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JobAssist: Contact Standardization Backend API Documentation

This document describes the current Flask-based RESTful API implemented in app.py, which manages the standardization and retrieval of company data using a PostgreSQL database (contact_db).

Configuration & Environment

The backend relies on the following PostgreSQL connection parameters, defined in the DB_CONFIG dictionary. These must be correctly configured for the application to function.

Parameter	Value (Example/Default)	Notes	
dbname	contact_db	The name of the database.	
user	jobert	The PostgreSQL user.	
password	linkedin	SECURITY NOTE: This password should be changed.	
host	localhost	The database server host.	

1. Data Retrieval Endpoints

These endpoints support the main **Dashboard (index.html)** view for displaying standardized data.

1.1 GET /api/companies

Retrieves all standardized company profiles from the companies table. This is the primary data source for the sortable dashboard view.

Detail	Specification

Method	GET
URL	/api/companies
Returns	JSON array of all company profiles.

Success Response Body:

```
{
  "status": "success",
  "companies": [
    {
      "company_id": 1,
      "company_name_clean": "Google",
      "target_interest": true,
      "size_employees": 150000,
      "annual_revenue": 282.8,
      "revenue_scale": "B",
      "headquarters": "Mountain View, CA",
      "notes": "High priority target for Q4."
    },
    // ... more companies
]
```

2. Company Mapping and Cleanup Endpoints

These endpoints are used by the **Cleanup Interface (cleanup.html)** to standardize raw company names.

2.1 GET /api/unmapped_list

Retrieves a list of all unique company names from the contacts table that do not yet have a corresponding entry in the company_name_mapping table.

Detail	Specification
Method	GET
URL	/api/unmapped_list
Logic	Performs a LEFT JOIN between contacts

and company_name_mapping where the mapping is NULL.

Success Response Body:

```
{
  "status": "success",
  "raw_names": [
   "Google Inc.",
   "Googlle",
   "Acme Corp LTD",
   // ... more unmapped names
]
}
```

2.2 GET /api/suggestions

Searches for existing clean company names (companies.company_name_clean) using a case-insensitive partial match (ILIKE), used for the autocomplete feature.

Detail	Specification	
Method	GET	
URL	/api/suggestions	
Query Param	q (string): The search query (e.g., ?q=goo).	

Success Response Body:

```
"suggestions": [

{
    "company_id": 1,
    "company_name_clean": "Google"
    },
    {
      "company_id": 2,
      "company_name_clean": "Alphabet"
    }
]
```

2.3 POST /api/map/existing

Maps a single unmapped raw_name to an existing standardized company profile identified by company_id. Corresponds to **Cleanup Action 1**.

Detail	Specification	
Method	POST	
URL	/api/map/existing	

Request Body Schema:

```
{
  "raw_name": "Google Inc.",
  "company_id": 1
}
```

2.4 POST /api/map/new (Create and Map)

Creates a new company profile in the companies table and immediately maps the given raw name to the newly generated company id. Used for **Cleanup Action 2**.

Detail	Specification
Method	POST
URL	/api/map/new

Request Body Schema:

```
{
    "raw_name": "NewCo. LLC",
    "new_clean_name": "NewCo",
    "target_interest": false // Optional, defaults to false
}
```

2.5 POST /api/map/self (Skip and Self-Map)

Handles **Cleanup Action 3** (Skip & Self-Map). This is a convenience endpoint that reuses the logic of /api/map/new, where:

- 1. The raw name is used as the clean name.
- 2. target interest is set to TRUE by default.

Detail	Specification	
Method	POST	
URL	/api/map/self	

Request Body Schema (requires only raw_name):

```
{
    "raw_name": "Acme Corp"
}
```

2.6 POST /api/map/batch

Batch processes all remaining unmapped names. Each unmapped raw_name is used to create a new company profile (self-map logic), and all new profiles are marked as target_interest: TRUE.

Detail	Specification
Method	POST
URL	/api/map/batch

Request Body: An empty JSON object {}.

Success Response Body:

```
{
    "status": "success",
    "message": "Batch mapping complete.",
    "processed_count": 42 // Number of names processed
}
```

3. Management Placeholders

These endpoints are designed to support the Management Interface (management.html). In the current app.py implementation, these are placeholders and return a 501 Not Implemented status.

3.1 GET /api/companies/{company_id}

Retrieves the full detail of a single standardized company profile.

3.2 PUT /api/companies/{company_id}

Updates all editable fields for an existing standardized company profile.

3. Company Management Endpoints

These endpoints support the **Company Management Tool** (management.html) for viewing, retrieving, and updating the standardized company profiles and their related contact/raw name data.

3.1 GET /api/companies/{company_id} (Retrieve Single Company Profile & Related Data)

Retrieves a single standardized company profile, along with all associated raw company names and contact records.

```
Method GET

URL /api/companies/<int:company_id>

Returns JSON object containing the company profile, a list of associated raw names, and a list of contact records.

Success Response Body:

{
    "status": "success",
```

```
"company": {
  "company id": 101,
  "company name clean": "Innovatech Solutions",
  "target interest": true,
  "headquarters": "San Jose, CA",
  "size_employees": 500,
  "annual_revenue": 8.5,
  "revenue_scale": "M",
  "notes": "Key account for Q3 marketing efforts."
},
"raw names": [
  "Innovatech Solutions Inc.",
  "InnovatechSol",
  "Innovatech-Solutions"
],
"contacts": [
  {
    "contact_id": 501,
    "first_name": "Jane",
    "last_name": "Doe",
    "job title": "CTO",
    "email": "jane.doe@innovatech.com",
    "linkedin_url": "[https://linkedin.com/in/janedoe](https://linkedin.com/in/janedoe)"
  }
```

```
// ... more contacts
]
}
```

3.2 PUT /api/companies/{company_id} (Update Company Profile)

Updates the enrichment data and/or the clean name for a specific standardized company profile.

Detail	Specification
Method	PUT
URL	/api/companies/ <int:company_id></int:company_id>
Returns	JSON object confirming success and returning the updated profile data.

Request Body Schema:

Only send the fields that need to be updated. All fields are optional, but at least one must be provided.

Field Name	Data Type	Required	Description
company_name_cle an	string(10 0)	No	The standardized company name.
target_interest	boolean	No	Flag for sales/marketing priority.
headquarters	string(10 0)	No	Primary location.
size_employees	integer	No	Estimated number of employees.

```
Numeric part of the annual
 annual_revenue
                                     No
                       numeric
                                                revenue.
                                                Scale of the revenue (K, M, or B).
 revenue_scale
                       string(10
                                     No
                                     No
                                                Internal notes/history.
 notes
                       text
Example Request Body:
{
  "headquarters": "London, UK",
  "target interest": true
}
Success Response Body:
{
  "status": "success",
  "message": "Company profile updated successfully.",
  "updated data": {
    "company id": 101,
    "company_name_clean": "Innovatech Solutions",
    "target interest": true,
    "headquarters": "London, UK",
    "size_employees": 500,
    "annual_revenue": 8.5,
    "revenue_scale": "M",
```

```
"notes": "Key account for Q3 marketing efforts." }
```