

# Como criar medidores no Fractal HUB?

[help.fractal.com/hc/pt-br/articles/37555428587917-Como-criar-medidores-no-Fractal-HUB](https://help.fractal.com/hc/pt-br/articles/37555428587917-Como-criar-medidores-no-Fractal-HUB)

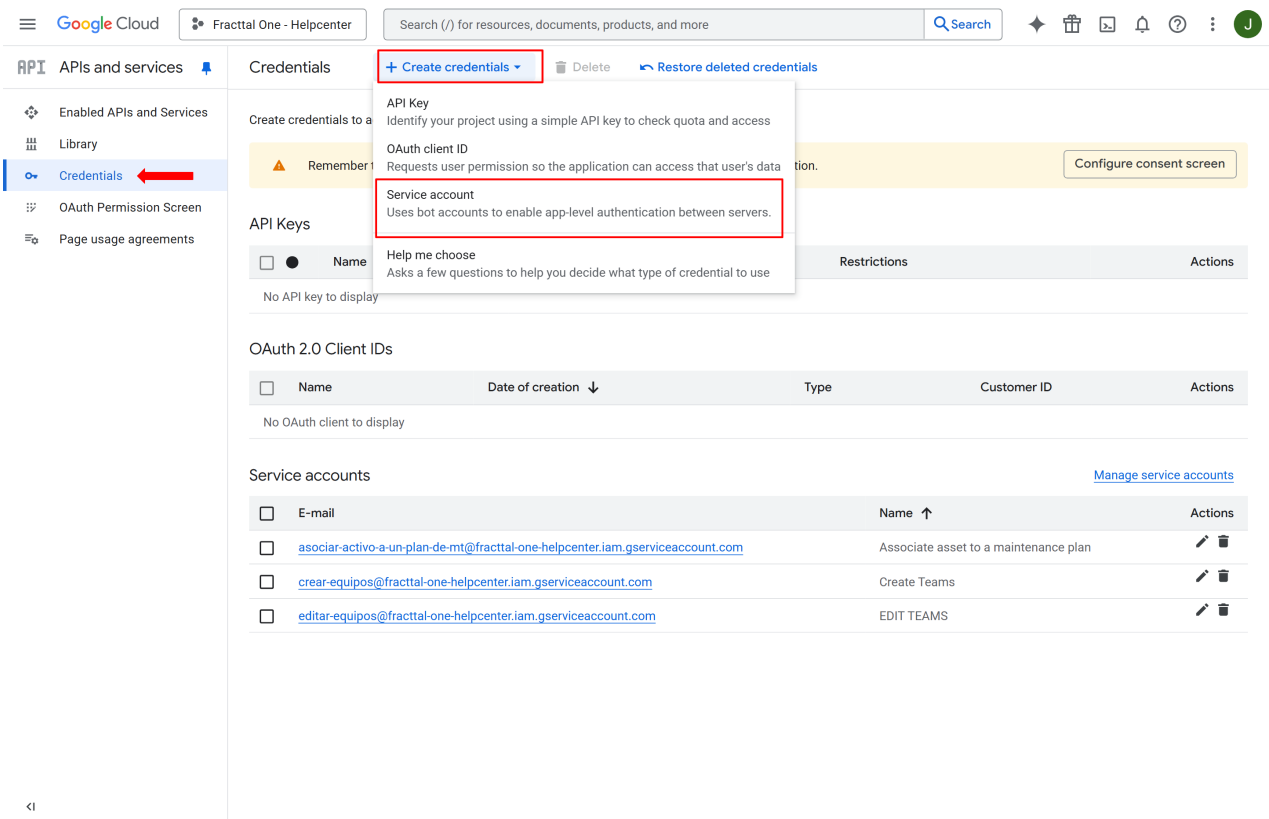
Com a opção de automação no **Fractal Hub**, é possível gerenciar a criação de medidores de forma eficiente e sem intervenção manual, especialmente em contextos de alto volume de dados. Essa funcionalidade permite aos usuários agilizar processos operacionais e minimizar erros humanos no manuseio de leituras de medidores.

A seguir, você encontrará um guia passo a passo sobre como configurar essa funcionalidade dentro da plataforma Fractal Hub.

## Passo 1: Acesse o Console do Google Cloud

Acesse o Google Cloud Console.

- Vá para a seção de **API e serviços > Credenciais**.
- Clique em **Criar credenciais > Conta de serviço**.



- Nomeie a conta de serviço como "criar\_medidores" e siga o processo até finalizar.

Google Cloud Fractal One - Helpcenter Search (/) for resources, documents, products, and more

IAM and administrator / Service accounts / Create service account

← Create service account

1 Create service account

Service account name

Display name for this service account

Service Account ID \*

Email address: <id>@fractal-one-helpcenter.iam.gserviceaccount.com

Service Account Description

Describe how the service account will be used

Create and continue

2 Permissions(optional)

3 Main with access(optional)

Conclude Cancel

## Passo 2: Gere a chave JSON

1. Uma vez criada a conta de serviço, selecione-a na lista.

Google Cloud Fractal One - Helpcenter

API APIs e serviços

Credentials + Create credentials Delete

APIs e serviços ativados

Biblioteca

Credenciais

Tela de permissão OAuth

Contratos de uso de página

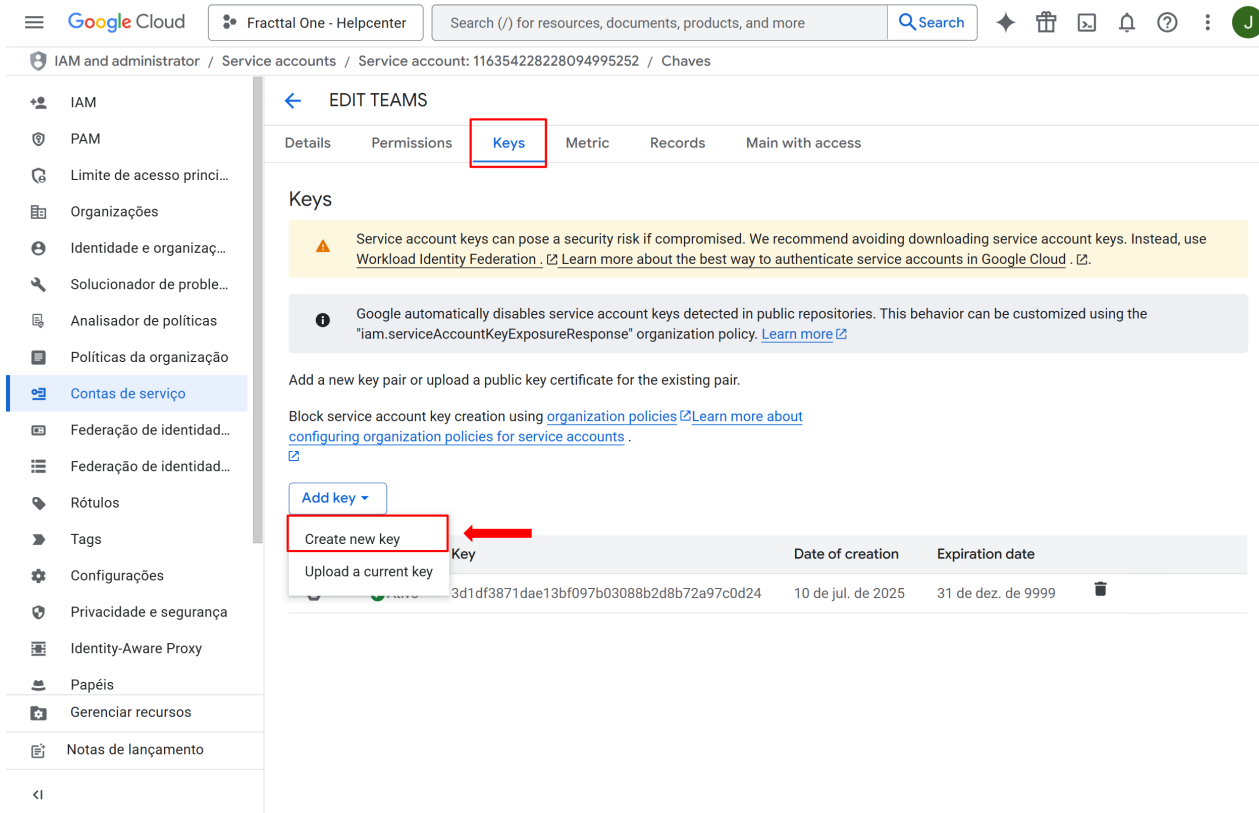
OAuth 2.0 Client IDs

| <input type="checkbox"/>   | Name | Date of creation ↓ | Type | Customer ID | Actions |
|----------------------------|------|--------------------|------|-------------|---------|
| No OAuth client to display |      |                    |      |             |         |

Service accounts Manage service accounts

| <input type="checkbox"/> | E-mail                                                                        | Name ↑                                | Actions |
|--------------------------|-------------------------------------------------------------------------------|---------------------------------------|---------|
| <input type="checkbox"/> | asociar-activo-a-un-plan-de-mt@fractal-one-helpcenter.iam.gserviceaccount.com | Associate asset to a maintenance plan |         |
| <input type="checkbox"/> | crear-equipos@fractal-one-helpcenter.iam.gserviceaccount.com                  | Create Teams                          |         |
| <input type="checkbox"/> | crear-medidores@fractal-one-helpcenter.iam.gserviceaccount.com                | create meters                         |         |
| <input type="checkbox"/> | editar-equipos@fractal-one-helpcenter.iam.gserviceaccount.com                 | EDIT TEAMS                            |         |

## 2. Acesse a seção **Chaves**. Clique em **Adicionar chave** > **Criar nova chave**.



The screenshot shows the Google Cloud IAM and administrator console. The left sidebar contains a navigation menu with options like IAM, PAM, and Contas de serviço. The main content area is titled 'EDIT TEAMS' and has tabs for Details, Permissions, Keys, Metric, Records, and Main with access. The 'Keys' tab is active, displaying a warning about service account keys and a table of existing keys. A red box highlights the 'Add key' button, and another red box highlights the 'Create new key' option in the dropdown menu. A red arrow points to the 'Create new key' option.

