



User Help

Fabasoft Private Cloud

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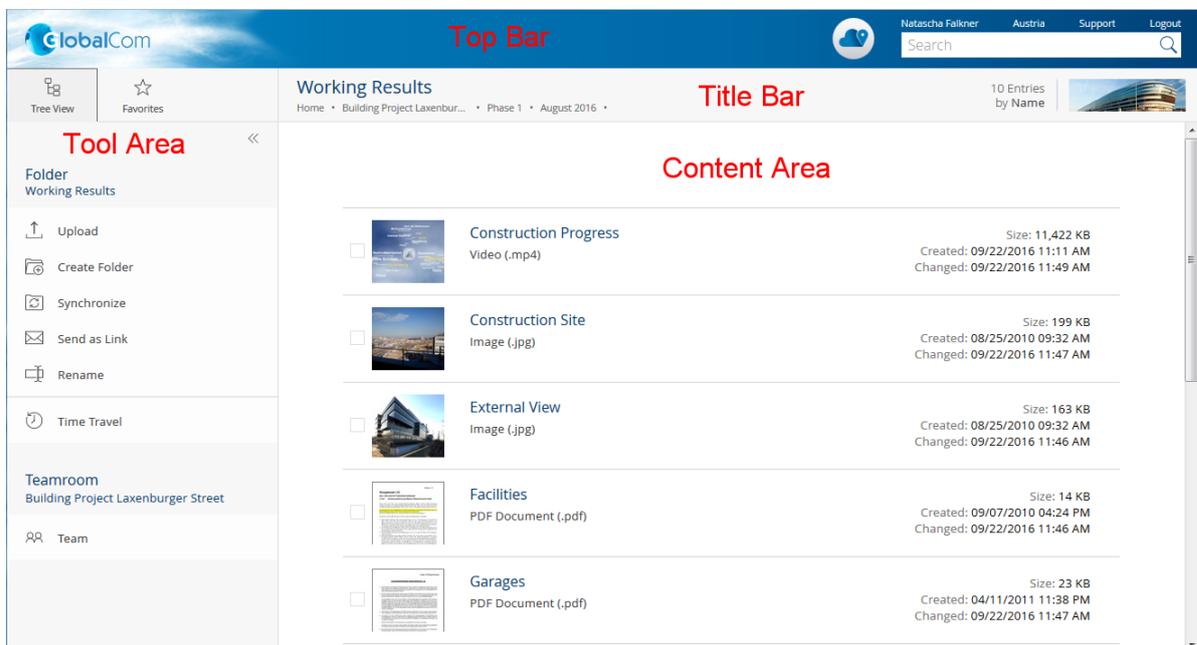
1 Introduction

The Fabasoft Private Cloud lets you create a digital business network for your company based on relationships of trust – for secure cross-company, transnational collaboration in the cloud.

2 The Web Client

An easy-to-use, completely accessible web client is available for accessing the Fabasoft Private Cloud. Further information on accessibility can be found in chapters 16 “Accessibility” and 17 “Keyboard Operations”.

Open your preferred web browser, enter the URL of the Fabasoft Private Cloud and log in with your favorite log-in method. If your web browser is not optimally configured for the use of the Fabasoft Private Cloud, 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, depending on your licensed Fabasoft Cloud Edition:

- 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 (availability depends on licensed edition).
- **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 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 displayed 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".

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 Fabasoft Private Cloud 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.
 - Context menu of objects
Right-click an object in the content area. The context menu of this object is opened.
 - 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.
 - 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 Fabasoft Private Cloud Web Client

To adjust the basic settings (e.g. the language) of the Fabasoft Private Cloud 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: The "Allow Public Links" and "All Team Members May Invite Members" options are disabled by default.

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 Fabasoft Private Cloud Web Client in the corresponding third-party product. As prerequisite the Fabasoft Cloud Client and an appropriate third-party product has to be installed.

Note: To check the status of the Fabasoft Cloud 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 Fabasoft Cloud 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). 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 in the Fabasoft Private Cloud.
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.

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. The objects are downloaded as ZIP archive.

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 14.16 "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.

Note: In the following cases, comments can only be attached via an external PDF viewer: using Fabasoft Cloud Professional, or using a read license.

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.
- For Teamrooms, the following can be defined on the “Content Settings” tab:
 - *Allow Comments*
Defines whether PDF comments can be added to documents of the Teamroom.
 - *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.

3.3.10 Digitally Signing Documents

To digitally sign documents, the following options are available (Enterprise and higher only).

If your cloud 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 cloud 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.

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 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.
4. If you want to add a stamp, click the “Insert Stamp” button.
 - Click on a predefined stamp to insert it.
5. If you want to add a text element, click the “Insert Text Element” button.
 - Click on a predefined text element to insert it. The text can still be modified if necessary.
 - Click “Empty Text Field” to insert a freely definable text.

6. If you want to add a visual signature, click the "Insert Signature" button.
 - 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.
7. Click the "Sign Digitally" button.

Note:

- 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 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.

Signature Areas

To predefine the position and size of visual signatures, signature areas are available. To do so, use the "Define Signature Areas" context menu command on a PDF document.

When inserting a signature area, it can be explicitly assigned to a signer. Thus, signers can jump directly to the corresponding signature area. In addition, a stamp can also be selected that is to be displayed with the signature.

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.

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 item 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.

- 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.
- 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 item 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 item can be used by the responsible user to upload the combined document.

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

"Sign Signature Folder" activity

The "Sign" work item 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.

3.4 Defining Team Members

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

1. Navigate in the desired Teamroom.
2. Click the "Team" 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

- read existing documents,
- only see release versions (if existing),
- create public links and
- add additional team members with read access.

- **Change Access**

These team members can

- change existing documents, create new documents or folders and delete them (wastebasket),
- define Teamroom templates,
- create public links and
- add additional team members with change access or read access.

- **Full Control**

These team members can

- change existing documents, create new documents and delete documents (wastebasket),
- define Teamroom templates,
- create public links,
- empty the wastebasket,
- dissolve the Teamroom,
- define settings regarding access protection, shortcuts, public links, team visibility, invitation possibilities and organization restrictions,
- define logos,
- delete the history,
- read audit log entries,
- change the branding,
- change the organization and
- 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.

- In the properties of a Teamroom, on the “Teamroom” tab, you can define following restriction:
 - *Access Protection*
Defines who is allowed to access the Teamroom. By default, only the specified team is allowed to access the Teamroom.
 - *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.
 - *Holiday Table*
Defines the holiday table to be used in the Teamroom context (otherwise the default holiday table is used).
 - *Default Thesaurus for New Terms*
If a default thesaurus is specified, new terms can be created directly during tagging.
 - *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 With Read Access Visible to All Members*
Defines whether all team members of the team are allowed to see the members with read access. If the setting is disabled, the team members with read access are only visible for members with "Full Control". Note that disabling this setting also restricts other use cases:
 - Only team members with “Full Control” have access to the “Team” action and can start processes.
 - Events can generally be deactivated for team members who are not allowed to see the team. Otherwise, only events will be displayed that do not allow conclusions to be drawn about team members with read access.
 - Team members with read access cannot use remarks, public comments, signatures, processes or comment on news feeds.
 - Team members with read access cannot be selected as participants in processes.
 - Team members with read access cannot create public links.
 - *Display Notifications for Users Without Rights to View the Team*
Defines whether events for team members who are not allowed to see the team are generally disabled. Otherwise, only events are displayed that do not allow any conclusions to be drawn about team members with read access.
 - *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 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 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.

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:

4. Locate the object, which should be assigned to another Teamroom.
5. On the context menu click “Tools” > “Change Teamroom”.
6. 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.
7. 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.
 - "Default"
The Teamroom and its content can only be read by team members.
 - "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.
 - "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.
 - "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, in the *Allow Public Links* field you can define whether public links can be published. You can use the *Block Downloading of Content* field to prevent that the "Download" button is offered for public links (even if they already exist).
- 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. You can also retrieve an access report.
- 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 Cloud.
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: If you have licensed "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.

On the "Orphan Objects" tab ("Teamroom" > "Properties") you can find objects that are assigned to the Teamroom but no longer stored in the Teamroom. Due to performance reasons, the list of orphan objects is not displayed, if the Teamroom contains too many objects.

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:

- 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".
- The "Show New Events" action leads to the timeline and 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).

3.16 Hierarchical Teamroom Relations

In order to manage hierarchies of Teamrooms easily and clearly, relations between Teamrooms are available as metadata. The relations are displayed on the "Relations" and "Relation (incl. Hierarchy)" tabs.

Note:

- The tabs are 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 data is transferred. The synchronization of encrypted Teamrooms is only possible when using encrypted file systems.

- 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.
- When creating new documents in the web client, the documents are only encrypted after content is added.
- Uploading or downloading documents in encrypted Teamrooms is now also possible without the Fabasoft Cloud Client.
 - Preview images are also available.
 - The size of the documents is limited to 100 MB.
 - A maximum of 5 documents can be downloaded at the same time.
- Working with encrypted Teamrooms is also possible without an installed Fabasoft Cloud 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 Fabasoft Cloud Client:
 - The document size is limited to 100 MB.
 - A maximum of 5 files can be downloaded at the same time.

3.18 Transferring a Teamroom

To relocate the processing of a Teamroom in another data location, in the cloud or private cloud, you can transfer Teamrooms (Enterprise and higher only). 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 cloud domain".
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 Cloud 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, to the cloud or private cloud (Enterprise and higher only).

To publish a Teamroom, proceed as follows:

1. On the context menu of the Teamroom click “Publish Teamroom” > “name of the cloud domain”.
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.
- 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 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.

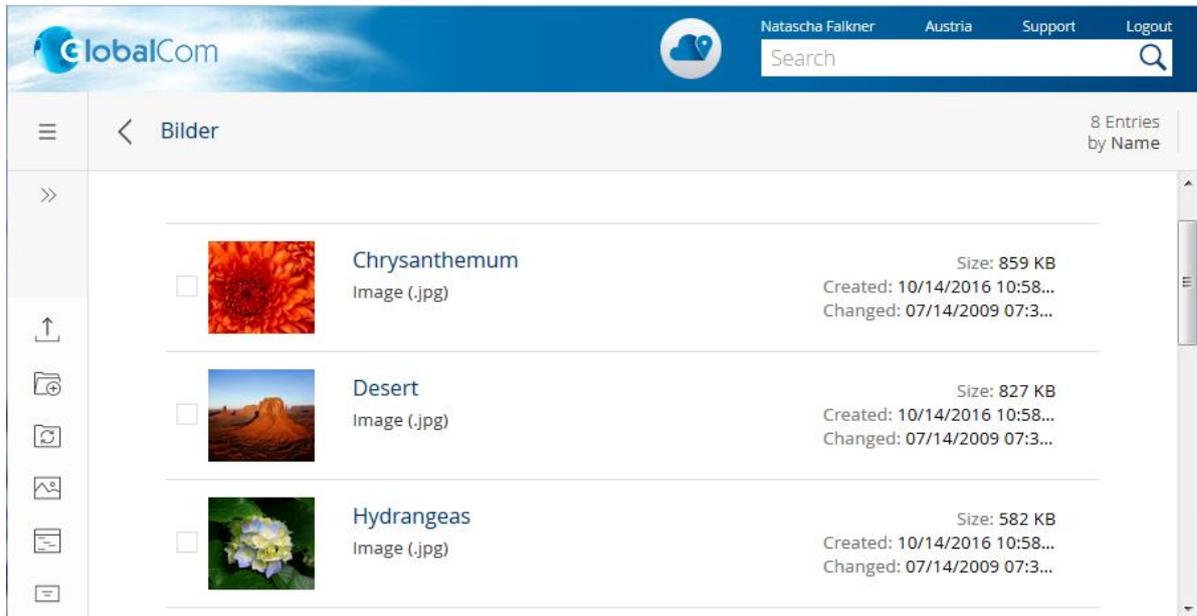
4 Working with Lists

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 17.5 “Content Area”.

