How to create and update meter readings in Fracttal HUB?

help.fracttal.com/hc/en-us/articles/37555428587917-How-to-create-and-update-meter-readings-in-Fracttal-HUB

With the automation option in **Fracttal Hub**, it is possible to efficiently manage the creation and updating of meters without manual intervention, especially in high data volume contexts. This functionality allows users to streamline operational processes and minimize human errors in handling meter readings.

Below, you will find a step-by-step guide on how to set up this functionality within the Fracttal Hub platform.

Step 1: Access the Google Cloud Console

Log in to Google Cloud Console.

- Go to the **API and Services > Credentials** section.
- Click on **Create Credentials > Service Account**.
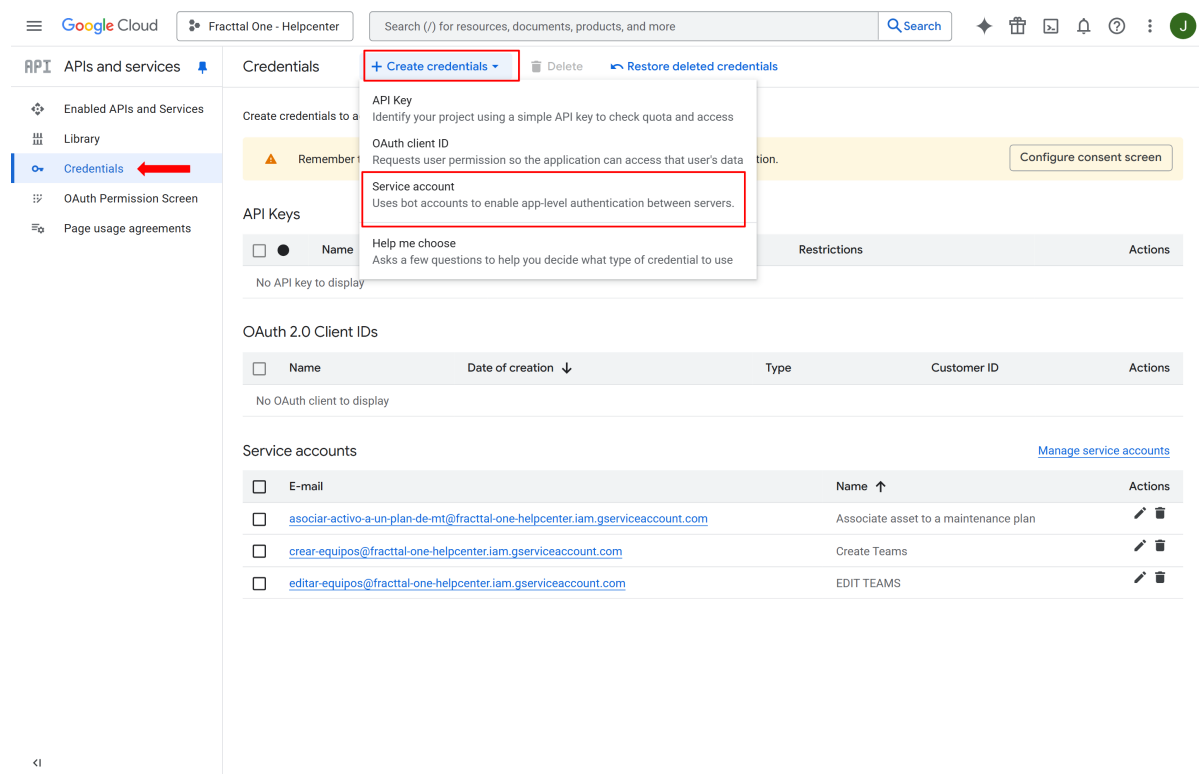
- Name the service account as "create_meters" and follow the process until completion.

