

Dynamica Google Maps Integration User Guide

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Overview

Google Maps is most popular mapping service. It is useful to have clear understanding where are your leads, contacts, accounts or opportunities are located, and the best way to visualize it – see the records location on the Google Map. However, there is no Dynamics 365 solution that allows to integrate with google maps and show records coordinates on the map.

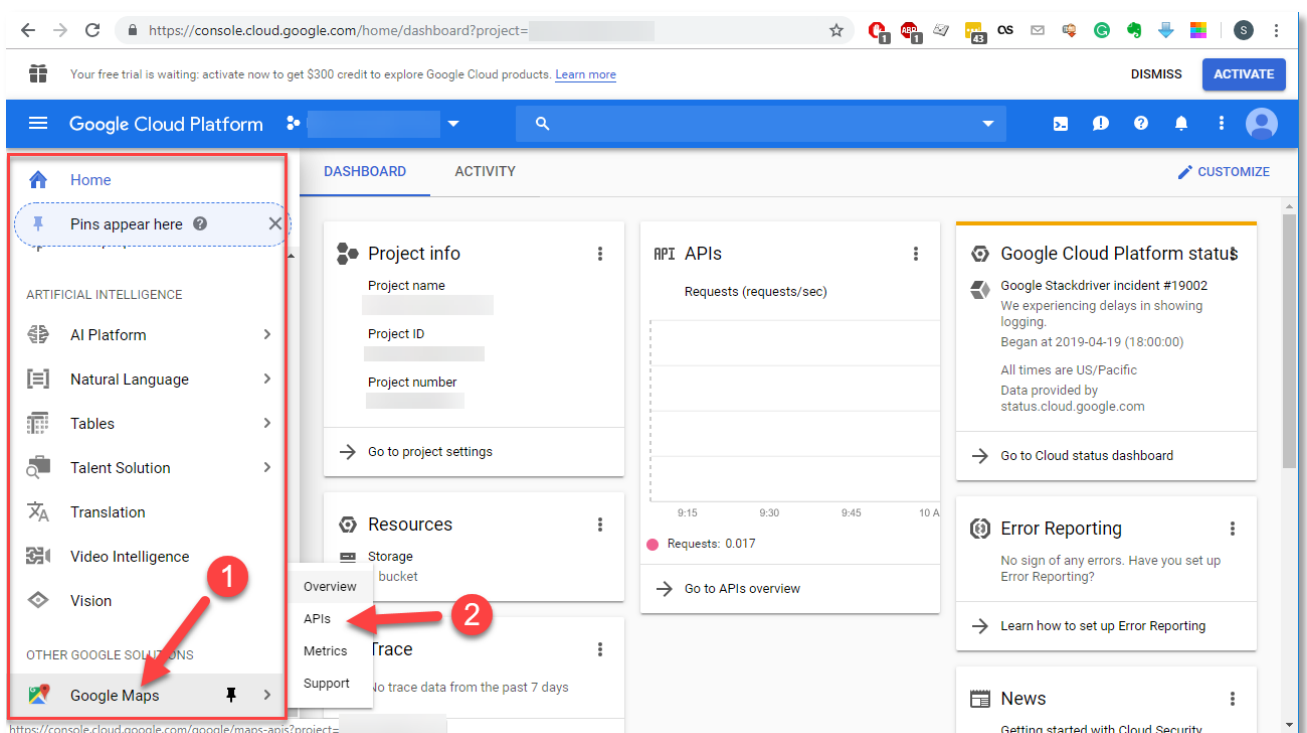
Dynamica Google Maps is easy 1-click google maps integration solution that allows to show records coordinates on the Google Map in an easy and simple way. Google maps are available on Dashboards, allows to change views and open records right from the Google Map by just clicking on record's name. Maps are also available on the record's form. Google Map can be also embedded either on any Dashboard or on any Form to show record's coordinates right on the Form when the record is opened.

Google Maps API Configuration

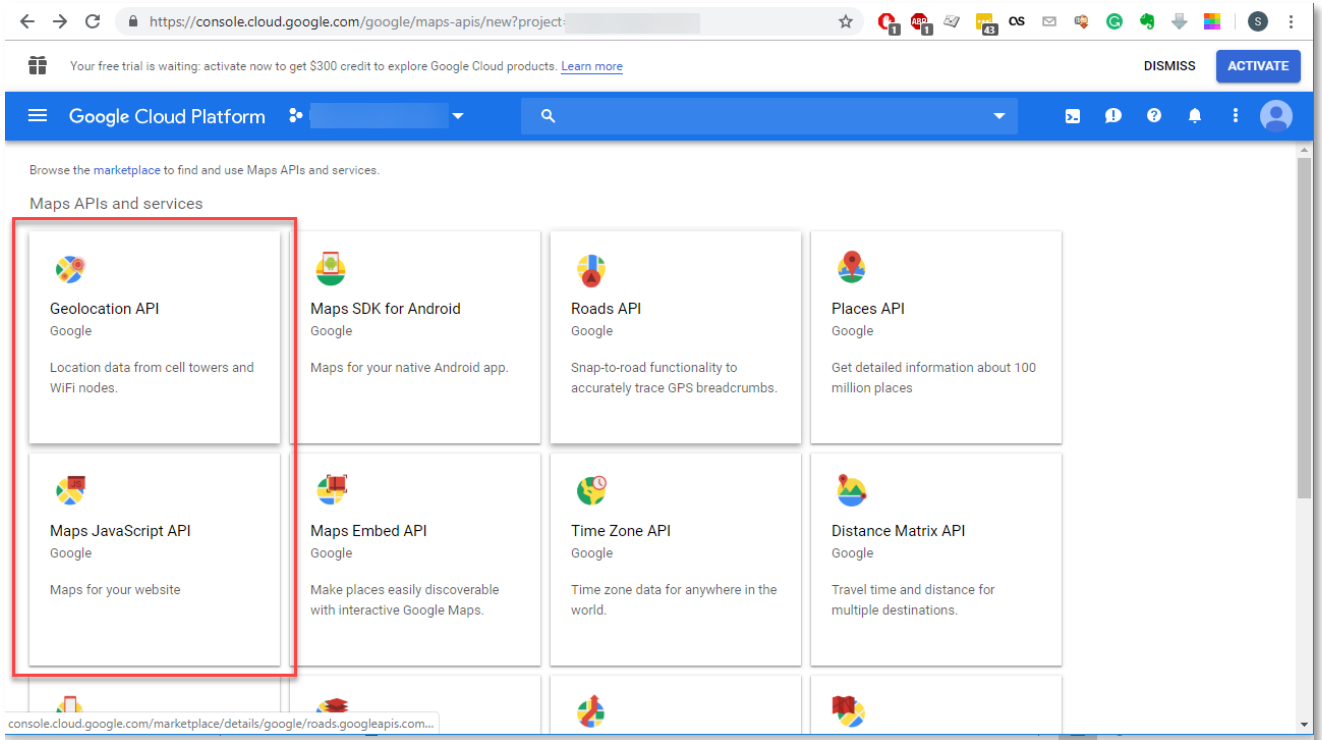
In order to use Google Maps in Dynamics 365 - Google Maps **Geolocation API** and **Maps JavaScript API** must be enabled. Then **Google Maps API Key** can be generated.

To do that:

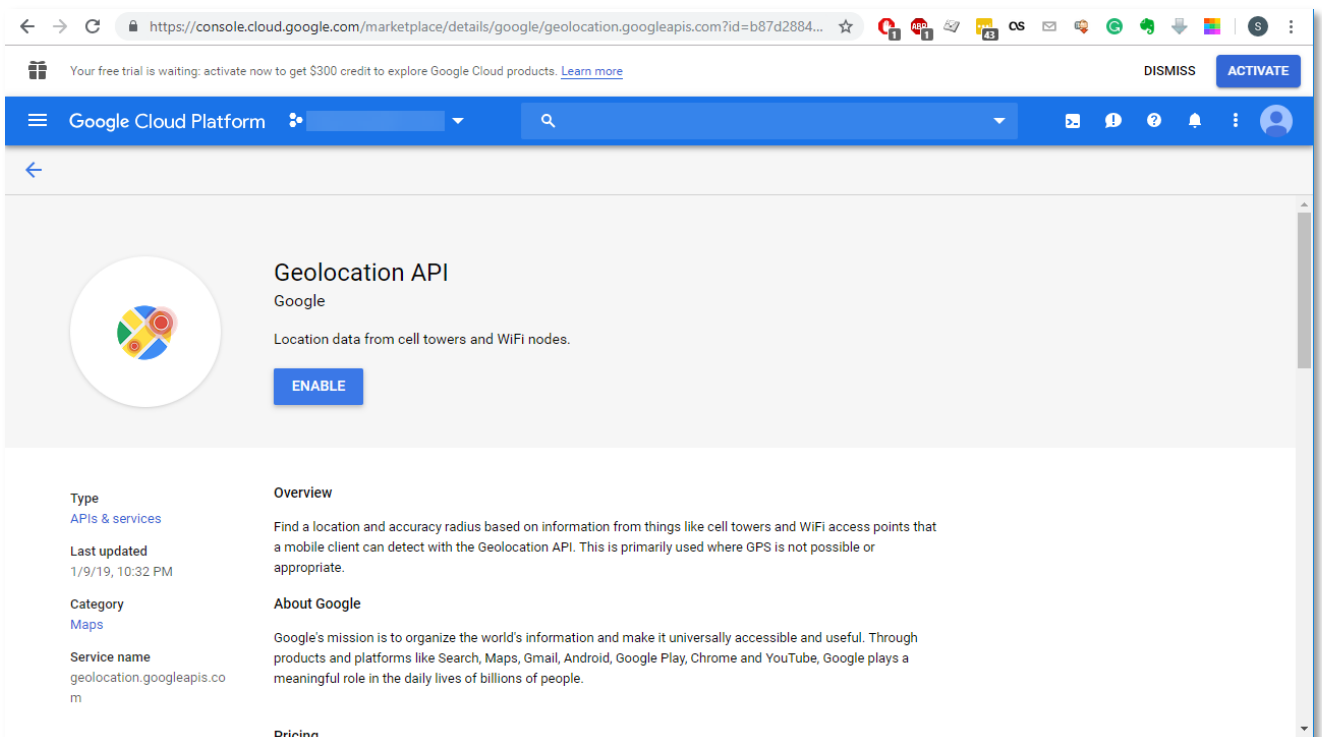
1. Go to <https://console.cloud.google.com> and scroll to the bottom of the left-side menu
2. Select **Google Maps -> APIs**



3. Find **Google Maps Geolocation API** and **Maps JavaScript API**



4. Enable both **Google Maps Geolocation API** and **Maps JavaScript API**



The screenshot shows the Google Cloud Platform Marketplace page for the Maps JavaScript API. The page header includes the Google Cloud Platform logo and navigation options. The main content area features a circular logo with 'JS' and 'Maps' text, followed by the title 'Maps JavaScript API' and the provider 'Google'. Below this, there is an 'ENABLE' button. The page is divided into sections: 'Type' (APIs & services), 'Last updated' (1/9/19, 10:32 PM), 'Category' (Maps), and 'Service name' (maps-backend.googleapis.com). The 'Overview' section describes adding a map to a website, and the 'About Google' section mentions Google's mission. A 'Tutorials and documentation' link is visible at the bottom.

5. Go to **Google Maps -> APIs** section again

The screenshot shows the Google Cloud Platform APIs list page. A navigation menu is open on the left side, listing various services under 'ARTIFICIAL INTELLIGENCE' and 'OTHER GOOGLE SOLUTIONS'. The 'Google Maps' service is highlighted, and a sub-menu is open, showing 'APIs' selected with a red arrow. The main content area displays a table of 'Enabled APIs' with columns for 'API', 'Requests', 'Errors', and 'Avg latency (ms)'. The table lists 'Geolocation API' and 'Maps JavaScript API', both with 0 requests and 0 errors. Below the table, there is a section for 'Additional APIs'.

API	Requests	Errors	Avg latency (ms)
Geolocation API	0	0	-
Maps JavaScript API	0	0	-

6. Open either **Google Maps Geolocation API** or **Maps JavaScript API**

The screenshot shows the Google Cloud Platform console interface. The left sidebar contains navigation options: Overview, APIs (selected), Metrics, and Support. The main content area is titled 'APIs' and includes a 'LEARN' button. Under the 'Enabled APIs' section, a table lists the following APIs with their respective metrics for the last 30 days:

API ↑	Requests	Errors	Avg latency (ms)	
Geolocation API	0	0	-	Details
Maps JavaScript API	0	0	-	Details

Below this, the 'Additional APIs' section lists several other APIs available in the marketplace, including Maps SDK for Android, Directions API, Distance Matrix API, Maps Elevation API, Maps Embed API, Geocoding API, and Roads API.

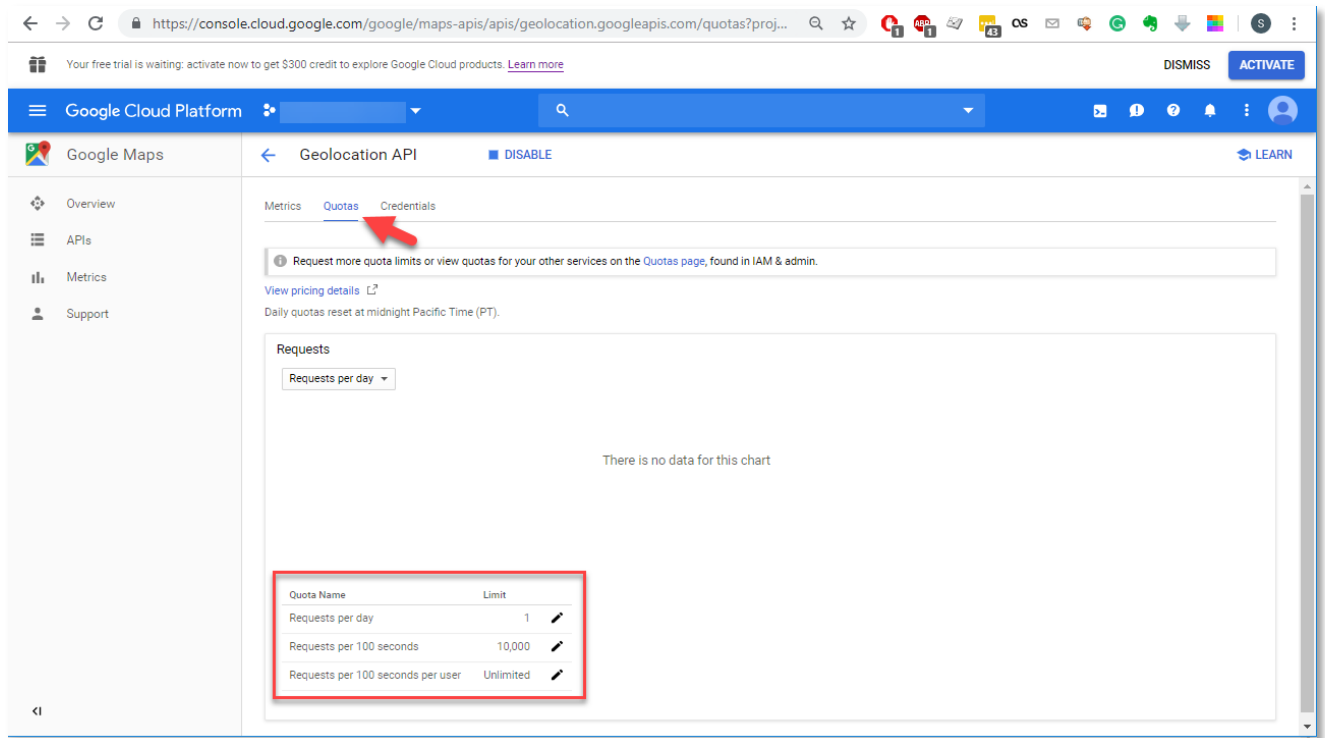
7. Click on **Credentials** to find API key

The screenshot shows the 'Credentials' page for the Geolocation API. The breadcrumb navigation is 'Geolocation API' with a 'DISABLE' button. The 'Credentials' tab is selected, indicated by a red arrow. Below the navigation, there is a message: 'Use one of these credentials to access this API, or create new credentials by visiting [Credentials in the API Manager](#).' Below this message is a table titled 'API keys' with the following data:

Name	Creation date	Restrictions	Key	
⚠️ Ключ API 1	Sep 13, 2016	None	AlzaSyDTkhf5pErdveTp54nB2gcclK-1b5S0mbs	🗑️

Google Maps API Limitations

Steps described above allow to activate and use **Free Version** of **Google Maps API**. It has limitations. Information about the limitations can be found in **Quotas** section