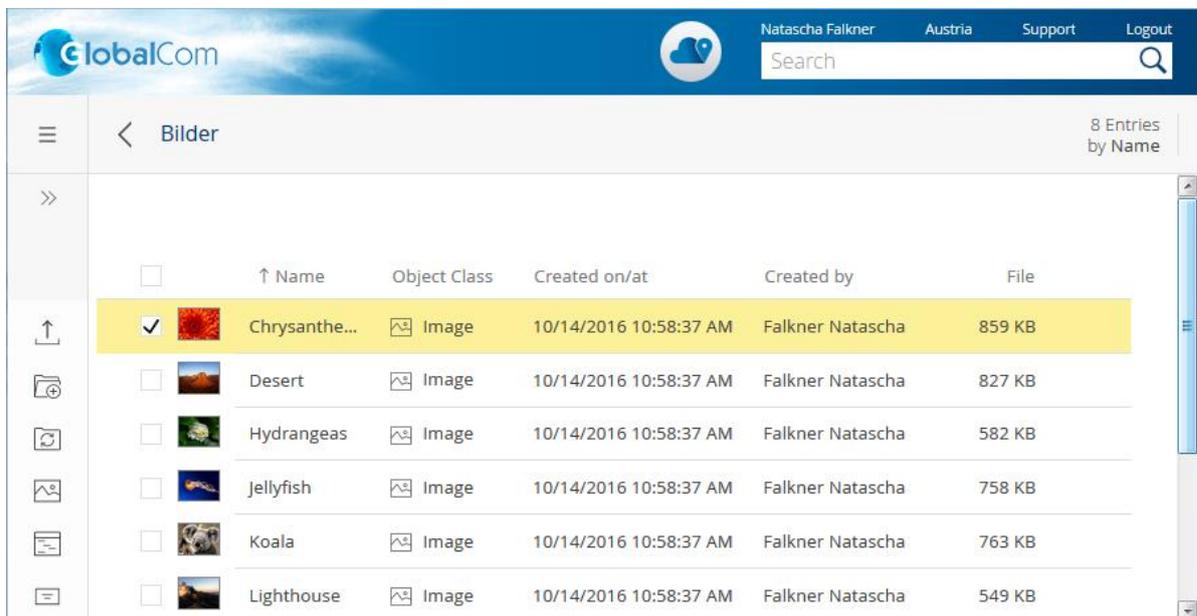
Content View

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



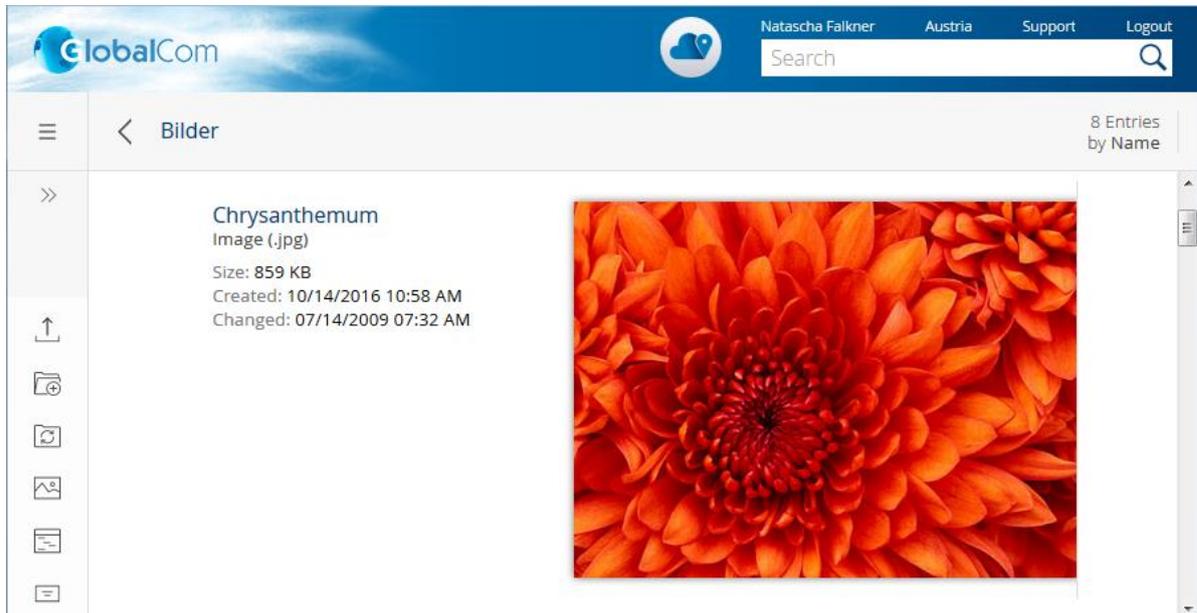
Detail View

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". If "Customizing" is not licensed for you, not all options are available.

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 All Users
- Create New Display Setting
 - *Save as*

The display settings can be saved at different levels. The display setting actually used is determined by the following evaluation hierarchy:

 - For This Object for all Users
If you have change rights, you can change the display setting for all users.
 - 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".
 - Room
Display settings can be saved in the current Teamroom or shelf.
 - Configuration
If the room is based on a configuration, the display settings can be saved in the configuration.
 - Presetting Collection
Display settings can also be stored in a presetting collection to which you are authorized ("Customizing" required).
 - *Name*

Assign a name to the new display setting.
 - *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
 - *Existing Display Setting*

Select a display setting to overwrite.
 - *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.

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 Objects Within 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 number of entries 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. When using the values filter, all rows that correspond to the selected values are displayed.

Note:

- 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".
- 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.

To add a column, proceed as follows:

1. Select the object in the list that provides the property you want to add.
2. Open the context menu of a column in the column header.
3. Click "Add Column".
4. 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 Fabasoft Private Cloud and pasted e.g. in Microsoft Excel. Pasting values from third-party products in the Fabasoft Private Cloud 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.

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 Workflow

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

Typical processes are approval and release processes.

5.1 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.

5.2 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:
 - 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".
 - 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 items are displayed in the properties and in the info box. For each work item, the following additional information is displayed if it applies:
 - Multiple
 - Must Be Executed
 - Completes Activity
 - Conditionally Visible
 - With Precondition
 - Executed by (for activity instances)
 - 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.
 - Process Initiator
The participant who starts the process.

- Current User
The participant who has executed the previous activity or for the first activity, the participant who has started the process.
- Property of the Object
The participants are evaluated based on a property of the object (e.g. *Last Signature by*).
- 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.
- 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*).
- 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.
- Property of the Teamroom of the Object
The participant is evaluated based on a property of the object's Teamroom.
- 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")

5.3 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.

5.4 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.

5.5 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.

5.5.1 Executing a Work Item of an Activity

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

- One or more work items of the activity can be defined such that they complete the activity. The process flow continues after executing the work item.
- A mandatory work item (bold) has to be executed before an activity can be completed. If only mandatory work items are still available that also complete the activity, only one of these work items must be executed.
- A repeatable work item can be executed repeatedly.

To execute a work item, proceed as follows:

1. Navigate in the work list in the “To Do” list.
2. Localize the desired activity.
3. Click the desired work item. Depending on the work item, 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)

5.5.2 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.

5.5.3 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.

5.5.4 Adding an Activity

The context menu command "Add New Activity" of an activity can be used to add ad hoc activities to the process. When adding new activities the current activity is completed. If mandatory work items 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.

5.5.5 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.

5.5.6 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.

5.5.7 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.

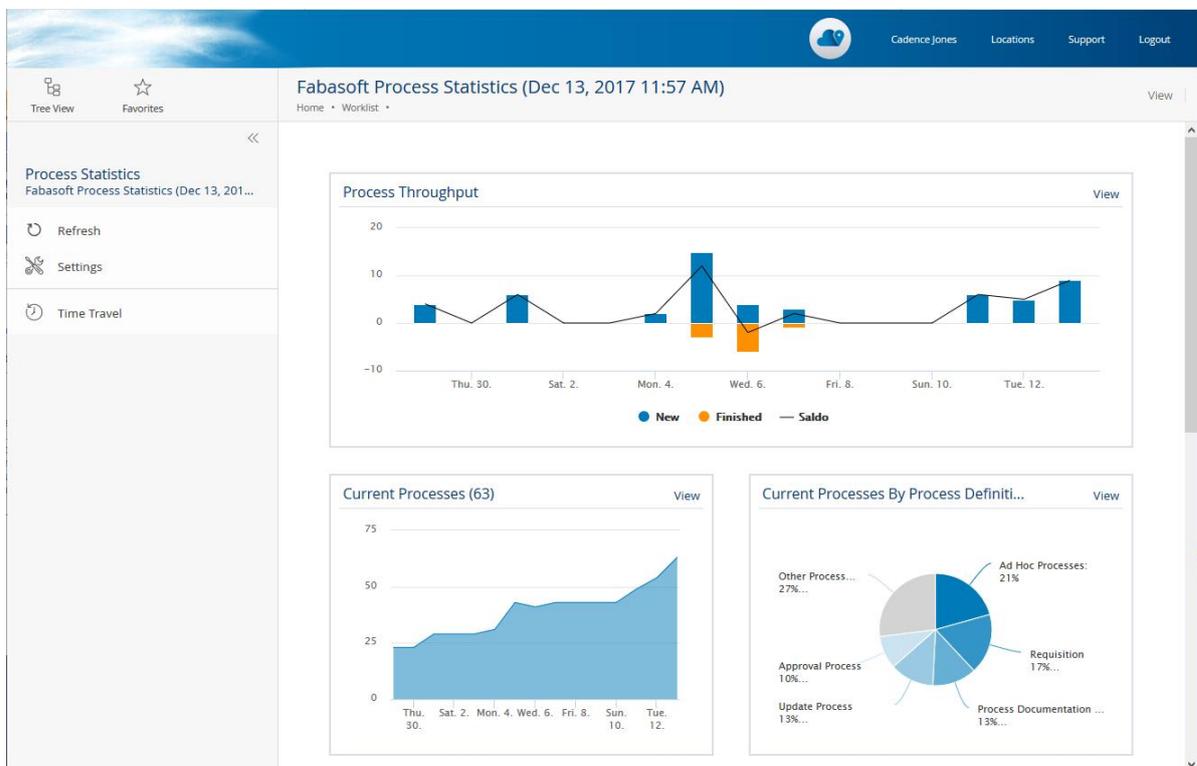
Note: The process owner can be defined on the "BPMN Process Diagram" tab of a BPMN process diagram.

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.

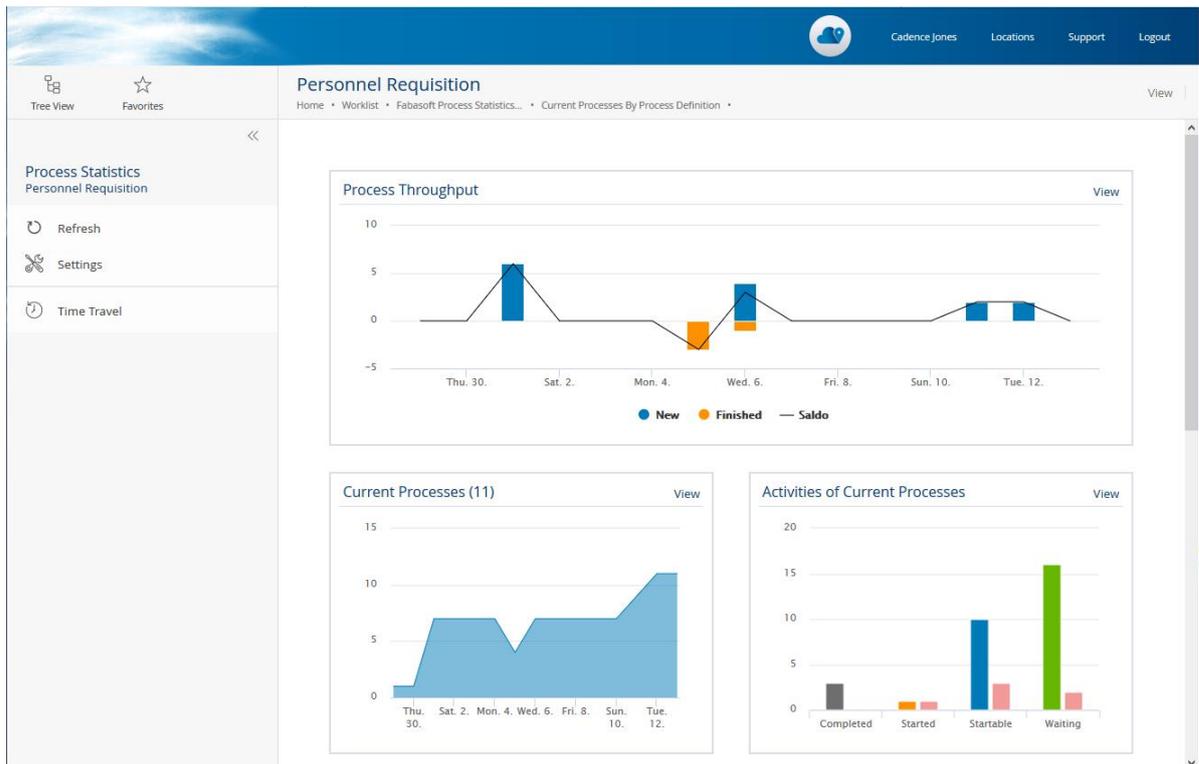
- **Running Processes per Process Definition**
Shows the percentage breakdown of the process definitions of the running processes.
- **Current Activities**
Shows the percentage breakdown of the current activities of the running processes.
- **Delayed Activities**
Shows the percentage breakdown of the 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.

5.5.8 Substitution

The Fabasoft Cloud offers the possibility to 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: 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.

5.6 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 Fabasoft Cloud 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 Timespan in Days (Instead of a Date)*
Defines whether deadlines are entered in days instead of a date.
- *Show Deadlines for Prescriptions 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.

5.7 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 Fabasoft Private Cloud Workflow Engine.

5.7.1 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 process collection 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.

5.7.2 Working With the BPMN Editor

In the graphical BPMN editor, besides the modeling of the process, cloud 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 cloud 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.

 - 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. 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 *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.
 - 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 Fabasoft Private Cloud 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 Fabasoft Private Cloud activity and one or more participant assigned. When carrying out a process the tasks are displayed in the worklists of the corresponding users.
 - 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.
 - The *Started Activity Remain in All Worklists* 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.
 - The *Ignore Completion* field can be used to define whether subsequent activities can be started although this activity has not yet been completed.
 - The *Skip Invalid Participant* field can be used to define whether the activity is skipped for an invalid participant (e.g. inactive user, missing license).
 - 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.
 - The *Disable Substitution* field can be used to define whether the activity may be executed by a substitute.
 - The *Escalation* field defines escalation rules for this activity. If the standard escalation is used, a reminder e-mail is sent if the start or completion date is exceeded.
 - 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.
 - 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.
- 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);`
- 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.appducx.fabasoft.com/doc/Reference-Documentation/props-fscdiagrameditor.htm#FSCDIAGRAMEDITOR_1_1001_eventpropscondition
- 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.
 - Expanded subprocess
An expanded subprocess is embedded in the process as structuring element.
 - 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. `IsValidParticipant` 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.

