MAPLYTICS™ – User Manual

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Introduction

Maplytics™ is a leading Certified for Microsoft Dynamics 365 (CfMD) geo-analytical mapping app. Maplytics empowers users across verticals with the power of Geographical Data Visualization, Optimized Routing, Automated Appointment Planning, Proximity Search, Heat Maps, Shape Overlay, Census data visualization and Territory Management to drive better sales, improve business processes and engage right customers at the right time.

Maplytics is available for Microsoft Dynamics versions CRM 2013 and above and supports all deployment models of CRM On-Premise (IFD as well), CRM Online and Partner-hosted. It uses the API services provided by Bing maps. The following are the highlights of Maplytics:

- ✓ Ease of access
- ✓ Compatible with Dynamics 365 App for Phones and Tablets
- ✓ Multiple language support
- ✓ Plot multiple OOB & custom entities on map
- ✓ Hierarchal Territories
- ✓ Area of Service
- ✓ Search nearby records with Proximity Search
- ✓ Auto Scheduling for multiple users
- ✓ Track field reps' activities with Check-In
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- ✓ Ability to Save & Share Driving directions
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- ✓ Maplytics Dashboards with configurable queries
- ✓ Geocoding Confidence Rating
- ✓ Turn-by-turn navigation on mobiles & tablets
- ✓ Seamlessly integrated within Dynamics
- ✓ Multi-search layer in Detail map Control

Language Support

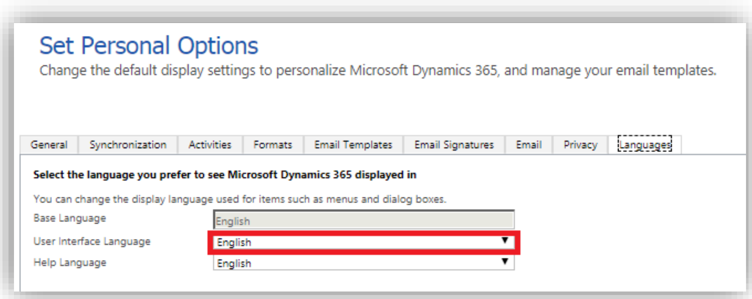
Maplytics is a multi-language solution currently available in eleven different languages namely:

- English
- Spanish (Español)
- German (Deutsche)
- French (Français)
- Portuguese (Português)
- Turkish (Türk)
- Arabic (عربي)
- Hungarian (Magyar)
- Dutch (Nederlands)
- Polish (Polski)
- Russian (Русский)

Maplytics auto-detects the user language set in Dynamics CRM and sets its language accordingly.

To check user language set in Dynamics CRM, please go to ***Settings > Options > Languages***

Maplytics Configuration (Personalization)



Each user of Maplytics can customize Maplytics configuration according to their preference. The user can configure Zoom level, Current Location, default origin and destination and a couple of other settings like Map more, default summary grouping, etc. Please go to ***Settings > Maplytics Configuration Details*** > Select Maplytics Configuration record for the required user (users added in Team Maplytics)> Set according to the preference

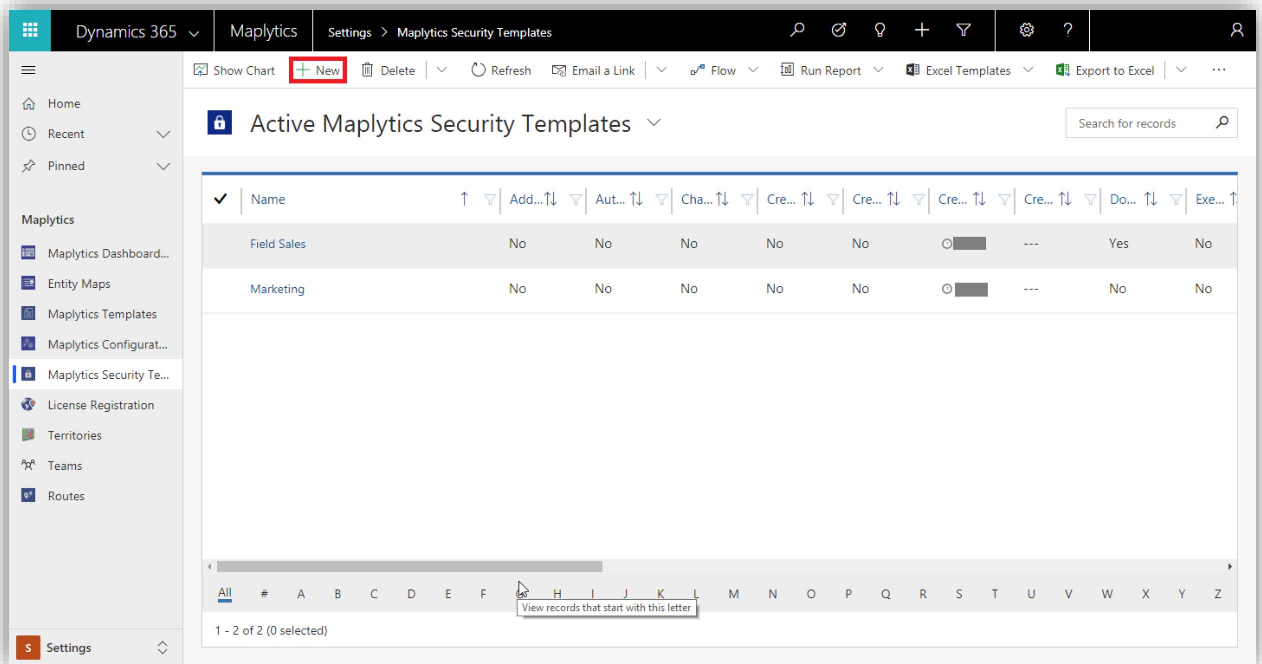
Refer to ***'Maplytics Configuration Details (Personalization)'*** section of ***Installation Manual*** for a detailed description of personalization settings.

Maplytics Security Template

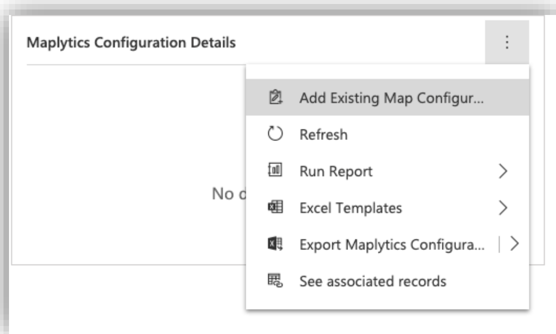
System admin and Maplytics admin can provide selective access of Maplytics actions to the Maplytics users. They can select the required Mass actions & other actions in the list and save it as a Security template. They can further assign this template to the required users so as to provide the access of the selected actions in the template to the respective Maplytics users.

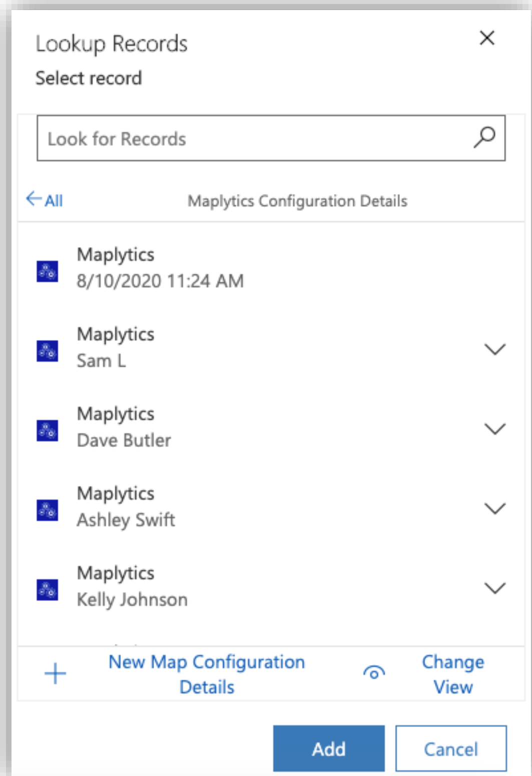
To create a Security Template,

Go to the Maplytics App > Settings > Maplytics Security Templates > New > 'General' tab > Give a name and 'save' the template.

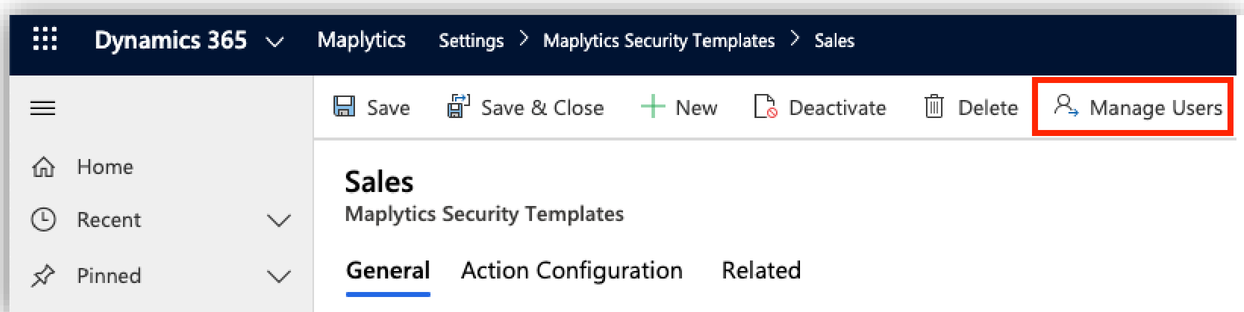


To assign a template to the Maplytics users, Admins can add the Maplytics Configuration Detail records of the Maplytics users under the section of 'Maplytics Configuration Details', to whom the template has to be assigned.

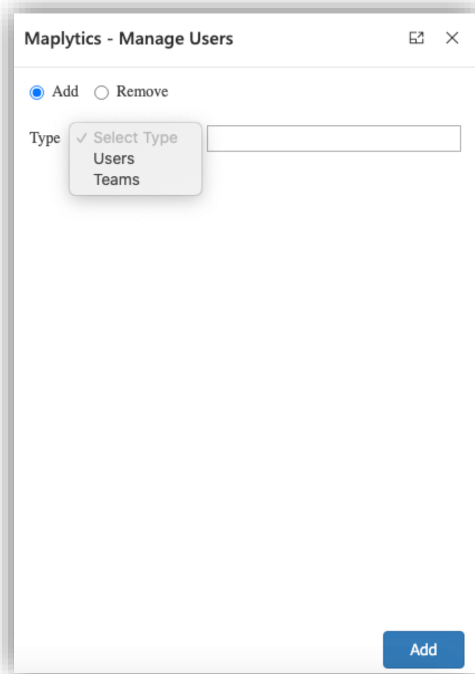


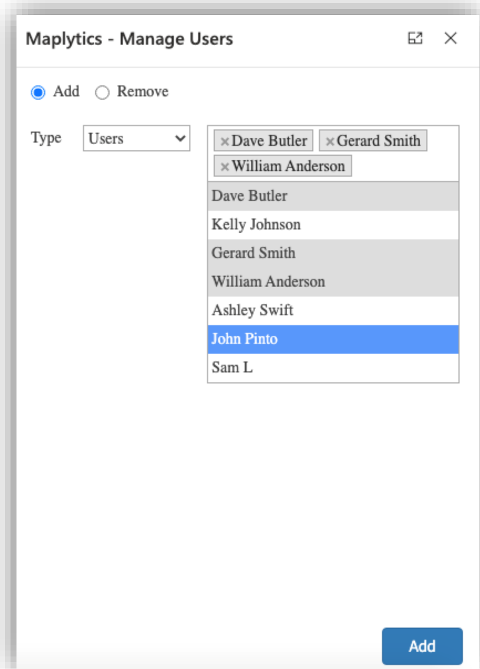


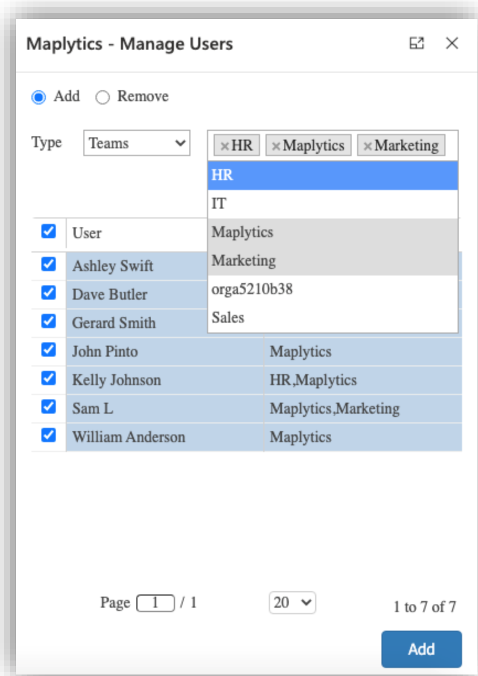
In order to assign the Security Template to multiple users at once. Admins can also add teams/users using the button 'Manage users' from the Ribbon bar. They can also remove the required users/teams from the list. Thus, using 'Manage users' admins can easily manage the users assigned with any Security Template.

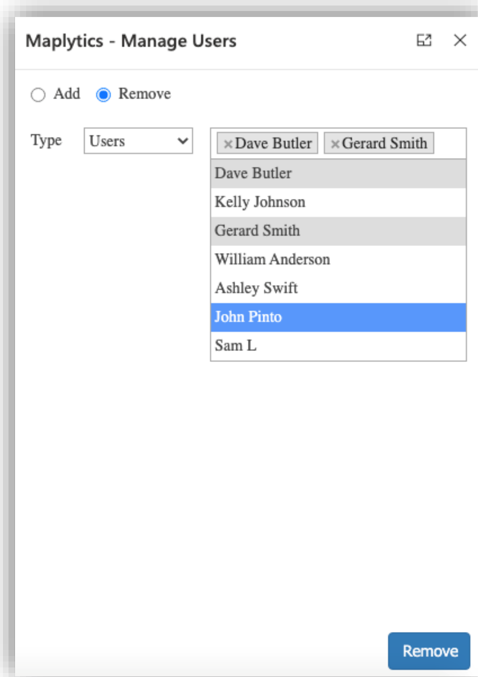


Admins can choose whether they want to assign the template to Users or Teams by adding them. They can also choose to remove the users/teams from the list. They can also see the list of teams and respective users added from those teams.



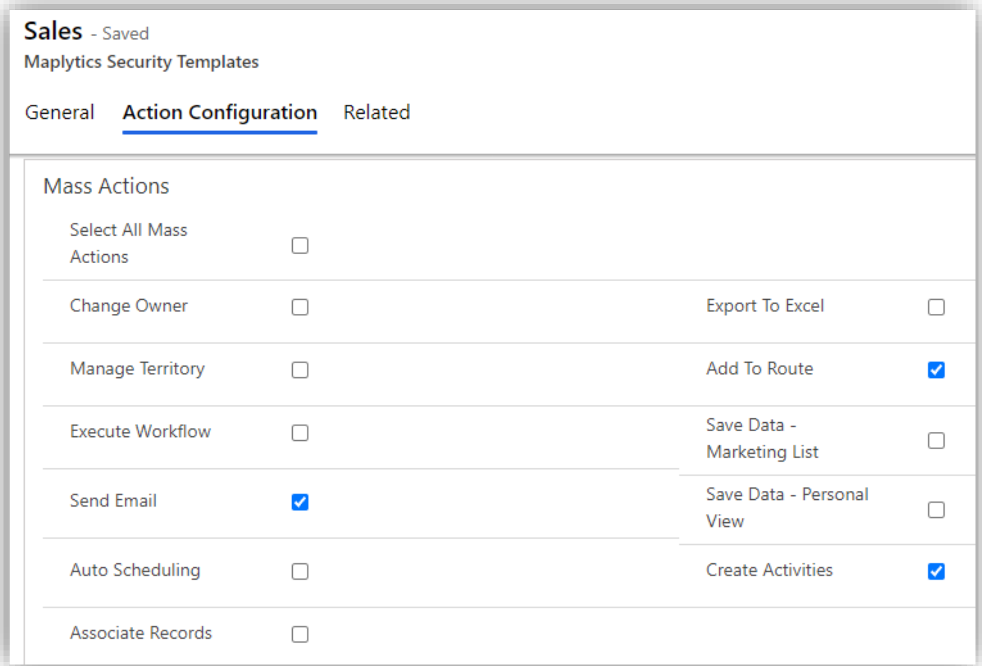


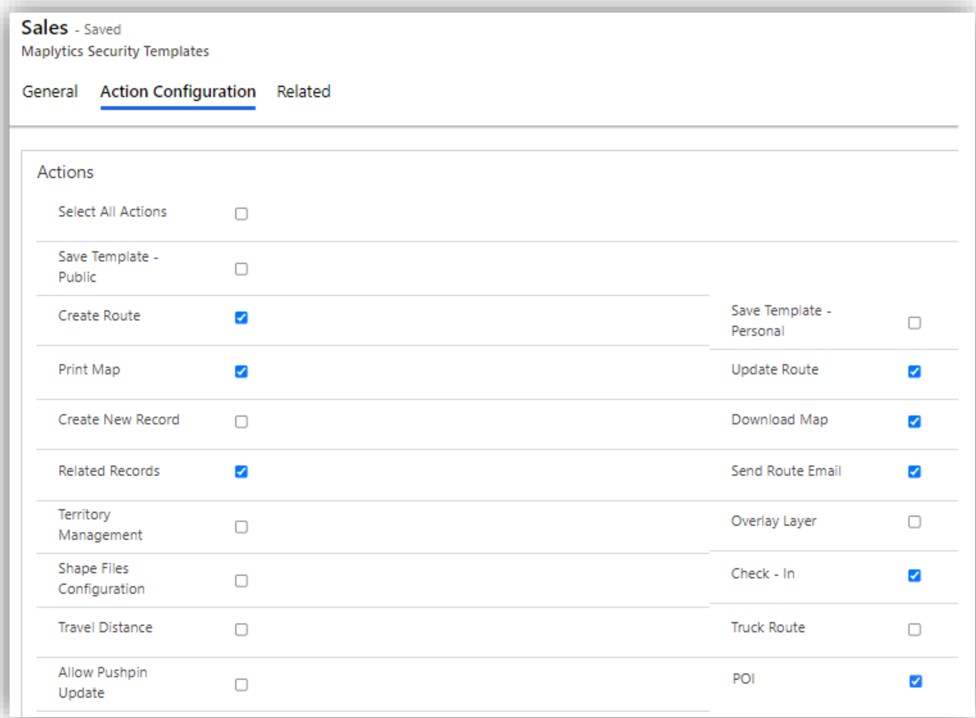




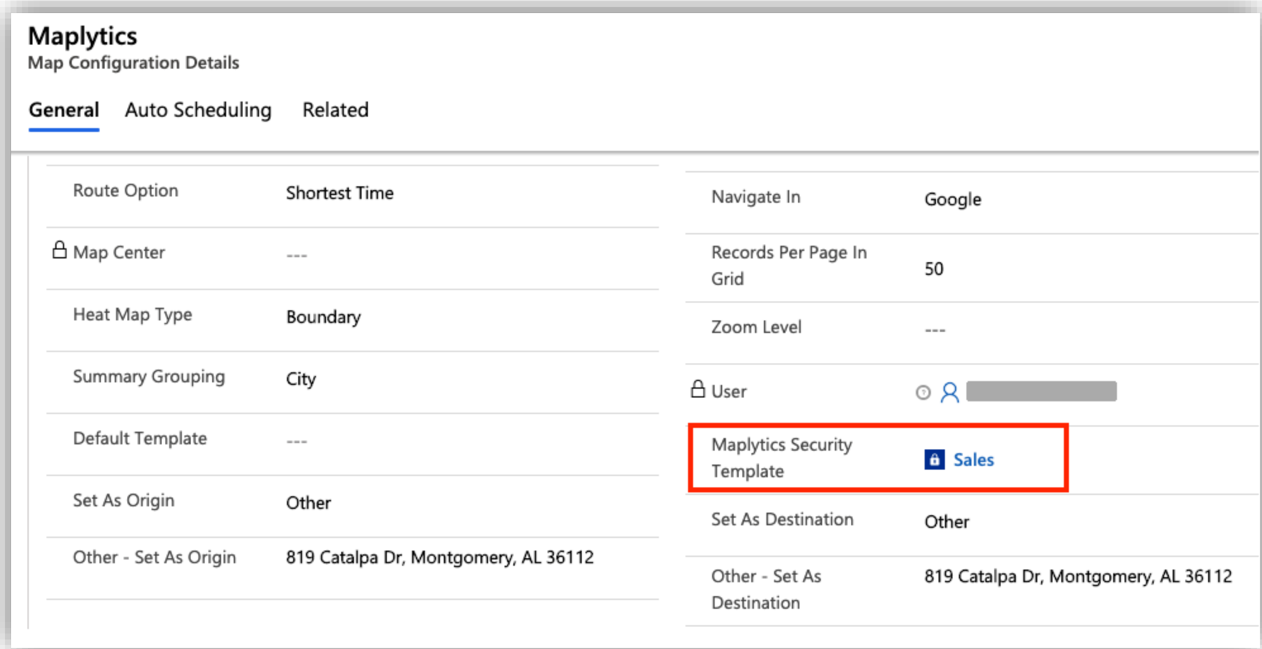
Note: A Maplytics Security template can be assigned to the users belonging to any team, however, they should also exist into the Maplytics team.

Go to Action Configuration > Select the required actions to be made available to the users assigned with this template and save.





Along with using the ‘Remove’ button, to unassign any template to a user, admins can also ***Go to Maplytics App > Settings > Maplytics Configuration Details > Select the record of the required user> Remove the lookup value for the field of ‘Maplytics Security Templates’***

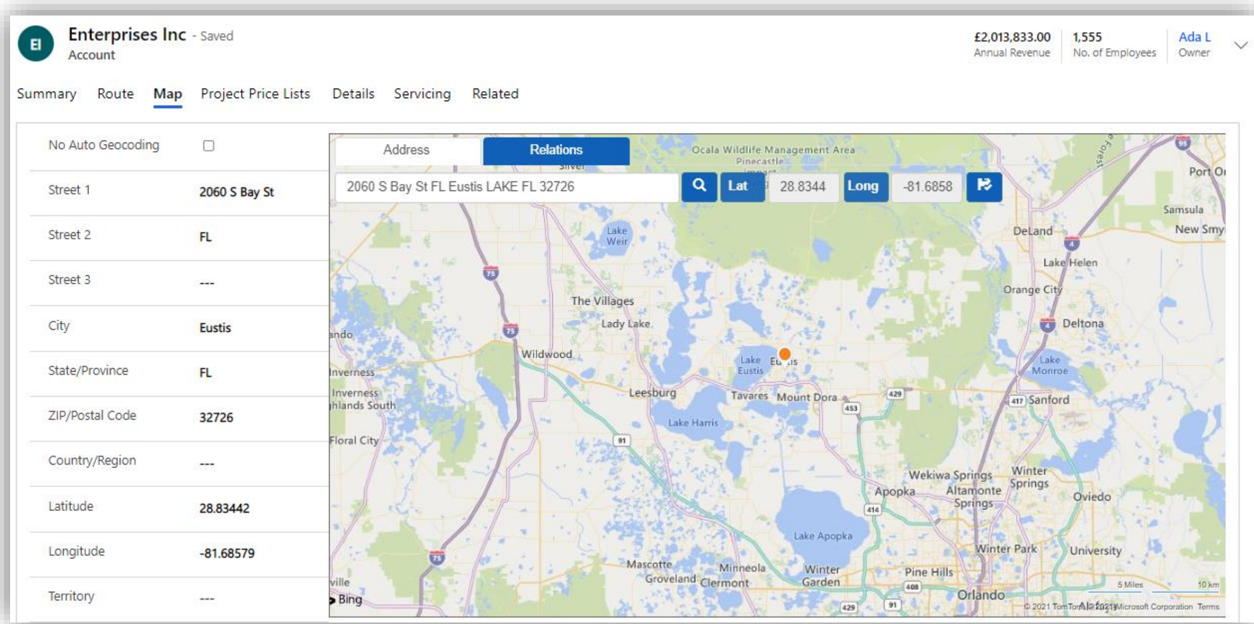


Note:

- ***All the actions will be visible to a user, if no template is assigned to the user***
- ***Only System Admin and Maplytics Admin will be able to access the Maplytics Security Template Entity***

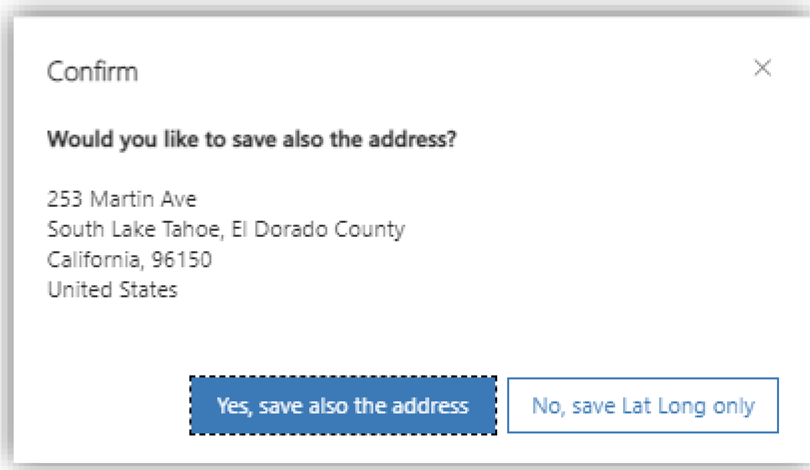
Individual Record Map

A tab to display an Individual Map section has been added by default on the Account, Contact and Lead records as a part of the Maplytics solution.

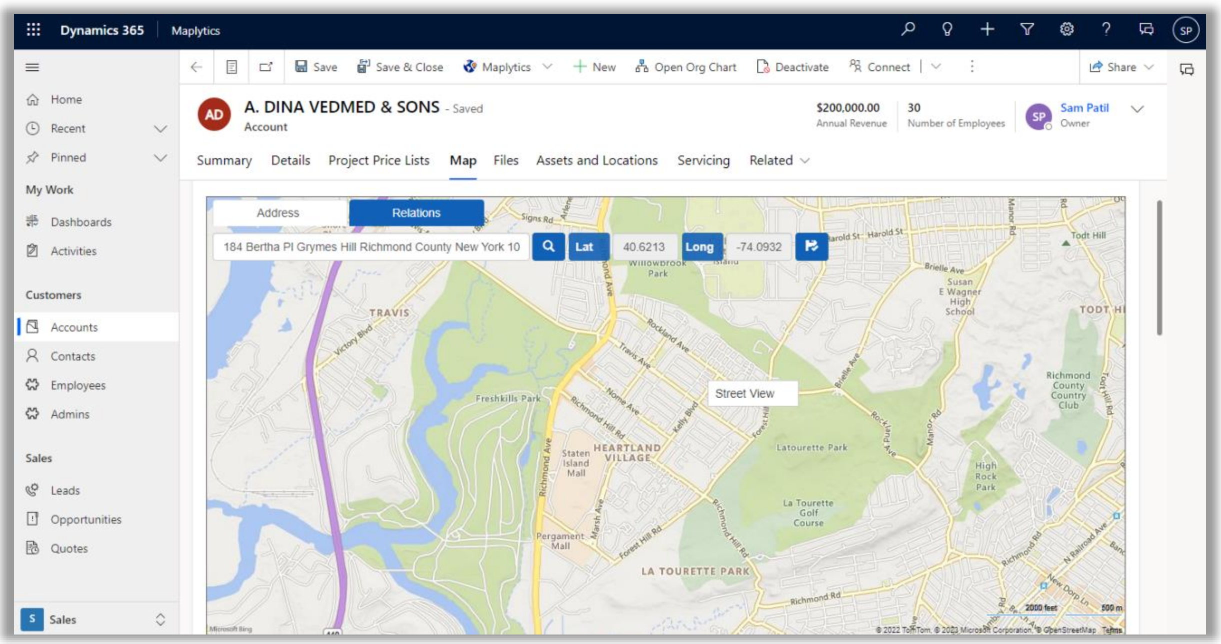


Here, two types of pushpins are plotted on the map:

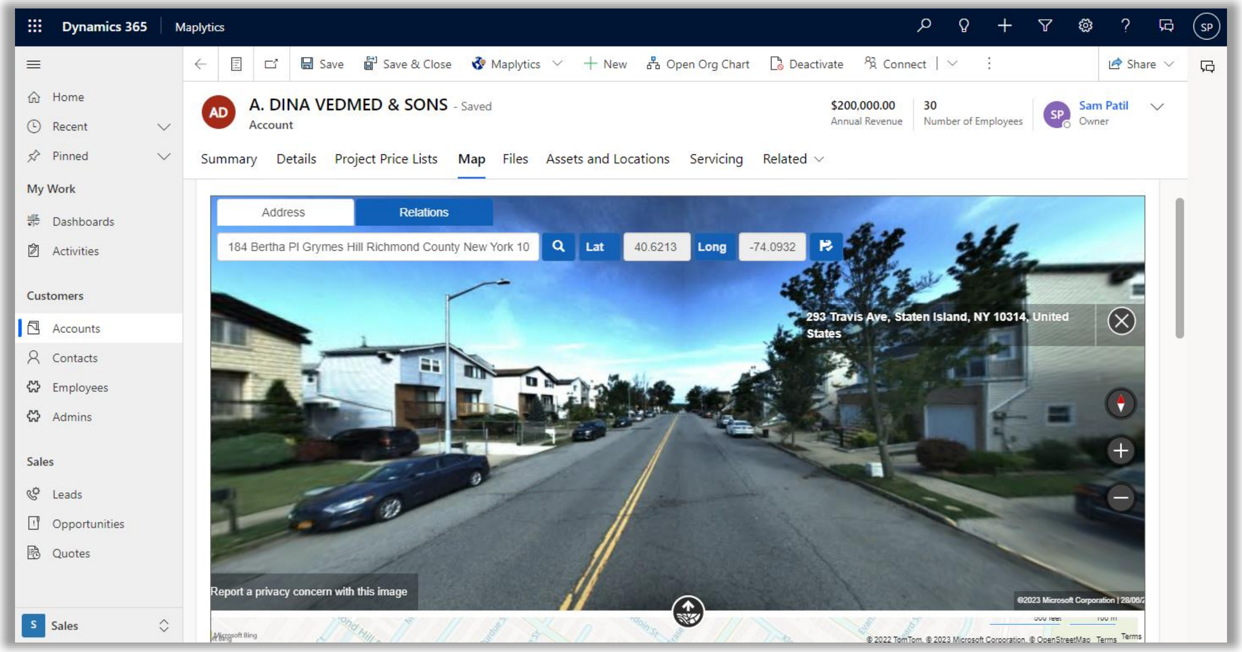
Orange color pushpin: This always indicates the record location on the map. This pushpin is movable on the map. If the user is not satisfied with the automatic geocoding information stored for the record, they can click on the pushpin and drag it around to the required location on the map. As the user moves the pushpin, the geocoding information (*Latitude* and *Longitude*) and the address is updated in the bar at the top. Use the Update button  to save the updated geocoding information. It will ask the user whether they would like to update only the Latitude & Longitude values or the address as well. They can select the required option. This will help the user to geocode the address as per the requirement.



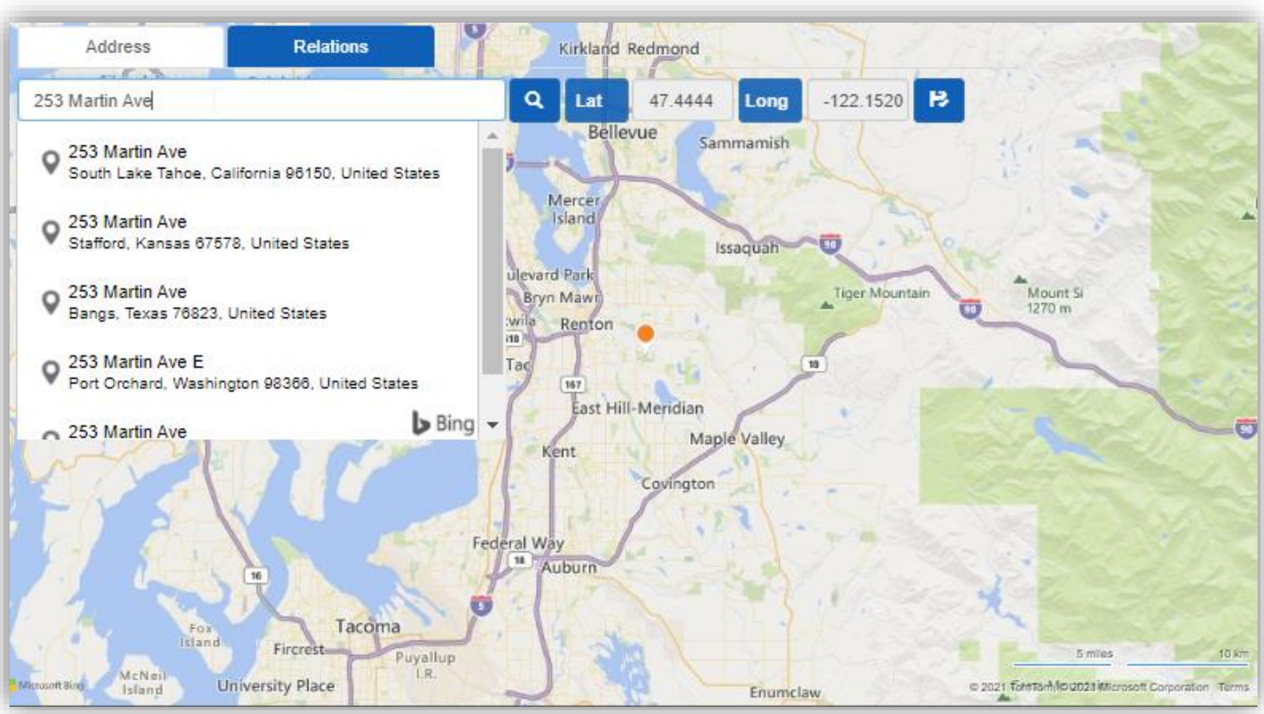
Set the *'No Auto Geocoding'* option to *'Yes'* available on the left-hand side, if the user has manually set the geocoding information and do not want the automation to override the geocoding information. Right Clicking on the Map gives an option of Street View.



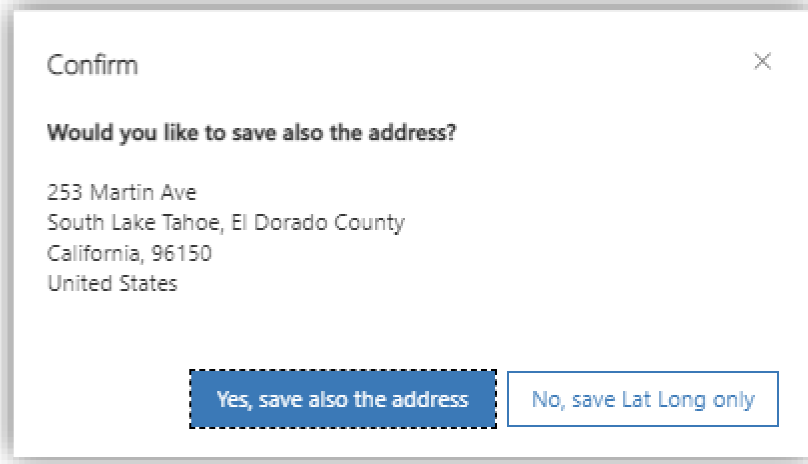
Selecting it would get the User a 3D View.



- **Address:** If users wants to modify the geocoding for any record, they can click in the *Address text* box.

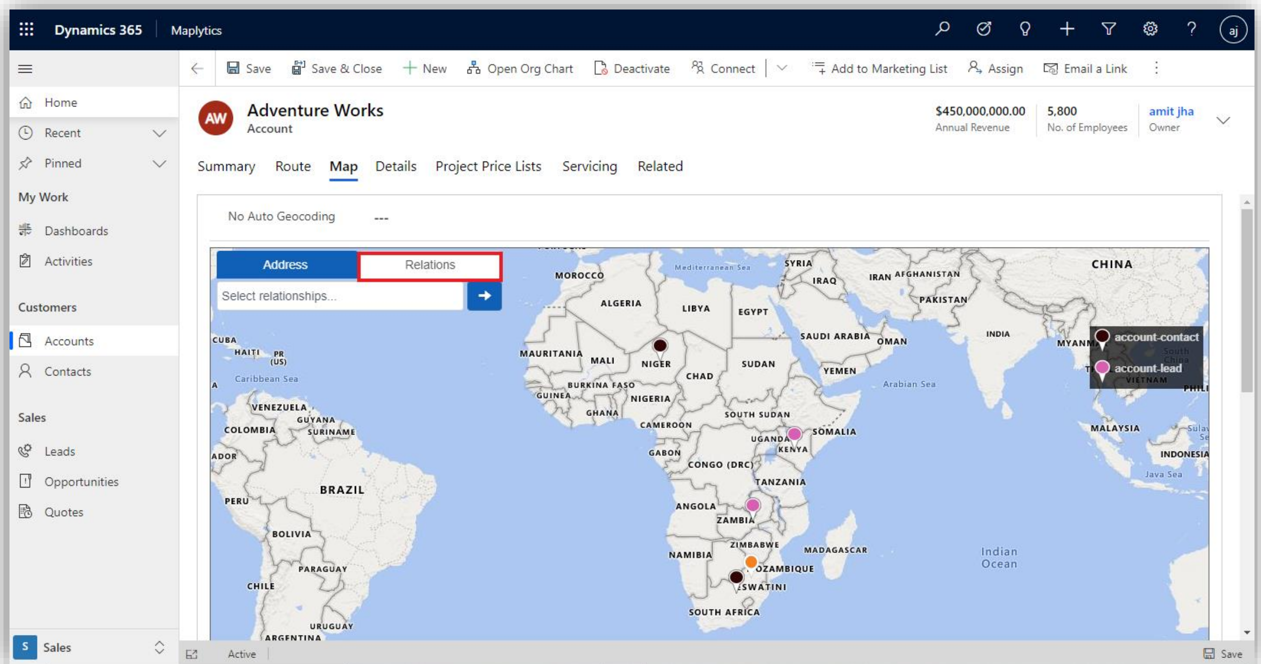


After that, they can click on 'Update' button  to update the address and Latitude & Longitude values. It will ask the user whether they would like to update only the Latitude & Longitude values or the address as well. They can select the required option. Apart from this, users can also click on the orange pushpin, drag it around to the required location, and then click on update to update the address and/or Latitude Longitude values.

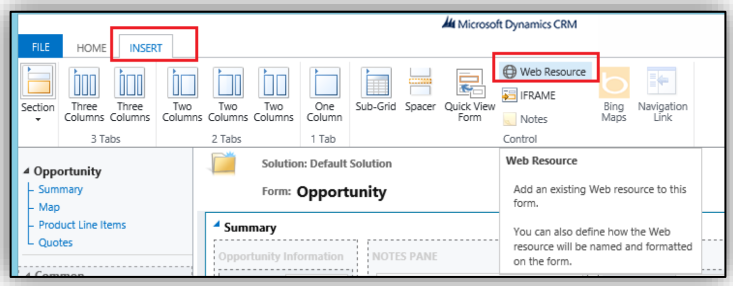


Note: Users can be restricted to update the address and Latitude & Longitude values by assigning them a security template where 'Allow Push Pin Update' is not selected. Please refer to the Maplytics Security template in this User manual to know more about the same.

- **Related Records:** User can use 'Relations' drop-down to select the available relationships for this Entity. Related records correspond to all 1:N relationship between the plotted Entity. The user can further see related record information by clicking or hovering on it. The required attributes like Email Address, Phone Number etc. can be selected within the entity map to be seen on hover or click. At a maximum, user can view 5 relationships at once. Default relationships can also be selected that will be plotted by default whenever this map is loaded. At a maximum, user can select five Default relationships. User can also select the color and pushpin icons for the related records. Check the Entity Map settings (refer to Installation Manual) to set Default relationship, colors & pushpins and adding more relationships to *'Relations'* dropdown. In the image below, two relationships (Account-Contact and Account-Lead) are plotted for the account "Adventure Works".

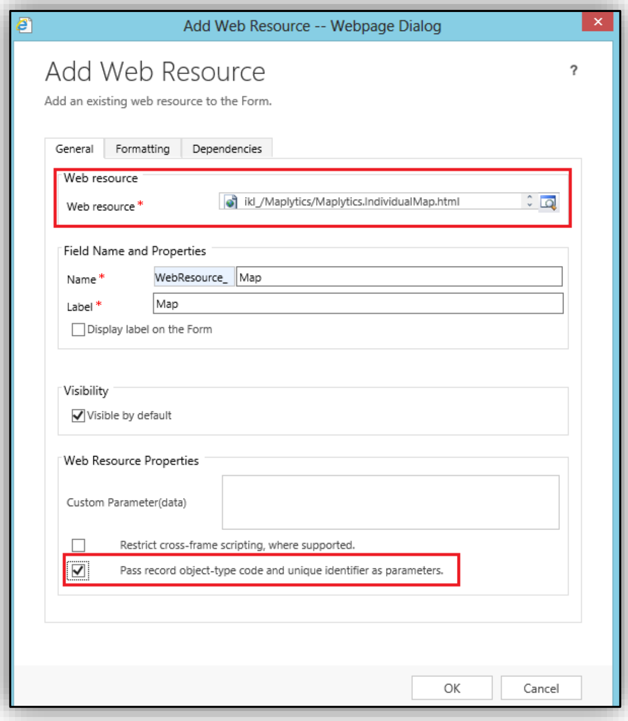


Steps to add the Map to other entity forms



Open the Entity form and go to the ‘Insert’ tab.

Click on ‘Web Resource’ button, as shown in the screenshot.



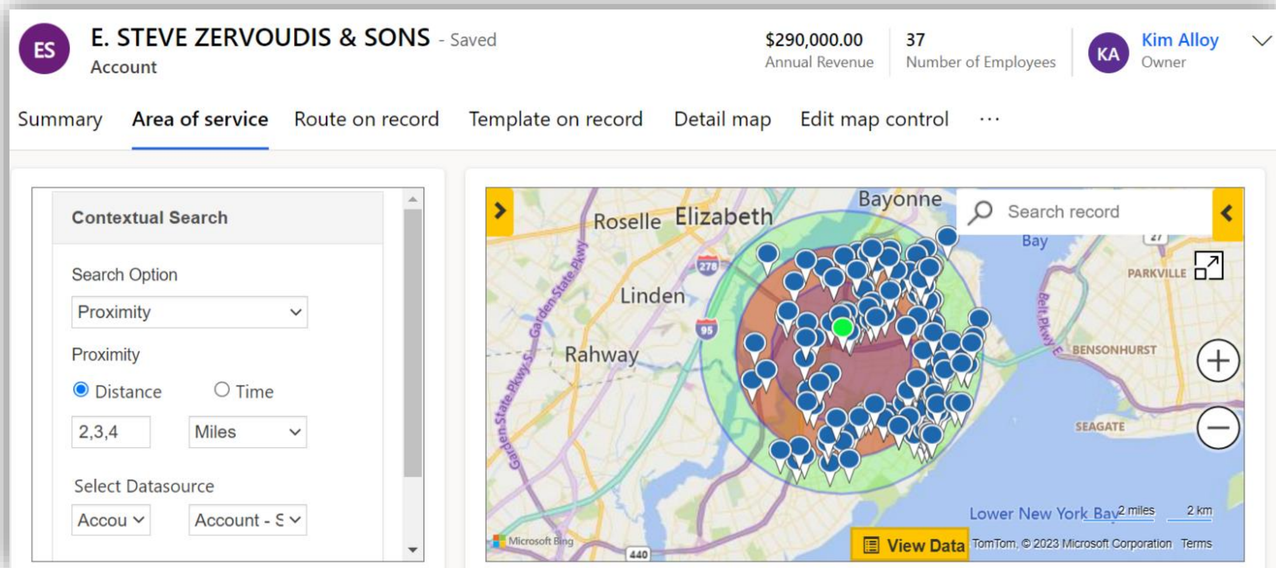
In the Add Web Resource dialog, select ***"ikl_/Maplytics/Maplytics.IndividualMap.html"*** web resource and check the Pass record object-type checkbox as shown in the screenshot. The recommended number of rows in formatting is minimum 10.

Click ***OK***, then ***Save and publish*** the form to see the Map on the entity form.

Note: To plot a particular address on the Map, it should be geocoded and the Latitude & Longitude should be set for that address. For geocoding you need to execute Maplytics Geocoding workflow for the records.

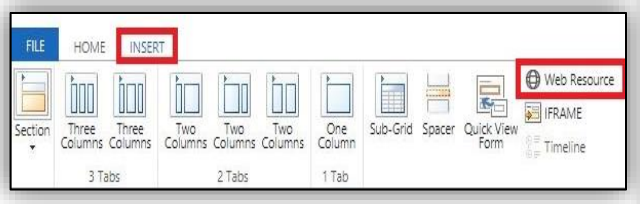
Area of Service

The user can view the data in a proximity or a region around an individual record as defined by the user in the Area of service.



Add Area of Service tab

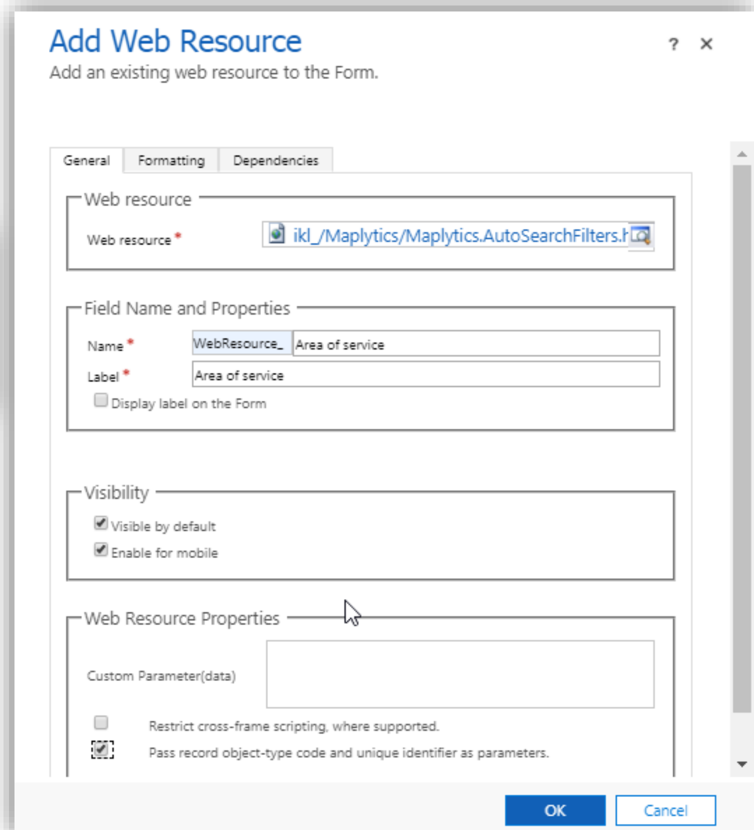
To add Area of Service tab, Open the Entity form and go to the 'Insert' tab. Click on Web Resource button, as shown in the screenshot.



In the Add Web Resource dialog, select ***"ikl_/Maplytics/Maplytics.AutoSearchFilters. html"*** web resource and check the 'Pass record object-type' checkbox.

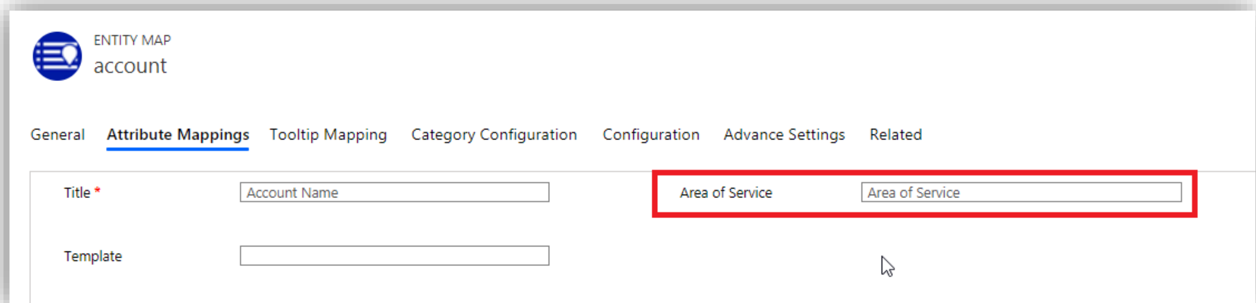
The recommended number of rows in formatting is minimum 10.

Click ***OK***, then ***Save and publish*** the form to see the Map on the entity form.



Create an Area of Service field

To save the values entered in the Area of Service, the user needs to create a field for the Entity for which Area of Service has been added. ***Go to Entity form > New field***. Enter the following values:
Name - Area of Service
Data type – Multiple Line of Text
Maximum Length – 10000
Select the field in the respective Entity map for the Area of Service field.



The values when entered and saved into the Area of Service, the corresponding data will be plotted on the map.

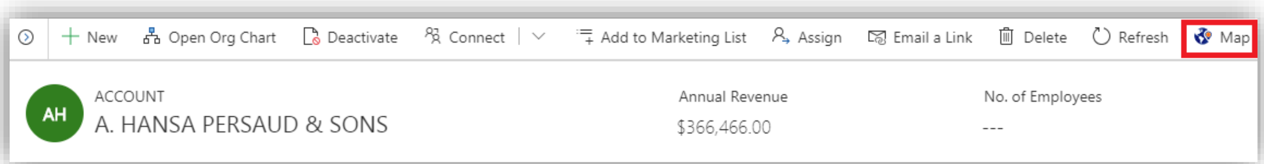
View Area of Service data on a map

To view the Area of Service data on the map, there are two ways:

- Using Map button – the results are shown in a map opened in a different tab
- Adding Detail map on form – the results are shown in a map added on the same record

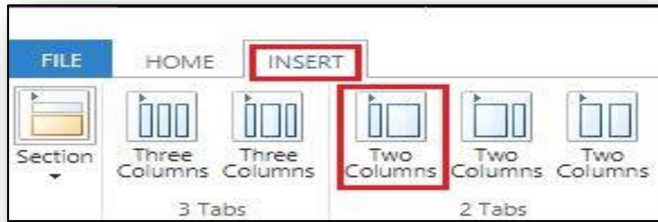
Using Map button

The user can open the Detail map to view the corresponding Area of Service data plotted on the map.



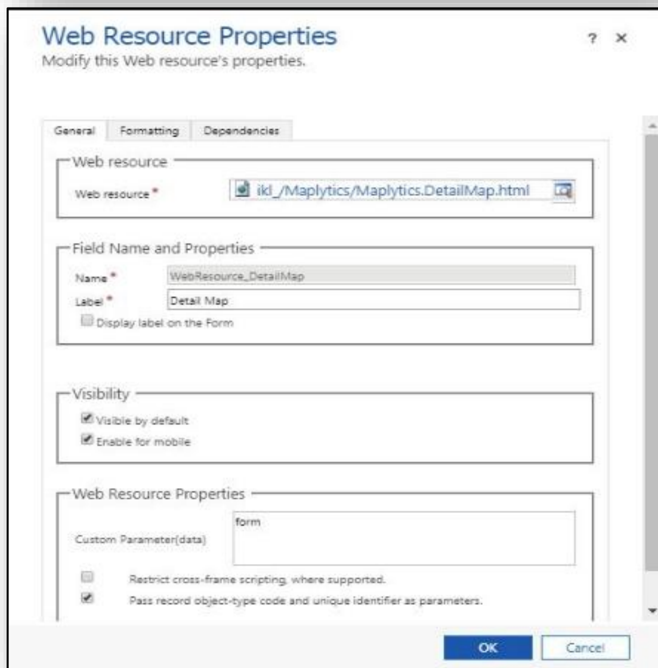
Adding Detail map on form

To add a Detail map to show the data of Area of Service, follow the steps mentioned below:
Open the Entity form and go to the 'Insert' tab. Add two columns.



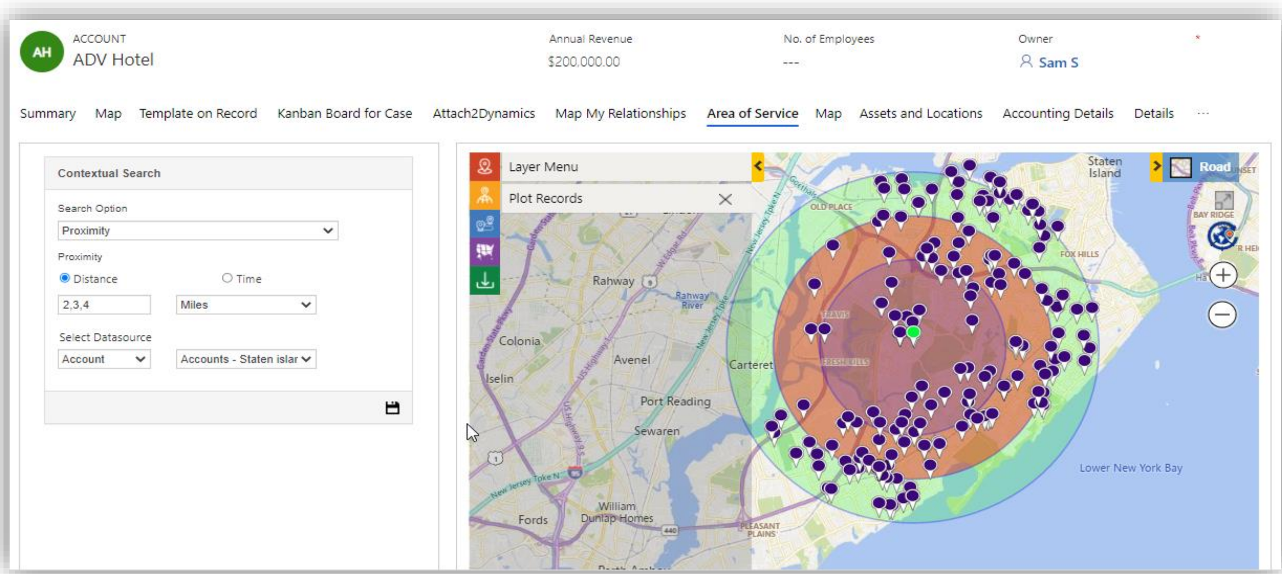
After adding Area of Service tab in the entity form as mentioned above, follow the steps mentioned below to add the Detail map on the entity form.

To add a detail map, Click on 'Web Resource' button. In the Add Web Resource dialog, select ***"ikl_/Maplytics/Maplytics.DetailMap.html"*** web resource, add "form" as custom parameter (data) and check the 'Pass record object-type' checkbox as shown in the screenshot. The recommended number of rows in formatting is minimum 10.



Click ***OK***, then ***Save and publish*** the form to see the Map on the Entity form.

Enter the required values into Area of Service, save it and click on the refresh button on the Detail map to view the data plotted.



Advanced Area Of Service

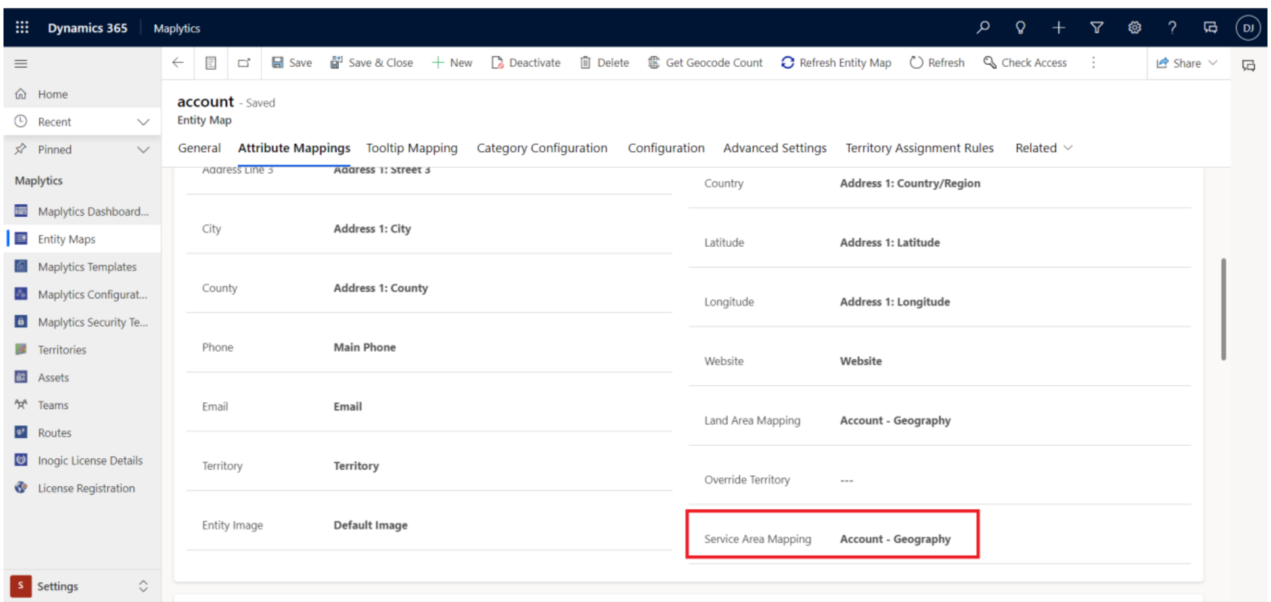
The advanced feature of Area Of Service enables users to determine an area in which services are being offered. It also helps in visualizing the records that lie in that area.

In the case of a Doctor, the Area Of Service helps in determining the region in which the doctor is operating or offering his services. Patient records falling under this service region can also be visualized. Similarly, from a Patient's POV, he can visualize all the doctors that offer services or whose services fall in his area. This helps the patient in selecting the nearest available doctor and the doctor can check the patients falling in his area of work.

Attribute Mapping of Service Area

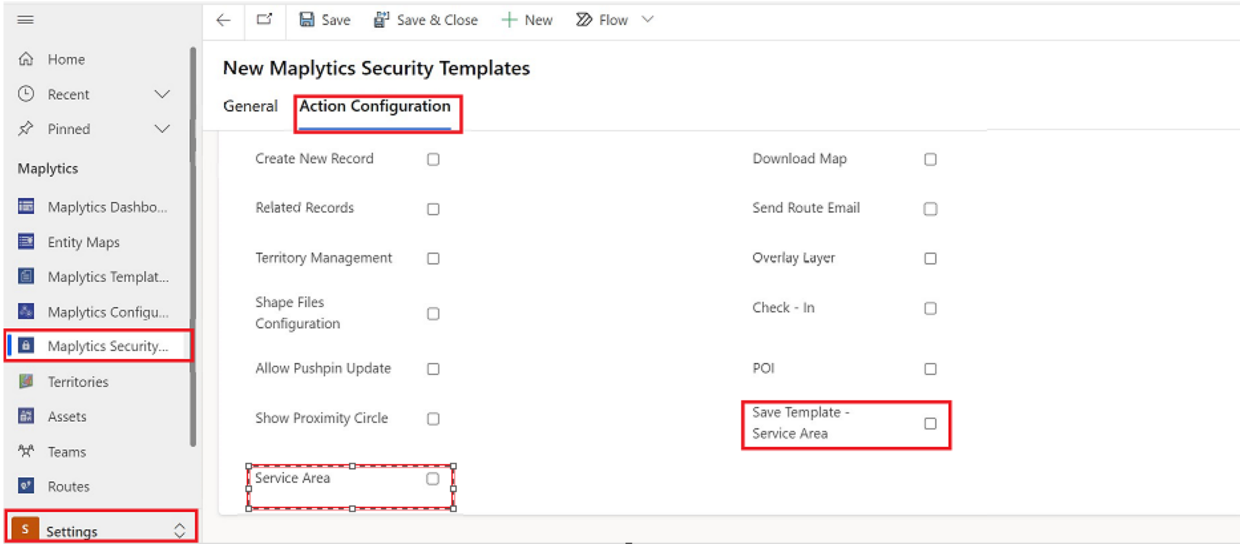
Before we start using the advanced features of Area Of Service, the user needs to check the configuration as mentioned at the beginning of the feature.