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IAM and administrator / Service accounts / Service account: 116354228228094995252 / Chaves

EDIT TEAMS

Details Permissions **Keys** Metric Records Main with access

**Keys**

Service account keys can pose a security risk if compromised. We recommend avoiding downloading service account keys. Instead, use Workload Identity Federation. [Learn more about the best way to authenticate service accounts in Google Cloud](#).

Google automatically disables service account keys detected in public repositories. This behavior can be customized using the "iam.serviceAccountKeyExposureResponse" organization policy. [Learn more](#)

Add a new key pair or upload a public key certificate for the existing pair.

Block service account key creation using [organization policies](#) [Learn more about configuring organization policies for service accounts](#).

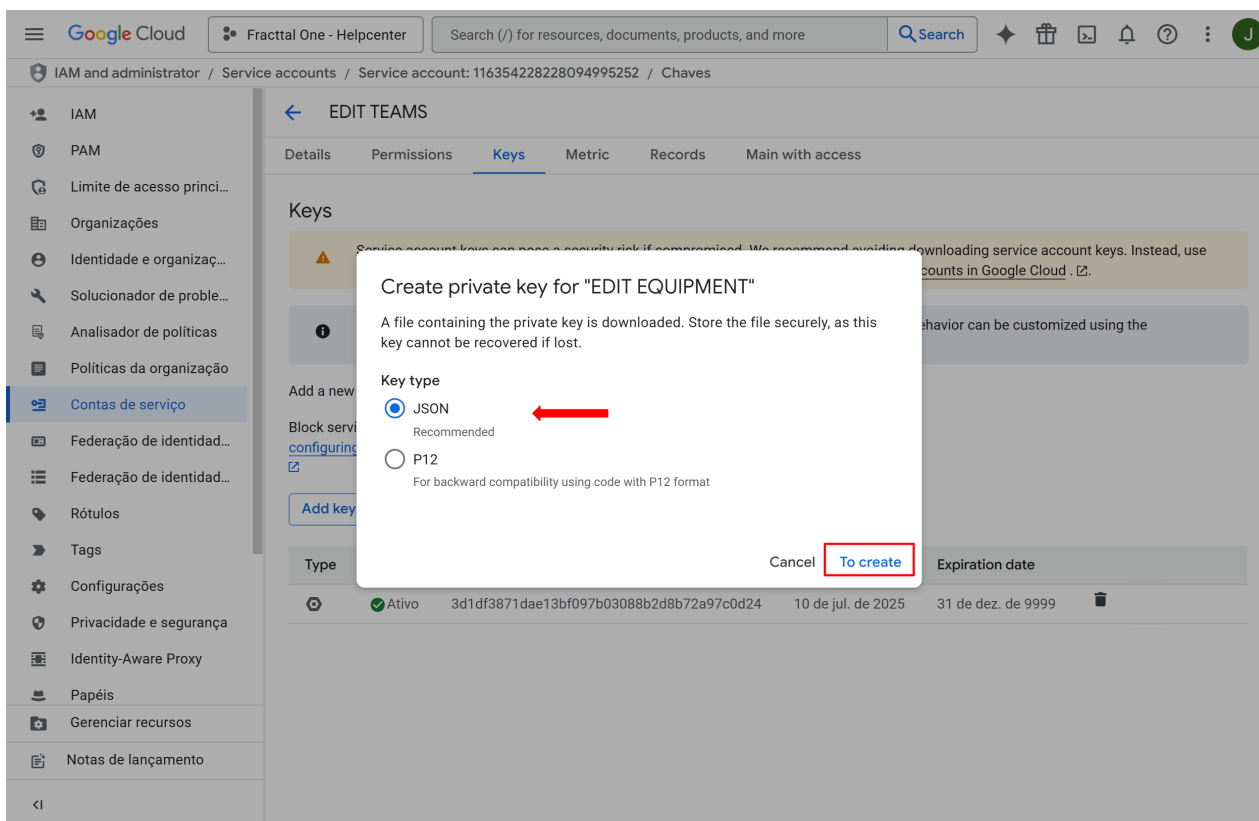
**Add key**

**Create new key**

Upload a current key

| Key                                      | Date of creation   | Expiration date    |
|------------------------------------------|--------------------|--------------------|
| 3d1df3871dae13bf097b03088b2d8b72a97c0d24 | 10 de jul. de 2025 | 31 de dez. de 9999 |

## 3. Selecione o formato **JSON**.



The screenshot shows the Google Cloud IAM and administrator console with the 'Keys' tab active. A dialog box titled 'Create private key for "EDIT EQUIPMENT"' is open, prompting the user to choose a key type. The 'JSON' option is selected and highlighted with a red arrow. The 'To create' button is also highlighted with a red box. The background shows the same console interface as the previous screenshot.

Google Cloud Fractal One - Helpcenter Search (/) for resources, documents, products, and more Search

IAM and administrator / Service accounts / Service account: 116354228228094995252 / Chaves

EDIT TEAMS

Details Permissions **Keys** Metric Records Main with access

**Keys**

Service account keys can pose a security risk if compromised. We recommend avoiding downloading service account keys. Instead, use Workload Identity Federation. [Learn more about the best way to authenticate service accounts in Google Cloud](#).

Google automatically disables service account keys detected in public repositories. This behavior can be customized using the "iam.serviceAccountKeyExposureResponse" organization policy. [Learn more](#)

Add a new key pair or upload a public key certificate for the existing pair.

Block service account key creation using [organization policies](#) [Learn more about configuring organization policies for service accounts](#).

**Add key**

**Create private key for "EDIT EQUIPMENT"**

A file containing the private key is downloaded. Store the file securely, as this key cannot be recovered if lost.

**Key type**

☒ JSON Recommended

☐ P12 For backward compatibility using code with P12 format

Cancel **To create**

| Type  | Key                                      | Date of creation   | Expiration date    |
|-------|------------------------------------------|--------------------|--------------------|
| Ativo | 3d1df3871dae13bf097b03088b2d8b72a97c0d24 | 10 de jul. de 2025 | 31 de dez. de 9999 |

