

# Communote Documentation

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*Last generated: June 08, 2016*

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# Table of Contents

## User Documentation

◦ 1 Basics & Interface.....	3
◦ 2 Functions .....	13
▪ 2.1 Write Notes .....	14
▪ 2.2 Read Notes.....	28
▪ 2.3 Manage Topics .....	33
▪ 2.4 Search Functions and Filters.....	39
▪ 2.5 Profile-Options .....	43
▪ 2.6 Tag Management .....	46
▪ 2.7 Embed Communote .....	48
▪ 2.8 Bookmarklet .....	49

## Installation Documentation

◦ 1 System requirements .....	51
◦ 2 Installation.....	52
◦ 3 Maintenance .....	60
◦ 4 Openfire .....	63
◦ 5 Communote Extensions .....	71

## Administrator Documentation

◦ 1 General Administration .....	72
◦ 2 System Administration .....	96

## Developer Documentation

◦ 1 How to ... .....	107
▪ 1.1 Write a Plugin .....	108
▪ 1.2 Customize the design .....	136
▪ 1.3 Build the core .....	137
◦ 2 Technical Overview .....	138
◦ 3 Javadoc.....	140
◦ 4 REST API.....	141
◦ 5 Design Guidelines .....	142

# 1 Basics and Interface

The surface of Communote is built to help you communicate in your daily communication and research. In this chapter the basic interface and functions will be explained. A detailed explanation of the app's functions can be found in the following chapters.

## 1.1 Register to Communote

In order to register to a Communote Microblog with free access, you only need to type in your email address in the Register form (see Figure "Login & Registration"). You will then receive an e-mail with an automatically generated link that closes off the registration.

The figure displays two separate forms side-by-side. The left form is titled 'Login' and contains fields for 'Username/E-mail' and 'Password', both represented by empty input boxes. Below these fields are two links: 'remember my login' (with a checkbox icon) and 'Forgot your password?'. To the right of these links is a blue rectangular button labeled 'Login'. The right form is titled 'Registration' and contains a single field for 'E-mail', shown as an empty input box. To the right of this field is a blue rectangular button labeled 'Register'.

Figure "Login & Registration"

Your Communote system may not be open to all users. In that case you do not receive an e-mail right away, but your registration has to be confirmed by an admin of the system before you can start using Communote.

## 1.2 Login to Communote

Using Communote always starts with logging in. In order to do so, start Communote and log in using your account data: Type in your user name and your password. If you want to be logged in automatically in the future, check “remember my login”.

After the login you will see the homepage of Communote.

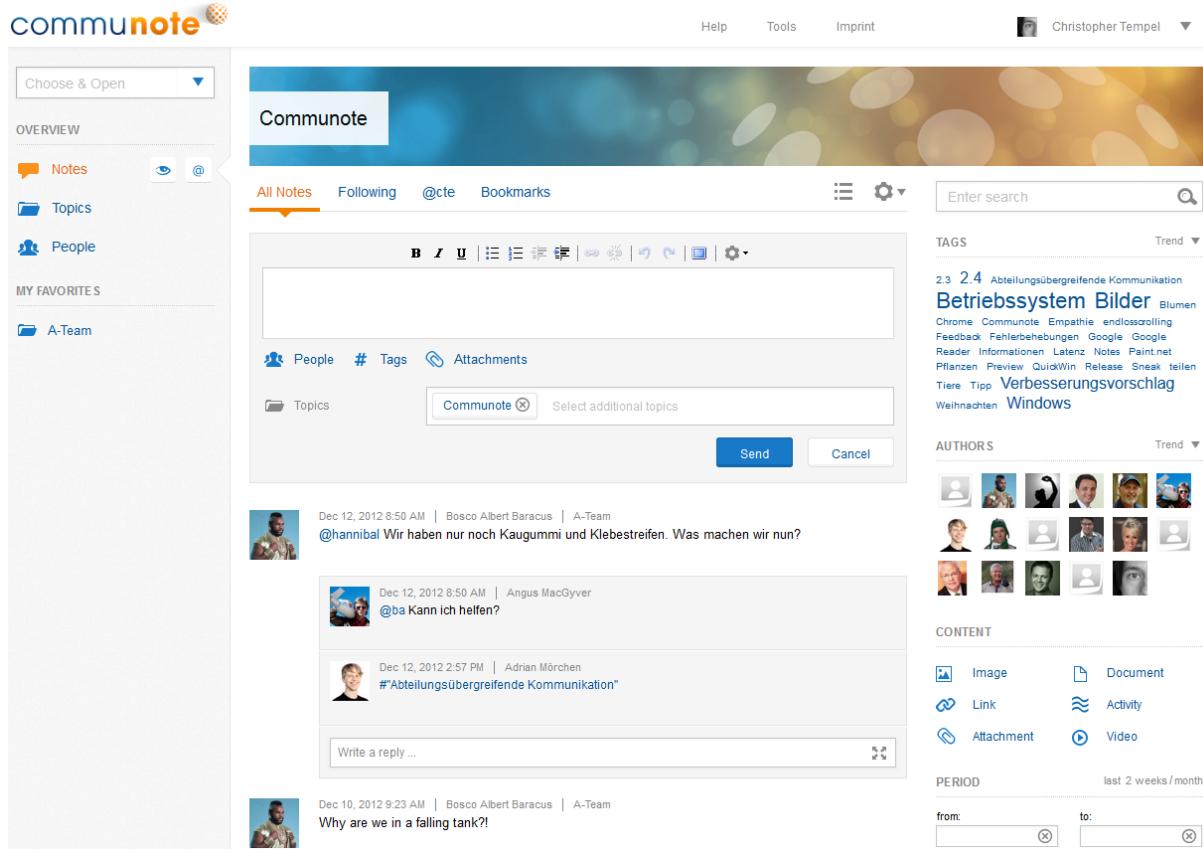


Figure “Communote Interface”

## 1.2 Topbar

In the upper part of the interface you can see “Help” and “Imprint” as well as see and edit your profile under “Your Name”. “Tools” will show you further information about working with Communote, for example the Communote Bookmarklet and the Communote Mobile App. You able to logout via the last entry of the user menu.



*Figure "Topbar"*

## 1.3 Navigation and Favorites on the left sidebar

On the left hand side of your screen you can choose in which topic you would like to act. When you choose “Notes” you will be guided to an overview of all messages in the system that you are able to see. This is also the welcome screen that you were brought to when you logged into Communote.

“Topics” and “Persons” shows a display of all (visible to you) topics and users in the system. You can search within this overview page to look at the Topics or users. You can also search for a specific user or topic by starting to type in the “Choose and open” field. Most of the time it is enough to type the first letters and the system will suggest a specific user or topic for you (see figure “Sidebar”).

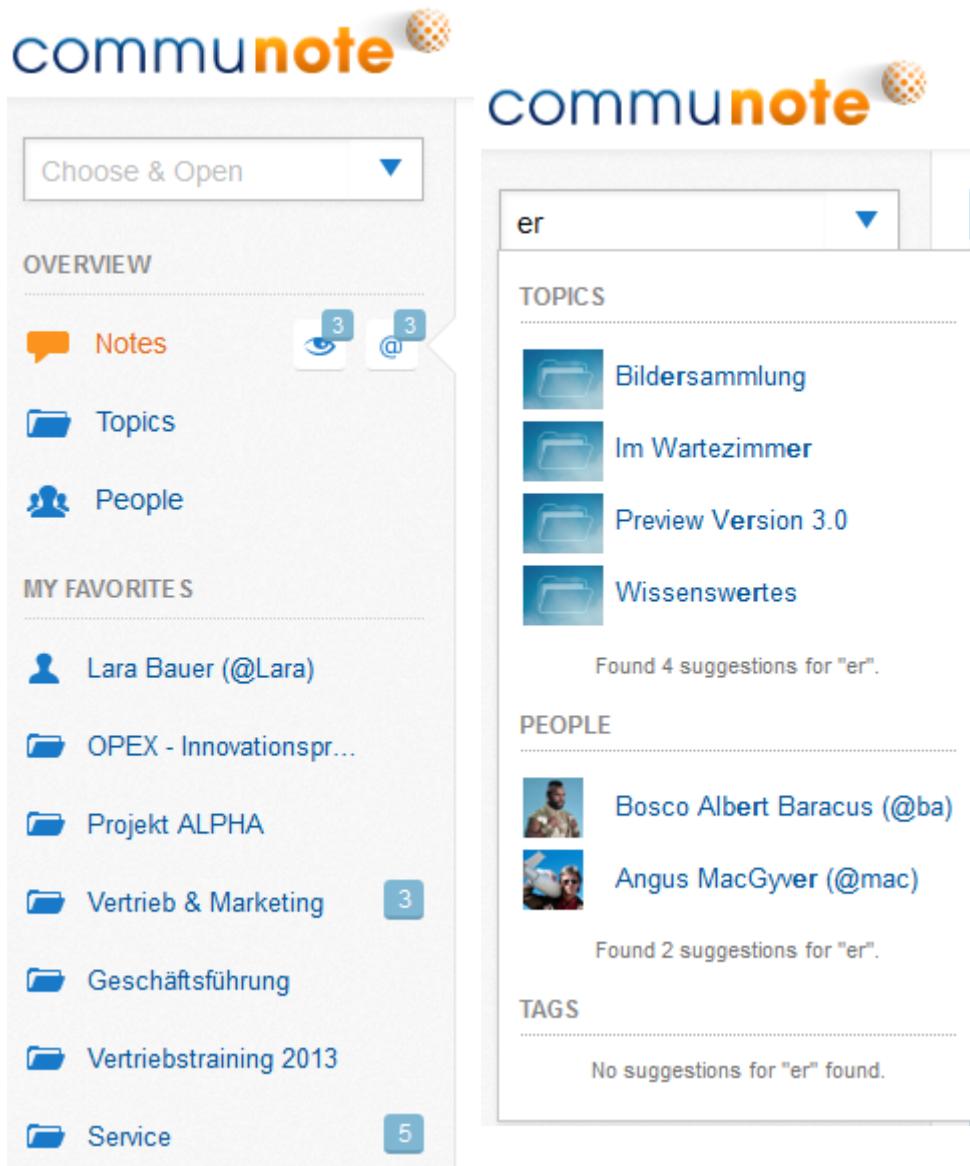
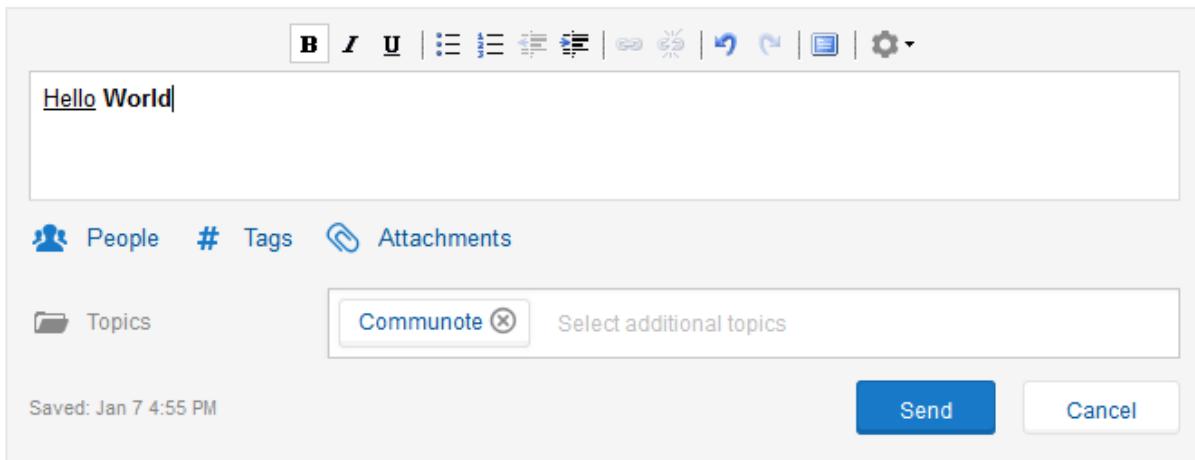


Figure "Sidebar" (left) and with auto suggest (right)

## 1.4 Basic Functions

### 1.4.1 Write a message

The note input field consists of an input box with different options for formatting. Several other options for writing a note are listed below the input field.



*Figure "Note Input Field"*

**Note:\_** If you already familiar with the older Version Communote (2.4), you will notice that the topic selection is not available above the editor anymore. You will now find that function below the editor and you can also choose more than one topic where the message is posted.

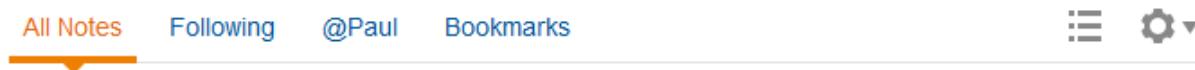
## 1.4.2 Read Messages

You can find the message bar right in the middle of the interface taking up the majority of Communote's interface. That's because Communote is all about the exchange of information and communicating!

In this section we will be explaining the layout of Communote's interface.

Between the banner on top and the editor you can see the tab section. This section changes depending on the area of Communote you're in:

If you find yourself in the overview page for notes ("notes" at the left sidebar) you will see "All notes", "Following", "@[YourName]" and "Bookmarks".



*Figure "Tab-Area Global"*

If you find yourself in a specific topic, these tabs will change into "Notes", "Subtopics", "Members", and "Info".



Figure "Tab-Area Context"

Below the editor you can find all notes you have the rights to see based on your user's permissions. The list of notes is sorted by date of creation downward (*meaning that new notes are on top and older notes are below*). A note consists of text, the profile picture of the author, the date of creation, and the topic that the note was posted in (see figure "Note"). Furthermore, other users can be notified about the note by being linked to the note using @mentions. Tags and attachments can also be added to the note. Users that have been mentioned and tags that are included are shown as a (blue) link within the note. If you click on that link, you are shown a list of notes that is filtered by that person or tag.

Dec 10, 2012 9:23 AM | Bosco Albert Baracus | A-Team  
Why are we in a falling tank?  
Reply Like Bookmark More ▾  
Show all 8 replies  
Dec 10, 2012 9:25 AM | John Smith ► Bosco Albert Baracus  
@ba Technically we're not flying.  
Dec 10, 2012 9:25 AM | Bosco Albert Baracus ► John Smith  
@hannibal I know! Cos we're falling, fool!  
Write a reply ...

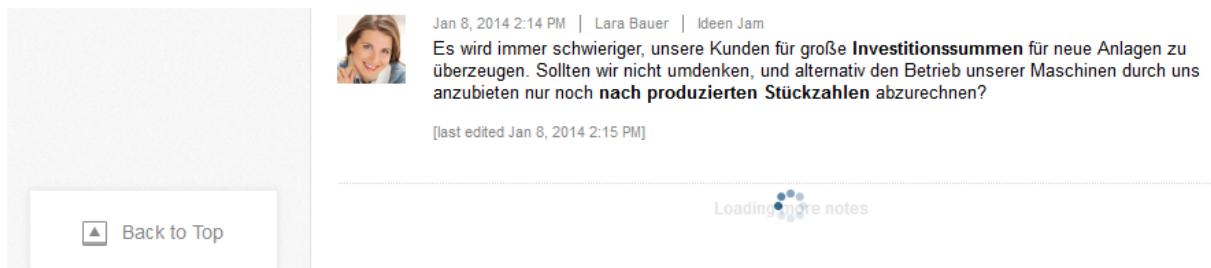
Figure "Note"

You can easily add Video-Links (YouTube or Vimeo) to your note's text. After you post these links into the message body, they will automatically be transformed into inbound links and integrated into the note. Videos can now automatically be played within the system (see Figure "Pictures & Videos inline")



*Figure "Pictures & Videos inline"*

Notes that are older than the notes shown on the initial screen will be loaded automatically via “endless scrolling”. If you need to get back on top quickly, you can use the “back to top”-Button, which will show up on the right hand side as you get further down the page.



*Figure "Endless Scrolling"*

Within the list of notes, Communote has a special display for users, tags, and topics: Small hover cards with the most essential information and functions will be shown as you pass the mouse over the user, the tag, or the topic. For example, if you pass over the profile

picture of a user, the hover card will show the name, position, phone number and tags of the specific user. Additionally the function “following” is available.

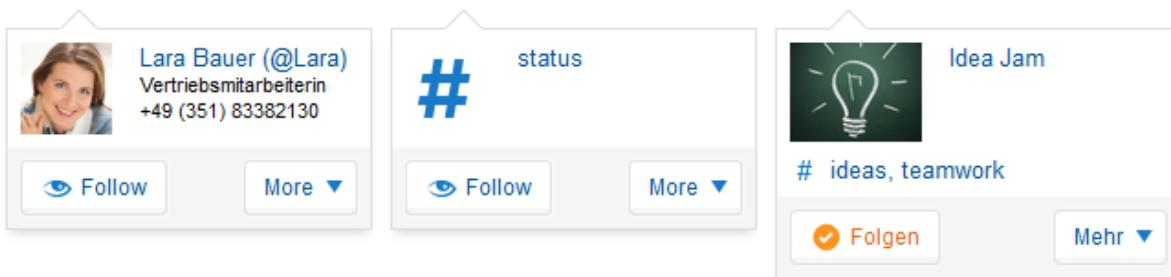


Figure “Hover Cards”

### 1.4.3 Search Notes

On the right side of the interface you can find an extensive search function. On the upper part, there is a search field in which you can search Commumote for a **specific term**. Commumote will suggest you tags, authors (or subtopics) based on your search term.

Enter search

**TAGS** Trend ▾

# **status**

**AUTHORS** Trend ▾

**CONTENT**

<a href="#">Image</a>	<a href="#">Document</a>
<a href="#">Link</a>	<a href="#">Activity</a>
<a href="#">Attachment</a>	<a href="#">Video</a>

**PERIOD** last 2 weeks / month

from:  × to:  ×

Enter search

**FILTERED BY** show all

# **status**

**TAGS** Trend ▾

Abschlussbericht **ALPHA** Analyse Analysephase  
**AP1** Berlin Chance **CRM**  
 Antwort Feedback Frage katalog Kickoff  
**Kundentage**  
**Nachbereitung** Notizen OPEX  
**Problem** programmierung projectplan Risiko  
**SeasideWarehouse** ToDo  
 vacuum VPN Workshop

**AUTHORS** Trend ▾

**CONTENT**

<a href="#">Image</a>	<a href="#">Document</a>
<a href="#">Link</a>	<a href="#">Activity</a>
<a href="#">Attachment</a>	<a href="#">Video</a>

**PERIOD** last 2 weeks / month

from:  × to:  ×

*Figure "Search": Search sidebar normal (left) and the search sidebar with suggested filters for the filtered tag "status" (right)*

All active filters are listed under "Filtered By". The tag cloud, the authors and the topic filter will match with an active filter.

More details for the different filters will be explained in Chapter 2.3.

As you have chosen a specific topic, person or tag, other filters will be proposed for you: Mentions, your Bookmarks, Following or a topic filter. The topic filter will only show if the notes are written in more than one topic.

**Note:** If you are using the full text search, activities will not be included in the results. Only if you are using the tag- or author search those results will be included.

# 2 Functions

## 2.1 Write Notes

Using Communote you can quickly and easily write notes, messages or protocols. You are thereby not - unlike other microblogging services - limited to a number of letters. You can add easy formats to your note and attach any kind of data to it. Pictures with the formats JPG, PNG or GIF will automatically be transformed into a preview within the note. It is possible to attach a video-link from YouTube or Vimeo, which will be embed into Communote. You can also notify your colleagues using @mentions.

### 2.1.1 The Editor

If you want to write a new note, you will always find a small editor field above the list of notes. When you click in that field, it will change into the note editor that we have already shown you in Chapter 2. Now you can start writing right away. You can add easy formatting options like **bold**, *italic* or underlined to your message.

The editor has further options for your message ("Topic", "People", "Tags" and "Attachments") that will help you add additional information and content to your note. Those options are not mandatory and can be used on demand. If you choose one of those options, a new input field will appear in which you can add the information.

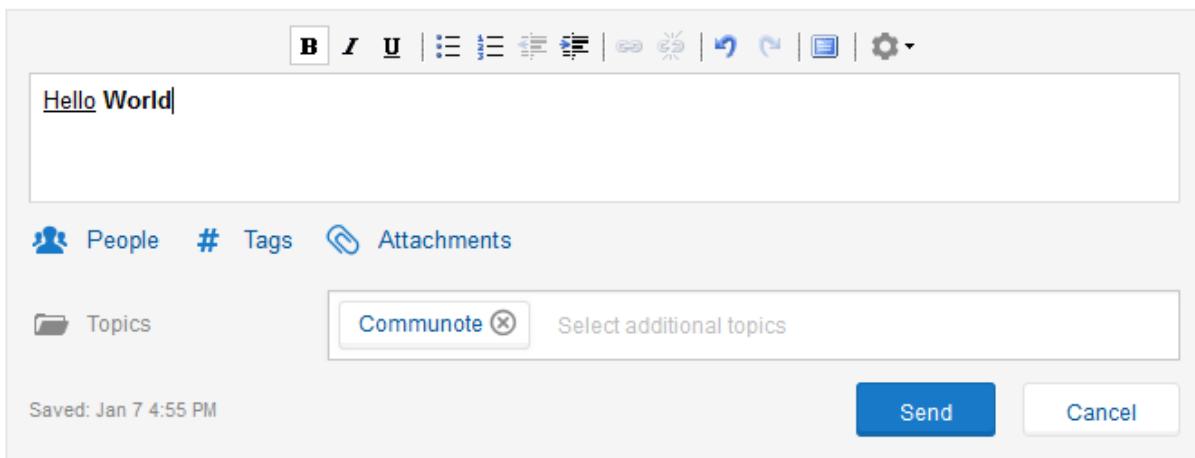


Figure "Editor"

## 2.1.1.1 Topics

Within Communote notes are always **specific to a topic**, meaning that before sending a note in, you have to decide in which topic the note will be saved in. Communote makes that selection easier for you by choosing the topic that you have selected by default. If you don't have the rights to write into a topic or if you are in the general message view, a default topic will be chosen for your note by default. You can always change that default option or add more topics to the selection. A new function of version 3.0 is that you can write into a different topic from the one that you are currently reading.

In order for the note to be posted, at least one topic has to be chosen. You can use the "send"-button or the combination Ctrl + Enter to send the message.

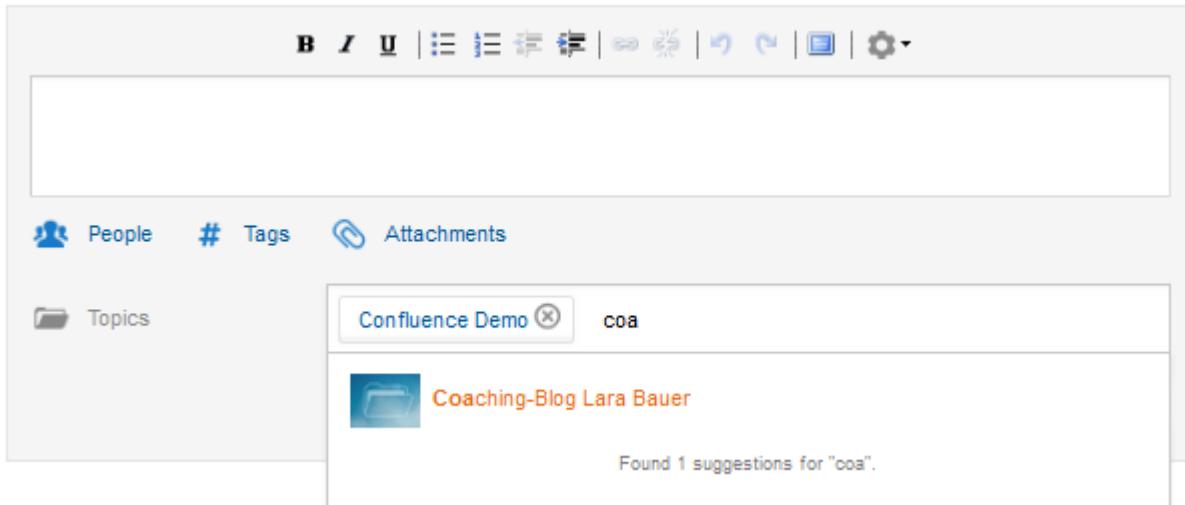


Figure "Choose topic in editor"

## 2.1.1.2 Tags

Tags have the purpose to structure Communote and make the search for content easier. There are two ways that can be used to insert tags into a note: Firstly they can simply be added into the note with a hashtag (#) before the tag and secondly they can be added with the option "Tags" below the editor (see "Using tags in the editor").

While you are still typing, Communote already suggests tags that have been used in Communote before. You can either user one of the suggestions or overwrite them and

add a new tag to the system. If you don't need the suggestions, you can easily blend out the list with the Esc key. You can also blend them out permanently for all future messages in the menu of the editor (the gear on the right hand's side of the editor).

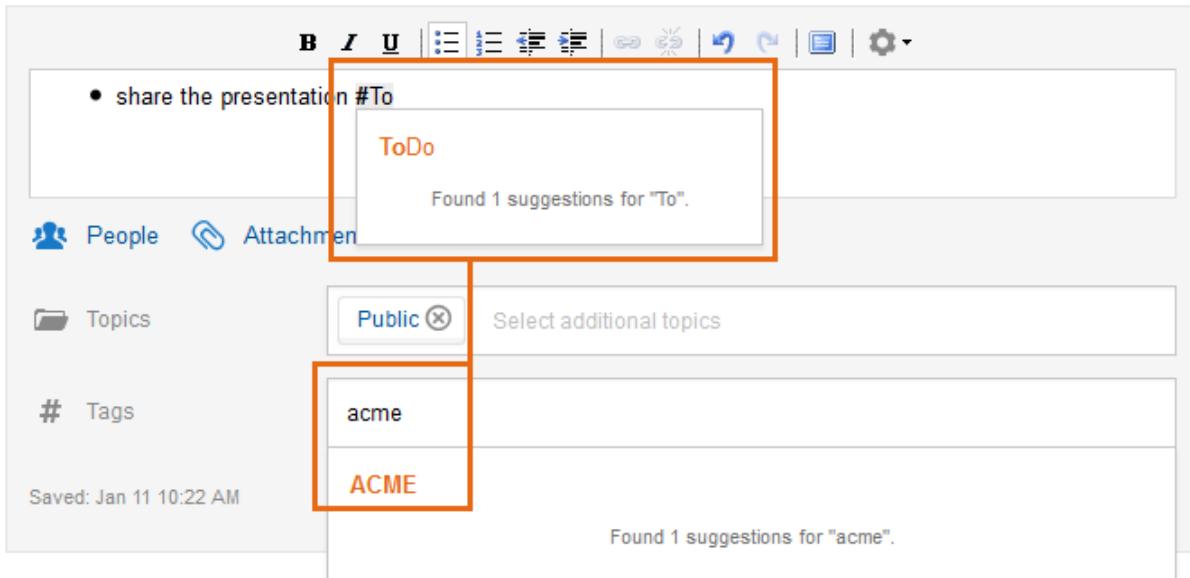


Figure "Using tags in the editor"

### 2.1.1.3 Attachments

Communote offers the possibility of adding attachments to the note and sharing them with other users. The standard configuration limits the data size to 10 MB. Please contact your Administrator, if you would like to know the exact size limit of the attachments.

You can add an attachment to your note by choosing the option "attachments" below the editor. You can now choose a file from your computer and add it to your note. Before sending in your note, you can re-check the attachment and erase it if that's necessary.

