N8N-Resource Request – Setup & User Guide

Overview

The **N8N-Resource Request** workflow from **AI Solutions, Inc.** is a robust automation for managing external resource or information requests. Designed to streamline collaboration between clients and internal teams, it employs AI-driven data gathering, document generation, and automated communication using the latest n8n orchestration, OpenAI GPT-4.1, and Microsoft SharePoint/Outlook integrations.

Process Summary:

1. Receives external requests via a secure webhook.
2. Analyzes requirements with an AI agent (LangChain/OpenAI).
3. Converts data into HTML, then generates a PDF.
4. Uploads the PDF to SharePoint.
5. Notifies internal teams and emails the client.
6. Logs contacts and activities to SharePoint lists.

Prerequisites

1. Running **n8n** instance, version 1.0 or later.
2. **Administrator** access to n8n for import and credential creation.
3. Accounts with necessary permissions for:
    - Microsoft SharePoint (site edit/upload access)
    - Microsoft Outlook (send mail as organization)

4. API keys or credentials for:
    - OpenAI/GPT (or Azure OpenAI)
    - PDF conversion service supporting HTML-to-PDF POST

Installation

1. Log into your **n8n** dashboard as an admin.
2. Go to **Workflows** → **Import from File/URL**, and upload the provided workflow `.json` export for **N8N-Resource Request**.
3. Review imported nodes (11 in total), as described below.
4. **Do not activate** the workflow until all configuration steps are complete.

Node Summary (Imported)

- **Resource Request Trigger** (webhook listener)
- **Resource Analysis Agent** (AI data collection)
- **Generate PDF HTML**, **Send to PDF Service**
- **Share PDF on SharePoint**
- **Prepare Client Email**, **Prepare Internal Notification**
- **OpenAI GPT-4.1 Mini Chat**
- **Add Contact to SharePoint List**
- **Alert Internal Team** (via Outlook)
- **Email Client via Outlook**

Configuration

Webhook URL

The workflow triggers on POST requests to:
`{n8n-base-url}/webhook/lgt-resource-request`

Example: `https://your-n8n-instance/webhook/lgt-resource-request`

Required Placeholders

Placeholder	Description / Required Value	Where Used
`YOUR_SERVICE_URL`	**PDF Service Endpoint:** The URL to which the HTML will be sent for PDF conversion (e.g., `https://your-pdf-service.com/api/convert`). Must accept an HTTP POST (most paid/enterprise PDF APIs support this).	**Send to PDF Service** node (HTTP Request)
`YOUR_SHAREPOINT_SITE_ID`	The unique **Site ID** for your Microsoft SharePoint site. Obtainable from SharePoint site settings or the SharePoint API.	**Share PDF on SharePoint**, **Add Contact to SharePoint List**
`YOUR_DRIVE_ITEM_ID`	The **Drive/Folder Item ID** in SharePoint/OneDrive where PDF documents will be uploaded. This is required by n8n's SharePoint upload nodes to target the correct folder.	**Share PDF on SharePoint**

To locate SharePoint IDs easily: Use Microsoft's Graph Explorer or visually browse your SharePoint folders and copy the resource IDs from the URL bar after navigating to the target location.

Credential Types Needed

- **Microsoft SharePoint OAuth2 (or Microsoft Graph)** – Full site/file/list access.

- **Microsoft Outlook OAuth2** – Send-as-organization permission.
- **OpenAI (or Azure OpenAI)** API Key – For GPT-4.1 and LangChain agent.
- **PDF Service API** – May require bearer token or API key.

To create credentials in n8n:

1. Navigate to **Credentials** → **Create new**.
2. Select the appropriate credential type.
3. Follow prompts—admin or service account recommended for SharePoint and Outlook.
4. Reference these credentials in the appropriate workflow nodes (select from dropdown during edit).

Final Steps Before Activation

- Replace all `YOUR_*` placeholders in the relevant node parameters.
- Review and set all relevant credentials in each node.
- Optionally, test the workflow using mock data to ensure each step completes successfully, especially document upload and email notifications.

Usage

1. **Activate** the workflow in n8n after all configurations are completed.
2. Submit a test POST request to `/webhook/lgt-resource-request` with the required request structure (see your workflow for schema).
3. Upon trigger:
    - The AI agent (LangChain/OpenAI) searches, processes, and summarizes incoming requests.
    - The data is formatted as HTML, then POSTed to your PDF service.
    - The generated PDF is uploaded to the designated SharePoint folder.
    - Contact details and tracking info are added to a SharePoint list.
    - Client and internal notification emails are dispatched via Outlook:
        - **Email Client via Outlook** for external contacts
        - **Alert Internal Team** for operations/staff

4. Monitor for errors in n8n's UI. Most nodes output detailed error messages for easy diagnostics.

Tips:
- Update AI prompts or system messages in the LangChain/OpenAI nodes to tailor responses for your sector.
- To change PDF formatting, edit the HTML code used in **Generate PDF HTML**.
- You can branch additional automations from any step or add further integrations as needed.

Troubleshooting

- **Webhook not triggering?** – Confirm the full webhook URL and HTTP method (`POST`). Test with a tool like Postman or curl.
- **PDF generation fails?** – Validate the `YOUR_SERVICE_URL` endpoint directly. Check your HTML for syntax issues.
- **SharePoint upload errors?** – Recheck `YOUR_SHAREPOINT_SITE_ID` and `YOUR_DRIVE_ITEM_ID`. Confirm OAuth permissions on your SharePoint app registration.
- **Emails not sent?** – Ensure Outlook credentials are valid and token is not expired. Verify the sender domain is allowed.
- **AI or LangChain node errors?** – Check the OpenAI API key and usage limits. Review the formulated prompt or system settings.
- **General n8n failures?** – Review logs (`docker logs`, supervisor, or n8n cloud activity) for detailed tracebacks.

If you encounter issues not listed here, gather screenshots, exported workflow JSON, and any relevant error messages before contacting support.

Support

For setup, workflow customization, or troubleshooting assistance, contact us:

Email: support@ais.email

Web: automatedintelligentsolutions.com

Phone: 404-293-0331

We offer priority support and can provide managed n8n hosting, workflow development, and full-stack AI solution consulting.

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