Once the relationship is created, select the same in the respective Entity map. As per our example, the Maplytics admin or system admin needs to ***go to Maplytics App > Settings (Left bottom) > Entity Maps > Accounts Entity map > Attributes Mapping > Geography relationship > Select the 1: N relationship of Geography and Account for Service Area Mapping***



To restrict access to creating and assigning of Service Area and saving Template as Service Of Area, the user can move to **Settings>> Maplytics Security Templates>> Action Configuration**

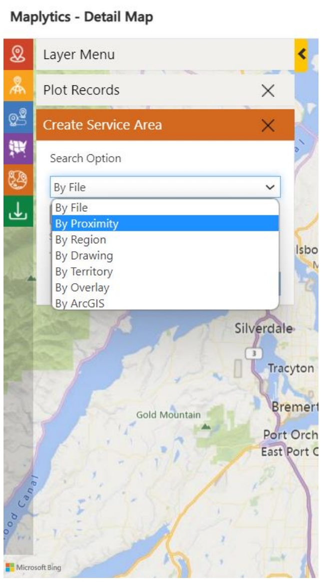
The user can then uncheck Service Area and Save Template- Service Area options to restrict the feature and the Template enabling them again, when required.



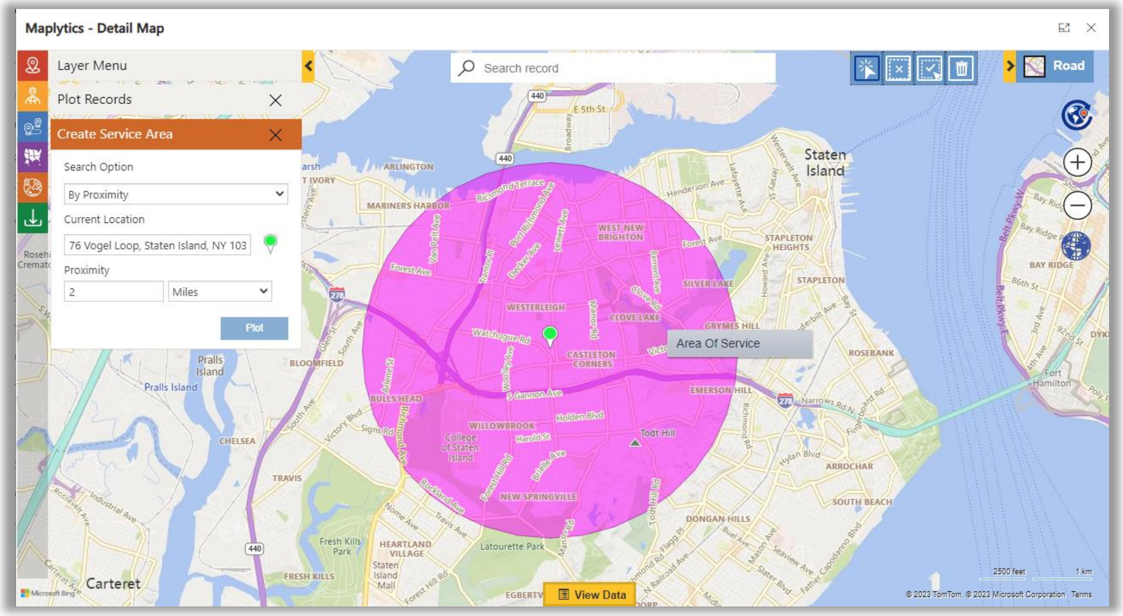
Working of Area Of Service

Users can create Service Area in an Individual Detail Map by using 6 ways-

by File, by Proximity, by Region, by Drawing, by Territory & By Overlay. Let us consider by Proximity.



After creating the shape, user can select the shape using align tool & right click over it to select Area of Service option to assign Service Area for individual record.

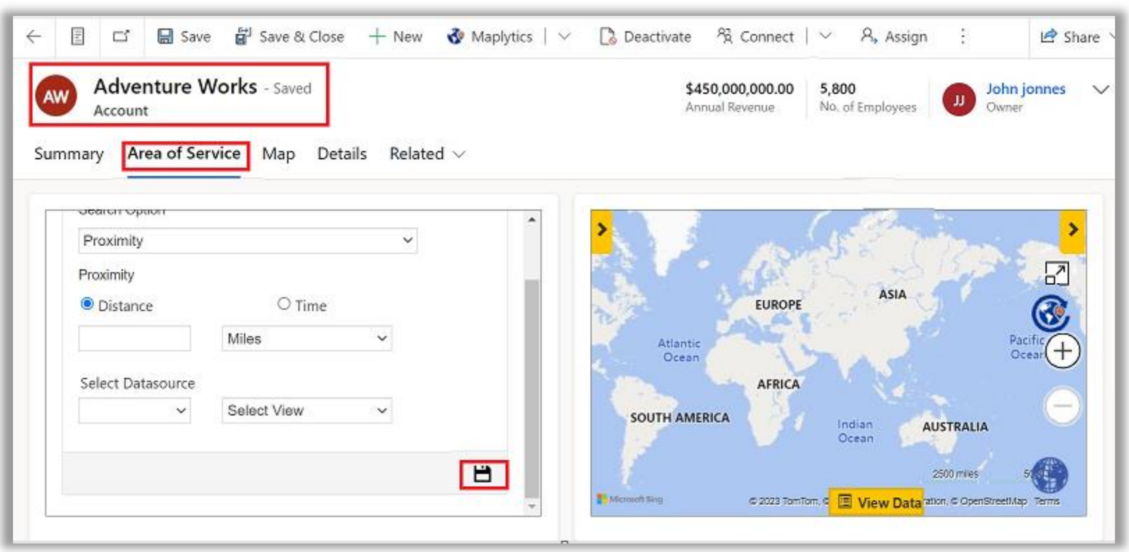


Once the area is assigned, the map can be refreshed to see the assigned Service Area for individual record.

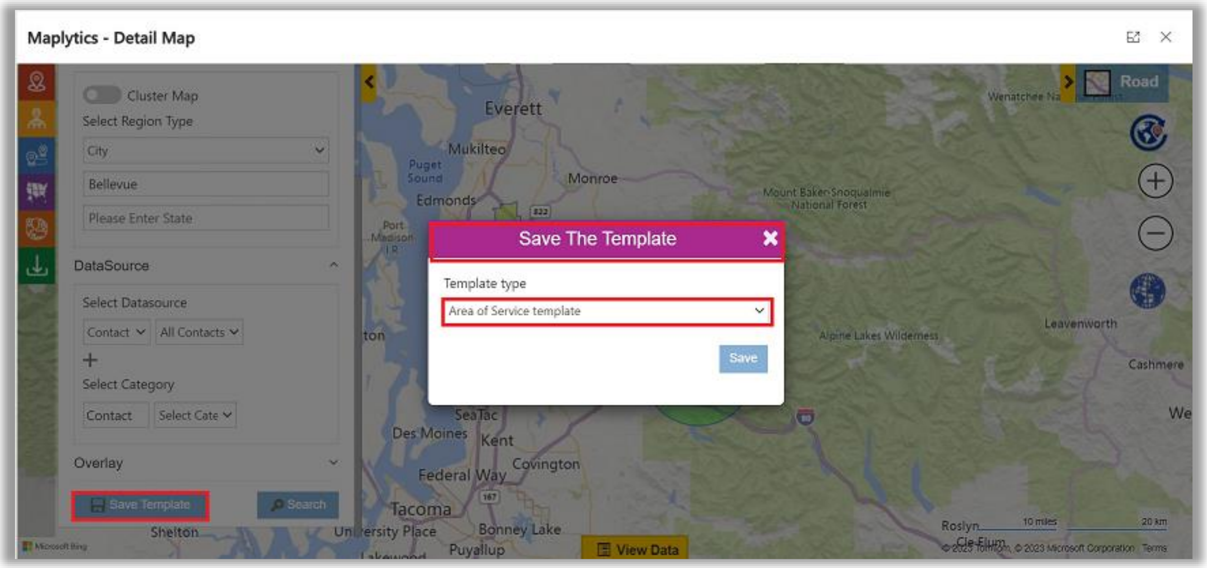
Using Area of Service template, user can see the records that lie within the created Service Area. For example, doctors can see patients' records which are falling under their service region.

There are two ways to save the Area of Service template,

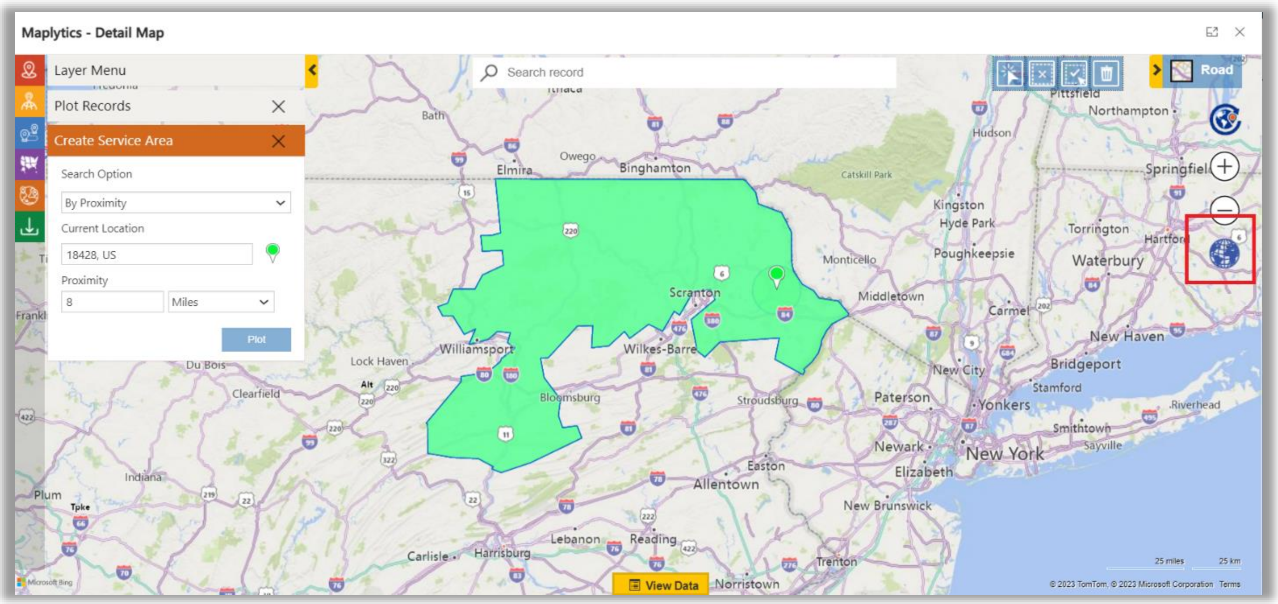
1. Using the Area of Service tab, which is configured by user,



2. Using Plot cards either by location or by region on the individual map

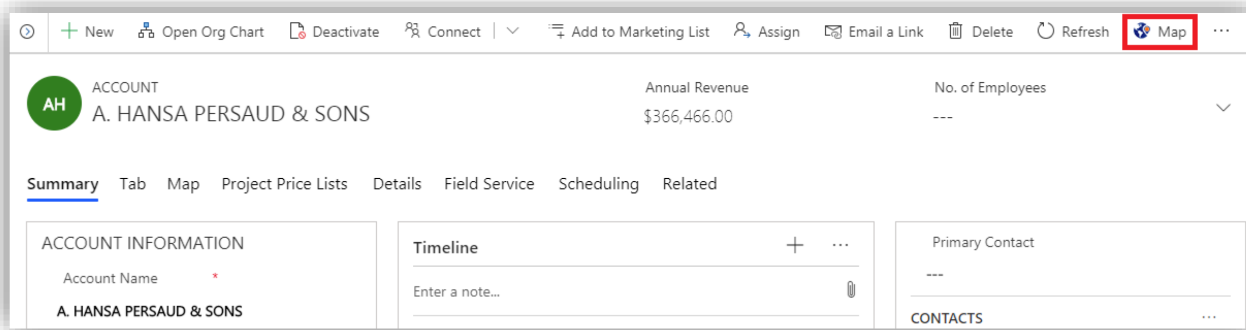


Plotting a Shape Layer on the created Service Area. This can be done by clicking on the 'Show Region Boundary' on the right

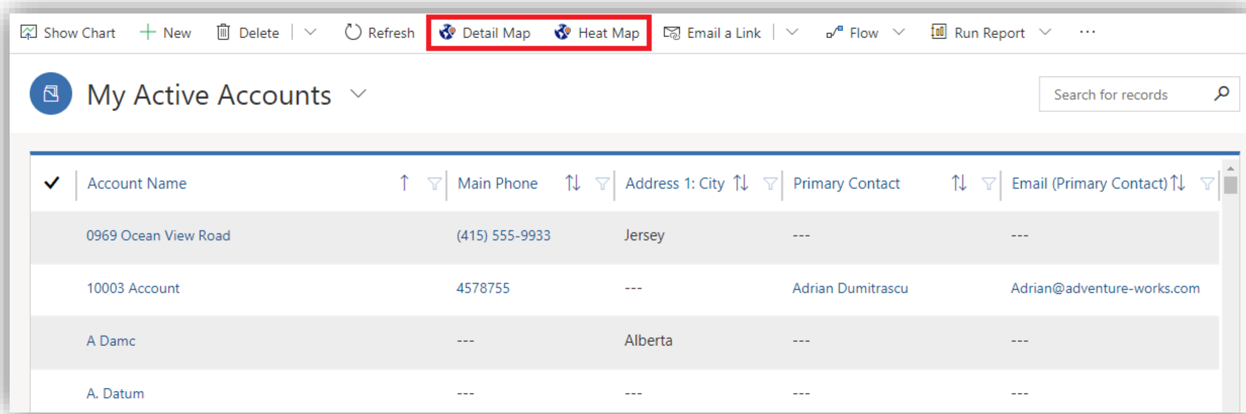


Detail Map

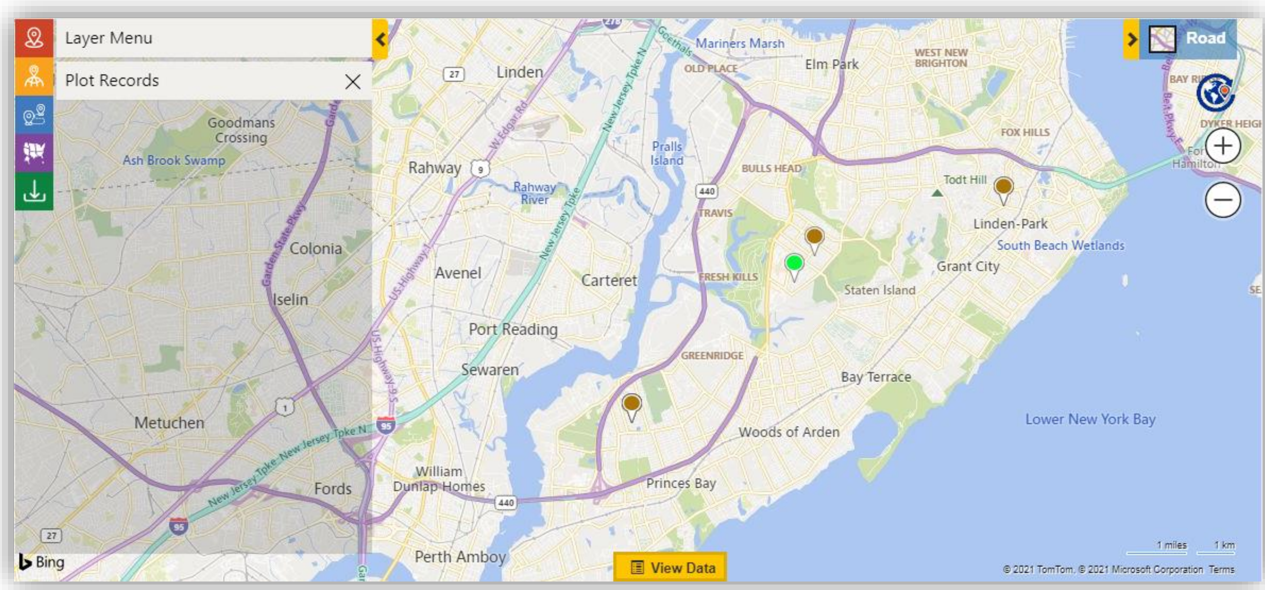
Maplytics buttons are added to the Entity forms as well as the Entity Homepages so that it can be easily accessed from anywhere.



Using this button, the user can invoke the Maplytics application for detailed geographical analysis. Maplytics provides both ‘Heat Maps’ view as well as ‘Detail Map’ view of the Dynamics CRM data. These views can be easily accessed from the buttons added to the command bar in entity home pages and other views.



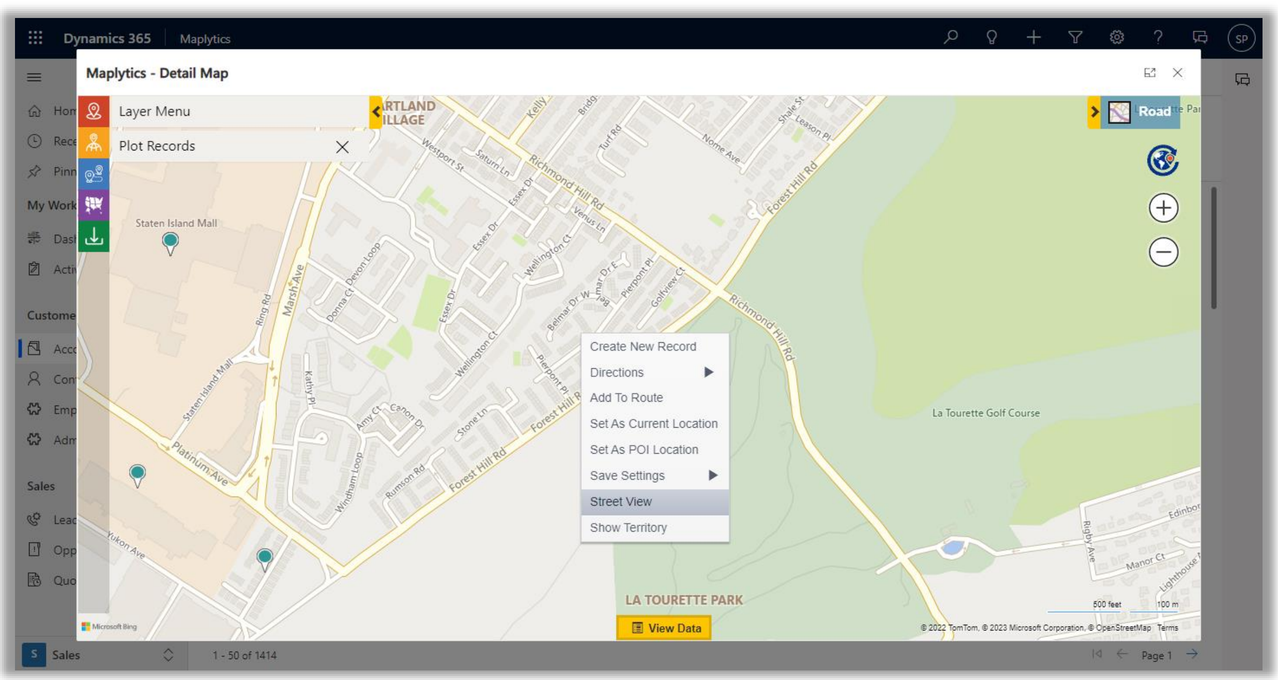
Selecting a few records and clicking on the 'Detail Map' button on a particular Entity Grid view will open the following window;



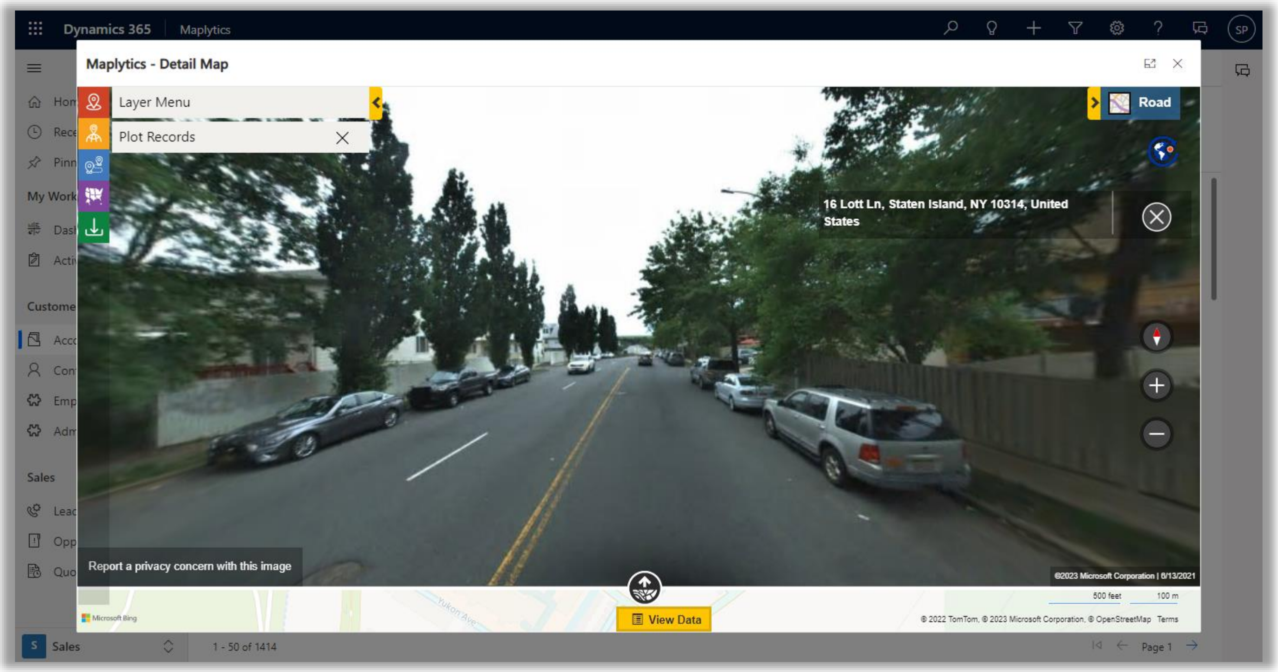
It will automatically plot the selected records from the view on the map. ***Records that do not have their latitude/ longitude will be ignored and will not be plotted on the Map.***

Street View

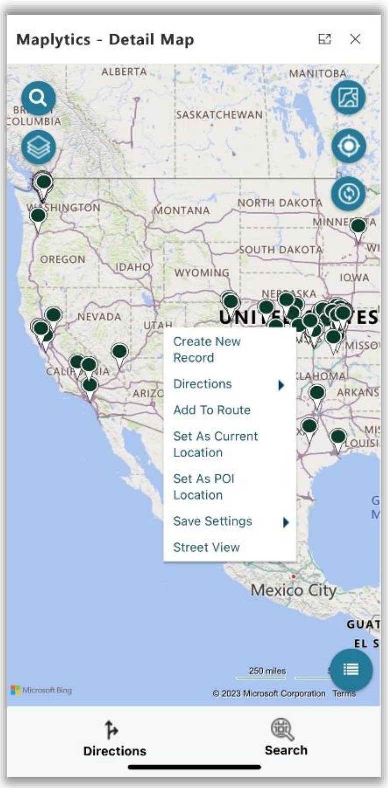
Right Clicking on the Detail Map gives an option of Street View.

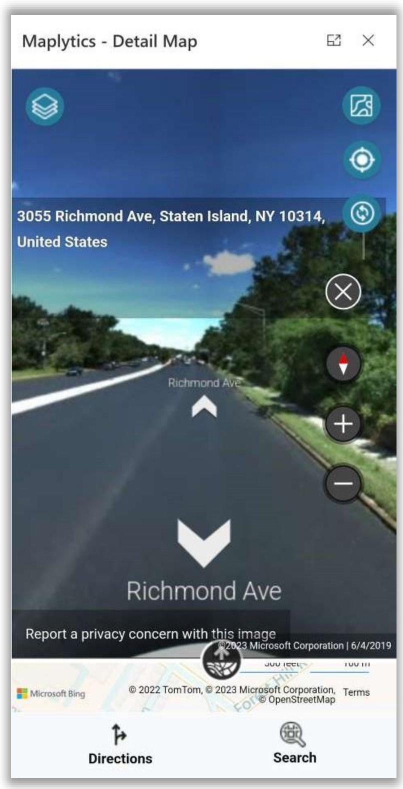


Clicking it opens an improved 3D view of the street.



Right Clicking on the Detail Map on the Mobile App also gives an option of Street View and a 3D View.





Plot

There are five different search options to plot the data on Map:

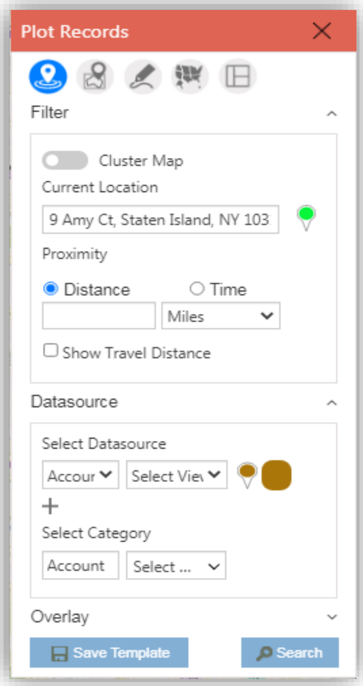
- By Location
- By Region
- By Drawing
- By Shapefile
- By Territory
- By Template

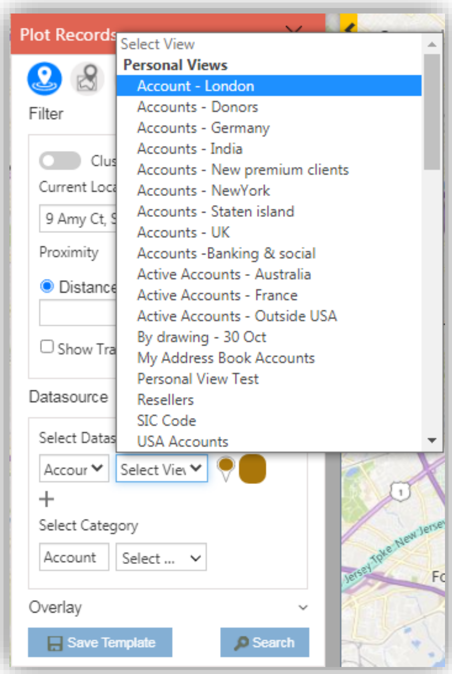
Note: The user can also configure the 'Search Options' to be visible on the map. Refer 'Setup Entity Map' section of Installation Manual for further instruction.

By Location

This helps the user to plot the data using the geocoding of each record. By Location search option also allows the user to perform Proximity/Radius Search based on Distance or Time.

The Current Location is fetched from the user's personalization record. The user can also set a new current location using the contextual menu. Refer to the section of the Contextual menu.





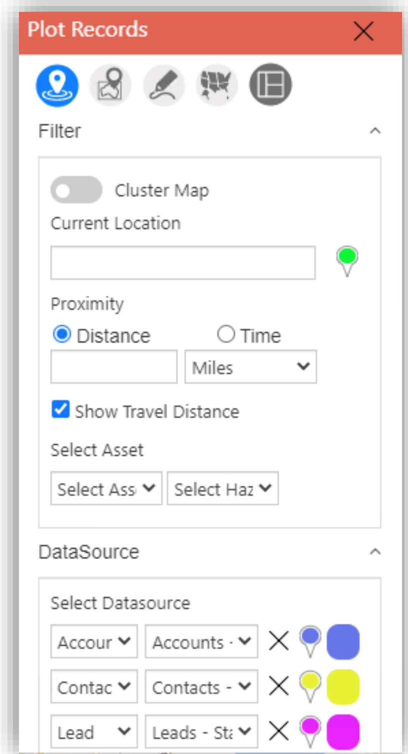
Select Datasource dropdown will list out all the Entities (OOB and Custom) configured for Maplytics and the active views (System views, Personal views, Maplytics Dashboards and Marketing Lists) that are available for the selected Entity type. The user can choose one of the views to plot all the records available in that view.

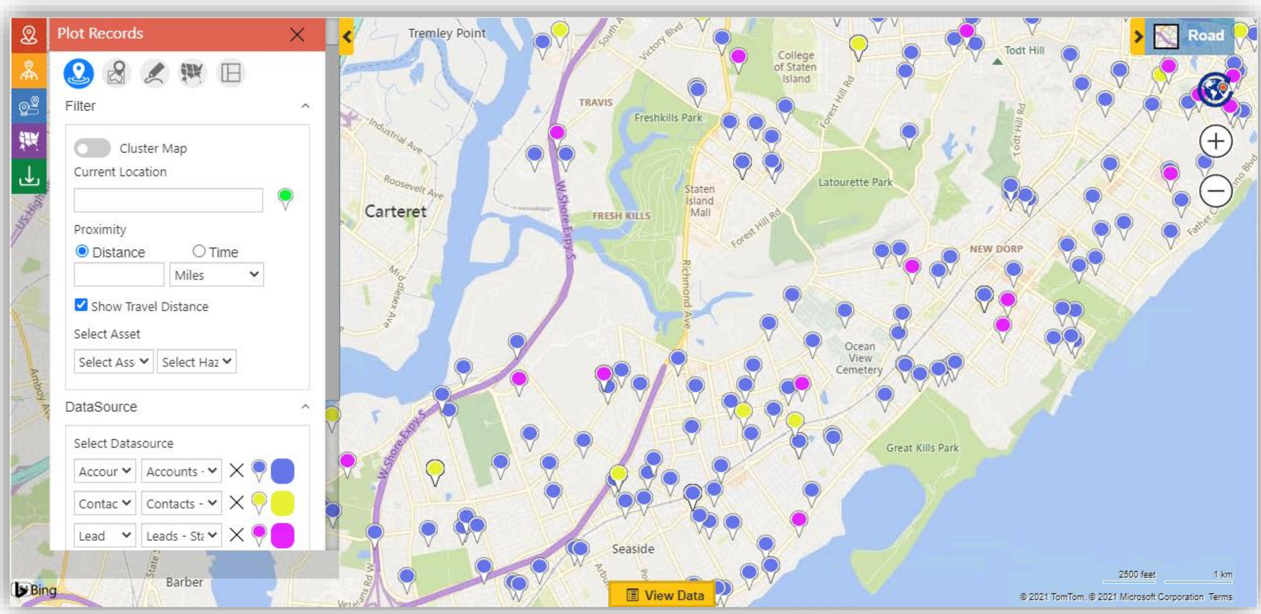
Note: The user can also configure the 'Views List'. Refer 'Setup Entity Map' section of Installation Manual for further instruction.

The user can select multiple entities using the '+' button. This allows for viewing Dynamics CRM data across Entities in a single view on the map.

After selecting multiple entities, the user can click on the 'Search' button to plot the records for the selected entities. This helps the user to visualize three entities on a single map.

Note: User can define the colors as well as pushpin shapes of the Entity – view combination. Refer to 'Setup Entity Map' section of Installation Manual for further instructions.

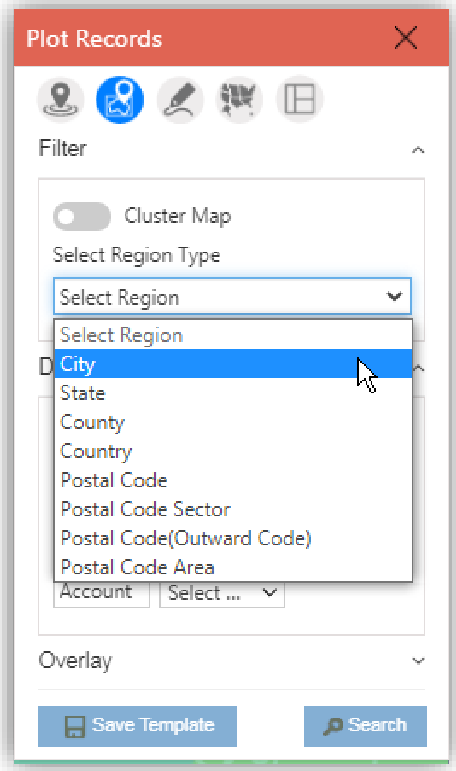




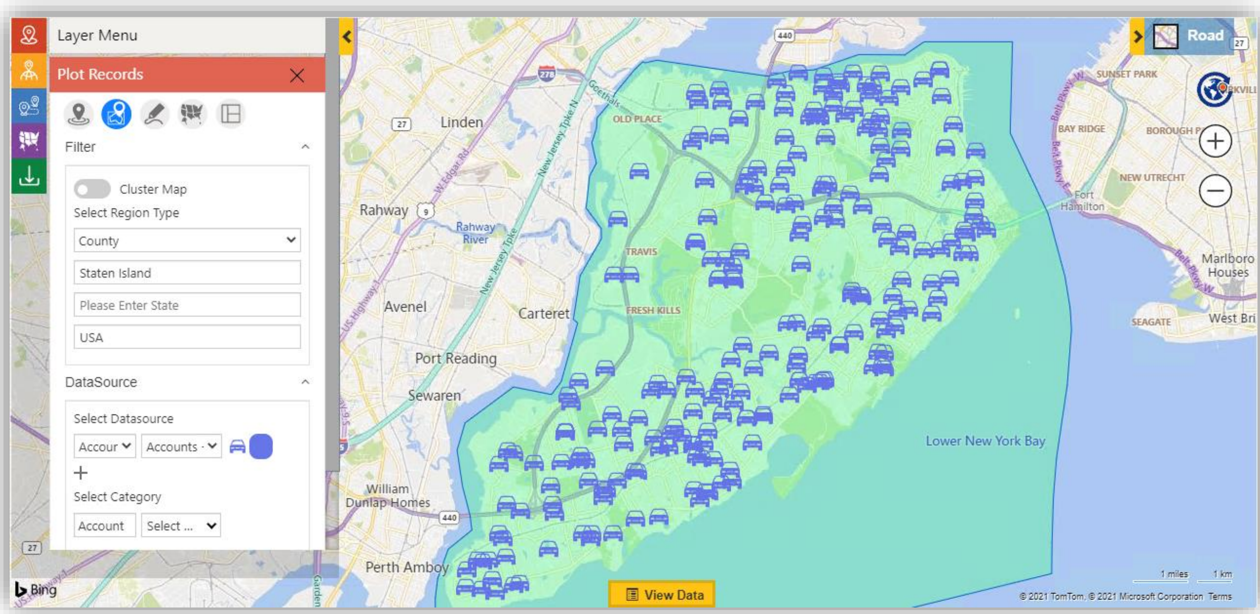
By Region

This helps the user to plot the data by the region of records, i.e., City, State, County, Country, PostalCode, PostalCode Sector, Postal Code(Outward Code), Postal Code Areas. The user can plot multiple regions under a particular region type.

- **Postal Code**: The smallest postcode category, such as a zip code.
- **Postal Code Sector**: The second '1' is called "Postcode Sector". Example: CA1 1
- **Postal Code(Outward Code):** This is called Outward Code, the part of the postcode before the single space in the middle. Example: CA1
- **Postal Code Areas**: The next largest postcode category after Postcode1 that is created by aggregating Postcode1 areas.



> ***Note:***
> - ***The regions that were plotted using the option of Post code Areas before will now be plotted by using the option of Post code sector.***
> - ***The regions will be plotted as per the Bing maps.***



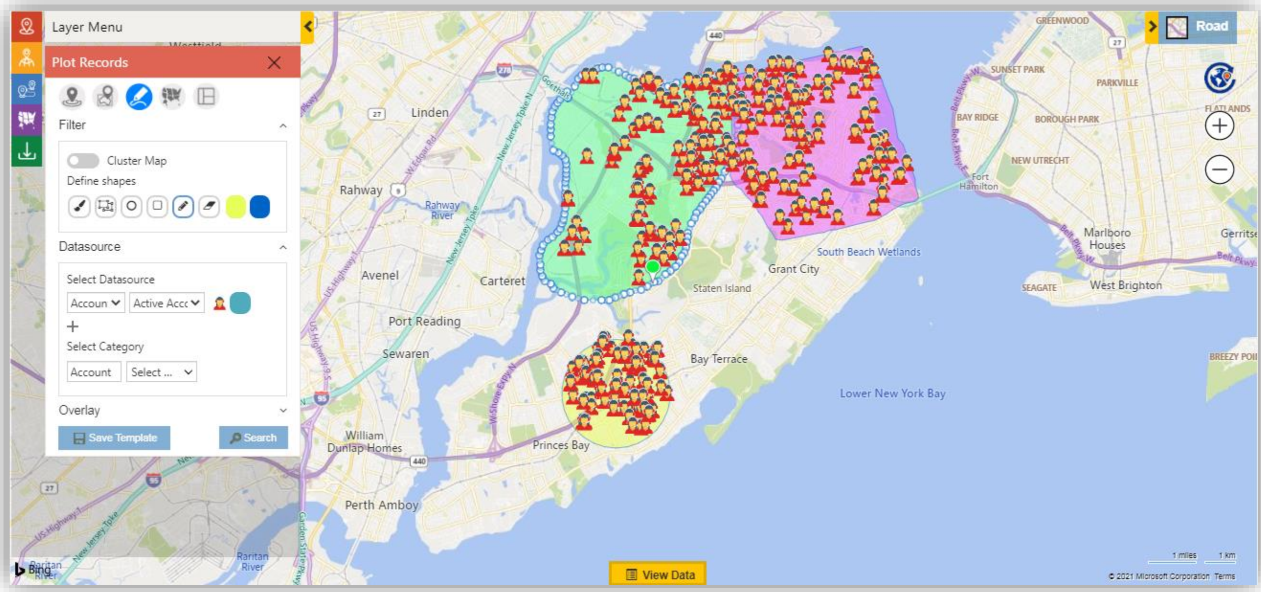
By Drawing

This helps the user to plot data by defining their own shapes. The user can use the 'Drawing tool bar' to draw the following shapes:

- Freehand drawing
- n-sided polygon
- Circle
- Rectangle

The user can further edit the drawn shapes by using the following options in the Drawing tool bar:

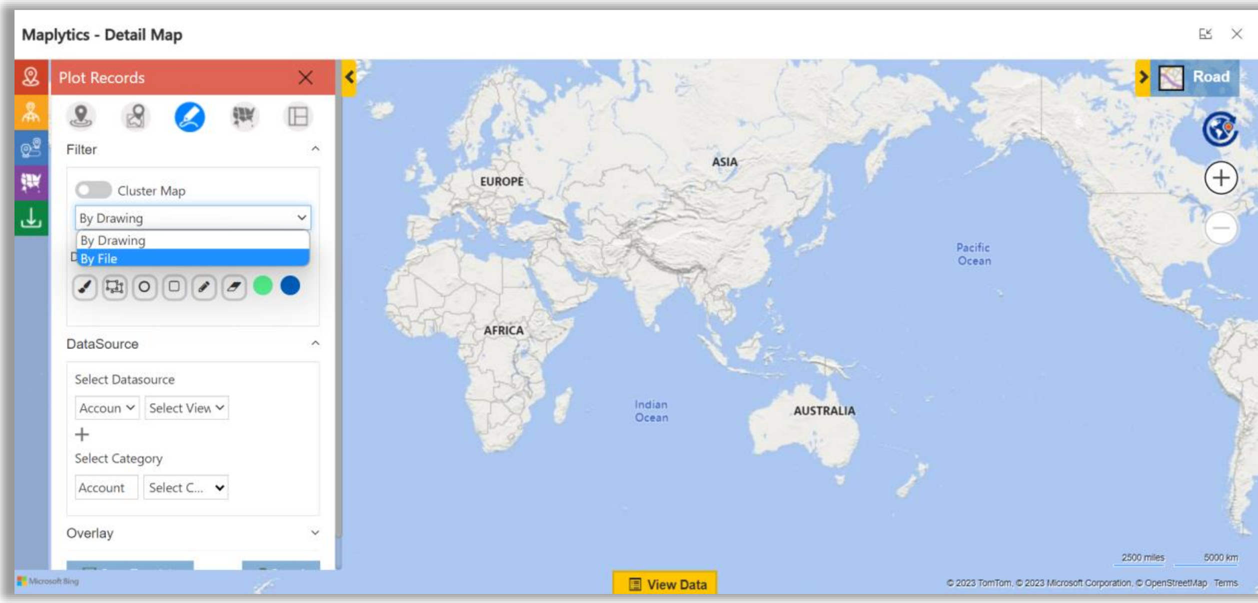
- Edit
- Erase
- Fill color
- Stroke color



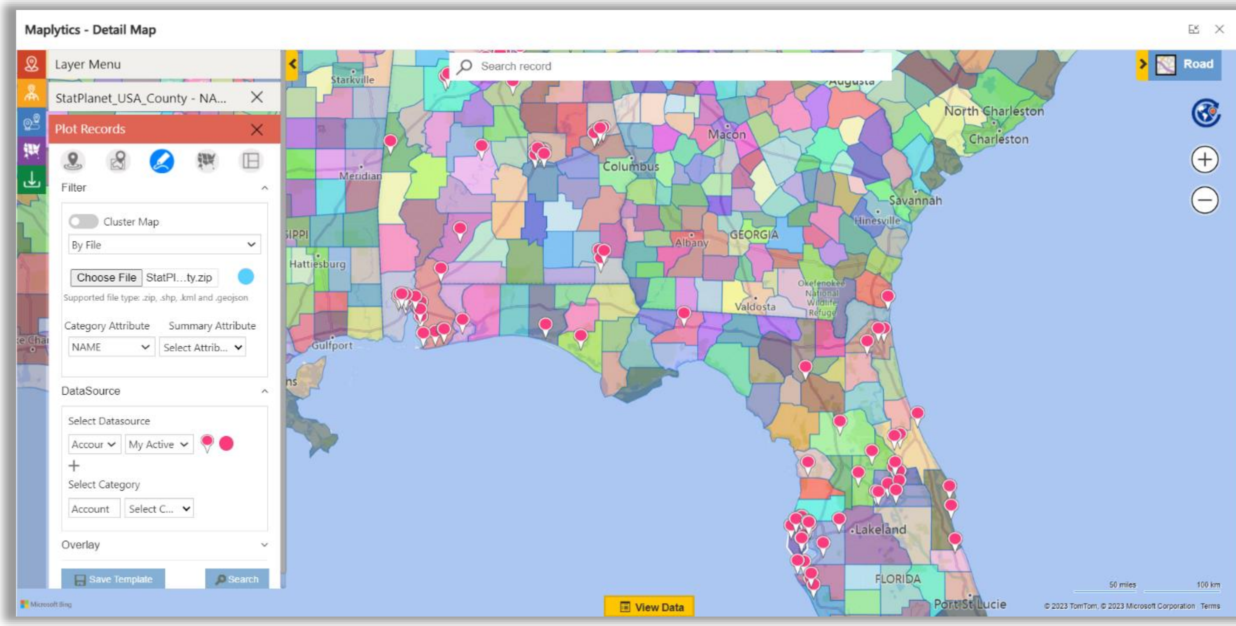
Note: While creating an n-sided polygon, use the 'Esc' key from keyboard to close the shape.

By File within By Drawing

Within the 'By Drawing' Option, there is a 'By File' Option available in the drop-down.

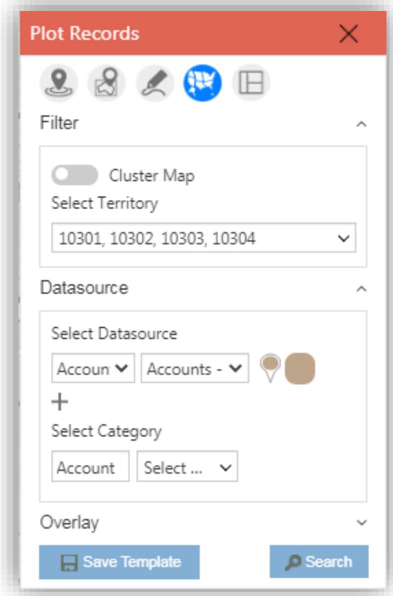


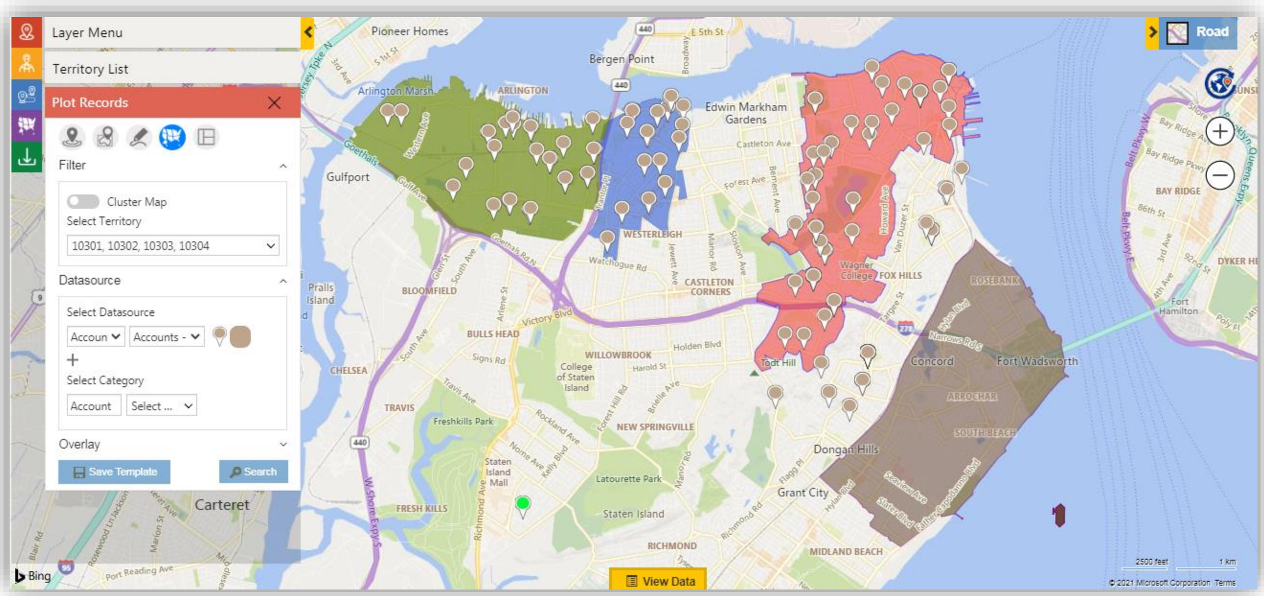
This helps the user to plot data by uploading .zip, .shp, .kml or. geojson file and filter records on the plotted shapes as per the uploaded file. Thus, the user can visualize records as per his requirement within a specific shape.



By Territory

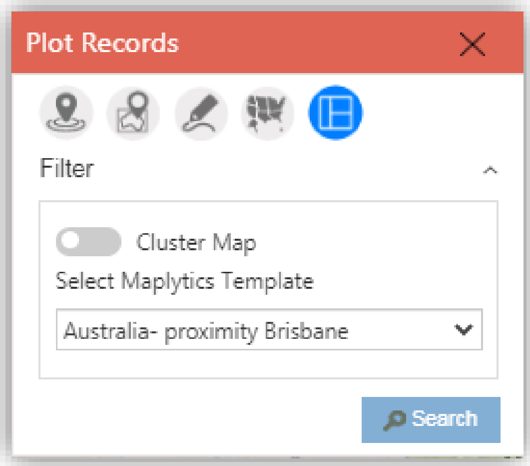
This helps the user to plot the data defined in a particular sales territory. The user can select multiple territories in 'Select Territory' option and respective Datasource & view to plot the territories along with the records assigned with them.



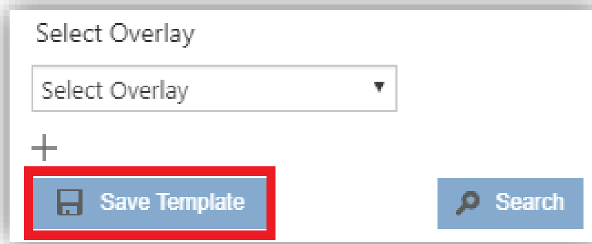


By Template

This helps the user to plot the predefined search criteria in Detail Map. The user can save the search criteria as a template and use the 'By Template' search option to quickly plot the data with that search criteria. This helps the user to save a considerable amount of time.



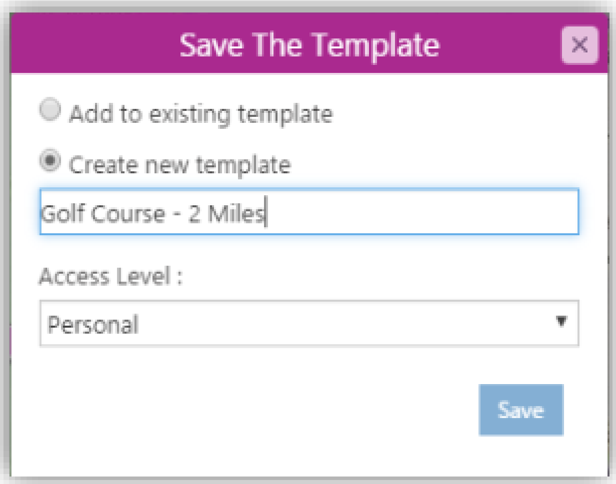
For example, if any user is assigned with a task where the requirement is to regularly plot 'My Active Accounts' records in 2 miles of a particular location and filter a particular Industry, then the By Template option can be beneficial.



The User can plot the required criteria on the map and use the button 'Save template' to save the search criteria as a template and define the access level of the Template while saving the template as described below:

- **Personal** – The users can limit the usage of this template to themselves
- **Public** – Anyone in the organization can use this template

Apart from saving information of Plot Records, Category card, and filters from Grid, it also saves the Zoom level & Center of the map.



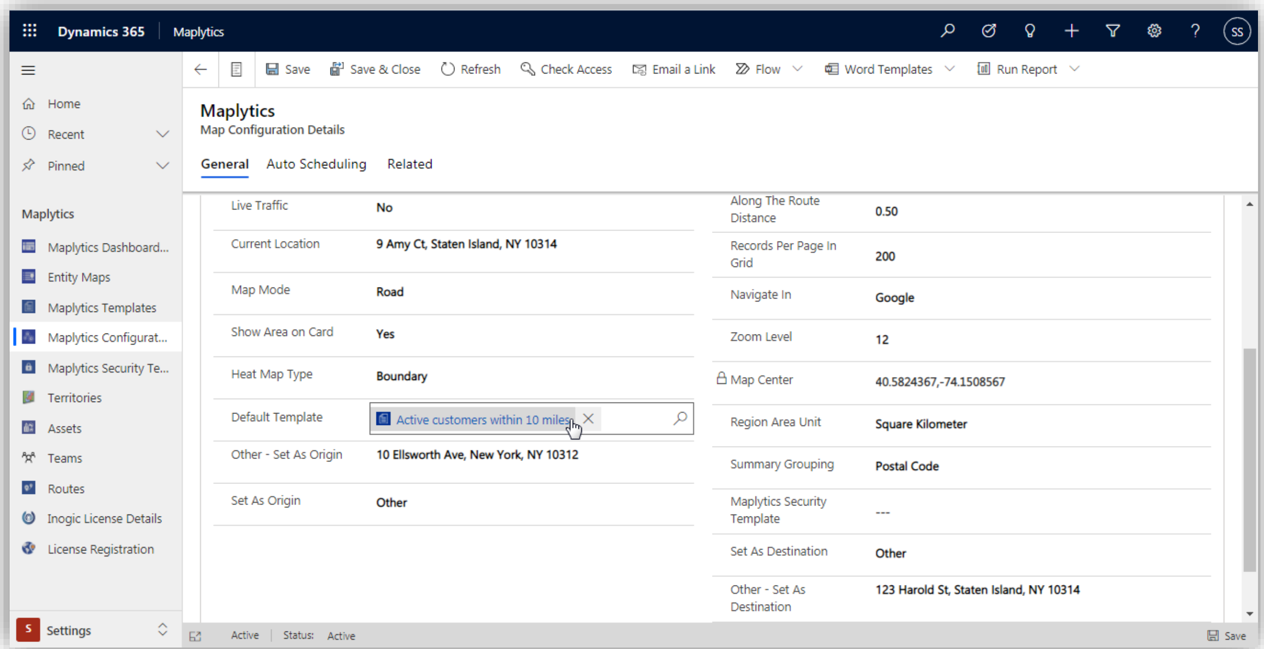
Note:

- ***Please assign 'Maplytics User' security role to Team Maplytics before exploring this functionality.***
- ***If user saves a template with Proximity search and current location as blank, while plotting the template, the current GPS location of the logged-in user will be fetched and the results to the Proximity search will be plotted around the user's current GPS location.***

Default Template

User can set the Default Template within their respective Configuration Detail record and view the predefined search criteria saved in the template plotted by default on the Detail Map.

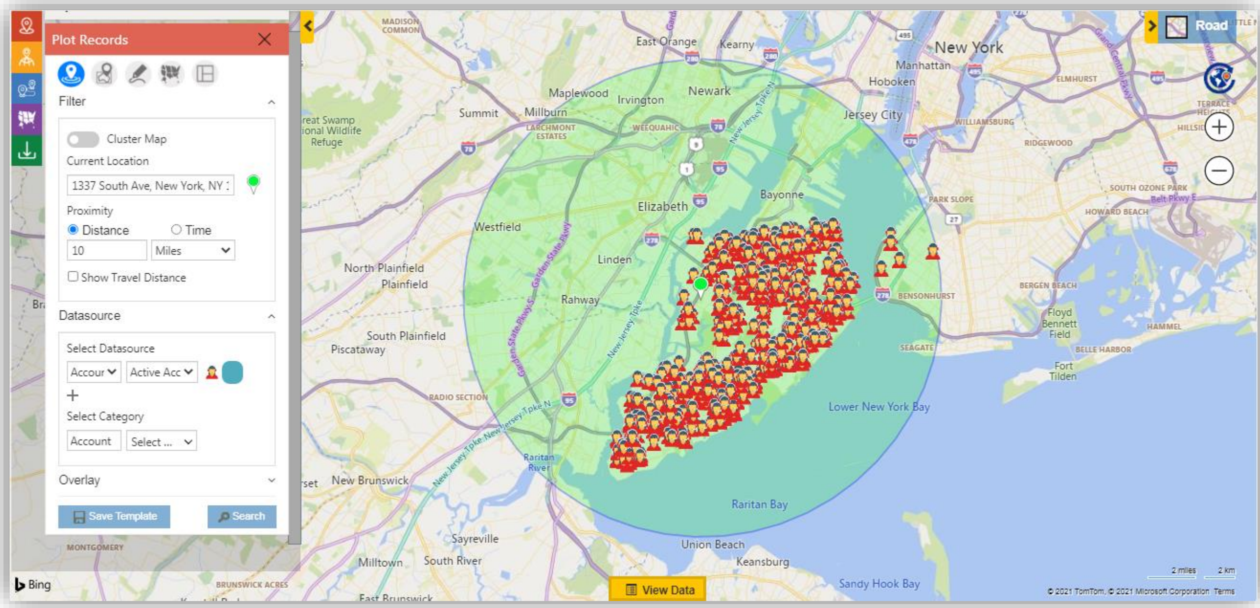
To set a template as Default, user need to ***Go to the Maplytics App > Settings > Maplytics Configuration Details > Respective User Configuration Detail record > General > Default Template > Select required template.***



Note: Default Template will not open if,

- ***User selects a few records in Entity home grid and then clicks on Detail map button.***
- ***User expands a dashboard to open on Detail map.***
- ***User has saved Default template with search criteria other than Proximity Search and uses the 'Map' button on a specific record and opened the map***

When clicked on the 'Detail Map' button, it will plot the default template selected in the respective user's Maplytics configuration detail record by default on the map.



