Zammad

Zammad

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MANAGE

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CHAPTER

ONE

USERS

Depending on your organization's IT capabilities, users can be managed individually or in bulk, or even synchronized with third-party directory services.

Fig. 1: The simplest way to manage users is directly in the Admin Panel.

Learn more about managing users…

1.1 Managing Users via the Admin Panel

The "Users" panel provides tools to manually manage user accounts.

Creating and editing users

Fig. 2: Click the **New User** button to open the New User dialog, or click on an existing user to edit.

Hint: See *Reference Guide: User Details* for help with the New/Edit User dialog.

Deleting users

Fig. 3: Use the **Actions** menu to open the **Delete User** dialog.

Warning: Deleting a customer destroys all their associated tickets!

To learn more, see *Data Privacy*.

Filtering the user list

Note: Known bug

The search list displays up to 50 users, from newest to oldest. That means that if there are more than 50 results, the user you're searching for might not be shown.

This is a known bug with a fix underway.

Fig. 4: Use the **Search for users** bar and the **Roles** buttons to filter the list. You may search by name, email, or any other user attribute.

Unlock locked user accounts

Fig. 5: Use the **Actions** menu to unlock accounts after too many failed logins. Locked accounts are indicated with a lock icon on the left side.

Taking over a user's session

Fig. 6: Use the **Actions** menu to **View from user's perspective**.

The **View from user's perspective** button allows you to "hijack" another user's session and confirm firsthand what they can and can't do (or see) when they're logged in.

This is especially useful when you need to verify that you've set up custom permissions correctly for non-admin users.

> **Danger: With great power comes with great responsibility.**
>
> This feature is not a simulation; entering this mode will boot the user from their session, and any actions you take (responding to tickets, changing passwords, *logging hours worked*) will actually be performed from the user's account.
>
> (On the other hand, if the user logs back in, you'll be booted, too.)

Hint: When finished, use the **Back to my view** × button at the top of the page. If you try to exit by logging out, the "hijacked" user session will be restored when you log back in.

1.2 Managing Users via CSV Import

If your organization has information about customers (or personnel) already stored in a directory system that can export to CSV, you can batch-import them into Zammad in just three steps.

Hint: CSV import provides one-off batch processing of user records. For persistent, automated user synchronization, consider integration with a third-party directory system like *LDAP / Active Directory* or *Exchange*.

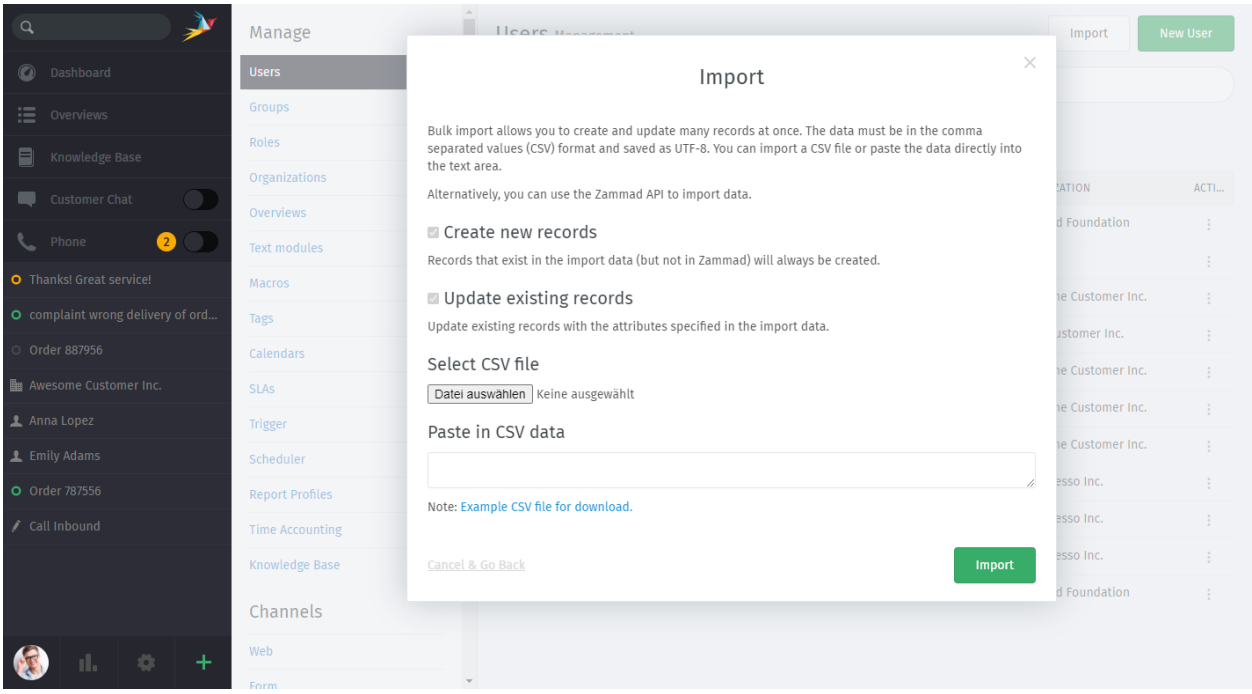


Fig. 7: Use the **Import** button to open the CSV import dialog.

1.2.1 Step 1: Inspect the Sample .csv

Use the link at the bottom of the CSV import dialog (**"Example CSV file for download"**) to see how Zammad expects you to format your user data.

1.2.2 Step 2: Export Your User Data to .csv

Prepare your .csv file according to the format found in Step 1 above. Note that:

- the `id` attribute (column) should be left blank or removed entirely;
- the `firstname` and `lastname` attributes are **required**; and
- any others may be safely omitted as long as each row has the same number of fields (commas).

For instance:

```
login,firstname,lastname,email,web,active
jdoe,"John","Doe",jdoe@example.com,"https://zammad.com",true
mmore,"Madeline","Moore",mmore@example.net,"",false
```

1.2.3 Step 3: Import Your .csv to Zammad

Once your raw user data has been submitted, Zammad will perform a test run to compute the number of affected records:

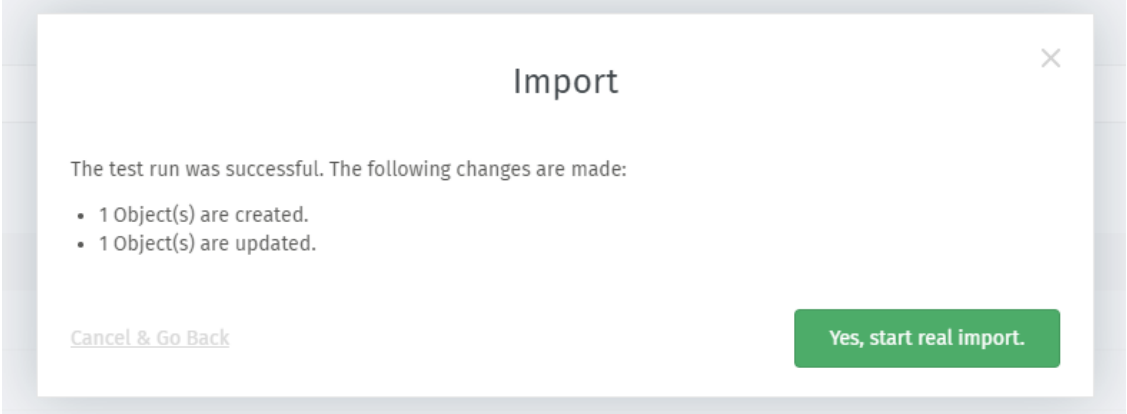


Fig. 8: CSV import always begins with a preview / test run.

Note: How does it know when to create new records and when to update?

Records are updated when the imported data contains an `email` or `login` that matches an existing user account.

Click **Yes, start real import** to proceed. (If you're importing a lot of records, be patient—it may take a minute.)

That's it!

1.3 LDAP / Active Directory

With our LDAP integration, you can easily use existing authentication systems without having to update more than one source. Also, e.g. password policies are ensured by your LDAP source - Zammad will always contact your LDAP server for authentications.

Note: The LDAP sync is one way: LDAP => Zammad. Changes to your users inside of Zammad might be overwritten by the LDAP Sync.

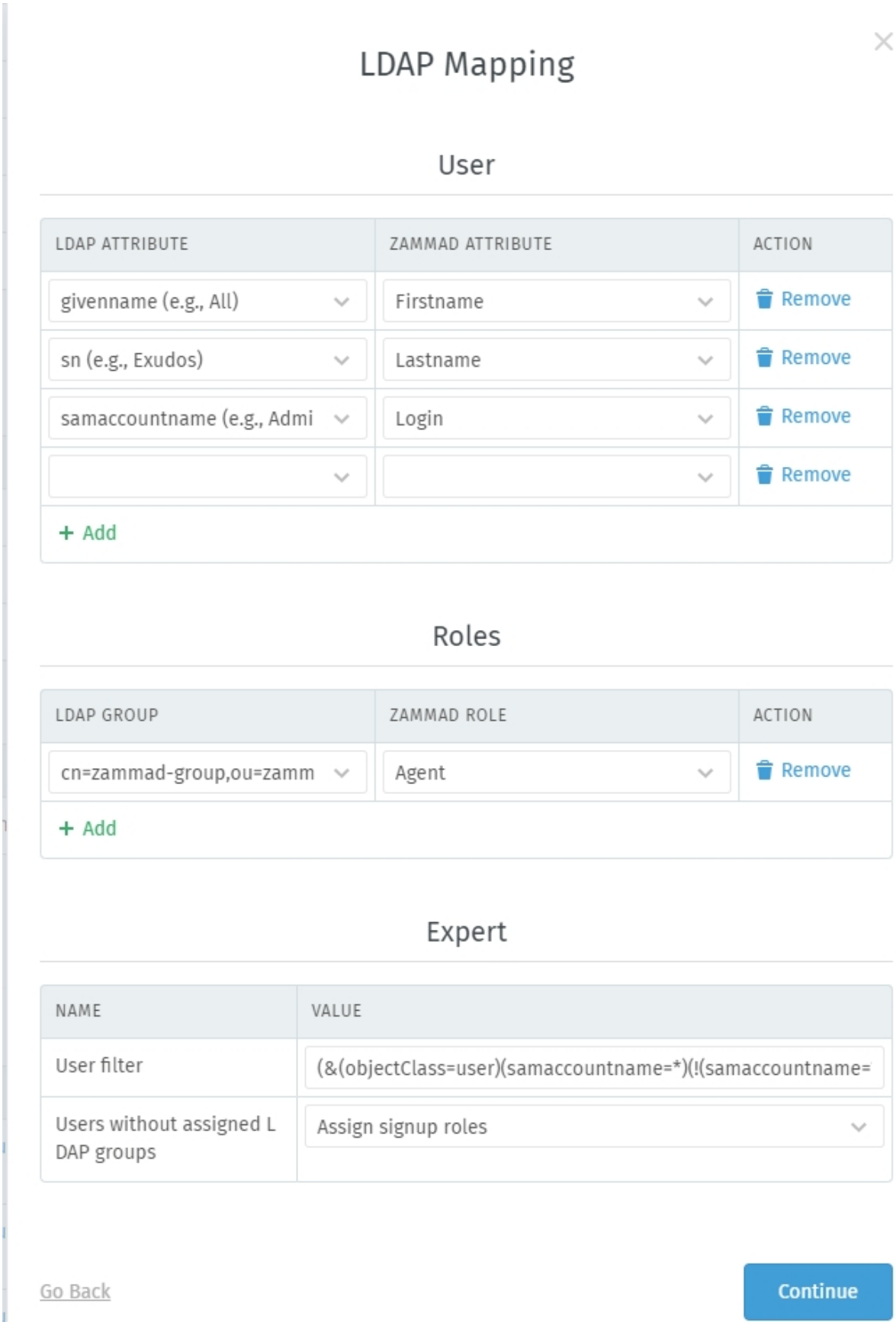
To configure LDAP integration, simply go to System -> Integrations -> LDAP in the admin panel. Press "change" and follow the wizard for adding the needed LDAP information to Zammad. On the last step Zammad will ask you for your wanted LDAP mapping. By default, Zammad only Maps Login, First- and Lastname. Technically you can map any LDAP object to a Zammad user object (this also works for Custom Objects!).

On this wizard step, you can also define the wanted LDAP-group-to-Zammad-role mapping.

Note: Please note that nested groups are currently not supported by Zammad.

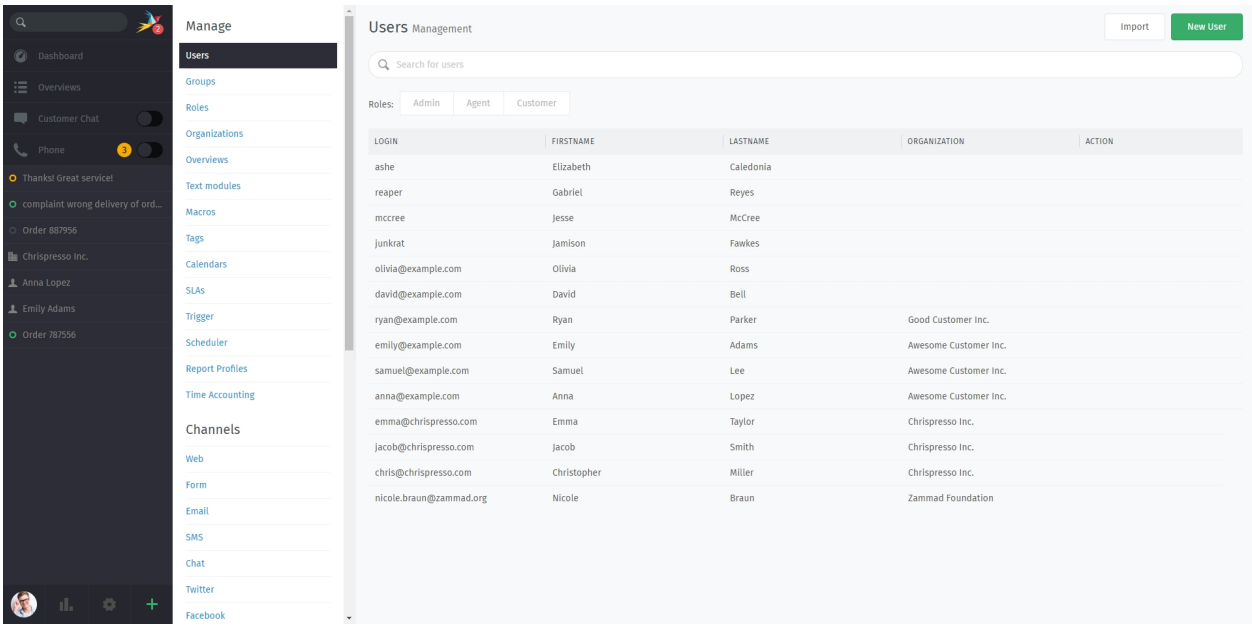
If needed, you can also change the user filter for your LDAP query. The option "Users without assigned LDAP groups" will by default assign the *customer* role (default sign-up role) to any LDAP user, that doesn't match to the above role mapping. After pressing Continue, Zammad will check if the configuration is okay. You can then enable LDAP and

start your first sync. The sync will then run hourly - if you need to change mappings, you can change the configuration at any time.


LDAP Mapping
User
LDAP ATTRIBUTE
ZAMMAD ATTRIBUTE
ACTION
givenname (e.g., All)
Firstname
Remove
sn (e.g., Exudos)
Lastname
Remove
samaccountname (e.g., Admi
Login
Remove
Remove
+ Add
Roles
LDAP GROUP
ZAMMAD ROLE
ACTION
cn=zammad-group,ou=zamm
Agent
Remove
+ Add
Expert
NAME
VALUE
User filter
(&(objectClass=user)(samaccountname=*)(!(samaccountname=
Users without assigned L DAP groups
Assign signup roles
Go Back
Continue

Note: You can use user filters to limit the search results Zammad gets. Also, you can hide deactivated Active Directory accounts (the users will be set to inactive within Zammad). You can find further information for Active Directory Filters at the Website from Microsoft.

After the sync has finished, you can find the new LDAP users under "Users". Zammad integrates them just normal users, the difference is the login name.



1.4 Exchange

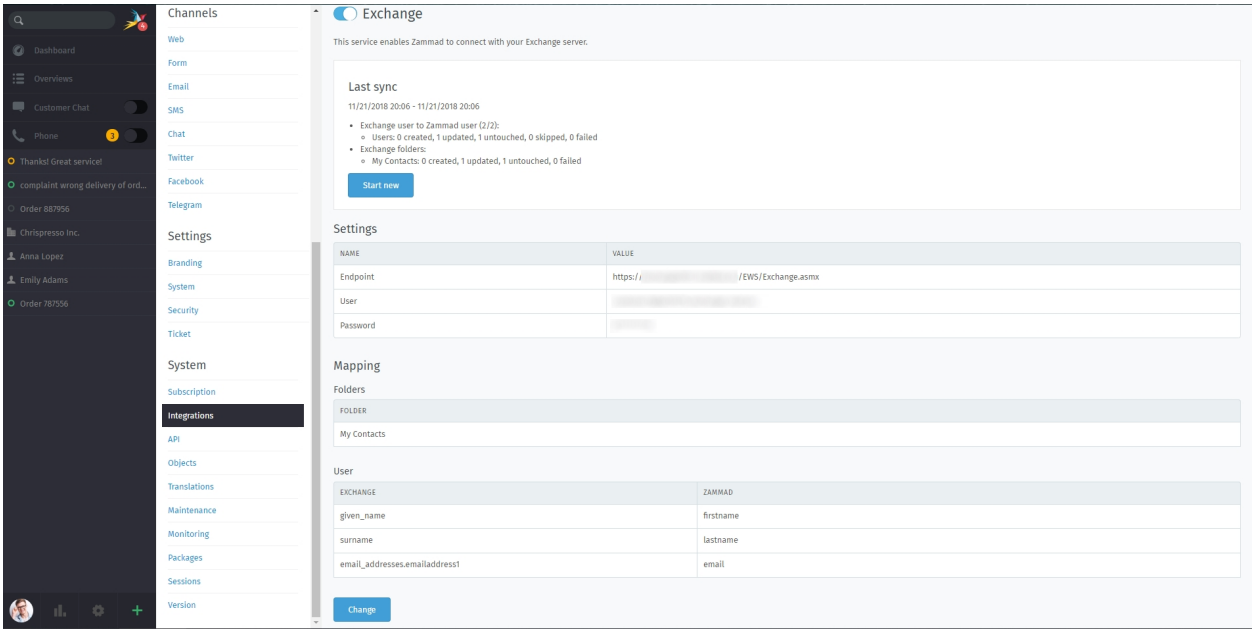
With our Exchange integration, you can easily use existing address books without having to update more than one source.

Note: The Exchange sync is one way: Exchange => Zammad. Changes to your users inside of Zammad might be overwritten by the Exchange Sync.

To configure Exchange integration, simply go to the System -> Integrations -> Exchange in the admin panel. Press "change" and follow the wizard for adding the needed Exchange information to Zammad. On the last two step Zammad will ask you for the address book(s) and your wanted Attribute mapping. By default, Zammad only Maps email address, First- and Lastname. Technically you can map any Exchange object to a Zammad user object (this also works for Custom Objects!).

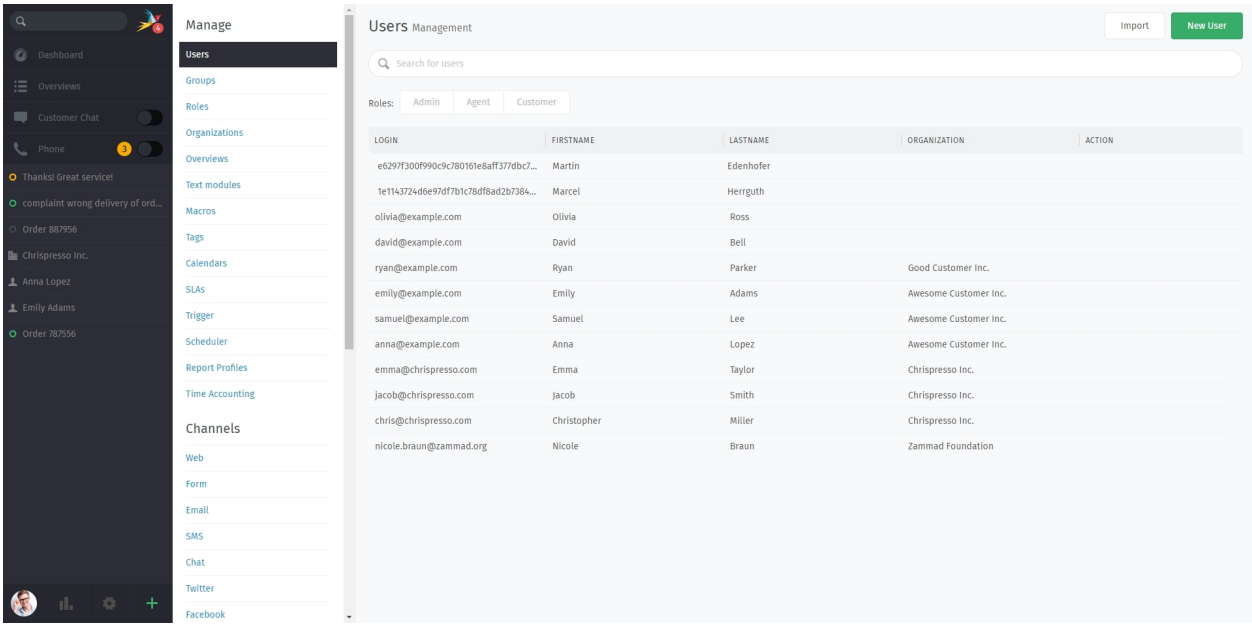
Note: Please refrain from syncing all addresses, as the results may not be what you expect (Exchange collects huge amounts of addresses). A central address book of your company to sync makes more sense, as you can ensure that Zammad gets only the data you need and want.

After pressing Continue, Zammad will check if the configuration is okay. You can then enable LDAP and start your first sync. The sync will then run hourly - if you need to change mappings or the address book(s), you can change the configuration at any time.



After the sync has finished, you can find the new Exchange contacts under "Users". Zammad integrates them just normal users.

Note: In some cases you might see unique IDs as "Login" instead of the email address. This is normal and doesn't affect the login or email mapping for that entry.



Note: Customers get their own user accounts, too?

Yes! Unlike OTRS, Zammad needs to store accounts for *everyone* who communicates through the system.

Why? It helps us do things like show all tickets from a certain customer.

How? Zammad checks the sender of every incoming message at every inbox it monitors, and if it doesn't recognize the

address, **poof**—new customer account!

(Your customers never need to set a password. Of course, they can if they want to, but the account will be there even if they never use it.)

1.5 Reference Guide: User Details

Most of the attributes you can set on user accounts are self-explanatory. The ones that aren't are described below.

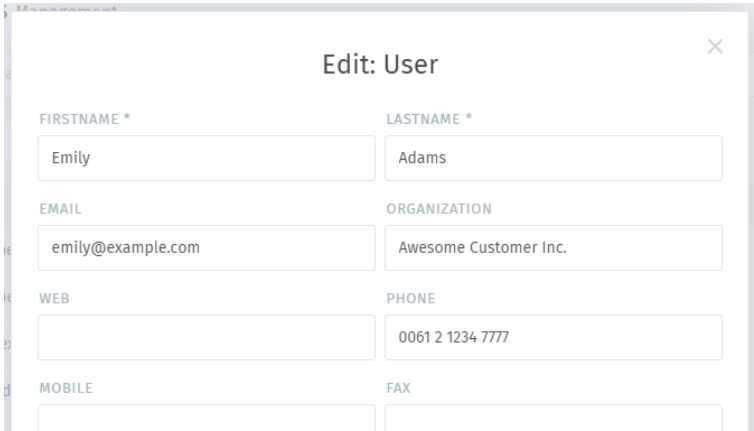


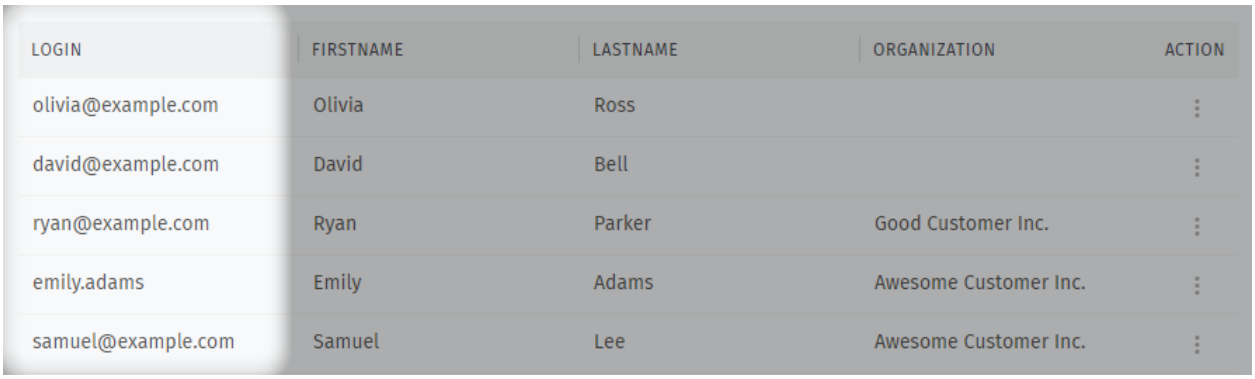
Fig. 9: User details can be set in the **New/Edit User** dialog.

Note: Admins aren't the only ones who can change these settings.

In most cases, agents can, too (using the new ticket dialog, search bar or the ticket pane).

Login A user's email and login may differ, but **either one can be used to sign in.**

Note:



LOGIN	FIRSTNAME	LASTNAME	ORGANIZATION	ACTION
olivia@example.com	Olivia	Ross		
david@example.com	David	Bell		
ryan@example.com	Ryan	Parker	Good Customer Inc.	
emily.adams	Emily	Adams	Awesome Customer Inc.	
samuel@example.com	Samuel	Lee	Awesome Customer Inc.	

Fig. 10: User logins are **not** shown in the New/Edit User dialog, but they are visible from the user overview.

This attribute **cannot** be set via the Admin Panel. Instead, use the Zammad console, the REST API, or *CSV import*.

Password Yes, administrators really do have the power to change other users' passwords.

(Agents do not, though.)

Organization *Organizations* are a way to group customers together (usually, members of the same company). This allows you to do things like view all tickets for that company or set up special *Triggers* that fire only for those customers.

Hint: You can't assign a customer to an organization that doesn't exist yet.

To add one, go to **Manage > Organizations** in the Admin Panel.

VIP This flag is a way for your team to indicate high-status customers. Just as with organizations, you can set up special *Triggers*, *Scheduler* jobs, *SLAs*, and *Overviews* just for VIPs.

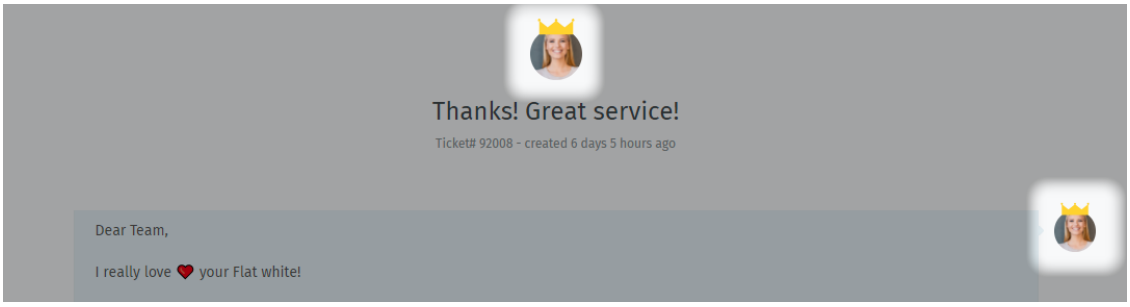


Fig. 11: VIPs are displayed with a crown above their avatars.

Note Notes are visible to all staff members, **including agents**.

Hint: Are you using the Note field to keep track of your own "custom" user attributes?

Wish you could add your own fields to the New/Edit User dialog?

You can! To learn more, see *Objects*.

Active Disabling this flag is a soft alternative to deleting a user. So what's the difference?

1. There is no way to restore a deleted user; inactive users can be reactivated at any time.
2. When a user is deleted, all their associated tickets are lost, as well; deactivating a user keeps all associated tickets intact.
3. Inactive users still appear in search results:

Permissions Under this heading, you can manage two separate (but related) user details:

1. *Roles* dictate what users can do in the system. If you need to grant someone privileges to edit the knowledge base or access part of the admin panel, roles are the answer.
2. *Group Access Levels* dictate which tickets an agent can work with. If someone's not receiving notifications for incoming tickets or can't be assigned a ticket, group access levels are likely to blame.

Hint: Huh? I don't see the group access table…

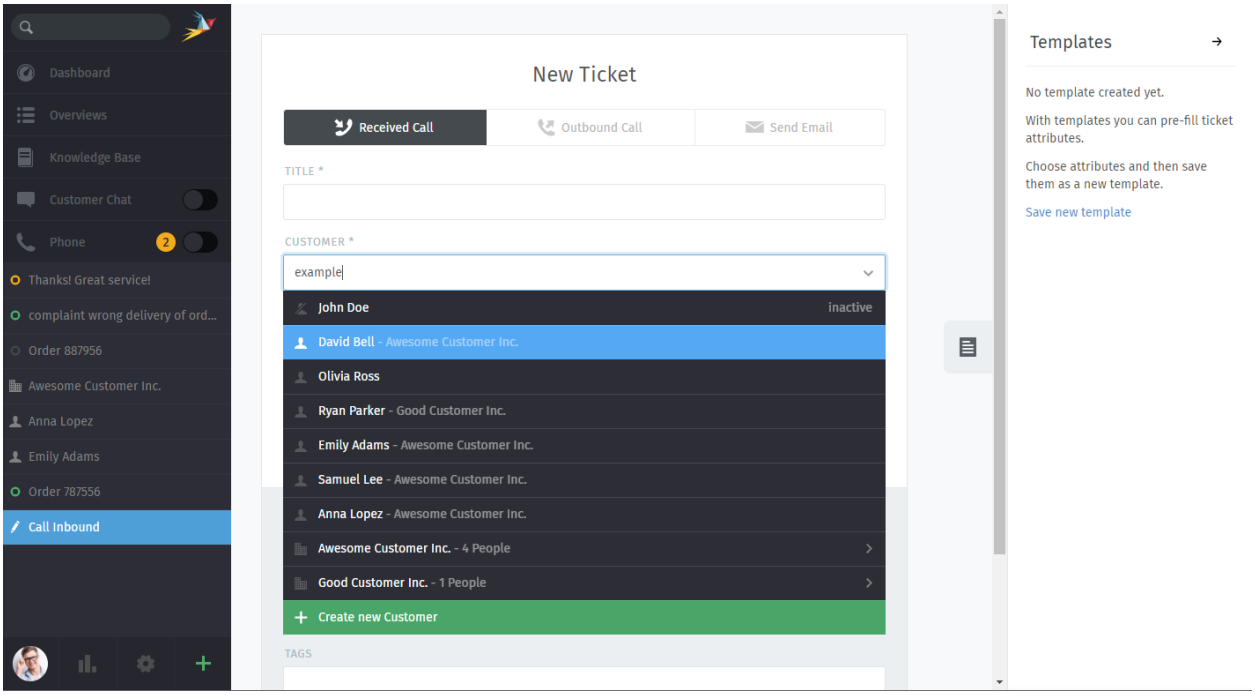


Fig. 12: A slashed-out icon indicates an inactive user. In other cases, inactive users are greyed out.

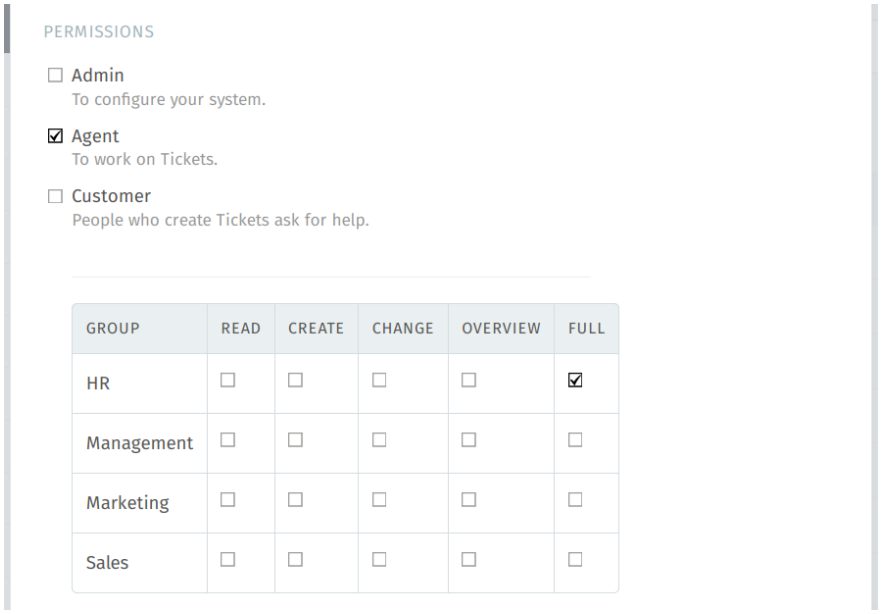


Fig. 13: **Top:** A user's roles decide what kinds of actions they can perform and which *groups* they belong to. **Bottom:** Group assignments can alternately be set on a per-user basis.

The group access table is only visible in **agent profiles**, when there is **more than one active group** in the system.

CHAPTER

TWO

GROUPS

This is the group management area. From here you can edit existing groups and add new groups.

Groups in Zammad are similar to working groups that deal with different topics within a company. For example, the tickets relevant to the sales department might be available in the *Sales* group, while the tickets for the support department might be available in the *Support* group. These are just examples; how you structure your groups is up to you.

Tickets enter Zammad through various channels (e.g. via email) and are then sorted into these groups. The tickets (cases) are thus made available to the agents responsible for the group. Each ticket can only belong to one group, and you can decide via **access levels** (see below) what access your agents have in each group. For example, you might want set up a group *Management* for confidential tickets; with access levels, you can configure that only a few select agents will have access to these tickets.

For an additional way to categorize tickets, have a look at *Tags*.

Hint: Zammad users are global to the whole instance. Restriction to specific groups is not possible.

2.1 Group Settings

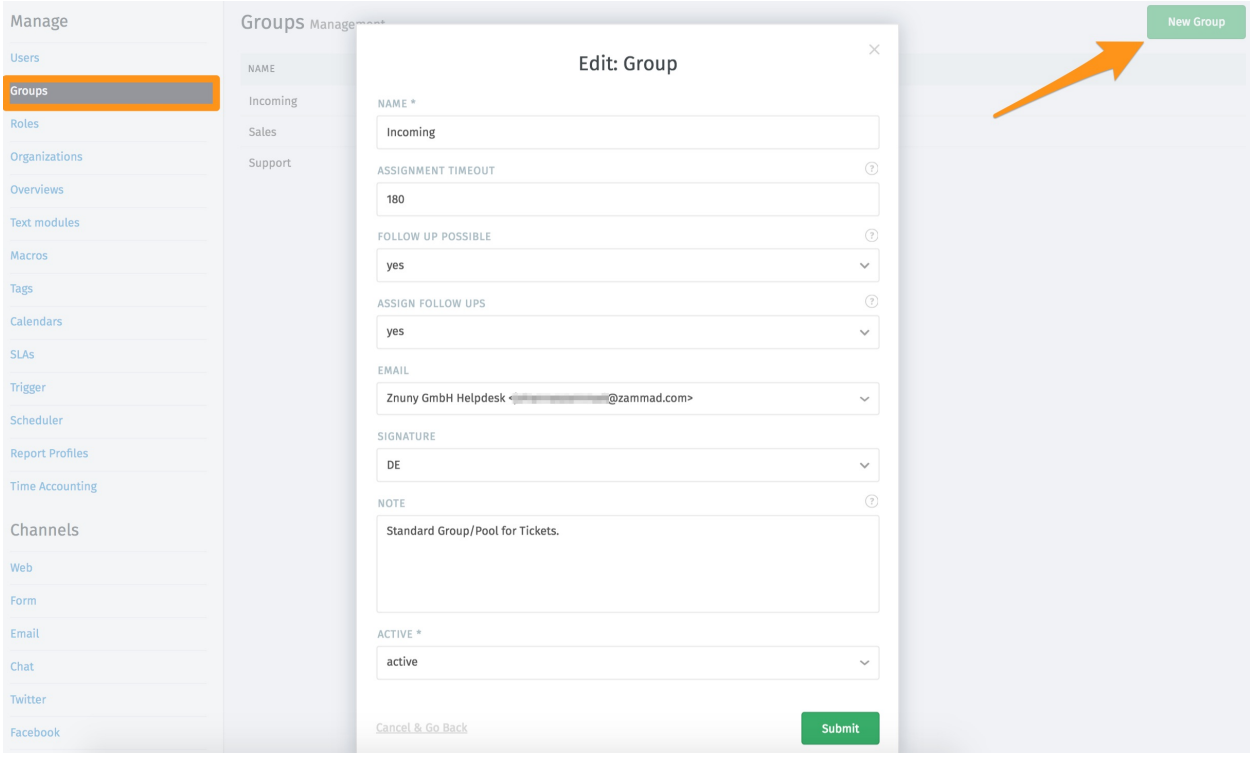
Click on a group to edit it, or click on *New group* to create a new group.

There you can edit the following settings:

- *Name*: choose a name for the group.
- *Assignment timeout*: the time in minutes after which the ticket's state will revert back to *unassigned* after the assigned agent hasn't worked on the ticket.
- *Follow up possible*: configure what happens when a customer replies to a closed ticket:
  - *yes*: the ticket will be reopened.
  - *do not reopen ticket but create new ticket*: the ticket will remain closed, and Zammad will instead create a new ticket for the customer's reply.
- *Assign follow ups*: configure whether a closed ticket that has been reopened due to a customer's reply should remain assigned to the last agent:
  - *yes*: the ticket will remain to the last agent who owned it.
  - *no*: Zammad will unassign the ticket.
- *Email*: choose which email address will be used as the sending address (*From* header) when agents reply to tickets in this group. Email addresses can be configured in Channels → Email → Accounts.
- *Signature*: choose which *signature* to use when replying to tickets in this group.

- *Note*: an internal note about the group that is only visible to people who can access the group management area.
- *Active*: choose whether the group is enabled or not. Groups cannot be deleted, they can only be set to inactive.

Eventually it should look something like this:



2.2 Group Access Levels

When assigning an agent to a *group*, Zammad gives you fine-grained control over what actions that agent can perform within it:

GROUP	READ	CREATE	CHANGE	OVERVIEW	FULL
HR	☐	☐	☐	☐	☑
Management	☐	☐	☐	☐	☐
Marketing	☐	☐	☐	☐	☐
Sales	☐	☐	☐	☐	☐

Fig. 1: Use the group access table to grant per-group privileges.

Within each group, the different access levels allow an agent to…

READ …view tickets

CREATE …create new tickets

CHANGE …modify existing tickets

OVERVIEW …see ticket overviews (but not ticket details)

FULL …all of the above **and be assigned / receive notifications for tickets**

Note: **Full group access also enables notifications for that group's tickets.**

2.2.1 Setting Access Levels

There are two ways to define an agent's per-group access levels:

1. Directly, in the *Edit User dialog*

Fig. 2: Simply set your access levels right on the target user.

2. Implicitly, by *editing a user's roles*

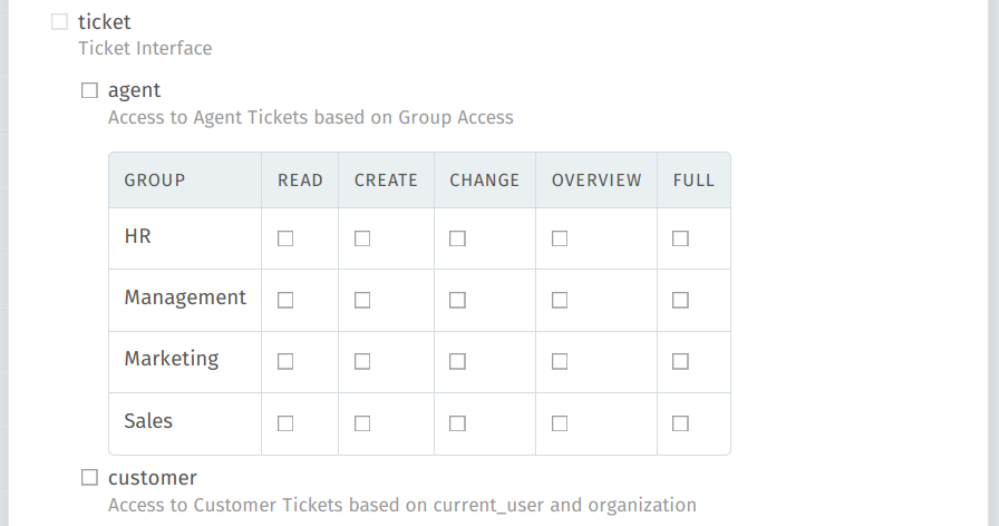


Fig. 3: First, set your access levels on a role…

Fig. 4: …then, add that role to the target user.

Note: **We recommend choosing one or the other**; things can get confusing if you use both at the same time.

So which one is right for you? *Whichever one is less work.* If you're trying to assign multiple agents to the same group with the same access levels, create a role for them to share—that's what roles are for!

2.2.2 Examples

"The Standard Issue"

GROUP	READ	CREATE	CHANGE	OVERVIEW	FULL
Incoming	☐	☐	☐	☐	☑

When a system only has one group, this is the default access level assigned to all agents. Unless you have special needs in mind, this is the way to go.

"The Supervisor"

GROUP	READ	CREATE	CHANGE	OVERVIEW	FULL
Incoming	☑	☑	☑	☑	☐

Agents with all permissions except for "full" **cannot be assigned tickets**. Otherwise, their privileges are identical to agents with "full" access. Great for letting other people do the real work.

"The Meddler"

GROUP	READ	CREATE	CHANGE	OVERVIEW	FULL
Incoming	☑	☐	☑	☑	☐

Agents with "read", "change", and "overview" access can do everything except create tickets or be assigned to them. Great for getting involved in other people's business.

"The Intern"

Agents with only "create" access can do just that, and nothing else—once they hit **Save**, they'll never see that ticket again. Great for taking phone calls for someone more important than you.

Hint: If the *Group* field does not appear in the ticket view, ensure that:

- you have created more than one group
- the current user has "change" permissions to more than one group

This is necessary because Zammad automatically hides selection fields with only one option.

GROUP	READ	CREATE	CHANGE	OVERVIEW	FULL
Incoming	☐	☑	☐	☐	☐

CHAPTER

THREE

ROLES

If you're already using Zammad, you'll know that users can be **admins**, **agents**, or **customers**. These are Zammad's built-in roles, and they're the tip of the iceberg of its powerful, flexible, and fine-grained permission system.

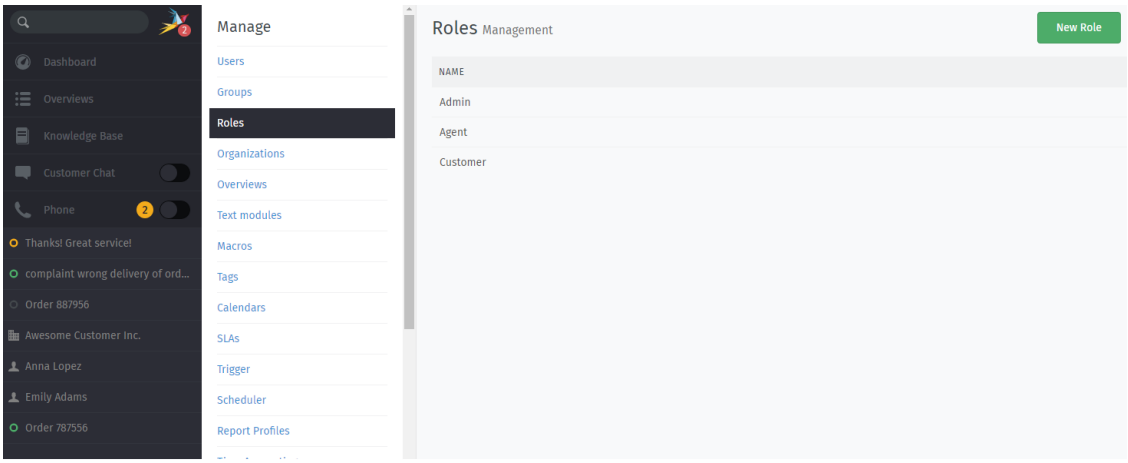


Fig. 1: Assign user privileges in the Admin Panel, under **Manage > Roles**.

Note: What's New in v3.5

Now, users can have both "agent" and "customer" roles at the same time!

Why would you want this? Agents get *overviews* of all the tickets they're *assigned to* (among other things), while customers get an overview of all the tickets they've *opened*. But some teams use Zammad for both internal and public communication, so their agents need both.

Having both roles also changes what you see in the ticket view, depending on whether you're the "customer" or not.

Tip: LDAP/Active Directory users:

Syncing your LDAP "groups" to Zammad roles can make access management *way* easier. To learn more, see *LDAP / Active Directory*.

3.1 What Is a Role?

tl;dr Some users can do things others can't (like close a ticket). Users have roles, roles have permissions, and permissions are what make those actions possible.

So what exactly are permissions, then?

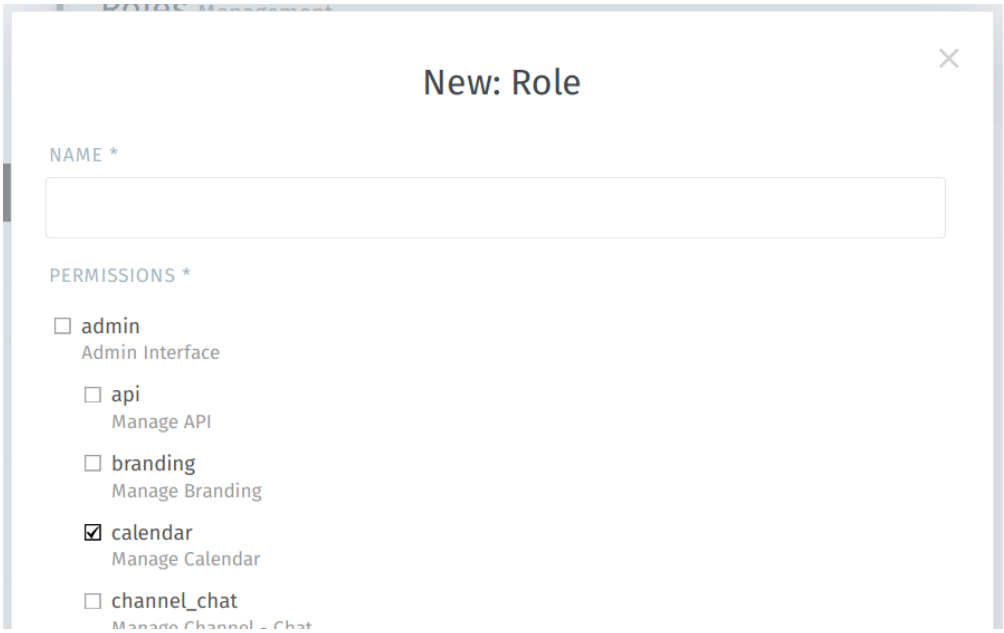


Fig. 2: The `admin.calendar` permission gives you access to the **Manage > Calendars** admin panel.

Simply put, permissions are names for all the different things users might want to do throughout the system, such as:

`chat.agent` respond to live chat messages

`ticket.agent` update tickets

`admin.user` access the **Manage > Users** admin panel

`knowledge_base.editor` create/edit knowledge base articles

Zammad has dozens of these permissions, which is a lot to keep track of. So instead of saying "This user has permissions A, B, and C", Zammad says "The *agent role* has permissions A, B, and C, and this user is an agent."

This makes creating user accounts for new agents a whole lot simpler, and it also makes it easier to invent a new permission D and say "All existing agents can do *that* now, too."

In short, roles are just collections of permissions that you can give to a user. The built-in admin, agent, and customer roles are enough for many teams, but Zammad gives you the freedom to custom-build your own.

And to do that, you'll need to know what each permission does.

3.2 Reference Guide: Permissions

3.2.1 Admin Permissions

Note: **Permissions are namespaced**, which is sort of like having files inside of folders.

The permissions listed on this page all belong to the `admin` namespace. You can select them individually, or you can just select `admin` to enable the whole bunch.

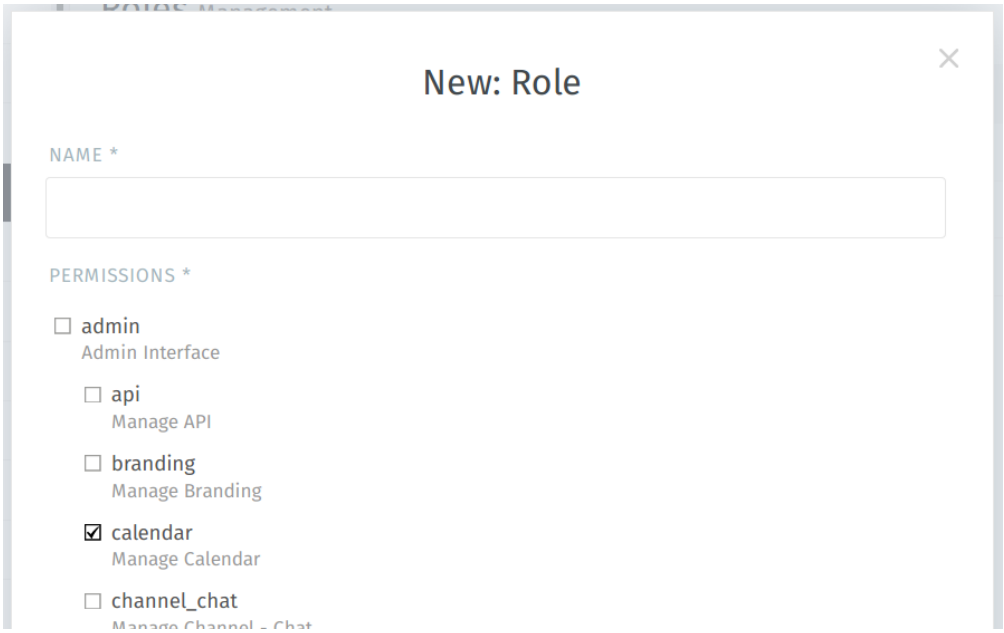


Fig. 3: Admin permissions are shown at the top of the New Role dialog…

`admin.api` System > API

`admin.branding` *Settings > Branding*

`admin.calendar` *Manage > Calendars* (required for *SLAs*)

`admin.channel_chat` *Channels > Chat*

> **Hint:** **Trying to grant access to send messages in live chats?**
>
> Use `chat.agent` instead.

`admin.channel_email` *Channels > Email*

> **Note:** There is no specific permission for the Google channel yet. This is an open feature request.

`admin.channel_facebook` *Channels > Facebook*

> **Hint:** **Trying to grant access to view/update tickets from Facebook?**

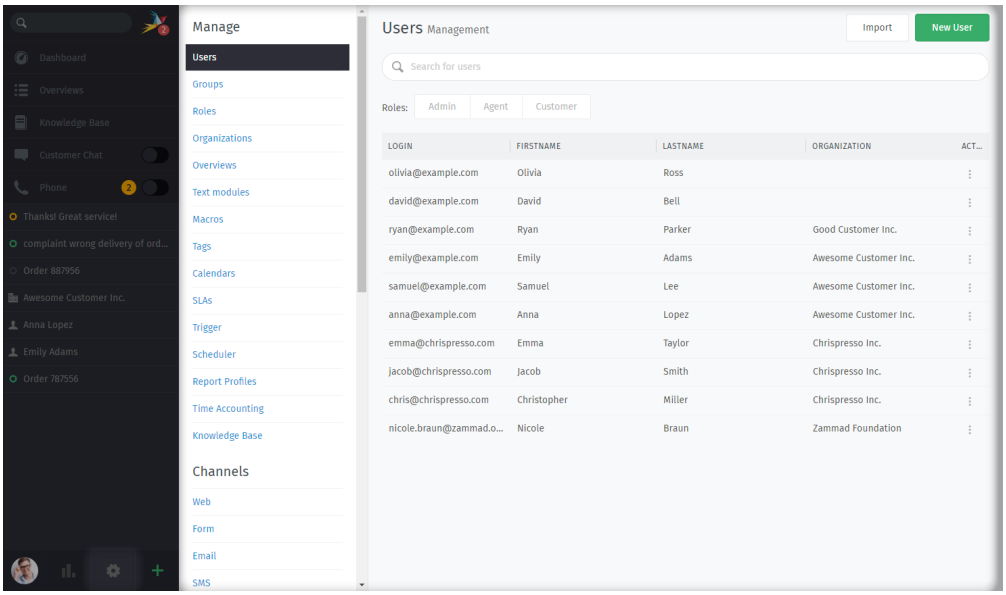


Fig. 4: …and give users access to the pages of the Admin Panel.

That's in *Group Access Levels*.

---

admin.channel_formular *Channels > Form*

admin.channel_sms Channels > SMS

admin.channel_telegram *Channels > Telegram*

Hint: Trying to grant access to view/update tickets from Telegram?

That's in *Group Access Levels*.

---

admin.channel_twitter *Channels > Twitter*

Hint: Trying to grant access to view/update tickets from Twitter?

That's in *Group Access Levels*.

---

admin.channel_web *Channels > Web*

admin.core_workflows *System > Core Workflows*

admin.data_privacy *System > Data Privacy*

> **Danger:** This permission allows users to permanently delete data on the system. Proceed with caution!

admin.group *Manage > Groups*

admin.integration *System > Integrations*

admin.knowledge_base *Manage > Knowledge Base*

> **Hint: Trying to grant access to read/edit knowledge base articles?**
>
> Use `knowledge_base.reader` and `knowledge_base.editor` instead, and double-check the answer's visibility.

`admin.macro` *Manage > Macros*

> **Note:** In some cases, macros may also require `admin.tag`.

`admin.maintenance` *System > Maintenance*

`admin.monitoring` *System > Monitoring*

`admin.object` *System > Objects*

`admin.organization` *Manage > Organizations*

> **Note:** Agents can access existing organizations from the search bar, even without this permission. They can even edit an organization's name, domain, and notes!

`admin.overview` *Manage > Overviews*

`admin.package` *System > Packages*

`admin.report_profile` *Manage > Report Profiles*

> **Hint: Trying to grant access to view reports?**
>
> Use `report` instead.

`admin.role` *Manage > Roles*.

`admin.scheduler` *Manage > Scheduler* for automation on tickets

`admin.security` *Settings > Security* settings of Zammad This also covers third party authentications.

`admin.session` *System > Sessions*

`admin.setting_system` *Settings > System* of Zammad

`admin.sla` *Manage > SLAs*

`admin.tag` *Manage > Tags*

`admin.text_module` *Manage > Text Modules*

`admin.ticket` *Settings > Tickets* (does not grant access to *Composer Settings*)

`admin.time_accounting` *Manage > Time Accounting*

> **Hint:** This permission may be useful for accounting personnel if they need to be able to export timekeeping records.

`admin.translation` *System > Translations* (also enables inline translation)

`admin.trigger` *Manage > Triggers*

`admin.user` *Manage > Users*

Note: I thought agents could already manage user accounts?

Agents can create and edit **customers**, but they can't:

- modify anyone's permissions (roles or groups)
- modify anyone's passwords
- edit other agents' accounts

Danger: This permission allows users to hijack other user sessions.

To learn more, see *Taking over a user's session*.

3.2.2 Agent Permissions

Note: The permissions listed on this page grant access to features that have to be enabled or configured system-wide in the Admin Panel first.

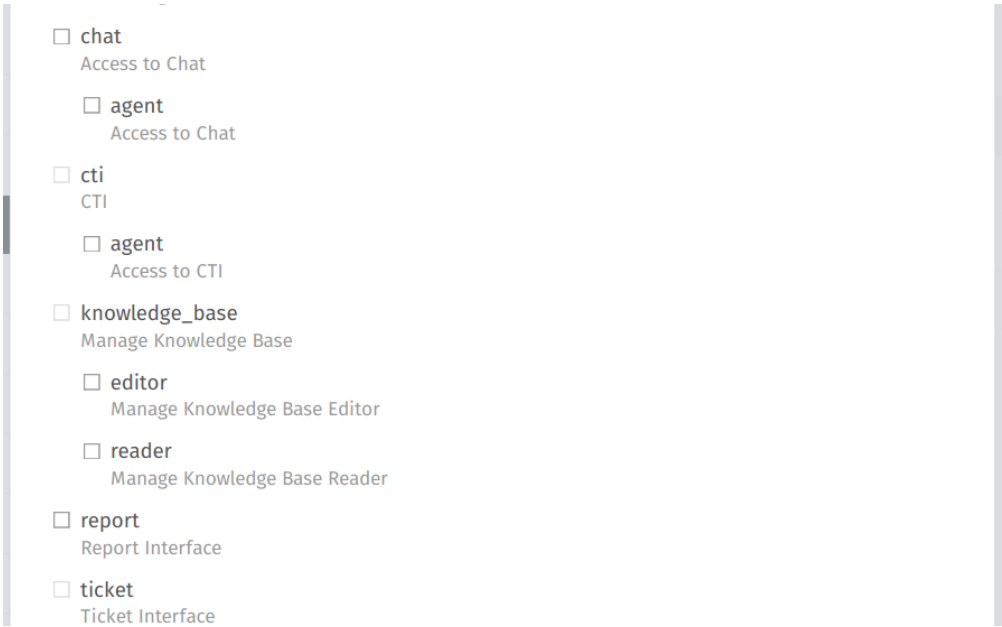


Fig. 5: Agent permissions are shown in the middle of the New Role dialog…

`chat.agent` Customer Chat

Hint: Requires configuration of *Chat Channel*

`cti.agent` Provides access to Caller Log

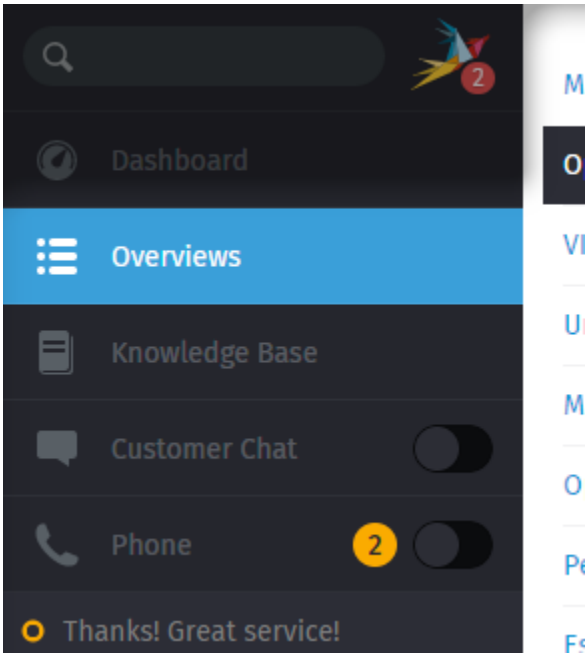


Fig. 6: ...and give users access to new sidebar tabs for communicating with customers.

Hint: Requires configuration of either integrations

- *Generic CTI*
- *placetel*
- *sipgate*

knowledge_base Knowledge Base

`knowledge_base.editor` create/edit privileges

Hint: Editor permissions always include reader permissions.

`knowledge_base.reader` read privileges for internal content

Hint: Public articles are always visible.

`report` *Reporting*

Warning: **Never grant this permission to your customers.**

Giving customers access to reporting constitutes a serious data breach, as it includes **all ticket and user information across the entire system**!

Note: This permission is the exception to the rule on this page:

1. the feature it enables is not for communicating with customers;
2. the button appears at the *bottom* of the sidebar; and
3. it is typically reserved for admins and supervisors.

`ticket.agent` (Agent) Overviews

Note: What's this big table doing here in the middle of my permissions?

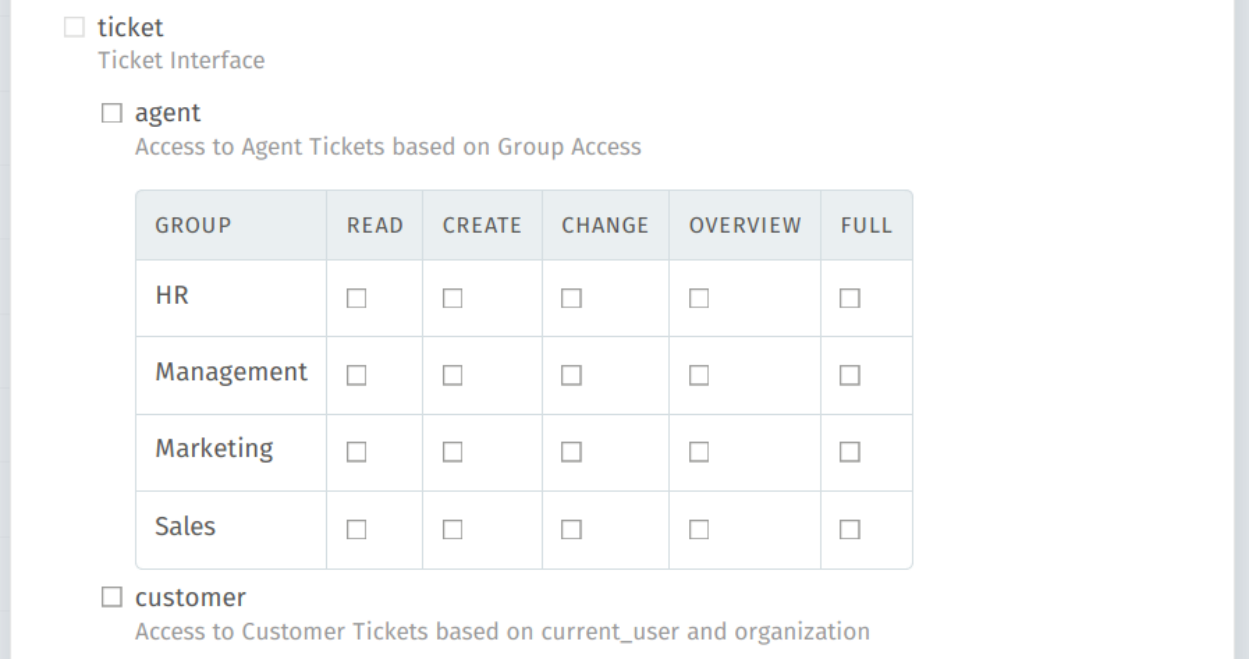


Fig. 7: The group access table is shown when there is **more than one active group** in the system.

Okay, so remember when we said that *"roles are just collections of permissions"*? That wasn't *entirely* true—they can also be collections of **group access levels**.

To learn more, see *Group Access Levels*.

Hint: Point of technicality

As of Zammad 3.5, you can assign both agent and customer roles to the same user—but but you **can't** assign both `ticket.agent` and `ticket.customer` *permissions* to the same *role!*

To make it work, you need two separate roles: one with `ticket.agent` and the other with `ticket.customer`.

3.2.3 User Preferences Permissions

Note: **Permissions are namespaced**, which is sort of like having files inside of folders.

The permissions listed on this page all belong to the `user_preferences` namespace. You can select them individually, or you can just select `user_preferences` to enable the whole bunch.

Fig. 8: User preferences permissions are shown at the bottom of the New Role dialog…

`user_preferences.access_token` Generate API tokens to control Zammad via the REST API

> **Note:** **Security Tip**
>
> Generated tokens will never have more permissions than the user that generated them.

`user_preferences.avatar` Override the default Gravatar with a custom avatar

`user_preferences.calendar` Configure the calendar feed

`user_preferences.device` Manage device login sessions

> **Note:** **Security Tip**
>
> Revoking this permission disables "Login detected from a new location" notification emails.
>
> To learn more, see *System Notifications*.

`user_preferences.language` Configure the UI locale/language

`user_preferences.linked_accounts` Manually link accounts after signing in with *third-party authentication*

> **Note:** If *automatic account linking* fails, this is the only way your users can utilize third-party logins.

`user_preferences.notifications` Configure ticket notification settings

> **Note:** Agents only receive ticket notifications for *groups they have "full" access to*.

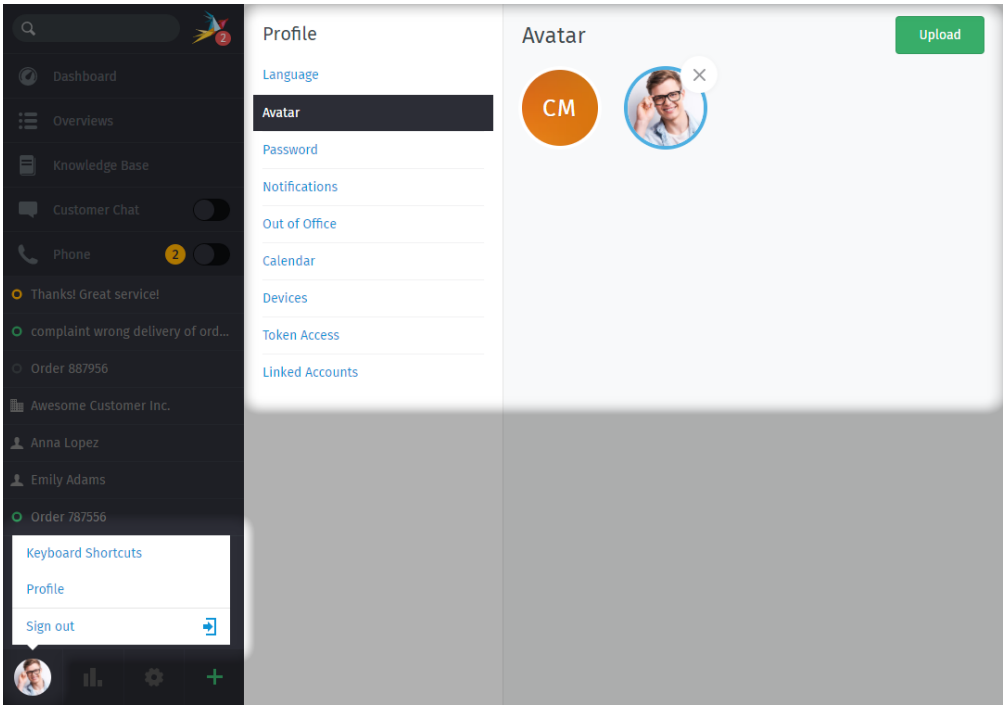


Fig. 9: …and give users access to the pages of their User Profile.

Customers can't receive ticket notifications at all.

`user_preferences.out_of_office` Designate a substitute for out-of-office hours

Note: Security Tip

Designating a substitute does **not** grant that person the permissions / *group access levels* of the agent they're replacing.

`user_preferences.password` Change account password

> **Warning: Third-party authentication / LDAP users:**
>
> Be sure to **revoke this permission** for all your users. When using a third-party identity server (like LDAP), the whole point is to let *it* take care of authentication so that passwords never have to live in Zammad's database.

Broadly speaking, there are four types of permissions:

Admin for access to each page of the Admin Panel

Agent for access to customer communications

Customer Without the `ticket.customer` permission, customers can't see the **My Ticket** overview—but they can still log in and open new tickets!

User Preferences for access to your own user profile

Note: **Permissions are namespaced**, which is sort of like having files inside of folders.

These permissions:

- `admin.api`
- `admin.branding`
- `admin.calendar`
- `admin.channel_chat`
- `admin.channel_email`
- ...and 30+ more

all belong to the `admin` namespace. You can select them individually, or you can just select `admin` to enable the whole bunch.

3.3 Role Details

Default at signup Every new user must be assigned at least one role upon creation. This attribute decides which role to give new users by default (which usually happens when creating a new ticket for a new customer).

Fig. 10: The default role is identified in the overview of the **Manage > Roles** admin panel.

Warning: **Default roles should never provide admin/agent permissions.**

CHAPTER

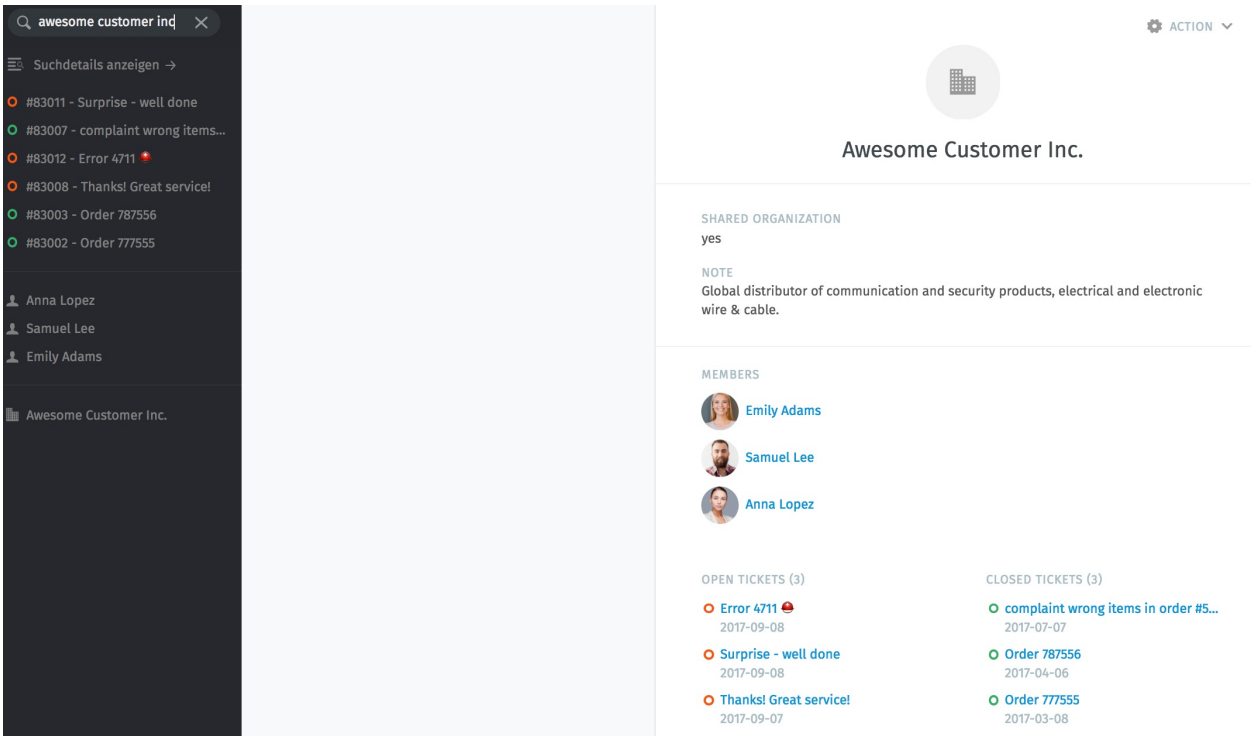
FOUR

ORGANIZATIONS

Organizations allow you to group customers. This has two important advantages, among other things.

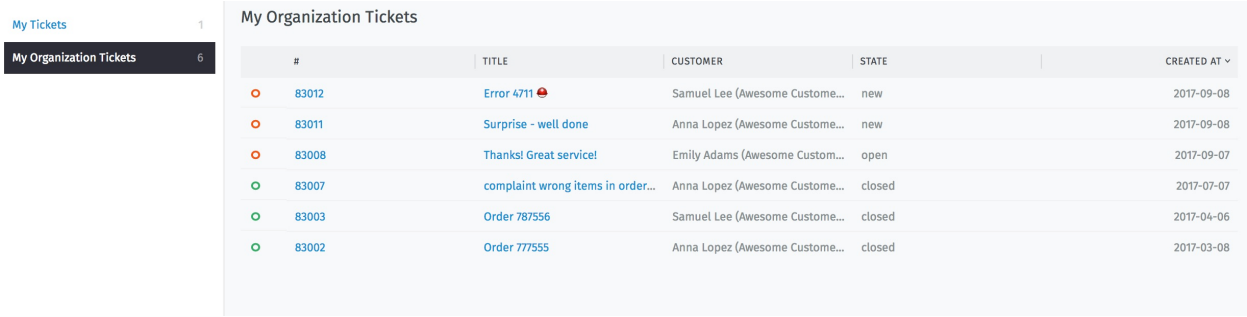
1.) As an agent you not only have the overview of a customer's tickets, but also an overview of the entire organization.

For example, by searching for the organization, all the tickets for the organization are displayed and they can be opened easily by a click. This overview appears as follows:

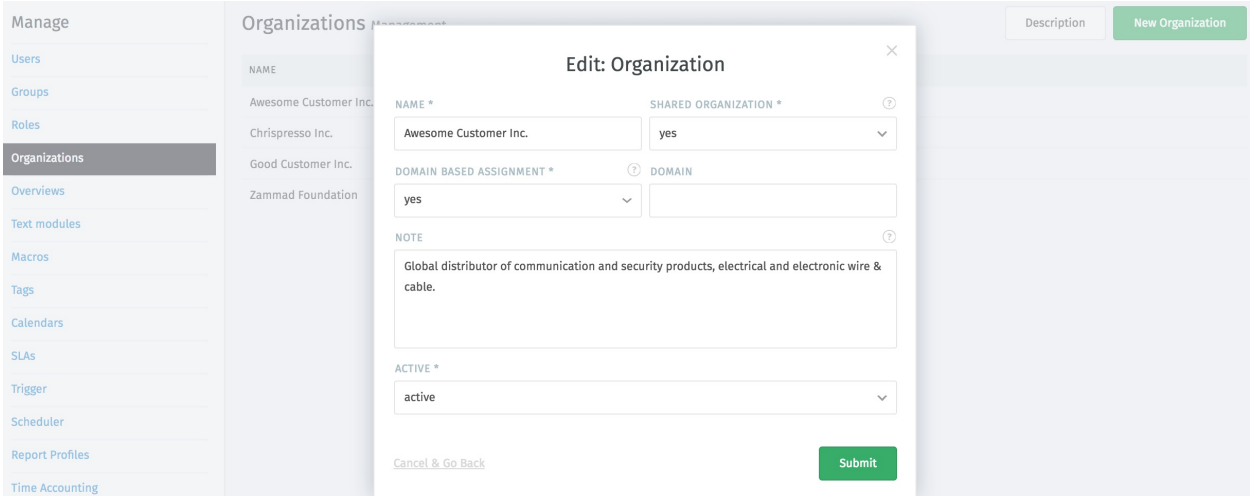


2.) As a customer, you can view and edit your colleagues' tickets (if the organization is a "shared organization", you can set this as a parameter for each organization. See the Edit-Mask).

For example: For a customer user who has only created one ticket himself, but whose entire organization has created 6, the overview would look like this:



In the organizations management area (Admin Interface –> Manage –> Organizations) you can manually add, edit or delete existing organizations. That's the Edit-Mask:



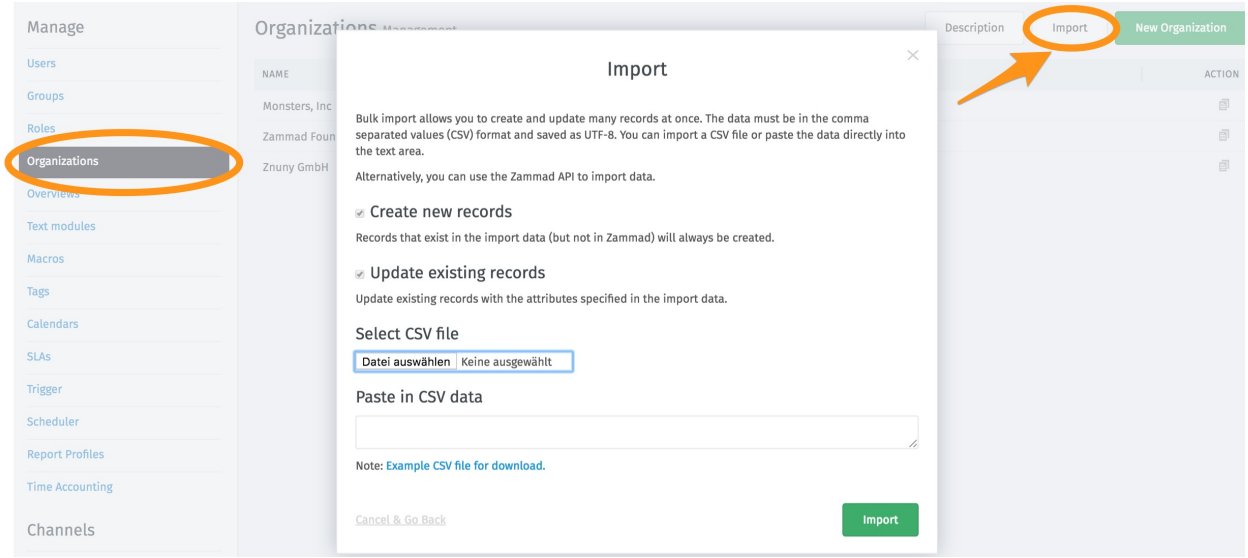
Within the organization the following things can be set:

- if it's a shared organization (All customers who are assigned to this organization can view and edit the group tickets)
- if the assignment is domain based (assign users based on domain)
- note
- if it's active or inactive

4.1 Import of organizations via CSV file

With the import action (since Zammad 2.5) you can download a sample CSV file and upload your own CSV file.

To reduce the error rate of unwanted mass changes, a test import is carried out first and a summary appears at the end. If you agree with the summary, the CSV import will be executed.


Manage
Users
Groups
Roles
Organizations
Overviews
Text modules
Macros
Tags
Calendars
SLAs
Trigger
Scheduler
Report Profiles
Time Accounting
Channels
Organizations
NAME
Monsters, Inc
Zammad Foun
Znuny GmbH
Description
Import
New Organization
ACTION
Import
Bulk import allows you to create and update many records at once. The data must be in the comma separated values (CSV) format and saved as UTF-8. You can import a CSV file or paste the data directly into the text area.
Alternatively, you can use the Zammad API to import data.
Create new records
Records that exist in the import data (but not in Zammad) will always be created.
Update existing records
Update existing records with the attributes specified in the import data.
Select CSV file
Datei auswählen
Keine ausgewählt
Paste in CSV data
Note: Example CSV file for download.
Cancel & Go Back
Import

CHAPTER

FIVE

OVERVIEWS

You can provide overviews to your agents and customers. They can be used as a kind of worklist of tasks that the agent is supposed to work off. You can also create individual reports for individual agents or agent groups.

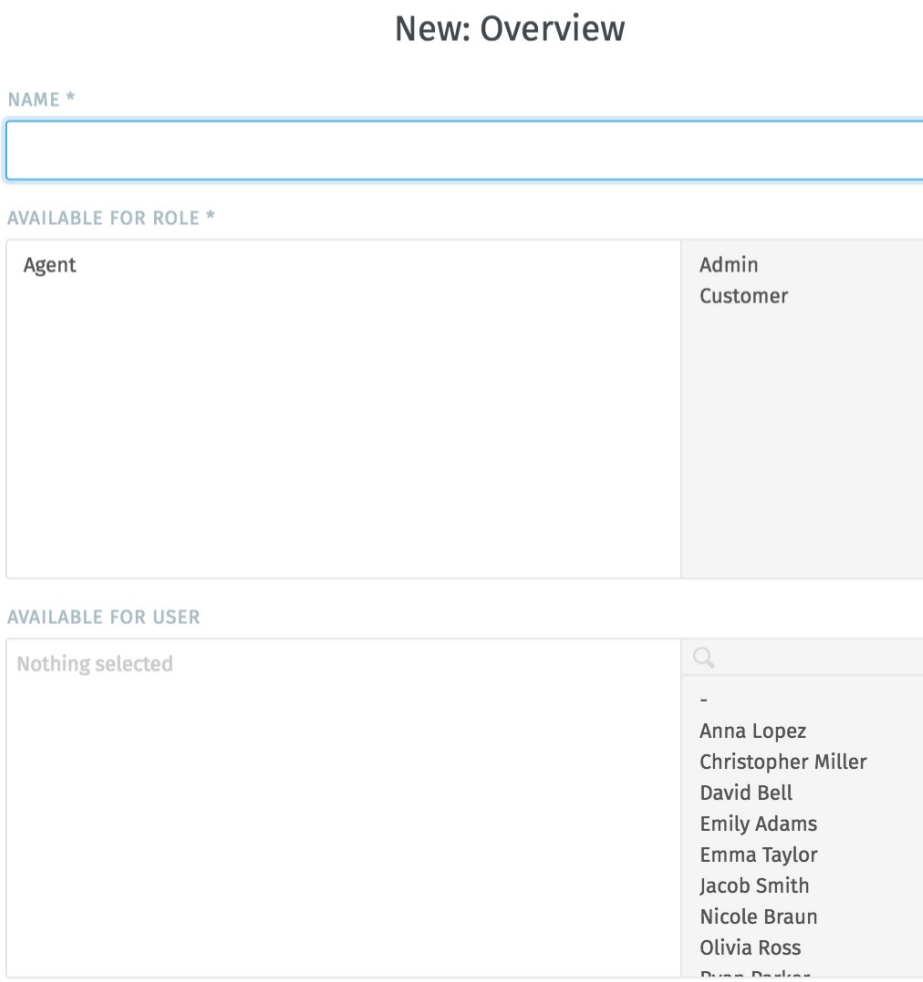
In the Overview Management Area you can add new overviews, edit or delete them.

Warning: Please note that Overviews can cause performance issues leading to no longer or less often refreshing overviews!

Whenever possible, try to use the same overviews for as many agents and groups as possible to keep the number of overviews low. For best results, you might want to use between 15-20 overviews maximum. Also, any overview will only show a total of 2100 elements.

Note: Overviews will only show tickets to your users, that the user have rights on (group or role based).

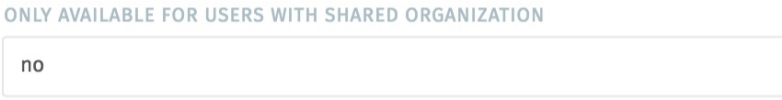
The following attributes can be set when creating an overview:



Available for role / Available for user

Hint: Roles are assigned to users, per default there are agents, admins and customers. Further information about *Roles*.

With these settings you can choose whether to make the overviews available to an entire group of people (by selecting the role) or to specific users. The entries in both fields apply. This means that you can also select individual users in addition to sharing the overview for all role members.



Only available for users with shared organization

Hint: Shared organization is a setting in the organisations-management. See *Organizations* for more information.

This is only important if the available role is a customer. When deciding whether yes or no is selected, it must be considered to what extent this makes sense - for example, if a customer sees only his own tickets, many views are usually not necessary…

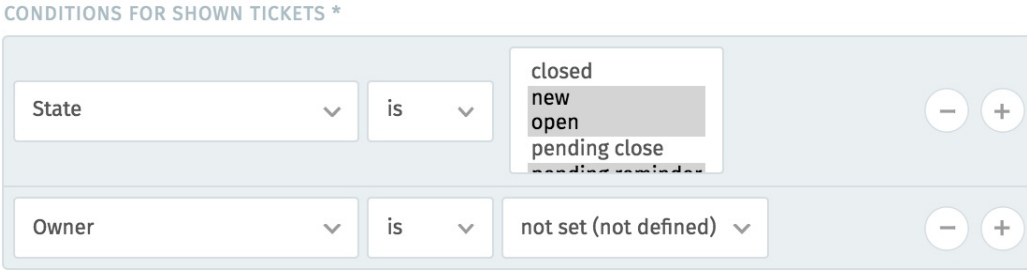
Note: Users also refers to the customer role in this case.

Available for users which are replacements for other users

This selection refers to the setting in the user preferences (profile-pic in the left corner –> profile –>) "out of office". If this option is checked, this selection is only displayed if someone has been entered as a substitution.

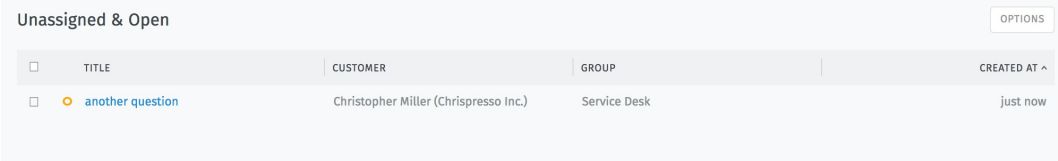
For example: Agent A is on vacation and Agent B will take care of his tickets. Then an overview can be set up, which only shows Agent B all new tickets from Agent A for this period of time, without having to search for them separately.

Note: Replacement users are part of our Out of Office function.



Conditions for shown tickets

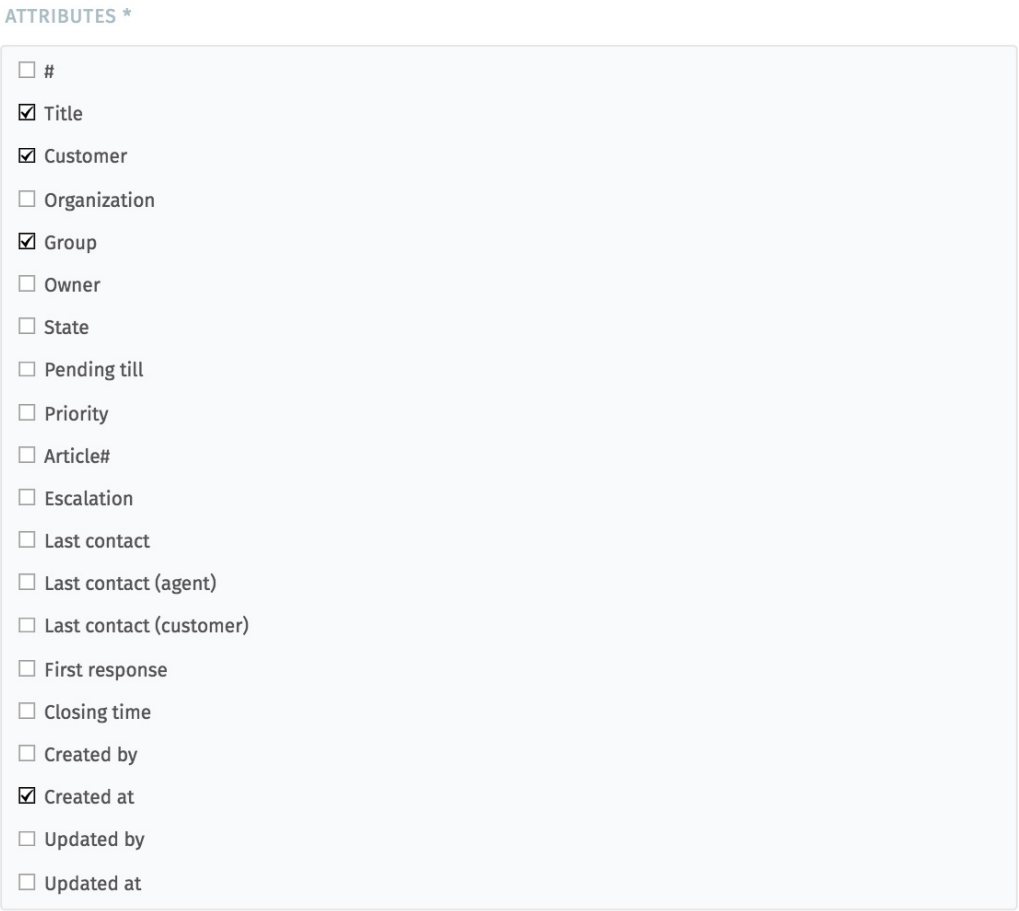
What conditions should the listed tickets contain? (it is like a filter) You can add more than one condition. In the preview you have the possibility to double check if your entry of the conditions makes sense by directly displaying tickets that match your filtering.



ATTRIBUTES

Which attributes shall be shown in the overview? (column headers)

With this setting you can select the headlines of your overview. Depending on which information is important in this selection, it can be displayed individually. For this example "Unassigned and open" the overview would look like this:



These settings can also be adjusted individually by admins at a later time (In the overview, top right: Options).

Note: Please note that overview column and sort settings are global settings which affect all users seeing those overviews.

Ordering, grouping and active

- order: In which order should the tickets be displayed? (Sorted by the attributes)

- direction: The direction of the order
- group by: Should the tickets be displayed again grouped by a specific attribute within the list?
- active: Set them active or inactive

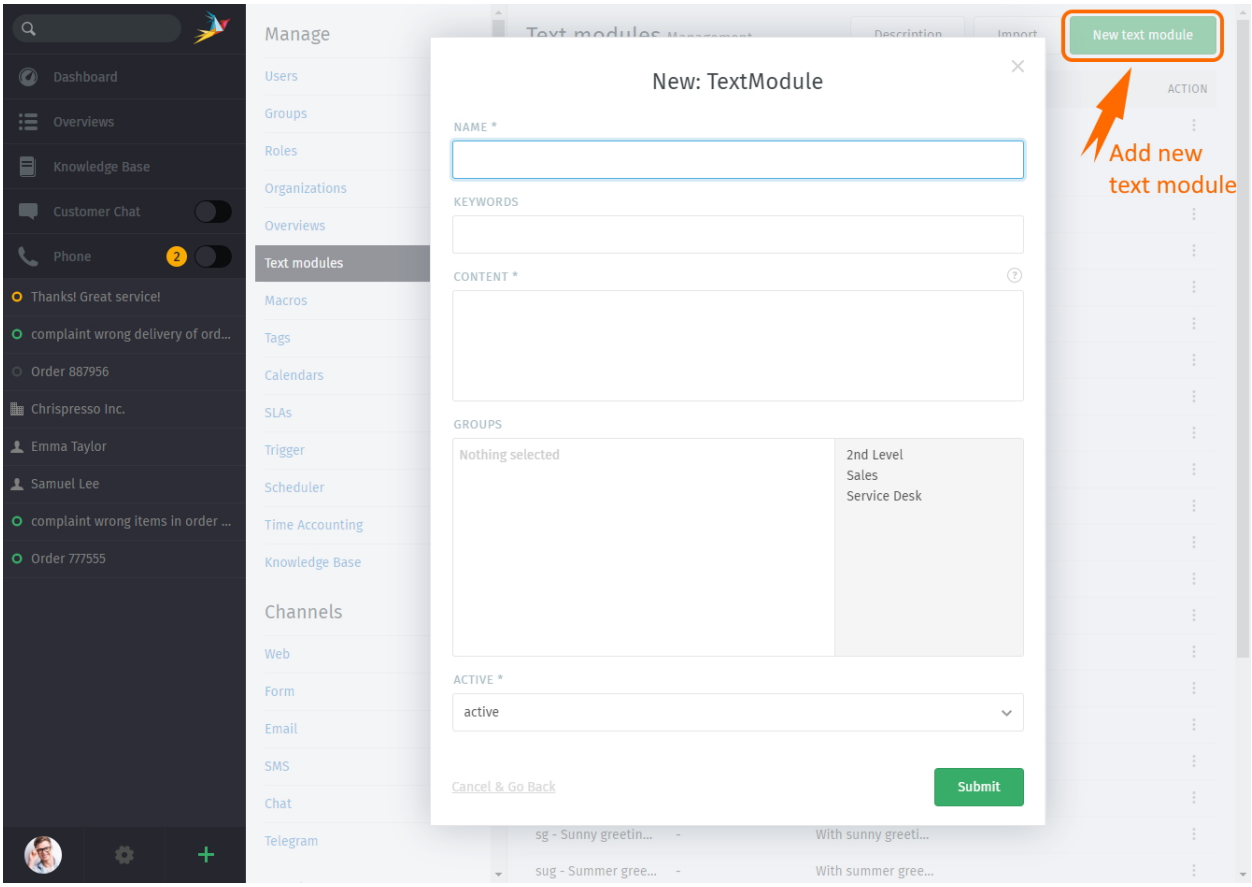
CHAPTER

SIX

TEXT MODULES

Note: Beside text modules Zammad also allows you to use Ticket-Templates for ticket creation.

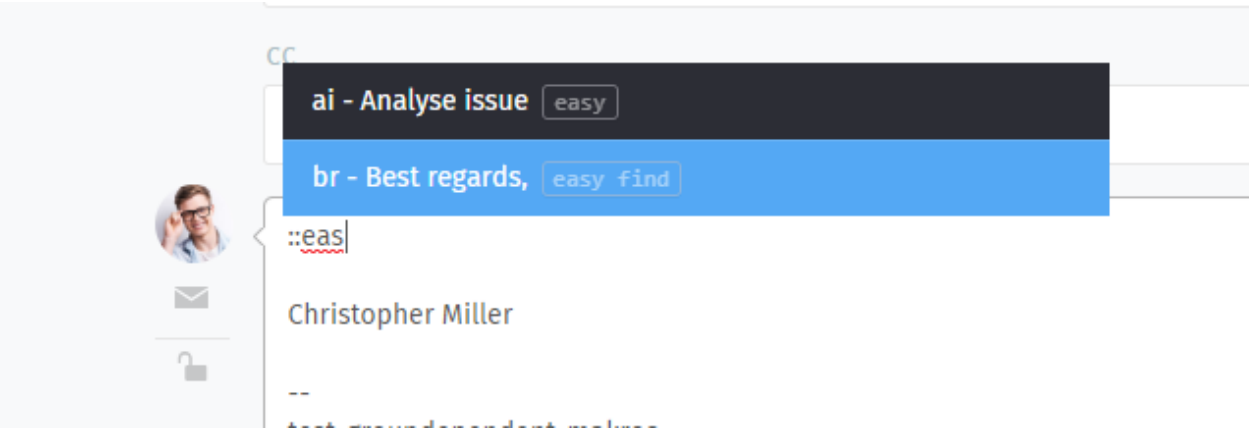
Text modules can be edited in the admin interface under Manage –> Text modules. Here you will find text snippets already created in the standard version, which can be extended as needed.



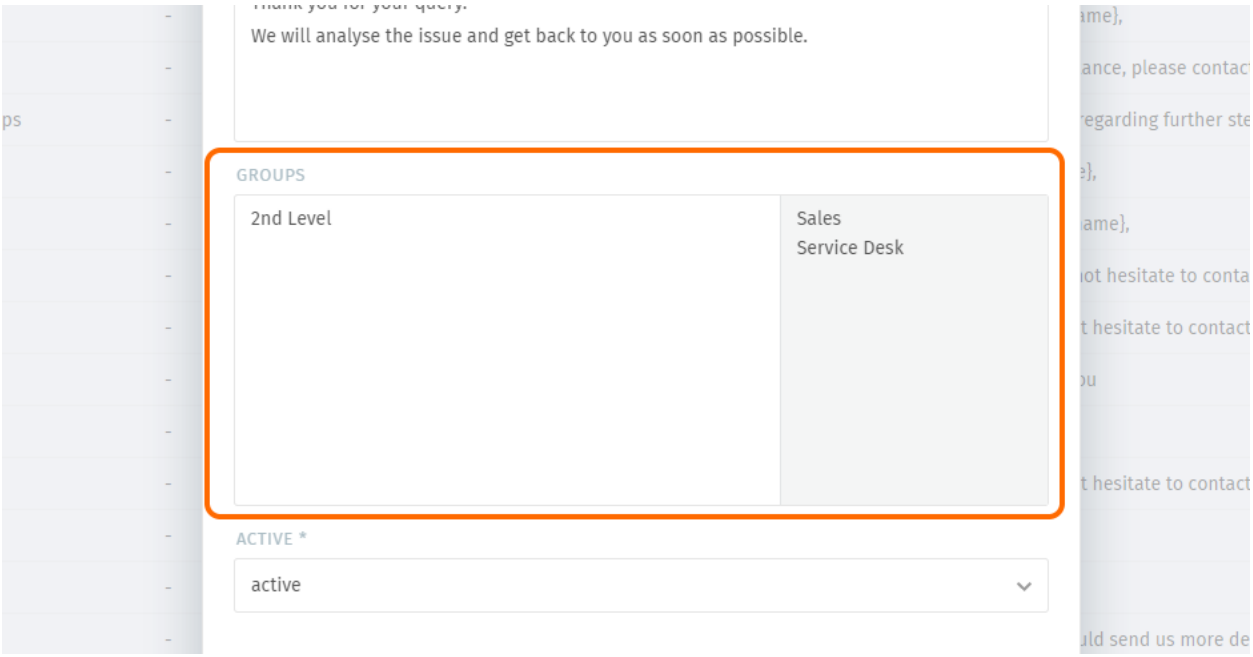
Here you can add new text modules, delete or edit them.

Creating keywords makes it easier to find the right text module.

If needed, you can restrict text modules to specific groups. With this, you can easilly keep text module lists short and dedicate specific texts to where they belong.



You can adjust the group memberships for text modules at any time. This allows you to have the text module available globally (no groups selected) or one or several specific groups.



To select placeholders from a list, just enter `::` in the text block. The list can be searched with the arrow keys after inputting keywords or shortcuts. All text modules can be used in articles as well as in the chat.

Note: You can find more information on how to use text modules on our User Documentation.

Tip: If text modules are to be grouped, this can be done using shortcuts. Example country codes:

Text modules are created for the group Germany as follows:

- Ger_Textmodule1
- Ger_Textmodule2
- …

for Austrian-Snippets:

- Aut_Textmodule1
- Aut_Textmodule2

thus only the relevant text modules are displayed for each country.

The example text modules below use *Variables* to dynamically insert information like the customer's or agent's names.

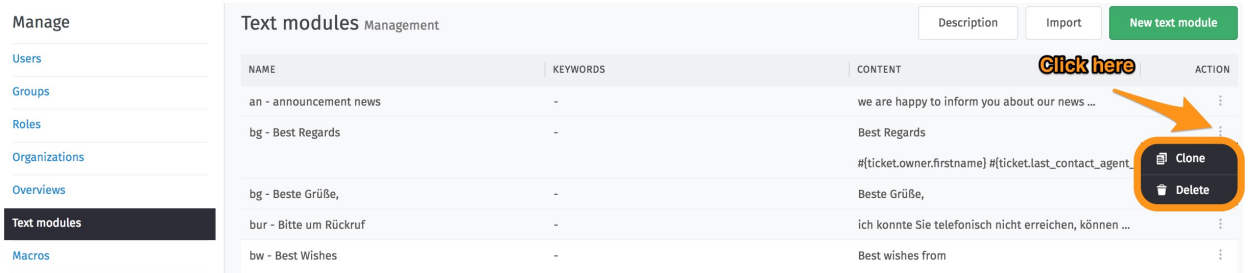
Examples of snippets are:

```
Hello Mrs. #{ticket.customer.lastname},

Hello Mr. #{ticket.customer.lastname},

Hello #{ticket.customer.firstname},

My Name is #{user.firstname},
```

Of course you can also use multi line snippets.

6.1 Delete or clone text modules

Often similar text modules have to be created or unnecessary ones deleted. For these cases you can click on the 3 points in the text module overview on the right side and select the corresponding action:

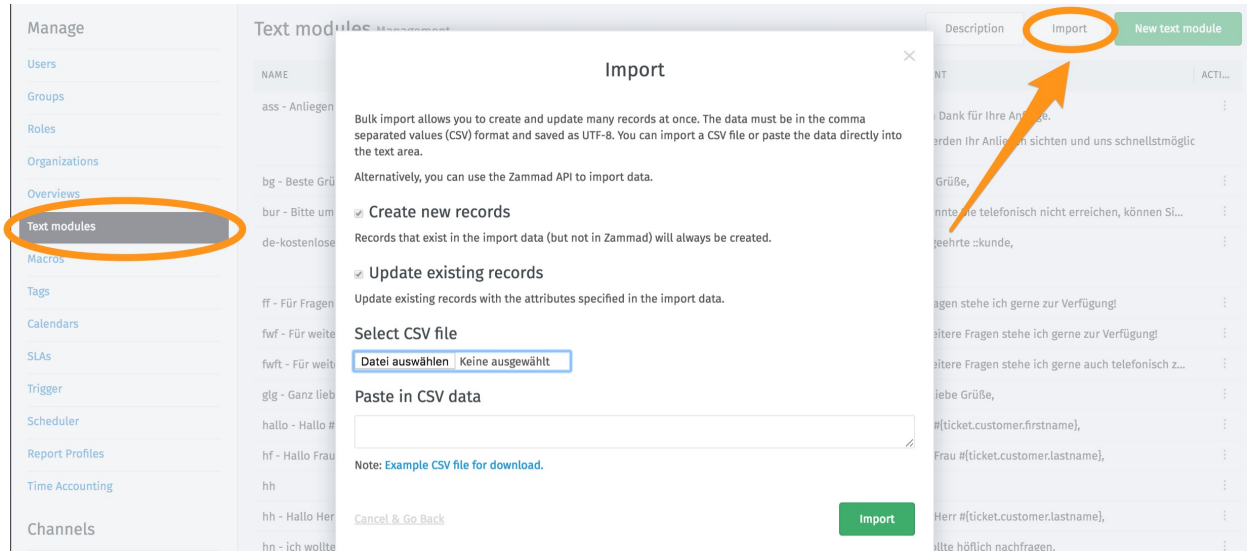


When cloning, text modules with all attributes are duplicated and can be edited later.

6.2 Import of text modules via CSV file

With the import action (since Zammad 2.5) you can download a sample CSV file and upload your own CSV file.

To reduce the error rate of unwanted mass changes, a test import is carried out first and a summary appears at the end. If you agree with the summary, the CSV import will be executed.


Manage
Users
Groups
Roles
Organizations
Overviews
Text modules
Macros
Tags
Calendars
SLAs
Trigger
Scheduler
Report Profiles
Time Accounting
Channels
Text modules
Description
Import
New text module
Import
Bulk import allows you to create and update many records at once. The data must be in the comma separated values (CSV) format and saved as UTF-8. You can import a CSV file or paste the data directly into the text area.
Alternatively, you can use the Zammad API to import data.
Create new records
Records that exist in the import data (but not in Zammad) will always be created.
Update existing records
Update existing records with the attributes specified in the import data.
Select CSV file
Datei auswählen
Keine ausgewählt
Paste in CSV data
Note: Example CSV file for download.
Cancel & Go Back
Import

CHAPTER

SEVEN

MACROS

Macros are **one-click shortcuts** for applying changes to a ticket.

If you find yourself making the same changes to lots of tickets (*e.g.,* close-and-tag-as-spam or reassign-to-another-group), you can store those changes in a macro for easy access:

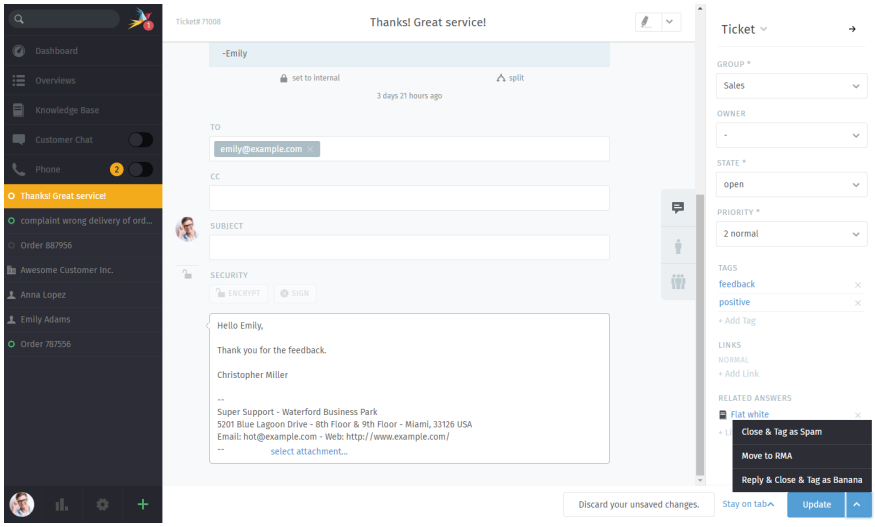


Fig. 1: Choose from the macros **Close & Tag as Spam**, **Move to RMA**, and **Reply & Close & Tag as Banana**.

You can also apply macros in bulk (*i.e.,* to many tickets all at once) via the *Overviews* page:

You can create or edit macros on the Macros page of the admin panel:

7.1 Learn by example

To get you up and running quickly, here are some examples of the kinds of one-click actions you can set up using macros.

Hint: If they don't make sense to you, don't worry—just skip ahead to *How do they work?* to learn about all the options in detail, then come back here to see them in action.

1. If you deal with a lot of spam, you could set up a macro that applies the following changes to a ticket:

   State closed

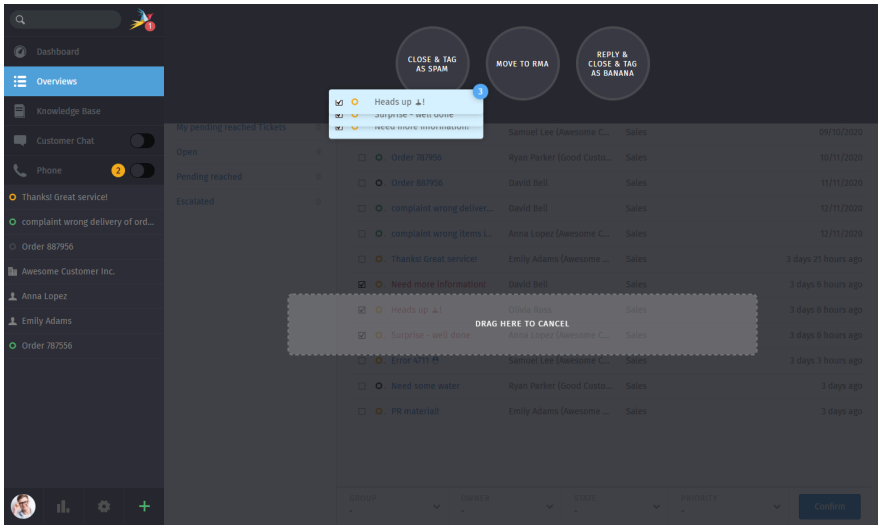
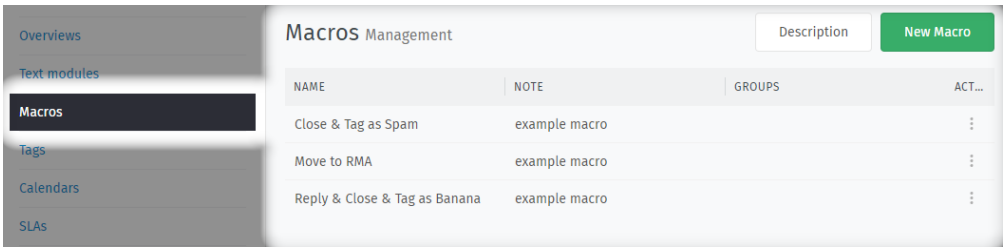


Fig. 2: Select your desired tickets, then click-and-drag to apply a macro to all of them.



Tags add `spam`

Owner current user

Tip: Run this macro in a *Scheduler* to periodically clean up unwanted tickets.

---

2. If you want to set a ticket's state to *pending reminder*, it's usually a two-step process—first select the state, then select a date. To always set a reminder for the same, fixed amount of time (say, seven days later), you can bundle the whole change into a macro:

   Note "Postponing ticket for 7 days." (internal visibility only)

   State pending reminder

   Pending Till relative / 7 / days

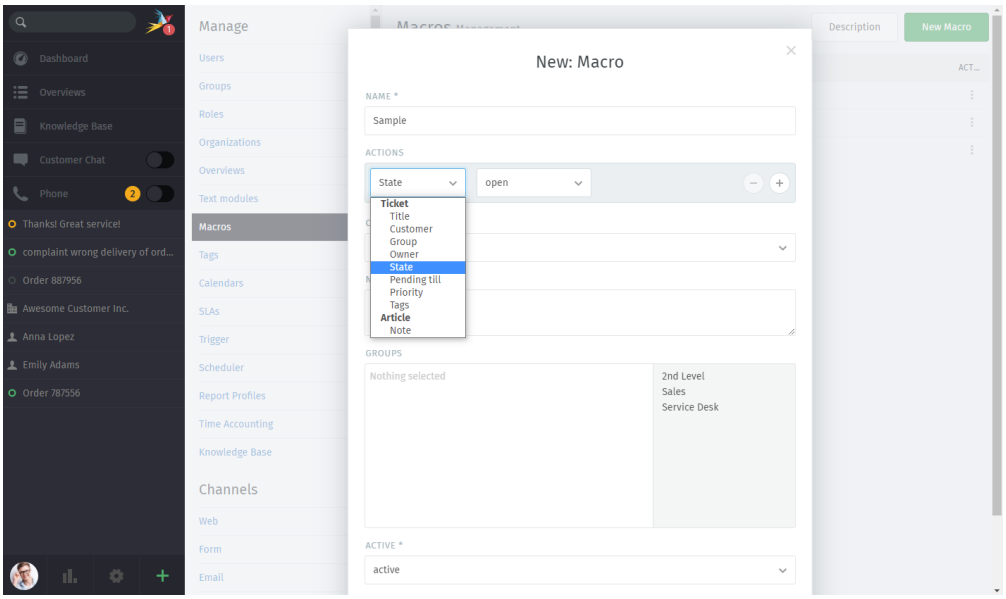
   Owner current user

7.2 How do they work?

Macros are made up of **actions** (changes to a ticket). You can add as many actions to a macro as you want.

There are also a few other settings that affect who can use a macro or how it behaves.

7.2.1 Creating Macros



Actions You can create actions to:

- set ticket attributes (priority, state, group, etc.)
- add new notes to a ticket

There are **no** actions for:

- sending a reply to the customer

Note: Unlike triggers, the scheduler, and text modules, macro actions do **not** support the use of *Variables*.

> **Warning:** If the ticket is missing a required attribute and the macro doesn't set it, then **no actions will be applied**.

Once completed… After running this macro, should Zammad remain on the current tab, close it, or automatically switch to the next ticket? (Does not apply when running macros "in bulk".)

Note What should other Zammad admins know about this macro? (Visible only via the "Edit: Macro" dialog, Rails console, and API.)

Groups Which *Groups* are allowed to see/use this macro?

Active Choose “inactive” to disable this macro without deleting it.

7.2.2 Managing Macros

You can delete or even clone existing macros in the Admin Panel under **Manage > Macros**.

Fig. 3: When cloning a macro, you *must* click “Submit” for the duplicate to be created.

CHAPTER

EIGHT

TAGS

With tags, tickets can be categorized and marked.

8.1 How to tag

All agents can tag tickets. You can find further information about tagging of tickets on our User Documentation.

