Fabasoft®

User Help
Fabasphere AI Core

Contents

1 Introduction

The Fabasoft Cloud for secure document and process management, together with Mindbreeze AI for AI-supported knowledge management, forms the Fabasphere AI Core.

Fabasoft Solutions offer tailor-made solutions for document-intensive processes. The Fabasphere is the digital ecosystem that unites Fabasphere AI Core and Fabasoft Solutions.

This user help refers to the base functionality of the Fabasphere AI Core. Depending on the operating model, not all functions are available (see software product information "Fabasoft Cloud" and "Mindbreeze AI").

2 The Web Client

An easy-to-use, completely accessible web client is available to you. Further information on accessibility can be found in chapters 15 "Accessibility" and 16 "Keyboard Operations".

Open your preferred web browser, enter the URL of the Fabasphere and log in with your favorite log-in method.

Log-in

Depending on the settings in your organization, you can log in using various authentication methods with two-factor authentication.

Linking With ID Austria

To be able to log in with ID Austria, you must create the link to your ID Austria in the account menu (your user name) under "Login and Password" on the "Digital ID" tab. Click on the "Link with a Digital ID" button. A new window will open in which you will have to log in again for security reasons. Once the link has been successfully established, you can also log in with ID Austria. Please note that you must be logged in with ID Austria to remove the link.

Using Mobile PIN

If you are requested to enter the mobile PIN when logging in, but have not received a PIN, you have the following options:

- Click on "Send Mobile PIN via SMS Again" or "Send Mobile PIN via E-Mail Again". This links will appear after some seconds. You can repeat this process twice.

- Try to log in again.

- Check the cell phone number or e-mail address to which we have sent the mobile PIN. To do this, briefly hover the mouse pointer over the label of the mobile PIN input field. A tooltip will pop-up which shows the cell phone number or e-mail address to which the mobile PIN was sent.

- Contact your organization administrator if, for example, you entered the wrong cell phone number when registering. Your organization administrator can adjust your account information accordingly.

- Contact your organization administrator if your cell phone number or e-mail address has changed.

- If the e-mail address is correct, please check your spam folder.

- If the e-mail cannot be found in the spam folder, please contact the IT administrators responsible for your e-mail server so that any e-mail server issues (in particular server-side spam filters, availability of the e-mail server, etc.) can be excluded.

- If the cell phone number is correct, please check the availability of the cellular network. If this is the case, please restart your cell phone and then log in again.

- To contact the support, click the support button.

- You cannot use virtual phone numbers (such as Google Voice).

Using One Time Password

Generate a one-time password using your RADIUS token or RADIUS app. You can enter this in the *Please enter your one-time password here* field.

To use a different second factor, wait briefly until the "Send Mobile PIN via SMS Again" or "Send Mobile PIN via E-Mail Again" links appear. These options are only offered if this is configured accordingly for you.

Web Client

If your web browser is not optimally configured for the use of the Fabasphere, a warning symbol (web browser state) will appear in the top bar. If necessary, click on the icon and follow the instructions to set up an optimal configuration.

The web client is divided into following areas:

- home (starting page)
- top bar
- tool area
- title bar
- menu bar (hidden by default)
- content area

Home

The dashboard concept of the home area allows you to show or hide widgets, change their size and move them. The following widgets are initially available to you:

- Personal Folder
  In your personal folder, you can store Teamrooms that are important for you.

- Organization Folder
  Contains all standard Teamrooms of your organizations in which you are authorized.

- Teamrooms Shared With Me
  Contains all Teamrooms in which you are authorized as a team member. Teamrooms that you have created yourself are excluded from this list. For a better overview, the list is structured by years and months. Via the "Integrate in My Folder Hierarchy" action, you can add the desired Teamrooms to your personal folder, to your favorites or directly to "Home".

- Favorites
  Favorites allow you to quickly access objects that you need repeatedly.

- Worklist
  Shows your worklist.
- History
  Contains the most recently used objects and most recently sent e-mails.
- Follow-Ups
  Contains your follow-ups that that fall within the period you defined.
- Other Dashboards
  Apps that offer their own dashboards are also displayed directly on "Home".

Customizing the Home Area Individually

The following options are available for customizing your home area:

- Show or hide widgets
  The "View" menu allows you to show or hide widgets (if allowed by your organization policy).

- Moving or resizing widgets
  You can move widgets using drag-and-drop or the context menu. You can also specify the size in the context menu of the widget.

- Storing objects on "Home"
  In addition to the widgets, you can also copy and paste important objects directly to "Home" (if allowed by your organization policy).

- The "Restore Standard" background context menu command can be used to take over the settings of the organization policy.

Top Bar

In the top bar, your organization logo is displayed on the left and on the right, you can find the account menu (your user name), the data locations menu, the support button, the logout button, the quick access button, the home button and the search field.

Tool Area

The tool area is available in all widgets, but not directly on "Home".

The context-independent tools "Tree View" and "Favorites" can be opened and closed via a quick selection. The "Actions" are always displayed. Depending on the context, different actions are provided.

Up to three tool areas can be displayed next to each other (e.g., "Tree View", "Actions" and "Authorize Team"). The tree view can be resized to be able to read even longer entries conveniently.

Tree View

Here you can find your Teamroom and folder hierarchy in a tree view, which allows fast navigation.

Favorites

You can add frequently used objects (e.g., Teamrooms or documents) to your favorites. To do so, navigate in the desired object. In the "Favorites" tool, the object is offered to be added.

Actions

In the "Actions" tool area, you will find important actions that are relevant in the current context.

Title Bar

In the title bar, you will find the breadcrumbs of the currently opened hierarchy. If you navigate in a widget, all other widgets of the same level are display as tabs.

Menu Bar

In the menu bar (hidden by default), menu items are displayed that are available in the current context.

To display the menu bar, proceed as follows:

1. Click the account menu (your user name) and then click "Basic Settings".

2. Mark the *Show Menu Bar* field.

3. Click "Save".

Note:

- If the window width is not sufficient for displaying the menu commands, they are hidden and can be reached via the "More" button,

- Depending on the context, more buttons of important commands can be displayed if the window width allows it.

- Regardless of whether the menu bar is shown or not, the status information of the list (e.g., number of entries, sorting) is displayed. In addition, the "Refresh", "Sort" and "View" buttons are available.

Content Area

In the content area, the content of the current object is displayed. This may be, for example, the contents of a folder or the preview of a document. The top level is referred to as "Home".

Basic Operations

For your first steps in the web client:

- Click with the left mouse button on the desired control to execute the corresponding action.

- The "Actions" tool always contains the most important actions of the current context. The actions apply to the object that is displayed in the content area. For example, if you are in a Teamroom, the "Upload" action imports a file in the currently displayed Teamroom.

- The context menu of an element can be opened by clicking the right mouse button. Usually you will find, beside the actions that are also shown in the tool area, further less frequently used actions.

  o Context menu of objects
    Right-click an object in the content area. The context menu of this object is opened.

- o Context menu of the title bar
  Right-click the title bar. The context menu of the object that is displayed in the content area is opened.
- o Background context menu
  If you are in a Teamroom or folder, right-click an empty area in the content area. The context menu contains actions that are relevant for working with lists (e.g., to create a new object in the list).
- To select entries in a list, click the check box beside the entry. This way you can, for example, execute a context menu command on several objects.

Customizing the Web Client

To adjust the basic settings (e.g., the language) of the web client, proceed as follows:

1. Click the account menu (your user name) and then click "Basic Settings".
2. Make the desired settings and click "Save".

Note: The *Show Menu Bar* option refers to the content area. In the property editor, menu bars are always displayed, regardless of the setting.

3 Collaboration with Teamrooms

A Teamroom offers the possibility to work together and exchange documents with your contacts.

Via the Teamroom, you define the team and consequently the access rights. Using folders, you can structure the Teamroom and classify documents accordingly.

3.1 Creating a Teamroom

To create a Teamroom, proceed as follows:

1. Navigate in your "Personal Folder".
2. Click the "Create Teamroom" action. Alternatively, click the "Create Teamroom" card in the content area.
3. Enter a name for the Teamroom.
4. Select another organization, if applicable.
   Note: The organization is only changeable, if you are a member of at least two organizations.
5. Click "Next".

Note: If you are a member of several organizations that are assigned their own tenant, you must also select the tenant to which the Teamroom should belong.

3.2 Structuring Teamrooms

For structuring documents in a Teamroom, folders are provided.

To create a folder, proceed as follows:

1. Navigate in the desired Teamroom.

2. Click the "Create Folder" action.

3. Enter a name for the folder and click "Next".

Note:

- You can also create folders within folders.

- In Teamrooms, additional Teamrooms can be created. The access rights defined by the Teamroom only apply to assigned objects but not to contained Teamrooms. A Teamroom always defines its own security context.

3.3 Documents in a Teamroom

Documents are managed in Teamrooms. Below you will learn how to open, upload, download and create documents.

3.3.1 Editing Documents

You can open documents directly from the web client in the corresponding third-party product. As prerequisite the Fabasphere Client and an appropriate third-party product has to be installed.

Note: To check the status of the Fabasphere Client, open the account menu (your username) and click "State" > "Web Browser State". If errors or warnings are displayed (e.g., because of a not installed or not current Fabasphere Client), follow the instructions and resolve the problems.

To edit a document, proceed as follows:

1. Navigate in the desired document. In the content area, the preview of the document is displayed.

2. Click the "Edit" action (document is editable) or "Read" action (document is read-only). If several options for opening are available (e.g., with Microsoft Office on the device or with Microsoft Office for the web), these can be selected via a submenu.
The third-party product associated with the document is opened.

3. If you have opened the document editable, carry out the desired changes in the third-party product. When saving, the document is directly stored.

4. Close the third-party product.

Note:

- To have metadata available in a Microsoft Excel worksheet, you can enable the option *Use Fields in Microsoft Excel* on the "Contents" tab. The "Define Fields" button allows you to define the available fields and the name of the worksheet on which the values of the fields are to be included.
The selected fields are exported to the defined worksheet and can be linked in the Excel workbook. Available columns: "Identity" (short reference), "Display Name" (tab > property name) and "Display Value" (value of the property).

- The "Tools" > "Optimize for Fast Web View" context menu command can be used to restructure PDF documents so that the documents do not have to be fully loaded before

they can be displayed. The context menu command is not offered if the PDF document is already optimized or password-protected.

- If Office for the web is enabled for you, you can define how documents should be opened, click "Basic Settings" in the account menu (your user name). In the Office Documents field, you can choose how to open Office documents (always in Microsoft Office on the device, always in Microsoft Office for the web or on demand). If the Office Documents field is not available, your organization administrator does not allow the use of Microsoft Office for the web.

- If you choose open always in Microsoft Office for the web, the preview of documents is also shown with Microsoft Office for the web.

- Microsoft Office for the web supports the file types Microsoft Word, Microsoft Excel, Microsoft Visio and Microsoft PowerPoint. Currently there is a known issue of Microsoft Office for the web that files with "docm" extension cannot be edited.

- Editing LibreOffice documents (OpenDocument Text with extension "odt", OpenDocument Spreadsheet with extension "ods" und OpenDocument Presentation with "odp") is also possible with Microsoft Office for the web.

- To be able to use Microsoft Office for the web, Microsoft Office 365 Business or Education is required.

- Documents in encrypted Teamrooms cannot be opened with Microsoft Office for the web.

3.3.2 Uploading Files

To upload a file, proceed as follows:

1. Navigate in the desired Teamroom or subfolder.
2. Click the "Upload" action.
3. Select the file that should be imported. Depending on the web browser, you can select multiple files.
4. Click "Yes" to confirm the upload.

Note: In the settings of Teamrooms, on the "Content Settings" tab, in the *Remove PDF Document Restrictions on Upload* field, you can specify whether to remove the PDF document restrictions when uploading PDF documents. A possibly defined password to open the document will not be removed.

3.3.3 Uploading Files With Drag and Drop

To upload a file with drag and drop, proceed as follows:

1. Navigate in the desired Teamroom or subfolder.
2. Locate the file you want to import in your file system. Depending on the web browser, you can also import whole folder structures and several files with drag and drop.
3. Drag the file with pressed left mouse button into the web client.

Note: When a file is uploaded directly in your personal folder, a Teamroom is automatically created and the file is stored therein.

3.3.4 Uploading Files With Keyboard Shortcuts

To upload a file with keyboard shortcuts, proceed as follows:

1. Navigate in the desired Teamroom or subfolder.
2. Locate the file you want to import in your file system. Mark the file and press `Ctrl + C`. You can also mark a folder or several files.
3. Switch to the web client and press `Ctrl + V`.

Note: When a file is uploaded directly in your personal folder, a Teamroom is automatically created and the file is stored therein.

3.3.5 Downloading Documents

To download a document, proceed as follows:

1. Navigate in the desired document.
2. Click the "Download" action.

The file can be found in the "Downloads" of the web browser.

Note:

- You can download multiple files or entire Teamroom or folder structures at once. To do so, select the desired objects and execute the "Download" context menu command.

- If the downloaded folder structure contains recursions, the recursion-triggering folders are downloaded only once.

- In the basic settings, on the "General" tab, in the *Download a Folder or a Selection of Multiple Objects* field, you can specify whether the Fabasphere Client or the web browser functionality should be used for downloading.

  o If you have installed the Fabasphere Client and enabled the corresponding option, multiple documents or even extensive folder structures are downloaded using the Fabasphere Client. Single documents are downloaded using the standard web browser functionality. You can access the downloaded documents or folders by double-clicking the automatically selected entry in the opened overview of the notification symbol or by pressing the Enter key. Alternatively, the "Show" context menu command is available. Folders with more than 200000 objects cannot be downloaded.
  In the options of the Fabasphere Client, you can define the download folder.

  o If you have not installed the Fabasphere Client or you have enabled the web browser option or in case of public links, folder structures are combined into a ZIP file. Note that you can download folder structures with a maximum of 1000 objects. The ZIP file must not exceed 2.5 GB in size.

3.3.6 Moving Documents Within the Web Client

To copy or move a document within the web client, proceed as follows:

1. Localize the desired document. If you want to copy or move several documents, mark them.

2. In the context menu of the document click "Copy" (`Ctrl + C`) or "Cut" (`Ctrl + X`). When you copy the document, it is copied into the clipboard, when you cut the document it is additionally removed.

3. Navigate to the desired target Teamroom or subfolder.

4. Open the context menu in an empty part of the content area and click "Paste Shortcut" (`Ctrl + V`) or "Paste Duplicate". If you paste a shortcut, it is the same document. If you paste a duplicate, an independent copy of the document is created.

Note: The "Orphan Objects" tab of a Teamroom shows objects that are assigned to the Teamroom, but are not stored within the Teamroom. This is the case when an object was removed with the "Cut" command but was not stored again in a Teamroom.

For more information on shortcuts, see chapter 3.6 "Working with Shortcuts".

3.3.7 Storing Documents by Performing a Search

To perform a search, proceed as follows:

1. Enter the desired search query in the search field in the title bar and press "Enter". For more information, see chapter 5.1 "Search With Mindbreeze".

2. The search result is displayed and the "Refine Search" tool area will open. Only results are displayed, you are allowed to search for. You can use the tool area to further restrict the search (e.g., to Teamrooms or organizations).

3. You can use the "Copy" context menu command to copy the required documents to the clipboard and store them in a Teamroom.

3.3.8 Creating New Documents

To create a new document, proceed as follows:

1. Navigate in the desired Teamroom or subfolder.

2. Open the context menu of an empty part of the content area and click "New".

3. Select what you want to create (e.g., Microsoft *Word Document*).

4. Enter a name and click "Next".

The document is stored in the current Teamroom or subfolder.

3.3.9 Commenting Documents

PDF documents, images or documents that can be converted into PDF documents can be commented using an integrated PDF viewer. The comments are extracted from the PDF document and saved in a public or private layer. Thus, the document does not have to be duplicated if you want to share general comments with other team members but private comments should only be visible to you.

Integrated PDF Viewer

To attach comments, navigate in the document. In the PDF preview, use the "Comment" button to open the PDF document for commenting.

- Select "Comment Privately" or "Comment Publicly" in the toolbar.

- Use the "Drawing", "Note", "Text" and "Line" buttons to select the desired comment type. Depending on the comment type, further options are available.

- In the left area you will find an overview of the attached comments, which you can also delete again if necessary.

- The adding of public comments is also possible with read access.

External PDF Viewer

To attach comments, navigate in the document. In the PDF preview, use the "Show comments toolbar" and "Comment Privately" or "Comment Publicly" buttons to open the PDF document for editing. The comments attached in the external PDF viewer are saved as private or public comments.

Note

- Commented documents are marked with a status symbol.

- If you edit the PDF document using the "Edit" action, the attached comments are saved as public comments.

- If the content itself changes (e.g., by replacing it with another file), the previous documents including comments are still available. The documents can be selected via a drop-down field in the PDF preview.

- When you download a PDF document or execute the "Send" > "Send Commented PDF" context menu command, the PDF content is commented with the comments visible to you.

- When an AutoCAD file is printed to PDF, comments are implicitly created. These comments are not separated.

- Comments can also be attached in the two-part view of documents (e.g., in the course of registration).

- For Teamrooms, the following can be defined on the "Content Settings" tab:

  o *Allow Comments*
    Defines whether PDF comments can be added to documents of the Teamroom.

  o *Allowed Types for Comments*
    Defines the allowed types of comments (public or private).

  o *Preferred Type for Comments*
    Defines the type of comment initially selected when commenting (overrides the setting in the user's basic settings).

  o *Users With Read Access Are Allowed to Comment Publicly*
    Defines whether users with read access are allowed to add public comments.

3.3.10 Digitally Signing Documents

To digitally sign documents, the following options are available.

- If your organization does not have its own organization certificates or no certificate has been released for you to use, you can use a certificate provided by Fabasoft for signing. This enables you to confirm that the document has not been changed since it was signed.

- If your organization has organization certificates that have been released for you to use, you can use them for signing. This enables you to confirm that the document has been signed by an authorized person and has not been changed since then.

- If you have a personal primesign signature certificate from the qualified trust service provider CRYPTAS (https://en.cryptoshop.com/fabasoft.html), you can sign with qualified electronic signature. Alternatively, the trust service provider SwissSign (https://www.swisssign.com/) can be used for the qualified electronic signature (SwissID app and SwissID account required).
  Note: To be able to use a qualified electronic signature, you must enable *the Use Qualified Electronic Signatures* option under "account menu (your user name)" > "Advanced Settings" > "My Signatures".

To digitally sign a document, proceed as follows:

1. Localize the desired document.

2. In the context menu of the document, click "Sign Digitally" or "Sign Digitally and Close".
   Note: If the document is already closed, the "Sign Digitally" context menu command is provided.

3. If signature elements have been predefined, they can be filled with a double-click. Alternatively, an overview of all signature elements is available on the right side. Click the corresponding element to fill it.

4. If you want to select a certificate or add a remark, click the "Further Information" button.
   Note: The certificate selection is only offered if multiple certificates are available.

5. If you want to add a company stamp, click the "Insert Company Stamp" button.

   o Click on a predefined company stamp to insert it.

6. If you want to add a signature element, click the "Insert Signature Element" button.

7. If you want to add a visual signature, click the "Insert Signature" button.

   o To sign with a qualified electronic signature, enable the *Qualified Electronic Signature* option.

   o Click on an existing signature to insert it.

   o Click "Add Handwritten Signature" (if supported by the device), "Add Textual Signature" (enter a text) or "Add Image Signature" (select or upload an image) to apply a new signature.

8. Click the "Sign Digitally" button.
   Note: If you sign with a qualified electronic signature, you are redirected to the trusted service provider.

Note:

- The position of the inserted elements can be changed by clicking in the element and moving it with the mouse button pressed. The size of the position frame can be changed using the corresponding frame points. If you use the frame point of the lower right corner, the content will be scaled additionally.

- A PDF document with the digital signature is created and saved as final form with the document.

- Use cases such as "Read" or "Download" refer to the signed PDF document in the final form of the closed document.

- In the document properties, the signatures are listed in the *Signatures* and *Digital Signatures* fields on the "Signatures" tab.

- Your visual signatures and company stamps can be found under "account menu (your user name)" > "Advanced Settings" > "My Signatures". You can also add or remove signatures here. You will see the organization certificates that have been released for you to use. You can enable or disable the option to sign with a qualified electronic signature.

Signature Elements

The position and size of visual signature elements (signature area, name, date, place, company, text) can be predefined.

When inserting a signature element, it can be explicitly assigned to a signee. Thus, signees can jump directly to the corresponding signature area via the symbol bar. For signature areas a company stamp can be selected that is to be displayed with the signature. In addition, you can define that a qualified electronic signature is required.

You can define signature elements as follows:

- In Microsoft Word documents, the "Insert Signature Element" button is available on the "Fabasphere" tab.

- For other documents, use the "Define Signature Elements" context menu command.

  o In the *Signee* field, you can define whether you want to use a new signee or no signee for the signature elements to be inserted.

  o Signees already in use can be selected as the default value in the *Signee* field. This enables the signature elements to be inserted efficiently.

  o You can drag and drop the signature elements directly to the desired position. Alternatively, you can insert a signature element by clicking on it.

  o Signature elements that have already been inserted can be edited by double-clicking.

  o The signature elements are highlighted in different colors for each signee to make them easier to distinguish (5 basic colors with 4 gradations each; the colors are repeated from the 21st signee onwards). The color yellow is used for "Do not assign a signee". The assignment of the color to a signee is not permanent and can change when the document is reopened.

Note:

- Signature elements in Microsoft Word can best be positioned using "In Line with Text".

- Signature elements cannot be inserted in text modules (Word).

- Signature elements cannot be used in Microsoft Word documents in compatibility mode.

- Signature elements cannot be used in Word documents that are merged programmatically.

When you double-click a signature area during digital signing, the signature selection dialog opens. After selecting the signature, it is inserted and the signature area is deleted. When you

double-click on other signature elements, the corresponding predefined text is inserted, which can still be modified.

Signature Folders

Using a signature folder, several documents of a file can be combined, visually signed, and digitally signed. Signing by means of a signature folder is started on a file via the "Tools" > "Prepare Signature Folder" context menu command. Alternatively, the "Prepare Signature Folder" activity, which is available for BPMN and ad hoc processes, can be used. The signature process offers the following options:

"Prepare Signature Folder" activity

The "Prepare" work step can be used to create the signature folder.

- Name
  The name of the signature folder.

- Handwritten Signatures
  Defines whether the documents should also be signed by hand. For this purpose, the documents are printed together by a responsible person and scanned again with all handwritten signatures.

  o No handwritten signatures
    There are no follow-up activities regarding handwritten signatures.

  o Handwritten signatures take place before digital signatures
    The "Print Signature Folder" and "Upload Signed Document" activities are assigned to the defined responsible user before the "Sign Signature Folder" activities.

  o Handwritten signatures take place after the digital signatures
    The "Print Signature Folder" and "Upload Signed Document" activities are assigned to the defined responsible user after the "Sign Signature Folder" activities.

  o Handwritten signatures are already on the document
    The "Upload Signed Document" activity is assigned to the defined responsible user before the "Sign Signature Folder" activities.

- Signees
  Defines who should sign the documents. The "Sign Signature Folder" activity is delegated to the signees in the defined order.
  You can either enter users or contacts directly or add signees using the "Advanced Display" button. The advanced view allows you to specify signees based on *Abstract Participant*, *User* or *Organizational Unit*.
  When a contact is selected, an external user is automatically created.

- Documents
  The specified documents are closed and digitally signed.

"Print Signature Folder" activity

The "Print" work step can be used by the responsible user to print the documents that have been combined into one PDF document.

"Upload Signed Document" activity

The "Upload" or "Scan" work step can be used by the responsible user to upload the combined document.

The "Sign Manually" work step can be used to record manual signatures digitally.

"Sign Signature Folder" activity

The "Sign" work step can be used to visually and digitally sign the combined PDF document. The individual documents are also digitally signed.

Note:

- In the properties of a document signed using a signature folder, the "Signatures" tab displays the *Signature Folder of Last Signature* field. The *Signatures* field displays the *Signature Folder* column.

- In the properties of a file, the "Signatures" tab also displays information about the signature folders.

- For the definition of standard processes on signature folders, the "Insert Signing Process" activity can be used.

3.3.11 Creating a Final Form

You can create a final form for documents that are convertible to PDF. The generated PDF file complies with the PDF/A standard.

To create a final form, proceed as follows.

1. Show the menu bar if necessary ("Account menu (your user name)" > "Basic Settings" > *Show Menu Bar*).
2. Mark the desired document.
3. Execute the "Object" > "Convert Final Form" menu command.

The generated PDF document can be found in the document's properties on the "Content" tab in the *File as Final Form* field.

Note:

- When you close a document (e.g., "Sign Digitally and Close" or "Tools" > "Close" context menu command), a final form is also generated.

- If a final form already exists and can be changed, the "Update Final Form" and "Remove Final Form" menu commands are available.

- If the document is a PDF document with a digital signature, you can choose to take over the existing content as final form or generate a final form (the digital signatures will be invalidated).

3.4 Defining Team Members

To define access rights for a Teamroom, proceed as follows:

1. Navigate in the desired Teamroom.
2. Click the "Permissions" action.

3. Via the plus symbol, you can add users to the team by entering their e-mail address or you can create new external members. Additionally, you may authorize whole organizations or organizational units.

The Teamroom is stored in "Teamrooms Shared With Me" for the added team members. Therefore, it makes sense to prepare the Teamroom first, to create structures and to store the documents before the team is authorized.

You can also inform team members by e-mail via the "Send E-Mail Invitations" action in the team area. In the properties of the Teamroom, on the "E-Mail Invitations" tab, you can define the default text for the invitation e-mail.

Access rights:

- **Read Access**
  These team members can

  o   read existing documents,

  o   only see release versions (if existing),

  o   create public links (if generally permitted for the Teamroom) and

  o   add additional team members with read access (if the *All Team Members May Add Members* option is enabled).

- **Change Access**
  These team members can

  o   change existing documents, create new documents or folders and delete them (wastebasket),

  o   define Teamroom templates,

  o   create public links (if generally permitted for the Teamroom),

  o   define logos and

  o   add additional team members with change access or read access (if the *All Team Members May Add Members* option is enabled).

- **Full Control**
  These team members can

  o   change existing documents, create new documents and delete documents (wastebasket),

  o   define Teamroom templates,

  o   permit and create public links,

  o   empty the wastebasket,

  o   dissolve the Teamroom,

  o   define settings regarding access protection, shortcuts, public links, team visibility, invitation possibilities and organization restrictions,

  o   define logos,

  o   delete the history,

  o   read audit log entries,

- o change the branding,

- o change the organization and

- o grant all access rights.

Note:

- Via the context menu of a team member, you can change the access rights or even remove the team member.

- In order to make it clear that the owner or co-owner of an organization has all rights to the Teamrooms of the organization, the organization is displayed under "Full Control". When you expand the organization, you see the actual owner and co-owners.

- The e-mail addresses of users are displayed if the e-mail domain differs from the e-mail domains stored with the organization. This allows you to see at a glance which users do not belong to the organization. If you do not have rights to read the user's e-mail address, only the e-mail domain is displayed. Please note that the display refers to the organization assigned to the Teamroom,

- External members and users not belonging to the organization may not be granted the "Full Control" access right in Teamrooms.

- In the properties of a Teamroom, on the "Teamroom" tab, you can define following restriction:

  - o *Access Protection*
    Defines who is allowed to access the Teamroom. By default, only the specified team is allowed to access the Teamroom.

  - o *Restrict Shortcuts Within Teamroom*
    Defines which type of shortcuts may be stored in the Teamroom. You can restrict the permitted shortcuts to objects that are assigned to the organization or to objects that are assigned to the Teamroom. In this way, you can prevent, for example, that shortcuts are stored to which the members of the Teamroom do not have access.

  - o *Holiday Table*
    Defines the holiday table to be used in the Teamroom context (otherwise the default holiday table is used).

  - o *Default Thesaurus for New Terms*
    If a default thesaurus is specified, new terms can be created directly during tagging.

  - o *Restrict the Downloading or Opening of Content on the Device*
    Allows to restrict team members who can open or download content at the device.

  - o *Roles That Are Allowed to Open or Download Content on the Device*
    Defines which permissions a team member must have in order to open or download content at the device.

  - o *Team Members Visible to All Members*
    Defines whether all members are allowed to see the team members. Note that disabling this setting also restricts other use cases.
    Note: Team members with change access can be eventually seen by all members, since changes are logged in log properties such as *Last Change by*.

- Only team members with "Full Control" have access to the "Permissions" action, can start processes, duplicate objects, use templates and release templates and presettings.

- Only team members with "Full Control" see the events by default. The display of events can also be enabled for team members who are not allowed to view the team. However, only events that could not lead to conclusions about team members with read access will be displayed.

- Team members with read access cannot use remarks, public comments, signatures, processes or comment on news feeds.

- Team members with read access cannot use the time travel.

- Team members with read access cannot be selected as participants in processes.

- Team members with read access cannot create public links.

- Team members with read access cannot view the "Processes" and "Activities" tabs of assigned objects.

- *Display Events for Team Members Who Are Not Allowed to View the Team*
  Only team members with "Full Control" see the events by default. The display of events can also be enabled for team members who are not allowed to view the team. However, only events that could not lead to conclusions about team members with read access will be displayed.

- *All Team Members May Add Members*
  Defines whether all team members can add users to the team or only team members with "Full Control". Members with change access may grant or revoke change access or read access to other members. Members with read access may grant or revoke read access to other members.

- *External Members May Be Added*
  Defines whether external members and users not belonging to the organization may be added.

- *Restrict Team Members*
  Defines the organizations, organizational units, teams and external organizations whose members may be added to the Teamroom. If the list does not contain any entries, members can be added without restriction.

- *Main Administrator*
  Defines the user who will receive the automatically generated e-mail messages concerning the Teamroom. Otherwise, all Teamroom administrators receive the e-mail messages. The user is also listed as contact in case of missing permissions.

- *Support Coordinator*
  The support coordinator team has access to all support requests in the corresponding context and can perform the same actions as the support request initiators.

- *Support Team*
  The support team handles the organization-internal management of support requests in the respective context.

- When editing the properties of several Teamrooms together, you can also define the permissions on the "Security" tab. This allows you to efficiently adjust the access rights of many Teamrooms.

3.5 Sending an E-Mail to Team Members

To simplify collaboration even further, e-mails can be sent directly from Teamrooms to the team. The "Send" > "Send E-Mail to Team Members" context menu command is available for Teamrooms and for objects assigned to Teamrooms. When using the context menu command on objects, they are added as links to the e-mail.

For easy selection of recipients, they can be set based on their role in the Teamroom or based on a team, organizational unit, or external organization used in a role. Additionally, recipients can be filtered based on membership or registration status.

Note: The sent e-mails can be viewed in the Teamroom properties on the "Recently Sent E-Mails" tab.

3.6 Working with Shortcuts

The same objects can be stored as shortcuts (context menu command "Paste Shortcut") in different Teamrooms or subfolders.

- When you delete a shortcut, only the shortcut is removed. The object itself and other shortcuts are not affected. If the object is in the wastebasket, the shortcuts are displayed with the additional text "(Deleted)". If the object is permanently deleted, the shortcuts will be removed, too.

- When you store shortcuts within a Teamroom in different folders, the shortcuts are visualized with an arrow. If the object itself is cut, the next succeeding shortcut becomes the "object".

- Each object can be assigned to only one Teamroom, which defines the access rights. If you store an object in several Teamrooms, the shortcuts are visualized with an arrow in a square. Note that team members have no access to the shortcut, if they are not authorized in the assigned Teamroom of the object.

- When you cut an object that has no shortcut in another Teamroom and paste it to a Teamroom, the object will be assigned to that new Teamroom.

- When you cut an object that has a shortcut in exactly one other Teamroom, the object will be assigned to that Teamroom. If shortcuts exist in several Teamrooms, the object is not assigned automatically to another Teamroom. In this case you can assign the Teamroom manually with the "Tools" > "Change Teamroom" context menu command.
  The change of the assignment can only be carried out, if you have full control in the original Teamroom and at least change access in the target Teamroom.

- In the properties of an object, on the "General" tab, in the *Teamroom* field you can find the assigned Teamroom that defines the access rights. The *Contained in* field shows the Teamrooms and folders in which the object is stored.

- In the properties of a Teamroom, on the "Teamroom" tab, in the *Restrict Shortcuts Within Teamroom* field you can define which type of shortcuts should be allowed. This way, for example, it can be prevented that not accessible shortcuts are stored.

3.7 Changing the Teamroom Assignment

An object is always assigned to only one Teamroom. In case shortcuts of the object are stored in further Teamrooms, the assigned Teamroom can be changed.

To change the Teamroom assignment, proceed as follows:

1. Locate the object, which should be assigned to another Teamroom.
2. On the context menu click "Tools" > "Change Teamroom".
3. Select the Teamroom the object should be assigned to.
   Note: If the object is stored in exactly two Teamrooms, the Teamroom must not be selected.
4. Click "Change Teamroom".

Note: To change the assigned Teamroom of an object, full control is needed in the original Teamroom and at least change access in the target Teamroom.

3.8 Changing the Organization Assignment

If you are member of several organizations, you can change the organization assignment of Teamrooms in which you have full control.

To change the organization assignment of a Teamroom, proceed as follows:

1. Navigate to the desired Teamroom.
2. On the context menu of the Teamroom click "Tools" > "Change Organization".
3. If you are member of more than two organizations, select an organization. Otherwise, the other organization is already selected.
4. Click "Yes".

The following conditions apply to the change of the organization:

- App configurations, app rooms, Teamrooms with forms, processes or with objects with running processes
  The current user must be allowed to manage forms or processes in the target organization.
- App configurations, app rooms, Teamrooms with objects that have a category assigned
  The category must either be defined in the corresponding context or already assigned to the target organization.
- Inboxes with rules
  The current user must be allowed to manage inboxes in the target organization.

3.9 Setting the Access Protection

The access protection defines whether non team members can read the Teamroom.

To change the access protection of a Teamroom, proceed as follows:

1. Navigate to the desired Teamroom.

2. On the context menu of the Teamroom, click "Properties".

3. Select the *Access Protection* on the "Teamroom" tab.

   o "Default"
   The Teamroom and its content can only be read by team members.

   o "Extended by category"
   The defined team can access the Teamroom and its contents. Access to individual objects can also be granted via the category.
   Note: You can assign access rights on the "Permissions" tab of the category. When the category is assigned to an object, the defined permissions are considered.

   o "Extended by category and workflow"
   The defined team can access the Teamroom and its contents. Users participating in workflow are granted read access. Access to individual objects can also be granted via the category.

   o "Generally readable"
   The Teamroom and its content can be read by all users.

4. Click "Next". You will receive a notice that this Teamroom becomes public. Click "Next" again.

3.10 Creating Public Links

You can provide documents read-only to users who have no account.

To create a public link, proceed as follows:

1. Navigate to the desired Teamroom, subfolder or document.

2. On the context menu, click "Create a Public Link".

3. You can define a description, a validity period and a password. In addition, you can define whether the "Download" button is available for the public link (if basically allowed in the organization or in the Teamroom).

4. Click "Create".

You get a link that can be directly sent or you can copy the link in the clipboard.

Note:

• In the properties of the Teamroom, on the "Content Settings" tab, you can define following settings:

   o *Allow Public Links*
   Defines whether public links can be published.

   o *Block Downloading of Content*
   Defines whether the "Download" button is offered for public links (even if they already exist).

- o *Storage Period of Expired Public Links*
  Entries for expired public links are deleted after the specified period of time. If no time period is specified, the entries are kept.

- o *Default Access Protection*
  When creating public links, the specified default values are suggested and used when sending directly.

- Via the "Send" > "Send Public Link" context menu command you can directly open an e-mail with the public link. In the Teamroom properties, on the "Content Settings" tab, you can define the default access settings that apply to directly sent public links.

- If public links exist, it is visualized with a chain symbol.

- Existing public links can be managed with the "Manage Public Links" context menu command.

  - o You can also retrieve an access report.

  - o For Teamrooms, you can use the "All Public Links" button to open a query-based list that allows you to search for objects with public links. Within the query-based list the "Delete Public Links" context menu command can be used to delete all public links of the selected objects.

  - o For Teamrooms, you can use the "Delete Expired Public Links" button to manually delete the expired public links of the Teamroom.

- The *State* field of a public link shows the state. Public links can be deactivated (Teamroom or organization level), valid or expired. If the issuer's rights in the Teamroom have been revoked, access to the public link is no longer possible. When revoking the rights, a corresponding warning is shown.

3.11 Defining a Logo

For each Teamroom an own logo can be defined. This logo is displayed in the card view, the thumbnail view and the preview.

To define a logo for a Teamroom, proceed as follows:

1. In the context menu of the Teamroom, click "Properties".
2. Click the "Logos" tab.
3. Click "Select" to browse for an image on your computer or select one from the system.
4. Click "Next".

Note: You can select a second logo that is used as a thumbnail. This logo will be displayed for example on the welcome screen.

3.12 Defining a Description

You can define descriptions for Teamrooms. The description is displayed in the content area, if you are in the Teamroom at top level.

To define a description for the Teamroom, proceed as follows:

1. Navigate in the desired Teamroom.

2. Click the "Define Description" action.

3. Define a title and a description for the Teamroom.

4. Click "Next".

3.13 Managing Teamroom Templates

You can define objects in a Teamroom as Teamroom templates that are available in the create dialog.

To define a Teamroom template, proceed as follows:

1. Navigate in the desired Teamroom to the object that should serve as template.

2. On the context menu of the document click "Tools" > "Add to Teamroom Templates". The document is added to the Teamroom templates as shortcut.
Note: When using "Customizing", the "Add to Templates" context menu command is available. In this case, you can specify in a further step whether the template should be added as a copy to the Teamroom templates of the Teamroom (or superordinate Teamroom) or to a template collection.

The Teamroom template is displayed in the create dialog in the "Teamroom Templates" category.

Note:

- Documents that already serve as Teamroom templates provide the "Tools" > "Remove From Teamroom Templates" context menu command.

- To display a list of all Teamroom templates, click the "Templates and Presettings" action and navigate in the "Templates" list. Here you can also add and remove Teamroom templates.

- Objects that are assigned to other Teamrooms can also be used as Teamroom templates. Make sure that the team members are authorized in the other Teamrooms to use the templates.

3.14 Wastebasket and Orphan Objects

When deleting objects of Teamrooms they are not deleted immediately but put in the Teamroom wastebasket. The "Open Wastebasket" action is only available if at least one object is in the wastebasket. Objects in the wastebasket can be permanently deleted ("Empty Wastebasket" or "Delete") or restored.

You can find objects that are assigned to the Teamroom but no longer stored in the Teamroom via the "Tools" > "Show Orphaned Objects" context menu command.

3.15 Displaying New Events

In the card view, the number of changes of Teamrooms is displayed, since you viewed the history for the last time.

1. Navigate in a Teamroom with new events.

2. Click the "Show New Events" action.

3. On the "New Events" tab, you find all current events. The tab is only shown if there are current events.

Note:

- The "Show New Events" action leads to the history that contains older entries, too. The "Delete History" button allows deleting the history and all versions of the objects that are assigned to the Teamroom (full control is needed).

