Dynamica

LABS

# DYNAMICA GOOGLE MAPS INTEGRATION

## Configuration Guide

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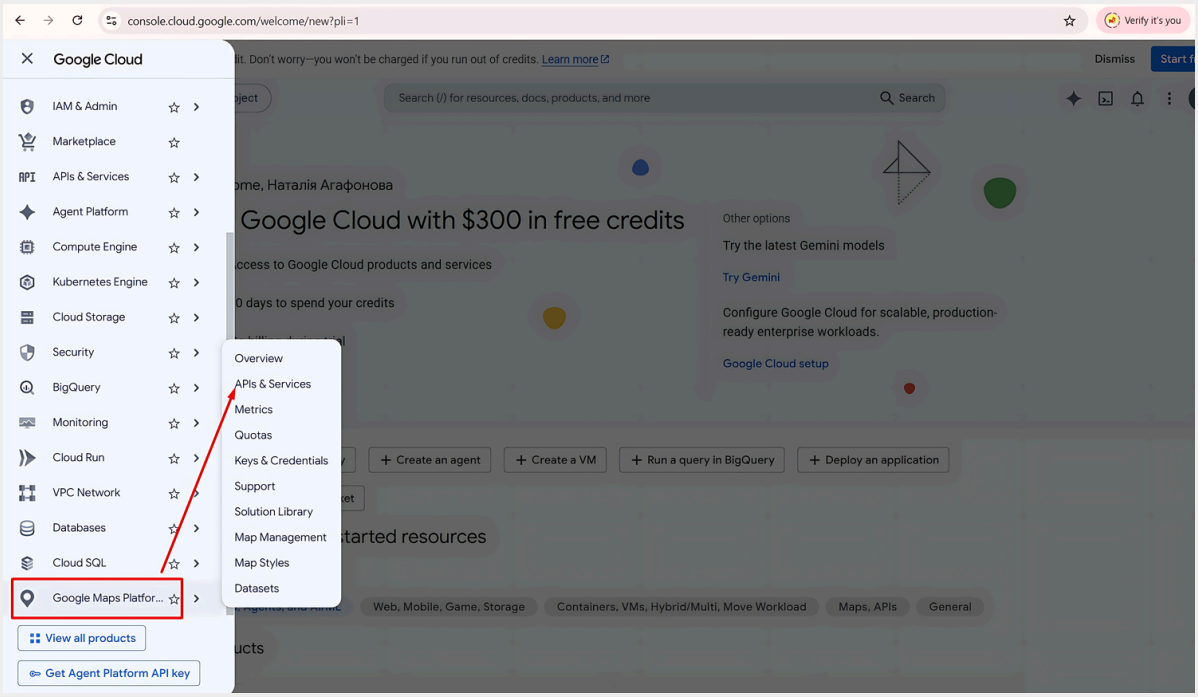

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# 3 GOOGLE MAPS API CONFIGURATION

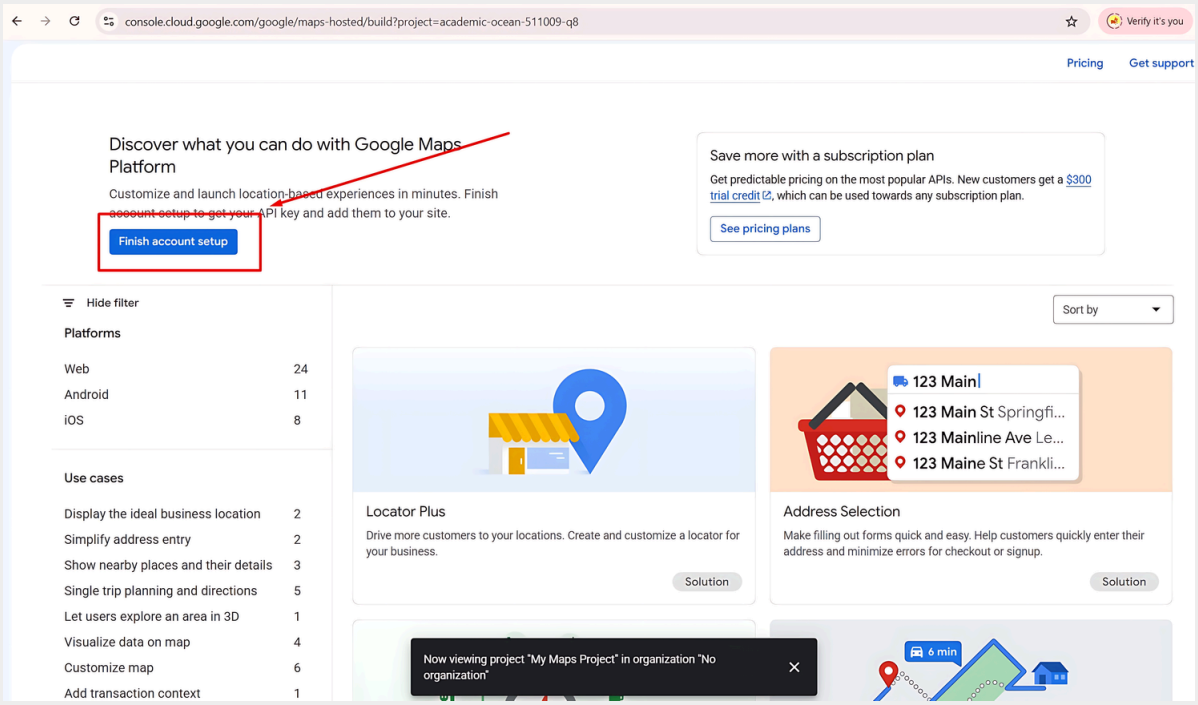
In order to use Google Maps in Dynamics 365 - Google Maps Directions API, Geolocation API and Maps JavaScript API must be enabled. Then Google Maps API Key can be generated.

To do that:

1. Go to https://console.cloud.google.com and scroll to the bottom of the left-side menu;
2. Select Google Maps Platform -> APIs & Services;



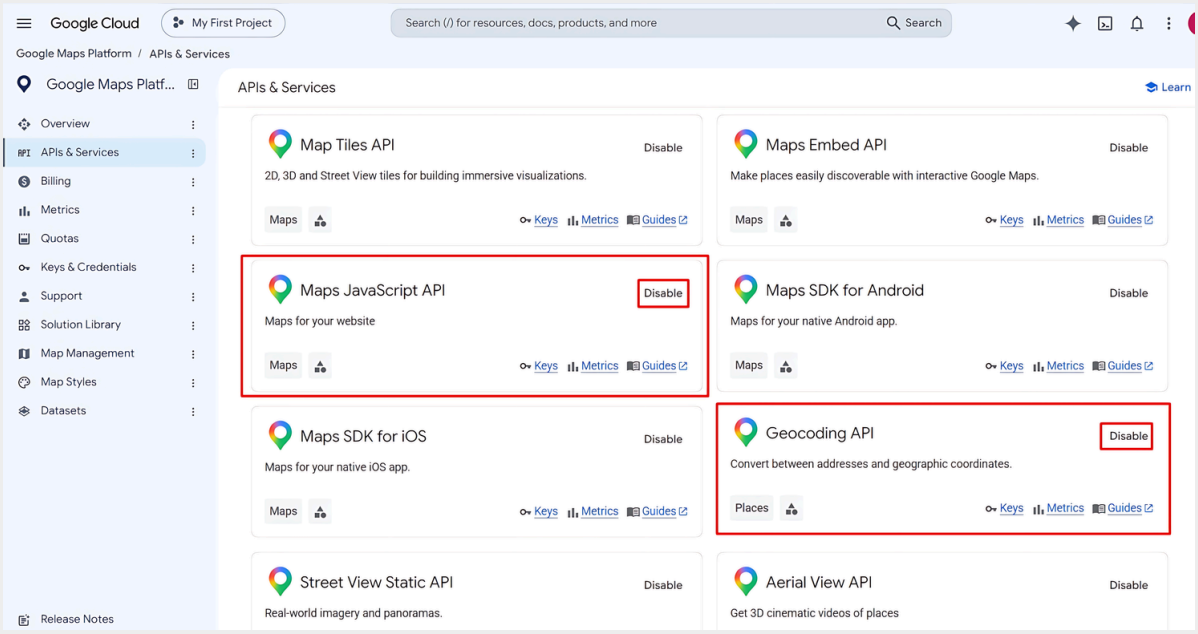

If you are not registered, click the Finish account setup button to enable full platform access




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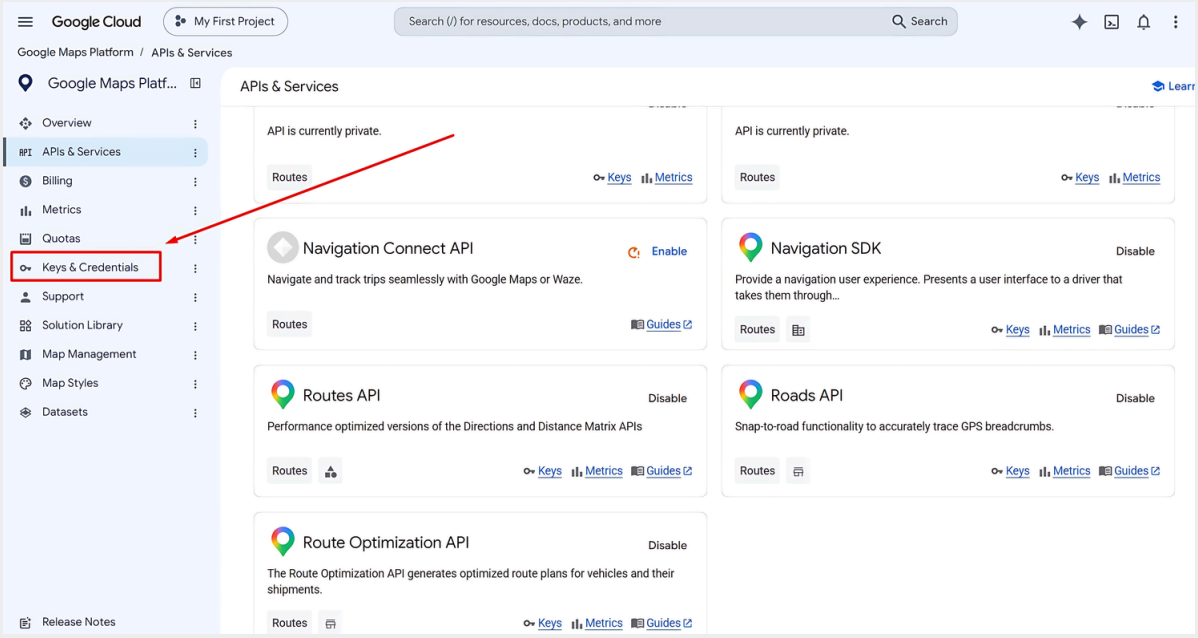
# GOOGLE MAPS API CONFIGURATION

3. For full map functionality, the following APIs should be enabled:
Directions API
Geocoding API
Isochrones API
Map Tiles API
Maps JavaScript API
Places API Places API (New)




4. Ensure these API are enabled; usually, they are enabled by default. If you see a 'Disable' button, it means that the API is enabled.

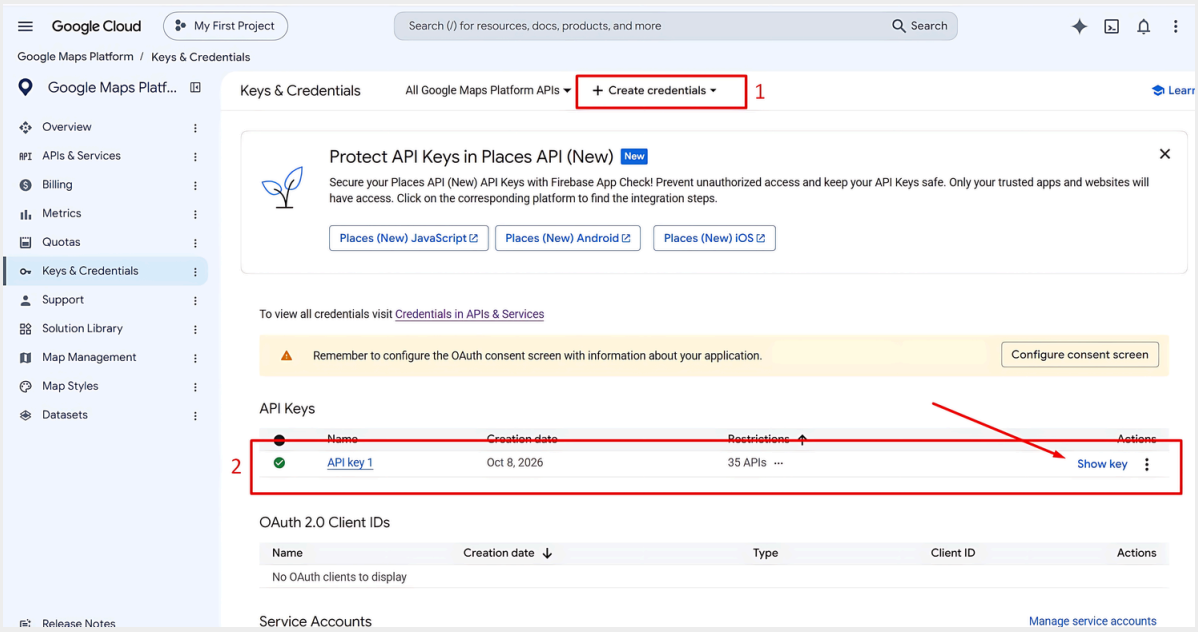
5. Go to Keys & Credentials section;