5.7.3 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 cloud 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 Customizing

You can adapt the Fabasoft Cloud to your requirements by means of model-based customizing (Enterprise and higher only).

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 cloud 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.

6.1 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.
- **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).

6.2 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.

6.3 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.
- *Stylesheets*
Shows the available Xeditor stylesheets.
- *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 12.1.2 "General Configuration Settings".

6.4 Collections for Templates and Presettings

Collections are used to manage templates, text modules, insight apps, forms, categories, processes, presettings and to define access rights ("Team" 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.

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 12.2.1 “General Shelf Settings”.

Access Rights

- Full Control
Users with full control can create, edit and delete templates and presets.
- Change Access
Users with change access can create and edit templates and presets.
- Read Access
Users with read access can only use templates and presets 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 presets in general.

Note:

- Only users are offered the templates and presets. If you are a user with change access and want to use the templates, you must also be defined as a user.
- 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.

6.5 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 presets 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 “Fabasoft Cloud” tab. In the submenu you will find the available fields according to your definitions.

Text Module Placeholders

Text module placeholders can also be inserted in Word templates, which are 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 “Fabasoft Cloud” tab. The placeholder is displayed as a hyperlink to the text module. Thus, the text can also be easily viewed via the template.

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.

Template Folders

With the “Create Template Folder” action you can create a folder to structure the templates. The folders have no influence on the display in the create dialog.

6.6 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.

6.7 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.

“Availability” 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.

- *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.

- *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.

“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.

Text Module Folders

With the “Create Text Module Folder” action you can create a folder to structure the text modules.

6.8 Using Text Modules

When you edit the Word document, you will find the “Insert Text” button on the “Fabasoft Cloud” tab. In the submenu click either “Text Module Unformatted” or “Text Module Formatted”. 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 inserted in a Word template are replaced by default when creating a document based on the template. If it is defined for the text module that the text module placeholder should not be replaced automatically, you can replace it afterwards using the “Replace Text Module Placeholder” button.

6.9 Defining and Using Insight Apps

Insight apps provide aggregated access to information in your cloud 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 14.15 “Insight Apps”.

6.10 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 13.1 “Forms” and 13.2 “Categories”.

6.11 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 5.2 “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 5.7.2 "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.

6.12 Using Processes

The defined processes are offered for selection when using processes (e.g. "Tools" > "Start New Process").

6.13 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.

6.14 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.

6.15 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.

7 Contact Management

The contact management allows you to create and manage contacts in contact rooms (Enterprise and higher only). 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 cloud 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 14.19 “Auditing”.

Note: The contact management may have to be enabled by an organization administrator (Organization > Licenses > Editions and Apps > Contact Management with assignment *Configured (Inactive)* > “Enable” action).

7.1 Contacts Dashboard

The contacts dashboard provides your access point to the 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.

7.2 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 12.1 “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.

- **Team**
The “Team” 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.
Note: Based on the specified users the consumed licenses of the respective service package are calculated.

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 12.1 “Configurations”.

7.3 Contact Rooms

Contact rooms are used for the structured administration of contacts and to define access rights (“Team” 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.

7.4 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 7.6 “Duplicate Check”).

7.5 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 7.6 "Duplicate Check").

7.6 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.

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.

7.7 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.
 - Case 1: Select the target contact room and click "Change Assignment".

- 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 "Team" action.

7.8 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.

7.9 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
<i>objexternalkey</i>	Import ID	String To fill fields with several lines (e.g. addresses), you can specify several lines with the same external key (<i>objexternalkey</i>) in the CSV file.
<i>objclass</i>	Object Class	String (ContactRoomOrganisation)
<i>externaldatasource</i>	External Data Source	String
<i>objcategory</i>	Category	Import ID or short reference of a category (e.g. <i>FormCategory_3_2875</i>).
<i>orgname</i>	Name	String
<i>orgnameext</i>	Name (Extended)	String list
<i>address.addrstreet</i>	Addresses (Street)	String
<i>address.addrpostofficebox</i>	Addresses (P.O. Box)	String
<i>address.addrzipcode</i>	Addresses (Zip Code)	String
<i>address.addrcity</i>	Addresses (City)	String
<i>address.addrstate</i>	Addresses (State)	String

address.adrcountry	Addresses (State)	String
address.adrtopic	Addresses (Type)	Short reference of an address type (e.g. TermBusiness, TermPrivate)
emailinformation.emailaddress	E-Mail Addresses (E-Mail Address)	String
emailinformation.adrtopic	E-Mail Addresses (Type)	Short reference of an address type (e.g. TermEMail1, TermEMail2)
telephone.telnumber	Telephone Numbers (Telephone Number)	String
telephone.adrtopic	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.adrstreet	Addresses (Street, Business)	String
addressbusiness.adrpostoffice box	Addresses (P.O. Box, Business)	String
addressbusiness.adrzipcode	Addresses (Zip Code, Business)	String

addressbusiness.addrcity	Addresses (City, Business)	String
addressbusiness.addrstate	Addresses (State, Business)	String
addressbusiness.adrcountry	Addresses (Country, Business)	String
addressinvoice.addrstreet	Addresses (Street, Invoice)	String
addressinvoice.addrpostofficebox	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.adrcountry	Addresses (Country, Invoice)	String
addressprivate.addrstreet	Addresses (Street, Private)	String
addressprivate.addrpostofficebox	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.adrcountry	Addresses (Country, Private)	String
orgsuppliernr	Supplier Number	String
orgcustomernr	Customer Number	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
<code>objexternalkey</code>	Import ID	String To fill fields with several lines (e.g. addresses), you can specify several lines with the same external key (<code>objexternalkey</code>) in the CSV file.
<code>objclass</code>	Object Class	String (<code>ContactRoomPerson</code>)
<code>externaldatasource</code>	External Data Source	String
<code>objcategory</code>	Category	Import ID or short reference of a category (e.g. <code>FormCategory_3_2875</code>).
<code>userfirstname</code>	First Name	String
<code>persmiddlename</code>	Middle Initial	String
<code>usersurname</code>	Surname	String
<code>persposttitle</code>	Post Title	String
<code>persawardedtitle</code>	Awarded Title	String
<code>persjobtitle</code>	Job Title	String
<code>persacademictitle</code>	Academic Title	String
<code>persnickname</code>	Nickname	String
<code>perssex</code>	Sex	String (<code>SEX_FEMALE</code> or <code>SEX_MALE</code>)
<code>persbirthday</code>	Date of Birth	Date
<code>perssalutations.salutation</code>	Salutations (Salutation)	String

perssalutations.addrtopic	Salutations (Type)	Short reference of a salutation type (either <code>TermFormalSalutation</code> or <code>TermPersonalSalutation</code>)
persmothertongue	Mother Tongue	Short reference of a system language (e.g. <code>LANG_GERMAN</code> , <code>LANG_ENGLISH</code>)
commlanguage	Language for Communication	Short reference of a system language (e.g. <code>LANG_GERMAN</code> , <code>LANG_ENGLISH</code>)
address.addrstreet	Addresses (Street)	String
address.addrpostofficebox	Addresses (P.O. Box)	String
address.addrzipcode	Addresses (Zip Code)	String
address.adrcity	Addresses (City)	String
address.addrstate	Addresses (State)	String
address.adrcountry	Addresses (State)	String
address.addrtopic	Addresses (Type)	Short reference of an address type (e.g. <code>TermBusiness</code> , <code>TermPrivate</code>)
emailinformation.emailaddress	E-Mail Addresses (E-Mail Address)	String
emailinformation.addrtopic	E-Mail Addresses (Type)	Short reference of an address type (e.g. <code>TermEMail1</code> , <code>TermEMail2</code>)
telephone.telnumber	Telephone Numbers (Telephone Number)	String
telephone.addrtopic	Telephone Numbers (Type)	Short reference of an address type (e.g. <code>TermBusiness</code> , <code>TermFax</code>)
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.adrcity	Addresses (City, Business)	String
addressbusiness.adrstate	Addresses (State, Business)	String
addressbusiness.adrcountry	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.adrcity	Addresses (City, Invoice)	String
addressinvoice.adrstate	Addresses (State, Invoice)	String
addressinvoice.adrcountry	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.adrcity	Addresses (City, Private)	String
addressprivate.adrstate	Addresses (State, Private)	String

<code>addressprivate.addrcountry</code>	Addresses (Country, Private)	String
<code>persfunctionbc</code>	Function According to Business Card	String
<code>perssupervisor</code>	Supervisor	String
<code>persassistant</code>	Assistant	String
<code>persmainorgname</code>	Name of the Organization	String
<code>persfunctions</code>	Functions	Import IDs of terms separated by a carriage return
<code>persmainorg</code>	Main Organization	Import ID of an organization
<code>perscurremployments.emplorg</code>	Current Organizations (Organization)	Import ID of an organization
<code>perscurremployments.emplfunction</code>	Current Organizations (Function)	String
<code>perscurremployments.emplfrom</code>	Current Organizations (From)	String
<code>perscurremployments.emplto</code>	Current Organizations (To)	String
<code>perspastemployments.emplorg</code>	Previous Organizations (Organization)	Import ID of an organization
<code>perspastemployments.emplfunction</code>	Previous Organizations (Function)	Import ID of a term
<code>perspastemployments.emplfrom</code>	Previous Organizations (From)	String
<code>perspastemployments.emplto</code>	Previous Organizations (To)	String
<code>persconsentdeclarations</code>	Declarations of Consent	Import IDs of terms separated by a carriage return
<code>overridekeys</code>	-	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.

7.10 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.

7.11 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 15.5 "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 cloud log-in as the user name and the generated password for applications as the password.

The cloud contacts are now displayed in the third-party product and can be edited if applicable.

Note: The “Open Cloud Address Book” context menu command of the Fabasoft Cloud notification symbol can be used to include the address book list in Microsoft Outlook.

7.12 Serial E-Mails

Via a serial e-mail you can send personalized e-mails to defined recipients from the contact management.

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:
 - [=addressee_FSCFOLIO_1_1001_FieldAddrSurName]
 - [=addressee_FSCFOLIO_1_1001_FieldAddrFirstName]
 - [=addressee_FSCFOLIO_1_1001_FieldAddrSalutation]
 - [=addressee_FSCFOLIO_1_1001_FieldAddrSexSalutation]
 - [=addressee_FSCFOLIO_1_1001_FieldAddrStreet]
 - [=addressee_FSCFOLIO_1_1001_FieldAddrPostOfficeBox]

- [=addressee_FSCFOLIO_1_1001_FieldAddrZipCode]
- [=addressee_FSCFOLIO_1_1001_FieldAddrCity]
- [=addressee_FSCFOLIO_1_1001_FieldAddrTitle]
- [=addressee_FSCFOLIO_1_1001_FieldAddrContact]
- [=addressee_FSCFOLIO_1_1001_FieldAddrCountry]
- [=addressee_FSCFOLIO_1_1001_FieldTelNumber]
- [=addressee_FSCFOLIO_1_1001_FieldOrganization]
- [=addressee_FSCFOLIO_1_1001_FieldAddrState]
- [=addressee_FSCFOLIO_1_1001_FieldMiddleName]
- [=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.

8 Digital Asset Management

The digital asset management provides advanced management capabilities for digital content (Enterprise and higher only).

Note: The digital asset management may have to be enabled by an organization administrator (Organization > Licenses > Editions and Apps > Digital Asset Management with assignment *Configured (Inactive)* > “Enable” action).

The user help can be found here:

<https://help.privatecloud.fabasoftware.com/index.php?topic=doc/User-Help-Fabasoftware-Digital-Asset-Management-eng/index.htm>

9 Change and Asset Management

The change and asset management enables you to create and manage change processes. This allows carrying out adaptations to an IT infrastructure in a controlled, efficient and risk-minimized manner.

In addition, problem records can be managed and processed using a problem management process. IT asset shelves are used to manage the inventory passed to employees.

Note: Available in the Fabasoftware Cloud Superior. The change and asset management may have to be enabled by an organization administrator (Organization > Licenses > Editions and Apps > Change and Asset Management with assignment *Configured (Inactive)* > "Enable" action).

9.1 Dashboard

The change and asset management dashboard provides your point of access to the change and asset management.

When you are added to at least one RFC or problem record shelf or you are added to the configuration and at least one IT asset shelf exists, a dashboard is automatically created and stored on "Home". If you are removed again, the dashboard is also removed.

The change and asset management dashboard is divided into the following areas for users:

- *My Requests for Change*
Shows the RFCs that you created.
- *My Problem Records*
Shows the problem records that you created.
- *My Assets*
Shows the assets handed over to you.
- *Track List*
Shows the objects that you have added via the "Add to Tracklist" context menu command.
- *Standard Change*
Shows the requests for change that have been defined as standard changes (only visible if at least one standard change exists). This allows you to efficiently request RFCs for routine tasks ("Request Standard Change" context menu command).

If you are at least a processor in a shelf, the following additional areas are available:

- *Release Packages*
Shows the release packages of the RFC shelves in which you are at least "Processor".
- *All Requests for Change*
Shows the RFCs that you created and the RFCs of the RFC shelves in which you are at least "Processor".
- *All Problem Records*
Shows the problem records that you created and the problem records of the problem record shelves in which you are at least "Processor".

- *RFC Shelves*
Shows all RFC shelves. You can only view RFCs in the shelves in which you are at least “Processor”.
- *Problem Record Shelves*
Shows all problem record shelves. You can only view problem records in the shelves in which you are at least “Processor”.
- *CMDB and IT Asset Shelves*
Shows all CMDB shelves (Configuration Management Database) and IT asset shelves. You can only view the items in the shelves in which you are authorized.