Note: Default Template will not open if,

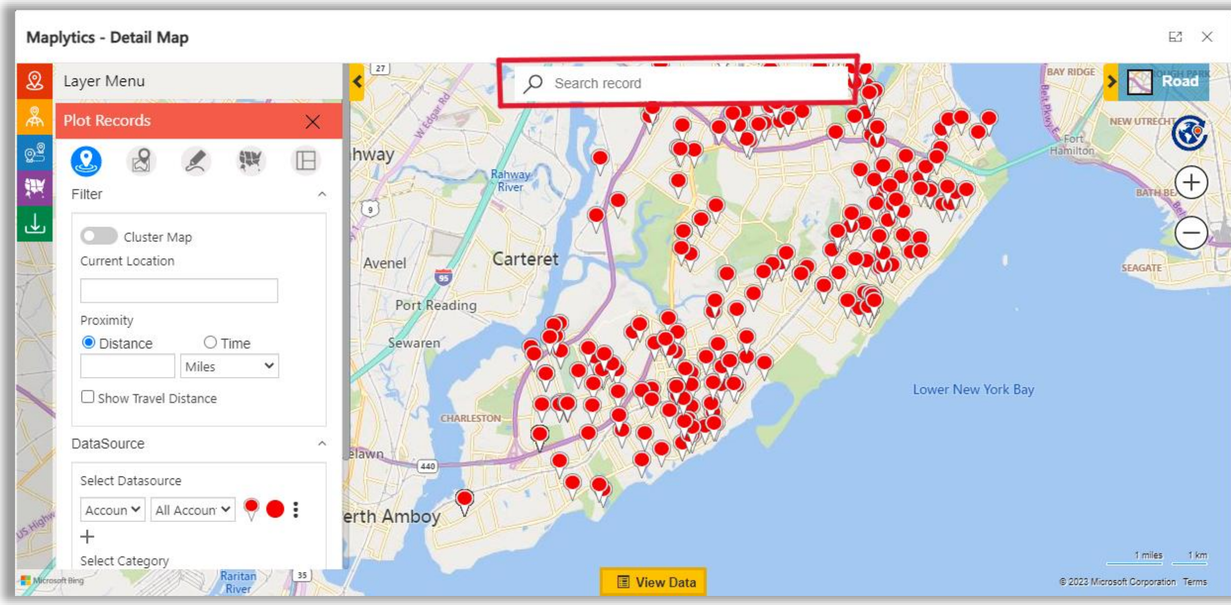
- ***User selects a few records in Entity home grid and then clicks on Detail map button.***
- ***User expands a dashboard to open on Detail map.***
- ***User has saved Default template with search criteria other than By location/ Proximity Search and uses the 'Map' button on a specific record to open the map. In this case, the respective record will be plotted on map.***
- ***User has set Area of Service on a record and is using the 'Map button' on the record to open the map.***

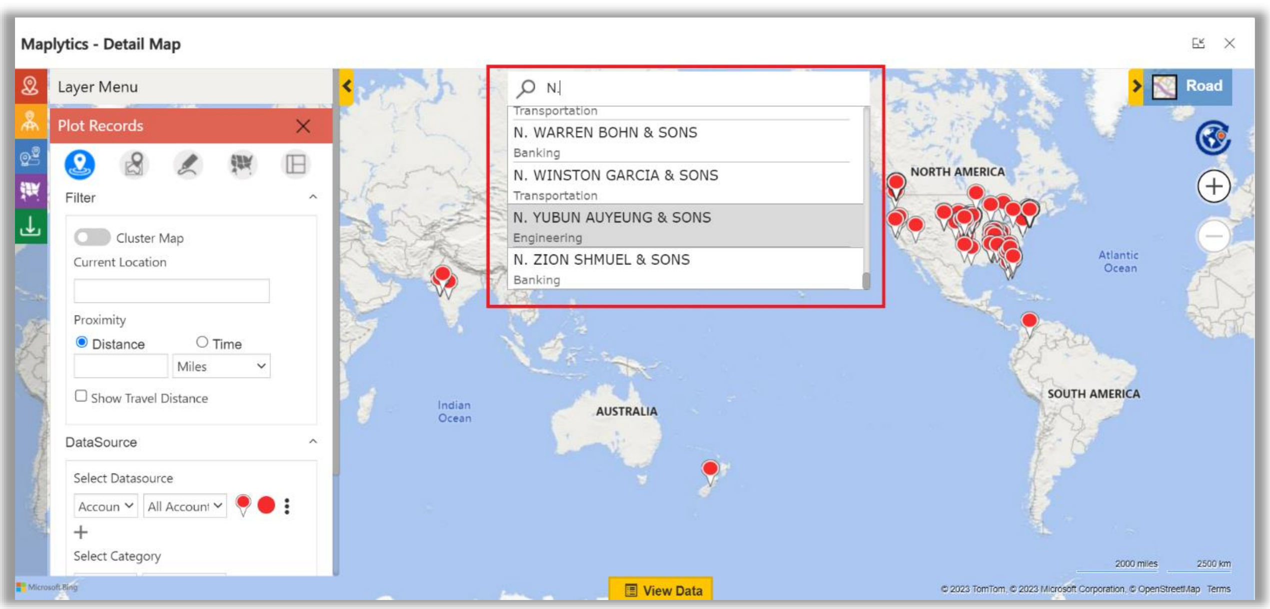
Note: Below are some exceptional cases for Default template where the plotted data might vary.

- ***If Default template has been saved with search criteria By Location and the user uses the 'Map' button on a record to open the Map, in this case, the respective record will be plotted as the current location along with other records selected within the Default template.***
- ***If Default template has been saved with search criteria Proximity Search and the user uses the 'Map' button on a record to open the Map, in this case, the respective record will be plotted as the current location replacing the initial current location set in the template. Thus, the records will be plotted within the specified radius from the respective record's location which is now the current location on the map.***

Search Record

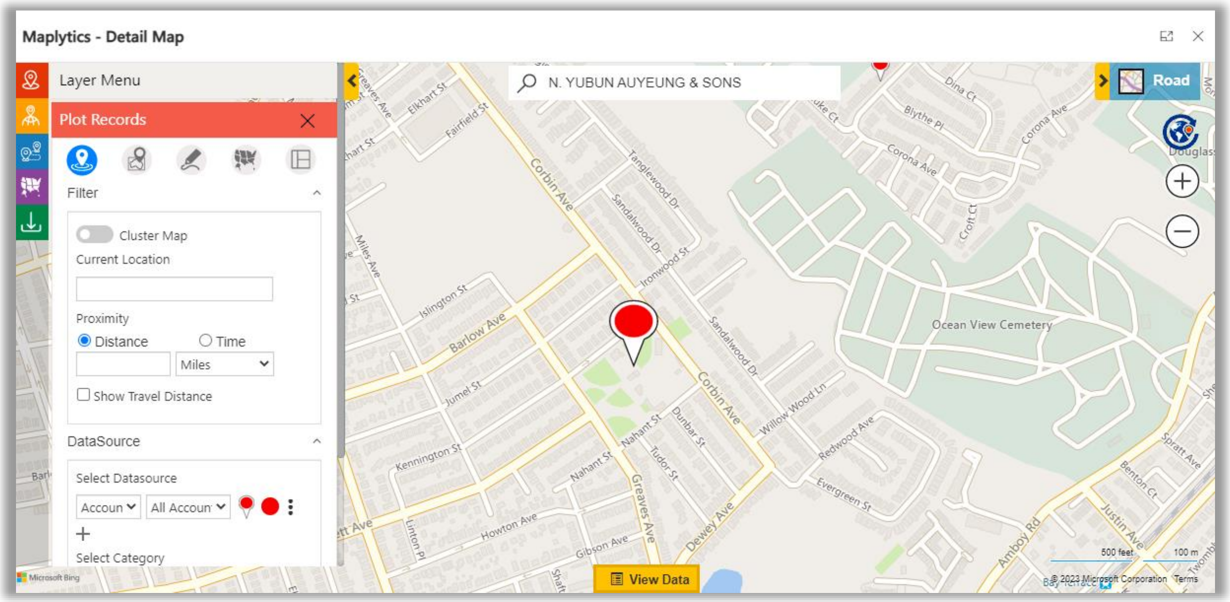
Once the records have been plotted, a search bar appears at top center of the map. This search bar can then be used to search any specific record from among the plotted ones using the primary attribute.





As in the above example, the Industry of 'Engineering' displayed for the search entity appearing in the bar above is derived from the second column of the Quick Find View.

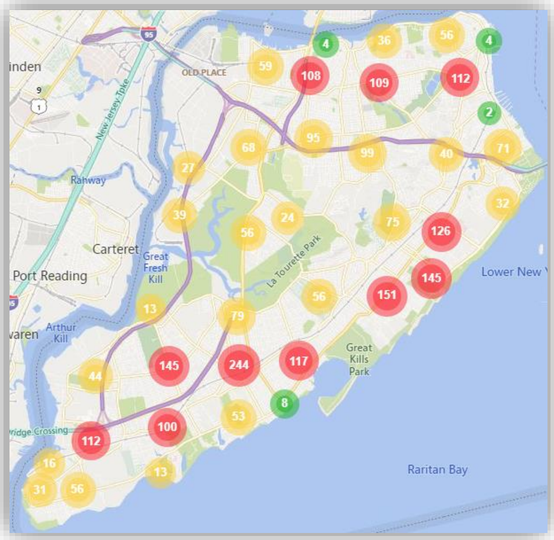
This search zooms the map to the area where the required record is plotted. The preferred pushpin blinks in quick succession to highlight its position from among the records.

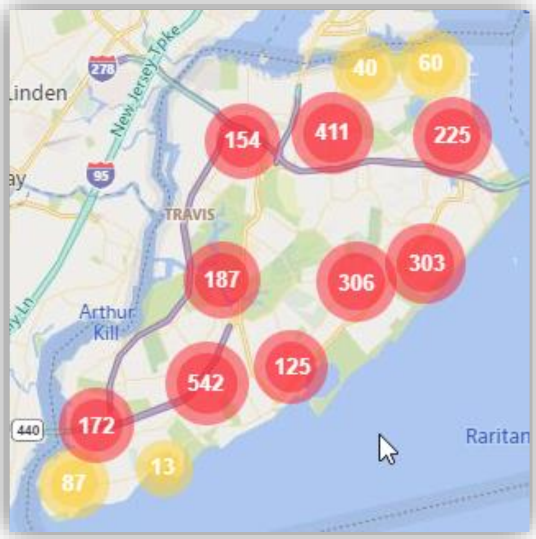


Finding a particular record from among many becomes easy with this feature.

Cluster map

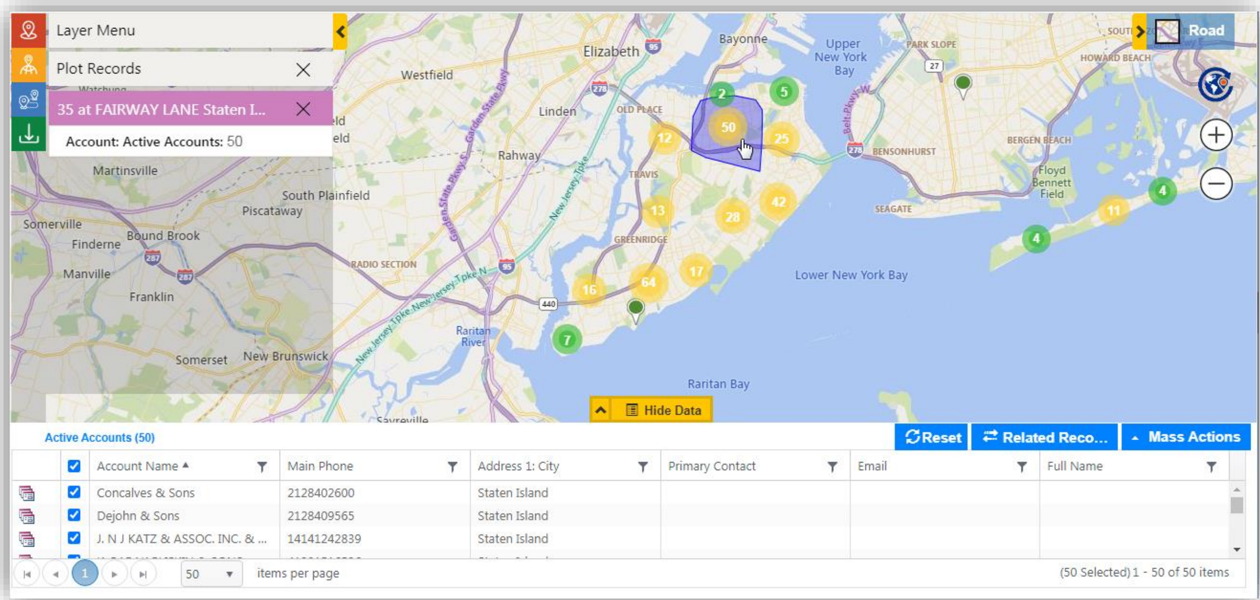
The user can select this option to group the closely positioned pushpins into a cluster. A cluster shows the number of pushpins in the cluster. The user can zoom in further to break down the cluster into smaller clusters or zoom out to group closely positioned clusters into one.





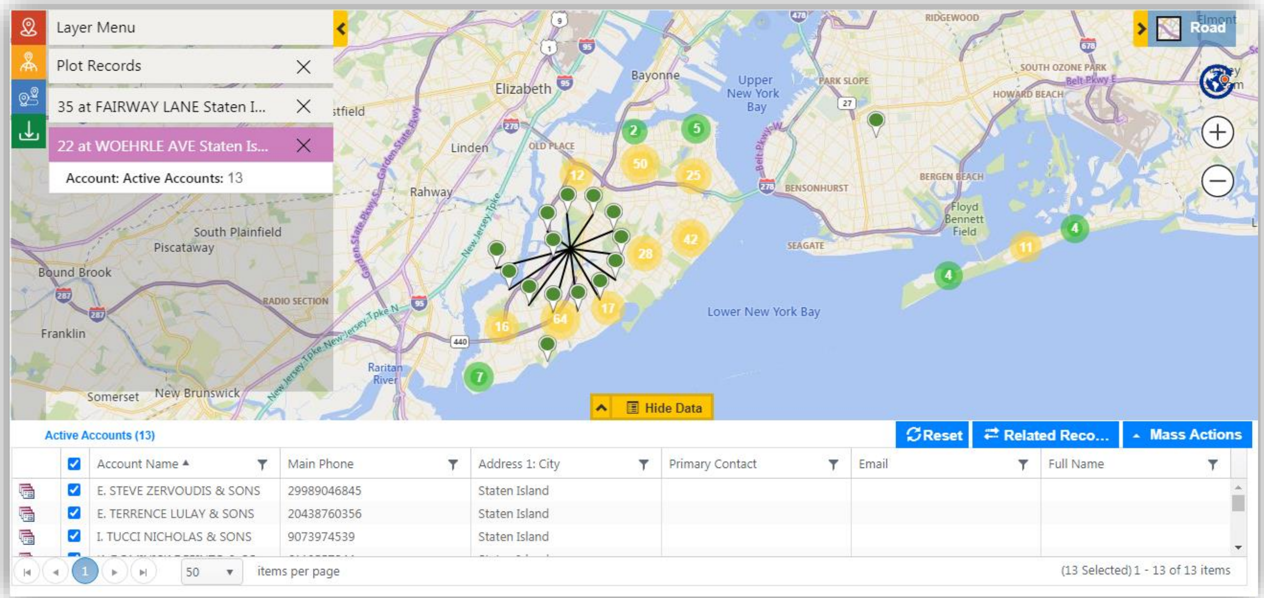
Cluster Area

The user can hover on any cluster to see the 'Cluster area' which shows the data spread. The data spread is based on the area covered by the pushpins existing in the cluster.



Spider cluster

The user can click on any cluster to view the pushpins existing in the same in the form of a 'Spider cluster'.



Note: Spider clusters can be visualized only for records less than or equal to 50.

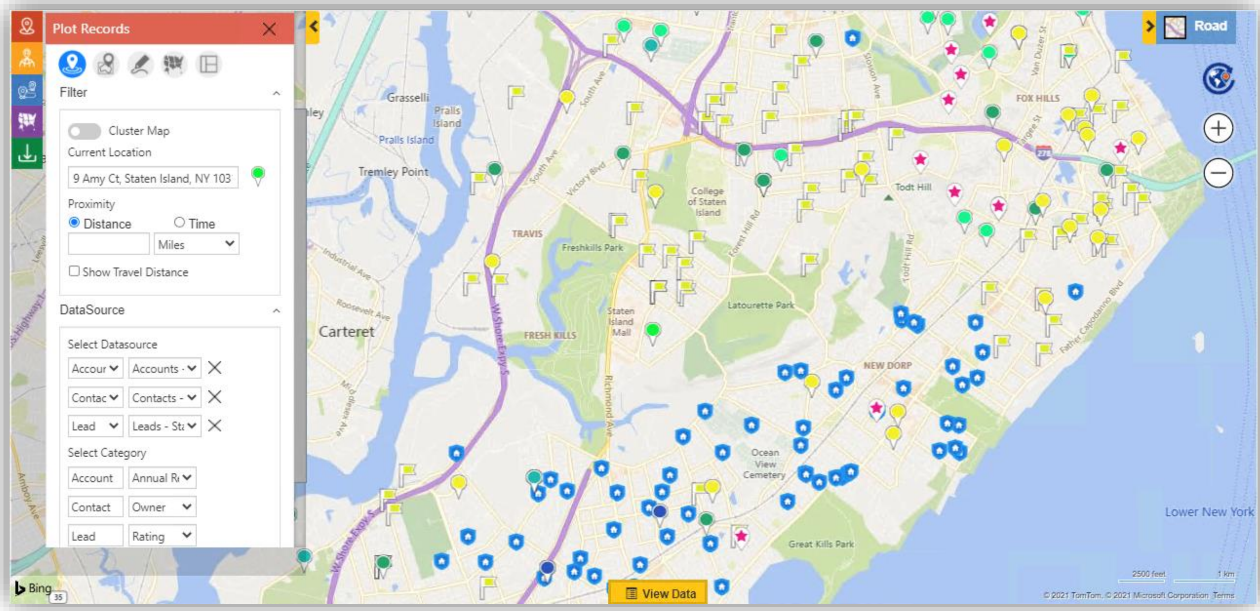
Category

Users can choose any attribute for the selected entity to categorize the data on the map and visualize the pushpins color-coded based on the selected attribute. The category card will further help the user to differentiate between the pushpins.

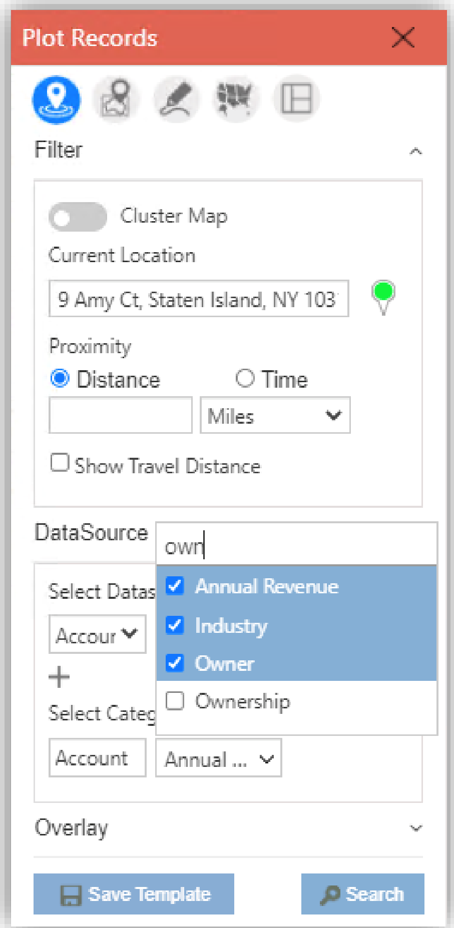
Multiple categories for multiple entitles

User can plot a maximum of three entities on the map and can also select one attribute for each of the three datasources selected to categorize them. The screenshot below shows the categorization of the records of Account, Lead and Opportunity based on the attributes Annual revenue, Rating and Estimated Revenue respectively.

> ***Note:***
>
> - ***User can choose respective categories for at a maximum of three different entities.***
> - ***The user can define the color as well as shape of pushpins for each parameters of category. Refer to [Pre-Define Colors for Category section]() for further details.***
> - ***User can also choose the field attributes to be visible in Category list. Refer to 'Setup Entity Map' section of Installation Manual for further instruction.***



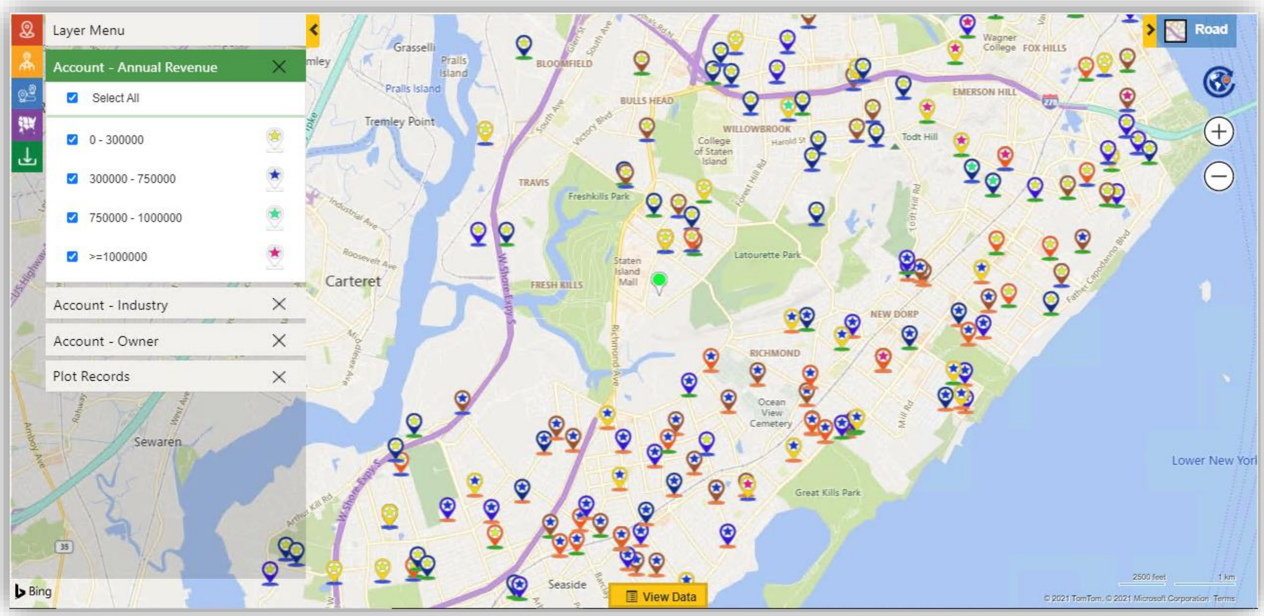
Multiple categories for single entity

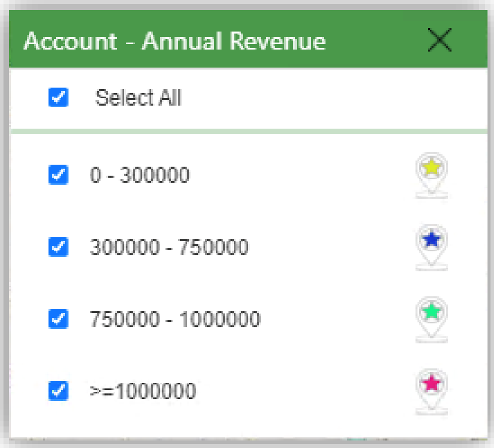


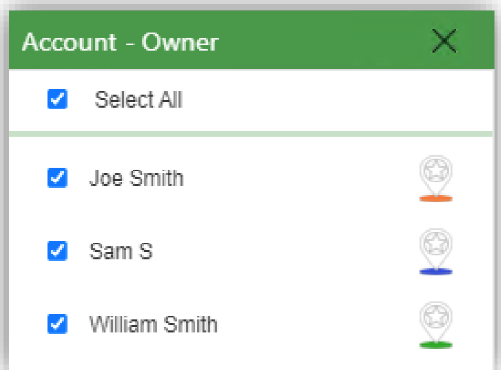
Users can also plot a single entity records categorized by multiple attributes e.g. Account records categorized by Open revenue, Originating lead, Owner. The user can choose an entity twice or thrice with two or three different views respectively and choose required attributes for the respective views to categorize the same entity with different attributes. User can select a maximum of three attributes to categorize a single entity.

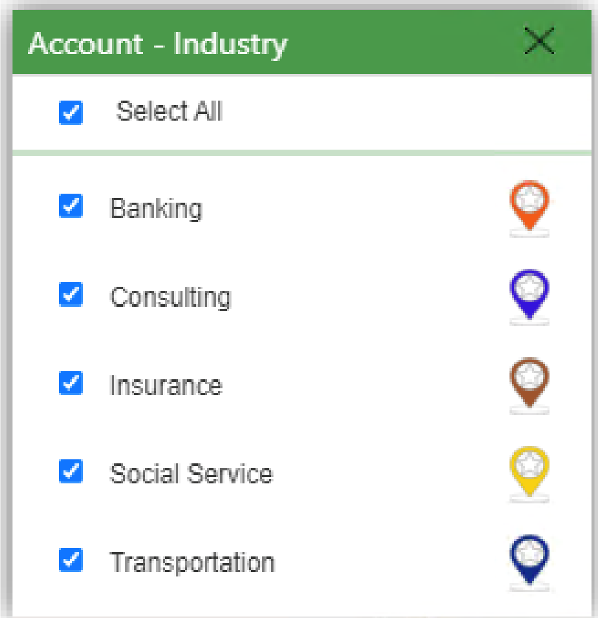
Note: User can select a maximum of three attributes to categorize a single entity.

While plotting a single entity categorized by three attributes, three category cards will open up for the three attributes. For example, the screenshot below shows Accounts plotted on the map which is categorized by three different attributes viz. Annual Revenue, Industry and Owner and three different cards have opened up for each of them.









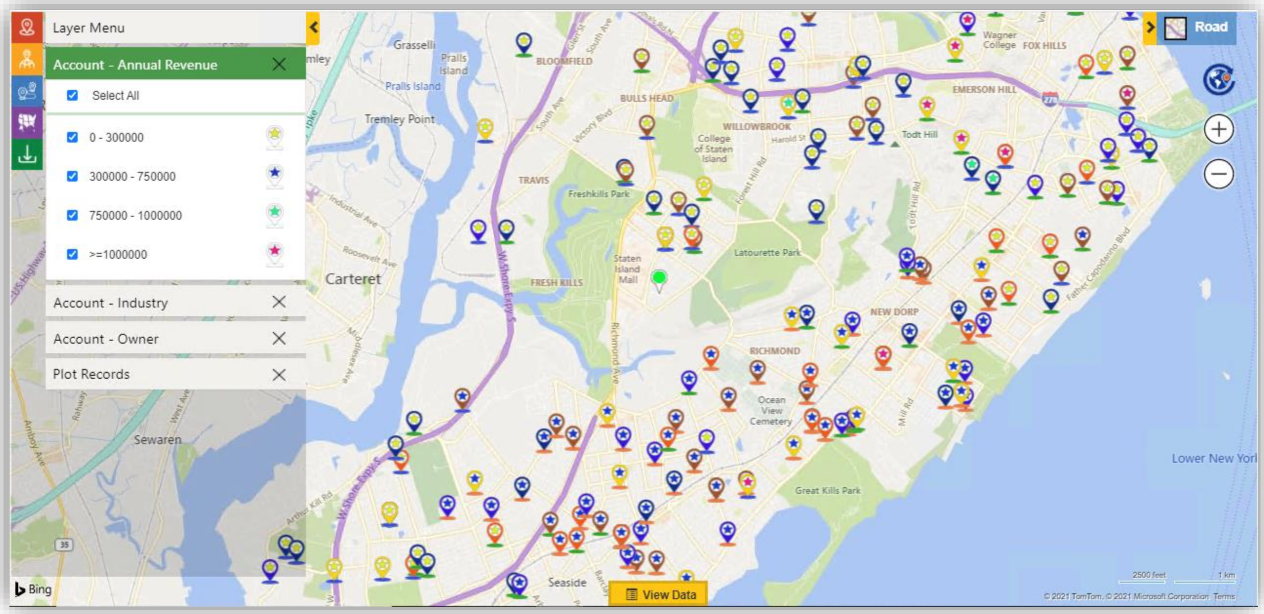
The category cards shown above states which category is represented by which pushpin. The categories are represented with the following three different parts of every single pushpin, , ,

All the above three icons combine to form a pushpin which will represent the plotted records. Each of the three parts represent three different categories with different colors shown within the category card. For example, the category card 'Account – Annual revenue' shows that the icon represents the Account records that belong to different ranges of Annual revenue with different colors. The category card 'Account-industry' shows that the icon represents the Account records that belong to different industries with different colors and the category card 'Account-Owner' shows that the icon represents the Account records that belong to different owners with different colors.

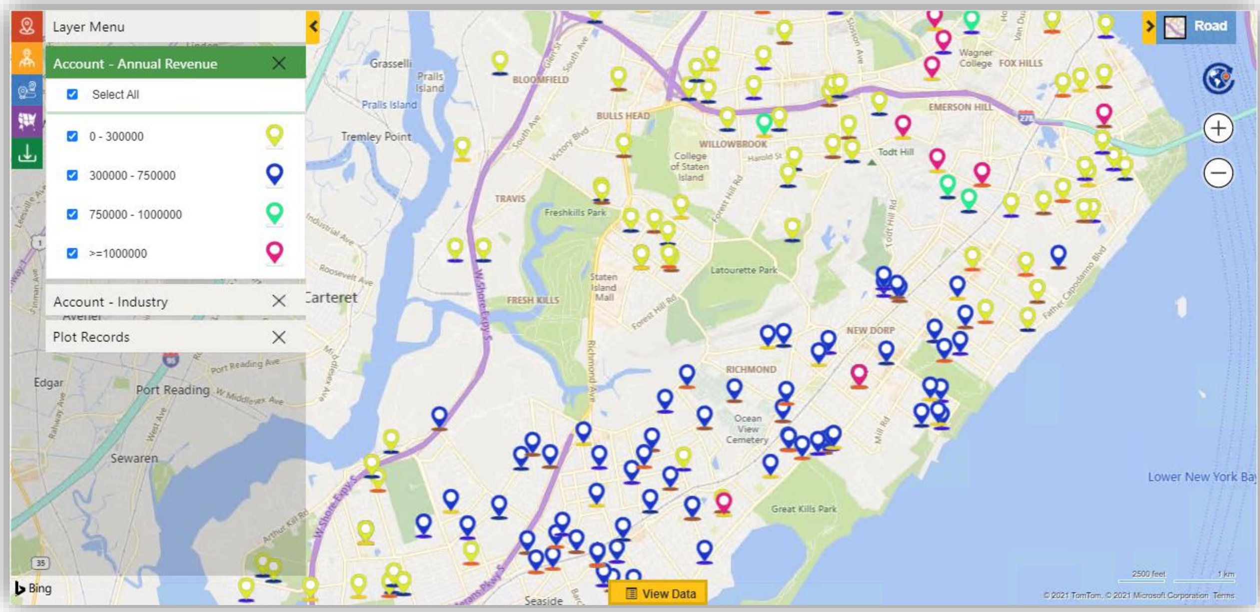
In case, the user has selected only two attributes in order to categorize the entity records, the pushpin that will be used to represent two categories will be .

The plotting of categories follows **AND** condition. This means that if the user deselects a category in one category card, then all the pushpins for records that belonging to that category will be hidden from the map even if any of the records belong to any other categories as well. For instance, if the user deselects the category of Annual revenue between 5000-10000, then all the pushpins for the records that belong to this category will be hidden from the map even if any of these records belong to other category like owner or industry.

In the screenshot below, three categories have been selected viz. Annual Revenue, Industry and Owner.



In the screenshot below, only two categories have been selected viz. Annual Revenue and Industry.



Set colors and shapes for pushpins

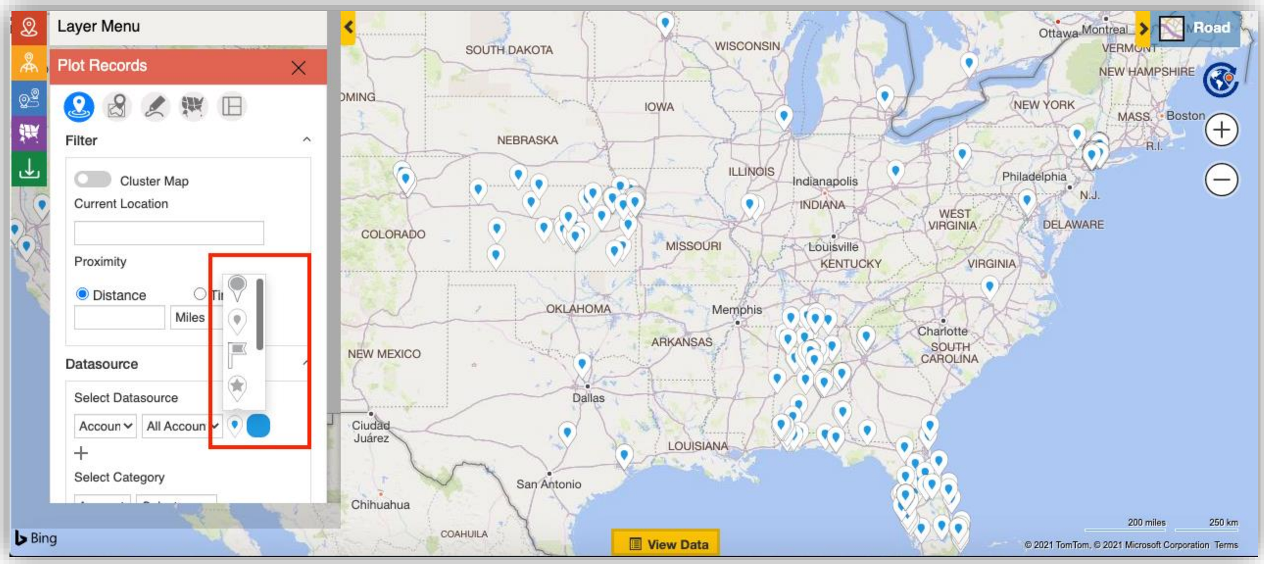
The users have the ability to define colors and shape of the pushpins to visualise the records plotted on the map as per the requirement. This will help the user to differentiate between the records that belong to different views or categories.

Set pushpins from map

Users can select the pushpin of their choice with the desired color, right from the Detail Map while visualizing CRM records on the map.

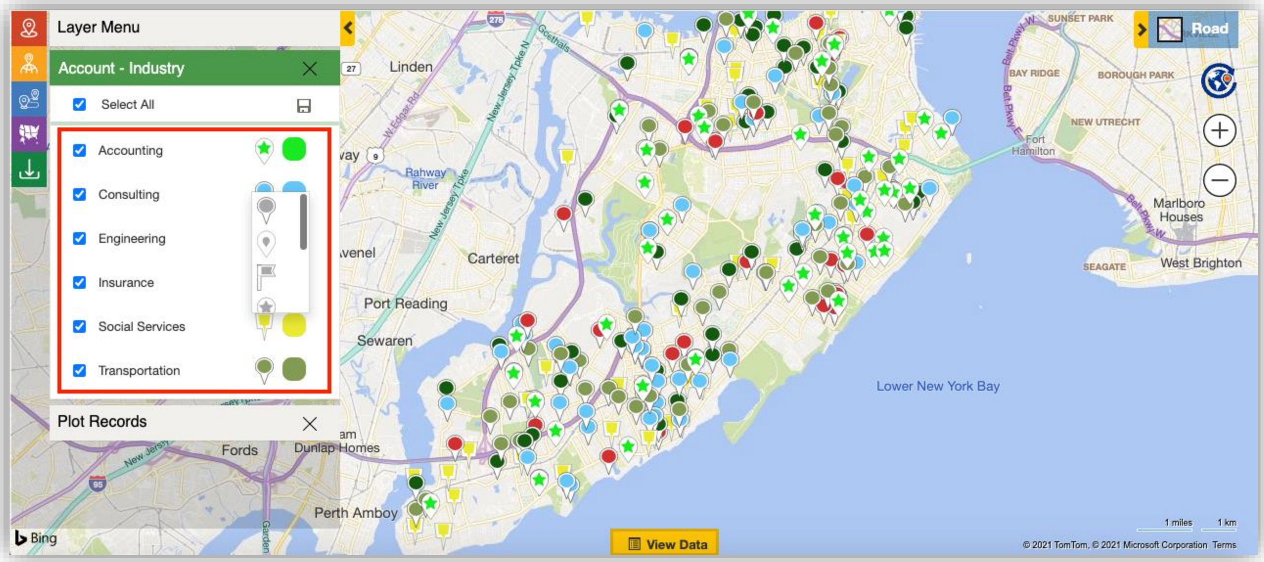
Set pushpins for views

While plotting records using the Plot card, users can select the required colors and the shape of the pushpins for the records of the view within the Datasource section in the Plot Records card. Once the color or pushpin are selected, it will instantly reflect on the map.



Set pushpin for categories

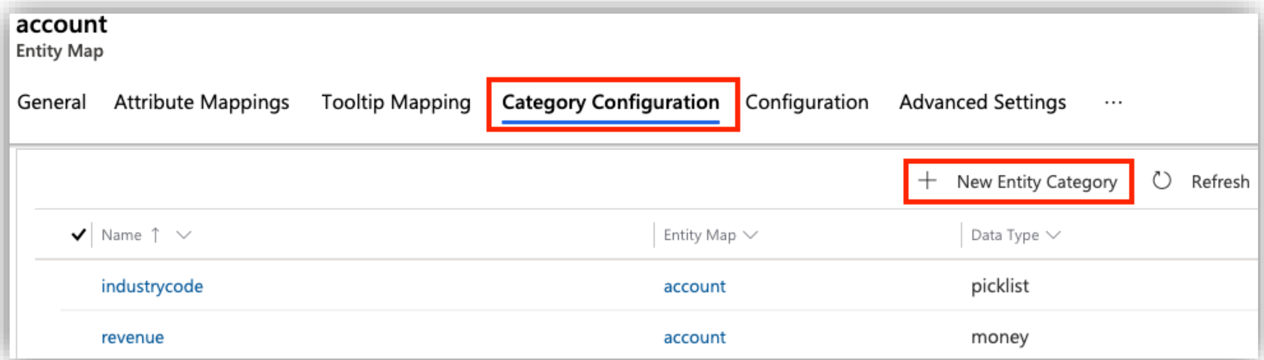
While plotting CRM records along with categorization, user can select the color and shape of the pushpins and also save the selection for future use. Once the categorized data is plotted, user can go to the respective category card, change the color and shape of the pushpins and click on 'Save' to save the pushpins selected for future use.



Configure pushpins in Entity map for new category

To set the colors and shape of the pushpins for the categories for any entity, the users have to follow the below steps:

- Go to ***Maplytics App > Settings > Entity Maps > select the entity map for required entity > Category configuration.***

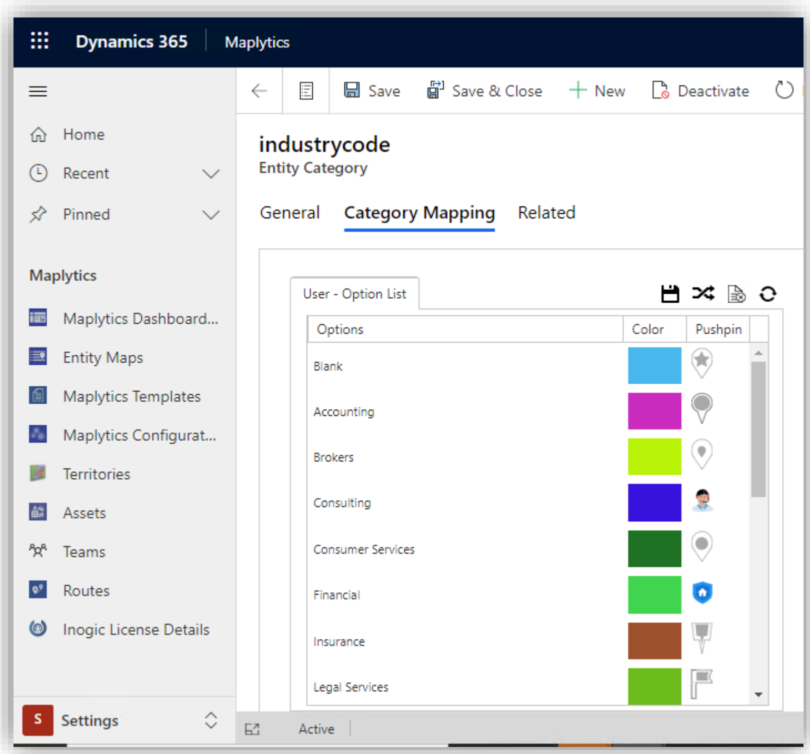


- Click on the plus '+ New Entity Category' in the subgrid to open the new Entity Category form. Select the name of the category attribute in the Category text box and save the form.
- The user can select only OptionSet, Two options, Numeric, String, Lookup and Money attributes to define category colors.
- Colors and shapes will be auto-populated, the user can further set their own preferences.

Category configuration for users

User can open a category from the Category Configuration tab by going to ***Maplytics App > Settings > Entity Maps > select the entity map for required entity > Category configuration.*** They can change the colors and shape of pushpins to view the same on the map using the following buttons. If user has saved some colors and pushpins for categories from the map then those saved selections will be shown here.

- Save : User can change the colors and pushpins and click on this button to save the selection
- Auto-Set : This button helps to set the colors and pushpins randomly
- Discard Changes : If user has made any changes to the colors and pushpins, they can click on this button to discard the changes done
- Set to default : User can click on this to set the selection of the colors and pushpins to default which has been selected by Maplytics admin or System admin.

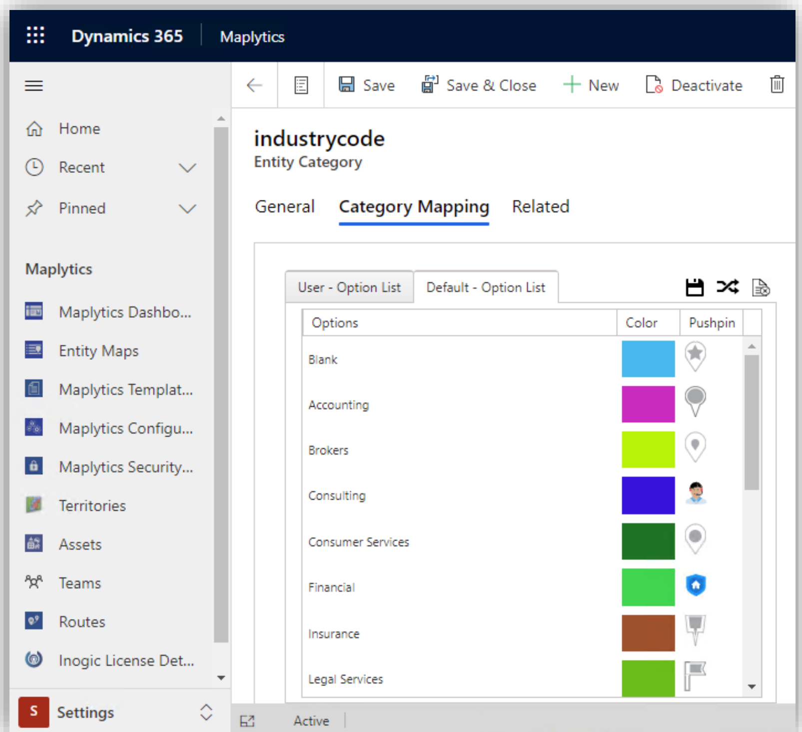


Category configuration for admins

System Admin and Maplytics admin can also check the colors and pushpin selection in the entity map. Along with this, they will also have the ability to set the required colors and pushpins for all the Maplytics users as well. To do this, admins can ***go to the Maplytics App > Settings > Entity Map > Respective Entity map > Category Configuration > Select required category.***

Admins will be able to view two Option lists, one for themselves as a user and one for Default selection. The User Option list will work the same as explained above. The admin can further take some actions within the Default Option List using the following buttons.

- Apply to all : Admins can select the required colors and pushpins and click on this button to save the selection for all Maplytics users
- Auto-Set : This button helps to set the colors and pushpins randomly
- Discard Changes : If admin has made any changes to the colors and pushpins, they can click on this button to discard the changes done.

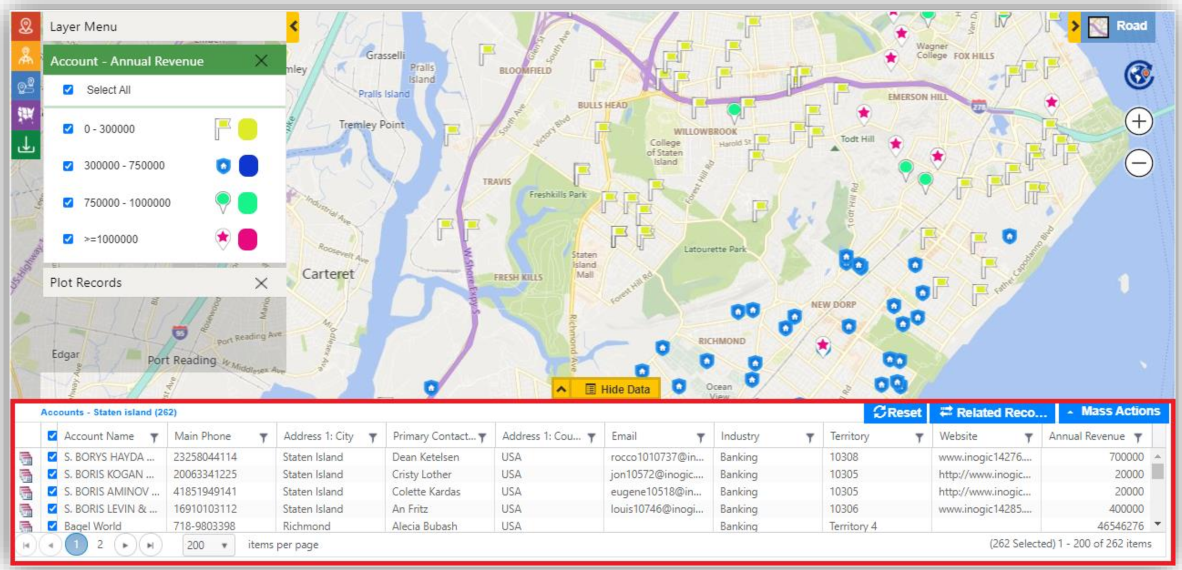


Note:

- *Selecting pushpins and saving the selection for categorized CRM data is only available for entities plotted with single category.*
- *The selection of pushpins saved will be available for the respective logged-in user only.*
- *If a category does not exist in the list of categories created in the respective entity map, then while saving the pushpin selection, the category will be created automatically for all the users.*
- *If a user has not selected any preference for pushpin colors and shapes for any category, the user will be shown the visualization of the pushpins on the map as per the selection saved by the Maplytics admin or the system admin in within the Default-Option list of the category in the respective entity map.*

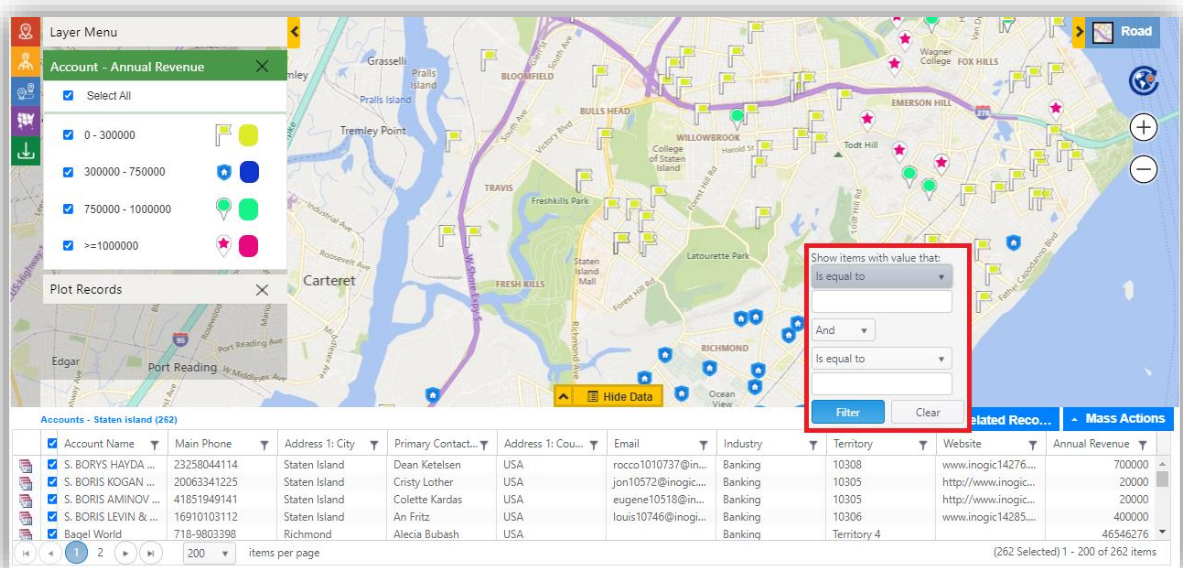
Data Grid in Detail Map

The Data Grid is available at the bottom of the Detail map which can be opened using the yellow button 'View Data'. All plotted pushpins represent a unique record in Dynamics CRM and data grid helps the users to access these records from the map screen, filter the data further and perform some mass actions. Order of columns in the grid depends upon the Dynamics CRM View selected to plot the data and in the case of Marketing Lists & Maplytics Dashboard records, it is same as that of the Entity-View selected in Entity Map. The users can also customize the data columns to be visible in the grid by adding/removing columns from the Entity view.

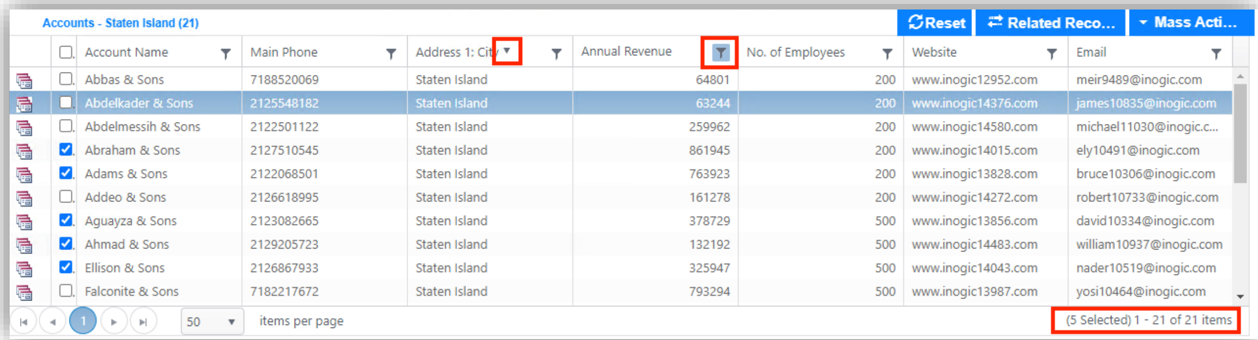


<u>Filter & Sort Data:</u>

The user can use the filter present on the top of every column to filter the data further selecting any of the conditions and entering the respecting value.



User can see the filter icon at the column header to understand based on which column the data has been filtered. Further, user can also click on any of the column header to sort the data and can see the arrow icon at the column header to understand based on which column the data has been sorted. User can deselect some of the records and see at the bottom the number of records selected from the list



Reset:

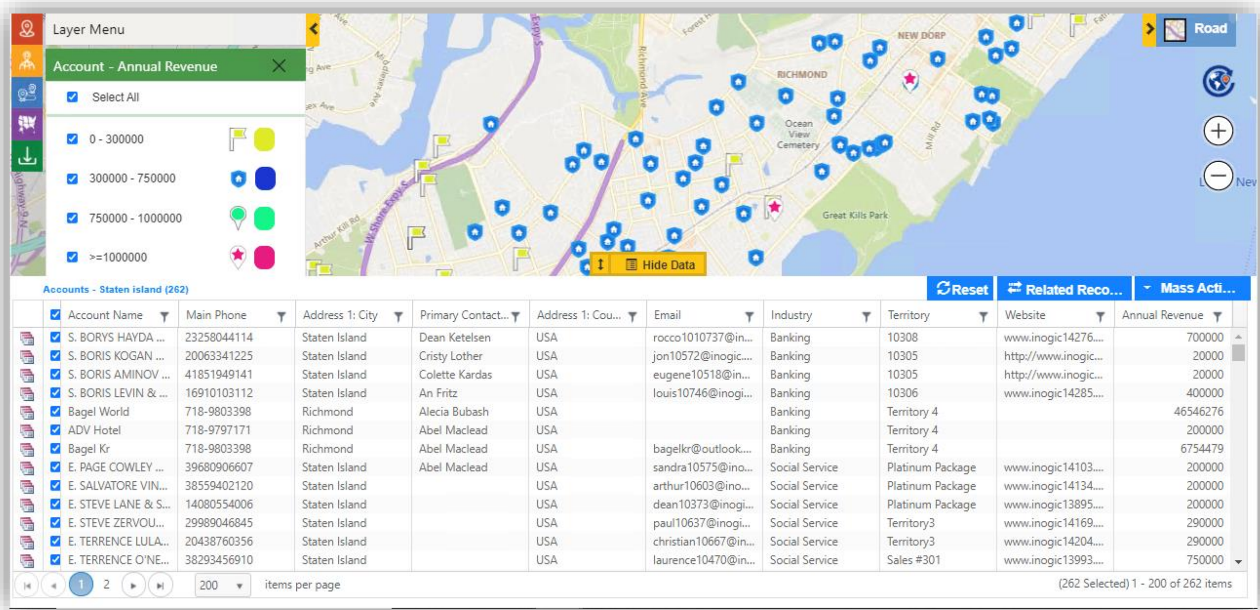
This will reset the grid to the initial search.

Parent Record / Related Record:

This is useful when the user is dealing with plot related records functionality. The user can switch between child data and parent data using this button.

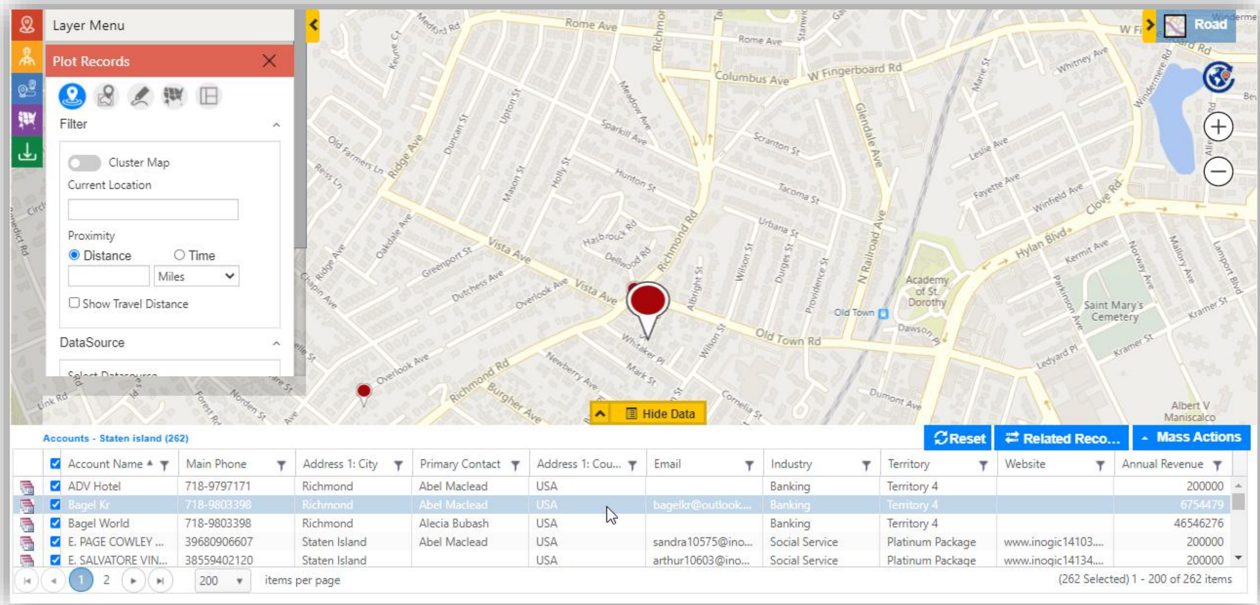
Resizable Data grid:

Double click on Expand button to view the data grid in full screen. Double click on Collapse button to view the default size of the data grid. Use can also click once and drag to resize the data grid to the desired size.



Highlight pushpins

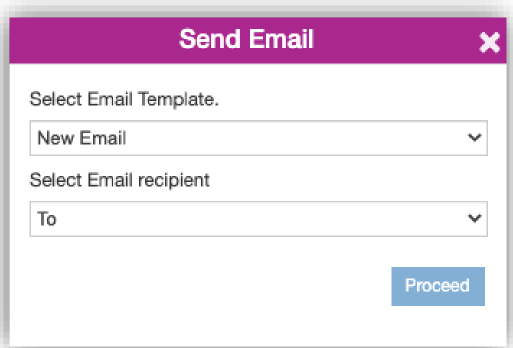
User can click on any record within the Data Grid to highlight the respective pushpin on the map. User can also click on any pushpin on the map to highlight the respective record in the Data grid.



Mass Action Buttons

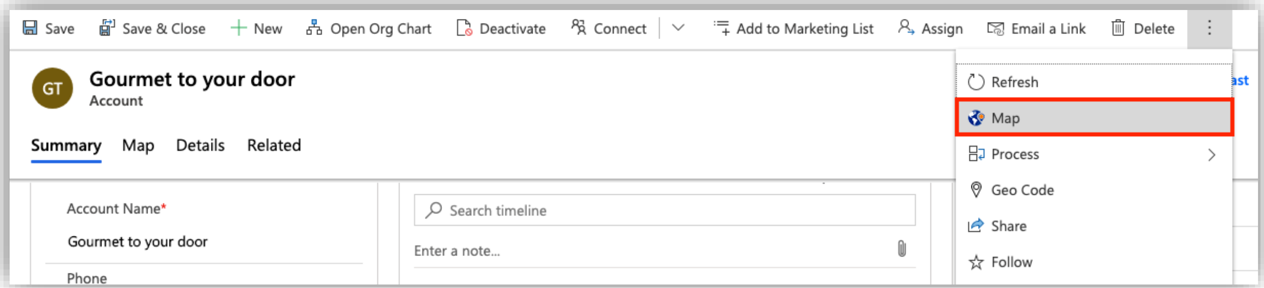
The user has the option to take actions on the plotted records like adding to route or executing the workflow on selected records in the grid. Defined mass actions are as follows:

- **Add To Route:** This option will add selected data points to the route. The user can add at max 25 data points to the route
- **Save Data:** The selected records can be saved as static Marketing List or Personal View in Dynamics CRM
- **Change Owner:** The user can assign the owner of the plotted records by selecting a user or a Team
- **Manage Territory:** The User can assign or change the territory of selected records
- **Send Email:** The user can send a mass email to the selected records. User can select any one the available email templates or a new email to write their own content. User can also choose to keep the recipient as To/Cc/Bcc in the email.

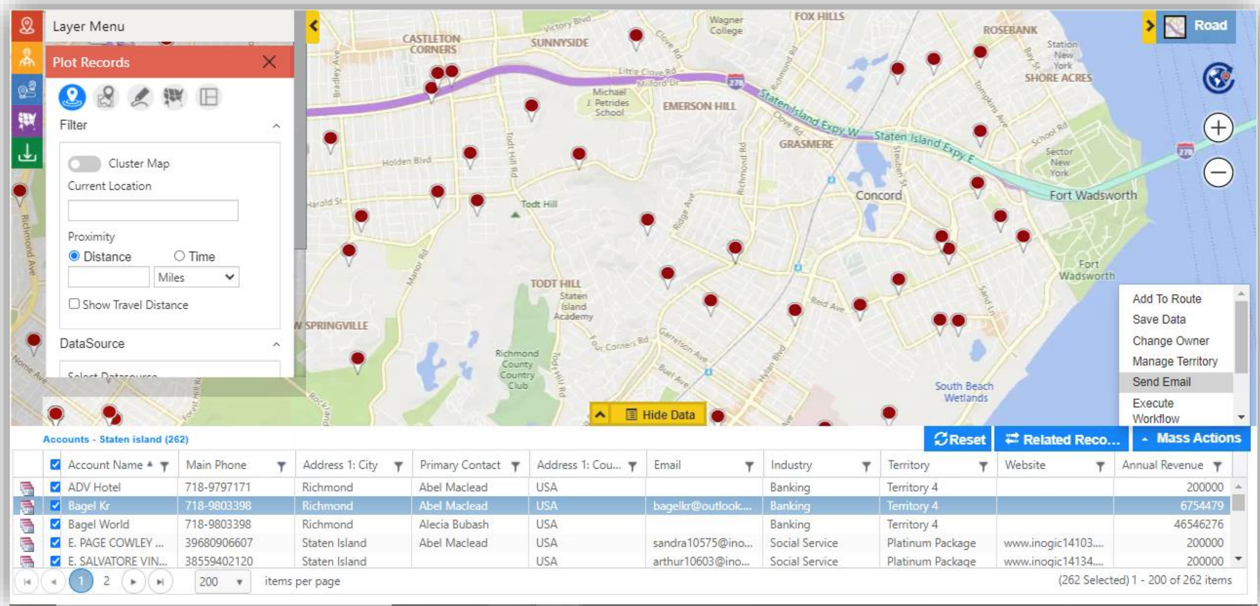


Select regarding: If user needs to send bulk emails and also wants to keep a specific record in the Regarding field into the email. They can select the option of ‘Select Regarding’. To view this option, they can follow the steps mentioned below.