Step 2: Generate the JSON key

1. Once the service account is created, select it from the list.

2. Go to the **Keys** section. Click on **Add Key** > **Create New Key**.
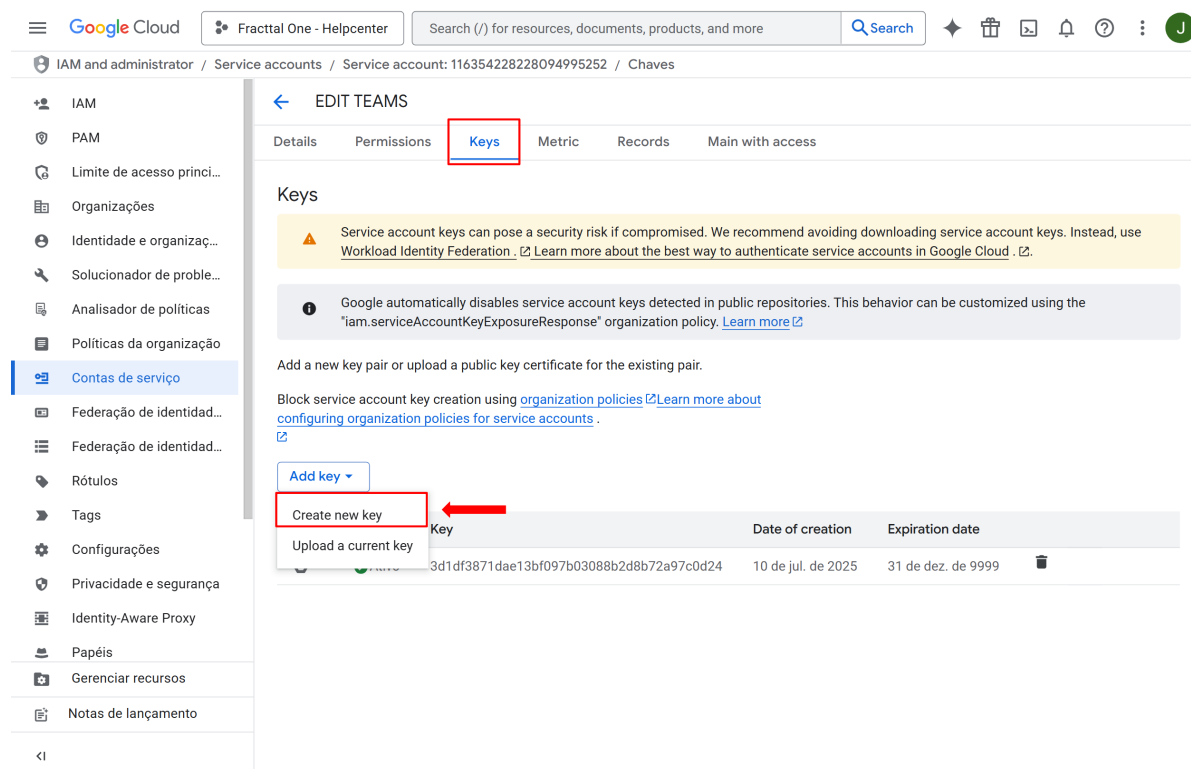

3. Select the **JSON** format.
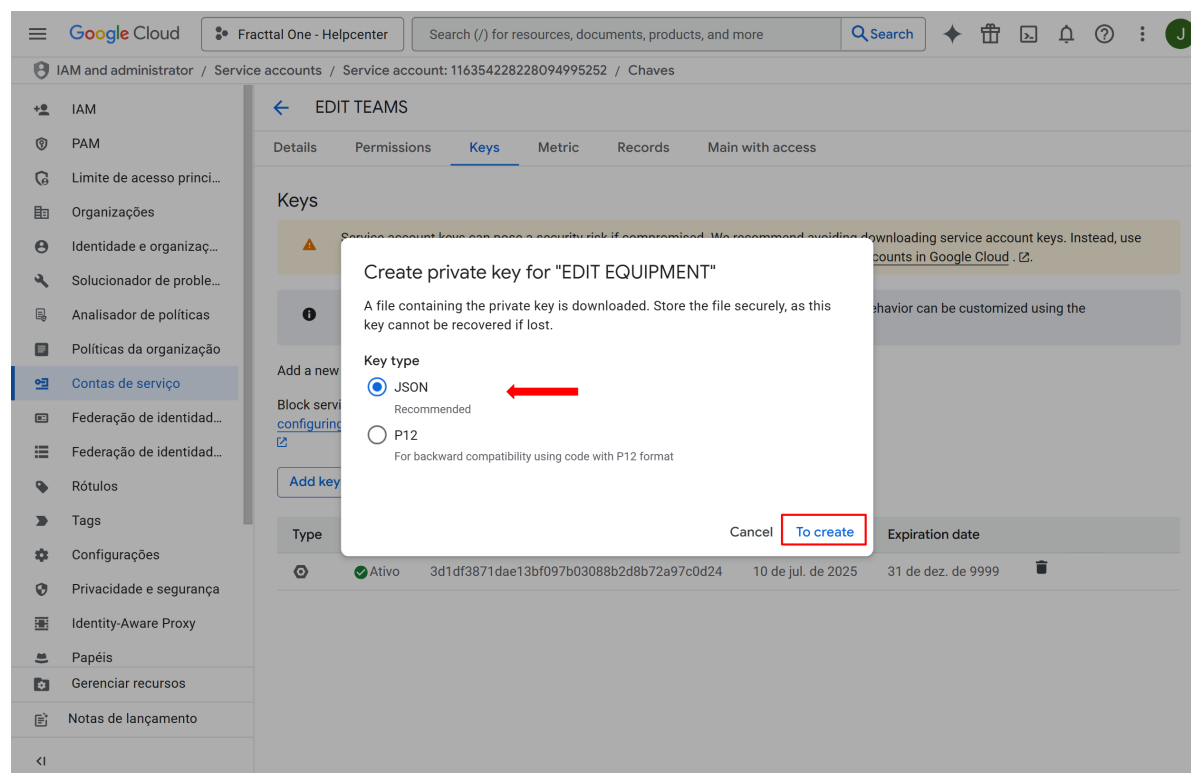
4. Save the generated file in a secure location; this file will be necessary to configure the integration in Fracttal Hub.

Step 3: Prepare the spreadsheet (Google Sheets)

Now, we will prepare the spreadsheet that will serve as the data source for the creation of meters.

description	item_code	unit_code	is_counter
Electric Transformer	ABC123-HC-FC	KM	TRUE

