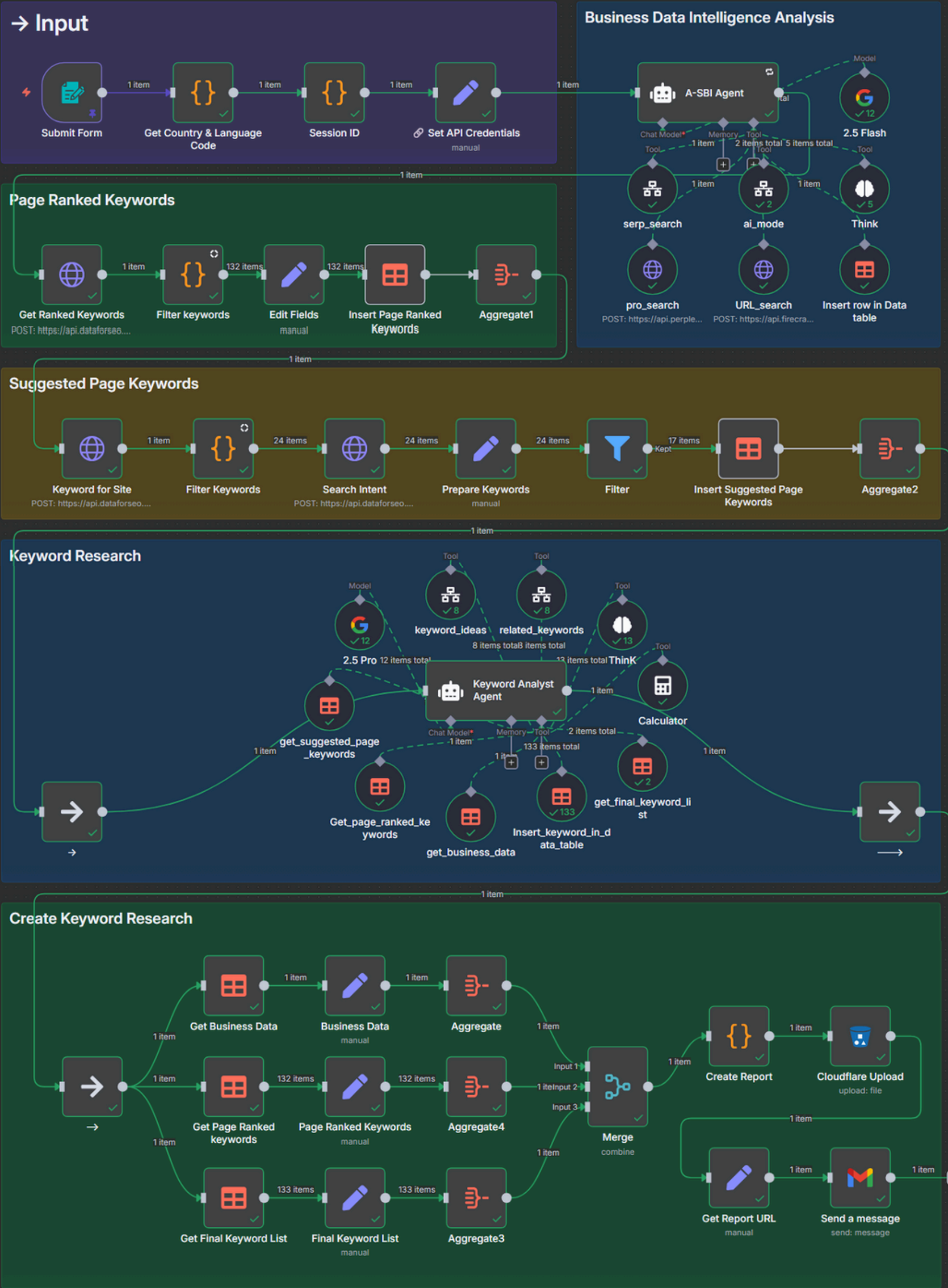


Keyword Research Workflow



Hey there!

To get started, just import **the JSON workflows** in n8n and follow the steps on the next pages. I've tried to make sure everything's covered – test each part, set things up, and you'll be ready to roll. Will appreciate a comment on how everything works: [AI Marketing Hub](#)

Good luck, and have fun with it! 🚀

Best,
Daniel A.

