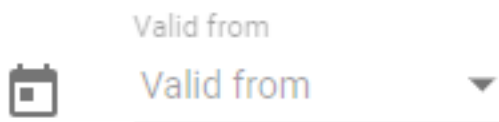
To start the editorial release, you can open the *Versions* in the menu bar and click the button *Publish* next to the public workspace entry. Alternatively, you have the option to open the context menu in the explorer and select the entry *Publish*.
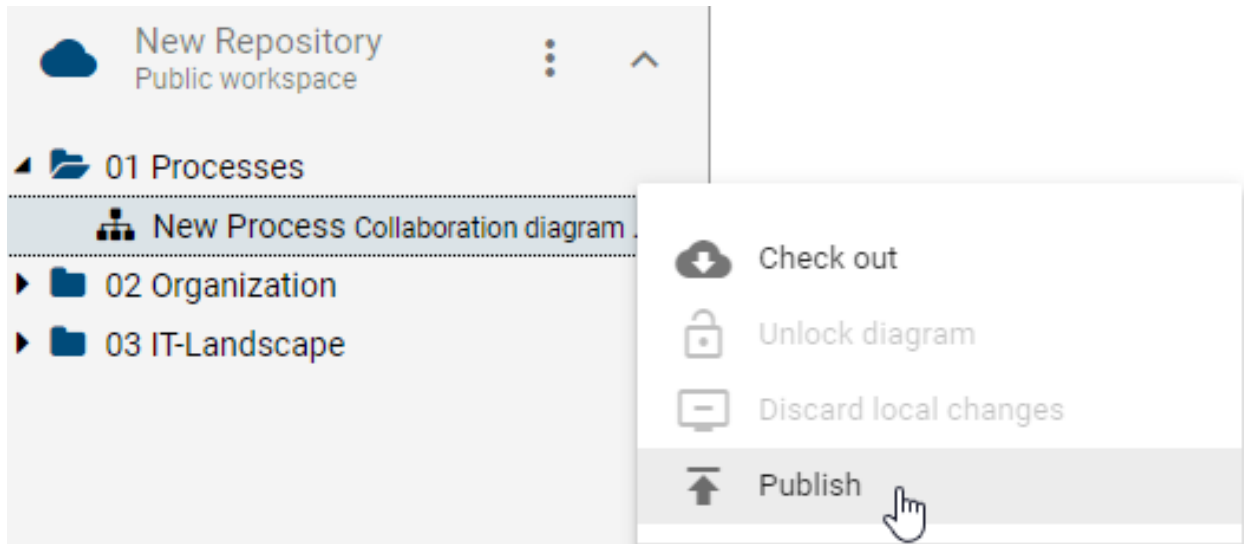
A dialog will open, prompting you to provide a reason for the publication. Type in the reason and confirm the checkbox "This is an editorial release. There will be no further approval requested." below the input field. Click *Publish*. You will then receive a notification in the application that the workflow will be started. If the launch was successful, you will also be notified by a toast. For various reasons, however, it is possible that a *workflow cannot be started*. You will also be notified of this in the application and by e-mail.

The diagram is now available in preview and in publication stage, without the need for acceptance by the responsible person. The responsible person and *other participants* receive an *optional e-mail* as informing them that the diagram has been published.

Note: Editorial release can be deactivated so that each publication must pass through the defined approval and release steps. If the checkbox is selected during publishing, the application will inform you that editorial publishing is not possible. To ensure governance, editorial release cannot be disabled by administrators. Please contact our Customer Support for further information.

Note: When the diagram is published by the workflow engine, the system attribute "Last Modified By" of the diagram is set to "Workflow" in all stages.

10.1.3 How do I see which diagrams have already been published?

In Explorer, open the context menu by clicking the *context menu*-button from the repository.
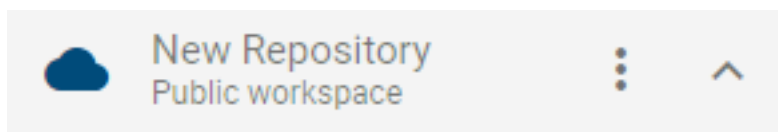
In the context menu, select *Change stage*. A list of available stages appears.
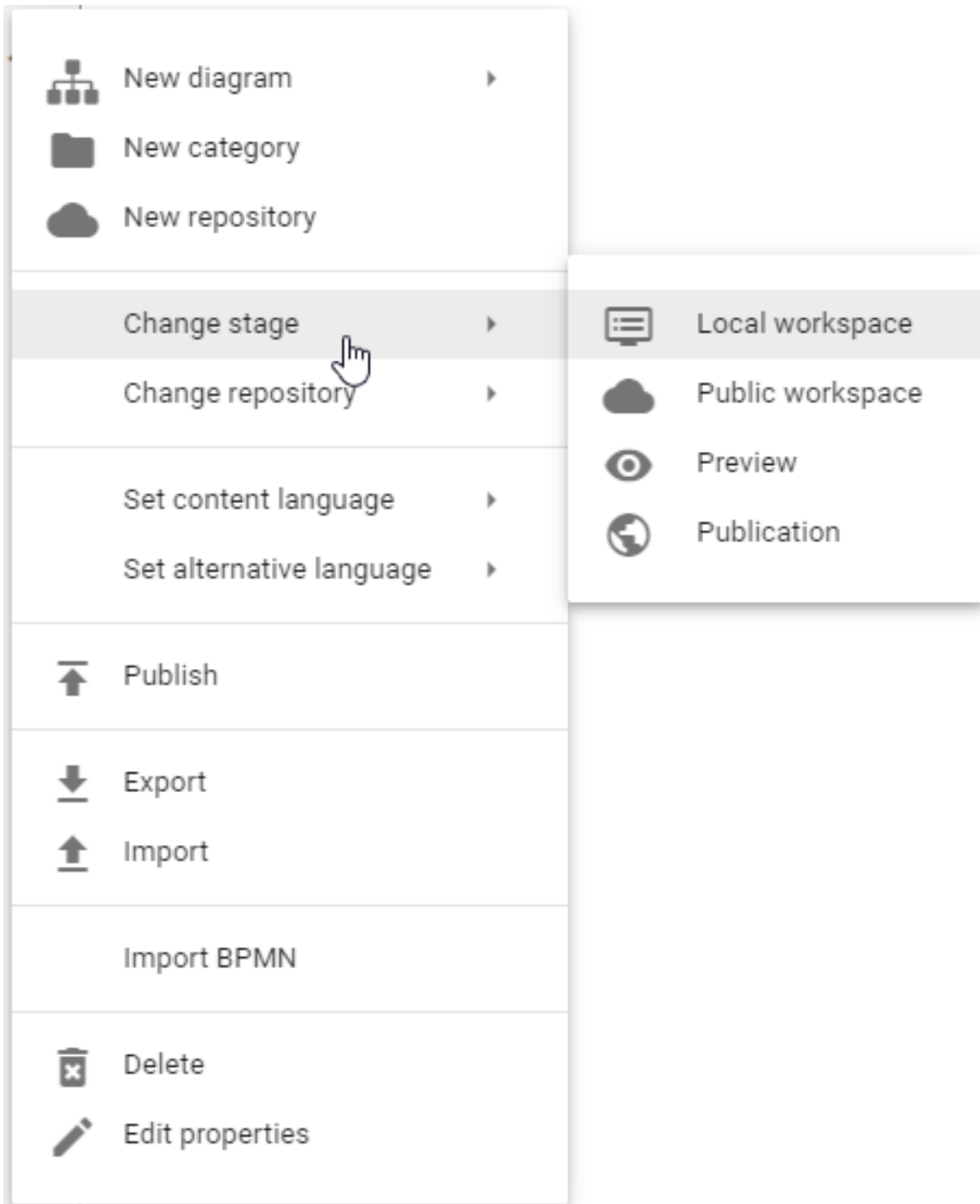
Select the stage *Publication*. Now you can see the selected stage right under the name of the repository. All diagrams and categories shown in the explorer have already been published.
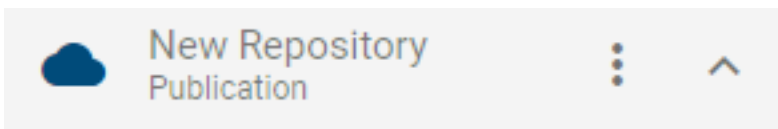
Note: The same procedure applies to *diagram versions* in *Preview (in Release)*.

10.1.4 How do I see if a diagram has been published?

Change to a diagram whose published version you want to check. Afterwards click the *Versions*-button to go to the versions view.

If the diagram has already been published, you can select the entry *Publication*. Afterwards you see the published version of the diagram.
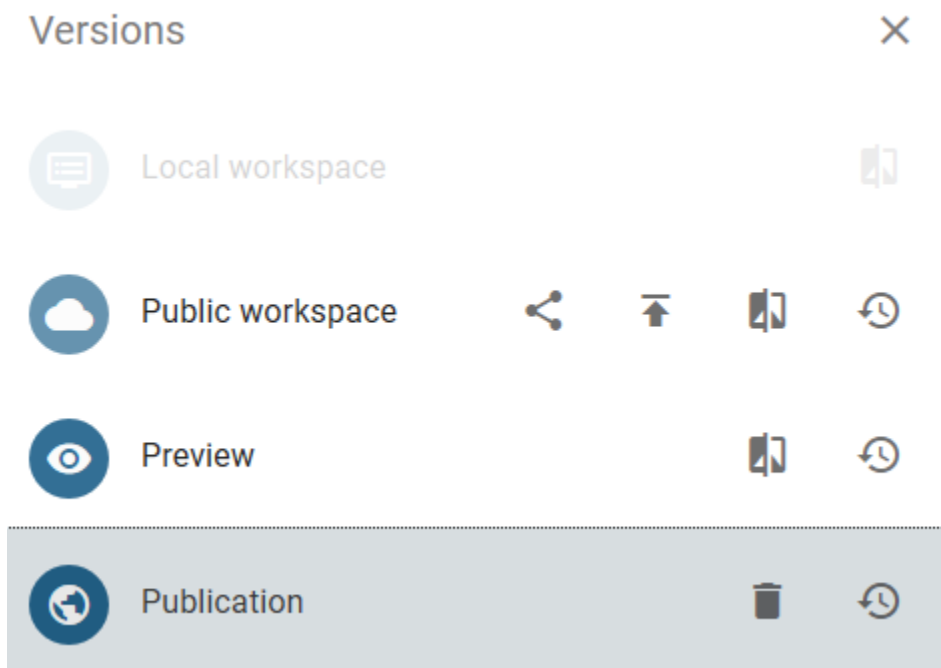
Note: The same procedure applies to diagram versions in *Preview (in Release)*.

10.1.5 How can I remove a diagram from the publication?

If you want to remove already published diagrams from the publication, you can use the "Depublish" function. The integrated workflow engine ensures a multi-level check. This workflow can be started by users of the role *Author*, *Editor* or *Administrator*.

Initiation

Open the diagram you want to remove from the publication and click on the *Versions*-button in the menu bar. Choose the paper basket to the right of "Publication" in order to depublish the selected diagram.
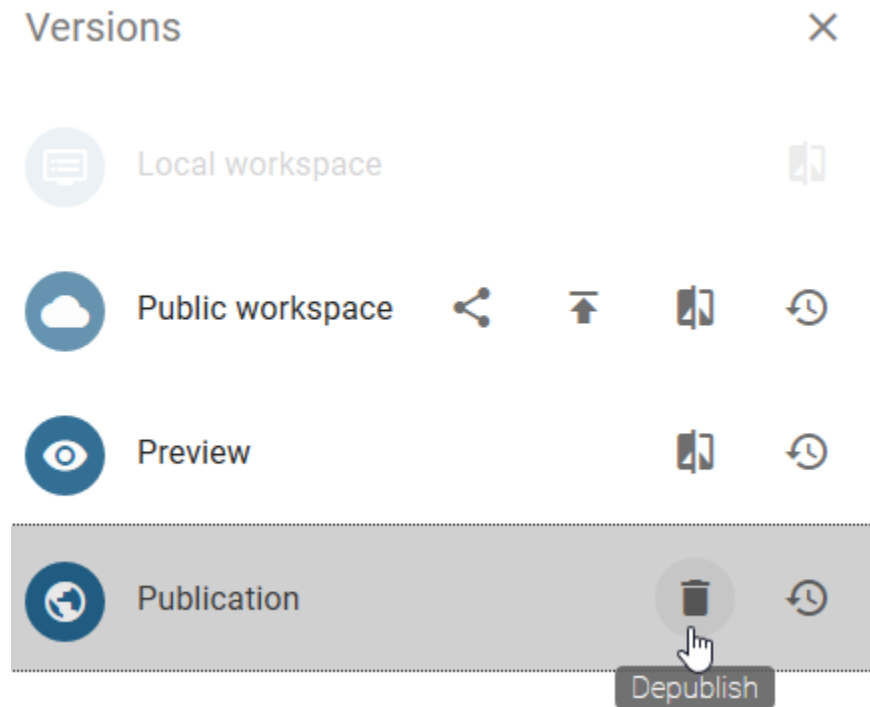
Specify a reason for the depublication and confirm the process by clicking the *Depublish* button.

Depublish diagram Process landscape

Please give a reason for depublishing this diagram!

0 / 1024

☐ This is an editorial change. There will be no further approval requested.

CANCEL   DEPUBLISH

Release step

The user or user group maintained as responsible receives a *task* or a *group task* in the system as well as by e-mail and can arrange the final depublication.

- If a responsible rejects the depublication of the diagram, he needs to write a suitable comment. Afterwards the initiator is informed by a task and an e-mail that the workflow is terminated.

- If a responsible approves the depublication, e.g. the initiator is informed by e-mail, the diagram is removed from publication, and the workflow is finished.

Catalog entries without an own responsible person and which are only used in this diagram, are removed from catalog by depublication of the diagram. Entities with an own lifecycle can be depublished using a *special workflow*.

10.1.6 How can I directly depublish a diagram?

With this editorial change, a diagram that has already been published is directly removed from the publication without explicit approval by a responsible person. This workflow can be started by users of the role *Editor* or *Administrator*.

Open the diagram you want to remove from the publication and click on the *Versions*-button in the menu bar. Select the paper basket to the right of "Publication" in order to depublish the selected diagram.
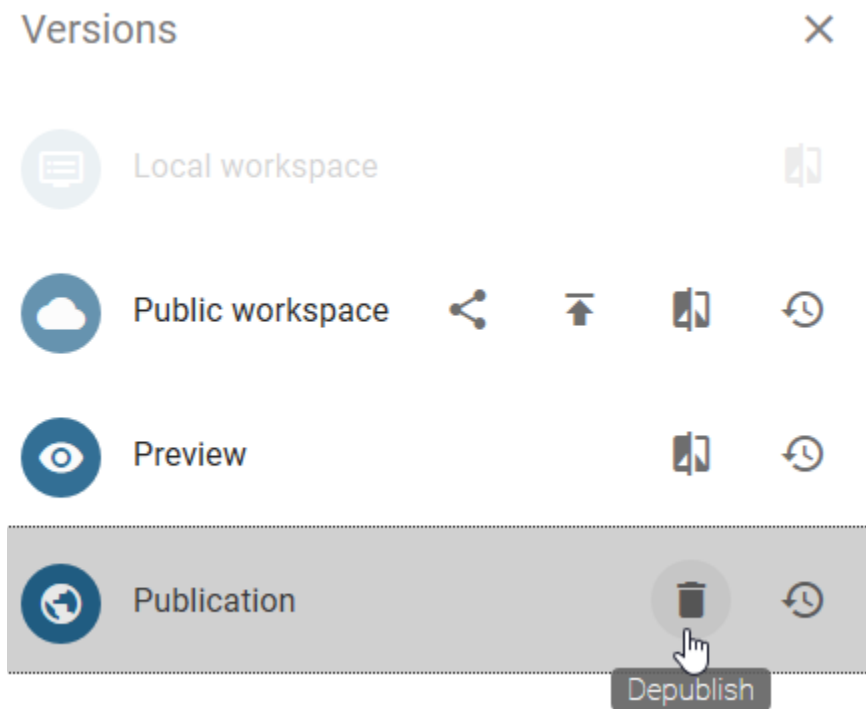
Enter a reason for depublication in the text field and activate the checkbox of the editorial change. Confirm the operation by clicking on *Depublish*. *Some participants* are optionally notified of this depublication by *e-mail optionally.*

Depublish diagram Process landscape

Please give a reason for depublishing this diagram!

0 / 1024

☐ This is an editorial change. There will be no further approval requested.

CANCEL   DEPUBLISH

Note: Editorial release can be deactivated so that each depublication must pass through the defined release steps. If the checkbox is selected during publishing, the application will inform you that editorial publishing is not possible. To ensure governance, editorial release cannot be disabled by administrators. Please contact our Customer Support for further information.

10.1.7 How can I publish multiple diagrams at the same time?

For the simultaneous publication of several diagrams, there are the options to publish a category or a repository. All diagrams and subcategories contained in the category or in the repository are published, that means for each individual diagram, a publication workflow is initiated.

To do this, navigate to the context menu of the corresponding category in the Explorer or the repository and click on *Publish*. The procedure is illustrated here using a category.
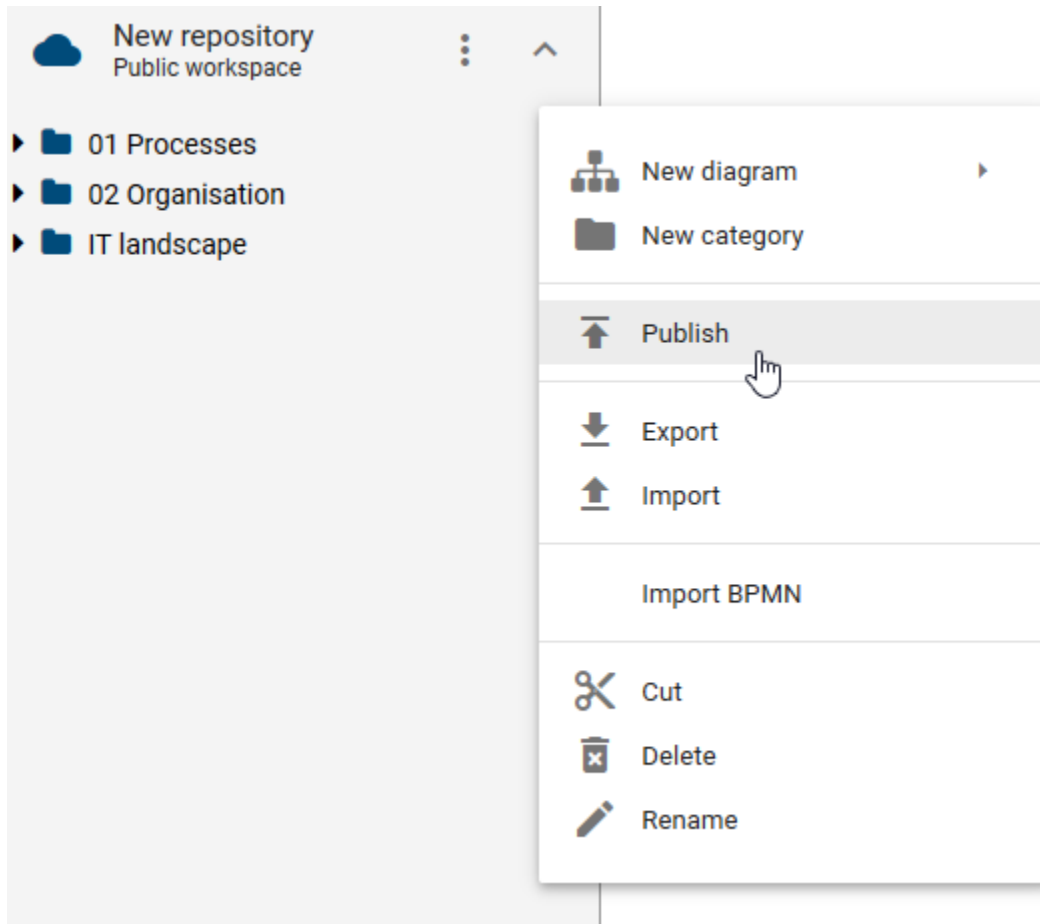
A dialog will open, prompting you to provide a reason for the publication.

Publication: Type in the reason and click *Publish*. This functionality is available to the user roles "Editor" and "Administrator".

Publish category 01 Processes

Please give a reason for publishing this category!

Publication|

11 / 1024

☐ This is an editorial change. There will be no further approval requested.

CANCEL   **PUBLISH**

Editorial release: Type in the reason and confirm the checkbox "This is an editorial release. There will be no further approval requested." below the input field. Click *Publish*. This functionality is available to users of "Editor" and "Administrator" roles.

Publish category 01 Processes

Please give a reason for publishing this category!

Publication

11 / 1024

✅ This is an editorial change. There will be no further approval requested.

CANCEL   PUBLISH

You will then receive a notification in the application that the workflow will be started. If the launch was successful, you will also be notified by a toast. *For various reasons*, it is possible that individual workflows cannot be started. You will also be notified about this in the application and by e-mail. However, this does not affect the publication of the remaining diagrams.

10.2 Catalog entries

10.2.1 How can I publish a catalog entry?

If an object is published via the multilevel release workflow, at least one review is necessary. This is always done by the responsible person. Optionally, a review by one or more examiners can be required. Only after successful verification the changed object becomes visible in the "Publication" stage. The requirements for publishing a catalog entry are explained in more detail in this *section*.

Initiation

In the catalog, navigate to the accepted entry you want to publish and click the *Publish* button of the catalog entry.

Then enter a reason for publication and click *Publish*.

The registered examiners and the responsible are then informed about the initiation and they can carry out their examine and release steps. The time of the workflow start determines the version of the catalog entry to be published. Changes made to the object after initiation are not taken into account. This can lead to differences between the catalog entry in the public workspace and its version in the preview.

If you receive an error message for initiating the workflow at this point, you will find the *possible reasons* for this here.

Examine and release step

The optional examine step is achieved if at least one *examiner* is set. After the release workflow has been triggered, the responsible examiners receive a notification by e-mail and in the application about the outstanding review task.
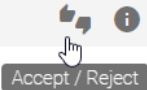
Responsible persons or organizational units are informed by e-mail or notification in the application of the pending release step after workflow initiation or after the accepted examine step.

By clicking on the notification, users can navigate to *their tasks* and can see the task here or in their *group tasks*. The new task is displayed there and can be edited. In the following, the rejection or approval of publication in the catalog by the examiner and the responsible is described as an alternative.

Use the option *change stage* to navigate to the *Preview* and open the catalog. Entries that have not yet been approved are highlighted in red and italic. You can also use *Only show suggested items* to *filter* these entries. Hold the mouse over the catalog entry you want to approve or reject. The button *Accept or reject an entry* appears for the entries for which you have a pending task. Now you can accept or reject the publication after clicking on the corresponding button in the appearing dialog.

- If the publication is rejected, the respective person must set an appropriate comment and the catalog entry will not be published. The initiator is informed by e-mail and the workflow is terminated.

- After approval in the examine step, the responsible is requested to perform a release check by e-mail and task. All persons registered as examiners must approve the publication. Furthermore, only the release of one member of a registered organizational unit or user group is necessary.

- If the responsible person or a member of the organizational unit responsible approves the publication, for example the author and initiator will be informed by e-mail, the catalog entry will be published (publication) and the release workflow will be completed. In all stages, the affected catalog entry is now accepted (black).

Note: Only after publication of the catalog entry, the changes are applied to all diagrams in preview and publication in which this object is modeled. Catalog entries, that have its own responsible, are not updated using diagram publication.

Note: Please note the hints when publishing catalog entries with *word file attachments*.

10.2.2 How can I directly publish a catalog entry?

In editorial release, a catalog entry is published directly, without explicit release confirmation by a responsible person or examiner. This workflow can be started by users of the role *Editor* or *Administrator*. Some prerequisites for publishing a catalog entry are explained in this *section*.

In the catalog of the public workspace, navigate to the entry you want to publish and click the *Publish* button.
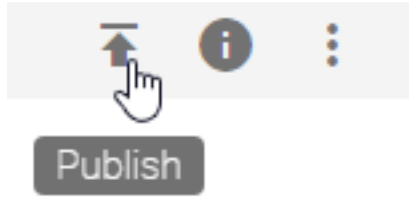
Enter a reason for publication in the provided text field and activate the checkbox "This is an editorial change. There will be no further approval requested." below the input field. Confirm by clicking *Publish*.

You will then receive a notification about the workflow start in the application. The catalog entry is now available in the preview and in the publication stage, without the approval of examiners or the responsible. The initiator and other *workflow participants* receive the information by e-mail that the catalog entry has been published.

If you receive an error message for initiating the workflow instead, you will find the *possible reasons* for this here.

Note: Editorial release can be deactivated so that each publication must pass through the defined approval and release steps. If the checkbox is selected during publication, the application will inform you that editorial publication is not possible. To ensure governance, editorial release cannot be disabled by administrators. Please contact our Customer Support for further information.

Note: Please note the hints when publishing catalog entries with *word file attachments*.

10.2.3 How can I remove a catalog entry from the publication?

If you want to remove a catalog entry from the publication, you can use the "Depublication" function. The integrated workflow engine ensures a confirmation step. Users of the roles *Editor* or *Administrator* can start this workflow.

Initiation

Open the catalog in the "Publication" stage and navigate to the catalog entry you want to depublish. Click on the context menu of the entry and select *Depublish*.
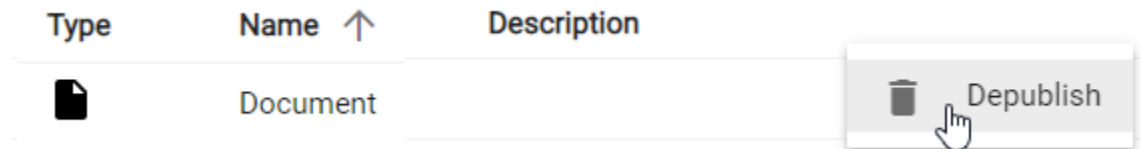
Then enter a reason for the depublication and click *Depublish*.
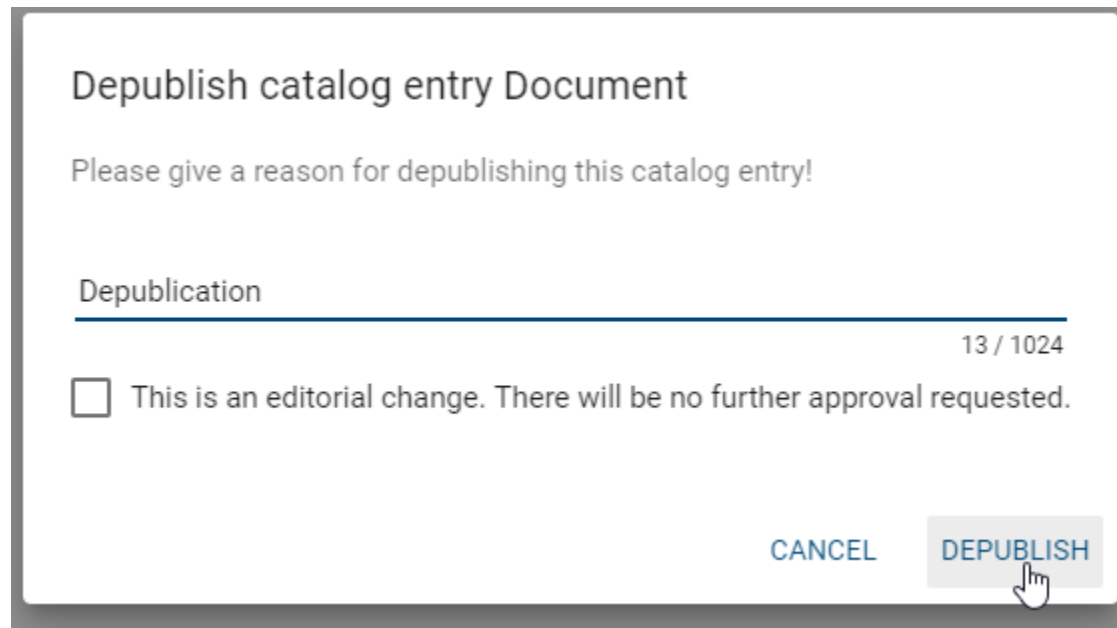
Release step

The user maintained as "Responsible" receives a *notification in the system* as well as by e-mail. With a click on the notification, users will be navigated to *their tasks* and can initiate the final depublication.

- If the person responsible rejects the depublication, a corresponding comment must be set. The initiator is informed by e-mail and the workflow is cancelled.

- If the responsible person approves the depublication, the initiator will be informed by e-mail, the catalog entry will be removed from the publication and the workflow will be finished.

Note: If the published catalog entry is used in a published diagram, the depublication of the entry is not possible and the workflow is terminated.

10.2.4 How can I directly depublish a catalog entry?

With this editorial change, a catalog entry that has already been published is directly removed from the publication without explicit approval by a responsible person. This workflow can be started by users of the role *Editor* or *Administrator*.

Open the catalog in the "Publication" stage and navigate to the catalog entry you want to depublish. Click on the context menu of the entry and select *Depublish*.
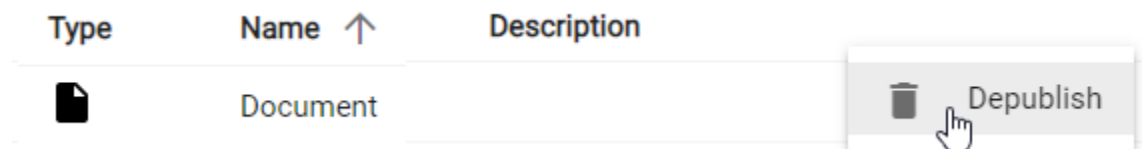
Then enter a reason for the depublication in the text field provided and activate the checkbox "This is an editorial change. There will be no further approval requested." below the input field. Confirm with a click on *Depublish*.

Then the catalog entry is removed from the publication.

Note: If the published entity is used in a published diagram, depublication is not possible and the workflow will be canceled.

Note: Editorial change can be deactivated so that each depublication must pass through the defined release step. If the checkbox is selected during depublication, the application will inform you that editorial change is not possible. To ensure governance, editorial release cannot be disabled by administrators. Please contact our Customer Support for further information.

10.2.5 How can I transfer attributes to documents during publication?

In the process of publication, *attached files* can be stamped with some attributes of the associated catalog entry if some requirements are fulfilled. The file has to be attached to a catalog entry of the type *document* that also has its own responsible in order to be *published independently*. The ability to stamp documents is enabled by default and can be disabled at the system level. Document stamping can be applied to all prepared files in .pdf, .doc, .docx, .xls, .xlsx, .ppt and .pptx format. The following attributes are transferred to your file by default:

- Author (AT_AUTHOR)
- Examiner (first three) (AT_EXAMINER, AT_EXAMINER_2, AT_EXAMINER_3)
- Responsible (AT_RESPONSIBLE)
- Responsible (Resubmission) (AT_RESUBMISSION_RESPONSIBLE)
- Valid from (AT_VALID_FROM)
- Valid to (AT_VALID_TO)
- Release (AT_RELEASE)
- Scope (AT_SCOPE)
- Restricted access (AT_ACCESS_RESTRICTION)
- Identifier (AT_IDENTIFIER)
- State (AT_STATE)
- Publish as PDF (AT_PUBLISH_AS_PDF) (see the note)

Other attributes of the catalog entry can be stamped if the file is prepared in such a way that desired attribute types are included to the file properties manually (unless they have already been added to the file by a publication). For more information on how to view and create file properties, please refer to the corresponding applications in which you open your document. A guide to viewing and creating custom properties for Microsoft Office products can be found here. The name of the property must be exactly the same as the *attribute type ID* (e.g. "AT_RESPONSIBLE" for the *Responsible*) whereas the value can be set to an arbitrary default.

To stamp language-dependent attributes (i.e. attributes that have a local value depending on the content language), you need to add a locale suffix to the attribute type ID. For example, to get the English name of the corresponding catalog entry you need to specify it as AT_NAME_EN. If you include a language localized attribute without a suffix, an error notification, that informs you about this, is maintained as the value of this property.

If the properties are configured and the corresponding attributes are maintained for the catalog entry, the attribute values will be transferred to the properties of the file within the publication of the catalog entry. The (default) values of the properties are reset with the attribute value from the application. Then the properties of the file version in preview and publication include the configured attributes. If an attribute is a multi-value assignment, such as the examiner, it is transferred as a comma-separated list. Properties defined by attributes with the data type *enumeration* are filled with their numerical value. If such an enumeration attribute is also language-dependent, you need to specify a suffix at the property as explained above.

The property associated with the *state* attribute ("AT_STATE") is set with a numerical value according to the selected state. You can add a suffix (e.g. "AT_STATE_EN") in order to write out the string in the corresponding language (e.g. "On Hold" instead of "1") as the state property.

- 0 - None
- 1 - On Hold
- 2 - In Progress
- 3 - Needs Review

- 4 - Approved

For example, the governance attributes mentioned above are transferred to a docx file in Microsoft Word as follows.
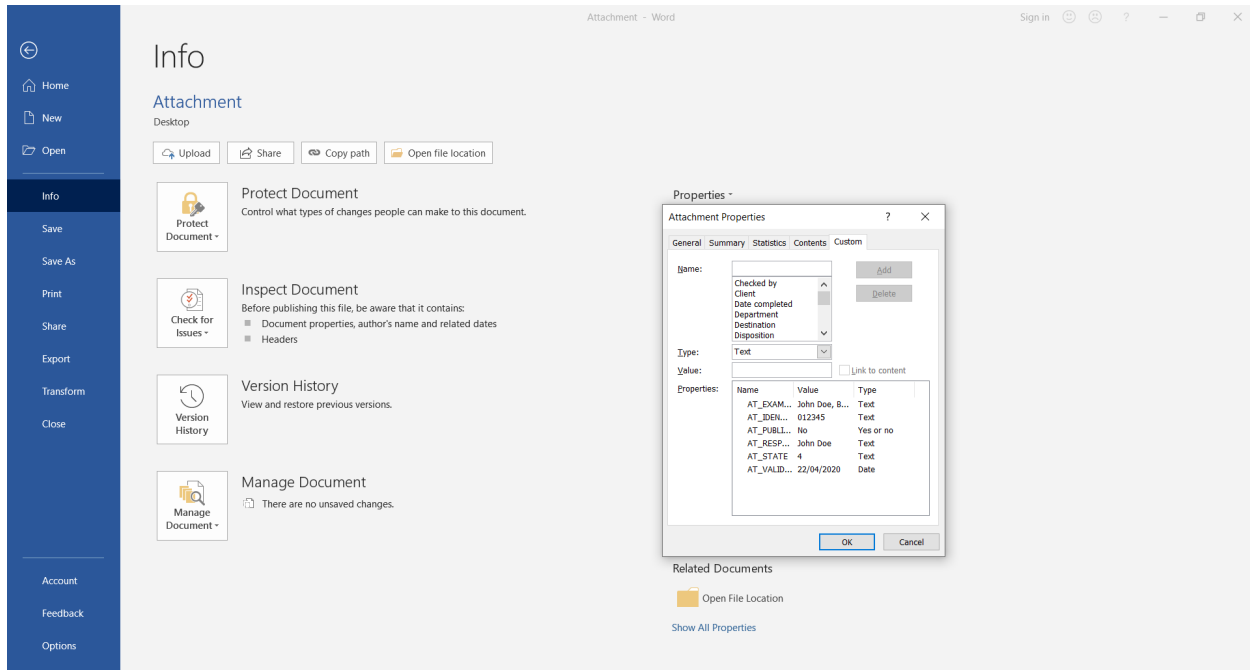
"Used with permission from Microsoft."

It is possible, for example, to use the field function in the header or footer of a Microsoft Word document to access the property values dynamically. You can select the name of a property in the "DocProperty" field as a placeholder. At this point also note the reference to the Support of Microsoft Word. In order to use the attributes of the catalog entry with the field function, they need to be defined in the file properties. With the next publication, the attribute values are finally transferred to the properties of the attached file. Thus also the values of the used placeholders will change.

Hint: If you want to use the values of the document properties in your document, use the path *Insert → Quick Parts → Field → DocProperty* in Word to access the values. In Excel and PowerPoint, this function is not supported by Microsoft Office. However, you have the option to do this using the Visual Basic-Editor. For more information, please consult the official Microsoft Support homepage.

If errors occur while adding the properties, the publication workflow will fail. This can be caused by invalid documents or protected documents.

Hint: Please note that your document is not stamped if its *extended rights* are activated.

Hint: Please note that if a PDF/A document is stamped, the long-term archiving functionality will be lost.

Hint: Please note that documents with *extended rights* are not stamped during publication. Thus, the .pdf file in preview and publication stage does not include the properties which are usually *transferred from the governance attributes*.

Tip: If a date that has been stamped (for example the attribute "Valid to", AT_VALID_TO) is printed in your word document using the field function, the date format can be specified by the author. Otherwise, the date format is taken from the language/locale of the server which is in most cases English. Therefore the date is printed with the delimiter

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slash as `MM/dd/yyyy`. In order to set the format, navigate to the definition of the field function - for example via the quick part *Field* within the "Insert" tab. Select the field name *DocProperty* and mark the desired attribute. Then select the button *Field Codes*. Now you can add the format in the input line right after the attribute. Enter a space and the desired format via `\@ "<YOUR-FORMAT>"`. You can use the placeholders d (for day), M (for month) and y (for year). All possibilities to edit the date format are shown in this Microsoft Support page. For example, you can display the "Valid to" date with written month (e.g. "30 September 22") using the definition `AT_VALID_TO \@ dd MMMM yy`.

10.2.6 What do I have to consider when publishing items with word file attachments?

If you publish a catalog entry with a word file attachment, unwanted changed might occur due to language-specific configuration in the table of contents. To prevent this, you should *not* format the TOC (Table of contents) field function using the `\t` switch. The configuration of the table of contents can be checked (and changed) as follows.

Select the table of contents and then press Alt + F9 to view the definition of the TOC field function. In the definition, you should use `\o` and `\u`. You can find more information on the switches and syntax in the TOC field function in this section of the Microsoft documentation.

If you *convert the word file to a pdf file during publication*, only certain fonts are supported. The usage of not supported fonts can lead to formatting losses and a change in the total number of pages in your .pdf file. *Here* you will find a detailed list of the fonts, which are supported by the report engine. Moreover, note the possibility to *embed the used fonts in your document*.

10.2.7 How do I ensure that attachments in the publication are provided as pdf files?

For catalog entries with an own responsible person, you can specify that files attached in the *"Attachment (URL)"* attribute are only available in pdf format in the publication, even though they were added in a different format in the public workspace.

To do this, activate the checkbox of the attribute *Publish as PDF* in the governance attributes of the catalog entry.

∧ Governance

✅ Publish as PDF

Hint: It is also possible to set the checkmark at this attribute without having defined a maintained responsible person. In this case, no release workflow is started for the catalog entry. Note that without a custom workflow, the attachment cannot be converted.

All attached files that are not in .pdf format in public workspace will be converted to .pdf files during the next object publication of this catalog entry. In preview and publication, these replace the original file format, which remains for the respective attachment in the public workspace. The files keep their names in all stages. For example, you get this .docx attachment in the attributes of the catalog entry in the public workspace,

Attachment (URL)
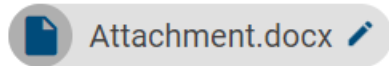
📄 Attachment.docx ✏️   ⬆

while the corresponding .pdf file can be found in preview and publication stage:

Attachment (URL)
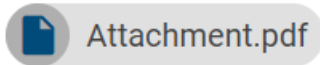
📄 Attachment.pdf

In the section about the attribute *"Attachment (URL)"*, you can find a list of the file formats that are supported by the upload and pdf generation engine. If errors occur during the generation of the pdf file, the *publish workflow* will fail. This can be caused by invalid documents or protected documents.

Note: Be aware that only certain fonts are supported in the process of converting your file to a .pdf file. The usage of not supported fonts can lead to formatting losses and a change in the total number of pages in your .pdf file. Therefore note the possibility to *embed the used fonts in your document*.

Hint: Please note that documents with *extended rights* are not stamped during publication. Thus, the .pdf file in preview and publication stage does not include the properties which are usually *transferred from the governance attributes*.

Note: The pdf conversion engine prints all worksheets from left to right. Each worksheet is printed from top to bottom and then from left to right. The generated pdf roughly corresponds to the defined print area of the Excel file, but page breaks can be slightly offset from the print preview. In principle, the paper format, margins and orientation are taken into account when generating the pdf. However, please note that with larger documents there is an increasing misalignment and the preview does not correspond to the final pdf.

Note: Please note that although it is possible to mirror text along the x or y axis in Excel, the Aspose framework does not support keeping the mirrored text when converting to PDF.

Warning: Please note that PDF conversion depends on the uploaded file and may result in deviations. If 100% accuracy is essential, we recommend performing the conversion locally before uploading.

10.2.8 How can I ensure that all characters are preserved in the pdf conversion?

Only certain fonts are supported in the process of converting your file to a .pdf file. The usage of not supported fonts can lead to formatting losses and a change in the total number of pages in your .pdf file. *Here* you will find a detailed list of the fonts, which are supported by the report engine. Note that symbols of not supported fonts are usually used automatically for enumerations. We recommend to adapt the following option in Microsoft Word in order to prevent formatting losses.

It is possible to embed the used Microsoft fonts in your Word file. If the fonts are embedded in the document, the corresponding characters and symbols are correctly shown in the pdf file that is generated in the process of publication in BIC Process Design.

You can embed the fonts in the Word Options in the menu item *Save*. In the section "Preserve fidelity when sharing this document", select the checkbox *Embed fonts in the file* and deselect the two below. Then choose the option *All New Documents* in the drop-down menu.
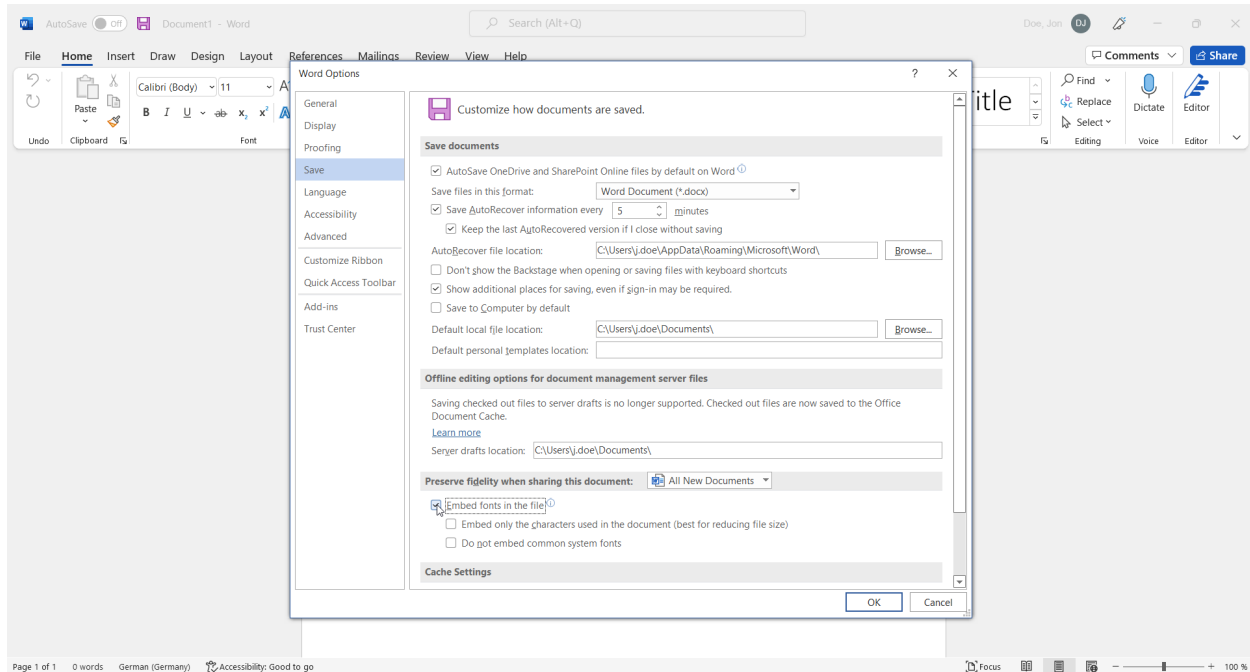
"Used with permission from Microsoft."

All documents saved afterwards can be converted to pdf during publication in BIC Process Design whereas the original characters are used.

10.2.9 How can I automatically create an output document with a service task for reports?

Suppose you have modeled a *Service task*. When you open the editor, you have the option of configuring the document creation in addition to the REST call.
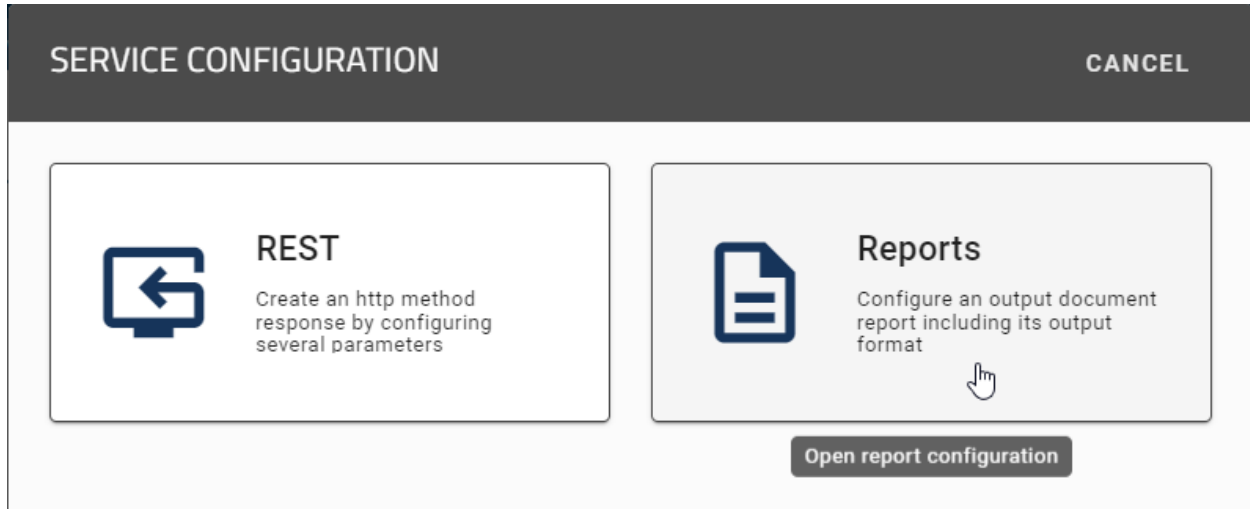
If you select the option *REST*, the REST configuration is started. Alternatively, if you select the *Reports* option, the report configuration starts, where you can specify the output format (PDF or DOCX).

Assume that the report task contains an input. If this input has an attached file in your configured default language in DOCX format, this file is used as a template for the report.

If there is an output in the report task and it is executed, the result is added to the output. The name of the output file corresponds to the name of the template file.

Hint: Please note that if the input or output is missing or the input has no attachment, the report will not be created and the task will be marked as an error. If there is not exactly one input and one output in the report task, the report will not be created and the task will be marked as an error.

Additionally, assuming there is a *Design Document* in the input and the input does not have an *Instance Attachment*, the template for creating the report will be the *Design Document*.

If there is a *Design Document* in the input and the input has an *Instance Attachment*, the template for creating the report will be the *Instance Attachment*.

10.3 Tasks

10.3.1 How do I work with my tasks?

Users who are maintained as "Examiner" or "Responsible" in the governance attributes must approve or reject a *publication* or *depublication*. Moreover, you can be assigned to resubmission tasks. You will receive further information about these tasks *here*. Using the task list, governance participants can edit their tasks directly or access the pending and completed (de-)publication tasks in the diagrams or catalog.

Open the tasks list by clicking on the *Tasks* button within the menu bar. A list of all unfinished and completed tasks appears on your screen.
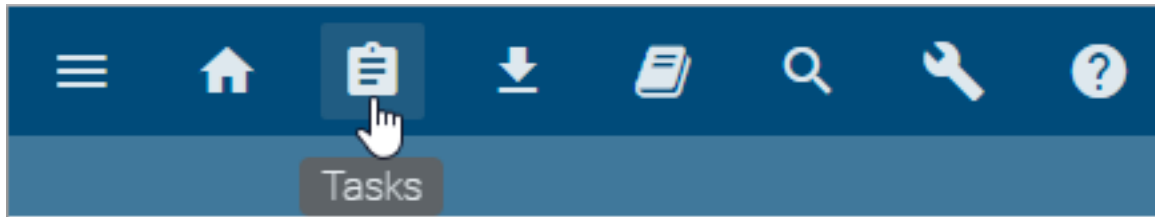
Clicking on a task opens up further details. In addition to the diagram or object name, user comments from previous workflow steps are displayed. In the history, the first comment always reflects the publication or depublication reason given at initiation. You can see your actual task above the history. Furthermore, a timestamp of received and completed tasks are also recorded for each task.
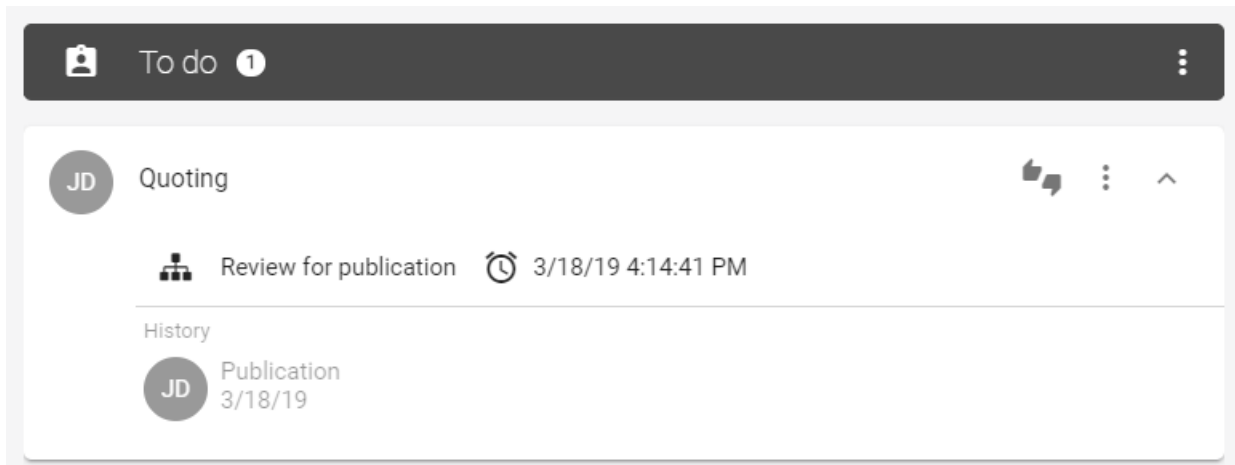
Completing tasks directly:

You can directly complete your tasks in the task list without navigating to the corresponding diagram or object. To do so, click on *Accept/Reject*.
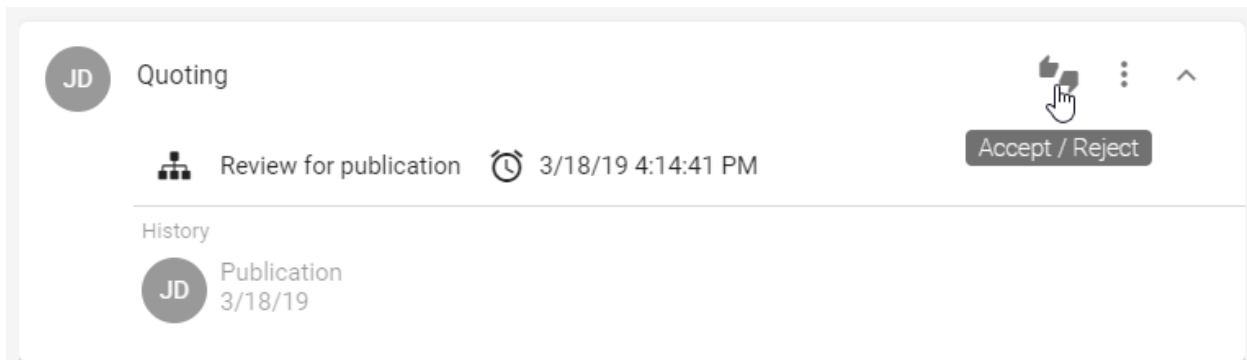
A window then opens in which you can reject or approve the task and also set a comment. By clicking on *Continue* you confirm the process, otherwise you can *Abort* it.

Completing tasks in the diagram:

Select one of the unfinished tasks via the diagram name to go directly to the corresponding diagram.
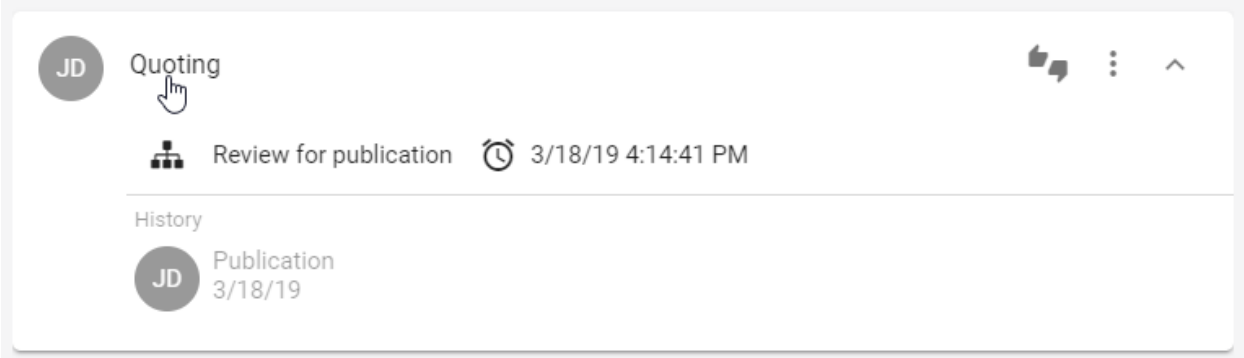
The selected diagram is presented to you in preview. Now you have the option to approve or reject the publication or depublication by clicking on the corresponding icon *Accept/Reject* in the versions tab and making a selection in the appearing window.
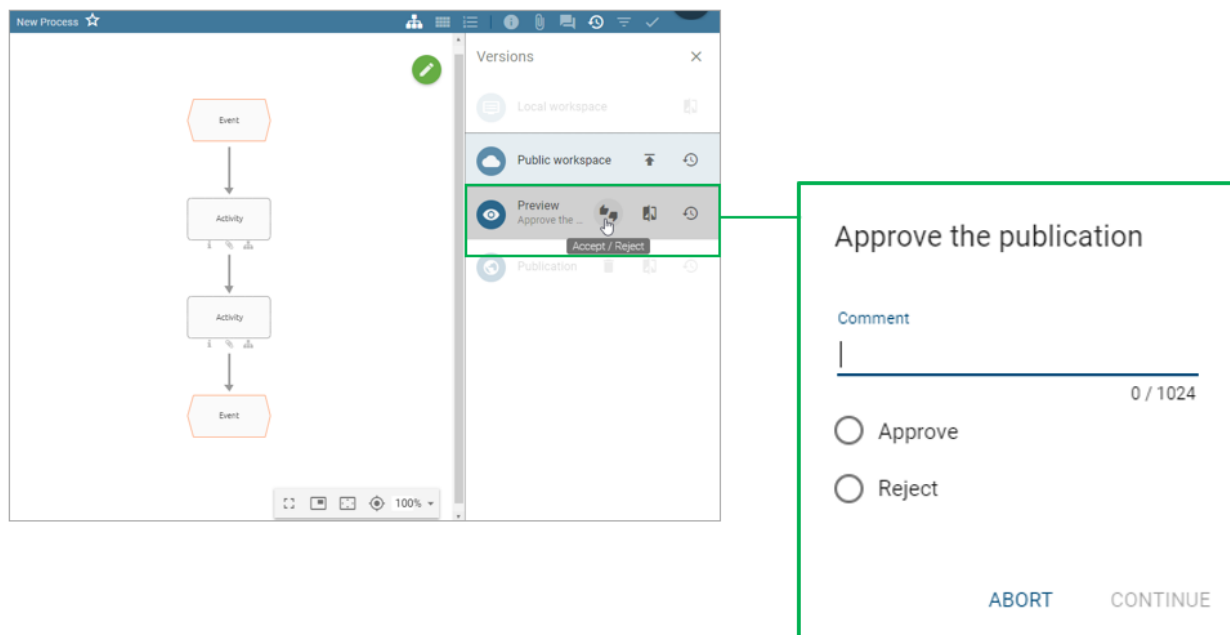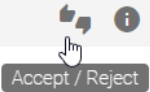
Completing tasks in the catalog:

Select one of the unfinished tasks via the object name to go directly to the corresponding details of the object in the catalog.
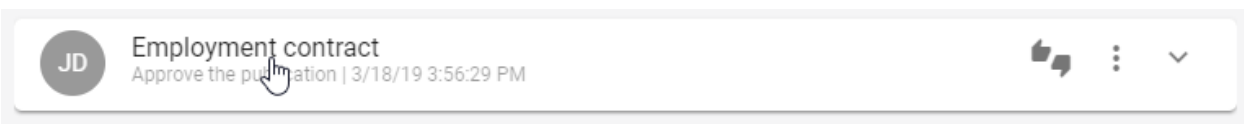
The selected catalog entry is displayed in the preview with the version to be approved. Now you have the option to approve or reject the publication in the catalog. Navigate to the list of catalog entries, choose the *Accept/Reject* button of the desired catalog entry (displayed in red and italics), and make your selection in the appearing window. Depublication can only be processed in the tasks.

Type	Name ↑	Description		
📄 Document	Employment contract		🖐	ℹ

Accept / Reject

After you have completed a task, it is no longer on the left side in your task list, but on the right under "Done" to see.

Note: Optionally, an additional user authentication can be requested when processing tasks. The user has then to confirm his identity again if, for example, a quality assurance task is being processed as part of the process release. As you cannot activate the additional authentication yourself, please contact us.

10.3.2 How am I informed about my new tasks?

If you receive a new task while you are logged in to BIC Process Design, a push notification will appear at the right bottom of the screen. If this affects a diagram, you can follow your task notification with one click directly into the corresponding diagram. If the notification concerns an object, you will be forwarded to the task in your task list by one click.

If you are assigned to one or more new tasks, an e-mail with a summary list of those will be sent to you on the next day.

Furthermore, you will receive a reminder e-mail every seven days by default informing you of pending tasks. This can be *changed by the administrator*.

10.3.3 How do I abort a workflow?

Every workflow can be terminated by administrators and editors. As an author, you can cancel a workflow initiated by you. Similarly, authors and reviewers listed as responsible and/or examiners in the diagram also have the ability to terminate the respective workflow.

Open the tasks list by clicking on the *Tasks* button within the menu bar. Navigate to the corresponding task and open the context menu there. Select the entry *Abort Workflow*. In the appearing window, click on *Abort Workflow* to confirm the procedure.
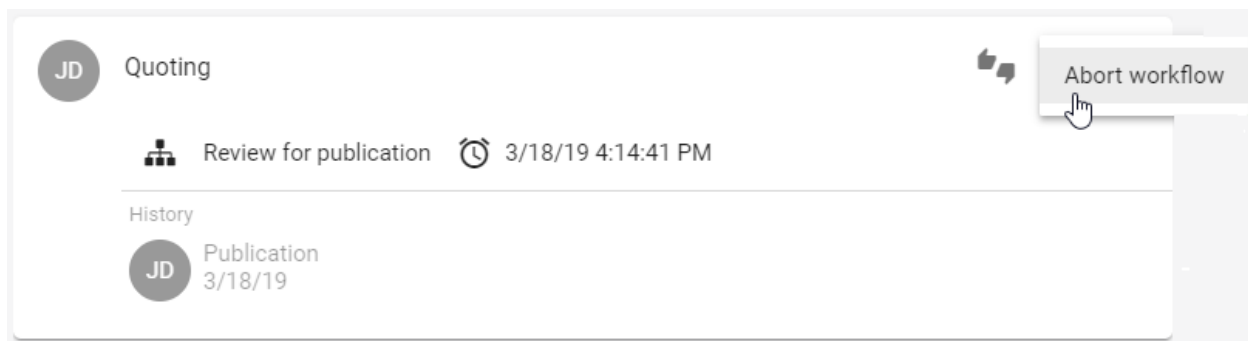
Then the workflow is terminated and the usual way of publishing or depublication is aborted. No other user gets a task. The version of the diagram or object remains in the area where it was during the termination. When you cancel a publication, for example, the *Preview* area still contains the diagram that should be published before. The initiator and users who have a pending or a completed workflow task will be notified of the cancellation by e-mail.

10.3.4 How do I work with my deputy tasks?

You can set a deputy for your tasks, who can then take over your tasks. Navigate to your *Tasks*.

Set deputy: In the list header of your tasks, open the context menu *More options* and choose *Add deputy*.
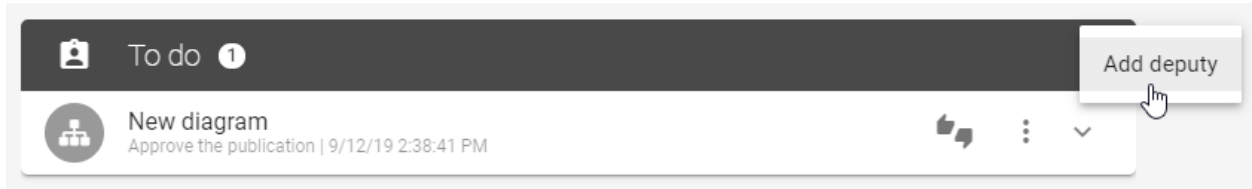
This opens a dialog in which you can select a user from the suggestion list. *Add* finally sets the selected user as the deputy for all your tasks.

Similarly, you can remove the deputy via the context menu and the *Remove deputy* option.

Claim task as deputy: Navigate to the list of *Deputy tasks*. All tasks for which you are set as deputy will be displayed under *To do*. A chip on the task shows you for which user the task is originally intended. To edit the task, you must claim it. To do this, open the context menu of the task and choose *Claim task*.
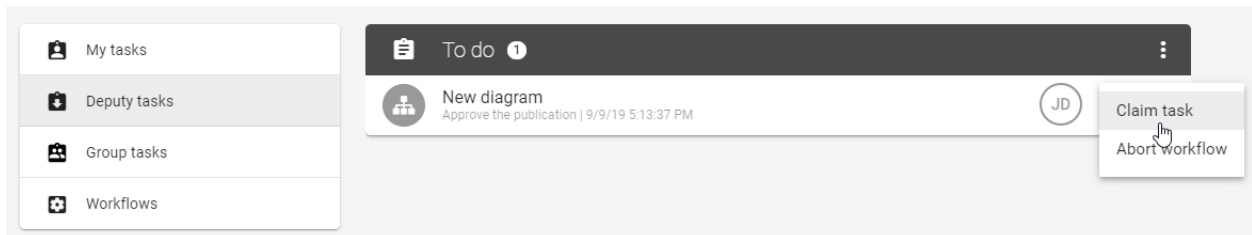
You will then see this task in the list *your tasks*. In addition, the originally assigned user can no longer claim the task again.

10.3.5 How do I work with my group tasks?

In addition to users, user groups can get an examination task if they are entered in the attributes of a diagram or catalog entry as reviewers. In this case, every user who was a member of the group when the workflow was started can see the corresponding workflow task in his *Group Tasks*.

Open the group task list in your explorer by opening the *Tasks* via the menu bar and switching to the tab *Group Tasks*.
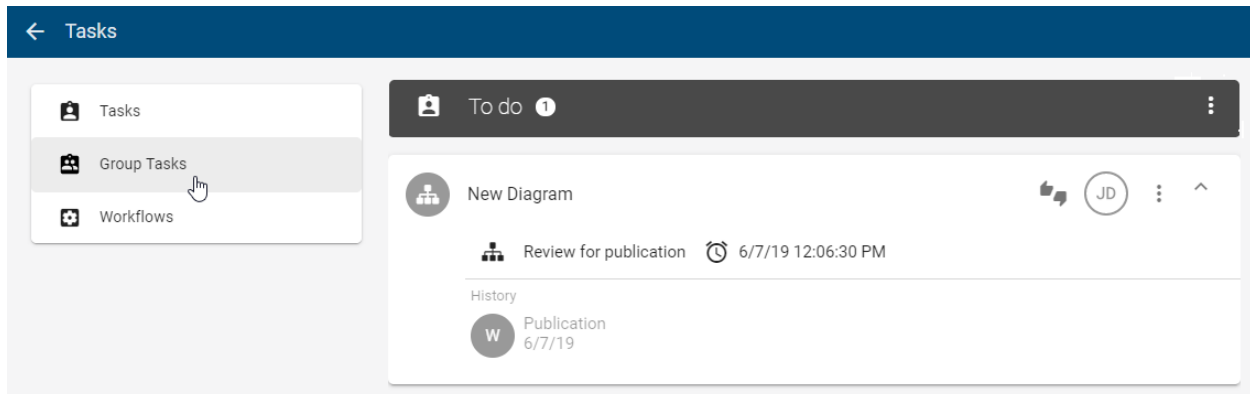
Here you will see all your pending group tasks in the "To do" list and all completed group tasks under "Done". Group members can now work on the task. The options of working on a task are described in more detail *in this section*. After you have edited the group task, it will be displayed as completed in your own tasks. In addition, you and all group members can see the task under "Done" in the list of their group tasks. The history also shows other users that you have edited the task.

Next to *aborting a workflow*, you can claim a group task, which is described below.

Claim task: Navigate to the group task you want to claim. Open the associated context menu and select *Claim task*.
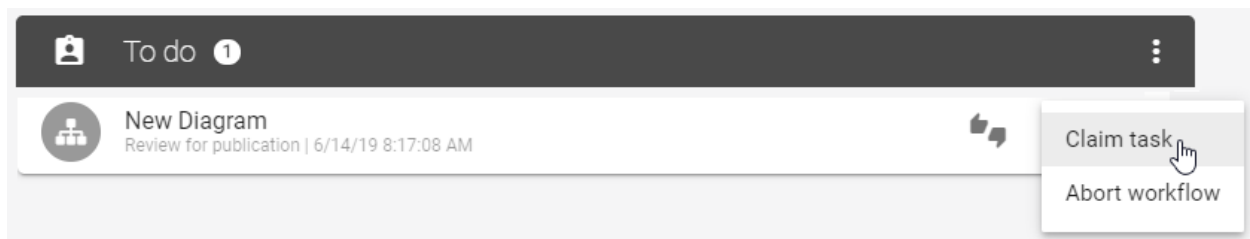
Afterwards, your initials are displayed as a "chip" on the task and thus the assignment is visible to other group members. The task can not be claimed or done by another user. In addition, the group task is also displayed in *your* tasks and can be edited there. After finishing the task, it is displayed in your "Done" tasks. In addition, the history of the task lists your examination.

Revoke task: If you have claimed a task that you do not want to work on, you can unclaim it. This gives other group members the opportunity to take over and complete the task. Navigate to the appropriate group task and select *Revoke task* in the context menu.
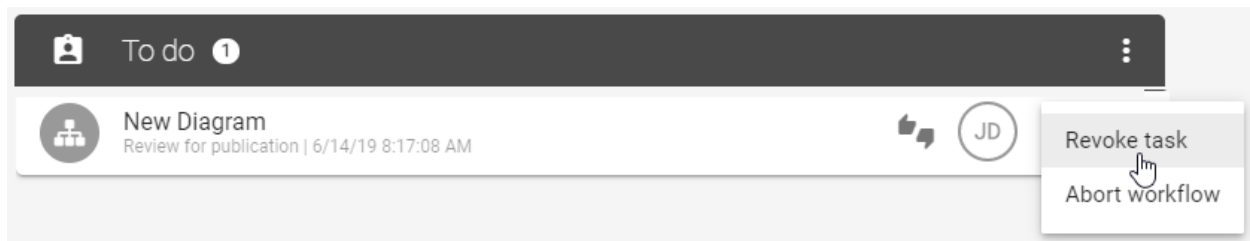
Then the task is neither marked with your initials nor seen in your task list. The task will still be visible in your group tasks.

Note: If a group has only one member, the workflow tasks are not displayed in the "Group Tasks" but in the "Tasks" of the corresponding user.

10.3.6 How do I work with resubmission tasks?

If the *validity of a diagram* or *catalog entry is limited*, the *responsible user or user group* for resubmission receives an examine task. The affected users are informed about the task by e-mail and can see it in the task list. To work on the task, click on *Accept/Reject*.
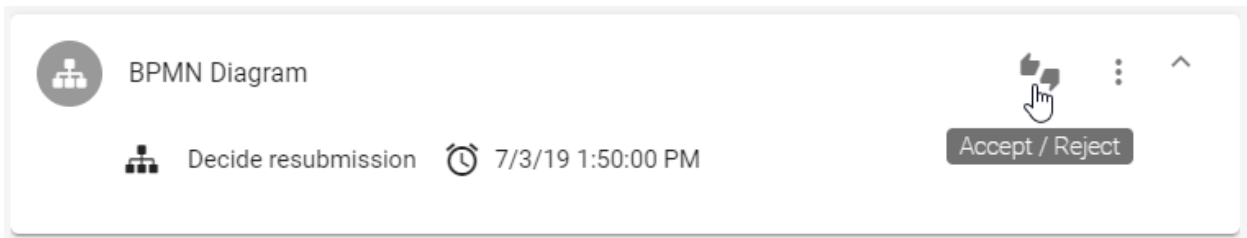
The following options are available:

Depublication: Select this option to remove the diagram or catalog entry from the publication and preview stages. The depublication of a catalog entry is not executed if the entry is present in another diagram in publication stage. Unlike default depublication, no additional confirmation from the responsible is required, as only they can work on the resubmission. Depublication is then started as soon as the "Valid to" date is reached.

Extend validity: By choosing this option, you can extend the validity of the diagram. The original expiration date, or "Valid to" date, is set to one year in the future, and it will be updated in the publication as soon as you confirm the extension. Additionally, archive entries will be created.

End task and inform Governance participants: By choosing this option, you can end the resubmission task and inform Governance participants via Email about your decision.

Decide resubmission

Comment

|

0 / 1024

○ Depublish

○ Extend validity

○ End task and inform Governance participants

ABORT   CONTINUE

For the option *End task and inform Governance participants* a comment has to be set. For the other options, it is optionally. Then click *Continue* to end the examination.

Afterwards, for the options *Depublication* and *End task and inform Governance participants*, an email will be sent to all recipients that are maintained in the governance attributes of the diagram/catalog object. This email contains the option that has been selected, as well as the (optional) comment and the responsible person.

If a revision is necessary, contact the appropriate author and extend the diagram or catalog entry to give the author time for the revision. Of course, you can also depublish the object in the event of a revision, but this could create a process gap until the revision is published.

If the resubmission task is not processed, there is no automatic depublication. A diagram or catalog entry can still be published or depublished while a resubmission workflow is active. In this case, the active resubmission process including the resulting outstanding and now obsolete tasks will be terminated. The behavior is further explained *here*.

For a general detailed description of tasks, see *the corresponding section*.

Tip: You can also see all resubmission workflows within the *list of all workflows* if you are an administrator or editor.

10.3.7 What happens if I initiate a publication while a resubmission workflow is active?

When a resubmission workflow for a published object (diagram or catalog entry) is active, the object can still be published. In this case, the active resubmission process including the resulting outstanding and now obsolete tasks will be terminated. Users will see the new version in publication stage as soon as the publication workflow is finished.

Note that the validity is not maintained automatically. This means: If the attribute "Valid to" of the object has not been updated manually before publishing the new version, another resubmission workflow will be started for the object. The responsible receives a new resubmission task and the *corresponding notifications* will be sent. An extension of the validity for one year can be triggered by the responsible when working on the task.

Therefore, when a resubmission workflow is active for a diagram or catalog object and you update it manually by publishing a new version, consider the validation date to avoid the direct start of a resubmission workflow for the new version.

10.3.8 How can I see a list of all workflows?

If you have the rights of an author or reviewer, you can get an overview of all workflows which have been initiated by you. As an administrator or editor you can see all workflows including resubmission workflows. Click on *Tasks* in the menu bar if you want to navigate to the lists of all workflows.

Then switch to the *Workflows* tab. Any (according to your rights) running, finished or canceled workflows are listed, including the name and associated icon of the diagram or object, the workflow type and the start and end dates. Initially, pending workflows are listed. This can be changed *by using the filter*. The order is determined by the start date, whereas recently started workflows are at the top of the list. If the end date is "Still pending", the workflow is not finished yet.

Note: The start date refers to the time when the workflow was initiated. Resubmission tasks are initiated by the system and start before the *Valid to* date in the attributes of the respective element. In the *administration*, you can specify exactly when a resubmission task is initiated. The end date denotes either the *Valid from* date of the item or the date when the respective workflow was completed, whichever comes later.
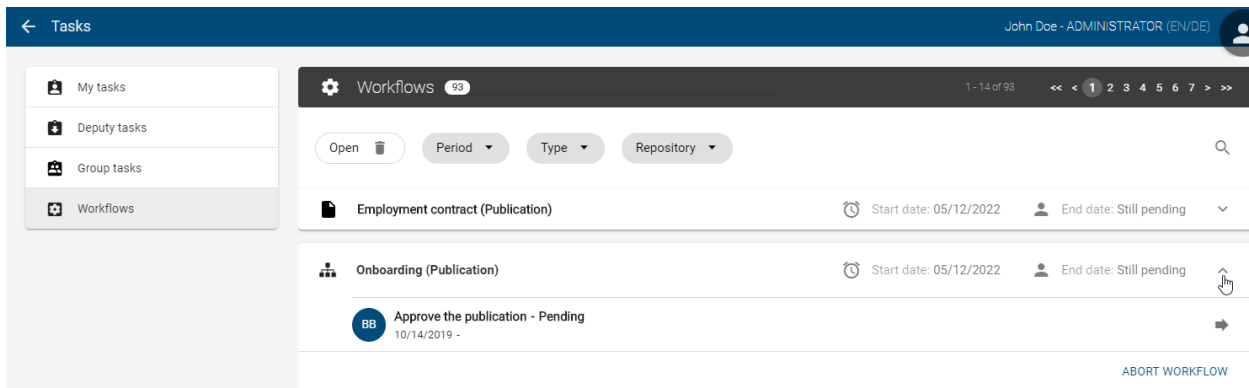
Click on a list entry to see its details. These include the initiator, workflow tasks, the status, the responsible user's chip and the assignment and execution date. When hovering over one of the user's chips the name of that user will be displayed in form of a tooltip. Resubmission workflows will display *SYSTEM* as tooltip for the initiator chip. If a workflow is not ended yet, the administrator can also use *the "Abort Workflow" functionality* here.

Since the number of entries on a page is limited, you can use the page numbering at the right top of your screen to access older entries.

Tip: You can also *delegate workflow tasks*.

10.3.9 How can I delegate workflow tasks?

As an administrator or editor, you can delegate workflow tasks. Click on *Tasks* in the menu bar and switch to the *Workflows* tab. Click on the entry of the desired running workflow, indicated by the end date "Still pending". There you will see the pending task and the associated user. Click on *Delegate* to open an input window.
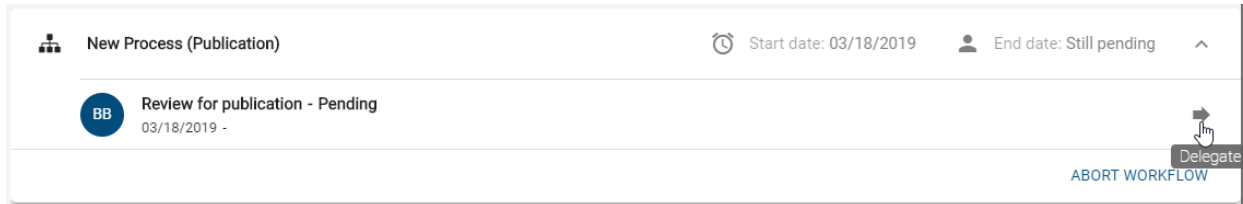
Now you can use the suggestion list to select the user who should take over the task. Clicking on *Delegate* assigns the task to the selected user. The task will be removed from the old assignee and will appear in tasks of the recently selected user.
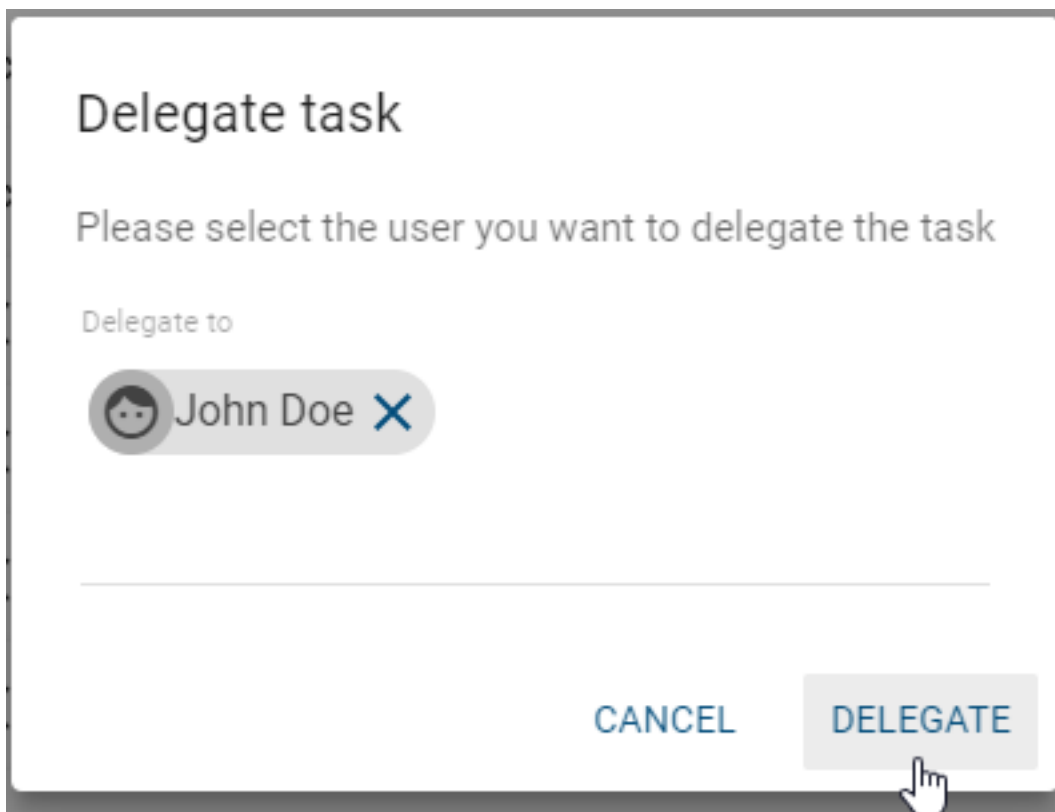
You can also see the assignment in the history of the workflow.
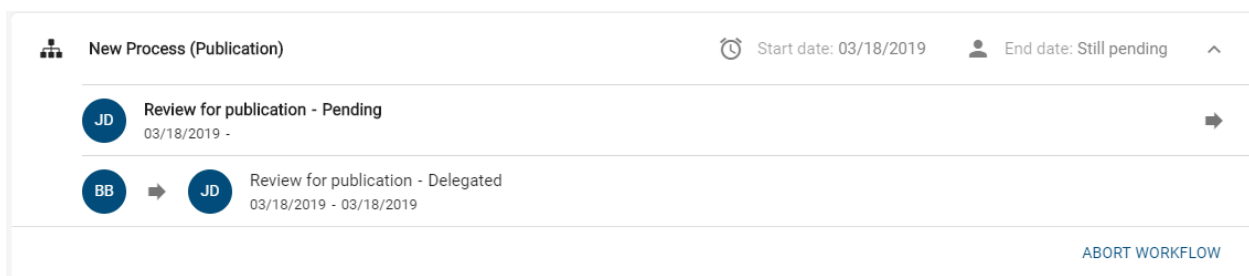
Note that you don't hand over a task to users of the role *Reader*, as this user role doesn't have the corresponding access

permissions. Moreover, it is not possible to delegate tasks to user groups or delegate their tasks to another user.

10.3.10 How can I filter workflows?

Authors and reviewers can see workflows which they have initiated, while administrators and editors will *see a list of all workflows*. The filtered list is still depending on your user role and might not show all workflows of the selected criteria. Navigate to your *Tasks* and switch to the *Workflows*.
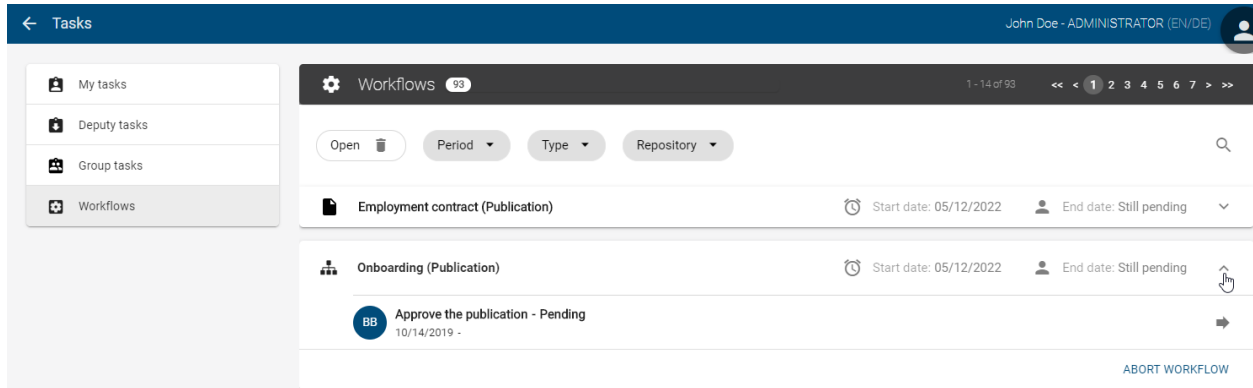
There you have different filter options, which are explained in more detail below.

State: You can filter the list by the state of the workflows. Initially, all open, that means pending workflows are displayed. The active setting can be seen in the filter itself. Click on *Remove filter* to clear the filter. If you would like to display the closed, terminated and aborted workflows, click on the filter and select *Closed* in the menu.
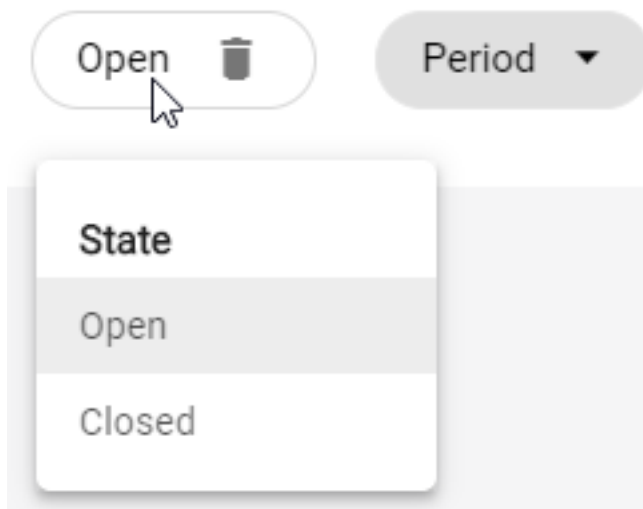
Period: In this filter, the period can be specified by selecting a start and end date. To do this, click on the *Period* filter. Now the desired dates in the past can be selected via the calendars. With a click on a date this is displayed in the respective input field above. Alternatively, you can enter a date manually in the input fields. Click outside the calendar to display the updated list. If only the start date is set, all workflows started after this date are displayed. If only an end date is selected, you see all workflows that were started before this date. In the filter, the setting is indicated by "since" or "before" and the selected date. If both start and end date are set, these are displayed in the filter itself and all workflows that were started in this period are listed. By clicking on *Remove filter* in the filter itself, you can remove the settings you have made.

Type: The workflow types *publication*, *depublication* and *resubmission* can be filtered for diagrams and objects each. Click on *Type* and select one or more types in the appearing menu. Click outside the filter menu to close it. Only the selected workflow types are displayed.

Repository: This filter lists the names of all repositories that you have access to. If a repository has not been named in your current content language, the value of the alternative language is taken into account. Click on *Repository* and select a name. Then, the list is filtered and shows only workflows related to diagrams and objects of the corresponding repository. You can select several repositories at once. Click outside the filter menu to close it.

Repository ▾

Repository
☐ Human Resources Repository
☐ Project Management Repository
☐ Sales Repository
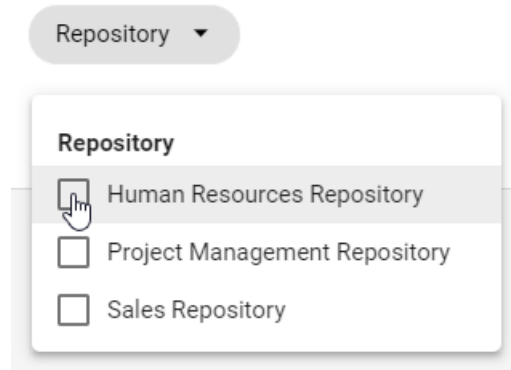
Search: You can search for the name of objects and diagrams. In addition, you can search for user names and e-mail addresses of initiators or users who had or have a workflow task. To do this, click *Search* on the right-hand edge of the screen, represented by a magnifying glass. Enter your search term in the appearing input field and start the search via the Enter key or a click outside the search field.

Quoting   🔍

10.4 Notifications

In BIC Process Design there exists a notification system with which users can be informed about changes that have been made during governance processes. A distinction is made between different cases, depending on which step of the governance process has just been carried out, whether this was successful and the role of the respective user in this process. In the following a few questions were listed with the help of which the different scenarios can be understood better.

Note: In general, every triggered email addresses up multiple users. All users which have the same language set within their user settings will receive the same email. These notifications are send via Bcc emails.

10.4.1 Why does the publication or depublication fail?

As the initiator you should have at least the rights of the user role *Author*. More detailed explanations can be found in the previous chapters.

In addition to the rejection or termination of the workflow by examiners or the responsible, the following situations can also prevent publication or depublication. Depending on the reason, you will also be informed about this in the application or by e-mail.

General causes for not publishing or depublishing

- no *responsible* entered in the attributes of the diagram or object

- the *e-mail address* of the responsible person is missing or does not match the address of the respective user in BIC Process Design

- a publication or depublication workflow is already running for the affected diagram or object

- predated publication for which the *"Valid from"* date has not been reached yet

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- one or more *mandatory attributes* of the diagram resp. object are missing

- A *language localized* mandatory attribute has not been maintained in the *default language* of the tenant. You will receive a notification about the concerning attribute.

Causes for not publishing or depublishing a diagram

- the affected diagram is *checked out*

- *validation errors in the diagram*, such as *unaccepted catalog entries* or *missing mandatory attributes*

- the diagram contains a *catalog entry that is not published yet* and which has an own life cycle (means with its own responsible person). Catalog entries with an own life cycle that are in the preview stage but not confirmed yet are an exception. Publishing is possible, but the catalog entry is substituted by a draft version until the person responsible confirms it.

Causes for not publishing catalog entry

- the *pdf generation of the attachment* of the catalog entry fails

- adding *metadata properties to attachments* of a catalog entry fails

10.4.2 When will I be informed about a (de-) publication?

Users who have diagrams or catalog entries within their scope will be informed by e-mail when the diagram or catalog entry is directly or indirectly published or depublished. In addition users, which have saved a diagram as a favorite diagram in Publication, will also be informed about the respecting changes.

In addition, workflow-related users will be notified by e-mail and depending on the release workflow by a task. Users, who have *saved a diagram as favorite* in Preview, will be informed for workflow changes in this stage.

10.4.3 Who will be notified at a publication and depublication?

Below is shown who is notified by the system in which workflow step via e-mail.

Publication

Notification	Initiator	Examiner	Responsible	Author	Scope*
Examine task	no e-mail	e-mail	no e-mail	no e-mail	no e-mail
Release task	no e-mail	no e-mail	e-mail	no e-mail	no e-mail
Rejection of examine task	e-mail	no e-mail	no e-mail	no e-mail	no e-mail
Rejection of release task	e-mail	e-mail	no e-mail	no e-mail	no e-mail
Publication	e-mail	e-mail	e-mail	e-mail	e-mail
Workflow error	e-mail	no e-mail	no e-mail	no e-mail	no e-mail
Abort workflow	e-mail	e-mail***	e-mail***	no e-mail	no e-mail

Depublication

Notification	Initiator	Examiner	Responsible	Author	Scope*
Depublication task****	no e-mail	no e-mail	e-mail	no e-mail	no e-mail
Rejection of depublication task	e-mail	no e-mail	no e-mail	no e-mail	no e-mail
Depublication**	e-mail	e-mail	e-mail	e-mail	e-mail
Workflow error	e-mail	no e-mail	no e-mail	no e-mail	no e-mail
Abort workflow	e-mail	no e-mail	e-mail***	no e-mail	no e-mail

E-mails informing about a (de)publication or workflow error are sent as soon as the system can initiate the last work-flow step through a user interaction or a system error. E-mails about release or examine tasks are not sent individually for each task assignment but gathered in a daily e-mail.

Users can navigate to BIC Process Design using a link in the e-mail. If the user has not been registered before, this must be done first. Then a second click on the link leads to the desired address.

An editorial change made notifies the same recipients as the *multi-level release* or *depublication* workflow.

*) All organizational units that are entered in the diagram- or catalog entry attribute *Scope* receive a notification at the corresponding steps. In this process, *organizational units* are assigned to user groups of BIC Process Design.

**) The e-mail is also sent to the second examiner, third examiner and the responsible for resubmission.

***) The user is informed if he or she has a pending or already completed workflow task.

****) Depublication tasks may also be called release tasks since they demand the approval of the responsible to depublish the concerning entity.

Note: Users who have saved the *diagram as a favorite in Publication* or Preview stage will be notified of changes to diagrams in the respective stage. This includes, for example, the publication and depublication.

10.4.4 How can I decide whether the scope is notified of changes by e-mail?

If you have logged in as an authorized user (editor, administrator) in the old user interface and have opened the start dialogue for a workflow to depublish or publish a catalog entity or a diagram, a dialog box opens showing you options for sending scope notifications. You have the option of specifying whether this change is an editorial change that does not require additional review or approval. If you select this option, you will have the opportunity to notify the affected scope of this change by email.

Hint: Please note that without selecting the option *This is an editorial change without additional review or approval*, you will not be shown the option to inform the scope of the change.

If the option *Inform scope about this change by e-mail* has not been selected for a publication or depublication, you will receive an e-mail stating that the scope will not be informed about the change.

If the option *Inform scope about this change by e-mail * has been selected for a publication or depublication, the scope will be informed about the change immediately by an e-mail.

If the editorial change option is removed, the selection to send the notification is also automatically canceled. This will remove the option to send a notification of the change to the scope.

Note: Even if no scope has been specified for a chart or catalog entity, you will still receive a corresponding e-mail notification. This e-mail will still inform you whether the scope is notified of a change or not.

Hint: For editorial changes, there is an option to select whether or not to inform the *scope*.

10.4.5 Who will be notified about a resubmission?

If a resubmission is initiated for a published diagram or catalog object, the responsible or (if the corresponding attribute is maintained) *responsible for a resubmission* receives a *resubmission task* and a notification.

In addition, an e-mail is sent to inform about the resubmission. This information mail is addressed to authors, the examiner (as well as the second and third examiner if they are maintained in the method) and the responsible if the latter is not the owner of the resubmission task. The dispatch of the information mail can be blocked for each diagram or catalog object by selecting the checkbox "Do not send information mail (resubmission)" in the attributes.

Responsible (resubmission)

👤 John Doe ✕

✅ Do not send information mail
(resubmission)

Note: The e-mail about a scheduled resubmission is sent independently of the task summary notification to the responsible or responsible (resubmission) user.

VERSIONS AND HISTORY

11.1 Which diagram versions are available?

A diagram can be available in different work states or versions. For example, there may be one version per local workspace, public workspace, preview and publication, which differ from each other. The membership of a particular *user role* determines which versions a user can see.
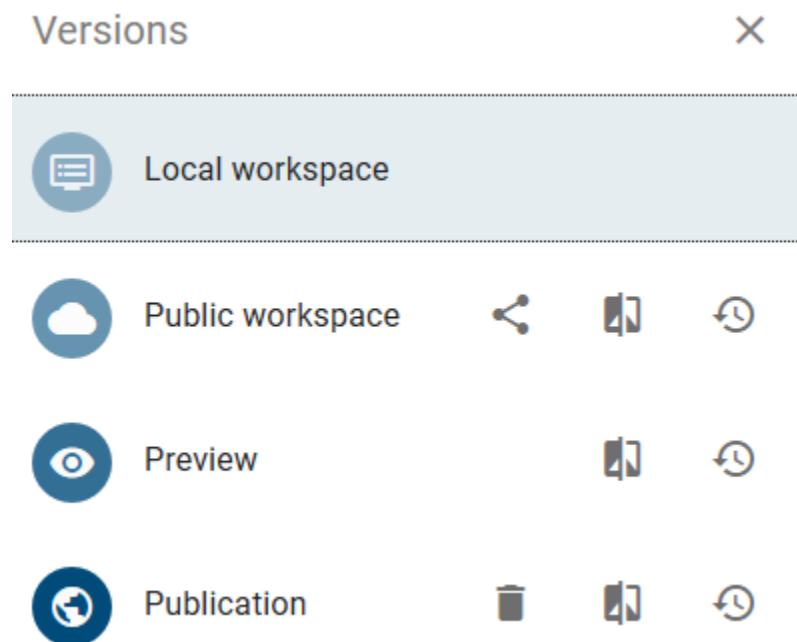
Local Workspace: By *checking out* a diagram for editing, the modeling data is loaded into the local workspace. The initial creation of diagrams and changes to diagrams is done in the local workspace and is temporarily stored in the "Local Storage" of your browser. According to your browser settings, local workstations may be discarded when the browser is closed. Please always check in local changes. The current status is moved to the BIC Process Design Server by checking in. The greyed-out entry for the local workspace on the versions view indicates that the diagram is checked in and exists no longer in its local workspace. To re-edit it, you have to check out the diagram again. Then the version in the public workspace is loaded to your local workspace. The local workspace can only be seen by the user who has currently checked out the diagram.

Public Workspace: Diagrams in public workspace are located on the BIC Process Design Server and are visible to users with access to this stage. After the local version of a diagram has been *saved* and *checked in*, it becomes visible in the public workspace.

Preview: A diagram from the public workspace can be submitted to the *release workflow* for publication. Before the diagram is published, a preview version is created, which can be released or rejected by the responsible person or the examiner. Catalog entries for diagrams in preview can not be edited.

Publication: After the responsible person has released the diagram, this is accepted as the new published version. In the publication, you only see the last released diagram. The released version is the only version that a user with "Reader rights" can see. Catalog entries of published diagrams can not be edited in the publication.

Note: The graphical diagram view differs in its handling depending on the stage. As a modeler, you can use the editor in the local and public workspace as usual, with useful functions for modeling, such as *multi-selections*, the *navigator*, and the *0/0 position*. In the preview and publication stages, the easy handling with the *left mouse button*, known from Google Maps, is supported.

Tip: It can occur that symbols in the publication or preview are displayed without labels. In such a case the label is not maintained in *the selected content language or the selected alternative language*.

11.2 How do I change the stage?

The following stages exist: Local Workspace, Public Workspace, Preview and Publication. Which stages you can see depends on your *user role*. If you have access to more than one stage, you can change the stage. The currently selected stage is displayed under the name of the repository. To display the individual stages and related diagrams, proceed as follows:

In the Explorer, open the context menu of the repository.
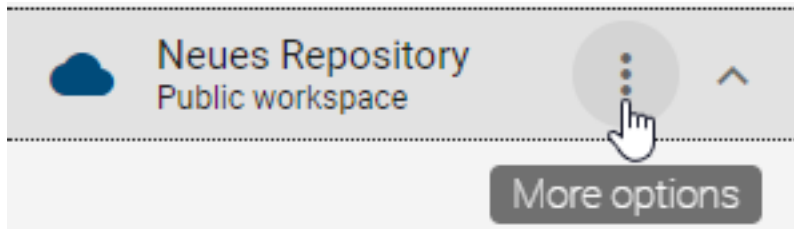
In the context menu, select *Change stage*. A list of available stages appears.
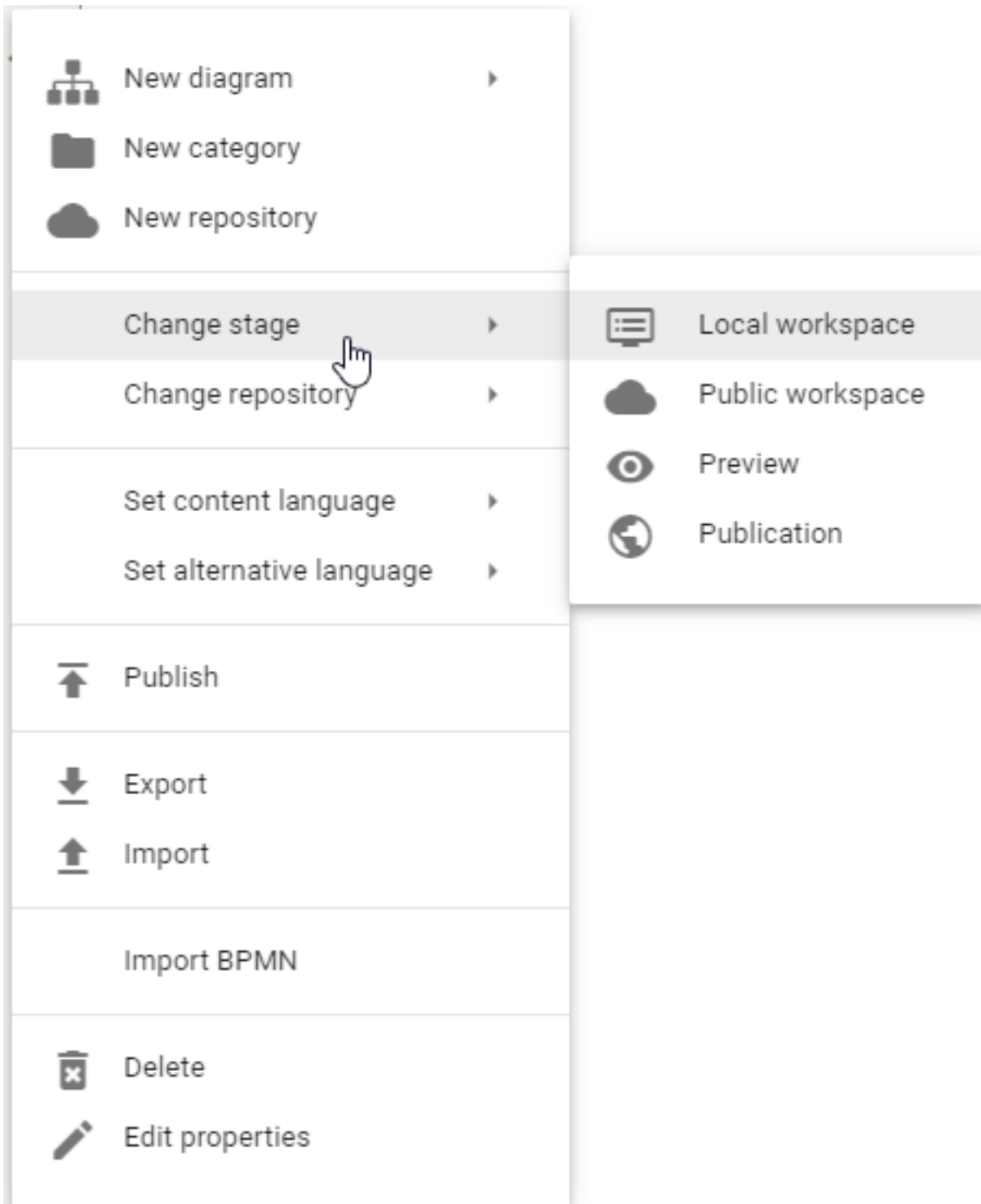
Select one of the stages, for example *Publication*. You can see the selected stage right under the name of the repository. All diagrams and categories from the repository shown in the Explorer are available in this stage.
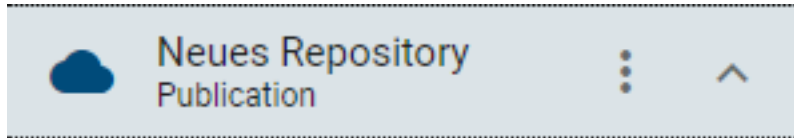
If you open the *Catalog*, you can see all entries contained in the diagrams of the selected stage.

Note: It is possible that single stages are not displayed, caused by different *user roles*. If you only have access to Publication, there is no button *Change stage* in the context menu.

11.3 How can I differentiate the stage from the diagram version?

You can display different diagram versions of other stages without *changing the stage*. Changing diagram versions is explained in more detail *here*. As soon as the stage differs from the diagram version, this is noted in the menu bar behind the diagram name.

For example, you are in the public work area. This is displayed below the repository name. At the same time, however, you are modeling and are therefore looking at a diagram in the local workspace. The addition "(Local workspace)" is then displayed behind the diagram name.
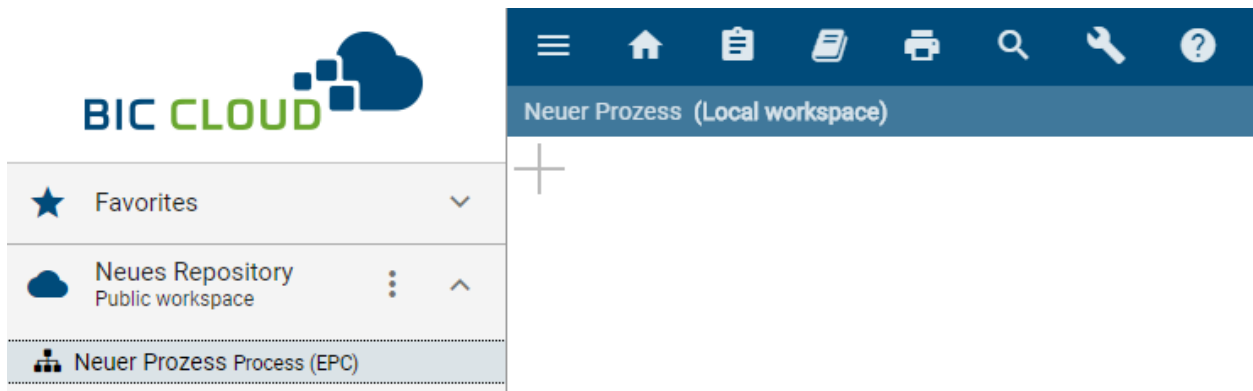
11.4 Where can I see earlier versions of a diagram?

You have the option of viewing previous versions in the archive. Whether and how long an archive entry exists for *Public workspace*, *Preview* and *Publication* can be set via the *administration*. Thus, for example, after each publication, the previous diagram version is entered in the archive of the publication. This therefore contains the history of all published versions for a diagram. The actual diagram version will be registered in the archive after publication. The individual diagram versions can be downloaded as ZIP archive. For example, this version can then be *imported*.

Open the *Versions* bar of a diagram. Then, click *Archive* to the right of the workspace entry, for example *Publication*.
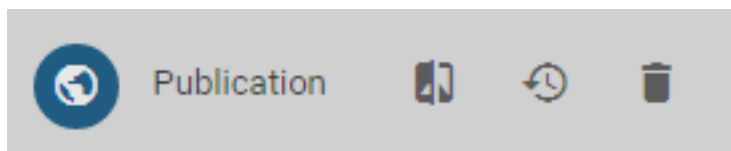
The archive opens and a list of previously published diagram versions shows up. The release date and time are displayed, as well as a button for downloading the archived version.
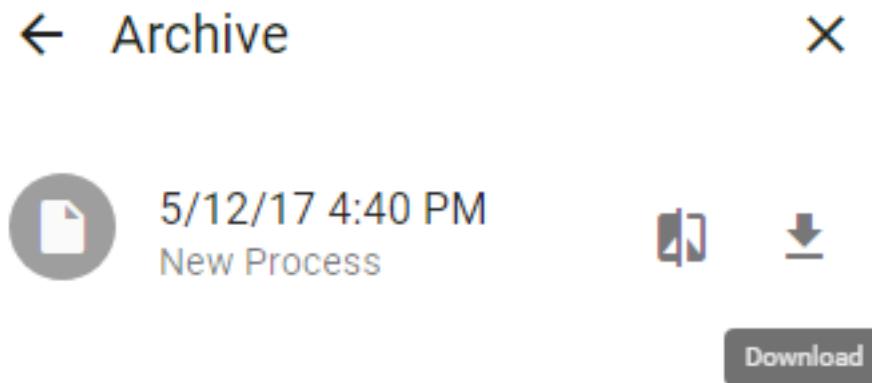
Note: In the public workspace, new archive entries are also created when catalog entries are changed in the catalog and when importing. All archive entries are created in the *languages in which content is maintained* on your diagram.

11.5 How does publishing behave with and without validity start time?

Within the governance *attributes* you have the option to maintain responsibilities as well as a validity period for the diagram or catalog entry. If the start time in the corresponding attribute *Valid from* has not yet been reached, it will continue to exist. However, the date of the publication can be predetermined by this attribute. If the approval of the publication takes place before reaching the registered date, the diagram or catalog entry is not published directly. Instead, the publication is postponed to the registered date. The exact time of publication depends on the coordinated world time (UTC+0). The german daylight time is then equivalent to UTC+2. If, instead, the date entered is already in the past, it is published directly.

If no *Valid from* date is entered during diagram or catalog entry publication, the attribute in the published diagram or catalog entry is automatically set to the current date when releasing. In the public workspace and in the preview, the attribute is still empty; it is only adjusted in the publication. Therefore, the date cannot be set in the properties of an *attachment of a catalog entry* when it is published.

11.6 What is the effect of limiting the validity of a diagram?

Within the governance *attributes* you have the option to maintain responsibilities as well as a validity period for the diagram. As soon as the diagram is only valid for less than 4 weeks (default setting), the responsible user or user group will be informed by e-mail about the expiration and receives a *resubmission task*. If the end date in the *Valid to* attribute is reached, the diagram will of course continue to exist. Users viewing the diagram in the publication stage get a warning, that they are looking at an outdated diagram. This is intended to prevent your employees from adopting outdated processes.
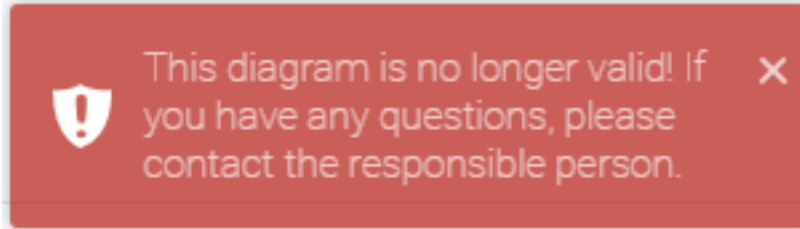
Note: The default setting of 4 weeks can be *adjusted by the administrator*.

11.7 What is the effect of limiting the validity of a catalog entry?

Within the *governance attributes* you have the option to maintain responsibilities as well as a validity period for the catalog entry. Users can see the validity in the details. As soon as the catalog entry is only valid for less than 4 weeks (default setting), the responsible user or user group will be informed by e-mail about the expiration and receives a *resubmission task*. If the end date in the *Valid to* attribute is reached, the catalog entry will of course continue to exist. Furthermore, the user will get a note in the *validation hub* if expired catalog entries are used.

Note: The default setting of 4 weeks can be *adjusted by the administrator*.

MODEL COMPARISON

The model comparison provides a clear graphical highlight of the changes to earlier versions of a diagram. For example, compare your local workspace with the published version or compare two *archived versions* of the same diagram. You have the possibility to go directly to the object details and to see the individual changes.

12.1 Where can I find the model comparison?

As soon as the versions of a diagram differ, the results can be compared.

Select your diagram in the Explorer and open the *Versions* in the menu bar.

In this example, the diagram was selected in the public workspace. This differs from the preview and the publication. By clicking on the *Compare* icon in the "Publication" tab, the model comparison between the public workspace and the publication opens.
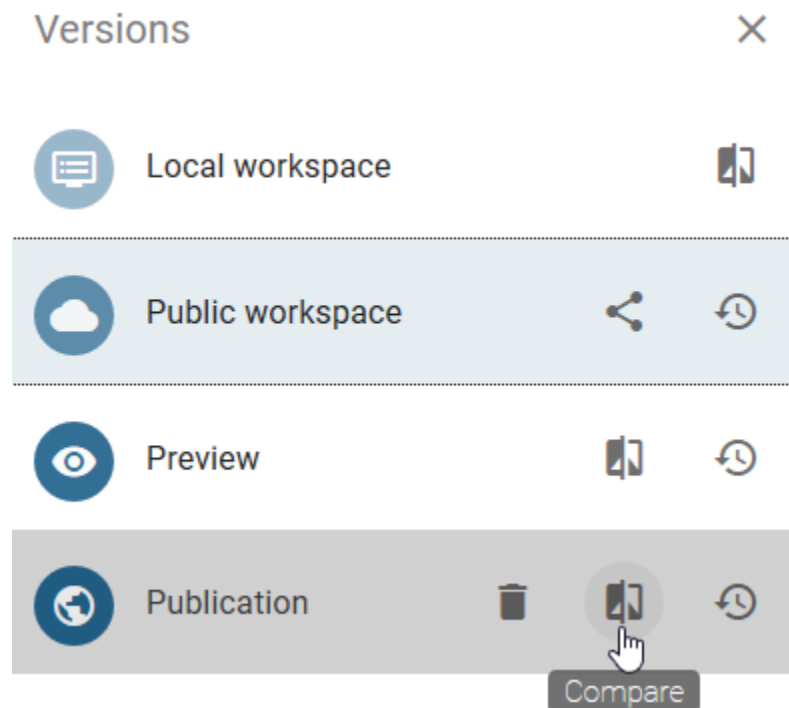
In the model comparison, the changes and differences between the stages are listed. The following image shows which stages are compared.

12.2 When and how is a symbol marked?

If you are in the model comparison, symbols can be highlighted in three different ways. In general, changes are marked by colored frames around the symbols in the editor and listed in the model comparison. The model comparison differs between the following changes:

- *Deleted*: Removed elements are highlighted in red
- *Added*: Added elements are highlighted in green
- *Changed*: Changed elements are highlighted in yellow
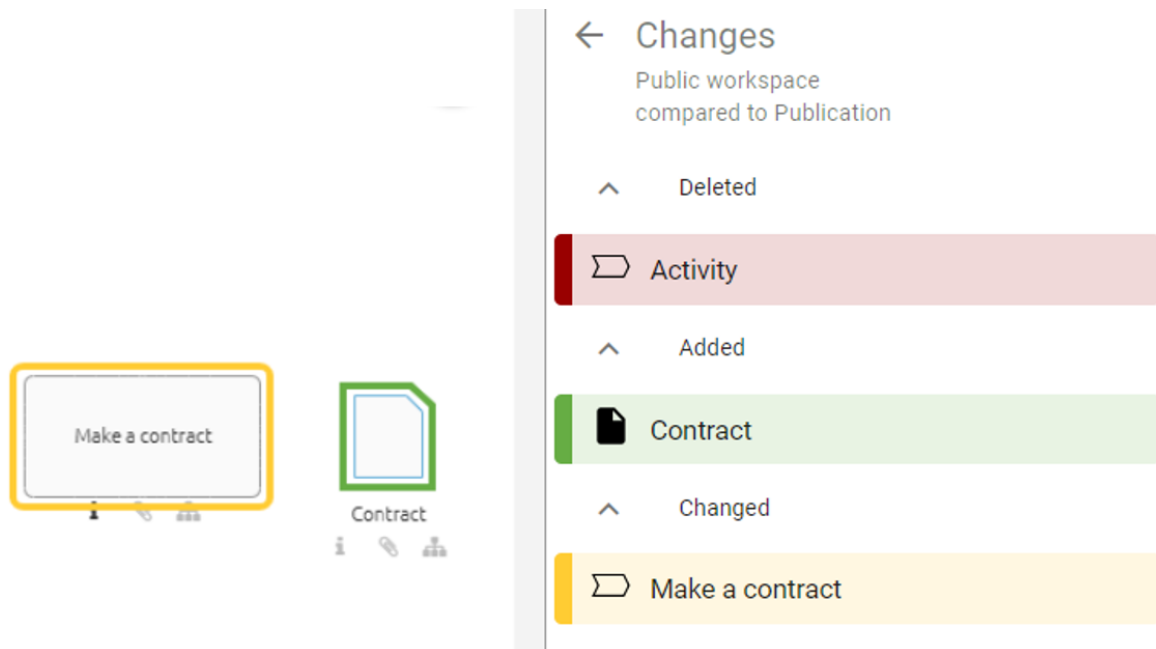
By clicking on an element in the list, the corresponding symbol is selected in the editor if it does not belong to the removed items.

12.3 How can I see which attribute has changed?

If the model comparison lists elements within the section *changed*, you can open the attributes of the element by clicking on the corresponding entry.
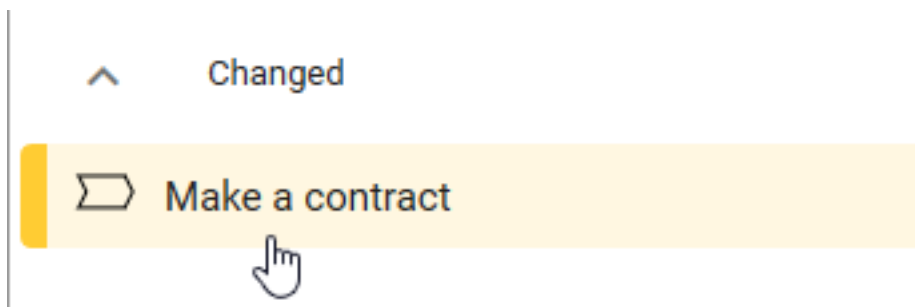
The headers of the changed attributes are finally highlighted in red in this view.

You will see changes to diagram attributes as well as object attributes. The entry of changed diagram attributes comes first in the list of changed elements for a better differentiation. In addition, you can also differentiate the different objets based on the icon displayed to the left of their name.

← Changes

Local Workspace
compared to Publication

∧   Deleted

▌ ⟧ Activity

∧   Added

▌ ▐ Contract

∧   Changed

▌ ⬡ Tender process

▌ ⟧ Sign contract

▌ ○ Start tender process

CHAPTER

THIRTEEN

NAVIGATION

13.1 How do I hide the sidebar?

In the menu bar, click the *Hide sidebar* button, to hide the sidebar on the left side.

To show the sidebar, click the same button again. It is now called *Show sidebar*.