1. Create a new spreadsheet in Google Sheets.
2. Give it a descriptive name, such as CREATE METER.
3. In the first row, define the column headers. These must match the parameters required by the Fracttal API. For this example, we will use the following mandatory fields and one optional:
   - **Column A:** description (Description of the meter, e.g.: "KM Meter").
   - **Column B:** item_code (Code of the asset to which the meter will be associated, e.g.: "HUB-004").
   - **Column C:** unit_code (Code of the meter's unit, e.g.: "KM". This code must exist previously in Settings > Auxiliary Catalogs > Unit).
   - **Column D:** is_counter (Optional, but recommended. Indicates if the meter is a counter. Write TRUE if it is, or FALSE if not).
4. Fill the rows with the information of the meters you wish to create.
5. **Share the spreadsheet:** This is a crucial step.
   - Copy the email of the service account you created in Step 1 (you will find it inside the .json file in the client_email field).
   - Click the **Share** button on your spreadsheet.
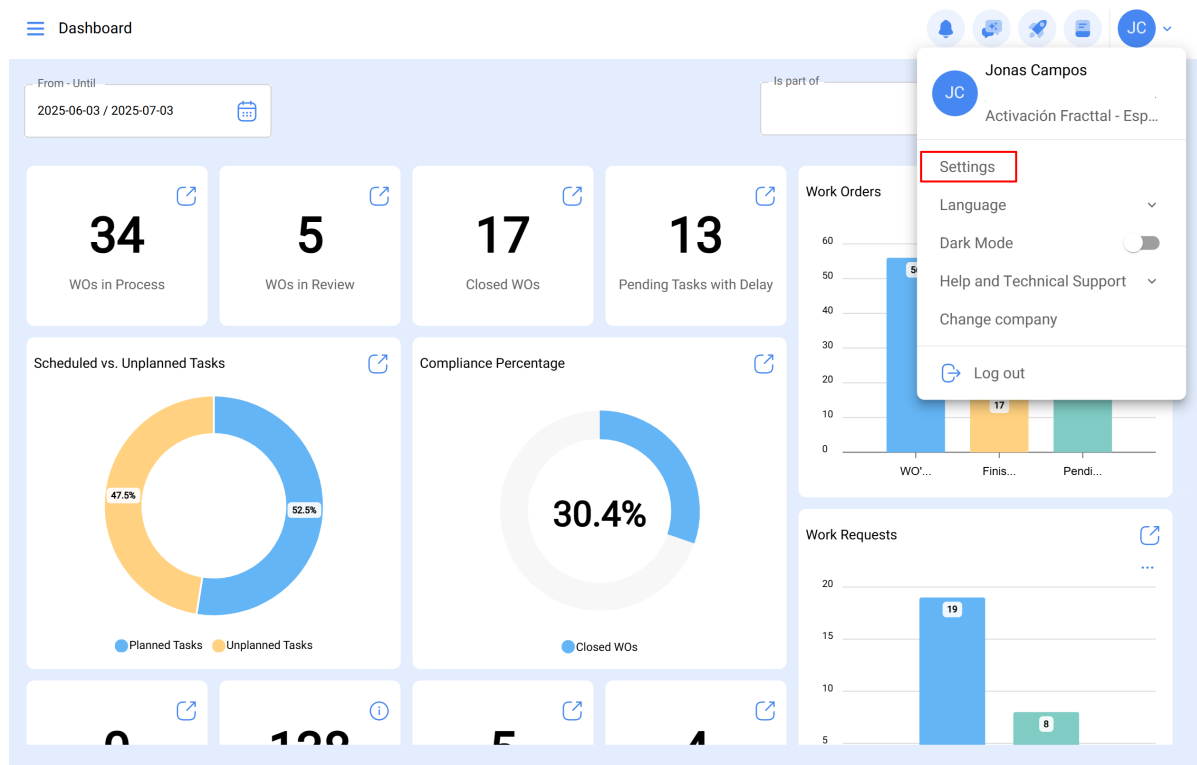   - Paste the email of the service account and assign it **Editor** permissions.
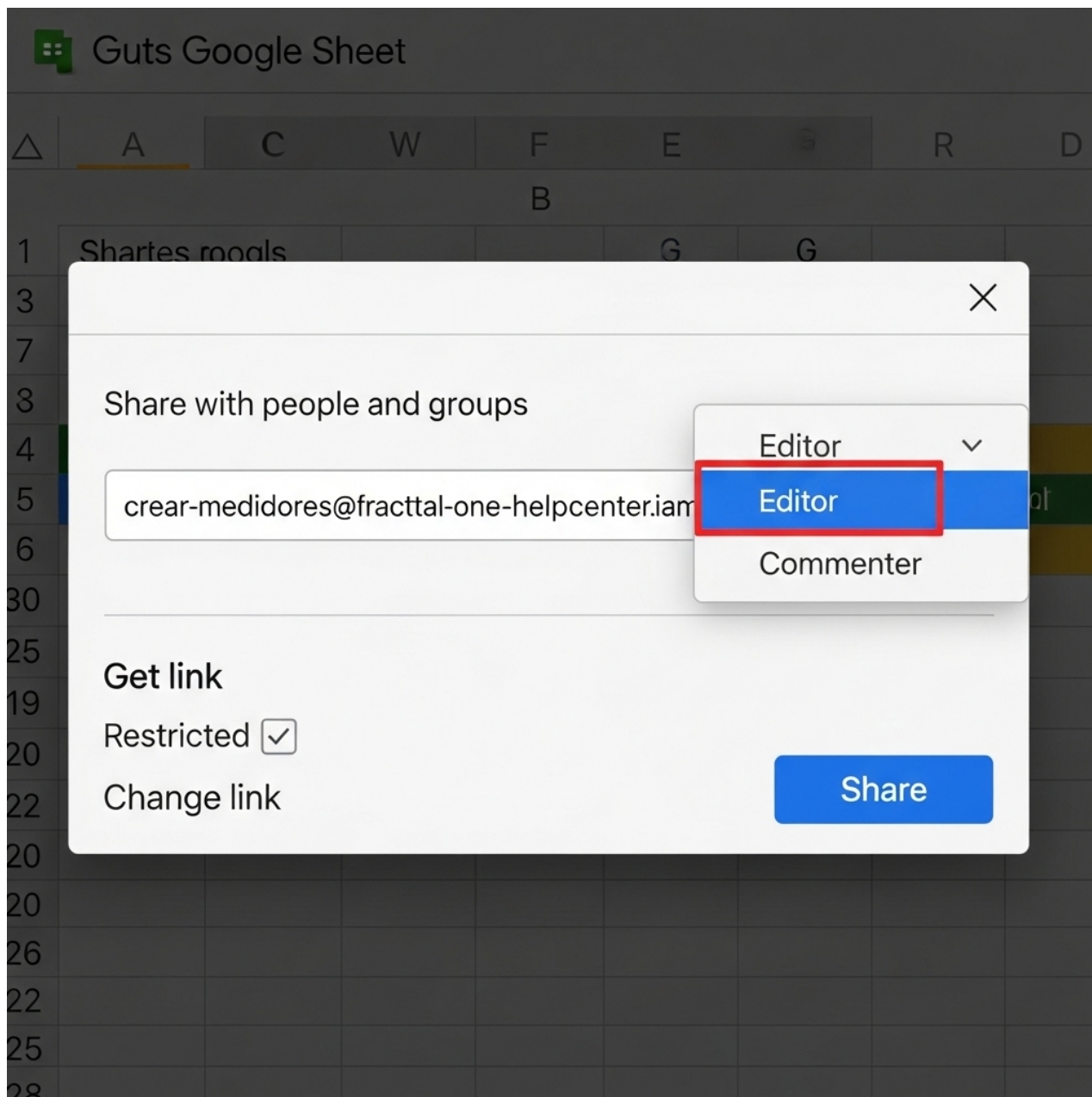
Click on **Send**.

