Configuring Your First AI Content Agent n8n Workflow

This guide will walk you through the necessary configurations for your imported AI Content Agent workflow in n8n.

Prerequisites

Before you begin, ensure you have the following:

- Access to n8n
- Telegram Bot API Key (created via Botfather)
- OpenAI API Key (with credits purchased; accessible at platform.openai.com)
- FreePick Developer API Key (sign up free at FreePick and get your API key)

Configuration Steps

1. Configure the Telegram Trigger Node

1. Locate the **Telegram Trigger** node in your workflow.
2. In the parameters panel, click on the **Credentials** dropdown.
3. Select your pre-configured **Telegram API** credential. If you haven't created this credential yet:
    - Create a Telegram bot in the Telegram app via Botfather by typing /newbot.
    - Name your bot (e.g., AI Content Agent bot) and copy the API key.
    - In n8n, add a new credential for Telegram and paste the API key.
4. Save the credential and close the panel.

2. Configure the AI Agent Node

1. Locate the **AI Agent** node in your workflow.
2. Drag in the Telegram message query from the left panel to the user message input field.
3. Drag the current date into the appropriate field for context.
4. Paste the system prompt text from your documentation into the system prompt field.
    - Ensure the system prompt includes role definition, context setting, task instructions, constraints, tool instructions, output format, and examples.
5. Toggle **Required Structured Output Format** to ON.
6. Import the JSON schema from the documentation in the schema field defining social media copy and image prompt outputs.

3. Configure the OpenAI Chat Model Node

1. Locate the **OpenAI Chat Model** node.
2. In the parameters panel, click on the **Credentials** dropdown.
3. Select your pre-configured **OpenAI API** credential.
    - If you don't have the credential configured:
        - Go to platform.openai.com, generate a secret API key, copy it.
        - Create a new OpenAI credential in n8n and paste your key.
4. For the **Model** field, enter gpt-4.1-mini.
5. Save your changes.

4. Configure the Research Tool HTTP Request Node

1. Locate the **Research Tool** HTTP Request node.
2. Set the HTTP method to POST.
3. Set the URL to https://api.openai.com/v1/chat/completions.
4. In the header parameters, set:
    - Name: Authorization
    - Value: Bearer YOUR_OPENAI_API_KEY (or select your OpenAI credential accordingly)
5. Set the body parameters as form fields (not JSON):
    - model: enter gpt-4o-mini-search-preview-2025-03-11
    - messages[0].role: enter user
    - messages[0].content: click the stars to have the Agent dynamically pick the search query
6. Name this tool **Research** in your workflow for future reference.
7. Save the node.

5. Configure the Simple Memory Node

1. Locate the **Simple Memory** node.
2. Set the **Session ID** to a value you define (e.g., telegram_chat_session).
3. Drag the Telegram chat ID from the Telegram Trigger node into the Session ID input on the node.
4. Leave the default retention of last 5 interactions.

6. Configure the Image Generation HTTP Request Node

1. Locate the node named **image gen**.
2. Click on the node and open its parameters.
3. Import the FreePick curl command for the Flux image generation API.
4. In the JSON body, replace the prompt value by dragging in the image prompt expression from your AI Agent structured output.
5. Adjust the aspect ratio or styling parameters as desired or leave default.

6. Remove the webhook URL from the parameters.
7. Insert your copied FreePick API key into the header field named x-freepik-api-key.
8. Save the node.

7. Configure the Wait Node

1. Locate the **Wait** node.
2. Set the wait time to 5 seconds.

8. Configure the Get Image Status HTTP Request Node

1. Locate the **get image** node.
2. Import the FreePick curl command for "get status of the task."
3. For the URL parameter, remove the static task ID and drag the expression of the task ID generated in the **image gen** node to the URL's end.
4. Paste your FreePick API key into the x-freepik-api-key header field.
5. Save and test the node.

9. Configure the If Node for Image Completion

1. Locate the **If** node.
2. Set the condition to check if the image generation status equals "completed".
    - Use the status expression output from the **get image** node.
3. Set the true branch to continue the workflow for downloading the image.
4. Set the false branch to loop back to the **Wait** node for another 5-second delay.

10. Configure the Download Image HTTP Request Node

1. Locate the **download image** node.
2. Set the URL parameter by dragging the expression of the image URL from the **get image** node.
3. Save the changes.

11. Configure the Telegram Send Photo Node

1. Locate the **Telegram Send Photo** node.
2. Select the same Telegram credential used in the Telegram Trigger node.
3. Set the **Chat ID** by dragging in the chat ID expression from the Telegram Trigger node.
4. Enable **Binary Data** and set the field name to data.
5. In the caption field, drag the social media copy expression from the AI Agent output.
6. Save the node.