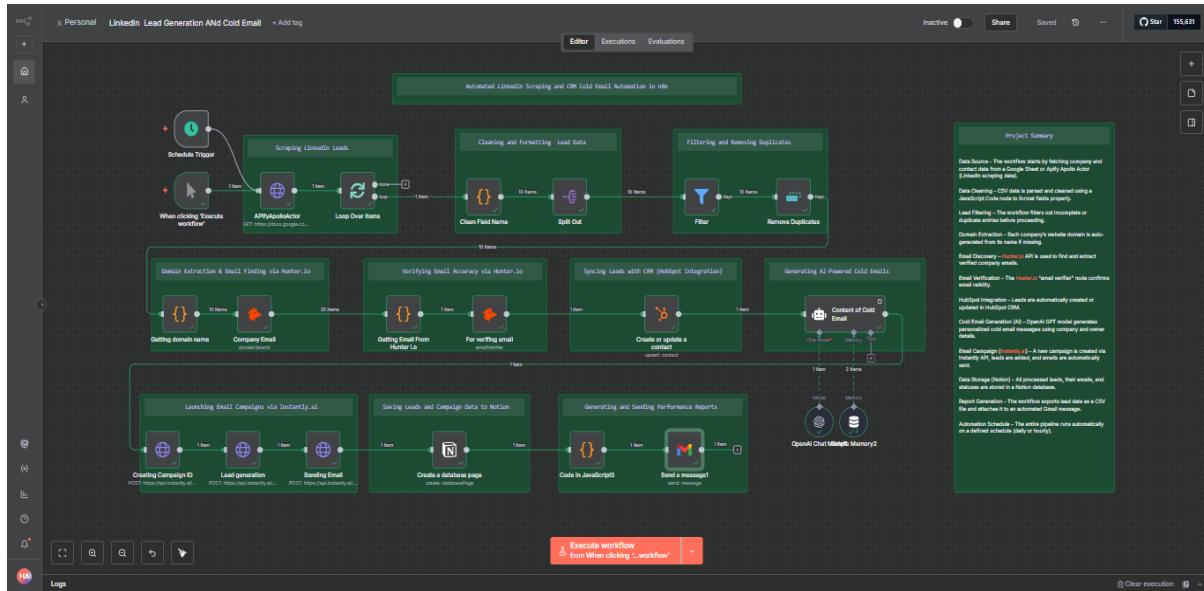


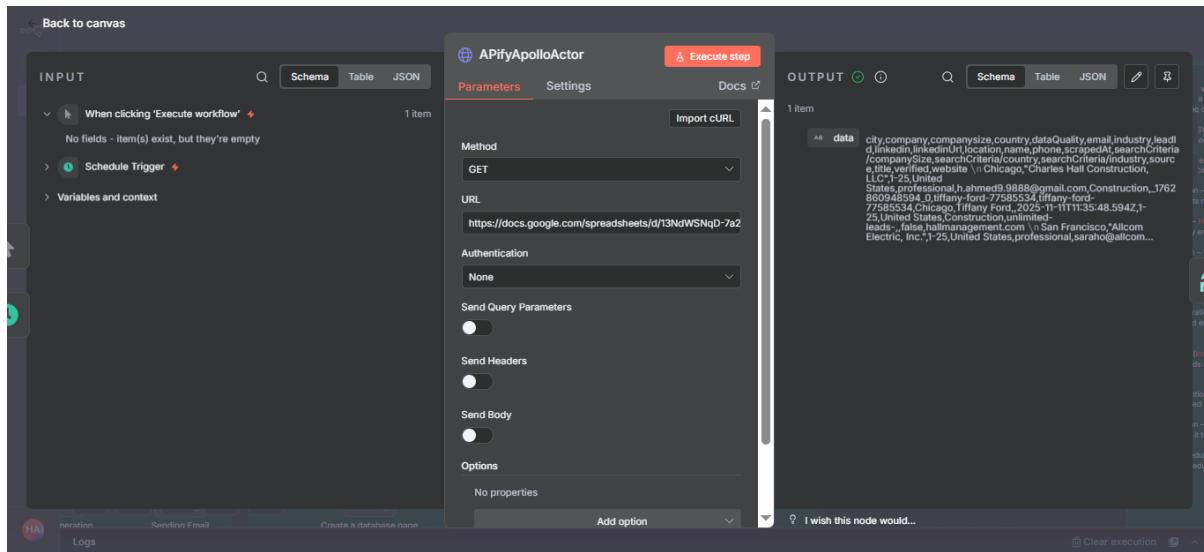
Automated LinkedIn Lead Scraping and CRM Cold Email Automation in n8n