Step 4: Create the connection in Fracttal One

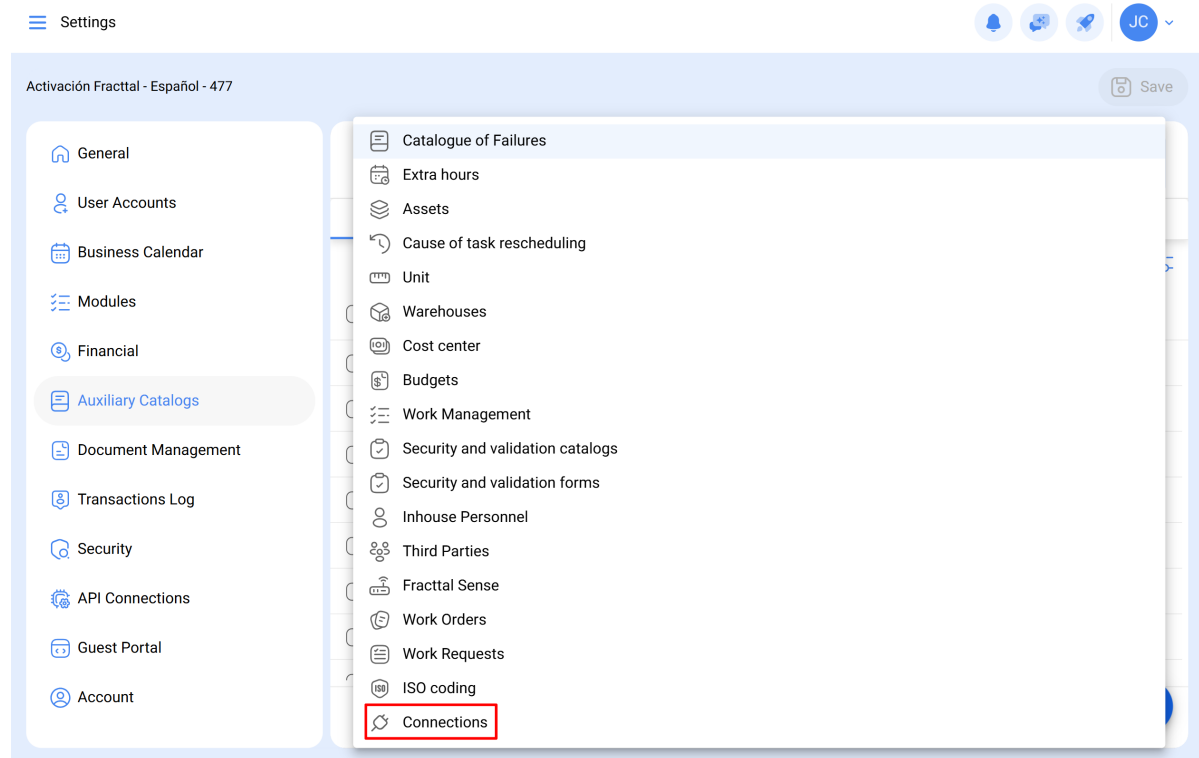Now we will configure the connection within Fracttal so that it can use the service account credentials.