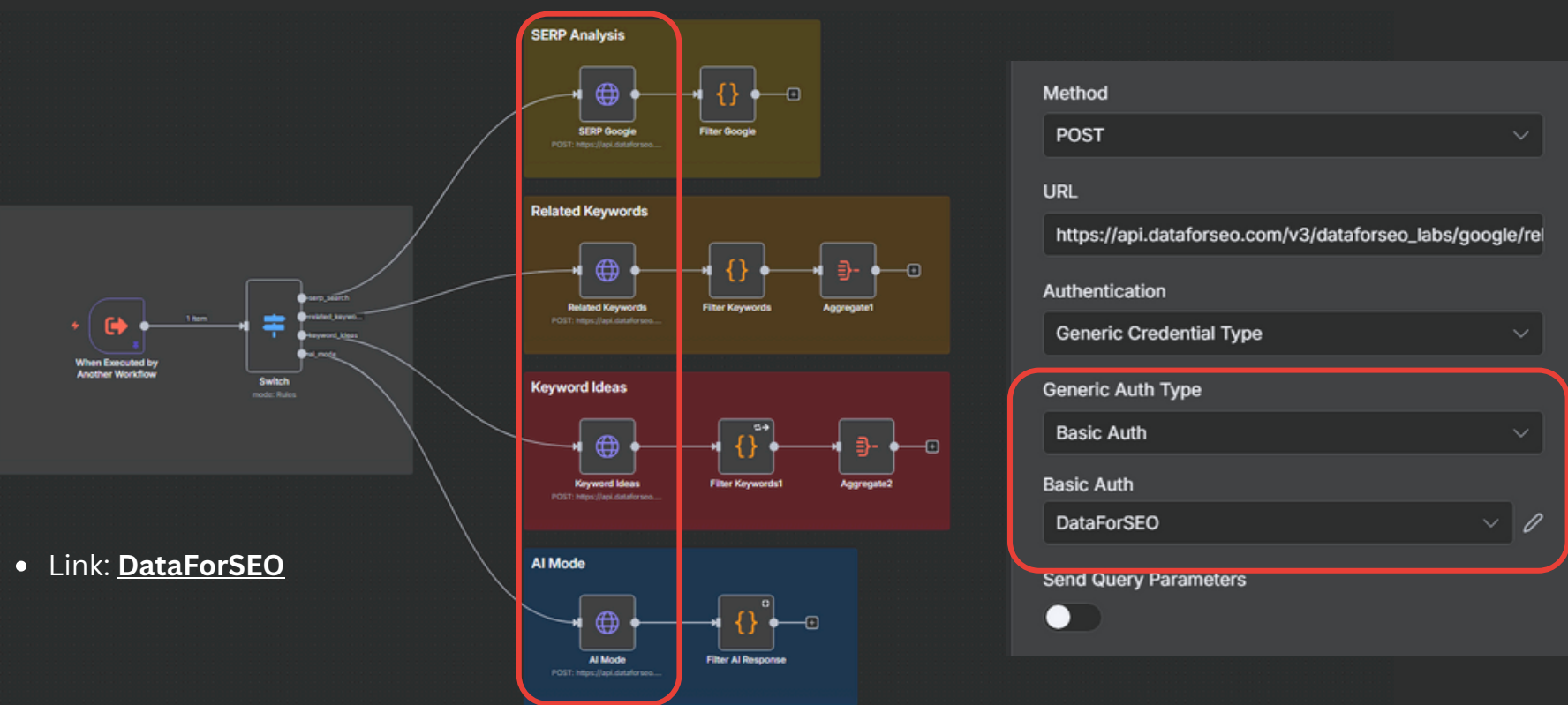


Step 1: Get Your Workflows Ready

First things first, you need to upload the two workflows into your n8n instance:

- <-KR-> Keyword Research Workflow
- <-KR-> Keyword Research Tools

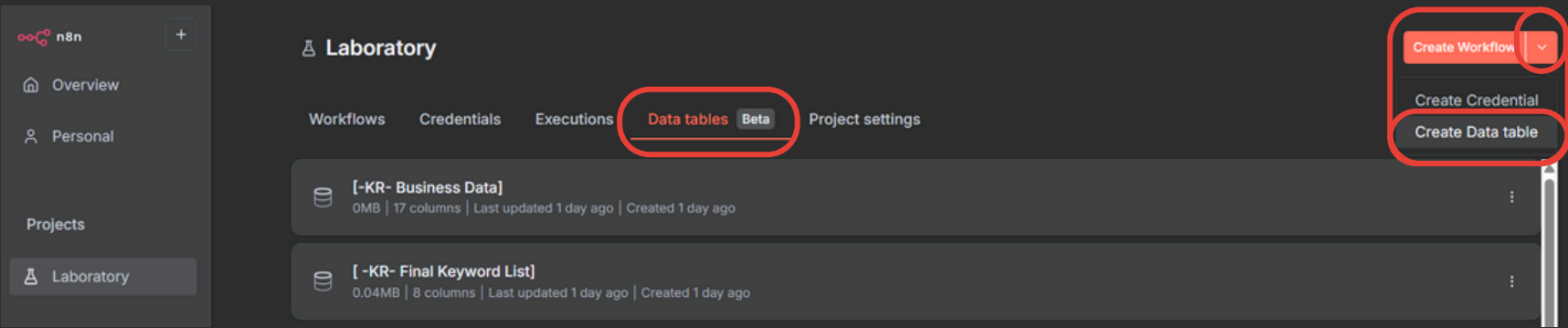
Next, open the <-KR-> Keyword Research Tools workflow and connect your **DataForSEO** account. You'll do this in the **Basic Auth** section of the nodes that need it.



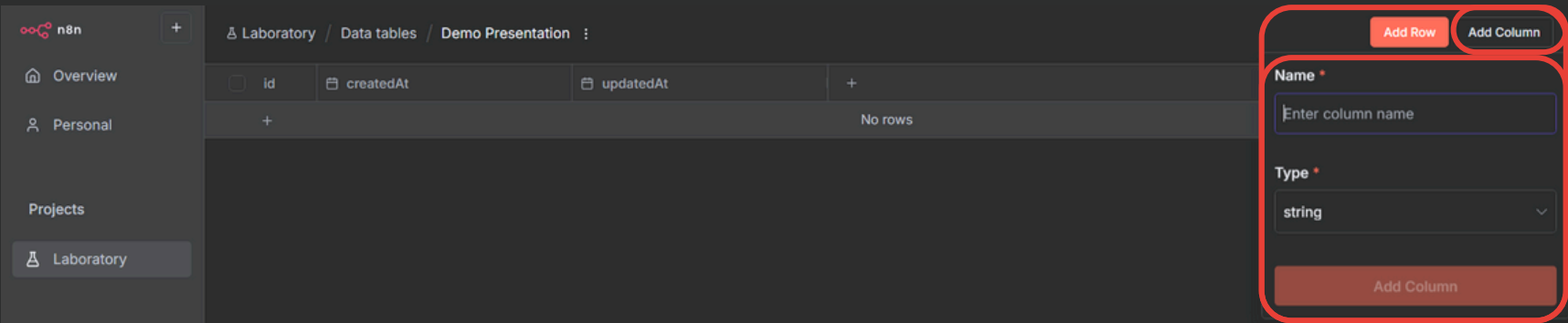
- Link: [DataForSEO](#)

Step 2: Create Your Data Tables

Your workflow needs a place to store all the data it gathers. You must create the four n8n Datatables listed below.



You need to create a total of 4 Data Tables then add columns (manually) for each and every one of them.



Data Table Name: [-KR- Business Data]

Columns: session_id, client_name, client_country, client_language, client_website, client_description, target_audience_personas, brand_personality_matrix, unique_value_proposition, primary_competitors, people_ask, customer_journey, customer_persona_trait, eat_signal_integration, GEO_tactic, call_to_action

Data Table Name: [-KR- Page Ranked Keywords]

Columns: keyword, search_volume, cpc, competition_level, estimated_traffic, session_id

Data Table Name: [-KR- Suggested Page Keywords]

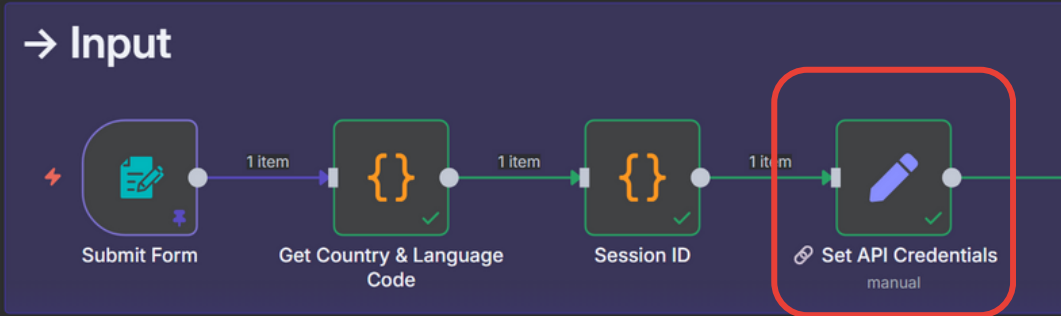
Columns: keyword, search_volume, cpc, competition, keyword_intent.label, keyword_intent.probability, session_id