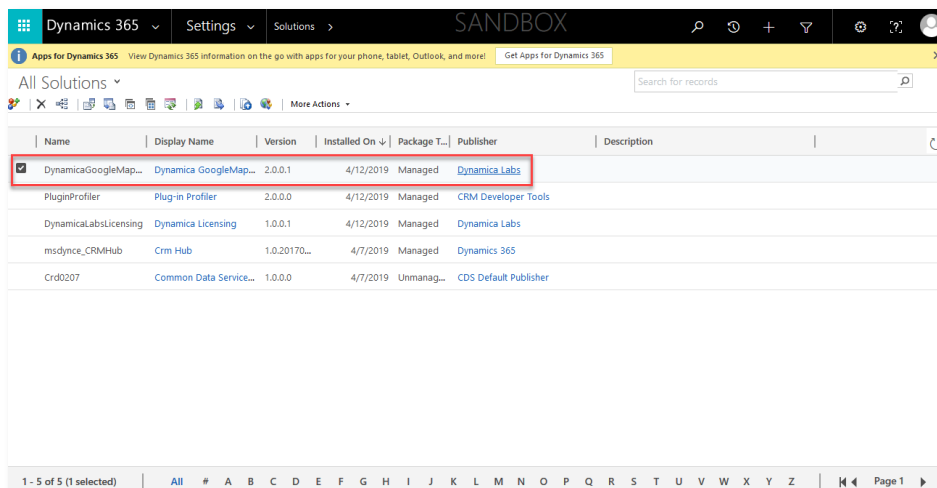


Find more information about Geolocation API Usage and Billing following this link https://developers.google.com/maps/documentation/geolocation/usage-and-billing?hl=en_US

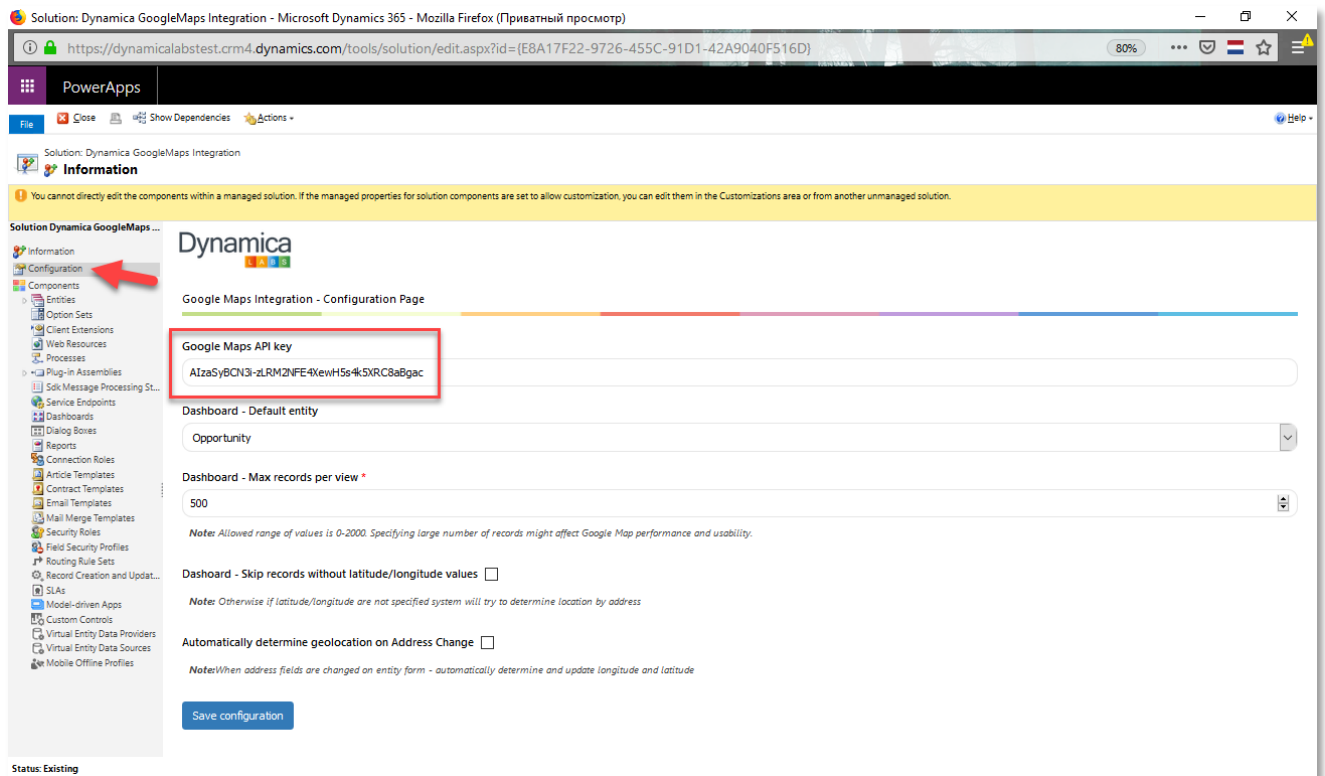
Dynamica Google Maps Integration solution configuration

After **Dynamica Google Maps Integration** solution installation few simple configuration steps must be done:

1. Go to **Settings** -> **Solutions** and open **Dynamica Google Maps Integration** solution



2. On configuration page – copy your **Google Maps API key** into appropriate field and **Save Configuration**



Dynamica Google Maps Integration Trial and Licensing

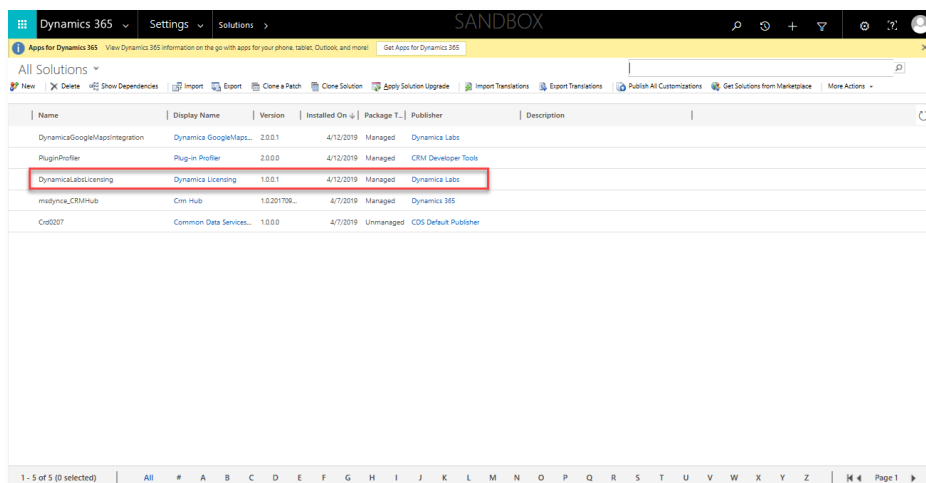
After installation - **Dynamica Google Maps Integration** solution works in trial mode.

Trial version has restrictions: it works with **Contact** entity only.

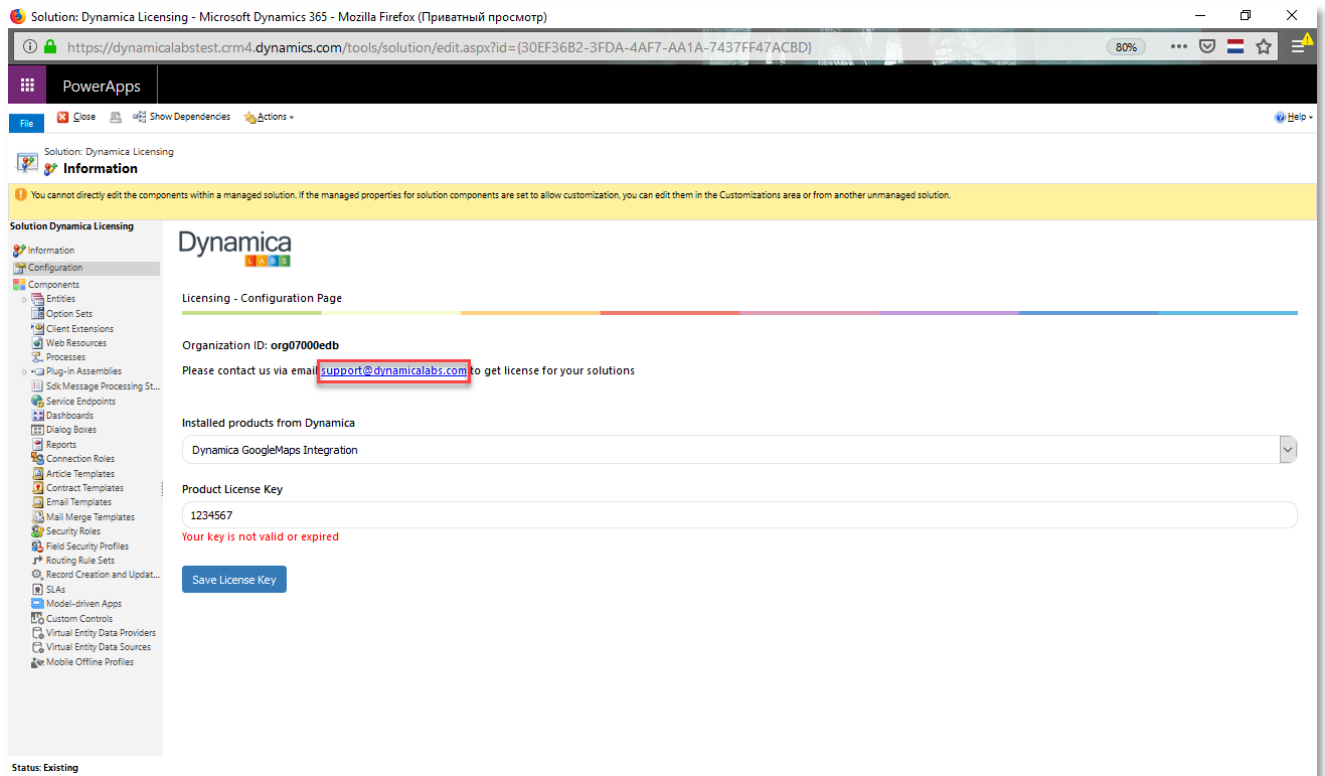
Full version works with **Account, Contact, Lead and Opportunity** entities.

