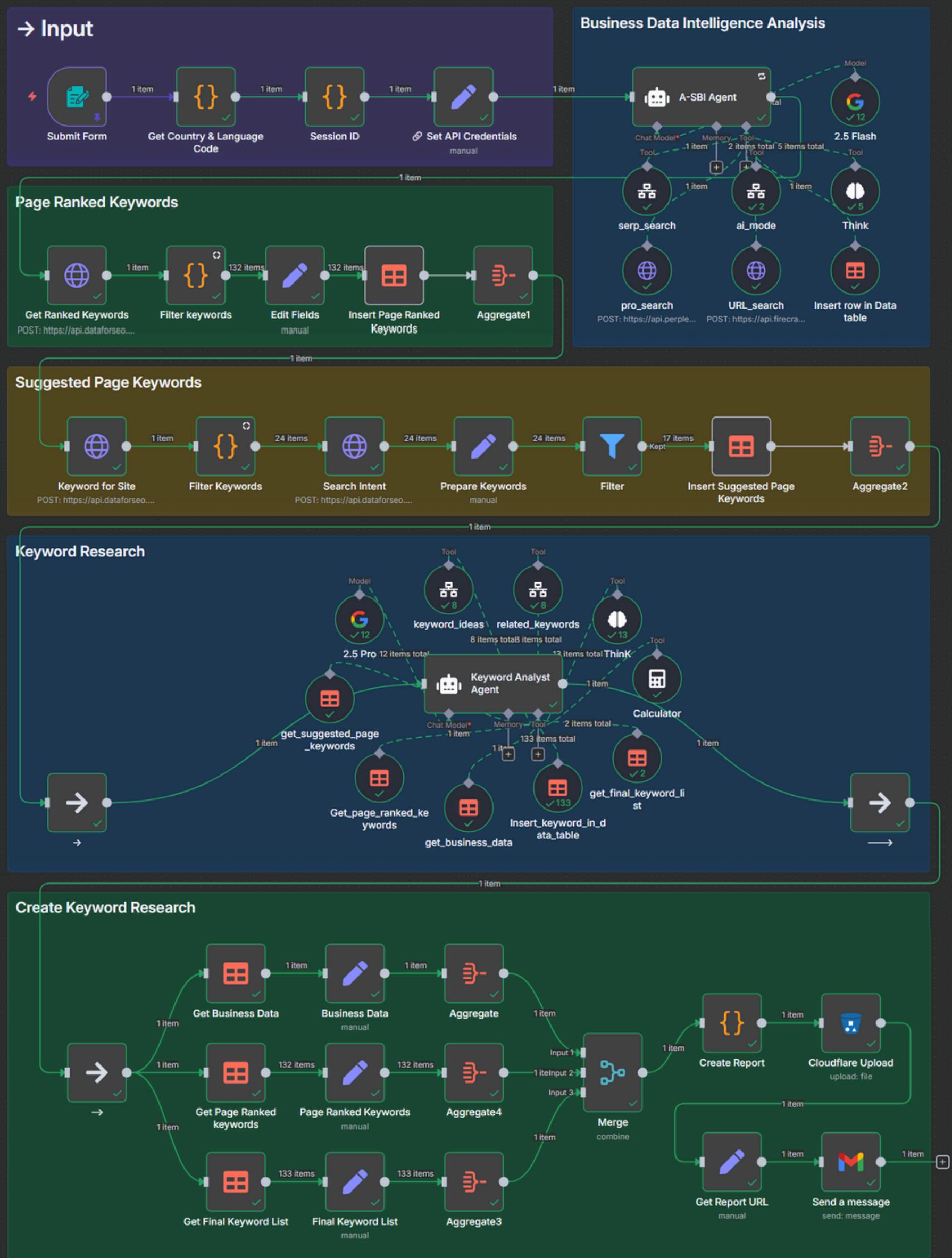


Keyword Research Workflow



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.