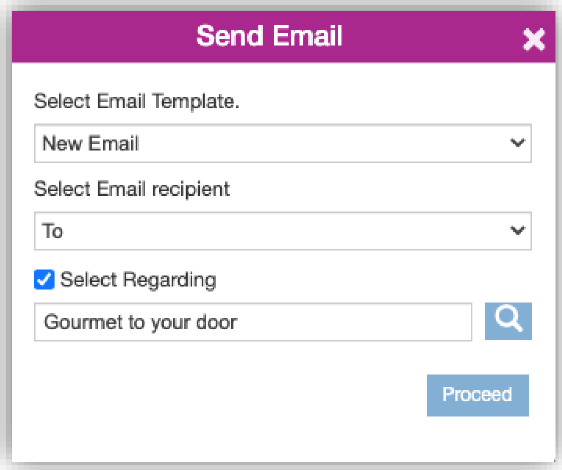
- Open the respective record to be set in Regarding field from the ‘Map’ button on the record. In the screenshot below, we have taken an Account ‘Gourmet to your door’ as an instance.



- Now plot the required records to whom the mail has to be sent and Go to Mass actions to choose the option of ‘Send email’. Here, we have plotted Contacts.



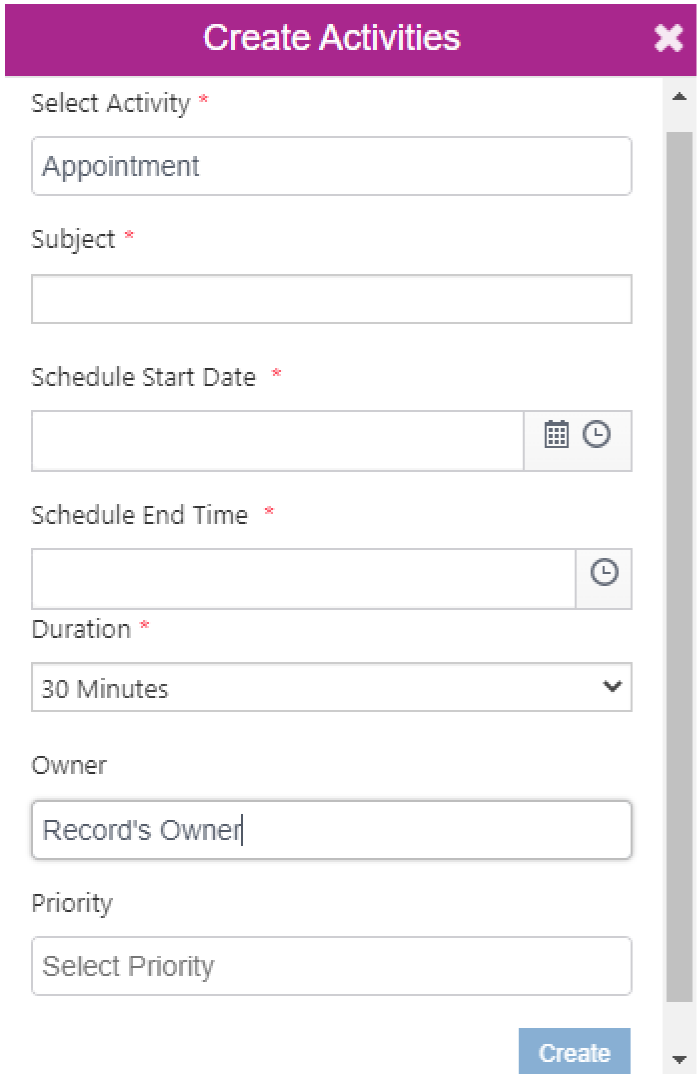
- Once clicked on ‘Send Email’ from ‘Mass Actions’, user can select the option of ‘Select Regarding’ and the Account that we plotted earlier ‘Gourmet to your door’ will be set by Default within the Regarding field.



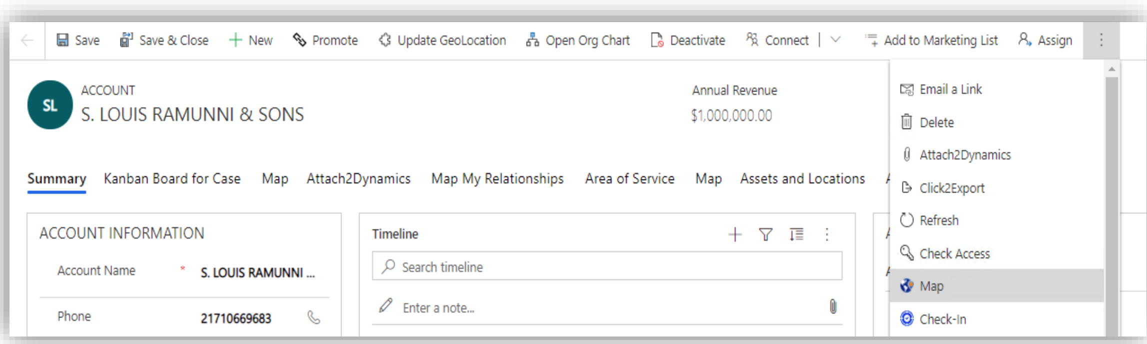
Note: This option will be visible only if the map has been opened using map button on a record.

- **Execute Workflow:** The user can execute any on-demand workflow with this functionality
- **Export To Excel:** The user can use this feature to export data from the map to excel. This functionality adhere to CRM security roles, if the user does not have the permission to 'Export Data to Excel' in CRM then that user will not be able to export data from Maplytics
- **Create Activities:** User can create activities for non-activity Entity records currently selected in "View Data grid." The user can define the Activity, Subject, Schedule Start date and Schedule end Time, Duration, Owner(User/Team) and Priority. The activities selected in respective Entity maps can be seen in the list of activities available to creare using the button of "Create activities". By clicking this button below window will open and the activities will be created based on the inputs given in the window by the user.

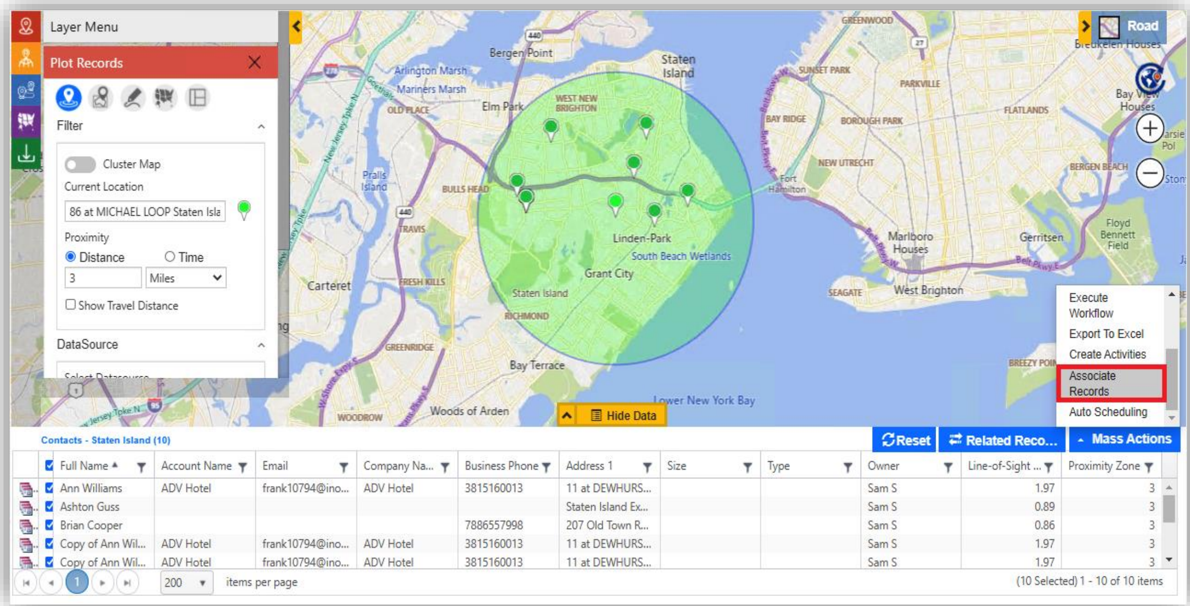
  For example: If a user selects the appointment as the activities to be created for 20 records plotted on the map. Now if they select the Schedule start date to be let's say 1st August 2022 at 10 am and schedule end time to be 5 pm along with the duration as 1 hour. So the appointments will start getting created for record 1 at 10 am for 1 hour and record 2 at 11 am for 1 hours and so on till the appointment for record 7 is created for 1 hour till 5 pm. Here it meets the schedule end time i.e. 5 pm. Now for the rest of the records will be handled in the follwing days. So the appointments for the next 7 records will get created for the next day i.e. 2nd August starting from 10 am, each for an hour till 5 pm. Likewise, the appointment for the rest of the 6 records will get created for the third day i.e. 3rd August 2022.
  The user can also select the required owner or the record's owner for the appointments being created. If the user has selected 'Record's owner' in the space for owner, the appointments will be assigned with the owner of the respective record i.e. if Record 1 has user A as the owner, then the appointment for the Record 1 will be User A itself.



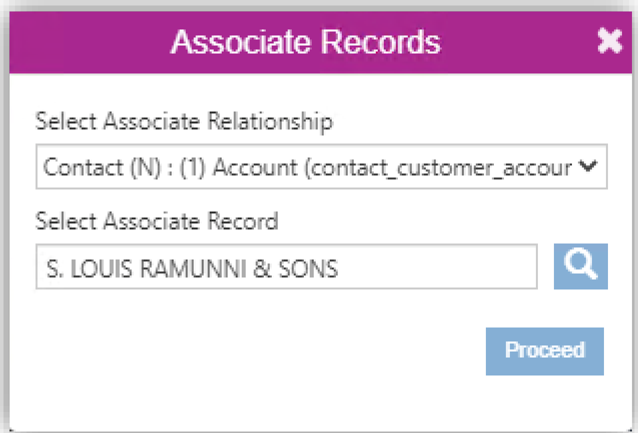
- **Associate Records:** This helps the user to associate a record with the plotted record(s) on map. To do this, user needs to open the map using 'Map' button on the record they want to associate. In the below screenshot the Account record is being opened using the 'Map' button.



Once the map is opened, plot the required Entity & View to associate the Account. Now, click on 'Mass actions'. In the below screenshot, Contacts are plotted on the map using Proximity Search.

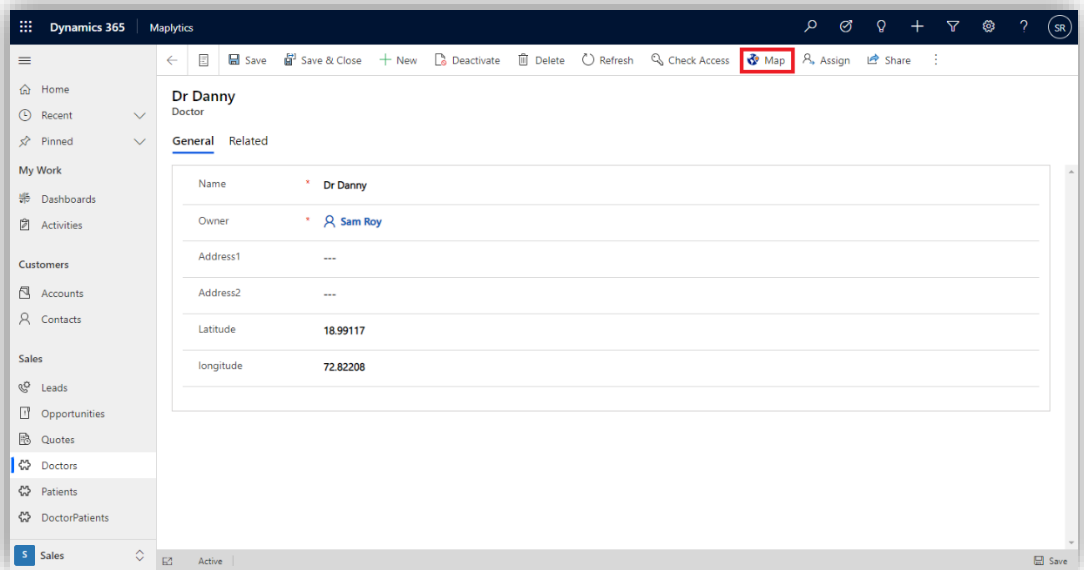


Within Mass Actions, click on 'Associate Records'to open the window. Here, the relationships between both of the entities, the records plotted and the record from which the map has been opened will be listed. User can select the relationship through which they want to associate the records . Here, the record from which the map was opened earlier has been selected by default. User can also select another record as per their requirement to associate with the plotted records.

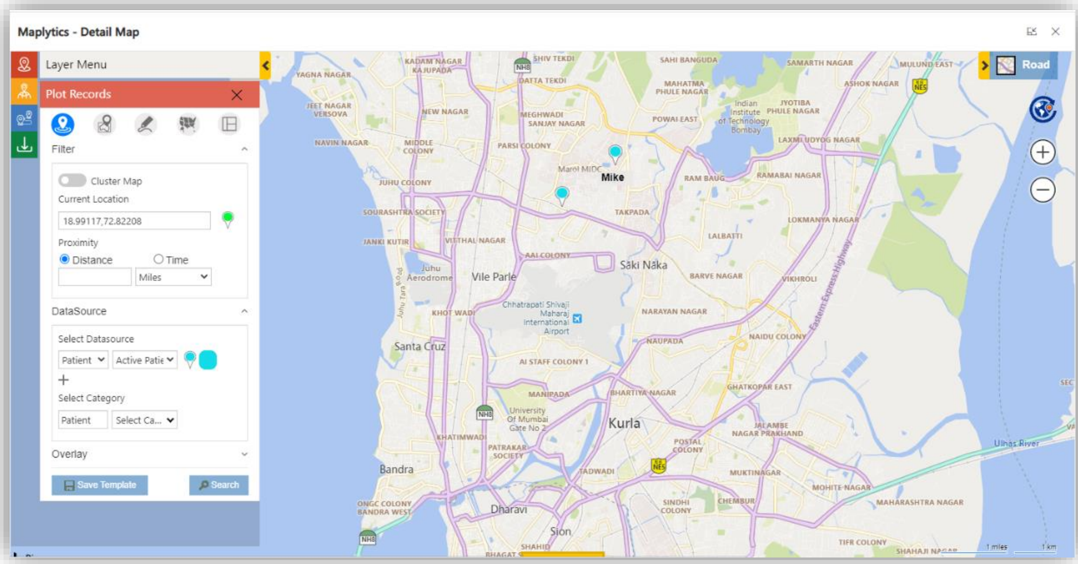


Note: This option will be visible in Mass Actions only if the map has been opened using map button on a record.

- **Associate records with many-to-many relationship:** 'Associate records' feature can also be used for many-to-many relationship. Users can associate multiple records of an entity with another related entity record. The related entity record can be an existing or new one.
  For an instance, we have two entities Doctor and Patient with many-to-many relationship. Let's say, the user opens the record of 'Dr Danny' of the entity 'Doctor' and clicks on 'Map' button to plot the record on the map.

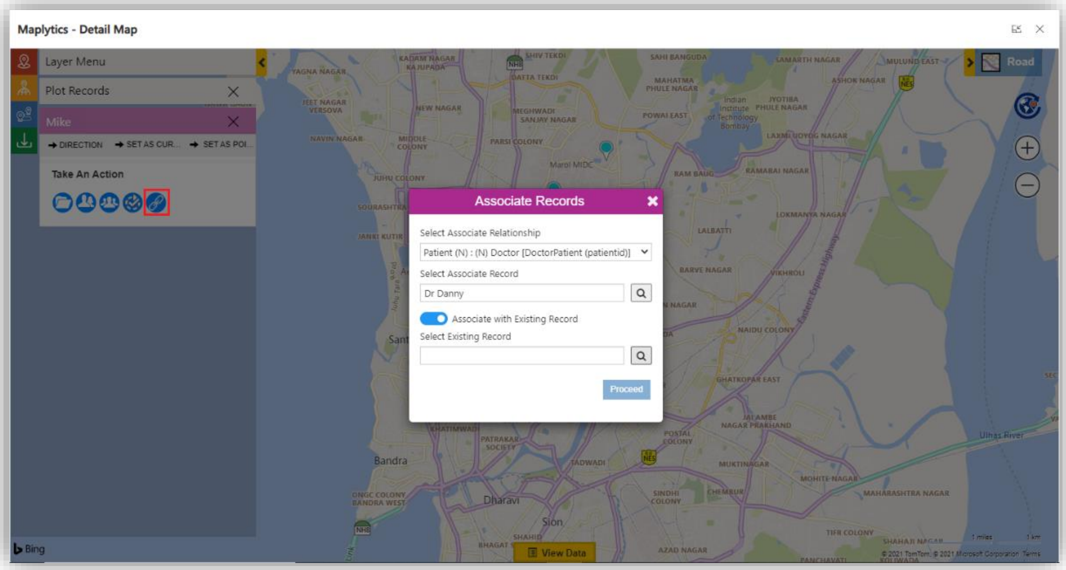


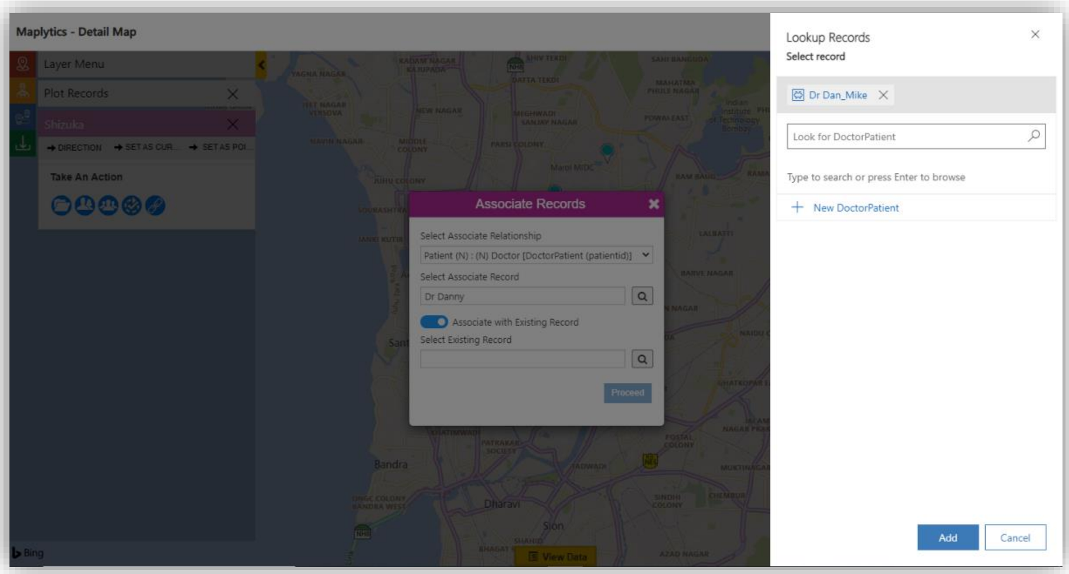
Now in the map, user can choose entity Patient as Datasource to plot multiple patients on the map. In this case, the Active patients are plotted.



Now user can click on a record of Patient and select the option of 'Associate Records' from the Tooltip card to open the window. Here, select the relationship Patient N:N Doctor.

Associate with Existing Record: This option can be selected in order to view the list of the Existing Records of the Middle Entity. Here select a record from the list and 'add' to associate the records of the Entities Doctor and Patient.



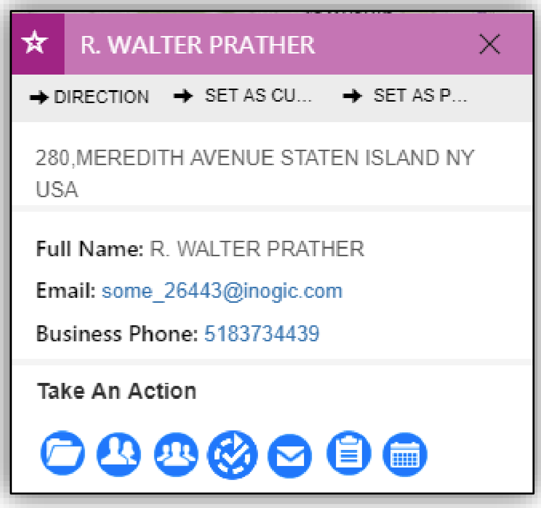


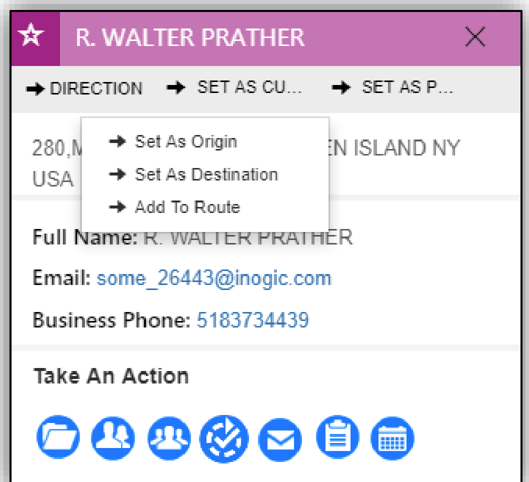
Note: Associate record for many-to-many relationship can only be performed through the tooltip card and cannot be performed from the Mass Actions.

- **Auto Scheduling:** This can be used to create a schedule for one or more users automatically. Refer to the section of Auto scheduling to know how Auto Scheduling works.

Tooltip Card

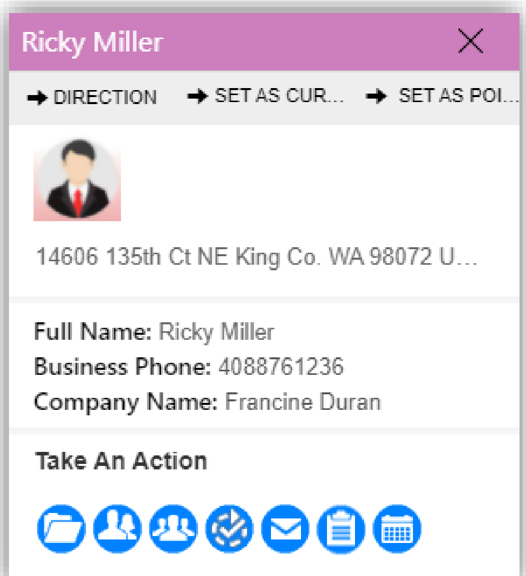
User can click on any pushpin to open a tooltip card. This card will display the data like Address, Account name etc. along with the Image set for the record. These attributes and image can be configured within the Tooltip Mapping section of the Entity Map so as to show on the Tooltip card.





User can also set a particular record as ‘Origin’, ‘Destination’, ‘Add to Route’ under Direction, ‘Set as Current Location’ and ‘POI location’ from the Tooltip card.

User can also **click on the pushpin** of that contact to open the tooltip card to view the respective image on the card. User needs to select the ‘Default Image’ field in the field of ‘Entity image’ in Entity map to view the record image on hover and tooltip card. Please refer to the installation manual.

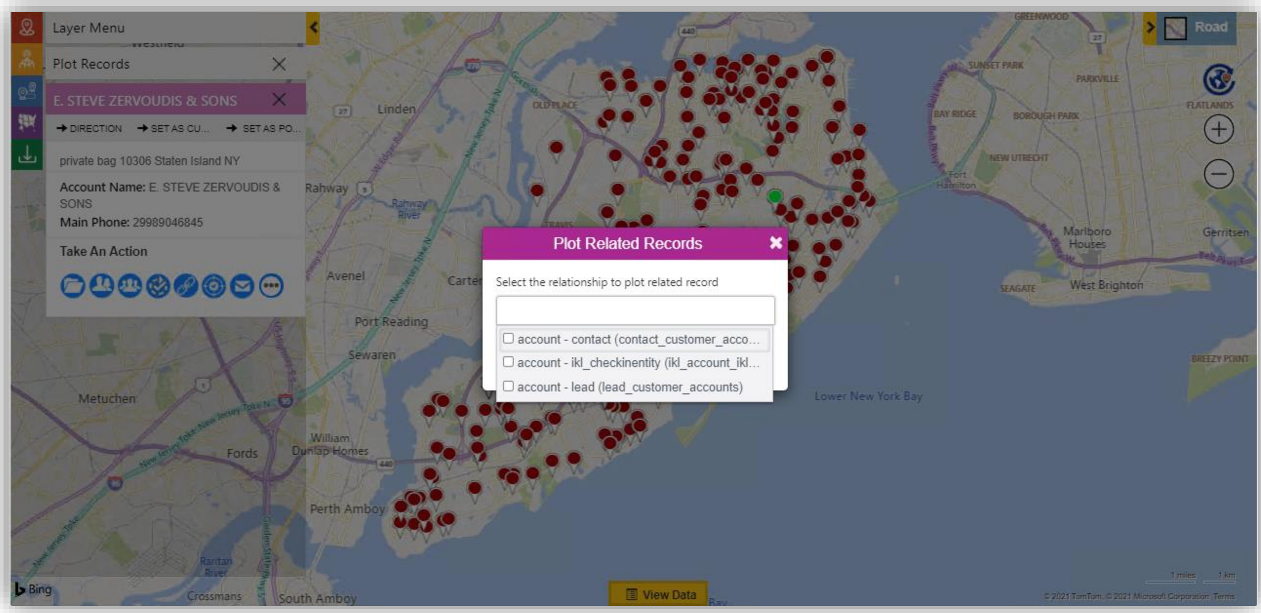


Moreover, the user can **hover on the image** appearing in tooltip card to zoom in the image.

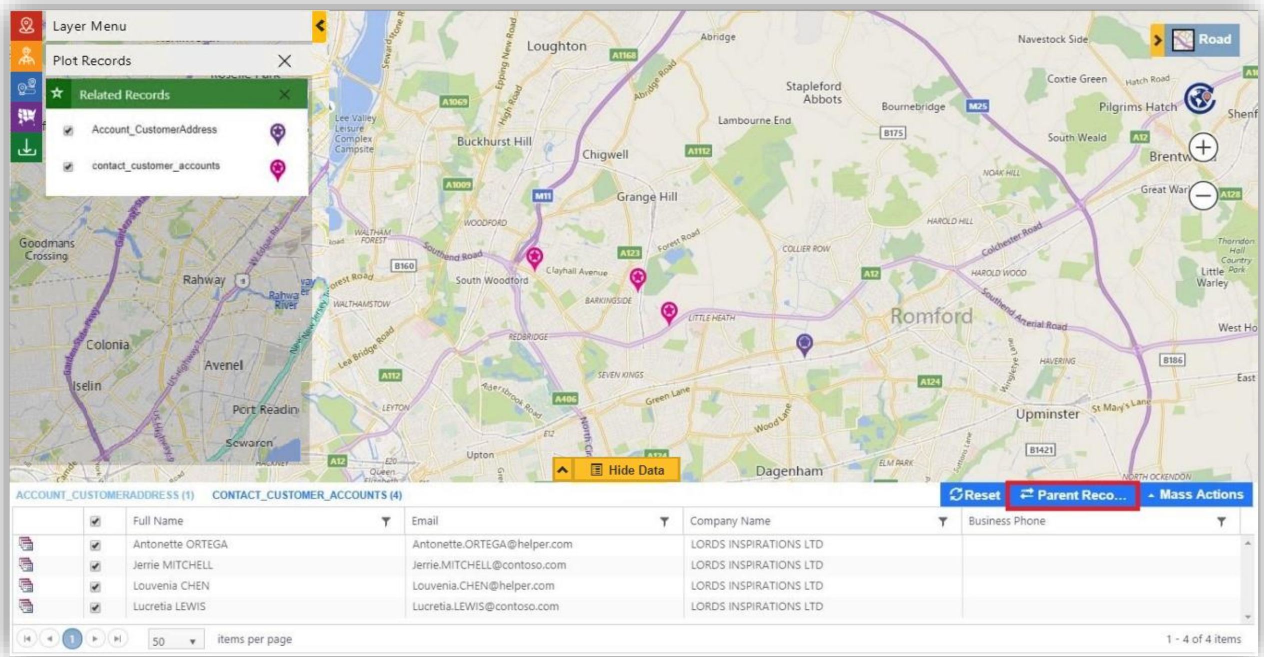
Quick Call to Action Buttons

User can associate quick action buttons. This helps in saving time while switching between screens to take actions. First four actions are the default actions and cannot be changed by the user. User can further add actions for creating records for activities and related entities. The default records are as follows:

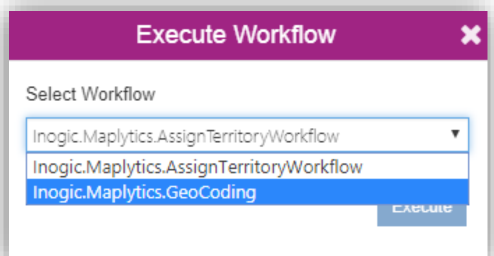
- **Change Owner** : Assign an owner to the respective record by selecting a user or a team
- **Open Record** : Open record directly from this screen to edit any field
- **Plot Related Record** : Plot One-to-Many Relationships/Related records of a particular record as shown below:



Select the required relationships from the list and click on 'Plot Records' button. Related records will be plotted as shown below. Use 'Parent Records' button to switch between Parent and Related records data points.

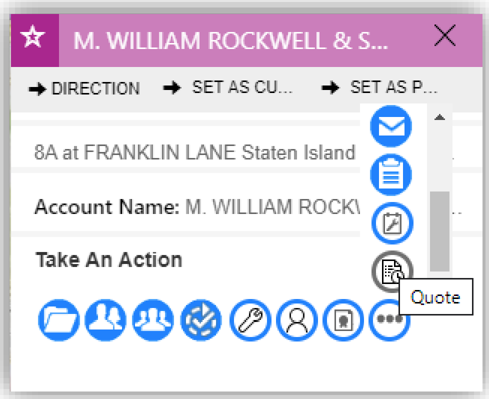


- **Run workflow** : The user can execute on-demand workflows on an individual record. When clicked on this button, it will open a window which will list down all the on-demand workflows available for respective Entity as shown below:



The user can customize the rest of the actions according to their requirement. For example, user can add Email, Add Task, Appointment and Quote and many more.

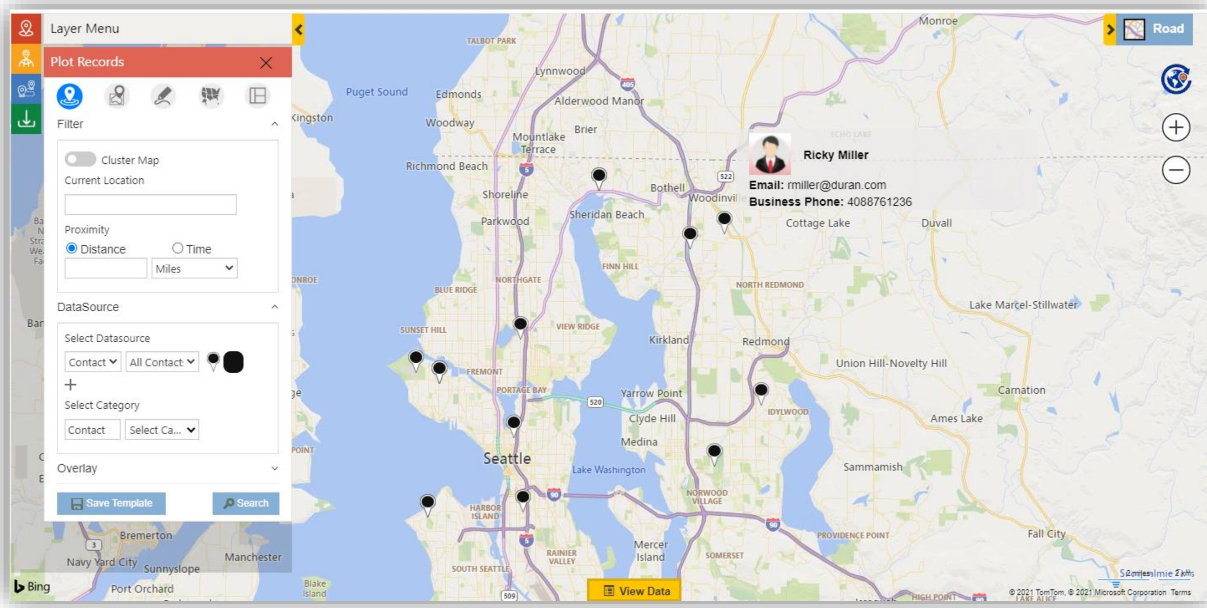
- **Email** : Send email to this record
- **Add Task** : Add task to this particular record
- **Appointment** : Schedule appointment with this record
- **Quote** : Create Quote related to the plotted entity record



The user can define these actions under 'Advance Settings' in Entity Maps. ***Go to Setting > Entity Map > Select Required Record > Advance Settings > Tooltip Card Actions*** or refer to 'Setup Entity Map' section of Installation Manual for further instructions.

Hover

User can hover on Dynamics CRM Records plotted on the map to have a quick glance at its details and the record image. The user can have a maximum 6 different attributes here apart from the title attribute. Refer to the 'Setup Entity Map' section of Installation Manual for steps to configure attributes and image on hover.



Reset Map

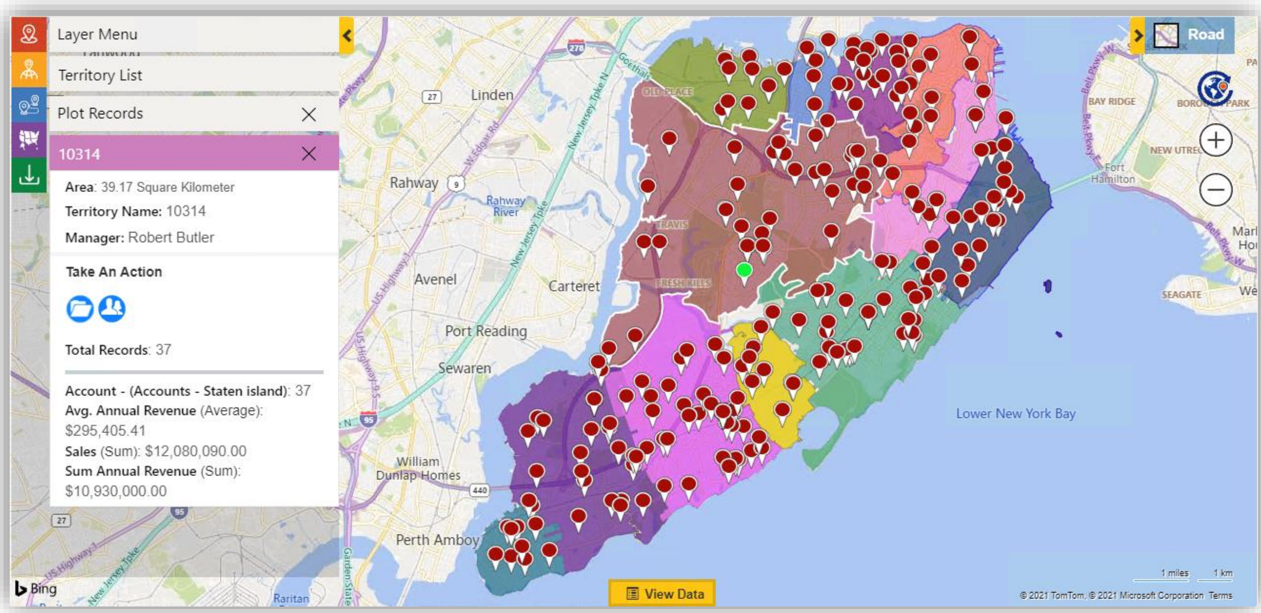
User can use the button of 'Reset Map' to reload the map with the initial Detail map settings.

Note:

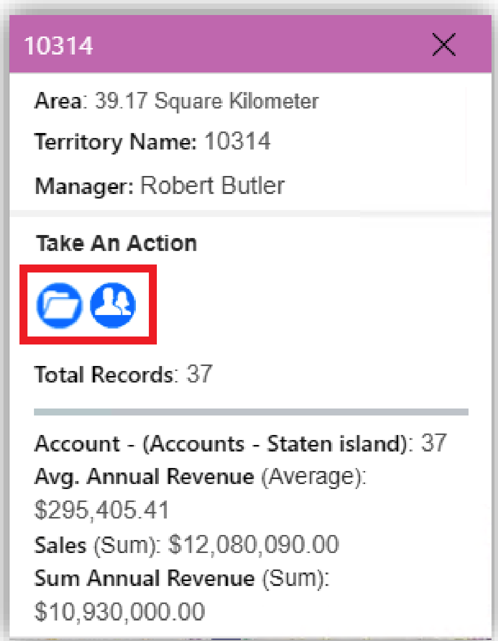
- ***This action will clear all the data plotted on map***
- ***The refresh map button will show the same data on the map in the following conditions:***
    - ***Expanding the map or plotting a route from a dashboard***
    - ***Using the map button from an individual Entity record page***
    - ***Plotting a route or a template***
    - ***Plotting records by selecting the records from the Entity records page***
    - ***User had set a default template for the Detail map***

Summary Card

The user can click on any enclosed area to get the summarized information of the plotted records in that area in a summary card. The area clicked will get highlighted and the respective data will be visible in the data grid. The user can customize the settings for this under the Summary card section in the respective 'Entity Maps'. Refer to 'Setup Entity Map' section of Installation Manual for further details.

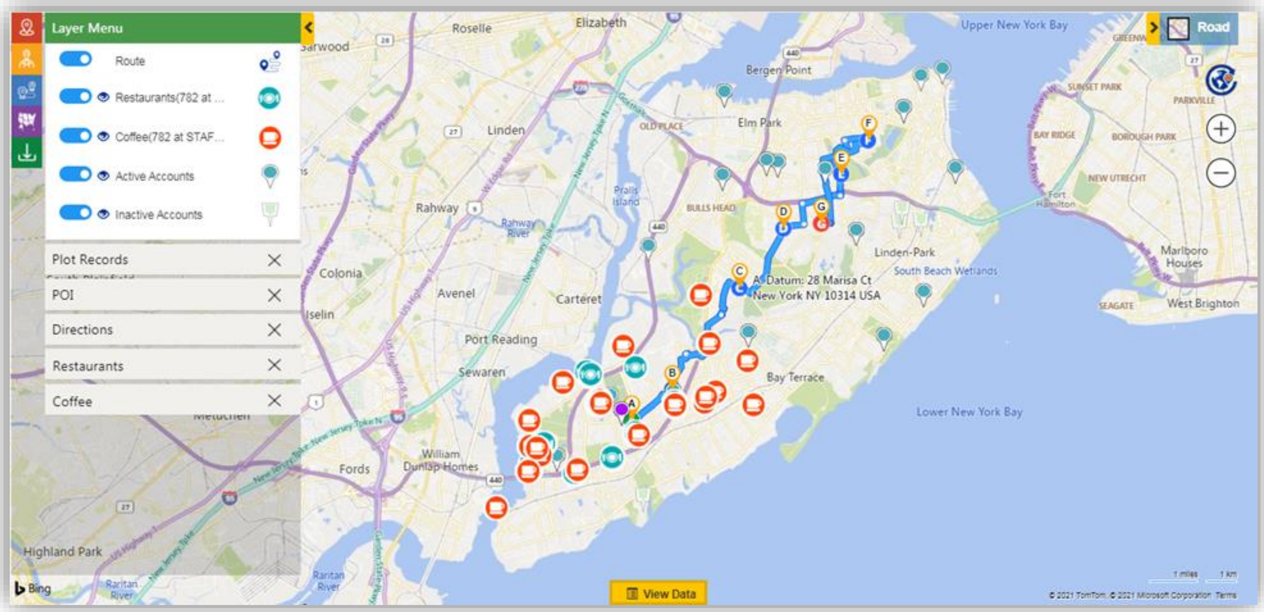


With territories plotted on the map, Summary card also provides a button to 'Open Record' that can be used to open the respective territory from the map itself and 'Change Manager' to change the Territory Manager for the selected territory.



Layer Menu

This helps the user to select the required data among the multiple data plotted on the map. The user can use the toggle buttons on the Layer menu card to show or hide the required layers of the data to be shown on the map without removing the same from map.



Note: Layer menu card is collapsible but a user cannot close this card exclusively.

The layer menu card will show the following icons for the respective layers mentioned:

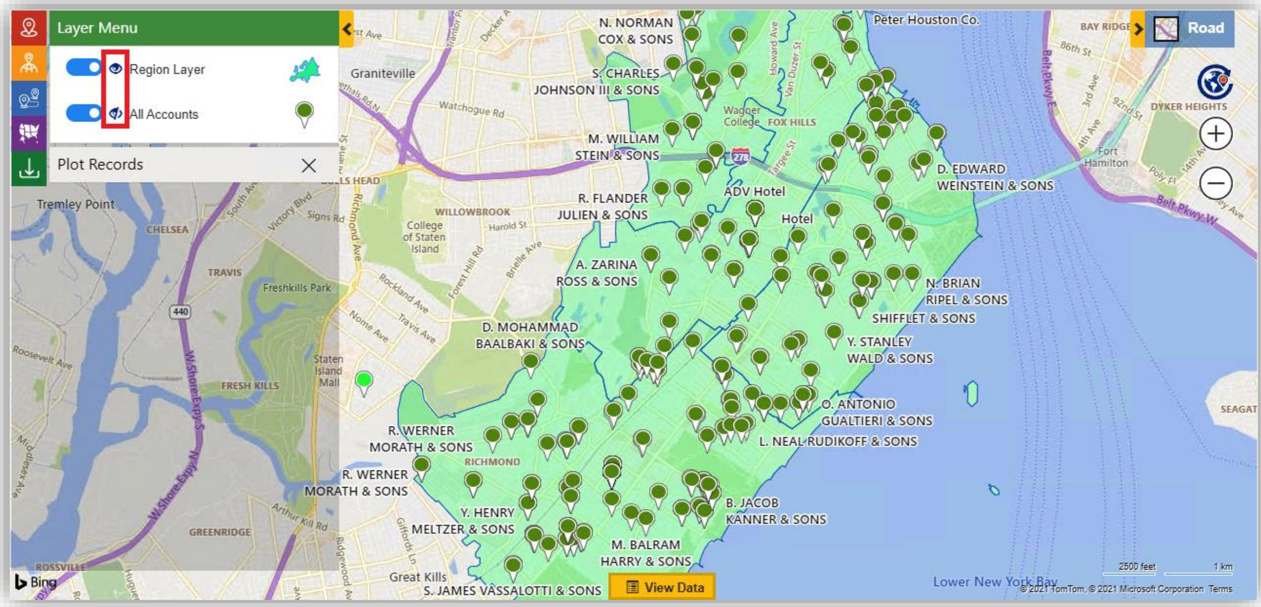
Layer type	Icon	Layer type	Icon
Data source		Territory	
Route		POI	
Proximity		Cluster Pushpin	500
Drawing Shape		Shape Operation	
Region Shape		Overlay- Shape file	
Plot-child		Territory Management – Shape file	

Note:

- ***Layer icon for Data source layer, POI layer and Plot-child layer will change depending upon pushpins visible on map***
- ***If category is selected in the plot card, the layer menu card will show only the default pushpin for the Data source layer***

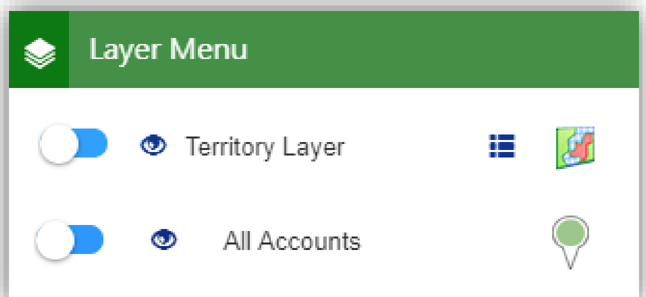
Show/Hide Labels

User can click on the 'Show label' button to view the labels for the pushpins, regions as well as territories plotted on the map. User can again click on 'Hide Label' to hide the labels showing on the map. The option for showing/hiding labels is available for every individual layer of data plotted on the map.

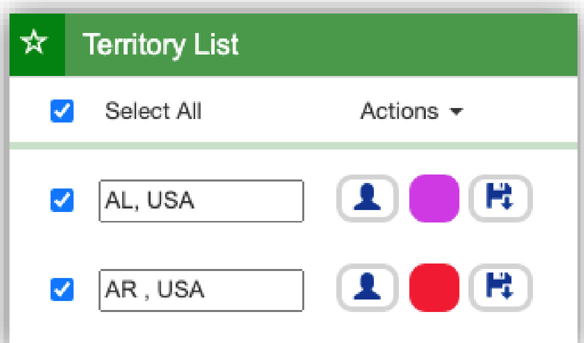


Note: Show Labels is available for less than 5k records.

Show/Hide Territory List



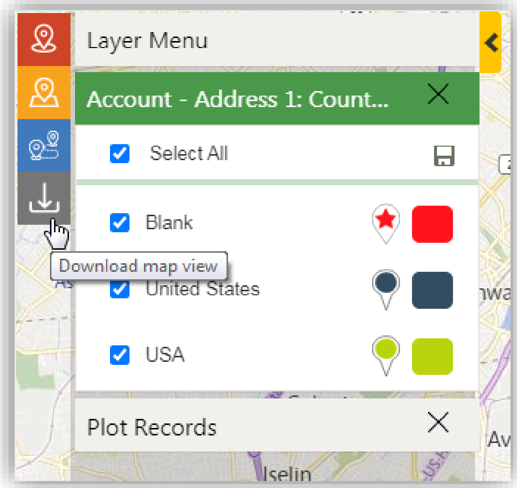
With territories plotted on the map, layer menu will also show an option of Show/Hide List for the layer of territories. User can click on the show/hide list button option to open the list of territories plotted on the map.



User can select or deselect the territories which are required to be plotted on map. User can further change the name, select a color and select the manager for the respective territories and also save the same with the 'Save' button within the 'Territory List' card.

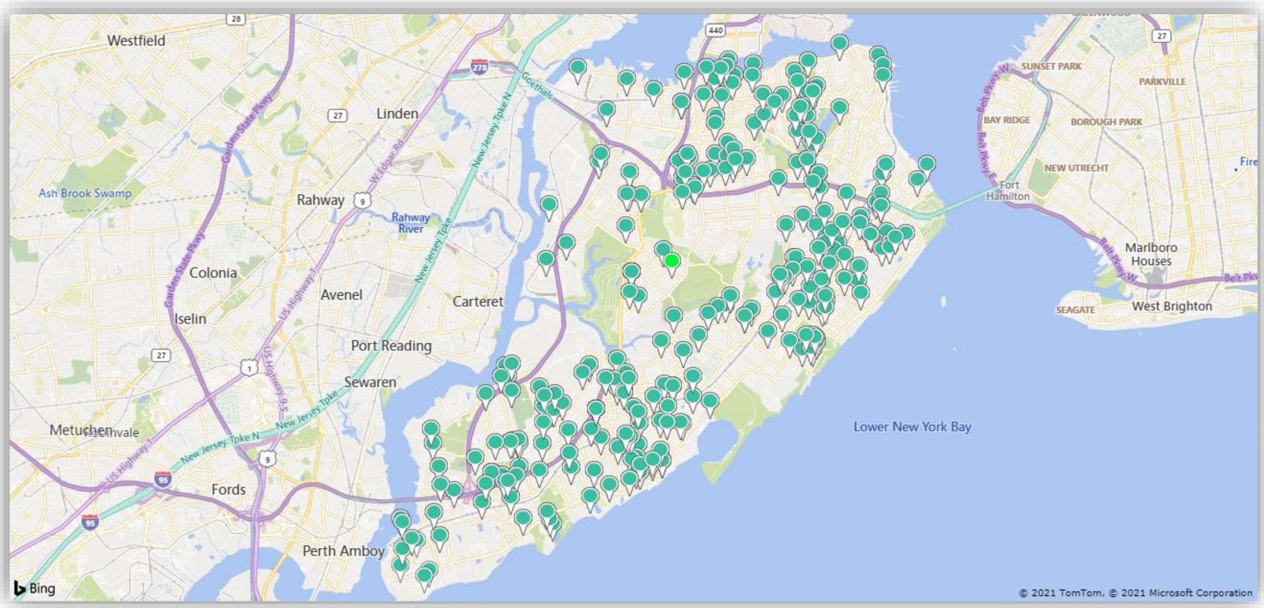
Download map

Using the Download map button, the user can download the map as visible on the screen.

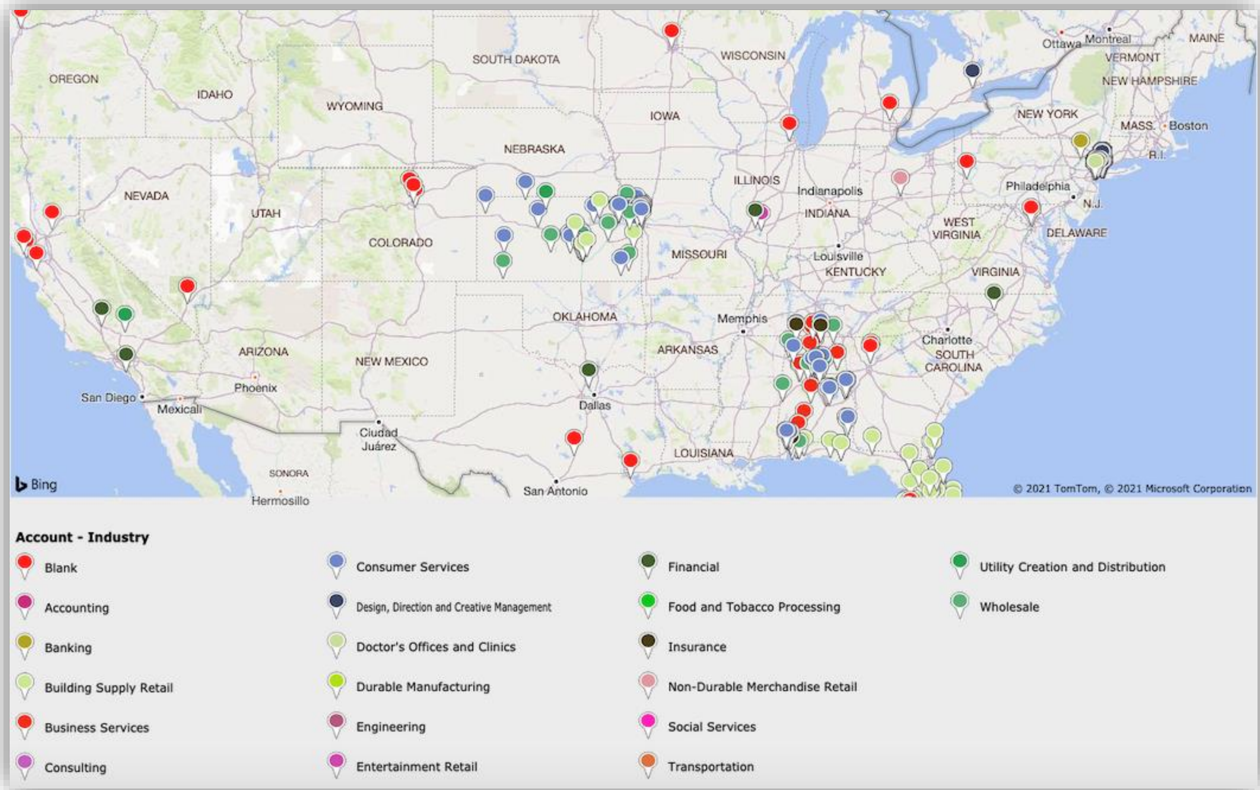


> ***Note: Download map is not supported for Internet Explorer.***

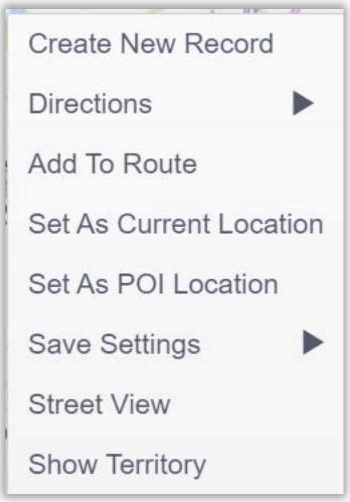
This helps the user to get the map download for using offline.



If the user has plotted data with categorization, the map will be downloaded with a legend showing the categories.

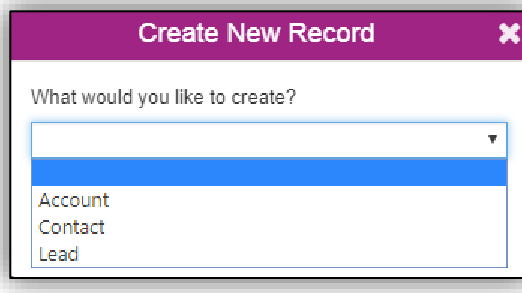


Contextual Menu



User can right click on the map to open Contextual menu. It provides commonly used features in Dynamics CRM like creating a new record, set origin/destination or selecting map zoom level on the map, etc. The contextual menu provides the following options:

<u>Create New Record:</u>
User can right-click anywhere on the map or POI result icons and create a record for that particular location. This will save the record with the details of the address and the geo-coordinates (Latitude & Longitude).



Note: Create new record option will not available for existing record pushpin

<u>Directions</u>:

- Set As Origin: This option will set the address of the pushpin/map location as the start location of the route.
- Set As Destination: This option will set the address of the pushpin/map location as the end location of the route.

<u>Add to Route</u>: This option will set the address of the pushpin/map location as a middle waypoint(s) of the selected route. For example, the user has selected Point A & B as orgin & destination respectively for a route and now clicks on the 'Add To Route' option, the Point B will remain as the destination and will become the Point C. The address of the selected pushpin will become the Point B of the route.

<u>Set as Current location</u>: User can click on any pushpin or anywhere on the map to set the address of the pushpin or the location as the current location respectively, which can be used for Proximity search.

<u>Set as POI Location:</u>
This option helps the user to set the location for the Point of Interest (POI) searches like ATMs, restaurants, Airports, etc. Setting the POI location, user can search for various Geo-tagged & Bing mapped locations around it.

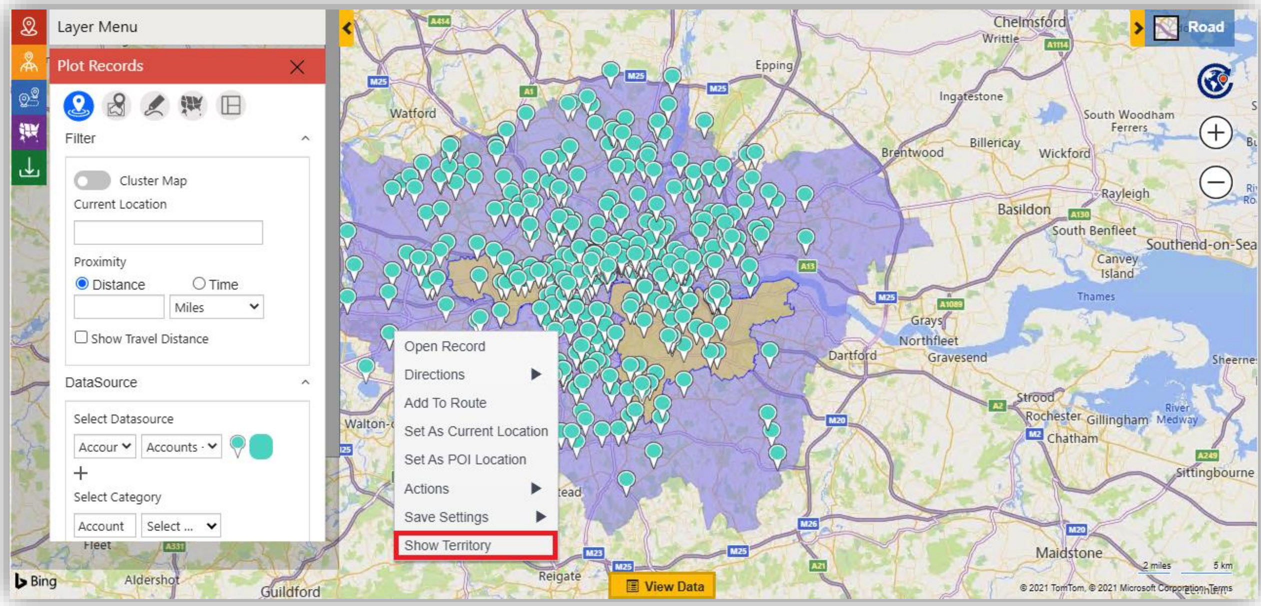
<u>Save Settings:</u>
User can save the default settings for the following options. These settings will be saved in the Configuration details record of the user:

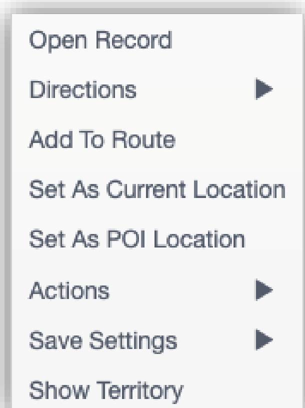
- Current location: This will save the location as the default current location.
- Map zoom level: This sets the zoom level and map center for the Map. After this setting is done, whenever the user will open the Detail Map, it will be zoomed down to the location set here.

- Origin: This sets the location as the default origin.
- Destination: This sets the location as the default destination

Street View:
User can right click on map to get a Street view option. This will open a 3D view of the Map

Show Territory:
User can right click anywhere on the map or at any record to select the option 'Show Territory' from the Contextual menu. This will plot the respective territory to which the selected location or the record belongs to. Further, user can click on 'Hide territory' from Contextual Menu to hide the plotted territory.





User can also click on any pushpin to get a contextual menu. Along with the options mentioned above, this will provide the following options:

Open record: User can open the record form right from the map and can further edit the details for the record.

Actions: User can perform the following actions on the pushpin selected:

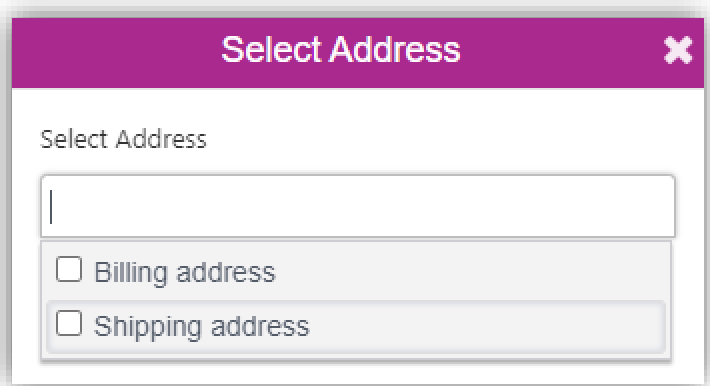
- Add Task: This option helps the user to create a new task in Dynamics CRM regarding the selected record.
- Schedule Appointment: The user can use this option to create a new appointment for the selected record.
- Manage Territory: The user can assign/re-assign a territory to the selected record from the map and hence can manage the territory.