To get licenses:

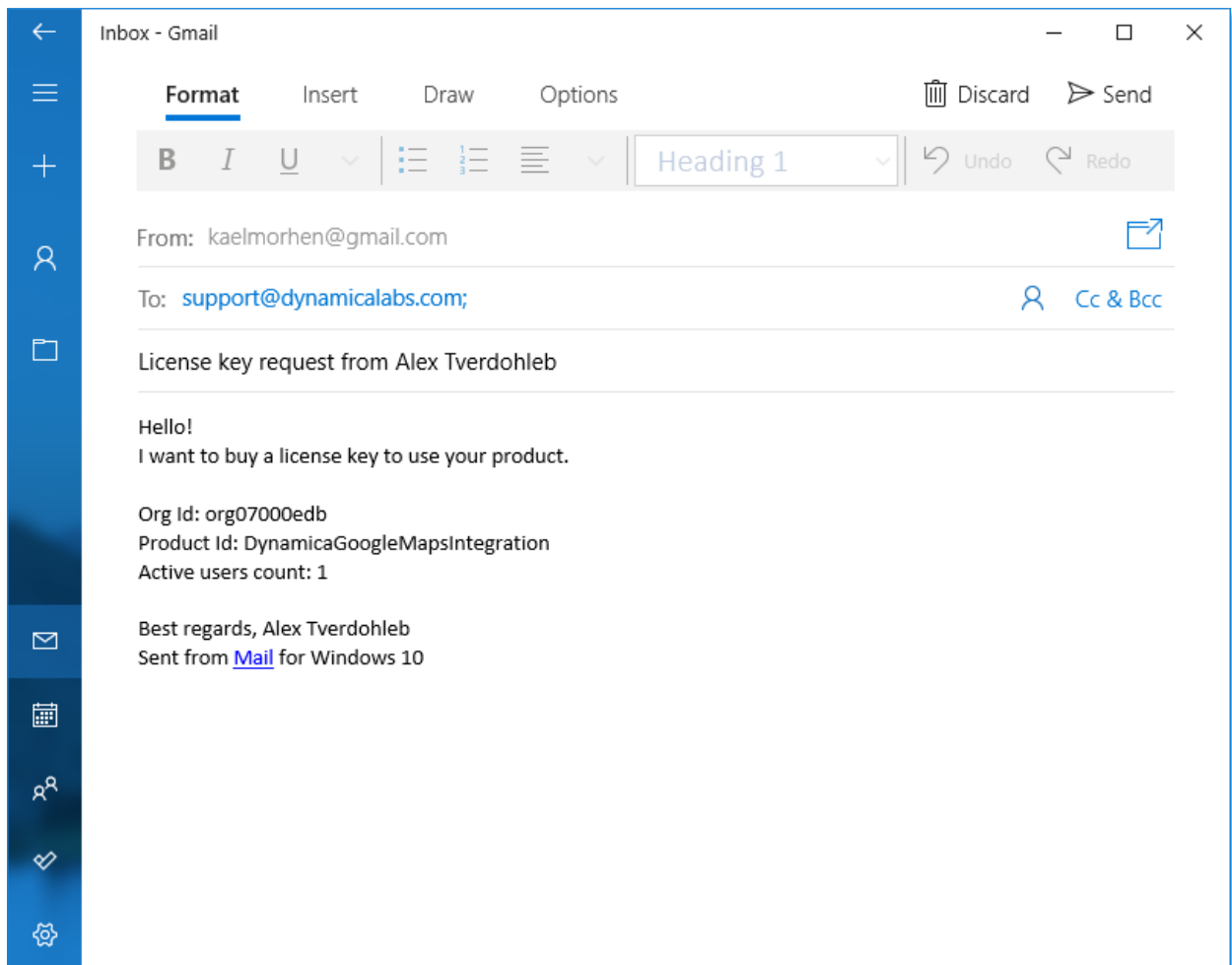
1. Go to **Settings -> Solutions** and open Dynamica Licensing



2. Click on support@dynamicalabs.com



3. Specify number of users you want to get licenses for

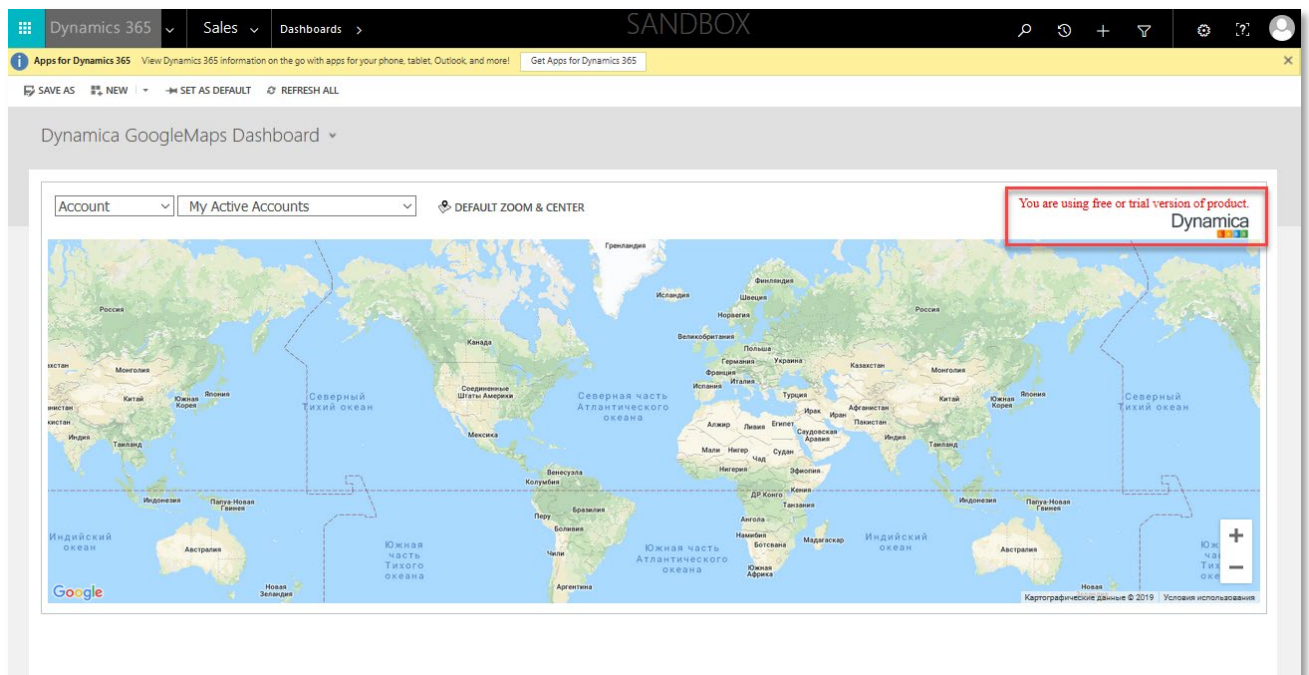


4. After receiving a licensing key from Dynamica Labs – copy it into Product License Key field of the Dynamica Licensing solution configuration page

Free licenses for up to 10 users

You can get licenses for up to 10 users for Free.