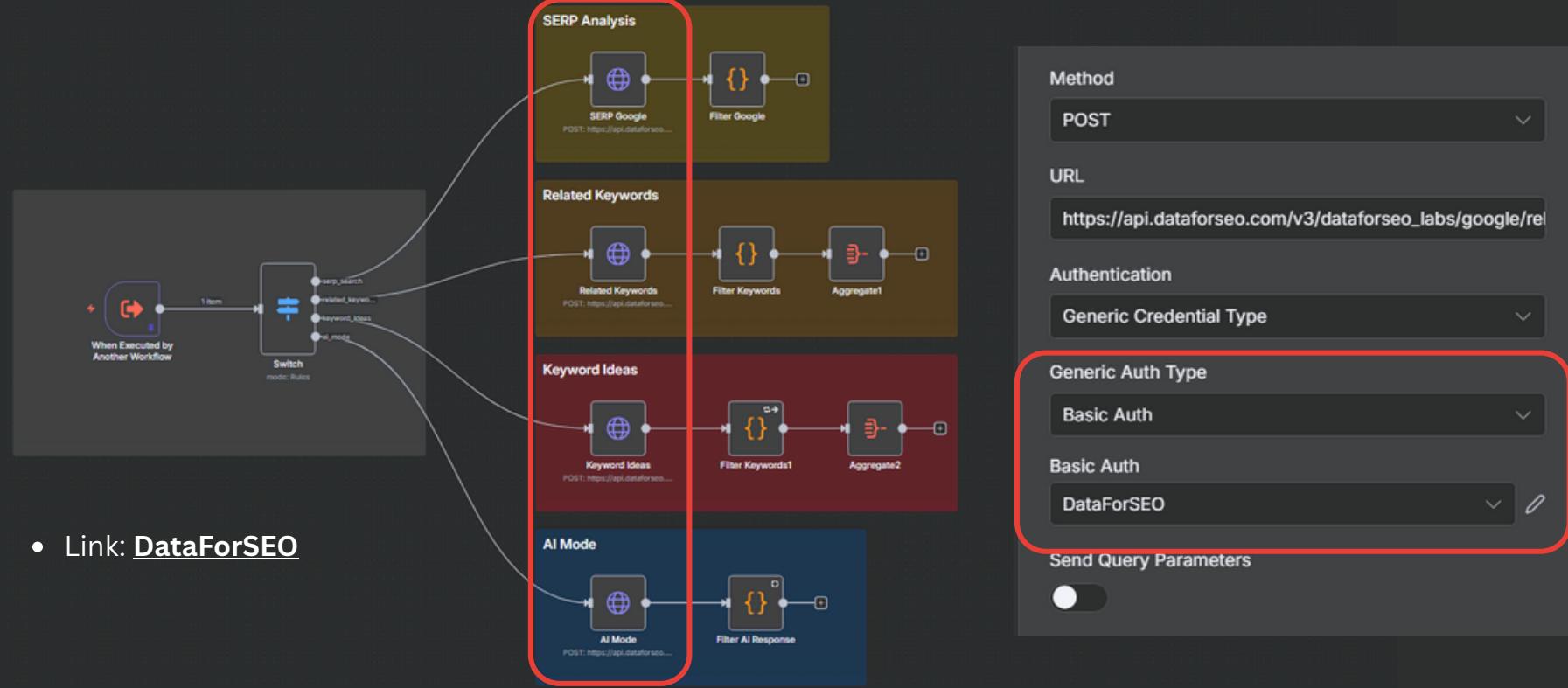


Step 1: Get Your Workflows Ready

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.



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, eeat_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]

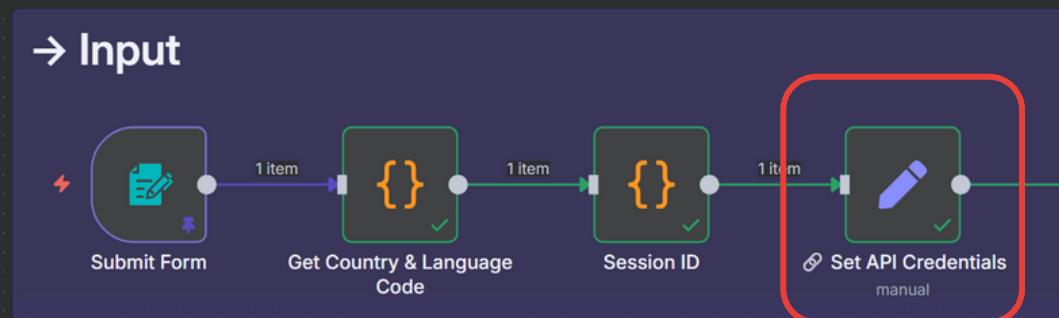
Columns: keyword, search_volume, cpc, competition, keyword_intent.label, keyword_intent.probability, session_id

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](#)

The dialog shows 'Mode: Manual Mapping' and 'Fields to Set' for 'Perplexity API Key' (String value: pplx-vXDb31f312fdU25VGK9OrTDhBMHztCGu) and 'Firecrawl API Key' (String value: fc-8500dbd0f49f213f213f12d65c7657b1d11c4).