4. Salve o arquivo gerado em um local seguro; esse arquivo será necessário para configurar a integração no Fractal Hub.

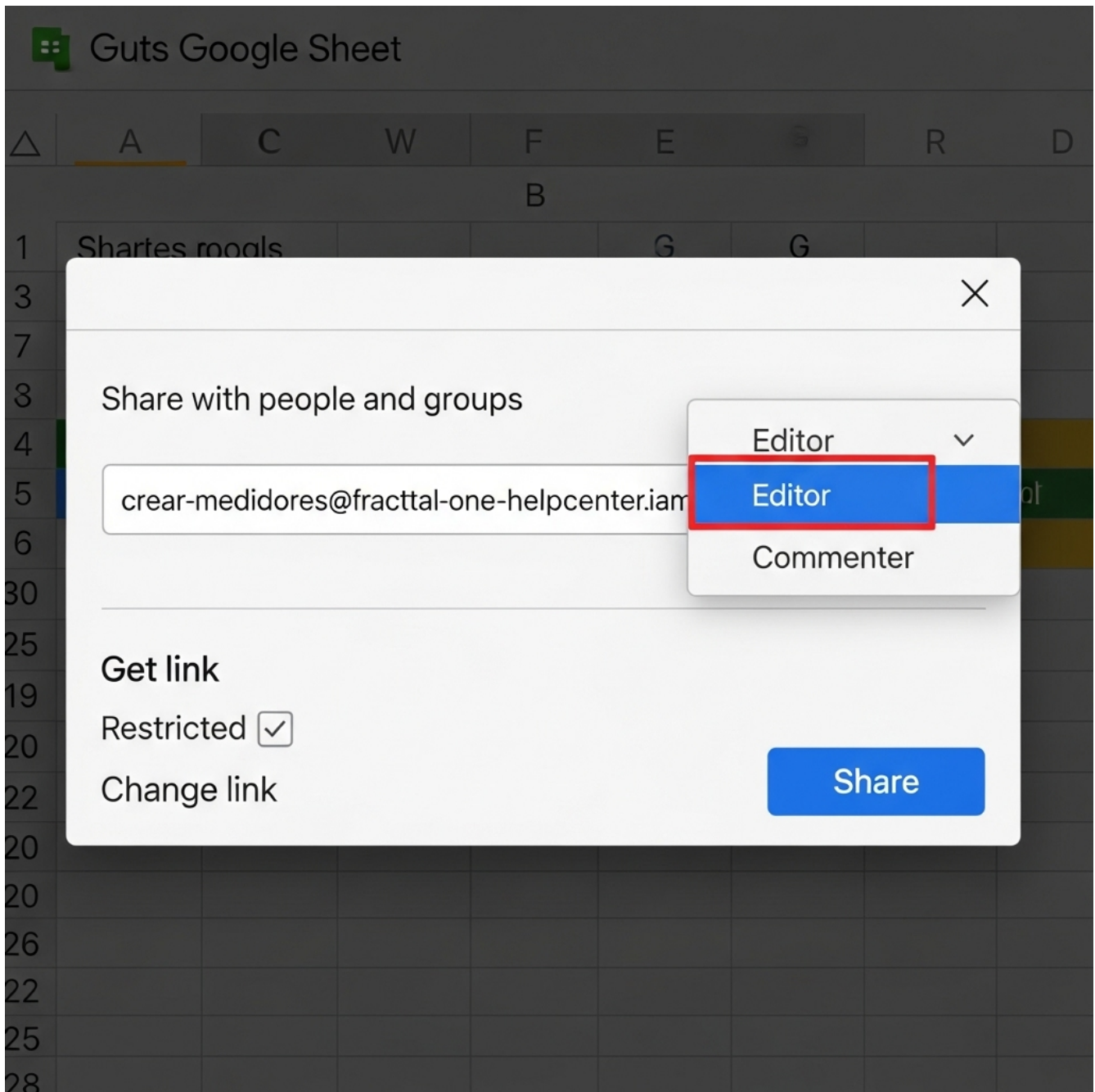
### Passo 3: Preparar a planilha (Google Sheets)

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Agora, prepararemos a planilha que servirá como fonte de dados para a criação dos medidores.

| description            | item_code    | unit_code | is_counter |
|------------------------|--------------|-----------|------------|
| Transformador Elétrico | ABC123-HC-FC | KM        | TRUE       |

1. Crie uma nova planilha no Google Sheets.
2. Dê um nome descritivo, como CRIAR MEDIDOR.
3. Na primeira linha, defina os cabeçalhos das colunas. Estes devem coincidir com os parâmetros exigidos pela API do Fractal. Para este exemplo, utilizaremos os seguintes campos obrigatórios e um opcional:
  - **Coluna A:** description (Descrição do medidor, ex: "Medidor de KM").
  - **Coluna B:** item\_code (Código do ativo ao qual o medidor será associado, ex: "HUB-004").
  - **Coluna C:** unit\_code (Código da unidade do medidor, ex: "KM". Este código deve existir previamente em Configuração > Catálogos Auxiliares > Unidade).
  - **Coluna D:** is\_counter (Opcional, mas recomendado. Indica se o medidor é um acumulador. Escreva TRUE se for, ou FALSE se não).
4. Preencha as linhas com as informações dos medidores que deseja criar.
5. **Compartilhar a planilha:** Este é um passo crucial.
  - Copie o e-mail da conta de serviço que você criou no Passo 1 (você encontrará dentro do arquivo .json no campo client\_email).
  - Clique no botão **Compartilhar** na sua planilha.
  - Cole o e-mail da conta de serviço e atribua permissões de **Editor**.

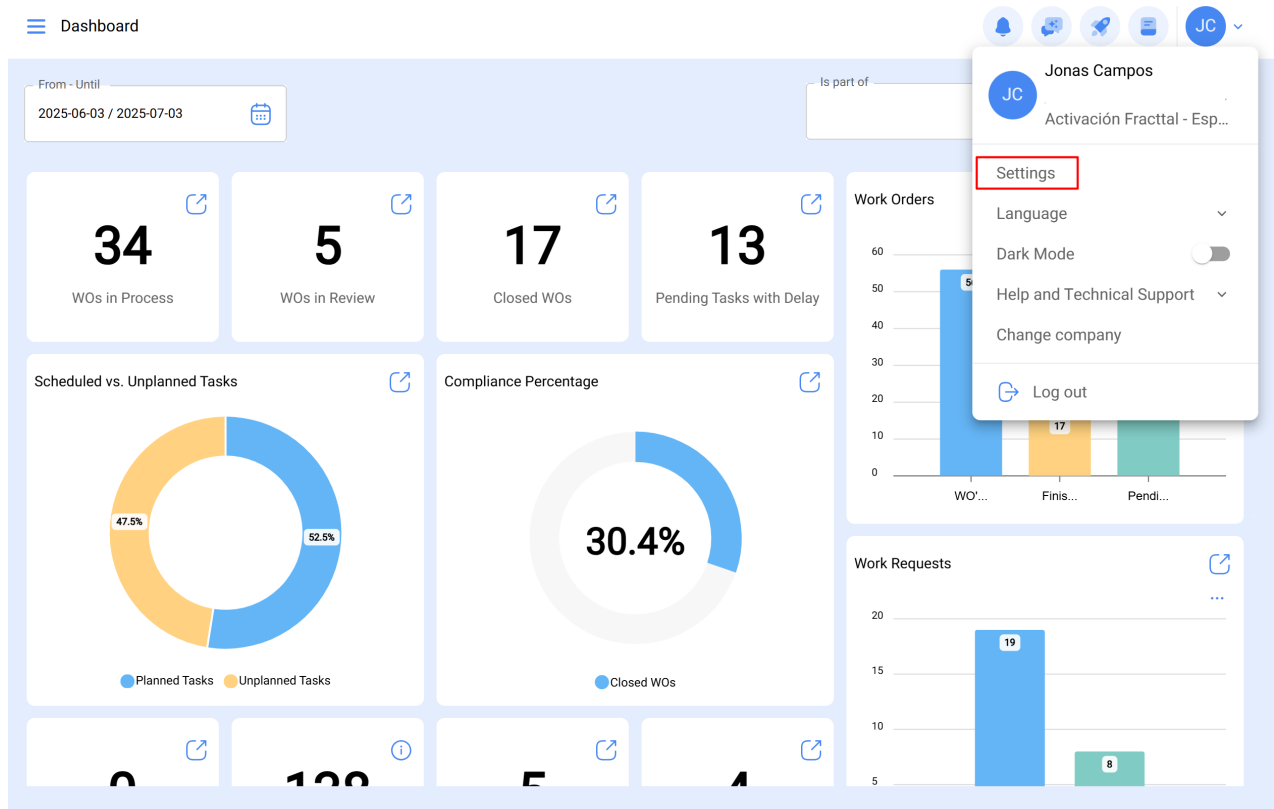


Clique em **Enviar**.