- You can use the "Disable Notification" or "Enable Notification" button to specify whether you want to see new events about this Teamroom at all. Alternatively, corresponding context menu commands are available for Teamrooms.

- Which changes are considered as new events can be configured under "account menu (your user name)" > "Advanced Settings" > "Notifications" > "Settings".

- You can display the history of objects via the "Tools" > "Show History" context menu command. If there are too many events, the oldest ones are deleted or events worth keeping are saved in an archive.

3.16 Hierarchical Teamroom Relations

In order to manage hierarchies of Teamrooms easily and clearly, relations between Teamrooms are available as metadata. The relations without the complete hierarchy across all levels are displayed on the "Relations" tab. The relations including the complete hierarchy can be displayed via the "Tools" > "Show Teamroom Relations" context menu command.

Note:

- The "Relations" tab is only displayed, if the Teamroom is related to at least one other Teamroom.

- The access rights defined by the Teamroom only apply to assigned objects but not to assigned Teamrooms. A Teamroom always defines its own security context.

- The Teamroom hierarchy includes all types of rooms.

Relations:

- Superordinate Teamroom
  A Teamroom can be assigned to exactly one superordinate Teamroom.

- Referencing Teamrooms
  A list of all Teamrooms in which the current Teamroom is stored.

- Subordinate Teamrooms
  A list of all Teamrooms that are assigned to the current Teamroom.

- Referenced Teamrooms
  A list of all Teamrooms that are stored in the current Teamroom.

- Orphan Teamrooms
  A list of all Teamrooms that are assigned to the current Teamroom but which are no longer stored in this Teamroom.

- Subordinate Teamrooms (incl. Hierarchy)
  A list of all Teamrooms that are assigned to the current Teamroom or to a Teamroom in the Teamroom assignment hierarchy.

- Referenced Teamrooms (incl. Hierarchy)
  A list of all Teamrooms that are stored in the current Teamroom or in a Teamroom in the Teamroom hierarchy.

- Orphan Teamrooms (incl. Hierarchy)
  A list of all Teamrooms that are assigned to the current Teamroom or to a Teamroom in the Teamroom assignment hierarchy but which are no longer stored in the Teamroom.

3.17 Encrypting a Teamroom

If your organization has Fabasoft Secomo and the "Teamroom Encryption" app is assigned to you, you can encrypt Teamrooms. If you read, edit or upload documents the encryption and decryption is carried out on the client. Thus, no unencrypted documents are transferred or stored.

- When you create a Teamroom, you can directly encrypt the Teamroom by clicking the "Encrypt" button.

- Existing Teamrooms can be encrypted or decrypted via the properties of the Teamroom ("Teamroom" tab, "Encrypt Documents" field).

- After you have enabled or disabled the encryption, it takes some time depending on the size of the Teamroom until all documents are encrypted or decrypted.

- A pending encryption or decryption is visualized with an opened or a closed lock symbol.

Note:

- When creating new documents in the web client, the documents are only encrypted after content is added.

- Working with encrypted Teamrooms is also possible without an installed Fabasphere Client, so documents can be uploaded or downloaded. The encrypted preview images and documents are also displayed.
  There are the following restrictions for working without the Fabasphere Client:

  o The document size is limited to 100 MB.

  o A maximum of 5 files can be downloaded at the same time.

- When encryption is enabled for a Teamroom, versions of the existing objects are deleted.

- For the objects in an encrypted Teamroom, the Teamroom assignment cannot be changed.

- If your organization has multiple key servers configured, you can select a key server if you are authorized to do so via organizational policy. Otherwise, the default key server is used.

- Collaboration in an encrypted Teamroom can only occur with users whose organization also has encryption enabled.

- Synchronization of encrypted Teamrooms to the local workstation is possible only when using encrypted file systems on Microsoft Windows and Apple macOS.

- In an encrypted Teamroom, documents can only be decrypted at the workstation, so a document cannot be analyzed or updated within the Fabasphere. This results in the following security features:

- No full text search
  Encrypted documents cannot be analyzed or searched for in full text.

- No conversion
  Encrypted documents cannot be converted.

- No preview
  Encrypted documents cannot be prepared for a viewer (e.g., PDF or 3D viewer).
  A preview image or PDF view created at the workstation (using the Fabasphere Client)
  is encrypted and can be displayed in the web client.

- No analysis, updating or generation of encrypted documents on the server (affects e.g.,
  Microsoft Excel, Microsoft Word, CSV and XML files).

- No provision of encrypted documents via server-side interfaces (affects e.g., WebDAV
  or the Fabasphere network drive).

3.18 Transferring a Teamroom

To relocate the processing of a Teamroom in another data location or in another installation,
you can transfer Teamrooms. The functionality is only available if it is configured accordingly
in the organization.

To transfer a Teamroom, proceed as follows:

1. On the context menu of the Teamroom click "Transfer Teamroom" > "name of the
   installation".

2. In the *Access Rights of the Source Teamroom* field, define the access rights to the source
   Teamroom after the transfer.

   - Keep Access Rights of Previous Team Members

   - Restrict Access to the Members of My Organization

   - Restrict Access to the Team Members With "Full Control"

3. In the *Dissolve Source Teamroom* field, define whether the source Teamroom should be
   dissolved.

   - Do Not Dissolve
     The Teamroom will not be dissolved.

   - Assign Activity "Dissolve Teamroom"
     A workflow activity will be assigned to the specified recipient at the specified time.

   - Dissolve Automatically
     The Teamroom will be dissolved at the specified time.

4. Click "Transfer" to confirm the transfer.

5. If you are not logged in to the target domain, a login dialog is displayed.

6. If requested click "Allow" to grant the "OAuth Client" the "Transfer Teamroom" right (only
   necessary once).

7. Click "OK" after the transfer has been completed.

Note:

- The Teamroom and the associated objects are marked as transferred in the source domain.

- The Teamroom and the associated objects are no longer editable in the source domain.

- The Teamroom is stored in the "Personal Folder" in the target domain.

- The user rights are transferred. Users are identified by the e-mail address. If users do not yet exist in the target domain, new users are created.

- Categories of objects are also considered if they exist in the source and target systems and can be identified by a unique import ID.

- With the "Transfer Teamroom" > "Restore Version Before Transfer" context menu command, you can restore the version of the Teamroom, which was saved by default prior to the transfer. Incompletely transferred Teamrooms will be deleted in the target domain. If a Teamroom was successfully transferred, the connection to the transferred Teamroom in the target domain will be lost.

- With the "Transfer Teamroom" > "Define Dissolve Period" context menu command, you can also subsequently specify whether and when the source Teamroom should be dissolved.

- With the "Transfer Teamroom" > "Open in <name of installation>" context menu command, you can navigate directly to the target Teamroom. The corresponding action is also available for objects in the Teamroom.

3.19 Retracting a Teamroom

After completing the collaboration, the transferred Teamroom can be retracted to the original place.

Note: Teamrooms that are transferred to another data location cannot be retracted. Another transfer to the initial data location is possible.

To retract a Teamroom, proceed as follows:

1. On the context menu of the Teamroom click "Transfer Teamroom" > "Retract form <name>".

2. Click "Retract" to confirm the retraction.

3. If you are not logged in to the target domain, a login dialog is displayed.

4. If requested click "Allow" to grant the "OAuth Client" the "Retract Teamroom" right (only necessary once).

5. Click "OK" after the retraction has been completed.

Note:

- The Teamroom and the associated objects are marked as retracted in the target domain.

- The Teamroom and the associated objects are no longer editable in the target domain.

- If users do not yet exist in the source domain, users are created.

- If the Teamroom could not be successfully retracted, you can restore the version of the Teamroom in the source domain and in the target domain, which was saved by default

prior to the transfer, with the context menu command "Transfer Teamroom" > "Restore Version Before Transfer".

3.20 Publishing a Teamroom

Teamrooms can be published read-only to another data location or to another installation.

To publish a Teamroom, proceed as follows:

1. On the context menu of the Teamroom click "Publish Teamroom" > "name of the installation".

2. Click "Publish" to confirm the transfer.

3. If you are not logged in to the target domain, a login dialog is displayed.

4. If requested click "Allow" to grant the "OAuth Client" the "Transfer Teamroom" right (only necessary once).

5. Click "OK" after the transfer has been completed.

Note: Teamrooms may be republished (either all objects or only the changes since the last publishing).

3.21 Converting a Folder to a Teamroom

The access rights to Teamrooms and the contained objects are defined by the team specified in the Teamroom. Folders are used for structuring, but do not have their own rights context.

If you want to give a folder a different right context, you can now use the "Tools" > 'Convert to "Teamroom"' context menu command to convert a folder to a Teamroom. Conversely, you can also convert a Teamroom located in another Teamroom into a folder.

Note:

- To convert a folder into a Teamroom, you need to have full control in the Teamroom associated with the folder. If there are other Teamrooms in the folder, you also need full control in these Teamrooms.

- To convert a Teamroom to a folder, you need full control in that Teamroom and change access in the target Teamroom for the folder.
  If the converted Teamroom is located in multiple Teamrooms, you can select the target Teamroom for the folder.

3.22 Determining the Teamroom Status

As a user with full control, you can determine the Teamroom status (number of objects, storage consumption and indexing status for AI use).

To determine the Teamroom status, proceed as follows:

1. Navigate to the desired Teamroom.

2. On the context menu of the Teamroom, click "Tools" > "Determine Status".

3. Click the "Determine Status" button. The status is displayed as first line in the *Usage* and *Indexing Status for AI Use* fields.

4. Click "Close".

Note:

- All objects that are assigned to the Teamroom are considered (for example, also objects in the wastebasket and the wastebasket itself).

- A maximum of 400 values or the values of 13 months are kept in the lists.

- You can remove all entries via the "Delete All Entries" button.

- The last determined values can also be displayed as columns ("Consumption: <field>" or "Indexing Status: <field>").

3.23 Dissolving a Teamroom

As a user with full control in a Teamroom, you can delete the Teamroom and all its objects.

To delete a Teamroom and its objects, proceed as follows:

1. Navigate to the desired Teamroom.

2. On the context menu of the Teamroom, click "Dissolve".

3. Click "Delete" to confirm that the Teamroom and its objects should be deleted. Shortcuts to these objects will also be removed from other Teamrooms.
    Note: If the Teamroom contains subordinate Teamrooms, you can either resolve all Teamrooms or only the parent Teamroom.

4 Working with Lists

Teamrooms and folders show the contained objects in the content area as a list. Three different list views are provided.

For more information on keyboard operation, see chapter 16.5 "Content Area".

Content View

The content view is displayed per default. In this list, the most important information for the objects is shown.

Detail View

In the detail view, you can modify the column settings to get more information about the listed objects.

Preview

In the preview, you can find the most important meta data and the preview of the object. For documents, the first pages are displayed.

4.1 Selecting Entries

Several objects in a list can be selected to edit them concurrently.

Select several objects

To select several objects in a list, click the objects while keeping the `Ctrl` key pressed or mark them via the "Selection" box.

- In the content view, the "Selection" box is displayed when you hover with the mouse over the right side of the line. In the preview you have to hover over with the mouse over the left side of the line.
- In the detail view, the "Selection" box is displayed left to the first column.
- In the card view, the "Selection" box is shown below the cards.

Select an area

To select an area of an object list, select the first entry and press the `Shift` key. Keep the `Shift` key pressed and select the last entry of the area you want to select. Doing so, all objects between the two entries are selected.

Select all entries

Select the box in the column header to select all entries (only detail view).

4.2 Change the View

To switch between the views, open the context menu of the content area.

1. Open the context menu of an empty part of the content area and click "Change View".
2. Select the desired view.

4.3 Display Settings

With the menu bar displayed, you can make appropriate view adjustments via the menu "View" > "Display Settings".

Load

Allows you to load a saved display setting or the product setting.

Reset

Restores the default display settings (only visible if the current settings differ from the default settings).

Save

The current display setting (view, columns) is saved.

Following storage options are available:

- Set Default View for "<object>" for All Users
  The defined view is displayed by default for all users. This option is only available if you have at least change access.
- Create New Display Setting
  - o *Save as*
    The display settings can be saved at various levels (personal presettings, room,

configuration, collection for templates and presettings). The available levels depend on the context and your permissions.

- o *Name*
  Assign a name to the new display setting.

- o *Define as Default for Objects of This Type*
  Defines whether this display setting is applied to new objects of this type and to existing objects whose display settings have not been changed. The display setting actually used is also determined by the evaluation hierarchy.

- Overwrite Existing Display Setting

  - o *Existing Display Setting*
    Select a display setting to overwrite.

  - o *Define as Default for Objects of This Type*
    Defines whether this display setting is applied to new objects of this type and to existing objects whose display settings have not been changed. The display setting actually used is also determined by the evaluation hierarchy.

Evaluation hierarchy for default display settings

The display settings defined as default are determined based on the following evaluation hierarchy:

1. Default View for "<object>" for All Users

2. Personal Presettings
   Personal display settings are available only to yourself.
   Note: All saved personal display settings can be found under "account menu (your user name)" > "Advanced Settings" > "Presettings".

3. Room
   Display settings can be saved in the current Teamroom or shelf.

4. Configuration
   If the room is based on a configuration, the display settings can be saved in the configuration.

5. Presetting Collection
   Display settings can also be saved in a collection for templates and presettings to which you have access.

Change

Allows you to define and position the displayed columns via a selection dialog. Alternatively, columns can also be added, removed and moved using the header bar.

Copy

Copies the current display setting to the clipboard.

Paste

Applies the display setting in the clipboard to the current list.

4.4 Sorting, Grouping and Filtering Objects in a List

The sorting of objects in a list can be easily adapted. You can sort objects depending on various criteria in an ascending or descending order. It is also possible to sort objects depending on several criteria at the same time.

You can define the sorting by clicking the "Sort" button in the upper right corner. Alternatively, you can use the context menu of the content area.

In the detail view, you can also sort the entries via the column header. The detail view provides additionally the possibility to group a column, to fix a column or to filter the entries depending on a search criterion. For object, date and enumeration properties, a values filter is available in addition to the text filter. When using the text filter, all rows containing the entered string are displayed (case-insensitive). When using the values filter, all rows that correspond to the selected values are displayed.

Note:

- If a values or text filter is active for a column, the other filter field is displayed in read-only mode (highlighted in gray). The filter can only be changed once the active filter has been deleted. An active column filter is indicated by the filter symbol highlighted in blue.

- In search-based lists and in the search portal, you can also sort by specific, correspondingly indexed properties. The sortable properties can be found in the menu of the "Sort" button in the upper right corner (e.g., *Name* or *Created on/at*). In the column header, the "Sort" context menu command is only available for sortable columns. Clicking on the column header also only changes the sorting for sortable columns, otherwise nothing happens.

- To display scrollbars for fixed columns under Apple macOS, the option "System Settings" > "Appearance" > "Show scrollbars" > "Always" must be selected. Scrolling with the "Left" and "Right" arrow keys works independently of the system setting.

- Keyboard operation: The shortcut `Alt + F9` takes you to the column header if the details are displayed, otherwise to the "Sort" button.

- The values filter is only offered if no element of the property path is defined as "multiple".

- The values filter for date values now has a tree structure and is therefore easier to use with keyboard and screen reader. The tree elements can be expanded or collapsed using the keyboard or by clicking on the corresponding symbol. Expanding and collapsing does not change the filter behavior and only serves to make operation easier. If subordinate tree elements have only been partially selected (for example, only one day of several in a month), then the superordinate tree elements have the status "partially selected". Clicking on a partially selected element selects all subordinate elements.

- Objects in unsorted lists can be moved not only by drag-and-drop but also with the context menu commands "Move" > "Prepare for Moving" and "Move" > "Move Before" or "Move After". Thus, the move functionality can also be used via keyboard operation.

4.5 Modify Column Settings

The columns of the detail view can be adjusted depending on your needs.

1. To add a column, proceed as follows:

2. Select the object in the list that provides the property you want to add.

3. Open the context menu of a column in the column header.

4. Click "Add Column".

5. Select the desired property.

Note:

- Which properties are available as columns depends on the type of the object that is selected in the list.

- For columns that contain objects, properties of these objects can be displayed via the "Next Level" context menu command.

- For compound properties, the properties of the compound property can be displayed via the "Details" context menu command.

- To move a column to the right or left, use the "Move to" context menu command. You can also move columns with drag and drop.

- To optimize the width of the column according to the length of the content, double-click in the column header between two columns.

- To remove a column, use the "Remove" context menu command.

- Keyboard operation: The shortcut `Alt + F9` takes you to the column header.

4.6 Column Editing in the Details View

If you mark a cell and press the F2 key, you can directly edit the content of the cell.

For efficient editing of several objects at the same time possibilities similar to a spreadsheet program are provided in the detail view.

Editing possibilities:

- copy (`Ctrl + C`)

- cut (`Ctrl + X`)

- paste (`Ctrl + V`)

- delete (`Del` key)

Several even not adjacent cells within a column can be copied and pasted at the same time. If the number of selected cells when pasting is greater than the number of selected cells when copying, then it is started over with the first value. If fewer cells are selected when pasting, only values in the selected cells are changed.

Note: Under Linux, no empty object pointers are copied.

The values can also be copied from the Fabasphere and pasted e.g., in Microsoft Excel. Pasting values from third-party products in the Fabasphere is only conditionally possible (depending on the clipboard format of the third-party product).

Table Handling

The alternatively available table editing can be activated by pressing the "Table Handling" button (`Alt + F2`) in the column header. This makes the operation similar to a spreadsheet program:

- The cells are displayed with border lines.
- The hover highlighting is displayed per cell.
- Cells that cannot be edited are displayed with a gray background.
- Editing a cell is activated with `F2`, a double-click (fast and slow) or typing letters/numbers.
- A click on the object name does not open the object.

Calculations Within Object Lists

For numerical and currency values displayed in a column, the number (of entries with a value), the total and the average can be calculated. The "Calculate" command is available in the context menu of the column header for the corresponding column. The result is displayed at the bottom of the page.

If the list is grouped, the calculations are performed per group and displayed at the end of the group entries. For filtered object lists, only the entries displayed are used for the calculation.

If a value is changed, for example, with the `F2` key a recalculation only takes place after the list has been updated. The values of the old calculation are grayed out.

4.7 Copy Data Table

If you enable the menu bar, you can use the "Clipboard" > "Data Table" > "Copy" menu command to copy the list in the clipboard and paste it for example in Microsoft Excel. If some lines are selected, only those lines will be copied to the clipboard. The order in which the lines were selected is taken into account.

Note: If you choose "Copy Extended", additionally to the visible columns also entries of shown object lists and all values of aggregates and aggregate lists are copied as nested table.

4.8 Infobox

The infobox is displayed after about one second, if your mouse is placed over the check box or symbol of a selected object and not moved. This way you get the most important information without the need to open the object.

Note: You can disable the infobox in the "Base Settings" with the *Show Hints* option.

4.9 Lists in the Property Editor

To reduce the complexity of the property editor and improve the overview, a simplified view is available for object and aggregate lists. The "Show details" button takes you to a full view of the list optimized for editing.

Simplified List

The reduced editing options in the simplified list provide an improved overview.

- No menu bar is displayed.
- The number of entries displayed depends on the context. In general, a maximum of 15 entries are displayed. The "Further Entries" button takes you to the full view.
- Sorting and grouping cannot be carried out in the simplified list. These are taken over by the settings in the full view.
- Only as many columns as space is available are displayed. Thus, horizontal scroll bars can be avoided.
- Thumbnails are not displayed in the detail view.
- Actions on the entries can be carried out via the context menu.
- Actions concerning the list can be offered via buttons above the list.
- Direct editing with F2 is possible depending on the list.
- If there are more entries that can be displayed on a page, the column headings are fixed.

Full List

The full list is used in particular for editing and can be accessed via the "Show Details" button of the simplified list. If the list is the only field on a tab, the full list can also be displayed directly.

- The full view makes optimum use of the window width.
- The full list offers the complete list functionality as usual.
- If there are more entries that can be displayed on a page, the column headings are fixed.

5 Search

The Fabasphere offers a powerful search and research capability.

5.1 Search With Mindbreeze

You can perform a full text search using the search field in the top bar (`Alt + 4`) or via the search portal ("Search" widget on Home).

To perform a search, proceed as follows:

1. Enter the desired search term in the search field and press "Enter".
   Note: The search is not case-sensitive. If you start directly in the search portal, you can, if necessary, narrow down the search criteria even before you perform the search. The following search criteria are offered as standard, which can be extended depending on the object types found:

   o Where
      The objects found must belong to the specified context (e.g., objects assigned to your organization).

o Date
The objects found must have the specified change date.

o Type
The objects found must be of the specified type (e.g., text document).

o Contained in Teamroom
The objects found must be assigned to the specified Teamroom.

2. The search result is displayed in the search portal. Only results on which you have search rights are displayed. You can use the search criteria to further restrict the search (e.g., to Teamrooms or types).

Note:

- In the search result, next to the search field, you can select the type of conjunction of the search terms: AND (all terms), OR (one of the terms), NEAR (all terms close to each other).

- In the result list, you can sort by specific, correspondingly indexed properties. The sortable properties can be found in the menu of the "Sort" button in the upper right corner (e.g., *Name* or *Created on/at*). In the column header, the "Sort" context menu command is only available for sortable columns. Clicking on the column header also only changes the sorting for sortable columns, otherwise nothing happens.

- The "Save Search Query" action allows you to save the search term and the currently selected search criteria under a freely selectable name.

- The "Saved Queries" > "<name>" action allows you to execute a saved search query. The last five search queries or the last five favorite search queries are displayed.

- The "Saved Queries" > "Further Search Queries" action allows you to view a list of all search queries. By clicking on a search query, it will be executed. In addition, you can rename, delete and mark search queries as favorite via the context menu.

- The "Save Search Result" action can be used to persist the search result in a "saved search result". You can select whether you want to remove entries that are already contained.
Thus, you can easily perform a research even if there are many hits. To display the saved search result, you can click the "Search" widget on "Home" and switching to the "Saved Search Results" tab.

The Mindbreeze query language offers the following possibilities. The listed options can also be combined.

Option	Example
Search for a term `term`	Objects that contain a text with the term "Contract" `contract`
Not included `NOT term`	Objects that contain no text with the term "Contract" `NOT contract`

Search for a whole word or an exact phrase
 	
`"word1"`
 	
`"word1 word2 word3"`
	Objects that contain a text with the phrase "Contract with Fabasoft"
	
	`"contract with fabasoft"`

AND operator
 	
`term1 term2 term3`
 	
or
 	
`term1 AND term2 AND term3`
	Objects that contain a text with the terms "Fabasoft" and "Contract"
	
	`fabasoft contract`

OR operator `term1 OR term2 OR term3`	Objects that contain a text with the term "Fabasoft" or "Contract" `fabasoft OR contract`
Precedence of logical operators by brackets `(term1 OPERATOR term2) OPERATOR term3`	Objects that contain a text with the term "Fabasoft" or "Mindbreeze" and the term "Contract" `fabasoft OR mindbreeze) AND contract`
Term near to another term `term1 NEAR term2`	Objects that contain a text with the term "Fabasoft" near the term "Contract" `fabasoft NEAR contract`
Ranking in the search result (importance of terms) `term1^number term2`	In the search result ranking, the occurrence of the term "Contract" is rated twice as highly as "Fabasoft" `contract^2.0 fabasoft`

Search for defined fields
 	
`metadata:term`
 	
The following metadata is generally available:
 	
Object
 	
• `title` (Name)
• `objsubject` (Subject)
• `objcreatedby` (Created by)
• `objchangedby` (Last Changed by)
• `objterms` (Terms)
• `objteamroom` (Teamroom)
• `objprimaryrelated` (Origin)
• `objfile` (File)
• `objappconfigurationroom` (App Configuration)
	Objects that contain the term "Contract" in the subject
	
	`objsubject:contract`
	
	Content objects with "DOCX" or "MSG" extension that contain the term "faba"
	
	`faba (extension:docx OR extension:msg)`
	
	Content objects with size between 5 KB and 10 MB
	
	`mes:size:[5KB TO 10MB]`
	
	Content objects with a 2020 change date
	
	`mes:date:[2020-01-01 TO 2020-12-31]`
	
	E-mail objects sent from "Jones"
	
	`from:jones`

- `objroomapp` (App)
- `organization` (Organization)

Content

- `content` (Content)
- `extension` (File Extension)
- `mes:size` (File Size)
- `mes:date` (Change Date)

E-Mail

- `subject` (Subject)
- `from` (From)
- `to` (To)

5.2 Metadata Search

You can perform a full text search using the search field in the header bar. However, in many lists and fields you can also search for objects based on specific metadata ("Search" button or "Add Entry" > "Search").

In the search dialog you can select either an object class, a category of a user-defined form or an object aspect in the *Selection* field. When selecting a category or an object aspect, the *Detailed Selection* field is displayed, which allows you to additionally select an object class. The object classes for which the category or object aspect is intended are offered for selection.

You can additionally restrict the search to objects of the current Teamroom or organization.

The search query itself can be edited via the "Edit Query" button by users who are authorized in one of the following policies: *Edit Forms and Categories*, *Edit BPMN Process Diagrams* and *Manage Inbox Rules*.

5.2.1 Defining Search Criteria Using Options

You can define the required values for properties as search criteria. You can specify the type of value comparison (e.g., "begins with") using the search option of the respective property.

Short description of all options

Different options are available depending on the property type.

- "equal"
  This option is used to find all objects whose value of this property is equal to the defined value.
- "not equal"
  This option is used to find all objects whose value of this property is not equal to the defined value.
- "any value"
  This option is used to find all objects whose value of this property is not empty. If this option is selected, no input is required in the input field. It is therefore displayed inactive.

- "no value"
  This option is used to find all objects whose value of this property is empty. If this option is selected, no input is required in the input field. It is therefore displayed inactive.

- "begins with"
  This option is used to find all objects whose value of this property begins with the defined string.

- "does not begin with"
  This option is used to find all objects whose value of this property does not begin with the defined string.

- "ends with"
  This option is used to find all objects whose value of this property ends with the defined string.

- "does not end with"
  This option is used to find all objects whose value of this property does not end with the defined string.

- "contains"
  This option is used to find all objects whose value of this property contains the defined string.

- "does not contain"
  This option is used to find all objects whose value of this property does not contain the defined string.

- "Full Text" Query
  If this option is selected, a full text search in string properties is performed (corresponding system configuration required). Operators like "AND" and "OR" are supported.

- "sounds like"
  If this option is selected, a phonetic search is performed. Objects will be found whose value of this property sounds like the defined string.
  Example: A search for "sounds like Meier" will return e.g., "Meyer", "Meier", "Maier" and "Mayr".

- "does not sound like"
  If this option is selected, a phonetic search is performed. Objects will be found whose value of this property does not sound like the defined string.
  Example: A search for "does not sound like Meier" will return all objects except e.g., "Meyer", "Meier", "Maier" and "Mayr".

- "from"
  This option is used to find all objects whose value of this property is equal or greater than the defined value.

- "up to"
  This option is used to find all objects whose value of this property is equal or lower than the defined value.

- "between"
  This option is used to find all objects whose value of this property is between the defined values.

5.2.2 Defining Search Criteria Using Wildcards

In the search query, wildcards act as placeholders for any characters or strings.

Example: A search using the string "_andy" in the *Name* field will return all objects with a name containing any character followed by the string "andy".

Wildcards

- "*" or "%"
  These wildcards are placeholders for any string.
  Examples:
  A search for "*ergy" will return results containing any string followed by the "ergy" string: "energy", "synergy", "allergy".
  A search for "berg*" will return results containing "berg" followed by any string: "bergamot", "bergenia".
  A search for "bl*d" will return results containing "bl" followed by any string and ending with the character "d": "blood", "bleed", "blond".

- "?" or "_"
  These wildcards are placeholders for exactly one character. You can either use "?" or "_".
  Example: A search for "_andy" will return results containing one arbitrary character followed by the string "andy": "Dandy", "Candy", "Sandy".

- "~"
  The wildcard tilde "~" will run a phonetic search. All objects will be determined that are pronounced similarly to the defined string. A tilde always has to be entered at the beginning of the search string.
  Example: A search for "~Maier" will return results sounding like "Maier": e.g., "Meier", "Mayr", "Maier".

- "%%" or "**"
  To perform a full text search in string properties, the wildcards "%%" and "**" can be used.
  Example: A search for "%%energy" in the *Name* field will return all objects with a name containing the word "energy".

Most options available via wildcards can also be defined via options in from the. For the "?" and "_" wildcards, no equivalent options are available in lists.

Comparison: options and wildcards

- '"begins with" agreement' corresponds to 'agreement*'
- '"ends with" agreement' corresponds to '*agreement'
- '"contains" agreement' corresponds to '*agreement*'
- '"sounds like" agreement' corresponds to '~agreement'
- '""Full Text" Query' agreement'' corresponds to '%%agreement'

5.3 Quick Search

This simplified search only searches for a character string without specifying an object type or further search criteria. If returned entries are not unique, the properties of the objects found can be viewed via the context menu.

Object Lists

To add an object to an object list in the property editor, a quick search can be performed in the search field.

Note: The "Search and Add" button is only displayed in object lists in which objects may be inserted.

To perform a quick search in the search field, proceed as follows:

1. Click the "Search and Add" button.

2. Select the desired search mode by clicking on the Fabasphere/Mindbreeze symbol.

   o   When using the Fabasphere search, only the names of objects are searched for.

   o   When using the Mindbreeze search, a full text search is performed. In a full text search, the entered character string is searched in all contents and properties of the object, not only in the object name.

3. Enter the string you want to search for. In a quick search, the character string entered is interpreted as the beginning of the name by default. You can also use wildcards (for example, *).

4. Press the `Enter` key to perform the quick search.

5. All objects whose names correspond to the defined character string are displayed as the result. Select the desired entry from this list of results by clicking it.

6. The entry is taken over to the object list in which you started the quick search.

Object Properties

A quick search can be performed directly in object properties. The "Search" button next to a drop-down list indicates that you can perform a quick search.

To perform a quick search in object properties, proceed as follows:

1. Click in the field and press the `Ins` key. Alternatively, double-click in the field. In this case, the system only searches in the name of the objects.
   To perform a full text search, press `Ctrl + Ins` or press `Ctrl` and double-click in the field. In a full text search, the entered character string is searched in all contents and properties of the object, not only in the object name. This way the field becomes editable.
   Note: To cancel a quick search, press the `Esc` key.

2. Enter the string you want to search for. In a quick search, the character string entered is interpreted as the beginning of the name by default. You can also use wildcards (for example, *).

3. Press the `Enter` button to perform the quick search.

4. All objects whose names correspond to the defined character string are displayed as the result.
   Select the desired entry from this list of results by clicking it.

5. The entry is copied to the object property in which you started the quick search.

If you could not find the desired object using the quick search, you can still open the search dialog using the "Search" button, to perform a search using further search criteria.

5.4 Search Folders

In search folders, the objects contained are determined using a search pattern.

1. Create a search folder in a Teamroom.
2. Define the search criteria via the "Create Search Form" or "Edit Search Form" action.
3. Click the "Save Query" button to use the search form for the search folder.

Hint:

- The search query itself can be edited via the "Edit Query" button by users who are authorized in one of the following policies: *Edit Forms and Categories*, *Edit BPMN Process Diagrams* and *Manage Inbox Rules*.
- The contents of the search folder are not updated automatically. Click the "Refresh" button to perform another search using the saved search pattern.
- With the "Find" action, you can perform a search independent of the saved search form.
- When duplicating a search folder, the associated search form is also duplicated if the search form is assigned to the same Teamroom. If the search form is assigned to a template collection, it is not duplicated.

5.5 Insight Apps

Insight apps provide aggregated access to information in your organization, customized to your needs. You can use insight apps to display and highlight important information without users having to explicitly search for it.

Insight App Management

Insight apps can be managed at the following levels by authorized users:

- collection for templates and presettings
- app configuration ("Insight Apps" widget)
- app rooms and Teamrooms ("Insight Apps" widget in "Templates and Presettings").

The permissions assignment and releasing for usage mechanism follow the usual pattern.

Note: The "Edit Insight Apps an AI Settings" organizational policy defines which users are generally allowed to edit insight apps.

Settings

You can define the following basic settings for insight apps. For a description of solution-specific settings, see the corresponding solution documentation.

"Insight App" tab

- *Multilingual Name*
  The name of the insight app.
- *Description*
  The behavior of the insight app can be described as free text.

- *Where*
  Defines the context (organization, Teamroom, everywhere) in which the search is performed.

- *Use AI Configuration*
  Defines whether the general organization index for the standard search or a special AI configuration index from Mindbreeze AI should be used.

- *AI Configuration*
  Defines the AI configuration used for the search. The following evaluation hierarchy applies:

  o defined insight app mapping (Teamroom/app room > app configuration > organization)

  o defined AI configuration of the insight app

  o default AI configuration at organization level

  o general organization index for the standard search

"Usage" tab

- *Show as Action*
  Defines whether a separate action should be displayed that allows the insight app to be opened.

- *Symbol*
  Defines the symbol that is displayed for the action.

- *Action Name*
  Defines the multilingual name of the action.
  Possible placeholders:
  `<~objname~>`: name of the current object
  `<~roomname~>`: name of the Teamroom the current object is assigned to
  If the respective user language is not explicitly defined, the following fallback mechanism applies: language variant (e.g., German (Switzerland)) > language (e.g., German) > English > insight app name.

- *Show as Split View*
  Defines whether a two-part view should be used for display when the insight app is opened via the action (the insight app on the left and the PDF overview of the current object on the right).

- *Current Document*
  The action is only displayed for objects that have one of the specified object classes and one of the specified categories.

- *Contained in*
  The action is only displayed for objects that are in an object with one of the specified object classes and one of the specified categories.

- *Files*
  The action is only displayed for objects that are in a file with one of the specified object classes and one of the specified categories.

- *Expression for Further Restrictions of Usability*
  The action is only displayed if the expression returns `true`.

Insight App Designer from Mindbreeze AI

Use the designer to create the insight app you want. Assemble your insight app by clicking on the elements in the left pane or dragging and dropping them into the drawing area. If necessary, you can specify additional settings in the left pane. To change elements afterwards, move the mouse pointer over the element and use the "Move", "Delete", and "Edit" buttons.

More information can be found here: https://help.mindbreeze.com/en/doc/Development-of-Insight-Apps/index.htm#insight-app-designer

Using Insight Apps

Insight apps can be accessed by authorized users as follows:

- In the search portal, the "Insight Apps" tab shows all released insight apps from app configurations, app rooms, Teamrooms and insight app collections to which you have been granted permission.
- Insight apps can be placed directly on "Home" or added to "Favorites".
- In the context of apps, insight apps are available in the "Insight Apps" widget.
- In the context of Teamrooms, the insight apps are available on a corresponding tab.
- For Insight apps, you can define on the "Usage" tab whether they are offered for execution as an action or context menu command directly for the defined objects.

6 Workflow

Users, organizations, organizational units and external organizations can be involved in the processing of business objects via a workflow.

Typical processes are approval and release processes.

6.1 Executing an Ad Hoc Process

An ad hoc process allows you to define the process flow by yourself. Consequently, you can react flexibly to situations for which no predefined processes are available.

To execute an ad hoc on an object, proceed as follows:

1. Navigate to the desired object.
2. Make sure that all process participants have the necessary access rights on the object. If necessary, authorize the users in the respective Teamroom.
3. On the context menu of the object click "Tools" > "Start New Process".
4. Select a template for an ad hoc process or start with an empty template. The step is omitted if there are no predefined processes.
   Note: In an empty template, you can also use an existing ad hoc process template by clicking the "Insert Template" button.

5. If you start with an empty template, define an activity and a participant for the first task in the process. Further information about the possible settings can be found in the next chapter.

6. Click "Next", if you do not want to add further activities.
    Otherwise, click "Take". You can add further activities by selecting an activity and participants and clicking "Take" again. The last activity with a defined participant is considered even if you do not click "Take".
    Note: If you need the ad hoc process regularly, you can save it as template. You can specify the storage location. All saved personal ad hoc process templates can be found under "account menu (your user name)" > "Advanced Settings" > "Workflow" > "Personal Settings" tab > *Ad Hoc Process Templates*.

The first activity is placed in the work list of the defined participant.

Note:

- In an ad hoc process (possibly parallel), activities with different participants can be defined. Further sequence flows can only be used in predefined processes.

- For ad hoc process templates, the applicability can be defined in the same way as for BPMN processes (*Applicable for*, *Object Class/Category of the File*, *Object Class/Category of the Teamroom*).

- Deadlines can be defined for activities, depending on your settings ("account menu (your user name)" > "Advanced Settings" > "Workflow" > "Personal Settings" tab).

    o Deadlines as dates can be entered directly in the overview.

    o Initially invisible time spans can be defined using the "Advanced Settings" button.

    o You can either define a time span starting from the current time or using a base date. If the base date changes, the deadline is recalculated.

    o app.ducx expressions for calculating the deadlines can be defined using the "Advanced Settings" button. The expressions are re-evaluated when the activity would become startable and no value already exists.
    Note: If an activity is suspended or delegated, expressions can only be defined if the user has the "Edit BPMN Process Diagrams" policy.
    Example:
    ```
    datetime visibledate = coonow + 86400;
    if (coonow.year == 2023) {
      visibledate = coonow + 172800;
    }
    visibledate;
    ```

6.2 Activities and Participants

Activities

By default, following activities are provided (apps can provide additional activities):

- *Edit*
  Allows editing a document.

- *Forward for Editing* (only available in BPMN processes)
  Allows editing a document.

- *Close*
Allows closing a document, such that no further changes are possible.
Note: The corresponding context menu command is "Tools" > "Close". If the object should be editable again, you can execute the "Tools" > "Revert Status 'Closed'" context menu command.

- *Close Documents*
Allows closing documents within a folder, such that no further changes are possible.

- *Close File*
Allows closing a file, such that no further changes are possible on the file and assigned objects.

- *Release*
Allows releasing a document. The document will be signed with a corresponding signature. If the document is released, additionally a release version is created for the document.

- *Release and Close*
Allows releasing and closing a document. The document will be signed with a corresponding signature and closed, such that no further changes are possible.

- *Release Documents*
Allows releasing documents within a folder. The documents will be signed with a corresponding signature. If the documents are released, additionally a release version is created for the documents.

- *Release and Close Documents*
Allows releasing and closing documents within a folder. The documents will be signed with a corresponding signature and closed. If the documents are released, additionally a release version is created for the documents.

- *Approve*
Allows approving a document. The document will be signed with a corresponding signature.

- *Approve and Close*
Allows approving and closing a document. The document will be signed with a corresponding signature and closed, such that no further changes are possible.

- *Approve and Close Documents*
Allows approving and closing documents within a folder. The documents will be signed with a corresponding signature and closed.

- *Forward for Approval* (only available in BPMN processes)
Allows a document to be forwarded for approval.

- *Review*
Allows reviewing a document.

- *Forward for Review* (only available in BPMN processes)
Allows a document to be forwarded for review.

- *Take Note*
Allows taking note of a document. The document will be signed with a corresponding signature.

- *Add Remark*
  Allows adding a remark to a document.

- *Add Comment*
  Allows adding a comment to a document (see also chapter 3.3.9 "Commenting Documents").