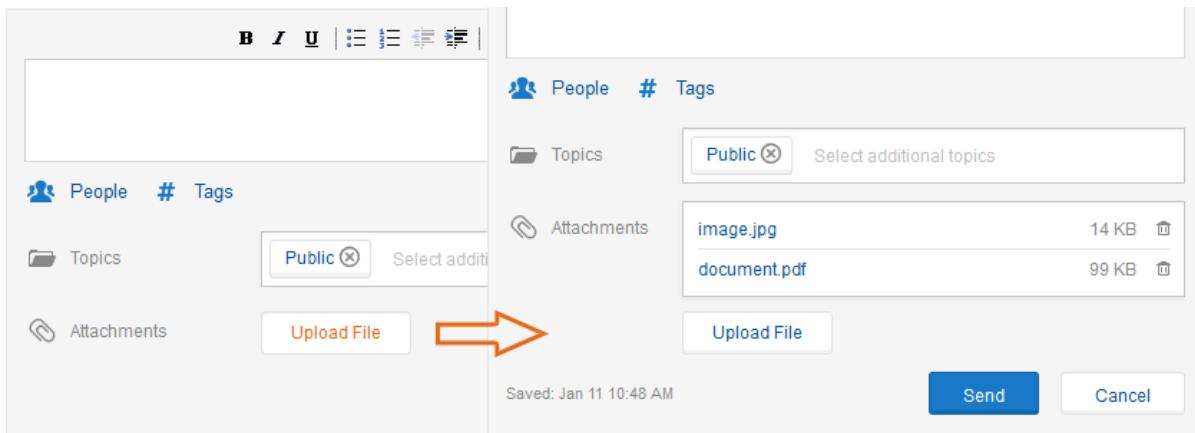


Figure "Attachments": Add files to your note (left) and re-check the attached files before sending them in (right)

#### 2.1.1.4 Notification of other users

You can notify other users about your note inside of the note or you can address them directly. The users will be notified via E-Mail and Communote will show that they have been mentioned in a message.

There are again two ways of mentioning other users in a note: Firstly you can add the username of the user with a @-sign in front of it within the text of the note. Secondly you can use the "People"-function below the editor and type in the name of the person you would like to notify manually.

You can find out the username of the user by hovering the profile picture with the mouse and waiting a short time until the username shows up. Alternatively just start typing the name and Communote will suggest matching users automatically.

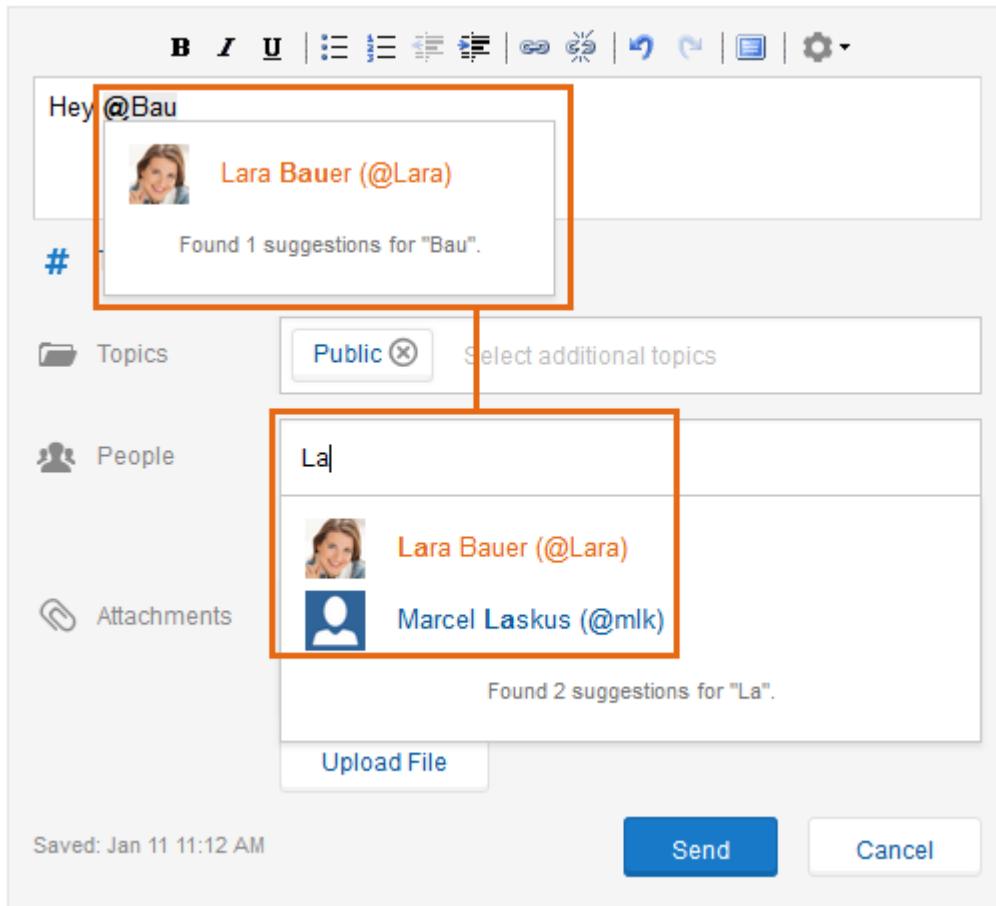


Figure "Notification in the editor": via @-Sign or with the option "People"

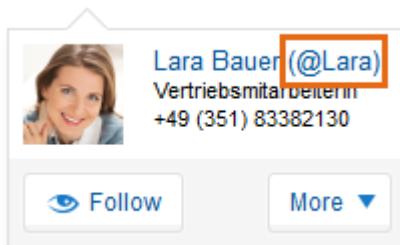


Figure "Finding the abbreviation"

If you would like to notify more than one person with one note, you don't have to notify everyone separately. You can simply address certain groups of users with a doubled @@-sign. All users belonging to that group will be notified about the message as it is sent. An overview of the supported groups and the users they comprise is outlined below:

MENTION SYNTAX	DESCRIPTION
<b>@@all</b>	All users with <b>reading rights</b> for the topic will be notified
<b>@@authors</b>	All <b>authors (users with write access)</b> of a topic will be notified. As soon as a user has written one note/answer, he is counted as an author.
<b>@@managers</b>	All <b>topic managers</b> will be notified.
<b>@@discussion</b>	All users that have <b>written an answer</b> in the discussion will be notified. ( <i>This function is only available if the note is an answer!</i> )

**Note:** Direct messages can only be sent to **@@managers**.

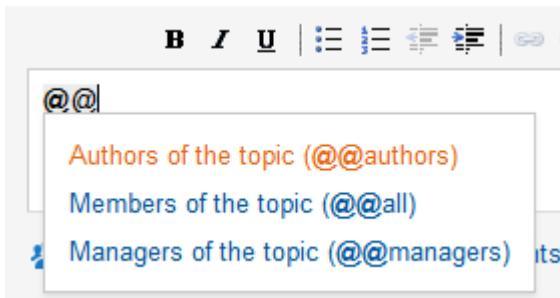


Abbildung "Address certain groups of users"

The standard configuration limits @@-mentions to 100 users. If one of the groups represents more than 100 users, the @@-function can not be used and the message won't be sent. You will receive an appropriate error message in that case. The limit which is configurable is helpful for larger companies to avoid excessive email traffic.

### 2.1.1.5 Links

Within Communote you can also create Hyperlinks for your note. The easiest way to do so is the type in the URL of the internet address. Communote automatically identifies it as a link and transforms it. You can also mark specific words or a group of words as a link. Therefor you mark the words and choose "Insert link" in the editor options. You now type

in the URL and the title in the new window and click “Insert” (see Figure “Insert Hyperlinks”)

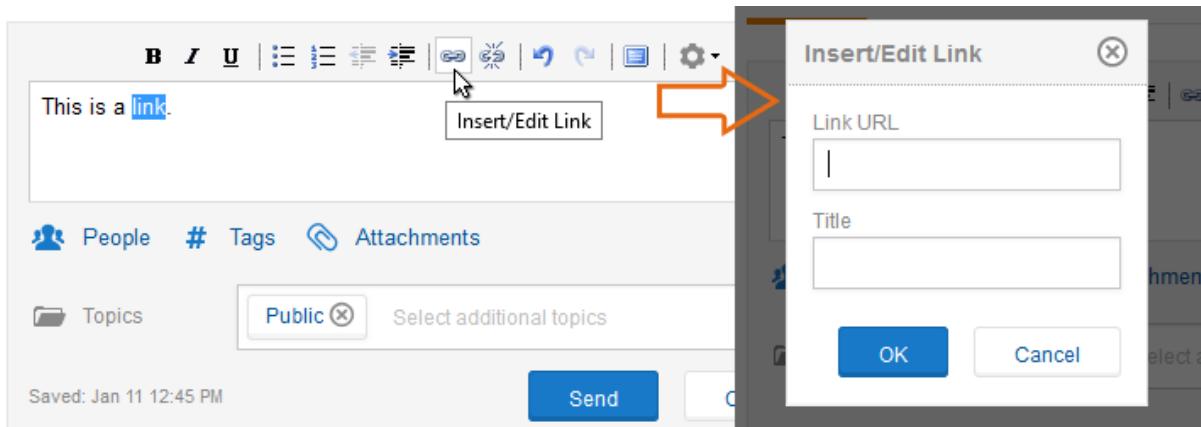
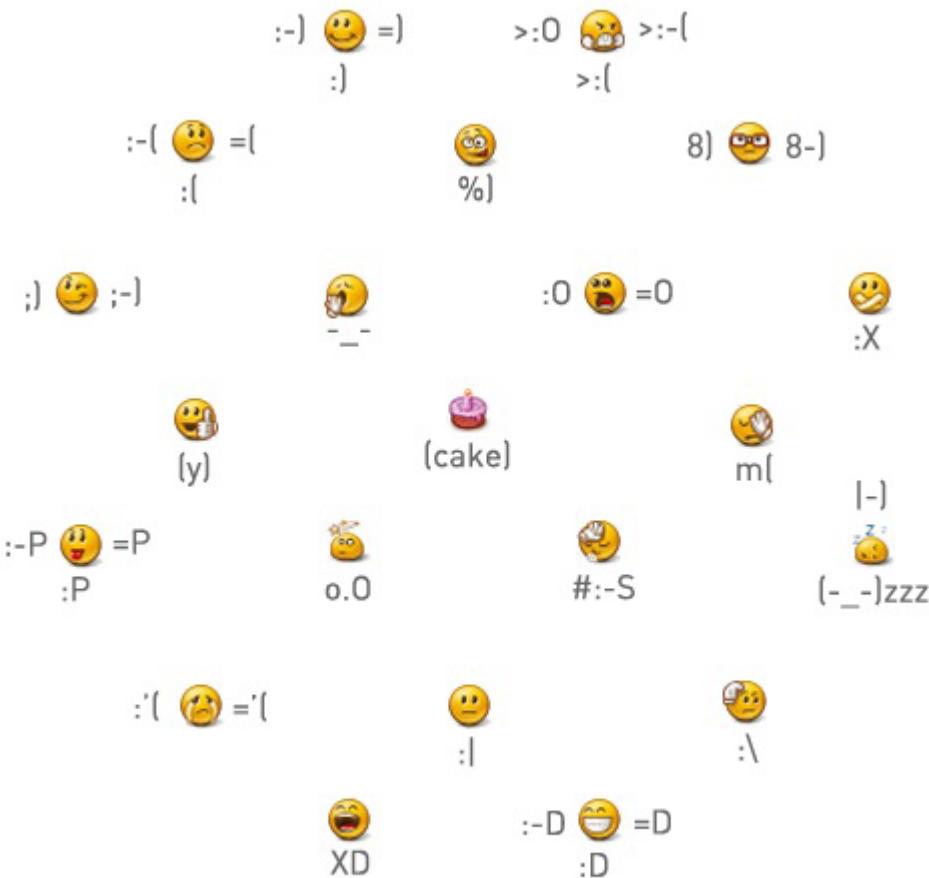


Figure “Insert Hyperlinks”

Furthermore it is possible to link messages with each other within Communote. All you need is the **permalink** of the note that you would like to link. The permalink is a permanent identifier of the note and can be found when “more” and “permalink” is chosen below the message. You don’t need to click on that field, you can also simply copy the link to your clipboard (with a click of your right mouse button) and then insert it into your note.

### 2.1.1.6 Emoticons

Communote supports a selection of the most common emoticons which will be automatically replaced with icons after the note was sent. An overview of the available smiley-codes with the associated icons is depicted in the next image.



© Webiconset - [www.webiconset.com/emoticons-smilies-icon-set](http://www.webiconset.com/emoticons-smilies-icon-set)

*Figure "Emoticon Cheat sheet"*

### 2.1.1.7 Autosave

As you are writing or editing a note, Communote automatically saves what is typed into the editor. You will then see a sign “Saved” with a date below the editor. If you need to take a break or your work has been interrupted, the last save will automatically be loaded into the editor as you open it again. You will then be able to see the message “Backup has been loaded” below the editor. You can also click “cancel” if you don’t need the autosave anymore.

**Note:** Communote only saved one autosave per note. If you start a new note in another browser, the former backup will be overwritten.

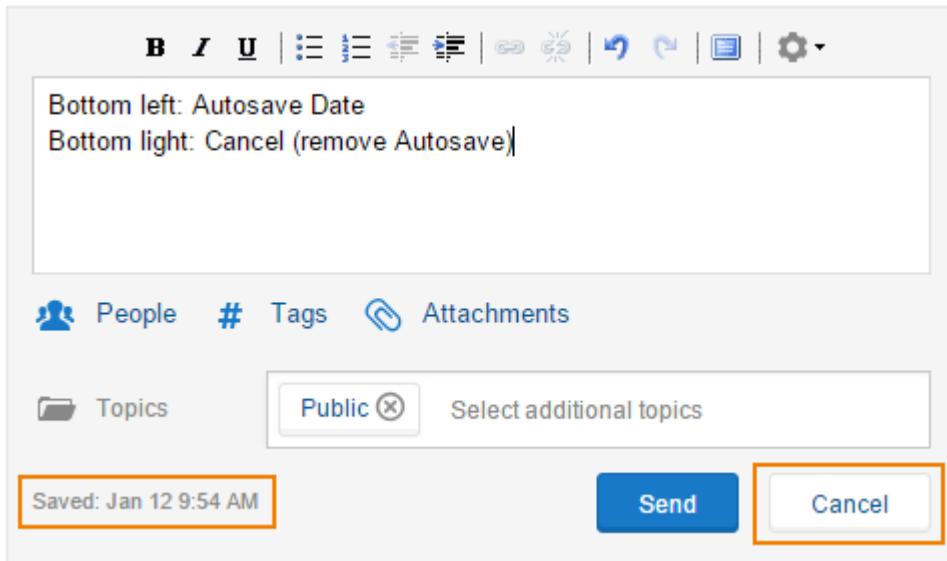


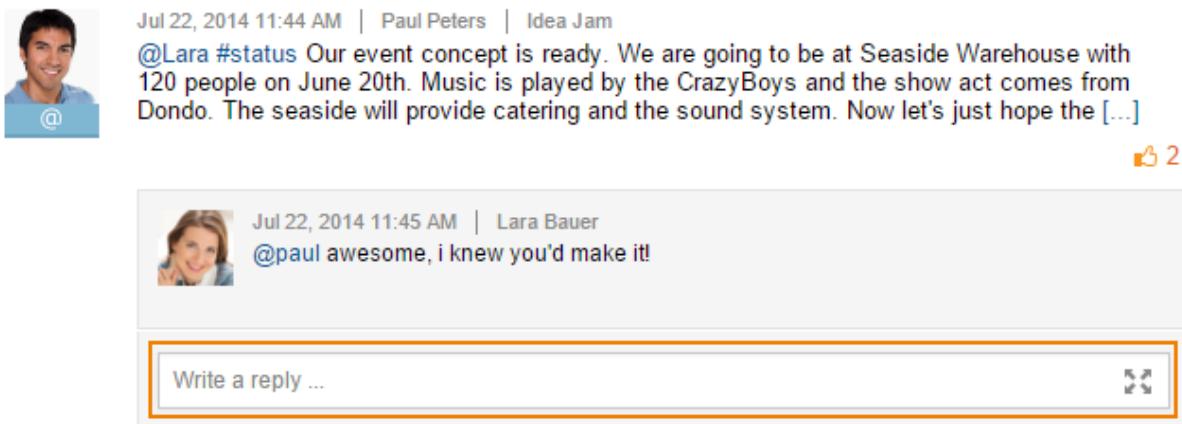
Figure "Automatic Backup of a Note"

## 2.1.2 Comment and answer notes

If you have write access to a topic, you can answer to any message within that topic in order to give your colleagues feedback. The functionality of the answer-editor is identical to the editor for writing notes with one exception: The topic is already predefined and cannot be changed.

In order to write an answer, you can pass the specific note and then click "answer". The editor will now open and by default the author will be notified. You can send your note by clicking "send" or by using the shortage **CTRL+Enter**.

If you are watching the notes in discussion view (*Comments are shown directly below the note*), there is a quick answer function with an easy input field and no format options right below the note. You can switch to the Rich Text Editor easily by clicking the arrows on the right hand's side of the quick editor.



Jul 22, 2014 11:44 AM | Paul Peters | Idea Jam  
 @Lara #status Our event concept is ready. We are going to be at Seaside Warehouse with 120 people on June 20th. Music is played by the CrazyBoys and the show act comes from Dondo. The seaside will provide catering and the sound system. Now let's just hope the [...]

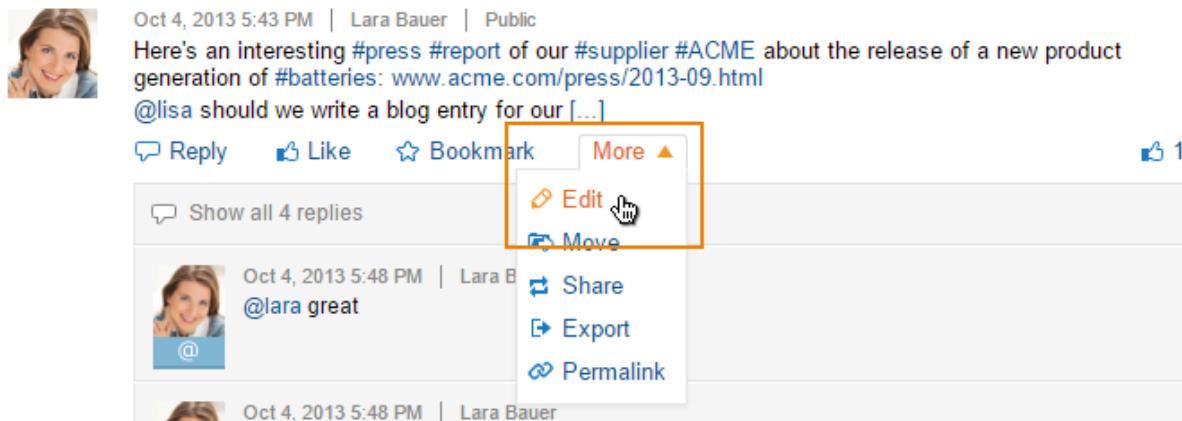
Jul 22, 2014 11:45 AM | Lara Bauer  
 @paul awesome, i knew you'd make it!

Write a reply ...

Figure "Create a quick answer"

## 2.1.3 Edit notes

If you have made a mistake or if you have missed some important information, you can edit the notes after you have sent them (Figure "Edit notes"). In order to edit, you pass over the note and then choose the action "edit" which you will find under the option "more". The editor will now load automatically and you can edit the note. When you are finished, you can click "save" or use CTRL + Enter.



Oct 4, 2013 5:43 PM | Lara Bauer | Public  
 Here's an interesting #press #report of our #supplier #ACME about the release of a new product generation of #batteries: www.acme.com/press/2013-09.html  
 @lisa should we write a blog entry for our [...]

Reply Like Bookmark More ▲

Show all 4 replies

Oct 4, 2013 5:48 PM | Lara Bauer  
 @lara great

Oct 4, 2013 5:48 PM | Lara Bauer

More ▲

- [Edit](#) 
- [Move](#)
- [Share](#)
- [Export](#)
- [Permalink](#)

Figure "Edit notes"

## 2.1.4 Delete Notes

Furthermore you have the option to delete a note after it has been sent (Figure "Erase Notes"). You will find that function under "more" and "delete" below the text of the note.

### If you want to delete a note, the following conditions apply:

- You may delete a note, if you are the **author of that note**.
- You may delete the note, as long as there is **no answer to it** yet.
- You may delete notes from other users if you are the **manager of the topic**.
- You may also delete discussions, if you are the **manager of the topic**.

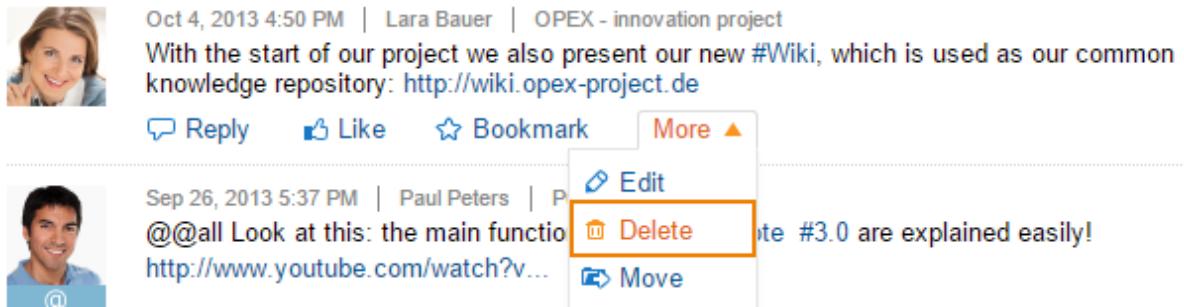


Figure "Erase Notes"

## 2.1.5 Move Notes

A note or a discussion can be moved into another topic by the author or the manager of the topic using the function "move".

If you would like to move a note or discussion, the following conditions apply:

- Only the entire discussion can be moved. Single answers cannot be moved.
- You can only move a note or discussion into a topic where you have write access.

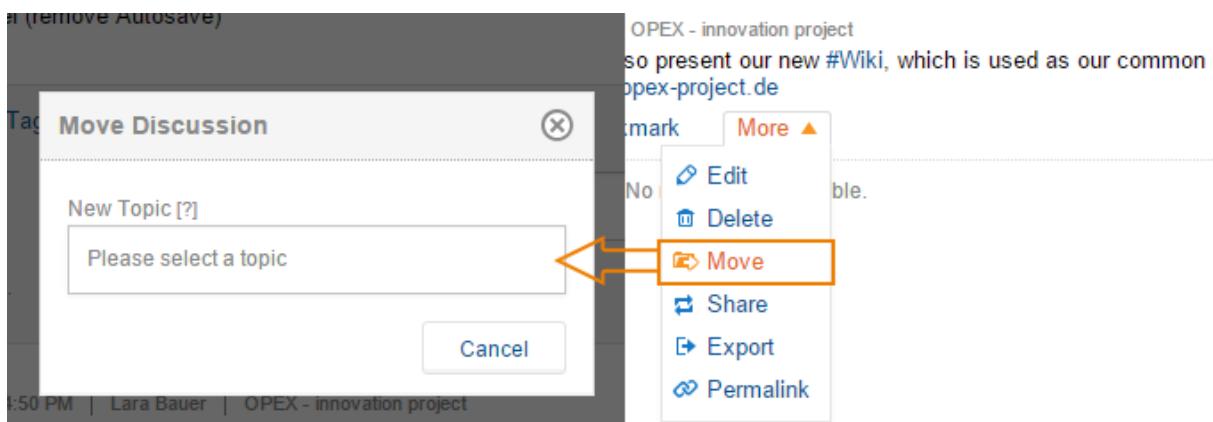


Figure "Move Notes"

## 2.1.6 Writing notes via E-Mail

You can write new notes via E-Mail, without being logged into the Communote system.

You only need to know the email address of the topic that you would like to write in and have a valid user account.

You can find the email address of the topic in the profile of the topic. In order to get there you choose a topic via "Select and Open" and then click onto "Info" in the horizontal navigation below the banner (Figure "Topic Information"). The email address will be shown in the information that is shown here. If there is no address to be found, the function may be disabled in your system.

Depending on the configuration of the system, a topic can have a unique email address or there may be only a system-wide address for all topics. In case there is only a system-wide address, you specify the topic in the reference headline.

The screenshot shows a user interface for viewing topic details. At the top, there is a horizontal navigation bar with four items: 'Notes' (in blue), 'Topics' (in blue), 'Members' (in blue), and 'Info' (in blue, with a downward arrow indicating it is selected). Below the navigation is a dark green header area featuring a white chalk-style drawing of a lit lightbulb with rays emanating from it. To the right of the header, the topic name 'Idea Jam (idea\_jam)' is displayed in blue text. Underneath the name are three data entries: 'Created on' followed by the date '8/27/13 12:20 PM'; 'E-mail address' followed by the email 'idea\_jam.communote-name.microblog@yourdomain.com'; and 'Tags' followed by the words 'ideas, teamwork'. In the bottom right corner of the main content area, there is a small rectangular button with the text 'Edit Topic'.

Figure "Topic Information"

If you would like to send in a note via e-mail, you need to use the address of your specific topic. Tags (#) and mentions (@) can be used the same way as the editor in the system. Attachments can also be integrated into the e-mail.



Figure "Send a note via e-mail"

If you receive an email with a notification about a new note you can also use the answer function of your email program. Communote will transfer your answer into a regular Communote note. Answer will remain within a discussion and the topic remains the same.

Important: Don't change the address or the subject headline of the email!

**If you would like to send a note from you mailaccount, the following conditions apply:**

- You need to have a **valid user's account** for the Communote system.
- You need to write from the email address that is **connected to your Communote user's account**
- The subject headline is import if there is only a system-wide mail address. If there is a specific address for your topic, the headline will not be in use.
- If you want to answer to a note, you need to use the **reply function**. Otherwise there will be a new note, not an answer.

## 2.1.7 Direct Messages

Direct messages are private messages between two or more users. They are only visible to the author and the addressee(s) and can be written as a response to another note or as a new note, but it has to be marked as a direct message within the note and it must be addressed to one or more specific users.

Again there are two options for marking a note as a direct message. You can either mark it directly in the message by starting the note with a d (for direct message) followed by a space and then followed by the mentioning of the addressee (@user). If you are

addressing more than one user, they must be separated by an empty space (Figure "Direct Messages"). The other way is again in the options: Below the input field of the users that you would like to notify is a field "send as direct note". If you check that field, your message will be send as direct note.