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.



The dialog shows inputs for 'function': 'serp_search', 'keyword': 'Defined automatically by the model', and 'country_code': 'fx {{ \$('Get Country & Language Code').item.json.location_code }}'.

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:

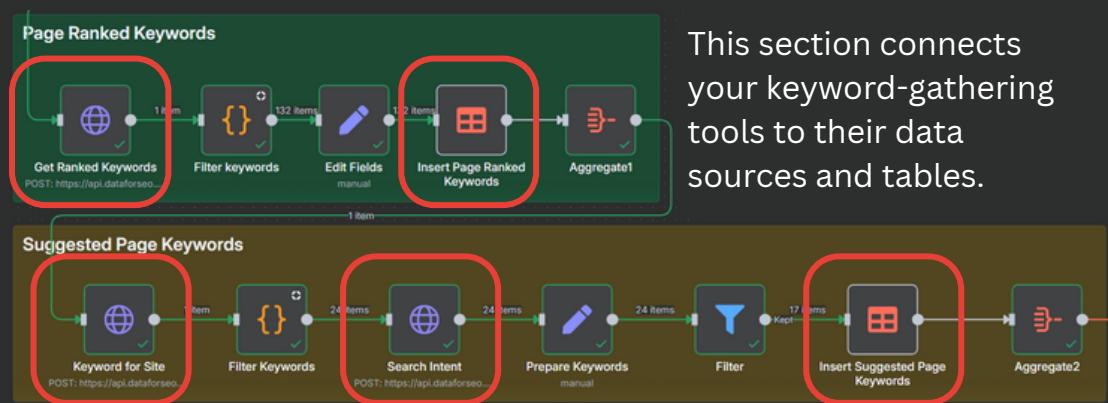
- Function: *ai_mode* / *serp_search*
- Keyword: Defined automatically by the model.
- Country_code: {{ \$(\$'Get Country & Language Code').item.json.location_code }}
- Language_code: {{ \$(\$'Get Country & Language Code').item.json.language_code }}

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.

The dialog shows 'From list: [-KR- Business Data]' and 'Values to insert' for 'session_id' (fx {{ \$(\$'Session ID').item.json.session_id }}) and 'client_name' (Defined automatically by the model).