Data Table Name: [-KR- Final Keyword List]

Columns: keyword, search_volume, cpc, competition, competition_level, intent, session_id

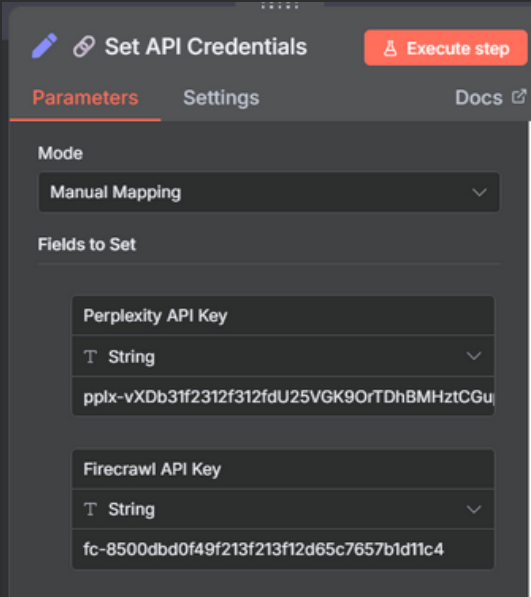
Step 3: Connect Your API Keys 🔑

Now, let's give your workflow the "keys" it needs to access other services.



Find the node named **Set API Credentials** and add your keys for:

- Firecrawl: [Firecrawl Website](#)
- Perplexity: [Perplexity Docs](#)

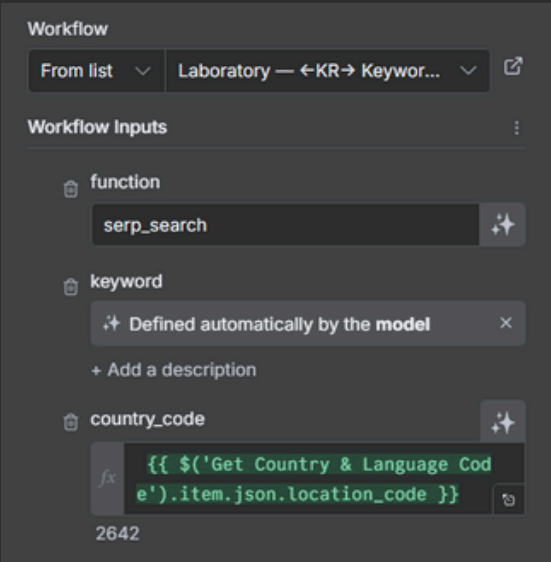


Step 4: Configure the First AI Agent ('A-SBI Agent') 🤖

This agent does the initial company and website research.

1. **Connect your Gemini API Key** and Set the AI Model to 2.5 Flash.
 - Get Gemini API Key: [Google AI Studio](#)

Note: pro_search and url_search tools will get their keys automatically from the Set API Credentials node you configured earlier.

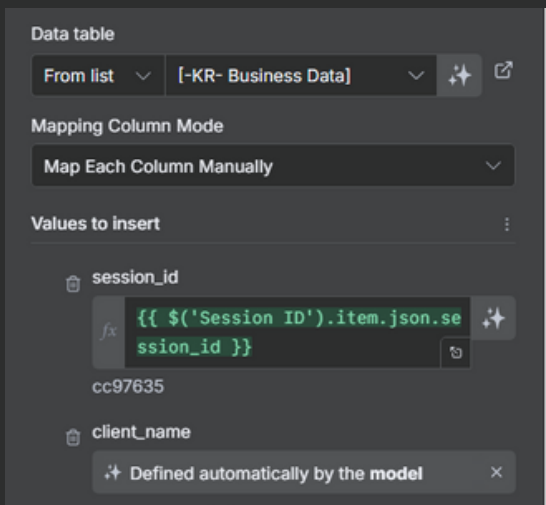


2. **Configure its Tools:** Connect the **serp_search** and **ai_mode** tools to your **<-KR-> Keyword Research Tools workflow**. Then, fill in the parameters like this:

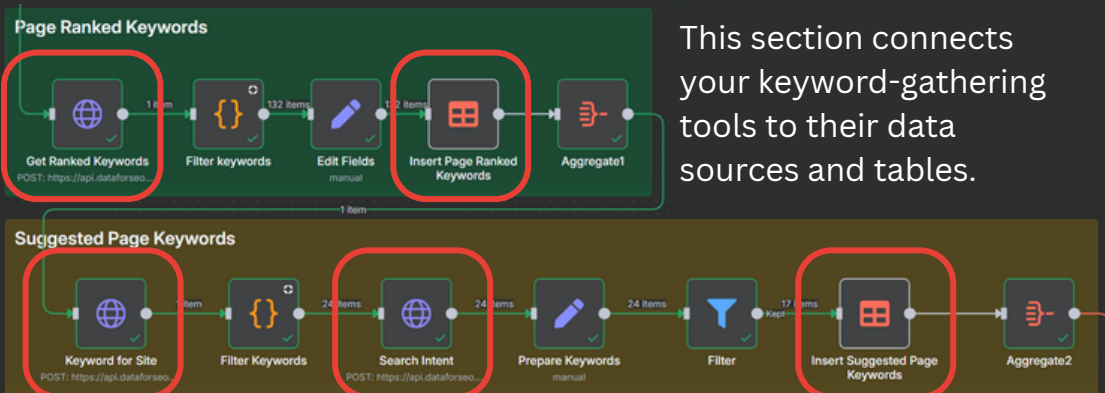
- Function: **ai_mode** / **serp_search**
- Keyword: Defined automatically by the model.
- Country_code: {{ \$('Get Country & Language Code').item.json.location_code }}
- Language_code: {{ \$('Get Country & Language Code').item.json.language_code }}

3. **Connect the Data Table:** Link the '**Insert row in Data Table**' node to your **[-KR- Business Data]** table and map these fields:

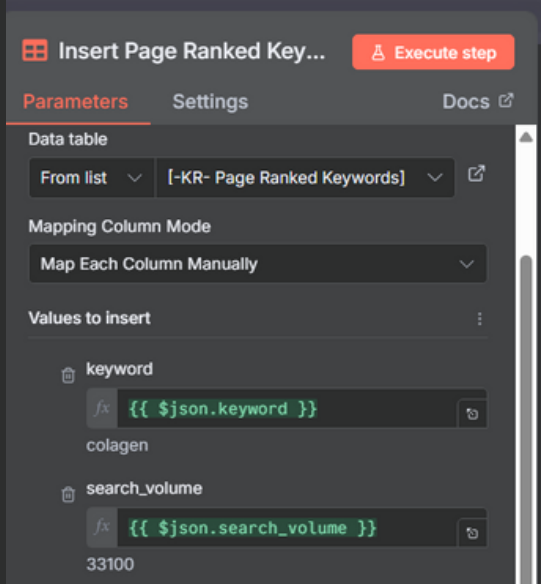
- session_id: {{ \$('Session ID').item.json.session_id }}
- client_country: {{ \$('Submit Form').item.json.Country }}
- client_language: {{ \$('Submit Form').item.json.Language }}
- client_website: {{ \$('Submit Form').item.json['Page URL'] }}
- Rest of the fields: Select - defined automatically by the model.