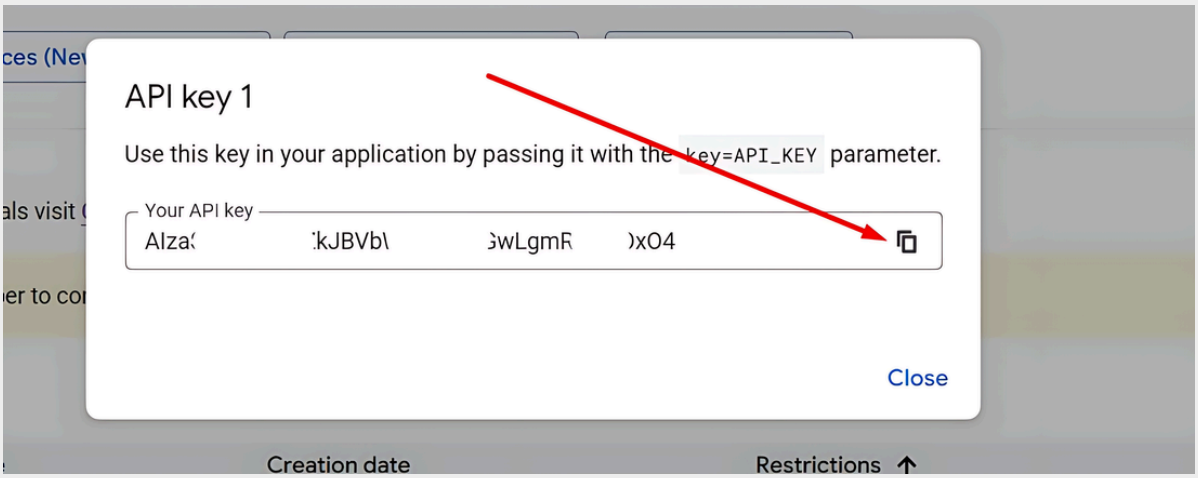

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# GOOGLE MAPS API CONFIGURATION

6. Click +Create credentials if you don’t see the one in API Keys Grid or click Show key




7. Press Copy icon and paste this value in the corresponding field of Configurator Hub

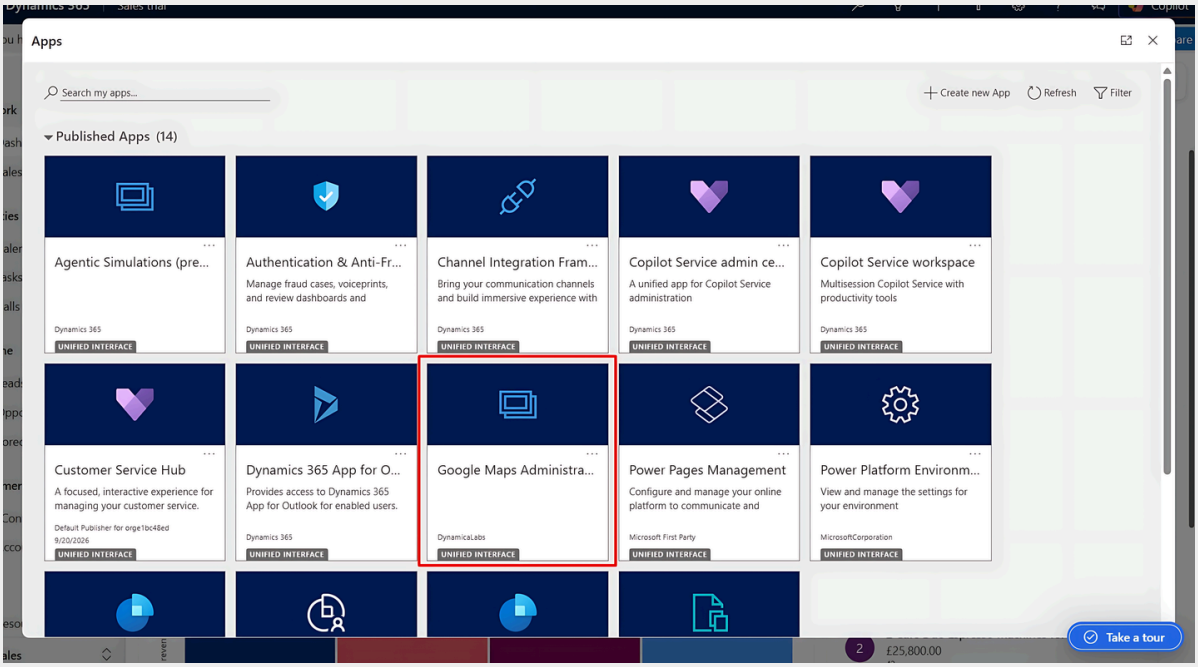



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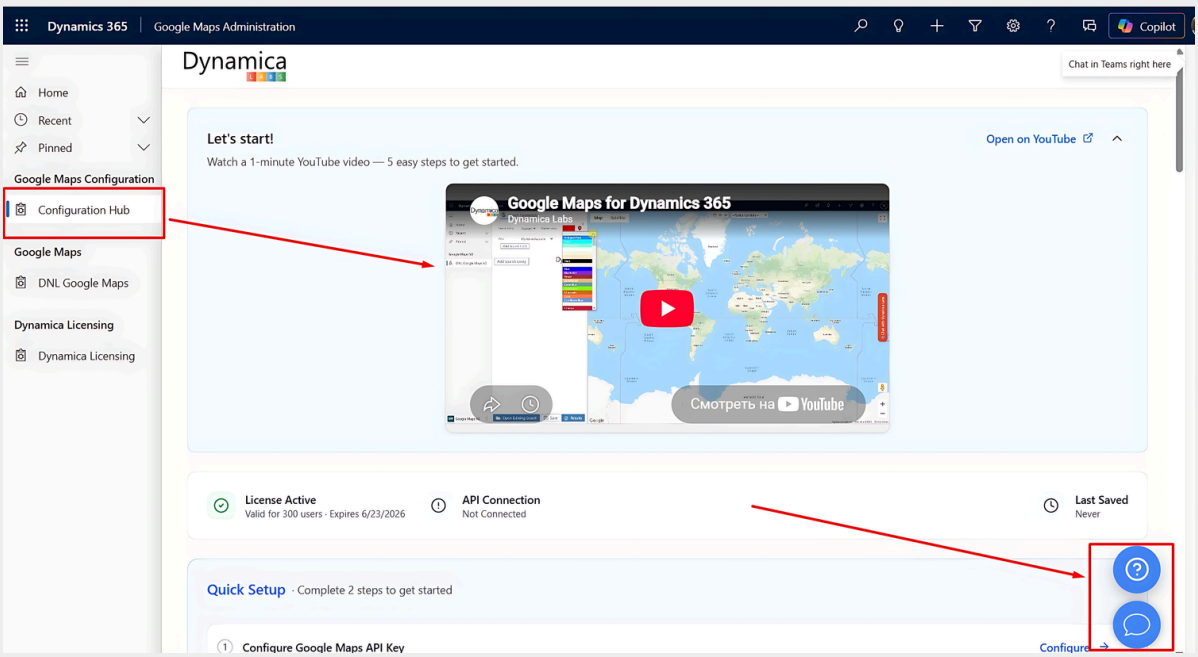
# CONFIGURATION HUB

After Dynamica Google Maps Integration solution is installed a few configuration steps must be done:

1. Go to Apps -> open Google Maps Administration.



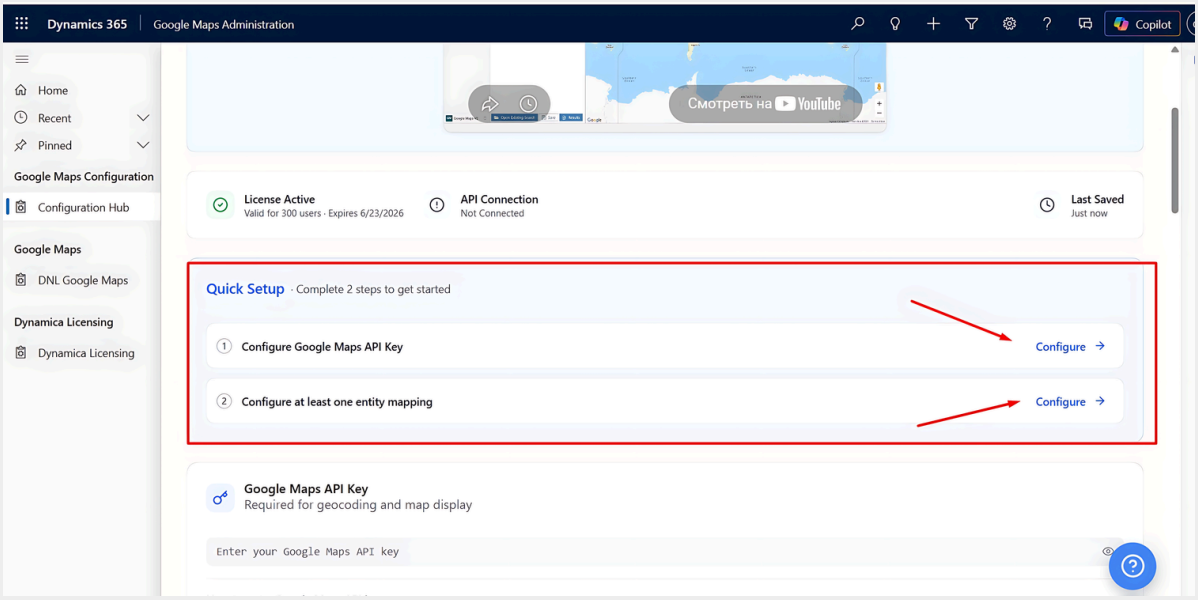

1. Navigate to Configuration Hub, short tutorial video is available here, along with buttons to contact support or explore the guides on your own.



# QUICK SETUP SECTION

The Quick Setup section enables rapid configuration of the environment by providing direct access to the required settings.
Quick Navigation
Clicking the corresponding Config button instantly redirects to the selected configuration area:

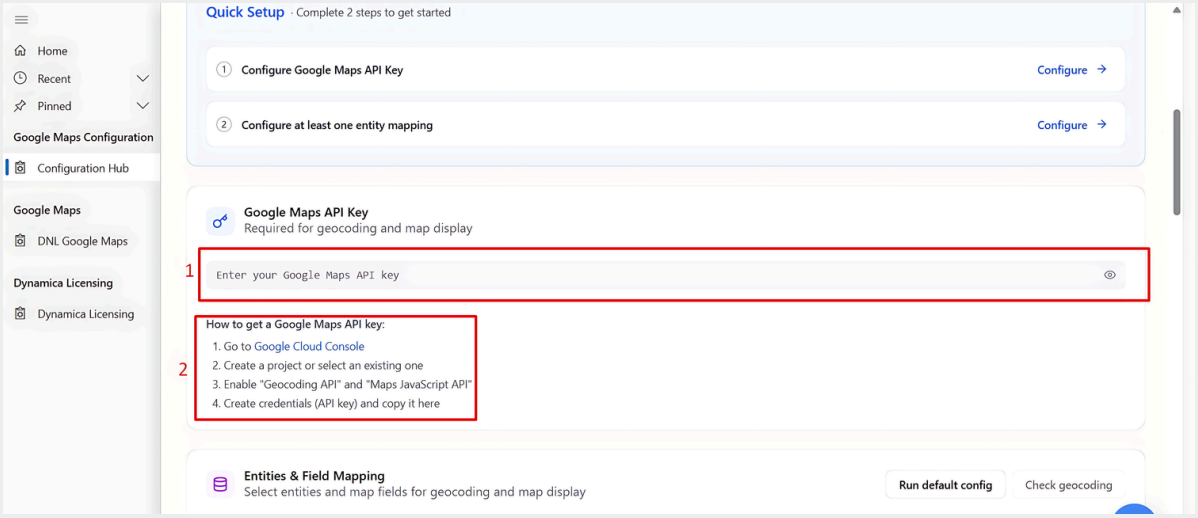
- Google Maps API Key Setup
- Entities & Field Mapping




Google Maps API Key

The Google Maps API Key must be entered into the designated input field. (1)

Note: If an API Key is not available, follow the instructions provided below the input field to generate one. (2)

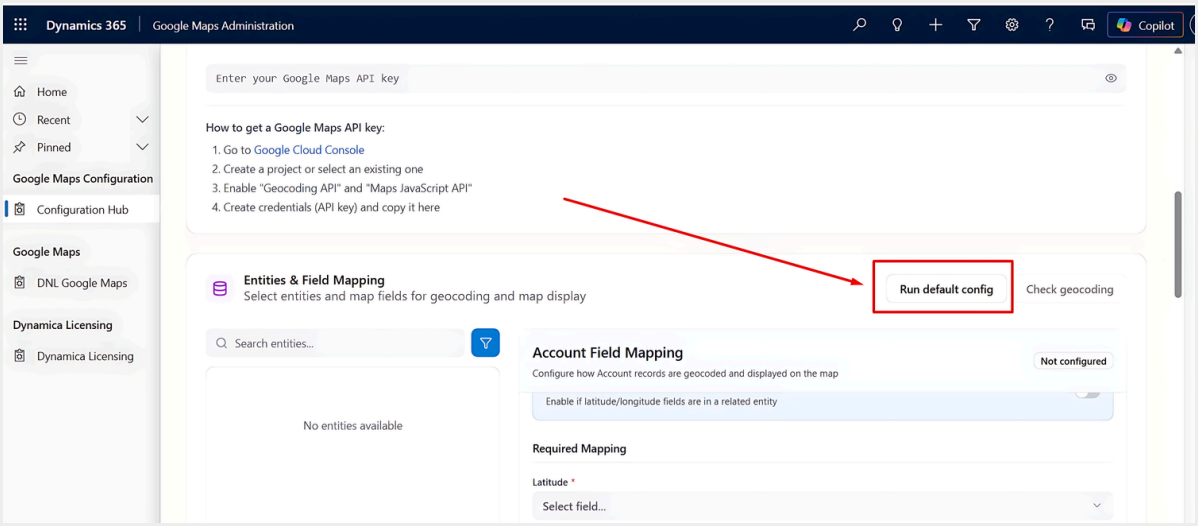


# ENTITIES AND FIELD MAPPING. DEFAULT CONFIGURATION

This section configures the entities to be displayed on the map, as well as their corresponding field mappings. Configuration can be completed using one of two methods:

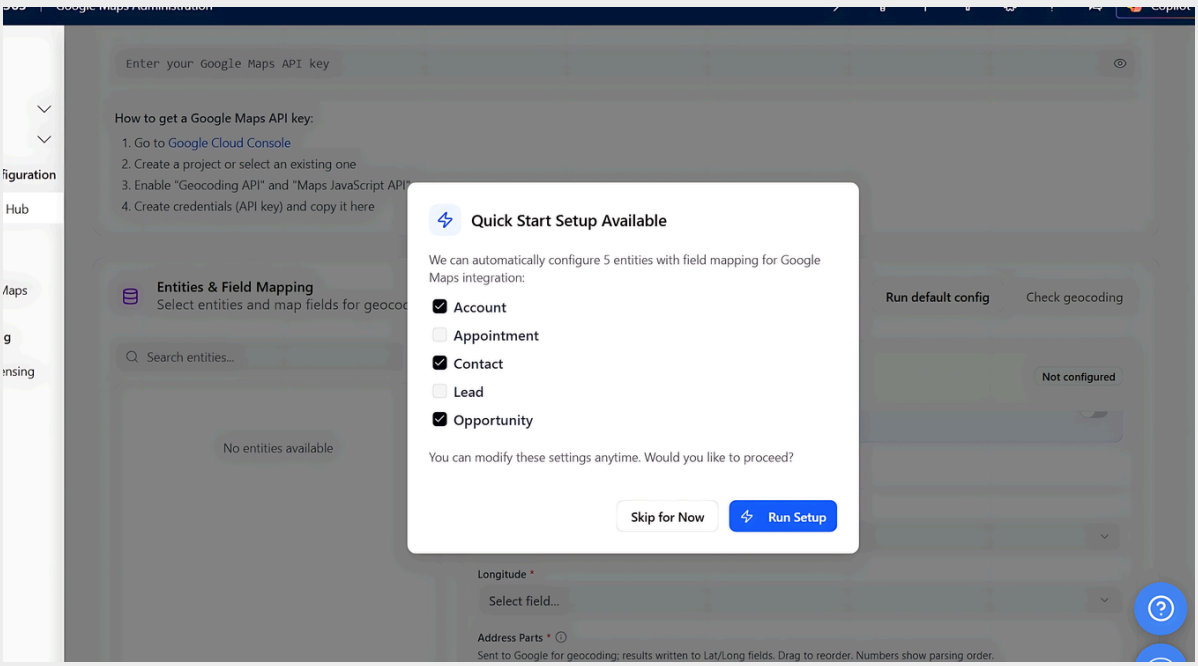
Default configuration

1. Click the Run Default Config button.



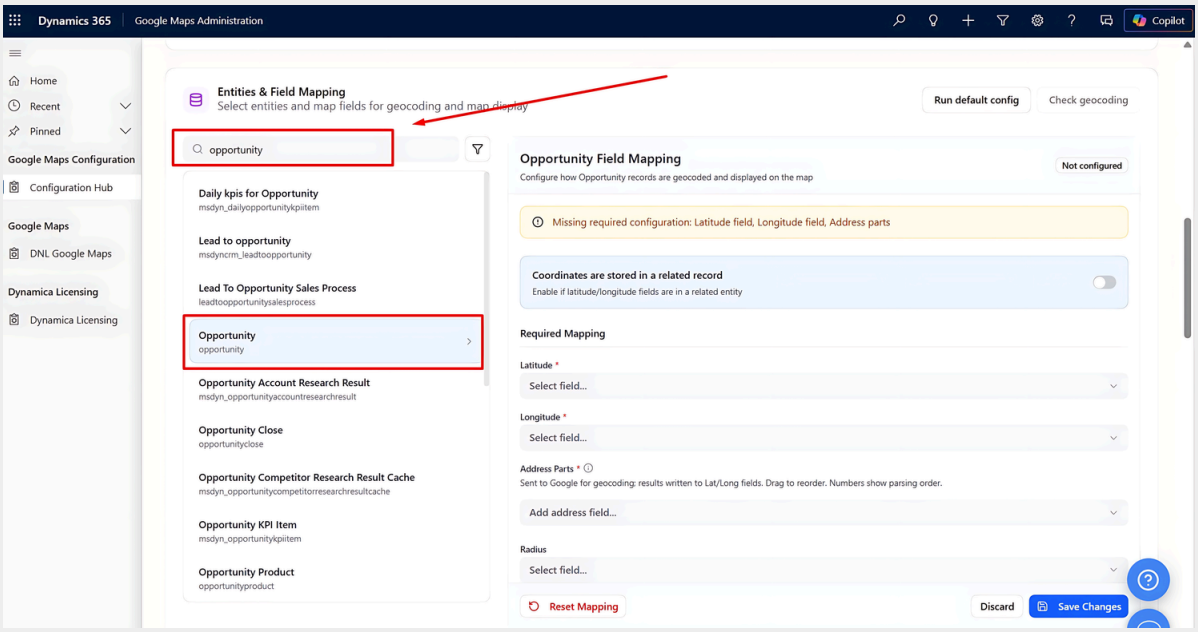

2. In the Quick Start Setup Available pop-up window, review the 5 pre-selected default entities.
3. Adjust the selection by checking or unchecking the corresponding checkboxes as needed.
4. Click Run Setup to automatically configure the selected entities.

Note: This step can be skipped and configured later if necessary.

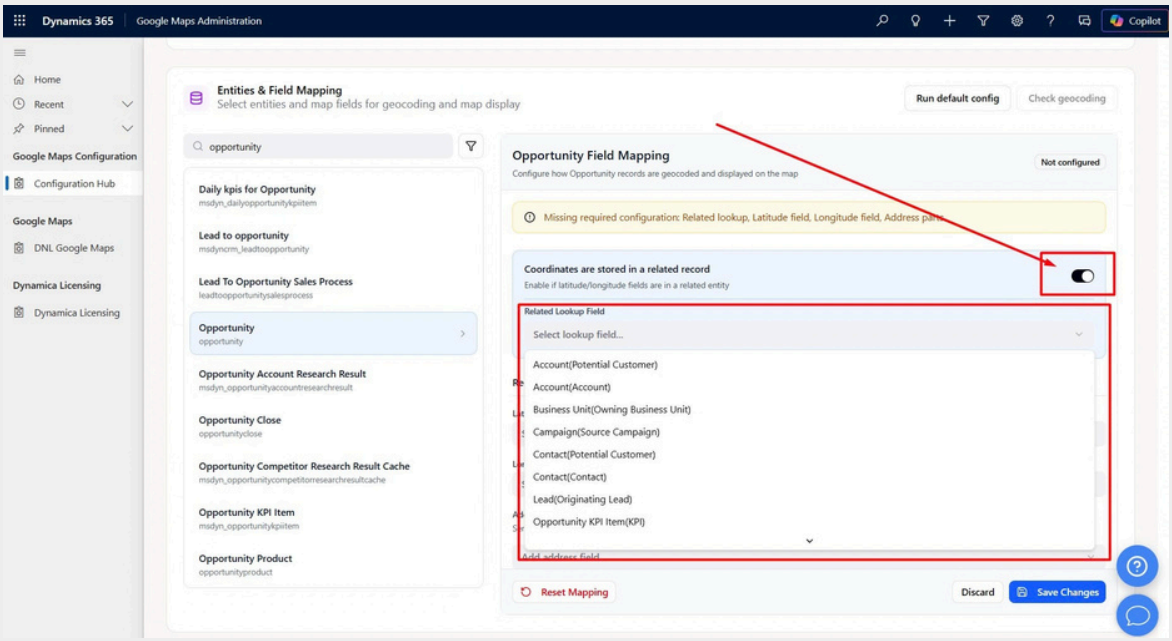


# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

1. Select an Entity: In the left search panel, type the name of the entity and select it from the list to open its field mapping settings.



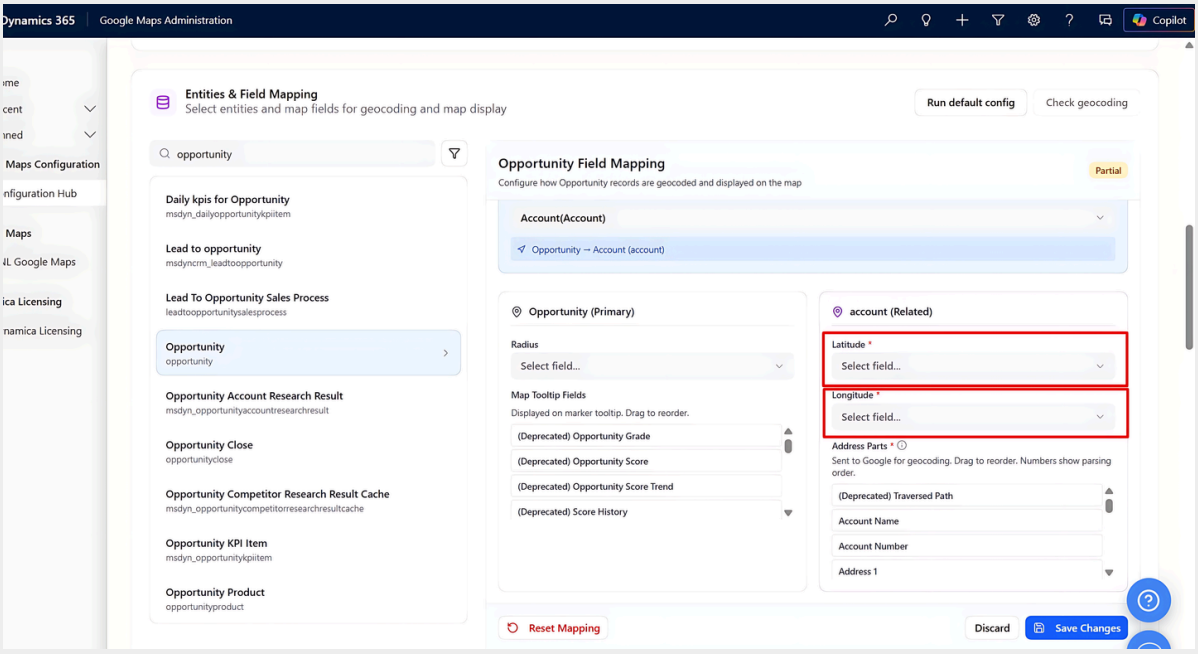

2. Coordinates in Related Record (Optional): Enable the "Coordinates are stored in a related record" toggle if the latitude and longitude fields are located in a related entity rather than the current one. Then choose the related entity



# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

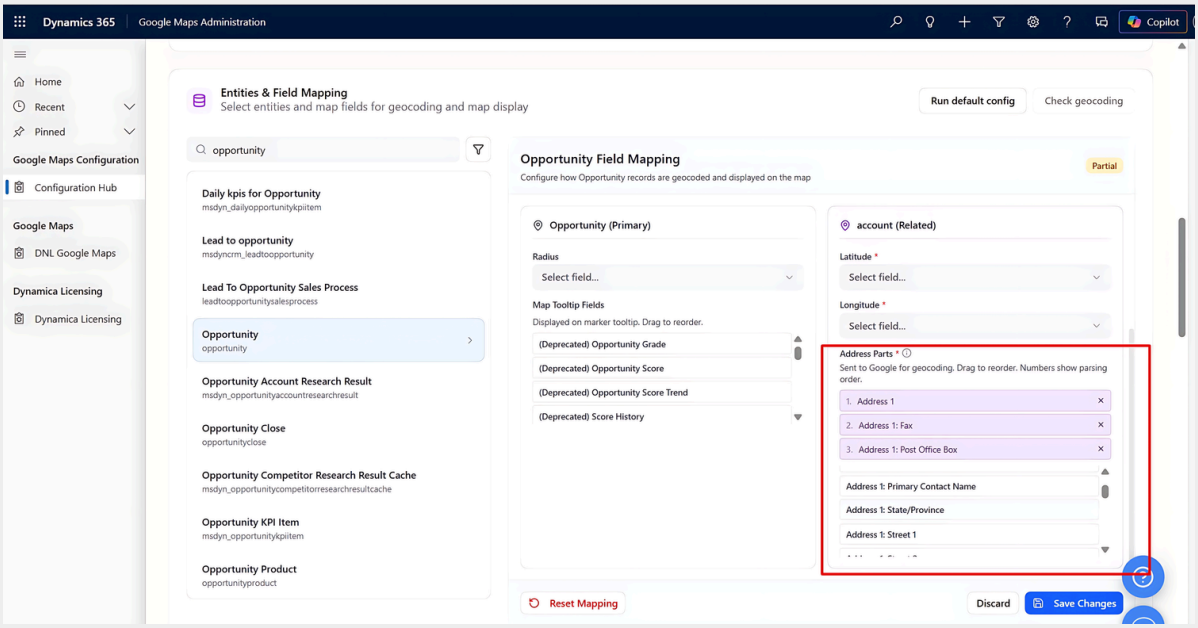
Required coordinates mapping

- Latitude and Longitude: Select 1 field for Latitude and 1 field for Longitude from the drop-down lists. Latitude and Longitude represent the geographical coordinates used for pinpointing locations on the map.



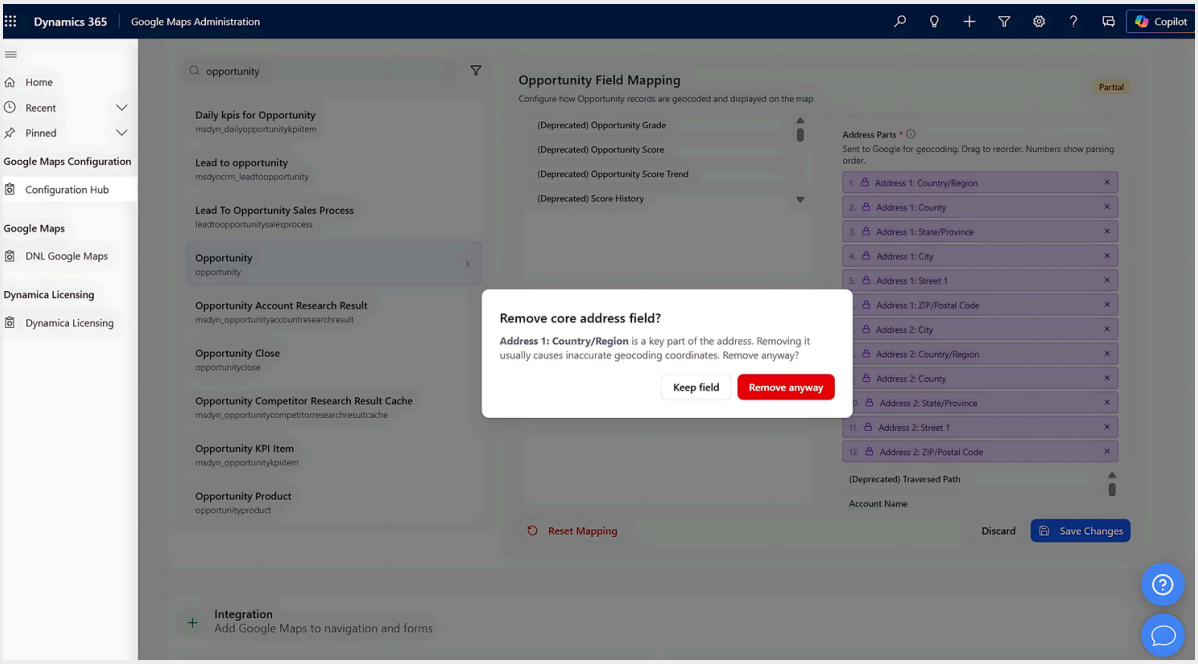

- Address parts:

In the Address parts section, select all address fields that should be sent for geocoding (e.g., Country, City, Street) or choose 1 composite address field (e.g., Address 1). Drag and drop the selected fields to reorder them, which defines the parsing order for geocoding.