- *Sign Digitally*
  Allows creating a PDF document with a digital signature and saving it as final form with the document. In addition, a corresponding signature is applied to the document and the document is closed if it is not already closed.

- *Prepare Signature Folder*
  Allows collecting, visually signing and digitally signing several documents of a file.

- *Send*
  Allows sending an object as a link or public link.

- *Send Link*
  Allows sending an object as a link.

- *Send Public Link*
  Allows sending an object as a public link.

- *Release for Usage* (only available in BPMN processes)
  Allows a template, form, etc. to be released for usage. In addition, a corresponding signature is applied.

Note:

- Activities can also be defined parallel. If a predecessor exists, this can be done via a parallel gateway or otherwise the first activities can be inserted loosely without a connection by an edge (duplicating the first activity with `Ctrl + C` and `Ctrl + V`).

- Multi-instance activities can be used for processing an activity sequentially or in parallel by several participants.

- If the activities "Review", "Approve" or "Release" are used in ad hoc processes, the following applies:

  o Negative results (e.g., "Approval denied") are reported via an automatically inserted activity to the person who started the ad hoc process. The remaining commonly prescribed activities that have not yet been completed are set to "Not Executed".

  o Activities for positive results (e.g., "Released") are only automatically inserted if they are the last activity in the process.

- If the activities "Review", "Approve" or "Release" are inserted in running processes, negative results are reported to the person who inserted the activities. The remaining commonly inserted activities that have not yet been completed are set to "Not Executed".

- For objects that are in the worklist, the work steps are also available in the object actions. Conversely, the standard actions of the concerned object are also available in the actions of the activity.

- For activities, the associated work steps are displayed in the properties and in the info box. For each work step, the following additional information is displayed if it applies:

  o *Multiple*

- o   *Must Be Executed*
- o   *Completes Activity*
- o   *Conditionally Visible*
- o   *With Precondition*
- o   *Executed by* (for activity instances)
- o   *Started* or *Completed* (for activity instances; process administrators additionally see the time)

Participants

By default, following participants can be defined:

- *Abstract Participant*
  Abstract participants allow generic sequence flows.

  - o   *Process Initiator*
    The participant who starts the process.

  - o   *Current User*
    The participant who has executed the previous activity or for the first activity, the participant who has started the process.

  - o   *Property of the Object*
    The participants are evaluated based on a property of the object (e.g., *Last Signature by*).

  - o   *Role by Property of the Object*
    If an organizational structure is defined in your organization, you can use it in the workflow to determine the process participants. Thus, for example, workflows for material requisitions or leave requests can be easily implemented.

    - ▪   *Property*
      Select a property that contains a user or organizational unit.
      If it is a user, the primary position of the user is determined and thus the assigned organizational unit.
      If it is an organizational unit, this organizational unit is used.

    - ▪   *Position*
      Select the position type (staff member or head) that must be assigned to the primary position of the process participant to be determined.

    - ▪   *Organizational Unit Type*
      Optionally, select a level that must be assigned to the organizational unit of the process participant to be determined. If the organizational unit determined by the property does not have the required level, the organizational unit with the necessary level is determined via the organizational unit hierarchy.

  - o   *Property of the File of the Object*
    The participants are evaluated based on a property of the object's file (e.g., *Last Signature by*).

  - o   *Role by Property of the File of the Object*
    If an organizational structure is defined in your organization, you can use it in the

workflow to determine the process participants. Works as the "Role by Property of the Object" abstract participant except that a property of the object's file is used for the evaluation.

   o *Property of the Teamroom of the Object*
     The participant is evaluated based on a property of the object's Teamroom.

   o *Role by Property of the Teamroom of the Object*
     If an organizational structure is defined in your organization, you can use it in the workflow to determine the process participants. Works as the "Role by Property of the Object" abstract participant except that a property of the object's Teamroom is used for the evaluation.

- *User*
  A concrete participant.

- *Organizational Unit*
  A whole organization, organizational unit or external organization.

- *Distribution List*
  A list of participants (only usable for multi-instance activities).

Note:

- Users not yet registered can already be selected as process participants. The users will also receive workflow notification e-mails with a link that allows them to register.

- Distribution lists can only be used together with multi-instances.

- An organizational unit or property of the object can be used both in multi-instances and in non-multi-instances.

- In the case of multi-instances, a separate activity instance is created for each resolved process participant, in the case of non-multi-instances only one activity instance for the entire organizational unit or property of the object is created.

- Distribution lists are immediately resolved at the start of the process. When a *Property of the Object* or *Organizational Unit* is used, the process participants are resolved during the runtime of the workflow (when the state of the corresponding activity is set to "Can Be Started")

6.3 Executing a Predefined Process

Recurring processes can be efficiently represented with predefined processes.

To execute a predefined process on an object, proceed as follows:

1. Navigate to the desired object.

2. Make sure that all process participants have the necessary access rights on the object. If necessary, authorize the users in the respective Teamroom.

3. In the context menu of the object click "Tools" > "Start New Process".

4. Click "Start Process" to directly start the desired process or click "Open Process" to view the process beforehand.

The first activity is placed in the work list of the defined participant.

6.4 Handling Processes Together

When processes are started together, the same activities that a user needs to execute are shown grouped together in the worklist. The number of identical activities currently in the worklist is displayed in parentheses after the name of the grouped activity. Executing a work step (for example, "Approve") affects all current activities in a grouped activity.

Note: For example, you can start processes together by selecting multiple objects, executing the "Tools" > "Start New Process" context menu command and clicking the "Process Together" button in the following dialog.

Summary Dashboard

Clicking on a grouped activity takes you to the overview dashboard. Which processes are displayed depends on your access rights.

- Overview of Related Processes
  Shows the processes in progress and the completed processes.

- My Activities of Processes in Progress
  Shows the activities of the current user (planned, in progress, completed) of the processes in progress.

- My Activities in Progress
  Shows the activities in progress of the current user of the related processes. Thus, you can also process the activities of the grouped activity individually.

- All Activities in Progress
  Shows all activities in progress of all process participants of the related processes.

Via the "Show Process Overview" action, you can display all related processes among each other as individual process diagrams.

6.5 Work List

The work list allows processing the respective activities. By default, the work list can be accessed via "Home".

The work list consists of following lists (only visible if at least one entry is present):

- *To Do*
  Contains the current activities that have to be processed.

- *Suspended*
  Contains activities that are suspended for a defined time span.

- *Last Finished*
  Contains completed activities.

- *Concerned Objects*
  Contains objects of the current activities.

- *Tracking*
  Contains objects of already completed activities.

6.5.1 Executing a Work Item of an Activity

An activity can consist of one or several work steps. Work steps can behave differently:

- One or more work steps of the activity can be defined such that they complete the activity. The process flow continues after executing the work step.

- A mandatory work step (bold) has to be executed before an activity can be completed. If only mandatory work steps are still available that also complete the activity, only one of these work steps must be executed.

- A repeatable work step can be executed repeatedly.

To execute a work step, proceed as follows:

1. Navigate in the work list in the "To Do" list.

2. Localize the desired activity.

3. Click the desired work step. Depending on the work step, the corresponding action is carried out (e.g., "Open" opens a document in the corresponding third-party product).

In addition to the name of the work step, the status is indicated in parentheses, if applicable:

- Work step has not yet been executed: no status text

- Work step has already been executed: (repeat)

- Work step could only be carried out once: (executed)

- Mandatory work step that does not complete the activity has not yet been executed: (to do)

- Work step is not yet executable: (not executable)

- Mandatory work step that cannot yet be executed: (to do, not executable)

Note: For work steps that require a password to be entered, the mobile app offers the option of using biometric authentication instead of a password. This requires an active code lock in the mobile app (including biometric unlocking) and permanent login.

6.5.2 Suspending an Activity

An activity can be suspended to move the processing to a later date. The activity will be moved from the "To Do" list to the "Suspended" list. After the defined time period has elapsed, the respective activity will be moved again to the "To Do" list.

To suspend an activity, proceed as follows:

1. Navigate in the work list in the desired activity.

2. Click the "Suspend" action.

3. Define the desired time span and click "Next".

Note: By clicking the "Activate" action, a suspended activity can be prematurely moved to the "To Do" list.

6.5.3 Delegating an Activity

A user can delegate an activity to another user who should complete the activity.

To delegate an activity, proceed as follows:

1. Navigate in the work list in the desired activity.
2. Click the "Delegate" action.
3. Select a participant and click "Next".

The activity will be stored in the work list of the selected participant.

Note:

- If an activity is set to ignore completion, no new activities can be inserted if the following activity has already been prescribed. In this case, the "Delegate Multiple" action is available to still be able to assign a copy of the current activity to multiple process participants.
- If the *Team Members Visible to All Members* option is disabled for the Teamroom and you do not have "Full Access" in the Teamroom, the "Delegate" action is not available.

6.5.4 Adding an Activity

The context menu command "Add New Activity" of an activity can be used add ad hoc activities to the process. When adding new activities the current activity is completed. If mandatory work steps of the current activity are still open, you will get the current activity again in your work list as soon as the added activities are completed.

6.5.5 Viewing Processes of an Object

To view the processes of an object, proceed as follows:

1. Navigate in the desired object.
2. Click the "Properties" action.
3. Click the "Processes" tab.
4. Click "Open Process" to display the complete process with any loops and conditions. The process flow that has already been executed is indicated by bold lines. Paths that were not traversed are visualized with dashed lines.
5. You can use the context menu of the process elements to execute the commands allowed in each case. For example, if you have the appropriate rights, you can change the participant of an activity that has not yet been executed using the "Edit" context menu command.
6. To make it easier to terminate processes that are no longer relevant, the "Change State" button is available. This allows you to change the state to "In Progress", "Suspended", "Completed" or "Aborted".
7. A started process can be deleted via the "Delete" button as long as no activity has been started.

Note:

- The "Processes" tab is only visible if at least one process is present.
- Completed processes are collapsed by default.
- When you collapse or expand processes, the state is saved.

6.5.6 Viewing Activities of an Object

To view the activities of an object, proceed as follows:

1. Navigate in the desired object.
2. Click the "Properties" action.
3. Click the "Activities" tab.

All current, planned and completed activities are shown.

Note: The "Activities" tab and the fields for current, planned and completed activities are only visible if at least one activity is present.

6.5.7 Process Statistics

To obtain an overview of the running processes, several process statistics are available that illuminate the individual aspects of process execution.

In the organization policies, on the "Processes" tab, you can define process administrators. The statistics can be displayed for:

*   Process Administrators
    Provides an overview of all predefined and ad hoc processes of the organization.
*   Process Owners
    Provides an overview of all predefined processes for which the user is defined as the process owner.

Note: The process owner can be defined on the "BPMN Process Diagram" tab of a BPMN process diagram.

You access the process statistics via your worklist. The statistics are available for the following three levels: general overview, process definition and specific process.

General Overview

*   Process Statistics
    Provides an overview of the number of running processes and delayed processes.
*   Process Throughput
    Shows the number of started and completed processes and their difference in the selected time period.
*   Running Processes
    Shows the number of running processes and their changes in the selected time period.
*   Running Processes per Process Definition
    Shows the percentage breakdown of the process definitions of the running processes.
*   Current Activities
    Shows the percentage breakdown of the current activities of the running processes.
*   Delayed Activities
    Shows the percentage breakdown of the delayed activities of the running processes.
*   Planned Activities
    Shows the percentage breakdown of the planned activities of the running processes.

- Activities With Participants Without Access Rights
  Shows the activities in which the participant does not have access to the affected object.

- Start Date of Running Processes
  Shows the number of running processes grouped by the start date in the selected time period.

- Due Date of Activities
  Shows the activities of the running processes that need to be processed in the next two weeks.

Based on a Process Definition

- Process Throughput
  Shows the number of started and completed processes and their difference in the selected time period.

- Running Processes
  Shows the number of running processes and their changes in the selected time period.

- Current Activities
  Shows the percentage breakdown of the current activities of the running processes.

- Delayed Activities
  Shows the percentage breakdown of the delayed activities of the running processes.

- Planned Activities
  Shows the percentage breakdown of the planned activities of the running processes.

- Activities With Participants Without Access Rights
  Shows the activities in which the participant does not have access to the affected object.

- Start Date of Running Processes
  Shows the number of running processes grouped by the start date in the selected time period.

- Due Date of Activities
  Shows the activities of the running processes that need to be processed in the next two weeks.

- Processes
  Displays all processes (including completed processes) of the process definition.

Based on a Process

- Runtime
  Shows the runtime of the process in days compared to the average runtime of the underlying process definition.

- Activities
  Shows the percentage breakdown of the status of the process's activities.

- Overview
  Shows the most important metadata of the process.

Note: The "Settings" action can be used to define the time period (from last week to last year) of the time-dependent statistics.

6.5.8 Substitution

You can set up a workflow substitution. The substitutes receive all activities of the user they substitute within the defined period of time. Objects to which the substitute has no access are filtered.

The substitute can be defined in the worklist via the "Define Substitutes". Alternatively, the substitution can also be defined via "account menu (your user name)" > "Advanced Settings" > "Workflow" > "Substitutes" tab.

For substitutes, the activities in the worklist are made available on the "To Do as Substitute" or "Suspended/Pending as Substitute" tabs.

Note:

- The workflow substitution has no influence on the access rights. The substitute must be authorized on the objects that are processed using the workflow.

- Organization administrators can also define or change a substitution in the member properties on the "Substitutes" tab. In the organization policies, on the "Workflow" tab it can be defined whether members can define substitutes themselves.

6.6 Settings

In the account menu (your user name), the "Advanced Settings" > "Workflow" entry provides following settings:

"Personal Settings" tab

- *Notify Me About the Following Events*
  You can define for which workflow events you want to be informed by e-mail or push notification.
  Note: To receive push notifications, you must allow them in your web browser or Fabasphere App. Push notifications must be additionally allowed in your organization and, if applicable, in the organization of the affected object in order to be sent.

- *Use Tabular Mode for Prescriptions*
  Defines whether the graphical or tabular process editor is used for prescriptions. The tabular process editor is especially defined for users who rely on keyboard operation.

- *Define Deadlines as Time Span (Instead of a Date)*
  Defines whether deadlines are entered as time span instead of a date.

- *Show Advanced Settings for Deadlines in Ad Hoc Processes*
  Allows you to change the way you enter deadlines. Additionally, you can specify the type of escalation.

- *Show Deadlines for Ad Hoc Processes per Default*
  Defines whether the deadlines are displayed by default when prescribing.

- *Show News About New Activities on the Welcome Screen*
  Defines whether news about new activities in the worklist are shown on the welcome screen.

- *Show News About Activities Which Have to Be Done in Substitution on the Welcome Screen*

Defines whether news about new activities in the worklist, which have to be carried out as substitute, are shown on the welcome screen.

- *Automatically Open the Next Activity After Finishing an Activity*
Defines whether when finishing an activity, the next activity will be opened or whether the "to do" list will be opened.

- *Ad Hoc Process Templates*
Contains your personal templates for ad hoc processes. If a template is no longer needed you can remove it.

- *Predefined BPMN Processes*
Contains your personal BPMN processes that are released for execution.

6.7 Business Processes With BPMN 2.0

The support of BPMN 2.0 (Business Process Model and Notation) allows you to model business processes and benefit from the advantages of a platform-independent notation. The created process diagrams can be directly executed with the workflow engine.

Note: You can only create, edit and release BPMN process diagrams if you are authorized in the *Edit BPMN Process Diagrams* organizational policy. Explicit authorization is required as app.ducx expressions can be created in the context of BPMN process diagrams.

6.7.1 Creating a BPMN Process Diagram

BPMN process diagrams are used to model business processes, which can be directly executed. The BPMN process diagrams can be used in the context in which they are defined or referenced. To make BPMN process diagrams generally available for Teamrooms (but not for app rooms), use a collection for templates and presettings in "Customizing". Otherwise, BPMN process diagrams can be stored in app configurations ("Processes" widget), in app rooms ("Templates and Presettings" action > "Process Templates" widget) or in Teamrooms ("Templates and Presettings" action > "Process Templates" widget).

To create a process diagram, proceed as follows:

1. Navigate in the "Processes" or "Process Templates" widget in the desired context.
2. Click the "Create Process" action.
3. Enter a name and click "Next".
4. In the context menu of the process diagram, click "Open".
5. Model the desired process and click "Next".
   More information about working with the BPMN editor can be found in the next chapter.
6. In the context menu of the process diagram, click "Release for Usage".

Note:

- In the properties of the BPMN process diagram, on the "Process execution" tab, the *Automatically Suspend the Process When Deleting the Affected Object and Activate It When Restoring* field defines whether the process is automatically suspended when the affected object is deleted or canceled and again activated when the object is restored.

- To use a BPMN process, on the one hand the users must be authorized in the corresponding room and on the other hand the BPMN process must be released for usage.

- On the "Process Execution" tab, all released instances are displayed in the *Release Version* field and the *Formerly Released for Execution* field.

- Changes can be released using the "Re-Release" context menu command. Processes that have already been started continue to run according to the old released BPMN process diagram. New processes are initiated based on the currently released version.

- You can withdraw the release with the "Withdraw Release" context menu command.

6.7.2 Working With the BPMN Editor

In the graphical BPMN editor, besides the modeling of the process, Fabasphere users and activities can be assigned to BPMN elements, in order to be able to execute the process directly with the workflow engine.

The BPMN editor is subdivided in three areas. The left pane contains the BPMN elements that can be dragged and dropped on the middle design pane. The right pane (folded by default) shows properties for the element that is currently selected in the design pane. The right pane is also used to assign Fabasphere users and activities for process execution.

The keyboard shortcuts `Ctrl + Z` and `Ctrl + Y` can be used to undo and redo actions. `Ctrl + S` allows saving changes made in the editor. For copying, cutting, pasting and deleting elements the keyboard shortcuts `Ctrl + C`, `Ctrl + X`, `Ctrl + V` and `Del` are provided. The executability of the process can be checked with the "Check Executability" button.

Executable process must or may contain following elements:

- Pool
  The pool consists of activities of a delimited unit (e.g., an organization). Exactly one pool per process diagram can be put into execution. Thus, the *Is executable* property must be set to "Yes" for one pool.

  o In the *Applicable for* field, click the "Edit" button to define the following settings.

    ▪ The *Applicable for* property is used to restrict processes to object classes and categories. This way processes are only offered if they are useful for the object, on which the process should be executed.
      If a restriction is defined, the process can only be executed on objects that have been assigned one of the listed categories and one of the listed object classes and one of the listed object aspects.
      When selecting activities for tasks in the BPMN editor, only activities are provided that correspond to the applicability of the process diagram. If the process is restricted to a category of a user-defined form, the defined fields can be used in the condition editor. If the process is restricted to the category of a user-defined base form, the process can also be used for forms derived from the base form.

    ▪ The *Object Class/Category of the File* property can be used to define the object class or category of the object's file. This allows access to the properties of the file when defining the abstract participants "Property of the File of the Object" and "Role by Property of the File of the Object".

- The *Object Class/Category of the Teamroom* property can be used to define the object class or category of the object's Teamroom. This allows access to the properties of the Teamroom when defining the abstract participants "Property of the Teamroom of the Object" and "Role by Property of the Teamroom of the Object".

- The *Expression for Determining the Visibility* property defines an app.ducx expression that determines whether the process is offered for selection when a process is started.

- The *Expression for Determining the Usability* property defines an app.ducx expression that determines whether the process can be started. This allows, for example, to check preconditions that must be fulfilled before the process can be started.

- o In the *Initializations* field, click the "Edit" button to define the following setting.

  - The *Expression for Initializations* property defines an app.ducx expression that allows defining common initializations and global process parameters.

- Lane
  Lanes represent responsibilities. A participant can be assigned to a lane. When creating tasks, the values defined for the lane are used as default values for the tasks, which allows comfortable working.
  Note: When creating a pool one lane is implicitly generated.

- Start event
  The process flow starts with a start event. For documentation purposes, all types of start events can be used in executable processes. However, the start event type has no effect on the execution of the process.

- Conditional start event (optional)
  A wait action can be implemented using an conditional start event. The process is not started until the condition (app.ducx expression) has been fulfilled. The check interval determines how often the condition is checked.

- Intermediate conditional event (optional)
  A wait action can be implemented using an intermediate conditional event. The process is not continued until the condition (app.ducx expression) has been fulfilled. The check interval determines how often the condition is checked.

- End event
  The process flow ends with an end event.

- Terminate end event (optional)
  Terminates the whole process (incl. subprocesses) and the process is marked as completed. When used in subprocesses, only the subprocess is terminated (without special marking).

- End error event (optional)
  Terminates the whole process (incl. subprocesses) and the process is marked as aborted. When used in subprocesses, only the subprocess is terminated (without special marking).

- Task
  A task represents an atomic unit of work that has to be done within a process. Currently, tasks of type "User" are supported. The task must have a Fabasphere activity and one or

more participant assigned. When carrying out a process the tasks are displayed in the worklists of the corresponding users.

o   If the activity "Execute Expression in Background" is used, an app.ducx expression can be executed in the background. The process is not continued until the background task has been executed.

o   Deadlines can be defined as date, time span or expression (*Enter Deadline as* field). The "Advanced Settings" button takes you to all deadlines.

o   The *Started Activity Remain in All Worklist*s field can be used to define whether the corresponding activity is removed from the worklists of the additional affected participants when the activity is started.

o   The *Ignore Completion* field can be used to define whether subsequent activities can be started although this activity has not yet been completed.

o   The *Skip Invalid Participant* field can be used to define whether the activity is skipped for an invalid participant (e.g., inactive user).

o   The *Display Activity Only if the Participant Has Access to Affected Object* field can be used to define whether the activity is only displayed in the worklist if the participant has at least read rights to the affected object of the process.
    Note: If the activity is not visible to any participant, the process stops. When starting the process, no warning is displayed if the activity goes to a team in which at least one user has rights to the affected object.

o   The *Disable Substitution* field can be used to define whether the activity may be executed by a substitute.

o   The *Escalation* field you can overwrite the escalation definition that is stored with the respective activity definition. The default escalation is defined for all Fabasphere activity definitions. If the default escalation is used, a welcome screen entry is shown and a notification e-mail is sent to the current workflow participant if the start or completion date is exceeded.

o   In the *Expression When Completing the Activity* field an app.ducx expression can be defined that is executed when completing the activity.
    In the app.ducx expressions, you can use `object` to access the object of the process.

o   A loop type can be defined for tasks.

    ▪   None
        From the defined activity, one instance is created, which is offered to the defined process participants in the worklist. The first process participant, starting the processing, takes over the activity. The activity will be removed from all other worklists.

    ▪   Standard
        Tasks can be run in a loop. The loop condition can be tested before or after the iteration. The maximum number of iterations can be defined, too.

    ▪   MI Parallel
        From the defined activity, one instance is created for each defined process participant and stored parallel in the respective worklists. All process participants must process the activity.

- **MI Sequential**
  From the defined activity, one instance is created for each defined process participant and stored sequentially in the respective worklists. All process participants must process the activity one after the other.

  o If an activity such as "Approve", "Release", "Review", "Sign", "Close", "Approve and Close", "Release and Close" or "Close File" is denied, activities are not executed if they belong to the same multi-instance task. The default behavior can be changed by the process parameter `keepactivitiesstarted`:
    ```
    process.SetProcessParameter("keepactivitiesstarted", true);
    ```

  o The `signdialogtitle`, `signdialogheading` and `signdialogdescription` process parameters can be used to customize the texts of the sign dialog. For multilingual strings, a `LanguageStringList` can be provided.
    For example: `process.SetProcessParameter("signdialogtitle", "Sign");`

- Sequence flow
  The sequence flow describes the order of events, tasks and gateways. A condition expression (Fabasoft app.ducx Expression Language) may be assigned to a sequence flow outgoing from a gateway. The expression can be entered directly in the text field or can be defined with the condition editor.
  See also: https://help.cloud.fabasoft.com/doc/Reference-Documentation/prop-fscdiagrameditor-eventpropscondition.htm

- Gateway (optional)
  A gateway allows the distinction between cases or parallelization in a process. Currently data-based exclusive gateways and parallel gateways are supported. For a converging parallel gateway, the join type (AND or OR join) can be defined.

- Subprocesses (optional)
  Subprocesses are used to enclosure complexity. Subprocesses can be nested and run in a loop (type "Standard"). The loop condition can be tested before or after the iteration. The maximum number of iterations can be defined, too.

  o Expanded subprocess
    An expanded subprocess is embedded in the process as structuring element.

  o Collapsed subprocess
    A collapsed subprocess references a separate BPMN process diagram that is therefore reusable. Released changes to subprocesses are taken over when subprocesses are expanded.

- Artifacts and data objects (optional)
  For documentation purposes all artifacts and data objects can be used in executable processes. However, these elements have no effect on the execution of the process.

Note:

- Go-to sequence flows can currently not be executed.

- In the app.ducx expressions global process parameters can be defined, to influence the process execution.
  ```
  process.ClearProcessParameters();
  process.SetProcessParameter("key", "value");
  ```

```
process.GetProcessParameter("key");
process.GetProcessParameters();
```

- The `keeporiginaldiagramversion` process parameter can be used to specify whether the at the start of the process released versions of subprocesses are retained. This way, re-releasing subprocesses does not affect processes that are already running:
```
process.SetProcessParameter("keeporiginaldiagramversion", true);
```

- `GetNextActivityInstances` can be used to determine the following activity in app.ducx expressions. `HasValidParticipant` can be used to check the validity of the participant.

- When initially defining a condition, you can decide whether you want to define the condition using the condition editor (graphical user interface with predefined properties) or the code editor (app.ducx expression). Subsequent changes will open the corresponding editor directly. You can switch from the condition editor to the code editor using the "Open Code Editor" button. In doing so, the condition is taken over, but must be manually converted into a valid app.ducx expression.

- Condition expressions are evaluated with `NOCHECK`. This avoids evaluation errors that properties are not assigned to the object class.

- Using the "Show Overview of app.ducx Expressions" context menu command, you get an overview of all app.ducx expressions defined in the process and, if applicable, in the subprocesses. This facilitates troubleshooting in particular.

Multilingual Names

If you assign or change your own names for process elements in the BPMN editor, these are saved in the current user language. For users with different language settings, you can store the translated names on the "Translations" tab. In this way, the name is displayed in the BPMN editor and also in the worklist according to the language settings of the respective user.

6.7.3 Downloading and Uploading a BPMN Process Diagram

BPMN process diagrams may be exported and imported. In case of an executable process diagram, possibly assignments to Fabasphere users and activities have to be adapted, if the objects are not available in the target system.

When downloading BPMN process diagrams, the following options are available:

- Download Diagram With Preview
  Downloads the XML representation and preview images of one or more BPMN process diagrams including any sub-processes that may be contained.

- Download
  Downloads the XML representation of one or more BPMN process diagrams including any sub-processes that may be contained.

- Upload
  The downloaded BPMN process diagrams can be uploaded again (also in another installation if applicable). Either a single XML file or an entire ZIP file can be uploaded. If a ZIP file is uploaded, existing diagrams can be updated.

Download

To download a process diagram, proceed as follows:

1. Navigate in the process diagram and click the "Download" or "Download Diagram With Preview" action.

2. An XML file or ZIP file will be downloaded that contains the process diagram as XML file.

Note: To download several processes at once as a ZIP file, select them and execute the "Download" or "Download Diagram With Preview" context menu command.

Upload

To upload a process diagram, proceed as follows:

1. Navigate in the process diagram and click the "Upload" action.

2. Click the "Select File" button.

3. Enter the path to the process diagram XML file and click "Next".

4. Click "Next" and "Close".

Note: To upload several processes at once as a ZIP file, navigate in a process list and click the "Upload" action.

6.7.4 Creating Escalation Definitions

When workflow deadlines expire, the affected workflow participant is notified by default via welcome screen and e-mail. However, you can also define your own escalation definitions and use them with the respective activity.

The escalation definitions can be used in the context in which they are defined or referenced. To make escalation definitions generally available for Teamrooms (but not for app rooms), use a collection for templates and presettings in "Customizing". Otherwise, escalation definitions can be stored in app configurations ("Processes" widget), in app rooms ("Templates and Presettings" action > "Process Templates" widget) or in Teamrooms ("Templates and Presettings" action > "Process Templates" widget).

Settings of an Escalation Definition

- *Name*
  The name of the escalation definition.

- *Escalations*
  Defines the desired escalations.

  o *Escalation Time*
    Defines the time of escalation.

    ▪ *Time Span*
      Defines a time span in days, hours and minutes (working days are not considered). If no operator and base date are specified, the time span is starting from now.

    ▪ *Operator*
      Defines whether the time span is added to or subtracted from the base date.

    ▪ *Base Date*
      Defines the base date for calculating the deadline ("Visible in Worklist From", "To Be Started at the Latest by" or "To be Completed at the Latest by"). If the base date changes, the deadline will be recalculated.

Note: For "Visible in Worklist From", escalations probably do not make sense, as the activity is automatically moved to the "To Do" list.

- o *Repetition*
  Defines how often the notification should be repeated.

  - ▪ *Time Span Until Next Escalation*
    Defines a time span in days, hours and minutes until the next notification (working days are not considered). Leave blank if you do not want a repetition.

  - ▪ *Repeat Until*
    Defines how long the notification will be repeated ("Infinite", "Date", "Date Value of a Property").

  - ▪ *End Date/*Date Value of a Property
    Depending on *Repeat Until* an end date or a property can be defined.

- o *Recipients of Escalation Message*
  Defines the recipients of the notification (e.g., "Current Participant" or "Responsible for Process").

- o *Expression for Computing the Subject*
  Allows using an app.ducx expression to change the default subject of the notification e-mail.

- o *Expression for Computing the Additional Message*
  Allows using an app.ducx expression to add an additional text to the notification e-mail.

- *Applicable for*
  The use of the escalation definition is restricted to the listed object classes and categories of the object.

- *Object Class/Category of the File*
  The use of the escalation definition is restricted to the specified object classes and categories of the object's file.

- *Object Class/Category of the Teamroom*
  The use of the escalation definition is restricted to the listed object classes and categories of the object's Teamroom.

Note:

- If no date can be determined, no notification will be sent.

- If the escalation definition is no longer usable in the corresponding context (e.g., due to a change in usability), no notification is sent.

Default Escalation

With the generally available default escalation, a notification is sent to the current workflow participant one minute after the expiration of *To Be Started at the Latest by* and *To be Completed at the Latest by*. The notification is repeated daily. The default escalation is defined for all Fabasphere activity definitions.

7 Customizing

You can adapt your solution to your requirements by means of model-based customizing.

Here you will find a brief overview of the customization options available to you. All options are described in detail in the following chapters.

- Templates
  Nearly all objects and especially documents can be defined as templates. In this way new objects or documents based on a template can be created.

- Text Modules
  You can use text modules to insert predefined standard texts into Microsoft Word documents.

- Insight Apps
  Insight apps provide aggregated access to information in your organization, customized to your needs.

- Forms
  User-defined forms can be used to add fields to objects for storing application-specific data. To apply logic or specific behaviors to the fields, Fabasoft app.ducx expressions can be used.

- Categories
  Categories can be assigned to objects and thus influence the behavior of the objects.

- Processes
  Processes can be individually defined reflecting your business and organizational structure. BPMN process diagrams are used to design executable business processes. Beside predefined BPMN processes, ad hoc processes can be started as needed.

- Display Settings
  Display settings can be provided to users who need special views on lists.

- Search Forms
  Search forms can be provided to users who need an overview of currently existing objects based on defined search criteria.

- Time Intervals
  Time intervals can be selected for a follow-up, for example.

7.1 General Information

In order to use customizing objects, on the one hand the users must be authorized in the corresponding room and on the other hand the customizing objects must be released for usage depending on the context.

Customizing Levels

Customizations are managed at different levels:

- Organization
  Organization-wide customization is done by defining customization collections in the "Templates and Presettings" dashboard. See the following chapters for more information.

Note: Organization-wide BPMN process diagrams, forms and categories are not available in an app context by default. If these customizing objects have to be available in an app context, they must be explicitly referenced in the app configuration or in the app room.

- App
In apps, such as contact management, you can make customizations in the app configuration that are only valid within the app configuration context.

- Room
In rooms (e.g., app rooms or Teamrooms), customizations can be made that are only valid within the room context.

- Personal
Personal customizations can only be used by the users themselves. The following customizing objects can be managed at the personal level: templates, ad hoc process templates, display settings, search forms and time intervals.

Release for Usage

In order to use customizing objects, they must be released for usage depending on the context.

Rules

- Customizing objects must be released if they are assigned to a customizing collection or an app configuration.

- Forms and BPMN process diagrams must also be released if they are assigned to a room.

- Personal customizing objects do not have to be released.

Actions and Context Menu Commands

The actions are available to administrators and processors of a customizing collection (organization level) or app administrators (app level).

- Release for Usage
You can create a release version using the "Release for Usage" action.

- Re-Release
Changes can be released using the "Re-Release" action.
Note: A corresponding status symbol is displayed for changed customizing objects. In the case of compound customizing objects, a status symbol is only displayed if the root object has changed.

- Navigate to Release Version/Navigate to draft Version
You can view the draft or release version.

- Compare With Release Version/Compare With Draft Version
You can compare the metadata of the draft version with the release version (except forms). For Microsoft Word documents, content comparison is also possible.

- Withdraw Release
You can use the "Withdraw Release" action to withdraw the release.

Release Process

In app configurations or customizing collections, you can define a release process in the settings, on the "Default Values" tab, in the *Release Process for Templates and Presettings* field. Release processes must contain the "Release for Usage" activity.

If a release process is defined, the following actions or context menu commands are offered:

- Start Release Process
  Starts the defined release process.

- Open Current Release Process
  Opens the release process that is not yet completed.

- Start Release Process Again
  Restarts the release process (is only displayed when the current release process is completed).

Structuring Folders

In order to structure customizing objects logically or hierarchically, corresponding folders (e.g., template folders or text module folders) are available, which can be created via the respective action.

7.2 Dashboard

The "Templates and Presettings" dashboard provides your access point to the customizing.

When you are added to a customizing configuration as an app user, a dashboard is automatically created and placed on "Home". When you are removed as an app user, the dashboard is also removed.

The "Templates and Presettings" dashboard is divided into the following areas:

- *Collections for Templates and Presettings*
  Shows the collections you are allowed to read or edit.

- *Personal Templates*
  Shows the templates you created for yourself.

- *Personal Processes*
  Shows the ad hoc process templates you created for yourself.

- *Personal Presettings*
  Shows the presettings you created for yourself.

You can perform the following actions:

- Create Collection
  With the "Create Collection" action you can create a new collection for templates and presettings as app administrator.

- Switch to Configuration
  With the "Switch to Configuration" action you can view the configuration.

- Settings
  With the "Settings" action you can define common properties of the dashboard like the logo or notification setting. Notifications are disabled by default.

7.3 Configuration

In the customizing configuration, you can manage the collections, artifacts and general settings as an app administrator.

Areas

The configuration is divided into the following areas:

- *Collections for Templates and Presettings*
  Shows the available collections.

- *Template Categories*
  Shows the available template categories. Template categories are used to group the templates in the create dialog.

- *Text Module Categories*
  Shows the available text module categories. Text module categories are used to display text modules hierarchically when inserting them into a Word document.

- *Insight Apps*
  Shows the available insight apps.

- *Forms and Categories*
  Shows the available forms and categories.

- *Processes*
  Shows the available custom processes.

- *Thesauri*
  Shows the available thesauri that allow indexing.

- *Failed Background Tasks*
  Shows failed background tasks (only visible if at least one failed background task is available). You can perform following manual actions: "Define Next Execution", "Send Link" and "Delete".

Note:

- To be able to store objects from a different context, you must adjust the *Restrict Shortcuts Within Teamroom* field in the configuration settings accordingly.

- In the default use case, you only need the "Collections for Templates and presettings", "Template Categories" and "Text Module Categories" areas.

Actions

You can perform the following actions:

- Create Collection
  With the "Create Template Collection" action you can create a new collection for templates and presettings.

- Create Template Category
  With the "Create Template Category" action you can define a new template category.

- Create Text Module Category
  With the "Create Text Module Category" action you can define a new text module category.

- Translations
  The "Translations" action can be used to export or import a CSV file containing the multilingual names of the customizing objects of the configuration. This enables an external translation.

- Settings
  With the "Settings" action you can make advanced configuration settings.

Settings

The general settings can be found in chapter 10.1.2 "General Configuration Settings".

7.4 Collections for Templates and Presettings

Collections are used to manage templates, text modules, insight apps, forms, categories, processes, presettings and to define access rights ("Permissions" action). Collections can be created by app administrators.

Areas

The collection for templates and presettings is divided into the following areas:

- *Templates*
  Shows the available templates.

- *Text Modules*
  Shows the available text modules.

- *Insight Apps*
  Shows the available insight apps.

- *Forms and Categories*
  Shows the available forms and categories.

- *Processes*
  Shows the available processes.

- *Presettings*
  Shows the available presettings.

Actions

You can perform the following actions:

- Create Template
  With the "Create Template" action you can define any object as a new template.

- Create Text Module
  With the "Create Text Module" action you can define a new text module.

- Create Insight App
  With the "Create Insight App" action you can define a new insight app.

- Create Category
  With the "Create Category" action you can create categories.

- Create Form
  With the "Create Form" action you can create user-defined forms.

- Create Process
  With the "Create Process" action you can define an ad hoc process template or a BPMN process diagram.

- Create Presettings
  With the "Create Presettings" action you can define a search form or time interval.

- Upload
  With the "Upload" action you can create a template, text module, BPMN process or form from a file.

- Create Escalation Definition
  With the "Create Escalation Definition" action you can create escalation definitions.

Note: Alternatively, you can use the "Tools" > "Add to Templates" context menu command on an existing object to define a copy of the object as a template in "Customizing".

Settings

"Template Collection" tab

- *Template Categories*
  In the create dialog the templates with the template categories as additional text are displayed in the "Templates" area.

- *Text Module Categories*
  Defines in which categories the text modules can be found when they are inserted into a document.

Additional tabs

- The additional settings can be found in chapter 10.2.1 "General Shelf Settings".

Note

Collections for templates and presettings can be made available across organizations in a generally readable manner ("General Settings" tab > *Access Protection* field). The templates and presettings must be referenced in the desired context (e.g., in an app configuration) so that they can be used.

The following restrictions apply:

- Template categories and text module categories cannot be considered. Templates and text modules are not offered categorized.

- Forms, categories and BPMN processes cannot be provided cross-organizational.

Access Rights

- Full Control
  Users with full control can create, edit and delete templates and presettings.

- Change Access
  Users with change access can create and edit templates and presettings.

- Read Access
  Users with read access can only use templates and presettings if they are explicitly referenced, for example, in the context of an app room. Thus, templates can be defined in the collection that are not generally offered.

- User
  Users can use templates and presettings in general.
  Note:

  o Only users are offered the templates and presettings. If you are a user with change access and want to use the templates, you must also be defined as a user.

  o BPMN process diagrams, forms and categories are not available in an app context by default. If these customizing objects have to be available in an app context, they must be explicitly referenced in the app configuration or in the app room.

7.5 Defining Templates

Almost every object type can be used as template. Adjust the metadata or content of the objects accordingly.