You can perform the following actions:

- **Create Request for Change**
With the “Generate Request for Change” action you can create an RFC for a change to be made.
- **Create Problem Record**
With the “Create Problem Record” action you can create a problem record that documents the details of a problem.
- **Create Release Package**
With the “Create Release Package” action you can create a release package. Release packages can be referenced in RFCs and thus define the execution time.
- **Create Multiple Assets**
With the “Create Multiple Assets” action you can create multiple assets of the same type in one step.
- **Switch to Configuration**
With the “Switch to Configuration” action you can view the configuration that is associated with the dashboard.
- **Settings**
With the “Settings” action you can define common properties of the dashboard like the logo or notification setting.

9.2 Configuration

In the change and asset management configuration, you as app administrator can manage the shelves, artifacts and general settings.

Areas

The configuration is divided into the following areas:

- *RFC Shelves*
Shows the available RFC shelves.
- *Problem Record Shelves*
Shows the available problem record shelves.
- *CMDB and IT Asset Shelves*
Shows the available CMDB and IT asset shelves.
- The general areas can be found in chapter 12.1 “Configurations”.

Actions

You can perform the following actions:

- **Create RFC Shelf**
With the “Create RFC Shelf” action you can define a new RFC shelf.
- **Create Problem Record Shelf**
With the “Create Problem Record Shelf” action you can define a new problem record shelf.
- **Create CMDB Shelf**
With the “Create CMDB Shelf” action you can define a new CMDB shelf.
- **Create IT Asset Shelf**
With the “Create IT Asset Shelf” action you can define a new IT asset shelf.
- **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**
With the “Settings” action you can define further configuration settings.

Settings

The general settings can be found in chapter 12.1 “Configurations”.

9.3 RFC Shelves

RFC shelves are used to manage RFCs and to define access rights (“Team” action).

Settings

“RFC Shelf” tab

- *Close Shelf*
No new RFCs can be created in a closed shelf.
- *Preferred Change Manager*
When creating an RFC, the preferred change manager is initially stored in the *Change Manager of the Affected Systems* field.

Additional tabs

- The additional settings can be found in chapter 12.2 “Shelves”.

Access Rights

- **Full Control**
Users with full control can authorize users, manage RFCs and release packages, and edit shelf settings. They can also be selected as change or release managers (if no change managers have been defined).
- **Change Manager**
Change managers can manage RFCs and release packages and can be selected as change or release managers.
- **Processor**
Processors can manage RFCs and release packages and can be selected as change or release managers (if no change managers have been defined).
- **User**
Users can create RFCs and access the RFCs they created themselves.

9.4 CMDB Shelves

CMDB shelves (Configuration Management Database) are used to manage artifacts and to define access rights ("Team" action). The artifacts can be assigned to RFCs.

The artifacts can be created in the following folders: Servers, Virtual Machines/Servers, IT Services, Application Services, Network Components, Locations, Cluster and Checks.

Access rights

CMDB shelves offer the standard roles "Full Control", "Change Access" and "Read Access".

9.5 IT Asset Shelves

IT asset shelves are used to manage the inventory passed to employees and to define access rights ("Team" action). Assets can be handed over to or handed back by employees through a workflow.

The assets can be created in the following folders: Computers, Monitors, Mobile Devices, SIM Cards, Landline Telephones, Printers, Scanners, Tokens, Keys, Access Cards, Docking Stations, Cars, Video conferencing Systems Credit Cards, Licenses, Data Media, Robots, Webcams, Headsets and Others. The workspace can be used to create arbitrary objects.

Actions

You can perform the following action:

- Determine Assets
With the "Determine Assets" action you can discover all assets of an employee base on the *Asset Owner* or *Hand Over Asset to* fields.

Settings

"IT Asset Shelf" tab

- *IT Assets Are Managed By*
Defines who manages the assets (is evaluated in the workflow).
- *Takeover Information*
Defines the multilingual text that is displayed in the workflow at the "Accept Take-Over" step.

Additional tabs

- The additional settings can be found in chapter 12.2 "Shelves".

Access rights

IT asset shelves offer the standard roles "Full Control", "Change Access" and "Read Access".

9.6 Problem Record Shelves

Problem record shelves are used to manage problem records and define the access rights ("Team" action).

Settings

"Problem Record Shelf" tab

- *Close Shelf*
No new problem records can be created in a closed shelf.

Additional tabs

- The additional settings can be found in chapter 12.2 “Shelves”.

Access rights

- Full Control
Users with full control can authorize users, manage problem records and edit shelf settings.
- Processors
Processors can manage problem records.
- Users
Users can create problem records and access the problem records they created themselves.

9.7 Creating a Request for Change

Requests for change (RFCs) are used to request a change. A request for change has the following fields (not all fields are available directly when they are created):

- *Name*
Defines the name of the RFC.
- *Initiator*
Defines the user who requests the RFC.
- *RFC Shelf*
The RFC is assigned to the specified RFC shelf.
- *Priority*
Defines the priority of the RFC.
- *Earliest Date*
Defines the earliest point in time at which the RFC can be implemented productively.
- *Latest Date*
Defines the latest point in time until which the RFC must be implemented productively.
- *Ranking*
Can be used to rank the RFCs in the list view.
- *Hotfix*
Defines whether it is a hotfix.
- *Description*
Defines the steps to be implemented.
- *Reason*
Defines the reason for the RFC.
- *Expected Result*
Defines the result after the implementation.
- *Risks*
Describes the risks.
- *Affected Systems*
Defines the systems affected by the implementation.

- *Additional Information*
Additional information can be added as objects.
- *Change Manager of the Affected Systems*
The defined user receives the workflow activities intended for the change manager.
- *Responsible for Accomplishment*
The defined user receives the workflow activities intended for the release manager.

Note:

- As a processor, you can use the "Set as Standard Change" context menu command to define an RFC as a template for routine tasks. The request is made using the "Request Standard Change" context menu command.
- The "Create Request for Change" action is also available for tickets, stories and defects.

9.8 Change Process

A typical change process can be performed as follows:

1. A user creates a request for change.
2. The user executes the "Request Change" action.
3. The responsible change manager receives the "Approve Request for Change" activity and executes the "Approve Change" step.
4. The responsible change manager receives the "Release Planning" activity and executes the "Approve for Tests" step. A team responsible for tests must be selected.
5. All members of the selected team receive the "Prepare Release" activity. The members can perform the "Start tests", "Further Tests Required" and "Tests Completed" steps.
6. After the tests have been completed, the responsible release manager receives the "Approve Release" activity and performs the "Approve Release for Implementation" step.
7. After the release preparation has been approved, the responsible release manager receives the "Scheduling" activity and executes the "Release for Implementation" step.
8. After the process planning has been released, the team responsible for the implementation receives the "Deployment" activity and executes the "Implementation Completed" step. The implementation can only be completed if all RFCs have the status "Implemented" or "Implementation Failed".
9. After the implementation has been completed, the responsible reviewer receives the "Review Release Package" activity and executes the "Close Release" step.
10. If the release manager was not the person who performed the review, he receives the "Close Request for Change" activity and performs the "Close" step.
11. Finally, the RFC requester, change manager and release manager receive the "Request for Change Closed" activity if they have not already received this information via another activity.

9.9 Managing IT Assets

The inventory handed over to employees can be managed using assets. The following use cases can be performed:

Creating and Editing IT Assets

In IT asset shelves, user with change rights can create and edit assets.

Using Fields in Word Documents

In Word documents that are stored in the *Documents* field of an asset, especially the following fields can be inserted of the asset: Owner, Location, Inventory Number, Manufacturer, Model, and Serial Number.

Hand Over Assets

The “Hand Over Asset” action allows users with change rights and asset owners to specify the new asset owner. The new asset owner receives the “Take Over Asset” activity in the worklist. The new asset owner can either confirm or reject the take-over.

Note:

- If the take-over is confirmed, the status of the asset is changed to “Active” and the user in the *Hand Over Asset to* field is moved to the *Asset Owner* field.
If an asset owner hands over the asset, the asset owner is informed after the take-over has been confirmed.
- If the take-over is rejected, the user is removed from the *Hand Over Asset to* field and the asset manager or process initiator receives the “Asset Take-Over Denied” activity.

Hand Back Assets

The “Hand Back Asset” action allows users with change rights and asset owners to hand back an asset. The asset manager receives the “Take Back Asset” activity in the worklist. The new asset owner can either confirm or reject the take-back.

Note:

- If the take-back is confirmed, the status of the asset is changed to “In Stock” and the user in the *Hand Over Asset to* field is moved to the *Asset Owner* field.
The former asset owner is informed after the take-back has been confirmed.
- If the take-back is rejected, the user is removed from the *Hand Over Asset to* field and the asset manager or process initiator receives the “Asset Take-Back Denied” activity.

Overview of Assets

In the “Workspace” folder, users with change rights can create a search folder. Specify “IT Asset” as selection in the search pattern. If you add the *Hand Over Asset to*, *Asset Owner* and *State* columns, you get an overview of all assets.

9.10 Creating a Problem Record

Problem records are used to document the details of a problem. A problem record provides the following fields (not all fields are available when they are created):

- *Name*
Defines the name of the problem record.
- *Problem Record Shelf*
The problem record is assigned to the specified problem record shelf.
- *Priority*
Defines the priority of the problem record (low to immediate).
- *Severity*
Defines the severity of the problem (low to high).

- *State*
Shows the state of the problem record.
- *Problem Manager*
The defined user receives the workflow activities intended for the problem manager.
- *Description of Symptoms*
Defines the symptoms of the problem.
- *Solution*
Defines a possible solution to the problem.
- *Affected Systems*
Defines the systems affected by the problem.
- *Known Error Record*
Problem records that already describe the problem as known can be added as objects.
- *Related Incidents*
Incidents can be added as objects.
- *References*
Additional information can be added as objects.

Note: The “Create Problem Record” and “Assign Problem Record” actions are available for tickets.

9.11 Problem Management Process

A typical problem management process can be performed as follows:

1. The problem management process can be started via the “Start Problem Management” action in the problem record.
2. The responsible problem manager receives the “Classify Problem Record” activity and executes the “Assign” step.
Note: Another problem manager can be selected with the “Redirect” step. With the “Close” step the problem record can be closed.
3. The person defined in the “Assign” step receives the “Edit Problem Record” activity and executes the “Complete with Workaround” or “Complete with Solution” step and enters a solution proposal.
4. The responsible problem manager receives the “Review Problem Record” activity and executes the “Close” step.
Note: With the “Assign” step a responsible person can be selected again if necessary.

10 Purchase

The purchase management enables you to conduct an efficient, digital purchase process. With the help of forms and processes, the purchase management can be adapted to the needs of your organization. The following description assumes a standard purchase process (see chapter 10.9 “Purchase Process”).

Note: Available in the Fabasoft Cloud Superior. The change and purchase management may have to be enabled by an organization administrator (Organization > Licenses > Editions and Apps > Purchase with assignment *Configured (Inactive)* > “Enable” action).

10.1 Dashboard

The purchase dashboard provides your access point to the purchase management.

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

The purchase dashboard (purchasing department, accounting) is divided into the following areas:

- *Requirement Requests*
Shows the requirement requests from the shelves in which you are authorized.
Possible action: Create Requirement Request
- *Orders*
Shows the orders from the shelves in which you are authorized.
Possible action: Create Order
- *Goods Receipts*
Shows the goods receipts from the shelves in which you are authorized.
Possible actions: Upload, Scan and Create Goods Receipt
- *Invoices*
Shows the invoices from the shelves in which you are authorized.
Possible actions: Upload, Scan and Create Invoice
- *Recently Used*
Shows the objects that you have recently used.
- *Shelves*
Shows all the shelves in which you are authorized.

Note: Only objects that have not been archived are displayed.

You can perform the following actions:

- Create Requirement Request
With the "Create Requirement Request" action you can create a requirement request and thus start a purchase process.
- Create Goods Receipt
With the "Create Goods Receipt" action you can create a goods receipt that must be assigned to an order.
- Create Invoice
With the "Create Invoice" action you can create an invoice that must be assigned to an order.
- Switch to Configuration
With the "Switch to Configuration" action you can view the configuration that is associated with the dashboard.
- Settings
With the "Settings" action you can define common properties of the dashboard like the logo or notification setting.

Note: As an employee, you will only see the requirement requests widget with your own requirement requests.

10.2 Configuration

In the purchase configuration, you as app administrator can manage the shelves, artifacts and general settings.

Areas

The configuration is divided into the following areas:

- *Shelves*
Shows the available shelves.
- *Product Groups*
Shows the available product groups. The following fields allow product groups to influence the purchase process:
 - *Specialist Department*
The specialist department can be used in the purchase process to determine the process participants.
 - *Direct Order Possible*
Defines whether a direct order can be placed without being forwarded to the purchasing department (influences the steps in the "Approve Requirement" activity).
 - *Stock Possible*
Defines whether the item group can be in the stock (influences the steps of the activity "Approve requirement").
 - *Stock Manager*
Stock managers can be used in the purchase process to determine the process participants.
 - *Close Product Group*
Defines whether the product group can be used for new requirement requests.
 - *Change Access for Requirement Requests with this Product Group*
Change access to individual requirement requests with this product group can be extended using this field.
 - *Read Access for Requirement Requests with this Product Group*
Read access to individual requirement requests with this product group can be extended using this field.
 - *Default Categories*
Overrides the configuration and shelf settings for requirement requests of this product group.
 - *Default Processes*
Overrides the configuration and shelf settings for requirement requests of this product group.
- *Suppliers*
Suppliers are managed in the contact management (see chapter 7 "Contact Management"). You can create additional suppliers in this widget, but they are assigned to a contact room.
- *Ordering Companies*
Companies are managed in the contact (see chapter 7 "Contact Management"). You can create further companies in this widget, but they are assigned to a contact room.
- The general areas can be found in chapter 12.1 "Configurations".

