Tiki Tracker entity relationship diagram (Tiki ERD)

Introduction

Tiki CMS is a powerful tool that contains multiple functionalities, among which it allows the creation of a full stack application without programming skills.

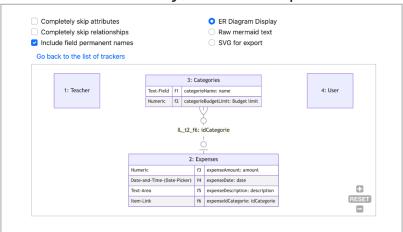
ou know that often a full stack application is composed of the front-end and the back-end. The front-end is everything the user sees, and the back-end is the storage (the database) and a language that manages this storage logic, in a nutshell.

In Tiki CMS, we also have trackers that can be considered as the database, and everything you can do with a normal database, well, you can also do with the trackers in Tiki CMS. We can also create linked tables (Entity Relationship).

You can read more about the Tiki CMS trackers here Trackers

Before creating an application that requires a database, we first start by drawing the different tables to see how the different data storage tables will be linked to each other. Sometimes, to better understand an already existing application, we have to resort to this drawing or the database to see how the tables are linked to each other. There are several types of diagrams that allow modeling an application, but among them we have the entity-relationship diagram (ERD), which is what interests us here.

We have added a feature that allows us to directly show how the trackers are linked to each other. This was done thanks to the Mermaid library, which is open source (Mermaid).



Click to expand

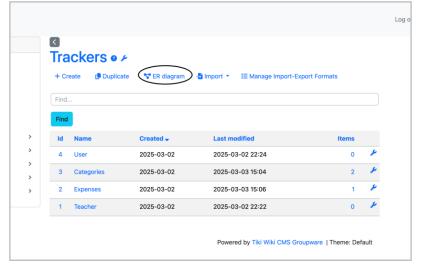
How to use it

We the possibility to see :

- All the trackers with his link
- Or a specific tracker with is linked trackers

See all the trackers with his link

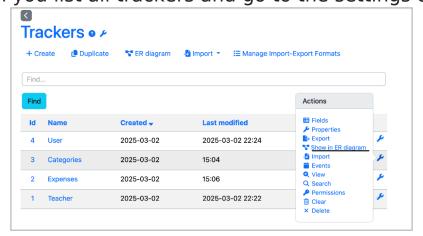
Go to the main menu > Tracker > Lists trackers. Then, above you will see a button labeled ER diagram . Once you click on this button, you will see your different trackers in an entity relationship diagram.



Click to expand

View specific tracker in ER Diagram

If you want to see a specific tracker in the ER diagram and view all its relationships, you can click on the "Show in ER diagram" button when you list all trackers and go to the settings of the specific tracker.

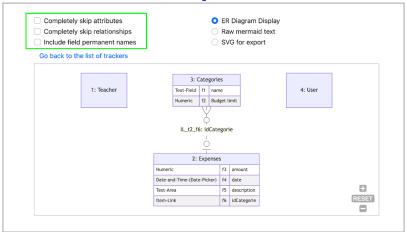


Click to expand

Alternatively, when you open a specific tracker, click on the dropdown button and select the "Show in ER diagram" button .

Options

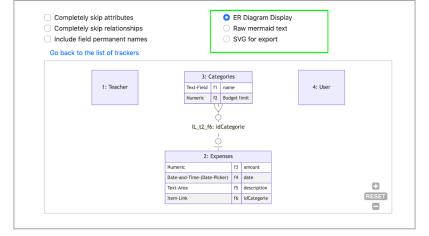
Left options



Click to expand

- If the "Completely skip attribute" button is checked, you will see your diagram without the different attributes (or fields).
- If the "Completely skip relationships" button is checked, you will see your diagram without the relationships between tables.
- If the "Include field permanent names" button is checked, you will see your diagram but the attributes will have thei permanent names instead of their regular names.

Right buttons



Click to expand

This section consists of 3 buttons.

- The first button shows the default view, where we directly see the diagram.

If we check the second button, we will see our diagram in Mermaid format. The text shown in Mermaid format can be ransferred to other tools that support Mermaid format, and your diagram will be displayed there as well. For example you can transfer it to this site mermaid live editor, and you will see your diagram in their tools. This button allows the transfer of ER diagrams without much effort. This format can be exported; just click on the export button, and the file will be downloaded to your device.

- The third button allows you to export your diagram in SVG format. This format can be exported; just click on the export button, and a file will be downloaded to your computer.

Coming soon le plugin mermaid qui permettra de voir le diagram dans differents pages de tiki.

Trouble shoot

```
    ER Diagram Display

    Completely skip attributes

    Raw mermaid text

    Completely skip relationships

    Include field permanent names

    SVG for export

  Go back to the list of trackers
Mermaid schema export
Teacher_1["1: Teacher"] {
Expenses_2["2: Expenses"] {
   Numeric f3 "amount"
    Date-and-Time-(Date-Picker) f4 "date"
    Text-Area f5 "description"
   Item-Link f6 "idCategorie"
Categories_3["3: Categories"] {
    Text-Field f1 "name"
    Numeric f2 "Budget limit"
User_4["4: User"] {
Categories_3 }o..o| Expenses_2 : "IL_t2_f6: idCategorie"
```

Click to expand

Sometimes, when you want to start using this feature in Tiki CMS, you might find yourself not seeing the diagram but getting a raw format for every different view.

This happens because your server does not yet support the mjs file.

Example: Assuming you are using MAMP, in that case, you must find the httpd.conf file and add a line to make your server understand the mjs file.

Go to MAMP directory > conf > apache > httpd.conf file and add this line: AddType application/javascript .mjs