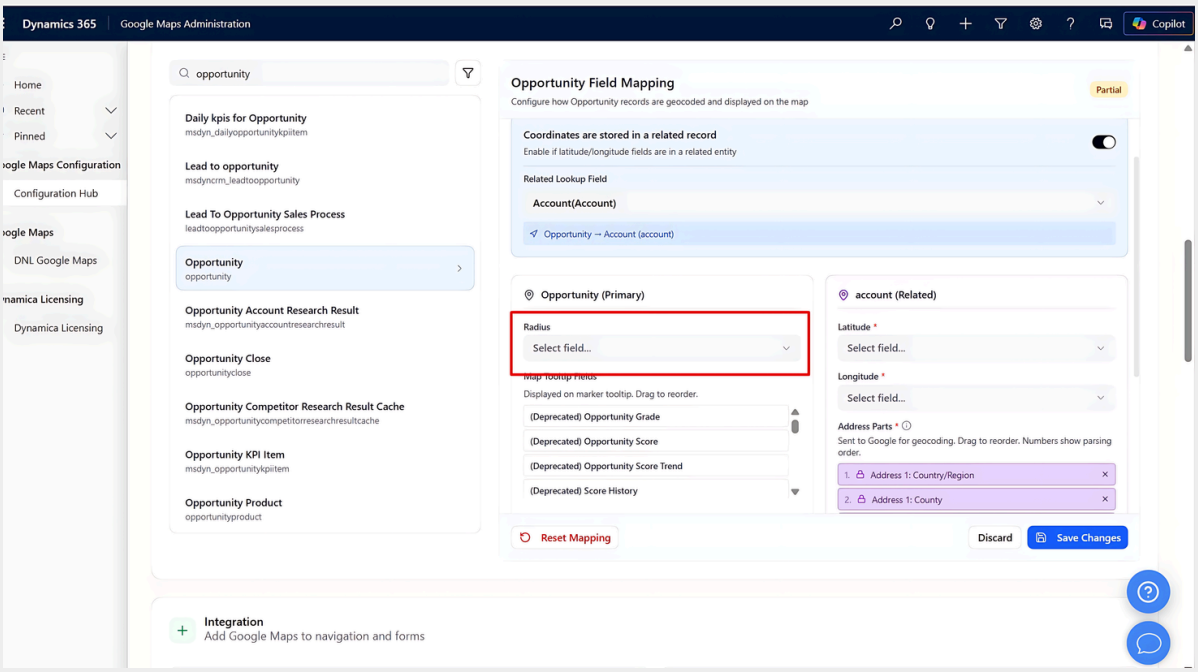


# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

Core address fields (lock icon): Fields marked with a lock icon are key components of the address structure. If to remove a core address field, a confirmation pop-up ("Remove core address field?") will appear warning that removing it may cause inaccurate geocoding coordinates.



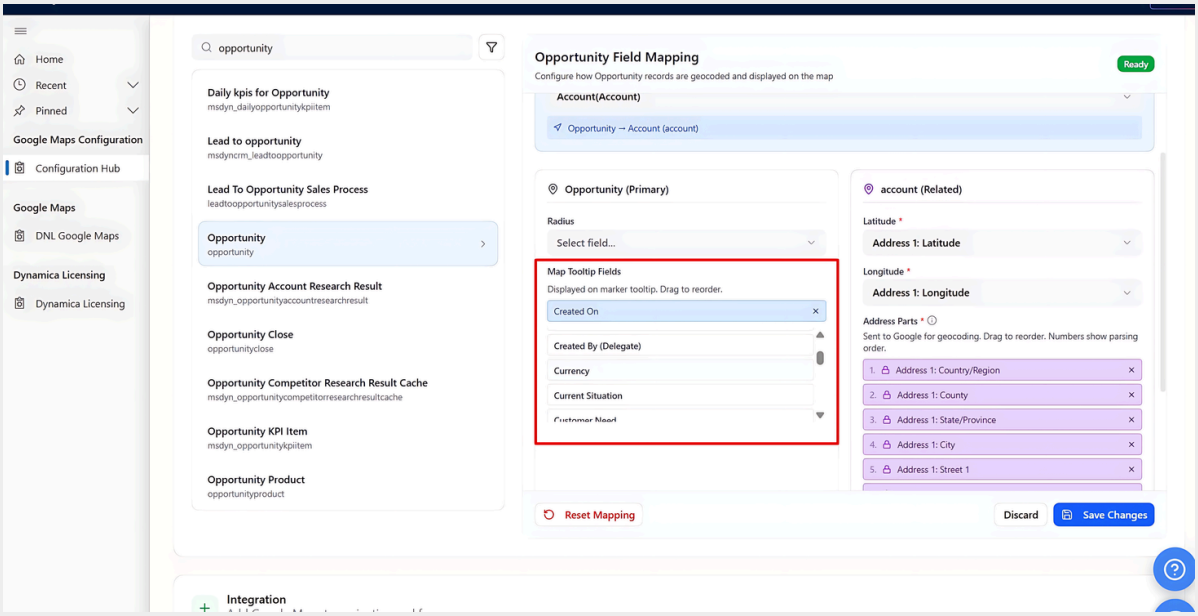

3. Radius (Optional): Select a field in the Radius drop-down if need to define a coverage or search radius for the entity.



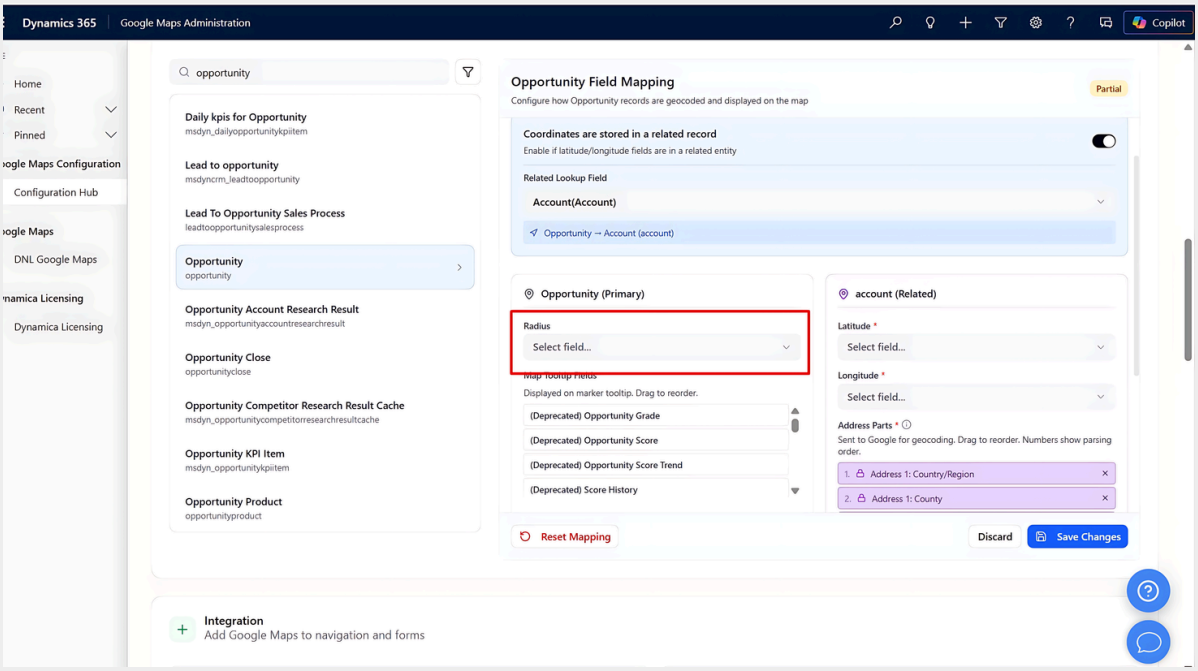
# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

4. Map Tooltip Fields:

- In the Map Tooltip Fields section, select the fields to display in the result tooltip when a user clicks on the map marker.
- drag and drop these fields to reorder how they appear in the tooltip.

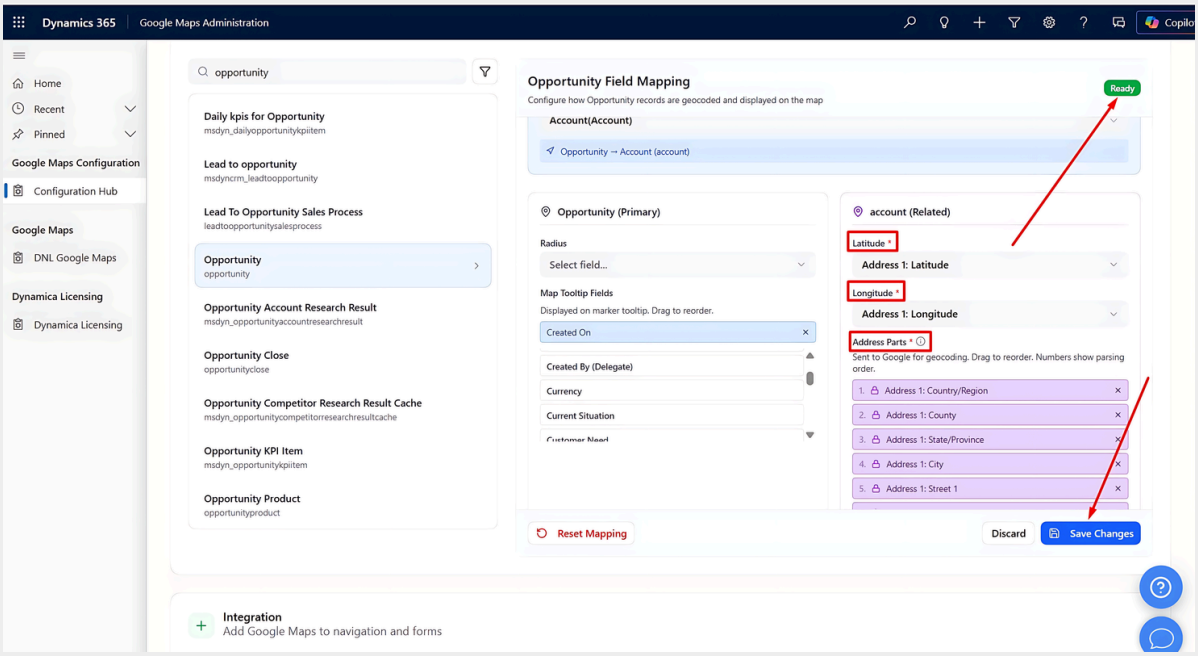



3. Radius (Optional): Select a field in the Radius drop-down if need to define a coverage or search radius for the entity.



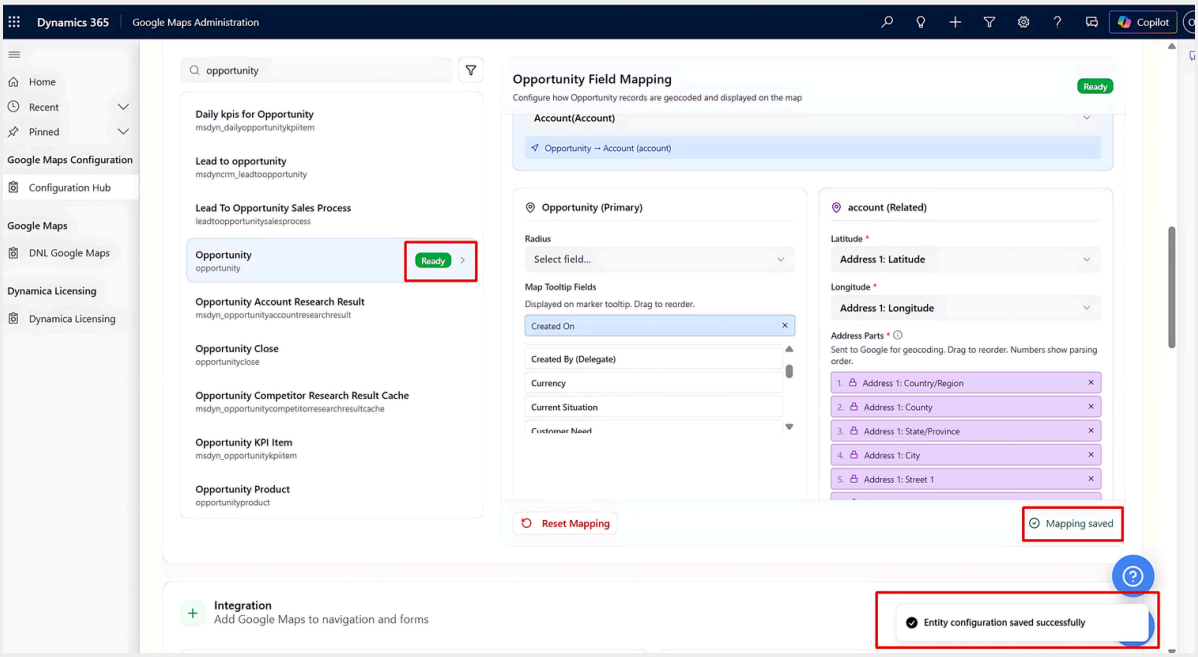
# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

Configuration Status:
When all mandatory fields (Latitude*, Longitude*, and Address Parts*) are configured, a green Ready badge is displayed in the upper-right corner of the mapping section, indicating that the entity configuration is complete and ready for use.