Actions

You can perform the following actions:

- **Create Shelf**
With the “Create Shelf” action you can define a new shelf.
- **Create Product Group**
With the “Create Product Group” action you can define a new product group.
- **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**
With the “Settings” action you can define further configuration settings.

Settings

“Purchase Configuration” tab

- *Archive Requirement Requests*
Defines whether requirement requests are archived.
- *Archive Setting for Requirement Requests*
Defines with which status and after what period requirement requests are archived.
- *Archive Orders*
Defines whether orders are archived.
- *Archive Setting for Orders*
Defines with which status and after which period orders are archived.

Additional tabs

- The additional settings can be found in chapter 12.1 “Configurations”.

10.3 Shelf

Shelves are used to manage requirement requests, orders, goods receipts, invoices and to define access rights (“Team” action).

Areas

The shelf is divided into the following areas:

- *Requirement Requests*
Shows the requirement requests of the shelf.
Possible action: Create Requirement Request
- *Orders*
Shows the orders of the shelf.
Possible action: Create order
- *Goods Receipts*
Shows the goods receipts of the shelf.
Possible actions: Upload, Scan and Create Goods Receipt
- *Invoices*
Shows the invoices of the shelf.
Possible actions: Upload, Scan and Create Invoice

Settings

“Shelf” tab

- *Close Shelf*
No new requirement requests can be created in closed shelves.

Additional tabs

- The additional settings can be found in chapter 12.2 “Shelves”.

Access Rights

- **Full Control**
Users with full control can authorize users, manage requirement requests, orders, goods receipts and invoices and can edit shelf settings.
- **Accounting**
The accounting has change rights to orders and invoices, but only has read rights to requirement requests and goods receipts.
- **Purchasing**
The purchasing department has the right to change requirement requests, goods receipts and orders, but only has read rights to invoices.
- **User**
Users can create requirement requests and access the requirement requests they have created themselves.

10.4 Requirement Requests

Employees can start a purchase process using requirement requests. After the requirement request has been created, the status of the requirement request is “In Preparation” and the user receives the “Prepare Requirement Request” activity in the worklist.

The following fields are available by default (can be extended by user-defined forms):

“Requirement Request” tab

- *Shelf*
If several shelves are available, one can be selected when creating.
- *Service/Material*
Describes the requested service or material.
- *Amount*
Sets the amount.
- *Product Group*
The product group can influence the available fields and the purchase process.
- *Total Cost (Net)*
Defines the total cost of the requirement request.
- *Reason (Who/What)*
The reason for the requirement request can be entered as free text.
- *Description*
A further description can be entered as free text.
- *Supplier*
Defines the supplier.

- *Documents*
Documents, such as offers, can be stored.
- *Remarks*
Defines the remarks for the requirement request.

“Delivery” tab

- *Organization*
The field is pre-initialized and displayed if an "ordering company" can be determined from the company that is assigned to the position of the current user using the external key. Otherwise, the field is not visible.
- *User*
Shows the ordering user.
- *Delivery Address*
Defines the delivery address for the requirement request.

10.5 Order

Once a requirement has been approved, the purchasing department can create an order. To do this, the responsible user receives the “Edit Requirement Request” activity in the worklist. An order can be created using the “Create Order” step.

The following fields are available:

- *Order Number*
Defines the order number.
- *Ordering Company*
Defines the ordering company.
- *Order Documents*
The stored order documents can be sent to the supplier in further consequence.
- *Supplier*
Defines the supplier.
- *Estimated Delivery Date*
Defines the expected delivery date.
- *Requirement Request*
The order must be assigned to a requirement request.
- *User*
Shows the user who created the requirement request.
- *Organization*
If defined, the organization is copied from the requirement request.
- *Description*
Defines the description.
- *Amount*
Defines the amount ordered.
- *Service/Material*
Defines the ordered service or material.
- *Product Group*
Shows the product group of the requirement.

- *Total Cost (Net)*
Defines the total cost of the order.
- *Documents*
Further documents can be stored with the order.
- *Remarks*
Defines the remarks of the order.

Via the “Upload” or “Scan” action order documents, goods receipts and invoices can be added to the order.

Via the “Edit Order” activity and the “Send Order” step, an e-mail with the order can be sent directly to the supplier. Existing data such as e-mail address and order documents are automatically preselected and can still be edited if necessary.

Once the corresponding goods receipts and invoices have been assigned, the order can be completed with the “Done” step.

10.6 Goods Receipt

For a delivery, you can create a goods receipt that is assigned to an order in the “Goods Receipts” widget.

The following fields are available:

- *Name*
The name of the goods receipt.
- *Order*
The goods receipt must be assigned to an order.
- *Product Group*
Shows the product group of the order.
- *Estimated Delivery Date*
Shows the estimated delivery date of the order.
- *Supplier*
Shows the supplier of the order.
- *Delivery Date*
Defines the actual delivery date.
- *Delivery Type*
Defines the type of delivery (e.g. partial delivery).
- *Serial Number*
Defines a serial number for the goods receipt.
- *Inventory Number*
Defines an inventory number for the goods receipt.
- *Delivery Notes*
Delivery notes can be added as documents.
- *Storage Location*
Defines the storage location for the goods.

10.7 Invoice

An invoice, which is assigned to an order, can be created for a delivery in the “Invoices” widget.

The following fields are available:

- *Name*
The name of the invoice.
- *Order*
The invoice must be assigned to an order.
- *Product Group*
Shows the product group of the order.
- *Invoice Number*
Defines the invoice number.
- *Date*
Defines the date of the invoice.
- *Total Cost (Net)*
Defines the total cost of the invoice.
- *Supplier*
Defines the supplier.
- *Documents*
The invoice can be added as a document.

10.8 Registering

Documents can be registered as order documents, goods receipts or invoices. You do this either by carrying out the corresponding steps in the worklist or using the “Register as” context menu command. Thereby the corresponding metadata for the documents can be entered.

10.9 Purchase Process

The purchase process differs from organization to organization. Therefore, you have to define the required BPMN processes by yourself.

Basically, the following applies: The purchase workflow begins with an employee's requirement request and goes through defined approvals by superiors. If the appropriate permissions are present, then the order can be accomplished by the purchasing department. With the goods receipt the delivery note is stored for the order. The invoice is also stored for the order.

In particular, the following activity definitions can be used for the purchase process:

- **Prepare Requirement Request**
The creator of the requirement request can use this activity to check the requirement request again and forward it for approval.
 - Open
 - Forward for Approval (next status: For Approval)
 - Discard (next status: Discarded)
- **Approve Requirement Request**
The user responsible for the approval (for example, the superior) can approve the requirement request.

- Open
- Further Information Required
- Approve (next status: Approved)
- Decline (next status: Declined)
- Approve Requirement Request (Specialist Department)
The specialist department responsible for the approval can approve the requirement request or, if the article group is appropriate, can select "Check Stock" (the stock manager receives an activity) or "Direct Order" (no forwarding to the purchasing department).
 - Open
 - Further Information Required
 - Check Stock (next status if in stock: In Stock)
 - Direct Order (next status: Ordered)
 - Approve (next status: Approved)
 - Decline (next status: Declined)
- Edit Requirement Request
Allows creating an order. The activity cannot be completed until at least one order has been created and completed.
 - Open
 - Further Information Required
 - Create Order
 - Done (next status: Ordered)
- Edit Order
Allows sending the order.
 - Open
 - Send Order
 - Cancel
 - Done
- Further Information Required
If the working step "Further Information Required" is carried out for the other activities, this activity is prescribed.
 - Open
 - Reply
 - Discard

The processing status of the requirement request can be used for case distinctions in the purchase process:

- In Preparation
- For Approval
- Approved
- Discarded
- Declined

- In Stock
- Ordered

11 Outgoing Invoices

The outgoing invoice management allows to administer outgoing invoices. Using forms and processes, the outgoing invoice management can be customized to meet the needs of your organization.

Using a web service, a draft invoice can be uploaded to the Fabasoft Cloud from an ERP system and an approval process can be started. The approval status can be queried in the ERP system and changed or newly added documents can be transferred to the ERP system. The original invoice sent via the ERP system can in turn be transferred to the Fabasoft Cloud.

Note: Available in the Fabasoft Cloud Superior. The outgoing invoice management may have to be enabled by an organization administrator (Organization > Licenses > Editions and Apps > Outgoing Invoices with assignment *Configured (Inactive)* > "Enable" action).

11.1 Dashboard

The outgoing invoice dashboard provides your access point to the outgoing invoice management.

When you are added to an outgoing invoice configuration as an app user, a dashboard is automatically created and stored on "Home". If you are removed again as an app user, the dashboard is also removed.

The outgoing invoice dashboard is divided into the following areas:

- *Current Outgoing Invoices*
Shows the current outgoing invoices to which you have access.
- *Recently Used Outgoing Invoices*
Shows the outgoing invoices that you have recently used.
- *Shelves*
Shows all shelves in which you are authorized.

You can perform the following actions:

- **Create Outgoing Invoice**
With the "Create Outgoing Invoice" action you can define a new outgoing invoice.
- **Switch to Configuration**
With the "Switch to Configuration" action you can view the configuration that is associated with the dashboard.
- **Settings**
With the "Settings" action you can define common properties of the dashboard like the logo or notification setting.

11.2 Configuration

In the outgoing invoice configuration, you as app administrator can manage the shelves, artifacts and general settings.

Areas

The configuration is divided into the following areas:

- *Shelves*
Shows the available shelves.
- *Profit Center*
Shows the available profit centers. In the outgoing invoice a profit center can be defined to which the invoice is assigned.
- *Companies*
Shows the available companies. In an outgoing invoice a company can be defined that issues the invoice.
- The general areas can be found in chapter 12.1 “Configurations”.

Actions

You can perform the following actions:

- **Create Shelf**
With the “Create Shelf” action you can define a new shelf.
- **Create Profit Center**
With the “Create Profit Center” action you can define a new profit center. In addition to the name, you can also define users who have read or change access to outgoing invoices assigned to the profit center.
- **Create Company**
With the “Create Company” action you can define a new company. In addition to the name, you can also define users who have read or change access to outgoing invoices assigned to the company.
- **Import Project Assignment**
With the “Import Project Assignment” action you can utilize a CSV file to define assignments of project number, profit center, approver and additional users with read access.
Note: You can download a sample file by clicking the “Download CSV Template” button. Multi-value properties can be filled by specifying several lines with the same project number. Users can be defined by e-mail address or import ID. Teams can also be defined via the import ID.
- **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**
With the “Settings” action you can define further configuration settings.

Settings

“Outgoing Invoices Configuration” tab

- *Externally Managed Master Data*
Defines the master data of an outgoing invoice, which can only be changed via an import.
Note: Whether an outgoing invoice is managed externally is determined by the field *Externally Managed*.

“Project Assignment” tab

- *Project Assignment*
Defines the assignments of project number, profit center, approver and additional users with read access. The project assignment is considered when importing outgoing invoices via the web service.

Additional tabs

- The general settings can be found in chapter 12.1 "Configurations".

11.3 Shelf

Shelves are used to manage outgoing invoices and to define access rights ("Team" action).

Settings

The general settings can be found in chapter 12.2 "Shelves".

Access Rights

Outgoing invoice shelves offer the standard roles "Full Control", "Change Access" and "Read Access".

11.4 Outgoing Invoice

In an outgoing invoice, the invoice documents and additional attachments can be stored in addition to the metadata.

The following fields are available:

"Outgoing Invoice" tab

- *Name*
The name of the outgoing invoice.
- *State*
Shows the state of the outgoing invoice (must be set in the workflow).
 - *In Progress*
The outgoing invoice is not approved.
 - *Approved*
The outgoing invoice is approved.
 - *Released*
The outgoing invoice is released.
 - *Closed*
The original invoice is available.
 - *Discarded*
The outgoing invoice has been discarded.
- *Type*
Defines the type of the outgoing invoice (e.g. "Invoice", "Credit Note" or "Down Payment").
- *Externally Managed*
Defines whether the fields defined in the configuration in the *Externally Managed Master Data* field are displayed read-only.
- *Remarks*
Shows the remarks if remarks are available ("Remarks" tab).

- *Booking Date*
Defines the booking date.
- *Net Value*
Defines the net value.
- *Invoice Number*
Defines the invoice number.
- *External Invoice Number*
Defines the external invoice number.
- *External Invoice*
If an invoice exists that corresponds to the external invoice number, it will be displayed (invoice number must be unequal to the external invoice number).
- *Project Number*
Defines the project number.
- *Order Number*
Defines the order number.
- *Company*
Defines the company that issues the outgoing invoice. Companies are managed in the configuration.
- *Profit Center*
Defines the profit centers that are assigned to the invoice. Profit centers are managed in the configuration.
- *Debitor*
Defines an organization from the contact management as invoice recipient.
- *Debitor Name*
If no debitor is selected, the debitor name can be entered as free text.
- *Debitor Number*
If no debitor is selected, the debitor number (customer number) can be entered as free text.
- *End Customer*
Defines the customer for whom the product or service is finally intended.
- *Approver*
Defines the approver for the approving process.
- *Users With Read Access*
The defined users get read access to the outgoing invoice.
- *Invoice (Draft)*
Defines the invoice draft for approving.
- *Invoice (Original)*
Defines the original invoice.
- *Invoice (Copies)*
Defines copies of the invoice.
- *Attachments*
Defines additional documents.