Please note that in Free version you will be able to use Dynamica Google Maps Integration solution with **Account, Contact, Lead and Opportunity** entities yet you will still see notification that you are using free or trial version of the solution

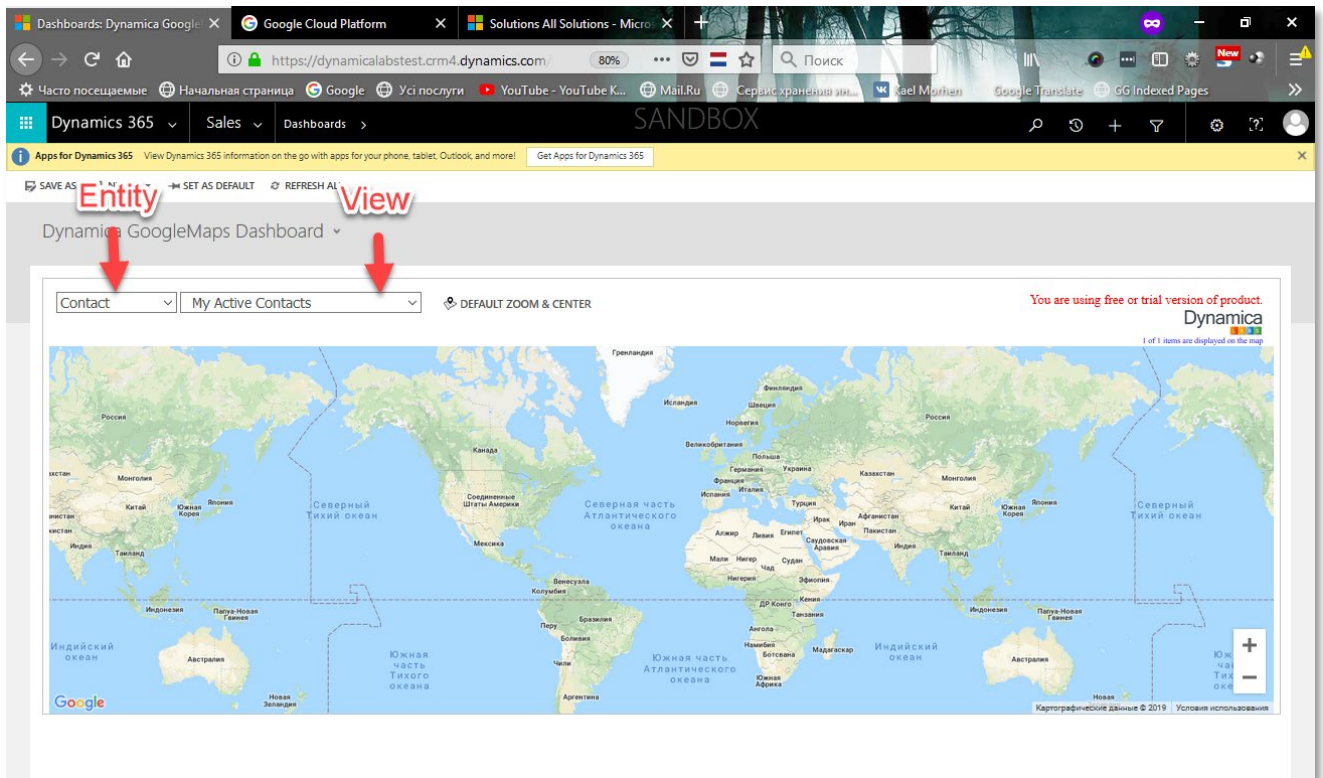


Google Maps Dashboard

After solution installation - **Google Maps Dashboard** will be added to **Dashboards** section.

1. Go to **Dashboards** and select **Dynamica Google Maps Dashboard** from the drop-down list of dashboards

2. Do display positions of the records on the map select **Entity** and **View** on the upper-left corner of the dashboard

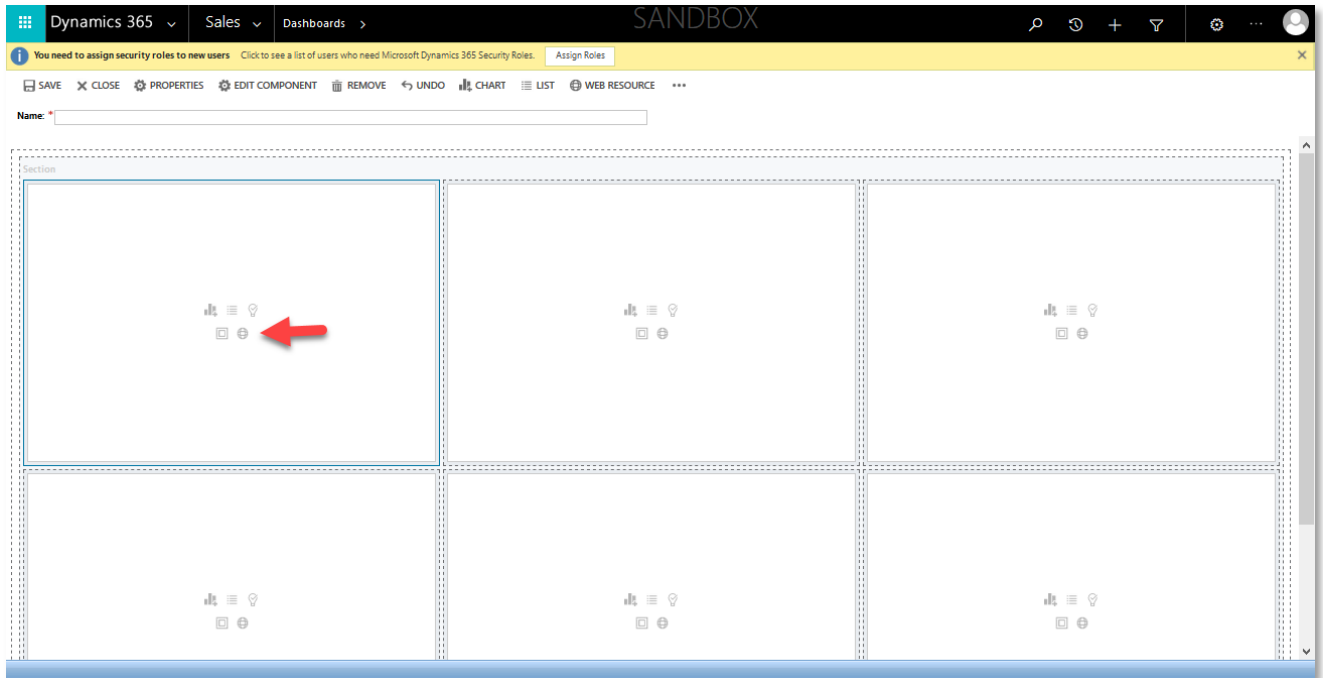


In order to show records coordinates on the map – records should have addresses that will be automatically geocoded into Longitude and Latitude.

Embed Google Maps on any Dashboard

Google maps can be embedded on any dashboard as a chart:

1. Click on **Insert Web Resource** on chart

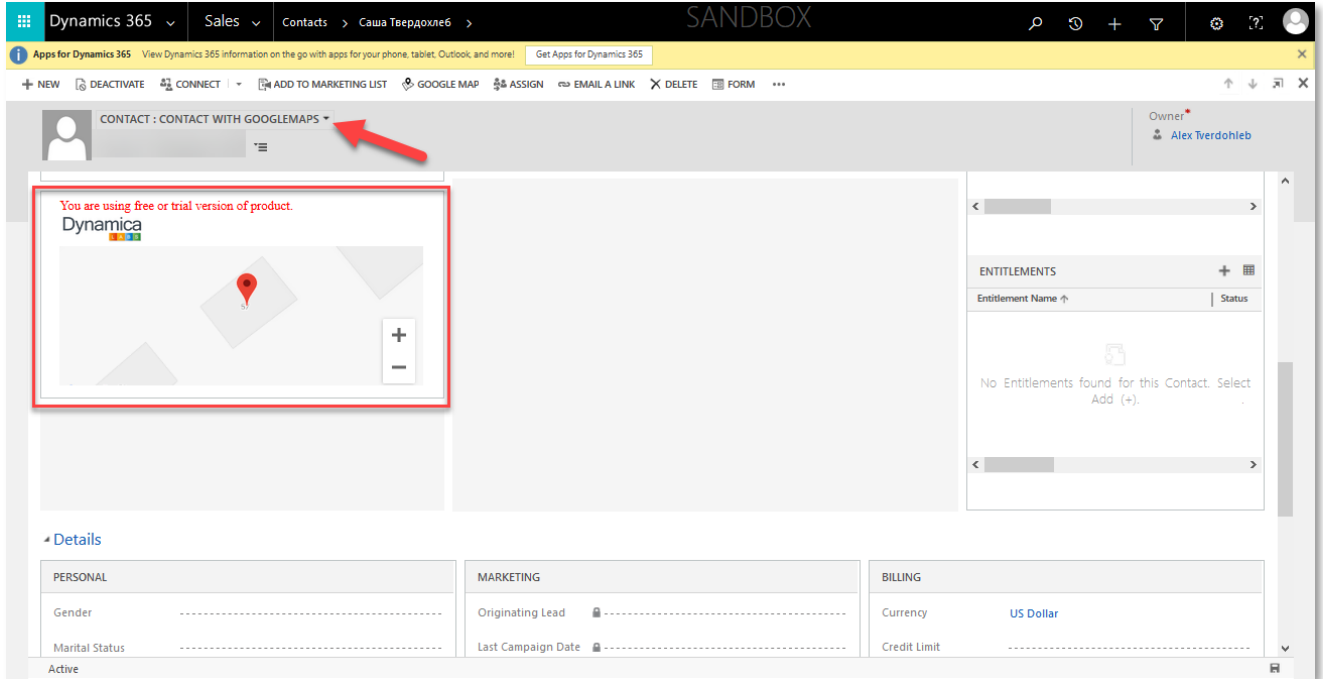


2. Find **dnI_GoogleMapsDashboardPage.html** in Web Resource lookup

3. Specify Web Resource **Name** and **Label** and click ok

Google Maps on Entities Forms

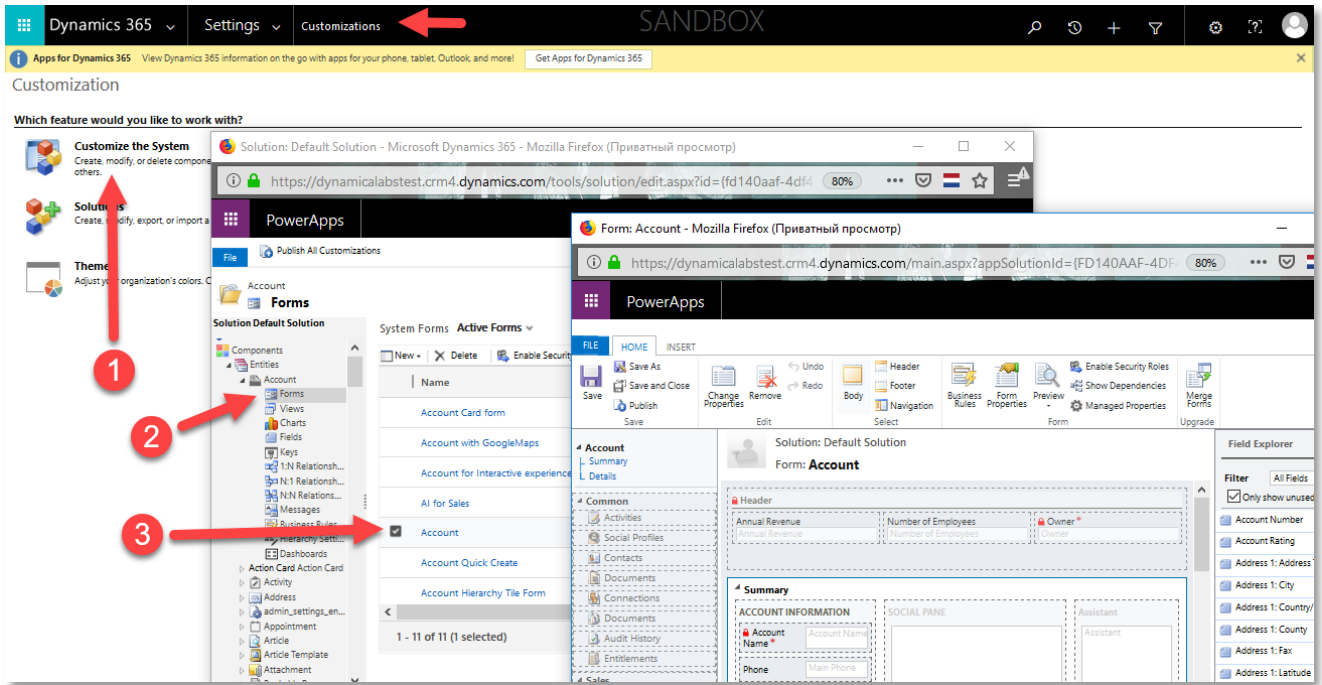
After solution installation – forms with already embedded Google Maps will be added on **Account, Contact, Lead and Opportunity** entities. These forms can be used for testing of the solution



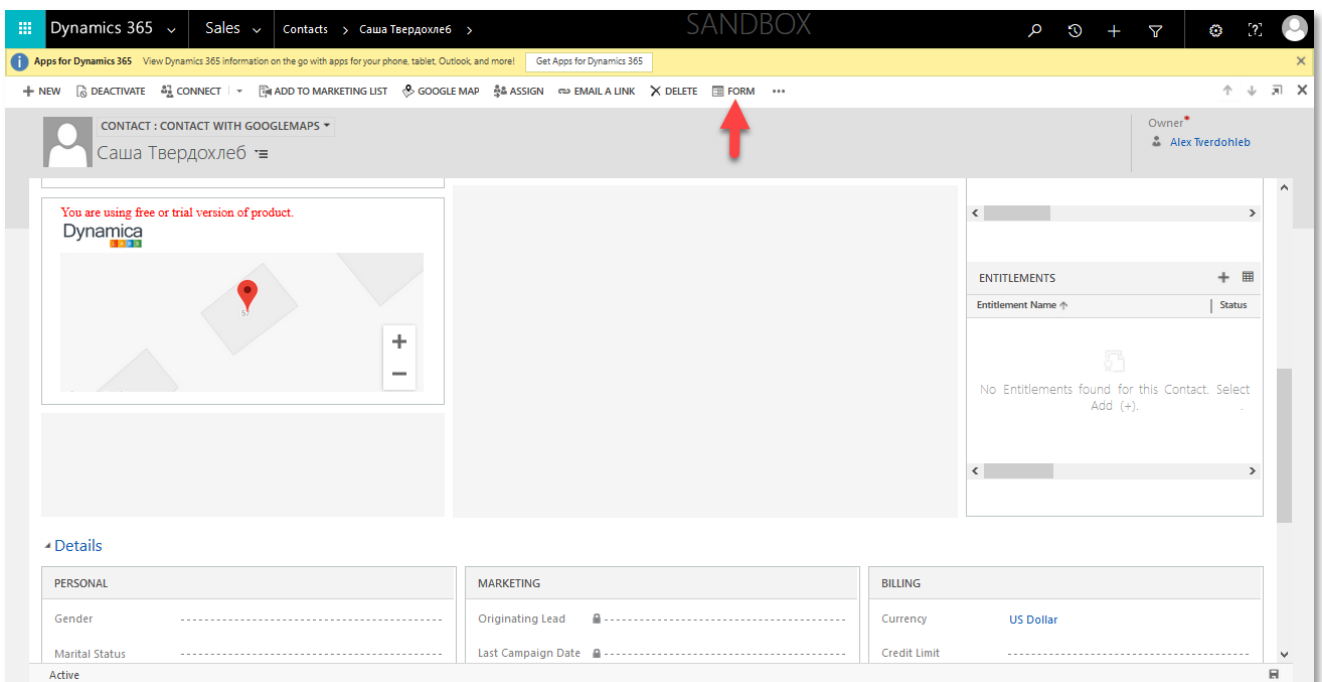
Embed Google Maps on any Form

Google Maps can be embedded on any form.

To do that either open **Form Editor** or go to **Settings -> Customizations -> Customize the System -> Entities -> <Entity Name> -> Forms -> <Forms Name>**



Form Editor:



1. Insert Section

The screenshot displays the Microsoft Dynamics CRM 4.0 user interface for editing a form titled "Form: Account". The browser window title is "Form: Account - Mozilla Firefox (Приватный просмотр)". The address bar shows the URL: <https://dynamicalabstest.crm4.dynamics.com/main.aspx?appSolutionId={FD140AAF-4DF...>

The interface features a ribbon with two tabs: "HOME" and "INSERT". The "INSERT" tab is active, showing a "Section" dropdown menu with options: "One Column", "Two Columns", "Three Columns", "Four Columns", and "Reference Panel". A red circle with the number "2" is placed over the "OverApps" button in the top navigation bar. A red circle with the number "1" is placed over the "INSERT" tab. A red circle with the number "3" is placed over the "Section" dropdown menu. The main workspace shows a "Map View" and a "Primary Contact" section. The "Field Explorer" on the right lists various fields, including "Account Number", "Account Rating", and "Address 1: Address Type".

2. Select the section and **Add Web Resource**

The screenshot displays the Microsoft Dynamics CRM PowerApps interface for editing a form. The browser window title is "Form: Account - Mozilla Firefox (Приватный просмотр)". The URL is "https://dynamicalabstest.crm4.dynamics.com/main.aspx?appSolutionId={FD140AAF-4DF...". The interface includes a ribbon with "FILE", "HOME", and "INSERT" tabs. The "INSERT" tab is active, showing various controls like "One Column", "Sub-Grid", "Spacer", "Quick View Form", "Bing Maps", "Navigation Link", "Social Insights", "Timer", "Knowledge Base Search", "ACI Control", "Relationship Assistant", and "Predictive Opportunity Scoring".