This project automates the entire lead generation and cold outreach process from LinkedIn to CRM. It scrapes company and contact data from LinkedIn, cleans and filters the leads, extracts company domains, and finds verified emails using Hunter.io. The verified leads are synced with HubSpot CRM, where AI-generated personalized cold emails are created and sent automatically via Instantly.ai. All lead details and campaign results are stored in Notion, and a performance report is generated and sent through Gmail. The entire workflow runs on a set schedule, ensuring continuous and hands-free lead generation.

Scraping LinkedIn Leads

LinkedIn leads are scraped using the Apollo Apify scraper, which automatically collects company and contact details such as name, position, email, and company information. This ensures accurate, real-time data directly from LinkedIn for high-quality lead generation.



Finding Verified Emails using Hunter.io

Hunter.io is used to find and extract verified professional emails for each company, ensuring only valid and reachable contacts are added to the workflow

The screenshot shows a workflow interface with three main sections: INPUT, COMPANY EMAIL (highlighted in red), and OUTPUT.

INPUT: A list of parameters for "Getting domain name". Key entries include:

- city: Chicago
- companysize: 1-25
- country: States
- dataQuality: professional
- email: h.ahmed9.988@gmail.com
- industry: Construction
- leadId: _1782860948594_0
- linkedin: tiffany-ford-77585534
- linkedinUrl: tiffany-ford-77585534
- location: Chicago
- name: Ford
- phone: 2025-11-11T11:35:48.594Z
- scrapedAt: 1-25
- searchCriteria_companySize: States
- searchCriteria_country: Construction

COMPANY EMAIL Step Configuration:

- Credential to connect with: Hunter account
- Operation: Domain Search
- Domain: {{ \$json.domain }} (set to charles-hall-construction-llc.com)
- Only Emails: Enabled
- Return All: Disabled
- Limit: 10
- Filters: No properties

OUTPUT: A list of extracted email sources.

- value: hello@chapter.com (confidence: 95)
- sources[0]:
 - domain: chapter.com
 - url: https://chapter.com
 - extracted_on: 2018-09-09
 - last_seen_on: 2024-12-21
 - still_on_page: false
- sources[1]:
 - domain: compliance.ai
 - url: https://compliance.ai/compliance-ai-referral-deal-registration
 - extracted_on: 2020-04-25
 - last_seen_on: 2025-09-06

Verifying Email Accuracy

Each email is verified through Hunter.io's email verifier to confirm its validity and reduce bounce rates during cold email campaigns

The screenshot shows a workflow editor interface with three main sections: INPUT, PARAMETERS, and OUTPUT.

INPUT: Shows a list of steps and their counts:

- Getting Email From Hunter.io (1 item)
- Company Email (35 items)
- Getting domain name (10 items)
- Remove Duplicates (10 items)
- Filter (10 items)
- Split Out (10 items)
- Clean Field Name (10 items)
- Loop Over Items (1 item)
- APIfyApolloActor (1 item)
- When clicking 'Execute workflow' (1 item)
- Schedule Trigger (1 item)
- Variables and context (1 item)

PARAMETERS: The central panel for the 'For verifying email' step. It includes:

- Credential to connect with: Hunter account
- Operation: Email Verifier
- Email: {{ \$json.companyEmail }} (with value hello@chapter.com)

OUTPUT: Shows the results of the verification:

- 1 item
- status: valid
- # score: 100
- email: hello@chapter.com
- regexp: true
- gibberish: false
- disposable: false
- webmail: false
- mx_records: true
- smtp_server: true
- smtp_check: true
- accept_all: false
- block: false
- sources: sources[0] (with domain chapter.com)

At the bottom, there is a message: "Send a message! I wish this node would..."