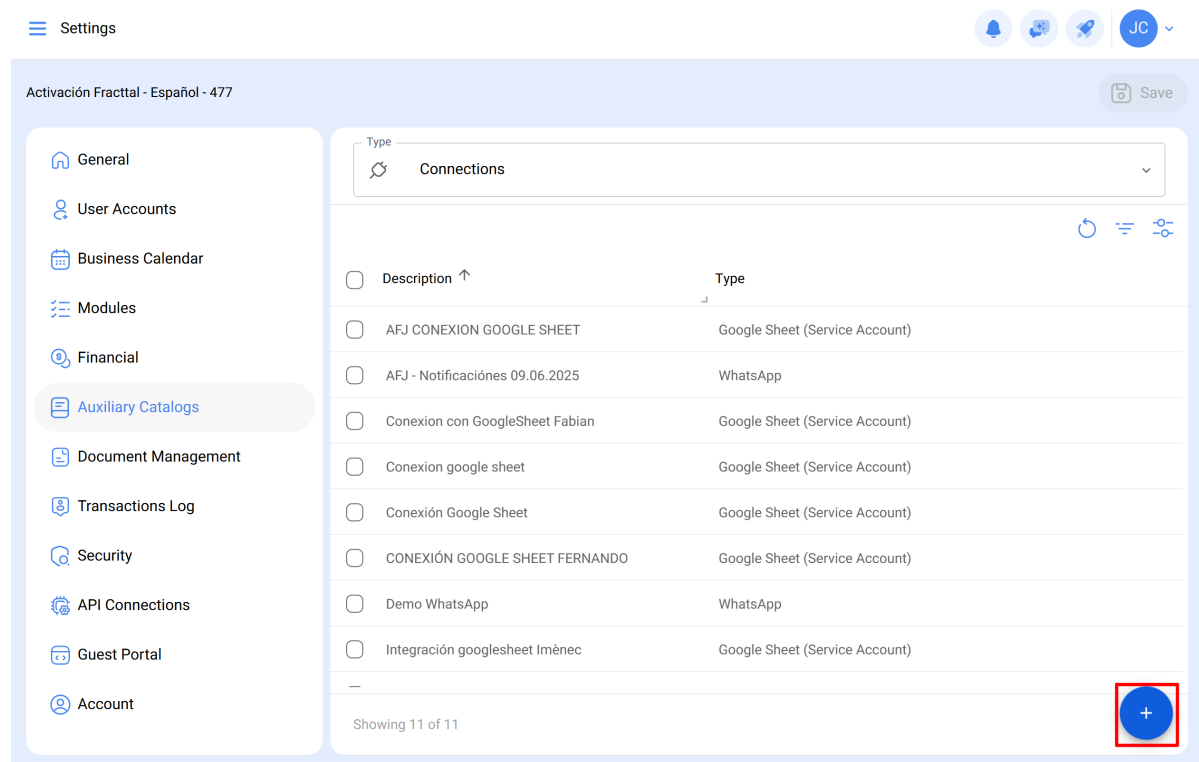1. In Fracttal, navigate to **Settings > Auxiliary Catalogs > Connections**.

2. Click on the **+** icon to add a new connection.

3. Fill in the following fields:

- **Type**: Select **Google Sheet (Service Account)**.

- **Description**: Assign a name to the connection:

4. Open the downloaded `.json` file and copy/paste the content of the following fields into their respective places in the Fracttal form:

- `private_key`

- `client_email`

- `client_id`

- `client_x509_cert_url`

5. Click the ✓ icon to save and then click **Save**.

Step 5: Configure the flow in Fracttal Hub

With the connection ready, the last step is to create the automation flow.

1. Navigate to the **Fracttal Hub** module.

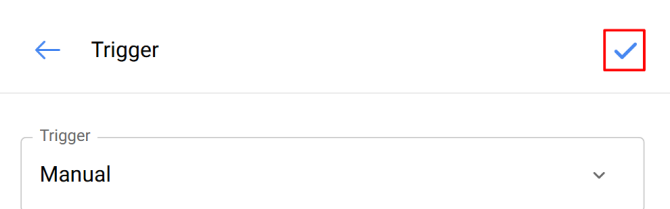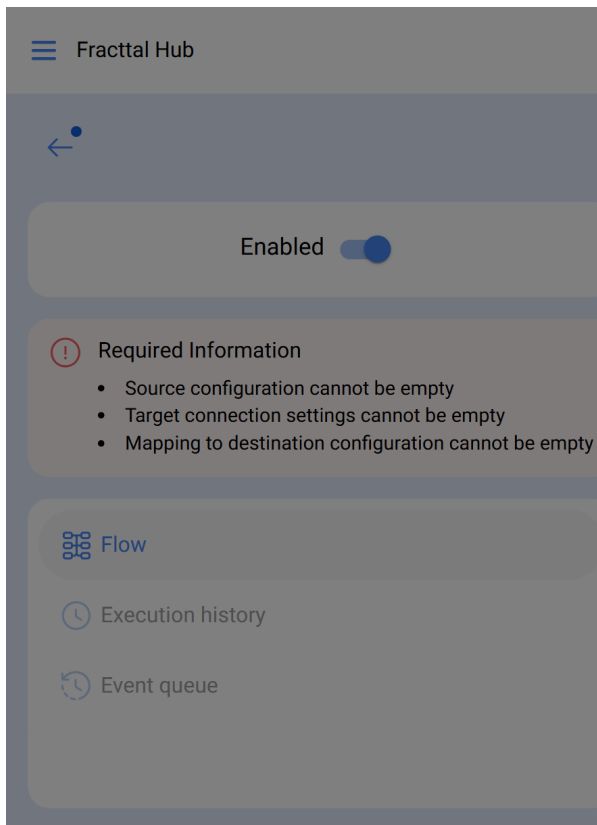2. Click the **+** icon to create a new flow.
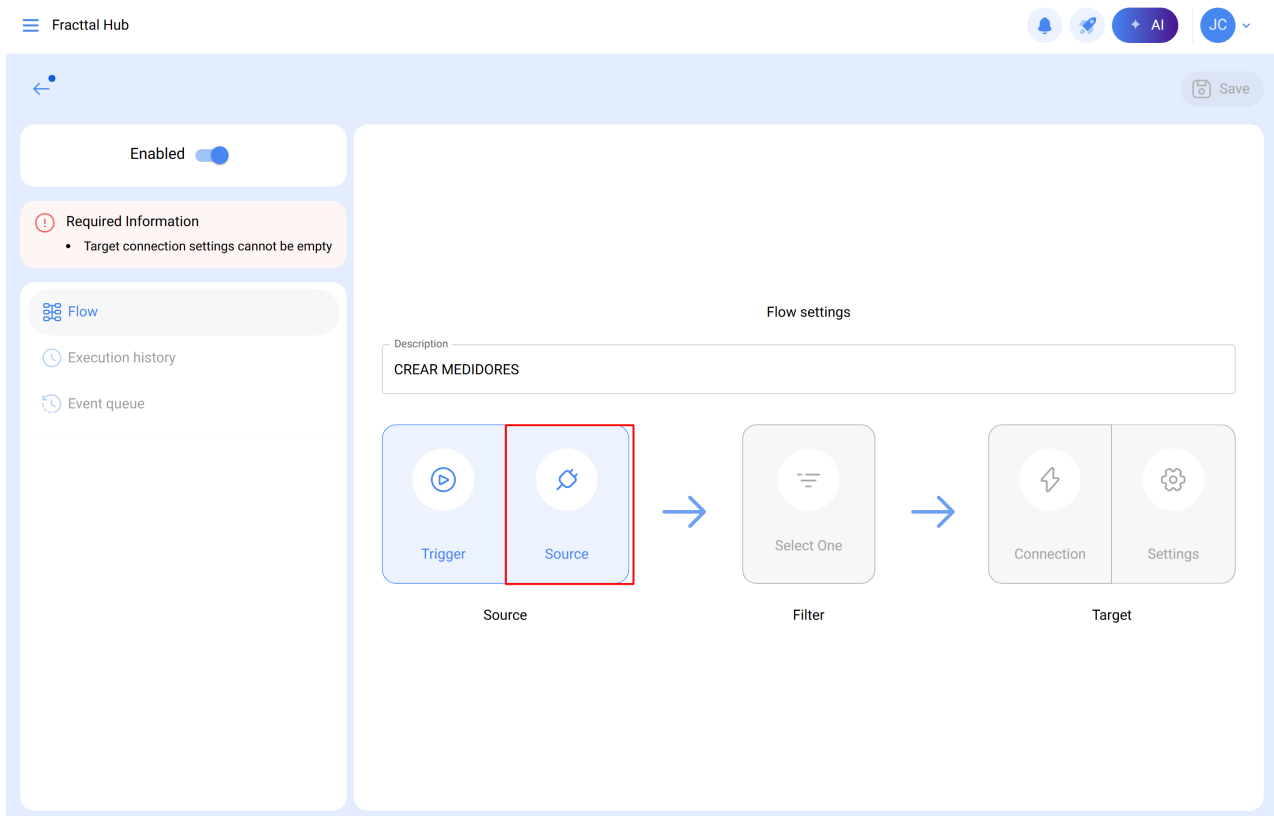