8.2 Tag-Overviews

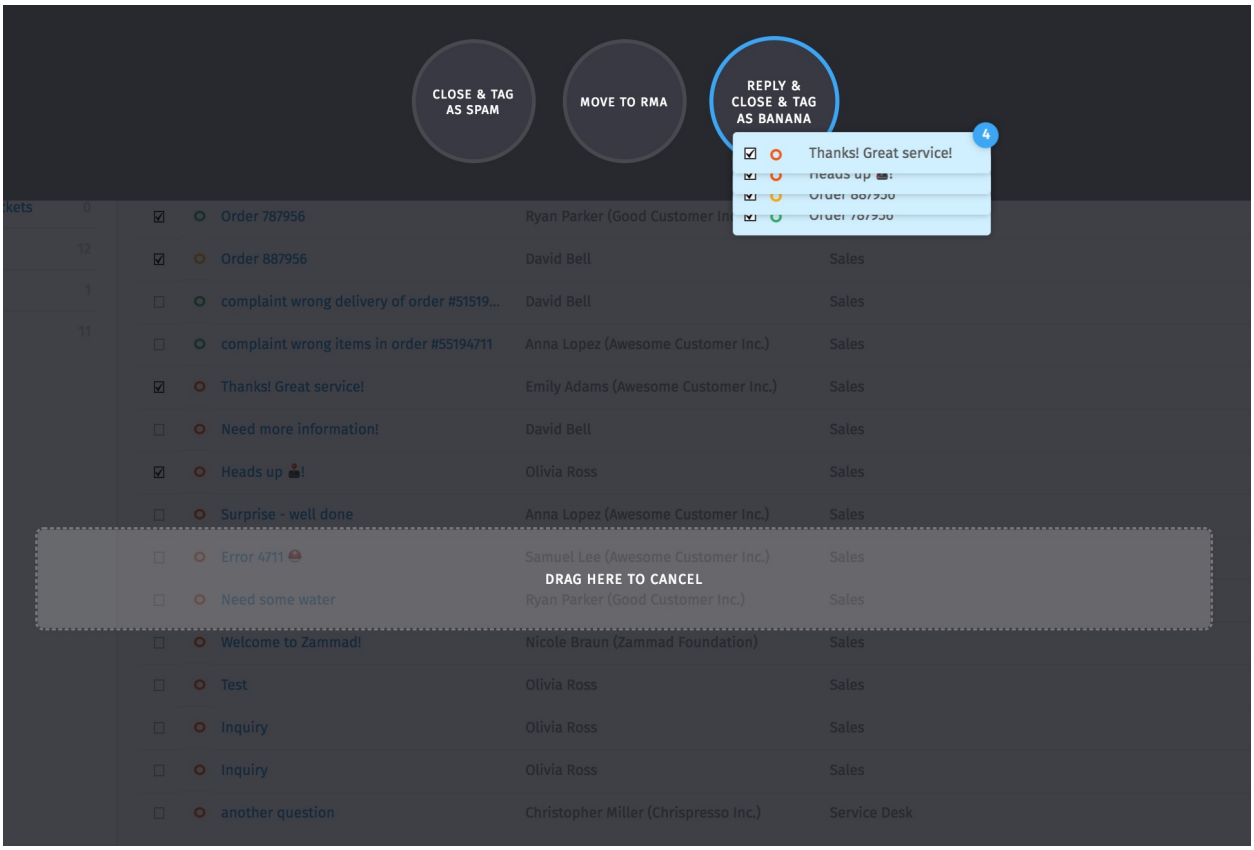
You can list all the marked tickets by tag in different ways:

1. by providing an appropriate overview

Create a new overview and select "Tag contains …" as condition. You can find further information in *Overviews*

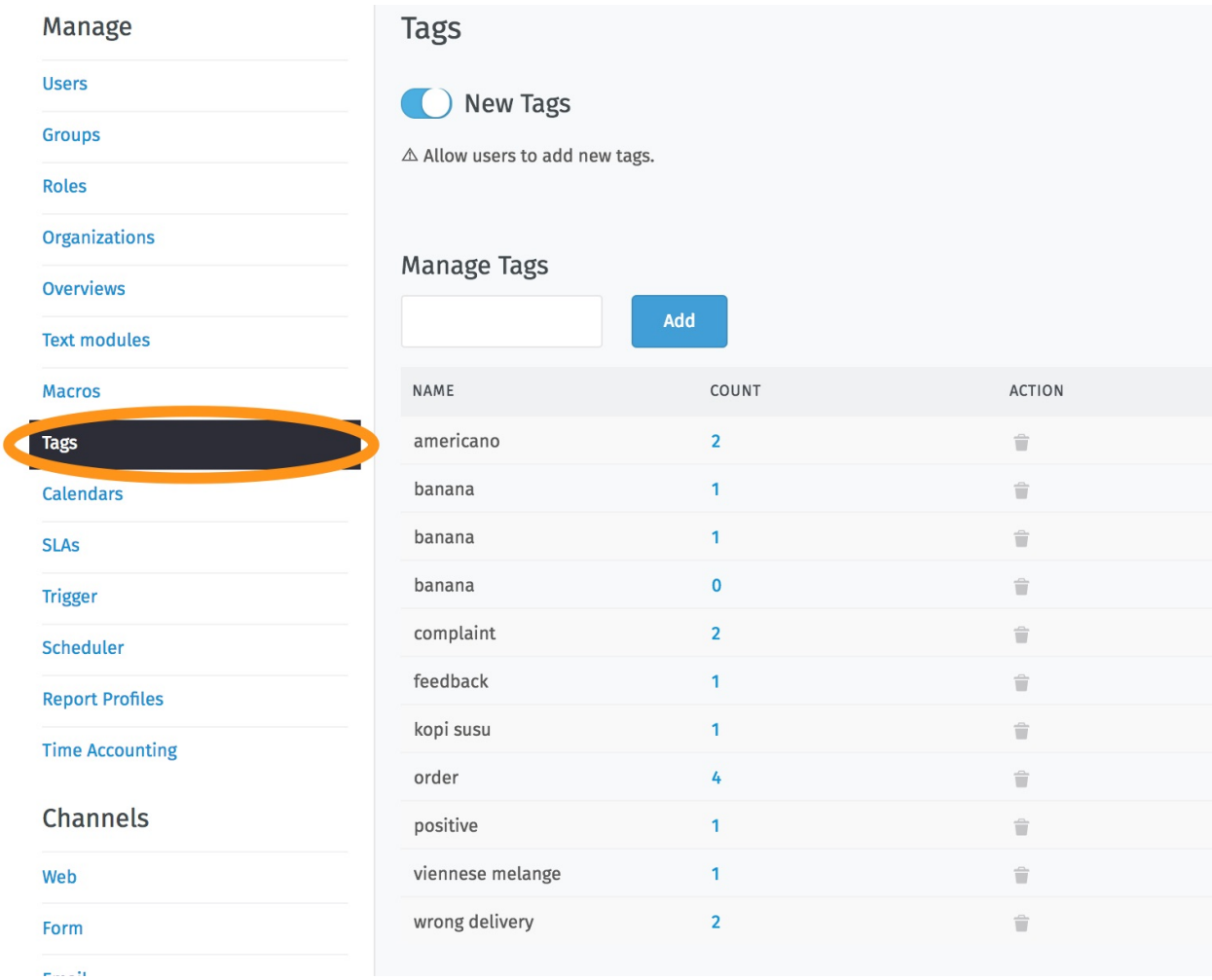
2. by a search-query

Enter e. g.: `tags:banana` in the search mask and you will receive all tickets that have been tagged accordingly. For a collected listing, click on "Show Search Details" under the search box:

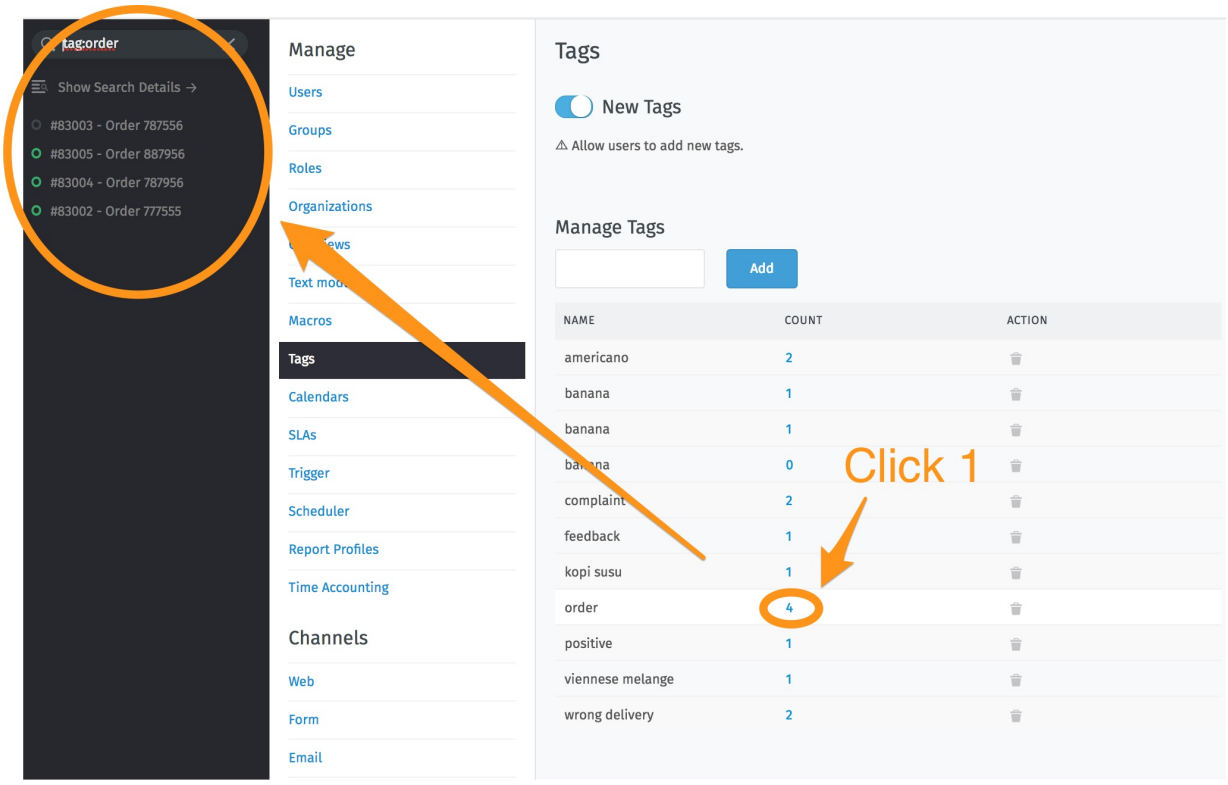


3. by clicking on the tag in the Tag Management Area

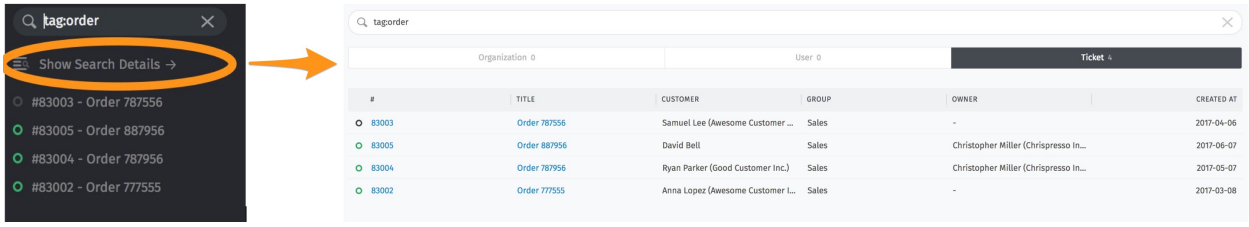
In the Tag Management you can find an overview of existing tags used in the system (and a counter how often they are used):



For more information about the individual tags, just click on the blue counter:



Select one of the tickets that appears below the search box or get a complete overview of all tickets by clicking on "Show Search Details":



8.3 Tag Management Area

Here it can also (in addition to the overview - as described above) be set whether the agents are allowed to add tags themselves or not (in the left upper corner).

You can add more tags or delete them.

CHAPTER

NINE

CALENDARS

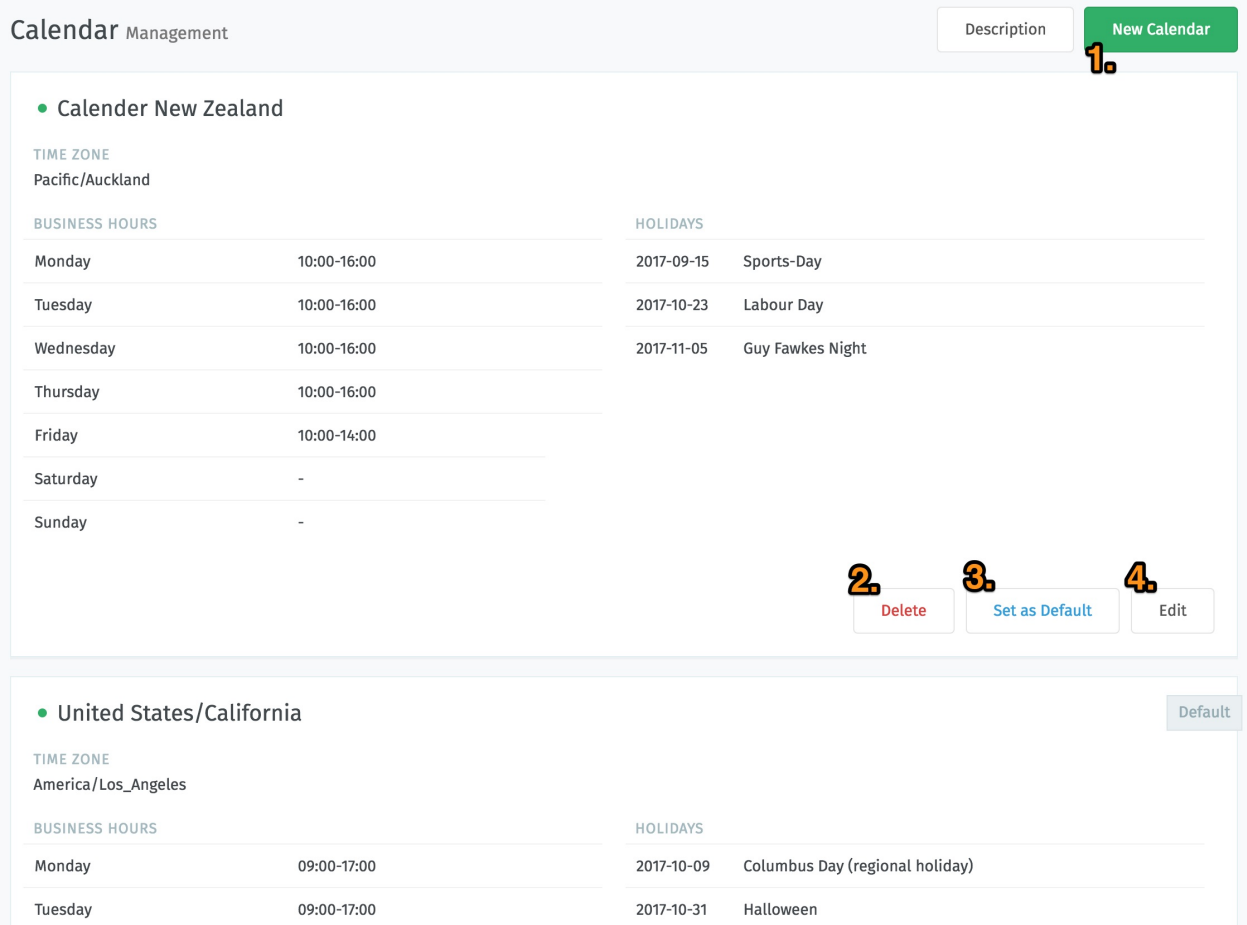
A calendar is required to:

- automate ticket escalations,
- generate reports that only capture activity during business hours, or
- set up time-sensitive triggers.

Define a “standard”-calendar which system-wide is valid. Only in the specified business hours, escalation notifications are sent to agents.

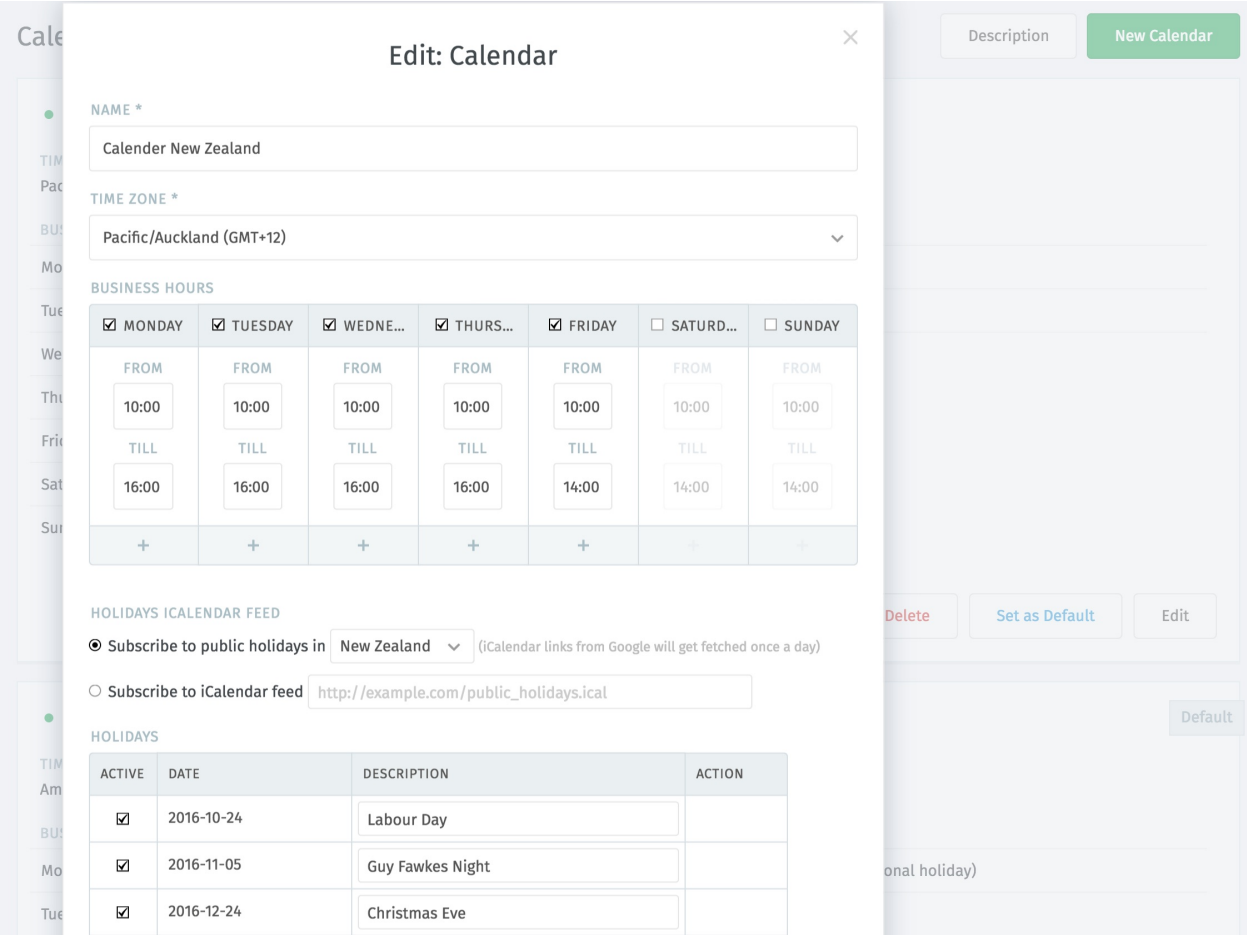
If you have customers for which you have to comply with different customer business hours, you can create several calendars. The allocation to the customer tickets can be adjusted via the SLAs.

And this is what it looks like:



All created calendars are displayed in the overview.

1. Here you can create a new calendar if agents or customers belong to another time zone.
2. Just push the delete-button to delete this specific calender - all SLAs assigned to this calendar are automatically assigned to the default calendar.
3. Pressing this button sets this calendar as the default calendar for the entire system.
4. Via this button you get to the edit-mask (same mask as in 1.):



–> determine a name, a time-zone, the business hours to be used for this calendar and special holidays. In addition, you can subscribe to the iCalendar, which will automatically load all holidays from Google (updated once a day) … and you can add a note.

CHAPTER

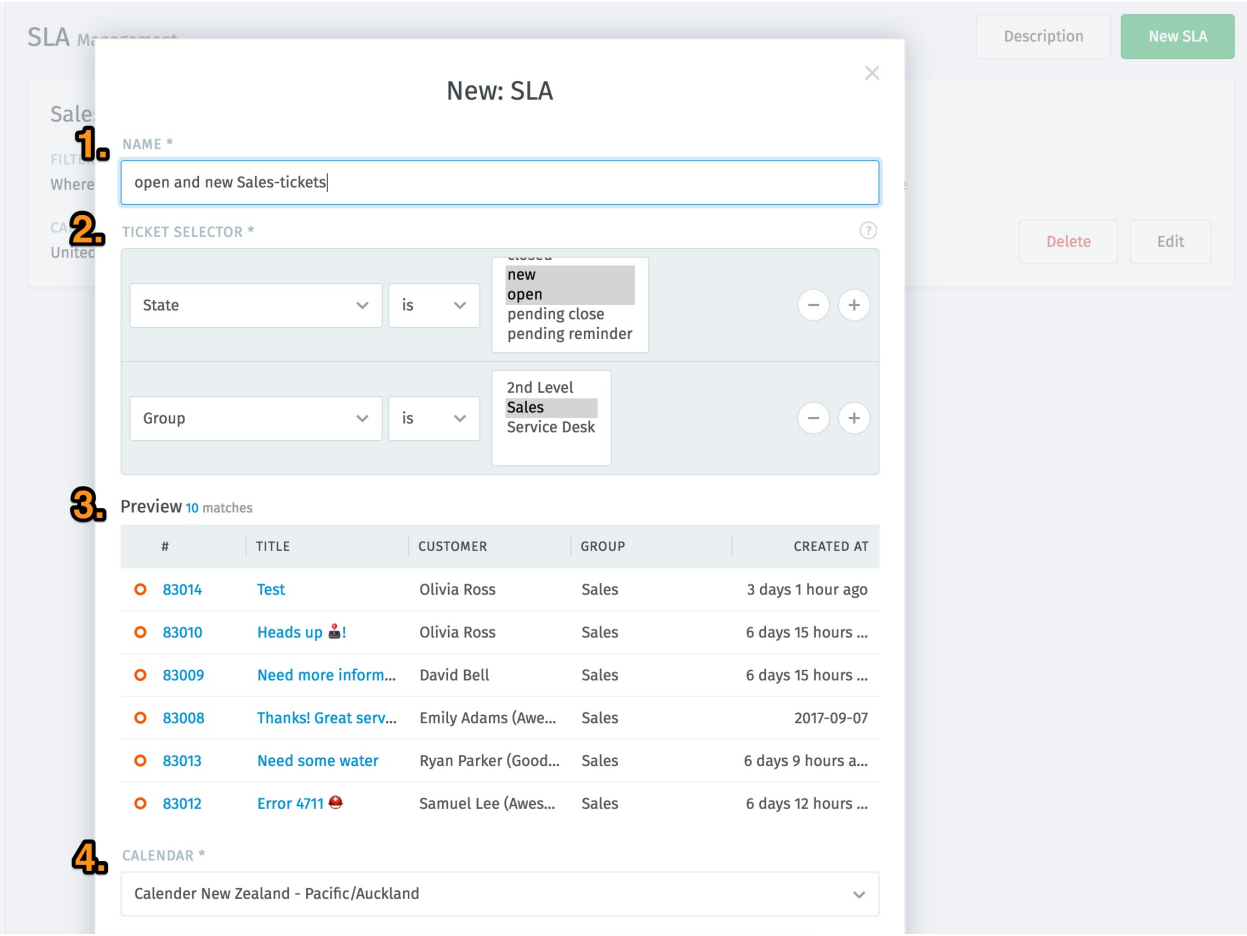
TEN

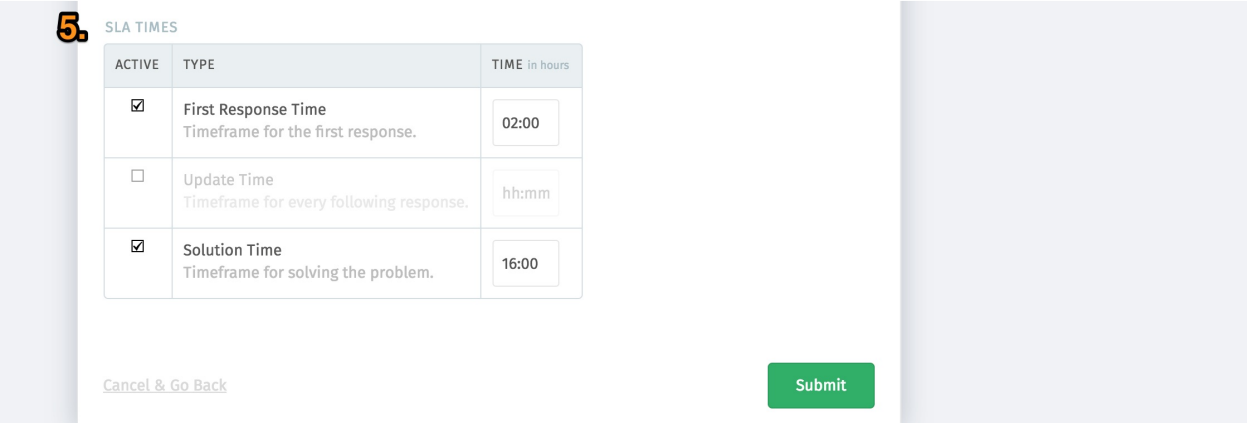
SLAS

Service levels and the respective agreements (service level agreements, SLAs) document quality pledges for IT services. SLAs are recorded and administered in here.

A calendar is required to calculate escalations or evaluations based on business hours. Define a "standard" calendar which is valid throughout the system. Only in the specified business hours, escalation notifications are sent to agents. If you have customers for which you need to comply with different business hours, you can create multiple calendars. The customer tickets are allocated via the SLAs.

That's how it works:





1. Give it a distinctive name
2. Specify the ticket groups for which the SLA is to apply (these can also be arbitrarily combined and thus specified)
3. In the preview you see the selection of the tickets and doublecheck wheather those are correct
4. Choose the business-calender
5. Define the SLA-Times:

   First Response Timeframe for the first response (external call, email)

   Update Time Timeframe for every following response (external call, email)

   Solution Time Timeframe for solving the problem (status: closed)

It is up to you if you set one, two or all three times. When the SLA time is reached, the ticket escalates. Now all agents get notifications, which have stored the corresponding setting in their own settings profile -> notifications. The information that a ticket is escalated can be selected in the triggers as an attribute, whereby a desired action can be followed.

CHAPTER

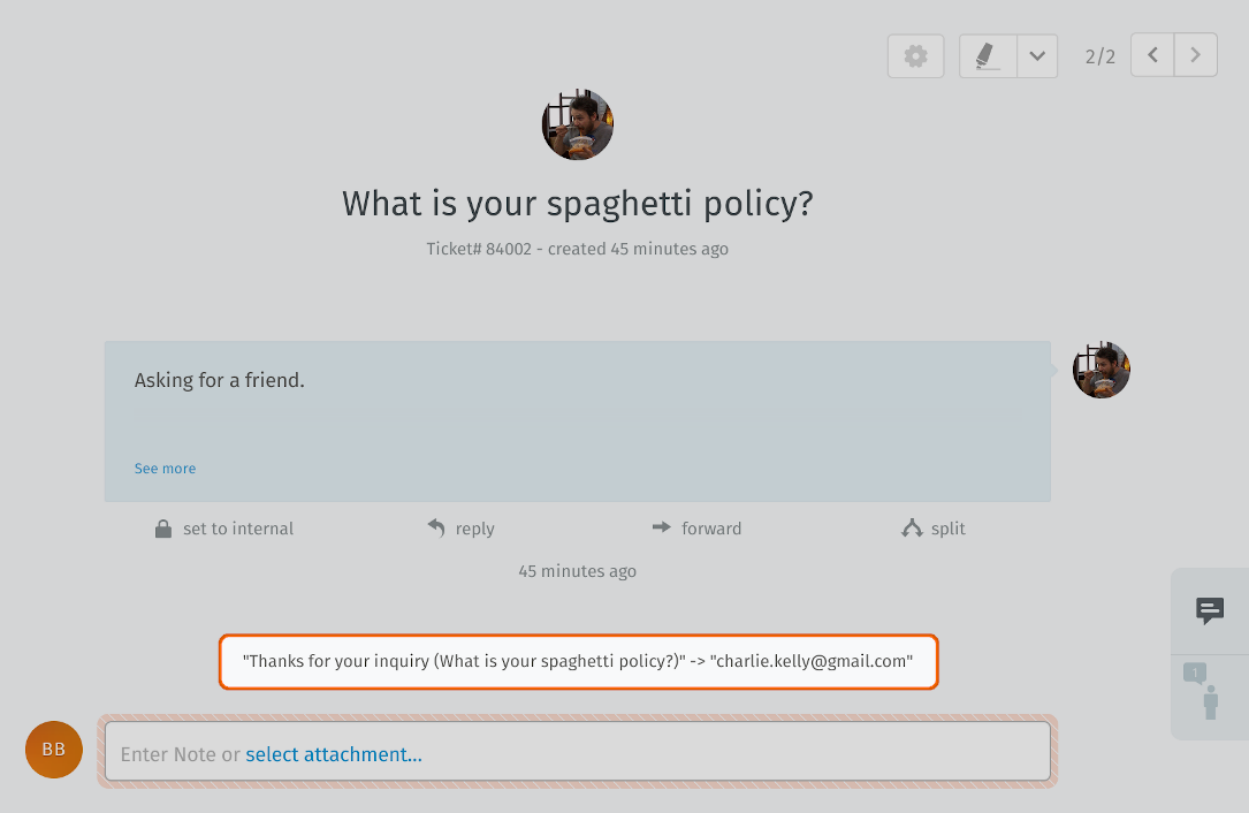
ELEVEN

TRIGGERS

Use triggers to set up all kinds of **if-this-then-that** automation workflows.

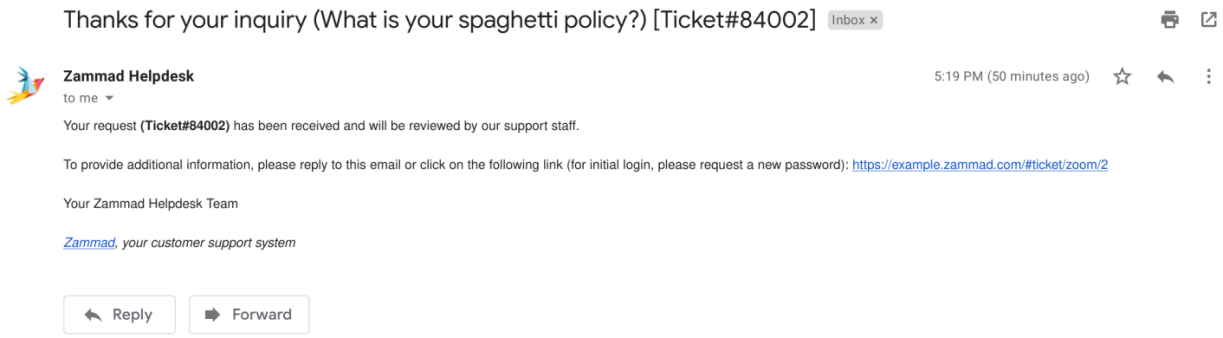
Hint: For **every-so-often** automation workflows, try *schedulers* instead.

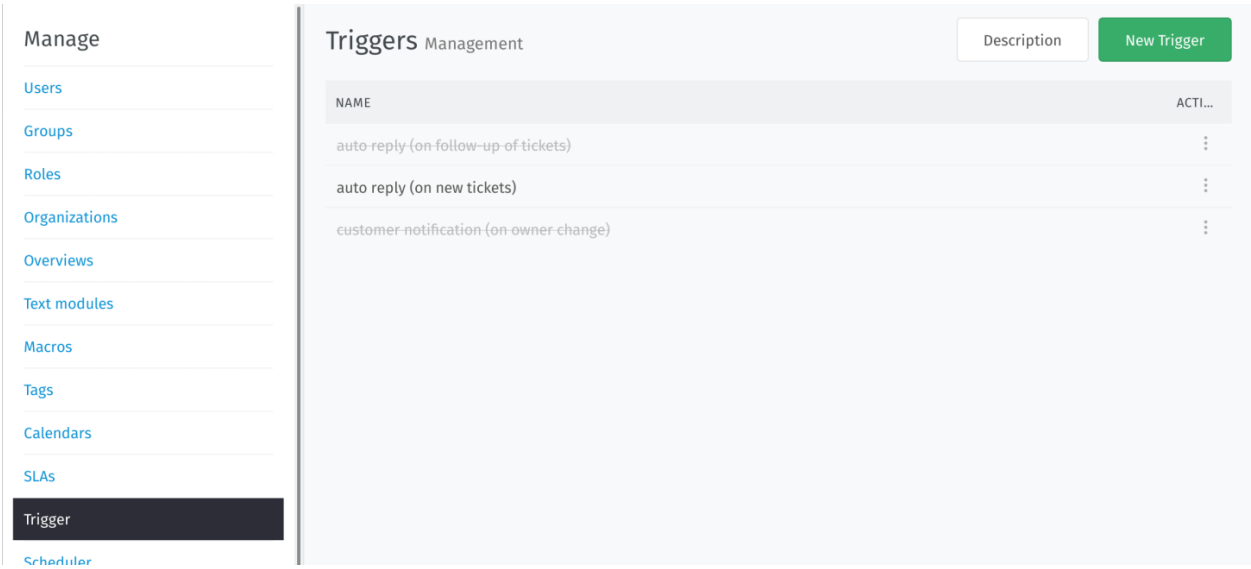
The first thing to know about triggers is that **you're already using them**. From the moment you set up Zammad, it starts sending auto-replies to all incoming emails. Recognize this line?



It means that the ticket is from an incoming customer email, and that the customer received this message in response:

This auto-reply message is a **trigger**. You can disable it, modify it, or create new ones for all sorts of automation tasks on the Trigger page of the admin panel:


Thanks for your inquiry (What is your spaghetti policy?) [Ticket#84002]
Inbox ×
Zammad Helpdesk
to me
5:19 PM (50 minutes ago)
Your request (Ticket#84002) has been received and will be reviewed by our support staff.
To provide additional information, please reply to this email or click on the following link (for initial login, please request a new password): https://example.zammad.com/#ticket/zoom/2
Your Zammad Helpdesk Team
Zammad, your customer support system
Reply
Forward

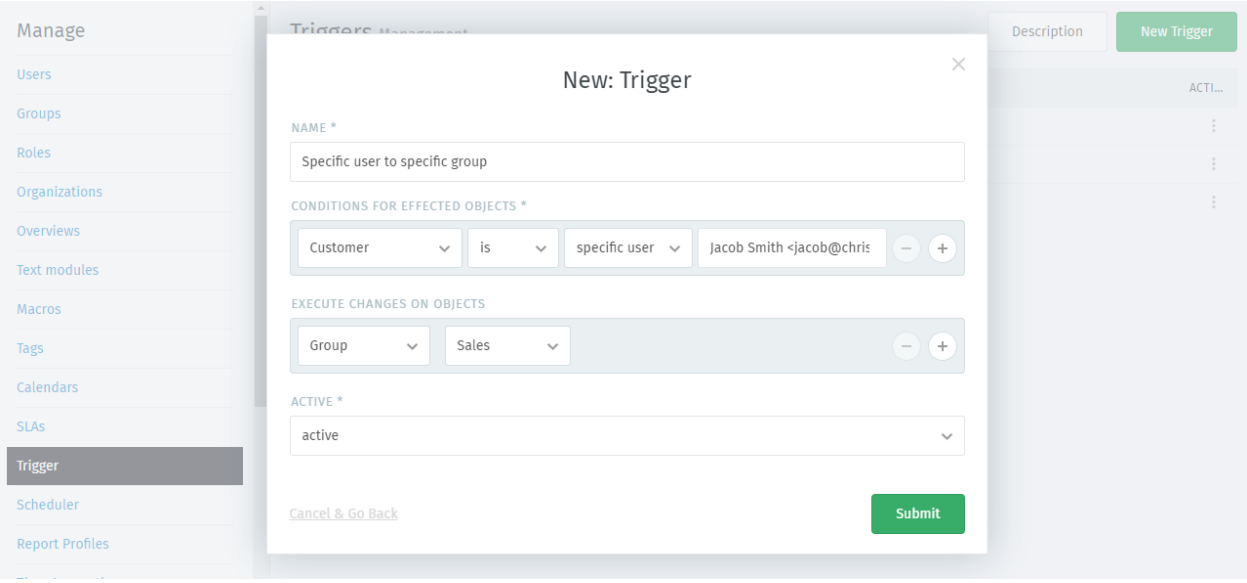

Manage
Users
Groups
Roles
Organizations
Overviews
Text modules
Macros
Tags
Calendars
SLAs
Trigger
Triggers Management
Description
New Trigger
NAME
ACTI...
auto reply (on follow-up of tickets)
auto reply (on new tickets)
customer notification (on owner change)

11.1 Learn by example

To get you up and running quickly, here are some examples of the kinds of automation tasks you can set up with triggers.

Hint: If they don't make sense to you, don't worry—just skip ahead to *How do they work?* to learn about all the options in detail, then come back here to see them in action.

1. Any time Jacob Smith creates a ticket, assign it to the Sales group:



2. Emma Taylor is responsible for all sales internally, so if a new ticket has the word "order" in the subject, assign it to her and make sure it's set with a high priority:
3. Send an auto-reply email to *any customer* who responds to a ticket:

Note: Not all automated messages come from triggers!

For instance, when *agents* receive a system email about a newly created ticket, that's built into the system itself. If you need to customize those, you will have to *manually edit files on your server*.

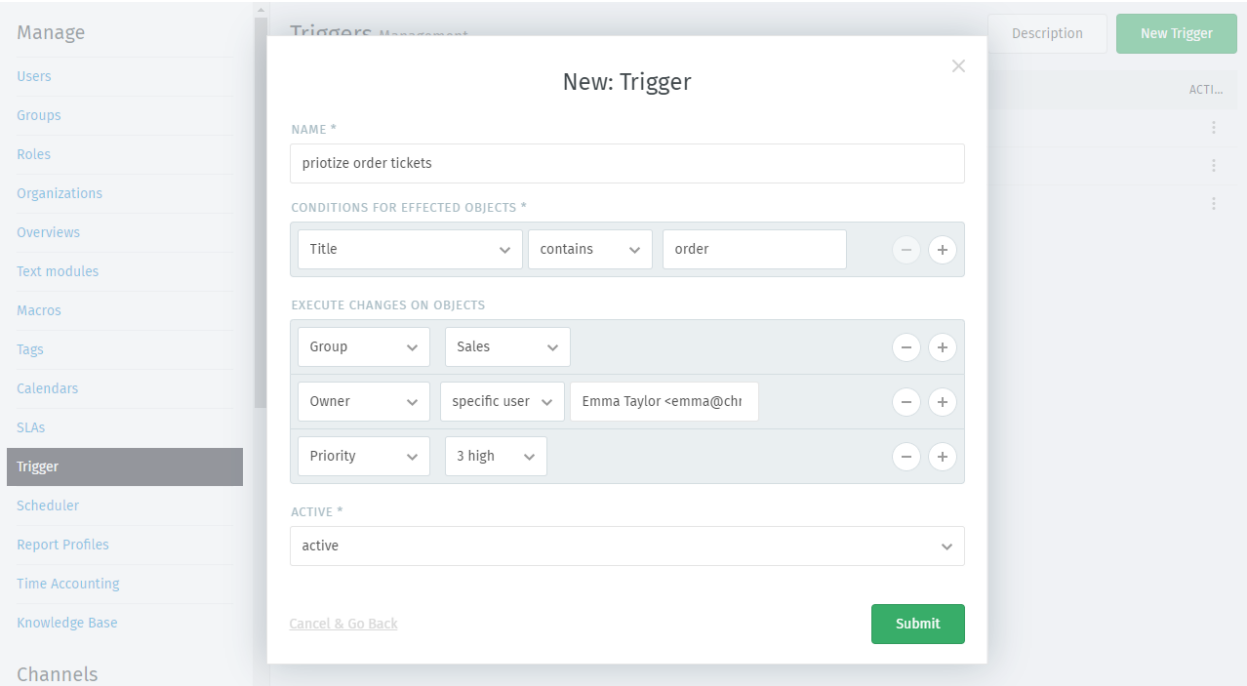
11.2 How do they work?

Triggers consist of two parts: **conditions** and **changes**. Conditions answer the question, "when should this trigger fire?" Changes answer the question, "what should happen when it does?"

Triggers are evaluated in alphabetical order, by **name.** In some situations triggers might be the wrong choice, see *Limitations* for more information.

Hint: Email trigger behavior can be manipulated

Please have a look at *Email header manipulation* in case this is a relevant use case for you.

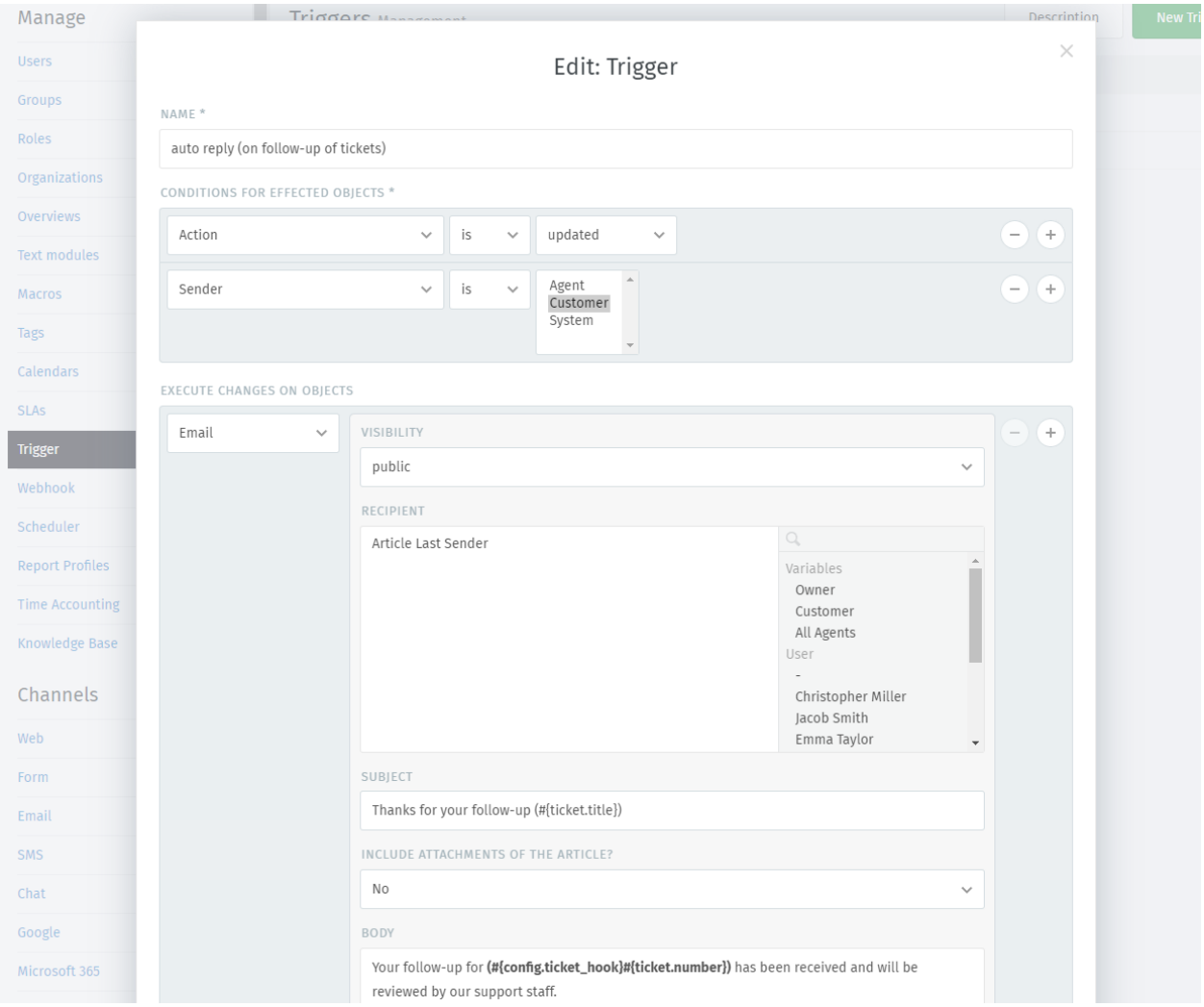


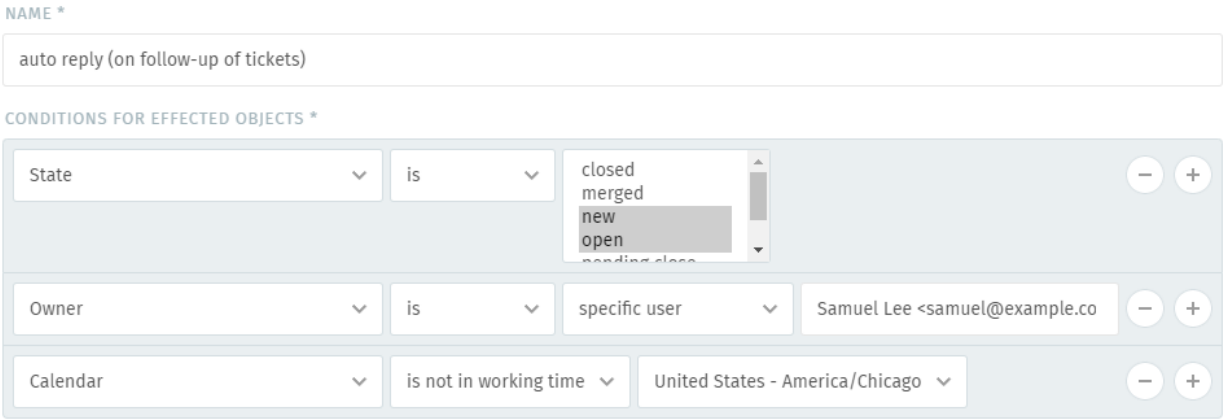
11.2.1 Conditions

When creating a trigger, define your conditions here:

Trigger conditions are **and-selectors** and thus all conditions must apply as configured for the trigger to fire. You can configure triggers to fire based on the properties of:

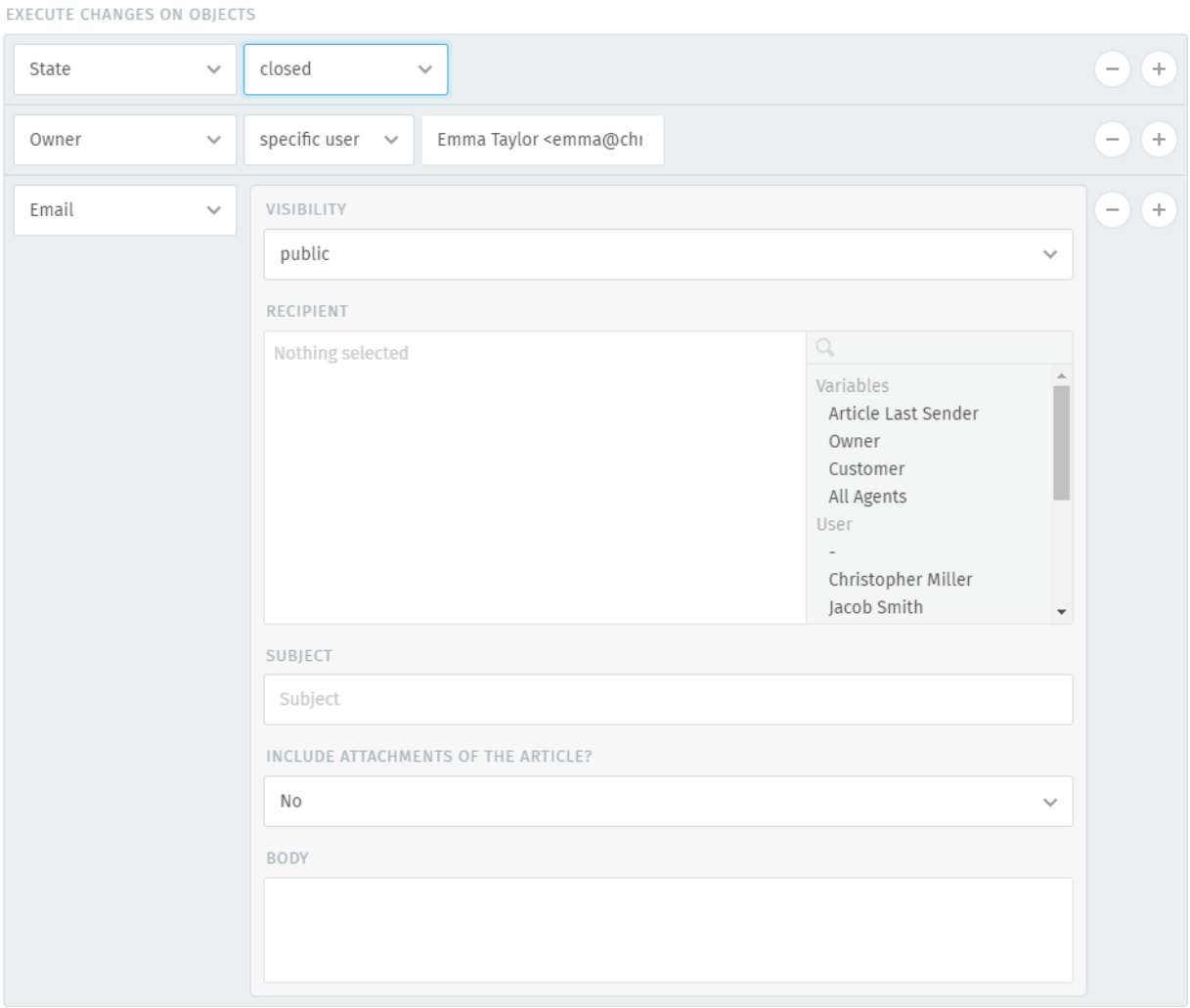
- **The Ticket itself** *e.g.,* Was this ticket newly created? Is the ticket currently open? When was the last time we received contact from the customer on this ticket?
- **New Articles on the ticket** *e.g.,* Was this article added by email? by phone? Was it created by an agent, or a customer? Does the subject contain a certain set of words?
- **The Customer that created the ticket** *e.g.,* What is the customer's name? Is the customer a VIP? What department does the customer work in?
- **The Organizations that the ticket's customer belongs to** *e.g.,* What is the name of the customer's organization? Does it have a note attached to it containing a certain set of words?
- **The Execution time the trigger is being triggered** *e.g.,* Only send an auto-reply if the message was received outside of regular business hours. ("Regular business hours" can be defined on *Calendars* setting.)


Manage
Users
Groups
Roles
Organizations
Overviews
Text modules
Macros
Tags
Calendars
SLAs
Trigger
Webhook
Scheduler
Report Profiles
Time Accounting
Knowledge Base
Channels
Web
Form
Email
SMS
Chat
Google
Microsoft 365
Edit: Trigger
NAME *
auto reply (on follow-up of tickets)
CONDITIONS FOR EFFECTED OBJECTS *
Action
is
updated
Sender
is
Agent
Customer
System
EXECUTE CHANGES ON OBJECTS
Email
VISIBILITY
public
RECIPIENT
Article Last Sender
Variables
Owner
Customer
All Agents
User
-
Christopher Miller
Jacob Smith
Emma Taylor
SUBJECT
Thanks for your follow-up (#{ticket.title})
INCLUDE ATTACHMENTS OF THE ARTICLE?
No
BODY
Your follow-up for (#{config.ticket_hook}#{ticket.number}) has been received and will be reviewed by our support staff.


NAME *
auto reply (on follow-up of tickets)
CONDITIONS FOR EFFECTED OBJECTS *
State
is
closed
merged
new
open
Owner
is
specific user
Samuel Lee <samuel@example.co
Calendar
is not in working time
United States - America/Chicago

11.2.2 Actions

When creating a trigger, define your changes here:



A trigger can do the following things once its conditions have been met:

- **Modify the ticket** *e.g.,* Escalate its priority, close it, reassign it, rename it, add tags, etc.

  Date & time attributes (like **Pending till** or **Escalation at**) can be specified in *absolute* or *relative* terms.

- **Send an email or SMS** Either to the customer, the agent who owns the ticket, or every agent in the system.

  > **Tip:** Sending emails allows you to include the attachments of the triggering article if required.

- ***Fire a webhook*** Connect Zammad to another web service or application to give it live updates about new tickets.
- **Add internal or public notes to the ticket** This allows you to help your agents with specific information if needed. (e.g. automated changes a trigger applied to the ticket)

Note: In order to send emails with Triggers, you need to configure an email address for the group the trigger is working in. If you don't, Zammad will skip the Trigger completely.

Hint: Certain actions (such as *email*, *SMS* and *notes*) support *Variables*, which can be used to build highly-customized message templates.

11.3 Limitations

It's important to understand when a trigger can be used and when it's better to use e.g. Zammads *Scheduler* or postmaster filter.

Triggers will fire during the following conditions:

- Creation of a ticket
- Updating a ticket

While the creation of tickets and triggering these actions is straight forward, updated of tickets are a bit trickier. In terms of triggers, a ticket is only updated if you press the update button on the lower right of a ticket. Adding tags to a ticket or switching articles visibility **is no ticket update**.

Also keep in mind that we're always only working on the last article. This means you can't trigger for past articles. Triggers always handle the current ticket attributes and the article (if applicable) that cause the trigger to fire.

If your use case doesn't fit in above possibilities, you might want to have a look at Zammads *Scheduler*.

11.4 System Notifications

Note: System notifications can only be customized on **self-hosted installations**.

System notifications are automated emails sent by Zammad for critical system events, such as account changes or SLA violations.

Unlike the automated emails you can set up using *Triggers* or the *Scheduler*, these notifications are built into Zammad itself: if you need to customize them, you will have to modify some of the files on your server.

11.4.1 When are they sent?

All users are notified of:

- password change requests

Staff (admins & agents) are notified of:

- logins from a new device
- logins from a new country

Agents are notified of:

- new tickets

- ticket updates
- "ticket pending" reminders
- SLA violations (before and after the deadline)

Daily reminder emails are sent at midnight (UTC) for all unresolved "ticket pending" reminders and SLA violations.

11.4.2 How can I customize them?

Inside your Zammad directory (usually `/opt/zammad`), email templates for various events are stored inside the `/app/views/mailer` directory, named according to the language they're written in. Thus,

```
/opt/zammad/app/views/mailer/ticket_create/de.html.erb
```

is the German-language template used to notify agents whenever a new ticket is created. To modify this template, create another file with the same name and add a `.custom` suffix:

```
/opt/zammad/app/views/mailer/ticket_create/de.html.erb.custom
```

Now, this file will be used instead of the original when sending notification emails in German.

CHAPTER

TWELVE

WEBHOOK

Webhooks are a way to integrate Zammad with other web services or applications, allowing them to subscribe to live updates about tickets instead of having to poll the Zammad server every *n* minutes.

Note: Webhooks may not arrive immediately.

Webhooks are sent out with the same priority and order as email triggers. If webhook dispatch fails (*e.g.,* because the receiving server is misconfigured), Zammad will retry up to four times.

Hint: Webhooks are available for *Triggers* and *Scheduler*.

12.1 How does it work?

Under the hood, Zammad sends a POST request to a third-party URL ("API endpoint") you specify in the New Trigger dialog. The application server behind this URL/endpoint must be configured to receive messages from Zammad and handle the attached data accordingly.

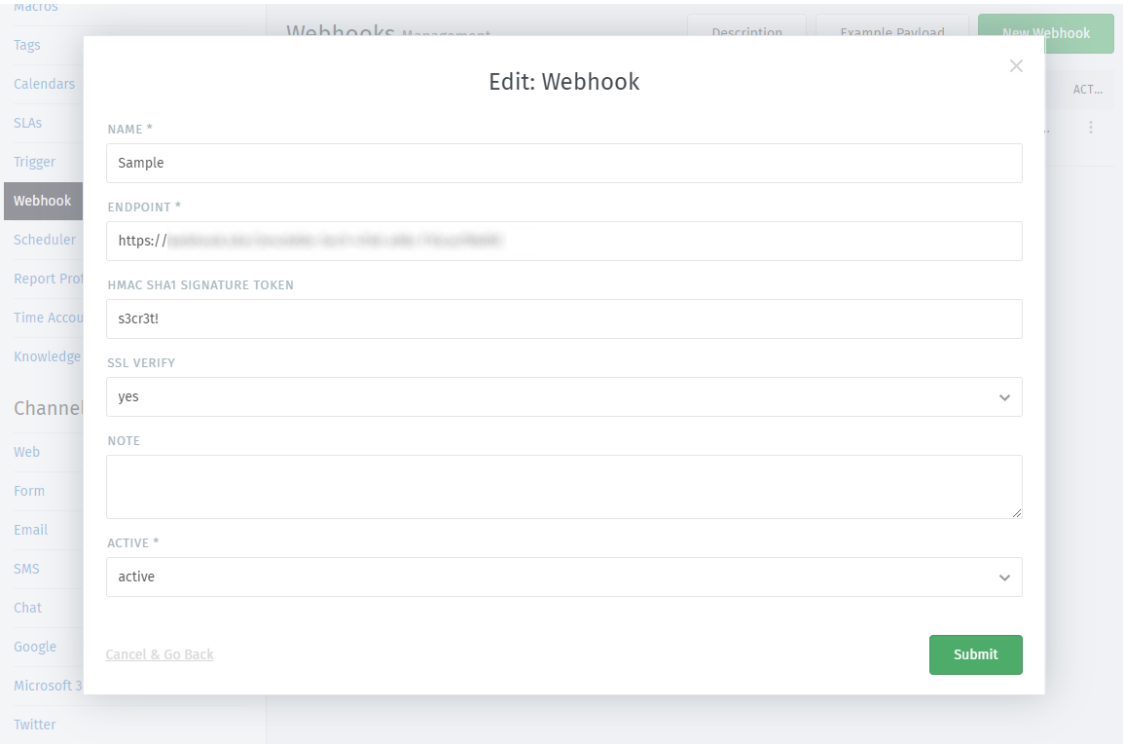
Webhook requests from Zammad contain the following JSON data about new/incoming tickets:

- ticket attributes/metadata
- *all* associated articles
- associated users (*e.g.,* article senders, owners, etc.)
- associated user roles
- associated user organizations (if applicable)
- associated groups

12.1.1 Adding webhooks

Webhooks are defined globally. This allows you to use one specific endpoint on several triggers or schedulers.

> **Warning: Zammad webhooks are specific**
>
> Keep in mind that the remote site has to be able to understand the webhook Zammad is sending! Simply throwing Zammad payloads at webhook endpoint may not have the desired result!



You can configure the following information to webhooks:

Name (mandatory) This name will be displayed within trigger and scheduler selections.

Endpoint (mandatory) Webhook endpoint Zammad sends its payload to.

> **Note:** Zammad ignores basic authentication parameters.

HMAC SHA1 Signature Token If set all sent webhooks contain a *x-hub-signature* header allowing the remote site to verify the request.

> **Note: Security note**
>
> This *does not* encrypt the payload. Use HTTPs connections to secure the communication. It contains a HMAC signature of the body of the webhook request
>
> Learn more about HUB-Signatures

SSL verify Defaults to `yes` - if you're using unsecure self signed certificates set this option to `no`.

Note If required you can leave useful information for other Zammad admins to understand the webhook in question better.

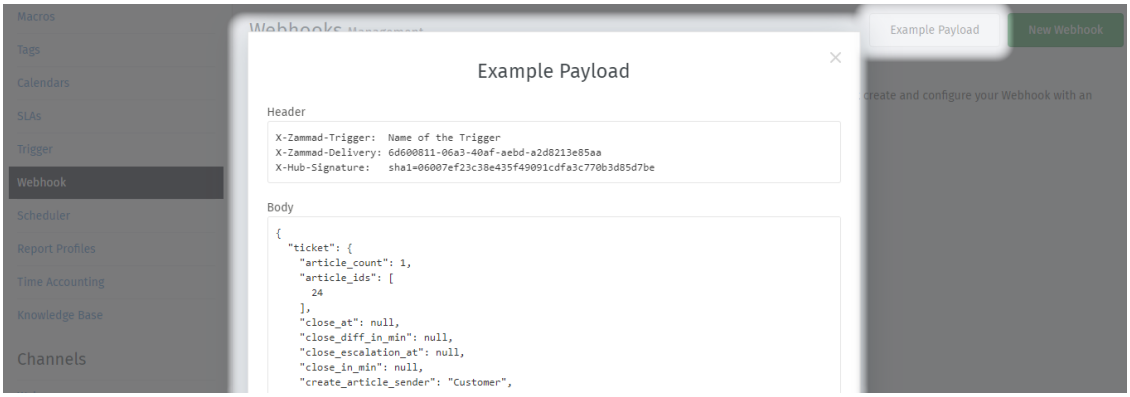
Active If set to `inactive` you can no longer select the webhook within trigger or scheduler actions.

> **Warning:** Setting webhooks to inactive that are used by triggers or schedulers will not run. If triggers or schedulers have other actions configured as well they'll still be executed.

12.1.2 Webhook Payload

Tip: A more personal payload…

Your Zammad instance also provides a payload as example. This payload *does fit your installation* and provides your custom objects!



Request headers

Zammad sends the following headers in each webhook POST request:

`User-Agent` `"Zammad User Agent"`

`X-Zammad-Trigger` The name of the originating trigger

`X-Zammad-Delivery` A unique, random ID string

`X-Hub-Signature` The SHA-1 hash of your HMAC-SHA1 signature token (assuming you provided one when creating your trigger)

JSON payload (example)


```
{
  "ticket": {
    "article_count": 1,
    "article_ids": [
      104
    ],
    "create_article_sender": "Customer",
    "create_article_sender_id": 2,
    "create_article_type": "phone",
    "create_article_type_id": 5,
    "created_at": "2020-11-13T14:34:35.282Z",
    "created_by": {
      "active": true,
      "created_at": "2020-11-13T12:57:47.679Z",
      "created_by": "-",
      "created_by_id": 1,
      "email": "chris@chrispresso.com",
      "firstname": "Christopher",
      "id": 3,
      "image": "7a6a0d1d94ad2037153cf3a6c1b49a53",
      "lastname": "Miller",
      "login": "chris@chrispresso.com",
      "organization": "Chrispresso Inc.",
      "organization_id": 2,
      "out_of_office": false,
      "role_ids": [
        1,
        2
      ],
      "roles": [
        "Admin",
        "Agent"
      ],
      "updated_at": "2020-11-13T13:00:03.064Z",
      "updated_by": "chris@chrispresso.com",
      "updated_by_id": 3,
      "verified": false,
      "vip": false,
    },
    "created_by_id": 3,
    "customer": {
      "active": true,
      "address": "Bennelong Point\nSydney NSW 2000",
      "created_at": "2020-11-13T12:57:48.779Z",
      "created_by": "-",
      "created_by_id": 1,
      "email": "emily@example.com",
      "firstname": "Emily",
      "id": 8,
      "image": "99ba64a89f7783c099c304c9b00ff9e8",
      "lastname": "Adams",
```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```
      "login": "emily@example.com",
      "note": "did order café au lait, ask next time if the flavor was as expected",
      "organization": "Awesome Customer Inc.",
      "organization_id": 3,
      "out_of_office": false,
      "phone": "0061 2 1234 7777",
      "role_ids": [
        3
      ],
      "roles": [
        "Customer"
      ],
      "updated_at": "2020-11-13T14:34:37.366Z",
      "updated_by": "chris@chrispresso.com",
      "updated_by_id": 3,
      "verified": false,
      "vip": false,
    },
    "customer_id": 8,
    "group": {
      "active": true,
      "created_at": "2020-11-13T12:57:47.498Z",
      "created_by": "-",
      "created_by_id": 1,
      "follow_up_assignment": true,
      "follow_up_possible": "yes",
      "id": 3,
      "name": "Service Desk",
      "updated_at": "2020-11-13T12:57:48.044Z",
      "updated_by": "-",
      "updated_by_id": 1,
      "user_ids": [
        3,
        4,
        5
      ],
      "users": [
        "chris@chrispresso.com",
        "jacob@chrispresso.com",
        "emma@chrispresso.com"
      ]
    },
    "group_id": 3,
    "id": 81,
    "last_contact_at": "2020-11-13T14:34:35.318Z",
    "last_contact_customer_at": "2020-11-13T14:34:35.318Z",
    "number": "10081",
    "organization": {
      "active": true,
      "created_at": "2020-11-13T12:57:47.524Z",
      "created_by": "-",
      "created_by_id": 1,
```


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```
      "domain_assignment": false,
      "id": 3,
      "member_ids": [
        8,
        6,
        7
      ],
      "members": [
        "emily@example.com",
        "anna@example.com",
        "samuel@example.com"
      ],
      "name": "Awesome Customer Inc.",
      "note": "Global distributor of communication and security products, electrical and␣
↪electronic wire &amp; cable.",
      "shared": true,
      "updated_at": "2020-11-13T14:34:35.346Z",
      "updated_by": "-",
      "updated_by_id": 1
    },
    "organization_id": 3,
    "owner": {
      "active": true,
      "created_at": "2020-11-13T12:57:48.036Z",
      "created_by": "-",
      "created_by_id": 1,
      "email": "emma@chrispresso.com",
      "firstname": "Emma",
      "id": 5,
      "image": "b64fef91c29105b4a08a2a69be08eda3",
      "lastname": "Taylor",
      "login": "emma@chrispresso.com",
      "organization": "Chrispresso Inc.",
      "organization_id": 2,
      "out_of_office": false,
      "role_ids": [
        2
      ],
      "roles": [
        "Agent"
      ],
      "updated_at": "2020-11-13T12:57:48.072Z",
      "updated_by": "-",
      "updated_by_id": 1,
      "verified": false,
      "vip": false,
    },
    "owner_id": 5,
    "priority": {
      "active": true,
      "created_at": "2020-11-13T12:54:02.238Z",
      "created_by": "-",
```


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```
      "created_by_id": 1,
      "default_create": true,
      "id": 2,
      "name": "2 normal",
      "updated_at": "2020-11-13T12:54:02.238Z",
      "updated_by": "-",
      "updated_by_id": 1
    },
    "priority_id": 2,
    "state": "open",
    "state_id": 2,
    "ticket_time_accounting": [],
    "ticket_time_accounting_ids": [],
    "title": "Webhook-Test",
    "updated_at": "2020-11-13T14:34:35.333Z",
    "updated_by": {
      "active": true,
      "created_at": "2020-11-13T12:57:47.679Z",
      "created_by": "-",
      "created_by_id": 1,
      "email": "chris@chrispresso.com",
      "firstname": "Christopher",
      "id": 3,
      "image": "7a6a0d1d94ad2037153cf3a6c1b49a53",
      "lastname": "Miller",
      "login": "chris@chrispresso.com",
      "organization": "Chrispresso Inc.",
      "organization_id": 2,
      "out_of_office": false,
      "role_ids": [
        1,
        2
      ],
      "roles": [
        "Admin",
        "Agent"
      ],
      "updated_at": "2020-11-13T13:00:03.064Z",
      "updated_by": "chris@chrispresso.com",
      "updated_by_id": 3,
      "verified": false,
      "vip": false,
    },
    "updated_by_id": 3
  },
  "article": {
    "attachments": [
      {
        "id": 174,
        "filename": "image1.jpeg",
        "size": "35574",
        "preferences": {
```


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```
          "Content-Type": "image/jpeg",
          "Mime-Type": "image/jpeg",
          "Content-ID": "81.969520479@zammad.example.com",
          "Content-Disposition": "inline",
          "resizable": true,
          "content_preview": true
        },
        "url": "https://zammad.example.com/api/v1/ticket_attachment/81/104/174"
      }
    ],
    "body": "This is a simple Webhook Test.<div><br></div><div>\n<img style=\"max-
↪width:100%;width: 849px;max-width: 100%;\" src=\"/api/v1/ticket_attachment/81/104/174?
↪view=inline\"><br>\n</div>",
    "content_type": "text/html",
    "created_at": "2020-11-13T14:34:35.318Z",
    "created_by": {
      "active": true,
      "created_at": "2020-11-13T12:57:47.679Z",
      "created_by": "-",
      "created_by_id": 1,
      "email": "chris@chrispresso.com",
      "firstname": "Christopher",
      "id": 3,
      "image": "7a6a0d1d94ad2037153cf3a6c1b49a53",
      "lastname": "Miller",
      "login": "chris@chrispresso.com",
      "organization": "Chrispresso Inc.",
      "organization_id": 2,
      "out_of_office": false,
      "role_ids": [
        1,
        2
      ],
      "roles": [
        "Admin",
        "Agent"
      ],
      "updated_at": "2020-11-13T13:00:03.064Z",
      "updated_by": "chris@chrispresso.com",
      "updated_by_id": 3,
      "verified": false,
      "vip": false,
    },
    "created_by_id": 3,
    "from": "Emily Adams <emily@example.com>",
    "id": 104,
    "internal": false,
    "origin_by": "emily@example.com",
    "origin_by_id": 8,
    "sender": "Customer",
    "sender_id": 2,
    "ticket_id": 81,
```


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```
    "to": "Service Desk",
    "type": "phone",
    "type_id": 5,
    "updated_at": "2020-11-13T14:34:35.318Z",
    "updated_by": {
      "active": true,
      "created_at": "2020-11-13T12:57:47.679Z",
      "created_by": "-",
      "created_by_id": 1,
      "email": "chris@chrispresso.com",
      "firstname": "Christopher",
      "id": 3,
      "image": "7a6a0d1d94ad2037153cf3a6c1b49a53",
      "karma_user_ids": [],
      "lastname": "Miller",
      "login": "chris@chrispresso.com",
      "organization": "Chrispresso Inc.",
      "organization_id": 2,
      "out_of_office": false,
      "role_ids": [
        1,
        2
      ],
      "roles": [
        "Admin",
        "Agent"
      ],
      "updated_at": "2020-11-13T13:00:03.064Z",
      "updated_by": "chris@chrispresso.com",
      "updated_by_id": 3,
      "verified": false,
      "vip": false,
    },
    "updated_by_id": 3,
    "accounted_time": 0
  }
}
```

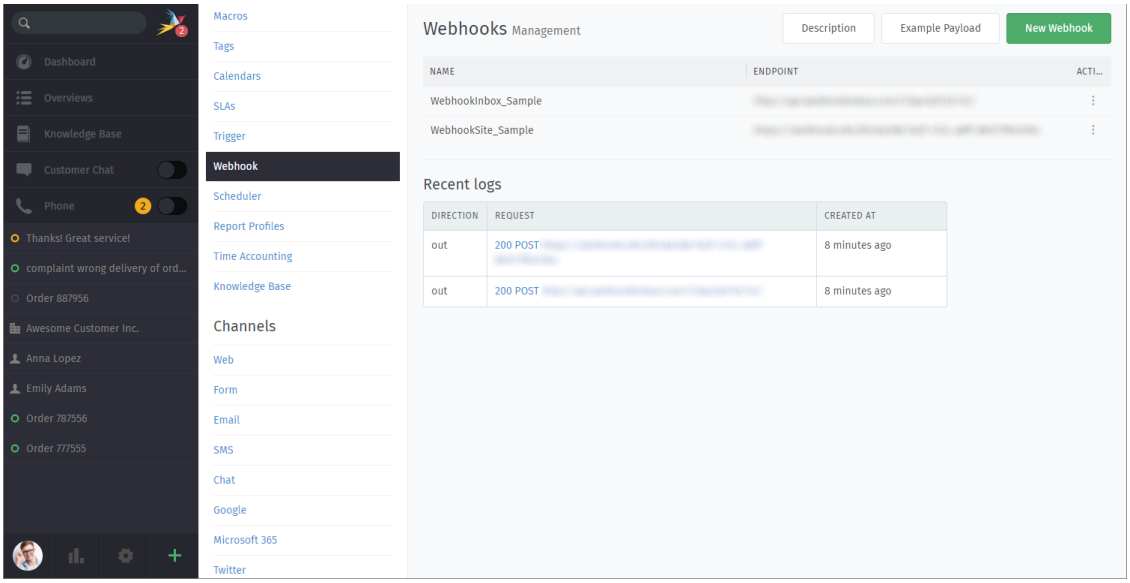

Note:

- For better readability, all empty and `null` values have been omitted from the sample payload above. That means the webhooks you receive *will include additional fields not shown here*.
- Webhooks will also include fields for any relevant *custom objects* defined in your system.
- Attachments are *not included*; links to attachments *are* (authentication required).
- None of the following **user attributes** are included:
  - `last_login`
  - `login_failed`
  - `password`
  - `preferences`

- `group_ids`
- `groups`
- `authorization_ids`
- `authorizations`

12.1.3 Webhook Logs

Zammad provides a history of your recent webhooks. You can find them below **Recent logs**.



If you need more details you can click on the request link in question. Zammad will provide a modal with the following information:

Direction Always `out`.

URL The URL Zammad sent the request to.

Method Always `POST`.

Status Contains the HTTP status code the remote server replied with. Should be `2xx` if successful.

Request Contains the request Zammad sent (HTTP header and payload)

Response Contains the remotes response header.

Created at Date and time the request was sent.

CHAPTER

THIRTEEN

SCHEDULER

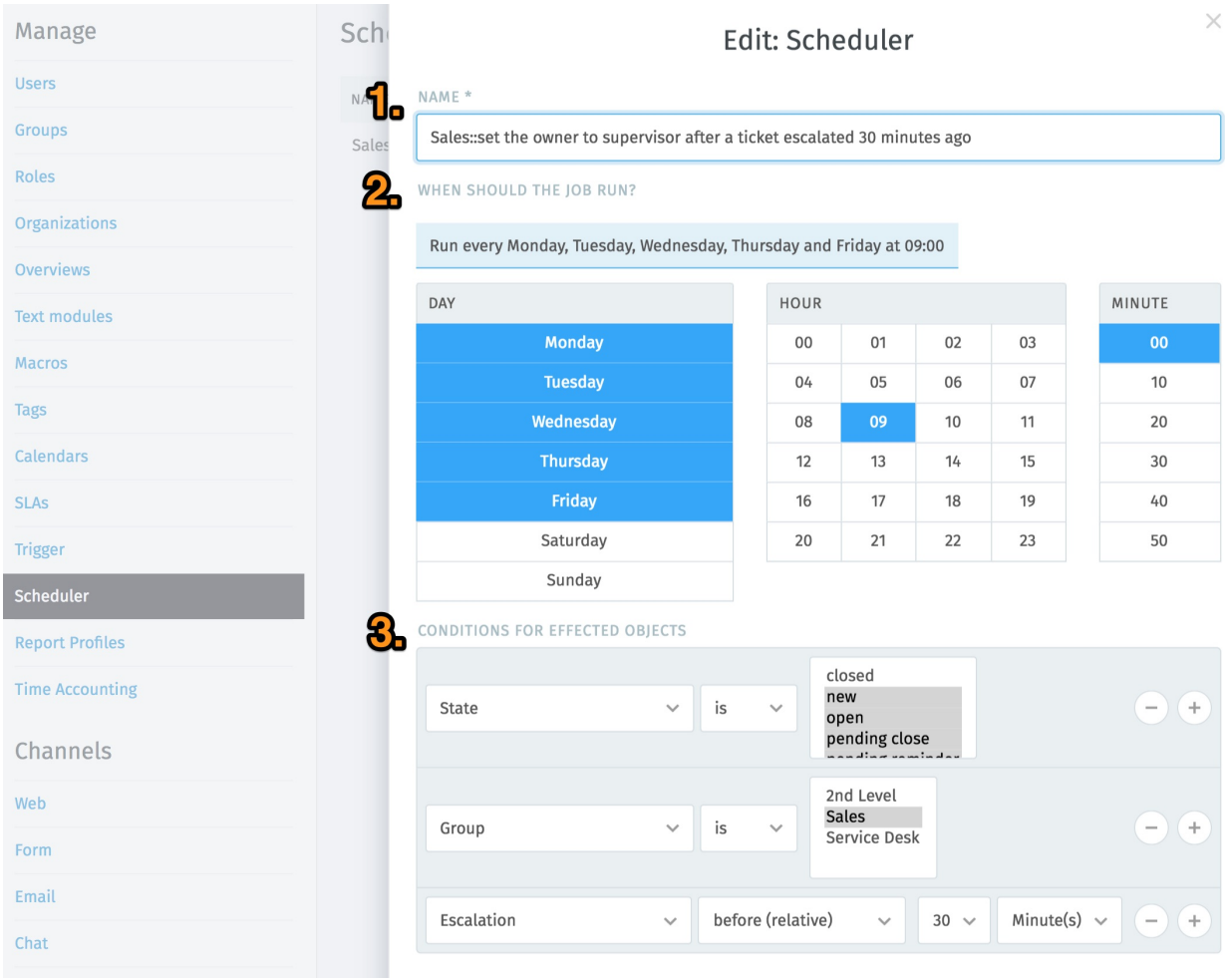
The scheduler performs time-based automated actions. You can set up your own schedulers, configure at which points in time they should run, set up conditions to determine which tickets they should affect, and then configure the actions that you want to be executed on these tickets.

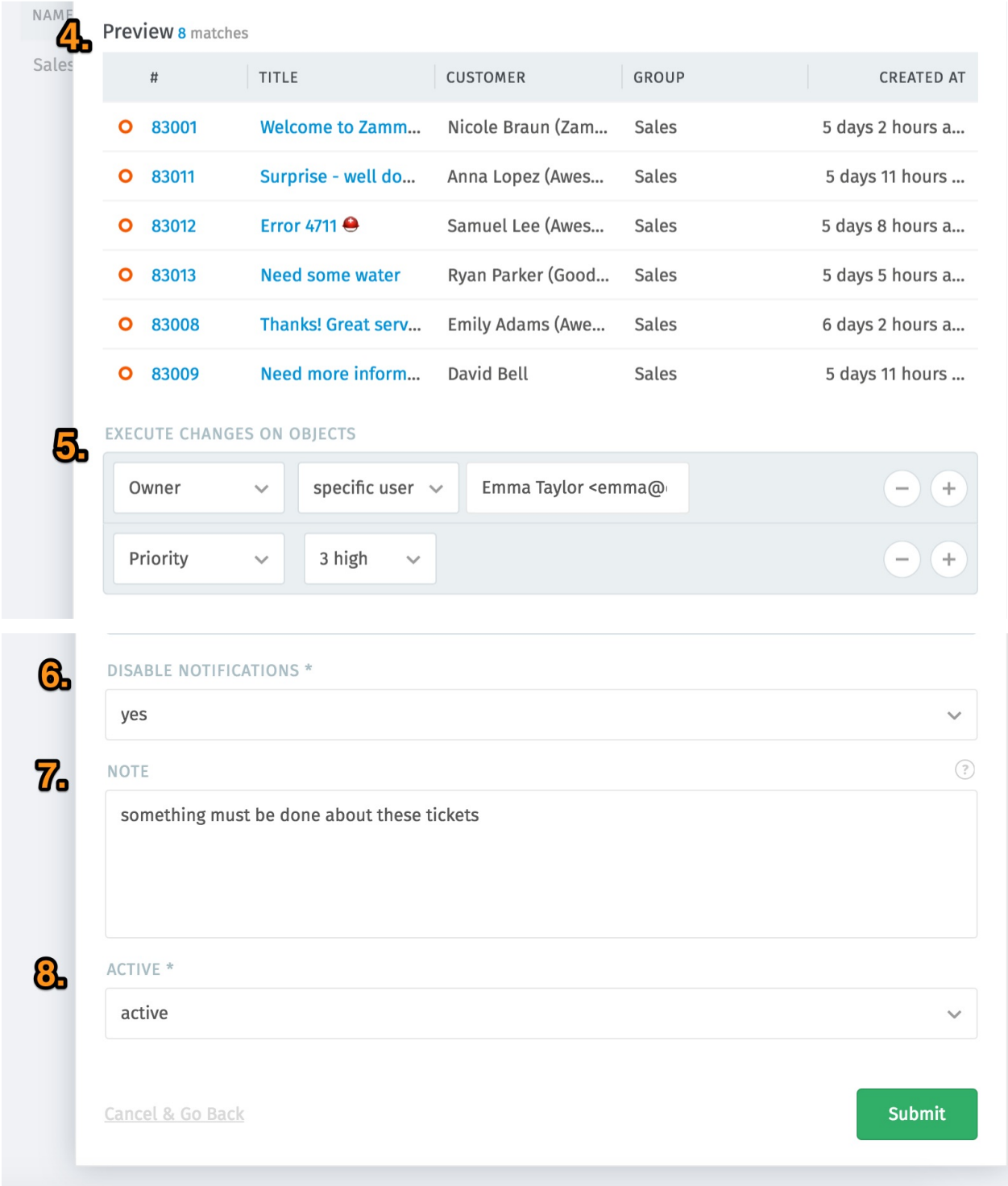
Note: Schedulers with *Action: Delete* are currently the only way in the Zammad front end to permanently delete tickets. This limitation is intentional as Zammad is designed to be revision-proof. A possible use case for such a scheduler is to delete spam tickets some time after creation (e.g. 30 days).

Warning: While it is possible to delegate scheduler permissions to normal agents with the `admin/scheduler` permission, it is inadvisable to do so. Malicious agents could use a scheduler to access tickets in restricted groups (by moving them to a non-restricted group) or to delete arbitrary tickets.

Hint: Schedulers can be used to send periodic reminder emails. Use *Variables* to build highly-customized email templates.

13.1 Add a new scheduler





1. *Name*: choose a name for the scheduler.
2. *When should the job run*: choose the points in time using UTC timezone when the scheduler should run.
3. *Conditions for affected objects*: determine the ticket attributes (conditions) to limit on which tickets the actions configured in step 5 are to be performed.

4. *Preview*: this list previews some tickets that your conditions are matching and shows a total of how many tickets are being matched. Use this to double-check the entered conditions.
5. *Execute changes on objects*: determine the changes to be made to the ticket.
6. *Disable notifications*: by default, actions triggered by schedulers won't send notifications. You can override this here by setting this to *no*.
7. *Note*: you can use the note field to describe the purpose of the scheduler. This is only visible to other admins when they are editing the scheduler. It is *not* a way to add notes to tickets.
8. *Active*: with this setting you can enable/disable the scheduler.

The scheduler shown in the screenshot would have the following effects:

Every workday (Monday to Friday) at 9:00 a.m. (*UTC*), all tickets which:

- are not closed and
- are assigned to the Sales group and
- whose escalation was 30 minutes ago

will be:

- assigned to Emma and
- have their priority changed to 3 high.

As a supervisor in the Sales group, this enables Emma to intercept and process escalated tickets.

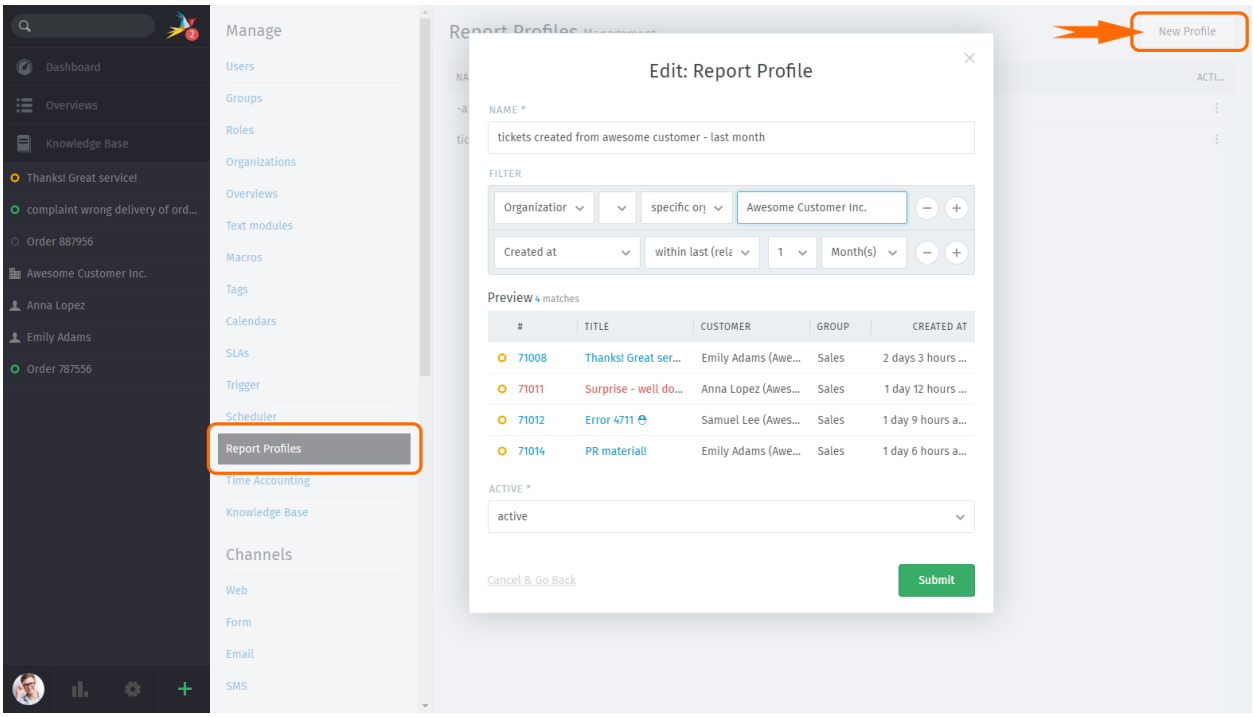
Emma will not receive notifications when the scheduler assigns her these tickets, and no note will be added to them.

CHAPTER

FOURTEEN

REPORT-PROFILES

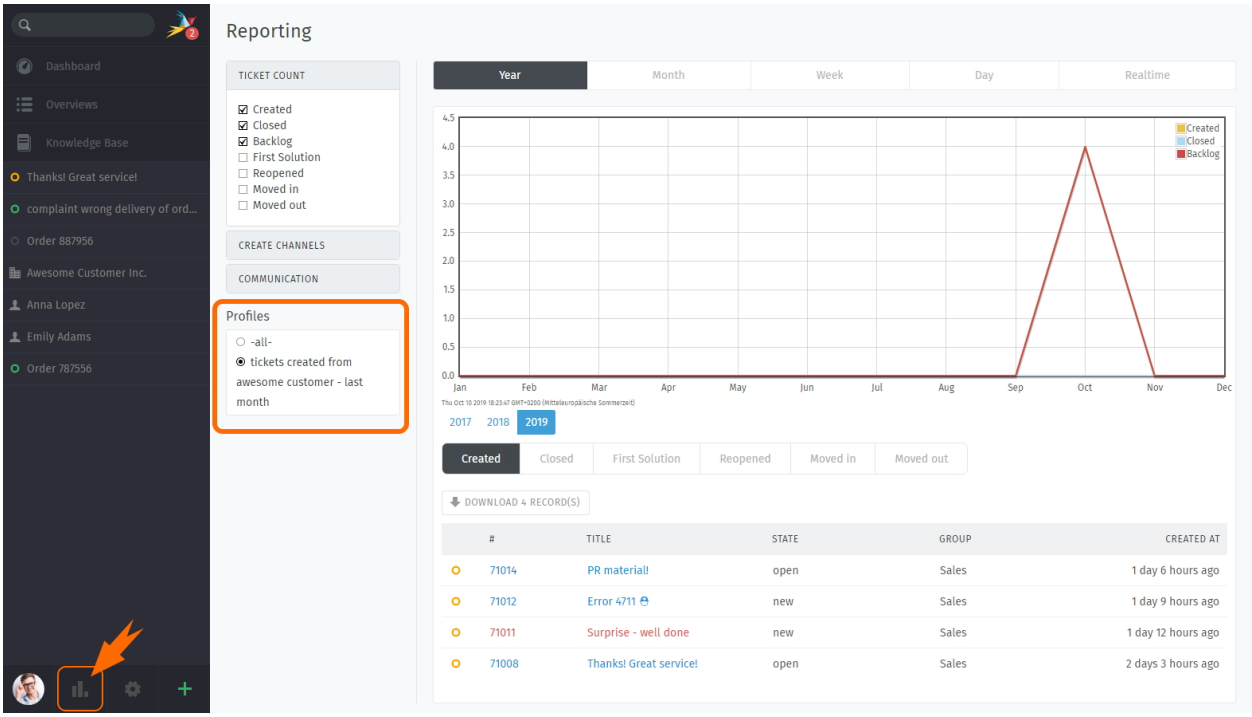
Report profiles are used to restrict / filter report-results. The idea of the profiles is to limit the number of tickets and determine the type of tickets you want to analyze. You can create any number of profiles in the Admin Interface in the "Report Profile" area. The edit-mask looks like this:



This example shows the statistics of all tickets of the organization "Awesome Customer" that were created in the last month.

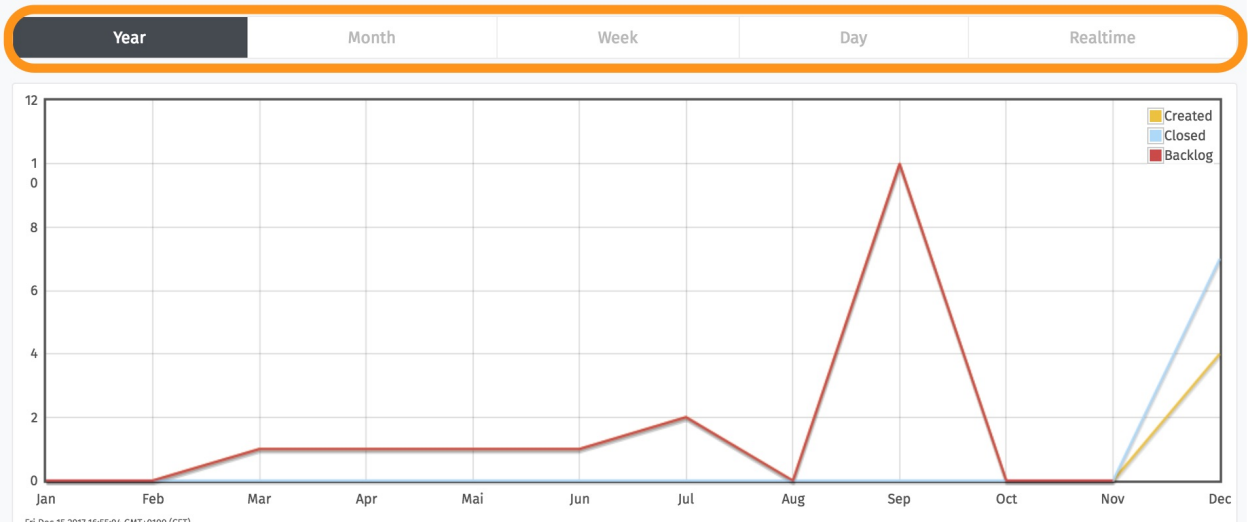
The filters can be combined with each other as desired. The filters build on each other, which means that they are further restricted per additional attribute.

All configured filters are displayed in the statistics area and you can switch between them with one click:

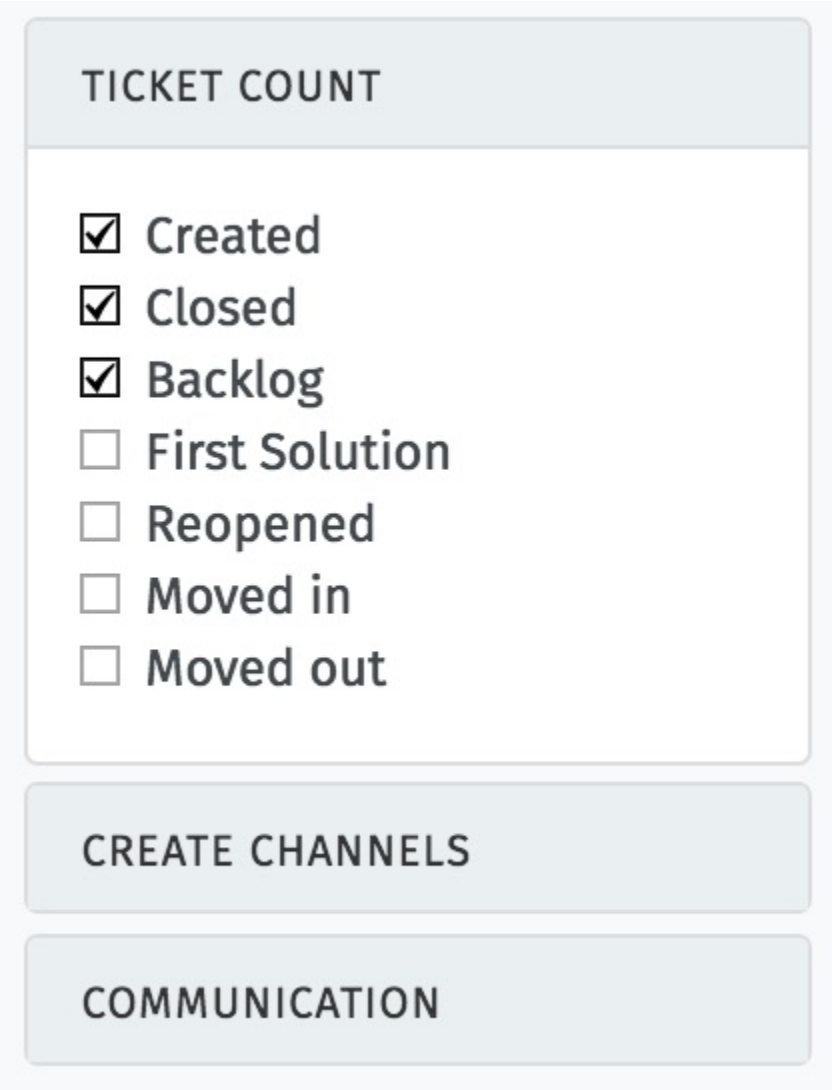


14.1 Further information about the reporting:

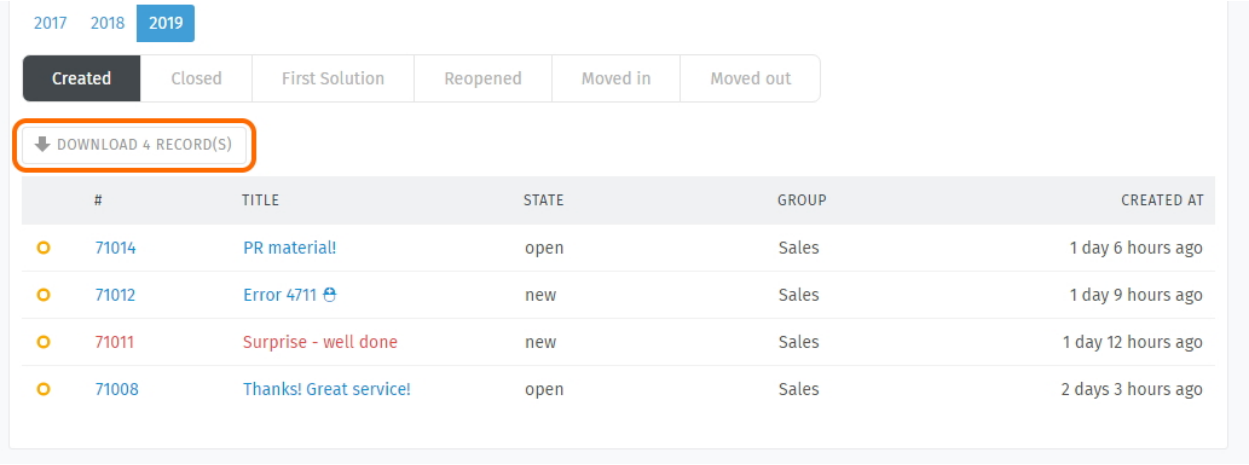
The time period and time interval can be changed with one click (the graphic adapts itself directly):



You can filter the Create Channels (Phone, email, Twitter,...) and Communication (Phone, email, Twitter,...) and select metrics (choose from the menu bar in the upper left corner - currently Ticket Count, Create Channels, Communication). Here are all tickets with a certain metric of a profile evaluated.



The list below the graphic shows the tickets that have been filtered out. This can be downloaded as CSV and processed in a statistics program:



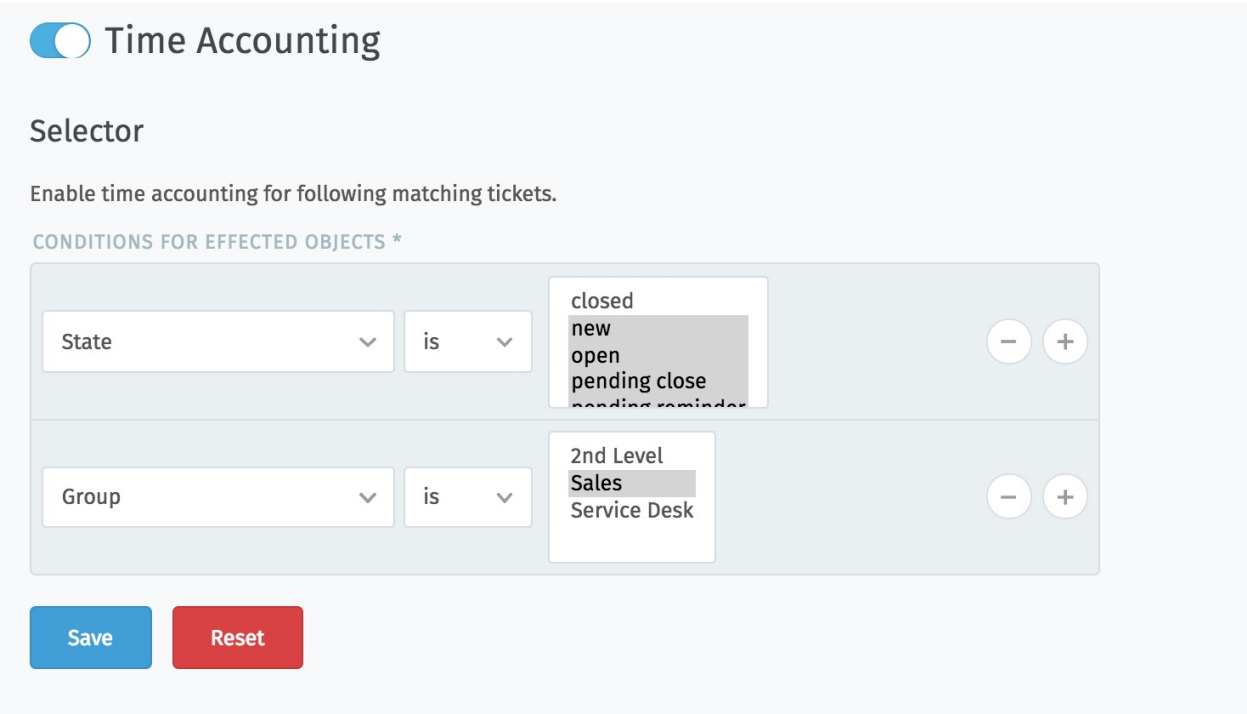
CHAPTER

FIFTEEN

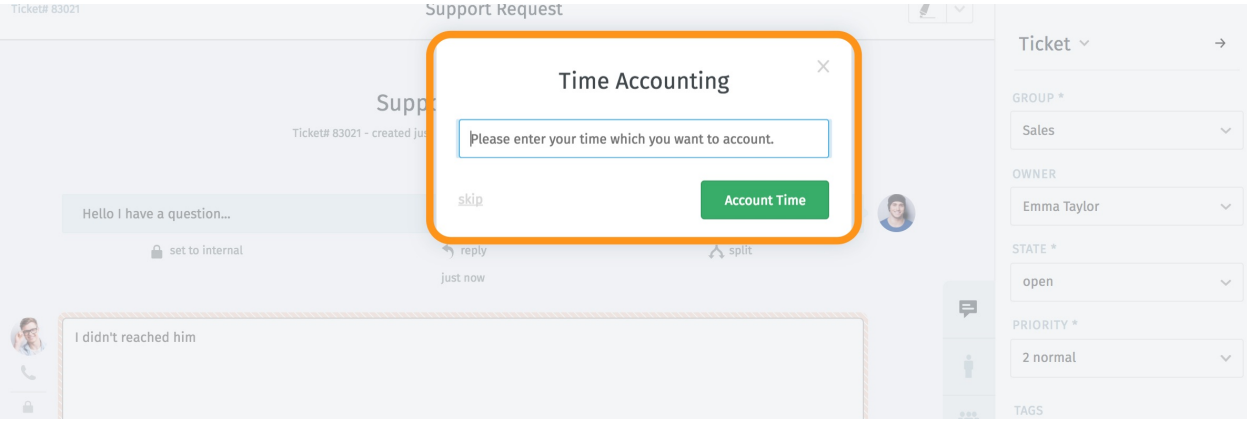
TIME ACCOUNTING

If you want to know how much time you need for your each project, you can enable time accounting (turn on the switch on the top left side of the page).

It can be set for which tickets the time accounting is activated - that means for which tickets you can enter, how much time was needed. It's possible to set multiple conditions (these can also be arbitrarily combined and thus specified):

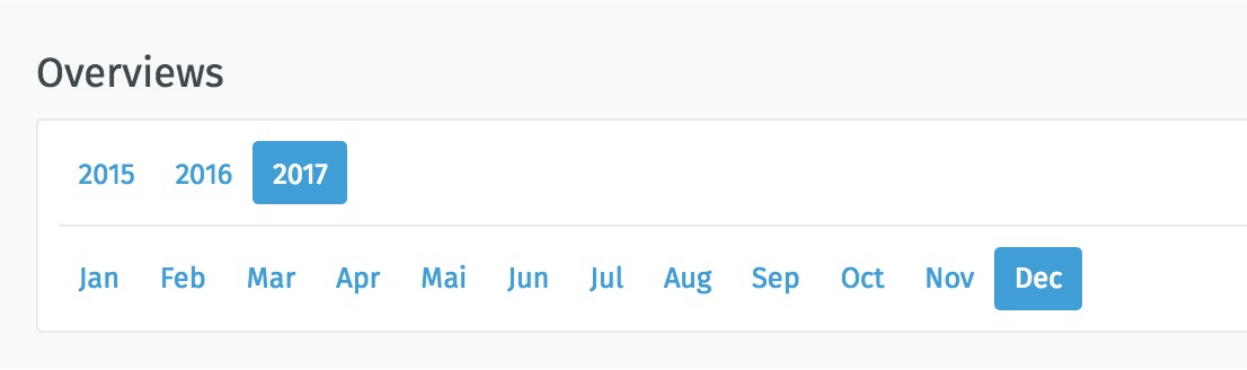


For all set cases (in this example, this is for each "Update" of tickets that are not closed and in the group 'Sales') the following field appears for entering the invested time:



In the admin area there are different possibilities to get an overview of the accounted times.

There is a monthly overview for all counted times. By clicking on the desired year and month you can see all corresponding tickets:



The tickets can be arranged according to customers and organization. All views can be downloaded as a CSV file (click on the down arrow).

Ticket

TICKET#	TITLE	CUSTOMER	ORGANIZATION	AGENT	TIME UNITS	TIME UNITS TOTAL	CREATED AT	CLOSED AT
83018	Inquiry	David ...	-	Christo...	10.0	10.0	3 days ...	3 days ...
83017	anothe...	Christo...	Chrispr...	Christo...	15.0	15.0	4 days ...	

Customer

CUSTOMER	ORGANIZATION	TIME UNITS
david@example.com		10.0
chris@chrispresso.com	Chrispresso Inc.	15.0

Organization

ORGANIZATION	TIME UNITS
Chrispresso Inc.	15.0

CHAPTER

SIXTEEN

KNOWLEDGE BASE

Publish your own library of FAQs, how-tos, internal SOPs and more with the **knowledge base**.

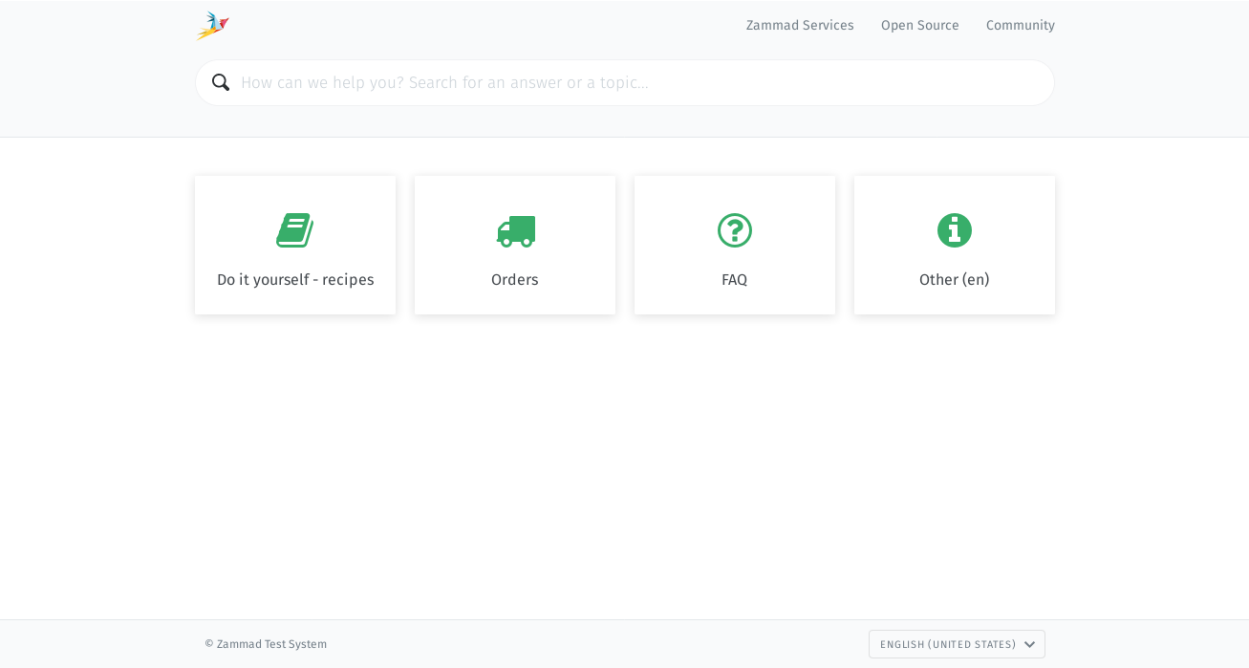


Fig. 1: See a live demo at https://support.zammad.com/help.

Hint: This document describes how to **configure** the knowledge base.

For details on how to **use and edit** it, please refer to the Zammad Agent docs.

By default, only admin users are permitted to create, edit, and manage knowledge base articles. See *Roles* for details on how to grant write access to agents or other users.

Note: The knowledge base will not appear in the main menu until it has been enabled in the admin panel.

16.1 Features

- Multi-language support
- Visibility settings (**draft**, **staff-only**, or **public**)
- Full text search
- Scheduled publishing
- File attachments
- Wiki-style internal linking to both **KB answers** and **tickets**
- Rich text editor + embedded images

16.2 Setup

To enable the knowledge base, first select the languages/locales you wish to publish in:

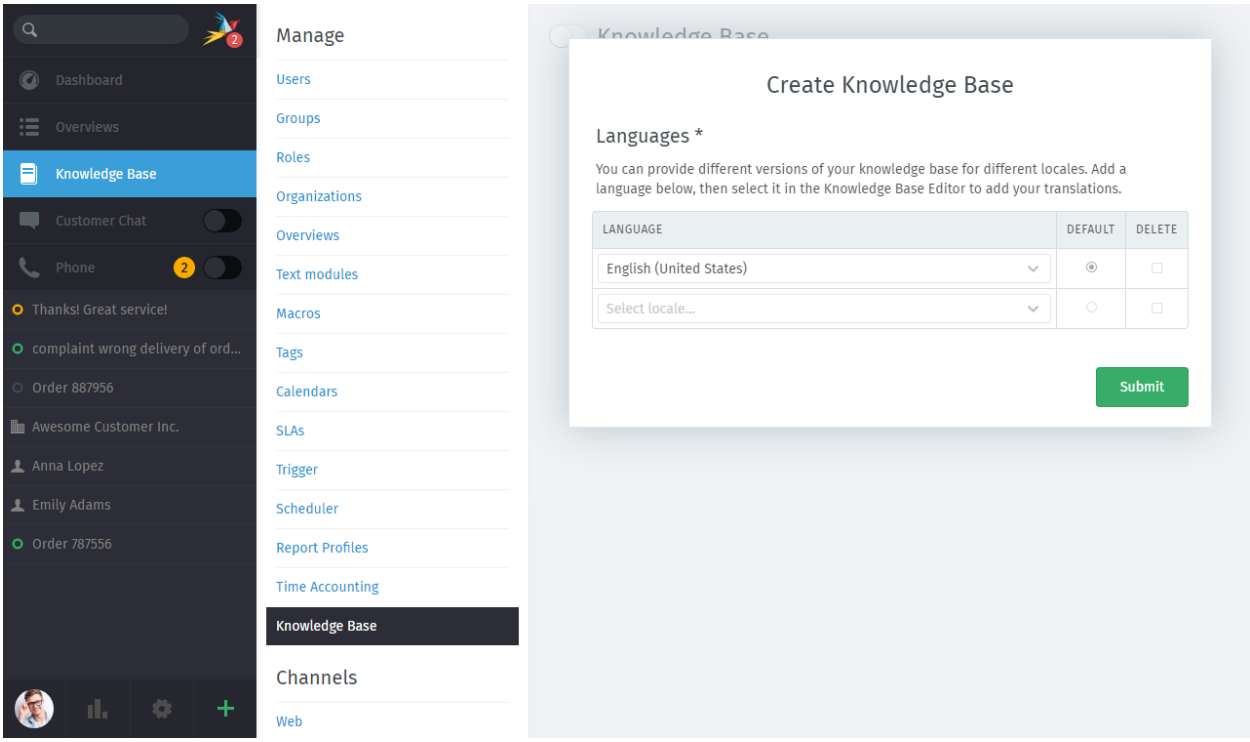


Fig. 2: You must choose at least one. (Don't worry, you can always change them later!)

Read on for details about each section of the knowledge base configuration.

16.2.1 Theme

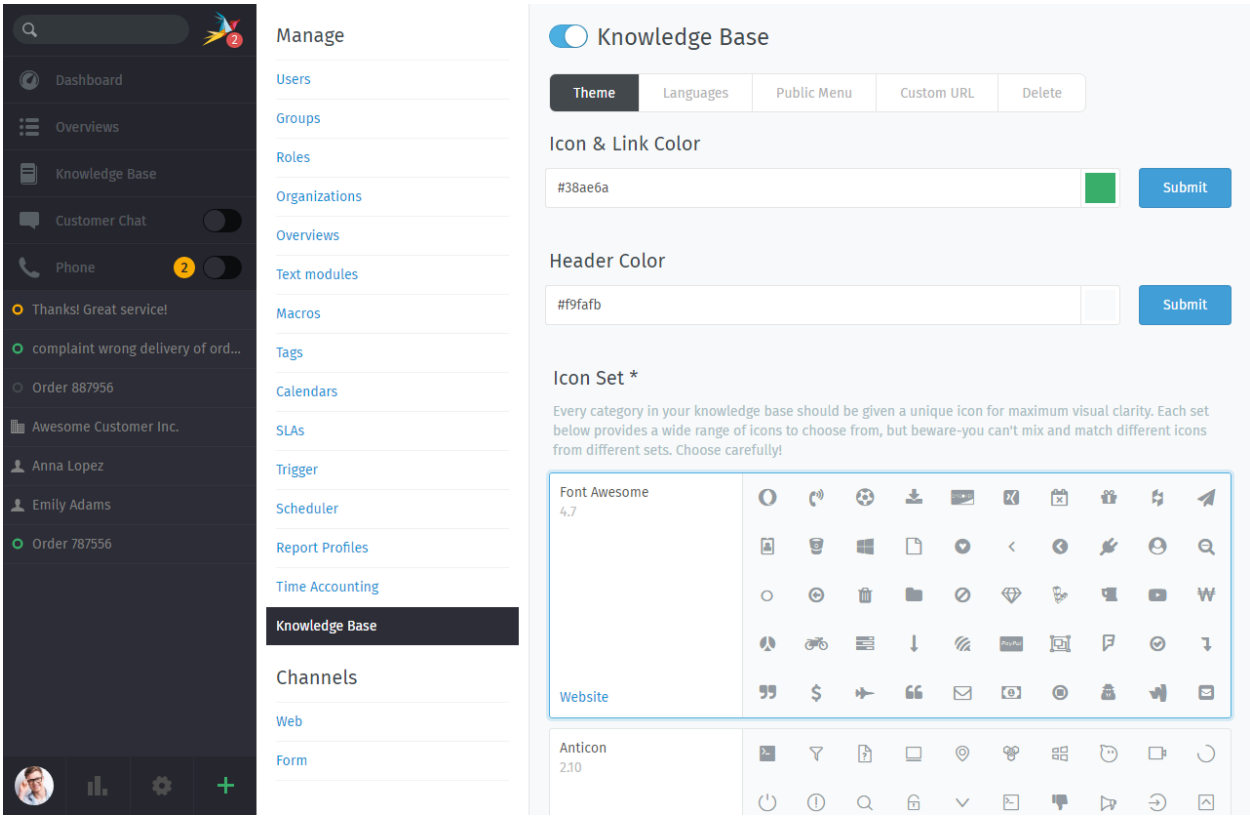


Fig. 3: Customize the appearance of the knowledge base.

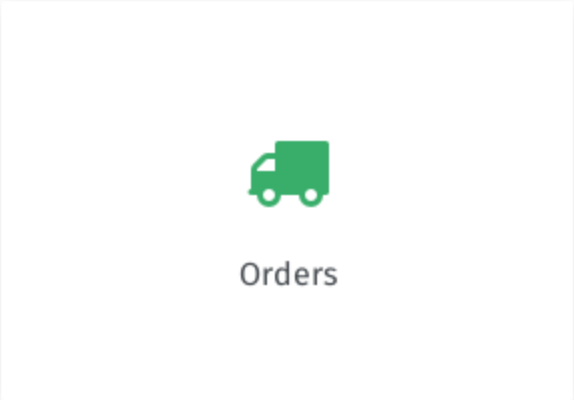
Icon & Link Color Applies to all **category & article** entries in knowledge base menus, as well as hyperlinks in articles.

Header Color Applies to the area surrounding the search bar.

Icon Set Defines the selection of icons that may be used when creating/editing categories.

Each category in the knowledge base *must* be given an icon. Icons appear prominently in the main menu, like so:

> **Warning:** Re-assigning icons on all of your categories is tedious work. It's advisable to explore your options early to avoid having to change your mind down the road.



16.2.2 Languages

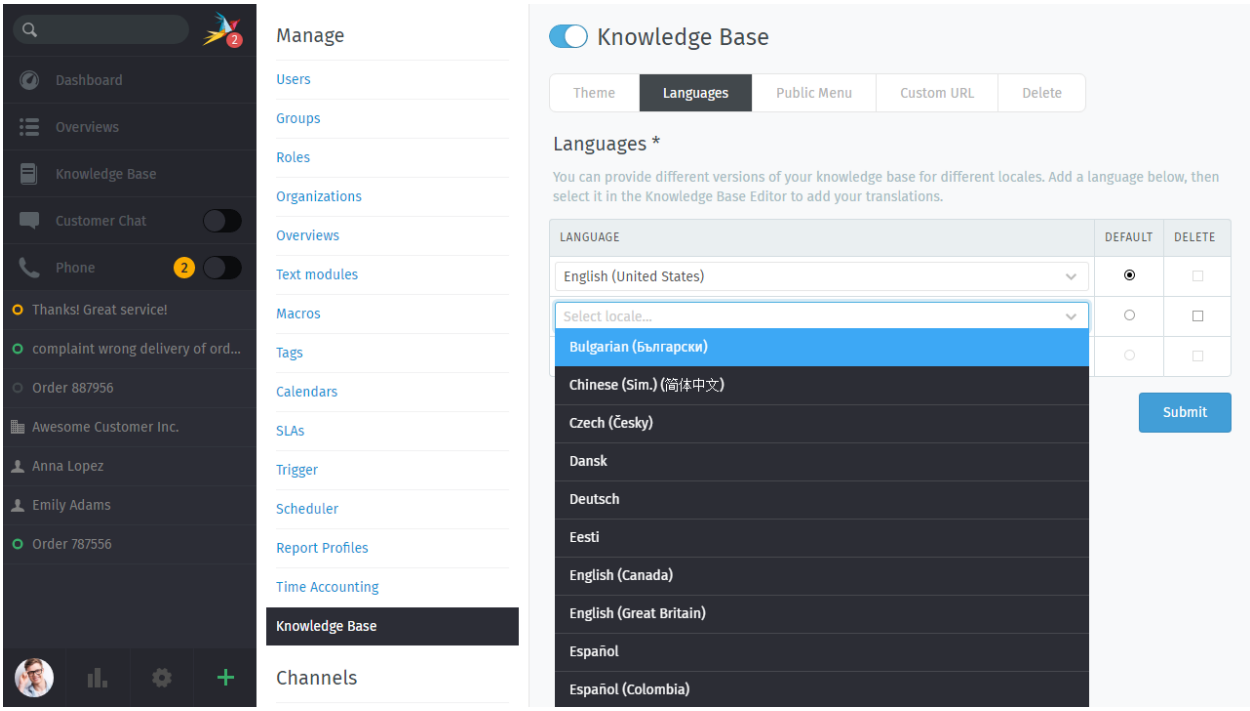


Fig. 4: Add or remove locales, or reassign the default.

The knowledge base will automatically display the language matching each visitor's locale. Visitors may always manually switch to another language via a dropdown menu in the footer.

The default locale is displayed when the visitor's locale is not supported.

Articles that have not yet been translated into a given language will be hidden from that locale.

16.2.3 Public Menu

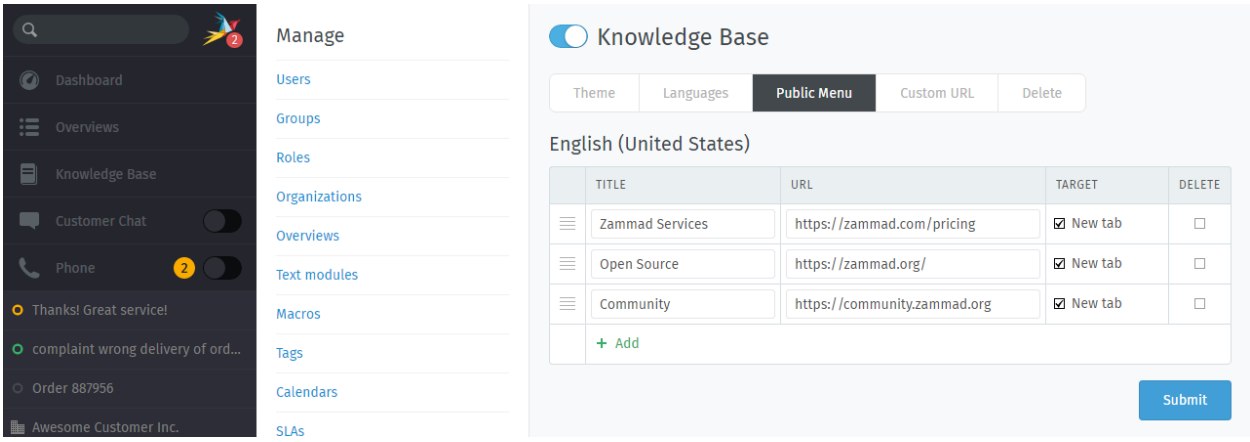
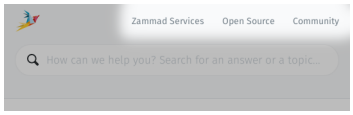


Fig. 5: Customize the nav menu that appears in the header of the knowledge base.

Hint: `Target` let's you decide if you want the link to be opened within a new browser tab upon click or not.

Use this section to unify the knowledge base with your own website's main navigation. Entries added here will appear in the knowledge base like so:



16.2.4 Custom URL

Note: This feature is only available on **self-hosted** instances.

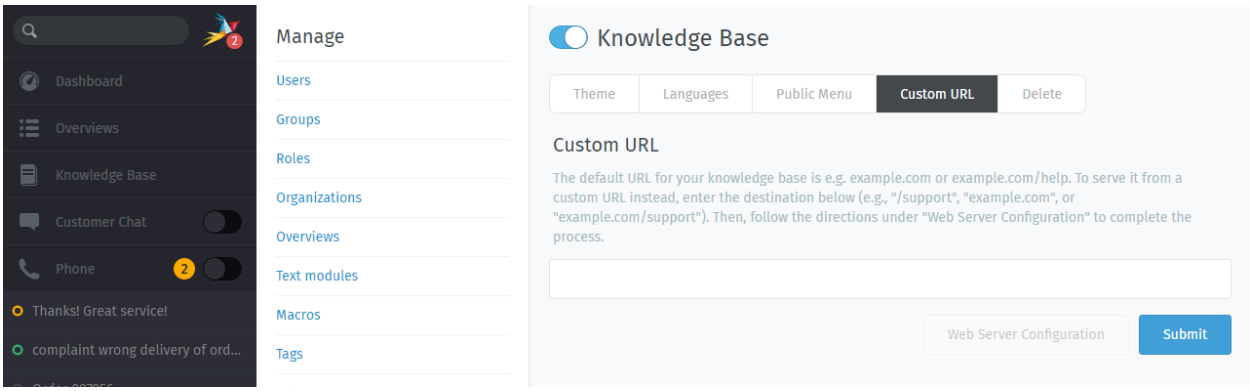


Fig. 6: Relocate the knowledge base to the URL of your choosing.

By default, the knowledge base will appear at the same domain as your Zammad instance, under `/help`.

If you wish to customize where it can be accessed, enter your desired URL here and configure your web server as described (instructions provided for Apache and NGINX only).

16.2.5 Delete

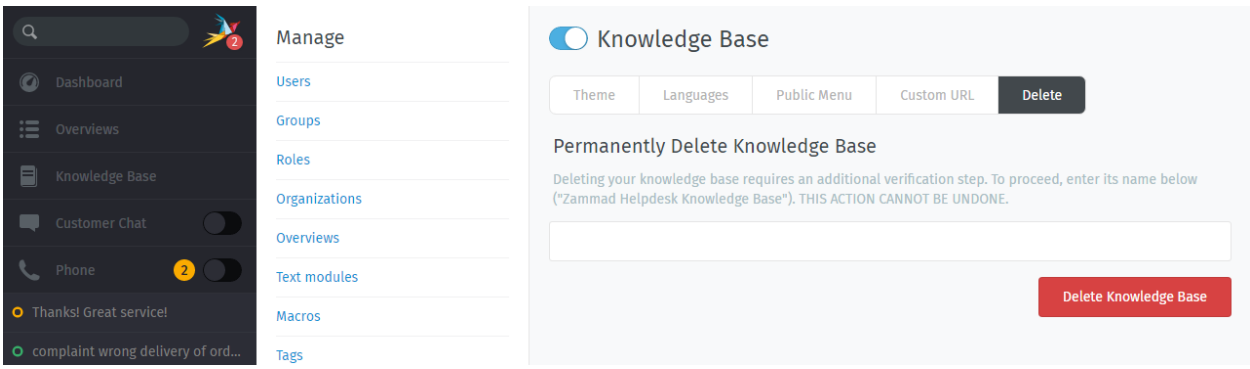


Fig. 7: Permanently delete the knowledge base and all the articles within it.

Use this panel to delete the knowledge base. If you wish to unpublish it without deleting all its content, simply disable it via the toggle button at the top of the window instead.

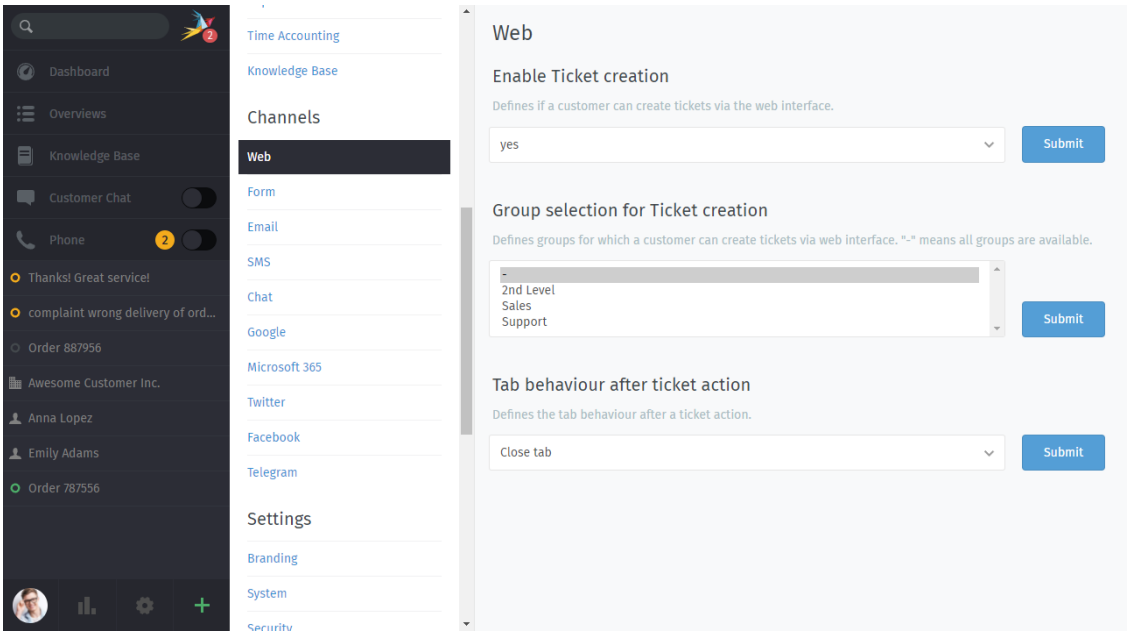
CHAPTER

SEVENTEEN

WEB

The web channel mainly affects your customers' using the web interface. These settings allow you to restrict your customers ticket creation.

Tip: *Core Workflows* allow even further restrictions and actions if you need them.



17.1 Settings affecting your customer

Enable Ticket creation You can forbid customers to create tickets via the web interface. This will remove the "" button on the lower left.

Default: `yes`

Note: This does not forbid updating existing tickets via UI.

Group selection for Ticket creation By default your customers may create tickets in all groups. As this may be an issue, especially when having several support levels or internal groups, you can always select a set of groups you want to be available.

Default: -

Note: This does not affect your agents

Agents are affected by *Group Access Levels*.

17.2 Global settings affecting *all* users

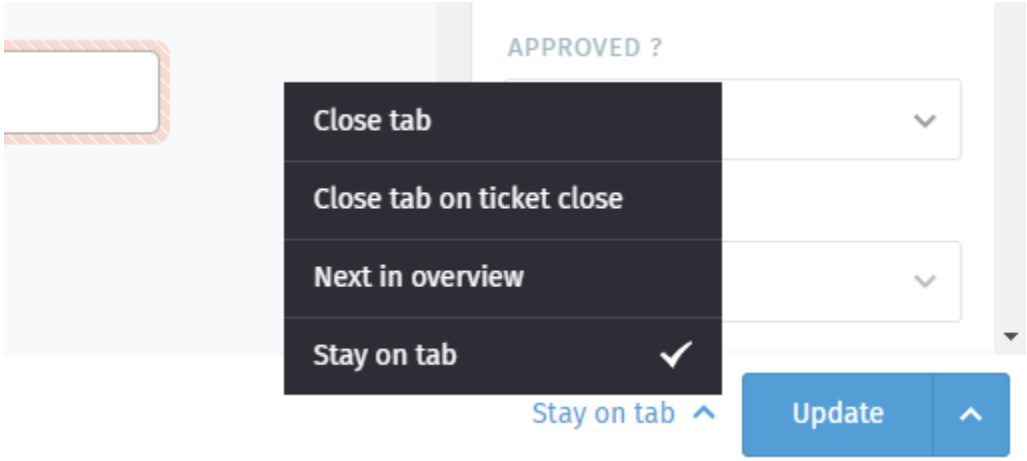
Tab behavior after ticket creation This setting allows administrators to provide a default behavior of Zammad's tab *after* ticket update.

Default: `Stay on tab`

Note: Users can always overrule

If your user decides to select a different tab behavior on any ticket, this action will be the new default behavior for that user.

Zammad remembers the decision of the user.



CHAPTER

EIGHTEEN

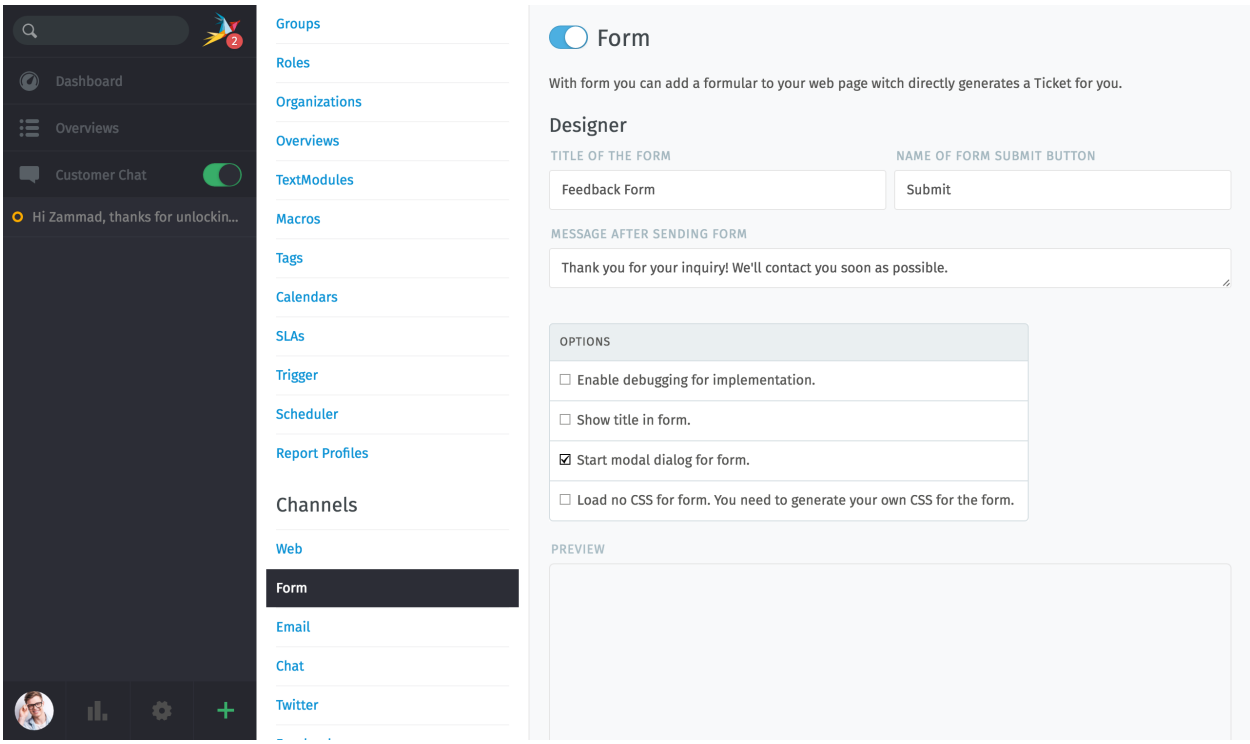
FORMS

Hint: At the moment it is not possible to add more (or custom) fields to a Zammad Form.

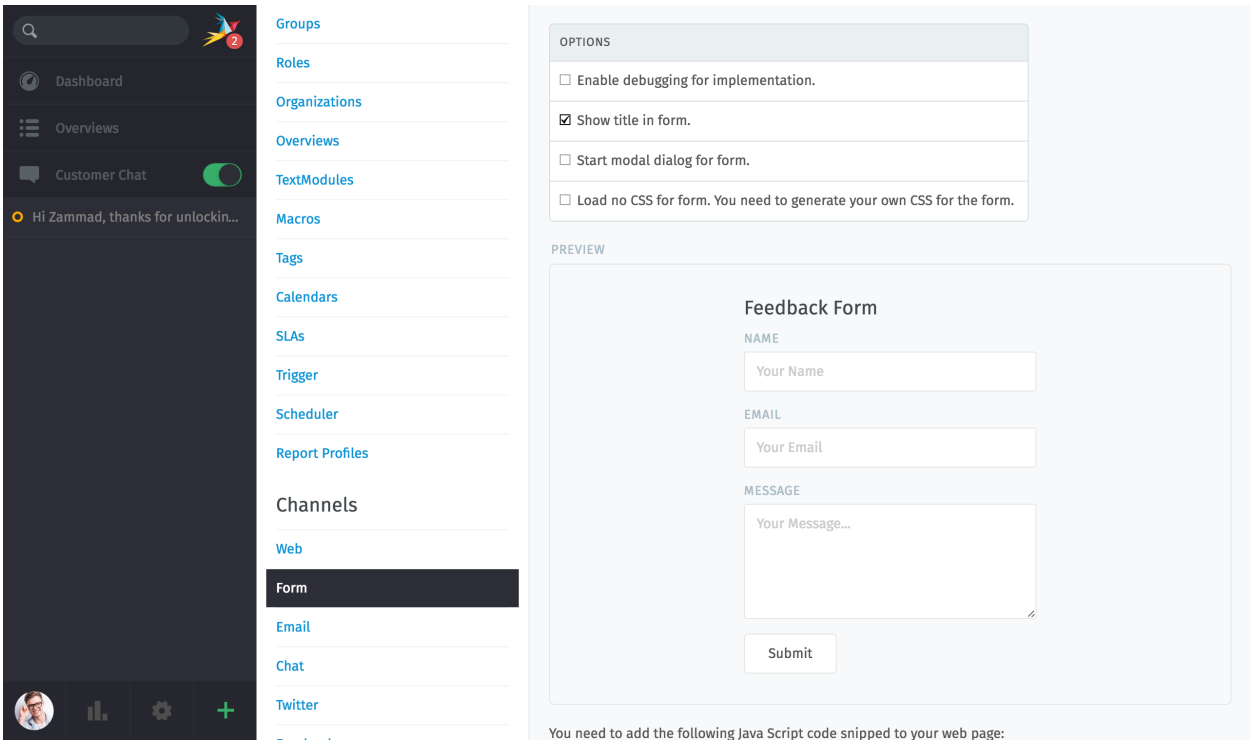
Note: The form is currently limited to one form per instance.

Feedback or contact forms are quite often used on websites. Usually they will generate an email which will be sent to somebody who forwards it and so on. With Zammad it's quite easy to integrate these forms into your website and directly generate tickets with them. In just 2 minutes.

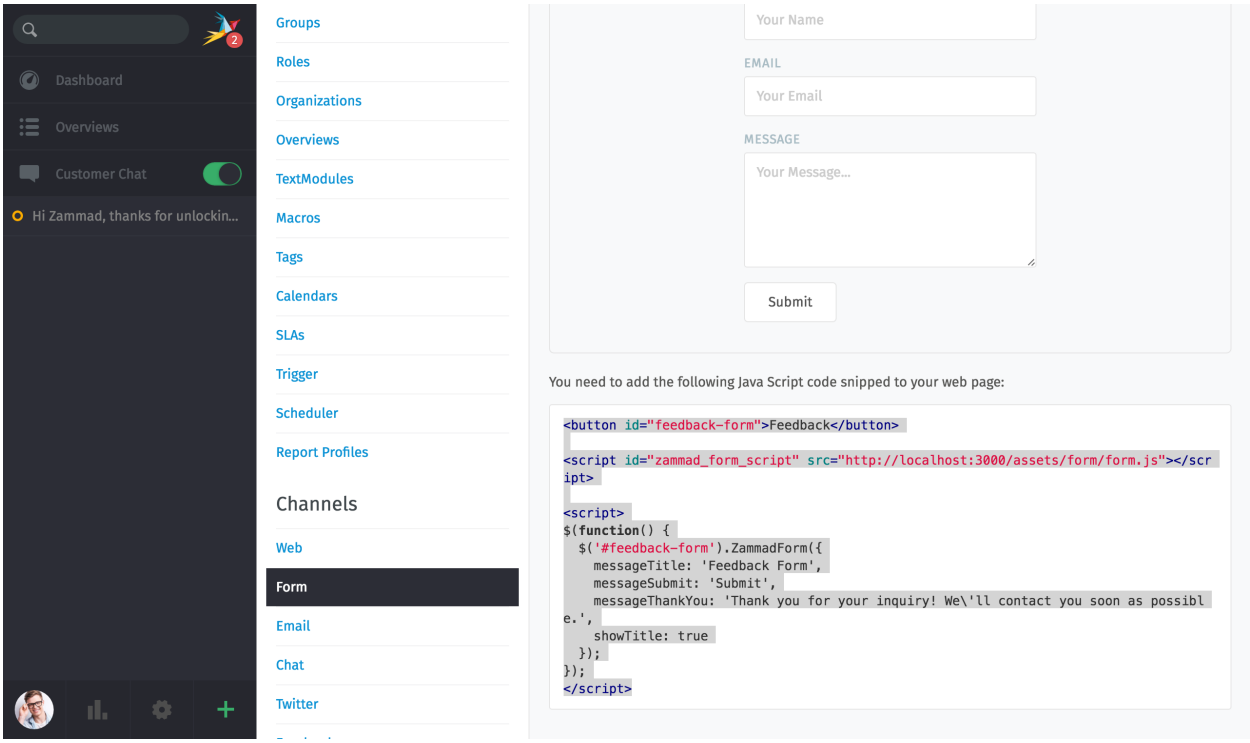
Go to "Admin -> Channels -> Form" and enable the switch for this feature. Below you can adapt your form settings.



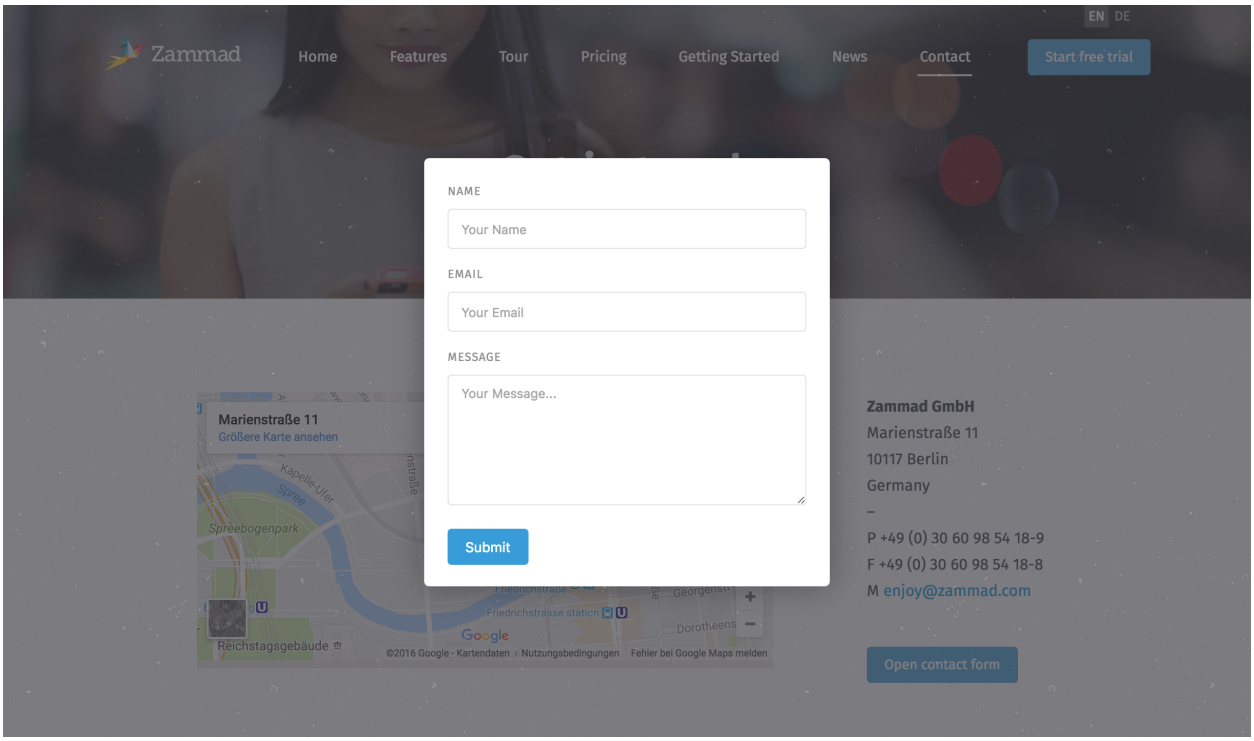
In preview mode you can test if the form fits your needs (e. g. if it opens as modal dialog or if it's shown inline on the website)



Just copy the JavaScript snippet and paste it into your website. That's all. Just 2 minutes.



Finally, the forms will look as follows:



Requirements

Zammad form requires jQuery. If you don't already use it on your website include it like this:

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

18.1 Potential Spam-Issue

The Form function could be abused by sending a higher amount of messages / tickets to your Zammad instance. If you do not use Zammad-Forms: **disable** them.

But don't worry! Zammad does limit the maximum created tickets based on different criteria. It also ensure that the email address being used is valid (with MX-Check on the email's domain).

Table 1: Form settings to limit Ticket-Creation

Option	Default value	Description
form_ticket_create_by_ip_per_hour	20	Limits Ticket-creation per IP and hour to 20 Tickets
form_ticket_create_by_ip_per_day	240	Limits Ticket-creation per IP and day to 240 Tickets
form_ticket_create_per_day	5000	Limits Ticket-creation for forms to 5000 Tickets per day

Hint: You can change the above default values, please keep in mind, that setting those values higher might lead to problems in term of created Tickets. Please note that the following changes require console access to your hosts that runs Zammad.

Change the Ticket-Creation per IP and hour to 10:

```
rails> Setting.set('form_ticket_create_by_ip_per_hour','10')
```

Change the Ticket-Creation per IP and hour to 50:

```
rails> Setting.set('form_ticket_create_by_ip_per_day','50')
```

Change the Ticket-Creation per day to 500:

```
rails> Setting.set('form_ticket_create_per_day','500')
```

18.1.1 Further options to make it harder

Another way to make it harder for bots to automate against your Zammad instance is to change the location of `form.js` (`/opt/zammad/assets/form/form.js`).

Please keep in mind if you change the location of `form.js` (by e.g. copying) that you need to ensure that your `form.js` stays up to date if you update Zammad.

Further more it's not recommended to delete form.js from it's location, but to forbid the access to it with your webserver configuration (if wanted).

CHAPTER

NINETEEN

EMAIL

19.1 Accounts

19.1.1 Account Setup

Setting up a new email account? Here's what all the settings do.

But first, a word of warning! The import process does things you might not expect:

> **Danger: Zammad will delete all emails in your inbox during the import process.**
>
> Use the *Experts* dialog to *disable this behavior*.

> **Warning: Zammad will send an auto-reply message to every email it imports.** (Including the old ones!)
>
> Use the *Experts* dialog to *change this behavior*.

Note:

Gmail / G Suite users: Google is in the process of upgrading its security policies. To stay up-to-date, do **not** add your account as an email channel—instead, create a *Google channel*.

Microsoft 365 users: Microsoft is in the process of upgrading its security policies. To stay up-to-date, do **not** add your account as an email channel—instead, create a *Microsoft 365 channel*.

Microsoft 365 / Exchange users: Shared mailboxes are not supported.

Basic

In most cases, Zammad is smart enough to figure out your email provider's configuration based on your email address alone.

Organization & Department Name The display name used for outgoing email.

If you add *multiple addresses* to a single account, you can define a separate Organization & Department Name for each one.

Email display names value can be *further customized in the Settings tab*.

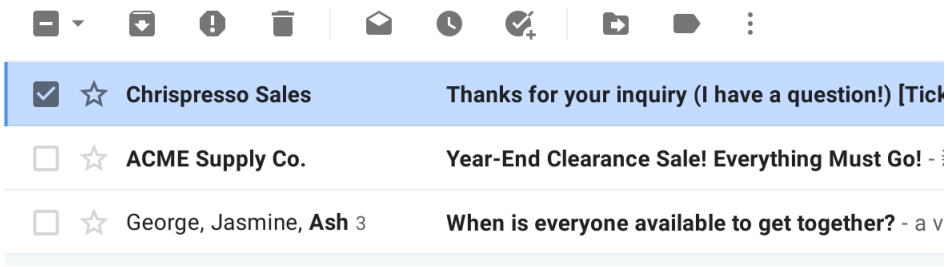


Fig. 1: A customer's inbox with an auto-reply from **Chrispresso Sales**.

Email Your email address.

If your account login/username is different from your email address, use the *Experts* dialog (see below).

If your inbox receives mail for more than one email address, be sure to *add your alternate addresses* after account setup.

Password Your account password.

If your email provider requires you to enter a one-time passcode (sent via SMS) when logging in, you'll have to generate an app password to use with Zammad.

Destination Group The *group* that incoming mail will be assigned to.

Use *filters* for more fine-grained sorting of incoming email.

Experts

If Zammad can't figure out how to connect your account (or if you just want to access advanced settings), use the *Experts* dialog.

Email Inbound

Type Choose from **IMAP** and **POP3**.

In most cases, you want IMAP. (With POP3, you won't be able to *keep messages on the server* or *specify which folder to fetch from*.)

Host Your email server's hostname or IP address (*e.g.,* `imap.gmail.com`).

Contact your email provider or system administrator if you don't know.

Password Your account password.

If your email provider requires you to enter a one-time passcode (sent via SMS) when logging in, you'll have to generate an app password to use with Zammad.

SSL / STARTTLS Enable encryption when fetching messages.

Choose from **yes** and **no**; Zammad will detect which protocol to use.

Port Your email server's port (usu. `993` for IMAP, or `995` for POP3).

Contact your email provider or system administrator if you don't know.

Folder Specify which folder to fetch from, or leave empty to fetch from `INBOX`.

If specifying a nested folder, be sure to use the full path. (Some systems use different **path separators**; *e.g.,* `Inquiries/Tech-Support` vs. `Inquiries.Tech-Support`. Contact your email provider or system administrator if you don't know.)

Note: Additional Steps Required

In the last step of the account setup process, Zammad sends you an email from your own account, then waits for it to appear in the folder specified here. **Account verification will not complete until this test message has been received.**

If this folder does not receive incoming messages automatically, you may have to manually check your inbox during the verification step and move Zammad's test message there when it arrives.

Keep messages on server Specify what happens to your emails after Zammad imports them:

- `no` Zammad deletes all imported messages
- `yes` Zammad marks imported messages as read

  (With this option, Zammad will only import unread messages. This means Zammad may miss messages if the mailbox is externally modified.)

Note: Why does Zammad delete messages by default?

If you never clean out your inbox, it'll eventually reach its storage limit, and your mail server will start **rejecting incoming messages**. Most Zammad users never even look at their inbox once it's set up, so they rely on Zammad to keep it clean for them.

If you choose **yes** here, remember that it's your responsibility to clean out your inbox from time to time to keep it below its storage limit.

Import as

During the import process, Zammad treats **all messages** (including ones you've already read from months or years ago) as if they had been sent today: senders will receive auto-replies saying "your message has been received and we'll get back to you within 24 hours," and tickets created for each message will be marked as "new".

Use this option to disable this behavior for messages more than two weeks old.

Note: This option may not be shown if:

- all messages in your inbox are less than two weeks old
- you selected **Keep messages on server: Yes**
- you selected **Type: POP3**

For more fine-grained control, manually disable this and other *triggers* before adding an email account, then turn them back on once all your messages have been imported.

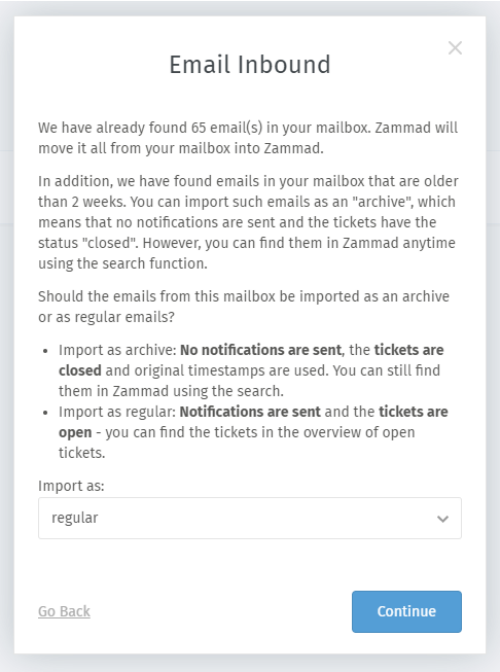


Fig. 2: How should old emails be imported?

Email Outbound

Send mails via Choose from **SMTP** and **local MTA** (*e.g.,* Sendmail).

Local MTA (mail transfer agent) configuration is only available on self-hosted installations.

Host Your email server's hostname or IP address (*e.g.,* `smtp.gmail.com`).

User Your account login/username.

Leave blank to use the same value from incoming account setup.

Password Your account password.

Leave blank to use the same value from incoming account setup.

Port Your email server's port (usu. `587` or `465`).

Zammad will detect and enable SSL/STARTTLS support automatically.

Verification

As a final step, Zammad sends a test email from your own account, to your own account. Once this test email is received, the new account setup process is complete!

Troubleshooting

- *Is a custom incoming mail folder to blame?*

19.1.2 Secondary Addresses

Secondary addresses (also known as *aliases*) allow you to send emails with a different "From:" address from the one on the account.

Fig. 3: Once you add a secondary address, you can configure a group to start sending emails with it.

> **Warning: Do not abuse this feature.**
>
> If you use secondary addresses to impersonate other parties, your IP is liable to get added to a spam blacklist.

Your email provider may also be set up to *receive incoming messages* for many addresses in the same mailbox. If this is the case, be sure to add your alternate inbox addresses here.

Display Name The display name used for outgoing email.

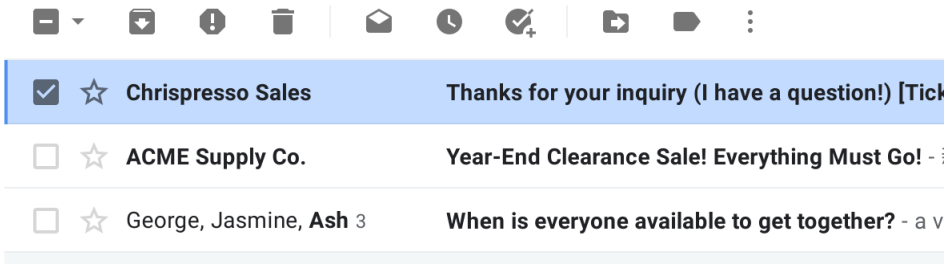


Fig. 4: A customer's inbox with an auto-reply from **Chrispresso Sales**.

Email display names value can be *further customized in the Settings tab*.

Email The alias address to send outgoing messages as.

Channel The email account to be used when sending outgoing messages from this alias.

Note Optional. Only visible from this dialog, the REST API, and the Rails console.

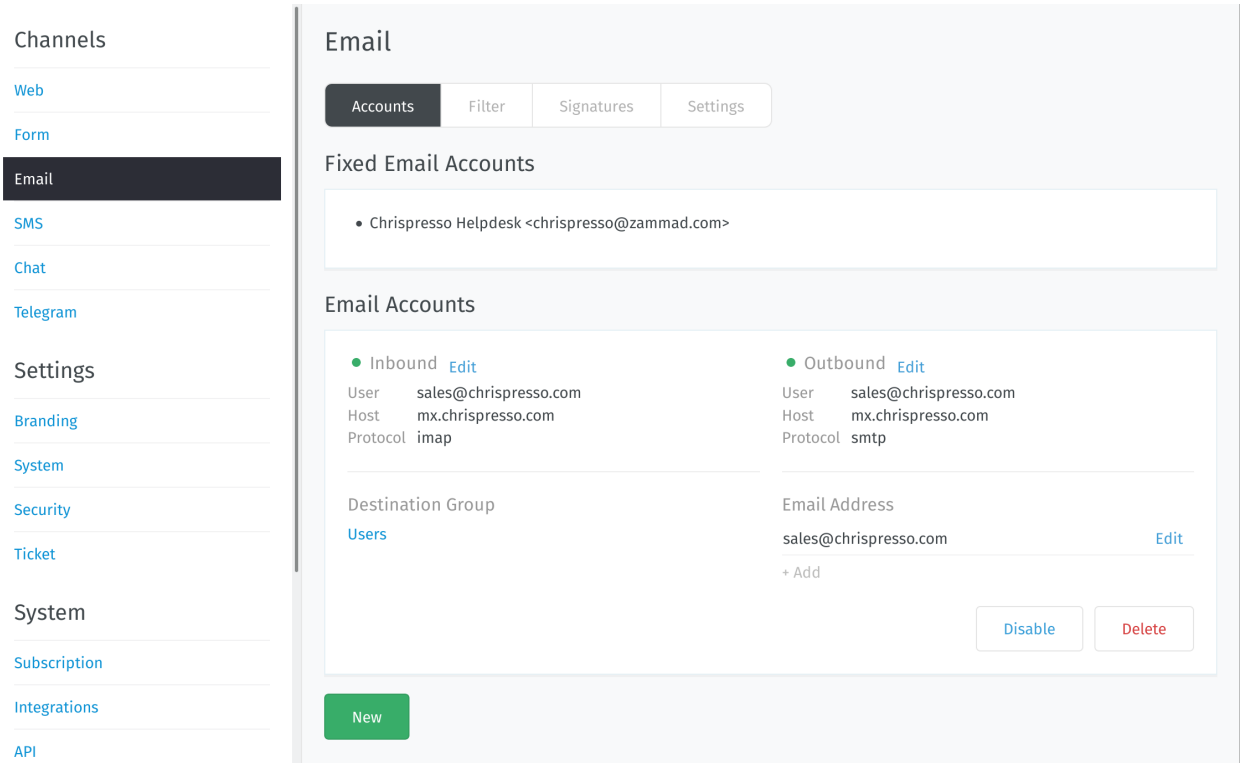
19.1.3 Managing Accounts

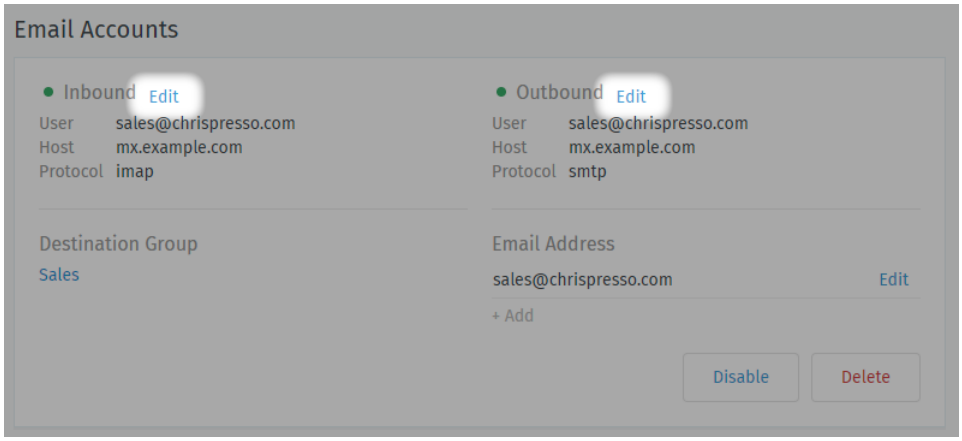
Once an account has been added, use the Accounts panel to edit its configuration.

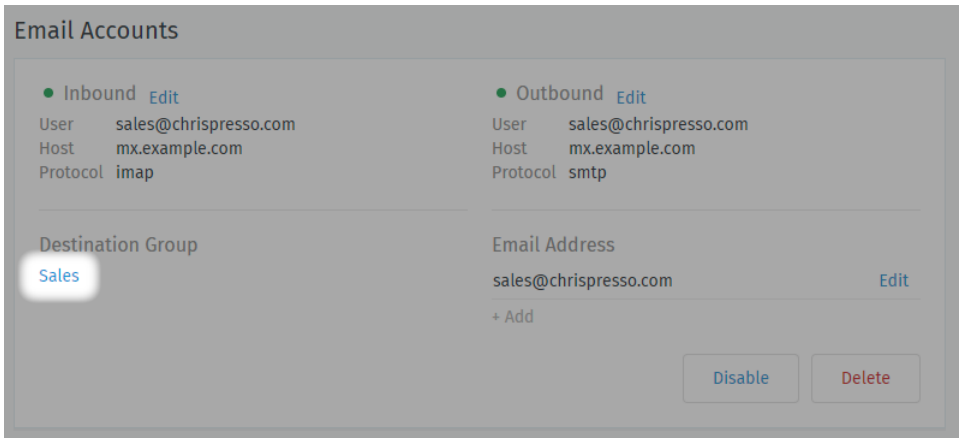
Mail Server Settings Click **Edit** on inbound/outbound account details to change your server configuration.

See *New Account Settings* for a detailed description of each option.

> **Note:** In some browsers, you may have to manually re-enter your password.


Channels
Web
Form
Email
SMS
Chat
Telegram
Settings
Branding
System
Security
Ticket
System
Subscription
Integrations
API
Email
Accounts
Filter
Signatures
Settings
Fixed Email Accounts
Chrispresso Helpdesk <chrispresso@zammad.com>
Email Accounts
Inbound Edit
User sales@chrispresso.com
Host mx.chrispresso.com
Protocol imap
Outbound Edit
User sales@chrispresso.com
Host mx.chrispresso.com
Protocol smtp
Destination Group
Users
Email Address
sales@chrispresso.com Edit
+ Add
Disable
Delete
New


Email Accounts
Inbound Edit
User sales@chrispresso.com
Host mx.example.com
Protocol imap
Outbound Edit
User sales@chrispresso.com
Host mx.example.com
Protocol smtp
Destination Group
Sales
Email Address
sales@chrispresso.com Edit
+ Add
Disable
Delete


Email Accounts
Inbound Edit
User sales@chrispresso.com
Host mx.example.com
Protocol imap
Outbound Edit
User sales@chrispresso.com
Host mx.example.com
Protocol smtp
Destination Group
Sales
Email Address
sales@chrispresso.com Edit
+ Add
Disable
Delete

Destination Group Click on the group name to reassign the account.

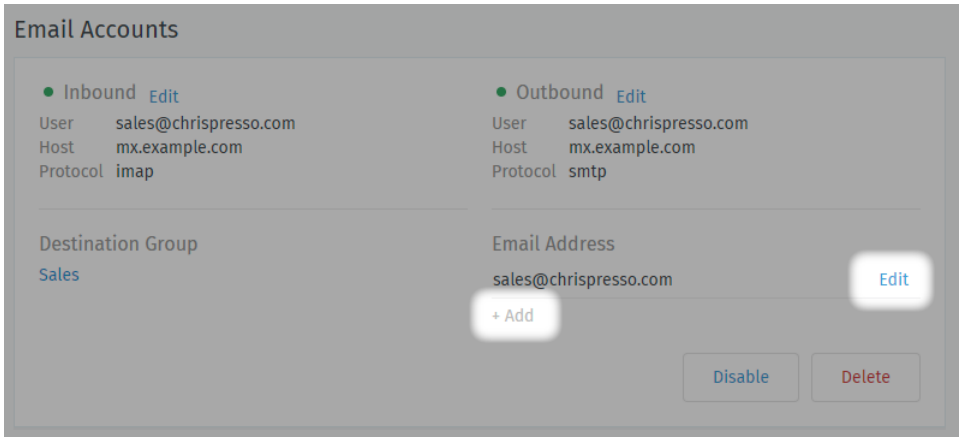
Only **active** groups will be displayed.

Changing this setting will not reassign existing tickets to the new group.

Hint: **Still can't send outgoing email tickets?** Check your *group settings*.

Email Address Use the **+ Add** or **Edit** buttons to set up secondary addresses on this account.

See *Secondary Addresses* for a detailed description of each option.



Enabled / Disabled Disabling an account temporarily prevents Zammad from importing its messages.

This may be necessary during scheduled maintenance or when migrating your installation to a new host.

Note: Disabling an account disables *outgoing* messages for it, as well.

Delete Deleting an account removes its configuration from Zammad entirely.

Note: **Additional Steps Required**

When an email account is deleted, its *email aliases* **remain in the system**. Be sure to reassign or delete them manually.

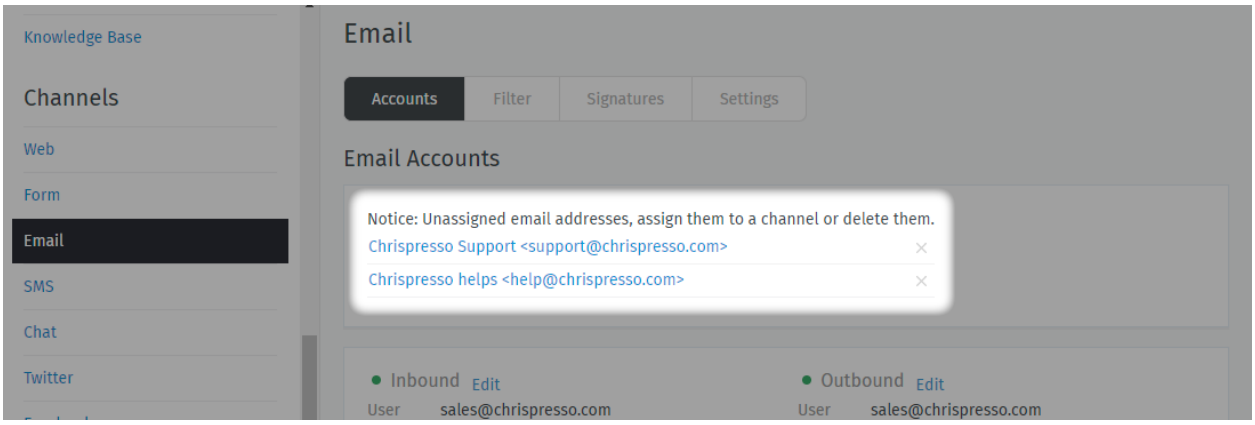


Fig. 5: Click on the address to assign it to another account, or click × to delete it.

Groups need an assigned an address to send outgoing emails. If you delete a group's assigned address, agents belonging to that group won't be able to send emails until you assign it a new one.

19.1.4 Email Notification

Note: The notification channel can only be configured on **self-hosted installations**.

For more information, see *System Notifications*.

System notifications are automated emails sent by Zammad for critical system events, such as account changes or SLA violations.

Use the **Email Notification** panel to configure how Zammad dispatches these notifications.

Send mails via Choose from **SMTP** and **local MTA** (*e.g.,* Sendmail).

Host Your email server's hostname or IP address (*e.g.,* `smtp.gmail.com`).

User Your account login/username.

Hint: The "From:" address on system notifications can be configured under *Channels > Email > Settings > Notification Sender*.

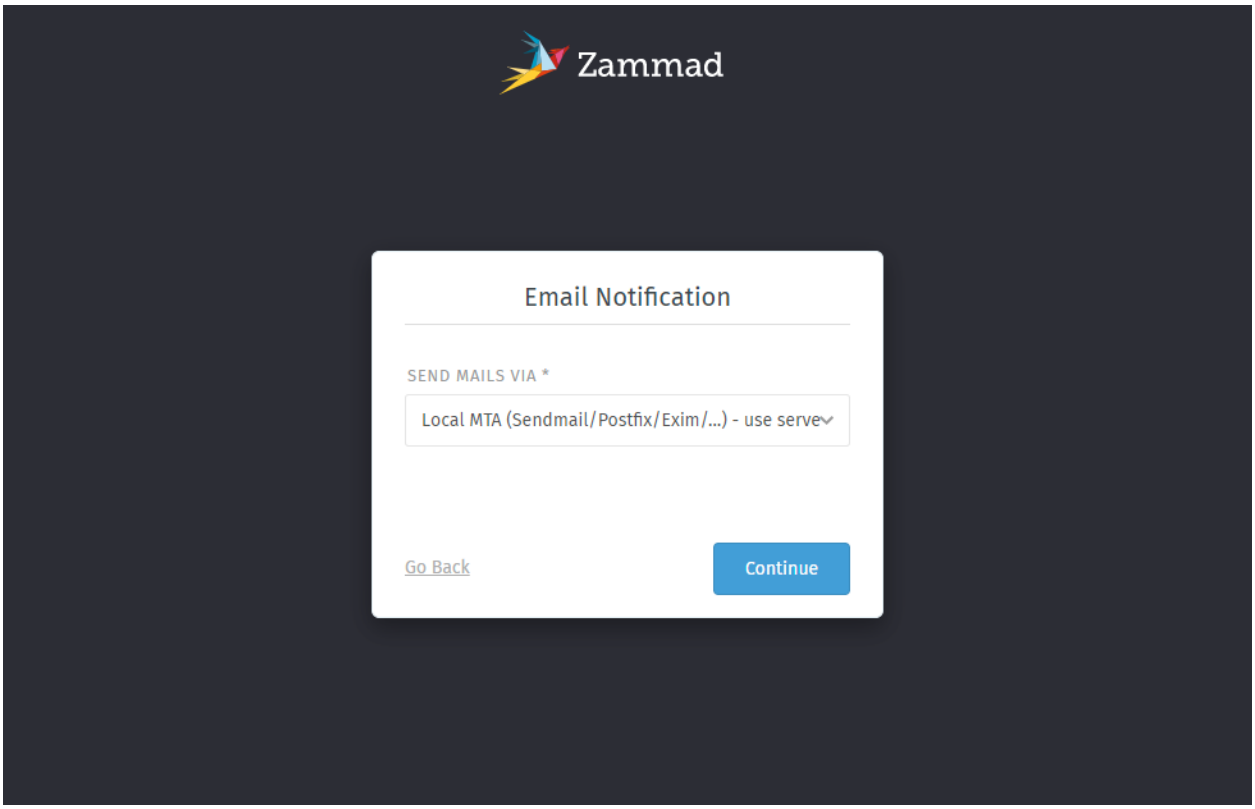
Password Your account password.

Port Your email server's port (usu. `587` or `465`).

Zammad will detect and enable SSL/STARTTLS support automatically.

Note: This looks familiar… Where have I seen it before?

This configuration step was part of the Getting Started wizard:



Account Setup Use the **New Email Account** dialog to connect your account.

Secondary Addresses Send and receive email at **additional email addresses**, all through the same mailbox/account.

Managing Accounts Edit the configuration of existing accounts in the **Accounts Panel**.

Email Notification Configure the outgoing mail provider for **system notifications**. (Self-hosted installations only.)

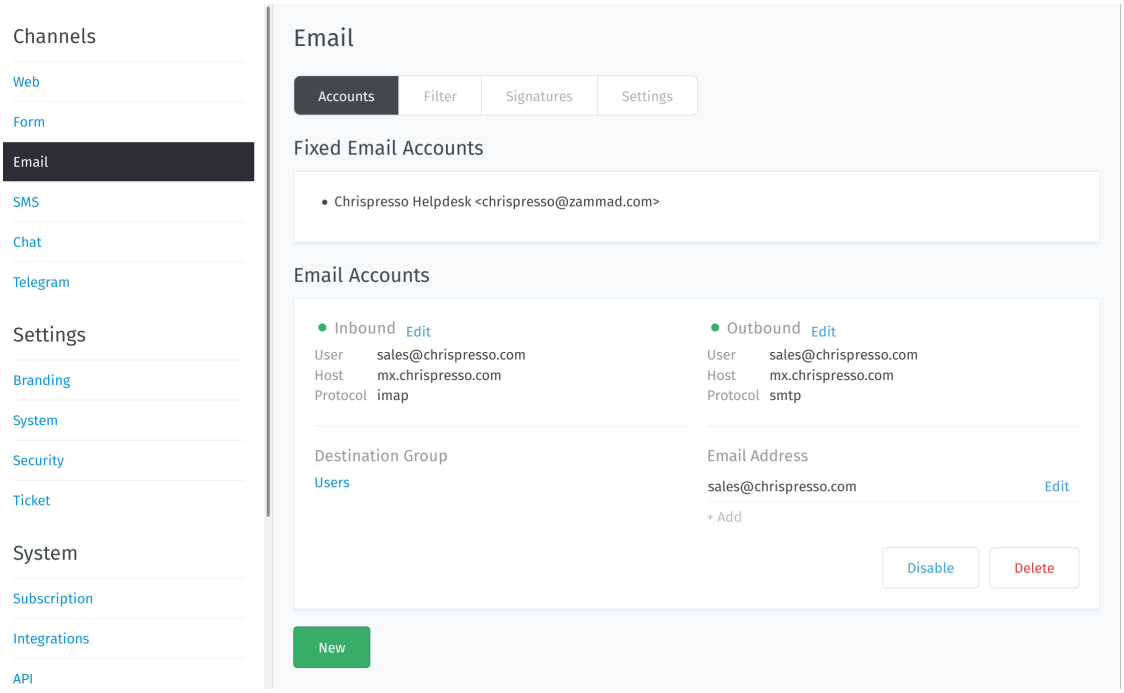
19.2 Filters

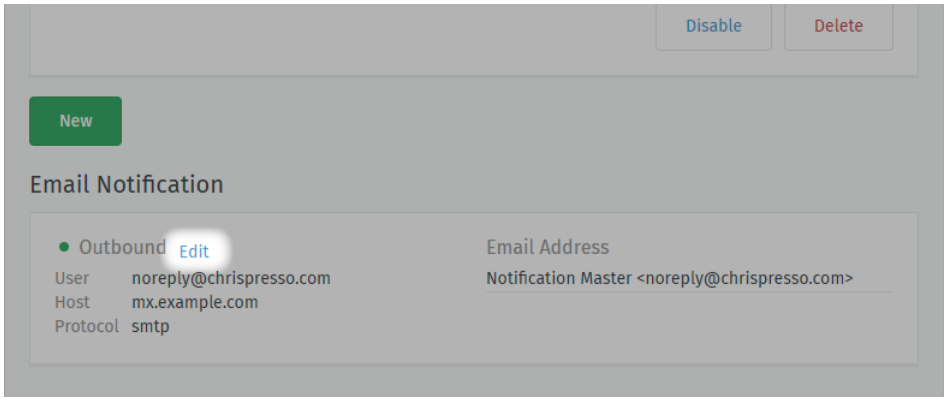
Postmaster filters allow you to match email headers (e.g. `From`, `To`, `Subject`, `X-Spam-Flag` etc.) and execute a set of actions whenever Zammad's email parser encounters a matching email. The actions will be applied to the ticket that is created or updated by this email. Here are some examples of what is possible with filters:

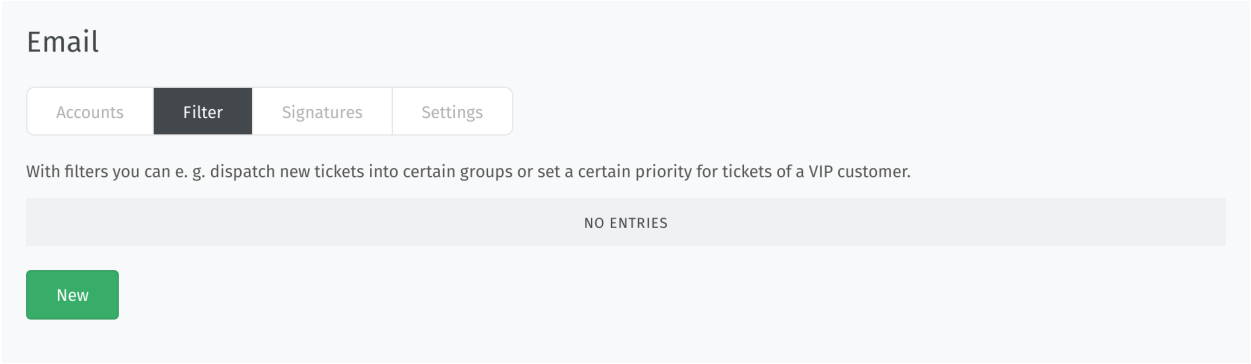
- Automatically dispatch tickets into certain groups:

  For example, tickets from `amazon.com` could automatically be dispatched to the Purchasing group.

  From: contains: `regex:(\.|@)amazon\.com`
  Group: Purchasing


Channels
Web
Form
Email
SMS
Chat
Telegram
Settings
Branding
System
Security
Ticket
System
Subscription
Integrations
API
Email
Accounts
Filter
Signatures
Settings
Fixed Email Accounts
Chrispresso Helpdesk <chrispresso@zammad.com>
Email Accounts
Inbound Edit
User sales@chrispresso.com
Host mx.chrispresso.com
Protocol imap
Outbound Edit
User sales@chrispresso.com
Host mx.chrispresso.com
Protocol smtp
Destination Group
Users
Email Address
sales@chrispresso.com Edit
+ Add
Disable
Delete
New


Disable
Delete
New
Email Notification
Outbound Edit
User noreply@chrispresso.com
Host mx.example.com
Protocol smtp
Email Address
Notification Master <noreply@chrispresso.com>


Email
Accounts
Filter
Signatures
Settings
With filters you can e. g. dispatch new tickets into certain groups or set a certain priority for tickets of a VIP customer.
NO ENTRIES
New

Note: Note that the Group action only has an effect when the matching email results in a new ticket. Zammad will not change the group of existing tickets.

- Automatically increase the priority of tickets from a VIP customer:

  From: contains: `ourvipcustomer@example.com`
  Priority: 3 high

  Note: Note that the Priority action only has an effect when the matching email results in a new ticket. Zammad will not change the priority of existing tickets.

- Automatically tag and close spam tickets that have been marked as spam by an external spam filter (e.g. SpamAssassin):

  X-Spam-Flag: contains: `YES`
  Tag: add: `spam`
  State: closed

  Note: Note that the State action only has an effect when the matching email results in a new ticket. Zammad will not change the state of existing tickets. It will add the tag though if it missing, even if the mail is an update to an existing ticket.

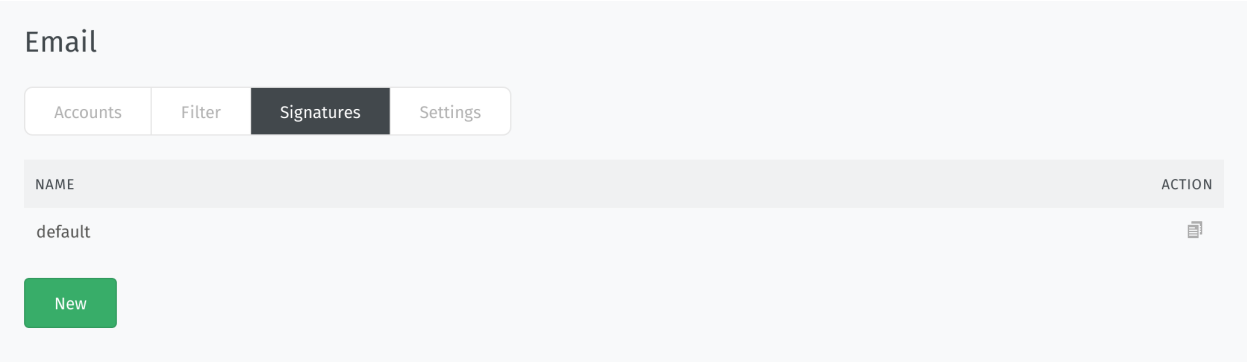
The following actions are only effective when creating tickets: Group, State, Priority, Owner.

Different attributes of a filter can be combined with each other. Likewise, the following actions can be combined. The supported matches are "contains" and "contains not"; for advanced matching, you can use regular expressions by prefixing the string with `regex:`.

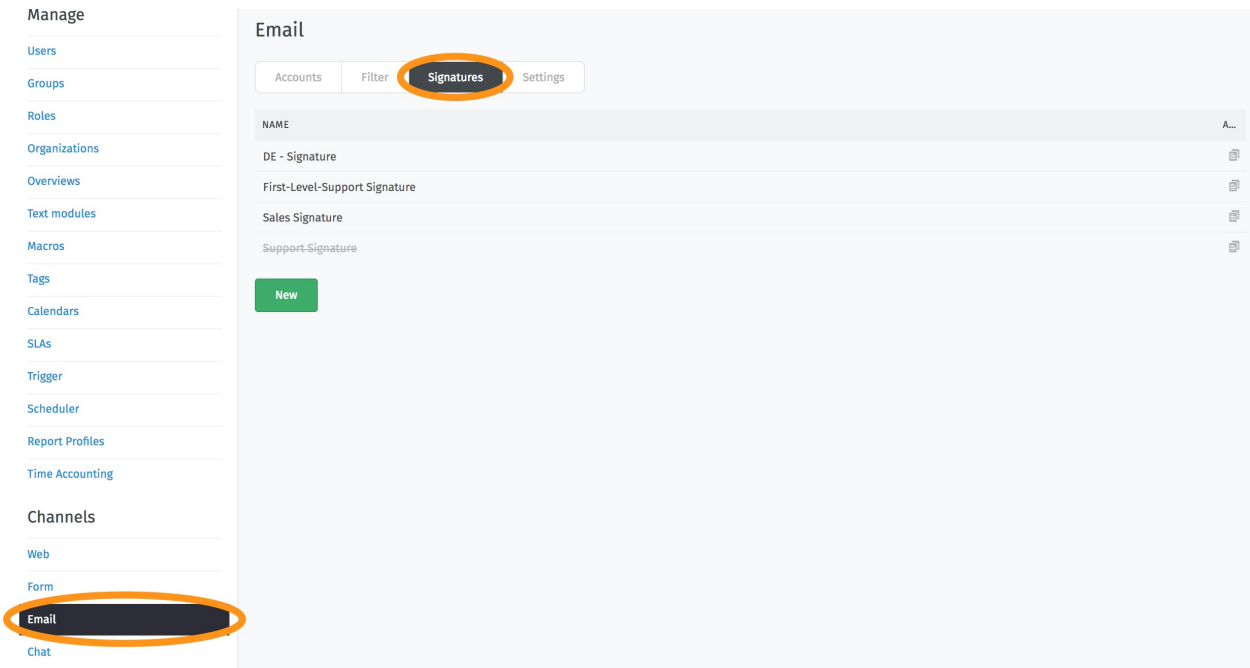
Note that Zammad matches against the full header, e.g. for a mail with "`From: Display Name <display.name@example.com>`", the `From` condition will test against "`Display Name <display.name@example.com>`". This is especially important when using anchored regular expressions; `regex:^display\.name@example.com$` would not match this mail!

It should be borne in mind that the combined attributes build on each other. If a filter is no longer needed, it can either be temporarily set inactive or deleted directly.

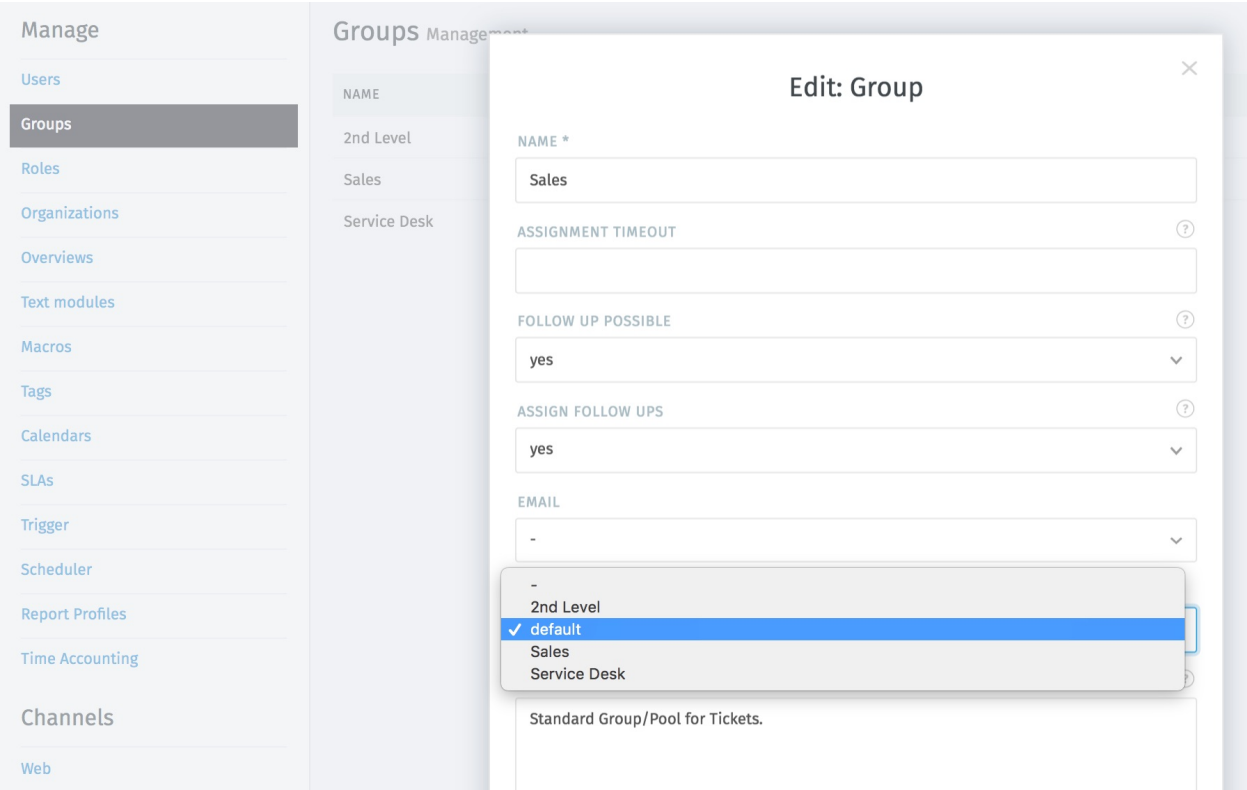
19.3 Signatures



You can create a separate signature for each group in Zammad. The individual signatures can be created and edited here:



Afterwards, the existing (and active) signatures are available in the group editing mask:

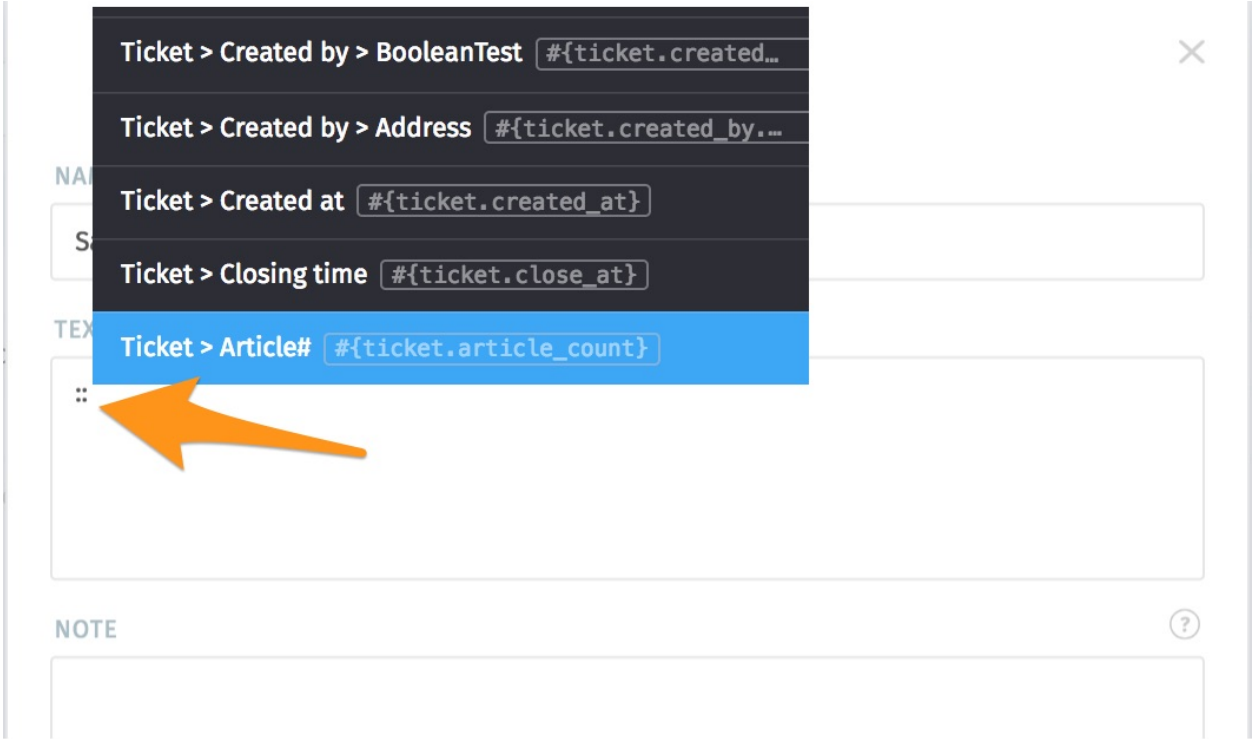


Each group can be assigned its own signature, but they can also all use the same signature.

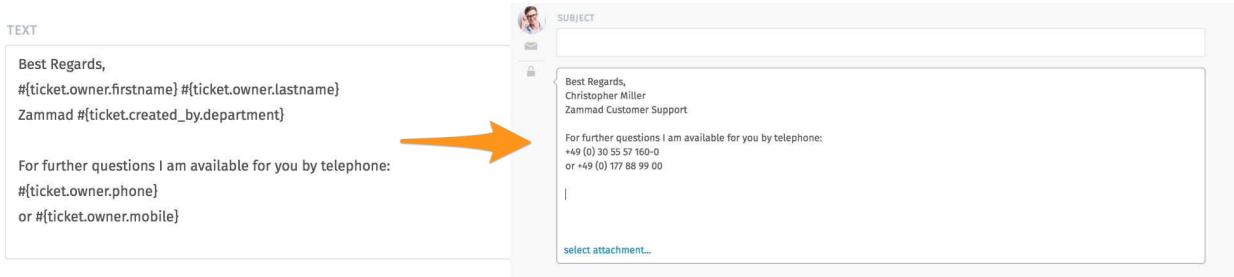
19.3.1 Dynamic Signatures

To individualize the signatures, it is possible to automatically load specific information into a signature via *Variables*. All information stored on the ticket, assigned customers or agents can be inserted. This makes it possible to design the signature individually. To load a list of available variables, enter two colons (`::`) into the *Text* box of the signature editor.

Hint: Please keep in mind that specific information might not be available during ticket creation. The best example here is the ticket number / id. Specific information are created with submitting the ticket and thus are not available before submitting.



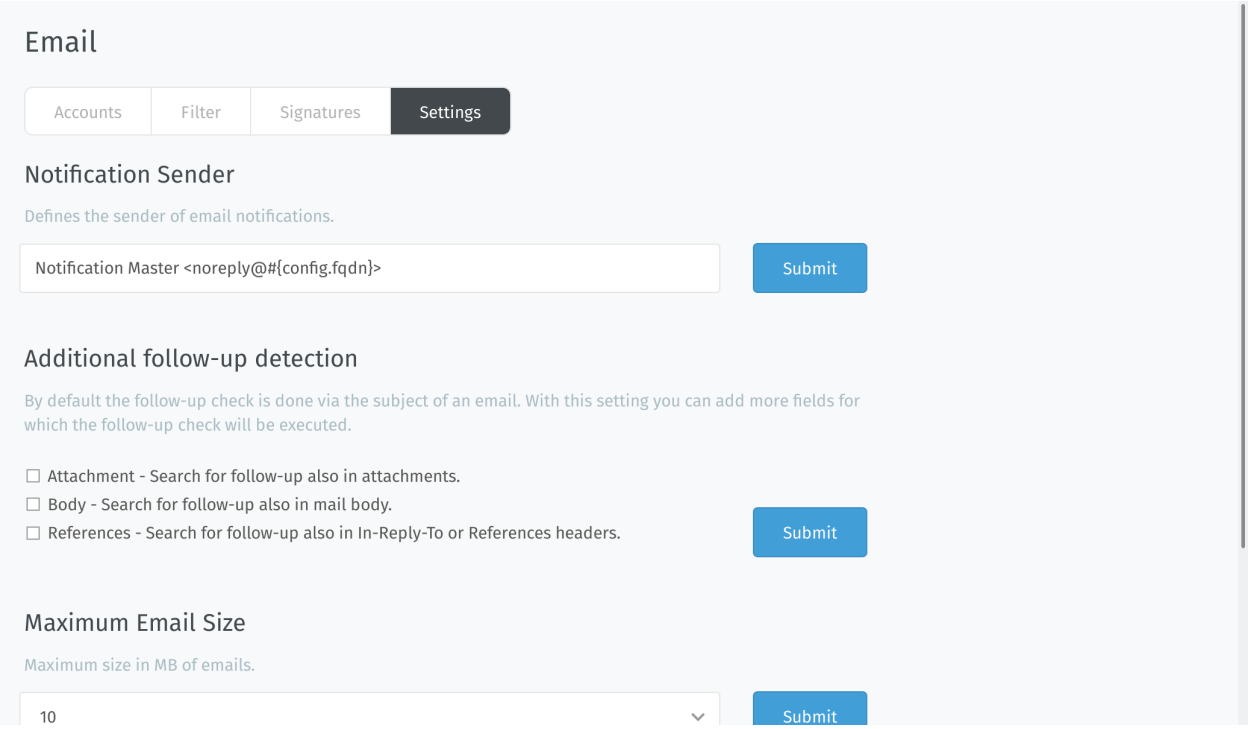
Here is an example of a signature with variables and the result when you write a mail:



19.4 Settings

Below you can find the currently available email-related settings. Most of these settings have default values which can be found in this list as well.

Note: Some email-related settings are ticket-based settings, which is why they can be found in the *Composer Settings*.



19.4.1 List of Settings

Notification Sender: Default value `Notification Master <noreply@#{config.fqdn}>` This is the default sender address for Zammad that affects all mails but those generated because of replies (like triggers or agent-based mails). Your customers normally will not see this address. This email address does not need to receive and can't be assigned to a group.

> **Note:** This address is relevant for agent notifications and password reset mails (also affects customers).

Additional follow-up detection In some situations the normal follow-up detection is not enough. This might be due to missing references in the subject (the ticket hook and number). These options can help to recognize follow-ups to existing tickets.

> **Note:** Please note that searching in attachment and body might lead to false follow-up detections.

Maximum Email Size: Default value `10 MB` This one is pretty obvious: It defines the maximum allowed size of an email Zammad will fetch. Zammad will not fetch Mails that are bigger than this option.

> **Hint:** This technically also affects attachments for articles.

Send postmaster mail if mail too large: Default value `yes (enabled)`

> **Note:** Upgraded installations will, by default, have the value set to `no (disabled)`.

Option set to `yes` This setting will cause Zammad to automatically reply to mails that exceed the above mail

size limit with a postmaster style mail. This will help your user to understand that his mail did not arrive and won't be reviewed by you.

Note: Zammad will still download and remove (if enabled) the mail from the mailbox. Instead of importing it to the database, it will save the affected mail to `/opt/zammad/tmp/oversized_mail/`.

Option set to `no` If the option is set to no, Zammad will not reply to mails that are too big. Your customer will **not notice** that the mail was too large! Instead, Zammad will use the monitoring endpoint to alert its administrators that it can't fetch a too large mail.

Learn more about *Monitoring*.

Sender based on Reply-To header: Default value `not set (-)` This setting decides how Zammad should recognize its customers from emails that contain a `Reply-To` header. This comes in useful if you're working with contact forms that need to use reply to headers.

Option set to `-` or `Take reply-to header as sender/from of email` This setting will overwrite the initial `FROM` to the value used in `Reply-To` completely.

Option set to `Take reply-to header as sender/from of email and use realname of origin from` This setting will partially overwrite the initial `FROM`. It uses the mail address from the `Reply-To` header and uses the given name of the `FROM` header, if given.

Customer selection based on sender and receive list: Default value `yes` This option decides how Zammad should react if an agent sends a email to it.

Option set to `yes` The first user / email address from the recipient list will be used as the ticket customer.

Option set to `no` The agent will be set as ticket customer.

Note: Currently agents can't be customers within the UI. While Email communication works, agents can't see their own tickets (as a customer) if they don't have access to the group.

Block Notifications With the regex that can be defined here, you can ensure not to send any notifications to specific systems. By default this especially affects typical system addresses which can't receive emails anyway.

The default value is: `(mailer-daemon|postmaster|abuse|root|noreply|noreply.+?|no-reply|no-reply.+?)@.+?`

Sender Format: Default value `Agent + Format Seperator + System Address Display Name` This configures the display name used in the `FROM` header of mails Zammad sends.

Note: This does not affect Notification mails (to agents) and password reset mails. Emails that are not sent by agents (e.g. trigger-based notifications) will always fallback to `System Address Display Name` if needed.

Option set to `Agent + Format Separator + System Address Display Name` This will cause Zammad to set the `FROM` header to agent name and the channel's display name, divided by a separator (configured below).

Example: `Christopher Miller via Chrispresso Inc.`.

Option set to `System Address Display Name` This will cause Zammad to always use the display name of the used channel in the `FROM` header.

Example: `Chrispresso Inc.`

Option set to `Agent Name` Zammad will use the agent's name which is very personal.

> **Tip:**
>
> Usually you'd also want to remove the ticket slug from the subject in those cases.
> Learn more in *Settings → Ticket*.

Sender Format Seperator: Default value `via` This is a can be a string you can freely choose. It divides the agent's name and the display name of the channel whenever needed.

Ticket Subject Forward: Default value `FWD` The above string will be used on the subject if you forward an email from Zammad.

> **Note:** `:` will be automatically appended to the above string.

Ticket Subject Reply: Default value `RE` The above string will be used on the subject if you reply to a mail from Zammad.

> **Note:** `:` will be automatically appended to the above string.

Ticket Subject Size: Default value `110` This setting enforces a maximum length for subjects when replying. If the subject you're using for your reply is too long, Zammad will automatically truncate the length and insert `[...]` to show it has shortened the subject.

Example: `RE: Test somew[...] [Ticket#123456]`

> **Note:** This does **not** limit ticket titles within the UI, just the subjects when replying to an email.

19.4.2 Enhanced settings

Some less relevant settings can be changed via rails console if needed. As an example, Zammad allows you to send all outgoing communication to a BCC address for archiving reasons if needed. You can find the needed commands within the advanced customization settings.

19.5 Email header manipulation

Email header manipulation allows you to re-route or adjust tickets apart from filters or triggers. Like an API call, but with emails.

Header checks are case insensitive.

> **Warning: Trusted channels required**
>
> Below options are a potential risk with external communication and thus require channels being set to trusted explicitly.

Tip: Below headers are examples and –in our opinion– the most relevant ones. However: You can adjust mostly any article or ticket attribute (yes, custom ones as well) if you know the attribute's exact name.

The name column within *object's management* provides easy access to objects attribute names.

19.5.1 Trigger auto responses

Normally Zammad runs internal checks to see if an email is an automatic response. In these cases Zammad will not send trigger based responses.

There may be use cases where this behavior may be in your way, below options allow you to overcome this issue.

Note: In some cases combining below headers is crucial. This is intentional but may be confusing.

`x-zammad-send-auto-response` Set to `false` to disable trigger based responses. If set to `true` Zammad will send a response.

Hint: This option *does not* work if e.g. `precedence: list` is set unless you use below auto response header as well.

`x-zammad-is-auto-response` Providing this header allows you to tell Zammad that the mail in question is an auto generated response (`true`). This will cause email based triggers to be skipped.

Set this header to `false` if you want to generate auto responses.

Tip: This header allows you to overwrite auto detects for e.g. `precedence: list`.

19.5.2 Ticket attributes

Zammad allows you to use headers to manipulate ticket creations or follow ups. The manipulation can be used instead of triggers. Triggers are considered *after* header settings and thus can still overrule.

Note: Zammad differentiates between ticket creation and follow up

For creations use: `X-Zammad-Ticket-{Attribute Name}`
For follow ups use: `X-Zammad-Ticket-FollowUp-{Attribute Name}`

This allows you to ensure the changes are only applied in the required situation.

Warning: About values

- While headers are not case sensitive, values like e.g. priority names are case censitive: `1 low` will work, but `1 lOw` will not!

- When using attributes that require date / time values, ensure to use Time Zoned Times. e.g. for 28th September 2021 on 8 am CEST, either use:
  - `2021-09-28T08:00:00+0200`
  - `2021-09-28T08:00:00+02:00`
  - `2021-09-28T06:00:00.000Z`

`X-Zammad-Ticket-Priority` & `X-Zammad-Ticket-FollowUp-Priority`

Allows you to adjust a ticket's priority.
Example: `X-Zammad-Ticket-Priority: 1 low`

`X-Zammad-Ticket-Group` & `X-Zammad-Ticket-FollowUp-Group`

Allows you interfere with regular channel routing of the ticket.
Example: `X-Zammad-Ticket-Group: Sales`

`X-Zammad-Ticket-Owner` & `X-Zammad-Ticket-FollowUp-Owner`

Directly assign or change the ticket owner. Valid values are either `login` or `Email`
Example: `X-Zammad-Ticket-Owner: jdoe`

`X-Zammad-Ticket-State` & `X-Zammad-Ticket-FollowUp-State`

Set a specific ticket state.
Example: `X-Zammad-Ticket-State: closed`

> **Note:**
>
> Pending states always require the `pending_time` attribute on top.
> Like so: `X-Zammad-Ticket-Pending_Time: 2021-09-26T08:00:00+0200`

`X-Zammad-Customer-Email`

Manipulate the ticket customer - this can be a different user than the actual sender. Replying to the original sender is still possible.
Example: `X-Zammad-Customer-Email: jdoe@example.com`

> **Note:** This header is not available for follow ups.

`X-Zammad-Customer-Login`

Manipulate the ticket customer - this can be a different user than the actual sender. Replying to the original sender is still possible.
Example: `X-Zammad-Customer-Login: jdoe`

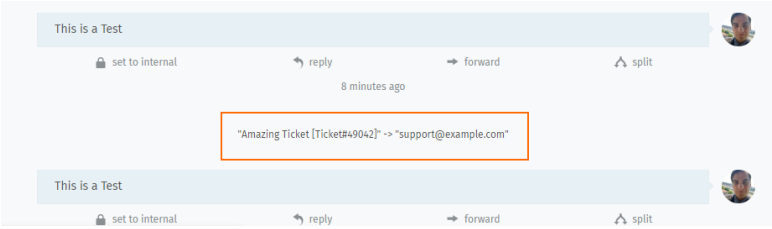
> **Note:** This header is not available for follow ups.

19.5.3 Article attributes

If needed Zammad allows you to manipulate attributes or states of fetched email articles.

`X-Zammad-Article-Sender`

Manipulate the sender type (Agent, Customer, or System)
Example: `X-Zammad-Article-Sender: System`

> **Warning:** System Emails are indicated in a similar way as trigger-response like entries Users can't see them natively.
>
> 
>

`X-Zammad-Article-Type`

Change the article type of your incoming mail. This requires you to know which article types are available in your system.
Example: `X-Zammad-Article-Type: phone`

> **Warning:** This header can cause *serious issues* in your instance and may lead to unexpected behavior. Only use with absolute care!

`X-Zammad-Article-Internal`

Manipulate the default article visibility.
Example: `X-Zammad-Article-Internal: true`

`X-Zammad-Ignore`

Tell Zammad to silently drop the Email.
Example: `X-Zammad-Ignore: true`

Control how Zammad **sends and receives email**.

Hint:

Using Gmail / G Suite? Set up a *Google channel* instead.

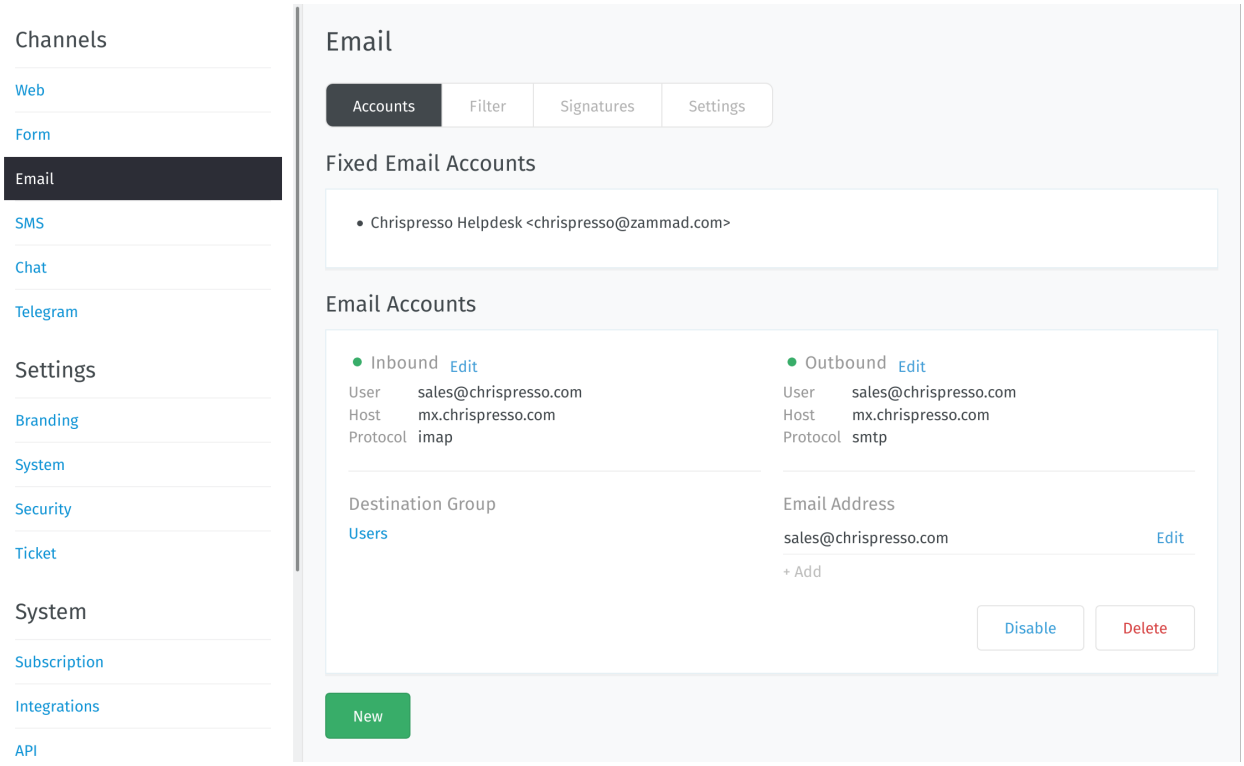
Using Microsoft 365? Set up a *Microsoft 365 channel* instead.

Accounts **Connect Zammad to your email provider** so that it can watch your inbox, send auto-replies, and more.

(Self-hosted users may have already completed this step during new system setup.)

Filters **Make sure new tickets show up in the right place** with automated, if-this-then-that rules for all incoming email.

Signatures Customize signatures for all outgoing email.



Settings Manage options like:

- set the "From:" address on system notifications
- raise the limit on attachment sizes
- modify subject-line prefixes (*e.g.*, use "AW:" instead of "RE:")

Hint: Want to **manually edit email subjects** or **always copy parent messages into your replies**?

Check the *Composer Settings*.

Header manipulation Manipulate auto response behavior or incoming routing.

> **Warning:** This is a very advanced topic.

19.6 Extra Options for Self-Hosted Users

If you're too cool for POP3/IMAP/SMTP…

19.6.1 Watch your inbox with Fetchmail

Maybe you want to add emails via Fetchmail or Procmail to Zammad.

To get this to work you need to pipe your emails to rails.

Note: If you installed Zammad through a package manager (rather than from source), replace `rails r` with `zammad run rails r` below. To learn more, see Administration via Console.

Command line:

```
su - zammad
cd /opt/zammad
cat test/fixtures/mail1.box | rails r 'Channel::Driver::MailStdin.new(trusted: true)'
```

Fetchmail

Create .fetchmailrc:

```
su - zammad
cd ~
touch .fetchmailrc
chmod 0600 .fetchmailrc
```

vi .fetchmailrc:

```
#
# zammad fetchmail config
#
poll your.mail.server protocol POP3 user USERNAME pass PASSWORD mda "rails r
↪'Channel::Driver::MailStdin.new(trusted: true)'"
```

That's it. Emails now will be directly piped into Zammad.

Using Procmail for advanced features like presorting

If you want to do some more with your emails, like presorting to a Zammad group or filtering spam, you can use Procmail.

Fetchmail config looks slightly different.

vi .fetchmailrc:

```
#
# zammad fetchmail config
#
poll your.mail.server protocol POP3 user USERNAME pass PASSWORD mda /usr/bin/procmail is␣
↪zammad here
```

Create .procmailrc:

```
su - zammad
cd ~
touch .procmailrc
```

vi .procmailrc:

```
# --
# Pipe all emails into Zammad
# --
PATH=/opt/zammad/bin:/opt/zammad/vendor/bundle/bin:/sbin:/bin:/usr/sbin:/usr/bin:
SYS_HOME="/home/zammad"
RAILS_ENV=production
GEM_PATH=/opt/zammad/vendor/bundle/ruby/2.4.1/
LOGFILE="$SYS_HOME/procmail.log"
#VERBOSE="on"

:0 :
| rails r 'Channel::Driver::MailStdin.new(trusted: true)'
```

19.6.2 Dispatch messages with Sendmail

Warning: For the initial setup of this you need administrative rights on the Zammad machine (console).

If you try to configure **only** an outgoing email account (as in, you do not wish to set up an incoming IMAP/POP3 account at all), you will find that it's simply not possible via the email channel setup wizard. Instead, you will have to create it via the CLI.

(The wizard is designed to provide an idiot-proof email configuration process for the average, non-technical user, so certain advanced options and use cases have been deliberately omitted.)

To configure Zammad to use sendmail, run the following command (you can use rails r [...] if you installed Zammad from source):

