

Manual for the Module «odoo_ilm_auto_responder»

EXTENSION TO THE EXISTING OPEN SOURCE ERP-SYSTEM ODOO 16.0

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Introduction

Odoo, available at odoo.com, represents an open-source enterprise resource planning software solution. This document refers to the module titled "odoo_llm_auto_responder," an extension designed for integration with the "helpdesk_mgmt" module within the community edition of Odoo16.

The "helpdesk_mgmt" module, an integral component of the Odoo Helpdesk application, serves to optimize the management of customer support inquiries or tickets within organizations. The "odoo_llm_auto_responder" addon extends the functionalities of the "helpdesk_mgmt"-module. Thanks to it, employees are provided with an AI-generated answer to tickets, which can then be further customized and refined. As a starting point, the LLM needs some context in form of a FAQ for basic questions. For more complicated ones, the adjusted responses by the employees are stored for future reference, facilitating swift and consistent resolution of similar support cases.

This manual advises system administrators how to install the module and advises the regular Odoo user how to use its functionalities. It is assumed that the user has at least basic knowledge of Odoo. The module was developed on behalf of Abilium GmbH (abilium.com) as part of the "Software Engineering Internship" at the University of Bern during spring semester 2024.

Installation

Docker Installation:

- Install Docker on your system.

Repository Cloning:

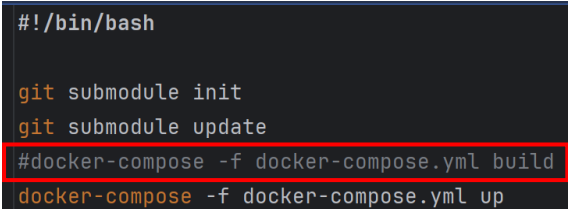
- Clone the repository from the following URL: https://github.com/Abilium-GmbH/odoo_llm_auto_responder

Testbed Setup:

- Navigate to the `odoo_llm_auto_responder/testbed` directory
- Run the script named `prepare-and-run-testbed.sh`

Initial Configuration:

- On the first execution, ensure that the line `docker-compose -f docker-compose.yml build` is not commented out and is executed.
- After the initial setup, comment out this line as illustrated in the provided image below.



```
#!/bin/bash
git submodule init
git submodule update
#docker-compose -f docker-compose.yml build
docker-compose -f docker-compose.yml up
```

- access <http://localhost:8069> and log in using `admin:admin`

Now the Odoo application is started.

1. Browse to the “Apps” module.
2. Search for “Odoo LLM Auto Responder” and click on “install”.
3. The module “Helpdesk Management” will be automatically installed as well.
4. **Note:** Probably the filter “Apps” has to be removed in the search window first before the module can be found. Or it can be searched directly for the module.

Now the module is installed.

Adding first context to LLM (Depends on chosen LLM):

The flaskserver can be accessed over the external port 5001 or the internal port 5000 (if you work inside of docker). To store context into the context database you need to access the URL <http://localhost:5001/store> and pass a json-file that is structured as following: `{"context": "insert your context here"}`. This task can be accomplished via the terminal on the own device or through code.

Here’s an example command to store context through the terminal:

```
curl -X POST -H "Content-Type: application/json" -d '{"context": "Insert context."}'
\http://localhost:5000/store
```

Other commands for LLM:

To check if the LLM is active the following url can be accessed: <http://localhost:5001/>. A json-file should be returned with “api working”, if the server runs properly.

To see what is stored in the database the url <http://localhost:5001/load> can be accessed, which returns the content of the database.

If the database should be reset and its content deleted one can access <http://localhost:5001/reset>, which resets and restores the database.

To send a question to the LLM one can access <http://localhost:5001/data> and pass the question as a json-file like this `{“qId”: “1”, “question”: “Insert your question?”}`. The question-ID is not important, this is just for Odoo to assign the answer of the LLM to the corresponding question in the helpdesk.

Exchanging the LLM:

The LLM used to answer the question can be changed in the `/testbed/flask_server/app.py` file.

```
# Initialize the pipeline once when the server starts for the llm
qa_pipeline = pipeline(
    task="question-answering",
    model="deutsche-telekom/bert-multi-english-german-squad2",
    tokenizer="deutsche-telekom/bert-multi-english-german-squad2"
)
```

This is the pipeline to load the LLM via the transformers library. The path of “deutsche-telekom/bert-multi-english-german-squad2” can be exchanged with any other model on www.huggingface.com. Depending on the model the parameter for the context or the question might need to be adjusted in the `llm_answer()` function. The code can be found on huggingface.