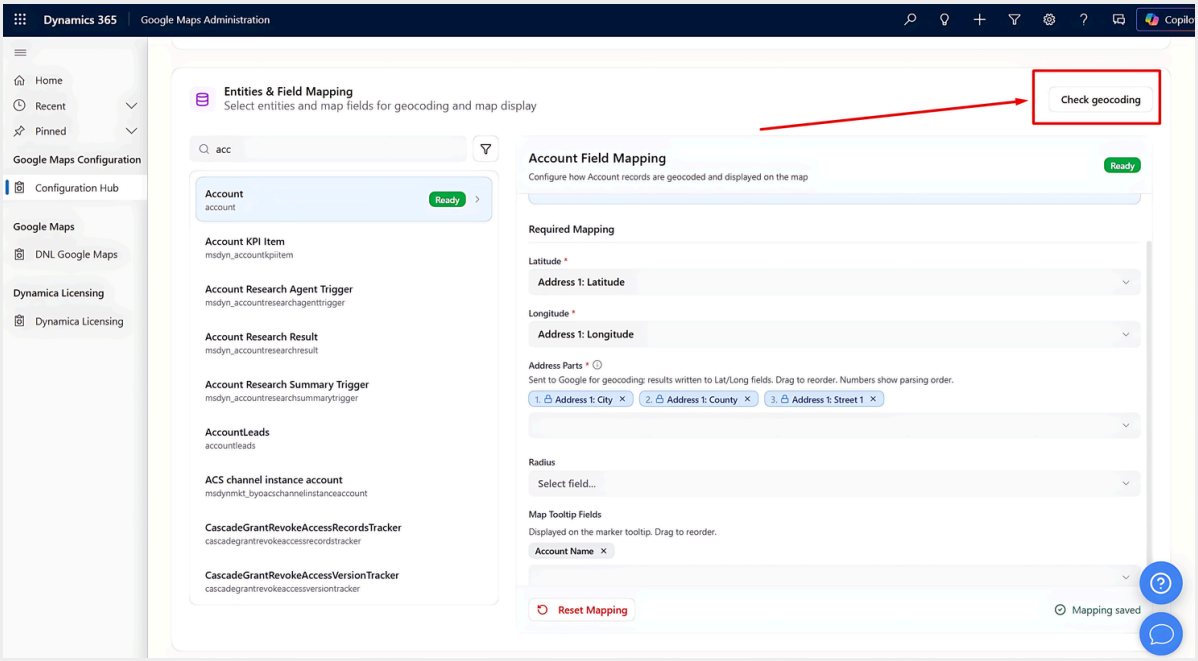

4. Save Configuration: Click Save Changes to submit the field mapping. Upon successful saving:

- A success message reading "Entity configuration saved successfully" pops up.
- The button label changes to Mapping saved.
- A green Ready badge appears next to the configured entity in the left-hand panel list

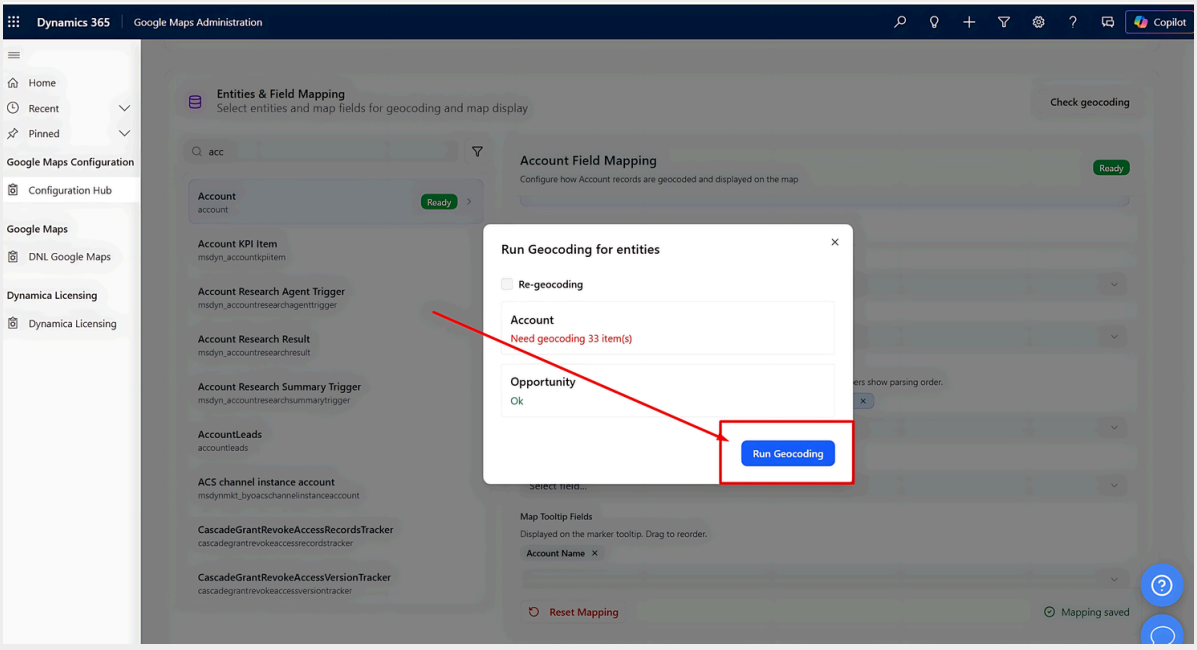


# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

5. After all entities and their parameters are selected, click on the Check Geocoding button.




6. In the modal window, that appears, the selected records and their number are visible. Click Run Geocoding.

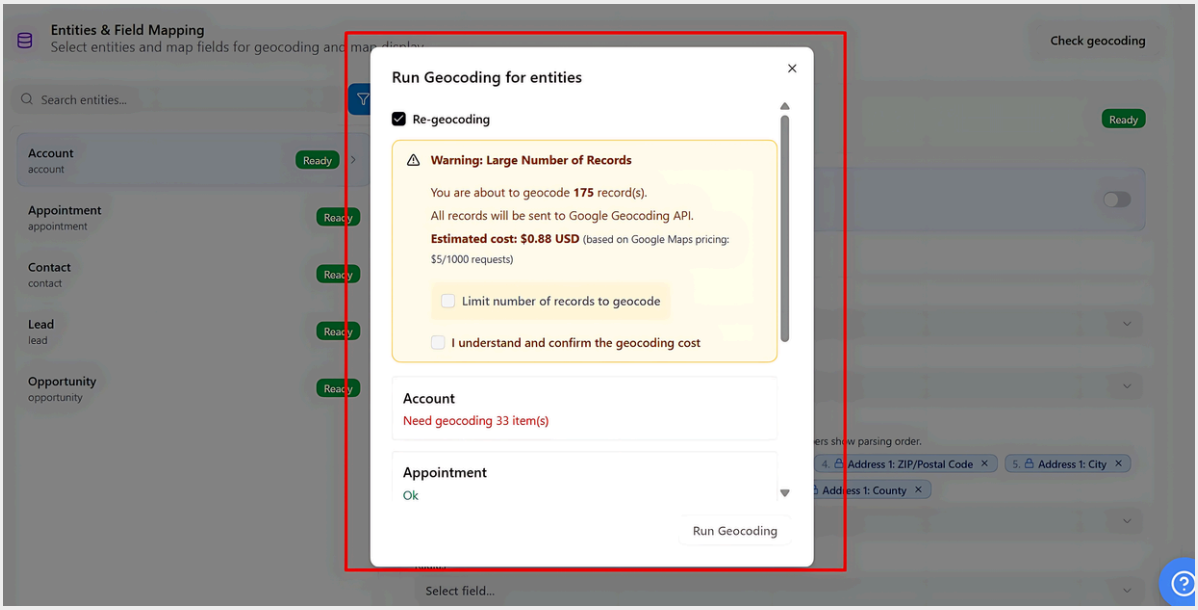



If the geocoding data was changed after the geocoding was completed, select the Re-geocoding option and start the geocoding again.

# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

The Run Geocoding for entities dialog enables converting physical addresses into geographic coordinates via the Google Geocoding API.

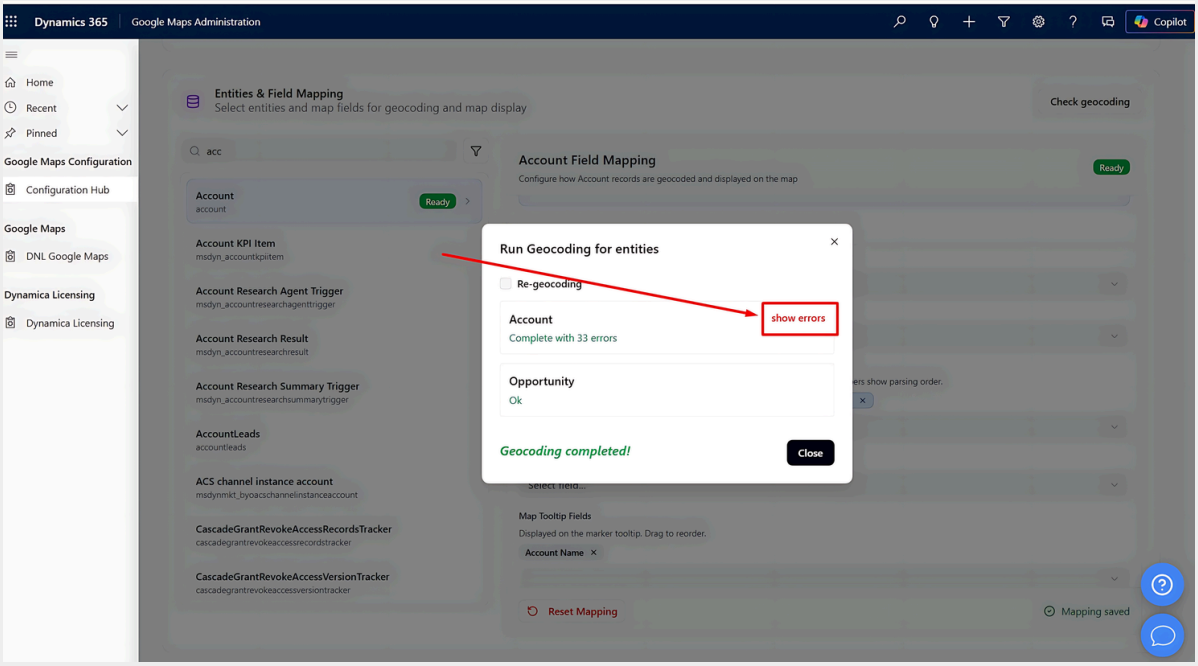
- Re-geocoding checkbox: Enables forced recalculation of geographic coordinates for records that were previously geocoded.
- Cost Estimation & Warning Notice: Displays the total volume of records submitted for geocoding alongside the estimated Google Maps API processing fee.
- Limit Number of Records: Option to set a custom limit on the maximum number of records processed in a single run to manage usage costs.
- Cost Confirmation: Requires checking the confirmation checkbox (I understand and confirm the geocoding cost) before initiating the batch process.
- Entity Status List: Indicates the current geocoding status for each configured entity (e.g., displaying records pending processing or confirmed Ok status).
- Run Geocoding: Triggers the address-to-coordinate conversion process upon user confirmation.



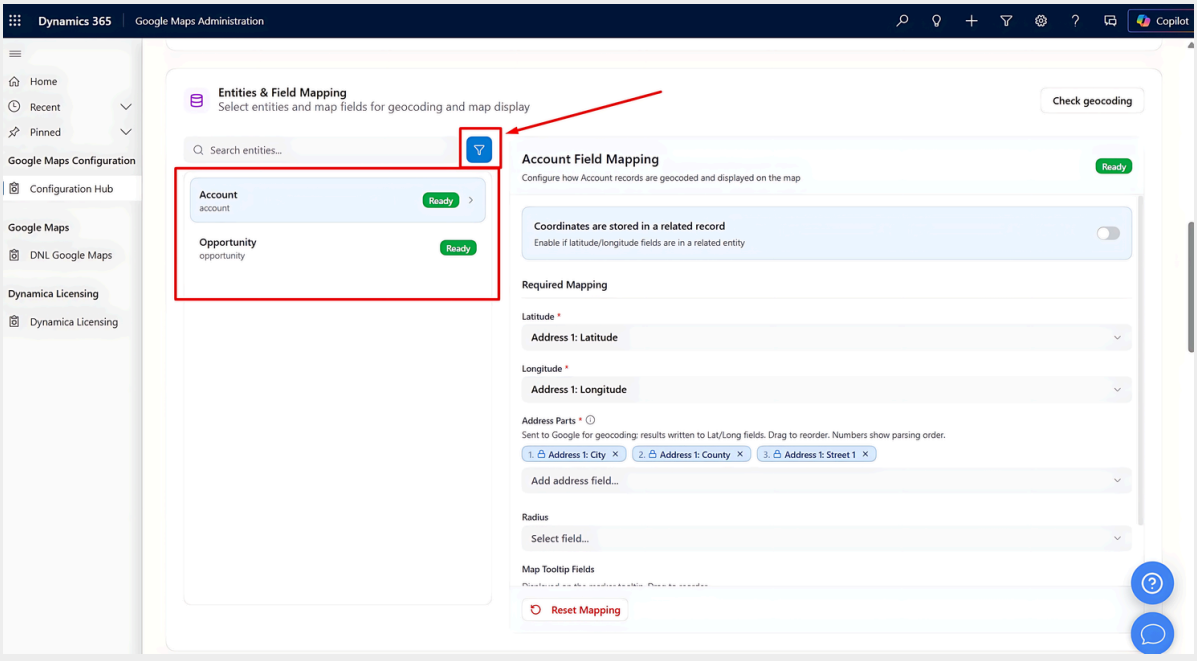
# ENTITIES AND FIELD MAPPING. MANUAL CONFIGURATION

7. After geocoding is completed, close the window.

If there are any errors,it is possible to see them by clicking on show errors.

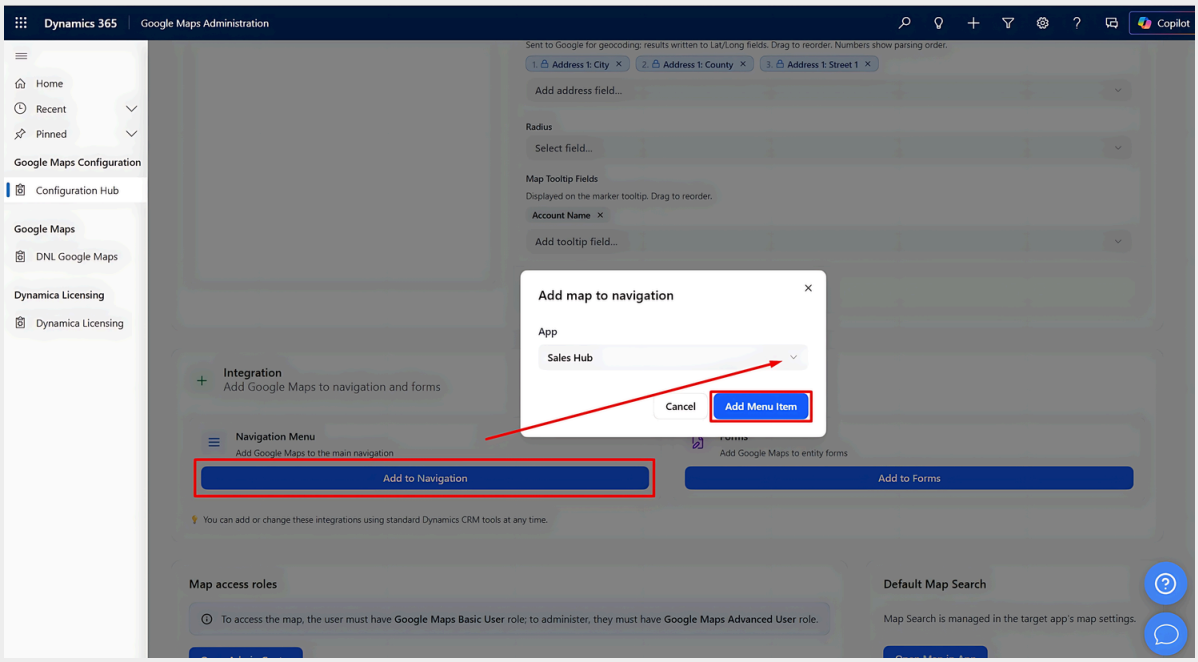



To view a list of all fully configured entities, click the Filter icon located to the right of the Search entities field. This action filters the entity list to show only the entities that have been set up and display a green Ready status badge.

