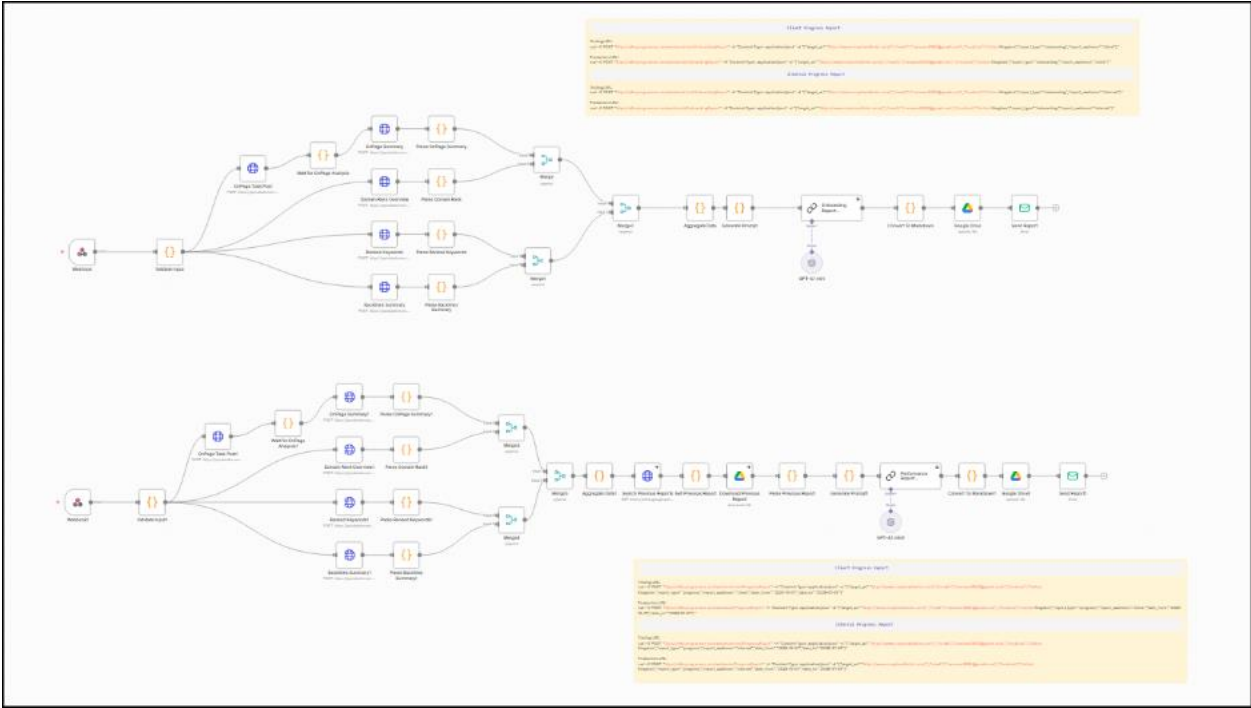
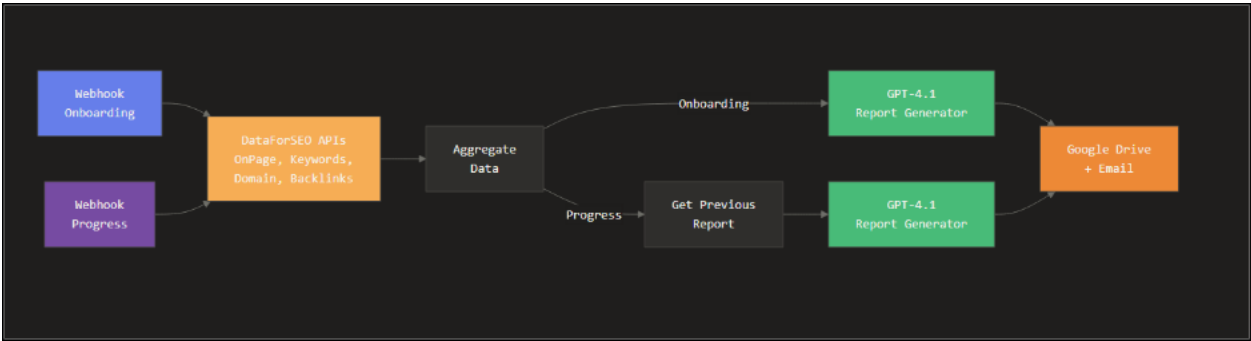


# SEO-Report-Generator

## Workflow



## Workflow Architecture



## Prerequisites

Before setting up the SEO Automated Report Generation System, make sure to have the following:

### 1. Technical Prerequisites

- Active **n8n instance** (cloud or self-hosted).
- n8n user account with permission to create and run workflows.