Syncing Leads with CRM (HubSpot Integration)

Verified leads are automatically synced with **HubSpot CRM**, where new contacts are created or existing ones are updated to keep the database organized and up to date

The screenshot shows a workflow interface with three main sections: INPUT, Parameters, and OUTPUT.

INPUT: Contains a single item under "For verifying email". It includes fields like status (valid), score (100), email (hello@chapter.com), regexp (true), gibberish (false), disposable (false), webmail (false), mx_records (true), smtp_server (true), smtp_check (true), accept_all (false), block (false), sources (with domain chapter.com), and sources[0].

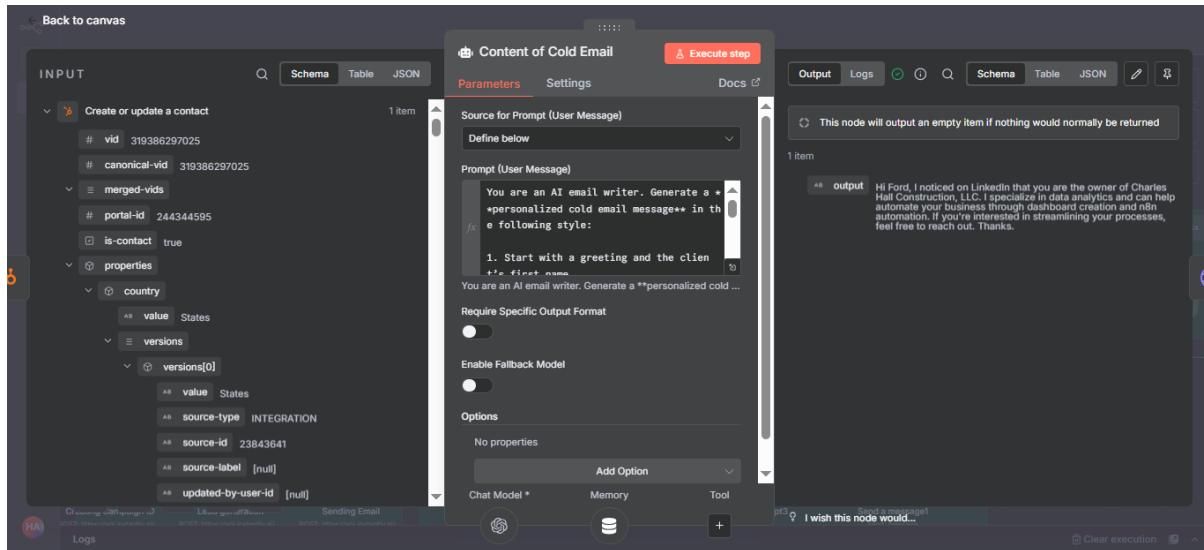
Parameters: Set to "Create or update a contact". It includes a "Credential to connect with" (HubSpot account), "Resource" (Contact), "Operation" (Create or Update), and "Email" (fx: {{ \${'Getting Email From Hunter i.o').item.json.companyEmail }}). The "Email" field contains the value hello@chapter.com.

Output: Shows a single item with the following properties:

- # vid: 319386297025
- # canonical-vid: 319386297025
- # merged-vids
- # portal-id: 244344595
- is-contact: true
- properties:
 - country:
 - value: States
 - versions:
 - value: States
 - source-type: INTEGRATION
 - source-id: 23843641
 - source-label: [null]
 - updated-by-user-id: [null]

Generating AI-Powered Cold Emails

Personalized cold emails are generated using AI (OpenAI GPT), tailored to each lead's company details and role to increase engagement and response rates