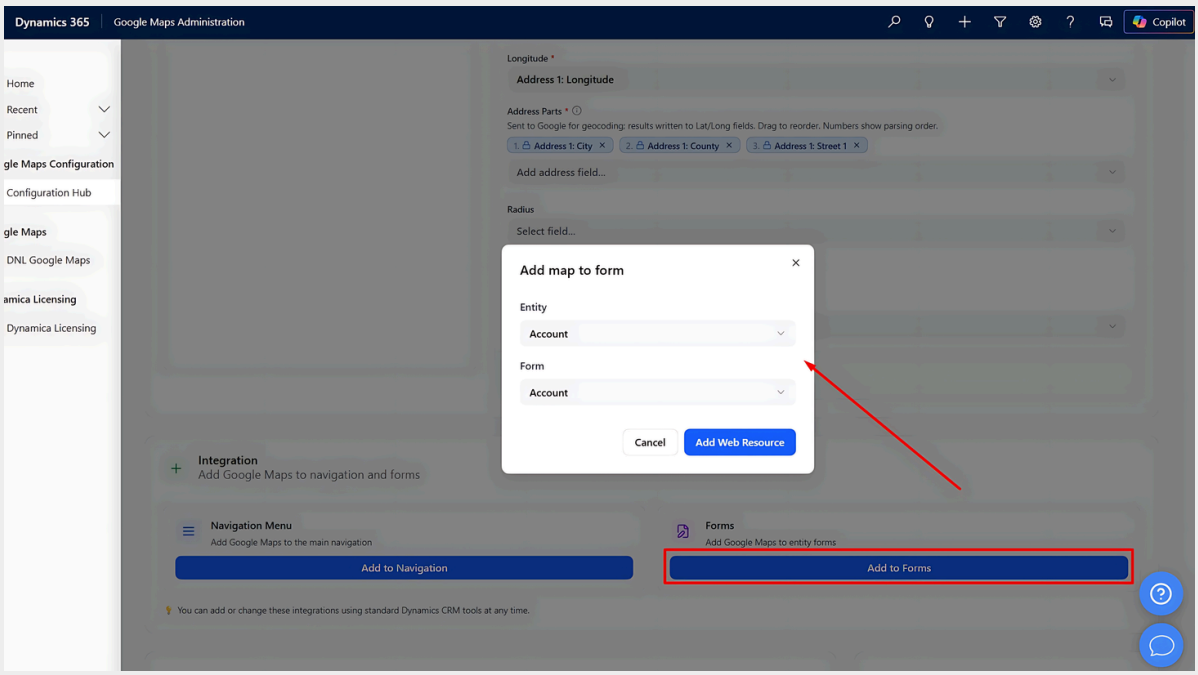


# ADDING GOOGLE MAPS TO NAVIGATION AND FORMS

1. Click the Add to Navigation button and choose the Model-Driven application, in which the Google Maps Integration solution should be added. Click to the Add Menu Item button and close the window.




2. Click the Add to Forms button to add Web Resource to forms. Select Entity, Form and click to the Add Web Resource button.

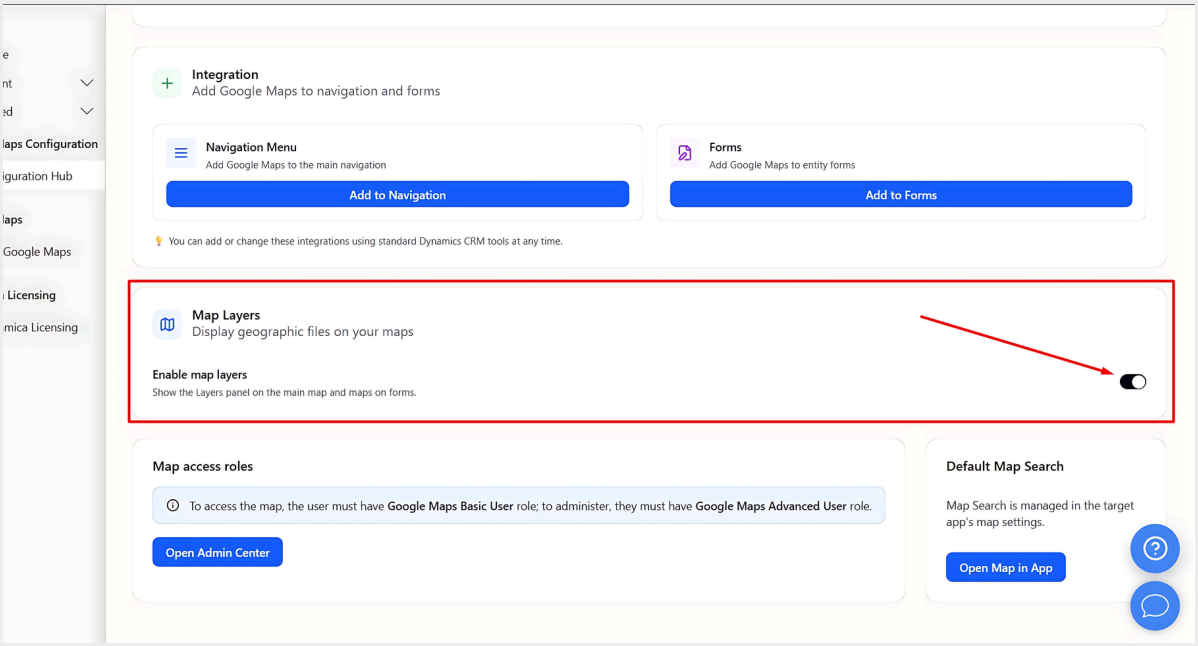


# MAP LAYERS

The Map Layers section is used to enable geographic layers on the main map and on maps on forms. Layers are uploaded from geographic files (GeoJSON, KML, KMZ or Shapefile ZIP) and displayed on top of Google Maps.

To enable map layers:

1. Open the Configuration Hub and scroll to the Map Layers section.
2. Turn on the Enable map layers toggle.
3. The setting is applied immediately; there is no separate Save button. The Layers panel becomes available on the main map and on all maps on forms.

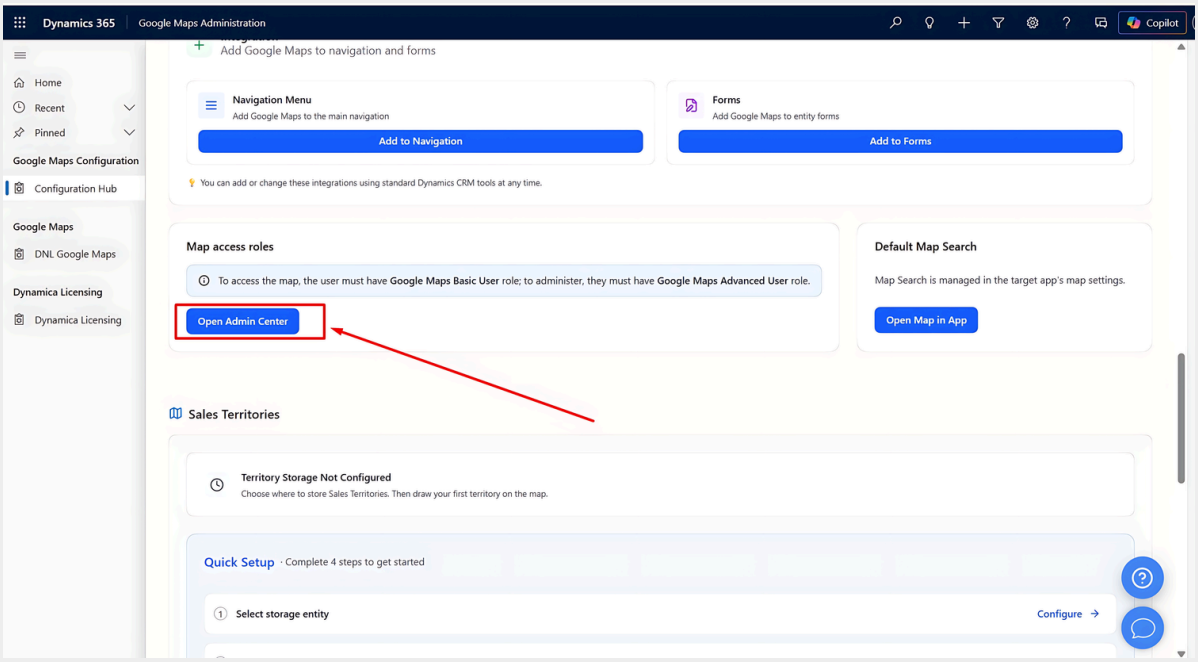



To disable map layers, turn off the Enable map layers toggle. The Layers panel is hidden after users refresh the map page. Previously uploaded layers are kept and become available again when the toggle is turned back on.

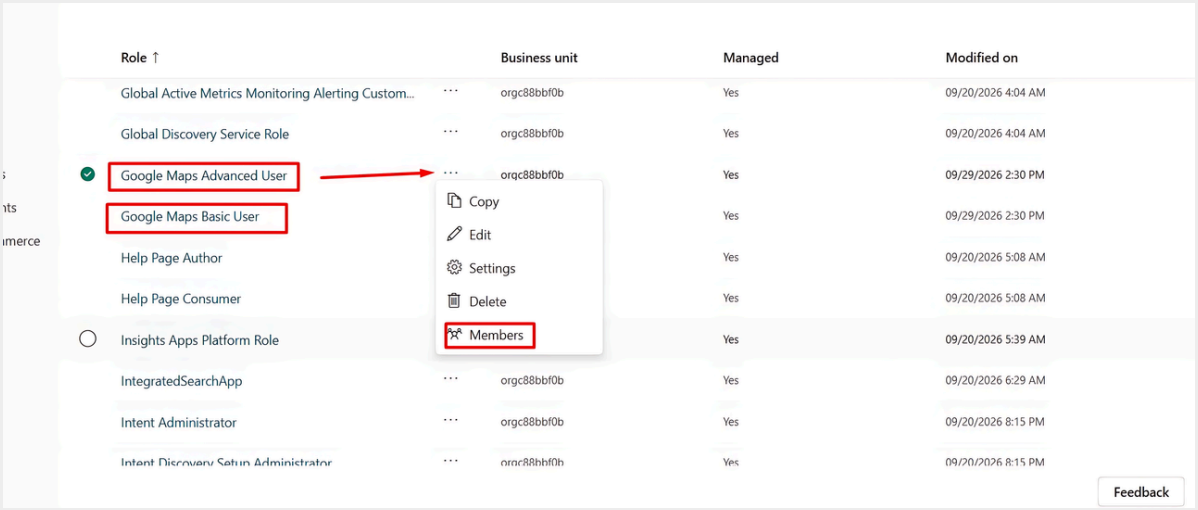
# MAP ACCESS ROLES

To access the map, the user must have Google Maps Basic User role; to administer, they must have Google Maps Advanced User role. To assign the role:

1. Click Open Admin Center button

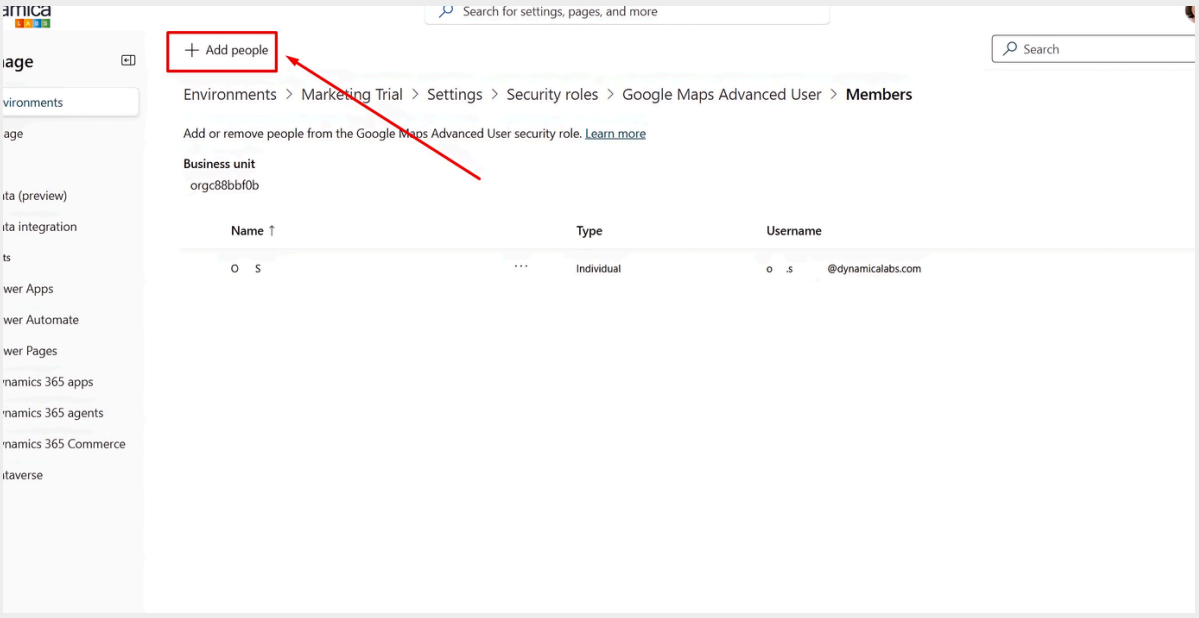



2. Locate the required security role in the list (Google Maps Advanced User, Google Maps Basic User).
3. Click the More Commands icon (three dots ...) next to the selected role.
4. Select the Members option from the context menu to view and manage assigned members.