Multi-Address Plotting

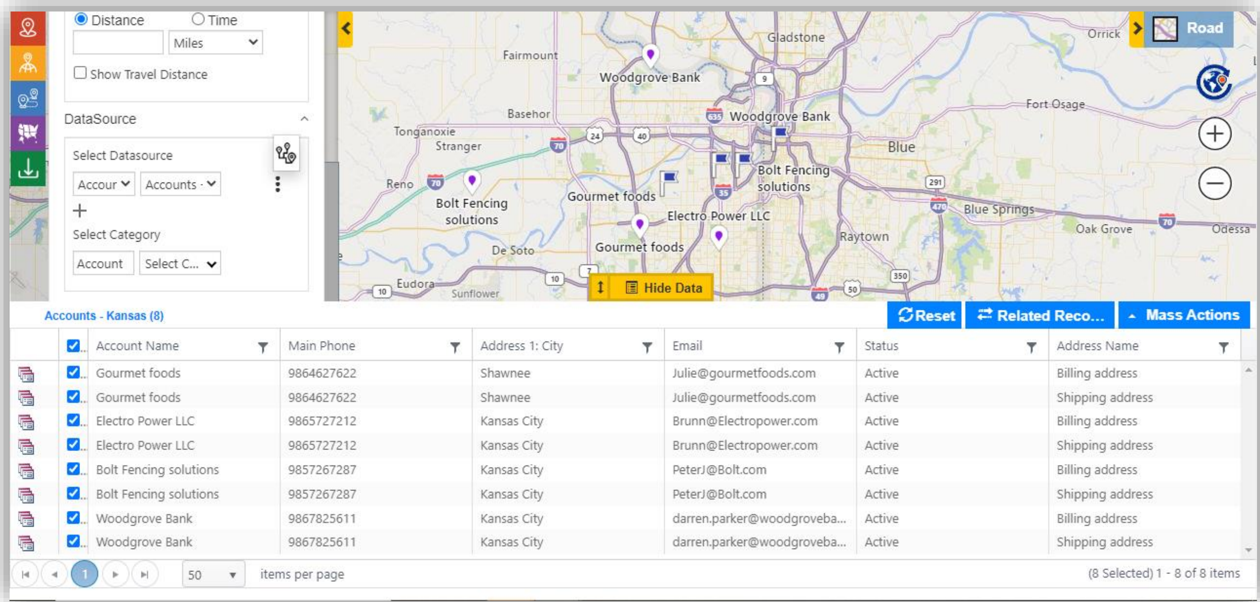
If the entities in CRM contains more than one addresses, users can plot the records based on multiple addresses at once. This feature will enhance the visualization experience of those records that have presence in multiple cities or states etc. Admins can configure required addresses within the Entity map of the entity so as to view the option of selecting the addresses to plot the same on the map. Please refer to the Entity map section of the Installation manual to know how to configure multiple addresses in Maplytics to plot records based on multiple addresses.

While selecting the Datasource and View within the Plot records card, user can click on the 'Select address' to select the addresses based on which they would like to plot the records. This will open the window that lists out all the addresses saved within the 'Address Attribute' Section of Entity map. User can select the required addresses and click on Search.

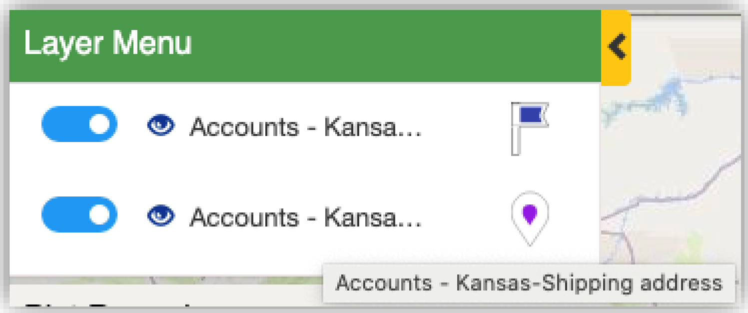
> ***Note: The icon for 'Select Address' will only appear if multiple addresses are configured in the Attribute Mapping section of the respective entity map.***



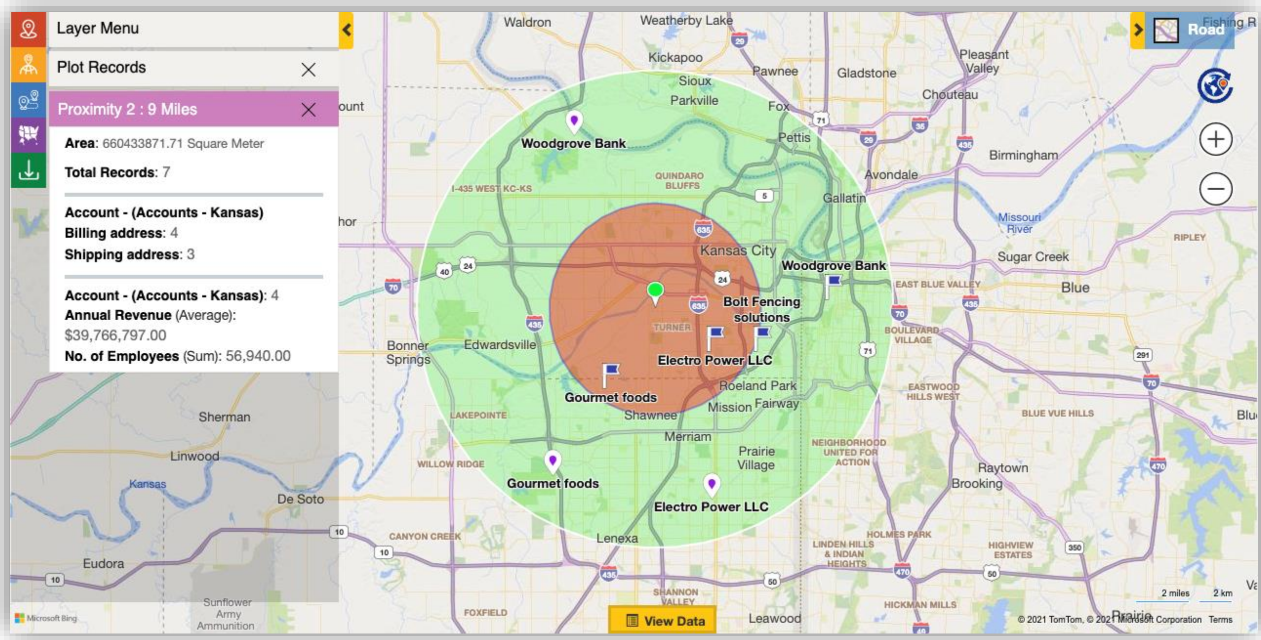
The below screenshot shows the Accounts plotted based on the two addresses, Billing address and Shipping address. Here 4 records have been plotted and due to the two addresses of each of the records the map is showing 8 pushpins in total.



The Layer menu will list both of the addresses, the Billing address and the Shipping address for Accounts.



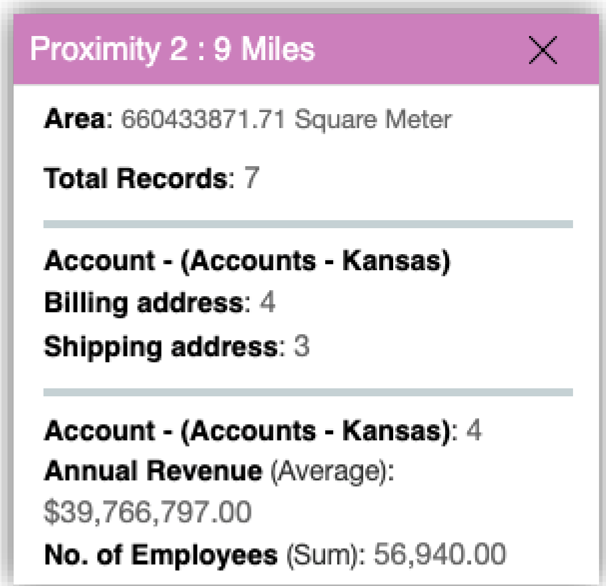
While working with any enclosed shape like proximity, drawn shape or a territory, user can click on the enclosed shape to view the Summary card. The below screenshot shows Proximity search performed on the above Accounts that were plotted based on two addresses Billing address and Shipping address.



With the click on the outer circle it is showing the Summary card for the same. Within the summary card, the Total Records will show the count based on the total number of pushpins plotted on the map i.e. 7 pushpins in total.

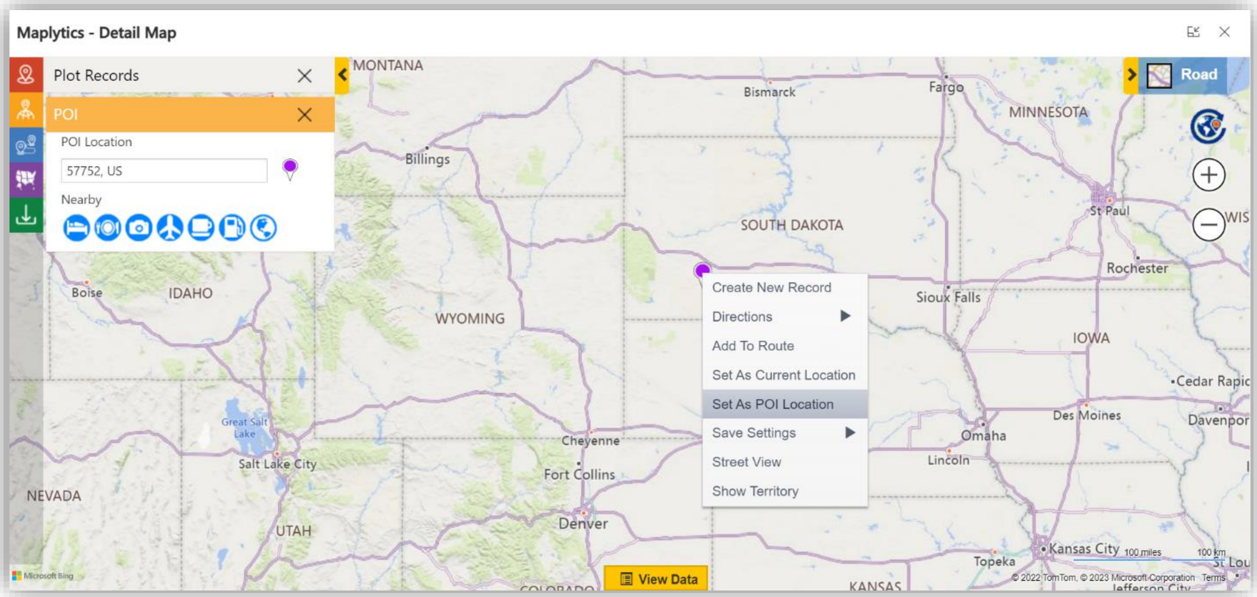
The second section of the Summary card shows the classification of the count of records based on the two types of the addresses i.e. 4 pushpins are plotted based on the Billing address and 3 pushpins are plotted based on the Shipping address.

In the third section, it shows the summary of the Annual revenue and the no. of Employees based on the actual(unique) count of the records plotted i.e. 4 Accounts.

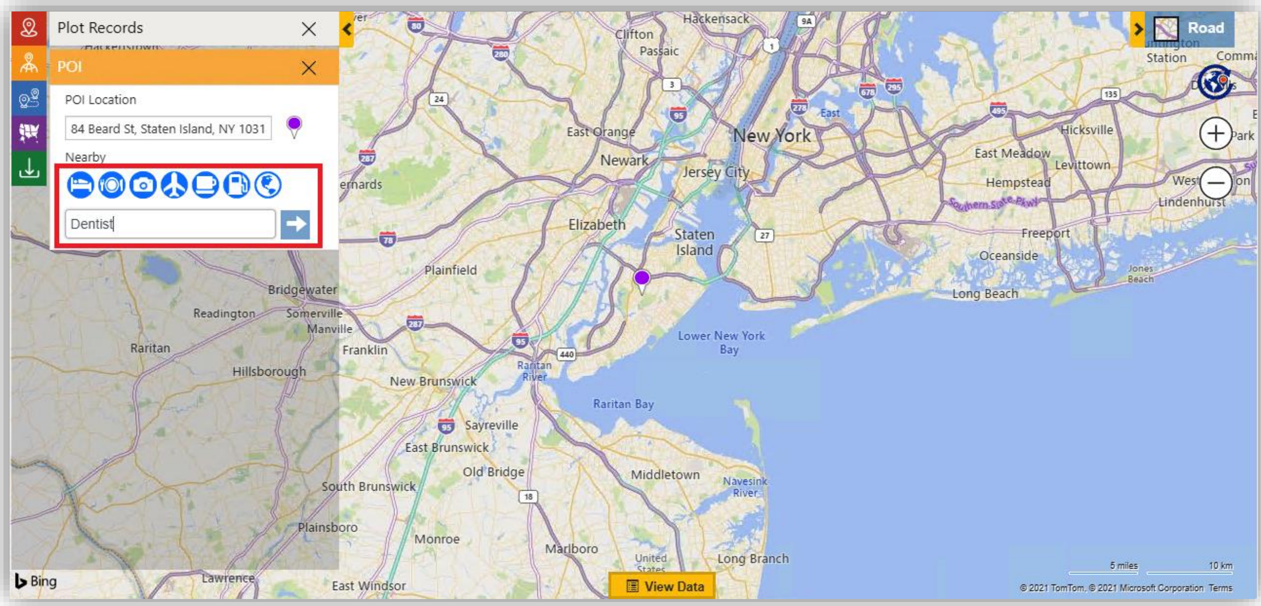


Point of Interest (POI) Locations

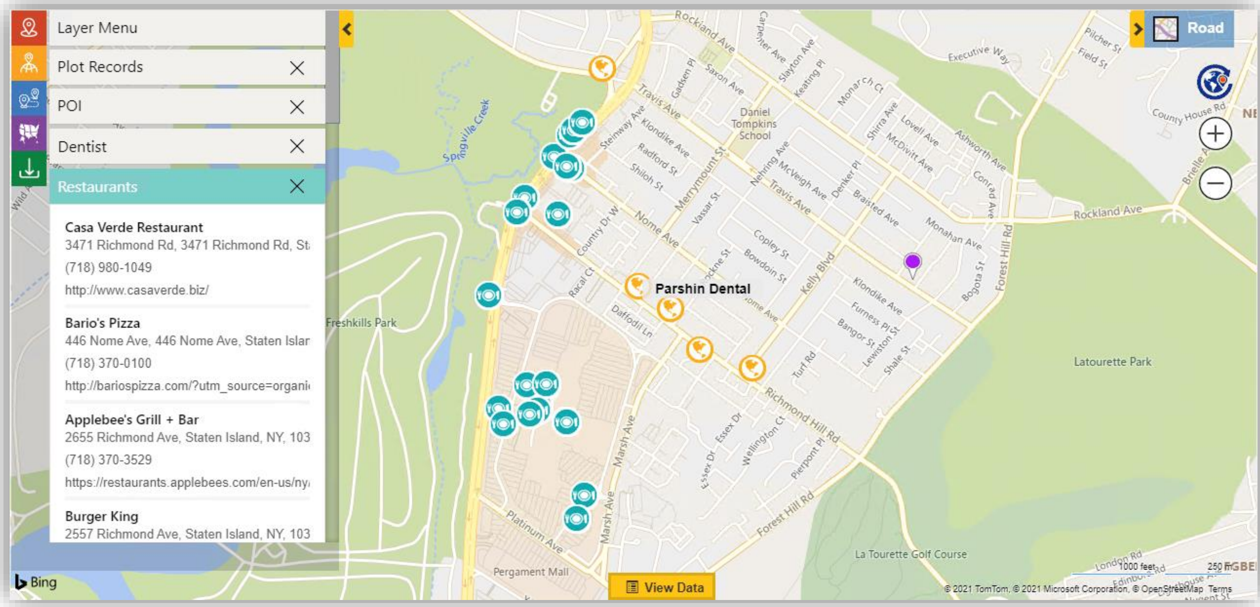
User can search for any geo-tagged Bing-mapped locations called points of interest (POI) like ATMs, restaurants, hotels, coffee shops, etc. near a specified location. This can also be plotted alongside the CRM data. User either can right-click on map to set the location as the POI location or can directly enter the required location in the POI card.



User can either click on any of the POI icons or manually search for required POI location by entering the respective keyword in the search bar.

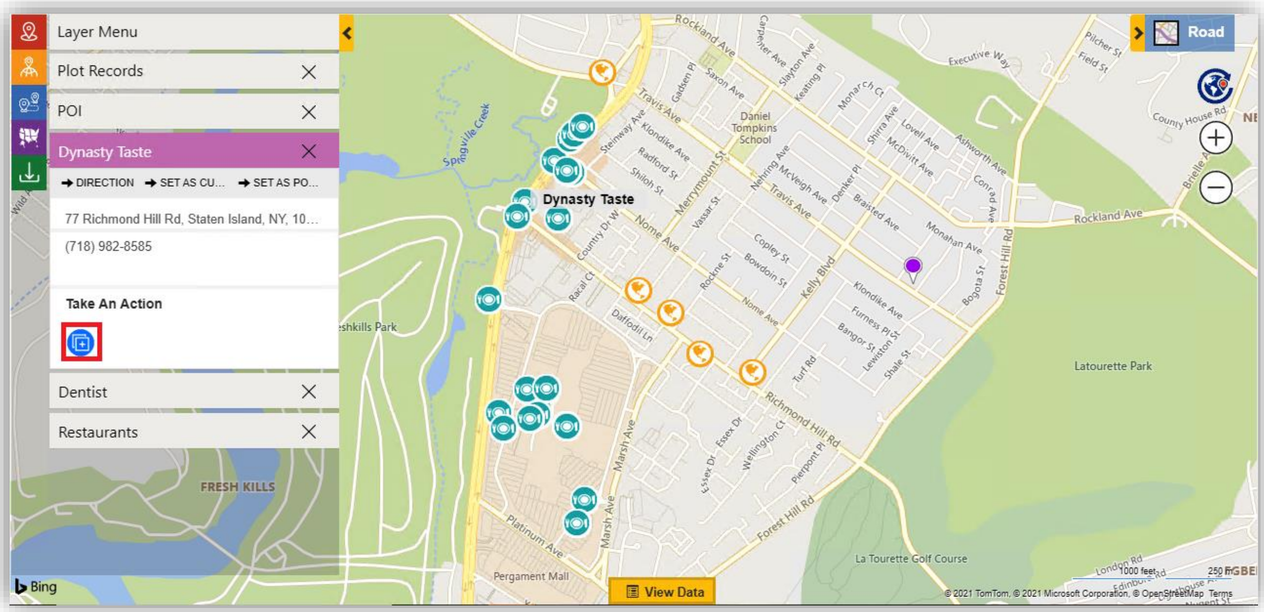


Based on the selected POI location icon or the entered keyword, the results will be loaded.



> ***Note:***
>
> - ***The option to enter a keyword to search POI locations is only available while searching in USA.***
> - ***For each POI location search, only 25 locations will be plotted on the map.***

Apart from plotting POI data, user can also add the plotted businesses in Dynamics CRM record as leads, accounts, contacts, or any custom entity by using the Create New Record option in the POI card or Contextual menu. (Refer to Contextual menu section)



Proximity Search

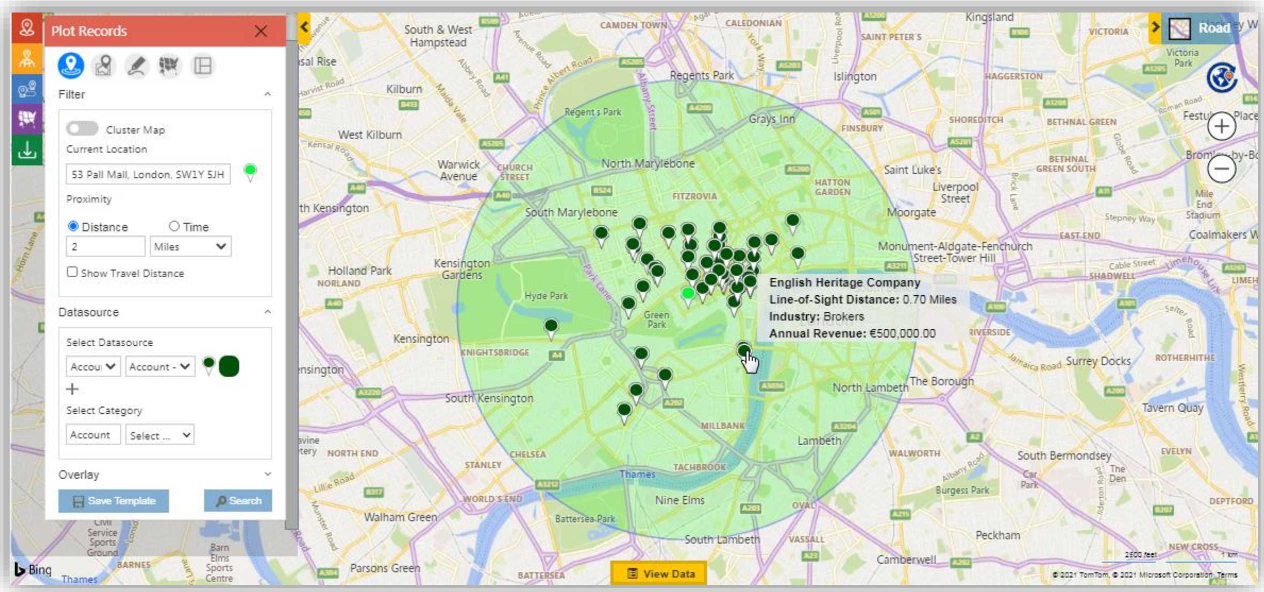
User can search for the nearby records around a required location using Proximity Search. This will help the users to understand the proximity of the nearby records in regards to the selected location. There are two different options to perform a Proximity Search:

1. Proximity by Distance
2. Proximity by Time.

<u>Current Location:</u> User can select any location or a record as the current location. This is used to specify the center point for the Proximity search. By default, this field displays the address stored in the Maplytics personalized record of the logged in user. This is always represented by a green color pushpin on the map and also indicated right next to the current location message box.

Proximity by Distance

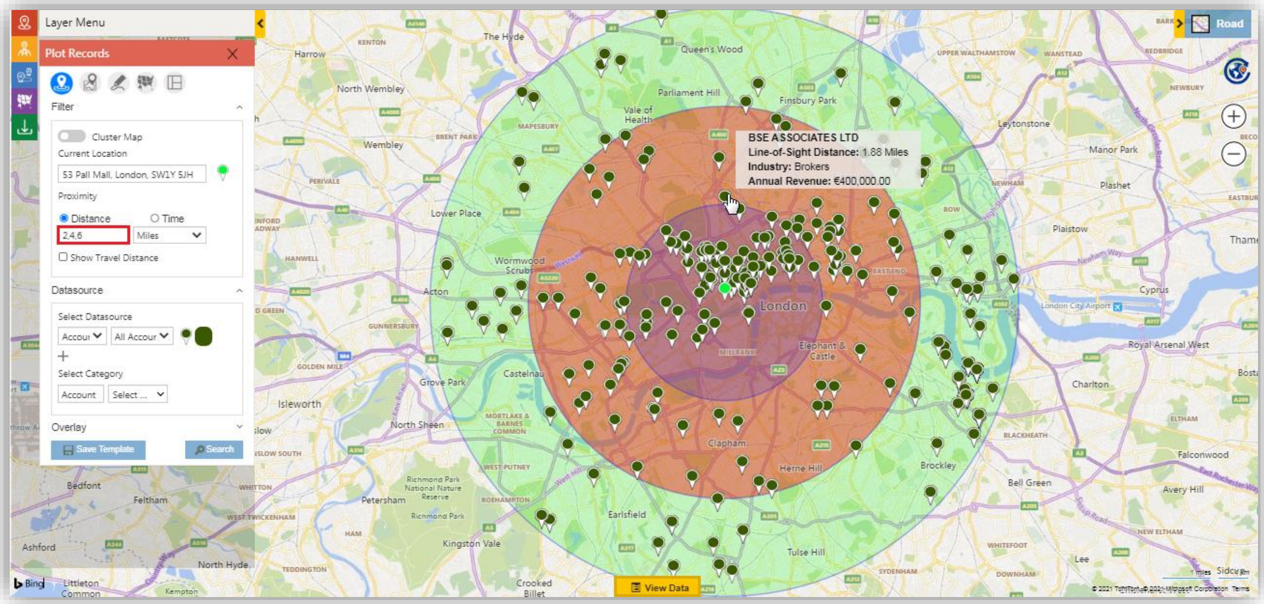
This option will calculate the straight-line distance between the current location and all the points which fall in the proximity parameter as shown below:



Enter the radius for the Proximity search. The user can also add decimal values with a scale of 2 for the radii. The Proximity can be provided either in Miles or Kilometers. The User can also hover over a pushpin and see the distance from current location.

Concentric Proximity Search

This new addition to Proximity based on Distance allows users to perform up to 3 proximity searches simultaneously. The user needs to enter the distance values separated by a comma (,) and all the points that fall in the defined proximity parameter will be plotted.



The Concentric proximity zones are represented by different colors for easy visual analysis. The user can also click on individual proximity zones to highlight the circle and open the Summary Cards for that proximity parameter.

The user can also filter the data points based on the proximity zone and their proximity distance from the current location in the 'View Data' grid.

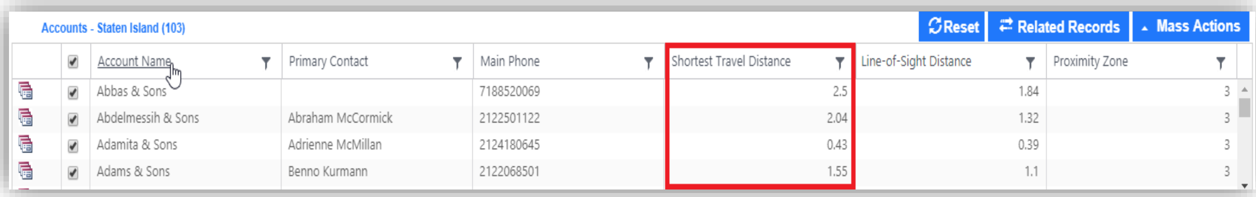
Accounts - Staten Island (130) — Reset | Related Records | Mass Actions

Account Name	Primary Contact	Main Phone	Shortest Travel Distance	Line-of-Sight Distance	Proximity Zone
Abbas & Sons		7188520069	2.5	1.84	2
Abdelmessih & Sons	Abraham McCormick	2122501122	2.04	1.32	2
Adamita & Sons	Adrienne McMillan	2124180645	0.43	0.39	1
Adams & Sons	Benno Kurmann	2122068501	1.55	1.1	2
Aguayza & Sons		2123082665	3.21	2.96	3.56
Aiello & Sons		2128165282	3.88	2.85	3.56

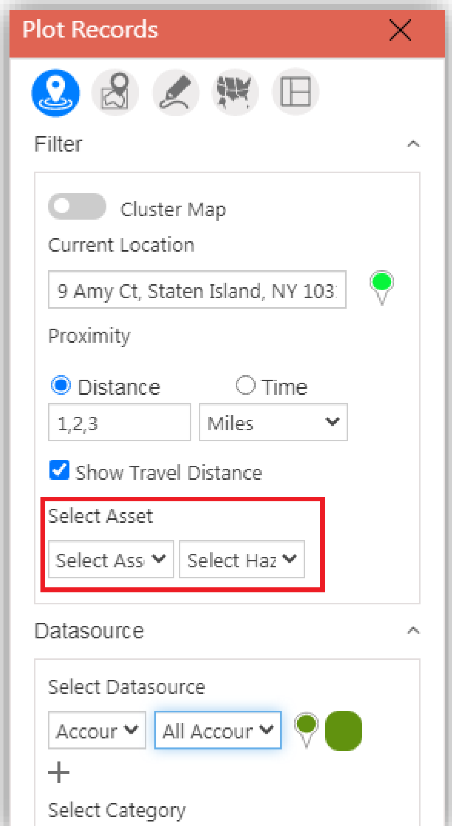
> ***Note: User can enter integer value from 0.1 to 2000 for distance proximity search.***

Show Travel Distance

While performing Proximity Search by Distance or Time, if the user wants to see the actual travelling distance from the current location till each of the individual pushpins, they can select the checkbox of 'Show Travel Distance' to view the Shortest Travel Distance on the hover and view data grid.



Show Travel Distance for Truck



Once the user selects the option of 'Show Travel Distance', user will get an option to an Asset and Hazardous material. This will provide the list of the assets created in the Asset entity within the CRM. If the user wants to search for the shortest travel distance for truck, they can choose to select the respective Asset and if any Hazardous material is being carried out or select none from the following list:

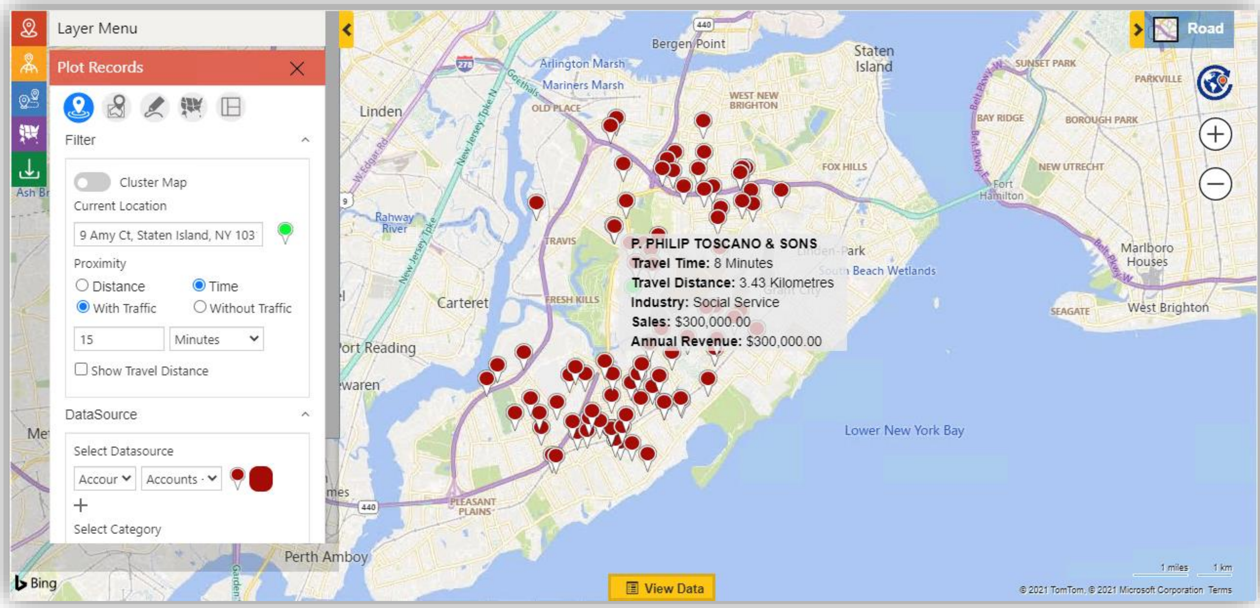
- Combustible
- Corrosive
- Explosive
- Flammable
- Flammable Solid
- Gas
- Goods Harmful To Water
- Organic
- Poison
- Poisonous Inhalation
- Radioactive
- Other
- None

Note:

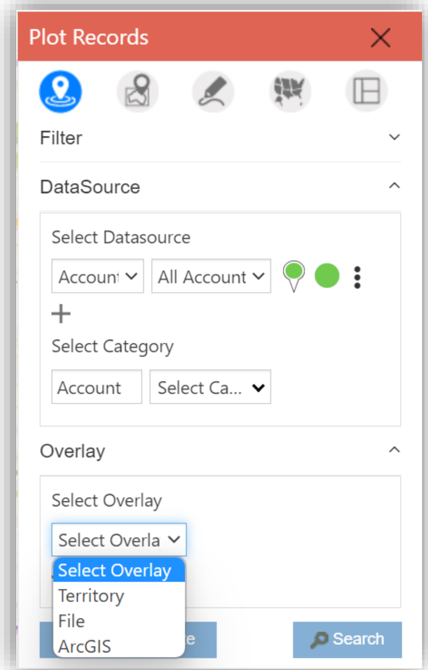
- ***If user has not selected any asset here, by default, the travel distance will be calculated as per driving by car.***
- ***The feature of 'Show Travel Distance' based on driving by truck uses a separate key. Every time the travel distance is searched based on driving by truck, 3 transaction limits of the key are consumed for each pushpin that appears within the proximity.***

Proximity by Time

This option will calculate how many points fall in 'x' minutes or hours of driving distance from current location. The Proximity can be provided in either Minutes or Hours. The User can also hover over a pushpin and see the distance from current location.



Overlay



This helps user to view the Dynamics CRM records along with shape/excel files, existing territories, and ArcGIS Online feature layers plotted on the map. User can also view the 'layer menu' to select or deselect the layers so as to show or hide the same respectively. Using Overlay user will easily be able to understand and analyze the data spread in required shape file regions and territories.

User can select the following three options:

- Territory – This option helps the user to select among the list of existing territories
- File – This option helps the user to select among the list of shape/excel files. The file should be in a territory in order to be visible in the list.
- ArcGIS - This option helps the user to select from among the live feature layers hosted by ArcGIS Online. The file need not be in territory and can be used even with real-time changes.

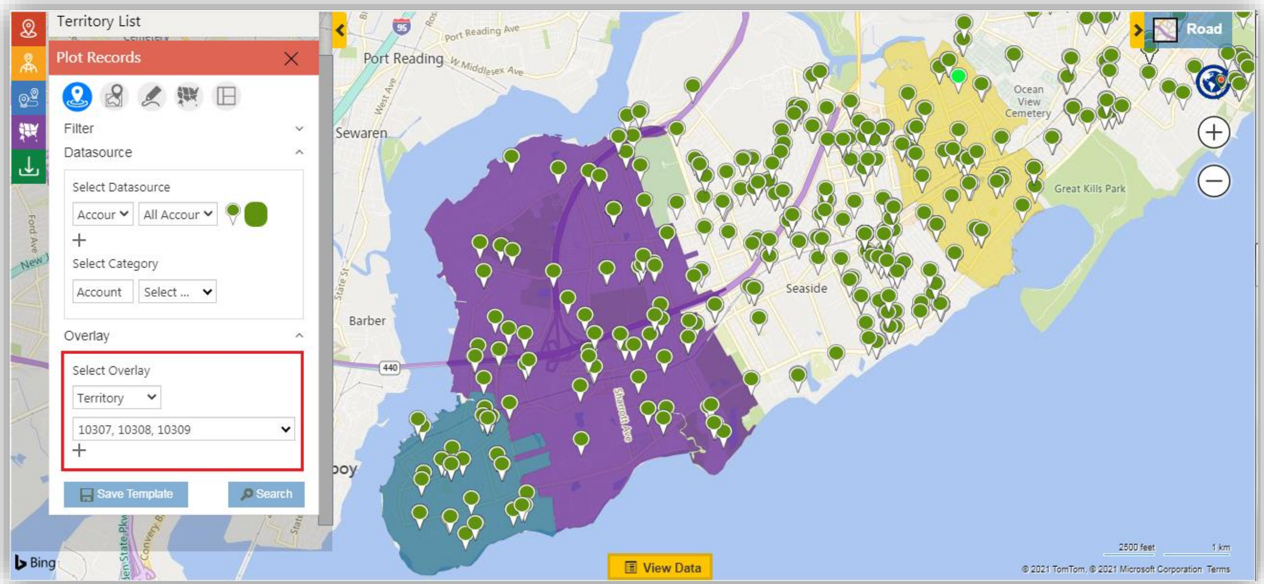
Let us consider a Sales and Marketing Manager of a Food and Beverage brand planning on Sales Area expansion. He would want to know the demographic of the Target Group in the new area. Knowing the information about the population, their age groups, spending capacities, buying patterns, sex ratio, etc. would be helpful in categorizing them and designing marketing campaigns for them. The sales processes could then be planned to cater to young adults, working population, senior citizens, and so on. Strengthening the location data with demographics would help in better decision making. With the overlay feature, the Manager would be able to-

- View the existing territories within the new area by plotting them over the map and know the head count in all the territories along with other details
- Import external shape/ excel files, save them in CRM and plot the same over the map to view the territorial data in-depth, or
- Seamlessly integrate the ArcGIS Online feature layers with the Map and view the collated data of the new area

Viewing this organized data spread in the new sales area he might decide on targeting 3 main territories with the right population age group and create marketing and selling plans for the young adults there.

Overlay by Territory

User can select the option of Territory and select the territories they want to plot. Along with this, they can also select any datasource & view. This will help them view the datasource records along with the Overlay of territories selected.



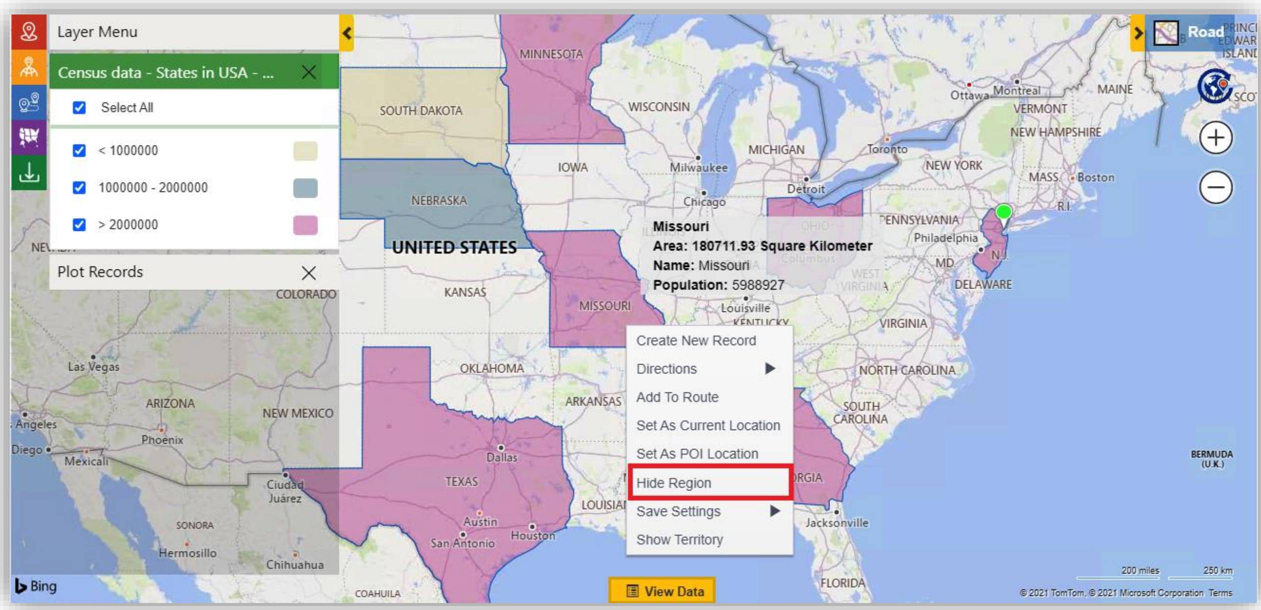
Territory List
Plot Records
Filter
Datasource
Select Datasource
Accour
All Accour
Select Category
Account
Select ...
Overlay
Select Overlay
Territory
10307, 10308, 10309
Save Template
Search
Road
Port Reading
Sewaren
Barber
Seaside
Great Kills Park
Ocean View Cemetery
View Data
Bing
2500 feet
1 km
© 2021 TomTom, © 2021 Microsoft Corporation Terms

Overlay by File

User can select a excel/shape file saved in CRM to plot the same on the map. Further users can select the following options as well.

<u>Category Attribute:</u> An attribute can be selected to categorize the regions plotted by file.
<u>Summary Attributes:</u> One or more attributes can be selected to show the same in the Summary card. The attributes selected within the 'Configuration' of the saved file in the Territory Entity will be selected by default. User can deselect them in the plot card and can select other attributes.

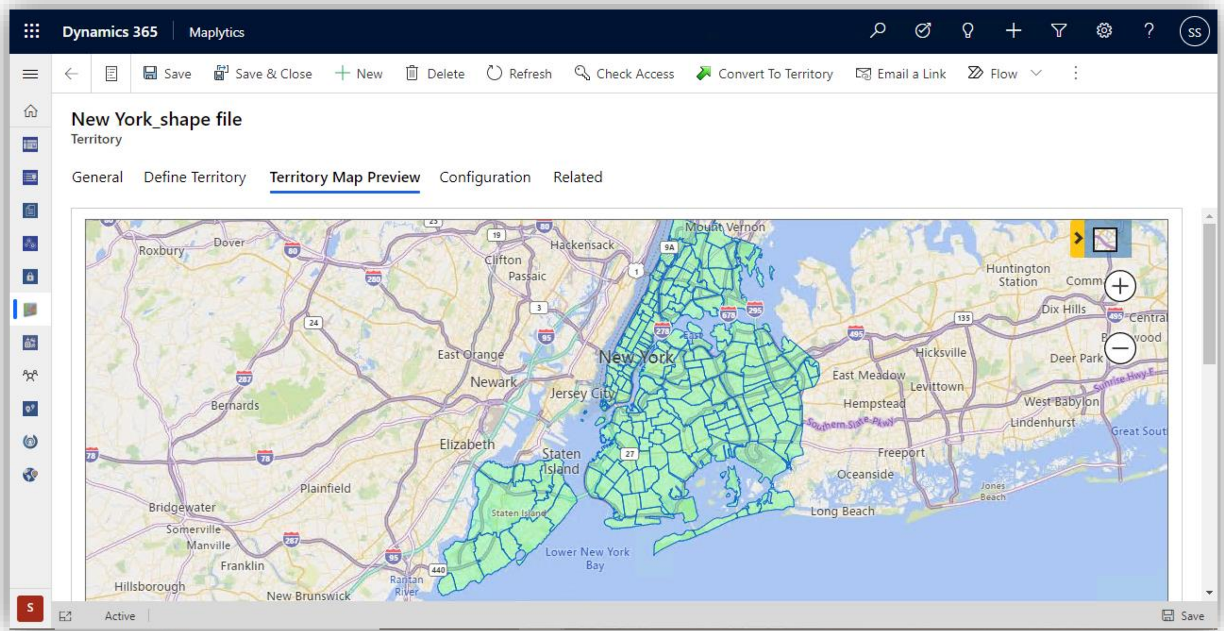
Users can also uncheck the option of 'Plot All Regions' if they do not want to plot all regions from the file. In this case, they can right click at any location on the map to select the option of 'Show region' from the Contextual Menu. This will help them to view the region for the respective selected location. User can again click on 'Hide Region' from the Contextual Menu to hide the region for the respective selected location. Further, user can also open the respective territory within which the file is saved using the 'Open record' button on the Summary card.



Save Shape/Excel file in territory

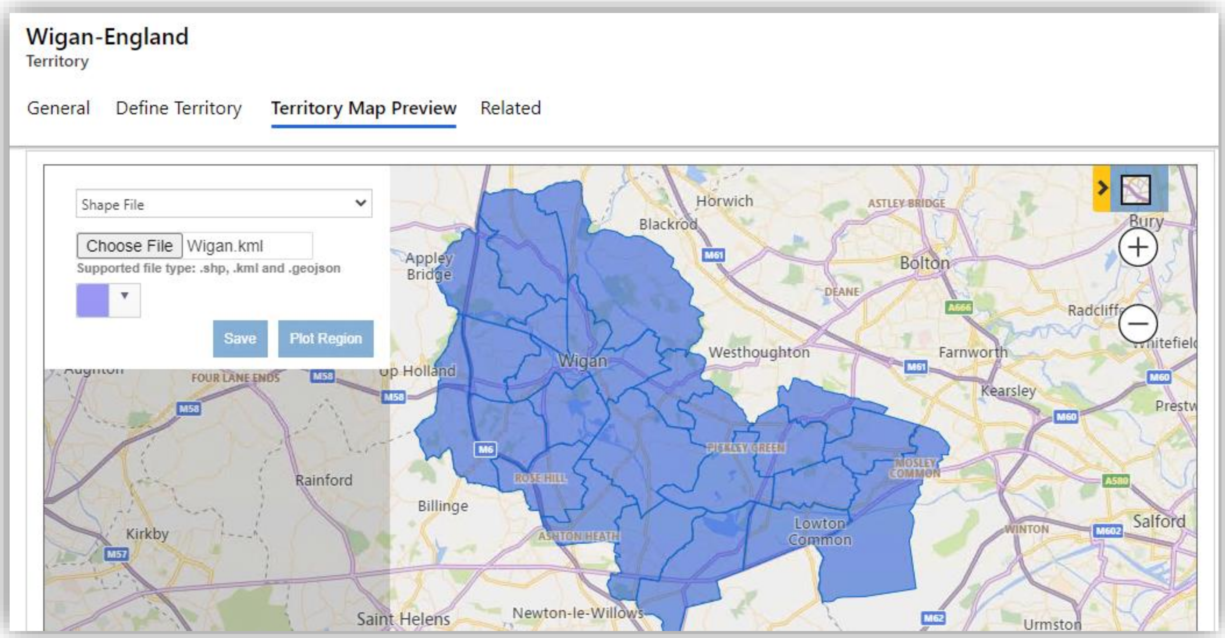
A file should be saved in a territory in order to be visible in the list of the files to be plotted as an Overlay. Follow the steps mentioned below to save the shape/excel file in a territory:

- ***Go to Settings > Business Management > Sales Territories > Create a sales territory > Save***
- ***Go to Territory Map Preview > Select Option > Shape file/Excel file > Save***



Save Shape file

Within the Territory Map preview, user can select the option of 'Shape file' and select the color to view the regions in the same.



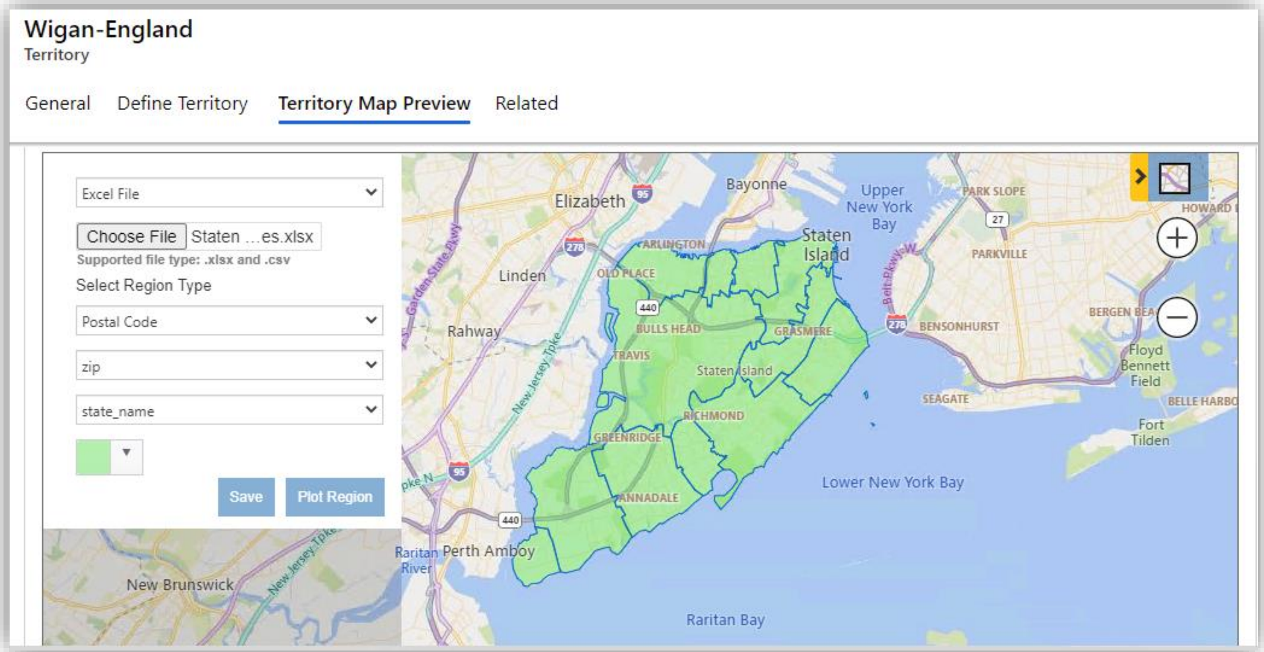
Save Excel File

Within the Territory Map preview, user can select the option of 'Excel File' to select an excel file to the territory. User can also select the color to view the regions in the same. They further need to select the following options in order to save the excel file as per their requirement:

Select Region Type: User should select the region type based on which the boundaries of the regions from the excel file is to be plotted.

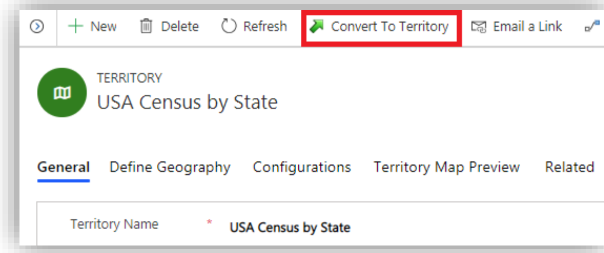
Select Region Value: User needs to select the column from the excel file that contains the values for the selected Region Type.

Select Main Region: User needs to select the column from the excel file that contains the value for the biggest region for the selected Region type in order to plot the regions accurately. For example, if the Region type selected is Postal code, so the Main Region should be preferably Country. If the column of country is not available then the column with the values for respective States or Cities can be selected.



Convert Overlay to territory

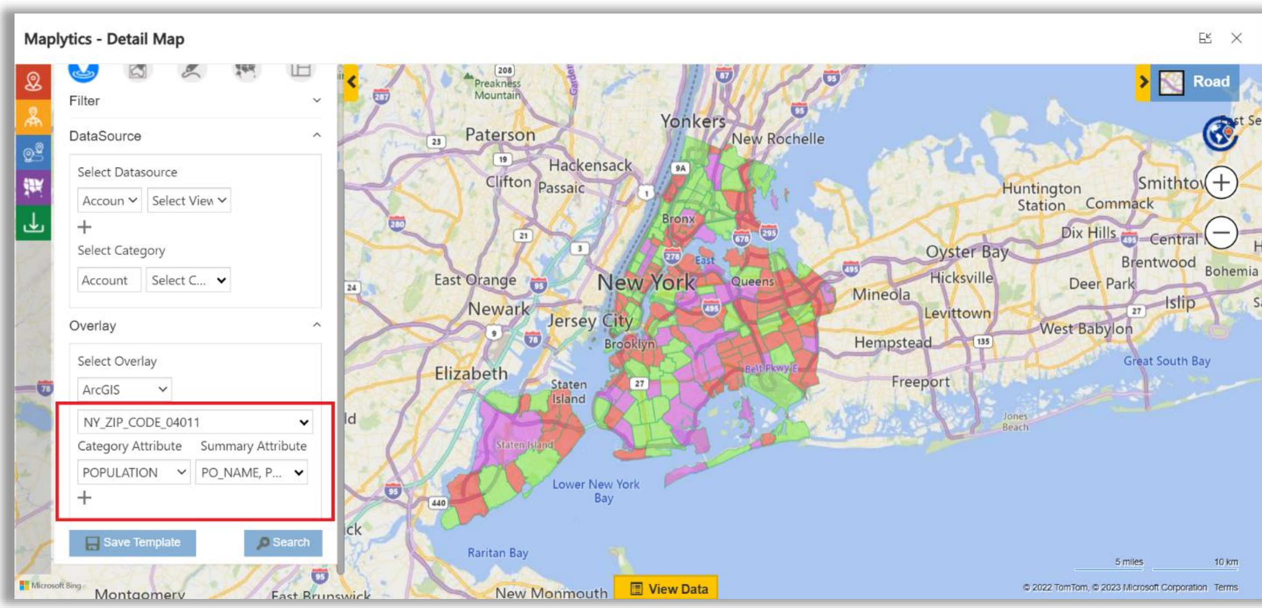
User can use this button to convert an overlay record to a territory. After the overlay record is converted, it becomes a territory which can be searched in the option of 'Territory' in Overlay.



> ***Note:***
> - ***Supported file types for shape files are .shp, .kml and .geojson and excel files are .xlsx, .csv***
> - ***In a territory, either a shape/excel file can be saved or geographies can be created***
> - ***Only one shape/excel file can be saved in one Territory***

Overlay by ArcGIS Online

User can begin with establishing a seamless integration between Maplytics and ArcGIS Online with a few configuration steps. Once done, the user can select from among the various feature layers available online on the ArcGIS portal and plot the same on the map. Further users can select the following options as well.



<u>Category Attribute:</u> An attribute can be selected to categorize the regions plotted using the ArcGIS feature layer. The plotted regions are differentiated with multiple colors. This visual representation makes regional analysis easy.
<u>Summary Attributes:</u> One or more attributes can be selected to show the same in the Summary card. All attributes will be selected by default. User can deselect them in the plot card and can select other

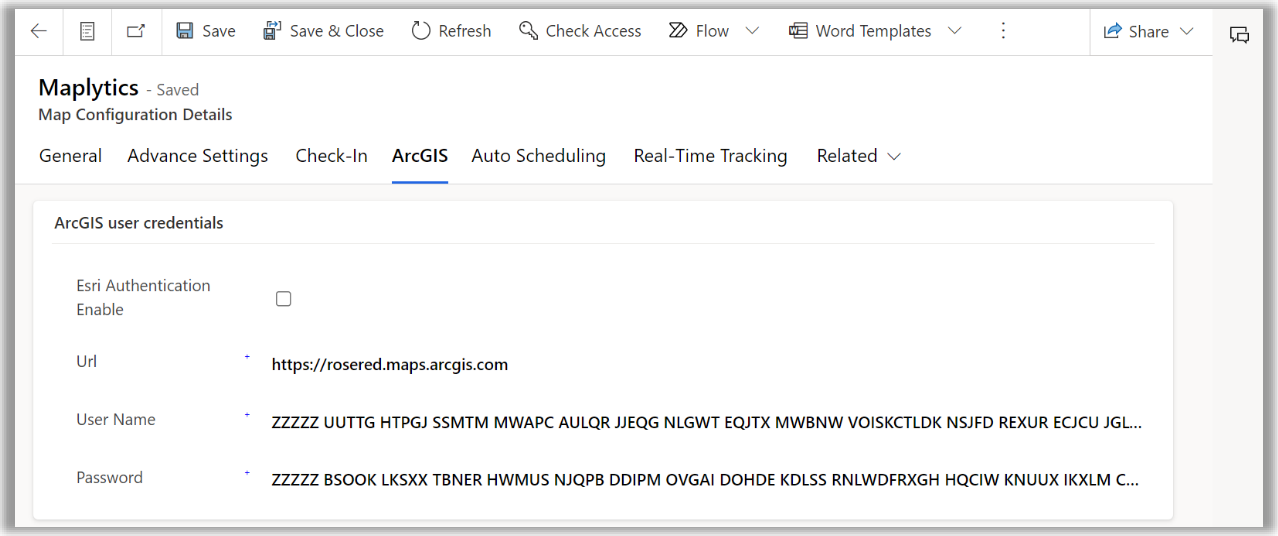
attributes. Attributes selected in summary attribute field will also be displayed when hovered over region boundary.

Integrate ArcGIS Online with Maplytics

For a seamless integration and to be able to utilize the hosted feature layers of ArcGIS Online, the user can perform the following steps-

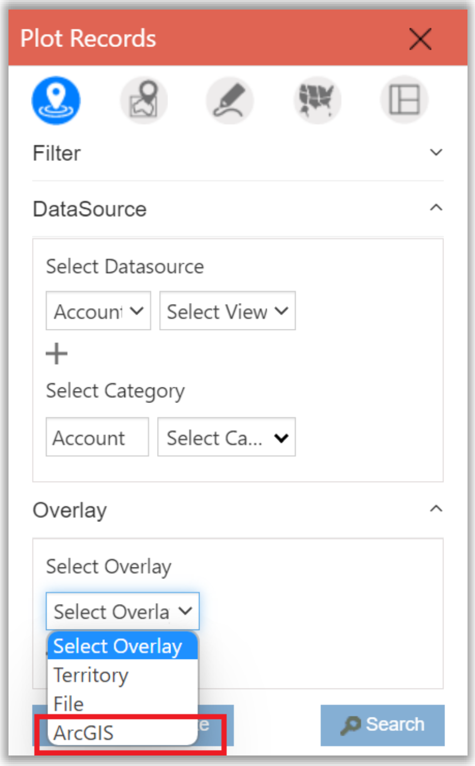
Single factor authentication

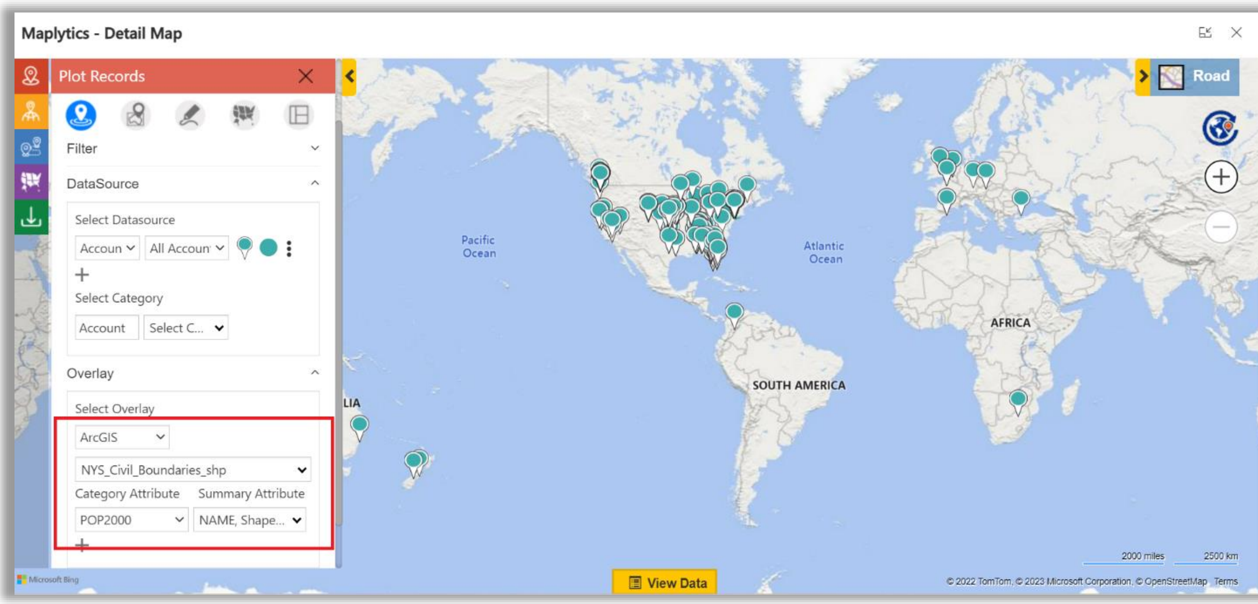
Go to Settings > Maplytics Configuration Details > Default configuration record> ArcGIS



In case the multi factor authentication option has not been enabled, the user can enter the URL from the ESRI Website, user name and password.