1

Apps Apps

A Administrator

Apps

4 Apps x Search...

Filters Group By Favorites

1-55 / 55

CATEGORIES

All

Sales7

Services4

Accounting2

Inventory4

Manufacturing5


Website5

Marketing7

Human Resources9

Productivity5


Administration2



Odoo LLM Auto Responder

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


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Send documents to sign online

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MODULE INFO




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Helpdesk Management

Helpdesk

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5

Functionality

Overview

This chapter serves to introduce the functionalities of our helpdesk-addon. To understand the functionalities of our Odoo LLM Auto Responder, it is evident to describe some basic features of the Helpdesk Management module as well. Thus, the first chapter commences by delineating the process of ticket creation and the various views accessible within the Helpdesk Management module. Subsequently, our addon's extensions to the helpdesk ticket are illustrated, which include the generation of AI-driven responses, their display, the customization of those AI generated templates, and their eventual transmission to the customer. It is essential to mention that our module was developed for the community edition of Odoo. It wasn't tested by us if it works with the enterprise edition.

Create a Ticket

To access our helpdesk addon, simply navigate to the home menu. A dropdown menu will appear displaying the previously installed helpdesk. Click on the helpdesk button.

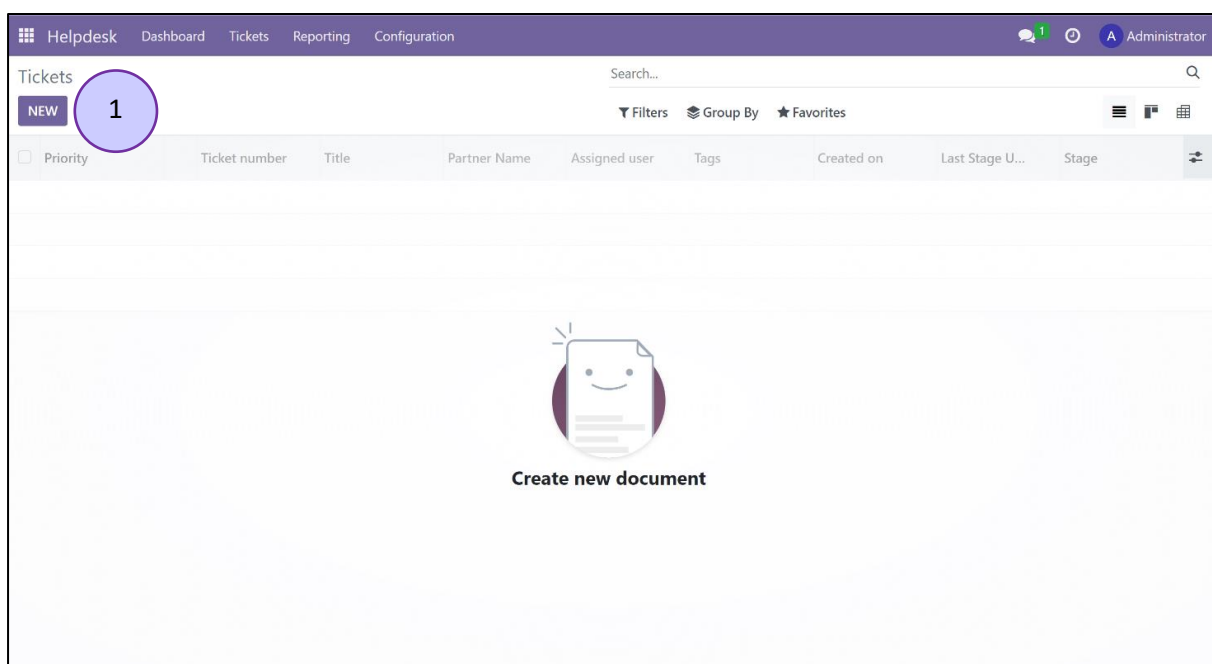
Upon accessing the main menu of the helpdesk, you'll notice a toolbar at the top of the page featuring various options such as "Dashboard", "Tickets", "Reporting", and "Configuration". Click on the "Tickets" button.

To create a new ticket, please follow the following steps:

1. Click on the "NEW" button located at the top left corner.
2. Give the ticket a name, which indicates the problem.
3. Describe your problem in the description.
4. Choose the priority of your problem.