Note: When you define a Teamroom as a template, the objects defined in the Teamroom's templates and presettings are copied to the Teamroom instance as shortcuts.

In addition, you can make additional settings on the "Template" tab of the object, which are particularly relevant when using fields in Word templates.

- *Template Categories*
  In the create dialog the template with the template categories as additional text is displayed in the "Templates" area (in addition to the template categories defined in the template collection).

- *Template Language*
  The language of the template can be used to determine text modules in the corresponding language.

- *Security Settings and Permissions Must Be Taken From the Template*
  Defines whether the user can select whether to apply the security settings and permissions (team members) when instantiating the template. This setting is only available for rooms.

- *Category*
  The category is copied to the object created from the template.
  Note: If applicable, lists can programmatically allow objects only with certain categories. In this way, the category can also restrict where the template can be used.

- *Contained in*
  Defines the folder types in which the template can be used. This can either be done using the object class or the category of the folder. If object classes and categories are specified together, the folder must have a defined object class and a defined category.

- *Files*
  Defines the type of files in which the template can be used. You can do this using either the object class or the category of the file. If object classes and categories are specified together, the file must have a defined object class and a defined category.

- *Available Fields (Category)*
  Shows the fields that are available in the Word document based on the category.

- *Available Fields (Contained in)*
  Shows the fields that are available in the Word document based on the definition in the *Contained in* field. This creates an intersection of all available fields of the object classes and an intersection of all available fields of the categories. This ensures that the properties actually exist in each object class category combination.

- *Available Fields (Files)*
  Shows the fields that are available based on the definition in the *Files* field in the Word document. This creates an intersection of all available fields of the object classes and an intersection of all available fields of the categories. This ensures that the properties actually exist in each object class category combination.

- *Additional Restrictions*
  The template is only offered for selection in the create dialog if the defined expression returns `true`.

When you edit the Word document, you will find the "Insert Field" button on the "Fabasphere" tab. In the submenu you will find the available fields according to your definitions.

Note: The formatting of fields in Microsoft Word can usually be considered when instantiating templates and in the PDF preview if a style is set for the field including the surrounding text after the field has been inserted.

Text Module Placeholders

Text module placeholders can also be inserted into Word templates and will be replaced by the content of the text module when the template is instantiated. The command "Insert Text" > "Text Module Placeholder" is available in Microsoft Word on the "Fabasphere" tab.

The placeholder is displayed as a hyperlink to the text module itself. Thus, the module text can be easily viewed via the template.

Make sure to insert the placeholder as a separate paragraph (the placeholder must not be part of another paragraph). This forms a single template paragraph which acts as a surrogate for the paragraphs of the text module. Those text module paragraphs will replace the single placeholder paragraph as part of the template instantiation procedure.

For a text module, all templates in which the text module is used are displayed on the "Templates" tab.

If a template (for example, a file) contains several Word documents, the text module placeholders in all Word documents are considered during instantiation.

7.6 Using Templates

In the create dialog (e.g., "New" context menu command in a Teamroom) the templates with the template category as additional text are displayed in the "Templates" area. For templates without a template category, "Miscellaneous" is used as additional text. During creation, a copy of the template is created, which you can edit independently of the template.

7.7 Defining Text Modules

There are two types of text modules:

- Static Text Module (Text)
  Allows you to enter unformatted text.

- Static Text Module (Word)
  Allows you to enter formatted text in a Word document.

Note: Text module placeholders can also be inserted in text modules. Thus, a multi-level dynamic text module hierarchy can be defined.

Metadata

The following metadata can also be defined:

"Static Text Module" tab

- *Name*
  The name of the text module.

- *Text Module Categories*
  The text module is offered within the specified categories when you insert it into a Word document.

- *Text Module Language*
  Defines the language of the text module. When inserting text modules into Word templates, only text modules are displayed that correspond to the language of the template or have no language defined.

- *Keep Text Module Placeholders in Document*
  Defines whether text module placeholders inserted in a Word template are replaced when a document based on the template is created. Text module placeholders that have not been replaced can be replaced afterwards in Microsoft Word using the "Replace Text Module Placeholder" button.

"Usage" tab

- *Current Document*
  Defines the categories and object classes of documents in which the text module can be used.
  Note: If a base form category is entered, the text module is also available for documents that have been assigned a derived form category.

- *Contained in*
  Defines the folder types in which the document can be stored in which the text module can be used. This can either be done using the object class or the category of the folder. If

object classes and categories are specified together, the folder must have a defined object class and a defined category.

- *Files*
  Defines the type of files in which the document can be stored in which the text module can be used. You can do this using either the object class or the category of the file. If object classes and categories are specified together, the file must have a defined object class and a defined category.
  Note: If a base form category is entered, the text module is also available for files that have been assigned a derived form category.

- *Additional Restrictions*
  The text module can only be used if the defined expression returns `true`. This allows you, for example, to realize that text module placeholders are removed in certain instances instead of the corresponding text being inserted.

- *Changeability*
  The changeability of a linked text module in Microsoft Word can be restricted. A linked text module is editable by any user in Microsoft Word by default.

- *Available Fields (Current Document)*
  Shows the fields that are available in the Word document based on the definition in the *Current Document* field.

- *Available Fields (Contained in)*
  Shows the fields that are available in the Word document based on the definition in the *Contained in* field. This creates an intersection of all available fields of the object classes and an intersection of all available fields of the categories. This ensures that the properties actually exist in each object class category combination.

- *Available Fields (File)*
  Shows the fields that are available based on the definition in the *Files* field in the Word document. This creates an intersection of all available fields of the object classes and an intersection of all available fields of the categories. This ensures that the properties actually exist in each object class category combination.

"Translations" tab

Defines the translated text modules assigned to the text module.

Translations

Further text modules can be assigned to a text module as translations. To create a translation for a text module, the "Create Translation" action is available. If translations already exist, the "Translations" action can be used to navigate to the corresponding text modules or to create a new translation.

Translations receive, among other things, the text module category and settings for usage from the text module of the main language.

Each translation must be released before it can be used. When you release a text module with translations, a dialog will inform you about unreleased translations. You can release all translations at the same time. The status "Check Translations" indicates that there is at least one translation that has not been released.

When you re-release a change, you will be informed in a dialog about translations that have not yet been edited. You can decide whether no revision is required (e.g., when correcting a spelling mistake). When you click the "Translation Required" button, the text module is not yet released and all translations receive the "Revision Required" status. After a change, the status is removed from the corresponding text module.

Existing text modules can serve as translations of another text module via the "Merge as Translation" context menu command.

7.8 Using Text Modules

When you edit the Word document, you will find the "Insert Text" button on the "Fabasphere" tab. In the submenu click either "Plain Text Module", "Formatted Text Module", "Linked Text Module" or "Text Module Placeholder". In the following dialog, you can select one of the text modules that you have access to and insert it into the Word document.

Text Module Placeholders

Text module placeholders inserted in a Word template are *replaced automatically* when creating a document based on that template – if the corresponding text module is not configured otherwise: a text module has a setting which defines that the corresponding placeholder should *not be replaced automatically*. In this case you can replace it subsequently using the "Replace Text Module Placeholder" button.

Placeholders have to be inserted as a separate paragraph (not as part of another paragraph). This forms a single template paragraph which acts as a surrogate for the paragraphs of the text module. Those text module paragraphs will replace (automatically or subsequently) the single placeholder paragraph as part of the template instantiation procedure.

Linked Text Modules

In Microsoft Word, linked text modules can be inserted that update automatically each time the document is opened. Depending on the user's permissions, linked text modules can be modified in the context of the currently opened document. Modified text modules are no longer updated automatically.

Following buttons are available:

- Remove Text Module
  Removes the selected text module.

- Modify Text Module
  Allows the text module to be changed in the context of the current document (if the user is authorized to do so). Text modules that are marked for modification are no longer updated automatically.

- Reset Text Modules
  Allows to reset changes of the focused text module or all text modules. The current, released content of the text modules is taken over and the text modules are automatically updated again in the future.

- Dissolve Text Modules
  Allows you to recursively dissolve the focused text module or all text modules (change

rights required). The current content of the text modules, which may have been changed in the context of the document, is taken over as continuous text and the links are removed.

The status of a text module is displayed textually and in color in Microsoft Word when you focus the text module:

- Modifiable
  Modifiable text modules are highlighted in blue.

- Read-only
  Text modules that cannot be changed are highlighted in gray and "Read-only" is displayed in the title.

- With Condition
  The text module defines an expression for further restrictions of usability. "With Condition" is displayed in the title.

- Modified
  The text module was marked as changed by the user. "Modified" is displayed in the title.

- Hidden
  The text module is hidden (generally due to the expression for further restrictions of usability). The text module is grayed out and a placeholder text is displayed.

- Broken
  The text module returns an error (e.g., if it is in the wastebasket). The text module is highlighted in red and "Broken" is displayed in the title.

Note:

- Linked text modules will replace text module placeholders in the future. The two functionalities cannot be used together in one document.

- In templates, the linked text modules are always displayed with content, regardless of the condition. In documents, the linked text modules remain available, but the content is displayed depending on the condition.

- Linked text modules are also considered on the server side (e.g., PDF overview). Make sure that the *Update PDF Content on Metadata Change* option is enabled on the Microsoft Word document.

- Text modules or linked text modules may only be inserted in normal continuous text (e.g., not in tables, headers and footers).

- Text modules or linked text modules may only contain continuous text with bulleted lists or numbered lists and tables (e.g., no cross-references, footers, comments and shapes). The style sheets of the linked text module must match those of the Word document containing the text module or linked text module.

- Text modules must not start with a table.

- Linked text modules must not contain tables that reference the properties of a form category and that are updated using the "Update Tables" context menu command.

- Linked text modules that contain a table must not contain any other linked text modules with tables.

- Deleted linked text modules are automatically removed from the document.

• Linked text modules (Word) can contain other linked text modules.

7.9 Defining and Using Insight Apps

Insight apps provide aggregated access to information in your organization, customized to your needs. You can use insight apps to display and highlight important information without users having to explicitly search for it.

More information can be found in chapter 5.5 "Insight Apps".

7.10 Defining and Using Forms and Categories

User-defined forms can be used to add fields to objects for storing application-specific data. Categories can be assigned to objects and thus influence the behavior of the objects.

More information can be found in the chapters 11.1 "Forms" and 11.2 "Categories".

7.11 Defining Processes

There are two types of process templates:

• Ad Hoc Process Template
• BPMN Process Diagram

Ad Hoc Process Template

To create an ad hoc process template, proceed as follows:

1. Navigate in the desired collection.
2. Click the "Create Process" action and select the "Ad Hoc Process Template" entry.
3. Enter a name and click "Next".
4. Click "Open" on the context menu of the ad hoc process template.
5. Enter the activity and the participant for the first task in the process. For more information on the options, see chapter 6.2 "Activities and Participants".
6. Click "Next" if you do not want to add another activity.
   Otherwise, click "Apply". You can add further activities by selecting an activity and participants and clicking "Apply" again. The last activity with a defined participant will be considered even if you do not click "Apply".
7. Click "Next" to complete the editing.
8. Click "Release for Usage" on the context menu of the ad hoc process template.

BPMN Process Diagram

To create a BPMN process diagram, proceed as follows:

1. Navigate in the desired collection.
2. Click the "Create Process" action and select the "BPMN Process Diagram" entry.
3. Enter a name and click "Next".
4. Click "Open" on the context menu of the BPMN process diagram.

5. Model the desired process. For more information on working with the BPMN editor, see chapter 6.7.2 "Working With the BPMN Editor".

6. Click "Next" to complete the editing.

7. Click "Release for Usage" on the context menu of the BPMN process diagram.

7.12 Using Processes

The defined processes are offered for selection when using processes (e.g., "Tools" > "Start New Process").

7.13 Defining Presettings

There are three types of presettings:

- Display Settings
- Search Form
- Time Interval

Display Settings

Display settings can be defined directly in a list via the "View" > "Display Settings" > "Save" menu command (thereby the storing location can be selected).

Search Form

To create a search form, proceed as follows:

1. Navigate in the desired collection.

2. Click the "Create Presettings" action and select the "Search Form" entry.

3. Enter a name and click "Next".

4. Specify what you want to search for and click "Next".

5. Specify the search criteria.

6. Click "Save Query".

7. Click "Release for Usage" on the context menu of the search form.

Time Interval

1. Navigate in the desired collection.

2. Click the "Create Presettings" action and select the "Time Interval" entry.

3. Enter a multilingual name, time interval, and unit and click "Next".

4. Click "Release for Usage" on the context menu of the time interval.

7.14 Using Presettings

You can use the presettings as follows:

- You can apply the display settings in lists via the "View" > "Display Settings" > "Load" menu command. You can also save display settings (thereby the storing location can be selected).

- Search forms can be selected during a search (e.g., in a search folder).

- Time intervals can be selected for a follow-up, for example.

7.15 Personal Templates, Processes and Presettings

Each user can define his own templates, processes and presettings in the "Personal Templates", "Personal Processes" and "Personal Presettings" areas of the dashboard.

8 Contact Management

The contact management allows you to create and manage contacts in contact rooms. Based on user-defined criteria you can specify address lists that can be exported for sending newsletters, for example.

Contacts can be either contact persons or organizations. Organizations, in the sense of contacts, should not be confused with Fabasphere organizations (used for user administration). Duplicate checks support the avoidance of different datasets.

Special property values of contacts (e.g., salutation, address, telephone number and so on) can be assigned to different contact rooms and are therefore only visible to authorized users in the respective contact rooms. This makes it possible, for example, to ensure that the business contact data of employees are accessible to all employees, while the private contact data is only accessible to the HR department.

Audit log entries are written for use cases such as copying data tables or exporting contacts. More information can be found in chapter 12.17 "Auditing".

8.1 Contacts Dashboard

The contacts dashboard is your central access point for contact management.

When you are added to a contact configuration as a contacts user, a dashboard is automatically created and placed on "Home". If you are removed as a contacts user, the dashboard will also be removed.

The contacts dashboard is divided into the following areas:

- *Recently Used Contacts*
  Shows the last contact persons and organizations you have used.

- *Contact Rooms*
  Shows the contact rooms in which the contacts are managed. Each contact room defines its own rights context.

- *Address Lists*
  Shows all address lists. In address lists, contacts can be collected and exported from different contact rooms.

You can perform the following actions:

- Create Contact Room
As contacts administrator you can use the "Create Contact Room" action to create new contact rooms.

- Switch to Configuration
Use the "Switch to Configuration" action to view the configuration associated with the dashboard.

- Settings
The "Settings" action allows you to set general contacts dashboard properties, such as the logo or notification setting.

8.2 Contacts Configuration

In the contacts configuration, you can define as contacts administrator settings for the metadata of contacts. In addition, you can specify users who are allowed to use the contact management.

Contacts configurations can be created in the organization by the organization owner, organization administrator or payment user. The defined contacts administrators can edit the corresponding contacts configurations.

Note: As contacts administrator, you can switch to the assigned configuration via the contacts dashboard.

Areas

The contacts configuration dashboard is divided into the following areas:

- *Contact Rooms*
Shows the contact rooms in which the contacts are managed. Each contact room defines its own rights context.

- The general areas can be found in chapter 10.1 "Configurations".

Actions

You can perform the following actions:

- Create Contact Room
With the "Create Contact Room" action you can define a new contact room.

- Translations
The "Translations" action can be used to export or import a CSV file containing the multilingual names of the customizing objects. This enables an external translation.

- Settings
Use the "Settings" action to define settings for the metadata of contacts.

- Permissions
The "Permissions" action allows you to specify contacts administrators who can edit the configuration. Contacts administrators have full control on all contact rooms. Contacts users are authorized to use the contact management. The respective rights are determined by the contact rooms.

Settings

In the contact configuration, you can make the following settings:

"Contact Person" tab

- Contact Person
  Specifies which optional contact person metadata should be displayed for a contact person.

- Address
  Specifies which optional address metadata should be displayed for a contact person.

- Organization
  Specifies which optional organizational metadata should be displayed for a contact person.

- Further Information
  Specifies which optional additional information metadata should be displayed for a contact person.

- Declarations of Consent
  Specifies which fields should be displayed for a contact person with regard to declarations of consent for data processing.

"Organization" tab

- Organization
  Specifies which optional organizational metadata should be displayed for an organization.

- Address
  Specifies which optional address metadata should be displayed for an organization.

- Further Information
  Specifies which optional additional information metadata should be displayed for an organization.

"Predefined Values" tab

- Relationship Types
  Specify values that you want to be selectable for relationship types (for example, business partners).

- Industries
  Specify values that you want to be selectable for industries (for example, trade).

- Functions
  Specify values that you want to be selectable for functions (for example, consultant).

- Kinds of Social Media
  Set values to be selectable for types of social media (for example, Facebook).

- Kinds of Other Information
  Specify values to be selected for types of additional information (for example, hobby).

- Declarations of Consent
  Specify values to be selected for types of declarations of consent (for example, e-mail).

"Externally Managed Fields" tab

- Contact Person
  The selected metadata is displayed read-only for a contact person, if the *Managed Externally* option is selected for the contact person. This means that the metadata can no longer be changed via the user interface, but only via the import mechanism.

- Organization
  The selected metadata is displayed read-only for an organization, if the *Managed Externally* option is selected for the organization. This means that the metadata can no longer be changed via the user interface, but only via the import mechanism.

Additional tabs

- The general settings can be found in chapter 10.1 "Configurations".

8.3 Contact Rooms

Contact rooms are used for the structured administration of contacts and to define access rights ("Permissions" action) and default values ("Settings" action > "Default Values" tab).

You can store the contacts directly in the contact room at top level or structure them further with folders. Special property values of contacts (e.g., the salutation) can be assigned to different contact rooms and are therefore only visible to authorized users in the respective contact rooms.

Address lists allow collecting and exporting contacts from different contact rooms.

In addition to the structured management of contacts, it is also possible to manage them in an unstructured way. You can find more information on unstructured shelves in chapter 10.2.4 "Unstructured Shelves".

8.4 Creating Contact Persons

To create a contact person, proceed as follows:

1. Navigate in the desired contact room.

2. Click the "Create Contact Person" action.

3. Enter the contact person's data. First name and surname are mandatory fields.

4. Optionally, click the "Show Additional Fields" button to see all available fields of the contact person.

5. Click "Create".

Note:

- If no main organization is assigned to the contact person, an organization name and the function in the organization can be assigned textually.

- If organizations are assigned to the contact person, the addresses and telephone numbers of the current organizations are added to the contact person.

- Before a contact person is created, a duplicate check is automatically carried out (see chapter 8.6 "Duplicate Check").

8.5 Creating Organizations

To create an organization, proceed as follows:

1. Navigate in the desired contact room.
2. Click the "Create Organization" action.
3. Enter the organization's data. The name is a mandatory field.
4. Optionally, click the "Show Additional Fields" button to see all available fields of the organization.
5. Click "Create".

Note: Before an organization is created, a duplicate check is automatically carried out (see chapter 8.6 "Duplicate Check").

8.6 Duplicate Check

When creating or changing contacts, it is checked whether a corresponding contact already exists. The duplicate check is only performed with contacts that the user, who executes the action, has access to. If a duplicate has been found, you can clean up or merge the contacts in a dialog.

Contact persons are recognized as duplicates if

- either the e-mail address already exists and/or
- the given first name and surname already exist.
  Note: If the first name is empty, contact persons with the same last name and also empty first name will be recognized as duplicates.

Organizations are recognized as duplicates if

- either the e-mail address already exists and/or
- the entered organization name already exists.

To perform a duplicate check, proceed as follows:

1. When creating or editing a contact, a duplicate check is automatically carried out. If a duplicate is found, a dialog will be opened.
2. Values that differ are highlighted. The new value is highlighted in yellow and the old value is crossed out. Move the mouse pointer over the corresponding line. You can adjust the values accordingly by using the "Insert", "Remove", "Replace" or "Discard" buttons. The "Restore" button can be used to discard an adjustment.
3. Click "Next" after resolving all conflicts.

8.7 Changing the Assignment of Contacts

Contacts can be assigned to another contact room. Full control is required in the source contact room and change access in the target contact room. If you do not have the necessary rights, the change request can also be forwarded to another user.

To change an assignment of contacts, proceed as follows:

1. Navigate to the desired contact.

2. In the contact's context menu, click "Change Assignment" (available only for users with full control).

3. If you have change access in the target contact room, you can change the assignment by yourself, otherwise you can forward the change request, for example, to a contact administrator.

    o Case 1: Select the target contact room and click "Change Assignment".

    o Case 2: Click "Forward". Select a user (contact administrator) and click "Forward". The selected user receives an activity in the worklist. The assignment to the contact room can be changed via the "Change assignment" work step.

Note: You can determine contact administrators by switching to the configuration and clicking the "Permissions" action.

8.8 Using Address Lists

Address lists can be created in a contact room (access rights context) using the "Create Address List" action. However, the contacts in address lists can be collected from different contact rooms.

If a user does not have access rights to a contact in the address list, the contact is displayed with "Access Denied".

Additional address lists can be created in address lists. This makes it possible to create an address list hierarchy. For example, an address list "Events" can consist of address lists for different events. When exporting the "Events" address list, all contacts of the subordinate address lists are taken into account.

You can manually compose address lists by copying and pasting contacts into the address list. Alternatively, you can also define search criteria.

To define search criteria for an address list, proceed as follows:

1. Navigate in the desired address list.

2. Click the "Define Search Criteria" action.

3. Select whether you want to search for contact persons or organizations.
   You can also restrict the objects you are looking for to the current contact room or your organization.

4. Enter the search criteria and click "Save Query".

5. Click on the "Refresh Result" action to apply the search criteria.

Note:

• "Refresh Result" applies the last saved query to the address list.

• You can also use the "Define Search Criteria" action for a standard search without saving the query. You can copy the search hits manually.

8.9 Importing and Exporting Contacts

The import and export of contacts is possible in address lists. When importing contacts, they are assigned to the contact room of the used address list. If a user-defined form is assigned to contacts, these properties can also be imported and exported (the programming name of the respective property serves as the column caption).

Import

Contacts can be imported and updated using a CSV or XLSX file.

To import contacts, proceed as follows:

1. Navigate in the desired address list.
2. Click the "Import Contacts" action.
3. Click the "Download CSV Template" button to obtain a template describing the required data structure.
4. In the *Content* field, enter the path to the CSV or XLSX file that defines the contacts.
5. Click "Start import".
6. After the import has completed, click "Next".

The imported contacts are stored in the address list and in the corresponding contact room.

The CSV columns are generally user-defined text fields of the type string or date (`yyyy-mm-dd`). For multi-value fields (e.g., `nameorgext`) a carriage return (`CR LF`) is used as separator.

Note: The externally managed properties of a contact can only be updated, if the specified data source matches the data source of the existing contact.

Organization

The following table contains all relevant columns for organizations.

CSV Column	Field	Possible Value
`objexternalkey`	Import ID	String To fill fields with several lines (e.g., addresses), you can specify several lines with the same external key (`objexternalkey`) in the CSV file.
`objclass`	Object Class	String (ContactRoom`Organisation`)
`externaldatasource`	External Data Source	String

`objcategory`	Category	Import ID or short reference of a category (e.g., `FormCategory_3_2875`).
`orgname`	Name	String
`orgnameext`	Name (Extended)	String list
`address.addrstreet`	Addresses (Street)	String
`address.addrpostofficebox`	Addresses (P.O. Box)	String
`address.addrzipcode`	Addresses (Zip Code)	String
`address.addrcity`	Addresses (City)	String
`address.addrstate`	Addresses (State)	String
`address.addrcountry`	Addresses (State)	String
`address.addrtopic`	Addresses (Type)	Short reference of an address type (e.g., `TermBusiness`, `TermPrivate`)
`emailinformation.emailaddress`	E-Mail Addresses (E-Mail Address)	String
`emailinformation.addrtopic`	E-Mail Addresses (Type)	Short reference of an address type (e.g., `TermEMail1`, `TermEMail2`)
`telephone.telnumber`	Telephone Numbers (Telephone Number)	String
`telephone.addrtopic`	Telephone Numbers (Type)	Short reference of an address type (e.g., `TermBusiness`, `TermFax`)
`website`	Web Site	String
`telephonebusiness`	Telephone Numbers (Telephone Number, Business)	String

`telephonefax`	Telephone Numbers (Telephone Number, Fax)	String
`telephonemobile`	Telephone Numbers (Telephone Number, Mobile)	String
`telephoneprivate`	Telephone Numbers (Telephone Number, Private)	String
`emailbusiness`	E-Mail Addresses (E-Mail Address, Business)	String
`emailprivate`	E-Mail Addresses (E-Mail Address, Private)	String
`addressbusiness.addrstreet`	Addresses (Street, Business)	String
`addressbusiness.addrpostoffice box`	Addresses (P.O. Box, Business)	String
`addressbusiness.addrzipcode`	Addresses (Zip Code, Business)	String
`addressbusiness.addrcity`	Addresses (City, Business)	String
`addressbusiness.addrstate`	Addresses (State, Business)	String
`addressbusiness.addrcountry`	Addresses (Country, Business)	String
`addressinvoice.addrstreet`	Addresses (Street, Invoice)	String
`addressinvoice.addrpostofficeb ox`	Addresses (P.O. Box, Invoice)	String
`addressinvoice.addrzipcode`	Addresses (Zip Code, Invoice)	String
`addressinvoice.addrcity`	Addresses (City, Invoice)	String
`addressinvoice.addrstate`	Addresses (State, Invoice)	String
`addressinvoice.addrcountry`	Addresses (Country, Invoice)	String
`addressprivate.addrstreet`	Addresses (Street, Private)	String

`addressprivate.addrpostofficeb ox`	Addresses (P.O. Box, Private)	String
`addressprivate.addrzipcode`	Addresses (Zip Code, Private)	String
`addressprivate.addrcity`	Addresses (City, Private)	String
`addressprivate.addrstate`	Addresses (State, Private)	String
`addressprivate.addrcountry`	Addresses (Country, Private)	String
`orgsuppliernr`	Supplier Number	String
`orgcustomernr`	Customer Number	String
`orgcompanycode`	Company Code	String
`orgtradeid`	Trade Directory ID	String
`orgvatid`	VAT ID	String
`orgdataprocid`	Data Processing ID	String
`orgjurisdiction`	Court of Jurisdiction	String
`orgindustries`	Industries	Import ID of a term
`overridekeys`	-	CSV columns of properties to be overwritten separated by commas (otherwise empty values are ignored and values are added in list properties)

Note: For `overridekeys` with multipart CSV column names, specify the string before the dot (e.g., `telephone`). Overwriting therefore affects all values of the telephone aggregate and all other telephone columns serving simplification purposes (`telephone.telnumber`, `telephone.addrtopic`, `telephonebusiness`, `telephonefax` etc.). For addresses, e-mail addresses and telephone numbers you have to specify the respective base column (`address`, `emailinformation` or `telephone`).

Contact Person

The following table contains all relevant columns for contact persons.

CSV Column	Field	Possible Value
objexternalkey	Import ID	String To fill fields with several lines (e.g., addresses), you can specify several lines with the same external key (`objexternalkey`) in the CSV file.
objclass	Object Class	String (`ContactRoomPerson`)
externaldatasource	External Data Source	String
objcategory	Category	Import ID or short reference of a category (e.g., `FormCategory_3_2875`).
userfirstname	First Name	String
persmiddlename	Middle Initial	String
usersurname	Surname	String
persposttitle	Post Title	String
persawardedtitle	Awarded Title	String
persjobtitle	Job Title	String
persacademictitle	Academic Title	String
persnickname	Nickname	String
perssex	Sex	String (`SEX_FEMALE` or `SEX_MALE`)
persbirthday	Date of Birth	Date
perssalutations.salutation	Salutations (Salutation)	String
perssalutations.addrtopic	Salutations (Type)	Short reference of a salutation type (either

		TermFormalSalutation or TermPersonalSalutation)
persmothertongue	Mother Tongue	Short reference of a system language (e.g., LANG_GERMAN, LANG_ENGLISH)
commlanguage	Language for Communication	Short reference of a system language (e.g., LANG_GERMAN, LANG_ENGLISH)
address.addrstreet	Addresses (Street)	String
address.addrpostofficebox	Addresses (P.O. Box)	String
address.addrzipcode	Addresses (Zip Code)	String
address.addrcity	Addresses (City)	String
address.addrstate	Addresses (State)	String
address.addrcountry	Addresses (State)	String
address.addrtopic	Addresses (Type)	Short reference of an address type (e.g., TermBusiness, TermPrivate)
emailinformation.emailaddress	E-Mail Addresses (E-Mail Address)	String
emailinformation.addrtopic	E-Mail Addresses (Type)	Short reference of an address type (e.g., TermEMail1, TermEMail2)
telephone.telnumber	Telephone Numbers (Telephone Number)	String
telephone.addrtopic	Telephone Numbers (Type)	Short reference of an address type (e.g., TermBusiness, TermFax)
website	Web Site	String

`telephonebusiness`	Telephone Numbers (Telephone Number, Business)	String
`telephonefax`	Telephone Numbers (Telephone Number, Fax)	String
`telephonemobile`	Telephone Numbers (Telephone Number, Mobile)	String
`telephoneprivate`	Telephone Numbers (Telephone Number, Private)	String
`emailbusiness`	E-Mail Addresses (E-Mail Address, Business)	String
`emailprivate`	E-Mail Addresses (E-Mail Address, Private)	String
`addressbusiness.addrstreet`	Addresses (Street, Business)	String
`addressbusiness.addrpostoffice box`	Addresses (P.O. Box, Business)	String
`addressbusiness.addrzipcode`	Addresses (Zip Code, Business)	String
`addressbusiness.addrcity`	Addresses (City, Business)	String
`addressbusiness.addrstate`	Addresses (State, Business)	String
`addressbusiness.addrcountry`	Addresses (Country, Business)	String
`addressinvoice.addrstreet`	Addresses (Street, Invoice)	String
`addressinvoice.addrpostofficeb ox`	Addresses (P.O. Box, Invoice)	String
`addressinvoice.addrzipcode`	Addresses (Zip Code, Invoice)	String
`addressinvoice.addrcity`	Addresses (City, Invoice)	String
`addressinvoice.addrstate`	Addresses (State, Invoice)	String

`addressinvoice.addrcountry`	Addresses (Country, Invoice)	String
`addressprivate.addrstreet`	Addresses (Street, Private)	String
`addressprivate.addrpostofficeb` `ox`	Addresses (P.O. Box, Private)	String
`addressprivate.addrzipcode`	Addresses (Zip Code, Private)	String
`addressprivate.addrcity`	Addresses (City, Private)	String
`addressprivate.addrstate`	Addresses (State, Private)	String
`addressprivate.addrcountry`	Addresses (Country, Private)	String
`persfunctionbc`	Function According to Business Card	String
`perssupervisor`	Supervisor	String
`persassistent`	Assistant	String
`persmainorgname`	Name of the Organization	String
`persfunctions`	Functions	Import IDs of terms separated by a carriage return
`persmainorg`	Main Organization	Import ID of an organization
`perscurremployments.emplorg`	Current Organizations (Organization)	Import ID of an organization
`perscurremployments.emplfuncti` `on`	Current Organizations (Function)	String
`perscurremployments.emplfrom`	Current Organizations (From)	String
`perscurremployments.emplto`	Current Organizations (To)	String
`perspastemployments.emplorg`	Previous Organizations (Organization)	Import ID of an organization

`perspastemployments.emplfuncti` `on`	Previous Organizations (Function)	Import ID of a term
`perspastemployments.emplfrom`	Previous Organizations (From)	String
`perspastemployments.emplto`	Previous Organizations (To)	String
`persconsentdeclarations`	Declarations of Consent	Import IDs of terms separated by a carriage return
`overridekeys`	-	CSV columns of properties to be overwritten separated by commas (otherwise empty values are ignored and values are added in list properties)

Note: For `overridekeys` with multipart CSV column names, specify the string before the dot (e.g., `telephone`). Overwriting therefore affects all values of the telephone aggregate and all other telephone columns serving simplification purposes (`telephone.telnumber`, `telephone.addrtopic`, `telephonebusiness`, `telephonefax` etc.). For addresses, e-mail addresses and telephone numbers you have to specify the respective base column (`address`, `emailinformation` or `telephone`).

Export

Contacts can be exported as CSV file. For property lists, the first value found is exported.

To export contacts, proceed as follows:

1. Navigate in the desired address list.

2. Click the "Export Contacts" action.

3. By default, the columns to be included in the CSV file are determined by the column settings of the address list. Adjust the columns if necessary.
   Note: The last used settings are saved for the address list, if the export was carried out by a user with at least change rights. You can restore the columns according to the address list by clicking the "Reset" button.

4. Optionally, click "Show Details" to set the order for exporting addresses, phone numbers, e-mail addresses, salutations and contact rooms. The order of the contact rooms is always the second criterion. Only the first value found is exported.
   Example: If you specify the sequence for e-mail addresses with "Business, Private" and the sequence of contact rooms with "Room 1, Room 2", the following sequence is defined:

   o First, the first business e-mail address assigned to room 1 is searched for.

   o if no e-mail address was found, the first business e-mail address assigned to room 2 is searched for.

o   If no e-mail address was found, the first private e-mail address assigned to room 1 is searched for.

o   If no e-mail address was found, the first private e-mail address assigned to room 2 is searched for.

5.   Click "Export".

The CSV file with the selected columns is downloaded.

Note: Contacts in the wastebasket are not exported.

8.10 Merging Contacts

If contact persons or organizations have been created twice, they can be merged.

To merge contacts, proceed as follows:

1.   Navigate to the contact that is to be replaced by another contact.

2.   In the context menu of the contact click "Merge".

3.   In the *Merge With* field, select the contact that should replace the contact on which the context menu command was executed.

4.   Click the "Merge" button.

5.   If necessary, define which data should be used from which contact.

6.   Click "Next".

Note:

•   The contact to be replaced is replaced asynchronously in the background. This may take some time.

•   Until the replacement is complete, the "Currently being merged" status symbol is displayed for the contact to be replaced.

•   When you open a replaced contact, you can decide whether you want to open the original contact or the merged contact.

•   The replaced contacts are displayed in the *Replaced Contacts* field on the "Further Information" tab of a contact.

8.11 Deleting Contacts

To delete a contact (to be placed in the recycle bin) you need to have change access. If property values of the contact are assigned to a different contact room, also change access is required in this room. If you do not have the necessary rights, contact a contacts administrator. To delete permanently a contact (to be removed from the recycle bin) full control is required.

To delete a contact, execute the "Delete" context menu command.

8.12 Using Address Books

Access to contacts is also possible via third-party products such as "Apple Contacts", which support the CardDAV standard. A password for applications is required for access. If you have not yet created one for CardDAV, create one now (see chapter 13.6 "Access for Applications").

To display contacts in a third-party product, proceed as follows:

1. Navigate in a contact room or address list.
2. Click the "Add to Address Book List" action.
   Note: The "Remove From Address Book List" action can be used to remove the contact room or address list again.
3. Switch to your third-party contacts product.
4. Configure a new account in the third-party product. Enter your e-mail address for the Fabasphere log-in as the user name and the generated password for applications as the password.

The Fabasphere contacts are now displayed in the third-party product and can be edited if applicable.

Note: The "Open Fabasphere Address Book" context menu command of the Fabasphere notification symbol can be used to include the address book list in Microsoft Outlook.

8.13 Serial E-Mails

Via a serial e-mail you can send personalized e-mails to defined recipients from the contact management.

Note: This functionality is only available if your organization has its own SMTP server configured.

To send a serial e-mail, proceed as follows:

1. Navigate to a Teamroom and create a "Serial E-Mail" object.
2. Define the metadata for the e-mails to be sent (see below).
3. The "Define Addressees" action can be used to define the recipients and to generate the CSV file with the contact data.
4. The "Execute E-Mail Test Dispatch" action can be used to specify test recipients who receive the specified number of sample e-mails. This allows you to check whether the e-mails meet your requirements.
5. The "Send Serial E-Mail" action can be used to send the e-mails to the recipients. In the send overview you can also create or update the CSV file with the recipient data.
   You can check the result on the "Transmission Log" tab of the serial e-mail. For the recipient contacts, the serial e-mail is stored on the "Communication" tab.
   When the action is executed again, only e-mails that have not yet been sent are sent (e.g., due to a sending error).

Metadata

"Serial E-Mail" tab

- *Name*
  The name of the serial e-mail.

- *E-Mail Subject*
  Defines the subject of the e-mail.

- *Use E-Mail Message From Document*
  Defines whether the e-mail text should be entered directly or whether a file should be uploaded. For directly entered text or for an HTML file, the following placeholders can be used to personalize the e-mail:

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrSurName]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrFirstName]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrSalutation]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrSexSalutation]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrStreet]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrPostOfficeBox]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrZipCode]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrCity]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrTitle]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrContact]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrCountry]`

  o `[=addressee_FSCFOLIO_1_1001_FieldTelNumber]`

  o `[=addressee_FSCFOLIO_1_1001_FieldOrganization]`

  o `[=addressee_FSCFOLIO_1_1001_FieldAddrState]`

  o `[=addressee_FSCFOLIO_1_1001_FieldMiddleName]`

  o `[=addressee_FSCFOLIO_1_1001_FieldPostTitle]`

- *E-Mail Message*
  The e-mail message as text or file.

- *Attachments*
  The specified contents are added as attachments to the e-mail. HTML attachments can also be personalized.

- *Send Attachments as*
  The contents can be sent in the original format or as a PDF file. If conversion to PDF is not possible, the file is sent in the original format.

"Addressees" tab

- *Name of Sender*
  Defines the name of the sender. By default, your user name is used.

- *E-Mail Address of Sender*
  Defines the e-mail address of the sender. By default, your user e-mail address is used.

- *Addressees*
  The e-mail is sent to the defined addressees (contact persons, organizations and address lists).

- *Robinson List*
  Allows filtering the specified addressees by contacts, organizations and address lists.

- *Create/Recreate CSV File*
  To determine the contact data from the addressees, a CSV file must be created before sending.

"Transmission Log" tab

- *Transmission Errors (Preview)*
  Shows a limited number of transmission errors that occurred.

- *Transmission Log*
  Contains the complete transmission log. If applicable, the corresponding error message is shown for each e-mail.

9 Material Master

Material master management makes it possible to manage materials and price conditions. Materials and price conditions can be created and updated via a web service interface, for example from SAP.

You can find more information on the web service interface here:

https://help.cloud.fabasoft.com/index.php?topic=doc/Fabasphere-Web-Services/material-master-data.htm

9.1 Material Master Dashboard

The material master dashboard is your central access point for material master management.

If you are added to a material master configuration as an app user or app administrator, a dashboard is automatically created and placed on "Home". If you are removed again as an app user or app administrator, the dashboard is also removed.

The material master dashboard is divided into the following areas:

- *Recently Used*
  Shows the materials and price conditions you recently used.

- *Material Shelves*
  Shows the material shelves in which you are authorized. Each material shelf defines its own access rights context.

- *Price Lists*
  Shows the price lists in which you are authorized. Each price list defines its own access rights context.

You can perform the following actions:

- Create Material Shelf
  As an app administrator, you can use the "Create Material Shelf" action to create new material shelves.

- Create Price List
  As an app administrator, you can use the "Create Price List" action to create new price lists.