13.2 Where can I find the context menu?

You can find a context menu for example in Explorer, Settings and Catalog. It is recognizable by three superimposed points. The context menu depends on the context therefore no consistent context menu exist. Depending on user rights and on the current area, such a context menu differs. In addition, there are different menus for diagrams, categories, favorites, catalog entries and a repository. In general, the most important executable options are listed in a context menu.
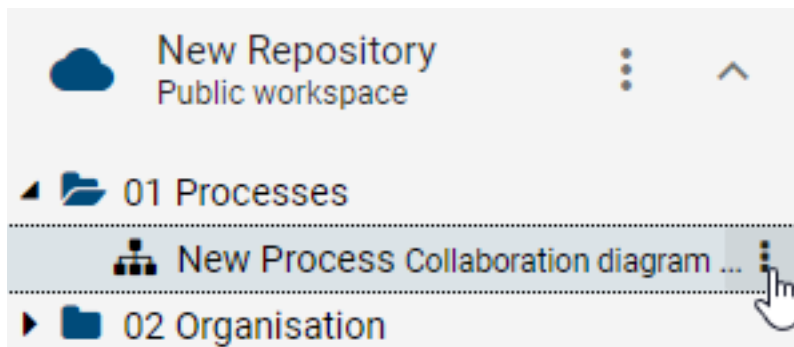
For diagrams, categories, favorites, catalog entries, comments and also in the settings, the context menu appears and can be selected as soon as you move the mouse over the entry in BIC Process Design.

13.3 How can I open a diagram in a new window?

Open the diagram you want to open in a new window. Afterwards, click on the context menu of the diagram (three points in a vertical arrangement) in the Explorer.
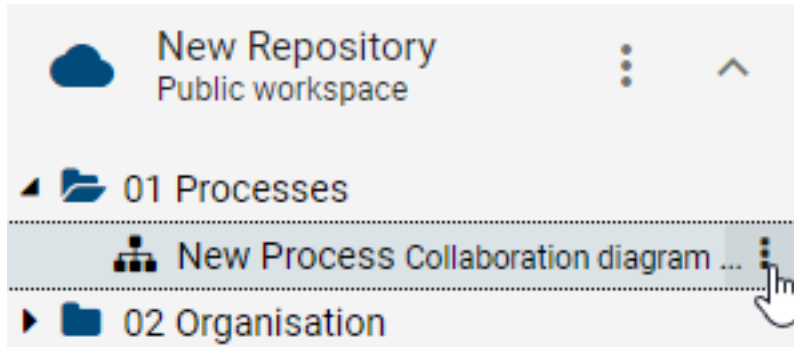
Select the menu item *Open in a new window*.
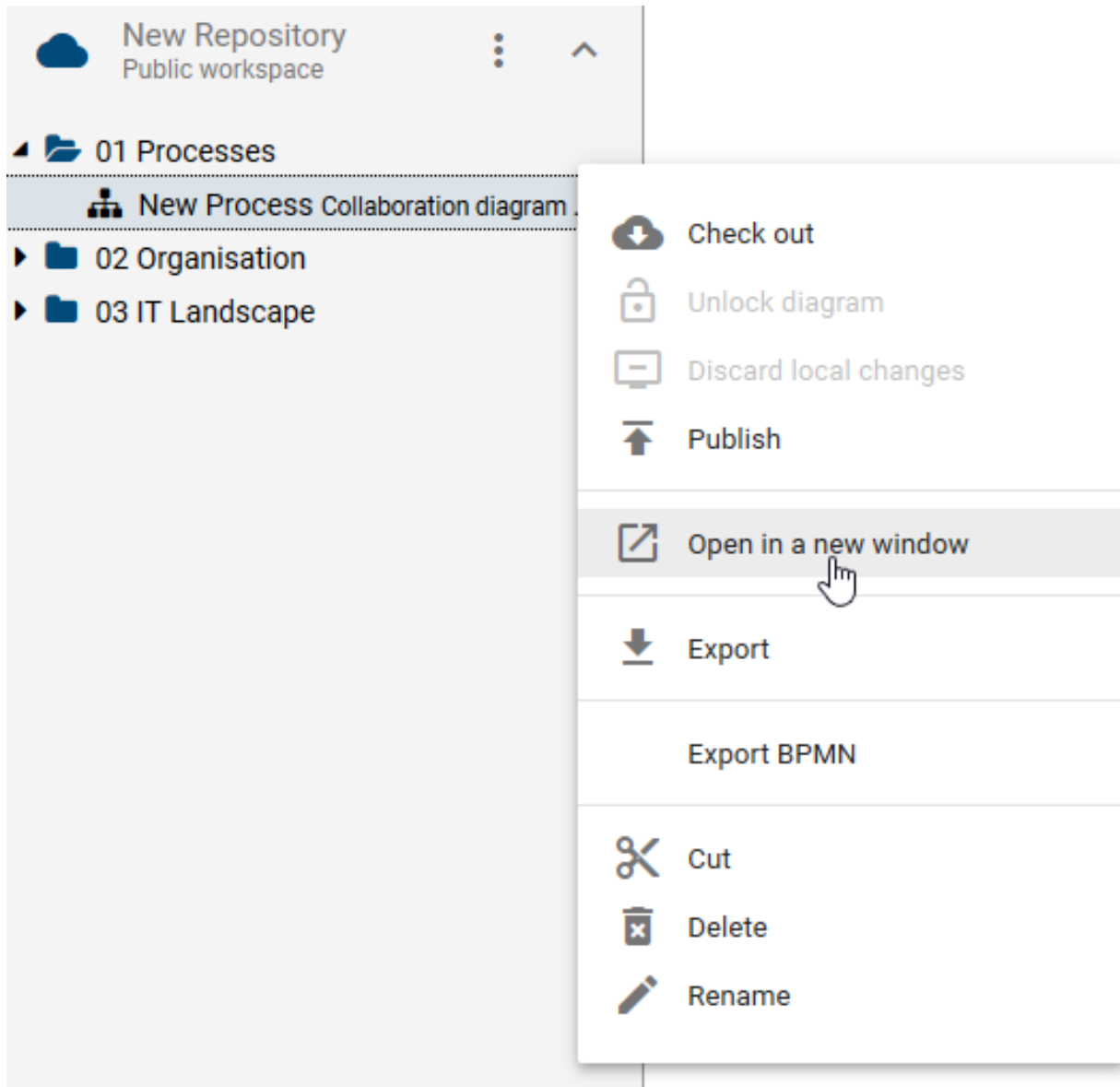
Note: Two opened windows are independent of each other. For example, you have opened a checked out diagram in two windows. After you edit and check in the diagram, it is not possible to check in in the other window a second time.

13.4 How can I zoom?

You can apply the zoom to a specific graph or to the entire website. This depends on whether the editor is selected or not. The selection can be made with a left-click outside, area 1. or inside, area 2. the editor.
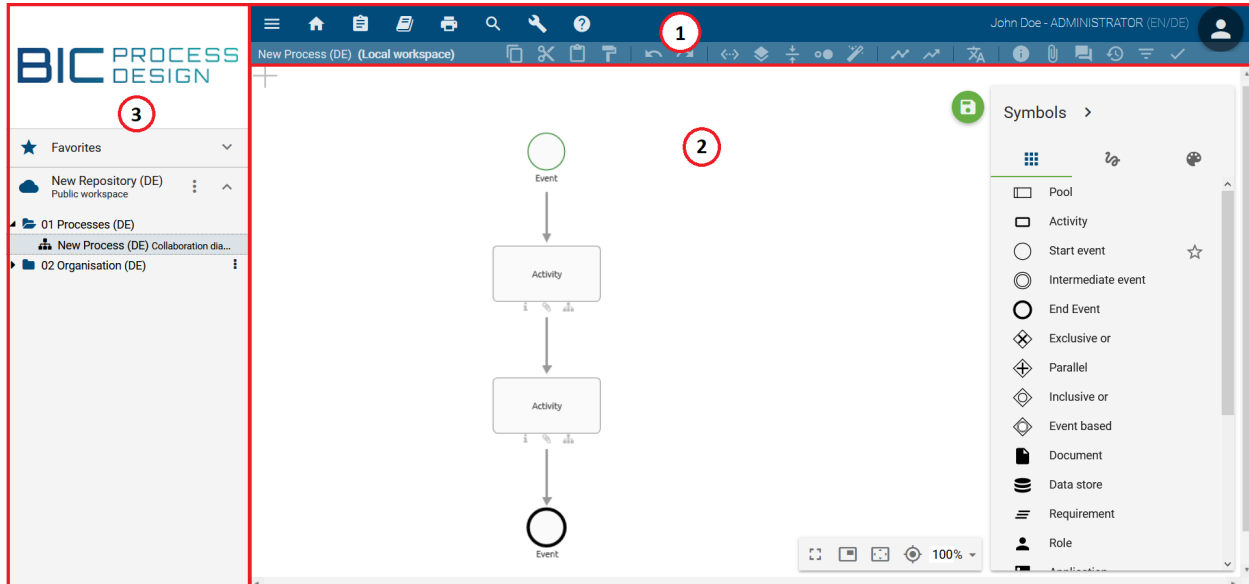
When viewing the diagram in the local or public workspace, hold down the *Ctrl* key and scroll with the mouse wheel. Optionally, you can zoom by holding down the Ctrl key and pressing + to zoom in or - to zoom out.

If you are in the preview or publication mode, you can simply zoom by scrolling with the mouse wheel.

13.5 How can I navigate the diagram?

The navigation differs depending on the stage. In the local and public workspace, you can navigate in the diagram by holding down the right mouse button or by scrolling and using the scrollbar. If you are in the Preview or Publication stage, you can navigate by holding down the left mouse button. As known from Google Maps, scrolling here corresponds to zooming and no scrollbars are displayed.

Furthermore, there is a navigation bar at the right bottom of the editor in diagram view, which offers the following possibilities:
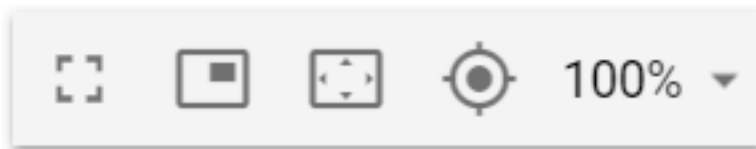
Full screen: If you click on the first icon *Enter fullscreen*, both the application and the browser switch to full screen mode. The application hides the explorer and the first menu bar. With a further click on the icon you can *exit fullscreen* mode for the application and the browser and return to the original view. Note that the *ESC* key only exits the browser's full screen mode. This overlays the *ESC* effect for other functions of the application, such as deactivating stamp mode. In addition, the application itself remains in full screen mode, if you exit full screen mode with *ESC*. That means the explorer and the first menu bar remain hidden. It is therefore recommended to use the buttons provided for deselecting full screen mode and other functions.

Navigator: This option is available in the public workspace. Click on the second entry to *Show navigator*. It gives

you an overview of the diagram and thus allows you to navigate easily by moving the transparent rectangle with the mouse. The size of the rectangle can be changed by dragging and dropping the edges, which corresponds to zooming in the diagram. Click again on the icon to *hide navigator*.
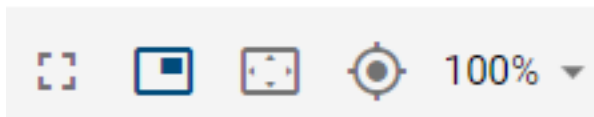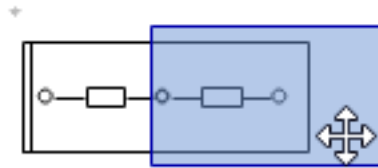
Adjust content to window size: By clicking on the third icon the diagram will be zoomed and scrolled, so that you can see the whole diagram in the editor.

Scroll selection into view: If you have selected a symbol, clicking on the fourth icon places the diagram so that the symbol is displayed. If no symbol is selected, this function scrolls the diagram to 0/0 position int the Public Workspace.

Zoom level: The fifth function allows you to set different zoom levels in percent. Preset levels appear when you click on the arrow. You can then select one of the zoom levels from the list. Furthermore, it is possible to set your own zoom level between 10% and 800%. To do this, click on the displayed number, enter a new percentage and confirm with the Enter key or click on the diagram.

13.6 Which keystroke combination can I use?

Navigation in the application

Navigation in the application via your keyboard is possible as follows.

Shortcut	Action
Tab	Focus in application changes to the next button.
Enter	Selection of the button on which the focus is located.
Shift + Tab	Focus in application changes to the previous button.
Arrow keys in Explorer	Focus in application switches between diagrams, categories and favorites in Explorer. For this, the focus must first be in the respective area of the Explorer.

For a stronger emphasis of the focus you can *toggle the high contrast theme*.

Diagram view in the preview and publication

These functions are available if you look at a diagram in the stages mentioned above. For example, they help navigate large diagrams.

Shortcut	Action
Mouse wheel	*Zoom in*, *Zoom out*
Pressed left mouse button	Diagram scrolling

Diagram view in the local and public workspaces

These functions are available if you look at a diagram in the stages mentioned above. For example, they help navigate large diagrams.

Shortcut	Action
Ctrl + + or Ctrl + Mouse wheel	*Zoom in*
Ctrl + - or Ctrl + Mouse wheel	*Zoom out*
Pressed right mouse button	Diagram scrolling
Ctrl + A	*Select* all objects
Shift + left mouse click	Select several objects one after the other
F9	Show attributes of a selected object

Diagram view in the local workspace

The following options are available to modellers in checked-out diagram. They facilitate fast modeling without a mouse.

Shortcut	Action
Ctrl + C	*Copy selected objects*
Ctrl + pressed left mouse button	Copy selected objects and paste by releasing mouse button
Ctrl + V	*Paste selected objects*
Ctrl + X	*Cut selected objects*
Del	*Delete selected objects*
Ctrl + Z	*Undo* the last modelling step
Ctrl + Y	*Redo* the last undo
Shift + pressed left mouse button	Move selected object only vertically or horizontally
Alt + pressed left mouse button	Move selected object when alignment lines are disabled
Arrow keys	Move selected object
Shift + Arrow key	Move selected object in big steps
Ctrl + B	*Description* bold
Ctrl + I	Description italicize
Ctrl + U	Description underlined
Tab	In formatted text attributes the tab key is used to indent the text.
Ctrl + Enter	Create the first element of the *mini symbol palette* of a selected object (inplace edit not active)
Ctrl + <number from 1 to 9>	Create the corresponding element of the mini symbol palette of a selected object (inplace edit not active)
F2	Access to the *text field* of a selected object (inplace edit)
Alt + Enter	Insert a line break in the text field of a selected object (inplace edit active)
Enter	End edit mode in text field with saving (inplace edit active)
Esc	Cancel edit mode in text field without saving (inplace edit active)
Ctrl + S	Save and then check in the modeling

13.7 How can I change my user role?

Users who have more than "Reader" rights can switch their active role in the system. This makes it easier for you to put yourself into the role of other users and to view the system from the perspective of your employees.

Your active user role is displayed in the upper right corner next to your user name. Click on your profile next to your user information to switch your active role. Then select *Change Role*. In the appearing window, you can pick the role of your choice from the drop-down list.

These settings remain until the user explicitly changes back his or her role. This also applies to the new login: *the role set by the administrator* is not automatically used.

Hint: Changing the user role does not change the rights of your user role, but rather the user interface is displayed according to the selected user role. This means that it can be that functions that are available to higher roles can be used even if you have changed your user role to one with less rights. For example, if you have selected the user role "Author" as an "Administrator" you can still check out diagrams where you have not been *set as "Author" within the governance attributes of the diagram*.

13.8 How can I turn on high contrast?

Open the *Profile* on the right-hand side of your user name.
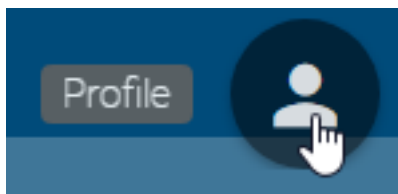
Click on the *Toggle high contrast theme* button. Afterwards, the application will be displayed in the high contrast scheme. This is a more contrasting version of the website, where for example the focus of the application is highlighted by a red frame. Operating without a mouse is thus supported. Also note *keystroke combination*.

You can switch off this view in the same way.

13.9 How do I open a subprocess?

You can jump directly from a diagram into a refined diagram which is a maintained in the *subprocess attribute*.

Open a diagram containing an activity with a subprocess diagram. Then, click the highlighted attribute icon below the object. Alternatively, navigate to the attributes of the object and click on the diagram in *Subprocess*. For checked-in diagrams, the stored diagram also opens by double-clicking on the activity.
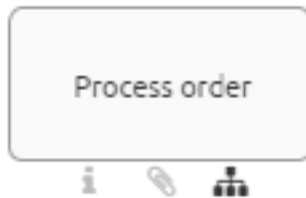
Note: The actual stage is Public Workspace and you have opened the diagram version Publication. If you want to change the diagram by clicking a subprocess or variants the stage will be changed to Publication. Published diagrams and categories are exclusively shown in the explorer. If the subprocess is not published, you will receive a *corresponding message*.

Note: Subprocesses also display diagrams to which you have *no access*. If you navigate into these diagrams, you will get a *corresponding message* and can not see the content of the diagram.

Tip: If no subprocess and no attachment has been maintained for a symbol, the attribute tab opens by double-clicking on the symbol.

13.10 How do I open a subprocess when multiple ones are maintained?

BIC Process Design offers the possibility to maintain *multiple variants within the attributes*. You can open them in the same way as *you can open one subprocess*. However, a simple click on the diagram icon under the object will give you a list of all the subprocesses. This gives you the opportunity to see at a glance which navigation options are available to you. The top entry reflects the subprocess field, followed by the variants. Select the required subprocess to follow the link as described above.

13.11 How do I get to MyBIC?

Click on the Home button in the menu bar to display *MyBIC*. Alternatively you can click on *Favorites* in the Explorer.

Then you can see the following different tiles:

Local diagrams: All local diagrams, that means diagrams, that you have checked out, are listed here. For each diagram you will see the name, the diagram type, the associated icon and the time of the last change. The list is sorted by the last change - the last modified diagram is at the top of the list.

Start diagram: This tile is displayed, if a *company-wide start diagram* is set, and shows the preview of this diagram.

Diagram: For each diagram favorite, a separate diagram tile will be displayed, which includes the diagram as a preview. The favorites are sorted alphabetically by name, which also form the header of the tile.

Search result: For each *search favorite*, a separate "Search result" tile is displayed named by the favorite. The favorites are sorted alphabetically by name. The corresponding search results are listed per tile. If there are many search results, a scroll bar appears within the tile, allowing you to see all the results. For each result you see the name, the diagram type, the associated icon and the time of the last change.

If available, the tiles are sorted according to local diagrams, the start diagram and the favorites. The favorites differ additionally in standard favorites, which are set via the *administration for MyBIC*, and the personal favorites and are displayed in this order on your MyBIC page.

Depending on the tile, you can navigate to the respective diagram or search by clicking on the tile or the tile header. Click on a diagram or object list entry of local diagrams or the search results to go to the respective diagram. If objects are catalog entries and are part of the search results, you can access the detailed view in the catalog by clicking on them.

Note: A diagram-specific preview is available if the diagram has been changed since version 5.3.0 and if it is in preview or publication stage. Otherwise, a preview will be displayed for the respective diagram type.

13.12 How can I edit a locked diagram?

Basically, you can not edit diagrams that are checked out by another user. However, you can contact the editor by e-mail:

Diagrams that are checked out by other users are marked with a red button showing a lock icon.

Move the mouse pointer over the red lock icon. The e-mail address of the blocking user appears. Click on the red button, your e-mail client with the pre-filled e-mail address of the blocking user opens. Tell the person that you wish to work on the diagram.

Note: Your administrator can *unlock diagrams* for editing, for example, if a modeler did not check in diagrams before his / her holiday, and another user should edit them during his / her absence. This procedure can cause data loss and is therefore only allowed to the administrator.

13.13 What happens if a diagram is not available?

If a diagram is not available in the current stage, you receive the following notification.
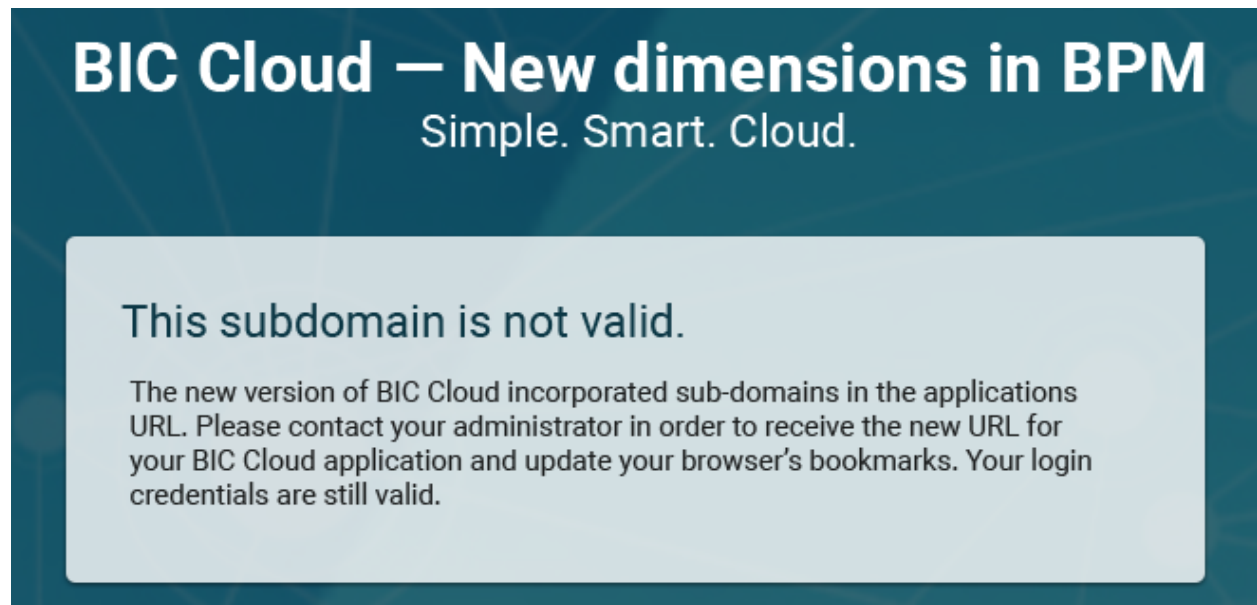
This information is not available in the stage Publication. If you are navigating from another diagram, contact the responsible person or contact a system administrator.

Diagram may not exist in single areas for different reasons. For example, you receive this message by following a subprocess in the publication to another diagram, which itself has not been published yet. When *navigating via deposited diagrams*, you switch to publication if you are not already there.

13.14 What happens if I use an invalid subdomain?

If the user wants to access the application without a valid subdomain and no default client is set, the following information text is displayed.

BIC Cloud — New dimensions in BPM
Simple. Smart. Cloud.

This subdomain is not valid.

The new version of BIC Cloud incorporated sub-domains in the applications URL. Please contact your administrator in order to receive the new URL for your BIC Cloud application and update your browser's bookmarks. Your login credentials are still valid.

EXPORTS

14.1 How can I print a diagram?

Open the intended diagram in the desired stage. In the menu bar above the opened diagram you will find the *Print preview* button. Click on this button to open the print menu on the left side.

From the drop-down menu, first select the format in which you want to save and print the diagram. You can choose between PDF, PNG, JPEG and SVG formats.
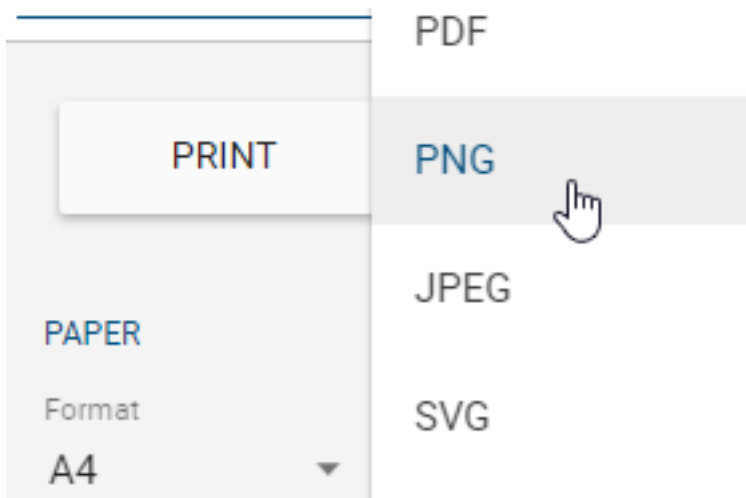
Some presets can be made by the administrator or *modeler*. In the print menu, you can set the following and adjust the print as you like:

- Select the paper size

- Set the orientation

- Define or reset page margins

- Set the scale

- Set resolution (png, jpeg only)

- Display header and footer in file (not visible in print preview and configured via *administration*, only pdf)

- Print black and white

PRINT   PNG ▼

PAPER

Format
A4 ▼

Orientation
Landscape ▼

MARGINS

Left (mm)
15

Right (mm)
15

Top (mm)
20

Bottom (mm)
20

SCALE

Limit vert. pages
-1

Limit horz. pages
-1

Factor   100

RESOLUTION

Low   High

OPTIONS

☐ Black and white

Once you have made the desired settings, you can print or export the diagram by clicking the *Print*-button. For security reasons it is not possible to send a print job directly from your browser to your printer. Your diagram is then exported with the selected settings and in the desired format in your content language. You can open the export and print it using the relevant program, such as the PDF reader.

You can leave the print preview via the *Back to process view*-arrow in the menu bar. The print settings are not saved. Modelers can make some *print presets* instead.

Note: The print preview does not support files stored in interlace mode in the diagram, such as *PNG files*. In this case, you can save the file without interlacing and reinsert it into the diagram.

Note: Please note that not all fonts support cyrillic letters in the PDF print. The letters will not be displayed in the PDF if the font *Handlee*, *Inconsolata* or *Titillium Web* is used. In case of the fonts *Arial*, *Courier New*, *Georgia*, *Lucida*, *Palatino*, *Tahoma*, *Times New Roman*, *TrebuchetMS* and *Verdana*, cyrillic letters will be shown in the default font *Ubuntu*. Currently arabic letters are not supported in a PDF print at all.

Note: If the formatting *bold/italic* is used in combination with the font *Handlee* or *Ubuntu Condensed*, it is not applied to the PDF print. The fonts *Inconsolata*, *Open Sans Condensed* and *Roboto Slab* do not support italic formatting in the PDF print as well.

Note: If you open an SVG export in your local operating system, the used fonts for text and symbols (GF and FA) must be installed there.

14.2 How can I export data?

Creating reports

You can only export checked-in diagrams. Therefore, make sure in which area you are located and, if necessary, *change it* via the corresponding menu.

Select a diagram, category or a repository for which you want to create an export. There, click the *Download report*-button and select an entry (e.g. Manual).

At the bottom right of the screen, you will get for example the information *Report is being created* and afterwards the *Report has been created* message. Click on the download link to download the export.

Now you can open the created export. This contains extensive information about your diagram. A list of available exports can be found in the *following chapter*.

Note: The report language is always based on your current *content language*.

Data backup

To save data, administrators can export diagrams, categories, and repositories. The exports are stage-dependent and can be executed in *Public workspace*, *Preview* and *Publication*. When exporting in the public workspace, note that the affected diagrams must have been checked in at least once to be considered. The state of the public workspace is exported from checked out diagrams that have already been checked in once. In the preview and publication, you can only export the entire repository.

- **Diagram export**: Open the context menu of the diagram that you want to export and click on the *Export* button. Now the export is created as ZIP-folder. It contains the selected diagram and *attached files*.
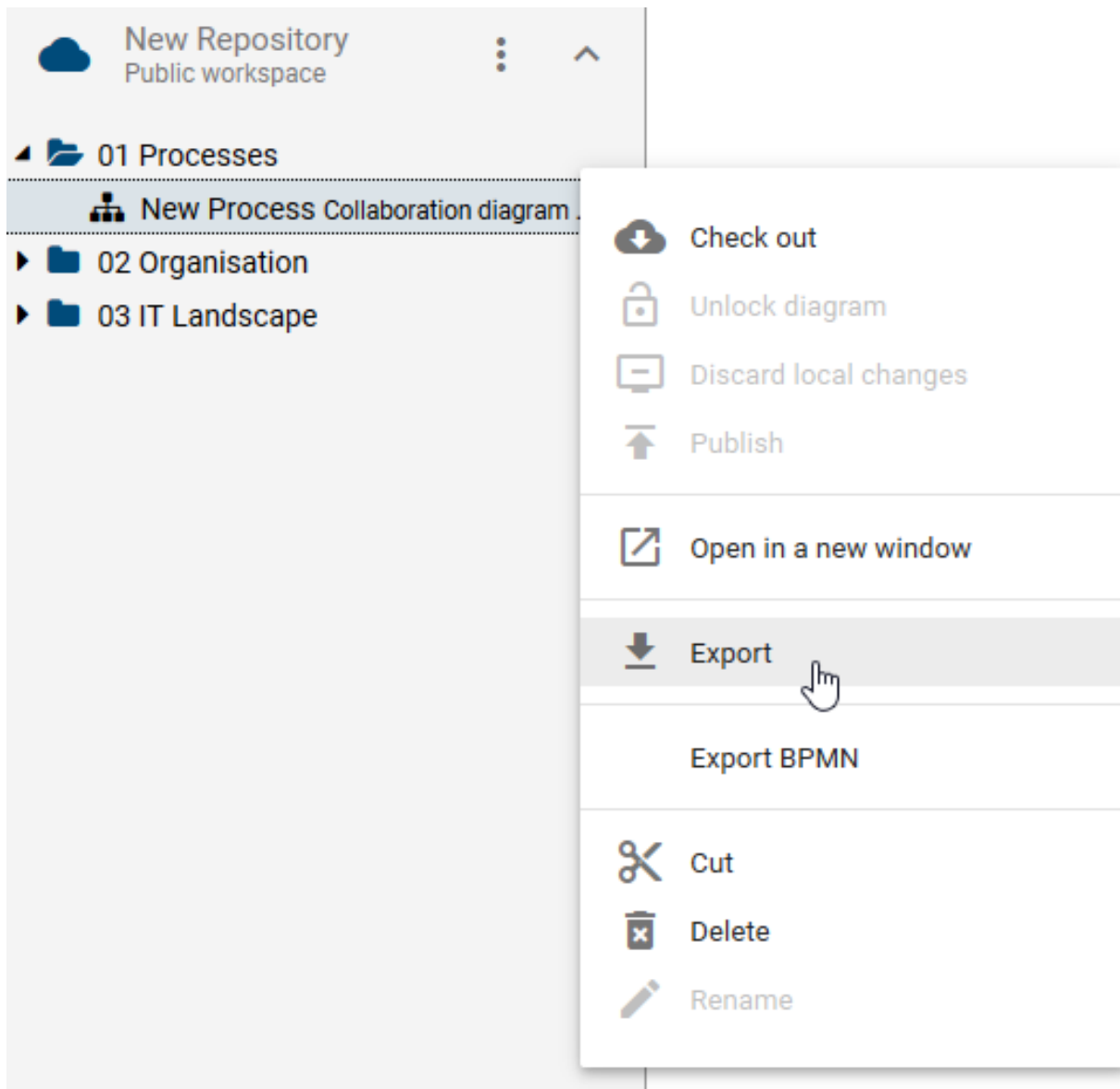
- **Category export**: Open the context menu of the category you want to export and click on *Export*. Now the export is created as ZIP-folder. It contains the selected category, subcategories and included diagrams.
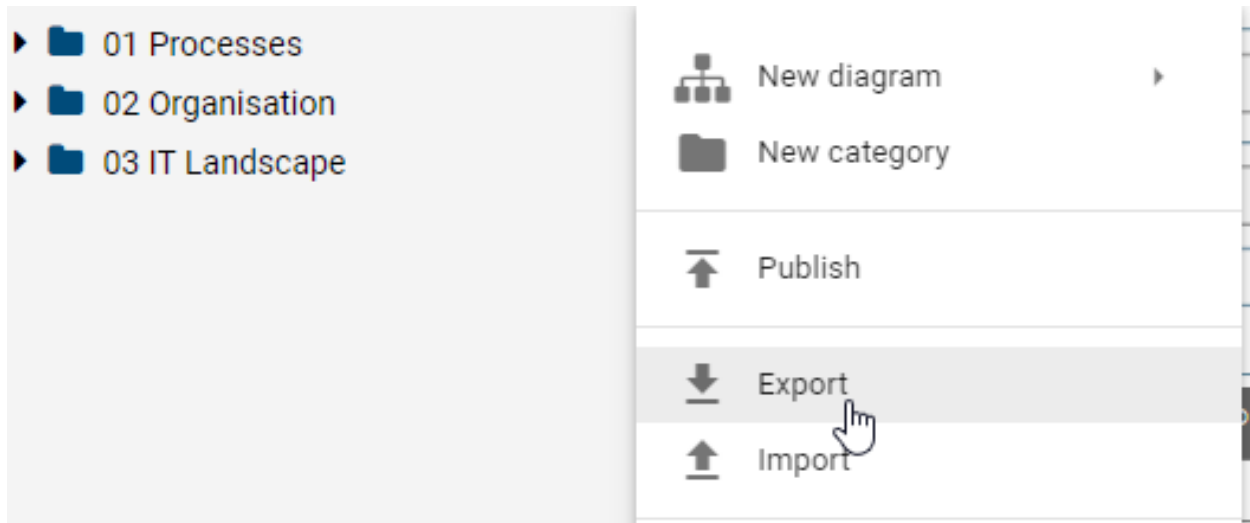
- **Repository export**: Open the context menu of the repository that you want to export and click on *Export*. Now the export is created as ZIP-folder. This contains all categories, subcategories and diagrams contained in the repository.
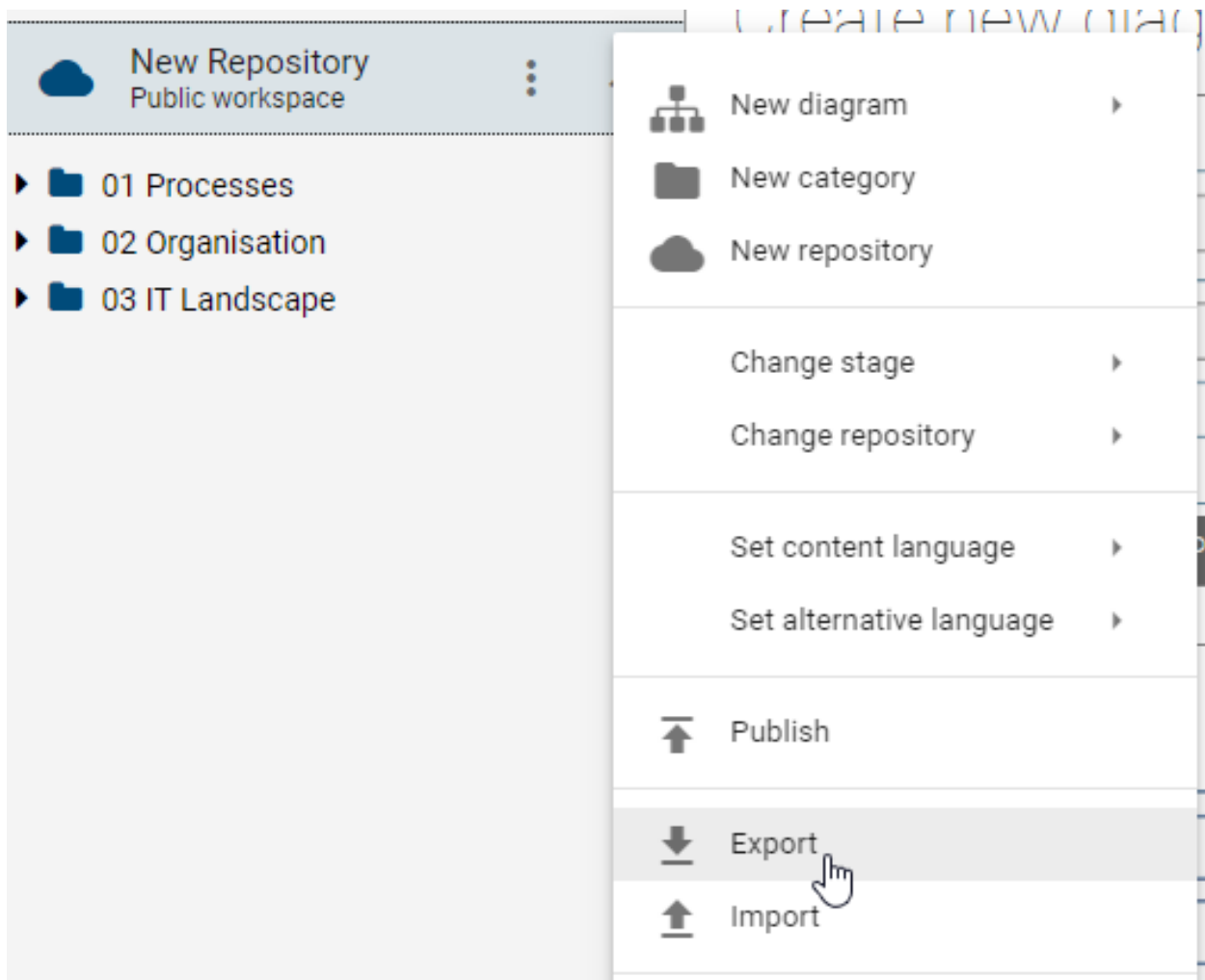
The export can be downloaded by clicking on *Download the export* in the appearing toast.
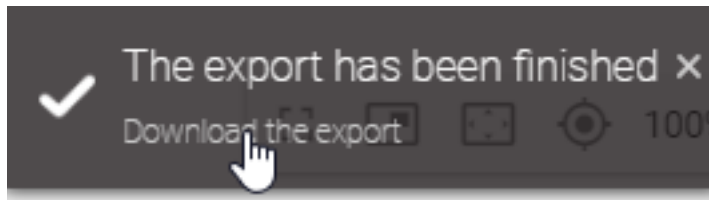
You can *import* exported data.

14.3 Which exports are available?

The following different exports are available.

Manual: The manual report (.docx-document) can be executed on individual diagrams (BPMN and EPC) by default. The cover sheet contains the name of the diagram as well as some release dates. Furthermore, there is a process overview, a process graphic, an overview of the responsibilities in the process, a tabular representation of the process steps and a description of used resources. As standard the process overview contains responsible and consulted roles, inputs, outputs, IT systems as well as risks and KPIs. The tabular representation of the process steps includes a list of all existing activities and associated symbols such as inputs, outputs, systems, risks and KPIs.

Process matrix: Regarding the default settings, the process matrix (.xlsx file) can be executed on VCD, EPC, BPMN diagrams, on a category and on a repository. The file is divided into seven sheets. The first five sheets offer you pre-configured evaluations in form of pivot tables related to different entities. They offer evaluations about the "Application usage", "Document usage", "RACI mapping", "Risk occurrence" and "Diagram metrics". The "Data" sheet of the file contains some collected information. This includes some diagram information, all modeled activities and objects directly related to the activities, such as the so-called satellites. Among others, the Entity ID and the Occurrence ID, which uniquely identify the connected object and its occurrence in the diagram, are also listed here. Unconnected objects and objects that are connected to an activity via two corners, for example, controls of risks, are not taken into account. Furthermore, the report does not contain any information about the process flow. The last sheet "Matrix" includes a pivot table in which you can create various evaluations. For more information about how to handle pivot tables, see e.g. here or on this support website.

Best Practice

With the process matrix you can quickly identify which satellites are connected to which activities. For example, if an application runs out, you have an overview of the affected diagrams, the activities concerned and the other parties involved. For this purpose e.g., just activate the checkmarks for the PivotTable fields one at a time. You can then use Excel to filter the corresponding columns (for example, *Object Type*). You can also answer additional questions using the column fields and value fields of the pivot table.

Manual report with assignments: By default, this export can be executed on process overviews (VCD) and processes (EPC and BPMN), which contain subprocesses. It includes a comprehensive process description including all diagrams, which are shown behind the respective process and furthermore behind the stored diagrams.

Note: **Subprocesses** on start or end activities with the node symbol type *NST_INTERFACE* are explicitly excluded from the manual report with assignments.

Process warehouse: You have the option to access the export in the form of an .xlsx file with various categories and diagrams. When running the export on a category, all diagrams within that category are taken into account. The exported Excel file includes the worksheets "Diagram" and "Object". In the worksheet "Diagram" all attributes of the involved diagrams, the diagram ID and the name of the category above are listed. The "Object" sheet contains the object type, the symbol type and all the attributes of the objects that are contained in the affected diagram. This also

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includes the Entity ID and the Occurrence ID, which uniquely identify the object and its occurrence in the diagram. Additionally, the affiliation to a diagram is shown for the respective objects using the diagram name and the diagram ID. Overall, all attributes in this export are output in the content language selected in the system.

Hint: Please note that the process warehouse export is not configurable by the administrator.

Hint: The date information you find within your exports (e.g., "Valid from", "Valid to", "Created date", and similar) undergo conversion to the time zone of the currently active user. This ensures that the display of date information always aligns with the user's current time zone.

Hint: In older versions, all attribute types were exported, regardless of whether they were deactivated or removed within the method. From now on, only visible attribute types are exported.

Note: Attribute values exceeding 32767 characters will be automatically shortened. A notification will be provided at the end of the shortened value indicating it has been reduced.

Note: In this export, all attribute types which use dates as values, will also have the data type date in the corresponding cell within the xlsx file. With this you can process these values easily, e.g. to calculate time spans. This applies for all Process warehouse exports, regardless of whether they are carried out for *repositories, categories, diagrams* or the catalog. The displayed date format in Excel (e.g. 12/05/2019 or 12:05.2019) depends on the display language, which has been set within the Windows language settings.

Tip: As part of the DSGVO action plan, you can filter the process warehouse for documents and activities to which "data protection" has been maintained. Another application possibility is filtering for "risk", which allows you to see the risk matrix.

See *"Creating reports"* to know how to perform these exports.

Note: As an administrator, you can *change the basic settings of individual reports*, such as their availability. You can also customize the reports by using a report template.

14.4 Which reports sort activities based on the process flow?

Similar to the *matrix diagram view* activities are listed in certain reports according to the process flow of the diagram. This means that activities which are placed at the beginning of the process flow, will also be listed first in the corresponding report.

This sorting algorithm is available for all reports in .docx format. This effects by default the *Manual* and the *Manual report with assignments*. The affected diagram types are accordingly the collaboration diagram (BPMN), the process (EPC) and the process overview (VCD).

Note: When gateways or operators have been modeled in a process flow, then the probability of the activities will determine the order of those activities.

14.5 Process cost/ Simulation

The Process cost/Simulation (.xlsx file) can be executed on individual diagrams (BPMN and EPC). Downloading the report is described in detail in the *Export Data section* under "Creating reports".

This report offers a detailed listing and calculation of different costs, times and capacity requirements on three worksheets. In principle, some *attribute inputs* are required in the affected diagrams of BIC Process Design for meaningful evaluation. These inputs affect not only the name of the resources and activities but also the attributes in the analysis attribute group. They are included in the report and explained below in the respective subsections under the point of view "taken from the system". The imported values can be adjusted manually in the report itself. Furthermore, multiple occurrences of resource objects in a diagram are recognized as one object in the report. Occurrences of activities and activities or resources with the same name are output individually in the report. Note that different objects should generally have different names, otherwise some calculations may be corrupted. In the following, the individual worksheets are explained in more detail in order to clarify the analysis procedure.

14.5.1 Table sheet "Activities"

This spreadsheet contains four different blocks. In the following, the functions and calculations are illustrated by the individual terms within the blocks.

Process costs: This block is essential for the further, automatically executed calculations of all times and costs. The three required fields are not filled in automatically when the report is created. Instead, they must be entered manually in the Excel file.

Process costs	
Date	04/13/2018
Period of calculation	Week
Instances per period	5

- *Date:* In the corresponding cell, you can enter any date, for example, the current date.

- *Period of calculation:* The entry of the calculation period is required in the corresponding cell. This could be "week" or "month", for example. The period should be taken into account by entering values in BIC Process Design. Take care of consistency, so as not to distort some calculations. For example, the capacity of a resource (see *worksheet "Resources"*) depends on the selected period!

- *Instances per period:* Depending on the calculation period, the number of runs of this process must be entered here, e.g. 5. Further calculations are only performed automatically using this number.

Activities of the process: This block offers a compact overview of the activities of the process, their frequencies and some total costs. These total costs partly originate the result of subsequent calculations.

Activities of the process					Total MC	Total RC	Total costs
Activities		Frequency	Probability	MC			
[n]	[Text]	[n]	[%]	[€]	[€]	[€]	[€]
1	Activity 1	5	100%	10,00 €	50,00 €	20,00 €	70,00 €
2	Activity 2	2,5	50%	60,00 €	150,00 €	150,00 €	300,00 €
3	Activity 3	2,5	50%	200,00 €	500,00 €	80,00 €	580,00 €
				Sum	700,00 €	250,00 €	950,00 €

Taken from the system:

- *Activities:* Number assigned when reading the process and name of the activity

- *Probability:* Probability with which this activity is performed in the process (in %)

- *Material costs (MC):* Cost of an activity (in €)

For example, the values for "Activity 1" have previously been entered in the attributes in the system as follows:

∧ Analysis

Material costs (Euro)

10

Idle time (minutes)

6

Probability (%)

100

Process time (minutes)

2

Setup time (minutes)

5

Transport time (minutes)

0

Calculations in the report depending on the instances per period:

- *Frequency:* Probability multiplied by the number of runs; it indicates how often an activity is executed per period
- *Total material costs (Total MC):* Material costs multiplied by the frequency; corresponds to the material costs of an activity per period (in €)
- *Total resource costs (Total RC):* Sum of all costs of the resources involved in this activity per period (in €), calculated using the "Resources" block

- *Total costs:* Sum of total resource costs and total material costs per activity per period (in €)

- *Sum:* These three numbers each represent the sum of the Total MC, Total RC and Total Costs of all activities. They therefore correspond to the respective total costs of the period. (in €)

Times: In this block some basic and total times are listed.

Times				Total time
PT	IT	TT	ST	
[min]	[min]	[min]	[min]	[min]
2	6	0	5	65
20	12	0	10	105
80	0	10	40	325
			Sum	495

Taken from the system:

- *Process time (PT):* Processing time of an activity (in minutes)

- *Idle time (IT):* Idle time of an activity (in minutes)

- *Transport time (TT):* Transport time of an activity (in minutes)

- *Setup time (ST):* Setup time of an activity (in minutes)

For example, the values for "Activity 1" have previously been entered in the attributes in the system as follows:

∧   Analysis

Material costs (Euro)

10

Idle time (minutes)

6

Probability (%)

100

Process time (minutes)

2

Setup time (minutes)

5

Transport time (minutes)

0

Calculations in the report depending on the instances per period:

- *Total time:* Sum of all times PT, IT, TT and ST multiplied by the frequency per activity (in minutes)

- *Sum:* Sum of the total times of all activities per period (in minutes)

Resources: This block is subdivided into further resource blocks, which are lined up and each four columns long. For each resource, the name and the values listed below, such as associated costs and times, are displayed here. The involvement of a resource in an activity is indicated by the existing numbers within a block in the respective row. Accordingly, the fields remain empty if a resource does not execute an activity. The calculation for "Total RC" finally

takes place across resources and thus stands in the last column of the block. The resources listed correspond to the ones in worksheet "Resources". The worksheets are linked and influence each other.

	P	Q	R	S	W	AA	AB

Resources							
	Role 1				Role 2	Role 3	Total RC
	PT	RC per instance	RC	Total PT	Total PT	Total PT	
	[min]	[€]	[€]	[min]	[min]	[min]	[€]
	2	4	20	10			20
	20	40	100	50	50		150
						200	80
	Sum	120,00 €		60	50	200	

Taken from the system:

- *Process time (PT):* Time taken by a resource to process an activity (in minutes). This corresponds to the PT of the activity if no separate entry per resource is possible in BIC Process Design. You can change the number yourself in the report.

Calculations in the report depending on the instances per period:

- *Resource costs per instance (RC per instance):* Cost rate of the resource (see "Resources" sheet) multiplied by the PT that the resource requires to process an activity (in €). It indicates how much a resource would cost if the activity is run once.

- *Resource costs (RC):* RC per instance multiplied by the frequency (in €). These are the costs per period that the resource causes by performing the activity.

- *Total process time (Total PC):* Frequency multiplied by the PT that the resource needs to process an activity (in minutes). It specifies how much time the resource needs to complete the activity per period.

- *Sum:* respective sum of RC, or PT. It indicates the total costs or total time the resource requires per activity per period (in € or minutes).

- *Total resource costs (Total RC):* Sum of all RC per activity. It specifies the amount of costs of an activity per period, caused by the resources involved (in €).

Note: Input values transferred from the system, such as names, probabilities, costs, times and capacities, can be subsequently adjusted in the report as required. The changes are useful for analysis root-attributes "Capacity" and "Cost rate" of the "Role" object, for example, if these values are activity-specific. In contrast to *occurrence attributes*, root attributes are adopted for each occurrence of an object. *Confirmed objects* should therefore only be changed in the catalog or in the file itself.

14.5.2 Table sheet "Resources"

This section contains the resource requirement calculation, which shows the capacities and costs of individual resources separately.

Capacity requirements calculation: In this block, some values of resources are listed separately. These values correspond to the entries in the system, are calculated separately in the worksheet "Activities" or in this worksheet.

Capacity requirements calculation						
Resources		Capacity	Cost rate	Total RC	Total time	Capacity requirements
[n]	[Text]	[h]	[€/min]	[€]	[min]	[n]
1	Role 1	0,5	2	120	60 ✖	2,00
2	Role 2	2	1	50	50 ❗	0,42
3	Role 3	5	0,4	80	200 ✔	0,67

Taken from the system:

- *Resources:* Number assigned when the process is read and name of the resources

- *Capacity:* Capacity of the resource (in hours)

- *Cost rate:* Cost rate of the resource (in € per minute)

For example, the values for "Role 1" were previously entered in the attributes in the system as follows:

⌄ Analysis

Capacity (in hours)

0,5

Cost rate (in € per minute)

2

Calculations in the report depending on the instances per period:

- *Total resource costs (Total RC):* Sum of the cost of this resource in the selected period (in €); it corresponds to "Sum" from *worksheet "Activities"*, block "Resources"

- *Total time:* Sum of resource processing times over participating activities in the selected period (in minutes); it corresponds to "Sum" from *worksheet "Activities"*, block "Resources"

- *Capacity requirements:* Ratio of the total time required by the resource to perform the activities of this process to its available capacity. The value of the capacity requirements therefore indicates the extent to which a resource uses its available time or whether more time is needed. A distinction is made as follows.

  - Value greater than 1 (red X): The time required for the tasks exceeds the capacity of this resource for the selected process. There is a capacity requirement.

– Value between 0.5 and 1 (green check mark): The capacity is equal to or half the processing time required for the activities. The resource has sufficient capacity.

– Value less than 0.5 (yellow exclamation point): The capacity is more than twice as large as the processing time required for the activities. The resource still has a lot of capacity.

14.5.3 Table sheet "Diagram"

Here you can see a picture of the evaluated diagram.
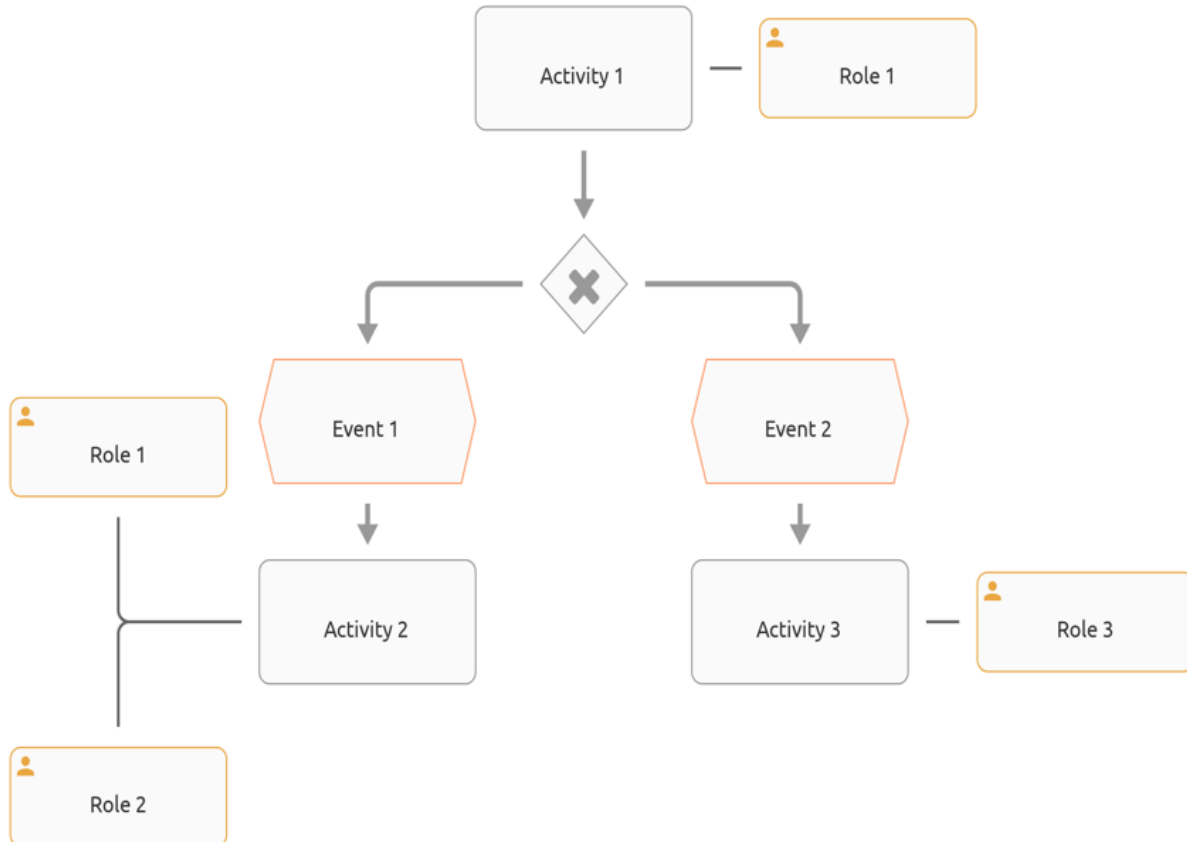
14.6 How can I import data?

Data exported from BIC Process Design or BIC Platform, such as diagrams, categories and repositories, can be imported in the *public workspace* of BIC Process Design. Published versions are not included in the import. Furthermore, this feature is available for users of the "Administrator" role.

- **Import into category**: Open the context menu of the category in which you want to import data. Click on *Import*. In the opening window you can select and confirm the desired ZIP-folder. Then all categories and diagrams are inserted in the selected category.
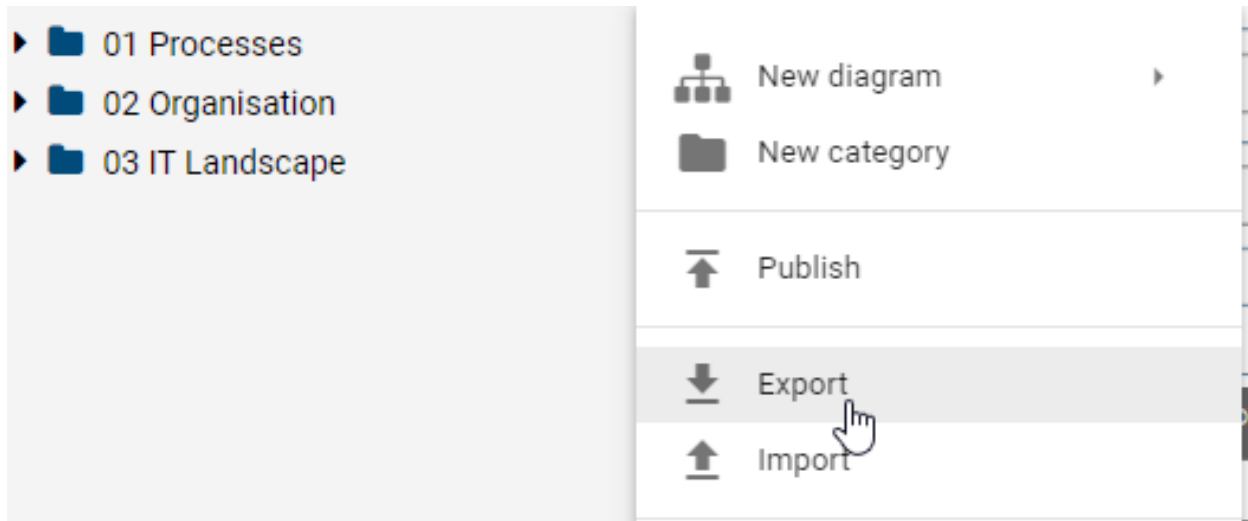
- **Import into Repository**: Open the context menu of the repository to which you want to import data. Click on *Import*. In the opening window you can select and confirm the desired ZIP-archive-folder. Then all categories and diagrams are inserted into the selected repository.
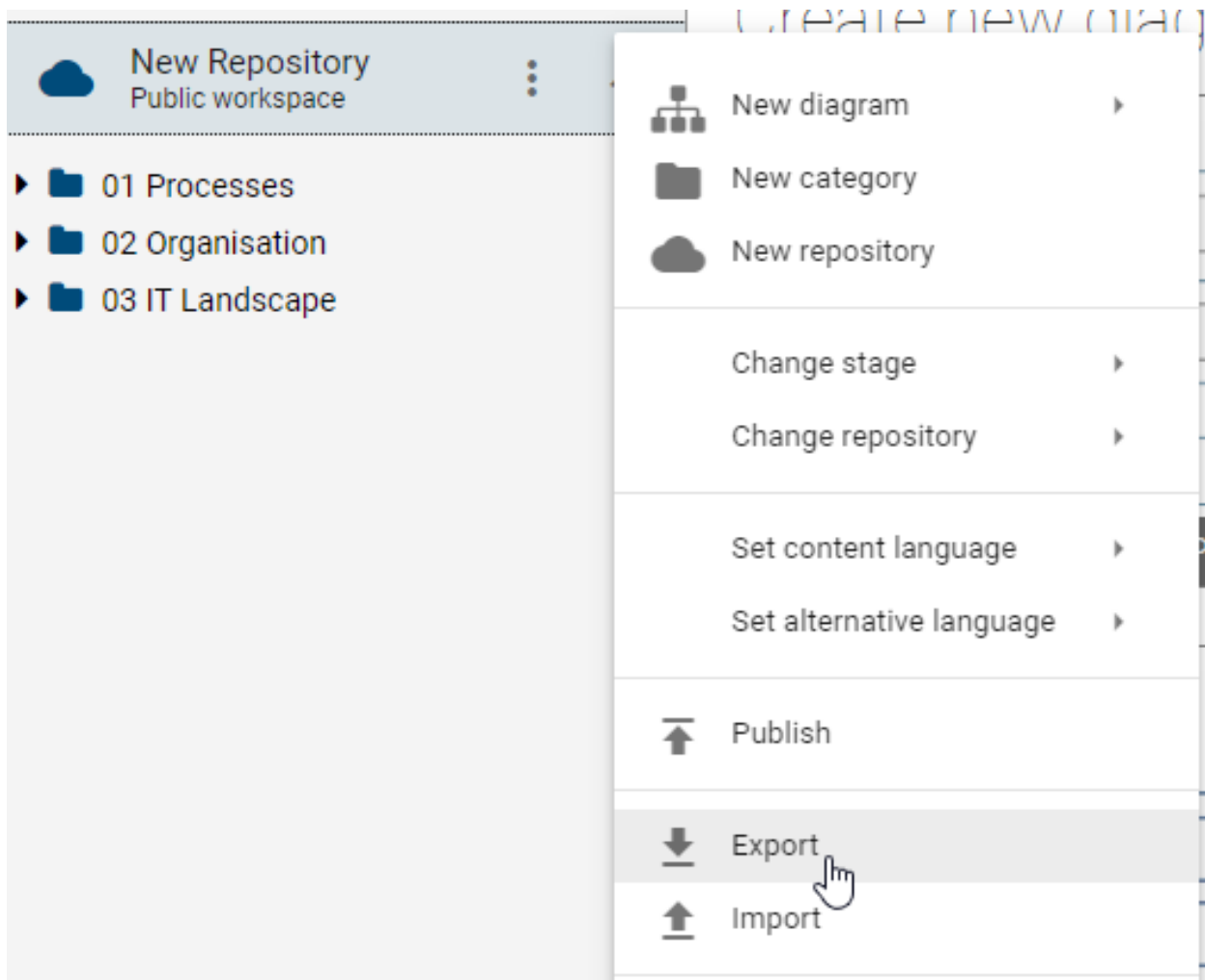
For the current import you will receive a note at the right bottom of the screen. You will also be notified of the

successful completion of the import.
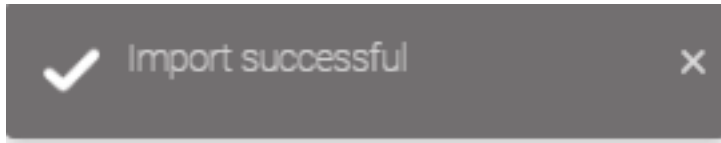
Note: Please note that imported diagrams overwrite the contents of existing diagrams of the same ID. Depending on the import, the existing diagrams also change their position in the explorer. Deposits maintained in attributes, like subprocesses to other diagrams are adopted without any problems if the stored diagrams also exist in the target repository. Uploaded files, such as in the *Attachment (URL)* attribute, are also imported.

Note: The date information you find within your imports (e.g., "Valid from", "Valid to", "Created date", and similar) undergo conversion to the time zone of the currently active user. This ensures that the display of date information always aligns with the user's current time zone.

Entities and attached files included in the diagram and in the attributes are also imported. All catalog entries underneath are then compared with the catalog entries of the selected repository using the IDs. Existing data will be overwritten here.

Furthermore, the method of the system has to match the data of the import, there is no method-related validation.

Some examples to illustrate the functionality of the import:

1. You have exported a diagram for data backup. Later, the same diagram will be edited in BIC Process Design, so a new version will be available in the public workspace. The export thus contains an outdated state of the diagram. If this export is imported into the same repository, the new version of the diagram will be overwritten with the old one. Depending on the *archive settings*, you will not be able to access the new version after the import.

2. You want to import a diagram into "Category 1". This diagram, that means the exact ID of the diagram you want to import, does already exist in "Category 2". After the import, the diagram no longer stays in "Category 2". Instead, the overwritten diagram is displayed in "Category 1".

Note: Confirmed master data receive special attention during import. In addition to IDs, the attributes of the accepted (black), existing catalog entries of the target repository are also compared. If there are differences in at least one attribute, new, unconfirmed (red and italic font) catalog entries are created. These "duplicated" entries can then be merged by *delete* or *reject*.

14.7 How do I execute a BPMN export?

This export can be executed on Collaboration Diagrams (BPMN). The diagram is exported as a BPMN standard (XML format) and is thus available for other systems or here as *BPMN Import*.

Navigate to the BPMN diagram you want to export. Open the context menu of this diagram and select the option *Export BPMN*.
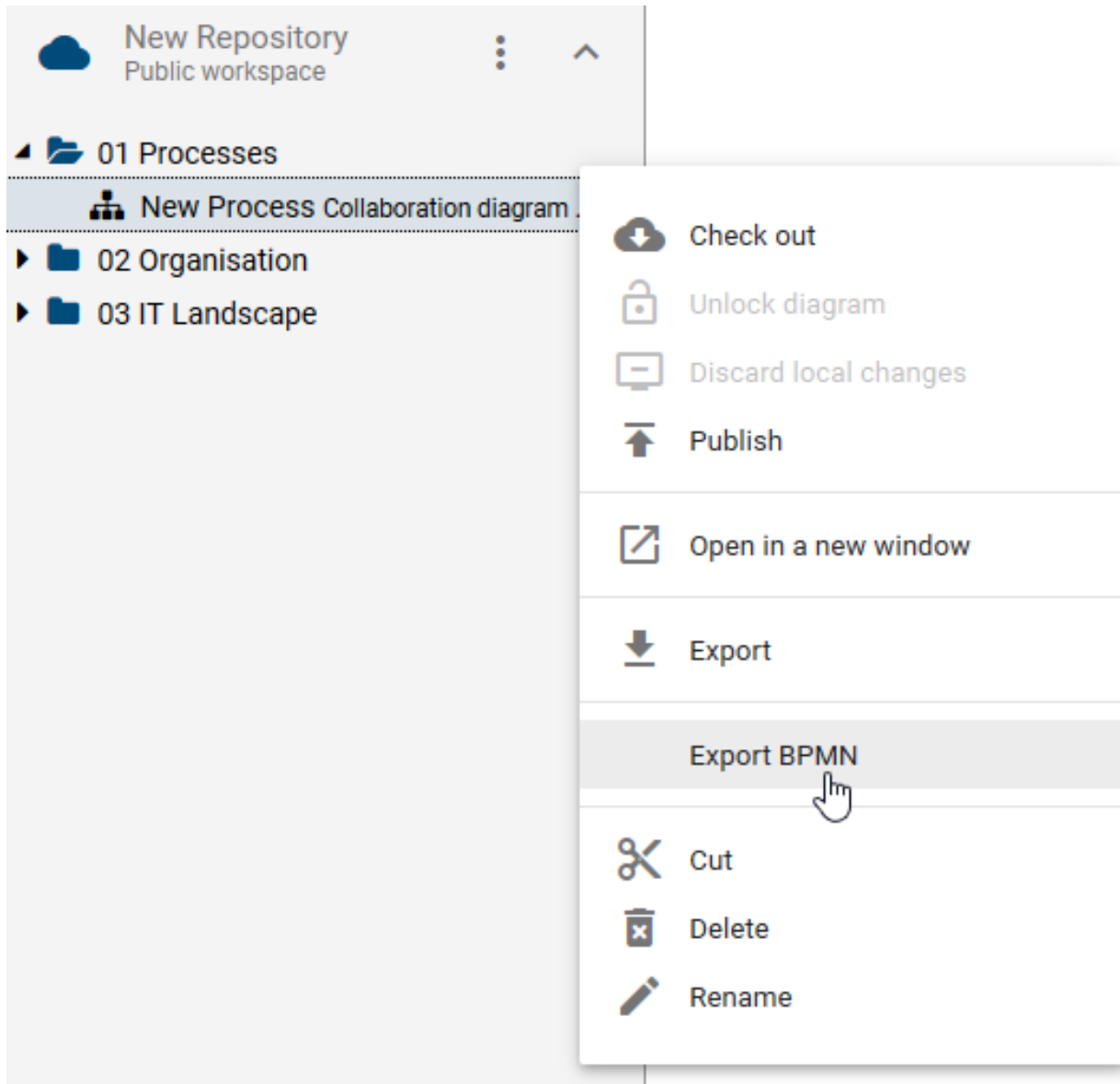
At the bottom right of the screen, you will receive information about the start and the completion of the export. Click on the link to *Download the export*.

Note: Please note that formatting of e.g. font color, font size, fillings ect. in not part of the export function and will be lost during the export.

Warning: BIC offers the flexibility to extend the modeling notation beyond BPMN standards, allowing you to incorporate concepts such as customer journey mapping to enhance your process representation. However, it is important to note that the BPMN export functionality might not be supported when these extensions or custom extensions are utilized.

14.8 How do I execute a BPMN import?

Individual diagrams in BPMN DI XML format, the "BPMN Diagram Interchange Extensible Markup Language Format", and ZIP files, that contain these diagrams, can be imported into the public workspace of BIC Process Design. The BPMN import is also supported by the *BPMN export*.

Navigate to the targeted repository for importing. Open the context menu of the repository or the category and select the option *Import BPMN*.
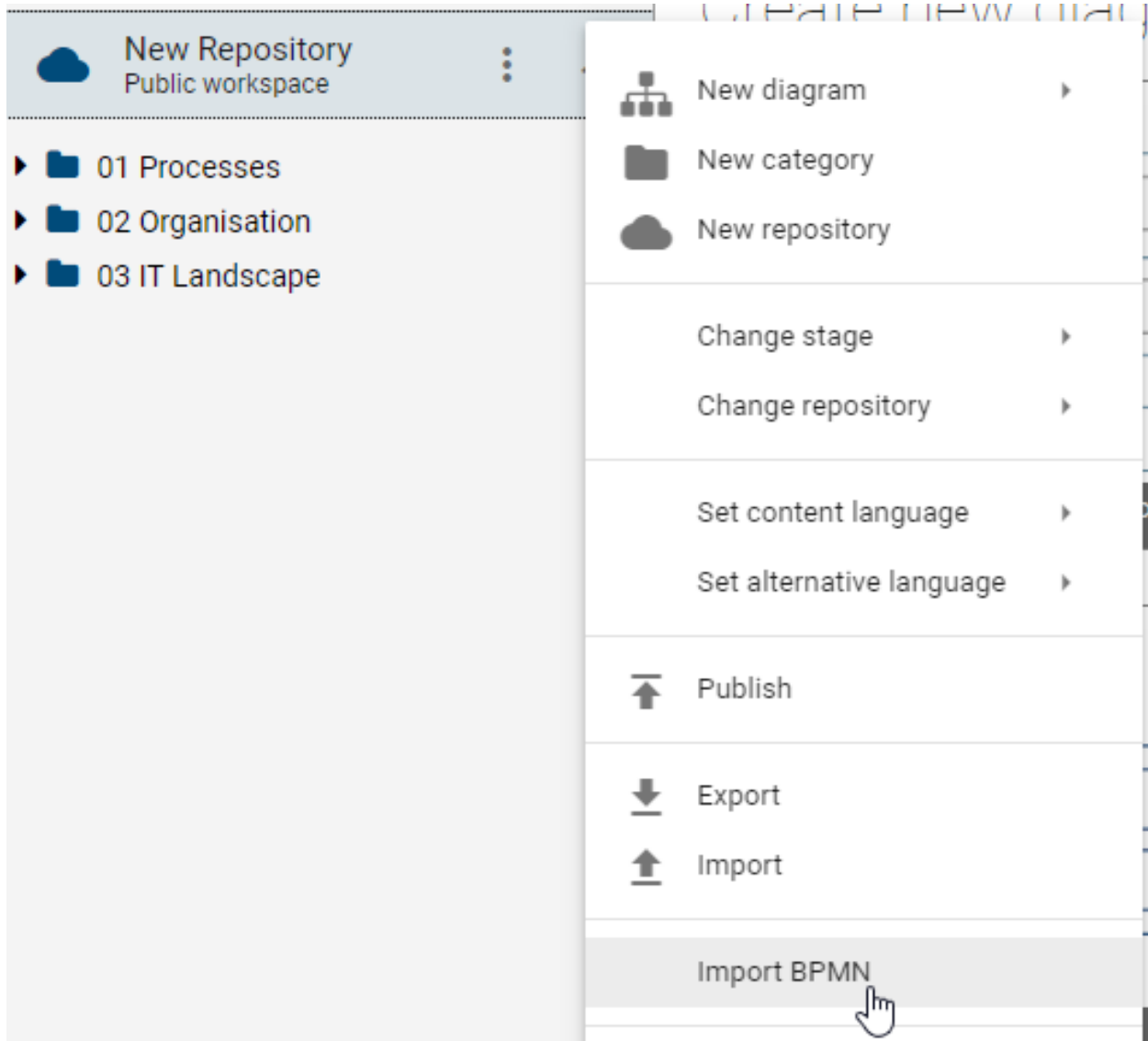
Choose the intended BPMN file or ZIP file in the appearing file selection window and select *Open* in order to start the import. The diagram is then imported into the repository or the selected category. If you have chosen a ZIP file, the diagrams contained therein are imported accordingly. Folder structures are also taken into account, that means a subcategory with the corresponding diagrams is created for each folder contained in the ZIP file.

Vertical pools are supported during the import if they are defined in the method. Please note, that collapsed subprocesses and pools are not supported by BIC Process Design. If you import a BPMN diagram with collapsed subprocesses or pools from another platform, the collapsed content is not imported into BIC Process Design. Instead, they are presented as an empty activity or empty pool. To import the contents of the subprocesses and pools, repeat the

export in the source platform with expanded subprocesses and pools. Then the underlying content is taken into account during import and displayed in the diagram. Please also note that formatting of e.g. font color, font size, fillings ect. in not part of the import function and will not be included.

No catalog entries are created during the import, regardless of the administration settings of the catalog. This applies, for example, to pools and lanes and objects, such as documents, contained therein. Therefore, the objects must be manually referenced to the corresponding catalog entry using the *suggestion list* or can be *added as a new suggestion* in order to have them available in the catalog.

Note: For example, if you have exported the import file from Signavio before, catalog entries will be identified and created as suggestions in the catalog. The reuse of catalog entries is also taken into account so that no duplicates are created. Furthermore, the use of resources, such as roles and applications, is supported. These are therefore not displayed as annotations.

14.9 How can I share a diagram from the public workspace?

With the permissions of the user role "Author", you can share the diagram version in the public workspace, if it exists, with users of all roles. For example, you can get feedback about the modeling of this diagram from users of the "Reader" role who otherwise have no access to this workspace.

To do this, navigate to the affected diagram and open the version tab. Select *Share by email* from the public workspace field.

This will open a new email in your email program. It contains the link to the diagram and shows the diagram name in the subject line. The user who receives the email can then view and *comment* the diagram in the public workspace.

Warning: Please note that the shared URL is stable: If you provide a user access to a diagram using this share function, it is not revocable. The user will always be able to view the unpublished version of the diagram. You can only suppress the access by maintaining the attribute *"Restricted access"*.

14.10 How can I share a catalog entry from the public workspace?

If you are in the catalog in public workspace, you can simply copy the catalog URL to the clipboard to forward it. To do this, click on the *Copy* button in the menu bar. At the bottom right of the screen you will see a toast stating that the URL has been copied successfully. You can share this link to any user of the application, for example to allow a *reader* to view the current modeling state of a certain catalog entry.
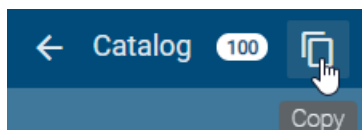
Warning: Please note that the shared URL is stable. If you provide a user access to a catalog item by sharing the URL, it is not revocable. The user will always be able to view the unpublished version of the diagram. You can only suppress the access by maintaining the attribute *"Restricted access"*.

REPORT TEMPLATES

The reports (and PDF variants generated from them) are based on MS Word templates that you can modify. Here we explain the essential configuration options that are available to you in the report engine.

15.1 What general adjustments to the manual template are possible?

The fixed formatting and layouts, as well as the logos and texts that you can see in the headers and footers, for example, can be changed using the Word on-board resources. Simply open your template, edit it, for example by changing the logo at the desired position, and save the change in the file.

Pay attention to possible section changes between portrait or landscape pages in the document, as it is possible that after such a section change, repeated changes are needed in the headers and footers.

Note: If you want to change the font of your report template be aware that in the process of generating a .pdf file only certain fonts are supported by the report engine. The usage of not supported fonts can lead to formatting losses and a change in the total number of pages in your .pdf file. Therefore note the possibility to *embed the used fonts in your document*. *Here* you will find a detailed list of the fonts, which are supported by the report engine.

15.2 How do I output properties of a document?

In the context of a template, you have a diagram available by using the method `content.getSelection()`. If you have queried the diagram, you can, for example, output the properties of a document.

For example, if you want to have the author of your template, proceed as follows:

```
<<[content.getSelection().getDocument().getBuiltInProperty("Author").getValue()]>>
```

- `content.getSelection()` returns the graph. Then you can access and output certain information from the diagram.
- `content.getDocument()` returns the document. Then you can access and output information about default and custom properties from the document.
- `getBuiltInProperty()` gives you the possibility to access all default properties of the template file. The example above is about the property "Author" of the template.

The method `getBuiltInProperty()` returns an attribute. Then, there are other methods available to you:

- `getValue()` returns the formatted value of the property in the current content language.
- `getRawValue()` returns the value of the property in the current content language.

- `getName()` returns the name of the property in the current content language.
- `getType()` returns the type of the attribute in the current content language.

If you want to output custom property of your template, proceed as follows:

```
<<[content.getSelection().getDocument().getCustomProperty("Some name").getValue()]>>
```

- `content.getSelection()` returns the graph. Then you can access and output certain information from the diagram.
- `getCustomProperty()` gives you the possibility to access all custom properties for template file.

15.3 How do I output the diagram graphic in the template?

You have two possibilities to output a diagram as a graphic in reports. The method `getImage()` renders the diagram in a single graphic. Write this method into a text field to specify the size and position of the graphic. The tag `image` has to be set ahead of the method:

```
<<image [content.getSelection().getImage()]>>
```

The above code line should be inserted into a text field as follows:

Alternatively, you can use the method `getImageWithPrintSettings()` to output the diagram in multiple graphics. This method cuts the diagram in parts as defined in the *print settings* and outputs each part as a single graphic. It is recommended to use the `getImageWithPrintSettings()` method for larger diagrams to guarantee the readability in the report. You can include the method in your report template as follows. Note that the required tag is `doc` and the method must *not* be inserted into a text field.

```
<<doc [content.getSelection().getImageWithPrintSettings()]>>
```

15.4 How do I output attributes of a diagram?

In the context of a template, you have a diagram available, that you get with the method `content.getSelection()`. If you have queried the diagram, you can, for example, output the maintained attributes. For a list of the identifiers of these attributes, see *the appendix*.

For example, if you want to have the name of your selected diagram written on the title page, proceed as follows:

```
<<[content.getSelection().getAttribute("AT_NAME").getValue()]>>
```

- `content.getSelection()` returns the graph. Then you can access and output certain information from the diagram.

- `getAttribute()` gives you the possibility to access a concrete attribute. The example above is about the attribute *Name* of the diagram.

When you request an attribute with `getAttribute()`, there are other methods available to you:

- `getName()` returns the name of the attribute in the current content language.

- `getValue()` returns the value of the attribute in the current content language.

- `getRawValue()` returns the value of the attribute in the raw form.

If you like to output the description of the diagram (AT_DESCRIPTION), you need to add the tag `-html` at the end. This ensures that the text of the description is formatted correctly.

```
<<[content.getSelection().getAttribute("AT_DESCRIPTION").getValue()]-html>>
```

Additionally, you can also output the title of an attachment by using the tag `-html`. Doing this, the title of the attachment will be put out instead of the full URL. This is also possible, if more than one file or URL is attached.

Proceed as follows to output the titles:

```
<<foreach [title in content.getSelection().getAttribute("AT_ATTACHMENT").
→getValuesAsList()]>><<[title]-html>><</foreach>>
```

Note: You can put the current name (`getName()`) of an attribute next to the value (`getValue()`). An advantage would be that even a changed attribute name remains up-to-date in the report. A disadvantage would be that the name can not be returned if the value was not maintained. Not maintained attributes are not made available to the report in their entirety. Alternatively, you can write the name of the desired attribute directly and thus statically into the template.

15.5 How can I specify the format of a date?

If you output the value of an attribute which is a date, you can specify the format. The attribute value has to be accessed via the `getRawValue()` method. Then you can add the format template by combining the special characters /, . or - and the abbreviations for the different time units. The following abbreviations can be used:

Character	Meaning (time unit)
YYYY or yyyy	year
yy oder YY	year in abbreviated format, e.g. "22" instead of "2022"
MM	month as a number
MMM	month as an abbreviation (first 3 English letters)
MMMM	month as string
dd	day in the month
EE	abbreviation of the week day (first 3 English letters)
EEEE	week day as string

In the following, some example formats are presented. Here, the governance attribute "Valid to" ("AT_VALID_TO") is output and its value will be the 24th August 2022.

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"yyyy.MM.dd">>
```

results in `2022.08.24`,

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"dd/MM/YYYY">>
```

results in `24/08/2022`. If the month should be output as a text, you could use

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"dd. MMMM yyyy">>
```

which gives `24. August 2022`. The day of the week can be templated by

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"EEEE, d MMM yyyy
↪"">>
```

to get `Wednesday, 24 Aug 2022`.

Dates that are output via the `getValue()` method are always written in the format `24. August 2022 UTC`.

The format of system attribute values (e.g., *lastModifiedDate*) cannot be changed and displays the date and time by default. However, if you want to display the date without the time in your application, you can use the following command:

```
<<var [dateTime = content.getSelection().getLastModifiedDate()]>><<var [date =
↪dateTime.substring(0, dateTime.lastIndexOf(","))]>><<[date]>>
```

This command extracts the date, for example, from the *system attribute lastModifiedDate* and formats it accordingly for the German date format.

Hint: Please note that this example is only suitable for the German date format.

15.6 How can I specify the format of the time?

If you output the value of an attribute which is a date, you can specify the format. The attribute value has to be accessed via the `getRawValue()` method. Then you can add the format template by combining the special character : and the abbreviations for the different time units. The following abbreviations can be used:

Character	Meaning (time unit)
h	hours (1-12)
HH or hh	hours (0-23)
mm	minutes
ss	seconds
SS	milliseconds
a	AM/PM marker
z	time zone
Z	ISO 8601 time zone (e.g., +0100)

In the following, some example formats are presented. Here, the governance attribute "Valid to" ("AT_VALID_TO") is output and its value will be 4:34 PM.

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"h:mm">>
```

results in `4:34`,

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"h:mm:ss:SS">>
```

results in `4:34:22:03`, while the seconds and milliseconds are fictitious. The according AM/PM marker will be templated as

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"h:mm a">>
```

which results in `4:34 PM`. For the time zone, you can use

```
<<[content.getSelection().getAttribute("AT_VALID_TO").getRawValue()]:"h:mm a Z z">>
```

which results in `4:34 PM +0000 UTC`.

Note: Please note that you cannot change the format of system attribute values (e.g., the *lastModifiedDate*).

15.7 How do I output objects of a diagram in a list?

There are two different operations on the diagram to access its the elements:

- `getEntities()` returns the used objects of the diagram exactly once. If, for example, you have used the risk "completeness" multiple times, you only receive it once for output. Note that occurrence attributes on entities ("objects or catalog entries") are not available.

- `getNodes()` returns the occurrences in a diagram. These may be redundant or contain occurrence attributes. This means, the previous example risk "completeness" may be issued multiple times and the particular risk score (an occurrence attribute) may vary from use to use.

Of course, you can now decide which objects you want to view. This can be, for example, all objects of a certain type. In the following example, all risks of the diagram are considered and the maintained names are listed one below the

other. This can be done using a `foreach` loop and inserting a line break before the closing `foreach` to have a line break after each object name.

```
<<foreach [in content.getSelection().getEntities("ET_RISK")]>><<[getAttribute("AT_NAME
↪").getValue()]>>

<</foreach>>
```

If a diagram contains the risks A, B and C, the output generated from the above template code would be:

risk A
risk B
risk C

Alternatively, you can write a comma-separated list in one line.

- `indexOf()` allows the listing under consideration of a separator symbol (here `,`). In addition, the first (or zeroth) element is not preceded by a comma.

```
<<foreach [in content.getSelection().getEntities("ET_RISK")]>><<[indexOf() != 0 ? ",
↪" : ""]>><<[getAttribute("AT_NAME").getValue()]>><</foreach>>
```

Here, the following output is generated:

risk A, risk B, risk C

If you want to make an enumeration, you have to choose the first enumeration point yourself in Word. Then the `foreach` loop follows. Write the closing `<</foreach>>` in the next line, but without bullets. Then no bullet will be output additionally when your list has reached the end.

```
• <<foreach [in content.getSelection().getEntities("ET_RISK")]>><<[getAttribute("AT_
↪NAME").getValue()]>>

<</foreach>>
```

For example, the result would look like this:

- risk A

- risk B

- risk C

Alternatively, the enumeration can be templated as a numbered MS Word list via:

```
1. <<foreach [in content.getSelection().getEntities("ET_RISK")]>><<[getAttribute("AT_
↪NAME").getValue()]>>

<</foreach>>
```

Then, the result of the example diagram would look like this:

1. risk A

2. risk B

3. risk C

Furthermore, you can determine the order of the returned objects of the `getNodes()`-operation by adding the parameter `Sort.with(...)`. For example, an alphabetical sorting of all documents is generated by

`content.getSelection().getNodes("ET_DOCUMENTS", Sort.with("byName")).`

Analogically, the indication "byCoords" results in a sorting by the coordinates in the diagram and "byPath" in a sorting by their occurrence in the process flow.

15.8 How do I output connected nodes?

On a node in a set of `getNodes()` you can execute `getRelatedNodes()`. The nodes represent the occurrences of the objects in the diagram. These are typically connected to other nodes. The connections are usually a condition for output in separate lists or contexts.

- `getRelatedNodes()` returns the associated values. As a condition, you can filter the object type and/or the link type that you want to output or evaluate.

In the first example, all activities are written to a variable named `activity`. This is necessary to buffer the values, since a loop runs over this set. As the loop passes, the name of each activity is output. In addition, the system checks for each activity whether associated symbols of the type role and the connection `Responsible` exist. The output of the text `Responsible for Implementation:` and the maintained name of the role follows.

```
<<foreach [activity in content.getSelection().getNodes("ET_ACTIVITY")]>>

<<[activity.getAttribute("AT_NAME").getValue()]>>

<<foreach [in activity.getRelatedNodes("ET_ROLE","AST_RESPONSIBLE")]>>Responsible for
↪Implementation: <<[getAttribute("AT_NAME").getValue()]>>

<</foreach>><</foreach>>
```

The next example uses the method `getRelatedNodes()` twice. First, the same iteration as above is done for all activities of the diagram. Then, the associated risks are output. For the risks, a second variable `risk` is introduced. At last, the associated controls for each risk (resp. the name) are issued.

```
<<foreach [activity in content.getSelection().getNodes("ET_ACTIVITY")]>>

<<foreach [risk in activity.getRelatedNodes("ET_RISK")]>><<[risk.getAttribute("AT_NAME
↪").getValue()]>>

<<foreach [in risk.getNodeAccess().getRelatedNodes("ET_CONTROL")]>><<[getAttribute(
↪"AT_NAME").getValue()]>>

<</foreach>><</foreach>><</foreach>>
```

15.9 How do I output all attributes of an element?

The method `getAttributes()` can be executed on objects, nodes and just on the diagram.

- `getAttributes()` returns the set of available, maintained attributes. You could simply output or filter them further.

The following code contains a loop in a loop that outputs all the objects of the diagram with all their attributes:

```
<<foreach [entity in content.getSelection ().getEntities (".*")]>>

<<[entity.getAttribute("AT_NAME").getValue()]>>

<<foreach [attribute in entity.getAttributes()]>><<[attribute.getName()]>>

<<[attribute.getValue()] -html>>

<</foreach>><</foreach>>
```

Here a variable named `entity` is created, which contains all objects of the diagram. The name of each object is output. Then a new variable named `attribute` is created, in which all attributes of the object are written. The name and value of each attribute are then displayed below each other.

15.10 How do I output multivalued attributes of a diagram in a list?

The method `getAttributes().getValue()` returns the set of available, maintained attributes as a comma-separated list. The code

```
<<[content.getSelection().getAttribute("AT_EXAMINER").getValue()>>
```

generates the following output, for example:

Examiner 1, Examiner 2, Examiner 3

Using the `.replace(", ", "\n")` method, you can display the list with line breaks.

```
<<[content.getSelection().getAttribute("AT_EXAMINER").getValue().replace(", ", "\n")]>
↪>
```

Here, the following output is generated, for example:

Examiner 1
Examiner 2
Examiner 3

Note: Use a bullet point "•" or a numbering "1." before the code for enumeration.

15.11 How do I output my data in tables?

If you integrate tables into your template, the report engine will fill in objects and/ or attributes according to your definition. Simply use the Word tables and - for example - write the desired loop with methods that return the diagram attributes, contained objects or object attributes into the first row. The data will be formatted in the chosen table.

In the following example, one table row is created for each activity. The entire loop per activity covers the entire line. This is important because otherwise empty rows are not removed by the report engine if they are not needed. The rows are numbered and contain the risks, controls and KPIs.

Process step	Risk	KPI
1. <<foreach [activity in content.getSelection().getNodes("ET_ACTIVITY")]>>	<<[activity.getAttribute("AT_NAME").getValue()]>> • <<foreach [risk in activity.getRelatedNodes("ET_RISK")]>><<[risk.getAttribute("AT_NAME").ge... • <<foreach [in risk.getNodeAccess()... ach>><</foreach>> <</foreach>> <</foreach>>	• <<foreach [in activity.getRelatedNodes("ET_KPI")]>><<[... .getRelatedNodes("ET_CONTROL")]>><<[get...

You can combine the loops described above and execute them in a table. In the following example, a header line is inserted for each group. A row is created for each entry in the group:

<<foreach [group in content.getSelection().getEntities(".*").where(p => !"ET_ACTIVITY,ET_EVENT,ET_XOR,ET_OR,ET_AND".contains(p.getStereotypeName())).groupBy(p => p.getStereotypeName())]>><<[first().getStereotypeName()]>>	
<<foreach [in group]>><<[getAttribute("AT_NAME").getValue()]>><<if [getAttribute("AT_ATTACHMENT").getValue().toString().length()!=0] (<<[getAttribute("AT_ATTACHMENT").getValue()]-html>>)<</if>>	<<[getAttribute("AT_DESCRIPTION").getValue()]-html>><</foreach>><</foreach>>

Here, all the objects of the diagram are first written to a variable called `group`. They are filtered so that no activities, events or rules are included. Then they are grouped by the stereotype designation. After that, names and descriptions will be displayed. If there is an attachment, it is also output.

- `getStereotypeName()` returns the name of the stereotype of the element.
- `contains()` defines the contained elements as a condition.
- `first()` selects the first object from the list.

Condition for table

In addition, you can set entire tables in conditions so that a header of the table may not be displayed without additional content. This can be done using the methode `any()`.

- In the following example, `any()` compares whether elements of the type role (ET_ROLE) or application (ET_APP_COMPONENT) exist. Otherwise (<<else>>) the text `No more information.` is output instead of an empty table.

You could structure such a table as follows:

```
<<if [content.getSelection().getEntities(".*").any(p => "ET_RISK,ET_APP_COMPONENT".
→contains(p.getStereotype()))]>>Here are the IT systems:
```

Process step	IT system
<<foreach [activity in content.getSelection().getNodes("ET_ACTIVITY")]>><<[activity.getAttribute("AT_NAME").getValue()]>>	• <<foreach [in activity.getRelatedNodes("ET_APP_COMPONENT")]>><<[getAttribute("AT_... <</foreach>><</foreach>>

```
<<else>>No more information.<</if>>
```

Note: foreach loops only work within the same table or e.g. starting before and ending after a table. If the loop surrounds a table, a new table is created for each element in the foreach loop. However, if you start the loop outside a table and end it inside it, or vice versa, the loop does not work.

15.12 How do I output sorted lists with certain conditions?

You can configure the template in such a way that only objects satisfying certain conditions are read out. The following methods can be useful:

- where() selects all objects, that fulfill the condition.

- orderBy() sorts the nodes by the desired value. In this example, activities are sorted by their probability. To be able to sort these values, they must be converted into comparable numbers.

In the first example, the activities with an execution probability (attribute AT_PROBABILITY) higher than 75% are identified and displayed. At first, the activities are sorted by probabilities whereas the values are converted to the data type *double*. The double values can also be used for calculations, for example. Secondly, the condition for a probability greater than 75% is checked. Only corresponding activities are output in this loop.

```
<<foreach [in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => ((Double)(p.
→getAttribute("AT_PROBABILITY").getRawValue()))).where(p => ((Double)p.getAttribute(
→"AT_PROBABILITY").getRawValue()) > 75)]>><<[getAttribute("AT_NAME").getValue()]>><</
→foreach>>
```

Similarly, you can search for the longest processing times and output only these activities. In the next example, all activities are displayed that have a maintained processing time of more than 20 minutes.

```
<<foreach [in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => (Double)(p.
→getAttribute("AT_PROCESS_TIME").getRawValue()))).where(p => ((Double)p.getAttribute(
→"AT_PROCESS_TIME").getRawValue()) > 20)]>><<[getAttribute("AT_NAME").getValue()]>><
→</foreach>>
```

Note: Java code is generally possible in the report engine. Examples can be found here and in the report template of the system.

15.13 How can I change the output language in the template?

If you want to output another content language than the current one, the system needs a corresponding note. To do this, a value with the corresponding language abbreviation must be entered at getValue(). You can use the language abbreviations defined by the standard ISO-639-1.

The example returns the value of the diagram name which has been maintained in the content language English.

```
<<[content.getSelection().getAttribute("AT_NAME").getValue("en")]>>
```

The following list is an extract from the ISO standard.

Language code	Language
ar	Arabic
zh	Chinese
en	English
fr	French
de	German
it	Italian
es	Spanish

15.14 How do I use variables to store data?

The `<<var [...]>>`-tag is used to store data or objects in a variable. Any data type can be stored in variables. The name of the variables and the data type **cannot** be changed afterwards.

The following line declares the variable *i*. Initially, it holds the value "0".

```
<<var [i = 0]>>
```

If you want to change the value of an existing variable, use the same tag as in the definition of the variable. In the next code block, the new value "1" is assigned to the variable *i*. Then, the variable is increased by 1.

```
<<var [i = 1]>>
<<var [i = i+1]>>
```

Variables may store objects like an activity analogically:

```
<<var [activities = content.getSelection().getEntities("ET_ACTIVITY")]>>
<<var [activities = activities.concat(content.getSelection.getEntities("ET_ACTIVITY
↪")]>>
```

A variable has the same functionality as the corresponding normal object.

15.15 How do I use diagrams to visualize data?

The report also supports visual representation via a diagram. Simply use the Word diagrams and - for example - write the desired methods that return the diagram attributes, contained objects or object attributes into the first row. The data will be formatted in the chosen diagram.

To do that, please note the following:

- Diagram header needs to start with a `<<foreach[...]>>` tag like any other loop.

- The `<<foreach[...]>>` tag can stay open.

- Diagram header needs to contain a `<<x[...]>>` tag to specify the x-axis marking.

- Diagram header needs to contain a `<<y[...]>>` tag to specify the y-axis marking.

The following example shows the template of a bar chart that compares the organizational units contained in a process diagram. In the title, the command `content.getSelection().getNodes("ET_ORG_UNIT")` gathers the categories of the bar chart (the organizational units) and they are sorted via `orderBy()`. For each category, the number of roles, positions and persons are visualized by different bars.
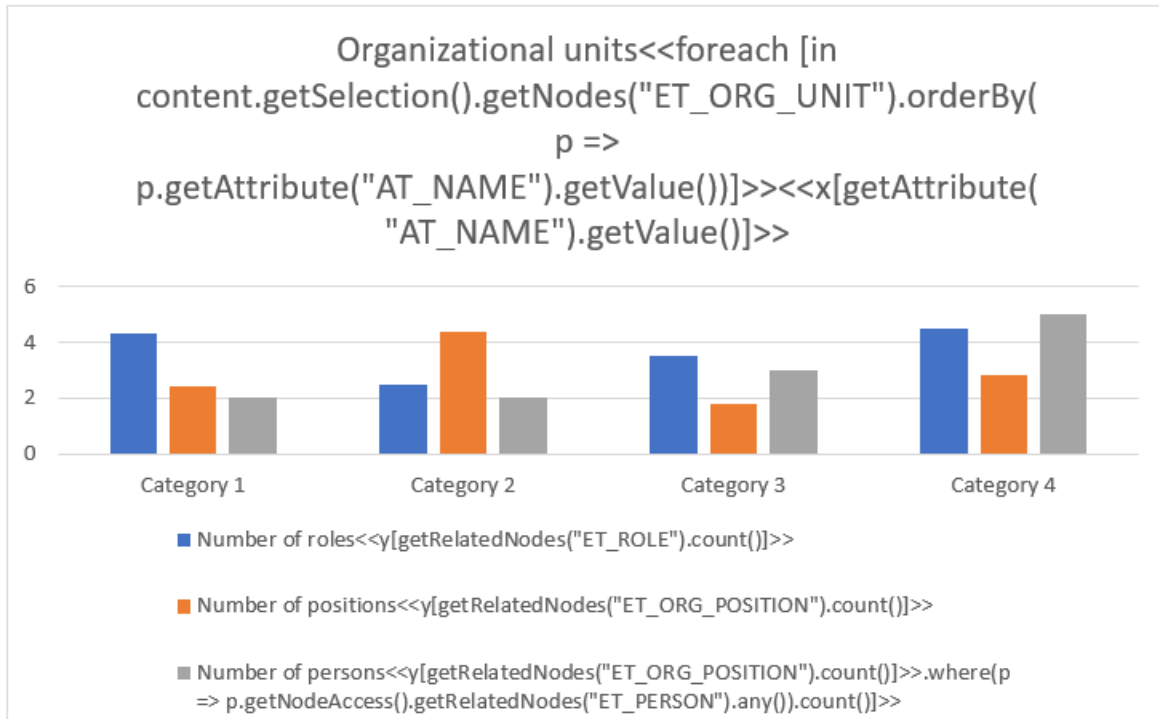
In a report of a BIC Process Design diagram containing the organizational units "Development", "Human Resources", "Management" and "Sales", this leads to the following result:
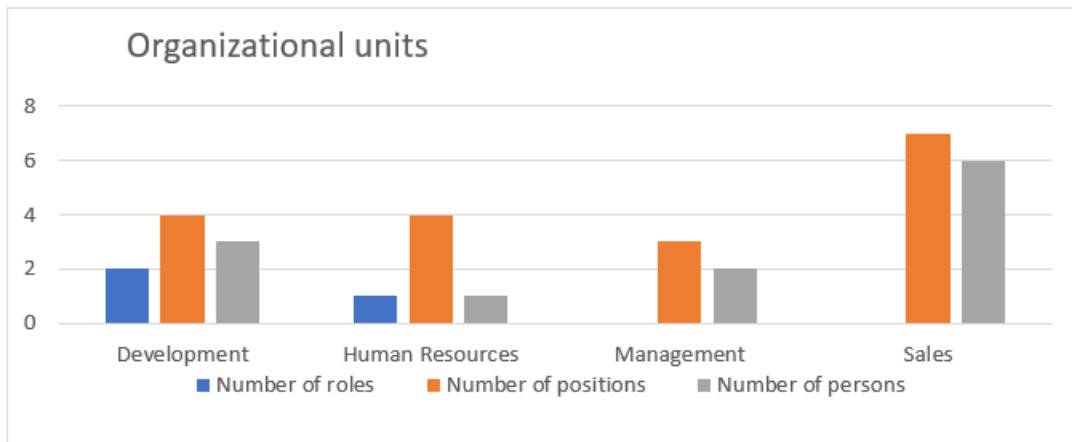
15.16 How do I use numbers in my template?

Using the method `getValue()`, you can display the value of an attribute as a text in the current content language. `getRawValue()` gets the value as a number, but they need to be casted into the right type. This is possible by adding the data type in parentheses before the method call. In the example, the attributes are read out as `(Long)` resp. `(Double)`.

```
<<[(Long) content.getSelection().getNodes("ET_RISK").first().getAttribute("AT_RISK_
↪CATEGORY").getRawValue()]>>
<<[(Double) content.getSelection().getNodes("ET_ACTIVITY").first().getAttribute("ET_
↪PROCESS_TIME").getRawValue()]>>
```

Attributes can be casted in the following types:

Attribute type ID	Data type
AT_ACTUAL_VALUE	Long
AT_AT_CONFIDENTIALITY_REASON	String
AT_AT_CONFIDENTIALITY_REASON	String
AT_ATTACHMENT	String
AT_AVAILABILITY	Long
AT_AVAILABILITY_REASON	String
AT_CALL_ACTIVITY	Boolean
AT_CALL_CONVERSATION	Boolean
AT_CAPACITY	Long
AT_COLLECTION	Boolean
AT_COMPENSATION_TASK	Boolean
AT_CONFIDENTIALITY	Long
AT_CONTROL_EFFECT	Long
AT_DAMAGE_CONTROL_MEASURES	String (<<[...]-html>>)
AT_DATA_SOURCE	String
AT_DATA_STATE	String
AT_DATA_UNIT	String
AT_DATATYPE	Long
AT_DEFAULT_VALUE	String
AT_DESCRIPTION	String (<<[...]-html>>)
AT_DEVELOPMENT_COSTS	Double
AT_EMAIL	String
AT_END_EVENT_TYPE	Long
AT_EVENT_GATEWAY_TYPE	Long
AT_EVENT_TYPE	Long
AT_EXECUTION_INTERVAL	Long
AT_EXECUTION_TYPE	Long
AT_EXTERNAL	Boolean
AT_FOCUS_ON_TARGET	String (<<[...]-html>>)
AT_GATEWAY_INSTANTIATE	Boolean
AT_GROUP	Boolean
AT_HEADCOUNT	Long
AT_IDENTIFIER	String
AT_IDENTIFYING	Boolean
AT_IDLE_TIME	Double
AT_IMPACT_ON_OCCURRENCE	Long

continues on next page

Table 1 – continued from previous page

Attribute type ID	Data type
AT_INPUT_OUTPUT	Long
AT_INSTANCES	String
AT_INTEGRITY	Long
AT_INTEGRITY_REASON	String
AT_INTERMEDIATE_EVENT_TYPE	Long
AT_IS_WEAK	Boolean
AT_ITEM_COLLECTION	Boolean
AT_KEYWORDS	String
AT_LIFE_CYCLE	Long
AT_MANUFACTURER	String
AT_MATERIAL_COSTS	Double
AT_MULTIPLE_INSTANCE_TYPE	Long
AT_MULTIPLE_INSTANCES	Boolean
AT_NAME	String
AT_NON_INTERRUPTING	Boolean
AT_OCCURRENCE_PROBABILITY	Long
AT_OPERATION_REFERENCE	String
AT_OPERATIONAL_TIME_END	Long
AT_OPERATIONAL_TIME_START	Long
AT_ORG_RES_CAPACITY	Double
AT_PERSONAL_DATA	Long
AT_PHONE	String
AT_PRIMARY_KEY	Boolean
AT_PRIORITY	Long
AT_PRIVACY_BY_DEFAULT	Boolean
AT_PRIVACY_BY_DESIGN	Boolean
AT_PROBABILITY	Double
AT_PROCESS_TIME	Double
AT_PROCESS_TYPE	Long
AT_PROCESSING_CRITICAL_DATA	Boolean
AT_PROCESSING_PURPOSE	String
AT_RELEASE	String
AT_RES_COST_RATE	Double
AT_RISK_CATEGORY	Long
AT_RISK_MITIGATION_MEASURES	String (`<<[...]-html>>`)
AT_RISK_PROBABILITY	Double
AT_RISK_PROBABILITY_CLASSIFICATION	Long
AT_ROOT_CAUSE	String (`<<[...]-html>>`)
AT_SETUP_TIME	Double
AT_STAFF_CAPACITY	Double
AT_START_EVENT_TYPE	Long
AT_STATE	Long
AT_STRUCTURE_REFERENCE	String
AT_TARGET_VALUE	Double
AT_TASK_TYPE	Long
AT_TEMPORAL_BINDING	Double
AT_TRANSFER_THIRD_COUNTRY	Boolean
AT_TRANSPORT_TIME	Double
AT_UNIT_COSTS	Double

Table 1 – continued from previous page

Attribute type ID	Data type
AT_VALID_FROM	Long
AT_VALID_TO	Long
AT_VERSION	String

15.17 How can I access the case data when I create a report?

As part of a template, you have the option to output the maintained process variables of a case.

For example, if you want to display the name of the selected case, you can proceed as follows:

```
<<[case.getName()]>>
```

- case.getName() returns the name of the case.
- case.getCreationDate() returns the creation date of the case.
- case.getDueDate() returns the due date of the case.
- case.getCreator() returns information about the creator.

You receive the following information about the creator as follows:

- case.getCreator().getType() returns who created the case (e.g. user, timer, etc.).
- case.getCreator().getId() returns the ID of the creator.
- case.getCreator().getName() returns the name of the creator.
- case.getCreator().getEmail() returns the e-mail address of the creator.

Hint: If you use case.getCreator() without accessing a specific field, the name of the creator is used as a placeholder: case.getCreator() ~ case.getCreator().getName()

15.18 How can I access process variables in a form field for a case?

In the context of a template, you have the option to access process variables in a form field for a case by using the method case.getVariable().

If you want to output the ID and value of a variable, for example, you can proceed as follows:

```
<<[case.getVariable("customer").getName()]>>: <<[case.getVariable("customer").
→getValue()]>>
```

- getName() returns the ID of the process variable.
- getValue() returns the value of the process variable.
- getRawValue() returns the value of the variable without any formatting.

In your template, you also have the option of accessing process variables of the type array.

To get a comma-separated list of the values in the array, you can use the following procedure:

```
<<[case.getVariable("myArray").getValue()]>>
```

To get a list that returns the entire collection of arrays, so that you can iterate over it directly, you can proceed as follows:

```
<<[case.getVariable("myArray").asList()]>>
```

Alternatively, you can also have the variables displayed one below the other. This can be done using a `foreach` loop and inserting a line break before the closing `foreach` to have a line break after each object name.

```
<<foreach [field in case.getVariables()]>><<[field.getName()]>>: <<[field.getValue()]>
↪><</foreach>>
```

Hint: If you access a value of a non-existing variable, for example with `case.getVariable("nonExistingVariable").getValue()`, the template will still be created. In this case, the following message is displayed instead of the value of the non-existing variable: The variable "nonExistingVariable" is not available.

Warning: Only the *case* object is available. Attempts to use other undefined objects are not taken into consideration. Either nothing is displayed in the resulting template, or a corresponding error message appears.

15.19 How can I access the tasks within a case?

In the context of a template, you have the option to access the tasks within a case. The provided information includes both user tasks and automated tasks. Additionally, it contains both open tasks, which are pending and require editing, and completed tasks that have been successfully finished.

You can use the following code to output all information related to the tasks of a case:

```
<<foreach [task in case.getTasks()]>><<[task.getStatus()]>> <<[task.getName()]>><
↪<[task.getDescription()]>> <<[task.getStartDate()]>> <<[task.getEndDate()]>> <
↪<[task.getAssignee()]>><<[task.getDueDate()]>><</foreach>>
```

If a line break is used before the closing `foreach`, you can display the information one below the other. The tasks are displayed sorted by start date.

The following information is included:

- `task.getStatus()` returns the status of the task.
- `task.getName()` returns the name of the task in your configured default language.
- `task.getDescription()` returns the description of the task in your configured default language.
- `task.getStartDate()` returns the start date of the task.
- `task.getEndDate()` returns the end date of the task.
- `task.getAssignee()` returns the assignee for the task.
- `task.getDueDate()` returns the due date of the task.

15.20 What other options do I have with the report engine?

Further options are listed below:

- `all(Predicate)` outputs all objects that fulfill the condition.

```
<<foreach [in content.getSelection().getEntities("ET_ROLE").all(p => ((Boolean)p.
↪getAttribute("AT_EXTERNAL").getRawValue())]>><<[getAttribute("AT_NAME").getValue()]>
↪>
<</foreach>>
```

In this example, all external roles involved are output.

- `any()` checks whether an objects exists in the list and can be used as a condition.

```
<<[content.getSelection().getEntities("ET_ROLE").any()]>>
```

This example checks if there are any involved persons.

- `any(Predicate)` checks if an object exists in the list, that satisfies the condition.

```
<<[content.getSelection().getEntities("ET_ROLE").any(p => ((Boolean) p.getAttribute(
↪"AT_EXTERNAL").getRawValue()))]>>
```

The example checks whether an external person is involved.

- `average(Selector)` calculates the mean value of the transferred property.

```
<<[content.getSelection().getNodes("ET_ACTIVITY").average(p => ((Double)p.
↪getAttribute("AT_MATERIAL_COSTS").getRawValue()))]>>
```

In this example, the average of all costs of the process is calculated.

- `concat(Iterable)` combines two lists by appending the second list to the first one.

```
<<[content.getSelection().getEntities("ET_ROLE").concat(content.getSelection().
↪getEntities("ET_DOCUMENT")).count()]>>
```

In this example, the list of persons is linked to the list of documents.

- `union(Iterable)` concatenates two lists into one by appending the second one at the end of the first one.

```
<<[content.getSelection().getEntities("ET_ROLE").union(content.getSelection().
↪getEntities("ET_DOCUMENT")).count()]>>
```

In this example, a list of persons are connected with a list of documents.

- `count()` counts the items of a list.

```
<<[content.getSelection().getEntities("ET_ROLE").count()]>>
```

In this example, the persons involved are counted.

- `count(Predicate)` counts the objects in a list that fulfill the condition.

```
<<[content.getSelection().getEntities("ET_ROLE").count(p => ((Boolean)p.getAttribute(
↪"AT_EXTERNAL").getRawValue()))]>>
```

In this example, all external employees are counted.

- `first()` selects the first object from the list.

```
<<[content.getSelection().getEntities("ET_ROLE").first().getAttribute("AT_NAME").
↪getValue()]>>
```

In this example, the name of the first employee involved is displayed.

- `first(Predicate)` selects the first object that satisfies the condition from the list.

```
<<[content.getSelection().getEntities("ET_ROLE")first(p => ((Boolean)p.getAttribute(
↪"AT_EXTERNAL").getRawValue())).getAttribute("AT_NAME").getValue()]>>
```

In this example, the name of the first external employee is displayed.

- `groupBy(Selector)` sorts the objects into groups according to their properties.

```
<<foreach [type in content.getSelection().getEntities(".*").groupBy(p => p.
↪getStereotype())]>><<[first().getStereotype()]>>

<<foreach [in type]>><<[getAttribute("AT_NAME").getValue()]>>

<</foreach>><</foreach>>
```

In this example, an enumeration is created in which all entities are listed sorted by stereotype.

- `last()` outputs the last object.

```
<<[content.getSelection().getEntities("ET_ROLE").last().getAttribute("AT_NAME").
↪getValue()]>>
```

In this example, the name of the last employee is displayed.

- `last(Predicate)` returns the last object with the property.

```
<<[content.getSelection().getEntities("ET_ROLE").last(p => ((Boolean)p.getAttribute(
↪"AT_EXTERNAL").getRawValue())).getAttribute("AT_NAME").getValue()]>>
```

In this example, the name of the last external employee is displayed.

- `max(ComparableSelector)` returns maximum value.

```
<<[content.getSelection().getNodes("ET_ACTIVITY").max(p => (Double)p.getAttribute("AT_
↪PROCESS_TIME").getRawValue())]>>
```

In this example, the longest process time is output.

- `min(ComparableSelector)` returns the minimum value.

```
<<[content.getSelection().getNodes("ET_ACTIVITY").min(p => (Double)p.getAttribute("AT_
↪PROCESS_TIME").getRawValue())]>>
```

In this example, the shortest process time is output.

- `orderBy(ComparableSelector)` sorts the objects in the list according to the parameter.

```
<<foreach [in content.getSelection().getEntities("ET_ROLE").orderBy(p => ((String) p.
↪getAttribute("AT_NAME").getValue()))]>><<[getAttribute("AT_NAME").getValue()]>><</
↪foreach>>
```

In this example, all employees are returned sorted by name.

- `skip(int)` skips n items in the list.

```
<<foreach[in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => ((Double)p.
↪getAttribute("AT_PROCESS_TIME").getRawValue()))).skip(5)]>>

<<[getAttribute("AT_NAME").getValue()]>><</foreach>>
```

In this example, all activities except the first five are displayed.

```
<<[content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => p.getAttribute("AT_
↪MATERIAL_COSTS").getValue().toString()).skip(2).first().getAttribute("AT_NAME").
↪getValue()]>>
```

In this example, the third most expensive activity in the process is output.

- `skipWhile(Predicate)` skips objects until the condition is no longer fulfilled.

```
<<foreach[in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => p.
↪getAttribute("AT_PROCESS_TIME").getValue().toString()).skipWhile(p => ((Double)p.
↪getAttribute("AT_PROCESS_TIME").getRawValue()) < 5)]>>

<<[getAttribute("AT_NAME").getValue()]>><</foreach>>
```

In this example, all activities are displayed that take at least 5 minutes to process.

- `sum(Selector)` sums the attributes of the objects in the list.

```
<<[content.getSelection().getNodes("ET_ACTIVITY").sum(p => ((Double)p.getAttribute(
↪"AT_PROCESS_TIME").getRawValue())))]>>
```

In this example, the total processing time is output.

- `take(int)` selects the first n objects from the list.

```
<<foreach [in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => ((Double)(p.
↪getAttribute("AT_PROCESS_TIME").getRawValue())).take(5)]>><<[getAttribute("AT_NAME
↪").getValue()]>><</foreach>>
```

In this example, the five activities with the shortest processing time are output.

- `takeWhile(Predicate)` selects objects until the condition is no longer fulfilled.

```
<<foreach [in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => ((Double)(p.
↪getAttribute("AT_PROCESS_TIME").getRawValue())).takeWhile(p => ((Double)p.
↪getAttribute("AT_PROCESS_TIME").getRawValue()) < 5)]>><<[getAttribute("AT_NAME").
↪getValue()]>><</foreach>>
```

In this example, all activities that have a processing time of less than 5 minutes are displayed.

- `where(Predicate)` selects all objects that satisfy the condition.

```
<<foreach [in content.getSelection().getNodes("ET_ACTIVITY").orderBy(p => ((Double)(p.
↪getAttribute("AT_PROCESS_TIME").getRawValue())).where(p => ((Double)p.getAttribute(
↪"AT_PROCESS_TIME").getRawValue()) < 5)]>><<[getAttribute("AT_NAME").getValue()]>><</
↪foreach>>
```

In this example, all activities are displayed that have a processing time of less than 5 minutes.

- `AT_PROCESS_TIME`, `AT_SETUP_TIME` and `AT_TRANSPORT_TIME` are needed to calculate the cycle time.

```
<<foreach [activity in content.getSelection().getEntities("ET_ACTIVITY")]>>

<<var[process = activity.getAttribute("AT_PROCESS_TIME").getRawValue().getClass().
↪getSimpleName().equals("Double")? (double) activity.getAttribute("AT_PROCESS_TIME").
↪getRawValue():0]>>

<<var[setup = activity.getAttribute("AT_SETUP_TIME").getRawValue().getClass().
↪getSimpleName().equals("Double")? (double) activity.getAttribute("AT_SETUP_TIME").
↪getRawValue():0]>>

<<var[transport = activity.getAttribute("AT_TRANSPORT_TIME").getRawValue().getClass().
↪getSimpleName().equals("Double")? (double) activity.getAttribute("AT_TRANSPORT_
↪TIME").getRawValue():0]>>

<<var[cycle =(double)process+(double)setup+(double)transport]>>

<<[activity.getAttribute("AT_NAME").getValue()]>>

<<[cycle]>>

<</foreach>>
```

In this example, the cycle time of an activity for each activity in a process is calculated.

- <<if [...]>><</if>> checks if a condition is true.

```
<<if [content.getSelection().getEntities("ET_ROLE").any(p => ((Boolean)p.getAttribute(
↪"AT_EXTERNAL").getRawValue())))]>>Process with external involvement.<<else>>No␣
↪external involvement.<</if>>
```

In this example, the system checks whether external roles occur. In this case, a corresponding message is output. Otherwise (<<else>>) the system displays that "No external involvement" was found.

- equals(...) checks if a boolean attribute was set.

```
<<foreach [activity in content.getSelection().getEntities("ET_ACTIVITY")]>>

<<[activity.getAttribute("AT_NAME").getValue()]>>

<<if [activity.getAttribute("AT_COMPENSATION_TASK").getRawValue().equals(true)]>>YES<
↪<else>>NO<</if>>

<</foreach>>
```

This example checks whether a boolean value has been set or not. Hence, a text (**YES/NO**) is displayed.

- <<foreach [in ...]>><</foreach>> applies the method to all objects in the data collection.