### 2. Account Prerequisites

- DataForSEO Account
- OpenAI Account
- Google Drive Account
- SMTP / Email Setup

## Initial Setup

### Import the Workflow

#### Step 1: Open n8n

- Log in to your n8n instance
- Go to Workflows
- Click Add Workflow or Import

#### Step 2: Import Workflow JSON

- Import from File
- Click Import from File
- Select SEO\_Reports\_Workflow.json
- Click Import

#### Step 3: Verify Import

- Workflow appears in list
- All nodes are visible
- Workflow name is correct
- No error messages
- Expected Nodes
  - Webhook nodes
  - Code nodes
  - HTTP Request nodes
  - Merge nodes
  - LLM nodes

- Google Drive nodes
- Email nodes

#### **Step 4: Save Workflow**

- Click Save
- Workflow is saved successfully

### **Activate the Workflow**

#### **Step 1: Open Workflow**

- Go to Workflows
- Open SEO Reports

#### **Step 2: Review Workflow**

- No broken connections
- All nodes visible
- Webhook nodes exist

#### **Step 3: Activate**

- Turn Active toggle ON
- Status shows active

#### **Step 4: Get Webhook URLs**

- Open Webhook node (Onboarding Report)
- Copy testing and production URLs
- Open Webhook1 node (Progress Report)
- Copy testing and production URLs
- Save URLs securely

#### **Step 5: Test Workflow**

- Send test request using curl
- Check execution logs
- Confirm webhook is triggered

## Required Changes for Using Workflow

Credentials must be added before the workflow can run.

### 1. DataForSEO Credentials

- Log in to DataForSEO.
- Go to API → Credentials.
- Copy username and password.
- Open n8n.
- Go to Credentials.
- Click Add Credential.
- Select HTTP Basic Auth.
- Name it DataForSeo
- Paste username and password.
- Open SEO Reports workflow.
- Open all DataForSEO API nodes.
- Select DataForSeo credential.
- Save nodes.

### 2. OpenAI Credentials

- Log in to OpenAI.
- Go to API Keys.
- Create a new API key.
- Copy and save it.
- In n8n, add a new credential.
- Select OpenAI API.
- Paste API key.
- Save.
- Open workflow.
- Open both GPT report nodes.
- Select OpenAI credential.
- Model: GPT-4.1-mini or gpt-4o-mini.
- Max Tokens: 4000.
- Temperature: 0.7.
- Save nodes.

### 3. Google Drive Credentials

- Open Google Cloud Console.
- Create a new project.
- Enable Google Drive API.
- Create OAuth 2.0 credentials.

- Copy Client ID and Client Secret.
- In n8n, add Google Drive OAuth2 credential.
- Paste Client ID and Client Secret.
- Connect Google account.
- Allow access.
- Save.
- Open workflow.
- Open all Google Drive nodes.
- Select Google Drive credential.
- Save nodes.

#### **4. SMTP Email Credentials**

- Get SMTP details from Gmail.
- In n8n, add SMTP credential.
- Enter host, port, username, and password.
- Test connection.
- Save.
- Open workflow.
- Open both email nodes.
- Select SMTP credential.
- Update From Email to your email.
- Save nodes.

#### **5. Update Google Drive Folder ID**

- Open Google Drive.
- Create a reports folder.
- Copy folder link.
- Get Folder ID from URL.
- Open workflow.
- Open both Google Drive upload nodes.
- Replace old Folder ID with your Folder ID.
- Save nodes.
- Make sure Google account has Editor access.

## Testing Setup

### 1. Test Onboarding Report

Using curl (Terminal/Command Prompt)

```
curl -X POST "https://[your-n8n-instance]/webhook-test/OnboardingReport" \  
-H "Content-Type: application/json" \  
-d '{  
  "target_url": "https://example.com",  
  "email": "your-test-email@example.com",  
  "location": "United Kingdom",  
  "report_type": "onboarding",  
  "report_audience": "client/internal"  
}'
```

### 2. Test Progress Report

Using curl (Terminal/Command Prompt)

```
curl -X POST "https://[your-n8n-instance]/webhook-test/ProgressReport" \  
-H "Content-Type: application/json" \  
-d '{  
  "target_url": "https://example.com",  
  "email": "your-test-email@example.com",  
  "location": "United Kingdom",  
  "report_type": "onboarding",  
  "report_audience": "client/internal"  
}'
```

## Requirements

- An active n8n setup (cloud or self-hosted) is required with a stable internet connection and enough system resources.
- A DataForSEO account is required with access to OnPage, Domain Rank, Keywords, and Backlinks APIs, along with sufficient API credits.
- An OpenAI account with billing enabled is required to use GPT-4.1 mini (or gpt-4o-mini) for report generation.
- A Google Drive account is required to store reports, with the Google Drive API enabled and enough storage space available.
- An SMTP email service is required to send reports, with proper authentication and security enabled.
- Regular monitoring is required by checking n8n logs, API usage, email delivery status, and Google Drive storage.

## Deliverables

- The workflow creates SEO reports in Markdown format and saves them automatically in Google Drive.
- Two types of reports are delivered: Onboarding Report and Progress Report.
- The Onboarding Report shows current SEO performance, opportunities, a 12-month roadmap, expected results, and next steps.
- The Progress Report shows performance changes over time, keyword movement, traffic trends, improvements, and growth opportunities.
- The Internal Audit Report gives a detailed and honest SEO review, including technical issues, risks, priorities, and effort estimates.
- All reports are uploaded to Google Drive and organized by website and date for easy access.
- An email is sent automatically after report creation with a link to the report and a short summary.