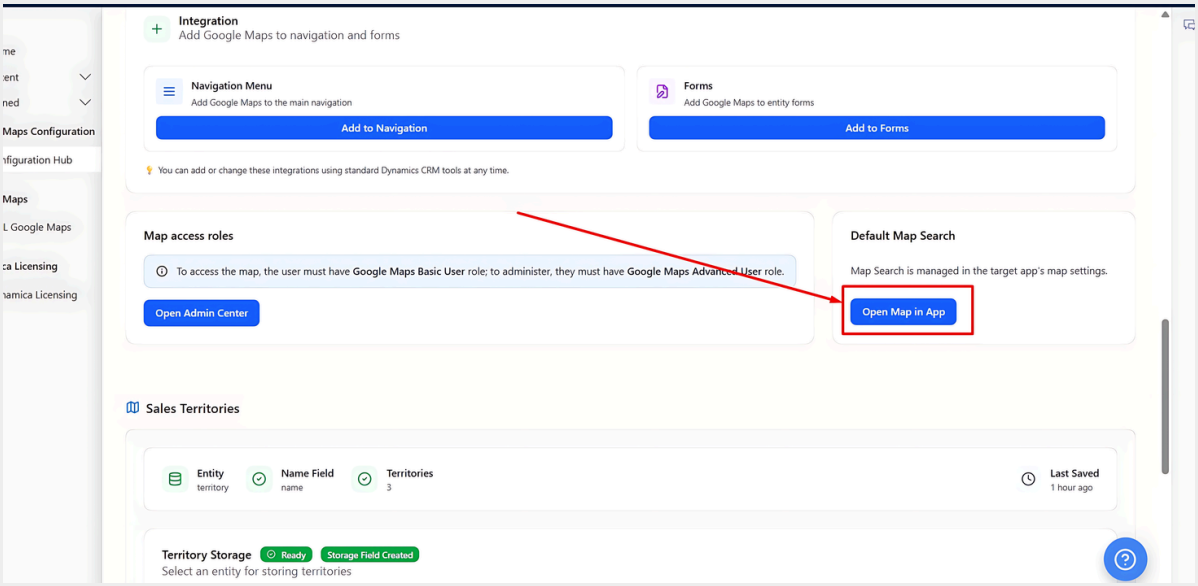
# MAP ACCESS ROLES

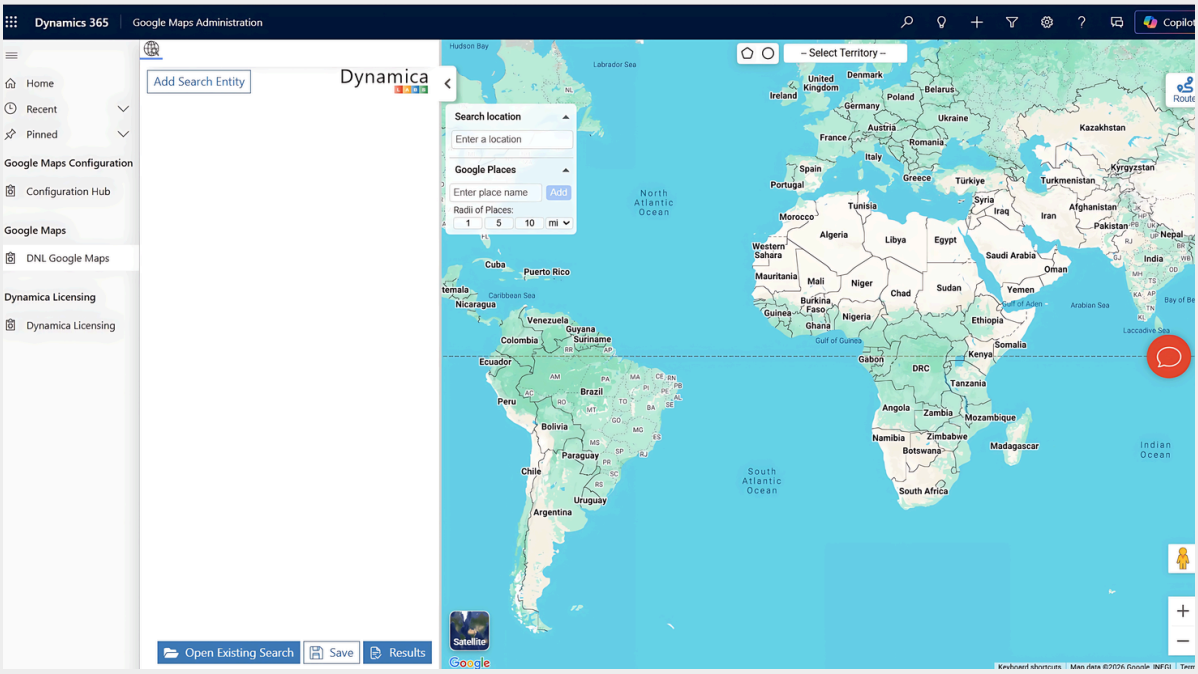
5. Upon selecting Members, the role configuration page will open, displaying the list of currently assigned users.
6. Click the + Add people button at the top-left corner of the page to add users to the selected security role



# DEFAULT SEARCH CONFIGURATION

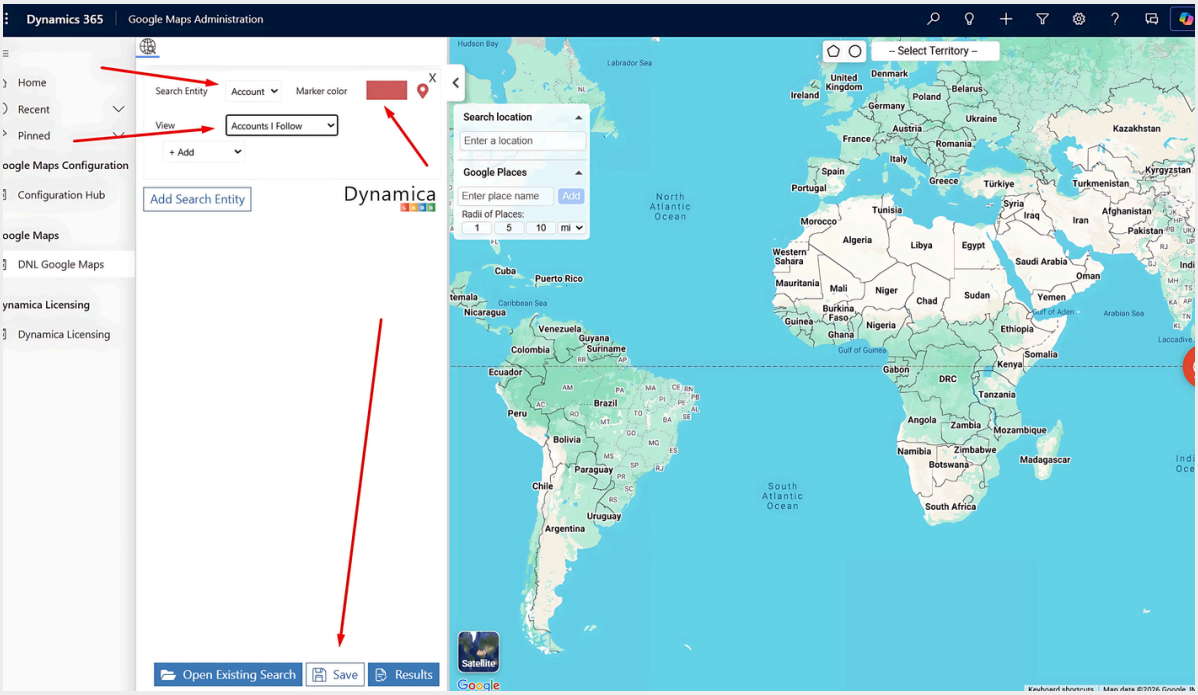
1. Click the Open Map in App button. You will be transferred to the Google Maps area.



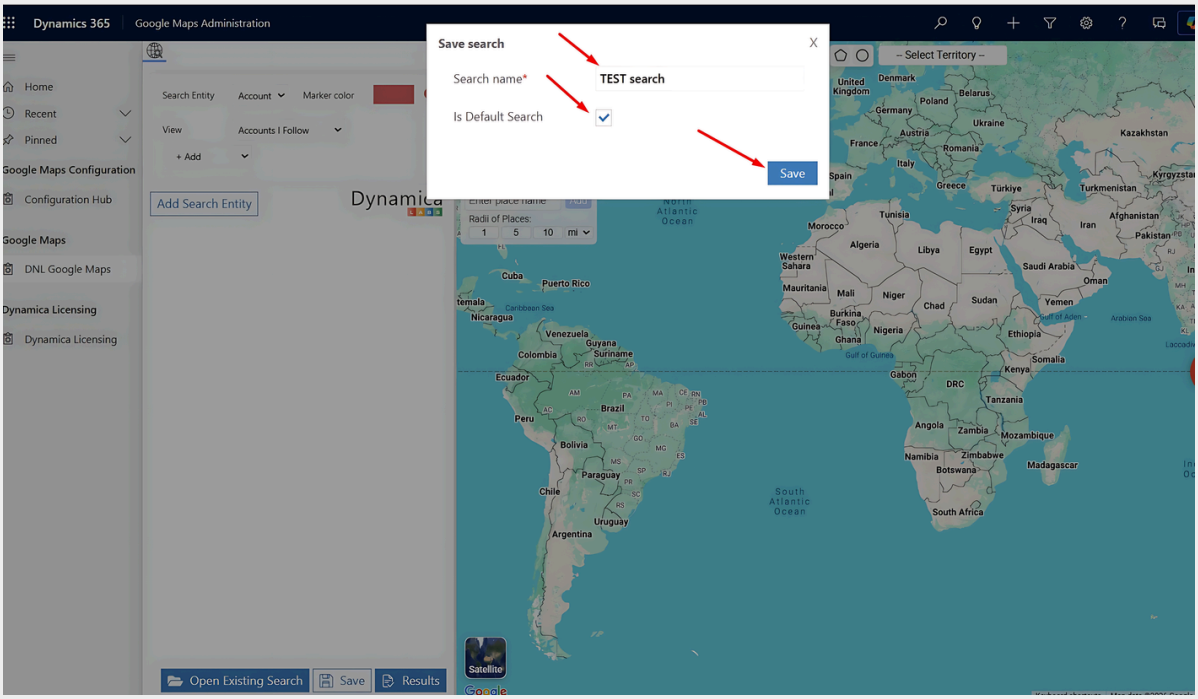



# DEFAULT SEARCH CONFIGURATION

Here it is possible to set up default search for users. Press Add Search Entity, select Entity, Marker color and Entity View for default search and click the Save button.



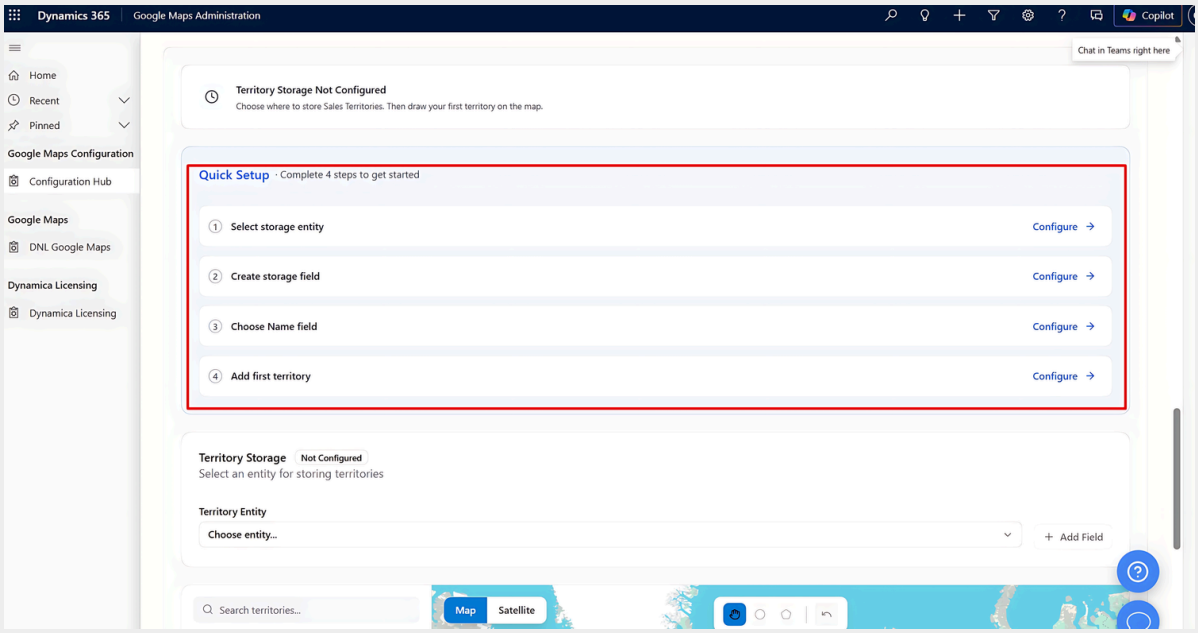

Enter Search Name, set up the Search as Default and click the Save button.



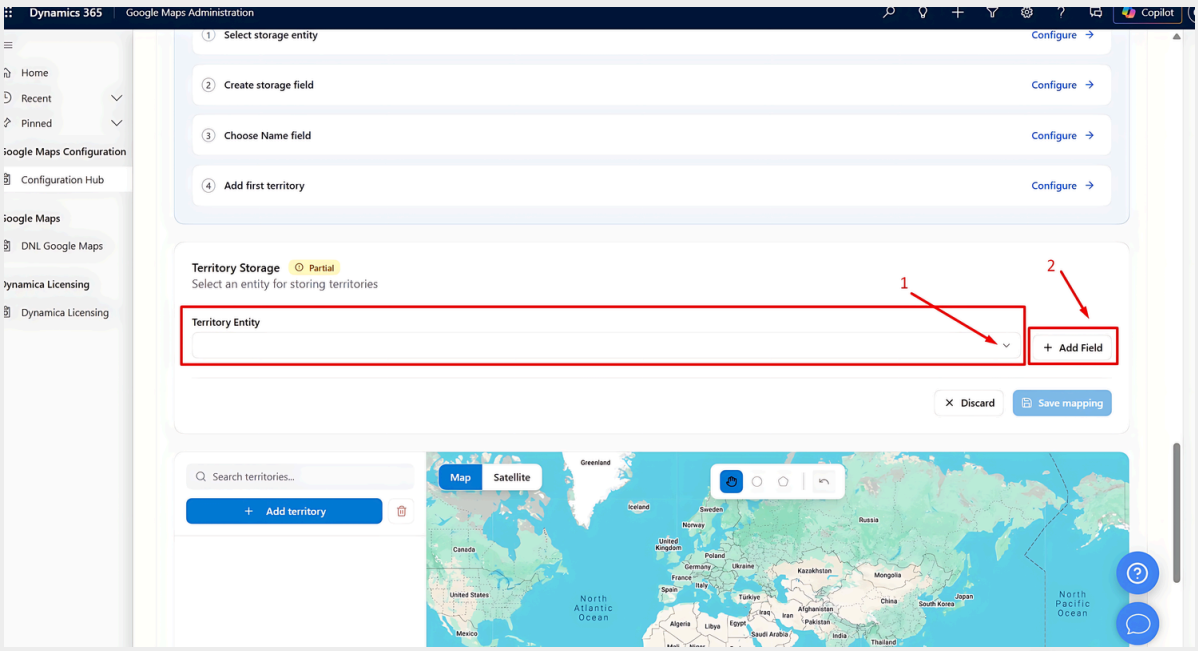
# SALES TERRITORIES CONFIGURATION

The Sales Territories section is used to configure territory storage and visually map custom sales boundaries directly on Google Maps.