```
<<foreach [in content.getSelection().getEntities("ET_ROLE")]>><<[getAttribute("AT_NAME
↪").getValue()]>>

<</foreach>>
```

In this example, the names of all roles in the diagram are listed.

Hint: Please note that the use of the **<<doc>>** tag and access to content from other files within report templates is not supported.

Cast necessity

Since the attributes of the objects from BIC Process Design are exported as an object and previously all data types are formatted as strings, which are then formatted in objects, it is necessary for predicates to parse the attributes back into strings. To do this, a `(<data type>)` must be used. This reformats the objects back to the desired data type, making the comparison possible again.

SEARCH

Use the search for keywords to search for attributes of diagrams and objects. Since the modeling data is used for the search, it is important that the corresponding attributes are maintained in the respective diagrams or objects. The content of *documents that are assigned to an entity or diagram* will also be searched. The following file formats are supported: PDF, DOC, DOCX, XLS, XLSX, PPT and PPTX.

A search always depends on the selected stage and content language. The stage does not change by navigation. If you are searching in the stage *Publication* and German is your content language, all objects and diagrams maintained in this language and existing in the publication will be listed. In addition to catalog entries, access-restricted diagrams that you cannot open are found.

Note: An exception here is the local workspace: The search is based on BIC Process Design Server. Therefore, searching in local workspace, where the new work status is stored locally in your browser, is accessing public workspace.

16.1 How can I search for content in BIC Process Design?

In order to find content, you can use the search for keywords and the *search in the catalog*. This section refers to the search for headword, which you can do as follows.

Click the *Search* in the menu bar.

Simple search: Enter the search term into the search field and confirm by pressing the Enter key.

Expert search: Enter the search term in the search field and, before confirming with the Enter key, activate the *Expert search* checkbox. Alternatively, you can activate the expert search automatically by entering "*". Note that the checkbox is not automatically deselected when the input is removed. This can be done manually by clicking on the checkbox.

It is searched in the currently opened repository. The number of results found, the corresponding stage and the content language are displayed below the input field. The search results are presented in a list sorted by diagram and object types found for the specified search term, and by relevance to the search term. If multiple search terms are equally relevant, the results are sorted by the last modification date. Next to the name of the search result, the type and the last modified date are listed. The details of the currently selected search result are automatically displayed on the right. In this case, the word "New" was searched for.
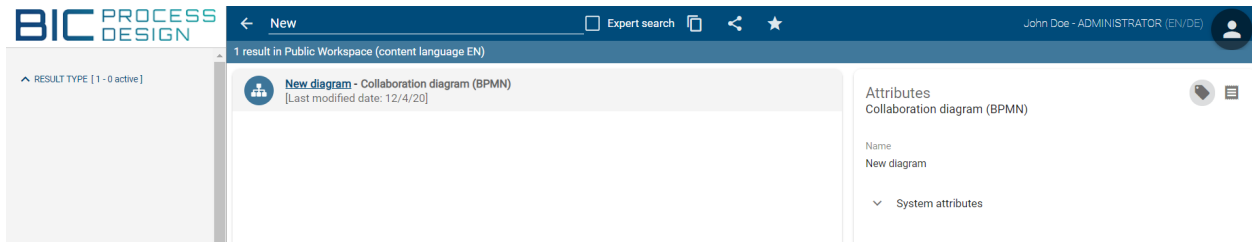
In the details bar you can switch between the *attributes*, that are always available here for the diagrams and for objects, and the *profile of a diagram* or the *occurrences of an object*.

The occurrences of an object allow you to navigate to a specific diagram in which the object is being used. To do so, click on the name of the diagram within the occurrences of the search entry.

Note: In case the search entry is a diagram you can open it directly with a click on the name of the entry. Note that the profile icon is only displayed if the option *to show the profile* is activated in the administration area for the corresponding diagram type.

16.2 What options do I have to search for specific terms?

Always keep in mind the search functions described below:

- The search is not case-sensitive.

- Line breaks and successive blanks are treated as one single blank.

- Phrase search: If the search term is enclosed in quotation marks, the search term is not changed, e.g. "process implementation". Here the search term must occur exactly in the searched data, and no wildcards characters are interpreted. Special words (see below) are ignored.

Simple search: The following options are available for the search terms in the simple search.

- Search for one word: If the search term does not contain wildcard characters, the search term will be searched at every position, e.g. a search for "Process" will find "Process model" as well. Process is virtually expanded to Process* and then used to search the content.

- Search for several words: If two or more words are searched for, the words are concatenated using or. So it is sufficient, if one word exists. Here are also wildcards (*) added, e.g. process implementation is searched as process* OR implementation*.

Expert search: If you have enabled the expert search, you can use the following search options.

- Search with special words: The search knows special words, which are interpreted, if they are part of the search term: AND, OR and NOT:

  - AND concatenated words must both exist in the results, e.g. development AND software

  - OR concatenated words can appear in the results, but do not need to. It is sufficient, if one of the words exists.

  - A NOT concatenated search word must not exist in the results, e.g. development NOT software

  - **Note**: Do not mix up with the search for several words (see above), wildcards are added there. This is not done, if one of the special words occurs.

  - You can use "!" or "-" instead of NOT (without the quotes).

- Search with special characters: The search knows special characters, which are interpreted, if they are part of the search term: +, - and !:

  - These characters are not allowed at the beginning of a search term.

  - If a + precedes a search word, this word must exist in the results, the first search word is optional, e.g. development +software.

  - If a - or a ! precedes a search word, this word must not exist in the results, e.g. development -software or development !software.

  - Search words with NOT, - and ! give the same results.

- Search term with wildcard characters:

  - "*" stands for none, one or more characters, e.g. *rocess will find "process" and every data that ends with "rocess"

  - "?" represents exactly one character, e.g. implement?tion

- Group terms to form partial queries: The search recognizes round brackets in the sense of grouping clauses. This allows you to control the Boolean logic of a query.

  - For example, the query "a AND (b OR c)" will search for "a AND b OR a AND c". If the brackets are not set, "a AND b OR c" is interpreted as "(a AND b) OR c".

16.3 How can I filter search results?

For each search, you will see the types and attributes of the search results as the facets in alphabetical order in the left side bar. By clicking on the facet headings, they can be expanded and collapsed. The number of found and active filter is also displayed next to the heading.

Expand a facet to see all filter option, that correspond to the attribute values or result types, are listed alphabetically. By setting a check mark for a filter, the search results are filtered according to this attribute value or result type. Multiple filters can be set simultaneously. In addition, there you have the option to only select a certain filter and to deselect all other filters at once. To do this, move the mouse to the desired filter and click on *Only* next to the filter. This selection can be undone by clicking on the filter again.

The example was filtered according to applications.
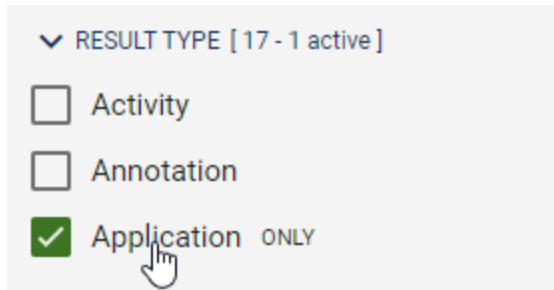
Available filters can be set via the *administration*.

16.4 How can I search for keywords?

In addition to the possibility to enter the respective keyword as search term and start the search, a keyword can be searched directly from the attribute tab. By clicking on the keyword in the attributes, the search is automatically started. It is regardless of whether you are looking at a diagram, the catalog or you are already in the search. You will see all the results associated with this keyword.

Note: The search by clicking on a keyword only returns results which are exactly assigned to this keyword in their attributes. If you are searching for the same word manually, you will find results, as well as keywords, matches in other attributes, such as the name.

16.5 How do I copy a search?

You can easily copy a search including search settings, such as selected filters. Clicking on *Copy* next to the search input field is sufficient to save the search to the clipboard. The URL is saved here, which can then be inserted, for example, in a new browser tab and leads back to the search.

16.6 How can I save a search?

You can save your search including filter settings via the URL as a bookmark in the browser. Use the bookmark to recreate the search and see the results. Furthermore, the search is always stored on the content language.

16.7 How can I store a search as favorite?

To make it easier to call up an often-needed search and the corresponding results, you can save the search including settings stage dependent as a favorite. Proceed as follows.

You are in search. Click *Add to favorites* next to the search box.
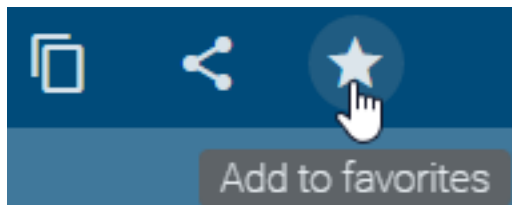
This opens a window in which you have to give the favorite a name. Then click *Store*.
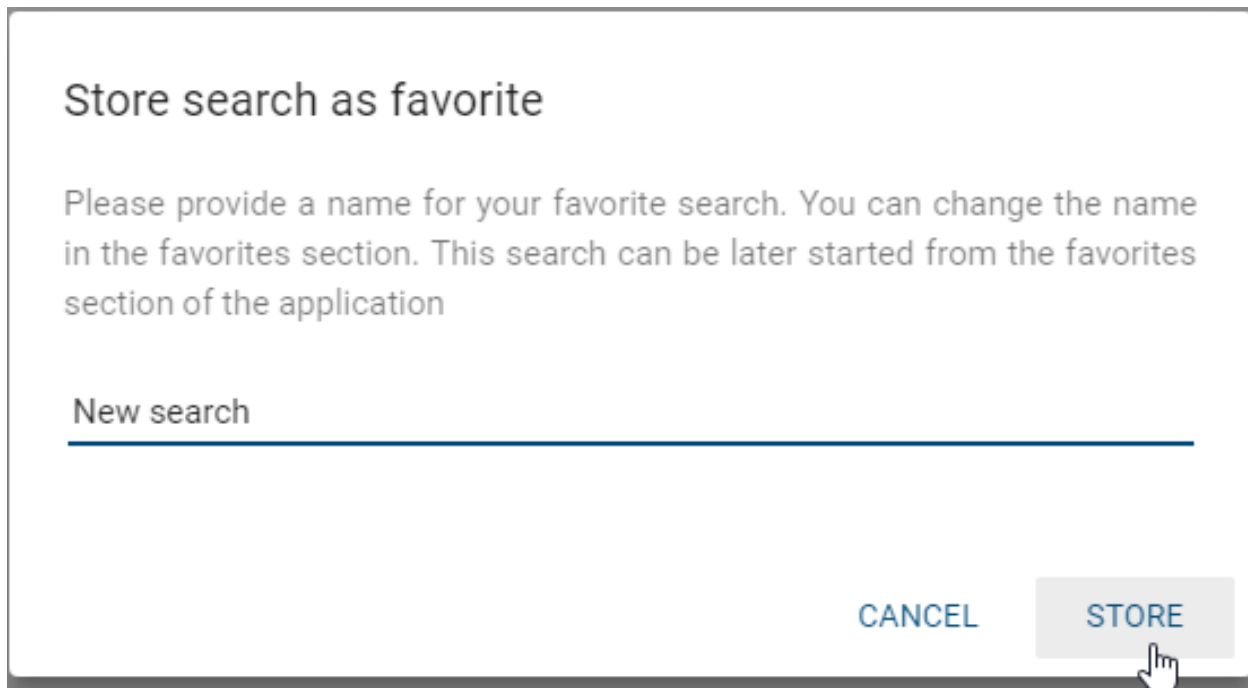
In the explorer, your saved search now appears as a favorite. By clicking on the favorite entry you will immediately see your search results in the stage, in which you have stored the search.

Note: The search favorites can still be *renamed* and *removed* and additionally appear on the *MyBIC page*.

16.8 How can I share a search?

Via the function *Share by e-mail* you can easily forward your search including search settings via e-mail to other users of BIC Process Design.

You are in the search and have made some filter settings. Now click on *Share by e-mail* next to the search input box and your e-mail client will open with an automatically inserted URL in the e-mail body. You can now send the e-mail to the e-mail address of a BIC Process Design user. If the recipient follows this link, he can see the results of your search in BIC Process Design.

FAVORITES

17.1 How do I add a diagram to my favorites?

Favorites are used to quickly find diagrams, which are often edited or are important for another reason. Diagrams marked as favorites can be found in the explorer under *Favorites*. Your personal favorites are not stored in the browser and are therefore available to you independently of the browser used.

Navigate to the diagram in the *desired stage* and open it by simply clicking on the entry in the explorer. The diagram name appears in the main navigation.
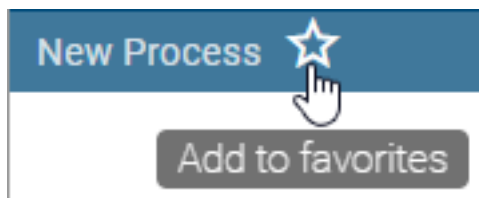
Click on *Add to favorites* represented by a star. You will receive a confirmation message that the diagram has been successfully added to your favorites.

Depending on the stage in which you added the diagram to your favorites, you will always be notified by e-mail about changes to the diagram in this area. This also applies to indirect changes to the diagram due to changed and possibly reused catalog entries. For example, in the Public Workspace, you receive a notification if the diagram is deleted or if changes are checked in.

Note: Only checked-in diagrams can be added to or removed from your favorites.

17.2 How do I rename a favorite?

You can rename your favorites. Note that renaming the favorites does not affect the name of the diagram.

Click the context menu button of a diagram in the Favorites group.

Select the *Rename* entry and enter a new name.
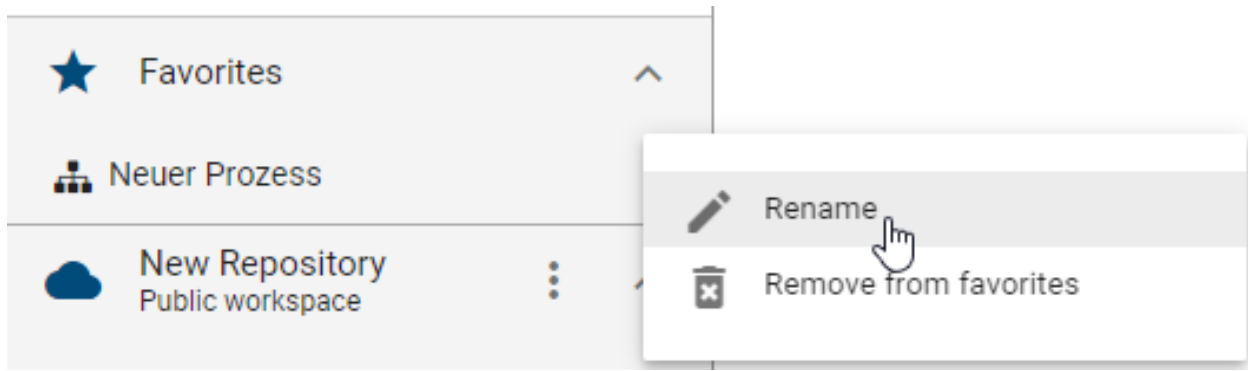
17.3 How do I remove a favorite?

Navigate to the desired entry, e.g. diagram, in the Explorer, or in your favorites, and open it by simply clicking on the entry. The diagram name appears in the main navigation.

Click on the star to remove the diagram from your favorites, which can be found next to the diagram name. You will receive a confirmation message that the diagram has been successfully removed from your favorites.

Optionally, you can open the context menu of an entry in the *Favorites* and select the *Remove from Favorites* entry.

EIGHTEEN

USEFUL HINTS

In this chapter, you find some concluding tips that facilitate the handling of BIC Process Design.

18.1 Which is the best position for the diagram?

Align your diagrams at the 0/0 position to ensure that they will be displayed optimally in the editor after checking-in.

18.2 How can I navigate the diagram more easily?

In addition to horizontal and vertical scrolling, you can move the diagram with the right mouse button in the editor of the local and public workspace. If you look at the diagram in preview or publication stage, this works by pressing the right mouse button. In addition, the *navigator* is available.

18.3 How can I make a multi selection?

A multi selection is possible in the modeling view of the local and public workspace. Select several elements at the same time, either by dragging with pressed mouse key over the area in which these elements are located or by holding the CTRL key and clicking on the corresponding symbols. Also note the possible *shortcuts*.

18.4 How can I deselect objects in a diagram?

If you have selected too many elements at the same time, you can remove individual objects from the selection by deselecting them. To do this, hold down the Shift key and click on the wrongly selected object.

18.5 How can I extend the search for specific terms?

With *, e.g. "*word", you can extend your *search* to show results that include the entered term.

18.6 How can I see the description of an object?

If you have maintained a *description* of an object, the corresponding attribute symbol "i" is highlighted on the object. Hold the mouse over this symbol. A tooltip with the description appears as a preview. Alternatively, you can also see the description of the object by clicking on the attribute symbol or by opening the attributes tab.

18.7 How can I invoke subprocesses easily?

You have the possibility to *invoke subprocesses by double-clicking* on the object, if you are not in the editing mode. Alternatively, click the diagram symbol for subprocesses and variants.

18.8 How can I deposit websites in the attachments?

In the attribute-tab, you can deposit websites in the *attachments* by typing in the URL and confirming with the "Return"-key.

18.9 How can I shift diagrams?

Cut the desired diagram using the functionality *Cut* in the context menu *More options* in order to shift it into another category. Use the context menu entry *Paste* of a category to finally shift the diagram. Note, that this cutting is not possible for diagrams that are locked by another user or have never been checked in before.

18.10 Where can I exercise modeling?

In order to learn new methods and test modeling, please create a repository named "Playground". That way, you can prevent inconsistent catalog-entries in your productive repository.

18.11 Should I always use the same browser for modeling?

After checking-out, your diagrams will be saved locally in the local storage of your browser. Therefore, you should always use the same browser.

18.12 What should I look for when translating objects?

Be aware that accepted catalog-entries cannot be changed by modelers and hence cannot be translated within the editor. Please go to the catalog and open the details to change the attributes of the object in the desired language. You can swap the set content and alternative language simply by clicking on the display at the top right of your user name. For example, the application changes from (EN/DE) to (DE/EN).

18.13 What should I look for after modeling?

Please, save your diagrams regularly and *check them in*, to avoid data loss and to make them available for other users. A diagram is locked for other users, if you do not check it in.

18.14 What should I consider after working with BIC Process Design?

Please do always log out at the end of a session. This will *inform you about checked out diagrams*. These should be checked in as far as possible in order to unlock them for other users and also to avoid data loss. Local workstations are stored in the *Local Storage* of your browser and will be lost if this state is deleted.

18.15 How can I unlock a diagram?

If a diagram is checked out by another user, it is locked for you. As an administrator, you have the option to *unlock a diagram*. To do this, select the entry *Unlock diagram* in the context menu of the diagram in the public workspace. If you have at least modeling rights, but not administrator rights, it is *not possible to unlock* the diagram. You can only contact the user who locks the diagram by clicking on the lock symbol in the editor.

18.16 How can I discard changes to the diagram?

If you have edited a diagram but do not want to check in your changes, *you can "discard local changes"*. Navigate to the context menu of the diagram and select the corresponding entry.

APPENDIX

19.1 Which stereotypes exist by default?

The following are lists that give you an overview of the default diagram, object attribute and symbol stereotypes and their IDs:

Diagram type name (EN)	Diagram type name (ES)	Diagram type ID
Collaboration diagram (BPMN)	Diagrama de colaboración (BPMN)	DT_BPMN_COLLABORATION
Customer Journey Map (CJM)	Customer Journey Map (CJM)	DT_CJM
Decision diagram (DMN)	Diagrama de decisión (DMN)	DT_DMN
Entity-Relationship Diagram (ERD)	Diagrama de entidad-relación (ERD)	DT_ERD
IT architecture	Arquitectura TI	DT_IT_ARCHITECTURE
IT landscape	Equipamiento TI	DT_IT_LANDSCAPE
Organizational chart	Organigrama	DT_ORGANIZATIONAL_CHART
Process (EPC)	Procesos (EPC)	DT_EPC
Process overview (VCD)	Vista general del proceso (VCD)	DT_VCD
Risk diagram	Diagrama de riesgo	DT_RISK
Structural diagram	Diagrama estructural	DT_STRUCTURAL

Object type name (EN)	Object type name (ES)	Object type ID
Activity	Actividad	ET_ACTIVITY
Annotation	Anotación	ET_ANNOTATION
Application	Aplicación	ET_APP_COMPONENT
Application function	Función de la aplicación	ET_APP_FUNCTION
Application interface	Interfaz de la aplicación	ET_APP_INTERFACE
Application service	Servicio de la aplicación	ET_APP_SERVICE
Attribute	Atributo	ET_ATTRIBUTE
Business object	Objeto comercial	ET_BUSINESS_OBJECT
Control	Control	ET_CONTROL
Data store	Almacenamiento de datos	ET_DATA_STORE
Document	Documento	ET_DOCUMENT
End event	Evento final	ET_END_EVENT
Entity	Entidad	ET_ENTITY
Event	Evento	ET_EVENT
Event based	Basada en evento	ET_EVENT_BASED_GATEWAY
Exclusive or	Or exclusiva	ET_XOR
Free form object	Forma libre	ET_FFO

Table 1 – continued from previous page

Object type name (EN)	Object type name (ES)	Object type ID
Group	Grupo	ET_GROUP
Inclusive or	Or inclusiva	ET_OR
Intermediate event	Evento intermedio	ET_INTERMEDIATE_EVENT
Key performance indicator	Indicador clave de rendimiento	ET_KPI
Knowledge model	Modelo de conocimiento	ET_KNOWLEDGE
Location	Localización	ET_LOCATION
Milestone	Hito	ET_MILESTONE
Norm	Norma	ET_NORM
Organizational unit	Unidad organizacional	ET_ORG_UNIT
Parallel	Paralela	ET_AND
Person	Persona	ET_PERSON
Position	Posición	ET_ORG_POSITION
Relationship	Relación	ET_RELATIONSHIP
Requirement	Requisito	ET_REQUIREMENT
Risk	Riesgo	ET_RISK
Role	Rol	ET_ROLE
Start event	Evento inicial	ET_START_EVENT

Attribute type Name (EN)	Attribute type Name (ES)	Attribute type ID
Actual value	Valor actual	AT_ACTUAL_VALUE
Allocation model	Modelo de asignación	AT_ALLOCATION
Applicable documents	Documentos aplicables	AT_APPLICABLE_DOCUMENTS
Application consultant	Consultor de la aplicación	AT_APPLICATION_CONSULTANT
Attachment (URL)	Archivo adjunto	AT_ATTACHMENT
Author	Autor	AT_AUTHOR
Call activity	Actividad de llamada	AT_CALL_ACTIVITY
Call Conversation	Conversación de llamada	AT_CALL_CONVERSATION
Capacity (0 = unlimited)	Capacidad (0 = ilimitada)	AT_CAPACITY
Capacity (in hours)	Capacidad (en horas)	AT_ORG_RES_CAPACITY
Collection	Collección	AT_COLLECTION
Compensation task	Tarea de compensación	AT_COMPENSATION_TASK
Control effect	Efecto del control	AT_CONTROL_EFFECT
Cost rate (in € per minute)	Tasa de coste (en € por minuto)	AT_RES_COST_RATE
Damage control measures	Medidas de control de daños	AT_DAMAGE_CONTROL_MEASURES
Data source	Fuente de datos	AT_DATA_SOURCE
Data state	Estado de los datos	AT_DATA_STATE
Data type	Tipo de dato	AT_DATATYPE
Data unit	Unidad de datos	AT_DATA_UNIT
Decomposition	Descomposición	AT_DECOMPOSITION
Default value	Valor por defecto	AT_DEFAULT_VALUE
Description	Descripción	AT_DESCRIPTION
Development costs (€)	Costes de desarrollo (€)	AT_DEVELOPMENT_COSTS
Email	Email	AT_EMAIL
End of operational time	Final del funcionamiento	AT_OPERATIONAL_TIME_END
Event type	Tipo de evento final	AT_END_EVENT_TYPE
Event type	Tipo de evento	AT_EVENT_TYPE
Event type	Tipo de evento intermedio	AT_INTERMEDIATE_EVENT_TYPE
Event type	Tipo de evento inicial	AT_START_EVENT_TYPE

Table 2 – continued from previous page

Attribute type Name (EN)	Attribute type Name (ES)	Attribute type ID
Examiner	Examinador	AT_EXAMINER
Executable process	Proceso ejecutable	AT_EXECUTABLE_PROCESS
Execution interval	Intervalo de ejecución	AT_EXECUTION_INTERVAL
Execution of control	Ejecución del control	AT_EXECUTION
Execution type	Tipo de ejecución	AT_EXECUTION_TYPE
External	Externo	AT_EXTERNAL
Focus on target	Centrarse en el objetivo	AT_FOCUS_ON_TARGET
Group	Grupo	AT_GROUP
Identifier	Identificador	AT_IDENTIFIER
Identifying	Identificando	AT_IDENTIFYING
Idle time (minutes)	Tiempo de inactividad (minutos)	AT_IDLE_TIME
Impact on occurrence	Impacto en la ocurrencia	AT_IMPACT_ON_OCCURRENCE
Input/Output	Entrada/Salida	AT_INPUT_OUTPUT
Instances	Instancias	AT_INSTANCES
Instantiate	Crear una instancia	AT_GATEWAY_INSTANTIATE
Keywords	Palabras clave	AT_KEYWORDS
Life cycle	Ciclo de vida	AT_LIFE_CYCLE
Manufacturer	Fabricante	AT_MANUFACTURER
Material costs (Euro)	Costes materiales (Euro)	AT_MATERIAL_COSTS
Multiple instance type	Tipo de instancia múltiple	AT_MULTIPLE_INSTANCE_TYPE
Multiple Instances	Instancias múltiples	AT_MULTIPLE_INSTANCES
Name	Nombre	AT_NAME
Non interrupting	Sin interrupción	AT_NON_INTERRUPTING
Occupation	Ocupación	AT_OCCUPATION
Occurrence probability	Probabilidad de ocurrencia	AT_OCCURRENCE_PROBABILITY
Phone	Teléfono	AT_PHONE
Primary Key	Clave primaria	AT_PRIMARY_KEY
Priority	Prioridad	AT_PRIORITY
Probability (%)	Probabilidad (%)	AT_PROBABILITY
Process time (minutes)	Tiempo de procesamiento (minutos)	AT_PROCESS_TIME
Process time (Days)	Tiempo de procesamiento (días)	AT_TIME_TO_PROCESS
Process type	Tipo de proceso	AT_PROCESS_TYPE
Publish as PDF	Publicar como PDF	AT_PUBLISH_AS_PDF
Release	Versión	AT_RELEASE
Responsible	Responsable	AT_RESPONSIBLE
Responsible (definition)	Responsable (definición)	AT_RESPONSIBLE_4_DEFINITION
Responsible (resubmission)	Responsable (reenvío)	AT_RESUBMISSION_RESPONSIBLE
Responsible (survey)	Responsable (estudio)	AT_RESPONSIBLE_4_SURVEY
Restricted access	Restricción de acceso	AT_ACCESS_RESTRICTION
Risk category	Categoría del riesgo	AT_RISK_CATEGORY
Risk mitigation measures	Medidas de mitigación de riesgos	AT_RISK_MITIGATION_MEASURES
Risk owner	Propietario del riesgo	AT_RISK_OWNER
Risk probability (%)	Probabilidad del riesgo (%)	AT_RISK_PROBABILITY
Risk probability (classification)	Probabilidad del riesgo (clasificación)	AT_RISK_PROBABILITY_CLASSIFICATION
Root cause	Causa principal	AT_ROOT_CAUSE
Scope	Área de aplicación	AT_SCOPE
Setup time (minutes)	Tiempo de configuración (minutos)	AT_SETUP_TIME
Source	Fuente	AT_SOURCE
Start of operational time	Inicio del funcionamiento	AT_OPERATIONAL_TIME_START

19.1. Which stereotypes exist by default?

Table 2 – continued from previous page

Attribute type Name (EN)	Attribute type Name (ES)	Attribute type ID
State	Estado	AT_STATE
System administrator	Administrador del sistema	AT_SYSTEM_ADMINISTRATOR
Target	Objetivo	AT_TARGET
Target value	Valor objetivo	AT_TARGET_VALUE
Task type	Tipo de tarea	AT_TASK_TYPE
Temporal binding (in minutes)	Tiempo de vinculación (minutos)	AT_TEMPORAL_BINDING
Transport time (minutes)	Tiempo de transporte (minutos)	AT_TRANSPORT_TIME
Type	Tipo	AT_EVENT_GATEWAY_TYPE
Unit costs (€)	Costes unitarios (€)	AT_UNIT_COSTS
Valid from	Válido desde	AT_VALID_FROM
Valid to	Válido hasta	AT_VALID_TO
Value range	Rango de valores	AT_VALUE_RANGE
Variants	Variantes	AT_VARIANTS
Version	Versión	AT_VERSION
Weak	Débil	AT_IS_WEAK

Association type Name (EN)	Association type Name (ES)	Association type ID
A - Accountable	A - Aprobador	AST_ACCOUNTABLE
acts as	actúa como	AST_ACTS_AS
Aggregates	agrega	AST_AGGREGATES
Aggregation	Agregación	AST_AGGREGATES_CONTROL
Aggregation	Agregación	AST_AGGREGATES_DATA
Aggregation	Agregación	AST_AGGREGATES_KPI
Aggregation	agrega	AST_AGGREGATES_RISK
annotate	anotar	AST_ANNOTATE
Assigned to	Asignado a	AST_ASSIGNED_TO
Association	Asociación	AST_ASSOCIATION
Attribute link	Enlace de atributo	AST_ATTRIBUTE_LINK
C - Consulted	C - Consultor	AST_CONSULTED
Composes	compone	AST_COMPOSES
contains	contiene	AST_CONTAINS
Controls	Controla	AST_CONTROLS
counteracts	contrarresta	AST_COUNTERACTS
covers	cubre	AST_COVERS
depends on	depende de	AST_DEPENDS_ON
Ends measuring	termina medición	AST_ENDS_MEASURING
I - Informed	I - Informante	AST_INFORMED
inherits from	hereda de	AST_INHERITANCE
Input	Entrada	AST_INPUT
Is superior	Es superior	AST_IS_SUPERIOR
measures	medidas	AST_MEASURES
Message Flow	Flujo de mensajes	AST_MESSAGE_FLOW
occupied by	ocupada por	AST_OCCUPIED_BY
occurs	ocurre	AST_OCCURS
Output	Salida	AST_OUTPUT
R - Responsible	R - Encargado	AST_RESPONSIBLE
Realizes	Realiza	AST_REALIZATION
realizes	necesita	AST_REALIZES

Table 3 – continued from previous page

Association type Name (EN)	Association type Name (ES)	Association type ID
Relation link	Enlace de la relación	AST_RELATIONSHIP_LINK
Sequence Flow	Flujo de secuencia	AST_SEQUENCE_FLOW
Serving	Servicio	AST_SERVING
Specialization	Especialización	AST_SPECIALIZES
Starts measuring	empieza medición	AST_STARTS_MEASURING

Diagram type ID	Object type ID	Symbol type ID
DT_BPMN_COLLABORATION	ET_ROLE	NST_POOL
DT_BPMN_COLLABORATION	ET_APP_COMPONENT	NST_POOL
DT_BPMN_COLLABORATION	ET_ACTIVITY	NST_TASK
DT_BPMN_COLLABORATION	ET_START_EVENT	NST_START_EVENT
DT_BPMN_COLLABORATION	ET_INTERMEDIATE_EVENT	NST_INTERMEDIATE_EVENT
DT_BPMN_COLLABORATION	ET_END_EVENT	NST_END_EVENT
DT_BPMN_COLLABORATION	ET_XOR	NST_XOR
DT_BPMN_COLLABORATION	ET_AND	NST_AND
DT_BPMN_COLLABORATION	ET_OR	NST_OR
DT_BPMN_COLLABORATION	ET_EVENT_BASED_GATEWAY	NST_GATEWAY_EVENT_BASED
DT_BPMN_COLLABORATION	ET_DOCUMENT	NST_DOCUMENT_BPMN
DT_BPMN_COLLABORATION	ET_DATA_STORE	NST_DATA_STORE
DT_BPMN_COLLABORATION	ET_REQUIREMENT	NST_REQUIREMENT_BPMN
DT_BPMN_COLLABORATION	ET_ROLE	ST_ROLE_BPMN
DT_BPMN_COLLABORATION	ET_APP_COMPONENT	NST_APP_COMPONENT_BPMN
DT_BPMN_COLLABORATION	ET_RISK	NST_RISK_BPMN
DT_BPMN_COLLABORATION	ET_CONTROL	NST_CONTROL_BPMN
DT_BPMN_COLLABORATION	ET_KPI	NST_KPI_BPMN
DT_BPMN_COLLABORATION	ET_NORM	NST_NORM_BPMN
DT_BPMN_COLLABORATION	ET_GROUP	NST_GROUP
DT_BPMN_COLLABORATION	ET_ANNOTATION	NST_ANNOTATION
DT_BPMN_COLLABORATION	ET_TOUCHPOINT	NST_TOUCHPOINT
DT_EPC	ET_ACTIVITY	NST_PROCESS_INTERFACE
DT_EPC	ET_EVENT	NST_EVENT
DT_EPC	ET_ACTIVITY	NST_FUNCTION
DT_EPC	ET_XOR	NST_XOR
DT_EPC	ET_AND	NST_AND
DT_EPC	ET_OR	NST_OR
DT_EPC	ET_ROLE	NST_ROLE
DT_EPC	ET_ORG_UNIT	NST_ORG_UNIT
DT_EPC	ET_DOCUMENT	NST_DOCUMENT
DT_EPC	ET_BUSINESS_OBJECT	NST_BUSINESS_OBJECT
DT_EPC	ET_APP_COMPONENT	NST_APP_COMPONENT
DT_EPC	ET_REQUIREMENT	NST_REQUIREMENT
DT_EPC	ET_RISK	NST_RISK
DT_EPC	ET_CONTROL	NST_CONTROL
DT_EPC	ET_KPI	NST_KPI
DT_EPC	ET_NORM	NST_NORM
DT_EPC	ET_ANNOTATION	NST_ANNOTATION
DT_EPC	ET_TOUCHPOINT	NST_TOUCHPOINT
DT_CJM	ET_JOURNEY_STAGE	NST_JOURNEY_STAGE

continues on next page

Table 4 – continued from previous page

Diagram type ID	Object type ID	Symbol type ID
DT_CJM	ET_CUSTOMER_STEP	NST_CUSTOMER_STEP
DT_CJM	ET_TOUCHPOINT	NST_TOUCHPOINT
DT_CJM	ET_FFO	NST_FFO_TEXT
DT_DMN	ET_ACTIVITY	NST_FUNCTION
DT_DMN	ET_DOCUMENT	NST_KNOWLEDGE_SOURCE
DT_DMN	ET_BUSINESS_OBJECT	NST_INPUT_DATA
DT_DMN	ET_KNOWLEDGE	NST_BUSINESS_KNOWLEDGE
DT_DMN	ET_ANNOTATION	NST_ANNOTATION
DT_ERD	ET_ENTITY	NST_ENTITY_CHEN
DT_ERD	ET_RELATIONSHIP	NST_RELATIONSHIP_CHEN
DT_ERD	ET_ATTRIBUTE	NST_ATTRIBUTE_CHEN
DT_ERD	ET_ANNOTATION	NST_ANNOTATION
DT_IT_ARCHITECTURE	ET_APP_COMPONENT	NST_APP_COMPONENT
DT_IT_ARCHITECTURE	ET_APP_FUNCTION	NST_APP_FUNCTION
DT_IT_ARCHITECTURE	ET_APP_SERVICE	NST_APP_SERVICE
DT_IT_ARCHITECTURE	ET_APP_INTERFACE	NST_APP_INTERFACE
DT_IT_ARCHITECTURE	ET_ENTITY	NST_DATA_OBJECT
DT_IT_ARCHITECTURE	ET_ACTIVITY	NST_FUNCTION
DT_IT_ARCHITECTURE	ET_LOCATION	NST_LOCATION
DT_IT_ARCHITECTURE	ET_RISK	NST_RISK
DT_IT_ARCHITECTURE	ET_CONTROL	NST_CONTROL
DT_IT_ARCHITECTURE	ET_DOCUMENT	NST_DOCUMENT
DT_IT_ARCHITECTURE	ET_BUSINESS_OBJECT	NST_BUSINESS_OBJECT
DT_IT_ARCHITECTURE	ET_NORM	NST_NORM
DT_IT_ARCHITECTURE	ET_ANNOTATION	NST_ANNOTATION
DT_IT_LANDSCAPE	ET_APP_COMPONENT	NST_APP_COMPONENT
DT_IT_LANDSCAPE	ET_RISK	NST_RISK
DT_IT_LANDSCAPE	ET_CONTROL	NST_CONTROL
DT_IT_LANDSCAPE	ET_ANNOTATION	NST_ANNOTATION
DT_ORGANIZATIONAL_CHART	ET_ORG_UNIT	NST_ORG_UNIT
DT_ORGANIZATIONAL_CHART	ET_ORG_POSITION	NST_ORG_POSITION
DT_ORGANIZATIONAL_CHART	ET_ROLE	NST_ROLE
DT_ORGANIZATIONAL_CHART	ET_PERSON	NST_PERSON
DT_ORGANIZATIONAL_CHART	ET_ANNOTATION	NST_ANNOTATION
DT_VCD	ET_ACTIVITY	NST_FUNCTION_VCD_START
DT_VCD	ET_ACTIVITY	NST_FUNCTION_VCD
DT_VCD	ET_ACTIVITY	NST_FUNCTION
DT_VCD	ET_ROLE	NST_ROLE
DT_VCD	ET_ORG_UNIT	NST_ORG_UNIT
DT_VCD	ET_BUSINESS_OBJECT	NST_BUSINESS_OBJECT
DT_VCD	ET_DOCUMENT	NST_DOCUMENT
DT_VCD	ET_REQUIREMENT	NST_REQUIREMENT
DT_VCD	ET_APP_COMPONENT	NST_APP_COMPONENT
DT_VCD	ET_RISK	NST_RISK
DT_VCD	ET_CONTROL	NST_CONTROL
DT_VCD	ET_KPI	NST_KPI
DT_VCD	ET_NORM	NST_NORM
DT_VCD	ET_MILESTONE	NST_MILESTONE
DT_VCD	ET_TOUCHPOINT	NST_TOUCHPOINT

Table 4 – continued from previous page

Diagram type ID	Object type ID	Symbol type ID
DT_VCD	ET_ANNOTATION	NST_ANNOTATION
DT_RISK	ET_RISK	NST_RISK
DT_RISK	ET_CONTROL	NST_CONTROL
DT_RISK	ET_ACTIVITY	NST_FUNCTION
DT_RISK	ET_APP_COMPONENT	NST_APP_COMPONENT
DT_RISK	ET_ORG_UNIT	NST_ORG_UNIT
DT_RISK	ET_ANNOTATION	NST_ANNOTATION
DT_STRUCTURAL	ET_DOCUMENT	NST_DOCUMENT
DT_STRUCTURAL	ET_BUSINESS_OBJECT	NST_BUSINESS_OBJECT
DT_STRUCTURAL	ET_KPI	NST_KPI
DT_STRUCTURAL	ET_NORM	NST_NORM
DT_STRUCTURAL	ET_PRODUCT	NST_PRODUCT
DT_STRUCTURAL	ET_ANNOTATION	NST_ANNOTATION

19.2 Which exceptions and particularities occur when configuring the symbol type color?

If you configure the *symbol type coloring* in the administration, the definition of the border, background and font color is not clear for all types. Parts of some types cannot be colored. In the following, you can find a list of these symbol types as well as an explanation about the individual color configuration.

Intermediate Event (NST_INTERMEDIATE_EVENT): The symbol in the middle (depending on the chosen event type) is is colored in the border color. The example shows the configuration

- Border color: red

- Background color: light blue

- Font color: black

Intermediate Event (Signal (Throw))   Intermediate Event   Intermediate Event (Timer)

Tip: If the border color does not apply to the inner symbol, the symbol definition is obsolete. You can update the symbol type using the *"Switch symbol"* function in each diagram it occurs.

Task, process type transaction (NST_TASK): If you configure an activity as task type *transaction*, the border color specifies the color of both lines edging this symbol. The example shows the configuration

- Border color: red

- Background color: light blue

- Font color: black
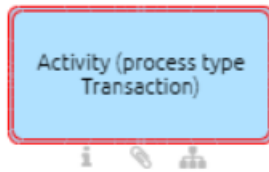
Tip: In an obsolete version of this symbol type, the border color only applied to the outer line. In this case, you can change the symbol type using the *"Switch symbol"* function in your diagram to the update your symbol.

Interface (NST_PROCESS_INTERFACE): The border color defines the complete line structure of this symbol type. The example shows the configuration

- Border color: red
- Background color: light blue
- Font color: black
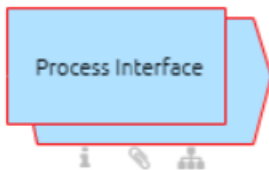
Tip: If the border color only applies to the outer border, the symbol definition is obsolete. You can update the symbol type using the *"Switch symbol"* function in each diagram it occurs.

Pool (NST_POOL, NST_VERTICAL_POOL): The font and background color only applies to the head of the pool and not to included lanes. The border color defines all borders of the lanes but not the border of the pool head. The example shows the configuration

- Border color: red
- Background color: light blue
- Font color: blue

Warning: After changing your pool colors, do not change the colors of your CI configuration. This can lead to undesired behavior. To avoid this, first change the colors of your CI configuration and only then change your pool colors.
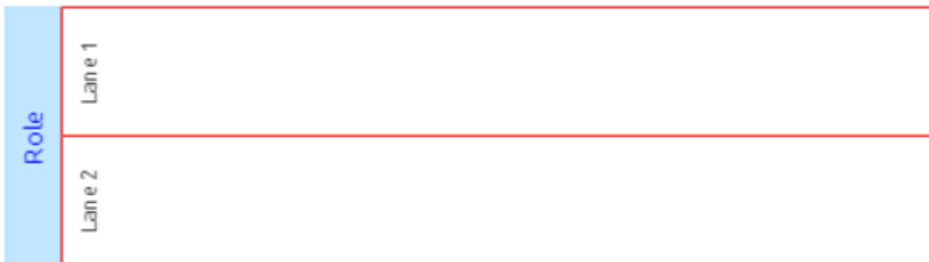
Role, Norm, Risk, Control (ST_ROLE_BPMN, NST_NORM_BPMN, NST_RISK_BPMN, NST_CONTROL_BPMN): Set the border color to configure the color of the symbol. Neither the exclamation mark of the risk symbol nor the check mark of the control symbol is changeable. The example shows the configuration

- Border color: blue - *no effect*
- Background color: red
- Font color: black

Document, type Input/ Output (NST_DOCUMENT_BPMN): If you model a document *in the attribute group* "Typing" as *Input* or *Output*, the border color also specifies the color of the arrow in the left upper corner. The example shows the configuration

- Border color: red
- Background color: light blue
- Font color: black

Tip: In an obsolete version of this symbol type, the border color does not apply to the arrow. In this case, you can change the symbol type using the *"Switch symbol"* function in your diagram to receive the coloring shown above.

Note: Please note that the arrow only appears when you maintain the attribute as above. The arrow is not in relation to the chosen connection type (input/ output) when adding the document object via the *mini symbol palette*.

Annotation (NST_ANNOTATION): The font color can be changed exclusively. The example shows the configuration

- Border color: red - *no effect*
- Background color: black - *no effect*
- Font color: blue

Annotation

Touchpoint, KPI (NST_TOUCHPOINT, NST_KPI_BPMN): Since the symbol color is conditional on each object, you can only change the font color of these symbol types. The example shows the configuration

- Border color: red - *no effect*
- Background color: black - *no effect*
- Font color: blue

Touchpoint   KPI

Risk, Control (NST_RISK, NST_CONTROL): The risk resp. control icon in the upper left corner is excluded from the configuration. The example shows the configuration

- Border color: red
- Background color: light blue
- Font color: blue

Risk   Control

Product (NST_PRODUCT): The border color applies to the complete line structure. The example shows the configuration

- Border color: red
- Background color: light blue
- Font color: blue

Product

Tip: If the border color only applies to the outer border, the symbol definition is obsolete. You can update the symbol type using the *"Switch symbol"* function in each diagram it occurs.

Journey Stage, Customer Step (NST_JOURNEY_STAGE, NST_CUSTOMER_STEP): The flag resp. person icon in the upper left corner is excluded from the configuration. The example shows the configuration

- Border color: red

- Background color: light blue
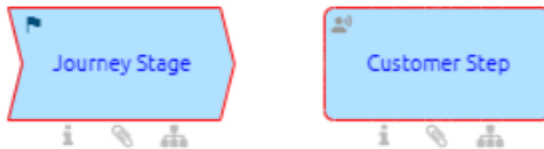
- Font color: blue

Group (NST_GROUP): The border color can be changed exclusively. The example shows the configuration

- Border color: red

- Background color: light blue - *no effect*

- Font color: blue - *no effect*
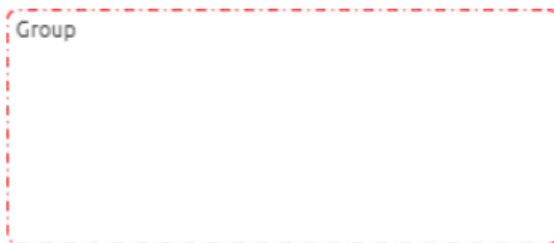
BIC PROCESS EXECUTION

Welcome to the documentation of BIC Process Execution! BIC Process Execution is an application which is used to execute processes that have been defined and published within BIC Process Design. This enables you to actively implement modeled processes and make them available for your users to execute.

BIC Process Execution is a Progressive Web App (PWA) and therefore available on all end devices. In addition to the desktop version, you can also access the mobile view, for example via an icon on your tablet. The mobile view is optimized and differs slightly from the desktop version, but is similar in its operation. In this documentation, mainly the desktop view is described to avoid redundancies. In some sections the mobile view will also be discussed, in case differences between the mobile and the desktop view are relevant for the usage.

20.1 Quickstart

20.1.1 BIC Process Execution content structure

Your BIC Process Execution application contains processes that have been modeled in your BIC Process Design. For each of these processes cases can be created. Cases are concrete forms of a process flow. These include executable *tasks*, which represent the process steps of the corresponding process. The tasks can be executed automatically or manually by assigned, responsible user or user groups.

The processes for the productive work with BIC Process Execution are available for all users (as far as not restricted). The reason is that the processes are based on the published version of the corresponding diagrams. In accordance with the different stages in BIC Process Design, BIC Process Execution offers *multiple environments* to authorized users in order to track the development of a process.

20.1.2 First steps

How do I log in?

To be able to use BIC Process Execution you must be *a registered user in BIC Process Design*. If this requirement is met, you can log in to BIC Process Execution at any time.

The login in BIC Process Execution is executed in the same way as in *BIC Process Design*. After BIC Process Execution has been called up and the login is completed, you will automatically be directed to *your tasks*.

If you do not have active tasks, you will be redirected to the *process overview*.

Hint: In order to make the simultaneous use of BIC Process Design and BIC Process Execution as pleasant as possible, the login is done via Single Sign-On. This means that a single login to one of the two applications is

sufficient to automatically be logged in to the other application. This means that you do not need to log in again when you call up the other application.

> **Warning:** Please note that you will receive a notification when attempting to access the application with an unsupported browser. The message informs you that your browser is not compatible. It's important to note that currently, only Internet Explorer is not supported.

How do I log out?

You can find the *Logout* function within the *menu*
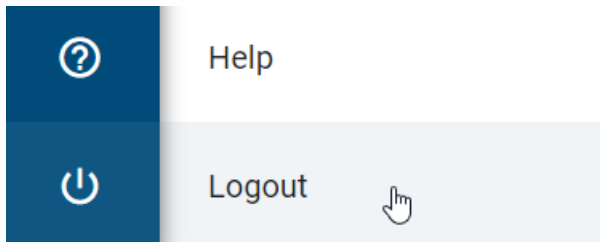
After using this function you will be signed off from the BIC Process Execution application.

> **Note:** With the *single sign-on function*, you are automatically logged out of BIC Process Design after signing off in BIC Process execution.

How is the interface of BIC Process Execution structured?

The interface of BIC Process Execution can be divided in three parts:

Header: The header displays the area which is currently displayed. In addition you will find some basic functionality like the burger menu icon that is used to hide or display the menu sidebar. In the mobile view you will also find, for example, the *back* arrow, which is used to navigate back through the different layers.

Main area: This area is the central area in which you can, for example, work on tasks, view processes or check the progress of the cases.

Sidebars: Navigation elements and functions, such as the menu, are provided via the sidebars of your desktop. By default, the functions are shown or hidden depending on your current screen size, your zoom setting and the level you are currently at. You can expand or collapse the menu as needed using the *menu* icon at the top left.

How can I navigate through BIC Process Execution?

The fundamental structure for the navigation in BIC Process Execution is the *Menu*. You can find it on the left side of your screen in form of a sidebar. The entries of the menu will navigate you to the main areas of BIC Process Execution. For example, the menu contains the following main areas:

Tasks: Here you will find a list of all tasks from all cases that are currently outstanding for you as the person responsible or member of the responsible user group. This allows you to access your tasks collectively and clearly arranged.

My cases: This area displays all cases which you have created and are therefore registered as the creator. This allows you to get a quick overview of the progress of all cases that are particularly relevant to you.

ProcessApps: This section contains all processes that you can use in your BIC Process Execution application. Further information about which processes are available in BIC Process Execution can be found *here*.
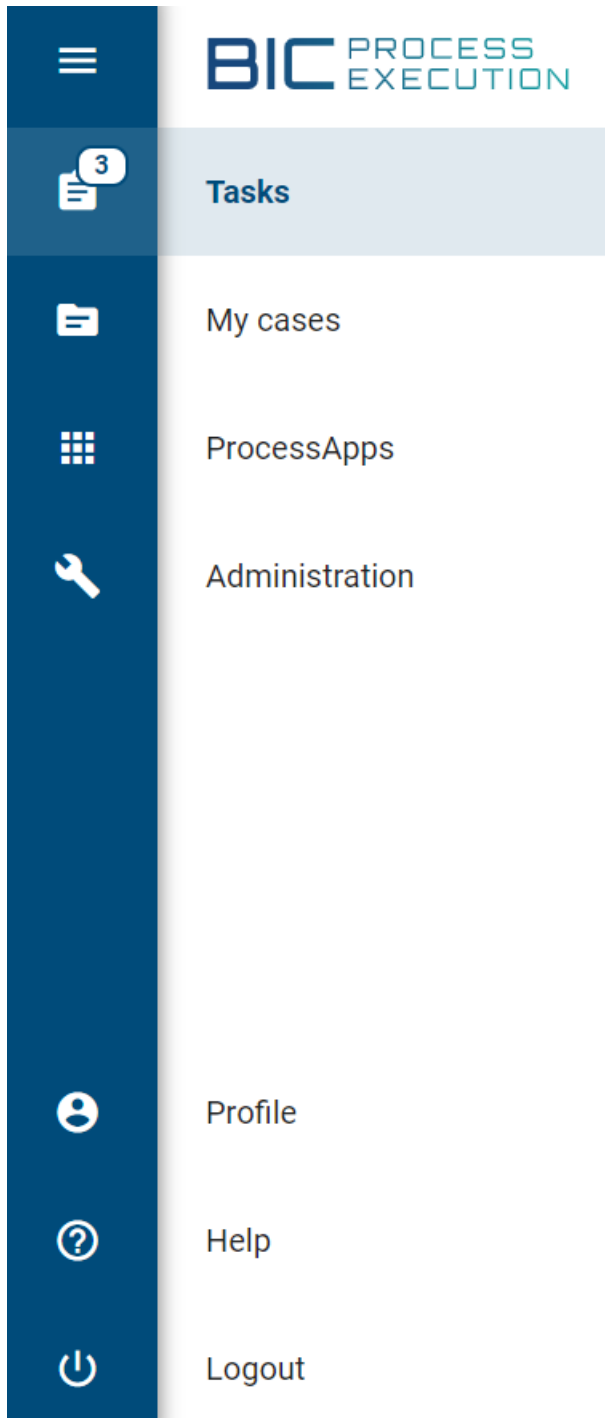
With the help of the arrows you can move back and forward again through your history.
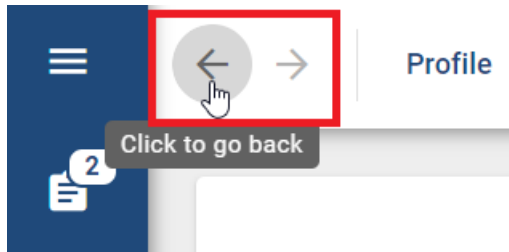
Note: To disable the arrows if you are moving outside of BIC Process Execution, we recommend using the browsers **Chrome, Opera, Edge** and **Samsung**. The navigation arrows **only** work for moving within BIC Process Execution.

In the header, you can find the breadcrumb navigation. By selecting the desired name, you will be redirected from a case or case list to the higher level.
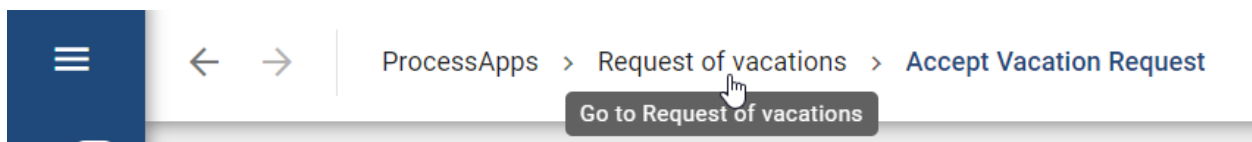
You can also use the *Up* button in the process flow of a case to navigate to the case list of the respective ProcessApp. Using the *Up* button in this list, you can go to the ProcessApp (Collections).
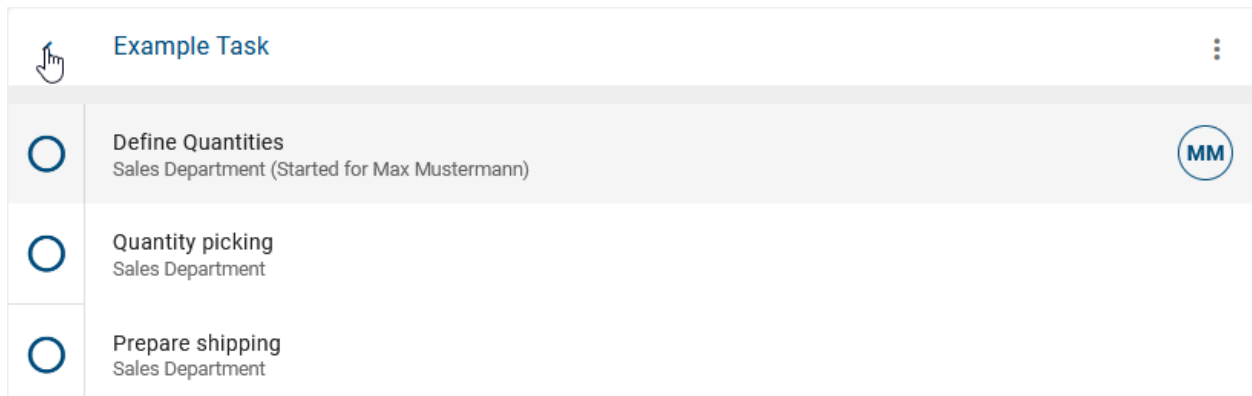
Tip: The menu can be hidden or displayed by using the burger menu in the upper left corner of your screen. If your screen does not offer enough space for the simultaneous display of the main area and the menu (e.g. in the mobile view), the menu is hidden by default.

How can I install BIC Process Execution as PWA on my device?

You can install BIC Process Execution as a Progressive Web App on your mobile device or desktop computer. This enables you to access the application even faster and allows you to receive *push notifications* on your mobile device even if the application has been closed. The PWA installation process can differ depending on the operating system and browser on your device. For detailed instructions on how to install a PWA on your device please refer to the corresponding help. For example you can find the instructions for an Android device with the browser Google Chrome here.

Where can I find the help?

In the *menu* click on the question mark to open the help. Here you can view the user documentation.
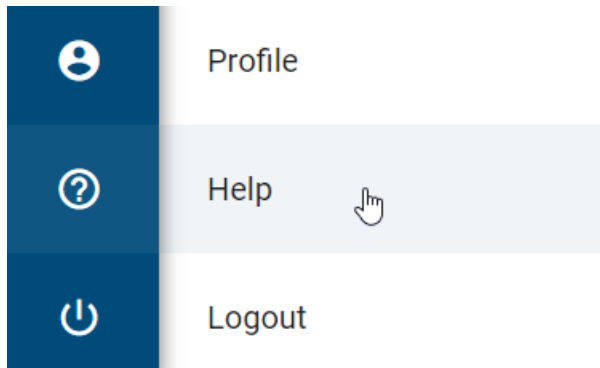
20.2 Modeling

If you use BIC Process Execution, BIC Process Design will allow you more possibilities than before. You can enhance *send tasks with an e-mail template* or configure user tasks with an individual form to help users accomplish their tasks. Moreover, you can automate process steps by defining *REST calls* or *script tasks*.

If you model a process in BIC Process Design, you can *test it in BIC Process Execution* before you publish it.

20.2.1 Which processes are displayed in BIC Process Execution?

BIC Process Execution is directly connected to BIC Process Design. Processes that are displayed and can be executed in BIC Process Execution, have previously been defined as such in BIC Process Design. This can be done using the diagram attribute *Executable process* within the attribute group *Automation* of the diagram types "Business Process Model and Notation (BPMN)" and "Event-Driven Process Chain (EPC)". This checkbox has to be activated to declare the process as executable. How to display the attributes of a diagram is explained in this *chapter*.

In the productive environment, you will only see processes in BIC Process Execution as long as the corresponding diagrams in BIC Process Design are available in the *publication*. If so, the process will be available within BIC Process Execution within the *ProcessApps*. When you depublish a diagram in BIC Process Design, you can no longer see the associated process here, unless there are still *running cases*. After every change that has been made to a diagram, it has to be published again to make these changes also visible in the corresponding process of the productive environment.

Hint: In the *development und test environment* of BIC Process Execution, a process can already be tracked during its development. This reflects the modeling of the corresponding diagram in BIC Process Design.

Note: Note that *access restrictions*, defined in BIC Process Design, will also effect the visibility of processes in BIC Process Execution. This means that diagrams which have an access restriction in BIC Process Design, will only be visible to you as a process in BIC Process Execution, if you are part of the corresponding access restriction.

Additionally, ProcessApp Administrators have the option to determine whether other user groups are allowed to start tasks manually. To do this, the checkbox *Allow users to start tasks manually* can be activated. This enables the initiation of previously unstarted active segments of a task.

By selecting the option *Hide Start Form*, you can configure that when *creating new cases* for the process, you will be directly redirected to the process execution view, skipping the case start form. The new case will be named based on the process name and the timestamp.

20.2.2 How can I configure my ProcessApp icons?

The icon with which your process is displayed in the *ProcessApp* area in BIC Process Execution can be adapted in the attributes of the corresponding diagram in BIC Process Design. To configure an icon, navigate in BIC Process Design to the details of the relevant diagram. Here you will find the attributes *ProcessApp color* and *ProcessApp icon* under the attribute group *Automation*.

You can use the *ProcessApp color* attribute to determine the icon's color. As value enter the RGB color code of your desired color, for example red via 255,0,0. You can also use hex codes, such as #FF0000 for red, or the corresponding color names. The task icon is always the same color as the ProcessApp.

The icon can be defined via the attribute *ProcessApp icon*. You can choose an icon provided by Font Awesome (v6.5.1) which is available for free. As the value of the attribute enter the name of the respective icon.

An example could be as follows:

The result will then be displayed like this:

The default icon for undefined processes is a diagram icon.

Note: You can choose from all Font Awesome icons in version 5.15.4 except the trademark-protected ones.

20.2.3 How can I restrict the visibility of all cases in the ProcessApp?

If you want to restrict the visibility of processes within the *ProcessApp* section of BIC Process Execution, you can do so during modeling. Navigate to the details of the regarding diagram in BIC Process Design. Here, under the *Automation* attribute group, you will find the *Analyst* attribute.

The *Analyst* attribute allows you to maintain multiple users or user groups that can view all cases within the ProcessApp after the process is published. It is important to note that users must be assigned to the *ProcessApp Analyst* role. All other users will only be able to see the cases assigned to them within the ProcessApp.

∧   Automation

✓ Executable process

☐ Allow users to start tasks manually

☐ Hide Start Form

Case creation restriction

Analyst

👤 John Doe ✕

⧉ ProcessApp Analysts ✕

Retention period in days

If you change the users or user groups in the *Analyst* attribute, previously maintained users and user groups will no longer have access to all cases within the ProcessApp.

20.2.4 Form Editor

With the form editor, you can create the form of a *user task*. You can configure different form fields that will be displayed in the *form of the task* when the process is executed. The responsible of the task can fill the fields when completing the task.

How can I create and configure my own form?

In order to use the form editor, your diagram has to be marked as *executable process* in the attributes. The *activity type* of the task has to be *User*.

Now you can open the form editor. To do so first open the context menu of the activity with a right click on it. There select the entry *Open Forms editor*.
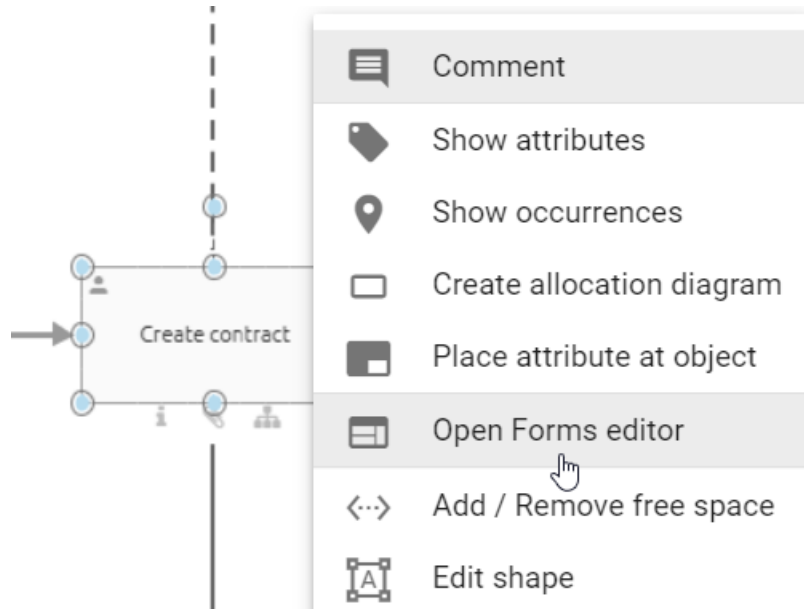
Alternatively, you can open the form editor via the *details* of a task. To do that, select the activity and open the details on the right-hand side. There you can find the button *Open Editor*. Select this button and the form editor will open.
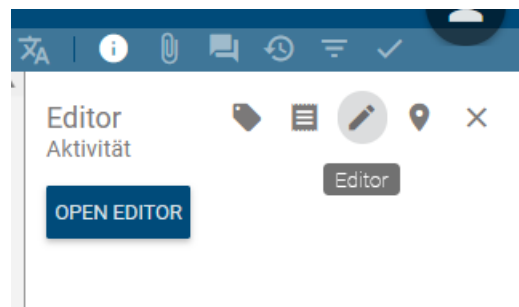
The form editor opens in a new dialog window. On the left side of the form editor you will find all available form fields that can be added or configured. In the middle of the editor you can see a preview of the form which contains all elements that have already been added to your form. If one of those elements has been selected you can see its details on the right side of the dialog.

Within the form editor you can *add new elements to your form*, *adapt the position of the different form fields* within the form, change their attributes or *remove single form fields* from the form.

To apply your changes, confirm your entries by pressing the *Save* function in the top right corner of the form editor. With *Cancel* you can leave the form editor and the changes will be discarded.
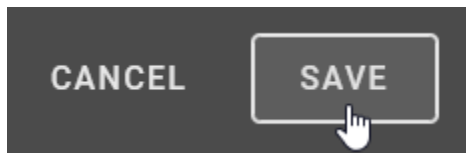
As soon as you have saved your changes and the corresponding *diagram meets all requirements to be displayed as process in BIC Process Execution*, your form can be found in addition to the automatic generated form fields of the task.

Be aware, that the relevant task must have been assigned to a user in order for your form to be editable in a case's process flow.

You can use *process variables* in your form. They need to be enclosed by two curly brackets (e.g. `{{variableName}}`). If you received a data object via a *rest call*, you can use that as well in your form. The following example shows a JSON file with the data object 'address'. To use the zip-code as a variable, you need to use `address.zip`. You can nest as many data objects as you like.

```
{
  "firstName": "John",
  "lastName": "Doe",
  "address":{
    "street": "Examplestreet",
    "number": 13,
    "zip": "44801"
  }
}
```

Hint: If a data object in the JSON file without a nested structure is named with a dot, it will be replaced with an underscore. In this example, if *address.zip* is not nested, the name will automatically be renamed to *address_zip*. After the replacement, you need to use the underscore(s) to continue using the variable(s).

Warning: Remember to also save the diagram, after you have applied changes within the form editor. Otherwise your changes will be lost when leaving the diagram.

Note: If you have errors in your user form, the form will not close after saving. You will see an error icon on fields with errors. After solving them, the form can be saved and closed.

Which form fields exist and how can I add a new form field to my form?

You have the possibility to add these form fields into your form:

- *Text*: A simple *text* field for the in- and output of alphanumeric strings.

- *Text area*: *Text field* for the input of longer text such as descriptions and comments, which also allows formatting the text.

- *Formula*: *Formula* for calculating numeric or logical values.

- *Number*: Field for the in- and output of numeric values. Can store *numbers* with decimal places.

- *Single choice*: *Choice field* where a user can choose exactly one option of several predefined options. This can be configured as a list or drop-down menu.

- *Multiple choice*: *Choice field* where a user can choose one or more options of several predefined options. This can be configured as a list or drop-down menu.

- *Date*: Field for the in- and output of *dates*.

- *Boolean*: Field with a *binary decision*.

- *Email*: Field, where user can enter an *e-mail address* or get an e-mail address as output to write an e-mail.

- *URL*: Field for the in- and output of *web addresses*.

- *Users/User groups*: Field to add a *user or user group*.

- *File*: Field to upload *files*.

- *Section*: Field to define the arrangement of *multiple columns* in a form.

To add a new form field into the form, first open the form editor at the corresponding activity.

In the left sidebar, select the desired form field that you want to add to your form.
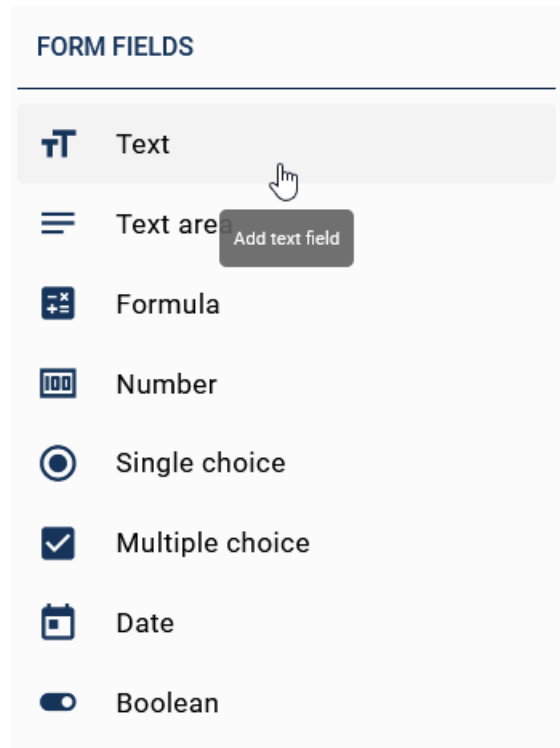
A new entry will be created at the bottom of the form preview. If you select the new entry you can edit the form field according to your needs. Every form field has different attributes, which are explained in the following sections. Alternatively you have the option to add a form field via drag & drop into the designated position.
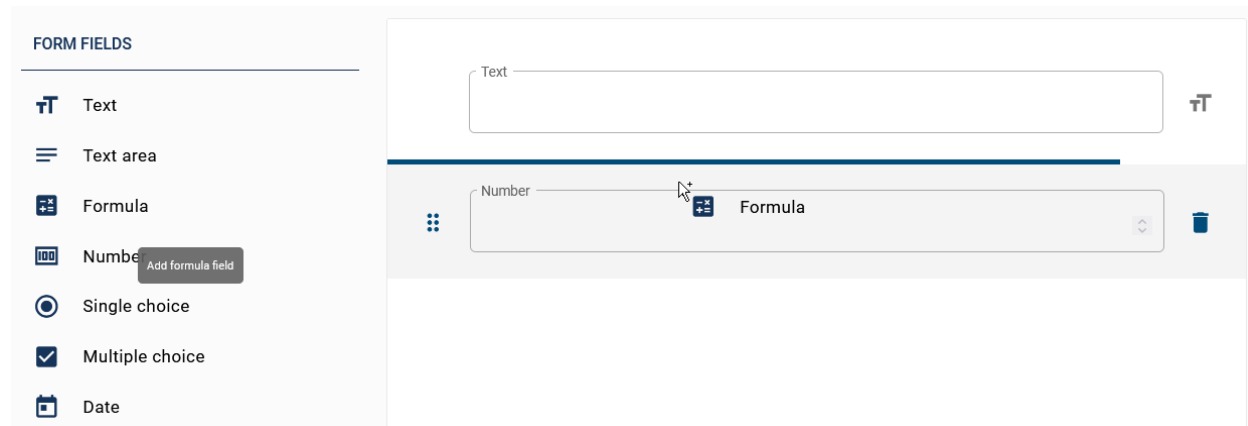
The field will be inserted underneath the blue line.
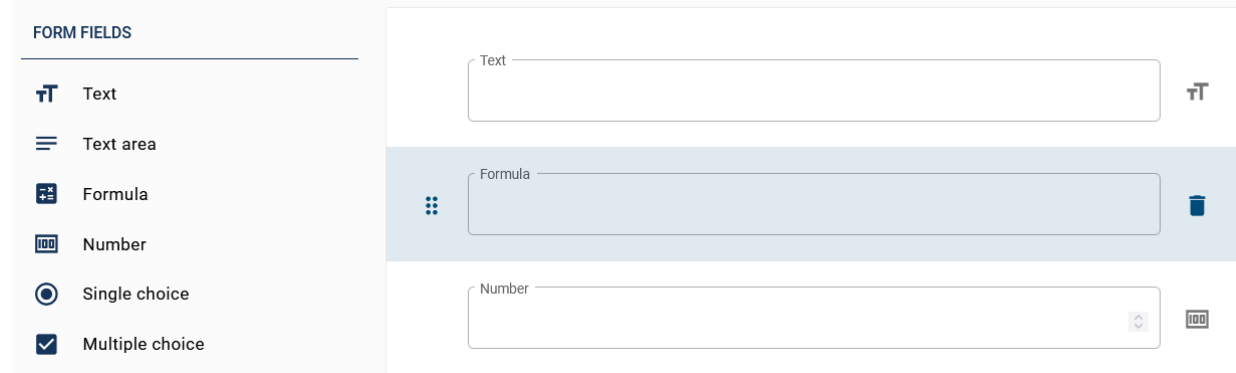
Which attributes does a form field have?

With attributes, you can configure your form fields in the right sidebar individually. For every form field there is a set of commonly available attributes:

- *ID*: If you add a new form field it automatically gets an ID. This ID is available as a *process variable* in your process and is necessary. If you want you can change the ID of your form field. This can be helpful if you want to use your input again. Furthermore you have the option to use already existing *process variables* as ID's. In this way you can get the current value of the corresponding variable in your process.

- *Label*: With the label you enter a name for your form field, which is displayed to the user in the form field at the top left.

- *Placeholder text*: Here you enter a text, which explains what kind of input is expected (for example a short description or an example).

- *Mandatory*: If this checkbox is activated the user needs to make an input before being able to continue.

- *Read-only*: Values of form fields which have activated this attribute cannot be changed by the user in BIC Process Execution. This means the corresponding process variable cannot be changed via this form field.

- *Hidden*: This attribute can be used, if you do not want the user to see the form field. When a field is *Hidden* no validations (e.g. mandatory, min length, etc.) are performed.

- *Hint*: This attribute can be used, to display a hint below the input field for the user.

- *Default value*: This attribute can be used to define a default value. You can decide whether you use a value or a formula that needs to be evaluated. Process variables must be enclosed by two curly braces.

With some attributes you have the possibility to choose whether they should always behave as specified or just in some cases. You have this option on the form fields *Hidden*, *Mandatory*, and *Read-only*. There are two different options possible for this. *Always* ensures that the corresponding form field always behaves as specified. *Conditionally* lets you type in a *formula* which decides whether the attribute is applied or not.

In the following screenshot you can see an example where the field will be *Hidden* if the variable *value* is bigger than 5.

After editing the attributes you can confirm your changes by using the function *Save*.

Note: Be aware that the values of the properties apply to all content languages and cannot be defined individually for each.

The following sections explain which additional attributes each form field has.

Text field

The simple text field can be used for the in- and output of short alphanumeric strings.

It has the following attributes:

- *Pattern*: Enter a regular expression the input must match in order to be valid.

- *Size*: This value indicates how wide the input field is (measured in characters).

- *Min length*: This value defines the minimum of characters needed to make a valid input.

- *Max length*: This value defines the maximum of characters needed to make a valid input.

Hint: An example for a pattern could be `([a-z]\d\d)+`. This regular expression indicates that a combination of a lowercase letter followed by 2 digits is valid. Those can be repeated several times. An example for a valid input would

---

be `a14b22` or `q41c96b74e44`. Other inputs like `A54b41` or `1d23` would not be valid.

In a running case, the text field above results in:

Text area field

The text area field can be used for longer alphanumeric strings. For example it could be used to save or show descriptions or comments. It also allows to format the input (e.g. bold, italic, etc...).

It has the following additional attributes:

- *Height*: This value indicates how high the text area is (measured in pixels).

- *Width*: This value indicates how wide the text area is (measured in pixels).

In a running case of the example above, the text area is displayed as follows:

Formula field

The formula field can be used to calculate a variable. It can be a numeric or logical value, even calculating with date values is possible. You can get an overview of all available formulas in *this chapter*.

It has the following additional attribute:

- *Formula*: Here you select the formula you want to use. Possibly one or more parameters are necessary to calculate your formula.

Note: Please be aware that the attribute *read-only* is **always** active for the formula field.

When entering your formula, you must pay attention to the following:

- The formula needs to be written in capital letters.
- Parameters have to be in brackets and need to be separated by a comma.
- If you want to use earlier defined *process-variable*, you need to put them between two curly brackets (e.g. {{VariableName}}).
- Other parameters do not need to be enclosed by curly brackets.

In the example above, the formula computes the number of absence days. This is done in a running case as soon as both start and end date have been entered:

Number field

The number field can be used to save or show numeric values. The use of decimal numbers is also possible.

It has the following additional attributes:

- *Min value*: Enter here a value which is the lower limit for the user input.

- *Max value*: Enter here a value which is the upper limit for the user input.

- *Step*: This value defines how much the input value increases or decreases when using the input form. The standard step is 1. Regardless of the step size, the user can write his own values, as long as they are between the min and the max value.

In the example above, the attributes min and max value of the number field "Contract number" are maintained in such a way that the user must specify a four digit number.

Single choice field

The single choice field can be used when the user needs to choose exactly one of several predefined options.

It has the following additional attributes:

- *Options*: A list of available options from which the user can choose. The options are separated by a line break.

- *Show single choices as a dropdown*: If you activate this attribute, the user can select the desired option in a drop-down menu. Deactivating the attribute will lead to a presentation of the options in a list.

The single choice field "Reason for absence" in the example above is configured as a drop-down menu. In the following, the option "vacation" has been chosen:

Keys

You can define a key for each option that is stored as the value of the process variable instead of the actual option. You can add the key to the respective option using a semicolon as separator. If an option itself contains semicolons, the last one is detected as separator. For example, the form field "Department" will have the option-key pairs *Development -* `dev`, *Human Resources -* `hr` and *Sales -* `sls`:

If the options *Development* is selected by a user in a case, the process variable "Department" is saved with the value

`"dev".`

department (string)

dev

Multiple choice field

The multiple choice field can be used when the user needs to choose one or more of several predefined options.

It has the following additional attributes:

- *Options*: A list of available options from which the user can choose. The options are separated by a line break.

- *Show multiple choices as a dropdown*: If you activate this attribute, the user can select the desired option in a drop-down menu. Deactivating the attribute will lead to a presentation of the options in a list.

- *Save selected options as string array*: This attributes indicates whether the *process variable* is saved as string or as a string array. If you deactivate the attribute, the process variable is saved as a string. If you activate the attribute, the process variable is saved as an array of strings. The array includes the selected answers. Note the possibility to define *keys* that are stored in the process variable array. You can find an explanation below the next screenshot.

The multiple choice field "Supported Locations" above is only visible in the form if the process variable `contract.international` has the value `TRUE`. The process variable can be set to `TRUE` via the *boolean field* "Does the company supply internationally?". In a running case, the fields are displayed as follows:

Keys

If you activate the attribute *Save selected options as string array*, you can define a key for each option that is stored in the string array instead of the actual option. You can add the key to the respective option using a semicolon as separator. If an option itself contains semicolons, the last one is detected as separator. For example, the form field "Department" will have the option-key pairs *Development* - `dev`, *Human Resources* - `hr` and *Sales* - `sls`:

If the options *Development* and *Human Resources* are selected by a user in a case, the process variable "Department" is saved with the value `["dev", "hr"]`.

Date field

The date field can be used when the user needs to input a date or get a specific date shown.

In the example above, two date fields are shown to the user. The desired dates can be chosen in a drop-down calendar:

Boolean field

The boolean field can be used for binary (yes/no) or logical (true/false) decisions.

It has the following additional attribute:

- *Show boolean as checkbox*: The appearance of the field will change and it will be displayed to the user as a checkbox instead of a slider.

In the example, the checkbox is activated so that the boolean field is displayed in the form as follows:

Note: If you mark a Boolean field as *mandatory*, users must check this field during a case in BIC Process Execution to proceed with their case. If they are not doing that, an error message will appear to inform users that they need to complete the task to proceed further.

Email field

The e-mail field can be used to input or display an e-mail address.

It has the following additional attributes:

- *Pattern*: Enter a regular expression the input must match in order to be valid. If you do not enter a custom pattern, a standard pattern will check if the input matches an e-mail address.

- *Min length*: This value defines the minimum of characters needed to make a valid input.

- *Max length*: This value defines the maximum of characters needed to make a valid input.

- *Width*: This value indicates how wide the e-mail field is (measured in pixels).

In the following example you can see an e-mail field with the option *Read-only* activated. In that case the e-mail address will be displayed as a link. When you are selecting the link, you will be redirected to your mail program, where you can send an e-mail.

URL field

An URL field can be used to call or enter a web address.

It has the following additional attributes:

- *Pattern*: Enter a regular expression the input must match in order to be valid. If you do not enter a custom pattern, a standard pattern will check if the input matches an URL.

- *Min length*: This value defines the minimum of characters needed to make a valid input.

- *Max length*: This value defines the maximum of characters needed to make a valid input.

- *Width*: This value indicates how wide the e-mail field is (measured in pixels).

In the following example you can see an URL field with the option *Read-only* activated. In that case the web address will be displayed as a link. When you are selecting the link (Ctrl + mouse click), it will open in a new tab in your browser.

Users/User groups

A Users/User groups field can be used to enter a user or user groups and include it into the case. Note that you can only add one user or group to a User/User groups field. If you start to enter a value into this field, a suggestion list appears where you can select a user (group). In case of a user, the e-mail address is stored as process variable and in case of a user group, the name is stored.

If the ID of the form field is the same as the identifier attribute of a role in the process, then this role will be linked to the form field. This means, that the initial value of the form field will be the user (group) that occupies the role in the current case. Also, if a new user (group) is set in the form field, this user (group) will occupy the role after the completion of the corresponding task.

File

The field for files can be used to upload files and embed them in the process.

Please note that the same identifier must be specified for the form field and the associated document for the form field to work. The document then represents either the input or the output document.

If you define a form field as *read-only* and the input document is linked to the same identifier as the form field, the actions of this input document will be applied to the read-only fields.

A *not read-only* form field allows data to be entered, while a *conditionally read-only* field is editable under certain conditions. If an output document has the same identifier as a form field, the actions of the document are applied to the field.

If multiple documents have the same identifier, only the actions of the document whose identifier is displayed in the form field will be visible.

If you are using a form with a file upload option and have selected a file for upload, a visual representation of the file name of the uploaded file is displayed. This makes it easier to identify the uploaded file in the context of the upload process.

Additionally, you have the option to view uploaded PDF files in the integrated browser PDF viewer by clicking on *Download*.
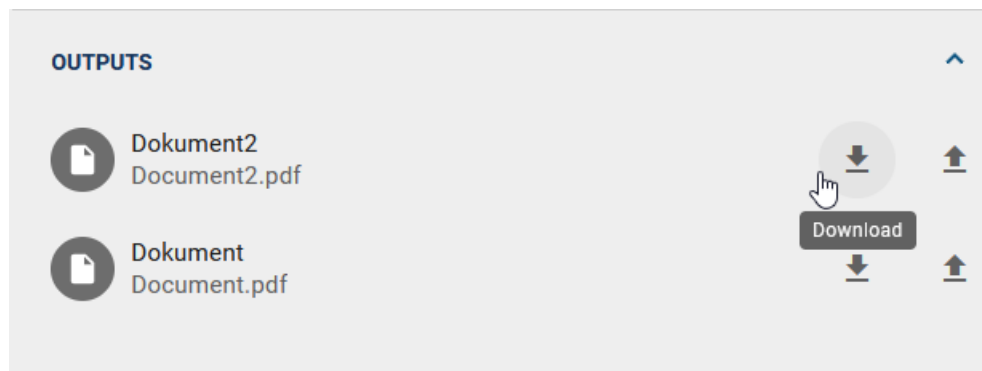
If an uploaded file is not supported, the file will be downloaded directly.

The above field for a file is prepared in the following way in the current process:

Documents of the contract
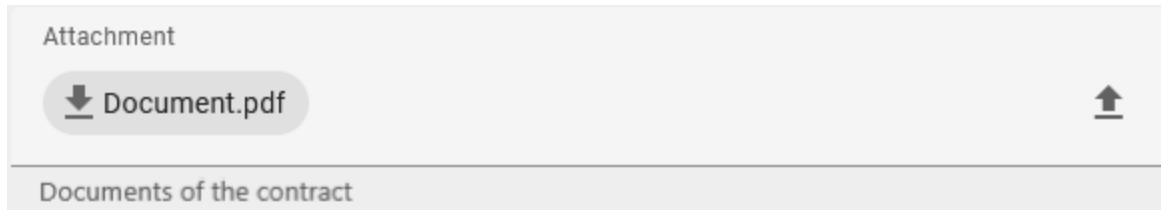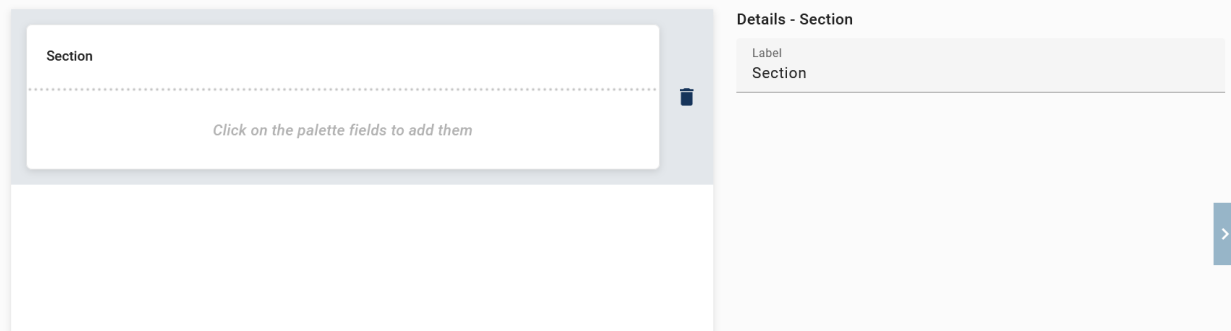
Section

The field for sections can be used to create multiple sections with different column layouts.

To create a section with a specific column layout, please open the form editor and add a new section. Once a section has been added, you will receive a message informing you how to change its layout. Select the section to make further adjustments, such as adding form fields.

Once you have created sections and form fields, you can click on them to display an overview with their details in the right panel.
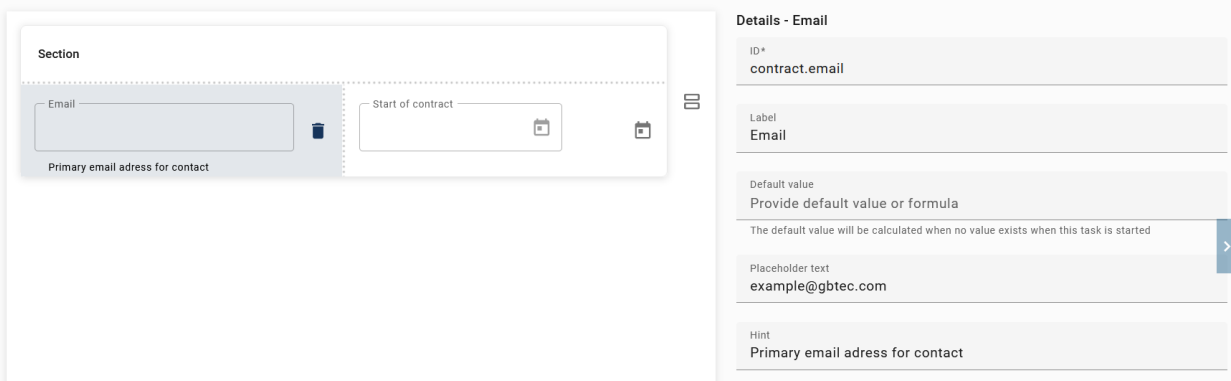
If you rearrange or remove fields within a section, the original column arrangement will be maintained. This means that the layout of the columns remains unchanged even if changes are made to the fields.

It is possible to add multiple sections to the form, each with its own independent layout for the columns of form fields.

When previewing or publishing the form, it will be displayed in accordance with the sections and fields included within them.

How can I rearrange the position of my elements within the form?

You can change the position of your elements in the form in BIC Process Execution by changing the position of them within the form preview in the form editor. The position within the form preview can be changed individually. To do so drag the element over the rearrange symbol on the left side of the entry to the desired position within the form preview.

How can I remove one of my form fields of the form?
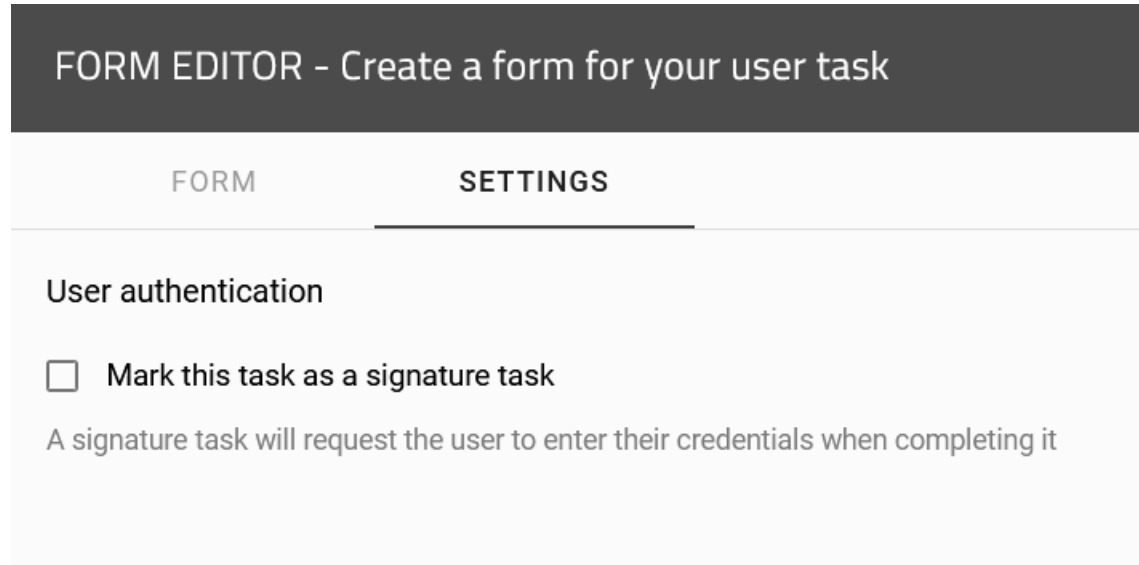
To remove a form field from the form you need to select the option *Delete Element* on the right side of the field. The entry will be removed from the list of form fields within the form.

How can I create a signature task?

You can create your forms in a way that your users must authenticate themselves before they can complete the task. To create a signature task the *activity* must be of the type *User*. Open the form editor of the corresponding activity and choose the tab *Settings*.

Here you have the option to select the checkbox *Mark this task as a signature task*. If you select this checkbox, your activity will be marked as a signature task and your users have to authenticate themselves before finishing the task. How the authentication process work can be found *here*.

Note: Please note that, this function is not activated by default in your System and must be configured first. To do that please contact your contact partner at GBTEC.

20.2.5 Service task with REST call

BIC Process Execution offers you the possibility, in interaction with your BIC Process Design, to exchange data via REST endpoints. The REST calls are defined in your BIC Process Design and automatically executed via the processes in BIC Process Execution. The data which is resulting from those REST calls will then be stored in *process variables* and can be used and displayed for further tasks during the process flow of the corresponding case.

Note: You have the possibility to define your REST request in the *REST configurator*, described further on. This request is executed prioritized. If you have defined a REST call in a previous version via the *Service call* attributes and did not set any configuration in the REST configurator, the Service call attributes will be used as fallback.

How can I define my REST calls?

In order to define the REST call, your diagram has to be marked as *executable process* in the attributes. The *activity type* of the task has to be *Service*.

Afterwards, right-click the activity to open the context menu. Select the option *Open REST configuration*.
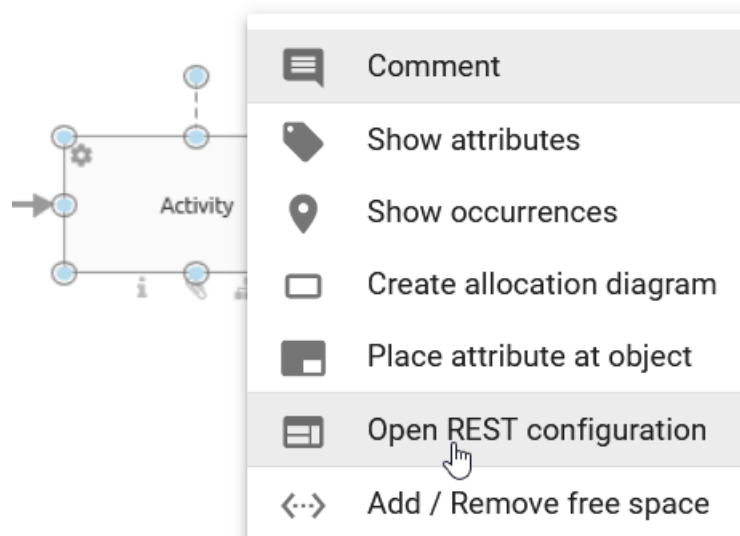
Alternatively, you can open the editor by selecting the activity and choosing *Editor* in the *Details* menu. There you will find the button *Open Editor*. Select it and the REST editor will be opened.

A dialog window opens where you can define your REST call. You will be guided by the following three steps. Click the fields to edit them or select the desired option.

Tip: You can also define your *REST calls dynamically via process variables*. For example: Using variables, the header data or request body can depend on the data of each case.

---

1. Connection

- **HTTP Method**: In this field enter the HTTP method which you want to use for your call. Supported HTTP methods are listed below. If no method has been specified the default value for this field is GET.

- *DELETE*

- *GET*

- *HEAD*

- *PATCH*

- *POST*

- *PUT*

- *OPTIONS*

- *TRACE*

- **URL**: Enter here the URL path of your REST endpoint (e.g.: *http://serviceUrl:port/service/1*).

- **Authentication**: Here you can select the type of authentication that is wanted for your REST Call. We offer you different options for authentication:

- *No Authentication*: You do not need any authentication and therefore do not need to enter more details.

- *Basic Authentication*: When you select this option, two new input fields will appear where you can enter your username and password for the desired service.

- *OAuth2*: Three new input fields will appear when you select this option. You need to input the *Client ID*, the *Client secret* and the *Authentication URL*. Via the *eye icon* you can hide and show the *Client secret*.

- *API Key*: After selecting this option, two input fields will appear: *Key* and *Value* where you can enter your corresponding API key and its value. Below the fields you have the option to add the key-value pair to your header or to your query parameters.

Go to the second step using the button *NEXT*. Alternatively, you can click the tabs *Connection*, *Request* and *Response* to switch between the steps arbitrarily.

2. Request
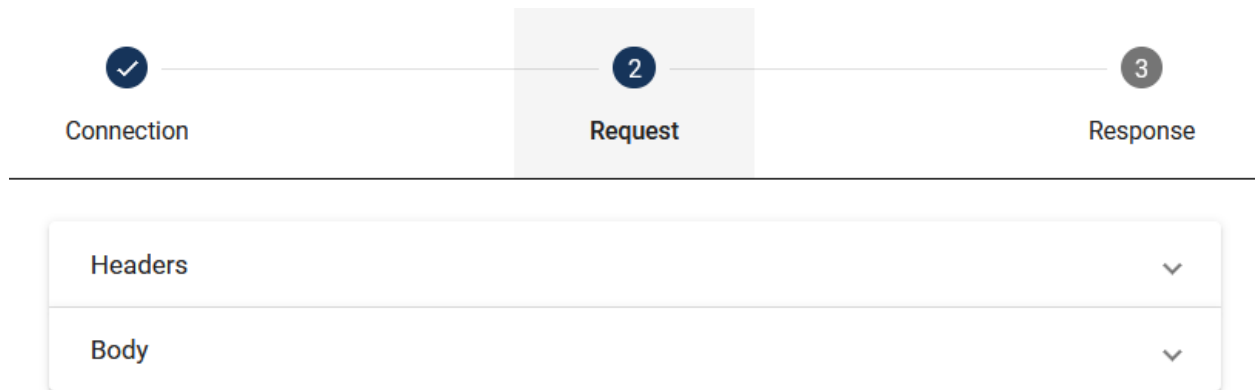
The input fields of the request options drop down if you select the respective option.

- **Request header**: Here you can enter all header data that has to be transferred in the REST call. This data is in a key-value table. Click on the plus-sign to add new entries or select the *recycle bin* icon to delete an entry.

- **Body**: Here you can enter the content that has to be transferred in the REST call. In the drop-down menu *Type*, choose one of the following options.

- *JSON*: Here you can enter the content in the *Request body* field using JSON-structure.

- *Binary (file)*: Choose this type to read the request body from a file. In this case the body of the request only contains the contents of the file.

- *Multipart (file)*: The request body is also imported from a file. This type enables you to import the request body in a form-data request format.

If you choose one of the types that *import the content from a file*, another field appears where you can link the desired file. Use the process variable defined in the identifier attribute of the file. You can find a detailed explanation in the linked section.

3. Response

- **Connection timeout in seconds**: Here the time limit (in seconds) for your REST call can be set.

- **Expected HTTP status code**: Here you can set one or more expected status codes for your REST call.

- **Response Type**: Here you can enter if your output is in the JSON format or if it is a file. An explanation regarding how to include files in REST calls can be found *here*.

- **Response Mapping**: Here you can specify whether the returned data should be stored and used as process variables. The default setting is *Automatic*. If you select *None*, the response will not be processed as process variables.

Click the equivalent button to *save* your configuration. If you do not want to save your changes, select *cancel* to close the dialog window.

Regardless of the Response Mapping, a _response variable is stored, allowing you to access *Request header* and *HTTP status code*. If you have configured multiple service tasks, the _response variable will be overwritten after their execution. You can access the _response variable, for instance, through _response.headers.NAME[0] or _response.headers["NAME-NAME"][0] for keys with a hyphen.

Note: Please note that if a service task with REST call returns an error status code such as 4XX or 5XX, BIC Process Execution does not store information from the `_response.headers`. Only the `_response.statusCode` will be stored.

Hint: Please note that the `_response` variable can only be used for the active main process and its subprocesses.

How can I use variables to create dynamic REST calls?

By the use of variables from your API you can create dynamic REST calls. Within the definition of the *REST configuration* you can use your process variables in the *Request body*. Variables should be listed as follows: `{{VariableName}}`.

If, for example, you have called up the name and age of an employee using the GET REST call, you can use these values in the following REST call by using the corresponding variables. The result of the first GET REST call could be: `{"name":  "John Doe", "age":   35}`. You can use those variables and their values then in the following POST REST call within the field *Request body* (if you select *JSON* in the *Body* field) as follows: `{"managerName": "{{name}}", "managerAge":   {{age}}"`.

Body

Request body

```
{ "manager": {
    "managerName": "{{name}}",
    "managerAge": "{{age}}"
  }
}
```

You can also use variables in the connection or response.

How can I configure my request body as file?

If you *configure your REST call (i.e. a service task)*, you can read the request body from a file. The file has to be added to the case as an attachment of a previous task. Moreover, you have the possibility to define a REST call which returns a file. The system will save the file as an attachment of the service task. To configure your REST call using files, follow the next steps.

Request body as type file: Model an activity in your diagram in BIC Process Design and add a document node as output. Maintain the attribute *Identifier*.
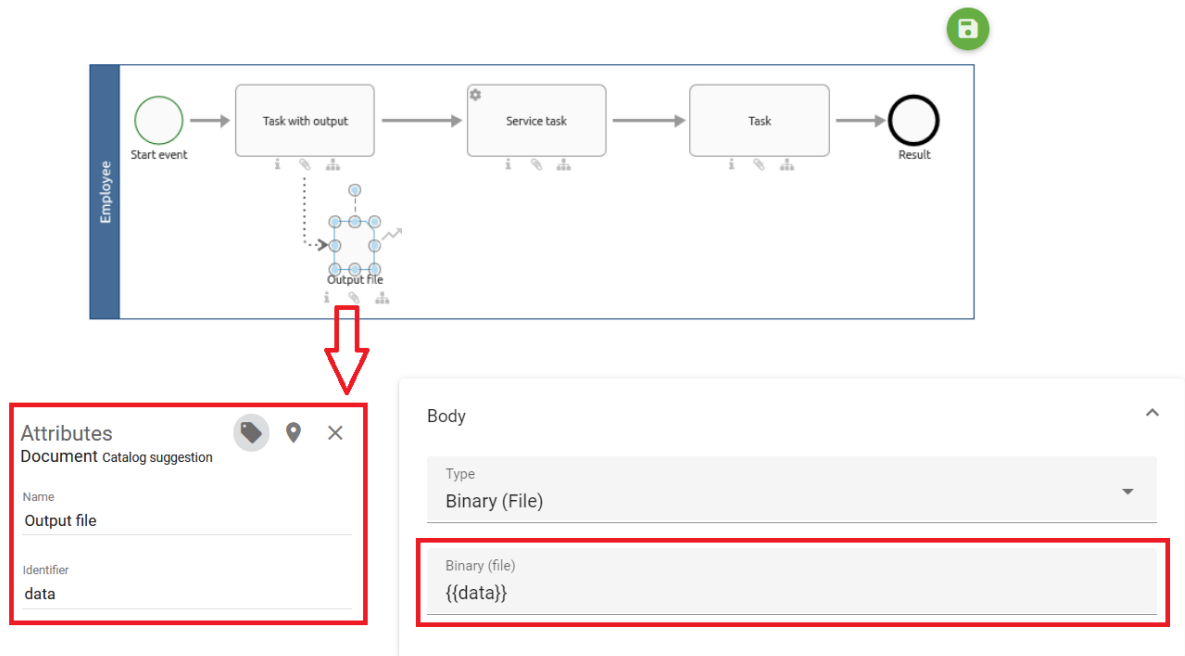
In the process flow, the service task has to occur after the task with the output. When you configure the REST call request, choose the type *Binary (file)* (or *Multipart (file)* if it is a data-form format) in the drop-down menu of the *Body*. Enter the identifier you defined previously.

If you use JSON Body Type with a corresponding Request Body (e.g., { "file": "{{fileID}}" }), you can utilize file identifiers as placeholders on service tasks. This functionality allows the substitution of the placeholder with the file content of the identifier, encoded as Base64 data.

To upload a file in your running case, you need to add a document as an *output* in a previous task. When the service task is executed, it will retrieve the latest version of the file data, incorporate it into the JSON body, and automatically replace the placeholder.

File as response: In order to link a file returned by a REST call to your case, the activity representing the service task in BIC Process Design has to be modeled with a document as output. The attribute *Identifier* has to be maintained for the document to link it to the REST call response. In the REST configurator choose the option *File* as *Response Type* and enter the identifier in the upcoming field. The Identifier needs to be enclosed by two curly braces.
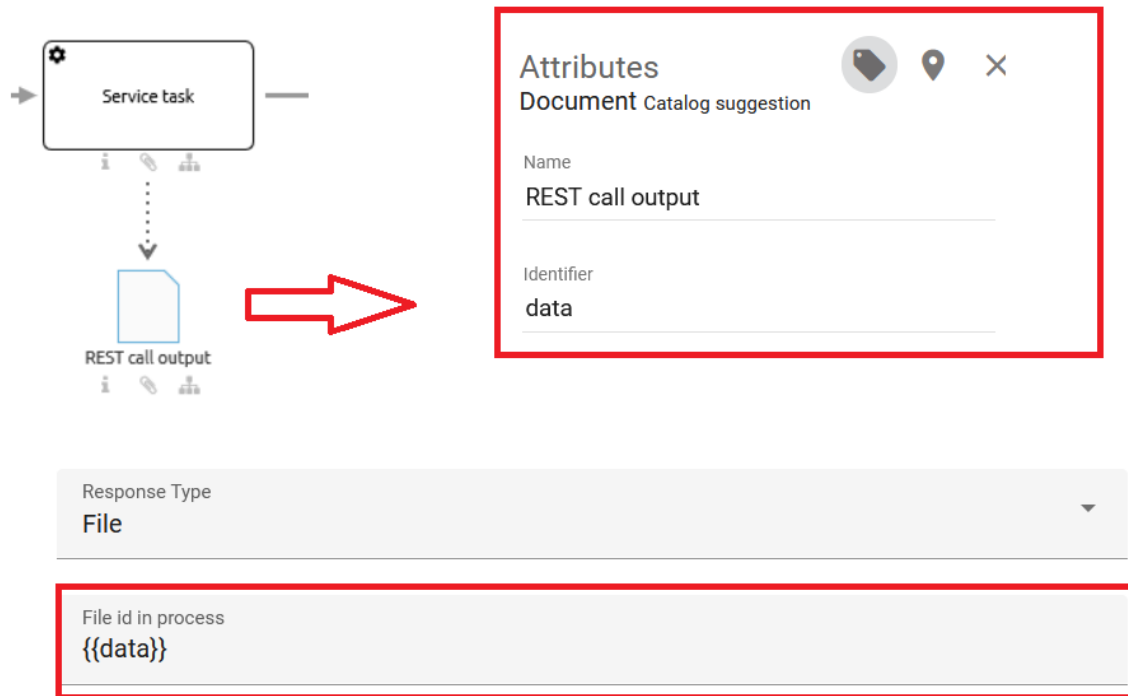
After the REST call has been executed in your case, you can download the response file at the service task just as if it was uploaded manually.

How can I define multiple values as expected response status codes for REST calls?

As a ProcessApp Creator, you can define multiple values as expected response status codes for REST calls.

To do so, open the *REST call for service tasks* and navigate to *Response*. In the *Expected HTTP status code* input field, you can now define multiple status codes. You can define both predefined status codes (e.g., **200**) and regular expressions such as **200|201** (both status codes are accepted), **20.** (anything from 200-209 is accepted), or combinations thereof.

Suppose you have configured a REST call and specified the expected HTTP status codes as patterns. If you receive a response from the API and the received status code matches the pattern, you can consider the response successful. Otherwise, the response is treated as an error, and appropriate actions are taken based on the received status code.

Note: The pattern also accepts numbers, pipes, dots and queries.

How can I automatically create an output document with a service task for reports?

Suppose you have modeled a *Service task*. When you open the editor, you have the option of configuring the document creation in addition to the REST call.

If you select the option *REST call*, the REST configuration is started. Alternatively, if you select the *Reports* option, the report configuration starts, where you can specify the output format (PDF or DOCX).

Assume that the report task contains an input. If this input has an attached file in your configured default language in DOCX format, this file is used as a template for the report.

If there is an output in the report task and it is executed, the result is added to the output. The name of the output file corresponds to the name of the template file.

Hint: Please note that if the input or output is missing or the input has no attachment, the report will not be created and the task will be marked as an error. If there is not exactly one input and one output in the report task, the report will not be created and the task will be marked as an error.

Additionally, assuming there is a *Design Document* in the input and the input does not have an *Instance Attachment*, the template for creating the report will be the *Design Document*.

If there is a *Design Document* in the input and the input has an *Instance Attachment*, the template for creating the report will be the *Instance Attachment*.

20.2.6 How can I create an e-mail template?

You can integrate send tasks in your process to enable users to *send e-mails based on a template*. In order to change the mail template, your diagram has to be marked as *executable process* in the attributes. The *activity type* of the task has to be *Send*.

Afterwards, right click the activity to open the context menu and find the entry *Open Email template editor*.
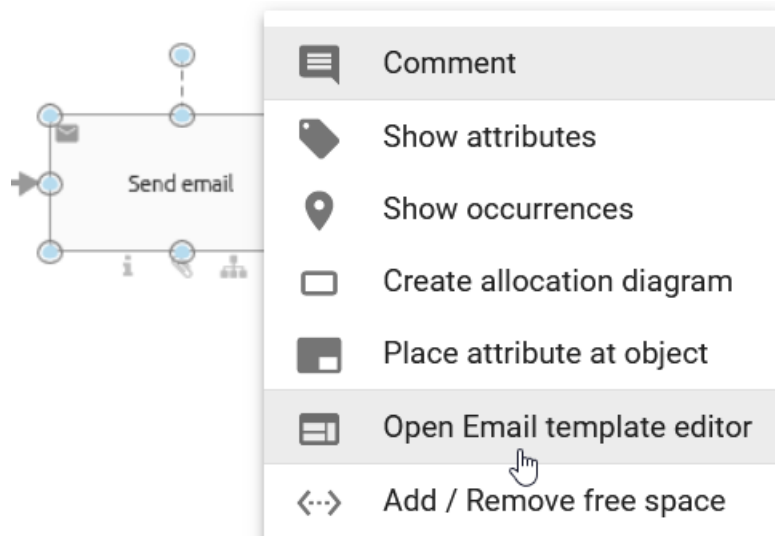
Alternatively, you can open the script editor via the *details* of the activity.

A click opens the editor. In the top fields, you can enter recipient, e-mail addresses as *Reply to*, Cc and Bcc as well as a subject. The template can be written in the text field below. Notice the different formatting functions in the header.

The **To** function also allows you to specify user groups. The email will then be sent to all members of the specified user group.

Note: Please note that you should not use curly brackets (**{{}}**) with user groups.

By using the *Reply to* function, you can specify an email address to which all responses to your sent email should be forwarded.

Note: Please note that only if the option *Send email automatically* is activated, the *Reply to*-address can be taken into account. Otherwise, the *Reply to* configuration will be ignored for manually sent e-mails.

Process variables can be used in every field of the editor and result in a dynamic template that is automatically adjusted in BIC Process Execution. The variables are replaced by the case-specific values in the form of each case as soon as they are set in prior process steps. Integrate process variables via double curly brackets: `{{VariableName}}`.

Note: Note that you can include process variables with html formatted values in the text editor. For such values you need to add an " -html" (attention: with a blank space!) to the process variable name. Otherwise the formatting is not processed. Consider a process variable `{{CompanyName}}` for which the values are given with a formatting (e.g. in bold via "GBTEC Software AG"). If you use the placeholder with the html tag `{{CompanyName -html}}` in the text editor of your template, the value will appear in the defined formatting (in bold in the example).

With the help of the editor you can configure that your mails will be sent automatically. To do that, activate the option *Send email automatically*. When you start this task in BIC Process Execution, your mail will automatically be sent from a *no reply* address. If you use process variables in your form they will be automatically substituted with their corresponding value.

☐ Send email automatically

If the *automatically sent e-mail* is supposed to contain an attachment, the desired file can already be included to the case in BIC Process Execution. Model a preceding activity connected to an output object which is either a *document*, *business object*, *norm* or *data store*. Add the same object as input to the send activity. Then, the responsible of the corresponding task can *upload a file* in the form and complete the task. When the *send task* is started, the file is attached automatically.

Note: Please note that the input is only attached if the e-mail is sent automatically (option *Send email automatically* activated).
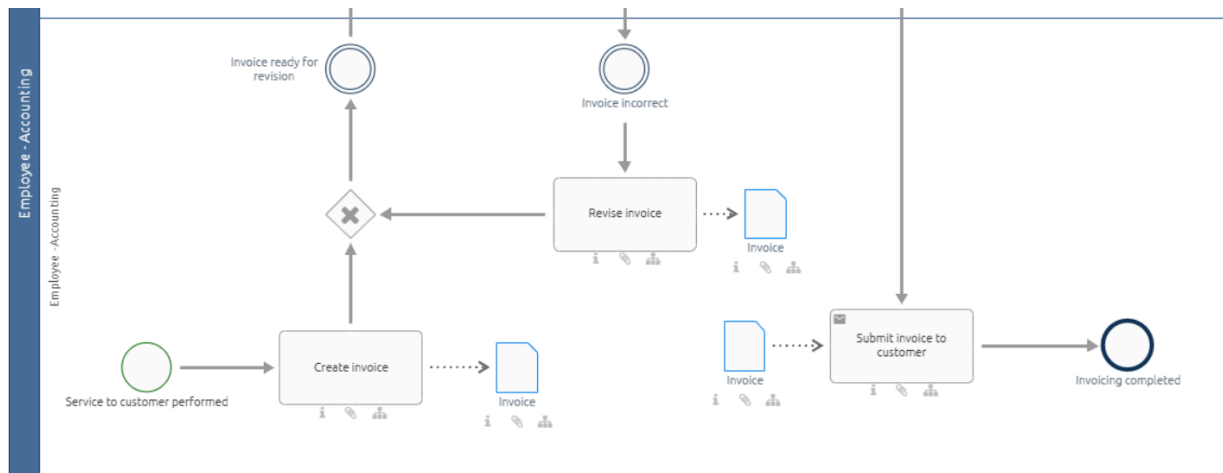
In the example above, the document "Invoice" is the output of the task "Create invoice" and the input of the send task "Submit invoice to customer". The attachment of the e-mail will be the latest version of the file in case. Thus, if the responsible uploads a new file (version) when working on the task "Revise invoice", this file is attached to the e-mail.

If your process variables are empty or not existing, BIC Process Execution will display an error icon and you have to send the mail manually via a human task. Alternatively, you got the option to replace these kinds of process variables with empty strings. For that you need to select the option *Replace placeholders with empty values if process variables are missing*.

☐ Replace placeholders with empty values if process variables are missing

---

Tip: Use the *form editor* to enable users to define the process variables in prior steps.

> **Warning:** If an e-mail is sent manually, there is a restriction for the length of the template. If your template is longer than a certain length, BIC Process Execution will automatically truncate the mail and only a part of it will be displayed in your e-mail client. If the e-mail is sent automatically, this restriction does not hold.

20.2.7 How can I create a script task?

You can *execute tasks automatically* in your process by integrating *script tasks*. The supported script languages are *JavaScript* and *Groovy*. Starting from version 7.12.0, the *JavaScript* scripting language is based on the GraalVM Script Engine. The JavaScript ECMA version 5.1 is backward compatible, supporting the new components introduced in version 13.0. You can find detailed information about the used JavaScript Standard ECMA and the Groovy Engine in the following links.

- JavaScript ECMA Version 5.1

- JavaScript ECMA Version 13.0

- Groovy Language Version 4.0.12

Hint: The Nashorn JavaScript Engine is no longer supported starting from version 7.12.0.

Hint: The version of the Groovy engine used to execute and create script tasks has been updated to version 4.0.12.

In order to define a script task, your diagram has to be marked as *executable process* in the attributes. The *activity type* of the task has to be *Script*.

Afterwards, right click the activity to open the context menu and find the entry *Open Script editor*.
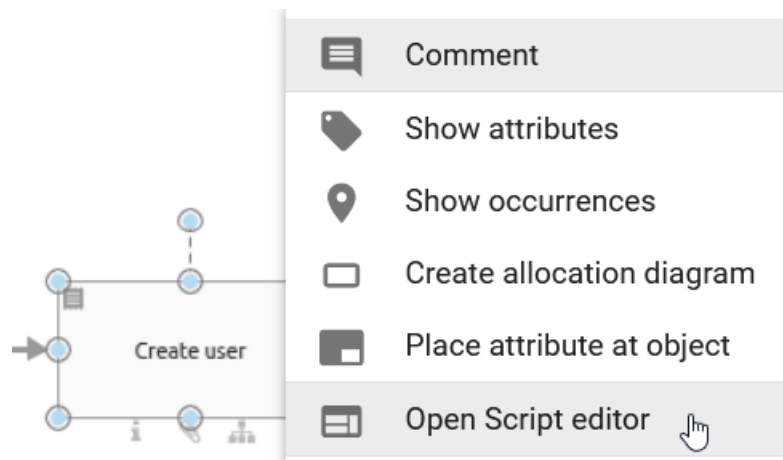
A click opens the editor. You can select the desired script language in the drop-down menu and then write the script which will be executed during the runtime of a case. Use *process variables* to adapt the script to each case dynamically. In the example below you can see a *groovy* script where the process variable `employee_name` is used as an attribute of a new object `user`. This object is then returned as a new process variable in line 15.
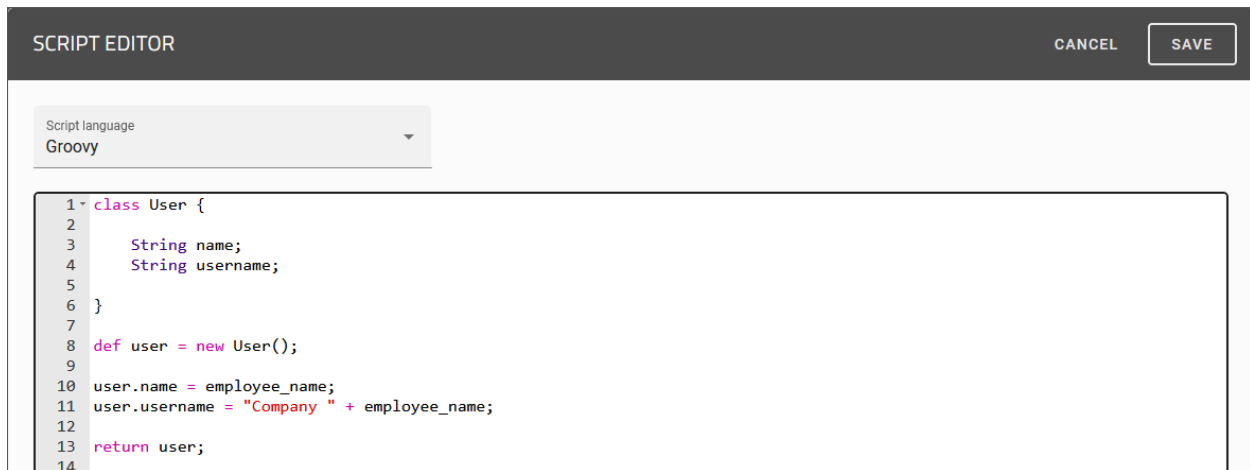
Alternatively, you can open the editor by selecting the activity and choosing *Editor* in the *Details* menu. There you will find the button *Open Editor*. Select it and the script editor will be opened.

You can work with the process variables in a JavaScript in a similar way. The example below leads to the same behavior as above. The last statement of the script is the return. Thus, the new object user is returned to the process variables of the case in line 13.
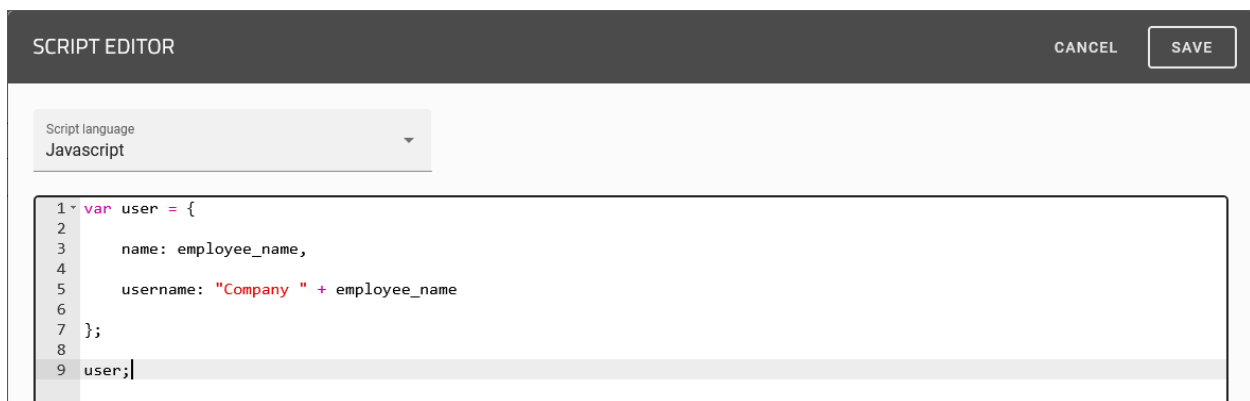
> **Warning:** If the result is declared with var result = ..., it is necessary to explicitly specify the result again in the ending line.

Afterwards, select *Save* to store your script and close the editor. If you click the button *Cancel*, the editor will close without saving your changes.

Hint: Please use the correct JavaScript syntax to add a list from a script task to the process variables. This is demonstrated in the following.