Launching Email Campaigns via Instantly.ai

Workflow connects with Instantly.ai to create and launch automated cold email campaigns, sending personalized messages to verified leads at scale

The screenshot shows a workflow canvas with the following components:

- INPUT:** A list of items under "Content of Cold Email". One item is expanded, showing a template message: "Hi Ford, I noticed on LinkedIn that you are the owner of Charles Hall Construction, LLC. I specialize in data analytics and can help automate your business through dashboard creation and RPA automation. If you're interested in streamlining your processes, feel free to reach out! Thanks."
- Step Preview:** A central panel titled "Creating Campaign ID" with the sub-titile "Execute step". It includes tabs for "Parameters", "Settings", and "Docs".
 - Method:** POST
 - URL:** <https://api.instantly.ai/api/v2/campaigns>
 - Authentication:** None
 - Send Query Parameters:** Off
 - Send Headers:** On
 - Specify Headers:** Using Fields Below
 - Header Parameters:** Name: Authorization
- OUTPUT:** A list of items under "campaign_schedule". One item is expanded, showing its details:
 - schedules[0]:** name: Weekday Schedule, timing: from 09:00 to 17:00, days: Etc/GMT+11
 - timestamp_created:** 2025-11-12T10:21:27.872Z
 - timestamp_updated:** 2025-11-12T10:21:27.872Z
 - organization:** 31d312c8-a5c4-4427-a754-357894d95659

Saving Leads and Campaign Data to Notion

All lead details and campaign results are automatically stored in Notion, providing an organized and easily accessible record of your outreach activities

The screenshot displays a workflow interface with three main sections: INPUT, PROCESS, and OUTPUT.

INPUT: Shows a "Sending Email" step with the following data:

- id:** 0e81bea4-7d20-400e-scaa-f1757fb461db
- name:** n8n
- # status:** 1
- campaign_schedule:**
 - schedules[0]:** Weekday Schedule
 - timing:** from 09:00 to 17:00
 - days:** 3 true, 4 true
 - timezone:** Etc/GMT+11
- start_date:**

PROCESS: A central node titled "Create a database page" with the following configuration:

- In Notion, make sure to add your connection to the pages you want to access.**
- Credential to connect with:** Notion account 4
- Resource:** Database Page
- Operation:** Create
- Database:** From list | Lead Generation And Cold Ema...
- Title:** (empty)
- Simplify:** (switch is on)
- Properties:** Key Name or ID

OUTPUT: Shows the resulting database page with the following properties:

- id:** 2a9bd0e1-0486-8179-85b5-f20099cd050e
- name:** Ford
- url:** https://www.notion.so/Ford-2a9bd0e10486817985b5f20099cd050e
- property_industry:** Construction
- property_company_email_generator:** hello@chaper.com
- property_company_linked_in_url:** tiffany-ford-7755534
- property_verification_of_email_re...**: valid
- property_company_name:** Charles Hall Construction, LLC
- property_status_of.instantly_cold...**: Scheduled
- property_name_of_person:** Ford

Generating and Sending Performance Reports

Detailed performance report is generated, summarizing leads, email statuses, and campaign results, and is automatically sent to your email for easy tracking

The screenshot shows a workflow interface with two main sections: INPUT and OUTPUT.

INPUT: A file named "leadFord.csv" is selected. The file details are: File Name: leadFord.csv, Mime Type: text/csv. There are "View" and "Download" buttons.

Parameters: The "sending email to client" step is selected. The configuration includes:

- Credential to connect with: Gmail account 5
- Resource: Message
- Operation: Send
- To: bibijaveria031@gmail.com
- Subject: Lead Generation Info With Instantly Cold Email Status
- Email Type: HTML
- Message: New lead is Generated
- Options: None

OUTPUT: The output shows the result of the execution. It includes:

- 1 item
- id: 19a7795cf9ab3875
- threadId: 19a7795cf9ab3875
- labelIds: [SENT]

A message at the bottom says: "I wish this node would..."

Hunter.io is used to find and extract verified professional emails for each company, ensuring only valid and reachable contacts are added to the workflow