Your ticket is now created.

Note: Of course, it's possible to link an email address with the helpdesk, so tickets are generated automatically.



Ticket-Views

If the steps above were followed, the ticket is now available to see:

1. By clicking on the "Ticket" button located on the Toolbar, you'll be presented with an overview of all created tickets, along with their key details.
2. Additionally, there's the option of using the Kanban View, which offers a distinct perspective of the various stages of the tickets. This view also highlights whether an AI-generated response has been provided.

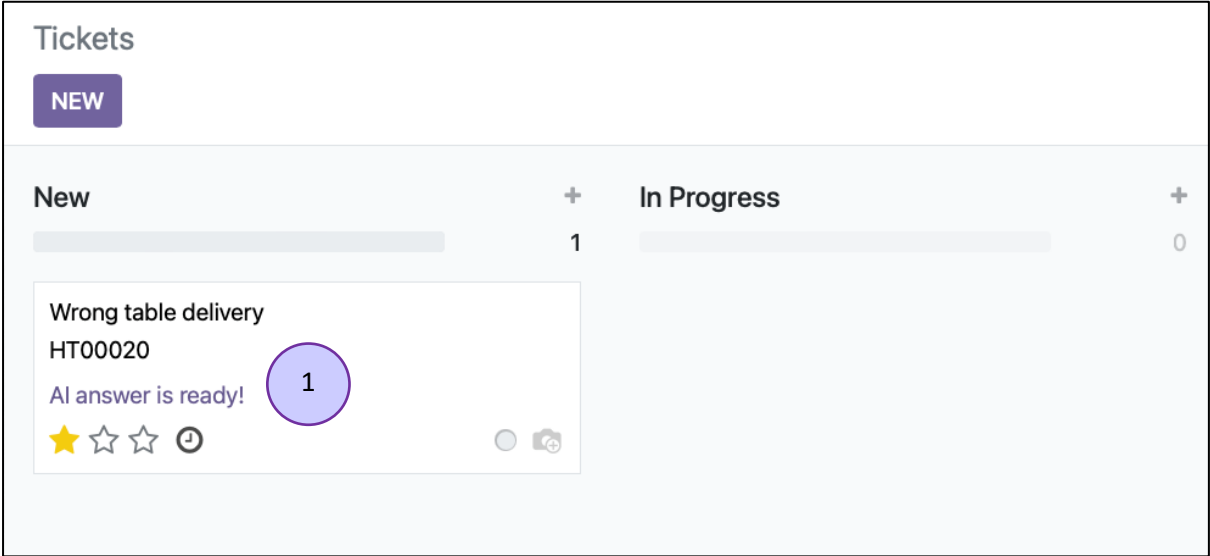
Priority	Ticket number	Title	Partner Name	Assigned user	Tags	Created on	Last Stage Update	Stage
High	HT00004	Wrong table delivery				Today	Today	New

Generate an AI-answer

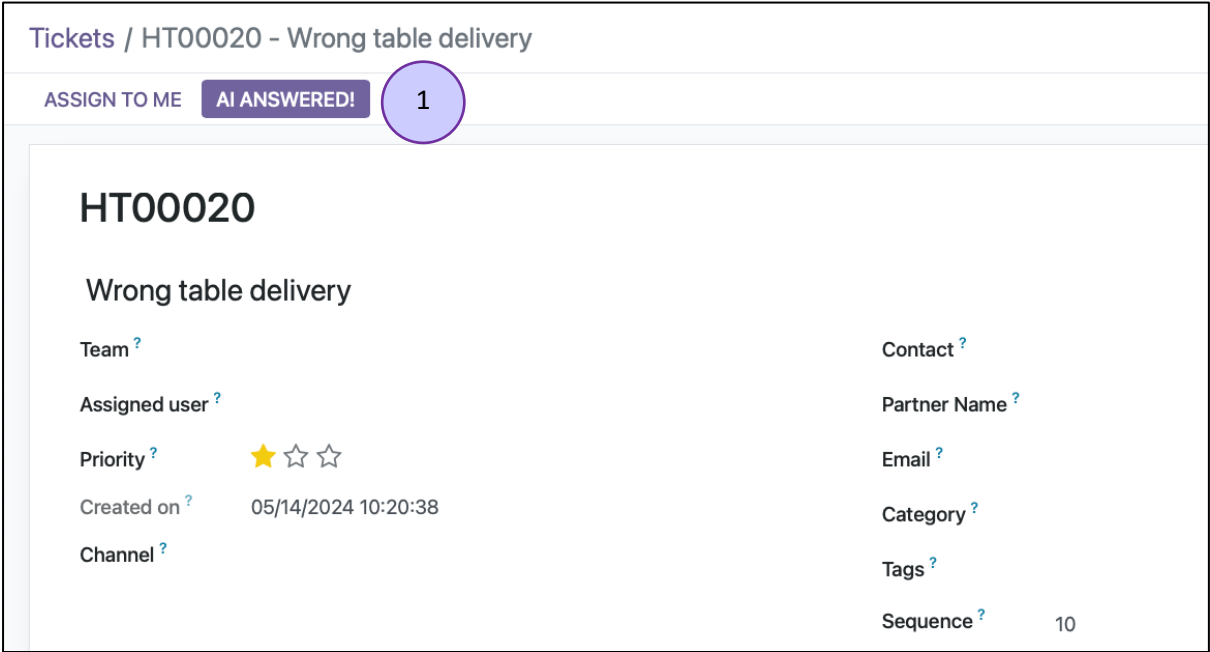
Once a ticket is created, the AI-answer is generated automatically, if the LLM is available.