#### Passo 4: Criar a conexão no Fractal One

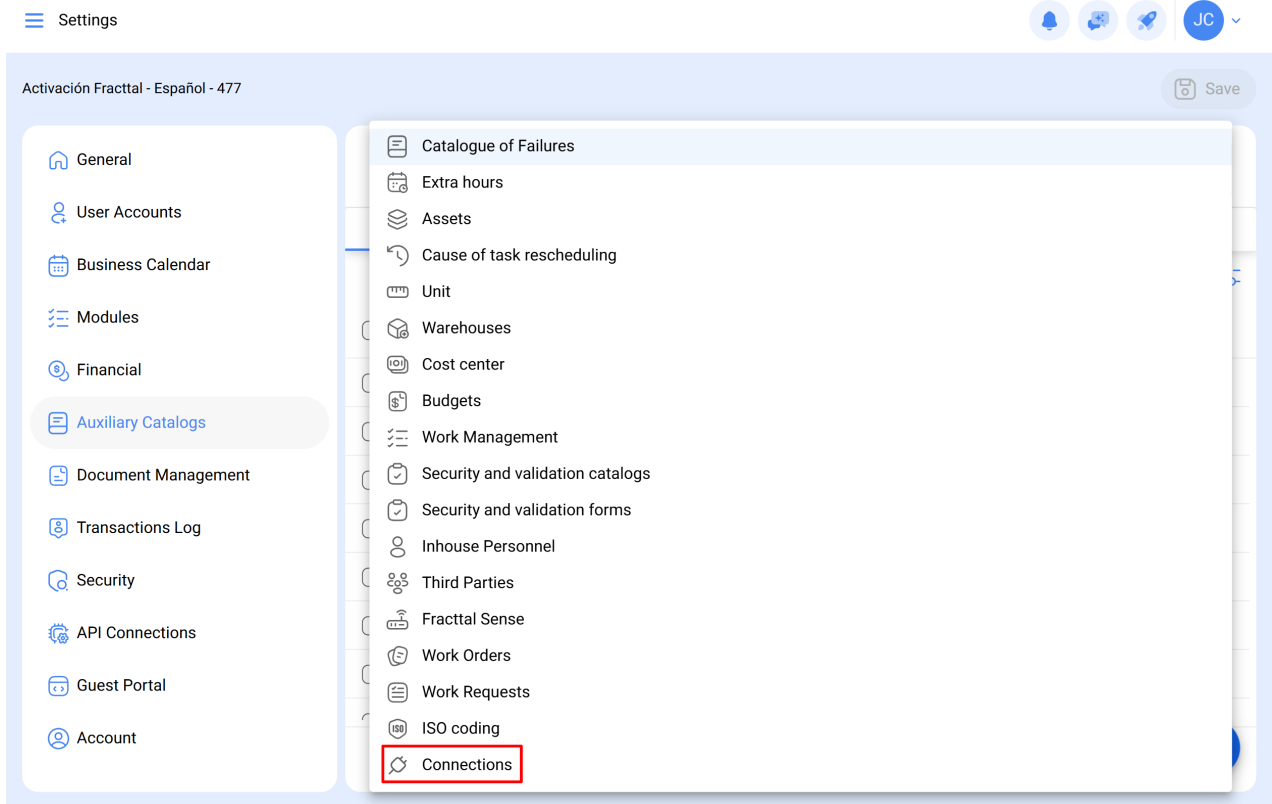
Agora vamos configurar a conexão dentro do Fractal para que você possa usar as credenciais da conta de serviço.

## 1. No Fractal, navegue até **Configuração > Catálogos Auxiliares > Conexões**.

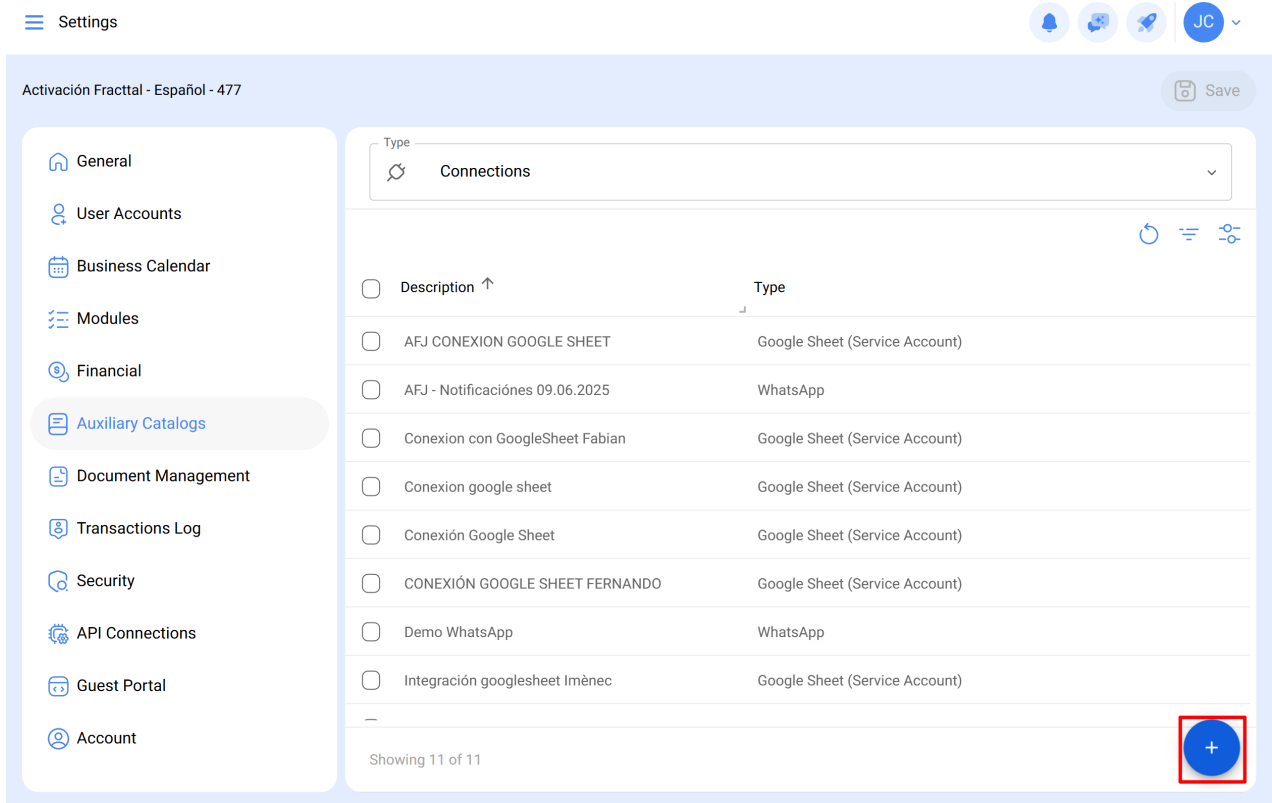


The settings page is titled "Activación Fractal - Español - 477". The left sidebar lists various settings categories, with "Auxiliary Catalogs" highlighted. The main content area shows the configuration for this catalog:

- General:**
  - Code: RFC10829120
  - Name: Activación Fractal - Español - 477
  - Email: contacto@fractal.com
  - Currency: Chilean Peso
  - Thousands separator: (.) The character used is a p
- Address:**
  - Address: Calle de San José Artesano, 12
  - City: Bogota
  - State: Cundinamarca
  - Country: Colombia
  - Zip code: 28108
- Map:** A Google Map showing the location of Inacap Apoquindo.



2. Clique no ícone + para adicionar uma nova conexão.



### 3. Preencha os seguintes campos:

The screenshot shows the 'Settings' page of the Fractal system. On the left is a sidebar menu with options: General, User Accounts, Business Calendar, Modules, Financial, Auxiliary Catalogs, Document Management, Transactions Log, Security, API Connections, Guest Portal, and Account. The main area is titled 'Activación Fractal - Español - 477' and contains a 'Connections' section. This section has a 'Type' dropdown menu and a list of existing connections, each with a checkbox and a description. To the right of the screenshot is a form for adding a new connection. It has a 'Type' dropdown menu with a red border and a red error message 'Type can't be blank'. Below it is a 'Description' text input field with a red border and a red error message 'Description can't be blank'. At the top of the form are back and save icons.

- **Tipo:** Seleccione **Google Sheet (Service Account)**.
- **Descrição:** Atribua um nome à conexão:

### 4. Abra o arquivo .json baixado e copie/cole o conteúdo dos seguintes campos em seus respectivos lugares do formulário do Fractal:

- private\_key
- client\_email
- client\_id
- client\_x509\_cert\_url

### 5. Clique no ícone ✓ para salvar e depois em **Salvar**.

Settings

Activación Fracttal - Español - 477

General

User Accounts

Business Calendar

Modules

Financial

Auxiliary Catalogs

Document Management

Transactions Log

Security

API Connections

Guest Portal

Account

Type

Connections

| Description ↑                   | Type                           |
|---------------------------------|--------------------------------|
| Conexión Google Sheet           | Google Sheet (Service Account) |
| CONEXIÓN GOOGLE SHEET FERNANDO  | Google Sheet (Service Account) |
| Crear medidor                   | Google Sheet (Service Account) |
| CREAR MEDIDOR - 0725            | Google Sheet (Service Account) |
| Demo WhatsApp                   | WhatsApp                       |
| EDITAR EQUIPO                   | Google Sheet (Service Account) |
| Integración googlesheet Imè nec | Google Sheet (Service Account) |
| Projeto LCS                     | Google Sheet (Service Account) |
| proyectorx                      | Google Sheet (Service Account) |
| webnar 2024 v.1                 | Google Sheet (Service Account) |
| whatsapp jonas                  | WhatsApp                       |

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←

↗

✓

Type  
Google Sheet (Service Account) ▾

Description  
CREAR MEDIDOR - 0725

Type  
service\_account

project\_id \*  
@fracttal.com

private\_key\_id \*  
\*\*\*\*\*

private\_key \*  
\*\*\*\*\*

client\_email \*  
crear-medidores@fracttal-one-helpcenter.iam.gserviceaccour

client\_id \*  
10948539799581941586

client\_x509\_cert\_url \*  
https://www.googleapis.com/robot/v1/metadata/x509/crear

auth\_uri  
https://accounts.google.com/o/oauth2/auth

token\_uri

## Passo 5: Configurar o fluxo no Fracttal Hub

Com a conexão pronta, o último passo é criar o fluxo de automação.