```
*JavaScript*
var userList = ["John Doe", "Max Mustermann"];
vars = {
    scriptListVar:userList
}
```

If you define your list via the syntax above, each entry of the list will be stored as a single process variable (of type *string* here). The following two alternatives should be used instead to include the whole list as one process variable of

---

the type *list*.

```
*JavaScript*
var List = Java.type("java.util.List");
var userList = List.of("John Doe", "Max Mustermann");

vars = {
    scriptListVar:userList
}
```

```
*JavaScript*
var Arrays = Java.type("java.util.Arrays");
var userList = ["John Doe", "Max Mustermann"];

vars = {
    scriptListVar:Arrays.asList(userList)
}
```

You can also use date values as output variables in the script. Date values in process variables are stored as **String**. However, there is an exception for JavaScript: If a *Date* object is returned as part of a response instead of formatting the object value, the variable can contain the value *null*. The following examples illustrate the different behavior of the two scripting languages.

Hint: Please note that scripts cannot return date values of the datatype *Date*.

Using Javascript:

```
let localdate = new Date()
output = {
    javaScriptDate: localdate,
    javaScriptDate_String: localdate.toISOString()
};
```

If you want to return the *javaScriptDate* object as a variable value, the output of the script will be *null*. To return the date as a string, methods such as `toISOString()` or `toJSON()` must be used, as in *javaScriptDate_string*.

Using Groovy:

```
Map output = new HashMap();
Date testDate = new Date();
output.put("groovyDate", testDate);
return output;
```

Returning a *Map* with a *Date* object, as shown in the previous code, **always** returns the date value as a string, unlike JavaScript.

20.2.8 Development and test environment

In addition to the productive environment where processes can be executed, BIC Process Execution offers two more environments where processes can be examined and tested while the diagram is still modeled in BIC Process Design.

A process in the studio or development environment is based on the version of its related diagram in the *public workspace*. If you have modeled a diagram as *executable process* in BIC Process Design, it will be visible in the development environment right after check-in.

As soon as this diagram is available in *preview* stage of BIC Process Design, it also appears in the test environment.

The development and test environment perform as follows: If there is a former version in the respective environment, it will be replaced when the corresponding diagram has changed in public workspace resp. the preview. All existing cases of the process in the environment will be deleted. This helps authors to view and examine changes in the process right after modeling the corresponding diagram.

Which environments are existing?

The execution of established processes is done in the *productive environment* of BIC Process Execution. This environment is accessible for all *registered users of BIC Process Design*. A process is displayed and usable in the productive environment if the corresponding diagram is *published* in BIC Process Design.

There are two more environments: the *development* and the *test environment*. Users with the user role *ProcessApp Creator* or higher can access these environments to test processes before publishing them. More information can be found in the chapter *"Development and test environment"*.

How can I change the environment?

You are viewing the productive environment if the URL of your browser contains the key word "app":

`https://XXX/process-execution/app/...`

You can access the development resp. test environment by modifying the URL. Add the key word "studio" resp. "test" behind `.../process-execution/`:

- Use `https://XXX/process-execution/studio` to enter the development environment/ the studio.

- Use `https://XXX/process-execution/test` to enter the test environment.

The following table serves as a short overview of the environments:

	Development environment	Test environment	Productive environment
Diagram version	public workspace	preview	publication
URL key word	`studio`	`test`	`app`

How can I test a process while it is modeled?

If you define a process by modeling a diagram in BIC Process Design, you can directly test it. You simply have to mark the diagram as *executable process* in the attributes.

As soon as you check-in the diagram, the *Test ProcessApp* button will appear.
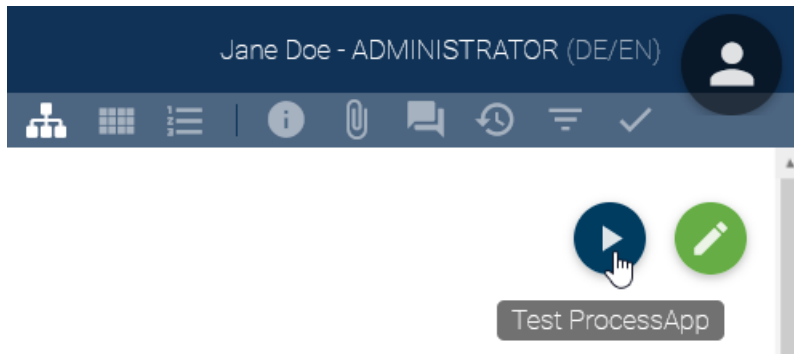
Select the button to open the studio of BIC Process Execution in a new browser tab. A new case of the modeled process will be created there automatically. The case name is maintained by the system with the name of the process and a timestamp. All roles will be assigned to you (even if the roles have a *default allocation*). This enables you to test the process flow quickly since no further configuration of the test case has to be done manually.

Testing a ProcessApp can be started from public workspace of the new user interface as well. If you open the diagram in the diagram view, the button is displayed in the upper right corner.
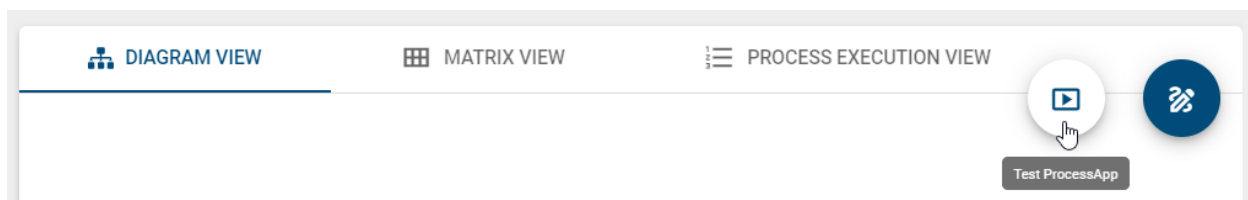
How can I test a process before publication?

New processes modeled in BIC Process Design can be tested while the concerning diagram is in preview stage. This enables you to create a final test case in the scope of reviewing the diagram before it is published. Note that the diagram has to be marked as *executable process* in the attributes.

In the diagram view, you will find the button *Test ProcessApp*.
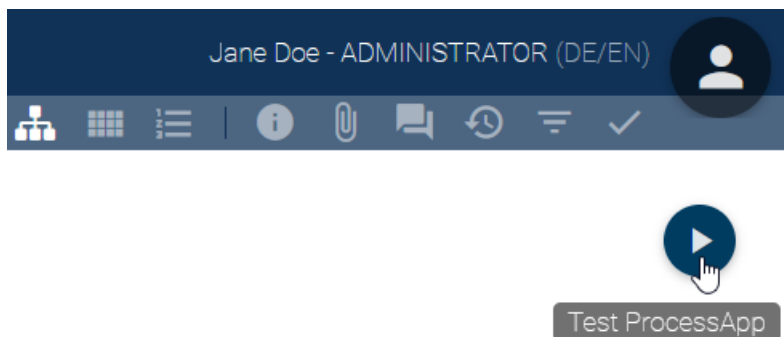
Select the button to open the test environment of BIC Process Execution in a new browser tab. A dialog window to *create a new case* of the defined process will open there. Follow the steps as in the productive environment to configure your test case.

Testing a ProcessApp in preview stage can be started from the new user interface as well. If you open the corresponding diagram, the button is displayed in the upper right corner of the diagram view.
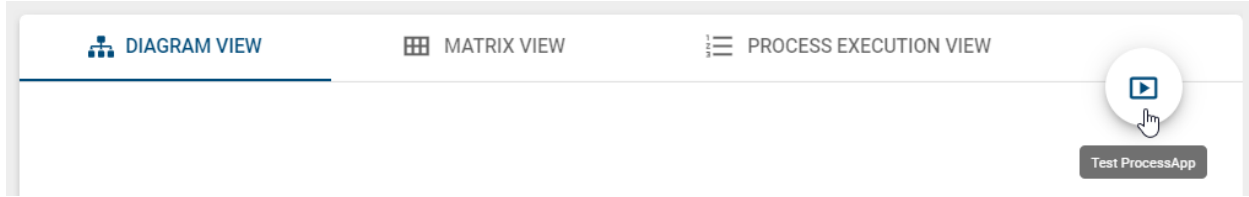
How can I delete a ProcessApp?

If you tested a ProcessApp in the studio and test environment in different cases, you might not need these data anymore. In the administration, you can delete the ProcessApp including all cases. All started and future tasks of the cases will be removed too. The data are only deleted in your current stage (studio or test environment). This is irrevocable.

Navigate to the *administration* area and select the option *ProcessApps*. In the list of all ProcessApps of the environment, scroll to the desired ProcessApp. If you hover of the entry, you can select the three dots to *open the menu*.

Then choose the option *Delete ProcessApp*.

Confirm the deletion in the appearing dialog window via the *DELETE* button. Alternatively, you can *cancel* the deletion.
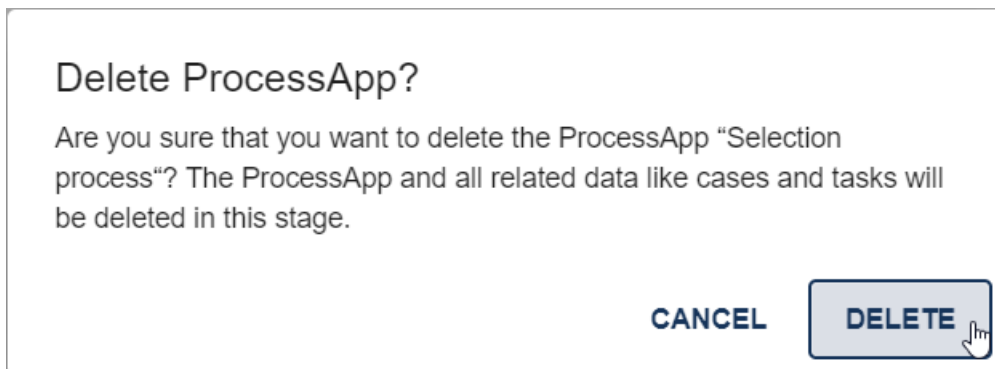
Note: Note that only *ProcessApp Administrators* can access the administration area.

20.2.9 How can I define a default role allocation for the process instantiation?

In BIC Process Design you have the possibility to assign persons or organizational units to roles so that they will be set automatically during *the process instantiation* in BIC Process Execution. If it is known in advance that the same people or organizational units are nearly always responsible for all cases of a process, you can speed up the process instantiation for this particular process.

To use this function, navigate to the relevant role in the desired diagram in BIC Process Design. In the attribute *Staffing* enter the *person or organizational unit*. You can find this attribute within the attribute group *Automation*.

∧ Automation

Staffing

Users as well as user groups or organizational units can be entered. The diagram has *to be published* afterwards, to apply the changes to the process in the productive environment. Once the new version of the diagram has been published, the person or organizational unit is assigned to the role as responsible in the instantiation process by default.

Tip: During the instantiation process the allocation can then still be changed if needed.

Note: If no user or user group has been assigned to a role when the case was created, the case creator will be responsible for each task of the role as soon as the task is started. This means the user who created the case can complete the tasks of this role but is not assigned to the role. He receives the responsibility for the tasks one by one when a task is started.

20.2.10 How can I model a dynamic due date for my activities?

You can model your activities with a dynamic due date. This means that the resulting tasks have to be completed in a certain number of days or on a certain date. An explanation of how you can work with due dates in BIC Process Execution can you find *here*

To do that, go into the *details* of the activity, and there go into the attribute group *automation*. Here you can find the attribute *Due date*.

∧ Automation

Due date

Here you can enter how many days after the start of the task or at what date it is due. BIC Process Execution calculates the correct due date automatically.

Note: If you do not give any input in the field, the due date will be set to the same value as the case due date.

Tip: Declare at least one date field in advance in the *form editor* to determine a due date with this value as well.

In the following, some examples of how to determine the due date using at least one date field are provided. Here, two date fields are created in the form editor and declared with the IDs "DueDate1" and "DueDate2". For these examples, *DueDate1* is always set to 03/28/2023 and *DueDate2* to 04/05/2023.

Hint: You can also determine dates in ISO 8601 format when using the form field *Text* and millisecond timestamps by using the form field *Number* through the following commands.

To move the due date by *X* days/weeks/months/years, you can use the commands:

```
nameID.plusDays(X).plusWeeks(X).plusMonths(X).plusYears(X)

nameID.minusDays(X).minusWeeks(X).minusMonths(X).minusYears(X)
```

- `nameID` here stands for your declared date field ID.
- `plusDays(X)` / `minusDays(X)` allows you to move the due date back or forward by *X* days.
- `plusWeeks(X)` / `minusWeeks(X)` allows you to move the due date back or forward by *X* weeks.
- `plusMonths(X)` / `minusMonths(X)` allows you to move the due date back or forward by *X* months.
- `plusYears(X)` / `minusYears(X)` allows you to move the due date back or forward by *X* years.

Examples:

```
DueDate1.plusDays(4)
```

gives the output `04/01/2023`.

```
DueDate1.plusWeeks(2).minusDays(1)
```

gives the output `04/10/2023`.

```
DueDate2.plusYears(1).minusMonths(2).plusWeeks(3)
```

gives the output `02/26/2024`.

```
DueDate2.minusWeeks(3).minusYears(1).plusDays(10).plusMonths(6)
```

gives the output `09/25/2022`.

To set the due date to the first day of the month, you can use the command

```
.withDayOfMonth(X)
```

Set *X* to the number *1* to give the first day of the month as the output.

Examples:

```
DueDate1.withDayOfMonth(1)
```

gives the output `03/01/2023`.

```
DueDate2.plusYears(2).withDayofMonth(1)
```

gives the output `04/01/2025`.

```
DueDate2.plusMonths(3).minusYears(1).withDayofMonth(1)
```

gives the output `07/01/2022`.

Alternatively, you can choose any number between 1-31 for *X*.

```
DueDate1.plusYears(1).minusMonths(2).withDayOfMonth(15)
```

gives the output `01/15/2024`.

Hint: Avoid numbers above 28, since not every month has the same number of days. For a number higher than 28, proceed as in the next example.

To set the due date to the last day of the month, you can use the command

```
nameID.plusMonths(X).withDayOfMonth(1).minusDays(X)
```

where `nameID` stands for your declared date field ID.

Examples:

```
DueDate1.plusMonths(1).withDayOfMonth(1).minusDays(1)
```

gives the output `03/31/2023`.

```
DueDate1.plusMonths(2).withDayOfMonth(1).minusDays(1)
```

gives the output `04/30/2023`.

```
DueDate2.plusMonths(1).withDayOfMonth(1).minusDays(1).plusYears(3)
```

gives the output `03/31/2026`.

```
DueDate2.plusMonths(1).withDayOfMonth(1).minusDays(2)
```

gives the output `04/29/2023`.

You can also use an if-else-then-statement to determine the due date if the output is determined by a *Boolean* value. For this, you need the operators ? and :, and a *TRUE* and *FALSE* condition. In addition, at least two date field IDs must be declared.

To compare two dates with each other, use the command:

```
nameID_1.equals(nameID_2) ? X : Y
```

- `equals()` is the command to compare two dates with each other.

- `nameID_1 / nameID_2` stand for your declared date field IDs.

- `?` terminates the request, followed by the *TRUE* and *FALSE* conditions.

- `X` is the output if the request is *TRUE*.

- `Y` is the output if the request is *FALSE*.

- `:` is inserted to separate the *TRUE* condition from the *FALSE* condition.

Examples:

```
DueDate1.equals(DueDate2) ? 5 : DueDate1.plusWeeks(1)
```

gives the output `04/04/2023`, because the condition is *FALSE*.

```
DueDate2.equals(DueDate1) ? DueDate2.plusWeeks(2) : DueDate2.minusDays(3).
↪plusMonths(1)
```

gives the output `05/02/2023`, because the condition is *TRUE*.

```
DueDate1.equals(DueDate2) ? 5 : 10
```

adds 10 days to the date when the task was created since the condition is *FALSE*. For example, if this date is set to 01.04.2023, the output will be `04/11/2023`.

To check whether a date is before or after another date, you can use the following commands:

```
nameID_1.isBefore(nameID_2) ? X : Y
```

```
nameID_1.isAfter(nameID_2) ? X : Y
```

- `isBefore()` checks if the date (nameID_1) is before the other date (nameID_2).

- `isAfter()` checks if the date (nameID_1) is after the other date (nameID_2).

Examples:

```
DueDate1.isBefore(DueDate2) ? DueDate1.plusMonths(1).withDayOfMonth(15) : DueDate2
```

gives the output `04/15/2023`, because the condition is *TRUE*.

```
DueDate2.isBefore(DueDate1) ? DueDate2.minusDays(5) : DueDate2.plusWeeks(2).
↪plusMonths(1)
```

gives the output `05/19/2023`, because the condition is *FALSE*.

```
DueDate1.isAfter(DueDate2) ? 10 : DueDate2.minusMonths(1).withDayOfMonth(20)
```

gives the output `02/20/2023`, because the condition is *FALSE*.

```
DueDate2.isAfter(DueDate1) ? 20 : DueDate2.plusYears(1)
```

adds 20 days to the date when the task was created because the condition is *TRUE*. For example, if this date is set to 04/01/2023, the output will be `21/04/2023`.

Hint: If the output value of a *TRUE* or *FALSE* condition is deposited with a numeric number, this number will **always** be added to the date on which the task was created.

20.2.11 How can I set up a case creation restriction?

In BIC Process Design you have the possibility to define a case creation restriction for diagrams, which will be executed with BIC Process Execution. This enables you to decide individually for every process, which users have the possibility to create new cases.

To define such a restriction navigate to the details of the relevant diagram. You can find the attribute *Case creation restriction* within the attribute group *Automation*.

Analogous to the diagram or repository *access restriction* you can set the names of multiple users or whole user groups. As soon as you enter the first characters into the entry field a suggestion list will be displayed where you can select the intended entry.
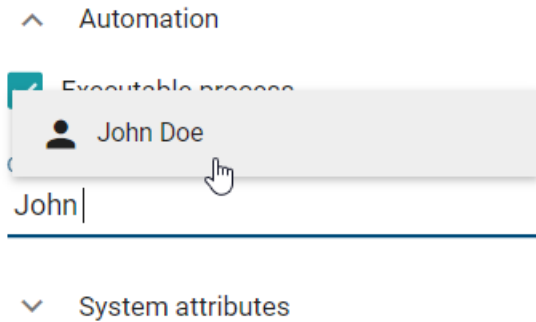
As soon as a case creation restriction has been set and the diagram fulfills all requirements in order to be displayed also in BIC Process Execution, the case creation restriction behaves as follows:

All users, who have been included in the case creation restriction, are enabled *to create cases as usual for the corresponding process*. Same goes for users who are part of user groups which have been included into the case creation restriction.

The process will still be displayed to all other users but they cannot create cases for this process. This means the function *Create a new case* will neither be displayed in the menu of the corresponding ProcessApp nor in the case list of the process.

20.2.12 How can I set a retention period for the archived cases of my process?

If you model a process in BIC Process Design, you can configure a retention period for all archived cases of the process. When a case is archived, it will be stored in the archive until this period is expired. Then, the case will be deleted automatically and irrevocably. You can set the period in the attribute *Retention period* which is part of the attribute group *Automation*. Enter a time period in *days*, e.g. "365" in order to store the archived cases for one year.

When the retention period for a case is expired while you view the list of archived cases, the case will be removed

---

from the list and you will be informed about this by a message. In case you view the process flow of an archived case and the retention period of this case expires, the case is deleted by the system and you will be redirected to the case list of the corresponding process. You receive an information message about this automatism.

> **Warning:** Maintaining a retention period leads to the **irrevocable deletion** of archived cases. For each case, the period starts to expire from the time it was *moved to the archive*.

20.2.13 How can I add a process to a ProcessApp Collection?

If you want to add a process to a *ProcessApp Collection* you need to do the following.

Open the diagram of the process you want to add in BIC Process Design and open its attributes. In the attribute group *Automation* you can find the attribute *ProcessApp Collections*.

ProcessApp Collections

Here you can enter as many ProcessApp Collection IDs as you want.

ProcessApp Collections

Sales ✕   Costumer related ✕

+ProcessApp Collections

20.2.14 How can I model the process flow with gateways?

Usually, a process does not follow one exact flow linearly. Based on decisions, the path splits into multiple flows which might also run parallel. In BIC Process Design, you can model this with sequence flows and gateways. In a concrete case in BIC Process Execution, gateways result in decisions or introduce parallel flow (and reunite them). You can use the following three gateway types:

- **Exclusive gateway**: After this gateway, exactly one sequence flow is followed. You may automate the decision which one to choose in a concrete case.

- **Inclusive gateway**: After this gateway, one or more of the following sequence flows can be executed.

- **Parallel gateway**: With a parallel gateway, all subsequent sequence flows are executed.

Note that it is possible to model multiple outgoing sequence flows at an activity without using gateways.
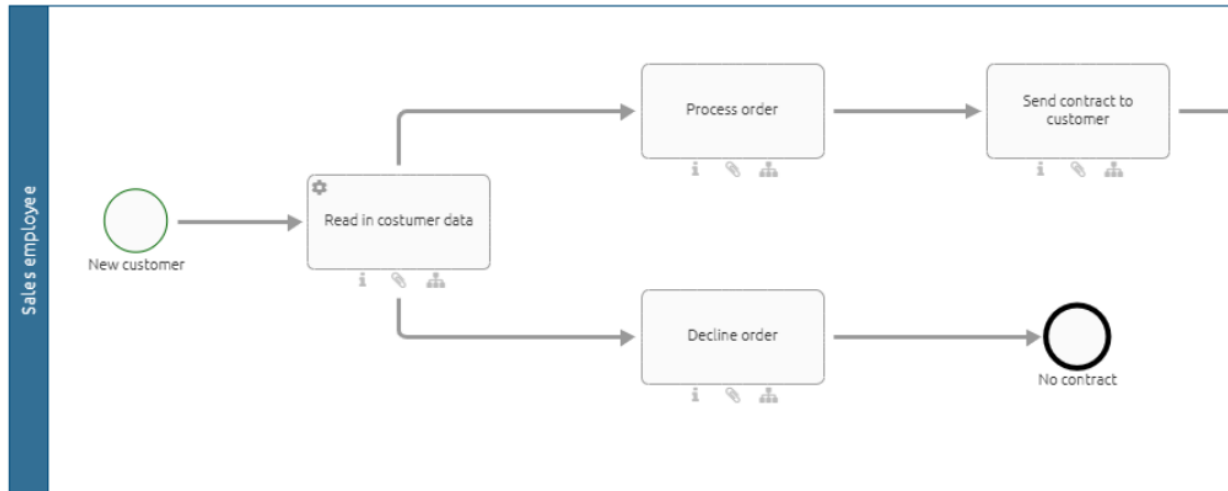
In this case, you have to define *expressions for an automatic decision* about the course of the process flow. Otherwise, the process will stuck. If you do not want to work with expressions and automated decisions,you must model the process with a gateway (see below). Then, the case owner will get a *manual decision task*.
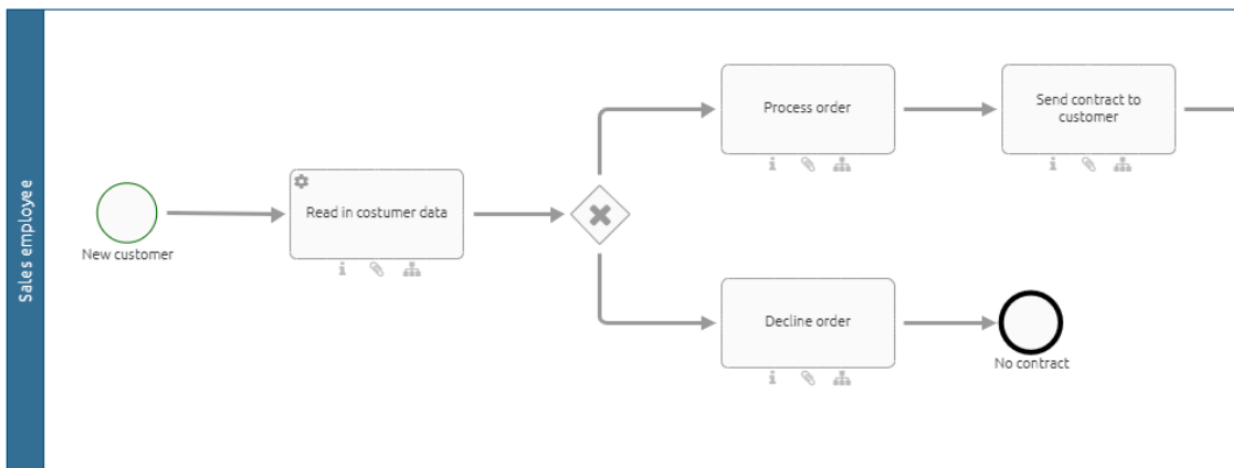
20.2.15 How can I model an automated decision?

During the execution of one of your cases, you can have decisions made automatically in order to archive the right result for your process. To use this function you must define expressions in the sequence flow in BIC Process Design, which specifies the conditions under which the respective decision is made.

To do so navigate first to the diagram in BIC Process Design, which represents the basis for the process in BIC Process Execution in which you want to have decisions made automatically. Here you have to define an expression for each sequence flow after a split gateway, which specifies the condition under which the following path is to be followed. To define the expression first select the corresponding sequence flow. Within the section *Automation* in the attributes of the sequence flow you will find the input field *Expression*.

Note: If you use the parallel gateway in your process, the definition of expressions is not necessary since every outgoing path is executed.

Here you can define your expression using the syntax of the programming language Java (an overview about the notation can be found in the table below). The return value of this expression should then be of the type boolean. The basis for the conditions are always *process variables* which receive their value before they reach the gateway within the process flow in BIC Process Execution. For example you can use process variables from previously executed *REST calls*, or process variables from previously executed *rule-based tasks*.
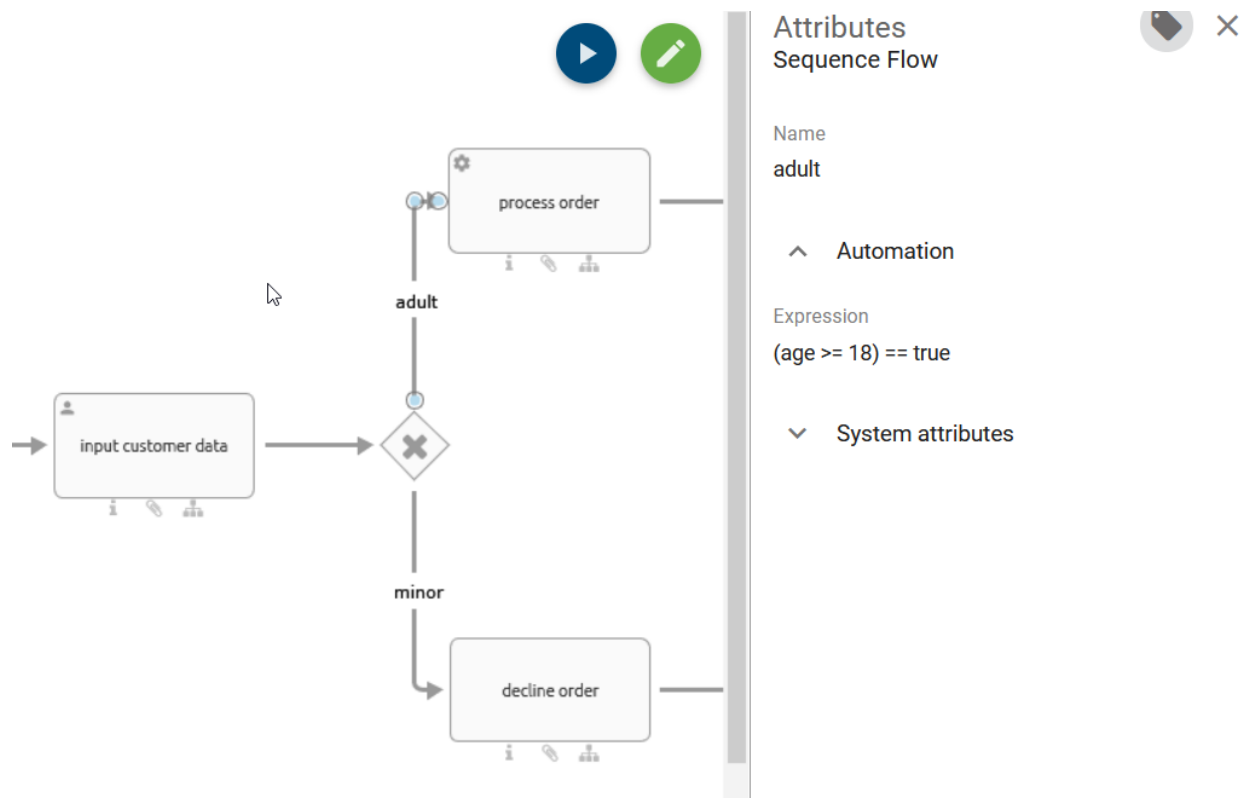
Overview about the notation

Symbol	Description	Symbol	Description
`&&`	logic and	`<`	smaller than
`||`	logic or	`<=`	smaller or equal
`==`	comparison of expressions (is used with `true` and `false`)	`=`	equal
`true`	expression is true	`!=`	not equal
`false`	expression is wrong	`>=`	bigger or equal
		`>`	bigger than

Therefore, the expression `(age >= 18) == true` checks whether the value of the process variable `age` is bigger or equal 18. If this is true the corresponding path will be taken.

As soon as you have defined your expressions and the diagram meets all *requirements*, you can access the respective process with the automated decision in BIC Process Execution.

If in BIC Process Execution the value of a process variable changes, for example due to a change within *a decision table* or because of *a manual change of a ProcessApp Administrator*, all expressions which include this process variable are checked for their return value.

When the return value of the first expression returns the value *true* for a gateway of the type *Exclusive Or*, the corresponding path in the process flow of the case is selected and displayed. In case the next the return value is *false*, the next expression is checked.

With gateways of the type *Inclusive Or*, all expressions are checked regardless of their order. For all expressions that return the value *true*, the respecting path is displayed in the process flow.

If none of the expressions return the value *true* until the decision has been reached, the *decision must be made manually by a user*.

Warning: If you model an activity with one or more outgoing sequence flows **without** gateway, you must automate the decision via expressions. Otherwise, undesired behavior may occur since manual decision tasks are created at gateways only. Please find an example *here*.

Note: Be aware that only automated decisions can be changed, which are still open. This means that decisions which have already been set by starting a task in the respecting path, can not be changed anymore.

Hint: If a task is completed which is the last task before an automated decision, the following task, which results from the path of the decision, is started automatically.

20.2.16 How can I configure an automatic time event?

Start Timer Event:

You can manually *create a new case* in BIC Process Execution. Alternatively, you can model a timer in your process so your cases will be created automatically.

Hint: Please note that start timer events are only executed in the productive environment (i. e. for published processes). The following Cron definition is not applied in the test and development environments.

To do that, open the concerning diagram in BIC Process Design. In the attributes of the start event, select the event type *Timer* (in the attribute group *Typing*).

∧   Typing

Event type 📍

Timer ▾

Then open the context menu of the start event via a right click on the symbol. Choose the option *Open start event settings*.
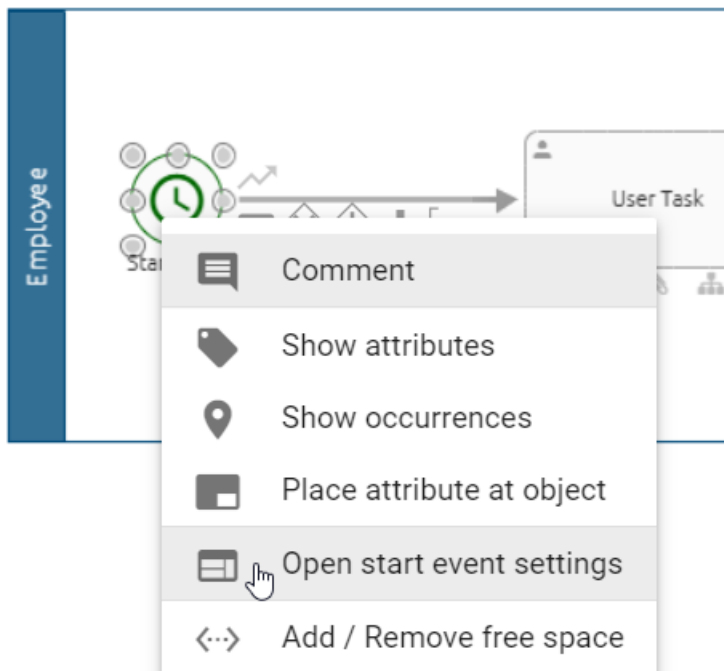
A dialog window opens. In the field *Starting timer configuration*, you can enter a *Cron expression* to define the (temporal) logic that will be applied to start new cases of the process in BIC Process Execution.
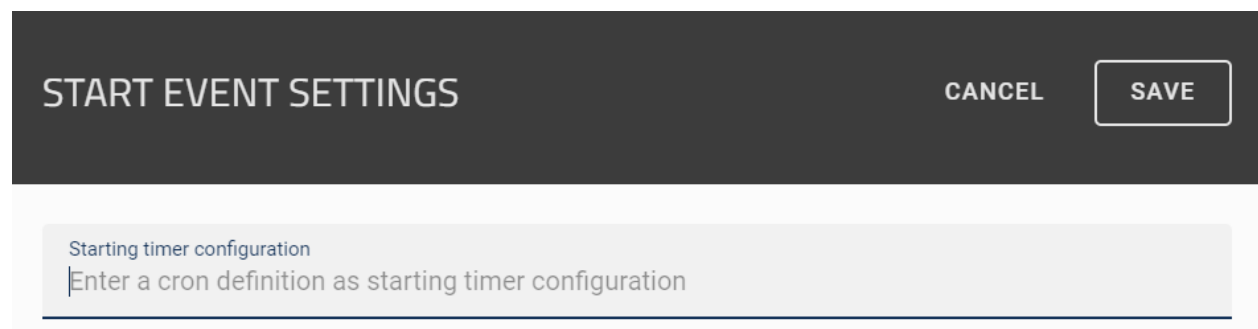
Save your configuration to close the dialog, or use the *cancel* button in order to discard your changes.

As soon as your process is published, it will automatically start a new case each time the timer is triggered. Such a case is always named by the start time of the case, and participating roles are assigned to their *default staffing*. Note that the case does *not have an owner* which implies that tasks without a default staffing have to be *delegated manually*. If there is no responsible user assigned for a started task, the task has to be *delegated* before you can *complete* it.

Note: If the diagram is depublished or no longer marked as *executable*, the automatic case creation will be stopped.

Tip: ProcessApp Administrators can edit the case name *in the process variables*.

Cron Expression:

A *Cron expression* is a chain of fields which are separated by blank spaces. The fields define the time units in the order

<Second> <Minute> <Hour> <Day-Of-Month> <Month> <Day-Of-Week> <Year>.

A field can consist of one or a combination of the following valid values and/ or characters.

Field	Rang of values	Valid characters
Second	0-59	, - * /
Minute	0-59	, - * /
Hour	0-23	, - * /
Day-Of-Month	1-31	, - * ? / L W
Month	0-11 or JAN-DEC	, - * /
Day-Of-Week	1-7 or SUN-SAT	, - * ? / L #
Year - optional	empty or 2022-2099	, - * /

Hint: Please note that support for specifying both a *day-of-week* and a *day-of-month* parameter at the same time is not implemented.

Combining these characters, you can configure the start event ("set a timer") in such a way that cases are started at recurring times. The following section gives an explanation for the possible characters, which is based on this page.

Tip: On Freeformatter.com, you can find a free tool to generate Cron expressions.

---

*: The timer is set *for every* **<time-unit>.** Example: '*' as <Month> means that a new case is started every month (JAN-DEC).

? [The timer is set on each <Day-Of-Week> resp. on each <Day-Of-Month>.] Example: '?' as <Day-Of-Week> means that a new case is started regardless of the day of the week.

- [The timer is defined for a *time span* (from-to).] Example: 'MON-SAT' as <Day-Of-Week> means that a new case is started on each working day.

, [The comma can be used to enumerate multiple values for one time unit. List the values without blank spaces.] Example: '8,15' as <Hour> means that new cases are started at 8 AM and 3 PM.

/ [The timer can be defined using individual increments.] Example: '1/7' as <Day-Of-Month> means that new cases are started every 7 days starting on the first day of a month.

L [The last value of the <time-unit>. It is also possible to combine this character with numerical values, e.g. using 'L-2' to get the second last value.] Example: 'L' as <Month> means that a new case is started on the last day of each month, i.e. on 31.01, 28./29.02., 31.03. usw.

W [The timer is set dynamically on the nearest week day (MON-FRI).] Example: '1W' as <Day-Of-Month> means that a new case is started on the nearest week day to the first day of the month. If the first day of the month is a Saturday, the new case will already be started on Friday. If the first day of the month is a Sunday, the case will be started on the following Monday.

#<n> [The timer is set to the <n>-th occurrence of the <Day-Of-Week> where <n> is a natural number.] Example: '2#1' as <Day-Of-Week> means that a new case is started on the first Monday of a month.

Hint: Note that the system computes the case start times in the **time zone of the server**. If your local time deviates from the server time, be sure to take the difference into account when you define the Cron expression.

For example, if a case should start at 8 AM in Germany (UTC+1) but the server is based in the time zone UTC+0, you have to set the timer to 7 AM.

The following three examples show some possibilities to configure a recurring start using the values and characters:

0 30 8 ? * MON-FRI New cases start each day from Monday to Friday at 8 AM.

0 0 15 1 * ? New cases start each first day of a month at 3 PM.

0 0 12 ? JAN,JUN 2#1 New cases start at the first Monday of January and June at 1 PM.

Intermediate Timer Events:

You have the option to pause your case for a specified period before it continues. This can be especially useful, e.g., when waiting for a payment confirmation. This way, you to set the case to resume, for instance, after 3 days.

Hint: Please note that intermediate timer events are only executed in the productive environment (i. e. for published processes). The following Cron definition is not applied in the test and development environments.

Hint: Please note that intermediate timer events only apply to BPMN modeling, not to EPC modeling.

To do that, open the concerning diagram in BIC Process Design. In the attributes of the intermediate event, select the event type *Timer* (in the attribute group *Typing*).

Event type

Timer

☐ Non interrupting

Then open the context menu of the intermediate event via a right click on the symbol. Choose the option *Open intermediate event settings*.
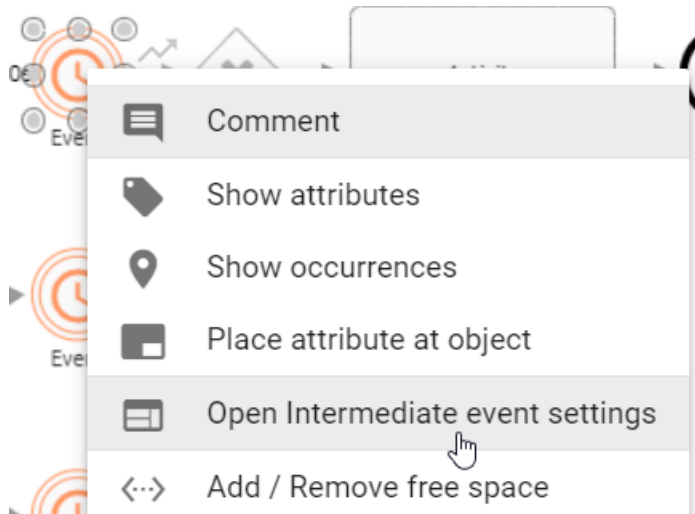
Selecting this option opens a dialog window. In the *Timer definition* field, you have the option of defining the duration using the *ISO8601 format* or a *variable*. This defines the time logic according to which a new case of the process is to be started in BIC Process Execution.

Save your configuration to close the dialog, or use the *cancel* button in order to discard your changes.

Once an intermediate event is integrated into the corresponding process diagram, it becomes visible in the process flow. Subsequently, the publication date and time for the intermediate event and the configured timing will be displayed to you.

When the release time is reached, the intermediate timer event is marked as *done*, and the date and time of release are displayed.
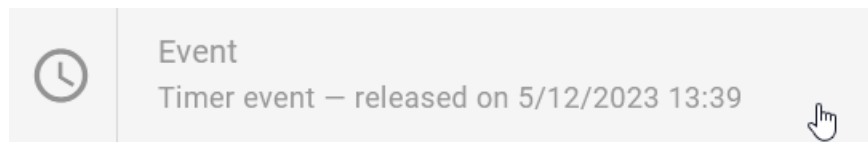
> **Warning:** When selecting an intermediate time event in the process flow of a process diagram, only the name and description of the event are displayed in the form.

After the diagram has been published, the case will only continue when the intermediate event is reached and the configured time is triggered. If you are in a different stage, the case will resume immediately. This also applies for incorrectly or not configured times and for times configured in the past.

> **Note:** If the configured time is triggered while the servers are down, the case will only resume once the servers are

restarted.

Hint: If an active case is aborted, all timers will be stopped.

ISO8601 format:

An *ISO8601 format* is a string of fields that specifies the time span of a time interval and is represented by the format **P(n)Y(n)M(n)DT(n)H(n)M(n)S**. The capital letters P, Y, M, W, D, T, H, M and S are identifiers for each of the date and time elements and are not replaced but can be omitted.

P : is the duration designator (for period) at the beginning of the duration representation.

Y : is the year designator that follows the value for the number of years.

M : is the month designator that follows the value for the number of months.

W : is the week designator that follows the value for the number of weeks.

D : is the day designator that follows the value for the number of days.

T : is the time designator that precedes the time components of the representation.

H : is the hour designator that follows the value for the number of hours.

M : is the minute designator that follows the value for the number of minutes.

S : is the seconds designator that follows the value for the number of seconds.

Examples:

PT15S - 15 seconds

P14DT1H30M - 14 days, 1 hour and 30 minutes

P3Y6M4DT12H30M5S - 3 years, 6 months, 4 days, 12 hours, 30 minutes and 5 seconds

---

Note: Please note that the *n* is replaced by the value for each of the date and time elements that follow the n.

The fields define the time units in order:

<year> <month> <day> <hour> <minute> <seconds> <milliseconds>.

Each field can contain one or a combination of the permitted values and/or characters.

Representation according to ISO 8601	Value range
Year (Y)	YYYY, four digits, shortened to two digits
Month (M)	MM, 01 to 12
Week (W)	WW, 01 to 53
day (T)	T, day of the week, 1 to 7
Hour (h)	hh, 00 to 23, 24:00:00 as end time
minute (m)	mm, 00 to 59
second (s)	ss, 00 to 59
Decimal fraction (f)	Fractions of a second, any accuracy

20.2.17 How can I create a case with a run link from outside the application?

BIC Process Execution provides the opportunity to start the case creation from outside the application. The run link corresponding to your process navigates to the dialogue window of the case creation. If you use a run link when you are not logged in to BIC Process Execution, you will be asked to enter your login data. Afterwards, you will be navigated to the case creation.

New case

New case *

Set due date of new case

Define the team

HR

IT Support

Vorgesetzer

CANCEL   CREATE

You can just copy the link of your process from the address line of your browser when you open all *cases of the process*. Note that this is also possible if there are no existing cases yet.

```
https://XXX/process-execution/app/processes/YOUR-PROCESS-ID/instances
```

In order to generate the run link for the case creation of your process, just add "/run" after the process ID. You can use this link to navigate to the window for case creation directly.

```
https://XXX/process-execution/app/processes/YOUR-PROCESS-ID/run
```

Furthermore, you can directly create a case by adding the case name via `?name=NAME-OF-CASE` to the link:

```
https://XXX/process-execution/app/processes/YOUR-PROCESS-ID/run?
name=NAME-OF-CASE
```

If you use this link, the process flow of the new case *NAME-OF-CASE* is displayed directly and you do not have to confirm the dialogue window.

In addition, you can set process variables if you add `&caseVariable=VALUE` to the link where *caseVariable* is the name of a process variable and *VALUE* is a valid input for this variable. It is possible to state arbitrarily many process variables of your case:

```
https://XXX/process-execution/app/processes/YOUR-PROCESS-ID/run?
name=NAME-OF-CASE&caseVariable1=VALUE1&caseVariable2=VALUE2
```

Subsequently, you can *add the team members* in the *details*.

Tip: The links mentioned above are executed via the front end. As an alternative you can create a case directly over the back end. To do so use the following format: `https://XXX/process-execution/api/run/processes/YOUR-PROCESS-ID/instances?name=NAME-OF-CASE`. Please be aware that this kind of run link can only be used by external applications that also include an authentication header.

20.2.18 How can I start subprocesses from a process?

If you like to call another process from within a case, you can use *call activities*. This enables you to start arbitrarily many new subordinated cases. If you want to call a process in BIC Process Execution it needs to be marked as *executable* as well. If the called process is not marked as executable, the task will be handled as a normal user task and needs to be done manually.

Here you can find an explanation of how you can work with a call activity.

Model an activity in your diagram and set its process type to *call activity*. You will find the attribute in the attribute group *Typing*.
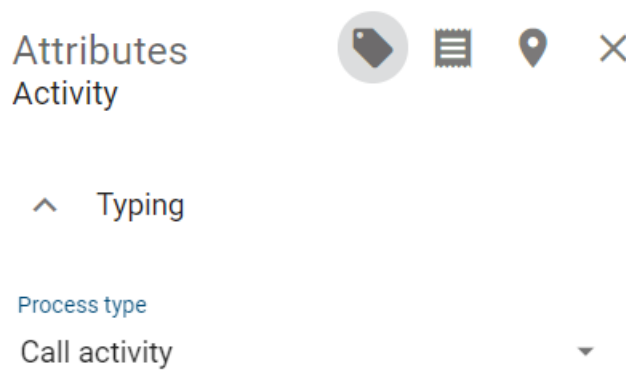
You choose between two different types of call activities. *Synchronous* call activities will be executed instantly and stop the main case. The *process variables* will be handed over to the sub case. After the completion of the sub case the process variables will be handed back to the main case. If the ProcessApp Administrator manually completes the synchronous call activity, nothing will change in the existing subcase, and it can continue to be processed.

Asynchronous call activities are also started immediately but will not pause the main case. The process variables will also be handed over to the sub case at the start but they will not be handed back at the completion of the sub case. Furthermore, one can continue their work on the main case before the sub case is completed. If the main case is archived, nothing will change in the existing subcase, and it can continue to be processed.

Open the context menu of your call activity with a right click on it. Select *Open Call activity settings*.

Here you can choose whether your call activity shall be synchronous or asynchronous.

Maintain the attribute *Subprocess* of the call activity with the desired process to link it. The following example shows the attribute of the call activity "Produce special order" which is part of an order process. The subprocess diagram "Custom-made product" is an executable BPMN diagram.
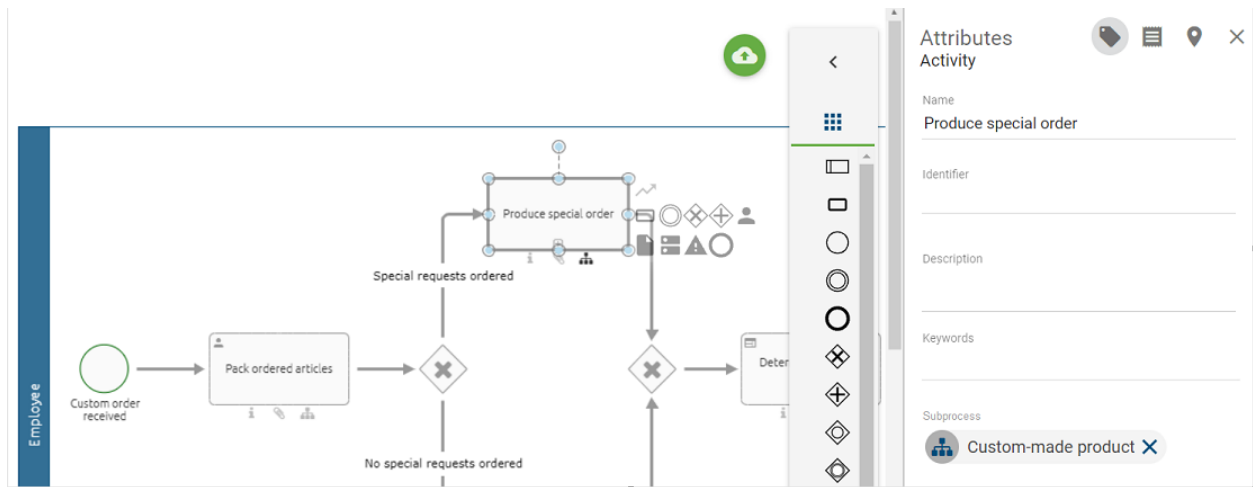
If the order process is executed in BIC Process Execution, a new case for the called process will be started automatically as soon as the *task of the call activity* is started. The case is named after the call activity plus "- *name of the main case*". In the example the call activity "Produce special order" of the the main case "Order 2503" triggered the creation of a new case of the process "Custom-made product".

Main case "Order 2503":

Sub case (new case of the process "Custom-made product"):

Max Mustermann is responsible for the tasks of the sub case because he is the *default assignee* of the corresponding role. The system is defined as the creator of the subprocesses of the call activities.

20.2.19 How can I provide documents as input for my subprocess?

When dealing with a call activity task, if you model an input document for this call activity, the uploaded document becomes available for this input in the subprocess. Provided you have an input document in a subprocess. If the identifier of this document matches that of the input document for the corresponding call activity in the main process, the input document is available in the subprocess.

Hint: Several input documents can be modeled, all of which are available in the subprocess. In each case, the last uploaded document is used as the one that serves as input.

In both cases, whether within the same case or if the input comes from a parent case, the subprocess can either not overwrite the input or override it. This also applies if the subprocess decides to override the input or if parallel paths cause both an override and no override.

20.2.20 How can I integrate an application into a task's form?

Application objects that you have modeled in BIC Process Design can also be integrated into BIC Process Execution. They are available to the users within the process flow. In order to be able to integrate an application object, it must have a connection to one activity object in your diagram in BIC Process Design.
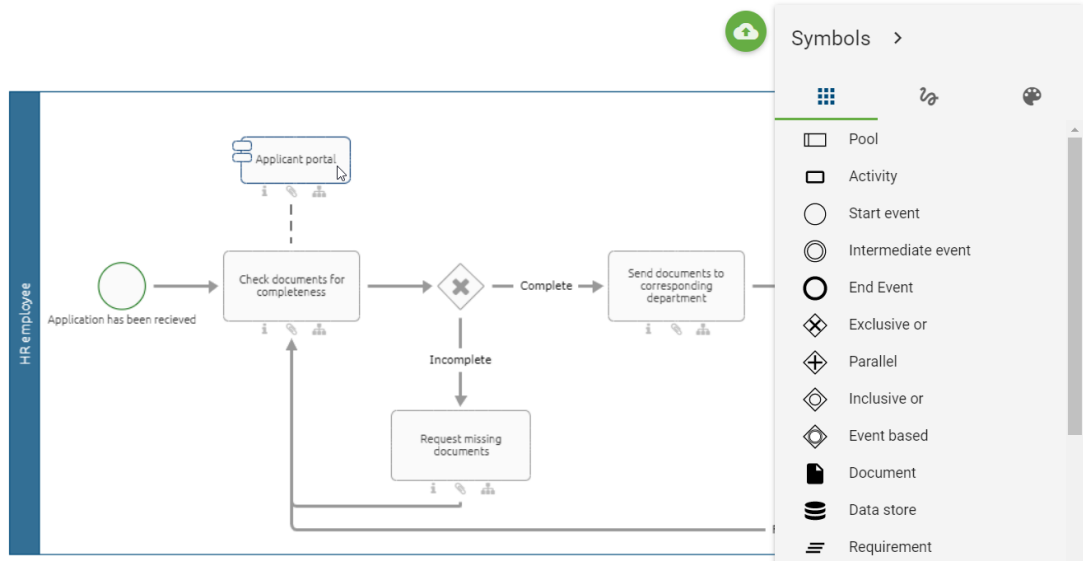
Within the details of the application object you can link the application of your choice to make it accessible in BIC Process Execution. To do so use the attribute *Integration link* within the section *Automation*. Analogous to the attribute Attachment (URL) you can add links or alternatively upload documents.

When adding a link to one of your applications you can also integrate *process variables* if you know that these will be defined before the respective task has been reached. To do so add the respecting variable name in two curly brackets at the appropriate place in the path. Here you can see an example how such a path could look like:

`mailto://{{emailRecipient}}?subject={{emailSubject}}&cc={{emailRecipientCC}}&body={{emailTe`

In this example, the process variables are "emailRecipient", "emailSubject", "emailRecipientCC" and "emailText".

If you have defined your attribute and your diagram fulfills all *requirements to be displayed in BIC Process Execution*, the application will be displayed under the section *Applications* within the *form of the task*. If a title is available for the link, it will be displayed below the application name. Otherwise the URL will be displayed. You can access the application via the *Integration Link*.

Also multiple links can be integrated into an application. If so a context menu that contains all the links will be shown after the *Integration Link* has been selected. You can then open the desired with a click on the corresponding link.
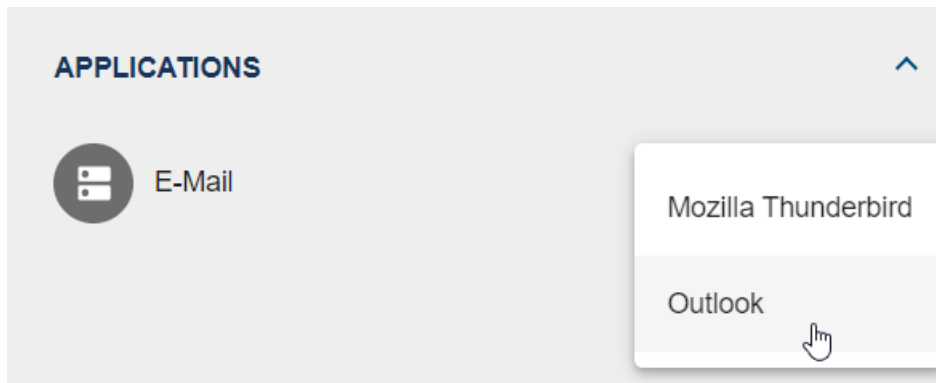
20.2.21 Formulas

Formulas can be used for different purposes. For example, you can use them in the *form editor* to calculate values. You can use them as well to make your forms more dynamic.

In this chapter you will find an overview of all existing formulas and how to use them correctly. At the end of this chapter, you will find a few *examples* of what you can calculate with these formulas. Additionally, you will find an example which explains how you can make your form dynamic.

The most formulas you can use in Microsoft Office Excel are supported and work the same as in Excel. It is also possible to write formulas with simple JavaScript syntax. E.g. `2+6` would also be a valid formula and return *8*.

Some formulas use parameters. Of course, you can use existing *process variables*. If you want to use already existing process variables, you need to enclose them in two curly brackets (e.g. `{{VariableName}}`).

If you use dates or strings as a data type for parameters, you need to enclose them in single quotation marks (e.g. `LEN('example')`).

Tip: Formulas can be nested within each other. That means you can use a formula as an input parameter for another formula.

Which formulas exist?

Note: This section is currently under revision and therefore not complete. A complete overview of all usable formulas can be found in the documentation of FormulaJS.

The formulas can be separated into six different categories:

- *Date formulas*
- *Logic formulas*
- *String formulas*
- *Math formulas*
- *Conversion into different number systems*
- *Statistical formulas*

Date formulas

When you use date formulas, you will often need parameters in the datetime format.

The data type *datetime* can be written in different formats. If you are not using predefined *process variables*, you need to make sure to use the correct form. A *datetime* without time looks like the following: `'month/day/year'` e.g. `'06/14/2021'` for June 14, 2021. Alternatively, you can use `'day-month-year'` e.g. `'14-Jun-2021'`. Note that it is important to abbreviate the month according to the table below. If you want to use a timestamp as well, you need to use one of the formatting options above and append `'hh:mm:ss AM/PM'`. The use of seconds is optional. E.g. `'06/14/2021 10:47:32 AM'` would represent 10:47 AM on June 14 2021.

Abbreviations for months:

Month	January	February	March	April	May	June	July	August	September	October	November	December
Abbreviation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Extract data from dates

There are various date formulas with which you can extract specific data out of a date.

- `YEAR({{datetime}})` returns the year of a *datetime* value in the range of 1900-9999.
- `MONTH({{datetime}})` returns the month of a *datetime* value in the range of 1-12.
- `WEEKNUM({{datetime}},[{{mode}}])` returns the week number of a *datetime* value in the range of 1-53. The parameter *mode* defines if the week starts on Sundays (*mode* = 1) or if the week starts on Mondays (*mode* = 2). If you do not use the parameter, the standard value is *mode* = 1.
- `ISOWEEKNUM({{datetime}})` returns the week number of a *datetime* value. The first week in the year is the week which has the first Thursday in it.
- `WEEKDAY({{datetime}}, [{{mode}}])` returns the number of the day of a *datetime* value in the range of 1-7. The parameter *mode* behaves equivalent to the one in the formula `WEEKNUM`.
- `DAY({{datetime}})` returns the day of a *datetime* value in the range of 1-31.
- `HOUR({{datetime}})` returns the hour of a *datetime* value in the range of 0-23.

- MINUTE(`{{datetime}}`) returns the minute of a *datetime* value in the range of 0-59.

- SECOND(`{{datetime}}`) returns the second of a *datetime* value in the range of 0-59.

Calculate time spans

The following table shows you the different modes and which parts of the week belong to the weekend.

<mode>	Weekend	<mode>	Weekend
1	Saturday and Sunday	11	only Sunday
2	Sunday and Monday	12	only Monday
3	Monday and Tuesday	13	only Tuesday
4	Tuesday and Wednesday	14	only Wednesday
5	Wednesday and Thursday	15	only Thursday
6	Thursday and Friday	16	only Friday
7	Friday and Saturday	17	only Saturday

With the following formulas you can measure the time span between two dates.

- DAYS(`{{enddate}}`, `{{startdate}}`) returns the difference in days between a start date and an end date. You can find a concrete example *here*.

- WORKDAY(`{{date}}`, `{{k}}`) returns the *k*-th next workday starting at *date*. Workdays are all days in a week except Saturday and Sunday.

- WORKDAYINTL(`{{date}}`, `{{k}}`, `{{mode}}`) returns the *k*-th next workday from *date*. *mode* defines which part of the week belongs to the weekend. Above you can find a table with an overview of all available weekend definitions.

- NETWORKDAYS(`{{startdate}}`, `{{enddate}}`, `[{{listOfHolidays}}]`) returns the number of work days (Monday-Friday) between two dates. Optionally, you have the possibility of adding holidays. They will also be excluded from counting. A more specific example can be found *here*.

- NETWORKDAYSINTL(`{{startdate}}`, `{{enddate}}`, `{{mode}}`, `[{{listOfHolidays}}]`) returns the number of workdays between two dates. *mode* defines which part of the week belongs to the weekend. Above you can find a table with an overview of all available weekend definitions.

- **DAYS360(`{{start}}`, `{{end}}`, `{{method}}`) returns the difference in days between a start and an end date. Th**

    – *European method*: If the start or end date falls on the 31st of a month, the formula will calculate with the 30th day of the month instead.

    – *US-american method*: If the start date falls on the 31st of a month, the formula will calculate with the 30th instead. If the end date falls on the 31st of a month it depends on the start date what the formula will calculate. If the start date is earlier than the 30th of a month, the end date will be set to the 1st day of the following month. Otherwise, the end date will be set on the 30th.

- **YEARFRAC(`{{start}}`, `{{end}}`, `{{mode}}`) returns the time span between two dates as a number. With the par**

    – *mode* = 0: The difference will be calculated with the 30-day month US-American definition (see formula DAYS360) and divided by 360.

    – *mode* = 1: The actual difference in days will be divided by the actual number of days in the year.

    – *mode* = 2: The actual difference in days will be divided by 360.

    – *mode* = 3: The actual difference in days will be divided by 365.

    – *mode* = 4: The difference will be calculated with the 30-day month european definition (see formula DAYS360) and divided by 360.

- **DATEDIF({{startdate}}, {{enddate}}, {{unit}}) returns the difference between two dates in a specified *uni***

    – *Y*: Difference of fully completed years.

    – *M*: Difference of fully completed months.

    – *D*: Difference of days.

    – *MD*: Difference of days; months and years are being ignored.

    – *YM*: Difference of months; days and years are being ignored.

    – *YD*: Difference of days; years are being ignored.

Current date

You can use the following formulas to get the current date.

- TODAY() returns the current date in the *datetime* format.

- NOW() returns the current date, including the current time in the *datetime* format.

Convert into datetime format

With the following formulas you can convert dates or other data types into the *datetime* format.

- DATE({{year}}, {{month}}, {{day}}) lets you create a variable in the *datetime* format.

- TIME({{hour}}, {{minute}}, {{second}}) returns a time span as floating point number in days. Therefore 24 hours correspond to the value 1, 12 hours to the value 0.5, etc. . .

- DATEVALUE({{string}}) converts a string, if possible, into a valid *datetime* format.

- TIMEVALUE({{string}}) converts a string, if possible, into a time span as floating point number (see TIME).

Adding timespans

- EDATE({{start}}, {{k}}) will add *k* months to *start* and return the result. *k* can be negative to calculate dates in the past. E.g. EDATE('2/5/2021',3) will return the *5th May 2021*.

- EOMONTH({{start}}, {{k}}) will add *k* months to *start* and return the end of the corresponding month. *k* can be negative or zero. E.g. EDATE('2/1/2021',3) will return the *31st May 2021*.

Logic formulas

Logic formulas can be used for evaluating logical expressions.

Note: Logical expressions are always *TRUE* or *FALSE*.

- TRUE() returns the logic value *TRUE*.

- FALSE() returns the logic value *FALSE*.

Logic gates

- AND({{log_a}}, {{log_b}}, ...) returns *TRUE* if **all expressions** are *TRUE*. Returns *FALSE* otherwise.

- OR({{log_a}}, {{log_b}}, ...) returns *TRUE* if **at least one expression** is *TRUE*. Returns *FALSE* otherwise.

- XOR(`{{log_a}}`, `{{log_b}}`, ...) returns *TRUE* if **exactly one expression** is *TRUE*. Returns *FALSE* otherwise.

- NOT(`{{log_a}}`) negates the parameter. *TRUE* becomes *FALSE*, *FALSE* becomes *TRUE*.

Conditional expressions

- IF(`{{cond}}`, `{{value1}}`, `{{value2}}`) returns depending on the condition a different value. If *cond* evaluates to *TRUE*, *value1* will be returned, otherwise *value2* will be returned.

- IFS(`{{cond1}}`, `{{value1}}`, `{{cond2}}`, `{{value2}}`, ...) allows the possibility of multiple evaluations. It will be checked if one of the conditions evaluates to *TRUE*, the corresponding value will be returned. If a condition is *FALSE* the next condition will be checked until a condition which is *TRUE* is found. But only the first condition that evaluates to *TRUE* will return a value. IFS(TRUE, 2, TRUE, 5) returns *2*.

- SWITCH(`{{value}}`, `{{check_1}}`, `{{return_1}}`, `{{check_2}}`, `{{return_2}}`) compares the parameter *value* with *check_1*, *check_2*, etc. until a match is found. The formula returns the corresponding return value then. E.g. SWITCH(7,9,'nine',7,'seven') would return *seven*.

- IFERROR(`{{formula}}`, `{{expression}}`) evaluates the inner formula *formula* and returns their return value. If the formula returns an error, *expression* will be returned. E.g. IFERROR(8/2,'Error') would return *4* but IFERROR(8/0,'Error') would return *Error*. Of course it is possible to nest any other formula into this formula.

String formulas

If your formula needs a parameter of the type string, then it needs to be enclosed by single quotation marks, e.g. LEN('Example'). Alternatively, you can use pre-defined process variables. You can find an explanation for that *here*.

String extraction

With the following formulas you can extract strings or specific information out of a string.

- RIGHT(`{{string}}`, `{{num}}`) returns the *num* right characters of *string*. E.g. RIGHT('Profit margin',6) would return *margin*.

- LEFT(`{{string}}`, `{{num}}`) returns the *num* left characters of *string*.

- MID(`{{string}}`, `{{startPos}}`, `{{num}}`) returns a part of *string*. Starting at *startPos*, *num* characters will be returned. E.g. MID('Pete drives his car', 6, 6) returns *drives*.

- LEN(`{{string}}`) returns the number of characters in *string*.

- REPT(`{{string}}`, `{{num}}`) repeats *string num*-times. E.g. REPT('x',5) returns *xxxxx*.

- SEARCH(`{{searchTerm}}`, `{{string}}`) searches in *string* for *searchTerm* and returns at which character index the searched string starts. E.g. SEARCH('margin', 'Profit Margin') would return *8*. If the string cannot be found, the formula will return an error.

- FIND(`{{searchTerm}}`, `{{string}}`, [`{{startPos}}`]) searches in a string *string* for a search term *searchTerm* and returns the first occurrence of it. *startPos* allows you to let the search start at a different character. E.g.: FIND('i','Pete drives his car',10) would return *14*. If you do not use the parameter *startPos* the formula starts searching at the first character.

- REGEXEXTRACT(`{{string}}`, `{{expression}}`) searches in *string* for the regular expression *expression* and returns the index of the first occurrence.

String manipulation

With the following formulas, you can manipulate a string.

- LOWER(`{{string}}`) converts *string* into lowercase letters.

- UPPER(`{{string}}`) converts *string* into uppercase letters.

- PROPER(`{{string}}`) converts the first character of *string* into an uppercase letter and the following characters into lowercase letters. E.g. PROPER(`'bicYCle'`) returns *Bicycle*.

- TRIM(`{{string}}`) deletes multiple spaces in *string*.

- CLEAN(`{{string}}`) returns *string* without non-printable characters.

- CONCATENATE(`{{string1}}, {{string2}}, ...`) concatenates two or more strings into one string. E.g. CONCATENATE(`'John', ' ', 'Doe'`) returns *John Doe*.

- REPLACE(`{{string}}, {{pos}}, {{num}}, {{replace}}`) replaces a character in a string with another character. Starting with the character at the position *pos*, *num* characters are replaced by the string *replace*. E.g. REPLACE(`'abcdefghijk', 6, 5, '*'`) will return *abcde*k*

- SUBSTITUTE(`{{string}}, {{old}}, {{new}}, [{{pos}}]`) substitutes in *string* the character *old* by *new*. If you do not want to replace all occurrences of *old*, you need to add the parameter *pos*. This will define which character gets replaced. E.g. SUBSTITUTE(`'Q1-2011', '1', '2'`) would replace all 1's by 2's therefore returning *Q2-2022*, but SUBSTITUTE(`'Q1-2011', '1', '2', 1`) would only replace the first occurrence of 1 therefore returning *Q2-2011*.

- SPLIT(`{{string}}, {{delimiter}}`) will split *string* at every position where *delimiter* is. Returns the results as a list. E.g. SPLIT(`'Peter&Max&Antonia', '&'`) will return *['Peter', 'Max', 'Antonia']*.

String comparison

With the following formula, you are able to check whether two strings are the same or not.

- EXACT(`{{string1}},{{string2}}`) checks if two strings are the same. This function is case-sensitive. It will return *TRUE* if the strings are the same, otherwise it will return *FALSE*.

- REGEXMATCH(`{{string}}, {{expression}}`) checks whether the regular expression *expression* is in *string* or not. It will return *TRUE* if the regular expression matches at least once and will return *FALSE* otherwise.

- T(`{{var}}`) checks if *var* is a string. If *var* is a string, it will be returned, otherwise an empty string will be returned.

Convert strings

With the following formulas, you can convert numbers into strings and vice versa. These formulas use the unicode standard.

- UNICHAR(`{{number}}`) formats a value and converts it into a string.

- UNICODE(`{{character}}`) formats a string and converts it to a number.

- ARABIC(`{{string}}`) converts a roman number *string* into the Arabic number system. E.g. ARABIC(`'XVI'`) would return *16*.

- ROMAN(`{{number}}`) converts an Arabic decimal number *number* into the roman number system. E.g. ROMAN(`16`) would return *XVI*.

Math formulas

Round numbers

With the following formulas you can round numeric values.

- `ROUND({{number}}, {{n}})` rounds *number* to *n* decimal places.

- `ROUNDDOWN({{number}}, {{n}})` rounds *number* down to *n* decimal places.

- `ROUNDUP({{number}}, {{n}})` rounds *number* up to *n* decimal places.

- `INT({{number}})` rounds a number down to the next integer.

- `FLOOR({{number}}, {{i}})` rounds *number* down to the nearest multiple of *i* (E.g. `FLOOR(3.1415, 2)` will return *2*)

- `FLOORMATH({{number}}, {{i}}, {{mode}})` rounds *number* down to the nearest multiple of *i*. *mode* decides whether you want to round away or towards zero. *mode* = 0 rounds away from zero `FLOORMATH(-12.1,1,0)` returns *-13*. *mode* = 1 rounds towards zero `FLOORMATH(-12.1,1,-1)` returns *-12*.

- `CEILING({{number}}, {{i}})` rounds *number* up to the nearest multiple of *i* (e.g. `CEILING(3.1415,3)` returns *6*).

- `CEILINGMATH({{number}}, {{i}}, {{mode}})` rounds *number* up to the nearest multiple of *i*. *mode* decides whether you want to round away or towards zero. *mode* = 1 rounds away from zero `CEILINGMATH(-4.1,1,1)` returns *-5*. *mode* = 0 rounds towards zero `CEILINGMATH(-4.1,1,1)` returns *-4*.

- `TRUNC({{number}}, {{n}})` truncates a number to an integer by removing the decimal.

- `ODD({{number}})` rounds *number* up to the nearest odd number.

- `EVEN({{number}})` rounds *number* up to the nearest even number.

- `SIGN({{number}})` determines the sign of a number. Returns *1* if the number is positive. Returns *-1* if the number is negative and returns *0* if the number is 0.

Arithmetic operations

- `QUOTIENT({{dividend}},{{divisor}})` performs division and returns only the integer portion of the division result. Use this function when you want to discard the remainder of the division.

- `MOD({{dividend}}, {{divisor}})` returns the remainder after a number is divided by a divisor.

- `POWER({{number}},{{power}})` returns the result of *number* to the power of *power*.

- `FACT({{number}})` returns the factorial of *number*.

- `ABS({{number}})` returns the absolute value of *number*.

- `SQRT({{number}})` returns the square root of *number*.

- `SQRTPI({{number}})` returns the square root of `{{number}} * Pi`.

- `MAX({{num1}},{{num2}},...)` returns the largest number value of the parameters. Logical values and text are being ignored.

- `MAXA({{num1}}, {{num2}},...)` returns the largest number value of the parameters. Logical values and text are not being ignored.

- `MIN({{num1}},{{num2}}, ...)` returns the smallest number value of the parameters. Logical values and text are being ignored.

- MINA(`{{num1}}`, `{{num2}},...`) returns the smallest number value of the parameters. Logical values and text are not being ignored.

- SUM(`{{num1}},{{num2}},...`) returns the sum of all parameters.

- SUMIF(`{{range}}`, `{{criterion}}`, `{{[sum_range]}}`) returns the sum of numbers in a list that meet a specific criterion. The criterion is applied to the list *range*. If that is not the list that should be summed up, the parameter *sum_range* must be used.

- SUMPRODUCT(`{{list1}}`, `{{list2}}`) returns the sum of the products of the lists.

- SUMSQ(`{{num1}}`, `{{num2}} ...`) returns the sum of the squares of the numbers.

- SUMX2PY2(`{{list1}}`, `{{list2}}`) returns the sum of the sum of squares of corresponding values in two list.

- SUMXMY2(`{{list1}}`, `{{list2}}`) returns the sum of squares of differences of corresponding values in two arrays.

- PRODUCT(`{{num1}},{{num2}},...`) returns the product of all parameters.

- LCM(`{{num1}}`, `{{num2}}`, `...`) returns the least common multiple of all parameters.

- GCD(`{{num1}}`, `{{num2}}`, `...`) returns the greatest common divisor of all parameters.

Information functions

- ISEVEN(`{{number}}`) returns *TRUE* when *number* is even. Otherwise it will return false.

- ISODD(`{{number}}`) returns *TRUE* when *number* is odd. Otherwise it will return false.

Trigonometric functions

- RADIANS(`{{number}}`) converts degrees into radians. E.g.: RADIANS(180) returns *3.14159*.

- SIN(`{{number}}`) returns the sine of *number*.

- SINH(`{{number}}`) returns the hyperbolic sine of *number*.

- COS(`{{number}}`) returns the cosine of *number*.

- COSH(`{{number}}`) returns the hyperbolic cosine of *number*.

- COT(`{{number}}`) returns the cotangent of *number*.

- COTH(`{{number}}`) returns the hyperbolic cotangent of *number*.

- CSC(`{{number}}`) returns the cosecant of *number*.

- CSCH(`{{number}}`) returns the hyperbolic cosecant of *number*.

- SEC(`{{number}}`) returns the secant of *number*.

- SECH(`{{number}}`) returns the hyperbolic secant of *number*.

- TAN(`{{number}}`) returns the tangent of *number*.

- TANH(`{{number}}`) returns the hyperbolic tangent of *number*.

- ASIN(`{{number}}`) returns the inverse sine of *number*.

- ASINH(`{{number}}`) returns the inverse hyperbolic sine of *number*.

- ACOS(`{{number}}`) returns the inverse cosine of *number*.

- ACOSH(`{{number}}`) returns the inverse hyperbolic cosine of *number*.

- ACOT(`{{number}}`) returns the inverse cotangent of *number*.

- ACOTH(`{{number}}`) returns the inverse hyperbolic cotangent of *number*.

- `ATAN({{number}})` returns the inverse tangent of *number*.

- `ATANH({{number}})` returns the inverse hyperbolic tangent of *number*.

Logarithm functions

- `LN({{number}})` returns the natural logarithm of *number*.

- `LOG({{number}}, {{base}})` returns the logarithm of *number* to the *base*. If the parameter *base* is not given, the standard value will be 10.

- `LOG10({{number}})` returns the logarithm of *number* to the base 10.

Random numbers

- `RAND()` returns a random decimal number between 0 and 1.

- `RANDBETWEEN({{num1}},{{num2}})` returns a random integer between *num1* and *num2*.

Finance formulas

In the finance formulas, some variables will be used regularly.

Vari-able	Meaning
`nper`	describes the number of periods
`npery`	describes the number of periods per year
`PV`	describes the present / current value of an investment
`FV`	describes the future value of an investment
`type`	describes, whether a payment is due at the end of the payment (*type = 0*) or at the beginning of the payment (*type = 1*)
`per`	describes the period you want to inspect. The value can only be between *1* and `{{nper}}`
`pmt`	describes the payment made each period

Other variables will be explained with the formula.

- `ACCRINT({{issue}}, {{first_interest}}, {{settlement}}, {{rate}}, {{par}}, {{frequency}}, {{[basis]}}, {{[calc_method]}})` returns the accrued interest for a security that pays periodic interest. *Issue* is the security's issue date. *Settlement* is the date after the issue date when the security is traded to the buyer. *Frequency* describes the number of payments in a year.

- `CUMPINT({{rate}}, {{nper}}, {{pv}}, {{start_period}}, {{end_period}}, {{type}})` returns the cumulative interest paid on a loan between *start_period* and *end_period*.

- `CUMPRINC({{rate}}, {{nper}}, {{pv}}, {{start_period}}, {{end_period}}, {{type}})` returns the cumulative principal paid on a loan between two dates.

- `DB({{cost}}, {{salvage}}, {{life}}, {{period}}, {{[month]}})` returns the depreciation of an asset using the fixed-declining balance method. *cost* describes the initial cost of the asset. *Period* describes the periode for which you want to calculate the depreciation. It must have the same unit as the variable *Life*.

- `DDB({{cost}}, {{salvage}}, {{life}}, {{period}}, {{[factor]}})` returns the depreciation using the double-declining balance method. The needed variables are the same as in the formula `DB`.

- `DOLLARDE({{fractional_Dollar}}, {{fraction}})` converts a number expressed as an integer part and a fraction part into a decimal number, e.g `DOLLARDE(1.02,16)` returns the value *1,125* (1 + 2/16).

- `DOLLARFR({{decimal_Dollar}}, {{fraction}})` converts a decimal number into a number that has an integer and a fraction part, e.g. `DOLLARFR(1.125,16)` returns *1,02*.

- `EFFECT({{nominal_rate}}, {{npery}})` returns the effective annual interest rate.

- `FV({{rate}}, {{nper}}, {{pmt}}, {{[pv]}}, {{[type]}})` returns the future value of an investment.

- `FVSCHEDULE({{Principal}}, {{Schedule}})` returns the future value of an investment, where interest rates are not constant. The variable *Schedule* must be given in list form.

- `IPMT({{rate}}, {{per}}, {{nper}}, {{pv}}, {{[fv]}}, {{[type]}})` returns the interest payment for a given period.

- `IRR([{{value1}}, {{value2}}, ...], {{guess}})` returns the internal rate of return of an investment. *guess* is used to determine at which return rate the algorithm starts to calculate. The closer *guess* is to the real rate, the preciser is the value calculated by the formula. Normally, *0.1 (10%)* is a good estimation for the IRR.

- `ISPMT({{rate}}, {{per}}, {{nper}}, {{pv}})` returns the interest over a specific time, with even interest rates and principal payments.

- `MIRR({{values}}, {{finance_rate}}, {{reinvest_rate}})` returns the modified internal rate of return for a series of periodic cash flows. *values* must be given in list form. *finance_rate* is the interest rate you pay on the money, *reinvest_rate* is the interest rate your receive from the cashflows as you reinvest them.

- `NOMINAL({{effect_rate}}, {{npery}})` returns the nominal annual interest rate.

- `NPER({{rate}}, {{pmt}}, {{pv}}, {{[fv]}}, {{[type]}})` returns the number of periods for an investment.

- `NPV({{rate}}, {{value1}}, {{value2}}, ...)` returns the net present value of an investment by using the discount rate *rate*. *value1*, *value2* … represent the corresponding cashflows.

- `PDURATION({{rate}}, {{presentValue}}, {{futureValue}})` returns the number of periods needed by an investment *presentValue* to reach *futureValue*. *rate* is the interest rate per period.

- `PMT({{rate}}, {{payments}}, {{presentValue}})` calculates the payment for a loan based on constant payments and a constant interest rate *rate*. *payments* denotes the number of payments. *presentValue* is the amount of the loan.

- `PPMT({{rate}}, {{per}}, {{nper}}, {{pv}}, {{[fv]}}, {{[type]}})` returns the payment on the principal for a given period.

- `PV({{rate}}, {{nper}}, {{pmt}}, {{[fv]}}, {{[type]}})` returns the present value of an investment.

- `RATE({{nper}}, {{pmt}}, {{pv}}, {{[fv]}}, {{[type]}}, {{[guess]}})` returns the interest rate per period of an annuity.

Conversion into different numeral systems

The formulas to convert numbers into different numeral systems are similar to each other: `XXX2YYY`. Here stands `XXX` for the original numeral system and `YYY` for the target numeral system. In the table below you can find the abbreviations and the usable numbers and characters of the different numeral systems. For example, `BIN2DEC({{number}})` will convert *number* from the binary system into the decimal system.

Numeral system	Abbreviation	Usable characters
Binary	BIN	0-1
Decimal	DEC	0-9
Hexadecimal	HEX	0-F
Octal	OCT	0-7

Additionally, there are two more general formulas which you can use to convert numbers into different numeral systems.

- `BASE({{number}}, {{base}})` converts a decimal *number* into a number of a numeral system with the *base*.

- `DECIMAL({{string}}, {{base}})` converts a number of a different numeral system with the base *base* into the decimal system.

Therefore, the formula `DECIMAL('101',2)` and the formula `BIN2DEC(101)` have the same output.

Statistic formulas

Basics

- `AVERAGE({{num1}}, {{num2}}, ...)` returns the arithmetic mean of all numeric parameters.

- `AVERAGEA({{num_1}}, {{num_2}}, ...)` returns the average of all variables. Logical values and texts are not ignored.

- `AVERAGEIF({{range}}, {{criteria}}, {{[average_range]}})` returns the average of the parameters that meet the given criterion. The parameter with the exception of the criterion must be given in form of a list.

- `AVERAGEIFS({{average_range}}, {{criteria_range1}}, {{criteria1}}, {{criteria_range2}}, {{criteria2}}, ...)` returns the average of the parameters that meet the given criteria. The parameter, with the exception of the criteria, must be given in form of lists.

- `MEDIAN({{num1}}, {{num2}}, ...)` returns the median of all numeric parameters.

- `COUNT({{num1}}, {{num2}}, ...)` returns the number of values.

- `COUNTIF({{range}}, {{criteria}})` returns the number of elements in a list, that meet a given criterion.

- `COUNTIFS({{criteria_range1}}, {{criteria1}}, {{criteria_range2}}, {{criteria2}}, ...)` returns the number of elements in a list, that meet the given criteria.

- `LARGE([{{num1}}, {{num2}}, ...],{{k}})` returns the *k*-th largest number. For example: `LARGE([2,3,5],2)` would return the second largest number *3*.

- `SMALL([{{num1}}, {{num2}}, ...],{{k}})` returns the *k*-th smallest number.

Examples for formulas

How do I calculate a leap year?

If you like to calculate whether a year is a leap year, you cannot use a predefined formula. But you can easily create your own formula to do that. First, you need a *number input field* in your form. In this case, the variable is called `year`. In BIC Process Execution you can enter the year you would like to check in the number field.

Now use the following formula:
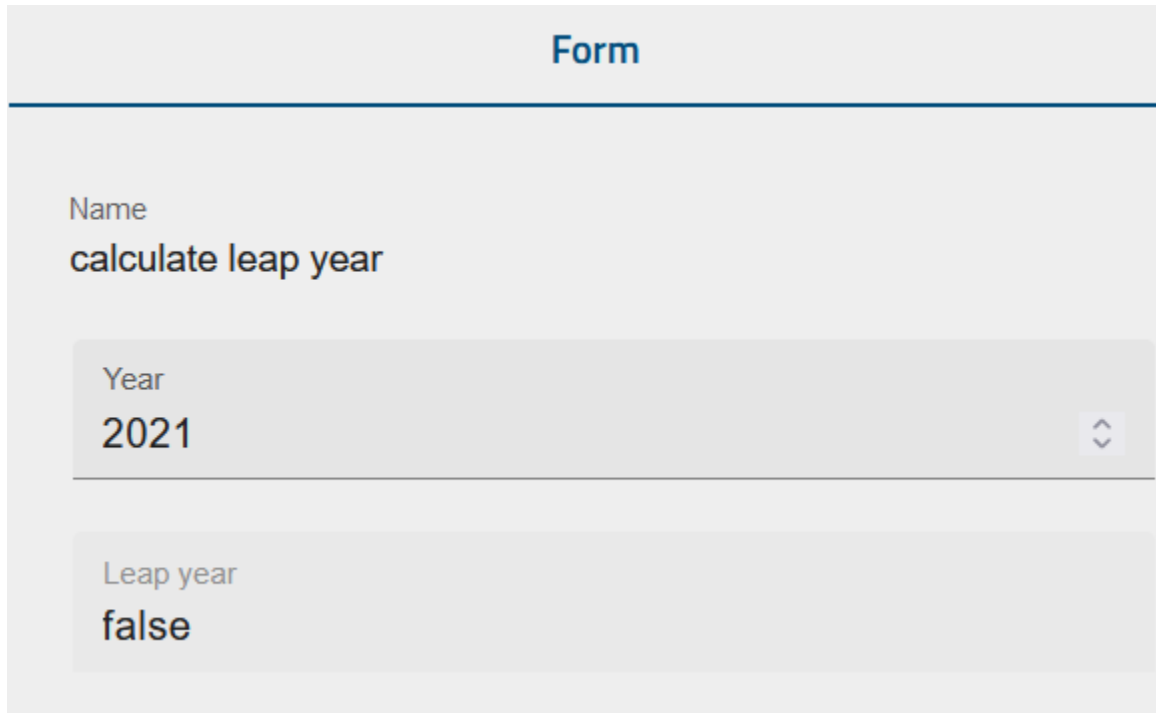
As you can see, the formula consists of multiple formulas nested in each other. First, you create with `DATE({{year}},02,29)` a valid variable in the *datetime* format. Depending on the year, the date will be March 1 (if the year is not a leap year) or February 29 (if the year is a leap year).

With using the formula `MONTH`, you will get the month of the corresponding date back as an integer. As already explained, the return value will be 2 (if the year is a leap year and therefore the month is February) or 3 (if the month is March).

Last but not least, we use the formula `EXACT` to check whether our result is 2 or not. If it is true and the year is a leap year, it will return *TRUE*, otherwise it will return *FALSE*.

In BIC Process Execution it will look like the following:

Form

Name
calculate leap year

Year
2021

Leap year
false

How do I calculate work days?

In the following we provide an example of how to use different formulas (e.g. how to calculate the number of work days between two dates).

In this example, you want to carry out a project and want to calculate how many work hours the company can offer in a given time.

This example is deliberately kept simple and does not reflect all relevant activities and aspects. It is just to give you an overview of what you can accomplish with formulas.

First you could use form fields to enter some key aspects of our project. Alternatively, you can get the data from other processes as well. This example considers only the start and end date of the project, the number of participating employees and their average working hours related to the project.

The start and end date fields are *date fields*. The fields to input the number of employees and their average work hours are *number fields*. The IDs of the corresponding form fields in this example are:

- start date: *start*
- end date: *end*
- number of employees: *people*
- number of working hours: *hours*

With these values, it is now possible to calculate the following variables.

The first formula calculates the number of workdays (the variable ID will be *workDays*) between the start and the end date. *Here* you can find the details of the formula `NETWORKDAYS`.

Secondly the calculation of available work power per day happens (variable: *workPower*). To do this, we simply multiply the number of employees times their average work hours per day.

Finally, the total project capacity is calculated, for this purpose the number of working days is multiplied by the

manpower available per day.

If you now open your process in BIC Process Execution, it will look like the following. The three calculated values will refresh automatically as soon as you input new values.

Create dynamic forms

With formulas you can also create dynamic forms i.e. the attributes of form fields can be manipulated by user input. In the following example a process to sell car insurance is used. Our form in the form editor looks like the following:

The name of a legal guardian or parent will only be needed if the person to be insured is younger than 21. For this we use the attribute *Hidden* and choose the option *Conditionally*. Here we can enter a condition or formula under which circumstances the field should be hidden. In this example, it will be the case if the variable *age* is bigger or equal to 21. If the person is younger than 21, the field will be mandatory.

Another option to make your form dynamically is by using the attribute *read-only*. In the following you see a form field of the type *boolean*, which is used to indicate whether the insurance includes fully comprehensive or not. As you can see, the field is read-only (And therefore not changeable) if the person is younger than 25 i.e. you can only choose fully comprehensive cover if the person to be insured is older than 25.

In BIC Process Execution it is possible to start this case and see the form. In the following you can see that the field *comprehensive cover* is not changeable because the person is younger than 25. But due to the fact that the person is older than 21, you cannot insert the name of a parent or legal guardian.

20.3 Tasks

BIC Process Execution offers you a variety of functions that you can use to manage the tasks, which result from your processes. When using these functions, the following questions may arise.

20.3.1 Where do I see my tasks?

Switch to the *Tasks* section via the menu.
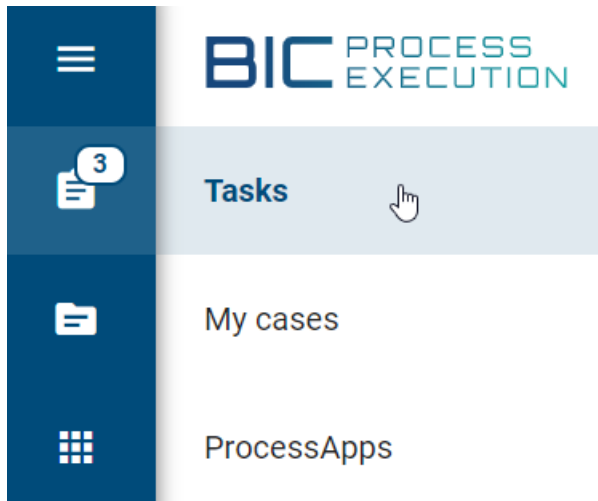
On the right side of the menu entry you can already see how many of your tasks are still open. As soon as you select the menu entry you will be directed to the area *My tasks*.
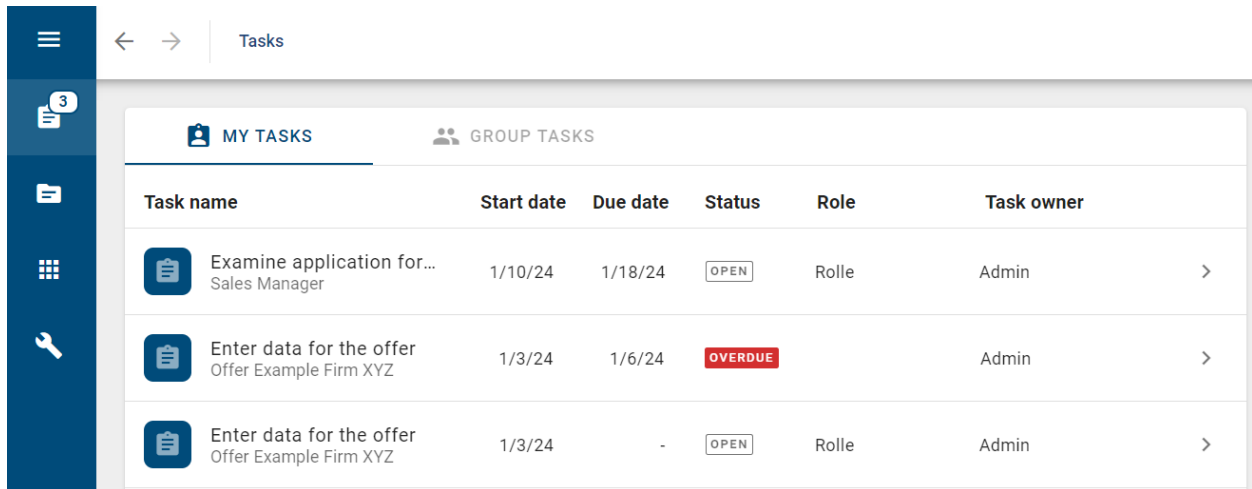
In the main area you will see all tasks, which have been assigned to you. Under the name of each task you can see the name of the corresponding case. The second line of each entry shows the *start date* of the case, the state and the *due date of the task* if the latter has been defined in *BIC Process Design*. If the state of a task changes, the entry will be updated. An explanation of the different states can be found at the next question.

You can filter your task list by ProcessApps on the right side of the main area. If you select the facet *ProcessApps*, the filtering options will be displayed. As soon as you select an application, only the respective tasks are shown in the task list.

Additionally, you can filter your tasks on the right side of the main area using predefined date range options. If you select the facet *Due Date*, the different date range options will be displayed. Once you select a predefined date range, your task list will be updated. You will only see the tasks that are due within the chosen time frame.

The chip of a task is based on the *icon of the underlying ProcessApp*. You can directly navigate to the *case list of the ProcessApp* by a click on the chip.

Create invoice Example Inc. 3	10/27/22	-	OPEN	Employee - Account…	John Doe	>
Navigate to cases list of Invoicing Create invoice Example Inc. 2	10/27/22	-	OPEN	Employee - Account…	John Doe	>
Create invoice Example Inc. 3	10/27/22	-	OPEN	Employee - Account…	John Doe	>

A click on the list entry itself leads you to a *popup window of the task*. Alternatively, you can select *Navigate to case flow* to see the full case flow view.

Create invoice Example Inc. 6	10/27/22	-	OPEN	Employee - Account…	John Doe	>
Create invoice Example Inc. 5	10/27/22	-	OPEN	Employee - Account…	John Doe	Navigate to case flow >

Your personal task list contains all *started tasks*, which have been assigned to you during a *case creation process*. In addition this list also contains tasks that have been *delegated to you* or *group tasks which you have claimed*. If you created a case and did not specify a responsible for a role, the corresponding tasks will appear in your task list (one by one) as soon as they are started. Moreover, if you created a case which includes a task without a responsible role, this task will be delegated to you as soon as it is started. This also applies to failed *script tasks*.

Personal tasks are part of your list until they have been *completed*.

Your task list may contain *tasks which demand manual decisions*. Such tasks are created by the system if a gateway has not been *modeled with an automation*. Decision tasks are assigned to the case owner.

Note: If you are working on your task list and the state of a task has been changed, it will be displayed in your task list automatically.

20.3.2 How can I sort the task list?

When you view a list of tasks, you have the option to sort the tasks by a specific column. To do this, click on the heading of a column.

MY TASK	GROUP TASKS					
Task name ↑		Start date	Due date	Status	Role	Task owner

If no sorting was applied before, the tasks will be sorted in ascending order based on the selected column. At the same time, you are scrolled to the top of the task list.

If you have already sorted by a column and the tasks are displayed in ascending order, you can change the sorting direction by clicking on the same column heading again. This will reverse the sorting, and you will be taken back to the top of the task list.

Hint: Please note that when entering the task list, tasks are sorted by default according to their creation date in ascending order. This serves as the starting point if no specific column sorting has been selected.

Note: Sorting is done for one column at a time.

20.3.3 How can I perform a full-text search for task names in my task list of a ProcessApp?

In the task list of a ProcessApp, while the filter panel is open, an input field is available at the top right to perform a full-text search in the *Enter term to filter task list name* field.

If you perform a full-text search for the *Task name* field, the list of tasks will be updated and you will see all the results of this search. If there are no search results, you will receive a notification that there are no results in the content area for your search. In the full-text search, you also have the option of using both 'a *AND* b' and 'a *OR* b' to display all results that contain either 'a' *and/or* 'b'.

Note: If you have applied a filter, the search will take into account the search term and all selected filter options.

Note: If you reset the search, you will again receive results that correspond to the previously selected filter options.

20.3.4 What is the state of my task?

In your *personal task list*, each task has the entry *State*. This state gives you one of the following information:

Task name	Start date	Due date	Status	Role	Task owner	
Create invoice Example Inc. 2	10/27/22	-	OPEN	Employee - Account…	John Doe	>
Create Invoice Example Inc. 1	10/27/22	-	OPEN	Employee Accounti…	John Doe	>
Create Invoice Example Inc. 5	10/27/22	-	OPEN	Employee Accounti…	John Doe	>
Create Invoice Example Inc. 6	10/31/22	-	DONE	Employee Accounti…	John Doe	>
Create Invoice Example Inc. 7	10/26/22	-	OPEN	Employee Accounti…	John Doe	>
Create Invoice Example Inc. 8	10/26/22	10/25/22	OVERDUE	Employee Accounti…	John Doe	>
Create Invoice Example Inc. 9	10/25/22	10/24/22	OVERDUE	Employee Accounti…	John Doe	⊘ >

- *Open*: This task has been started and you have to work on it or *delegate* it to another user.

- *In progess*: This task has been started and you have started to work on its form fields. But the task has not been completed yet.

- *Done*: If the task has been completed by you or another user, the task name is displayed crossed out. The completed task will disappear from the list as soon as you leave the personal task area.

- *Overdue*: The task has an exceeded *due date*. The urgency is emphasized in red color.

If you are currently in *your personal task area* and the state of a task changes, this change is automatically displayed to you. This means you will always have a good overview on which tasks you have to work on.

In case that an error occurs at your task, the entry will be marked by a red error mark on the right side. Next to this *error* icon, you can navigate to the corresponding case where you receive further information about the error (if available).
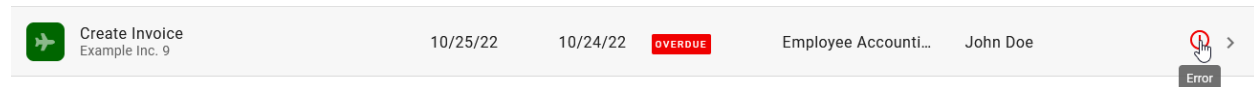
However, if a new task is started for you or if an existing task is delegated to you, you will see that task at the top of the task list.

Hint: If you are in the popup window of your task and someone else completes the task, the *Complete* Button will be disabled and you will receive a tooltip about the completion of the task.

20.3.5 When is my task due?

The due date of a task is shown in the task list. If the date has been exceeded, the state becomes *overdue*.
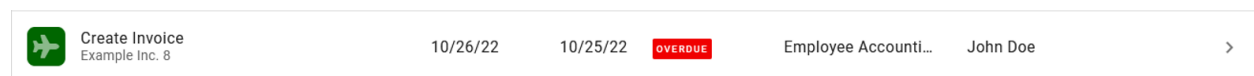
Moreover, you can see the due date in the case flow view.
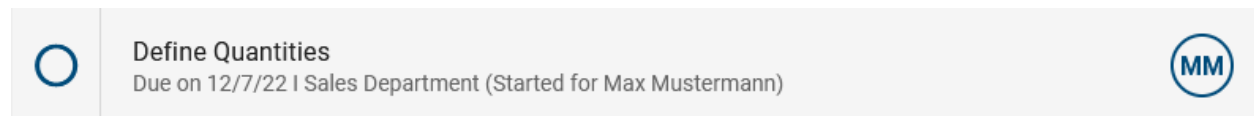
If your task is overdue the due date will be shown in red.
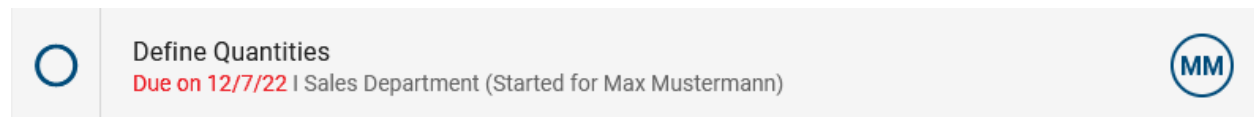
Note: If you want your tasks to have a due date, you have to model it in BIC Process Design first. An explanation of how to do this can be found *here*.

20.3.6 How am I notified about my tasks?

BIC Process Execution informs you about currently upcoming tasks by e-mail. The notification rhythm described in the following includes *your personal tasks* as well as open *group tasks* if you are a member of the group and no member *has claimed the respective task* yet.

You receive an e-mail at the start of the week which informs you about tasks that are *Overdue*, *Due today*, *Upcoming* and *New tasks*. *Upcoming* hereby indicates the *tasks that are due* within the current week. There is also a link to BIC Process Execution in the e-mail, which takes you directly to the corresponding tasks.

Furthermore, you receive an e-mail on the other workdays, which informs you about tasks that are *Overdue*, *Due today* or *New tasks*. Tasks, which are longer overdue than others will be presented at the top of the list.

At the weekend you will not receive any task reminder e-mails. But the e-mail on friday also lists all tasks that are due on the weekend or monday.

If you receive a reminder email regarding the due date or a new task on Monday, no information about Friday and Saturday is received in the default configuration.

Hint: In order to receive daily reminders also on weekends, an update of the default configuration is required. This means that on Saturday and Sunday the reminders of the previous days (Friday and Saturday respectively) can be received.

If a new task is assigned to you that is already overdue or due in the next 24 hours, you will be notified by e-mail instantly.

20.3.7 Where can I find my group tasks?

Navigate to the area *Tasks* via the menu. You will get access to all your group tasks over the register card *My groups*.

This area lists all started tasks, which have been assigned to user groups you are part of. Under the name of each task you can see the name of the corresponding case, when it was created and the due date of the task. The due date is empty if the corresponding attribute has not been maintained in BIC Process Design. In case there is a chip with initials on the right side of the entry, the task *has already been claimed* by a user.

Once one of these tasks has been completed successfully by one of the users, it will disappear from the personal task area of all users involved.

20.3.8 How can I claim a group task?

If you want to claim a group task first navigate to the *group tasks* list or to the relevant case. Both views give the information whether the task has already been claimed. If some group member claimed the task, this user is assigned as the responsible in the task form in the case flow view. The corresponding entry in the group task list also shows the initials of this user.

Tasks which can be claimed have a context menu on the right side of the entry instead.

With a click on the context menu you can select the option *Claim task*. As soon as you have claimed a task your initials will be displayed at the entry and the context menu disappears. From that point on you will find this task also in your *personal list of tasks*.

If your group task has not been claimed yet, you will also find the button *Claim task* in the tasks' form when you view the process flow of the corresponding case. By clicking this button, you can directly claim the task in the case.

If you complete the group task and another task for this group is started in the same case, this task is assigned to you automatically. You do not have claim it manually. Note that this is only the case for tasks arising from the same role. Consider the following example: In a case, the group "Team Development" is responsible for the roles "Software developer" and "Software tester". As a member of this group, you have claimed and completed the first group task which was defined for the role "Software developer". If another group task of the case is started and this role is responsible for it, this task is assigned to you automatically. But if a task with the responsibility "Software tester" is started in the case, this task has to be claimed by a group member - unless a user has completed a previous task as software tester and thus will be assigned here as well.

Note: If you claim a group task, delegate it to a user afterwards and the user completes the task, the next task of this group in the case will be assigned to this user.

20.3.9 How do I start a task?

In BIC Process Execution tasks are usually started automatically as soon as the corresponding step in the process flow has been reached. This means if a task is in the first place within the process flow, it is automatically started as soon as *the case was created*.

All subsequent tasks are automatically started as soon as the direct predecessor task in the sequence has been *completed*.

This way, several tasks can also be started automatically at the same time. For example, by using parallel gateway. If the task that is located in front of this gateway is completed, all directly following tasks are started at the same time.

Depending on the definition of your process, it might occur that the first task of a process has to be started manually because the user can decide the first task. However, it should be noted that this can only be done if the *Allow users to start tasks manually* checkbox is selected. As a ProcessApp Administrator, you have the ability to manually start any task. Tasks are shown and can be started in the process execution view of a case as soon as the first task of their segment is started, i.e., when the segment is *active*.

To start a task manually, navigate to a task in the process execution view for which you or another user has role responsibility. You can recognize this by the user name, which is displayed below the task in small letters. When selecting the entry of the task and given that the segment of the task is active, you can see the option *Start task manually* within the *form* of the task.

Tip: If you are a ProcessApp Administrator you can start every task manually.

Hint: Additionally, there is an option to either use a *link* or share it to access the form for starting a task.

In the case "A new offer", you cannot start the task "Verify order" manually until the case has proceeded up to the corresponding segment:

The task will be started manually as soon as this function has been activated. After the manual start the chip with the user's initials is filled.

Define Quantities
Sales Department (Started for Max Mustermann)

(MM)

Quantity picking
Sales Department (Started for Max Mustermann)

(MM)

Prepare shipping
Sales Department

Now all users can directly see here, that this task is started in this case. The task also appears in the *tasks of the responsible person*, who can now work on it.

Hint: If a group is assigned to a role and the first task of this role is started, the group task has to be claimed by a group member. Subsequent tasks of this role will be assigned to this member automatically (as soon as they are started). Further information about this rule can be found *here*.

Note: A segment of the process flow is defined by the corresponding diagram and consists of a sequence of activities (the tasks) between gateways and events.

20.3.10 How do I complete a task?

In general, a task can be completed after it has been started *and* assigned to a user. You can see your own started tasks *in "Tasks"*. In BIC Process Execution tasks are completed via *the task's form*. The form gives more information and links to applications that are relevant for your task. Moreover, you might have the possibility to *up- or download files* or enter other data at a *user task*. There are two ways to find the form of a task. The popup window allows you to complete single tasks faster because you do not need to open the corresponding case flow view of each task.

In a popup window:

Navigate to your *tasks* where you can find your own tasks that have already been started. If you select a task, it will be opened in a popup window and you can see the form of the task. At the end of the form, you can find a comment field where you can enter a note before completing the task via the *complete* button. The popup window closes automatically.

Hint: The possibility to complete a call activity is only available to the user who has the role of the ProcessApp Administrator. If you are the owner of a task but do not have the ProcessApp Administrator role, you cannot complete the task manually.

In a case flow:

Alternatively, you have the possibility to open the case flow view. To do that, select the button *Navigate to case flow*. The affected task is highlighted in the case flow by a filled chip showing your initials. If you are using the mobile view of BIC Process Execution, the form will be opened when you select the task. In the desktop view you will find the form in the right side bar.

In the form of your task, you can find a comment field where you can enter a *comment* before completing the task via the *Complete* button.

After completing the task, the check mark is displayed in the chip of the task and the task text turns grey, which is

directly visible to all users at this point. In the form, the possibly submitted comment can be viewed. The task is not listed in your tasks anymore. This cannot be undone.

If a task has been started but no user has been assigned, it cannot be completed. The hint *No user assigned* will be shown in the *Responsible* section of the form. In this case, ProcessApp Administrators can *delegate* the task to a user (group). Then, this user (group) can complete the task as described above.

When a task has been completed, the next task in the sequence is automatically started and thus appears in the task list of the responsible user. This will be done, if the next task is clear successor or the following activity. If the following task is already done, the next task in the sequence is started.

If the last task of a case has been completed, the case will be *finished*.

Hint: Please note the difference between a role being responsible for a task and an explicit user being assigned to the task. A user can be assigned to a role during the *case creation* or *subsequently in the case details*. Then, the user is automatically assigned to a task of the role when it is started. If the responsible role of a task cannot be assigned to a user during its start, it cannot be completed.

Tip: As a ProcessApp Administrator, you can complete every task by *delegating* it to yourself and then completing it as described above.

Note: A started task without an assigned user can occur in cases started by the system. These cases have no owner who would be responsible if no other role responsibility has been defined.

Warning: Please note that only users with the *ProcessApp User* role can work on tasks. If a task is assigned to you and you do not have the *ProcessApp User* role, you will not be able to perform any actions with this task. You will receive a notification with details to understand that the required role is missing. Assuming you do not have the *ProcessApp User* role. When you open *BIC Process Execution* and have been assigned tasks, you can view them on the *list of your tasks*. A notification is displayed on the task forms indicating that the required role is missing. If you have not been assigned any tasks, you will not be able to access the *Task list* menu item.

20.3.11 How can I make a manual decision for a gateway?

If a gateway has not been *modeled with an automation*, the case owner receives a task to decide which path will be executed.

As a case owner, you can find the manual decision task in your task list as soon as the previous task has been completed. Select this task to open its pop-up window. Based on the options shown in the window, you can see whether your decision is an *Exclusive Or* or an *Inclusive Or* gateway. Gateways of the type *Exclusive Or* only allow the selection of one decision option.

Did customer accept the offer?

Name
Did customer accept the offer?

Did customer accept the offer? *

⦿ Offer not accepted

◯ Offer accepted

RESPONSIBLE

👤 Jane Doe ➡

COMMENT

JD Your comment

CANCEL **COMPLETE**

On the other hand, *Inclusive Or* gateways have checkboxes for the decision-making options, which allow multiple selections.

Mark (depending on the gateway type) one or more desired options and confirm your selection using the *complete* button.

> **Warning:** If an activity is modeled with one or more outgoing sequence flows **without** a gateway, the decision must be automated via expressions. Otherwise, undesired behavior may occur. Please find an example *here*.

20.3.12 How can I delegate a task?

If a task is assigned to you and has already been started, you can delegate this task to another user. As a ProcessApp Administrator, you can delegate all started tasks, i.e. tasks owned by you or other users. The delegation option will also be displayed to ProcessApp Administrators if a task has been started but not yet assigned to a user. A delegation only affects the respective task. All other tasks keep the assignment that was defined when the case was created.

In your *tasks list*, navigate to the pending task you want to delegate. If you click on that task, the form of that task will open as a popup window. Within the form you will find the section *Responsible*. Next to your user name, you can select the function *Delegate task* on the right side.
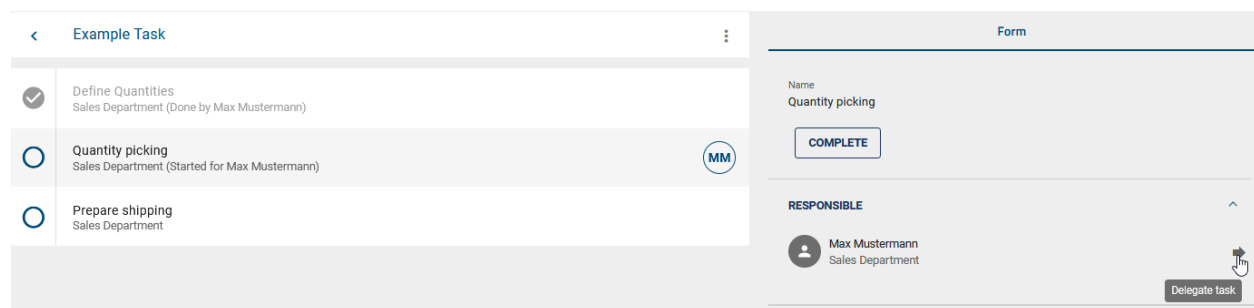
Alternatively, you can find this function in the form of the started task in the case flow view. ProcessApp Administrators can delegate the tasks of other users this way.

If you use this function, a window appears where you can then search for a user (group) using the input field. You can then select a search result from the suggestion list.

Your selection is then displayed as a chip. If you have inadvertently not made the desired selection, you can remove the chip via the *x* or select and delete it on the desktop with the backspace key. In general, you can choose between all users and user groups for delegation. If you want to *Cancel* the delegation, select the corresponding option.

Otherwise, click on *Delegate* to complete the delegation. The window will close and you will no longer find the task in your tasks list. In the process flow of the concerning case, the initials of the newly assigned user (group) are displayed now. In addition, the task appears in the tasks list of the affected users.

20.3.13 Where can I see comments of completed tasks?

When *completing a task*, the users can set additional comments. These comments can then be seen by all users. To see a comment, first navigate to the tasks of a running case. On the right side of the entry you will find a *Show comments* icon.

A click on this button will open the comment window. Next to the comment itself, this window displays the author of the comment and the comment timestamp. The comment is available here in read mode and can therefore not be edited.
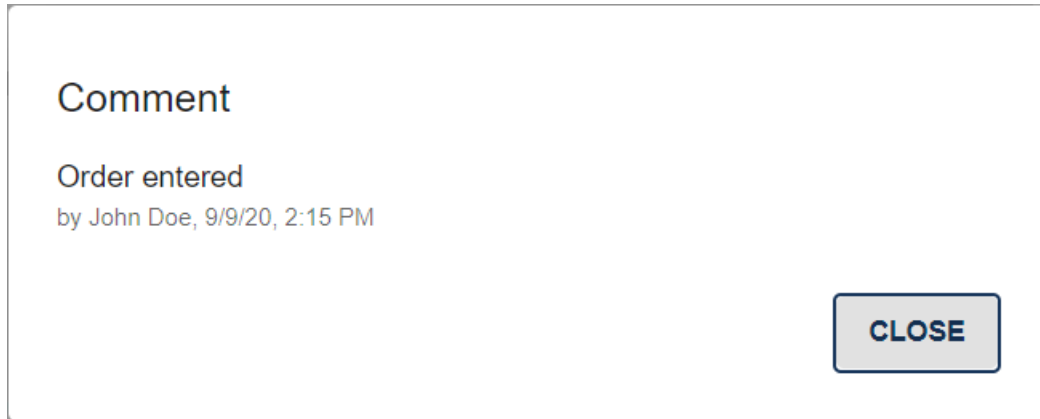
Click on *Close* to return to the original view.

20.3.14 How can I be informed if one of my tasks has been started independently of me?

You have the option of being informed in BIC Process Execution every time one of your tasks has been started independently of you. That means that if one of your tasks was started automatically or by another user, you will receive a push notification.

If you then select this, you will navigate directly to the relevant case and the corresponding task will be highlighted with a short visual animation. In order to be able to use this function you must first configure some settings on your device. Since these settings differ depending on whether you are using a mobile device or the desktop version, both types are discussed separately below.

Desktop version:

If you are using the desktop version, you have to allow push notifications in your browser when using the BIC Process Execution Application. Depending on which browser you are using, you will find this setting on a different place in your browser. The documentation on how to find this setting has been linked below for the three most common browsers.

- Google Chrome
- Mozilla Firefox
- Microsoft Edge (Privacy -> Change website permissions)

Mobile version:

If you have a mobile device and you are using the application via the browser of your device, you also need to allow notifications to be displayed. Please refer to the help of your respective application/browser to find out how you can activate the notifications.

In case you have *BIC Process Execution installed* on your mobile device, you will receive notifications about your started tasks even if your application has not been opened. In that case it can be that your application must first be granted authorisation to send notifications. The documentation on how to find this setting has been linked below for the two most common operating systems.

- Android

- IOS

Hint: If you use a desktop computer and the PWA has been installed, you will only receive the messages when the application is open.

Note: If a new task is started for you that is *overdue or due* within the next 24 hours, you will also be informed via *e-mail*.

20.3.15 How do I identify signature tasks in my task list?

If you check your task list and a task is configured as a signature task, you can recognize this directly in the task list. This can be identified by a tooltip that appears as soon as you move the mouse over the task icon.
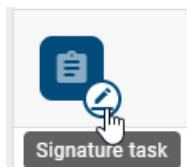
20.3.16 How do I work with a signature task?

There are tasks that are marked as *signature tasks*. To successfully complete these tasks, you need to authenticate yourself. To authenticate yourself you need to login again. After a successful login you will be redirected back to your task.

As long as the authentication was not successful, the task can not be marked as finished. If you are assigned to more than one signature task, you need to authenticate yourself for each one individually.

Note: If you work with a signature task while being in the *popup window* the popup will automatically close after you have authenticated yourself.

20.3.17 How can I send the e-mail of a send task?

Tasks typed as *Send* can be linked to sending an e-mail in BIC Process Execution. *This section explains how to create a template* for these tasks.

If a send task has been assigned to you, navigate to the *process flow of the case* by a click on the task. The form of the corresponding step contains an e-mail preview provided by the created template. If you have specified a user group as the recipient, it is displayed as the recipient.
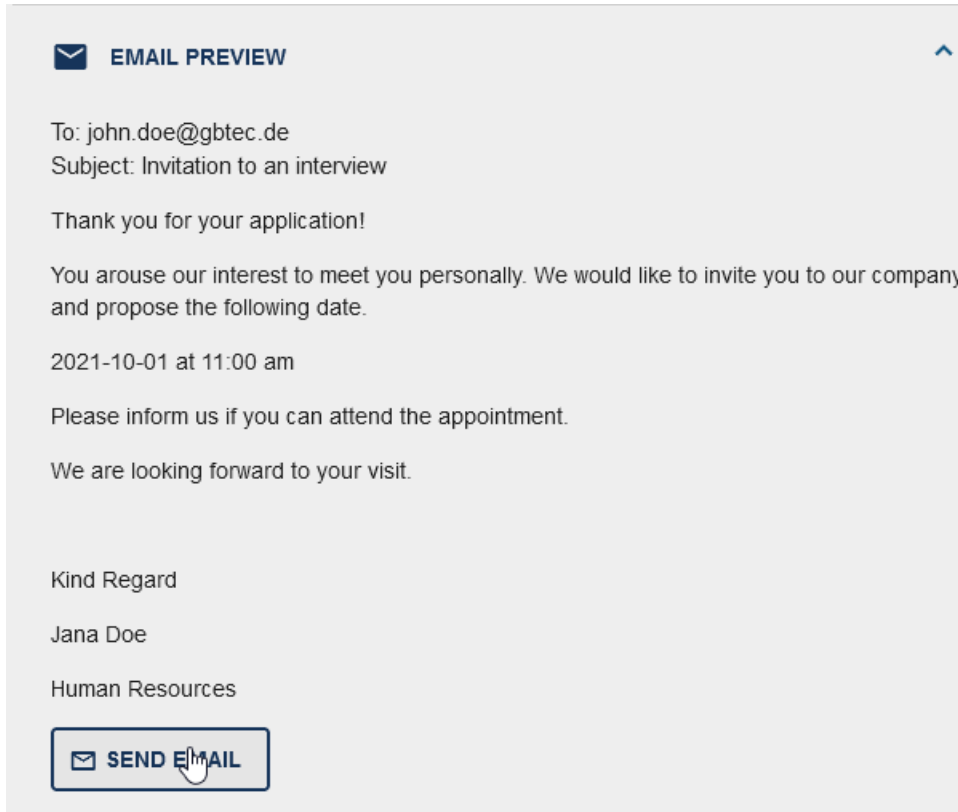
If process variables have been included to the template, they are replaced by the actual values defined in the case. The form can show a section *Input*. You can *upload a file* there which will be attached to the e-mail automatically.

Click *Send Email* to open a new e-mail in your e-mail client which equals to the preview. You can (if necessary) edit the e-mail and send it there. Afterwards, you can finish your task by clicking *complete* in the form.
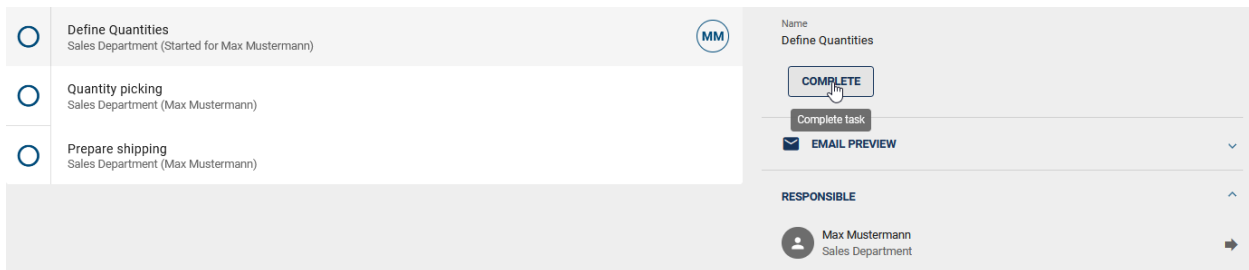
Note: If the option *Send mail automatically* is activated, the task will start automatically. The e-mail will be sent and the task will be set to done. If an error occurs during automatic sending you will receive an error notification in the process overview. Here you have the option to send the mail manually.

Note: If an automatic send task is defined in the development or test environment of a process, only the creator of the case receives an automatic e-mail when it is executed. However, the configured recipients are displayed in the e-mail preview. When the case is executed in a production environment, all configured recipients receive the automatically sent e-mail.

Hint: If you send an e-mail *manually* as explained above, you should check the formatting in your e-mail client.

The preview in BIC Process Execution shows the e-mail formatted according to the definition in the editor but some settings can be lost when it is converted to the text in your client. Indentations and tables will be lost and bullet lists will be marked with the character "*" instead. E-mails that are sent *automatically* do not lose their formatting. They are formatted according to the html definition in the *template editor*.

20.3.18 How can I execute a script task?

Script tasks are executed by the system. If an error occurs thereby, the task will be marked by a red chip containing an exclamation mark. In this case, the tasks is assigned to the responsible role and appears in the task list of the corresponding user. If the role has not been modeled or set, the task is assigned to the case owner.
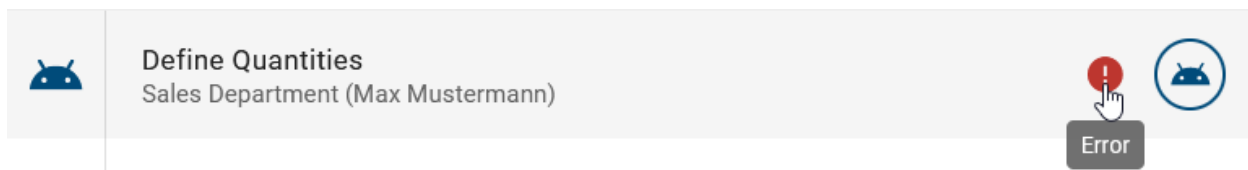
You can click the error mark to open a dialog showing the error message of the system. In the bottom of the dialog, you can *close* it.
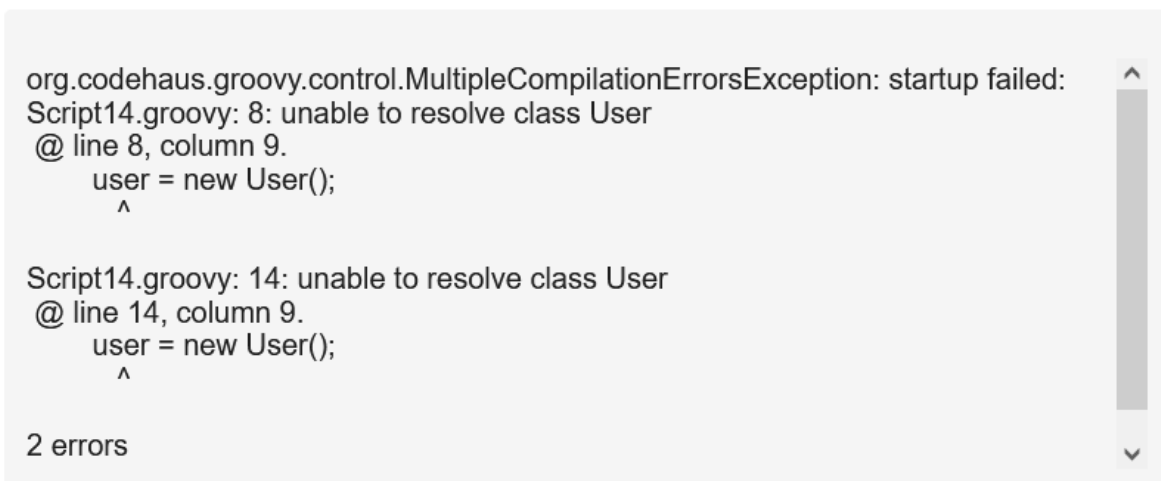
Failed script tasks can be restarted or completed manually. To restart a task, select the button *Retry* in the error dialog or next to the script task in the case view.
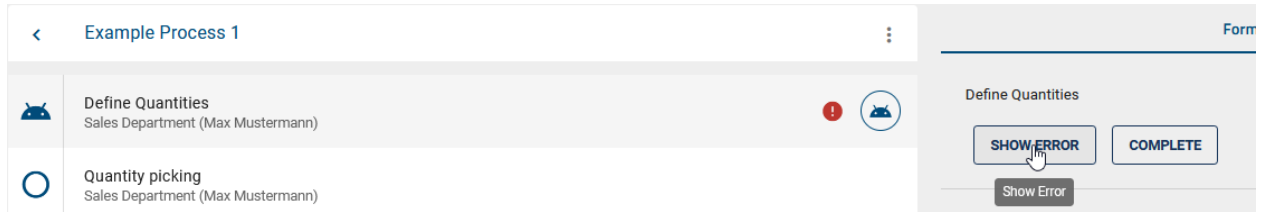
Alternatively, *complete* the task manually via a click on the equivalent button.

20.3.19 How do I work with the task of a call activity?

If the task of a call activity in a case is started, a new case of the called process will be created automatically. The responsible of the task will be the owner of the case. In case that a group is responsible for the task, the case will be owned by the case owner of the main case instead. The case is named after the call activity plus "- *name of the main case*".

If the call activity is *synchronous*, the main case is blocked as long as you are working on the called sub case. You can only continue working on the main case once the called sub case has been successfully completed.

If the call activity is *asynchronous*, the main case will not be blocked. Therefore, you can work on both processes independently and parallel. The call activity will instantly be marked as *complete*.

The *process variables* of the main case are copied to the sub case and *can be edited* there. If The roles of the main case are present in the sub case as well, they are inherited from the main case. New roles will be assigned to the *default user (group)* if the attribute has been maintained or can be *set in the details* of the sub case.

If the call activity was synchronous and the sub case is completed, the process variables are handed over to the main case. If they have been changed, the process variables of the main case are up-to-date again. Variables that have been defined in the sub case exclusively will not be copied to the main case. Moreover the sub case is *automatically archived* after its completion.

If the call activity was asynchronous the process variables will not be handed back to the main case.

Note: As a ProcessApp Administrator or case owner you can complete the sub case manually as well. In this case you will get a warning which tells you about an ongoing call activity task.

20.3.20 How do I work with a parallel multi-instance activity?

When you mark an activity as a parallel multi-instance activity, you can define a process variable that serves as input. In doing so, you also define a name for the variable that holds the data of each array element for that task.

Once the multi-instance activity is reached within a case, a task is created in BIC Process Execution for each element in the input array. The data of each element is accessible under the defined variable name. Additionally, there is a smart variable (_loopCounter) that stores the index of its own task. After completing all tasks, the next step in the process is activated. In the event that the input array is empty or contains no elements, the multi-instance activity will be immediately completed.

Hint: Please note that DMN tasks are currently not supported.

20.3.21 How will my REST calls be executed?

If you have defined REST calls and the corresponding diagram has been published in your BIC Process Design, they can be executed automatically in BIC Process Execution. This means that tasks, which execute REST calls do not have to be started manually, but are started automatically as soon as the previous task has been completed or if they are the first tasks in line.

You can identify tasks which are executed automatically at their labels *Automated task* below the corresponding entry and the robot icon within the task chip.
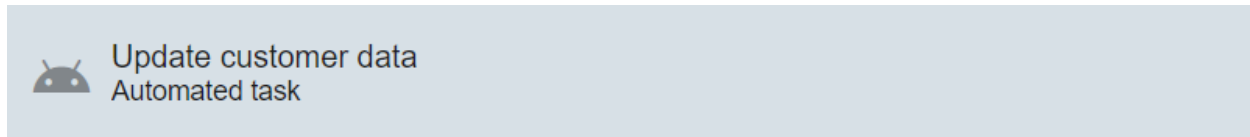
The REST call will be executed as soon as the task has been started. If the status code of the REST call matches the status code, which has been defined in your BIC Process Design for this task, the task will be marked as done analogous to *the manual execution*. The data, which is resulting from that REST call, will be stored in *process variables within the corresponding case*. They can then be used for further processing, for example in *other REST calls*.

If the transmitted status code does not match the expected status code, the task will be marked as incorrect. This will be indicated by a red chip with an exclamation mark on the right side of the entry.
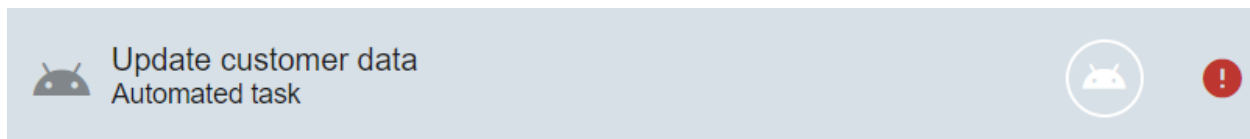
Tasks which have been executed incorrectly can be restarted at anytime. So with that you can run your REST call at any time later. To manually start an incorrectly executed task click on the red *Error* chip of the relevant entry in the case overview.

You will receive a message which will inform you about the failed attempt. Click on *Retry* to start the task again. You can also select this button in the form of the task.

The REST call will then be restarted.

If the automated *service* task is a task that has not been *configured*, it can also be completed manually by the responsible user (the linked role or the case owner) after the first failed attempt to execute it automatically. To do this use, as usual, the *Complete task* on the right side of the entry. For more information about how to complete tasks manually, see *here*.

20.4 Cases

20.4.1 How is the case's process flow view organized?

The process flow of a case corresponds to that of the *default case*. In contrast to the default case, you can use the process flow of one of your cases to design its specific sequence. Therefore, this is the central view if, for example, you are editing tasks, changing decisions or want to see the current state of the case.

To get to the process flow of a case, simply select the entry of the desired case in *the case list of the corresponding process*. If you are the case owner you will also find the case in your *personal case list*.

As soon as you have selected the entry, the process flow of that case appears in the main area of the application. Analogous to the default case, the process flow here consists of tasks, decisions and the start and end events. If multiple end events have been modeled, they will all be visible in the process flow view. The process flow of a running case shows the completed and next up process steps (tasks of the active segment). In addition, there might be more steps coming up and the end event might not be visible yet.

Depending on the *fully completed cases* of the active process, a forecast is generated upon subsequent runs. The forecast is based on the sequence of archived cases. The most frequently completed task among all possible subsequent tasks is identified, and the process flow of the active process is supplemented accordingly. If a different path is taken in the process that has not been completed by any other completed case of the same process version, or if the process is run for the first time, no forecast can be made. Additionally, forecasts are not applicable across different process versions.

If you select one of the elements you will get further information about this element and the possibility to edit or change it via the right sidebar. This bar is called the *form*. In the mobile view these options will appear as soon as you select one of those elements.

The case owner can choose a desired start if there are several start events in the corresponding process modeling. The selection can be made via a single choice field in the form of the start event in BIC Process Execution. If you are the case owner, select the desired start and confirm by clicking the *complete* button.

The path of a case can be changed by decisions (so-called *gateways*). The gateways *Inclusive Or*, *Exclusive Or* and *Parallel* are taken from the process modeling in BIC Process Design and displayed as an entry in the process flow. You can recognize these entries by the diamond-shaped symbol with an arrow in the middle. Thus, the gateways divide the process flow into segments, which contain the decisions and resulting tasks. This means that you can always see at which point in the process flow a decision has to be made.

Note: Gateways of the *Parallel* type are only recognisable by the segmentation in the process flow, as no decision can be made there.

Ideally, decisions can be executed *automatically* at inclusive or exclusive gateways due to predefined expressions that determine the outcome. If the modeling does not support automated decisions, they have to be made manually. In this case, the case owner will receive a decision task as soon as the previous task has been completed. His decision will determine the further the path of the case after the gateway.

In BIC Process Execution, several users can work simultaneously on the same process flow. To ensure this parallel working, your case is updated automatically if a task has been changed by another user (e.g. *completed* or *delegated*). Thus, you can always keep track of the current state. When the *case is archived* while you view it, the application will show you the corresponding case in the archive.

Tip: We recommend to *automate decisions using expressions*. You may use process variables which are set (for example) in a *user task*. In the end, this configuration prevents that manual decisions are overlooked and further automates your process flow.

Depending on which decision is made at the gateways, the path of the process flow changes and can therefore lead to different results. The changed path is displayed automatically. If the path calculation is not immediately resolved, it is indicated with a loading indicator in the gateway step.

Note: When a process is executed and a *throwing event* occurs, a message with the associated event ID is sent. At the same time, the event is thrown with the corresponding identifier and the step is marked as completed.

Note: If a task, which is positioned after a decision in the process flow, has been started, then the decision can no longer be changed.

How is the default case structured?

The default case displays the standard process flow, which is the basis for *every case that is created for the respective process*.

To display a default case first navigate to *the process overview*. Open the menu of the desired ProcessApp and select the option *Navigate to default case*.
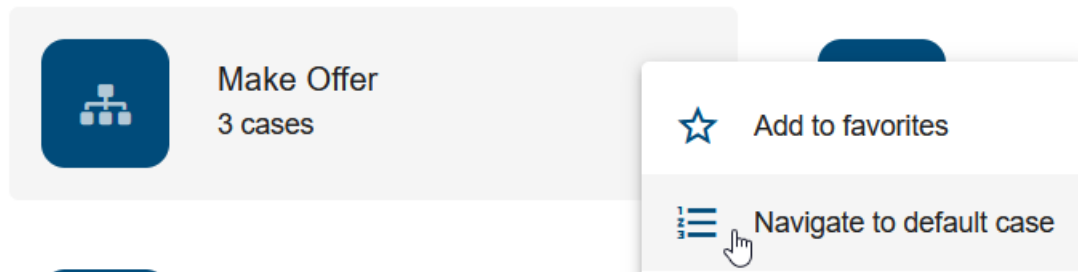
This view shows you the process flow from the first task of your process to its end event. Here you can navigate through the process, for example by making decisions and being shown the corresponding tasks of the process. The chronological sequence of process flow is shown from the top to the bottom.

Each process flow consists of tasks, gateways and the start and end events. You can distinguish these elements from each other by the chip symbol on the left side of the respective entry. End events are represented by a chip with a flag icon in it. You can recognize gateways by a diamond-shaped symbol with an arrow in the middle. In contrast, tasks are displayed with a number indicating when a task has to be done in the process.

Note: When a process is executed and a *throwing event* occurs, a message with the associated event ID is sent. At the same time, the event is thrown with the corresponding identifier and the step is marked as completed.

By selecting individual entries you will receive further information and options for the respective element via the right sidebar. For example, you can display the form of a task to see the role which is responsible for this task. Gateways and decisions can also be adapted so that alternative paths of the process can be displayed.

Since this is the default view, which is not based on a running case, no tasks are assigned to users here, nor can you start or complete tasks here. To do this, you first need to *create a case* for the process.

How can I define a correlation key for a throwing event?

In a process initiated by a throwing event, there is an option to access specific configurations through the *Details* menu of the editor. Here, you can set a JUEL expression as a Correlation key.
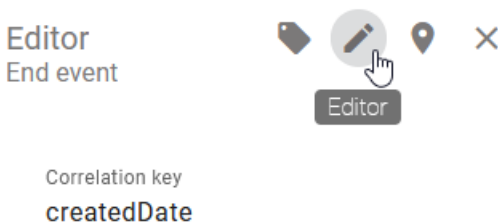
Once the predefined throwing event occurs, a message is automatically generated. This message includes a specified event ID and the previously defined correlation key. Simultaneously, upon the occurrence of the event, the associated process step is triggered and marked as completed.

Note: The defined correlation key is retrievable in the context of the process instance.

How do I automatically activate a task after receiving a message via an intermediate event in a case?

There is a possibility that the subsequent task will be automatically activated when an intermediate event intercepts a message in a case, especially when opening the Quick Editor. In this context, the event includes an attribute called *correlation key*.

If your process includes a catching intermediate event, and this event has an identifier reached in a case, the sequence is automatically paused at this event.

If an event that triggers a message is executed in any process, the message is received if the message event has the same identifier and the same correlation key. The entry is then marked as completed and the process flow is continued.

Additionally, you can initiate a signal event by sending an *HTTP POST request* to proceed with a waiting event. See *here* to see how the REST call should be configured.

What is a task's form and what is it used for?

In BIC Process Execution a form is generated for every task as soon as the corresponding case has been created. This serves as a source of information for a specific task, but also offers you many options to carry out the necessary steps to complete the corresponding task. The information is derived from the information that was provided in the corresponding diagram in BIC Process Design for the corresponding task. But be aware that this form cannot be compared to the profile that you know from BIC Process Design. The form offers you much more. For example, you can see the responsible users and the task's attributes, or you can access its inputs and outputs. To help you get a better picture of what the form is, the following explains a few of the options available and how you can access the form.

You can access the form of your own task in your task list as soon as the task has been started. Simply select the desired task there and the form will open as a pop-up window.

To be able to access the form of any task, you have to navigate first to the *process flow of the corresponding case*. There select the desired task. The form of the task now opens in the right sidebar. If you use the mobile view of the application, the form of the task is automatically displayed after selecting the task.

Here you will find among other things, the name of the task, the responsible user or the responsible roles, a description and other attributes of the task. The basis for this is the correspondingly modeled task with its properties in the respective diagram of BIC Process Design.

In addition to the information that you can get, it also provides you with some functions. So for example you can *download input documents or upload output documents for the task*.

You can also access document services and other web applications or websites by selecting individual *attachments*. Depending on the hyperlink, e.g. the download of a document is started automatically if it is a link to a document service. If a hyperlink is activated which contains an URL to a website, it will automatically be opened in a new browser window.

You can also make use of decision tables within the form. This provides you users with decision making aids, under which they can adequately work on their task.

Form

Name
Decision

Dispatch type

International

Weight (kg)

5

Shipment costs (€)
13.25

In addition to these functions and information you can also *make decisions* and (provided that you have the permission) *delegate tasks* within a task's form.

The majority of the form fields in the form of a task are obtained automatically from the information derived from your diagram in BIC Process Design. In addition, the form of a user task can be enhanced by further form fields using the *form editor*. The responsible of the task can fill these form fields when the case is executed.

How to share a link to the form for starting a task?

Users have the option to share a link to the *form* for starting a task, to easily create a new task in a process. This can be done by using the *Share* option in the task list. Clicking on this will open a pop-up window that allows the user to copy a link (form link) to access the form for starting the task.

There are certain requirements for using this feature. The user must be authenticated to use the form link. When the user uses the link, they will be directed to the form to create a new instance of the task.

Note: Please note that the form link may contain request parameters. If a specific request parameter is present in the link and is associated with a form field, the corresponding form field will automatically be pre-filled with the value of

the request parameter.
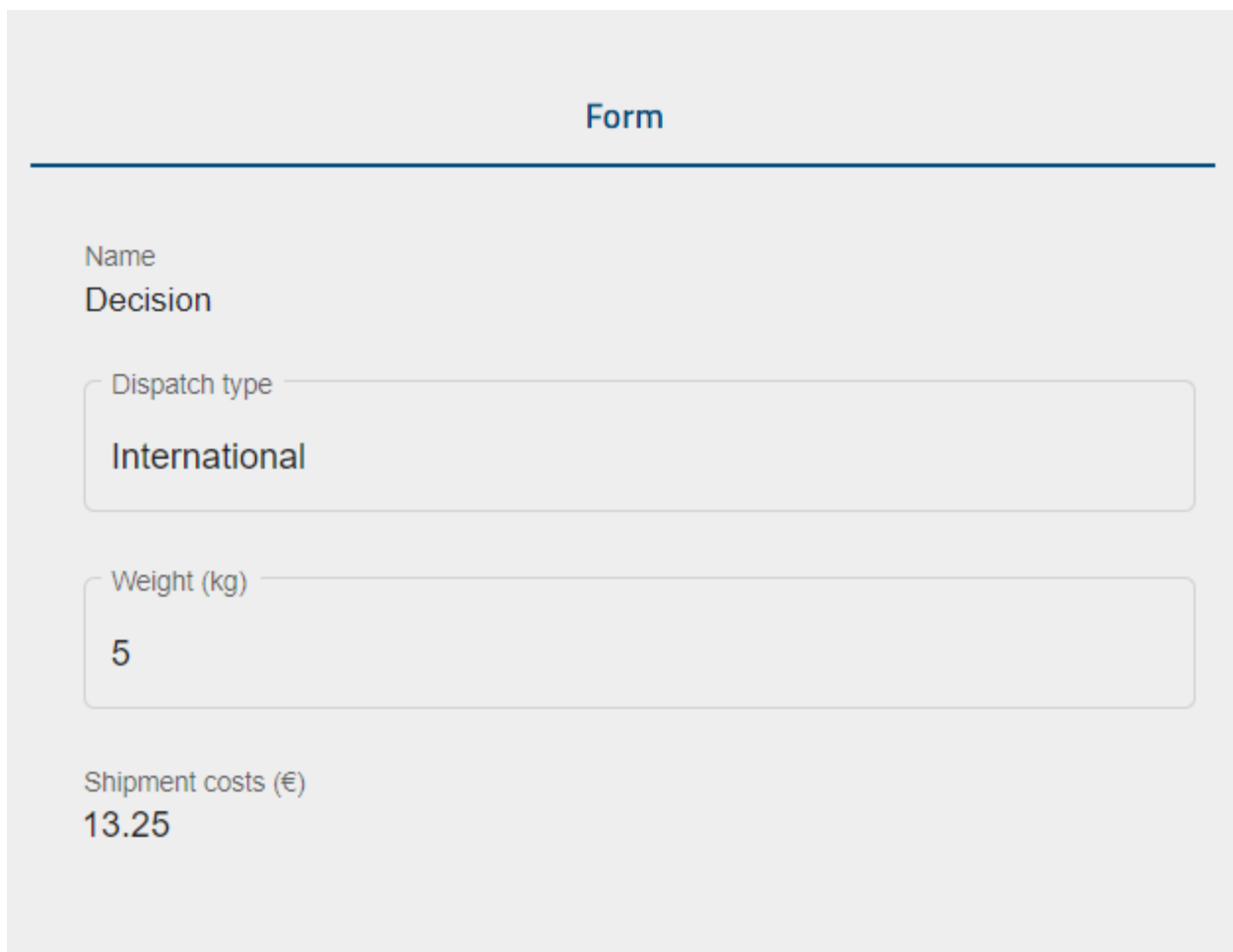
After completing the task start form, the user will receive a success message confirming the creation of the task and providing a link to the created task.

Furthermore, all parameters contained in the form link are also available as process variables in the created process.

How can I use decision tables within my case?

If in BIC Process Design a task is of the type *"Business Rule"* the defined decision table can then also be found at *the task's form* within BIC Process Execution.

In the processes you will see the *Input variables* in the form of input fields in the form of the corresponding task. To use the input fields within the decision table, *the task has to be started*. As soon as you have filled in all input fields with valid data, the result is automatically displayed in the output field of your decision table.

For each of your input fields there exists a *process variable* which contains the value of your input. Thus, in addition to the information you can receive from the table, you can further use the individual data, for example in *automated decisions*.

If the value of the process variable has been defined before the *Business Rule* task has been reached, the corresponding input field is automatically filled with the value of the process variable. Thus, for example *REST calls* can be used to automatically provide information that is then used in a decision table. If you change the input fields manually in such a case, the corresponding value of the case's process variable will also be changed.

For *Business Rule* tasks in which all input fields have been filled in automatically, the output of the decision table is determined and the task is then automatically completed.

Tip: Within *the default case* you can also make use of the decision tables without the need to start the corresponding tasks. This enables you to access these tables without the need of a specific case.

Note: Be aware that the output value can be different, in case you use the *COLLECT hit policy*. This depends on whether the hit policy was selected with or without aggregation. In case the *COLLECT* hit policy was chosen with aggregation, the output value is equal to the result out of the matching rules output values. The result can be the greatest matching value (MAX), the minimum (MIN), the number of matching rules (COUNT) or all the matching values combined (SUM). Otherwise, the value of the *output variable* is a comma separated string with all the results for the matching rules, when the *COLLECT* hit policy has been chosen with no aggregation.

How can I use attachments in BIC Process Execution?

In BIC Process Execution you can use attachments, which have been defined at the corresponding objects in BIC Process Design. You can use all attachment types that are available for *the attribute *Attachment (URL)* in BIC Process Design*. In BIC Process Execution these are displayed in *the form* of the relevant task at various points.

If the attribute *Attachment (URL)* has been defined for an activity, you will find these attachments in BIC Process Execution in the form of the corresponding form under *Attachment (URL)*.

If you have defined an attachment in the attributes of a document object that represents an input or output of an activity, you will find the attachment in the *Inputs* or *Outputs* section of the corresponding task's form. The attachment is represented by a paperclip icon. If you click on the paperclip icon you can access the attachment.
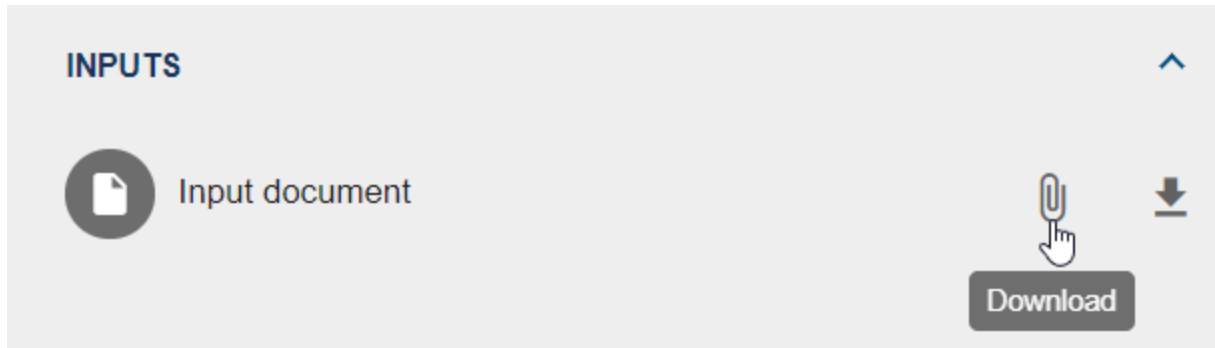
How can I upload or download inputs and outputs in my tasks?

If inputs or outputs have been modelled in your diagram in BIC Process Design, you can make use of them in BIC Process Execution to download or upload documents in the tasks of your case. This enables you to provide important documents for the process flow. You can also use these files for a *rest call*. These are always assigned to individual tasks in your case. The following section explains in more detail how you can use these functions.

Outputs

If an output document was modeled for an activity in BIC Process Design, you will find a corresponding entry in the *form* of your task in BIC Process Execution. In order to upload a document, you have to be the responsible of the relevant task and it has to be already started. If that is the case, you can use the *Upload file* function to select and upload the desired document via a corresponding dialog window.
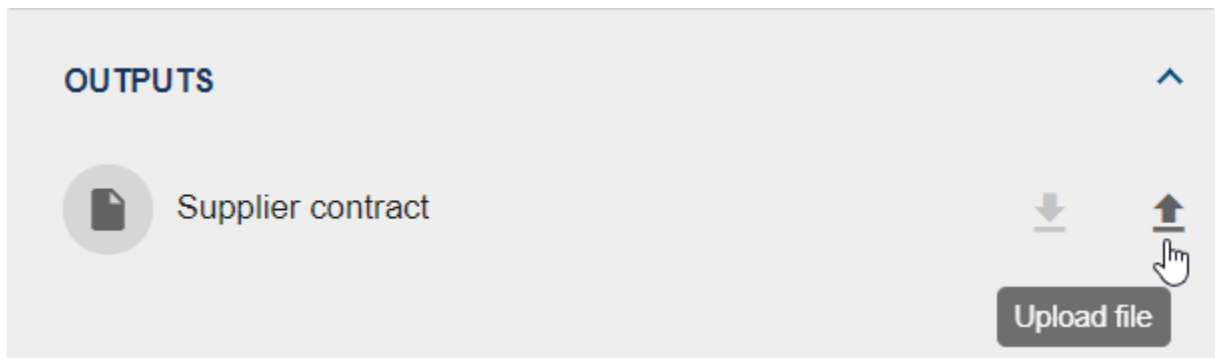
As soon as you have successfully uploaded a document, the document icon on the left side of the entry is displayed in white to indicate the completed upload process. Documents that have been uploaded as output can be downloaded at any time using the *Download* function.
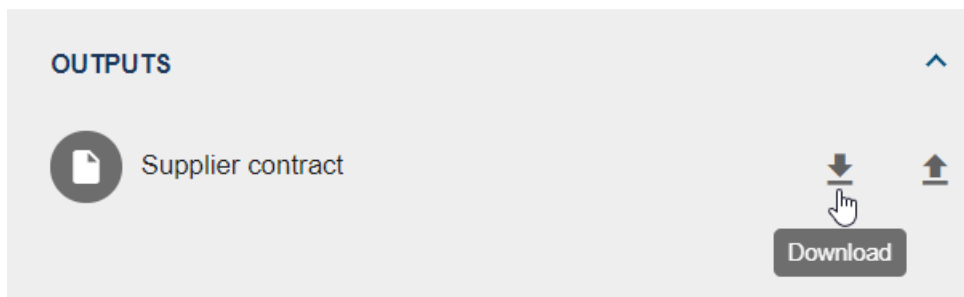
If the function *Upload file* is used when a document has already been uploaded, this document will be replaced by the newly selected one. This means that only one file can be provided per output entry. As soon as the corresponding task has been completed, the function *Upload file* is greyed out and no further files can be uploaded for the relevant output.
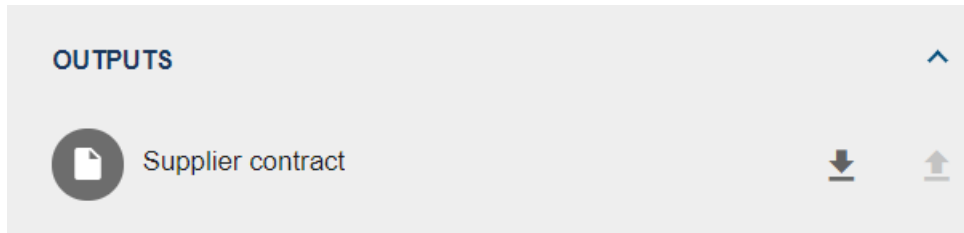
Inputs

Like the outputs, you will find inputs in the form of the corresponding task. If an input exists for a task, you can access the relevant document by using the *Download* function.
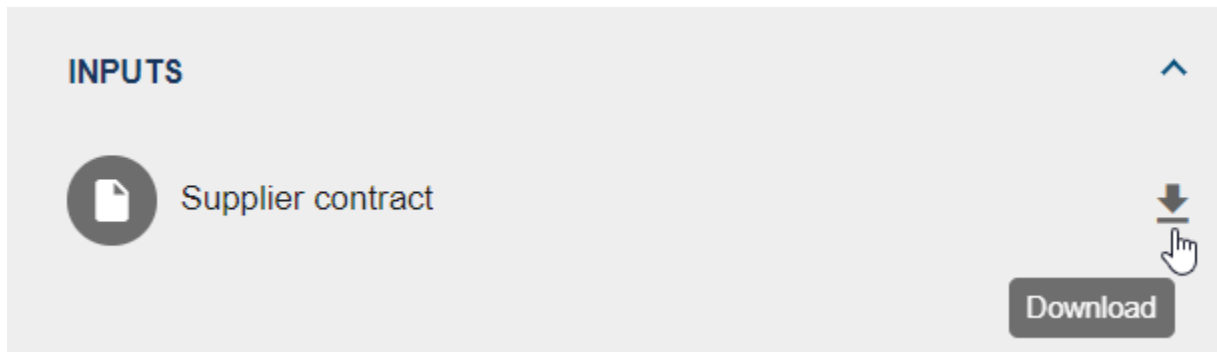
All inputs result from outputs of previously processed tasks in the process flow. You can download the document only if the task that contains the output has successfully been completed and the task containing the input has been started. If that is not the case or no file has been uploaded for the input, the *Download* function is greyed out and cannot be used.
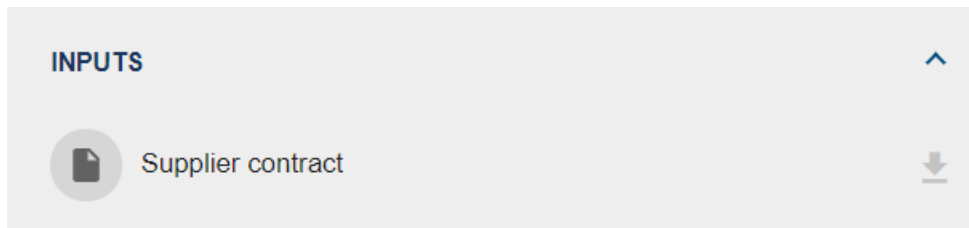
Note: You can use the following objects to upload or download files: *Document*, *Business object*, *Norm*, and *Data store*.

Tip: *Attachments* that have already been added to the document object in BIC Process Design can also be accessed via the corresponding input/output entries.

20.4.2 How can I create a new case for a process?

Cases represent the concrete executable form of your processes. In BIC Process Execution and BIC Process Design, you initiate the case creation at different places.

In the public workspace and preview, the capability to initiate a new case is restricted to users holding the *ProcessApp Creator user* role. However, in the published version, this option is exclusive to users with the *ProcessApp User* user role.

To start a new case via the ProcessApp directly, go to the area *ProcessApps* and navigate (possibly into a Collection) to the desired ProcessApp. Via a click on the three dots at the desired ProcessApp, you can *open its menu*.
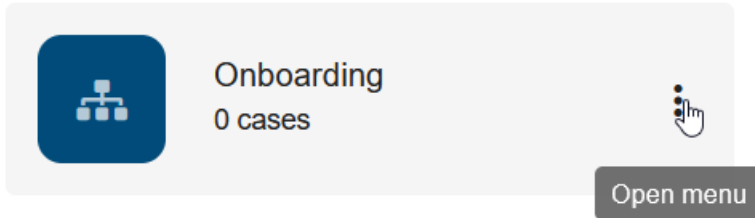
Now select the function *Create a new case* to start the creation.
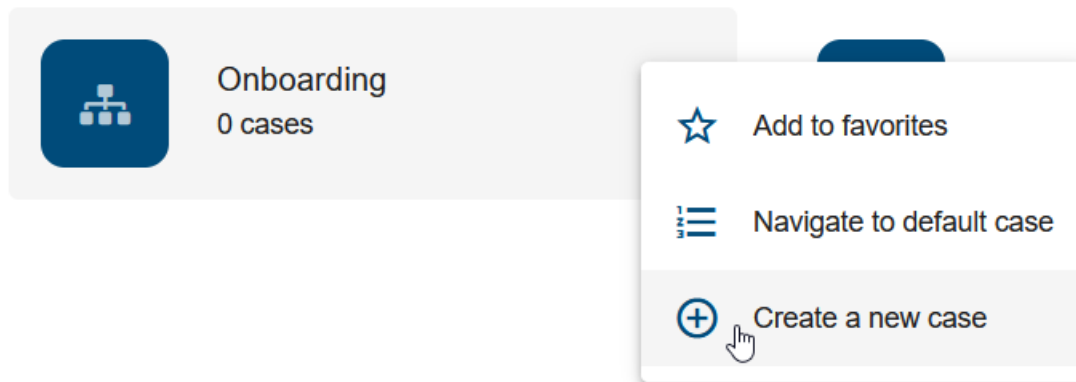
As an alternative you can initiate the case creation process by using the *Create a new case* function. You can find this function within the *case list of a process*.

Moreover, you can start the creation process for a new case when you are viewing the corresponding diagram in BIC Process Design in publication stage. The button *Create case* is displayed in the upper right corner of the diagram view but it is only shown to users who are authorized to create a case for this process.
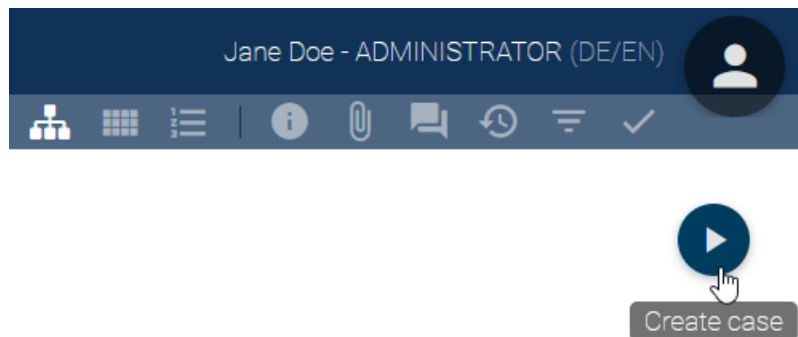
The button is also available in the diagram view of the new user interface. Select this button to trigger the opening of BIC Process Execution in a new tab where you are directed to the case creation.
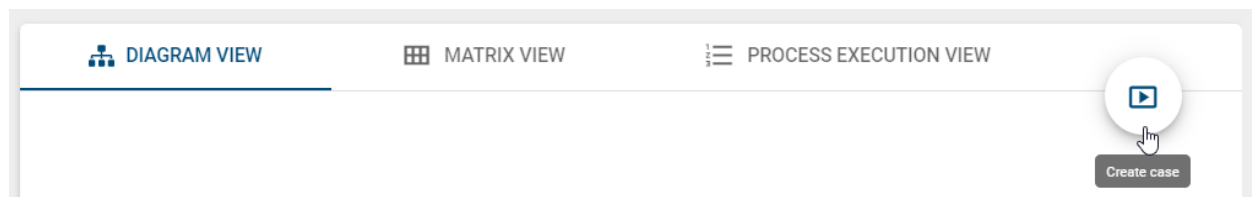
Hint: Diagrams with a *start timer event* cannot be started manually in the publication. If several start events are modeled and at least one start event does not have a configured time, the case for this start event can be started manually.

As soon as you have started the creation process in any of the above explained ways, a dialog appears where you have to assign a name of your new case. You can set a *due date* for this case in the second field. Furthermore, you can select

representatives from your users for every role occurring in the process. This user is then displayed as responsible person for every task that is assigned to the corresponding role. Entire user groups can also be set as responsible persons. In such a case all users of that user group are able to see the tasks of the role they have been assigned for, in their *personal task area*.

Users and user groups can be assigned as a *default person in charge* within BIC Process Design. They will be automatically set, when creating a new case of the corresponding process. If no user is assigned to a role, the case owner will automatically be responsible for the tasks of this role as soon as they are started. You as a case owner are not assigned to the role itself but each *started* task of the role will be delegated to you.

A new case will be added, as soon as you confirm your entries by clicking on *Create*. You will be taken directly to the process execution view of the case. If the process always starts at one possible starting point, the first task is automatically started. If there are multiple starting points, you (as the case owner) have to choose a starting point in the form of the start event and confirm your choice via the *complete* button. Then, the first tasks after the starting point will start automatically.

Hint: If the option *Hide Start Form* was selected during *modeling*, no dialog will be displayed. Instead, you will be directly redirected to the process execution view of the case. The name of the case will be named after the process

name and the timestamp.

Note: In case the corresponding diagram has been depublished within BIC Process Design, you will receive a corresponding message when you tap the *plus* icon or hold your mouse over it. In this case, you can still edit and terminate all existing cases, but you cannot create new ones. If the *plus* icon is not visible a *case creation restriction* has been set.
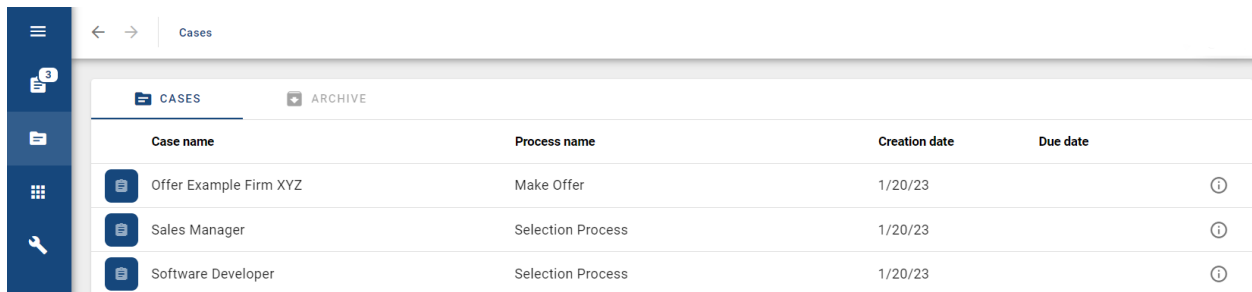
Tip: In case you want to create cases via other applications you can either use *run links* or *the BIC Process Execution REST API*.

20.4.3 Where do I find my cases?

You can display all cases that you have created yourself to have a collective overview. To do this, use the menu entry *My cases* .
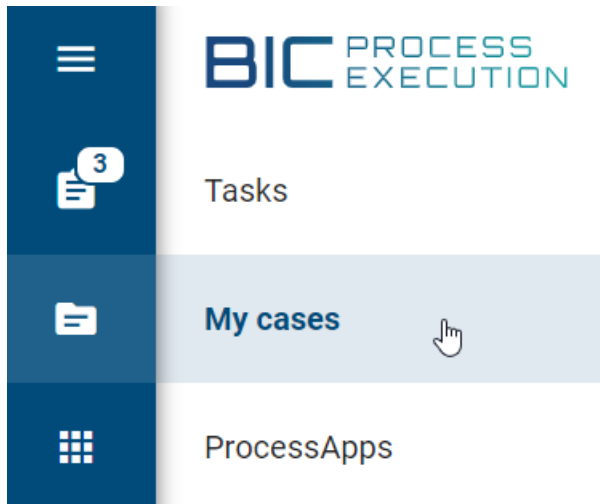
In the main area you will now see a list of your running, not yet completed cases. For each case, the creation and due date as well as the progress of the case are displayed next to the case and process name. The list is sorted descending by creation date whereas the oldest case is at the top.

The *Progress* defines the percentage of the total progress of the respective case. The percentage is calculated based on the currently selected path in the case and the tasks completed in that path. The progress bar shows how many tasks have been completed, started (color gradation) and not yet started (dotted line). In the desktop version, a tooltip shows you the number of completed tasks as soon as you hold the mouse over the progress bar.

With a click on an entry you will be forwarded directly to the process execution of the running case. Furthermore, the *Details* are available for each case. You can access these by clicking on the *i* on the right of the entry.
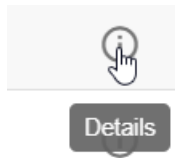
In the details, the creator, the owner, the due and the creation date as well as the name of the case are displayed. In the *Team* section, you can see all the roles that are involved in the process and the assigned users for this case.

20.4.4 Where do I find the list of cases of a process?

In the *ProcessApps* section, navigate to the desired process in the listing and click on the corresponding entry. You are then forwarded to the case list of this process.

Hint: If the *Analyst* attribute has been maintained in the process, you will not be able to view all cases of the process.

All running cases with the corresponding *ProcessApp icons*, in which you are involved, are listed here. This means that you can see every case if you have the *user role *ProcessApp Administrator**, if you are assigned to a role or task of the case, or if you are part of a user group that is assigned to a role or task. For every entry within the case list you can see the following information:

- Name: Name of the case

- Creation date: Start date of a case

- Creator: User who started the case

- Owner: User to whom the case is assigned. The owner can be changed when you are in the details. In addition, if a task in your case is overdue, you as the owner will receive a notification in your reminder emails for overdue tasks. Even if you do not have any (over)due tasks, but there are overdue tasks in your cases that are assigned or not assigned to other users or groups, you will still receive the email notification.

- Progress: The *Progress* defines the percentage of the total progress of the respective case. The percentage is calculated based on the currently selected path in the case and the tasks completed in that path. The progress bar shows how many tasks have been completed, started (colored gradient) and not yet started (dotted line). You also have the option of sorting the column by the percentage of tasks completed by clicking on the column header of the progress column.

- Due date: Date when the case should be completed

The list is sorted descending by creation date whereas the oldest case is at the top.

Furthermore, you have the possibility to filter the entries by specific case owners. To do that, choose the filter facet *OWNER* on the right-hand side and select the corresponding owners whose cases you want to view. The case list refreshes automatically. This function is also available for the overview of archived cases.
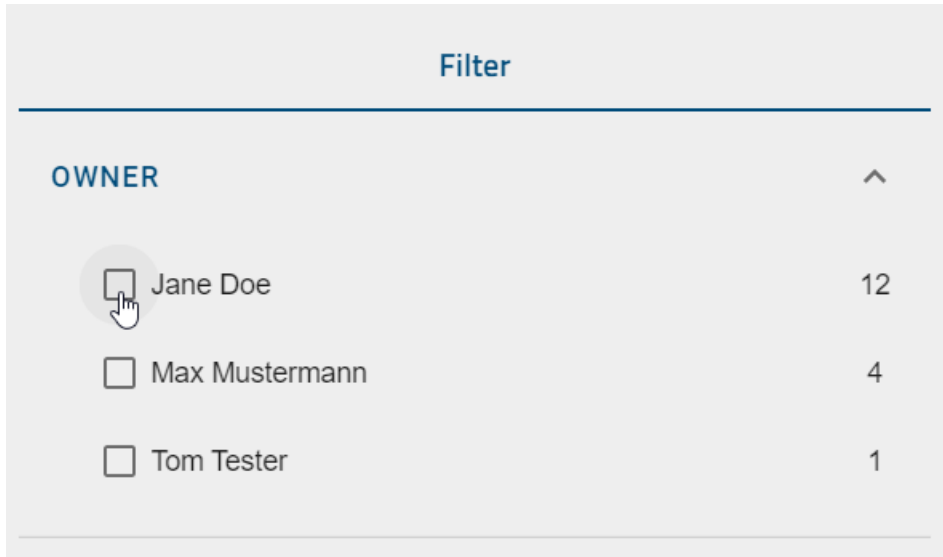
Additionally, you can filter the entries by the due date of the case. If you select the facet *Due Date* on the right side, you will see the different date range options. Once you have selected a predefined date range, your case list will automatically update. You will only see the cases that are due within the chosen time frame.
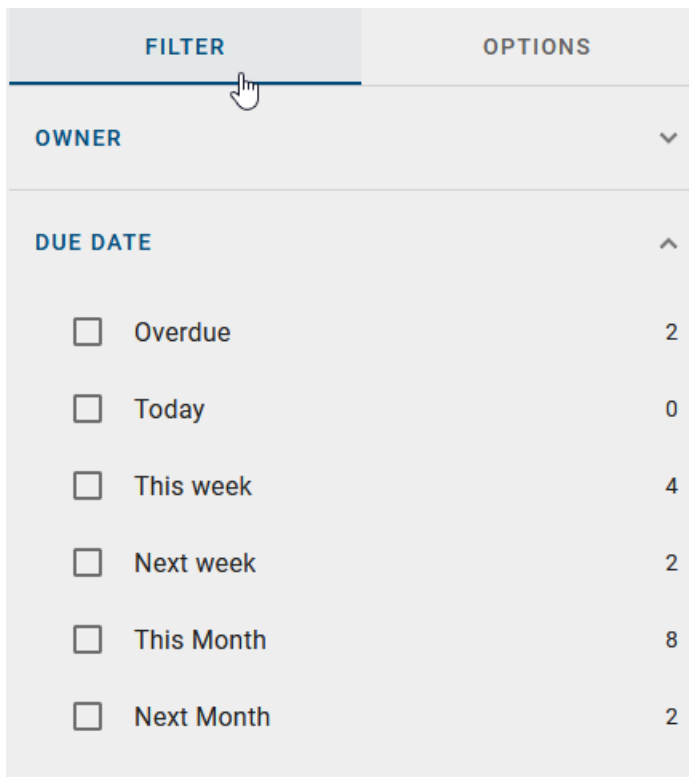
Click on an entry in the list to open the process execution view of the case. Use the *Back* arrow to go back to the list of cases.
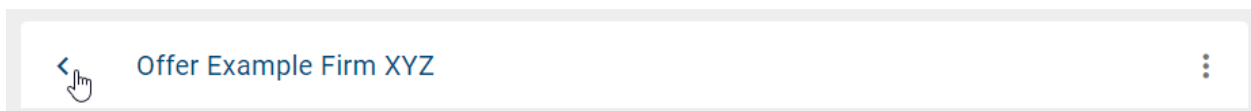
In addition, you can access *a case's details view* over the circled *i* icon. In addition you can use the *Create a new case*

function to *create a new case* for this process.

Note: If there are no cases for a process, you will navigate to an empty list when selecting this entry.

20.4.5 How can I sort the case list of a process?

When you view the case list of a process, you have the option to sort the cases by a specific column.

The list can be sorted by *Name*, *Creation date*, *Owner*, *Due date* or *Progress*. To do this, click on the heading of a column.
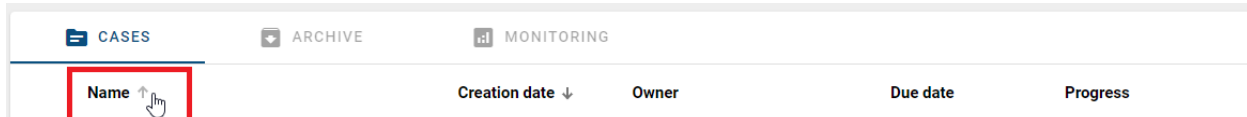
If no sorting was applied before, the cases will be sorted in ascending order according to their creation date.

If you have already sorted by a column and the cases are displayed in ascending order, you can change the sorting direction by clicking on the same column heading again. This will reverse the sorting, and you will be taken back to the top of the case list of the process.

Note: Sorting is done for one column at a time.

Hint: Sorting is done in the same way for *My cases*.

20.4.6 How can I apply a filter facet for a creation date range in the case list?
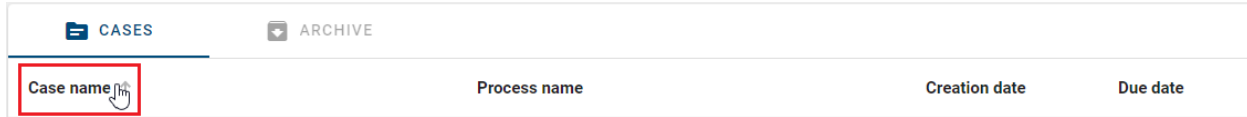
Suppose you are on the case list page and there are multiple cases with different creation dates listed. When the filter option *Creation Date* is called, predefined date options should appear as follows:

- *This week*
- *This month*
- *Last 3 months*
- *Last 6 months*
- *This year*

If you have selected the filter option *Creation Date* and have selected a predefined date range, such as *This Month*, the list of cases should be updated accordingly. Only cases created within the selected date range should be displayed.

20.4.7 How can I sort the case list?

When you view a list of cases, you have the option to sort the cases by a specific column. To do this, click on the heading of a column.

If no sorting was applied before, the cases will be sorted in ascending order based on the selected column. At the same time, you are scrolled to the top of the case list.

If you have already sorted by a column and the cases are displayed in ascending order, you can change the sorting direction by clicking on the same column heading again. This will reverse the sorting, and you will be taken back to the top of the case list.

Hint: Please note that when entering the case list, cases are sorted by default according to their creation date in ascending order. This serves as the starting point if no specific column sorting has been selected.

Note: Sorting is done for one column at a time.

20.4.8 How can I perform a full-text search for case names in my case list of a ProcessApp?

In the instance list of a ProcessApp, while the filter panel is open, an input field is available at the top right to perform a full-text search in the *Enter term to filter instance list* field.

If you do a full text search for the *Case name* field, the list of cases will be updated and you will see all the results of this search. If there are no search results, you will receive a notification that there are no results in the content area for your search. In the full text search, you also have the option of using both 'a *AND* b' and 'a *OR* b' to display all results that contain either 'a' *and/or* 'b'.

Note: If you have applied a filter, the search will include the search term and any filter options you have selected.

Note: If you reset the search, you will again receive results that match the previously selected filter options.

20.4.9 How can I export an event log of the cases of a ProcessApp?

In the case list of a ProcessApp, you can download an event log of the cases. Navigate to the case list of a ProcessApp and open the options in the ride side bar. By filtering the list before you trigger the export, you can create the event log for a restricted case list.

Select the option *Export completed cases* by clicking on the icon *Export cases to Excel file*. Then the event log is generated for you.
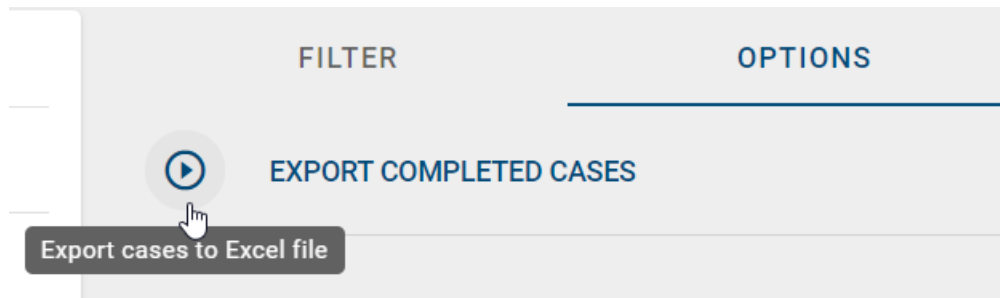
As soon as the export is available, you will find a *download* button at the *Export completed cases* option. Note that this event log is only available for you. Other users have to create an event log themselves to download it. Select the arrow button to download the created event log.
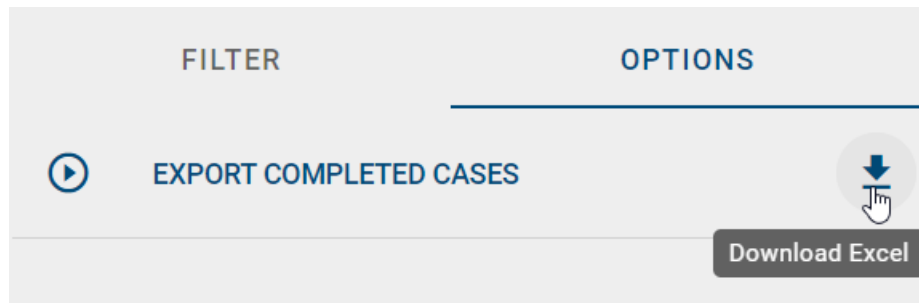
In the file you will find the following data for each process:

- Case ID
- Case name
- Activity ID
- Activity name (in your content language)
- Task start date (in ISO format)
- Task end date (in ISO format)
- Task due date (in ISO format)
- Activity performer role (in your content language)

Hint: If your *UI language* is not maintained, the default template is English.

Note: The export function is not available in the mobile version of BIC Process Execution.

Tip: If your user role allows this, you will find additional tabs in the process list of your ProcessApp. You can view *archived cases* and a *monitoring cockpit* to analyse the status of active cases.

20.4.10 How can I access the case's details view?

In the details view of a case, you can get detailed information about a specific case. To access a case's details view, you got two options. The first option is via the case list. To do that, navigate first to *the case list of the corresponding process*.

Then use the *Details* function to get to the details view of the desired case. You will find the function in form of a circled *i* icon on the right side of the list entry.

The second option is via the case itself. You can open the context menu next to the title of your process. Click here on the menu entry *View Case Details* and the details of your process will appear.
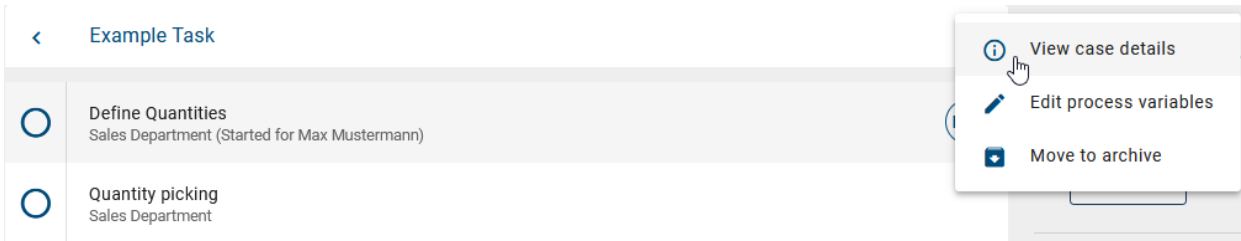
The following information will be displayed in the details view: the creator, the owner, the creation date, the optional due date and the name of the case. In addition, in the section *Team* you will see all roles, which are included in the corresponding process, and all users which have been assigned to these roles.

Here you can also *reassign the team members*.

Note: Please note that only ProcessApp Administrators and owners can modify the details of a case.

20.4.11 How can I set or change the due date of a case?

The due date defines when a case should be completed. When the date has exceeded but the case has not been completed yet, the progress of the case is emphasized in red color in the personal as well as in the case list of the corresponding process.

If you *create a new case*, you can directly set a due date in the corresponding field. This statement is optional. Enter a date in the format MM/DD/YY or click the calendar button and choose a date in the appearing calendar.

New case

New case *

Set due date of new case

Define the team

HR

IT Support

Vorgesetzer

CANCEL   CREATE

As a ProcessApp Administrator or case creator, you can set and change the due date of your case subsequently. Navigate to the *details* of your case. You can find the *due date* below the owner. If no date has been set before, the field will be empty. Click the placeholder *due date* to enter a date or click the calendar to choose a date there.

< Details

Owner

👤 Jane Doe

Due date

In case there was a due date before, you can change it here. Click the date to enter a new one or use the calendar as

stated above.

20.4.12 How can I reassign team members of a case?

As a case owner, you can reassign team members of your case at any moment. To do so first navigate to the case's *details view*.

Here you can see all roles of the corresponding process. Below the role description you will find the name of the user or user group currently assigned to the role. If no one has previously been assigned to the role, the lettering *Add team member* is displayed.

To reassign a role of your team just click on the name of the currently assigned user or user group, or if nobody has been assigned yet click on *Add team member*. A dialog appears in which you can reassign the corresponding role.

Just enter the name of the user or user group into the input field and then select the corresponding entry from the drop-down menu.

By using the *ADD* button your changes will be adopted and the role will be reassigned. The name of the assigned user or user group is now displayed below the relevant tasks within *the case's process flow* and in *the details view of the case*.

Note: Tasks, that have already been started before the reassignment, will not be reassigned. These tasks will still be visible in *the personal task list* of the corresponding user. If you want them to be processed by the newly assigned user or user groups you have to *delegate* them.

Note: If no user or user group has been assigned to a role when the case was created, the case creator will be responsible for each task of the role as soon as the task is started. This means the user who created the case can complete the tasks of this role but is not assigned to the role. He receives the responsibility for the tasks one by one when a task is started.

20.4.13 When is a case finished?

A case is finished as soon as all tasks within the process flow have been completed. From that moment on, elements from that case can no longer be changed. It is noted for every finished case at which end event the case has been finished.

Once your case is finished it will be *archived* and the sequence of events is stored in the system. These are used for predicting subsequent flows of new cases for the same process.

Note: The completion time or end time of a task is displayed when a step is completed in a given case.

Note: In a given case, the start time is displayed if the step is considered as an activity in progress. The start time is also displayed if the step has an error.

20.4.14 How can I archive cases?

By default, cases will be archived as soon as they are *completed*.

How can I archive unfinished cases?

You also have the option to archive cases even if they are not finished yet. To do so open the case list of the corresponding process and open the case you want to archive.
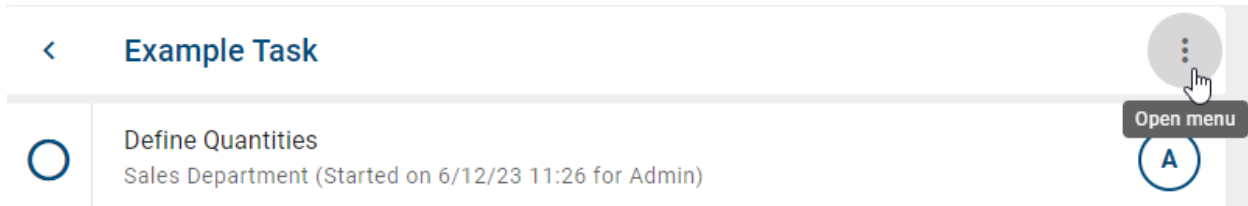
There click on the context menu with the three dots on the right side of the entry and select the option *Move to archive*.
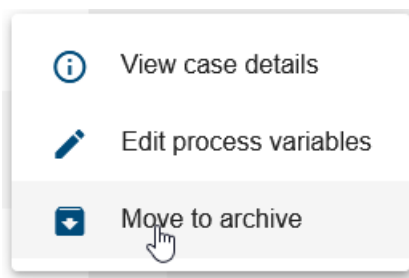
A dialog appears which informs you that some tasks have not been finished yet. If you still want to archive the case, select the option *Do it anyway*. All uncompleted tasks are then canceled and the case is archived.
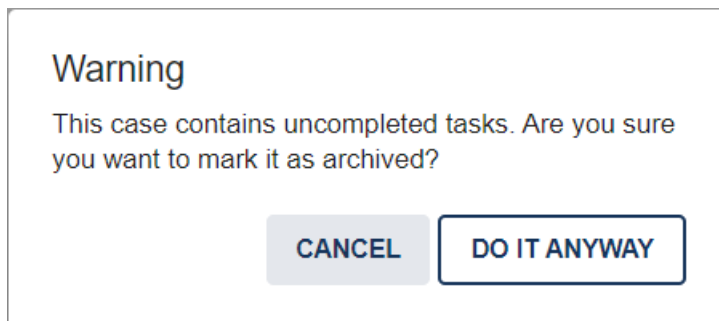
After your case has been archived, you will be informed about the successful completion by a message. The case will disappear from the case lists. Instead it appears in the *archive*.

> **Warning:** If you abort a synchronized call activity prematurely and therefore archive the case, its subcases will be archived as well.

> **Note:** If the case was the last case that has not been archived of a depublished diagram of your BIC Process Design, the corresponding process will also disappear from the *process overview*.

20.4.15 Where do I find archived cases?

The *archive* enables you to view archived cases. There is an archive for your personal cases as well as for each process.

If you view *your case list*, you can navigate to the list of archived cases via the tab *Archive* in the upper right corner.

For each archived case, you can view the *details* by a click on the *i* button and the process flow by a click on the case name - just like with regular cases. Click on the tab *Cases* to navigate back to your current cases.

If you would like to view the archived cases of a process, navigate to the *case list of your process*.

Then click on the tab *Archive* to see all cases that have been created and archived for this process. The process flow and details can be displayed for each listed case as stated above. Click on the tab *Cases* to navigate back to current cases of the process.

20.4.16 What are process variables used for in my cases?

In BIC Process Execution you have the option of using process variables in your cases in order to process data dynamically during the process flow. Some *process variables are created by default* while others will be generated by *executing REST calls*, *script tasks* or *decision tables of rule based tasks*.

These process variables can be used during the process flow to provide users with data, with which these users can then successfully *complete their tasks*. Process variables can be used in *user forms*. In addition, the provided data can also be used in further automated tasks, like *new REST calls* or script tasks.

Note: Note that the values of process variables change *locally in the task* until the task is completed.

Which process variables are created by default?

In BIC Process Execution, a set of process variables is provided by default for each case. The following process variables, with the associated values, are therefore available for each case:

Name of the variable	Default value
createdDate	Date when the case was created
creatorEmail	E-Mail of the user, who created the case
creatorName	Name of the user, who created the case
caseName	Case name

Additionally, a process variable will be created for every role used that has an *Identifier*. The name of the variable will be the used *Identifier*, the value will be the corresponding e-mail of the assigned role.

Within the process flow of a case, you can *view the values of all process variables*. ProcessApp Administrators can also change the case name there (value of *caseName*).

How can the standard process variables be grouped as smart variables in a case object?

When an instance of a new process is created, a case-object is automatically created that contains all the required process variables.

The following variables are available in the _case object:

- "name" (changeable)
- "dueDate" (changeable)
- "creationDate" (not changeable)
- "owner" object (not changeable)
- "creator" object (not changeable)

Note: In this context, it should be noted that the variables **.name** and **.email** belong to the owner and creator object.

The variables are accessible in the following way:

- _case.name
- _case.dueDate
- _case.creationDate
- _case.owner.type / _case.creator.type
- _case.owner.id / _case.creator.id
- _case.creator.ATTRIBUTE

You can set a new value for a process variable. If this variable is modifiable, the adjustments will be reflected throughout the application. If the process variable is not modifiable, the changes will not be saved, and the process variable will remain unchanged.

When viewing the process variables of a case, the attributes of the case-variable as well as the "old" standard variables become visible. If you open an older case where the case-object did not exist, only the "old" standard variables will be displayed when checking the process variables.

Hint: Please note that the new object applies only to newly created cases. Existing cases do not have this updated element. While the previous method to access these variables is still supported, it is deprecated.

How can I see process variables for archived cases?

If a case is archived, there are different authorizations for accessing the process variables dialog:

As a *ProcessApp Administrator*, you have the option to open the process variable dialog and view the process variables in all stages.

As a *ProcessApp Creator*, on the other hand, you can open the process variable dialog to read the process variables only in the public workspace and the preview stage.

How can I find and edit process variables within the process flow?

Within the process flow of a case users with the user role *ProcessApp Administrator* have the possibility to display and change the value of your process variables. This enables you to adapt the data of your process variables to your needs, in case something changes during the case completion.

To do so first navigate to the process flow view of the corresponding case. There open the context menu in the upper right corner of the main area.

You can then click on the option *Edit process variables*.
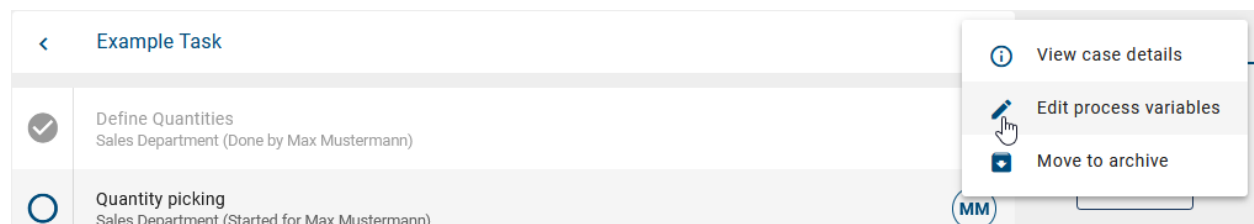
A dialog appears where you will find all available process variables, their data type and their values for this case. In this dialog you can edit the values of the process variables. In case you have edited the value of a process variable you can confirm the changes by using the button *Save*.

Prozessvariablen bearbeiten

createdDate (date)
2021-07-22T13:29:36.314+00:00

creatorEmail (string)
John_doe@exampleCompany.com

creatorName (string)
John Doe

caseName (string)
TestCase

SCHLIEßEN   SPEICHERN

If you just want to exit the dialog or in case you don't want your changes to be adopted, click on the button *Cancel*.

Note: By default, every case has a set of *standard process variables*.

How do the values of process variables change when working on a task?

When a task is started, the current values of the process variables are loaded to a local scope. If you work on the task and change the variables for example by editing or adding values in the form, the variables will be updated locally. The list of process variables still shows the values set before the task was started. Completing the task will transfer the local variables to the process variables of the case. Then they are available in following tasks.

How can I link a role to a process variable?

When you model a process in BIC Process Design, you can maintain the *identifier* attribute of a role and use it as a process variable. This can allow process participants to choose the responsible of following tasks in a user form or the responsible can be determined by a preceding *REST call*. Moreover, you might use this process variable as a parameter to create a new case via a REST call against BIC Process Execution or via a *run link*.

If a value (which is a name or an e-mail address) is set for the identifier process variable within preceding process steps and a task of the role is started, the value of the variable is evaluated and if there is a corresponding user (group) in BIC Process Execution, this user (group) is assigned to the task. Otherwise, the task is assigned to the default responsible (according to the *Staffing* attribute or case creator, see at the *end of this section*). Note that the user (group) is *only applied to the started task* but not to all tasks of the role. Therefore you have the possibility to change the assigned user by editing the identifier value *in the process variables of the case*. If another task of the concerning role is started afterwards, it is assigned to the corresponding user of the new value.

For example, the role "Executive Manager" is part of the "Selection process" and the *Identifier* is set as `executive-manager`. In the process, the HR employee should enter the name of the responsible executive manager in a user task to assign him to the task of the role. Therefore, a user form with with a text field is modeled where the ID of the field equals the *Identifier*.

In a concrete case, this results in the user task "Examine application formally". The role "Executive Manager" (responsible for the last task) is not assigned to a user yet.

After the user task is completed, the identifier can be viewed and edited in the process variables.

When the task of the Executive Manager role has been started, the corresponding user is assigned as responsible.

20.5 ProcessApps

In the ProcessApp overview, you can find all processes of your organization that are relevant (for you) as *ProcessApps*. They can be grouped according to departments, teams or other structures using ProcessApp Collections. ProcessApp Administrators have a list of all available ProcessApp Collections in the *administration* and can *edit the Collections* as well as *create new ones*.

20.5.1 Where are all available ProcessApps displayed?

Go to the *ProcessApps* using the menu.
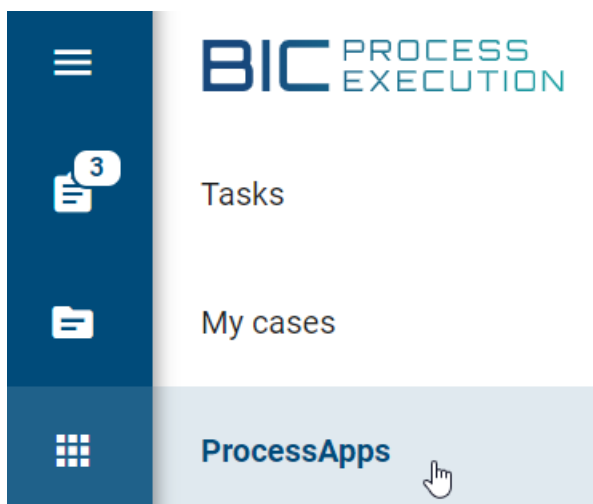
Depending on the configuration, this area can differ. However, you can find all *executable*, published processes (BPMN and EPC) of your tenant which are displayed as *ProcessApps*.

If there are *ProcessApps Collections defined* in your tenant, you will see the ProcessApps grouped into these Collections. The Collections are arranged alphabetically from left to right and top to bottom. Depending on your device and zoom factor, they are displayed in a single or multi-column list. The first Collection in the upper left corner is always the favorite tile.

Each Collection can appear with an individual icon and color. Note that a Process App Collection only appears in this area if at least one *ProcessApp has been assigned* to it. Therefore, not all Collections that have been *created in the administration* might be involved here.

If you have ProcessApps which are not grouped into a ProcessApp Collection, you will see a Collection called *More ProcessApps* as the last Collection on this screen.

As a preview, the assigned ProcessApps with the highest number of running cases are shown for each Collection. Thus, you can access frequently used ProcessApps quicker. If you select a ProcessApp in the preview, you will be navigated to the *list of all running cases* of the corresponding process.

If you select the header of a ProcessApp Collection or the button *Go to* at a ProcessApp Collection, all ProcessApps of this Collection will be presented to you as a list.
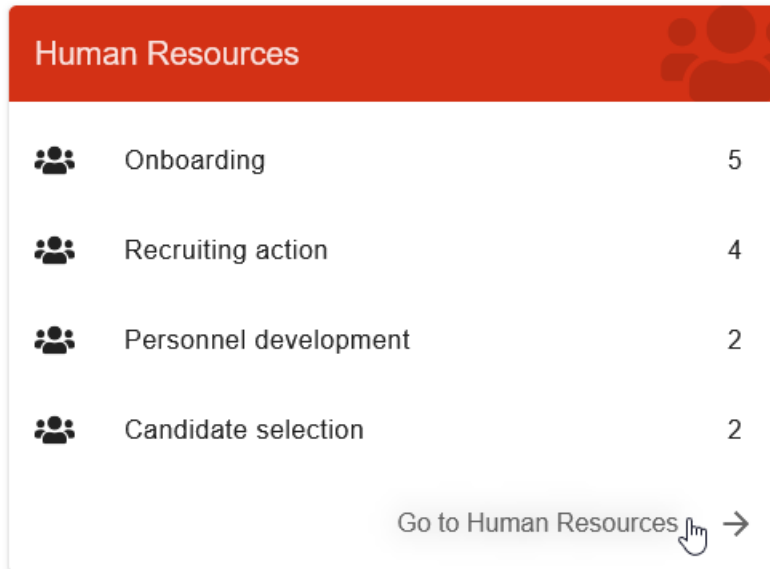
Each ProcessApp is represented by an icon and the name of the process in the chosen content language. In addition, the number of the running cases you are involved in, is noted. The ProcessApps are displayed in a multi-column list which is depending on your device and zoom factor.
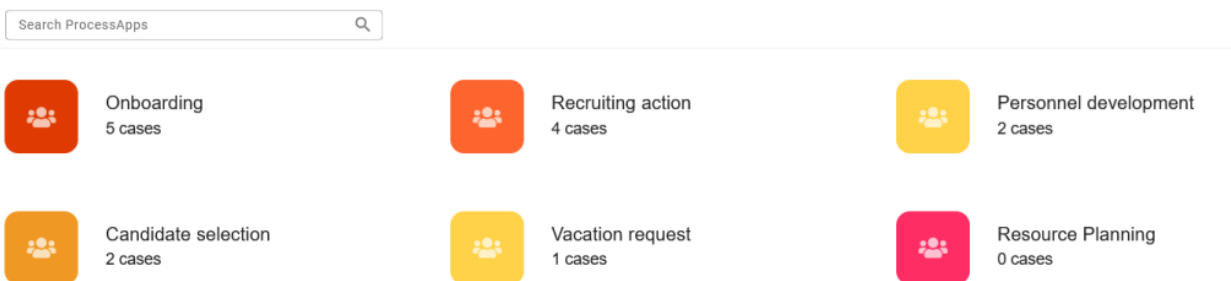
If you select the ProcessApp itself, you will be directed to the *list of current cases for the process*. If you hover over a ProcessApp, a menu (three dots) appears at the entry. You can *open the menu* by selecting the three dots once.
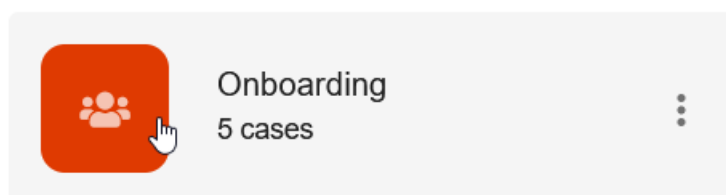
The menu (usually) contains three options for the corresponding process. The first one enables you to (un)mark the process as your *favorite*. The second option allows you to *navigate to the corresponding diagram in BIC Process Design*. Given that there is no *case creation restriction* defined for the concerning ProcessApp, you will find the option to *create a new case* for the process at last.

In case that no ProcessApp Collections have been configured, the *ProcessApps* area directly displays a multi-column list of all *ProcessApps*. For each ProcessApp, you have the same possibilities as described above.

Note: Users with the user role *ProcessApp Administrator* can access all running cases even if they are not involved

in these cases.

Users with the role *ProcessApp Creator* or higher can *switch the environment* to view the processes of *executable* but still unpublished diagrams.

Tip: You can *configure* every process icon individually. Also you can *search* for specific processes or add them as *favorites to your favorites list* to access them faster.

20.5.2 How can I search for a certain ProcessApp?

Within the *ProcessApps* area you have the possibility to search for certain processes. To do so, use the search field in BIC Process Execution while you are in the *ProcessApps* section. There, enter the term you want to search for. The search is started as soon as you click on the magnifying glass icon or press the *enter* key. As result all ProcessApps are displayed which contain the term in the selected content language. The search result is not grouped into ProcessApp Collections.
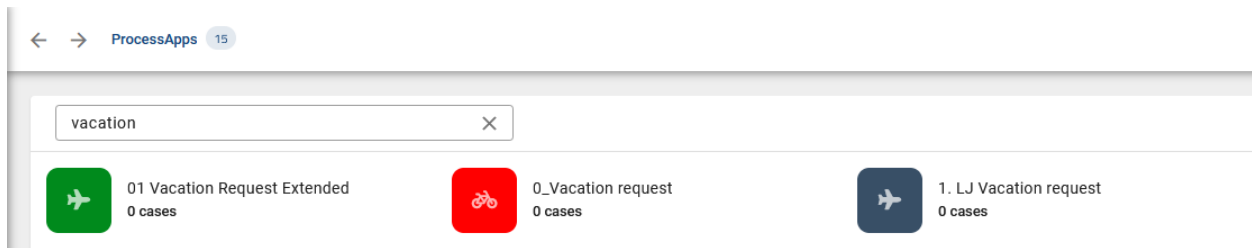
If the name of a process has not been maintained, the corresponding ProcessApps will not be displayed.

Note: The search is case insensitive. Expressions like wildcards are not supported by the search.

20.5.3 How can I see my favorites and add a ProcessApp?

In BIC Process Execution you can mark single ProcessApps as your favorites. They will be marked by a star icon.
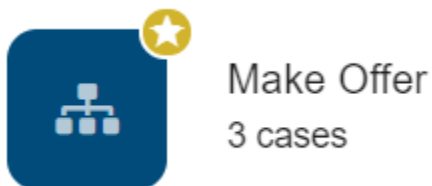
In the ProcessApp overview, these favorites will appear in the *Favorites* Collection.
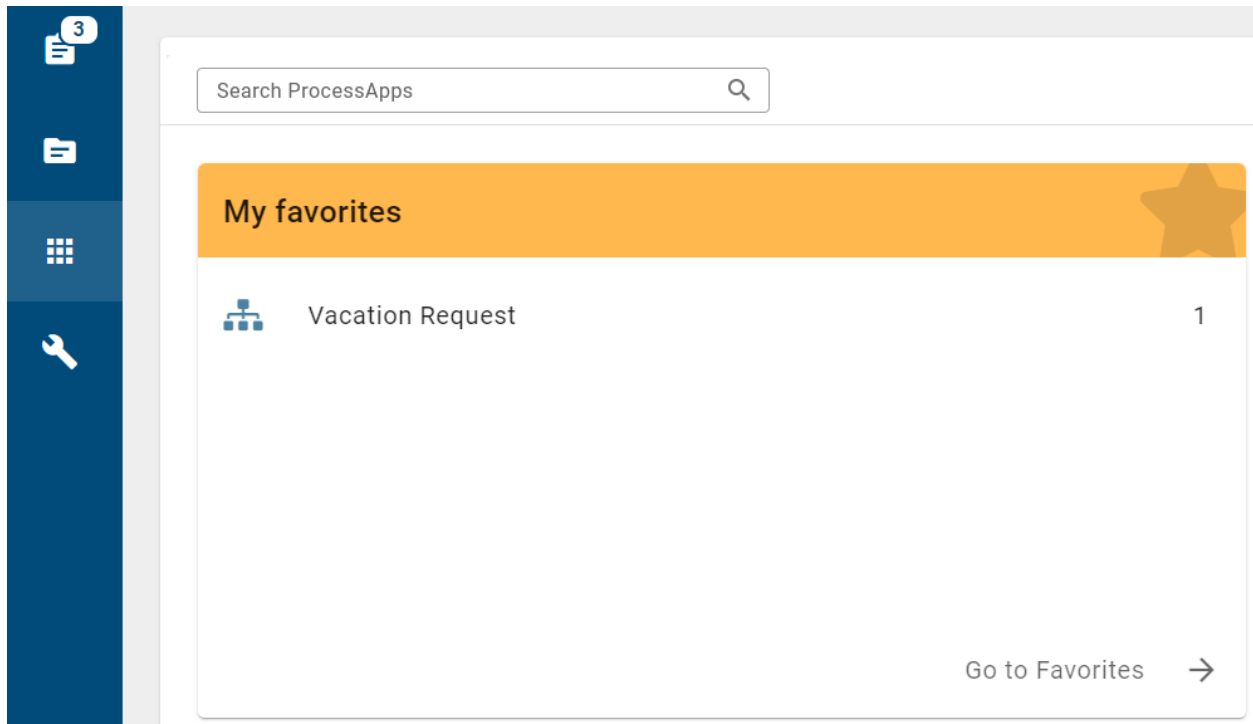
To add a ProcessApp to your favorites, go to the *ProcessApps* and navigate to the desired ProcessApp (possibly into a Collection first). Then open the menu of the ProcessApp via the three dots.
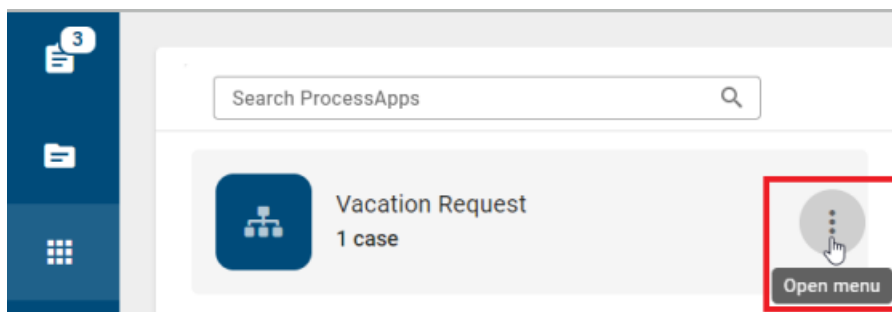
If you select the function *Add to favourites*, the ProcessApp will be displayed with a yellow star icon.
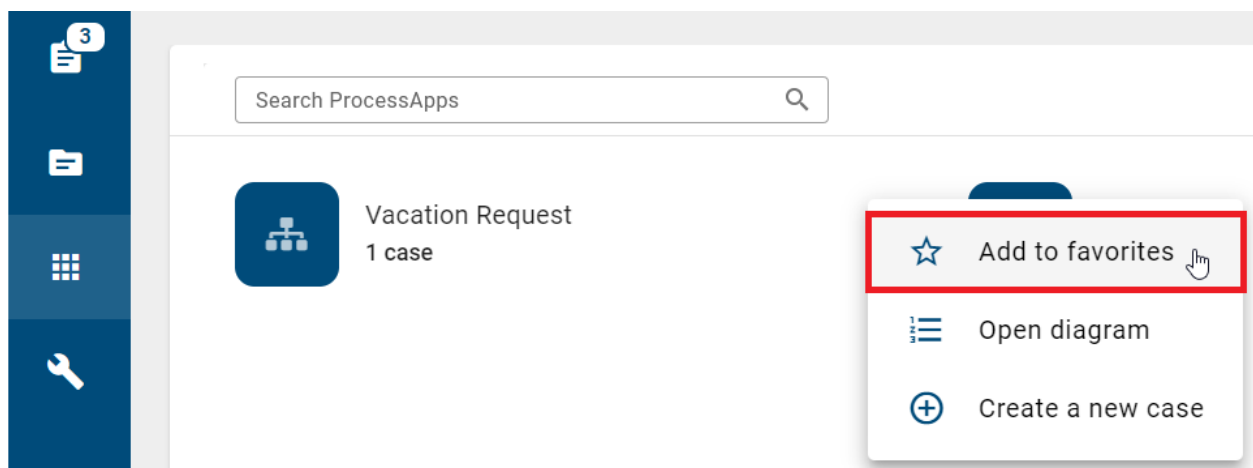
In case you like to remove a ProcessApp from your favorites, you have to use the function *Remove from favourites*

which you will find in the menu of the ProcessApp.
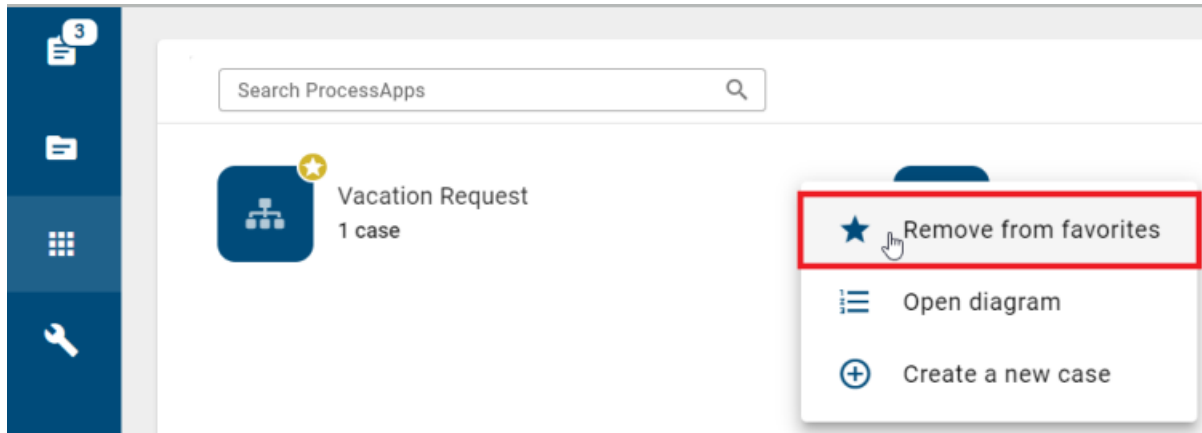
The star icon of the corresponding ProcessApp will disappear then.

20.5.4 How can I navigate from my ProcessApp to the corresponding diagram in BIC Process Design?

When you are in the ProcessApp overview and open the context menu of a specific ProcessApp, you will find the option to navigate to the corresponding diagram in BIC Process Design.
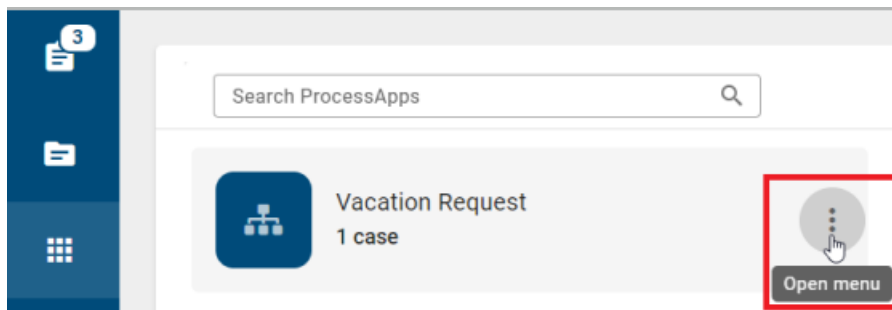
After selecting the option *Open diagram*, you will be redirected to the corresponding diagram. The diagram for this ProcessApp will open in a new browser tab and automatically present the corresponding stage of the process in BIC Process Design.

Hint: If a diagram with active cases has been depublished, you can still click on the option to view the diagram. Please note that it is now in the archived state.
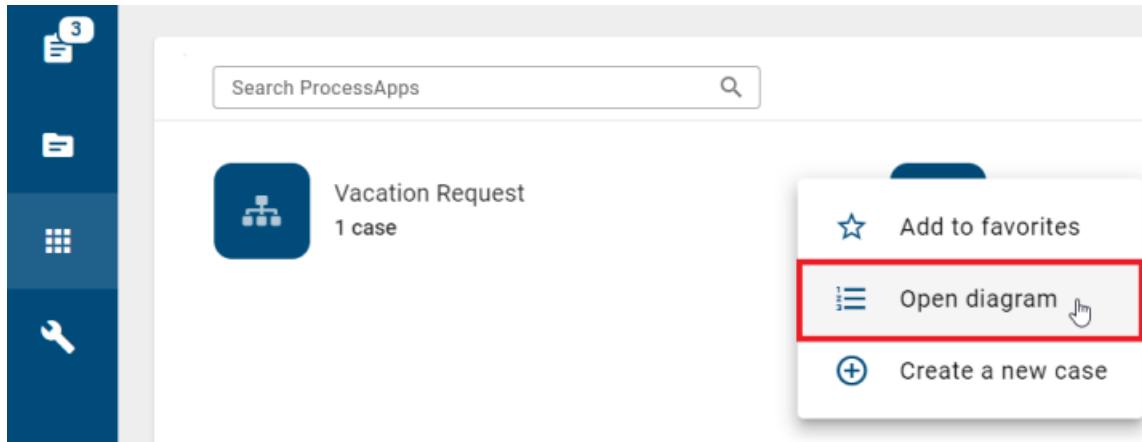
20.5.5 How can I monitor the status of the cases for a ProcessApp?

As a ProcessApp Administrator, you can view a dashboard for each ProcessApp, which provides you with information about the status of all running cases. You can switch to the tab *Monitoring* in the *case list of a ProcessApp*.

Hint: Please note that only users with the user role *ProcessApp Administrator* can access the overview.
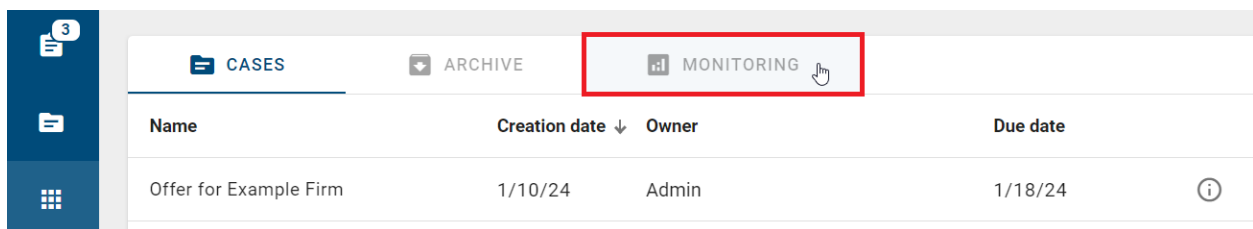
When you open the overview for a ProcessApp, you are presented with a donut chart that summarizes the status of the running tasks in the following categories:

- (current) processes running on time, i.e. the due date is in the future.
- Transactions without a due date
- Overdue cases (according to the server's time zone, UTC)
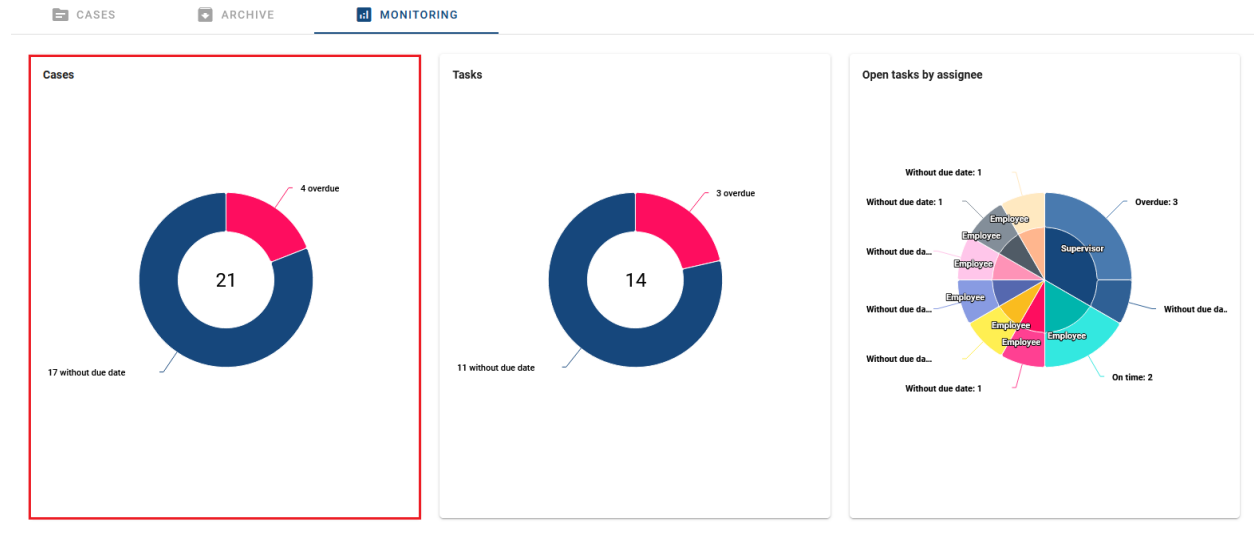
The number in the middle of the diagram indicates the number of ongoing tasks for the selected ProcessApp.

20.5.6 How can I monitor the status of open tasks for a ProcessApp?

When you open the *Monitoring* for a ProcessApp, you are presented with another donut diagram that shows the status of the active tasks accessible to you.

The donut chart is designed to visually display the task data. It is sorted clockwise and presents the following information in a specific order:

- **Number of open tasks:** This value is displayed in the center of the chart and indicates the total number of tasks that are currently open and assigned to you.

- **Number of tasks completed on time:** This data point is represented by a specific segment area on the chart. It represents the number of tasks that have been successfully completed within your designated time frame.

- **Number of overdue tasks:** Another segment in the chart represents the number of tasks that have passed their designated due date and are now overdue.

- **Number of tasks with no due date:** The chart also includes a segment representing tasks for which no due date has been set.

By viewing this donut chart, you can get a quick assessment of the distribution of your active tasks based on their status.
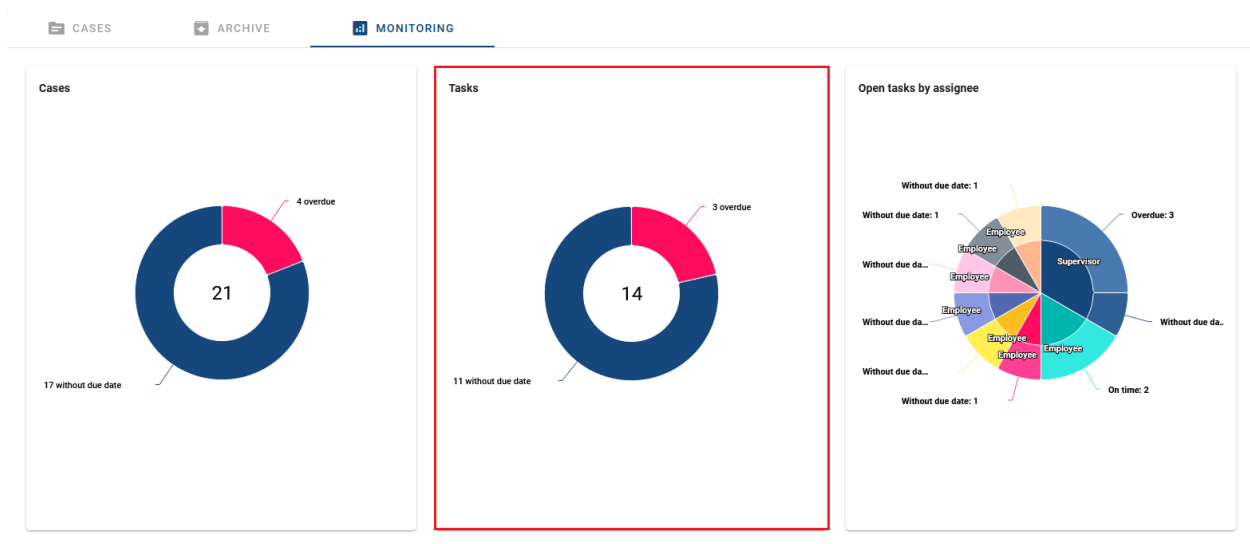
Hint: Please note that only users with the user role *ProcessApp Administrator* can access the overview.

20.5.7 How can I see the status of the started tasks, grouped by the assignees?

When you open the *Monitoring* for a ProcessApp, you are presented with a third donut chart that shows the state of the tasks that have been started.

The donut chart consists of two circles, which are sorted clockwise.

The inner circle represents the assignees for the tasks. The names of the assignees are displayed with the number of tasks in brackets.

The outer circle represents the task status of the started tasks for the assignees. The ring is divided into different segments that present the following information:

- **Number of tasks completed on time:** This segment area in the chart represents the number of tasks assigned to the particular assignee that were successfully completed within their designated time frame.

- **Number of overdue tasks:** Another segment in the chart represents the number of tasks that have passed their designated due date and are therefore overdue.

- **Number of tasks with no due date:** The last segment in the diagram contains the number of tasks for which no due date has been set.

The donut chart gives you an overview of the current stats of the started tasks, grouped by the respective assignees.
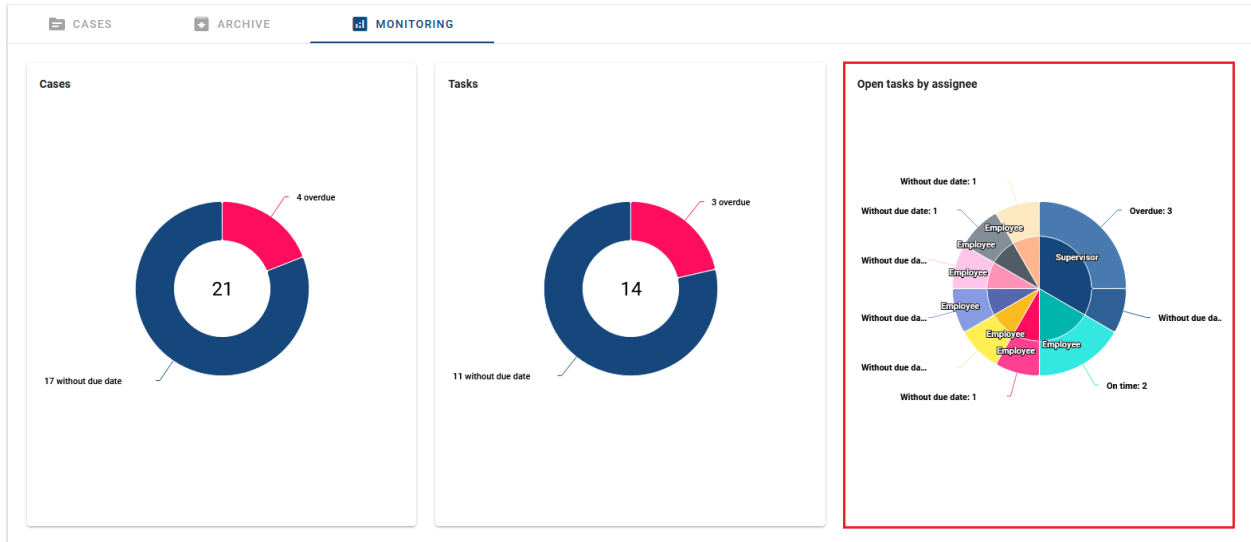
Hint: Please note that only users with the user role *ProcessApp Administrator* can access the overview.

20.6 Administration

To access the administration area, you need to select the *Administration* button in the left sidebar.
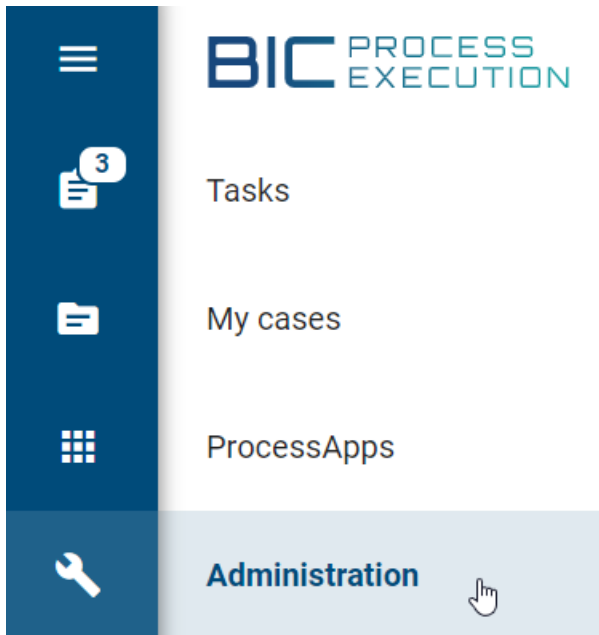
To access the administration fully, you need to be assigned to the role *ProcessApp Administrator*. You can edit your user details here.

Here you see an overview of all options you can administer.
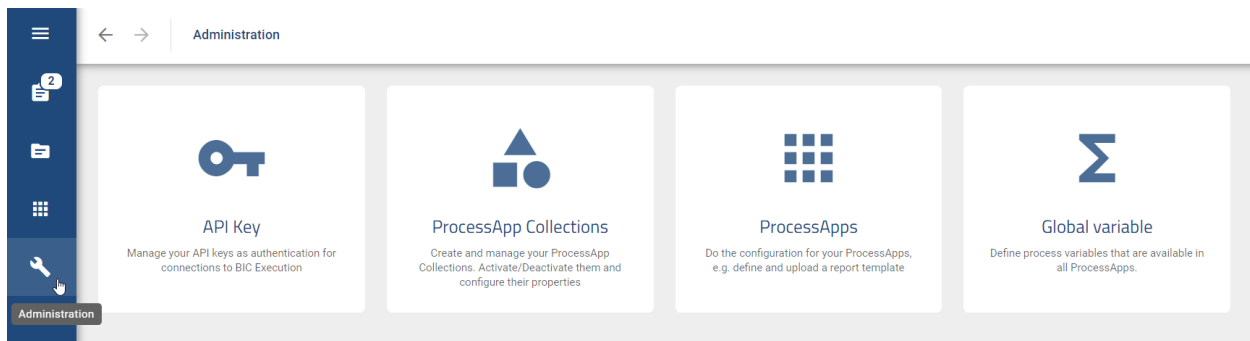
> **Warning:** The functions *update case details, archive a case, open the case variables dialogue and change values of case variables* are only available for ProcessApp Administrators.

20.6.1 BIC Process Execution API

How can I manage my API key?

To ensure that only authenticated users can access the API of your BIC Process Execution, every ProcessApp Administrator can create an API key. This can then be used in the respecting REST calls for authentication.

To create an API key you first have to navigate to the administration area. To do so select the entry *Administration* in the menu. Here select the option *API Key*.

Here you can manage your personal API key. If no API key has been created so far you can see this information in the main area. There you can also find the button *CREATE API KEY*. If you click on it a new key will be created.

No API key generated yet

You can generate an API key by pressing the button. An API key is needed to connect BIC Process Execution with another system.

O╌ CREATE API KEY

The generated key is now available and valid. The creation date of the key is now displayed in the main area. In addition the button *COPY API KEY* is displayed with which you can can copy the key into the clipboard of your device.

Your API key was created on 4/13/21

·······························

⎘ COPY API KEY

If the API KEy is no longer used or out of date, you can remove it. To do so open the context menu with the three dots in the upper right corner of the main area.
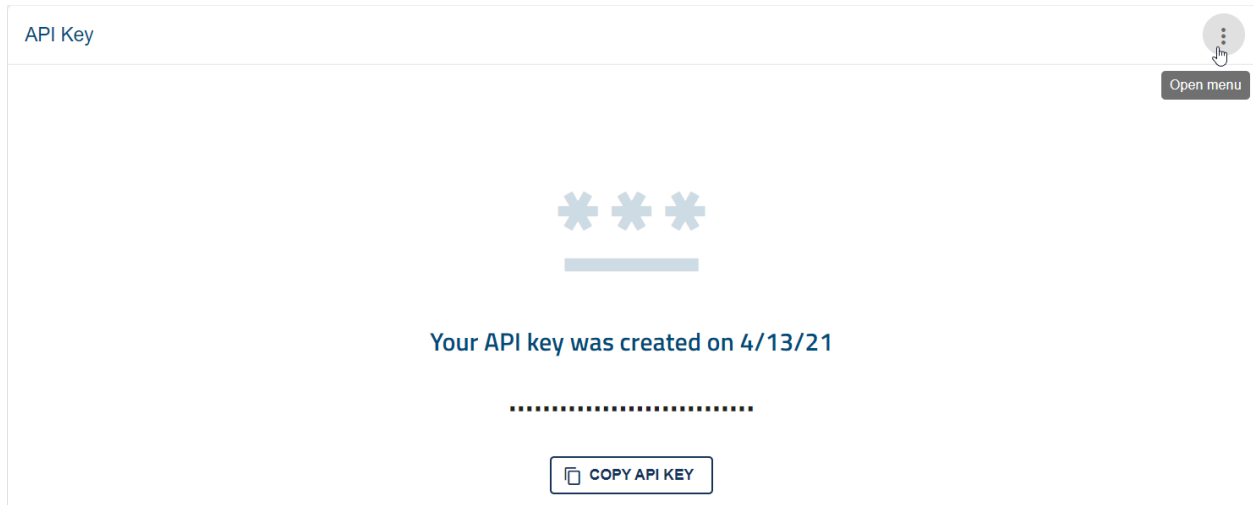
Then select the entry *Delete API Key*.
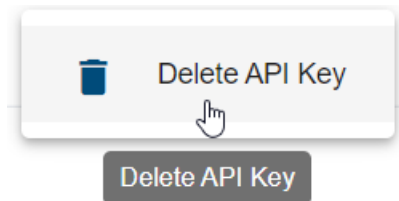
A dialog window appears. The API key will be deleted and can no longer be used as soon as you click on *DELETE*.
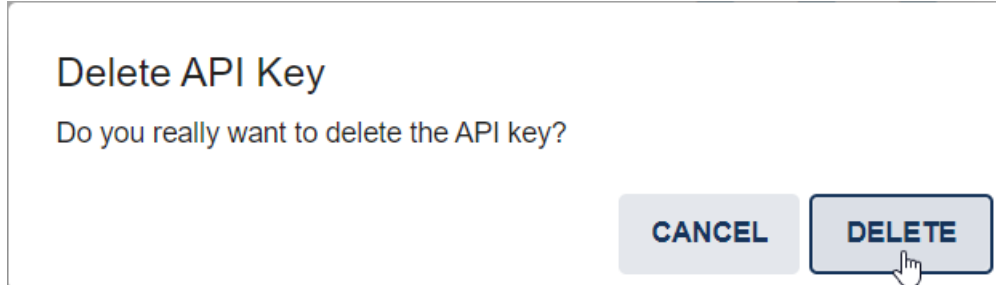
Within the administration area you can then create a new API key.

How can I create a new case using the REST API?

The BIC Process Execution REST API enables you to create new cases via external applications. To use this function, you will need the REST endpoint of the desired process for which you want to create a new case, as well as a valid API key.

The REST endpoint is defined as:

```
{{host}}/process-execution/external/tenants/{{tenantId}}/stages/{{stageId}}/
processes/{{processAppId}}/instances?apiKey={{apiKey}}
```

The variables you need to replace are:

- `{{host}}`: The host can be found in your web address when you open BIC Process Design and take a look at the URL. It is the first part before `/client/` or `/portal/`.

- `{{tenantId}}`: The tenant ID can be found when you open a diagram in BIC Process Design and take a look at the URL. It is the part between `/tenant/` and `/repository/`.

- `{{stageId}}`: In order to create the case in the desired environment, you have to replace the stage ID by the corresponding keyword. Use the keyword `dev` to address the development environment, `test` to address the test environment and via the key `prod`, you can address the productive stage. Please be aware that the keywords differ from the *URL keys* of the environments.

- `{{processAppId}}`: The ProcessApp ID can be found in the URL when creating a new case in BIC Process Execution. It is the part after `/processes/`.

- `{{apiKey}}`: You can find and create your api key in the *administration area of BIC Process Execution*.

Note: Please note that the HTTP method POST has to be used to use this REST API.

Hint: Please be aware that, the ProcessApp ID depends on your stage. Make sure that you use the ProcessApp ID of the stage you want to address.

In addition to the name of the new case, you can set the values of *process variables* within the body of the request. These values must be transferred in form of a JSON object.

By default, when creating a new case the name of the case (`caseName`) will be transferred as an attribute. If this attribute will not be transferred, the attribute `name` will be used as the case name. If both attributes are not transferred the actual timestamp in the format *YYYY-MM-DD T HH:mm:ss* will be set as name.

If you want to transfer additional attributes, you can use the attribute `variables`. In this situation, no additional data other than the `caseName` or `name` will be transferred. An example could look like the following:

```
{
    "name": "New case",
    "variables": {
        "manager_name": "John",
        "surname": "Doe",
        "department": "Marketing"
    }
}
```

Alternatively, you can transfer attributes without using the attribute `variables`. In this situation all *process variables* will be handed over to the new case. This may look like the following:

```
{
    "name": "New Case",
    "manager_name": "John",
    "surname": "Doe",
    "department": "Marketing"
}
```

Note: Cases generated via the REST API do not have a unique owner. The owner of those cases will be set with the value *REST API*.

How can I process waiting events using the REST API?

With the BIC Process Execution REST API, in addition to *creating new cases from external applications*, you can also process waiting events. To use this feature, you need the REST endpoint and an *API key*.

The REST endpoint is defined as:

```
{{host}}/process-execution/external/tenants/{{tenantId}}/stages/{{stageId}}/
signal-events
```

The variables you need to replace are:

- `{{host}}`: The host can be found in your web address when you open BIC Process Design and take a look at the URL. It is the first part before `/client/` or `/portal/`.
- `{{tenantId}}`: The tenant ID can be found when you open a diagram in BIC Process Design and take a look at the URL. It is the part between `/tenant/` and `/repository/`.
- `{{stageId}}`: In order to create the case in the desired environment, you have to replace the stage ID by the corresponding keyword. Use the keyword `dev` to address the development environment, `test` to address the test environment, and `prod` to address the productive stage. Please be aware that the keywords differ from the *URL keys* of the environments.

In the *REST call*, select the HTTP method type *POST*, the authentication type *API key*, and enter the REST endpoint described above in the *URL* field.

In the body section of your HTTP request, you muss pass the `eventIdentifier` and `correlationKey` attributes in JSON format:

```
{
    "eventIdentifier": "identifier",
    "correlationKey": "correlationKey"
}
```
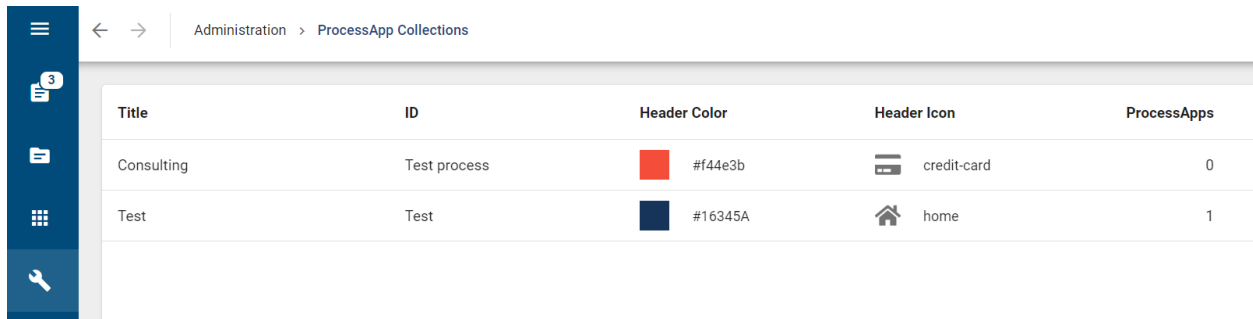
20.6.2 ProcessApp Collections

You can use ProcessApp Collections to group different ProcessApps. For example you could group the ProcessApps of a specific department into one ProcessApp Collection. A ProcessApp can be included in as many ProcessApp Collections as you like. In the administration you can see a list of all available ProcessApp Collections and create new ones.

Tip: In the upcoming versions of BIC Process Execution the functions of ProcessApp Collections will be extended. You will be able to structure your Process Apps better so that your users can more quickly identify and execute the cases that are relevant for them.

Where can I find an overview of all ProcessApp Collections?

If you want to get an overview of all ProcessApp Collections, you need to navigate to the *Administration* first. Choose the option *ProcessApp Collections*.

Here you can see an overview of all ProcessApp Collections in alphabetical order.

How can I create a new ProcessApp Collection?

If you want to create a new ProcessApp Collection you need to navigate to the *overview of all ProcessApp Collections*.
In the bottom-right corner you find the button *Create new ProcessApp Collection*.
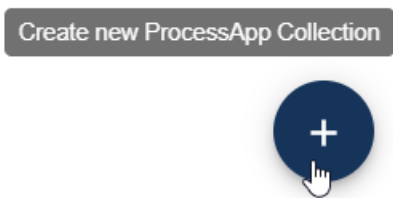
Click it and a dialog will appear in which you can enter the details of the new ProcessApp Collection.

New ProcessApp Collection

ID *
Define identifier, e.g. sales, energy, germany

Title

Header

Icon

Color
#16345A

CANCEL   CREATE

You need to give your ProcessApp Collection a unique ID. This is used to *add a process to your ProcessApp Collection*.

The title will be seen by users when they use this ProcessApp Collection. You also got the possibility to use an icon (free of charge) from Font Awesome (v5.15.4) and a color of your choice to make your ProcessApp Collection more prominent.

Afterwards, choose *Create* to create your Collection.

Note: You can choose from all Font Awesome icons in version 5.15.4 except the trademark-protected ones.

How can I edit a ProcessApp Collection?

If you want to edit a ProcessApp Collection, navigate to the *Overview of all ProcessApp Collections*. If you hover over an entry, a context menu will appear on the right side. Open the menu of the desired Collection and select the option *Edit collection*.

Title	ID	Header Color		Header Icon		ProcessApps	
Consulting	consulting	🟥	#f44e3b	💳	credit-card	0	⋮
Human Resources	human-resources	🟩	#68bc00	🏠	home		✏️ Edit collection
Sales	sales	🟥	#9f0500	🦛	hippo		🗑️ Delete collection

Then, a dialog window will open where you can edit the title, icon and color of your Collection. Note that the ID is read-only. To confirm your changes, press the *save* button. Use the *cancel* button if you want to discard your changes.

Note: You can choose from all Font Awesome icons in version 5.15.4 except the trademark-protected ones.

How can I delete a ProcessApp Collection?

If you want to delete a ProcessApp Collection, navigate to the *Overview of all ProcessApp Collections*. Hover over the entry of the desired Collection. Then you can open the appearing context menu on the right side of the entry.

Title	ID	Header Color		Header Icon		ProcessApps	
Consulting	consulting	🟥	#f44e3b	💳	credit-card	0	⋮
Human Resources	human-resources	🟩	#68bc00	🏠	home		✏️ Edit collection
Sales	sales	🟥	#9f0500	🦛	hippo		🗑️ Delete collection

Here you find the option *Delete collection*. If you select this option, a confirmation window appears. If you select *Delete*, your ProcessApp Collection will be deleted. The contained ProcessApps will not be deleted.

20.6.3 ProcessApps

Where can I find a list of all ProcessApps?

In the *Administration* you will find an overview of all ProcessApps. To get to this, first navigate to the *Administration* and select the option *ProcessApp*. You will then get an overview of all ProcessApps that are available. Furthermore, you can see here how many processes of the respective ProcessApp are currently active or archived.

ProcessApp		Active Cases	Archived Cases	Report Template
📄	Job advertisment	3	36	
📄	Vacation request	0	15	
📄	Onboarding	14	83	
📄	plan company event	0	5	
📄	evaluate performance	3	14	
📄	BPM tool evaluation	14	76	

Note: Be aware that the administration is only accessible for users with the role *ProcessApp Administrator*.

20.6.4 Global Variables

Where do I find an overview of all global variables?

Global variables are *process variables* that can be used in all ProcessApps. You can define them in the *administration area* of BIC Process Execution. It is possible to define the value of the variable for each stage (Public workspace, Preview and Publication) separately.

To open the overview of all existing global variables, open the *administration area* and choose the option *Global Variables*.

A list with all globally created variables opens. You can see the name and the values of the variables for the corresponding stages. The variables are sorted alphabetically by their name.

Variable name	Studio	Test	Production (App)
stage_name	development	test	production
Test	False	True	False
ID_066			1233

How can I add a new global variable?

If you want to add a new global variable, you need to do the following. First open the *overview of all global variables*. In the bottom right corner you will see a *Plus* Button *Add new global variable*.

When you select this button, a new dialog window will appear. Here you can enter the *Variable name* and the values for the different stages.

Afterwards, you can press *ADD* to save your new global variable. Alternatively, you can *CANCEL* the creation of it.

If the name of a global variable contains special characters, punctuation marks, or spaces (e.g., +, /, =, >, ?, ., ;), it cannot be saved. Additionally, the name of a global variable is not allowed to include accents and specific letters (e.g., á, à, ß, ç, ñ, ö, ü). In these cases, you will receive an error message at the bottom right corner of the page.

Hint: For already existing global variables with a dot in the name, the dot is replaced by an underscore. If this creates a duplicate, the global variable will be removed.

Note: When you do not provide a value for one (or more) stage, the value will be saved as an empty string.

How can I delete a global variable?

If you are on the *overview of all global variables*, you have the option to delete global variables. To do so, select the context menu (three dots) of the desired global variable and click on *Delete variable*.

This will open a pop-up window where you need to confirm the deletion. Once you click *DELETE*, the deleted global variable will appear with a strikethrough in your list and will be permanently removed upon reloading. If a global variable is deleted by another user, it will also be displayed with a strikethrough in your list.

← → Administration › Global Variable

Variable name	Studio	Test	Production (App)
~~variable_name~~	~~100~~	~~100~~	~~100~~

How are global variables used in the process?

If you use a placeholder in your process that is not defined within the process, the system checks if a global variable with the provided name exists. The system then requests the value for the stage in which the case is being executed.

If no value has been set for the stage in which the case is being executed, the placeholder is replaced with an empty string.

When a global variable is modified within a task, the value is changed within the context of that task. If a global variable is not modified within a task, the value is not transferred to the context of the operation.

If the value of a global variable is changed within the context of a task and the task has not yet been completed, the change only applies within that task.

20.7 Profile

In the *profile* area, you can make adjustments to your BIC Process Execution interface. For example you can change your content language or settings regarding your deputy.

John Doe

✉ john.doe@gbtec.com

Content Language
🌐 English (English) ▾

Status

Available	Out of office

20.7.1 Deputy

If you are not available for a longer time, you can change your availability status. You can set a general deputy, who will be responsible for your tasks as long as you are out of office. Therefore, important tasks cannot be forgotten and the normal workflow can continue as usual.

When you set your availability status to *out of office* and have a deputy set, your new tasks will be automatically assigned to your deputy.

Note: If your deputy has also set a deputy and is *out of office* as well, your tasks will not be assigned to their deputy. This way you can ensure that your tasks will only be assigned to people you have personally selected.

Note: You will not get any *e-mail notifications* or *push notifications* if your task is delegated to your deputy automatically. If you have been automatically assigned to a task, you will receive all notifications related to the task.

How can I change my availability status?

With the availability status you can set whether you can currently work on your tasks or if you are not available (e.g. vacation or sickness). If you want to change your availability status, you need to navigate to your *profile* first. Here you can see your current status. Your selected option is highlighted in color.
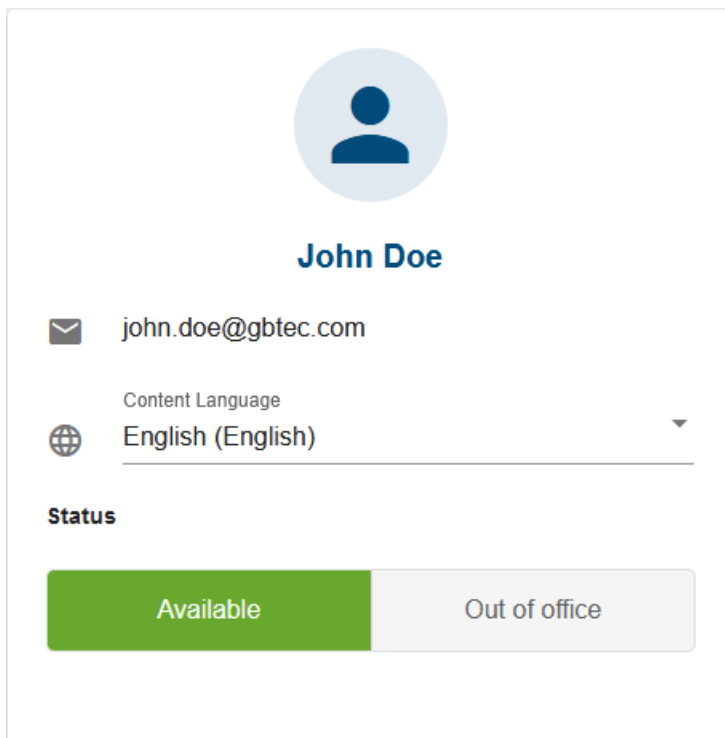
You have the possibility to switch between *Available* and *Out of Office*.

Note: Your availability status does not reset, i.e. the status stays the way you set it until you change it again.

How can I set my general deputy?

If you want to set your *general deputy*, you need to open your *profile* first. On the right-hand side you can see the *Deputy*-Overview. Here you can set a *General Deputy*. Select the option *Define General Deputy* for that.
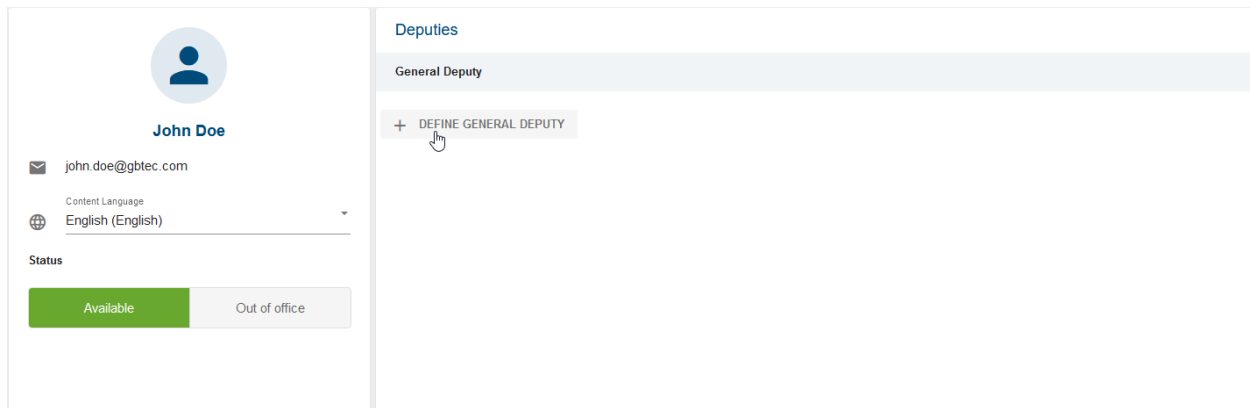
An input field where you can enter your general deputy appears.
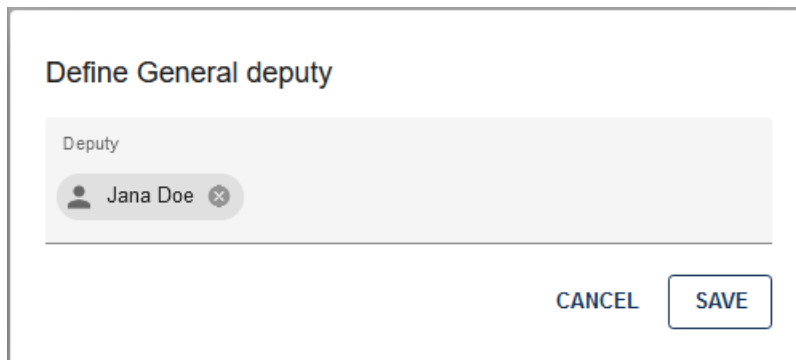
Use the Button *Save* to save your general deputy. After the confirmation your deputy will be shown in the list on the right-hand side.

How can I remove my current general deputy?

To remove your *general deputy*, you need to open your *profile* first. On the right-hand side you can see the *Deputy*-Overview and your *General Deputy*.

Right to the name of your deputy is a *trashcan* icon. Select this icon.
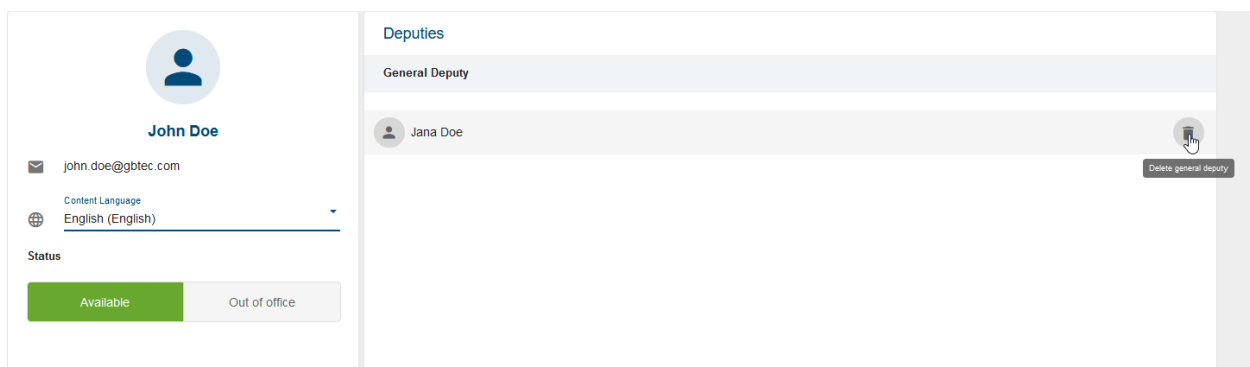
A dialog window appears where you can confirm the deleting of your general deputy. After confirmation your general deputy is removed.

20.7.2 How do I change language settings?

To change the content language of your BIC Process Execution application navigate to the *Profile* via the menu.
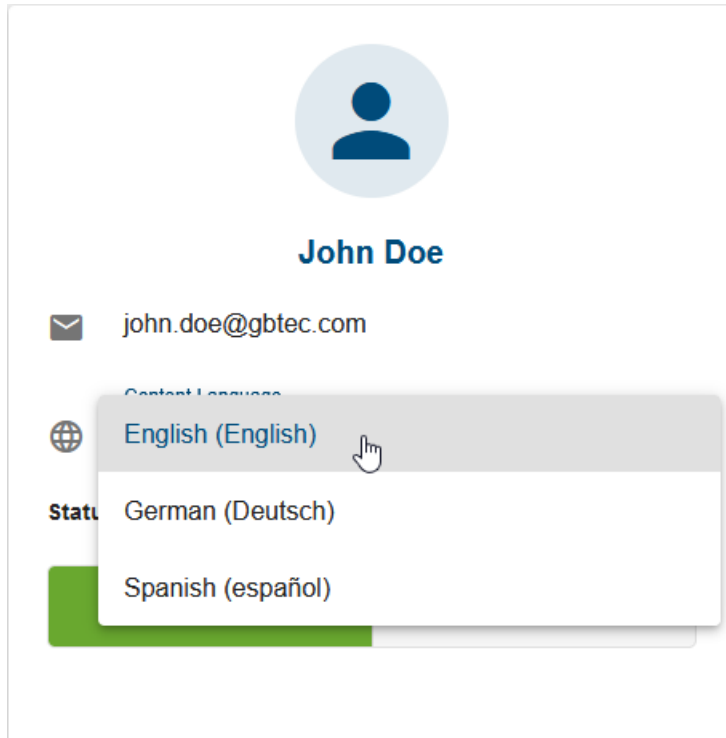
Here, you can select the desired content language using the drop-down menu. If you have not selected anything else, the content language corresponds by default to the language that was specified as the preferred language in the *User language* under the *User Administration* in your administration in BIC Process Design.

As soon as you have selected a suitable content language, your settings will be adopted in BIC Process Execution. This setting will persist even if you close the application or the cache has been deleted from your browser.

Note: Changes of the content language applied to the BIC Process Execution application have no effect on the content language settings of your BIC Process Design. With that you can set different content languages in the two applications.

Note: The content languages which are available for the users are derived from the languages specified in *the administration area* of your BIC Process Design.

20.7.3 How can I change the language of the user interface (UI)?

You have the possibility to change the language of your user interface. Like in your BIC Process Design the UI language depends on the browser settings, which have been chosen for the corresponding browser. You can find more information about this subject *here*

Note: In case the UI language settings can not be applied, then the user interface will be displayed in English by default.

TWENTYONE

RELEASE NOTES

21.1 Version 7.14.11

21.1.1 Resolved bugs

- [DES-6343] Checkin fails after removing updated non catalog item

21.2 Version 7.14.10

21.2.1 Resolved bugs

- [PT-14549] When clicking on the options entry "Reports & Exports" in the diagram gallery view, the available reports are not listed
- [PT-14640] Newly created catalog entries are not sorted alphabetically
- [PT-14876] Context menu for nodes inside a pool is not appearing anymore after converting the pool to a suggestion and dropping new nodes to the pool
- [PT-14928] Users are not suggested when adding user assignments to an attribute
- [PT-15045] Catalog Index does not get updated on catalog item change, leading to outdated views & facet results in catalog
- [PE-9640] The case owner is not shown in form field when the task is not started yet
- [PE-9682] Task assignment to case creator as fallback is not working in app stage
- [PE-9782] Diagram changes in production are not transferred to ProcessApp when it has cases with instance attachments

21.3 Version 7.14.9

21.3.1 Resolved bugs

- [PT-14741] Suggestions for assignment governance attributes are not filtered by range

21.4 Version 7.14.8

21.4.1 Resolved bugs

- [PT-14550] Opening files (PDF) directly in the integrated browser viewer behaves inconsistently throughout the application and opens file with uuid as name instead of the real file name
- [PT-14619] Diagrams cannot be checked in when assigned entities are not available
- [PT-14721] Recreating catalog index runs into error message due to missing revision information
- [PE-9146] Service Reports can not access string variables longer than 4000 characters
- [PE-9616] When in app stage, task assignee follows assignation steps of test stages
- [PE-9369] Call Activity with active status after archiving the parent case is shown in MyTasks view
- [PE-9530] When a second group task is started, it should be assigned back to the group if the previous user is out of office
- [PE-9620] Email Template fails replacing variables longer than 4000 characters when parsing html content
- [PE-9624] User Form's multiple choice fields does not load correctly the key/value pairs

21.5 Version 7.14.7

21.5.1 Resolved bugs

- [PT-14551] Chips are cut and full chip title cannot be reached

21.6 Version 7.14.6

21.6.1 Resolved bugs

- [DES-5840] Users and groups with short names sometimes not reachable in attribute suggestion list
- [PE-9531] Cannot complete a task when a variable associated with the identifier of a role is set to empty string
- [PT-14136] Users and groups with short names sometimes not reachable in attribute suggestion list
- [PT-14377] Diagram cannot be checked in when diagram assignment attributes contain inaccessible or circular references
- [PT-14415] Potentially long running upgrade step does not indicate progress

21.7 Version 7.14.5

21.7.1 Resolved bugs

- [DES-5859] Changing symbol type of a node does not apply on related processwarehouse export (fix for new symbol assignments)
- [PT-12924] Key value is displayed instead of title in diagram and catalog dashboard
- [PT-13564] Reduce the amount of calls and loaded data when validating a diagram
- [PT-13641] Cursor focus disappears on Catalog/Diagram edit page when typing in a value on an empty formatted text field
- [PT-13750] Opening an attachment opens a file with a uuid as name instead of the real file name
- [PT-13896] Checking in a diagram is not possible when using Firefox browser
- [PT-13965] Display of edit button for catalog entries is inconsistent for authors
- [PT-13987] Filter facets cannot be opened on mobile devices
- [PT-13988] Mobile touch scrolling not working on catalog filter facets
- [PT-14145] Re-indexing of catalog-search fails instead of appropriate error handling
- [PT-14165] Inconsistent data can cause publication steps to be repeated
- [PT-14183] Catalog entries with assignments are reindexed multiple times during bulk index
- [PE-9360] Claimed group tasks cannot be delegated by group members
- [PE-9194] Several diagram updated message in a short period cause loss of updates
- [PE-9372] Deputy: Task is reassigned when the person responsible does not have an assigned status
- [PE-9447] Formula for conditional hidden field not working properly
- [PE-9448] User Form Editor's details section scrolls the whole editor out of view

21.8 Version 7.14.4

21.8.1 Resolved bugs

- [DES-5926] UpdateMessages sent after the bulk update of diagrams don't have the correct priority
- [DES-5974] No archives are created for bulk updates
- [PE-9178] Files used in a JSON body of a REST service task include line breaks
- [PE-9278] Multi-line text fields link option is displayed incorrectly
- [PE-9300] ProcessApp Analyst has not access to the process app monitoring tab

21.9 Version 7.14.3

21.9.1 Resolved bugs

- [PT-14095] Workflow execution may result in endless loop

21.10 Version 7.14.2

21.10.1 Resolved bugs

- [PE-9115] Option labels are too long and oversize the fields in forms
- [PE-9124] Case progress calculation is inconsistent with the displayed flow
- [PE-9213] Call Activity Editor dialog is not centered and lacks a background
- [PE-9093] A text area in the form causes task completion to fail in the "My Tasks" view
- [PE-9135] The German translation of "Creator" in instance facets is incorrect

21.11 Version 7.14.1

21.11.1 Resolved bugs

- [DES-5888] Wrong thread pool configuration in some services

21.12 Version 7.14.0

21.12.1 New Features

Setting new standards in process modeling with Arty

In our effort to further revolutionize business process modeling and management, we are pleased to introduce Arty, our intelligent AI-based modeler and editor. Arty integrates the latest AI technologies to save you time while improving the accuracy and consistency of your modeling. By using Arty, you can ensure that your processes are modeled and documented not only faster and more accurately, but also with fewer resources.

Hint: Please note that the AI-powered features of Arty are not included in the standard license. Please contact your sales representative for more information.

Automatic BPMN process modeling

Arty provides the ability to automatically generate complete BPMN processes, including all associated resources. This feature is ideal for teams that need to create high-quality process diagrams quickly and without prior knowledge. By minimizing human error and accelerating the entire modeling process, you can be confident that your processes will be created not only faster, but with higher quality

Smart name suggestions during modeling

With the ability to generate naming suggestions for the next process flow elements as you model, Arty helps you maintain clear and consistent naming that seamlessly integrates with existing process structures.

Automatic generation of descriptions

In addition to modeling, Arty also supports the generation of descriptions for processes and process elements. This automated creation of clear and concise text facilitates documentation and improves accessibility and understanding of your process landscape.

Generation of catalog items

With Arty, you can now quickly and efficiently create new catalog items, such as documents or applications, from which you can directly select and create the appropriate items. Arty allows you to quickly expand your catalog without manual effort, greatly increasing efficiency.

With these advanced features, Arty sets a new standard for efficiency in business process modeling. We are confident that these innovations will significantly increase your productivity and help you efficiently meet the demands of modern business.

Filters for the governance lifecycle of diagrams and catalog entries

In the new user interface, we have introduced the ability to filter diagrams and catalog entries in the public workspace by their governance lifecycle.

Publication

- **Not published:** Filters content that has not yet been published.

- **Published:** Filters content that has been published.

- **Depublished:** Filters content that was previously published and then depublished.

Revision

- **Unmodified:** Filters content that has not been changed since it was published.

- **Modified:** Filters content that has been modified since it was published.

Workflow

- **Publication:** Filters content that is in the process of being published.

- **Resubmission:** Filters content that has been resubmitted for review.

- **Depublication:** Filters content that is in the process of being depublished.

These new filters help you keep track of the status and lifecycle of your diagrams and catalog items, enabling more efficient management in the public workspace.

Hint: The filter options were introduced with this version and cannot reflect the life cycle before the update. For example, diagrams or catalog elements that have already been published only appear in the "Published" filter category once they have been edited in the public workspace. The "Revision" filter category also only shows changes when the diagram or catalog item is published again. Until then, the value is "unknown".

Quick access to recently visited diagrams

We have introduced quick access to recently visited diagrams in the new user interface. When you open a diagram, you now see a list of your five most recently viewed diagrams in the diagram header. This list allows you to quickly and easily switch between your most recently viewed diagrams. Simply click on one of the diagrams in the list to open it directly and continue working seamlessly.

Gallery view for diagrams

A new "Gallery" tab is now available when navigating to the "Diagrams" section on large screens. This tab displays all diagrams in a selected category as gallery tiles, enhancing visual navigation and interaction.

Set access to archives in the publication

Administrators now have the ability to specify whether readers can access archived versions within the new user interface. This setting provides more granular control over what historical data is available to readers. If readers are allowed to access archives in the publication, they can now select all archived versions in the change view and compare them to the current version. This setting only applies to the new user interface.

Export of the current diagram version in the publication

With the new user interface, it is now possible to directly export the current version of a diagram in the publication. This removes the previous limitation that only archived versions could be exported.

Improved usability in the new user interface

We have significantly improved the interaction with the category explorer: You can now minimize the explorer further and resize it more easily using drag-and-drop, with a preview of the new size.

We have simplified catalog navigation: On the details page of a catalog entry, you can now navigate directly to a linked object, such as a diagram or another catalog entry, by simply clicking on the chip.

The height of all list entries has been optimized to take up less space, allowing more list entries to be visible at once.

Other optimizations have been made for low-resolution devices: In the Diagram list, Catalog, and Governance Cockpit, options are now available in context menus instead of on the bottom panes. When opening a category, diagrams are now displayed first, followed by categories.

Finally, the RACI matrix in the new user interface now displays all modeled RACI relationships between a role and an activity. Previously, only one relationship was shown.

Based on your feedback, we have renamed the "Properties" tab back to "Details" in the new UI to make it easier to find attributes and profiles. In the old interface, these views were called "Details".

Statement of Accessibility

We are constantly working to remove barriers in BIC Process Design. On the login page and in the help section, you can now view our **:ref:`Statement of Accessibility <../../../help/portal/en/accessibility.html#accessibility>`_** to learn about known barriers.

21.12.2 Existing administration functions available in the new user interface

The new user interface gives you access to familiar administrative functions. You can now easily manage and configure the following areas:

- User
- User groups
- Attribute and profile view for diagrams and objects
- MyBIC
- Reports
- Corporate Design
- Method, Symbol color and layout assistant
- Catalog

In future versions, we will integrate the remaining administration functions into the new user interface.

21.12.3 Process-Execution

Instance Progress Tracking

You can now easily monitor the progress of your instances directly from the case list. This feature provides real-time insights into the status of each instance in your workflow, enabling better decision-making.

Reports with Access to Tasks

Access all executed tasks of a case when generating reports, allowing for comprehensive and detailed insights into case activities. With this feature, users can generate more detailed reports.

Parallel Multi-Instance Activity

You can now define parallel *Multi-Instance Activities* within processes, enhancing workflow efficiency and scalability. This feature allows multiple tasks to be executed simultaneously based on a collection of data.

Group Emails

It is now possible to address user groups in send tasks. This enables effective communication by sending email notifications to all group members set as recipients, facilitating seamless collaboration and information sharing.

End Events Inside the Instance View

Enjoy improved process transparency with end events that are now visible to users within the process flow. This feature provides users with a clear understanding of process completion points, facilitating better process monitoring.

Overdue Task Notifications for Case Owners

Stay on top of task deadlines with notifications of overdue tasks within your cases. This feature empowers case owners to take timely action, reducing the risk of delays and ensuring smooth case execution.

Simplified Multiline Field View

Experience an enhanced user interface by viewing the value of multiline fields without the toolbar when not in editing mode. This feature provides a clutter-free view, allowing users to focus on content without distractions.

Multi Column User Forms

You can now customize *user forms with multiple columns*, offering greater flexibility and compactness. This feature enables users to design forms tailored to their specific needs, enhancing usability and efficiency.

Case Ownership Management

Improve accountability and ownership with the introduction of case owners. This feature assigns responsibility for case management, ensuring clear ownership and streamlined collaboration.

Analyst Case Visibility

Analysts can now easily view all cases to which they are assigned as the *analyst for the ProcessApp*. This feature provides analysts with quick access to relevant cases, streamlining their workflow and enhancing productivity.

Studio Stage Email Testing

Test emails from send tasks executed in the studio stage or test stage are now sent to the case creator only. This feature enables thorough testing of processes without disrupting other users, ensuring smooth process development.

Unified Handling of Results with the Collect Hit Policy

To have a consist handling of output variables with DMN tables using the hit policy "Collect", the result is now also an array if there is only one result. This feature simplifies data handling and processing.

REST API Signal Events

You can now trigger signal events via the REST API to allow waiting processes to continue. This feature provides greater flexibility and control over process execution, enabling seamless interaction with external systems.

Consistent Field Hinting

Maintain consistency in UI design with read-only fields now displaying hints in the same font color. This feature enhances visual clarity, improves user experience, and reduces cognitive load.

Overdue Reminder Optimization

Reduce notification overload with overdue reminders that are no longer sent for successful automated tasks. This feature streamlines communication, ensuring that users receive relevant notifications.

HTML Code Visibility in Email Templates

Users can now opt to see the HTML code to resolve issues, providing greater transparency and control over their content. This feature allows users to troubleshoot formatting issues more effectively and make precise adjustments directly in the HTML code.

Call Activity Subcase Management

Subcases started by a call activity now have a system creator as the case creator. However, the case owner remains the task owner of the call activity. This feature enhances traceability and accountability, ensuring clear ownership of subcases.

Usability Improvement

Enjoy improved usability with the increased size of the Task Dialog opened from the task list. For multi-column forms, the task form popup is 75% of the browser width, and for simple forms, the popup is 50% of the browser width. This feature enhances user interaction, makes it easier to work with large user forms, and improves the overall user experience.

21.12.4 Resolved bugs

- [DES-4826] User export does not work for customer with large number of users (>90k)

- [DES-5449] Security Improvements

- [DES-5778] The configuration for the max header size for the bpm-service uses the wrong property key in docker-client

- [DES-5853] Docker health check for proxy return always unhealthy if extra domain names are configured

- [PT-1580] Invalid characters in formatted text attribute blocks process warehouse export

- [PT-4375] Attachment not downloadable from chip with a cut name

- [PT-4872] Entity profile performance issue

- [PT-5614] Simulation of business rule fails when DMN contains date and time function

- [PT-6262] Document stamping fails if file ending is not all lower case

- [PT-6692] Empty examiner 2 and 3 get stamped

- [PT-6766] Comment emails will be sent to more recipients than the configured limit

- [PT-6982] Wrong styling of filters of Governance Cockpit

- [PT-12136] Placeholder texts exceed input field size

- [PT-12168] Catalog edit mode design issues

- [PT-12267] Tooltips are missing for administration cards

- [PT-12324] Stage switch does not get updated correctly

- [PT-12362] Help link in administration redirects to wrong section in online help

- [PT-12386] Catalog archives will be displayed in enabled edit mode

- [PT-12420] Input limit does not work for user group names in Portal

- [PT-12434] Some OCL rules lead to errors leading to an empty validation

- [PT-12531] Debug tool does not work correctly with relationship attributes

- [PT-12598] User group administration issues in Portal

- [PT-12667] User administration issues in Portal

- [PT-12683] Buttons on click (hold) have too strong color

- [PT-12711] Security improvement

- [PT-12804] Changed file upload limit is not respected in Portal

- [PT-12819] Top bar badge font color is wrong

- [PT-12832] User group members are not filtered out in add dialog

- [PT-12927] Request token does not get updated

- [PT-12960] Delete file in all languages dialog does not get displayed

- [PT-12962] Attachment attribute label gets display without a value

- [PT-12979] Direct link to an attachment leads to errors

- [PT-13023] Central search URL misses parameters

- [PT-13057] SVG does not get updated on language switch

- [PT-13082] Radio buttons on touch devices behave incorrectly

- [PT-13084] Catalog facet does not show custom attribute name changed in a object context

- [PT-13091] Printing does not work with a SVG logo set as footer or header

- [PT-13191] Missing tool tip for cut attachment names in Portal

- [PT-13205] Pasting a selection with free form elements or big images can cause errors

- [PT-13280] Label in quick modeler dialog is incorrect

- [PT-13281] Entity profile report availability is not taken from report descriptor

- [PT-13413] Error toasts get displayed to all users

- [PT-13440] Deleting assigned objects in catalog details page is not persisted

- [PT-13456] Diagram dashboard not displayed in Portal

- [PT-13463] Generate smart description tooltip is incorrect

- [PT-13465] Generated smart description gets inserted in wrong attribute

- [PT-13496] BPMN quick model import does not work with associations without edge symbols

- [PT-13540] Wrong error handling in central search

- [PT-13546] Validity expiration banner does get updated when switching stages

- [PT-13548] Invalid archive retention period values can get persisted

- [PT-13558] Archive export does not work on repository level

- [PE-1356] If a column in a DMN table contains prefilled values, not only strings are presented as dropdowns.

- [PE-1468] When delegating to a group, the instance is permanently listed.

- [PE-4135] A new tab created from the run link is not being updated if it is changed.

- [PE-7622] Dragging the scrollbar of the process flow view is not working and shows a not allowed icon.

- [PE-7791] The "My cases" list does not update the process name when a new case is created and a second tab is open.

- [PE-8059] Elastic is rejecting write operations due to the flood stage watermark being reached

- [PE-8153] The regexmatch formula returns the matching expression by default.

- [PE-8331] Sorting by status on the "My tasks" view is not working as expected.

- [PE-8399] Attachment names are not shown correctly.

- [PE-8513] The ordering arrow for columns in the case list is not shown if there is not enough space.

- [PE-8562] Fetching users from a group only returns the first 20 users.

- [PE-8566] The user form loads slowly.

- [PE-8663] Terminate end events are not archiving the case when the fragment where the event belongs is not completed.

- [PE-8749] German translations are incorrect in some places across the application.

- [PE-8896] Line breaks within the ProcessApp titles do not consider proper hyphenation.

- [PE-8906] Attachment URL is shown instead of the title of the attachment.

- [PE-8908] DMN evaluation filters variables with null values and makes the evaluation fail because there is no value for the corresponding input.

- [PE-8924] DMN tasks in error status do not show the error icon.

- [PE-8925] The attribute labels in the form inside the process flow view are not shown after refreshing the page.

- [PE-8978] The autocomplete suggestion list for formular fields in the form editor is not working in the form preview and default value

- [PE-8979] A ProcessApp beginning with a parallel gateway gets stuck.

- [PE-8983] Inclusive gateways at the beginning of a ProcessApp are failing.

- [PE-9048] Script/REST service task is stuck when it is not possible to add variables.

21.13 Version 7.13.24

21.13.1 Resolved bugs

- [PT-14876] When a pool as approved catalog item gets converted into a suggestion and activities will be dropped inside you cannot get the menu of the activity by right clicking

21.14 Version 7.13.23

21.14.1 Resolved bugs

- [PE-9624] User Form's multiple choice fields does not load correctly the key/value pairs
- [PE-9369] Call Activity with active status after archiving the parent case is shown in MyTasks view
- [PT-14741] Suggestions for assignment governance attributes are not filtered by range

21.15 Version 7.13.22

21.15.1 Resolved bugs

- [PT-14550] Opening files (PDF) directly in the integrated browser viewer behaves inconsistently throughout the application and opens file with uuid as name instead of the real file name
- [PT-14619] Diagrams cannot be checked in when assigned entities are not available

21.16 Version 7.13.21

21.16.1 Resolved bugs

- [DES-5840] Users and groups with short names sometimes not reachable in attribute suggestion list
- [PE-9447] Formula for conditional hidden field not working properly
- [PT-14136] Users and groups with short names sometimes not reachable in attribute suggestion list
- [PT-14377] Diagram cannot be checked in when diagram assignment attributes contain inaccessible or circular references

21.17 Version 7.13.20

21.17.1 Resolved bugs

- [PT-13750] Opening an attachment opens a file with a uuid as name instead of the real file name
- [PE-9194] Several diagram updated message in a short period cause loss of updates
- [PE-9372] Deputy: Task is reassigned when the person responsible does not have an assigned status

21.18 Version 7.13.19

21.18.1 Resolved bugs

- [PT-14145] Re-indexing of catalog-search fails instead of appropriate error handling
- [PT-14165] Inconsistent data can cause publication steps to be repeated
- [PT-14183] Catalog entries with assignments are reindexed multiple times during bulk index

21.19 Version 7.13.18

21.19.1 Resolved bugs

- [DES-5926] UpdateMessages sent after the bulk update of diagrams don't have the correct priority
- [DES-5974] No archives are created for bulk updates

21.20 Version 7.13.17

21.20.1 Resolved bugs

- [PE-9178] Files used in a JSON body of a REST service task include line breaks
- [PE-9278] Multi-line text fields link option is displayed incorrectly
- [PT-14008] Delete file in all languages dialog does not get displayed

21.21 Version 7.13.16

21.21.1 Resolved bugs

- [PT-13896] Checking in a diagram is not possible when using Firefox browser
- [PT-13754] Deleting user-assignment values is not possible in Portal

21.22 Version 7.13.15

21.22.1 Resolved bugs

- [PT-13564] Reduce the amount of calls and loaded data when validating a diagram
- [PT-13641] Cursor focus disappears on Catalog/Diagram edit page when typing in a value on an empty formatted text field

21.23 Version 7.13.14

21.23.1 Resolved bugs

- [PE-9084] Forms which are too big for the available screen size cannot be completed from the MyTasks view
- [PE-9093] Text area in form makes completion of task from My Tasks view fail

21.24 Version 7.13.13

21.24.1 Resolved bugs

- [DES-5888] Wrong thread pool configuration in some services

21.25 Version 7.13.12

21.25.1 Resolved bugs

- [PE-9029] Javascript Script Task do not have access to Java classes anymore

21.26 Version 7.13.11

21.26.1 Resolved bugs

- [PE-8952] Process Instance Monitoring View is partially hidden
- [PE-8979] A ProcessApp beginning by a parallel gateway get stuck
- [PE-8983] Inclusive gateways at beginning of ProcessApp are failing
- [PE-8993] Page layout incorrect when user lands on Mytasks page from a link - App stage
- [PE-8046] Elasticsearch is overload due to many request
- [PE-8955] Boolean fields with default value true are not working properly

21.27 Version 7.13.10

21.27.1 Resolved bugs

- [PE-8907] Disable Nashorn compatibility mode in the script engine to support JavaScript ECMA version 13
- [PE-8919] Breadcrumb is not shown in flow view when the page is refreshed
- [PT-13376] Notify UserFlow about enabled AI features
- [PT-13434] Default attribute values are not applied when creating a new entity
- [PT-12305] Default attribute values are not applied when an entity is created in the catalog

21.28 Version 7.13.9

21.28.1 Resolved bugs

- [PE-8796] Process variables of type Array are not available in reports

- [PE-8804] Diagram without a start behaves erroneous

- [PE-8811] ProcessApp is not checked in when it has multiple starting points and one of the paths is a single node

- [PE-8824] Logout button gets redirect to login page

- [PE-8826] Form data is lost when the application tokens expire because of inactivity

- [PE-8838] Formula Field producing values NaN causes a Bad Request when saving variables

21.29 Version 7.13.8

21.29.1 Resolved bugs

- [PT-12919] Update gpt-api version

- [PT-12927] Render-service runs into infinite request loop when request token is expired

- [PT-13257] Non-localized multi-value link attributes are not shown in the Catalog Details view in the new UI

21.30 Version 7.13.7

21.30.1 Resolved bugs

- [PT-12374] Attachment titles get double encoded

- [PT-13077] Object attribute icons will not be removed anymore after removing the node and undo the change

- [PT-13148] When opening or using an approved catalog item with a description that is missing a surrounding <p> tag, a suggestion is created without any user interaction

21.31 Version 7.13.6

21.31.1 Resolved bugs

- [PT-13078] Selecting an entity in a relationship attribute does not update symbol condition (Portal designer)

- [PT-13079] Removing an activity with entities in relationship attribute can cause inconsistent diagram data

21.32 Version 7.13.5

21.32.1 Resolved bugs

- [PT-13025] Chromium update centers the catalog list vertically, making half of the list inaccessible
- [PE-8699] Smart variables are mapped from sub case to parent case

21.33 Version 7.13.4

21.33.1 Resolved bugs

- [PE-8672] The placeholder replacement with text empty values make formulas fail
- [PE-8678] User Task's Boolean Fields are not initialized when starting the task

21.34 Version 7.13.3

21.34.1 Resolved bugs

- [PT-6076] Disabled content language gets set as alternative language on first login
- [PE-8443] Due date value does not work bidirectionally with process variables
- [PE-8480] REST, Report and Script tasks are being executed inside a transaction
- [PE-8539] User Form Default values are applied when the variable has a falsy value but not null nor undefined
- [PE-8566] User form is loaded slowly

21.35 Version 7.13.2

21.35.1 Resolved bugs

- [PT-12833] Reports execution fails when using a client token

21.36 Version 7.13.1

21.36.1 Resolved bugs

- [PT-7872] Cursor jumps to beginning of HTML attributes
- [PT-10599] Workflow-service sometimes does not restart automatically
- [PT-12409] Autocomplete list shows less than 5 results when potential results are already used
- [PT-12413] Enumeration values of 0 aren't displayed and cannot be validated
- [PT-12495] Removal of an internal allocation diagram generates broken visual data
- [PT-12550] Wrong context menu functions for approved catalog items in diagram editor

- [PT-12589] Disable process draft feature in UI

- [PT-12827] Copy pasting does not work anymore

21.37 Version 7.13.0

21.37.1 New features

Receive translation suggestions via DeepL connector (separate licensing)

In the public workspace of the new user interface, translation suggestions for language-dependent text attributes can be requested via the DeepL API. This enables even faster translation of multilingual content from diagrams and catalog entries. The feature is available in diagram and catalog translation modes and requires a connection to a DeepL account. Administrators can easily link their company's DeepL account in the new BIC Process Design administration to connect their system to the DeepL API.

Note: Please note that DeepL integration is separately licensed and needs to be activated for your account. Before linking a DeepL account, ensure your company policies allow data exchange with DeepL.

Bulk editing of diagram attributes in the public workspace

In the new user interface, we have significantly simplified the management of existing diagrams. Administrators and Editors can now comfortably make bulk changes to the assignment attributes of diagrams in the public workspace. The bulk editing function allows for efficient updating of an attribute value for multiple diagrams simultaneously.

Creation of a BPMN Quick Model including resources

In the BPMN Quick Model Excel template, resources for an activity can now also be captured. When importing the completed Excel template, the associated resources are automatically included in the generated BPMN diagram.

Note: Please note that importing resources may generate new catalog suggestions and does not rely on existing catalog entries.

Open PDF attachments directly in your browser's integrated PDF viewer

PDF attachments in both the old and new user interfaces are now opened directly in the browser's integrated PDF viewer. This allows you to easily view PDF documents even if you do not have a separate PDF viewer installed on your device or if you want to view the document before downloading it.

21.37.2 Existing functions available in the new user interface

Translate diagrams in the public workspace

We have improved the translation mode for diagrams. You can now access it in the public workspace without having to check out the diagram. The translation mode can be found in the diagram options.

Export repository

Administrators can export a repository via the category tree to download the data from the public workspace, preview, or publication.

Publish repository

Administrators and Editors can now publish repositories from the public workspace. To avoid unintended publications, we have implemented an additional security measure: Before publishing a repository, a confirmation dialog is displayed. This ensures users that the publication is intentional.

21.37.3 Improvements in the new user interface

Display diagram and object type

The type of a diagram or selected object is now displayed in the properties.

Integrated forward and backward navigation

We have improved navigation in the new user interface. You can now use the integrated forward and backward navigation to navigate forward and backward along your navigation path.

Property view for relationship attributes

You can now also open and display the properties of relationship attributes in diagrams and objects. This feature was already available for assignments and has been extended to relationship attributes.

Marking objects with comments in the diagram

We have improved interaction with object comments. Users can now select commented objects directly from the comment area to mark them in the diagram and move them into the visible area.

Displaying occurrence attributes in all diagram views

The values of occurrence attributes are now displayed in all diagram views. Please note that you may need to customize the profile view of objects to display the desired attribute.

21.37.4 Existing administration functions available in the new user interface

The new user interface provides access to familiar administration functions. You can now easily:

- Set content, alternative, and default languages

- Set reminders for workflow tasks and resubmissions

- Adjust archiving settings

- Set standard configuration of header and footer for print outputs

- Customize BIC Process Design to match your company's corporate design

- Select filters for central search

In upcoming versions, we will integrate additional missing administration functions into the new user interface.

21.37.5 Process-Execution

Timestamp in case overview

Users can now see in the case overview when a task was started and completed. *Intermediate timer events* are also displayed in the process flow view of a case. The trigger time of the intermediate event is also displayed. This promotes the transparency and traceability of your work processes.

Event-based process control

From now on, a message with the event ID is sent for throwing events such as end events or certain intermediate events. A corresponding catching event such as start events or certain intermediate events with the *same identifier* are *automatically triggered by this message*. This function enables a more transparent and precise control over your work processes.

Immediate process termination by end event

Cases can now be instantly terminated by terminating end events. This is useful whenever the process contains parallel paths, and the parallel activities no longer need to be executed when a certain end event is reached.

Configuration of output document reports

With Service Tasks, *documents can now be created based on templates*, like BIC Process Design. Users have the option to fill a Word template with data from the case and to flexibly choose between output formats Word and PDF. This extension enables efficient document creation and opens a wide range of application options for individual process requirements.

Defining multiple expected HTTP status codes

Users now have the option to specify *multiple expected HTTP status codes* when configuring REST requests. This new feature provides enhanced flexibility in API usage, allowing you to make your applications more robust and reliable. This is important, for example, if a particular endpoint sometimes responds with 200 and sometimes with 201. With the introduction of a new variable, "_response", you can access to the status code, enabling you to control the further course of the case.

Summary of case information in a variable

Until now, various pieces of information about the case were available in individual variables (e.g., creatorName). With the introduction of the new *smart variable* "_case", we have now summarised this information for all newly created processes. With the "_case" variable, customers can easily access case information.

Improved task and case search

Users now can search the *task* and *case list* using advanced filtering options, enabling efficient management and prioritization. These features allow you to quickly sort the lists by a specific column and order, as well as *filter by due date* to identify and focus on important tasks or cases. Additionally, you can *search for tasks by name*.

Input documents in subprocess

As a user, you now have the option to provide *documents in the case for a subprocess*. To do this, you simply need to model the document as input in the main process for the subprocess, and the file will be automatically made available in the subprocess.

Corporate Design and Redesign

The color configurations from BIC Process Design are now also adopted in BIC Process Execution to ensure a consistent design of the application. Additionally, we have further optimized the UI in BIC Process Execution and aligned it with the new UI from BIC Process Design.

Process variables for archived cases

From now on, *ProcessApp Administrators* can also access *process variables for archived cases*. For the *ProcessApp Creator* role, access to these variables remains limited to the Studio and testing environment.

Quick identification of signature tasks

Users can now identify which tasks are *configured as signature tasks* in their task list. This function allows for quickly identifying signature tasks and determining where additional authentication is required.

Notification for unsupported browsers

From now on, users will receive a notification when attempting to access the application using an unsupported browser. This notification aims to ensure that users have the best possible experience with the application and encounter no limitations due to their used browser.

21.37.6 Resolved bugs

- [DES-2920] Wrong warning information regarding the SAML group mapper configuration in the installation documentation
- [DES-4161] Security Improvement
- [DES-4481] Security Improvement
- [DES-4502] BPMN import fails if "<text>" section for an "textAnnotation" is missing
- [DES-4507] API Documentation contains "unresolved directive" problems in domain-service
- [DES-4983] SQL Statement to identify SSO-tenants in the toolbox does not collect all relevant tenants
- [DES-5330] Public-apigateway is not part of the "docker-compose-64.yml"
- [PT-1390] Examiner does not receive depublication mail
- [PT-6552] Date input field doesn't apply new value
- [PT-7248] Tenant customized colors are not applied to previously unsaved entities
- [PT-7504] AR and PL templates are not included in the template overview for manual reports in admin ui
- [PT- 8216] Matrix View becomes unresponsive with bigger data sets (Portal)
- [PT-8530] No search results default page will be displayed shortly
- [PT-9238] Workflow task dialog is displayed incorrect
- [PT-9844] Search facets in catalog change order
- [PT-9969] Catalog Favorites are saved as an empty tile
- [PT-9971] MyBIC Page in Portal reloads tiles when switching content language
- [PT-10299] MyBIC tiles don't work in high contrast mode
- [PT-10301] Interaction with item bar reloads attribute view
- [PT-10305] Check in warning dialog appears when using default values for access restriction
- [PT-10406] Catalog headers differ in different screen sizes
- [PT-10817] "Read more" button on long description is not reachable (Portal)
- [PT-11005] Renaming favorite fails (Portal)
- [PT-11198] Main diagram cannot be saved
- [PT-11256] Catalog resubmission isn't automatically closed after the depublication
- [PT-11359] Arabic, Japanese, and other supported languages text not displaying when printing a PDF
- [PT-11364] System attribute are displayed in profile view (Portal)
- [PT-11458, PT-11659] Security improvement
- [PT-11459] Report executions do not work for certain timezones

- [PT-11476] Empty mandatory attribute value prevents checkin
- [PT-11550] "Show more" option of description disappears (Portal)
- [PT-11562] Diagrams with allocation diagrams stuck in the loading screen
- [PT-11602] Export to excel only works by clicking the icon (Portal)
- [PT-11662] Suggestion list for assignment attributes is not usable
- [PT-11689] Character limit will be ignored in translation mode
- [PT-11701] Missing toast when modifing a catalog item within a diagram
- [PT-11709] [Firefox] Catalog list loses scroll position when navigating back from details
- [PT-11751] Incorrect behavior of long names (Portal)
- [PT-11932] Diagram navigation bar is not shown correctly for certain window sizes
- [PT-11943] Catalog edit button is displayed in Publication
- [PT-12066] Add user to group dialog is blank
- [PT-12068] Latest version option for a selected stage is disabled (Portal)
- [PT-12075] Design error
- [PT-12081] Occurrence attributes do not show up on attribute profile view (Portal)
- [PT-12082] Switching content/alternative language does not update columns in catalog translation mode
- [PT-12087] Commentator name is not visible in the comment hub (Portal)
- [PT-12108] Process Warehouse export shows disabled attribute types
- [PT-12186] Edit link dialog in rich text field freezes diagram editor
- [PT-12262] Catalog translation mode can be left without dialog (Portal)
- [PT-12266] Catalog translation button is visible in Publication (Portal)
- [PT-12289] Incorrect visual feedback for unavailable assignments in Profile View (Portal)
- [PT-12292] Removing a description in diagram does not delete the value
- [PT-12348] Subcategories are displayed duplicated in category tree (Portal)
- [PT-12355] [Firefox] Customer logo is sized incorrectly (Webclient)
- [PT-12376] Back button does not work after opening a diagram through Governance cockpit
- [PE-2297] Field Size in form field editor doesn't change width
- [PE-4635] Mobile View: Background fails to scroll to last element while scrolling the menu
- [PE-5753] Group icon missing in process flow and in form in responsible chip when group is assigned
- [PE-7774] Service Task "OAuth2" error message will not go away, after we change the authentication type
- [PE-7859] Edit Process Variable and Archive Instance Button are shown after an Instance is completed
- [PE-7884] Prometheus endpoints are not installed
- [PE-7905] Subcases and cases with attachments with expired retention period are not removed
- [PE-7939] Sonar test coverage is not calculated
- [PE-7965] Many threads crash the system with an OOM Exception
- [PE-8001] Date picker input fields do not allow manual date entry

- [PE-8159] Email reminders are notifying for tasks with due date today a day before the expected one

- [PE-8175] "Show more" button of the form description is not displayed when description is long

- [PE-8311] Conditional text area loses content when hiding and un-hiding (visual issue)

- [PE-8316] Sort by task name is not working properly

- [PE-8318] Mandatory validation of form fields is not enforced when claiming and completing tasks very quickly

- [PE-8347] Exporting report does not work

- [PE-8357] Insufficient error logging for deletion of non-execution users or groups

- [PE-8358] Out of memory is thrown when a process definition with many cases is updated

- [PE-8382] Tasks list columns are not aligned with their headers

- [PE-8392] Inconsistent update of assigned role in cases across database

21.38 Version 7.12.21

21.38.1 Resolved bugs

- [PT-13896] Checking in a diagram is not possible when using Firefox browser

21.39 Version 7.12.20

21.39.1 Resolved bugs

- [PT-13564] Reduce the amount of calls and loaded data when validating a diagram

21.40 Version 7.12.19

21.40.1 Resolved bugs

- [PE-9029] Javascript Script Tasks do not have access to Java classes anymore

21.41 Version 7.12.18

21.41.1 Resolved bugs

- [PE-8955] Boolean fields with default value true are not working properly

- [PE-8979] A ProcessApp beginning by a parallel gateway get stuck

- [PE-8983] Inclusive gateways at beginning of ProcessApp are failing

- [PE-8046] Elasticsearch is overload due to many request

21.42 Version 7.12.17

21.42.1 Resolved bugs

- [PE-8907] Disable Nashorn compatibility mode in the script engine to support JavaScript ECMA version 13
- [PE-8919] Breadcrumb is not shown in flow view when the page is refreshed

21.43 Version 7.12.16

21.43.1 Resolved bugs

- [PE-8804] Diagram without a start behaves erroneous
- [PE-8811] ProcessApp is not checked in when it has multiple starting points and one of the paths is a single node
- [PE-8824] Logout button gets redirect to login page
- [PE-8826] Form data is lost when the application tokens expire because of inactivity
- [PE-8838] Formula Field producing values NaN causes a Bad Request when saving variables
- [PE-8897] Entire reindexing fails, if single document update throws an exception

21.44 Version 7.12.15

21.44.1 Resolved bugs

- [PT-13077] Object attribute icons will not be removed anymore after removing the node and undo the change
- [PT-13148] When opening or using an approved catalog item with a description that is missing a surrounding <p> tag, a suggestion is created without any user interaction

21.45 Version 7.12.14

21.45.1 Resolved bugs

- [PT-13078] Selecting an entity in a relationship attribute does not update symbol condition (Portal designer)
- [PT-13079] Removing an activity with entities in relationship attribute can cause inconsistent diagram data

21.46 Version 7.12.13

21.46.1 Resolved bugs

- [PT-13025] Chromium update centers the catalog list vertically, making half of the list inaccessible

21.47 Version 7.12.12

21.47.1 Resolved bugs

- [PE-8672] The placeholder replacement with text empty values make formulas fail
- [PE-8678] User Task's Boolean Fields are not initialized when starting the task

21.48 Version 7.12.11

21.48.1 Resolved bugs

- [PE-8568] Blank values in the process variables form for certain data types gives an error
- [PE-8566] User form is loaded slowly

21.49 Version 7.12.10

21.49.1 Resolved bugs

- [PT-7872] Cursor jumps to beginning of HTML attributes
- [PT-12409] Autocomplete list shows less than 5 results when potential results are already used
- [PT-12413] Enumeration values of 0 aren't displayed and cannot be validated
- [PT-12495] Removal of an internal allocation diagram generates broken visual data

21.50 Version 7.12.9

21.50.1 Resolved bugs

- [PE-8539] User Form Default values are applied when the variable has a falsy value but not null nor undefined
- [PE-8448] User Form does not activate after starting a step manually
- [PT-10599] Workflow-service sometimes does not restart automatically

21.51 Version 7.12.8

21.51.1 Resolved bugs

- [PT-11659] Security improvement
- [PT-12287] Internal allocation diagrams cannot be opened in new UI

21.52 Version 7.12.7

21.52.1 Resolved bugs

- [PE-8341] Performance issues updating ProcessApp definitions
- [PE-8364] Tasks with only attachment form fields cannot be completed
- [PE-8390] Signature tasks cannot be completed

21.53 Version 7.12.6

21.53.1 Resolved bugs

- [PT-12270] Improve SVG compressing

21.54 Version 7.12.5

21.54.1 Resolved bugs

- [PT-12223] SVG image compression is performed on every request and blocks following requests
- [PT-12231] Fit SVG to screen is always enabled in new UI

21.55 Version 7.12.4

21.55.1 New features

- [PE-8297] Delete instances not found in Camunda for studio/test stage and notify for app

21.55.2 Resolved bugs

- [PE-8311] Conditional text area loses content when hiding and un-hiding
- [PE-8318] Mandatory validation of form fields is not enforced when claiming and completing tasks very quickly
- [PE-8324] Postgres error resizing shared memory because no space left on device

21.56 Version 7.12.3

21.56.1 Resolved bugs

- [PT-8786] Manual report shows tables in description attribute with minimal width
- [PT-11601] Content language changes unexpectedly in Portal
- [PT-11657] Change comparison only works when an archive is already existing in Portal
- [PT-11704] Attribute hub does not update data after deleting name and switching between nodes of the same type
- [PT-11752] Blocking OCL rule violations do not prevent the user from check in
- [PT-11783] Cross stage diagram comparison doesn't work in Portal when there is no archived version yet
- [PT-11930] Long text attribute values are not cut and make 'Show changes' button unreachable in Portal
- [PT-12022] Relationship attributes for input and output create wrong edge direction

21.57 Version 7.12.2

21.57.1 Resolved bugs

- [PT-9229] Description of catalog items is missing on catalog list in Portal
- [PE-7982] Text variables which represent a ISO date values are always saved like date but only is needed for Service tasks and external cases creation

21.58 Version 7.12.1

21.58.1 Resolved bugs

- [PT-10139] "Open in new window" attribute gets changed after checking a diagram / catalog item out
- [PT-11140] Switching the suggestion filter on hides entity type filter
- [PT-11305] Pool generated by the excel import can not be copied
- [PT-7251] Responsible gets logged in audit trail and mail instead of responsible (resubmission)
- [PT-10582] Document links created via "Copy URL" are not valid hyperlinks
- [PT-10803] Diagrams sorted incorrectly when filtering
- [PT-10816] Role restrictions are incorrectly applied in Portal

- [PT-10964] Attachment containing special characters cannot be downloaded in Portal

- [PT-11232] Hidden attributes are getting exported in process warehouse

- [PT-11272] You cannot delete free form lines from the canvas

- [DES-4809] Deletion of tenant data for tenants with a huge amount of documents/archives could fail

- [DES-4847] User export is not working for tenants with thousands of users

- [DES-4934] Repository export may fail in case of a complex category structure

21.59 Version 7.12.0

21.59.1 New features

Automatically create a BPMN diagram via Excel import

Administrators and editors can now download an Excel template for BPMN diagrams from the online help and easily, consistently, and efficiently capture their processes in Excel. Add activities and responsible roles and import the Excel file into the public workspace of the new user interface. A graphical BPMN diagram is automatically generated with the specified responsible roles as pools and lanes. Activities are connected by a continuous sequence flow.

Hint: Please note that this feature is only available in the new user interface. If further editing of the graphical BPMN diagram is required, users need to switch to the old user interface. In future versions, we plan to add support for satellites.

Restructured occurrence list and extended evaluation for assignment attributes

We have made significant optimizations to the occurrence list in the catalog and diagram options for modeled objects to enhance clarity and detail.

The structure of the occurrence list has been reorganized to include a dedicated entry for each diagram. Instead of a long list of uses, you will now find separate entries for each diagram in which the object is used. These entries are easily accessible and give you a detailed view of how the object is used in that diagram. With just one click, you can seamlessly navigate to the precise usage and quickly visualize connections.

Additionally, we have extended the occurrence list to display the usage of assignment attributes. This means that you can easily review all instances of an object's usage, allowing you to navigate to specific use cases effortlessly.

New sorting for multivalued attribute values

We have improved the search for specific attribute values when dealing with multiple entries in the new user interface. The user's current content language is now automatically used to sort the values of assignment attributes, text attributes, links, and files alphabetically. Examples of such attributes are standard attributes like 'author', 'reviewer', 'keyword' and 'attachment (URL)'. Custom attributes are sorted similarly. The sort order is applied in the matrix view, in the properties, in the quick access under an icon in a diagram, and on the details page of a catalog entry.

Hint: Please note that alphabetical sorting is currently not supported in reports and exports. We are actively working to remove this limitation in future updates. This sorting is not available in the old user interface.

Execute reports on archived diagram versions

The new user interface now allows you to run reports on archived process versions. You can simply open the archive of a diagram version and execute a report on that version without the need to manually restore the diagram version. This saves time and greatly simplifies your work. You can run reports at any time, which is important for long-term projects that started with an archived process version.

Hint: Please note that reports do not explicitly indicate whether the version is archived.

Change of report templates for add-ons

Administrators now have full control over the change of add-on-provided report templates.

Hint: Please be aware that the customization options for add-on templates may differ from the standard ones. Refer to the according add-on documentation for details. Changing templates can impact the functionality of these reports.

Converting timestamps for reporting and exporting

The time zone of a logged-in user is now considered when creating reports and exports to ensure that the timestamps refer to the same reference time zone as in the user interface.

Additional content language

Persian can now be enabled as a content language in the administration.

21.59.2 Method

Method for modeling in attributes

The standard method has been updated to faciliate the transition to modeling resources and satellites within attributes, if you are considering this innovative approach. The default method now includes predefined relationship attributes that can be activated in activities. Additionally, an alternative symbol has been added to indicate that there are resources that are not graphically visible on the modeling interface.

The following attributes are available in the standard method:

· A - Responsible role(s)

· C - Contributing role(s)

· I - Role(s) to be informed

· Supporting application(s)

· Required input(s)

· Produced output(s)

· Risk(s) Occurring

When these relationship attributes have a value, an icon is displayed within the alternate activity symbol, drawing attention to the specific attribute.

Hint: Please note that we recommend making any necessary changes to the method either after training or by requesting us to make the customization. The configuration may not be suitable for inexperienced users. To customize your method, access to the BIC Method Editor is necessary.

Validation of properties of assigned objects

The properties of objects within a diagram can now be validated using OCL in validation.

Hint: Please note that the default validation does not contain a rule that uses this possibility. To customize the validation rules, you need access to the BIC Methods Editor.

21.59.3 Existing functions available in the new user interface

Manage repositories in the administration of the new user interface

In the new user interface, repository management has been moved to Administration. You can find all existing repositories there and edit and delete them. Deleting a repository has been provided with an additional security confirmation prompt to minimize the risk of accidentally deleting it and losing valuable data.

Currently, the list of repositories does not include repositories that have access restrictions set that exclude the administrator. In future versions, administrators will be able to view all repositories. However, they will not have access to the contents of a repository if access restrictions prohibit it.

Printing with individual print settings

The print settings can now be customized in the diagram options. All print options that were available in the old user interface are still available.

21.59.4 Process-Execution

Intermediate Timer-Events

Designers can now define *intermediate timer* events, enabling fine-tuned control over case progression. This feature allows you to specify a waiting time, ensuring that your cases pause for the defined duration. This precision enhances process orchestration and helps you optimize your case management.

Data Mapping in Service Task

When configuring a *service task*, you can now set it to ignore the response. This additional control prevents the automatic mapping of response bodies to process variables, enabling you to customize the handling of service task responses according to your specific needs.

Service Task Response Handling

When using a *service task* , the response is now automatically stored in a process variable named "_response.". This variable provides access to the header of the response, allowing for greater flexibility in handling and utilizing the data in subsequent process steps.

Enhanced Task Monitoring

In this release, we've made it easier for case managers to track the tasks by introducing the ability to view open tasks organized by assignee. This feature simplifies task management and provides clear visibility into assignments, making it more convenient to manage and prioritize work.

File Fields in Form Editor

When configuring forms, you can now add a *file field*, providing you with additional customization options for handling files within your processes. This enhancement empowers you to tailor file-related configurations to meet your specific requirements, making form design more versatile.

Enhanced File Upload Experience

When interacting with file uploads in forms, users will now see a visual representation of the uploaded file's name. This feature enhances the user experience by making it easier to identify and manage uploaded files.

Integrated Browser Viewer

You can now open PDF files directly in the integrated browser viewer, allowing you to quickly view file content without the need to download. This feature saves time and improves accessibility, making it easier to access and review files within your processes.

Full Text Search for Case Names

Users can now perform comprehensive full-text searches in the case list, enhancing your ability to find and access specific cases quickly. This feature streamlines case discovery, saving you time and effort in navigating your cases.

Case and Task List Sorting

Users now have the option to sort the task list and the case list, enabling efficient management and prioritization. With this feature, you can quickly identify and focus on the most critical tasks or cases at hand.

Access Control

Access control has been refined in this release to provide more tailored permissions. Please note that with Version 7.12, it's essential to assign the specific ProcessApp roles to your users. These roles are now checked for compliance, and proper role assignment is crucial to ensure a seamless and secure experience with BIC Process Execution:

- ProcessApp Creators now have exclusive access to execution editors, granting greater control over process execution and refinement. In previous versions, all authors had the ability to configure tasks in Process Execution Editors.

- ProcessApp Creators can seamlessly view and edit process variables directly in the studio stage, streamlining ProcessApp development and customization.

- Creating new instances now requires the ProcessApp User role, giving you greater control over different stages in your processes.

- Task assignment and work can only be carried out by ProcessApp Participants. This helps maintain clear responsibilities and ensures that only authorized users can interact with tasks.

- The admin area is now exclusively accessible to ProcessApp Administrators, ensuring the secure and efficient administration. It's worth noting that a BIC Design Administrator can no longer access the administration area in BIC Process Execution.

Gateway Task Assignment

Tasks created at gateways are now automatically assigned to the corresponding lane, providing more effective responsibility allocation. This feature simplifies task management, ensuring that tasks are consistently assigned to the right team or individual.

21.59.5 Resolved bugs

- [DES-3483] Security improvement
- [DES-4036] Caching of method failed because of serialization issues
- [DES-4132] BPMN file can't be imported if it contains xsi:type="dc:Point"
- [DES-4139] Missing migration for entities that have AT_NAME as node attributes
- [DES-4152] The system does not prevent users from creating domain objects in stage Preview and Publish
- [DES-4153] When importing BPMN files, for some edges the import uses outdated edge-symbol stereotypes
- [DES-4541] Deleting a single document does not remove the data properly
- [PT-10035] Failed workflows are not correctly aborted
- [PT-10285] Edit option for catalog item is displayed in preview in Portal
- [PT-10978] Add-on reports are incorrectly listed in catalog in Portal
- [PT-10994] Relationship attributes are not displayed in the publication and preview
- [PT-10999] New user group gets displayed in list only after refreshing the page

- [PT-11014] Diagram gets duplicated after cut and paste in category panel in Portal

- [PT-11034] Phrase search cannot be saved as search favorite in Portal

- [PT-11058] Missing spacing to the right for default favorite badges on small resolution devices in Portal

- [PT-11080] Properties panel can be opened in audit trail on small resolution devices in Portal

- [PT-11101] Filter of diagram view not working reliable in Portal

- [PT-1754] Switching the role from Reviewer to Reader does not switch stage to Publication in Portal

- [PT-4481] Some special characters in a comment are shown in unicode in emails

- [PT-4918] Attachments cannot be downloaded in catalog in Portal

- [PT-8106, PT-8342, PT-9322] Security improvements

- [PT-8663] Users in user groups are sorted incorrectly and duplicate entries will be shown while scrolling through the list

- [PT-9033] Diagram editor logs misleading error message

- [PT-9547] Multi-value attributes are not testable via OCL

- [PE-1108] The option "Add team member" is not completely displayed in the German version within the case's details

- [PE-2698] Boolean fields should default to false in DMN Tasks

- [PE-2779] Gateway Evaluation fails when checked string variable is null

- [PE-2975] Progress bar does not differ between completed and running tasks on overdue

- [PE-3667] Formating applied on email editor is not set in Execution email preview

- [PE-4170] Process with multiple gateways does not start first task

- [PE-4504] ProcessApp Icon Color is not consistent across the application

- [PE-4821] When deputy is delegated an error task, task counter is not update immediately

- [PE-4998] Ng-hal-forms not setting default header

- [PE-5060] Collection cards do not have ellipsis overflow

- [PE-5113] Process Apps in favourites tile show randomly in the wrong order

- [PE-5838] User Picker errors when User/Group begin with the same substring

- [PE-5908] Role assignment is not set in sub case

- [PE-7165] My task/Group task list don't upgrade correctly when task list is empty

- [PE-7178] Forms Editor fails to detect circular dependencies in in formulas when changed in the field list

- [PE-7313] Instances of deleted diagrams can still be created in app stage

- [PE-7319] Gateways whose execution result in no decision being made end up in state completed, instead of error

- [PE-7324] In certain situations there is a problem with the forecast where a case is not able to show the flow

- [PE-7343] Error creating instance in ElasticSearch for instances created from a timer start event

- [PE-7370] Date Input fields are not editable on smaller screens or when zoomed in

- [PE-7404] Instance is not archived in ElasticSearch

- [PE-7438] Textbox is not alligned with checkbox on Editor Service

- [PE-7514] In the list of fields, you cannot select a field if you click inside the input.

- [PE-7527] Reduce the attributes information of the flow steps to avoid performance issues getting the flow of case

- [PE-7629] Initial readonly and mandatory expression evaluation is failing

- [PE-7707] Update and remove Process Collections templates are sent to NO Admin users in ProcessApp view

- [PE-3272] Process flow calculation breaks on loops with non-exclusive gateways

- [PE-6058] Performance issues on ProcessApp Collections view

- [PE-6148] Script tasks with float variables fails

- [PE-7326] Some Material Icons are missing

- [PE-7344] Can not open link of Disabled URL Field in Firefox

- [PE-7362] Too many variables makes URL too long when requesting variables leading to 414

- [PE-7363] Error evaluating formulas in field conditions

- [PE-7410] Pending task reminder mails are sent without pending tasks

- [PE-7513] Not all Owner are shown as filters in the case list view of a ProcessApp

21.60 Version 7.11.15

21.60.1 Resolved bugs

- [PT-13148] When opening or using an approved catalog item with a description that is missing a surrounding <p> tag, a suggestion is created without any user interaction

21.61 Version 7.11.14

21.61.1 Resolved bugs

- [PT-13025] Chromium update centers the catalog list vertically, making half of the list inaccessible

21.62 Version 7.11.13

21.62.1 Resolved bugs

- [PT-7872] Cursor jumps to beginning of HTML attributes

- [PT-10599] Workflow-service sometimes does not restart automatically

- [PT-12409] Autocomplete list shows less than 5 results when potential results are already used

- [PT-12495] Removal of an internal allocation diagram generates broken visual data

21.63 Version 7.11.12

21.63.1 Resolved bugs

- [PE-8390] Signature tasks cannot be completed
- [PE-8448] User Form does not activate after starting a step manually

21.64 Version 7.11.11

21.64.1 Resolved bugs

- [PT-11659] Security improvement

21.65 Version 7.11.10

21.65.1 Resolved bugs

- [PT-11783] Cross stage diagram comparison doesn't work when there is no archived version yet

21.66 Version 7.11.9

21.66.1 Resolved bugs

- [PT-11657] Change comparison only works when an archive is already existing in Portal

21.67 Version 7.11.8

21.67.1 Resolved bugs

- [PE-7946] A String variable with date format 'DD-MM-YYYY' is converting into date and the generated date is not correct
- [PE-7982] Text variables which represent a ISO date values are always saved like date but only is needed for Service tasks and external cases creation

21.68 Version 7.11.7

21.68.1 Resolved bugs

- [DES-4934] Repository export may fail in case of a complex category structure
- [PT-11580] Move activities to other lanes is not possible

21.69 Version 7.11.6

21.69.1 New Features

- [PE-7495] As a process designer, I want to store the response of a service task as a process variable, so that I can access and utilize various parts of the response in subsequent steps of the process
- [PE-7699] Prepare services so that quay labeling for legacy releases is easy possible

21.69.2 Resolved bugs

- [PE-7598] Long automatic tasks could block all database connections
- [PE-7629] Initial readonly and mandatory expression evaluation is failing

21.70 Version 7.11.5

21.70.1 New Features

- [PT-9819] As a user, I want to see changes in relationship attributes in version comparison so that I can identify the differences of two versions
- [PT-10264] As a user, I want to use OCL for relationship attributes
- [PT-9916] As a symbol editor, I want to use association types as conditions for formatting symbols

21.70.2 Resolved bugs

- [PT-10694] When deleting a node that has Relationship Attributes maintained, the Relationship nodes do not get deleted and produce ghost nodes
- [PT-10626] Catalog items are created without default assignment in Portal

21.71 Version 7.11.4

21.71.1 Resolved bugs

- [DES-4550] Wrong max-http-header size configuration for some services
- [DES-4053] Elasticsearch frequently restarts due to memory problems
- [PE-7586] In a JSON body, when utilizing placeholders for string arrays, the quotation marks are missing
- [PE-7607] Hyperlinks in disabled/readonly fields are not functional in Firefox

21.72 Version 7.11.3

21.72.1 Resolved bugs

- [PE-7457] Migration of gatewaypoints fails

21.73 Version 7.11.2

21.73.1 Resolved bugs

- [DES-4447] SQL Statement to identify SSO-tenants in the UPGRADE.md for version 7.11.0 does not collect all relevant tenants
- [PT-10321] Categories cannot be reached on small resolution devices
- [PT-10477] Associations of relationship attributes are created in the wrong direction

21.74 Version 7.11.1

21.74.1 Resolved bugs

- [PT-9944] Scrolling diagram filters does not work on small screens (e. g. mobile devices)
- [PT-10063] Unable to search in categories for diagrams after the category or diagram was moved
- [PT-10302] Process cost analysis report does not calculate resources
- [PE-7342] ObjectOptimisticLockException when calculating the path with gateway expressions
- [PE-7391] Task details view does not open on mobile

21.75 Version 7.11.0

21.75.1 New Features

Set validation scope of languages for mandatory attributes

Administrators now have more control over the validation of mandatory language-dependent text attributes during publishing workflows. With this update, administrators can now specify whether these attributes should contain a value in any content language, a value in the enabled default content language, or a value in all enabled content languages. These settings apply to new workflows from the beginning, while ongoing workflows keep their existing settings. This configuration can only be set in the new user interface administration.

Improved notifications for editorial releases and favorites

In this release, we have made adjustments to the default behavior for scope e-mails in editorial releases and notifications for updated favorites. **By default, the scope will no longer receive notifications about changes when an editorial workflow is initiated.** However, users still have the option to send scope e-mails by selecting the mail sending feature in the workflow start dialog.

Similarly, in the new user interface, we have updated the default behavior for change notifications related to newly marked favorites. **By default, we will no longer send change e-mails for newly marked favorites.** Instead, users are now required to actively subscribe to receive change notifications for their favorites. **Change e-mails will continue to be sent for favorites marked in the old user interface.**

It is important to note that we will continue to send change notifications for existing favorites to facilitate a smooth transition to the new default behavior. Users can manage their change mail subscriptions, including subscribing and unsubscribing, on their myBIC page within the new user interface.

Favorite catalog lists

In the new user interface, we have introduced a new feature that allows users to mark lists in the catalog as favorites. Once marked a catalog list as favorite, this lists will conveniently appear as tiles on the user's myBIC page, providing easy access to their preferred catalog items. We do not send change notification e-mails when a favorite catalog list is updated. Additionally, at present, there is no explicit subscription option available for these updates.

It is important to note that the catalog favorites feature is exclusively available in the new user interface. If you are using the old user interface, you will not find the Catalog Favorite tile on your myBIC page, and you will not be able to mark a catalog list as a favorite in the catalog of the old user interface. Furthermore, Administrators cannot set a catalog favorite as a myBIC configuration for their organization.

Alternative to the graphical modeling of resources

We have introduced a new feature that allows you to model the relation between resources and activities within the activity attributes. Once you have prepared your method accordingly, you can select a catalog entry in the corresponding activity attribute or directly create a catalog proposal from the suggestion list. This automatically establishes the configured relationship between the selected catalog entry and its activity.

This alternative approach to graphical modeling offers many advantages. For example, the resources of an activity no longer need to be arranged graphically, and existing processes can be more easily maintained throughout their lifecycle. Readers see the resources in a more natural representation and do not need to learn a specific notation to understand the process.

Please note that this new capability needs to be activated in your method and is not available automatically. Before enabling this feature, we recommend checking its impact on your modeling conventions. Currently, the functionality of this new modeling option is still limited. Version comparison is not yet optimized for this new approach, and validation needs to be extended. However, these limitations will be improved shortly.

Save simulation parameters and continue working with them

We have optimized the simulation to enhance usability. From now on, you can assign individual names to simulation scenarios, enabling better navigation among different scenarios. Additionally, you can now save the entered parameters of a scenario and continue working on them later if needed. These saved scenarios are also visible to other simulation users, promoting collaboration.

Please note that scenario names cannot be changed afterwards and that scenarios saved in new diagram versions will no longer be available if the previous diagram version has been archived.

21.75.2 Existing features available in new user interface

Print diagram graphic with default print settings

In the new user interface, you now have the option to print the diagram graphic of a checked-in diagram through the options panel. Currently, you have access to default standard print settings that cannot be customized individually. Nevertheless, enhancements in this aspect are scheduled for the near future.

Rename personal favorites on myBIC

On your myBIC page, you can now rename diagram, catalog list, and search result favorites using the context menu of each respective tile. Renaming does not affect the content of the personal favorite but exclusively contributes to better user clarity. The changes made apply only to the active content language.

Please note that standard favorites defined by the administrator cannot be renamed.

21.75.3 Process Execution

Filter Facet Date Range Options

We are excited to introduce a brand-new feature that enhances your task and case management experience. As a user, you now have the power to conveniently filter your *lists of tasks* and *cases* based on specific date ranges for due dates. This means you can easily narrow down your workload and focus on the tasks that matter most within your desired timeframe.

Task Status Monitoring

We have added a *task status monitoring feature* that displays the status of your open tasks. This means you will have quick and easy access to see how your tasks are progressing without having to dig through details. Stay informed and in control with this new addition.

Global Variable Management

We are thrilled to announce that users can now *use global variables in their processes*. This powerful addition allows you to create more dynamic and adaptable workflows, utilizing variables that can be accessed throughout your processes.

We have also rolled out a handy enhancement that gives you more control over your application's configuration. You now have the ability to *delete global variables* that are no longer needed. This helps keep your application clutter-free and ensures you're utilizing resources efficiently.

Process Enhancement - Task Start Restrictions

Authors and users working with ProcessApps, this one is for you. We've added a feature that allows authors to define restrictions on *manually starting tasks*. This means you can have better control over your process flow, ensuring tasks are initiated only when appropriate. This enhancement provides a more streamlined and efficient process.

Process Enhancement - Skip Case Creation Start Form

We are all about optimizing your workflow. Authors, we heard you! You can now define that the *case creation start form will be skipped*. By skipping this form, you gain the advantage of creating a specific form as the first task in a process. This opens up possibilities for delivering a tailored and engaging user experience right from the start.

Seamless Navigation to BIC Process Design

Users can now seamlessly jump *from their ProcessApp to the corresponding diagram* in BIC Process Design. This feature enhances collaboration and ensures a smoother transition between design and implementation.

Base64 Encoded File Transfer

Need to send files as part of your JSON request? We have got you covered. With this new feature, users can now send files as *base64 encoded strings in JSON request bodies*. This simplifies the process of sharing files and streamlines data integration across your systems.

Starting Timer Event Option

We have tidied things up to ensure a clean and user-friendly experience. You will notice that when a process has a starting timer event, this event will not appear as an option during manual process initiation. This design decision emphasizes the automatic triggering nature of timer events, ensuring a more intuitive and efficient user experience. This subtle adjustment helps maintain clarity in your process options.

21.75.4 Resolved bugs

- [DES-3793] Missing logging configuration for elasticsearch and audit-logstash in docker-compose-local.yml(.example)
- [DES-4040] domain-data-archive-service creates error logs for repository exports
- [DES-4054] BPMN import seems to run indefinitely if an internal error occurs
- [DES-4151] Metrics configuration for spring services are not correct
- [DES-4276] Logout is not possible when user token size is above 4KB

- [DES-4439] Some modules do not support SCRAM authentication for database connectivity

- [PT-1859, PT-1951, PT-2355, PT-4104, PT-9724, PT-9725, PT-9726] Navigating to a different repository does not update repository switch

- [PT-1860] Custom name for catalog item profile is not displayed correctly (Portal)

- [PT-6871] File title is HTML encoded in title edit dialog

- [PT-7585] Sanitizing HTML attributes is too strict

- [PT-7818, PT-9089, PT-9312] Security improvements

- [PT-8743] Header of catalog item details page is not sticky

- [PT-9255] Pasting content into HTML attribute takes over unsupported HTML tags

- [PT-9265] Search field clearing fails to clear filter facets in diagrams, catalog, governance, and central search

- [PT-9436] Publish option is missing for categories (Portal)

- [PT-9442] User login count is capped to 10000

- [PT-9467] Catalog item profile report cannot be triggered (Portal)

- [PT-9489] Indexing attachments causes memory errors

- [PT-9703] Administration tiles in Portal are not colored

- [PT-9729] Misleading description of process warehouse report

- [PT-9753] Favorite update mail has wrong reference

- [PT-9843] Applicable documents cannot be downloaded (Portal)

- [PT-9999] Catalog item profile report has wrong page break

- [PT-10063] Unable to search in categories for diagrams after the category was moved

- [PT-10134] Changing to suggestion a catalog element doesn't update publish button properly

- [PT-10140] Approve/Reject button is briefly shown when opening catalog details view in publication

- [PE-6883] Exporting in the DMN Editor does not work on Firefox

- [PE-6888] Update a task takes to long

- [PE-6898] Improve Flow View loading screen when creating a case of an empty diagram

- [PE-6919] XS/S version: Filter Design is incorrect

- [PE-7056] Error when case name exceeds 100 characters

- [PE-7057] Non-Admin users see the Process Monitoring tab

- [PE-7096] Null token is allowed on root API end-point

- [PE-7152] Visual error because scroll overlay doesn't work

- [PE-7167] Visual error to enter name with space when create a case

- [PE-7187] Details section inside the form field doesn't show the 'Show more' button

- [PE-7240] When we have multiple starting timer events and one of those events is triggered we see a manual decision at the beginning of the flow

- [PE-7263] Recreated User groups do not work properly

- [PE-7268] Wrong font in attachment link

- [PE-7299] ProcessApp Collection color bug after resizing

- [PE-7301] Case stuck waiting on a gateway
- [PE-7314] ProcessApps Search box is moving when clicking on "Toggle Sidebar" button
- [PE-7315] Variables cannot be updated when form field changes from single choice type to multiple choice
- [PE-7345] User Tasks with FormulaJs are not executed in the Task Popup View

21.76 Version 7.10.17

21.76.1 Resolved bugs

- [PT-11783] Cross stage diagram comparison doesn't work when there is no archived version yet

21.77 Version 7.10.16

21.77.1 Resolved bugs

- [PT-11657] Change comparison only works when an archive is already existing in Portal

21.78 Version 7.10.15

21.78.1 Resolved bugs

- [PE-7629] Initial readonly and mandatory expression evaluation is failing

21.79 Version 7.10.14

21.79.1 Resolved bugs

- [PT-10626] Catalog items are created without default assignment in Portal

21.80 Version 7.10.13

21.80.1 Resolved bugs

- [PE-7482] Step with mandatory text area can be completed without value inside in mobile view
- [PE-7457] Migration of gatewaypoints fails

21.81 Version 7.10.12

21.81.1 Resolved bugs

- [PT-10321] Categories cannot be reached on small resolution devices

21.82 Version 7.10.11

21.82.1 Resolved bugs

- [PE-7342] ObjectOptimisticLockException when calculating the path with gateway expressions
- [PE-7391] Task details view does not open on mobile

21.83 Version 7.10.10

21.83.1 Resolved bugs

- [PT-9944] You cannot scroll correctly through the diagram filter list on small screens (e.g. mobile devices)
- [PT-10302] When I use process cost analysis report, it does not calculate resources

21.84 Version 7.10.9

21.84.1 Resolved bugs

- [PT-9753] Favorite update mail has wrong reference

21.85 Version 7.10.8

21.85.1 Resolved bugs

- [PT-10240] First entity type is not displayed in publication catalog
- [PT-10245] Some modules do not support SCRAM authentication for database connectivity
- [DES-4439] Some modules do not support SCRAM authentication for database connectivity

21.86 Version 7.10.7

21.86.1 Resolved bugs

- [PT-10130] Catalog search sends wrong locale for facet request

21.87 Version 7.10.6

21.87.1 Resolved bugs

- [PT-9321] Configure time zone for date values in stamped attachments

21.88 Version 7.10.5

21.88.1 Tasks

- [PT-9347] As administrator, I want that the creation option for catalog items in an assignment attribute depends on the administration settings for catalog items

21.89 Version 7.10.4

21.89.1 Resolved bugs

- [PE-7144] Execution Apigateway does not manage HTTP headers larger than 8192 bytes
- [PE-7146] Parallel gateway starts next fragment before finishing all of incoming fragments

21.89.2 Tasks

- [PT-7901] As simulation user, I want to save my entered simulation parameters so that I can continue working on it later

21.90 Version 7.10.3

21.90.1 Resolved bugs

- [PT-9258] Simulation parameters for lanes of imported BPMN diagrams cannot be maintained
- [PT-9298] Editing link title of a catalog item opens maintained URL
- [PT-9314] Security improvement
- [PT-9320] Security improvement
- [PT-9470] Dynamic valid from date is not set in PDF on publication

21.91 Version 7.10.2

21.91.1 Resolved bugs

- [PE-6661] Process-execution-service gets killed several times a day, because it consumes too much memory

- [PE-7035] Restore missing attachment relations

- [PE-7058] Mishandled NPE when completing a task with formulas or default values

- [PE-7060] Flow Step Skeleton Screen does not hide on User Tasks without any field

21.92 Version 7.10.1

21.92.1 Resolved bugs

- [PT-9234] A catalog item can added in wrong stage when you change your role

- [PT-9258] Simulation parameters for lanes of imported BPMN diagrams cannot be maintained

- [PT-9298] Editing link title of a catalog item opens maintained URL

- [DES-4134] After a BPMN import from Signavio the renaming of entities in the diagram does not work properly

21.93 Version 7.10.0

21.93.1 New Features

Relationships between catalog items

We've enhanced the analysis capabilities for catalog items by adding relationships to other catalog items in the occurrences lists of the catalog. The new user interface catalog now includes a comprehensive list of all assignments of a catalog item to other catalog items, making it easier to analyze relationships between items. In a separate panel, you can view all catalog items to which the selected item has been assigned. By clicking on a listed catalog item, you can access more details about that item.

If you've already assigned a catalog item to another item (e.g., you've assigned a person as the author of a document), you can immediately see the assigned item in the occurrences list.

Switch stage and repository in top bar

We have added two new features that make it easy for you to switch between different stages and repositories while working in the new user interface. The active stage and repository you are working on are now always displayed at the top of your screen. This allows you to quickly switch between the different stages and repositories, navigate between them, view the contents, and keep track of the stage and repository you are currently working in. Both features are available in the stage- and repository-specific areas, such as diagram list, catalog, or central search.

Hint: Users can only select stages that they have access to. Since Readers have access only to the Publication stage, they do not see the stage switch at all.

Reassign the connection between symbols

We've made modeling easier by enabling the *reassignment of connections between two symbols*. To reassign a connection, simply drag it from the original symbol and drop it onto the desired new symbol. It's important to note, however, that the new symbol must allow the connection for the edge to be successfully reassigned.

This new feature streamlines the modeling process and allows for more efficient editing and updating of diagrams. With the ability to reassign connections quickly and easily, users can make changes to their diagrams with ease without the need to redraw entire connections of the diagram.

Session lifetime reminder

In the new user interface, users now receive a session lifetime reminder 5 minutes before they are automatically logged out. This feature allows users to refresh their session without the need to log in again, ensuring uninterrupted work.

Improvements in process simulation

We have added new functionalities for customers who have licensed our simulation component. They can now view the resource utilization of a simulation run as a bar chart in the Charts tab, in addition to the Heatmap tab. Furthermore, simulation results can be exported as a CSV file, allowing for easy analysis of the results in other applications. Please note that all KPIs are listed in the CSV file with varying levels of granularity, which may require adjustments to fit your specific needs.

Furthermore, it is now possible to enable the simulation component in Public Cloud systems. If you are interested in utilizing the simulation component and your system is hosted in a Public Cloud environment, you can now benefit from this functionality. However, please note that an additional license is required for the simulation component.

Additional validation rules for governance attributes

We've added new validation rules to the validation hub that help you keep track of the maintenance of governance attributes. The validation hub will show you if a diagram has no assigned responsible person, if the diagram's scope hasn't been maintained, if the valid-to date is earlier than the valid-from date, or if the valid-to or valid-from date is in the past. You can customize the rules that are applied or deactivate them entirely, according to your preferences. Note that this is done in the BIC Method Editor.

Additional resubmission decision "End task and inform Governance participants"

The resubmission task has received an *additional decision option* called "End task and inform Governance participants". This option is designed to streamline the resubmission process and make it easier to manage tasks. When a task assignee selects the "End task and inform Governance participants" option, they'll be prompted to enter a comment explaining why the task is being closed. Furthermore, the governance group will be automatically notified of the decision, ensuring that all parties involved are kept up to date with the task's progress. This feature is particularly useful in cases where a decision may not be required or if a task can be closed without further action.

Switch currency in process costs/simulation report

The Excel-based process costs/simulation report now includes support for Dollar as a currency. Users can conveniently switch between currencies within the Activities worksheet. Please be aware that the default currency in your method is Euro, but it can be easily modified in the BIC Method Editor.

21.93.2 Existing features available in new user interface

New design for top bar, menu, and category explorer

We have implemented major redesigns and added new functionalities to the category explorer, menu, and top bar. The category explorer is now easily expandable by clicking on the repository bar besides the diagram list and can be collapsed with the repository or collapse icon at the edge of the category explorer. The edge of the category explorer can also be used to broaden the category explorer for easy access to even deep category structures.

The menu on the left side and the top bar have been reworked. The menu is collapsible and can still be used for navigation, with icons representing menu entries available in the collapsed state. Users can now access the most important profile settings in a card by clicking on the profile icon. To adjust further settings, the "open complete profile" button needs to be clicked. Additionally, search fields for diagrams, catalog items, and governance workflows have been moved to their respective filter sections. These improvements provide a more streamlined user experience and easier navigation within the application.

Select any diagram version for comparison to see changes

The version of a diagram open in the content area in a stage can now be compared with any version from different stages to see the changes between them. Administrators, Editors, and Authors can choose between the Public Workspace, Preview, and Publication, and select a diagram version from these stages for comparison with the version currently opened in the content area. Readers can only see the comparison with the latest version in the Publication and cannot select any other stage or chart version. Reviewers have only access to diagram versions in Preview and Publication.

Import and export diagram archives, BPMN files, and categories

Diagram archives, BPMN diagrams, and categories can now be imported from the context menu of the repository and category, as well as from the options panel of an opened category. To export a diagram, you can access it from the diagram list via the context menu of the diagram or from the options panel of the diagram's details page. Category import and export options can only be accessed from the context menu of a category.

Hint: Please note that the repository import and export options are only available to Administrators and will be located in the administration area of the new user interface. This functionality is currently not available and will be added in upcoming versions.

Depublish catalog items and diagrams

We've added the depublication feature, which allows published catalog items and diagrams to be removed from the Publication. The depublish option can be found in the options panel on the details page of the catalog item and diagram, as well as on the list view.

Both Administrators and Editors have the ability to initiate an editorial depublication as well as a depublication that requires approval. Authors, on the other hand, are only able to depublish diagrams and catalog items using an approval workflow.

Publish a category

Administrators and Editors can now publish categories from the Public Workspace. This option is available in the context menu of a category and triggers the publication workflow for all subordinated diagrams, including those in sub-categories. We've added a confirmation dialog that requires the user to enter the category name before the publication can be confirmed. This ensures that the user is intentionally publishing the correct category and prevents accidental publication.

Create, rename, and delete a category

Categories can be created, renamed, or deleted by Administrators, Editors, and Authors in Public Workspace.

Cut and paste categories and diagrams

Diagrams and categories in Public workspace can now be cut and pasted into a different category in the same repository. Please note that a cut diagram or category cannot be pasted to a different repository.

Import and update catalog items

Administrators and Editors can now import and update catalog items using the process warehouse report for catalog items. To import items, simply filter the catalog by entity type and set the content language to the language of the items being imported. This will automatically determine the entity type and language for the import.

Translate catalog items

We've introduced a new translation mode for catalog items in the Public Workspace catalog. This feature is activated after applying a filter for a specific entity type, and you can further refine the list of catalog items to be translated by applying additional filters or a search term. The translation mode displays all language-dependent attributes of a catalog item and provides a column for each content language defined in your tenant. The first column in the translation mode represents the active content language and remains visible as you scroll through other language columns. Administrators and Editors can translate all catalog items, while Authors are only permitted to translate catalog items to which they have been assigned as an Author.

Hint: This feature is not available on small resolution devices.

Reorganize unused catalog items

Administrators and Editors can reorganize the Public Workspace catalog to delete catalog items that are no longer needed (not referenced in diagrams or attributes). This feature is activated after applying a filter for a specific entity type. We have improved this feature by adding a confirmation dialog that requires the user to enter the entity type name before the reorganization dialog can be confirmed. This ensures that the user is intentionally deleting the correct entity types and prevents accidental deletion.

Hint: This feature is not available on small resolution devices.

Approve or reject catalog suggestions

Administrators and Editors can now make decisions about catalog items either directly from the catalog list or by accessing the options on the details page of a catalog item. You can use the "Only show suggested" filter to view catalog suggestions and determine which items need a decision. Once a catalog suggestion is approved, it can no longer be modified during the modeling process. Conversely, if a suggestion is rejected, the object will remain in the diagram or attribute as a standalone object without any connection to the catalog.

Publish catalog item from catalog list

In addition to the option to publish a catalog item in the options panel on the details page, catalog items can now also be published from the context menu of a catalog item in the catalog list.

21.93.3 Process Execution

Monitoring dashboard now available for running cases

We have added a monitoring dashboard next to the case list. This dashboard provides first metrics of all running cases, including those that are on time, overdue, and have no due date. This is the first step towards providing various metrics for instances.

Export feature enables quick and easy process data analysis in BIC Process Mining

The application now supports *exporting an event stream* as an Excel file. This file can be easily used for analyzing instances in process mining tools, such as our own product, BIC Process Mining. Exporting event streams as an Excel file allows administrators to quickly and easily analyze process data and identify areas for improvement. It also makes it easier to share process information with other stakeholders, such as process owners or auditors.

Improved form fields with dynamic options using process variables for flexible choices

Previously, single and multiple-choice fields in forms could only provide static values. Now, you can use a process variable to provide dynamic options. The ability to use process variables for dynamic choices in forms makes it easier to maintain and update forms as business needs change. It also allows greater flexibility in the types of choices that can be offered to users.

Skeleton screens added for improved user experience

Using skeleton screens helps to improve the perceived performance of the application by providing users with visual feedback that content is loading. This can help to reduce a users frustration and improve the overall user experience.

Dynamic due dates for process tasks

We have renamed the "Process time in days" attribute to "Due Date" attribute for activities. You can still use numbers to provide the number of days for performing an activity. Additionally, you can use *date variables* from the process to set the due date for a task. The ability to use date variables from the process to set due dates for tasks makes it easier to manage and track task deadlines. It also provides greater flexibility for users, as they can set due dates based on the specific needs of their process.

Get notified about new tasks in your reminder emails

The reminder emails that inform users about due tasks now include tasks that were assigned within the last day. This helps users organize their work more efficiently. Including newly assigned tasks in reminder emails helps users stay on top of their work and prioritize their tasks more effectively. It also helps to reduce the risk of tasks being missed, which can improve process efficiency.

Prediction of upcoming tasks based on previous completed cases

The application now displays an *automatic forecast for instance* if historical data is available. Based on past instances for a process version, the application shows the most likely next steps in an instance. The automatic forecast feature helps users anticipate upcoming tasks and plan their work more effectively. This can help to reduce delays and bottlenecks in the process and improve overall process efficiency.

Restriction of task completion for synchronous call activities to administrators only

Previously, users could finish call activity tasks manually before the subprocess was finished, which could cause problems. Restricting the complete action to administrators for synchronously started call activities helps to prevent users from inadvertently causing problems in the process by prematurely completing tasks. This will help to improve process accuracy and reduce the risk of errors.

21.93.4 Resolved bugs

- [DES-4046] Method-service has less memory configured in the 64GB configuration than in the default 32GB configuration
- [DES-4124] Exporting in the DMN Editor does not work on Firefox
- [PT-510] Boolean facets in central search show true or false
- [PT-4355] Suggestion list overlaps input label in diagram editor
- [PT-4415] Missing scrollbar in process flow view (Portal)
- [PT-5367] Facet count of catalog item has wrong value when using suggested filter
- [PT-5369] Facet count of catalog item has wrong value when using search term
- [PT-5874] Description preview in catalog will not displayed when text contains HTML formatting [Customer action required]

- [PT-6385] Set start diagram prevents Readers to switch repository

- [PT-6480, PT-6481] Security improvement

- [PT-6845] Pasted image cannot be moved in diagram editor

- [PT-7031] Default value for enumeration attributes cannot be defined in BIC Method Editor

- [PT-7258] Overlapping dashed or dotted edges result in a solid edge

- [PT-7265] Dynamic valid from date is not set in PDF on publication

- [PT-7333] Catalog list and dashboard tab is not displayed on small screens

- [PT-7418] Diagram changes get lost during checkin attempt

- [PT-7513] Scroll bar disappears when searching or filtering in workflow list (Portal)

- [PT-7530] Catalog does not respect the time zone in date filters

- [PT-7531] Language switch does not change the translations in favorites page

- [PT-7534] Language switch does not change the translations in the matrix of a diagram

- [PT-7535] Language switch does not change the translations in workflow list

- [PT-7766] Diagram changes default value for archived assignments

- [PT-8063] Admin set background colors of a symbol cannot be overwritten by format options in a diagram

- [PT-8150] MyBIC favorites are not sorted in alphabetically (Portal)

- [PT-8175] Accessibility improvement

- [PT-8245] Activities in manual report for VCD are sorted incorrectly

- [PT-8451] "Show changes" button has wrong tool tip (Portal)

- [PT-8529] System attributes are displayed wrong when clicking in a specific order

- [PT-8542] Option entry for simulation is available in read-only stages (Portal)

- [PT-8616] Boolean facets in catalog show true or false

- [PT-8666] Undo / redo breaks visual diagram data in allocation diagrams

- [PT-8685] Mimetype is displayed for attachment titles with special characters (Portal)

- [PT-8740] Templates for "Manual with Assignments" report cannot be downloaded after modification of report descriptor

- [PT-8797] Attachment titles with special characters have wrong name after PDF conversion

- [PT-8915] Special characters in name of catalog item lead to wrong representation in breadcrumb

- [PT-9027] Publication dialog shows domain object name in random locale

- [PT-9064] Role-rights table is incorrect in documentation

- [PT-9095] Access permissions of Readers miss detailed information in documentation

- [PT-9215] Non smooth scrolling through the search result list and entity type name is missing

- [PE-5992] Corrupted data in Camunda causes process to be irresponsive

- [PE-6057] Inconsistency on number of processes

- [PE-6358] Task join gateways behave differently depending on order of execution

- [PE-6400] The user picker is displayed incorrectly

- [PE-6445] Rest Editor OAuth2 Client Authentication Dropdown does not save

- [PE-6532] Exception is thrown when having multiple last fragments

- [PE-6544] Concurrently changing variables leads to org.camunda.bpm.engine.OptimisticLockingException

- [PE-6616] As a user I can see group task without belong to any group

- [PE-6635] Error toasts in the Process Cases View persist into the Flow View after creating a new case and navigating to it

- [PE-6636] Process Instances List receives the Instance Created Message before the Instance is available in the BE's datasource

- [PE-6638] Diagram modification are not applied to ProcessApp in studio stage

- [PE-6639] Mail are not sent when a overdue task is assigned or delegated to other user/group

- [PE-6649] User Task's Multiple Selection Dropdown Form Field is not showing it's current value

- [PE-6660] Performance issues on Flow and Step detail views

- [PE-6682] Problem with attachment on automatic task

- [PE-6695] Variables that include dots are not assigned when doing a REST call

- [PE-6720] Enhance 2.2.0 sql scripts using white spaces

- [PE-6722] Create instance using the external API fails with text variables bigger than 4000 characters

- [PE-6736] User Task Formulas aren't evaluated correctly when a value is an empty List

- [PE-6742] I/O takes place on subprocesses when call activities are asynchronous

- [PE-6851] Wrong redirection on Collections view

- [PE-6883] Exporting in the DMN Editor does not work on Firefox

- [PE-6886] Gateway waits unnecessarily for token from loop

- [PE-6887] An error toast is shown when a user starts a task which is already started

- [PE-6890] Overdue due date in "my cases" is not shown in red on mobile view

- [PE-6896] Subcases are not archived when main case is archived

21.94 Version 7.9.12

21.94.1 Improvements

- [PE-6643] Attachment cannot be accessible after upgrading to 7.9.*

21.95 Version 7.9.11

21.95.1 Resolved bugs

- [DES-4070] The maintenance mode fails because of wrong certificate locations

21.96 Version 7.9.10

21.96.1 Improvements

- [SRE-157] / [DES-3875]: Proxy recognizes changes in certificate

21.97 Version 7.9.9

21.97.1 Improvements

- [PE-6717] Remove "No forecast possible" message from process flow view

21.98 Version 7.9.8

21.98.1 Improvements

- [PE-6696] Create a feature flag to control error messages in UI

21.98.2 Resolved bugs

- [DES-3701] LDAPs configuration is outdated with Keycloak 20.0.3

21.99 Version 7.9.7

21.99.1 Resolved bugs

- [PT-8329] Tenant default language overwrites user's content language in the webclient on reload when userflow is enabled
- [DES-3927] The cleanup of temp files in the domain-data-transfer-service does not run
- [DES-3911] Diagram archive contains documents

21.100 Version 7.9.6

21.100.1 Resolved bugs

- [DES-3876] In some cases it is not possible to select a user in the attributes, when there are multiple users with a similar name
- [DES-3891] Missing update of the configuration for upload limits

21.100.2 Tasks

- [PT-7415 | PE-6598] Enhance data provisioning for onboarding tool
- [PT-7910] Enable font replacement mapping in workflow-service

21.101 Version 7.9.5

21.101.1 Resolved bugs

- [PE-6516] Security Improvements
- [PE-6541] Script to clean up process execution Elasticsearch data causes process execution service not to start
- [DES-3821] Security improvements
- [PT-7747] Apigateway memory configuration is insufficient

21.102 Version 7.9.4

21.102.1 Resolved bugs

- [PE-6472] Process execution not responding, all database connections blocked

21.103 Version 7.9.3

21.103.1 Resolved bugs

- [PT-6438] Security improvements
- [PT-6482] Security improvements
- [PT-6630] Adding missing translations for AR, IT, FR
- [PT-6732] Sync entity messages don't contain the repository ID
- [PT-7623] Default values for diagram attributes are not applied on diagram creation
- [PT-7706] Method editor does not allow the user to set attributes as mandatory for specific domain object types
- [PT-7709] Incorrect default configuration for the onboarding tool
- [PT-7754] Lists use wrong enumeration symbols in generated PDF reports

21.104 Version 7.9.2

21.104.1 Tasks

- [PE-6416] Security improvement

21.104.2 Resolved bugs

- [PE-6418] In progress tasks of archived cases are shown on task list
- [PE-6437] Expired cases cannot be removed

21.105 Version 7.9.1

21.105.1 Resolved bugs

- [PE-6418] Process gets stuck because of loop
- [PE-6437] Reindex of tasks results in an OOM

21.106 Version 7.9.0

21.106.1 New Features

Analyze views of published diagrams

All user roles, except Reader, can now analyze views of published diagrams. When you open the publication in the new user interface, you will find the "Diagram views" filter in the filter area to filter a range of values of views. If you want to see the number of views of a particular diagram, you can find the exact number of views in the system attributes of the diagram.

Hint: Evaluation starts after installation of this version. Logins before installation cannot be evaluated.

Hint: Views in the old and in the new user interface are all counted.

Analyze user logins in the administration

In the administration of the new user interface you now have the possibility to analyze user logins. The logins are summarized per month and are listed for the past 12 months.

Hint: Evaluation starts after installation of this version. A login before installation cannot be evaluated.

Hint: Currently you will find only this entry in the administration of the new user interface. In upcoming versions, you will be able to access other administration options as well.

Export workflow tasks to Excel

In the Governance Cockpit of the new user interface, users with the appropriate user role (Administrator or Editor) can now export all workflow tasks to Excel. You can use the search or the filters to determine the workflows that should be exported to Excel.

Hint: If you do not filter the workflow list and thus export all workflows including their tasks, then the generation of the Excel file may take a long time.

Waypoint of edge trajectories can be set while dragging

If you want to create the *sequence flow* between two symbols on the modeling interface, then you can set the waypoints directly when dragging to define the flow. To do this, click once on the edge in the *mini symbol palette* at the output symbol to be able to set the manual sequence flow. If you want to set a waypoint, click with the left mouse button on the desired position. The manual flow will end when you click on the target symbol. The manually drawn sequence flow is considered by the layout assistant and is not changed.

Create catalog proposals in assigned attributes

You can now create a catalog suggestion directly in an *assigned attribute* if the desired catalog entry does not exist yet. The configuration of the attribute determines for which object type you can create a catalog suggestion. If several object types are provided for an attribute, you can choose between these object types.

Automatically check language-dependent mandatory attributes on publication

If a *language-dependent mandatory attribute* is assigned to a diagram, then it is checked whether the mandatory attribute has a value in the *default language* of your system (can be configured by the administrator), when the publication is started. If the standard language does not contain a value, the publication will be rejected. All other languages of your system will not be checked.

Automatically check mandatory attributes when publishing catalog entries

When the *publication workflow for a catalog entry* is started, it is checked whether all *mandatory attributes* have a value. Please consider for language-dependent mandatory attributes that only the set standard language is checked (analogous to the publication of diagrams).

Hint: Classification as a mandatory attribute is applied to the attribute definition and is not dependent on the context (diagram or object attribute). For example, if you have classified the description as a mandatory attribute, then it will now check for diagrams and objects if a value exists in the default language of their system.

Publishing of governed catalog entries in diagrams during diagram publishing

If you use a governed catalog entry in a diagram that is not yet published, the governed catalog entry is published as a draft with the diagram so that the *diagram publication* can continue without releasing the approving catalog entry first. The maintained attribute values of the catalog entry are not available in the *publication until it is released*.

Switch analysis data in the Governance Cockpit

In the Analysis tab of the Governance Cockpit of the new user interface, you can now easily switch between your repositories to change the data basis of the evaluations. If you have only created one repository in your system, the selection option is deactivated.

Create your own Word-based reports in administration

Administrators can now *create their own reports* and define Word-based report templates for them. With this feature, you can create your own reporting scenarios or offer existing report templates in different variations.

Change report templates for the manual with assignments report

In the administration area all report templates of the manual with assignments can be downloaded as a ZIP file to *adapt the report templates to your needs*. After adjusting the templates, you have to save all report templates again in a ZIP file to be able to upload the customized report templates. Please read the corresponding chapter in our documentation beforehand and keep the downloaded ZIP file, because the default templates cannot be restored.

Monitor licensing status in user report

The *user report* has been revised and now keeps the group and role membership of users in separate spreadsheets. In addition, you will now find an overview of purchased and used licenses in the user report. On the first spreadsheet you will find an aggregated overview as table and diagram.

Manage BIC Process Execution Roles in administration

In the *user management*, you can assign BIC Process Execution roles to users. Users can have multiple roles at the same time.

Extension of the Customer Journey Map

In the Customer Journey Map (CJM), you will now find alternative symbols for the Touchpoint, Customer Step and Journey Stage. Additionally, the Document, Application and Backstage Process symbols have been added so that you can model the Customer Journey in more detail and do not have to maintain this information in attributes.

"Decomposition" is now called "Subprocess" for activities

The "Decomposition" attribute on activities has been renamed to "Subprocess".

21.106.2 Existing features available in new user interface

Central search

The central search can be used to search for catalog entries, diagrams, or modeling objects in diagrams at the same time. You can use the expert search or save a search query as a favorite. After the search shows results, you can use the filters to further narrow down the search results. When you save a search query as a favorite, it is saved on your MyBIC page and you can navigate directly to your search query from the MyBIC.

Category tree

On the diagram list, the category tree is now available for navigation. If you use filters on the diagram list, then the selected category is also used as a filter so that you only see hits that are in the category or subcategories.

Hint: With the introduction of the category tree, the appearance of subcategories in the diagram list has been removed for high screen resolutions.

Hint: If you are accessing from an end device with a small screen resolution, then the embedded categories are still available for navigation. The category tree, though, will then not be offered for navigation.

Comparison of the current version with the direct predecessor version

In the new user interface, you can compare the active version in a stage with the direct previous version. Removed and added symbols are shown, as well as objects whose attributes have been changed. If the attributes of an object have changed, then you can compare the difference in tabular form.

Hint: You can currently run the version comparison only on the previous version. In future versions, you will be able to select another version of the diagram for comparison

Deputies can take over tasks from the task owner

In the task management of the new user interface, you can take over and execute deputy and group tasks.

Number of tasks in the menu

In the new user interface, the number of your own open tasks is shown as a badge on the menu entry. Substitute tasks and group tasks are not counted.

Perform tasks directly on the diagram or catalog entry

If you click on a task in your tasks, you will be directed to the diagram or catalog entry where you can perform your task.

Diagrams can be published

Users with the appropriate user role can start publication of a diagram on the diagram list and detail page of a diagram in public workspace.

Catalog entries can be deleted

In the catalog of the new user interface, you can now delete catalog entries and suggestions from corresponding user roles.

Labeling of catalog proposals in proposal lists

Non-accepted catalog entries are marked as catalog suggestions in suggestion lists.

Automatic search for keywords

You can click on a keyword to perform a search for the keyword.

21.106.3 Process Execution

New development of the process execution

With the version 7.9 the calculation of the process execution was substantially revised and accelerated. This has resulted in a higher reliability of process execution. Unfortunately, this improvement made it necessary to temporarily remove the forecast of future tasks. The forecast will be available again in the next version of BIC Process Execution.

BIC Process Execution also allows the execution of processes where no conditions were specified at sequence flows after gateways. Until now, the decision of these gateways was integrated into the task immediately before the gateway. This procedure was not always reliable and predictable for the user. With the new version, gateways where no conditions were specified now become *active tasks* for the task creator. The user is thus prompted by an explicit task to make a decision for the further process flow.

In processes that have multiple start events, it was previously necessary to start the case after creation. With the new version the creator of the process gets a task to decide with which event the case should be started. In this way, the process can no longer be simply overlooked.

> **Warning:** Running cases must be terminated before updating to version 7.9. Unfortunately, it is not possible to migrate running cases to the new version 7.9. All processes that have not yet been finished will be automatically archived when updating to version 7.9.

Enhancements in the form editor

The *form editor* now provides a field that supports the selection of users and user groups during process execution. This makes it even easier to dynamically assign roles in the process to users or user groups.

Selection fields in the form editor were previously simple texts. These now optionally support a key. So you have the possibility to use the key e.g. in formulas and don't have to use the display text.

Enhancements in the REST editor

The *REST editor* now allows to send configuration files as binary. This form of REST call is necessary e.g. when using MS-Sharepoint to upload a file.

In addition, more HTTP methods (e.g. HEAD, PATCH) are now available in the REST configuration. This allows to cover a wider range of API calls for external systems.

CI configuration in BIC Process Execution

BIC Process Execution now also adopts the *CI configuration* from BIC Process Design to achieve a consistent web presence of both products in the organization.

Breadcrumb for navigation

The breadcrumb is not only used to display where you are currently located in the application, but now also allows you to navigate to the higher levels of the application. For this purpose, the individual components of the breadcrumb can be clicked.

Next to the breadcrumb you will also find a way to navigate back and forth. This navigation makes it easier for the user to navigate back to the task list, for example.

Filter in the case and task list

The case list of a ProcessApp and the task list can now be filtered. The first filter available here is the owner or creator of the case and the ProcessApp to which a task belongs. More filters will follow in the next version.

Group tasks in the process

Group tasks can now also be claimed directly within the case. If the group task is not assigned to anyone yet, a button "Assign to me" is displayed. This eliminates the need to navigate to the task list to take ownership of the task there.

More compact task list

The task list has been redesigned to provide a more compact view that allows you to see more tasks on one page.

Changed display of tabs

The tabs in different areas of the application have been unified and show the name of the tab in addition to an icon.

21.106.4 Resolved bugs

- [DES-3023] Improve content security policy
- [DES-3359] Users cannot login via SAML from time to time
- [DES-3363] Inconsistencies prevent publication of diagram
- [DES-3412] Security improvements
- [DES-3435] Exception during the replacement of a used and connected entity
- [DES-3467] Import fails and cause a "DataIntegrityViolationException"
- [DES-3479] User report generation can run into timeouts
- [DES-3481] Security improvement
- [DES-3489] Failing export due to duplicate document id
- [DES-3665] Setting standard attributes to read-only has no effect for diagrams
- [PT-518] Users and User groups don't get loaded in alphabetic order in Administration
- [PT-1569] Audit trail is not visible anymore if the owner of an open task is deleted
- [PT-2001] Wrong default page of deputy tasks
- [PT-2997] Catalog has no default page (Portal)
- [PT-4087] OverlayEdgeCreation has no alignment assistance
- [PT-4467] Clicking on keyword always leads to a search in the public workspace
- [PT-4468] Attribute view shows date values in different format than the profile view (Portal)
- [PT-4844] Toasts are translated incorrectly (Portal)
- [PT-5277] Formatting of lane edges differs in printed diagram
- [PT-5416] Boolean conditional formatting is not triggered when a diagram gets freshly checked out after reloading page
- [PT-5487] First task listed in the group task list cannot be revoked after claiming it
- [PT-5688] Formatted text attributes not updated in edit mode when toggling languages
- [PT-6116] Requesting diagrams causes unacceptable loading times
- [PT-6211] Font loading produce wrong calculation
- [PT-6248] Third Examiner doesn't get a task (Portal)
- [PT-6330] Once a BPMN event label contains a line break, its edge overlaps with the label
- [PT-6352] Dates don't respect the locale variant
- [PT-6357] Governance analytics tab has options (Portal)
- [PT-6431] Security improvement
- [PT-6465] Missing ellipsis in MyBIC Titles
- [PT-6479] Notification about a new task is missing when assigned as an examiner on a catalog item

- [PT-6487] Task list shows only 50 items (Portal)

- [PT-6567] An edge docked at bottom port covers node name

- [PT-6579] Reports don't respect locale variants

- [PT-6580] Date filter in dashboards do not respect the filter values (Portal)

- [PT-6589] Unused catalog items in publication are not cleaned up

- [PT-6594] Break point of a sequence flow cannot be selected and moved

- [PT-6595] Message edge cannot be drawn straight

- [PT-6694] Freeform lines could not moved anymore after placing it on canvas

- [PT-6777] User report generation can run into timeouts

- [PT-6788] Attachment cannot be downloaded when filename has certain special characters (Portal)

- [PT-6791] Mimetype will be shown for attachments with special characters in filename (Portal)

- [PT-6792] Attachment that is published as PDF will be shown with its original file ending

- [PT-6854] Tenant symbol type colors are sometimes overwritten

- [PT-6880] Saved searches ignore set filters (Portal)

- [PT-6899] Security improvement

- [PT-7045] Workflow error toasts are displayed to all users (Portal)

- [PT-7214] Layouting two pools doesn't work correct

- [PT-7219] Suggestion list does not find expected hits when using a space character (Portal)

- [PT-7235] Disabled bulk publication option available in read-only stages (Portal)

- [PT-7257] Center port will not be highlighted if the edge does not exactly hover over center port

- [PT-7403] AUTHOR doesn't see "Publish" button in the List page for catalog and diagram (Portal)

- [PT-7404] AUTHOR doesn't see "Depublish" button in the catalog list (Portal)

- [PT-7420] Invalid diagram toast gets shown on last validity day already [User action required]

- [PT-7515] You cannot set a title for a document in upload dialog

- [PT-7519] Clicking on a validation item has a wrong behavior

- [PT-7521] Title of uploads and links are not given in reports

- [PT-7528] Date attributes are displayed differently depending on their attribute group

- [PE-2285] Wrong icon when there are no favorites

- [PE-4911] Unify Apidoc URL in all services

- [PE-5199] User tasks with only formula fields cannot be completed

- [PE-5540] A default value error message is displayed but there is no error on date type fields.

- [PE-5632] Variables saved as String throw an exception with more than 4000 characters because a database restriction

- [PE-5725] User form is not disabled if task is not assigned to me

- [PE-5863] Role occupation defined in process variable is not set in sub case

- [PE-5996] List created in a script task is not stored correctly

- [PE-6049] The value in a formula field is not calculated when a value exist on task start

- [PE-6072] Query parameters encoding is not needed on Service tasks

- [PE-6073] Form values are not stored when the pattern for a text field is invalid

- [PE-6088] When I claim a group task, I want to be assigned for all following tasks of the group in order to be responsible for the entire instance

- [PE-6095] Performance issues in processes request

- [PE-6098] End event with multiple incoming edges crashes execution

- [PE-6099] Task can not be completed when optional field does not contain a value

- [PE-6106] Empty cases message is not properly align

- [PE-6107] The task counter doesn't work as expected

- [PE-6113] ACL for Elasticsearch Instance documents is not correctly populated

- [PE-6114] Selecting a different step in the process flow view causes the view to fully reload

- [PE-6114] Selecting a different step in the process flow view causes the view to fully reload

- [PE-6115] Sub case icon is not shown when the call activity is synchronous

- [PE-6116] How to remove process-execution elasticsearch data is missing in upgrade notes

- [PE-6123] Updating a process variable does not update the corresponding Elasticsearch document

- [PE-6130] Elastic Search throws timeout exceptions during re-indexing of Nightly

- [PE-6153] Service task does not attach the result file in a Document entity

- [PE-6162] Service Task fails if the URL is a place holder

- [PE-6165] When a case was stuck because of multiple paths, the synchronization after check-in was not working

- [PE-6168] Case creation restriction does not work when more than one identity is specified

- [PE-6169] Text area value is not shown properly in the Email task preview

- [PE-6186] When multiple paths are finish together, next fragments are not calculated and cases can be stuck

- [PE-6222] Republishing a diagram in production stage breaks decisions of previous version cases

- [PE-6224] The status of the first task of a new case is not shown properly when it was started automatically

- [PE-6260] On systems with cgroup v2, memory management fails in some Java services

- [PE-6270] New instances are added to the Archived Process' Instances View

- [PE-6273] Wrong german translation in the header of My Cases view.

- [PE-6276] The labels of new user form fields are not localized

- [PE-6306] Pagination of Collections view is broken

- [PE-6310] Upload a file to output documents does not work on cases belonging to previous versions of a ProcessApp

- [PE-6316] NullPointerException when republish a diagram

- [PE-6346] When a user belongs to more than one Restricted Access group the ProcessApp is shown multiple times as a result of a search

- [PE-6359] App url changes without view change should replace last navigation entry

- [PE-6363] Tooltips block the selection on steps of the Flow View

- [PE-6371] Form Editor Spanish translation misspellings

- [PE-6377]Signature user task does not get completed in the Flow View

- [PE-6380] Formatted Text Field with conditional hidden value fails to enable initially

- [PE-6383] Field with default value fails to execute conditional formulas

- [PE-6396] The list of cases is misaligned

- [PE-6398] Long username and email does not display properly in the Profile view

21.107 Version 7.8.19

21.107.1 Resolved bugs

- [PT-6997] Excel macros may not work after stamping

- [PT-7177] Document conversion during publication has a delay

- [PT-7178] Process Warehouse creation to fails

21.108 Version 7.8.18

21.108.1 Resolved bugs

- [PT-6623, PT-6793, PT-6900] Security improvements

- [PT-6809] Local files cannot be opened

- [PE-6072] Query parameters encoding is not needed on Service tasks

