N8N-Sports Digest Newsletter

Setup & User Guide

Overview

The **N8N-Sports Digest Newsletter** is an end-to-end automated solution that periodically gathers top sports news and headlines from multiple sources, uses powerful AI for summarizing, creates AI-generated images, and distributes an attractive HTML newsletter to subscribed recipients. It leverages **n8n** for orchestration, ensuring a customizable, reliable, and efficient workflow ideal for teams, fans, clubs, and sports newsrooms.

- **Collects:** News from Reddit, Google News, NCAA, Yahoo Sports, BBC, and more
- **Uses AI:** Summarizes articles and creates custom images
- **Publishes:** Uploads images to WordPress and crafts a rich, branded newsletter
- **Distributes:** Sends via Outlook to a configurable list of recipients

Prerequisites

1. **n8n Environment:**
    - Self-hosted n8n instance (recommended latest stable release)
    - Access to n8n Editor UI

2. **API Accounts & Credentials:**
    - Reddit (OAuth2 App)
    - OpenAI API (GPT-4o-mini)
    - Google Gemini (Palm API for image generation)
    - WordPress (HTTP Basic Auth or Application Password)
    - Microsoft Outlook (Outlook OAuth2 API access)

3. **RSS Feeds:**

- Ensure target RSS feeds for sports news are reachable from your n8n server

4. **Newsletter Recipients:**
    - List of email addresses to receive the newsletter

Installation

1. **Import the Workflow:**
    - Obtain the `.json` export for the **N8N-Sports Digest Newsletter** workflow.
    - Log into your n8n Editor UI.
    - Click **Import Workflow** (top right), then select or paste the JSON file contents.
    - Review the flow diagram to ensure all nodes are correctly imported.

Configuration

Once imported, the workflow must be configured with your APIs, access tokens, topics, and mailing details. Below are the critical configurable elements and credentials you'll need.

Configurable Fields

- **Schedule Trigger:**
  Controls newsletter frequency. Default: Every Friday at 9:00 AM. You may edit this under the `Schedule Trigger` node's settings.
- **Topics & Recipients:**
    - **Sports Topics/Subreddit**: Set the main themes or target subreddits in the `Set Topic and Recipients` node (e.g., `sports`, `soccer`, `nba`).
    - **Recipient Emails**: Provide the comma-separated recipient list in the same node (`recipients` field).

Credential Setup

Service	n8n Credential Type	Used In Node	How to Set Up

Reddit API	redditOAuth2Api	Fetch Reddit Posts	• Register a script app at Reddit Apps • Get **Client ID**, **Client Secret**, set redirect to `http://localhost` • In n8n, create credentials (**Reddit OAuth2 API**), enter your details • Grant necessary scopes, e.g., `read`
OpenAI GPT	openAiApi	OpenAI GPT-4o Mini	• Sign up at OpenAI • Generate an API key • In n8n, add credentials (**OpenAI API**), paste your API key
Google Gemini (Palm)	googlePalmApi	Generate Image for Article 1 & 2	• Sign up for Google Gemini/MakerSuite • Generate API Key for Palm • In n8n, create credentials (**Google Palm API**), paste API key
WordPress	httpBasicAuth	Post Image to WordPress	• Recommend using **Application Passwords** • Get **Username** and **App Password** • Create credentials (**HTTP Basic Auth**) in n8n and enter your WordPress site's username and application password

Microsoft Outlook	microsoftOutlookOAuth2Api	Send Newsletter via Outlook	• Register your app in Azure Portal, grant **Mail.Send** and **Mail.ReadWrite** API permissions • Copy **Client ID**, **Client Secret**, and set Redirect URI to `http://localhost` • In n8n, add credentials under **Microsoft Outlook OAuth2 API**

> **Tip:** After creating each credential, test the connection in n8n under the credentials manager.
> **All credentials must be linked to appropriate workflow nodes (see above).**

Usage

1. **Verify Credentials:** Confirm all linked APIs (Reddit, Gemini, OpenAI, WordPress, Outlook) have valid and working credentials assigned.
2. **Configure Topics & Recipients:** Open `Set Topic and Recipients` node:
    - Set your focus sports topics in `topic` or `subreddit` fields.
    - Add all target emails to `recipients`, comma-separated.
3. **Review Schedule:** Ensure the `Schedule Trigger` node reflects your preferred newsletter schedule (default is Fridays 9:00 AM).
4. **Test Run:** Manually execute the workflow (click "Execute Workflow") for a dry run to validate all components work end-to-end.
5. **Enable Automation:** Switch the workflow to **Active** when ready; it will then process and send new newsletters at each scheduled interval.
6. **Monitor & Review:** All steps are visible in the n8n execution list; monitor for errors or run-time issues.

Editing & Customization

- To adjust the number of featured articles: edit logic in the `Select 7 Articles` node (set to 7 by default).
- To add or switch news sources: duplicate or modify relevant RSS or API nodes and link them to the normalization and merge chain.
- To modify the generated newsletter template: adjust the `Build Newsletter HTML` node as needed.

Troubleshooting

- **Credential Errors:** Confirm API key/token validity; re-authorize if prompted by n8n, and ensure proper scopes are assigned for each.
- **Missing Images:** Verify Gemini (Palm API) keys and WordPress credentials; check image payload/size limits.
- **Email Delivery Failures:** Ensure proper Outlook OAuth connection; check for recipient email typos.
- **Empty or Partial Newsletter:** Inspect upstream news feed nodes; at least some articles should be present in each feed.
- **Schedule Not Firing:** Ensure workflow status is **Active** and n8n is running in production mode (not sleeping or stopped).
- **Debugging Steps:**
    1. Check the execution logs in n8n UI for step-by-step outputs.
    2. Edit and rerun individual nodes with sample data for isolated testing.
    3. Review the **Error Message** in failed node outputs for targeted fixes.

Support

If you encounter issues, require enhancements, or need configuration assistance, reach out to our team. We're here to help you maximize your n8n newsletter automation!