1. Navegue até o módulo **Fracttal Hub**.

FRACTTAL ONE

Version: 5.8.09

Start

Fracttal AI

Catalogs

Warehouses

Work Management

Monitoring

Dispatcher

Events

Fracttal Hub

Business Intelligence

Cloud Disk

Requests

73

Closed WOs

24

Pending Tasks with Delay

Compliance Percentage

57.0%

Closed WOs

Work Orders

128

73

55

Work Requests

39

2. Clique no ícone + para criar um novo fluxo.

Fracttal Hub

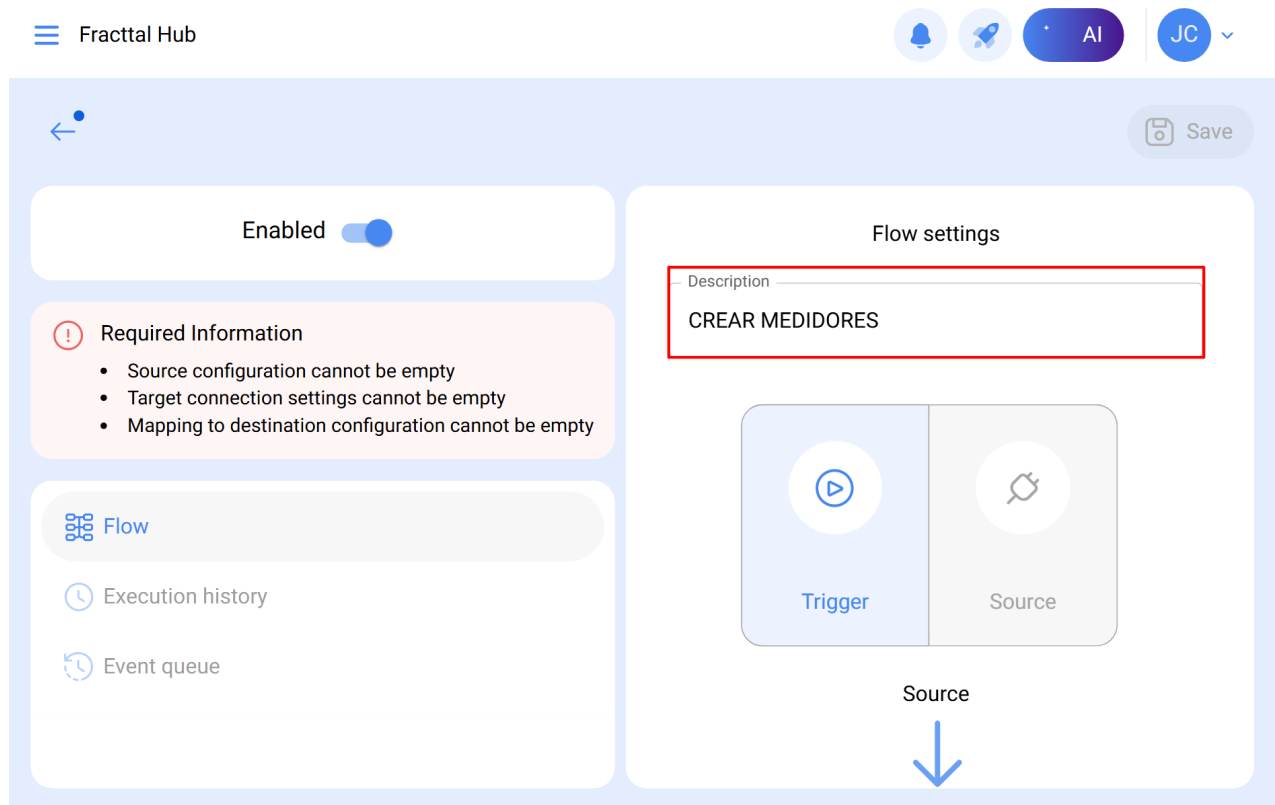
Search...

JC

| Enabled                  | Description                          | Last Date                                                    | Trigger          |          |
|--------------------------|--------------------------------------|--------------------------------------------------------------|------------------|----------|
| <input type="checkbox"/> | Yes                                  | Notificación de nuevas órdenes de servicio de Whatsapp (P... | 2025-07-02 12:54 | Event    |
| <input type="checkbox"/> | Yes                                  | actualización de horometro                                   | 2024-11-22 18:15 | Schedule |
| <input type="checkbox"/> | Yes                                  | AFJ. 09.06.2025. Conex. Wpp                                  | 2025-06-09 09:57 | Event    |
| <input type="checkbox"/> | Yes                                  | Lecturas fuera de Rango (Rangel)                             | 2023-03-22 17:51 | Event    |
| <input type="checkbox"/> | <input checked="" type="radio"/> Yes | Consulta subtaeas Fracttal Fabian                            | 2024-12-18 20:26 | Manual   |
| <input type="checkbox"/> | <input checked="" type="radio"/> Yes | Projeto LCS 1212                                             | 2024-12-12 18:12 | Manual   |
| <input type="checkbox"/> | Yes                                  | Lecturas fuera de rango                                      | 2023-03-22 17:51 | Event    |
| <input type="checkbox"/> | <input checked="" type="radio"/> Yes | webnar 2024                                                  | 2024-12-17 23:06 | Manual   |
| <input type="checkbox"/> | Yes                                  | Notificación de nuevas órdenes de servicio de Whatsapp (E... | 2025-05-23 22:20 | Event    |
| <input type="checkbox"/> | No                                   | Comunicación Fracttal One                                    | 2024-09-05 21:53 | Event    |
| <input type="checkbox"/> | <input checked="" type="radio"/> Yes | BODEGAS FAC - MEDIDORES                                      | 2025-01-20 16:56 | Manual   |

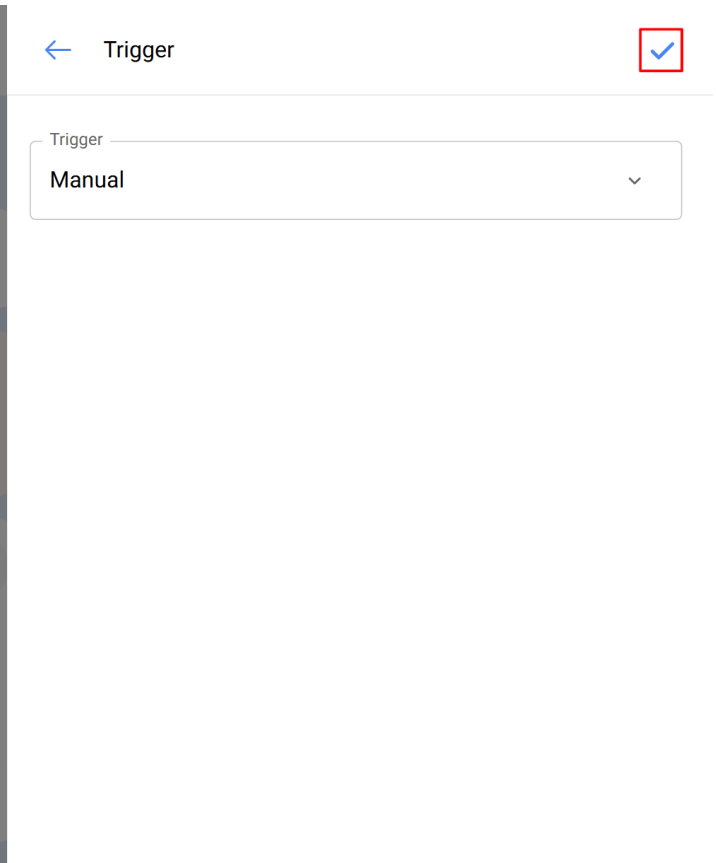
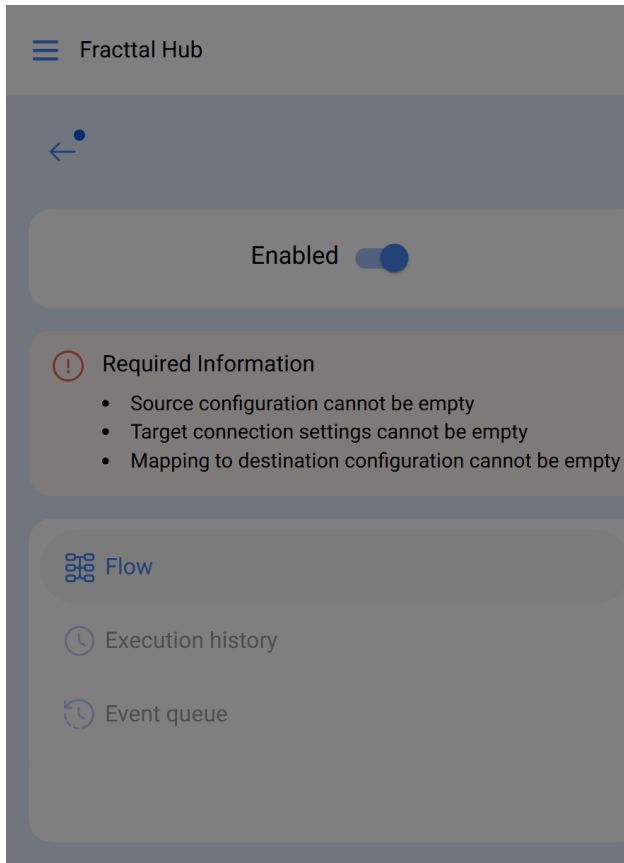
Showing 14 of 14