3. Add a **Description** for the flow:

Trigger Configuration:

Click on **Trigger** and select the type **Manual**. This allows the flow to be executed whenever desired.

Source Configuration:

- Click on **Source**.

- **Module**: Select `GoogleSheet`.

- **Connection**: Select the connection created in the previous step.

- **Action**: Select `Read`.

- **spreadsheet_id**: Copy the ID of your spreadsheet (you can find it in the URL, between `/d/` and `/edit/`).

- **sheet**: Write `0` to read the first tab.

- **Fields**: Add the names of the columns:

Destination Configuration:
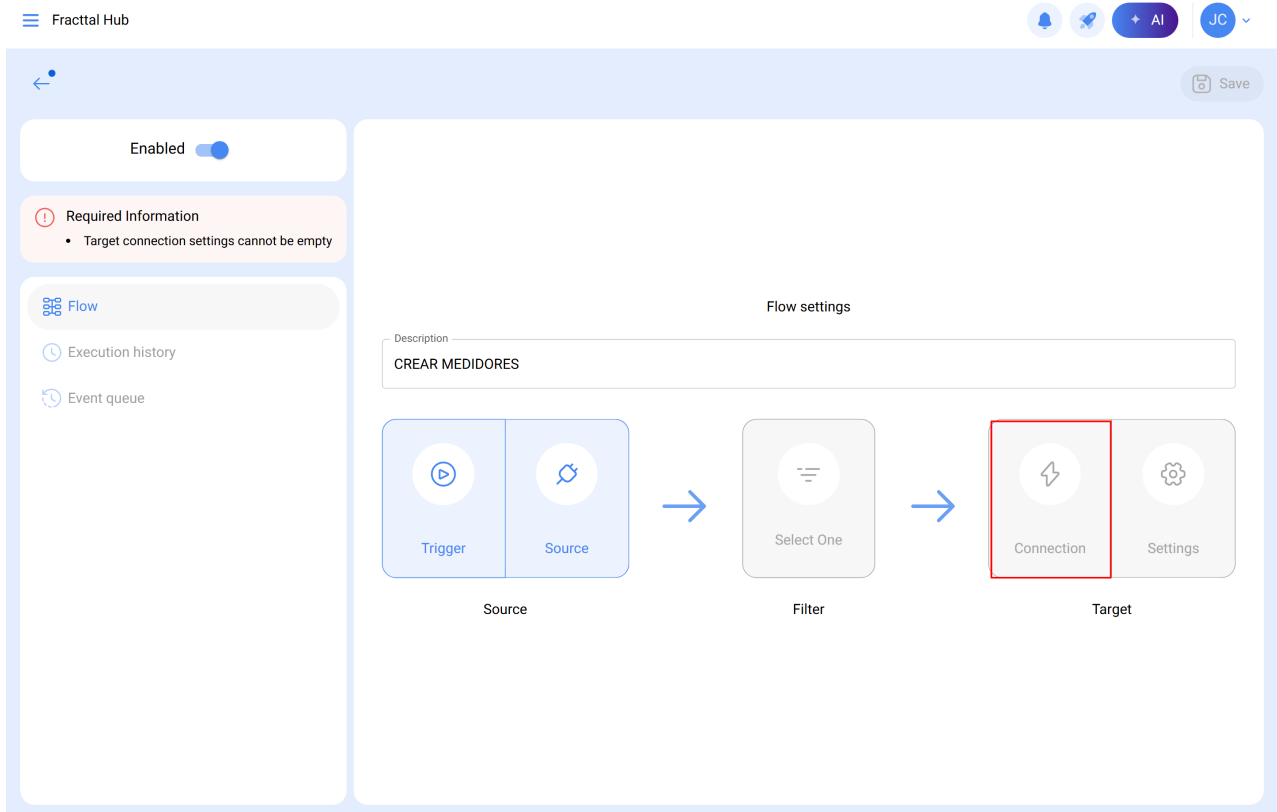
- Click on **Connection** in the destination section.