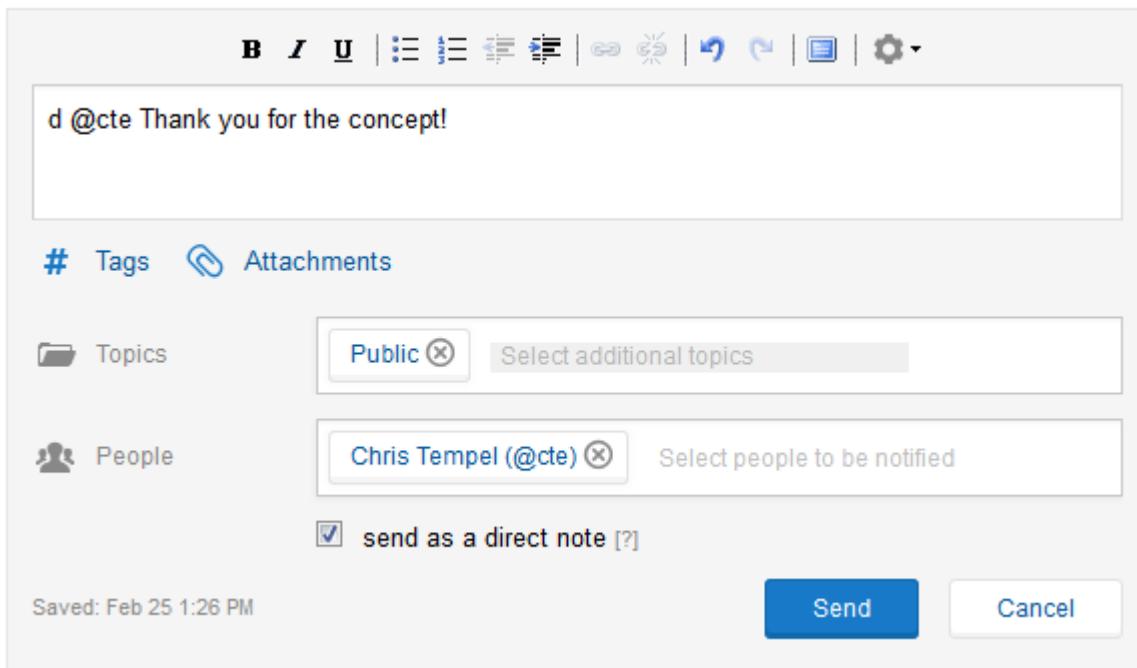


Figure "Direct Messages": Mark a note as a direct message

If you have write access to a topic, you can directly answer to the note. You can now either answer all addressee of the note or only a selection. It is not possible to include additional users in an answer to a direct message.

#### If you would like to send a direct message, the following conditions apply:

- A direct message can be edited and erased as long as there is no answer to it yet.
- A direct message can be transformed into a "normal" message via editing.
- It is on the other hand not possible to transform a "normal" message into a direct message.
- @mentions within the note do not apply as addressee of the note.
- Answers can only be sent to all addressees of a direct message
- addressees can be excluded when answering to a direct message.

# 2.2 Read Notes

## 2.2.1 Note view

Within the Communote system there are two different ways of viewing a message:

- The stream view which shows all notes separately in the order of their creation (see "View Modes" - right). You can always switch to the discussion view:
- the discussion view shows a conversation (mother post and comments) as it appeared in one post (see Figure "View Modes" - left)

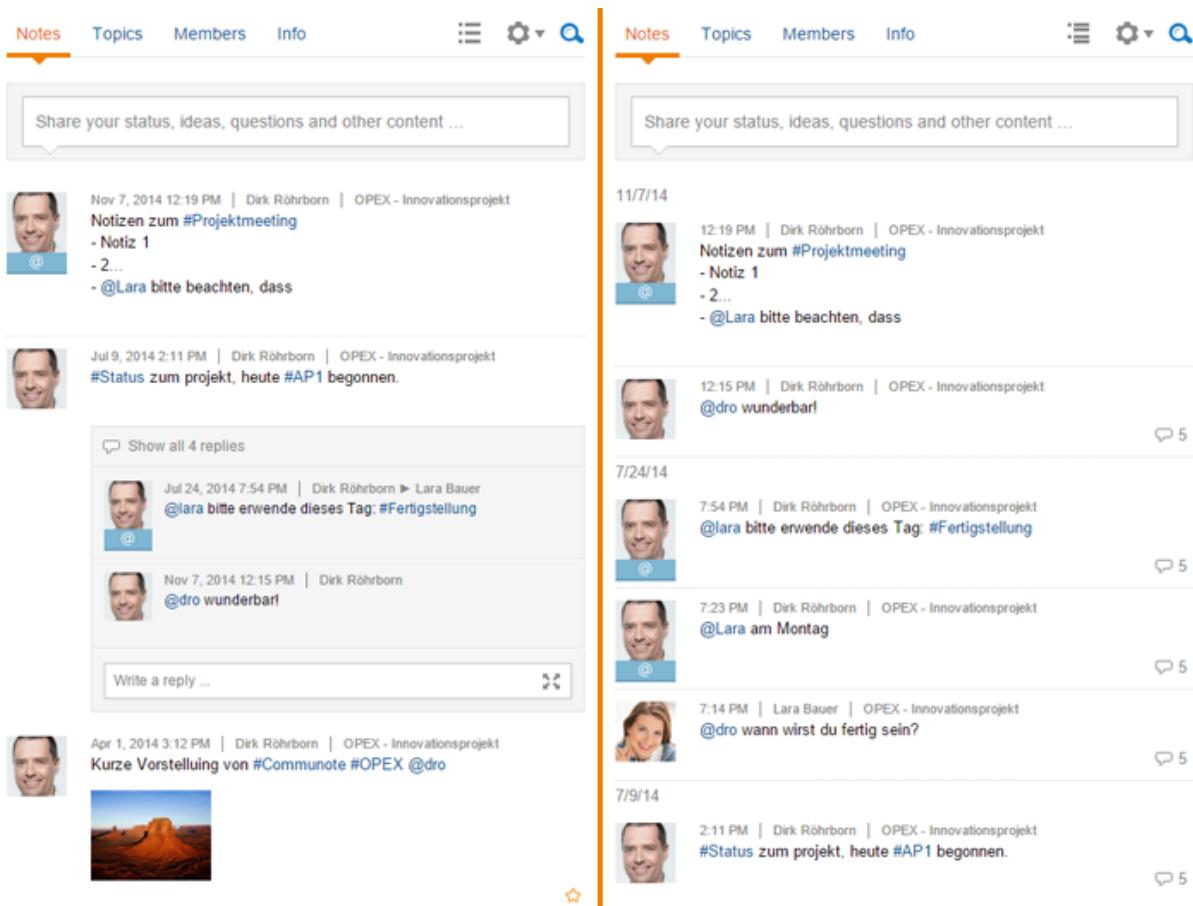


Figure "View modes for notes": Discussion view (left) or Stream view (right)

In order to switch between the views, you can choose the button above the note.

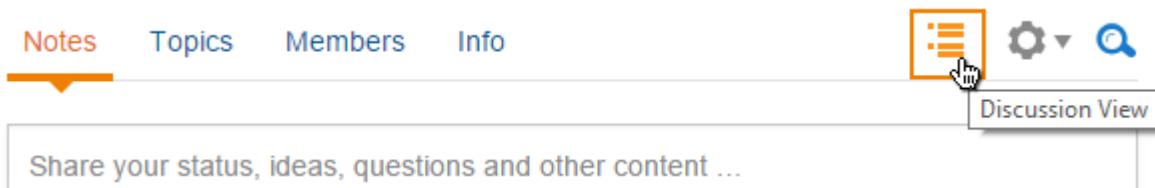


Figure "Change view mode"

## 2.2.2 Topic and People Overview

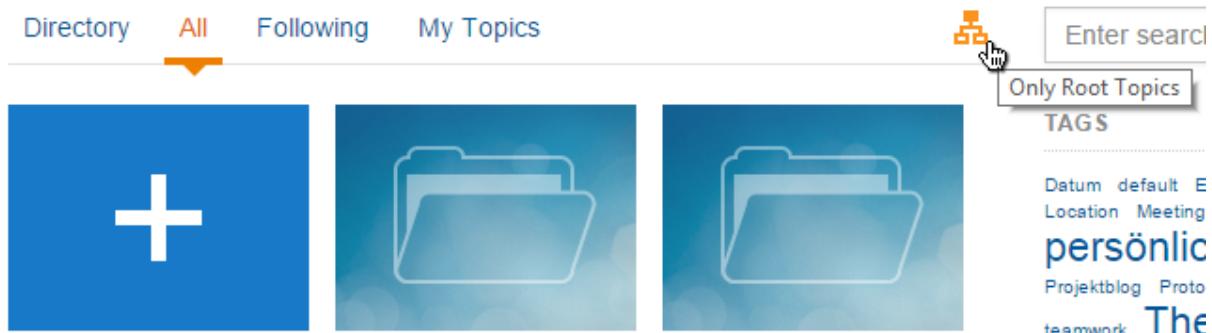
On the left hand's side of the interface you can find the tab "Topics" with all topics that you have access to. You can choose which topics you would like to follow. Two ways of viewing the topics are available: You can view only root topics (no subtopics) or you can view a complete list of all topics sorted in alphabetical order.

On the right hand's side you can additionally search for tags and topics.

The image contains two screenshots of the Communote interface. The top screenshot shows the 'Topics' overview page. On the left, there is a sidebar with 'Choose & Open' dropdown, 'OVERVIEW' section with 'Notes', 'Topics' (highlighted in orange), 'People', and 'A parent topic' (with a blue folder icon); and 'MY FAVORITES' section. On the right, there is a banner for 'Communote 3.2' featuring a night cityscape. Below the banner are buttons for 'Directory', 'All' (highlighted in orange), 'Following', and 'My Topics'. There are three large blue cards: 'Create New Topic' (with a white plus sign), 'A parent topic' (with a blue folder icon), and 'China' (with a blue folder icon). An orange arrow points from the 'A parent topic' card to the word 'China'. The bottom screenshot shows a similar interface but with 'Topics' highlighted in orange at the top. It has 'Create Subtopic' (with a white plus sign) and 'A subtopic' (with a blue folder icon).

*Figure "Topics and subtopics"*

You can switch between the views by clicking on the button on the right side above the topic list.



*Figure "View modes for topics": All or only root topics*

Next to the topic view you will find the tab “People”. Here you can find all People that are registered to your Communote in alphabetical order. Equal to the topic view you can also see which users you follow and add new users to follow. You can also search for tags within this view.

Name	Title
Martin Alter (@maa)	Disabled User
Chriss Besser (@kenmei)	Project Manager (Alpha Cor...)
Martin Böhme (@mtb)	
Lara Bauer (@Lara)	Vertriebsmitarbeiterin (Must...)
Henning Blanke (@hbl)	
Ulrike Bothur (@ubo)	

*Figure "Overview Users"*

## 2.2.3 Organize Notes

### 2.2.3.1 Bookmark a Note

In order to get a better overview of your Communote system and not to get important notes out of sight you can “bookmark” notes. Below the note, next to “answer” and “like” there is an option for “bookmarking” the note (Figure “Bookmark”). If you have chosen to bookmark the note, it will from now on appear in your tab “Bookmarks”. You can remove notes from your bookmark list by clicking that option “bookmark” within the specific note for a second time. The note will no longer be part of your bookmark list.

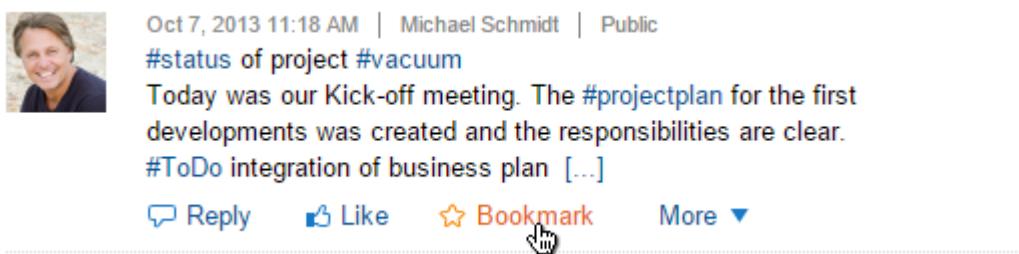


Figure “Bookmark”

### 2.2.3.2 “Follow” Notes

Another option for filtering Communote specifically for your interest is the “Following”-function. With its help you can directly follow specific activities within a topic. You can follow topics, tags and users. All notes that apply to your following-requirements will appear in your “Following”-Tab. You can activate new criteria in the topics and people overview or you just use the follow button inside the hovercards (Figure “Follow a person”). If you no longer want to follow a topic or person, you must click the follow-button again.

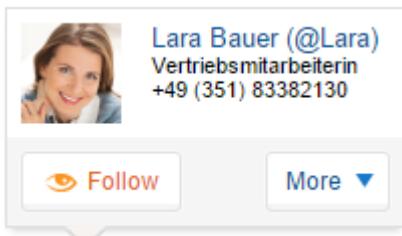


Figure "Follow a person"

### 2.2.3.3 "Like" Notes

Additionally to following and bookmarking a note, you can also give quick feedback with the "like"-function with which you can show the other users that you liked that note. Just choose "like" (the thumb symbol) in the options below that note. You can now also see, who else likes the note.

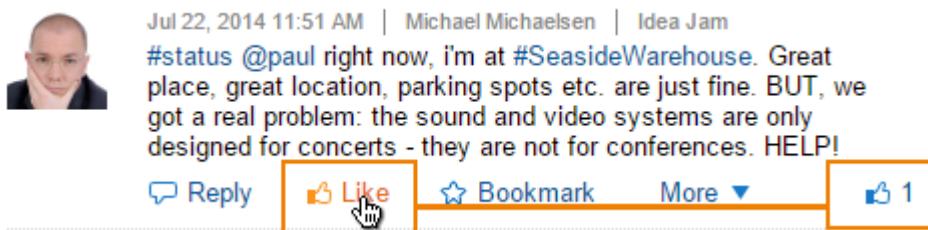


Figure "Like a Note"

### 2.2.3.4 RSS & RTF

Above the list of notes you can find a knurl for further note-options. Here you can either do a RTF-export and convert the current note list into another type of document, that can be opened for example with MS Word. The RSS-Feed lets you subscribe to all changes within that topic via RSS-Feed.

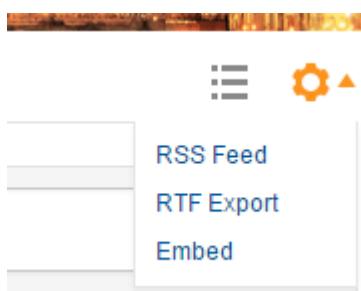


Figure "RTF and RSS"

Depending on your RSS-Program, there may be differences in the way RSS-feeds can be subscribed to. Please make sure that your RSS-reader supports authenticated feeds.

# 2.3 Manage Topics

## 2.3.1 Topic localization

### 2.3.1.1 Choose a topic | Filter topics

There are three different ways to choose a topic. The first way is to search for the name of topic at the “Choose & Open” search input at the top left corner of the interface. To click on a topic name at the meta information of a note is the second way. The last way is to go to the topics overview and choose your topic. If you have chosen a topic, the search function (see below) will now be applied to this topic. If you would like to change back to all notes, just go to the notes overview at the sidebar.

The screenshot shows the Communote web interface. At the top, there is a navigation bar with the Communote logo, a search input field containing "Choose & Open", and links for "Help" and "1". Below the navigation is a sidebar on the left with sections for "OVERVIEW" (Notes, Topics, People), "MY FAVORITES" (Lara Bauer (@Lara), OPEX - Innovations..., Projekt ALPHA), and a section for "A parent topic" which is highlighted with an orange box. The main content area shows a banner image of a building at night. Below the banner is a search bar with the placeholder "Share your status, ideas, questions and other content ...". A vertical orange line connects the "A parent topic" section in the sidebar to the search bar. The main content area also displays a timeline of events:

- 1/12/16: 5:15 PM | Lara Bauer | A subtopic  
Lara Bauer assigned the topic A subtopic to topic A parent topic.
- 5:15 PM | Lara Bauer | A subtopic  
Lara Bauer has created the topic A subtopic.

Figure “Choose a topic”

### 2.3.1.2 My favorites

If you have topics that you frequently read or write in, you can save them as a favorite in order to make them available more easily in the future. If you open the topic that you would like to choose as a favorite, you can “pin” it to the list of favorites.

If there are new notes in one of your favorite topics, you will be notified. You can erase a topic from your favorites by clicking the “X” next to the name of the topic.

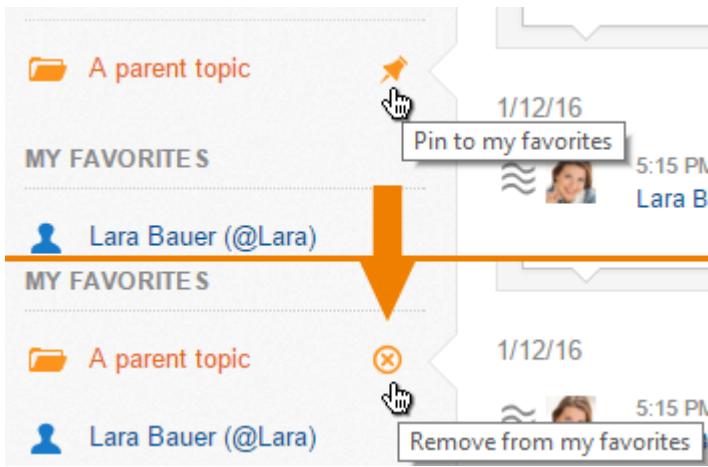


Figure “Pin topics as favorites”

### 2.3.2 Create and edit topics

You can create a new topic in the topic overview. Choose the plus-sign that is included in the first position of the overview (Figure “Create a topic”) and a new window will appear that lets you specify the topic details (Figure “Specify topic details”). After creating a new topic, you will automatically be the topic manager.

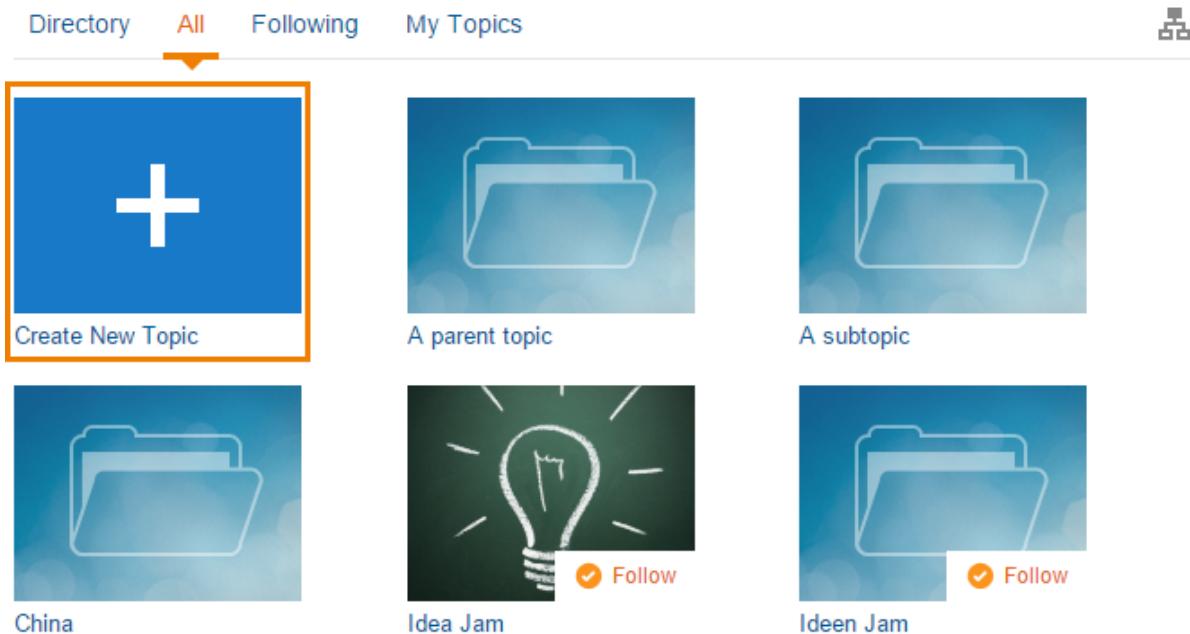


Figure "Create a topic"

**Create new Topic**

**Title \***  
Topicname

**Alias [?]**  
topicaalias

**E-mail Address [?]**  
topicaalias.global.microblog@communote.com

**Description**  
Eine Beschreibung.

**Tags**  
tag  Please enter tags

Automatically create an activity, when the access rights of this topic are changed

*Fields marked with an asterisk (\*) are required.*

**Create Topic** **Cancel**

Figure "Specify topic details"

You as the new topic manager can specify the topic title or alias and you can see and edit the topic details. You can also apply a protocol that will make all changes in access rights a systemwide note. Please note, that this system note can not be erased. In the topic details, you also have the possibility of erasing the topic.

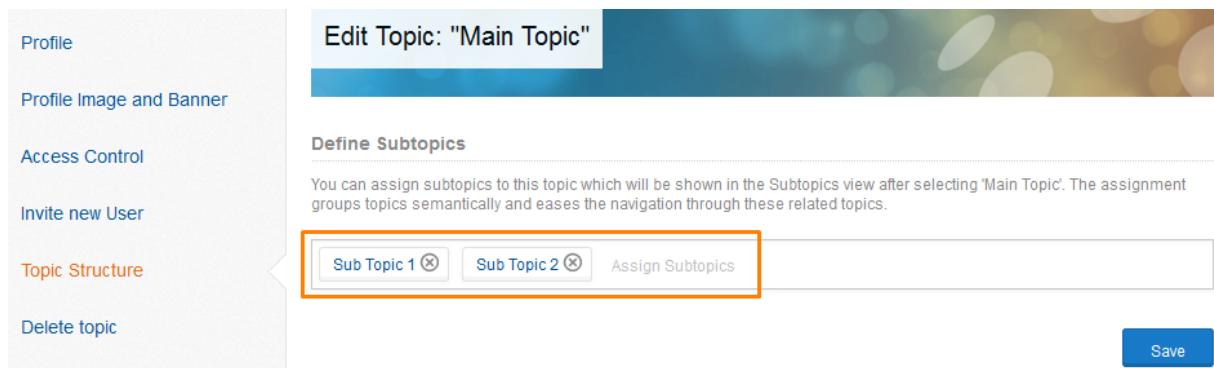
After creating a topic, it will appear in the topic overview page and can be found with the search function. If you would like to apply changes, you can choose the tab "info" and then "edit topic" (Figure "Topic Information").

Here you can also change the topic picture (for the overview page), the banner, access rights and the topic structure. Additionally you can also invite new users in this function.

The screenshot shows the 'Edit Topic' interface. On the left, a sidebar contains links: 'Profile' (highlighted with an orange box), 'Profile Image and Banner', 'Access Control', 'Invite new User', 'Topic Structure', and 'Delete topic'. The main content area has a banner image of a city at night. The title is 'Edit Topic: "Idea Jam"'. The 'Title \*' field contains 'Idea Jam'. The 'Alias [?]' field contains 'idea\_jam'. The 'E-mail Address [?]' field contains 'idea\_jam.confluence.microblog@preview.communote.com'. The 'Description' field contains 'A description...'. Under 'Tags', there are two tags: 'ideas' and 'teamwork'. A placeholder 'Please enter tags' is visible. A checkbox labeled 'Automatically create an activity, when the access rights of this topic are changed' is checked. A note at the bottom says 'Fields marked with an asterisk (\*) are required.' A blue 'Save' button is at the bottom right.

Figure "Edit Topic"

To connect different topics with each other hierarchically, you can define subtopics. Therefor you have to click on "Topic Structure" in your topic settings. In the next step you can assign subtopics to your topic by typing in their names into the search field.



*Figure "Define Subtopics"*

As the creator of the topic you are automatically assigned as the topic manager of the topic. You can assign new topic manager to the topic and assign other access rights to the users. While typing in the name, Communote will automatically suggest users to you. You can now pick "manage", "read" and "write" as access rights. If you assign "manage" to a user, he will now have the same rights as you. You can also edit access rights with a click on right and erase the user by clicking "erase".



*Figure "Access Rights"*

Additionally you can invite new users. You therefore choose the tab in the topic manager and type in the name and abbreviation of the user and suggest a language and access right to him. The abbreviation can not be changed afterwards. If you now choose "invite user", the new user will receive an e-mail that informs him about the topic and the access rights that have been given to him.



New Users that don't have access to this communote system yet can get invited to become a member of this system and grant access to this topic. If there is an integration to an external user repository, the user gets invited from this repository.

E-mail/Username \*

Language \*

English ▾

Topic access

Read ▾

*Fields marked with an asterisk (\*) are required.*

**Invite user**

*Figure "Invite Users"*

# 2.4 Search Functions and Filters

If you are looking for a specific message, Communote supplies an extensive search function in order for you to find it.

You can filter for a specific note by text, tag, author and topic. Only one click onto the tag or user filters Communote for that tag or person. You can also choose a search tag directly from a note or you can pick a tag from the tag cloud on the right side of the interface. You can also type in the tag you are looking for there. Below the search field there will now appear the filtered tags and users. By clicking on the words for a second time, you can erase them.

Note: The different filters can be combined with each other. The more filters you apply, the fewer search results you will get.

## 2.4.1 Context Search

If you are searching for a specific note content, you can search for that content in the search field without using the other search functions. Just type in the keyword you are looking for and press "Enter". You will now be proposed possible tags that you can choose directly from. If none of those tags apply to your search phrase, just keep on typing in the correct phrase.

The screenshot shows a microblog interface with a header featuring a cityscape background. A sidebar on the left lists 'Notes', 'Topics', 'Members', and 'Info'. Below the sidebar is a text input field with placeholder text 'Share your status, ideas, questions and other content ...'. On the right, there's a search bar with a magnifying glass icon and a 'FILTERED BY' section containing '# idea' and a user profile for 'Lara Bauer'. A 'TAGS' section below shows no items.

*Figure "Context Search"*

## 2.4.2 Tagcloud

The tag cloud supplies you with an overview of the tags that are frequently used in the microblog. The bigger the tag is in the tag cloud, the more it is used in the microblog. If you choose a tag from the tagcloud, you will be guided to a filtered search.



*Figure "Tagcloud"*

## 2.4.3 Author filter

With the user filter you can search for notes that have been written by a specific author.

You will receive an overview of all users that have write access to the topic you're looking at and can select an author by clicking on their profile picture. You will be able to see the username abbreviation when you pass your mouse over their profile picture.

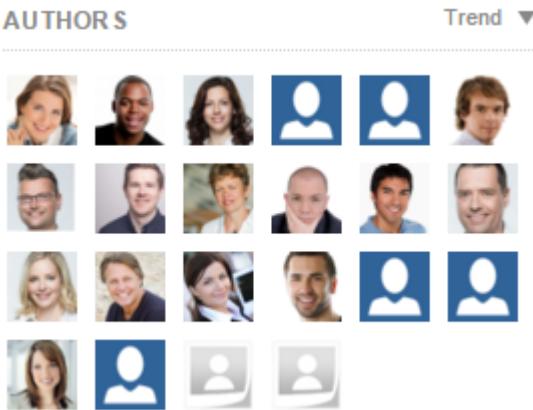


Figure "Author filter"

## 2.4.4 Content Filter

The content filter is useful if you are looking for a specific format of a note or an attachment. You can directly choose what the note you are looking for is supposed to contain: A picture, document, link activity or a video? If you choose one of those contents, only notes will appear that contain that specific content.

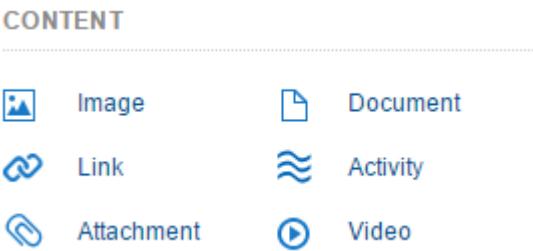


Figure "Content Filter"

## 2.4.5 Period Filter

You can also choose a period of time in which you note was written. The quick launch will let you choose the last week and the last month, but you can also choose a very specific period of time in the mask. Therefor a small calender will appear in which you can pick the right period of time. The arrows on top let you jump between the months.

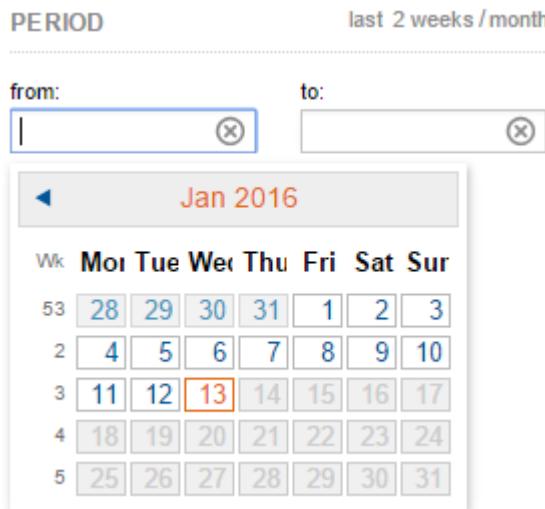


Figure "Filter for a period of time"

# 2.5 Profile-Options

As you are choosing “Your Name” in the top menu bar and then click “edit profile”, you can change profile details like your company, phone number and tags.