### 3. Adicione uma **Descrição** para o fluxo:

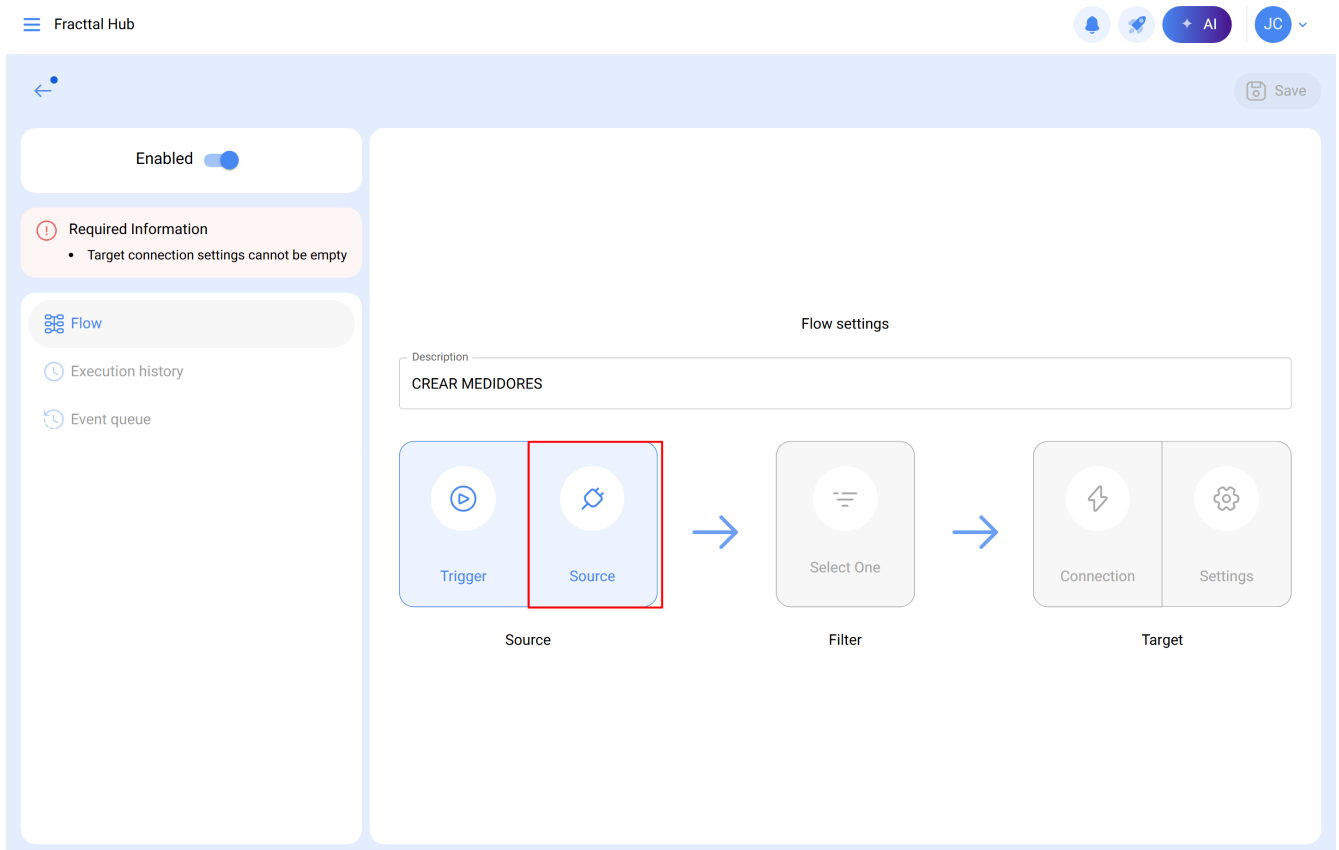


#### Configuração do gatilho:

Clique em **Gatilho** e selecione o tipo **Manual**. Isso permite executar o fluxo quando desejado.



## Configuração da Fonte:



- Clique em **Fonte**.
- **Módulo**: Selecione GoogleSheet.
- **Conexão**: Selecione a conexão criada no passo anterior.
- **Ação**: Selecione Ler.
- **spreadsheet\_id**: Copie o ID da sua planilha (você o encontra na URL, entre /d/ e /edit/).
- **sheet**: Escreva 0 para ler a primeira aba.
- **Campos**: Adicione os nomes das colunas:

Fractal Hub

Enabled ☒

**Required Information**

- Source configuration cannot be empty
- Target connection settings cannot be empty
- Mapping to destination configuration cannot be empty