Actions

You can perform the following actions:

- Open
Allows to check the metadata and the invoice document.
- Close
If an *Invoice (Original)* exists, the outgoing invoice can be closed.
- Discard
Discards the outgoing invoice (status: Discarded).
- Start New Process
Starts an ad hoc or predefined process.

Inbox

For example, the original invoice can also be assigned via an inbox (see also 13.4 “Inbox”). To do this, create a rule in the inbox with two actions:

- Assign Category (Incoming Category for Outgoing Invoice Documents)
- Assign (Asynchronous)
The QR code or PDF keywords of the invoice must contain either the cloud ID or the invoice number of the outgoing invoice.

11.5 Approval Process

The approval process varies from organization to organization. Therefore, you have to define the required BPMN processes by yourself.

Basically, an outgoing invoice is forwarded to the defined approver for approval. The approver can approve or discard the outgoing invoice. If necessary, a second approval can be obtained, for example, from the “Invoicing” management.

Especially the following activity definitions can be used for the approval process. The subsequent status can be defined as an expression when completing the activity.

- Forward for Approval
With this activity, the outgoing invoice can be checked again and forwarded for approval.
 - Open
 - Forward for Approval
 - Discard (subsequent status: Discarded)
- Approve
The user responsible for approval can approve the outgoing invoice.
 - Open
 - Approve (subsequent status: In Progress or Approved, if no further approval is necessary)
Example (Expression When Completing the Activity):

```
import COOSIGNATURE@1.1;
import FSCFOLIOWF@1.1001;
if (object.lastsigned == #SIGN_APPROVE) {
    object.ObjectLock(true, true);
    object.FSCINVOICEMGMT@1.1001:oistate = 2; //OIS_APPROVED
}
```
 - Deny Approval (subsequent status: In Progress)
- Take Note
This activity informs that the outgoing invoice has been approved.
 - Open

- Take Note (subsequent status: Released)

11.6 Web Service Interface

Outgoing invoices can be uploaded and updated from an ERP system via a web service.

Further information can be found here:

<https://help.cloud.fabasoft.com/index.php?topic=doc/Fabasoft-Cloud-Web-Services/outgoing-invoice.htm>

12 General Settings in Configurations and Shelves

The following applications provide the general settings described here:

- Customizing
- Contact Management
- Digital Asset Management
- Change and Asset Management
- Purchase
- Outgoing Invoices

12.1 Configurations

The configurations provide the following general configuration settings.

12.1.1 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".

Insight Apps

Insight apps provide aggregated access to information in your cloud 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 14.15 "Insight Apps".

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 13.1 "Forms" and 13.2 "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 5 “Workflow”.

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.

To define a template category for templates, proceed as follows:

1. In the configuration, navigate in the “Templates” area.
2. Click the “Define Template Categories” action.
3. In the *Template Categories* field, enter the desired name for the template category and click “Click here to create the entered template category”.
4. 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".

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.

Thesauri

This area shows the thesauri provided by the configuration, which allow keywording.

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.

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".

12.1.2 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 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 (`coobj.Trace("string");` or `coobj.Trace("string", value);`).

“Logos” tab

The defined logos and the background image are used for the configuration and for all personal dashboards.

“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.

12.2 Shelves

The shelves offer the following general settings. When evaluating the settings, the shelf hierarchy is taken into account in addition to the configuration.

12.2.1 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 With Read Access Visible to All Members*
Defines whether all team members of the team are allowed to see the members with read access. If the setting is disabled, the team members with read access are only visible for members with "Full Control". Note that disabling this setting also restricts other use cases.
- *Display Notifications for Users Without Rights to View the Team*
Defines whether events for team members who are not allowed to see the team are generally disabled. Otherwise, only events are displayed that do not allow any conclusions to be drawn about team members with read access.
- *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 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 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 (`coobj.Trace("string");` or `coobj.Trace("string", value);`).

"Logos" tab

The defined logos are used for the shelf.

"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.

12.2.2 Templates and Presettings

Via the “Templates and Presettings” action, you can access the following areas.

Insight Apps

Insight apps provide aggregated access to information in your cloud 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 14.15 “Insight Apps”.

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 13.1 “Forms” and 13.2 “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 5 “Workflow”.

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.

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.

13 Advanced Use Cases

You can create user-defined forms and process documents automatically.

13.1 Forms

With the graphical form editor you can create new forms with drag-and-drop and extend objects with new properties without programming knowledge (Enterprise and higher only).

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.

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
- 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: The type of a field cannot be changed after the form is published.

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.

“Display” tab

- Control (the used control, based on the field type, is displayed read-only)
- Compute control styles
- Compute control options

Additional information can be found here:

- Expressions
<https://help.cloud.fabasoft.com/index.php?topic=doc/Model-Based-Customizing/index.htm>
- Control styles and control options
<https://help.appducx.fabasoft.com/index.php?topic=doc/Reference-Documentation/controls-overview.htm>

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:

- `coobj.Trace("string");`
- `coobj.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).

13.1.1 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".
 - Enter a multilingual name.
 - Define a base form, if you want to take over tabs and fields of another form.
 - 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.
 - Define a base class to specify the base properties of the default template. For example, if you select "Document With User Data", the *File* field is available in the default template of the form.

When choosing “Container With User Data”, you can also specify whether it is a file. The reference to the file is saved for the subordinate objects. 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 provided automatically.

- If you specify a symbol, it will be displayed instead of the object class symbol for objects that have the form assigned.
 - Abstract forms cannot be used directly but serve as base forms.
 - 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 “Tools” > “Export Form” context menu command. You can import a form with the “Import Form” action or the “Tools” > “Export Form” context menu command.

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 = coobj.totalpayment;
if (@installment.currvalue) {
    // switch based on the ID of paymentfrequency
    switch (coobj.paymentfrequency) {
        case 1:
            @installment /= 12;
            break;
        case 2:
            @installment /= 4;
            break;
        case 3:
            @installment /= 2;
            break;
    }
}
@installment;
```

Further information on expressions can be found in the white paper "[An Introduction to Fabasoft app.ducx](#)".

13.1.2 Metadata of a Form

You can also make the following settings in the properties of a form.

"Advanced" tab

You can define processing states that can be selected in the standard field *Processing State*. In addition, you can specify a name build for the names of objects based on the form.

"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 Fabasoft Private Cloud, you can provide translations for the names and context-sensitive help. For each multilingual name of the form, you will find a corresponding entry.

13.1.3 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)*.

13.1.4 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 13.2 "Categories".

13.1.5 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".
 - Enter a multilingual name.
 - 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:
 - *Key for Unique Lists*
Defines the properties that are used as keys for unique aggregate lists.
 - *Key for Sorting Lists*
Defines the properties that are used as keys for sorting aggregate lists.
 - *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://help.appducx.fabasoft.com/index.php?topic=doc/Reference-Documentation/control-fschighcharts-CTRLHighcharts.htm>

6. Click "Next" twice to complete the editing.

13.2 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.

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 14.14 "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 13.3 "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.

13.3 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
- 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).

- Define Property Value
A value is assigned to a property of the incoming object.
 - Assign Category
The specified category is assigned to the incoming object.
 - Classify With Mindbreeze InSpire
The incoming objects are classified. Based on the classification, a category is assigned to the object.
 - OCR Text Recognition (Asynchronous)
For documents that can be converted to PDF, text recognition can be performed.
 - Start Process
The specified process is started on the incoming object.
 - Assign (Asynchronous)
The incoming document can be assigned based on QR code or PDF keywords. By default, the *Fabasoft Cloud 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.
 - *Translated with www.DeepL.com/Translator (free version)*
 - *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.

13.5 Classifying and Registering

The Fabasoft Private Cloud in conjunction with Mindbreeze InSpire allows you to automatically classify documents and extract metadata (Enterprise and higher only). 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 InSpire 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 Mindbreeze InSpire 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.

13.5.1 Prerequisites

The classification requires a Mindbreeze InSpire service, which can be configured by the organization administrator (for more information, see the administration help).

13.5.2 Using Categories

The classification value calculated by Mindbreeze InSpire 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).

13.5.3 Using Forms

User-defined forms (see chapter 13.1 "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 InSpire 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 InSpire keys, your organization administrator must enter the corresponding mapping in the Mindbreeze InSpire service.

13.5.4 Inbox

Documents can be classified automatically via the inbox. To do so, you can define a rule that performs the “Classify With Mindbreeze InSpire” action (see also chapter 13.4 “Inbox”).

13.5.5 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 InSpire and opens the appropriate registration form.
- Registering
Opens the registration form.
- Do not register
Removes the activity from the worklist without performing a registration.

13.5.6 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 licensed 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.

13.6 Form Inbox

The form inbox allows you to capture data using an HTML form and store it in the Fabasoft Private Cloud. 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 *Fabasoft Cloud 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:
 - Attribute: `action`
Value: `https://at.cloud.fabasoft.com/foiliop/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.
 - Attribute: `method`
Value: `post`
 - Attribute: `accept-charset`
Value: `UTF-8`
 - Attribute: `enctype`
Value: `multipart/form-data`
3. Define a hidden field named `objectclass` and specify the *Fabasoft Cloud 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:
 - Folder: `COODESK@1.1:Folder`
 - PDF Document: `FSCACROBAT@1.1:PDFObject`
 - Microsoft Word Document: `COOMSOFFICE@1.1:WinWordObject`
 - Microsoft Excel Worksheet: `COOMSOFFICE@1.1:ExcelObject`
 - Microsoft PowerPoint Presentation: `COOMSOFFICE@1.1:PowerPointObject`
 - Generic Content: `GENCONT@1.1:ContentObject`
 - 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 *Fabasoft Cloud 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 *Fabasoft Cloud 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
<code>objectclass</code>	Required field (as long as <code>objecttemplate</code> is not used): Defines the <i>Fabasoft Cloud ID</i> 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.
<code>objecttemplate</code>	Only evaluated if <code>objectclass</code> does not exist. Defines the <i>Fabasoft Cloud ID</i> 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 cloud organization as the form inbox object. A template must be either a <i>Document</i> (<code>ContentObject</code>), an <i>Object With Object List</i> (<code>CompoundObject</code>) or a <i>Basic Object</i> (<code>BasicObject</code>).
<code>inbox</code>	Required field: Defines the <i>ID</i> of the form inbox. Alternatively, the <i>Fabasoft Cloud ID</i> of the form inbox can be used.
<code>redirect</code>	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.
<code>errorredirect</code>	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 <code>redirect</code> . 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 <code>errorcode</code> and <code>error</code> parameters.
<code>redirecttype</code>	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 <code>http-equiv="REFRESH"</code> . 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".
<code>objname</code>	Defines the name of the created object.
<code>objsubject</code>	Defines the subject of the created object.

objcategory	<p>Defines the category of the created object.</p> <p>If an <code>objcategory</code> is specified, fields that are assigned to the category can also be submitted as HTML fields. The <i>Programming Name</i> 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 “<i>Applicable for</i>”). Categories created by a user form can only be used if they belong to the same cloud organization as the form inbox.</p>
content	<p>Allows uploading a file, which is then stored in the <i>File</i> field of the generated object.</p> <p>This is only possible if the <i>File</i> property is assigned to the object class specified as <code>objectclass</code>. The relevant HTML field must be of type <code>file</code>. 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 <code>accept</code> attribute in the input field to restrict the selection to specific file types. Only one file can be uploaded via this field.</p>
attachmentkeys	<p>Defines the names of the HTML fields (separated by a comma) for submitting additional files.</p> <p>For the uploaded files, documents are instantiated in the Fabasoft Private Cloud, which are then stored in the property specified in the <code>attachmentattrdef</code> field of the instance of <code>objectclass</code>. The specified HTML fields must be of type <code>file</code>. If a value is specified in the <code>attachmentkeys</code> field, it is also necessary to provide a value for <code>attachmentattrdef</code>. 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.</p>
attachmentattrdef	<p>Defines the <i>Fabasoft Cloud ID</i> or the full reference of the property, in which additional uploaded documents are stored.</p> <p>If a value is specified in the field <code>attachmentattrdef</code>, you also have to provide the <code>attachmentkeys</code>. For object class <i>Folder</i> (<code>COODESK@1.1:Folder</code>), provide the <code>COOSYSTEM@1.1:objchildren</code> property.</p>
<Reference/Fabasoft Cloud ID of other properties>	<p>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 <i>Fabasoft Cloud ID</i> (e.g. <code>COOSYSTEM@1.1:objexternalkey</code>).</p>

Note:

- You can find the *Fabasoft Cloud 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 *Fabasoft Cloud 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 should be shown after the form was
processed 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="CODESK@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>
```

14 Additional Features

The Fabasoft Private Cloud provides following additional features.

14.1 Permanent Login

With the help of a device binding, you can remain permanently logged in to the Fabasoft Cloud 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 Cloud App and on a workstation with Fabasoft Cloud Client installed.

Fabasoft Cloud App

When logging in to the Cloud 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 to the Fabasoft Cloud, 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 Fabasoft Cloud Client

You can also perform a device binding on a workstation with installed Fabasoft Cloud Client. To do so, click on the link "Log in your device in the Fabasoft Cloud" 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 Fabasoft Cloud on the corresponding device, you will be prompted to log in again.

14.2 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.

14.3 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 cloud 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 cloud 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.

14.4 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.

14.5 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.