- [PE-6099] Task can not be completed when optional field does not contain a value

- [PE-6125] Not count the default instances in the "count open instances endpoint"

21.109 Version 7.8.17

21.109.1 Resolved bugs

- [PT-4234] The word file name is not correct, when the FileName field property in the word is being used

- [PT-3977] Formatted text attributes get stamped with HTML tags

- [PE-5752] Archive running instances to support the new flow calculation

21.110 Version 7.8.16

21.110.1 Resolved bugs

- [PE-5886] Variables calculated in a script task have an unexpected result
- [PE-5905] Rearranging columns in the dmn editor does not work as expected
- [PT-6663] Security Improvement

21.111 Version 7.8.15

21.111.1 Resolved bugs

- [DES-3419] Entities are replaced by different entities after re-opening a diagram

21.112 Version 7.8.14

21.112.1 Resolved bugs

- [SRE-45] Reliability improvement

21.113 Version 7.8.13

21.113.1 Resolved bugs

- [SRE-45] Reliability improvement

21.114 Version 7.8.12

21.114.1 Resolved bugs

- [PT-6471] Date attributes can not be cleared on the attribute list
- [PT-6575] Security improvements
- [PT-6618] Mismatch between selected date and displayed date for datepickers in old UI

21.115 Version 7.8.11

21.115.1 Resolved bugs

- [PE-5819] API key validity is not checked
- [PE-5782] Properties on form fields do not work as expected
- [PE-5773] When I move a column in a dmn task then only the column header is moved, not the rows with the values
- [PE-5755] User Form's Formatted Text field saves step variables on OnChanges instead of on OnBlur
- [PE-5750] DMN tasks show outputs that should be hidden
- [PE-5820] Optimize output mapping on call activity tasks
- [PE-5756] Save only changed variables
- [PE-5533] Run start timer only on production stage

21.116 Version 7.8.10

21.116.1 Resolved bugs

- [DES-3343] Archive import does not update entities correctly

21.117 Version 7.8.9

21.117.1 Resolved bugs

- [PT-6382] Workflow emails will be sent to more recipients than the configured limit
- [PT-5184] Workflow fails with uninformative error if any governance related group does not exist
- [PT-4119] Workflow related issue after temporary database connection failure

21.118 Version 7.8.8

21.118.1 Resolved bugs

- [PT-6316] Governance dates should be shown with the locale time of the viewing user
- [PT-6252] Images can be added to the description attribute which leads to unexpected behaviour

21.119 Version 7.8.7

21.119.1 Resolved bugs

- [PE-5651] Task list is not updated automatically when I complete a task

- [PE-5611] Request for task variables fails, if request gets to long, because of filters

- [PE-5650] Input/output mapping fails on multiple choice fields marked as "Save selected options as string array"

21.120 Version 7.8.6

21.120.1 Resolved bugs

- [DES-3323] User Export does not contain all users

- [PT-5858] Switching the language while editing description attributes displays the same value in both languages instead of an empty field

- [PT-6188] Replace unsupported list bullet characters during PDF conversion of MS Word documents

21.121 Version 7.8.5

21.121.1 Resolved bugs

- [PE-5612] After deleting and recreating a user, the query to search by email address gets multiple search results

21.122 Version 7.8.4

21.122.1 Resolved bugs

- [PT-6216] Add/Remove free space does not work if pools with multiple lanes are involved

21.123 Version 7.8.3

21.123.1 Resolved bugs

- [PE-5568] Formula execution resulting in null values results in npe

- [PE-5556] Default reminder schedule has wrong configuration

- [PE-5554] Input fields for DMN are not shown in task

21.124 Version 7.8.2

21.124.1 Resolved bugs

- [PT-6118] Diagrams with non-resolvable decompositions cannot be displayed in the webclient

- [PT-6207] Documents without stamping properties are not converted to PDF on repeated entity publications

21.125 Version 7.8.1

21.125.1 Resolved bugs

- [PT-3840] When using an occurrence assignment attribute to display a conditional formatting on the symbol, the format is not applied

- [PT-5827] Date attribute values are not displayed in the local timezone

- [PT-6005] SVG of diagram with over 2000 entities is not requestable and diagram cannot be displayed in portal or publication stage

- [PT-6104] Changing color settings is not consistent for all stages

21.126 Version 7.8.0

21.126.1 New Features

Governance Analytics

We extended the Governance Cockpit of the new user interface with an analytics tab. There you can display the most important information aggregated in charts and get an even better overview of your diagrams and catalog items.

Various evaluations are available to analyze your governance:

All diagrams or catalog items of a repository

The two evaluations show you the number of diagrams or catalog items per stage and offer you the possibility of drilling down on the aggregated view to get to the detailed view.

Upcoming diagram or catalog item resubmissions

The evaluations give you an outlook of how many diagrams or catalog items become invalid in which month so that a check of their validity is necessary. The outlook covers the next 12 months. The reminder interval for resubmissions is not considered here.

Finished publications of diagrams or catalog items

The evaluations present the past publications of diagrams or catalog items within the last 12 months and summarizes them per month.

After updating to the current version, it may take some time until all the data is available in the evaluations.

Resubmission and repository filter in the Governance Cockpit

In the Governance Cockpit, you can now filter for diagram or object resubmissions as well as for workflows originating from certain repositories. Both filters are available in the new and old user interface.

Bulk publication of catalog items

In the new user interface, you now have the option of publishing several catalog items at the same time. The function is in the options panel if you are in the catalog on the catalog list. If you select bulk publication, BIC Process Design pre-filters the catalog list so that you can only select catalog entries that can be published. Each entry is displayed with a checkbox. As soon as you have selected several entries, you can start the bulk publication for these catalog entries.

Please note that for each selected catalog entry a publishing workflow is initiated, and tasks and notifications are triggered (depending on the release type).

Document stamping with language localized attribute values and dynamic date values

If you publish your documents in BIC Process Design, then you can use *document stamping* to include values from governance attributes in the document. We have extended the function so that you can now also use the values of language-dependent text and enumeration attributes. It is necessary that you configure the intended language in the document beforehand.

Furthermore, you can now leave the "Valid from" date empty and use it in the stamping. If you have subscribed to the Extended Approval Package, you have the possibility to use the date values in the stamping that are set when the workflow is executed.

Please note the necessary preparation to stamp attribute values in a published document.

Configure cut process image in Word reports

In Word-based reports it is now possible to include a *process as a cut graphic* instead of an uncut graphic. To do this, you must first adapt the corresponding template by exchanging the placeholder for the graphic. After that you need to set the number of pages to be used to cut the process in the print settings of the process. The print settings are also applied to the print function.

Additional validation possibilities via OCL

We extended the *validation possibilities* and give you the opportunity to . . .

- . . . check the values of diagram attributes.

- . . . double check date values against the current date.

- . . . double check date values against defined intervals.

- . . . classify rules as blocker to prevent the check-in in case of a violation.

Please note that OCL rules are configured in the method editor. Currently, none of these options is applied in a validation rule in the standard method.

Pre-configured report scenarios in the Process Matrix report

We have extended the *Process Matrix report* with common reporting scenarios and integrated the existing report as additional pivot matrices. The pre-configured reporting scenarios are:

- Application usage (per activity and process)

- Document usage (per activity and process)

- RACI mapping (per activity and process)

- Risk occurrence (per activity and process)

- Diagram metrics (per process)

You specify the scope of the report, i.e., whether a diagram, the diagrams of a category or the entire repository should be included in the report, directly when generating the report. All processes listed in the content area are considered. If essential relationships or objects are not available in the report context, the affected report scenarios remain empty.

User overview as Excel report

Administrators can export a *user overview as Excel report* in the user administration. In the Excel file you can see the number of licenses used per user role, all users of your system and other details about a user such as name, email, user role, language, and stored user groups. If several user groups have been stored for a user, an entry is created for each user group.

Please note that activated filters or search terms are not considered for the export.

21.126.2 Existing features available in new user interface

Central search

The new user interface gained a central search which helps you to find diagrams, modeling objects and catalog entries.

Please note that the search does not yet include all functions and we will integrate them in the coming versions.

Set a deputy for tasks

Task owners can set a deputy in their profile. This setting could be made in the "My Tasks" area of the old user interface and has been moved to the user profile.

After a deputy has been chosen, all tasks also appear in the "Deputy tasks" list of the deputy and can be taken over, for example, if the task owner is absent.

Remove favorites

Favorite diagrams or search favorites can be removed from your MyBIC page at the corresponding tile. This option was available in the old user interface in the favorites panel above the current repository. Please note that you cannot remove favorites set for you by your administrators. Therefore, these tiles have no context menu.

Change catalog entry to suggestion

If you open the details view of an accepted catalog entry in the catalog of the public workspace, you have the possibility to change the *catalog entry into a catalog suggestion* in the options.

Please note that catalog suggestions, in contrast to catalog entries, can be changed in the modeling and the changes affect all occurrences.

21.126.3 Process Execution

Task form on your task list

Working on tasks is the main use case you will face in BIC Process Execution. Therefore, we have now enhanced the focus on your tasks and how to work on them. When opening your task list and clicking on one of them, the task form will *open in this view as pop-up*. You can then work on your task just in the same way as in the task form within the process flow view. When you complete the task, the pop-up closes, and the task is marked as completed in the task list. The option to provide a comment when completing a task is also integrated in the pop-up task form. In this way, it is now possible to edit all your tasks directly within the task list and no longer have to navigate into the process flow.

Remark: The pop-up task form will not include auto generated decisions for gateways without expressions! This is only a backup mechanism. You should always define expressions on the outgoing edges of a gateway. Please check the documentation for the pop-up task form to get more information.

E-Mail and URL as new inputs field for the user form

We have added two new input field types to the *user form editor*. As an author you can now add an email and an URL field to your user form. The fields provide built-in validation for emails and URLs. As an author you have the option to provide own definitions for the validation of the user inputs.

The URL field supports the URL functions of the browser, such as opening the URL when clicked. The email field also supports the mailto feature so that your local email client will be triggered to open the send email window.

Define default values on your input fields

There are some cases where it is necessary to have a *default value* on an input field. This can be a number, text, selection, or anything else. As an author you can define a default value that can be a fixed or calculated value and refer to process variables in the case. You can use the same formulas and options as on a formula field. The defined value will be calculated once the task is started. You are then able to change the value before completing the task.

Attachments in automatically sent emails

E-Mails can be sent automatically via *send tasks* in BIC Process Execution. You can provide all necessary information like the receiver, cc, bcc, subject, and body. Now also attachments will be included in automatically sent emails via send tasks. To add an attachment, you only need to model an input document on a send activity. When a document was uploaded in a step before, this document will be attached to the email. When you want to send multiple attachments, you simply need to model one input document for each attachment on the activity in BIC Process Design.

API key as dedicated authentication option for REST-Calls

We have improved the configuration for the API key authentication. You can now select the API key as authentication type in the connection section of the *REST-Call configuration*. When you have selected the API key authentication you can provide the name and the value of the API key and select whether to place it in the header or request parameters of the request.

OAuth2 as authentication for REST-Calls

Oauth2 is a common authentication method and provides various authentication workflows. BIC Process Execution now supports the OAuth2 client credentials flow for the *REST-Calls* in the service tasks. You can provide all necessary information in the editor when you select OAuth2 as authentication type.

Improved error messaging in user form editor

There are some conventions and mandatory fields to configure for a *user form*. When you try to save a form configuration that contains errors, the system will not allow you to save these settings and will give you feedback on the errors and where they occur. By that you can find and resolve the issues quickly.

Favorites as dedicated ProcessApp Collection

When you are using ProcessApp Collection, you now have a *dedicated collection* for your ProcessApp favorites. All ProcessApps that you marked as favorite are included in this collection automatically. This collection is shown by default when the ProcessApp Collections are configured. The favorites collection is always shown as the first collection in the ProcessApp Collections view.

"More ProcessApps" Collection to collect unassigned ProcessApps

When you are using ProcessApp Collection, you now have a *dedicated collection* for ProcessApps that are not assigned to any collection. This collection is shown by default when the ProcessApp Collections are configured. The "More ProcessApps" collection always appears as the last collection in the ProcessApp Collections view.

Edit ProcessApp Collection configuration

If you are an administrator, you can now *edit the configured ProcessApp Collections*. All settings except the collection ID can be adjusted. If you want to change the ID, you must delete and recreate the collection.

Improved usability in the header configuration of a REST-Call

We improved the usability in the header configuration of the REST configuration for service tasks. Adding new parameters to the header is now more intuitive and predictive. The provided fields are now also saved when not clicking explicitly on the plus icon.

New entry point for editors in the configuration panel of a diagram

When editing a diagram, you now have a new entry point for the BIC Process Execution editors of the different element types in a diagram. In the details section on the right side of the screen, you will find a new option for the editors. In the first step this is a place where you can open the existing editors. In the future, editors will be integrated into the side bar so that you can do the configuration in this place without opening a pop-up.

Redesign of the process flow view

We have updated the *process flow view* that you see when you open a case. Like this, we provide a better overview of the different tasks and types of activities that have been completed, are active and will be relevant in the future.

Redesign of DMN editor

In the past the *DMN editor* did not fit the design of the other editors. Therefore, we updated the design to align it and have a consistent UX on overall BIC Process Execution editors. The changes bring a better readability, better UX and add explicit buttons to save and cancel the changes.

Navigate into a ProcessApp Collection by clicking on the collection header

When you have configured the *ProcessApp Collections*, you can now navigate into a collection by clicking the header on the card of a collection.

Automatic group task assignment

Some cases contain *group tasks that can be claimed* by a member of these groups. Usually, a user who takes over a task for a group should automatically be responsible for all tasks of the respective case. Therefore, when you claim a group task, the system now assigns all following tasks for this group to you. By that you do not have to claim the tasks on your own.

Only the responsible for a task can now complete this task

In the past, you could complete tasks that were not assigned to you. This was a comfort function that we changed in this release. If you are not the responsible of a task, you cannot work on a task and cannot complete it. The *task form* is disabled, and the complete button is not shown. When you want to complete the task, you must be the assignee.

Only an authorized user can now delegate a task

Delegation of a task was previously available to all users. This was a comfort function that we changed in this release. If you now want to *delegate a task*, you must be the assignee, an administrator, or part of the group if it is a group task.

Store multiple-choice selection in an array

Multiple choice fields save the user selection in a process variable with the data type string. To have an easy handling of the selection in expressions, evaluations, etc., this data can now be saved as data type array. As an author you can set the type of storing in the configuration for the multiple choice field. Each field can be configured separately.

Remark: The use of storing multiple choice selection as string is no longer recommended. This functionality is deprecated and will be removed in 2023. Please check your processes and update them in the next months.

21.126.4 Resolved bugs

- [DES-526] Missing documentation for Advanced Approval / Execution Signing
- [DES-1668] Administrator cannot filter SSO users using the role filter
- [DES-2832] Installation instruction in SAML has incorrect screenshot
- [DES-2893] Upload limits are incorrectly documented
- [DES-2905] Configuration of open relay SMTP leads to warnings
- [DES-2928] Nginx often crashes during the upload of a 1 GB file
- [DES-2995, DES-2996] Security improvements
- [DES-3022] Proxy does not work if more than one nameserver exists
- [DES-3024] Unlocalized attachment attribute in imported objects are invisible
- [DES-3039] GRC-Apigateway returns 500 by fetching big diagram
- [PT-1598] Catalog list filter display enumeration value instead of the name (Portal)
- [PT-2305, PT-5641, PT-5764] - Security improvements
- [PT-2779] Invalid diagram warning toast gets displayed on the expiry day already
- [PT-2786] Assignment is created in wrong stage when navigating from versions hub
- [PT-4650] Charts show index of enumeration instead of related name (Portal)
- [PT-4653] Tables are not inserted at cursor position in formatted text attributes
- [PT-4655] Format buttons in formatted text attributes are not correctly highlighted
- [PT-4914] Occurrence view does not show all occurrences (Portal)
- [PT-5019] Publishing a workbook could hide spreadsheets
- [PT-5148] Copied symbol format gets partially lost
- [PT-5357] Extend option in resubmission can affect preview stage
- [PT-5471] Undo function does not work properly
- [PT-5557] Filtering catalog leads to an empty export (Portal)
- [PT-5612] Entity release mail contains wrong language
- [PT-5642] Default configuration can lead to out of memory
- [PT-5822] Diagram layouter can break edges
- [PT-5882] Catalog state will always set to 'suggested' when this column is missing in the import
- [PT-5987] Removing free space on pools with nodes may prevent diagram check in

- [PT-6001] Opening a diagram by link doesn't switch to corresponding repository context

- [PE-5472] Formula is recalculated after task completion

- [PE-5471] Null comparison for null value in string variable does not work on sequence expression

- [PE-5425] The DMN output is not shown properly when the variable matches the label

- [PE-5347] The task following a DMN task shows the DMN form field

- [PE-5345] DMN evaluation does not work for default instance

- [PE-5342] Shown ProcessApps in Collection card do not fit the defined logic

- [PE-5298] Placeholder in text area is not visible

- [PE-5285] Retention period attribute missing on BPMN and EPC diagrams

- [PE-5224] User task list does not show all tasks when the app starts in the group task list

- [PE-5218] Security improvements

- [PE-5200] DMN editor jumps to top when I delete or duplicate a row

- [PE-4999] createdDate process variable only sends date without time in a service task

- [PE-4996] Formatting text in textarea does not apply the format

- [PE-4894] Setting a ProcessApp as favorite does not apply when switching to another site before the animation is not completed

- [PE-4892] Case flow view does not appear after creation

- [PE-4597] Warning toast pops up multiple times when starting process without clear entry point

- [PE-4171] Boolean field not checkable after textarea input

21.127 Version 7.7.8

21.127.1 Resolved bugs

- [PT-5270] Activities without name will sometimes be rendered with an undefined label

- [PT-5558] Diagram search results cannot be opened via left click in the portal

- [PT-5838] Images are displayed in wrong order when using "getImageWithPrintSettings" in report templates

- [PT-5839] Image resolution of large diagrams is too low when using "getImageWithPrintSettings" in report templates

21.128 Version 7.7.7

21.128.1 Resolved bugs

- [PT-5755] Signed PDF files cannot be published with stamping enabled

- [PT-5819] SVG rendering fails with custom symbol formats for BPMN pools

- [PT-5829] Catalog search in webclient incorrectly applies additional sorting

- [PT-5828] Stamping in document publication removes unmaintained properties instead of leaving them empty

21.129 Version 7.7.6

21.129.1 Resolved bugs

- [DES-2958] Message publishers will be blocked due to high watermark alarm

21.130 Version 7.7.5

21.130.1 Tasks

- [DES-2036] When the trial period has ended, the tenant should be deleted after a grace period
- [DES-2035] When the trial period for a tenant is over, the tenant should be blocked

21.130.2 Resolved bugs

- [PT-5529] Security Improvements
- [PE-5068] Role occupation does not work when creating a case via run link

21.131 Version 7.7.4

21.131.1 Resolved bugs

- [DES-2903] Serialization of domain data fails sporadically during field access via reflection
- [DES-2894] The usage of the Method-Service leads to OutOfMemoryError on multi-tenant systems
- [PT-5377] Donut charts does not get updated facet value counts

21.132 Version 7.7.3

21.132.1 Resolved bugs

- [PT-5237] Facet view moves when a hidden value gets displayed again
- [PT-4974] Multiple items get pasted from clipboard
- [PT-5341] Edit catalog item attributes after creation saves data only partially
- [PT-4642] Dynamic facet count does not work for catalog filter

21.133 Version 7.7.2

21.133.1 Resolved bugs

- [DES-2866] Keycloak cause Bad Request 400 in Authentication Configuration when the flow name contains a space
- [DES-2845] Username and other user attributes from Keycloak don't fit user-service columns
- [DES-2890] User cannot choose highest role when more than one role is assigned in Keycloak

21.134 Version 7.7.1

21.134.1 Resolved bugs

- [DES-2843] Add missing hint in Upgrade notes
- [DES-2785] Reindex cannot be triggered

21.135 Version 7.7.0

21.135.1 New features

Dashboards for diagrams

The new user interface provides a dashboard view for diagrams now. The dashboards evaluate the attributes of your diagrams in donut charts and since they are interactive, you can easily analyze your repository. The dashboard is an alternative view to the diagrams of your diagrams list. If you select pieces in a donut chart and navigate back to the list view, the list will contain exactly the diagrams which match your criteria.

To see dashboards for diagram attributes, you need to select those attributes in the administration. You can apply the same procedure to your self-configured attributes to evaluate them in the dashboards. In addition, these attributes are available as filter options in the diagrams list.

Process Warehouse export includes state of catalog entries

We added the column „Catalog state" in the *Process Warehouse export for catalog entries*. The values in the column indicate if the respecting entry is an accepted catalog entry or a catalog suggestion.

You can change the catalog state in a Process Warehouse export and import it to accept a large quantity of catalog suggestions or reset accepted entries to suggestions. If you create new catalog entries using a Process Warehouse import and change their catalog state to "APPROVED", these new entries do not have to be accepted manually in the catalog.

Please note that you should only display the columns of the attributes you would like to update with an import.

Including of graphics to diagrams and modelling objects

You can include graphics as a background of a symbol. For example, this can be helpful if the graphic serves as a navigation element. To do so, you must model and format a navigable object first and then add the graphic.

Hint: The formatting options do not show yet that a graphic has been included as background.

Moreover, you have the possibility to paste graphics directly from your clipboard. In the past, the pasting of a graphic had to be done via drag and drop which meant that you had to save it locally to add it.

Hint: If you have several items in your clipboard, all items will be pasted.

New catalog design

The design of the catalog in the new user interface has been reworked and adapted to the diagrams view. The dashboards are displayed in a new design which matches the diagram dashboards. The bar charts have been removed in the new user interface since this form of evaluation was redundant.

List of expired catalog entries in publication stage

Until now, BIC Process Design informed about expired catalog entries ("Valid to" date in the past) contained in a diagram via a banner in the new user interface. From now on, those entries are listed in the *validation*. You can simply click on an entry in the validation to highlight the expired catalog entry in the diagram and easily identify the specific occurrences.

21.135.2 Process Execution

Group ProcessApps in ProcessApp Collections

You can now group your *ProcessApps in ProcessApp Collections*. You can define your Collections in the BIC Process Execution *Administration* and create Collections based on departments, areas, topics and any other structure you need. A ProcessApp then can be assigned to one or multiple Collections. The Collections let you group your ProcessApps so that you have a clear structure and can find your relevant ProcessApps even quicker.

Single- and multiple-choice fields as dropdowns

When creating a user form, you can now configure *single-choice* and *multiple-choice* fields to be shown as dropdown fields. You do not need to create new input fields to do so. You can simply update your existing input fields and change the radio buttons and checkboxes into dropdowns.

Introducing the user profile

We implemented a *user profile area* in the application. Here you find your user information, the selection for the content language, and new profile settings. The user profile will include even more features in the future.

Define your deputy who will get your tasks when you are out of office

In the new user profile area, you are now able to configure your *deputy* and your availability status. Both features in combination ensure that your tasks will be handled even if you are out of office. You can define another user as your deputy and when you set your availability status to "Out of office", all new tasks assigned to you, will be delegated to your deputy.

When you are back in the office, you set your availability status back to "Available" and all new tasks will be again assigned to you.

Provide hint text for input fields

Some *input fields* need to provide more information to the user. We already have placeholders to provide information and from now on you can use *hint texts* for most of the input fields. The hint text will be shown right under the input field. In contrast to the placeholder, the hint text is visible even if there is a value in the input field.

Payload for case creation via REST API adjusted

In BIC Process Execution, you can create *new cases for a process via REST call*. You can include data for the case, like process variables, the case name, and roles in the payload of the REST call. The structure was a bit different to the structure we accept and the way we handle the payload in the REST calls of service activities. Therefore, we now have aligned this in the case creation API, so that creating the payload is more in common with the rest of the application.

Hint: You can use both variants, the old one and the new one. By that you do not need to adjust existing configurations.

Roles are included as process variable

Every case has some *process variables* that are created automatically when starting a case. Until now these process variables were the case name, creator name, creator email and creation date. We added the functionality that also roles are available when creating a case.

To have a role as a process variable, you must set an identifier on the role. By that the system creates a process variable with the defined identifier as name when creating a new case.

When you have defined a staffing for a role, the process variable contains either the email of the user or the name of the user group.

21.135.3 Resolved bugs

- [PT-5216] - Check in of a favorite fails on different repository
- [PT-5202] - Create new catalog item dialog has scroll bar on mobile view (Portal)
- [PT-5189] - Facets for an entity type are not shown if set to hidden in the method
- [PT-5119] - Automatic line break in description editor breaks lines within words
- [PT-5112] - Catalog search misses sorting for equal scores
- [PT-5109] - Titles are not properly removed from URLs
- [PT-4864] - Language switch doesn't work for diagrams (Portal)
- [PT-4837] - Catalog list is not update after deselecting a facet (Portal)
- [PT-4583] - Chart titles in catalog depend on content language (Portal)
- [PT-4571] - Generating an entity profile report in catalog fails sporadically
- [PT-2103] - Stamped attribute values are not updated after re-releasing a document
- [PT-1222] - OCL fails to evaluate association attributes
- [DES-2620] - GroupMapper should first try to use the groupId
- [PE-4725] - Outline is crossing label in the preview area in the form editor
- [PE-4724] - Drag and drop indicator line is too short in user form editor
- [PE-4599] - Curly braces instead of correct error is shown when unrelated formula field gets updated
- [PE-4525] - Long instance names overflow is disregarded
- [PE-4483] - New empty instance flows are not updated once the flow has been calculated
- [PE-4472] - Label fonts in form editor are blurred
- [PE-4305] - Push notifications are not sent when tasks are delegated
- [PE-3896] - JSON variables arraise an exception if has a field with an object value

21.136 Version 7.6.10

21.136.1 Resolved bugs

- [PE-5329] Role occupation does not work when creating a case via run link

21.137 Version 7.6.9

21.137.1 Resolved bugs

- [PT-5220] Adjust timeout for editor context menu items

21.138 Version 7.6.8

21.138.1 Resolved bugs

- [PT-5033] "You are offline" hint gets triggered when opening modeling context menu on slow connection

21.139 Version 7.6.7

21.139.1 Resolved bugs

- [PT-4834] As a user I want to confirm my identity in a single sign on environment so that the Advanced Approval works with SSO

21.140 Version 7.6.6

21.140.1 Resolved bugs

- [DES-2677] Keycloak fails starting for systems with more than one LDAP provider
- [PT-5110] Diagram cannot be rendered if it contains boolean attribute placements
- [PT-5021] Cursor in description fields jumps to beginning while typing

21.141 Version 7.6.5

21.141.1 Resolved bugs

- [DES-2472] Login with LDAP user fails when LDAP is set to read-only
- [PT-5020] Define a max limit for email recipients

21.142 Version 7.6.4

21.142.1 Resolved bugs

- [PT-4943] Allow check-in of catalog suggestions option in administration does not work
- [PT-4908] Stamping certain file formats blocks catalog publication

21.143 Version 7.6.3

21.143.1 Resolved bugs

- [PT-4450] Expired valid to dates are not shown in the validation hub

21.144 Version 7.6.2

21.144.1 Resolved bugs

- [DES-2485] Entity replacement does not create update event
- [DES-2482] Pagination is broken when fetching entity occurrences
- [DES-2508] Retrieving all users with projection fails
- [DES-2483] User groups with a stop word as name do not work in access restrictions
- [PE-4460] Security improvement
- [PE-4417] PWA on mobile devices is not working properly

21.145 Version 7.6.1

21.145.1 Resolved bugs

- [DES-2512] When entering two different passwords while setting a new password no hint message is shown
- [PE-4325] Case name is not changed when the Service or Script tasks change the caseName variable
- [PE-4324] Reminder just after creating an instance doesn't work
- [PT-4925] Provide actual user role to Userflow
- [PT-4861] Banners for validity period are not refreshed when changing stage
- [PT-2153] Original file format is not always kept during publication

21.146 Version 7.6.0

21.146.1 New features

Add tables and links in the description attribute

In formattable text attributes (e.g., Description) you can now *add tables* to structure your information. With this change you can also add external links in a dialog, which allows easier editing and more configuration options. These functions are also available for custom attributes with the data type formatted text.

Please be aware of the limitations:

- You can place the attribute on the modeling surface, but tables won't be displayed.
- The pop-up for the description in the mini bar can show tables but not their border lines.

- The catalog process warehouse report does not show tables in cells. Please keep this in mind when re-importing a catalog process warehouse.

Copy and paste of symbols between different diagram types and automatic symbol conversion

You can *copy single or multiple symbols and paste* them into a different diagram type. We automatically change the symbols copied to your clipboard to match the notation of the targeted diagram type and transfer the modeling objects. The object types must be allowed in the target diagram to enable copying and symbol conversion. Prohibited objects will not be pasted and you will receive a note. You can manage object types in the method to allowed entity types in diagram types and set the default for symbol types.

Please be aware of the limitations:

- The BPMN standard differentiates between start, intermediate, and end events. EPCs only have a generic event which can be used for all circumstances. Therefore, events will not be pasted.

- When pasting into a BPMN diagram, pools will not be automatically created.

Special retention periods for diagrams and catalog entries

You can assign a special retention period to diagrams and catalog entries for the publication stage, which differs from the general setting in the administration area. Use the *governance attribute "Special retention period (in years)"* to configure a special retention period to assign an individual retention period in years.

Please be aware that the attribute "Special retention period (in years)" is disabled in the standard method. You need to enable it in your method for productive use.

Declaration for expired catalog entries in published diagrams

When a catalog item is used in a published diagram and its validity period is reached the user will see a banner which informs them about that.

The banner text can be customized if it does not fit your needs, but only for Private SaaS or on-premises installation. Please contact your GBTEC project team.

Exchange symbol color settings

Administrators have the possibility to change the symbol color settings to easily switch between different designs or use predefined symbol color settings. You have the option to *download the current symbol color settings* in the administration. At the same place you can upload your own symbol color settings for example to use predefined symbol color settings.

Distribution types in the simulation

You now have the possibility to use different types of distributions when using parameters for the simulation. This allows you, for example to specify more precisely the duration of an activity or the incoming of a process instance.

EPC Symbol classified by task type

The EPC symbol for activities now shows an icon to visually identify the task type of the activity. Before that you could choose a task type, but it was not visible in the modeling surface.

Please be aware that already modeled symbols will not automatically change. You need to *reassign the symbol* in that case.

EPC symbol classified as external

The EPC symbol for roles now switches its color to visualize external roles. Before that you could classify roles as external, but the symbol stayed in the same color.

Please be aware that already modeled symbols will not automatically change. You need to *reassign the symbol* in that case.

21.146.2 Process Execution

Introducing signature tasks

Some processes contain critical tasks where you, as the task owner, must confirm that you and not someone else performed the task. You can obtain this confirmation with *signing tasks*. To complete the task, you must first authenticate yourself with your credentials. If the authentication is successful, the task is completed, otherwise the system refuses to complete it. The authentication follows your company's rules and is even requested when SSO is enabled by default.

Dynamic role assignment

Within a process flow, you can model different roles and store a default assignment for them. With our new feature, you can define which user or user group is *responsible for a role during the runtime* of a process. To achieve this, you can use different task types and methods. Roles can be assigned wherever process variables can be modified. This can occur, for example, within activities or also at the start when creating an operation from another system via the API interface.

Create cases automatically by timer

You can now define *timers on start events*. The system then automatically creates cases according to the defined timer. By that you can automate recurring processes and ensure that these processes will not be forgotten. When you have reached a state of full automation of a process, you will not even have to do one manual step.

Setting dynamic due dates on tasks

Tasks often need to be done in a specific time to keep projects and processes on track. Therefore, you can now define a *processing time* for each task in the processes. When reaching such a task during runtime, the due date will be calculated dynamically. You as assignee can see the due date on the task in the task list and in the case flow overview. By that, the tasks can be completed on time.

Getting reminders for due tasks

By having due dates on tasks, you can ensure that your cases will be handled in a proper time. To keep the task owners up to date and remind them about due and overdue tasks, the system sends *reminder emails* with a task overview. The tasks are grouped into pending, due today and overdue, so you can get the tasks listed by urgency and work through them.

If you are assigned a task that is already overdue or needs to be completed within the next 24 hours, the system sends a separate email for this task immediately after the assignment.

Every task mentioned in the reminder email contains a link to the task in BIC Process Execution so that you can directly access and work on it.

Perform subprocesses asynchronously

With release version 7.5 we introduced *call activities* that allow you to refer another process via call activity and by that create a subcase for that process automatically. In that version, the subcase will be processed synchronously. That means that the main case waits for the subcase to be completed to continue with the next steps.

Now you can mark a call activity as asynchronous. By doing so, the call activity task in the main process will be continued instantly when the case for the subprocess was created. The next task is started, and the main case can continue without waiting for the subcase to be completed.

Delete ProcessApp data in Studio and Test stage

When you create a ProcessApp, you usually test it intensively to make sure that everything works as defined. Some process designers duplicate ProcessApps and then work with that version. In the long run, this creates a lot of data that you will eventually no longer need. The Studio and Test environments are automatically cleared of ProcessApp operations when a new version of the process is checked in. Now you have the additional option of *deleting the entire ProcessApp* in the Studio and the Test environment in order to manually clean up the system.

JavaScript in script tasks

We introduced *script tasks* with release 7.5 where you can provide Groovy script to the ProcessApp and handle data in script tasks. Now BIC Process Execution is also supporting JavaScript as script language. You can switch between JavaScript and Groovy and will get syntax highlighting and code suggestions for both languages. With JavaScript, you have an easier access to script tasks.

Change case name

The case name is a specification that is also available as process variable within a case. There are use cases where you need to change the case name in a running case and see the change in the case list. We have improved the application there so that this change takes effect in all places where the case name is displayed.

Favourites within the ProcessApp list

The ProcessApp list was separated into "All ProcessApps" and "Favorites". We have merged these views as a preparation for features that will be available in the next release. When you have marked a ProcessApp as *favorite*, then you will see the favorite icon on this ProcessApp.

Actions on a ProcessApp

We changed the icons and the access to the functions of a ProcessApp in the ProcessApp overview. Additionally, to the ProcessApp icon there is only the favorite icon left. Other actions like the create case action are now placed in a context menu that can be accessed on the ProcessApp.

Improved error handling on send tasks

Send tasks can be configured to be sent automatically. But there can be an issue e.g., with the email server so that the task cannot be sent and is in an error state. When this happens, this task now becomes a user human task, and you can handle this task manually. The error is shown on this task and you can decide whether to send the task manually or try to send it again automatically.

Automatic email sending when placeholders are missing

Email templates can contain placeholders for process variables. In a generic email, you sometimes add placeholders for variables that are not provided in all cases. For these cases you can now specify the option to set an empty string at this point. In manual send task, you will not be confused by the placeholder any longer. In automatic send task, the system will send the email with an empty string.

Redesigning the task list

We redesigned the *task list* to provide a better overview of the pending tasks. The task entries now show the information in a more structured way. It also shows the due date for a task if one is set. Additionally, status icons will be shown when a task is in error state or overdue.

Updated application name and favicon

To ensure a consistent look and feel for all products, we have updated the application name and the favicon. Both changes can be seen in the browser tab.

21.146.3 Resolved bugs

- [DES-2376] - Service calls sometimes fail because of expired access token
- [DES-2314] - The "visual-data" is not loaded lazy and can cause an OOM of the domain-service
- [DES-2312] - Diagrams may be displayed in the wrong context
- [DES-2161] - Misleading information in section "Configuration for automatic linking of SAML accounts" of installation documentation
- [DES-2092] - It is not possible to trigger the endpoint for creating an user without sending an first-login-email
- [DES-2017] - System requirements needs update
- [DES-1967] - Database backup may cause unexpected high disk usage

- [DES-1962] - Java Mail Properties set by environment variables have no effect

- [PE-4259] - Attachments are being handled in memory

- [PE-4178] - Form data is not saved when completing a task

- [PE-4176] - Button text size on mobile devices is too big on case archive action

- [PE-4169] - Hidden condition is not evaluated

- [PE-4143] - The Process Execution Apigateway is killed in production due to too much memory consumption

- [PE-4121] - Publishing of new process version aborted when creation case

- [PE-4107] - Can not download an attachment on activity

- [PE-4067] - Manual complete task is not possible for started task which does not have an assignee

- [PE-3981] - Form focus jumps to top when updating the form

- [PE-3975] - Menu is missing on mobile when accessing the application

- [PE-3878] - Error message for mobile view has wrong format

- [PE-3665] - NullPointerException on navigating to the default instance

- [PT-4886] - Online help download as PDF broken

- [PT-4841] - Special characters in link title breaks search when link is search facet

- [PT-4806] - Delete attachment in all languages does not work without attachment title

- [PT-4731] - Simulation parameters cannot be entered on custom symbols

- [PT-4488] - Typo in info banner

- [PT-4020] - Matrix view does not respect configuration

- [PT-3945] - Some fonts are not displayed correctly

- [PT-3710 | PT-3733 | PT-4455] - Security improvements

- [PT-3263] - Catalog import removes link titles

- [PT-3151] - Valid from date did not recognize UTC time zone in process warehouse report

- [PT-2787] - Third examiners do not receive an email on diagram publication completion

- [PT-2503] - Profile report for catalog items gets generated in browser language

- [PT-2014] - PDFs with extended rights do not work after publication (see *hint here*)

- [PT-1922] - Reports do not update Created / Last Saved property

21.147 Version 7.5.11

21.147.1 Resolved bugs

- [DES-3024] When the attachment attribute is configured as unlocalized, the attachments from imported objects are invisible. *Attention*: This fix not included in 7.6.x and 7.7.x.

21.148 Version 7.5.10

21.148.1 Resolved bugs

- [DES-2845] Username and other user attributes from Keycloak don't fit user-service columns

21.149 Version 7.5.9

21.149.1 Resolved bugs

- [PE-4762] Enhance how the JWT public key is loaded in Process Execution service

21.150 Version 7.5.8

21.150.1 Resolved bugs

- [PT-5110] Diagram cannot be rendered if it contains boolean attribute placements

21.151 Version 7.5.7

21.151.1 Resolved bugs

- [DES-2384] Improve "migrateToUserService" migration

21.152 Version 7.5.6

21.152.1 Resolved bugs

- [PT-4265] Last changed date of search hit is not correct
- [PT-4666] Sanitizing results in format differences
- [PT-4671] Pasting a link in third-party applications breaks URL

21.153 Version 7.5.5

21.153.1 Resolved bugs

- [PT-4632] Building search index is interrupted on uncommon office documents

21.154 Version 7.5.4

21.154.1 Resolved bugs

- [DES-2277] No User and Group related messages are sent for LDAP and SAML configurations

21.155 Version 7.5.3

21.155.1 Resolved bugs

- [PT-4557] - Security improvement

21.156 Version 7.5.2

21.156.1 Resolved bugs

- [PT-3770] - Redirect roles in feature toggle

21.157 Version 7.5.1

21.157.1 Resolved bugs

- [PT-4120] - Scale factor slider values in diagram print format settings are not correctly reproduced in print view
- [PT-4388] - Active resubmission workflows started before version 7.4.8 that are manually aborted will be recreated once if they are still valid
- [PT-4505] - Security improvement

21.158 Version 7.5.0

21.158.1 Key features

Easy inserting of a symbol in an existing sequence flow

Symbols can now be dropped on a sequence flow to automatically embed the new symbol in an *existing sequence flow*. You will see a visual feedback which signals that a symbol can be embedded in a sequence flow.

For example, you can drop an Activity or Gateway on the sequence flow between two other Activities and the new Activity is directly embedded in the sequence flow and connected to the other Activities.

Access to publication archives

Until now the archive export of depublished diagrams or catalog items were provided at the depublication workflow in Governance Cockpit. Users wanting to view an archived version in BIC Process Design needed to download the archive export and import it again.

The archived versions of diagrams and catalog items can now be accessed from the Governance Cockpit. When a diagram or catalog item was depublished, users can access the archived version from the audit trail of the depublication workflow. You will be informed that the diagram or catalog item has been depublished and have the option to open the archive. If you choose to open the archive you will directly see the diagram or catalog item and easily navigate through the different versions. Your Readers won't be able to access archived versions in publication since the archive access is in the Governance Cockpit, but you can share the URL to the diagram or catalog item with them, if they need to access an archive.

Please note that this is only available in the new user interface.

Linking Governance Workflows to diagrams or catalog items

In the old user interface, it was not possible to navigate from a workflow to a diagram or catalog item which is subject of the workflow. We enabled this navigation in the new user interface where you can now easily navigate from the workflow. The accessing link is located on the audit trail of a governance workflow and leads to the diagram or catalog item in the corresponding stage depending on the current state of the workflow (whether it is pending, rework or closed).

Displaying effective time span of archives

Archives were declared with the time stamp of the archive generation in the old user interface. In the new user interface, archive entries of diagrams and catalog items now display the actual time span in which the archive entry was the active version. This time span may differ from the governance attributes "valid from" and "valid to" since it displays the effective time span and not the set values in those attributes.

With the new declaration it is now easily possible to e. g. identify gaps in publication archives.

Arabic and Polish user interface

BIC Process Design now speaks Arabic and Polish in the new user interface! Both languages could already be chosen as content languages, but our user interface did not support those languages. The language of the user interface is determined by the set browser language. Our online help remains in English when accessing from an Arabic or Polish browser.

Serbian added as content language

We implemented Serbian as content languages, so that processes or catalog entries can be maintained in Serbian. Please note that this does not count for the language of the user interface.

Optimized search in catalog

We deactivated the alphabetical order of search results in the catalog search so that the list of search results is sorted by the relevance of each item. The alphabetical sorting of catalog items is still possible but not on search result list.

Optimization of task summary mail

Delegated tasks are now included in the *task summary mail* once a day. The task is still directly assigned in BIC Process Design and a toast informs the new task owner about the delegation.

Additional customization capabilities

We extended our customization capabilities so that some attributes can be excluded from being transferred to preview and publication stage. This is helpful if some attributes should not be archived in those stages, e. g. when they are only used in modeling.

We also enabled customization projects to perform validation on the start of publication workflows, so that individual rules can be validated. The workflow continues if the rule evaluation is positive and will be aborted if the rule evaluation is negative. In this manner, we can implement a variety of validations for you, for example to check whether the assigned Author is not also assigned as Responsible or whether the validity period is set correctly according to your governance definition.

Please note that both capabilities are highly individual and that your requirements can only be implemented by customization projects.

21.158.2 Existing features available in new user interface

Declaration of expired content in publication stage

When the validity period of a catalog item or diagram is reached the user will see a banner in publication that the catalog item or diagram exceeds the set "valid to"-date in the governance attributes. If the standard banner text does not fit the wording of your organization, then it can be adjusted for Private SaaS or on-premises systems. Please talk to your GBTEC project team about it.

Abort workflows and delegate tasks

In Governance Cockpit

- Administrators, Editors, and the initiator of a Governance Workflow can abort running workflows in Governance Cockpit. Simply open the audit trail of a Governance Workflow and you will find the option to abort in the option panel.

- Administrators and Editors can delegate a pending task of a Governance Workflow to a user in BIC Process Design. Users only need to open the audit trail of a Governance Workflow and click on the Delegation-Button on the pending task to delegate it to another user.

Filter catalog suggestions and access archives

In Catalog, users can now

- filter the catalog list in Public Workspace for catalog suggestions. Reviewers can filter the catalog list in Preview Stage for catalog items which need an approval.

- distinguish catalog suggestions from approved catalog items on the catalog list and on the details page of a catalog item.

- access archived versions of catalog items on the details page of a catalog item. Please note that a catalog item needs the Responsible being set to archive the version of a catalog item. You also need to set a Responsible to access the archived versions.

21.158.3 Process Execution

Introducing call activities in BIC Process Execution

Process designers are now able to include *call activities* in their processes. With call activities you can refer to other processes and create cases for them. During runtime a *sub case* will be created automatically when the call activity has been reached. All process variables and roles are transferred to the sub case and are available there. When the sub case is completed, the changes for the process variables will then be handed over to the main case.

Send emails from send tasks automatically

Process designers can already define *email template* for send tasks, so that users have predefined emails. With this release the designer can mark a send task, so that the email will be sent automatically by the system. The system completes the task when the mail was sent, so that no user interaction is needed in the case.

Write own scripts and run them within script task

It is sometimes necessary to do complex calculations or interactions with process data. Many things can be done with formula fields within user forms. But sometimes this is not sufficient, so designers can now use *script tasks* for this. As the name already says, designers can write scripts that will be executed during run time. You can use all available process variables within the script, change them and create new process variables that will be available in the following steps of the case.

Define a retention period for your cases

Due to data protection purposes and system cleanups designers can now define a *retention period* for their processes. The retention period for a case starts when it is completed. BIC Process Execution deletes the case and all its data automatically after the defined period.

Use basic authentication in REST calls

It is best practice to use authentications when running REST calls against other systems. We introduce the *basic authentication to extend our REST functionality*. Process designers can configure the authentication easily in the REST configuration.

Possibility to handle data objects within user forms

Service tasks and REST are a common and powerful way to get data from external systems. That data is mostly structured as objects. *User forms* now support data object handling, so that the process designer can directly address attributes in data objects.

Updated administration page as preparation for coming features

The *administration* only contained the API-key configuration. With the coming releases there will be more things that need to be configured in the administration. That's why we've added a new page as overview of those things as administration entry page.

Mark a Boolean field as mandatory

Process designers can now mark a *Boolean field* in a user form as mandatory. As a result, a user must check this Boolean field to complete the task. By that you can force the user to actively accept or confirm data, information, etc.

User form editor design improvements

The design of the user form editor was improved. The preview section was increased, and the details section decreased in size. But both sections benefit from the change. The input fields in the details have now a row for their own. By that the size of the fields increases and the user can see even longer inputs.

Improve behavior of environments when deleting cases

User now get more detailed information when a case in the studio and test environment was deleted. Additionally, the user will be redirected to the instance when the case he/she had opened was deleted.

Include case functions in case flow menu

In the flow view of a case there were two menus – one at the top and one at the bottom of the flow. These menus have been merged so that there is only one menu left that contains all menu options from the former ones. It is shown at the top of the flow so that users can access it easily.

Use all output elements as document containers

By now it was only possible to use document objects as *container for input- and output documents* in BIC Process Execution. We improved the system so that business objects and other containers can be used. The user has now options to upload and download documents on those objects.

Show user error message on wrong REST response HTTP status code

Process designers usually define an expected HTTP status code for the response of their REST calls. When something goes wrong or the system simply returns an unexpected HTTP status code, then the user needs to know what happened. Therefore, BIC Process Execution now shows an error message to provide that information.

Show different start pages depending on user tasks

Different users have a different workload and a different type of work. Some have a lot of tasks in their task list, some have mostly group tasks, and some have most of their time no tasks and only create new cases. To match all those use cases and to improve the usability, we changed the behavior for the starting page when logging into BIC Process Execution. When the user has personal tasks to do, then he/she will see the task list. If there are no personal tasks but group tasks, the user will get the group tasks list. If there are no personal and no group tasks the user will be redirected to the ProcessApp overview to be able to create a new case quickly.

21.158.4 Resolved bugs

- [PE-3752] - Very long diagram names (>100 characters) causes an exception when the user tries to create an case of the process
- [PE-3698] - Task list in studio stage is not being updated after diagram update
- [PE-3546] - The size of the steps' icons in the instance flow view is not fitting with the design
- [PE-3456] - Mark, unmark and mark again a process as a favourite doesn't work as expected
- [PE-3442] - Mandatory fields have no mandatory indicator
- [PE-3376] - Updating a process in studio stage fails, if more than one user has marked it as favorite
- [PE-3375] - Input/Output documents should be retrieved by their association type and not edge type
- [PE-3342] - Alignment and line spacing in textarea for email editors are not being saved
- [PE-3339] - Email editor and preview content are not displayed correctly
- [PE-3184] - DMN task is not completed automatically
- [PE-3051] - Flow is breaking when having two associations with expressions pointing to the same entity
- [PE-2457] - Wrong warning message when trying to create an instance with creation restriction
- [PT-4381] - Wrong redirect on catalog list when creating a catalog entry (new UI)
- [PT-4172] - Switching between a main and allocation diagram can break visual data
- [PT-4127] - Converting PPT to PDF might fail
- [PT-4041] - Diagram editor allows selection of fonts not available for rendering, resulting in visual differences between stages and reports
- [PT-3941] - Diagram publication is not working correctly when started from publication stage
- [PT-3937] - Changing a title for an URL attachment decodes and breaks original link

- [PT-3910] - Document selector not working for multivalue attachments in documents view
- [PT-3892] - Local time zone is ignored after picking a date
- [PT-3778] - Open an URL needs double click to reach the destination (new UI)
- [PT-3771] - Updating numeric attribute values is not always possible
- [PT-3634] - Generated PDF doesn't display Cyrillic
- [PT-3630] - Diagram cannot be copied with broken edges
- [PT-3436] - Process flow calculation breaks on loops with non-exclusive gateways
- [PT-3060] - Only english translation for resubmission task toast is displayed
- [PT-2766] - "Share by email" is not working if the diagram name contains a special character
- [PT-2543] - Security improvement
- [PT-2529] - Reader see Tasks entry in navigation (new UI)
- [PT-1805] - Entity Resubmission Reminders still get sent after entity was republished with empty "Valid To" value
- [PT-1581] - Loss of image quality when creating a manual as a PDF
- [PT-1570] - Second and third examiner tasks are not included in entity publication mail
- [DES-1969] - Delete used catalog entries without replacement is not working
- [DES-1928] - Deletion of archive entries fails
- [DES-1919] - Repository archive entries are not properly removed
- [DES-1900] - Archive cleanup misses one entry
- [DES-1866] - Duplicated groups can be created by renaming
- [DES-1864] - Updating a node attribute through GRC-Apigateway does not work correctly
- [DES-1779] - Labels are broken after setting an attribute to hidden
- [DES-1736] - Differences between stages and reports due to unavailable fonts in rendering
- [DES-1275] - Layouter decreases pool size under specific circumstances
- [DES-562] - BPMN "call activity" can be set by two distinct attributes

21.159 Version 7.4.8

21.159.1 Resolved bugs

- [PT-3847] Resubmission data are incorrect
- [PT-4009] Catalog item replacement blocks diagram check in
- [PT-3949] Opening an allocation diagram from catalog can block check in
- [PT-3948] Opening an allocation diagram from catalog can double the main diagram
- [PT-3565] Saving larger diagram takes is not performant

21.160 Version 7.4.7

21.160.1 Resolved bugs

- [PT-3911] Frontend does not work in Internet Explorer 11
- [PT-3760] Role based UI selection is not reliable redirecting on first login
- [PT-3654] Security improvement

21.161 Version 7.4.6

21.161.1 Resolved bugs

- [PT-3517] Entity resubmission aborts on single failure
- [PT-3611] Search can't find assignment attribute values
- [PT-3568] Deputy tasks are limited to EDITOR or ADMINISTRATOR

21.162 Version 7.4.5

21.162.1 Resolved bugs

- [PE-3306] Uploaded documents are removed from cases when publishing new ProcessApp version

21.163 Version 7.4.4

21.163.1 Resolved bugs

- [DES-1835] As a new User I want to reach the application after I initially set my credentials

21.164 Version 7.4.3

21.164.1 Resolved bugs

- [PE-3297] Datepicker does not allow German inputs
- [PT-3509] Search filters may show IDs instead of names

21.165 Version 7.4.2

21.165.1 New features

- [PT-3273] As a user I want to see the KPIs when I hover over a node in heatmap view

- [PT-3181] As a user I want to see simulation scenario statistics in order to analyze the run

- [PT-2987] As a user I want to see the simulation results in a heatmap

- [PT-2985] As a user I want to execute a simulation based on a locally filled out scenario

- [PT-2511] As a user I want to specify scenario parameters in a simulation scenario

- [PT-2508] As a user I want to specify gateway parameters in order to apply decision probabilities to a simulation scenario

- [PT-2507] As a user I want to specify task parameters in order to apply these to a simulation scenario

- [PT-2505] As a user I want to create a simulation scenario so that I can define the scenario

21.165.2 Resolved bugs

- [PT-2262] Links on landingpage point to invalid URLs

21.166 Version 7.4.1

21.166.1 Resolved bugs

- [PT-2615] BPMN export misses outgoing sequences of a gateway in BPMN XML

- [PT-3250][DES-1804] Migration to find missing resubmission reminders fails to match e-mail addresses in different cases

- [PT-3231][DES-1809] Workflow participants can delegate tasks

- [PT-2962] Manual report doesn't display role satellites of first activity

- [PT-1586][DES-1821] Search filter based on assignments are not updated if the assigned object is changed

- [PE-3159] Completing send task results in error

- [PE-3149] Null comparison does not work in forms

21.167 Version 7.4.0

21.167.1 New features

Analyze repository with diagram filters

Up to now it was not possible to filter diagrams for diagram attributes and the only way to achieve filtered lists was to receive the process warehouse export and filter the diagrams in Excel or via the overall search. We now introduce filter for diagrams to analyze your repository. When you open the diagram view in the new user interface you will see the filter panel on the right side to tailor the diagram list. The feature enables you to quickly answer plenty of questions, like

- What resubmission effort will come up next month?

    Use Valid To filter and set time span to next month

- Which processes are in my department?

    Use Scope filter and set your department

- Which diagrams are maintained by me?

    Use Author filter and set yourself as author

- Which diagrams are in responsibility of a colleague who leaves the company next month?

    Use Responsible filter and set the leaving person as responsible

- Which are currently in modelling or needs to be reviewed?

    Use State filter and set the desired state

It is also possible to extend your method by custom attributes which then can be used to filter the diagrams. Just add them in the diagram type in your method, maintain the attribute in BIC Process Design and the filter will directly be available.

Apply custom colors to symbols

Administrators can change the *symbol colors*, namely border color, background color and font color, in the administration without changing the symbol definition in the method. A custom symbol code can be set for almost all symbols and can be directly applied to all diagrams in all stages.

Please note that changes to the symbol colors might have a huge impact on the appearance of the modeled processes in your organization. We recommend to carefully plan, coordinate, and communicate those changes.

Copy direct link to attached files

It is now possible to copy a direct link to an attached file into your clipboard so that you can easily share the URL to this attachment. Simply hover over an attached file at a catalog item, diagram or even a modeling object and copy the URL. The generated URL leads to the attachment in the corresponding stage and the file gets directly downloaded when a user follows the URL (depends on your browser configuration). We will check the user's permissions to access the file (valid BIC Process Design account, access permission to stage, access restriction) and show the context of the attachment to the user. The shared URL is stable if you give the new version of a file the same title.

Please note that this feature is available for attached files, not for external links or links to local files. You can only copy the URL in the new user interface and user who follow the URL will be directed to the new user interface.

Editors are now Governance Cockpit administrators

Until now Administrators where the only ones who could see and manage all governance workflows. This gave them a heavy workload besides their system administration tasks. We enabled Editors to take over the administrative tasks for *governance workflows* to ease the situation for Administrators. Users with the Editor role now can see and manage all governance workflows. They have the same rights in governance cockpit like Administrators, e.g. delegating or aborting a workflow.

Please note that Editors did not receive any other administrator rights. This feature only allows them to administer workflows.

Resubmission tasks for catalog items

Until now, the responsible or responsible (resubmission) received only an e-mail notification about the upcoming resubmission of a catalog item. We now introduce the *resubmission task* for catalog items, which is already available for diagrams. When a catalog item is going to be invalid, then the responsible or responsible (resubmission) is assigned to the task. The resubmission workflow for the catalog item is listed in the governance cockpit and the task will appear directly in the user's task list in BIC Process Design. We will also inform the task recipient in the task summary mail once a day. The resubmission task has the options to extend the validity for 1 year or depublish the catalog item (will be depublished when "valid to"-date is reached).

Please note that it is currently not possible to filter for resubmission workflows in the Governance Cockpit.

Participating Reviewer can access the Governance Cockpit

We introduced in version 7.3 that *task owner can track progress* of their governance workflows . We kept on improving this feature so that Reviewers can also access the Governance Cockpit in BIC Process Design to track the progress of their governance workflows where they have or had a task.

Resubmission information mail for governance participants

All governance participants (persons assigned to governance attributes) can receive an *information mail* that a resubmission for a catalog item or diagram has been initiated. This mail serves only for their information and is independent to the resubmission workflows. We also introduced an additional governance attribute "Do not send information mail (resubmission)" to deactivate the mail for a diagram or catalog item so that you can decide whether you want to inform the governance participants or not. This mail gets send per default and the attribute can be configured in the method, e.g. if you do not want modelers to deactivate the mail or if you want this mail to be never send. Please contact us if you have questions regarding the right method configuration.

Please note that the information mail can only be send for diagrams or catalog items published after this version.

Configure granular retention period for archives

Administrators can set the *retention period* for the publication stage up to 30 years with a yearly interval. The retention period for the public workspace and preview stage can be set up to 365 days with a daily interval. Please consider that changes to the retention period only affect newly created archives and that a newly set retention period does not affect already created archives.

Please note that we limited the archive period for the public workspace and preview stage to 365 days, but we will not change your configuration. When you already configured a higher period before version 7.4, then we will retain this period and convert it to days. When you change the period after the update, then you can only set the new limit for the public workspace and preview stage.

Copy & paste between diagram types

Copying & pasting modelled objects was only possible between the same diagram type until now, e.g. copying an activity from a BPMN diagram and paste it into another BPMN diagram. From now on you can copy a selection of modeling elements and copy them to your clipboard to paste the elements in a different diagram type, e.g. copy a risk from a risk diagram and paste it into a BPMN diagram. The only precondition is that the modeled object (symbol type, entity type and association type) is allowed in the target diagram type. We will remove the modelled objects during pasting if you have modeled objects in your clipboard which are not allowed in the target diagram type while allowed modeling objects are pasted.

Please note that you can configure the diagram types in the method and thereby allow modeling objects in a diagram type which are not enabled in the standard method. Thereby you could extend the transfer of modelling objects between diagram types according to your requirements.

21.167.2 Existing functionalities available in the new user interface

Please note that not all functionalities of the old user interface are yet available in the new user interface. You might miss some functions but be sure that we will transfer all. The new user interface is a work in progress state. We offer you the possibility to get used to the new user interface and give us feedback on it, so that we can keep on improving it.

Adding and editing catalog items

Catalog items can now be added in the new user interface. You can also edit existing catalog items and maintain the attributes. Please note that some catalog features, e.g. deleting catalog items or the catalog re-organization, are not yet available. We are working on the catalog to enable the whole functionality!

21.167.3 Process Execution

Introducing studio, test and production environment

In order to create and test your ProcessApps, you now have *two additional environments* in BIC Process Execution. We added the studio and test environments to enable authors and reviews to test their ProcessApps without creating testing data on the production environment and mix production and testing data. A big bonus of studio and test environments is that the test cases and data will be deleted automatically when you check in a new version of your ProcessApp. By that you will always have a clean system.

Create case and access BIC Process Execution directly from BIC Portal

You are now able to access BIC Process Execution directly from BIC Portal. You will find a button in the top right corner of the documented processes. As an author in the common stage, you will create a test case in the studio environment and as a reviewer in the review stage, you will create a test case in the test environment of BIC Process Execution in order to test the process quickly. As a "normal" user in the publication stage you will create a case in the public/production stage in BIC Process Execution.

Assign task to case owner as fallback

There are several cases where a task needs to be assigned automatically to a user. That can be an error on a service task, a missing role assignment, etc. To avoid that these tasks will not be recognized, they now will be assigned to the case owner as fallback. The case owner then can see this task in the *task list* and decide what to do.

Define a conditional expression for the mandatory property of a form field

We have already introduced the conditional expression for the "readonly" and "hidden" property of input fields. You can now define a conditional expression for the *"mandatory" property*, too.

By that you are now able to create complete dynamic user forms that will react to the process and form data provided by the tasks and users.

Drag & drop form field from the field palette

You are now able to drag & drop a new form field directly from the field palette to the place of the form where you want it to be.

Default id for input fields in user form editor

When you are editing a user form in the designer and adding new input fields to your form, these input field will now get an *automatic generated id*. By that you are no longer forced to set an id by yourself. But you are still able to change the id to a more user friendly one.

Admins can start any task manually

It is sometimes necessary to start a task which is not the next one in flow of the documented process. Therefore, admins are able to *start any task* they want.

That function should only be used on an exceptional basis and only by admins who know what this action can lead to!

See datatype of process variables

When you are in the case flow view, you have the option to see all process variables in the *"Edit process variables"* dialog. In order to evaluate issues with these variables in the process, we added the datatype as information to each variable in this list.

Design improvement Text area

We improved the design of the text area input field to have a better look and feel in the user form.

Design improvement Menu Bar

We improved the design of the menu bar to have a more consistent look and feel over all BIC products.

Dates are shown in the format of your browser language

Dates will now be shown in your local format. The system evaluates the language and format from your browser settings. When you have set British English as language in your browser, the dates will be shown in British English format. When you have set American English as language in your browser, the dates will be shown in American English format. Same behavior for other languages.

21.167.4 Resolved bugs

- [PT-3187] - Resubmission workflow does not work as intended if the responsible is a user group
- [PT-3133] - Long names overlap dialogs
- [PT-3021] - Errors in email sending during publication interfere with resubmission mechanism
- [PT-2613] - Catalog Warehouse Export doesn't show the entity type for not maintained languages
- [PT-2304] - Fallback placeholder is missing in catalog list and detail page in new UI
- [PT-2647] - Clicking on the attachment icon in the SVG view may lead to wrong content language
- [PT-2151] - Entries in Matrix Report are duplicated
- [PT-2131] - Search subfolder with enums are not shown correctly in new UI
- [PT-2111] - Manual report in pdfa/pdfa2b format are missing icons
- [PT-2017] - Process Warehouse report doesn't show the content of certain rows for not maintained languages
- [DES-1673] - Formatting for some symbol does not work as expected
- [DES-1428] - When renaming a link, the title= parameter gets appended and not replaced, potentially leading to the display of the old title
- [DES-1364] - It is not possible move an attribute to the main attribute group
- [DES-1277] - If maintained attachments Urls are too long you cannot click the edit button
- [DES-1231] - Typo in path for updating the user group
- [DES-565] - Enumeration and indentation in description is wrong after check in
- [PE-3071] - Bug when routing from selection directly to end event to path having tasks
- [PE-3014] - Process is stuck after multiple gateways
- [PE-3012] - Process is stuck after first task with a following loop
- [PE-3011] - Space under Textarea is too small
- [PE-3010] - Error when resetting default instance being in a gateway and trying to change the decision after reset
- [PE-2970] - Drag & drop objects into textarea breaks forms
- [PE-2944] - Task acting like a gateway before a Pararell is not started
- [PE-2925] - Boolean value is saved as string
- [PE-2913] - Evaluation of booleans does not work dynamically with calculated fields values
- [PE-2912] - Checkbox in form show wrong value
- [PE-2861] - Can not start task after two gateways
- [PE-2860] - Manual gateway switch is missing on task
- [PE-2846] - Last character in textarea is removed after completing a task (sometimes)
- [PE-2797] - Gateway in one click ProcessApp does not work and destroys case
- [PE-2791] - First task can not be completed
- [PE-2763] - When completing a task the system starts overnext task, if next task is already started manually
- [PE-2762] - Process with loop on XOR gateway fails to calculate the flow on decision selection

- [PE-2734] - No step can be started after a GW
- [PE-2409] - Initial method resource request has no tenantId specified
- [PE-1678] - Fast typing deletes characters
- [PE-2736] - Service Task may fail when request body content contains double quotes

21.168 Version 7.3.5

21.168.1 Resolved bugs

- [PT-2947] - Values of occurrence attributes were duplicated to entity
- [PT-2781] - Diagram resubmission do not start

21.169 Version 7.3.4

21.169.1 New features

21.169.2 Process Execution

21.169.3 Resolved bugs

- [PE-2720] - Push notification links do not work
- [PE-2685] - Rest editor offers Http Methods that are not implemented in the BE

21.170 Version 7.3.3

21.170.1 New features

21.170.2 Process Execution

REST Configuration editor to define the details of a REST call

As a process designer you are able to do the configuration for the REST call within a dialog. This dialog structures the configuration in three steps. The connection, the request and the response. With that changes the user has a better experience and overview. It is also the basis for more configuration options in order to use REST with all its features.

Configure the header of a REST call

One new feature that we provide in REST calls is the request header. As a process designer you can add additional data in the request header. You can either use static key value pairs, or use placeholders to provide dynamic data from a case as request parameters.

Define a file as request body for a REST call

Sometimes it is necessary to send files and document via REST call to other systems. Therefore you can now configure in the new REST configuration a file that will be send in the request of the REST call.

Receive a file as response in a REST call

When doing REST calls, you always get a response from the system you are calling. This response can contain different data and data types. You can now receive a file as response, map it to an modeled output document and use it in further steps of your process.

Set a conditional expression for the hidden property of a form field

In order to create less complex diagrams and to improve the user experience, a process designer can now configure whether an input field in a user form should be hidden or not on a dynamic basis. Therefore you can define an expression that will be evaluated during runtime and decide on the basis of the output if the field will be displayed or not.

Set a conditional expression for the read only property of a form field

Like the dynamic configuration for the hidden property of a field in a user form, you have the same option for the read only property. A process designer can define an expression do decide during runtime if that field is read only or not.

21.170.3 Resolved bugs

- [DES-1523] - Start diagram cannot be changed
- [PE-2628] - System does not route to flow view while calculating a case
- [PE-2591] - Initialize boolean variables as false if no value ist set
- [PE-2545] - The flow of "old" cases are not shown after changing the way to calculate integrated decision options
- [PE-2468] - Form calculation does not happen when using calculated values
- [PE-2453] - When a task after a gateway is started some of previous gateways are not block
- [PE-2377] - Wrong "Responsible" spelling for German language
- [PE-2337] - Mark and unmark a process as favourite doesn't work for processes listed in the search result
- [PE-1762] - There is no reload button on a decision when the selected task is below the changed gateway
- [PE-1715] - Localized content is not loaded on mobile when the tab is refreshed
- [PE-2414] - Deleting a group used in a process' "Create restriction" results in case list and process apps req failures
- [PE-2399] - Request timeout when creating a case via run link

- [PE-2379] - Flow is requested while in calculation leading to corrupted data

21.171 Version 7.3.2

21.171.1 Resolved bugs

- [PT-2748] - Correction in domain service migration
- [PT-2247] - Queries with two or more whitespaces break the catalog search
- [DES-1521] - Catalog item suggestions don't show entries when query contains umlauts
- [DES-1517] - Role suggestion list in modeler is missing correct search results

21.172 Version 7.3.1

21.172.1 Resolved bugs

- [PT-2736] - Workflow list is incorrect when user did not participate in any workflow
- [PT-2605] - Catalog list cannot be loaded when catalog items have a huge amount of custom assignments
- [DES-781] - Decomposition icon at nodes are not always highlighted

21.173 Version 7.3.0

21.173.1 New features

Breadcrumb navigation

We reworked and enhanced the design of the breadcrumb function in the new user interface. It is now always available for example when you are in a diagram, category or in the catalog. The breadcrumb can also be used for navigation so that it is now even easier to navigate through BIC Process Design.

Archive access for depublished catalog entries

We introduced the archive access for depublished diagrams in version 7.1 and continued our improvements. You can now also access the archived version of a depublished catalog entry in the corresponding depublication workflow in governance cockpit. Like for depublished diagrams, the archive of the depublished catalog entry is stored in the audit trail of the depublication workflow and can be downloaded there. We also enabled the archive access of already depublished catalog entries before this version.

Please note that this feature is only available in the new user interface and that we will also improve this feature in future versions.

Option to delete attachments in all content languages

We introduced localized attachments in version 7.2 and continued to improve this feature. When you uploaded a file or maintained an URL in all content languages, then you can delete those attachments with one click instead of deleting each attachment in all content languages. This reduces the maintenance effort a lot.

Task owner can track progress of their governance workflows

Governance participants who have an open task or had completed a task in a governance workflow can access the workflow in governance cockpit to track the progress of the workflow. You can also see your workflows even though you delegate the task to another user to track the progress of your delegation. All functionalities of the governance cockpit, like searching for a workflow or filtering the list of workflows, can be used.

Please note that reviewers cannot access the Governance Cockpit at the moment.

Alignment of BIC Process Design standard method with BIC GRC

Attribute "Risk category" for Risks

We adjusted the standard method and changed the attribute context from occurrence to entity. This means that the set value now counts for the whole entity and no longer for an occurrence of this entity. We migrated the set values to the entity just in case the values of all occurrences were unique. For all other cases we discarded the value in modeling (public workspace). You might need to set a value again.

Please note that the migration was only executed in public workspace and does not affect the preview, publication, or archived versions.

"Obsolete" flag for Controls

The catalog entry "Risks" has already the option to maintain it as "Obsolete". We adjusted the standard method so that you can also maintain Controls as "Obsolete", e. g. when the corresponding Risk is obsolete.

Enhanced OCL custom validation

We enhanced our OCL (Object Constraint Language), so that it now uses the entity instead of its graphical nodes. For example, you can now create a validation rule (in method editor) to check weather an activity inside an application pool is typed as service task. You can also set a more specific validation context for an OCL rule (in method editor), modelling or validation, to define when the rule should be validated (during modelling or when a user check in a diagram).

Hindi and Indonesian added as content language

We implemented Hindi and Indonesian as content languages, so that processes or catalog entries can be maintained in those languages. Please note that this does not count for the language of the user interface.

Do you need to maintain your processes in a content language which is not yet available in BIC Process Design? Then please request the language at our Support team. We will give you a feedback whether we can provide your desired content language.

Administration in a new tab

When you open the administration in the application, then the administration gets opened in a new tab. You can then simply close the administration tab and all changes are saved.

21.173.2 Existing functionalities available in the new user interface

Identity validation for governance tasks

When you are working in the new user interface and your organization activated the re-validation of your identity for governance tasks, this feature is now also active in the new user interface. Task owner are directed to the login screen when deciding upon a governance task to validate their identity.

21.173.3 Process Execution

Create an API key in order to connect to BIC Execution

An API key can now be created in BIC Process Execution. This function enables you to securely connect external systems to BIC Process Execution so that only authenticated systems can access BIC Process Execution via REST call. API keys can be created and deleted in the administration area.

Create new cases via REST call

Cases can now be *created from external systems*. Therefore, a higher degree of automation can be reached for your processes. Technically speaking a HTTP POST request is sent to BIC Process Execution via a REST call. For a safe authentication, this call must contain an API key, which can be created in the administration area of BIC Process Execution. In addition, the case's name and process variables can be specified within the request. As soon as the HTTP POST request has been processed, the new case is available in BIC Process Execution and can be worked on immediately.

Search for ProcessApps

If you have many different processes that are made available as executable ProcessApps in BIC Process Execution, it can sometimes be difficult to find the right ProcessApp quickly. To ease this task for you, we have implemented a *search* function. Simply type in the name or a part of the name of the ProcessApp in the search bar and press enter to filter the ProcessApps.

Mark ProcessApps as favourites

As a user you have usually a couple of ProcessApps you are working with. To have a quick access to these ProcessApps, you are now able to *mark ProcessApps as favourites*. You can can do this for every app in the ProcessApps view. There you can also switch to the favorites tab in the top right corner.

Calculate data in user forms

User forms are powerful tools to get relevant data from the user during the process flow. But sometimes it is necessary not only to collect the data, but also to do calculations, checks, transformations, etc. To this purpose we have *introduced the "Formula" field* in the form editor. With that field, you can use different formulas to access and process data within your process instance.

All available formulas can be checked in the documentation of Formula.js.

Create an e-mail template for a send task

You can now *create and configure e-mail templates* in send tasks via the "Email template editor" in BIC Process Design. Process variables will be replaced during runtime to provide data dynamically for defined placeholders in the e-mail template, such as the recipient of the e-mail. The users who have been assigned to such a task in BIC Process Execution can see the email template in the corresponding task's form. With a simple click the e-mail template can then be transferred to their local email client for further editing, file attaching and sending.

Create a new case from the process's case list

Through the usage of a new implemented button the process's case list you can now create new cases directly for the corresponding process.

User form editor improvements

We implemented some improvements in the user form editor to provide a better user experience when creating a user form.

- The field type icon is displayed at the right side of a form field to show the user which form fields are already included in the form.

- The field type name is added to the details header on the right side of the user form editor.

- The error messages have been updated to provide a clear and more understandable error message.

21.173.4 Resolved bugs

- [PT-1352 | BC-14041] - User group assigned to scope and access restriction of same diagram is not shown as search facet in wildcard search

- [PT-1535] - SVG of a diagram look different in portal and design

- [PT-1621] - Fonts in reports differ in some user languages

- [PT-1786] - Delegation entry is missing in mail notification

- [PT-1793 | BC-14291] - Applicable documents are displayed twice in profile view

- [PT-1869] - Check out button is still present when opening allocation diagram

- [PT-1947] - Chips in catalog are not directly clickable because of overlaying tooltips

- [PT-1991] - Links to online help in mails are outdated

- [PT-2021] - Big imports bottleneck the messaging leading to unresponsive catalog usage

- [PT-2064] - Governance search facets missing user when user was maintained in several governance attributes

- [PT-2090] - Customized entity publication mails link to the entity in the common stage

- [PT-2096] - Depublication of managed document aborts with failure when the document is still referred in preview stage

- [PT-2261] - Indexing of documents with content length larger than 32KB is skipped

- [PT-2358] - Wrong default language for release notes

- [PT-2497] - Resubmission email templates cannot be changed for specific tenants

- [PT-2504] - Occurrences view misses elements

- [PT-2526] - Catalog import removes keyword in other languages

- [PT-2531] - Indexing of documents with number of characters larger than 100000 is skipped completely

- [DES-436 | BC-14482] - Methodeditor stores numerical default values as strings in the method file

- [DES-550] - OCL check works not as expected when creating objects via mini symbol palette

- [DES-645] - Security improvement

- [DES-654 | PT-465| BC-3067] - The text formatting window of an Annotation does not work correctly

- [DES-1107] - Parallel document downloads may lead to no response

- [DES-1140] - Content language in diagram SVG is not always update when switching language

- [DES-1176] - Context menu for attachment / decomposition link misses entries

- [DES-1281] - Edited link title gets not updated correctly

- [DES-1362] - Catalog creates occurrence attribute value for catalog item

- [DES-1363 | DES-1277] - Edit button for attachments with long names is hidden in catalog view

- [DES-1371] - Clicking on a keyword in catalog entry edit mode discards all unsaved changes

- [DES-1395] - Suggestion list misses some items with special character in name

- [PE-2278] - ProcessApps list not up to date on login or site reload

- [PE-2265] - Administrator cannot modify case details

- [PE-2264] - Gateway change causes error when form boolean switch is changed

- [PE-2259] - Drag & Drop icon on input field is always visible in user form editor

- [PE-2258] - When i create an instance via REST call, the first task should start automatically when it has a user or grouped assigned

- [PE-2251] - When receiving an user deletion message, then we should ignore the message

- [PE-2223] - DMN task can not be completed

- [PE-2184] - Change info message for archive cases when there are no cases in the list

- [PE-2183] - Typo in german no cases info text

- [PE-2181] - Archived cases button must not be present on archived cases list

- [PE-2177] - Missing error message and error is shown when unnecessary in user form editor

- [PE-2154] - Archive confirmation dialog has a horizontal scrollbar

- [PE-2112] - Readme has a typo in title

- [PE-2109] - Drag and trash icons are always visible on each form field in form editor

- [PE-2108] - German label name in form editor is wrong

- [PE-2107] - Task can not be completed if all form fields are read only

- [PE-2106] - Long formfield value texts are cut in user task view

- [PE-2099] - Adjust icon size of ProcessApps on a desktop

- [PE-2098] - Wrong color of active due date icon

- [PE-1970] - Wrong deign for input field placeholder text

- [PE-2224] - Gateway recalculation spinner is never removed when no input expression resolves to true

- [PE-2220] - Customer cannot create new instances because unique[email,tenant] constraint

- [PE-2216] - Escaping quotation marks in DMN Table attribute causes exception

21.174 Version 7.2.7

21.174.1 Resolved bugs

- [DES-1236] - Migration Service view is broken

21.175 Version 7.2.6

21.175.1 Resolved bugs

- [DES-1214] - Attachments are not migrated when checked out during upgrade across 7.2.0

- [PT-2225] - Nodes are not listed in manual report with path sorting

- [PT-2227] – Old and new user interface should handle non-localized attachments

21.176 Version 7.2.5

21.176.1 Process Execution

As an admin or instance owner, I want to set a due date for an instance

When you create a new instance of a process, you can add a due date. You can also add and edit the due date for an instance, when you go to the details of the instance. When you set a due date on an instance, it will be shown in the instance list. If the due date is expired, the entry for this instance will be shown with a red due date in the instance list.

As a user I want to see archived entries in the case list

You can move instances of a process into the archive. When you are on the instance list, you have the option to switch from your active instances to the archive by selecting the archive register at the top of the list. You can switch between the two available registers to show active or archived instances.

As a user I want to create a case with a run link from outside the application

As a user, you are now able to create a run link for a process to create a new instance from outside the application. You can use this link in other applications. By clicking on this link, you will be redirected to the create instance dialog in BIC Process Execution. If you are already logged in, the dialog will show up. Otherwise you will have to log in first. After logging in, you will be redirected to the create instance dialog.

When a DMN Task has all input it should be executed automatically

DMN tasks will now be executed automatically, if all input variables are available. The calculation will be done as soon as the task starts and the output will be shown directly.

21.176.2 Resolved bugs

- [PE-1818] - Instance list is partial hidden when windows size is to small.
- [PE-1854] - When a diagram is checked and for a while, form fields disappear if you close and open the form editor
- [PE-1991] - Menu toggle button doesn't work after some quick clicks
- [PE-2010] - TenantId should be checked for Camunda rest API requests
- [PE-2014] - DMN errors messages are always empty

21.177 Version 7.2.4

21.177.1 Resolved bugs

- [PT-2192] - Attachments are localized during import when they are non-localized in method
- [PT-2169 | PT-2187 | PT-2188] - Enumeration of process step path differs in matrix view and manual reports
- [PT-2159] - Recreating the SOLR index breaks sometimes

21.178 Version 7.2.3

21.178.1 Process Execution

Separate section for the user task form on the right side

When a user task has a configured form, the form will now be shown on the right side of the task in the flow view. The form is only visible if the task is assigned to a user.

ProcessApps view as an icon view

"Processes" is renamed to "ProcessApps" and the view is changed to an icon view. You can change the color of the default icon, so this color will be shown instead of the default color (primary color). You can also change the process app icon by a custom icon. You can change both in the automation group settings of your diagram in the process designer.

21.178.2 Resolved bugs

- [PE-1615] - Roles are shown under "Applications" section of task form
- [PE-1623] - Automatic Start next task throws an exception when the next task after a parallel gateway is already started
- [PE-1652] - Archived instances cannot access process variables
- [PE-1898] - Automatic DMN evaluation sends null variables value if untouched
- [PE-1925] - The process does not run correctly if the output is changed in a DMN task
- [PT-2136] - Update search-index without deleting it

21.179 Version 7.2.2

21.179.1 Resolved bugs

- [DES-948] – Changes to catalog items are not visible when switching between content languages in edit mode
- [DES-949] – Newly created links are only available in current content language when a title was directly added
- [DES-1025] - Assignments are limited to 100
- [PT-1852] – Scheduled workflow steps are not performed correctly
- [PT-1987] – Retrieving localized attribute values is not possible in report templates
- [PT-2084] - Assigned entities with own lifecycle get directly published when source entity gets published
- [PT-2092] – All entity assignments are not available when only one assignment is not available

21.180 Version 7.2.1

21.180.1 Resolved bugs

- [PT-1970] - Security improvement
- [PT-1997] - Error while sending task assignment emails
- [DES-916] - Adding a new lane does not change the parent for elements that are already on the pool

21.181 Version 7.2.0

21.181.1 New features

View diagram archives directly

When a diagram has an archived version, then you can view the archive directly in BIC Process Design. Just select the intended stage (e.g. publication) of the diagram and click on the archive entry! The displayed archive can only be viewed and so some functionalities are not available for the diagram archive. You can still download the archive and import it to use all functionalities.

Please note that this feature is available only in the new user interface.

Language dependent attachments

Attachments are now *language dependent*. Therefore, uploaded files will be stored in a specific content language. This enables you to provide attachments to users in their language, like you provide process translation in every content language. You can use the translation mode for diagram and catalog items to maintain the attachments for each content language or to gain an overview about the maintained attachments in each content language.

When you do not want to provide attachments in each content language, then you can still maintain only one attachment for each content language. The procedure is then the same as before, just do not uncheck the option to *Upload the attachment for all content languages*. The option is active per default.

Please note that you might want to rework your attachments for language localization to provide your current attachments in only specific languages.

Support for browser extensions to link local files

Browsers have become more restrictive when it comes to access locally stored files to raise the security of your data. Several browser extensions can help to overcome those restrictions and *we did our best to support those extensions*. But it depends on your browser, your browser settings, and the used browser extension whether our improvements work for your configuration. Browser extensions are not part of our software.

Path sorting of activities in reports

Activities of a process are now ordered in accordance with their sequence flow in a process when they are enumerated in *reports*. If gateways or operators are modeled in a process, then we will rely on the maintained probability of the following activity to determine the order if the activities.

Resubmission workflows in workflow list

Resubmission workflows for diagrams and catalog entries now appear in the *workflow list* (and in governance cockpit of the nw user interface). You can now track the process of a resubmission workflow, delegate a task, or abort the workflow.

Please note that you are not yet able to filter for resubmission workflows.

Summary mail for new tasks

We optimized our *task notification*. Your task will be directly available in the application, but we will not send you one mail per task each time a new task was assigned to you. We gather all new tasks and summarize them in a single mail once a day (during night).

Edit mode without alternative language

We still provide the fallback language, when a process or catalog item is in public workspace, preview or publication stage. But we *do not show the fallback language* when you are editing a diagram or catalog item. This adjustment enables you to complete your translation tasks faster and have a clearer overview about missing translations.

Explicit editing of catalog items

We also introduced a check out mechanism to *edit catalog items*. This mechanism avoids unintended changes to catalog items and allows you to view the fallback language when you only want to view a catalog item in public workspace.

Adjustments of standard method

The customer journey map attribute *Key performance indicator* is now a multi value attribute, so that you can assign several KPI to this attribute.

Adjustment of layout settings

In the administration area, the *list of configurable layouts* was reduced so that only diagram types appear for which a process layout can be configured. Those diagram types are EPC, BPMN and VCD.

Quick start guide

When you click on the *quick start guide*, then you do not receive a file any longer. Instead, you are directing to the quick start guide section in our documentation. If you have replaced our quick start guide file with organization specific files, those files will still be provided, and the users can receive them.

21.181.2 Existing features available in new user interface

Working with workflow tasks

Your workflow tasks go an audit trail, so that you can see the previous workflow steps including all given comments. You can navigate from the task directly to the process or catalog entry or perform the task directly in the task list. If you navigate from a task to a process, you can also perform the task directly on the process.

Searching for diagrams

The diagram search was aligned with known search logic from the old user interface:

- The list of search hits is no longer alphabetically ordered. The order is determined based on the ranking of a search hit so that more relevant hits are ranked higher.

- When you search for diagrams, the content of all diagram attributes will be searched now. For example, when you search for a diagram of a certain author you can just type the name to find all related diagrams.

Further improvements

- Catalog entries can be published from the catalog if you have maintained at least the responsible.

- The RACI-Matrix can be filtered, e.g., when you want to see only your process role.

21.181.3 Process Execution

- With the new version the user gets a *push notification when a new task is assigned*. Thus, each user stays informed about new events even if the application is not directly used at the moment.

- When a decision in a case was changed, the new tasks are shown directly without the need to press the update button on the gateway. The update button is only shown, if the user current selected task would be vanished.

- When the process flow is recalculated, the gateway shows a :loading indicator to make ot visible for the user, that the process flow is about to be updated.

- Only administrators are now able to *edit case variables*.

21.181.4 Resolved bugs

- [PT-110 | DES-224] - 2nd / 3rd examiner and resubmission responsible cannot see an access restricted diagram

- [PT-370 | BC-13493 | PT-996] - Security improvements

- [PT-915] - Workflow list may show non-existing workflows as active tht cannot be aborted

- [PT-1056 | PT-1387 | BC-9323] - Depublication mail contains link to diagram

- [PT-1344] - Wrong link to online help in workflow notification mails

- [PT-1345] - GRC API Gateway only provides the first attribute value for multi value attributes

- [PT-1391 | BC-10696] - The local time when a workflow was started is not correct in workflow e-mails

- [PT-1398 | DES-490] - Misspelling in German mail template for resubmission tasks

- [PT-1485] - Governance attributes are displayed in wrong order

- [PT-1543] - Words get cut illogical in new UI

- [PT-1673] - Portal and Design show different reports based on the same report descriptor configurations

- [PT-1675] - Diagram Publication may fail if it's using an entity with its own lifecycle and the same "Valid From" date

- [PT-1741] - Link in entity release mail leads to common stage

- [PT-1757 | PT-1206 | DES-566] - Missing documentation of font usage restrictions for pdf output formats (Note: Please check out our documentation for applicable fonts.)

- [PT-1949] - Upgrade can cause workflow timer inconsistency

- [PT-1964] - Upload limit for attachments is calculated incorrectly

- [DES-246] - On MyBIC page images get overwritten

- [DES-488] - Document list is not scrollable in Designer

- [DES-527] - "Show more" for long attributes works properly only in 100% browser zoom

- [DES-528] - The cropping of the description is not consistent

- [DES-532] - Entity replacement for entities with associations

- [DES-533] - Watermark broken on pools and lanes

- [DES-537] - Line brakes in annotation are not consistent

- [DES-570] - Attribute "Name" of gateways is emptied after the field has values inside

- [DES-587 | BC-13505] - Methodeditor removes tooling after symbol definition changes or export

- [DES-590] - Download the online help as pdf does not work

- [DES-684] - Auto logout in "authenticateOnWorkflow" feature will break if the customer uses multiple tabs in browser

- [PE-1394] - Process Instances counter is wrong

- [PE-1587] - Mobile instances list update

- [PE-1596] - Flow calculation produces NullpointerException for specific constellation

- [PE-1616] - When a case is archived with new or assigned tasks. These are not disabled on the list and the hub shows the button to manual start or complete them

- [PE-1617] - Custom symbol types result in filtering out an activity

- [PE-1658] - Predecessor cannot be retrieved correctly, if gateway synchronizes and splits at the same time

21.182 Version 7.1.3

The following bugs have been fixed in this release

- [PE-1477] - Performance issue, when evaluating expressions while calculating the flow

- [PT-1713] - Resubmission workflow, that was initiated by the system, will be aborted with errors

- [DES-665] - Authentication on approval continues even after interruption

21.183 Version 7.1.2

New features

Process Execution

- In the main menu next to the "Tasks" menu item, the user can see how many tasks are assigned to him. This counter also changes immediately when a new task is assigned.

- The task list is also automatically updated when the status of a task changes or a new task is assigned. This keeps the user up to date while the task list is open.

- Application systems have a new attribute "Integration link". Here you can enter one or more URLs that will be used to call other systems. Within these URLs, data from the current process can also be transferred to a third-party system as parameters.

- The checklist for the process is now recalculated immediately if data changes within the process. Previously, data-based gateways were only calculated when the previous activity was completed. You can now see the consequences for the process after the data entry.

- If a task has an output (usually a document), the user can now upload his work result to the task. This file is then made available to other users in the following tasks if they have this document as input for their task. Files no longer have to be sent back and forth between users via email. The current file is always available in the context of the task.

The following bugs have been fixed in this release

- [PT-1584] - Depublished diagram archive cannot be downloaded (button inactive)

- [PT-1596] - Administration and MyBIC only shows a maximum of twenty shared favorites even if more are configured

- [PE-1015] - Group Tasks are not correctly updated

- [PE-1017] - Team edition is not instantly reflected in flow

- [PE-1250] - Showing default flow or creating instance fails, if staffing to an user group is defined, that is not existing

- [PE-1272] - When a new case is created and the user presses the enter key, a new dialog appears

- [PE-1302] - When I don't have admin rights I should not see an instance of a process in which I am not involved in

- [PE-1338] - DMN issues

21.184 Version 7.1.1

The following bugs have been fixed in this release

- [DES-536] - Bugs in release notes are missing predecessor ID

21.185 Version 7.1.0

New features

Governance Cockpit

- The Governance Cockpit is available in the user interface so that you can manage and analyze your workflows centrally.

- **We implemented existing features in the *new user interface*:**

    - You can access the complete workflow audit trail.

    - You can filter the workflow list and search for workflows.

- **We also added new features to the new user interface:**

    - The initiator of a workflow is the first entry of a workflow audit trail.

    - All comments of the examination steps and approval given in a workflow are accessible in the audit trail of this workflow.

– Depublished diagrams are stored in the audit trail of the depublishing workflow and can be retrieved in the audit trail.

Utilization of external Functional Allocation Diagrams (FAD)

- When you use *external FAD* to model the resources of a process flow, then those activities are now utilized in the process flow. For example, the resources of the external FAD are utilized for the process flow in reports (both new and old user interface) or are displayed in the process flow view as integral resources of the process flow (only new user interface).

Extension options for Governance Workflow

- Governance-Workflows can be extended for individual validations prior to publishing diagrams or catalog entries. Customers have the option to implement industry-specific validations (for example FDA 21 Part 11). Industry-specific validations are individual, thus a custom-service is required to implement those requirements. Our customizing would be glad to realize your requirements.

The following bugs have been fixed in this release

- [BC-14418] - Inplace-edit shows old label content if a condition of the label exists

- [BC-13282] - Catalog import does not remove attribute value

- [BC-11609] - Catalog Data Transfer Service cannot export a diagram if it contains values in enum attributes which not defined in the corresponding stereotype

- [PT-1392] - All existing report types are shown for each diagram type instead of only the types where a diagram type is included for

- [PT-1386] - Third row for myBIC tiles will not be used anymore when there are at least 7 Favorite tiles

- [PT-1372] - Misspelling on DMN loading screen in German UI language

- [PT-1355] - Diagrams are also listed when clicking on Attachments mini symbol (only new user interface)

- [PT-1220 | BC-14519] - Repository import performs entity postprocess on wrong entity

- [PT-1206] - Table of content has in published stage different amount of pages than in common stage

- [PT-1098] - Process Cost report references wrong rows

- [PT-1094] - When switching languages in opened Catalog List, some languages are only changed after hovering over other elements

- [PT-1075] - "No Diagram available" message is missing and leaving a blank page

- [PT-1071] - Process Flow starts with step second activity

- [PT-908] - Properties are not up to date when switching the content and alternative language

- [PT-907] - New UI displays the repository name not in the content language, but in the alternative language

- [PT-693] - Diagram manual with assignments styling issues

- [PT-672 | BC-13986] - User preferences do not save toggled content / alternative

- [DES-521] - Re-authentication of workflow tasks does not work with IDP

- [DES-457] – When a symbol was removed from sequence flow, then the sequence flow is behind the lane

- [DES-431 | DES-408 | DES-223 | DES-144 | DES-142 | DES-141 | PT-890 | PT-427 | PT-260 | PT-232 | BC-11755 | BC-13512 | BC-13778 | BC-14327 | BC-14348 | BC-14328] - Security improvements

- [DES-416] - Line breaks in formatted text attribute is not working

- [DES-400] - Inplace edit on a placed occurrence attribute is not saved correctly

- [DES-308] - Undo "branch catalog item" in diagram damages edges connected to that catalog item

- [DES-300] - Margin of diagram to border is too small in publication

- [DES-278] - French and Italian translations are missing for some method objects

- [DES-251] - Typo in validation hub on activity with invalid sequence flows

- [DES-232 | PT-502 | BC-4225] - In BPMN, the symbols on activity for multiple instances "sequence" and "parallel" are switched (Note: To correct the visualization in existing diagrams, use "Switch symbol" on affected activity symbols and re-apply the symbol type.)

- [DES-197] - Inplace edit causes a "New catalog entry" toast to show even though no entity was changed and no catalog entry was created

- [DES-159 | BC-12230] - Annotation symbol splits if selection contains only the bracket

- [DES-158] - Attributes details are rendered too often

- [PE-951] - Role is missing in process flow list when no one is assigned

- [PE-961] - When a case begins with a gateway, selection is not updated in flow

- [PE-973] - DMN form fields are displayed even if it is not a rule based task

- [PE-983] - Toggle button leads to a problem in 'My Tasks'

- [PE-984] - Hub is inaccesible when task's responsible text is long

- [PE-990] - Task name is partially hidden in the hub if the task name is long

- [PE-1046] - First task in a flow has disabled DMN form right after case is created

- [PE-1152] - Checkbox labels should do a line break if there is not enough space

- [PE-1179] - Group tasks should be only shown if the task is already created

- [PE-1039] - When there is more than one translation of a process, then the process is displayed duplicated in the process list

- [PE-1048] - Dmn evaluation request is not sent

21.186 Version 7.0.2

The following bugs have been fixed in this release

- [PE-1091] - DMN Editor window size is reduced to minimum if there are to many rows

- [PE-1121] - Stackoverflow error when saving diagram with associated diagrams

- [PE-1129] - Bug when merging a parallel branch within the main flow

- [PT-1210] - When I publish the catalog entity the responsible person task reminder cannot be sent and the workflow will be aborted

- [PT-1265] - Bug when merging a parallel branch within the main flow

21.187 Version 7.0.1

The following bugs have been fixed in this release

- [DES-27] - Rectifications in release notes 7.0.0

- [DES-146] - Logout without Loadbalancer does not redirect to logout page

- [DES-297] - Child entity loses relationship to parent after renaming an approved catalog item

- [PE-948] - Nested parallel gateway steps fail to be listed in flow

- [PE-963] - Problem with Integrated Decision when dealing with an OR gateway nesting another OR gateway and a human task

- [PE-991] - Join gateway won't start following task, if a decision is a predecessor, even if this decision is done

- [PE-1034] - Process flow crashed for several nested stuck loops

- [PE-1055] - Process list not always shows the depublished processes properly

- [PE-1060] - DMN type Date and Time fails to be evaluated

- [PE-1065] - Integrated Gateway calculation fails on instances of deprecated processes when there is a new process version

- [PE-1070] - Processes do not get updated, if the same role gets used in different default instances

- [PE-1098] - Start Next Task fails for cases belongs to deprecated versions

- [PT-697] - Nested parallel gateway steps fail to be listed in flow

- [PT-961] - Process flow crashed for several nested stuck loops

- [PT-992] - Security improvement

- [PT-993] - Security improvement

- [PT-994] - Security improvement

- [PT-995] - Security improvement

- [PT-1016] - Default values of text attributes are not taken over, producing attributes without values, leading to an error in domain service

21.188 Version 7.0.0

A new name and a new look for BIC Process Design!

BIC Process Design now offers you a second user interface that is easily usable on mobile devices. The new interface is available immediately and has become even easier to use. A *button in the top menu* allows you to switch between the old and new interface. This is still necessary at first because not all functions of the old user interface have been transferred to the new user interface yet. The choice between the user interfaces also gives you the opportunity to get used to the new interface during the transition phase. Here you can find the help of the new user interface.

Growth in the product family!

With BIC Process Execution, we have a new module in the BIC Platform product family. BIC Process Execution allows you to publish processes as executable and then actually execute these processes using BIC Process Execution. If you are interested in this paid module, please contact us. *Here* you can find the help of BIC Process Execution!

New features

- The templates for the process manual can be *downloaded in the administration*. You can now modify and upload the process manuals without support from us. Our documentation provides all necessary information including examples to make individual adjustments. Please keep the standard template locally in its original state because you cannot automatically restore the standard template in the system at the moment.

- The release process for catalog entries now corresponds with the release process for diagrams:

  – Governed catalog entries (e.g., documents) now have the option to specify a *resubmission responsible* who receives the resubmission notification instead of the actual person responsible.

  – You can also configure additional examination steps for governed catalog entries, which are run through sequentially. In each of the steps, several examiners can still be entered to each be given a task. As for the release of processes, the examination steps must be activated in the method.

  – The *valid-from date* is also considered for the release of catalog entries in the same way as for diagram releases. If you have defined this date in the future, the system will wait until this date before publishing. If you did not specify a date, the catalog entry will be published immediately after the approval and the valid-from date will be set accordingly in the publication (no writing back to the public workspace).

- BIC4SAP has become part of the standard method, thus ensuring easy activation of the method components. Are you interested in BIC4SAP? Contact us!

- Reports can now be generated in PDF/A-2B format. The output format must be set in the *reports descriptors (administration)* accordingly.

- We strived forward to harmonize both methods and aligned the drop-down values of the attribute "Control effect".

- A lot of customers gave us feedback about this configuration, and we disabled it for all systems. When a user opens a diagram in publication stage the diagram will no longer be displayed in *fit-to-screen mode*. Users can still decide to use this mode. Customers can contact us if they wish to have this mode as default, when opening a diagram in publication stage.

- To support you meeting regulatory requirements, additional user authentication can be requested *when processing tasks*. The user then has to confirm his identity again if, for example, a quality assurance task is being processed as part of the process release. You cannot activate the additional authentication yourself, please contact us.

- An *editorial release* can be deactivated so that each release must go through the defined release steps and no changes can be published without approval. You cannot deactivate the editorial release yourself, please contact us.

The following bugs have been fixed in this release

- [BC-11735, BC-14302, BC-14303, BC-14310, BC-14211, BC-13511] Security improvements

- [BC-11288] - Downloading and generation of reports fails after refreshing access a second time

- [BC-12129] - Requests of user who is member of many groups fails with „Bad Request"

- [BC-12209] - Border of the free text can be moved separately

- [BC-12699] - Maintaining user or user groups for risk and control attributes fails without existing person object

- [BC-12778] - Catalog entry in public workspace has an empty archive page

- [BC-13625] - The attribute type cannot be displayed again

- [BC-13633] - Cleaning empty categories may fail during publication

- [BC-13849] - Mandatory attributes assigned to entity types are not marked in catalog details view

- [BC-13859] - Translation of pools in ES is wrong

- [BC-13876] - Enum attribute default value is always 0 if the entity is created in the catalog

- [BC-13883] - Translation of edges not possible for diagrams that has been checked in before
- [BC-13965] - Focusing an annotation needs two clicks
- [BC-13985] - No check-in possible on conflicting catalog administration settings
- [BC-13987] - Occurrences are missing when you have >= 20 occurrences
- [BC-14084] - svg renders incorrectly if choosen font is not available in render service
- [BC-14196] - Error when trying to place a multivalue assignment node attribute
- [BC-14201] - PDF print does not display several (slovak) special characters correctly
- [BC-14230] - Typo in error message
- [BC-14245] - Author cannot edit attribute values of their catalog entries
- [BC-14300] - During import biccloud-document link attributes are overwritten for entities with assignments
- [BC-14314] - Importing a catalog-item will not import the assigned entities as well
- [BC-14413] - Wrong behavior of pasting HTML
- [BC-14417] - It is possible to edit risk attributes from edit mode (temporary).
- [BC-14444] - Empty field in Task View for Reviewers
- [BC-14505] - Process Cost report fails depending on Excel version

21.189 Version 6.3.3

The following bugs have been fixed in this release

- [BC-14344] - Error on deserialization of resubmission process instance
- [BC-14398] - Error on depublication decision for older resubmissions

21.190 Version 6.3.2

The following bugs have been fixed in this release

- [BC-13890] - Profile view does not resolve enum values correctly

21.191 Version 6.3.1

The following bugs have been fixed in this release

- [BC-10972] - You can select all symbol types under "Switch symbol" instead of just those relevant for the diagram type
- [BC-11032] - BPMN Export fails
- [BC-12025] - Catalog Process Warehouse is missing entries with restricted access
- [BC-13726] - When an activity has an integrated FAD, then a double click in publications opens attribute hub instead of navigating to the FAD

21.192 Version 6.3.0

New features

- Attributes can now be defined as read only. For this purpose, in your method the option *read only*, and a default value is set for the attribute concerned. Thus, when modeling in BIC Cloud Design, the value for such attributes is already set and can no longer be changed.

- You will now be forwarded directly to the allocation diagram if you select the corresponding diagram in the *"occurrences" of catalog entries*. This means that you no longer end up in the higher-level main diagram, but directly in the desired allocation diagram, in which the respective catalog entry is used.

- The diagram type *Customer Journey Map* is no longer available in its beta version, but under *Customer Journey Map (CJM)*.

- The *catalog entry profile report* has now a smoother design. For a better overview, all tables within the report are now aligned to the left.

- The following languages have been added to the list of *content languages within the administration area*: Polish, Finnish, Estonian, Irish, Scottish Gaelic, Latvian, Lithuanian, Maltese. This means you can now translate your diagrams in these languages.

- When catalog entries are published, files attached to the *Attachment (URL)* attribute, such as Microsoft Office file formats, are given extended properties. In the areas preview and publication, the governance attributes and the identifier of the catalog entry are added to the properties of the file. For example, you can use the field function in the header or footer of a Microsoft Word document to access the values of the properties. Required preparations for using this function are explained *in the corresponding chapter*. If attached files were not added as PDF during the modeling process, you can optionally activate the new governance attribute *Publish as PDF*. As a result, the files are then only available as PDF in the preview and publication area. More information about which formats are supported can be found *in the corresponding chapter*.

The following bugs have been fixed in this release

- [BC-6493] - Note for customers: Please use "Switch symbol" to apply fixed symbols

- [BC-9897] - Search by clicking on a keyword doesn't work

- [BC-10692] - Wrong role in the email text after creating a user

- [BC-10698] - Creating a matrix report of a VCD fails with a red toast

- [BC-11510] - Active resubmission workflows are not canceled on republication of diagrams

- [BC-11620] - When selecting a folder then configured reports are missing

- [BC-12746, BC-13580] - Assignments displayed broken by using replace function

- [BC-12766] - Governance attributes are missing in entity profile report

- [BC-12768] - BIC Cloud freezes when using certain data sets in DMN editor

- [BC-12771] - Catalog search does not find underscore separated terms

- [BC-12788, BC-12994] - Encoding issues in assignment attributes

- [BC-12925] - Token lifetime results in webclient stops loading with a white screen and no redirect

- [BC-12983] - Checkin is not possible under some conditions

- [BC-13001] - Catalog entry shows state unapproved in preview when the responsible has approved

- [BC-13042] - Modification of access restriction API

- [BC-13293] - Catalog import ignores last row if second row is empty

- [BC-13326] - Wrong localization in email template
- [BC-13530] - Corrected login mail footer
- [BC-13543] - Double line in category context menu without content for Authors
- [BC-13554] - Deleted user cannot be removed as deputy
- [BC-13557] - Attribute hub loads read-mode when switching between two local diagrams
- [BC-13565] - Typo in German language rework-task-reminder-template
- [BC-11408] - Fix signature of comment-service docker image

21.193 Version 6.2.5

The following bugs have been fixed in this release

- [BC-12881] - Authors can delete categories with diagrams they are not the author of
- [BC-13002] - Diagram sync can create orphan associations
- [BC-13036, BC-13119] - Fix vulnerability

21.194 Version 6.2.4

The following bugs have been fixed in this release

- [BC-11704] - Description in search hits causes wrong content displayed after scrolling
- [BC-12287] - Chips display names are truncated even though there is enough space to display the name in full.
- [BC-12757] - Process warehouse report does not resolve assignment name for multi-value assignments
- [BC-12802] - Performance problems in the "Profile View"

21.195 Version 6.2.3

The following bugs have been fixed in this release

- [BC-12700] - Filter on roles in the user administration does not work anymore

21.196 Version 6.2.2

The following bugs have been fixed in this release

- [BC-12663] - Login page not accessible if SSO is activated

21.197 Version 6.2.1

The following bugs have been fixed in this release

- [BC-12649, BC-12650, BC-12651] - Minor bugfixes regarding release process

21.198 Version 6.2.0

New features

- You can *copy the URL of a specific catalog view* via the menu bar, so that you can share it with other users. When opening the URL, the recipient sees the same catalog view with the same set filters or search results. For example, a document responsible can get a catalog view showing him a digital list with documents of his responsibility, which are expiring at a given date.

- The *facets of catalog entries* will now display how many catalog entries have the same attribute value. For example, you can directly see how many documents are assigned to a specific scope.

- *A dashboard for catalog entries* is now available, that enables an easier way to give you an overview of all catalog entries and their facets. You can dynamically use donut- and bar charts to analyze the object types of your catalog. For example, you can answer questions like how many different document authors exist in the catalog, who are they and how many documents are assigned per author.

- *The catalog export* now includes the technical description of the attributes, which is hidden by default to preserve a better overview. You don't need to maintain the technical description (attribute type ID) manually anymore in case you want to *reimport a generated catalog export (Process warehouse)*. For example, you can now edit the excel sheet to update attributes or to provide missing translations for additional languages (target language must be set before the import). The following still applies: In case you want to maintain attribute types, which are not existing in the generated export, the technical descriptions must be added to the first row of the corresponding columns.

- An additional *report for catalog entries* is available. Besides the attributes of the catalog entry, the profile contains all occurrences and associations with other objects so that you can fully export the information.

- The scope of catalog entries will now be informed about publications via email. Similar to diagrams, user groups which are stored in the attribute "Scope" will be notified as soon as changes are available in the publication. The availability in the publication depends on the date that has been set in the "Valid from" attribute.

- You can choose if you want to be directed to the *details view of a catalog entry directly after its creation*. This supports you in a way that you can directly maintain the catalog entry's attributes (e.g. a description), without first manually searching for the new catalog entry in the catalog.

- The displayed number of catalog entries per page has been increased from 50 to 100.

- *The translation mode is available for diagrams* and catalog entries. The translation mode presents language dependent text attributes of all content languages, which have been set in the administration area, in a table. In the local workspace (checked out diagram) you can activate the translation mode in the menu bar to translate diagram attributes or modeling objects (catalog entries within a diagram can only be translated by editors or administrators). The *translation mode can also be found in the catalog* to translate catalog entries only. When translating catalog entries, these entries will directly be changed without creating duplicates or new catalog suggestions (this is for example the case when changing a catalog entry during the modeling process).

- The representations of associations (sequence flow, input, output, ect.) has been optimized so they need less space at the ports. You can model now even more compact.

- The visibility of watermarks in diagrams (*for example in pools*) can now be activated or deactivated.

- Attributes within search results are now always displayed, even if the details bar for a catalog entry or diagram has been deactivated within the administration area. The administration setting to hide the details bar now only affects the diagram view.

- Search facets are now sorted alphabetically, which simplifies the search and selection of the desired filter.

- The diagram alternative language is now included in all SVG graphics within the preview and publication. Please note due to rendering it can come to a longer waiting period, when initially opening the SVG graphic.

- The attributes of risks and controls were aligned with the attributes of BIC Cloud GRC so that the attribute names are identically.

- You can connect Data Objects with documents in IT Architecture Diagram.

The following bugs have been fixed in this release

- [BC-2276] - Occurrences are not displayed correctly

- [BC-5355] - Local Diagram not deleted if you delete it's public version

- [BC-5984] - EDGE - Selected items in symbol filter are shown incorrectly

- [BC-6150] - If a User group contains only 1 element there is label '1 members' instead of e. g. '1 member' or '1 member(s)'

- [BC-6443] - Missing Tooltip for some Buttons in the Comments Hub

- [BC-7597] - Suggestion list for eg. examiner of a diagram is sorted in reverse alphabetical order

- [BC-7621] - Search-facet contains no result

- [BC-7828] - Error while switching between Process Flows

- [BC-8295] - Reloading the page while being in The Administration or Tasks View causes that you land on the start page/start diagram

- [BC-8483] - When you logout there is a warning for checked out diagrams, even then there are no diagrams in the local workspace

- [BC-8896] - If the usergroup name contains a lot of characters it is possible to push the more options button out of the view

- [BC-8902] - 'Validation' button is not clickable when Occurrences view of a symbol is opened

- [BC-9076] - Watermarks on lane are missing after upgrade from 5.2.2 to 5.3.4

- [BC-9158] - [IE] The 'To Do' box in the Tasks view overlaps with the left menu

- [BC-9213] - [IE] Occurrences item is not centered vertically

- [BC-9372] - Longer comments in workflows get no line breaks so there is only a part of comment visible

- [BC-9476] - [FIREFOX, EDGE] Some icons for Attribute chips are missing

- [BC-9531] - Filter doesnt get updated properly after saving a diagram

- [BC-9601] - Attachments with title are diplayed as URL in search facettes

- [BC-9620] - Workflow administration looks broken, when comments get to long and contain line breaks

- [BC-9762] - Titles of input fields should not be cut by an ellipsis

- [BC-9852] - There are two separators to Publish button in context menu of category instead of just one for roles except Admin

- [BC-9945] - when you click on reset button you see a click in the left corner above

- [BC-10212] - Catalog replace dialog, needs to sort the results like other searches

- [BC-10485] - ProcessFlow is not calculated correctly, when it get stucked in the same loop over and over again

- [BC-10531] - Error message for empty user group in examination step is misleading

- [BC-10662] - MyBIC start diagram tile shows svg preview and fallback image, moving fallback image out of tile

- [BC-10706] - Workflow tasks for non existing workflows are shown, leading to a 400 Bad Request when a abort is trying (processInstance is null)

- [BC-10728] - When uploading a corrupted .bpmn file a success toast is shown