The main workspace shows the "Form: Account" for "Solution: Default Solution". The form layout includes a "Map View" and a "Section" placeholder. A red arrow labeled "1" points to the "Section" placeholder. Another red arrow labeled "2" points to the "Add Web Resource" icon in the "INSERT" ribbon.

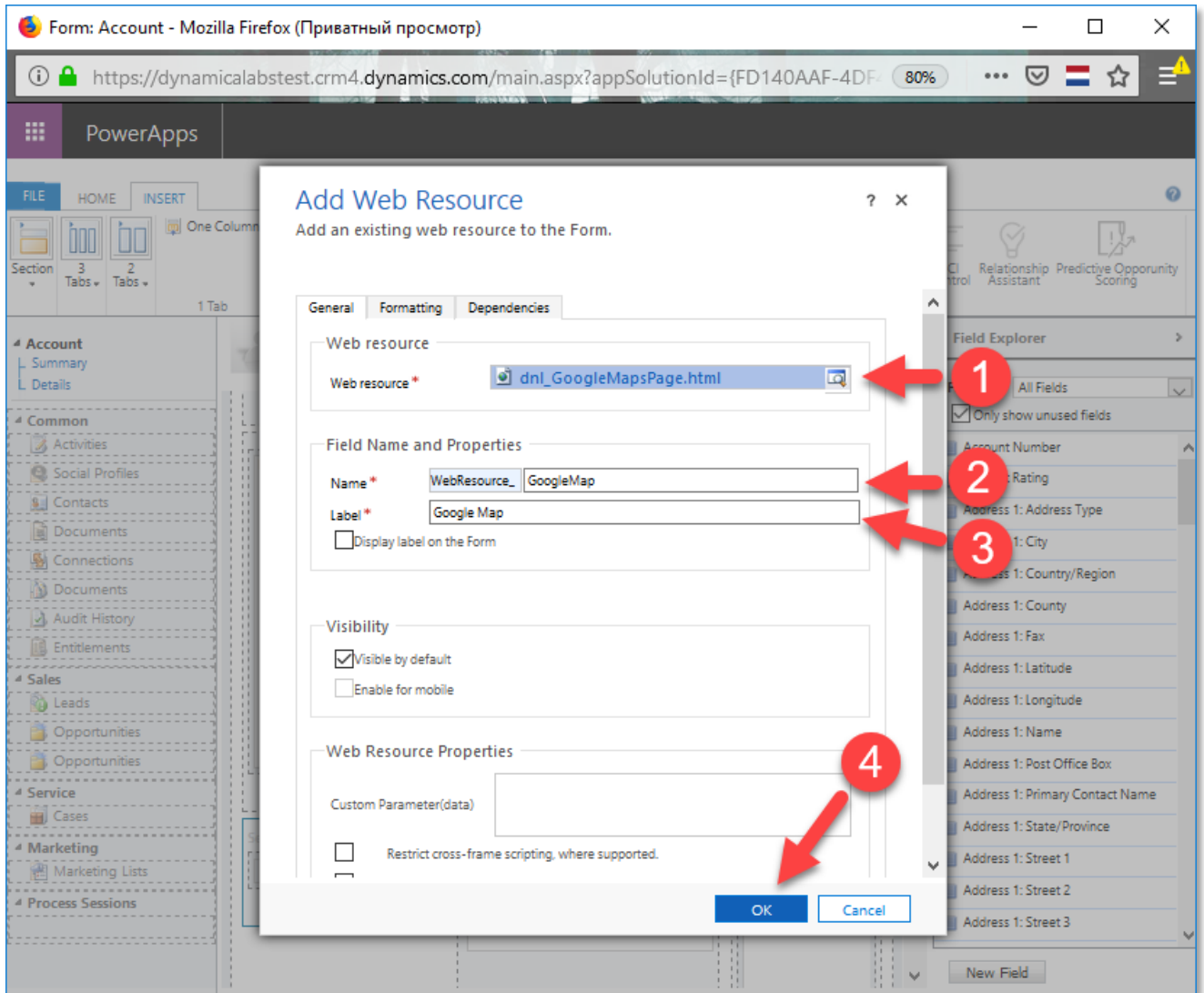
The "Field Explorer" on the right side of the interface shows a list of fields for the "Account" entity. The filter is set to "All Fields" and "Only show unused fields" is checked. The fields listed are:

- Account Number
- Account Rating
- Address 1: Address Type
- Address 1: City
- Address 1: Country/Region
- Address 1: County
- Address 1: Fax
- Address 1: Latitude
- Address 1: Longitude
- Address 1: Name
- Address 1: Post Office Box
- Address 1: Primary Contact Name
- Address 1: State/Province
- Address 1: Street 1
- Address 1: Street 2
- Address 1: Street 3

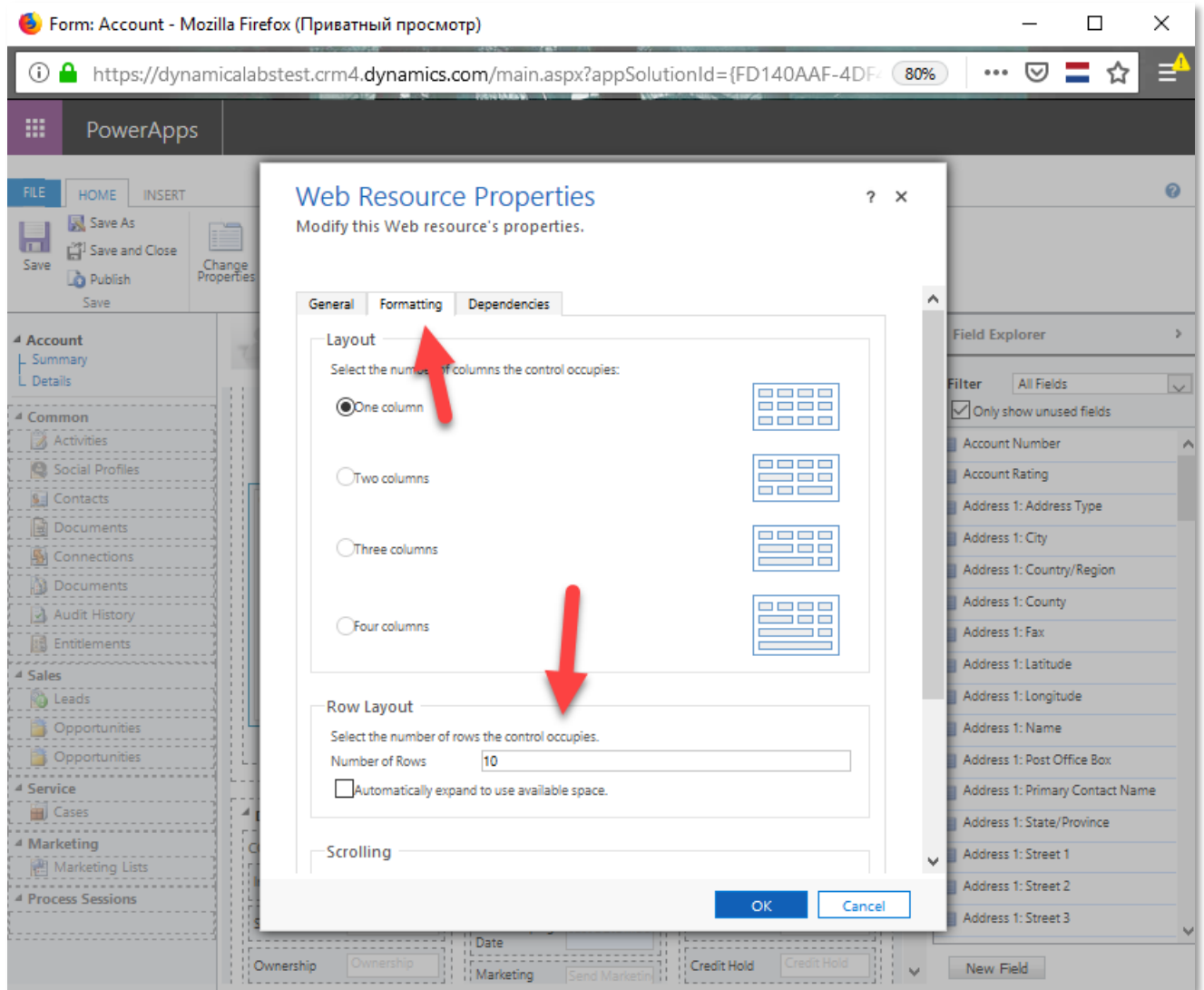
A "New Field" button is located at the bottom of the Field Explorer.