Once saved, the user can avail the option of ArcGIS in the Overlay dropdown.

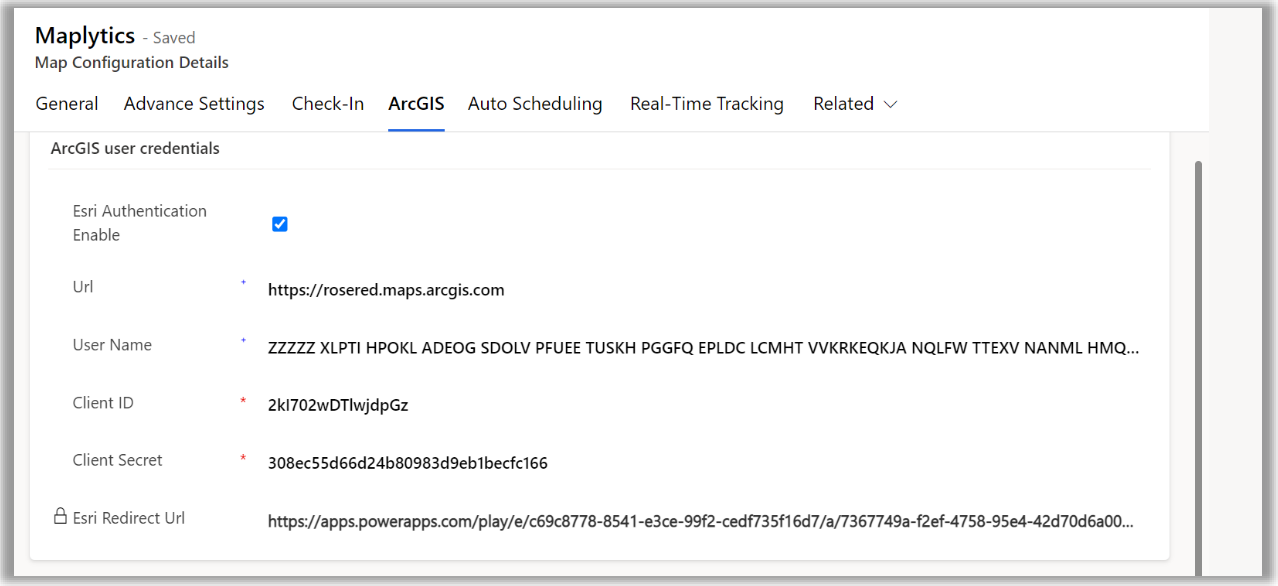




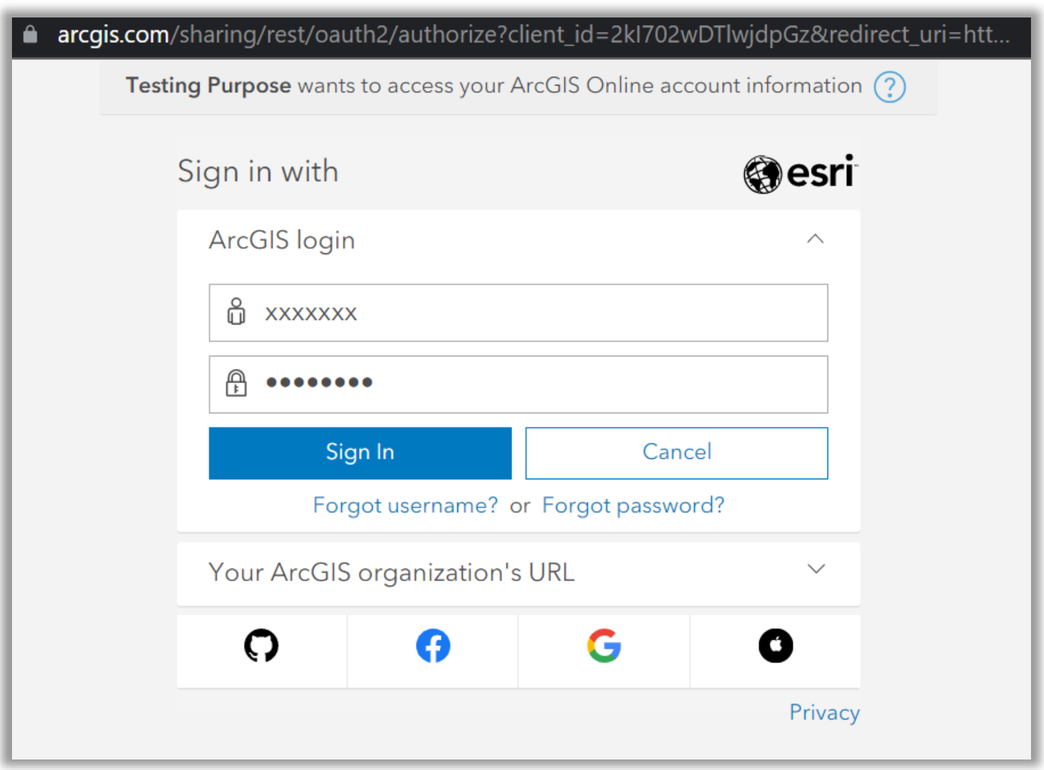
Multi- factor authentication

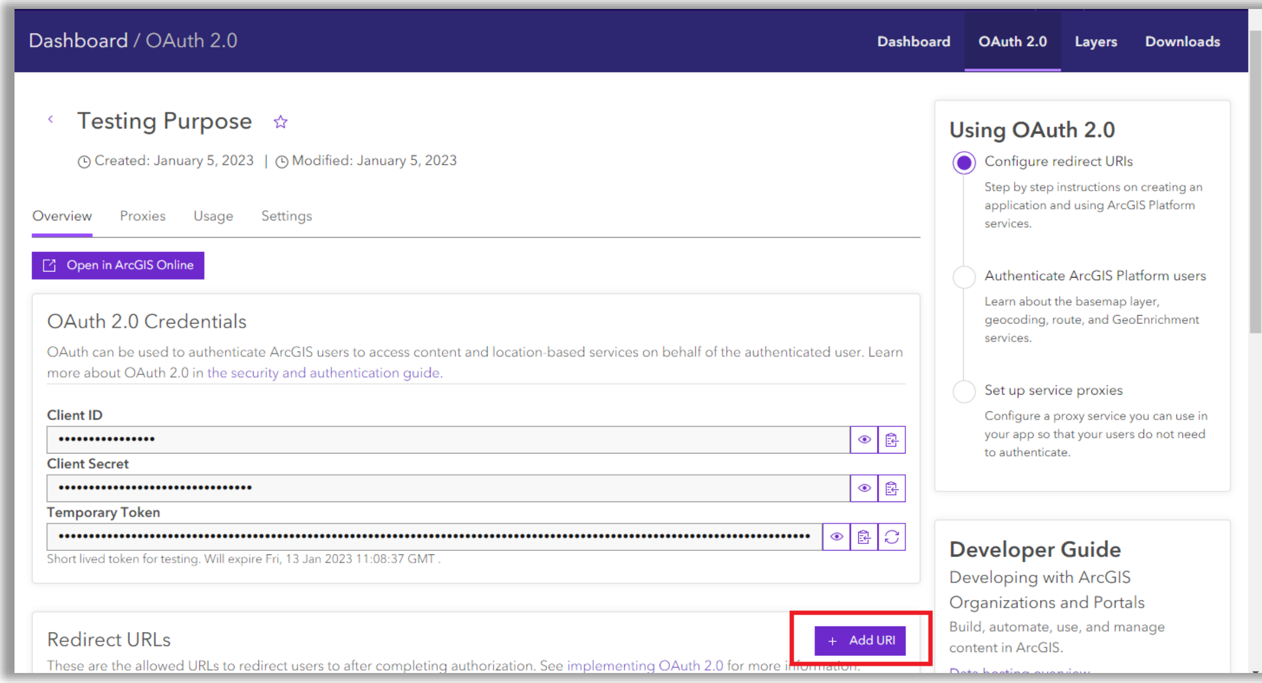
The user needs to have a Developer's Account on the ArcGIS Website by Esri. Once an account is created, the user will have his user name and password. Having access to this account, the user can select the feature layer that is suitable for his overlay needs.

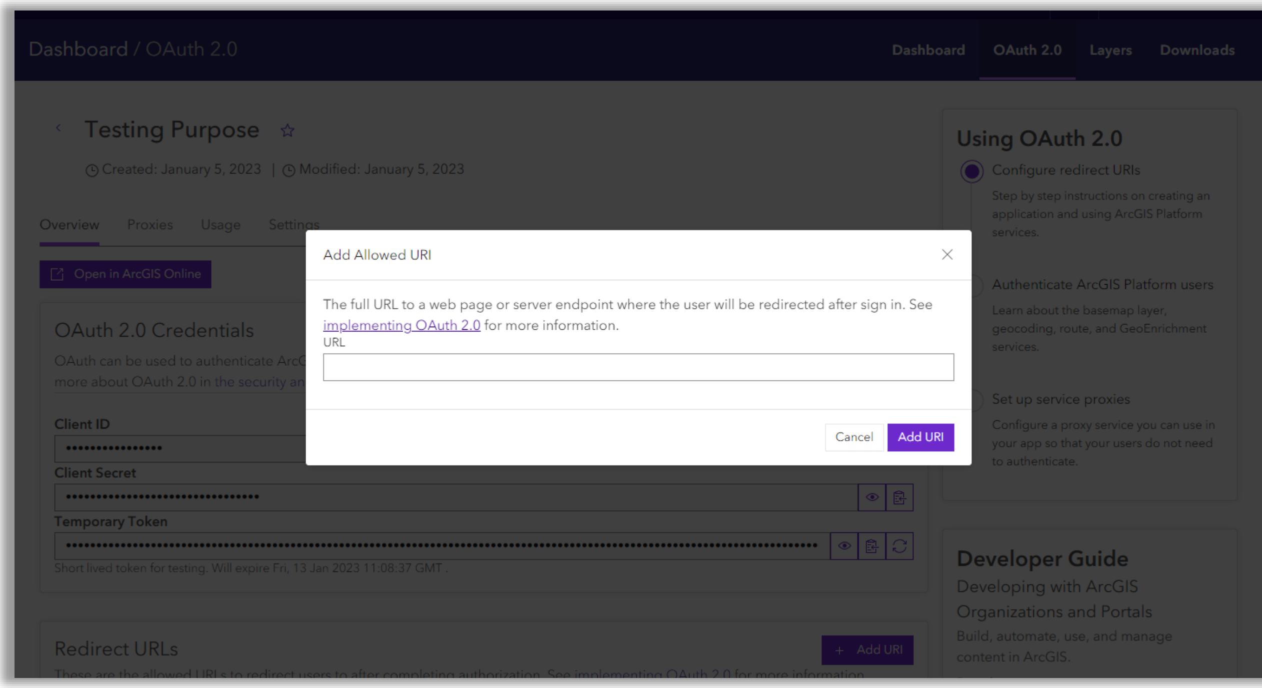
Go to Settings > Maplytics Configuration Details > Default configuration record> ArcGIS



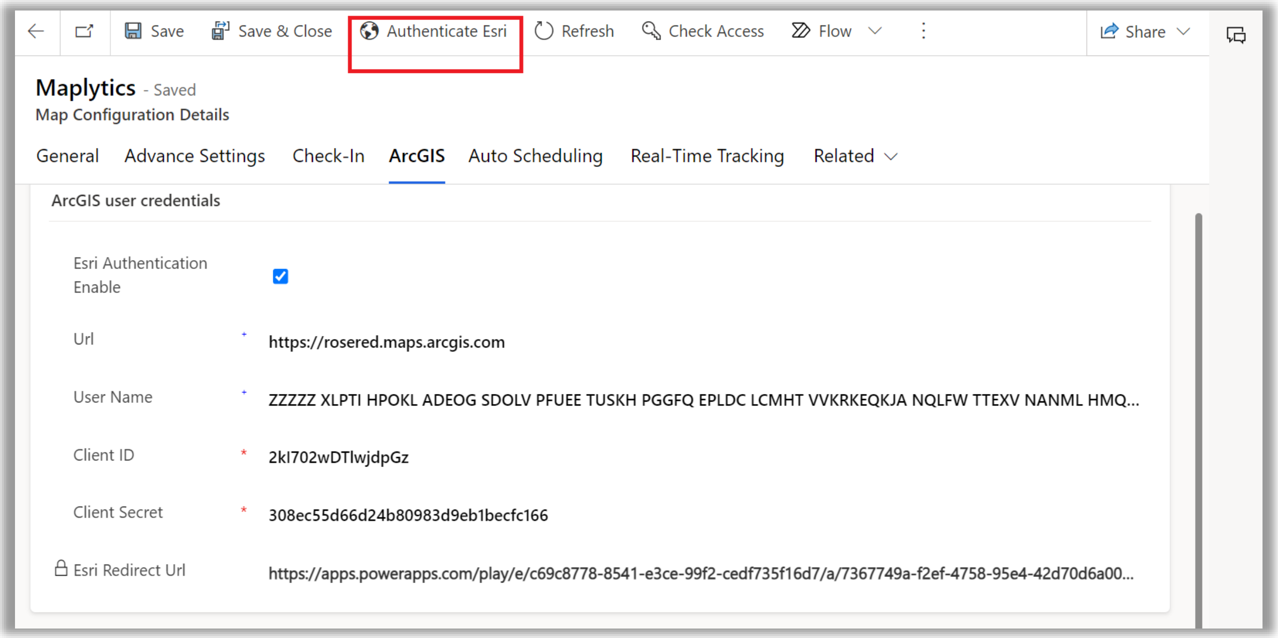
The user needs to provide a Client ID and a Secret Code that is available for the developer account. On saving the entered configuration record, a redirection URL gets generated.



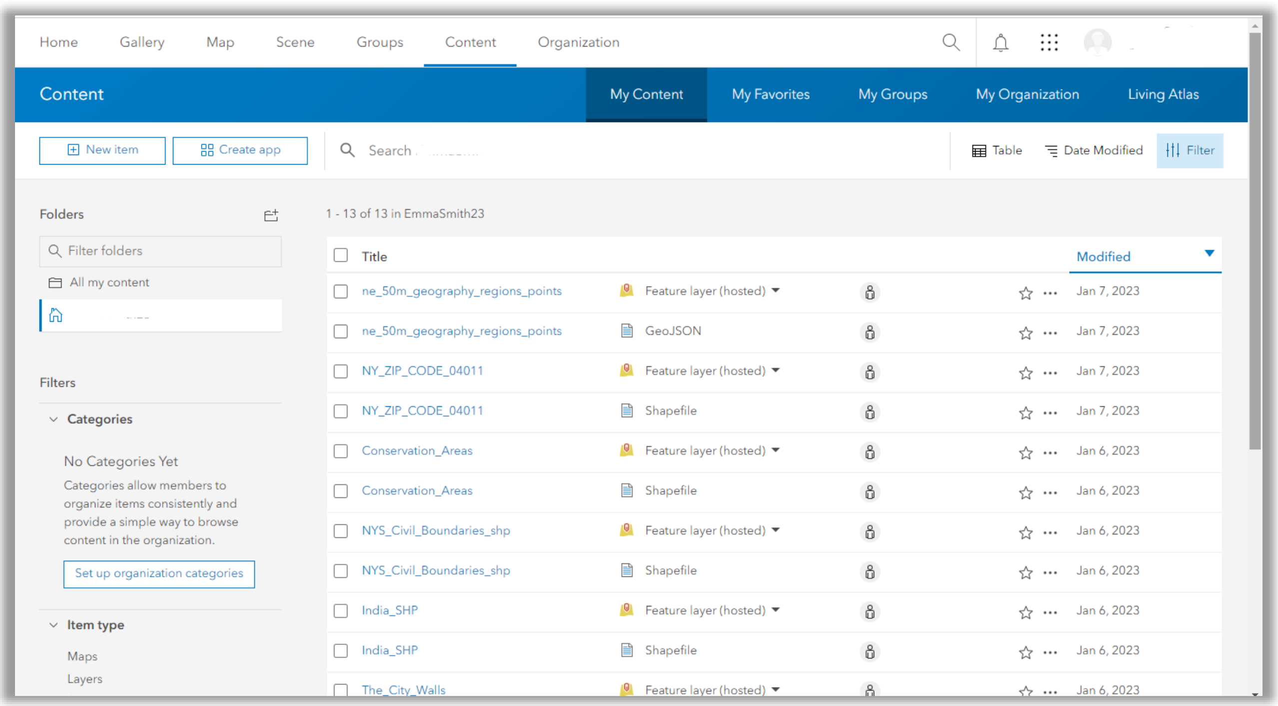




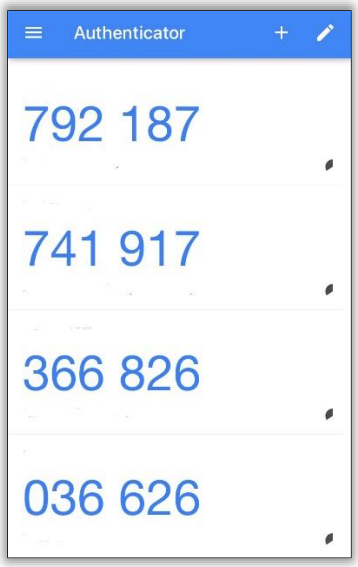
This URL needs to be put up on the ArcGIS Developer's Account.



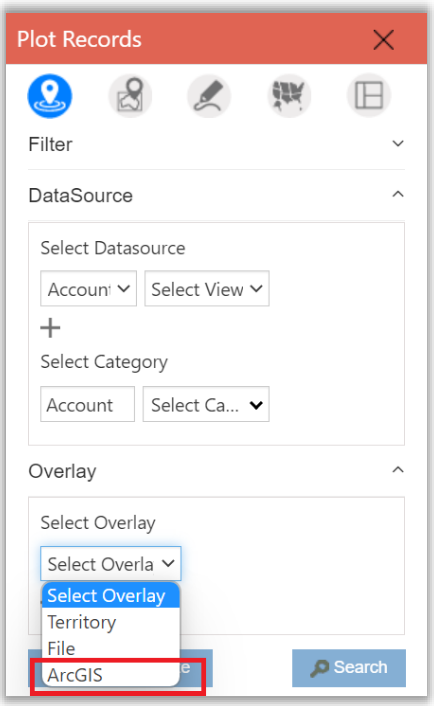
A new button, 'Authenticate Esri' will then appear on the Maplytics Default Configuration page. On clicking this button, the user will get a window to enter username, password and code. Once done, a connection will be established between Maplytics and user's ArcGIS Account allowing an access to Feature Layer hosted by Esri

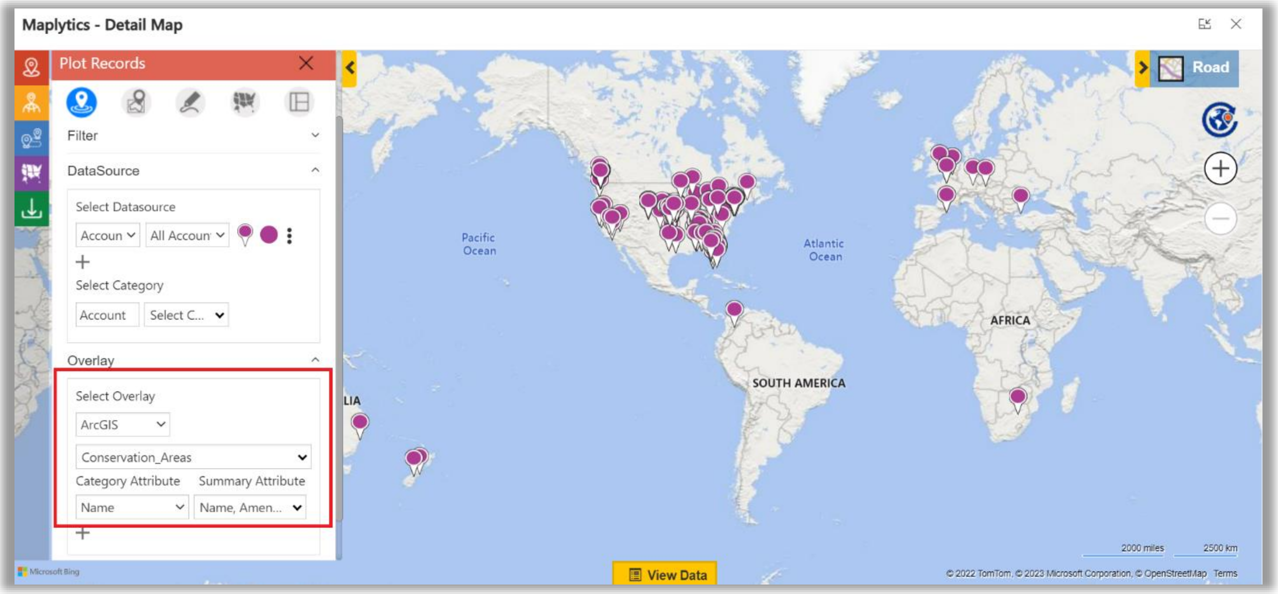


A code will then be sent on authenticator app which the user has selected while enabling multi factor authentication.



The User then needs to enter that code and avail an access to an option of ArcGIS in the Overlay dropdown.



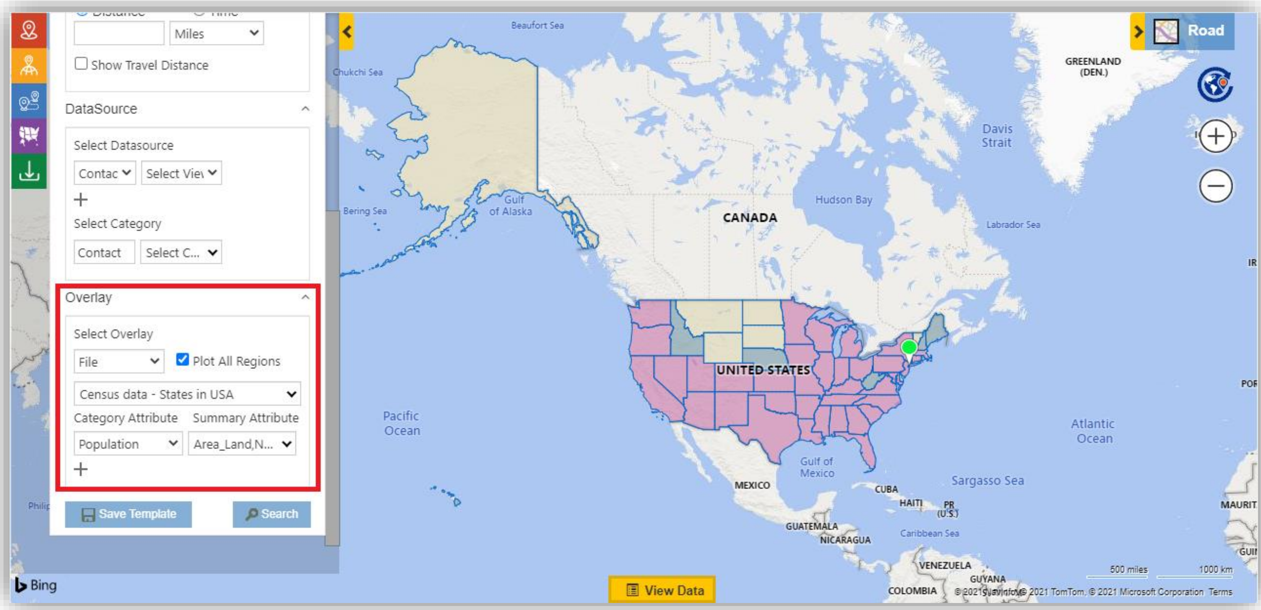

Maplytics - Detail Map
Plot Records
Filter
DataSource
Select Datasource
Accoun
All Accoun
Select Category
Account
Select C...
Overlay
Select Overlay
ArcGIS
Conservation_Areas
Category Attribute
Summary Attribute
Name
Name, Amen...
Road
Pacific Ocean
Atlantic Ocean
AFRICA
SOUTH AMERICA
View Data

Census data Visualization

This feature helps the user to visualize census data on the map. Census data provides the information about the population for a whole country or parts of country. Visualization of this data on Maplytics will help the user to analyze various information of the required area in a country like Housing units, Area land, Area water, population demographics, etc. and take strategic decisions. A few census data are available by default within Maplytics. These default census data are provided by Bing maps for USA. User can also plot their own census files on the map which contains census data. User can configure categories to see colored regions as per the configuration and also configure attributes to see on Summary card and hover on region.

To plot the census data, user can choose the option of 'Files' in the feature of Overlay. Please refer to the section of 'Overlay'. Further users can select the following options as well.

Category Attributes: An attribute can be selected to categorize the regions plotted by file.
Summary Attributes: One or more attributes can be selected to show the same in the Summary card. The attributes selected within the 'Configuration' of the saved file in the Territory Entity will be selected by default. User can deselect them and can select other attributes.



Configuration for Census data

User can configure the Census files provided by Maplytics in the Dynamics CRM. Please refer to the section of 'Configure' in Installation manual for the steps to configure. This will save some census files in CRM provide by Maplytics.

While configuring the census data into Dynamics CRM, territories will get created within which the respective census data will be saved in the form of geographies. To view the saved census data, ***Go to Settings > Business Management > Sales Territories.*** Following are the territories for census data saved on configuration:

- England-Cities
- Germany-Postalcodes
- NewYork-Postalcodes
- USA 111th Congressional Districts
- USA Counties
- USA States
- USA-Postalcodes

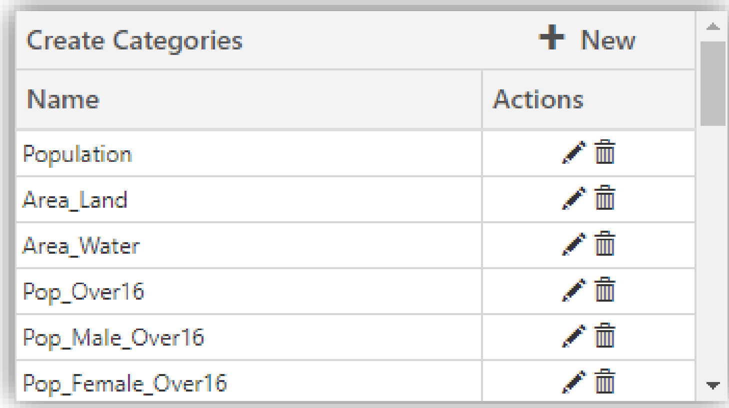
Configuration for attributes

User can configure the attributes available in the census data/shape files to show on the map, create categories for attributes and select the colors to visualize the categorized data on the map. This allows the user to frame the data how they want to view on the map.

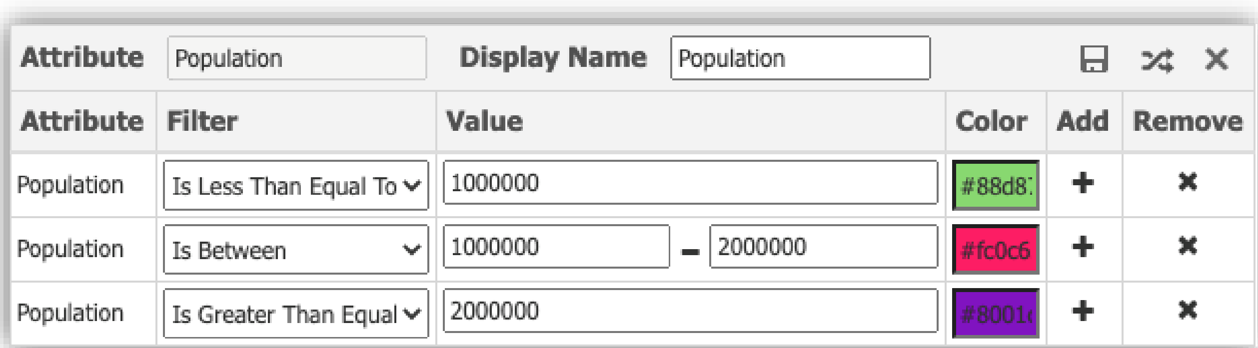
Go to Settings > Business Management > Sales Territories > Territories with census data/shape files saved > Configuration

- Attribute Configuration:
  - **Summary Attributes:**
    User can select the attributes to show on the Summary card shown on the click on the regions in the census data/shape file plotted on the map.
  - **Hover Attributes:**
    User can select at a maximum of 6 attributes that will be shown on the hover on the regions in the census data/shape file plotted on the map.
  - **Data grid Attributes:**
    User can select the attributes from the census data/shape file to be shown as columns in the data grid in Detail map.

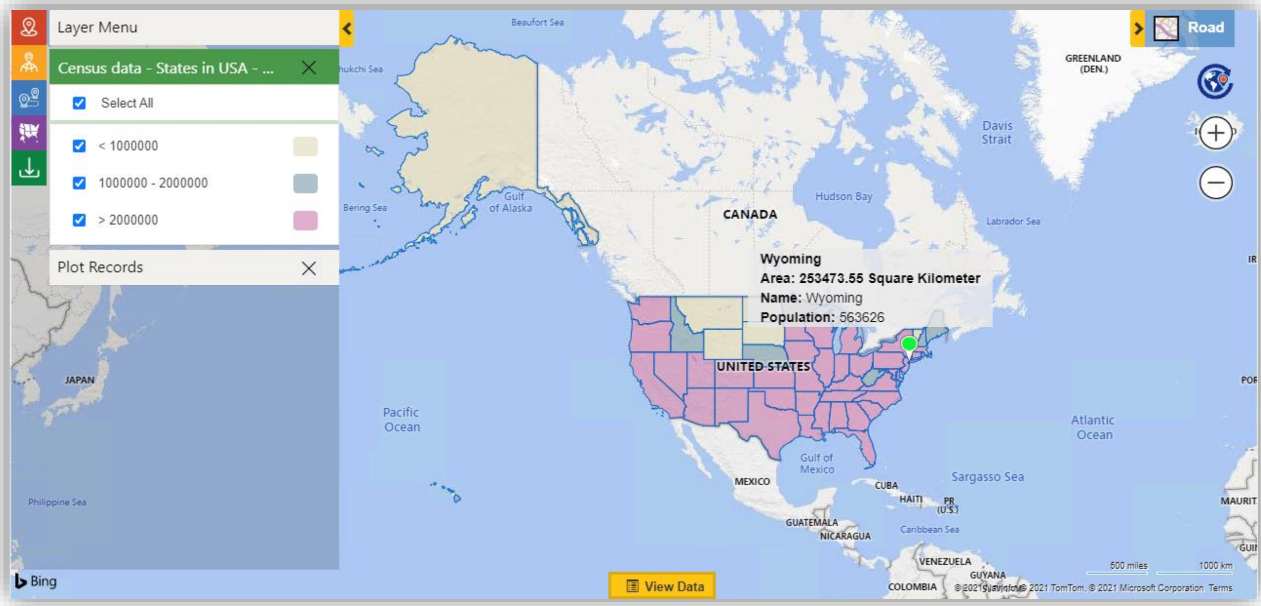
- Category Configuration
  User can create categories for the attributes in the census data/shape file. Creating categories will help the user to view the categorized census data for the required attributes in the desired colors. Some categories are provided by default for configured census data. User can click on + New New button to create a new category for any attribute. User can also click on 'Edit' and 'Remove' to make changes or delete the existing categories respectively.



- **Create filters and define colors**
  After clicking on Edit/New button, user can filter the attributes and define colors for the ranges of the filtered attributes.
  - **Attribute:** This shows the name of the Attribute for which the category has been created/will be created.
  - **Display Name:** User can type a name for the category which should be displayed in the list of the categories.
  - **Save:** User can click on save button to save the changes made.
  - **Discard:** User can click on Discard button to discard the changes made.
  - **Filter:** User can set various filter conditions for the category.
  - **Value:** User can set values for respective filters set.
  - **Color:** This can be used to set colors for individual filters set. The user can click on the Auto Set button to set random colors for all the values.
  - **Add/Remove:** Click on Add or Remove to add a new filter or delete the filter respectively.



After the user has created categories, user can plot the census data along with an attribute selected to visualise the categorised Census data on the map as shown below:



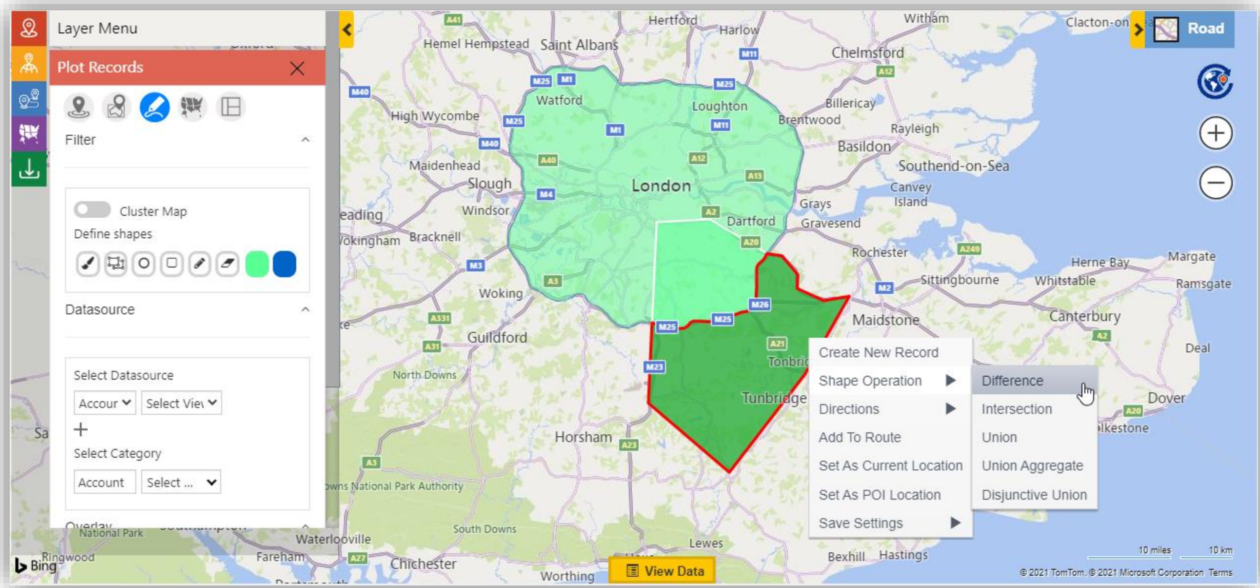
Shape Operations

With the help of Shape operations, users can perform Binary operations on the shapes drawn on the map. These operations can only be performed under the Search option of 'By Drawing' in the Plot card and Territory management section. Please refer to the section of Territory management for the shape operations in Territory management.

User can open the 'by drawing' search option and right click on the shapes and can choose the option of 'Shape operations'. The following five operations can be performed on the shapes:

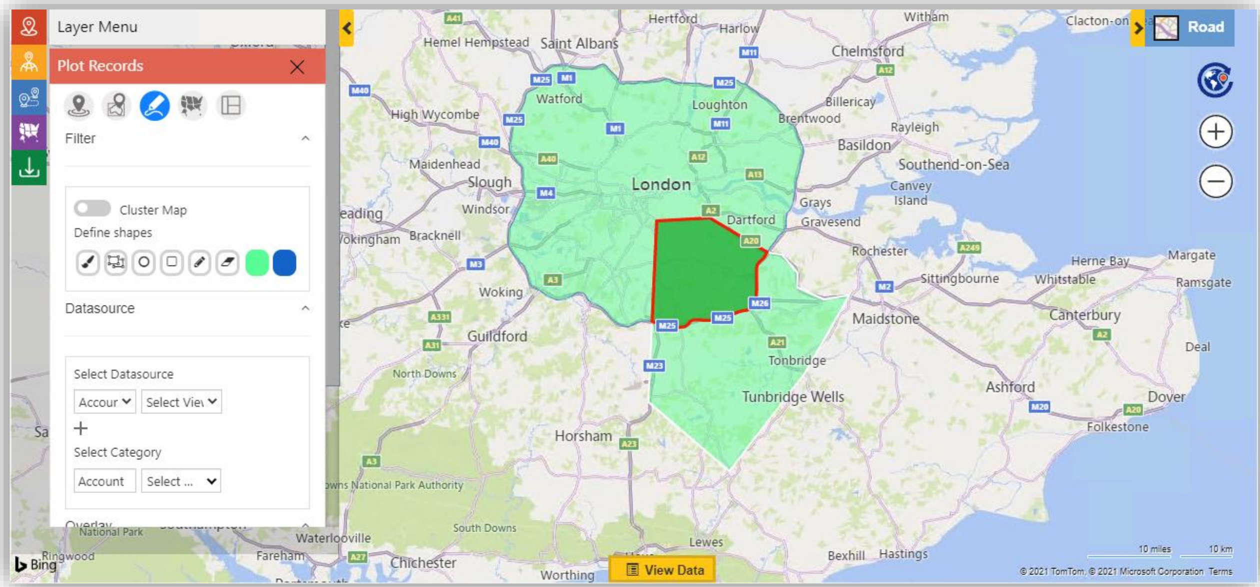
Difference

This highlights the shape(s) obtained by subtracting the overlapped ones from the selected shape



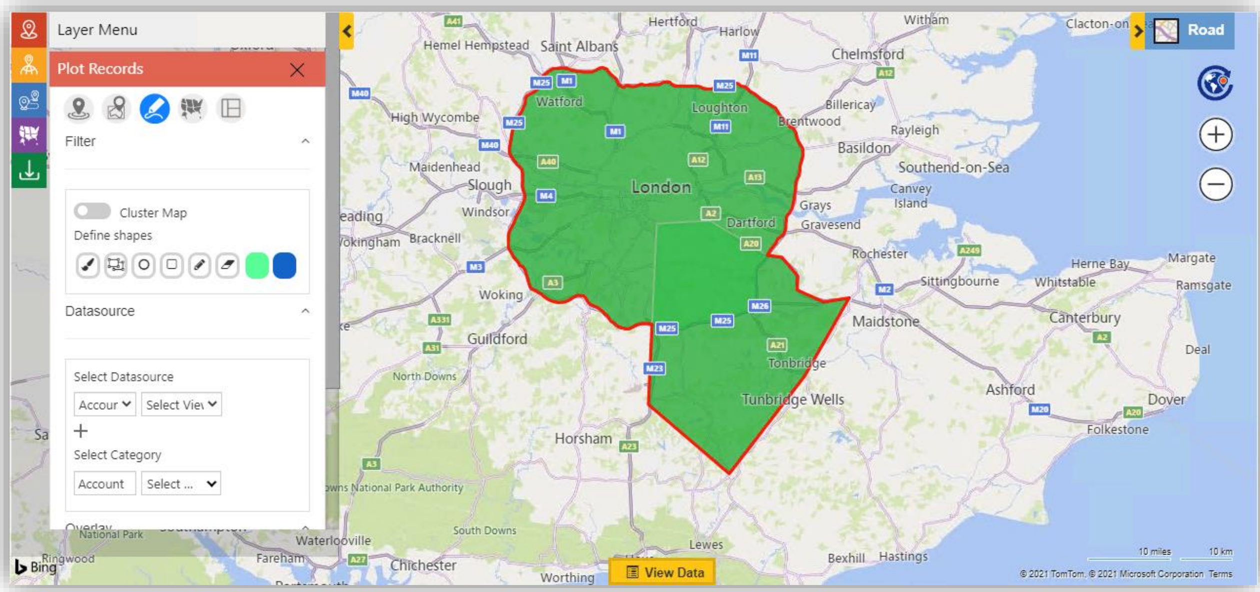
Intersection

This highlights the shape(s) where the selected shape and other shapes overlap.



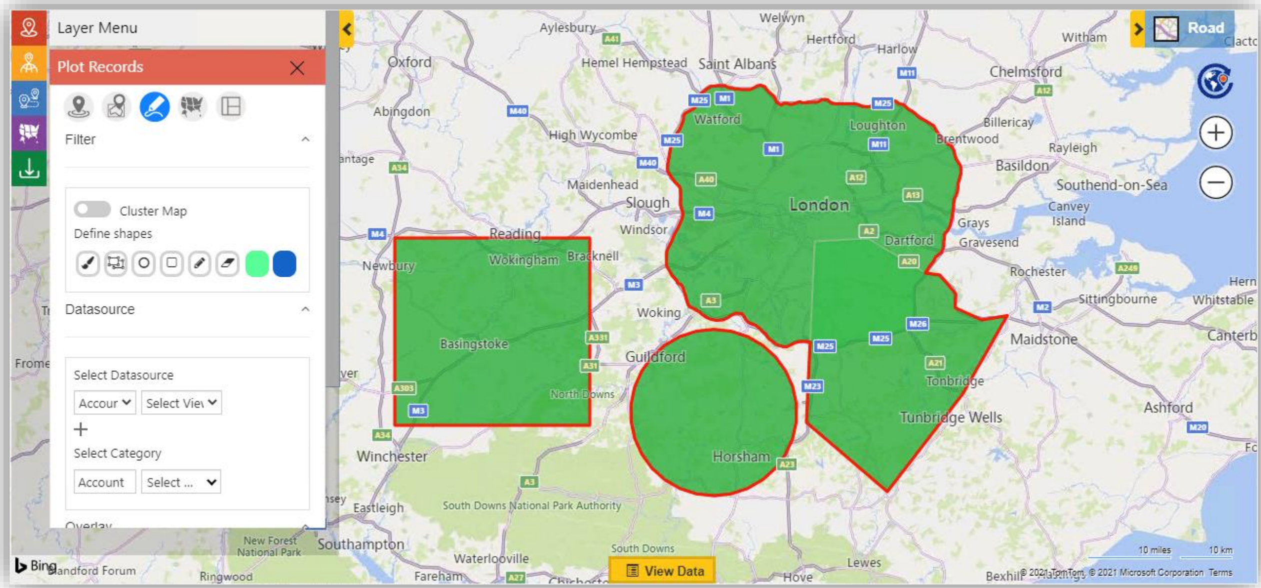
Union

This adds all the shapes overlapped on the selected shape



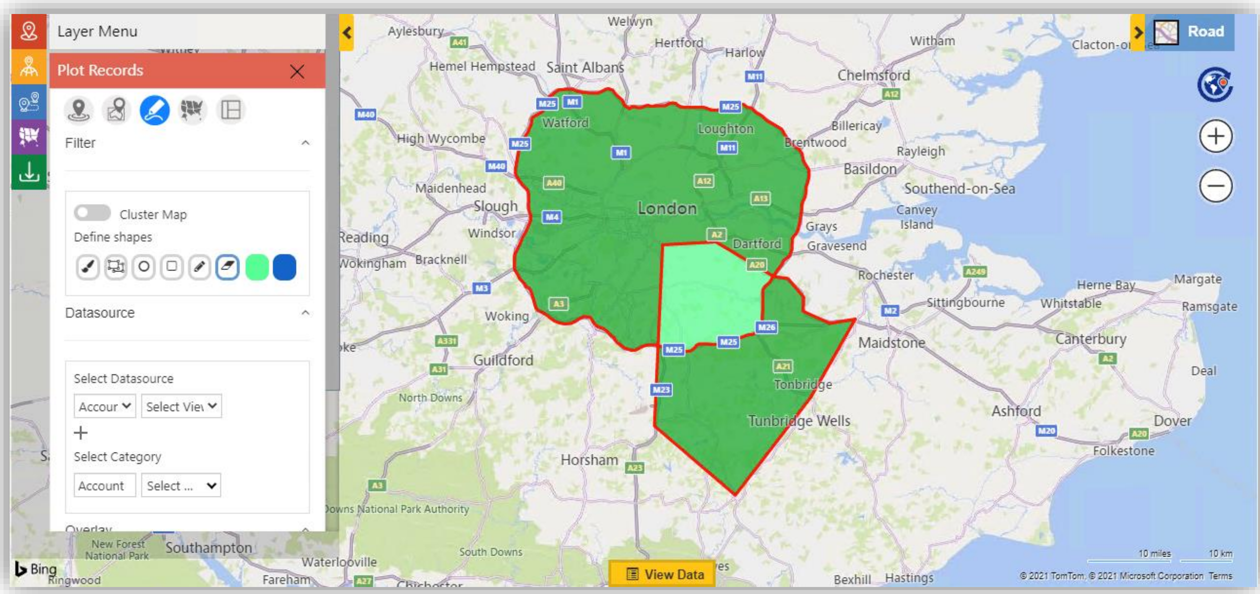
Union Aggregate

This performs union operation on all the shapes that are drawn on the map. If a shape does not overlap with any other shapes, it highlights such shapes and the union of the rest of the overlapping shapes.



Disjunctive union

This highlights the shapes that are not overlapped and lie in the selected shape & the shapes that are linked with the selected shape.



Undo – While performing operations, user can use the option of 'Undo' to go only one step back into the binary operations performed
Reset – Using the option of reset, user can remove all the operations that are performed on the shapes drawn on the map

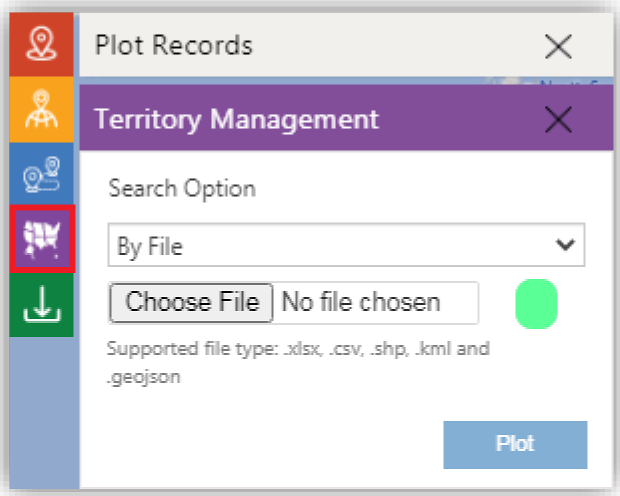
Note:

- ***To perform any operation, two or more shapes should overlap.***
- ***For Union Aggregate, there should be more than one shapes with or without overlap.***
- ***The highlighted shapes are new shapes as resultants of the operations performed. User can click on the highlighted shapes to view the summary card and the data in the view data grid.***

Territory Management

Territory management helps the user to create new territories manually as well as automatically and align the existing territories as well to get proper distribution of territories. User can plot required regions, draw shapes or directly upload shape files/excel files to get the required regions plotted on the map to create territories for the same. User can create multiple territories automatically based on count of records or use the territory Alignment tool to select the required regions and create new territories for the same. While creating multiple territories automatically, user can also save the territories as a draft and rework on the draft to get the territories created as per the requirement. Further, user can plot the existing territories and edit them to get proper distribution of territories.

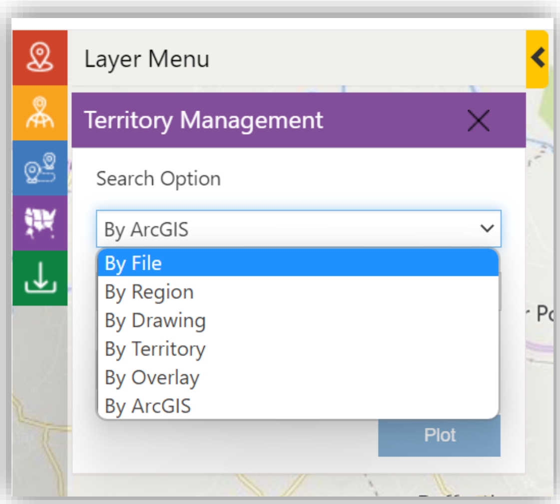
To access Territory Management, Go to Detail map > Territory Management



Note: Users other than System Admin, can use Territory management only if they are given the role of Maplytics Territory Manager

User can use the search options to plot shape files, excel files, search by region, draw a shape or plot existing territories on the map. There are five search options:

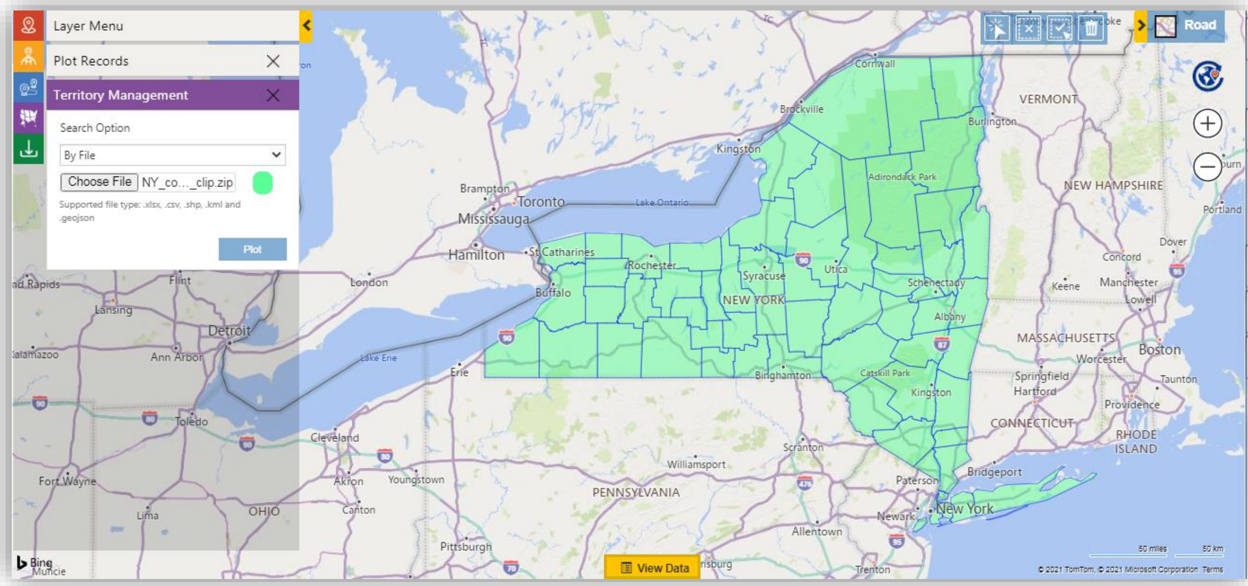
- By File
- By Region
- By Drawing
- By Territory
- By Overlay
- By ArcGIS



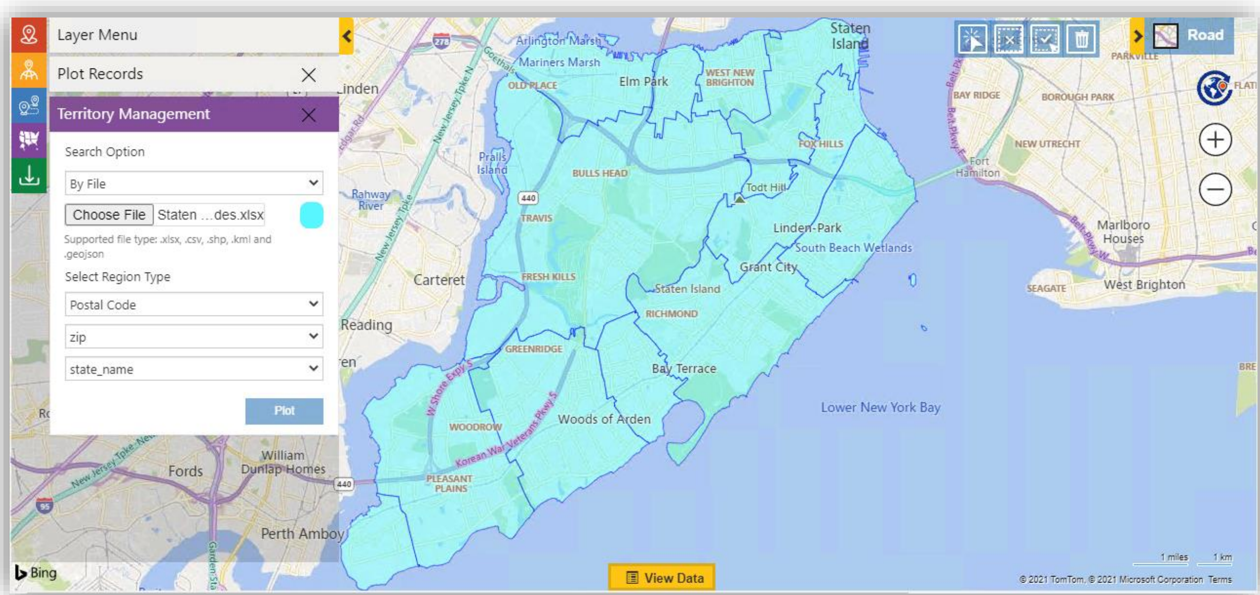
By File

This helps user to plot the shape files and excel files on the map that store geographical information and attributes of the geographic features. User can plot the following two types of files:

- Shape files: The supported file formats are .shp, .kml and .geojson

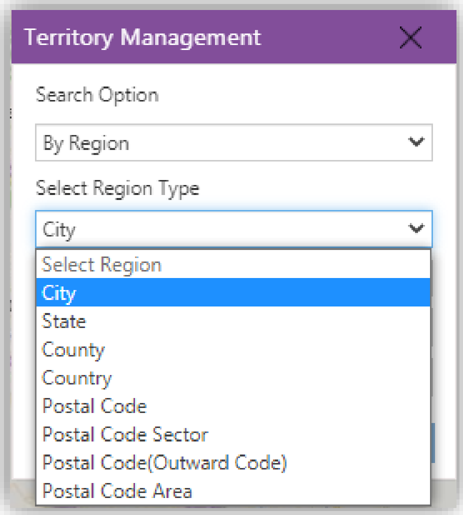


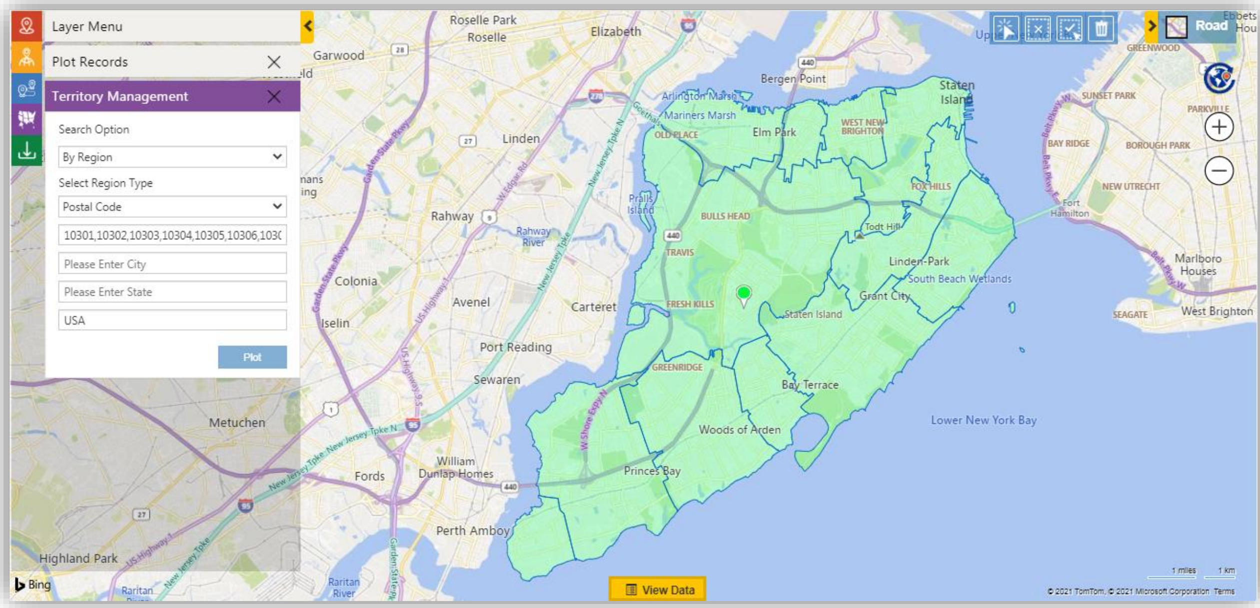
- Excel files – The supported file formats are .xlsx, .csv



By Region

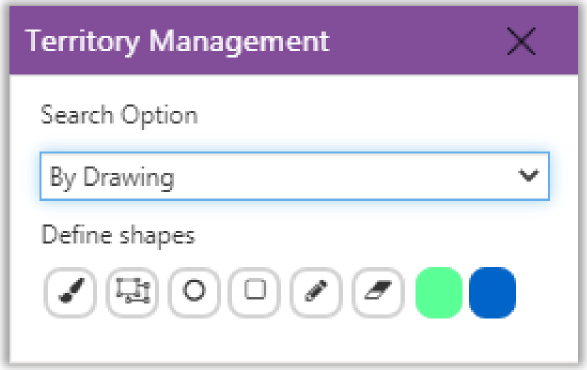
This options helps the users to search for regions on the map by City, State, County, Country, PostalCode, PostCode Sector, PostCode(Outward Code), PostalCode Area.