If an answer is generated and ready, this will be signaled as follows:

Kanban view



Ticket view



If you click "AI Answered! ", you get directly redirected to the answer.

For a manual refresh of the AI-answer, for example if you want an updated answer or the LLM wasn't available at the time the ticket was created, please follow these steps:

1. In ticket view, click on the "AI Answer" Tab
2. Click "Generate Answer"
3. Now you get notified that the answer is processing, and you have to reload the page
4. Once you have done that, you can see the new generated answer via the "AI Answered!"-button

HT00020

Wrong table delivery

Team ?

Assigned user ?

Priority ?

★☆☆

Created on ?05/14/2024 10:20:38

Channel ?

Contact ?

Partner Name ?

Email ?

Category ?

Tags ?

Sequence ?10

Description

Other Information

AI Answer

1

Last Stage Update ?05/14/2024 10:20:38

Assigned Date ?

Closed Date ?

AI Answer ?

GENERATE ANSWER

2

Tickets / HT00020 - Wrong table delivery

ASSIGN TO ME

AI ANSWERED!

4

HT00020

Wrong table delivery

Modify the AI-answer

If the generated answer isn't adequate, you can modify the answer directly in the answer field and save it.

Tickets / HT00020 - Wrong table delivery

ASSIGN TO ME AI ANSWERED!

HT00020

Wrong table delivery

Team?

Assigned user?

Priority? ★☆☆

Created on? 05/14/2024 10:20:38

Channel?

Contact?

Partner Name?

Email?

Category?

Tags?

Sequence? 10

Description

Other Information

AI Answer

Last Stage Update? 05/14/2024 10:20:38

Assigned Date?

Closed Date?

AI Answer?

This is a generated answer.