3. Find **dnI_GoogleMapsPage.html** in Web Resource lookup

4. Specify Web Resource **Name** and **Label**

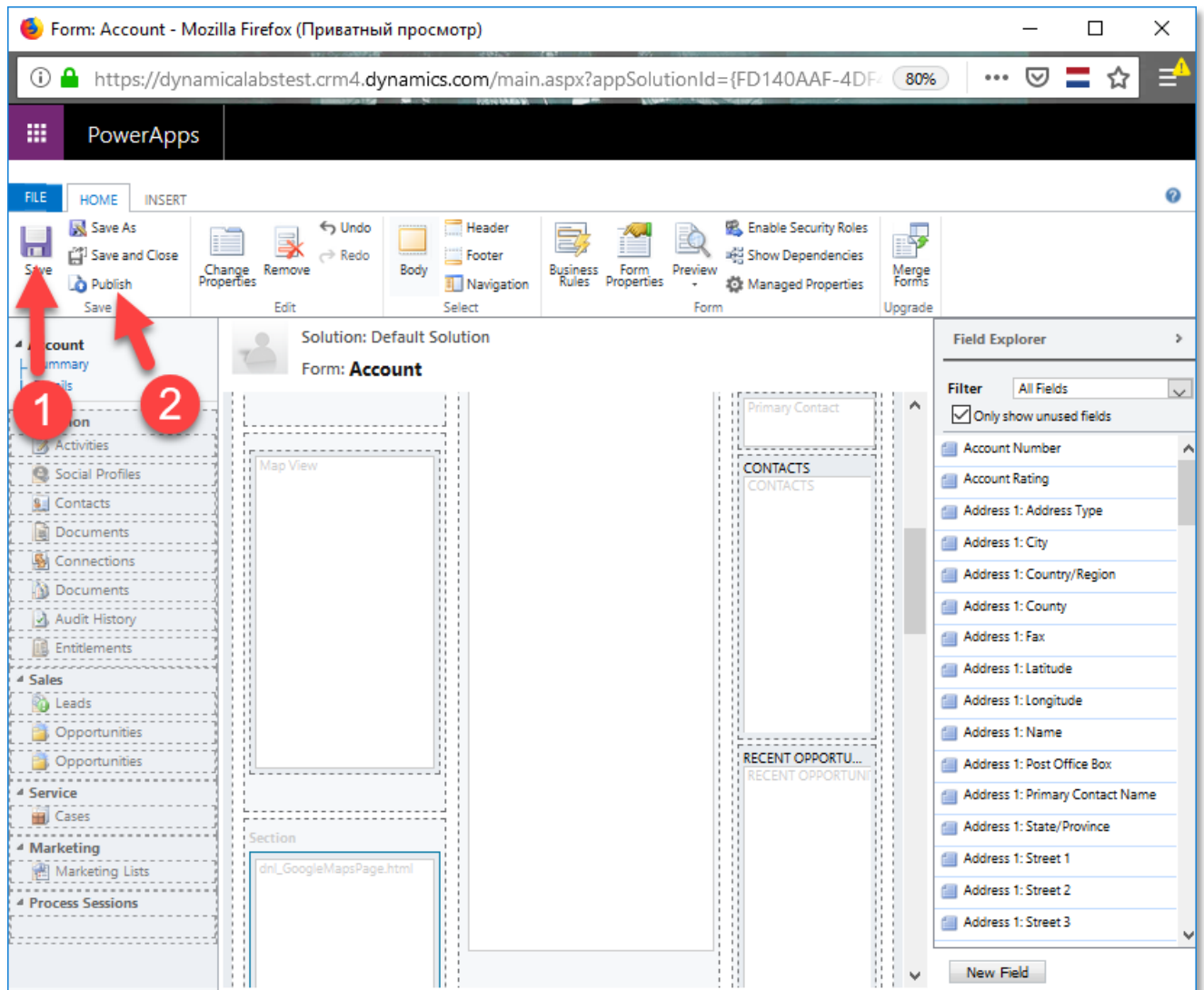


5. On the **Formatting** Tab you can adjust **Layout size**



7. After you've finished - click **Ok**

8. Click **Save** and **Publish**



9. Open the record and switch on your form. If the map cannot be found on the form – refresh the page with clearing cache (In Google Chrome - Ctrl + F5)

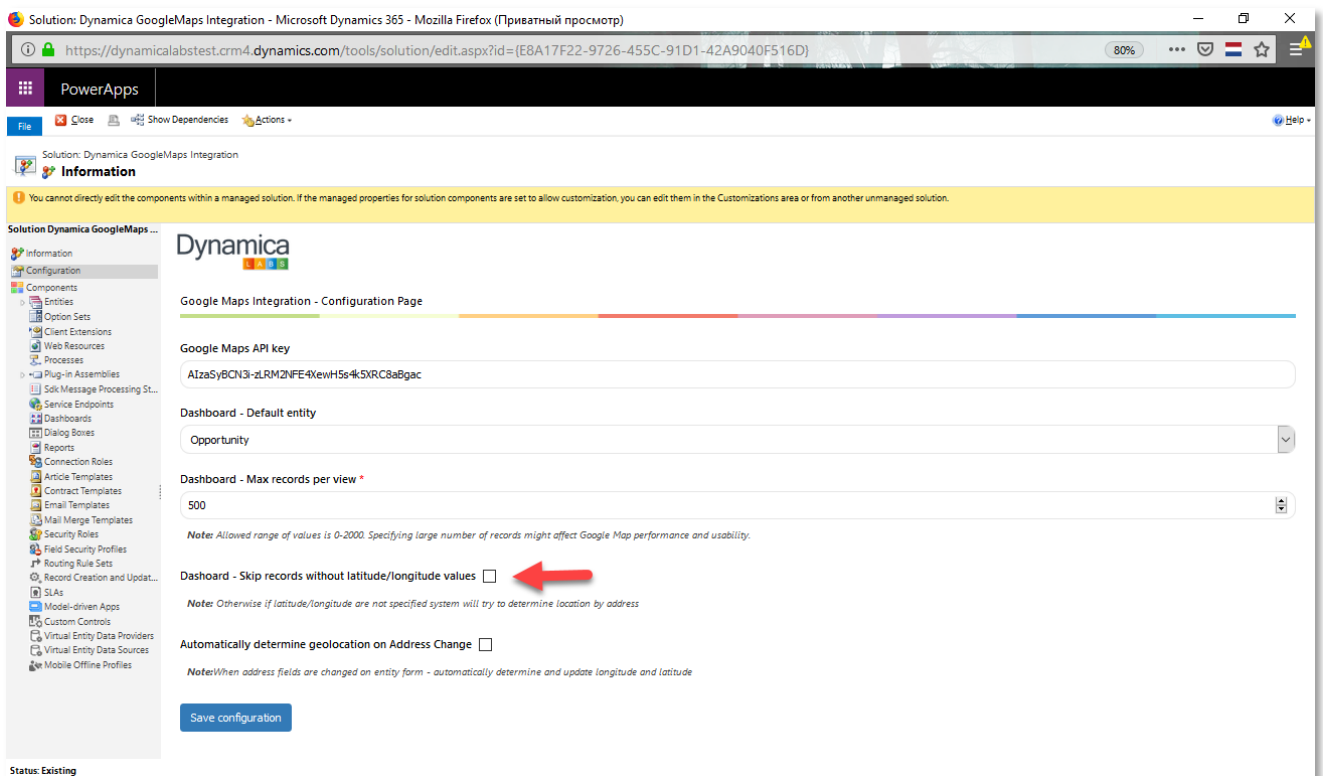
Records Geolocation Determination

In order to show positions of the records on the map the solution uses **Longitude and Latitude**. Longitude and Latitude are determined based on the record's address.

Records coordinates can be determined in real-time and saved in appropriate fields

* *Option: Dashboard - Skip records without latitude/longitude values must be turned off.*

This option can be changed on the solution's configuration page



Dynamica Google Maps Integration Configuration Options

Option	Description
Google Maps API key	API key that must be generated and copied from Google Maps
Dashboard - Default Entity	Entity selected by default on Google Map Dashboard

Dashboard – Max records per time Maximum number of records that will be shown on the Google Map Dashboard

Dashboard – Skip records without latitude/longitude values When option is turned on - system will try to determine location by address if latitude/longitude are not specified

Automatically determine geolocation on Address Change When option is turned on – system will automatically determine and update longitude and latitude if address of record is changed

Restrictions

1. Currently the solution works only with **Account, Contact, Lead and Opportunity** entities