- Switch to Configuration
  As an app administrator, you can use the "Switch to Configuration" action to display the configuration assigned to the dashboard.

- Settings
  You can use the "Settings" action to define general properties of the material master dashboard (e.g., the logo or the notification setting).

9.2 Material master Configuration

As an app administrator, you can define general settings in the material master configuration.

Note: As an app administrator, you can switch to the assigned configuration via the material master dashboard.

Areas

The material master configuration dashboard is divided into the following areas:

- *Shelves*
  Shows the material shelves and price lists in which the materials and price conditions are managed. Each shelf defines its own access rights context.
- *Sales Organizations*
  Shows the sales organizations that can be used in the context of material master management. The organizations are managed in "Contact Management" and referenced here. You can store individual organizations, but also contact rooms and address lists. You can find more information on contact management in chapter 8 "Contact Management".
- *Quantity Units*
  Shows the defined quantity units that can be used for materials.
- The description of the other general areas can be found in chapter 10.1 "Configurations".

Actions

You can perform the following actions:

- Create Material Shelf
  You can use the "Create Material Shelf" action to create new material shelves.
- Create Price List
  You can use the "Create Price List" action to create new price lists.
- Translations
  The "Translations" action can be used to export or import a CSV file with the multilingual names of the customizing objects. This enables an external translation.
- Settings
  You can use the "Settings" action to define general settings.
- Permissions
  You can use the "Permissions" action to define app administrators who are allowed to edit the configuration and create shelves. App users are authorized to use the material master management. The respective access rights are defined via the shelves.

Settings

The description of the general settings can be found in chapter 10.1 "Configurations".

9.3 Material Shelves

Material shelves are used for the structured management of materials and for defining access rights ("Permissions" action).

You can store the materials directly in the shelf at top-level or use folders for further structuring.

In addition to the structured management of materials, it is also possible to manage them unstructured. You can find more information on unstructured shelves in chapter 10.2.4 "Unstructured Shelves".

9.4 Price Lists

Price lists are used for the structured management of price conditions and for defining access rights ("Permissions" action).

You can store the price conditions directly in the shelf at top-level or use folders for further structuring.

In addition to the structured management of price conditions, it is also possible to manage them unstructured. You can find more information on unstructured shelves in chapter 10.2.4 "Unstructured Shelves".

9.5 Creating Materials

To create a material, proceed as follows:

1. Navigate in the desired material shelf.
2. Click the "Create Material" action.
3. Enter the material's data. The *Material Number* is a mandatory field.
4. Click "Next".

The following fields are available:

- *Material Number*
  The material number of the material.

- *Multilingual Name*
  The multilingual name of the material.

- *Sales Organization (Owner)*
  The sales organization that originally sells the material.

- *Sales Organizations*
  The sales organizations that, in addition to the owner, are authorized to sell the material for the owner.

- *Quantity Unit*
  Defines the default quantity unit for the material.

- *Alternative Quantity Units*
  Defines additional quantity units with a conversion factor for the material.
  Example:

Quantity Unit: Hours
Alternative Quantity Units: Person days with conversion factor 8

9.6 Creating Price Conditions

To create a price condition, proceed as follows:

1. Navigate in the desired price list.

2. Click the "Create Price Condition" action.

3. Enter the price condition's data. The *Price Condition ID* is a mandatory field.

4. Click "Next".

The following fields are available:

- *Price Condition ID*
  The ID of the price condition.

- *Material*
  The material to which the price condition applies.

- *Sales Organization*
  The sales organization to which the price condition applies.

- *Valid From*
  The price condition is valid from the specified date.

- *Valid Until*
  The price condition is valid until the specified date.

- *Calculation Rule*
  Defines the calculation rule (percentage, quantity, etc.) for the price condition.

- *Scale Type*
  Defines whether there is a quantity scale for the price condition.

- *Condition Amount (Price)*
  Defines the price of the price condition.

- *Price Scales*
  If a quantity scale has been defined as the scale type, the price scales are available.

  o *Scale Kind*
     Defines whether it is a from scale or a to scale.

  o *Scale List*
     Defines a list consisting of the scale quantity and condition amount.

- *Lower Limit*
  Defines the lower limit of the price.

- *Upper Limit*
  Defines the upper limit of the price.

- *Quantity Unit*
  Defines the quantity unit of the price condition. Only quantity units that have been stored for the defined material can be selected.

10 General Settings in Configurations and Shelves

The following applications provide the general settings described here:

- Customizing
- Contact Management
- Material Master

10.1 Configurations

The configurations provide the following general configuration settings.

10.1.1 General Configuration Areas

In the configurations you will find the following general areas.

Note:

- To be able to store objects from a different context, you must adjust the *Restrict Shortcuts Within Teamroom* field in the configuration settings accordingly.
- The areas differ in "Customizing".

Templates

This area shows the templates provided by the configuration. The templates are displayed in the create dialog (e.g., "New" context menu command).

Defining Template Categories for Templates

In the "Create" dialog the templates can be filtered according to the template category.

1. To define a template category for templates, proceed as follows:
2. In the configuration, navigate in the "Templates" area.
3. Click the "Define Template Categories" action.
4. In the *Template Categories* field, enter the desired name for the template category and click "Click here to create the entered template category".
5. Click "Define".

The template category can be assigned in templates, on the "Template" tab, in the *Template Categories* field.

Defining Templates

To define a new template, proceed as follows:

1. In the configuration, navigate in the "Templates" area.
2. Click the "New" action and then click the desired entry.
3. Define the name and click "Next".
4. Define the content or the metadata of the template.
5. Click "Properties" on the context menu of the template.
6. Switch to the "Template" tab.

7. Select an existing template category in the *Template Categories* field.
Note: If no template category is defined for a template, the template category "Teamroom Templates" is assigned to the template in the "Create" dialog.

8. Click "Next".

9. Click "Release for Usage" on the context menu of the template.

Note: A template can only be used after it has been released for usage via the "Release for Usage" context menu command. Changes must be released using the "Re-release" context menu command. The release can also be withdrawn.

Text Modules

This area shows the text modules provided by the configuration that can be inserted into Word documents.

Defining Text Module Categories for Text Modules

Text module categories define the categories under which the text module can be found when it is inserted into a document.

To define a text module category for text modules, proceed as follows:

1. In the configuration, navigate in the "Text Modules" area.

2. Click the "Define Text Module Categories" action.

3. In the *Text Module Categories* field, enter the desired name for the text module category and click "Click here to create the entered text module category".

4. Click "Define".

5. The text module category can be assigned in text modules in the *Text Module Category* field.

Defining Text Modules

To define a text module, proceed as follows:

1. In the contract manager configuration, navigate in the "Text Modules" area.

2. Click the "Create Text Module" action.

3. Select "Static Text Module (Text)" or "Static Text Module (Word)" and click "Next".

4. Enter the desired name for the "Static Text Module" in the *Name* field.

5. In the *Text Module Categories* field, select the desired text module category under which the text module is to be made available for insertion into the Word document.

6. To make the text module available only for documents in a specific language, select this language in the *Text Module Language* field.

7. When you create a static text module (text), you can enter the desired unformatted text in the *Text* field.

8. Click "Next".

9. If you have selected a text module (Word), you can enter the required text using the "Edit" or "Upload" context menu command.

10. Click "Release for Usage" on the context menu of the text module.

Note:

- A text module can only be used after it has been released for usage via the "Release for Usage" context menu command. Changes must be released via the "Re-release" context menu command. The release can also be withdrawn.

- Text modules can be inserted into document templates both directly and as placeholders. If a text module is inserted into a template as a placeholder, this placeholder is only replaced by the content of the text module in question when the template is instantiated. on the "Usage" tab, in the *Expression for Further Restrictions of Usability* field of the text module, you can specify an expression that is evaluated when a template is instantiated to decide whether a placeholder is to be replaced by the content of the text module or ignored and removed.

- You can create a hierarchy of text module folders ("Create Text Module Folder" action) to improve the structure of your text modules.

Forms and Categories

This area shows the forms and categories provided by the configuration. For example, custom forms can be used to add fields to objects for storing customer-specific data. Categories can be assigned to objects and thus influence the behavior of the objects.

For more information on defining forms and categories, see chapter 11.1 "Forms" and 11.2 "Categories".

Processes

This area shows the processes provided by the configuration. Users, organizations, organizational units and external organizations can be involved in the processing of business objects via workflow by starting a process that can be processed in the worklist. Typical processes are approval and release processes.

For more information on defining processes, see chapter 6 "Workflow".

Insight Apps

Insight apps provide aggregated access to information in your organization, customized to your needs. You can use insight apps to display and highlight important information without users having to explicitly search for it.

More information can be found in chapter 5.5 "Insight Apps".

AI Settings

This area shows the AI settings that have been made for the current context. For more information about the AI settings, see here:

https://help.cloud.fabasoft.com/index.php?topic=doc/Administration-Help-Fabasphere-AI-Core-eng/artificial-intelligence.htm

Presettings

This area shows the presettings (view settings, search patterns, time intervals) provided by the configuration.

App administrators can create search templates and time intervals. In addition, it is possible to store view settings in the configuration via the "View" > "Display Settings" > "Save" menu command of lists.

Thesauri

This area shows the thesauri provided by the configuration, which allow keywording.

Failed Background Tasks

This area shows failed background tasks (only visible if there is at least one failed background task). You can perform following manual actions: "Define Next Execution", "Send Link" and "Delete".

E-Mail Dispatch Errors

This area shows e-mail dispatch errors (only visible if there is at least one e-mail dispatch error). You can perform following manual actions: "Send Test E-Mail", "Resend E-Mails" and "Delete".

Note: E-mail dispatch errors are only logged if the *Log E-Mail Dispatch Errors* option is enabled on the organization.

10.1.2 General Configuration Settings

You can define the following values in the configuration settings.

"General Settings" tab

- *Name*
  The name of the configuration.

- *Subject*
  A description of the configuration.

- *Holiday Table*
  Defines the holiday table to be used in the configuration context (otherwise the default holiday table is used).

- *Restrict Shortcuts Within Teamroom*
  Defines which type of shortcuts may be stored in the configuration. You can restrict the permitted shortcuts to objects that are assigned to the organization or to objects that are assigned to the configuration.

- *Restrict the Downloading or Opening of Content on the Device*
  Allows to restrict team members who can open or download content at the device.

- *Roles That Are Allowed to Open or Download Content on the Device*
  Defines which permissions a team member must have in order to open or download content at the device.

- *All Team Members May Add Members*
  Defines whether all team members can add users to the team or only team members with "Full Control".
  Members with change access may grant or revoke change access or read access to other members. Members with read access may grant or revoke read access to other members.

- *Restrict Team Members*
  Defines the organizations, organizational units, teams and external organizations whose members may be added to the configuration. If the list does not contain any entries, members can be added without restriction.

- *Enable Advanced Mode*
  Advanced mode includes, for example, working with multiple shelves, as well as managing templates and presettings.

- *Main Administrator*
  Defines the user who will receive the automatically generated e-mail messages concerning the configuration. Otherwise, all app administrators receive the e-mail messages. The user is also listed as contact in case of missing permissions.

- *Support Coordinator*
  The support coordinator team has access to all support requests in the corresponding context and can perform the same actions as the support request initiators.

- *Support Team*
  The support team handles the organization-internal management of support requests in the respective context.

- *Activate Trace Output*
  For example, as a form designer, when you use expressions for calculation or validation, it can sometimes be difficult to identify errors in the expressions. To simplify analysis, you can write trace output to the web browser console (`cooobj.Trace("string");` or `cooobj.Trace("string", value);`).

"Logos" tab

The defined logos and the background image are used for the configuration and for all personal dashboards.

"AI Settings" tab

The defined AI settings are evaluated for objects in the current context. For more information about the AI settings, see here:

https://help.cloud.fabasoft.com/index.php?topic=doc/Administration-Help-Fabasphere-AI-Core-eng/artificial-intelligence.htm

"Default Values" tab

- *Default Thesaurus for New Terms*
  If a default thesaurus is specified, new terms can be created directly during tagging.

- *Default Categories*
  When an object is created, the specified category is assigned according to the defined object class. In the *Apply to* field, you can specify whether the setting applies to instances, templates, or both.
  Note: The default categories are also applied to shelves if they have been explicitly defined for shelves. This also applies to Teamrooms and other rooms contained in shelves.

- *Default Processes*
  When an object is created, the specified process is assigned according to the defined

object class or category. In the *Apply to* field, you can specify whether the setting applies to instances, templates, or both.
Note: The default processes are also applied to shelves if they have been explicitly defined for shelves. This also applies to Teamrooms and other rooms contained in shelves.

- *Default Background Tasks*
  When an object is created, the specified background tasks are assigned.

- *Release Process for Templates and Presettings*
  In order to use templates, text modules, forms and categories, processes and presettings, they must be released. If a process is to be used for the release, a BPMN process diagram can be defined here. Release processes must contain the "Release for Usage" activity.

"Content Settings" tab

- *Allow Comments*
  Defines whether PDF comments can be applied to documents.

- *Allowed Types for Comments*
  Defines the allowed types of comments (public or private).

- *Preferred Type for Comments*
  Defines the type of comment initially selected when commenting (overrides the setting in the user's basic settings).

- *Users With Read Access Are Allowed to Comment Publicly*
  Defines whether users with read access are allowed to add public comments.

- *Allow Public Links*
  Defines whether public links may be published.

- *Generate Cover Sheet for PDF Overviews of Documents*
  Defines whether a cover sheet is generated for PDF overviews of documents.

- *Use Watermarks*
  Defines whether documents are automatically converted into protected PDF documents with a definable watermark.

10.1.3 General Actions

Following general actions are available:

- Translations
  The "Translations" action can be used to export or import a CSV file containing the multilingual names of the customizing objects of the configuration. This enables an external translation.

- For users with administrative rights it is possible to define special invitation texts via the "Tools" > "Standard Texts for E-Mail Invitations" context menu command, regardless of the invitation texts stored with the organization.
  When inviting new users in the "Permissions" area, the invitation text defined for the context is offered as a suggestion. The text defined in the configuration applies to subordinate shelves if they do not define their own text.

  o   The "Reset" button takes over the standard text of the organization.

- o   The "Delete" button removes the standard text from the configuration. This means that the organization's currently valid standard text is offered again as a suggestion when inviting new users.

10.2 Shelves

The shelves offer the following general settings. When evaluating the settings, the shelf hierarchy is considered in addition to the configuration.

10.2.1 General Shelf Settings

You can define the following values in the clipboard settings.

"General Settings" tab

- *Name*
  The name of the configuration.

- *Subject*
  A description of the configuration.

- *Holiday Table*
  Defines the holiday table to be used in the shelf context (otherwise the holiday table of the configuration or the default holiday table is used).

- *Restrict Shortcuts Within Teamroom*
  Defines which type of shortcuts may be stored in the shelf. You can restrict the permitted shortcuts to objects that are assigned to the organization or to objects that are assigned to the shelf. In this way, you can prevent, for example, that shortcuts are stored to which the members of the shelf do not have access.

- *Restrict the Downloading or Opening of Content on the Device*
  Allows to restrict team members who can open or download content at the device.

- *Roles That Are Allowed to Open or Download Content on the Device*
  Defines which permissions a team member must have in order to open or download content at the device.

- *Team Members Visible to All Members*
  Defines whether all members are allowed to see the team members. Note that disabling this setting also restricts other use cases.
  Note: Team members with change access can be eventually seen by all members, since changes are logged in log properties such as *Last Change by*.

  - o   Only team members with "Full Control" have access to the "Permissions" action, can start processes, duplicate objects, use templates and release templates and presettings.

  - o   Only team members with "Full Control" see the events by default. The display of events can also be enabled for team members who are not allowed to view the team. However, only events that could not lead to conclusions about team members with read access will be displayed.

  - o   Team members with read access cannot use remarks, public comments, signatures, processes or comment on news feeds.

- Team members with read access cannot use the time travel.

- Team members with read access cannot be selected as participants in processes.

- Team members with read access cannot create public links.

- Team members with read access cannot view the "Processes" and "Activities" tabs of assigned objects.

- *Display Events for Team Members Who Are Not Allowed to View the Team*
Only team members with "Full Control" see the events by default. The display of events can also be enabled for team members who are not allowed to view the team. However, only events that could not lead to conclusions about team members with read access will be displayed.

- *All Team Members May Add Members*
Defines whether all team members can add users to the team or only team members with "Full Control".
Members with change access may grant or revoke change access or read access to other members. Members with read access may grant or revoke read access to other members.

- *External Members May Be Added*
Defines whether external members may be added.

- *Restrict Team Members*
Defines the organizations, organizational units, teams and external organizations whose members may be added to the shelf. If the list does not contain any entries, members can be added without restriction.

- *Main Administrator*
Defines the user who will receive the automatically generated e-mail messages concerning the shelf. Otherwise, all shelf administrators receive the e-mail messages. The user is also listed as contact in case of missing permissions.

- *Support Coordinator*
The support coordinator team has access to all support requests in the corresponding context and can perform the same actions as the support request initiators.

- *Support Team*
The support team handles the organization-internal management of support requests in the respective context.

- *Activate Trace Output*
For example, as a form designer, when you use expressions for calculation or validation, it can sometimes be difficult to identify errors in the expressions. To simplify analysis, you can write trace output to the web browser console (`cooobj.Trace("string");` or `cooobj.Trace("string", value);`).

"Logos" tab

The defined logos are used for the shelf.

"AI Settings" tab

The defined AI settings are evaluated for objects in the current context. For more information about the AI settings, see here:

https://help.cloud.fabasoft.com/index.php?topic=doc/Administration-Help-Fabasphere-AI-Core-eng/artificial-intelligence.htm

"Default Values" tab

- *Default Thesaurus for New Terms*
  If a default thesaurus is specified, new terms can be created directly during tagging.

- *Default Categories*
  When an object is created, the specified category is assigned according to the defined object class. In the *Apply to* field, you can specify whether the setting applies to instances, templates, or both.

- *Default Processes*
  When an object is created, the specified process is assigned according to the defined object class or category. In the *Apply to* field, you can specify whether the setting applies to instances, templates, or both.

- *Additional Default Background Tasks*
  When an object is created, the specified background tasks are assigned.

Note: The default properties overwrite or extend the settings in the configuration.

"Content Settings" tab

- *Allow Comments*
  Defines whether PDF comments can be applied to documents.

- *Allowed Types for Comments*
  Defines the allowed types of comments (public or private).

- *Preferred Type for Comments*
  Defines the type of comment initially selected when commenting (overrides the setting in the configuration or user's basic settings).

- *Users With Read Access Are Allowed to Comment Publicly*
  Defines whether users with read access are allowed to add public comments (overrides the setting in the configuration).

- *Allow Public Links*
  Defines whether public links may be published.

- *Generate Cover Sheet for PDF Overviews of Documents*
  Defines whether a cover sheet is generated for PDF overviews of documents.

- *Use Watermarks*
  Defines whether documents are automatically converted into protected PDF documents with a definable watermark.

Note: The content settings overwrite the settings in the configuration.

10.2.2 Templates and Presettings

Via the "Templates and Presettings" action, you can access the following areas.

Templates

This area shows the templates provided by the shelf. The templates are displayed in the create dialog (e.g., "New" context menu command).

Text Modules

This area shows the text modules provided by the shelf that can be inserted into Word documents.

Forms and Categories

This area shows the forms and categories provided by the shelf. For example, custom forms can be used to add fields to objects for storing customer-specific data. Categories can be assigned to objects and thus influence the behavior of the objects.

For more information on defining forms and categories, see chapter 11.1 "Forms" and 11.2 "Categories".

Process Templates

This area shows the processes provided by the shelf. Users, organizations, organizational units and external organizations can be involved in the processing of business objects via workflow by starting a process that can be processed in the worklist. Typical processes are approval and release processes.

For more information on defining processes, see chapter 6 "Workflow".

Insight Apps

Insight apps provide aggregated access to information in your organization, customized to your needs. You can use insight apps to display and highlight important information without users having to explicitly search for it.

More information can be found in chapter 5.5 "Insight Apps".

AI Settings

This area shows the AI settings that have been made for the current context. For more information about the AI settings, see here:

https://help.cloud.fabasoft.com/index.php?topic=doc/Administration-Help-Fabasphere-AI-Core-eng/artificial-intelligence.htm

Presettings

This area shows the presettings (view settings, search patterns, time intervals) provided by the shelf.

App administrators can create search templates and time intervals. In addition, it is possible to store view settings in the configuration via the "View" > "Display Settings" > "Save" menu command of lists.

Thesauri

This area shows the thesauri provided by the shelf, which allow keywording.

For objects, corresponding terms can be selected directly in the *Terms* field. Alternatively, the "Choose Terms" button allows a structured selection using the thesaurus hierarchies.

10.2.3 General Actions

Following general actions are available:

- For users with full control it is possible to define special invitation texts via the "Tools" > "Standard Texts for E-Mail Invitations" context menu command, regardless of the invitation texts stored with the organization.
  When inviting new users in the "Permissions" area, the invitation text defined for the context is offered as a suggestion. The text defined in the configuration applies to subordinate shelves if they do not define their own text.

  o The "Reset" button takes over the standard text of the configuration or organization (if not defined for the configuration).

  o The "Delete" button removes the standard text from the shelf. This means that the currently valid standard text of the configuration or organization is offered again as a suggestion when inviting new users.

10.2.4 Unstructured Shelves

If you want to manage a large number of objects in a shelf, an unstructured shelf is a good option, which allows each user to individually specify which objects are to be displayed using search criteria.

Using the "Tools" > "Display Entries in Flat List" context menu command, users with full control can convert a shelf into an unstructured shelf. Note that in general this will delete all existing folders.

The following options are now available to you:

- Search or Adapt Search
  If no manual search criteria are currently defined, you can use the "Search" action to specify what and with which search criteria you want to search. The result is displayed directly in the shelf.

  o If search criteria have already been defined, you can change them accordingly using the "Adapt Search" action.

  o To change what you want to search for, first execute the "Reset Search" action. This will display the "Search" action again.

  o The list is not updated automatically and can be customized manually. So, for example, objects you have created will be displayed even if they do not match the current search criteria.

- Refresh
  Updates the list based on the current search criteria. This will undo any changes you have made to the list (e.g., cut or move objects) and display objects that have been created in the meantime and match the search criteria.

- Further Search Functions
  The following additional search functions are available.

- o Reset Search
  Resets the current search criteria. An empty list is displayed.
- o Save Search Form
  If manual search criteria are defined, they can be saved for reuse.
- o Load Search Form
  Loads a saved search form. Only search forms that make sense in the context of the shelf are offered. The entries in the list are updated accordingly.

Using the "Tools" > "Structure List Entries in Folders" context menu command, you can convert an unstructured shelf back into a structured one. In doing so, in general the objects are stored in folders.

Note:

- A maximum of 10000 objects will be returned as search result. When the maximum is reached, a corresponding dialog is displayed.
- The origin of objects is the unstructured shelf.
- "Open Origin" opens the unstructured shelf.
  Note: The object is only possibly visible in the query-based list.
- Objects in query-based lists of the shelf have no link state (unless the object is assigned to another shelf).
- Unstructured shelves do not have orphaned objects.
- Automatic change of shelf assignment is not applied. The shelf assignment can be done manually using the corresponding context menu command.
  Note: For structured shelves, the assignment is changed when an object is cut and located in exactly one other shelf.
- Unstructured shelves cannot be converted into folders.
- Time travel is not available in unstructured shelves in the query-based list.
- Unstructured shelves cannot be kept up-to-date in the mobile app or in the synchronized folder.

11 Advanced Use Cases

You can create user-defined forms and process documents automatically.

11.1 Forms

With the graphical form editor you can create new forms with drag-and-drop and extend objects with new properties without programming knowledge.

Either you can add a form to an existing object (shown in the properties of the object) or you can create basic objects based on a form.

Note: You can only create, edit and release forms and categories if you are authorized in the *Edit Forms and Categories* organizational policy. Explicit authorization is required as app.ducx expressions can be created in the context of forms and categories.

Form Fields

You can use the following form fields on your form:

- Input Field
  A single-valued field of a particular type (e.g., string, date or object).

- Item List
  A list of fields of a particular type (e.g., string, date or object)

- Multiline Text
  A multi-valued field of type plain text, code or HTML.

- Check Box
  One or more check boxes (multiple selection is possible).

- Radio Buttons
  One value can be selected from several values with radio buttons.

- Combo Box
  One value can be selected from several values in a drop-down box.

- Standard Property
  Provides the ability to display standard properties of objects on the user-defined form.

- Separator
  Used to structure related properties.

- HTML Text
  Allows providing formatted descriptions on the form.

Types

You can define the following types for input fields and item lists:

- String

- Integer

- Float

- Date

- Date and Time

- Timespan

- Numerator (only input fields)

- Hyperlink

- Password

- Currency

- Object
  You must also define the type of objects allowed (for example, standard objects).

- Compound Type
  You must also select either a standard type or a type defined via a form. You can choose between standard and chart display.

Note: If the form has already been released, the type of a field can only be changed to compatible types (e.g., from string to hyperlink or password).

Additional Settings

Depending on the type, you can make further settings for form fields. In general, you can specify:

"General" tab

- Label
- Mandatory field
- Description (is displayed with the field as an additional description to the label)
- Help text (is displayed as context-sensitive help)
- Initialization value

"Advanced" tab

- Programming name
- Readability or changeability depending on user rights
- Mask (string and integer)
- Expressions for computing and validating
  You are supported by syntax checking and auto-completion when entering an app.ducx expression. You can find more information in the white paper „Model-Base Customizing".

"Display" tab

- Control (the used control, based on the field type, is displayed read-only)
- Compute Control Styles
- Compute Control Options
- Display in New Row (if disabled, the field will be displayed next to the previous field)
- Field Width (in percent in relation to the other fields in a row)

Trace output

When you use expressions for calculation or validation, it can sometimes be difficult to identify errors in the expressions. To simplify analysis, you can write trace output to the web browser console. To do this, you must go to the context menu of the Teamroom where the form is used, choose "Tools" > "Activate Trace Outputs" and allow trace output.

Call in expressions:

- ```
  cooobj.Trace("string");
  ```
- ```
  cooobj.Trace("string", value);
  ```

Output:

The output is a JSON data record.

- c
  Context of the call (Teamroom).
- d
  Current time.

- s
  Section of the expression (if available).

- t
  The text to be traced (first parameter of the trace call).

- u
  Current user.

- v
  The value to be traced (second parameter of the trace call).

11.1.1 Creating a Form

Forms can be used in the context in which they are defined or referenced. To make forms generally available for Teamrooms (but not for app rooms), use a form and category collection in "Customizing". Otherwise, forms can be stored in app configurations ("Forms and Categories" widget), in app rooms ("Templates and Presettings" action > "Forms and Categories" widget) or in Teamrooms ("Templates and Presettings" action > "Forms and Categories" widget).

To create a form, proceed as follows:

1. Navigate in the "Forms and Categories" widget in the desired context.

2. Click the "Create Form" action.

3. Define the initial data of the form and click "Next".

   o Enter a multilingual name.

   o Define a base form, if you want to take over tabs and fields of another form.
     Note: The base form property can only be changed when the form is not released for usage.
     Template categories (component objects) can also be used as base forms. When template categories of installed software components change, the forms based on them are marked as "Changed After Release". These forms must be re-released to apply the changes.

   o Define the incoming category for registration, if you want to register objects based on the form in a specific way.
     Note: When using the "Category for Generic Registration With Form", only the user-defined form is displayed without default tabs during registration.

   o Define the base class to specify which objects the form is basically suitable for. If the form is used directly as a template, the template will have the corresponding object class.

     ▪ Object With User Data
       Can be used for base objects, objects with object list and documents.

     ▪ Document With User Data
       Can be used for documents.
       Note: If the form is used directly as a template, a content ("Content" tab) can be saved.

- **Container With User Data**
  Can be used for objects with object list.
  Note: You can additionally specify whether it is a file. For the subordinate objects, the reference to the file is saved. This makes it possible, for example, that the properties of the file are also available as fields in Microsoft Word. In addition, file-typical actions such as "Replace", "Close", "Cancel", "Restore" and "Scan" are automatically available.

- **Room With User Data**
  Can be used for rooms.
  Note: If the form is used directly as a template, roles analogous to a Teamroom are available.

  o If you specify a symbol, it will be displayed instead of the object class symbol for objects that have the form assigned.

  o Abstract forms cannot be used directly but serve as base forms.

  o Check *Suppress Template Creation*, if you want to prevent that objects based on the form can be directly created. In this case, the form can only be assigned to existing objects (using the form category).

4. Arrange the desired fields with drag-and-drop.

5. Click "Next".

6. In the context menu of the form, click "Release for Usage".

Note:

- To use a form, on the one hand the users must be authorized in the corresponding room and on the other hand the form must be released for usage.

- Changes can be released using the "Re-Release" context menu command.

- You can withdraw the release with the "Withdraw Release" context menu command.

- You can export a form as JSON file with the "Download" action. The import takes place via the "Upload" action.

- An existing, currently not released category can be converted into a form ("Tools" > "Convert to Form" context menu command). Thus, no migration is necessary if the category is to be extended by user-defined fields.

Backward Linking

For an input field or an item list of type "Object" (type of content: forms), a backward linking with another input field or item list of type "Object" can be defined. In the case of backward linking, the other object is automatically referenced in the object entered in the field.

Note: The field or fields for backward linking can be located either on one form or on two forms.

To define a backward linking with only one form involved, proceed as follows:

1. Create the form.

2. Define an input field or an item list of type "Object".

3. Select "Forms" as type of content.

4. Define the form you have just created as the default form for objects in the field.

5. If the backward linking is to refer to a second field, define a corresponding second field.

6. Apply the changes so that you can define the link.

7. Edit the first field again. In the *Link to Field* field, which is now available, you can define the field for backward linking.

8. Apply the changes.

To define a backward linking with two forms involved, proceed as follows:

1. Create the first form.

2. Define an input field or an item list of type "Object".

3. Select "Forms" as type of content.

4. Define the form you have just created as the default form for objects in the field.

5. Apply the changes.

6. Create the second form in the same way as the first form, but select the first form as the default form for objects in the field.

7. Edit the field in the first form again.

8. Define the second form as the standard form for objects in the field.

9. Define the field for the backward linking of the second form in the *Link to Field* field.

10. Apply the changes.

Note: You must release both forms for usage at the same time.

Example

The following example shows in particular the possibility of using expressions in forms. The amount of each installment is to be calculated based on a total amount and a payment frequency.

Create a form ("Object With User Data" base class) with following three properties:

- *Total Amount* (input field)
  Type: Currency
  Programming Name: `totalpayment`

- *Payment Frequency* (radio buttons)
  Options: Monthly (ID: 1), Quarterly (ID: 2), Semi-Annual (ID: 3), Annual (ID: 4); The ID is determined by the order of the options.
  Programming Name: `paymentfrequency`

- *Installment* (input field)
  Type: Currency
  Programming Name: `installment`

To calculate the installment dynamically, you must define expressions for the fields:

- For the *Total Amount* and *Payment Frequency* field enable the *Handle Changes of Values* option and enter `true` as expression. This means that if you change the values, the installment value is updated directly.

- For the *Installment* field enable the *Compute Value of Field* option and enter the following expression:

Calculating Value

```
Currency @installment = cooobj.totalpayment;
if (@installment.currvalue) {
  // switch based on the ID of paymentfrequency
  switch (cooobj.paymentfrequency) {
  case 1:
    @installment /= 12;
    break;
  case 2:
    @installment /= 4;
    break;
  case 3:
    @installment /= 2;
    break;
  }
}
@installment;
```

11.1.2 Downloading and Uploading Forms

You can download forms as JSON files and upload them again. The following options are available to you:

Download

- To download a form, execute the "Download" action or context menu command. The form is downloaded as a JSON file. If other forms are referenced in the form (e.g., a basic form), these forms are not included in the JSON file.

- To download several forms at the same time, select them and execute the "Download" context menu command. The forms are downloaded together as JSON files in a ZIP file. **Note:** You can also include structuring folders, whereby also all subordinate structuring folders and forms are considered. The structuring is adopted accordingly when uploading.

- When downloading, the translations, the incoming category for registration, the symbol, the retention settings and the default background tasks are also considered.

- To be able to download forms, you need at least read rights and you must be authorized by the "Edit Forms and Categories" organizational policy.

Download Fully

- To download a form fully including the dependent forms, execute the "Download Fully" action or the context menu command. The form and the dependent forms are downloaded together as JSON files in a ZIP file. If there are no dependent forms, the form is downloaded as JSON file.

- If you do not have read access to a dependent form or the dependent form is in the wastebasket, a corresponding message is displayed. You can still download the form without the affected dependent forms. Please note, however, that the form will not work

as desired if you upload it in another installation in which the dependent forms concerned are not available in the desired version.

Upload

- To upload a form directly to an existing form, execute the "Upload" action or context menu command on the existing form and select a JSON file.

- To upload a form in a list, execute the "Upload" action and select a JSON file.

  o If no form with the key in the JSON file exists, a new form is created and stored in the list.

  o If a form with the key in the JSON file already exists, it is updated, regardless of whether the form is in the current list. If the form is not in the current list, a shortcut is inserted, too.

- To upload multiple forms in a list, execute the "Upload" action and select a ZIP file with the forms.

- The drag-and-drop import and the import via `Ctrl + C` and `Ctrl + V` of forms is not possible. Instead, use the "Upload" action.

- When uploading, you can decide whether the incoming category for registration, the retention settings and the default background tasks should also be considered. If so, the settings (including empty values) of the JSON file are applied. If not, the settings will not be applied and the currently existing settings will be retained when updating.

- If you upload several forms in a ZIP file, you will first receive an overview of all the forms contained. Deselect the forms that you do not want to upload.

  o *Create Selected Forms*
  Shows the forms that can be newly created.

  o *Update Selected Forms*
  Shows existing forms that can be updated.

  o *Non-Updatable Forms*
  Shows the forms that you cannot update due to the lack of change rights or because the forms are in the wastebasket.
  If you select the *Create Non-Updatable Forms With a New Key* option, new forms are created for existing forms to which you have no rights or which are in the wastebasket. It is recommended that you do not continue and first request the rights to the listed forms or restore them from the wastebasket.

- A check of the uploaded forms is carried out and the result is displayed in an overview. **Attention:** It is strongly advised not to continue with errors. If you continue, you must fix the problems manually before you release the forms for usage. Otherwise you may risk losing data.

- The errors are stored on the "Advanced" tab in the "Import Errors" field of the form for traceability.

Keys

Forms that were created before the 2025 March Release and have not been edited or downloaded since then do not have a key for unique identification. This also applies to JSON files that were downloaded before the 2025 March Release.

The keys can be found on the "General" tab of the forms and form elements.

The keys are essential for identifying the forms and form elements and prevent potential errors and data loss. The following procedure is therefore strongly recommended:

- If you have JSON files without keys (downloaded before the 2025 March Release), replace them by re-downloading the forms from the production environment.
  Note: JSON files without keys can still be uploaded, but correct identification of the fields when updating forms cannot be guaranteed (may result in data loss).

- If you are using a test system for form creation, make sure that it has at least the 2025 March Release.

- If you have developed forms in a test system, discard them. Download the forms from the production system and upload them to the test system. This creates a unique link between the forms. You can then further develop the forms in the test system and upload and update them in the production system.
  Note: If the forms from a test system have never been transferred to the production system, you can download them and upload them to the production system. This also creates a unique link between the forms.

- Alternatively, a form from a production system can be linked to an existing form in a test system by executing the "Upload (Migration)" context menu command once (only available in test systems). Any existing keys for the form in the test system will be ignored and the keys from the JSON file will be adopted. An attempt will be made to update existing fields, but correct identification cannot be guaranteed (may result in data loss). Therefore, use the method described in the previous point whenever possible.

Common Error Messages

- **Field "<field name>" ("<property>"): The object with the key "<ID>" could not be found.**
  The specified user-defined field references an object in the specified property that does not exist in the system. If you continue, you will lose the entry for the non-existent object.

- **The form "<form name>" with the key "<ID>" is replaced by the form "<form name>" with the key "<ID>".**
  You are trying to upload a form directly into an existing form, but the forms do not match. Make sure that you select the JSON file that belongs to the form.

- **The key "<ID>" is already used for <object type> "<object name>" (<Fabasphere ID>). A new key is generated.**
  An object with the specified key already exists in another form. A new key is generated to ensure that the keys are unique. You lose the connection to the original object.

- **The backlink between the fields "<field name>" and "<field name>" has been removed. The property will be cleared.**
  The backlink has been changed and cannot be corrected in one step. You have to define the backlink manually.

Note: If the form was already released, you must first release the form without backlink changes. Subsequently, you can define the desired backlink manually and release the form again.

- **The key "<ID>" for the field "<field name>" is ignored because the uploaded form itself has no key.**
  The problem only occurs if the JSON file has been modified. If no key is defined for the form itself, all other keys are ignored.

- **The field "<field name>" has no key and is therefore ignored.**
  The problem only occurs if the JSON file has been modified. If a key is defined in the form itself, all other form elements are also identified by a key. Form elements without a key are ignored.

11.1.3 Metadata of a Form

You can also make the following settings in the properties of a form.

"Advanced" tab

- *Available Processing States*
  You can define processing states that can be selected in the *Processing State* standard field.

- *Name Build Configuration*
  You can specify a name build for the names of objects based on the form.

- *Prepare Commit Configuration*
  You can define an app.ducx expression that is executed as part of the prepare commit.

- *Applicable for*
  You can specify the object classes for which the form can be used.

"Retention" tab

You can specify whether objects based on the form are retention worthy. This tab displays the *Category (Draft)* retention properties. When the form is published, the settings are applied to the *Category (Published)*.

"Translations" tab

For the languages available in the Fabasphere, you can provide translations for the names (labels), descriptions and context-sensitive help. For each multilingual name of the form, you will find a corresponding entry. In order to define the translation for the description or help text open the details dialog (e.g., by clicking on the line number). The multilingual text for fields of type *HTML Text* has to be entered in *Help Text*.

11.1.4 Form Template

In the form's properties on the "Form" tab, you will find the corresponding templates. You can use the templates to create objects directly based on the form. If you want to prevent this, choose *Suppress Template Creation* and publish the form again.

- Generated Default Template
  If you do not define your own template, the default template is used to generate the

template and published template, which are used when creating objects based on the form.

- Template (Draft)
  You can define your own template (e.g., a Word document with default content), which is used when creating objects based on the form.

- Template (Published)
  When releasing a form for usage the *Template (Published)* is generated from the *Template (Draft)*.

11.1.5 Form Category

In the form's properties on the "Form" tab, you will find the corresponding *Category (Published)*.

The category can be used for the following use cases:

- Adding a form to an object
- Defining the registration behavior
- Defining the applicability
- Defining retention worthiness
- Defining background tasks
- Defining permissions

Note: The settings of the *Category (Draft)* are applied to the *Category (Published)* when the form is published.

Adding a Form to an Object

Not only basic objects that are based on a form can be created but it is also possible to extend existing objects with a form. This is particularly useful for templates.

To add a form to an object, proceed as follows:

1. Navigate in the desired object.
2. Click the "Properties" action.
3. In the *Category* field (typically on the "General" tab), select the desired category. The category name corresponds to the form name.
4. Click "Next".