Step 5: Configure the Keyword & Intent Nodes 🔗

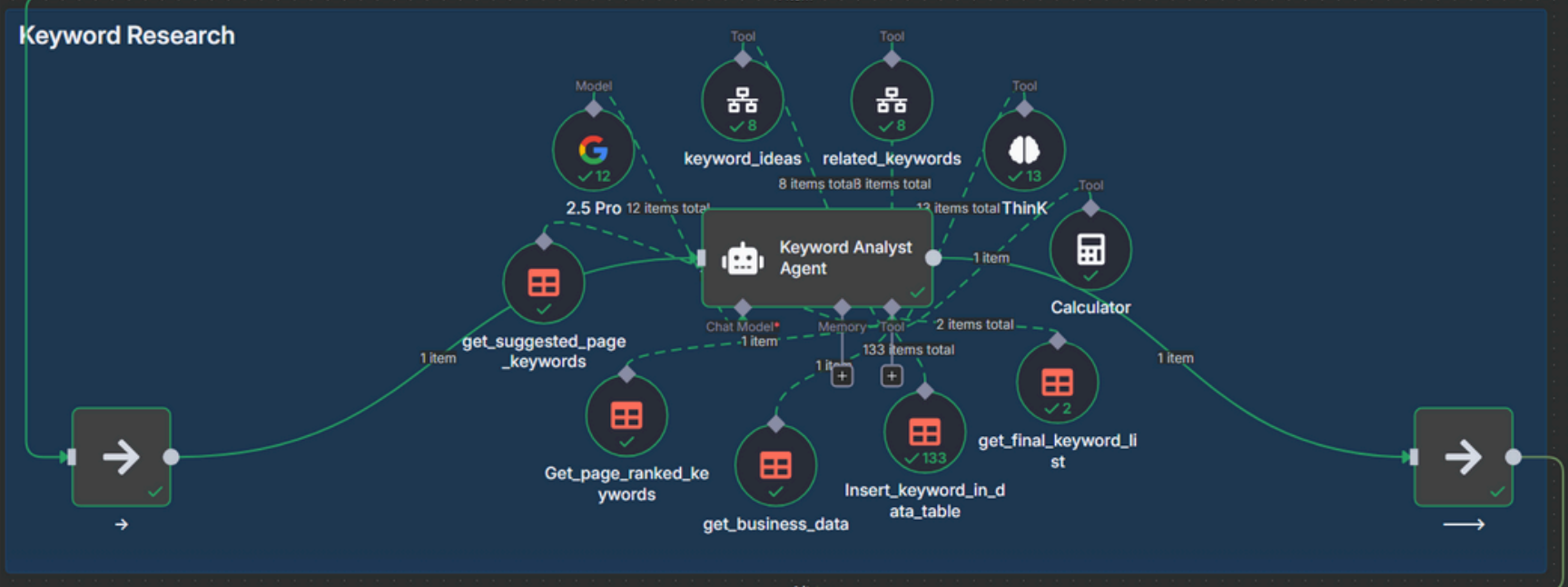


This section connects your keyword-gathering tools to their data sources and tables.



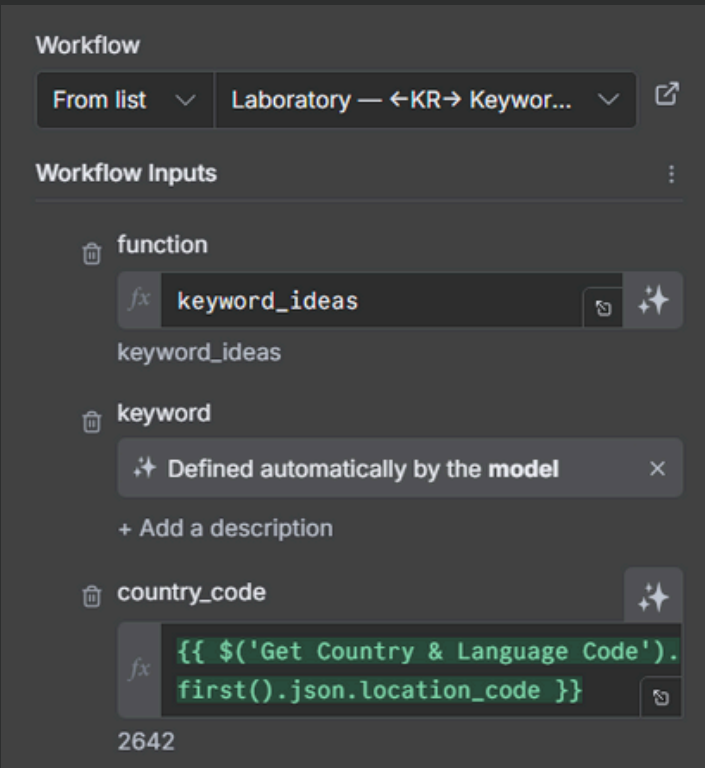
1. Connect **DataForSEO**: Make sure your DataForSEO credentials are connected (using Basic Auth) in these three nodes: 'Get Ranked Keywords', 'Keyword for Site', and 'Search Intent'.
2. (Optional) **Adjust Filter**: If you're getting too many results, you can adjust the settings in the 'Filter' node.
3. Connect the 'Insert Page Ranked Keywords' node to the **[-KR- Page Ranked Keywords]** table.
4. Connect the 'Insert Suggested Page Keywords' node to the **[-KR- Suggested Page Keywords]** table.
5. Important: In both nodes, make sure to map all the required fields by dragging and dropping the data from the input.

Step 6: Configure the 'Keyword Analyst Agent' 🧠



This agent analyzes all the gathered data to create the final keyword strategy.