- **Module**: Select `Fracttal`.

- **Connection**: Choose `FRACTTAL HUB`.

- **Action**: Select `Create Meters`.
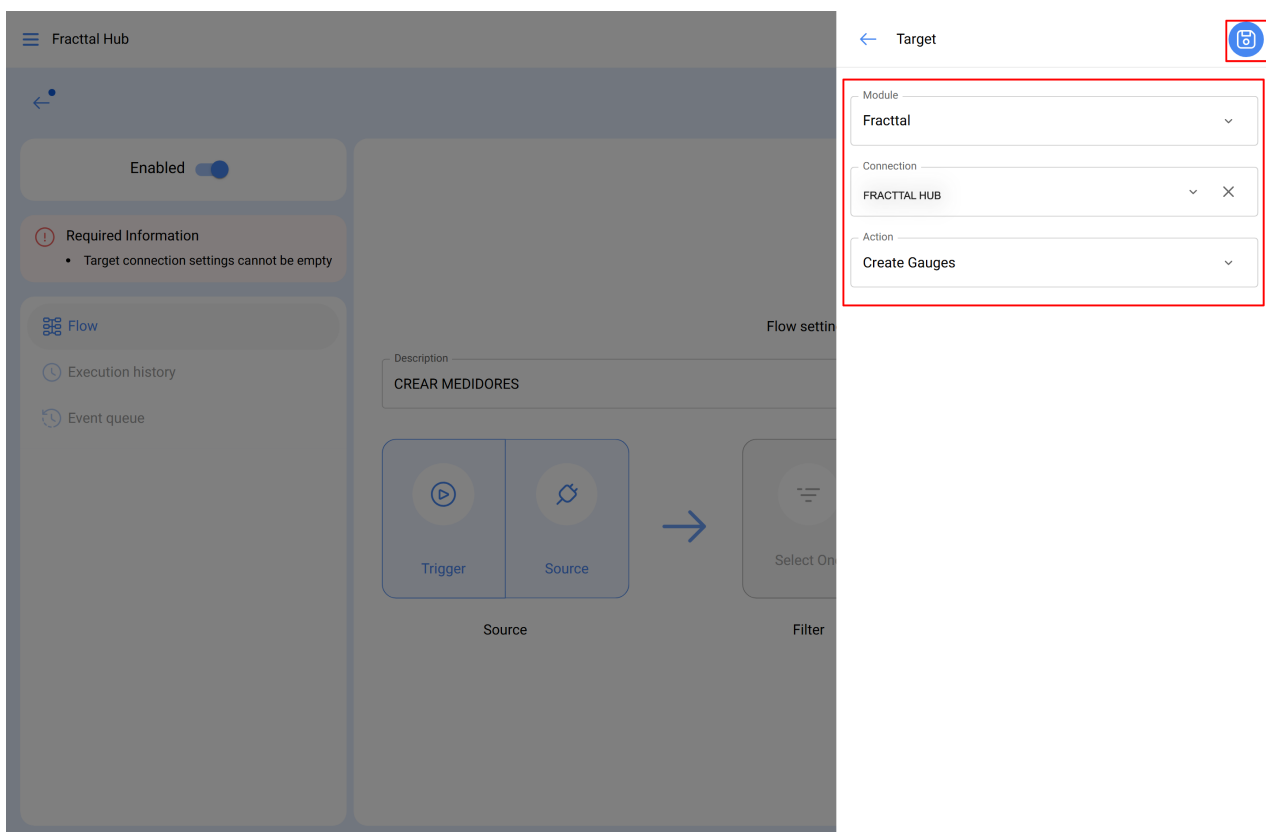
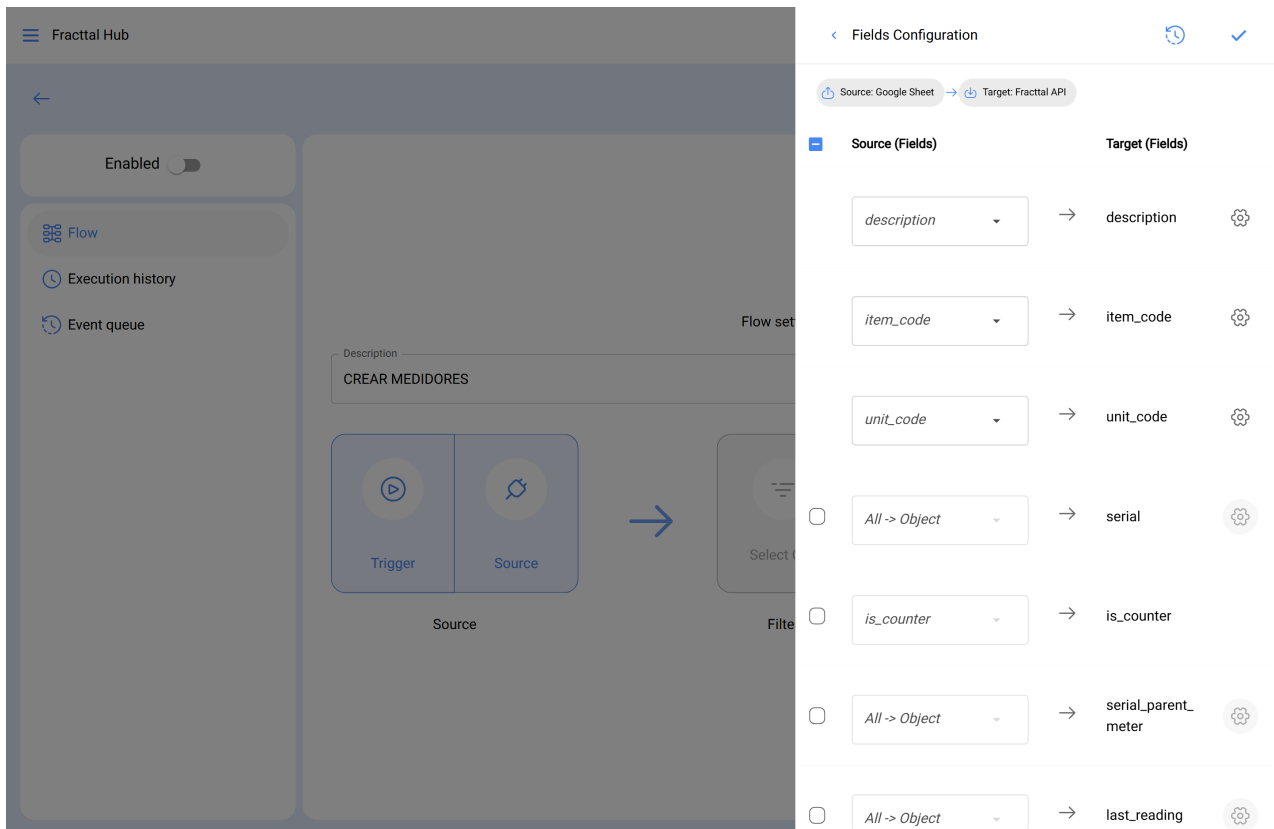**Field Settings (mapping):**