Flow

Execution history

Event queue

Source

Module  
GoogleSheet

Connection  
CREAR MEDIDOR - 0725

Action  
Read

spreadsheet\_id  
338689D5-4FC6-4641-9FB3-715768F4DCAC

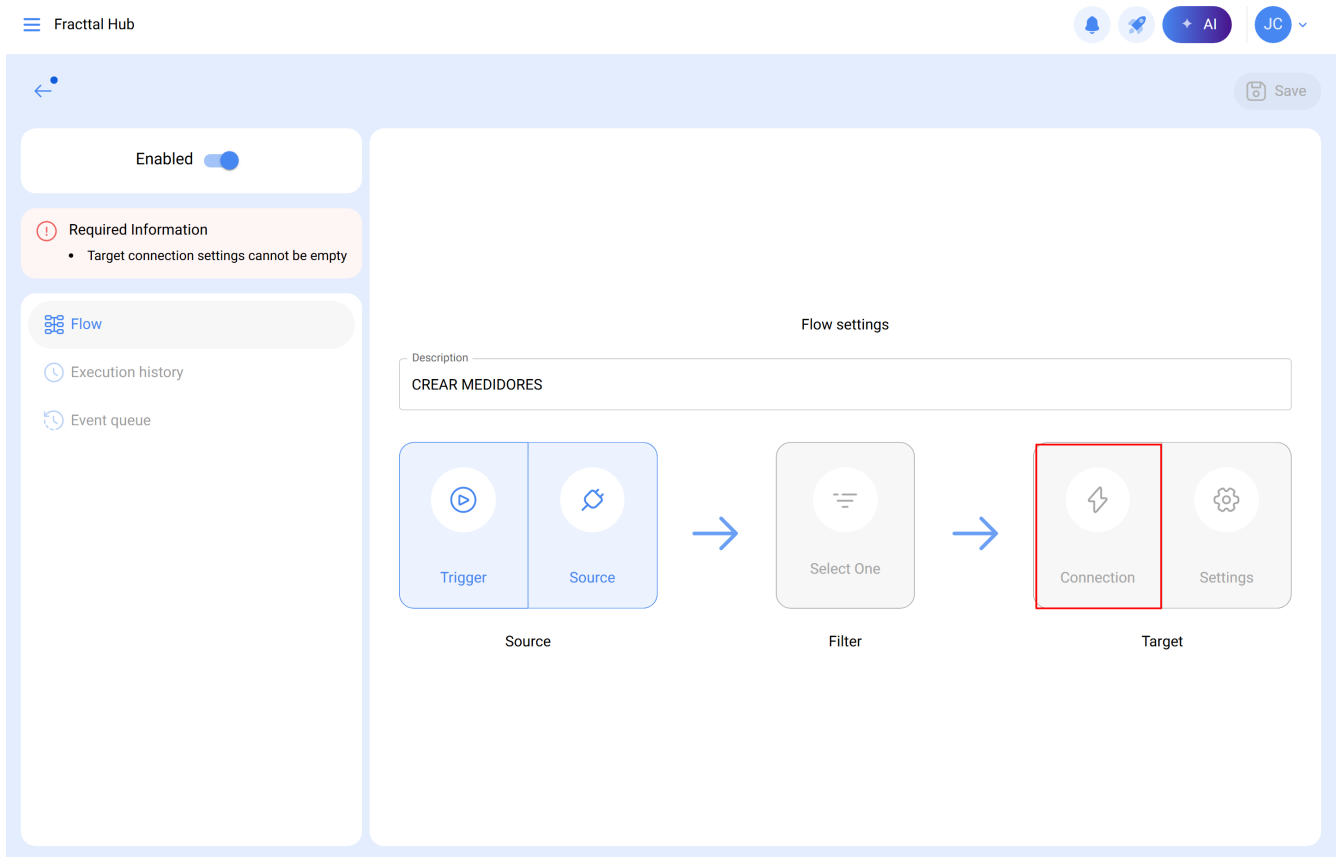
sheet  
0

Fields

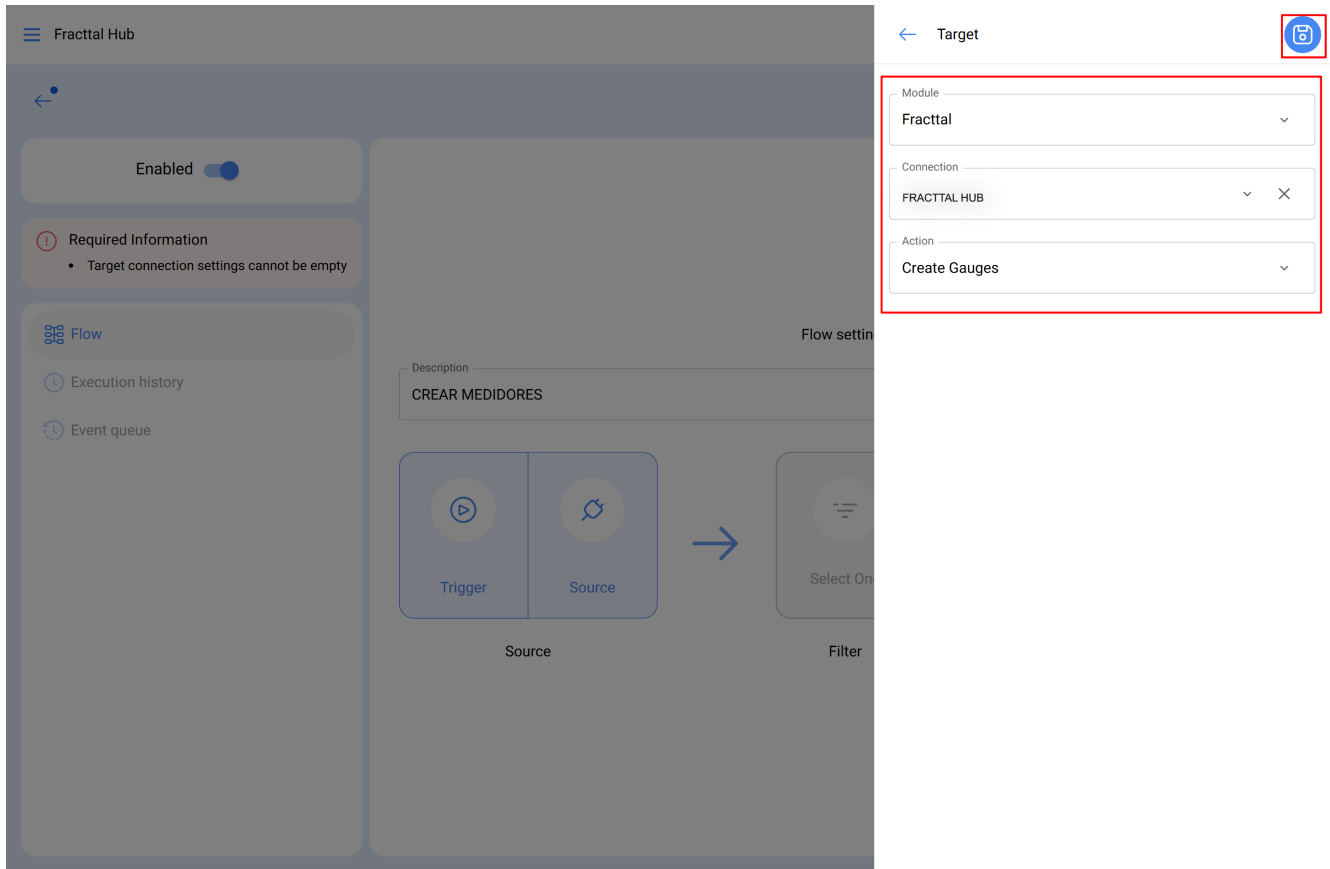
Name  
id

Text

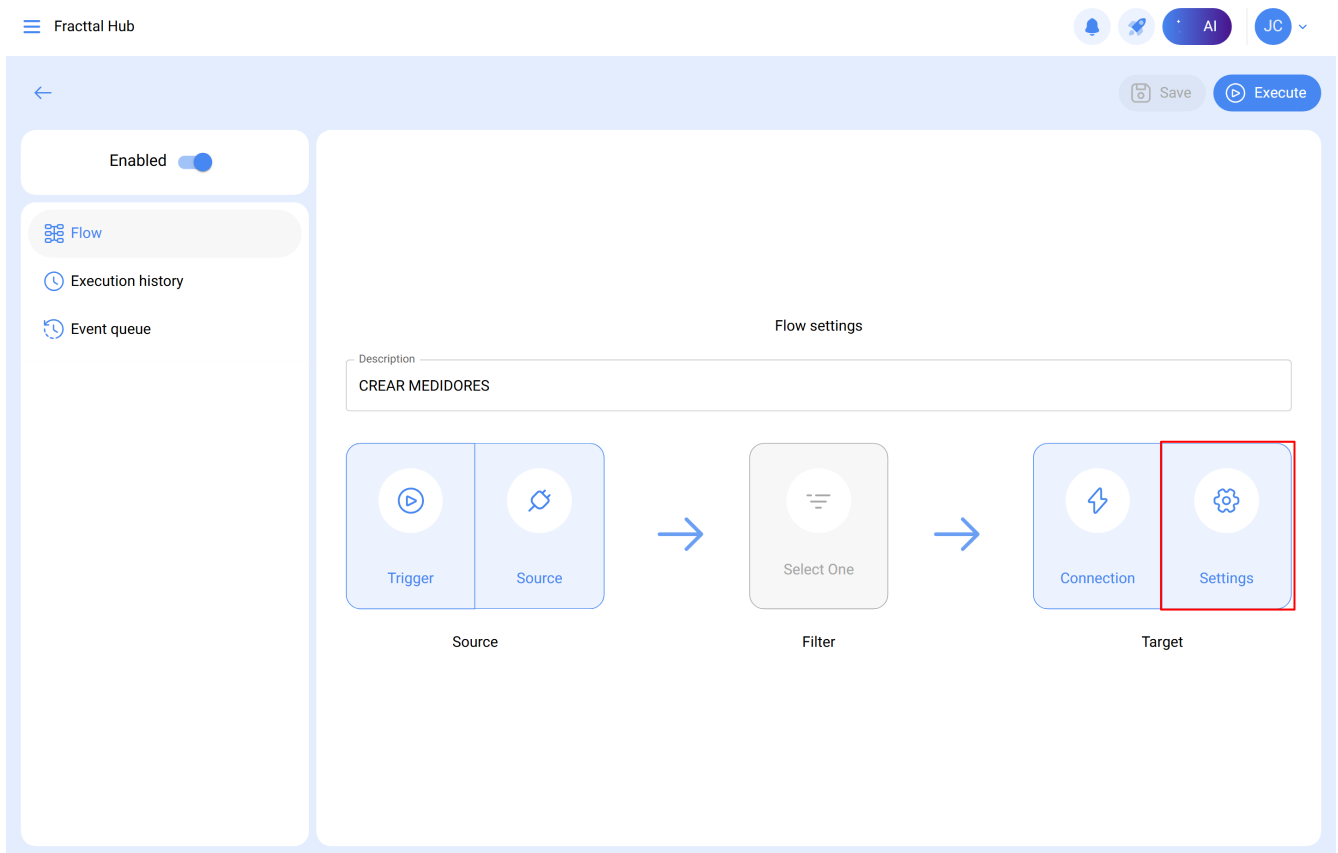
## Configuração do Destino:



- Clique em **Conexão** na seção de destino.
- **Módulo**: Selecione Fractal.
- **Conexão**: Escolha FRACTTAL HUB.
- **Ação**: Selecione Criar Medidores.



## Configuração de campos (mapeamento):



- Clique em **Configuração** na seção de destino.
- Mapeie os campos da planilha (Origem) com os do sistema (Destino), garantindo que coincidam:

**description** ← **description**

**item\_code** ← **item\_code**

**unit code** ← **unit\_code**

**is\_counter** ← **is\_counter**

The screenshot shows the Fractal Hub interface. On the left, there's a sidebar with 'Enabled' toggle, 'Flow', 'Execution history', and 'Event queue'. The main area shows a flow diagram with a 'Trigger' and 'Source' block. The 'Fields Configuration' panel on the right is titled 'Fields Configuration' and shows a mapping between 'Source (Fields)' and 'Target (Fields)'. The source fields are 'description', 'item\_code', 'unit\_code', 'All -> Object', 'is\_counter', 'All -> Object', and 'All -> Object'. The target fields are 'description', 'item\_code', 'unit\_code', 'serial', 'is\_counter', 'serial\_parent\_meter', and 'last\_reading'. Each mapping is shown with a dropdown menu and a gear icon for configuration.