1. Set the AI Model: Choose **Gemini 2.5 Pro** and set the **Temperature to 0.3**.



2. Configure its Search Tools: Connect the **keyword_ideas** and **related_keywords** tools to the **<-KR-> Keyword Research Tools workflow** with these settings:

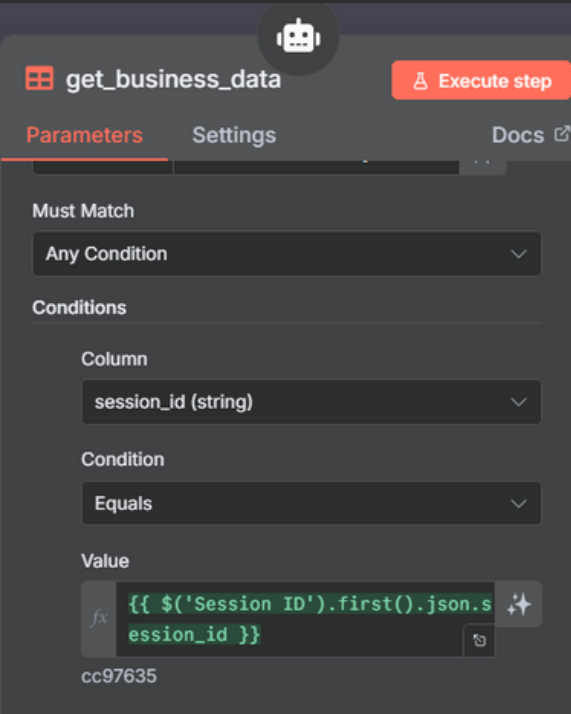
- Function: **keyword_ideas / related_keywords**
- Keyword: This is defined automatically by the model.
- country code: `{{ $('Get Country & Language Code').first().json.location_code }}`
- language code: `{{ $('Get Country & Language Code').first().json.language_code }}`

3. Configure its **DataTable Tools**: This is crucial. Connect the agent to all the tables you made so it can read from and write to them.

- get_suggested_page_keywords** = [-KR- Suggested Page Keywords]
- get_page_ranked_keywords** = [-KR- Page Ranked Keywords]
- get_business_data** = [-KR- Business Data]
- get_final_keyword_list** = [-KR- Final Keyword List]

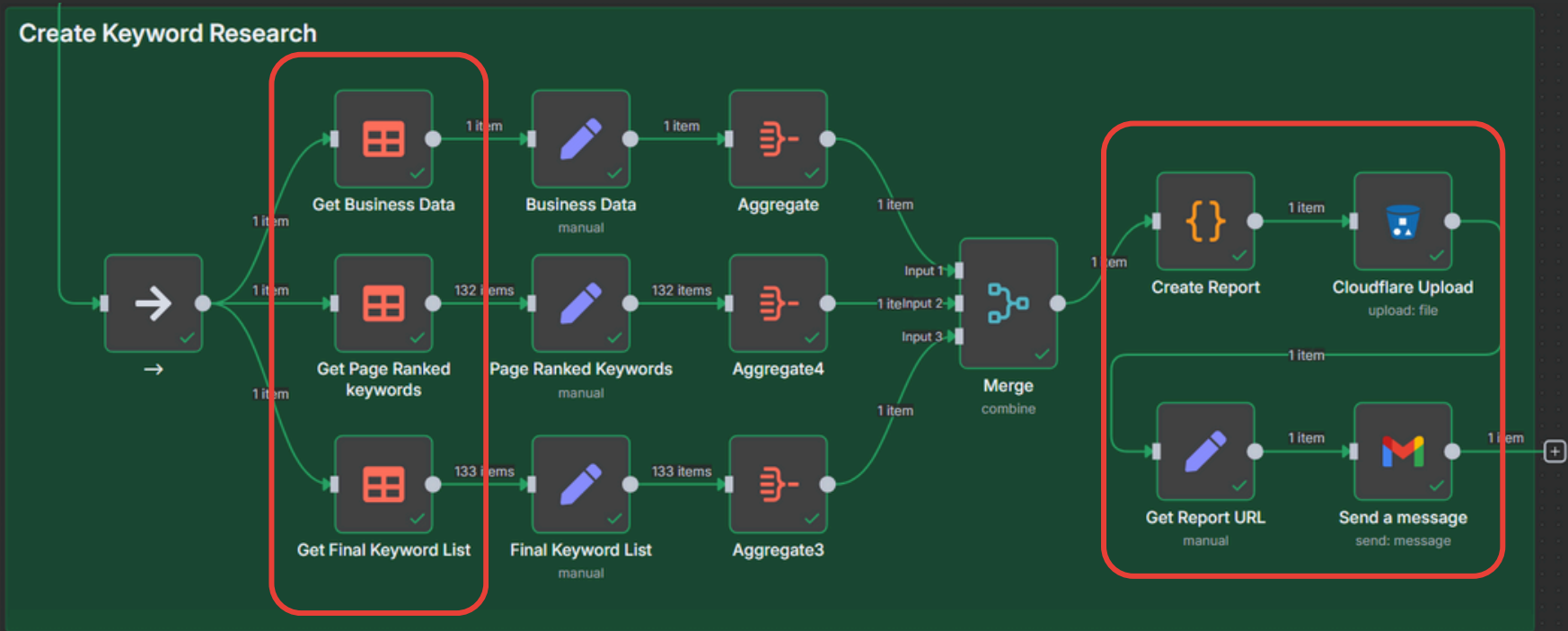
Condition for All: **session_id** = `{{ $('Session ID').first().json.session_id }}`