When accessing the section for the first time, a warning banner indicating "Territory Storage Not Configured" is displayed. A Quick Setup guide assists with completing the essential steps:

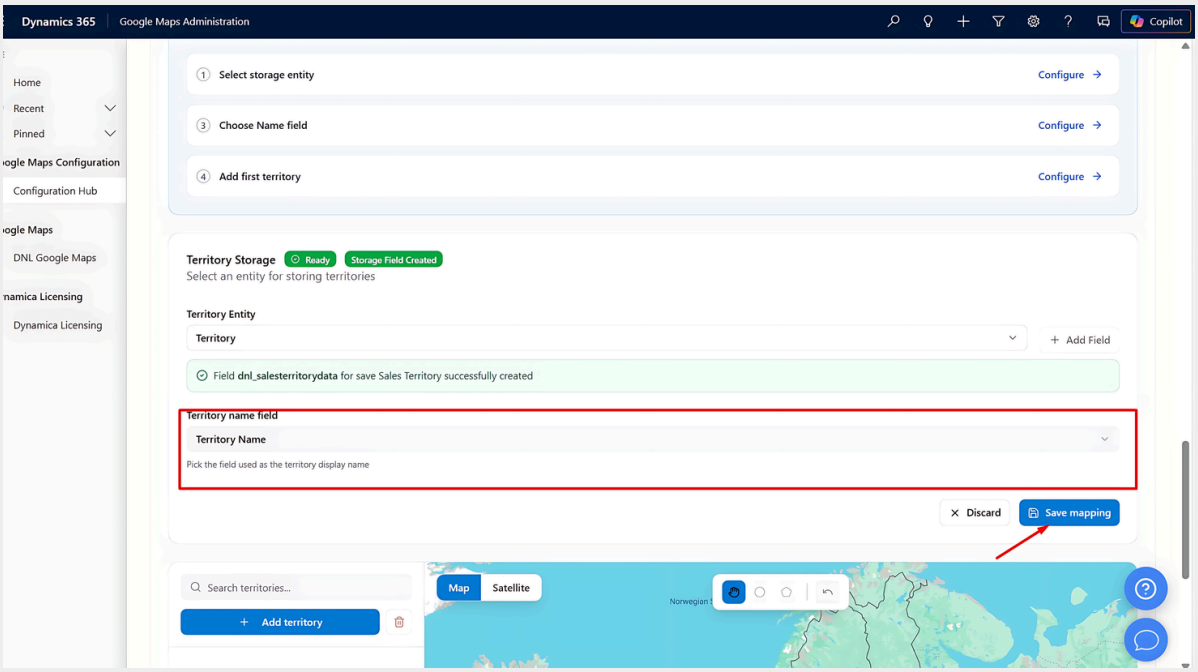



1. Select Storage Entity: From the Territory Entity drop-down menu, select the entity used to store sales territory data.
2. Create Storage Field: Click the + Add Field button to automatically generate the necessary storage field for holding boundary coordinates.



# SALES TERRITORIES CONFIGURATION

3. Choose Name Field: Select the field from the Territory name field drop-down menu that will serve as the display label for created territories.
4. Save Mapping: Click Save mapping to confirm the entity and field association.

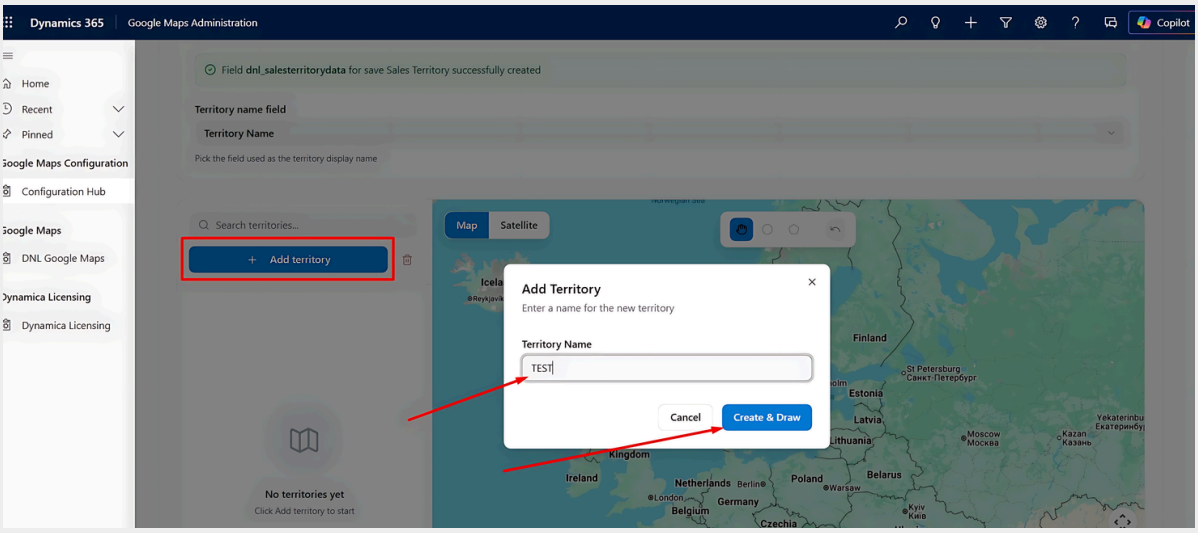


# CREATING AND DRAWING A TERRITORY

After configuring territory storage, new sales territories can be created and drawn on the map:

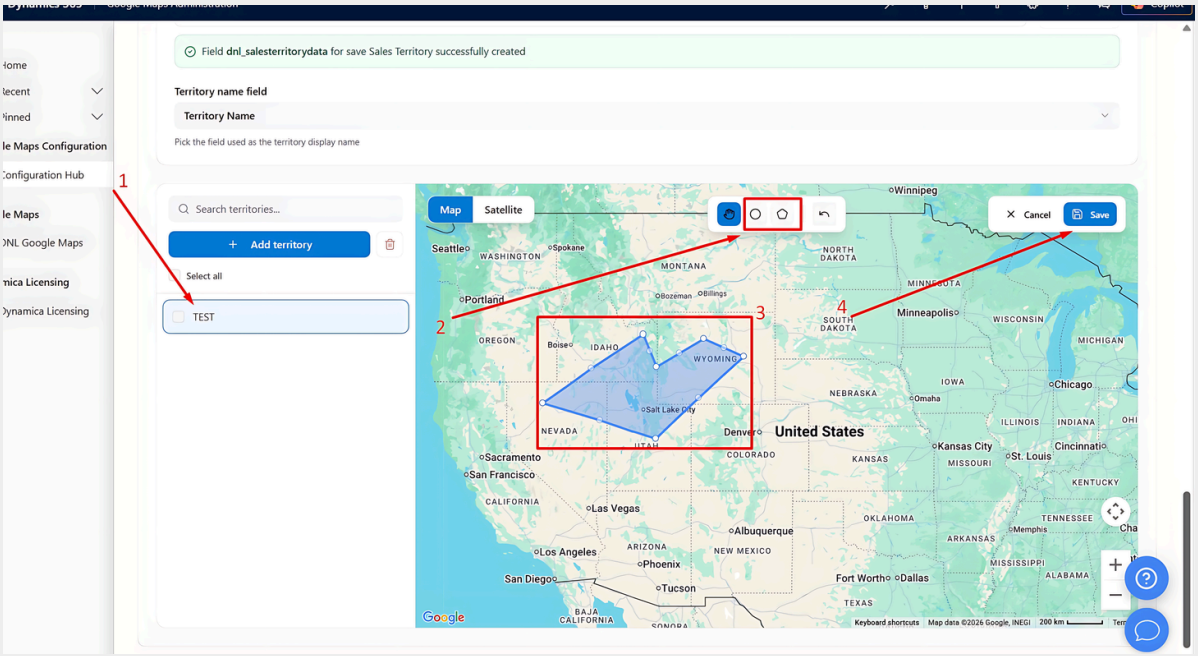
To add Territory:

1. Click the + Add territory button located above the left territory list panel.
2. In the Add Territory pop-up window, enter a name into the Territory Name field.
3. Click Create & Draw to open the map interface.




To draw boundaries on map:

1. Choose newly created territory
2. Use the drawing toolbar at the top of the map to select the preferred shape tool (Circle, Polygon).
3. Click the Save button in the top-right corner of the map overlay to store the newly created territory.

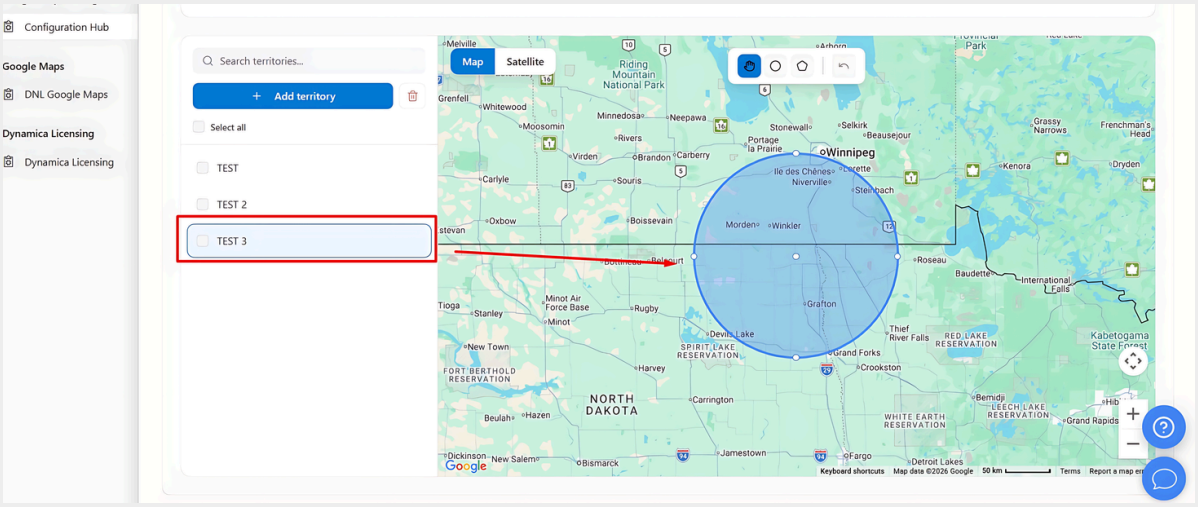


# MANAGING AND EDITING SALES TERRITORIES

Multiple sales territories can be created, viewed, modified, and removed within the system.

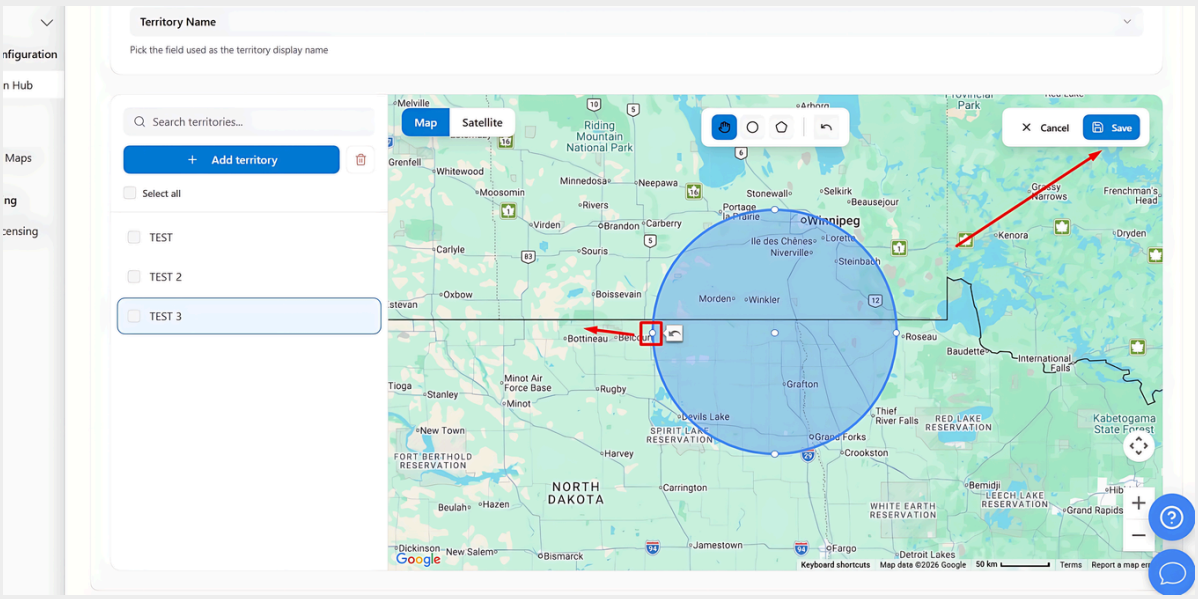
1. Displaying territories on the map

To render a specific territory on the map, select it from the left-hand panel.




2. Editing Territory boundaries

- To adjust the shape or size of an existing territory, select the territory to activate its boundary overlay on the map.
- Drag the blue control points (vertices) along the perimeter to reshape the boundary as needed.
- Click Save in the top-right corner of the map overlay to apply the updated boundaries.



# MANAGING AND EDITING SALES TERRITORIES

3. Deleting a Territory

- Select the checkbox next to the territory that needs to be removed.
- Click the Delete (trash icon) button located next to the + Add territory button.
- Confirm the deletion when prompted.