The form is displayed in the properties of the object. When you define the object as a template, the form is available with each newly created object that is based on the template.

Further Use Cases

A description of the further use cases of a form category can be found in chapter 11.2 "Categories".

11.1.6 Defining and Using a Compound Type

Forms can also be used to define compound types, which in turn can be used in other forms as types for input fields or element lists.

Defining a Compound Type

To define a compound type, proceed as follows:

1. Navigate in the desired Teamroom.

2. Open the context menu in an empty part of the content area and click "New".

3. In the "All" category, select the "Form" entry.

4. Define the initial data of the form and click "Next".

    o Enter a multilingual name.

    o Define "Compound Type" as base class.

5. Arrange the desired fields with drag-and-drop.
   Note: Compared to a standard form, the selectable fields and settings are reduced accordingly.

6. Click "Next".

Note:

• The following additional settings can be made on the "Advanced" tab in the form properties:

    o *Key for Unique Lists*
       Defines the properties that are used as keys for unique aggregate lists.

    o *Key for Sorting Lists*
       Defines the properties that are used as keys for sorting aggregate lists.

    o *Simple View of Properties*
       Defines the properties that are displayed in the simple representation of an aggregate list (for example, in the property editor).

• The form is now available as a draft. Publish the form for general use.

Using a Compound Type

To use the compound type, proceed as follows:

1. Create a new form or open an existing form.

2. Define an input field or an element list and select "Compound Type" as type.

3. Select "Forms" as the type of content.

4. In the *Compound Type User Form* field, select the previously defined type.

5. In the *Compound Type Display Mode* field, select "Standard" or "Chart". If you choose "Standard", the field values of the aggregate are displayed. If you choose "Chart", a Highchart diagram based on the aggregate data is displayed. However, the aggregate must have a certain structure according to the diagram type. The chart type (line chart by default) is defined on the "Display" tab in the *Expression for Calculating the Control Options* field.

Example: `dictionary({ chart: { type: "bar" } });`
For more information see:
https://api.highcharts.com/highcharts/

6. Click "Next" twice to complete the editing.

11.2 Categories

Categories can be assigned to objects ("General" tab) and thus influence the behavior of the objects.

Categories can be used for the following use cases:

- Defining the registration behavior
- Defining default follow-ups
- Defining the applicability
- Defining retention worthiness
- Defining background tasks
- Defining permissions

User-defined categories can be used in the context in which they are defined or referenced. To make categories generally available for Teamrooms (but not for app rooms), use a form and category collection in "Customizing". Otherwise, categories can be stored in app configurations ("Forms and Categories" widget), in app rooms ("Templates and Presettings" action > "Forms and Categories" widget) or in Teamrooms ("Templates and Presettings" action > "Forms and Categories" widget).

The "Change Assignment" context menu command can be used to change the context of the category.

Note: You can only create, edit and release forms and categories if you are authorized in the *Edit Forms and Categories* organizational policy. Explicit authorization is required as app.ducx expressions can be created in the context of forms and categories.

Defining the Registration Behavior

By default, the "Register as" context menu command provides all possible registration targets. If the registration target is well-known, it can be restricted to improve the usability (*Incoming Category for Registration* field).

Defining Default Follow-Ups

To receive a reminder at a specific time, follow-ups can be used (*Default Follow-Ups* field). You can find more information on follow-ups in chapter 12.14 "Follow-Ups".

Defining the Applicability

Not every category make sense for every object class. Thus, the object classes for which the categories are allowed can be restricted (*Applicable for* field). In addition, if you want to use special base dates for follow-ups or retention periods a restriction to the object classes that provide the desired properties is needed.

If you want to restrict a BPMN process to a category and use activities that are allowed only for a certain object class, you can define the category accordingly (only the corresponding object class must be entered).

Defining Retention Worthiness

Compliance rules may enforce that objects must not be deleted for a defined time period ("Retention" tab).

In the properties of the category, on the "Retention" tab you can define whether objects with this category are retention worthy. In addition, define a *Retention Period* and a *Base Date for the Beginning of the Retention Period*. The calculation of the concrete retention period is carried out via a background task, which must be defined on the "Background Tasks" tab. **Note:** Alternatively, you can also use the "Create/Edit Background Task" button on the "Retention" tab.

In the background task, select the "Determine Retention Period Based on the Category" action. In addition, determine the date when the background task should run. In general, it makes sense to use the *Base Date for the Beginning of the Retention Period* as *Base Date* for the time interval and, for example, "Immediately" as time interval.

For disposal, you can define another background task in the category. In general, it makes sense to define the *Retention Period* as base date for the execution of the task. As action, you can either select "Delete Automatically" or "Start Process". If you want to start a process, you must also specify the process. In the process, a task with the activity "Retention Period Exceeded" should be defined.

When the background task is executed, the process is started and can be processed by the defined users in the worklist. The "Retention Period Exceeded" activity provides the steps "Delete", "Extend Retention Period" and "Accept".

Defining Background Tasks

Background tasks allow you to perform actions at a specific time ("Background Tasks" tab).

More information can be found in chapter 11.3 "Background Tasks".

Defining Permissions

In general, the defined team can access the Teamroom and its contents. Access to individual objects can also be granted via a category ("Permissions" tab).

Note: In order that the access rights granted via categories are evaluated, the entry "Extended by category" or "Extended by category and workflow" must be selected in the *Access Protection* field of the Teamroom.

11.3 Background Tasks

For categories, background tasks can be stored that execute an action at a definable point in time.

Actions

Possible actions (extendable by apps):

- Determine Retention Period Based on the Category

- Determine Retention Period Based on the Category and Close (File and Documents)

- Execute Expression (App: Forms)
  Only available if the user is allowed to create user-defined forms.

- Delete Automatically

- Anonymize Object
  By default, the following data is removed (for special objects, such as support requests or tickets, additional fields are considered):

  o   History

  o   Remarks

  o   References (referenced objects are deleted if the object is the origin, otherwise objects are removed)

  o   Processes (the processes must be completed, otherwise the background task will fail)

  o   Versions

- Start Process (App: Workflow)

Note: The background tasks of objects are displayed on the "Background Tasks" tab. Whether background tasks that have already been processed are displayed depends on the action. You can override the default setting of the action using the *Remove Processed Entries From the List of Background Tasks* field.

Point in Time

The action can be executed at an explicit time or at a time based on a base date. Optionally, the execution date can be redefined if the base date is changed.

Repetition

It is also possible to repeat background tasks. The following cases can be distinguished.

Explicit date or date is not recalculated when the base date is changed

You can define a repetition rule that is applied starting with the execution time.

- Unit
  Defines the unit of the interval (e.g., day or month).

- Interval
  Defines the interval between the repetitions (number).

- Repeat Until
  Defines the end time of the repetitions (infinite, explicit date, date value of a property).

Date is recalculated when the base date is changed

The background task is rescheduled after the selected action is executed and the base date is changed. Only *Repeat Until* can be defined as a repetition rule.

Suspend Background Task When Deleting

You can define whether the background task is automatically suspended when the affected object is deleted or canceled and again activated when the object is restored.

11.4 Inbox

In an inbox, rules for the processing of incoming objects can be defined. A rule consists of conditions and actions.

You can create an inbox in your personal folder (background context menu > "New" > "Inbox"). As for Teamrooms, you can also set a team for inboxes to define the access rights.

Note: You can only create and edit inbox rules if you are authorized in the *Manage Inbox Rules* organizational policy. Explicit authorization is required as app.ducx expressions can be created in the context of inbox rules.

To define rules for an inbox, proceed as follows:

1. Navigate in the desired inbox.

2. Click the "Manage Rules" action.

3. Specify whether the rules are to be applied to top-level objects only. If so, the rules are applied to all objects (including folders) at the top level. Otherwise, the rules are applied to all objects (also in folder hierarchies), but not to the folders themselves, since in this case they are only used for structuring.

4. Open the "Rule" menu and click "New".

5. Enter a name for the rule.

6. Set the conditions for the rule. A condition checks whether the selected property contains the defined string (case-insensitive). Specify the string without wildcards. If you select the "Condition as Expression" entry, you can define an app.ducx expression as a condition. All conditions must be met for the rule to run. Do not specify a condition if the rule should always be executed.

7. Specify the actions to be executed.

    o   Execute User Defined Expression
        Allows defining an app.ducx expression that will be executed. In the app.ducx expression, you can use `cooobj` to access the object. You are supported by syntax checking and auto-completion.

    o   Import Data (Asynchronous)
        The content of the incoming CSV file is imported. To do so, the target for the import and the type of import (e.g., members or organizational structure) must be specified. You can download templates for the CSV files via the respective manual actions (e.g., "Import Members" action of an organization).

    o   Extract E-Mail Attachments (Asynchronous)
        The attachments are extracted from an e-mail and stored as separate objects for further processing in the inbox. The e-mail can be kept, moved or deleted.

    o   Define Property Value
        A value is assigned to a property of the incoming object.

- o Assign Category
  The specified category is assigned to the incoming object.

- o Classify With AI
  The incoming objects are classified. Based on the classification, a category is assigned to the object.

- o OCR Text Recognition (Asynchronous)
  For documents that can be converted to PDF, text recognition can be performed.
  Note: Only objects are considered for which no text recognition has been performed since the last content change.

- o Start Process
  The specified process is started on the incoming object.

- o Assign (Asynchronous)
  The incoming document can be assigned based on QR code or PDF keywords. By default, the *Fabasphere ID* (e.g., COO. 1.506.4.4063) of the document whose content is to be replaced by the incoming document must be stored in the QR code or PDF keywords. The assignment is performed asynchronously at regular intervals.

  - ▪ *Close Document*
    Defines whether the status of the document is set to "Closed" by default. Closed documents can no longer be changed as long as the status is not removed. However, the type of assignment and closing can be influenced by an incoming category of the incoming document.

  - ▪ *Continue Process on Object*
    Defines whether an existing process is to be continued on the target object after assignment.

  - ▪ *Continue Process on File of Object*
    Defines whether an existing process is to be continued on the file of the target object after assignment.

  - ▪ *Activities to Be Continued Automatically*
    If a process is to be continued, it is also possible to define activities that are automatically continued. These activities automatically get the status "Not Executed". If an activity to be automatically continued currently has the status "Startable" or "Started", this activity is set to "Not Executed". Other activities with the same activity definition will not be automatically continued in this case.

  - ▪ *Start New Process on Object*
    Defines whether a new process is to be started on the target object after assignment. For this purpose, you can specify the desired BPMN process.

  - ▪ *Start New Process on File of Object*
    Defines whether a new process is to be started on the file of the target object after assignment. For this purpose, you can specify the desired BPMN process.

  - ▪ *Target for Unassignable Documents*
    For non-assignable objects, you can define a folder as the target.

8. Click "Next".

9. You can define additional rules, or complete the processing with "Save".

For an object placed in the inbox, the rules are checked according to the order. If all conditions of a rule apply to an incoming object or no condition has been defined, the defined actions are executed on the object. Only the first applicable rule is executed.

Note:

- The organization of the placed objects must correspond to the organization of the inbox for the rules to be applied.
- To be able to define the rules, you must be authorized in the *Manage Inbox Rules* organizational policy.

11.5 Classifying and Registering

The Fabasphere in conjunction with Mindbreeze AI allows you to automatically classify documents and extract metadata. Especially when interacting with custom forms, you have a powerful concept for the incoming classification of documents for your particular application.

The following steps explain the basic operation:

1. In a learning phase, Mindbreeze AI is trained to classify the documents. For the extraction of the metadata from documents, regular expressions can be defined.
2. In productive mode, when classifying documents (either manually or automatically triggered), the metadata and classification are requested from the AI service. Feedback can further improve the quality of the classification.
3. For the classification value, a category with a corresponding import ID is searched and assigned to the document.
4. The category can be used to start a specific registration or to initialize a process. If metadata can be retrieved from the document, the data will be prefilled and highlighted in color.

11.5.1 Prerequisites

The classification requires a AI service, which can be configured by the organization administrator (for more information, see the administration help).

11.5.2 Using Categories

The classification value calculated by Mindbreeze AI is used to determine a category based on the *Import ID* of the category. The following processing can be defined via the category:

- type of registration
- standard process
- retention rules

Categories are used in the context of different apps and can be created or managed there (e.g., custom forms).

11.5.3 Using Forms

User-defined forms (see chapter 11.1 "Forms") can be taken into account during classification. The corresponding *Category (Published)* is displayed in the properties of the form. Define in the properties of the category classification value as *Import ID*, which is returned by Mindbreeze AI for the corresponding type of documents. This way the registration is based on the form.

The metadata extracted during classifying is applied to the corresponding fields when registering.

Note: If the programming names of the user-defined fields do not match the Mindbreeze AI keys, your organization administrator must enter the corresponding mapping in the AI service.

11.5.4 Inbox

Documents can be classified automatically via the inbox. To do so, you can define a rule that performs the "Classify With Mindbreeze AI" action (see also chapter 11.4 "Inbox").

11.5.5 Workflow

When using the "Register" activity, documents can be classified and registered via the workflow. You can start an ad-hoc process with the prescribed activity "Register". In a predefined BPMN process, the activity can also be used (the usability has to be restricted to documents).

The following steps can be performed via the activity. Only appropriate work steps are offered in the respective context.

- Open
  Opens the document.
- Classify and register
  Classifies the document with Mindbreeze AI and opens the appropriate registration form.
- Registering
  Opens the registration form.
- Do not register
  Removes the activity from the worklist without performing a registration.

11.5.6 Register

When you register a document, you can capture metadata of the document in a split view (on the left the metadata, on the right the document). If necessary, the document is also assigned (e.g., to a file).

Register (generic)

The generic registration is available if no category could be determined by the classification. In this case, you can capture metadata in a split view.

Register as (incoming category)

An incoming category determines the registration and assignment of the document. The incoming category can be assigned directly to a document or to a category that is assigned to a document. If no category is assigned to a document, the incoming categories of the available apps are also considered.

Register as (form)

When a form category is assigned to a document, the user-defined metadata can also be entered in a split view.

11.6 Form Inbox

The form inbox allows you to capture data using an HTML form and store it in the Fabasphere. You may also use an Inbox room as an alternative to a "Form Inbox".

To create a form inbox and receive the identification of the form inbox, proceed as follows:

1. Navigate in the desired Teamroom.

2. Open the context menu of an empty part of the content area and click "New".

3. In the "Tools" category, select the "Form Inbox" entry.

4. Enter a name and click "Next".

5. In the context menu of the form inbox, click "Properties".

6. On the "Form Inbox" tab in the *ID* field, you can find the unique ID of the form inbox. Copy the ID to use it further on in the HTML form.

7. Click "Next".

As an alternative to a "Form-Inbox" you can also create an "Inbox" room. In that case you have to use the *Fabasphere ID* as identifier for this Inbox room.

To define a corresponding HTML form on a page of your web site, proceed as follows:

1. Create an HTML form on a page of your web site.

2. Define the following attributes of the HTML form:

   o Attribute: `action`
   Value: `https://at.cloud.fabasoft.com/foliop/createobject`
   Note: Change the host in the URL to `de.cloud.fabasoft.com` if your form inbox is located in Germany or to `ch.cloud.fabasoft.com` in Switzerland.

   o Attribute: `method`
   Value: `post`

   o Attribute: `accept-charset`
   Value: `UTF-8`

   o Attribute: `enctype`
   Value: `multipart/form-data`

3. Define a hidden field named `objectclass` and specify the *Fabasphere ID* or the full reference of the object class from which an instance is to be created in the form inbox when the HTML form is submitted. For example, you can use the following object classes:

- o Folder: `COODESK@1.1:Folder`

- o PDF Document: `FSCACROBAT@1.1:PDFObject`

- o Microsoft Word Document: `COOMSOFFICE@1.1:WinWordObject`

- o Microsoft Excel Worksheet: `COOMSOFFICE@1.1:ExcelObject`

- o Microsoft PowerPoint Presentation: `COOMSOFFICE@1.1:PowerPointObject`

- o Generic Content: `GENCONT@1.1:ContentObject`

- o Object with Form Data: `FSCUSERFORMS@1.1001:ObjectWithUserForm` or `FSCUSERFORMS@1.1001:DocumentWithUserForm` or `FSCUSERFORMS@1.1001:ContainerWithUserForm`

4. As an alternative to the `objectclass` field, you can define a hidden field named `objecttemplate`, in which you store the *Fabasphere ID* of an object (e.g., a template) that is to be copied when the HTML form is submitted.

5. Define another hidden field named `inbox` and set its value to the *ID* field of the form inbox (or the *Fabasphere ID* for an Inbox room).

6. If necessary, define additional fields.

You can specify the following fields in the HTML form (unless otherwise specified, the fields are optional):

Field in HTML Form	Description
`objectclass`	Required field (as long as `objecttemplate` is not used): Defines the *Fabasphere ID* or full reference of the object class from which an instance is to be created in the form inbox after the HTML form is transferred.
`objecttemplate`	Only evaluated if `objectclass` does not exist. Defines the *Fabasphere ID* of an object that is to be copied after submitting the HTML form. The user "Form Poster Fabasoft Cloud" must have the right to read and copy this object (and dependent objects). Moreover the template must belong to the same organization as the form inbox object. A template must be either a *Document* (`ContentObject`), an *Object With Object List* (`CompoundObject`) or a *Basic Object* (`BasicObject`).
`inbox`	Required field: Defines the *ID* of the form inbox. Alternatively, the *Fabasphere ID* of the form inbox can be used.
`redirect`	Required field: Defines the URL the submitter is redirected to after submitting the HTML form. The URL has to be defined absolutely including protocol and host. Protocol and host must match the URL of the page on which the form is embedded.
`errorredirect`	Defines the URL the submitter is redirected to in case of a processing error. If this parameter is omitted, the user will be redirected to the page defined by `redirect`. The URL has to be

	defined absolutely including protocol and host. Protocol and host must match the URL of the page on which the form is embedded. The error code and an error description are provided in the `errorcode` and `error` parameters.
`redirecttype`	Defines how the redirect should be executed. Valid values are "302", "303", "307", all other values will be ignored. By default, the redirect is executed in the web browser by script or meta tag http-equiv="REFRESH". If this form field is set the redirect is initiated on the server by responding with the appropriate http status code and the URL in the http header "Location".
`objname`	Defines the name of the created object.
`objsubject`	Defines the subject of the created object.
`objcategory`	Defines the category of the created object. If an `objcategory` is specified, fields that are assigned to the category can also be submitted as HTML fields. The *Programming Name* of the category fields must match the name of the respective HTML fields. The category must be usable for the created object (e.g., check property "*Applicable for*"). Categories created by a user form can only be used if they belong to the same organization as the form inbox.
`content`	Allows uploading a file, which is then stored in the *File* field of the generated object. This is only possible if the *File* property is assigned to the object class specified as `objectclass`. The relevant HTML field must be of type `file`. When saving, the system does not check whether the file extension of the uploaded file matches the data type of the object class. You can use the `accept` attribute in the input field to restrict the selection to specific file types. Only one file can be uploaded via this field.
`attachmentkeys`	Defines the names of the HTML fields (separated by a comma) for submitting additional files. For the uploaded files, documents are instantiated in the Fabasphere, which are then stored in the property specified in the `attachmentattrdef` field of the instance of `objectclass`. The specified HTML fields must be of type `file`. If a value is specified in the `attachmentkeys` field, it is also necessary to provide a value for `attachmentattrdef`. The object class of the objects created for the uploaded files is determined by the file extension of the uploaded files. The file names are used as names for the created documents.
`attachmentattrdef`	Defines the *Fabasphere ID* or the full reference of the property, in which additional uploaded documents are stored.

If a value is specified in the field `attachmentattrdef`, you also have to provide the `attachmentkeys`. For object class *Folder* (`COODESK@1.1: Folder`), provide the `COOSYSTEM@1.1:objchildren` property.

`<Reference/Fabasphere ID of other properties>`	You may also set other properties that a user can change in the properties editor. These properties are identified by their full reference or their *Fabasphere ID* (e.g., `COOSYSTEM@1.1:objexternalkey`).

Note:

- You can find the *Fabasphere ID* on the "General" tab in the *Properties* dialog of the corresponding object. To identify object classes and properties, you can use the full reference as well as the *Fabasphere ID*. You can determine the reference of properties by pressing the key combination `Ctrl + Shift + #` in the "Properties" dialog.

- New objects will be created by the user "Form Poster Fabasoft Cloud". This user will need change access to the Form-Inbox object or the Inbox room, respectively. When creating a Form-Inbox within a Teamroom access for this user is granted automatically. However, if you use an Inbox room you have to add this user explicitly to the team of this room. Just search for a user with e-mail-address "formposter@fabasoft.com".

- If a duplicate of an object is to be created (`objecttemplate`), the user "Form Poster Fabasoft Cloud" must also have the right to duplicate the object. If referenced objects are to be accessed (e.g., categories or text modules), the user must also have the necessary access rights for these objects.

- If you assign a category (`objcategory`) to the new objects or if you have some rules configured in the Inbox room that assign categories or initiate a process, the user "Form Poster Fabasoft Cloud" will need also read access to the Teamrooms where you created the user form (and thus also the form category) or your processes.

- If you pass a category (`objcategory`) with the form data but it is not set check whether the category can be applied to the created object.

Example

```
<!-- Replace "form inbox ID" with the value of the ID field of your form inbox and
"redirect URL" by a URL of a page that schould be shown after the form was
proccessed on the server.
  -->

<form action="https://at.cloud.fabasoft.com/foliop/createobject" method="post"
  accept-charset="UTF-8" enctype="multipart/form-data">

  <input name="encodingfix" type="hidden" value="&#9760;" />
  <input type="hidden" name="objectclass" value="COODESK@1.1:Folder" />
  <input type="hidden" name="redirect" value="redirect URL" />
  <input type="hidden" name="inbox" value="form inbox ID" />
  <input type="hidden" name="attachmentkeys" value="attachments">
  <input type="hidden" name="attachmentattrdef"
    value="COOSYSTEM@1.1:objchildren">

  <label for="objname">Name:</label>
  <input type="text" name="objname">
  <br>
```

```
  <label for="objsubject">Subject:</label>
  <input type="text" name="objsubject">
  <br>
  <label for="attachments">Attachments:</label>
  <input type="file" name="attachments" multiple="multiple" accept="pdf">
  <br>

  <input type="submit" value="Send">
  <input type="Reset">
</form>
```

12 Additional Features

The Fabasphere provides following additional features.

12.1 Permanent Login

With the help of a device binding, you can remain permanently logged in to the Fabasphere App. This is especially useful if you are on the move and your IP address changes frequently.

The permanent login is available both in the Fabasphere App and on a workstation with Fabasphere Client installed.

Fabasphere App

When logging in to the Fabasphere App, you need to set up a code lock. If you wish, you can also enable authentication methods such as Touch ID or Face ID to unlock the app, depending on the device you are using.

Once you have logged in, you remain logged in until you explicitly log out again. You can also be logged out, for example, if validity restrictions are defined in the organization policy.

In the settings you can manage the code lock and the alternative authentication methods.

Workstation With Installed Fabasphere Client

You can also perform a device binding on a workstation with installed Fabasphere Client. To do so, click on the link "Log in your device in the Fabasphere" in the login dialog. You remain logged in until you explicitly log out again.

Note: For security reasons, a certificate is required to identify the devices used. The corresponding certificate authorities that are allowed to issue computer certificates must be defined in the organization policies.

Logging off devices via the web client

Under "Account menu (your user name)" > "Advanced Settings" > "Devices" you can manage your permanently logged in devices and log out a device if necessary. The next time you use the Fabasphere on the corresponding device, you will be prompted to log in again.

12.2 Edit Common Properties

If you select multiple objects and execute the "Edit Properties" context menu command, you can change the common properties of the objects at once. This is possible for scalar properties (e.g., strings), object lists, aggregate lists and aggregates (with scalar values).

Scalar Property

- If the corresponding property value is the same in all objects, the value is displayed when it is commonly edited. Otherwise, an empty value is displayed.

Object List

- If the content of the object list is the same in all objects, the content is displayed when it is commonly edited. Otherwise, an empty object list is displayed.

- If the content of the object list is the same in all objects, the old object list is overwritten by the new object list. Otherwise, you can decide whether the new objects are added to the object list, or whether the old object list is overwritten by the new object list.

Aggregate List

- If the content of the aggregate list is the same in all objects, the content is displayed when it is commonly edited. Otherwise, an empty aggregate list is displayed.

- If the content of the aggregate list is the same in all objects, the old aggregate list is overwritten by the new aggregate list. Otherwise, you can decide whether the new aggregate rows are added to the aggregate list, or whether the old aggregate list is overwritten by the new aggregate list. If a key will be violated in the case of adding rows, the corresponding row is ignored.

Aggregate

- If the corresponding aggregate value is the same in all objects, the value is displayed when it is commonly edited. Otherwise, an empty value is displayed.

12.3 Compare Objects

Two different objects can be compared. To do so, select any two objects and execute the "Compare" context menu command. If two Microsoft Word documents are involved, the "Compare Content" button is also available in the comparison dialog.

12.4 Send as E-Mail

Objects can be conveniently sent by e-mail via the corresponding context menu commands:

- Send Link
  Opens an e-mail with a hyperlink to the object. In order to access the object the recipients of the e-mail must have a Fabasphere account and at least read access is required on the object.

- Send Public Link
  Opens an e-mail with a public link to the object. No Fabasphere account is necessary to access the object.

- Send File

  Opens an e-mail with the file itself as an attachment. This command is only available for documents.

- Send PDF

  Opens an e-mail with a PDF file as an attachment. For documents, the content is converted in a PDF file. For Teamrooms and folders an index is generated.

  Note: Not all objects can be converted in a PDF document.

12.5 View as PDF

Via the "Tools" > "View as PDF" context menu command a PDF overview can be generated. Depending on the object type, different contents are generated. For documents, the content is generated as PDF document. For Teamrooms and folders an index with hyperlinks to the contained objects is generated. Otherwise, a PDF document contains the metadata of the object.

Note: In the Teamrooms properties, on the "Content Settings" tab, you can specify whether a cover sheet should be generated for PDF views of documents assigned to the Teamroom. You can select which versions or signatures are to be displayed on the cover sheet.

12.6 Support Requests

You can always submit support requests via the support button. In the account menu (your user name), you can find the "My Support Requests" entry, which leads to the history of your requests. Here you can reply to open requests or close them. In addition, you can create new requests.

If applicable, the support will create product change wishes or requests based on your support requests. You can track these in the "Product Changes" area (*State* field).

Note:

- The "My Support Requests" entry is only visible, if you have already submitted a support request via the support button.

- After submitting your first request, it may take a few minutes that the "My Support Requests" entry becomes available.

Organization-Internal Support Coordinators

The support coordinator team is given access to all support requests in the corresponding context and can perform the same actions as the initiators of the support requests. The support coordinator team can thus assist in the support process in a supportive manner.

Note: A dashboard is available to help the support coordinator team manage support requests. In the "Research" area, the desired support requests can be determined. Activation of this functionality can be requested free of charge from Fabasphere Support (cloudsupport@fabasoft.com). Subsequently, an organization administrator can authorize the appropriate members in the service desk configuration (accessible via the service desk operations dashboard).

Configuration of Support Coordinators

The configuration of the organization-internal support coordinator teams can be done on the following levels:

- Organization > "Advanced Settings" widget > "Define Organization Roles" action > *Support Coordinator* field

- Teamroom > "Settings" action > "Teamroom" tab > *Support Coordinator* field

- App configuration or app room > "Settings" action > "General Settings" tab > *Support Coordinator* field

The support coordinator team is selected based on the context in which the support request is created.

Organization-Internal Support Teams

By default, support requests submitted via the support button are handled by Fabasphere Support within the scope of the support agreement. For customer-specific apps, there can be a separate app support that may be involved by Fabasphere Support.

The app support is specialized in providing assistance with technically and professionally complex customer apps. This is available to you for an additional fee.

For the organization-internal support coordination you can define support teams that primarily handle support requests in the respective context. For this purpose, the support team can be defined at the following levels: organization, app configuration, app room, or Teamroom. This allows you to provide your organization members with an internal contact person without losing the ability to forward support requests to Fabasphere Support if necessary.

The designated support team receives workflow activities for the support requests brought in. The requests can either be answered directly or additional support requests can be submitted to Fabasphere Support. With the answers from Fabasphere Support, further processing of the original support requests is possible.

Note:

- A dashboard is also available to help the support team manage support requests. Activation of this functionality can be requested free of charge from Fabasphere Support. Subsequently, an organization administrator can authorize the appropriate members in the service desk configuration (accessible via the service desk operations dashboard).

- The support button is only available to external members if a support team has been defined for the organization.

Configuration of Support Teams

The configuration of the organization-internal support teams can be done on the following levels:

- Organization > "Advanced Settings" widget > "Define Organization Roles" action > *Support Team* field

- Teamroom > "Settings" action > "Teamroom" tab > *Support Team* field

- App configuration or app room > "Settings" action > "General Settings" tab > *Support Team* field

The support team is selected based on the context in which the support request is created.

Configuration Support Dialog

The support dialog for support requests to the organization's internal support team can be customized accordingly by an organization administrator:

Organization > "Advanced Settings" widget > "Define Logo" action > *Use Logo und Background Color in Support Dialog* field

Manage Support Requests

When a support request is submitted, the defined support team receives the workflow activity "Edit". As a support team member, you can perform the following steps:

- Set Responsible User
  Defines the responsible user (necessary to be able to perform the further work steps). Thus, it is visible in the service desk dashboard by whom the request is processed.

- Reply
  Allows you to enter a response to the submitter. The answer can be marked as a suggested solution.

- Close
  Closes the support request. If necessary, a message can still be added.

- Further Information Required
  Allows you to get more information from another user.

- Request at Fabasoft Support
  If the problem cannot be solved internally, a new support request can be generated for Fabasphere Support. As soon as this request has been processed, the original support request is put in your worklist again.

Service Desk Dashboard

A dashboard is also available to help the support team manage support requests. Activation of this functionality can be requested free of charge from Fabasphere Support.

The service desk dashboard is divided into the following areas:

- My Support Requests
  Shows all requests assigned to the current support employee or not yet assigned to a support employee.

  o grey symbol
    The request has the state "Work in Progress" and no support employee is assigned.

  o no symbol
    The request has the state "Work in Progress" and a support employee is assigned.

  o yellow symbol
    The request has the state "Waiting for Customer".

- o green symbol
  The request has the state "Closed".

- Support Requests in Progress
  Shows all requests with status "Work in Progress" regardless of the support employee.

- Requested at Fabasoft Support
  Shows all current requests to the Fabasphere Support.

- Recently Processed
  Shows the last hundred requests on which an action was performed.

- Product Changes
  Shows the product changes. If a support request leads to a story or a defect, a product change can be created by the Fabasphere Support or app support. You can use the *Status* field to track the implementation status.

- Research
  Allows searching for product changes, support requests and support request reports.

- Support Reports
  Displays the generated support reports. The "Create Support Reports" action can be used to create evaluations of the processed requests in a specific time period.

12.7 Working with a WebDAV Client

The Fabasphere supports the platform-independent WebDAV standard. This way it is possible to access documents in the Fabasphere via WebDAV client applications (e.g., Microsoft Windows Explorer or Apple Finder).

The data is accessible via following WebDAV URL: `<URL of the installatzion>/folio/webdav`

Example: `https://at.cloud.fabasoft.com/folio/webdav`

If you use the default WebDAV URL, "Home" is used as the base folder. Alternatively, you can also specify an object and, if necessary, a property directly as the base. In this way, path length problems can be avoided, for example. In general, the property can be omitted, since usually only one list per object is visible as a WebDAV resource.

Syntax:

`.../webdav/[<object>-<property>]`

Example:

`.../webdav/[COO.1.506.3.4961]`

`.../webdav/[COO.1.506.3.4961-COO.1.1001.1.324006]`

Mapping a network drive using the Fabasphere Client

1. Open the context menu of the Fabasphere Client by right-clicking the notification symbol in the taskbar of the operating system.

2. Click the "Open Fabasphere Network Drive" command.

3. For access, a password for applications is needed. By clicking "Open Network Drive (New Password), a password for applications is automatically generated. The password is stored

in both in the Fabasphere and in the credential manager of the operating system.

If a valid password is stored on the local computer, the network drive is directly opened.

The network drive is opened in the Microsoft Windows Explorer or Apple Finder and this way you have access to your folder structure in the Fabasphere.

Note:

- In the web client, you can revoke the password for applications by opening the account menu (your user name) and clicking the "Advanced Settings" > "Access for Applications" command. Click the "Revoke" button in the corresponding row with the description "Network drive for <computer name>".

- You cannot view the generated password for applications that was created with the Fabasphere Client.

- In the credential manager of the operating system only one, the last current password is stored. If, for example, you map a network drive manually as described below and store the credentials in the operating system permanently, the password will be used further on also in the Fabasphere Client, even if you previously generated an own password.

Mapping a network drive manually

Alternatively, you can map a network drive also manually. This is, for example, necessary on smartphones since no Fabasphere Client is available.

1. For access, a password for applications is needed. Create a password by opening the account menu (your user name) and clicking "Advanced Settings" > "Access for Applications". Create a password valid for "Network Drive (WebDAV)". Additional information can be found in chapter 13.6 "Access for Applications".

2. Switch to the corresponding third-party product and define the WebDAV URL (see the beginning of this chapter), your e-mail address (used for the Fabasphere log-in) and the generated password for applications. In the following, you will find a description for the third-party products Microsoft Windows Explorer and Apple Finder.
   Microsoft Windows Explorer
   Click "Tools" > "Map network drive". Select a drive letter and enter the WebDAV URL in the *Folder* field. Click "Finish". If no valid password is stored on the local computer, enter your e-mail address and the password for applications. If you store the credentials permanently, the password is used also for further connections.
   Apple Finder
   Click "Go" > "Connect to Server". Enter the WebDAV URL in the *Server Address* field and click "Connect". If no valid password is stored on the local computer, enter your e-mail address and the password for applications. If you store the credentials permanently, the password is used also for further connections.

Notes for working with WebDAV

- If you import a folder on top-level or in a folder that is not assigned to a Teamroom, the folder will be converted into a Teamroom in the Fabasphere.

- Documents cannot be imported on top-level or in a folder that is not assigned to a Teamroom.

12.8 Time Travel

The time travel allows you to view documents and metadata to specific times in the past. Via the "Time Travel" > "Start Time Travel" action you can start the time travel. Use the timeline to reach easily and quickly the desired point in time.

- "Start Time Travel", "Continue Time Travel", "End Time Travel"
  Select the version you want to view or end the time travel. As an alternative to selecting a version, you can specify a point in time.

- "Save Current Version"
  Saves a version of the current state. The version can also be treated as "release version". This way, team members with read access can only see this version. A new release version replaces a possibly present release version.

- "Clean up Versions"
  You can delete versions that are no longer needed.

  - *How many versions should be kept?*
    You can define the maximum number of versions you want to keep.

  - *How many days versions should be kept?*
    You can define how many days the versions should be kept at maximum.

  - *Apply these rules automatically*
    You can specify that in the future too many or too old versions will be automatically deleted.
    Note: To disable automatic execution, run the "Clean up Versions" action again. Remove all values, disable this option and click "Clean up".

  - "Select Versions"
    You can explicitly select and delete versions via the "Select Versions" button. The button is displayed if there are at least two versions.

- "Compare"
  Compares the selected version with an arbitrary other version. The contents of Word documents can also be compared.

- "Restore"
  The current version is replaced by the selected version.

- "Delete"
  You can delete the currently displayed version that is no longer needed.

Note: The timeline is not operable with the keyboard.

12.9 Calendar

Calendars allow you to manage events and tasks, and to share them with other team members. In addition, you can access your calendars with third-party products via CalDAV.

12.9.1 Creating a Calendar

To create a calendar, proceed as follows:

1. Navigate in the desired Teamroom.

2. Open the context menu of an empty part of the content area and click "New".

3. In the "Calendar" category, select the "Calendar" entry.

4. Enter a name and click "Next".

In the calendar, you can create events and tasks. The calendar can also be downloaded as an iCalendar file (ICS).

12.9.2 Creating an Event

To create an event, proceed as follows:

1. Navigate in the desired calendar.

2. Click the "Create Event" action.

3. Enter the data of the event.

4. Click "Create".
   Note: If you have specified at least one attendee, you can use the "Create and Send" button to create the event and also send an e-mail to the defined attendees with the event as an ICS file.

Note:

- An event can be sent subsequently via the "Send Event" context menu command.
- If a sent event is updated or deleted, you can send an event update or event cancellation.
- Via the sent e-mail the event can be opened, accepted, provisionally accepted or declined. The respective status is displayed for the event in the *Attendees* field.

12.9.3 Access via CalDAV

Calendars can also be accessed by third-party products via CalDAV. For access, a password for applications is required. If you have not created a password for CalDAV, create one now (see chapter 13.6 "Access for Applications").

If your third-party product supports calendar lists, you can manage them in the Fabasphere. Otherwise, you can embed a calendar directly via the *Calendar URL* (properties of the calendar).

To manage the calendar list, proceed as follows:

1. Click the account menu (your user name) and then click "Advanced Settings" > "Calendar".

2. In the *Calendar* field, add the wanted calendars. Via the URL `webcals://<server>/<vdir>/caldav` (e.g., `webcals://at.cloud.fabasoft.com/folio/caldav`) you can access the calendar list in a corresponding third-party product.

3. The calendar shown in the *Default Calendar* field can also be accessed via the URL `webcals://at.cloud.fabasoft.com/folio/caldav/home`.

4. Click "Save" to apply the changes.

Note:

- Depending on the third-party product, you may replace `webcals://` by `https://`.

- Calendars can also be managed by the context menu commands "Add to Calendar List" and "Remove From Calendar List".

If you are using Apple iOS, you can include your calendar list as follows:

1. Navigate to "Settings" > "Passwords & Accounts" > "Add Account".

2. Select the entry "Other" > "Add CalDav Account".

3. Enter your account information.

   o *Server*
   `webcals://<server>/<vdir>/caldav`
   Example: `webcals://at.cloud.fabasoft.com/folio/caldav`

   o *Username*
   The e-mail address you use to log in to the Fabasphere.

   o *Password*
   The generated CalDAV application password (see chapter 13.6 "Access for Applications").

4. Now you can access your Fabasphere calendar list with the Apple Calendar app.

12.10 Address Book

When using the contact management, you can manage your contacts in contact rooms and address lists. In addition, you can access your address book list via CardDAV with third-party products.

You can find your address book list under "Account menu (your user name)" > "Advanced Settings" > "Address Book". In the *Address Book List* field, add the wanted contact rooms or address lists. Via the URL `https://<server>/<vdir>/carddav` (e.g., `https://at.cloud.fabasoft.com/folio/carddav`) you can access the address book list in a corresponding third-party product.

CardDAV

Access to contacts is also possible via third-party products such as "Apple Contacts", which support the CardDAV standard. A password for applications is required for access. If you have not yet created one for CardDAV, create one (see chapter 13.6 "Access for Applications").