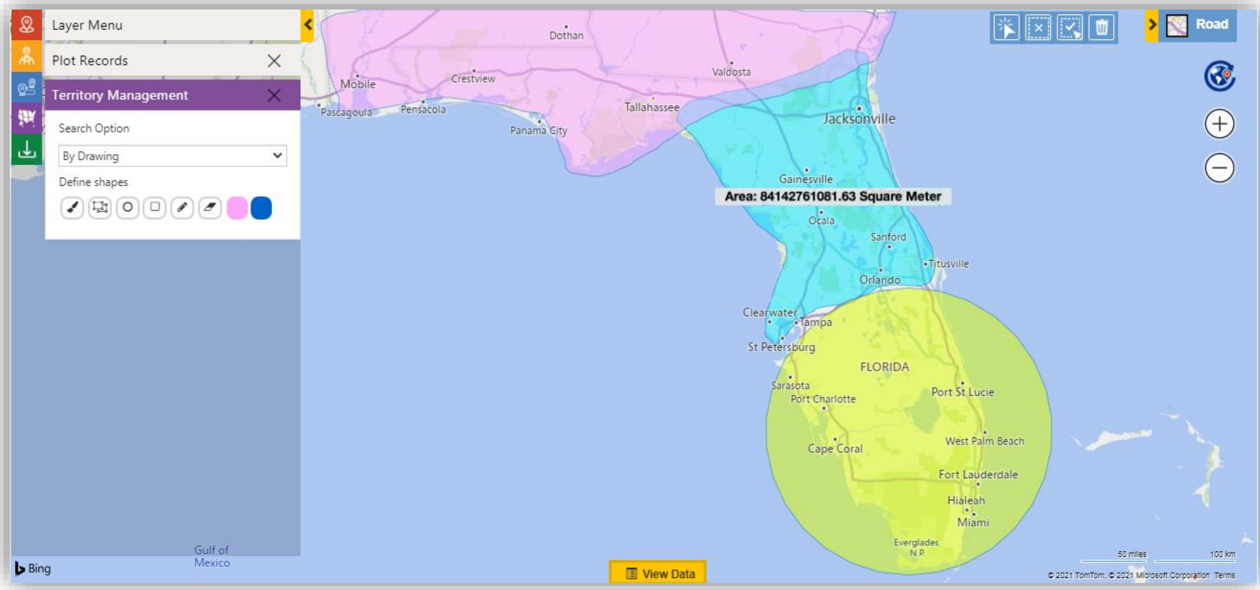




By Drawing

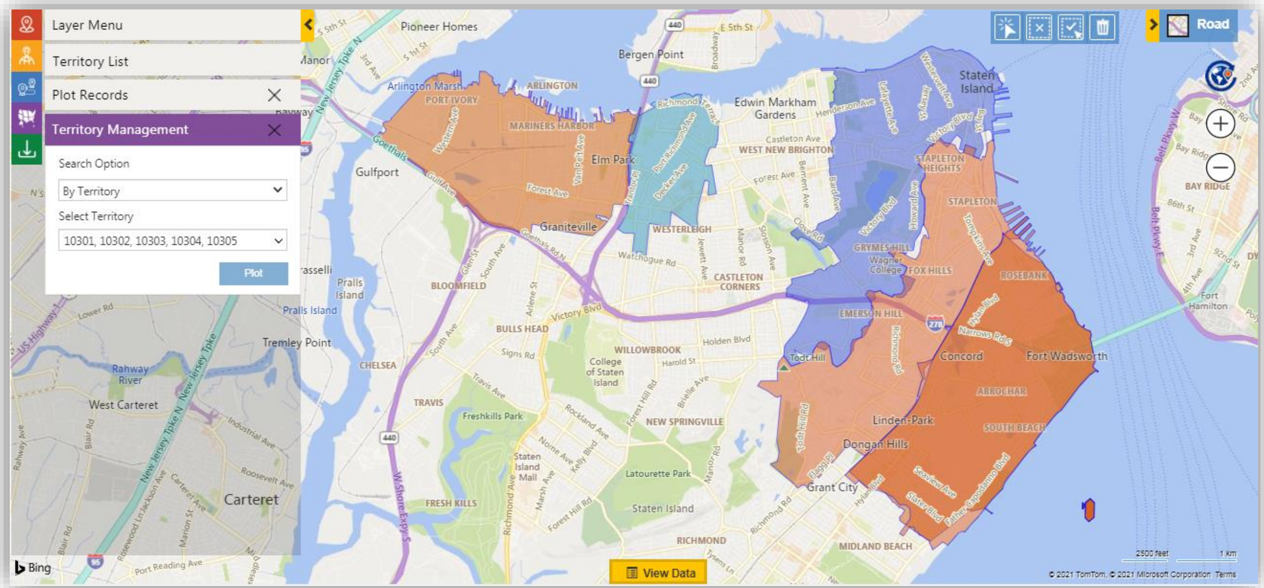
This helps the user to draw a shape on the map using the Drawing Tool Bar.





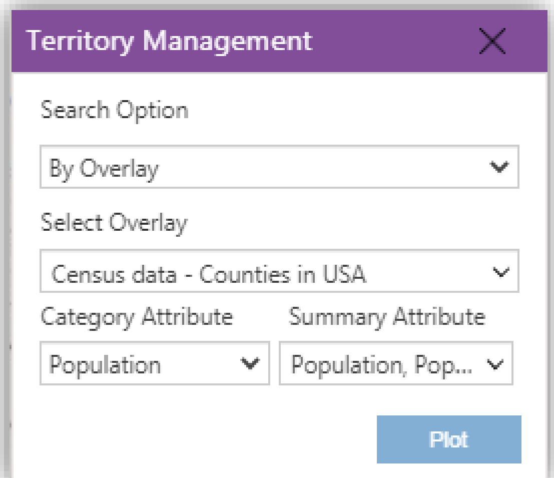
By Territory

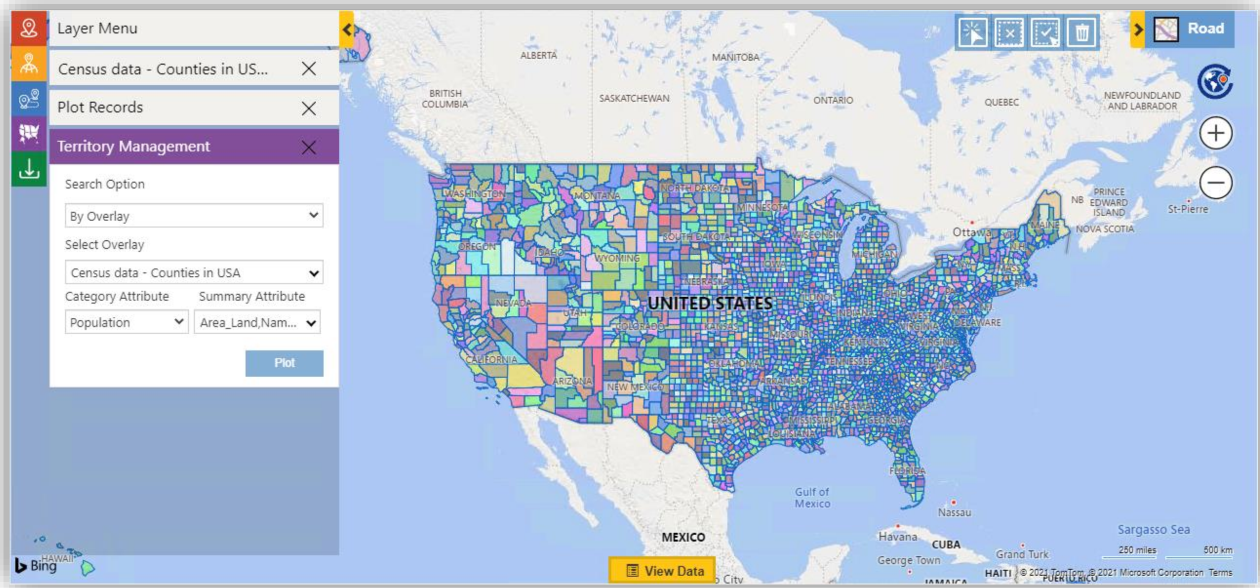
This helps user to plot the existing territories on the map.



By Overlay

Users can select this option of ‘By Overlay’ to select any shape/excel file saved in CRM to plot the same on the map. Users can also select an attribute within ‘Category Attribute’ to categorize the regions plotted on map. Also, they can select one or more attributes within ‘Summary Attribute’ to show on Summary card when clicked on any region plotted on the map.

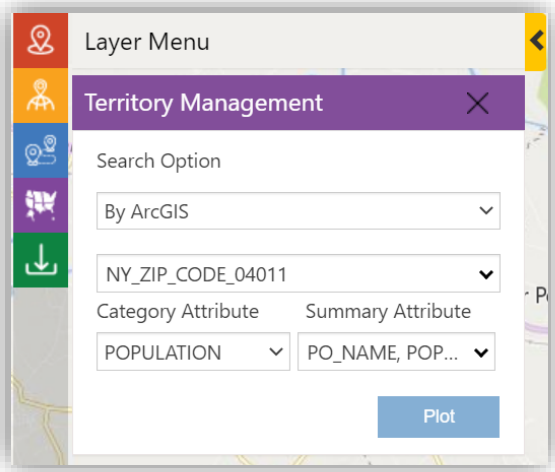




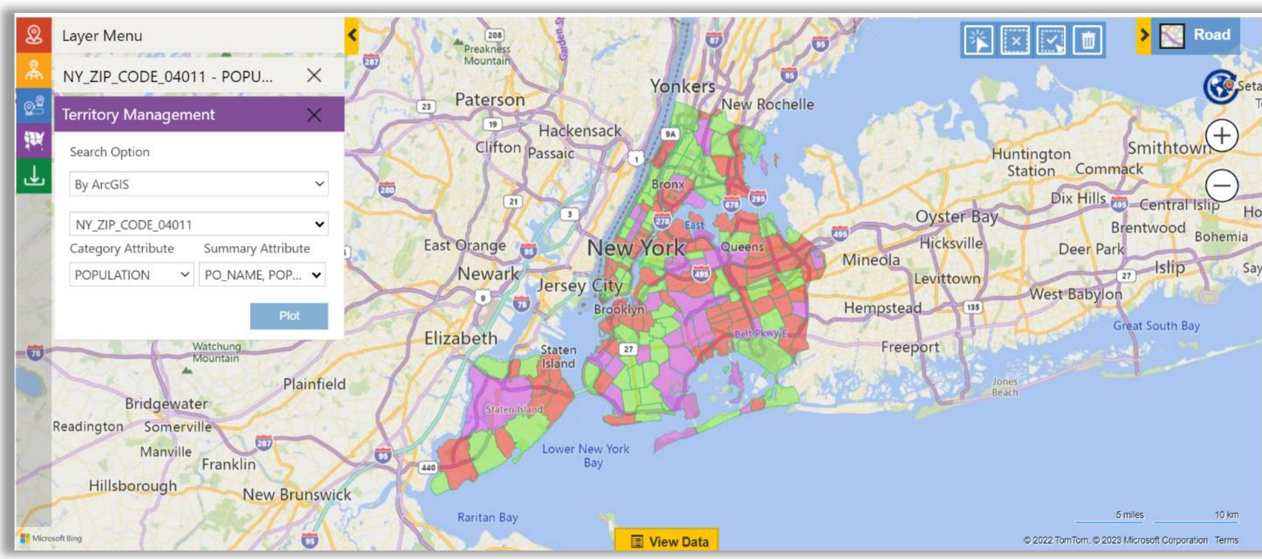
Note: If user has plotted any territory or shape/excel file using the feature of ‘Overlay’ within the ‘Plot records’ card and moves to ‘Territory Management’ card so the option of ‘By Overlay’ will retain the selection of the same while working with Territory Management.

By ArcGIS

This option helps the user to select from among the live feature layers hosted by ArcGIS Online. The file need not be in a territory and can be used even when updated in real-time.



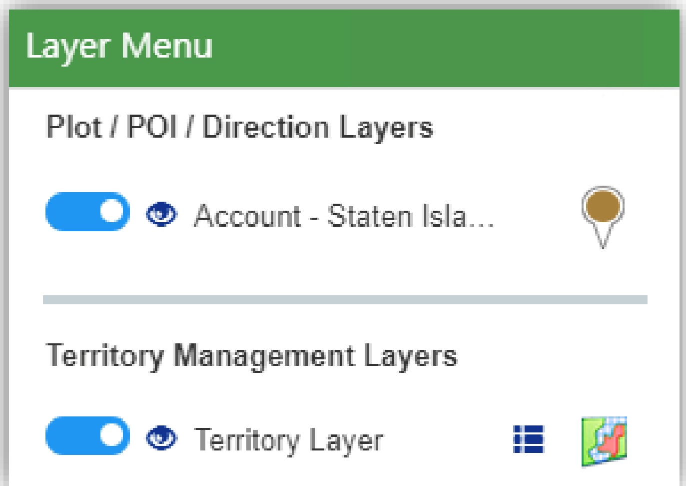
A seamless integration can be experienced with the online files. Users can choose this option to select any live feature layer hosted by ArcGIS Online to plot the same on the map. Users can also select an attribute within 'Category Attribute' to categorize the regions plotted on map. Also, they can select one or more attributes within 'Summary Attribute' to show on Summary card when clicked on any region plotted on the map.



Note: If user has plotted any territory using the feature of 'ArcGIC' within the 'Plot records' card and moves to 'Territory Management' card so the option of 'By ArcGIS' will retain the selection of the same while working with Territory Management.

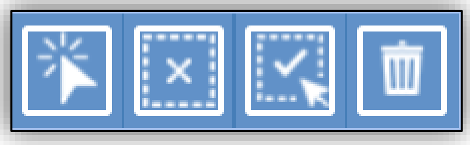
Layer Menu

This helps the user to select the required data among the multiple data plotted on the map. The user can use the toggle buttons on the Layer menu card to show or hide the required layers of the data to be shown on the map without removing the same from map. If user is using the 'Plot Records/POI/Directions card' and has plotted Datasource Records, POI locations or Route and has proceeded for Territory Management, the plotted layers of data will be retained and will be listed in the section of 'Plot/POI/Direction Layers' of the Layer menu. The data plotted using the Territory Management card will be listed in the 'Territory Management Layers' section of the Layer menu.



Territory Alignment Tool

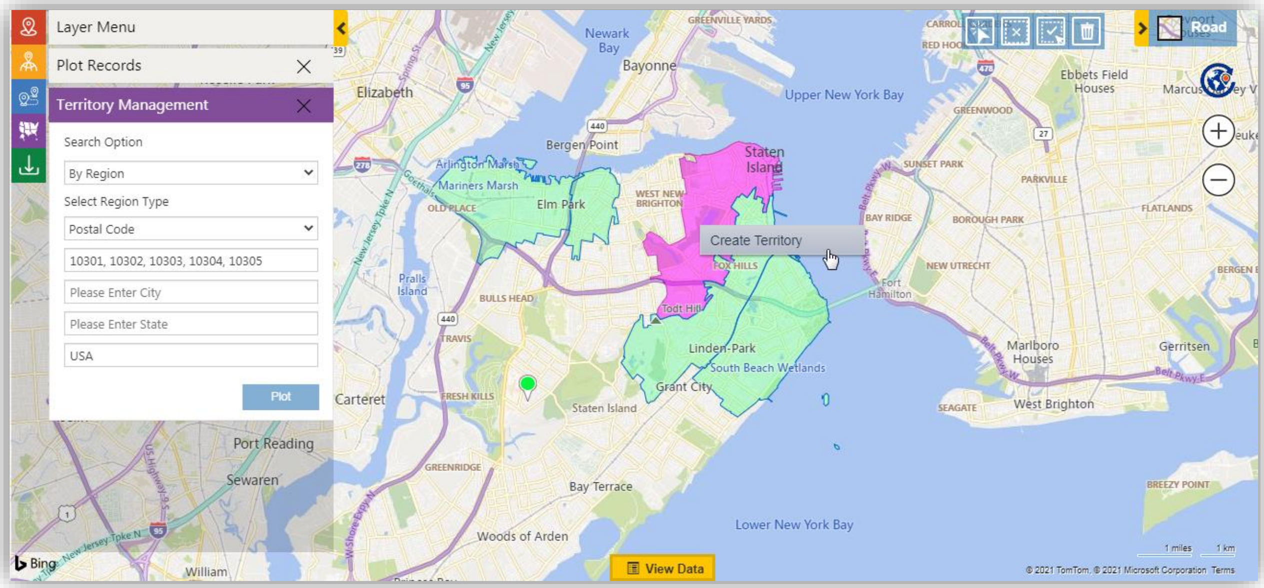
This tool has four options respectively as mentioned below:

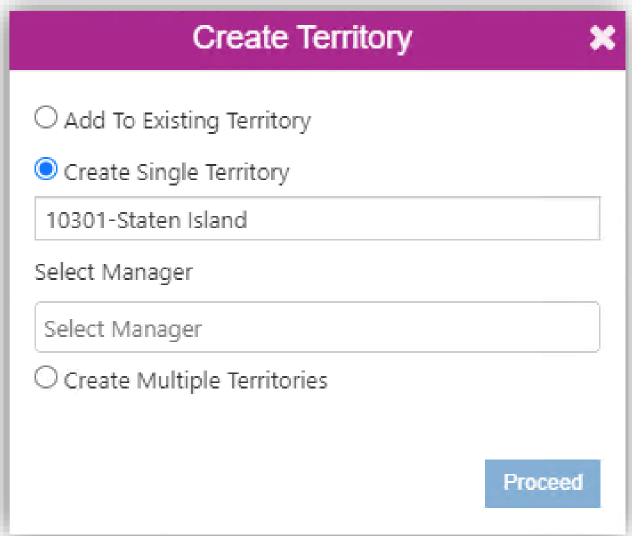


- Select/Deselect: User can select regions/shapes/territories one by one on the map
- Deselect All: User can deselect all the selected regions/shapes/territories on the map
- Select Multiple: This is a freehand selection which helps the user to select multiple regions/shapes/territories on the map
- Delete: User can delete the shapes/regions/geographies plotted on the map
  Note: If the delete option is used on the existing territories, it will delete the selected geographies from the existing territories.

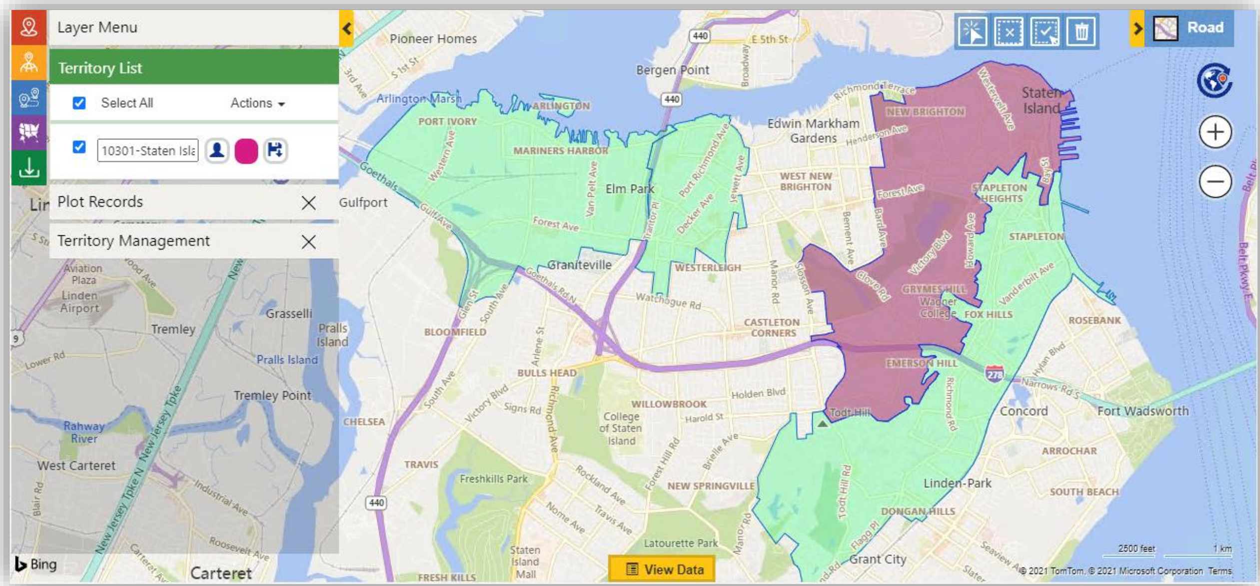
Create new territory

User can select some of the regions/shapes using the 'Alignment Tool' and right click to create a new territory. User can also select the required manager who will be responsible for the respective territory.



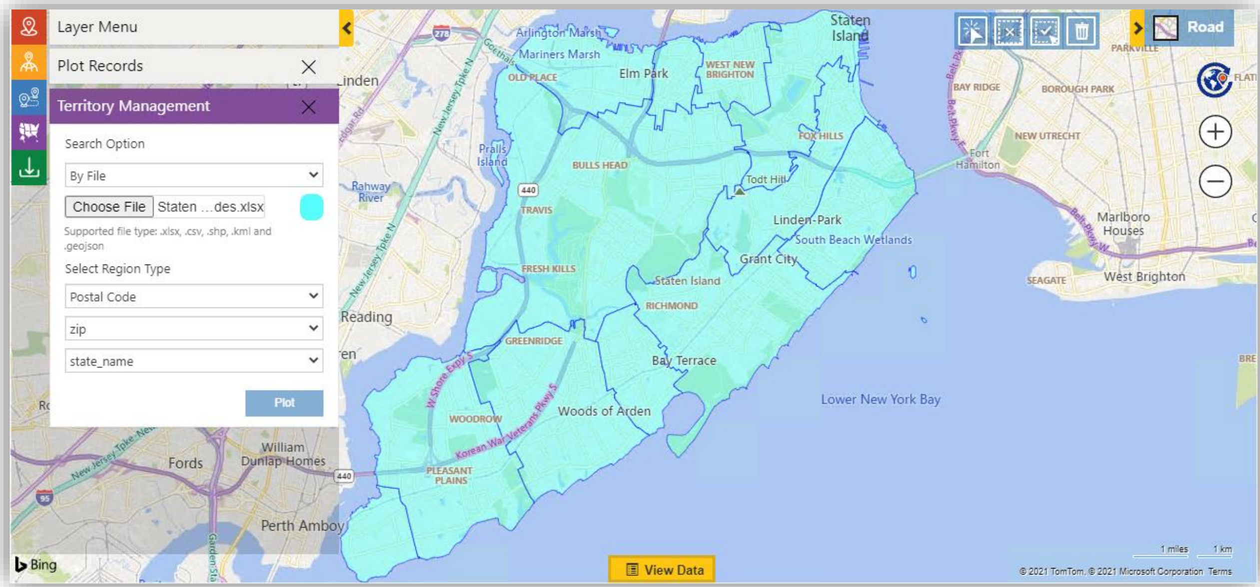


Note: Users who have already been assigned as a manager for another territory will not be visible in the list of users to be selected as a manager of the territory.

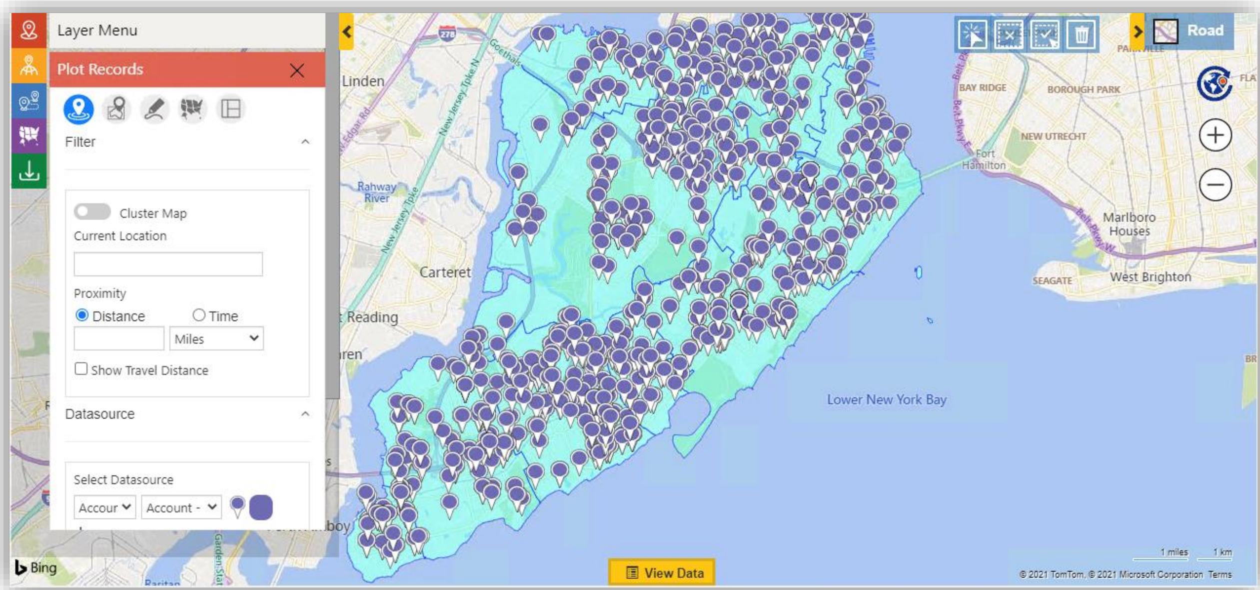

Layer Menu
Territory List
Select All
Actions
10301-Staten Isla
Plot Records
Territory Management
Road
View Data
Bing
Pioneer Homes
Bergen Point
Edwin Markham Gardens
Staten Island
Elm Park
Graniteville
Gulfport
Tremley
Grasselli
Pralls Island
Tremley Point
Rahway River
West Carteret
Carteret
Concord
Fort Wadsworth
Linden-Park
Grant City
Freshkills Park
Latourette Park

Auto Territory creation

User can create territories automatically based on a shape/excel file and count of records plotted on the map to get the desired number of balanced territories. To do this, user can go to Territory Management and use the option of 'By File' to upload a Shape file or an Excel file to get it plotted on the map. User can also choose the option of 'By Overlay' to plot a saved shape/excel file on the map.

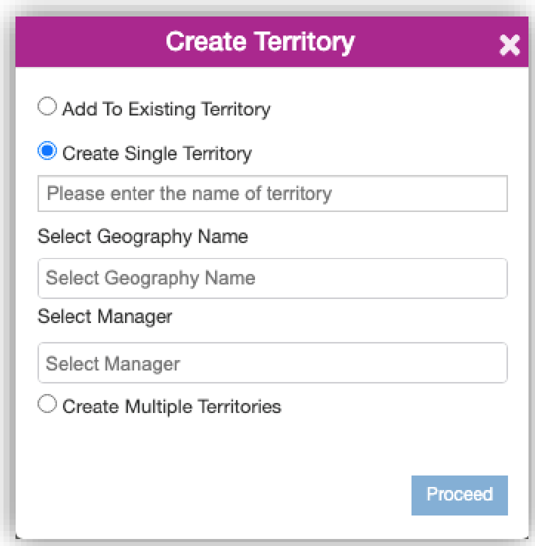


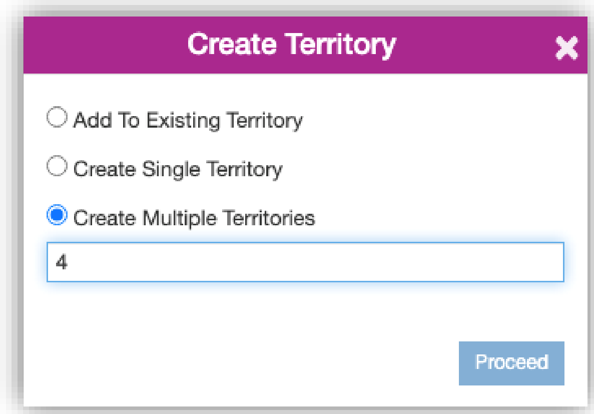
Now, user can go to the 'Plot Records Card' and select the required 'DataSource' and the respective 'View' to plot the same on the map. These records will be distributed among the territories that are to be created.



Note: Only those records which lie within the regions selected will be considered while creating multiple balanced territories.

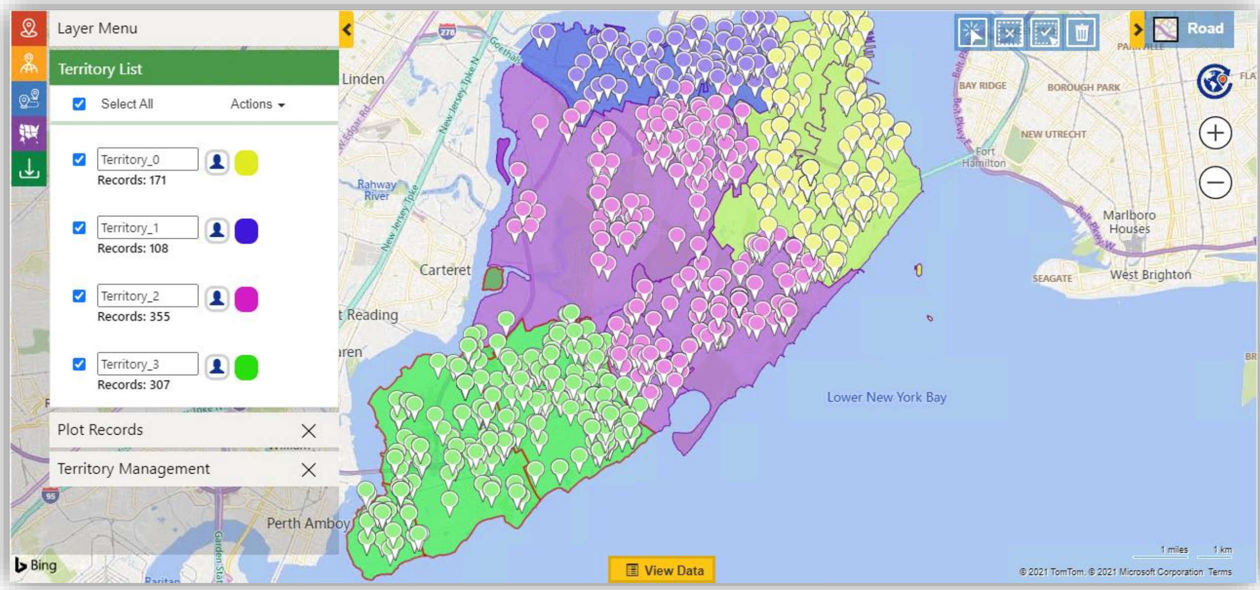
Using the options of 'Select' or 'Multi-select' from the 'Alignment Tool' user can choose the required regions and right click to select the option of 'Create Territory' to open the window. Here, user can select the option to 'Create Multiple Territories' and enter the number of territories they want to create out of the selected regions on the map. In the screenshot below, we have entered 4 for an instance.



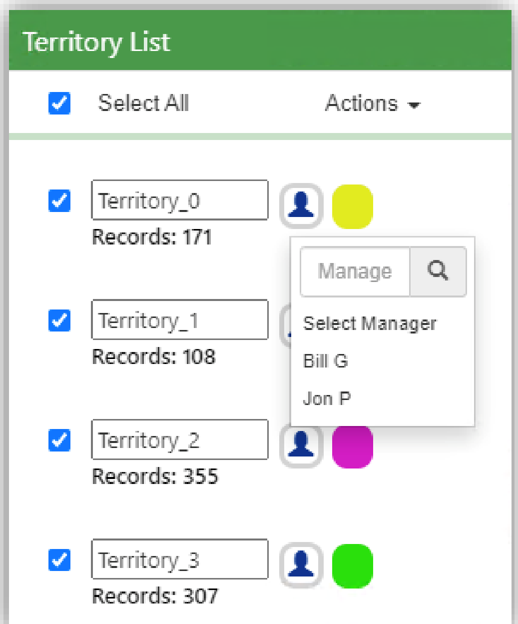


This will calculate the number of records and divide the selected regions automatically to get 4 balanced territories. By default, territories will be named as Territory_0, Territory_1, Territory_2 and so on. User can change the names as per their requirement.

Note: The count of records in the territories created automatically might vary slightly.

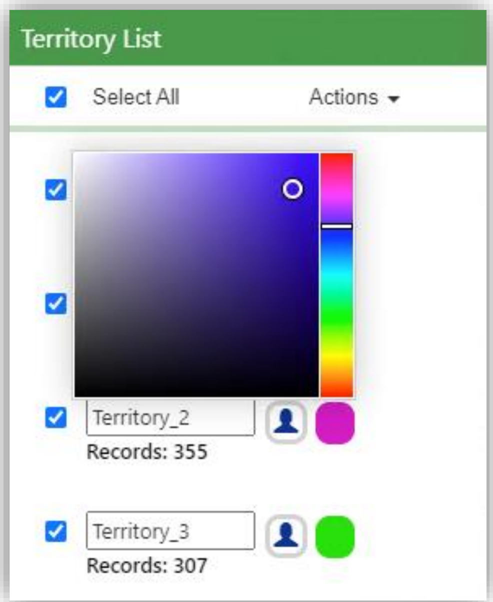


User can also set the required user as a manager for the territories processed, by clicking on the 'Select manager' icon.

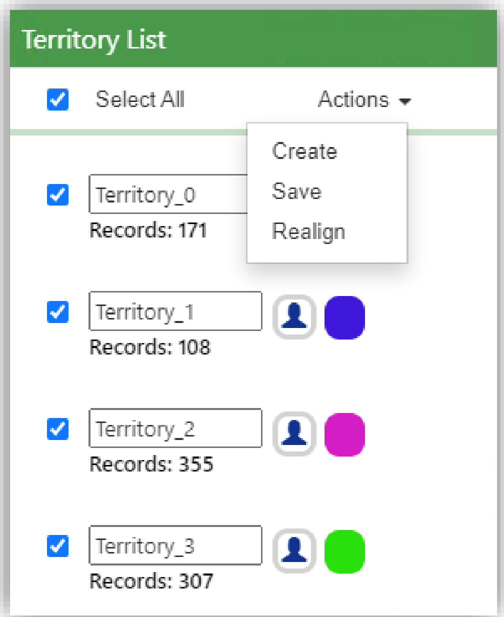


Note: Users who have already been assigned as a manager for another territory will not be visible in the list of users to be selected as a manager of the territory.

User can also set the colors for the territories using the option of 'Fill color'.



User can further choose to take an action on the territories processed on the map by using 'Actions'. There are three Actions available:



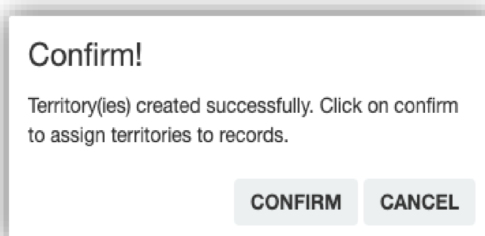
Create: If the user is satisfied with the territories processed, then they can choose this option to create the territories processed on the map within the CRM.

Save: If user needs to work on the territories processed to further make any changes or take an opinion on the same from a colleague, they can use this option to save the territories processed as Draft Territories within the CRM.

Realign: User can further rework on the territories processed using this option. This will allow the user to revise the number of territories processed.

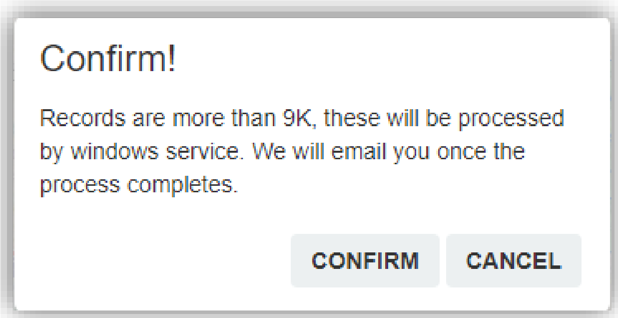
Assign territories to record

If user chooses to create territories from the 'Actions', then after creating the territories, user will be asked if they want to assign the territories created to the respective records plotted on the map. User can click on 'Yes' to do so.



Register to Windows Service

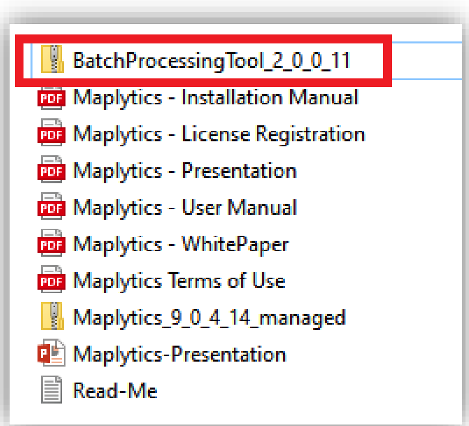
If the number of records is more than 9K, then user needs to register to Windows service in order to create multiple territories. With more than 9K records plotted on the map when user tries to create multiple territories then the below message will be shown and these records will be processed by Windows Service. When the user clicks on 'Confirm' then it will create the territory records with the status 'Process by WS' and Windows Service will process these territories by distributing the records to create the specified number of balanced territories based on the number of records.



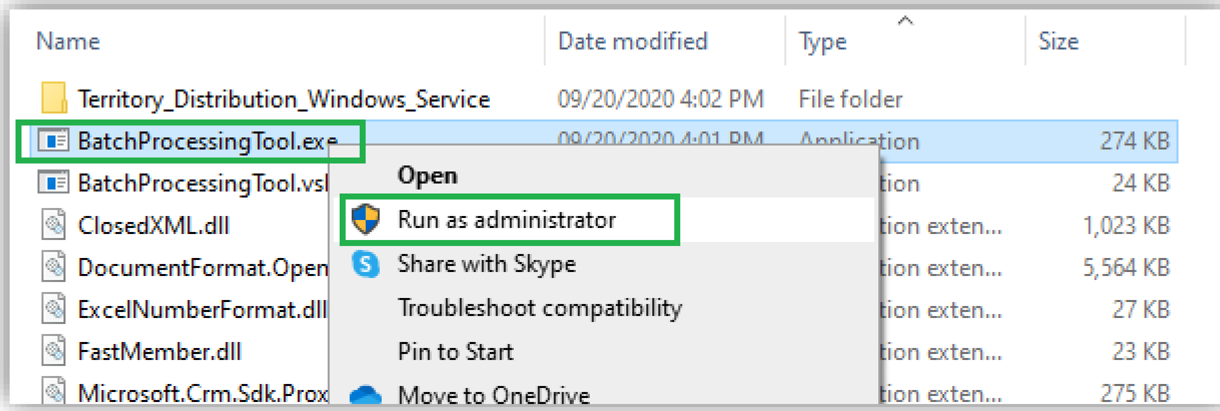
Windows service runs at the interval that user will set. For example, user can set it for every 1 hour. When windows service runs and finds territories with the status 'Process by WS' then it will process them one by one. It takes one territory and performs the logic and distributes the records properly to create the respective number of territories and while updating these territories it changes the status of those territories to draft. User can plot this draft territory and create the respective territories into the CRM.

To install Windows Service, user can go to the 'Batch processing tool'.

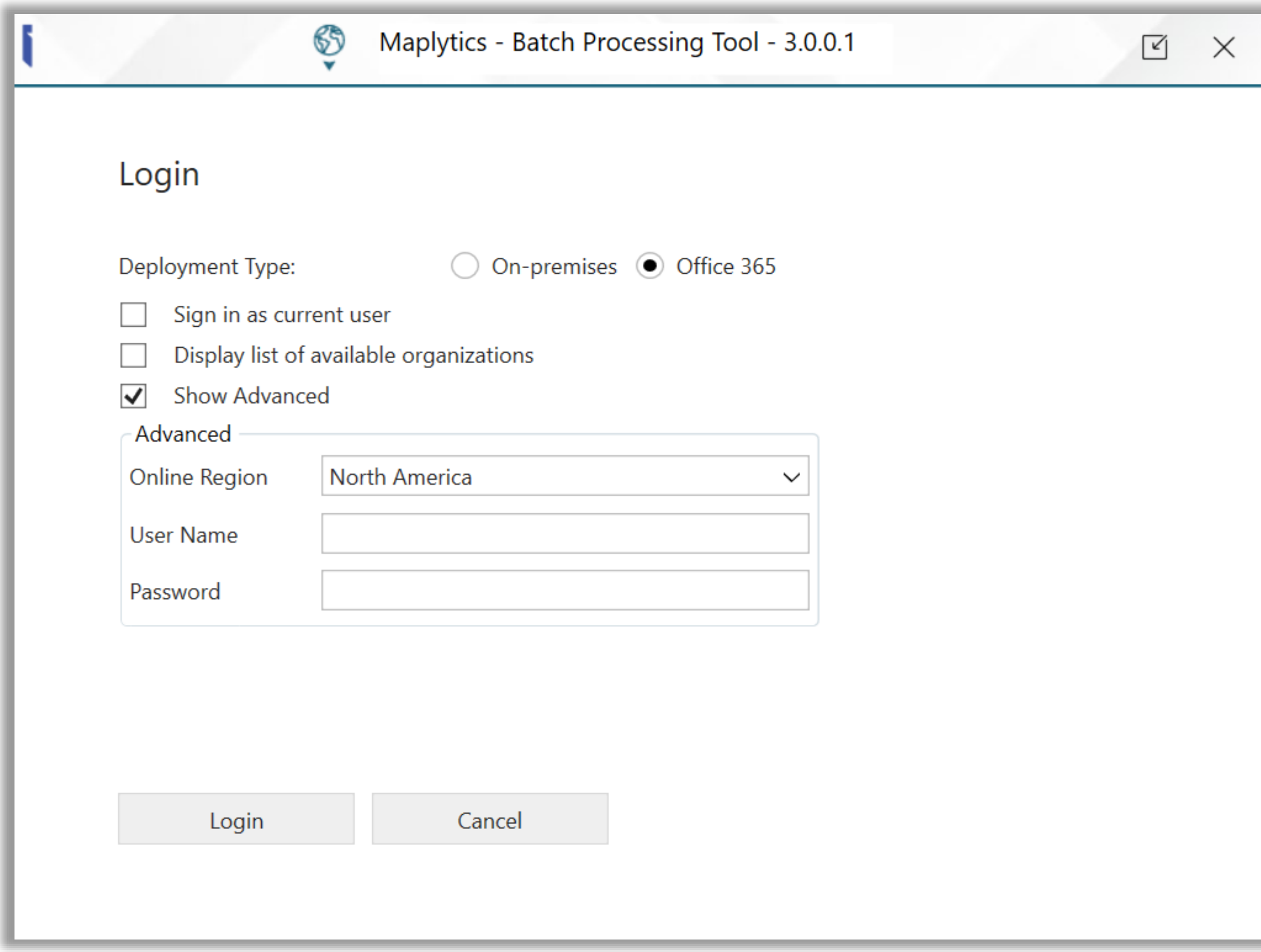
1. *To get the tool, Extract the Batch Processing tool .zip file from the extracted Zip folder of downloaded Maplytics solution.*



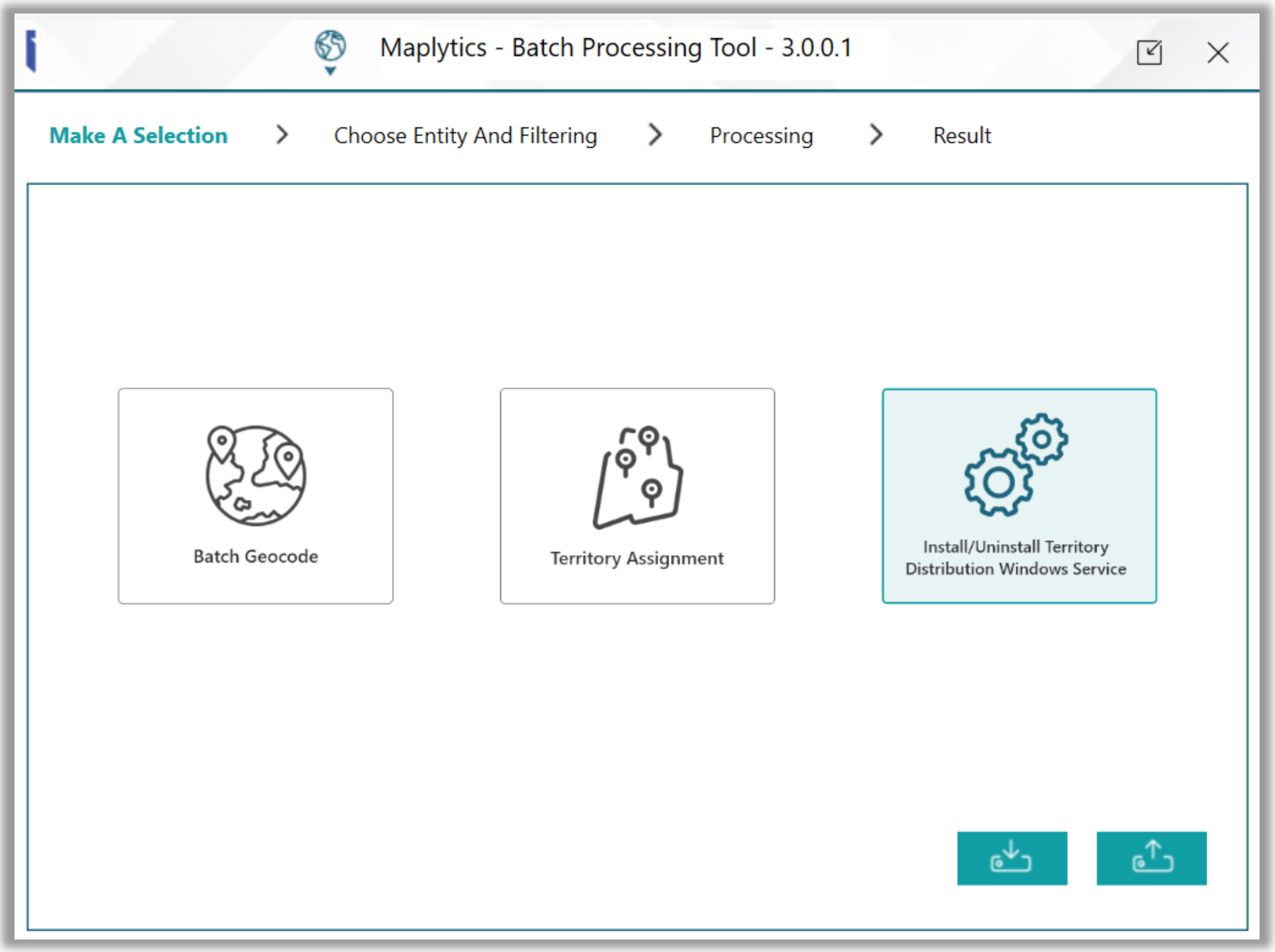
2. Run the ***BatchProcessingTool*** as Administrator as shown below.



3. Once the user runs the tool, the following window will open where they need to enter the credentials and click on 'Next'.

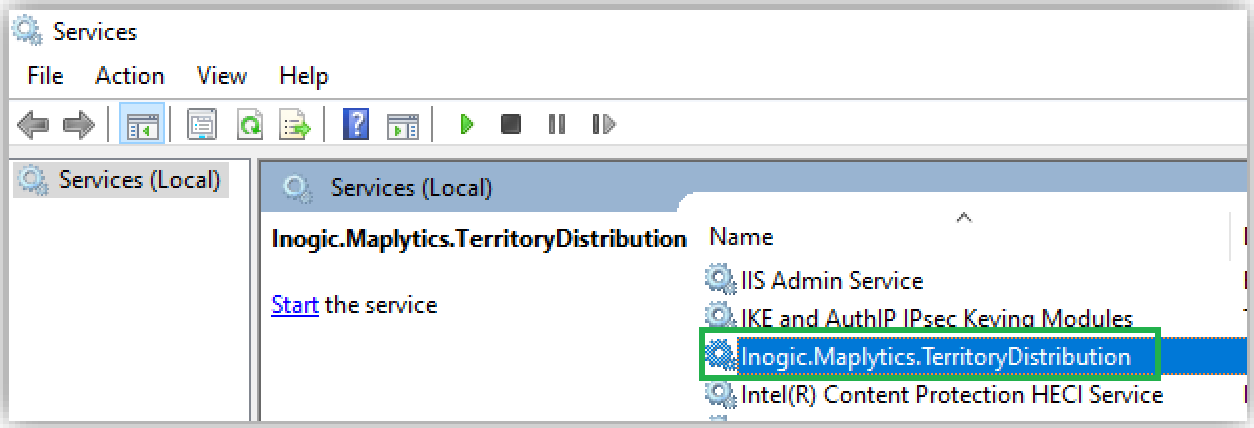


4. Once user clicks on 'Next', it validates the credentials and if credentials are valid then the below window shows up. Here, user needs to select the option to Install/Uninstall Territory Distribution Windows Service and click on 'Install'.

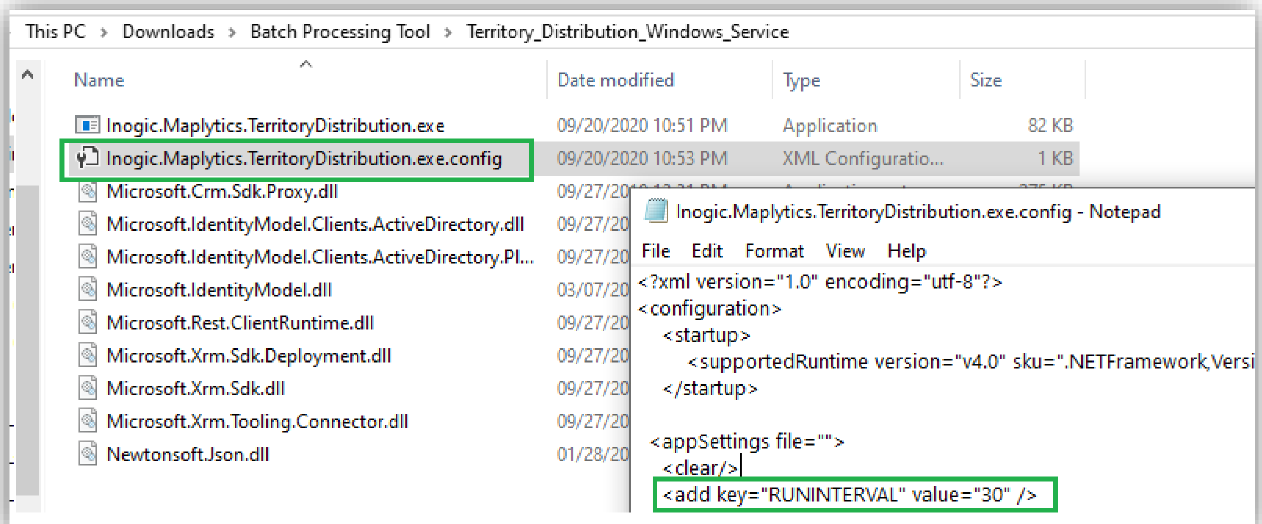


Once clicked on 'Install' the 'Territory Windows Service' will be installed in the PC as shown below. User can click on 'Uninstall' to uninstall 'Territory Windows Service'.

User can start and stop windows service using 'Start' and 'Stop' button.



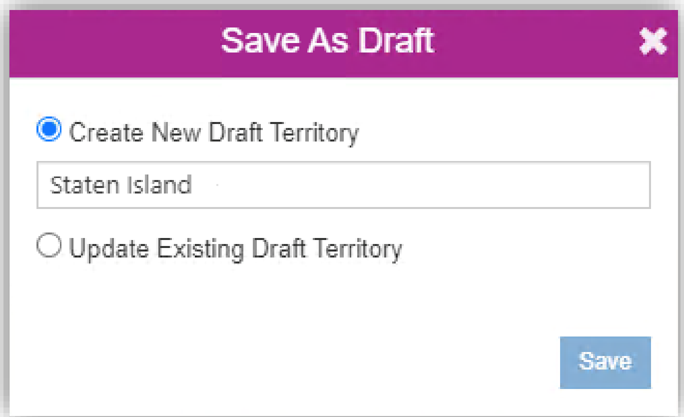
To update the windows service run interval, user needs to change "RUNINTRERVAL" in the app config of windows service (Inogic.Maplytics.TerritoryDistribution.exe.config).

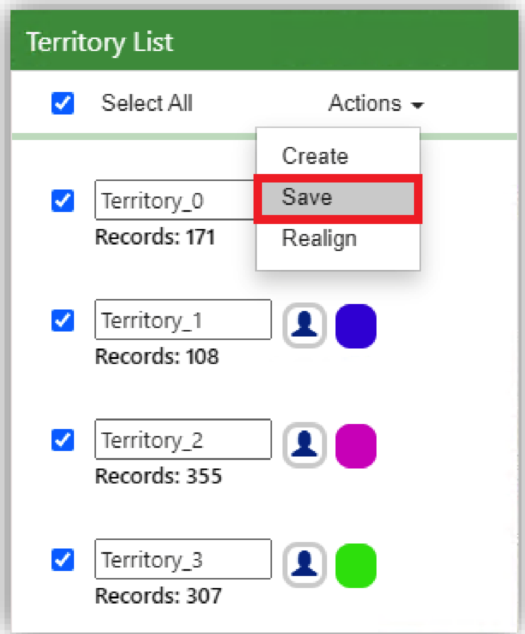


Note: Make sure the PC in which the Windows Service is installed is running all the time because if the PC is turned off, the Territory Windows Service will also get turned off and it will not perform any task.

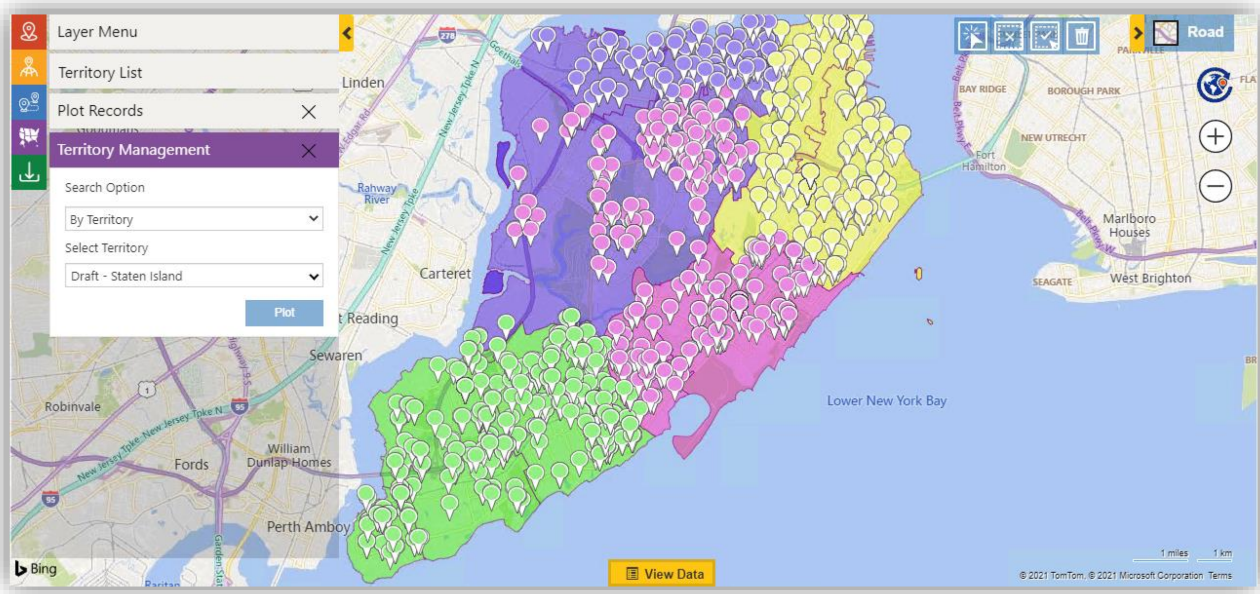
Draft territories

If the users need to further work on the territories processed or needs to make any changes, they can choose the 'Save' from the Actions and save the territories processed as a 'Draft territories' within the CRM.





After saving a draft, user can use the option of 'By Territory' within the 'Territory Management' card to plot the draft territories saved in CRM and rework on them. Further, user can choose to save it again as a draft with the updates done or create the respective territories in the CRM using the option of 'Create' from the Actions. If user wants to create the respective territories from the draft, they can also choose whether or not to delete the respective draft territory.

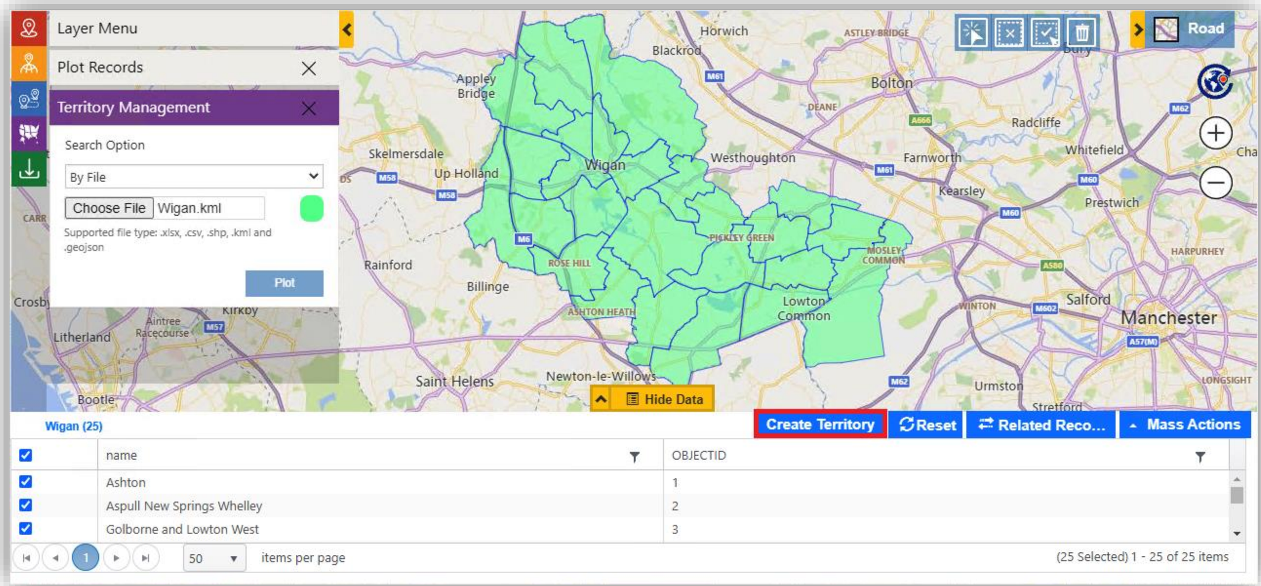


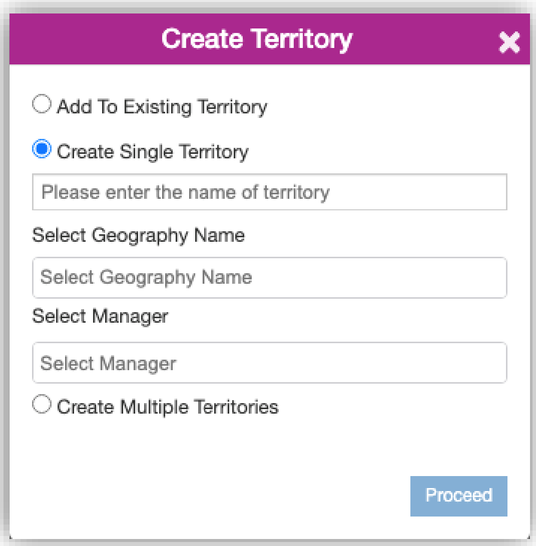
Create territory on one click

User can create multiple territories with a single click on 'Create Territory' button. User can plot shape files or excel files on the map to view the shapes required as geographies and follow the steps mentioned below to create territories:

By Shape file

After plotting a shape file on the map, user can click on the 'Create Territory' button to create a new territory with the plotted shapes as geographies or create the plotted shapes as geographies into a selected existing territory.





User can provide the name for the new/existing Territory to be created and select the column from the excel file for 'Select Geography Name' and the respective names of geographies will be fetched from the file.

By Excel file

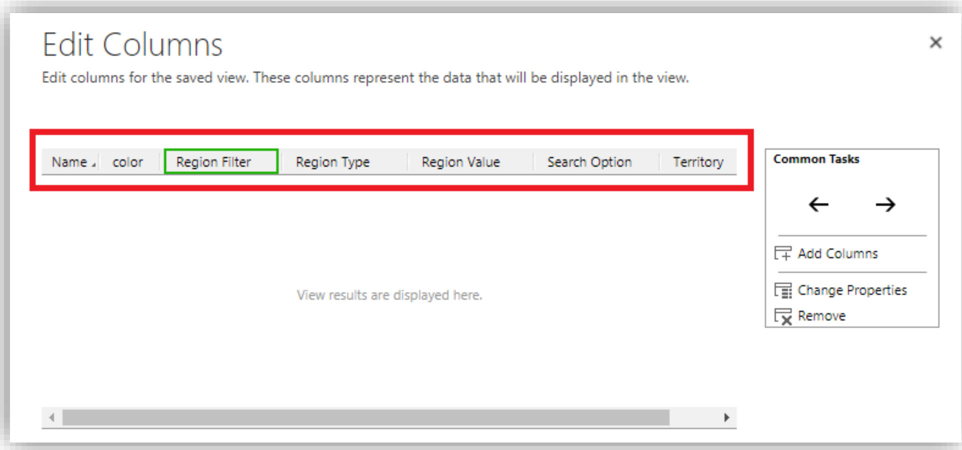
After plotting an excel file, user can click on the ‘Create Territory’ button to create territories with the shapes plotted on the map as Geographies. The names of the territories and the respective Geographies will be fetched from the excel file.