The screenshot shows the 'Edit My Profile' page. On the left, a sidebar lists 'Profile', 'Profile Picture and Banner', 'Notification', 'Account', and 'User Interface'. The main area has a blue header 'Edit My Profile'. It contains fields for Salutation (empty), First Name \* (John), Last Name \* (Doe), Company (ACME), Position (CEO), Street/No. (empty), Zip (empty), City (empty), Phone (+ 00 (123) 45678), Fax (+ (empty) (empty)), Language (English), Country (Germany), Time Zone (Please select), and Interests (My Tags) with tags for usability, HTML, and CSS. A note at the bottom says 'Fields marked with an asterisk (\*) are required.' A 'Save' button is at the bottom right.

Figure “My Profile”

You can also change your profile picture if you choose “Profile Picture and Banner” and then “Choose a file” and choose the correct file for your profile picture on your computer. Now you can set the area of the picture that you would like to use. If you choose “Upload Profile Picture”, the picture will automatically be linked to your profile. If you would like to use the default picture again, choose “use default” and your profile picture will be erased.

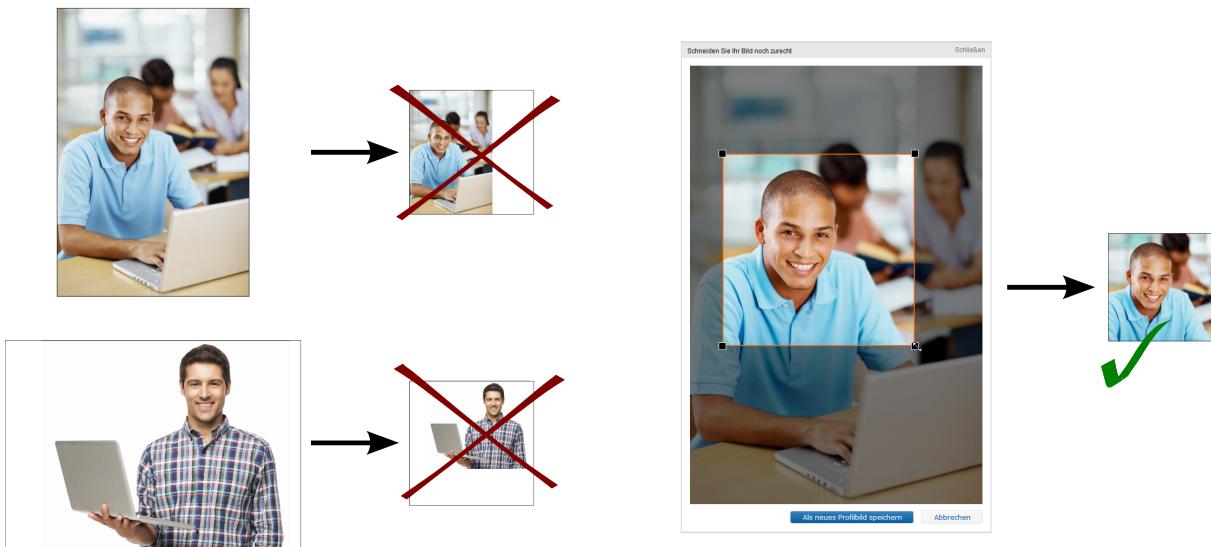


Figure "Adjust profile picture"

The process for adjusting the banner is very similar: You can also find it in the area "Profile picture and banner". For the banner it is important that it has the correct size of 960px\*100px in order for it to be shown correctly.

"Notification" lets you adjust your notification options. You therefore need to make sure that the email address that you have received your first Communote email from is listed as a "secure address". Otherwise your notifications will be put into the Spam-Folder of your inbox.

You can be notified about the following options:

- mentions - You will be notified if there is a note in which you have been mentioned with @YourName (former standard)
- Discussions you took part in - You will be notified if there is a new answer in a discussion that you have been part of, meaning have written at least one answer
- When someone "likes" a note of yours

Additionally you have the option to change your email address and to set a new password. The bar on top of the password inbox, how secure your password is. If you would like to erase your account, you can also do that here. Depending on your system, you may be

able to choose between erasing all your data and notes and erasing your account without erasing your notes.

# 2.6 Tag Management

The Communote administrator have the ability to manage all tags used in notes. For him it is possible to rename, replace and delete tags.

The best way to access the administration page for a tag is to use the global search at the left sidebar and search for the specific tag. Another way to access the tag page is to use the hover cards of a tag inside a note.

At the tag page you able to see the tab "Administration" as administrator:

The screenshot shows the tag management interface for the '#Stash' tag. At the top, there is a message box stating "#Stash This tag was used in 2 notes." Below this, there are two tabs: 'Notes' and 'Administration'. The 'Administration' tab is highlighted with an orange underline. Under the 'Administration' tab, there is a section titled 'Rename or Replace Tag' with a text input field containing the placeholder 'Enter a new name or select an existing tag'. To the right of this input field is a blue 'Rename' button. Below this section is another titled 'Delete Tag' with the instruction 'You can delete the selected tag "Stash" here.' To the right of this instruction is a blue 'Delete' button.

Figure "Tag Management"

At the first section of the tag management you able to rename the tag or replace it with a existing tag. To rename a tag you have typing a new name into the input and click the

“Rename” button. If the entered tag already exist then you will see it in the auto suggestions. By selecting the tag from there and clicking the “Rename” button, a dialog will ask you whether or not replacing the old tag with the new one:

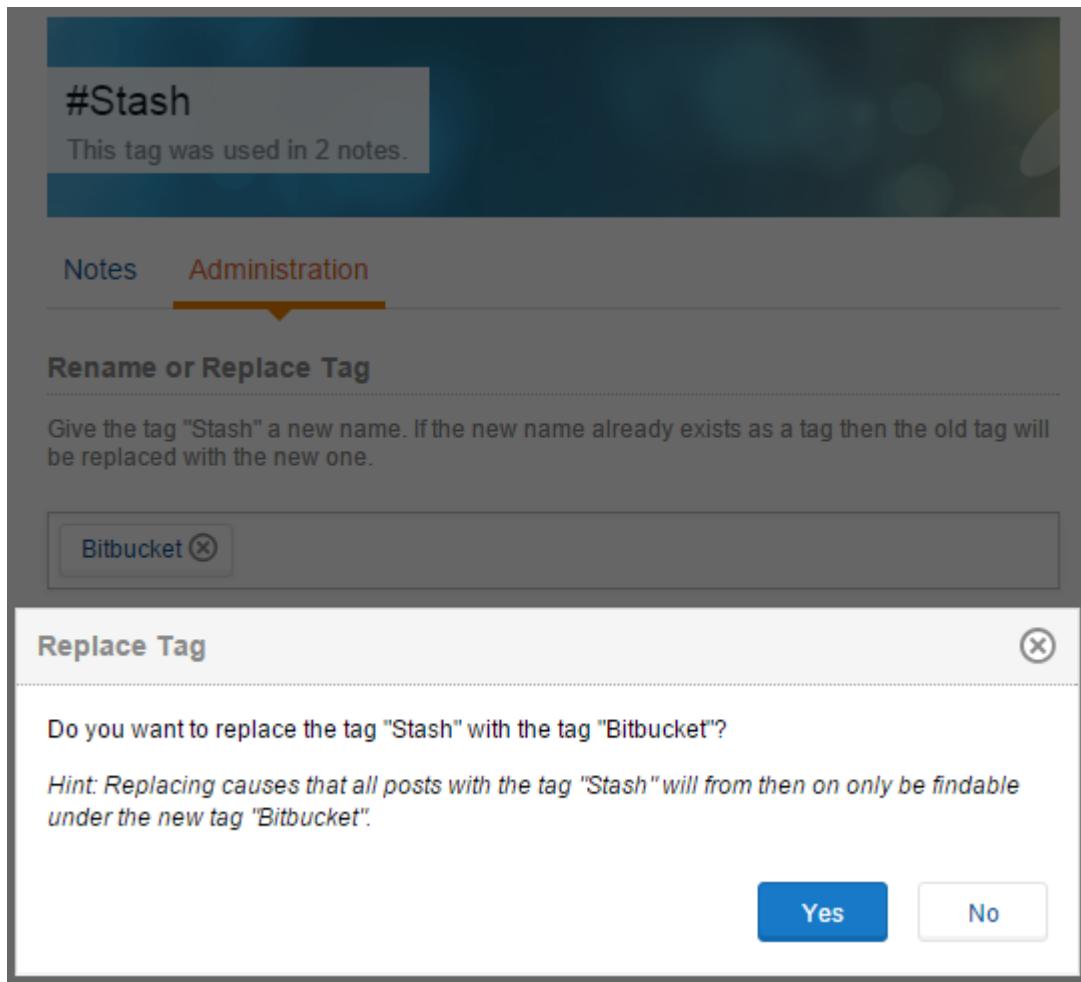


Figure “Replacing an old tag with an existing”

Replacing causes that all posts with the old tag will from then on only be findable under the new tag. If the tag name was written directly in a note then only the link will be replaced but the text will remain unaffected.

At the second section of the tag management you able to delete the tag by clicking the button “Delete”. A dialog will ask you if the tag should deleted and a confirmation will removed the tag link from all notes that use it.

## 2.7 Embed Communote

It is possible to embed streams of Communote topics into any website. Therefor you have to copy and paste a special embed code (a JavaScript snippet) into the HTML code of your website.

Even in embedded topic streams you can write, comment and like messages - as easy as you already know it from the regular Communote. The embed code can be reached from the actions menu of the stream.

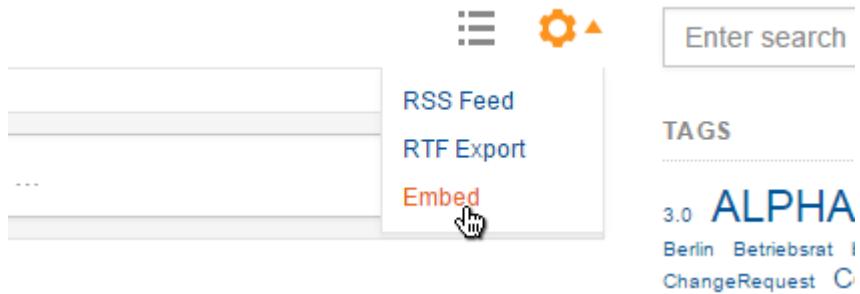


Figure "Embed option"

# 2.8 Bookmarklet

Go to “Tools” at the topbar in to install the bookmarklet.

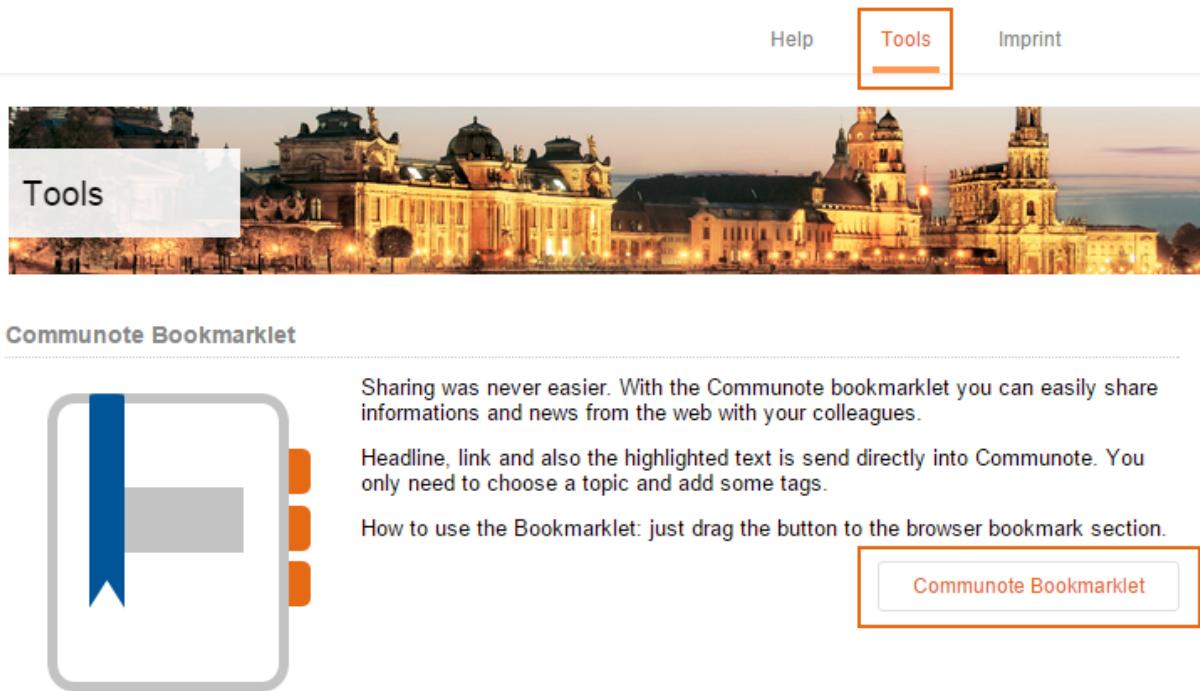


Figure “Bookmarklet page”

Drag the button “Communote Bookmarklet” to your browser bookmarks.

If you want to share a website just click on your bookmark and the bookmarklet will appear in a popup with the title and URL of the website you want to share.

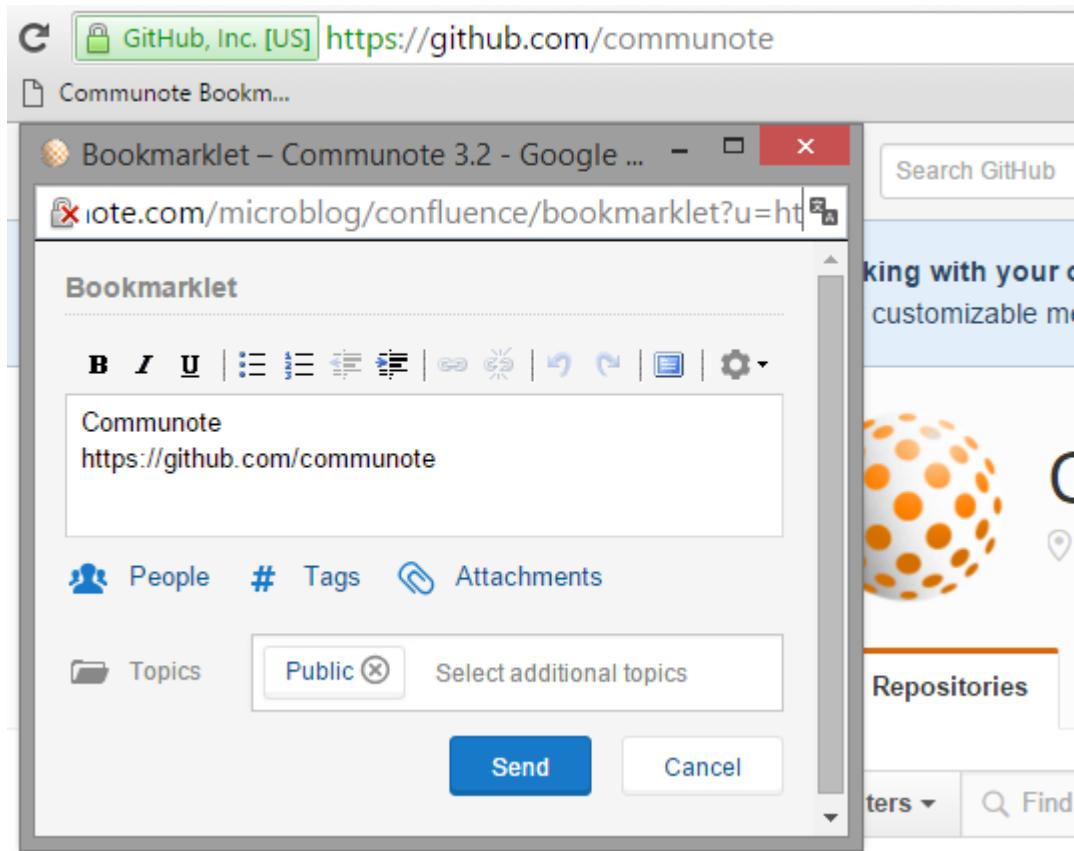


Figure "Bookmarklet popup"

# 1 System requirements

**First, you need the following things on your system:**

- Windows or Linux (32-bit or 64-bit)
- Java 1.7
- Apache Tomcat 7

It is recommended to run an Apache HTTP server for serving requests to the Communote installation. This server should fulfill the following requirements:

- Apache Version 2.2.5 or higher
- with the modules `mod_proxy` , `mod_proxy_http` and `mod_proxy_balancer`
- Maven
- PostgreSQL 9.3 or MySQL 5.1

**The following hardware requirements are recommended:**

- 64bit Dual core system
- 10 – 100 GB data storage (The actual size depends on the usage of the file upload option. The actual installation data size is less than 1 GB.)
- 2 GB RAM

# 2 Installation

## 2.1 Types of installation

There are different installation packages for Communote:

### **Installation with system integration script**

Tested with chosen Linux distributions. It contains a script which supports the system integration of the installation. This installation package already contains a Java Runtime Environment, therefore there is a 32 and 64bit version.

### **Installation without system integration script**

Available for Linux and Windows. With this package you can start Communote without special configuration. However you have to install a Java Runtime Environment before installing Communote. In case you are not sure if the system integration script is working on your platform use this installation package.

### **Installation by WAR-File**

Using the installation by a WAR-File the complete configuration must be done by hand.

The installation by WAR-File should only be done by experienced users.

To download the various packages or upgrade to a new version, visit the download area of our github project: <http://communote.github.io/download/communote.war>

## 2.2 Create Databases

Communote supports MS SQL, Oracle, PostgreSQL and MySQL. Download the JDBC driver for your database system and copy the JAR file to the `lib` directory of your Tomcat installation.

## 2.1 For MySQL

Go to the PostgreSQL shell:

```
mysql -u root -p mysqlpwd
```

First create a database for Communote and replace `communote_db_name` with the name of the database for Communote to use:

```
CREATE DATABASE communote_db_name CHARACTER SET utf8 COLLATE utf8_general_ci;
```

For security reasons a separated database user should be created and the database access to the Communote database should be limited. To do this execute the following statements in the MySQL Shell:

```
GRANT ALL PRIVILEGES ON communote_db_name.* TO 'communote_db_user'@'IP_COMMUNOTE_SERVER' IDENTIFIED BY 'communote_db_password';
FLUSH PRIVILEGES;
```

Replace `communote_db_name`, `communote_db_user` and `communote_db_password` with the database name, the database user and the database password. The `IP_COMMUNOTE_SERVER` needs to replaced by the IP of the Communote server. Copy and paste this line if you need other servers to access the database as well (e.g. for administrative access).

## 2.2 For PostgreSQL

Go to the PostgreSQL shell:

```
psql -U postgres -W
```

It is recommended to use a separate database user with rights to access the communote database. You can create a new user with the following statement in the PostgreSQL shell:

```
CREATE USER communote_db_username NOCREATEDB NOCREATEROLE NOCREATEUSER ENCRYPTED PASSWORD 'communote_db_password';
```

Replace `communote_db_username` and `communote_db_password` with the name of the database user and the password.

The database can be then created with:

```
CREATE DATABASE communote OWNER communote_db_username ENCODING 'UTF8';
```

## 2.3 Installation

### 2.3.1 With system integration script

**Remark:** The installer script has been only tested on a Gentoo (up to date configuration as of Q3 2010) and for Ubuntu 10.04 LTS. You should only use the installer script for those distributions. Also make sure that your system has a current version (at least 4.1.3) of the shadow package installed.

For Linux distributions an Installer is available which will ship with all necessary components for Communote to run and configure them initially. The installer will also include the required Java Runtime Environment (JRE).

Using Linux you can download the installer with the command line tool wget. You will find an up-to-date version on the Communote homepage:

```
wget http://www.communote.com/download/Communote-linux-x64.tar.gz
```

After downloading the installer you can unpack the installer. By default the command is:

```
tar xvfz communote-installer.tar.gz
```

Now change into the directory of the just unpacked files and execute the following command:

```
sudo bash ./setup.sh
```

Follow the instructions of the installer. It will go through the following steps (For every step default values will be suggested. You may accept them by just pressing the return key):

- **User und group:** Here you can define a user and group to be used as owner for the files to be installed. If user or group do not exist they will be created.
- **Port:** Here you can specify which port the application should use. If the port is currently used, the installer will give you a warning. You should then choose a different one.
- **Installation directory:** Enter the installation directory. The application and necessary components will be installed into this directory.
- **Data directory:** Enter the data directory for Communote. In this directory the configuration data, cache data and by default the attachment repository will be stored here. Please assure to have enough disk space available for this directory since attachments will be stored there by default. The default value for the data directory will be a sub directory of the installation directory.

After completing the installation check:

1. Communote has been installed in the correct installation directory and
2. The file system rights have been set correctly on the provided data directory.

At the end of the installation procedure Communote will be started and you can continue with the installation using the web interface ([see section 2.4 \(page 59\)](#)).

## 2.3.2 Without system integration script

For an installation without the installer script you will have to use one of the packages without the JRE (see section 1.1.). Use the tar.gz on Linux and .zip on Windows platforms. To install Communote from these packages follow the instructions below:

1. Download and install the latest Oracle Java Runtime Environment (JRE) of version 7 (<http://www.java.com/en/download/>). After the installation of Java check that the correct version is returned when executing the command:

```
java -version
```

2. Unzip or untar the downloaded package into an arbitrary directory. This directory now contains among others a directory named communote which you copy into your preferred installation directory ( `COMMUNOTE_INSTALL_DIR` ).
3. When not using a PostgreSQL database download and install the appropriate JDBC driver for your database as described in the previous sections.
4. Configuration:

1. Define the Communote configuration directory. Edit the file

`COMMUNOTE_INSTALL_DIR/communote/conf/context.xml` and add the following entry in between the elements `<context>` and `</context>`:

```
<Environment name="communote.config.dir" type="java.lang.String" value="absolute path to configuration directory" />
```

We suggest that you use the prepared configuration directory

`COMMUNOTE_INSTALL_DIR/communote/conf/communote`

2. Configure the data directory which Communote will use for storing application data. This directory will also be used as the default location for saving attachments.

1. Create a file called `startup.properties` in the Communote configuration directory.
2. Add the absolute path to the data directory to the `startup.properties` file as shown in the following example. The example defines `C:\Communote\Data` as data directory. You should not select a directory within `COMMUNOTE_INSTALL_DIR/`

`communote/communote/` because this would allow unauthorized users to access the content of that directory directly from their web browsers.

`communote.data.dir=C:/communote-data`

#### Note for Windows:

In front of the colon ( `:` ) you have to add a backslash `\` and all backslashes in the path have to be replaced by normal slashes `/`.

So instead of `C:\Communote\Data` write `C:/Communote/Data` .

5. Optional for Linux systems (recommended): Create or select a special user without root access that should be able to run Communote. This user must have read and write access for the data directory and should be the owner of the Communote installation directory.
6. Now you are ready to start Communote. To do this, go to the directory `COMMUNOTE_INSTALL_DIR/communote/bin` and run Communote with `startup.bat` (Windows) or `startup.sh` (Linux / as the correct user).

Continue the installation with the web interface ([see section 2.4 \(page 59\)](#)).

### 2.3.3 By deploying WAR-File

First of all rename your downloaded WAR-file to `ROOT.war` and copy it to your Tomcat `webapps` directory. Remove the `ROOT` folder if it already exists.

You now have to configure the server before the first start:

1. If you run Tomcat 7 edit the files `server.xml` and `context.xml`, so that every context-Element has the parameter `useHttpOnly="true"` :

```
<context ... useHttpOnly="true" >
```

This way the application will be more secure, as cookies containing session data can't be accessed via Javascript in modern browsers.

2. You need a data folder for storing attachments and application data at a preferred location, for example `communote-data`. The Tomcat needs by the way read and write access.
3. Create a sub folder `communote` into the directory `conf` of your Tomcat installation and put a new file called `startup.properties` in it.
4. In this file you have to define the absolute path to the data directory of Communote you created at the first step. Do this by adding the following line:

```
communote.data.dir=C\:/communote-data
```

#### Note for Windows:

In front of the colon ( `:` ) you have to add a backslash `\` and all backslashes in the path have to be replaced by normal slashes `/`.

So instead of `C:\Communote\Data` write `C\:/Communote/Data`.

5. Open the file `context.xml` at the `conf` directory of your Tomcat installation and add the following lines between the elements `<context ...>` and `</context>`. Replace the value for `communote.config.dir` with the absolute path to the `startup.properties`: The path must be in the format of your operating system. (Slash in Linux and Backslash in Windows). Escaping characters as in step 3 is not necessary.

```
<Environment name="communote.instance.name"
    type="java.lang.String"
    value="communote" />
<Environment name="communote.config.dir"
    type="java.lang.String"
    value="Absolute path to the directory that contains start
    up.properties without any escaping" />
```

6. Now you can start your server.

## 2.4 Set-up Communote with the installer

Start your browser for the final installation and go to the homepage of your own Communote instance. By default it is accessible on the same host at

<http://localhost:8080/>.

Now you should see the start screen of the web installer:

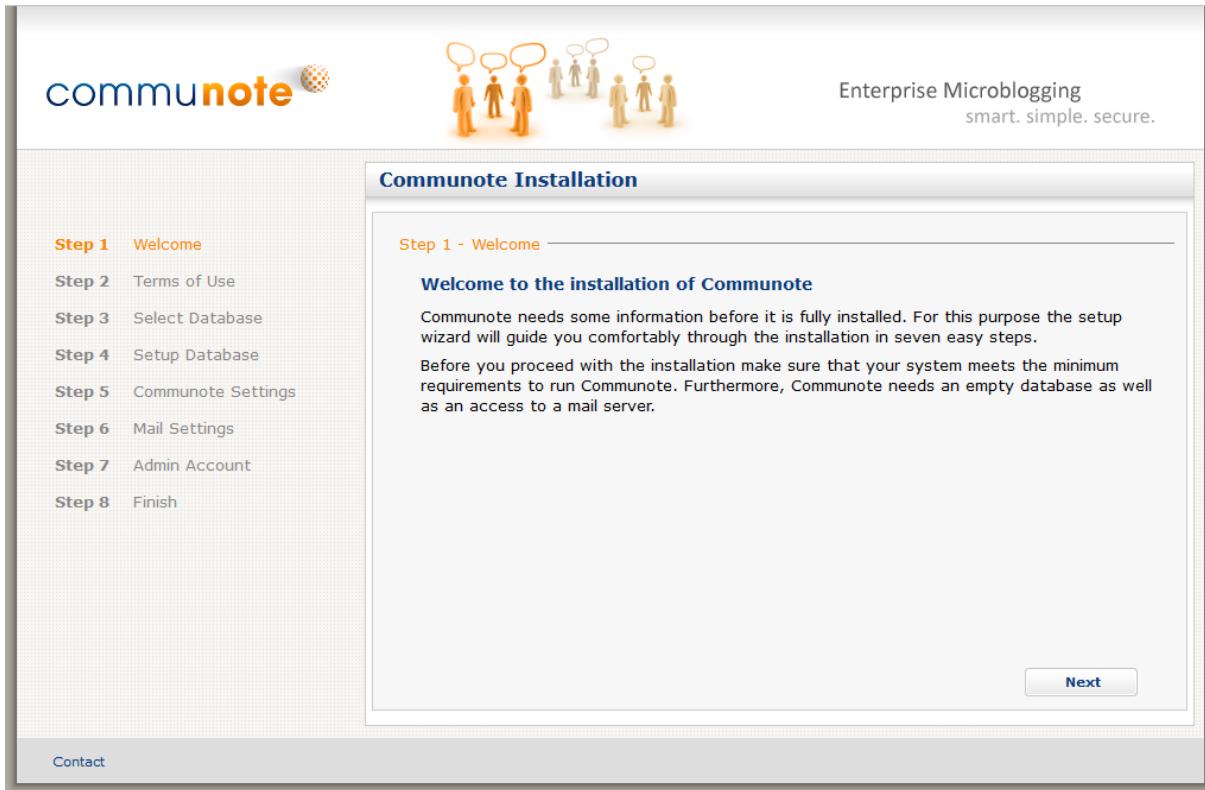


Figure "Communote Installer Startpage"

Follow the single steps. Every step and input is described in the installer. After a successful installation the installer should forward you to the login page of your Communote instance. There you can log in with your previously specified login data.