- [BC-10747] - Archive icon in the sub toolbar is not highlighted anymore when selecting the comparision button

- [BC-10766] - Catalog report doesn't work when it contains a touchpoint entry

- [BC-10912] - BPMN Import fails for collapsed sub processes, that include a seperate process

- [BC-10932] - Use of a 'ß' in the name of a usergroup create multiple catalog entries with the automatic creation

- [BC-10963] - Mailhistory is not complete, for diagram publication inluding rework by the author

- [BC-10973] - Catalog items with names containing a colon cannot be filtered by facets

- [BC-10975] - I can not resize item (like activity) after layout was used

- [BC-10982] - Catalog suggestions by scope does not work if the scope contains umlauts

- [BC-10985] - If I create pool with lanes, so I can not see the name of choosen lane in the middle of my pool

- [BC-11084] - Cannot create label on Edge which was created in old version < 5.2

- [BC-11098] - switching repository with unsaved diagram

- [BC-11099] - ProcessWarehouse report contains CR and LF characters

- [BC-11268] - Imported keywords of an entity are concatenated/merged into a single keyword

- [BC-11285] - Workflow-service fails due to a PoolExhaustedException

- [BC-11302] - Catalog reloading leads to wrong view

- [BC-11320] - Switching the language if you are inside the catalog view has no impact of the created report, report gets created in initial language

- [BC-11321] - Switching the language if you are inside the catalog view has no impact of the sort of the catalog entries

- [BC-11322] - Switching between diagrams with opened Process flow view causes an error message and incorrect modeling behavior

- [BC-11331] - If the user want to change his password he will be requested to enter either his username or email address

- [BC-11349] - If I have an occurence attribute on an node and the diagram and I switch from node to diagram, the node value gets displayed at the diagram

- [BC-11406] - The tool tip of "Fenstergröße an Inhalt anpassen" is wrong

- [BC-11437] - Attribute details are missing in search

- [BC-11553] - The width of the catalog is not limited in Firefox, so that with long descriptions the menu is not in the visible area

- [BC-11563] - the catalog accordion counters show wrong values after deleting an entry so a facete has no entries

- [BC-11639] - An author cannot upload attachments to a document object in the catalog.

- [BC-11676] - If I use content language french and I search for any objects (items) in catalog, I can not find desired objects (items)

- [BC-11757] - Copying a renamed approved catalog entry results in multiple catalog suggestion

- [BC-11827] - Layoutassistant does not use the correct column break configuration

- [BC-11837] - When exiting the catalog details view the opened entry is still in focus but not in view

- [BC-11843] - Task retrieval in workflow service can cause blocking threads and exhausted connection pool

- [BC-11877] - catalog breaks if localized attributes of type boolean, assignment or link is used

- [BC-11879] - When toggling content and alternative language in the catalog the search is performed in the old content language

- [BC-11883] - Method allows Sequence flow between 'event based' and 'end event'

- [BC-11886] - Problems with vertical pools

- [BC-11892] - Search: duplicate list of occurrences

- [BC-11906] - Layoutassistant does not set the correct ports for joins and forks

- [BC-11907] - watermarks should be escaped correctly

- [BC-11912] - Workflow emails don't work for responsible user group in french language

- [BC-11933] - edge attributes are not displayed

- [BC-11999] - When hovering over the description in the item bar, then the tool tip is placed wrong (edge) and format is broken (edge, chrome)

- [BC-12114] - Newly created catalog entries were not visible in catalog view for several hours

- [BC-12139] - Postgres container could not be backed up

- [BC-12167] - MyBic: if you configure a favorite for mybic in the administration you dont see any search results in the my bic page

- [BC-12170] - importing a catalog export without entity IDs causes the header to be imported as catalog entry

- [BC-12177] - An author cannot edit approved catalog entries where he is set as author

- [BC-12178] - Hide/show more informations on FormattedText attributes in read mode does not work correctly if you have a method with multiple formatted text attributes

- [BC-12182] - Missing comments in task list for entity publication

- [BC-12185] - Suggestions list for applicable documents of a diagram is sorted in reverse alphabetical order

- [BC-12206] - The catalog facet filter's "Valid from" and "Valid to" set dates are gone after refreshing the catalog

- [BC-12231] - After reloading the page public workspace is always shown instead of the last workspace

- [BC-12233] - Conditional formatting on boolean attribute does not show, if the value is changed

- [BC-12312] - URL field from catalog entity does not work as expected, if URL contains '%20' chars

21.199 Version 6.1.5

New features

- [BC-10910] - Update Keycloak to newest version

- [BC-11572] - SSL certificate must have a key length of at least 2048 bit

The following bugs have been fixed in this release

- [BC-11680] - Open a diagram should not crash if a referenced attribute is not part of the method anymore

- [BC-11697] - Move postgres backup to postgres container

21.200 Version 6.1.4

The following bugs have been fixed in this release

- [BC-11599] - Set enums or numbers in diagram or entity only shows the headline not the value in read mode (formatted symbols are broken aswell)

- [BC-11613] - labels of watermarks are not displayed correct - dont encode spaces

21.201 Version 6.1.3

The following bugs have been fixed in this release

- [BC-11378] - In preview and publication stage, there is no comment marker anymore on nodes that received comments

- [BC-11436] - Security improvements in BIC Cloud Design webclient

- [BC-11519] - As a user I want the SVG to be displayed with padding after running "FitToSrceen".

- [BC-11521] - As a user I want to have the possibility to scroll to the zero point in the SVG View.

- [BC-11523] - Wrong Async/Await chain implementation could lead to the token expired problem

21.202 Version 6.1.2

New features

- [BC-6665] - As a user I want to see the description when hovering over an item in the iconbar

- [BC-10931, BC-10967, BC-10968] - As a user, I want to use the UI in French language

- [BC-10989] - As a user, I want to see the SVG image fit to screen when I navigate to a diagram

The following bugs have been fixed in this release

- [BC-9320] - Importing a zip fails when browser is unable to determine the correct content-type

- [BC-9519] - If I import BPMN Diagram, so I can not see the name of lines between activities on UI

- [BC-10481] - Message broker crashed on production due to a docker kill because it reached the memory limit

- [BC-10684] - Waypoint are not considered when importing a BPMN diagram

- [BC-10866] - Reorganization of catalog entries fails after re-import of already existing entries

- [BC-11010] - Document-Service should be able to handle document with no conent (0kb file size)

- [BC-11103] - Empty cells in Process-Warehouse export contain control characters

- [BC-11114] - Render-Service should use same getReferencedAttributes logic as webclient

- [BC-11155] - Label for Gatways are lost during BPMN Import

- [BC-11209] - Diagram resubmission in workflow-service fails due to non-unique responsible person

- [BC-11280] - Administrators cannot revoke group tasks

- [BC-11282] - "Your session has expired" toast appears although the refresh token is still valid

- [BC-11287] - Catalog data transfer is getting crazy under the pressure of thousands empty lines import

- [BC-11305] - SVG renders differently than Canvas, causing edges to overlap nodes and make them unreadable

- [BC-11356] - When navigating to a diagram via item bar in publication, the loading time of the target diagram differs significantly from the navigation in the explorer tree

21.203 Version 6.1.1

The following bugs have been fixed in this release

- [BC-11130, BC-11157] In some cases migration to version 6.1 fails.

21.204 Version 6.1.0

New features

- The administrator can *configure default MyBIC pages* for their users. You can use diagrams or results of search queries as content for the default MyBIC pages which can be assigned to user groups. The users will see the preset content for their user group(s) on their MyBIC page.

- The first column of the catalog import file can be used to identify existing catalog entries, for example by using the ENTITY_ID. When you import the file into the catalog, the update is applied to the selected content language and all attributes, which are given in the import file. You can look up the ENTITY_ID of existing catalog entries in the process warehouse report of the catalog. But you also have the option to use other attributes, for example the name of a catalog entry, to identify the intended catalog entries. BIC Cloud Design tries then to identify unique catalog entries and updates them, if there is an exact match. Please read the *corresponding chapter* in the user documentation before you use the catalog import to update catalog entries.

- We optimized the catalog! In this view you will only see object types which are configured by the *administrator as catalog entries* or which have at least one entry. In addition, the amount of catalog entries for an object type displayed.

- We enhanced the workflow filters! You can filter the workflow for a specific time span or search for a workflow by the name or e-mail address of a workflow participants, meaning that this user is the initiator or has a workflow task.

- The *multi-level depublication workflow for catalog entries* is now available.

- Users with an open task in the publication workflow for catalog entries are now reminded of their open task via e-mail. Your administrator can configure the *reminder interval*.

- You can set a deputy for your workflow tasks in the task management. Your deputy sees now his deputy tasks under the menu entry "Deputy tasks" in his task management. He must actively claim a task in order to perform it. You can find further information *here*.

- The group tasks now also show done group tasks. Each group member can now see which group task has been already performed and who performed it.

- The responsible person for published catalog entries will be informed via e-mail when the catalog entries are going to be invalid.

- You can set an alternative *resubmission responsible* for diagrams (user and user groups are available) which will receive the resubmission task instead of the diagram responsible.

- You can optionally define a third examination step for the publication of diagrams. You must enable the corresponding governance attribute in the method in order to use it productively. The third examination step is handled in the same way as the first and second examination step. Please note that you must maintain a third examiner in the diagram attributes in order to be recognized by the workflow. You can also define the corresponding governance attribute as mandatory in the method in order to enforce its maintenance.

- You can define mandatory attributes for diagrams in the method. Those attributes are marked with an asterisk in the attribute view in edit mode. The mandatory attributes are checked prior to the workflow start and the workflow cannot be started when they don't have a value. The only mandatory attribute of the standard method is the *Responsible* in order to start a workflow. For example, when you want to have an examination step included in your workflow permanently, then you can set this attribute as mandatory in the method.

- The attribute *Target* of events is now multi-value so that you can assign several diagrams as target.

- We enhanced the search! The corresponding stage and content language of the search results are now displayed.

- You can also assign a user group to the governance attribute *Responsible* besides an individual user. The responsibility of a process should be uniquely defined so that you can still assign just one value (one user or one user group).

- When you delete an object from the sequence flow, then the predecessor and successor will be automatically linked to each other in order to restore a valid sequence flow without the need to do it manually.

- The suggestion list in modeling uses the scope of the diagram to filter the results. Only results will be suggested which match the scope of the diagram or which don't have a scope assigned at all. This new filter mechanism ensures that you use the correct catalog entries and that you don't see irrelevant catalog entries.

- Symbols of objects can be switched after you have modeled an object. You don't have to delete the object and model it again with the new symbol. The only part of the object which changes is the representation (symbol), so that all assigned attributes, relationships, etc. are kept. You can choose between all symbol types maintained in your method and which are assigned to the used diagram type.

- We advanced the layout assistant. It can be used for diagrams with vertical pools, if you have configured them in the method.

- We introduce a first validation of BPMN diagrams! BIC Cloud Design validates the sequence flow of gateways, activities and events. When there are invalid sequence flows in your diagram, then the validation hub explains and points towards them. Your administrator or our Customizing can configure individual OCL rules to be validated considering your companies modeling conventions.

- The mass import of BPMN diagrams is now available. The mass import can import several BPMN diagrams compressed in a ZIP-file and also creates categories, when the diagrams are embedded in a folder structure.

- You will be logged out of the application after 30 minutes, when you have been inactive in BIC Cloud Design during this period.

- We optimized loading times for diagrams in the preview and publication stage by introducing the SVG view to these stages. Even huge diagrams in those stages can now be opened quickly. By introducing the SVG view there will also be minor changes to the navigation, which you can find *here*.

- The print preview is available in all stages (public workspace, preview and publication)!

- We optimized the process execution! The end of a process will be identified automatically, you can choose the decision options along the process flow from a modern menu and mark performed process steps as done, so that you have an overview about the progress of the process instance.

- The DMN editor is now available! You can define embedded business rules within your diagrams and reach automated decisions based on your input parameters by using self-defined decision tables. A thorough description of all functionalities can be found in *the DMN chapter*.

- We advanced our collaboration functionalities! You can share diagrams in the public workspace with Readers via a link in order to receive feedback on the modeling status. This helps you, for example, after modeling workshops with process experts to verify the workshop results with them.

The following bugs have been fixed in this release

- [BC-499] - You can't check a diagram in if it contains a deleted catalog entry from the local workspace which has never been checked in

- [BC-3263] - Misspelling: 'Attribut Symbole' instead of 'Attributsymbole' or 'Attribut-Symbole' in German UI Language

- [BC-3861] - It is not possible to predefine entity default values if the attribute type is not localized

- [BC-3977] - After check-out, edit, save, clear cache, reload, edit a diagram, there is no symbol palette

- [BC-4045] - In English UI language all Formatting labels have the wrong capitalization

- [BC-4575] - Position from suggestion list is wrong

- [BC-5205] - Errors in usage of catalog entries

- [BC-5311] - Edge Label cannot be edited via F2

- [BC-5618] - BPMN Import on category

- [BC-5715] - 'Task' instead of 'Activity' in filter hub

- [BC-5761] - By Modelling a Diagram if you use a suggested catalog entry and before Check in the Diagram you delete this Catalog entry it will be impossible to check in your Diagram

- [BC-5990] - AT_NAME is still displayed as "required" in the attributes hub

- [BC-6019] - Allocation diagrams are not shown in left menu tree when stage is set to Local workspace

- [BC-6362] - Renaming a diagram via the category tree fails after moving a diagram

- [BC-6754] - Empty categories can be expanded but can't be collapsed

- [BC-6855] – Item bar: decomposition is not highlighted, if only Variants are maintained

- [BC-7637] - Process flow is not correct when branch leads directly to an end event

- [BC-7693] - Using align option on labels which are part of node makes them not selectable and it will disappear after reload graph

- [BC-7986] - Can't update the text in annotations, if you leave it empty while creating

- [BC-7989] - In the Document view the document name is cut if it is long

- [BC-8307] - after deleting a user you get misinformed that something went wrong

- [BC-8424] - Domain-service does not generate stubs

- [BC-8611] - Category after depublication of diagrams stays in publication even if its empty

- [BC-8709] - After a user got the role changed via the user administration and then logs in, their former role will still be displayed in the UI (even if the former role has more permissions than the current one)

- [BC-8836] - Check in via context menu does not work when no item of the tree is opened

- [BC-8891] - Annotation's text cannot be set anymore when it got changed (connected, resized, moved)

- [BC-9046] - Matrix report displays entity id as object id whereas process warehouse displays occurrence id as object id, makes linking of the info impossible

- [BC-9049] - Users of groups set as author are unable to edit/delete the concerned diagrams

- [BC-9172] - Calendar attributes show in addition to the set date a fixed time of day from 2am

- [BC-9175] - As a reader, I can list all users and user details of my tenant

- [BC-9214] - [IE] There are icons from top menu bar in catalog that are not centered vertically

- [BC-9307] - Annotations lose text

- [BC-9311] - Entities with line break are not found in the catalogs replace form

- [BC-9312] - Entities with line break are not found in the suggestion list

- [BC-9321] - Print view ignores discarded changes

- [BC-9423] - Depublishing a company-wide set start diagram causes an incorrect start diagram tile on MyBIC

- [BC-9442] - Validation hub does not show unapproved catalog entries in occurrence attributes

- [BC-9586] - User search in administration only searches in users' email addresses

- [BC-9603] - Searching approved catalog entries is case sensitive

- [BC-9612] - Shared search link in emails gets cut by whitespace

- [BC-9618] - [IE] If the User imports a Method a Warning Toast appears even if the Method was imported in the Background

- [BC-9680] - Archive model comparison runs into time-out when archive content is too big

- [BC-9692] - Diagram is not openable and freezes client

- [BC-9750] - Profile content does not get updated when content language changes

- [BC-9757] - The entries of the workflow list are not correctly aligned when the icon of an entry is not displayed

- [BC-9771] - BPMN diagram from SAP Library cannot be imported

- [BC-9789] - Publication works even if Examiner User got removed

- [BC-9812] - if you refresh in a different view than the diagram view the current stage label in the sub tool bar is broken

- [BC-9846] - Editor and author still have "publish" button in the repository context menu in preview and publication stage

- [BC-9929] - Setting in Layout Assistant: Rename 'Number of Symbols' to 'Vertical Number of Symbols'

- [BC-9951] - [EDGE] After aborting the import of a method, the Client freezes until you right-click or reload the page

- [BC-10026] - Unexpected port setting of layout assistant

- [BC-10030] - Leaving an edited FAD by selecting another diagram in the explorer, there is no warning for losing the changes

- [BC-10031] - Search of user in governance attributes is too slow with ldap connected

- [BC-10067] - Diagram comparison does not have a scroll bar

- [BC-10072] - Kerberos token too big for http header and rejected by proxy

- [BC-10075] - Login not possible when using IE in compatible mode

- [BC-10129] - If a diagram has an assigned diagram as variants that is blocked by an access restriction for me I still see the UUID
- [BC-10134] - You can access a diagram although the repository has an access restriction
- [BC-10135] - Suggestion box for restricting repository access shows still suggestions from the catalog instead of directly from the user management
- [BC-10180] - User cannot login when he is a member of too many groups
- [BC-10192] - Enumeration of repository content of access restricted repository without permission
- [BC-10194] - Unauthorized deletion of document attachments
- [BC-10196] - Unauthorized user may import new diagrams
- [BC-10203] - Dates following German format on the tasks view are wrongly highlighted [Edge only]
- [BC-10209] - Cookie attributes transmitted with insecure connection
- [BC-10218] - Search for asterisk leads to wrong sorted entries
- [BC-10242] - If a workflow has several steps, the date in done list will be set to 1/1/70
- [BC-10246] - User with the role AUTHOR cannot edit his own catalog entry
- [BC-10292] - If a vertical pool resizes while modelling at the right edge, the wrong lane ist resized causing overlay symbols
- [BC-10335] - Reader can see diagrams of access restricted repositories
- [BC-10360] - Updated catalog items are marked as deleted after renaming in other browsers
- [BC-10361] - Download link for BPMN exports always point to the default host
- [BC-10362] - User list does not show all users if there are more users than fit on one page
- [BC-10396] - SVG view is broken
- [BC-10398] - If (after creating a text field) no text is added, it is not possible to add some text afterwards
- [BC-10400] - No effect when clicking on Activity chips in Profile view when they were shown in the Process Flow before. Can causes that diagram cannot be checked in anymore
- [BC-10403] - If I use facet and choose url nothing will be shown
- [BC-10404] - If I put description in activity or in diagram, I see wrong formatted text
- [BC-10425] - Search does not respect switch between content and alternative language
- [BC-10433] - History of examiner in done list gets overwritten by history of responsible
- [BC-10495] - Diagram Matrix is broken, if custom node symbol types get used
- [BC-10496] - Configuration causes that the layout assistant does not work
- [BC-10519] - READERs and REVIEWERs can access to public workspace data at search and catalog view
- [BC-10520] - Webclient needs to filter associations based on its visibility
- [BC-10529] - Miss spelling in enumeration of control measures (method)
- [BC-10539] - The visual-data is not loaded lazy and will therefore be loaded every time a diagram is accessed
- [BC-10542] - Search in workflow administration is case sensitive
- [BC-10583] - Wrong translation for buttons in create and rename user groups dialog in admin UI
- [BC-10589] - [Firefox only] Aborting the method download in admin UI freeze the whole application until reloading the page

- [BC-10618] - Typed keyword not deleted after selecting an item from the suggestions list

- [BC-10622] - Selected edges disappear in publication view

- [BC-10643] - If the governance users are not entered in "restricted access", they can't see the object in the catalog

- [BC-10644] - List of possible email template contexts in the workflow-service apidoc is outdated and partly wrong

- [BC-10659] - Re-Publish diagram fails if a node has been exchanged for the same entity

- [BC-10662] - MyBIC Start Diagram Tile shows svg preview and fallback image, moving fallback image out of tile

- [BC-10678] - When using the filter function in the matrix view, the page gets reloaded

- [BC-10681] - After BPMN Import a BIC Cloud BPMN Export, input and output relation are missing

- [BC-10682] - Wrong edge style for edges when importing a BPMN Export from BIC Cloud

- [BC-10683] - After BPMN import watermarks on pool/lanes are missing

- [BC-10685] - After BPMN import an attached event is missing

- [BC-10732] - Chips leading to local diagrams are empty after check-in

- [BC-10736] - Create translation for translation.missing message

- [BC-10739] - Unconnected layout edge after copy and paste

- [BC-10740] - Catalog Export fails if dates before 1970 are used

- [BC-10743] - Exception on every message from message broker

- [BC-10745] - Not completely uppercase stereotypes causes missing data in the catalog

- [BC-10746] – Catalog tree for Activity with assigned subcategory for catalog should not use its index for getting the label

- [BC-10756] - Shared favorites for groups with the same name (in different tenants) is not possible

- [BC-10857] - As a reader the explorer can sometimes contain content from the common stage

- [BC-9593, BC-9747, BC-10066, BC-10076, BC-9745, BC-10077] – Memory issues fixed

21.205 Version 6.0.2

The following bugs have been fixed in this release

- [BC-6928] - As reader I should be able to open a link to a diagram in common workspace and preview

- [BC-10063] - Links in e-mails are not redirected correctly

21.206 Version 6.0.1

New features

- Add Bulgarian to available content languages

The following bugs have been fixed in this release

- [BC-9136] - user-service does not send AMQP messages for imported users (by SAML or LDAP)

- [BC-9615] - Domain Data Archive Service runs into OutOfMemory errors when archives are too big

- [BC-9715] - Domain Data Transfer Service fails during export generation if the data contains big documents

- [BC-9769] - migration-service cannot be accessed withouth proxy

- [BC-9841] - Checkin crashes

- [BC-9917] - Index update is not possible due to missing port forward of auth-service

- [BC-9952] - Chips in the profile hub are wrongly formatted

- [BC-9958] - Rabbit management UI is not fully functional over proxy

- [BC-10017] - Big reports run out of memory

21.207 Version 6.0.0

New features

- BIC Cloud Design can now be started *even when you are offline*! You can continue your modeling work even when being disconnected from your BIC Cloud Design service.

- Your *MyBIC page* is there! We moved your company's start diagram to this view and in addition, you can find your local diagrams and diagram favorites there. You can also see search results of your favorite search queries in MyBIC allowing you to have a plenty of useful information at your fingertips.

- Setting a personal start diagram was replaced by MyBIC which is your new landing page.

- We introduced *group tasks* in the workflow administration. You can claim those tasks in the group tasks view in order to perform them. The task then appears in your tasks view and your initials are displayed at the group task letting other members know that you will perform it. You cannot perform the task? Just revoke the task and other group members can take them over.

- We optimized the *workflow filters*. You are now able to filter workflows for the state or type and you can search for specific workflows.

- Administrators can configure the *task reminder interval* and the *period for diagram resubmissions*.

- When the validity of a diagram is about to expire, the person responsible is informed by e-mail and *gets a task* with the options to extend the validity or depublish the diagram.

- You can include a second examiner stage in your publication workflows. This second stage must be activated in the method, then the workflow includes the stage and the second examiner has the same functionalities as *the first examiner*.

- You can give a *title to an attachment* in order to shorten the displayed name. You are also able to *edit the title* for URLs and uploaded documents.

- Editors can *replace catalog entries* which are used only in attributes.

- Catalog entries can initially be created and updated using an *Excel spreadsheet or CSV file*.

- *Archived versions of a catalog entry* can be accessed and downloaded in order to restore older versions of the catalog entry.

- Catalog entries with an *access restriction* are now hidden from users which are not member of the group entered in the access restriction.

- Administrators can *download the current method* applied to the productive system.

- All parts of the method can now be changed for a specific tenant using the new version of the method editor (available soon).

- The e-mail address of a user can be used in different tenants on the same application server.

- The *search was optimized* so that the last change date is given for each result. This allows you to identify changes easier. Do you want to have a change list of relevant catalog entries? You can easily search for e. g. a document of interest and mark the *search query as favorite*. The results appear now on your MyBIC page and you can monitor changes to the document there.

- The *expert search* is automatically activated when you use an asterisk in your query.

- The layout-assistant can be *permanently activated* so that your configured layout is applied as you use the mini symbol palette to place your modeling object anywhere on the modeling area. You can activate the permanent layout by holding CTRL and left-click on the "Layout" button. Please consider that a specific layout for your diagram must be set in advance by the administrator and that this feature is in a beta-state for now.

- We optimized the *matrix view* for diagrams! It appears in a new design (including intuitive filter icons) and respects the actual sequences of the process flow.

- We enhanced our *BPMN import capabilities* in order to import diagrams with collapsed pools, collapsed sub-processes and diagrams with vertical pools.

- Values of occurrence attributes and assignment attributes (except the attribute type "Decomposition") can be *placed at the modeling object* in the modeling area.

- The *descriptions in the attribute tab* were optimized so that just the first three lines of the text are displayed in read mode. You can see the full description when you click on "Show more".

- The repositories are now sorted alphabetically.

- The *set content and alternative languages* can be changed by clicking on the display next to the user name. This makes it easy to maintain *translations* in the catalog without leaving the catalog for language conversion.

- On-premises customers can now configure SSO with Kerberos, if certain pre-conditions are met.

The following bugs have been fixed in this release

- [BC-451] - You can't add shadows to symbols without background color

- [BC-457] - Alphabetically order of diagram creation list is not correct when content language is English and user tries to create a diagram in a category

- [BC-468] - When you change the distance of a shadow the template setting will get lost

- [BC-1276] - Custom attribute type names is not handled as delta

- [BC-1277] - Custom attribute type names can not have empty values

- [BC-3328] - After changing the name of a catalog entry it will not be sorted in the right alphabetic position in the catalog until reloading it

- [BC-3749] - Format > Text > Textfield > Form Resize does not work

- [BC-4417] - In certain pool constellations when you add a lane in the middle of the pool and then undo, some edges will not have their correct course

- [BC-4831] - Logos in templates are not positioned equally.

- [BC-5156] - Cannot customize NodeSymbolTypes
- [BC-5246] - The overlay did not disappear if you click on another button which triggers the overlay
- [BC-5267] - Even if you delete a diagram all symbols within the diagram remain displayed in the search results
- [BC-5276] - Bitmaps cannot be copied over browser windows.
- [BC-5369] - 'Place attribute at object' doesn't work for Application-Symbols in BPMN diagrams
- [BC-5430] - Catalog filter settings for several types get reduced to one type after a new catalog item has been added
- [BC-5608] - Check out diagrams via context menu sometimes leads to a white editor for (large?) diagrams.
- [BC-5635] - When I receive a mail from the favorite service, I want to get a direct link to the diagram
- [BC-5695] - Applications cannot be deleted via context menu from BPMN
- [BC-6024] - In publication workspace there is no button to close an allocation diagram
- [BC-6087] - Diagrams still have a check in option through the context menu in offline mode
- [BC-6104] - The option Open in catalog doesn't work with activities that contain Allocation Diagrams
- [BC-6165] - Users will be informed about modifications in favorite Diagrams not in their user language
- [BC-6228] - After open a diagram from search results, the diagram is not marked as active within the tree view
- [BC-6472] - It is not possible to change the font color in a free-form object.
- [BC-6815] - Validation is missing used entities with an own lifecycle that are not yet published
- [BC-6828] - Unable to cut/copy/delete application items
- [BC-6928] - Reader could get access to a diagram in common workspace or preview stage
- [BC-6972] - the context menu of categories and diagrams link up with each other
- [BC-7025] - layouter freezes after trying to change the position of the name of an object
- [BC-7135] - Link in favorite/workflow emails opens diagram in published stage, but explorer is in common stage
- [BC-7172] - Checkin not possible if name of an object contains more than 1024 characters
- [BC-7183] - Exception during workflow execution, caused by invalid associations in the domain model
- [BC-7362] - Diagram shows rectangular shapes within activities when opened in new window
- [BC-7466] - Comments are not saved if a user's email exceeds 40 characters
- [BC-7378] - As an author, my selection shall be retained when using the layout assistant
- [BC-7598] - if creating a lane, while using a content language which is not maintained in the method, the lane is can not display its label anymore
- [BC-7633] - Render-Service does not generate images exactly like displayed in webclient
- [BC-7694] - The Association-types between Roles and Activities are not correct translated
- [BC-7771] – Wrong edge style during bpmn import
- [BC-7778] - Show sidebar is not possible after full screen mode
- [BC-7832] - Empty space on left side appears during task list navigation
- [BC-7875] - Reload in the print view leads to the checkout button beeing displayed
- [BC-7876] - Lines for pages stay in the diagram after use of the print option

- [BC-7906] - Explorer will not be re-sorted when changing the content language.

- [BC-7935] - Error when deleting custom method

- [BC-7994] - Selected diagrams not highlighted in local workspace

- [BC-8046] - Assignment attributes are not replaced during the checkin if an assigned entity has changed in between checkout and checkin

- [BC-8262] - When I close a FAD, I want to have the same view as before when opening the FAD

- [BC-8303] - I get 'Something went wrong' if I go to 'Process execution' view (BPMN diagram type)

- [BC-8405] - User with Author role may delete diagrams without being author of those diagrams

- [BC-8428] - [EDGE] Allocation diagrams doesn't get shown in the left menu

- [BC-8460] - Error in layout assistant if a lane contains an unconnected node

- [BC-8466] – Generated passwords to not follow default password policy

- [BC-8482] - Publish button is available in context menu of repository in preview and publication stage

- [BC-8487] - Wrong positioning of diagram print-settings fields under IE

- [BC-8518] - Missing translation in toast of bpmn import

- [BC-8612] - it's possible to delete diagrams that you can't see due to an access restriction if you delete the category containing the diagrams

- [BC-8614] - For a checked out diagram, the first change of a text field attribute is not save-able

- [BC-8628] - Deleted Governance attribute reappears when changing the Content language (without saving)

- [BC-8629] - Governance suggestion list should also list users by name and not only by email

- [BC-8630] - Showing user groups in the suggestion list of a Governance attribute depends on correct case sensitivity

- [BC-8684] - Depublish button should not be available for catalog entries without an own responsible person

- [BC-8688] - The process warehouse cannot be created when the content language is not maintained in the method[BC-8706] - Trying to change an LDAP user in the Administration causes that this user to vanish in Keycloak[BC-8708] - User cannot use the client when they got assigned to not exactly one role

- [BC-8716] - The print scaling is not correctly applied from the settings to the print preview.

- [BC-8722] - Downloading reports does not work if an additional subdomain is used.

- [BC-8731] - All communication with the BIC Cloud server is now encrypted by SSL / https. / The login subsystem is also using the default https port 443, so no additional port must be opened for common use.

- [BC-8735] - Workflow steps are displayed twice in e-mail (depublication workflow)

- [BC-8791] - FAD is not displayed in explorer

- [BC-8893] - If I write complete username in any attribute field of 'Governance', so this user will be not found

- [BC-8905] - Updating a diagram via GRC apigateway fails due to version mismatch

- [BC-8906] - Missing port information in BICCloud documentation

- [BC-8925] - Catalog facets dont respect multi value fields

- [BC-8953] - The label of a pool has an offset when using vertical pools

- [BC-8963] - There are tooltips which should not be shown when hovering over hub headlines

- [BC-8964] - User name and email are wrong in favorite table, leading to notifications of the wrong user

- [BC-8968] - Missing space after comma for Governance attributes on Manual report header page
- [BC-8969] - The german diagram manual with assignments report continues with the numbering in two different chapters
- [BC-8970] - Headline at the beginning of a page of the attachments section in Manual report is incorrect
- [BC-8977] - Too long repository names and a deeper category structure occurs an unreachable context menu
- [BC-8978] - If the repository tree contains a structure of categories and diagrams multiple context menus are shown
- [BC-8979] - Layouting nodes in vertical pool does not work if the the modeling direction is configured to vertical
- [BC-9134] - Update of users by user-service overwrites username set by SAML and LDAP
- [BC-9135] - Suggestion list for users does not search by name of users
- [BC-9142] - Link to comment in email does not work
- [BC-9153] - Users with role "Author" can not use the suggestion list if a new entity would be created
- [BC-9237] - Layoutassistant does not handle configured satellite
- [BC-9241] - Catalog not working correctly if some specific languages are used
- [BC-9243] - The item bar is not shown for all diagrams and entities although they should be shown in the options
- [BC-9245] - Maximum size for upload should be 64 mb but is actually lower
- [BC-9247] - initiator (not admin role) cannot abort a workflow if a user group is set as examiner
- [BC-9371] - The title of the input field of the details in the catalog in publication and preview state are off
- [BC-9437] - If I try to search for an entity on second page, so I will not get the required entity
- [BC-9445] - Paperclip in profile view should not be cut due to long names
- [BC-9455] - If I comment the diagram or the activity within diagram, as author I will retrieve the wrong link to the diagram.
- [BC-9482] - Duplicate "task" in email templates
- [BC-9496] - IE: When I navigate to the Workflow tab in the Administration I only see a small part of the view and cannot use it properly
- [BC-9519] - If I import BPMN Diagram, so I can not see the name of lines between activities on UI
- [BC-9533] - Not admin users cannot check in a diagram if restricted access was set
- [BC-9548] - Authors are unable to start entity publication workflows
- [BC-9583] - If you follow a chip in the profile you open the attributes of the entity and not those of the node

21.208 Version 5.3.4

The following bugs have been fixed in this release

- [BC-8671] - Attachments to documents in "biccloud-document" are not working
- [BC-8812] - Links are not working correctly (single value)
- [BC-8828] - Editor autocomplete search does not use correct sort
- [BC-8829] - Using multi link input field leads couses issues for uploading documents

21.209 Version 5.3.3

The following bugs have been fixed in this release

- [BC-8625] - Migration for resubmission data in workflow fails in case of non-resolvable user groups

- [BC-8626] - Export from 5.3.1 fails during import to 5.3.1

21.210 Version 5.3.2

The following bugs have been fixed in this release

- [BC-8497] - Migration "generateResubmissionReminder" fails due to removed user table in user service

- [BC-8501] - Diagrams migrated from another environment are not viewable due to invalid uuid

21.211 Version 5.3.1

The following bugs have been fixed in this release

- [BC-8478] - Proxy does not start up due to duplicate route

21.212 Version 5.3.0

New features

- The *resubmission function* reminds the responsible person of the validity period. 30 days before the set "valid to" date expires, the responsible person is asked to check the diagram. The author(s) are also informed (in CC).

- Users are now reminded once a week of their *open tasks* in depublication workflows.

- *Examiners are now informed* about the rejection of a publication workflow.

- The *editorial release for the publication of catalog entries* is now available for corresponding user roles.

- Administrators and editors can start the *publication workflow on categories and repositories* for diagrams. A separate workflow is initiated for each diagram in the category or repository.

- Administrators can now monitor and manage workflows. A list of all workflows is available, which contains pending and finished workflows for diagrams and catalog entries (e.g. documents) and corresponding metadata. When workflows are running, administrators can see which user is currently assigned to an active workflow task, for example, to monitor the workflow progress. In addition, administrators can *delegate active tasks* to other users or abort a workflow. Further information on workflow administration and corresponding notifications *can be found here*.

- Workflow initiators are also allowed to monitor and manage their own workflow instances. In addition to the overview of the running workflow, the initiators can delegate active tasks or abort the workflow instance.

- When exporting, attached files are now considered and can of course *be imported again*. More over, the *uploaded files can be named* individually. This also applies to existing attachments: these no longer display the URL, but their original file name.

- *Users* or *user groups* can now be entered in assignment attributes (for example Author in Governance) without the need to create a person or organizational unit in the catalog. If a corresponding catalog entry already exists,

then the existing entry will be assigned. Otherwise, a catalog entry with data of the user or user group will be created.

- Users are warned when they *set an access restriction* for diagrams or repositories which would exclude them.

- You can now use *object chips for navigation*, for example, to open the details of the object.

- We have extended the standard method by the diagram type "Customer Journey Map (Beta)", so that you can model and analyze your customer experience with regard to your internal processes. Beta means that we will continue to develop this diagram type and look forward to your feedback!

- *The search has been improved* so that the recently changed results are weighted higher. In addition, the system attributes of search results are now displayed.

- The *task list* has been re-designed and provides more information.

- In administration area, the *options of catalog entries* have been reworked. The current configuration is now displayed directly.

- The layout assistant can now be configured in administration area so that you are able to specify the position of satellites on activities. In addition, you can define the number of satellites per row, distances, arrangement of ports, etc. How to configure the layout assistant *can be found here*.

- The use of the *layout assistant* has been improved. If the user chooses a pool or activity that contains modeling objects, the embedded objects are arranged by the layout assistant. If no modeling objects are embedded, the entire diagram is layouted.

- The default configuration of catalog entries in the publication stage has been changed. In this new configuration, applications, risks, controls, roles, documents and business objects are displayed in the publication catalog by default. How to change the default settings *can be found here*.

- Virtual folders with facets are now available in the catalog to structure the catalog entries. Thanks to the innovative technology, the same catalog entry can be present in several virtual folders at the same time, without being duplicated. How to configure the new *catalog in the administration area* or how to *use virtual folder productively* can be found in our online documentation. The catalog is now accessible via the menu bar, whereby all catalog functions (e.g. creation of entries, catalog export, etc.) are still available.

- The *password settings* are now secured by an e-mail. Passwords cannot be changed by a user from within the BIC Cloud any longer.

- When a user *changes his user role*, this change will be recognized for the next login. The user role can be changed again at any time.

- In projects, catalog entries can now be created initially via CSV import.

- Vertical pools/swimlanes (for example in BPMN or EPC) can be configured in the method.

- An optimized diagram view can be activated on request in read mode to achieve a minimum loading time.

The following bugs have been fixed in this release

- [BC-3330] - If you click on the comment marker of a symbol, the comments are not visible

- [BC-5714] - User should be informed that it should not be possible to import a diagram, if the same diagram is checked out by someone

- [BC-6020] - Email you get when you got a new Task is incorrect

- [BC-6025] - Toast for successful generation of an export for a repository incorrect

- [BC-6164] - Authors won't be informed in their user language about new comments

- [BC-6301] - Occurrences are shown to many times

- [BC-6349] - Leading "Groß" in user name breaks decoding

- [BC-6471] - Entities with CatalogState = 'NONE' are treated like entries with status 'SUGGESTED' in the validations hub

- [BC-6686] - Layout Assistant freezes

- [BC-6811] - Client creates invalid model data

- [BC-6826] - Occurrences from catalog items are not calculated correctly

- [BC-6850] - To many occurrences are displayed

- [BC-6990] - Link to online help is wrong in emails for favorites

- [BC-7004] - Warehouse Report throws NPE

- [BC-7026] - User search function does not work within the administration area

- [BC-7093] - Search favorites are marked when they are not selected

- [BC-7101] - Border of pools does not retain CI color

- [BC-7192] - Allocation diagrams a not shown in explorer and profile

- [BC-7235] - The profile is no longer updated after a single deselection.

- [BC-7262] - Justified print in publication dialog header

- [BC-7272] - Notification "Email successfully sent" appears even if you cancel the dialog for Password recovery

- [BC-7281] - the attribute description have a line break in alternativ language on checked in diagrams

- [BC-7560] - Error message after cancelling catalog reorganization dialog

- [BC-7600] - Governance attributes cannot be saved in the catalog details

- [BC-7641] - DiagramManual should list business objects as In-/outputs in ProcessOverview Chapter

- [BC-7652] - Maintained URL in AT_ATTACHMENT are not clickable in profile view of the corresponding object

- [BC-7688] - Profile of Business Objects not correct

- [BC-7720] - When returning after chip navigation to another profile in search, you are redirected to the attributes instead of profile

- [BC-7722] - Process warehouse is not executable certain formatting styles are applied on a node

- [BC-7729] - When a link attribute is configured as multilanguage and its value is displayed for the alternative content language, the link is not functional anymore

- [BC-7744] - Emails contains empty entity and diagram names if user and modelling languages are different

- [BC-7789] - When a default value for an enum attribute is set and this value gets changed, there are two values in the process warehouse report viewable

- [BC-7799] - Suggestion list for entities show duplicates on customer diagram

- [BC-7803] - Workflow task list "completed" is empty/contains only one "translation.missing" task

- [BC-7824] - Manuelly tiped in date values are not safed properly

- [BC-7877] - Focus of the editor is not adapted when a FZD diagram is opened

- [BC-7924] - Catalog: Process Warehouse cannot be executed in a language that is not maintained in the method.

- [BC-7970] - FZD overwrites contents of EPK

- [BC-7979] - Error during update from 5.1.4 to 5.2.2

- [BC-8019] - Search Facets are not translated correctly

- [BC-8051] - Objecttype ""Product"" is available in VCD

- [BC-8112] - Wrong triggers for checking model match on Public Cloud

- [BC-8238] - Wrong font is used for paging of manual report

- [BC-8315] - client can create commands which do not target to 'common' stage

- [BC-8317] - Delete local changes button deletes the whole diagram

- [BC-8319] - Prozess-Warehouse export of the Showcase repository fails

- [BC-8321] - In Process flow view the filter icon is there but not clickable (maybe it should be grayed out or not there instead)

21.213 Version 5.2.3

The following bugs have been fixed in this release

- [BC-7120] - As a user I want to have access to referenced attachments so that I can open the information directly from the chip

21.214 Version 5.2.2

The following bugs have been fixed in this release

- [BC-7543] - Entities having AssociationIds out of scope of the diagram are causing matrix view hang

21.215 Version 5.2.1

The following bugs have been fixed in this release

- [BC-6753] - hideSlowBrowserMessage does not disable yellow hint if a diagram is opened via a direct link

- [BC-7092] - Expert search is not stored when adding search to favorites

21.216 Version 5.2.0

New features

- The *process matrix report* now includes the diagram type and the category path of an entry. This gives you additional options to filter and analyse your data. In addition, the process matrix report now also contains the diagram ID and object ID of an entry for better identification of the entries and to be able to combine information of different reports.

- The *process warehouse report* now also contains the object ID in addition to the diagram ID of the entries.

- Additional output formats for the manual, the process matrix and the process cost simulation are now available. You can find information about the different output formats and their configuration *in this section*.

- Users will be reminded by e-mail about *open tasks* once a week until the task has been processed.

- The search has been improved! Next to the simple search the expert mode is now available. *Follow this link* for more information about the search.

- The accessibility has been improved.

The following bugs have been fixed in this release

- [BC-253] - When the browser window is too small then the catalog entries' type and name fields are not shown

- [BC-470] - When you refresh the page while a repository without diagrams is opened then another repository will be opened instead of the one without diagrams

- [BC-551] - Some symbols have the decomposition icons, although you can't add a decomposition for them

- [BC-567] - Time system attributes are missing seconds in English Browser language

- [BC-1303] - Incorrect error toast when trying to paste a cut category into its parent category

- [BC-1443] - Scrolling in the search page cancels the selection

- [BC-1574] - Errors in workflow logs during the startup

- [BC-2221] - Chrome: expiry dates are marked as obligatory attributes

- [BC-3629] - left alignment of the description does not match with other left aligned input fields, i.e. name

- [BC-3653] - The styled Description will be not displayed in the description part of each catalog entry

- [BC-4078] - 'Delete all comments' does not work for Local workspace

- [BC-5298] - By switching from a VCD-Diagram to Matrix view the process execution Icon will be Briefly displayed and then hide

- [BC-5365] - The Description Background-Color makes Links not clearly visible

- [BC-5607] - Time not displayed correctly in the workflow error e-mail

- [BC-5951] - Publishing catalog entries without governance attributes is not possible

- [BC-6028] - Wrong forwarding help button in admin of details

- [BC-6045] - Edit shape doesn't work for Activities that contain an Allocation Diagram

- [BC-6047] - The Option place attribute at object doesn't work with activities that contain an Allocation Diagram

- [BC-6084] - Search filter sidebar doesn't get shown when the sidebar is hidden in the main view

- [BC-6092] - Some reports caption is wrongly capitalized

- [BC-6199] - After creating a new Allocation diagram while the navigator is opened the navigator still shows the main diagram

- [BC-6279] - The reason for getting a warning-Toast during the publication is not specified in the Toast if the Responsible user doesn't exist

- [BC-6295] - After searching for users in the Administration it can be unclear if the search is still active and for what was searched for

- [BC-6296] - As a role other then administrator, I see a not useable "Import" menu item on the repository context menu

- [BC-6300] - In german language the report is named "Manual" instead of "Handbuch"

- [BC-6314] - Login is not possible if the email address is incorrectly case sensitive

- [BC-6326] - After publication of an empty diagram the diagram service will return it with outdated content

- [BC-6328] - In Task view the text within the circles is not placed in the center

- [BC-6407] - Wrong position for initials in task view

- [BC-6516] - Matrix Report is not completely in Spanish

- [BC-6532] - No error Toast if the publication for Catalog-entries is aborted

- [BC-6555] - Publishing of a catalog entry is possible even if necessary governance attributes are empty

- [BC-6690] - Error when discarding changes on a checked out diagram

- [BC-6695] - Entity workflows fail without error toast if the entity's name is empty in any of the participant's languages

- [BC-6698] - Categories do not expand in explorer when a favorite is being opened

- [BC-6804] - As an responsible Person, i am not able to see the attributes (diagrams and entities) within the publication stage

- [BC-6818] - No emails are sent when a comment is created

- [BC-6825] - It is not possible to use the context menu on activities when an allocation diagram is set for this activity

- [BC-6844] - Reader and reviewer can't tab to repository context menu

- [BC-6845] - If you click on the diagram view directly after checking in, you get a loading overlay that won't go away

- [BC-6886] - Explorer doesn't expand when you navigate to a diagram from the search results

21.217 Version 5.1.6

The following bugs have been fixed in this release

- [BC-6804] - As an responsible Person, i am not able to see the attributes (diagrams and entities) within the publication stage

- [BC-6813] - getReferencedAttributesPaths does not return correct attribute references

21.218 Version 5.1.5

The following bugs have been fixed in this release

- [BC-6702] - When I try to checkin and my token is not valid anymore (i.e. too old), my diagram gets flagged as failed to checkin and I cannot checkin again

- [BC-6703] - Check-In not possible after copying specific objects in the diagram

- [BC-6706] - If User copy and paste two or more nodes of the same entity which is not a catalog item, it is not possible to check in

- [BC-6749] - Double click on nodes does not work for source/target attributes

- [BC-6757] - If you click on the diagram view button when already on the diagram view, you get a loading overlay that won't go away

21.219 Version 5.1.4

The following bugs have been fixed in this release

- [BC-6554] - No archives are generated for diagrams which get indirectly changed through entities updated within a diagram publication

21.220 Version 5.1.3

The following bugs have been fixed in this release

- [BC-6288] - If Scope is maintained alongside with a decomposition, you get a context menu on double click with one entry

- [BC-6444] - Executing reports on categories leads to an error or, if a report was previously executed on a diagram, returns the report of this diagram

- [BC-6451] - Matrix report never includes sub categories if it is executed on category

21.221 Version 5.1.2

The following bugs have been fixed in this release

- [BC-6107] - Performance of requesting specific diagrams seems to get slower the more database content is available

21.222 Version 5.1.1

The following bugs have been fixed in this release

- [BC-6251] - Migration of archive does not work for old data (before March 2018)

21.223 Version 5.1.0

New features

- BIC Cloud Design speaks Spanish now. The user interface, e-mails, reports and method are also available in Spanish. Just the online help for Spanish-speaking users remains in English for now.

- Administrators can configure the respective *archive* for Public Workspace, Preview and Publication now. Archives can be activated and deactivated for each area and a retention period can also be configured for each single area. This enables you to set a suitable period for each area to retrieve the diagram versions.

- The archive is now sorted by descending date, so you will always find the latest version as the first entry. The *current version* of the respective area is no longer displayed in the archive.

- Catalog entries can be *published separately from diagrams* and are managed through their own approval process (analogous to diagrams). For example, you can control documents by your own responsible person. If a diagram is published in which a catalog entry with its own responsible person is used, this catalog entry must be released separately.

- Reports can be easily configured in the *administration area*. Beyond specifying the displayed name of the report (offered in the application), you are also able to set diagram types and user roles for which specific reports are available. You are also able to set the preferred file format of the reports, namely a Word document or a PDF.

- The application displays details about selected diagrams or objects, for example the attributes or the profile. You can define the set of displayed information which you want to provide. You can also disable displaying attributes to the readers in the Publication. You'll find the configuration interface in the *administration area*.

- The *Enter key* performs several functions when modeling diagrams from now on. You can end the edit mode instead of creating a line break by pressing the Enter key. Anyway, you can still force a line break if the automatic break is not sufficient to you. In order to achieve this behavior, press the Alt+Enter keys in the same way analogous to Excel. Further, we use Ctrl+Enter keys now to create the first symbol from the mini-symbol palette automatically. In this manner you can model even faster without using the mouse.

- The explorer on the left side has been redesigned! The design is more lean now, because we moved the *task list* to the main menu. Additionally, the design of categories and diagrams maintained in the explorer is even more clearly. If you want to reset your selection, you can simply click on the repository and select the whole repository. For instance, if you want to start the process warehouse report for the whole repository.

- The *comparison mode for diagrams* is an excellent way to compare two diagram versions. The comparison mode shows in a clear manner which versions are currently being compared. It also takes into account whether diagram attributes themselves have been changed.

- The diagram *validation* is also available in read mode, in addition to the write mode.

- You can centrally set the headers and footers for PDF within the *administration area*, which is the valid for the print preview. You are able to select diagram attributes, your logo (if uploaded to BIC Cloud Design) or the page number as placeholders for the headers and footers.

- Authors can make *presets for the print preview* in the new formatting section of the diagram. This provides the users with ideal pre-settings for printing, but they are still able to adjust the output individually.

- Embedded images (raster graphics) in the *print preview* have been improved! Previously, these were outputs in the report, but were missing in the vector-based PDF output of the print preview.

- You can navigate directly from a diagram *to the corresponding catalog entry* with a single click. For instance, if you want to edit the object in the catalog (assuming you got the appropriate rights to do so).

- You can also add modelling objects to the catalog *as suggestion*, which normally exist just in the diagram (such as activities).

- You can also *remove suggestions* from the catalog without replacing their occurrences in the diagram.

- As the author you can now create and edit catalog suggestions in the catalog. Accepted suggestions can still be edited by editors only. However, if you are set as author in the attributes of the respective catalogue entry, you can still edit it.

- As an editor you can change catalog entries back to the previous state of a catalog suggestion. This procedure allows you to redefine a decision on the catalog entry. For example, you can remove an entry from the catalog without being forced to replace the occurrence in the diagram.

- As an editor you can accept modeling objects in a diagram, so that the diagram can be published. You can *accept suggestions directly in the validation* mode in the diagram.

- Confirmed catalog entries are not overwritten when *importing diagrams*, instead new catalog suggestions are generated. In version 5.1, these proposals are only created if the content of catalog entries differ in the target system.

- Users created via SSO are marked in the user profile. *SSO users* cannot reset and change their password.

- Rules defined with OCL for modeling are now checked not only during modeling, but also afterwards. Rule violations are displayed in the *validation* mode and can be defined in the method with appropriate notes for the modeler.

- For ease of navigation, the Explorer only displays diagrams that you have access to.

- The *Process Warehouse* report (former called Excel export) is now available as a download in the menu bar and no longer in the catalog list.

- The validity period of a diagram is automatically set during publication, if no date is defined. The *start date* is set to the current date, making the diagram valid immediately.

- Empty categories are automatically deleted, if for instance the de-publication of diagrams has emptied the category. If you already have such data in the publication, they will be removed with the next publication after the update to version 5.1.

- Authors can now create *allocation diagrams for activities* to structure the process in a clear manner. Allocation diagrams allow you to swap modeling objects from the actual process flow to display them in allocation diagrams. These allocation diagrams are displayed in Explorer if the respective diagram is opened. Alternative representations of the process, such as the matrix, process execution, or reports, still contain the full information of the diagram.

The following bugs have been fixed in this release

- [BC-962] - If you create a category inside of category the category tree will not open to show the new category

- [BC-2128] - Attribute sorting for attributes from groups is not correct in the report

- [BC-2207] - The styling of email templates is not applied (at least in outlook)

- [BC-2222] - English: only the first word should be capitalized

- [BC-2298] - Context menu of objects should depend on the ui language

- [BC-2459] - Form of address is set fixed to the responible's name in the email template, although also the initiator gets the same mail

- [BC-5015] - PDF print performs wrong scaling for A5 and diagrams with large width

- [BC-5098] - When printing a Pool of specific length with settings Landscape, A3 and one page, the font is wrongly scaled

- [BC-5212] - Some tooltips are missing in the explorer

- [BC-5297] - Overlay "Loading diagram…" is missing when you swith the view from matrix or process execution to the diagram view

- [BC-5302] - Hard coded uri in 'isValidJwtToken'

- [BC-5308] - Suggestion list for Roles does not filter correct

- [BC-5363] - IE11: By Diagram Export if the correspondent diagram is opened process toast remains active even if the export is finished

- [BC-5366] - Attribute hub on entity selection disappear from search page and the return arrow isn't needed here

- [BC-5379] - Animation and coloring is not the same in all hubs

- [BC-5423] - It's not possible create a new node pressing ctrl + enter (or number) when the in place edit is active

- [BC-5459] - Date picker for search facettes does only allow available values

- [BC-5464] - Reports have wrong file details entered

- [BC-5480] - After using the layouter, data store symbols will not be shown correctly

- [BC-5486] - Unaccepted catalog entries will be shown with black color in suggestion lists instead of red color

- [BC-5516] - When you check in a diagram while in local workspace and check it out directly in common workspace, the diagram is not loaded

- [BC-5606] - Assignments are displayed as "not available" in the menu after double clicking on the node

- [BC-5620] - Undo/redo produces floating edge and sometimes freezes the editor

- [BC-5634] - Mails in favorite service should not send the GBTEC signature

- [BC-5643] - Render service can't open diagrams with char-return combinations

- [BC-5649] - When the stage is set as local workspace there is an additional line in the repository's context menu

- [BC-5741] - Error when cutting & pasting a new diagram into a new category

- [BC-5752] - Symbols with four rows of text displays only three rows

- [BC-5753] - By changing an approved catalog item it is possible to make a new suggestion for not allowed items

- [BC-5758] - Search field in help is not working properly

- [BC-5772] - Change the repository with an unsaved diagram didn't discard changes

- [BC-5781] - Wrong focus after opening a diagram

- [BC-5784] - Discard local changes on an unlocked diagram didn't discard changes and you can edit the diagram again

- [BC-5815] - Matrix view shows responsibilities in content language

- [BC-5819] - Repository context menu button is not visible when you use the high contrast theme

- [BC-5821] - When high constrast theme is activated the left menu headers switch back to the regular colour when you expand them

- [BC-5824] - Wrong tooltips on the 'Expand/Collapse' buttons in the left menu

- [BC-5828] - Process warehouse in catalog often fails and shows some additional wrong toasts

- [BC-5835] - Additional line in attribute view for search details

- [BC-5838] - Editing a catalog item will reload the page

- [BC-5840] - Empty archive if you select a change from the comparing view and return to the archiv page

- [BC-5842] - Entity for diagram governance attribute is considered in RACI matrix

- [BC-5845] - Approval step fails, but is listed as done task after reloading the page

- [BC-5943] - Only first element of multi value fields is shown on diagram/entity profile

- [BC-5945] - Wrong language in BPMN export

- [BC-5949] - Locale detection within SSO fails due to case sensitivity

- [BC-5952] - Repository name is not visible in IE11

- [BC-5961] - Fix not visible environment variable for curator cron job

- [BC-5973] - Other stages can not be compared with local workspace

- [BC-5974] - Missing overlay "loading diagram . . . " if you switch between diagrams or process flow and diagram view

- [BC-5983] - Wrong forwarding for help buttons in admin area

- [BC-5987] - Tabbing through diagrams and categories only highlights the collapse and expand button

- [BC-6008] - Style issues on diagram validation hub

- [BC-6009] - If stage hub is too narrow, the stages labels move the stage action buttons

- [BC-6010] - Issues on diagram/entity profile hub

- [BC-6011] - On public and preview comparison with archived diagrams, there should be a timestamp

- [BC-6012] - IE11 - Scrolling is not possible for profile view

- [BC-6049] - Adding images (png/jpeg/bmp) to diagrams does not work

- [BC-6051] - Memory leak in 'render-service' for nodeCoordinates

- [BC-6091] - Emails could not be sent due to a SMTPSendFailedException (530 5.7.1 Client was not authenticated)

- [BC-6103] - New user (user who has not choosen a repository yet) should get redirected to the start diagrams

- [BC-6106] - Pagination is messed up when you add new users to a group in the administration area

- [BC-6111] - "Change to suggestion" menu item in publication should not be visible

- [BC-6113] - "Create new Diagram" animations for ERD, CMMN and BPMN Conversation does not match the style of the other tiles

- [BC-6127] - Report service restarts when executing a "big" report

- [BC-6144] - Archive's storage period values are always in english (not ui language)

- [BC-6151] - Load diagram message persists at exit of the print view

- [BC-6171] - The email body for comments is in the user language of the commenting person, not of the i.e. author

- [BC-6174] - Emails to new comments are sometimes not sent to one or more participants

- [BC-6189] - Repository can't be changed if a start diagram is set through the favorites

- [BC-5340] - Use a debounce for the scale factor in print preview for better user experience

- [BC-5694] - Remove unnecessary cross join in edge trigger for better performance

- [BC-5738] - Adjust upload limits for repository import

- [BC-5852] - Update Quick Guide to newest version

- [BC-5954] - Update JSG to latest version in render service

21.224 Version 5.0.5

The following bugs have been fixed in this release

- [BC-4594] - Diagram Manual report contains two names

21.225 Version 5.0.4

The following bugs have been fixed in this release

- [BC-5619] - Cannot load diagram after undo redo with overlapping pools or lane in lane
- [BC-5803] - Check-in and -out reloads the diagram

21.226 Version 5.0.3

The following bugs have been fixed in this release

- [BC-5433] - The performance when inserting or checking in a diagram decreases

21.227 Version 5.0.2

The following bugs have been fixed in this release

- [BC-5175] - Incorrect state of human tasks lead to a PermissionDeniedException
- [BC-5176] - An error email cannot be sent during diagram publication because the cause of the problem could not be converted into an email body
- [BC-5179] - NullPointerException while requesting the tasks of a specific workflow instance
- [BC-5312] - If you check a diagram out, not the last local version will be opened
- [BC-5424] - An export including categories could contain data from concurrently executed exports
- [BC-5446] - Can't open diagrams with char-return combinations, leading to an error message

21.228 Version 5.0.1

The following bugs have been fixed in this release

- [BC-5253] - Deleted local diagram visible
- [BC-5271] - Checkin and out via context menu produces uncomplete checkin process

21.229 Version 5.0.0

New features

- The *interactive process execution* makes it possible to work with processes - completely detached from graphical modeling notations! Depending on decisions, the process flow can be brought into tabular form with a focus on pure execution of tasks.
    - Initially, maintained probabilities are used for the path selection and the user can interactively change the selection.
    - In this view, the new activity profile helps you to get an overview of the relevant information
- The *Layout Assistant* is available for the diagram types EPC and BPMN Collaboration! It positions the satellites of an activity in corresponding quadrants at the top right, bottom right, top left, bottom left:

- The choice of the quadrant is based on the coarse positioning of the user

- The sequence flow is also straightened as long as the sequence is largely modeled in a corresponding line

- Connection ports of satellites are corrected, but the ports of sequence connections are not changed

- The mini symbol palette now has a new *quick modeling function* that positions the following symbols horizontally (BPMN) or vertically (EPC) by one click and connects them to the previous object

  - Depending on the previous modeling direction, the system decides whether the new symbol is positioned horizontally or vertically next to the previous symbol

- Filter symbols for better readability of the diagram: the new *filter bar* allows you to hide symbol types in the diagram (transparently displayed) and in the matrix

  - In the diagram, the user can thus focus on the essential desired aspects. Edges connected to the filtered symbols are also provided with a transparency

  - *Filtering of the matrix view* now also takes place in the filter tab. The columns in the table can be hidden by setting the cross

- The *freeform palette* is now generated dynamically depending on the method: the new freeform object can have several symbols, can be maintained in several languages and can be created and maintained in the catalog:

  - The old freeform objects (free text, rectangles, circles, etc.) remain in your existing data and are not converted to the new freeform object - the new properties only apply to newly created freeform objects.

  - If the method does not allow the freeform object in the context of a diagram, it is also not available in the symbol palette

- The search can be *configured by the administrator*:

  - The possible and available search facets can be set

  - The search can now also filter for date and selection field attributes

- *No more publishing with unaccepted catalog suggestions*: with the help of this new rule, the publication stage is kept "clean" and the quality assurance of the respective master data must take place before the publication

- The *predated publication* is available: the system does not publish the released diagrams until the "Valid from" date (Central European Time), if the corresponding date has been maintained. If no "Valid from" date is maintained, it will continue to be published immediately after successful completion of the publication

- The former attribute bar is now the new detail bar: a lot of important information is summarized and made available there

  - In addition to *attributes*, *occurrences of symbols* can be analyzed

  - The profile has been moved here

- In addition to diagram information, the *profile* now also displays corresponding information for the selected activity

- The OCL (Object Constraint Language) is supported on the method side and is also used for validating the model: this allows you to set various modeling restrictions that help users to design valid diagrams. This is for example used in BPMN Collaboration diagrams to prevent invalid message flows

- The *BPMN import* is now also available for BPMN export: the data exchange format according to OMG (Object Management Group) specifications can now also be imported into the BIC Cloud to generate corresponding diagrams

- The new diagram type "Entity-Relationship-Diagram" is available

- The Profile report is only available as part of customizing

- For better readability, a *high contrast scheme* is available and can be activated via the user profile

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The following bugs have been fixed in this release

- [BC-236] - The matrix report is missing the translations for the output stereotypes if the choosen language differs from German or English

- [BC-464] - If activities as catalogitems are part of a pool (of type role), the association between these two is missing in the matrix view

- [BC-492] - The sequence of attributes in the catalog export depends on the entries' order

- [BC-508] - The order of analysis attributes in the catalog export does not match the frontend order

- [BC-564] - No readable values in the Matrix Report of diagrams and catalog if the main language isn't German

- [BC-2206] - Graphics in reports are not displayed correctly (cut off edges)

- [BC-2267] - When you publish a diagram and the author has no E-Mail adress, the initiator gets an error E-Mail

- [BC-2293] - When you want to publish a diagram with opened 'Rework' dialogue and the comment field is empty the publication will not be started

- [BC-3147] - Wrong text layout in dialog for editorial change

- [BC-3415] - Suggestion list for entities in inplace editing does not find substrings

- [BC-3468] - The panel for changing colors is not correct framed

- [BC-3731] - After importing a local diagram, new checked-in changes are saved in the old diagram in another repository

- [BC-3751] - In process cost analysis report the probability decimal places are neglected

- [BC-3775] - Comments don't work on entities without name

- [BC-3814] - When a favorite has a too long name, it is not possible to open the context menu

- [BC-3815] - Filling with gradient looks weird, also you can not set another fill start colour

- [BC-3816] - Authors and Readers have options to edit or delete comments (but changes of them will not be saved)

- [BC-3820] - The more you extend something in the explorer the more its height will increase and overlap with the logo

- [BC-3825] - When you depublish a diagram it will also vanish from the list in the explorer when you are not in the Publication stage

- [BC-3856] - Object loses connection to pool after reattaching it

- [BC-3862] - If you rename a repository, the new name will not appear in the repository selection until you reload the page

- [BC-3863] - When you check out a diagram and remove its local version then the context menu of the diagram in Public Workspace still has an active Check In menu item

- [BC-3898] - diagram attributes are broken after copy and paste symbols

- [BC-3949] - After you Check In a diagram in fullscreen mode and use the toolbar on top, you cannot leave full screen mode anymore

- [BC-4102] - Make skew time configurable for SAML

- [BC-4147] - Missing options in symbol's context menu when no symbol was selected before

- [BC-4160] - If you input some Analysis Parameter with (up & down input-buttons) that's will be not detected as a change

- [BC-4222] - BPMN import fails with participants without processes

- [BC-4224] - Email value of a Person can not be removed

- [BC-4229] - Reorganization dialog information is not up to date

- [BC-4342] - Check in a model in offline modus does not show an error message

- [BC-4384] - Suggestion list of governance attributes of the diagram disappears quickly

- [BC-4418] - Back navigation from the administration area does not redirect directly to diagram editor

- [BC-4419] - Add User Group Function does not show new user group directly in list

- [BC-4435] - Order of attributes in process warehouse export is not the same as in the cloud

- [BC-4438] - If you navigate from a diagram in publication version to the catalog, the entries can not be edited

- [BC-4439] - The versions tab does not update preview if the diagram is not published

- [BC-4478] - Unnecessary Connection attempts by Winston Logger

- [BC-4483] - Sometimes a wrong context menu appears by clicking on an object

- [BC-4501] - While a diagram is checked out when you hide the sidebar the diagram will be stretched until you select something

- [BC-4518] - Changing the repository name doesn't work when content language is not German

- [BC-4524] - When you double click on a symbol and then click anywhere in the canvas the diagram's attributes will not be shown

- [BC-4529] - When you right-click on empty space in the canvas while an object is selected the context menu will refer to the selected object

- [BC-4532] - When navigating from occurrences to diagram, object is selected automatically

- [BC-4535] - Edit shape does not work for edges

- [BC-4536] - You can not change the path of a selected edge

- [BC-4537] - While hovering over an edge the yellow points will not be shown

- [BC-4541] - Showing Attribute symbols can not be activated or deactivated

- [BC-4542] - If you rename a Repository the new name will be not assigned

- [BC-4544] - No selection from catalog suggestion list for symbol possible

- [BC-4545] - When a selection contains more than one object they can not be transformed

- [BC-4546] - Keywords disappear in the attributes after being created

- [BC-4573] - Head and footer are not displayed correct on every page after downloading pdf/jpeg/svg via print preview

- [BC-4601] - DefaultValue for an enum attribute type leads to erronous display of this attribute type in attribute view of the webclient

- [BC-4633] - Suggestions are displayed on top of the input field

- [BC-4665] - "Favorite was changed" email does not respect user language, seems to be always german

- [BC-4668] - Its not possible to delete a user which is part of a user group

- [BC-4674] - Process Warehouse report shows wrong notifications in gray toast

- [BC-4675] - In German UI language the text about renaming a repository in the repositroy properties is not shown completely

- [BC-4726] - After double clicking on an edge the diagram attributes will not be shown until you open the attributes of another object

- [BC-4728] - Linked texts are not displayed in the description in Catalog

- [BC-4743] - The Process warehouse button should work even if no Category or diagram was selected

- [BC-4745] - Process warehouse report on a category has an additional empty column at the beginning

- [BC-4761] - In the catalog view it is not possible to toggle the "suggested filter" when the list is empty

- [BC-4816] - The suggestion list of the governance attributes shows only exact matches of the beginning characters

- [BC-4821] - Adding/Removing free space into a diagram does not work

- [BC-4833] - Toast when checking in after session expired shows wrong error text

- [BC-4834] - Toast shows wrong error text when checkin is not possible ("Data could not be saved")

- [BC-4913] - After editing attributes and check in these changes, they are not correctly displayed if you switch the content language back and forth

- [BC-4939] - It is not possible to select the start color for gradient fill in the internet explorer

- [BC-4956] - Empty symbol palette is shown, forcing the user to manually switch to free form

- [BC-4957] - Default values of entites are set in more than the content language

- [BC-4969] - Reset of date facette in the search is translated into German as "klar" instead of "zurücksetzen"

- [BC-4973] - Repositories with no name (translation missing) cannot be renamed

- [BC-4979] - Titles, subtitles and buttons of editor hub should have a 54% transparency

- [BC-4980] - Some editorHub tabs don't have enter animation

- [BC-4987] - If there is no suggested items in the catalog the Button "only show suggested items" is just once clickable

- [BC-4988] - In the manual and manual with assignments report, page is misspelled as pagge

- [BC-4998] - RACI Matrix does not update if the modeler changes the diagram

- [BC-5000] - If the message connection is used only once, the raci matrix is broken

- [BC-5004] - Opening a warehouse report can lead to an error about its content

- [BC-5007] - Diagram which is not checked in will change state to checked in automatically after changing from local workspace to the public workspace

- [BC-5014] - Description field of diagram profile should be shown as the same way as entity profile

- [BC-5017] - You can't switch edge ports if the edge is marked

- [BC-5018] - If the UI language is in german in administration i'm not able to set catalog suggestions

- [BC-5019] - In the Administration area some buttons are not placed correctly

- [BC-5046] - DE: rename "BPMN Importieren" to "BPMN importieren"

- [BC-5055] - After deleting a model its graphic view is still visible

- [BC-5056] - Discard local changes doesn't reload the diagram view

- [BC-5073] - User gets no Toast for process warehouse report execution

- [BC-5085] - Success toast for creating a diagram only appears when you create it through the start page

- [BC-5096] - Author gets "Data could not be saved successfully" Toast if he tries to check-out a diagram he is not author of

- [BC-5097] - Delete a catalog entry and then reorganize throws an empty dialog window

- [BC-5107] - Some catalog icons seem to be shown incorrectly in the explorer and catalog view

- [BC-5111] - Checkboxes of the matrix's filter hub should have a cross instead of a tick

- [BC-5120] - The repository's context menu has unnecessary lines at the bottom when you are not logged in as an Administrator

- [BC-5122] - You cannot copy elements from a diagramm to an other if the diagramm is checked in

- [BC-5124] - Catalog export fails if entities contain attribute types within custom attribute groups

- [BC-5128] - Inconsistency in the report success toast for Catalog Excel Report and Warehouse Report

- [BC-5140] - If the validation dialog is triggered, you can't check in, even when you remove the causing symbol

- [BC-5146] - Rename menu items of "Matrixansicht"

- [BC-5155] - If I try to rename an edge within an imported BPMN diagram the canvas freezes

- [BC-5162] - Validation errors are not marked by clicking on a list entry

- [BC-5166] - Two different size icons on some attributes fields labels

- [BC-5167] - Progress bar is not gone when press ESC

- [BC-5191] - Entries in profile view should be open on default

21.230 Version 4.1.4

New features

- If you no longer lock a diagram from your local workspace in the public workspace, you will receive a message after loading the diagram.

- If the last checkin of the loaded diagram in the local workspace has not been completed properly, you will be alerted to it.

The following bugs have been fixed in this release

- [BC-5124] - Catalog export fails if entities contain attribute types within custom attribute groups

21.231 Version 4.1.3

The following bugs have been fixed in this release

- [BC-4750] - The publication of a diagram fails because the Report Service cannot serialize a transaction during report execution

- [BC-4785] - A workflow cannot be started because the SCOPE attribute contains organization units without an identifier

- [BC-4788] - A publish diagram workflow results in an error because the 'send diagram published' step tries to send an e-mail with a 'null' cc address

- [BC-4789] - Cannot send an error email during the depublication workflow due to passing 'null' as a locale

- [BC-4803] - Search is not working for hyphens and spaces

- [BC-4847] - If the diagram has no name filled out in the user prefered language, sending an email to that user results in an error

- [BC-4851] - Some use cases inside the workflow execution will result in unexpected behavior if hollow entities are used as governance attributes

- [BC-4899] - Deleting a document link may not delete the document

21.232 Version 4.1.2

The following bugs have been fixed in this release

- [BC-4503] - You can not open the attribute of edges with labels after a diagram was checked in

- [BC-4631] - On multiple import, graphitems of edges are not adjusted

- [BC-4670] - For some diagrams, the application freezes in copy overlay

- [BC-4676] - Edge stereotype missing and no attributes available

- [BC-4817] - Services may restart due to memory restrictions

21.233 Version 4.1.1

The following bug has been fixed in this release

- [BC-4557] - Search does not allow specification of terms without wildcard

21.234 Version 4.1.0

New features

- *Watermarks of pools and lanes* in BPMN diagrams are no longer displayed centered initially when placing them. Instead, they are only visible from a certain pool width. Furthermore, the initial watermarks are not in the center of the pool, but at its upper edge.

- Administrators can *restrict access to a repository* in the same way as diagrams

- Administrators can *allow and prevent catalog suggestions* for individual object types. This allows *validation* during modeling and automatically validation when checking in changes to diagrams.

- Both the successful start of a *publication workflow* and the failure of the start are notified in the application.

- The *export "Process warehouse"* is now available for diagrams and categories

- A *new workflow can only be started* if no (de-)publication is already running for the affected diagram.

- Users can also display the *RACI matrix* for process overviews (VCD)

- The use of a non suitable browser is signaled by a notification in the application

- *Occurrences of an entity* can now be displayed in the attributes tab

- Diagrams can now be saved in the *print preview* as SVG, PNG and JPEG files in addition to the PDF format

- *Tasks* display comments from users of previous workflow steps and can be edited directly on the task card without navigating to the diagram

- A workflow can now be *ended* in the outstanding task card of governance participants

- *Emails* sent to governance participants during the workflow allow users to navigate directly to their *task list*

- The *manual* has been modernized. Next to the new layout, the additional representation of responsibilities in the process creates a further clear analysis option.

- The *manual with assignments* is now available for process overviews (VCD) and individual processes, such as BPMN and EPC diagrams.

- [BC-4165] - Individual reports can be selected and deactivated in customizing

The following bugs have been fixed in this release

- [BC-1869] - Explorer in the local workspace does not update when diagram is renamed and saved

- [BC-2216] - Diagram resolution too low for large diagrams

- [BC-2566] - Labels in graphics (from Reports, i.e. manual report) are misplaced

- [BC-2690] - In the navigator the cursor is very imprecise when you want to change the view's size

- [BC-3865] - RACI view is not available for VCD diagrams

- [BC-3867] - If you change all 3 Colors only Logo background Color is applied

- [BC-3899] - If you open the print preview while the RACI Matrix is open, there are no pages in the print view

- [BC-3959] - If a report fails, render service goes out of memory and instance breaks down

- [BC-3961] - Save button seems to be placed too much on the right in User window

- [BC-3967] - Zoombar not visible in stages preview und published

- [BC-4100] - Occurrence attributes are not displayed in Matrix- or Profile-view

- [BC-4103] - In search diagram attributes are not shown

- [BC-4105] - Required Feld asterisk (*) is missing

- [BC-4107] - Diagram can not be published with multiple examiners

- [BC-4130] - Indication error catalog description

- [BC-4131] - SuggestionList for Assignments does not filter correct

- [BC-4132] - Catalog is not realoding when stage has been changed

- [BC-4213] - If a tenant only uses SSO as login, no websocket namespace is created for this tenant.

- [BC-4219] - user cannot import into root category

- [BC-4220] - You'll get an error email during publishing a diagram when an Organization unit is set as an Author

- [BC-4244] - successful import toast of diagram and category does not appear

- [BC-4278] - Help button should be an icon button as the other buttons in administration area

- [BC-4338] - Firefox wrong position menus on graph

- [BC-4340] - Catalog Search Excel Export contains all entries not only the filtered entries

- [BC-4343] - Password validation on client side does not allow various special chars

- [BC-4350] - It is possible to rename a user group to a name of an existing group

- [BC-4351] - The description for search results is not shown sometimes

- [BC-4354] - Entity Occurrences not updated when changes the selection

- [BC-4355] - Select an occurrence does not select the node on the diagram

- [BC-4356] - Matrix filters are not are not correctly displayed

- [BC-4360] - Webclient redirects to /login instead of / which leads to problems when using SSO

- [BC-4408] - Scrolling down and loading in the search will deselect the previously selected result

- [BC-4434] - Help button highlighting and position

21.235 Version 4.0.2

The following bug has been fixed in this release

- [BC-3965] - As a user, I want to receive personalized emails

21.236 Version 4.0.1

The following bugs have been fixed in this release

- [BC-3789] - Make maxAuthenticationAge configurable

- [BC-3838] - When you write a new comment, the responsible person does not receive an e-mail

- [BC-3900] - Opening of diagrams fail when AttributedTextNodes do not have a formula set

- [BC-3906] - Auth Service 1.8.0 release does not contain UpdateUserModel

- [BC-3910] - Attributes are not persisted properly when changing diagrams

- [BC-3912] - Name labels of VCD activities appear at a wrong position

21.237 Version 4.0.0

New features

- *Additional textattributes* for objects in the editor

- *Export* and *import* of diagrams in BIC Format

- *Export BPMN diagrams* as BPMN standard

- *Copy*, *save* and share configured search requests or mark them as *favorite*

- The *search* is now able to interpret file contents and therefore makes it possible to search for content in these formats: PDF, DOC, DOCX, XLS, XLSX, PPT, PPTX

- Use of *implicit asterisks for searching* to improve the quality of the results

- Have a view on details by clicking on an object's attribute chips. For example in the *attribute bar*, *RACI matrix* and in the *profile view*.

- Sytem attributes have become part of the *catalog export*

- Getting automatically in the editing mode after *placing a new object* in the editor, enables a more efficient modeling

- *Customization of the method* by the administrators

- *Local occurrences of the same type* will now be suggested while modeling an object

- All comments within a certain context are *deletable*

- Assigning an organizational unit as author of a diagram gives all members of that unit the permission to write on the diagram

- Set organizational units as examiner

- The user-specific start diagram is deletable now

- Changing a *favorite diagram* through a catalog entry leads to a notification

- Displaying names of date attributes

- Oversized names get reduced for a better handling of the explorer view

- The editor is extended with a *navigation bar*, that gives an overview of the editor, allows to adjust the zoom level and to enter the fullscreen mode

- *Rejected catalog entries* are deleted and replaced by a selectable substitute

- The *creator can be notified* when a catalog suggestion is for example rejected

- The matrix allows to *filter by actors*

- Administrators are able to *filter users* by their roles in the user administration

- Administrators are able to configure which object types get part of the *catalog as suggestions*

- Adiminstrators are able to configure the *visibility of objects type* for the published catalog

- *Rename diagrams* without checking them out

- *Process cost analysis* is available as report

- Optimized and unified dialogs for the whole application

- Mark objects of the *symbol palette as favorites*

- Optimized previews of descriptions in diagrams

- Arabic as new *content language*

- Add a label for the name to a gateway object via double clicking

- Task in BPMN diagrams can be marked as call activity

- New optimized symbols, including *immovable labels* of some symbols for a better handling

The following bugs have been fixed in this release

- [BC-179] - Wrong display of connections in the manual report and the profile report (circle is missing)

- [BC-189] - When there is a suggestion list below a symbol and then you pull a new symbol from the symbol palette in the editor then the suggestion list will be displayed until you chose a suggestion - You can not cancel it

- [BC-196] - If the report download toast is closed manually, the info "was created" also shows a loading indicator instead of a finished indicator

- [BC-200] - IE11 - 'Show suggestions only' button in the catalog is slightly offset upwards

- [BC-203] - HUB verschiebt beim Skalieren die Buttons aus dem Bild.gif

- [BC-214] - Cutting a category / diagram can not be aborted with ESC

- [BC-216] - Attachment-Icon in Itembar funktioniert nur nach dem Einchecken

- [BC-238] - If you change the name of a repository in different content languages, for some languages the name change is not persistant

- [BC-260] - Users shall be informed about a character limit when they type in a publication reason

- [BC-281] - Dialog (confirmation) is missing when deleting a local diagram under Show local element only

- [BC-284] - Verwendungen im Katalog werden doppelt angezeigt und Verbindungen zu Objekten werden nicht mehr angezeigt

- [BC-295] - Display error in RACI Matrix

- [BC-296] - Number of users in a user group gets incremented even if no user was added to the group

- [BC-308] - If two reports are running simultaneously and you hide one progress toast, the finish toast will be displayed incorrectly (with spinning icon, not check mark)

- [BC-309] - Report progress toast is clickable, shows time in 12h format instead of 24h and with wrong "at" instead of "um" (in german)

- [BC-329] - Wenn durch Undo/Redo die Position von Symbolen geändert wird, aktualisiert sich die Position deren entsprechender Kommentarmarker erst, wenn man mit dem Cursor über den Editor fährt

- [BC-330] - Save + Check in after using the stamp mode lets the object be marked in the subsequent editing, but does not work directly as a stamp

- [BC-340] - Falls Diagramm leer, wird es bei Auswahl im Seitenfenster nicht markiert

- [BC-343] - Unexpected bahevior in category tree when you close and open up a category

- [BC-348] - You can not open a category's context menu when its name is too long

- [BC-353] - Selecting another diagram can instead open the context menu of the currently selected diagram

- [BC-374] - Attributgruppe nimmt Fallbacksprache des Contents an - sollte sich genau wie Attributnamen auch verhalten

- [BC-377] - Local diagrams should be in alphabetical order in the local stage

- [BC-378] - Diagonale Kanten können von ihren anliegenden Symbolen gelöst und frei bewegt werden.gif

- [BC-394] - IE11 Layout changes size when adding users to group

- [BC-406] - Process Interfaces are displayed in the Matrix of diagrams

- [BC-411] - Dokumente werden erst dann alphabetisch sortiert, wenn der Button zur alphabetischen Sortierung nicht aktiviert ist

- [BC-417] - Symbol palette is displayed in content and not UI language when switching content language while checked out a diagram

- [BC-428] - Changing to preview inside of versions-tab displaces the icons

- [BC-438] - IE11 - By Removing used entries in a diagram from the Catalog - In the Dialog-Window overlapp the Save button with cancel

- [BC-442] - Delete a local chart whose display slows down to Home

- [BC-464] - Liegen Aktivitäten, deren Stammdaten vom Katalog stammen, in einem Rollen-Pool, wird in der RACI-Matrix nicht die entsprechende Beziehung zwischen Aktivität und Rolle angezeigt

- [BC-465] - When a comment in the hub is too long then you can not delete this comment until it is shortened

- [BC-467] - If you rename a repository, the new name will not appear in the repository selection until you reload the page

- [BC-474] - Annotation's label is empty when a list was created

- [BC-475] - There are no different previews for the different shadow types

- [BC-476] - Google Chrome: Menu-Divider im Kontextmenü von Diagrammen werden teilweise nicht angezeigt

- [BC-485] - IE11 Icon for repository options is not aligned

- [BC-500] - In local workspace, the diagrams still have the option "Check out" in the context menu

- [BC-503] - Deleting a pool which contains some objects and edges causes that the edges will not be recreated by using undo and then redo

- [BC-554] - Ist ein Kommentar an einem Symbol zu lang, wird der Benutzer nicht mehr angezeigt.gif

- [BC-556] - Attribute-Tab springt beim Wechsel der Aktivität oder Klick auf Info einer anderen Aktivität nicht nach oben oder zur Beschreibung.gif

- [BC-557] - Symbol palette has to be UI language instead of content language

- [BC-565] - Diagram type should be in UI language instead of content language

- [BC-881] - There is no note about a multi selection in the attribute tab if you do a multi selection by using the selection rectangle

- [BC-1062] - It is not possible to maintain a responsible person for an application STABLE

- [BC-1115] - The diagram name of a decomposition/Variants is not displayed when the correspondent diagrams do not exist in the same stage

- [BC-1126] - There is no hint that you can not delete a diagram that is checked out by another user

- [BC-1140] - Entity comment counter doesn't update

- [BC-1311] - No scrollbar in the explorer tree when there are much entries

- [BC-1373] - Copy format icon has to be in active state while the operation is performed

- [BC-1394] - Empty BPMN diagrams can not be exported

- [BC-1426] - While on the search page the user name and current languages are not visible

- [BC-1469] - If a user exports a diagram as BPMN or ZIP, all users on the server get a notification

- [BC-1470] - BPMN Export fails if the diagram contains an activity with the task type "Script"

- [BC-1471] - In an exported BPMN Diagram, formatted text is shown with HTML Tags

- [BC-1472] - Names of Documents are missing in exported BPMN Diagrams

- [BC-1473] - Loop, parallel and sequential instance and compensation Tasks are not displayed in an exported BPMN Diagram

- [BC-1475] - BPMN lanes and most of their contents don't show up in an exported diagram when using 'application' pools

- [BC-1476] - Edge labels do not show up in the exported BPMN diagram

- [BC-1671] - counter for users in group doesn't function properly (no user was added but counter gets one more)

- [BC-1698] - Persons created in catalog in local workspace cannot be used in local workspace for governance attributes

- [BC-1700] - if a keyword is not confirmed with ENTER button the entered text is not deleted when clicking in editor or pressing other buttons (e.g. TAB)

- [BC-1716] - Report-Service does not respect edge formatting (for example: End Arrow Type)

- [BC-1719] - The scaling in the print menu doesn't work

- [BC-1730] - When you check out a diagram and remove its local version then the diagram in Public Workspace is still treated as a checked out diagram

- [BC-1732] - There is no sign of working offline when the internet connection is gone

- [BC-1766] - Catalog Export ignores search term

- [BC-1798] - A diagram can not be checked in by using 'Discard local changes' when it was not checked in before

- [BC-1867] - If you duplicate a symbol (STRG + D), all changes to the new symbol will be applied to the original one

- [BC-1869] - Explorer in the local workspace does not update when diagram is renamed and saved

- [BC-1973] - Browser back button works not correct

- [BC-1977] - User is not able to mark a favorite as start-diagram

- [BC-1983] - Slider in the color picker dialog doesn't work

- [BC-1990] - If you delete the "factor" value in the print view and print the diagram, the cloud crashes

- [BC-2062] - RACI Matrix can't be created if the diagram has just been checked in

- [BC-2078] - Font size of diagram names in favorites isn't as big as the font size of diagram names in the repository explorer

- [BC-2085] - Favorites cannot be deleted or changed after responsible user was changed

- [BC-2094] - IE11 - Graphic error in Change role dialogue

- [BC-2100] - If you discard local changes in IE11, the diagram is locked by yourself

- [BC-2121] - In the context menu of a multi selection there is still 'Edit shape' as option

- [BC-2127] - When you check in a diagram by using the context menu and when the checked in version of the diagram is opened the checked out version will not be greyed out after check in

- [BC-2143] - Publish via diagram context menu does not work when diagram is newly created

- [BC-2277] - You can compare Local Workspace with Local Workspace when a diagram is checked out yet

- [BC-2289] - After Depublication, the diagram stays in publication stage until you reload the page

- [BC-2290] - Missing 'Compare' tooltip on 'Publication' in 'Versions' when it is greyed out yet

- [BC-2292] - The 'Rework'-Dialogue is different when you open it by clicking on the button or by using the context menu

- [BC-2293] - When you want to publish a diagram with opened 'Rework' dialogue and the comment field is empty the publication will not be started

- [BC-2296] - Diagram types in explorer should be dependent on the ui language

- [BC-2299] - Connection types (in RACI matrix) should depend on the ui language

- [BC-2304] - When you make a right click on an empty space in the editor there are some options in the context menu which are not needed

- [BC-2380] - The messages from Bpmn-data-transfer-service are not reaching the webclient

- [BC-2402] - When a diagram name is very long its name label in the menu bar and the favorite icon overlap with the editor

- [BC-2438] - After multiple reattachment, a createEntityCommand was missing

- [BC-2442] - In some cases, a createEdgeCommand came before the corresponding createNodeCommand and checkin failed

- [BC-2450] - Application does not load , if user has a unicode character in its name

- [BC-2460] - You can't format the text of an annotation with the formatting bar in the editor

- [BC-2461] - If you click outside of the editor while the suggestion list is active, stamp mode won't work and multiselections will no longer be visible

- [BC-2465] - Missing 'Set as start diagram' button in Favorites when you add a diagram to the favorites while its Publication version is not opened

- [BC-2468] - 'Save' instead of 'Speichern' in Add user group dialogue in German UI language

- [BC-2470] - Publish button for checked out diagram if you open the preview of the diagram

- [BC-2479] - If entering in a very small amout of time LOTS of chars into a label of a node the hole cloud system gets very slow and unuseable

- [BC-2480] - When you open a diagram as a Reader or Reviewer thorugh the Task view the Versions tab will open (also when you are a Reader) but no version is selected. So there is a Compare button in each version

- [BC-2583] - Misspelling: '. . . Textattribute. . . ' instead of '. . . Textattribut. . . ' in Attribute Placement in German UI language

- [BC-2593] - You can delete the name of symbols in the editor but not in the attribute tab

- [BC-2624] - Right click on canvas causes deselection when in positive coordiante values

- [BC-2650] - wrong text by removing an entity by rejection in the catalog

- [BC-2651] - IT Systems are included in the RACI Matrix, even if they are not responsible

- [BC-2652] - When you write comment on a symbol and then delete of them while the comment marker is activated there will still be a comment marker with '1' at the symbol

- [BC-2659] - no german translation for the filter of raci matrix

- [BC-2660] - Language settings, color settings and method upload are available for non-administrative user roles.

- [BC-2661] - Locked diagram does not show locking user

- [BC-2662] - Additional line in Change Role dialogue

- [BC-2663] - All kinds of context menus from the editor are shown in the top teft corner of the editor

- [BC-2664] - Diagrams on start page are displayed flat

- [BC-2680] - The favorite buttom is displayed in the editor instead of the menu bar and because of the editor's white background you can not see this button directly

- [BC-2681] - Discard local changes dialog has no clear option buttons

- [BC-2688] - After login the start diagram will not be opened but the start page instead

- [BC-2694] - If the diagram name is to long, in the version view it overlaps with the local workspace

- [BC-2696] - Categories can not be deleted if they contain subcategories with diagrams which reference elements in the category

- [BC-2791] - A reader has a 'Change role' button although it does not need it because there is no role which it can switch to

- [BC-2792] - By choosing a long Diagram name this creates some Problems in the home page of a repository

- [BC-2794] - When we write nothing in the search panel and we start a search the system freezes up

- [BC-2795] - "only" is selectable twice for search facettes

- [BC-2804] - If you discard local changes the diagram is locked by yourself

- [BC-2812] - If you make a lane smaller so that some symbols are placed in another lane and press undo, the symbols will still be in the other lane after undo

- [BC-2828] - In Local workspace diagrams will be opened from their Public workspace state. If it was not checked in yet there will be an error and the client will freeze

- [BC-2830] - Reader can find catalog entries and diagrams although they were not published

- [BC-2835] - The local version of a diagram can not be opened while another version of the diagram is opened

- [BC-2843] - FIREFOX - You can not copy or paste by using the buttons or CTRL+C/V

- [BC-2892] - FIREFOX - Symbolpalette shifts if you hit ENTER while editing a symbol in the diagram

- [BC-2928] - The time to load the name of variants depends on the size of the Diagram.

- [BC-2936] - Catalog does not load all entries by scrolling

- [BC-2938] - When you find a diagram in the search and open it the Pubished version of it will be opened instead of the version of the actual stage

- [BC-2940] - If the main language of the browser is in Enlisch notifications are mixed by english and german

- [BC-2943] - It isn't possible to change primary and secondary color in the ci-configurations

- [BC-2944] - User can be created without a set language

- [BC-2970] - FIREFOX - The Compare function does not have a scrollbar

- [BC-2971] - When a diagram got a 'Rework' label on Public workspace in the label can be seen on each other checked in diagrams and the 'Rework' dialogue will when publishing a diagram

- [BC-2974] - When you search twice for the same keyword the Filter list will disappear and the search results counter will be assigned to 0

- [BC-3032] - The Attributs of entries in search results doesn't change by clicks on serveral entries

- [BC-3066] - User should be able to share the active search trough the mail sharing button

- [BC-3068] - Cutting a diagram from a repository and pasting it in another repository is apparently possible (Normally that should be not possible)

- [BC-3083] - A maintained URL at a symbol is not opened on double click in read mode if no other reference is maintained

- [BC-3114] - In the Catalog , by removing used entries in a diagram no replacement is requested an error message comes instead

- [BC-3121] - After removing a big diagram it stays in the repository tree until reloading the page

- [BC-3123] - Help button is main menu is not aligned properly

- [BC-3124] - In profile view is a document twice listed

- [BC-3132] - Comment input field for publications has initialy the wrong size

- [BC-3135] - Profile view on narrow screens

- [BC-3143] - German text for the toast after reorganizing the catalog is wrong

- [BC-3149] - The bar with the formatting options for annotations is missing in IE11

- [BC-3152] - no translation for store search result as favorite

- [BC-3154] - Migration of bytea lobs in document-service, workflow-service, report-service fails

- [BC-3157] - IE11 - Scrollbar of Compare function is missing when the hub's width is too small

- [BC-3158] - Missing scrollbar in the Attribute view when the hub's width is too small

- [BC-3159] - It can not be scrolled through comments in the hub

- [BC-3170] - OutputStream is not closed if providing downloadable content
- [BC-3172] - When you unlock a diagram as an admin the diagram has to be reopened to check it out
- [BC-3178] - translation missing for sending a comment
- [BC-3215] - The help buttons on administration panel should be round
- [BC-3230] - When I copy and paste my password out of my login mail I cannot login
- [BC-3236] - Wrong layout in depublication dialog
- [BC-3238] - After you check in a diagram, the diagram is no longer selected in the tree
- [BC-3241] - Wrong german/english tooltip for alternative and content language
- [BC-3255] - If you click on a link in the description, the link gets shown twice and the menu is not fully visible
- [BC-3260] - By changing the stage, there is no warning that the open diagram does not exist in this new stage
- [BC-3279] - When you edit the details of a catalog entry and save the changes there is a toast without text in German UI language
- [BC-3307] - When navigating to a favorite after clicking on the Home Button, tree does not switch stage
- [BC-3324] - A user group can not be renamed or deleted when its name is too long
- [BC-3327] - Wrong layout if you click on a changed symbol in the version tab
- [BC-3329] - When a symbol is found in the search which does not contain a keyword the keyword attribute is shown very imcomplete
- [BC-3331] - You can't edit comments on diagrams
- [BC-3342] - Performance of requesting domain related data decreases due to calling the necessary data step by step
- [BC-3398] - IE11: Alignment and padding in administration area is not correct
- [BC-3400] - Text to long in matrix filter drop down for actors depending on the width of the field
- [BC-3401] - Floating label of the filter field in matrix view is not aligned correctly if an actor is selected
- [BC-3402] - Up button for attributes should only be available if the user navigates within the attributes view
- [BC-3406] - Filter by role in administration area is not working
- [BC-3411] - Selection in matrix is not styled correctly
- [BC-3414] - Esc and Cancel doesn't work as expected on dialog "The diagram has been changed"
- [BC-3419] - Centered text in symbol palette (freeform) and the distance between entries is large
- [BC-3422] - The arabic language breaks the line
- [BC-3428] - Unnecessary copy option the context menu of edges
- [BC-3435] - Wrong labels in the context menu of the Resize feature
- [BC-3440] - It's Impossible to reset a start Diagram
- [BC-3450] - When you rename a diagram by using the context menu the new name will only be shown after reloading the client or reopening the repository
- [BC-3453] - Link in workflow email does not lead to the diagram but to the login screen
- [BC-3457] - BPMN export is omitting lanes
- [BC-3462] - When you open a diagram and switch to its 'Public workspace' there is still shown its local version

- [BC-3463] - When you click on different symbols with the same symbol type after you added some attributes to some of them the attributes will be shown in the other symbols, too

- [BC-3464] - Misspelling in check in loading screen: 'Diagramm gets checked in...' instead of 'Diagram gets checked in...'

- [BC-3465] - Misspelling in paste loading screen: 'Elements gets pasted...' instead of 'Elements get pasted...'

- [BC-3466] - Misspelling when you want to import a diagram but the format is wrong: 'falsches Format' instead of 'Falsches Format'

- [BC-3467] - FIREFOX - You can not set symbols as favorites

- [BC-3478] - When you change the stage to Local workspace the local version of a diagram will not be shown although it has one

- [BC-3479] - When a diagram is opened in its local version and change the stage the diagram still show its local version

- [BC-3519] - Category title for search facettes is not displayed

- [BC-3527] - Wrong diagram is selected in tree if you choose cancel in the diagram change dialog

- [BC-3532] - VisualData not updated after a "409 conflict" (lock exception)

- [BC-3539] - When you use the search while a diagram with not saved changed is opened then there is no dialogue about saving and the client freezes

- [BC-3547] - Misspelling in the canvas' context menu: 'Add / Remove Free Space' instead of 'Add / Remove free space'

- [BC-3550] - When dropping an role on the canvas and immediantly trying to create an edge that results in a choice dropdown, the canvas is not useable anymore until reload

- [BC-3551] - Chips in comments are deformed

- [BC-3563] - Reattaching a node, undo this and reattachinga gain leads to an error and reattachment of this node is not possible anymore

- [BC-3568] - if you are in private stage the search should use common

- [BC-3570] - Color Inputs are not displayed correctly in IE11

- [BC-3572] - after dropping an item, the inplace edit ist started. but if you directly drop another item the edited text is not applied correct

- [BC-3577] - If there is more than one ContenteditableInputFields field, only the first one will work.

- [BC-3590] - Right click on canvas throws error when clipboard is empty

- [BC-3597] - Direct after Login In Existing Diagrams in the Tree are not clickable

- [BC-3633] - If the Diagram name is to long - In the Local workspace the Diagram context menu is not shown

- [BC-3640] - typing error in comments (unter einer minute)

- [BC-3649] - Domain data transfer broken for diagrams in private stage

- [BC-3654] - Right Click on a pool causes deselection

- [BC-3675] - A big biagram cannot be published

- [BC-3702] - RACI Matrix doesn't get updated when a pool is split into two lanes

- [BC-3713] - Error when you try to cut a diagram and paste it in a Category

- [BC-3785] - The sorting in the tree is not deterministic

- [BC-3792] - When you Filter the Search - the Counter is not updated

- [BC-3807] - Misspelling: 'SEND' instead of 'SENDEN' in German UI Language

21.238 Version 3.3.5

The following bugs have been fixed in this release

- [BC-2896] - You can not publish a diagram when it is too big

- [BC-2913] - Performance of requesting domain related data decreases due to not using @BatchSize for attributes

21.239 Version 3.3.5

The following bugs have been fixed in this release

- [BC-3274] - Replace existing SAML-Keystore

21.240 Version 3.3.4

The following bugs have been fixed in this release

- [BC-3344] - Report cannot be executed if diagram has non mappable attributeTypes

- [BC-3362] - Report cannot be executed if diagram has non mappable entityTypes

- [BC-3363] - Catalog export fails if domain data does not match method

- [BC-3421] - PublishDiagramHistoryCtrl.findAll endpoint throws an exception

- [BC-3460] - adjust apigateway to changed workflow service endpoints for archive

21.241 Version 3.3.3

The following bugs have been fixed in this release

- [BC-3267] - Latest published diagrams are not in versions view

- [BC-3416] - Editing labels on freeforms cause application to crash entirely

21.242 Version 3.3.2

The following bugs have been fixed in this release

- [BC-3407] - Follow links via Double-Click on node works again

- [BC-3410] - Abort an interaction via ESC key

21.243 Version 3.3.1

The following bugs have been fixed in this release

- [BC-505] - List with locally checked out diagrams is not displayed correctly in firefox

- [BC-2201] - If you add text with multiple lines to an annotation in the diagram, the text will have only one line in the properties

- [BC-2458] - NodeSymbol is always set to defaultSymbol from Entity

- [BC-2460] - You can't format the text of an annotation with the formatting bar in the editor

- [BC-2619] - Use a simplified object when drag & drop from symbol palette, equal to when moving an existing entity in diagram

- [BC-2622] - If you start inplace edit on a node via double click, the entity gets de- and reselected, which causes a new rendering of attribute view and context palette

- [BC-2624] - Right click on canvas causes deselection when in positive coordinate values

- [BC-2629] - Drag & Drop out of symbol palette does not work when clicking in the (vertical) middle of the label

- [BC-2653] - Custom logos are sometimes cut off when the explorer has a lot of content

- [BC-2663] - FIREFOX - All kinds of context menus from the editor are shown in the top left corner of the editor

- [BC-2773] - When you select something in a checked in diagram the cursor looks like a move cursor

- [BC-2778] - (De-)Publishing as an editorial change is not possible - The checkbox for editorial change is missing when you want to (de-)publish a diagram as an administrator

- [BC-2781] - FIREFOX - In the catalog you can not scroll through the attribute view of a symbol

- [BC-2782] - The stamp function to add a symbol to a diagram can only be canceled by Esc

- [BC-2785] - If we want only to change some diagram attributes we don't have the possibility to save this changes

- [BC-2786] - If you use the search functions in the catalog it isn't possible to reject an object in the catalog

- [BC-2790] - Comments on symbols are not saved

- [BC-2796] - Do not reload diagram from server when switching diagram views

- [BC-2802] - The text "Ergebnistyp [*]" isn't present as topic in the left menu after searching

- [BC-2803] - Empty dialog shown if you click "Reorganisieren" in the catalog

- [BC-2805] - Render context menus on tree items only when clicking on the menu button

- [BC-2836] - Changing the content language while a symbol is selected causes that the diagram attributes will be shown in the attribute tab but with the symbol's attribute fields

- [BC-2838] - The description attribute is displayed lower than other attribute labels when it has no value

- [BC-2893] - File upload input is too short in catalog view

- [BC-2898] - Occurrences are not displayed for search result items on search result page

- [BC-2936] - Catalog does not load all entries by scrolling

- [BC-3067] - The text formatting window of an annotation does not work correctly

21.244 Version 3.3.0

New features

- The possible synchronization between the BIC Cloud and an ActiveDirectory has been further expanded.

The following bugs have been fixed

- [BC-2101] - Overlapping of explorer and application Logo

21.245 Version 3.2.0

New features

- SSO via SAML: The automatic login can be configured for on-premises and private cloud installations in the customer project. Users who do not yet exist in the system are created with the first login.

21.246 Version 3.1.4

The following bugs have been fixed

- [BC-2702] - Performance of opening diagrams decreases with more diagrams within one repository
- [BC-2603] - Search service cannot convert Strings throws exception "Execution of Rabbit message listener failed."
- [BC-2597] - java.lang.OutOfMemoryError: Java heap space when creating a diagramManual
- [BC-2598] - "Unable to download report for execution id" due NullPointerException
- [BC-2440, BC-2441, BC-2436, BC-2439] - Complex email templates can not be uploaded into the Service without reworking them before

21.247 Version 3.1.3-1

The following bugs have been fixed

- [BC-2442] - Commands sent to server are in wrong order and checkin fails
- [BC-3092] - When using replaced catalog item in new diagram, checkin is not possible anymore

21.248 Version 3.1.3

The following bugs have been fixed

- [BC-2569] - No paragraph between checkboxes in the attributes view if there is enough space for more than one checkbox in a row
- [BC-2579] - drag & drop from images
- [BC-2580] - label positioning in custom symbols

21.249 Version 3.1.2

The following bugs have been fixed

- [BC-2105] - When the user clicks on a category, the list with the local diagrams and diagram types is missing

- [BC-2200] - Printed PDF is always in portrait mode instead of landscape

- [BC-2217] - If you follow the occurrences of an object, the object is not visible in the diagram

- [BC-2270] - Comments on symbols are not displayed correctly

- [BC-2308] - zoom factor on old diagrams leads to blank canvas

- [BC-2312] - switch from diagram view to matrix view and back

- [BC-2317] - Responsible applications are not shown in the matrix as executing column

- [BC-2364] - Double clicking on activity with one decomposition does not open it

- [BC-2372] - Diagrams having long names are shown as centered text in favorites panel

- [BC-2437] - Copy and paste revokes catalogstates of entities

21.250 Version 3.1.1

New features

- *Searching for keywords*: Searching for keywords is now even easier in the integrated search engine of BIC Cloud. Simply click on the desired keyword in the attribute bar of the search, so that you will see all entries that have the same keyword in their attributes.

- *List of all decompositions and attachments*: If several decompositions and/or attachments are maintained within the attributes of an object, a list of all of them is displayed when you click onto the object. This allows a targeted navigation.

- *Integrated upload function in the attribute bar*: You can now link documents, images etc. with objects by using the intuitive upload function in the attribute bar. Simply click on the upload arrow in the field "Attachment (URL)" or just drag the desired document into the attribute bar.

- *Note for expired diagrams*: If the validity period of a diagram is exceeded, a warning will be displayed in the publication stage.

- *Optimized display of occurrences*: In the list of occurrences of objects, all nodes are now enumerated. If, for example, an object is input and output of different activities at the same time, the object is displayed two times, once in each of its functions.

- *Extension of matrix representation*: In addition to roles, the matrix representation now also contains inputs, outputs, IT-systems and risks, which are displayed in the respective column.

- Performance improvement when switching views: If you change the view/representation of your diagram, no re-connection to the server is necessary anymore. In this way, when you change the view, the same information will be displayed in a different representation, even if the diagram has been changed at the same time.

- Performance improvement when checking in and out: If you check your diagram in or out, no re-connection to the server is necessary anymore. In this way, when you check in or out, the same information will be displayed before and afterwards.

- Display of the current role: In the upper right corner you now see your current role alongside your user name. In this way, you are able to see at one glance which rights you are currently having. There is the possibilty to *change your user role*.

- Improvement of the *attribute view*: Attributes are no longer provided by a retrieval of the server, but by the diagram itself. This improves the loading speed of especially governance attributes.

- *Adjusting the background color*: As an administrator, you can change the background color of the logo area so that it harmonizes perfectly with your logo.

- Integration of links in the *description field*: You have the possibility to add links to your description text. Use the add link feature in the description text of the attribute field.

- *Expand and collapse attribute groups*: Attribute groups, such as the governance attributes, can now be expanded and collapsed with a simple click.

- Re-open BIC Cloud through the last visited repository: The system remembers which repository you were working on last, so you will be redirected to this repository when you log in again.

- Indication for *denied access*: If you do not have access to a specific diagram, you now see an image in the workspace that tells you that you are not allowed to open this model.

- Adjustment of the symbol for *occurrence attributes*: Occurrence attributes are now represented by the plugpin symbol to indicate that the attributes only apply to this specific node.

- The *BPMN Collaboration diagram* has been extended to include the event-based gateway and data store. In addition, there are some extensions and reorganizations of object attributes.

The following bugs have been fixed in this release

- [BC-178] - Header and footer are not printed

- [BC-235] - Inclusive Or Gateway has no mini symbol palette

- [BC-273] - Search for Keywords, Attachement URLs, Identifier, version, scope and access restriction is not working

- [BC-297] - If a refinement and several variants are maintained for an activity, only links to two of the diagrams are displayed after a double-click on the activity. In addition, the IDs of the diagrams are displayed in the list instead of the names

- [BC-1136] - Show properties context menu not opens the attributes view

- [BC-1498] - No warning window that a diagram is not saved when you leave an unsaved diagram

- [BC-1725] - IE11 - The diagram's 'Valid From' and 'Valid To' attributes will not be saved after check in

- [BC-1866] - Area to upload a new logo is very small if there is not already a logo set

- [BC-1880] - When changing the role, do not always switch to "published" state.

- [BC-1883] - If you try to open a checked out diagram in a new tab, it only opens a blank tab

- [BC-1898] - It is not possible to open a favorite diagram by selection in the favorite list

- [BC-1909] - There are some representation errors in RACI matrixes which are scrollable

- [BC-1974] - Matrix view: When scrolling on many lines, the line with column headings disappears

- [BC-1975] - Matrix view: Column sorting of the matrix view inconsistent

- [BC-1982] - Catalog filter can not be deselected in the explorer

- [BC-1983] - Slider in the color picker dialog doesn't work

- [BC-1993] - Gateways cannot create a label with F2

- [BC-2009] - IE11 - On Local Workspace all diagrams are shown as selected

- [BC-2055] - The search facets are not reset when searching for keywords

- [BC-2072] - In IE11 you can't set date values in the catalog

- [BC-2075] - Wrong layout for the dialog to replace a catalog entry with another one in IE11

- [BC-2086] - Firefox - The diagram's 'Valid From' and 'Valid To' attributes will not be saved after check in

- [BC-2092] - When you change your role to Reader you can still edit published diagrams which are checked out

- [BC-2099] - email comparison to find authors etc. is case sensitive

- [BC-2126] - Tabbing or clicking into description attribute causes a copy of a approved catalog entity because it is threated as change

- [BC-2145] - RACI Matrix does not account for application pools without role pools

- [BC-2188] - Workflow email failure "questions to the responsible person"

21.251 Version 3.1.0

New features

- Performance improvement: Performance improvement when opening diagrams.

- Improved comment display: Comments to objects are no longer displayed as a speech bubble at the respective object, but clearly visible in the center of the screen.

- Start diagram: A user can set a diagram from his favorites as his personal start diagram so that it is opened directly at login.

- Advanced search results: In addition to diagrams the search now also finds objects and provides the option of navigation via the occurrences of the objects.

- Enriched Matrix: The alternative representation "Matrix" now also contains IT-systems as executing actors for BPMN and EPC diagrams.

- Dynamic model comparison: A clear graphical highlight of the changes to earlier versions and the possibility to get directly to the object details is available to you.

- Display of the local workspace: The "Show only local diagrams" function can now be found under "Change stage". This further enhances the clarity of the system, especially for modelers. The function is now called "Local Workspace".

- Change the authorization role: The active role in the system can be switched if you have more rights than only "Reader". This makes it easier for you to get into the role of other users and to view the system from the perspective of your employees.

- Discard changes: Modelers can discard local changes via the context menu of the checked-in diagram.

- Searching in the catalog: The search in the catalog shows the active search term permanently. This gives you a better overview of the displayed content of your catalog and you have the possibility to further restrict it.

- Improved catalog display: The catalog can be unfolded and then displays all available object types as a filtering option.

- Copy of formatting: The copying of a specific format is available to modelers as a functionality in the menu bar. This allows you to transfer formatting from one object to the another.

- Reorganization of the catalog: If the filter is active, you can reorganize the selected object types. That means that unused (not modeled in a diagram) catalog entries are deleted. Keep in mind that decompositions are not yet considered as used in a diagram - this means that you should control persons' objects manually, since these are not necessarily shown in the diagram but could be deposited as a governance participant.

- Editing diagrams: Authors can only edit diagrams when they are maintained as authors in the model attributes. If you check in a diagram where the author has not been specified, the system will notify you.

- Reminder when attempting to publish a checked-out diagram: Checked-out diagrams cannot be published, so the system tells you to check them in.

- Comment when rejecting a published diagram: In case of rejection of a published diagram, a comment has to be given. In addition, the initiator receives a rework task.

- Task list for releases: A list of tasks for upcoming and completed workflows is available to governance participants.

- Depublication: The depublication (removal of a diagram from the publication) is now available.

- E-mail delivery when publishing and depublishing: Users who have saved a diagram as a favorite or have it within their scope will be informed by e-mail when the diagram is published or depublished.

- Bilingual e-mail delivery: Depending on the setting in the user details, the e-mail is sent in German or English.

- Adjustment of colors and logo: In the administration area, you can set the company colors and the company logo. These settings affect all users.

21.252 Version 3.0.3

New features

- Performance IE11: Various performance enhancements within the Internet Explorer 11 browser has been made.

- Comments on process steps: The comment function is available not only on diagrams, but also on diagram content. Thus, the content in diagrams can be discussed more specifically.

- Dynamic diagram comparison: The diagram comparison shows you your changes live. By selection in the diagram, the changes are highlighted. You can e.g. compare your local work status with the published version, or even two archived versions of the same diagram.

- Multifaceted search function: The search shows your results depending on the search filters ("facets") set. The search filters work additively - the more you activate in various categories, the less results you have left.

21.253 Version 3.0.2

New features

- Watermarks: Watermarks are available in several languages and display the name of the respective object in the selected language. These are initially activated in the background of pools and lanes. You can also edit the watermarks in the formatting palette. If you rename the watermark itself in the formatting palette, it will no longer automatically display the name of the object.

- Diagram display in a new tab: You can open a diagram in a new browser tab. To do this, you must click the "Open in a new window" option in the context menu of your diagram.

- Change workspace: Users can change their workspace - this is done either centrally from your active repository in the context menu or on the diagram by changing the versions. That way for example a modeler can view the entire repository in the publication version, in order to see what already has been released.

- Cross-model copying: The copying of diagram content can now be done across diagrams of the same type. Note that resources (such as roles, applications, risks and controls) are reused and process flow elements (such as events, activities and operators) are newly created. As a result, connections from and/or to new elements must be recreated.

- Search: You can search for attributes of your diagrams. The search result page shows intelligent filtering possibilities, attributes as well as descriptions and offers the possibility to directly move to the diagram profile. The latter can be found in the lower right corner of the page.

- Notifications when generating a report: During the generation of a report, the system displays a progress indicator. If you close this indicator, you will receive another message after completion, which will allow you to download the report.

- New loading indicator: If you open large diagrams, you will see a loading indicator for the duration up to the display of the diagram. This indicator has been updated and the design has been optimized.

- Archiving diagrams: When you publish your diagrams, PDF archive entries are created from these diagrams. The archive entries are created in the same languages in which the content is maintained in your diagram.

21.254 Version 3.0.1

New features

- Attribut-bar in the catalog: When opening the catalog, the attribute-bar appears simultaneously. That way, you can see the most important information at first sight.

- Filtering settings: The filtering settings in the catalog are retained while navigating in the Cloud, so that they are still active when you return to the catalog. Additionally, the dialog for creating new catalog entries is preselected with the filtered type.

- Group-based authorization management: Besides the role-based authorization management, there is also the possibility to assign authorizations based on groups. In order to do so, you simply have to match your users with the appropriate group. It facilitates the authorization of users. Note, that users can be assigned to more than one group.

- Dynamic tooltip: Descriptions to objects are displayed in a dynamic tooltip as soon as you place your mouse over the highlighted information symbol („i") in the diagram.

- RACI-matrix-illustration: The RACI-matrix-illustration is an alternative view of EPC- and BPMN Collaboration Diagrams. It provides an understandable overview of the responsibilities in your process.

- Check-in reminder: In case you did not check in an edited diagram, you will receive a reminder to do so when leaving the site (Internet Explorer) or when logging out (Internet Explorer and Chrome). Therefore the diagram is unlocked for other users.

- Mini symbol palette: A mini-symbol palette is now available for modeling. This allows you to easily create your diagrams from step to step, without having to search for the next symbol. The connections between the symbols are created automatically.

The following bugs have been fixed in this release

- The output of too many download messages during the creation of the catalog export in certain constellations is now corrected.

- Selections will remain active when you switch between symbols and symbol formatting.

- Some improvements have been made for the Internet Explorer.

SYSTEM REQUIREMENTS

22.1 Hardware Requirements User Workstations

BIC Process Design and BIC Process Execution are browser-based tools and there is no need of a separate client installation. Nevertheless, there are hardware requirements for the computer which runs the web browser.

CPU	RAM	Network data rate
4 CPU cores	8 GB (The user workstation must have 64-bit operating system to be able to use all physical RAM)	10 Mbps or more recommended[*]

[*]Since the application content is freely defined by the authors, the size of the content can vary in a huge range. For example, using high-resolution images in diagrams heavily increases the amount of data that must be transferred to display such diagrams. Limited data rates result in longer loading times for application and content, which can result in users experiencing impaired application performance.

On user workstations with less hardware resources performance of BIC will degrade. Performance may by sufficient for limited use cases like read-only viewing.

22.2 Software Requirements User Workstations

Web Browser	Web Browser Settings	Printing
Supported: Google Chrome, Microsoft Edge in the latest version, Mozilla Firefox (latest ESR) **Recommended:** Google Chrome	JavaScript and Cookies activated, at least 50 MB free memory for web databases	PDF Viewer (e.g., Adobe PDF)