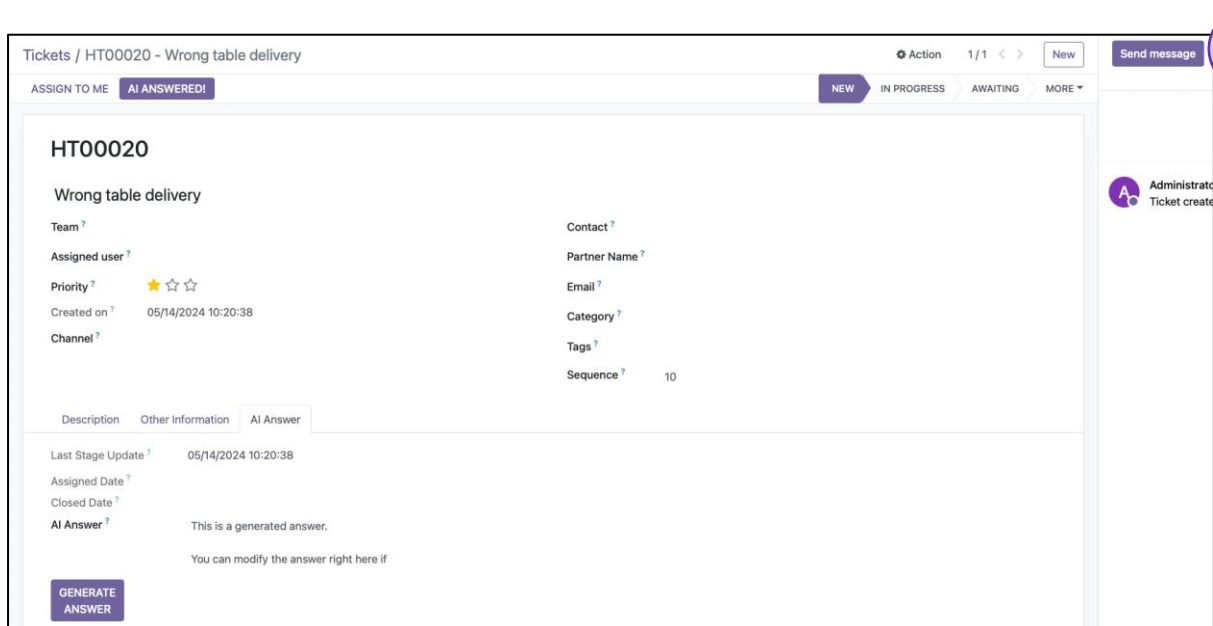
You can modify the answer right here if

GENERATE ANSWER

Send an Answer with the AI-Template

Once the answer is generated and perhaps modified, you can send it directly via helpdesk:

1. Click on "Send Message". **Note:** If you work on a smaller screen, this button may be at the bottom of the page.
2. Click the two arrows to extend the message window
3. Now you can choose the "AI Answer" template and the answer appears in the message.



Tickets / HT000020 - Wrong table delivery

ASSIGN TO ME AI ANSWERED!

NEW IN PROGRESS AWAITING MORE

HT000020

Wrong table delivery

Team ?

Assigned user ?

Priority ? ★☆☆

Created on ? 05/14/2024 10:20:38

Channel ?

Contact ?

Partner Name ?

Email ?

Category ?

Tags ?

Sequence ? 10

Description Other Information AI Answer

Last Stage Update ? 05/14/2024 10:20:38

Assigned Date ?

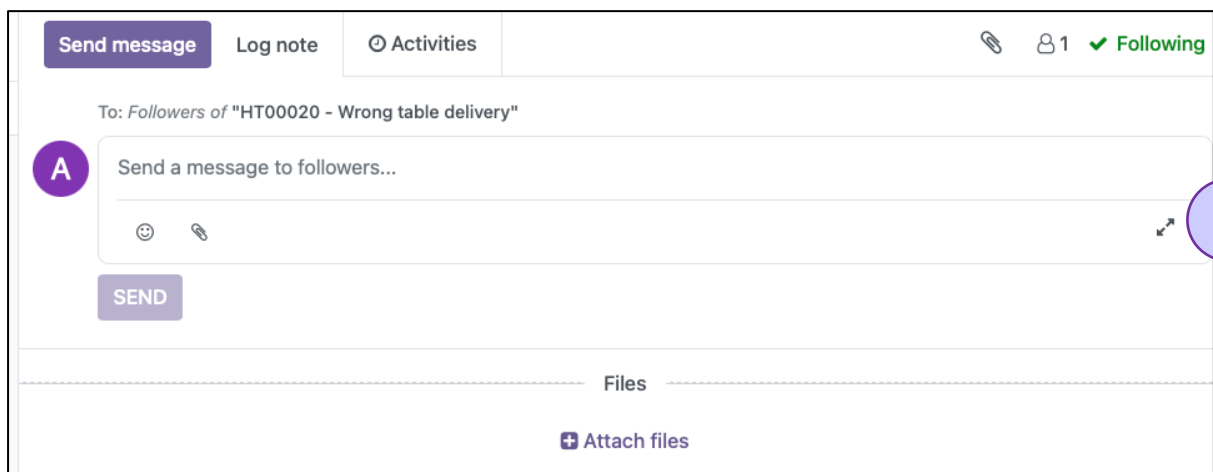
Closed Date ?

AI Answer ? This is a generated answer.
You can modify the answer right here if

GENERATE ANSWER

Send message

1



Send message Log note Activities

To: Followers of "HT000020 - Wrong table delivery"

Send a message to followers...