# 3 Maintenance

## 3.1 Log files

The location of the log files depends on the chosen installation type. In case you installed the Linux package with integration script the Communote logs will be stored in:

`<communote.data.dir>/log/communote.log`.

In case you installed the Linux or Windows package without script the Communote logs will be stored in:

`COMMNOTE_INSTALL_DIR/communote/logs/communote.log`.

At the start of Communote a file `communote-startup.log` will be created. This is located in the bin folder of the executive Tomcats. The location of these log files cannot be changed.

During the initialization, Communote is trying to configure logging. For this it needs a `log4j.properties` file, which must be located in the configuration directory of Communote ([see chapter “Installing as a WAR” \(page 57\)](#) -> `communote.config.dir`). This file should be created and configured, as otherwise it may happen that important error messages aren't logged . An example of the log4j.properties configuration is shown below. The paths of the log files are configured at the beginning. Usually there is nothing else to adjust but the paths.

```
# info: Lines starting with a hash character like this one are treated as comments

log4j.threshold=INFO
log4j.rootLogger=INFO

# Appender that Logs all messages to a file. This definition supports log file rotation when the file reaches a given size.
log4j.appender.std_log=org.apache.log4j.RollingFileAppender
# Assign the absolute path to the file the logger should write to. The path separator has to be a
```

```
# slash (even on Windows systems). A colon must be escaped with a backslash, e.g. C:\temp\communote.log
# must be written as C\:/temp/communote.log
log4j.appendер.std_log.File=ABSOLUTE_PATH_TO_LOG_FOLDER/communote.log
log4j.appendер.std_log.MaxFileSize=5000KB
log4j.appendер.std_log.MaxBackupIndex=5
log4j.appendер.std_log.layout=org.apache.log4j.PatternLayout
log4j.appendер.std_log.layout.ConversionPattern=%d{ISO8601} %p %t
%c - %m%n
log4j.appendер.std_log.Threshold=INFO

# Appender that Logs only error messages to a file.
log4j.appendер.error_log=org.apache.log4j.RollingFileAppender
# Assign the absolute path to the file the logger should write to.
See above for further details.
log4j.appendер.error_log.File=ABSOLUTE_PATH_TO_LOG_FOLDER/communote-error.log
log4j.appendер.error_log.MaxFileSize=5000KB
log4j.appendер.error_log.MaxBackupIndex=5
log4j.appendер.error_log.layout=org.apache.log4j.PatternLayout
log4j.appendер.error_log.layout.ConversionPattern=%d{ISO8601} %p %t
%c - %m%n
log4j.appendер.error_log.Threshold=ERROR
#Rolling appender for missing message keys
log4j.appendер.missingLocalization=org.apache.log4j.RollingFileAppender
# Assign the absolute path to the file the logger should write to.
See above for further details.
log4j.appendер.missingLocalization.File=ABSOLUTE_PATH_TO_LOG_FOLDER/
communote-missing-localization.log
log4j.appendер.missingLocalization.MaxFileSize=5000KB
log4j.appendер.missingLocalization.layout=org.apache.log4j.PatternLayout
log4j.appendер.missingLocalization.layout.ConversionPattern=%d{ISO8601} - %m%n
log4j.appendер.missingLocalization.Threshold=WARNING
log4j.logger.missingLocalization.de.commundo.kenmei.core.api.common.messages=WARNING, missingLocalization
```

```
log4j.logger.com.communote=INFO  
log4j.logger.com.communote.server.web.commons.filter=ERROR  
log4j.logger.de.communardo=INFO, std_log, error_log  
log4j.logger.org=WARN, std_log, error_log  
log4j.logger.com=WARN, std_log, error_log  
log4j.logger.net=WARN, std_log, error_log
```

## 3.2 Starting Communote

For WAR file based installations just start and stop the Tomcat as usual. On Linux systems you should be careful to run the commands with the correct user account.

For the other installation types do it as follows.

With **Linux** you may start or stop Communote with the following command line statements:

```
su PRIVILEGED_USER  
COMMUNOTE_INSTALL_DIR/communote/bin/startup.sh  
COMMUNOTE_INSTALL_DIR/communote/bin/shutdown.sh
```

Please check after stopping Communote that the process has been stopped as well.

Note: the `PRIVILEGED_USER` is the user that should be allowed to run the application. For installations with the integration script it is the user you selected during script execution. For installations without script it is the user created or selected in the installation step ([see chapter “Installing as a WAR” \(page 55\)](#)).

With **Windows** you may start or stop Communote with the following command line statements:

```
COMMUNOTE_INSTALL_DIR/communote/bin/startup.bat  
COMMUNOTE_INSTALL_DIR/communote/bin/shutdown.bat
```

# 4 Openfire

## 4.1 Introduction

If you want to use the XMPP integration with Communote you have to install Openfire.

At the moment version 3.6.4 is supported.

## 4.2 Installation of Openfire

Install Openfire using the packet management of your operating system or download it from the Openfire website:

<http://www.igniterealtime.org/downloads/index.jsp> (page 63)

It is recommended to use the installer version for windows.

## 4.3 Starting the Openfire Installation

1. In Linux, start Openfire as follows: Go to the directory `<openfire.install.dir>` and enter `./openfire` start.  
In Windows you can start or stop Openfire using the start menu.
2. Openfire will be started in the background and the administration console will be available under: <http://localhost:9090> (page 63). Go to this URL and follow the installation instructions.
3. Choose your language.
4. Configure the server settings: Please check the host name.
5. Configure the database: Choose “**Default database connection**”.
6. Configure the database settings: It is recommended but not necessary to use the same database type as you have chosen for Communote. Before the database can be initialized you have to create it. Execute the following SQL statements on your database, replace `openfire_db_name` with the database name and `communote_db_user_name` with the database username:

1. For MySQL use:

```
CREATE DATABASE openfire_db_name CHARACTER SET UTF8
```

2. For PostgreSQL use:

```
CREATE DATABASE openfire_db_name OWNER communote_db_use
r_name encoding='utf8'
```

7. Profile Settings: Please use the default settings.
8. Administration account: Please enter the login and password for the initial administration account.
9. Now you can login with the administration account using the following URL <http://localhost:9090> (page 63). By default the username is **admin** and the password is the one you specified before.

## 4.4 Configuration of Openfire for Communote

The Communote Installer contains two plugins for Communote. Please copy those to the following destinations:

- `openfire-alias-plugin-VERSION.jar` to `<openfire.install.dir>/plugins`
- `openfire-auth-provider-VERSION.jar` to `<openfire.install.dir>/lib`

The plugins will be found and installed automatically by Openfire after a few seconds.

Now follow these steps:

1. Open the Openfire administration console (<http://localhost:9090> (page 63)) and log in with your administration account
2. Change to **User -> Groups**
3. Create a new user
4. Choose `bot.communote` as user name and define a password. Do not assign admin rights to this user.

Proceed as shown in Figure “Openfire Alias Configuration”:

1. Change to **User -> Aliases**
2. Create a new alias: Replace the hostname with the FQDN (Full Qualified Domain Name) of the host Openfire is running on (e.g. server.company.com):

**Real Jabber Id:** bot.communote@hostname

**Alias:** \*

**Subdomain:** communote

Jid	alias@subdomain.myhost.com	Delete
mybot@myhost.com	*@communote.myhost.com	X

Figure “Openfire Alias Configuration”

Create a file `http-auth.properties` in the following directory:

`<openfire.install.dir>/conf/`. Go to the Communote XMPP configuration by following **Administration -> System Administration -> Communication -> XMPP -> Tab Openfire Configuration**. Copy the content of the text box into the just created `http-auth.properties` file:

**Openfire HTTPRequestAuthProvider**

Der Openfire HTTPRequestAuthProvider wird verwendet, um Loginversuche am Openfire gegen eine Webschnittstelle durchzuführen.

Das folgende Textfeld enthält den Inhalt der **http-auth.properties** mit Ihren Serverdaten, welche Sie für die Openfire-Konfiguration verwenden können. Standardmäßig werden in der Konfiguration HTTPS und Ihre externen Serverdaten verwendet.

```
# After editing this file you have to restart Openfire.  
# /etc/init.d/openfire restart  
  
# The url the request goes to.  
# Available placeholders:  
# - {HOST}: will be resolved via a pattern out of the username  
# - {POST}: will be resolved via a pattern out of the username  
# - {CLIENT}: will be resolved via a pattern out of the username  
  
url=https://communote-demo-133.communardo.de:/microblog/{CLIENT}/api/v1.0/local  
/xmpp.do  
  
# url=http://communote-demo-133.communardo.de:/microblog/{CLIENT}/api/v1.0/local  
/xmpp.do  
# url=http://communote-demo-133.communardo.de:80/microblog/{CLIENT}/api/v1.0/local  
/xmpp.do  
  
# You can define a fallback authentication method, which will be used if http auth didn't  
work.  
# Attention: To use a proper configured alternative, install Openfire with this before setting  
up  
# the HttpAuthProvider.  
  
# fallback.provider.auth.className=org.jivesoftware.openfire.ldap.LdapAuthProvider  
  
# the post parameter name for the login  
param.login=username  
# the post parameter name for the password  
param.password=password  
  
# Default parameter values  
host=communote-demo-133.communardo.de  
# host=communote-demo-133.communardo.de  
port=  
# port=  
# port=80  
client=global  
  
# Patterns to be used to match the login to be used for http-auth or the fallback.  
  
# Matches usernames with letters and dots, i.e. adrian.moerchen@myHost.com  
pattern.login=[a-zA-Z.]+(@.*?)  
# Matches usersnames with letters only, i.e. adrian@myHost.com  
pattern.login.fallback=[a-zA-Z]+(@.*?)  
  
# Regular expression patterns to parse parameters from login. Password has no pattern.  
# The default pattern matches something like:  
adrian.myClient.localhost.8080@myHost.com  
pattern.host=[a-zA-Z0-9_\\-\\.]+\\([a-zA-Z0-9_\\-\\.]+)\\.[0-9]+  
pattern.port=[a-zA-Z0-9_\\-\\.]+\\([0-9]+)  
pattern.client=[a-zA-Z0-9_\\-\\.]+\\([a-zA-Z0-9_]+)\\.[a-zA-Z0-9_]+\\.[0-9]+
```

http-auth.properties

Figure "http-auth.properties"

Now you have to make the following changes to this property file:

- The login of the administrator and the login of the user created before must be defined in the property file. The password must be stored as SHA-1 Hash.

With Linux the SHA-1 Hash can be computed as follows:

```
printf 123456 | sha1sum
```

Add the following lines to the http-auth.properties file:

```
allowed_user[0].user=admin
allowed_user[0].password=*SHA1-Passwort*
allowed_user[1].user=bot.communote
allowed_user[1].password=*SHA1-Passwort*
```

- Check the settings in `url=`.
- In the Openfire administration, go to **Server -> Server Administration -> System Settings**.
- Add a new property (or change it if it already exists):  
**Name:** `provider.auth.className`  
**Value:** `de.communardo.xmpp.openfire.auth.HTTPRequestAuthProvider`
- Now restart Openfire to activate these changes.

## 4.5 Configure Communote to use XMPP

- Go to the Communote administration area.
- Go to the menu **Communication -> XMPP**.
- Set the following values in the tab **Client Configuration**:

Communication > XMPP

Client Configuration Advanced Settings Openfire

The service for XMPP support is *turned off*. [Activate](#)

To use XMPP you have to setup the bots server and login credentials here.

Server* <a href="#">[?]</a> localhost	Port* <a href="#">[?]</a> 5222
Login* <a href="#">[?]</a> bot.communote	Password* *****

Fields marked with an asterisk (\*) are required.

[Test Connection](#) [Save](#)

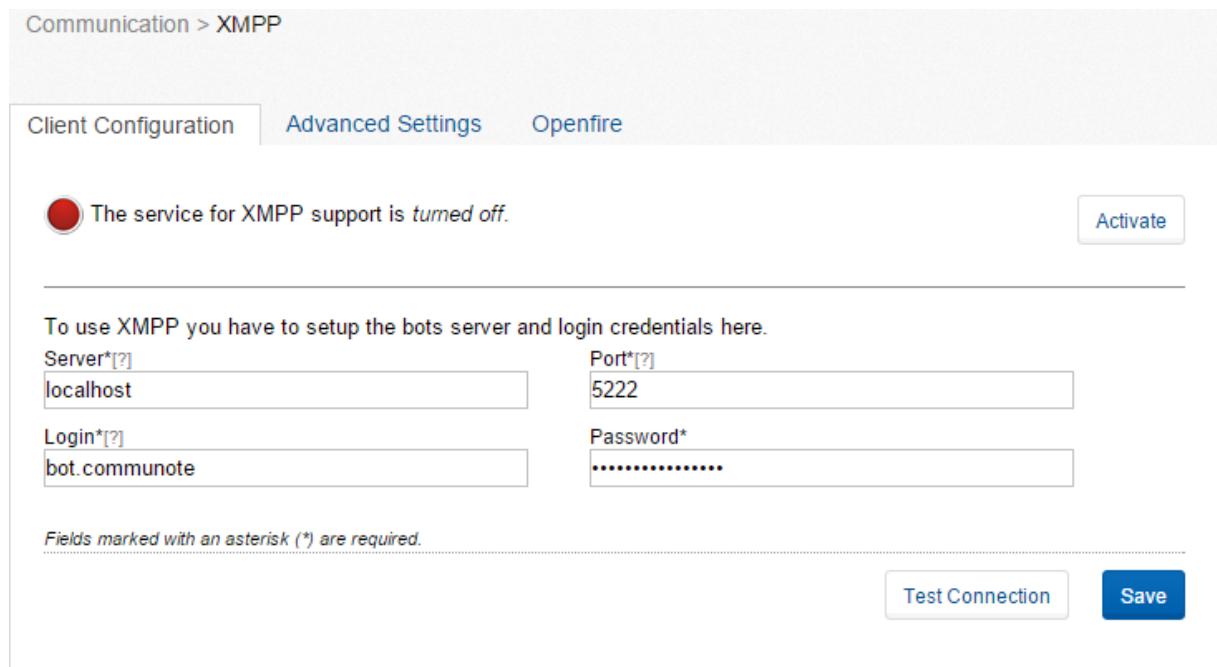


Figure "Page for XMPP -Settings"

- Server: Enter the host name of the Openfire server. In case the server is running on the same host as Communote you may just enter `localhost`.
- Port: Enter the XMPP port Openfire will be running on.
- Login: Enter the login of the bot which you defined during the configuration of Openfire. The default name is `bot.communote`.
- Password: Enter the password of your bot.
- Check your connection. If this fails please check the configuration in Communote and the configuration of Openfire.
- Enter the following data in the tab **Advanced Settings**:

Communication > XMPP

**Client Configuration**   **Advanced Settings**   **Openfire**

This area specifies settings the bot needs to correctly handle incoming and outgoing messages.

Suffix for Users* <a href="#">[?]</a> @server.company.com	Suffix for Topics* <a href="#">[?]</a> @communote.server.company.com
Posting Interval in ms* <a href="#">[?]</a> 30000	

Fields marked with an asterisk (\*) are required.

**Save**

Figure "Advanced Settings for the XMPP Communication"

- Suffix for users (@hostname): Replace `hostname` with the FQDN hostname of the Openfire server, for example: `@server.company.com`.
- Suffix for blogs (@subdomain.hostname): Replace `subdomain` with the subdomain of the alias configuration in Openfire. Replace `hostname` with the FQDN hostname of the Openfire server, for example:  
`@communote.server.company.com`.
- Time to wait: The user must wait at least the given amount of time to post another message using XMPP.
- Activate the XMPP service in the tab **Client Configuration**.

**Note:** An activated service does not necessarily mean that the communication will work. Therefore please check after activation:

- Is the bot logged-in in Openfire?
- Are you able to establish a connection to the Openfire server using a XMPP client (such as Digsby or Pidgin) with the connection data provided in your user profile?
- Activate the XMPP notifications in your user profile and check if you receive an XMPP notification when a Communote message is posted to you.
- Please check if you are able to post to a blog using XMPP.



# 5 Communote Extensions

Communote can be extended with plugins. The installation and uninstalling of such additional plugins is described in this section. Take look at [this chapter \(page 108\)](#) if you want to know how to develop such plugins.

## 5.1 Installation of a Communote plugin

A Communote plugin is a JAR file which has to be copied to the Communote plugin-directory to get installed. The Communote plugin-directory is usually the subdirectory **plugins** of the Communote data-directory defined during the installation.

A plugin can be installed at runtime. A restart of Communote is normally not necessary and the new features should be available immediately. After installing a plugin which alters the Communote frontend the user has to refresh the page in the browser for the changes to become effective.

After the installation the plugin will be listed in the Communote administration area under **Extensions > Overview**.

## 5.2 Uninstalling of a Communote plugin

To uninstall a plugin the JAR file has just to be removed from the plugin-directory. A restart is usually not necessary.

## 5.3 Update of a Communote plugin

To update an installed Communote plugin you just have to uninstall it first and install the new JAR file afterwards.

# 1 General Administration

## 1.1 Access and Interface

In order to access the administration area your account has to be equipped with the corresponding rights. In this case the user menu at the topbar shows the additional link "Administration".

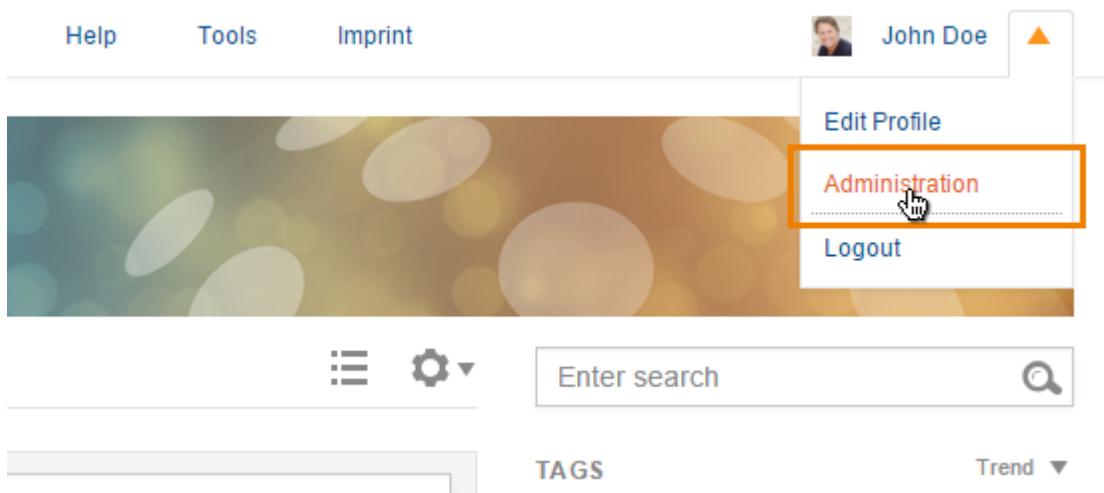


Figure "Expanded Topbar"

The "Administration" link will lead you to a new site:

A screenshot of the Communote administration interface. At the top, there is a navigation bar with the 'communote' logo, a 'Notes' link, the 'Administration' link which is underlined in orange, and a user profile for 'John Doe'. The main content area has a sidebar with sections like 'GENERAL SETTINGS' (Contact Data, Logos and Banners, Mailing Properties, Notification Settings) and 'USER MANAGEMENT' (User Management, User Group Management, Settings, Imprint, Terms of Use). The main content area displays a table titled 'Administrative information' with the following data:

	Current Size
Content repository	1337 MB
Topics	42
Active user accounts	555
Items	1024

Figure "Administration UI"

The administration area is subdivided into the following areas:

- **General settings:** *change ui and mailing*
- **User management:** *manage user, groups and their rights*
- **Integration:** *external authentication, ldap and confluence settings*
- **Security:** *security and permission settings*
- **Application:** *clear cache, upload certificates and config the server*
- **Communication:** *mail in/out and XMPP settings*
- **Logging:** *view log entries*
- **Contents:** *attachment settings*
- **Extensions:** *overview of communote extensions and their settings*

Additionally to the administrator area it is possible for Communote administrators to add themselves as a topic manager. That way topics in which the topic manager is not available can still be managed by the admin. For example:

- If the only topic manager has left the company
- If the only topic manager is ill and/or not available

**Notice:** In order to avoid misuse, there will be an activity message in the topic that shows the new topic manager which can not be erased afterwards. That way all users of the topic can see the change in user's rights. Furthermore, all topic managers receive an email notification about the changes.

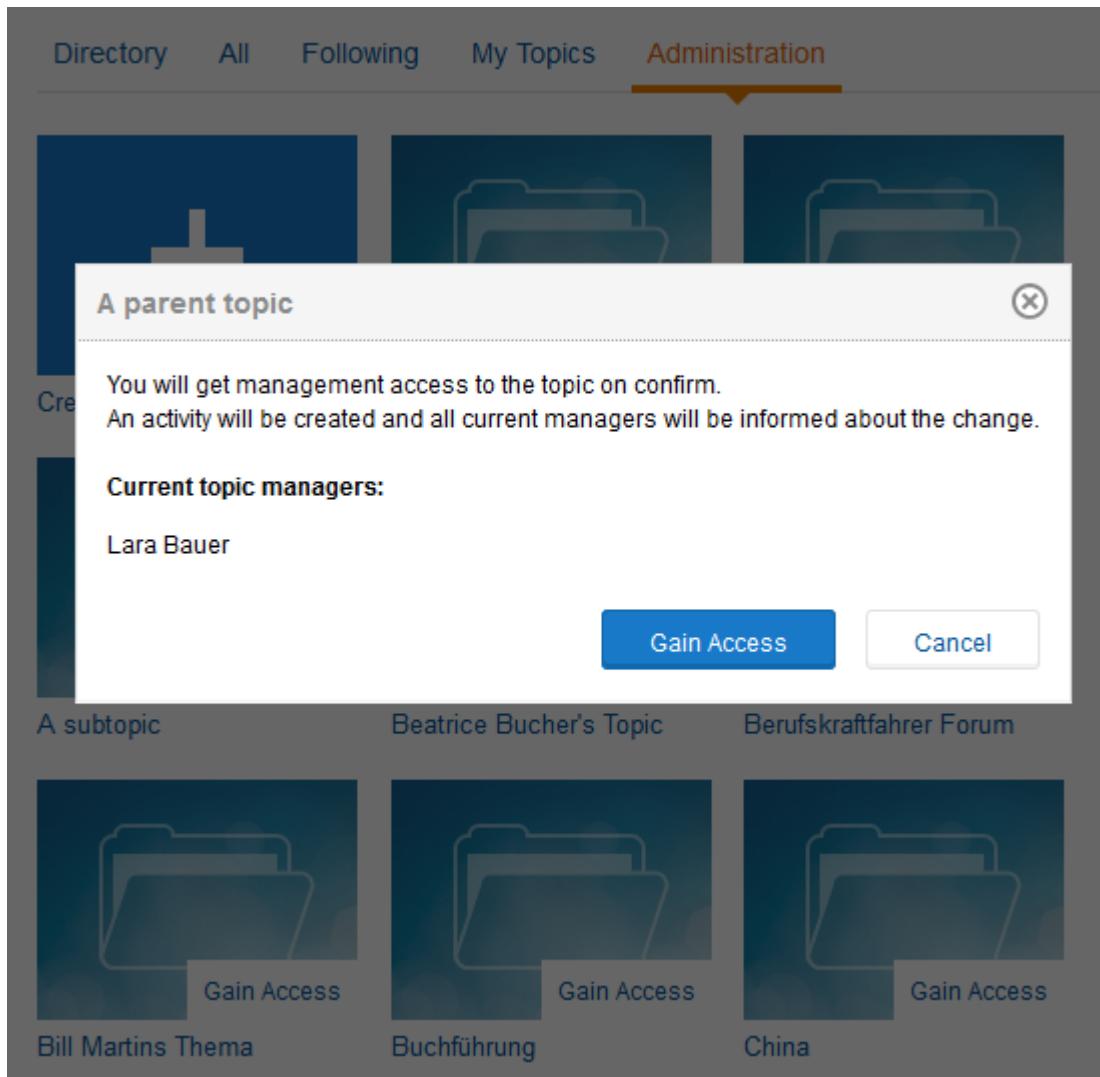


Figure "Gain Access"

## 1.2 General Settings

Here you will find the contact data that you have entered at the beginning of the Communote installation. You can change title and the standard timezone (system time by default) of your system.

General Settings > Contact Data

System Title*	My Communote	
Company*	Department	
Your Company	Communote	
Contact Person*	Contact Email*	
Chris Rock	chris.rock@your.email.com	
Contact Phone Number*		
+ 49 ( 351 ) 12345678		
Address*	Address Addition	
Nördliche Waldwiese 22		
Zip Code*	City*	
01234	Dresden	
Country*	Timezone*	
Germany	(GMT+01:00) Amsterdam, Berlin, Bern, Rome,	
Value Added Tax Identification Number		

*Fields marked with an asterisk (\*) are required.*

[Update Profile](#)

Figure "Contact Data"

You have the possibility to insert your own logo in Communote which will be visible in the upper left corner of the Communote interface. The logo should not be bigger than 220px in width and 40px in height. Select "Browse" and choose the correct file. Finish the process by selecting "Upload Logo". It is also possible to change the default banner and profile picture for topics.

General Settings > Logos and Banners

### Change Logo

Please select a logo

Recommended logo size  
– maximum width of 220px  
– maximum height of 40px

Current Logo



### Change Default Images for Topics, Users and Tags

#### Change Default Banner



Hints for an optimal image

Maximal size: 1 MB  
Valid formats: bmp, gif, jpg, png  
Best resolution: 960px \* 100px

#### Change Default Image for Topics



Hints for an optimal image

Maximal size: 1 MB  
Valid formats: bmp, gif, jpg, png  
Best resolution: 160px \* 120px

Figure "Change Logo and Banner"

In the mailing properties you can define an email address and a corresponding name to which the emails will be sent if a user for example respond to an invitation or registration mail. Emails that notify due to a creation or a change of a note are excluded from this rule. These emails use a topic-specific email address. In addition you can define a support

address and a signature that will appear in every email that sent by Communote by default.

General Settings > Mailing Properties

This section allows the configuration of e-mails send through your enterprise account for instance when you invite a user. You have the possibility to define an e-mail address and a name which will be inserted as recipient by the user's e-mail client when he decides to answer one of these e-mails (excluding e-mails about creation or modification of notes which will have the topic e-mail address as reply-to address). Moreover, you can provide a signature that will be appended to all e-mails.