14.6 Working with a WebDAV Client

The Fabasoft Private Cloud supports the platform-independent WebDAV standard. This way it is possible to access documents in the Fabasoft Private Cloud via WebDAV client applications (e.g. Microsoft Windows Explorer or Apple Finder).

The data is accessible via following WebDAV URL: <URL of the private cloud>/cloud/webdav

Example: `https://privatecloud.example.com/cloud/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 Fabasoft Cloud Client

1. Open the context menu of the Fabasoft Cloud Client by right-clicking the notification symbol in the taskbar of the operating system.
2. Click the "Open Cloud 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 Fabasoft Private Cloud 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 Fabasoft Private Cloud.

Note:

- In the Fabasoft Private Cloud 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 Fabasoft Cloud 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 Fabasoft Cloud 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 Fabasoft Cloud 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 15.5 "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 cloud 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 Fabasoft Private Cloud.
- Documents cannot be imported on top-level or in a folder that is not assigned to a Teamroom.

14.7 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", "Delete"
No longer required versions can be deleted.
- "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.

Note: The timeline is not operable with the keyboard.

14.8 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.

14.8.1 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).

14.8.2 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.

14.8.3 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 15.5 "Access for Applications").

If your third-party product supports calendar lists, you can manage them in the Fabasoft Private Cloud. 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 `webcal://at.cloud.fabasoft.com/folio/caldav/home`.
4. Click "Save" to apply the changes.

Note:

- Depending on the third-party product, you may replace `webcal://` 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.
 - *Server*
`webcal://<cloud server>/<vdir>/caldav`
Example: `webcal://at.cloud.fabasoft.com/folio/caldav`
 - *Username*
The e-mail address you use to log in to the Fabasoft Private Cloud.
 - *Password*
The generated CalDAV application password (see chapter 15.5 "Access for Applications").
4. Now you can access your Fabasoft Private Cloud calendar list with the Apple Calendar app.

14.9 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 15.5 "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 Cloud Address Book" context menu command of the Fabasoft Cloud notification symbol can be used to include the address book list in Microsoft Outlook.

14.10 Newsfeed

With the newsfeed, you can keep your team members up to date with the latest news.

14.10.1 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".

14.10.2 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.

14.11 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 "Team" 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.

14.12 CAD Objects and 3D Viewer

Manage your 3D CAD files in the Fabasoft Cloud and benefit from the new preview and 3D viewer functionality.

Note: This functionality must be licensed separately.

CAD Object

To be able to store 3D models in the Fabasoft Cloud, the "CAD Object" object class is available. Using the "View in 3D Viewer" action, you can display the 3D model in the integrated 3D viewer.

3D Viewer

The integrated 3D viewer allows you to view 3D models interactively in an overlay. You can rotate, zoom and position the 3D model using the keyboard and mouse.

- Rotate
Mouse: drag with pressed left mouse button
QWERTY keyboard: Q, E or Left, Right, Up, Down
- Zoom
Mouse: mouse wheel
QWERTY keyboard: W, S or +, -
- Position
Mouse: drag with pressed right mouse button
QWERTY keyboard: A, D, X, Z
- A tree view of the elements of the displayed 3D model can be displayed. The individual elements/element groups can be shown or hidden via the respective check boxes. The element selected in the tree view is highlighted in the 3D view for better orientation. In addition, it is possible to hide the navigation cube.

14.13 Converting Multimedia Files

Convert your images, videos and audio files in different formats (Enterprise and higher only).

14.13.1 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.

14.13.2 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.

14.14 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 (Enterprise and higher only).

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 date 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 date and after processing the automatic task the defined action will be executed.

Note: For non-personal follow-ups, substitutes and successors will be considered.

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.

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.

14.15 Insight Apps

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

Note: Insight apps are provided by Mindbreeze InSpire. This appliance must be purchased separately.

Insight App Management

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

- cloud organization ("Insight App" collections)
- 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 “Define Expressions for Customizing Objects” organizational policy defines which users are generally allowed to manage insight apps.

Insight App Designer from Mindbreeze InSpire

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.

- **Layout**
Defines the page layout (e.g. two columns).
- **Search Box**
Allows to perform a manual search.
- **Results**
Shows the results according to the search settings.
- **Link**
Allows to perform a search in an external search engine.
- **Pager**
Defines the navigation in the search results.
- **Charts**
Allows you to include charts.

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.

14.16 Search With Mindbreeze

You can perform a full-text search using the search field in the top bar (Alt + F4) 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.
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:

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

Option	Syntax
Search for a term	term
Not included	NOT term
Search for a whole word or an exact phrase	"word1" "word1 word2 word3"
AND operator	term1 term2 term3 or term1 AND term2 AND term3
OR operator	term1 OR term2 OR term3
Precedence of logical operators by brackets	(term1 OPERATOR term2) OPERATOR term3 Example: (fabasoft OR mindbreeze) AND contract (the term Fabasoft or Mindbreeze and the term contract must be included)
Term near to another term	term1 NEAR term2
Ranking in the search result (importance of terms)	term1^number term2 Example: contract^2.0 fabasoft (contract is valued twice as highly as Fabasoft)
Metadata The following metadata is generally available: Object <ul style="list-style-type: none"> • title (Name) • objsubject (Subject) • objcreatedby (Created by) • objchangedby (Last Changed by) • objterms (Terms) • objteamroom (Teamroom) • objprimaryrelated (Origin) 	metadata:term Example: objsubject:contract (the subject must contain the term contract) extension:docx (contents with DOCX extension) mes:size:[5KB TO 10MB] (contents with size between 5 KB and 10 MB) mes:date:[2020-01-01 TO 2020-12-31] (contents with a 2020 change date) from:jones (e-mail from Jones)

<ul style="list-style-type: none"> • <code>objfile</code> (File) • <code>objappconfigurationroom</code> (App Configuration) • <code>objroomapp</code> (App) • <code>organization</code> (Organization) <p>Content</p> <ul style="list-style-type: none"> • <code>content</code> (Content) • <code>extension</code> (File Extension) • <code>mes:size</code> (File Size) • <code>mes:date</code> (Change Date) <p>E-Mail</p> <ul style="list-style-type: none"> • <code>subject</code> (Subject) • <code>from</code> (From) • <code>to</code> (To) 	
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14.17 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").

14.17.1 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.

14.17.2 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'

14.18 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 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.

14.19 Auditing

"Auditing" gives you the opportunity to reconstruct requests on objects. There are not only shown changes of properties. For example, you can also find out when and by whom an object was read, or rights were granted (Enterprise and higher only).

14.19.1 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.

14.19.2 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.

14.19.3 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.

14.20 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.

15 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.

15.1 Login and Password

Various login settings can be defined here.

- Change your password.
Do not use a password you use for other sites.
- Shows the e-mail address used for the login (can be changed by the organization administrator).
If you are no organization member, you can manage the e-mail address by yourself.
- Shows your mobile phone number for mobile PIN (can be changed by the organization administrator).

15.2 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 of the Fabasoft Cloud. Please note that Fabasoft Cloud 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.

15.3 Basic Settings

The basic settings can be used to adapt the Fabasoft Private Cloud Web Client to your needs.

“General” tab

- *Language*
Defines the language of the web client.
- *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 taken into account 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.
- *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 16 “Accessibility” for more information.

15.4 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. On the “Notifications” or “Disabled Notifications” tab, define for which Teamrooms or dashboards you want to receive events.

Note: For the objects entered, the setting applies to the entire hierarchy unless another setting has been made for a subordinate object.

4. On the "Settings" tab, define about which events you want to be informed.
5. Click "Save" to apply the changes.

15.5 Access for Applications

The access to the Fabasoft Private Cloud 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.

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. Select an external application in the *Valid for* field.
4. Choose a validity period.
5. Click "Next".

The generated password will be displayed. The password has to be entered at the applications instead of your own one.

Note:

- If a generated password runs out shortly or has already run out an e-mail is sent to your login e-mail address.
- To extend passwords, select the menu entry "Renew all". 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.

16 Accessibility

Accessibility is an elementary concept of the Fabasoft Private Cloud. Users with visual impairment are supported with entry and visual display.

16.1 Notes on Keyboard Operations

The Fabasoft Private Cloud 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 Fabasoft Private Cloud. The supported shortcuts can be found in chapter 17 "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, activate the *Show Alternative Text for Highlighted Fields* option.

5. If you find background images disturbing, deactivate the *Show Background Images in Dashboards and Home* option.
6. Save the settings.

16.2 Reinforced Highlighting of the Focus With Keyboard Operations

When working with the keyboard the focus is highlighted increasingly (e.g. yellow margin). The reinforced highlighting is automatically activated by pressing `Tab` or `Shift + Tab`. The first mouse using deactivates the reinforced highlighting again.

16.3 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

16.4 Design in High Contrast

The Fabasoft Private Cloud supports the design in high contrast.

Note: If you have activated the high contrast, after you have loaded the Fabasoft Private Cloud, you have to reload the page.

16.5 Notes on Using Screen Readers

The Fabasoft Private Cloud 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 Fabasoft Private Cloud:

- [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 Fabasoft Private Cloud 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 Fabasoft Private Cloud.

Perform the steps below:

1. Open the Fabasoft Private Cloud 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 Fabasoft Private Cloud.
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.

16.6 Accessibility Exceptions

The following functionality is restricted or not accessible:

- BPMN Editor
- Document View
- Content of Widgets
- New Events in Teamrooms
- Adjusting Images
- Adjusting Screenshots (Support Button)
- Menus in List Cells

- Manual Sorting of Lists

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.

New Events in Teamrooms

The new events are used to display changes in the Teamroom. The events are shown on tabs with different filter criteria. The events are displayed when you execute the "Show New Events" command.

Screen readers are not supported on the "New Events" and "Timeline" tabs.

Alternatively, the "History", "By Objects", "By Category", and "By User" tabs can be used.

Adjusting Images

Images can be scaled and cropped. The integrated image processing is possible, for example, when defining logos or user images.

Screen readers are not supported (the image size cannot be determined when scaling via the slider).

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).

Menus in List Cells

Menus in list cells are used to execute commands directly in relation to the row. Menus in lists are used in the worklist to execute work steps of activities.

Keyboard operation and screen readers are not supported (the menu is not accessible).

Alternatively, you can navigate in an activity and execute the corresponding work step action or use the context menu.

Manual Sorting of Lists

Entries in lists can be arranged manually. Positioning is possible using drag-and-drop.

Keyboard operation and screen readers are not supported (manual sorting is only possible with the mouse).

17 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.

17.1 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 <code>End</code> key to select the last object currently visible. If there are further results, the reload is started automatically.

17.2 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:

	<ul style="list-style-type: none"> • 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.

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.

17.3 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.

17.4 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.
- **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)
--	---

17.5 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*.

17.5.1 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. Therefore 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	Focuses and selects only one entry.
Ctrl + Arrow keys, Ctrl + Home, Ctrl + End	Navigates to an entry without selecting. All selected entries are still selected.
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.

17.5.2 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.

17.5.3 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.

17.5.4 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.

17.5.5 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.

Shortcuts	Action
F2	Enables editing the marked cell or saves the changes if editing already in progress. Note: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ Opens a collapsed group. ○ Navigates from an expanded group header to the first cell of the first row of the group.
Left	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ Closes an expanded group. ○ Navigates from a collapsed group header to the first cell of

	the last row above (or to the group header above)
Up	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<p>Enables editing of the marked cell (e.g. text field, drop-down menu, dialog).</p> <p>Note: In text fields, the current value is deleted.</p>
Alt + Down or Alt + Up	Opens/closes an editing drop-down menu and selects the currently focused value upon closing.
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 + Left	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.

17.5.6 Shortcuts for the Document View

Shortcuts	Action
Up	Opens the preview of the next element in the

	list.
Down	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.

17.6 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 17.2 “Global Navigation”.

17.6.1 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.

17.6.2 Team

The “Team” 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.

17.7 Forms

The Fabasoft Private Cloud 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 16.1 “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 <code>Esc</code> 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 <code>Ctrl + Y</code> followed by the <code>Plus</code> 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.

17.8 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.
Alt + B	Navigates to the element that was focused immediately before (if available).

17.9 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.

18 The Fabasoft Cloud Client

The native Fabasoft Cloud 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 Fabasoft Private Cloud Web Client. More information can be found in the white paper "[Fabasoft Cloud Client](#)".

18.1 Overview

By clicking on the notification icon of the Fabasoft Cloud 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.
- **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
 - view the document in the Windows Explorer (if it is synchronized),
 - view the document in the Fabasoft Private Cloud Web Client or
 - copy a link to the document into the clipboard.

In the "About" dialog it is shown whether the Fabasoft Cloud Client is current (green check mark). If this is not the case, you can start the update directly.

18.2 Synchronization

The Cloud Folder allows you to synchronize folder structures of your Fabasoft Cloud Web Client with the file system.

The Fabasoft Cloud 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.

18.2.1 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 Cloud 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 Fabasoft Private Cloud Web Client or in the file system.

18.2.2 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 “Cloud Folder” > “Keep Folder Up to Date” context menu command for folders.
- Synchronized folders can be excluded from synchronization using the “Cloud 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 Fabasoft Private Cloud.

Note:

- Synchronization takes place automatically in the background, but can be deactivated via the options dialog of the notification icon ("General" tab > "Cloud Folder" > *Offline* field).
- If you no longer need synchronization, you can remove the Cloud 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 Fabasoft Private Cloud 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.

18.2.3 Symbols for Visualizing the Status

Notification Symbol

The notification icon displays status information about the synchronization (e.g. paused). When using multiple Cloud Folders, the status refers to the currently selected Cloud 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.