Step 5: Configure the Keyword & Intent Nodes

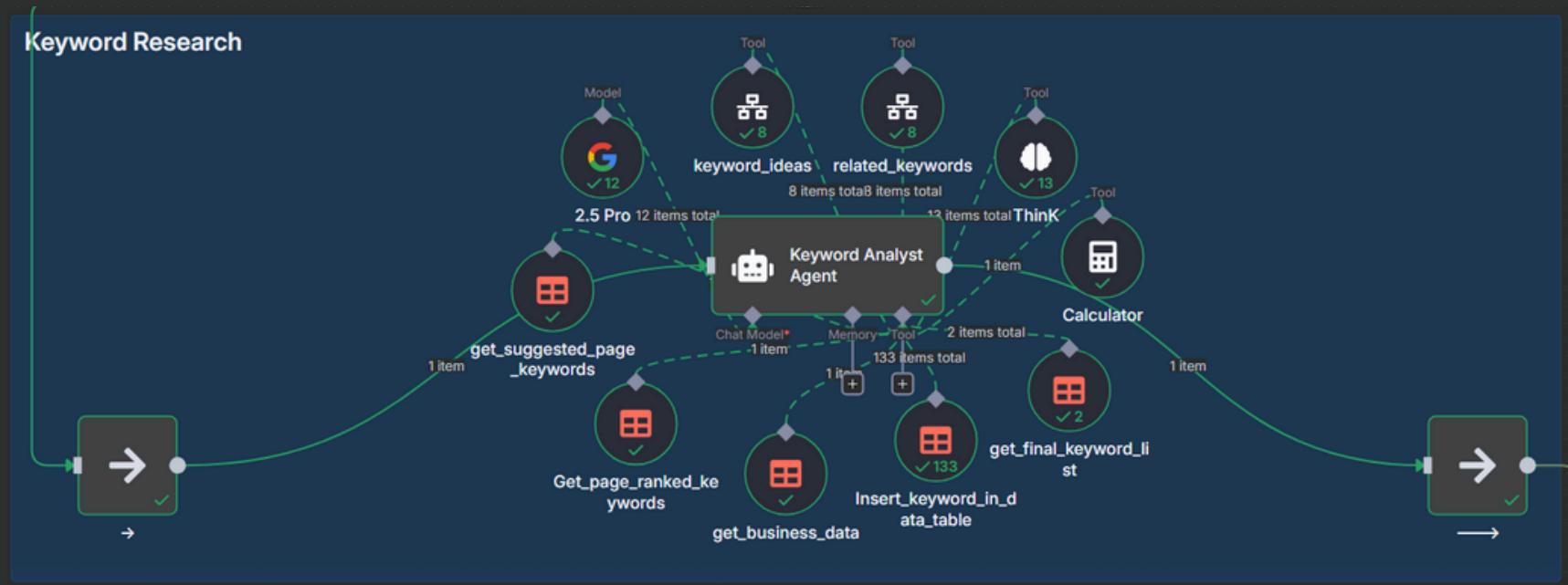


This section connects your keyword-gathering tools to their data sources and tables.

The dialog shows 'Data table: [-KR- Page Ranked Keywords]', 'Mapping Column Mode: Map Each Column Manually', and 'Values to insert' for 'keyword' (fx {{ \$json.keyword }}) and 'search_volume' (fx {{ \$json.search_volume }}).

- 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'.
- (Optional) **Adjust Filter**: If you're getting too many results, you can adjust the settings in the 'Filter' node.
- Connect the 'Insert Page Ranked Keywords' node to the [-KR- Page Ranked Keywords] table.
- Connect the 'Insert Suggested Page Keywords' node to the [-KR- Suggested Page Keywords] table.
- 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.

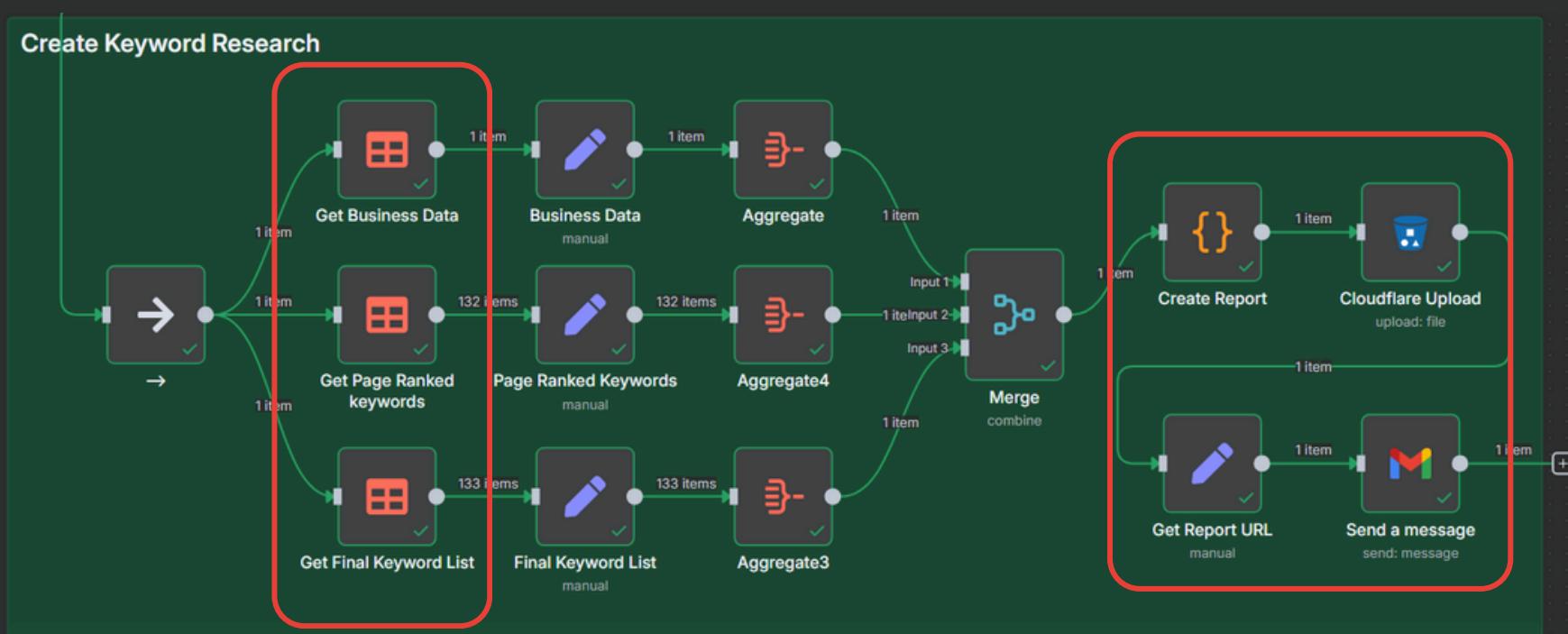
- `get_suggested_page_keywords` = [-KR- Suggested Page Keywords]
- `get_page_ranked_keywords` = [-KR- Page Ranked Keywords]
- `get_business_data` = [-KR- Business Data]
- `get_final_keyword_list` = [-KR- Final Keyword List]