Reply-To address:\*  
reply.address@your-communote.com

Name of Reply-To address:\*  
John Doe

E-mail address for support requests:\*  
support@your-communote.com

Fields marked with an asterisk (\*) are required.

Save

**Signature**

Here you can customize your mails signature.

Language  
English - en ▾

Text  
Sincerely,  
John Doe

Cancel Save

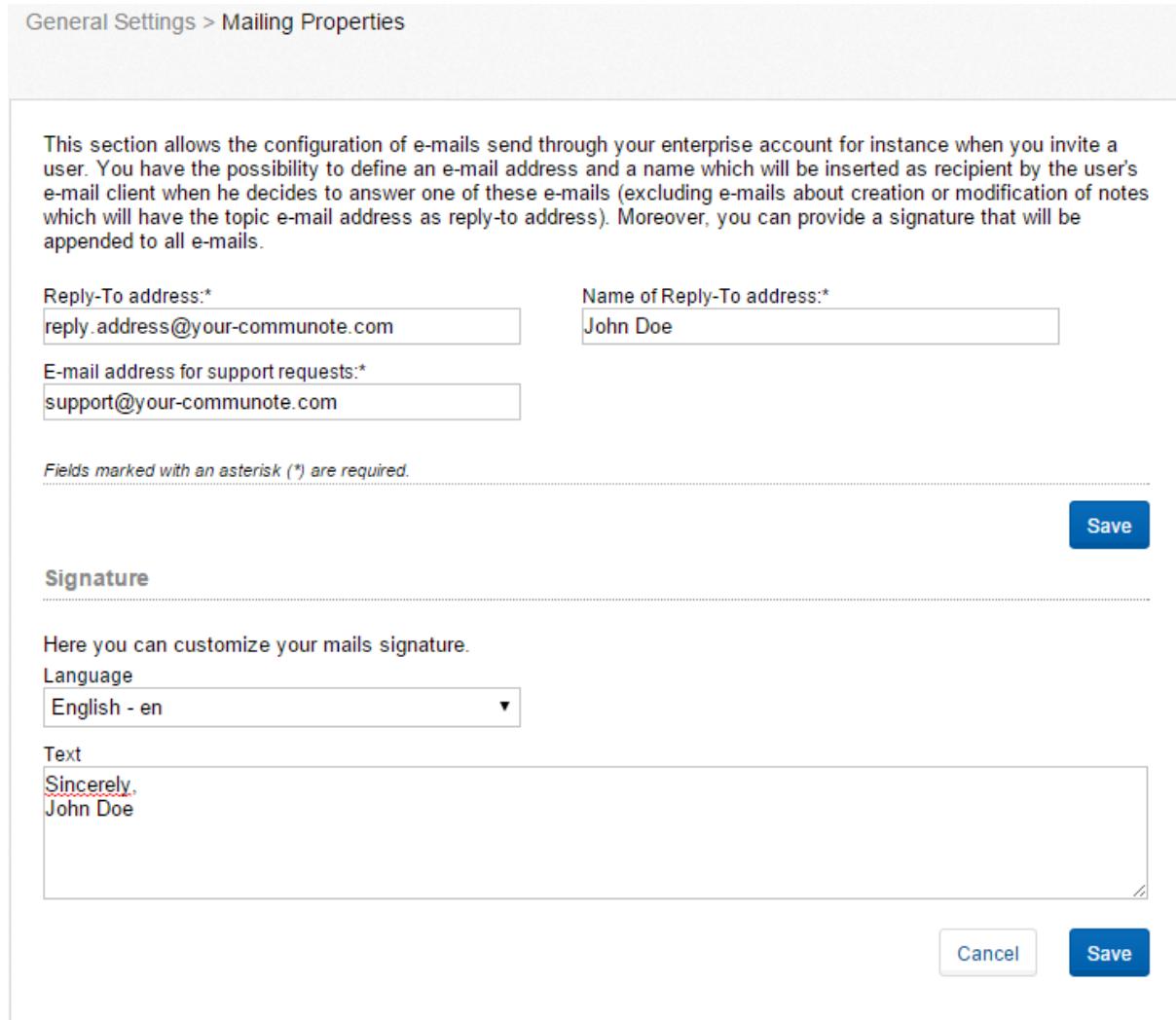


Figure "Mailing Properties"

The screenshot shows the 'Notification Settings' page under 'General Settings'. It includes sections for 'Permalinks' and 'Notifications'. In the 'Permalinks' section, three checkboxes are checked: 'Add a permalink to the notification message which points to the created or modified note when sending the e-mail and Jabber/XMPP notifications', 'Add links to attachments in notifications (i.e. via e-mail or XMPP)', and 'Render a link to the topic in the invitation e-mail when inviting a user'. In the 'Notifications' section, there is a field labeled 'User limit for @@-notifications [?]' containing the value '100'. A blue 'Save' button is located in the bottom right corner.

Figure "Notification settings"

Here you can decide whether notifications via email or xmpp include a permalink to the note and whether a hyperlink to an attachment will be added. You can also set a limit of users to address for the @@-notifications.

## 1.3 User Management

The user management consists of two parts that are each organized in a tab: An overview of all users as well as an area for the invitation of new users.

In the overview you can see all users that are registered in Communote in any kind of way. The name, the alias, the status and the role are displayed. The status of a user can be:

- Invited: The user received an invitation.
- Registered: The user responded to the invitation and registered.
- Confirmed: If a user was invited by a topic manager, and the user finished his registration, it still requires activation by an administrator. The activation is not always necessary.

- Activated: The user is activated and can work in Communote.
- Deactivated: The user cannot log in anymore; his profile information and messages are still visible for other users though. An administrator can reactivate the user.
- Deleted: The user cannot log in anymore and cannot be reactivated. His profile information and messages are still visible for other users.

Users can have the role “Member” or “Administrator”. In the user management overview, filters can be set for names, statuses and roles. In addition the number of displayed search results per page can be defined.

The screenshot shows the 'User Management > User Management' interface. At the top, there are two tabs: 'Overview' (selected) and 'Invite New User'. Below the tabs is a search bar with placeholder text 'Enter phrase ...' and a clear button (X). Underneath the search bar are sections for 'Status' and 'Role'. The 'Status' section contains checkboxes for 'Registered', 'Disabled', 'Terms of Use not accepted', 'Confirmed', 'Invited', 'Active' (which is checked), and 'Deleted'. The 'Role' section contains checkboxes for 'Administrator', 'Systemuser', and 'Crawl systemuser'. A 'Display' section includes a dropdown menu set to '10 Members'. The main area displays a table of users:

Name	Username	Role	Status
Lara Bauer (@Lara)	Lara	Member	Active
Chriss Besser (@kenmei)	kenmei	Administrator	Active

Figure “User Management – Overview”

Select an user to display and edit his information. Additional to the information that every user can access the administrator will see the user status, the role and the groups that the user belongs to.

User Management > User Management

Overview    Invite New User    John Doe (@kenmei) 

**User Overview**

 Alias: kenmei

E-mail: [kenmei@communote.com](mailto:kenmei@communote.com)

Status: Active ▾

Role:  Administrator

Groups: not a member of any group

Remove Save

**General User Informations**

Salutation

Firstname\* John      Lastname\* Doe

Figure "User Management – User Information"

As an administrator you can invite new users to Communote. Depending on whether you set a connection to LDAP/ SharePoint/ Confluence in the integration settings and you marked this integration as primary authentication, you will see different input fields. In case of such an integration with activated primary authentication users can be invited by simply naming the alias and the e-mail address of the person. More for connecting to LDAP/ SharePoint/ Confluence, see chapter 1.44 The invited person will receive an e-mail with these data and can edit it if necessary. The difference to an invitation as a normal user is, that the invited users are activated right after their registration and do not have to wait for a further activation by the administrator. The user group management is also subdivided into two tabs. One tab gives an overview over the existing user groups and the other tab allows you to create new user groups. User groups provide the possibility of

summarizing a certain group of people that belong to a certain department or project. These groups can be used for specifying topic access rights.

The screenshot shows a user interface for managing user groups. At the top, there is a breadcrumb navigation: "User Management > User Group Management". Below the header, there are three tabs: "Overview" (selected), "New Group" (highlighted in blue), and "A user group" (with a small info icon). A search bar labeled "Enter phrase ..." with a clear button is positioned below the tabs. The main content area is a table with three columns: "Name", "Members", and "Description". The table lists five groups:

Name	Members	Description
A user group	0	This is a user group.
Schichtleitung	2	
Schulungs...ehmer 2013	2	
Team Marketing	2	

Figure "User Group Management – Overview"

In the tab "New Group" a new group can be created. You can define the name of the group, an alias and a description. You can add members to this group or include other groups in that group. Type the name the name or the alias of a user or the name of a different group in the search input field "Add member to group". Select one of the proposals and click "Add" to add the selected user or group to the group. In the lower part of the field you can see the users and groups that are already part of the group. These can be deleted by selecting "Delete" that appears when rolling over a user or a group with the mouse. A group can be edited after, by selecting the desired group from the list and by editing the corresponding information. The window is thereby the same like the one used for the creation of a group.

User Management > User Group Management

Overview    New Group    A user group 

**Group Details**

Name\*  Alias

Description  
This is a user group.

*Fields marked with an asterisk (\*) are required.*

Add Member to Group  
ke

-  Sebastian Bathke (@megglos)
-  Chriss Besser (@kenmei)
-  Henning Blanke (@hbl)

Figure "User Group Management – Edit Group"

the settings are splitted into two parts. users and groups. In the users - settings you can configure general settings, as well as settings concerning the deletion of users. In the general settings you can activate a feature that new users will be activated automatically. If this feature is not active, administrators will have to confirm every user. The second feature concerns the notification with an active integration. Check this one and the users will receive a notification when being activated on Communote, if they are being imported from another database. The third option is the creation of a user, which isn't yet present in communote, but,in an external system,for example LDAP, exist. When enabled, the user profile is automatically created. Communote relates the necessary data (name, first

name and log in) from the external system. You also have the option of specifying a default language for new users. English is selected as the default language.

In the settings concerning the deletion of users you can define, whether a user is allowed to delete his account or not. You can allow a deletion with keeping his data or without. Data therefore means all notes and profile information of the user. If none of the fields is active, the user is not able to delete his profile at all. If both are active, the user can choose which option to take. If a user chooses to delete his account and to keep his data, his status will be set to deleted.

You can also configure the layoutsettings. Here you can configure how users will see the newsstream. You have the following settings for the default tab: "all notes", following, @[user] or bookmarks. "All notes" is the default setting after installation.

The screenshot shows a configuration interface titled "Layoutsettings". It includes two dropdown menus: one for the "Preselected tab for the notes stream" (with options All Notes, Following, @User, Bookmarks, and Discussion View) and another for the "Preselected tab for the topics overview" (with options All Topics). Below these dropdowns is a note stating "or the notes stream:". At the bottom right is a blue "Change Settings" button.

Figure "Layout settings"

In the groups-settings you can configure general settings for groups. With the functions "User Group Registration" is looked up, starting from the user in an externally connected system in which groups the user is located. If a group is found in which the user is located, this group is created when the function is active in Communote and the users assigned to this group. If the group already exists in Communote, the user of this group is added.

On this page you can specify general options for user groups.

**User Group Registration**

Create new group from external systems automatically when requested (for example during rights synchronization, invites, notifications)

**Synchronization**

Configuring general settings for the user group synchronization by integrated user directories (e.g. active directory)

Polling interval \*

60  minutes

Fields marked with an asterisk (\*) are required.

Save

Figure "General user group settings"

With the polling interval you configure the interval in which Communote searches for changes of the included user directory, eg Active Directory and these optionally synchronized. You can also start a full synchronization by clicking on the appropriate button

## 1.4 Integration

### 1.4.1 Overview

On this site you can configure the way users are authenticated against Communote. Attention should be paid to:

- It is only possible to activate one external authentication. If no external authentication is activated, all users will be authenticated against the internal database.
- The authentication against the internal database can only be deactivated, when there is at least one administration within the foreign system.

- After switching back to the internal database users from foreign systems won't have passwords within the internal database and will not be able to log in. These users can create a new password using the "Forgot Password" functionality.

Integration > Overview

### User Directory Selection

On this site you can configure the way users are authenticated against Communote. Attention should be paid to:

- It is only possible to activate one external authentication. If no external authentication is activated, all users will be authenticated against the internal database.
- The authentication against the internal database can only be deactivated, if there is at least one user from the foreign system with administrative access to Communote.
- After switching back to the internal database users from foreign systems will not have passwords within the internal database and thus will not be able to log in. These users will have to obtain a new password by using the "Forgot Password" function.

Primary Directory	Name	Administrators	Configuration
<input type="checkbox"/>	Confluence Integration	4	Edit
<input checked="" type="checkbox"/>	LDAP Integration	2	Edit

Allow authentication against internal database [?]

### Requests to the external user directory

Strict: User/Groups are always loaded from the primary directory. [?]

Flexible: Users/groups are always loaded from the directory from which the request comes (e.g. SharePoint). This requires a properly configured system with enabled external directory. [?]

Save

Figure "Integration - Overview"

To remove the tick at "allow authentication against internal database", you have to define a primary authentication and an administrator, for this.

With the option "requests to the external user directory" you can configure the mode to synchronize user information. If the "Strict" mode is activated, Communote will be synchronized with the primary directory you have defined. If you select the "flexible" mode, Communote searches the user in the directory from which the request is made and synchronizes user information with this directory.

## 1.4.2 SharePoint and Confluence Configuration

Further information about the integration of Microsoft Sharepoint and Atlassian Confluence can be found in our Supportportal Section "Integrations".

### 1.4.3 LDAP Configuration

### General Settings

- Direct connection to user directory
- Dynamic connection to user directory (Active Directory)

LDAP/S Server URL\*[\[?\]](#)

ldap://your-ldap-server.de

Bind User[\[?\]](#)

cn=support,cn=users,dc=company,dc=local

Password of the Bind User

[Change or set password](#)Authentication Mode [\[?\]](#)Simple (user name/password) [▼](#)

### Advanced Settings

- 
- Directory supports Paged Results

### User Synchronization

- 
- Incremental Synchronisation
- [\[?\]](#)

LDAP Search Filter[\[?\]](#)

(&amp;(objectClass=user)(!(memberOf=CN=communote-user,OU=Rollen,OU=Company,DC=company,DC=local)(n

LDAP Search Base[\[?\]](#)

dc=company,dc=local

Search subtree \* [\[?\]](#)

Yes

[Add New Search Base](#)

#### Synchronization of user properties

Define the user properties which should be synchronized with LDAP record properties.

Object Identifier[\[?\]](#)

objectGUID

 Is binaryLogin Name[\[?\]](#)

sAMAccountName

E-mail[\[?\]](#)

mail

First Name[\[?\]](#)

givenname

Last Name[\[?\]](#)

sn

### External authentication

- 
- Allow external authentication

### User Group Synchronization

- 
- Activate user group synchronization

### Figure "LDAP Integration"

You can choose between direct or dynamic connection to user directory. If you choose direct connection the LDAP server URL, the administrator login and the authentication mode are required for the LDAP integration. Provide the LDAP Server URL in the following format: *ldap://your.ldap.server:389* Default is the port 389, in case the LDAP Server you want to use runs on a different port you have to provide it.

When you choose the dynamic connection the query prefix and the domain are extra required. The query prefix is the attribute name of the SRV record that will be used in determining the LDAP server. With the advanced settings you can configure the paged results function. The directory must support this feature. Is this function activated, you can define the number of results per page.

Furthermore, a Bind User and password must be provided. As syntax for the bind user the full DN name must be used. This user is used for authentication for all LDAP requests.

The LDAP search base and the LDAP search filter are required for the User Synchronization. You can furthermore define if you want to search in sub trees. The LDAP Search Base defines which part of the LDAP will be considered by Communote for finding and authenticating users. If the field "search subtrees" is activated also user will be found which are contained in sub nodes of the LDAP Search Base:

- CN=Users,dc=company,DC=com

The LDAP Search Filter constraints the result set independent from the LDAP Search Base:

- (objectClass=\*)

In case you do not know the configuration of your LDAP Server you may use tools such as "jexplorer" for exploring your LDAP. Such tools will help you to figure out the correct configuration. You have also the chance to activate the incremental synchronisation. The activation of the incremental synchronisation ensures that only changes since the last synchronisation will be requested.

In the following you have to name the attributes that are supposed to be synchronized with the Communote attributes. The synchronisation attributes are uid, alias, email, firstname, and lastname. Activate the field "isBinary" for "uid" if this attribute is a binary one.

For final storing of the configuration provide your login for a LDAP account. This is used for validation of the configuration. Before activation the LDAP integration Communote tries to login with the login data you provide. Only if Communote is able to retrieve a valid authentication with the current settings from the LDAP the integration will be activated.

Besides the support for authentication Communote also support the synchronisation of user groups using LDAP. Those groups can than be used for topic rights. The LDAP group synchronization can be activated by the field "User groups synchronisation". Here you have to define similar to the LDAP user authentication the LDAP Search Base and the search filter. You may also define several independent search bases. You also have to provide the LDAP attributes which will be used for creating a user group. Thos attributes are: the uid, the name of the group a short alias and an optional description of the group. Activate the field "isBinary" for "uid" in case the attribute is a binary one in the LDAP. You can also activate the incremental synchronisation for the group synchronistation.

Remark: All groups found will be created within Communote. Only users know to Communote will be assign to the groups. The user group synchronisation will not create new users. If a new users is activated by the administrator the synchronisation must run again before the groups are assigned for the new user. The synchronization of the groups based on DNs. With changes to the DN group, these Group are created new, which may lead to conflicts. In this case, the database must be adjusted manually.

User Group Synchronization

<input checked="" type="checkbox"/> Activate user group synchronization	<input type="checkbox"/> Incremental Synchronisation [?]
LDAP Search Filter[?] (objectClass=group)	
Mode [?] memberOf-mode	Synchronization Attribute* [?] memberOf
LDAP Search Base* [?] dc=company,dc=local	Search subtree * [?] No
<a href="#">Add New Search Base</a>	

Synchronization of group properties

Define the group properties which should be synchronized with LDAP records.

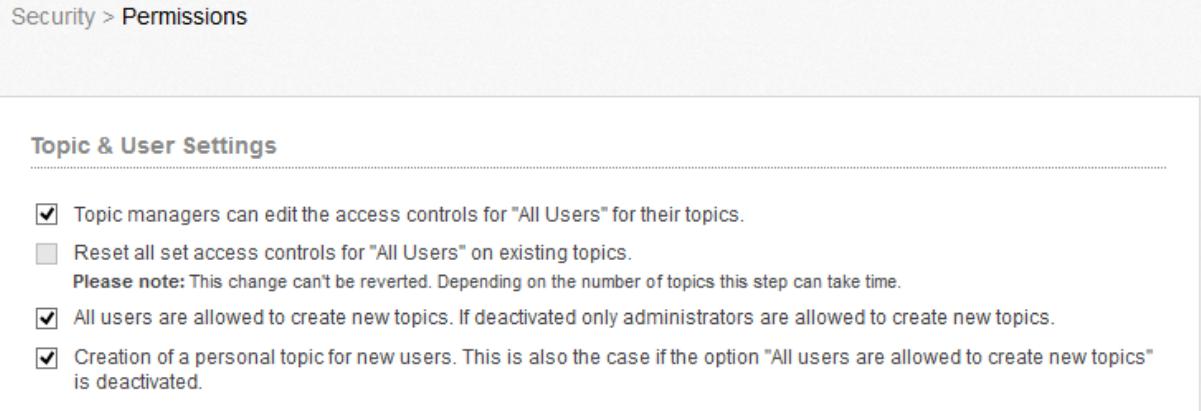
External Identifier* [?] objectGUID	<input type="checkbox"/> Is binary
Display Name of a Group* [?] cn	Unique Alias for the Group[?]
Description for the Group[?] description	

Figure "LDAP Group Synchronization"

To use a secured LDAP connection using SSL (LDAPS) simple use the correct url and port as value for the LDAP server url, i.e. <ldaps://myDirectory.com:10636>. It might be necessary to make the servers certificate known to Communote, especially if your LDAPS server is using a self-signed certificate. This can be done via uploading the certificate at "Certificates" within the administration area (see chapter 2.1).

## 1.5 Security

On this page, you can choose how Communote should behave, if user logon attempt failed. Here you can specify the failed logon attempts to a temporary or permanent ban. In the security settings you can specify whether users can define global read and write rights to their topics, meaning that they could all read the topic and create notes. You can also remove the previously set permissions for "All Users". This option is useful especially for users of older Communote versions.



## Security > Permissions

### Topic & User Settings

- Topic managers can edit the access controls for "All Users" for their topics.
- Reset all set access controls for "All Users" on existing topics.  
Please note: This change can't be reverted. Depending on the number of topics this step can take time.
- All users are allowed to create new topics. If deactivated only administrators are allowed to create new topics.
- Creation of a personal topic for new users. This is also the case if the option "All users are allowed to create new topics" is deactivated.

*Figure "Users and Topics Settings"*

The "Anonymous access" allows the activation of the anonymous read access to a topic. This means that users can read messages without them being registered in Communito. This setting is suitable for the use of plug-ins, especially in an intranet. In the administration area, this option will be capitalized on or off. If this option is enabled, which allows each business area managers to grant his subjects anonymous access. this is useful especially when sharing with external parties. Thus multiple authentications are possible. this means that no more external users in LDAP must register his, but can be registered only in Communito.

### Anonymous Access

Anonymous access allows read access for anonymous users. By default, anonymous access is turned off on topics. A topic manager can choose to enable anonymous access for his topic.

This option can only be used with the integration of Communito in Confluence.  
 Allow anonymous access

*Figure "Anonymous Access"*

Furthermore you can define whether you want to have a public topic that is open to everybody and that does not have a specific topic.

### Default Topic

Here you can specify whether messages are written into a default topic, if users have not selected a topic before sending a note.

The input field below allows you to select a topic from your managed topics which should be used as the default one. Typically, a default topic grants write access to a large number of users. Therefore you should choose a topic for which the write permission is set for "All Users" or one which gives write access to a group containing all users.

Enable default topic

Public

*Figure "Default Topic"*

The settings for the IP range filter consist of two tabs: The overview of the already created filters and a tab for the creation of new filters. Define the name of the filter, decide whether it should be activated and for which sectors (API, RSS, WEB, and XMPP) it should be enabled. Afterwards type in an IP address or different ranges of IP addresses.

If a user requests content from Communote the IP address of the user will be checked against the filter. Only if the IP address is not excluded or is in at least one include (if one is defined) the user can access Communote.

Security > IP Range Filter

Overview New Filter

### IP Range Filter Configuration

Name\*  Active   
The filter name doesn't need to be unique.

Enable for:  
 API  
 RSS  
 WEB  
 XMPP

### IP range definitions

Define ranges of IP addresses. IP addresses in the include section will be allowed for the service and addresses in the exclude section will be rejected. You may use IPv4 and IPv6 addresses.

Syntax:  
For one ip: 192.168.22.1  
For one range: 192.168.22.1-192.168.22.99  
Combination: 192.168.22.1-192.168.22.99,192.168.33.1

Includes  Excludes

Save

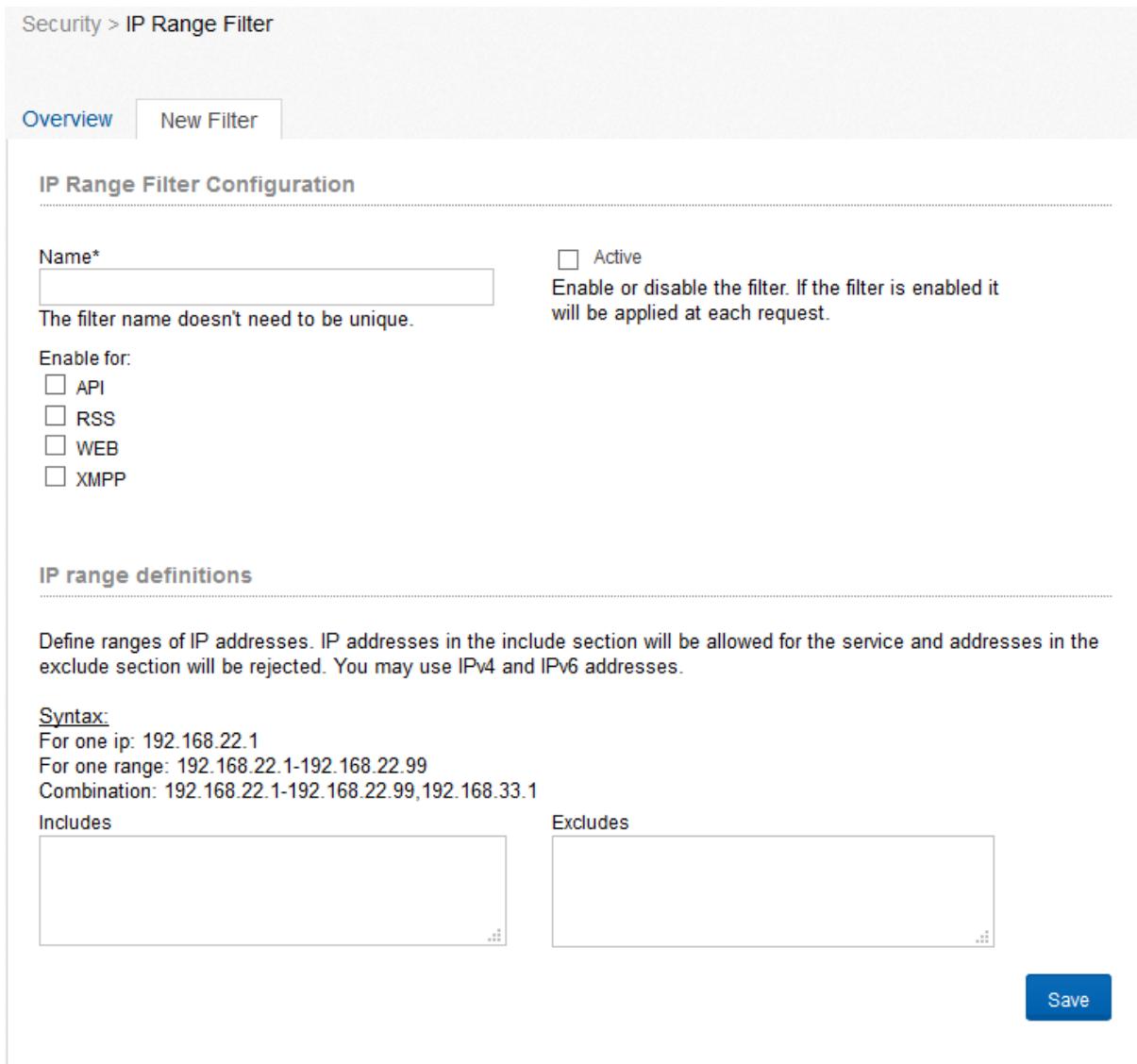


Figure "IP Range Filter"

SSL (Secure Sockets Layer) will be used automatically at login and registration processes for a secure transfer of data. You can furthermore define here, for which channel SSL should be forced. You have the choice between WEB, API and RSS. If the user requests content unsecure but the channel requires secure access a redirect will be send.

Security > SSL

### Channel Security

This section allows the configuration of channel security for your enterprise account. You can force to use secure connections for the services below. The login and also the registration process generally uses a secure connection. To use SSL correctly, you also have to configure your servlet container for supporting SSL. Visit [this page](#) to find out how to configure Tomcat for SSL.

#### Force SSL Connections

Enable secure connections for the following services:

- WEB
- API
- RSS

**Save**

Figure "SSL"

# 2 System Administration

The options mentioned in this section are visible only to administrators who use their own installation.