```
zammad run rails r "Channel.create(area: 'Email::Account', options: { inbound: {␣
↪adapter: 'null', options: {} }, outbound: { adapter: 'sendmail' } }, active: true,␣
↪preferences: { editable: false }, updated_by_id: 1, created_by_id: 1)"
```

Now, you should see a new **Email Account** entry in the admin settings panel:

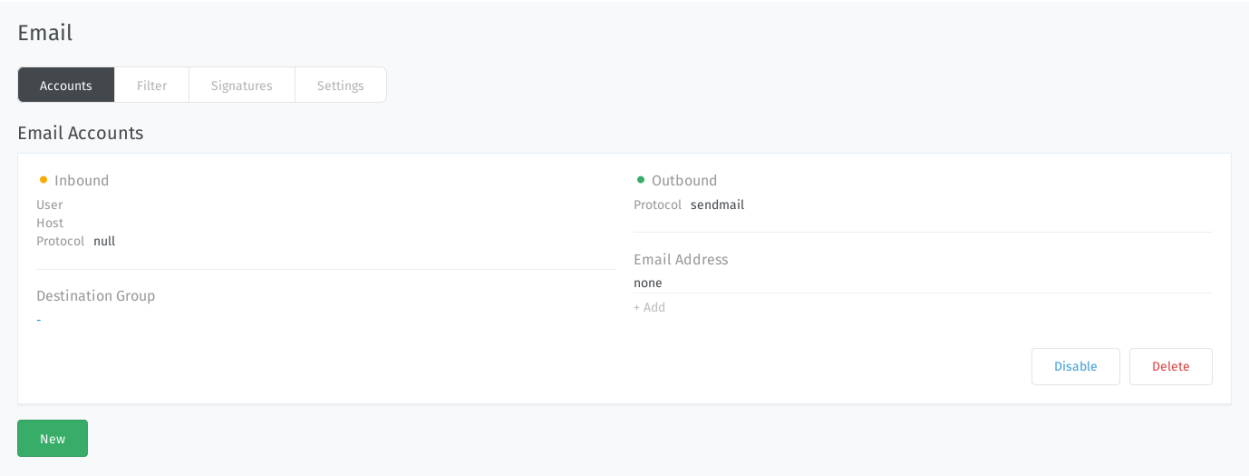


Fig. 6: Use the **Add** button under the **Email Address** heading to add new email addresses to send from.

CHAPTER

TWENTY

CHAT

Chat has gotten very important for company and overall customer support. If used properly, support via chat can be a real efficiency booster. A downside of chats is when nobody responds or a bot responding to the customer.

20.1 How to improve Support by Chat?

We've asked others about their opinion in our circles, to learn what people expect or dislike. This is what we found out:

Good experiences

- Getting personal support by a human being
- Getting a fast response
- Solving my problem quickly

Bad experiences

- A chat window on a website (while the chat being offline) with the hint to "Leave a message"
- Long waiting queues before even writing with a personal
- Receiving a message like "My name is Nina, what can I do for you?" after sending a message with my issue.
- A Chat that doesn't integrate itself into the Website properly

20.2 Our answer: The Zammad Chat Widget

The task is clear: Work on the disadvantages of a regular support chat and improve them.

Our approach is as follows

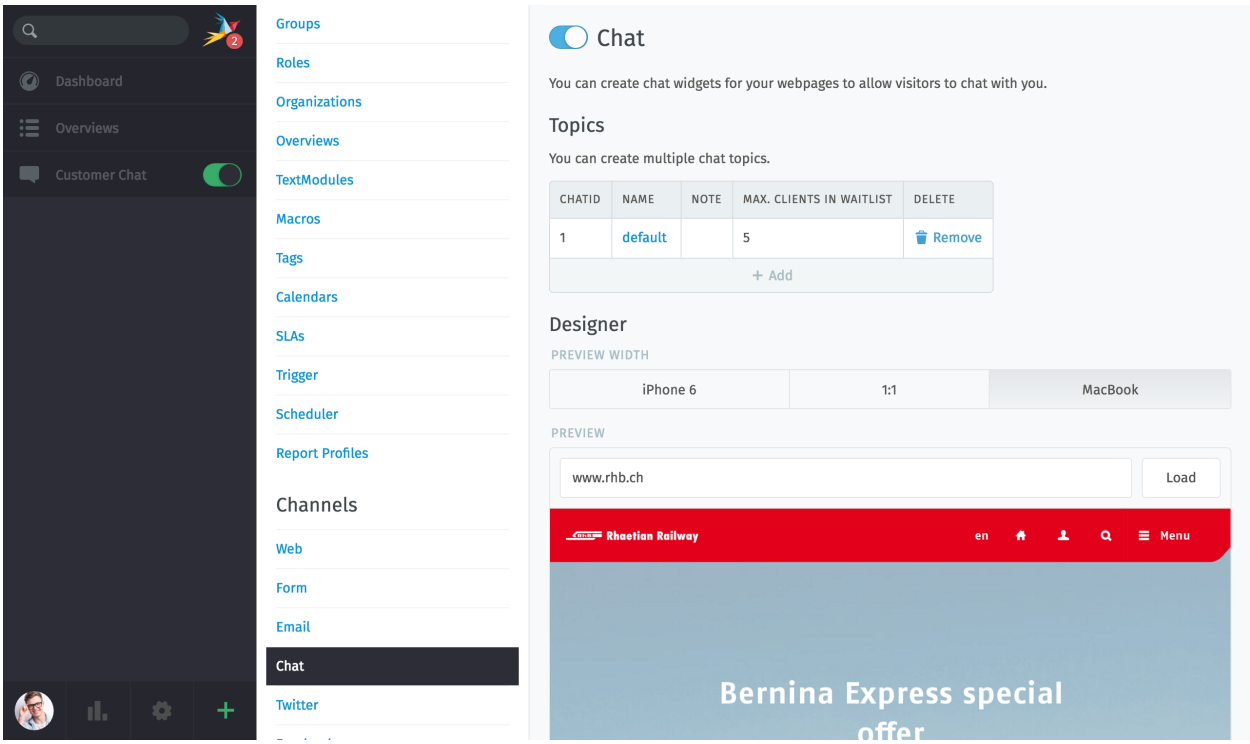
- We'll only display the chat widget, if at least one agent is available and the agent still has capacity.
  - If no agent is online or the agents are absend, the chat won't be available
- We're setting an agent as inactive, if the agent doesn't accept new chat requests or the WebApp is offline. This way, your support staff can take breaks without your customers waiting ages for a reaction (see point above)
- Zammad does not respond to chat messages on it's own to ensure that there's no strange delay coming afterwards. Zammad will fire a (configurable by agent) auto response as soon as the agents accepts the Chat request.

- Zammad will try to adapt your main website colors to the chat. You can also adjust those colors allowing you to integrate the chat into your website, like it has been there before.

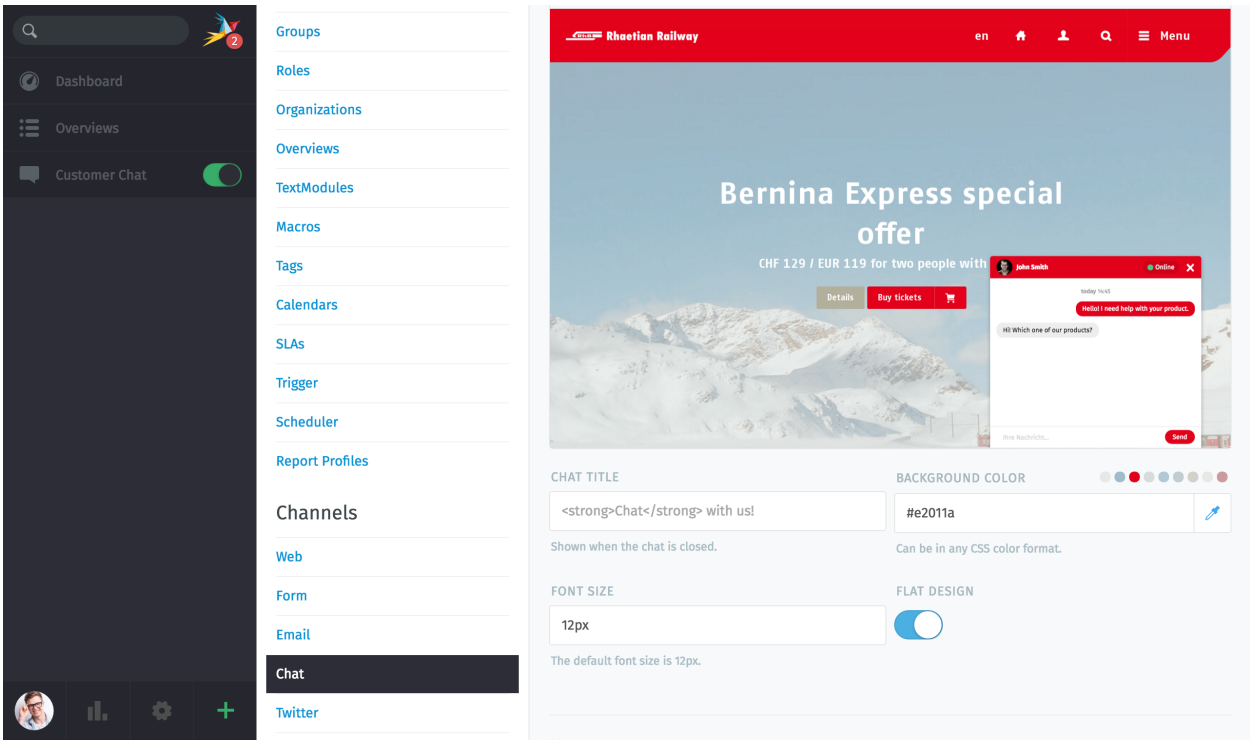
20.3 Configuration of the Chat widget

You can create chat widgets for your web pages to allow visitors to chat with you.

The area for configuring the chat can be found in the admin area at Channels → Chat:

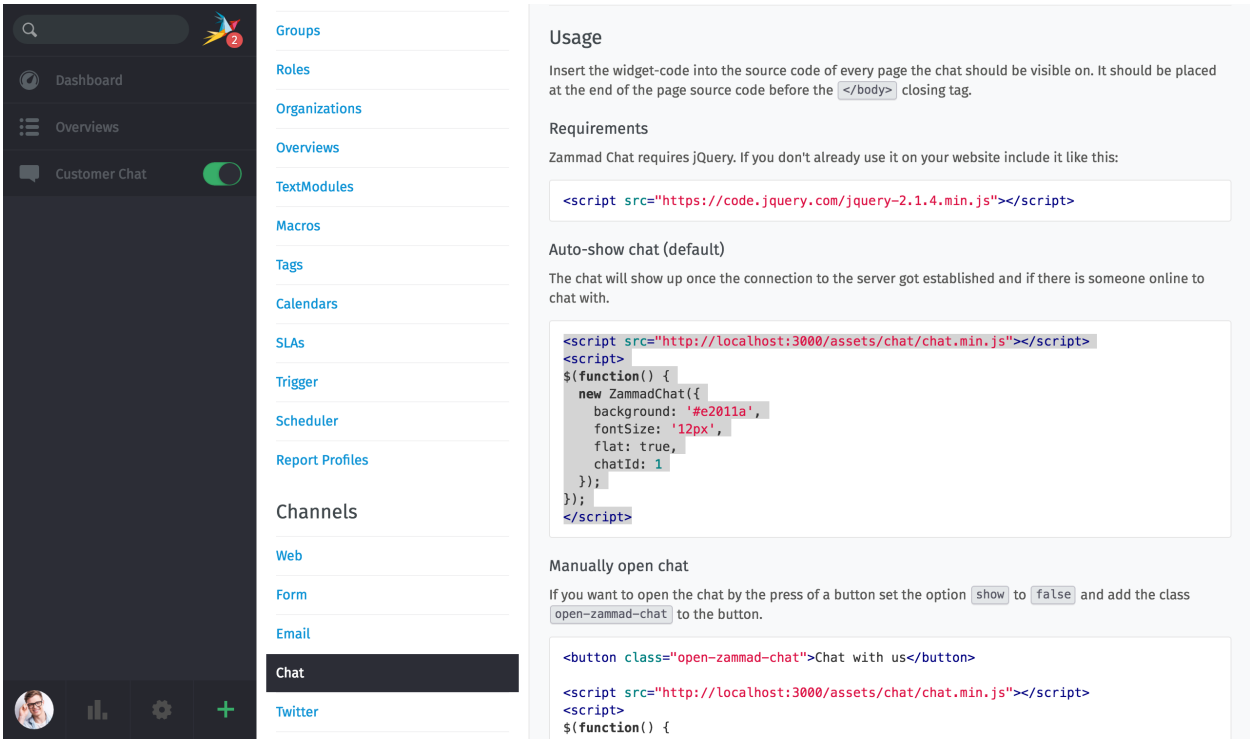


You can set up chats for different websites and edit them independently. The integrated designer helps the chat-widget to adapt to the website color. If you don't like the proposed design, you can manually adjust the design. Through the different previews you have the possibility to display directly how the presentation looks on different devices.



Usage

Insert the widget code into the source code of every page on which you want the chat to be visible on. It should be placed at the end of the page's source code before the </body> closing tag.



Result

The final result will look like the following:

Requirements

Zammad chat requires jQuery. If you don't already use it on your website include it like this:

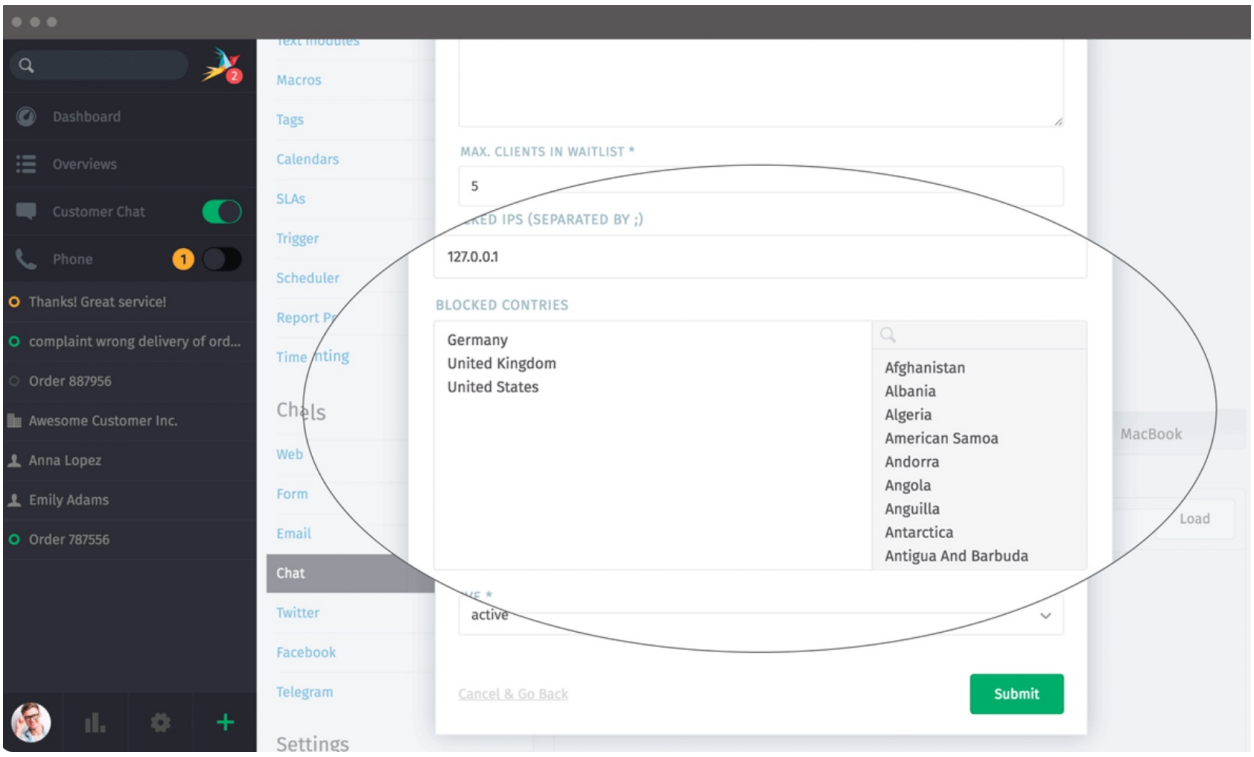
```
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
```

You have two options to implement the chat on your website:

- Automatically show chat (that's the default-setting)
- or manually open chat.

Chat restrictions

You offer a chat for your target group, but you don't want to activate chat for certain IP addresses or countries? Then you have the possibility to block the wished IP addresses and countries fast and easily via the chat configuration in the admin panel. The configuration panel looks like this:



You can also find more information about the chat customization in the admin area.

CHAPTER

TWENTYONE

GOOGLE

21.1 Accounts

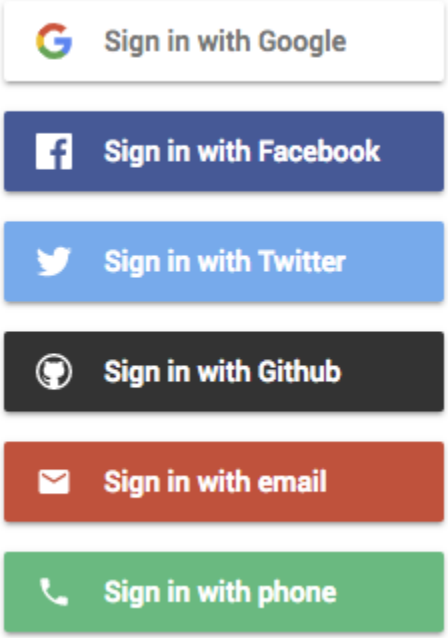
21.1.1 Register an OAuth App

Setting up a new Gmail / G Suite account? Because of Google's strict security policies, it's not as simple as entering your username and password.

First, you'll have to connect Zammad to your Google account as an **OAuth app** via the Google Developer settings panel. Once that's done, you'll be able to connect as many Gmail accounts to Zammad as you want, using only active Gmail browser sessions (no usernames or passwords required).

Note: What the heck is OAuth?

If you've ever used a website that lets you "Sign in with Google/Facebook/Twitter", you've used OAuth. OAuth is a way for you to let a third-party website see a tiny slice of your Google/Facebook/Twitter account data without giving them your password (which would let them see *everything*).



When a third-party website wants to use OAuth, it has to **register with the provider first** (*i.e.,* Google). This way, the provider knows who's receiving its users' data, and can give users a way to revoke access if they change their minds.

In this case, **Zammad is that third-party website**. That's why adding a Gmail account is a two-stage process: first, you have to register Zammad as a website that wishes to access Google user data; then, you have to add yourself as a Google user who agrees to let Zammad fetch your email.

Step-by-Step

To get started, head over to Google's Developer settings panel.

1. **Create a new project**

   For the purposes of this guide, a "project" and an OAuth app are the same thing. You may name it whatever you wish.

2. **Enable & add the Gmail API**

   Use the **Enable APIs and Services** button to start your search.

3. **Set up the OAuth consent screen**

   Configure who can use your app, what kind of access it's asking for, and a few fine print details (like a link to Zammad's privacy policy).

   This information will be displayed in the process of connecting a Gmail account to Zammad, when users are redirected to Google for sign-in/confirmation.

   User Type This option is only available to G Suite users.

   If you have the option, choose **Internal** (unless you plan on creating channels for Gmail addresses from outside your G Suite domain).

   Scopes for Google APIs Add **Gmail API: https://mail.google.com**.

4. **Generate OAuth credentials**

   Click on **Create credentials > OAuth client ID** to begin.

   Application type Choose **Web application**.

   Authorized redirect URIs *E.g.,* `https://your-domain.com/api/v1/external_credentials/google/callback`

   Find it in the Zammad admin panel under **Channels > Google > Connect Google App > Your callback URL**.

5. **Connect your Google app in Zammad**

   Copy your new OAuth app's credentials (**client ID** and **client secret**) into Zammad in the admin panel, under **Channels > Google > Connect Google App**.

Congratulations! Now you're ready to connect Gmail accounts to Zammad.

Troubleshooting

My OAuth credentials stopped working all of a sudden Did you recently reset your Google password?

(Google invalidates all your OAuth tokens whenever you change your password. Generate a new one per Steps 4 and 5 above.)

21.1.2 Account Setup

After you've *registered Zammad as an OAuth app* in your Google Developer settings, you can begin connecting Gmail accounts to Zammad.

But first, a word of warning! The import process does things you might not expect:

> **Danger: Zammad will delete all emails in your inbox during the import process.**
>
> Use the *Keep Messages on Server* setting to *disable this behavior*.

> **Warning: Zammad will send an auto-reply message to every email it imports.** (Including the old ones!)
>
> Make sure to *disable this behavior* prior adding an email account, and to turn it back on once all your messages have been imported.

Migrate an Existing Email Channel

If you've already added your Gmail account as a regular email channel, you'll have to convert it to a Google channel eventually: Google is planning to end support for simple password authentication in third-party email clients (like Zammad). **But there's no rush just yet**.

Upcoming versions of Zammad will feature an automated migration wizard to help you make the switch, and it'll be available well before Google officially pulls the plug on password auth.

Hint: If you'd prefer not to wait, you can do it manually today—just remember to **delete the email channel for your Gmail account** (and all its associated aliases) before re-adding it here.

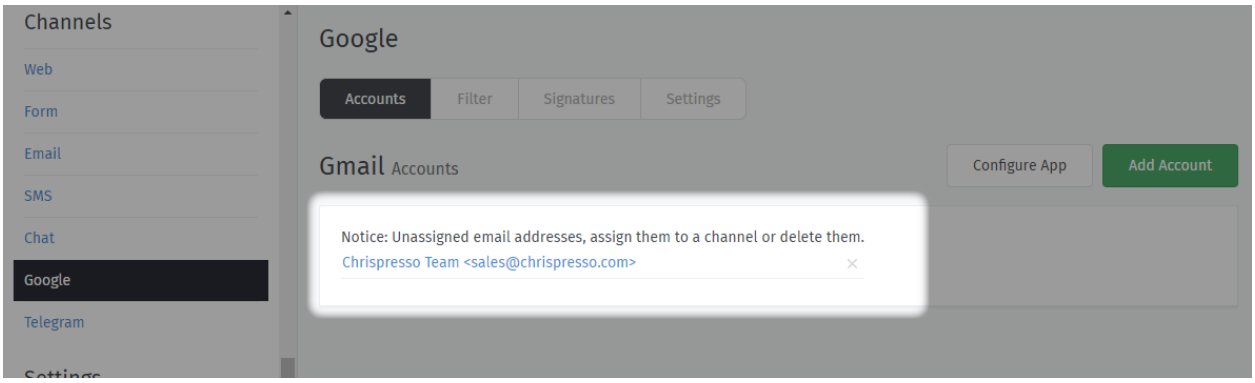


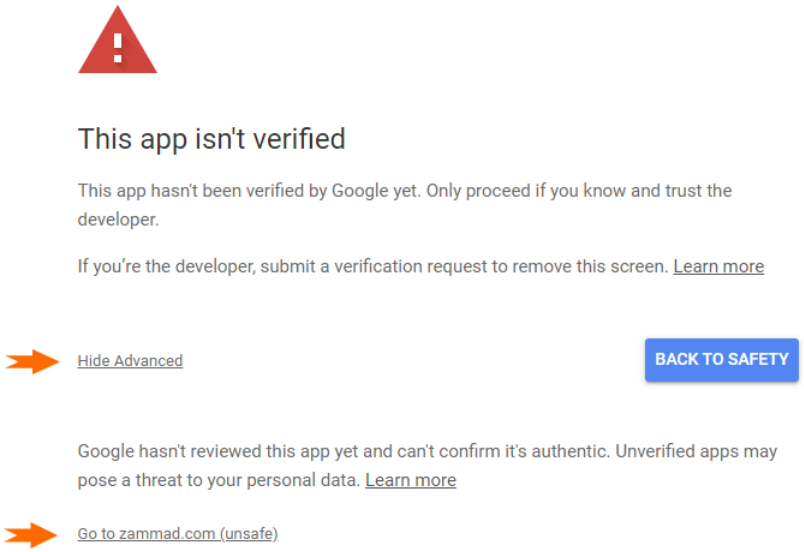
Fig. 1: Make sure you don't have any of these left over before creating your new Google channel.

Add a New Account

Click **Add Account** to connect your Gmail / G Suite accounts to Zammad. You will be redirected to a Google sign-in and confirmation page.

Any aliases registered in your Gmail settings will be imported automatically.

Note:



Google has a stringent verification process to protect users from third-party websites that use OAuth to access their data. Since you *are* the third-party website here, you can safely ignore this warning.

Channel

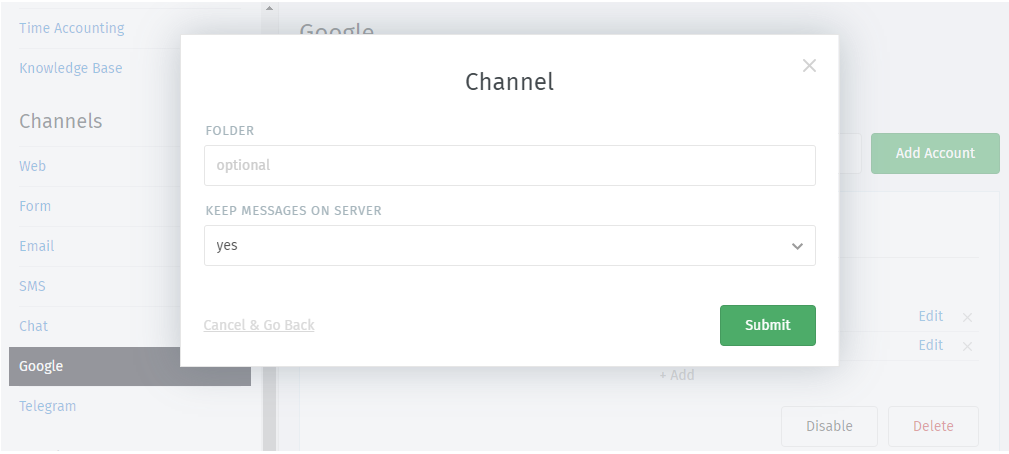
Folder Specify which folder (or *label*) to fetch from, or leave empty to fetch from `INBOX`.

If specifying a nested folder, be sure to use the full path; *e.g.*, `Inquiries/Tech-Support`.

Keep messages on server Specify what happens to your emails after Zammad imports them:

- `no` Zammad deletes all imported messages
- `yes` Zammad marks imported messages as read

  (With this option, Zammad will only import unread messages. This means Zammad may miss messages if the mailbox is externally modified.)



Note: Why does Zammad delete messages by default?

If you never clean out your inbox, it'll eventually reach its storage limit, and your mail server will start **rejecting incoming messages**. Most Zammad users never even look at their inbox once it's set up, so they rely on Zammad to keep it clean for them.

If you choose **yes** here, remember that it's your responsibility to clean out your inbox from time to time to keep it below its storage limit.

Troubleshooting

I successfully added my account, but Zammad isn't fetching new email If you specified a *custom folder/label to fetch from*, are you sure incoming mail is arriving in that folder?

Note: Secondary addresses in Google channels work (almost) **just like they do in email channels**, so this article is lifted (almost) verbatim from *here*.

21.1.3 Secondary Addresses

Secondary addresses (also known as *aliases*) allow you to send emails with a different "From:" address from the one on the account.

Fig. 2: Once you add a secondary address, you can configure a group to start sending emails with it.

Warning: Secondary addresses must be added and verified in your Gmail settings first.

Gmail has its own process for adding and verifying aliases (under **Settings > Accounts and Import > Send mail as**). If you add an alias here before adding it in your Gmail settings, Google will refuse to dispatch it.

G Suite users may need to contact their administrators in order to add aliases in their Gmail settings.

Your email provider may also be set up to *receive incoming messages* for many addresses in the same mailbox. If this is the case, be sure to add your alternate inbox addresses here.

Display Name The display name used for outgoing email.

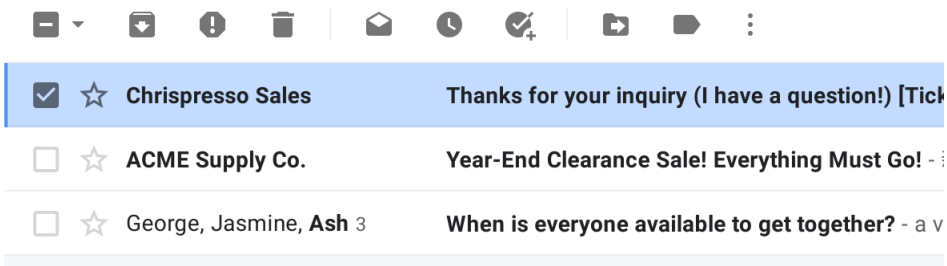


Fig. 3: A customer's inbox with an auto-reply from **Chrispresso Sales**.

Email display names value can be *further customized in the Settings tab*.

Email The alias address to send outgoing messages as.

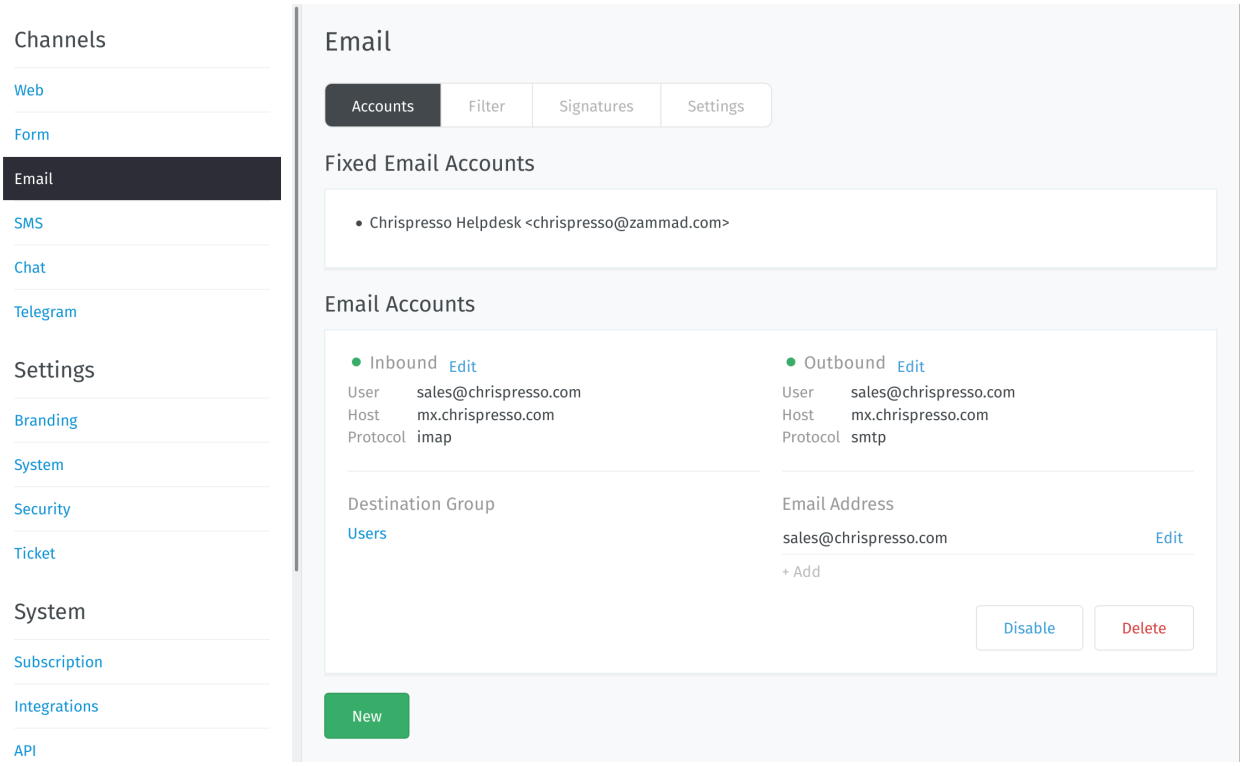
Channel The email account to be used when sending outgoing messages from this alias.

Note Optional. Only visible from this dialog, the REST API, and the Rails console.

Note: Managing accounts in Google channels is (almost) **just like it is in email channels**, so this article is lifted (almost) verbatim from *here*.

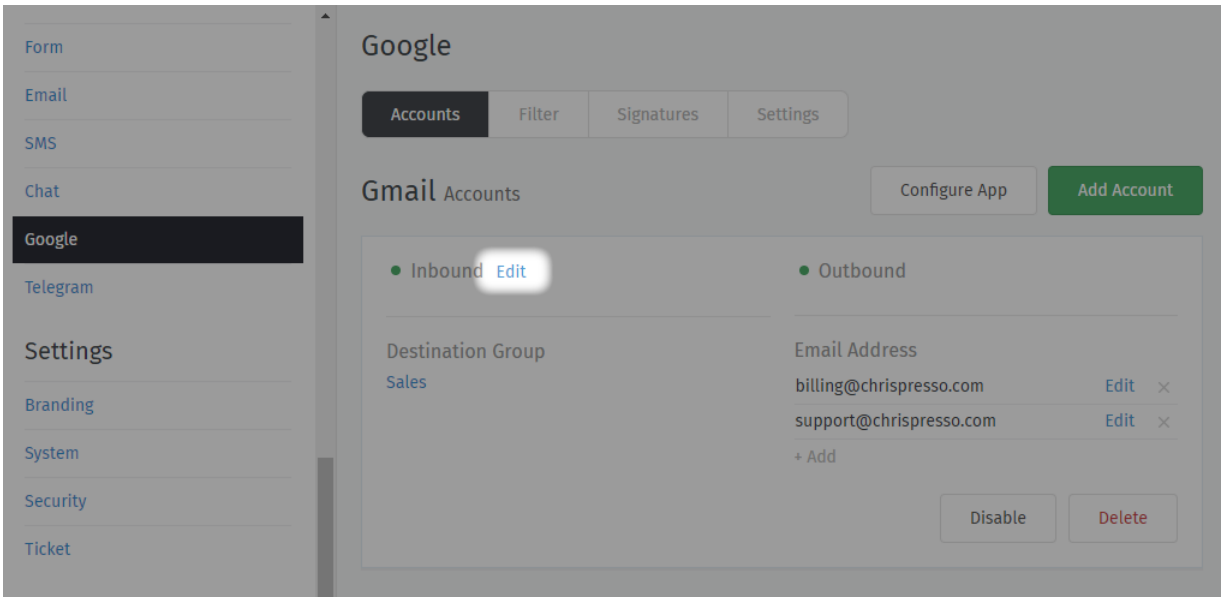
21.1.4 Managing Accounts

Once an account has been added, use the Accounts panel to edit its configuration.

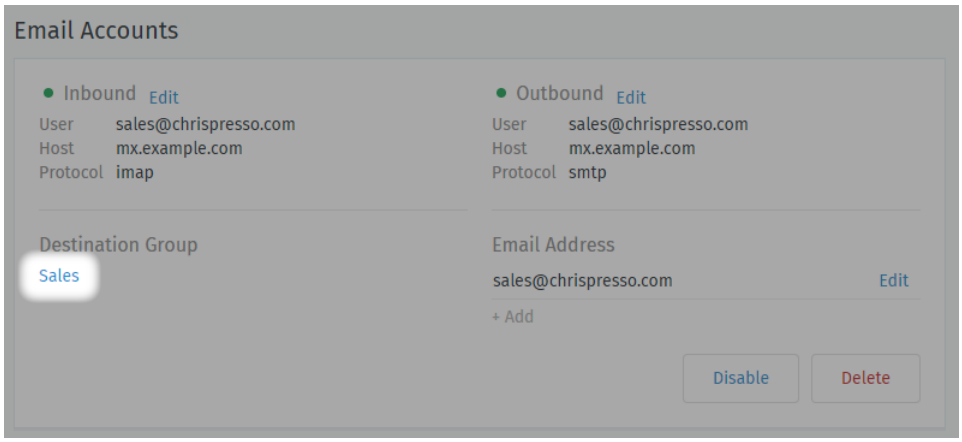


Fetch Preferences Click **Edit** on inbound account details to change how messages are retrieved from your account.

See *New Account Settings* for a detailed description of each option.



Destination Group Click on the group name to reassign the account.



Only **active** groups will be displayed.

Changing this setting will not reassign existing tickets to the new group.

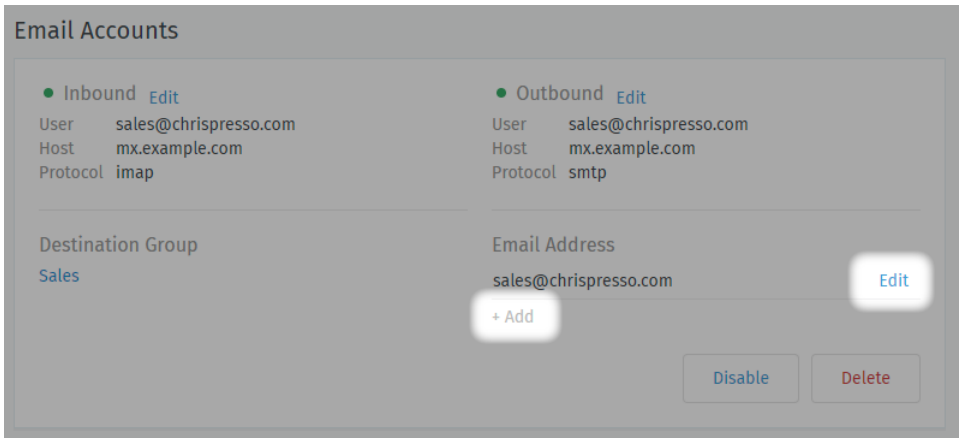
Hint: Still can't send outgoing email tickets? Check your *group settings*.

Email Address Use the **+ Add** or **Edit** buttons to set up secondary addresses on this account.

See *Secondary Addresses* for a detailed description of each option.

Enabled / Disabled Disabling an account temporarily prevents Zammad from importing its messages.

This may be necessary during scheduled maintenance or when migrating your installation to a new host.



Note: Disabling an account disables *outgoing* messages for it, as well.

Delete Deleting an account removes its configuration from Zammad entirely.

Note: Additional Steps Required

Groups need an assigned an address to send outgoing emails. If you delete a group's assigned address, agents belonging to that group won't be able to send emails until you assign it a new one.

(There's no need to manage orphaned email addresses like you would on an email channel. In Google channels, aliases are connected to your Gmail account, which means they can be imported and purged automatically.)

Register an OAuth App Use the **Connect Google App** dialog to register Zammad as an OAuth app on Google.

(This step is **required**; read on to learn why.)

Account Setup Use the **Add Account** dialog to connect your account.

Secondary Addresses Send and receive email at **additional email addresses**, all through the same mailbox/account.

Managing Accounts Edit the configuration of existing accounts in the **Accounts Panel**.

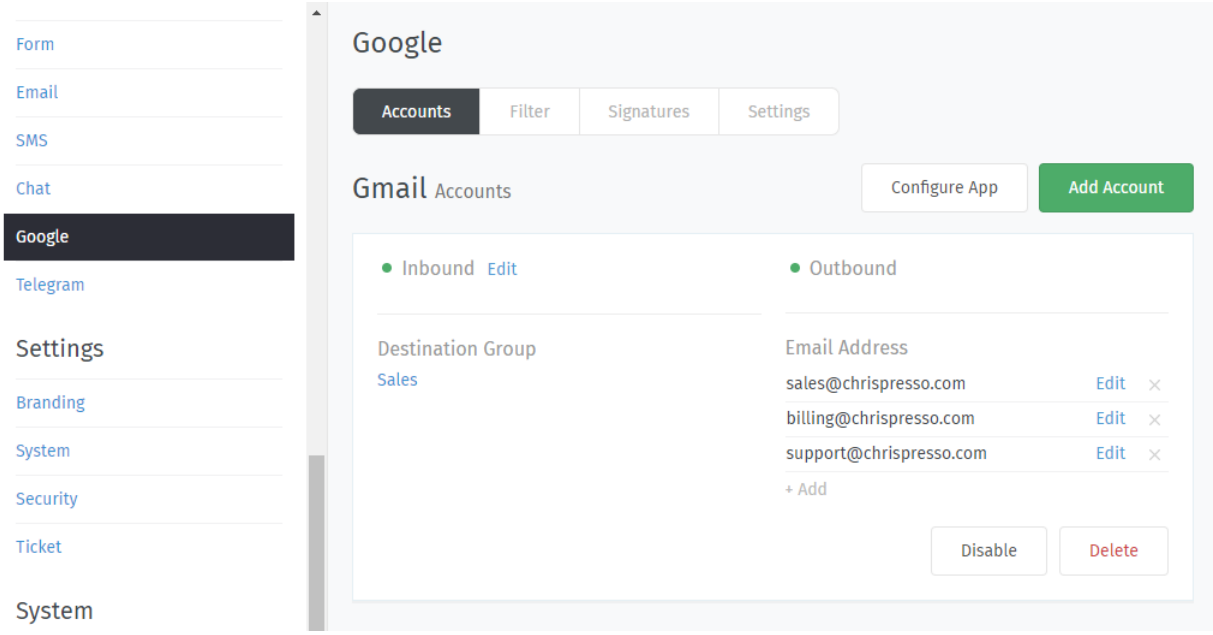
Note: How do I use my Gmail account for outgoing system notifications?

On **subscription/cloud-hosted instances**, you can't. Notifications will always come from "Notification Master <noreply@your.zammad.domain>".

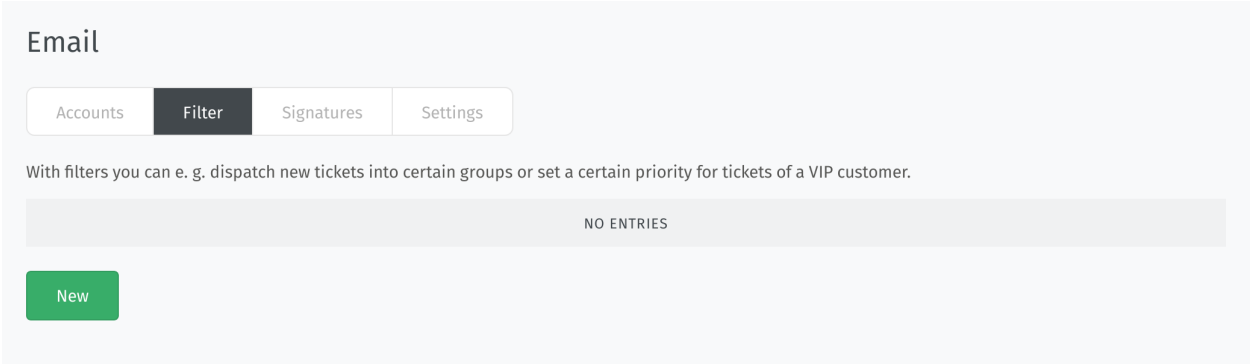
On **self-hosted instances**, we still don't recommend it. Using a Gmail account for automated, outgoing messages is risky: users who exceed Google's email sending limits can have their accounts suspended.

Set up a generic *email channel* instead, the use the *Email Notification* setting.

Note: Filters in Google channels are **just like filters in email channels**, so this article is lifted verbatim from *here*.



21.2 Filters



Postmaster filters allow you to match email headers (e.g. `From`, `To`, `Subject`, `X-Spam-Flag` etc.) and execute a set of actions whenever Zammad's email parser encounters a matching email. The actions will be applied to the ticket that is created or updated by this email. Here are some examples of what is possible with filters:

- Automatically dispatch tickets into certain groups:

  For example, tickets from `amazon.com` could automatically be dispatched to the Purchasing group.

  From: contains: `regex:(\.|@)amazon\.com`
  Group: Purchasing

  Note: Note that the Group action only has an effect when the matching email results in a new ticket. Zammad will not change the group of existing tickets.

- Automatically increase the priority of tickets from a VIP customer:

  From: contains: `ourvipcustomer@example.com`
  Priority: 3 high

  Note: Note that the Priority action only has an effect when the matching email results in a new ticket. Zammad will not change the priority of existing tickets.

- Automatically tag and close spam tickets that have been marked as spam by an external spam filter (e.g. SpamAssassin):

  X-Spam-Flag: contains: `YES`
  Tag: add: `spam`
  State: closed

  Note: Note that the State action only has an effect when the matching email results in a new ticket. Zammad will not change the state of existing tickets. It will add the tag though if it missing, even if the mail is an update to an existing ticket.

The following actions are only effective when creating tickets: Group, State, Priority, Owner.

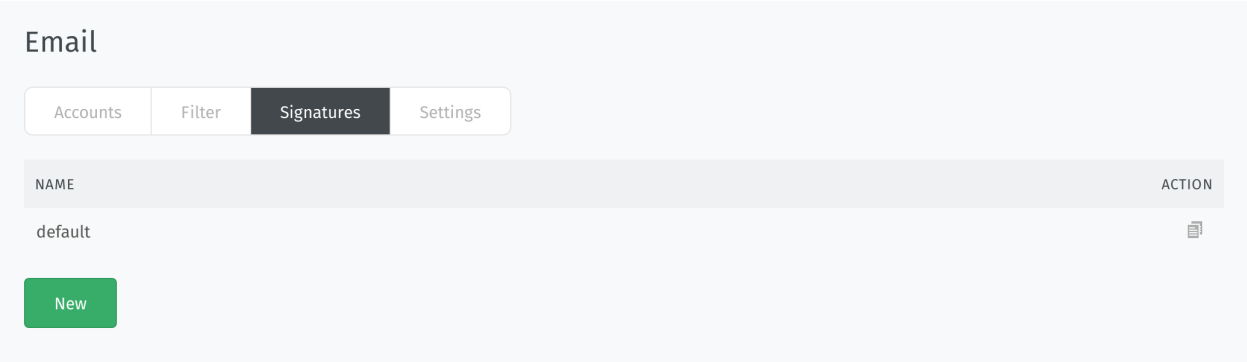
Different attributes of a filter can be combined with each other. Likewise, the following actions can be combined. The supported matches are "contains" and "contains not"; for advanced matching, you can use regular expressions by prefixing the string with `regex:`.

Note that Zammad matches against the full header, e.g. for a mail with "`From: Display Name <display.name@example.com>`", the `From` condition will test against "`Display Name <display.name@example.com>`". This is especially important when using anchored regular expressions; `regex:^display\.name@example.com$` would not match this mail!

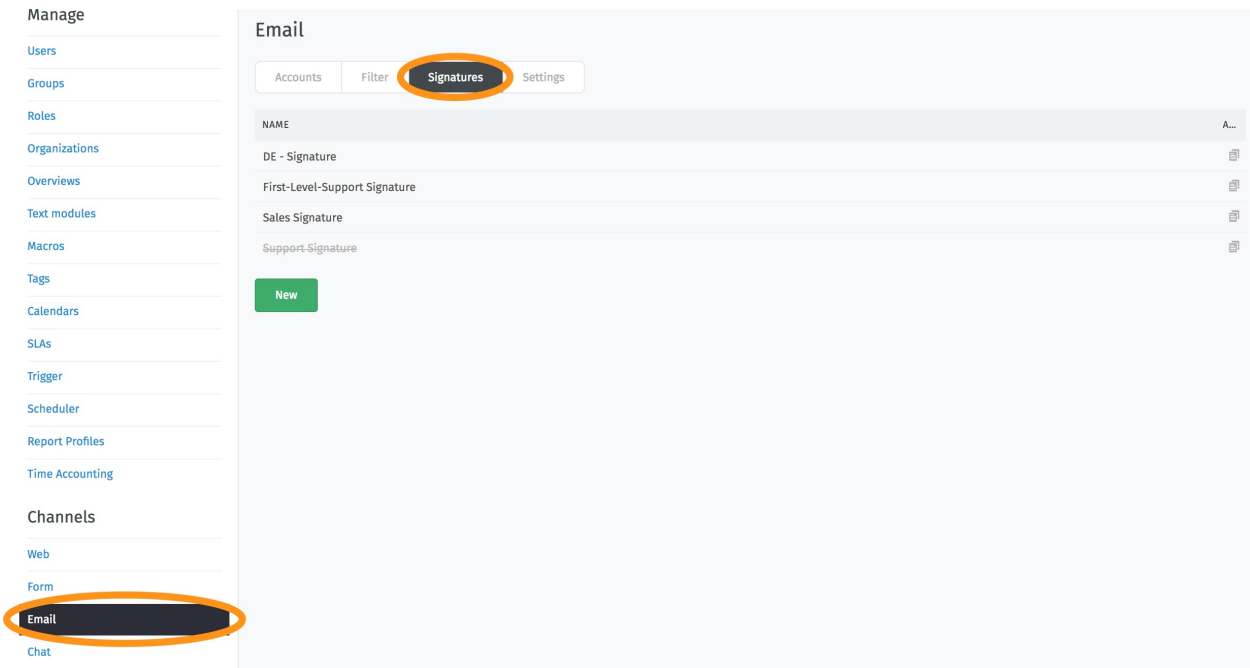
It should be borne in mind that the combined attributes build on each other. If a filter is no longer needed, it can either be temporarily set inactive or deleted directly.

Note: Signatures in Google channels are **just like signatures in email channels**, so this article is lifted verbatim from *here*.

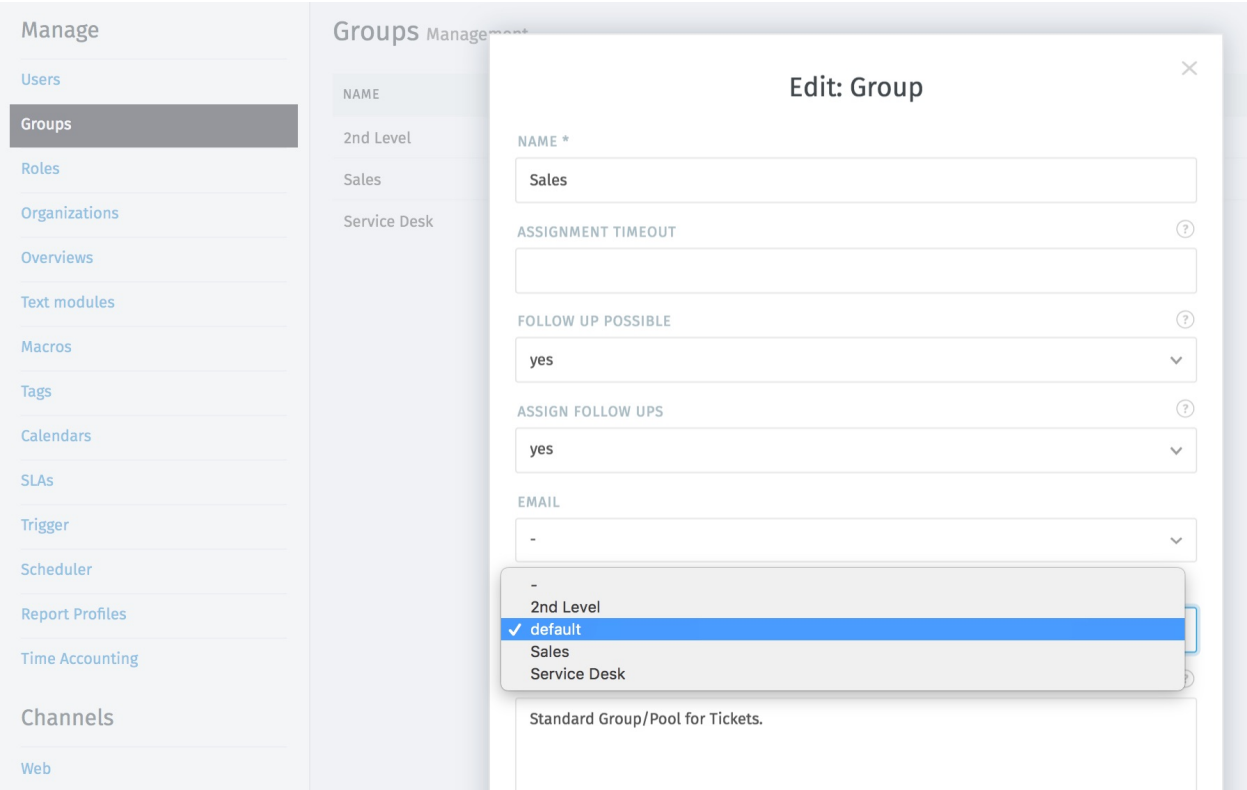
21.3 Signatures



You can create a separate signature for each group in Zammad. The individual signatures can be created and edited here:



Afterwards, the existing (and active) signatures are available in the group editing mask:

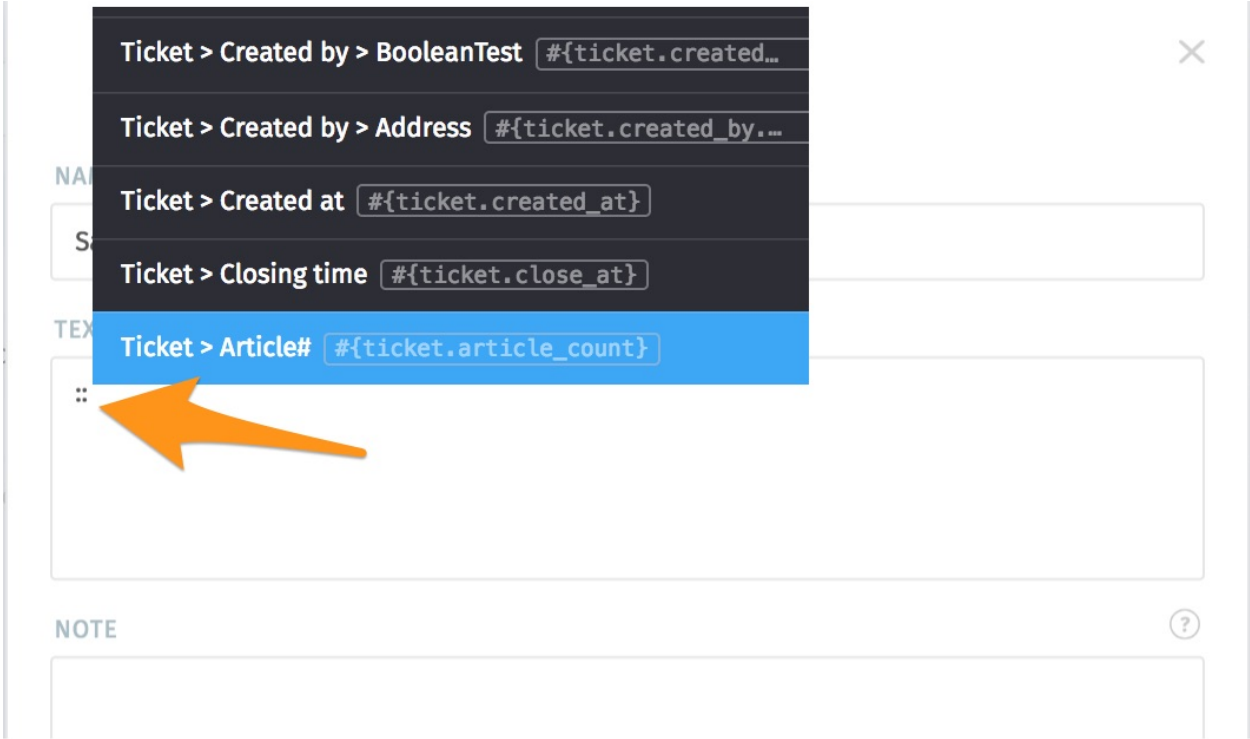


Each group can be assigned its own signature, but they can also all use the same signature.

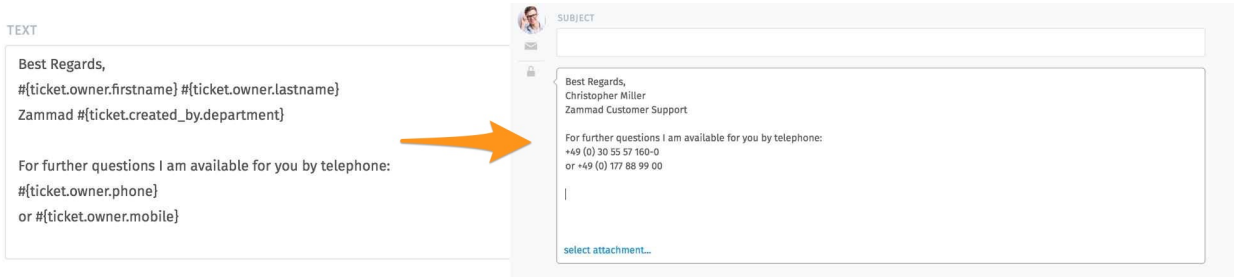
21.3.1 Dynamic Signatures

To individualize the signatures, it is possible to automatically load specific information into a signature via *Variables*. All information stored on the ticket, assigned customers or agents can be inserted. This makes it possible to design the signature individually. To load a list of available variables, enter two colons (`::`) into the *Text* box of the signature editor.

Hint: Please keep in mind that specific information might not be available during ticket creation. The best example here is the ticket number / id. Specific information are created with submitting the ticket and thus are not available before submitting.



Here is an example of a signature with variables and the result when you write a mail:

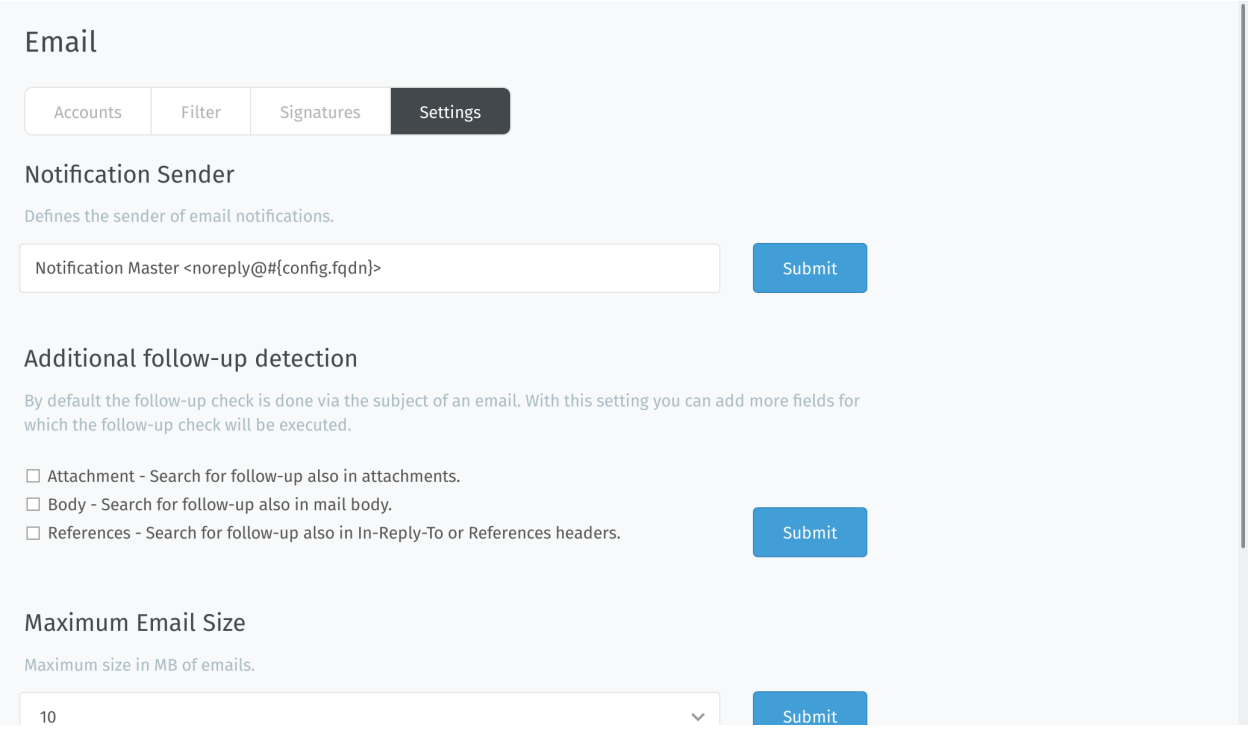


Note: Settings in Google channels are **just like settings in email channels**, so this article is lifted verbatim from *here*.

21.4 Settings

Below you can find the currently available email-related settings. Most of these settings have default values which can be found in this list as well.

Note: Some email-related settings are ticket-based settings, which is why they can be found in the *Composer Settings*.



21.4.1 List of Settings

Notification Sender: Default value `Notification Master <noreply@#{config.fqdn}>` This is the default sender address for Zammad that affects all mails but those generated because of replies (like triggers or agent-based mails). Your customers normally will not see this address. This email address does not need to receive and can't be assigned to a group.

> **Note:** This address is relevant for agent notifications and password reset mails (also affects customers).

Additional follow-up detection In some situations the normal follow-up detection is not enough. This might be due to missing references in the subject (the ticket hook and number). These options can help to recognize follow-ups to existing tickets.

> **Note:** Please note that searching in attachment and body might lead to false follow-up detections.

Maximum Email Size: Default value `10 MB` This one is pretty obvious: It defines the maximum allowed size of an email Zammad will fetch. Zammad will not fetch Mails that are bigger than this option.

> **Hint:** This technically also affects attachments for articles.

Send postmaster mail if mail too large: Default value `yes (enabled)`

> **Note:** Upgraded installations will, by default, have the value set to `no (disabled)`.

Option set to `yes` This setting will cause Zammad to automatically reply to mails that exceed the above mail

size limit with a postmaster style mail. This will help your user to understand that his mail did not arrive and won't be reviewed by you.

Note: Zammad will still download and remove (if enabled) the mail from the mailbox. Instead of importing it to the database, it will save the affected mail to `/opt/zammad/tmp/oversized_mail/`.

Option set to `no` If the option is set to no, Zammad will not reply to mails that are too big. Your customer will **not notice** that the mail was too large! Instead, Zammad will use the monitoring endpoint to alert its administrators that it can't fetch a too large mail.

Learn more about *Monitoring*.

Sender based on Reply-To header: Default value `not set (-)` This setting decides how Zammad should recognize its customers from emails that contain a `Reply-To` header. This comes in useful if you're working with contact forms that need to use reply to headers.

Option set to `-` or `Take reply-to header as sender/from of email` This setting will overwrite the initial `FROM` to the value used in `Reply-To` completely.

Option set to `Take reply-to header as sender/from of email and use realname of origin from` This setting will partially overwrite the initial `FROM`. It uses the mail address from the `Reply-To` header and uses the given name of the `FROM` header, if given.

Customer selection based on sender and receive list: Default value `yes` This option decides how Zammad should react if an agent sends a email to it.

Option set to `yes` The first user / email address from the recipient list will be used as the ticket customer.

Option set to `no` The agent will be set as ticket customer.

Note: Currently agents can't be customers within the UI. While Email communication works, agents can't see their own tickets (as a customer) if they don't have access to the group.

Block Notifications With the regex that can be defined here, you can ensure not to send any notifications to specific systems. By default this especially affects typical system addresses which can't receive emails anyway.

The default value is: `(mailer-daemon|postmaster|abuse|root|noreply|noreply.+?|no-reply|no-reply.+?)@.+?`

Sender Format: Default value `Agent + Format Seperator + System Address Display Name` This configures the display name used in the `FROM` header of mails Zammad sends.

Note: This does not affect Notification mails (to agents) and password reset mails. Emails that are not sent by agents (e.g. trigger-based notifications) will always fallback to `System Address Display Name` if needed.

Option set to `Agent + Format Separator + System Address Display Name` This will cause Zammad to set the `FROM` header to agent name and the channel's display name, divided by a separator (configured below).

Example: `Christopher Miller via Chrispresso Inc.`.

Option set to `System Address Display Name` This will cause Zammad to always use the display name of the used channel in the `FROM` header.

Example: `Chrispresso Inc.`

Option set to `Agent Name` Zammad will use the agent's name which is very personal.

> **Tip:**
>
> Usually you'd also want to remove the ticket slug from the subject in those cases.
> Learn more in *Settings → Ticket*.

Sender Format Seperator: Default value `via` This is a can be a string you can freely choose. It divides the agent's name and the display name of the channel whenever needed.

Ticket Subject Forward: Default value `FWD` The above string will be used on the subject if you forward an email from Zammad.

> **Note:** `:` will be automatically appended to the above string.

Ticket Subject Reply: Default value `RE` The above string will be used on the subject if you reply to a mail from Zammad.

> **Note:** `:` will be automatically appended to the above string.

Ticket Subject Size: Default value `110` This setting enforces a maximum length for subjects when replying. If the subject you're using for your reply is too long, Zammad will automatically truncate the length and insert `[...]` to show it has shortened the subject.

Example: `RE: Test somew[...] [Ticket#123456]`

> **Note:** This does **not** limit ticket titles within the UI, just the subjects when replying to an email.

21.4.2 Enhanced settings

Some less relevant settings can be changed via rails console if needed. As an example, Zammad allows you to send all outgoing communication to a BCC address for archiving reasons if needed. You can find the needed commands within the advanced customization settings.

> **Note:** EMail header manipulation in Google channels work **just like in email channels**, so this article is lifted verbatim from *here*.

21.5 Email header manipulation

Email header manipulation allows you to re-route or adjust tickets apart from filters or triggers. Like an API call, but with emails.

Header checks are case insensitive.

Warning: Trusted channels required

Below options are a potential risk with external communication and thus require channels being set to trusted explicitly.

Tip: Below headers are examples and –in our opinion– the most relevant ones. However: You can adjust mostly any article or ticket attribute (yes, custom ones as well) if you know the attribute's exact name.

The name column within *object's management* provides easy access to objects attribute names.

21.5.1 Trigger auto responses

Normally Zammad runs internal checks to see if an email is an automatic response. In these cases Zammad will not send trigger based responses.

There may be use cases where this behavior may be in your way, below options allow you to overcome this issue.

Note: In some cases combining below headers is crucial. This is intentional but may be confusing.

`x-zammad-send-auto-response` Set to `false` to disable trigger based responses. If set to `true` Zammad will send a response.

Hint: This option *does not* work if e.g. `precedence: list` is set unless you use below auto response header as well.

`x-zammad-is-auto-response` Providing this header allows you to tell Zammad that the mail in question is an auto generated response (`true`). This will cause email based triggers to be skipped.

Set this header to `false` if you want to generate auto responses.

Tip: This header allows you to overwrite auto detects for e.g. `precedence: list`.

21.5.2 Ticket attributes

Zammad allows you to use headers to manipulate ticket creations or follow ups. The manipulation can be used instead of triggers. Triggers are considered *after* header settings and thus can still overrule.

Note: Zammad differentiates between ticket creation and follow up

For creations use: `X-Zammad-Ticket-{Attribute Name}`
For follow ups use: `X-Zammad-Ticket-FollowUp-{Attribute Name}`

This allows you to ensure the changes are only applied in the required situation.

Warning: About values

- While headers are not case sensitive, values like e.g. priority names are case censitive: `1 low` will work, but `1 lOw` will not!
- When using attributes that require date / time values, ensure to use Time Zoned Times. e.g. for 28th September 2021 on 8 am CEST, either use:
  - `2021-09-28T08:00:00+0200`
  - `2021-09-28T08:00:00+02:00`
  - `2021-09-28T06:00:00.000Z`

X-Zammad-Ticket-Priority & X-Zammad-Ticket-FollowUp-Priority

Allows you to adjust a ticket's priority.

Example: `X-Zammad-Ticket-Priority: 1 low`

X-Zammad-Ticket-Group & X-Zammad-Ticket-FollowUp-Group

Allows you interfere with regular channel routing of the ticket.

Example: `X-Zammad-Ticket-Group: Sales`

X-Zammad-Ticket-Owner & X-Zammad-Ticket-FollowUp-Owner

Directly assign or change the ticket owner. Valid values are either `login` or `Email`

Example: `X-Zammad-Ticket-Owner: jdoe`

X-Zammad-Ticket-State & X-Zammad-Ticket-FollowUp-State

Set a specific ticket state.

Example: `X-Zammad-Ticket-State: closed`

Note:

Pending states always require the `pending_time` attribute on top.

Like so: `X-Zammad-Ticket-Pending_Time: 2021-09-26T08:00:00+0200`

X-Zammad-Customer-Email

Manipulate the ticket customer - this can be a different user than the actual sender. Replying to the original sender is still possible.

Example: `X-Zammad-Customer-Email: jdoe@example.com`

Note: This header is not available for follow ups.

X-Zammad-Customer-Login

Manipulate the ticket customer - this can be a different user than the actual sender. Replying to the original sender is still possible.

Example: `X-Zammad-Customer-Login: jdoe`

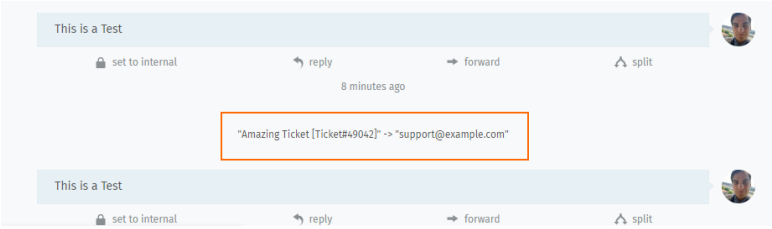
Note: This header is not available for follow ups.

21.5.3 Article attributes

If needed Zammad allows you to manipulate attributes or states of fetched email articles.

`X-Zammad-Article-Sender`

Manipulate the sender type (Agent, Customer, or System)
Example: `X-Zammad-Article-Sender: System`

> **Warning:** System Emails are indicated in a similar way as trigger-response like entries Users can't see them natively.
>
> 
>

`X-Zammad-Article-Type`

Change the article type of your incoming mail. This requires you to know which article types are available in your system.
Example: `X-Zammad-Article-Type: phone`

> **Warning:** This header can cause *serious issues* in your instance and may lead to unexpected behavior. Only use with absolute care!

`X-Zammad-Article-Internal`

Manipulate the default article visibility.
Example: `X-Zammad-Article-Internal: true`

`X-Zammad-Ignore`

Tell Zammad to silently drop the Email.
Example: `X-Zammad-Ignore: true`

Connect a Gmail or G Suite account to Zammad.

Note: Google channels are a specialized kind of *email channel*.

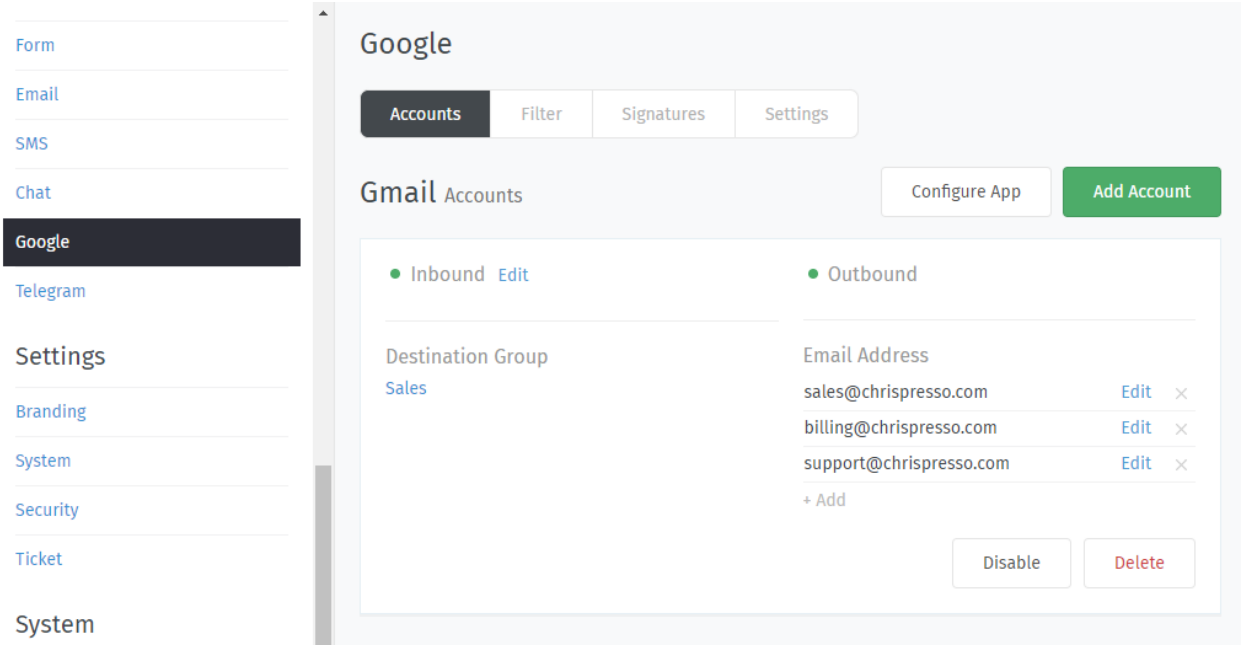
If you're already familiar with email channels, you can skip most of this—but **watch out for the "Accounts" section**, which has a few extra quirks due to Google's strict security measures.

Accounts **Connect Zammad to your email provider** so that it can watch your inbox, send auto-replies, and more.

(Self-hosted users may have already completed this step during new system setup.)

Filters **Make sure new tickets show up in the right place** with automated, if-this-then-that rules for all incoming email.

Signatures Customize signatures for all outgoing email.



Settings Manage options like:

- set the "From:" address on system notifications
- raise the limit on attachment sizes
- modify subject-line prefixes (*e.g.*, use "AW:" instead of "RE:")

Hint: Want to **manually edit email subjects** or **always copy parent messages into your replies**?

Check the *Composer Settings*.

Header manipulation Manipulate auto response behavior or incoming routing.

Warning: This is a very advanced topic.

CHAPTER

TWENTYTWO

MICROSOFT 365

22.1 Accounts

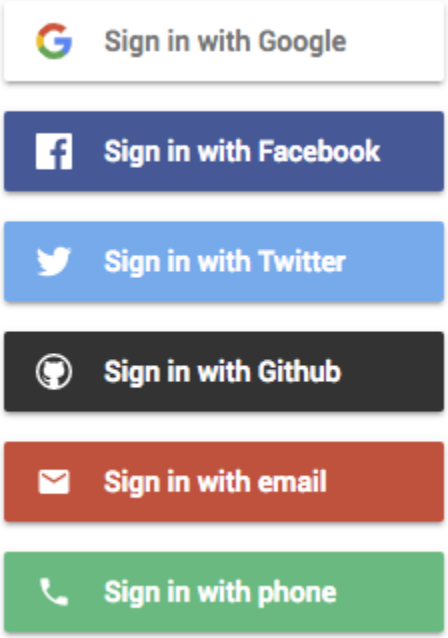
22.1.1 Register an OAuth App

Setting up a new Microsoft365 / Outlook account? Because of Microsoft's strict security policies, it's not as simple as entering your username and password.

First, you'll have to connect Zammad to your Microsoft account as an **OAuth app** via the Microsoft Azure Portal. Once that's done, you'll be able to connect as many Microsoft 365 accounts to Zammad as you want, using only active Microsoft 365 browser sessions (no usernames or passwords required).

Note: What the heck is OAuth?

If you've ever used a website that lets you "Sign in with Google/Facebook/Twitter", you've used OAuth. OAuth is a way for you to let a third-party website see a tiny slice of your Microsoft/Facebook/Twitter account data without giving them your password (which would let them see *everything*).



When a third-party website wants to use OAuth, it has to **register with the provider first** (*i.e.,* Microsoft). This way, the provider knows who's receiving its users' data, and can give users a way to revoke access if they change their minds.

In this case, **Zammad is that third-party website**. That's why adding a Microsoft account is a two-stage process: first, you have to register Zammad as a website that wishes to access Microsoft user data; then, you have to add yourself as a Microsoft user who agrees to let Zammad fetch your email.

Step-by-Step

To get started, head over to Microsoft's Azure Portal.

Note: Use an admin account for your organization.

Otherwise, an admin will have to approve your changes before they can take effect.

1. **Add an App Registration**

   Under **App Registrations > New Registration**, use the following:

   Supported account types Choose the option that's right for your organization (or click *Help me choose…* if you're not sure).

   - Accounts in this organizational directory only (Default Directory only - Single tenant)
   - Accounts in any organizational directory (Any Azure AD directory - Multitenant)
   - Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

   Note: The "Personal Microsoft accounts only" option is not supported.

   Redirect URI Web > *E.g.,* `https://your-domain.com/api/v1/external_credentials/microsoft365/callback`

   Find it in the Zammad admin panel under **Channels > Microsoft 365 > Connect Microsoft 365 App > Your callback URL**.

2. **Add API permissions**

   Under **API Permissions > Add a permission > Microsoft Graph > Delegated permissions**, add the following:

   OpenId permissions

   - `email`
   - `offline_access`
   - `openid`
   - `profile`

   IMAP

   - `IMAP.AccessAsUser.all`

   SMTP

   - `SMTP.Send`

3. **Connect your Microsoft app in Zammad**

   Copy your new app registration's **Application (client) ID** and **Directory (tenant) ID** (found under **Overview > Essentials**) into Zammad in the admin panel, under **Channels > Microsoft 365 > Connect Microsoft 365 App**.

   Then, create a new client secret under **Certificates and Secrets > New Client Secret** and copy that into the Zammad admin panel, as well.

Congratulations! Now you're ready to connect Microsoft 365 or Outlook accounts to Zammad.

22.1.2 Account Setup

After you've *registered Zammad as an OAuth app* in your Azure Portal, you can begin connecting Microsoft accounts to Zammad.

But first, a word of warning! The import process does things you might not expect:

> **Danger: Zammad will delete all emails in your inbox during the import process.**
>
> Use the *Keep Messages on Server* setting to *disable this behavior*.

> **Warning: Zammad will send an auto-reply message to every email it imports.** (Including the old ones!)
>
> Make sure to *disable this behavior* prior adding an email account, and to turn it back on once all your messages have been imported.

Migrate an Existing Email Channel

If you've already added your Microsoft 365 account as a regular email channel, you'll have to convert it to a Microsoft 365 channel eventually: Microsoft is planning to end support for simple password authentication in third-party email clients (like Zammad). **But there's no rush just yet**.

Upcoming versions of Zammad will feature an automated migration wizard to help you make the switch, and it'll be available well before Microsoft officially pulls the plug on password auth.

Hint: If you'd prefer not to wait, you can do it manually today—just remember to **delete the email channel for your Microsoft account** (and all its associated aliases) before re-adding it here.

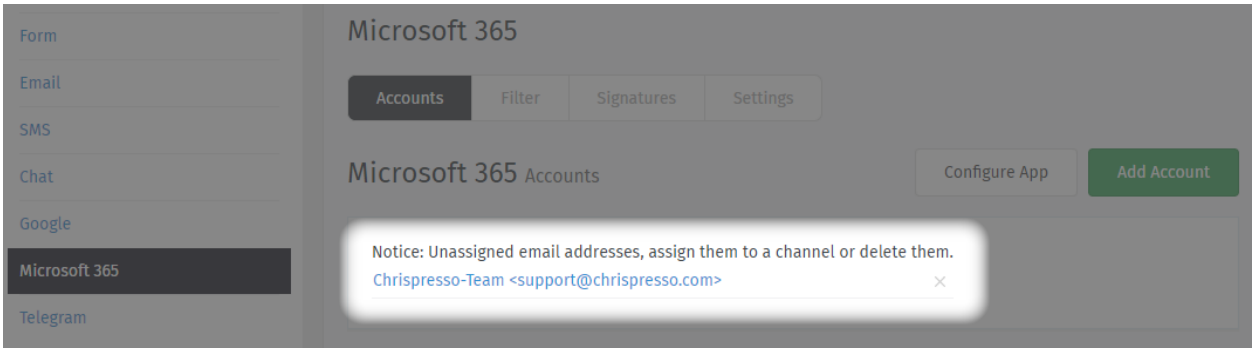


Fig. 1: Make sure you don't have any of these left over before creating your new Microsoft 365 channel.

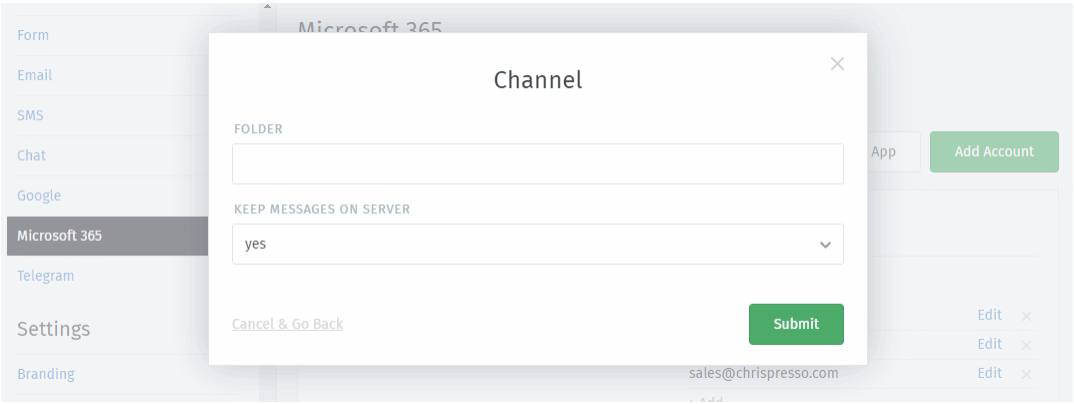
Add a New Account

Click **Add Account** to connect your Microsoft 365 / Outlook accounts to Zammad. You will be redirected to a Microsoft sign-in and confirmation page.

Note: Aliases are not imported automatically.

See *Secondary Addresses* to add them yourself.

Channel



Folder Specify which folder (or *label*) to fetch from, or leave empty to fetch from `INBOX`.

If specifying a nested folder, be sure to use the full path; *e.g.*, `Inquiries/Tech-Support`.

Keep messages on server Specify what happens to your emails after Zammad imports them:

- `no` Zammad deletes all imported messages
- `yes` Zammad marks imported messages as read

  (With this option, Zammad will only import unread messages. This means Zammad may miss messages if the mailbox is externally modified.)

Note: Why does Zammad delete messages by default?

If you never clean out your inbox, it'll eventually reach its storage limit, and your mail server will start **rejecting incoming messages**. Most Zammad users never even look at their inbox once it's set up, so they rely on Zammad to keep it clean for them.

If you choose **yes** here, remember that it's your responsibility to clean out your inbox from time to time to keep it below its storage limit.

Troubleshooting

I successfully added my account, but Zammad isn't fetching new email If you specified a *custom folder/label to fetch from*, are you sure incoming mail is arriving in that folder?

Note: Secondary addresses in Microsoft 365 channels work (almost) **just like they do in email channels**, so this article is lifted (almost) verbatim from *here*.

22.1.3 Secondary Addresses

Secondary addresses (also known as *aliases*) allow you to send emails with a different "From:" address from the one on the account.

Fig. 2: Once you add a secondary address, you can configure a group to start sending emails with it.

Warning: Secondary addresses must be added to your Microsoft account first.

Personal accounts Use the Manage how you sign in to Microsoft panel at https://account.live.com.

Hosted Exchange accounts In your Exchange admin center:

1. select a user under **recipients > mailboxes**,
2. edit it (double-click or), and
3. add an an alias under **email address**.

Contact your administrator if you don't have access to an admin account.

Your email provider may also be set up to *receive incoming messages* for many addresses in the same mailbox. If this is the case, be sure to add your alternate inbox addresses here.

Display Name The display name used for outgoing email.

Email display names value can be *further customized in the Settings tab*.

Email The alias address to send outgoing messages as.

Channel The email account to be used when sending outgoing messages from this alias.

Note Optional. Only visible from this dialog, the REST API, and the Rails console.

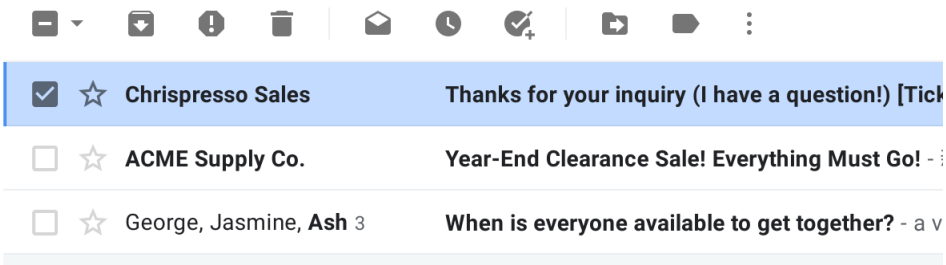
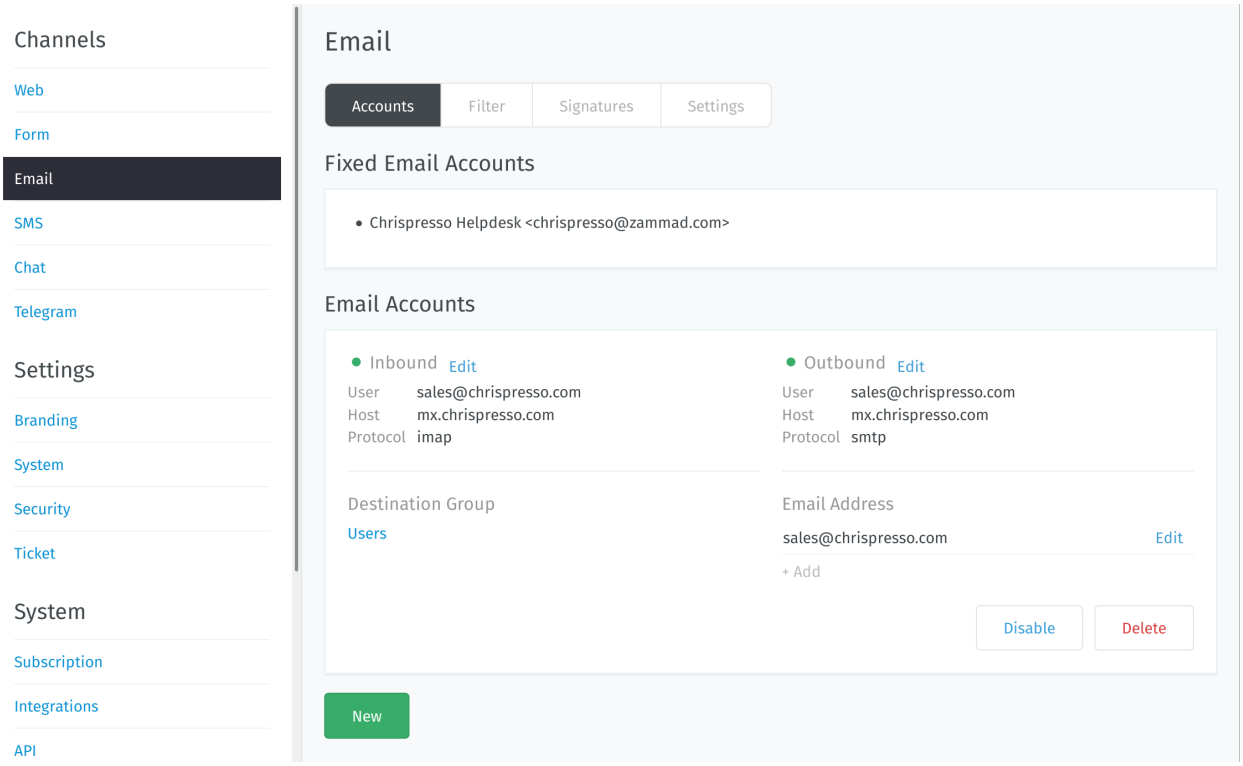


Fig. 3: A customer's inbox with an auto-reply from **Chrispresso Sales**.

Note: Managing accounts in Microsoft 365 channels is (almost) **just like it is in email channels**, so this article is lifted (almost) verbatim from *here*.

22.1.4 Managing Accounts

Once an account has been added, use the Accounts panel to edit its configuration.



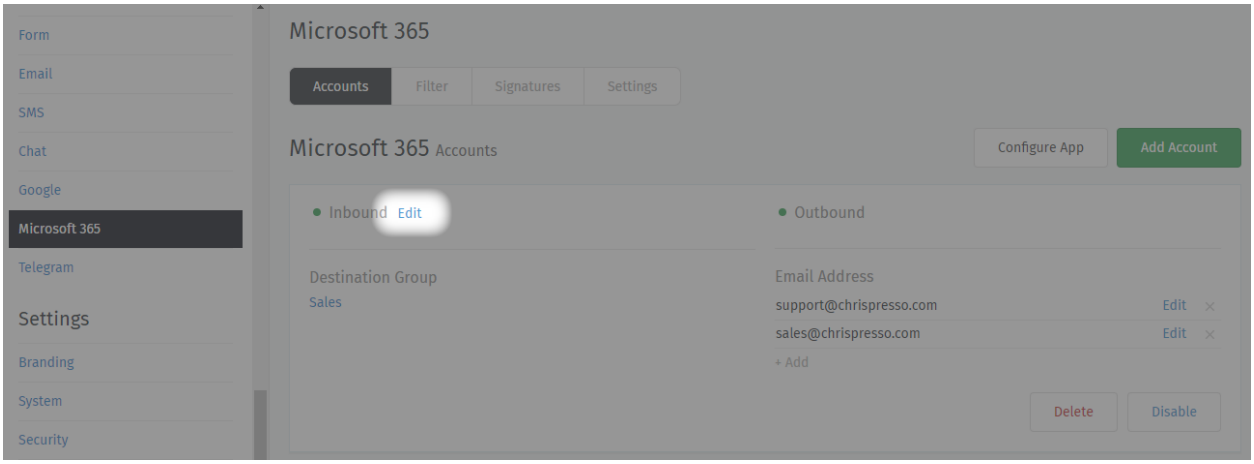
Fetch Preferences Click **Edit** on inbound account details to change how messages are retrieved from your account.

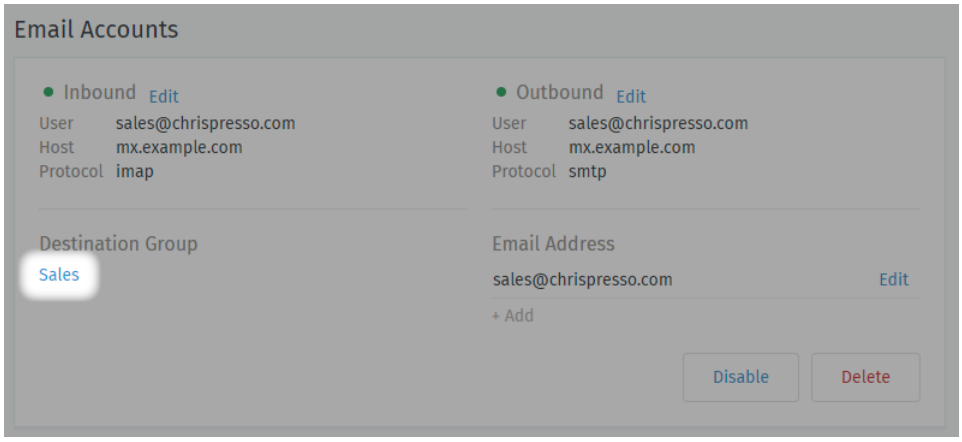
See *New Account Settings* for a detailed description of each option.

Destination Group Click on the group name to reassign the account.

Only **active** groups will be displayed.

Changing this setting will not reassign existing tickets to the new group.

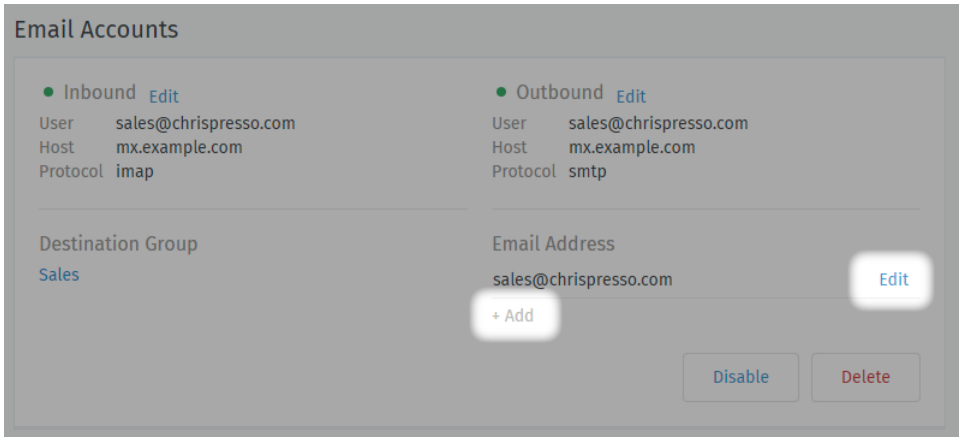

Form
Email
SMS
Chat
Google
Microsoft 365
Telegram
Settings
Branding
System
Security
Microsoft 365
Accounts
Filter
Signatures
Settings
Microsoft 365 Accounts
Configure App
Add Account
Inbound Edit
Outbound
Destination Group
Sales
Email Address
support@chrispresso.com
Edit
sales@chrispresso.com
Edit
+ Add
Delete
Disable


Email Accounts
Inbound Edit
User sales@chrispresso.com
Host mx.example.com
Protocol imap
Outbound Edit
User sales@chrispresso.com
Host mx.example.com
Protocol smtp
Destination Group
Sales
Email Address
sales@chrispresso.com
Edit
+ Add
Disable
Delete

Hint: **Still can't send outgoing email tickets?** Check your *group settings*.

Email Address Use the **+ Add** or **Edit** buttons to set up secondary addresses on this account.

See *Secondary Addresses* for a detailed description of each option.



Enabled / Disabled Disabling an account temporarily prevents Zammad from importing its messages.

This may be necessary during scheduled maintenance or when migrating your installation to a new host.

Note: Disabling an account disables *outgoing* messages for it, as well.

Delete Deleting an account removes its configuration from Zammad entirely.

Note: **Additional Steps Required**

Groups need an assigned an address to send outgoing emails. If you delete a group's assigned address, agents belonging to that group won't be able to send emails until you assign it a new one.

Register an OAuth App Use the **Connect Microsoft 365 App** dialog to register Zammad as an OAuth app on Microsoft.

(This step is **required**; read on to learn why.)

Account Setup Use the **Add Account** dialog to connect your account.

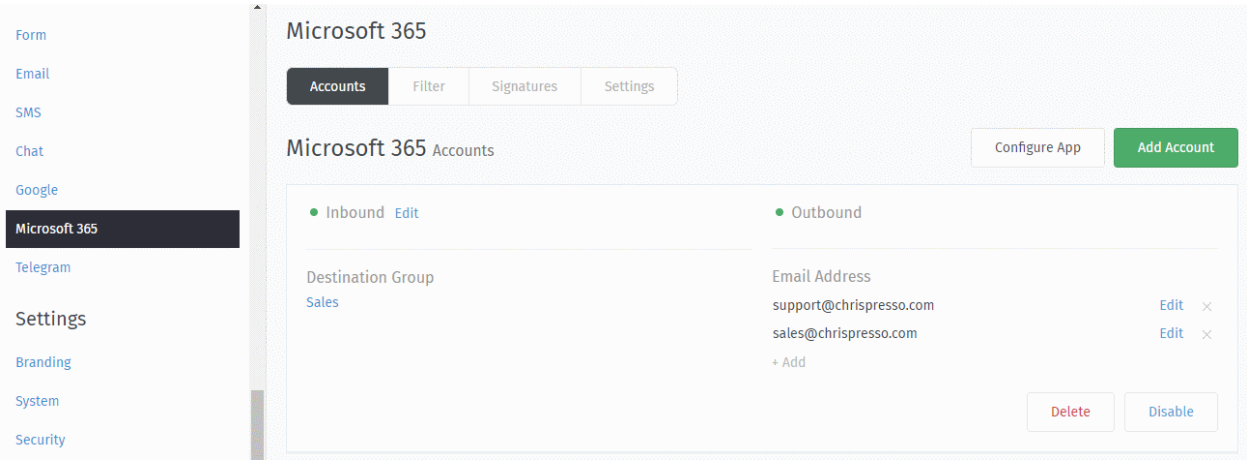
Secondary Addresses Send and receive email at **additional email addresses**, all through the same mailbox/account.

Managing Accounts Edit the configuration of existing accounts in the **Accounts Panel**.

Note: **How do I use my Microsoft 365 account for outgoing system notifications?**

On **subscription/cloud-hosted instances**, you can't. Notifications will always come from "Notification Master <noreply@your.zammad.domain>".

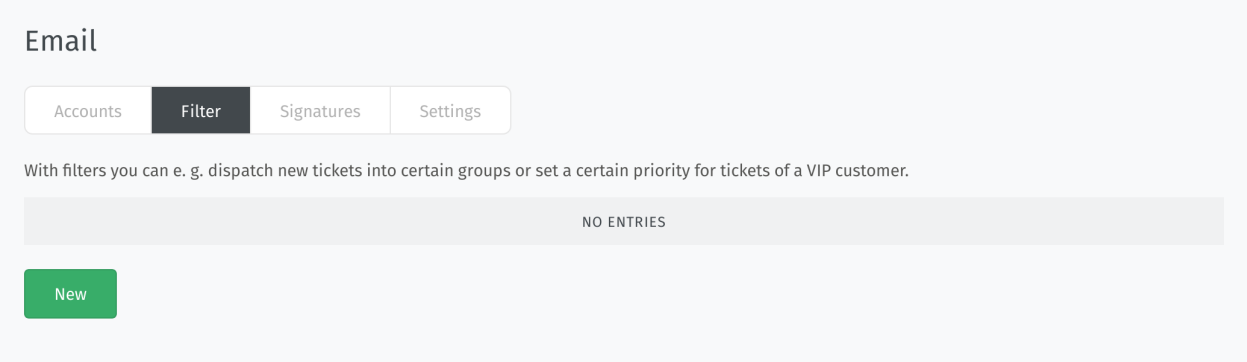
On **self-hosted instances**, we still don't recommend it. Using a Microsoft account for automated, outgoing messages is risky: users who exceed Microsoft's email sending limits can have their accounts suspended.



Set up a generic *email channel* instead, then use the *Email Notification* setting.

Note: Filters in Microsoft 365 channels are **just like filters in email channels**, so this article is lifted verbatim from *here*.

22.2 Filters



Postmaster filters allow you to match email headers (e.g. `From`, `To`, `Subject`, `X-Spam-Flag` etc.) and execute a set of actions whenever Zammad's email parser encounters a matching email. The actions will be applied to the ticket that is created or updated by this email. Here are some examples of what is possible with filters:

- Automatically dispatch tickets into certain groups:

  For example, tickets from `amazon.com` could automatically be dispatched to the Purchasing group.

  From: contains: `regex:(\.|@)amazon\.com`
  Group: Purchasing

Note: Note that the Group action only has an effect when the matching email results in a new ticket. Zammad will not change the group of existing tickets.

- Automatically increase the priority of tickets from a VIP customer:

  From: contains: `ourvipcustomer@example.com`
  Priority: 3 high

Note: Note that the Priority action only has an effect when the matching email results in a new ticket. Zammad will not change the priority of existing tickets.

- Automatically tag and close spam tickets that have been marked as spam by an external spam filter (e.g. SpamAssassin):

  X-Spam-Flag: contains: `YES`
  Tag: add: `spam`
  State: closed

Note: Note that the State action only has an effect when the matching email results in a new ticket. Zammad will not change the state of existing tickets. It will add the tag though if it missing, even if the mail is an update to an existing ticket.

The following actions are only effective when creating tickets: Group, State, Priority, Owner.

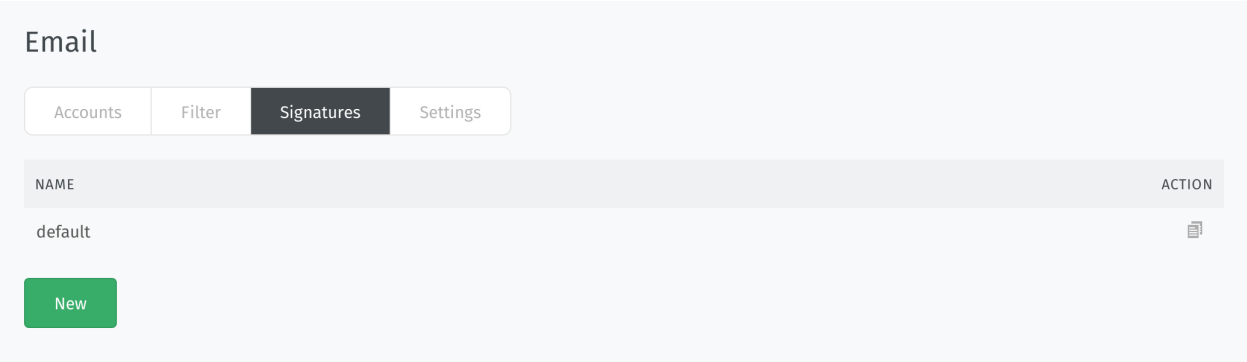
Different attributes of a filter can be combined with each other. Likewise, the following actions can be combined. The supported matches are "contains" and "contains not"; for advanced matching, you can use regular expressions by prefixing the string with `regex:`.

Note that Zammad matches against the full header, e.g. for a mail with "`From: Display Name <display.name@example.com>`", the `From` condition will test against "`Display Name <display.name@example.com>`". This is especially important when using anchored regular expressions; `regex:^display\.name@example.com$` would not match this mail!

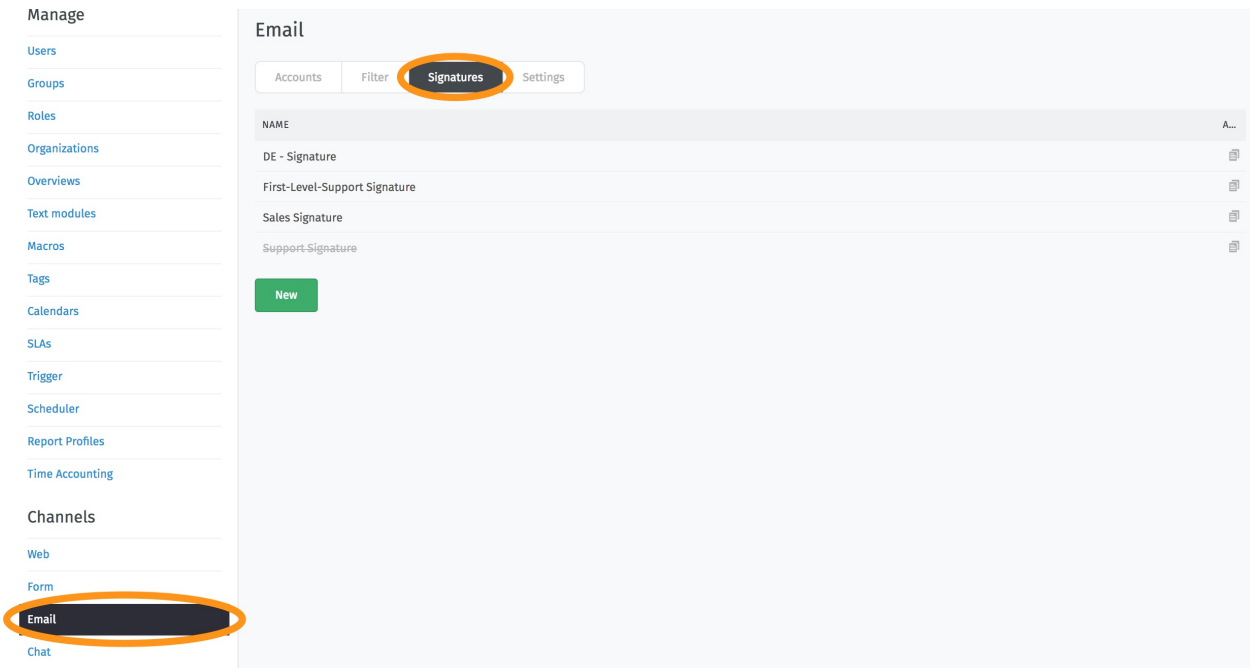
It should be borne in mind that the combined attributes build on each other. If a filter is no longer needed, it can either be temporarily set inactive or deleted directly.

Note: Signatures in Microsoft 365 channels are **just like signatures in email channels**, so this article is lifted verbatim from *here*.

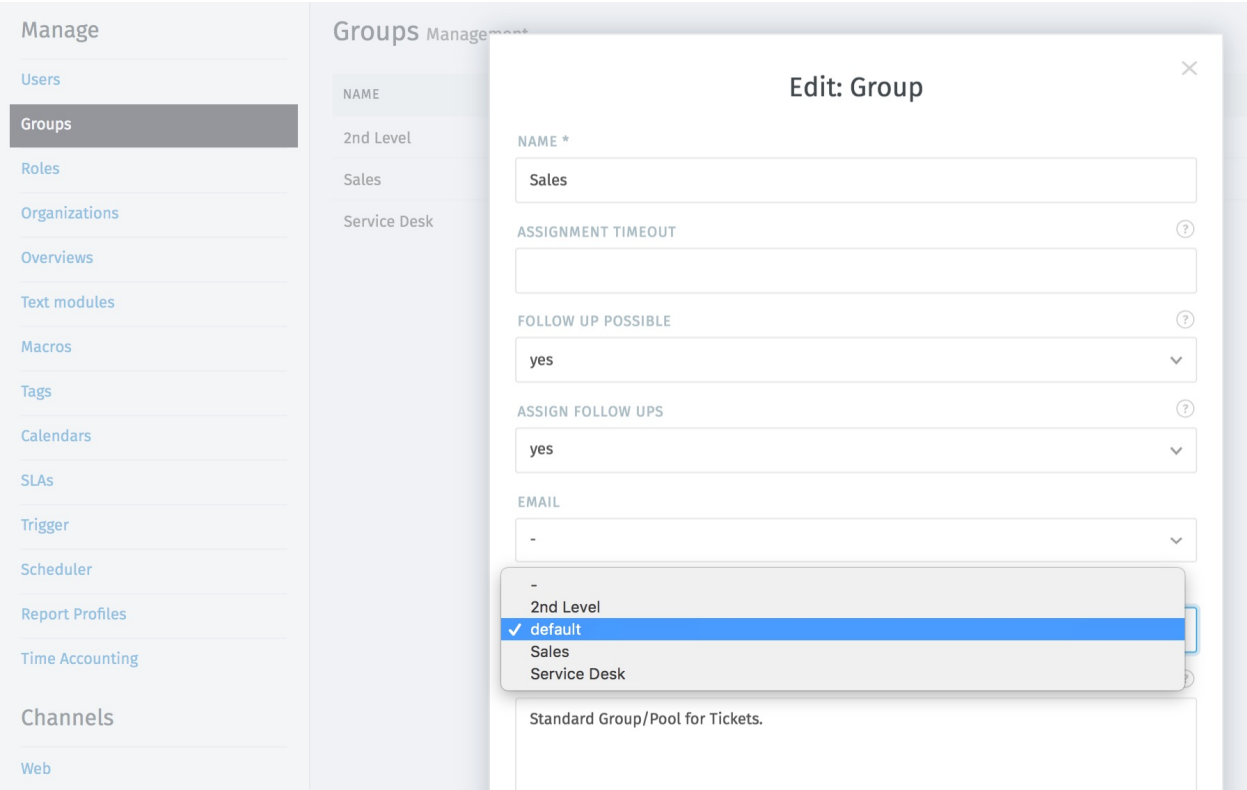
22.3 Signatures



You can create a separate signature for each group in Zammad. The individual signatures can be created and edited here:



Afterwards, the existing (and active) signatures are available in the group editing mask:

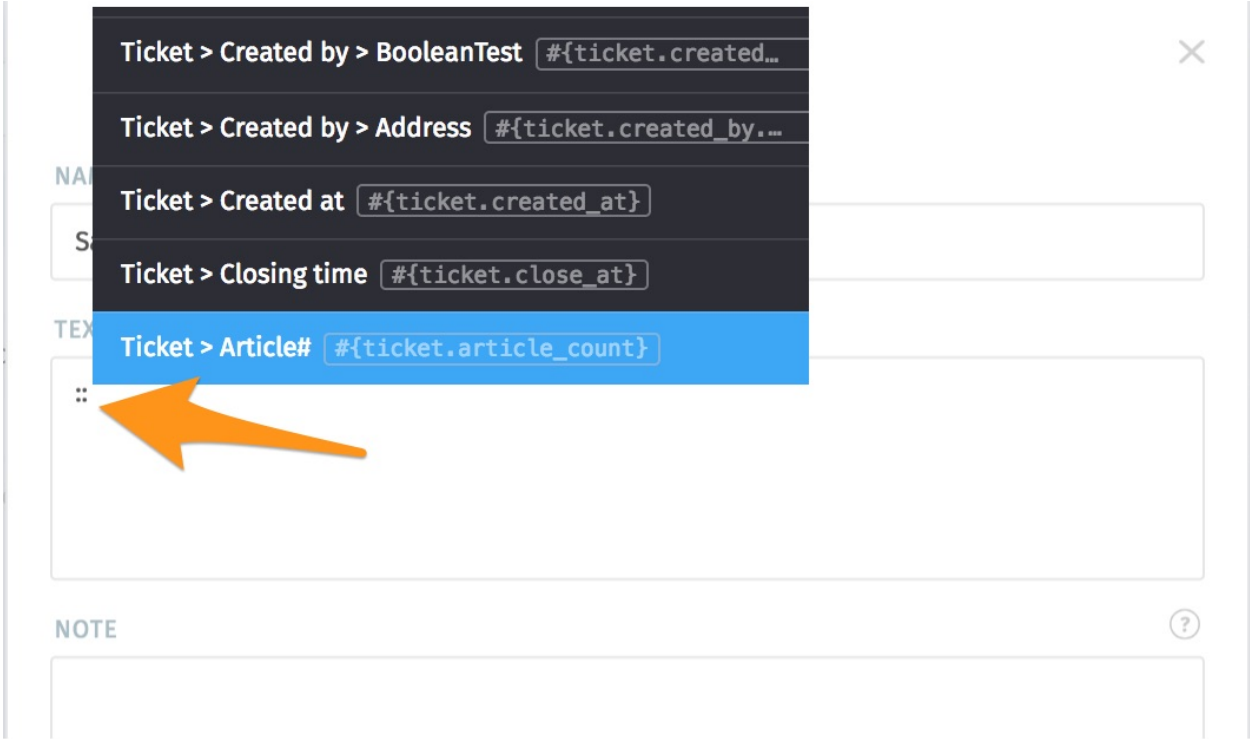


Each group can be assigned its own signature, but they can also all use the same signature.

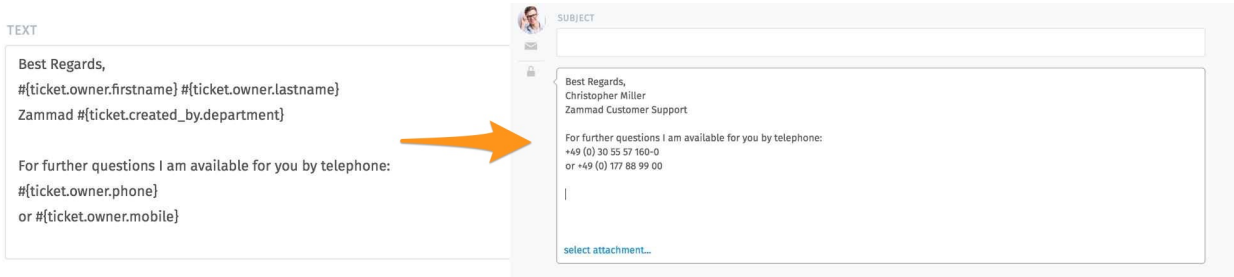
22.3.1 Dynamic Signatures

To individualize the signatures, it is possible to automatically load specific information into a signature via *Variables*. All information stored on the ticket, assigned customers or agents can be inserted. This makes it possible to design the signature individually. To load a list of available variables, enter two colons (`::`) into the *Text* box of the signature editor.

Hint: Please keep in mind that specific information might not be available during ticket creation. The best example here is the ticket number / id. Specific information are created with submitting the ticket and thus are not available before submitting.



Here is an example of a signature with variables and the result when you write a mail:

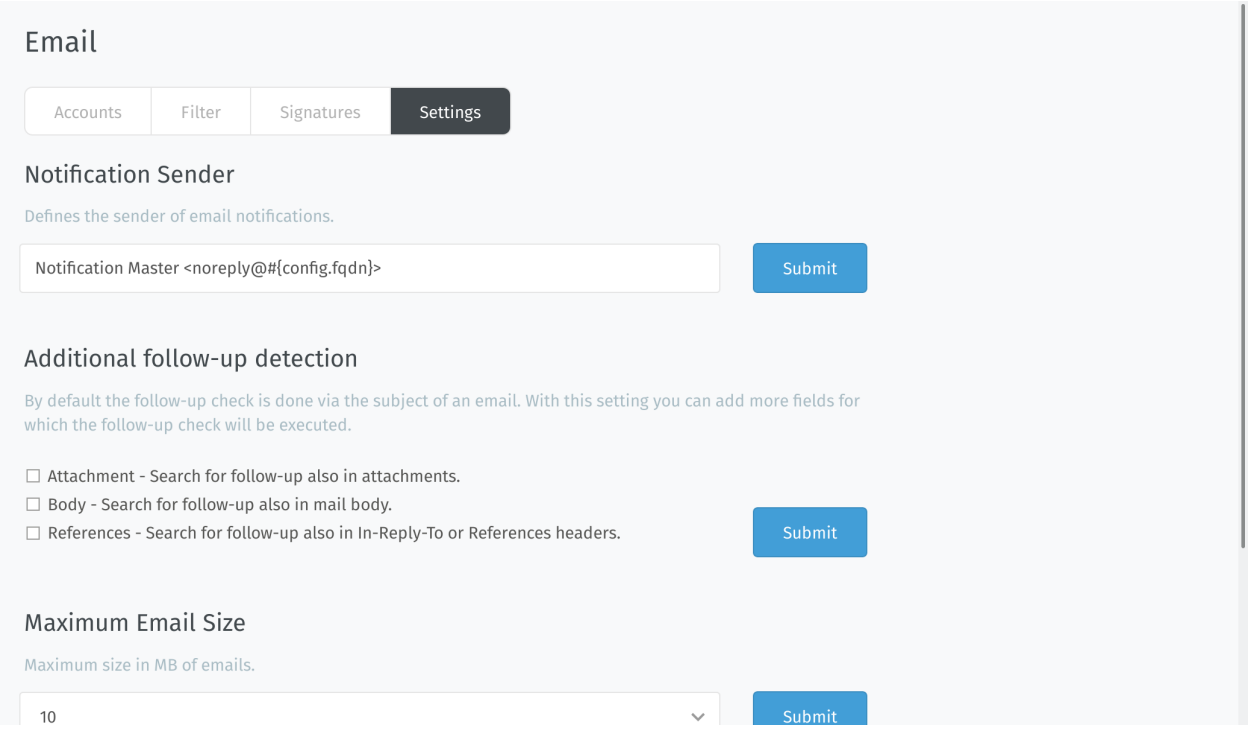


Note: Settings in Microsoft 365 channels are **just like settings in email channels**, so this article is lifted verbatim from *here*.

22.4 Settings

Below you can find the currently available email-related settings. Most of these settings have default values which can be found in this list as well.

Note: Some email-related settings are ticket-based settings, which is why they can be found in the *Composer Settings*.



22.4.1 List of Settings

Notification Sender: Default value `Notification Master <noreply@#{config.fqdn}>` This is the default sender address for Zammad that affects all mails but those generated because of replies (like triggers or agent-based mails). Your customers normally will not see this address. This email address does not need to receive and can't be assigned to a group.

> **Note:** This address is relevant for agent notifications and password reset mails (also affects customers).

Additional follow-up detection In some situations the normal follow-up detection is not enough. This might be due to missing references in the subject (the ticket hook and number). These options can help to recognize follow-ups to existing tickets.

> **Note:** Please note that searching in attachment and body might lead to false follow-up detections.

Maximum Email Size: Default value `10 MB` This one is pretty obvious: It defines the maximum allowed size of an email Zammad will fetch. Zammad will not fetch Mails that are bigger than this option.

> **Hint:** This technically also affects attachments for articles.

Send postmaster mail if mail too large: Default value `yes (enabled)`

> **Note:** Upgraded installations will, by default, have the value set to `no (disabled)`.

Option set to `yes` This setting will cause Zammad to automatically reply to mails that exceed the above mail

size limit with a postmaster style mail. This will help your user to understand that his mail did not arrive and won't be reviewed by you.

Note: Zammad will still download and remove (if enabled) the mail from the mailbox. Instead of importing it to the database, it will save the affected mail to `/opt/zammad/tmp/oversized_mail/`.

Option set to `no` If the option is set to no, Zammad will not reply to mails that are too big. Your customer will **not notice** that the mail was too large! Instead, Zammad will use the monitoring endpoint to alert its administrators that it can't fetch a too large mail.

Learn more about *Monitoring*.

Sender based on Reply-To header: Default value `not set (-)` This setting decides how Zammad should recognize its customers from emails that contain a `Reply-To` header. This comes in useful if you're working with contact forms that need to use reply to headers.

Option set to `-` or `Take reply-to header as sender/from of email` This setting will overwrite the initial `FROM` to the value used in `Reply-To` completely.

Option set to `Take reply-to header as sender/from of email and use realname of origin from` This setting will partially overwrite the initial `FROM`. It uses the mail address from the `Reply-To` header and uses the given name of the `FROM` header, if given.

Customer selection based on sender and receive list: Default value `yes` This option decides how Zammad should react if an agent sends a email to it.

Option set to `yes` The first user / email address from the recipient list will be used as the ticket customer.

Option set to `no` The agent will be set as ticket customer.

Note: Currently agents can't be customers within the UI. While Email communication works, agents can't see their own tickets (as a customer) if they don't have access to the group.

Block Notifications With the regex that can be defined here, you can ensure not to send any notifications to specific systems. By default this especially affects typical system addresses which can't receive emails anyway.

The default value is: `(mailer-daemon|postmaster|abuse|root|noreply|noreply.+?|no-reply|no-reply.+?)@.+?`

Sender Format: Default value `Agent + Format Seperator + System Address Display Name` This configures the display name used in the `FROM` header of mails Zammad sends.

Note: This does not affect Notification mails (to agents) and password reset mails. Emails that are not sent by agents (e.g. trigger-based notifications) will always fallback to `System Address Display Name` if needed.

Option set to `Agent + Format Separator + System Address Display Name` This will cause Zammad to set the `FROM` header to agent name and the channel's display name, divided by a separator (configured below).

Example: `Christopher Miller via Chrispresso Inc.`.

Option set to `System Address Display Name` This will cause Zammad to always use the display name of the used channel in the `FROM` header.

Example: `Chrispresso Inc.`

Option set to `Agent Name` Zammad will use the agent's name which is very personal.

> **Tip:**
>
> Usually you'd also want to remove the ticket slug from the subject in those cases.
> Learn more in *Settings → Ticket*.

Sender Format Seperator: Default value `via` This is a can be a string you can freely choose. It divides the agent's name and the display name of the channel whenever needed.

Ticket Subject Forward: Default value `FWD` The above string will be used on the subject if you forward an email from Zammad.

> **Note:** `:` will be automatically appended to the above string.

Ticket Subject Reply: Default value `RE` The above string will be used on the subject if you reply to a mail from Zammad.

> **Note:** `:` will be automatically appended to the above string.

Ticket Subject Size: Default value `110` This setting enforces a maximum length for subjects when replying. If the subject you're using for your reply is too long, Zammad will automatically truncate the length and insert `[...]` to show it has shortened the subject.

Example: `RE: Test somew[...] [Ticket#123456]`

> **Note:** This does **not** limit ticket titles within the UI, just the subjects when replying to an email.

22.4.2 Enhanced settings

Some less relevant settings can be changed via rails console if needed. As an example, Zammad allows you to send all outgoing communication to a BCC address for archiving reasons if needed. You can find the needed commands within the advanced customization settings.

> **Note:** EMail header manipulation in Microsoft 365 channels work **just like in email channels**, so this article is lifted verbatim from *here*.

22.5 Email header manipulation

Email header manipulation allows you to re-route or adjust tickets apart from filters or triggers. Like an API call, but with emails.

Header checks are case insensitive.

Warning: Trusted channels required

Below options are a potential risk with external communication and thus require channels being set to trusted explicitly.

Tip: Below headers are examples and –in our opinion– the most relevant ones. However: You can adjust mostly any article or ticket attribute (yes, custom ones as well) if you know the attribute's exact name.

The name column within *object's management* provides easy access to objects attribute names.

22.5.1 Trigger auto responses

Normally Zammad runs internal checks to see if an email is an automatic response. In these cases Zammad will not send trigger based responses.

There may be use cases where this behavior may be in your way, below options allow you to overcome this issue.

Note: In some cases combining below headers is crucial. This is intentional but may be confusing.

`x-zammad-send-auto-response` Set to `false` to disable trigger based responses. If set to `true` Zammad will send a response.

Hint: This option *does not* work if e.g. `precedence: list` is set unless you use below auto response header as well.

`x-zammad-is-auto-response` Providing this header allows you to tell Zammad that the mail in question is an auto generated response (`true`). This will cause email based triggers to be skipped.

Set this header to `false` if you want to generate auto responses.

Tip: This header allows you to overwrite auto detects for e.g. `precedence: list`.

22.5.2 Ticket attributes

Zammad allows you to use headers to manipulate ticket creations or follow ups. The manipulation can be used instead of triggers. Triggers are considered *after* header settings and thus can still overrule.

Note: Zammad differentiates between ticket creation and follow up

For creations use: `X-Zammad-Ticket-{Attribute Name}`
For follow ups use: `X-Zammad-Ticket-FollowUp-{Attribute Name}`

This allows you to ensure the changes are only applied in the required situation.

Warning: About values

- While headers are not case sensitive, values like e.g. priority names are case censitive: `1 low` will work, but `1 lOw` will not!
- When using attributes that require date / time values, ensure to use Time Zoned Times. e.g. for 28th September 2021 on 8 am CEST, either use:
  - `2021-09-28T08:00:00+0200`
  - `2021-09-28T08:00:00+02:00`
  - `2021-09-28T06:00:00.000Z`

X-Zammad-Ticket-Priority & X-Zammad-Ticket-FollowUp-Priority

Allows you to adjust a ticket's priority.
Example: `X-Zammad-Ticket-Priority: 1 low`

X-Zammad-Ticket-Group & X-Zammad-Ticket-FollowUp-Group

Allows you interfere with regular channel routing of the ticket.
Example: `X-Zammad-Ticket-Group: Sales`

X-Zammad-Ticket-Owner & X-Zammad-Ticket-FollowUp-Owner

Directly assign or change the ticket owner. Valid values are either `login` or `Email`
Example: `X-Zammad-Ticket-Owner: jdoe`

X-Zammad-Ticket-State & X-Zammad-Ticket-FollowUp-State

Set a specific ticket state.
Example: `X-Zammad-Ticket-State: closed`

Note:

Pending states always require the `pending_time` attribute on top.
Like so: `X-Zammad-Ticket-Pending_Time: 2021-09-26T08:00:00+0200`

X-Zammad-Customer-Email

Manipulate the ticket customer - this can be a different user than the actual sender. Replying to the original sender is still possible.
Example: `X-Zammad-Customer-Email: jdoe@example.com`

Note: This header is not available for follow ups.

X-Zammad-Customer-Login

Manipulate the ticket customer - this can be a different user than the actual sender. Replying to the original sender is still possible.
Example: `X-Zammad-Customer-Login: jdoe`

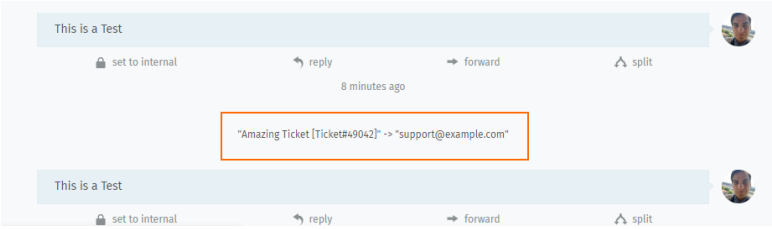
Note: This header is not available for follow ups.

22.5.3 Article attributes

If needed Zammad allows you to manipulate attributes or states of fetched email articles.

`X-Zammad-Article-Sender`

Manipulate the sender type (Agent, Customer, or System)
Example: `X-Zammad-Article-Sender: System`

> **Warning:** System Emails are indicated in a similar way as trigger-response like entries Users can't see them natively.
>
> 
>

`X-Zammad-Article-Type`

Change the article type of your incoming mail. This requires you to know which article types are available in your system.
Example: `X-Zammad-Article-Type: phone`

> **Warning:** This header can cause *serious issues* in your instance and may lead to unexpected behavior. Only use with absolute care!

`X-Zammad-Article-Internal`

Manipulate the default article visibility.
Example: `X-Zammad-Article-Internal: true`

`X-Zammad-Ignore`

Tell Zammad to silently drop the Email.
Example: `X-Zammad-Ignore: true`

Connect a Microsoft 365 account (formerly "Office 365") to Zammad.

Note: Microsoft 365 channels are a specialized kind of *email channel*.

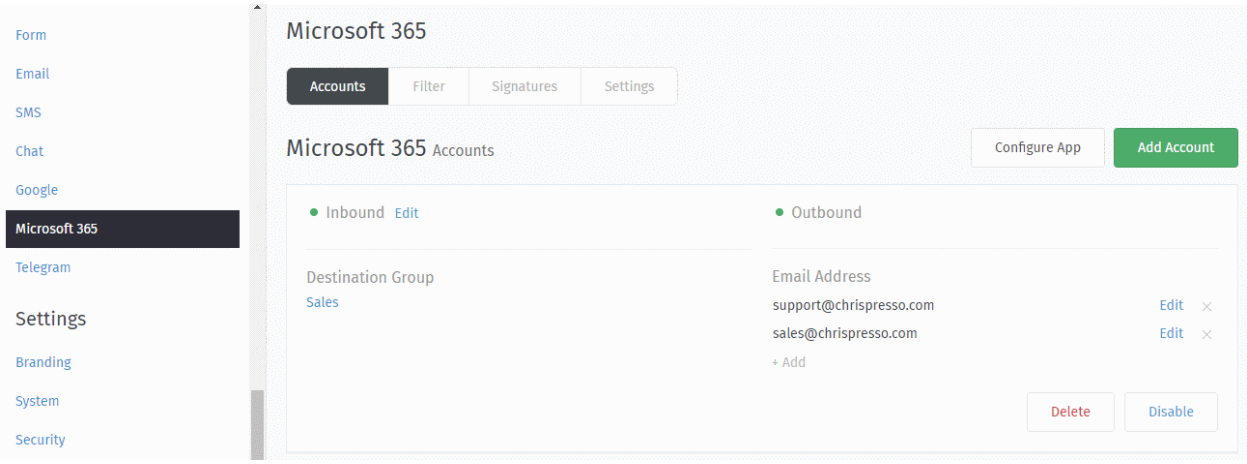
This documentation part does not cover *user authentication*.

If you're already familiar with email channels, you can skip most of this—but **watch out for the "Accounts" section**, which has a few extra quirks due to Microsoft's strict security measures.

Accounts **Connect Zammad to your email provider** so that it can watch your inbox, send auto-replies, and more.

(Self-hosted users may have already completed this step during new system setup.)

Filters **Make sure new tickets show up in the right place** with automated, if-this-then-that rules for all incoming email.



Signatures Customize signatures for all outgoing email.

Settings Manage options like:

- set the "From:" address on system notifications
- raise the limit on attachment sizes
- modify subject-line prefixes (*e.g.*, use "AW:" instead of "RE:")

Hint: Want to **manually edit email subjects** or **always copy parent messages into your replies**?

Check the *Composer Settings*.

Header manipulation Manipulate auto response behavior or incoming routing.

> **Warning:** This is a very advanced topic.

CHAPTER

TWENTYTHREE

TWITTER

Zammad supports Twitter integration, meaning you can send and receive tweets and DMs just like emails!

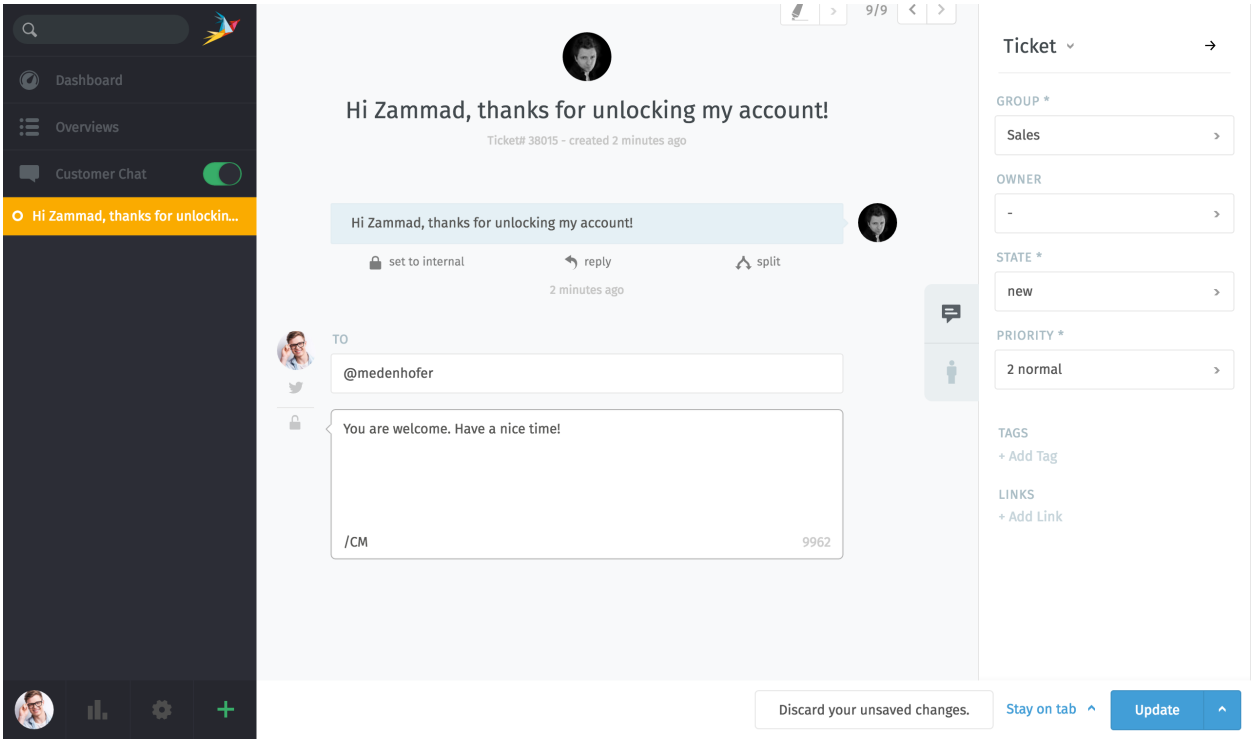


Fig. 1: Twitter tickets will show a Twitter bird in the reply area. Just click on the reply button (as you would for an email) to tweet back.

Note: To set it up, follow the steps below:

1. Apply for a Twitter Developer account.
2. Create a new Twitter app for Zammad.
3. Set your new app's permissions to *Read, write, and access direct messages.*
4. Generate a new access token & secret.
5. Set up a dev environment for the Account Activity API.
6. Add your new Twitter app in Zammad.
7. Add your Twitter account in Zammad.

8. Configure filters for creating new tickets based on **#tags** and **@mentions**.

Read on for details about each step.

23.1 1. Apply for a Twitter Developer account

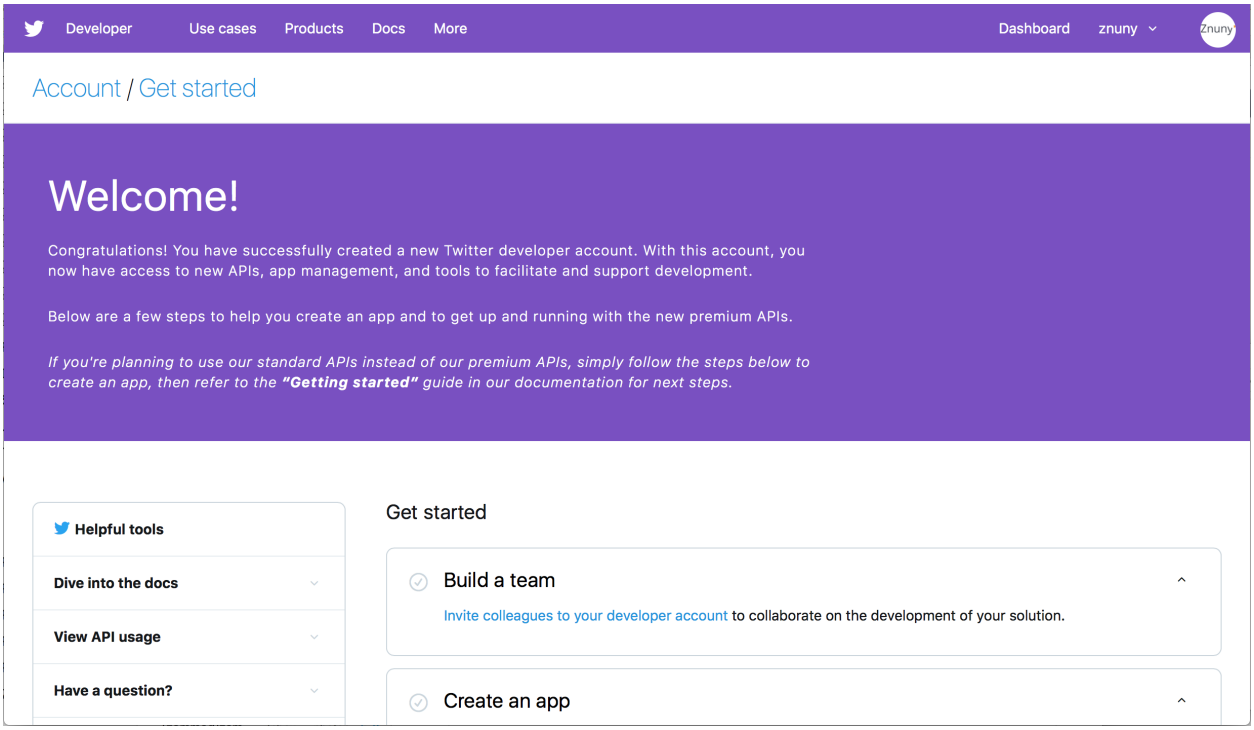


Fig. 2: This welcome page is displayed after completing the application for a Developer account.

You will need a regular Twitter account with a verified phone number to apply for a Twitter Developer account (at https://developer.twitter.com).

During the application process, you will be asked to **Describe in your own words what you are building**. You may use the answer below:

```
1. To manage customer service communications for our organization.
2. No.
3. Our use case involves posting original tweets in response to tweets and DMs we␣
↪receive. We will not use the Twitter API to post or like "content".
4. Our application will display individual tweets in their original form to authorized␣
↪customer service agents of our organization only.
```

23.2 2. Create a new Twitter app for Zammad

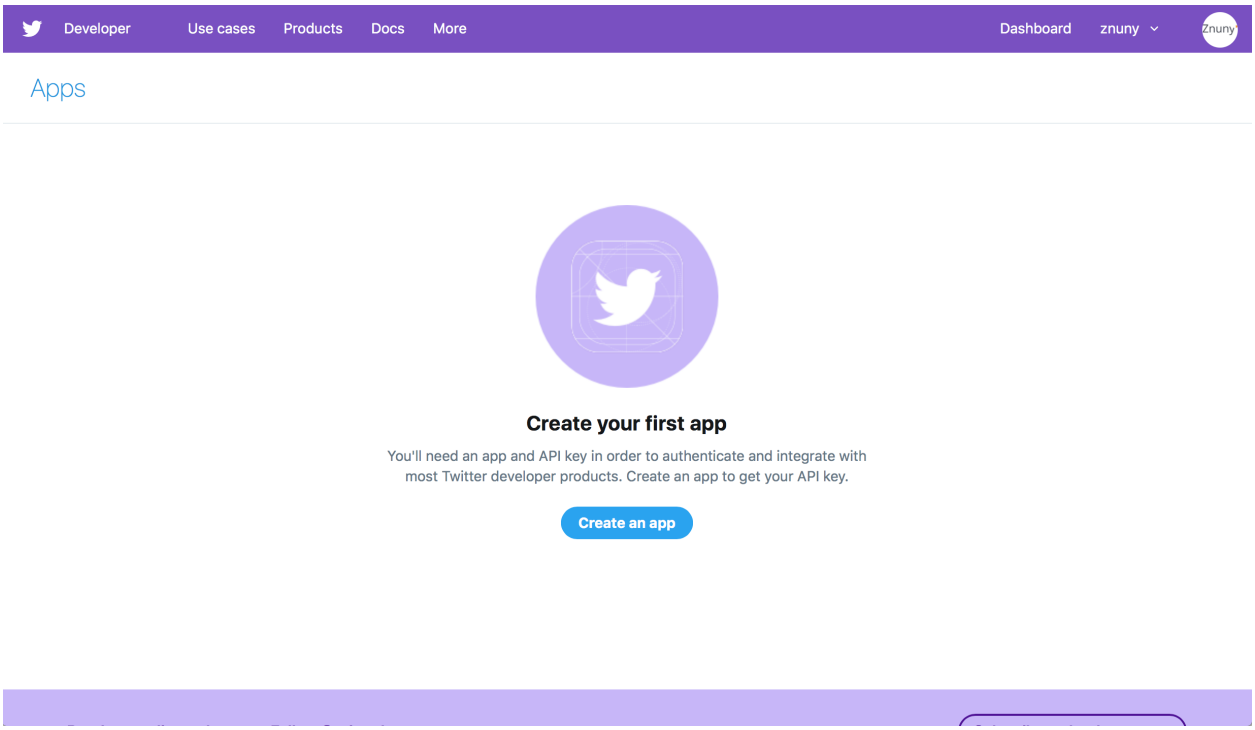


Fig. 3: To create a new app, select **Apps** under your user menu, then click **Create an app**.

Once you have finished setting up your Developer account, use it to create a new Twitter app. The following fields are **required:**

App name Must be unique *across all of Twitter.* No other developer account may create an app with the same name.

Application description Anything is fine here.

Website URL The URL of your Zammad instance.

Callback URLs `https://<zammad_instance>/api/v1/external_credentials/twitter/callback`

This URL is also visible in the **Connect Twitter App** dialog of your Zammad admin settings panel.

Tell us how this app will be used Anything is fine here. We suggest the following:

```
This app will be used to manage Twitter communications between our customers and␣
↪our organization's customer service agents on Zammad.
```

23.3 3. Set your new app's permissions

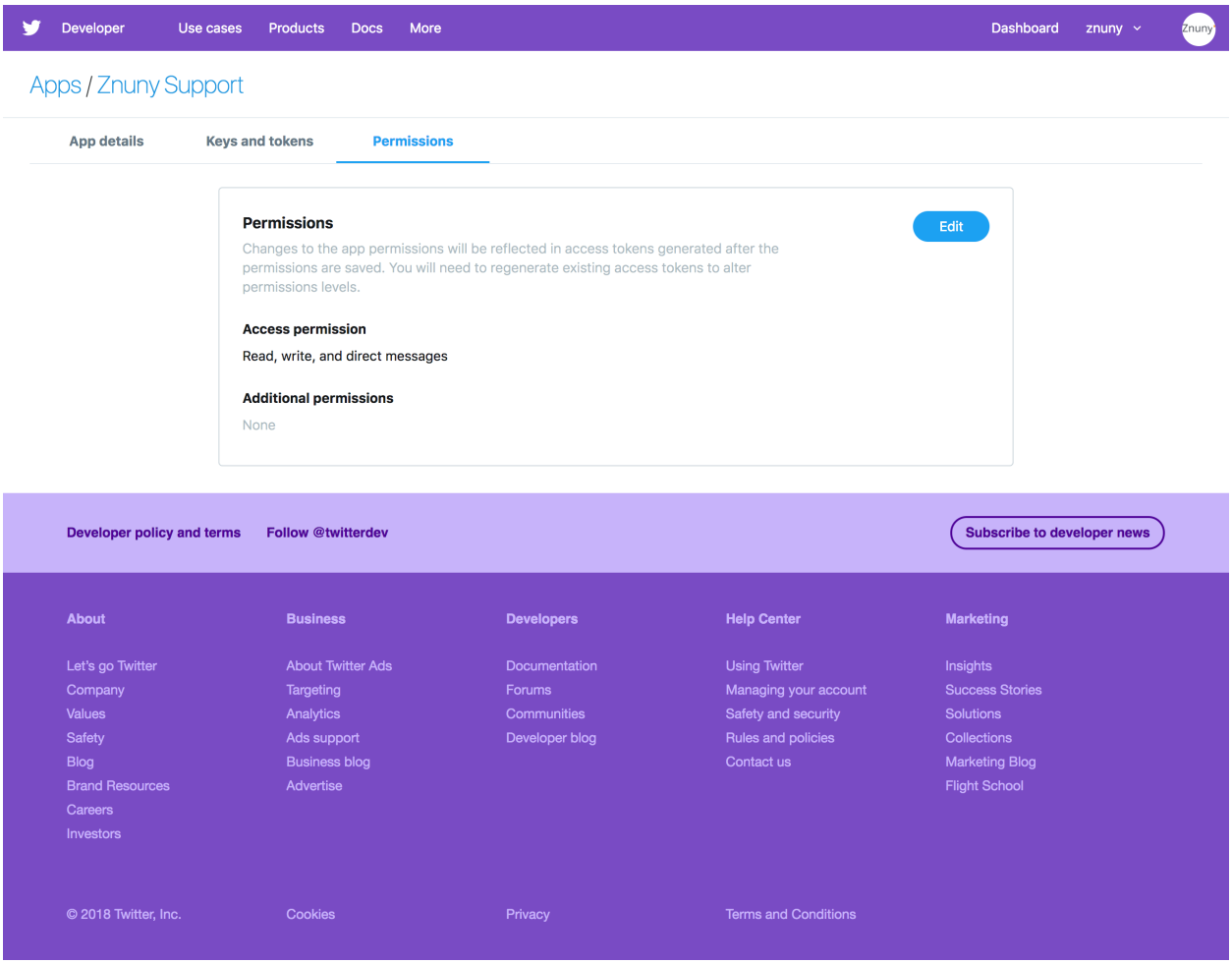


Fig. 4: Select *Read, write, and access direct messages.*

23.4 4. Generate a new access token & secret

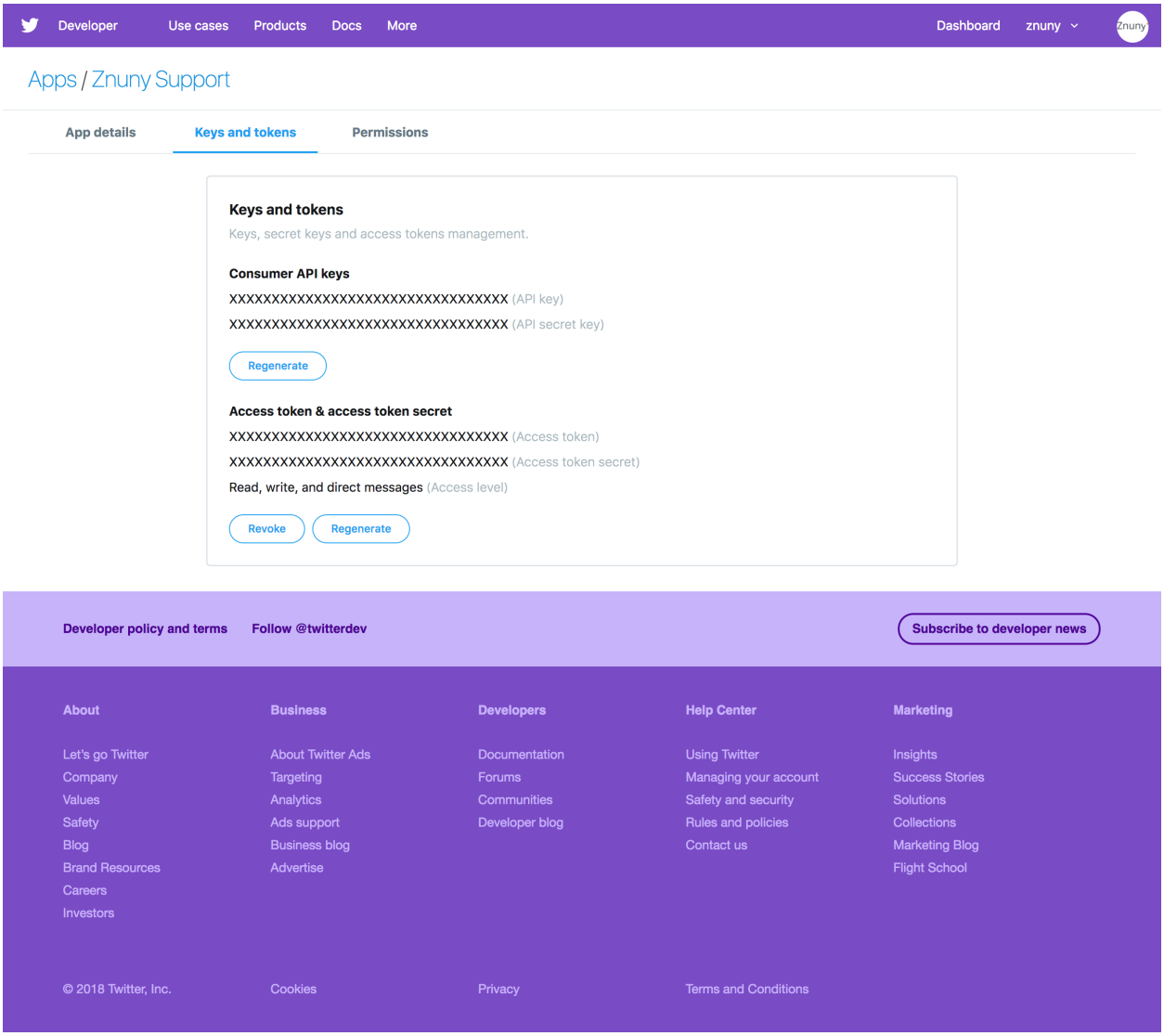


Fig. 5: You will need all four keys/tokens later, so don't close this tab.

23.5 5. Set up a dev environment

After creating your app, set up a dev environment for the Account Activity API.

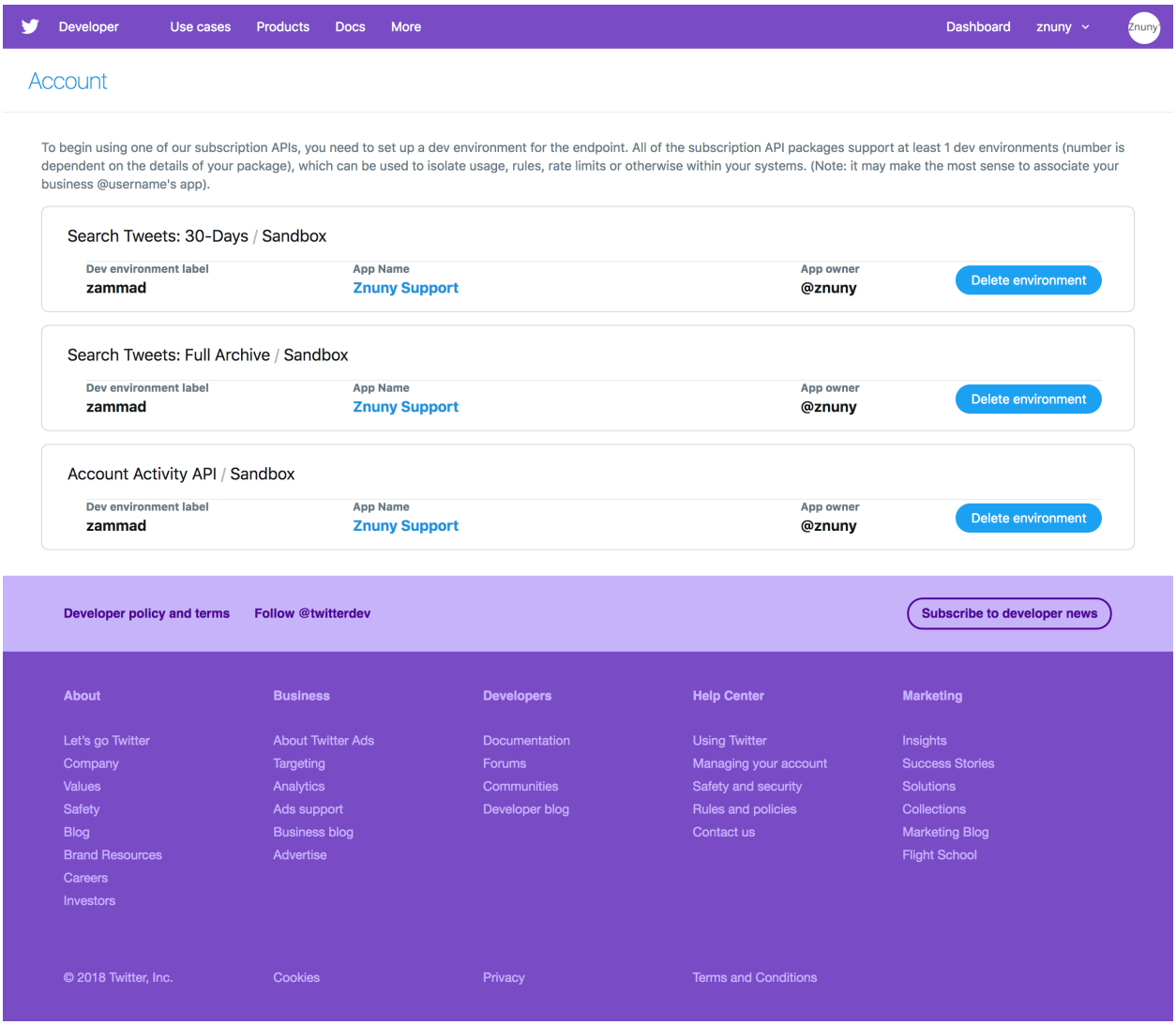


Fig. 6: Name it whatever you like (*e.g.*, `zammad`). You will need the label later, so don't forget it.

23.6 6. Add your new Twitter app in Zammad

23.7 7. Add your Twitter account in Zammad

23.8 8. Configure filters

That's it! Now, incoming tweets and DMs will be automatically turned into Zammad tickets.

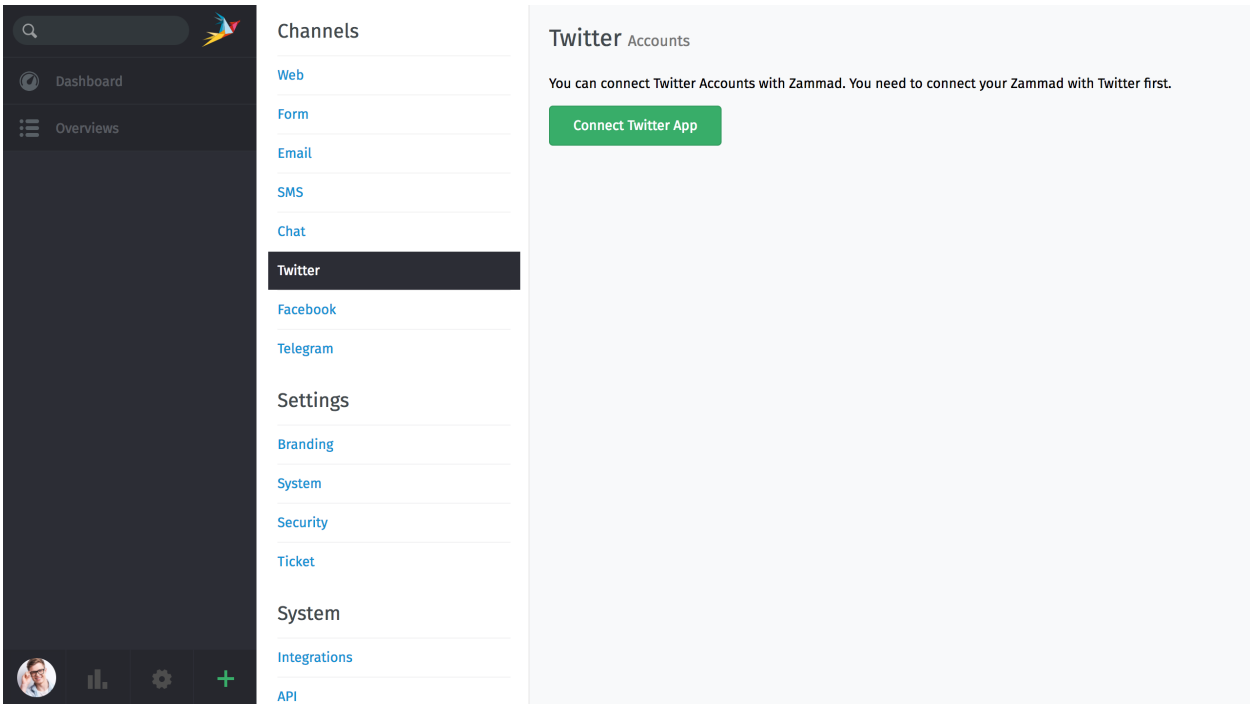


Fig. 7: Add your new Twitter app under **Channels > Twitter** in the admin settings panel. You will need the keys, tokens, and dev environment label from Steps 4 and 5.

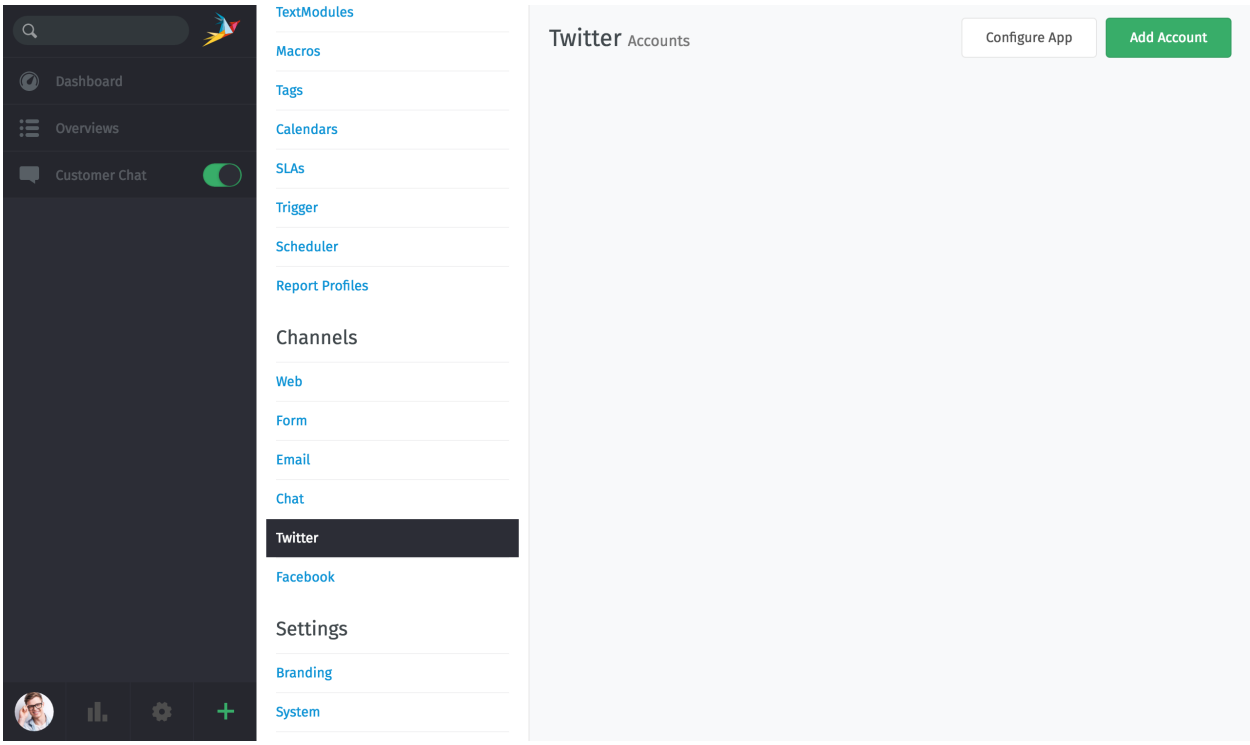


Fig. 8: Click **Add Account** under **Channels > Twitter** in the admin settings panel.

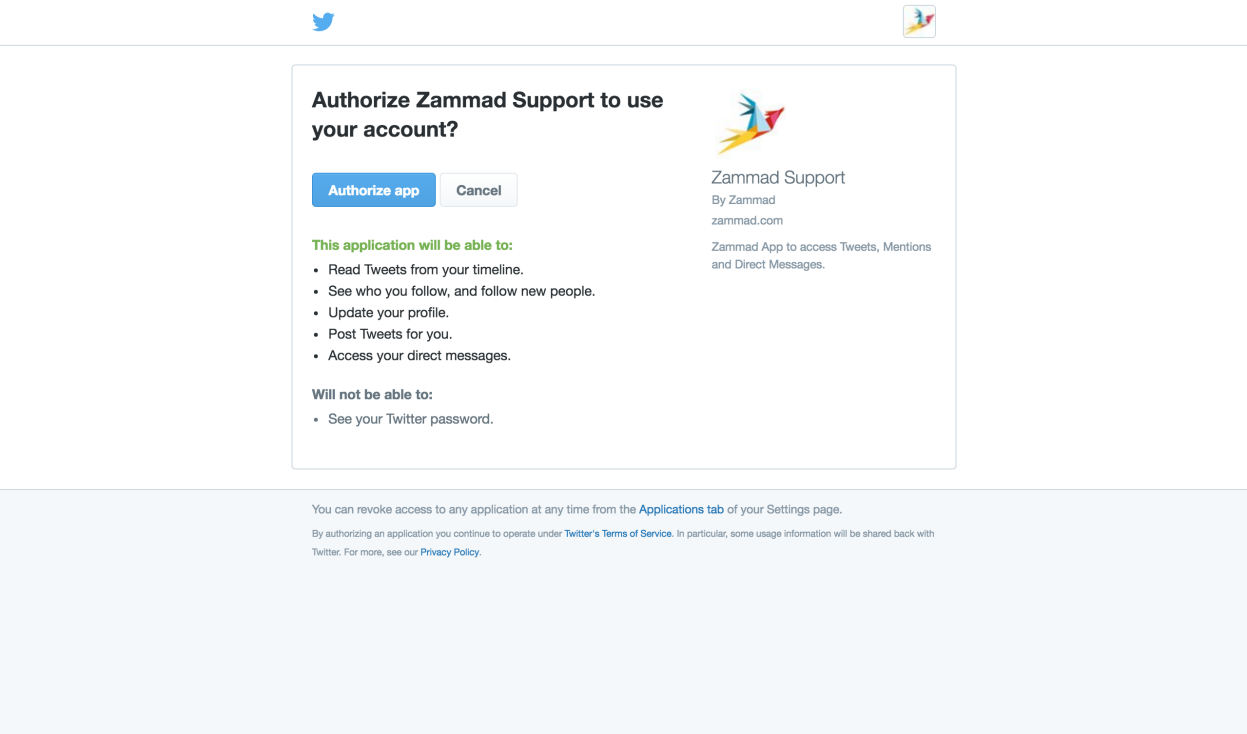


Fig. 9: You will be redirected to Twitter and asked to authorize Zammad to access your account.

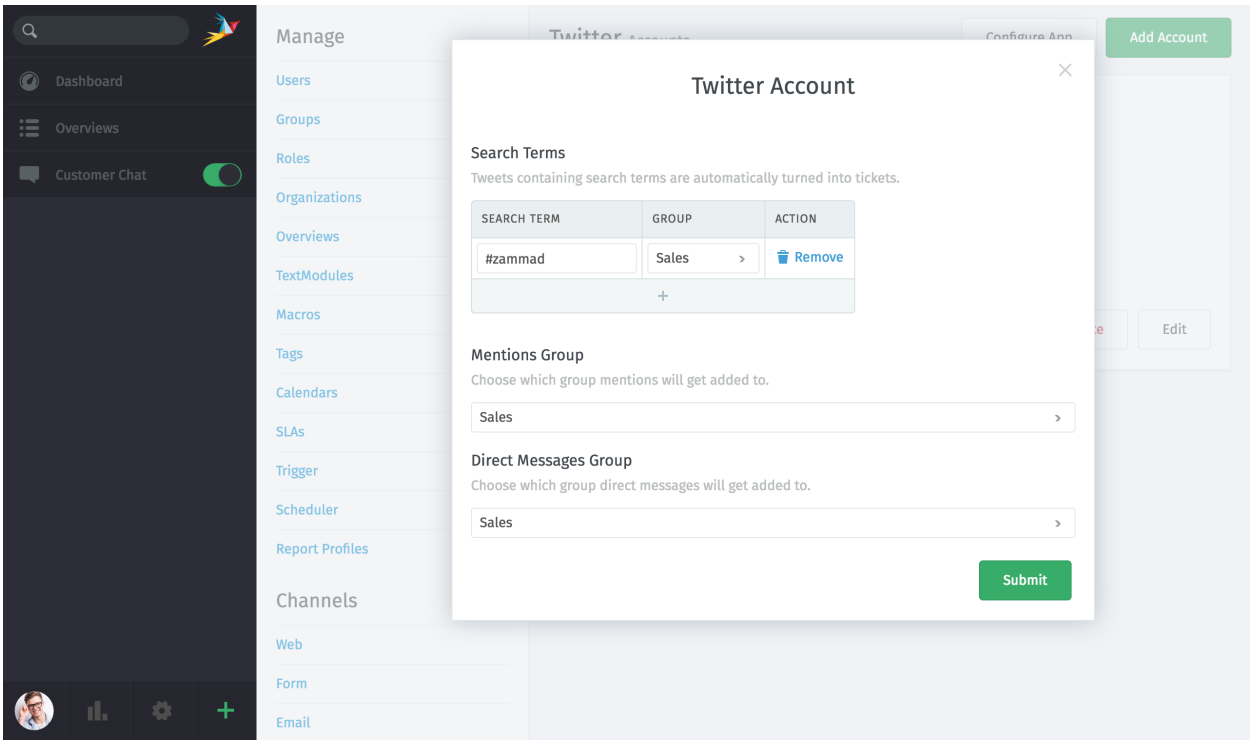


Fig. 10: Set up filters to automatically create new tickets based on **#tags** or **@mentions**.

CHAPTER

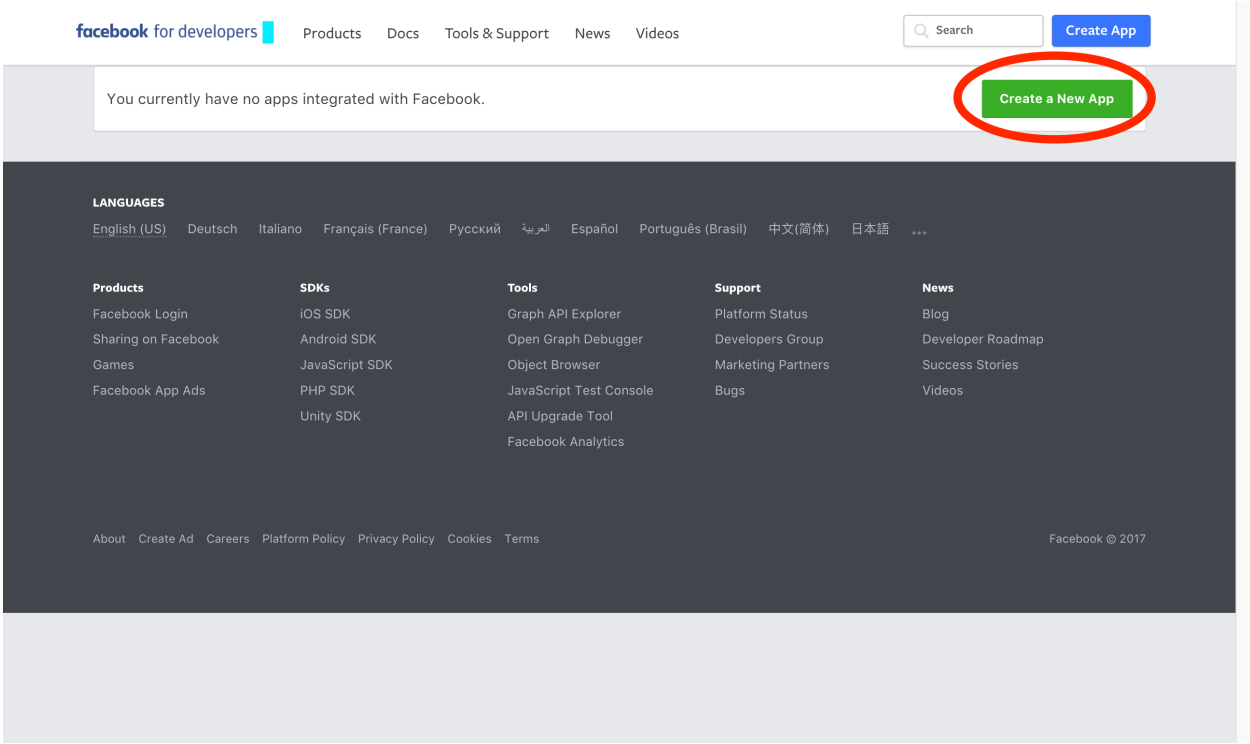
TWENTYFOUR

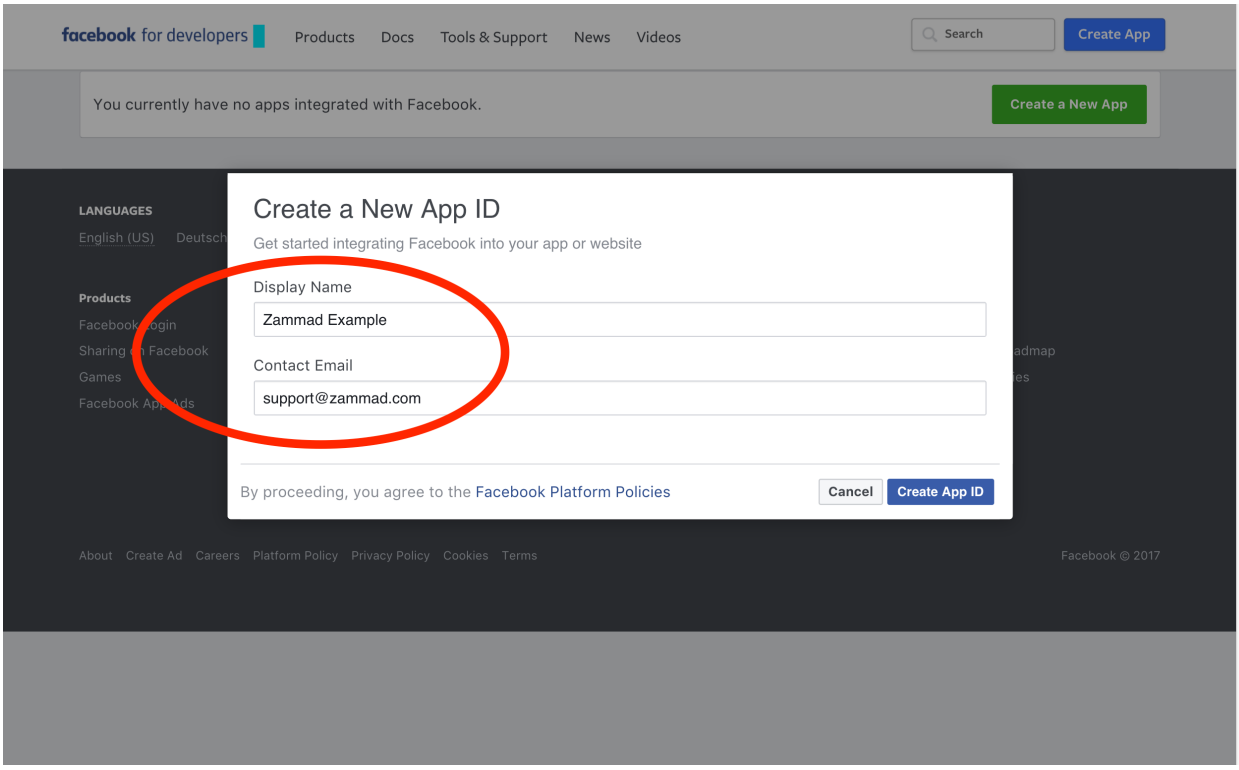
FACEBOOK

Hint: Please note that this part of our documentation currently is outdated. We currently are working on solutions for this topic.

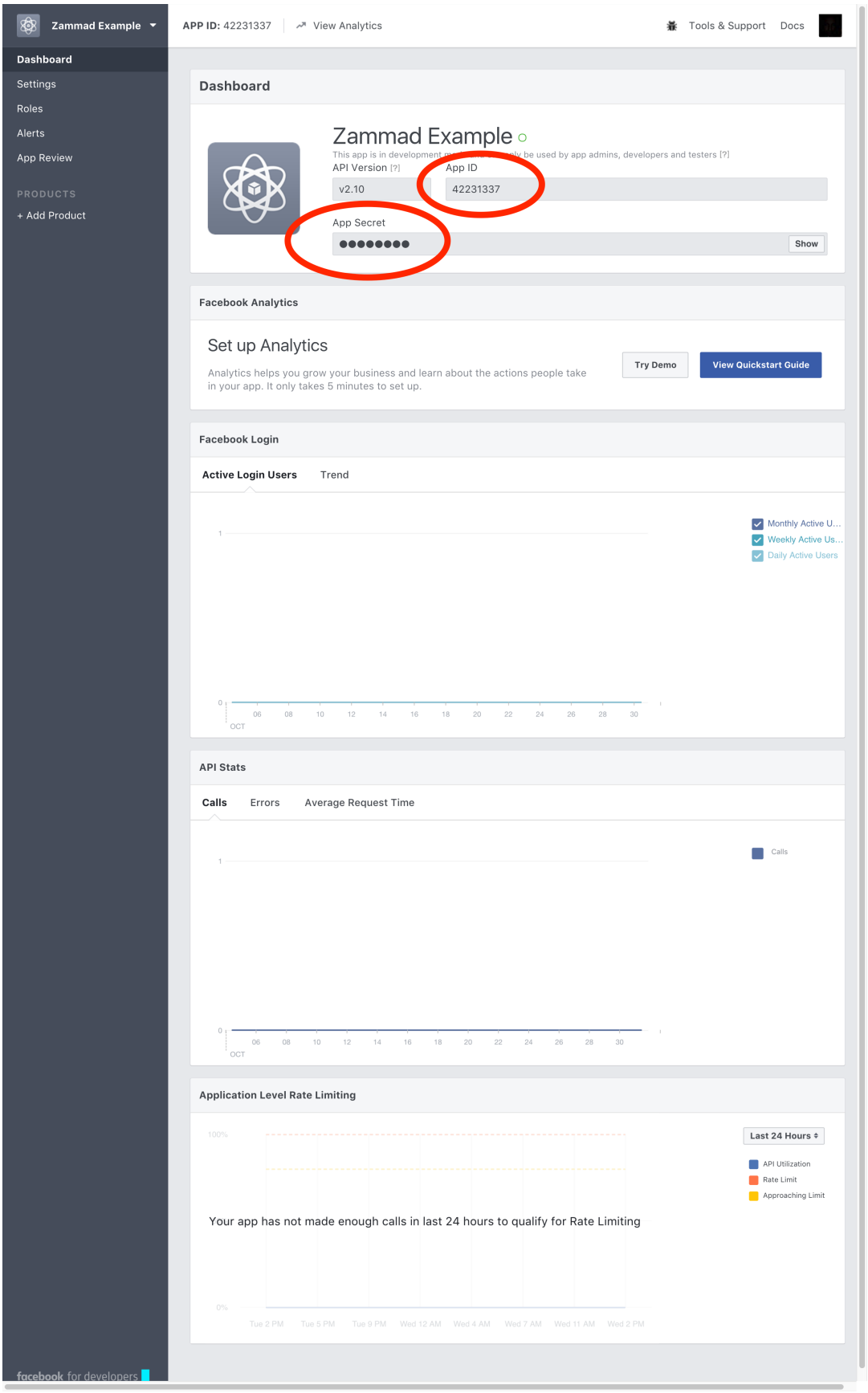
You can connect Facebook Accounts with Zammad. You need to connect your Zammad with Facebook first:

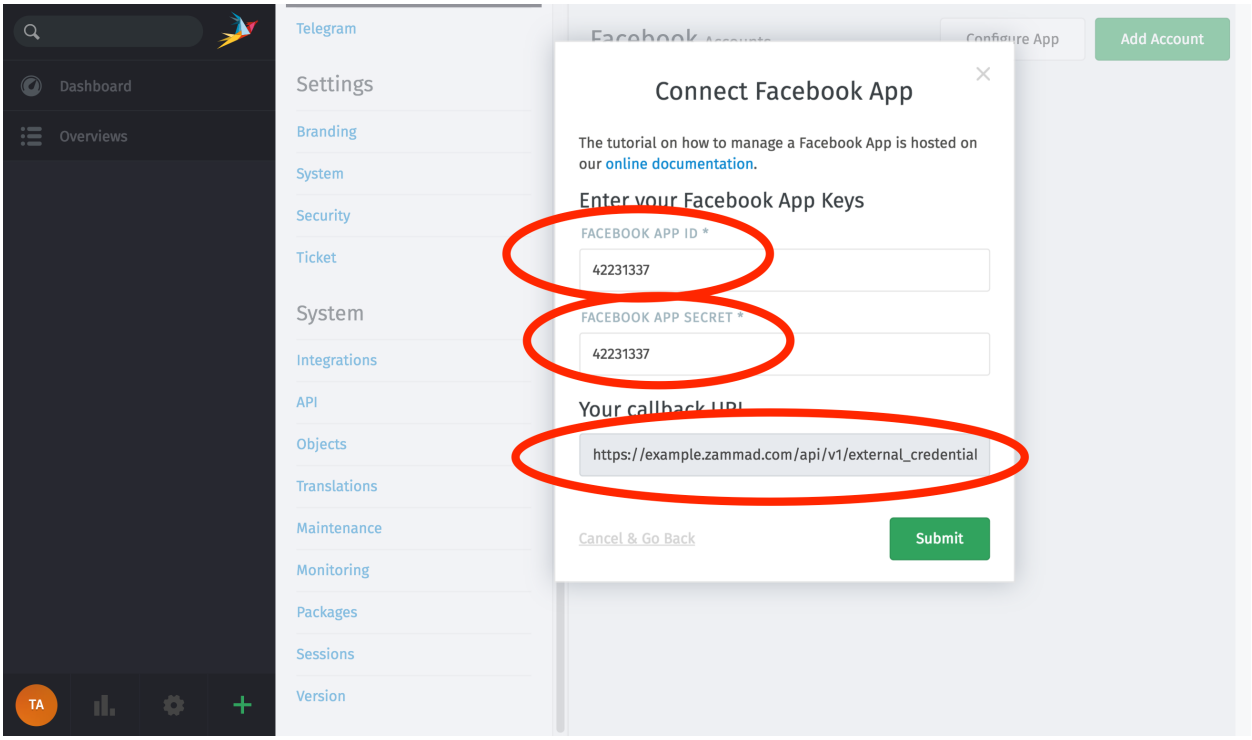
For this start at: https://developers.facebook.com/apps/

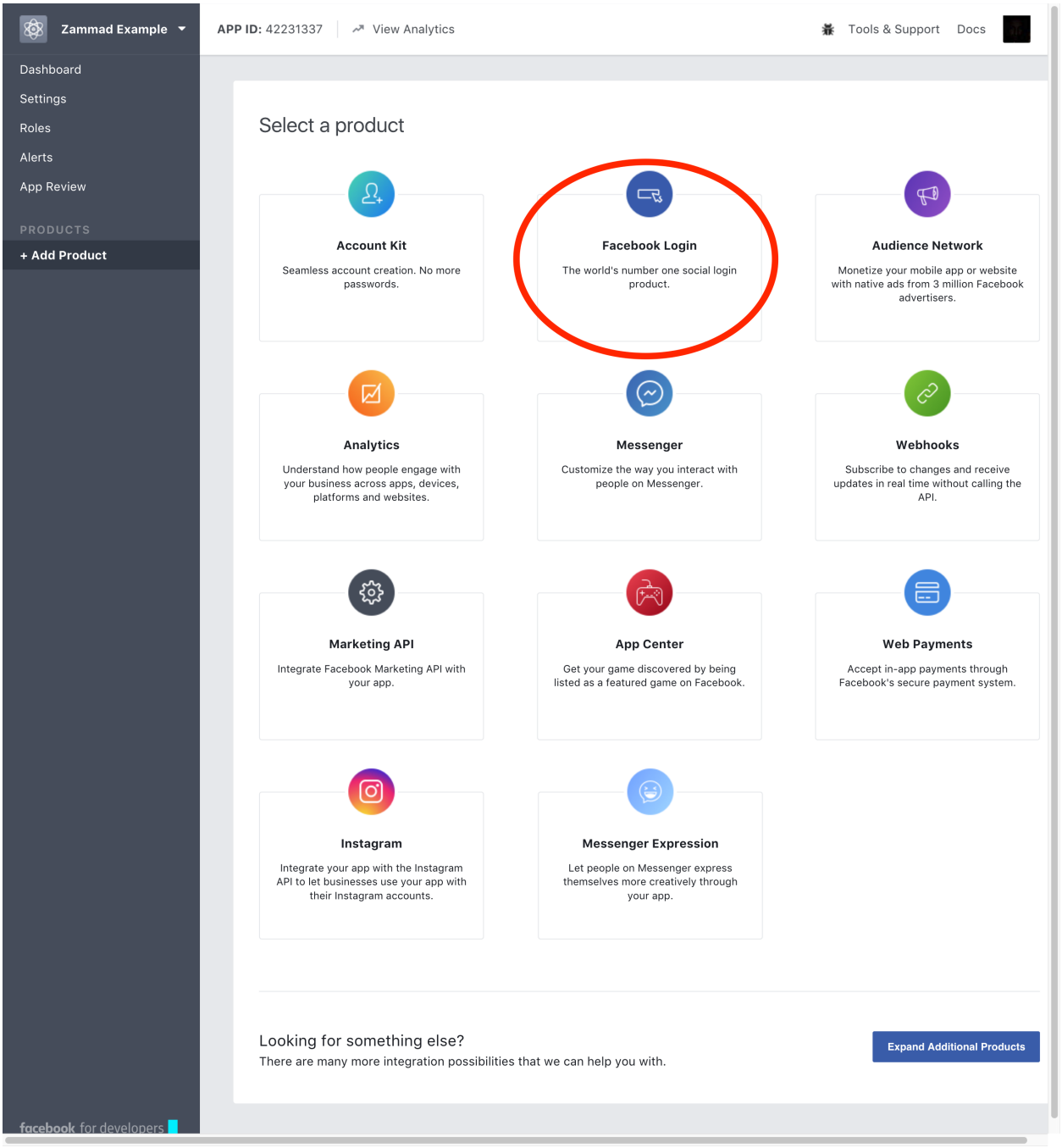




Click on “Create App ID” and enter app name


Zammad Example
APP ID: 42231337
View Analytics
Tools & Support
Docs
Dashboard
Settings
Roles
Alerts
App Review
PRODUCTS
+ Add Product
Dashboard
Zammad Example
API Version [?]
App ID
v2.10
42231337
App Secret
Show
Facebook Analytics
Set up Analytics
Analytics helps you grow your business and learn about the actions people take in your app. It only takes 5 minutes to set up.
Try Demo
View Quickstart Guide
Facebook Login
Active Login Users
Trend
Monthly Active U...
Weekly Active Us...
Daily Active Users
API Stats
Calls
Errors
Average Request Time
Calls
Application Level Rate Limiting
Last 24 Hours
API Utilization
Rate Limit
Approaching Limit
Your app has not made enough calls in last 24 hours to qualify for Rate Limiting
facebook for developers


Dashboard
Overviews
TA
Telegram
Settings
Branding
System
Security
Ticket
System
Integrations
API
Objects
Translations
Maintenance
Monitoring
Packages
Sessions
Version
Configure App
Add Account
Connect Facebook App
The tutorial on how to manage a Facebook App is hosted on our online documentation.
Enter your Facebook App Keys
FACEBOOK APP ID *
42231337
FACEBOOK APP SECRET *
42231337
Your callback URL
https://example.zammad.com/api/v1/external_credential
Cancel & Go Back
Submit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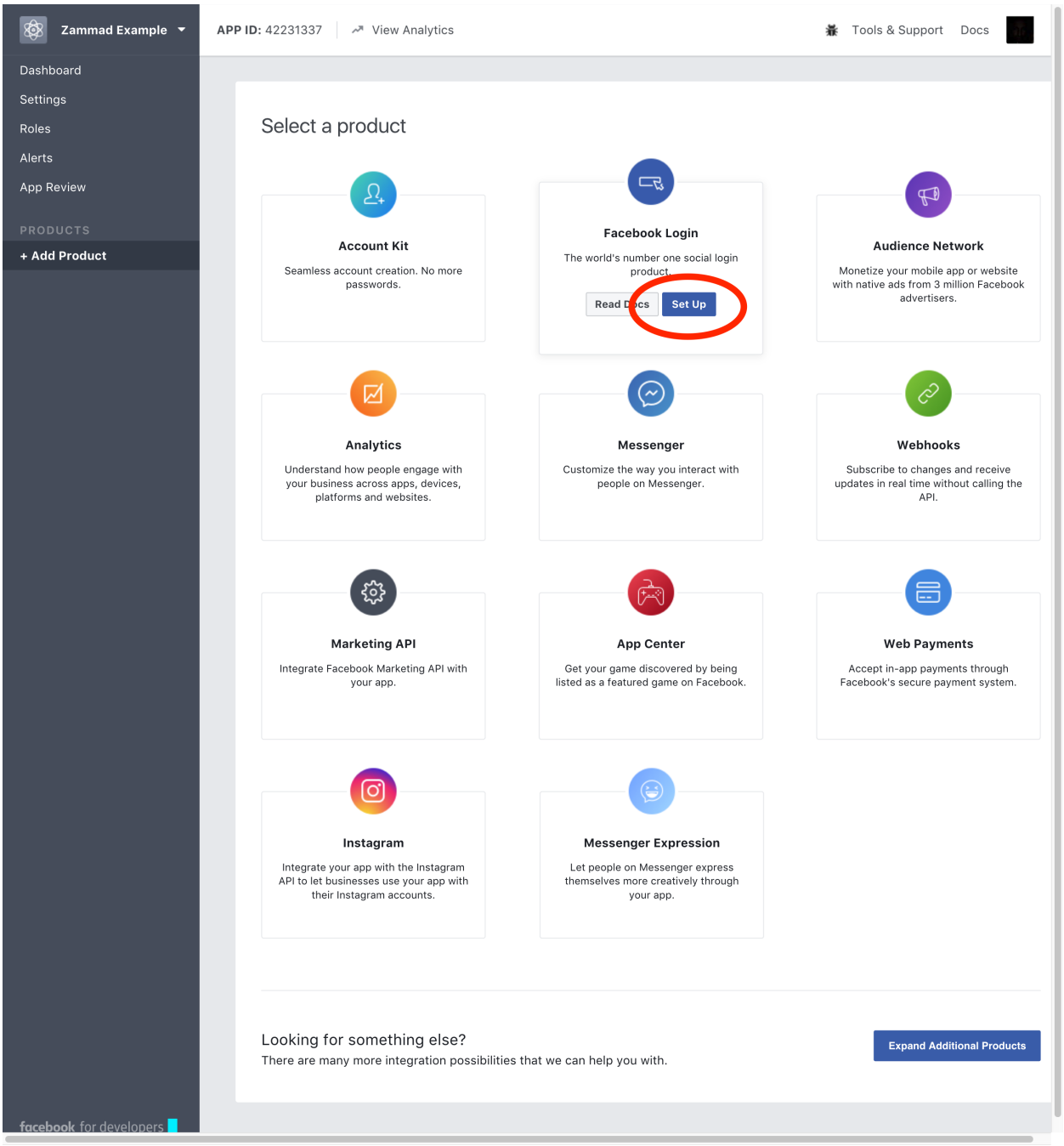
App Review
PRODUCTS
+ Add Product
Select a product
Account Kit
Seamless account creation. No more passwords.
Facebook Login
The world's number one social login product.
Audience Network
Monetize your mobile app or website with native ads from 3 million Facebook advertisers.
Analytics
Understand how people engage with your business across apps, devices, platforms and websites.
Messenger
Customize the way you interact with people on Messenger.
Webhooks
Subscribe to changes and receive updates in real time without calling the API.
Marketing API
Integrate Facebook Marketing API with your app.
App Center
Get your game discovered by being listed as a featured game on Facebook.
Web Payments
Accept in-app payments through Facebook's secure payment system.
Instagram
Integrate your app with the Instagram API to let businesses use your app with their Instagram accounts.
Messenger Expression
Let people on Messenger express themselves more creatively through your app.
Looking for something else?
There are many more integration possibilities that we can help you with.
Expand Additional Products
facebook for developers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The world's number one social login product.
Read Docs
Set Up
Audience Network
Monetize your mobile app or website with native ads from 3 million Facebook advertisers.
Analytics
Understand how people engage with your business across apps, devices, platforms and websites.
Messenger
Customize the way you interact with people on Messenger.
Webhooks
Subscribe to changes and receive updates in real time without calling the API.
Marketing API
Integrate Facebook Marketing API with your app.
App Center
Get your game discovered by being listed as a featured game on Facebook.
Web Payments
Accept in-app payments through Facebook's secure payment system.
Instagram
Integrate your app with the Instagram API to let businesses use your app with their Instagram accounts.
Messenger Expression
Let people on Messenger express themselves more creatively through your app.
Looking for something else?
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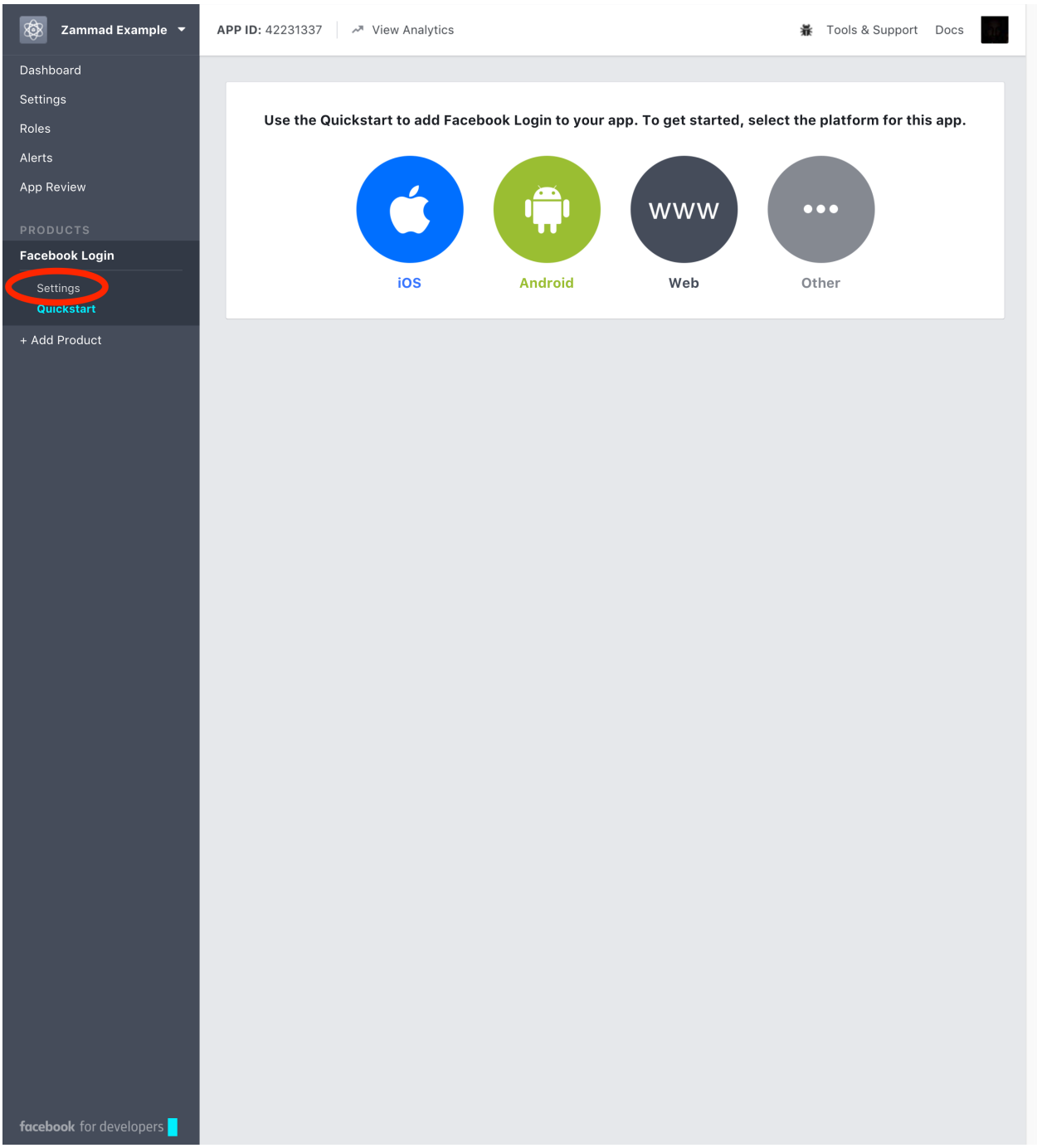
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Dashboard
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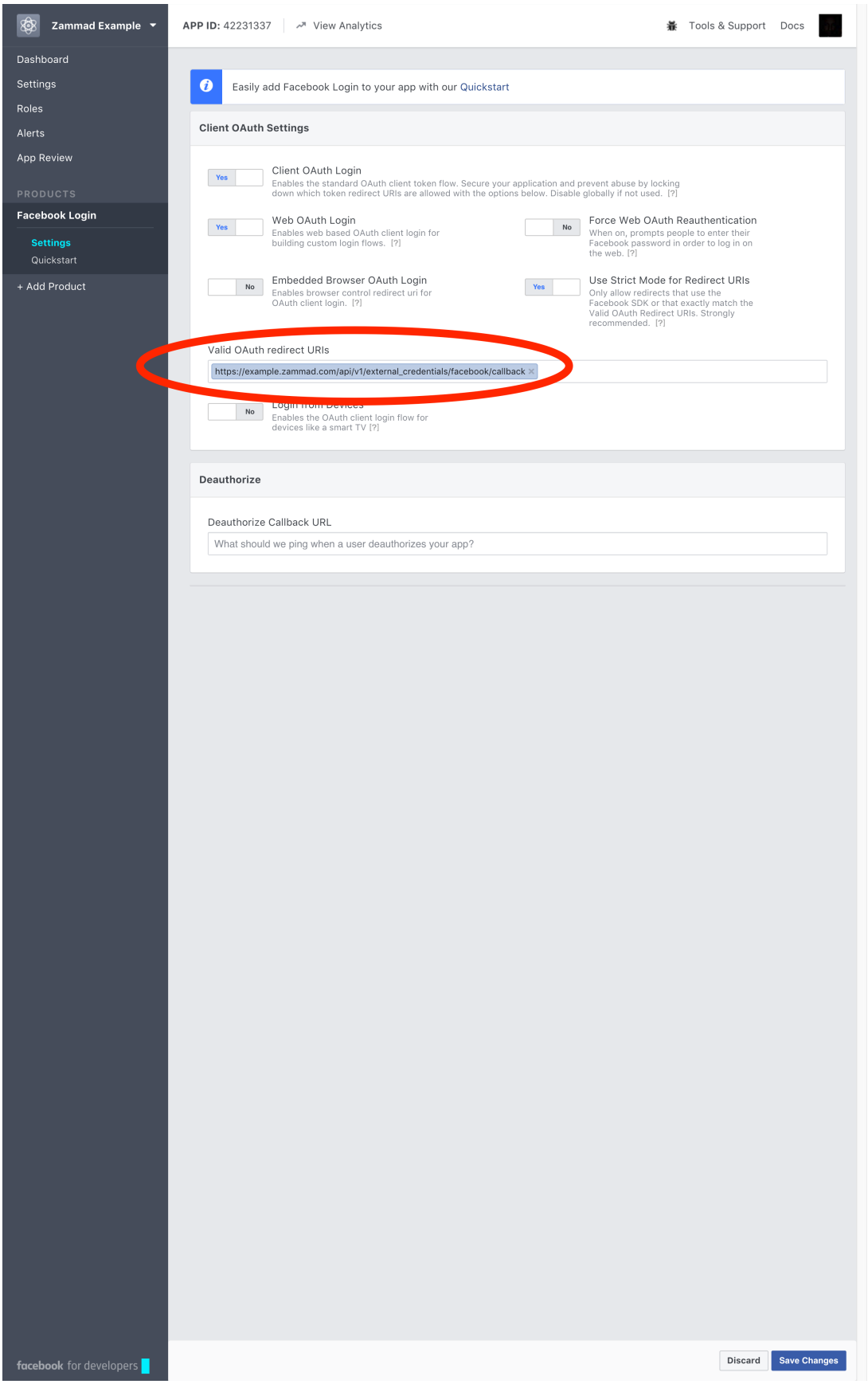
Alerts
App Review
PRODUCTS
Facebook Login
Settings
Quickstart
+ Add Product
Use the Quickstart to add Facebook Login to your app. To get started, select the platform for this app.
iOS
Android
WWW
Web
Other
facebook for developers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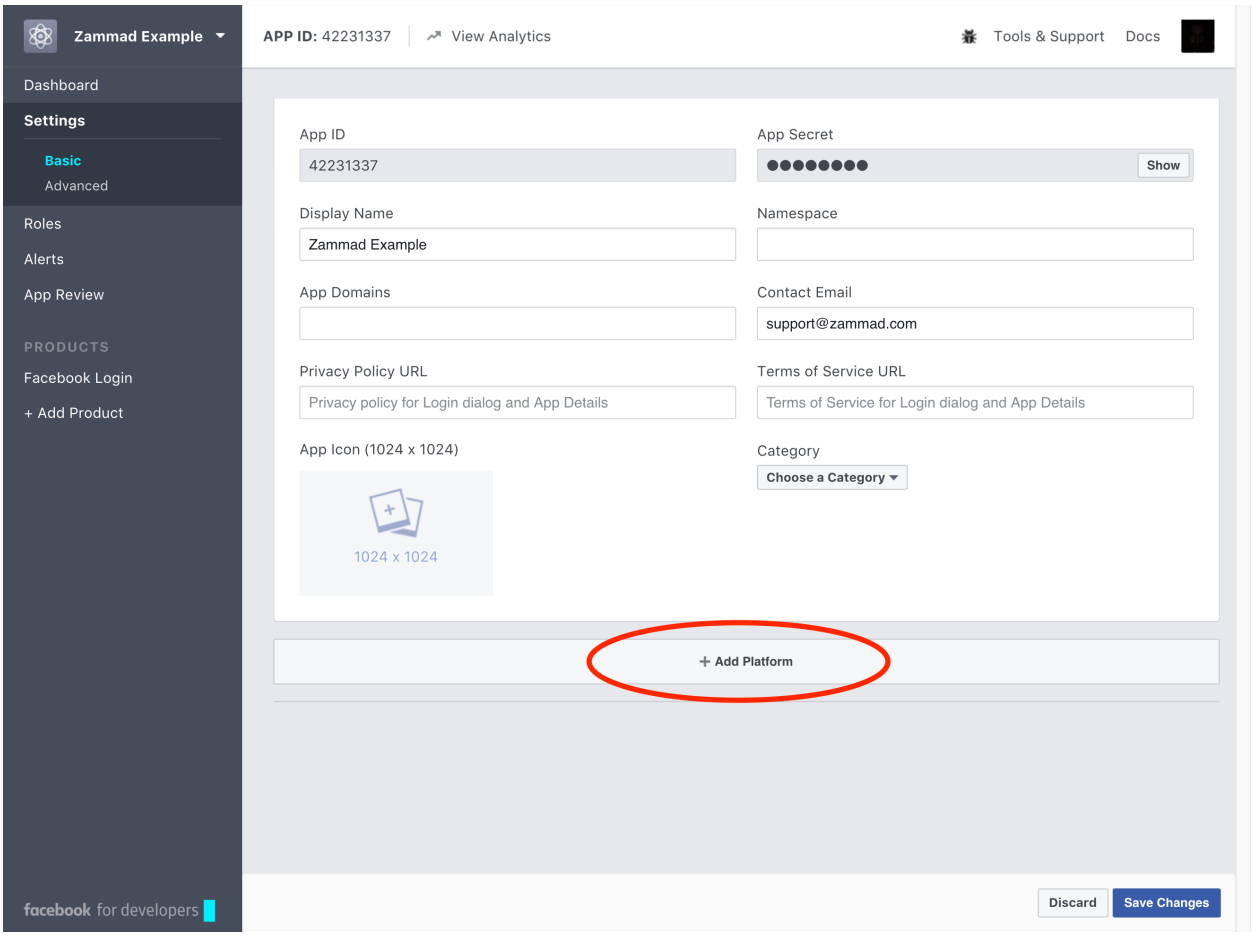
Settings
Roles
Alerts
App Review
PRODUCTS
Facebook Login
Settings
Quickstart
+ Add Product
Easily add Facebook Login to your app with our Quickstart
Client OAuth Settings
Yes
Client OAuth Login
Enables the standard OAuth client token flow. Secure your application and prevent abuse by locking down which token redirect URIs are allowed with the options below. Disable globally if not used. [?]
Yes
Web OAuth Login
Enables web based OAuth client login for building custom login flows. [?]
No
Force Web OAuth Reauthentication
When on, prompts people to enter their Facebook password in order to log in on the web. [?]
No
Embedded Browser OAuth Login
Enables browser control redirect uri for OAuth client login. [?]
Yes
Use Strict Mode for Redirect URIs
Only allow redirects that use the Facebook SDK or that exactly match the Valid OAuth Redirect URIs. Strongly recommended. [?]
Valid OAuth redirect URIs
https://example.zammad.com/api/v1/external_credentials/facebook/callback
No
Enables the OAuth client login flow for devices like a smart TV [?]
Deauthorize
Deauthorize Callback URL
What should we ping when a user deauthorizes your app?
facebook for developers
Discard
Save Changes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App Review
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App Secret
Show
Display Name
Zammad Example
Namespace
App Domains
Contact Email
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Privacy Policy URL
Privacy policy for Login dialog and App Details
Terms of Service URL
Terms of Service for Login dialog and App Details
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1024 x 1024
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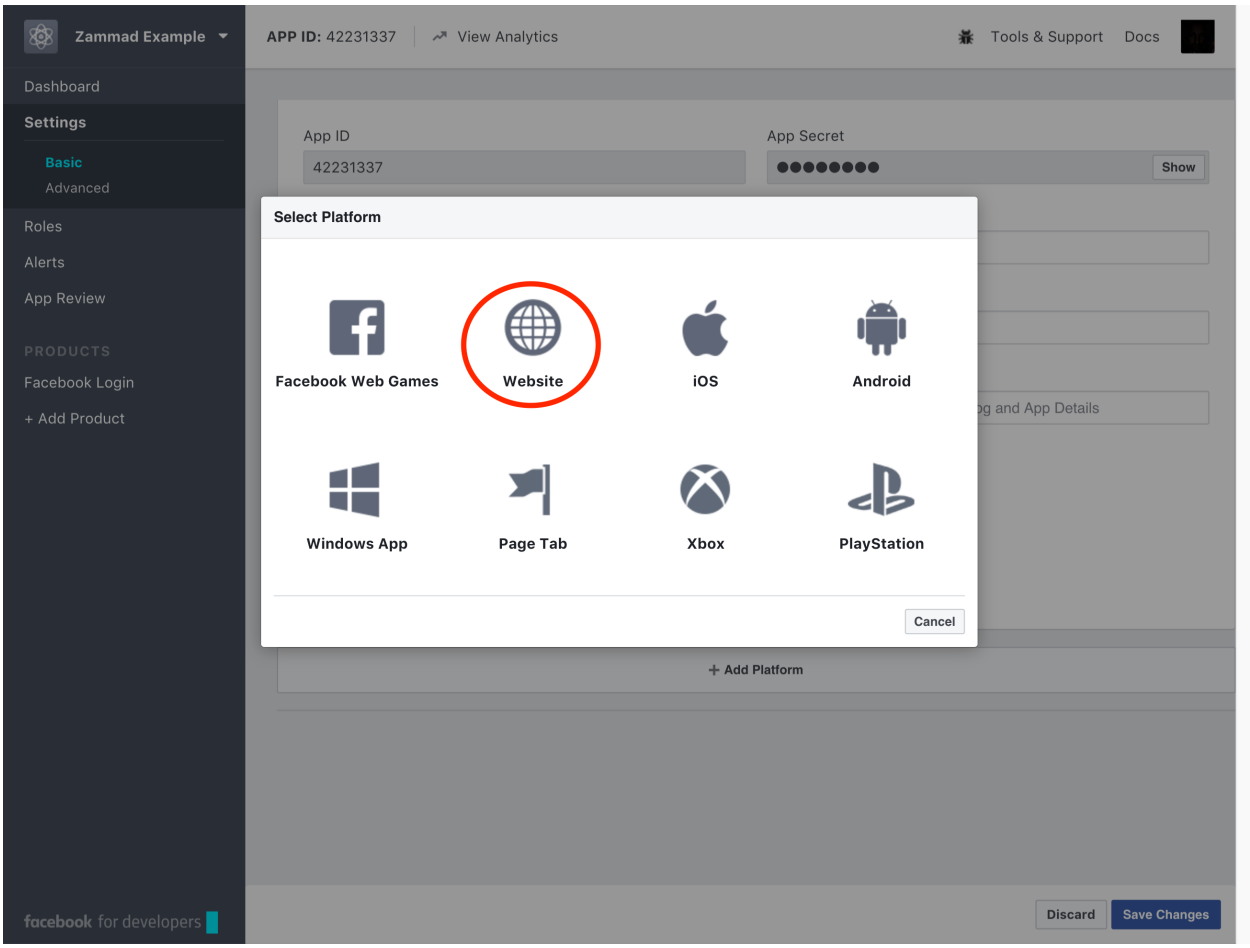
Choose a Category
+ Add Platform
Discard
Save Changes
facebook for developers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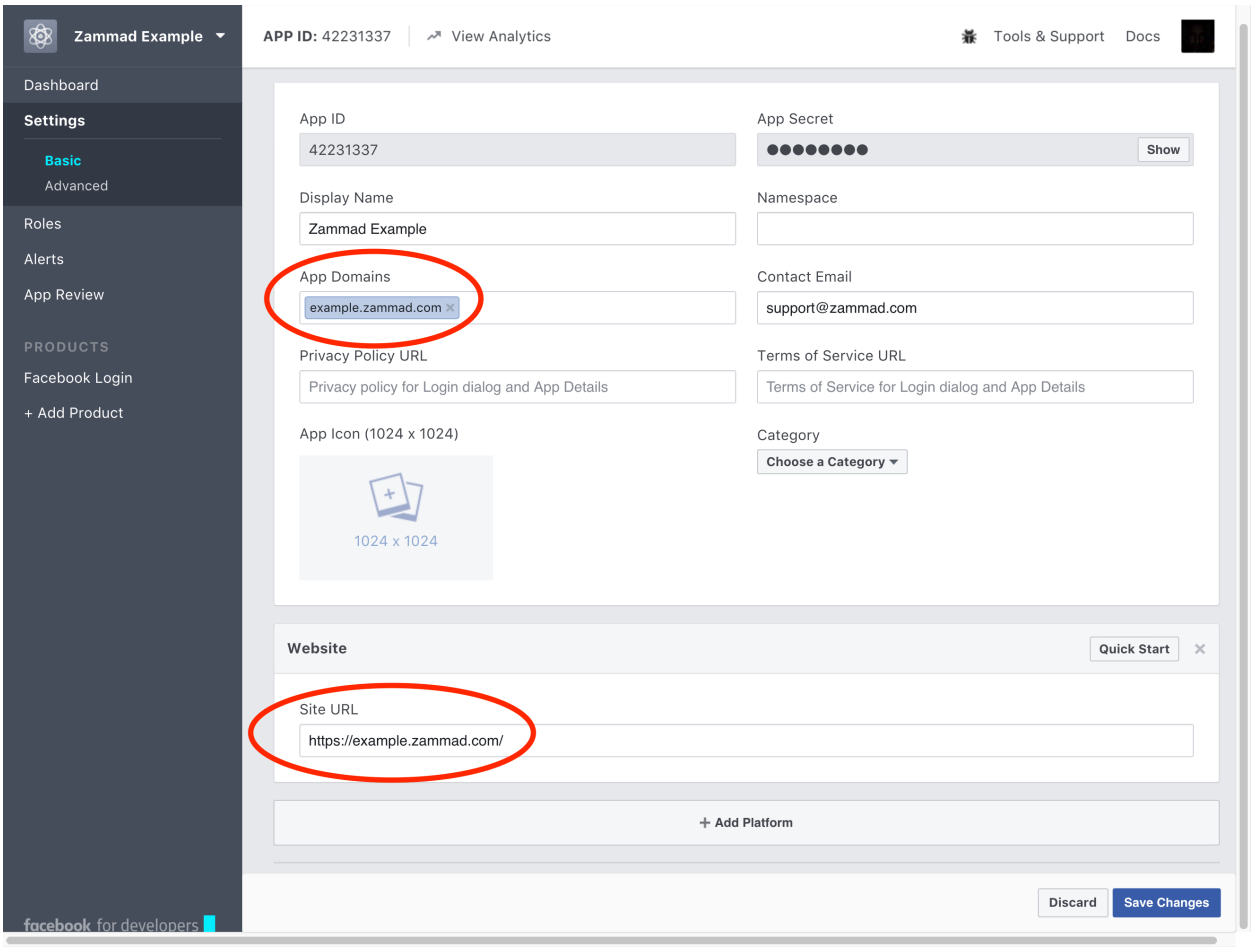
Dashboard
Settings
Basic
Advanced
Roles
Alerts
App Review
PRODUCTS
Facebook Login
+ Add Product
App ID
42231337
App Secret
Show
Select Platform
Facebook Web Games
Website
iOS
Android
Windows App
Page Tab
Xbox
PlayStation
Cancel
+ Add Platform
Discard
Save Changes
facebook for developers



Configure Zammad as Facebook app

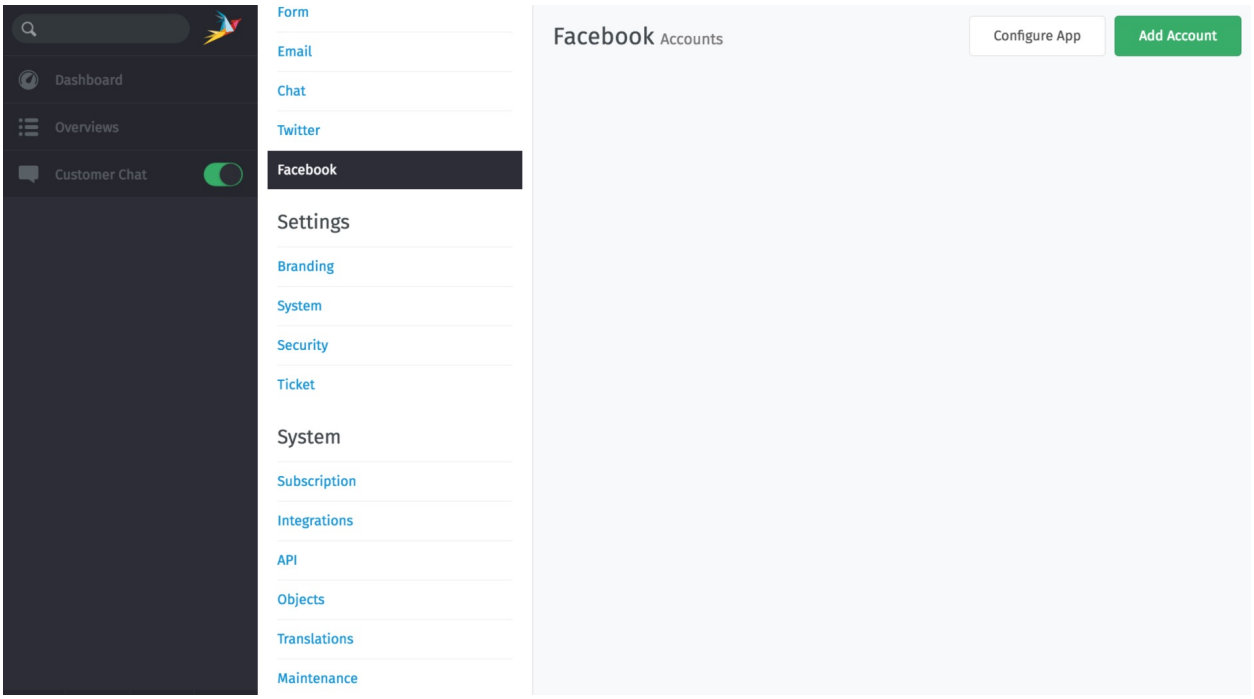
- Go to “Admin -> Channels -> Facebook”
- Click on “Connect Facebook App” and enter your “App ID”, “App Secret” and verify the “Callback URL”.

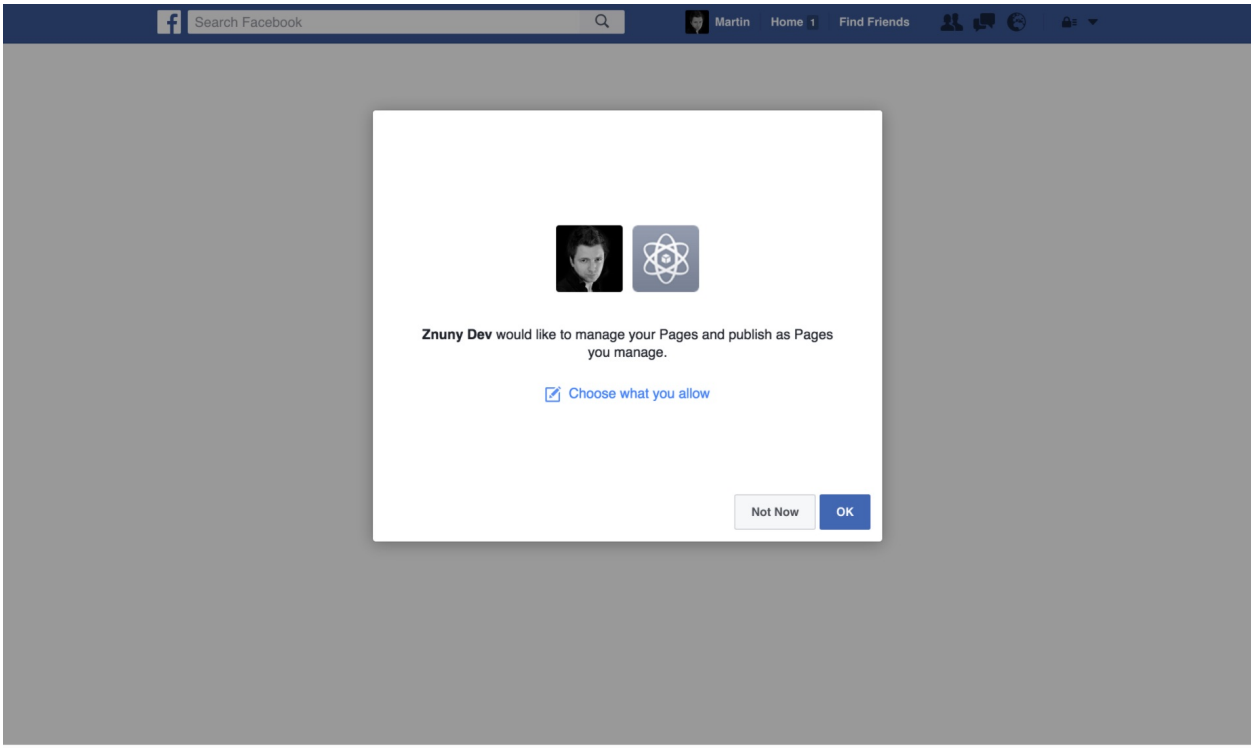
Done, your Zammad is configured as Facebook App now.

Link your Facebook Page to your Zammad Facebook app

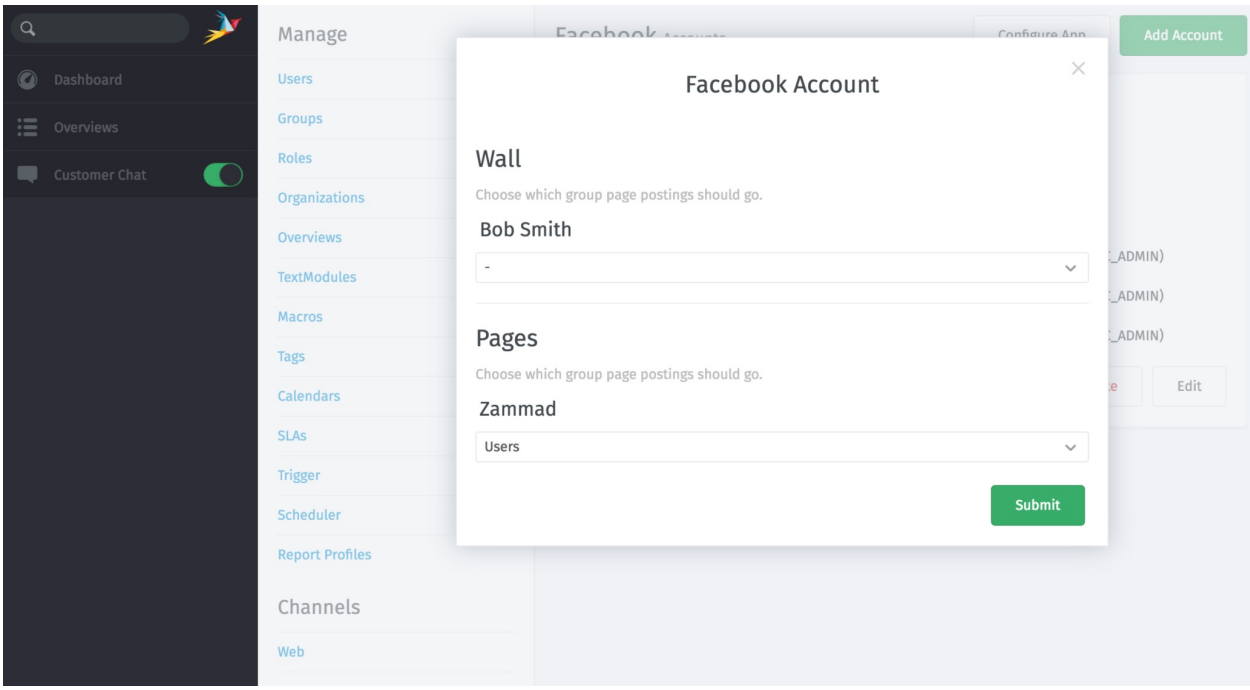
Now you need to link your Facebook Page from which you want to get posts and send out comments.

Click on “Add Account”, then you will see the authorize app page of Facebook. Click on “authorize app”.

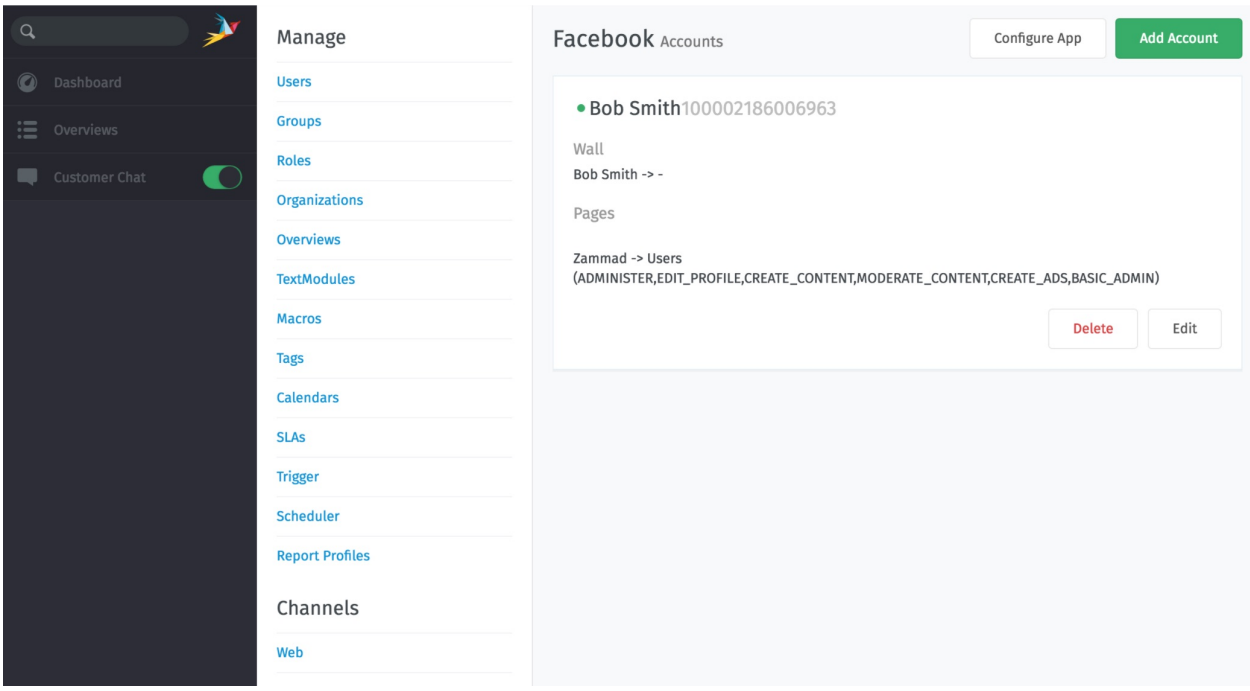




You will get redirected back to Zammad. Now you need to configure your search keys, where mentions should get routed.



After you are done, you will get an overview of all linked Facebook Accounts.



Start using your new channel

Start and write a post to your page, short time later you will have a new ticket in Zammad.

Just click on the reply button (as you do it for emails) to send a comment.

CHAPTER

TWENTYFIVE

TELEGRAM

It's possible to put your Telegram bot communication into Zammad. To do so, you need to follow these steps.

Note: Your Zammad instance needs to be publicly available via HTTPS (we use Telegram WebHooks).

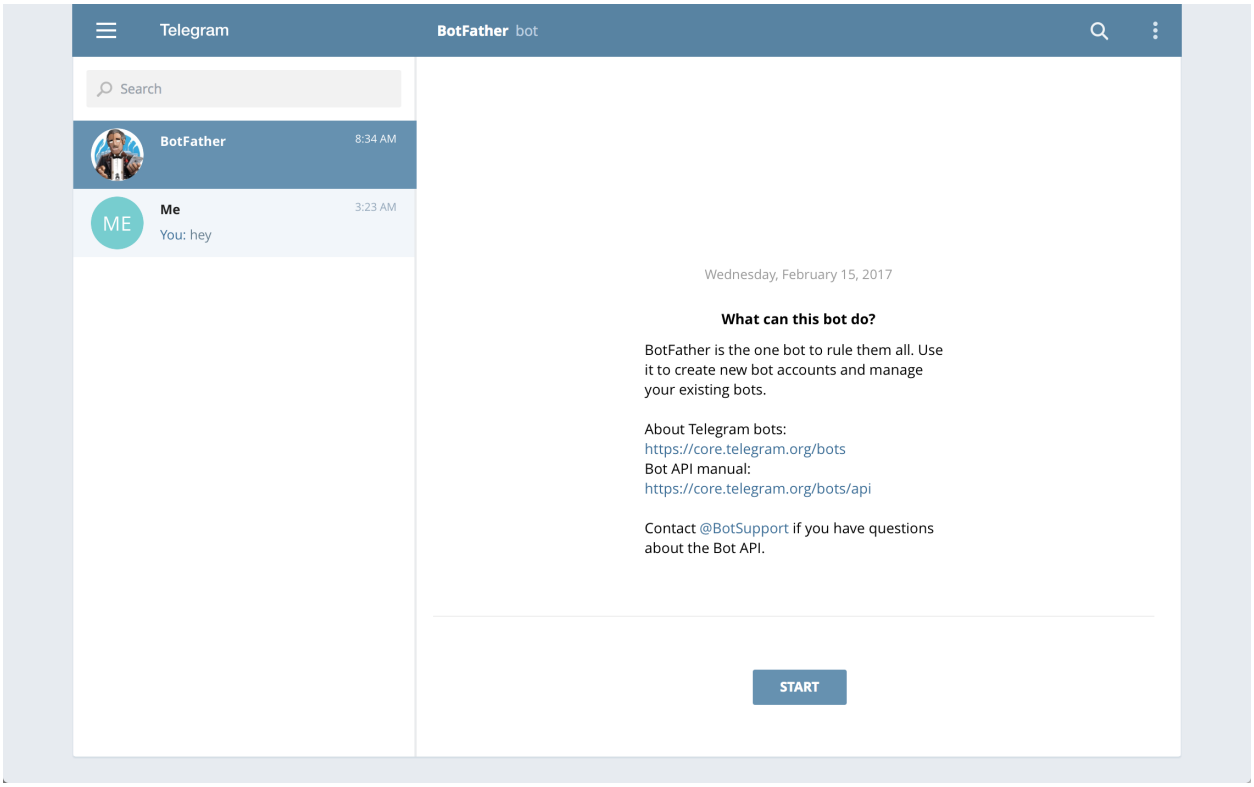
Warning: Zammad **cannot receive file attachments larger than 20MB** in Telegram messages.

This is a hard limit imposed by the Telegram Bot API.

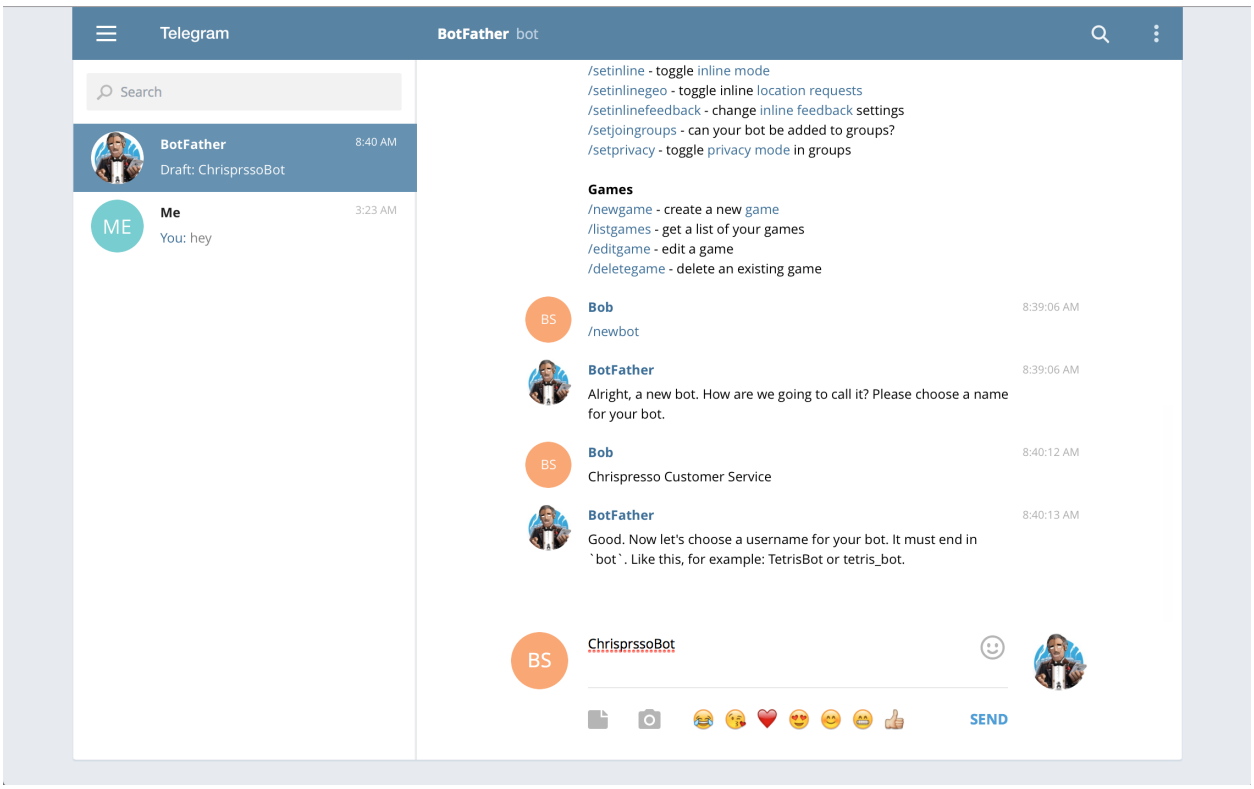
25.1 Register a Telegram bot app

Register your Telegram bot via your Telegram client, see also here: https://core.telegram.org/bots#3-how-do-i-create-a-bot

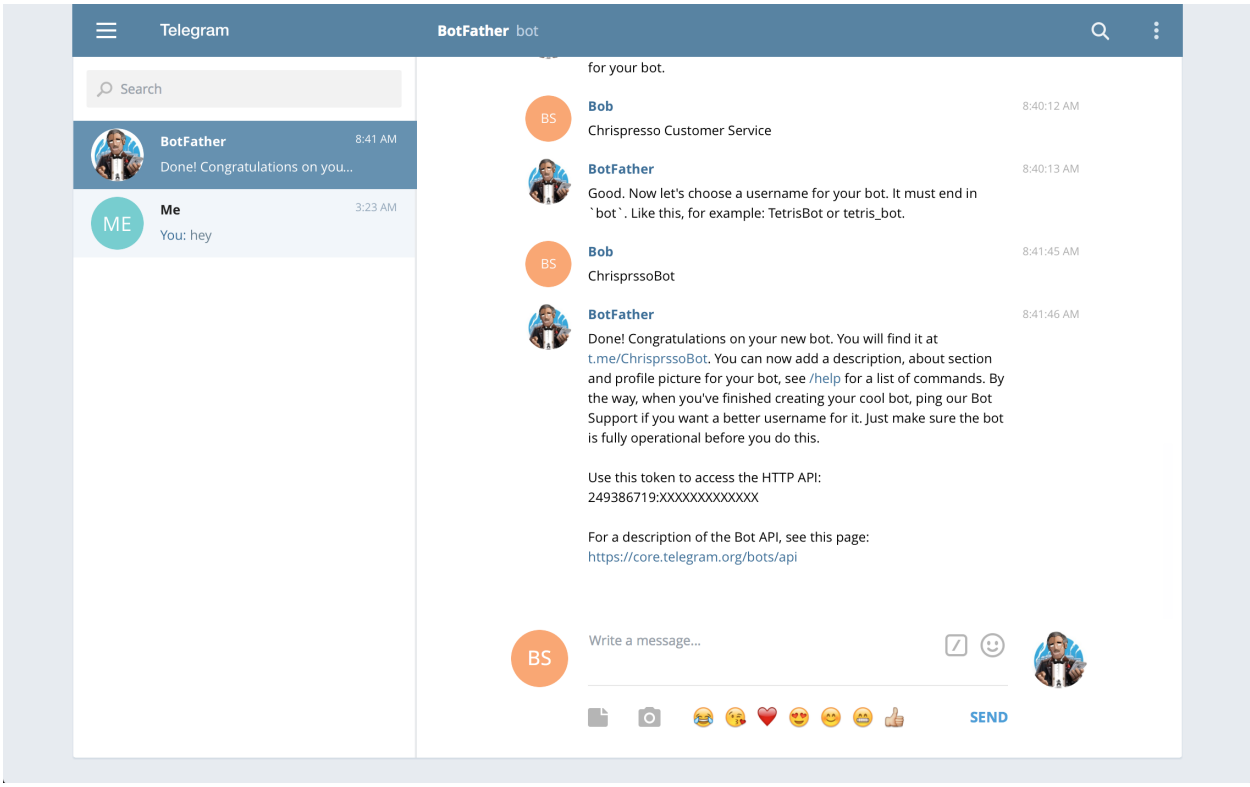
Go to BotFather



Register a new bot by using "/newbot" and define its name and username

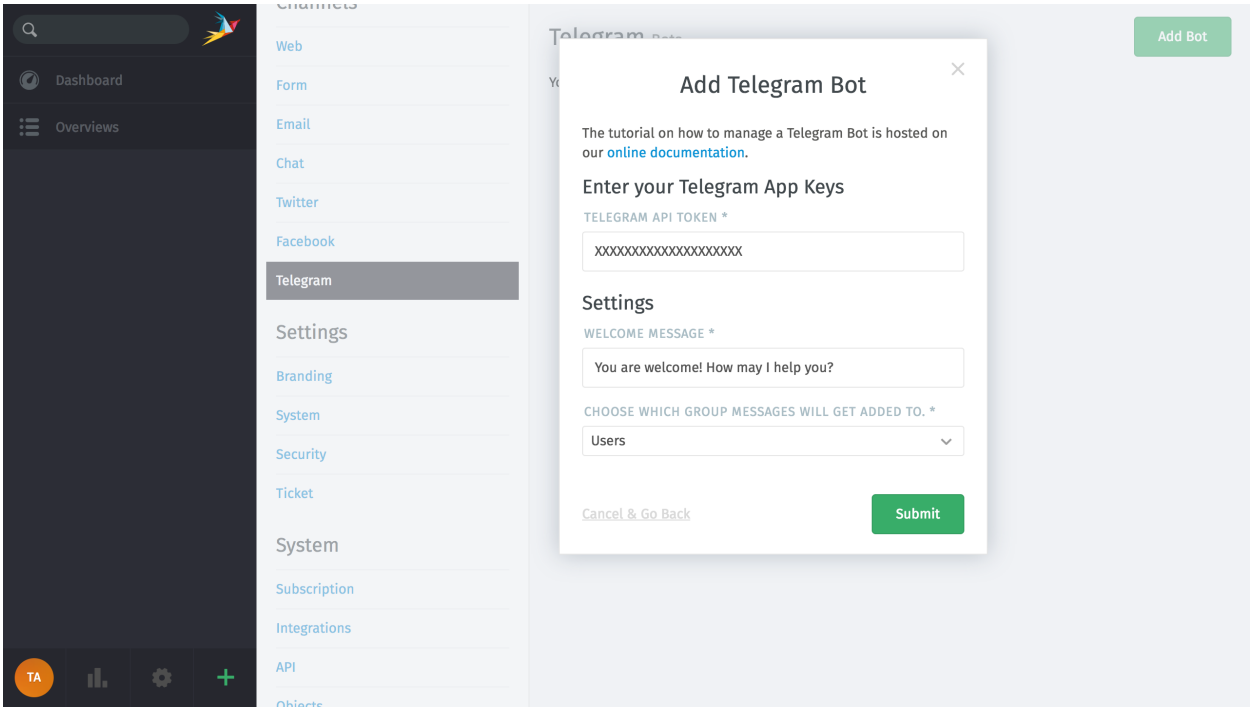


When you're all done, you will get your Telegram bot API token

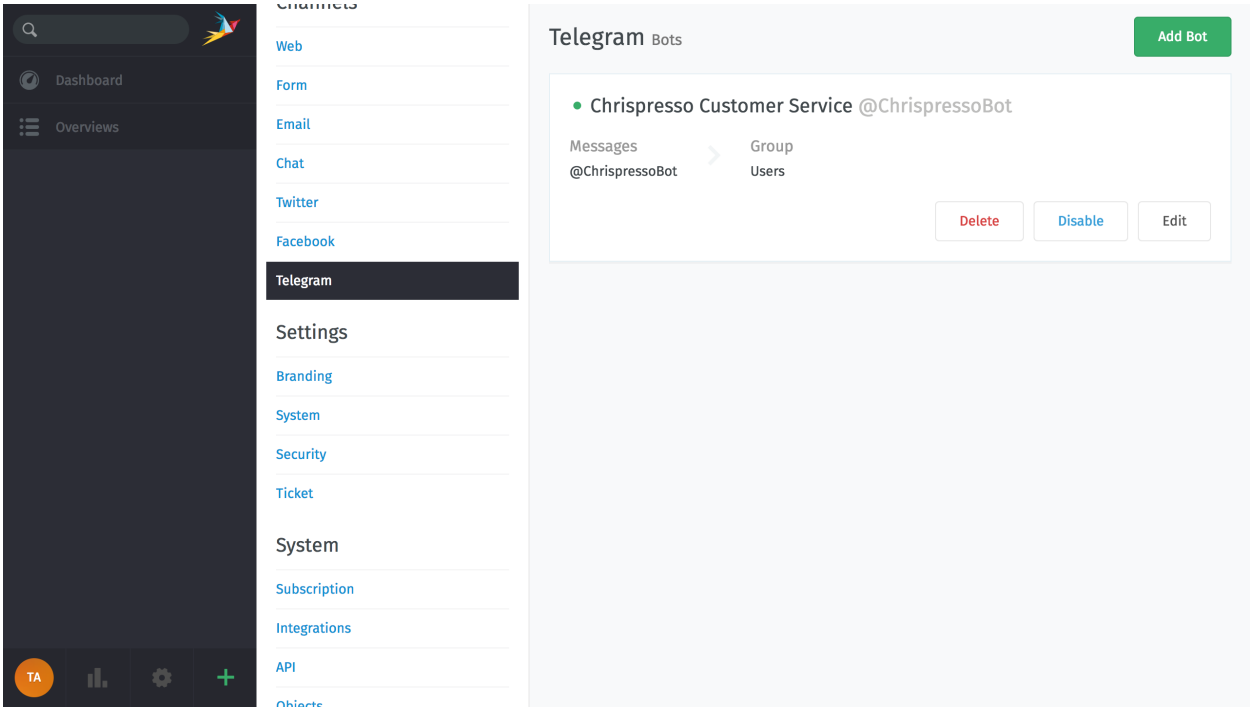


25.2 Configure Zammad as Telegram bot

Go to “Admin -> Channels -> Telegram” and click “Add Bot”



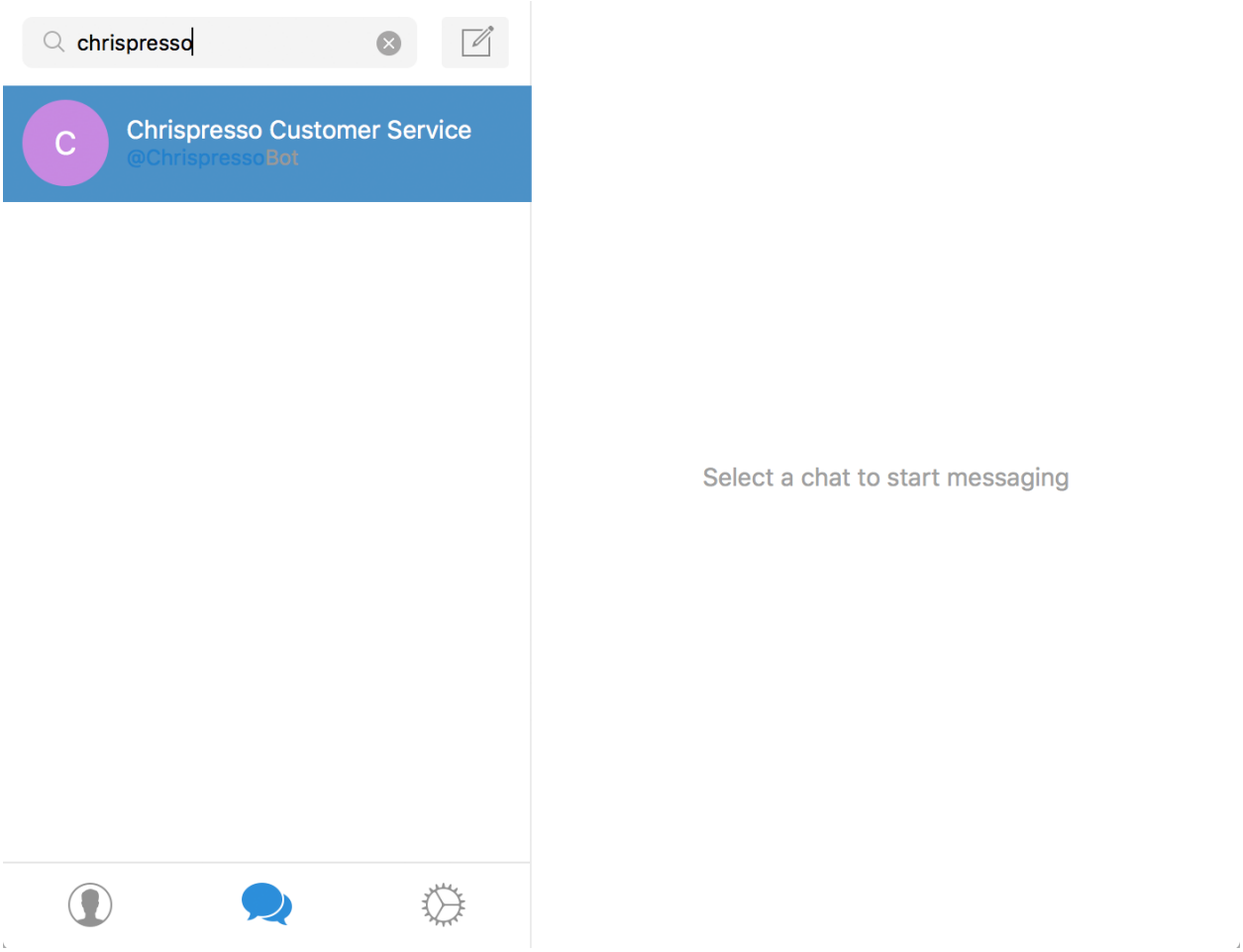
Enter your “API Token”, your “welcome message” and set the incoming group.

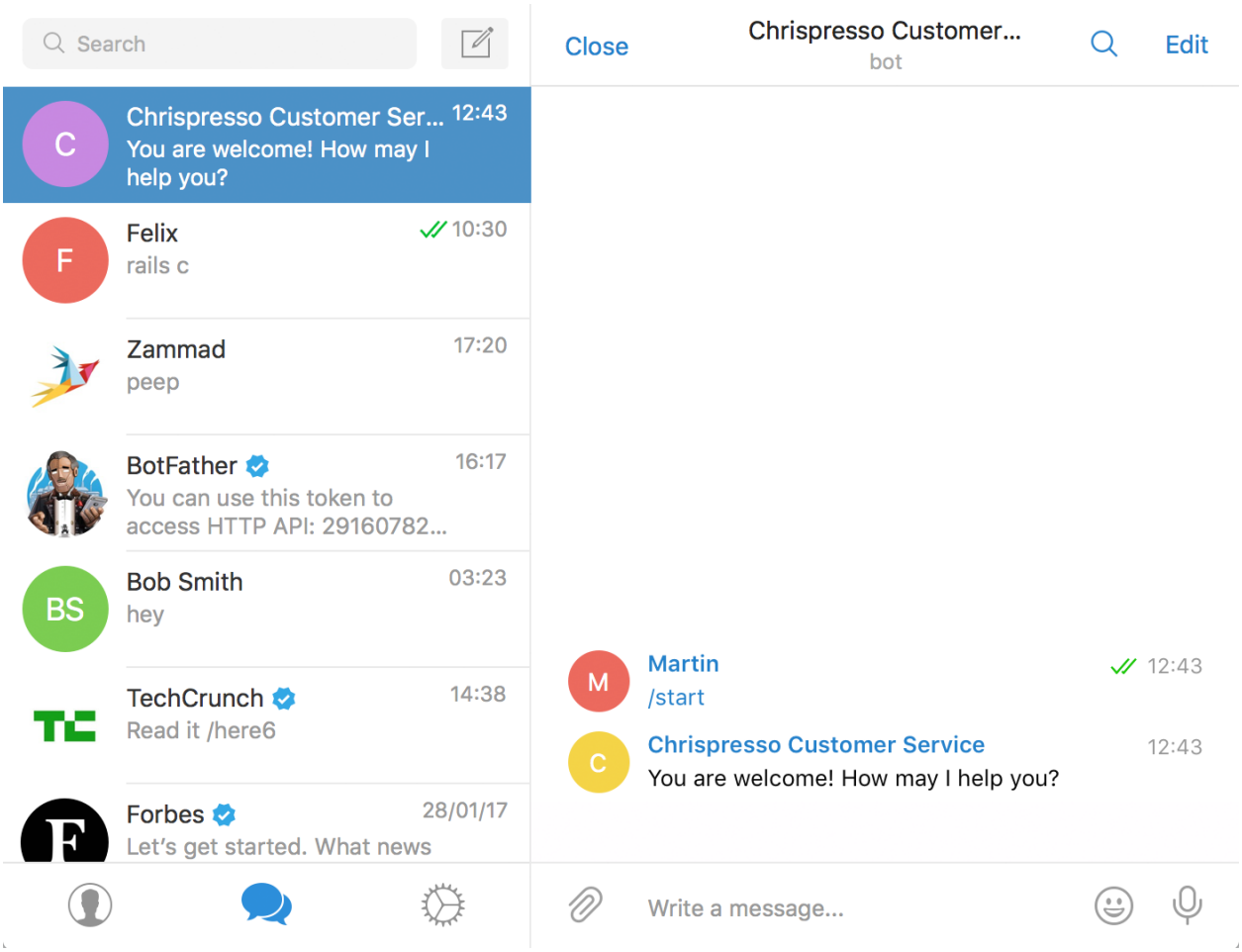


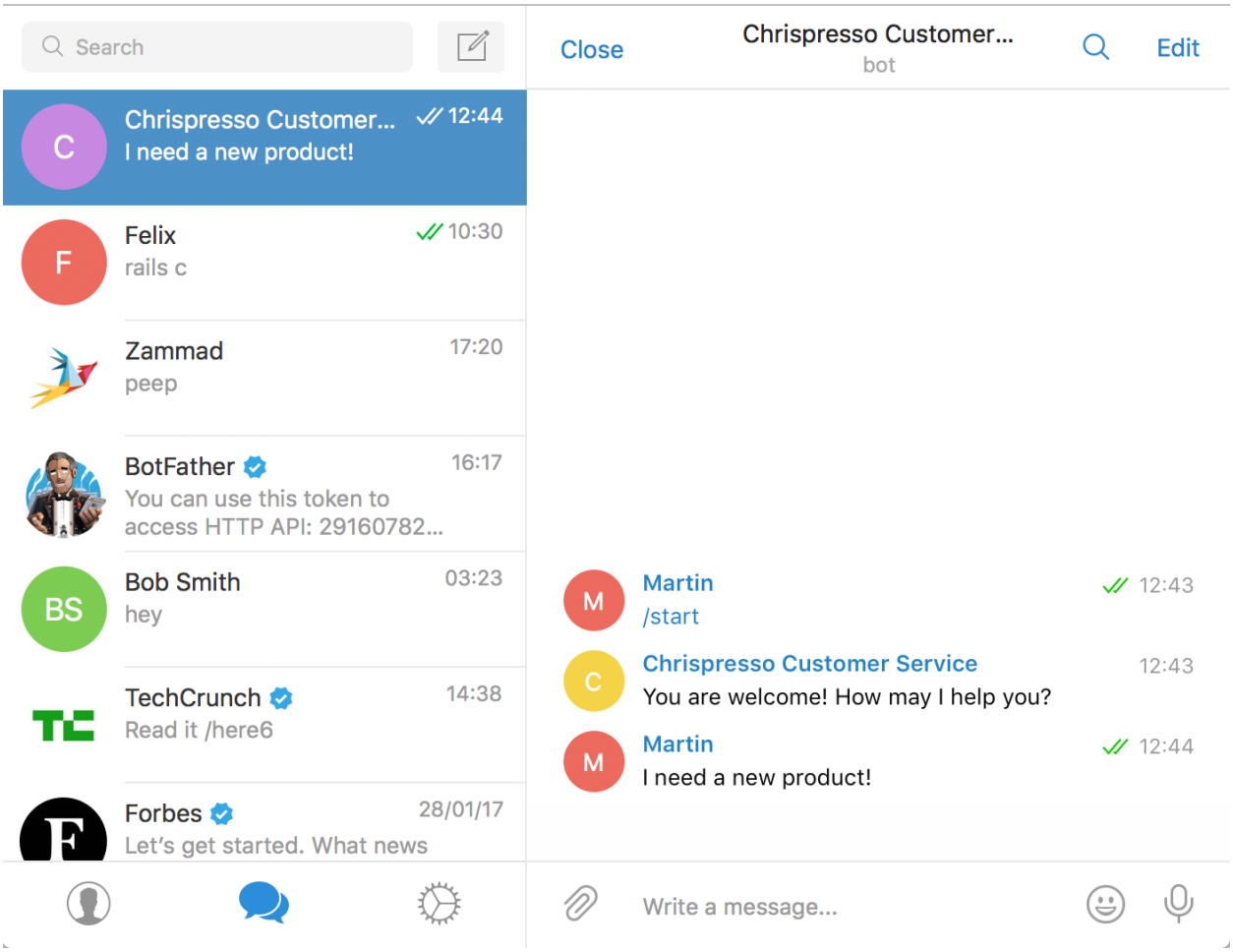
Done, your Zammad is now configured as a Telegram bot.

25.3 Start using your new channel

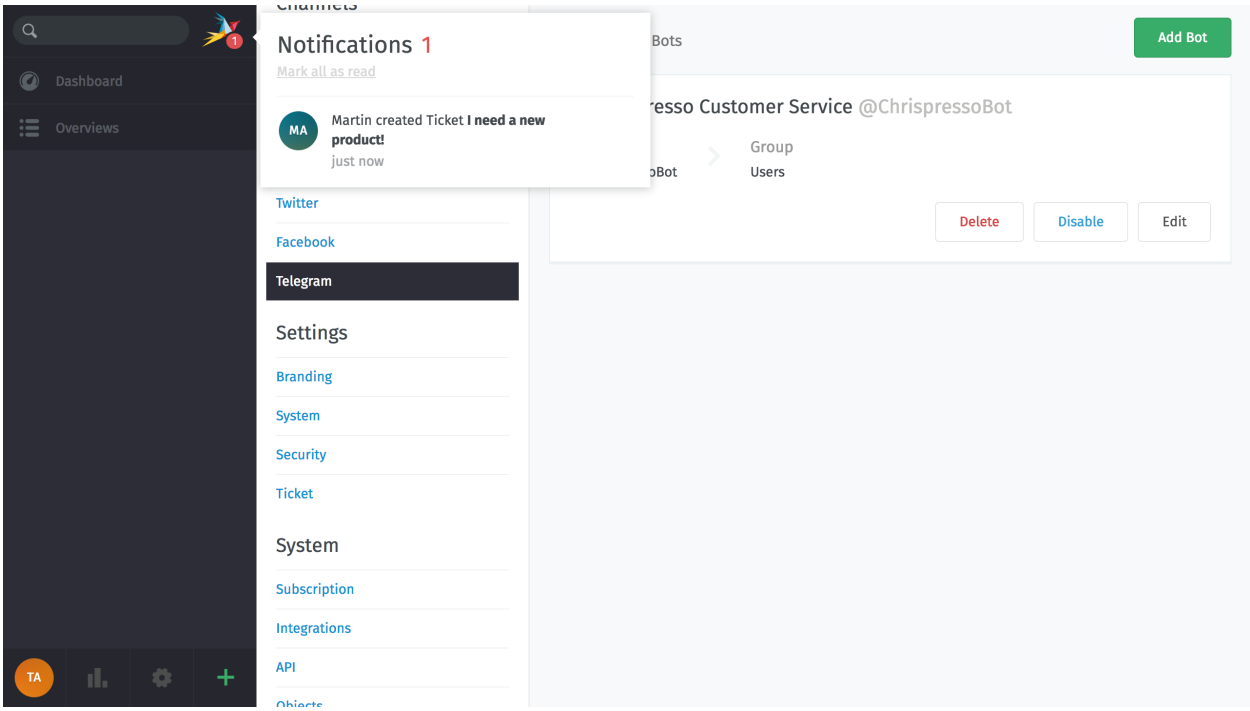
Go to your Telegram client, search for your new Telegram bot and start writing a message.


chrispresso
C
Chrispresso Customer Service
@ChrispressoBot
Select a chat to start messaging

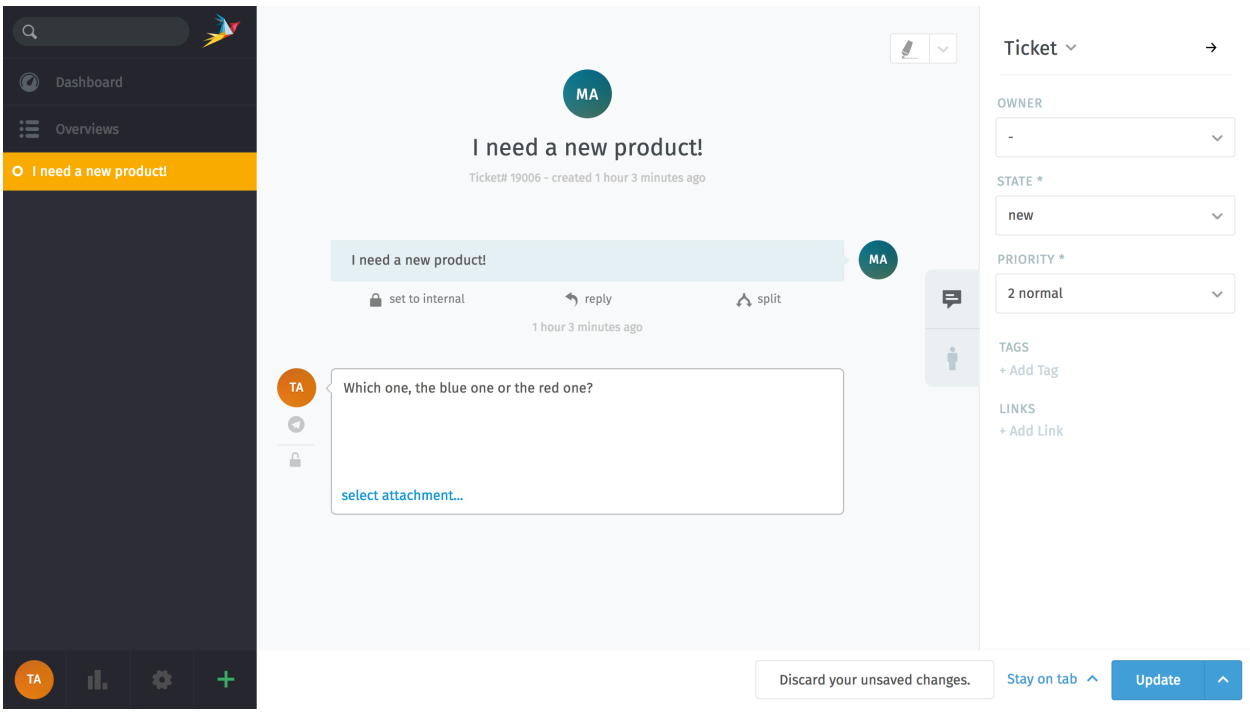

Search
Close
Chrispresso Customer...
bot
Edit
Chrispresso Customer Ser... 12:43
You are welcome! How may I help you?
Felix 10:30
rails c
Zammad 17:20
peep
BotFather 16:17
You can use this token to access HTTP API: 29160782...
Bob Smith 03:23
hey
TechCrunch 14:38
Read it /here6
Forbes 28/01/17
Let's get started. What news
Martin 12:43
/start
Chrispresso Customer Service 12:43
You are welcome! How may I help you?
Write a message...



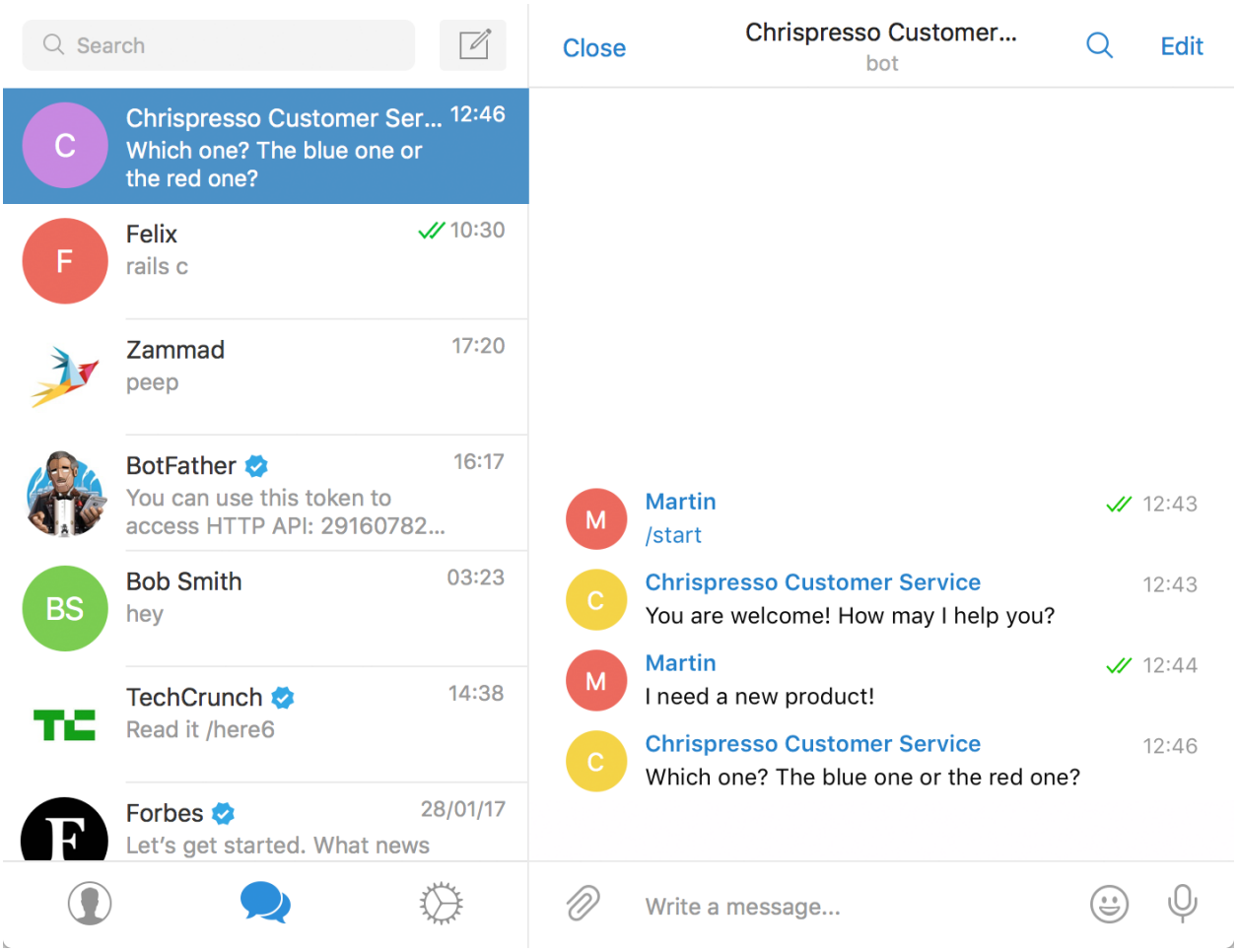
After a few seconds a new message in Zammad appears.



Just click on reply button (as you do it for emails) to send a reply.



The message will appear in your Telegram client.


Search
Close
Chrispresso Customer...
bot
Edit
Chrispresso Customer Ser... 12:46
Which one? The blue one or the red one?
Felix 10:30
rails c
Zammad 17:20
peep
BotFather 16:17
You can use this token to access HTTP API: 29160782...
Bob Smith 03:23
hey
TechCrunch 14:38
Read it /here6
Forbes 28/01/17
Let's get started. What news
Martin 12:43
/start
Chrispresso Customer Service 12:43
You are welcome! How may I help you?
Martin 12:44
I need a new product!
Chrispresso Customer Service 12:46
Which one? The blue one or the red one?
Write a message...

CHAPTER

TWENTYSIX

BRANDING

Product-name Defines the name of the application, shown in the web interface, tabs and title bar of the web browser.

Organisation Will be shown in the app and is included in email footers.

Logo Defines the logo of the application, shown in the web interface.

Pretty Date Defines date format you like the most.

CHAPTER

TWENTYSEVEN

SYSTEM

For your overview we split each tab within system settings into its own page:

27.1 Base

Note: Self Hosted only

Below settings are only available to self hosted users. In hosted environments we're handling these settings for you to ensure service stability.

Fully Qualified Domain Name The URL of your Zammad installation.

This setting is used within *Variables* and notifications.

Note: This setting is automatically set by the Getting Started wizard.

Warning:

- Changing this setting also changes callback URLs for your channels etc.
- This setting can have negative affects on being able to login.

HTTP type The HTTP type tells your installation how your clients connect. This is relevant for authentication and cookie security.

This setting is used within *Variables* and notifications.

Note: This setting is automatically set by the Getting Started wizard.

Warning:

- Changing this setting also changes callback URLs for your channels etc.
- This setting can have negative affects on being able to login.

SystemID This ID is being used within your ticket number. In case you're communicating with another ticket system with similar ticket number schemes this ID greatly reduces the risk of false follow ups.

The SystemID is randomly selected upon installation of Zammad (`1-99`).

> **Warning:** **Do not** change this setting in a productive system! Your Zammad installation may no longer recognize old ticket number based follow ups upon change!

27.2 Services

Image Service Defines the backend for user and organization image lookups.

Default: `Image Service` (active)

Geo Calendar Service Defines the backend for geo calendar lookups. Used for initial calendar succession.

Default: `Geo Calendar Service` (active)

Geo IP Service Defines the backend for geo IP lookups. Shows also location of an IP address if an IP address is shown.

Default: `Geo IP Service` (active)

Geo Location Service Defines the backend for geo location lookups to store geo locations for addresses.

Default: `Geo Location Service` (active)

Hint: You can find a detailed privacy information on what we store for how long on our Privacy-Appendix inside of our System-Administrator-Documentation.

27.3 Storage

Note: **Self Hosted only**

Below settings are only available to self hosted users. In hosted environments we're handling these settings for you to ensure service stability.

Storage Mechanism This tells Zammad where to store attachments for tickets and knowledge base.

By default we're writing to the `Database` - you can switch to `Filesystem` at any time. If you chose filesystem, your files are written to `/opt/zammad/storage/`

> **Note:** We strongly encourage you to use filesystem storage on busy instances. This will greatly improve system performance (de-crease database load and size).

> **Tip:** Moving attachments from Database to Filesystem can be run during production use.

27.4 Network

Note: Self Hosted only

Below settings are only available to self hosted users. In hosted environments we're handling these settings for you to ensure service stability.

Proxy Settings

Note: The proxy settings can only be saved after successfully testing the proxy connection.

Proxy Address Allows you to provide a proxy server if needed. This is relevant for network communication by Zammad.

It **does not** affect the update process or Elasticsearch.

Username for proxy connection If your proxy server requires authentication, provide the username here.

Password for proxy connection If your proxy server requires authentication, provide the password here.

No proxy for the following hosts Exception list for hosts you can't or don't want to reach via proxy server.

Default: `localhost,127.0.0.0,::1`

27.5 Frontend

Send client stats Send client stats/error message to central server to improve the usability.

Default: `no` (inactive)

Danger: This sends logging to our central logging server. Log files of Zammad can contain *very sensitive* data like email addresses and other. **Do not** enable this option unless we're asking you to.

Client storage Use client storage to cache data to enhance performance of application.

Default: `no` (inactive)

Core Workflow Ajax Modus This setting allows administrators to enforce *Core Workflows* to use Ajax-Calls instead of web sockets. You'll usually only need this if you experience serious issues as noted below.

Hint: Possible (technical) reasons

In some cases, your network structure (e.g. firewalls, proxies) may disconnect long web socket connections. This leads to select fields staying empty (e.g. owner selection *after* selecting your group) or fields not shown / hidden (e.g. when switching to or from pending states, the "pending till" field not showing / hiding).

Please keep in mind that the Ajax fallback may cause serious pressure on your application server. If you have the choice stick to web sockets.

Default: `no` (inactive)

27.6 Console based settings

There's some console based settings we didn't put into the UI. However, you may find them helpful - you can find them in our hidden settings section.

CHAPTER

TWENTYEIGHT

SECURITY

For your overview we split each tab within security settings into its own page:

28.1 Base

28.1.1 New User Accounts

Activates the *register as a new customer* function on the login page. If set to `no` only administrators or agents can create new accounts manually.

Default setting: `yes`

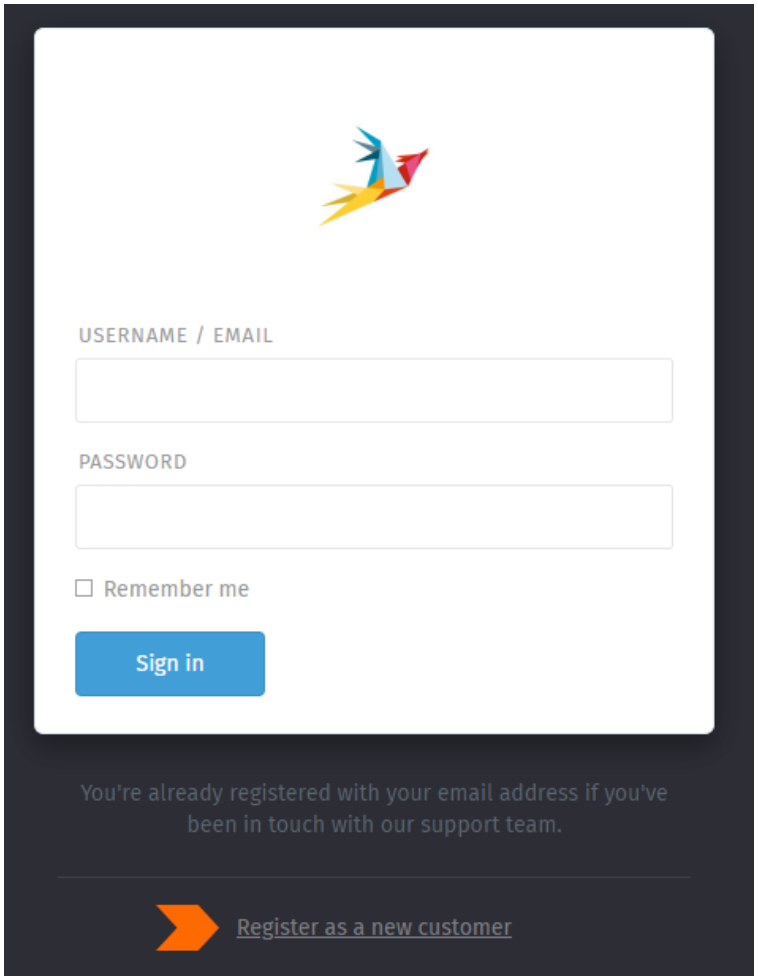
> **Warning: This setting may be confusing**
>
> Deactivation of above function **does not** deactivate automatic account creation! This means: If a user writes e.g. an email to Zammad and has no account yet, Zammad will automatically create the account.
>
> User accounts are a direct dependency of tickets and thus technically mandatory.

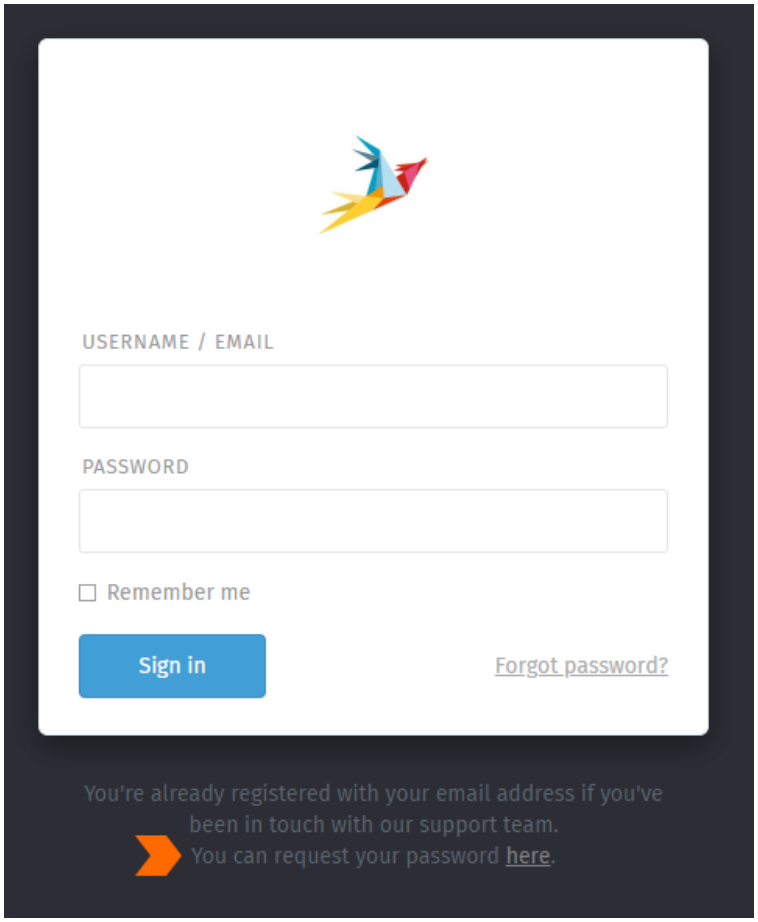
28.1.2 Lost Password

Activates the *lost password* function on the login page. If set to `no` only administrators may change the user's password - users may update their own password if they're still logged in and they have the required *permission*.

Default setting: `yes`

> **Tip: This function may be confusing**
>
> With third party authentications – but especially LDAP – you may want to disable this function. Zammad **will not** change third party login passwords and instead set or change the local password!


USERNAME / EMAIL
PASSWORD
Remember me
Sign in
You're already registered with your email address if you've been in touch with our support team.
Register as a new customer


USERNAME / EMAIL
PASSWORD
Remember me
Sign in
Forgot password?
You're already registered with your email address if you've been in touch with our support team.
You can request your password here.

28.1.3 Session Timeout

All settings below by default are set to `4 weeks`. Session Timeout defines the life time of a users session. As soon as it's reached, Zammad will automatically log off the session in question.

Zammad takes the highest value set assigned for the user based on the permissions.

1. `admin`
2. `ticket.agent`
3. `ticket.customer`
4. `default` (fallback if user doesn't have above permissions set)

All settings act independently from each other allowing you to disable the timeouts for e.g. admins, but not agents.

Note: An example

Let's suppose you configured the following session timeouts

- default: 3 weeks
- admin: 2 weeks
- ticket.agent: 4 weeks
- ticket.customer: 1 week

This results in the following situations

- a user with `admin` permission will have a timeout of 2 weeks
- a user with `admin` and `ticket.agent` permissions will have a timeout of 2 weeks
- a user with `ticket.customer` permission will have a timeout of 1 week
- a user with neither `admin`, `ticket.agent` nor `ticket.customer` permissions will have a timeout of 3 weeks

28.2 Password

This section allows you to define password requirements for the local user accounts.

Note: Zammad does **not** allow you to change your LDAP password, instead, it will set a password in its local database which might confuse your users. This will be addressed in the future by #1169.

Warning: Exception for strong passwords

Please note that below password policies *do not* affect administrators setting passwords on user accounts. While this seems strange and not safe we believe that an administrator knowing an user's password is insecure as well.

The suggested workflow is either:

- to use third party logins to not require local passwords at all **- or -**
- to require your *user to reset the password* upon first login.

This way administrators are not required to set a user's password at all!

28.2.1 Maximum failed logins

You can choose a value between `4` and `20`. This defines how often a login to a user account may fail until Zammad will lock it. Your users can always use the "forgot password" function to change their password and unlock their account.

The default value is `10`.

Note: Beside changing the user's password, you can also unlock accounts via

- *user management list*
- console
- api

Hint: Failed logins via LDAP no longer lock accounts.

28.2.2 2 lower and 2 upper characters

You can add complexity to passwords by enforcing at least 2 upper and lower case characters.

The default value is `no`.

28.2.3 Minimum length

This defines the minimum password length required for users to provide (from `4` to `20`).

The default value is `6`.

28.2.4 Digit required

This enforces your users to use at least one digit within the password.

The default value is `yes`.

28.3 Third-Party Applications

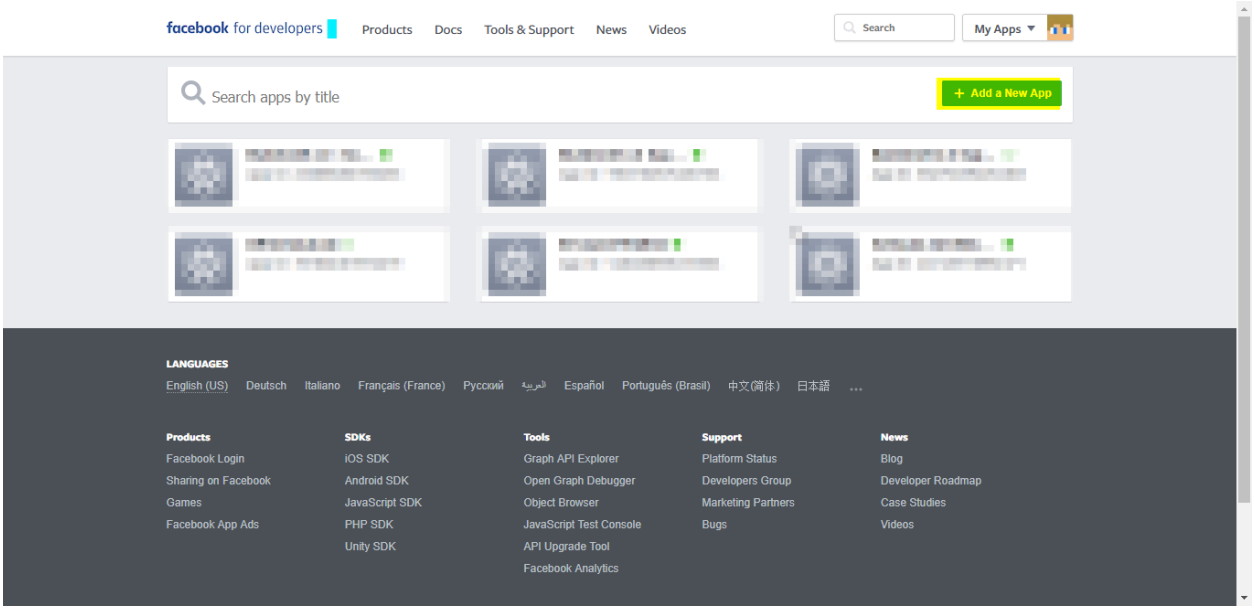
Third party authentication is a great way to help your users to login to Zammad more easily. If the account is yet unknown, Zammad will create a new user automatically, without the user needed to interact (e.g. type in his name). Another big advantage of this feature is that your user doesn't need to remember another password.

28.3.1 Facebook

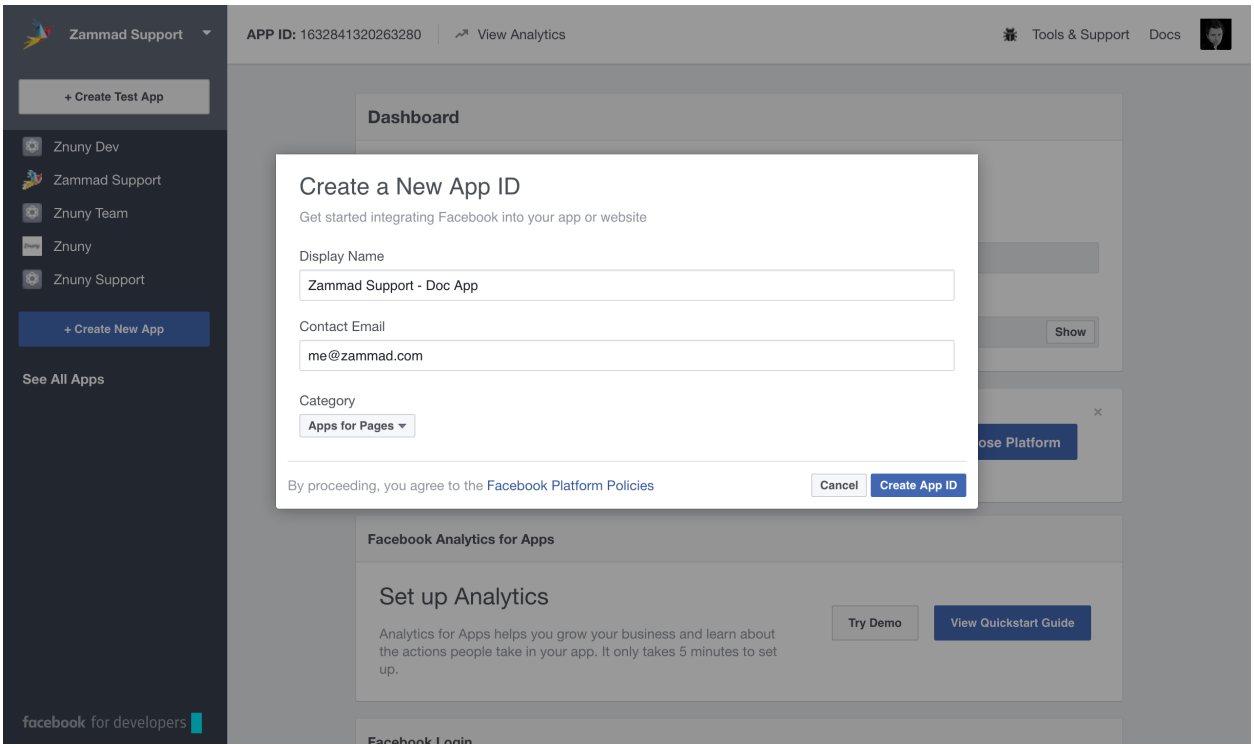
It is possible to create a quick login for your helpdesk via Facebook To do so, you need to follow these steps:

Register Facebook app

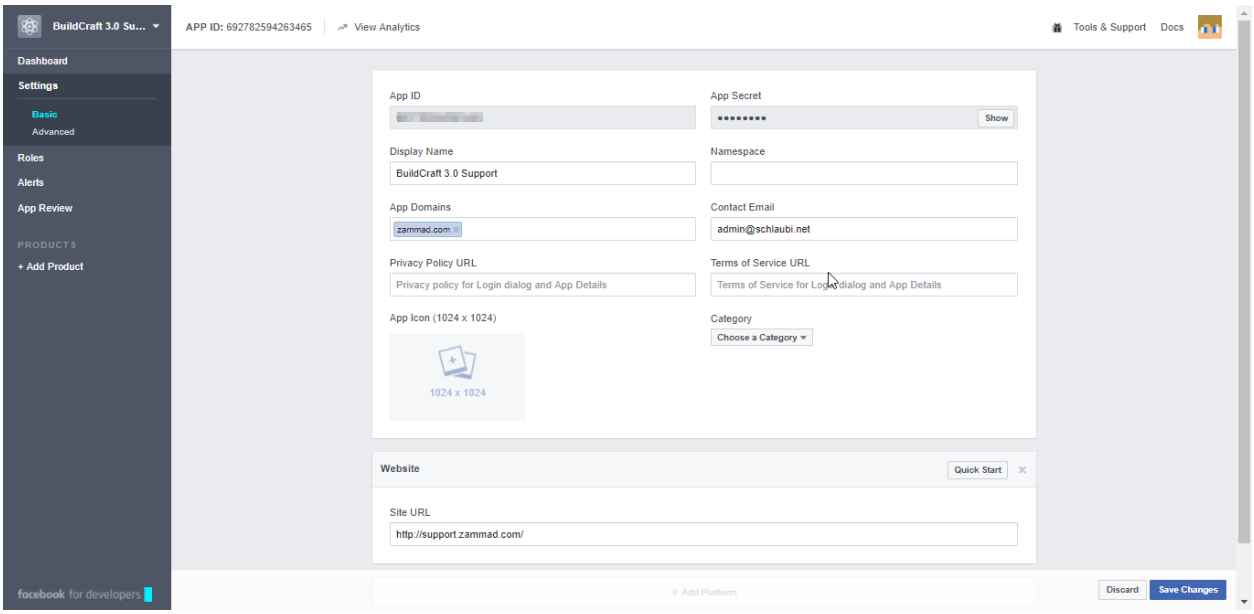
Visit [https://developers.facebook.com/apps/] and click on "Add a new App"



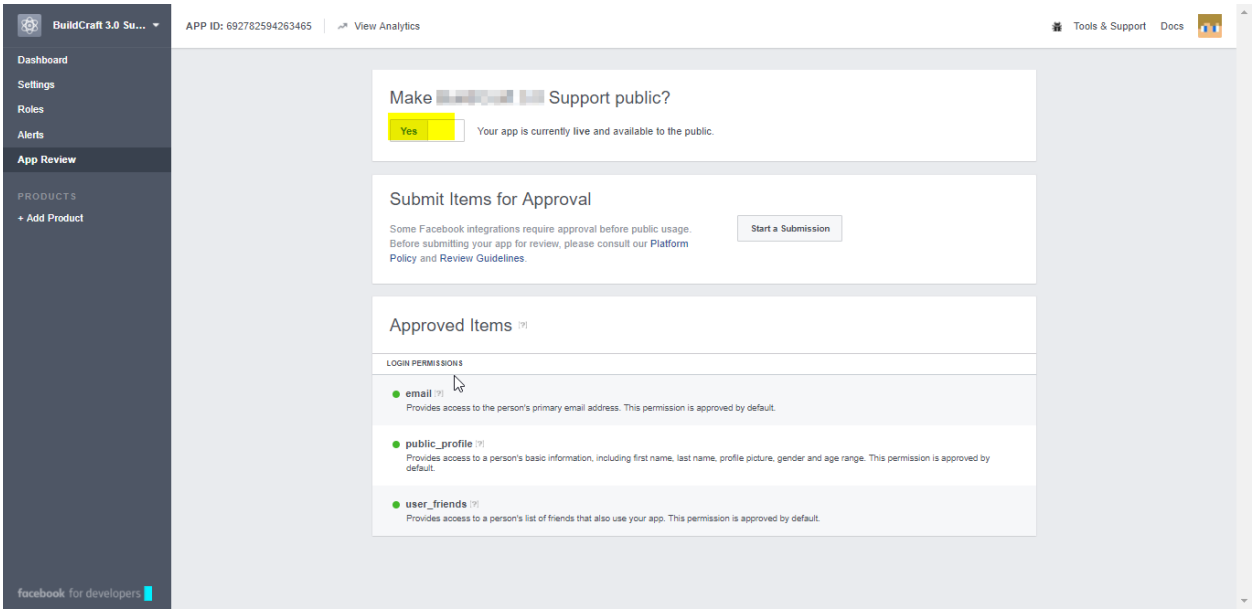
After that enter the app settings



Navigate to "Settings" and fill in this infromation



Navigate to app review and Check “Make [appname] public?”



Configure Zammad as Facebook app

Navigate to "Admin -> Security -> Third Party Applications" and enter the App ID and the App Secret. You can find this Key in the Dashbard of your Facebok app

Now you can link accounts via "Avatar -> Profile -> Link Accounts" or login via Zammad login page.

28.3.2 GitHub

It is possible to create a quick login for your helpdesk via GitHub. To activate the quick login you need to enable OAuth for GitHub.

Register GitHub app

Visit https://www.github.com/settings/applications/new and enter the app settings. As callback URL enter "https://zammad_host/auth/github/callback" where zammad_host has to be replaced with your Zammad FQDN

0 users

Client ID
f301[redacted]

Client Secret
1363[redacted]

Revoke all user tokens | Reset client secret

Application logo

Drag & drop

Upload new logo

You can also drag and drop a picture from your computer.

Application name

Zammad

Something users will recognize and trust

Homepage URL

https://myzammad.zammad.com

The full URL to your application homepage

Application description

Very nice ticket system.

This is displayed to all users of your application

Authorization callback URL

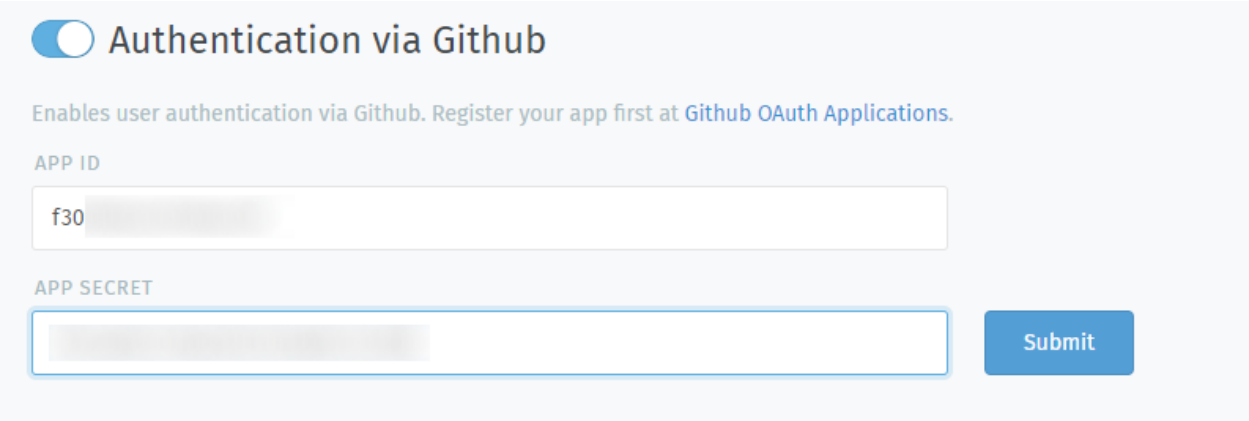
https://myzammad.zammad.com/auth/github/callback

Your application's callback URL. Read our OAuth documentation for more information.

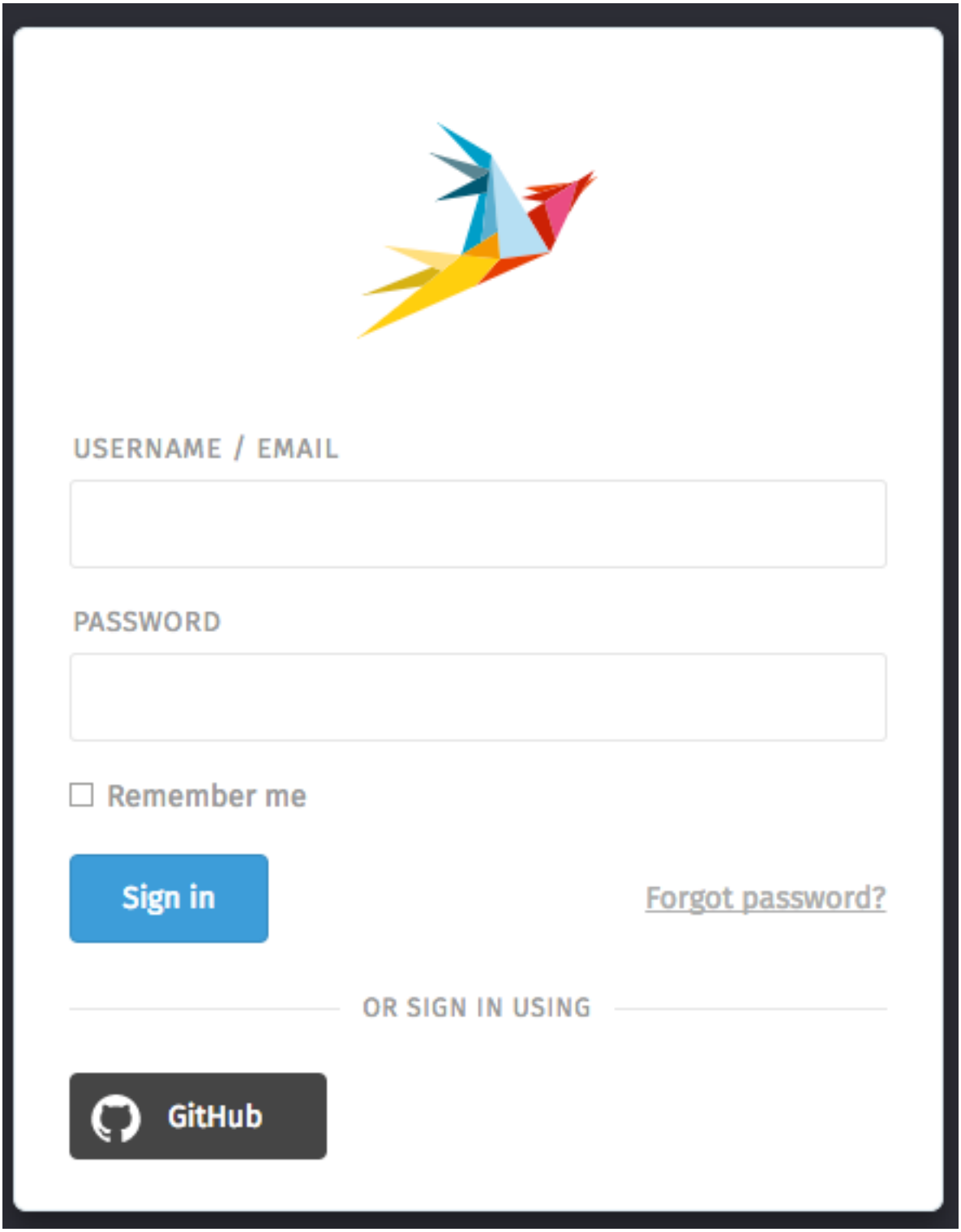
Update application | Delete application

Configure Zammad as GitHub app

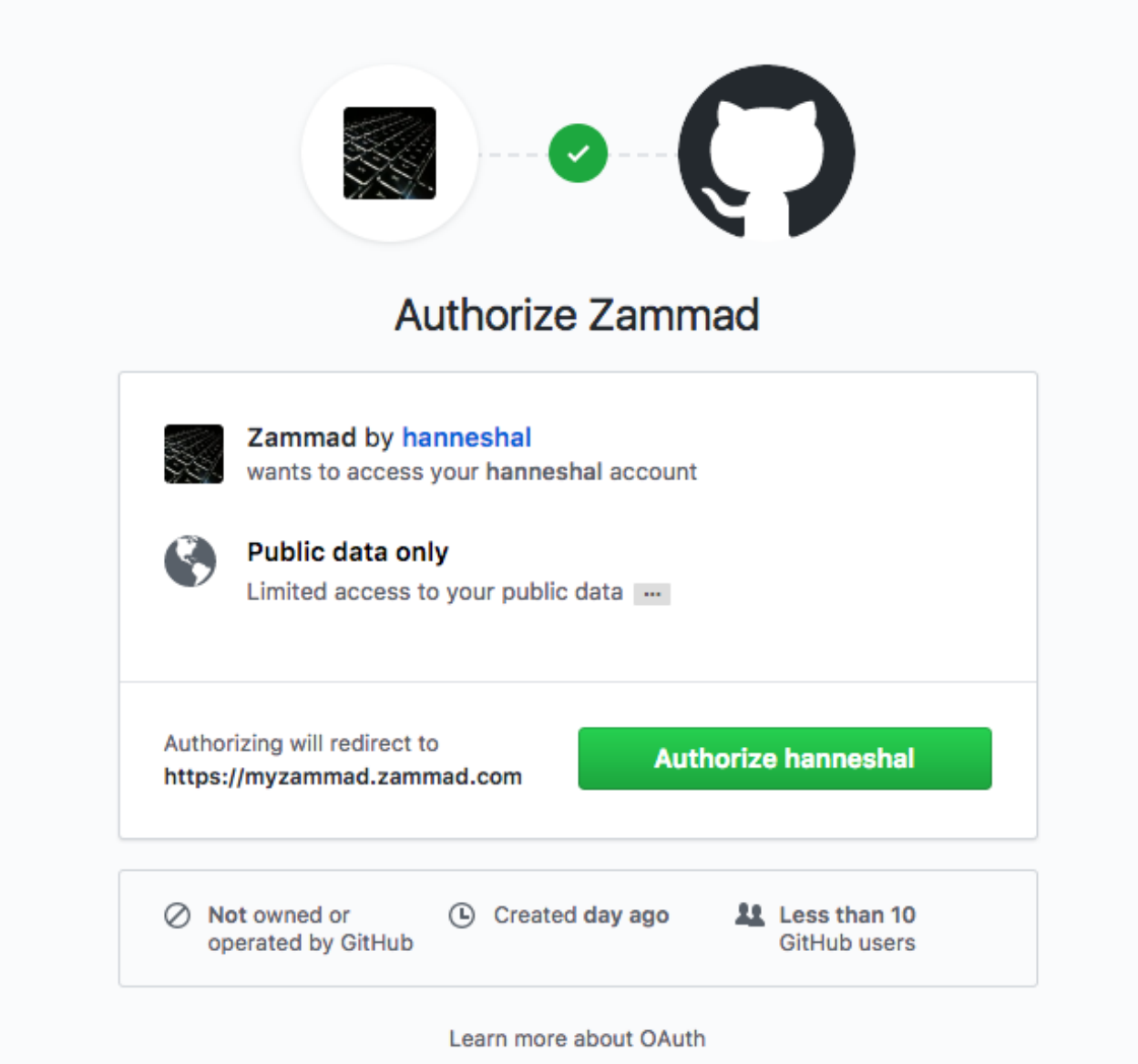
Enter the “APP ID” and the “APP SECRET” from the GitHub OAUTH Applications Dashboard



After you configured the GitHub credentials and activated the login method, you should see a new icon on the login page.



If you click on the icon you will be redirected to GitHub and see something similar to this:



When you grant the access you will be redirected to your Zammad instance and logged in as a customer.

Now you can link accounts via “Avatar -> Profile -> Link Accounts” or login via Zammad login page.

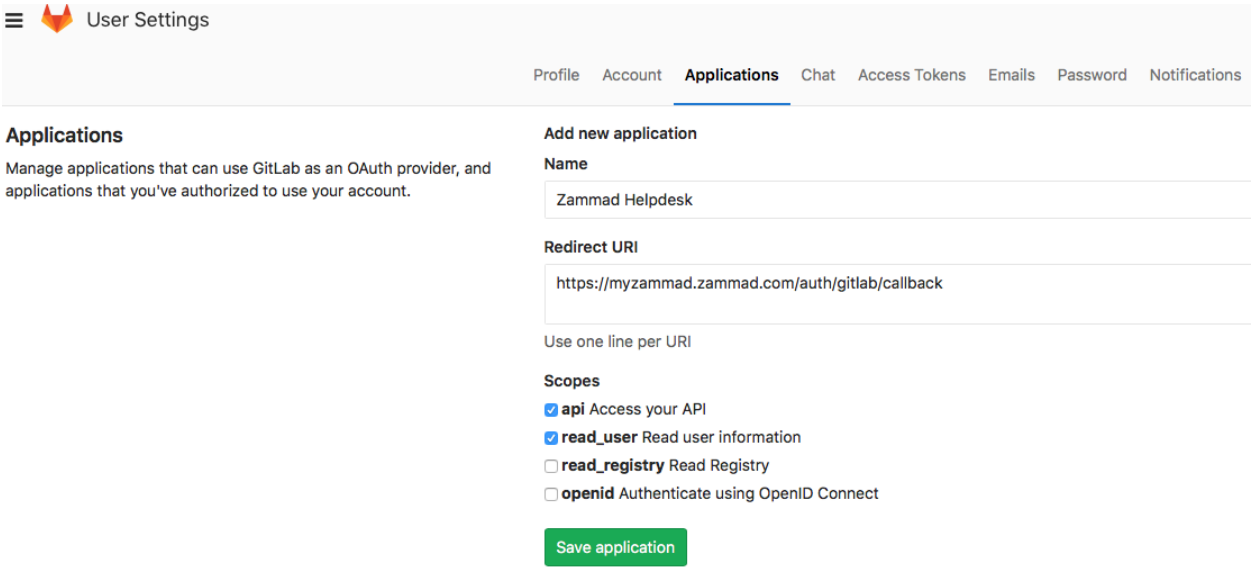
28.3.3 Gitlab

It is possible to create a quick login for your helpdesk via Gitlab. To activate the quick login you need to enable OAuth for Gitlab.

Register Gitlab app

To register an app in Gitlab open your profile and select applications.

As callback URL enter "https://zammad_host/auth/gitlab/callback" where zammad_host has to be replaced with your Zammad FQDN

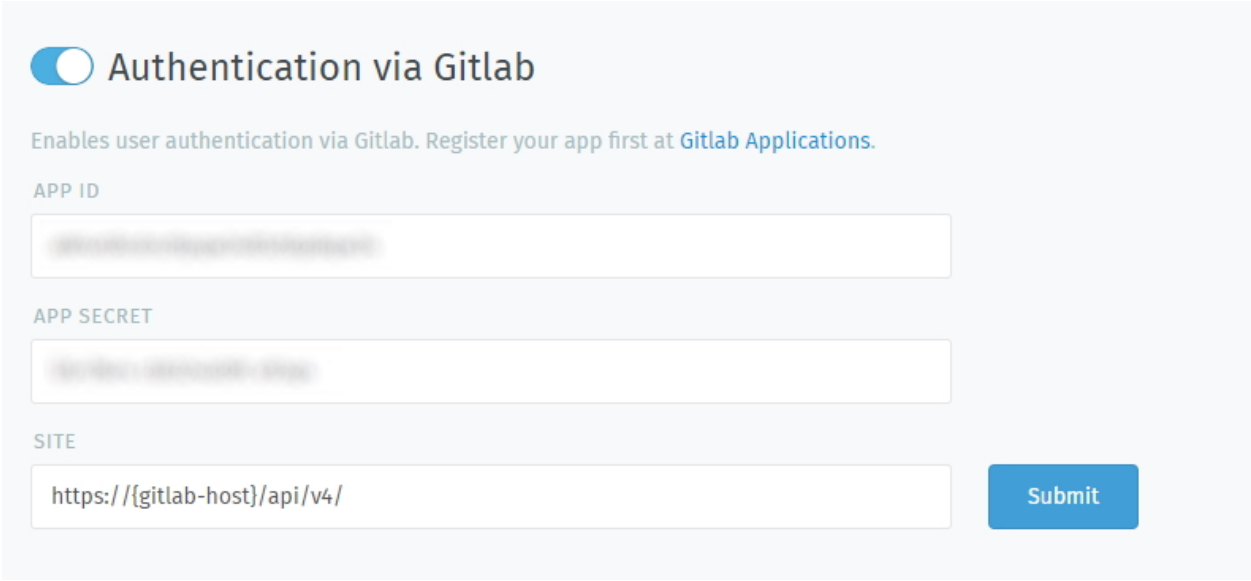


At the moment we need the "api" scope. This is caused due a bug in Gitlab: https://gitlab.com/gitlab-org/gitlab-ce/issues/33022

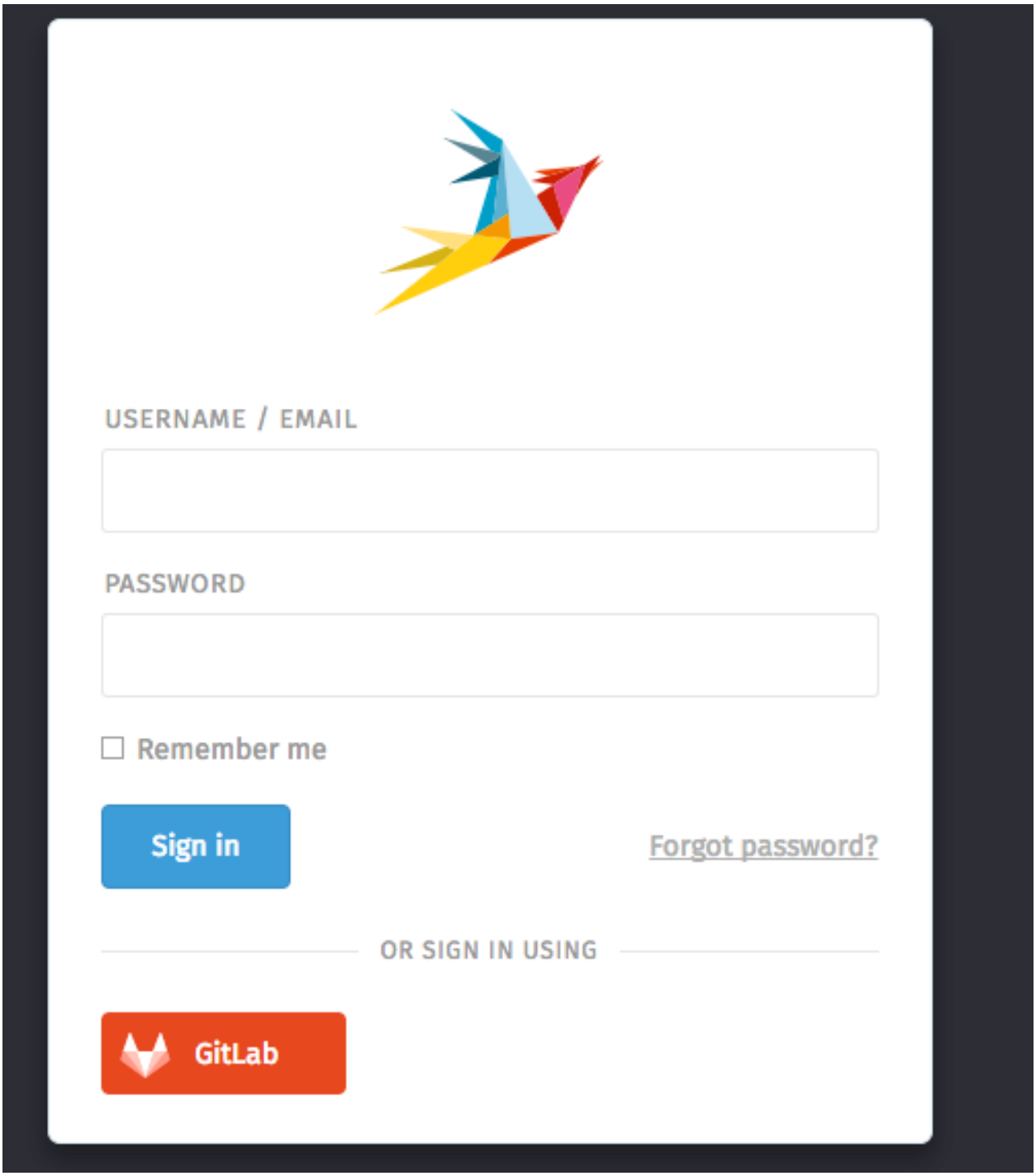
Configure Zammad as Gitlab app

Enter the "APP ID" and the "APP SECRET" from the Gitlab OAUTH Applications Dashboard.

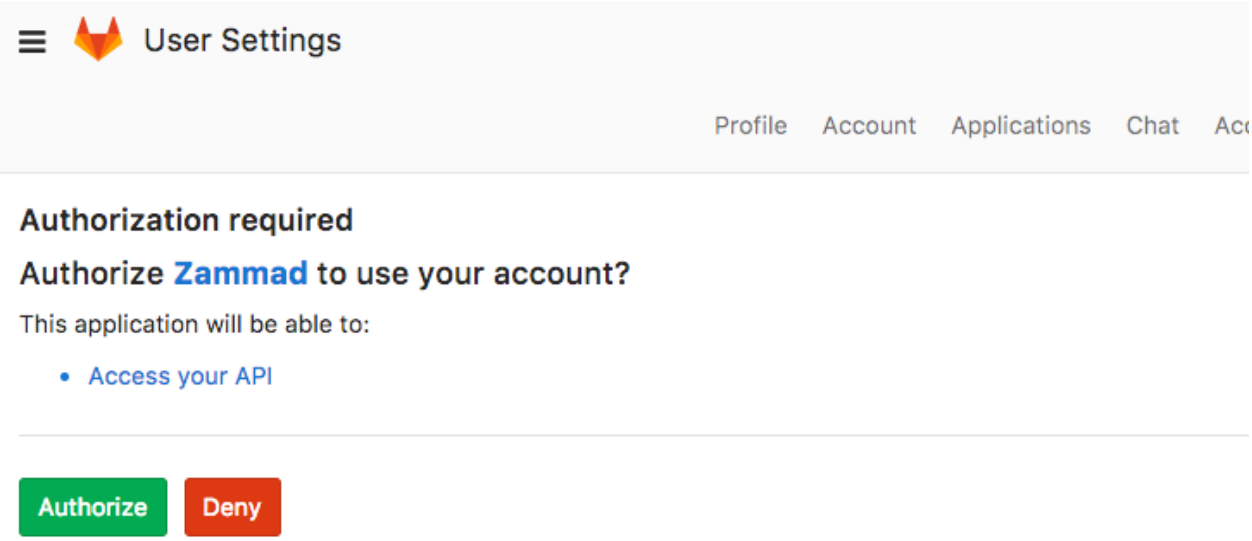
Note: Please ensure to use `https://{git_host}/api/v4/` for site.



After you configured the Gitlab credentials and activated the login method, you should see a new icon on the login page.



If you click on the icon you will be redirected to Gitlab and see something similar to this:



When you grant the access you will be redirected to your Zammad instance and logged in as a customer.

Now you can link accounts via "Avatar -> Profile -> Link Accounts" or login via Zammad login page.

28.3.4 Google

With some easy and fast steps, you can enable Zammad to authenticate your users via Google.

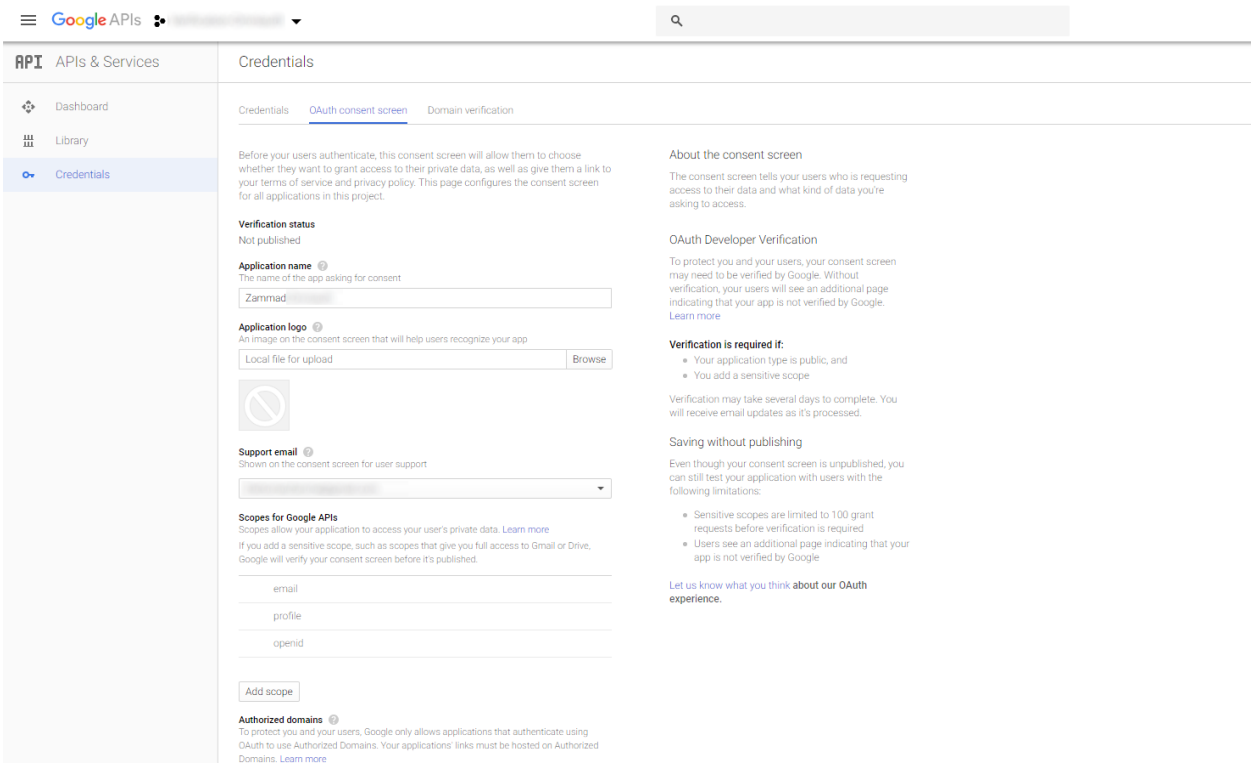
Hint: Prior Zammad 2.9 it was necessary to activiate the Google+ API - it's deprecated, thus this authentication will only work with Zammad 2.9 and later.

Register a Google app

First of all, we need to create a new project - you can skip this step if you already have one.

Hint: Use this link to create a new project: `https://console.cloud.google.com/projectcreate`

Now expand the menu, expand "APIs & Services" and select "Credentials". Go to the tab "OAuth consent screen" first and ensure to fill in the requested information - without doing so you can't create credentials!



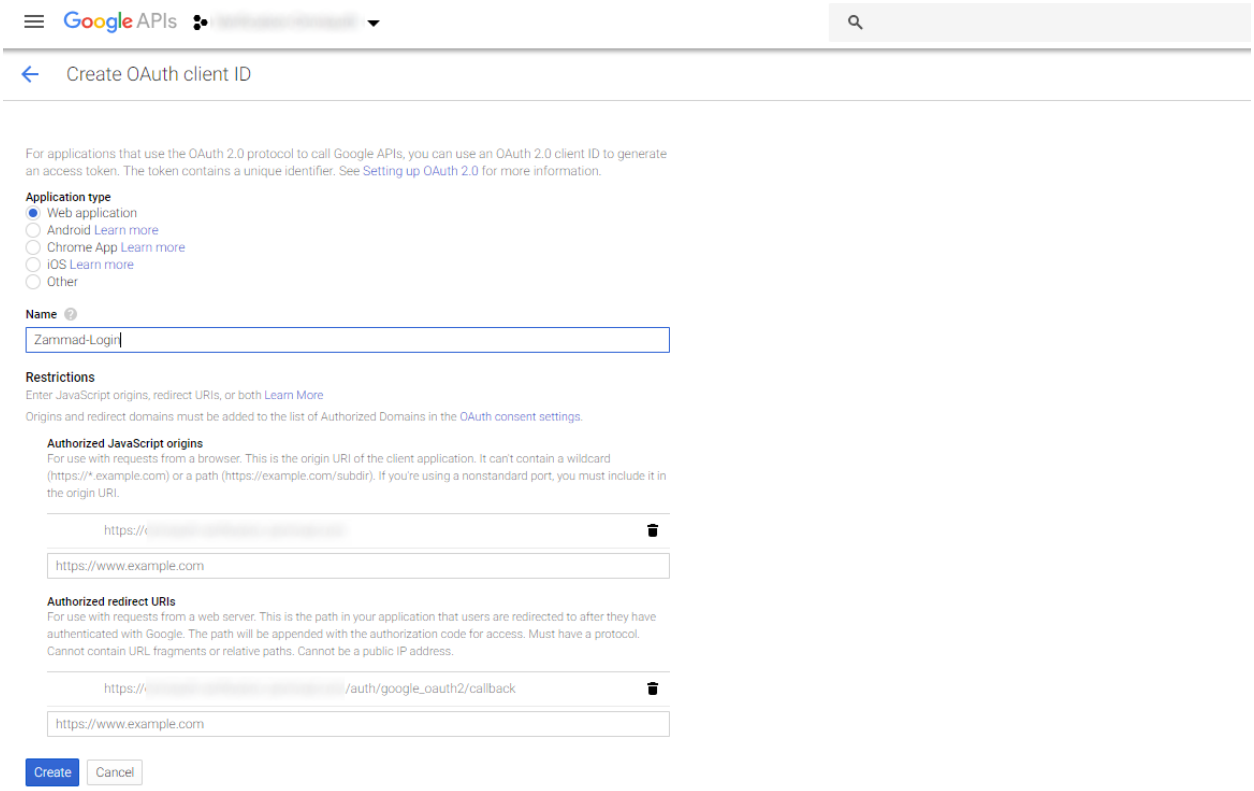
After filling in and savingthe consent screen information, you can change to “Credentials” tab and create new “OAuth client ID”-Credentials.

Fill in the neceassary information, for restrictions you need the following (replace `zammad_host` with your FQDN):

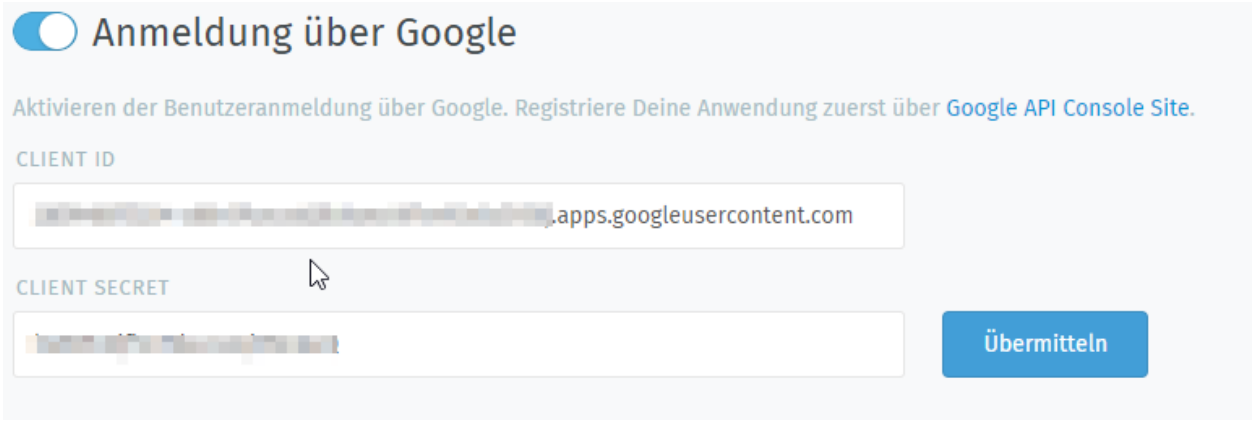
Aplication type `[x] Web application`

Authorized JavaScript origins `https://zammad_host/`

Authorized redirect URIs `https://zammad_host/auth/google_oauth2/callback`



After creating the credentials, go to your Zammad installation and navigate to “Admin -> Security -> Third Party Applications” -> Google. Enter your Client ID and Client secret here.

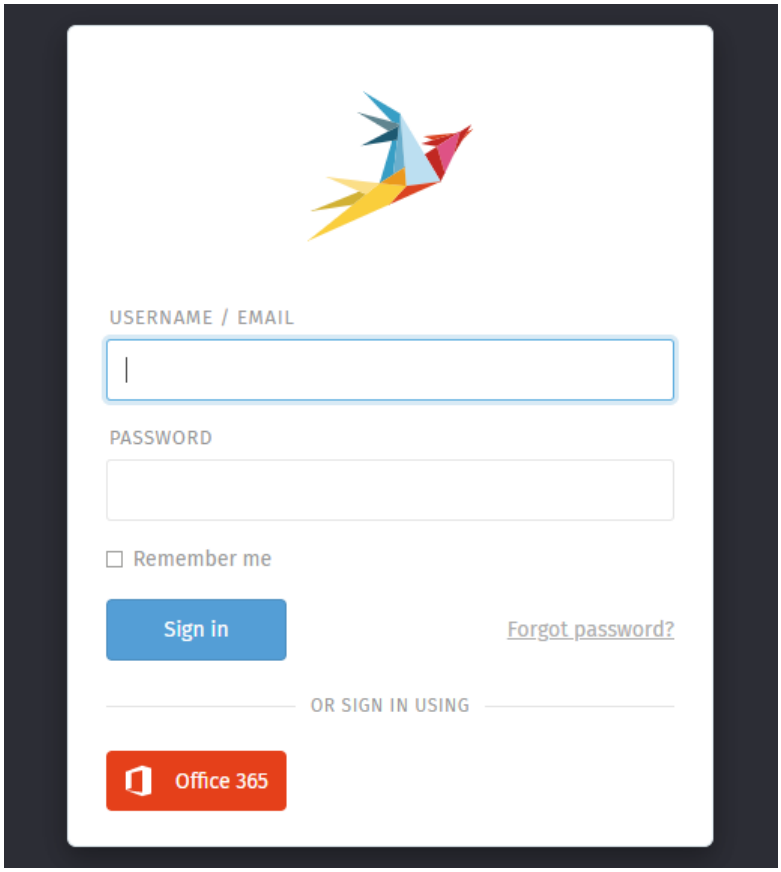


After submitting, the login via Google can be used.

28.3.5 Office 365

Zammads Office 365 allows your users with Microsoft accounts to login. This works for Azure users as well and can be an alternative to *LDAP / Active Directory*.

Note: This documentation part does not cover our *Microsoft 365 email channel*.



Limitations

Supported account types: Please note that Zammad only supports these account types (App dependent):

- Accounts in this organizational directory only (Default Directory only - Single tenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

Avatars of signing in users: Zammad currently ignores user avatars. If the user is registered with e.g. Gravatar, Zammad will fetch the avatar from there if enabled. See *Zammad Image Service* for more.

Step 1 - Register a Microsoft app for Zammad

Login to the Microsoft Azure Portal and navigate to App registrations to create a new app. Provide the requested information as follows and register your app.

Name: Any meaningful name fitting, this name will be displayed to users trying to authenticate with this app.

Supported account types: Choose one of the above mentioned account types (see Limitations).

> **Tip:** The correct account type depends on your use case. If you want to use the authentication internal only, choose the first option. If you're unsure, use the "Help me choose…" link.

Redirect URI (optional): Select web and provide your callback url. The callback url looks like this: `https://zammad.domain.tld/auth/microsoft_office365/callback`

Within API permissions add the following permissions:

OpenId permissions

- `openid`

User

- `User.Read`

Contacts

- `Contacts.Read`

You can find these permissions within *Microsoft Graph → Delegated permissions*.

Within **Certificates & secrets** create a new client secret. Note down the returned secret **value** for later. **Do not** use the secret ID!

From **Overview** copy your apps *Application (client) ID*. If you're using a single tenant app, please also copy *Directory (tenant) ID*. You now have all required information for Zammad.

Step 2 - Add app credentials to Zammad

Navigate to Security → Third-party Applications (Tab) within Zammads admin settings. Scroll down to the section *Authentication via Office 365* and fill in the required information.

App ID: This is your *Application (client) ID*.

App secret: This is your *client secret* (value).

App Tenant ID: **optional** only required for apps that use account type *Accounts in this organizational directory only (Default Directory only - Single tenant).*

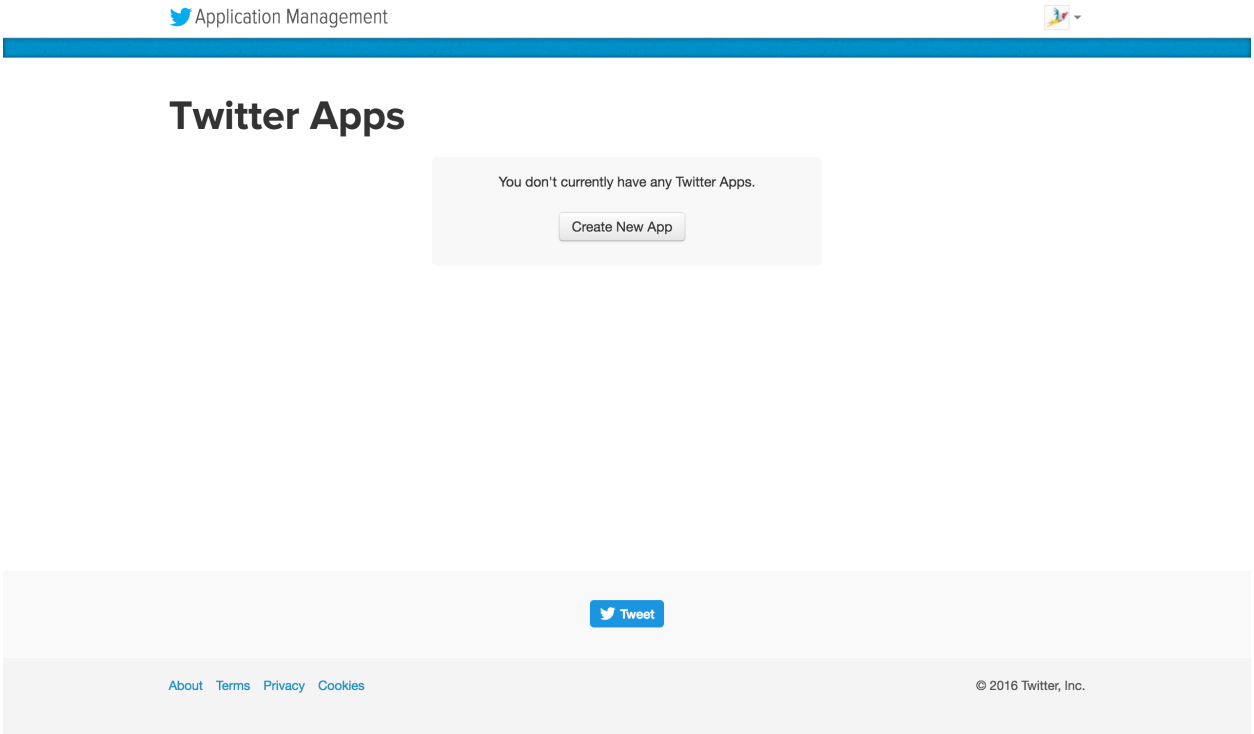
Apply your settings by pressing submit and activate *Authentication via Office 365*.

28.3.6 Twitter

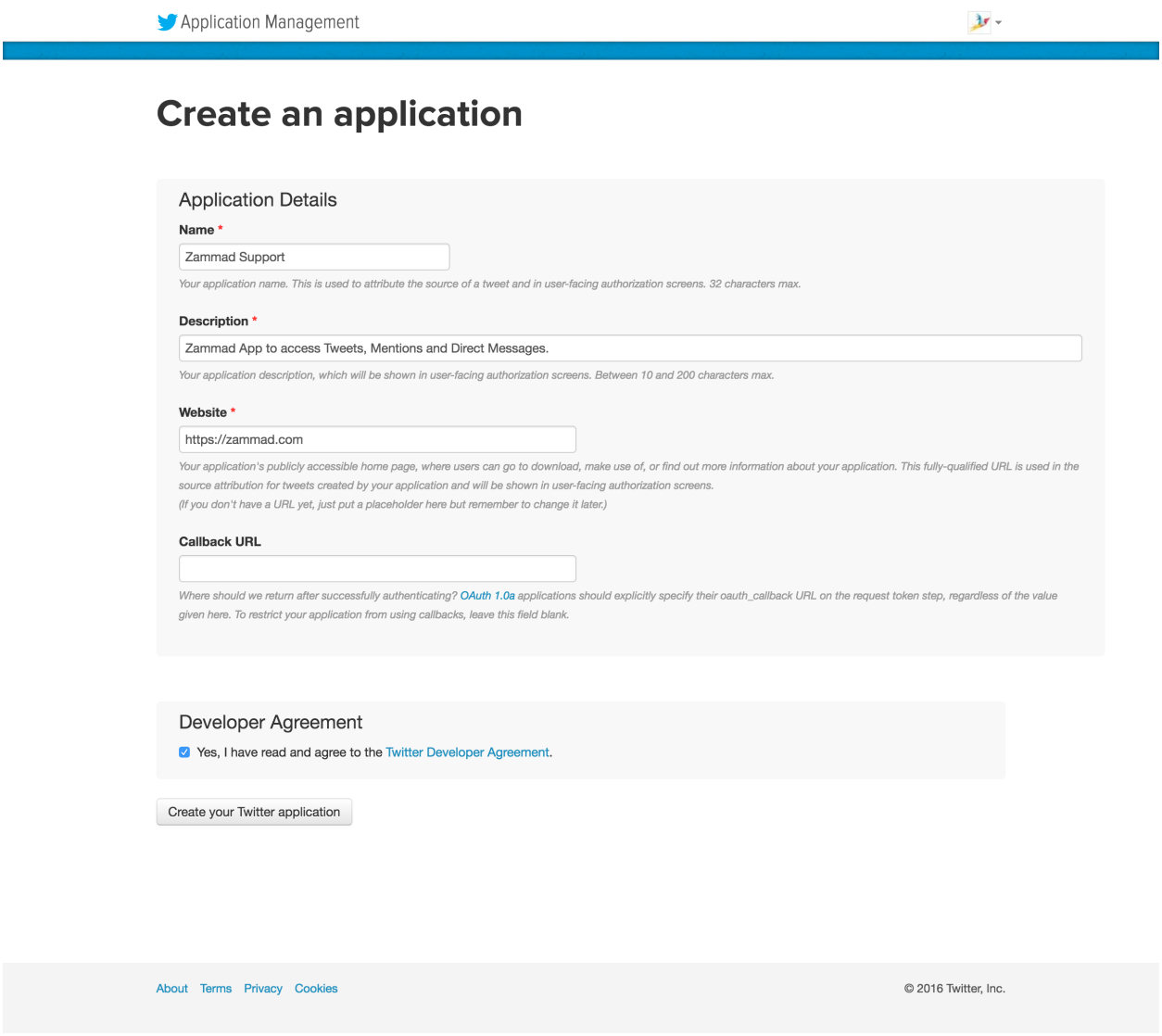
It is possible to create a quick login for your helpdesk via Twitter To do so, you need to follow these steps:

Register Twitter app

Go to https://dev.twitter.com/apps and login with your account.

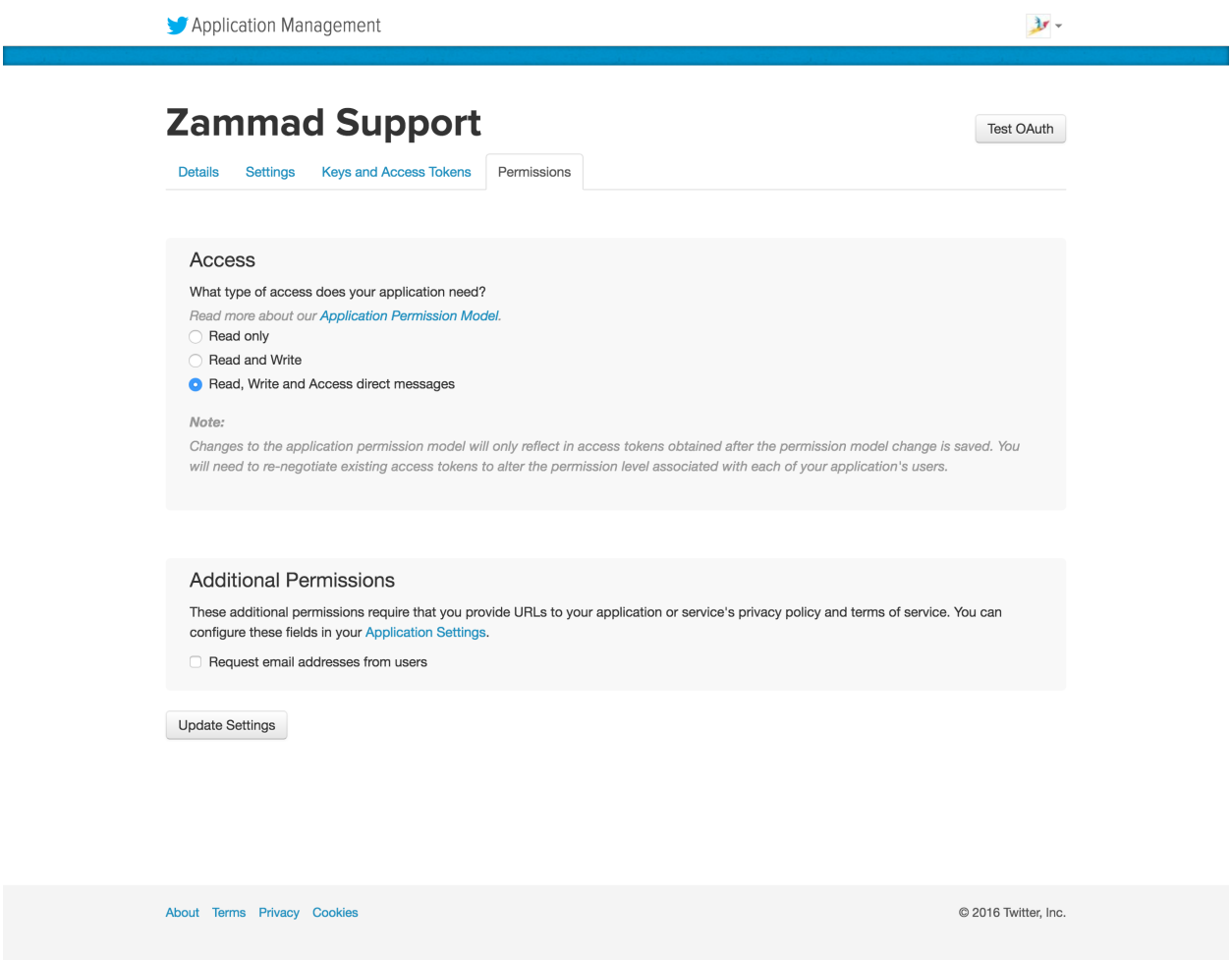


Click on “Create App”

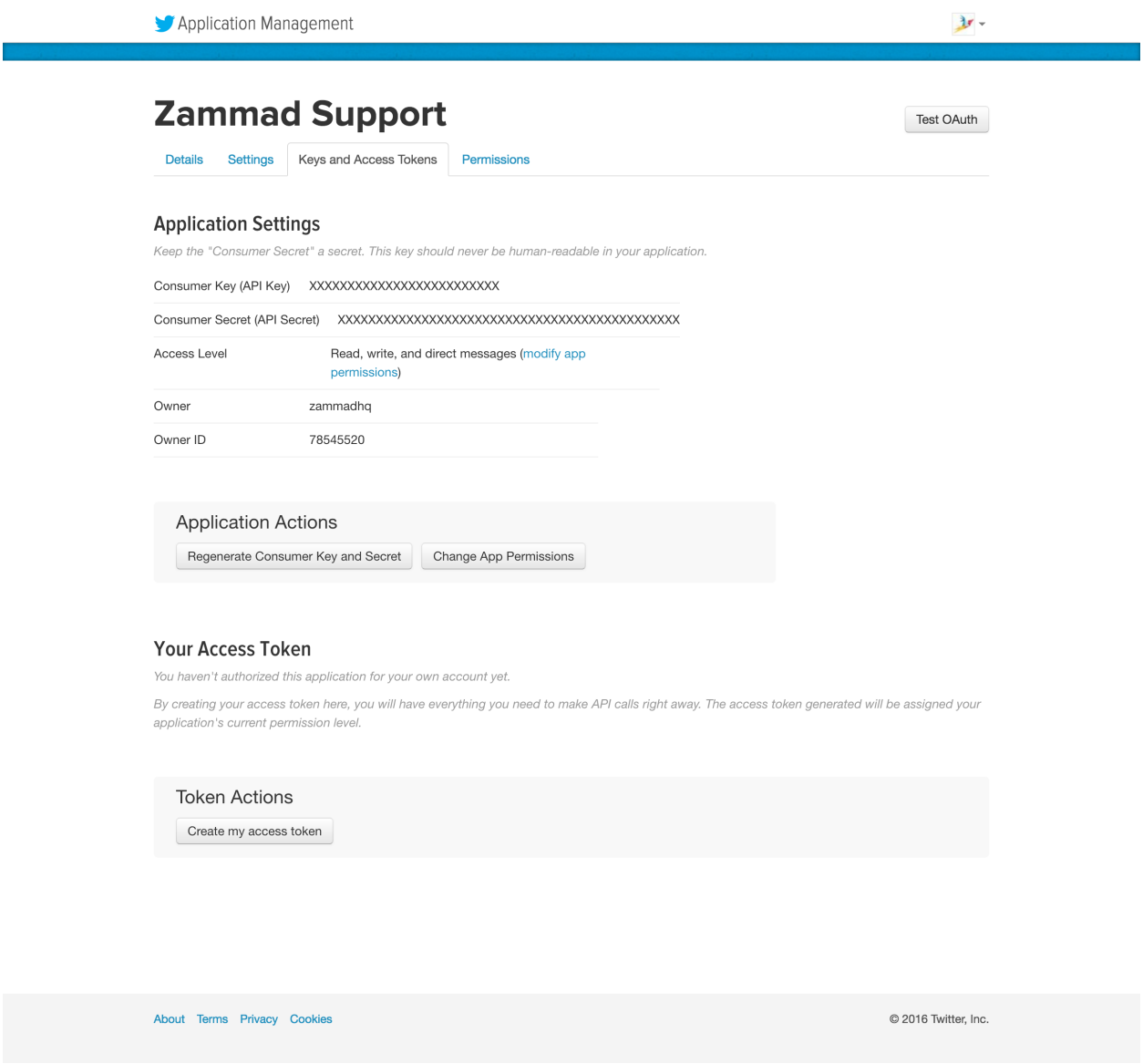


Enter app settings. As "Callback URL" you need to enter "https://zammad_host/api/v1/external_credentials/twitter/callback"

After the app has been created, update the application icon and organization attributes.



Next we need to set `read, write and access direct messages permissions` for the app.



Go to “Keys and Access Token” tab and note the “Consumer Key” and “Consumer Secret”.

Configure Zammad as Twitter app

Go to “Admin -> Security -> Twitter -> Third Party Applications -> Twitter Section”

Fill in the "Twitter Key" and the "Twitter Secret" and click the "Submit" button.

Now you can link accounts via "Avatar -> Profile -> Link Accounts" or login via Zammad login page.

28.3.7 SAML

Connect your SAML identity provider as a single sign-on (SSO) method.

Note: What is SAML?

SAML is an open standard for SSO authentication (among other things). Sign-ins are shared across multiple **service providers** and managed by a central **identity provider** (IdP).

In this case, the service provider is Zammad, and the IdP is a software service that you either host or subscribe to (*e.g.*, Keycloak, Redhat SSO Server, ADFS, or Okta).

This guide assumes you are already using SAML within your organization (i.e., that your IdP is fully set up).

Step 1: Configure Your IdP

Add Zammad as a client/app

Import Zammad into your IdP using the XML configuration found at `https://your.zammad.domain/auth/saml/metadata`.

Note: What if my IdP doesn't support XML import?

You will have to configure Zammad as a new client/app manually using the above XML metadata file for reference. For instance, when you see this tag:

```
<md:AssertionConsumerService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"␣
↪Location="http://your.zammad.domain/auth/saml/callback" index="0" isDefault="true"/>
```

Set the **Assertion Consumer Service Binding URL** (sometimes also listed as **Valid Redirect URIs**) to `http://your.zammad.domain/auth/saml/callback`.

Set up user attribute mapping

Zammad requests the following user attributes (or "properties") from the IdP:

- Email address (`email`)
- Full name (`name`)
- Given name (`first_name`)
- Family name (`last_name`)

You may need to set up "mappers" (or "mappings") to tell your IdP how user attributes in SAML correspond to those in Zammad. For a more detailed breakdown, refer to the XML metadata file referenced in the previous section.

Per-IdP Instructions

Keycloak

- **To add Zammad as a client,** save the XML configuration to disk (`https://your.zammad.domain/auth/saml/metadata`) and use **Clients > Create > Import** in the Keycloak admin panel.
- **To help Zammad match its own user accounts to Keycloak users,** create a user attribute (or "property") mapper:

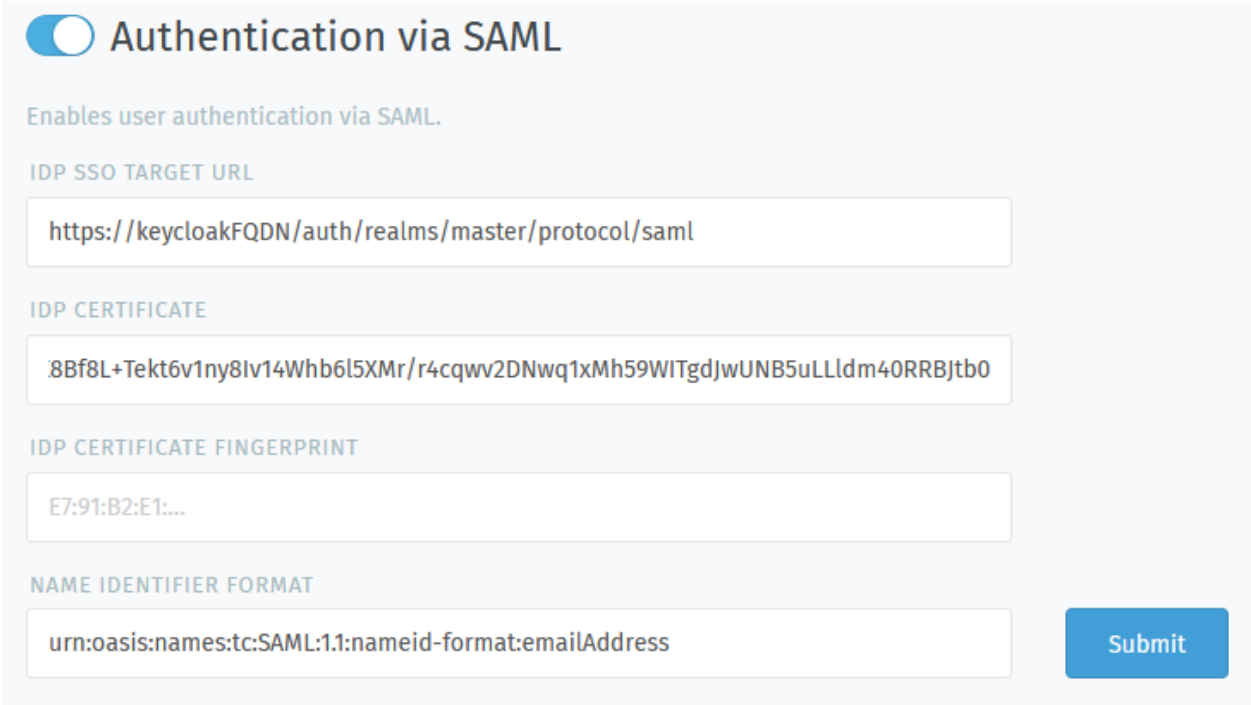
Clients > https://your.zammad.domain/auth/saml/metadata > Mappers > Create	
Name	emailAddress
Mapper Type	User Property
Property	emailAddress
SAML Attribute Name	email
SAML Attribute NameFormat	basic

In the example above, we're telling Zammad that whenever it receives a SAML login request, it should take the `emailAddress` property from Keycloak, look for a Zammad user with the same `email` attribute, and create a new session for that user.

If your Keycloak users' email addresses are stored on another property (*e.g.,* `username`), adjust accordingly.

Step 2: Configure Zammad

Enable SAML and enter your IdP's details in the Admin Panel under **Settings > Security > Third Party Applications > Authentication via SAML**:



Note: For the IdP certificate / certificate fingerprint:

Provide **only one or the other**—do not provide both! (Between the two, we recommend the signing certificate itself: fingerprints use SHA-1, which has been broken for a while now.)

Keycloak users: Find your certificate in the Keycloak admin panel under **Realm Settings > Keys > RSA > Certificate**.

See *automatic account linking* for details on how to link existing Zammad accounts to IdP accounts.

Troubleshooting

Automatic account linking doesn't work Have you double-checked your IdP's user attribute mapping configuration?

Note: We're currently missing documentation for the following login providers:

- LinkedIn
- Weibo

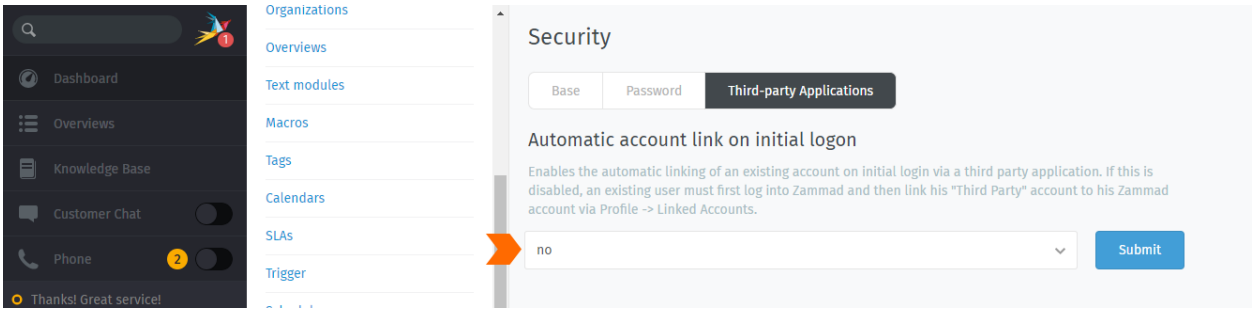
28.3.8 Automatic account link on initial logon

In general there's two possible options for Zammad on how to deal with already known users as they try to authenticate against a third-party application. By default, Zammad will not automatically link "unknown" authentication providers to existing accounts.

This means that the user has to manually link authentication providers to their accounts (for more about this consult the user documentation).

Sometimes this doesn't come in handy as this also means you'll receive error messages about "email address being in use already" for (yet) unknown third-party authentication methods.

If you want to allow your users to always be able to log in, no matter what, you may want to enable `Automatic account link on initial logon`.



CHAPTER

TWENTYNINE

TICKET

Note: Additional settings for the ticket composer interface can be found in the *Composer Settings*.

29.1 Base

Ticket Hook (default: `Ticket#`) The identifier for a ticket; *e.g.,* Ticket#, Call#, MyTicket#.

Ticket Hook Position (default: `right`) With this setting you can decide (if) where to insert the ticket number.

Right This setting will add the ticket reference on the right site of the subject.

Example: `Some Subject [Ticket#12345]`

Left This setting will add the ticket reference on the left site of the subject.

Example: `[Ticket#12345] Some Subject`

None This will completely remove ticket references from the subject.

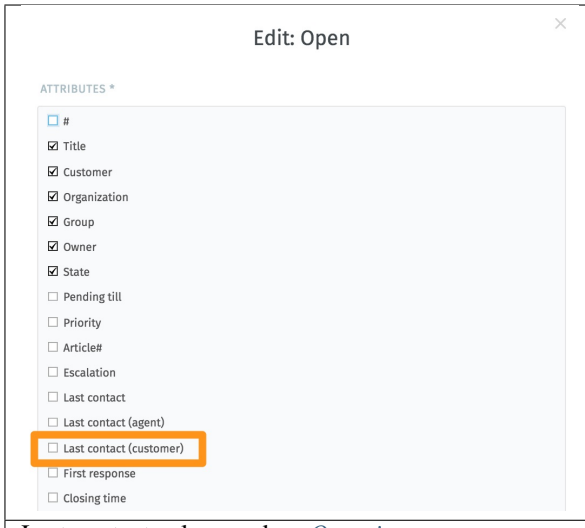
> **Warning:** Please ensure to take a look at *Settings* within the email channel to ensure you have at least one reference that helps Zammad to assign follow-ups correctly.
>
> Disabling this and not setting up any further follow up search will lead to unexpected results!

Ticket Last Contact Behaviour (default: `Last customer contact (with consideration an agent has replied to it)`)
This setting changes the way Zammad updates the `Last Contact` value of a ticket. This is fairly important for overviews and what you expect upon ticket updates of a customer.

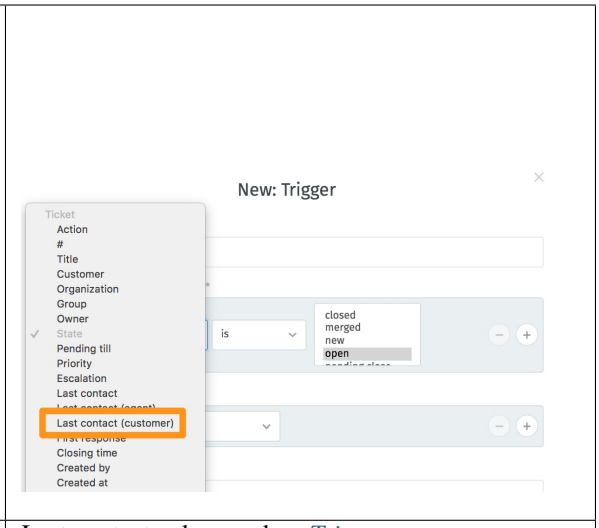
Last customer contact (with consideration an agent has replied to it) If this option is chosen, Zammad will update the last updated value just once if a customer replies. After that, Zammad will wait for an agent to react.

This comes in handy if you want to work tickets in the order of their first update. This will not change ticket orders if customers decide to "bumb" the ticket affected.

Last customer contact (without consideration an agent has replied to it) When setting this option, Zammad will always update the last updated value. This means that if ordering by `Last Update`, ticket orders will change if customers "bump" the ticket.



Last contact value used on *Overviews*



Last contact value used on *Triggers*

29.2 Number

Ticket Number Format (default: `Increment (SystemID.Counter)`) This setting defines the way Zammads ticket number will look. Changing this setting in production will cause follow up detection to fail.

Increment (SystemID.Counter) The increment value contains the SystemID (automatically generated during installation) and a increment which counts up with every new Ticket. The increment will automatically get another digit if needed.

Examples: `1010138`, `1010139`

Date (Year.Month.Day.SystemID.Counter) This version of the ticket number is fairly long. However, because it contains the date of ticket creation, it also allows you to see when the ticket has been created. You may feel familiar with this number format if you've worked with OTRS already.

Examples: `201206231010138`, `201206231010139`

OPTIONS The below options allow you to further customize your ticket number. The availability of options differ depending of the chosen ticket number format above.

Checksum (default: `no`) If set to yes, we'll built a checksum to further "unique" the ticket number of your system. If you're dealing with many other ticket systems this might help to prevent false positive follow up detections on tickets.

This will also add another digit to the ticket number.

Min. size of Number (default: `5`) This setting defines the minimum length of your ticket number. If your counter is not yet high enough, Zammad will fill the number with zeros to ensure the wanted length.

Please note that the minimum length is 3 (SystemID + at least one digit if below 10). Also, if the length is no longer long enough, the number will automatically get one digit longer. Ticket-Numbers **do not overflow**, thus it's save to keep it at 5 or set it lower if wanted.

Note: This option is only available if ticket number format is set to `Increment`!

29.3 Auto-Assignment

In a larger Zammad environment, it happens that several agents open the same ticket at the same time. Although collision detection is then effective, the efficiency of processing can be increased by means of the automatic assignment of tickets when a ticket is opened.

> **Note:** Auto Assignment only kicks in if the ticket has no owner yet. By default the agent can always reset the ticket owner to - if needed.

The automatic assignment of tickets can be activated and configured in the admin area under within Settings -> Ticket -> Auto assignment.

If you want to use this function for only specific tickets, you can configure the conditions accordingly to meet your requirenment. By default the condition affects all tickets with the state `open`.

If you need to exclude users (e.g. a group leader), you can search and select the desired agents in the `Exception Users` list.

> **Note:** The search function in this area is only affective, if you have too many agents to display at once to help you with the configuration.

CHAPTER

THIRTY

INTEGRATIONS

Zammad offers numerous integrations that add rich features to your instance.

Note: We're still working on this part of our documentation, stay tight!

30.1 Integrations for phone systems

Hint: Your VoIP provider or telephony system is not listed? Possibly your provider supports Zammad by using the generic CTI - if you're unsure ask your provider.

Provider does not support Zammad? Consider creating a feature request in the Zammad Community.

30.1.1 CTI (generic)

This integration enables Zammad to provide a caller log to your agents. With this your agents can greet your customers by their name and are supported by Zammad with automatically opening a new ticket dialogue or the user profile.

If you want to learn more on how your agents can use this function, please refer the user documentation.

Note: Automatically opening new ticket dialogues or user profiles requires agent to extension mapping - see more below.

Limitations

Please note the following limitations to reduce confusion later on:

- CTI integrations provide caller log functions only.
- This integration does not provide any VoIP functionalities; you can't make phone calls from within Zammad.
- If your browser supports `tel`-URLs, you can click on phone numbers for automatic dialing. This requires additional software / configuration on your agent's computers.

Requirements

Please provide the following requirements:

- A telephone system that supports webhooks (outbound) (best option are those that allow customizing the calls).
- A unique Call-ID during the call session.
- Call event data (both numbers and direction).
- Your Zammad instance must be reachable for your telephony system.

If you want to learn more on what kind of requests are supported by Zammad and what it expects, please consult our CTI-API documentation.

Available settings

Hint: Click the button next to the `CTI (generic)` heading to activate or deactivate this function.

Endpoint Settings Zammad will list your generic CTI endpoint here. It contains a unique token so ensure to keep this URL save.

You'll need this endpoint for your PBX to talk to Zammad, see CTI-API documentation.

Important: All following options **do not save automatically**. Always use the Save button on the lower end of the integration page!

Call Settings

Inbound This option allows you to block specific incoming caller IDs. It allows you to temporarily reject e.g. spam callers without having to contact providers or PBX administrators.

Caller ID to block Provide caller IDs to block in `E.164` format.

Note Provide a meaningful note for your fellow administrators to remind yourself why you've chosen to block the number.

Note: Your telephony system has to support this function. Zammad will send a `reject` response which will cause your telephony system to hang up the call.

To callers this usually will feel like the line is busy.

Outbound In many cases you may want to use a different caller ID depending on the destination you're calling. This may apply due to specific connection rates to other countries or because you want your customer to feel you're calling from the same country.

Note: This option expects `E.164` number formats.

Destination caller ID The caller ID or number you're trying to call.

Tip: You can use wildcards for e.g. country specific outbound numbers like:

- `49*` for Germany

- `4930*` for Berlin / Germany landlines
- `33*` for France

Set Outbound caller ID The outbound caller ID to set (the number your customer sees on his display) in `E.164` number format.

Note Provide a short description for fellow administrators.

Note: This option requires your PBX to send a specific request to Zammad *before dialing*. Please consult the CTI API in case you're not sure.

Other Settings Below you can find all available additional settings for this CTI integration. For your overview we're sorting them by appearance and reference their description first.

Default caller ID for outbound calls In many cases you may want to use a different caller ID depending on the destination you're calling. This may apply due to specific connection rates to other countries or because you want your customer to feel you're calling from the same country.

Note: This option expects `E.164` number formats.

Note: This option requires your PBX to send a specific request to Zammad *before dialing*. Please consult the CTI API in case you're not sure.

Shown records in caller log Allows you to set the number of shown caller log entries for all users. You can choose from the following values:

- 60 (default)
- 120
- 180
- 240
- 300

Warning: Potential performance issue

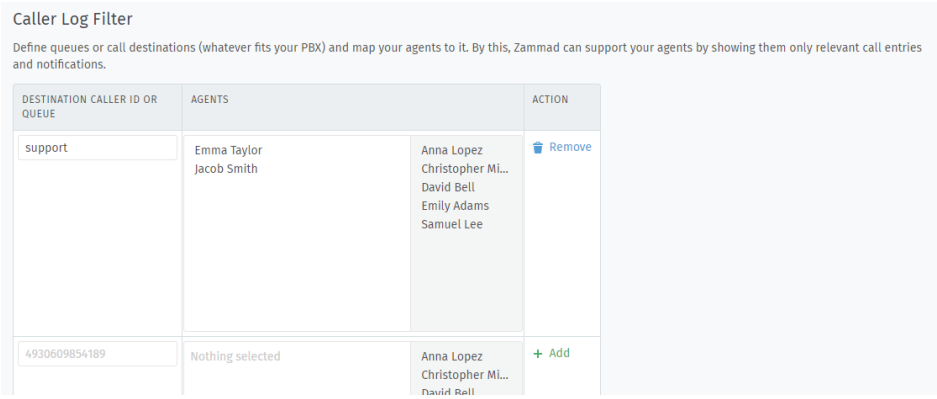
Setting this setting higher than 60 may cause serious performance issues on very busy instances. Keep in mind that this setting causes Zammad to poll and send up to 300 records to *all active agent sessions* in very short time periods.

Caller Log Filter This function allows you to provide call information based on e.g. queues only to agents that really need the information.

Why? If you have a team for several countries or departments, you don't want to bug your agents from other departments. Leaving these options empty will fallback to showing everything to everyone.

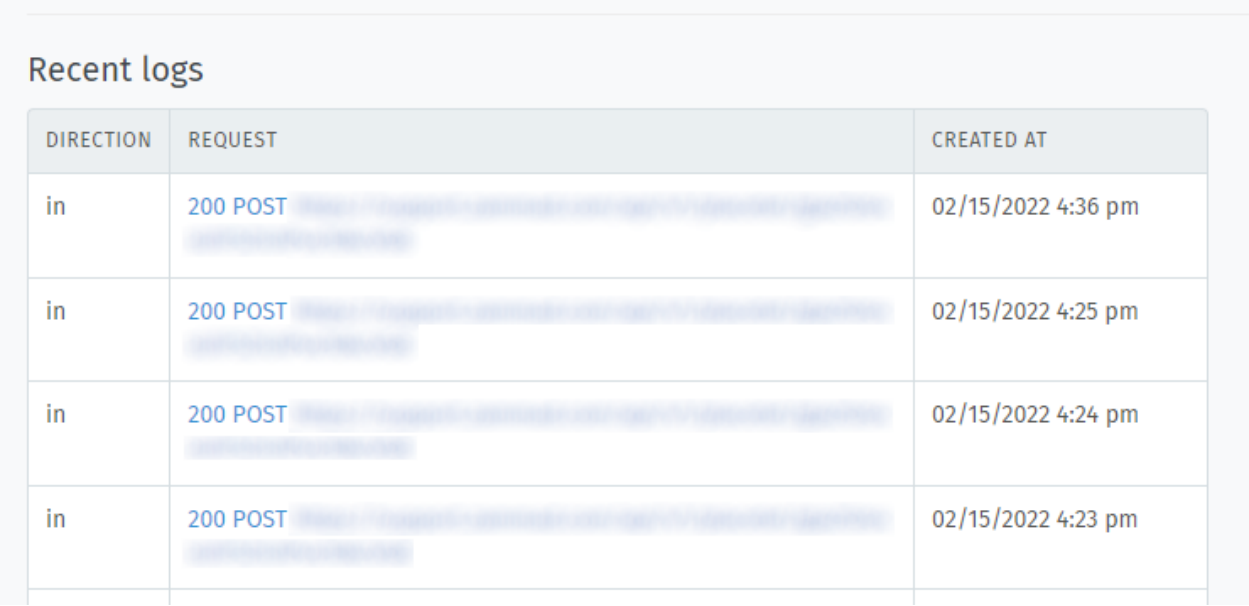
Destination caller ID or Queue This depends on your PBX and usually is either a queue ID, phone number or extension.

Agents Select the agents that are responsible for the group. These agents will then see caller log entries and call notifications fitting to said queue.



Recent Logs

With recent logs Zammad allows you to view the latest calls for the CTI functionality. This usually comes in handy, when you're looking for errors.



Recent logs

DIRECTION	REQUEST	CREATED AT
in	200 POST	02/15/2022 4:36 pm
in	200 POST	02/15/2022 4:25 pm
in	200 POST	02/15/2022 4:24 pm
in	200 POST	02/15/2022 4:23 pm

I'm just here to clear floats up.

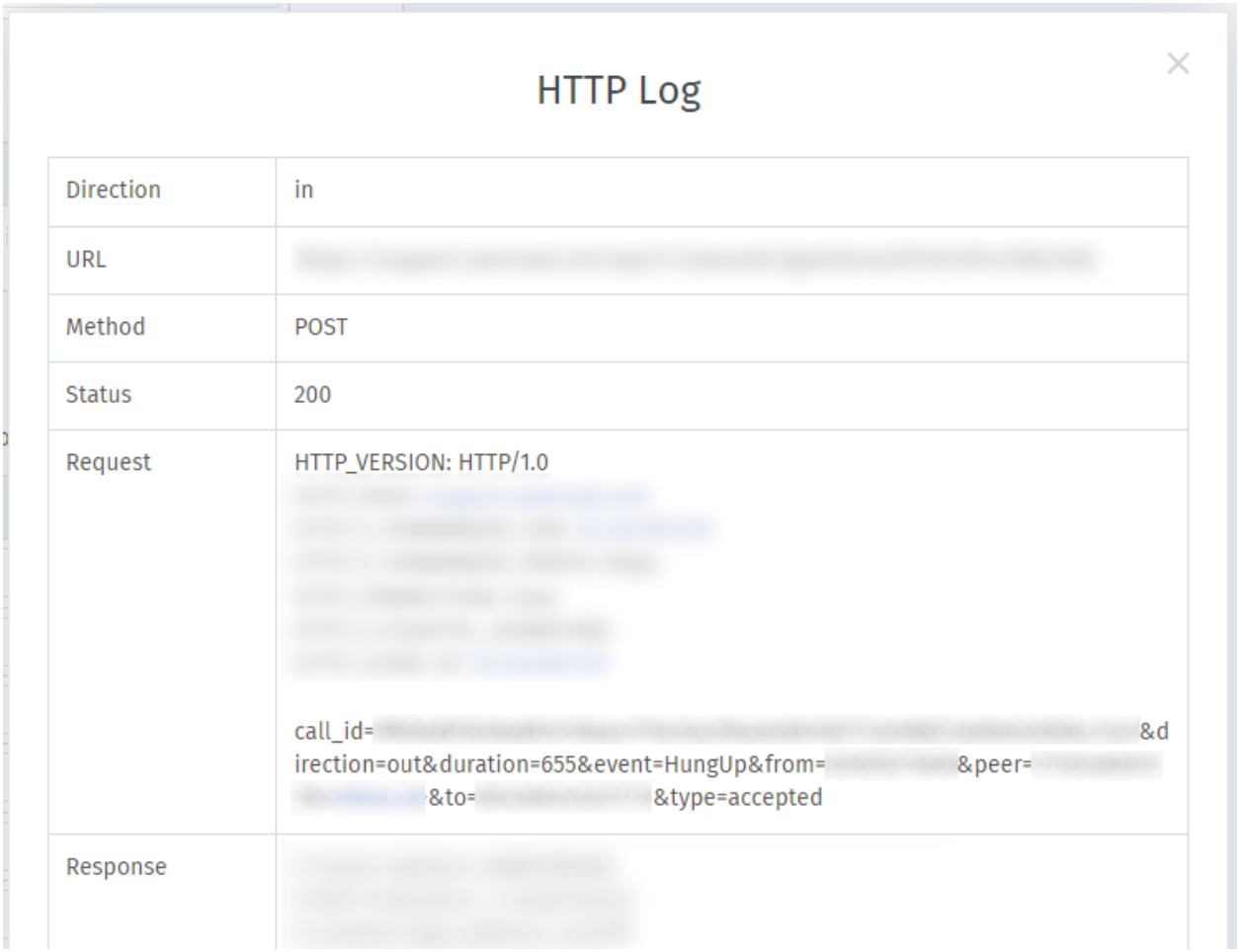
By clicking on the entry of interest, Zammad will provide more details on the call in question. You'll see the payload it received and also the response that was sent.

30.1.2 Placetel CTI

Setup Placetel connection for Zammad

Note: This configuration step requires a *full* administrative Placetel account. You may receive forbidden error messages with Placetel in case your permissions are not high enough.

The following actions can be configured via the Placetel web interface.



HTTP Log

Direction	in
URL	[illegible]
Method	POST
Status	200
Request	HTTP_VERSION: HTTP/1.0 [illegible] call_id=[illegible]&direction=out&duration=655&event=HungUp&from=[illegible]&peer=[illegible]&to=[illegible]&type=accepted
Response	[illegible]

Step 1: Activate Zammad integration Within Integrations, scroll down to Partner integrations and select Zammad.

You can alternatively filter by "Ticket Systems" to reduce the number of entries on the page. You'll still want to look for Partner integrations.

Within the Zammad integration now press "Activate". A new tab `API` becomes available - open this tab.

Now tick "Enable Call Control / Notify API" and paste the Placetel endpoint from your Zammad instance into the field "URL of your API endpoint". Save to apply the settings

Step 2: Generate API Token for Placetel Go back to the integrations page and scroll down to "Web API". Generate a new API token by using the "Create a new API token" button.

Note: If you already generated a token either use your existing token or reset it by using above mentioned button. Placetel will ask you to conform this reset.

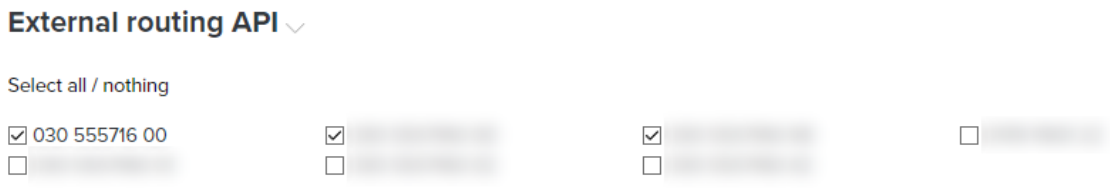
Please keep in mind that existing API scripts may no longer work due to token resets!

Copy the provided API token and insert it into the "API Token" field within Zammads Placetel integration.

Apply your changes by using the "Save" button on the bottom of the Placetel integration page and activate the Placetel integration.

Step 3: Restrict the numbers to notify on Having a lot of numbers that shouldn't be used for notifying Zammad? Within the the Integrations page of the Placetel web interface, go to "Notify API".

Lower on the page Placetel allows you to restrict the numbers to notify on. You'll find this within the "External routing API" part.



Hint: This menu point also provides a API request log from Placetel view. Just open "Recent responses of your API endpoint" to learn more.

If you want to see Zammads perspective, use the "Recent Logs" part from within the Placetel integration page.

Recent responses of your API endpoint

Show / Hide

Received at	Signalised event	Call ID	Your status	Your response	Processing status	Response time
Thu, 17 Feb 2022 14:43:55 +0100	HungUp		200			80ms
Thu, 17 Feb 2022 14:36:18 +0100	CallAccepted		200			96ms
Thu, 17 Feb 2022 14:36:14 +0100	IncomingCall		200	Show		115ms
Thu, 17 Feb 2022 13:29:43 +0100	HungUp		200			96ms
Thu, 17 Feb 2022 13:26:47 +0100	CallAccepted		200			96ms

Step 4 (optional): Further configurations for Placetel If needed, you can now configure Zammads Placetel integration in more detail. You can learn more about your options here: *Placetel integration settings*.

This integration enables Zammad to provide a caller log to your agents. With this your agents can greet your customers by their name and are supported by Zammad with automatically opening a new ticket dialogue or the user profile.

If you want to learn more on how your agents can use this function, please refer the user documentation.

> **Note:** Automatically opening new ticket dialogues or user profiles requires agent to extension mapping - see more below.

Limitations

Please note the following limitations to reduce confusion later on:

- CTI integrations provide caller log functions only.
- This integration does not provide any VoIP functionalities; you can't make phone calls from within Zammad.
- If your browser supports `tel`-URLs, you can click on phone numbers for automatic dialing. This requires additional software / configuration on your agent's computers.

Requirements

Please provide the following requirements:

- You need an administrative Placetel account for your organization.
- Your Zammad instance must be allowed to communicate to external services.
- Placetel must be able to reach your Zammad instance.

Setup Placetel connection for Zammad Learn how to configure Placetel to enable Zammad and Placetel to communicate with each other.

Available settings

Hint: Click the button next to the `Placetel` heading to activate or deactivate this function.

Important: All following options **do not save automatically**. Always use the Save button on the lower end of the integration page!

Endpoint Settings The here listed endpoint settings are relevant for the *integration configuration with Placetel*.

Endpoint This endpoint will be required for the Zammad integration within the Placetel web interface.

API Token You'll receive this token within the `Web API` menu. Make sure to copy this value, it's only shown once!

Call Settings

Inbound This option allows you to block specific incoming caller IDs. It allows you to temporarily reject e.g. spam callers without having to contact providers or PBX administrators.

Caller ID to block Provide caller IDs to block in `E.164` format.

Note Provide a meaningful note for your fellow administrators to remind yourself why you've chosen to block the number.

Other Settings Below you can find all available additional settings for this CTI integration. For your overview we're sorting them by appearance and reference their description first.

Shown records in caller log Allows you to set the number of shown caller log entries for all users. You can choose from the following values:

- 60 (default)
- 120
- 180
- 240
- 300

Warning: Potential performance issue

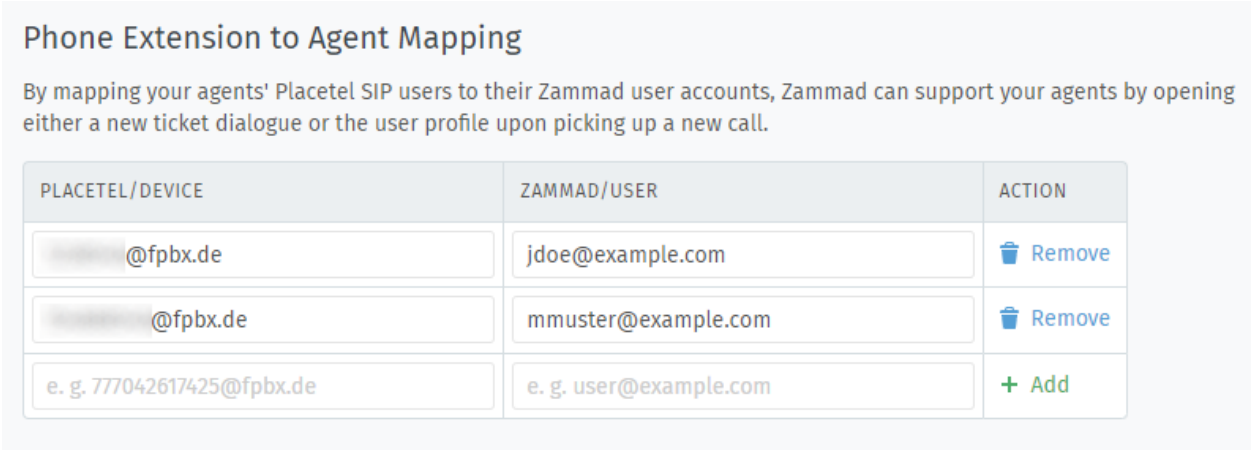
Setting this setting higher than 60 may cause serious performance issues on very busy instances. Keep in mind that this setting causes Zammad to poll and send up to 300 records to *all active agent sessions* in very short time periods.

Phone Extension to Agent Mapping By mapping your agents extension to their existing Zammad users, Zammad can provide a new ticket dialogue or open the user profile for the agent that picks up the call.

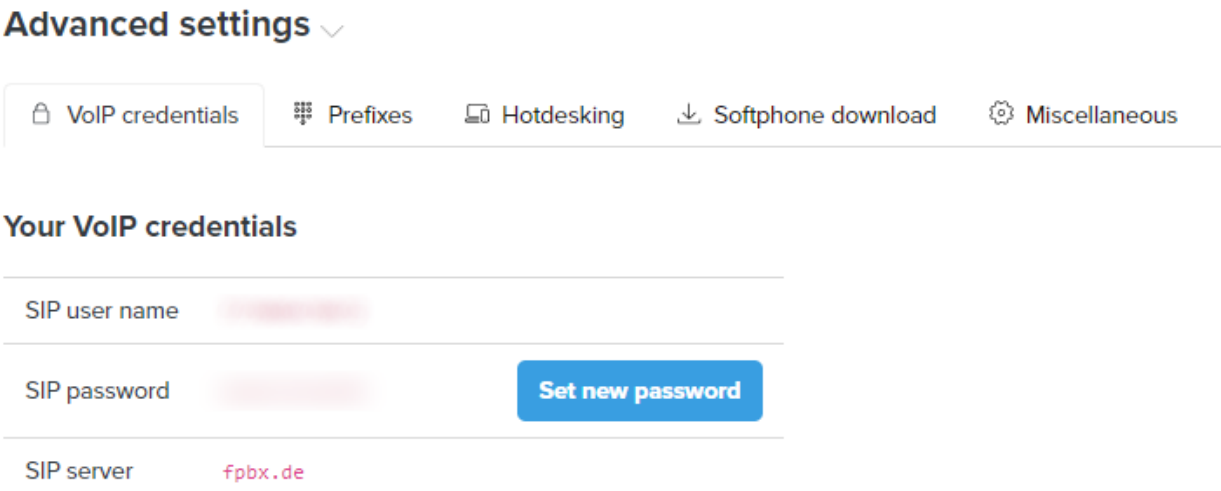
This speeds up ticket aiding, no matter if it's for existing tickets or new ones!

Note: The agent perspective is described within our user documentation.

Hint: You can find your agents Placetel username combination required within PBX → VoIP destinations. Within the "Advanced settings" section you're looking for "SIP user name" and "SIP server".



Combine these two like so: `<sip-user-name>@<sip-server>`.



Recent Logs

With recent logs Zammad allows you to view the latest calls for the CTI functionality. This usually comes in handy, when you're looking for errors.

I'm just here to clear floats up.

By clicking on the entry of interest, Zammad will provide more details on the call in question. You'll see the payload it received and also the response that was sent.

Recent logs

DIRECTION	REQUEST	CREATED AT
in	200 POST	02/15/2022 4:36 pm
in	200 POST	02/15/2022 4:25 pm
in	200 POST	02/15/2022 4:24 pm
in	200 POST	02/15/2022 4:23 pm

HTTP Log

Direction	in
URL	
Method	POST
Status	200
Request	HTTP_VERSION: HTTP/1.0 call_id= &direction=out&duration=655&event=HungUp&from= &peer= &to= &type=accepted
Response	

30.1.3 Sipgate (sipgate.io)

Setup Sipgate connection for Zammad

Note:

Sipgate has no english web interface which is why this documentation page is mixing up languages badly.

Please also note that the availability of API addons highly depends on your package trier. Usage of sipgate.io packages *is not free*, please check their pricing page before!

Step 1: Book sipgate.io package

Hint: Skip to step 2 if you already have the package booked!

Login to an administrative Sipgate account and navigate to `Accountverwaltung`. You'll see several different options depending on your booked packages. Select `Verträge & Produkte` to continue.

Scroll down to the section `Zusätzliche Produkte buchen` and look for `sipgate.io` - select this product by using the `Produkte anzeigen`-Button.

On the next page select either one of the `sipgate.io` packages or `Push-API Package Free`. Follow the dialogue by booking the addon. You'll be returned to your contract overview and now should see the selected addon in your list.

Note: The availability for `sipgate.io` packages and their levels highly depends on the overall account type and product you've booked with Sipgate.

Step 2: Configure webhook for Zammad Within your `Accountverwaltung` navicate to your product `sipgate.io`. In the newly opened tab, switch from "Clients" to "Webhooks" and paste the endpoint URLs from your Zammad instance like so:

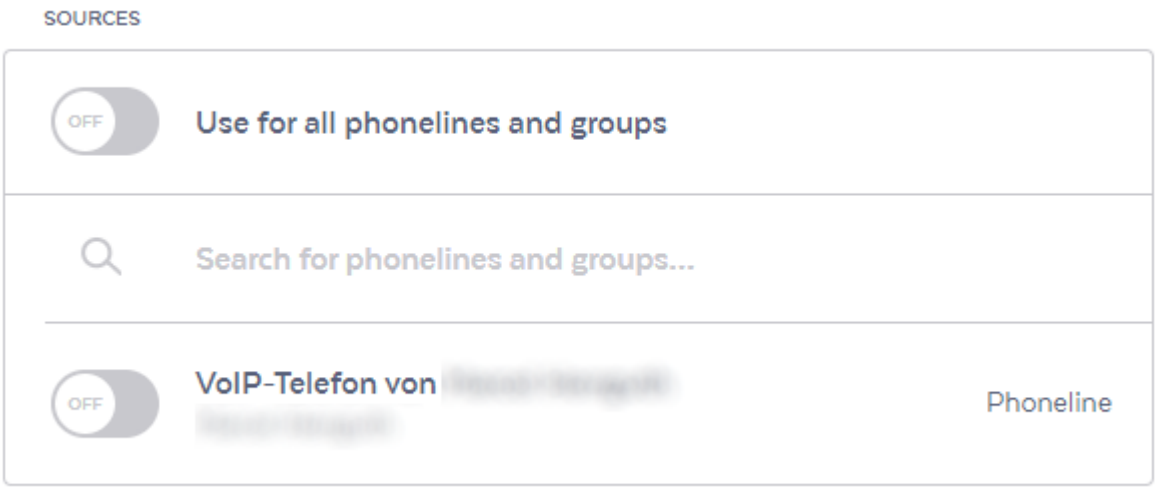
- Inbound endpoint to "Incoming"
- Outbound endpoint to "Outgoing"

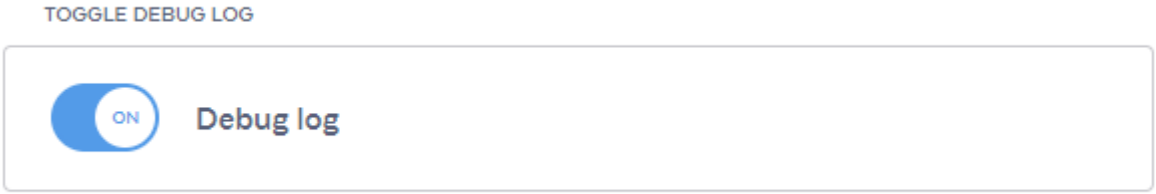
Note: Ensure to select at least one call group or phoneline within "Sources". Other wise Sipgate will not indicate any incoming or outgoing calls to Zammad.

Step 3: Restrict the numbers to notify on Having a lot of numbers that shouldn't be used for notifying Zammad? Within the Webhooks → URLs section of Sipgate you can select which *sources* Sipgate should notify Zammad about in- and outgoing calls.

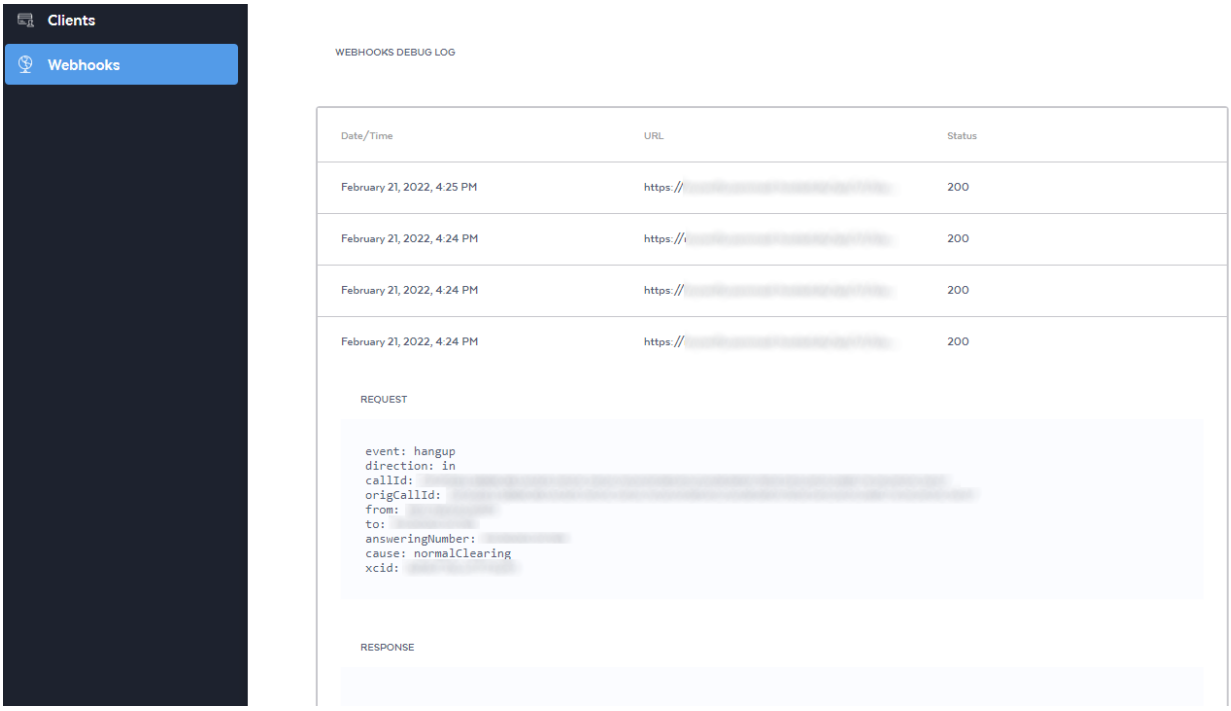
Use either specific phone lines or use the option "Use for all phonelines and groups" to notify Zammad about all existing lines of your Sipgate account.

Hint: This section also allows you to enable a Debug log.





After enabling you can use the Debug log section to see all sent webhook calls to Zammad. You'll also can see the response.



Step 4 (optional): Further configurations for Sipgate If needed, you can now configure Zammads Sipgate integration in more detail. You can learn more about your options here: *Sipgate integration settings*.

This integration enables Zammad to provide a caller log to your agents. With this your agents can greet your customers by their name and are supported by Zammad with automatically opening a new ticket dialogue or the user profile.

If you want to learn more on how your agents can use this function, please refer the user documentation.

> **Note:** Automatically opening new ticket dialogues or user profiles requires agent to extension mapping - see more below.

Limitations

Please note the following limitations to reduce confusion later on:

- CTI integrations provide caller log functions only.
- This integration does not provide any VoIP functionalities; you can't make phone calls from within Zammad.
- If your browser supports `tel`-URLs, you can click on phone numbers for automatic dialing. This requires additional software / configuration on your agent's computers.

Requirements

Please provide the following requirements:

- You need an administrative Sipgate account for your organization.
- **Zammad requires a `sipgate.io` addon from the feature store.**
  - Please note that API calls are not free with Sipgate. Rates may apply and differ from account to account.
- Your Zammad instance must be allowed to communicate to external services.
- Sipgate must be able to reach your Zammad instance.

Setup Sipgate connection for Zammad Learn how to configure Sipgate to enable Zammad and Sipgate to communicate with each other.

Available settings

Hint: Click the button next to the `sipgate.io` heading to activate or deactivate this function.

Endpoint Settings Below endpoint settings affect the *sipgate.io configuration*.

Inbound This endpoint is required for incoming call hooks.

Outbound This endpoint is required for outgoing call hooks.

Important: All following options **do not save automatically**. Always use the Save button on the lower end of the integration page!

Call Settings

Inbound This option allows you to block specific incoming caller IDs. It allows you to temporarily reject e.g. spam callers without having to contact providers or PBX administrators.

Caller ID to block Provide caller IDs to block in `E.164` format.

Note Provide a meaningful note for your fellow administrators to remind yourself why you've chosen to block the number.

Outbound In many cases you may want to use a different caller ID depending on the destination you're calling. This may apply due to specific connection rates to other countries or because you want your customer to feel you're calling from the same country.

Note: This option expects `E.164` number formats.

Destination caller ID The caller ID or number you're trying to call.

Tip: You can use wildcards for e.g. country specific outbound numbers like:

- `49*` for Germany
- `4930*` for Berlin / Germany landlines
- `33*` for France

Set Outbound caller ID The outbound caller ID to set (the number your customer sees on his display) in `E.164` number format.

Note Provide a short description for fellow administrators.

Other Settings Below you can find all available additional settings for this CTI integration. For your overview we're sorting them by appearance and reference their description first.

Default caller ID for outbound calls In many cases you may want to use a different caller ID depending on the destination you're calling. This may apply due to specific connection rates to other countries or because you want your customer to feel you're calling from the same country.

Note: This option expects `E.164` number formats.

Shown records in caller log Allows you to set the number of shown caller log entries for all users. You can choose from the following values:

- 60 (default)
- 120
- 180
- 240
- 300

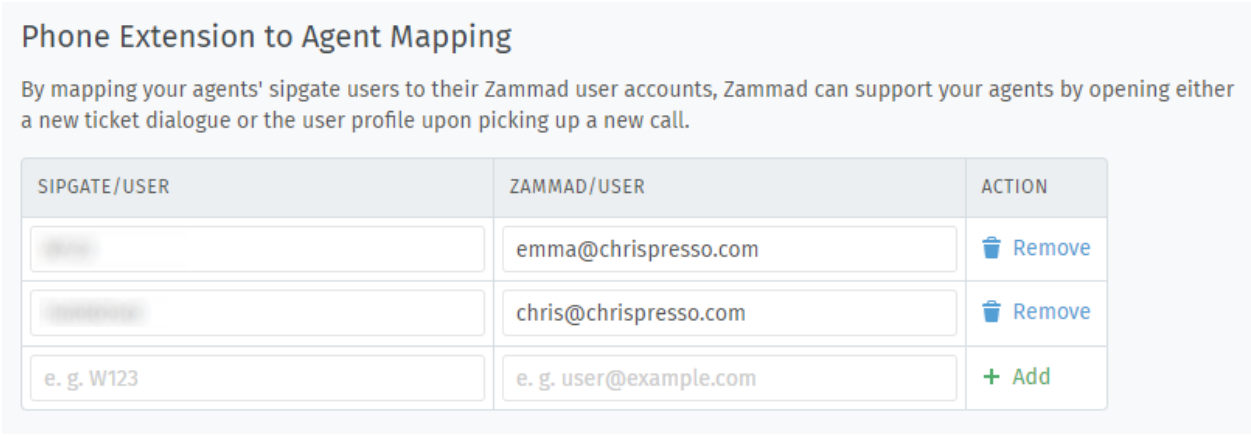
Warning: Potential performance issue

Setting this setting higher than 60 may cause serious performance issues on very busy instances. Keep in mind that this setting causes Zammad to poll and send up to 300 records to *all active agent sessions* in very short time periods.

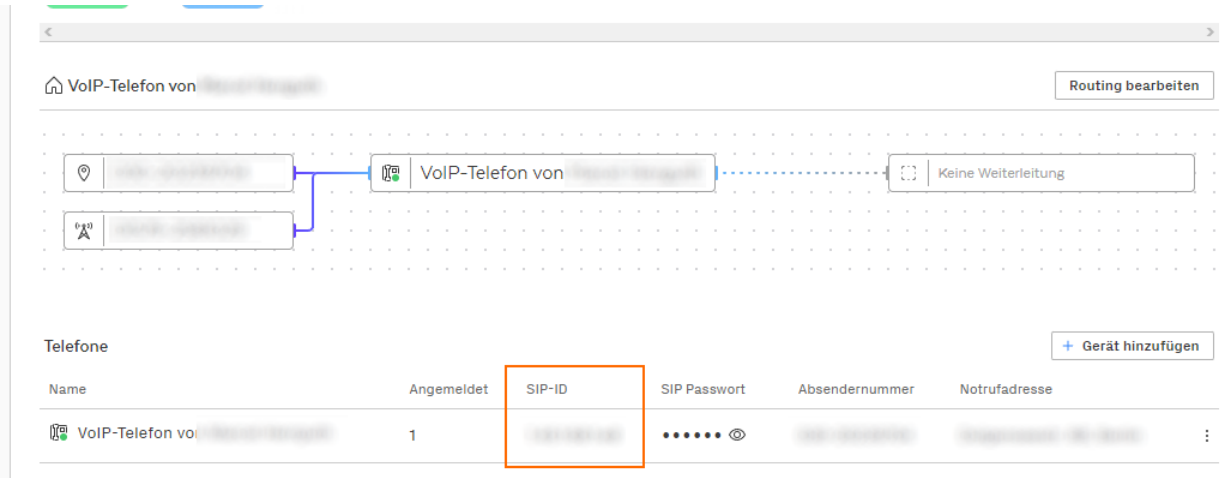
Phone Extension to Agent Mapping By mapping your agents extension to their existing Zammad users, Zammad can provide a new ticket dialogue or open the user profile for the agent that picks up the call.

This speeds up ticket aiding, no matter if it's for existing tickets or new ones!

Note: The agent perspective is described within our user documentation.



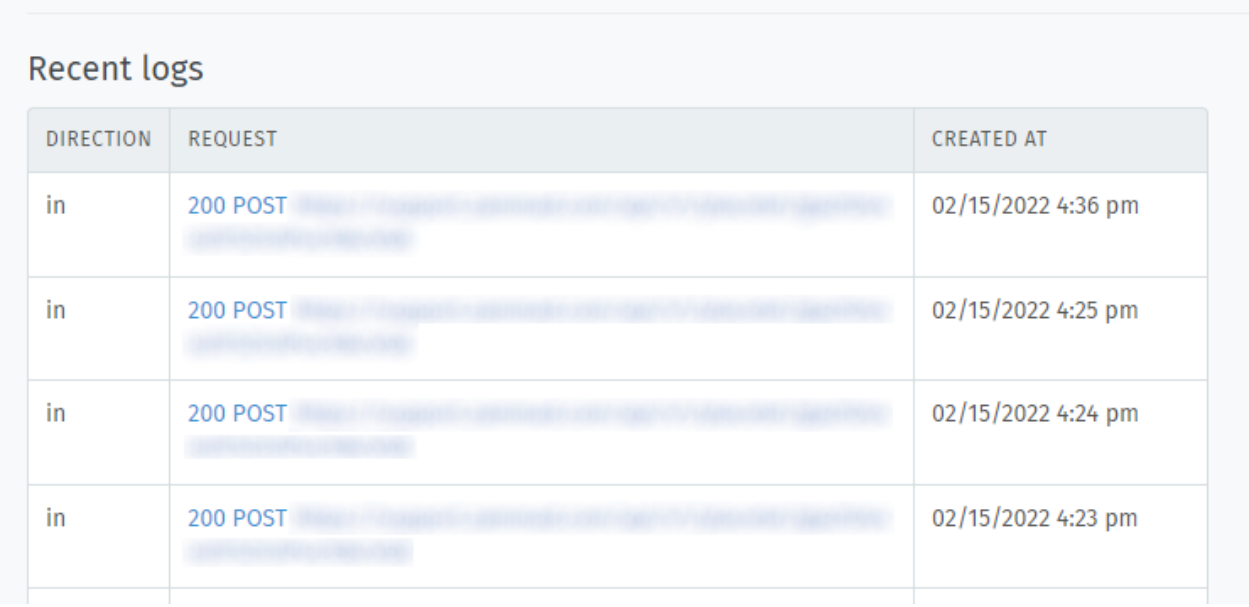
Hint: You can find your agent's Sipgate username within `Accountverwaltung` → `Benutzer`. You're looking for the SIP-ID.



Note: Users with several devices also have several SIP-IDs.

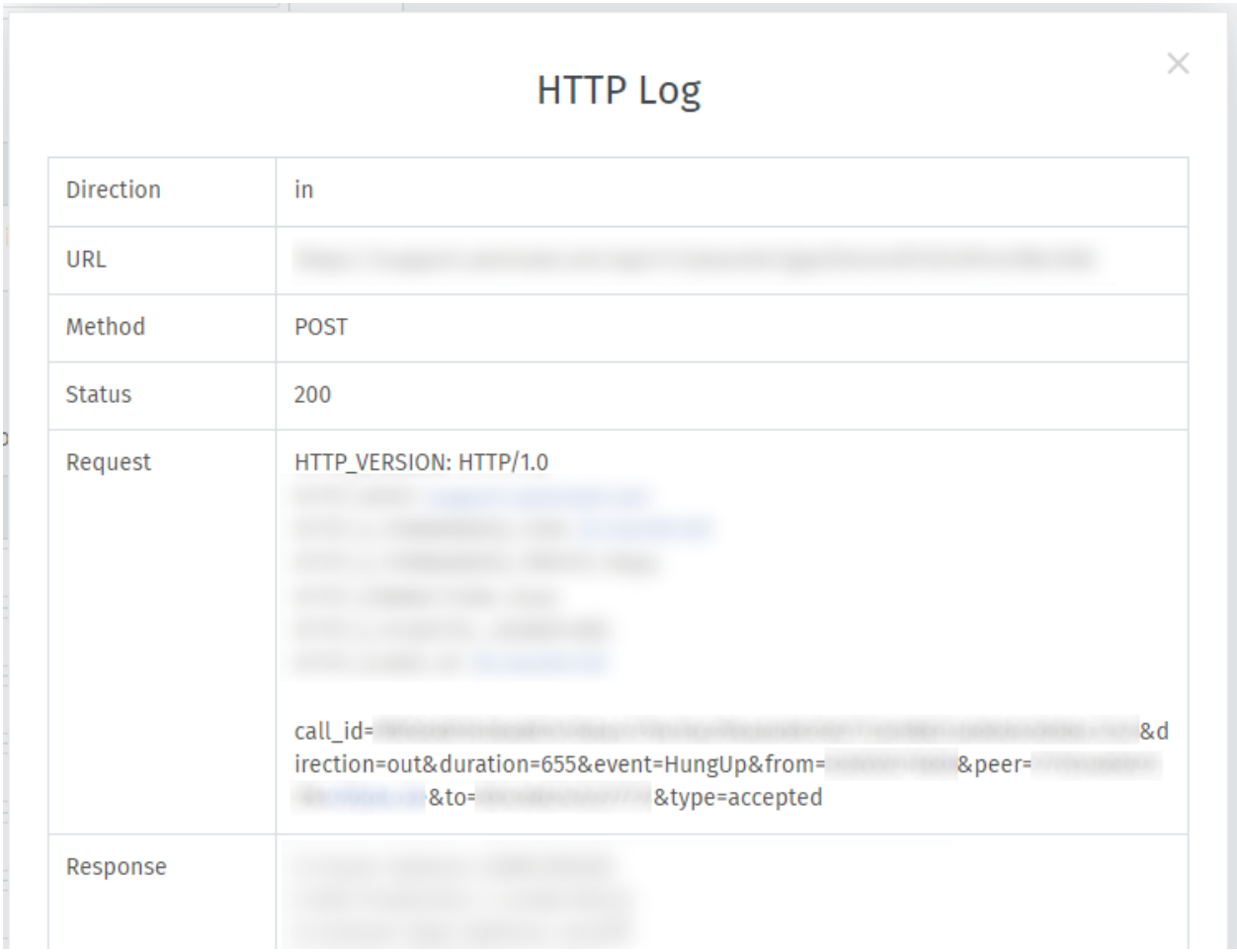
Recent Logs

With recent logs Zammad allows you to view the latest calls for the CTI functionality. This usually comes in handy, when you're looking for errors.



I'm just here to clear floats up.

By clicking on the entry of interest, Zammad will provide more details on the call in question. You'll see the payload it received and also the response that was sent.



HTTP Log

Direction	in
URL	[illegible]
Method	POST
Status	200
Request	HTTP_VERSION: HTTP/1.0 [illegible] call_id=[illegible]&direction=out&duration=655&event=HungUp&from=[illegible]&peer=[illegible]&to=[illegible]&type=accepted
Response	[illegible]

30.2 Integrations for authentication and customers

30.2.1 Clearbit

With our Clearbit integration, you can easily enrich the information provided by Zammad. If the customers or agents email address is known to Clearbit, it will share all information it has regarding the user with Zammad. Those information can include the following:

- Avatar
- Address information
- Website information
- A BIO (as Note by default)

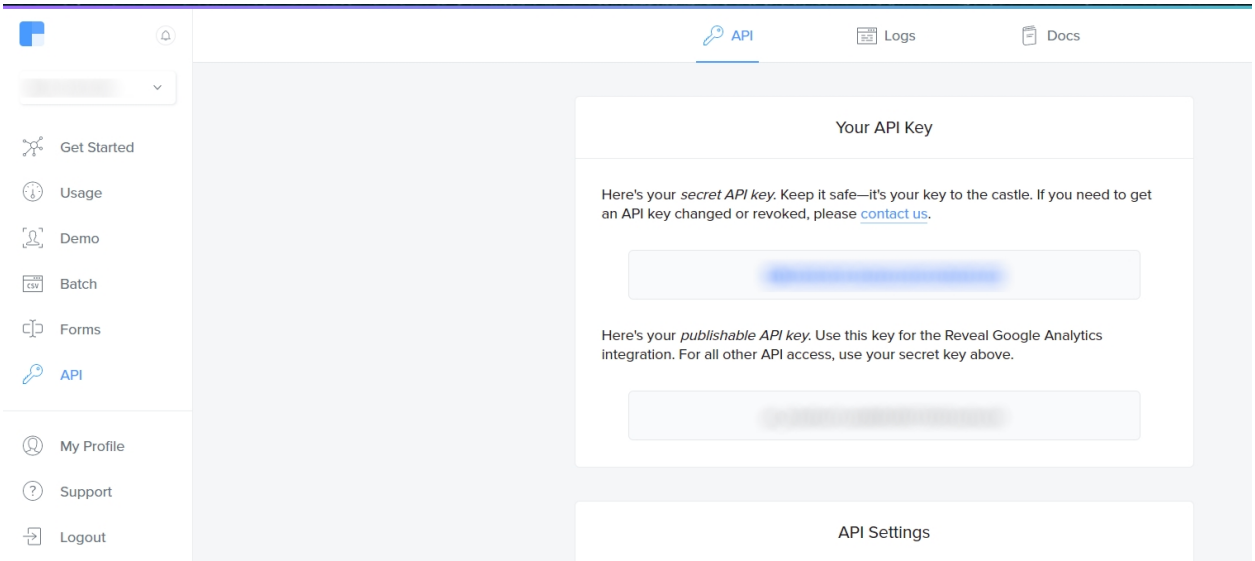
If needed, you can add further custom objects and add mappings to them, so the clearbit information can be filled within the database. In general you can get any information from clearbit, as long as you have a mapping to an Zammad object.

Hint: Clearbit does have a Mapping of fields like LDAP and Exchange have, but does not "win" against Zammad information. This means that if you have e.g. the lastname field filled in already and Clearbit has other information on that, it will not be updated.

However: If let's say the lastname has been set by Clearbit and Zammad notices that the lastname on the Clearbit source has changed, Zammad will also update this value.

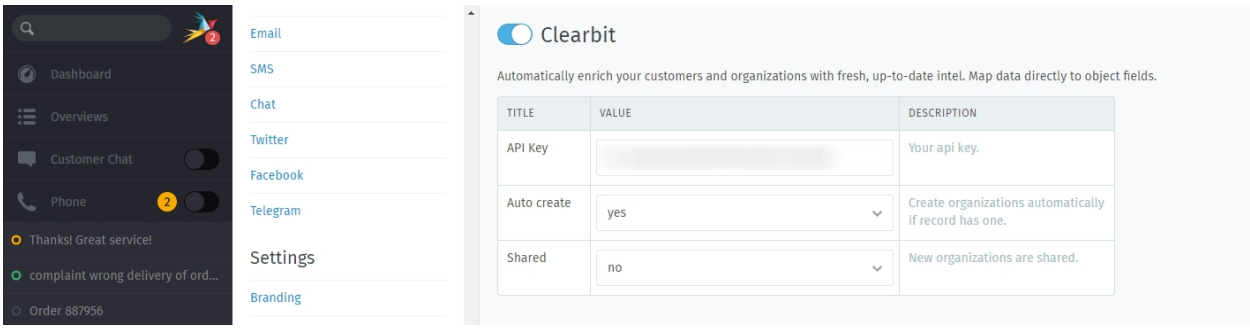
Configuration

The configuration of clearbit is really easy and done fast! Just login to your Clearbit-Account, go to "API" and copy the secret-API-Key.



Now change to your Zammad instance, go to Integrations (System) -> Clearbit in the admin panel. Paste your API-Key into the API-Key-Field and decide if Zammad should create unknown Organizations automatically, if the user does not have one yet (and Clearbit knows it). The shared option decides if the new organizations Zammad creates with Clearbit should be shared ones.

Note: If you're unsure what option to choose, better stick with "no". You can also learn more about *Organizations*.

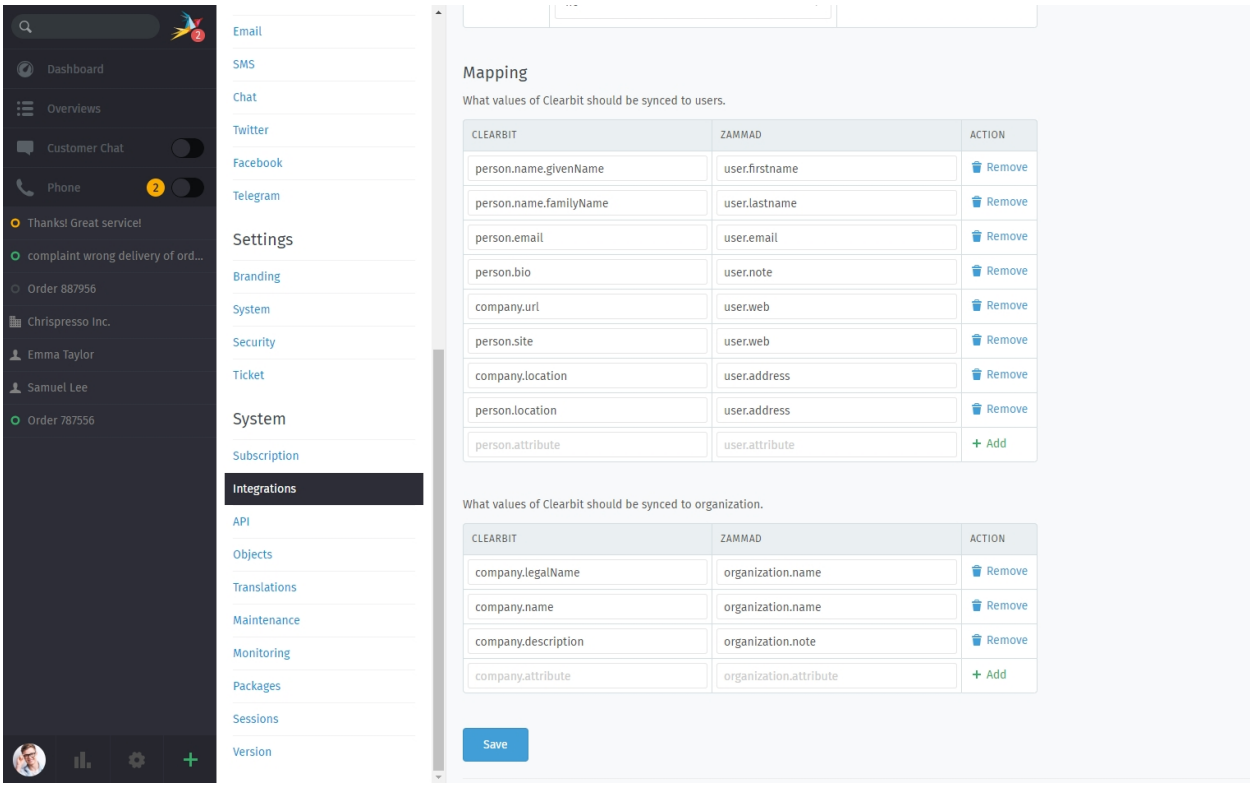


The Mapping option works similar to the mapping within the Exchange and LDAP sync. You can add further mappings for e.g. custom fields if you need more information that Clearbit can provide.

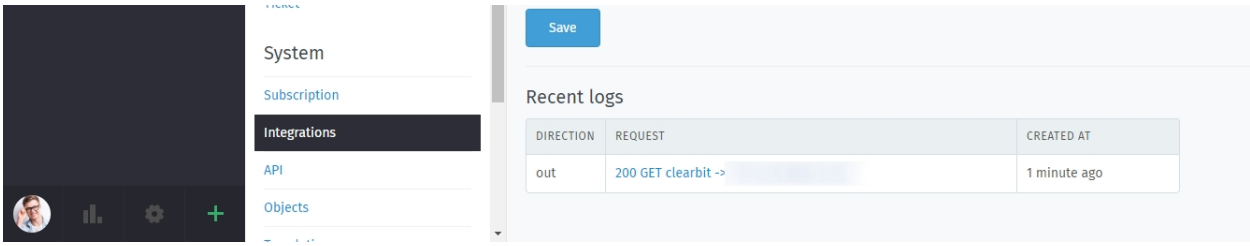
Note: If you want to add more Clearbit fields and want to learn more about available fields on their API, you can take a look at their API documentation .

If you're happy with the above chosen Settings and your mapping, just save the changes and enable Clearbit integration. Zammad will now start polling the Clearbit API as users contact you.

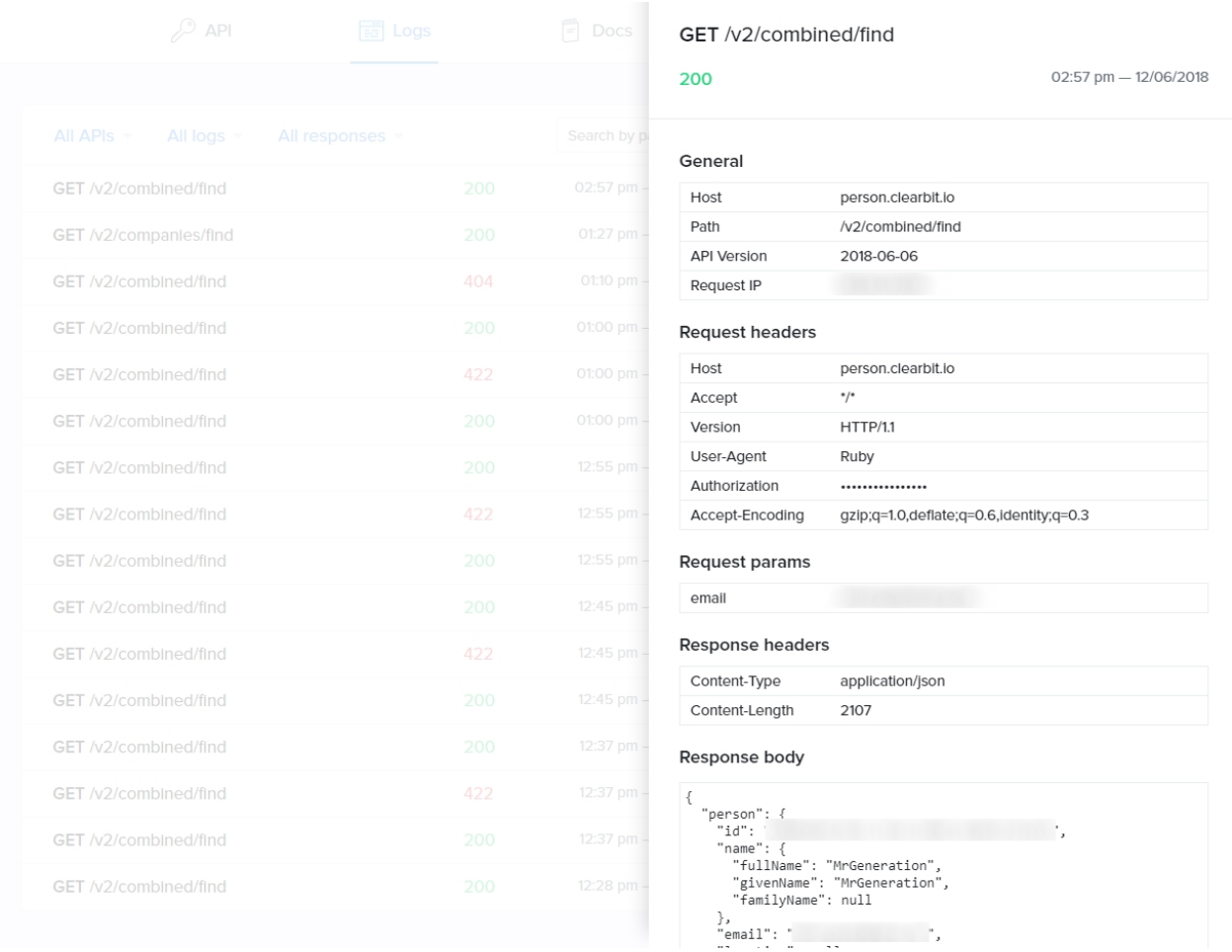
Note: Zammad does not synchronize with Clearbit on a regular basis, but on demand if needed. This saves API calls.



Below the Settings and Mappings, you'll find our Integration log. You can see what requests Zammad sent to Clearbit and also the APIs Response.



By the way, you can also view the API log on the Clearbit website - the information seen is basically the same.



Example when adding a user

To show you how fast information is added, we added a small Screencast below. This shows the creation of the User Alex from Clearbit. As we already set the lastname of Alex to "X", Zammad did not update it. What Zammad did was to add further information it received from Clearbit. Really cool, right?

30.2.2 S/MIME

Prerequisites

- A certificate *and* private key for your own organization

  (Use this to **sign outgoing messages** and **decrypt incoming messages**.)

- Certificates belonging your contacts, or their issuing certificate authority (CA)

  (Use these to **verify incoming message signatures** and **encrypt outgoing messages**.)

Note: I'm new to S/MIME. Where can I get a certificate?

The easiest way to get certificates is to buy an annual subscription through a commercial CA, such as:

- Sectigo (formerly Comodo)
- Secorio
- GlobalSign

(Zammad is not affiliated with these CAs in any way.)

You can also generate your own self-signed certificates, but the process is complicated and usually **involves extra work for your contacts**.

Bear in mind that **S/MIME only works if the other party is using it, too.**

Limitations

Please note that Zammad will distrust senders by default. This means that you're always required to provide certificate data, no matter if for signing or encrypting.

This is by design and can't be adjusted.

Manage Certificates

S/MIME is **disabled by default**. Enable it to start adding certificates.

Fig. 1: Manage certificates in the Admin Panel under **System > Integrations > S/MIME**. Certificates may be pasted in as plain text or uploaded from a file.

Add Certificate data

Add Certificate Import public-key certificates for both your own organization and your contacts.

You can also add a bunch of certificates in one go by providing a single file with all relevant certificates.

> **Warning: ALWAYS verify certificates in-person or over the phone!**
>
> The whole point of signatures is to alert you when someone is trying to pretend to be someone they're not. Never accept a certificate from someone online without verifying it first.

Note: What about trusted certificate authorities?

In some cases (*e.g.*, when dealing with large enterprises), you may be given a certificate for an entire CA, rather than a single contact. Add it here to trust *all* certificates issued by that CA.

Commercial CAs can usually be verified online. Zammad does not include a list of built-in, trusted CAs.

Add Private Key Once you've added a public-key certificate, you can import its matching private key.

Private keys are for **your own organization only**; never ask your contacts for their private keys.

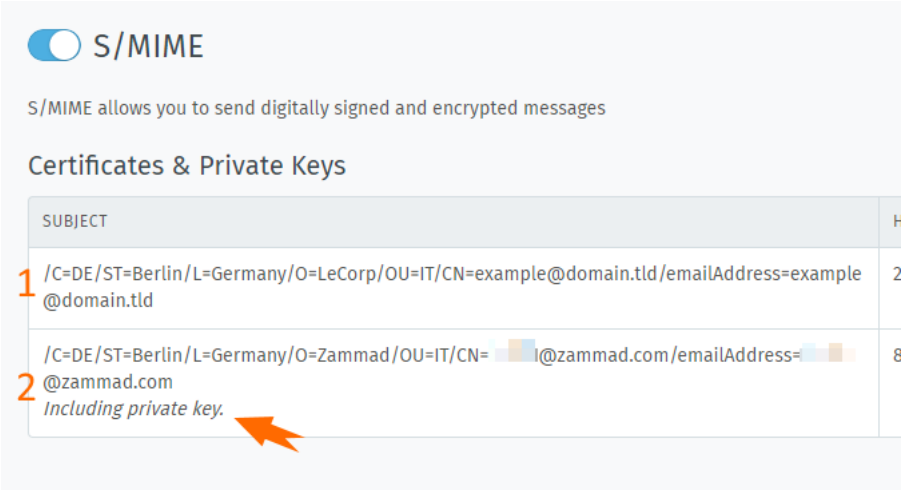


Fig. 2: A note is displayed on certificates with a matching private key (see line 2).

Note: Certificates and private keys must be uploaded separately.

If your certificate and private key are bundled together in the same file or PEM block, import it twice (once using each button).

Please note that bulk imports of private keys are not possible.

Download Certificate data

You can download the earlier provided certificates and private keys at any time from your Zammad instance.

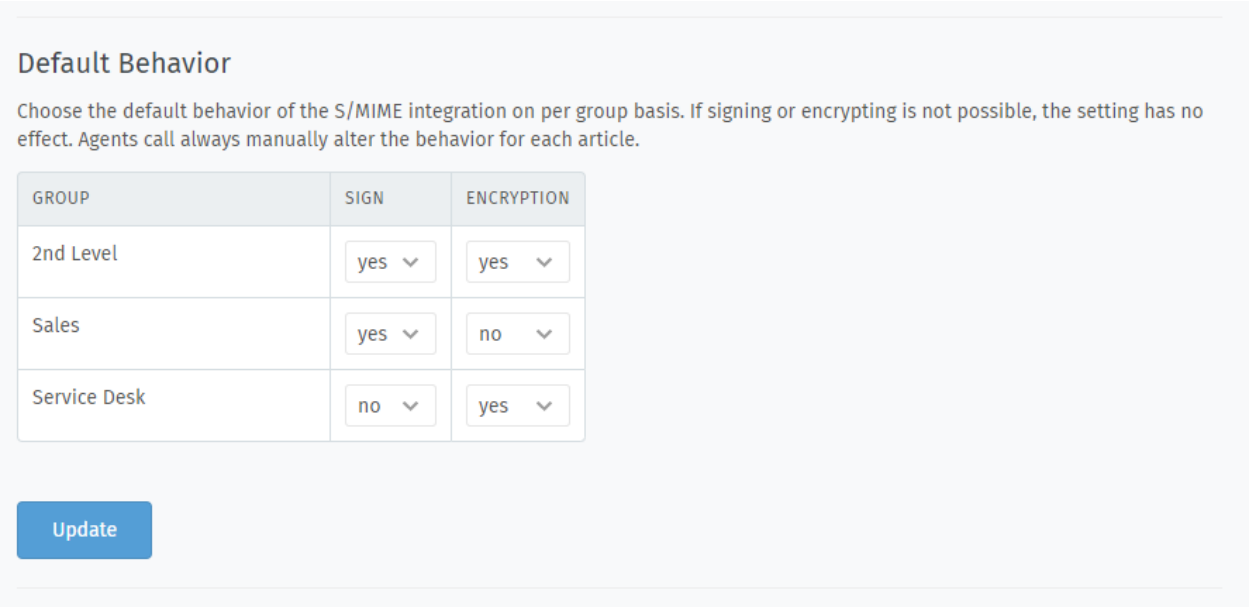
> **Note: Passphrase-protected private keys stay protected**
>
> Downloading private keys that originally were encrypted with a passphrase will also have this state after retrieval. Knowing the password is mandatory to continue working with keys in question.

Fig. 3: Download stored certificates and their keys

Default Behavior

The ticket composer will set all outgoing messages to **signed and encrypted** by default (assuming the required certificates exist).

These defaults can be modified on a per-group basis:



Of course, agents can always manually change these settings on each email they send out.

Troubleshooting

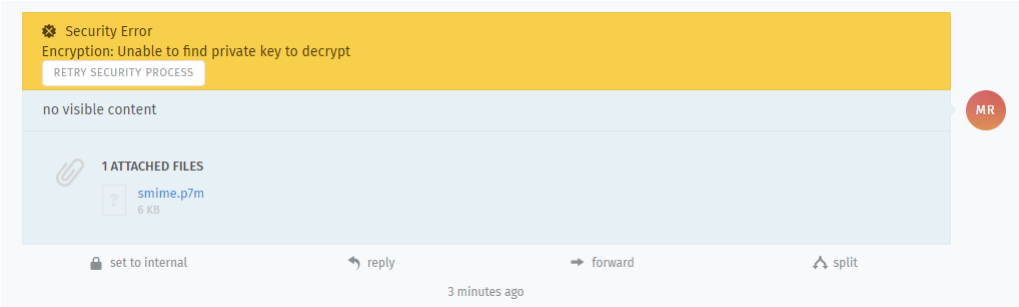
All of the system's latest S/MIME activity is displayed in the **Recent Logs** section.

Fig. 4: Logs report the status and details of all mail, both incoming and outgoing, that used signing/verification or encryption/decryption.

> **Note:** This log does **not** include email sent by *triggers* or the *scheduler*. For those, check your `production.log`.

Common Issues

I received a signed/encrypted email before I set up S/MIME integration No problem. Once S/MIME has been enabled and the appropriate certificates have been added, agents will be prompted to retry verification/decryption on matching emails.



The Encrypt button is disabled

- Have you added the recipient's certificate?
- Are you sure the recipient's certificate is valid?
- Have you checked your `production.log` for more details?

> **Warning:** If encryption doesn't work in the composer, it won't work in *triggers* or the *scheduler* either!

The Sign button is disabled

- Have you added **both the certificate and private key** for your organization?
- Does the email address on the certificate match the email address of the agent/group composing the email?

Error: "Fingerprint already taken"

- Are you sure you haven't added this certificate already?

Error: " invalid byte sequence in UTF-8"

- Please ensure to provide PEM formatted certificate and keys.
- Did you check if the provided file is a valid certificate or key?

S/MIME is the most widely-supported method for secure email communication. With S/MIME, you can exchange **signed** and **encrypted** messages with others.

Signing is proof that a message hasn't been tampered with or sent by an impersonator.

In other words, it guarantees a message's **integrity** and **authenticity**.

Encryption scrambles a message so that it can only be unscrambled by the intended recipient.

In other words, it guarantees **privacy** and **data security**.

Fig. 5: Once S/MIME has been enabled, **Encrypt** and **Sign** buttons will appear in the ticket composer.

Prerequisites New to S/MIME? This section helps you to find certificate providers and points out Limitations.

Manage Certificates Add and download certificates; configure group default behaviors.

Troubleshooting Took a wrong turn? About recent logs and common issues.

Usage

For more details on how S/MIME integration works in practice, see the user docs.

30.3 Integrations for Monitoring Systems

Note: This section currently misses the following integrations:

- Icinga
- Monit
- Nagios

30.3.1 Checkmk

Checkmk is a powerful IT monitoring tool that can send real-time status alerts to Zammad via email or REST API. Set these alerts up in Checkmk, and Zammad will automatically create, update, and close tickets based on the health of your system:

Setup Guide

Whenever the Checkmk integration is enabled, Zammad listens for messages on its API and over email. As long as those messages follow the required format, Zammad will create new tickets (or find and update existing ones) based on the message contents.

That means that "setting up Checkmk integration" is simply a matter of **adding configuration to your Checkmk site**: telling it when to send these messages and what to say. To do that, you'll need to create a new **notification rule** (see Checkmk's official docs for help with that).

As part of this new rule, you'll have to choose a **notification method** (*i.e.,* a script to execute whenever the rule is triggered). This script will be written by you (samples below), and contain the logic for sending API/email messages to Zammad:

Once you're done setting up your new rule, you're all set! New tickets should start coming in and auto-updating any time your rule is triggered.

(If you need help troubleshooting, be sure to check the *Recent Logs*.)

API Alerts

To add these scripts in the Checkmk WATO, copy them into your Checkmk installation directory and make them executable. (Be sure to replace the `zammad.example.com` callback URL with the one found in your admin panel.)

Service notification For updates on the status of the software running on your server (*e.g.,* postgres).