- Click on Settings in the destination section.

- Map the fields from the sheet (Source) with those of the system (Destination), ensuring they match:

description ← description
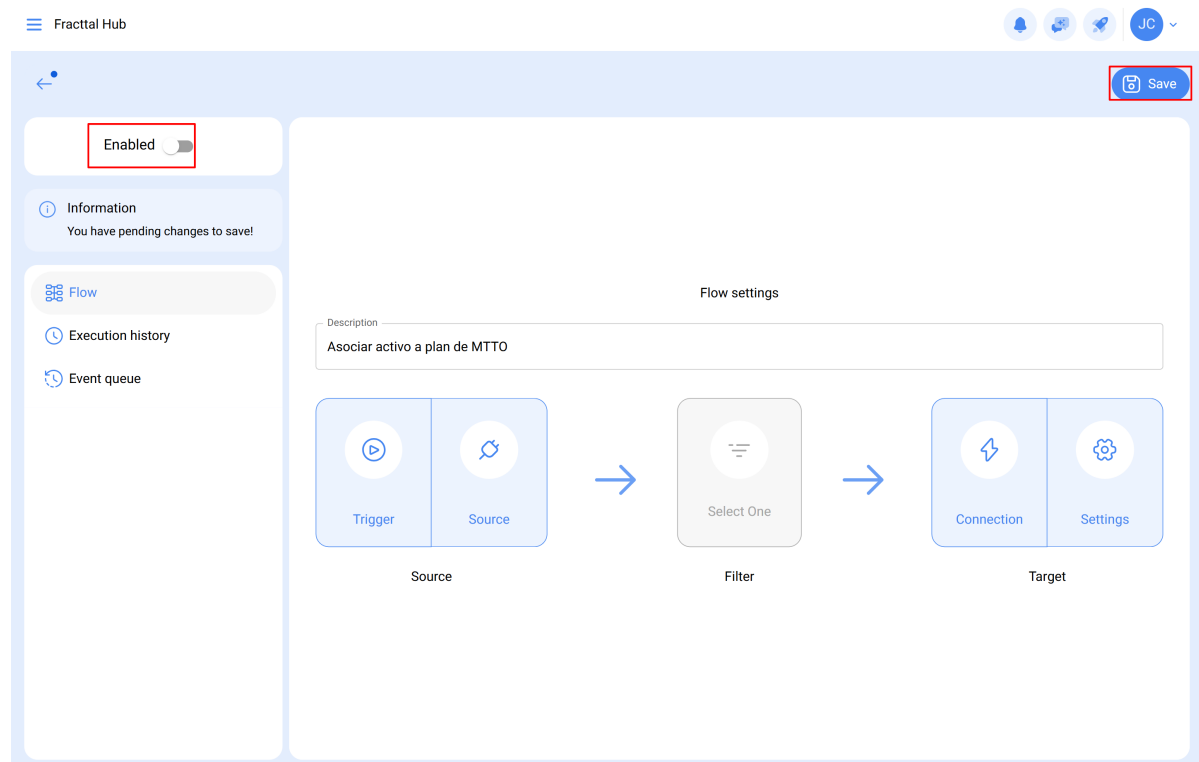
item_code ← item_code

unit code ← unit_code

is_counter ← is_counter

Click on **Save** to save the flow configuration.

Step 7: Run and verify the flow

1. Turn on the **Enabled** switch.

2. Click again on **Save**.

3. Click the **Execute** button to start the process.

You can monitor the progress in the **Event Queue** and **Execution History** tabs. A successful process will show "Process Completed" and mark the Extraction, Transformation, and Loading stages as complete.

Related articles

[How to create a new meter?](#)