## 2.1 Application

Define the address at which your server is reachable. It will be used to display links in emails or other notifications correctly. This is necessary if for example your server is not reachable directly and requests have to be redirected to another server e.g. a firewall.

**Note:** Please check the box “server supports HTTPS” only if this is the case, as otherwise it may happen that your server is no longer available. Try it simply by replacing “http” with “https” in the address bar of your browser.

The screenshot shows a configuration interface for a server. At the top left, there is a breadcrumb navigation: "Application > Server". Below this, a descriptive text states: "With this settings you can define the address of your system. They will be used for the correct URL within links, e-mails and others instead the internal server name." The form contains several input fields and a checkbox:

- Host Name\***: A text input field containing "your.communote-domain.de".
- Port for HTTP\***: A text input field containing "80".
- Server supports HTTPS**: A checked checkbox.
- Port for HTTPS**: A text input field containing "443".
- Context[?]**: An empty text input field.
- Save**: A blue rectangular button located at the bottom right of the form area.

Figure “Server Setup”

To run Communote in another context you have to add the contexts name as value for the field “context”.

Communote offers the possibility to check all file uploads for viruses and to discard infected files if necessary, to prevent that computer viruses are spread via the microblogging system. The configuration area “Virus Scanner” provides the possibility to

set up Communote for the use of an external anti-virus scanner.

There are two options for the configuration. You can connect to an externally installed Clam Antivirus Service (Figure "Virus Scanner" - top) or use a command-line virus scanner (Figure "Virus Scanner" - bottom) alternatively.

Clam AV is a free virus scanner, which can be obtained at the following URL:

<http://www.clamav.net> (<http://www.clamav.net>).

Application > Virus Scanner

The anti-virus service is *disabled*. Activate

---

To check file uploads for viruses, you have to configure the anti-virus service and activate it.

Type of the Virus Scanner\*[\[?\]](#)  
Clam AntiVirus

Host\*[\[?\]](#)  
localhost

Port Number\*[\[?\]](#)  
3310

Directory for temporary files\*[\[?\]](#)

Connection Timeout in s\*[\[?\]](#)  
90

---

The anti-virus service is *disabled*. Activate

---

To check file uploads for viruses, you have to configure the anti-virus service and activate it.

Type of the Virus Scanner\*[\[?\]](#)  
Command Line Scanner

Command for the command prompt\*[\[?\]](#)

Exit code of the scan process\*[\[?\]](#)

Timeout of scan process in s\*[\[?\]](#)

Directory for temporary files\*[\[?\]](#)

Name prefix for files\*[\[?\]](#)

Name suffix for files\*[\[?\]](#)

Save

### Figure "Virus Scanner"

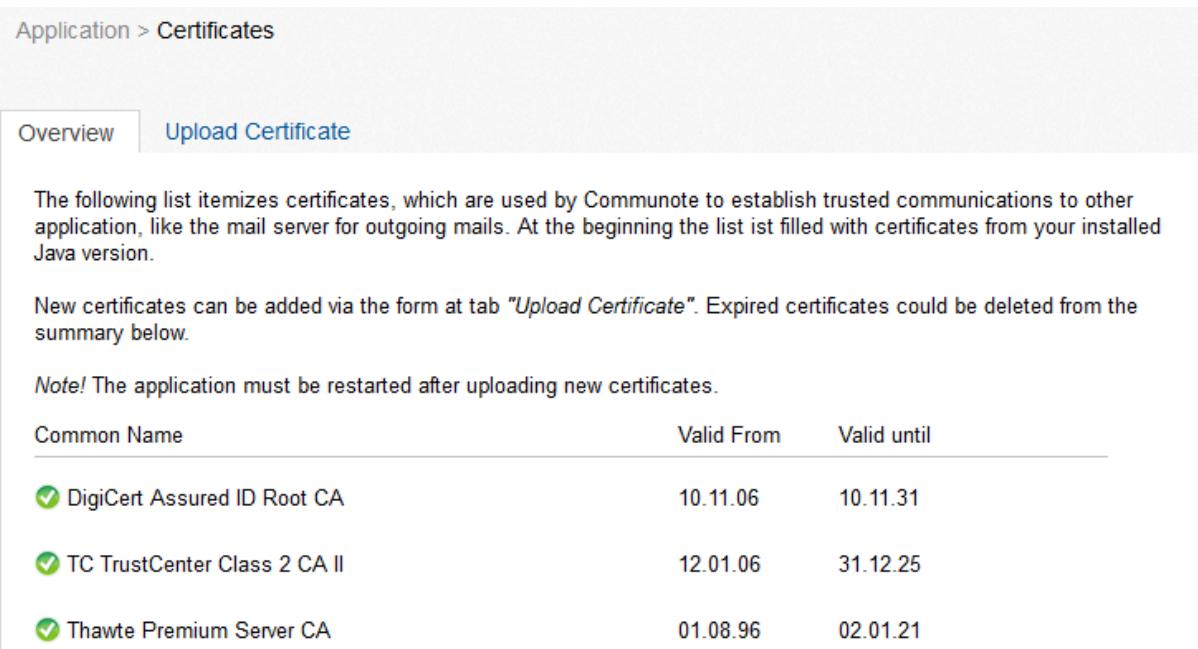
After enabling the virus scanner, check whether the file upload still works. If the virus scanner is configured incorrectly, no files can be uploaded! Check also whether the virus scanner detects a test virus properly. This is possible with the test virus eicar:  
[http://www.eicar.org/anti\\_virus\\_test\\_file.htm](http://www.eicar.org/anti_virus_test_file.htm) ([http://www.eicar.org/anti\\_virus\\_test\\_file.htm](http://www.eicar.org/anti_virus_test_file.htm))

This list contains certificates that are used to build trusted connections to other systems, e.g. to connect to the mail server for outgoing e-mails. At the beginning the list includes all certificates of your installed version of Java. More certificates can be uploaded via the tab "Upload Certificate". These must be of the format X.509 version 3.

Valid certificates are marked with and expired with . Certificates whose validity starts in the future are marked with .

To delete certificates move the mouse over the certificate and press the red icon that appears at the end of the line.

**Note:** Changes to certificates require a restart of the application.



The screenshot shows the 'Certificates' overview page in the Communote application. The top navigation bar has 'Application > Certificates'. Below it, there are two tabs: 'Overview' (selected) and 'Upload Certificate'. A note states: 'The following list itemizes certificates, which are used by Communote to establish trusted communications to other applications, like the mail server for outgoing mails. At the beginning the list is filled with certificates from your installed Java version.' Another note says: 'New certificates can be added via the form at tab "Upload Certificate". Expired certificates could be deleted from the summary below.' A third note cautions: 'Note! The application must be restarted after uploading new certificates.' A table lists three certificates with columns: Common Name, Valid From, and Valid until. Each row has a green checkmark icon to its left.

Common Name	Valid From	Valid until
DigiCert Assured ID Root CA	10.11.06	10.11.31
TC TrustCenter Class 2 CA II	12.01.06	31.12.25
Thawte Premium Server CA	01.08.96	02.01.21

### Figure "Certificates - Overview"

## 2.2 Communication

In this section you can configure Communote for receiving e-mails (see Figure 2 5). You have to specify the credentials of the IMAP server and the e-mail address.

When Mail-In is configured and activated, Communote will check for incoming mails and post the content of the mail to the associated topic. The mail itself will be marked as deleted on the mail server, as soon as Communote created a post in the topic successfully.

In case the content of the mail contained a notification defined by the "@" syntax and the users that should be notified do not have the right to read the topic, the message will be created in Communote but the user will only receive an info email. The same happens in case that the message contained a cross topic reference denoted by "&" and the sender of the email does not have write right on those topics.

In the following cases no message will be created in Communote, but the message will be marked as deleted on the mail server. However the user will receive an info message, if:

- The creation of the note failed (for example the topic alias does not exist),
- The email contained no content,
- The email has been sent by an unknown user. (A user is unknown if there is no user within Communote with this e-mail address).

The Mail-In of Communote offers two options to assign e-mails to a specific topic: the "Single Address Mode" and the "Multi Address Mode".

In the "Single Address Mode" there is only a single recipient address that the user can use to send e-mails to Communote (Figure "Single Address Mode"). The assignment to a topic will be defined by the subject of the e-mail. The subject must contain the alias of the topic within squared brackets (e.g. "[topic]"). The sender of the email will be the author of the note to be created. As a basic principle: E-mails of users that are unknown in Communote and that have an incorrect topic alias, will be marked for deletion on the mail server without any notice to the user.

In the "**Multi Address Mode**" every topic will be associated with an own e-mail address that is predefined by a certain pattern (Figure "Multi Address Mode"). The content of the

subject line of the e-mail will be ignored and not included in the note in this mode. Again, the sender will be used as author for the note. E-mails that do not match the e-mail pattern will be ignored on the mail server.

The service to receive e-mails is *turned off*. [Activate](#)

On this page you can define the settings for incoming mails. The inbox supports two modes: *Single Address Mode* and *Multi Address Mode*.

### Server Settings

We currently only support the IMAP protocol.  
Please note that you will have to restart the service for the changes to take effect.

Protocol* <a href="#">[?]</a>	<input type="text" value="IMAP"/>	<input checked="" type="checkbox"/> Use STARTTLS <a href="#">[?]</a>
Server* <a href="#">[?]</a>	<input type="text" value="192.168.4.1"/>	Port <a href="#">[?]</a> <input type="text"/>
Folder Name* <a href="#">[?]</a>	<input type="text" value="Inbox.Dev"/>	
Login*	<input type="text" value="admin"/>	Password* <input type="password" value="*****"/>
Fetch Interval in ms <a href="#">[?]</a>	<input type="text" value="30000"/>	Reconnect Timeout in ms* <a href="#">[?]</a> <input type="text" value="120000"/>
<input checked="" type="radio"/> Enable mail fetching in <i>Single Address Mode</i> <a href="#">[?]</a> <input type="radio"/> Enable mail fetching in <i>Multi Address Mode</i> <a href="#">[?]</a>		

### Settings for *Single Address Mode*

E-mail Address\*[\[?\]](#)

Fields marked with an asterisk (\*) are required.

[Test Connection](#) [Save](#)

Figure "Single Address Mode"

- Enable mail fetching in *Multi Address Mode* [?]

#### Settings for *Multi Address Mode*

Domain* <a href="#">[?]</a> your-communote.com	Static Suffix <a href="#">[?]</a> dev-mail
<input checked="" type="checkbox"/> Use the Communote ID as part of the e-mail address	

**Preview**  
*<blogAlias>. <yourAccount>. dev-mail@your-communote.com*

Figure "Multi Address Mode"

In this part you specify the settings for outgoing e-mails and configure a server (Figure "Mail Out Settings"). These settings are important so Communote can send emails, for example to users during the registration process, to confirm the e-mail address of an user or to send system messages to the administrator.

Communication > Mail Out

Here you can define the settings for outgoing mails.

Server* <a href="#">[?]</a> smtp.exapmple.net	Port <a href="#">[?]</a> 25
<input type="checkbox"/> Use STARTTLS [?]	
Login <a href="#">[?]</a> admin	Password <a href="#">[?]</a> <a href="#">Change or set password</a>
Displayed Name of sender* <a href="#">[?]</a> Your Communote Sender	Displayed E-Mail Address of sender* <a href="#">[?]</a> mail@your-communote.com
<i>Fields marked with an asterisk (*) are required.</i>	
<a href="#">Send a Test E-mail</a> <a href="#" style="background-color: #0070C0; color: white; border: 1px solid #0070C0; padding: 2px;">Save</a>	

Figure "Mail Out Settings"

Communote supports the delivery (currently only notifications) and receiving of messages via XMPP.

**Note:** For using the XMPP feature an additional XMPP server is necessary. At the moment

only *Openfire* is supported by Communote. Plug-in are available for these servers, but must be installed before. You will find a detailed installation and configuration instruction of Openfire in section 2 in the installation manual.

Under the menu item “Openfire”, as well as in the installation manual, you will find instructions how to configure a xmpp-server to communicate with communote.

Under the „Client Configuration” tab (Figure “Client Configuration”) you must specify the login credentials of the bots. The credentials you should get from your XMPP server operator.

Note: when configuring the access it is important to note that the login is not specified by the full Jabber ID (JID), but only the part before the @ symbol.

For example: the full JID of the bot is „*CommunoteBot@myJabberServer.com*”, then the login is „*CommunoteBot*”.

The screenshot shows the 'Client Configuration' tab selected in a navigation bar. Below it, a message states 'The service for XMPP support is turned off.' with an 'Activate' button. The configuration form includes fields for Server (xmpp.muster.ag), Port (5222), Login (xmpp.administrator), and Password. A link to 'Change or set password' is also present. At the bottom, a note says 'Fields marked with an asterisk (\*) are required.' and features 'Test Connection' and 'Save' buttons.

Figure “Client Configuration”

In the second tab “Advanced Settings” (Figure “Advanced Settings”), you need adjustments to make needed by the bot, so he can properly send and receive messages. These settings are used in similar form by the XMPP server.

The value “*Suffix for Users*” generally consists of the @-Symbol and the Address of the

server with the Communote instance and is used to cut the communote username from the jabber id of the user in the xmpp- server. Is your Communote instance under the address “[http://www.mycommunote.com\_”](http://www.mycommunote.com%22\_) available, the value for “suffix for user” likely “@mycommunote.com”.

The “*Suffix for Topics*” is needed to separate the Jabber ID of the topic of the actual alias of the topic in Communote. The first character must include the @ symbol. After the first character comes a selectable word and the address of your Communote server. The word must be selectable in the Openfire server for the subdomain using the alias (see tab “Open Fire”). With the „Posting Interval in ms“ you can set how long users must wait between sending two messages over XMPP.

The screenshot shows a web-based configuration interface for the Openfire plugin. At the top, there are three tabs: "Client Configuration", "Advanced Settings" (which is currently selected), and "Openfire". Below the tabs, a descriptive text states: "This area specifies settings the bot needs to correctly handle incoming and outgoing messages." There are three input fields: "Suffix for Users" containing "@xmpp.muster.ag", "Suffix for Topics" containing "@xmpp.muster.ag", and "Posting Interval in ms" containing "30000". A note below the fields says: "Fields marked with an asterisk (\*) are required." In the bottom right corner, there is a blue "Save" button.

Figure “Advanced Settings”

## 2.3 Logging

In the logging section you have direct access to the log files of communote. Also you can download them.

For instructions on configuring logging, see the Installation manual on chapter “3.1 Logsfiles”.

## 2.4 Contents

Here you specify where Communote stores uploaded attachments. Communote must have write permission for this directory (Figure “File Storage”).

**Note:** If you change the directory you have to copy the contents of the original directory manually to the new directory, because otherwise existing attachments are no longer available.

The path to the file repository is changeable during runtime, however all existing files won't be copied automatically. To ensure that users are able to download existing files you have to copy them manually to the new repository. Through the operation of changing the repository users might not be able to download existing files anymore.

File Storage Directory\*

Fields marked with an asterisk (\*) are required.

Save

Figure "File Storage"

On this page you can set the limits for user pictures (including logos) and attachments. To prohibit the uploading generally you can enter a value of 0 (zero). The values are in KB (kilo bytes). Figure "File Upload" shows an example in which the maximum attachment size is 10 MB and user pictures and logos are limited to 1 MB.

Here you can define the maximal sizes for uploaded attachments and userimages (with the client logo).

Max. Upload Size of Attachments (in KB)\* [?]

Max. Upload Size of Images (in KB)\* [?]

Fields marked with an asterisk (\*) are required.

Save

Figure "File Upload"

## 2.5 Extensions

On this page you can find an overview about all installed plugins and their version and their status.

Extensions > Overview		
Name	Version	Status
Apache Felix Remote Shell	1.1.2	Active
Apache Felix Shell Service	1.4.3	Active
Apache Felix iPOJO	1.11.0	Active
Apache Felix iPOJO Arch Command	1.6.0	Active
Communote - Plugins - Activity - Base	3.2.0.55358	Active
Communote - Plugins - Activity - Core	3.2.0.55358	Active
Communote - Plugins - Alias And Tag Link Renderer (ATLR)	3.2.0.55358	Active
Communote - Plugins - Bookmarklet	3.2.0.55358	Active
Communote - Plugins - Content Types Extractor	3.2.0.55358	Active
Communote - Plugins - Core	3.2.0.55358	Active
Communote - Plugins - Embed	3.2.0.55358	Active
Communote - Plugins - HTML Client	3.2.0.55358	Active
Communote - Plugins - Integration - Confluence	3.2.0.55358	Active
Communote - Plugins - Integration - LDAP/AD	3.2.0.55358	Active
Communote - Plugins - Message Queue - ActiveMQ Adapter	3.2.0.55358	Active
Communote - Plugins - Message Queue - ActiveMQ Provider	3.2.0.55358	Active
Communote - Plugins - Message Queue - Core	3.2.0.55358	Active
Communote - Plugins - Message Queue - JMS Adapter	3.2.0.55358	Active
Communote - Plugins - Message Queue - Message	3.2.0.55358	Active
Communote - Plugins - Message Queue - Service	3.2.0.55358	Active
Communote - Plugins - Rest-API - 3.0	3.2.0.55358	Active
Communote - Plugins - Smileys	3.2.0.55358	Active
Communote - Plugins - Webservice - Core	3.2.0.55358	Active
System Bundle	4.2.1	Active

Figure "Extensions Overview"

Also you can find the configuration options for the activities, and other plugins. Activities of a user (if a system user) triggered events to be displayed in Communote by a system message. The system message describes the action that the person has performed with or on an object. A user activity, for example, changes to access rights have to be a topic. Communote stores always themed activities, as well as user-specific. This means that an activity message is assigned to the user who triggered the event and the activity message in the message flow of the associated topic. The activities are subdivided into Communote and external activities which eg be triggered by SharePoint.

Extensions > Activity Configuration

### Available Activity Types

You may choose here whether an activity message should be created for every available activity. The activation option for external activities is administered by the respective integration system.

Communote Activities

▼ **New Topic Created Activity** Active

Activate  
 Users can delete activity messages  
Delete all messages by this type when they are older than  days.

► **Topic Access Granted To Manager** Active

► **Topic Access Rights Changed** Active

► **Topic Hierarchy updated** Active

Save

Figure "Activities"

For each available activity, you can define whether a message is created or not. You can also specify whether and how many days after, the messages are deleted from your Communote.

If this option of activating, is turned off, is an activity that is controlled by an integration system. In external activities, the setting of the integration of these systems are activated.

# 1 How to...

# 1.2 Write a plugin

Communote uses OSGi (Apache Felix) in conjunction with Apache iPOJO for offering extensibility and variability in an easy way. This also provides the possibility to add and remove plugins while Communote runs. Currently it is possible to:

- Replace existing templates and though creating your own theme,
- Add your own controller for a specific URL,
- Add your own NoteRenderingPreProcessor.

## 1.2.1 Creating a Plugin using Maven

The easiest way to create a new plugin is to use Mavens [archetype](#) (<http://maven.apache.org/guides/introduction/introduction-to-archetypes.html>) mechanism.

1. Open a command line
2. Change to the folder you want to create the plugin in
3. Call the following command (change the values for groupId, artifactId and version to your needs):

```
mvn archetype:generate -DgroupId=yourGroupId -DartifactId=yourArtifactId -Dversion=1.0-SNAPSHOT -DarchetypeArtifactId=communote-plugin-archetype -DarchetypeGroupId=com.communote.plugins -DarchetypeVersion=2.1.1-SNAPSHOT
```

The value for `archetypeVersion` specifies the version of Communote your plugin should be written for.

ToDo: Slim the generated folder structure of the archetype artifact.

## 1.2.2 Example 1 - Extend Note Rendering

In this example we would like to create a plugin to extend the note rendering pre processor. We will define two placeholders named `[logo]` and `[github]`, which will be later replaced by our plugin to the Communote logo and a link to our Github. Furthermore we want the alternative text of the logo and the link text localized. Before you start maybe it's good to create a message via JavaScript, which will show the user that your Communote is under construction.

1. To generate such a construction message you have to create a JavaScript file

`construction.js` at `src\main\resources\META-INF\resources\static\javascript`:

```
// Jumps in when the namespace Communote and the main Layout  
is Loaded  
if (window.communote && communote.environment && communote.en  
vironment.page == 'main') {  
    // Add the construction container before Communote start  
    // to initialize everything  
    communote.initializer.addBeforeInitCallback(function() {  
        //... it generates a container with a Localized messa  
        //ge and append it at the top  
        var constructionContainer = new Element('div', {  
            id: 'construction-container',  
            html: '<h1>' + communote.i18n.getMessage("plu  
gins.communote.tutorial.construction.text") + '</h1>'  
        });  
        constructionContainer.inject($('cn-view-wrapper'), 't  
op');  
    });  
}
```

With the `communote.i18n.getMessage()` function you are able to search for translation message keys.

2. You need to create a message properties at `src\main\resources\META-INF\resources\i18n` to store the keys with there translation:

- `messages_en.properties` (for the English translation) and insert:

```
plugins.communote.tutorial.construction.text=Warning! Y  
our Communote is right now under construction.
```

- `messages_de.properties` (for the German translation) and insert:

```
plugins.communote.tutorial.construction.text=Achtung! I  
hr Communote ist gerade im Aufbau.
```

3. But you are not able to use these message keys in the JavaScript context so we need a extension to register them. Go to your plugin Java folder where the `Activator.java` takes place and delete the file because in this example we do not need it. Create instead at the same folder the java file called `TutorialJsMessages`:

```
@Component  
@Provides  
@Instantiate  
public class TutorialJsMessages implements JsMessagesExtension {  
  
    @Override  
    public Map<String, Set<String>> getJsMessageKeys() {  
        HashSet<String> messageKeys = new HashSet<String>();  
        // Add the message keys you need to access via your JavaScript file  
        messageKeys.add("plugins.communote.tutorial.construction.text");  
  
        HashMap<String, Set<String>> mapping = new HashMap<String, Set<String>>();  
        // Define the context where you have access to the message keys  
        mapping.put(JsMessagesRegistry.CATEGORY_PORTAL, message
```

```
        Keys);
        return mapping;
    }
}
```

4. You also need to register your JavaScript file in your plugin. That is why we need a JSON file called `javascript-categories.json` at `src\main\resources\META-INF\resources\` :

```
{
  "extensions": {
    "portal": ["javascript/construction.js"]
  }
}
```

5. Build the plugin with a simple `mvn` and deploy the jar file at the target folder to your Communote data plugin directory (e.g. `D:\Communote\Data\plugins`). Reload your Communote and when everything is good you will see this:

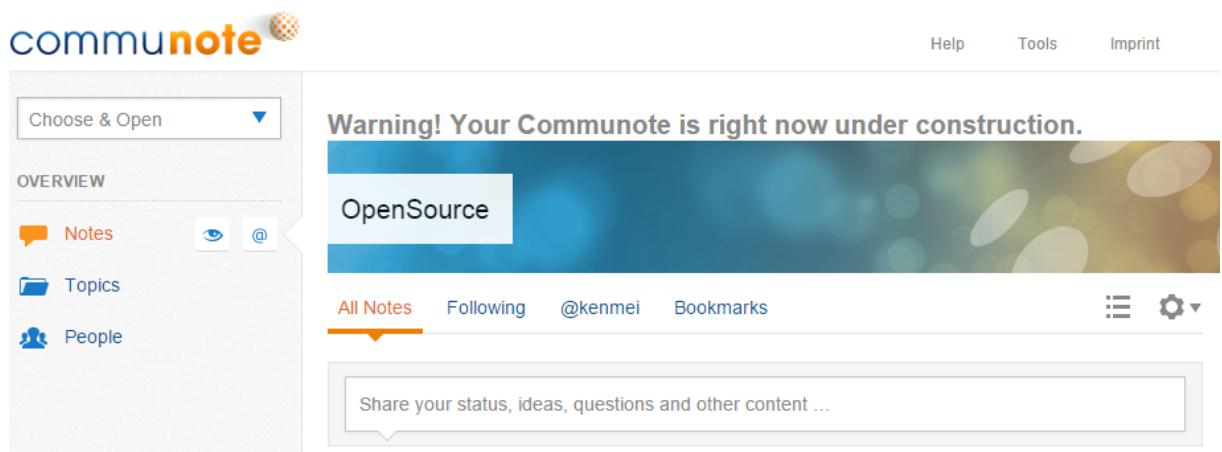


Figure "Result of the construction message with no style"

6. You probably recognized that the construction message have no style. Therefore we create a `style.css` at `src\main\resources\META-INF\resources\static\styles` :

```
#construction-container {
    background-color: #ee7f01;
    padding: 15px;
    text-align: center;
}

#construction-container h1 {
    color: #FFFFFF;
    font-size: 16px;
    margin: 0;
}
```

7. The CSS file needs also to register like the JavaScript files with a JSON file called

`css-categories.json` at `src\main\resources\META-INF\resources\`:

```
{
    "extensions": {
        "portal": ["styles/style.css"]
    }
}
```

If you build and deploy the plugin again it will looks like this:

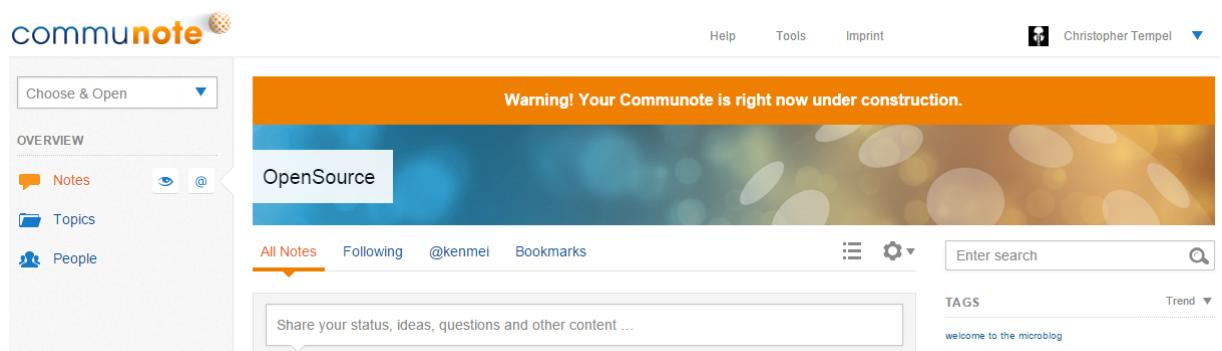


Figure "Result of the construction message with no style"

Now you can start going deeper and extend the note rendering process to manipulate the content of a note.