Access is possible via the central CardDAV URL. For example:

- `https://at.cloud.fabasoft.com/folio/carddav`
- `https://de.cloud.fabasoft.com/folio/carddav`
- `https://ch.cloud.fabasoft.com/folio/carddav`

Microsoft Outlook

The "Open Fabasphere Address Book" context menu command of the Fabasphere notification symbol can be used to include the address book list in Microsoft Outlook.

12.11 Newsfeed

With the newsfeed, you can keep your team members up to date with the latest news.

12.11.1 Creating a Newsfeed

To create a newsfeed, proceed as follows:

1. Navigate in the desired Teamroom.
2. Open the context menu of an empty part of the content area and click "New".
3. In the "Collaboration" category, select the "Newsfeed" entry.
4. Enter a name and click "Next".

12.11.2 Writing Posts in the Newsfeed

Any user who has change rights in the Teamroom can write posts in the newsfeed. These posts are readable for all team members. For a newsfeed, it can be configured that team members with read access can also write posts.

To write a post in the newsfeed, proceed as follows:

1. Navigate in the newsfeed.
2. Enter the text in the textbox and possibly add an attachment.
3. Click "Send".

Any user can remove their posts. Team members with full control can remove any post.

Note:

*   A maximum of 2000 characters can be entered.
*   Team members with read access cannot add attachments.
*   Posts can be commented.
*   If you share a link, starting with http://, https:// or ftp://, it will be displayed as a hyperlink. If you follow this hyperlink, it will be opened in a new window.
*   With `<code></code>` source code can be displayed formatted.

12.12 Watermarks

It can be defined that documents in a Teamroom are automatically converted to secured PDF documents with a definable watermark. Team members with read access only see the PDF documents whereas team members with change access or full control see the source documents.

To define a watermark for a Teamroom, proceed as follows:

1. Navigate in the desired Teamroom.
2. Open the "Permissions" tool and click "Watermark Settings".
3. In the *Use Watermarks* field, select "Yes".
4. Define the desired settings for the watermark. With the *Watermark for All Users* option, you can test the settings by yourself.
5. Click "Next".

Note: Watermarked Teamrooms and assigned objects cannot be duplicated by users who only have access to PDF documents with watermarks.

12.13 Multimedia Files

Multimedia files can be displayed directly in the web browser, depending on the format.

- For images, alternative text and a description can be added on the "Image Properties" tab.

- The alternative text defined for an image is stored as an `alt` attribute in the `img` tag when the image is displayed and is thus accessible for screen reader users. If an image description is defined, the "Show Image Description" context menu command is available.

- If an audio description is provided for audio objects ("Audio Properties" tab > *Alternative Text* field), the "Open Transcript Document" context menu command is available.

- For video and audio objects, on the "Video Properties" or "Audio Properties" tab, in the *Tracks* field, VTT files can be stored to enable a timed text track to be displayed alongside the media content.

12.13.1 Images

You can export images in different formats in the file system or in the clipboard.

To export an image, proceed as follows:

1. Navigate to desired image and mark it.
2. Open the "Clipboard" menu and click "Download Image".
   Note: Make sure that the menu bar is displayed ("account menu (your user name)" > "Basic Settings" > "Show Menu Bar").
3. Define the size and target format.
4. Click "Copy Image to Clipboard", "Copy Link to Clipboard" or "Download Image".

Note: In the "Clipboard" menu, you will additionally find the menu entries "Copy Image for Presentation" and "Copy Image for E-Mail" that export the marked image in different formats to the clipboard.

12.13.2 Video and Audio Files

You can convert video files to MP4, OGV or WEBM. For audio files, MP3 and OGG are available.

To convert a video or audio file, proceed as follows:

1. Navigate to the desired multimedia file.
2. On the context menu of the multimedia file, click "Save as <format>".

The conversion runs in the background and may take longer depending on the size of the source file. The result of the conversion can be found in the properties of the multimedia file, on the "Content" tab in the *File in Different Formats* field.

12.14 Follow-Ups

When using the follow-up functionality, an e-mail can be sent to a user or a process can be started at a particular time.

To define a follow-up, proceed as follows:

1. Navigate to the desired object.

2. On the context menu of the object, click "Tools" > "Create Follow-Up" or "Manage Follow-Ups" (at least one follow-up is already defined).

3. If you mark the follow-up as personal (only valid for the "Send e-mail" action), it will not be visible to other users.

4. Select the *Action* that should be executed.

   o Send E-Mail
     Define *Recipients* for the e-mail. In the *Message* field, you can specify the e-mail text.

   o Start Process
     Define the process that should be executed.
     Note: The process has to be released for the organization.

5. If applicable, enter a reason. The text is displayed as a suffix of the follow-up name and calendar event.

6. Define the point in time of the follow-up and whether it should be repeated. For more information, refer to the "Point in Time" and "Repetition" sections below.

7. Click "Next".

Upon reaching the follow-up point in time and after processing the automatic task the defined action will be executed.

Note:

- For non-personal follow-ups, substitutes and successors will be considered.

- "Immediately after last change on/at" can also be selected for the execution time. Changes within the first 10 seconds after definition of the follow-up are ignored. After that, the next change to the object is considered.

- A default category can be defined for follow-ups ("Default Values" tab in app configurations or app rooms).

- If a form category is assigned to a follow-up, the name build of the form category is considered for the follow-up name.

- If a follow-up date has been defined as an explicit date, this can be changed programmatically via a low-code expression using the `ReCalculateResubmissionDate` action.
  Example:
  ```
  cooobj.myproperty.FSCNOTIFICATION@1.1001:objresubmissions[0].FSCNOTIFICATION@1.
  1001:ReCalculateResubmissionDate(null, datetime("2030-01-01"));
  ```

Point in Time

You can either specify an explicit date or let the date be calculated based on a base date field of the object. Optionally, the execution date can be redefined if the base date is changed.

Note: In addition to the date, the specified time is also considered. For fields without a time, 00:00:00 is used as the time.

Repetition

It is also possible to repeat follow-ups. The following cases can be distinguished.

Explicit date or date is not recalculated when the base date is changed

You can define a repetition rule that is applied starting with the execution time.

- Unit
  Defines the unit of the interval (e.g., day or month).

- Interval
  Defines the interval between the repetitions (number).

- Repeat Until
  Defines the end time of the repetitions (infinite, explicit date, date value of a property).

Date is recalculated when the base date is changed

The background task is rescheduled after the selected action is executed and the base date is changed. Only *Repeat Until* can be defined as a repetition rule.

Follow-Ups Dashboard

You can manage the follow-ups in the follow-ups dashboard. The dashboard is divided into the following areas:

- Calendar
  Shows all follow-ups of the "My Follow-Ups" list.

- My Follow-Ups
  Shows the follow-ups that were created by you or in which you are entered as the recipient. You can also store other follow-ups by yourself. You can use the "Settings" action to adjust the filter criteria and to find the CalDAV URL, which you can use to integrate your follow-ups as a calendar in Microsoft Outlook, for example.

- Further Follow-Ups
  Shows follow-ups determined by you. You can define the search criteria using the "Determine Follow-Ups" action.

12.15 Cloud Mail Import

Using the cloud mail import, you can automatically query mailboxes and import e-mails. In this process, cloud mail folders allow you to filter e-mails based on conditions. You can use cloud mail dispatchers to assign e-mails to different folders.

A typical scenario would be that you query the e-mails in your mailbox and select a cloud mail folder as the target folder. In the cloud mail folder, you set a condition that only e-mails that contain the word "Invoice" in the subject should be stored. In a cloud mail dispatcher, define the cloud mail folder as the source folder and store all e-mails with "Car" in the subject in a folder. The destination folders of the first dispatcher can be source folders for further dispatchers. Thus, a dispatcher cascade can be built until all e-mails have been sorted into the desired folders.

Note: "Cloud Mail Import", "Cloud Mail Folder" and "Cloud Mail Dispatcher" can be created in a Teamroom.

Cloud Mail Import

You can define the following settings:

"E-Mail Server" tab

- *Name*
  The name of the cloud mail import.

- *Protocol*
  Defines the protocol to be used to access the e-mail server.

- *Server*
  Defines the fully qualified domain name of the e-mail server on which the mailbox is hosted.
  Note: The data required in the following for communication with the e-mail server can be found, for example, in the configuration of your e-mail client or in the documentation of your provider.

- When using the Microsoft Graph API, an administrator must create an app in your Microsoft portal that defines the required API access rights. To do this, navigate to "Microsoft Entra ID" and register a new app.
  Allow "Accounts in this organizational directory only".
  As redirect URI for the platform "Web" define
  `https://at.cloud.fabasoft.com/folio/cmigraphauthcodecallback` (use `de` or `ch` instead of `at` based on the data location).
  Assign the following Microsoft Graph API permissions (delegated permissions): `Mail.Read`, `Mail.ReadWrite` and `User.Read`.

  - Server
    Use the default value "graph.microsoft.com".

  - OAuth 2.0 Authorization Endpoint
    Use the default value
    "https://login.microsoftonline.com/{tenant_id}/oauth2/v2.0/authorize".

  - OAuth 2.0 Token Endpoint
    Use the default value
    "https://login.microsoftonline.com/{tenant_id}/oauth2/v2.0/token".

  - Scope
    Use the default value "https://graph.microsoft.com/.default offline_access".

  - *Microsoft Directory (Tenant) ID*
    Defines the "Directory (Tenant) ID" of your Microsoft environment.

  - *Microsoft Application (Client) ID*
    Defines the "Application (Client) ID" of the app defined in your Microsoft environment.

  - *Microsoft Client Secret (Value)*
    Defines the "Client Secret (Value)" of the app defined in your Microsoft environment.

- *Port*
  Defines the port for accessing the e-mail server. The input is optional when using the standard port for the respective protocol (e.g., 110 for POP3).

- *User Name*
  Defines the user name to be used to access the mailbox.

- *Password*
  Defines the password to be used to access the mailbox.

- *Mailbox Folder*
  Defines a special mailbox folder to be queried.
  Note: When using the IMAP protocol or Microsoft Graph API, you can specify a specific folder to be retrieved.

- *Recipient Filter*
  If an e-mail address is specified, only e-mails sent to the specified e-mail address will be imported (To, CC, BCC).

- *Delete After Retrieval*
  Defines whether the e-mails are deleted from the e-mail server.

  o When using the IMAP protocol
    If this field is enabled, all e-mails are retrieved from the mail server and then deleted. If this field is disabled, only unread e-mails are retrieved and then marked as read.

  o When using the POP3 protocol
    This field cannot be disabled. All e-mails are retrieved and then deleted.

  o When using the Microsoft Graph API
    If this field is enabled, retrieved e-mails are deleted from the mail server.

- *Target Folder*
  Defines the folder in which the retrieved e-mails are stored. If no folder is specified, the "Cloud Mail Import" itself is the target folder.

"Automation" tab

- *Retrieve Automatically*
  Defines whether e-mails should be retrieved automatically.

- *Interval*
  Defines the time interval for automatic retrieval.

- *Automation Enabled for*
  Shows all your cloud mail imports and dispatchers with automatic execution.

Context Menu Commands

- Retrieve E-Mails
  You can manually retrieve the e-mails.

- Enable Automatic Retrieval/Disable Automatic Retrieval
  You can enable or disable the automatic retrieval.

- Authenticate
  When using the Microsoft Graph API, you must authenticate yourself and allow access.

- Reset Synchronization Status
  When using the Microsoft Graph API, if you reset the synchronization status, again all e-mails will be considered the next time you retrieve them and not just the new e-mails since the last synchronization.

Cloud Mail Folder

You can specify the following settings:

"Cloud Mail Folder" tab

- *Name*
  The name of the cloud mail folder.

- *Maximum Age (Days)*
  E-mails older than the specified days will be deleted (creation date).

- *Maximum Number of E-Mails*
  If the number of e-mails exceeds the specified maximum number, they will be deleted.

- *Conditions*
  Only e-mails that match the defined conditions will be stored (OR conjunction). A condition consists of a property (e.g., "Subject") and a pattern (any string). The value of the property must contain the pattern string to match the condition (case-insensitive).
  Note: The conditions are checked when e-mails are to be stored in the cloud mail folder via the cloud mail import.

- *Target Folder (Not Matching)*
  Defines the folder where e-mails that do not match the conditions will be stored.
  Note: This folder should always be defined in order not to lose any e-mails.

Cloud Mail Dispatcher

You can specify the following settings:

"Dispatcher" tab

- *Name*
  The name of the cloud mail dispatcher.

- *Conditions*
  E-mails are placed based on the defined conditions (OR conjunction). A condition consists of a property (e.g., "Subject") and a pattern (any string). The value of the property must contain the pattern string to match the condition (case-insensitive).

- *Source Folder for E-Mails*
  Defines the source folder from which e-mails are distributed.

- *Target Folder (Matching)*
  Defines the target folder for e-mails that match the conditions.

- *Target Folder (Not Matching)*
  Defines the target folder for e-mails that do not match the conditions.

"Automation" tab

- *Dispatch Automatically*
  Defines whether e-mails should be dispatched automatically.

- *Interval*
  Defines the time interval for automatic dispatching.

- *Automation Enabled for*
  Shows all your cloud mail imports and dispatchers with automatic execution.

Context Menu Commands

- Dispatch E-Mails
  You can manually dispatch the e-mails.

- Enable Automatic Dispatch/Disable Automatic Dispatch
  You can enable or disable the automatic dispatching.

12.16 Data Import

You can use an Excel file to create or update objects with the desired metadata. If you want to create objects of different object classes, you need one Excel file per object class.

Note: As an alternative to the Excel file, you can also use a CSV file with UTF-8 character encoding.

To import data records from an Excel file, proceed as follows:

1. For example, in a Teamroom, open the "Tools" menu and click "Import Data".
   Note: Make sure that the menu bar is displayed ("account menu (your user name)" > "Basic Settings" > "Show Menu Bar").

2. Select the Excel file you want to import and click "Import". A description of the required data structure of the Excel file can be found below.

3. Select the container and the list in which the objects are to be created or updated. For example, the objects can be created in the *Contents* list of a Teamroom.

4. Select the object class for the newly created objects.

5. If necessary, select a category (incoming category, form category) to be assigned to the newly created objects.

6. If the container already contains objects, select a key that identifies the objects. This allows you to update existing objects. The key can also consist of several properties. If you do not specify a key, new objects will always be created. In general, the *Import ID* (`objexternalkey`) is used as the key.

7. Click "Next" to import the data records.

New objects are created from the data records or existing objects are updated.

Format of the Excel File

- For each property that is to be filled with a value, a column is required.

- In the header row, the respective property is defined based on the reference of the property.
  Note: To determine the reference of a property, open the properties of a sample object. Using the shortcut `Ctrl` + `Shift` + `#` you can show or hide the references of the properties. Clicking on the reference copies it to the clipboard. The short reference (part after the colon) can be used if it is unique (instead of for example `COOSYSTEM@1.1:objexternalkey` just `objexternalkey`). Alternatively, the multilingual name of the property can be specified, but this is discouraged to ensure uniqueness.

- Each additional row represents the values of an object.
  Note: If possible, always use a unique ID to determine the objects to be referenced.

- You can also define an `OverrideKeys` column in which you can enter column names separated by commas or one below the other (`Alt + Enter`). This results in the following behavior:
  - o If the `OverrideKeys` column does not exist, empty values are taken over and lists are overwritten.
  - o If the `OverrideKeys` column exists and the column name is entered, empty values are taken over and lists are overwritten.
  - o If the `OverrideKeys` column exists and the column name is not entered, empty values are not taken over and new entries are added to lists.

Example table:

objexternalkey	objname	objsubject	OverrideKeys
Import1	Object Name 1	Subject of object 1	
Import2	Object Name 2	Subject of object 2	objname,objsubject

Note:

- The specified properties must be modifiable for the values to be imported. For example, *Created by* is not modifiable.
- The changes must be permitted:
  - o Mandatory fields cannot be emptied.
  - o The uniqueness of lists is maintained.
  - o Objects of non-permitted object classes cannot be stored.
- In order to assign several objects to a list, the individual objects must be specified one below the other in the corresponding cell (`Alt + Enter`).

Mapping the Values

The import will attempt to convert the specified strings to the appropriate property data types, although not all data types are supported.

Procedure:

- Enumeration
  - o Reference of the enumeration value
  - o Name of the enumeration value
  - o Numeric value of the enumeration value
- Date/Time
  - o ISO 8601
  - o `dd.mm.yyyy HH:MM:SS`
- Currency
  - o Currency symbol (e.g., EUR, USD) + space + value

- o Value + space + currency symbol
- Object
  - o Fabasphere ID
  - o MX URL with Fabasphere ID (`../mx/COO.a.b.c.d`)
  - o Reference with prefix #
  - o Import ID with prefix ?
  - o User (member or external member of the organization if not specified by e-mail address).
    - E-mail address
    - Object name
    - Last name + space + first name
    - First name + space + last name
  - o Organization element (team, organizational unit, external organization)
    - Object name
  - o Country
    - ISO 3166 ALPHA-2
    - ISO 3166 ALPHA-3
    - Multilingual name
  - o Organization (contact management)
    - E-mail address
    - Object name
  - o Contact person (contact management)
    - E-mail address
    - Object name
  - o Processing state
    - Multilingual name
  - o Category
    - Multilingual name
  - o Terms
    - Multilingual name
    - Multilingual name of synonyms
  - o Object (allowed in the property)
    - Object name
    - Multilingual name
- In all other cases, an attempt is made to assign the value to the property.

12.17 Auditing

"Auditing" allows you to track access to objects. Not only changes to properties are displayed, but you can also find out when and by whom the contents of an object were read.

12.17.1 Creating a Search Folder for Audit Logs

To create a search folder for audit logs, proceed as follows:

1. Navigate in the desired Teamroom.
2. Open the context menu in an empty part of the content area and click "New".
3. Click the "Search Folder for Audit Logs" entry.
4. Enter a name and fill out the fields depending on your search criteria.
   Note: If you do not define a Teamroom, only a limited time range can be investigated. If an organization is defined, you can extend the time interval up to 3 months, if an audit originator is defined, you can extend the time interval up to 7 days, otherwise only a maximum of two hours can be investigated.
5. Click "Next".

Navigate in the search folder and click the "Refresh" action. All objects matching your search criteria will be displayed (except for objects that have already been deleted). Use the "Export Audit Log" action to check the audit log entries of deleted objects.

Note:

- You can create search folders for audit logs only if you have been authorized in the organization policies.
- To change the search criteria, click "Properties" in the context menu of the search folder and adjust the search criteria accordingly.

12.17.2 Showing Audit Log Events

To show the audit log events of an object, proceed as follows:

1. Navigate in the search folder for audit logs.
2. Mark the desired object.
3. Open the "Object" menu and click "Show Audit Log".
   Note: Make sure that the menu bar is displayed ("account menu (your user name)" > "Basic Settings" > "Show Menu Bar").

All events are displayed that occurred during the specified period. The "Show Changes" context menu command, can be used to read the versions of the object.

Note: Alternatively, you can also navigate to the desired object, select it and execute the "Tools" > "Show Audit Log" menu command.

12.17.3 Exporting the Audit Log

To export the audit log events as CSV file, proceed as follows:

1. Navigate in the search folder for audit logs.

2. Click the "Export Audit Log" action.

3. After the report generation has finished click the "Download" button, to export the CSV file.

12.18 Adjusting Access Rights After a Membership Exclusion

If a member's organization membership is terminated, all access rights to the organizational Teamrooms are revoked and, if a successor has been defined, the successor is entered in the Teamrooms instead of the former member. Users who have all rights in the affected organizational Teamrooms and are members of this organization will be notified by e-mail. The successors will also be informed by e-mail. The links in the e-mails can be used to check the Teamrooms and make any necessary adjustments.

Note: When terminating a membership in external organizations, organizational units or teams, those with full control in the Teamroom are also informed by e-mail, if the Teamroom is restricted to the affected external organization, organizational unit or team.

For Teamrooms of other organizations the following applies:

- If the user's membership in his or her main organization is terminated, users with full control in Teamrooms of other organizations will also be informed about the exclusion and, if applicable, about the successor. The access rights can be manually adjusted by a user with full control.

- If the user's membership in one of his or her non-main organizations is terminated, only Teamrooms that are restricted to the affected organization are handled.

12.19 Handle Infected Documents

A virus scan is carried out regularly. If viruses are found, the respective Teamroom administrators are informed by e-mail. Using the "Handle Infected Document" action, Teamroom administrators can either mark the document as incorrectly classified or download and clean it. Be aware of the risks involved in downloading infected files to your computer. Cleaned documents can be uploaded again using the "Upload" action.

13 Account Menu

The account menu with your user name is located in the top bar and allows you to set up basic settings.

Your organization administrator can define default values for the basic settings, notification settings and workflow settings. In addition, the organization administrator can specify whether these settings can be changed by you.

13.1 Login and Password

Here you can view or change various log-in settings.

- Password
  You can change your password. Do not use a password that you also use for other websites.

- E-Mail Address
  Displays your log-in e-mail addresses (can be changed by the organization administrator).

- Mobile PIN
  Displays your data for two-factor authentication (can be changed by the organization administrator).

13.2 Contact Data

You can define your own contact data.

On the "Data Protection" tab, you can generate an excerpt that contains only your personal data (contact data) stored in the user administration. Please note that organizations manage their data themselves (user data) and that further personal data may appear in it. Personal data in user data cannot be contained in this information.

13.3 Basic Settings

The basic settings can be used to adapt the web client to your needs. When saving the basic settings, the page is reloaded to enable them.

"General" tab

- *Language*
  Defines the language of the web client.
  Note: By default, the mobile app is displayed in the device language. If the device language basically matches the user language in the basic settings, the language characteristic defined in the basic settings is preferred.
  Example: If the device language is German (Austria) and the user language is German (Switzerland), the strings for German (Switzerland) are displayed. If the device language is English (US) and the user language is German (Switzerland), the strings for English are displayed.

- *Locale*
  The selected locale affects the representation of property values such as the format of the date or the decimal separator.

- *Default Currency*
  The default currency can be considered in currency properties.

- *Show Menu Bar*
  Defines whether the menu bar is shown.

- *Show Hints*
  Defines whether object hints are displayed in an info box.

- *Read Properties by Default*
  Defines whether the properties of an object are displayed in read-only or edit mode (for example, when using the "Properties" action).

- *Preferred Type for Comments*
  Defines which comment type (public or private) is initially selected when using the integrated PDF viewer.

- *Start With*

  Defines which element on "Home" should be displayed initially after login.

- *Show Upload Confirmation*

  Defines whether a confirmation dialog is shown when importing files.

- Default Data Location

  Defines the data location in which you work by default.

- *Show Exit Confirmation*

  Defines whether a security prompt is displayed when closing the client by closing the web browser.

"Accessibility" tab

On this tab you can find settings that are helpful when using the keyboard and screen readers. Refer to chapter 15 "Accessibility" for more information.

13.4 Notifications

You can define about which events you want to be informed. You can be informed either by e-mail or by events displayed in the Teamroom ("Show New Events" action). In the card view, the number of changes is displayed on the Teamroom, since you viewed the events for the last time.

To configure the notifications, proceed as follows:

1. Click the account menu (your user name) and then click "Advanced Settings" > "Notifications".

2. Click the "Settings" button.

3. Define about which events you want to be informed and click "Save".

4. Click the "Define Affected Objects" button.

5. In the newly opened window, use, for example, the "Enable Notification" or "Disable Notification" context menu commands to specify the Teamrooms or dashboards for which you want to receive notifications and close the window.
   Note: For the Teamrooms entered, the setting applies to the entire hierarchy unless a different setting has been made for a subordinate Teamroom.
   For the dashboards with enabled notifications, the *Notification Sources* field of the dashboard is considered.

6. Click "Close" to close the notifications dialog.

13.5 Announcements

You can define about which announcements you want to be informed. You can be informed either by e-mail or by push notifications.

To configure the announcements, proceed as follows:

1. Click the account menu (your user name) and then click "Advanced Settings" > "Announcements" > "Settings".

2. Define about which announcements you want to be informed and click "Save".

13.6 Access for Applications

The access with external applications such as CMIS, CalDAV, WebDAV, RSS or web services has to be protected with an own generated password. The password has a validity period and can be renewed and revoked. Alternatively, applications can be secured via OAuth or OpenID Connect.

To generate passwords for applications, proceed as follows:

1. Open the account menu (your user name) and click "Advanced Settings" > "Access for Applications".

2. In the *Passwords for Applications* field click "New".

3. Define the desired settings and click "Next".

   o *Description*
     The free-text description of the password for application.

   o *Valid for*
     The application (e.g., "Standard Web Services for the Fabasphere") for which the password should be used.

   o *Validity Period*
     After the specified period has expired, the password can no longer be used unless its validity period is extended.

   o *Enable IP Range*
     Allows to define an IPv4 address range for which the password for applications is valid. Must be in CIDR notation (e.g., 198.51.100.0/24)

4. Copy the displayed password that can be used for the authentication of the web service.
   Note: The password is only displayed once and cannot be displayed again.

5. Click "Close".

Note:

• If a generated password is about to expire or has already expired, an e-mail is sent to your login e-mail address.

• To extend passwords, click the "Renew all" menu entry. The passwords will be extended by the entered validity period. You can also extend a single password by editing the entry.

• If you want to change a generated password, you have to revoke it and generate a new one.

• Access of OAuth applications and OpenID Connect tokens can be revoked via "Advanced Settings" > "Access for Applications".

14 Data Locations

A data location determines the physical data location of where your data is saved. You decide in which data location you want your data to be saved.

Fabasoft currently offers data locations in the following countries:

• Austria

- Germany

- Switzerland

To change the data location, proceed as follows:

1. Click the current data location name (e.g., Austria) in the top bar, to open the data location menu.

2. Click the desired data location entry, to change the data location.

You are now on "Home" of the corresponding data location.

Note:

- If you switch to a data location for the first time, an own "Home" is created for this data location.

- Teamrooms, folders and their content are only available in the data location in which they were created. The users are available in each data location.

- Changing the data location via the data location menu can be prevented by an organization policy.

15 Accessibility

Accessibility is an elementary concept of the Fabasoft products. Users with visual impairment are supported with entry and visual display.

15.1 Notes on Keyboard Operations

The Fabasphere offers full access for users who work with the keyboard instead of the mouse. As you use shortcuts on your operation system, you can use default key operations as for example `Ctrl + C` in the Fabasphere. The supported shortcuts can be found in chapter 16 "Keyboard Operations".

Users who only use the keyboard should define following settings:

1. Open the account menu (your user name) and choose "Basic Settings".

2. Switch to the "Accessibility" tab.

3. Activate the *Use Tabular Mode for Prescriptions* option because the default displayed graphical process editor is not suitable for keyboard operation.

4. If you do not see colors or see colors badly, enable the *Show Alternative Text for Highlighted Fields* option.

5. If you find background images disturbing, disable the *Show Background Images in Dashboards and Home* option.

6. If you need an increased contrast, enable the *Increase Contrast* option.

7. In the *Highlight Active Element (Focus)* field, select either "When Using the Keyboard" or "Always Emphasize Especially".

8. Save the settings.

15.2 Enhanced Highlighting of the Focus

Under the account menu (your user name), in the "Basic Settings", on the "Accessibility" tab, in the *Highlight Active Element (Focus)* field specify when an active field should be highlighted with a yellow border:

- When using the keyboard
  Pressing keys or key combinations (e.g., `Tab` or `Shift + Tab`) that set the focus on an element in the user interface enables the enhanced highlighting. A mouse click disables the enhanced highlighting.

- Always emphasize especially

- Never emphasize especially

15.3 Zooming

You can zoom text and graphics. The layout adapts itself optimally to the size. Use the web browser functionality for this.

Shortcuts	Actions
`Ctrl + Plus` (Edge/Firefox/Chrome) `Apple key + Plus` (Safari)	Zoom in
`Ctrl + Minus` (Edge/Firefox/Chrome) `Apple key + Minus` (Safari)	Zoom out
`Ctrl + 0` (Edge/Firefox/Chrome) `Apple key + 0` (Safari)	Reset to normal size

If you enable the *Use Simplified Resizer* option (account menu (your user name) > "Basic Settings" > "Accessibility" tab), for example, when registering a flap is displayed at the dividing line of the areas which provides a larger area for positioning the mouse pointer in order to enlarge or reduce the areas.

15.4 Design in High Contrast

Under the account menu (your user name), in the "Basic Settings", on the "Accessibility" tab, you can enable the *Increase Contrast* option to obtain a design with high contrast.

15.5 Notes on Using Screen Readers

The Fabasphere supports the WAI-ARIA standard (Accessible Rich Internet Applications). WAI-ARIA is not fully supported by all screen reader programs.

The following screen reader programs are recommended for the use with the Fabasphere:

- NVDA (NonVisual Desktop Access) with Mozilla Firefox or Google Chrome

- JAWS with Microsoft Edge, Google Chrome or Mozilla Firefox

Users who use a screen reader should define following settings:

1. Open the account menu (your user name) and choose "Basic Settings".

2. Switch to the "Accessibility" tab.

3. Activate the *Include All Fields in Tab Order* option to include also read-only fields in the tab order.
   Note: If you are using Apple Safari, you additionally have to activate following option in the web browser: "Safari" > "Preferences" > "Advanced" > *Press Tab to highlight each item on a webpage*.

4. Activate the *Use Tabular Mode for Prescriptions* option because the default displayed graphical process editor is not suitable for keyboard operation.

5. Activate the *Show Alternative Text for Highlighted Fields* option.

6. Activate the *Prepare Foreign Language Expressions for Speech Output* option. This way you can specify that well-known English terms are specially tagged to ensure correct pronunciation

7. Save the settings.

Note:

- The web client customizes itself automatically of the browser windows size. That means that some areas are blanked temporarily, if the space is not sufficient. When using screen reader programs, the web browser window should be maximized (`Windows key + Up`), so that all elements are in the tabulator order.

- If your screen reader offers a reading mode in the web browser (e.g., if you can use buttons for the quick navigation in the web), it might be possible that you have to switch the mode off and on again. Whether your screen reader requires your manual intervention, notice whether the keyboard shortcuts of the Fabasphere work or not.

- If the Braille output of your screen reader makes a distinction between a level one and a structured representation, you must set the structured one.

Useful JAWS Settings

The following JAWS settings permit an optimum work with the Fabasphere.

Perform the steps below:

1. Open the Fabasphere in your preferred web browser.

2. Open the JAWS quick settings with the `JAWS-key + V`. All the necessary settings can be found in the last category "Personalize Web Settings". This means that the settings only apply for the Fabasphere.

3. Deactivate the setting "Document automatically reads".

4. Select for the setting "Document presentation mode" the value "Simple layout"

5. If you have changed any other general JAWS web settings, you may have to restore the default settings.

15.6 Accessibility Exceptions

The following functionality is restricted or not accessible:

- BPMN Editor
- Document View
- Content of Widgets
- Adjusting Screenshots (Support Button)

BPMN Editor

The BPMN editor is used to graphically model business processes that can be executed directly. The BPMN editor is displayed when you open a BPMN process diagram, BPMN choreography diagram or BPMN conversation diagram.

Keyboard operation and screen readers are not supported (graphical modeling is only possible using the mouse).

Document View

The document view is used for the integrated PDF preview of documents. The document view is displayed in the content area when you navigate in a document.

Screen readers are not supported (document structure and navigation are not accessible).

Alternatively, documents can be opened in the corresponding third-party product (if permitted).

Content of Widgets

Widgets show preview lists or graphics and serve in dashboards as access points to the corresponding areas. For example, widgets are displayed directly on "Home" in the content view.

Keyboard operation and screen readers are not supported (access to preview lists is not possible and there are no text alternatives for graphics).

Alternatively, you can navigate into the widget to access the complete, accessible information.

Adjusting Screenshots (Support Button)

For support requests, a screenshot can be edited and transmitted. The support request opens when you use the "Support" button.

Keyboard operation and screen readers are not supported (cropping, highlighting and blackening is only possible with the mouse).

16 Keyboard Operations

Besides working with the mouse also keyboard operation is supported. In this chapter, the available keyboard shortcuts are grouped according to the application areas.

Note:

- On Apple macOS, the `Cmd` key is treated the same as the `Ctrl` key on Microsoft Windows.
- On Apple macOS, the keyboard shortcuts `Ctrl + [0-9]` are used instead of `Alt + [0-9]`.

16.1 Common Keyboard Operations

Shortcuts	Action
Tab	Focusses the next control.
Shift + Tab	Focusses the previous control.
Enter	Executes the corresponding action on the selected element (e.g., press a button or execute a menu command and open an object).
Space Bar	Activates the selected element.
Menu Key or Shift + F10	Opens the context menu of the selected element (if existing).
Left, Right, Up, Down Home, End	Navigates in symbol bars, object lists and structures. **Note:** In a search result list, press the End key to select the last object currently visible. If there are further results, the reload is started automatically.

16.2 Global Navigation

All controls are located in tab order. This means you can move from one control to other forward and back.

Shortcuts	Action
Tab	Navigates to next menu command.
Shift + Tab	Navigates to previous menu command.
Ctrl + F6, Ctrl + Shift + F6	Navigates circular between the areas: • Home (logo) • search field • tool menu • actions • right tool area (if opened) • content area
Alt + 0	Activates to "Support" button.
Alt + 1	Navigates to "Home".

`Alt + 2`	Navigates to the object list in the content area.
`Alt + 3`	Navigates to the actions.
`Alt + 4`	Navigates in the search field.
`Alt + 5`	Navigates in the opened context-independent tool or in the tool selection if no context-independent tool is opened.
`Alt + 6`	Navigates in the "Options" tool bar.
`Alt + 9`	Activates to "Quick Access" button.
`Esc`	Navigates back step by step until finally the main area is reached.

Within individual complex controls like menus or structure views, you can use the arrow keys to navigate in e.g., sub-menus or tree branches.

16.3 Top Bar

In the top bar, the following shortcuts are available.

Shortcuts	Action
`Right, Down`	Navigates to next menu command. If the last menu command is selected, it navigates to the first one.
`Left, Up`	Navigates back. If the first menu command is selected, it navigates to the last one.
`End`	Navigates to first menu command.
`Home`	Navigates to last menu command.
`Enter or Space Bar`	Activates the selected element.

16.4 Menus

The following menus are available:

- Menu Bar (of the object list)
  The menu bar can be activated via the basic settings and is located above the content area.
- Tools
  Is used for displaying and reverse clipping of tools.

- Actions

  Provides the most important actions for the displayed list or object.

- User

  The user menu with your name is located in the top bar and is used for defining basic settings.

- Locations

  The data location menu is located in the top bar and can be used to switch between data locations.

- Sorting

  The sorting menu is located right above the content area. It can be reached by pressing `Alt + F9`, if the focus is within the object list.

- Column Menu

  Can be opened via the columns in the content area.

- Context Menu

  Offers commands for the selected objects. Can be opened via the `context menu key` or `Shift + F10`.

Shortcuts	Action
`Down`	In the menu bar: Opens the selected menu and selects the first entry. In an open menu: Select the previous entry. If the last first is selected, it steps to the last entry.
`Up`	In the menu bar: Opens the selected menu and selects the first entry. In an open menu: Select the next entry. If the last entry is selected, it steps to the first entry.
`Right`	In the menu bar: Selects the next entry. If the last entry is selected, it steps to the first entry. In an open menu: Opens the submenu if selected. Otherwise opens the next menu and selects the first entry.
`Left`	In the menu bar: Selects the previous entry. If the first entry is selected, it steps to the last entry. In an open menu: Opens the previous menu and selects the first entry. In a submenu: Closes the submenu and selects the first entry in the menu.
`Enter` or `Space Bar`	`Enter` or `Space Bar` executes the selected menu command or the assigned submenu is opened.

Esc	Esc closes the opened submenus and/or menus hierarchically. On top-level either nothing happens (actions, tools) or it will navigated in the content area (menu of the object list)

16.5 Content Area

The most important control in the content area is the object list. It includes the title bar and the menu bar, positioned directly above it.

The object list has the following different views:

- Cards
- Content
- Details
- Preview

Single objects are displayed in the so-called *Document View*.

16.5.1 Overview of Currently Available Shortcuts

For every Teamroom and folder within Teamrooms you can change the view of the object list between content view, details and preview. Therefor open the desired Teamroom or folder. The view can be changed via the menu or context menu command "Change View". The context menu command is only available, if no object is selected.

Selecting, Copying and Pasting

Shortcuts	Action
Arrow keys, Home or End	Focusses and selects only one entry.
Ctrl + Arrow keys, Ctrl + Home, Ctrl + End	Navigates to an entry without selecting. All selected entries are still selected.
Alt + Shift + Up or Down	In grouped lists, navigates to the previous or next group header (if present).
Page Up, Page Down	Scrolls up or down (web browser functionality) and sets the focus on the first or last entry on the displayed list part.
Character string	The input of the first or from initial letters of the object name selects the suitable object, if available.
Space Bar	Selects the focused entry. This is especially useful directly after navigating in a list. The focus is initially on the first entry that has not yet been selected.

`Ctrl + Space Bar`	Places or removes the selection from the focused entry, if the focus is in the first cell.
`Shift + Arrow Keys`	Extends the selection. The extension passes differently in all views (see below).
`Shift + Home`	Extends the selection to the beginning of the list.
`Shift + End`	Extends the selection to the end of the list
`Ctrl + A`	Selects all entries in an object list
`Ctrl + C`	Copies the selected objects to the clipboard
`Ctrl + X`	Cuts the selected objects
`Ctrl + V`	Pastes objects from the clipboard

Actions

Shortcuts	Action
`Enter`	Opens the selected object
`Del`	Moves the selected Teamroom objects to the wastebasket or removes them from the object list, if they are pointers.
`Backspace`	Navigates one page back in the web browser history.
`Ctrl + Enter`	Opens the attribute editor.
`F2`	Switches selected cell between editor and navigation mode.
`Alt + F9`	Navigates to the column header, if the detail view is shown, otherwise to the sorting button.
`Alt + F10`	Navigates to the menu of the object list.

16.5.2 Shortcuts for the Card View

The card view, for example, is used by default in the personal folder.

Shortcuts	Action

`Down`	Navigates to the card directly below the currently selected card. If no such card is available, it navigates to the last card in the row.
`Up`	Navigates to the card directly above the currently selected card.
`Left`	Navigates to the next card in read order.
`Right`	Navigates to the card before in read order.
`End`	Navigates to last card in object list.
`Home`	Navigates to first card in object list.
`Shift + Down`	Selects all cards below the current card in read order.
`Shift + Up`	Selects all cards above the current card in read order.
`Shift + Right`	Extends the selection to the next card.
`Shift + Left`	Extends the selection to the card before.
`Shift + Home`	Extends the selection to the first card.
`Shift + End`	Extends the selection to the last card.

16.5.3 Shortcuts for the Content View

Within Teamrooms, the content view is used by default.

Shortcuts	Action
`Down`	Navigates to next object.
`Up`	Navigates to previous object.
`End`	Navigates to last object.
`Home`	Navigates to first object-
`Shift + Down`	Extends the selection to the next object.
`Shift + Up`	Extends the selection to the previous object.

`Shift + Home`	Extends the selection to the first object.
`Shift + End`	Extends the selection to the last object.
`Alt + F9`	Navigates to sorting button.
`Alt + F10`	Navigates in the menu bar of the object list, if the menu bar is enabled.