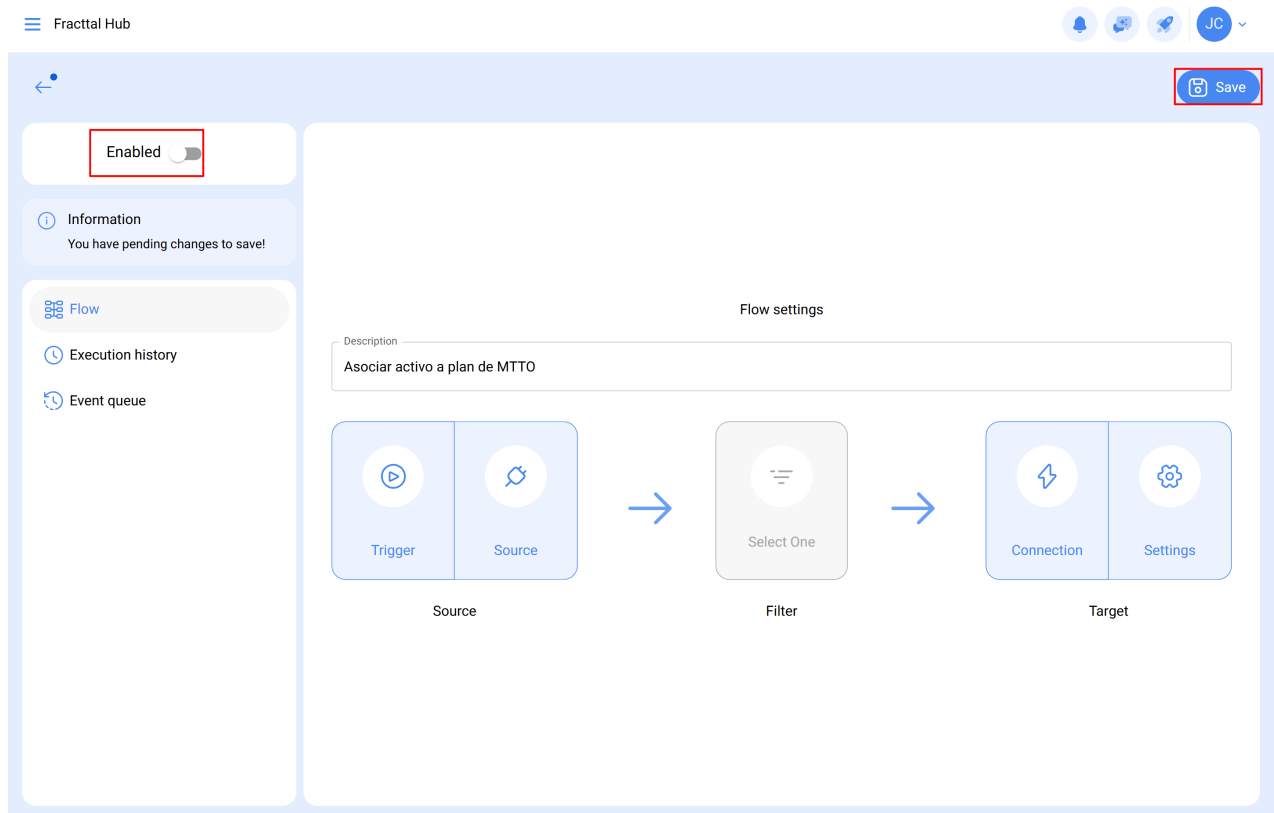
| Source (Fields) | Target (Fields)     |
|-----------------|---------------------|
| description     | description         |
| item_code       | item_code           |
| unit_code       | unit_code           |
| All -> Object   | serial              |
| is_counter      | is_counter          |
| All -> Object   | serial_parent_meter |
| All -> Object   | last_reading        |

Clique em **Salvar** para salvar a configuração do fluxo.

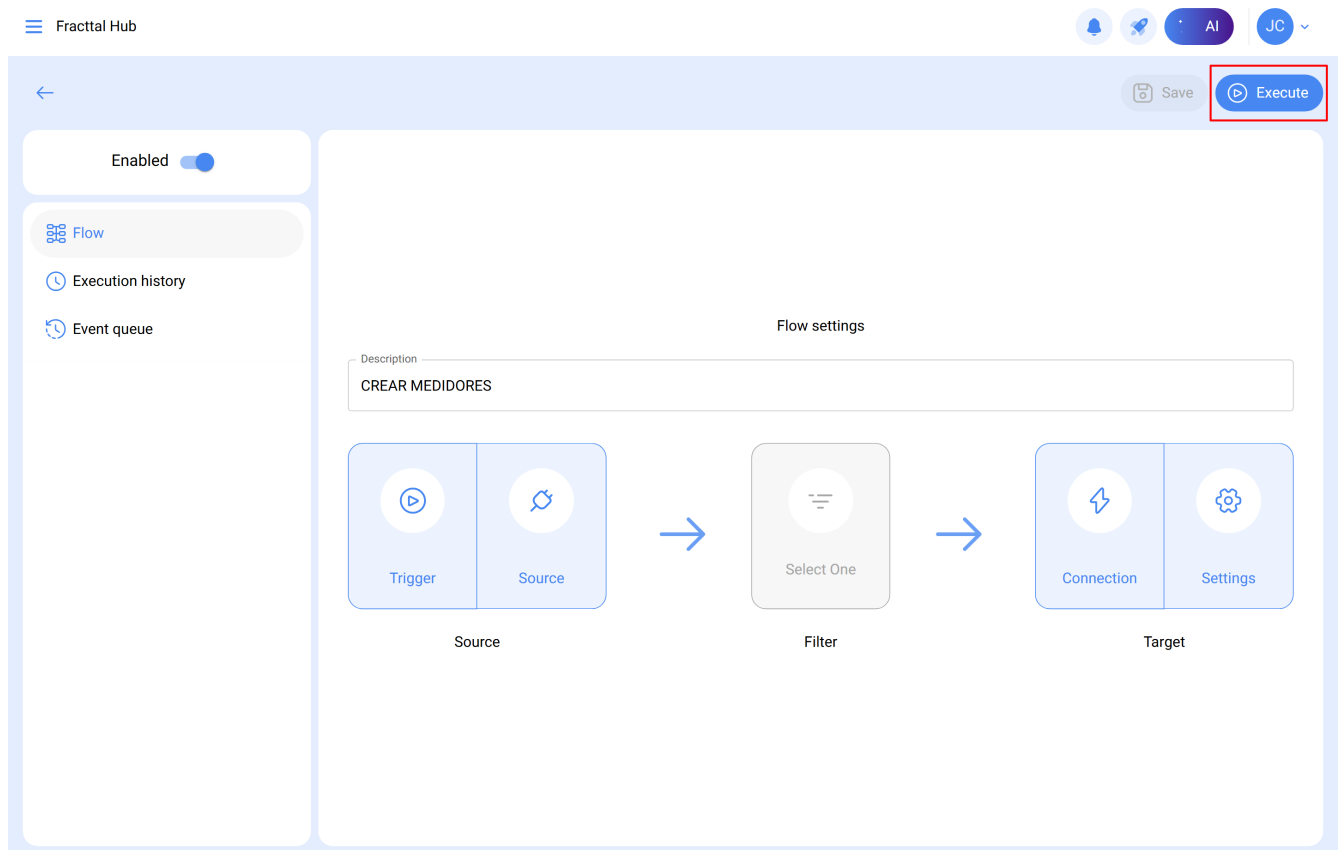
## Passo 7: Executar e verificar o fluxo

1. Ative o interruptor **Habilitado**.

## 2. Clique novamente em **Salvar**.



## 3. Clique no botão **Executar** para iniciar o processo.



Você pode monitorar o progresso nas abas **Fila de eventos** e **Histórico de Execução**. Um processo bem-sucedido mostrará "Processo Realizado" e marcará como completas as etapas de Extração, Transformação e Carga.

The screenshot displays the Fractal Hub interface. At the top left, the text "Fractal Hub" is visible. On the top right, there are notification icons and a user profile icon labeled "JC". Below the top bar, on the left, is a sidebar with a toggle switch labeled "Enabled" and a menu with options: "Flow", "Execution history", and "Event queue". The "Execution history" and "Event queue" options are highlighted with a red rectangle. The main area is titled "Flow settings" and contains a description field with the text "Asociar activo a plan de MTTO". Below this, a flow diagram is shown with three stages: "Source", "Filter", and "Target". The "Source" stage has two sub-components: "Trigger" and "Source". The "Filter" stage has a sub-component: "Select One". The "Target" stage has two sub-components: "Connection" and "Settings". Arrows indicate the flow from Source to Filter to Target.