- Insert_keyword_in_data_table**: Connect to [-KR- Final Keyword List]
 - session_id**: `{{ $('Session ID').first().json.session_id }}`
 - All other fields**: defined automatically by the model.



⚠️ Make sure that all data tables are properly connect, test each and every step

Step 7: Finalize Reports & Uploads 📄



1. Reporting Nodes: For the final report generation, connect the data table nodes: **Get Business Data**, **Get Page Ranked keywords**, **Get Final Keyword List** to their respective tables.

The condition for all of them is:

- `session_id = {{ $('Session ID').item.json.session_id }}`

Conditions

Column

session_id (string)

Condition

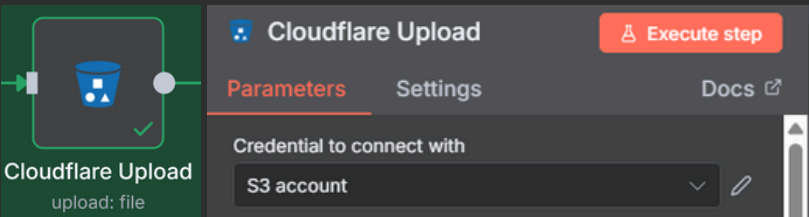
Equals

Value

`{{ $('Session ID').item.json.session_id }}`

cc97635

Step 8: Connect your 'Cloudflare Upload' node to store the final report.



- **Cloudflare upload (upload: file):** This node handles the uploading of the generated Keyword Research to the storage service, specifically Cloudflare S3 (R2).

To connect is simple, create an account in **cloudflare** then follow the steps below:

1. In the dashboard section, select **R2 Object Storage > Overview**.
2. Create a **Bucket**, name it 'N8N Automation' (or whatever name u want).
3. In the **Settings** section, make sure that the **Public Development URL** is **ENABLED**.

Storage & Databases

R2 Object Storage

Overview

Data Migration

R2 Object Storage / n8n

Default Storage Class ①

Public Access ①

Bucket Size

Class A Operations ①

Class B Operations ①

Standard

Enabled

43.29 MB

120

210

Objects Metrics Settings

Name: n8n

Created: May 18, 2025

Location: Eastern Europe (EEUR)

S3 API: `https://2f39[REDACTED]597.r2.cloudflarestorage.com/n8n`

Cloudflare Documentation Link: <https://developers.cloudflare.com/r2/api/s3/api/>

Configure the n8n Node

1. Return to the workflow and locate the "Cloudflare Upload".
2. Click on the Credential field and select "Create New".
3. Fill in the credential fields using the information you just gathered from Cloudflare:
 - **S3 Endpoint:** Paste the endpoint URL from your R2 bucket page.
 - **Access Key ID:** Paste the ID you generated.
 - **Secret Access Key:** Paste the secret key you saved.
4. Click **Save**.

S3 Endpoint

`https://2f39[REDACTED]be79697.r2.cloudflarestorage.com`

Region

auto

Access Key ID

bc474e3[REDACTED]

Secret Access Key

.....

Set up the 'Get Report URL' node with the correct **Public Development URL** that you have in Cloudflare.

Get Report URL

manual

url

String

`https://pub-6e4b77b888bc4422963711caabeb1953.r2.dev/{{ $('Session ID').first().item.json.session_id }}`

URLs

Public Development URL

`https://pub-6e4b77b888bc4422963711caabeb1953.r2.dev/ghid-co`

You can skip Step 7 & Step 8 if you don't want the report.