8. Go to your java folder to create a new java file called

`TutorialNoteRenderingPreProcessor.java`, that implements the `NoteContentRenderingPreProcessor` to extend the note rendering process:

```
@Component
@Provides
@Instantiate(name = "TutorialNoteRenderingPreProcessor")
public class TutorialNoteRenderingPreProcessor implements NoteContentRenderingPreProcessor {

    /**
     * @return the order value which is interpreted as the priority of the pre-processor. The higher
     *         the priority, the earlier this processor will be called.
     */
    @Override
    public int getOrder() {
        return DEFAULT_ORDER;
    }

    /**
     * @return whether the result can be cached. This method has to return false if this
     *         PreProcessor modifies the content in a way that depends on other NoteRenderContext
     *         attributes than the NoteRenderMode (e.g. Locale, request attributes or modeOptions).
     *         This PreProcessor should not modify the note metadata (NoteListData object) while
     *         processing the content if this method returns true because the PreProcessor will not
     *         be invoked if the processed content was cached.
     */
    @Override
    public boolean isCachable() {
        return true;
    }
}
```

```
}

/**
 * Processes a note for a specific render context. This method will only be called if the
 * processor supports the mode given by the render context.
 *
 * @param context
 *          holds details about the render context to allow specific processing in different
 *          situations
 * @param item
 *          the item to be processed
 * @return true if the item was modified, false otherwise
 * @throws com.communote.server.plugins.api.NoteRenderingPreProcessorException
 *          in case something unexpected lead to the failure of the processor
 */
@Override
public boolean processNoteContent(NoteRenderContext context, NoteListData item)
    throws NoteRenderingPreProcessorException {
    return false;
}

/**
 * Denotes whether the pre-processor replaces the note content completely.
 *
 * @return true if the processor replaces the content and the shortened content completely. If
 *         the processor only modifies parts of the content or other members of the item, false
 *         should be returned. When replacing content the new content must match the render
 *         mode.
 */
```

```

@Override
public boolean replacesContent() {
    return false;
}

/**
 * Whether the processor supports a specific render mode. When returning true and the processor
 * modifies or replaces the note content it must ensure that it only inserts text which matches
 * the render mode, specifically the processor shouldn't insert HTML markup when called in PLAIN
 * mode.
*
* @param mode
*          the note render mode, never null
* @param note
*          the note to render. A pre-processor can use this parameter to decide based on note
*          attributes whether the note content should be processed
* @return true if the mode can be handled by the processor, false otherwise
*/
@Override
public boolean supports(NoteRenderMode mode, NoteListData item) {
    return NoteRenderMode.PORTAL.equals(mode);
}
}

```

9. Define a list of your replacements globally:

```

// Definition of the replacements list
private final static List<Pair<String, String>> REPLACEMENTS
= new ArrayList<>();

// On the left side of our pair are the placeholders and on t

```

*he right side are the HTML replacements*

```
static {
    REPLACEMENTS.add(new Pair<>("[logo]", "<span class=\"commu
note-logo\"></span>"));
    REPLACEMENTS.add(new Pair<>("[github]", "<a href=\"htt
p://github.com/communote\>Github Communote</a>"));
}
```

10. Jump into the function `processNoteContent(NoteRenderContext context, NoteListData item)` and you can use the `item` object to get and set the short and full content of a note:

```
public boolean processNoteContent(NoteRenderContext context,
NoteListData item)
throws NoteRenderingPreProcessorException {
// Setting the new content of the note delivered by the re
placement function
item.setContent(processContent(item.getContent()));
// ... and do the same for the short preview content
item.setShortContent(processContent(item.getShortContent()));
return true;
}
```

11. You now able to create the new function `processContent(content)` with the current content as variable that needs to be replaced:

```
private String processContent(String content, Locale locale)
{
    // Do nothing if the content is null
    if (content == null) {
        return null;
    }

    // Searching for the "[Logo]" and "[github] placeholder t
o replace them with the HTML defined above
    for (Pair<String, String> replacement : REPLACEMENTS) {
```

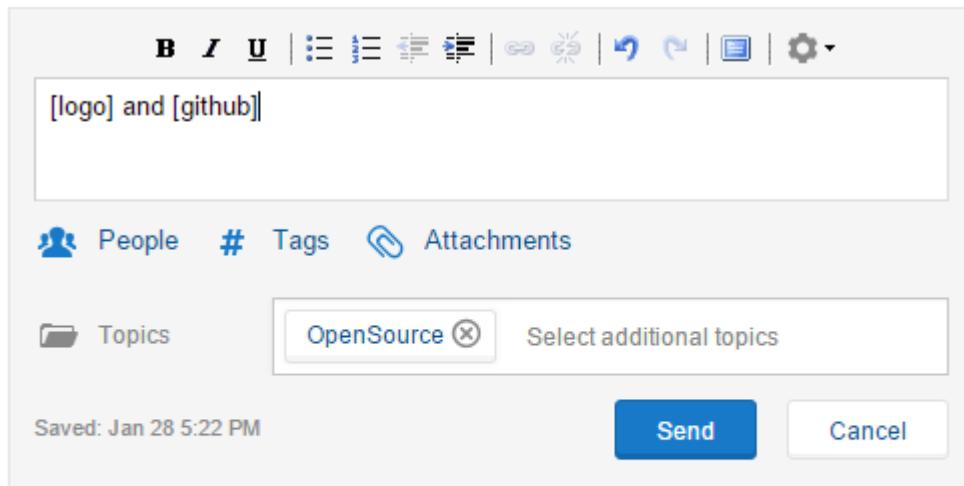
```
        content = content.replace(replacement.getLeft(), replacement.getRight());
    }
    return content;
}
```

12. Nearly done. For the image replacement you need a style for the `.communote-logo` class and the logo image.

1. Upload the `logo.png` at `src\main\resources\META-INF\resources\static\images`
2. Add to your CSS file `style.css` the following class:

```
.communote-logo {
    background-image: url("../images/logo.png");
    display: inline-block;
    height: 16px;
    width: 106px;
}
```

13. Build the plugin with a simple `mvn` and deploy the jar file at the target folder to your Communote data plugin directory (e.g. `D:\Communote\Data\plugins`). Reload your Communote and when everything is go you will see this:



Jan 28, 2016 5:21 PM | Christopher Tempel | OpenSource  
communote and Github Communote

Figure "Result for Example 1 - Extend Note Rendering"

### 1.2.3 Example 2 - Create a view with a widget

This example will explain you how to create a view at the notes overview with one simple widget on it.

1. At the horizontal navigation next to the bookmarklet link we want to register a new view with a widget as content.

Lets start at your `resources/static/javascript` folder and place a new javascript file `CreateHelloWorldView.js` in it:

```
// Jumps in when the namespace communote and the main Layout
is Loaded
if (window.communote && communote.environment && communote.en
vironment.page == 'main') {
    // Add the new view before Communote start to initialize ev
erything
    communote.initializer.addBeforeInitCallback(function() {
        var widgets, views;
```

```
// Parent view name where the new subview takes place (other examples are topicsOverview or topicSelected)
var parentViewId = 'notesOverview';
// Name of the new subview
var viewName = 'helloWorld';
var subViewName = parentViewId + '_' + viewName;

// Register view Link to horizontal navigation bar
communote.configuration.mainPageContexts[parentViewId].push(viewName);

// Get list of all views
views = communote.configuration.mainPageViewManagerConfig.views;

// Add the new view to the list of views
views[subViewName] = {
    // When the user change the view and 'hide' is defined the view container will hidden by display: none;
    // Another option is 'delete' for delete from the DOM
    previousViewAction: 'hide',
    // List of shown widgets for the view
    visibleWidgets: ['EntityChooser', 'VerticalNavigation', 'HorizontalNavigation', 'GlobalIdShowBannerImage', 'HelloWorld']
    // You can also add parentViewId: 'insertMainView' as an option
    // to extend the visible widgets of a main view
}

// Get list of all widgets
widgets = communote.configuration.mainPageViewManagerConfig.widgets;

// Add a HelloWorld widget to the list of widgets
widgets['HelloWorld'] = {
    // Rendered as a CSS class to the widget
    // and act as identifier for the java and the javascript class without the "Widget" suffix
```

```

        widgetType: 'HelloWorld',
        // The CSS selector defines where the widget takes place
      e
        containerSelector: '#cn-list-posts'
      };
    });
}

```

2. Localize the name of the new horizontal navigation point via the message properties:

- `messages_en.properties`

```

mainpage.horizontal.navigation.notesOverview.helloWorld
d=Hello World!

```

- `messages_de.properties`

```

mainpage.horizontal.navigation.notesOverview.helloWorld
d=Hallo Welt!

```

The key `notesOverview` stands for the parent view and `helloWorld` for our new subview.

3. In step 1 we also add a new widget to the view. A widget needs a Java and a JavaScript class.

1. Lets start with the Java class `HelloWorldWidget.java` which needs to be created at your Java folder:

```

public class HelloWorldWidget extends EmptyWidget {

  @Override
  public String getTile(String outputType) {
    // key of the vm.tiles-mappings.properties entry
    // whose value holds
    // the path of the velocity file which should be
    // rendered
}

```

```
        return "com.communote.tutorial.HelloWorld.widge
t";
    }
}
```

2. The tiles are mapped at the file `resources/META-INF/resources/vm.tiles-mappings.properties`:

```
com.communote.tutorial.HelloWorld.widget=/vm/widget/Hel
loWorld.Widget.html.vm
```

3. The linked Velocity file `HelloWorld.Widget.html.vm` needs to be placed at `resources/META-INF/resources/vm/widget/` and have the following content:

```
##
## $widgetInstance -> via the widget instance it is pos
sible to access functions and variables by the JavaScri
pt widget class
##
#set($widgetInstance = "#jsCurrentWidget()")
<div class="cn-form-container">
    <div class="cn-field-50">
        <label class="cn-label" for="${widget.WidgetI
d}_message">
            ## In order to internationalize your code u
se the helper functions #t(key) and #t_args(key, argume
nts)
            #t('plugins.communote.tutorial.widget.Hello
World.input.label')
        </label>
        <input type="text" class="cn-inputTxt" id="${
wi
dget.WidgetId}_message" name="${widget.WidgetId}_messag
e" />
    </div>
    <div class="cn-buttons">
        ## Using the widget instance to define an oncli
```

```

    ck event for the button
    <input type="button" id="${widget.WidgetId}-show"
           name="${widget.WidgetId}-show" class="cn-button main"
           value="#t('plugins.communote.tutorial.widget.HelloWorld.button')"
           onclick="${widgetInstance}.showSuccessMessage()"/>
    </div>
</div>

```

With this widget template the user can write a text and click on the button to generate it as a Communote notification.

4. In this case we your JavaScript folder you can create the widget class

`HelloWorld.Widget.js` :

```

(function(namespace) {
    var HelloWorldWidget = new Class({
        Extends: C_Widget,
        /*
            First part "plugin/" is required and marks the
            widget as one that is provided by a plugin.
            The maven placeholder is needed to create an un
            ique widget group name based on the name of the OSGi bu
            ndle and
            will be replaced by building the plugin.
        */
        widgetGroup: 'plugin/${maven-symbolicname}',

        //This function prints out the input value via
        //a notification
        showSuccessMessage: function() {
            var message = this.domNode.getElementById(t
his.widgetId + '_message').get("value")
                showNotification(NOTIFICATION_BOX_TYPES.suc
cess, null, message);
        }
    });
}

```

```
// to register the widget constructor within the Communote namespace
namespace.addConstructor('HelloWorldWidget', HelloWorldWidget);

})(window.runtimeNamespace);
```

5. You need to edit your pom.xml file and configure the filter process to get the maven placeholder to be replaced:

```
...
<defaultGoal>package</defaultGoal>
<resources>
    <resource>
        <directory>src/main/resources</directory>
        <filtering>true</filtering>
        <includes>
            <include>**/*.vm</include>
            <!-- to replace maven placeholders in Widget files -->
            <include>**/javascript/*.js</include>
            <include>**/error_*.html</include>
        </includes>
    </resource>
    <resource>
        <directory>src/main/resources</directory>
        <filtering>false</filtering>
        <excludes>
            <exclude>**/*.vm</exclude>
            <exclude>**/javascript/*.js</exclude>
            <exclude>**/error_*.html</exclude>
        </excludes>
    </resource>
</resources>
...
```

In order to filter also the minified JavaScripts add this plugin:

```
<plugin>
    <groupId>org.codehaus.mojo</groupId>
    <artifactId>build-helper-maven-plugin</artifactId>
    <executions>
        <execution>
            <id>add-minimized-css-and-js</id>
            <phase>generate-resources</phase>
            <goals>
                <goal>add-resource</goal>
            </goals>
            <configuration>
                <resources>
                    <resource>
                        <!-- add bundle name to widgetGroup for minimized files -->
                        <directory>src-gen/minimized</directory>
                        <filtering>true</filtering>
                        <includes>
                            <include>**/*Widget-min.js</include>
                        </includes>
                    </resource>
                    <resource>
                        <directory>src-gen/minimized</directory>
                        <filtering>false</filtering>
                        <includes>
                            <include>**/*-min.js</include>
                            <include>**/*-min.css</include>
                        </includes>
                        <excludes>
                            <exclude>**/*Widget-min.js</exclude>
                        </excludes>
                    </resource>
                </resources>
            </configuration>
        </execution>
    </executions>
</plugin>
```

6. It is time to register both JavaScript files at your plugin in the `javascript-`

`categories.json` at `resources/META-INF/resources/` :

```
{  
    "extensions": {  
        "portal": [  
            "javascript/HelloWorld.Widget.js",  
            "javascript/CreateHelloWorldView.js"]  
    }  
}
```

7. We used some translation keys at the widget velocity template you need to add:

- `messages_en.properties`

```
plugins.communote.tutorial.widget.HelloWorld.inp  
ut.label=Type in your message  
plugins.communote.tutorial.widget.HelloWorld.but  
ton>Show Message
```

- `messages_de.properties`

```
plugins.communote.tutorial.widget.HelloWorld.inp  
ut.label=Deine Nachricht  
plugins.communote.tutorial.widget.HelloWorld.but  
ton=Nachricht senden
```

4. Now we need an widget factory class `TutorialWidgetFactory.java` for our plugin in your Java folder. This factory creates an instance of our widget with the given widget group and widget type name:

```
@Component  
@Instantiate  
public class TutorialWidgetFactory implements WidgetFactory {  
  
    private final String symbolicName;
```

```
/*
 * Constructs the widget factory
 *
 * @param bundleContext
 *         the context of the bundle
 */
public TutorialWidgetFactory(BundleContext bundleContext) {
    // Saving the context of the plugin to stop and start the factory
    this.symbolicName = bundleContext.getBundle().getSymbolicName();
}

/**
 * Create a new widget instance that should handle the current widget request.
 *
 * @param widgetGroupName
 *         the group of the widget
 * @param widgetName
 *         the name of the widget
 * @param requestParameters
 *         the request parameters of the current request
 *
 * @return the new widget instance
 * @throws WidgetCreationException
 *         in case the widget cannot be created
 */
@Override
public Widget createWidget(String widgetGroupName, String widgetName,
    Map<String, String[]> requestParameters) throws WidgetCreationException {
    // Return the new widget instance
    return new HelloWorldWidget();
}
```

```
/*
 * Plugin start callback to register the factory.
 */
@Validate
public void start() {
    WebServiceLocater.instance().getService(WidgetFactory
Registry.class)
        .addWidgetFactory(this.symbolicName, thi
s);
}

/*
 * Plugin stop callback to remove the factory.
 */
@Invalidate
public void stop() {
    WebServiceLocater.instance().getService(WidgetFactory
Registry.class).removeWidgetFactory(
        this.symbolicName);
}
```

5. Done!

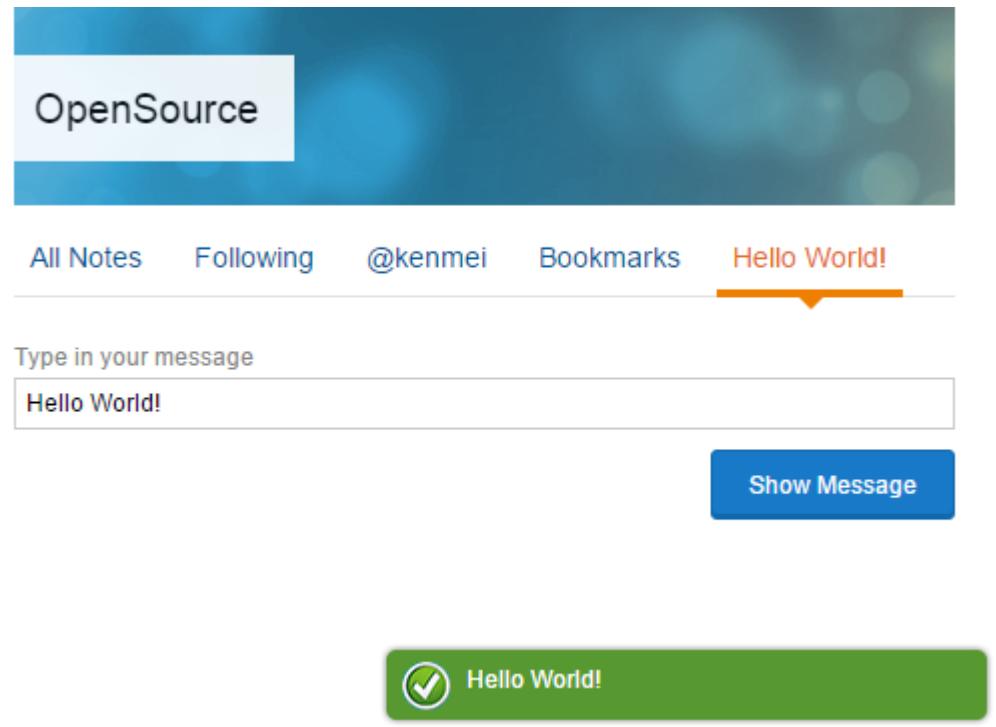


Figure "Result for Example 2 - Create a view with a widget"

## 1.2.4 Other Plugin examples

You can download and look through other examples:

- [communote-development-examples-plugin](https://github.com/communote/communote-development-examples-plugin) (<https://github.com/communote/communote-development-examples-plugin>)
- [communote-example-external-authentication](https://github.com/communote/communote-example-external-authentication) (<https://github.com/communote/communote-example-external-authentication>)

## 1.2.5 Platform Extension Points

### 1.2.5.1 Extend Notes, Tags, Users

WHAT TO EXTEND	CLASS/INTERFACE
Note content before stored	NoteStoringEditableContent

WHAT TO EXTEND	CLASS/INTERFACE
This interface allows to edit the content of a note before it is stored at the database.	
<b>Note metadata before stored</b>	NoteStoringImmutableContentProcessor
This interface allows to edit the metadata of a note before it is stored at the database.	
<b>Note content rendering</b>	NoteContentRenderingProcessor
Allows to execute logic after the note is saved. At the point of manipulation the note is already stored at the database. The process is working async. Overwrite the <code>processNoteContent()</code> and manipulate the content with their getter and setter functions of the item object.	
<b>Note metadata rendering</b>	NoteMetadataRenderingProcessor
Allows to execute logic after the note is saved. At the point of manipulation the note is already stored at the database. The process is working async. Overwrite the <code>processNote()</code> and manipulate the metadata with their getter and setter functions of the item object.	
<b>Note user notification (@user)</b>	UserNotificationNoteProcessor
Allows you to control if the user receiving a notification by overwriting the function <code>preProcess()</code> .	
<b>Note topic notification (@@all, @@authors and @@managers)</b>	NotificationNoteProcessor
Allows you to control if the users of a topic receiving a notification by overwriting the function <code>preProcess()</code> .	
<b>Tag suggestions</b>	TagSuggestionProvider
A TagSuggestionProvider allows searching for tags in arbitrary systems. The results will be shown to the user as suggestions.	
<b>Note attachments</b>	AttachmentStoringPreProcessor
Processor to process attachments before they will finally be stored.	

WHAT TO EXTEND	CLASS/INTERFACE
<b>New note format</b>	CPLNoteItemTemplateProvider
Extension for the ChronologicalPostList widget which provides means to render the HTML of a note with another template. As an example take a look into the <a href="#">ActivityNoteItemTemplateProvider</a> .	
<b>Add note meta data</b>	CPLNoteMetaDataProvider
Extension for the {@link ChronologicalPostListWidget} which allows adding meta-data to a note which should be available in the JavaScript frontend, for example in a <a href="#">NoteActionHandler</a> or a note click handler.	
<b>Add note functions</b>	CPLNoteActionsProvider
Extension for the ChronologicalPostListWidget which allows adding or replacing actions of a note. This extensions just provides the names of the actions. Additionally message keys for the actions which adhere to the following naming conventions must be provided and exposed to JavaScript:	
<ul style="list-style-type: none"> <li>• <code>widget.chronologicalPostList.note.action.NameOfTheAction.label</code> - the display name of the action</li> <li>• <code>widget.chronologicalPostList.note.action.NameOfTheAction.title</code> - to provide a value for the title attribute (optional)</li> </ul>	
More over a JavaScript action handler has to be registered to the <a href="#">NoteActionHandler</a> of the widget.	
<b>Tag store</b>	TagStore
Add an own tag store	
<b>User preferences</b>	UserPreference
Allows to store own user preferences. Implementing class must have an empty constructor to allow instantiation while runtime.	
<b>External user repository</b>	ExternalUserRepository
It is possible to integrate a own user repository.	
<b>Content type</b>	ContentTypeWidgetExtension

WHAT TO EXTEND	CLASS/INTERFACE
This class allows to add new content types to Communote, for instance "Video", "Image" or "Document". Content types can be used in conjunction with the <a href="#">ContentTypeWidget</a> to allow filtering for content types.	

## 1.2.5.2 Administration Page

An own page at the administration is possible via an AdminController. For an example take a look at the AdminController of this plugin: #Todo: Link zum {AdminstrationPluginSample}

Extend the [AdministrationViewController](#) and implement the [Controller](#) Interface.

## 1.2.5.3 Events

Implement the interface [com.communote.server.events.EventListener<Your Event Type>](#) to extend your Event.

WHAT TO EXTEND	EVENT TYPE
<b>Topic created</b>  Event to notify about new topics.	ExternalUserRepository
<b>Role changed</b>  Event to notify about a change of a blog role of a user. This covers all roles that have been assigned to the user either directly or indirectly through group membership. The reason for the event can be that the role was added, removed or modified.	AssignedBlogRoleChangedEvent
<b>Discussion changed</b>  Event, which is fired, when a discussion has changed.	DiscussionChangedEvent
<b>Topic Hierarchy Connections changed</b>	TopicHierarchyEvent

WHAT TO EXTEND	EVENT TYPE
Event, which is fired, when a topic is added or removed at the topic hierarchy.	
<b>Property changed</b>	PropertyEvent
Fired if property of any entity is created, updated or deleted. Check available types of properties at <code>com.communote.server.core.property.PropertyType</code>	
<b>Status of a user changed</b>	UserStatusChangedEvent
Event that is fired the status of a user was changed.	

## 1.2.5.4 JS Hooks

### Initializer Callbacks

Helper to initialize the application. The component provides different hooks to do custom initializations at different points during startup and is exposed in the communote namespace as `communote.initializer`.

WHAT TO EXTEND	CALLBACK FUNCTION
<b>After initialization complete</b>	<code>communote.initializer.addAfterInitCallbacks</code>
Add a callback function that will be called after the initialization completed. If the widget framework should be initialized this callback will be invoked after any callback added with <code>addWidgetFrame-workInitializedCallback</code> .	
<b>Before initialization</b>	<code>communote.initializer.addBeforeInitCallbacks</code>
Add a callback function that will be called before doing any kind of initialization.	
<b>After Widget Framework initialization</b>	<code>communote.initializer.addWidgetFrameworkInitializedCallback</code>

WHAT TO EXTEND	CALLBACK FUNCTION
Add a callback function that will be called after the widget framework was initialized.	
<b>After scanning widgets</b>	communote.initializer.addAfterWidgetScanCallbacks
Add a callback function that will be called after scanning for widgets during page load.	
<b>Before scanning widgets</b>	communote.initializer.addBeforeWidgetScanCallbacks
Add a callback function that will be called before scanning for widgets during page load.	
<b>After everything</b>	communote.initializer.addApplicationReadyCallbacks
Add a callback function that will be called after everything (initializations and widget scan if required) is ready. If called after <code>initApplication</code> was called the callback will be invoked directly.	

## Configurations

WHAT TO EXTEND	OBJECTS
<b>View registration</b>	communote.configuration.mainPageViewManagerConfig.views
New views can be added to the <code>mainPageViewManagerConfig.views</code> object. It is possible to extend a view (via <code>parentViewId</code> as parameter) or create a view from scratch.	
<b>Widget registration</b>	communote.configuration.mainPageViewManagerConfig.widgets
New widgets can be added (without the	

WHAT TO EXTEND	OBJECTS
<p>"Widget" suffix) to the <code>mainPageViewManagerConfig.widgets</code> object with the following parameters:</p> <ul style="list-style-type: none"> <li>• <code>widgetType</code>: as identifier and CSS class</li> <li>• <code>containerSelector</code>: CSS selector, which says where the Widget takes place</li> <li>• <code>settings</code>: object which holds all the widget settings</li> </ul>	
<p><b>Navigation registration</b></p> <p>Add a link of a view into the navigation (horizontal or vertical).</p> <p>Set the main view via the parent view ID like for example <code>notesOverview</code>, <code>topicSelected</code> or <code>userEdit</code> and push the view ID of the new view to it.</p> <p>The localized frontend name of the navigation point can be set via the message key <code>main-page.horizontal.navigation.{Parent View ID}.{View ID}</code></p>	<pre>communote.configuration .mainPageContexts[Parent View ID].push(View ID)</pre>
<p><b>Default render options for widgets at views</b></p> <p>It is possible to change the render options for widgets in a view. You can hide for example the tag cloud in the notes overview per default.</p>	<pre>communote.configuration.factory.defaultNoteViewRenderOptions</pre>

## 1.2.5.5 Overwrite Templates

It is possible to overwrite all the templates registered at the `core.vm.tiles-mappings.properties` (#ToDo: Link) with an own `vm.tiles-mapping.properties` file but it

cannot be recommended. In the worst case the custom template stops working when a core update alters the overwritten template.

# 1.4 Customize the design

Right now there is no chance to replace the whole design like with a theme. But you can build a plugin which overwrites CSS classes and replace images like the iconmap. Another option is to use the REST-API and build your own application with an individual design.

# 1.4 Build the core

If you like to build the core than you have to clone the project via Git first:

```
git clone https://github.com/communote/communote.git
```

When the cloned Communote is in place you can use maven to build it with a simple `mvn`.

Few minutes later you will hopefully see a “Success” message on your screen. Now you can go to `webapp/target`, rename your generated `communote.war` to `ROOT.war` and copy the WAR file to your Tomcat `webapps` directory. If exists remove the `ROOT` folder.

#ToDo:

(eigenes mvn Profile [fullbuild] anlegen)

- Beschreibung wie man Plugins deployed

# 2 Technical Overview

## 2.1 Components and Frameworks

(mit Diagramm, vllt. ein Komponentendiagramm oder Kompositionsstrukturdiagramm oder vllt. ein Modelldiagramm) um Schichten zu beschreiben? Beschreibt relativ grob die einzelnen Komponenten mit ihren Aufgaben und den darin verwendeten Frameworks (mit Links). Beschreibung erfolgt in Unterpunkten)

### 2.1.1 Backend

(mit Services und Hinweis zu Transaktionshandling?, DAOs, DB)

### 2.1.2 Frontend

#### 2.1.2.1 Filterchain

(mit Spring Security)

#### 2.1.2.2 Controller

(DispatcherServlet, JSPs, VM, VelocityTools)

#### 2.1.2.3 Widgets

#### 2.1.2.4 Plugins

(osgi container und ipojo)

#### 2.1.2.5 MessageQueue

(gibt's da nicht irgendwo ne Doku?)

## 2.2 Modules and Java Packages

(Übersicht zu den Maven Modulen und der Java Paketstruktur (aufbauend auf dem was sich Torsten mal überlegt hat, mit dem Hinweis das es noch nicht ganz umgesetzt ist?)

## 2.3 Terms and Concepts (oder Glossary nennen?)

2.3.1 Kenmei

2.3.2 Client, Standalone and SaaS

2.3.3 Blog vs. Topic

2.3.4 Portal?

# 3 Javadoc

Get an eye on the Java Documentation here:

 [Go to Javadoc](#)

# 4 REST-API

Download the REST API Documentation here:

 PDF Download

# 3 Design Guidelines

## Colors

CASE	COLOR
Link	#005599
Link hover/active	#E66914
Primary Icon	#1779C8
Secondary Icon & Link	#888888
Icon hover/active	#FB931D