16.5.4 Shortcuts for the Details View

Within Teamrooms, the "Details" view can be used.

Shortcuts	Action
`Down`	One cell down within the current column.
`Up`	One cell up within the current column.
`Left`	One cell left within the current row.
`Right`	One cell right within the current row.
`Home`	First cell of the current column.
`End`	Last cell of the current column.
`Ctrl + Down`	Next cell within the current column without selecting it.
`Ctrl + Up`	Previous cell within the current column without selecting it.
`Ctrl + Left`	Selects the current row and additionally focusses the first cell.
`Ctrl + Right`	Focusses the last cell of the current row.
`Shift + Down`	Selects an additional cell below the current cell. If the focus is in the first cell, the entire rows are selected.
`Shift + Up`	Selects an additional cell above the current cell. If the focus is in the first cell, the entire rows are selected.

`Shift + Left`
or
`Shift + Right`
	Selects the whole row without changing the current focus.

`Shift + Home`	Selects all lines above the current line and the current line. If the focus is in the first cell, the entire rows are selected.
`Shift + End`	Selects all lines below the current line and the current line. If the focus is in the first cell, the entire rows are selected.
`Alt + F9`	Navigates to the column header.
`Alt + F10`	Navigates in the menu bar of the object list, if the menu bar is enabled.

The column filters can be accessed via the column header. The values filter for date values is represented by a tree structure. Only one tree element ever has a `tabindex`. The `arrow keys`, `Pos 1` and `End` can be used to navigate between the tree elements. Screen readers can determine whether an element is expanded via the `aria-expanded` attribute. If subordinate tree elements have only been partially selected (for example, only one day of several in a month), then the superordinate tree elements have the status "partially selected". This is made clear when using screen readers with the attribute `aria-checked="mixed"`. When a partially selected element is selected, all subordinate elements are selected.

16.5.5 Shortcuts for Table Handling

In the detail view, the table handling can be activated via the button "Table Handling" in the column header (`Alt + F2`) as an alternative editing mode. Thus, the controls work similarly to a spreadsheet program.

Note: When switching to the table editing mode, a warning is displayed that entering text in table cells can in some cases open a dialog and set the focus to this dialog. You can disable the warning directly. In the basic settings on the "Accessibility" tab, the warning can be enabled again using the *Warn About Context Changes* field.

Shortcuts	Action
`F2`	Enables editing the marked cell or saves the changes if editing already in progress. **Note:** • In text fields, the cursor is at the end of the text. • The cell remains marked after editing is finished.
`Typing letters or numbers`	Enables editing of the marked cell. **Note:** In text fields, the current value is deleted.
`Tab`	• Marks the next editable cell to the right. **Note**: This depends on the setting "Include all Fields in Tab Order".

	• Navigates from the last cell of a row to the first cell of the next row.
	• Navigates from the last cell of the last row to the next tab stop on the page and leaves the table.
	• If the current cell is being edited, its content is saved.
Shift + Tab	• Marks the next editable cell to the left. **Note**: This depends on the setting "Include all Fields in Tab Order".
	• Navigates from the first cell of a row to the last cell of the previous row.
	• Navigates from the first cell of the row to the previous tab stop and leaves the table.
	• If the current cell is being edited, its content is saved.
Enter	• If the current cell is being edited, its content is saved.
	• Marks the next editable cell below. **Note**: This depends on the setting "Include all Fields in Tab Order".
	• In the last row, the mark stays in the current cell.
Shift + Enter	• If the current cell is being edited, its content is saved.
	• Marks the next editable cell above. **Note**: This depends on the setting "Include all Fields in Tab Order".
	• In the first row, the mark stays in the current cell.
Right	• Marks the next cell to the right.
	• In the last column, the mark stays on the current cell.
	• If the current cell is being edited, navigation within the cell moves to the right.

	• Group header:
	  o Opens a collapsed group.
	  o Navigates from an expanded group header to the first cell of the first row of the group.

Left	• Marks the next cell to the left.
	• In the first column, the mark stays on the current cell.
	• If the current cell is being edited, navigation within the cell moves to the left.

	• Group header:
	  o Closes an expanded group.
	  o Navigates from a collapsed group header to the first cell of the last row above (or to the group header above)

Up	• Marks the cell above. • Upon reaching the first row, the mark stays there. • If the current cell is being edited, navigation within the cell moves upwards.
Down	• Marks the cell below. • Upon reaching the last row, the mark stays there. • If the current cell is being edited, navigation within the cell moves downwards.
Esc	• Ends editing without saving the changes (the focus remains). • If the current cell is not being edited, the selection is removed (the focus remains).
Space Bar	Enables editing of the marked cell (e.g., text field, drop-down menu, dialog). **Note:** In text fields, the current value is deleted.
End	Navigates to the last cell of the column.
Pos1	Navigates to the first cell of the column.
Ctrl + Right	Navigates to the last cell of the row and marks it.
Ctrl + Links	Navigates to the first cell of the row and marks it.
Ctrl + Up	Focusses the cell above (without selection).
Ctrl + Down	Focusses the cell below (without selection).
Ctrl + Space Bar	Activates or deactivates the selection.
Shift + Arrow Keys	Extends the selection.
Alt + F9	Navigates into the column header.
Alt + F10	Navigates into the menu bar of the object list if it is displayed.

16.5.6 Shortcuts for the Document View

Shortcuts	Action

`Ctrl + Shift + Right`	Opens the preview of the next element in the list.
`Ctrl + Shift + Left`	Opens the preview of the previous element in the list.
`Context Menu Key, Shift + F10`	Opens the context menu for the object displayed in the preview.

16.6 Tools

Tools are displayed in the left area and can be opened directly with the key combinations. The focus is always moved into the tool. You can find these commands in chapter 16.2 "Global Navigation".

16.6.1 Navigation (Tree View)

The tree view allows the navigation in Teamroom and folder hierarchies.

Shortcuts	Action
`Down`	Navigates to the next visible entry.
`Up`	Navigates to the previous visible entry.
`Right`	Expands the tree node or navigates to the first entry of the open node.
`Left`	Navigates to the parent node if an entry is selected in an open path. If an expanded node is selected it will be closed.
`End`	Navigates to the last entry.
`Home`	Navigates to the first entry.

16.6.2 Permissions

The "Permissions" tool for managing team members is very similar to the "Navigation" tool in terms of keyboard operation. The only difference is that the main nodes are always open. To speed up the navigation of many members the arrow keys navigate up and down at the top level directly between the highest nodes not to the next or previous entry. The deeper levels behave identically to the tree navigation.

16.7 Forms

The Fabasphere uses forms to display object properties and settings.

Note: Screenreader users should activate the *Include All Fields in Tab Order* option in the *Basic Settings* (see chapter 15.1 "Notes on Keyboard Operations"). This way also read-only fields are included in the tab order.

Shortcuts	Actions
Tab	Navigates to the next field.
Shift + Tab	Navigates to the previous field.
Enter	Saves and closes the form.
Esc	Closes the form without saving.
Ctrl + F1	Navigates to the help text of the field, if exists. With `Esc` the focus switches back to the field. **Note for screen reader users:** The help area is marked as "document". When moving the focus to the help, the screen reader should read the help text. It might be possible that you have to switch the screen reader in read mode. For JAWS press `Ctrl + Y` followed by the `Plus` key on the number pad.
Ctrl + F6	Navigates to the next form area.
Ctrl + Shift + F6	Navigates to the previous form area.
Alt + 0	Activates the "Support" button.
Alt + 2	Navigates in the first or previously focused field, if the focus is on a form button or on a tab.
Alt + 7	Navigates to the tabs (if present).
Alt + 8	Navigates to the form buttons.

Note: In aggregate lists, generally the same key combinations apply as for the details view of lists. However, the difference is that `F2` in aggregate lists toggles the entire list between edit and navigation mode and not just a cell.

16.8 Process View

The process view, as it can be found on the "Processes" tab, for example, has been implemented as an open, horizontal tree view. The difference to a standard tree view, however, is that the nodes cannot be collapsed and the main sequence of entries is not from top to bottom, but from left to right.

Shortcuts	Actions
Right	Navigates to the next element.
Left	Navigates to the previous element.
Down	Navigates to the below element.
Up	Navigates to the above element.
Home	Navigates to the first element.
End	Navigates to the last element.
Ctrl + Right	Navigates to the next element on the same level.
Ctrl + Left	Navigates to the previous element on the same level.
Ctrl + Shift + Left	Navigates to the superordinate element.
Context Menu Key, Shift + F10	Opens the context menu of the selection.
Alt + M	Marks the currently focused element.
Alt + P	Navigates to the marked element.
Alt + G	Navigates to the first element with "Startable" state.

16.9 HTML Editor

The HTML editor for formatting text supports almost the same keyboard shortcuts in the text area as Microsoft Word.

Some of the most important shortcuts are listed below.

Shortcuts	Actions
Alt + F10	Enters the editor toolbar.

Tab	Moves to the next editor toolbar button group.
Shift + Tab	Moves to the previous editor toolbar button group.
Right	Moves to the next editor toolbar button within the group.
Left	Moves to the previous editor toolbar button within the group.
Enter or Space Bar	Activated the action of the selected button and moves the focus from the editor toolbar back to the text area.
Esc	Moves the focus from the editor toolbar back to the text area without any action.
Ctrl + B	Applies bold formatting to a text fragment.
Ctrl + I	Applies italic formatting to a text fragment.
Ctrl + U	Applies underline formatting to a text fragment.
Ctrl + L	Opens the link dialog window.

17 The Fabasphere Client

The native Fabasphere Client provides following advantages:

- Edit documents directly via your web browser
- Import documents with drag and drop
- Synchronize documents with the file system

The installation can be started via the web browser state in the top bar of the web client. More information can be found in the white paper "Fabasphere Client".

17.1 Overview

By clicking on the notification icon of the Fabasphere Client the list of recently used documents is opened.

- **Header**
  If you work with multiple data locations or installations, you can switch between them via the header. By clicking on the question mark, the support dialog is opened. Via the gear icon, you can access the options.
  Note: If you are working with test systems and different users, a large number of entries that are no longer required may accumulate. To delete entries that are no longer used, you can select the desired entries under "More" > "Manage" and delete them.

- **Footer**
  In the footer, you can initially start synchronizing or the current state of the synchronization is shown. By clicking on the synchronization state, you can pause the synchronization.

- **Document overview**
  The open, recently edited, renamed, downloaded or uploaded documents are displayed chronologically. If an error occurs when synchronizing, the affected file is shown with a red background.
  Via the context menu of the respective document you can

  o view the document in the Windows Explorer (if it is synchronized),

  o view the document in the web client or

  o copy a link to the document into the clipboard.

In the "About" dialog it is shown whether the Fabasphere Client is current (green check mark). If this is not the case, you can start the update directly.

17.2 Synchronization

The Fabasphere Folder allows you to synchronize folder structures with the file system.

The Fabasphere Folder offers two types of synchronization:

- Entire Home
  When you synchronize your entire home, navigating through the folder structure in the file system automatically synchronizes the contents of the current folder.

- Dedicated Synchronized Folder
  If you use a dedicated synchronized folder, the entire contained folder hierarchy is synchronized to the file system by default.

Note: The Fabasphere Folder supports local NTFS 3.1 file systems on Microsoft Windows, and local HFS+ or APFS file systems on Apple macOS. Each Fabasphere Folder is assigned to one user and one device only. Hence, several users cannot synchronize into the same Fabasphere Folder, and one user cannot synchronize from several devices into the same Fabasphere Folder. The Fabasphere Folder is not supported on Microsoft Windows server operating systems.

17.2.1 Using the Synchronization for the First Time

Depending on the organization settings, you can decide whether you want to synchronize your entire "Home" or just one dedicated folder with the file system.

To activate the dedicated synchronized folder, proceed as follows:

1. Click the account menu (your user name) and then "Advanced Settings" > "Synchronization".

2. Click the "Enable Synchronized Folder" button.

3. Click the "Enable" button. All previously synchronized data is removed from your devices.

4. Click "Close".

The dedicated synchronized folder is automatically stored on "Home".

Note: Deactivating the dedicated synchronized folder works in the same way ("Disable Synchronized Folder" button).

Start Synchronization

On the notification icon in the task bar, execute the "Open Fabasphere Folder" context menu command.

- If you synchronize "Home", the top level is synchronized to the file system. When you navigate in a folder, the contents of this folder are synchronized (at the first level). You can also synchronize entire folder hierarchies (see next chapter).
- If you use a dedicated synchronized folder, the entire folder hierarchy is synchronized to the file system by default.
- The successful synchronization is visualized by a green checkmark.

Now you can edit the files and folders either in the web client or in the file system.

17.2.2 Selecting Folders and Documents for Synchronizing

You can select folders and documents for synchronization as follows:

- If you synchronize "Home", the contents of the current folder are automatically synchronized and kept synchronized as you navigate through the folder structure.
  Note: If you use a dedicated synchronized folder, the entire folder hierarchy is synchronized to the file system by default.
- To synchronize an entire folder hierarchy and keep it synchronized, you can use the "Fabasphere Folder" > "Keep Folder Up to Date" context menu command for folders.
- Synchronized folders can be excluded from synchronization using the "Fabasphere Folder" > "Remove Local Files" context menu command. Thereby the local files of the entire folder hierarchy will be deleted. This has no effect on the corresponding objects in the Fabasphere.

Note:

- Synchronization takes place automatically in the background, but can be deactivated via the options dialog of the notification icon ("General" tab > "Fabasphere Folder" > *Offline* field).
- If you no longer need synchronization, you can remove the synchronized folder from the file system using the "Delete Folder" button in the options dialog of the notification icon.
- Synchronization can also be started in the web client. To do so, navigate to the desired Teamroom or folder and carry out the "Synchronize" action. The action is only available if the Teamroom or folder is stored in a hierarchy starting from your "Home".
  If you use a dedicated synchronized folder, the Teamroom will be stored in the dedicated folder, too.

17.2.3 Symbols for Visualizing the Status

Notification Symbol

The notification icon displays status information about the synchronization (e.g., paused). When using multiple Fabasphere Folders, the status refers to the currently selected Fabasphere Folder.

File System

Following symbols visualize the synchronization status in the file system:

- Not synchronized
  Not synchronized folders are displayed without any special visualization.

- Synchronized
  Synchronized folders and documents are marked with a green check mark.

- Keep folder up to date
  Folders in which the entire hierarchy should be synchronized are represented with a blue border.

- Modified
  The element has been modified locally or a synchronization process is currently carried out.

- Error
  If an error occurred, the context menu provides corresponding commands under "Resolve Error".
  In order that changes and errors can be easily identified, they are displayed over the entire hierarchy.

17.2.4 Context Menu of the Notification Symbol

In the context menu of the Fabasphere notification symbol following commands that are relevant for the Fabasphere Folder are available:

- Open Fabasphere Folder
  Opens the folder in the local file system that was created for synchronizing.

- Synchronize
  Starts the synchronization process manually.

Note: If you work with different Fabasphere installations, you can also choose the system that should be synchronized in the context menu.

17.2.5 Context Menu of the Fabasphere Folder

In the context menu of synchronized elements, the following commands are available under "Fabasphere Folder":

- Show in Fabasphere Web Client
  The web client is opened and the element is selected.

- Show Properties in Fabasphere Web Client
  Opens the properties of the element in the web client.

- Copy Link
  Copies the link to the respective object to the clipboard.

- Keep Folder Up to Date
  The entire folder hierarchy is synchronized and is kept synchronized.

- Remove Local Files
  The local files are removed. This has no effect on the corresponding elements in the Fabasphere.
  If a folder contains unsynchronized documents, an error will be displayed. When you execute the context menu command again, the unsynchronized documents are removed and a backup is stored in `\Users\<user>\Documents\My Recovered Documents`.
  Note: If you want to cancel the download of a too large file, you can execute this context menu command on the parent folder.

17.2.6 Resolving a Conflict

If a document has been changed in the web client and file system simultaneously, this is detected during synchronization. For visualization, a yellow call sign is displayed on the notification icon and in the web client on the document.

To resolve the conflict via the file system, proceed as follows:

1. Click the notification icon.

2. Click "Resolve Conflict" for the corresponding document.

3. In the following dialog, you can choose whether you want to continue using the current version or the last version before the conflict. The content of the discarded version is still accessible via time travel and can be taken over manually, if necessary.

Alternatively, you can execute the "Resolve Conflict" context menu command in the web client. If you edit the document using the web client, the conflict dialog opens automatically.

17.2.7 Error Handling

If an error occurred, the context menu provides corresponding commands under "Resolve Error". In order that errors can be easily identified, they are displayed over the entire hierarchy.

17.2.8 Document Exchange via LAN

By default, synchronization or editing/reading of documents is carried out over the internet with the Fabasphere. Depending on your amount of data and your internet access, this may take some time.

Use document exchange via LAN to achieve a significant reduction in the required internet bandwidth and a significantly increased speed. When data in the Fabasphere has changed, all Fabasphere Folders in the local network are contacted first, whether the changed data is already available locally. If this is the case, the data is synchronized over the LAN and not over the internet. After the data was modified it will be stored for 20 minutes on the client to allow other clients to retrieve the edited document via LAN. Security is ensured in both cases by encryption.

To be able to use document exchange via LAN, you have to enable it:

1. Click the account menu (your user name) and then click "Advanced Settings" > "Fabasphere Client".

2. Enable the *Allow Document Exchange via LAN* option.

3. If necessary, define trusted networks for document exchange via LAN.
If no network is configured, document exchange via LAN is possible on Microsoft Windows in all private networks and on Apple macOS in all networks.
If one or more networks are configured, document exchange via LAN is only enabled in these networks (connection to the Fabasphere must be possible). Define one IPv4 address or IPv4 address range per line (in CIDR notation, e.g., 198.51.100.0/24).

4. Click "Next".

Note:

- Files will be provided via LAN without any access check, but the requesting user must know the object address, the hash and the modification date of the requesting file. Since this information must be provided by the requesting user, it is assumed that the user has access to the object within the Fabasphere to retrieve the information from the server.

- The clients must be connected to both, the LAN (same subnetwork) and the Fabasphere.

- The communication uses the TCP port 17096 and the IP multicast address 224.0.0.202 or ff02::1 (local subnetwork). If necessary, appropriate settings must be made in the firewall. If you are encountering problems with document exchange via LAN, please contact your network administrator with this information.
In the Windows firewall, for example, two inbound rules can be defined (one for the TCP protocol and one for the UDP protocol):

  o Program:
    `C:\Program Files\Fabasoft\Cloud\x64\FabasoftCloudUI.exe` (Fabasphere Enterprise Client)
    `C:\Users\<username>\AppData\Local\Fabasoft\x64\FabasoftCloudUI.exe` (Fabasphere Client)

  o Local address, remote address, local port, remote port, authorized users, authorized computers: `any`

  o Protocol: `TCP` or `UDP`

- You may provide the data permanently on a dedicated Microsoft Windows device with a specific user without an interactively logged in session. For this purpose the Native Client Service can be installed (see https://help.cloud.fabasoft.com/index.php?topic=doc/Fabasphere-Client/microsoft-windows.htm#native-client-service). After installing the Native Client Service on the device open the Fabasphere Folder via the notification icon and set a password for applications. Synchronize the desired folders with the documents that you want to make available to other users in the network efficiently.

17.2.9 Synchronization Exceptions

Excluded Files

To avoid the temporary files from third-party products are uploaded, there are following synchronization exceptions:

- Hidden files.

- Files that start with `~WRD`, `~WRL`, `ps` or `ppt`, followed by at least one decimal or hexadecimal (upper case) digit and followed by `.tmp` (uppercase and/or lowercase).

- Files that start with `~`, followed by an arbitrary string and followed by `.idlk`.

- Files that start with `Acr`, followed by an arbitrary string and followed by `.tmp`.

- Files that start with a least one decimal or hexadecimal (uppercase) digit and followed by `.tmp` (uppercase and/or lowercase).

- Files that consist solely of digits (decimal or hexadecimal digits in capital letters). However, files beginning with "000" followed by any number of decimal digits are excluded from this rule.

- Files that start with `aa`, followed by a lower case character, followed by five digits and optionally followed by a string that also matches the previously stated rule.

- Files that start with `Icon` follow by a "carriage return" (only Apple macOS).

Note:

- The PDF representation for "Search" is not displayed.

- Folders with more than 10000 objects cannot be synchronized. A corresponding error is displayed.

Additional file information

Additional file information is not synchronized and will be lost. However, Apple macOS file tags are synchronized.

17.2.10 Configuration in the Web Client

Which objects are synchronized on which devices can also be seen in the web client.

1. Open the web client.

2. Click the account menu (your user name) and then click "Advanced Settings" > "Synchronization".

3. One line is displayed for each device on which you keep objects up to date. Click on the magnifying glass symbol to see the details.
   Note: You can delete all settings using the "Remove Synchronization Settings" button.

   - *Device*
     Shows the ID of the respective device.

   - *Included Objects*
     Shows the folders that are to be kept up to date.
     Note: If a folder is kept up to date, all subordinate objects are automatically synchronized.

   - *Excluded Objects*
     Shows folders that are not synchronized even if they are in a folder kept up to date.

4. Click "Close".

17.3 Integration in Microsoft Word

The integration is available for Microsoft Word, Microsoft Word for the web, and Microsoft Word for Mac and gives you the following options.

17.3.1 Microsoft Word

When using Microsoft Word on Microsoft Windows, the following functionality is available.

Buttons

You can perform actions in the Fabasphere directly from Microsoft Word. The "Fabasphere" tab offers the corresponding actions depending on the context.

- Open
  You can select the document in the Fabasphere and open it in Microsoft Word.

- Upload
  If the current document was not opened via the Fabasphere, it can be uploaded to the Fabasphere. You can select a location in the Fabasphere and continue processing directly without having to close the document.

- Register
  If the current document was not opened via the Fabasphere, it can be registered in the Fabasphere. You can select the registration type (e.g., digital asset) and a location in the Fabasphere and continue processing directly without having to close the document.

- Copy Link
  You can put a link to the document in the Fabasphere in the clipboard.

- Create Public Link
  You can create a public link to the document. Users can access public links without logging in to the Fabasphere.

- Send Link
  You can create an e-mail draft with a link to the document in the Fabasphere.

- Rename
  You can change the name of the document in the Fabasphere.

- Release Version
  You can create a version of the document in the Fabasphere and provide it as a release.
  Note: Unsaved changes are saved automatically before the version is created.

- Properties
  You can edit the properties of the document in the Fabasphere.

- Show in Web
  Shows the document in the web client.

- Insert Text
  Note: For more information on text modules, see chapter 7.7 "Defining Text Modules" and chapter 7.8 "Using Text Modules".

  - Property
    You can insert certain property values as updatable DocProperties.

- o Plain Text Module
  You can insert available text modules unformatted.

- o Formatted Text Module
  You can insert available text modules formatted.

- o Text Module Placeholder
  You can insert text module placeholders in templates.

- o Linked Text Module
  Inserts a linked text module.

- **Replace Text Module Placeholder**
  You can replace the existing text module placeholders of the document with the contents of the text modules.

- **Remove Text Module**
  Removes the selected text module.

- **Modify Text Module**
  Allows the text module to be changed in the context of the current document (if the user is authorized to do so). Text modules that are marked for modification are no longer updated automatically.

- **Reset Text Modules**
  Allows to reset changes of the focused text module or all text modules. The current, released content of the text modules is taken over and the text modules are automatically updated again in the future.

- **Dissolve Text Modules**
  Allows you to dissolve the focused text module or all text modules (change rights required). The current content of the text modules, which may have been changed in the context of the document, is taken over as continuous text and the links are removed.

- **Enable Fields/Insert Field**
  You can insert certain property values as updatable fields. If you change the value of an editable field in the Word document, the changed value is taken over into the property.
  Note: The "Insert Field" > "Refresh Values" menu command can be used to refresh the field values without having to close the document.

- **Insert Signature Area**
  If digital signatures are enabled in your organization, you can define signature areas.

- **Context (Domain and User Account)**
  For documents that have not been opened via the Fabasphere, the context for the buttons can be selected. If you change the context in Microsoft Office, the context is also changed in the Fabasphere Client and vice versa.

Note:

- If the "Fabasphere" tab is not displayed, ensure that the COM add-ins "Fabasphere Domain Hot-Switch" and "Fabasphere Word Extension" are enabled in Microsoft Word ("File" tab > "Options" > "Add-ins").

- Not all of the buttons listed above are available in the other Microsoft Office applications.

- The following buttons are also available in Microsoft Office applications under "Open" on the "Fabasphere" tab:
  - Open document (for your Fabasphere favorites and history)
    Allows you to quickly open important or recently used documents for reading or editing.
  - Select document
    Allows you to select a document from the folder structure of your home area.

Fields

The following property types can be edited in the Word document:

- Integer
- String (also multi-line)
- Date
- Date and time
- Boolean
- Enumeration

The other property types are displayed as read-only fields.

Note:

- The short date format defined in the operating system is used for date fields.
- When saving the content, the fields in the PDF view are updated automatically, regardless of whether the PDF view is generated on the server or on the client.
- On the "Content" tab, in the *Update PDF Content on Metadata Change* field you can define whether the PDF view is newly generated on the server when the metadata of the object is changed. This way, fields that refer to the metadata of the document are displayed with current values.
- When importing a Microsoft Word document that already has metadata embedded as fields, the field values are stored in the properties of the Word object. If metadata of existing objects would change (e.g., when replacing the document), a dialog allows you to specify which field values should be stored.

User-Defined Properties as Fields

When you add a user-defined form to a Word document, you can insert your defined properties as fields in the Word document.

17.3.2 Microsoft Word for the Web

To use the integration in Microsoft Word for the web, you must add the Office add-in "Fabasphere" from the Microsoft Store to Microsoft Word for the web ("Insert" menu > "Add-ins" > "Office Store" > "Fabasphere"). The "Fabasphere" area can be opened via the Fabasphere ribbon button.

Note: In the organization policies, the *Value for SameSite Attribute of Session Cookie* must be set to "None" to be able to use the integration.

When using Microsoft Word for the web, the following functionality is available.

Buttons

You can perform actions in the Fabasphere directly from Microsoft Word for the web. The "Fabasphere" area offers the corresponding actions depending on the context.

- Send Link
  You can create an e-mail draft with a link to the document in the Fabasphere.

- Show in Web
  Shows the document in the web client.

- Insert Text

  - Plain Text Module
    You can insert available text modules unformatted.

  - Text Module Placeholder
    You can insert text module placeholders in templates.

- Insert Signature Area
  If digital signatures are enabled in your organization, you can define signature areas.

- Login/Logout
  You can log out and log in if needed.

17.3.3 Microsoft Word for Mac

To use the integration in Microsoft Word for Mac, the Fabasphere Client must be installed and you must add the Office add-in "Fabasphere" from the Microsoft Store to Microsoft Word for Mac ("Insert" menu > "Add-ins" > "Office Store" > "Fabasphere"). The "Fabasphere" area can be opened via the Fabasphere ribbon button.

When using Microsoft Word for Mac, the following functionality is available.

Buttons

You can perform actions in the Fabasphere directly from Microsoft Word for Mac. The "Fabasphere" area offers the corresponding actions depending on the context.

- Send Link
  You can create an e-mail draft with a link to the document in the Fabasphere.

- Show in Web
  Shows the document in the web client.

- Insert Text
  Note: For more information on text modules, see chapter 7.7 "Defining Text Modules" and chapter 7.8 "Using Text Modules".

  - Property
    You can insert certain property values as DocProperties. These must be updated manually.

  - Plain Text Module
    You can insert available text modules unformatted.

- o Formatted Text Module
  You can insert available text modules formatted.

- o Text Module Placeholder
  You can insert text module placeholders in templates.

- o Linked Text Module
  Inserts a linked text module.

- **Replace Text Module Placeholder**
  You can replace the existing text module placeholders of the document with the contents of the text modules.

- **Remove Text Module**
  Removes the selected text module.

- **Modify Text Module**
  Allows the text module to be changed in the context of the current document (if the user is authorized to do so). Text modules that are marked for modification are no longer updated automatically.

- **Reset Text Modules**
  Allows to reset changes of the focused text module or all text modules. The current, released content of the text modules is taken over and the text modules are automatically updated again in the future.

- **Dissolve Text Modules**
  Allows you to dissolve the focused text module or all text modules (change rights required). The current content of the text modules, which may have been changed in the context of the document, is taken over as continuous text and the links are removed.

- **Insert Field**
  You can insert certain property values as updatable fields.

- **Insert Signature Area**
  If digital signatures are enabled in your organization, you can define signature areas.

- **Login/Logout**
  To use the functionality, you need to log in to the Fabasphere for each newly opened document due to technical restrictions.

17.4 Integration in Microsoft Outlook

The integration in Microsoft Outlook gives you the following options.

Note: The "Fabasphere" group is only available if the "Fabasphere Outlook Extension" add-in ("File" > "Options" > "Add-ins") is enabled.

Display Fabasphere Area

On the "Start" tab, in the "Fabasphere" group, you can use the "Home" or "Worklist" button to display your own task area in Microsoft Outlook. This gives you direct access to your home area or worklist.

Upload E-Mails

On the "Start" tab, in the "Fabasphere" group, you can use the "Upload E-Mail" button to import the selected e-mails in a Teamroom or folder. Alternatively, you can use the "Fabasphere" > "Upload E-Mail" context menu command.

Note:

- When choosing the folder using the "Choose Folder" button, you can also create a new Teamroom or folder.

- When uploading encrypted e-mails, you can decide whether to import the e-mail unencrypted, for example, to make it readable by other team members. Encrypted e-mail attachments cannot be decrypted.

Register

On the "Start" tab, in the "Fabasphere" group, you can use the "Register" button to register the selected e-mails for example as digital assets. Alternatively, you can use the "Fabasphere" > "Register" context menu command.

Replace Attachments With Links

When you compose an e-mail, you can upload attachments directly to the Fabasphere and replace them with links. To do so, the "Replace Attachments With Links" button is available on the "Message" tab.

To replace attachments with links, proceed as follows:

1. Compose an e-mail with attachments.

2. Place the cursor at the position where you want to insert the links.

3. Click the "Replace Attachments With Links" button.

4. In the *Folder* field, select a Teamroom or folder where you want to store the attachments. Alternatively, by clicking the "Choose Folder" button, you can navigate to the desired folder or create a new folder or Teamroom. The e-mail recipients are added to the newly created Teamroom with read access rights (can still be adjusted manually).

5. Click the "Add as Link" button, if you want to insert links for Fabasphere users. Click the "Add as Public Link" button, if you want to insert links that do not require authentication in the Fabasphere. The button is only available if the Teamroom allows the creation of public links.

The attachments will be uploaded to the Fabasphere and the links will be inserted in the e-mail.

Access Check

When you compose an e-mail, the "Check Access" button is available on the "Message" tab. This enables you to check whether the recipients have access to the Fabasphere objects linked in the e-mail. You can perform the check manually using the "Check Now" button. Enable the "Always Check on Send" option to perform the check automatically.

Automatically Upload E-Mails

You can connect a folder in Microsoft Outlook to the Fabasphere using the corresponding context menu command. Thereby, you can specify the storage location for the e-mails in the Fabasphere. In addition, you can define whether an own menu for copying or moving e-mails to the folder should be displayed in Microsoft Outlook. When the copy menu is selected, the original e-mails can optionally be assigned a category to indicate whether they have already been copied.

E-mails that are stored in the folder manually or via a client-side rule are imported into the Fabasphere and moved to the wastebasket in Microsoft Outlook.

Note:

- The e-mails must be stored directly in the folder and not in the subfolder with the connection information.
- Server-side Outlook rules are not supported.
- Uploading e-mails in encrypted Teamrooms is not supported.

Contact Synchronization

You can synchronize contacts that you manage in the Fabasphere with Microsoft Outlook. The "Open Fabasphere Address Book" command is available in the context menu of the Fabasphere notification symbol. If you have not yet assigned a password for applications, you can generate one directly. Your address book list is added in Microsoft Outlook under "Contacts" and automatically kept synchronized. With the "Synchronize" context menu command of the Fabasphere notification symbol, you can also perform the synchronization manually.

If you use contact management, you can add contact rooms and address lists to the address book list via the "Add to Address Book List" context menu command. This means that these contacts are also available in Microsoft Outlook.

Note:

- You can find your address book list under "Account menu (your user name)" > "Advanced Settings" > "Address Book". Here you can manage your contacts and create additional address books.
- Contacts can be synchronized from the Fabasphere to Microsoft Outlook and vice versa.
- To enable the synchronized contact folder to be used as an e-mail address book in Microsoft Outlook, for example when sending e-mails, proceed as follows: In Microsoft Outlook, navigate to the desired contact folder (e.g., in the "People" area under "My contacts" or in the "Folders" area under "Contacts"). Enable the "Show this folder as an email address book" option in the properties of the contact folder on the "Outlook Address book" tab.
- If you no longer need the synchronized contacts and want to end the synchronization, delete the corresponding address book list ("Address Book List - <user name>") in Microsoft Outlook. To restart synchronization, execute the "Open Fabasphere Address Book" command in the context menu of the Fabasphere notification symbol.

17.5 Options Dialog

The "Options" dialog of the Fabasphere Client offers the following configuration possibilities:

General

- Account
  Displays the URL of the current Fabasphere installation. Use the "Reset" button to delete all local account settings (including the Fabasphere Folder).
  Note: If you click "fully reset" in the following dialog, you can reset all accounts and directories without checking for local changes. Local changes will be lost.

- Fabasphere Folder
  Displays the base directory of the Fabasphere Folder in your file system.

  o Remove Folder
    If you no longer require the synchronization, you can remove the Fabasphere Folder from the file system by clicking the "Remove Folder" button. This does not affect the objects in the Fabasphere, but not yet synchronized changes in the file system are lost.

  o Select Folder
    Select a new base folder.
    Note: The button is only available, if you have removed the current base folder beforehand via the "Remove Folder" button.

  o Offline
    Select this option to turn off the synchronization temporarily (e.g., to avoid roaming charges).

- Download Folder
  You can define the download folder for downloading multiple documents or folder structures.

  o Use Default
    The default download folder of the system is used.

- Proxy Server

  o Proxy Settings
    Opens the proxy settings of the operating system.

  o Automatic Proxy Login
    Defines whether stored proxy credentials (user name and password) are automatically used for proxy login. This means that if your proxy requires authentication using a user name and password, you only need to enter the credentials once.

- Run Fabasphere Client on System Startup
  Defines whether the Fabasphere Client is started automatically when booting the operating system.

More Options

The "More Options" button takes you to the user-specific settings in the Fabasphere. The default settings are managed by your organization administrator. If necessary, you can apply these via the "Apply Organizational Settings" button.

- Consider in the Web Browser Status
  Defines whether errors are displayed in the web browser status.

- Allow to Open Web Client
  Defines whether the corresponding context menu item is displayed.

- Allow to Open Network Drive
  Defines whether the corresponding context menu item is displayed.

- Allow Contact Synchronization
  Defines whether the corresponding context menu item is displayed.

- Allow to Open Calendar (Apple macOS Only)
  Defines whether the corresponding context menu item is displayed.

- Allow to Open Address Book (Apple macOS Only)
  Defines whether the corresponding context menu item is displayed.

- Synchronization Mode
  Defines the allowed Fabasphere Folder synchronization types.

- Allow Document Exchange via LAN
  Use document exchange via LAN to achieve a significant reduction in the required internet bandwidth and a significantly increased speed. When data in the Fabasphere has changed, all Fabasphere Folders in the local network are contacted first, whether the changed data is already available locally. If this is the case, the data is synchronized over the LAN and not over the internet.

- Trusted Networks for Document Exchange via LAN
  If no network is configured, document exchange via LAN is possible on Microsoft Windows in all private networks and on Apple macOS in all networks.
  If one or more networks are configured, document exchange via LAN is only enabled in these networks (connection to the Fabasphere must be possible). Define one IPv4 address or IPv4 address range per line (in CIDR notation, e.g., 198.51.100.0/24).

- Contents (Microsoft Windows only)
  If you generate a PDF view by default, you still have the option of disabling this option in individual cases when uploading in order to achieve better performance.

  o Generate PDF Preview on the Workstation (Unencrypted Documents)
    You have the option that the PDF view of Office documents is generated locally using Microsoft Office. This has the advantage that the mapping between the Office document and the PDF document is much better than converting the PDF document with LibreOffice on the Fabasphere server.

  o Generate PDF Preview on the Workstation (Encrypted Documents)
    Local generation allows PDF views of Office documents that are encrypted with Fabasoft Secomo (full end-to-end encryption is ensured). The PDF views are transferred to the server encrypted as the documents themselves, and can only be decrypted by users who are authorized in the encrypted Teamroom.

  o Generate Thumbnails Form the PDF Preview on the Workstation (Encrypted Documents)
    Local generation allows thumbnails of Office documents that are encrypted with Fabasoft Secomo.

Bandwidth

The settings apply globally to the device.

- Download Speed
  To limit the download speed for synchronizing, you can specify the maximum bandwidth in kilobytes per second.

- Upload Speed
  To limit the upload speed for synchronizing, you can specify the maximum bandwidth in kilobytes per second.

Certificates (only Ubuntu)

When using a certificate-based authentication under Ubuntu the client certificates have to be stored in the Fabasoft Client.

18 Glossary

Here you find explanations for terms used in this document.

- Button
  Buttons are graphical controls that carry out commands.

- Click
  When you press your left mouse button once and release it again, you achieve a click.

- Clipboard
  The clipboard enables a simple data exchange between programs or different fields of applications within an application. Therefore, you usually copy the data via the "Copy" or "Cut" command into the clipboard and paste it via the "Paste" command to the new location.

- Context menu
  A context menu provides commands, which are reasonable in that current context. Usually you reach the context menu by performing a right-click.

- Double-click
  When you press your left mouse button twice in quick succession, you achieve a double-click (the essential speed depends on the settings of your operating system).

- Drag and drop
  Drag and drop denotes the opportunity of moving objects from one place to another. For that, click the object and keep the mouse button pressed. Move the mouse pointer (with pressed mouse button) to the place, where you want to move the object. Release the mouse button. The object will be inserted at this point (if it is allowed).

- Home
  The top level of the content area is named "Home". Further navigation is possible via widgets.

- Menu
  A menu provides commands of a certain area. You reach these commands by clicking on the menu. Menus are located in the menu bar (not visible by default).

- Object
  In the Fabasphere you work with objects. Objects store different kinds of information. The kind of information depends on the object class of the object.

- Object class
  The object class specifies the properties and methods of an object. For example, the object class *Microsoft Word Document* indicates that objects of this object class can contain Microsoft Word documents.

- Right-click
  When you press your right mouse button once you achieve a right-click. Right-clicks are mostly used to open a context menu at the particular position.

- Selecting
  To select an object (e.g., to carry out an action) click the small checkbox of the object.

- Shortcut
  Keyboard shortcuts are used to execute actions directly by pressing two or more keys at the same time.

- Tab
  Tabs are used to structure information and input fields on different pages.

19 Open Source Licenses

The open source software contained in the Fabasphere is licensed under conditions that require to display the following notes.

A list of the included open source software can be found here:

[Open Source Licenses - Fabasoft Software Products](#)

The corresponding copyright annotations and terms of license can be found here:

[Open Source Licenses](#)