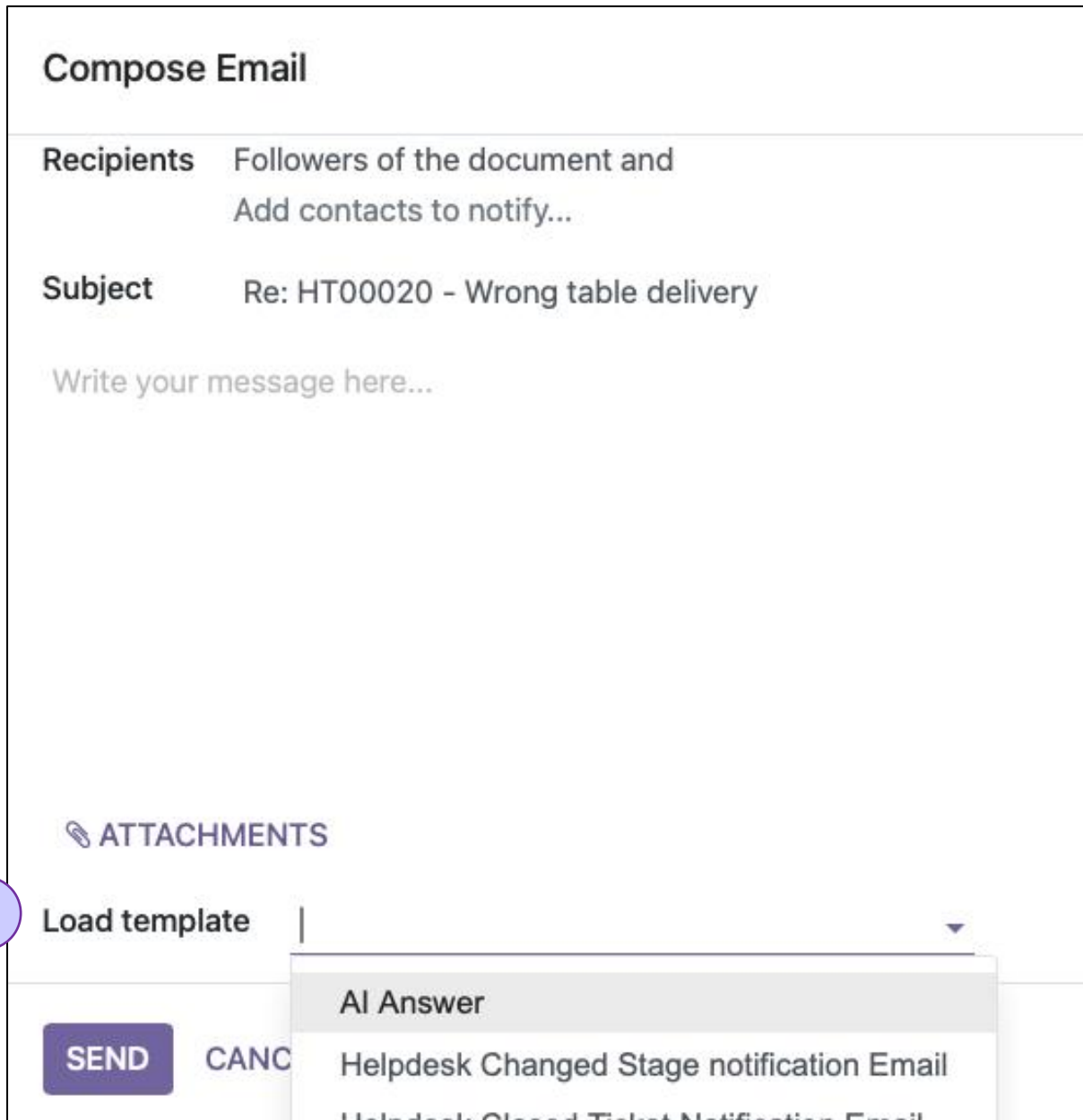
SEND

Files

+ Attach files

2

Note: Only messages sent by this expanded chatter will be stored as context.




Compose Email

Recipients Followers of the document and
Add contacts to notify...

Subject Re: HT00020 - Wrong table delivery

Write your message here...

 **ATTACHMENTS**

3 Load template |

SEND **CANCEL**

- AI Answer
- Helpdesk Changed Stage notification Email
- Helpdesk Closed Ticket Notification Email

Note: You can modify the "AI Answer" template for your needs. You must do that directly in the XML file. You find this file in `odoo_llm_auto_responder > addons > odoo_llm_auto_responder > data > llm_auto_responder_data.xml`

Here you can edit the template in the "body_html" field.