```
#!/bin/bash
# /opt/omd/sites/<SITE>/local/share/check_mk/notifications/zammad-service

curl -X POST \
  -F "event_id=$NOTIFY_SERVICEPROBLEMID" \
```

(continues on next page)

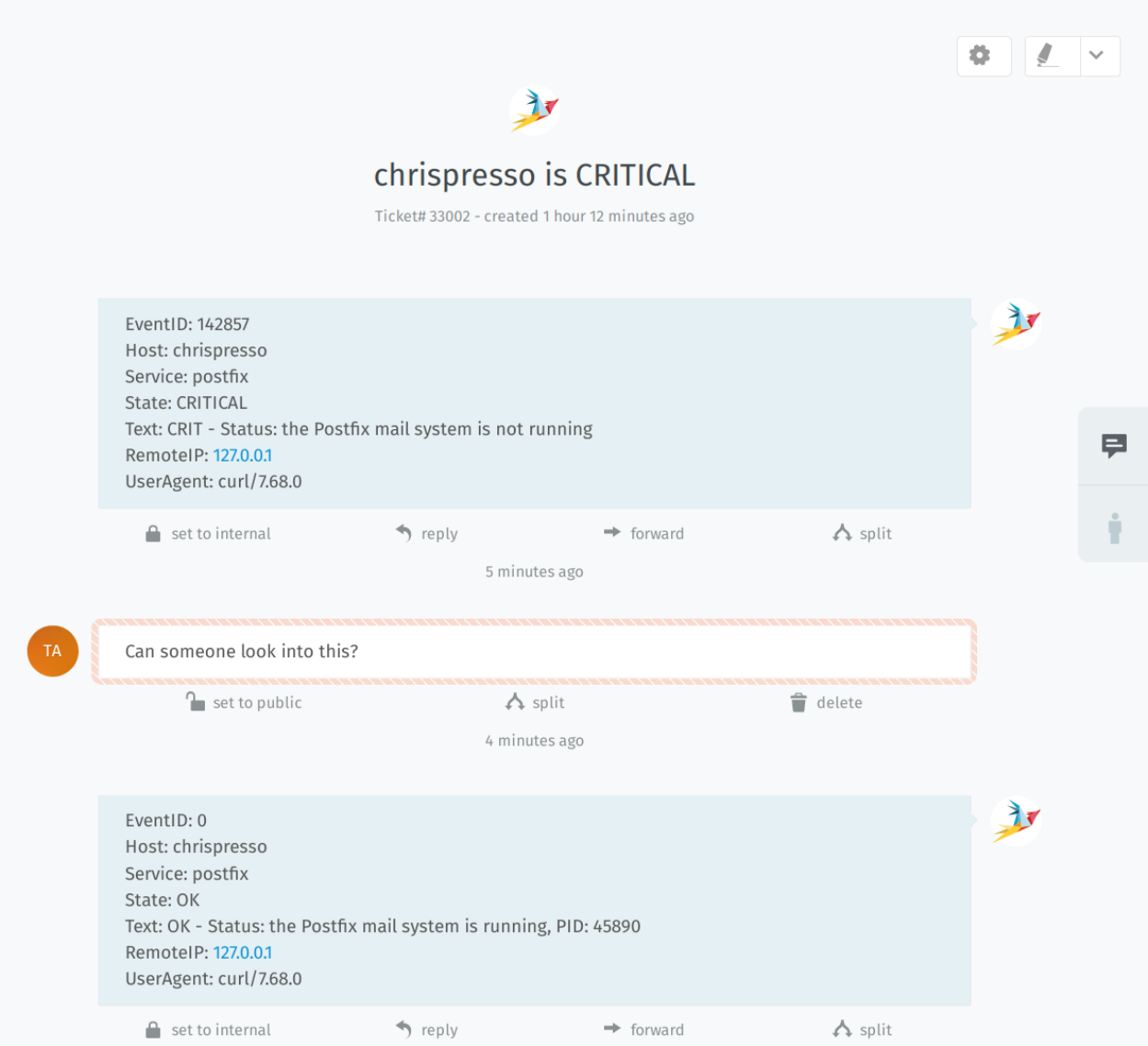


Fig. 6: Multiple alerts, same ticket.

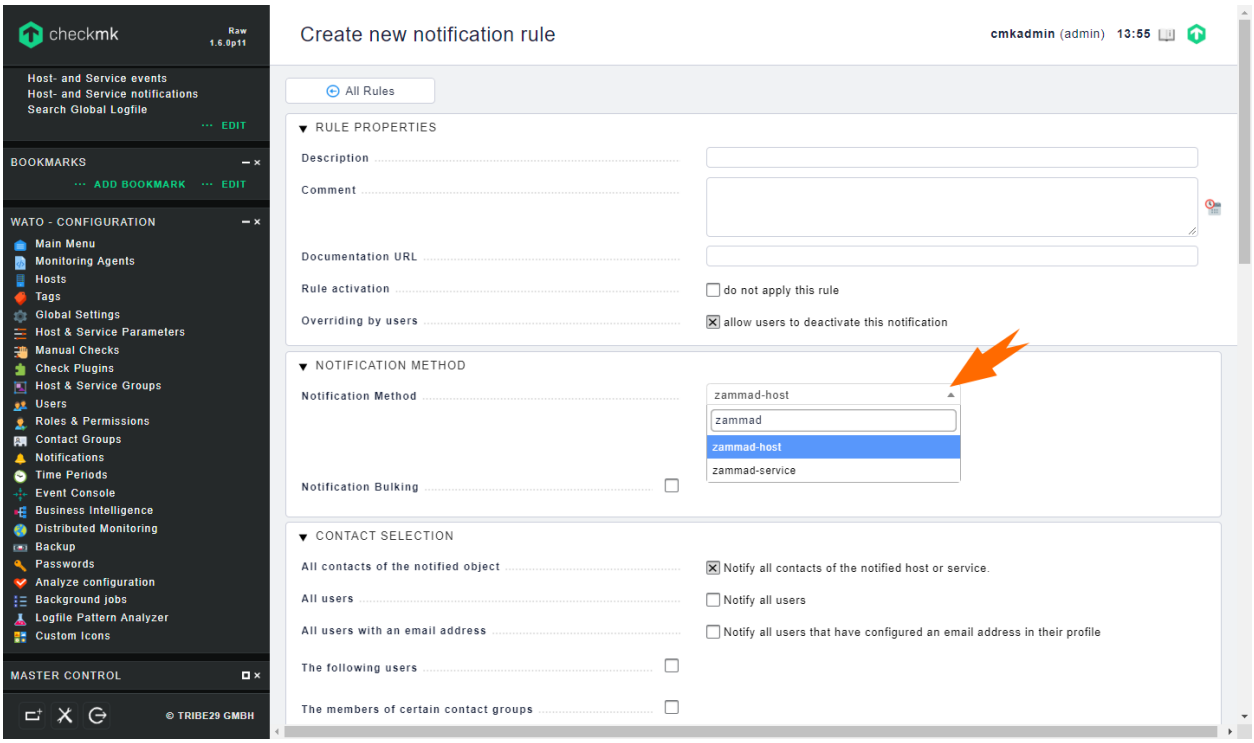


Fig. 7: Find your custom scripts in the Checkmk WATO under **Notifications > New Rule > Notification Method**.

(continued from previous page)

```
  -F "host=$NOTIFY_HOSTNAME" \
  -F "service=$NOTIFY_SERVICEDESC" \
  -F "state=$NOTIFY_SERVICESTATE" \
  -F "text=$NOTIFY_SERVICEOUTPUT" \
  https://zammad.example.com/api/v1/... # see Admin Panel > System > Integrations >
↪Checkmk > Usage
```

Host notification For updates on the status of the server itself.

```
#!/bin/bash
# /opt/omd/sites/<SITE>/local/share/check_mk/notifications/zammad-host

curl -X POST \
  -F "event_id=$NOTIFY_HOSTPROBLEMID" \
  -F "host=$NOTIFY_HOSTNAME" \
  -F "state=$NOTIFY_HOSTSTATE" \
  -F "text=$NOTIFY_HOSTOUTPUT" \
  https://zammad.example.com/api/v1/... # see Admin Panel > System > Integrations >
↪Checkmk > Usage
```

Note: What's with all the env vars?

Whenever Checkmk runs these scripts, it needs to provide some information about the event that triggered the notification. This information is passed in the form of these `$NOTIFY_*` environment variables.

You can specify additional parameters to pass to the script when you're setting up your notification rule, but the ones

you see here are all provided by default.

Email Alerts

> **Warning:** **There are known bugs** in Zammad's processing of email from Checkmk. This section will be completed once they have been resolved. (Learn more at GitHub issues #2377 & #2180.)
>
> In the meantime, we encourage you to set up API alerts instead.

API Reference

For most users, *the sample scripts from the Setup Guide* will do the job just fine. But if you want more fine-grained control—for instance, to create high- and low-priority tickets for different types of system events—then you'll have to customize the data those scripts send to Zammad.

Example

This custom script will automatically set all tickets it creates to **high priority** and **assign them to charlie@chrispresso.com**.

```
#!/bin/bash

curl -X POST \
  -F "event_id=$NOTIFY_HOSTPROBLEMID" \
  -F "host=$NOTIFY_HOSTNAME" \
  -F "state=$NOTIFY_HOSTSTATE" \
  -F "text=$NOTIFY_HOSTOUTPUT" \
  -F "priority=3 high" \
  -F "owner=charlie@chrispresso.com" \
  https://zammad.example.com/api/v1/...
```

How does it work?

There are two kinds of data you can pass to the API, both in the form of key-value pairs:

Checkmk parameters are required, and make up the **contents** of the resulting tickets/articles. They also determine whether an event creates a new ticket or updates/closes an existing one.

These are the only values used in the sample scripts. **Use them as-is**; technically, they can be customized, but it's hard to imagine a good reason for it.

Ticket attributes are optional, and can be used to **adjust settings** on newly created tickets (*e.g.,* set the owner, group, priority, or state).

If you want to customize your Checkmk alert script, do it with these. Simply add an extra "form" option for each one (`-F "key=value"`) to your script's `curl` command line, as in the example above.

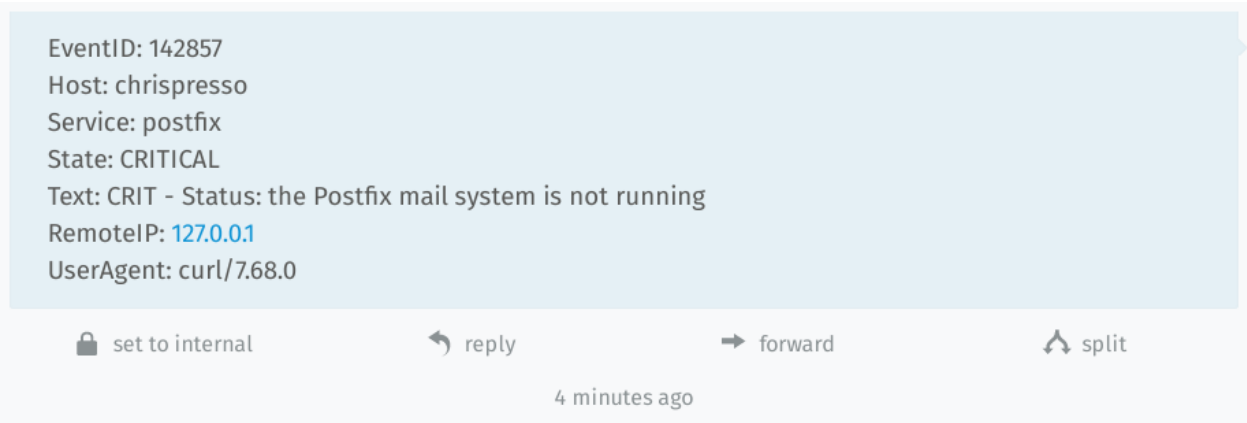
Hint: **It's just an API endpoint!**

When using Checkmk integration, messages need to be formatted in a certain way, but that *doesn't mean the messages actually have to come from Checkmk*.

If you use another monitoring tool that's not officially supported by Zammad, there's probably a way to make it work with your Checkmk callback URL.

Checkmk Parameters

When a notification is received, Zammad creates a new article containing the details of the event that triggered it:



These details come from the fields listed below, which correspond to parameters provided by Checkmk (`$NOTIFY_*`).

Required fields are marked with an asterisk (*).

event_id* A unique ID for the system event. (`$NOTIFY_SERVICEPROBLEMID` / `$NOTIFY_HOSTPROBLEMID`)

host* The hostname of the system that the event originated from. (`$NOTIFY_HOSTNAME`)

Used to determine if a new event belongs to an existing ticket. Also used in the subject line of the resulting article ("<host> is <state>").

service The name of the service that the event originated from. (`$NOTIFY_SERVICEDESC`)

Used to determine if a new event belongs to an existing ticket.

Displayed as `-` when omitted.

state* The current state of the service or host in question. (`$NOTIFY_SERVICESTATE` / `$NOTIFY_HOSTSTATE`)

Used to detect when a ticket should be auto-closed (*i.e.,* on `OK`/`UP`). Also used in the subject line of the resulting article ("<host> is <state>").

text The output of the process that triggered the event. (`$NOTIFY_SERVICEOUTPUT` / `$NOTIFY_HOSTOUTPUT`)

Displayed as `-` when omitted.

Ticket Attributes

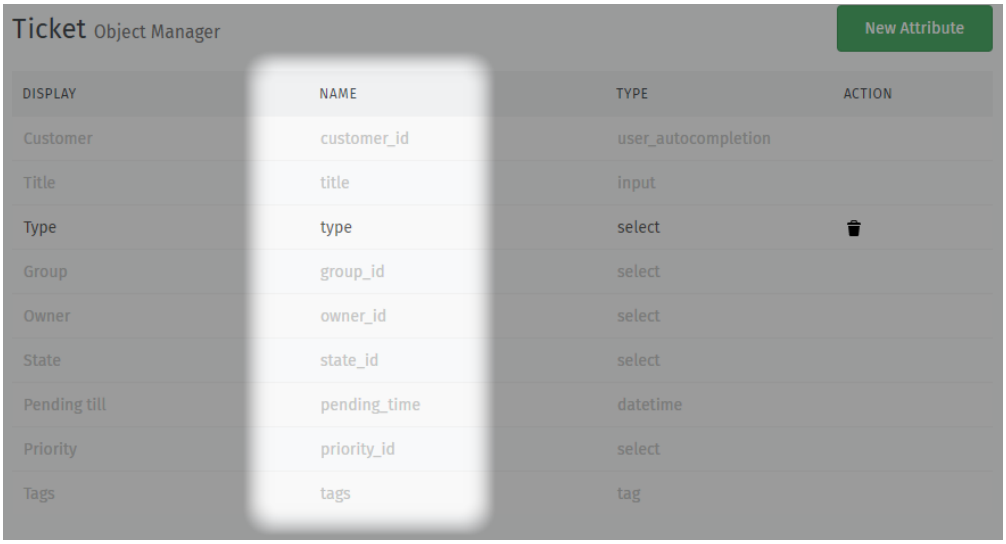


Fig. 8: Find a complete list of ticket attributes in the Object Manager.

Ticket attributes are entirely optional, and can be used to customize the tickets that Checkmk creates. (Note that these attributes will be ignored if a new event belongs to an existing ticket.)

Why would you want to do this? Maybe you have only one IT guy, and all system monitoring issues should be automatically assigned to him. Or, maybe you're creating multiple notification rules so that database outages take higher priority than disk space warnings.

In most cases, you'll probably want to set one of the following:

- group
- owner
- state
- priority

but in practice, you can set almost any attribute, including *custom ones you created through the Object Manager*.

Note: The following attributes are **not customizable**:

- title
- id
- ticket number
- customer
- created_by_id
- updated_by_id

How do I know what values I can set?

> **Warning: Invalid values → unpredictable behavior**
>
> If you provide a value that Zammad doesn't understand (*e.g.,* `-F "priority=high"`), it's not always clear what will happen. In some cases, a ticket will be created with the default values instead—but in others, it may not be created at all!

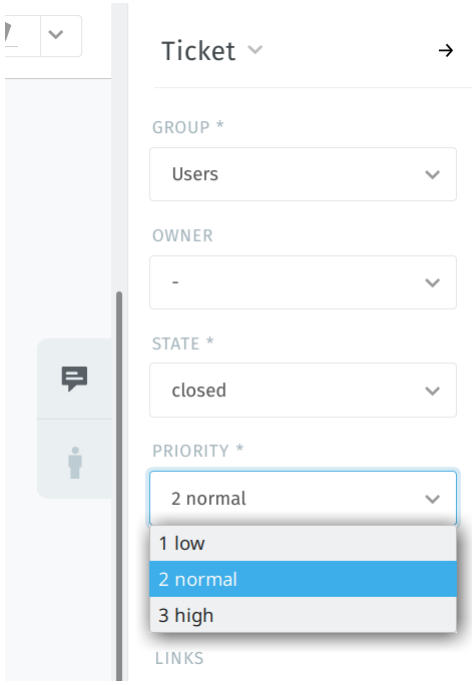
So what values does Zammad understand, then? Well, it depends…

owner Use an email address or username:

```
-F "owner=it@chrispresso.com"
```

group & priority Refer to the dropdown menus in the ticket pane:

```
-F "group=Users"
-F "priority=3 high"
```



> **Note: Ticket state CANNOT be set this way!**
>
> Why? Because `-F "state=..."` is already used *as a Checkmk parameter*.

Everything Else To set any other attributes, it helps to know your way around the Rails console. Valid values are those that you can set with a string:

```
# valid
>> Ticket.first.update(note: "You're gonna need a bigger boat")
=> true
```

(continues on next page)

(continued from previous page)

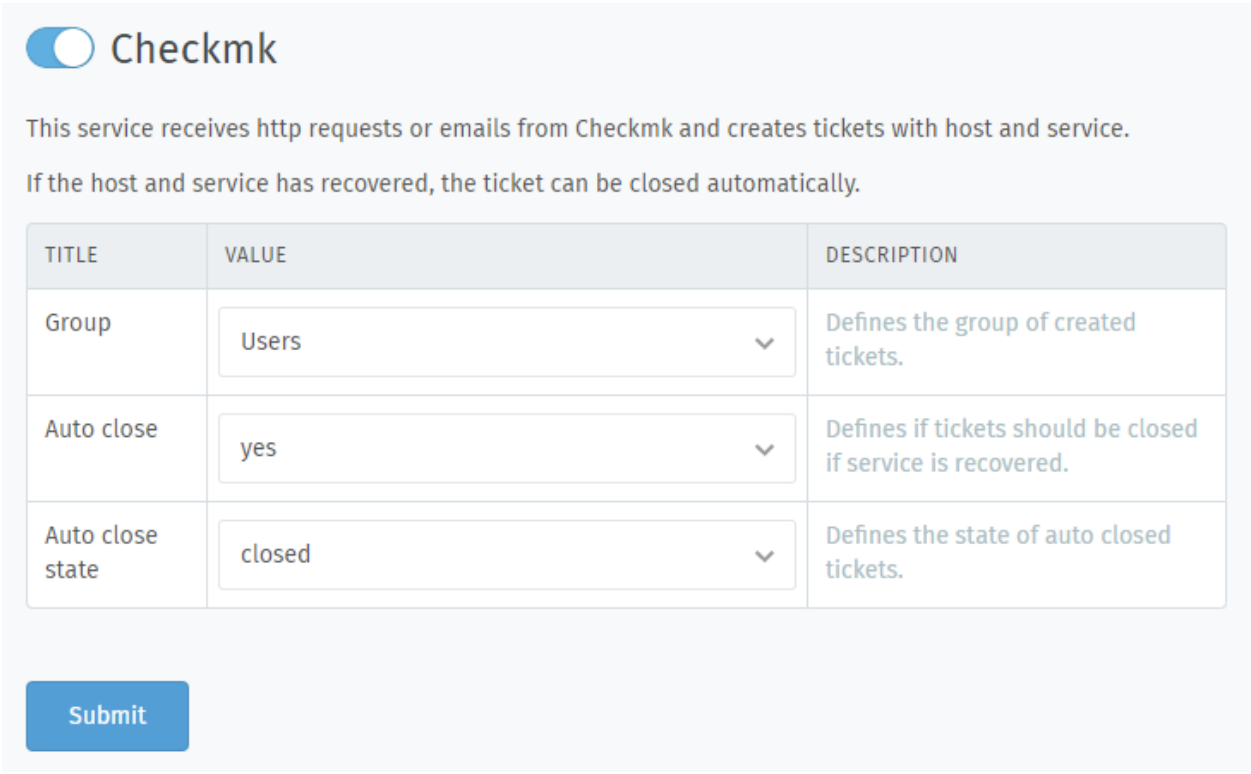
```
>> Ticket.first.note
=> "You're gonna need a bigger boat"

>> Ticket::State.find_by(name: "open").id
=> 2
>> Ticket.first.update(state_id: 2)
=> true
>> Ticket.first.state.name
=> "open"

# invalid
>> Ticket.first.update(preferences: "I'm a Checkmk ticket!")
=> true
>> Ticket.first.preferences
=> {}
```

These values can then be passed directly to the API:

```
-F "note=You're gonna need a bigger boat"
-F "state_id=2"
```

Admin Panel Reference

Settings



Group Which *group* should Checkmk tickets be assigned to as a default (*i.e.*, when none is specified)?

(Applies to *API alerts* only.)

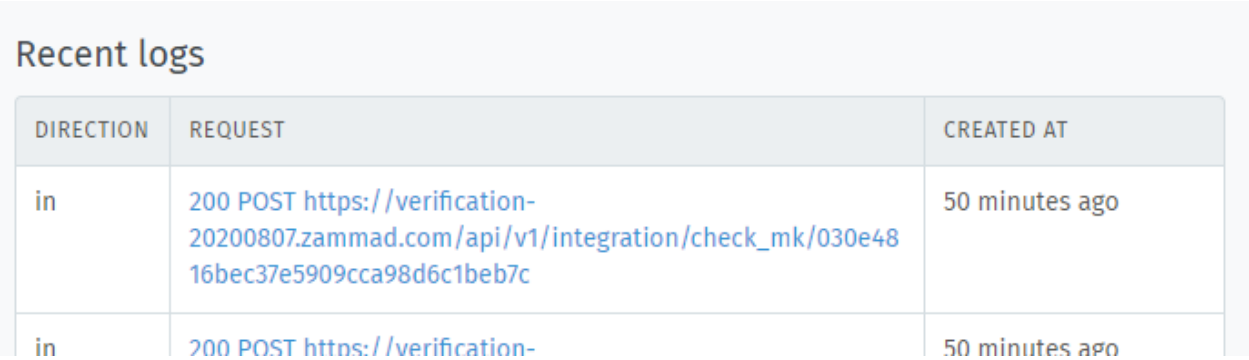
Auto close Should Zammad automatically close tickets if a service has recovered on its own?

(Agents will receive notifications for such closures as appropriate.)

Auto close state What ticket state should be applied when "auto-closing" a ticket?

(You may choose from the seven built-in ticket states, but if you change this setting from the default, you'll more likely want to define a new ticket state for this purpose. This can be especially useful for tracking tickets with *reports*.)

Recent Logs



Recent logs

DIRECTION	REQUEST	CREATED AT
in	200 POST https://verification-20200807.zammad.com/api/v1/integration/check_mk/030e4816bec37e5909cca98d6c1beb7c	50 minutes ago
in	200 POST https://verification-	50 minutes ago

If you're having trouble getting Zammad and Checkmk to play nicely together, this section can help you troubleshoot.

It contains a record of the fifty most recent transactions that Zammad knows about, including each one's request/response details and return status.

30.3.2 Zabbix Integration

This guide describes how to integrate your Zabbix 5.0 installation with Zammad using the Zabbix webhook feature. This guide will provide instructions on setting up a media type, a user and an action in Zabbix.

Requirements

- Zammad with enabled HTTP Token Authentication
- Zabbix version 5.0 or higher

Setting up a Zammad

1. Enable **API Token Access** in Settings > System > API.

2. Create a **new user** for a Zabbix alerter with an **email address** and create a personal user token with **ticket.agent** permissions.

Zabbix Webhook configuration

Create a global macro

1. Before setting up the **Webhook**, you need to setup the global macro **{$ZABBIX.URL}**, which must contain the **URL** to the **Zabbix frontend**.
2. In the **Administration > Media types** section, import the Template
   3. Open the added **Zammad** media type and set:
   - **zammad_access_token** to the your **Personal User Token**
   - **zammad_url** to the **frontend URL** of your **Zammad** installation
   - **zammad_customer** to your **Zammad user email**.
   - **zammad_enable_tags** to **true** or **false** to enable or disable trigger tags. **Important**: if you enable tag support, each tag is set with a separate request.
4. If you want to prioritize issues according to **severity** values in Zabbix, you can define mapping parameters:
   - **severity_<name>**: Zammad priority ID
   6. Click the **Update** button to save the **Webhook** settings.
7. To receive notifications in **Zammad**, you need to create a **Zabbix user** and add **Media** with the **Zammad** type.

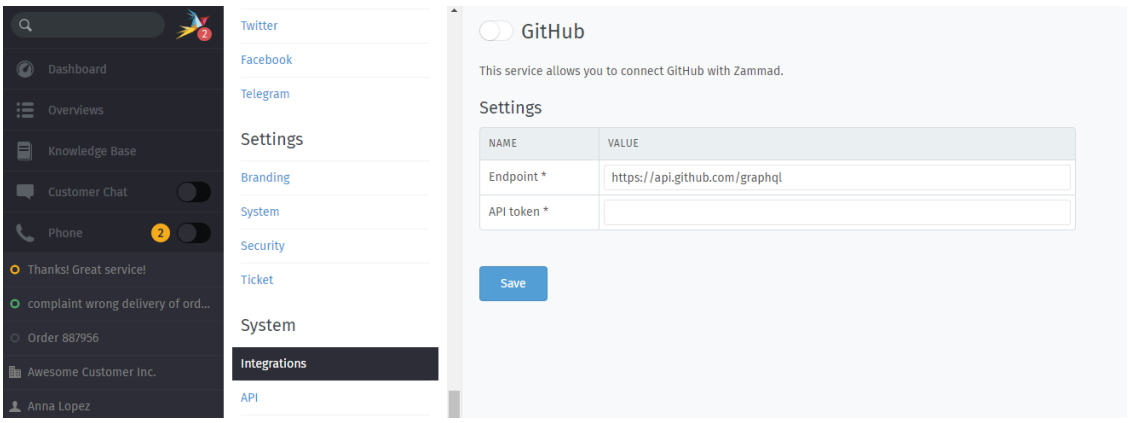
For **Send to**: enter any text, as this value is not used, but is required.

For more information, use the Zabbix

30.4 Integrations for Issue Trackers

30.4.1 GitHub

Use GitHub integration to track GitHub issues directly within Zammad tickets. Add issue hyperlinks and get a live summary of metadata like status (open/closed), assignee, labels, and more.



Note: GitHub integration does not support pull requests.

Setup

1. In your GitHub settings, create a new API token under **Developer settings > Personal access tokens > Generate new token**. Leave the **Scopes** section empty.

   Fig. 9: Create a new API key with no scopes/privileges.

   > **Hint: Will this work for private repos?**
   >
   > No. To link private repo issues, **use the `repo` scope instead**. Bear in mind that the resulting token will have lots of permissions that it doesn't actually need, which presents a security risk if your token ever falls into the wrong hands.
   >
   > Unfortunately, because of how GitHub's OAuth token scopes are set up, this is the only way to link issues on private repos.

2. Enter your new API token in Zammad and enable GitHub integration.

   > **Hint:** Leave the default API endpoint (`https://api.github.com/graphql`) as-is unless you're using GitHub Enterprise Server.

Once completed, a new GitHub issues tab will appear in the ticket pane.

Troubleshooting

Token verification is taking a long time Slight delays are normal (<2 min.), especially for systems under heavy load.

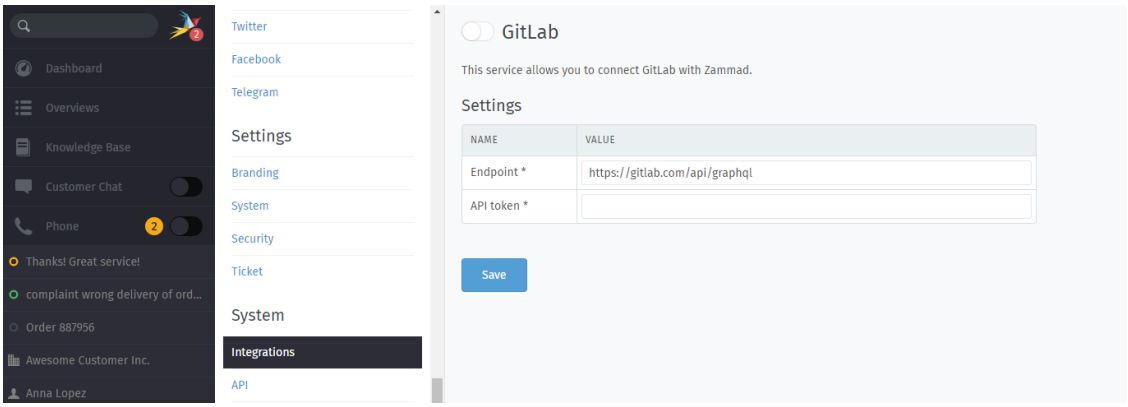
Self-hosted administrators, please check your network settings to ensure that your Zammad server can reach api.github.com.

I reloaded the page and now the API token is gone This may indicate that Zammad is still verifying your API token. Try reloading the page again in a couple minutes.

30.4.2 GitLab

Use GitLab integration to track GitLab issues directly within Zammad tickets. Add issue hyperlinks and get a live summary of metadata like status (open/closed), assignee, labels, and more.

> **Note:** GitLab integration does not support merge requests.



Setup

1. In your GitLab preferences, create a new API token under **Access Tokens**.

   Under **Select scopes**, choose `read_api` only.

   Hint: If you wish to link issues on any private repos…

   Your API token must belong to an account with access to those repos.

2. Enter your new API token in Zammad and enable GitLab integration.

   Hint: Leave the default API endpoint (`https://gitlab.com/api/graphql`) as-is unless you're a self-hosted GitLab user.

Once completed, a new GitLab issues tab will appear in the ticket pane.

Troubleshooting

Token verification is taking a long time Slight delays are normal (<2 min.), especially for systems under heavy load.

Self-hosted administrators, please check your network settings to ensure that your Zammad server can reach gitlab.com.

I reloaded the page and now the API token is gone This may indicate that Zammad is still verifying your API token. Try reloading the page again in a couple minutes.

30.5 Other Integrations

This section will hold any other integration that can't be grouped up (yet).

30.5.1 Slack

Note: In order to use this feature, please add a new Slack app to your Workspace. The App you need is called `Incoming WebHooks` .

Why do I need this feature?

If you're already using Slack for your team communication, you'll love this feature! Our Slack integration can push ticket notifications about the last ticket article based on the following events:

- on Ticket creation
- on Ticket updates
- on reached reminders
- a Ticket has escalated
- a Ticket is going to escalate

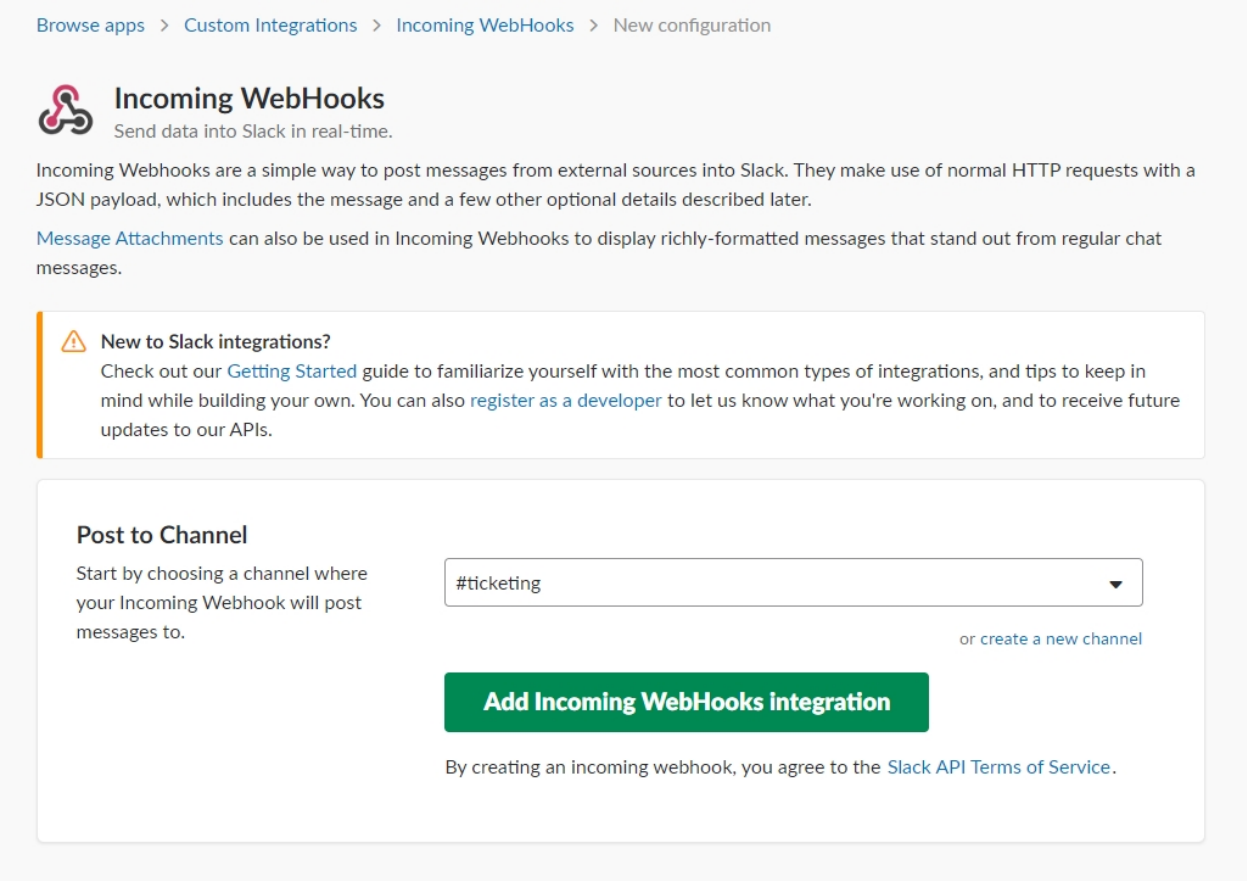
Zammad will provide the Ticket title, a direct link to the Ticket, the event type (creation, updated, escalation), the customer, time and the last article that has triggered the notification. This will give you further options, as you can see e.g. escalating tickets that are assigned to an agent that's e.g. absent. You can interact faster, as you might see problems earlier (or even before the problem gets one).

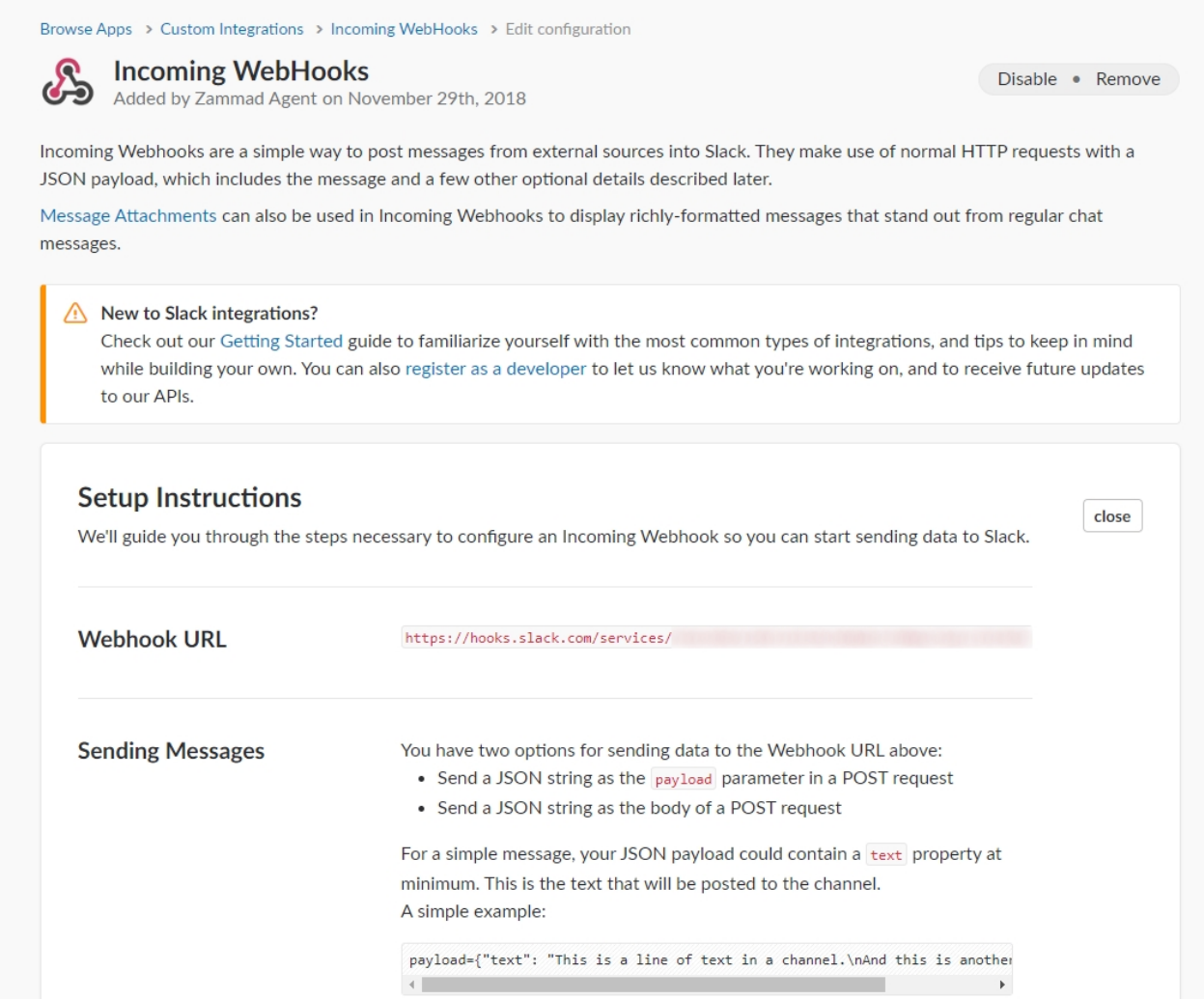
If needed and wanted, you can even discuss directly about the topic before sending an answer to the customer. Another possible use case would be a agent monitoring new agents and their answers to tickets.

Configure the integration

First of all, please go to your slack workspace - go to administration => Manage Apps. If you don't have an app yet, you can simply add a new one - just search for `` Incoming WebHooks`` and customize the app to your needs. Choose (or create) the channel Zamma should post it's information to and press on "Add Incoming WebHooks integration". If you're ready, copy the provided WebHook URL and go to your Zammad installation.

Hint: You need administrative rights on the Slack Workspace. The link to the app directory is normally `https://[workspace-name].slack.com/apps` .

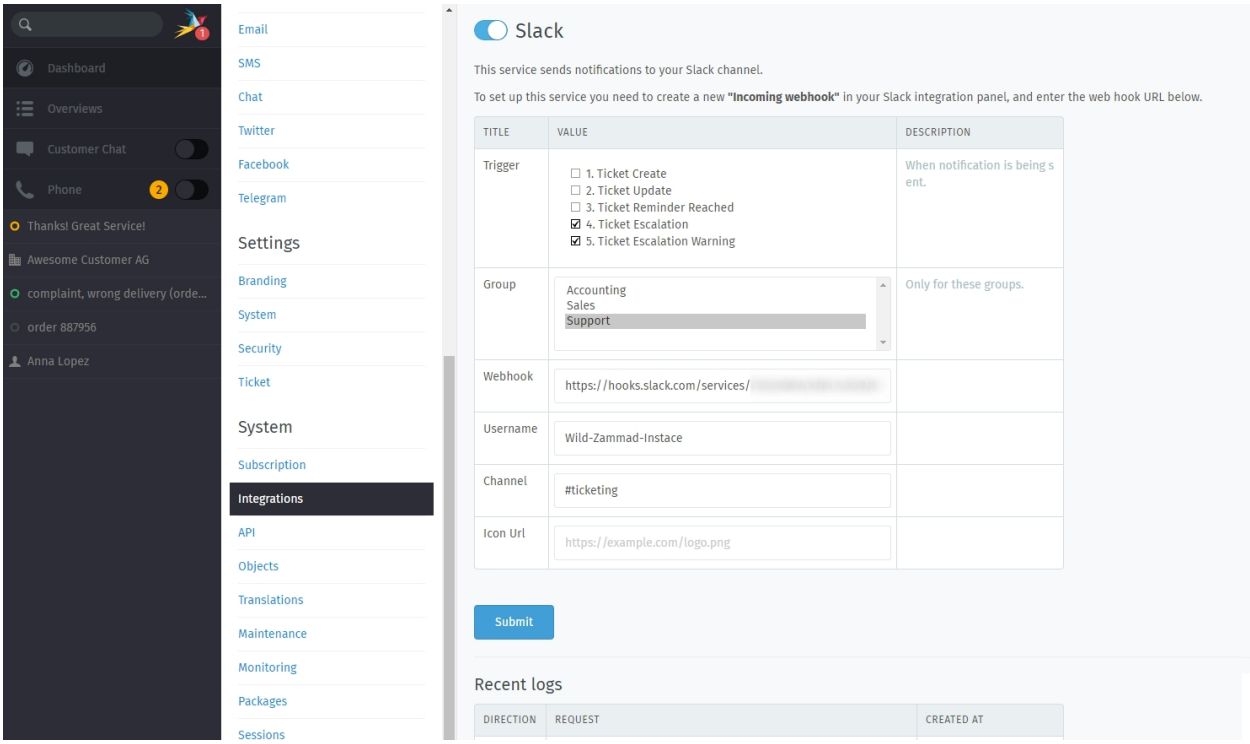

Browse apps > Custom Integrations > Incoming WebHooks > New configuration
Incoming WebHooks
Send data into Slack in real-time.
Incoming Webhooks are a simple way to post messages from external sources into Slack. They make use of normal HTTP requests with a JSON payload, which includes the message and a few other optional details described later.
Message Attachments can also be used in Incoming Webhooks to display richly-formatted messages that stand out from regular chat messages.
New to Slack integrations?
Check out our Getting Started guide to familiarize yourself with the most common types of integrations, and tips to keep in mind while building your own. You can also register as a developer to let us know what you're working on, and to receive future updates to our APIs.
Post to Channel
Start by choosing a channel where your Incoming Webhook will post messages to.
#ticketing
or create a new channel
Add Incoming WebHooks integration
By creating an incoming webhook, you agree to the Slack API Terms of Service.



To configure the slack integration, log in to Zammad and go to Integrations (System) => Slack in the admin panel. Here you can choose on what evens Zammad should post information about a ticket to your Slack channel. Next you need to device what groups shall be affected by this, as anybody with access to that specific Slack channel can read at least parts of the ticket this might be a privacy issue, if you select the wrong groups. The username is simply the name that Zammad uses as display name inside the Slack chat. The channel defines the Slack channel the information is being posted in. As last option, you can set a custom icon for posting to slack.

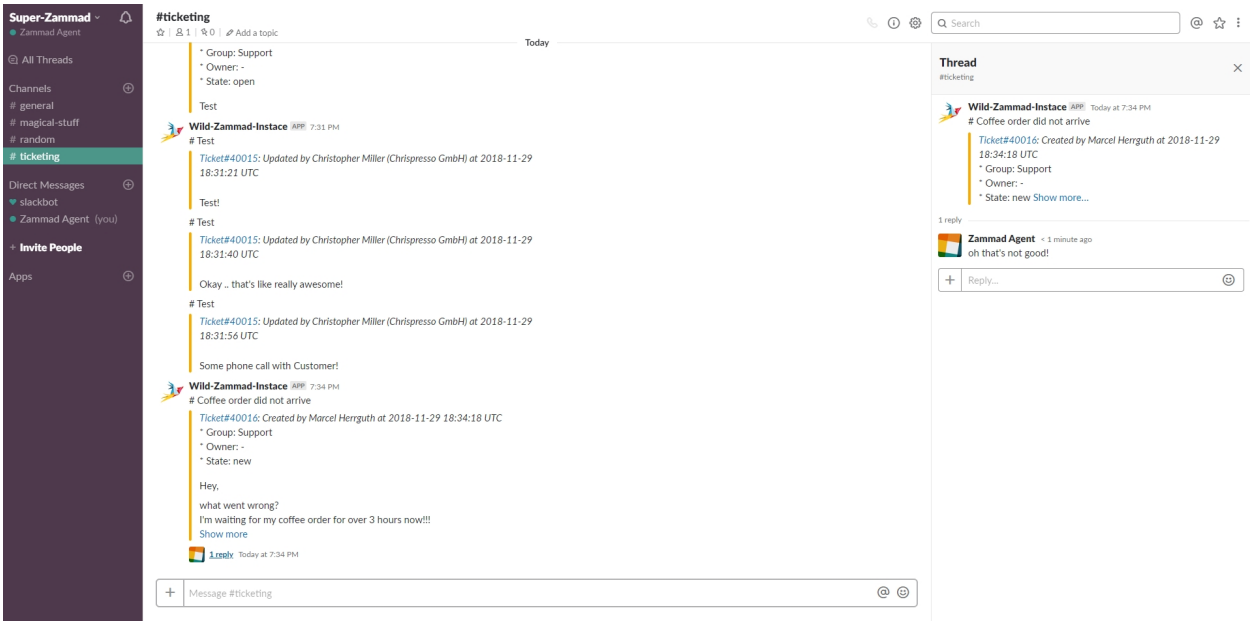
When you're ready, just hit "Submit" and enable the integration. Zammad will now post new ticket information based on the trigger you chose. Below the options you have the recent log that shows the latest requests to Slack for debugging if needed.

Note: If you leave the icon URL empty, Zammad will use the Zammad logo instead. The icon should be a square PNG file.

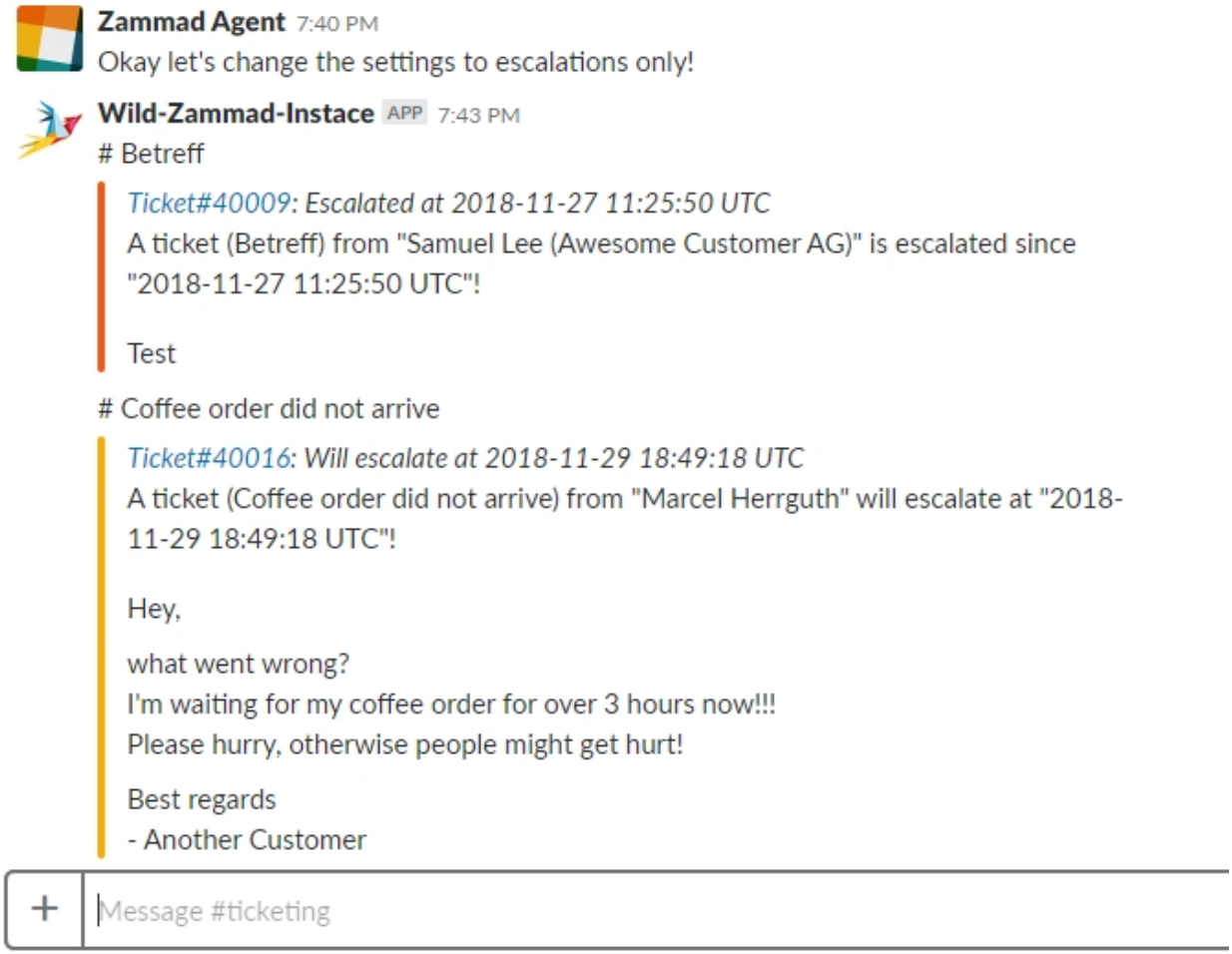


The result

The following figure shows how it will look if you choose to receive updates on created and updated tickets. On every post Zammad sends to the Slack channel, you can create new threads to discuss about the new article.



If you just want to keep track of soon escalating or already escalated tickets, it will look the the following figure. Zammad changes the color in front of the post so you can easily see the state of the ticket.



If you change the state, Zammad will also put information on what state the ticket gets and (if pending state) the date until it pends. You'll also recognize the color codes in front of posts on slack, as they are exact the same the ticket state colors you'll see in Zammad!

Test

> *Ticket#40015: Updated by Christopher Miller (Chrispresso GmbH) at 2018-11-29 19:21:33 UTC*
>
> Public Note Test

Test

> *Ticket#40015: Updated by Christopher Miller (Chrispresso GmbH) at 2018-11-29 19:22:01 UTC*
>
> I called the customer and appologized

Wild-Zammad-Instace APP 8:37 PM

Test

> *Ticket#40015: Updated by Christopher Miller (Chrispresso GmbH) at 2018-11-29 19:37:16 UTC*
>
> * State: open -> closed
>
> Okay, the issue has been solved.

Test

> *Ticket#40015: Updated by Christopher Miller (Chrispresso GmbH) at 2018-11-29 19:39:58 UTC*
>
> * State: closed -> pending close
>
> * Pending till: -> 2018-11-30 07:00:00 UTC
>
> some pending state

+ Message #ticketing

30.5.2 i-doit

i-doit is an open-source **configuration management database**—in other words, a tool for keeping tabs on every single piece of your physical and digital infrastructure, from network equipment to virtual machines on down to the faceplates on your rack shelves and more.

What's that got to do with Zammad? Well, if you used tickets to track issues with all that hardware, you might start wishing there was a way they could talk to each other.

Zammad gives you two:

1. Add i-doit Links to Zammad Tickets

What users see

Fig. 10: The i-doit integration will appear under a new tab in the ticket pane.

i-doit integration puts a new tab in Zammad's ticket pane where you can add links to existing i-doit devices for easy reference. (See our user documentation to learn how it works in practice).

How to set it up

Note: **Requires i-doit's** API Add-on. Use the following settings:

Active Yes

Enforce autentication by username and password No

To set it up, enable the integration in the Zammad admin panel under **System > Integrations > i-doit**:

API token* Found in the i-doit admin panel under **Interfaces / external data > JSON-RPC API > Common Settings**.

Endpoint* The root URL of your i-doit installation.

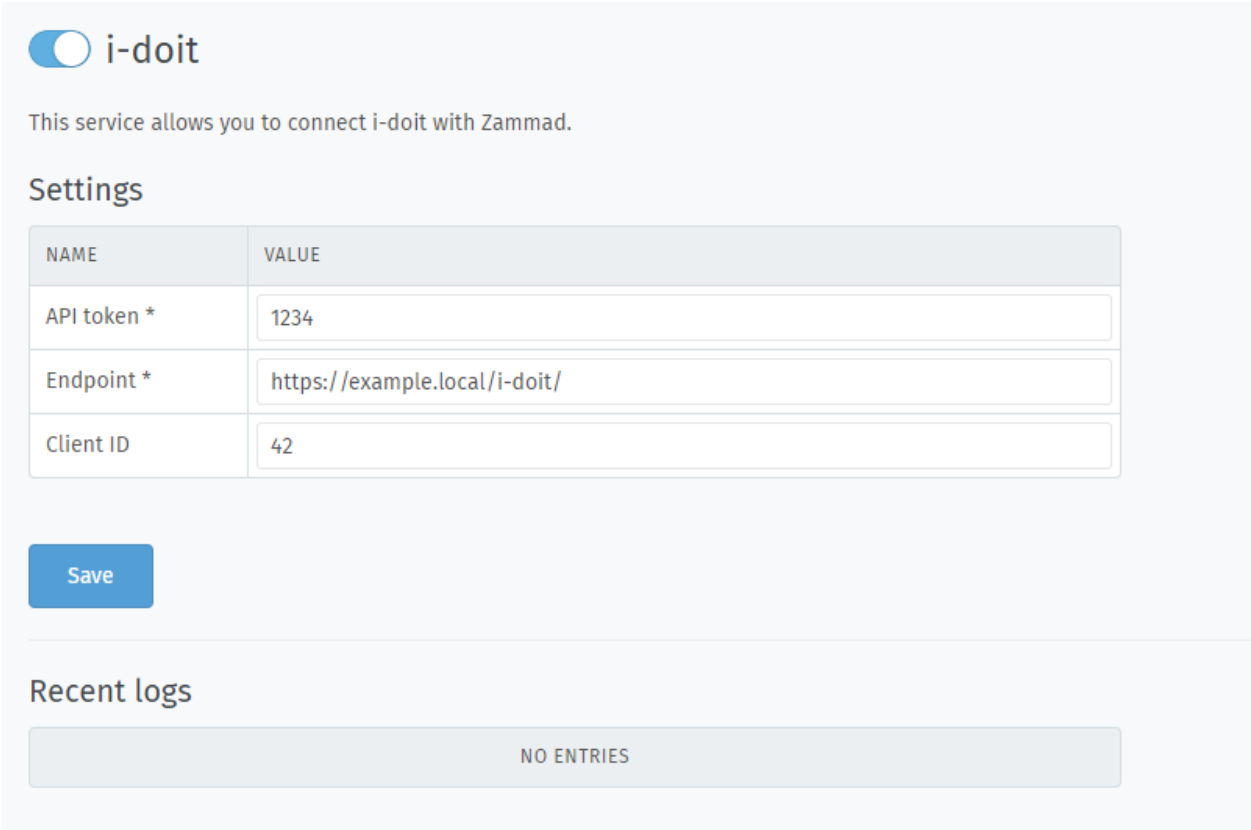
Client ID A unique name to identify Zammad within i-doit.

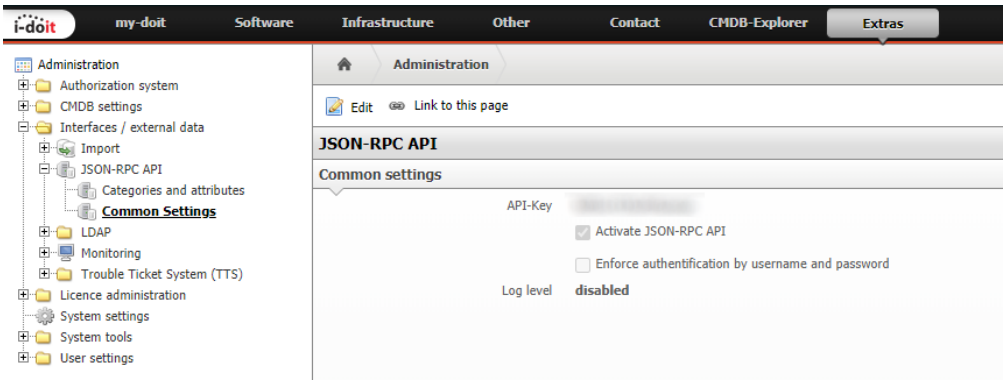
(Zammad does not require you to enter a value here, but i-doit might!)

2. List / Create Zammad Tickets in i-doit

What users see

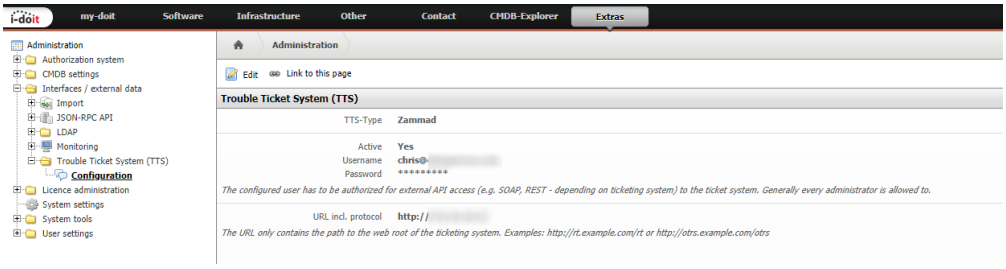
i-doit's ticket system integration gives you a way to see all the tickets for a given device without ever leaving i-doit. (See our user documentation to learn how it works in practice).


i-doit
This service allows you to connect i-doit with Zammad.
Settings
NAME
VALUE
API token *
1234
Endpoint *
https://example.local/i-doit/
Client ID
42
Save
Recent logs
NO ENTRIES


i-doit
my-doit
Software
Infrastructure
Other
Contact
CMDB-Explorer
Extras
Administration
Authorization system
CMDB settings
Interfaces / external data
Import
JSON-RPC API
Categories and attributes
Common Settings
LDAP
Monitoring
Trouble Ticket System (TTS)
Licence administration
System settings
System tools
User settings
Administration
Edit
Link to this page
JSON-RPC API
Common settings
API-Key
Activate JSON-RPC API
Enforce authentification by username and password
Log level
disabled

How to set it up

Enable this integration in the i-doit admin panel under **Interfaces / external data > Trouble Ticket System (TTS) > Configuration**:



TTS-Type `Zammad`

Username / Password Login credentials for a Zammad agent.

> **Note:** This agent must have **read permission** for all *groups* that plan on using the i-doit integration.
>
> You may even wish to create a dedicated agent account just for this integration. (Otherwise, if the agent ever changes her password, you will have to remember to update it here.)

URL incl. protocol `https://your.zammad.domain`

30.5.3 Elasticsearch (SaaS)

The Elasticsearch integration allows you to create a read-only user to use with your favorite reporting tool (e.g. like Grafana).

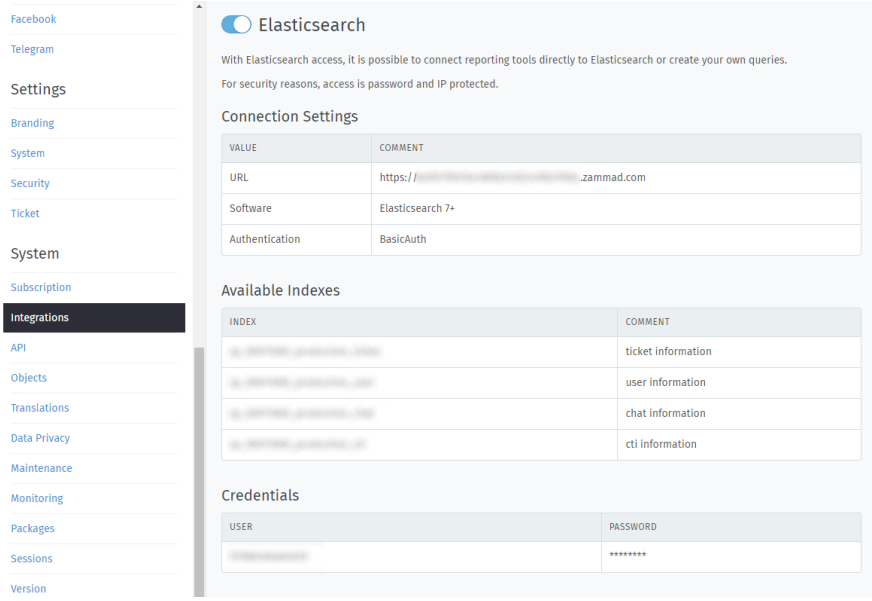
If you want to take full advantage of the Zammad reporting, have a look at our Grafana setup page as well.

> **Warning: Hosted environment specific**
>
> This integration is only available for Hosted setups. In order to use Elasticsearch you'll need the **Plus** subscription.
>
> Self hosted users have all the control over their self hosted Elasticsearch instances.

Limitations

Please note the following limitations of Elasticsearch access on hosted environments:

- access to the Elasticsearch index is read-only access
- currently you're limited to user only
- Reporting tools that require to write into the indexes (like Kibana) are not supported
- IP access restriction is currently not yet supported



Activating Elasticsearch access

By default external access to your Elasticsearch index is not active. You can enable the integration at any time if needed.

Please ensure to note down the password provided - you won't have access to it afterwards.

Connection Settings

This section holds the most important general information for accessing your Elasticsearch indexes - such as:

URL A unique subdomain that does not tell your real instance URL.

Software The major version of the search index being used. This is required by some Reporting tools like Grafana.

Authentication The authentication type being supported. `Basic Authentication`

Available Indexes

Within this section we're displaying the -in our opinion- most important indexes for a Zammad instance.

Tip: If you require all indexes or our listing is not good enough for you, point your browser to the URL we're providing and append `/_aliases?pretty=true`. The result should look like so: `https://<URL>.zammad.com/_aliases?pretty=true`.

Your browser will automatically ask for your credentials - you'll then see something like this:

```
{
   "XXXXXXXX" : {
      "aliases" : { }
   },
   "XXXXXXXX_cti_log" : {
      "aliases" : { }
```

(continues on next page)

(continued from previous page)

```
    },
    "XXXXXXXX_knowledge_base_answer_translation" : {
       "aliases" : { }
    },
    "XXXXXXXX_ticket" : {
       "aliases" : { }
    },
    "XXXXXXXX_knowledge_base_category_translation" : {
       "aliases" : { }
    },
    "XXXXXXXX_knowledge_base_translation" : {
       "aliases" : { }
    },
    "XXXXXXXX_ticket_state" : {
       "aliases" : { }
    },
    "XXXXXXXX_user" : {
       "aliases" : { }
    },
    "XXXXXXXX_stats_store" : {
       "aliases" : { }
    },
    "XXXXXXXX_chat_session" : {
     "aliases" : { }
    },
    "XXXXXXXX_group" : {
     "aliases" : { }
    },
    "XXXXXXXX_ticket_priority" : {
       "aliases" : { }
    },
    "XXXXXXXX_organization" : {
       "aliases" : { }
    }
}
```

Credentials

Within this section Zammad displays your available users. The password is provided once (upon activation) and cannot be retrieved after that.

> **Note: I need my Elasticsearch user password to be changed**
>
> Currently setting the integration to inactive and back to active again does the trick. We're working on a better solution!
>
> *Above does not change indexes.*

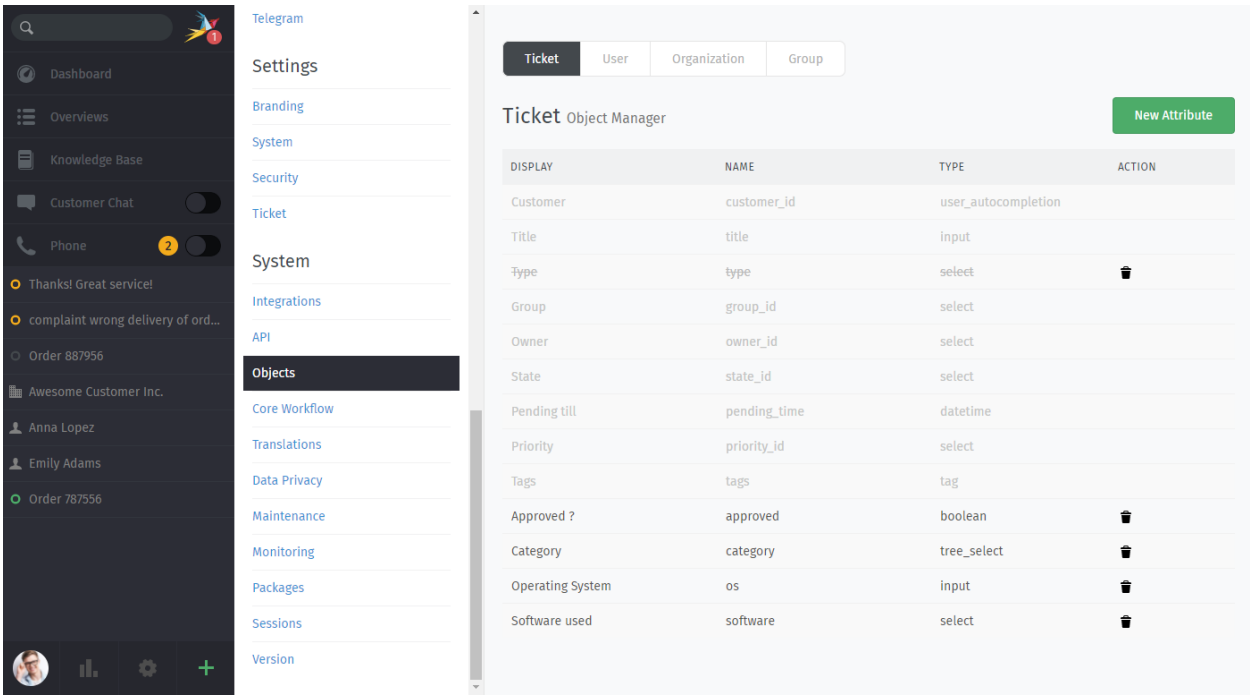
CHAPTER

THIRTYONE

OBJECTS

In Zammad you can add your own fields to tickets, users, organizations and even groups. This can be useful if you need to add further information to a ticket that you don't want to have in a note (you'll find it easier).

Note: Try to avoid deleting objects (and disable them instead) as Zammad might run into unexpected conditions if they are referenced somewhere.

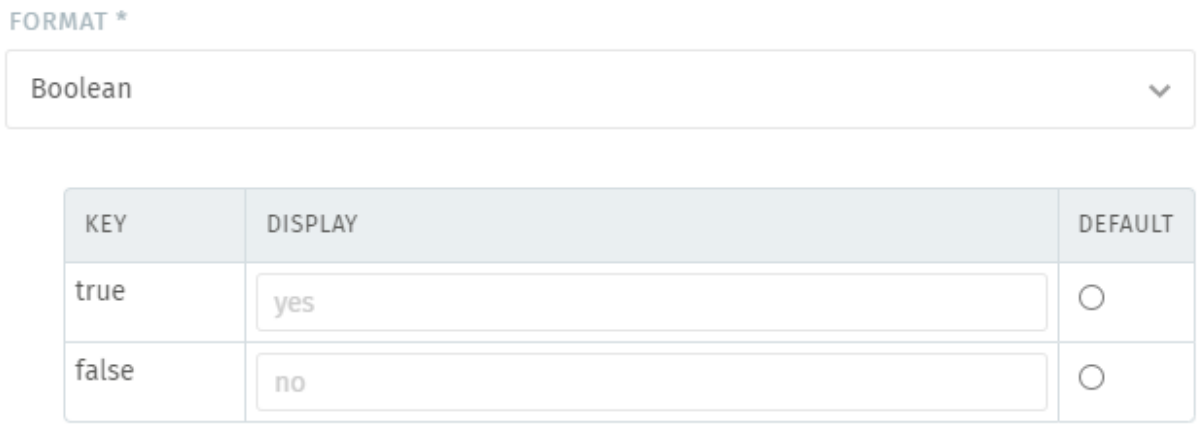


Here's an overview of the objects. On the upper right you can add new Attributes. By default, there will be no custom fields - standard objects will be grayed out, you can't delete or change those. Custom objects (will be displayed in black font and have a trash bin on the right site to delete unnecessary objects. By clicking on "custom objects" you can edit them to suit your needs.

31.1 Object types

When adding a new object, you can choose between the following object types.

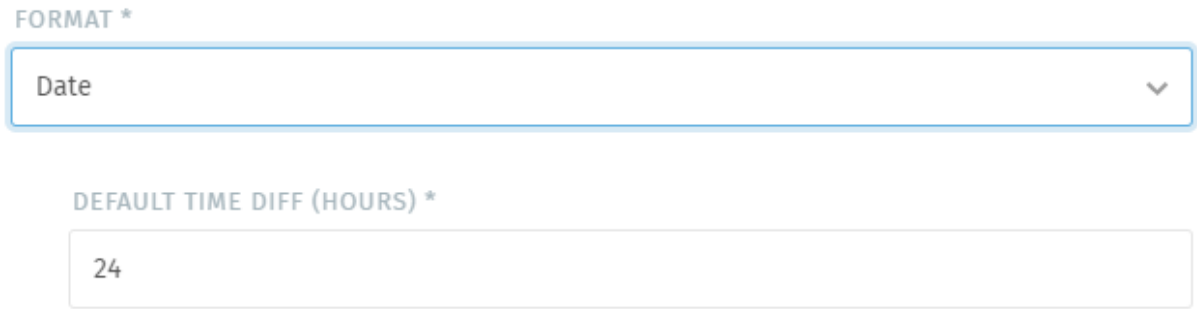
Boolean Provides a drop-down field with display values for `true` and `false`. Allows setting a default value.



Date Provides a date picker field and does not allow default values.

Default time diff (hours) This setting helps the user by highlighting the day from now plus the provided value. It does not pre-fill the field.

> **Note:** Please note that this setting is currently affected by bug 3763.



Datetime Provides a date and time picker – does not allow default values

Allow future

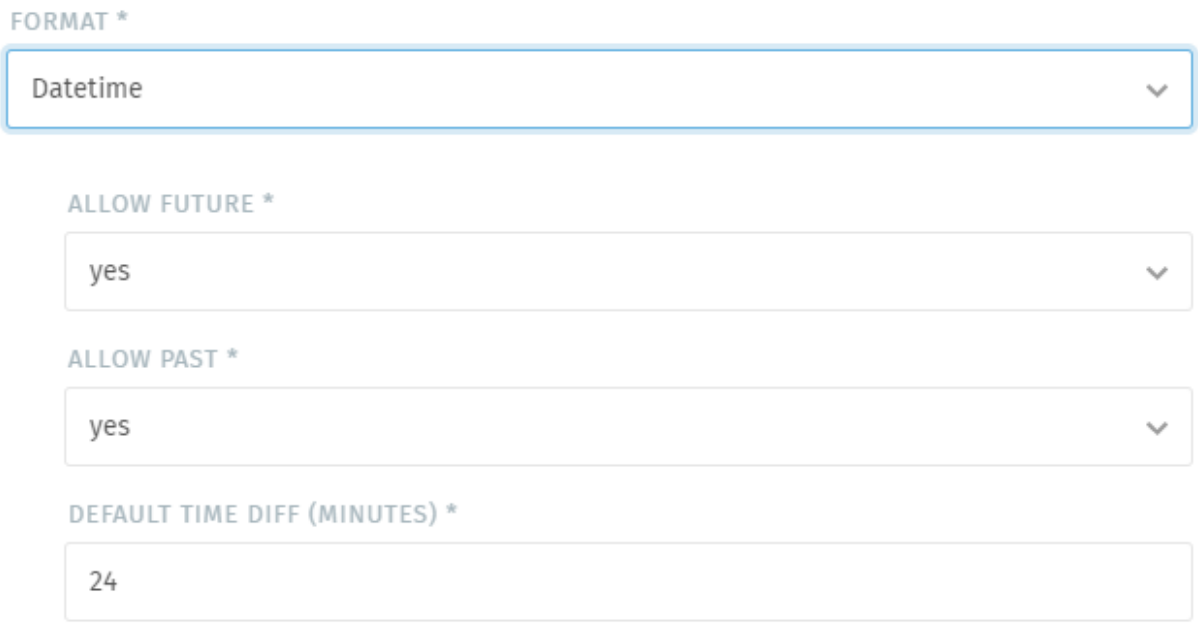
Forbid dates and times in the future.
Default: `yes`

Allow past

Forbid dates and times in the past.
Default: `yes`

Default time diff (minutes) This setting helps the user by highlighting the day from now plus the provided value. It does not pre-fill the field.

Note: Please note that this setting is currently affected by bug 3763.



Integer Provides an input field that allows integer usage only. You may define a default value.

Minimal The minimal value the field accepts.

Maximal The maximum value the field accepts.

Select Provides a drop-down field that allows selection of one value out of several. This field does allow setting a default value.

Tip: Adding values can be tricky for first timers, don't forget to press " Add" after typing your values. Otherwise you may loose a value.

Hint: Select fields allow usage of *URL fields (Link Templates)*.

Text Provides a text field (one line) and allows choosing a default value.

Type Defines the type of the input field. This allows e.g. your browser to ensure that you provide the specific type.

Currently available:

- email
- phone
- text
- url *(url fields disable link-template availability)*

Maxlength you can pick the maximum length of the field.

FORMAT *

Integer

DEFAULT

MINIMAL *

0

MAXIMAL *

999999999

FORMAT *

Select

KEY	DISPLAY	DEFAULT	ACTION
akey	My Key	○	Remove
Key	Display	○	+ Add

LINK-TEMPLATE

https://example.com/?q=#{ticket.attribute_name}

Hint: Select fields allow usage of *URL fields (Link Templates)*.

Tree Select Provides a select-like field with up to 6 layers of options. Does not allow setting a default value.

Warning: You cannot change the object format / type as soon as it is applied. If you no longer need an object, consider disabling it instead of removing.

31.1.1 URL fields (Link-Template)

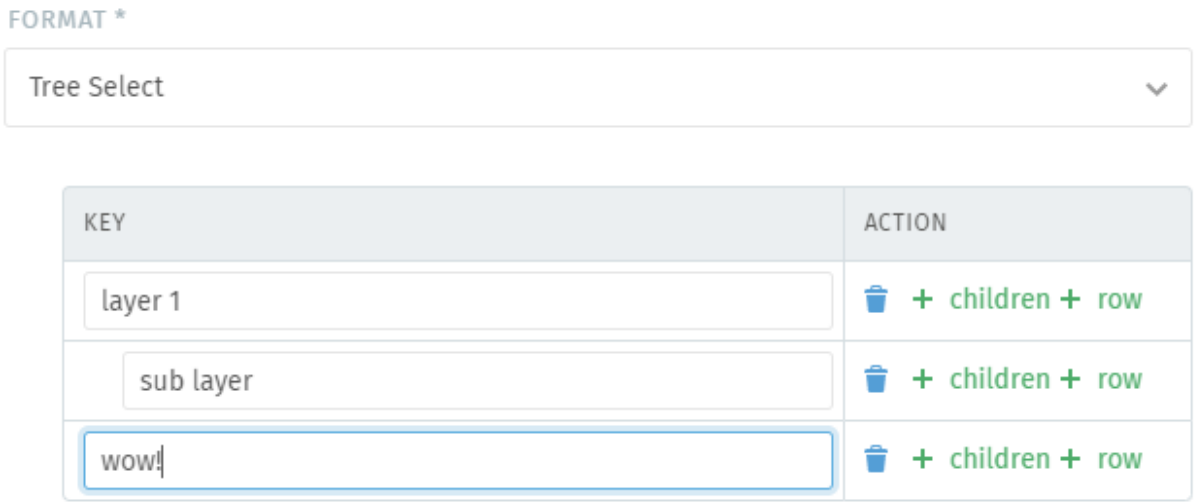
Note: This function is restricted to Text and Select objects only.

Link-Templates are an amazing way to dynamically generate URLs. They allow you to integrate other systems better without having to manually copy data from Zammad if possible.

Note: Another great way of communicating with another system may be Zammad's *Webhooks*.

After filling a link-template enabled field, an URL icon will appear on its right. Clicking on the icon opens a new tab.

Hint: Even though Zammad displays the link template within object edit and create screens, the function is optional. It's only active if you populate the field.



How does this work...?!

As an example, let's say you have an object called `amazingobject` - you want to open a google search directly with the input from that field.

Providing below to the link-template field allows you to do so: `https://www.google.com/search?q=#{ticket.amazingobject}`

> **Tip:** You can use any *Zammad variable* as long as it's available in the moment you need it.

The result will look as follows.

Fig. 1: The above screencast shows how the link template will perform after object creation.

31.2 Object permissions

Whenever needed you can restrict access to objects based on the *user permission* (`admin`, `ticket.agent` & `ticket.customer`).

> **Tip: Below is not set in stone**
>
> You can always adjust below settings with *Core Workflows*. This also allows role based restriction.

> **Note:** In some situations, Zammad internally overrules below screen, requirement and permission settings. This is because at some points you can't set fields which would mean we couldn't create the ticket.
>
> This currently affects:
>
> - merging
> - emails no matter of the originating channel (incoming)
> - *Forms* (incoming)

PERMISSIONS	SCREEN	OPTIONS
ticket.customer		
	create_middle	shown: ☑ required: ☐
	edit	shown: ☑ required: ☐
	Not applicable to: merging, emails, form, Facebook, Telegram, Twitter, SMS	
ticket.agent		
	create_middle	shown: ☑ required: ☐
	edit	shown: ☑ required: ☐
	Not applicable to: merging, emails, form, Facebook, Telegram, Twitter, SMS	

Fig. 2: Some of the possible permission and screen options for objects.

- *Facebook* (incoming)
- *Telegram* (incoming)
- *Twitter* (incoming)
- SMS (incoming)

31.2.1 About screens

Zammad cares about the screen you're going to use the object in.

create Every time you use a creation dialogue for not yet existing data.

edit Every time you're editing existing data - viewing existing tickets counts as edit screen.

view Affects view screens of existing data like e.g. user profiles.

> **Note:** This setting is available for the following object contexts:
>
> - User
> - Organization
> - Group

invite_customer & invite_agent Shown when using the invitation dialogue from "First Steps" in the dashboard.

31.2.2 About screen options

Now that we know the different possible situations, let's talk about available options.

shown Show or hide a field.

required Set a field to mandatory. Forces users (via UI and API) to populate the field.

31.3 Updating database after adding or editing objects

When adding or changing objects, Zammad will not apply the changes instantly, but instead shows you the changed objects first. If you're ready to go, just click on "Update database" to apply the changes to Zammad. If you made a mistake or just want to discard your changes, click "Discard changes".

Warning: After applying the object changes with "Update Database" a restart of Zammad is **mandatory**. If you don't perform it, you may experience unexpected behavior or even errors. You may want to do those kind of configurations during maintenance windows.

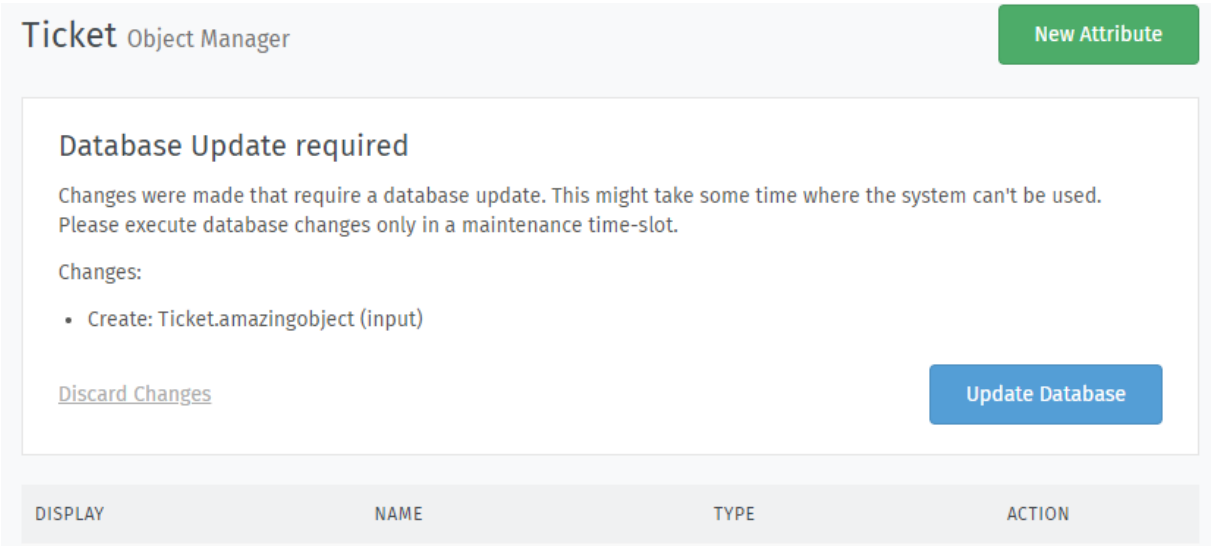


Fig. 3: Changes on objects require you to update the database to apply these changes.

Tip: Service restarts can be automated

Hosted environments automatically restart for you.
If you're using a self-hosted installation you can use environment variables

31.4 System objects

Zammad comes with pre-configured objects. Some of these currently do not provide the possibility to edit them via UI (or at all).

This is not a bug but is to save you from possibly nuking Zammad.

> **Tip:** There are technical exceptions which can be solved via console. This e.g. affects ticket states and priorities, see console section.
>
> If you're a hosted customer, please contact your support for more.

CHAPTER

THIRTYTWO

CORE WORKFLOWS

Core Workflows allow you to create complex ticket processes just as (but not limited to):

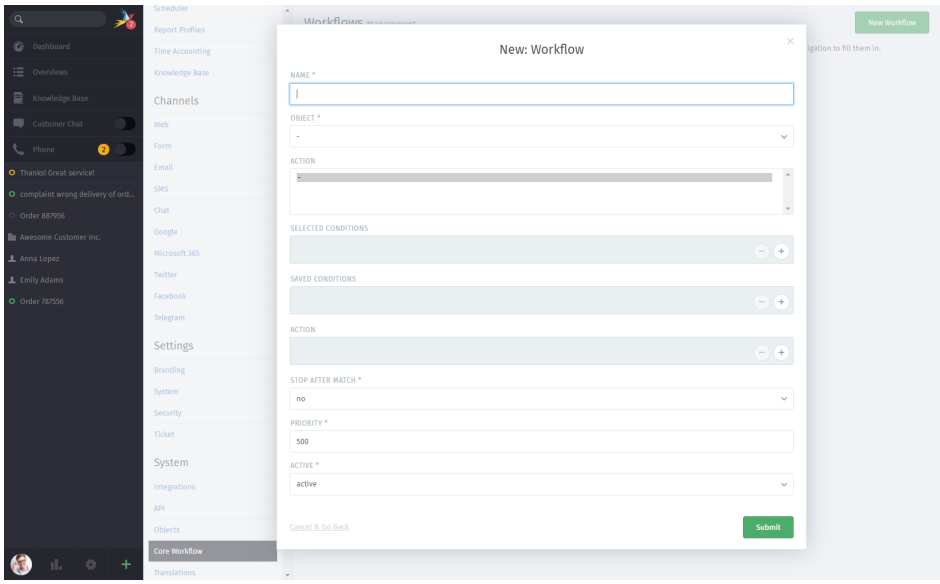
- show / hide
- adjust mandatory setting
- manipulate available options

With this, you're all set to provide exactly those information you really need!

Note:

- If the pre-defined *Objects* are not enough, please add them beforehand.
- If you experience slow or unreliable field updates, please see *Core Workflow Ajax Modus*

Warning: This is a very enhanced functionality and can cause unexpected UI behavior. Please ensure to test your use cases after configuration to reduce surprises.



32.1 Learn by example

This page provides some of the ideas we had for Core Workflows. Of course you can build much more complex workflows.

Hint: If they don't make sense to you, don't worry—just skip ahead to *How do they work?* to learn about all the options in detail, then come back here to see them in action.

All following workflows have the same base configurations. The workflow may not use them all.

- **Groups**
  - Sales
  - Support
  - 2nd Level
- **Attributes**
  - Category (Tree-Select, not mandatory, agents only)
  - Approved (Boolean, not mandatory, not shown, `false` as default)
  - Operating System (Text, not mandatory, not shown)
  - Software used (Select, not mandatory, not shown)

1. **Group specific values and fields** This workflow set depends on the category field. It reduces the available set of values based on the group selected.

   Workflow 2nd Level group

   Workflow Support group

   Workflow Sales group

   This reduces the category options to `2nd Level/*`, `Internal/*` and `Others`. It also sets further required fields to mandatory and visible.

   This reduces the category options to `Support/*`, `Internal/*` and `Others`. It also sets further required fields to visible.

   This reduces the category options to `Sales/*`, `Internal/*` and `Others`.

   The Result This is what the agent would experience with the above workflows in place.

2. **Approval process** In this case `approved` is visible to agents by default. For this workflow, an additional role `Approval person` is required (no further permissions).

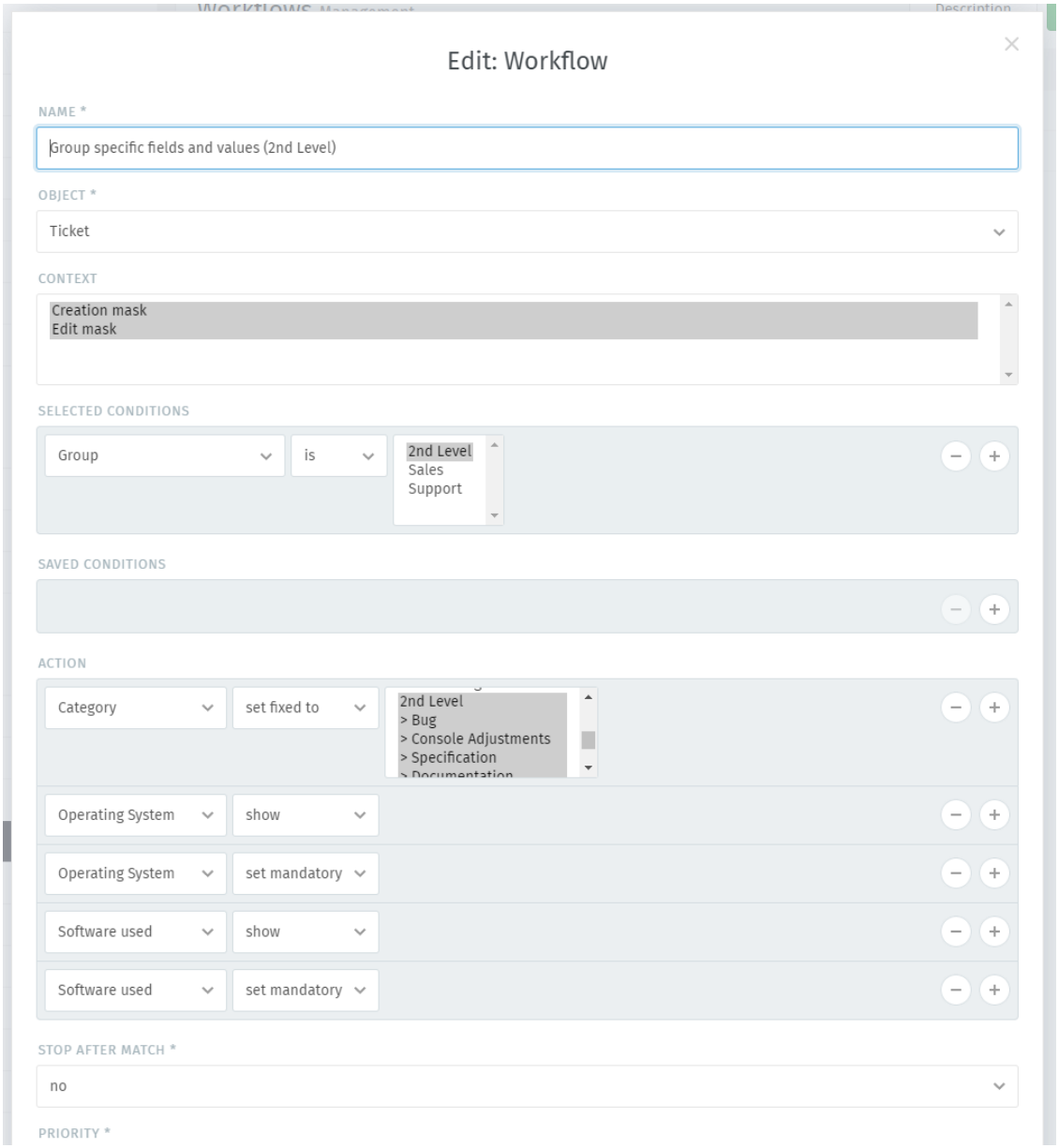
   Tip: This workflow may work best in combination with a *trigger* but technically, this is not required.

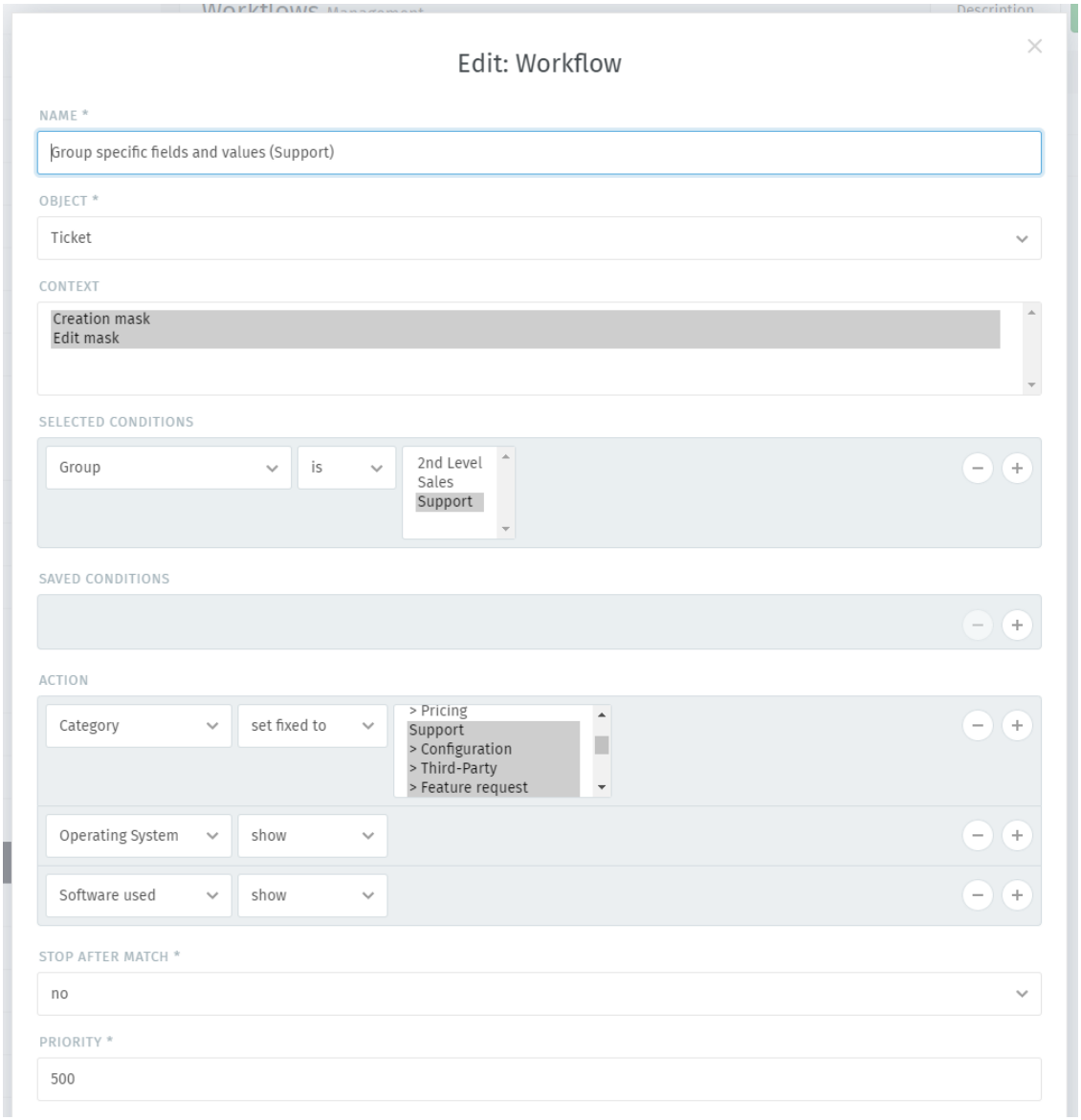
   Select fields may be a better approach because they allow more values than just a simple `true` or `false`.

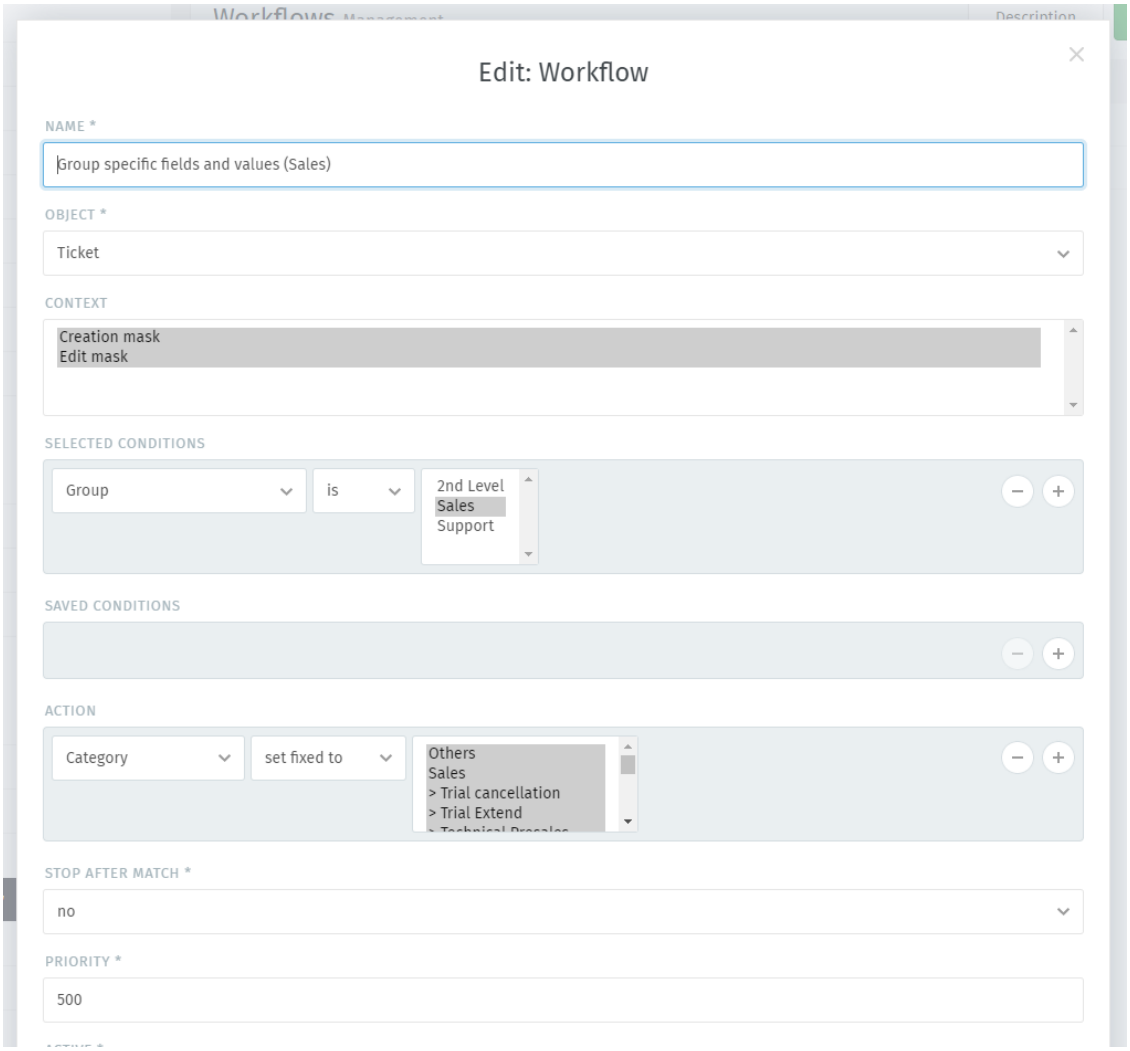
   The result

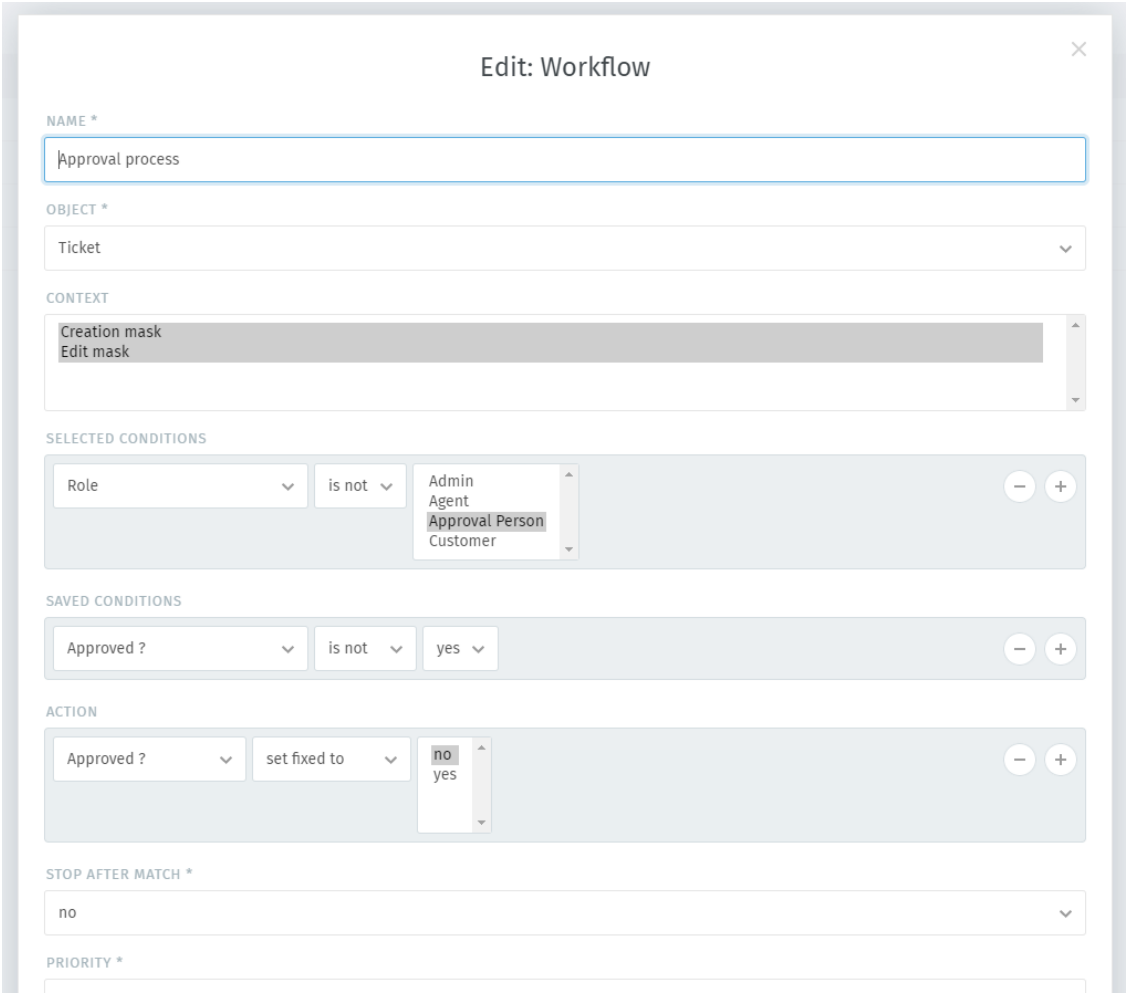
3. **State dependent mandatory fields** This workflow sets `Category` to mandatory if the agent wants to set the states `closed` or `pending close` to enforce categorization.

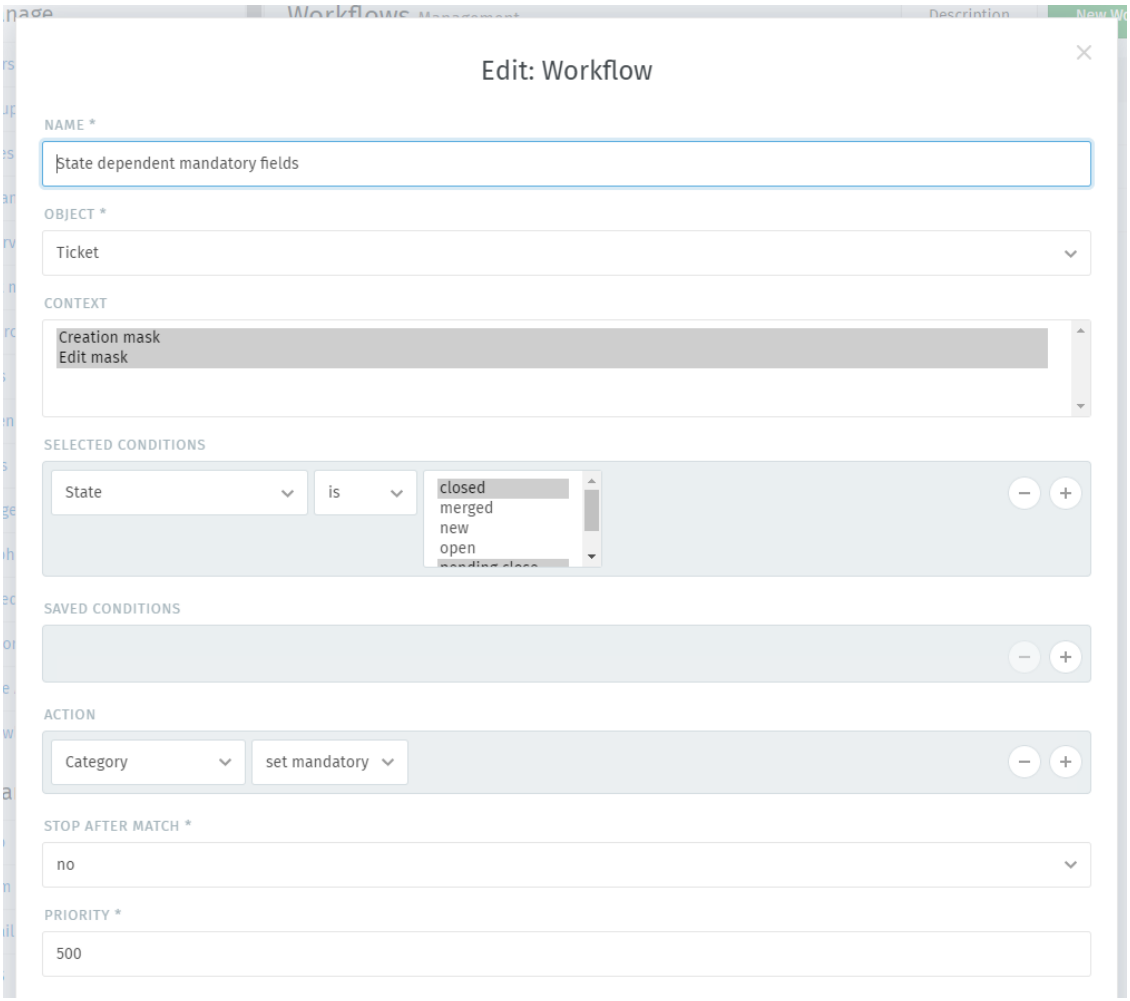
   The result


Edit: Workflow
NAME *
Group specific fields and values (2nd Level)
OBJECT *
Ticket
CONTEXT
Creation mask
Edit mask
SELECTED CONDITIONS
Group
is
2nd Level
Sales
Support
SAVED CONDITIONS
ACTION
Category
set fixed to
2nd Level
> Bug
> Console Adjustments
> Specification
Operating System
show
Operating System
set mandatory
Software used
show
Software used
set mandatory
STOP AFTER MATCH *
no
PRIORITY *


Edit: Workflow
NAME *
Group specific fields and values (Support)
OBJECT *
Ticket
CONTEXT
Creation mask
Edit mask
SELECTED CONDITIONS
Group
is
2nd Level
Sales
Support
SAVED CONDITIONS
ACTION
Category
set fixed to
> Pricing
Support
> Configuration
> Third-Party
> Feature request
Operating System
show
Software used
show
STOP AFTER MATCH *
no
PRIORITY *
500


Edit: Workflow
NAME *
Group specific fields and values (Sales)
OBJECT *
Ticket
CONTEXT
Creation mask
Edit mask
SELECTED CONDITIONS
Group
is
2nd Level
Sales
Support
SAVED CONDITIONS
ACTION
Category
set fixed to
Others
Sales
> Trial cancellation
> Trial Extend
STOP AFTER MATCH *
no
PRIORITY *
500


Edit: Workflow
NAME *
Approval process
OBJECT *
Ticket
CONTEXT
Creation mask
Edit mask
SELECTED CONDITIONS
Role
is not
Admin
Agent
Approval Person
Customer
SAVED CONDITIONS
Approved ?
is not
yes
ACTION
Approved ?
set fixed to
no
yes
STOP AFTER MATCH *
no
PRIORITY *


Edit: Workflow
NAME *
State dependent mandatory fields
OBJECT *
Ticket
CONTEXT
Creation mask
Edit mask
SELECTED CONDITIONS
State
is
closed
merged
new
open
SAVED CONDITIONS
ACTION
Category
set mandatory
STOP AFTER MATCH *
no
PRIORITY *
500

32.2 How do they work?

Core Workflows are evaluated by priority. If 2 workflows have the same priority by alphabetical order by **name**. Workflows are evaluated in alphabetical order, by **name.**

Because of the way Core Workflows works all changes to attributes are checked with the application server – please see *Limitations* for possible issues.

Below we're talking about settings that have an impact and are not self-explanatory.

32.2.1 Object

Choose the object context you want to run the workflow in. This will decide on your available conditions and actions.

Tip: You will be able to use objects that are in relation to your selection in your conditions.

This means:
Ticket objects also have access to the ticket customer.

32.2.2 Context

Choose in which situation the workflow is applied. Contexts can be combined to reduce workflows.

Creation Mask Once selected your conditions and actions will affect all applicable creation masks.

Edit Mask Once selected your conditions and actions will affect all applicable edit masks.

32.2.3 Conditions

Zammad decides in between selected and saved conditions. These can be combined wherever needed.

> **Tip: Combining conditions allows "OR"-selections**
>
> However, note that each condition type counts as *and* selector and can't overrule the other condition type.
>
> Every attribute can be used once per condition type.

> **Warning: Restrict on role basis if needed**
>
> By default, unless configured in conditions, workflow rules are evaluated for **all roles**. This also affects your customers!

Selected Conditions These conditions only match if they're active in selection. This applies for drafts (active selection) and currently saved values.

Saved Conditions These conditions only apply if they're saved within the database regardless of the current value or selection of the field.

Note: Keep in mind that the value has to be available in the situation where you need it. Otherwise the condition won't match.

32.2.4 Action

Which actions should we run on the relevant fields? The possible actions depend on the object type, however, usually you can at least change the visibility and whether the field is mandatory.

Note: Actions are not available for relations

Let's say you're working in ticket context. While you can have customer conditions, you can't adjust objects with actions in that scope.

That's because this wouldn't have any impact on the ticket dialogue. All ticket attributes (state, owner, . . .) are available.

Warning: Please also have a look at our *Limitations* to be safe from surprises.

Available Operators

Note: The availability of operators depends on the object type and scope.

Hint: Actions can cause confusion

Please note that actions may or may not restrict API based access to attributes. We're displaying the following icons for your overview to understand these limits better.

{ API }
This icon indicates the action affects the API.

UI
This icon indicates the action only affects the web interface.

show UI Display the field in question. Allows setting of values.

hide UI Hide the field in question however, technically still allows setting the field.

Warning: The field is **not** gone and still contains any value it provides! You may want to consider *remove* instead.

remove UI { API } Entirely removes the field. The field value cannot be changed / set.

> **Warning:** This field's value is being unset in case it's set! You may want to consider *hide* instead.

set mandatory UI { API } Sets the field to mandatory.

set optional UI { API } Sets the field to optional.

add option UI { API } Allows adding options to tree selects or selects.

> **Note:** This requires options to be hidden beforehand (remove option). It allows to use *existing* configured values.

remove option UI { API } Allows removing options from tree selects or selects.

> **Note:** It allows to use *existing* configured values.

set fixed to UI { API } Reduces the available options by your selection.

> **Tip:** This may indirectly reduce your workflows in terms of *add option* and *remove option*.

fill in UI Allows population of string and integer fields with your value.

fill empty UI Allows population of string and integer fields with your value **if the field is empty**.

select UI Select a specific value within a select, tree select or boolean fields.

auto select UI

Helps the user on tree selects and select fields:
If the field has one option to select only and has no value yet, the value is automatically set.

> **Warning:** This option only works if you have one value and acts passively with more options.

set readonly UI Allows you to display an attribute as read only.

unset readonly UI In case a workflow set the field in question to read only, you can undo this with above option.

32.2.5 Stop after match

Stop evaluation of other, following workflows that would match otherwise.

Default: `no`

32.2.6 Priority

You decide at which point your workflow is evaluated. Priorities are sorted descending – this means that a workflow matching can stop matching in specific situations.

Default: `500`

32.3 Limitations

Core Workflows does not replace Trigger Workflows manipulate behavior of fields, however, they do not set values in fields because of actions.

API calls are only partly affected Some options affect UI only and thus do not restrict responses and calls.

This affects the following actions:

- select
- auto select
- show
- hide

Some fields stay unavailable to customers For technical and security reasons, some default fields (the pale ones you can't edit) stay unavailable for display and usage on customer permissions.

> **Hint:** If you require your customers to change e.g. priorities, please consider using workarounds via *Objects* and *Triggers*.

What is out of scope of Core Workflows…? There are some things that would count as workflow but are either done via *Triggers*, *Scheduler* or over the current top.

Such as (but not limited to):

- up- or downgrade permissions of users
- affect article creation or listing

CHAPTER

THIRTYTHREE

VARIABLES

Note: Please note that this is just an overview of available variables. It might be incomplete or variables might not be available within some functions. If you're missing variables or are not sure if something is not working as expected, feel free to ask over at the Community.

Variables can be called by typing `::` (just like text modules in the frontend), as long as you're in a supported text field within the Backend. Zammad will show display all variables being available within this context and replace it to the variable as soon as you selected an entry.

Hint: You have an empty field which you referenced and it appears as `-`? That's currently working as designed - you might want to ensure that these fields always have a value (in text fields `` `` is a value!).

33.1 Variable Categories

33.1.1 Config

Note: If you're missing variables or are not sure if something is not working as expected, feel free to ask over at the Community.

Below you'll find config related variables. These hold useful configuration information that you can use within e.g. triggers to show necessary information to your customer.

The below list gives you an example what kind of data you can expect, it's not intended to explain the data itself.

Table 1: Config Variables

name	variable	example
Config > Fully Qualified Domain Name	`#{config.fqdn}`	`zammad.example.com`
Config > Ticket Hook	`#{config.ticket_hook}`	`Ticket#`
Config > HTTP type	`#{config.http_type}`	`https` or `http`
Config > SystemID	`#{config.system_id}`	`31` (value between 1 and 99)
Config > Organization	`#{config.organization}`	`Zammad GmbH` value set in Branding
Config > Product Name	`#{config.product_name}`	`Helpdesk` value set in Branding

33.1.2 Current User

Note: If you're missing variables or are not sure if something is not working as expected, feel free to ask over at the Community.

Current user variables always return values of the current user that caused e.g. a trigger to run.

Note: Due to the above fact, these variables are often not (yet) set or available for usuage.

In situations where e.g. schedulers or triggers run, this most likely is nothing you want to use.

Table 2: Current User Variables

name	variable	example
Current User > Web	`#{user.web}`	`https://zammad.org` or empty if not set
Current User > VIP	`#{user.vip}`	`false` or `true`
Current User > Updated by > Web	`#{user.updated_by.web}`	`https://zammad.org` or empty if not set
Current User > Updated by > VIP	`#{user.updated_by.vip}`	`false` or `true`
Current User > Updated by > Phone	`#{user.updated_by.phone}`	`004930123456789` or empty if not set
Current User > Updated by > Note	`#{user.updated_by.note}`	`Some note to this user` or empty if not set
Current User > Updated by > Mobile	`#{user.updated_by.mobile}`	`0049176123456789` or empty if not set
Current User > Updated by > Login	`#{user.updated_by.login}`	`jdoe`

continues on next page

Table 2 – continued from previous page

name	variable	example
Current User > Updated by > Lastname	#{user.updated_by.lastname}	Doe or empty if not set
Current User > Updated by > Firstname	#{user.updated_by.firstname}	John or empty if not set
Current User > Updated by > Fax	#{user.updated_by.fax}	004930123464789 or empty if not set
Current User > Updated by > Email	#{user.updated_by.email}	jdoe@customer.tld
Current User > Updated by > Department	#{user.updated_by.department}	Sales or empty if not set
Current User > Updated by > Address	#{user.updated_by.address}	Some street 1, 12345 Berlin or empty if not set
Current User > Updated at	#{user.updated_at}	2019-10-07 16:25:00 UTC
Current User > Phone	#{user.phone}	004930123456789 or empty if not set
Current User > Organization > Shared organization	#{user.organization.shared}	true or false
Current User > Organization > Note	#{user.organization.note}	A note to the organization of the user or empty if not set
Current User > Organization > Name	#{user.organization.name}	
Current User > Organization > Domain based assignment	#{user.organization.domain_assignment}	
Current User > Organization > Domain	#{user.organization.domain}	Zammad GmbH or empty if not set
Current User > Note	#{user.note}	Some note to this user or empty if not set
Current User > Mobile	#{user.mobile}	0049176123456789 or empty if not set
Current User > Login	#{user.login}	jdoe
Current User > Lastname	#{user.lastname}	Doe or empty if not set
Current User > Firstname	#{user.firstname}	John or empty if not set
Current User > Fax	#{user.fax}	004930123464789 or empty if not set
Current User > Email	#{user.email}	jdoe@customer.tld
Current User > Department	#{user.department}	Sales or empty if not set
Current User > Created by > Web	#{user.created_by.web}	https://zammad.org or empty if not set

continues on next page

Table 2 – continued from previous page

name	variable	example
Current User > Created by > VIP	#{user.created_by.vip}	true or false
Current User > Created by > Phone	#{user.created_by.phone}	004930123456789 or empty if not set
Current User > Created by > Note	#{user.created_by.note}	Some note to this user or empty if not set
Current User > Created by > Mobile	#{user.created_by.mobile}	0049176123456789 or empty if not set
Current User > Created by > Login	#{user.created_by.login}	jdoe
Current User > Created by > Lastname	#{user.created_by.lastname}	Doe or empty if not set
Current User > Created by > Firstname	#{user.created_by.firstname}	John or empty if not set
Current User > Created by > Fax	#{user.created_by.fax}	004930123464789 or empty if not set
Current User > Created by > Email	#{user.created_by.email}	jdoe@customer.tld
Current User > Created by > Department	#{user.created_by.department}	Sales or empty if not set
Current User > Created by > Address	#{user.created_by.address}	Some street 1, 12345 Berlin or empty if not set
Current User > Created at	#{user.created_at}	2019-10-07 16:25:00 UTC
Current User > Address	#{user.address}	Some street 1, 12345 Berlin or empty if not set

33.1.3 Articles

Note: If you're missing variables or are not sure if something is not working as expected, feel free to ask over at the Community.

Below you can find all available ticket article-based variables within Zammad. These can be called via Triggers for example. If you're unsure if Zammad does support variables at the point you're at, you can try to type `::` to check.

The below list gives you an example what kind of data you can expect, it's not intended to explain the data itself.

Table 3: Article Variables

name	variable	example
Article > Updated by > Web	#{article.updated_by.web}	https://zammad.com or empty if not set in user object
Article > Updated by > VIP	#{article.updated_by.vip}	true or false
Article > Updated by > Phone	#{article.updated_by.phone}	+4930123456789 or empty if not set in user object
Article > Updated by > Note	#{article.updated_by.note}	Some note about user or empty if not set in user object
Article > Updated by > Mobile	#{article.updated_by.mobile}	+4930123456789 or empty if not set in user object
Article > Updated by > Login	#{article.updated_by.login}	jdoe
Article > Updated by > Lastname	#{article.updated_by.lastname}	Doe or empty if not set
Article > Updated by > Firstname	#{article.updated_by.firstname}	Joe or empty if not set
Article > Updated by > Fax	#{article.updated_by.fax}	+4930123456789 or empty if not set in user object
Article > Updated by > Email	#{article.updated_by.email}	jdoe@example.com
Article > Updated by > Department	#{article.updated_by.department}	Sales or empty if not set in user object
Article > Updated by > Address	#{article.updated_by.address}	Some street 1, 12345 Berlin or empty if not set in user object
Article > Updated	#{article.updated_at}	2019-10-08 15:24:47 UTC
Article > Type > Name	#{article.type.name}	email (list of article types)
Article > To	#{article.to}	helpdesk@example.com
Article > TicketID	#{article.ticket_id}	1 (not ticket number)
Article > Subject	#{article.subject}	My amazing subject
Article > Sender > Name	#{article.sender.name}	Customer, Agent or System
Article > Visibility	#{article.internal}	false or true (false if not internal)
Article > From	#{article.from}	Joe Doe <jdoe@example.com> may differ, depends on FROM of send mail
Article > Created by > Web	#{article.created_by.web}	https://zammad.com or empty if not set in user object

continues on next page

Table 3 – continued from previous page

name	variable	example
Article > Created by > VIP	#{article.created_by.vip}	true or false
Article > Created by > Phone	#{article.created_by.phone}	+4930123456789 or empty if not set in user object
Article > Created by > Note	#{article.created_by.note}	Some note about user or empty if not set in user object
Article > Created by > Mobile	#{article.created_by.mobile}	+4930123456789 or empty if not set in user object
Article > Created by > Login	#{article.created_by.login}	jdoe
Article > Created by > Lastname	#{article.created_by.lastname}	Doe or empty if not set
Article > Created by > Firstname	#{article.created_by.firstname}	Joe or empty if not set
Article > Created by > Fax	#{article.created_by.fax}	+4930123456789 or empty if not set in user object
Article > Created by > Email	#{article.created_by.email}	jdoe@example.com
Article > Created by > Department	#{article.created_by.department}	Sales or empty if not set in user object
Article > Created by > Address	#{article.created_by.address}	Some street 1, 12345 Berlin or empty if not set in user object
Article > Created	#{article.created_at}	2019-10-08 15:24:47 UTC
Article > Cc	#{article.cc}	jdoe@example.com, company@example.com
Article > Text	#{article.body}	Test without formatting (plain)
Article Text as HTML (not referenced)	#{article.body_as_html}	Test with formatting
Ticket > Article#	#{ticket.article_count}	1 number of ticket articles

33.1.4 Ticket

Note: If you're missing variables or are not sure if something is not working as expected, feel free to ask over at the Community.

Below you can find all available ticket-based variables within Zammad. These can be called via Triggers for example. If you're unsure if Zammad does support variables at the point you're at, you can try to type `::` to check.

The below list gives you an example what kind of data you can expect, it's not intended to explain the data itself.

Table 4: Ticket Variables

name	variable	example
Ticket > Updated by > Web	`#{ticket.updated_by.web}`	`https://zammad.org` or empty if not set
Ticket > Updated by > VIP	`#{ticket.updated_by.vip}`	`false` or `true`
Ticket > Updated by > Phone	`#{ticket.updated_by.phone}`	`004930123456789` or empty if not set
Ticket > Updated by > Note	`#{ticket.updated_by.note}`	`Some note to this user` or empty if not set
Ticket > Updated by > Mobile	`#{ticket.updated_by.mobile}`	`0049176123456789` or empty if not set
Ticket > Updated by > Login	`#{ticket.updated_by.login}`	`jdoe`
Ticket > Updated by > Lastname	`#{ticket.updated_by.lastname}`	`Doe` or empty if not set
Ticket > Updated by > Firstname	`#{ticket.updated_by.firstname}`	`John` or empty if not set
Ticket > Updated by > Fax	`#{ticket.updated_by.fax}`	`004930123464789` or empty if not set
Ticket > Updated by > Email	`#{ticket.updated_by.email}`	`jdoe@customer.tld`
Ticket > Updated by > Department	`#{ticket.updated_by.department}`	`Sales` or empty if not set
Ticket > Updated by > Address	`#{ticket.updated_by.address}`	`Some street 1, 12345 Berlin` or empty if not set
Ticket > Updated at	`#{ticket.updated_at}`	`2019-10-07 16:25:00 UTC`
Ticket > Title	`#{ticket.title}`	`My amazing Subject` (normally subject, can be edited within Interface and thus differ)

continues on next page

Table 4 – continued from previous page

name	variable	example
Ticket > Accounted Time	#{ticket.time_unit}	1, 2.75 or empty response
Ticket > Tags	#{ticket.tags}	Currently not available, see Issue 2769
Ticket > State > Name	#{ticket.state.name}	new, open, ...
Ticket > Priority > Name	#{ticket.priority.name}	2 normal
Ticket > Pending till	#{ticket.pending_time}	2019-10-07 16:25:00 UTC or empty if not set
Ticket > Owner > Web	#{ticket.owner.web}	https://zammad.com or empty if not set
Ticket > Owner > VIP	#{ticket.owner.vip}	false or true
Ticket > Owner > Phone	#{ticket.owner.phone}	004930123456789 or empty if not set
Ticket > Owner > Note	#{ticket.owner.note}	Some note to this user or empty if not set
Ticket > Owner > Mobile	#{ticket.owner.mobile}	0049176123456789 or empty if not set
Ticket > Owner > Login	#{ticket.owner.login}	agent
Ticket > Owner > Lastname	#{ticket.owner.lastname}	Mustermann or empty if not set
Ticket > Owner > Firstname	#{ticket.owner.firstname}	Max or empty if not set
Ticket > Owner > Fax	#{ticket.owner.fax}	004930123456789 or empty if not set
Ticket > Owner > Email	#{ticket.owner.email}	agent@company.tld or empty if not set
Ticket > Owner > Department	#{ticket.owner.department}	Support or empty if not set
Ticket > Owner > Address	#{ticket.owner.address}	Some street 1, 12345 Berlin or empty if not set
Ticket > Organization > Shared organization	#{ticket.organization.shared}	false or true
Ticket > Organization > Note	#{ticket.organization.note}	A note to the organization of the user or empty if not set
Ticket > Organization > Name	#{ticket.organization.name}	Zammad GmbH or empty if not set
Ticket > Organization > Domain based assignment	#{ticket.organization.domain_assignment}	false or true
Ticket > Organization > Domain	#{ticket.organization.domain}	domain.tld or empty if not set
Ticket > #	#{ticket.number}	31001, 201910731001, ...

continues on next page

Table 4 – continued from previous page

name	variable	example
Ticket > Last contact (customer)	#{ticket.last_contact_customer}	2019-10-07 16:25:00 UTC or empty if not applicable yet (Please note Ticket last contact behaviour Settings for this)
Ticket > Last contact	#{ticket.last_contact_at}	2019-10-07 16:25:00 UTC
Ticket > Last contact (agent)	#{ticket.last_contact_agent_at}	2019-10-07 16:25:00 UTC or empty if not applicable yet
Ticket > Group > Note	#{ticket.group.note}	Note about this group
Ticket > Group > Name	#{ticket.group.name}	Sales
Ticket > Group > Follow-up possible	#{ticket.group.follow_up_possible}	no or yes
Ticket > Group > Assign Follow-Ups	#{ticket.group.follow_up_assignment}	false or true
Ticket > Group > Assignment Timeout	#{ticket.group.assignment_timeout}	20 or empty if not configured
Ticket > First response	#{ticket.first_response_at}	2019-10-07 16:25:00 UTC or empty if not applicable yet
Ticket > Escalation at	#{ticket.escalation_at}	2019-10-07 16:25:00 UTC or empty if not applicable
Ticket > Customer > Web	#{ticket.customer.web}	https://zammad.org or empty if not set
Ticket > Customer > VIP	#{ticket.customer.vip}	false or true
Ticket > Customer > Phone	#{ticket.customer.phone}	004930123456789 or empty if not set
Ticket > Customer > Note	#{ticket.customer.note}	Some note to this user or empty if not set
Ticket > Customer > Mobile	#{ticket.customer.mobile}	0049176123456789 or empty if not set
Ticket > Customer > Login	#{ticket.customer.login}	jdoe
Ticket > Customer > Lastname	#{ticket.customer.lastname}	Doe or empty if not set
Ticket > Customer > Firstname	#{ticket.customer.firstname}	Joe or empty if not set
Ticket > Customer > Fax	#{ticket.customer.fax}	004930123456789 or empty if not set
Ticket > Customer > Email	#{ticket.customer.email}	jdoe@customer.tld
Ticket > Customer > Department	#{ticket.customer.department}	Sales or empty if not set
Ticket > Customer > Address	#{ticket.customer.address}	Some street 1, 12345 Berlin or empty if not set

continues on next page

Table 4 – continued from previous page

name	variable	example
Ticket > Created by > Web	#{ticket.created_by.web}	https://zammad.org or empty if not set
Ticket > Created by > VIP	#{ticket.created_by.vip}	false or true
Ticket > Created by > Phone	#{ticket.created_by.phone}	004930123456789 or empty if not set
Ticket > Created by > Note	#{ticket.created_by.note}	Some note to this user or empty if not set
Ticket > Created by > Mobile	#{ticket.created_by.mobile}	0049176123456789 or empty if not set
Ticket > Created by > Login	#{ticket.created_by.login}	jdoe
Ticket > Created by > Lastname	#{ticket.created_by.lastname}	Doe or empty if not set
Ticket > Created by > Firstname	#{ticket.created_by.firstname}	Joe or empty if not set
Ticket > Created by > Fax	#{ticket.created_by.fax}	004930123456789 or empty if not set
Ticket > Created by > Email	#{ticket.created_by.email}	jdoe@customer.tld
Ticket > Created by > Department	#{ticket.created_by.department}	Sales or empty if not set
Ticket > Created by > Address	#{ticket.created_by.address}	Some street 1, 12345 Berlin or empty if not set
Ticket > Created at	#{ticket.created_at}	2019-10-07 16:25:00 UTC
Ticket > Closing time	#{ticket.close_at}	2019-10-07 17:25:00 UTC
Ticket > Article#	#{ticket.article_count}	3, any number of articles existing in the ticket right now

33.2 Wait, what about custom objects?

Good point! Of course, we can't predict what objects you might create, but we can give you a hint on how to put the puzzle together to get your custom values.

For this, we'll talk about the inner part of the variable (so everything within #{}), please put the outer part around to have a valid variable. The first part of the variable name consist of the object type. Currently these are:

- Ticket (ticket)
- User (user)

- Organization (`organization`)
- Group (`group`)

The second part is the name of the object. This is the name you define during object creation and can be found within the object menu at any time. The first and second part of a variable is divided by a point, e.g.: `ticket.number` which will in total be `#{ticket.number}`.

Now, in some situations it's possible that you'll need to use a third part. The best example for such a situation would be a `select` or `tree-select` field which will by default return the key value, not it's display name. For this, just extend your variable with `.value`. This will result in `#{ticket.select.value}`.

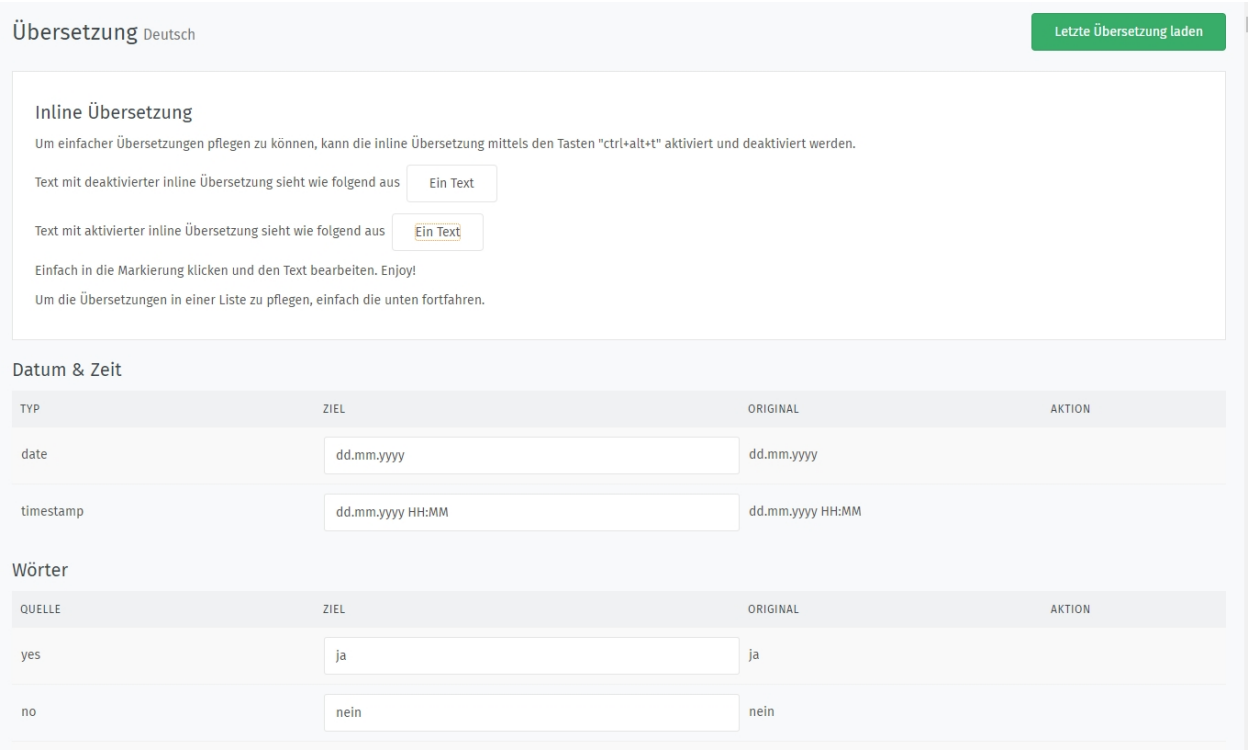
CHAPTER

THIRTYFOUR

TRANSLATIONS

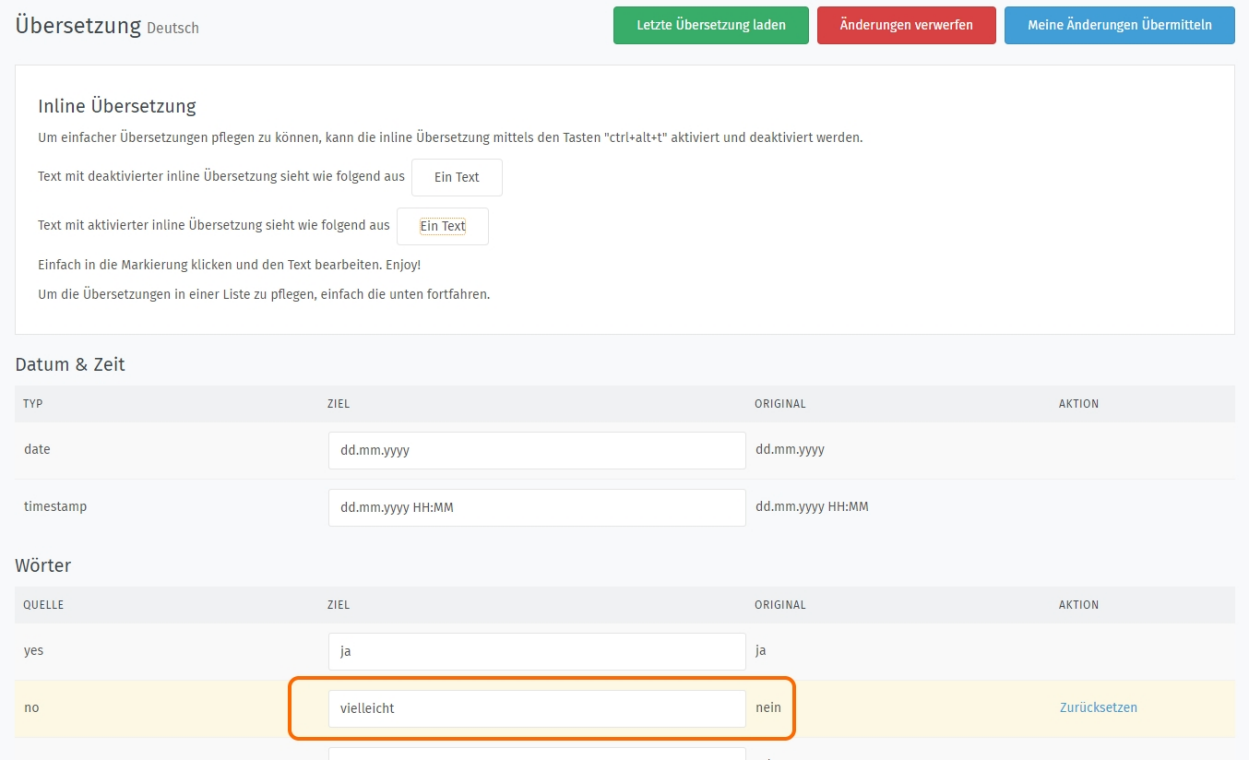
In Zammad (as admin) you can translate strings having typos or even not being translated. You can always "Get last translations" to ensure that you're up to date before doing that.

Note: The language for translation is always the language you chose within your profile. As Zammad's main language is English, you can't translate into English.



Translated strings are highlighted within Zammad. If you've translated strings, you have two options: You can send your changes to our central system, this will share your translation with other users. This is a great contribution.

If you don't like your changes or want to start over, you can discard your changes at any time.


Übersetzung Deutsch
Letzte Übersetzung laden
Änderungen verwerfen
Meine Änderungen Übermitteln
Inline Übersetzung
Um einfacher Übersetzungen pflegen zu können, kann die inline Übersetzung mittels den Tasten "ctrl+alt+t" aktiviert und deaktiviert werden.
Text mit deaktivierter inline Übersetzung sieht wie folgend aus
Ein Text
Text mit aktivierter inline Übersetzung sieht wie folgend aus
Ein Text
Einfach in die Markierung klicken und den Text bearbeiten. Enjoy!
Um die Übersetzungen in einer Liste zu pflegen, einfach die unten fortfahren.
Datum & Zeit
TYP
ZIEL
ORIGINAL
AKTION
date
dd.mm.yyyy
dd.mm.yyyy
timestamp
dd.mm.yyyy HH:MM
dd.mm.yyyy HH:MM
Wörter
QUELLE
ZIEL
ORIGINAL
AKTION
yes
ja
ja
no
vielleicht
nein
Zurücksetzen

CHAPTER

THIRTYFIVE

DATA PRIVACY

For compliance with GDPR and other data privacy laws, you may wish to **permanently delete users from the system**, along with **all of their associated tickets**.

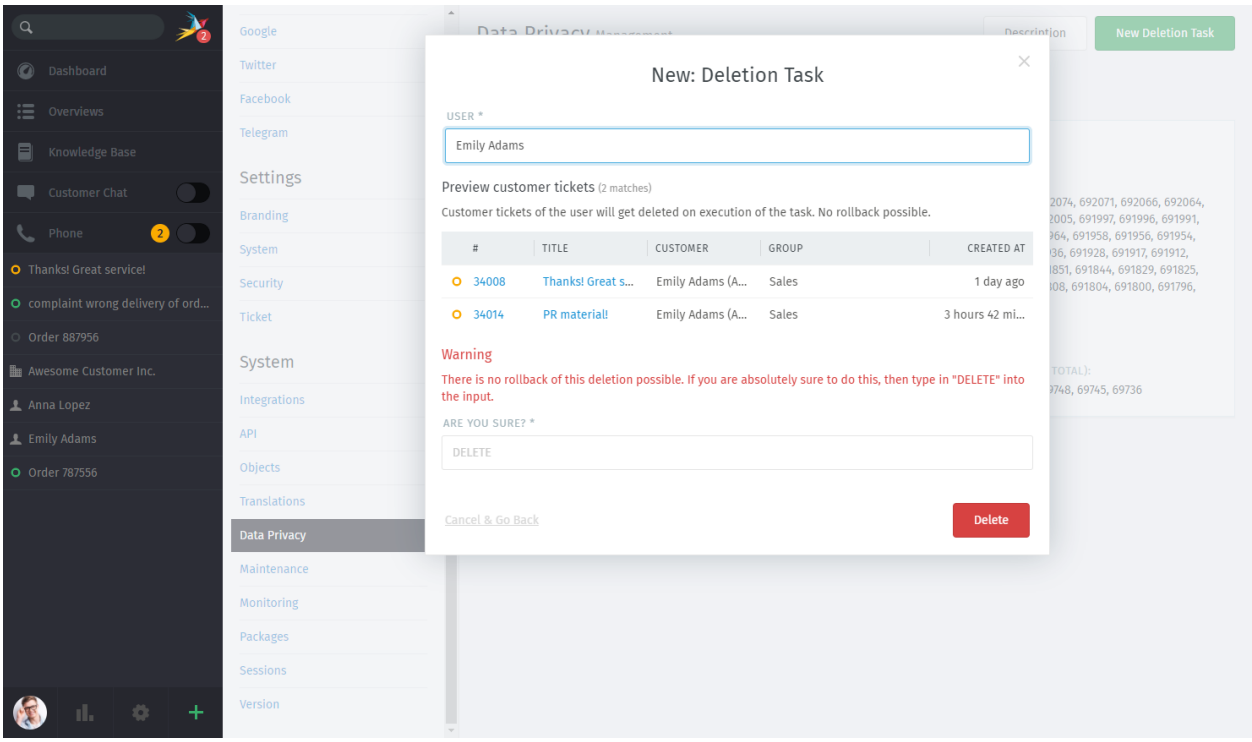


Fig. 1: The user deletion dialog lists some of the tickets that will be removed from the system along with the user.

Note: Huh? I don't see the Data Privacy panel…

Access to this panel requires `admin.data_privacy` permissions (introduced in Zammad 3.5).

On older systems that have not been updated yet, customers can also be deleted via the Zammad console.

35.1 Deleting Users

Warning: All deletions are FINAL!

Once you click "Delete", the action cannot be cancelled or undone.

Any time you delete a user, all their tickets will be deleted, as well. It is not possible to delete a user and still keep their tickets.

Note: The following records cannot be deleted:

- your own account
- the system's last remaining administrator account

35.1.1 Step 1: Find a user / confirm deletion

There are three ways to access the user deletion dialog:

from the user's profile

Fig. 2: Click **Action > Delete**.

in the "Manage > Users" Admin Panel

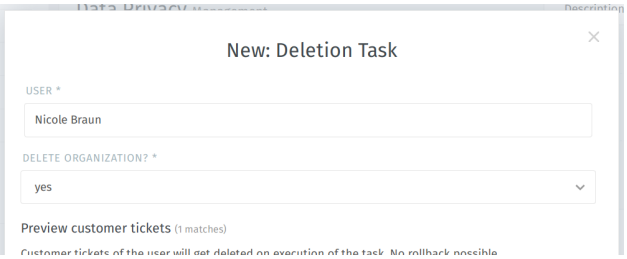
Fig. 3: Use the **Actions** menu for the target user.

in the "System > Data Privacy" Admin Panel

Fig. 4: Use the **New Deletion Task** button. Search for users by name or email address.

Hint: You can delete organizations, too.

If the customer you are deleting is the last user in their organization, a **Delete Organization?** option will be displayed in the user deletion dialog:

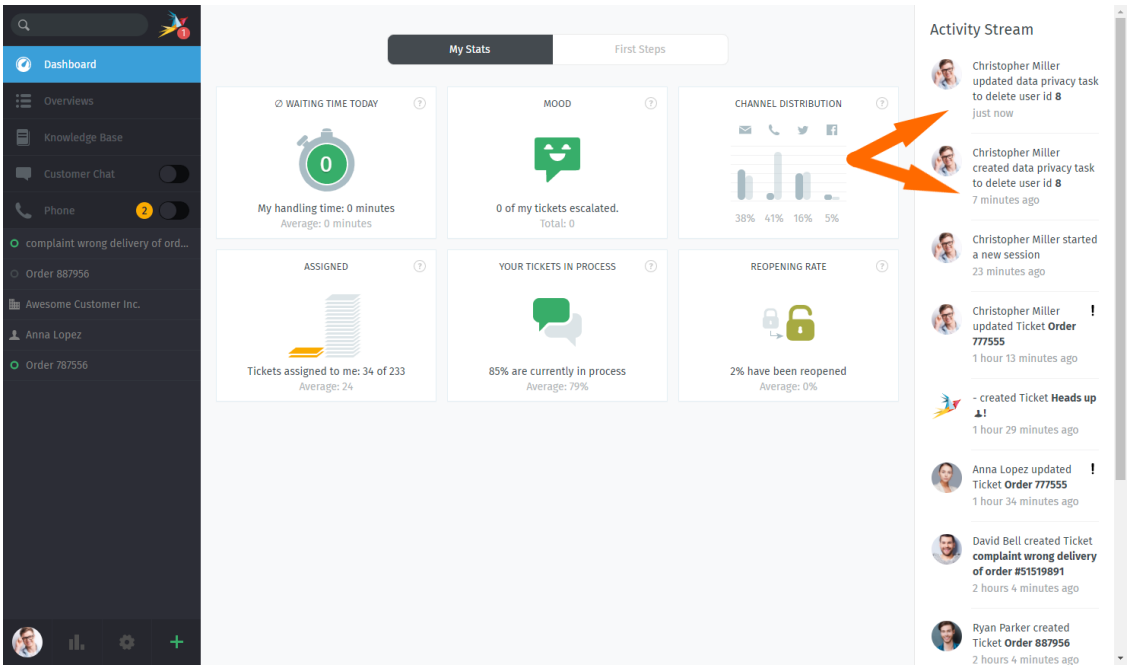


(If this option does not appear, make sure there are no pending deletion tasks for other customers from this organization.)

35.1.2 Step 2: Monitor deletion job status

It may take up to ten minutes for the system to process your request, so for each user you delete, a "deletion task" is added to the queue. You can keep an eye on the status of these tasks in two places:

in the Activity Stream



For each deleted user, the Activity Stream will be updated twice—once when the task is created, and once when it's complete.

Hint: These notifications are only visible to users with `admin.data_privacy` permissions.

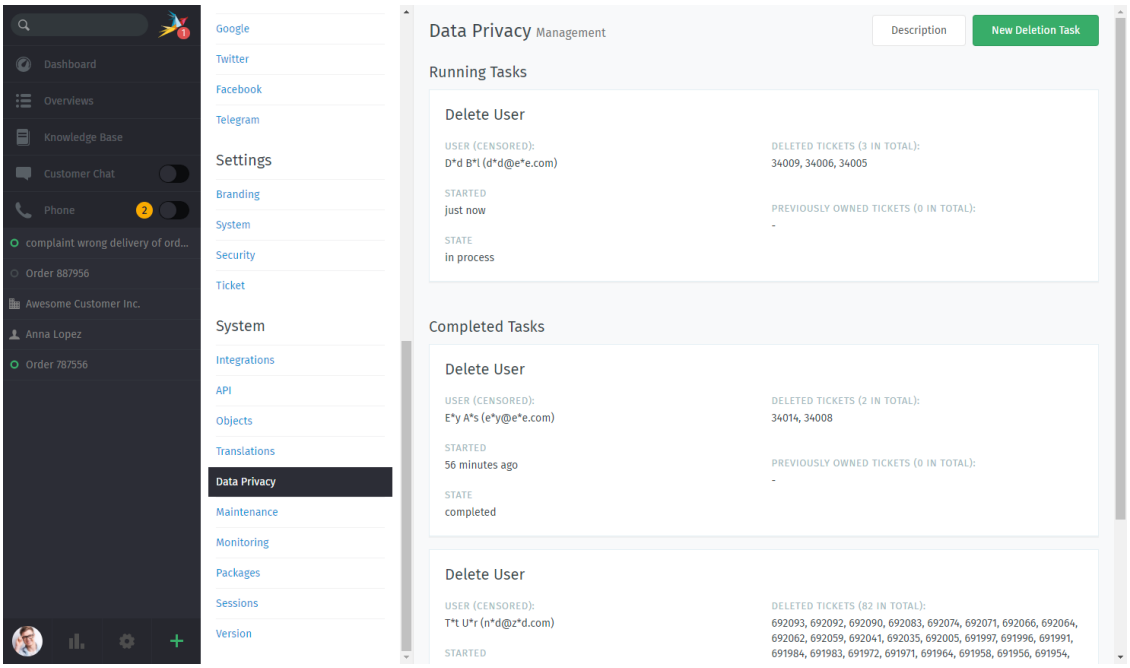
in the "System > Data Privacy" Admin Panel

35.2 Frequently Asked Questions

What happens if I receive an email from a deleted customer? Zammad automatically creates a new user account whenever it receives a message from an unrecognized email address, including deleted users. Deleted users are never blocked from creating new tickets.

In the unlikely event that you receive an email between the time that you click "Delete" and the system has processed your request, **that ticket will be automatically removed**. The ticket number for the lost ticket will be displayed in the Admin Panel under **System > Data Privacy > Completed Tasks > Delete User > Deleted Tickets**.

What about user information stored in internal notes or other messages? The deletion process removes **user accounts and associated tickets only**.



If there are references to a user's name or information stored elsewhere in the system, that information **will not be removed** because there is no way to safely determine if it actually describes the user in question.

I deleted an user and can still see a message they sent! Tickets can only belong to a single customer, but may contain messages ("articles") from many people. If you deleted a user but you're still seeing articles they sent, don't worry—those articles are for a ticket that belongs to someone else, and no longer contain any reference to the sender's identity.

CHAPTER

THIRTYSIX

MAINTENANCE

If maintenance work on the system is necessary, a number of preparations must be made. You can take care of them here.

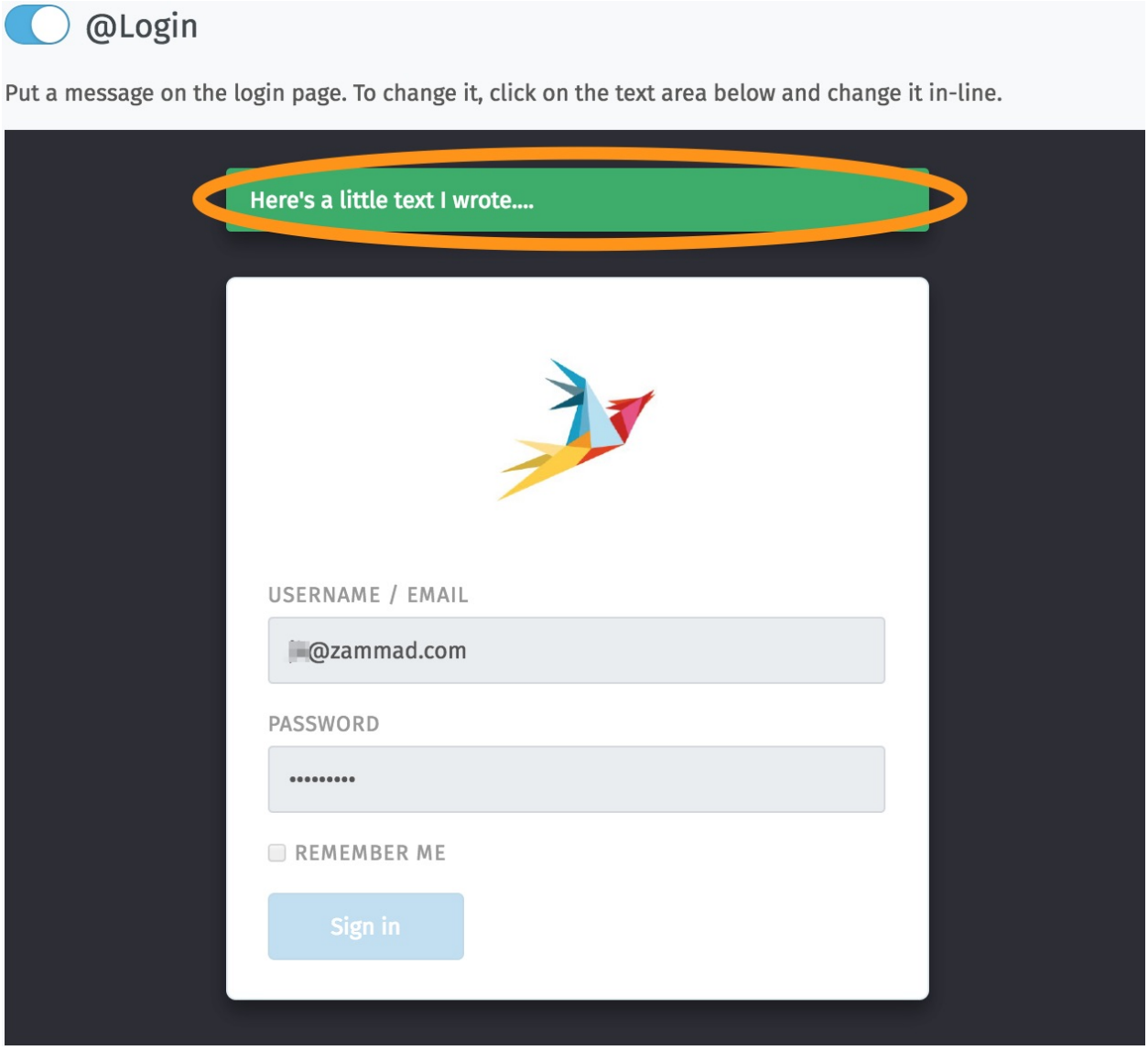
36.1 Mode

Enable or disable the maintenance mode of Zammad. If enabled, all non-administrators get logged out and only administrators can start a new session.

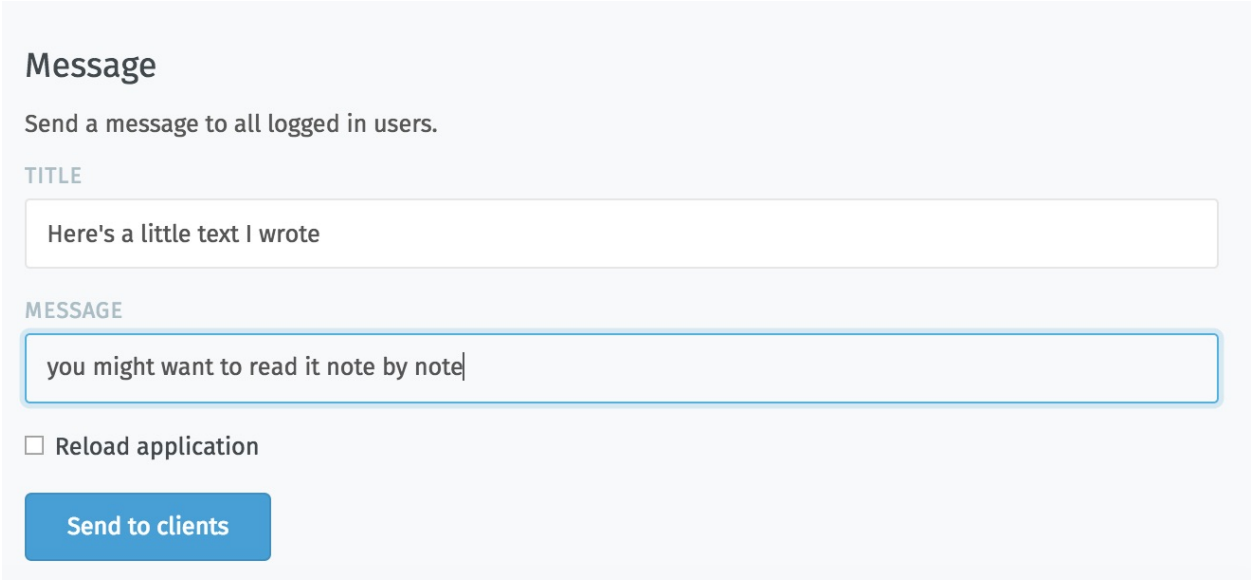
Before the maintenance mode is activated, you can not only inform about it on the login page…

36.2 @Login

You can place a short message for all users on the login page. This will then be displayed as follows:



But you can also inform all agents with a message about something:


Message
Send a message to all logged in users.
TITLE
Here's a little text I wrote
MESSAGE
you might want to read it note by note
Reload application
Send to clients

CHAPTER

THIRTYSEVEN

MONITORING

Please note: This is only available in self hosted instances, as we're monitoring hosted instances and fix problems.

On the monitoring page you can see the current health state of Zammad. This can be useful if you for example have the feeling that you don't receive emails anymore, you can take a look here before logging onto your Server.

Besides the optical state of an event, you can also reset the access token for this module and get the monitoring URL for a monitoring system of your choice.

Example output to this can be:

Everything is OK (refer to image 2 for interface example):

```
{"healthy"=>true, "message"=>"success", "token"=>"2432XXXXXXXXXXXXXXXXXXXXXX1761"}
```

Zammad has issue (whatever nature, refer to image 2 for interface example):

```
{"healthy":false,"message":"Channel: Twitter::Account in key:{\"id\"=\XXXXXXXXXXXXXXXXX,␣
↪\"screen_name\"=\u003e\"Name\", \"name\"=\u003e\"Somewhat name\"}; Can't use stream␣
↪for channel (42): #\u003cJSON::ParserError: 765: unexpected token at 'The Site Streams␣
↪and User Streams endpoints have been turned off. Please migrate to alternate APIs. See␣
↪https://t.co/usss'\u003e","issues":["Channel: Twitter::Account in key:{\"id\"=\XXXXXXX,
↪ \"screen_name\"=\u003e\"Name\", \"name\"=\u003e\"Somename\"}; Can't use stream for␣
↪channel (42): #\u003cJSON::ParserError: 765: unexpected token at 'The Site Streams and␣
↪User Streams endpoints have been turned off. Please migrate to alternate APIs. See␣
↪https://t.co/usss'\u003e"],"actions":[],"token":"OgitXXXXXXXXXXXXXXXXXXXXXXNxo4ptCoQ"}
```

Monitoring

Current Token

[redacted]

Reset

Health Check

Health information can be retrieved as JSON using:

https:/[redacted]/api/v1/monitoring/health_check?token=[redacted]

Current Status

- Channel: Twitter::Account in key:{"id"=>[redacted], "screen_name"=>"[redacted]", "name"=>"[redacted]"}; Can't use stream for channel (42): #<JSON::ParserError: 765: unexpected token at 'The Site Streams and User Streams endpoints have been turned off. Please migrate to alternate APIs. See https://t.co/usss'>
- Failed to run background job #1 'BackgroundJobSearchIndex' 8 time(s) with 144 attempt(s).

Monitoring

Current Token

[redacted]

Reset

Health Check

Health information can be retrieved as JSON using:

https:/[redacted]/api/v1/monitoring/health_check?token=[redacted]

Current Status

- no issues

CHAPTER

THIRTYEIGHT

PACKAGES

That's the package management-area.

Individual add-ons for Zammad can be installed and managed here.

CHAPTER

THIRTYNINE

SESSIONS

Shows who logged on to the Zammad instance as a user, when and from where.

CHAPTER

FORTY

VERSION

Shows which version is currently being used on your Zammad-instance.

CHAPTER

FORTYONE

COMPOSER SETTINGS

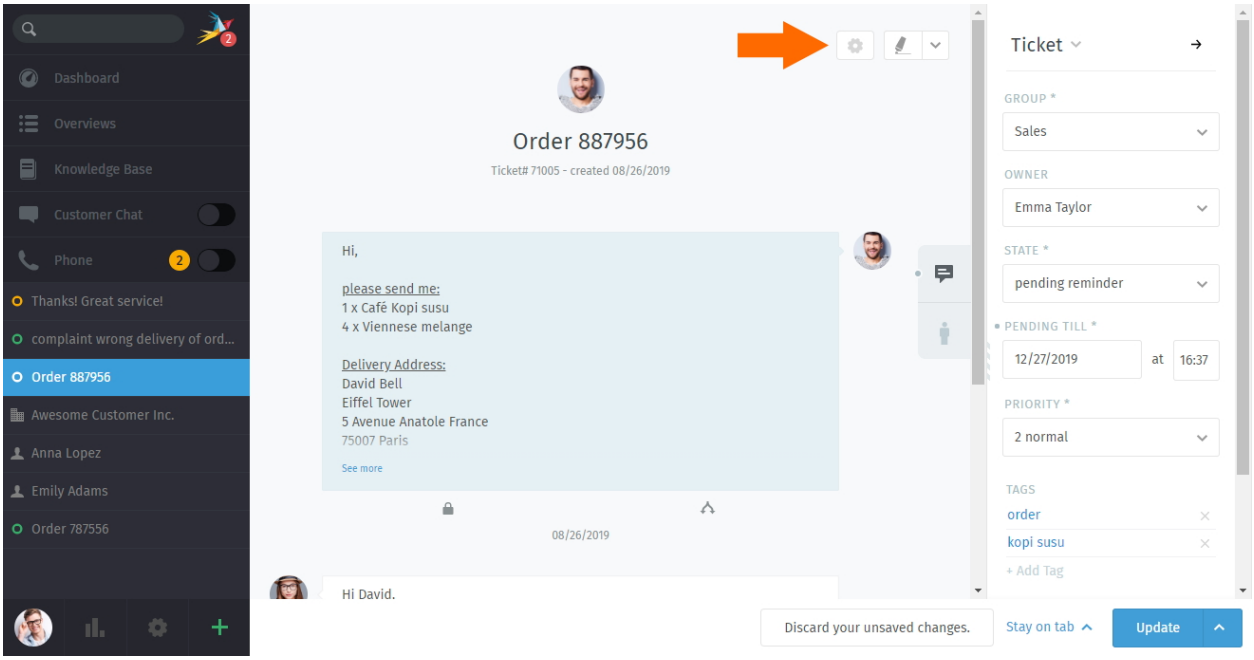
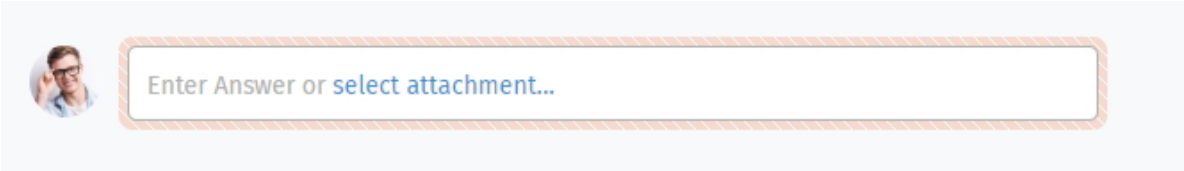


Fig. 1: Use the Composer Settings to change the behavior of the new message editor.

Note: These settings **apply on all tickets and to all users across the entire system**.

Note - default visibility (default: `internal`) This setting decides what the default visbility of note articles is. This affects **only** notes (default article on ticket answering). The visibility of phone- and email article notes is not affected.



Email - subject field (default: `no`) When setting this option to `yes`, Zammad will also display the subject field when answering via email articles. It doesn't matter if you click on `reply` or switch to email article manually.

> **Warning:** Please note that if set to `no`, Zammad will automatically use the tickets title as subject!
>
> The subject can differ between title and mail subject if choosing `yes`.

Email - full quote (default: `no`) Setting this option to `yes` will always add the content of the answered article as quotation below your signature.

> **Note:** This does not affect the "mark and quote" functionality, if you mark a text with this setting enabled, we'll use the marked text as quote instead.

Email - quote header (default: `yes`) If you don't want Zammad to add the date, time and name or the article you're quoting, set this to `no`.

Example: `On Thursday, June 27, 2019, 3:37:11 PM, Jacob Smith wrote:`

Twitter - tweet initials (default: `yes`) When set to yes, this will add `/CM` (first character of first- and lastname) to the bottom of every tweet answer you create. This only affects tickets that come from the Twitter Channel.