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

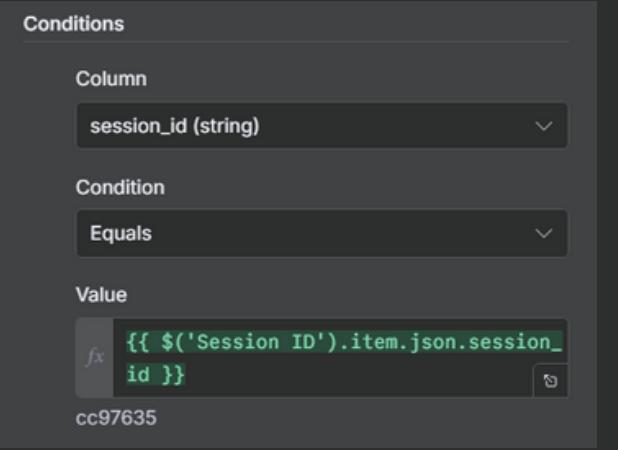
Step 7: Finalize Reports & Uploads



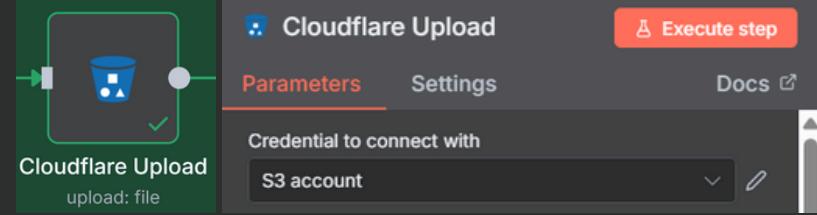
1. Reporting Nodes: For the final report generation, connect the data table nodes: **Get Business Data**, **Get Page Ranked keywords**, **Get Final Keyword List** to their respective tables.

The condition for all of them is:

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



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).

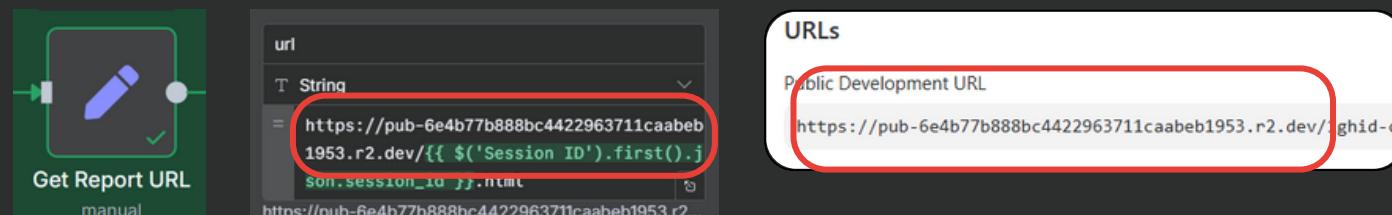
To connect is simple, create an account in **cloudflare** then follow the steps below:

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

Configure the n8n Node

- Return to the workflow and locate the **"Cloudflare Upload"**.
- Click on the Credential field and select "**Create New**".
- 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.
- Click **Save**.

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



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