18.2.4 Context Menu of the Notification Symbol

In the context menu of the Fabasoft Private Cloud notification symbol following commands that are relevant for the Cloud Folder are available:

- Open Cloud Folder
Opens the folder in the local file system that was created for synchronizing with the Fabasoft Private Cloud.
- Synchronize
Starts the synchronization process manually.

Note: If you work with different Fabasoft Cloud installations, you can also choose the system that should be synchronized in the context menu.

18.2.5 Context Menu of the Cloud Folder

In the context menu of synchronized elements the following commands are available under “Cloud Folder”:

- Show in Cloud Web Client
The Fabasoft Private Cloud Web Client is opened and the element is selected.
- Show Properties in Cloud Web Client
Opens the properties of the element in the Fabasoft Private Cloud 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 Fabasoft Private Cloud.
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\\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.

18.2.6 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.

18.2.7 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.

18.2.8 LAN Synchronization

By default, synchronization is carried out over the internet with the Fabasoft Private Cloud. Depending on your amount of data and your internet access, this may take some time.

Use LAN synchronization to achieve a significant reduction in the required internet bandwidth and a significantly increased synchronization speed. When data in the Fabasoft Private Cloud has changed, all Cloud 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. Security is ensured in both cases by encryption.

To be able to use the LAN synchronization, you have to enable it:

1. Open the context menu of the Fabasoft Private Cloud notification icon and click "Options".
2. On the "Bandwidth" tab, enable the *LAN Synchronization*.
 - o LAN synchronization should only be used in trusted networks.
 - o Under Microsoft Windows ensure that the network type is either "Domain Network" or "Private Network" (Network and Sharing Center). Otherwise, you cannot enable the LAN synchronization.
 - o Under macOS you can activate the LAN synchronization for the current network.

Note:

- The clients must be connected to both, the LAN (same subnetwork) and the Fabasoft Private Cloud.
- 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 LAN synchronization, 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 (x86)\Fabasoft\Cloud\x64\FabasoftCloudUI.exe (Fabasoft Cloud Enterprise Client)
 - C:\Users\
- o Local address, remote address, local port, remote port, authorized users, authorized computers: any
- o Protocol: TCP or UDP

18.2.9 Synchronization Exceptions

Restrict File Paths

If you select this option in the "Options" dialog of the notification symbol, only folders with a path length of max. 246 characters and files with a path length of max. 259 characters are synchronized. If you do not select this option, the internal 8.3 notation is used for the path length calculation under Microsoft Windows (this method ensures that max. 12 characters are calculated for each folder or file; the name is actually not changed). Under Apple macOS no path length restriction exists in this case.

When exceeding the path length limit a corresponding error message is displayed. If you use third-party products under Microsoft Windows that cannot handle long file paths you should activate this option.

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 `Acx`, 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.

Additional file information

Additional file information is not synchronized and will be lost. However, Apple macOS file tags are synchronized.

18.2.10 Configuration in the Web Client

Which objects are synchronized on which devices can also be seen in the Fabasoft Private Cloud Web Client.

1. Open the Fabasoft Private Cloud 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".

18.3 Integration in Microsoft Word

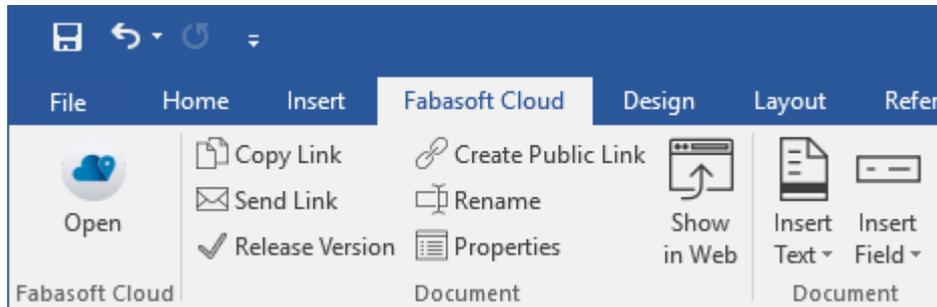
The integration is available for Microsoft Word, Microsoft Word Online, and Microsoft Word for Mac and gives you the following options.

18.3.1 Microsoft Word

When using Microsoft Word on Microsoft Windows, the following functionality is available.

Buttons

You can perform actions in the Fabasoft Private Cloud directly from Microsoft Word. The “Fabasoft Cloud” tab offers the corresponding actions depending on the context.



- **Open**
You can select the document in the Fabasoft Private Cloud and open it in Microsoft Word.
- **Upload**
If the current document was not opened via the Fabasoft Private Cloud, it can be uploaded to the Fabasoft Private Cloud. You can select a location in the Fabasoft Private Cloud and continue processing directly without having to close the document.
- **Register**
If the current document was not opened via the Fabasoft Private Cloud, it can be registered in the Fabasoft Private Cloud. You can select the registration type (e.g. digital asset) and a location in the Fabasoft Private Cloud and continue processing directly without having to close the document.
- **Copy Link**
You can put a link to the document in the Fabasoft Private Cloud 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 Fabasoft Private Cloud.
- **Send Link**
You can create an e-mail draft with a link to the document in the Fabasoft Private Cloud.
- **Rename**
You can change the name of the document in the Fabasoft Private Cloud.
- **Release Version**
You can create a version of the document in the Fabasoft Private Cloud 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 Fabasoft Private Cloud.
- **Show in Web**
Shows the document in the Fabasoft Private Cloud Web Client.
- **Insert Text**
 - **Property**
You can insert certain property values as updatable DocProperties.
 - **Plain Text Module**
You can insert available text modules unformatted.

- Formatted Text Module
You can insert available text modules formatted.
- Text Module Placeholder
You can insert text module placeholders in templates.
- 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.
- Replace Text Module Placeholder
You can replace the existing text module placeholders of the document with the contents of the text modules.
- Context (Domain and User Account)
For documents that have not been opened via the Fabasoft Cloud, the context for the buttons can be selected. If you change the context in Microsoft Office, the context is also changed in the Fabasoft Cloud Client and vice versa.

Note:

- If the “Fabasoft Cloud” tab is not displayed, ensure that the COM add-ins “Fabasoft Cloud Domain Hot-Switch” and “Fabasoft Cloud Word Extension” are enabled in Microsoft Word (“File” tab > “Options” > “Add-ins”).
- In Microsoft PowerPoint and Microsoft Excel, the “Open”, “Upload” and “Register” buttons are available on the Fabasoft Cloud tab.

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.

18.3.2 Microsoft Word Online

To use the integration in Microsoft Word Online, you must add the Office add-in “Fabasoft Cloud” from the Microsoft Store to Microsoft Word Online (“Insert” menu > “Add-ins” > “Office Store” > “Fabasoft Cloud”). The “Fabasoft Cloud” area can be opened via the Cloud 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 Online, the following functionality is available.

Buttons

You can perform actions in the Fabasoft Private Cloud directly from Microsoft Word Online. The “Fabasoft Cloud” 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 Fabasoft Private Cloud.
- Show in Web
Shows the document in the Fabasoft Private Cloud 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.
- Login/Logout
You can log out and log in if needed.

18.3.3 Microsoft Word for Mac

To use the integration in Microsoft Word for Mac, the Fabasoft Cloud Client must be installed and you must add the Office add-in “Fabasoft Cloud” from the Microsoft Store to Microsoft Word for Mac (“Insert” menu > “Add-ins” > “Office Store” > “Fabasoft Cloud”). The “Fabasoft Cloud” area can be opened via the Cloud ribbon button.

When using Microsoft Word for Mac, the following functionality is available.

Buttons

You can perform actions in the Fabasoft Private Cloud directly from Microsoft Word for Mac. The “Fabasoft Cloud” 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 Fabasoft Private Cloud.
- Show in Web
Shows the document in the Fabasoft Private Cloud Web Client.
- Insert Text

- Property
You can insert certain property values as DocProperties. These must be updated manually.
- Plain Text Module
You can insert available text modules unformatted.
- Formatted Text Module
You can insert available text modules formatted.
- Text Module Placeholder
You can insert text module placeholders in templates.
- Insert Field
You can insert certain property values as updatable fields.
- Replace Text Module Placeholder
You can replace the existing text module placeholders of the document with the contents of the text modules.
- Login/Logout
To use the functionality, you need to log in to the Fabasoft Private Cloud for each newly opened document due to technical restrictions.

18.4 Integration in Microsoft Outlook

The integration in Microsoft Outlook gives you the following options.

Note: The “Fabasoft Cloud” group is only available if the “Fabasoft Cloud Outlook Extension” add-in (“File” > “Options” > “Add-ins”) is enabled.

Display Cloud Area

On the “Start” tab, in the “Fabasoft Cloud” 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 Fabasoft Cloud home area or worklist.

Upload E-Mails

On the “Start” tab, in the “Fabasoft Cloud” 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 “Fabasoft Cloud” > “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.

Register

On the “Start” tab, in the “Fabasoft Cloud” group, you can use the “Register” button to register the selected e-mails for example as digital assets. Alternatively, you can use the “Fabasoft Cloud” > “Register” context menu command.

Replace Attachments With Links

When you compose an e-mail, you can upload attachments directly to the Fabasoft Private Cloud 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 cloud users. Click the "Add as Public Link" button, if you want to insert links that do not require authentication in the Fabasoft Private Cloud. The button is only available if the Teamroom allows the creation of public links.

The attachments will be uploaded to the Fabasoft Private Cloud 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 cloud 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 Fabasoft Cloud using the corresponding context menu command. Thereby, you can specify the storage location for the e-mails in the Fabasoft Cloud.

E-mails that are stored in the folder manually or via a client-side rule are imported into the Fabasoft Cloud 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.

Contact Synchronization

You can synchronize contacts that you manage in the Fabasoft Cloud with Microsoft Outlook. The "Open Cloud Address Book" command is available in the context menu of the Fabasoft Cloud 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 Fabasoft Cloud 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 Fabasoft Cloud to Microsoft Outlook and vice versa.

18.5 Options Dialog

The “Options” dialog of the Fabasoft Cloud Client offers the following configuration possibilities:

General

- Account

Displays the URL of the current cloud installation. Use the “Reset” button to delete all local account settings (including the Cloud 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.
- Cloud Folder

Displays the base directory of the Cloud Folder in your file system.

 - Remove Folder

If you no longer require the synchronization, you can remove the Cloud Folder from the file system by clicking the “Remove Folder” button. This does not affect the objects in the Fabasoft Private Cloud, but not yet synchronized changes in the file system are lost.
 - 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.
 - Offline

Select this option to turn off the synchronization temporarily (e.g. to avoid roaming charges).
 - Restrict Path Length

If you select this option, only folders with a path length of max. 246 characters and files with a path length of max. 259 characters are synchronized. If you do not select this option, the internal 8.3 notation is used for the path length calculation under Microsoft Windows (this method ensures that max. 12 characters are calculated for each folder or file; the name is actually not changed). Under Apple macOS no path length restriction exists in this case. When exceeding the path length limit a corresponding error message is displayed. If you use third-party products under Microsoft Windows that cannot handle long file paths you should activate this option.
- System Settings
 - 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.
 - Proxy Settings

Opens the proxy settings of the operating system.
 - Run Fabasoft Cloud Client on System Startup

Defines whether the Fabasoft Cloud Client is started automatically when booting the operating system.

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.
- **LAN Sync**
Use LAN synchronization to achieve a significant reduction in the required internet bandwidth and a significantly increased synchronization speed. When data in the Fabasoft Private Cloud has changed, all Cloud 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.

Content (only Microsoft Windows with installed Microsoft Office)

The settings apply globally to the device.

- **Documents**
 - **Generate PDF Preview on the Device**
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 cloud server.
- **Encrypted Documents**
 - **Generate PDF Preview on the Device**
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.
 - **Generate Thumbnails from the PDF Preview on the Device**
Local generation allows thumbnails of Office documents that are encrypted with Fabasoft Secomo.
- **Performance**
 - **Use All CPU Cores for Conversion**
Defines whether local generation is performed in parallel (the maximum number of threads corresponds to the number of available CPU cores).
Note: PowerPoint documents are never converted in parallel.

Note: 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.

Certificates (only Ubuntu)

When using a certificate-based authentication under Ubuntu the client certificates have to be stored in the Fabasoft Client.

19 Tips

This chapter provides tips and tricks for efficient working with the Fabasoft Private Cloud.

19.1 PDF Preview

If you have Adobe Acrobat Reader DC installed, it will be used for PDF previews (if accordingly configured in the web browser). To prevent that the tools pane of the reader is opened for each document, proceed as follows:

1. Close the web browser.
2. Open Adobe Acrobat Reader DC from your desktop.
3. Disable the *Open tools pane for each document* option under "Edit" > "Preferences" > "Documents".
4. Close Adobe Acrobat Reader DC.

When you fold the tools pane to the right, it will not be opened automatically anymore.

19.2 Using Adobe Acrobat Pro

When using Adobe Acrobat Pro the following behavior may occur:

- Adobe Acrobat Pro displays a download confirmation dialog.
- Adobe Acrobat Pro may crash.

Solution:

- In addition to Adobe Acrobat Pro, Adobe Acrobat Reader can be installed.
- Alternatively, you can use another PDF viewer.
- In the Fabasoft Private Cloud select "View as Image" in "Basic Settings" > "Accessibility" tab > *Preview in the Document View*. In this case, images are generated instead of PDF previews.

20 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 Fabasoft Private Cloud 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.

21 Open Source Licenses

The open source software contained in the Fabasoft Private Cloud 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](#)