The excel file should in the supported file format as mentioned below.

Name: Name of the Geography.

Search Option: Bulk geography feature is available only for the ‘By Region’ option, so this value should always be ‘1’.

Color: Color should be in Hexadecimal format i.e. (#DAF7A6). If the user enters the color in other format then the default color (Blue) will be set.



Region

Type: There are 6 region types that the user can define to create the geography. (Country, State, County, City, PostalCode1, PostalCode2).

Region Value: If the user needs to create the geography based on Postal Code, then they can define the postal code values in this column. To define multiple geographies in single territory, use the comma separator (,).

Territory: This is a lookup value to define which geography belongs to which territory.

Manager: The names of the users can be provided here. While creating territories, the managers for the respective territories. However, the column of ‘Manager’ is not mandatory to be in the excel file.

Note: For Territory management:

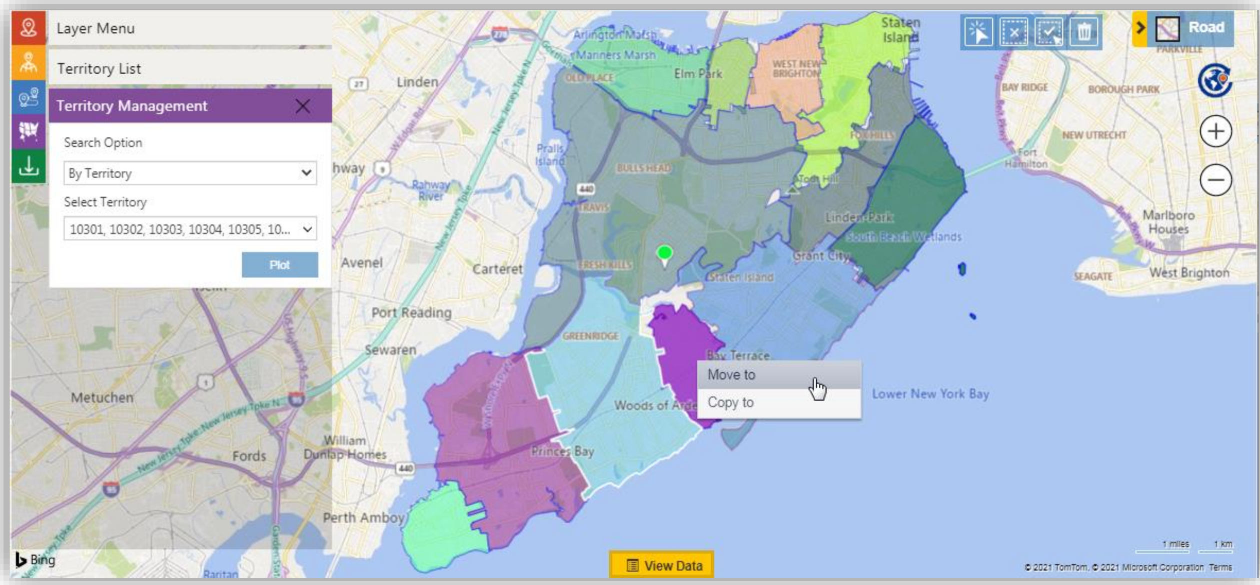
- ***The column of ‘Territory’ should contain the Names of the territory(ies)***
- ***Color: Color should be in Hexadecimal format i.e. (#DAF7A6). If the user enters the color in other format then the default color (Green) will be set.***
- ***There are 8 region types that the user can define to create the geography. (Country, State, County, City, PostalCode1, PostalCode2, PostalCode3, PostalCode4).***

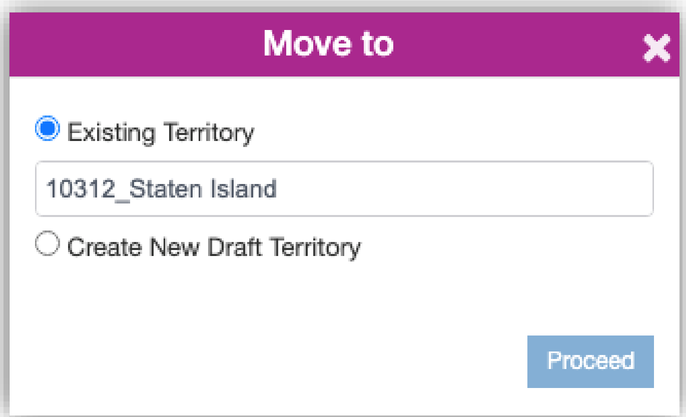
Alignment of Existing territories

User can plot the existing territories and align them to get the proper distribution of the regions. User can use the following two options to align the territories.

Move to

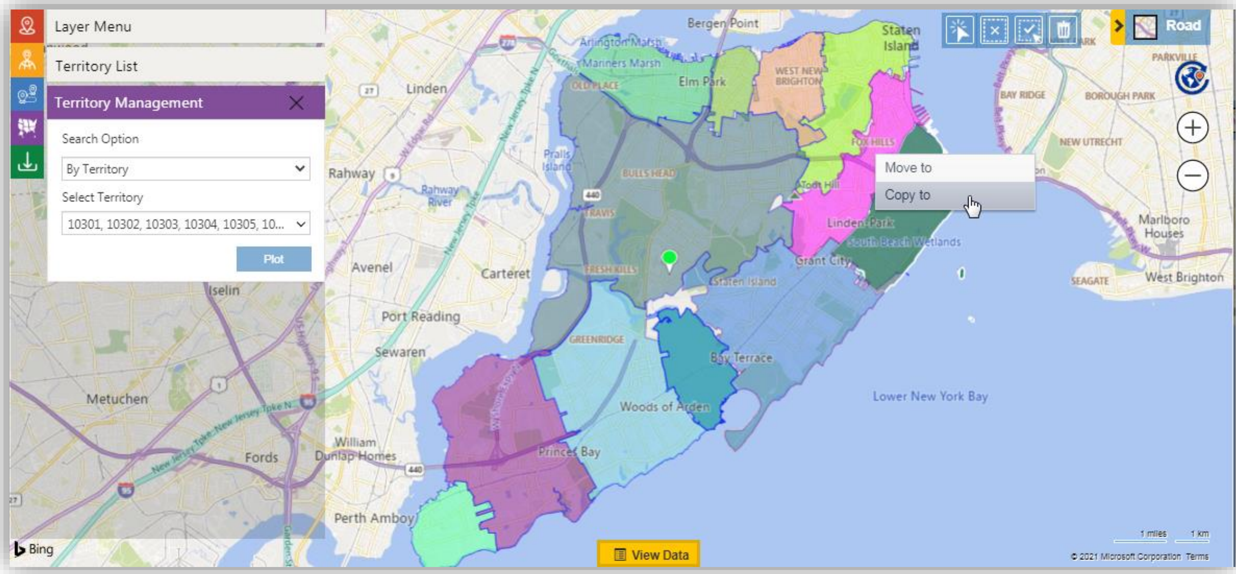
User can select some geography(ies) of one or more territories and move it to another plotted existing territory or create a new territory. This will remove the geographies from the original territory.

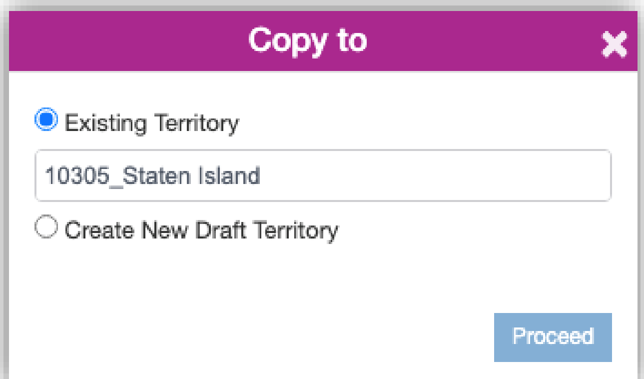




Copy to

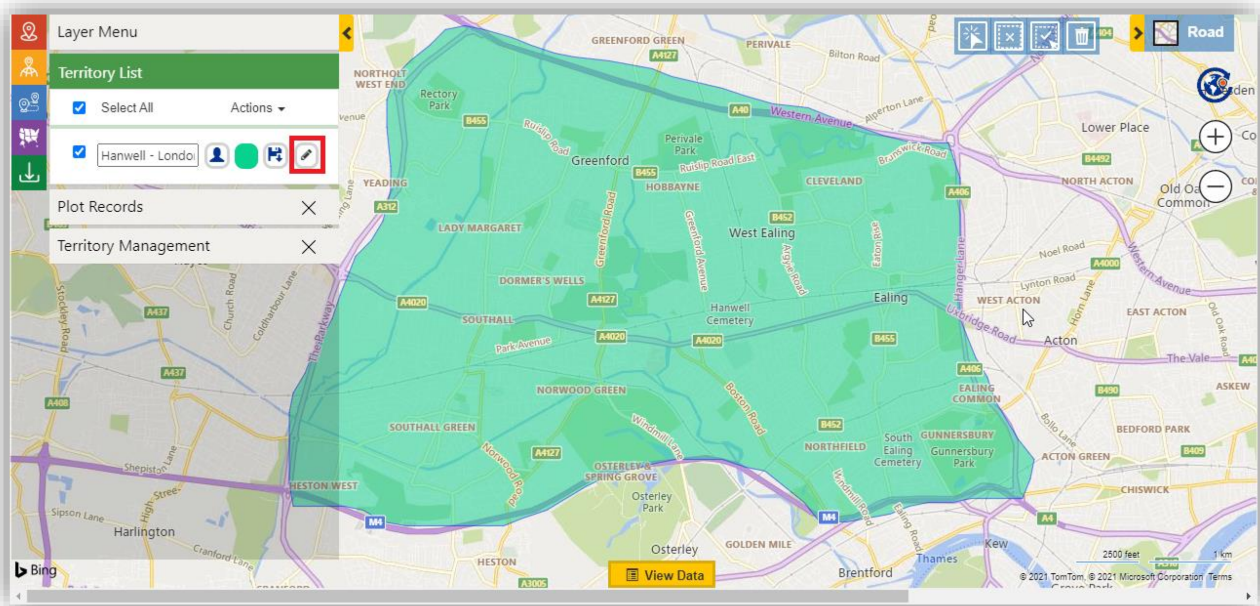
User can select some geography(ies) of one or more territories and copy it to another plotted existing territory or create a new territory while keeping the geography in the original territory.



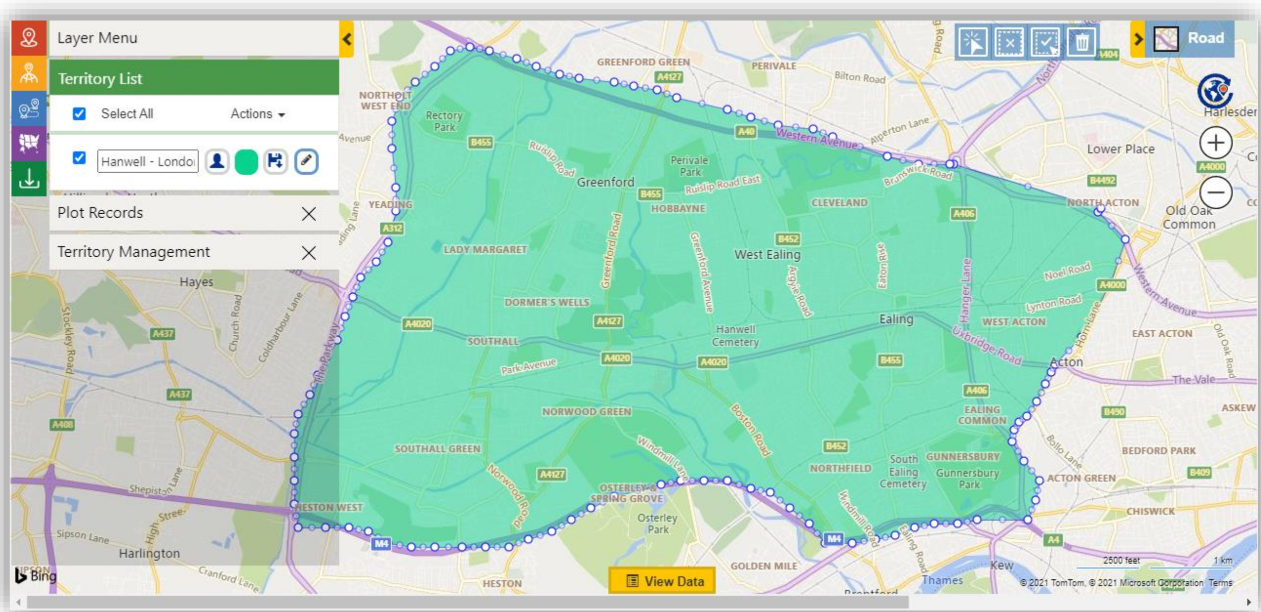


Edit Existing Territory

Users can modify the boundaries of the drawn shapes in existing territories using this option. To do this first plot the existing territories on the map. Now, go to the ‘Territory List’ and click on the ‘Edit’ button for the required territory and click on the required shape to modify.



Now user will be able to drag the boundaries of the shape to modify it according to the requirement.



Note: Only the territories that contains shapes created using the Drawing tool can be edited by Edit Existing Territory option.

Shape Operations in Territory Management

User can perform Binary operations on the shapes, regions or territories plotted on the map. User can select the shapes on which they want to perform operations and right click on them to select the Binary operations. There are five Binary options available: Difference, Intersection, Union, Union Aggregate and Disjunctive Union. Please refer to the section of the Shape operations to know more about these Binary operations.

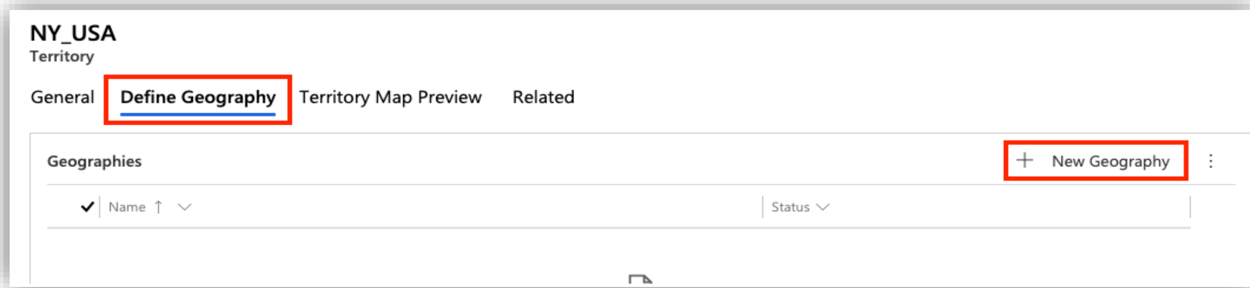
Note:

- ***The shapes should overlap each other to be available for performing shapes operations***
- ***There should be a layer of drawing overlapped with the shapes on which binary operations has to be performed***
- ***The required shapes should be selected before performing Binary operations***

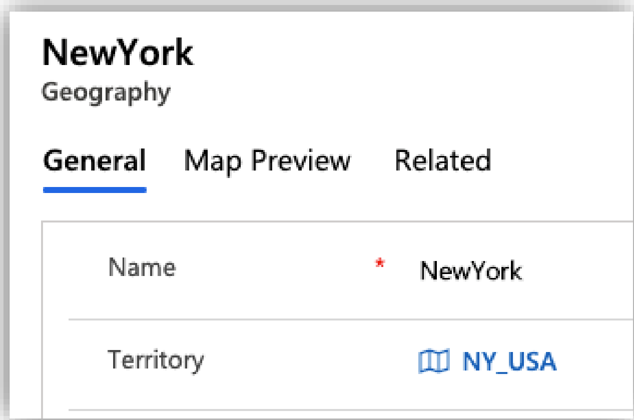
Defining Geographies for Sales Territory using Maplytics

The users can create sales territories using the native Dynamics CRM 'Sales Territories' feature and define geographies for the sales territories on a map using Maplytics.

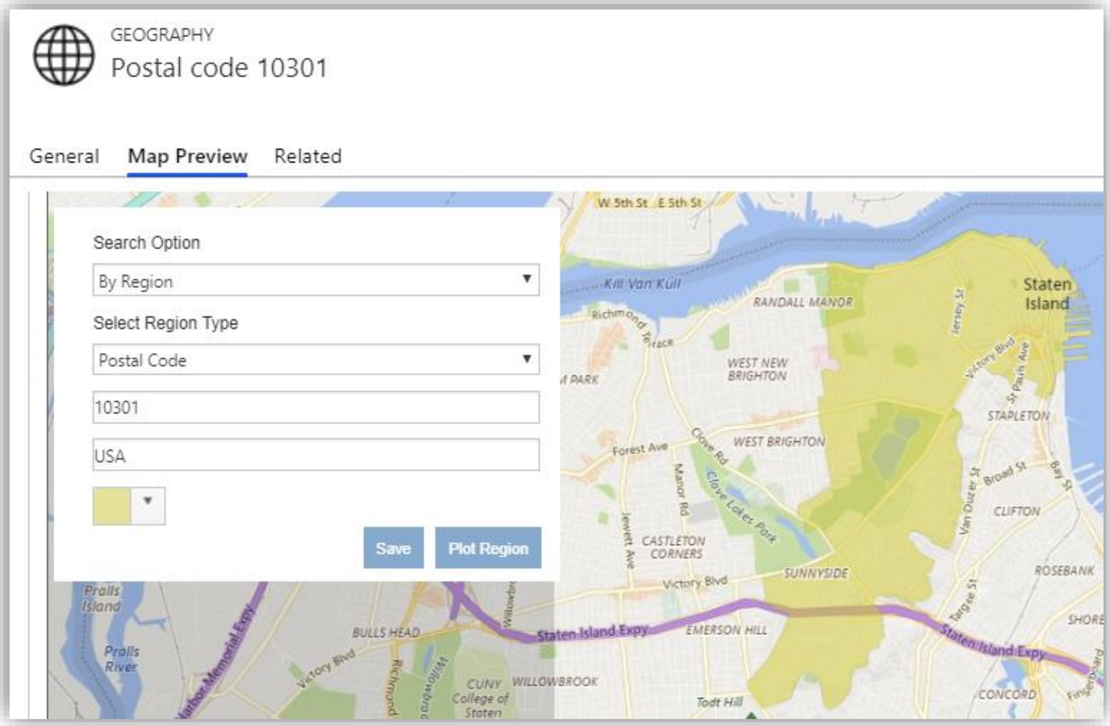
To create geographies for sales territory, go to ***Settings > Territories*** and click on 'New' to create a sales territory. With Maplytics a 'Geographies' Entity is added on the territory. User can use this feature to visualize and create geographies for the sales territory. To create a new geography, click on ***'Add New Geography'***.



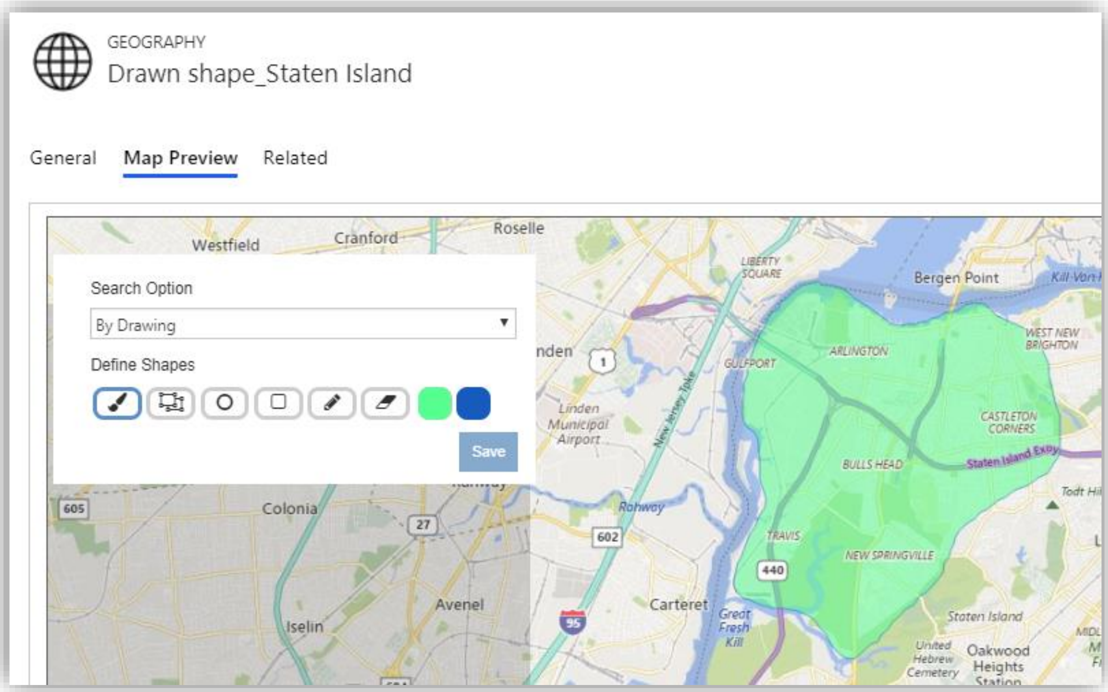
In the section '***General***', provide a name for the Geography.



Within the section '***Map preview***', the user has the option to visualize the geography on a map 'By Region' or "By Drawing'. The 'By Region' option lets the user to plot the geography based on region types and the user has the freedom to choose the color for the plotted region.



The ‘By Drawing’ option lets the user to plot the geography by drawing a shape on the map and the user can further edit the shape based on their needs.



Note: User can define multiple geographies for a single territory.

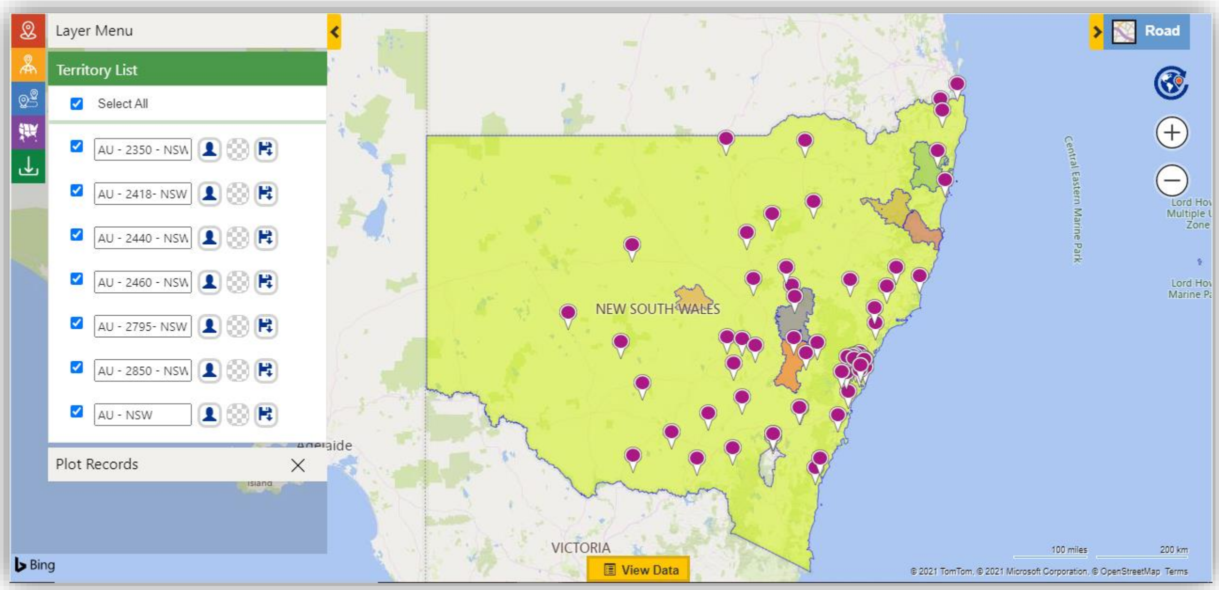
Hierarchal Territories

Dynamics 365 supports the hierarchy of territory where user can manage multi-level territories. If an organization has enabled the Hierarchical territories in the CRM, the users can plot the territories to plot and manage multi-level territories. So, if there are any child territories created for the selected territories, then those will also get plotted on the map along with the selected territories.

User can select and plot the territories on the map using the three ways as follows:

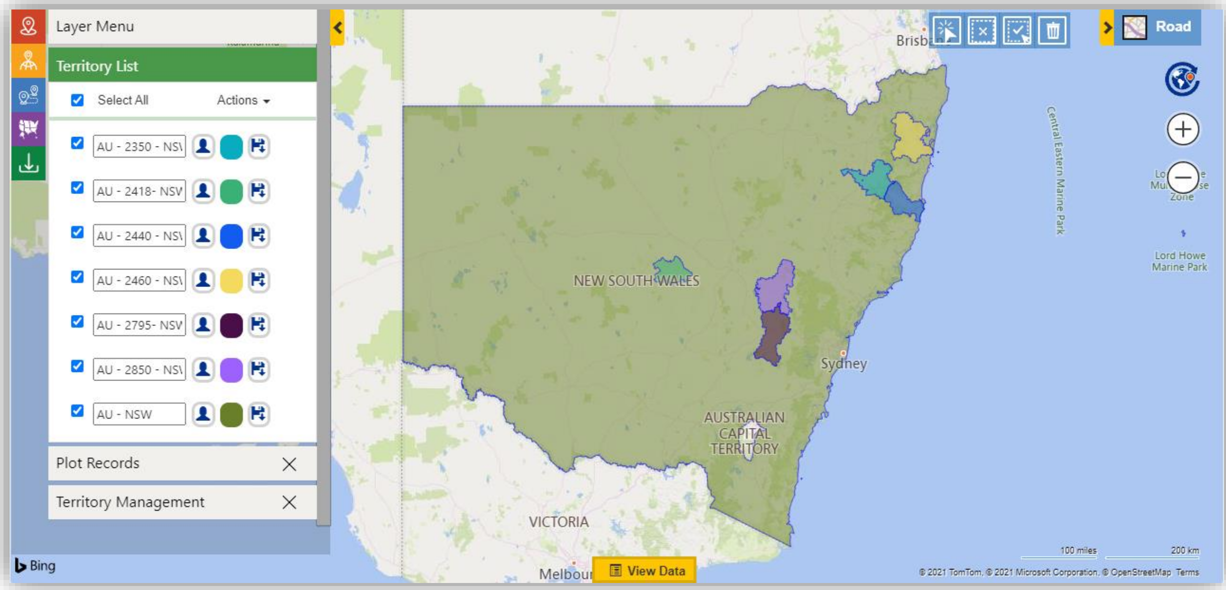
- By Territory using plot card in Detail map

  User can open the Detail map to choose the icon of 'By territory' in the Plot card. They can select the territories from the list, select Data source & view and click on Search to plot the same.



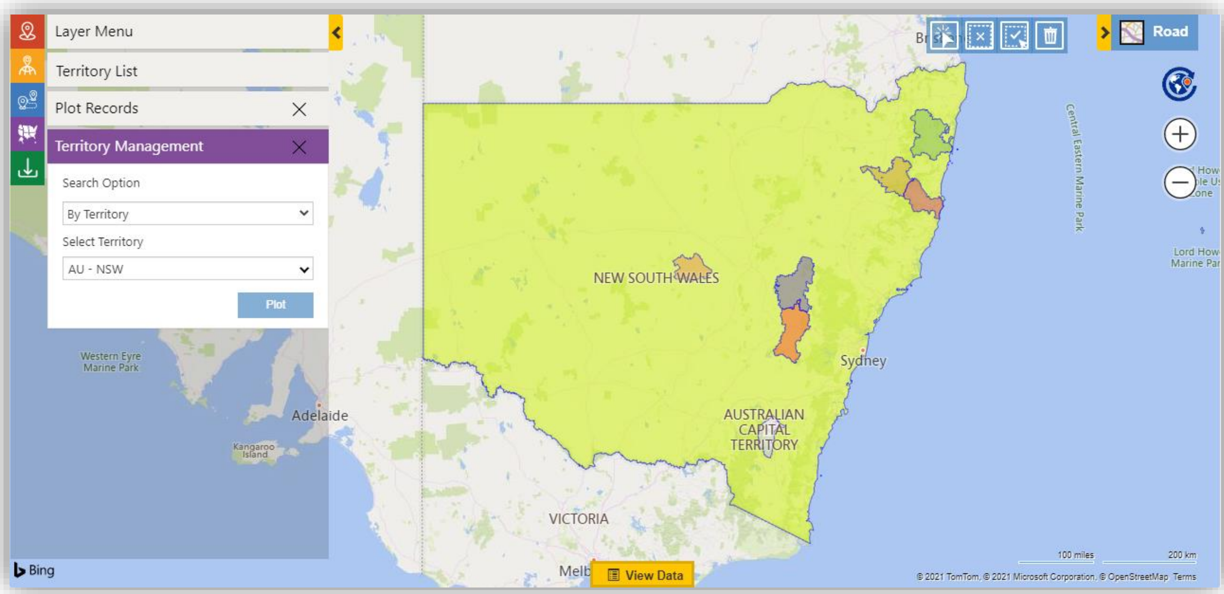
- By Territory using Territory Management in Detail map

  Within the Detail map, user can click on the icon of ‘Territory Management’ and select the option of ‘By territory’. Now, select the territories and click on Plot.



- Overlay in Detail map

  User can use the option of Overlay within the Plot card or Territory management to plot the territories.

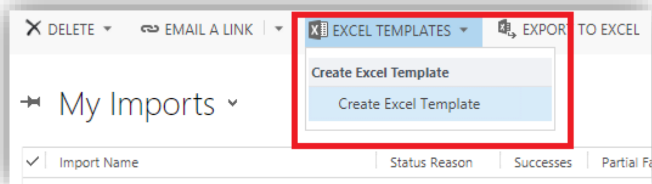


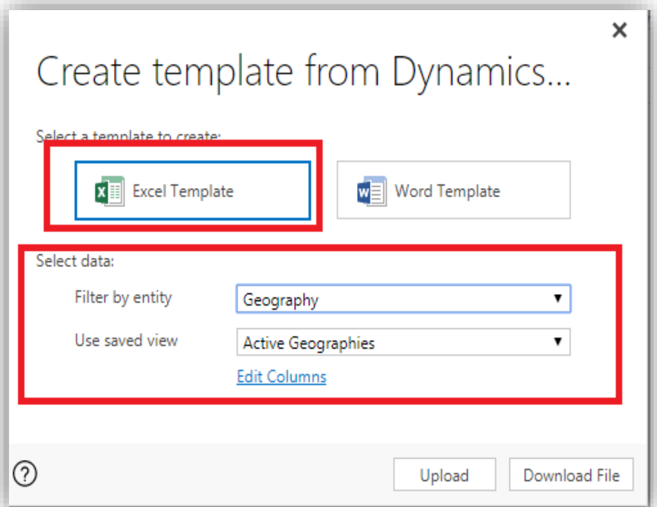
Note:

- ***System admin and Territory Manager will have access to all territories***
- ***The visualization of the territories to the rest of the users will be dependent on the usage of the option of 'Show All Territories' within the Default Configuration Detail record > Advanced Settings > Configure Option>Show All Territories. If the option is not selected then the user will be able to view only the territories for which they are the Territory Manager or the member.***
- ***If a user is the Territory Manager or the member of a parent territory, then the user will be able to access the child territories as well, either using the Maplytics maps as mentioned above or by going to the respective child territory records within the Territory entity to visualize it in the Territory Map Preview.***

Bulk Geographies by uploading an Excel file

The users also have the option to upload multiple geographies through an Excel files supported by CRM using the Bulk Geographies feature in Maplytics.

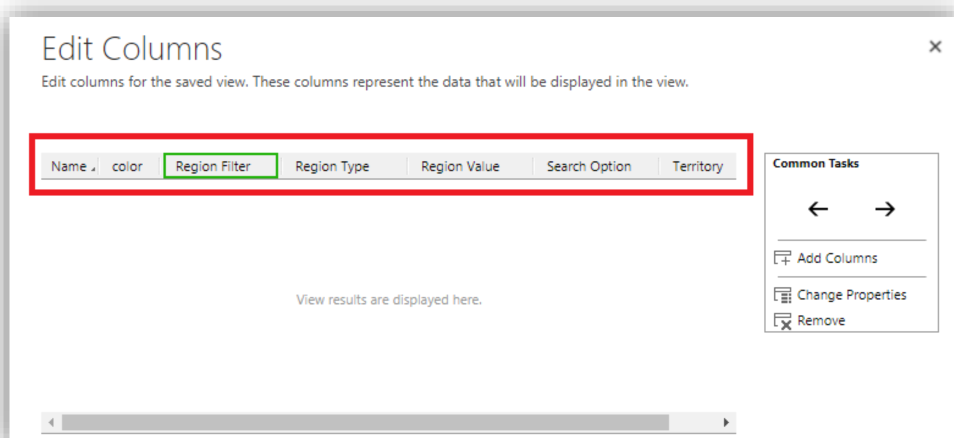




To upload the geographies in bulk, the user first needs to export an Excel template. Go to ***Settings > Data Management > Imports*** > select the ***'Excel Templates'*** and then click on the 'Create Excel Template' option.
Select the 'Excel Template' and in the 'Select data' section, select the 'Geography' Entity in the 'Filter by entity' field.

Click on 'Edit Columns' and select the below columns;

The excel file should in the supported file format as mentioned below:
Name: Name of the Geography.
Search Option: Bulk geography feature is available only for the 'By Region' option, so this value should always be '1'.
Color: Color should be in Hexadecimal format i.e. (#DAF7A6). If the user enters the color in other format then the default color (Blue) will be set.



Region Type: There are 6 region types that the user can define to create the geography. (Country, State, County, City, PostalCode1, PostalCode2).
Region Value: If the user needs to create the geography based on Postal Code, then they can define the postal code values in this column. To define multiple geographies in single territory, use the comma separator (,).
Territory: This is a lookup value to define which geography belongs to which territory.

Note: For Territory management:

- ***The column of 'Territory' should contain the Names of the territory(ies)***
- ***Color: Color should be in Hexadecimal format i.e. (#DAF7A6). If the user enters the color in other format then the default color (Green) will be set.***
- ***There are 8 region types that the user can define to create the geography. (Country, State, County, City, PostalCode1, PostalCode2, PostalCode3, PostalCode4).***

Multiple Territories assigned to records

If a user needs to assign more than one territory to the entity records, user can enable the feature of Multiple Territories for a record. This feature will help the user to visualize records which lie in single or multiple territories. After assigning the territories, they can plot the territories to visualize the respective records lying into them.

To start using the feature of Multiple Territories for a record, user can follow the steps mentioned below:

Step 1: Enable Multiple Territories

Go to Settings > Maplytics > Maplytics Configuration Details > Default configuration detail record > Configuration option > Select 'Enable Multiple Territories'.

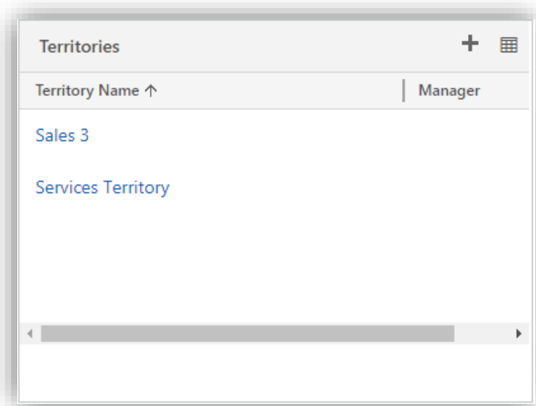
Note: User cannot undo this option, once selected and saved.

Step 2: Creating N: N relationship of entity with Territory.

Go to Settings > Customizations > Customize the System > Entities > Select Entity > N: N Relationships > New Many-to-Many Relationship

Step 3: View the list of territories assigned to a record

User can add a sub-grid to show the territories that an entity record is associated with. This step is optional, even if a sub grid is not added, the assigned territories will get associated with the records in background.



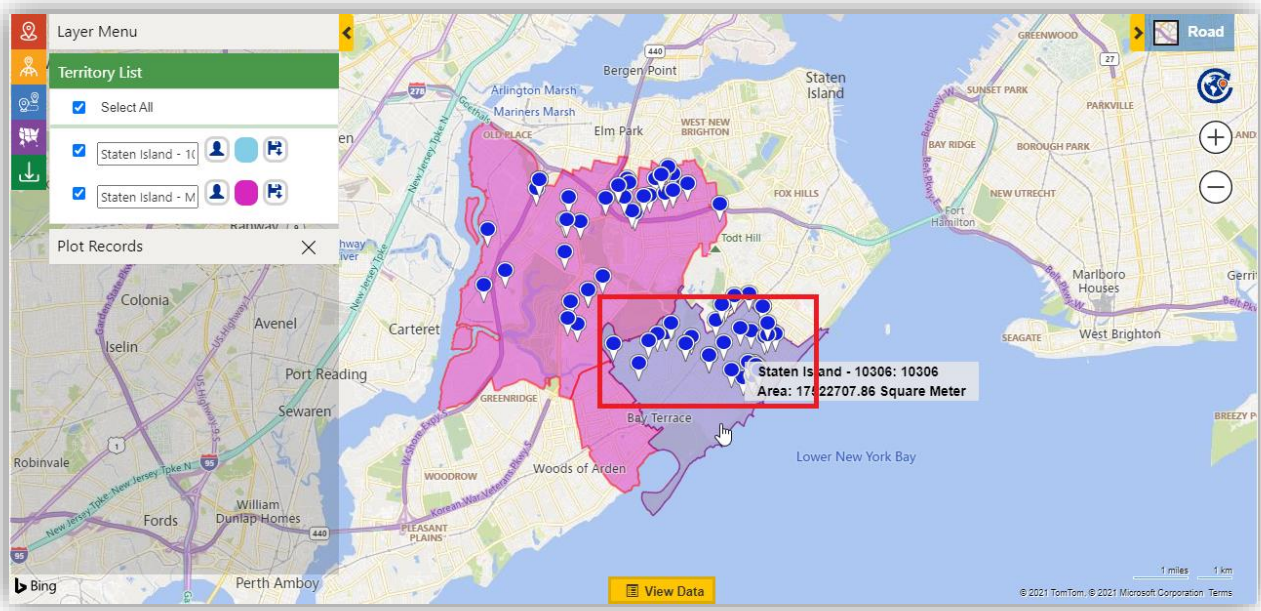
Step 4: Select relationship for the field 'Territory Relationship' in Attribute mapping section of Entity map.

Go to Settings > Maplytics > Entity maps > Attribute mappings > Territory Relationship > Select 'Entity - Territory' relationship

Step 5: Assign territories to records

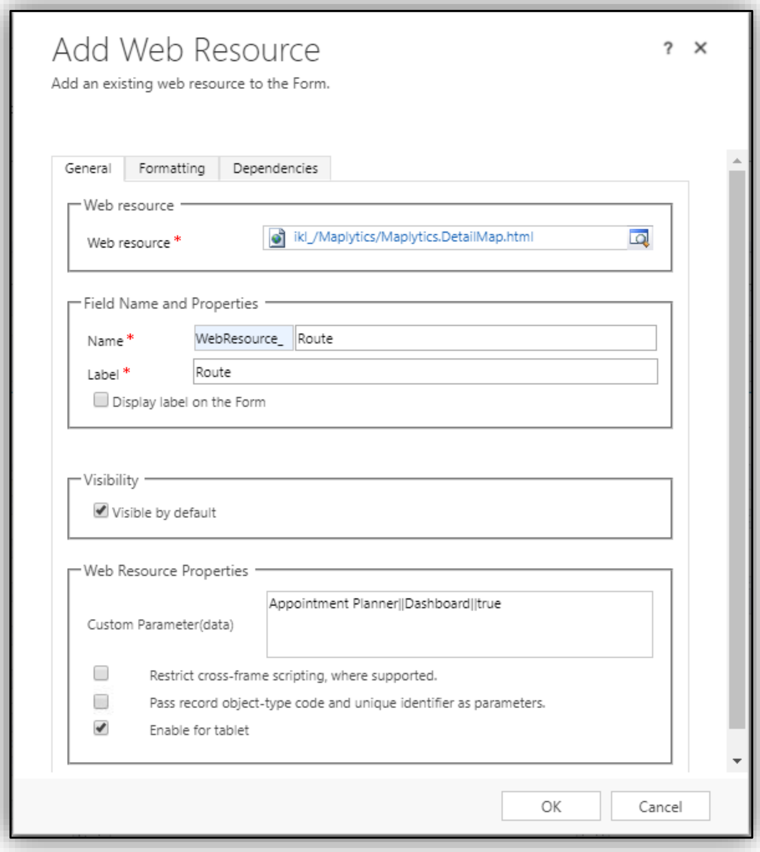
User can either run ***Batch Processing tool*** or the ***Inogic.Maplytics.AssignTerritoryWorkflow*** on the records to assign the territories to the records.

After assigning the territories, user can choose the Search option of 'By territory' to plot the territories along with the respective records. The below screenshot shows two territories plotted on the map, 'Staten Island – 10306' and 'Staten Island- Mid' which overlap on each other and have pushpins in common as highlighted.



Detail Map on CRM Dashboard

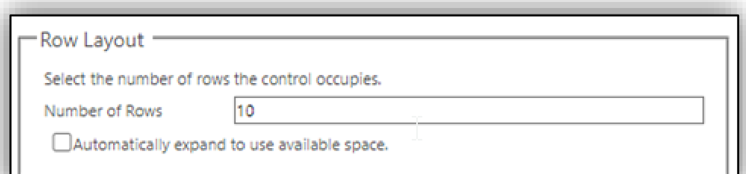
To include the Maplytics Detail Map component on the Dashboard, click on the 'new' button and select 'Add Web Resource'. Select ***'ikl_/Maplytics/Maplytics.DetailMap.html'*** web resource. The User can further modify this web resource by including some custom parameter. For Example, if the user wants to plot a route from a dashboard like Appointment Planner. The user can automate the complete process.



Custom Parameter(data) : You need to provide the Custom Parameter(data) as

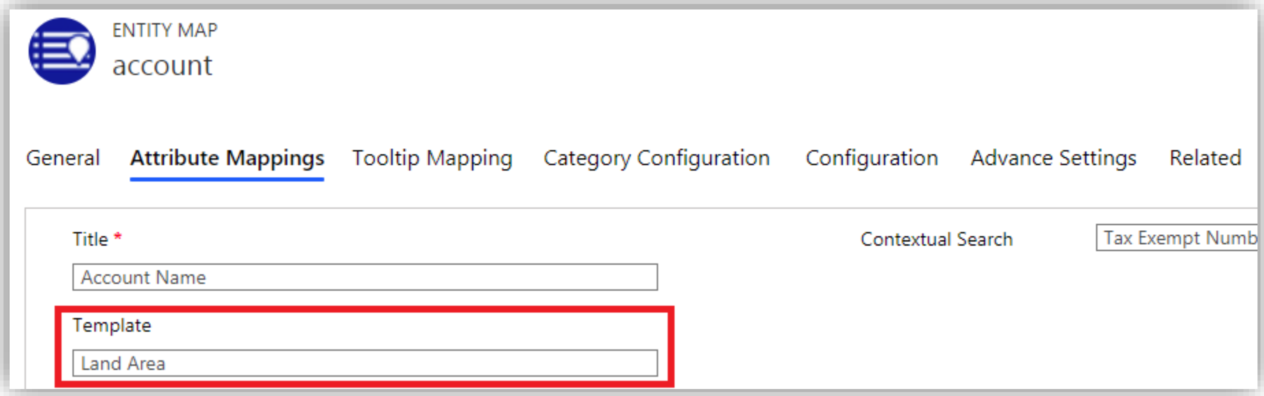
- **<Dashboard Name>||dashboard||true**
- **Appointment Planner||dashboard||true**

The recommended number of rows in formatting is minimum 10.



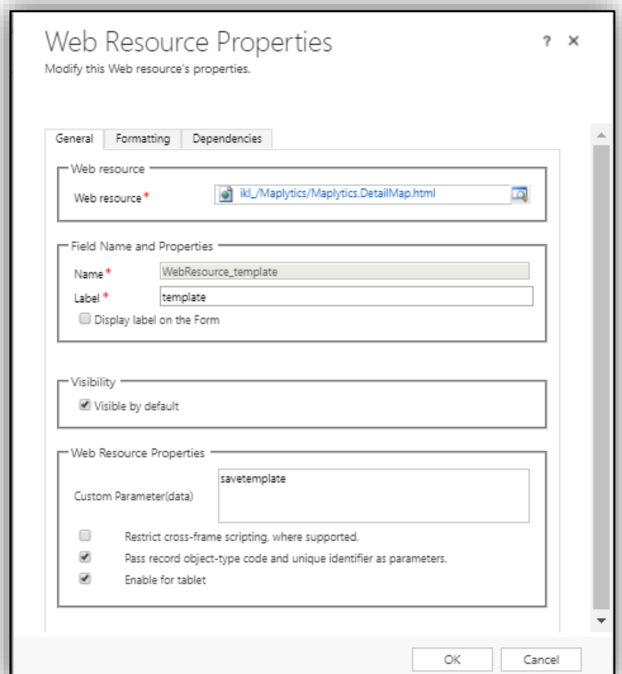
Saved Template Visualization on CRM Entity Form

Users can include the Maplytics Detail Map component that loads a saved template associated with the Entity record on the Entity Form. For this, the user needs to create a 'Template' lookup field on the Entity form where user can select the required Maplytics Template. The user also needs to select the name of that field in the 'Template' field under 'Define Attributes' section on the Entity Map for that particular entity.

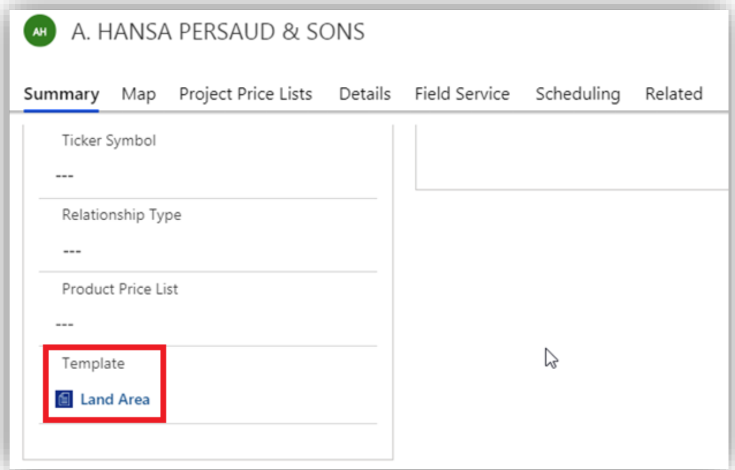


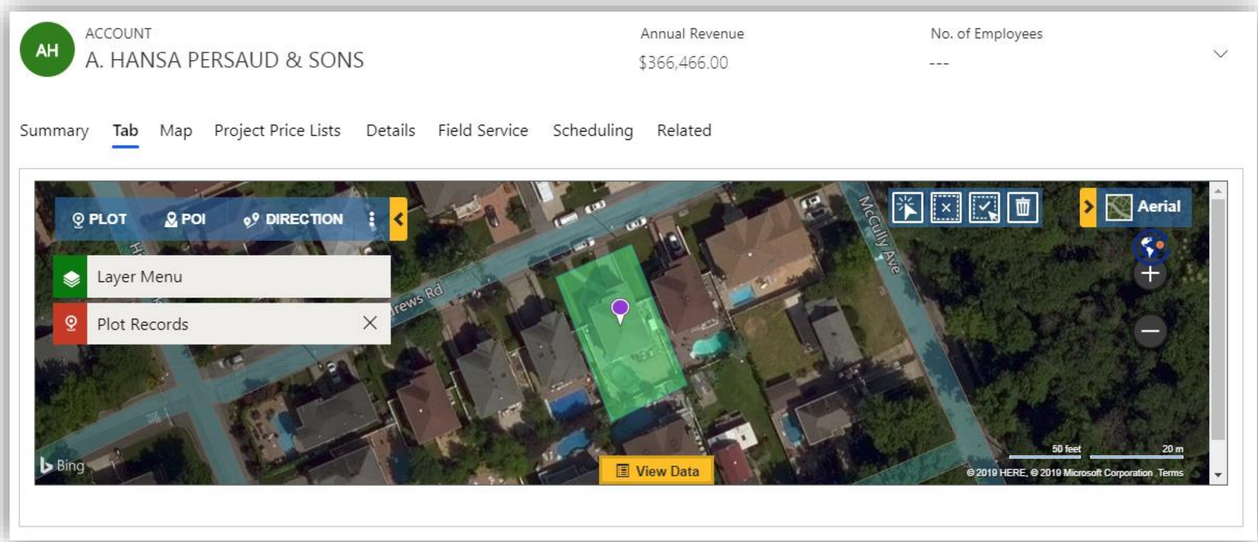
On the Entity form, the user needs to 'Insert' a new Tab and select 'Add Web Resource'. Select ***'ikl_/Maplytics/Maplytics.DetailMap.html'*** web resource. The user now needs to add a Custom Parameter for the saved templates. The recommended number of rows in formatting is minimum 10.

- Custom Parameter (data): Provide the Custom Parameter(data) as ***savetemplate***



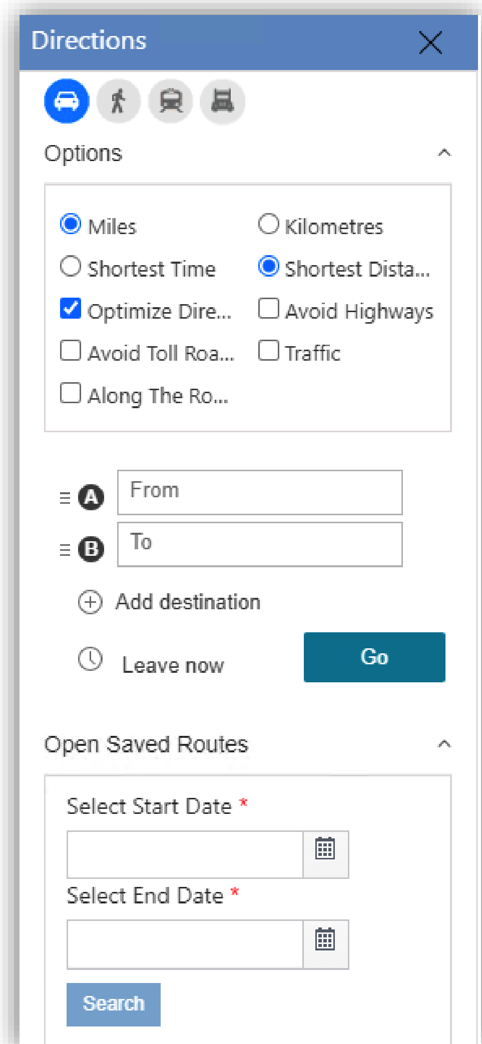
Now, when the user selects a Maplytics Saved Template on the ‘Template’ lookup field on the Entity form, the selected template will be plotted on the Detail Map component added on the Entity form.





Routing Optimization

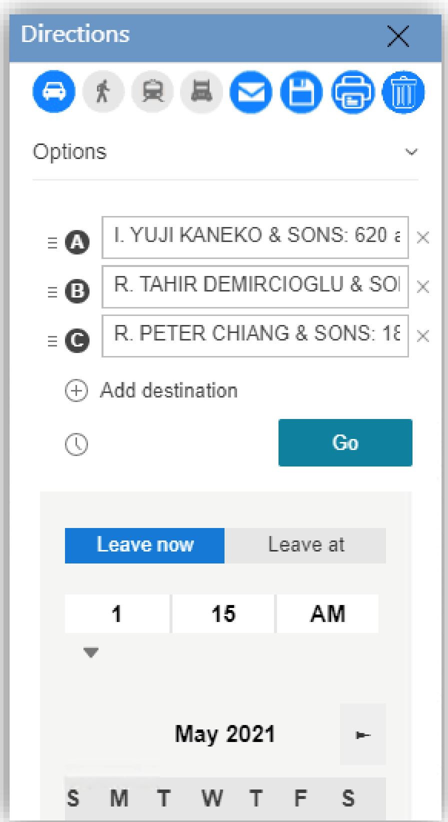
User can select some locations on the map as waypoints to plot an optimized route. User can follow this route to visit the required locations and complete their meetings. User can also redirect themselves for turn-by-turn navigation in order to reach the right location on time.



Directions Card

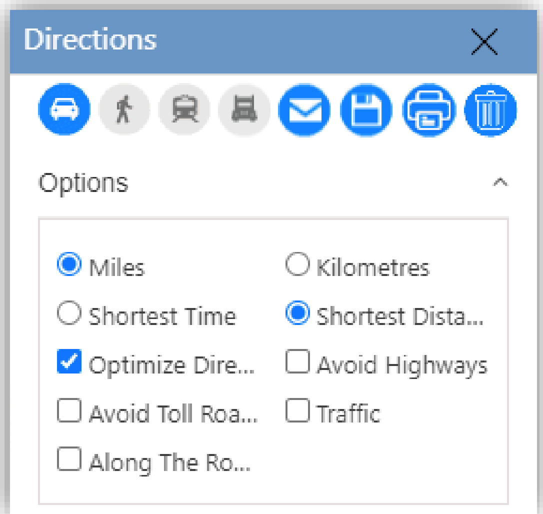
Directions card provides the user with all the routing features. The user can open the Directions Card directly by clicking on Directions tab.

The Directions Card also opens up when the user adds a waypoint(s) to the route either through the Contextual Menu, ToolTip Card or using the 'Add to Route' mass action. User can select the required waypoints and the leaving/arriving time. The user can drag and drop the waypoints to change the order of route



Note: The user can add a maximum of 25 waypoints in the direction functions.

Once the waypoints are selected, the user can choose the mode of transports like Driving, Walking, Transit or Truck to view the route.
The user can select different options to reduce the time, toll, highways, etc. by clicking on the Options button. Some of these can be auto-selected using Maplytics Configuration Settings.

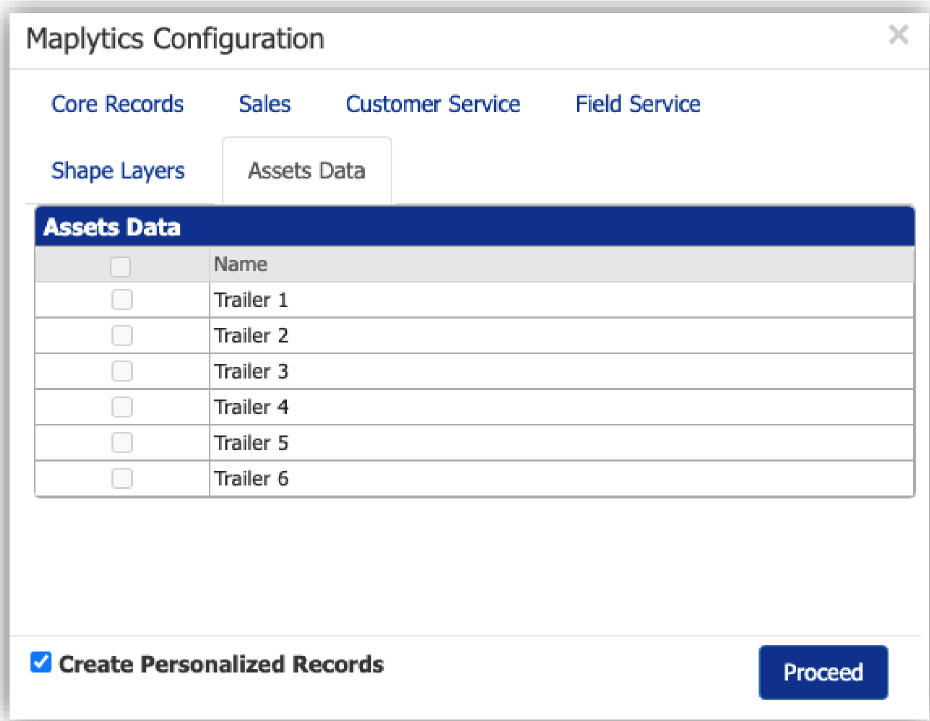


> ***Note: To start using Truck route, please contact crm@inogic.com***

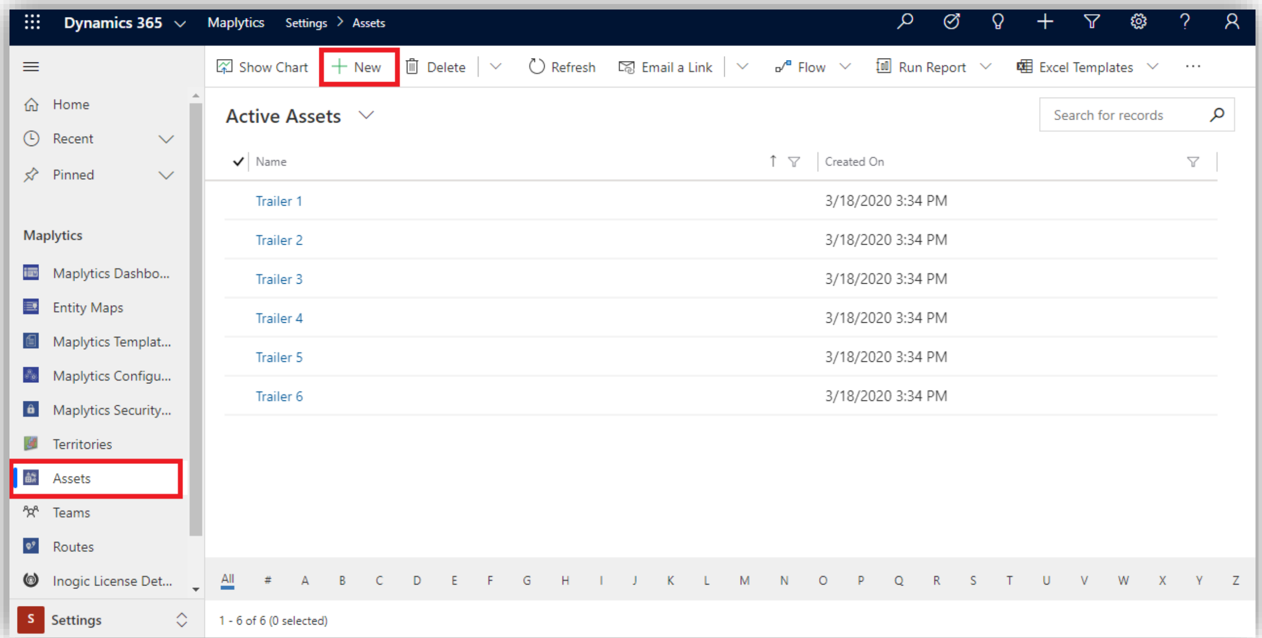
Truck Route

To start using Truck route, please contact crm@inogic.com. Once the user has contacted us at crm@inogic.com for the truck route, the user will be provided with a Maplytics license with Truck routing enabled into it. To start using Truck route, user needs to update the license and then configure as mentioned below:

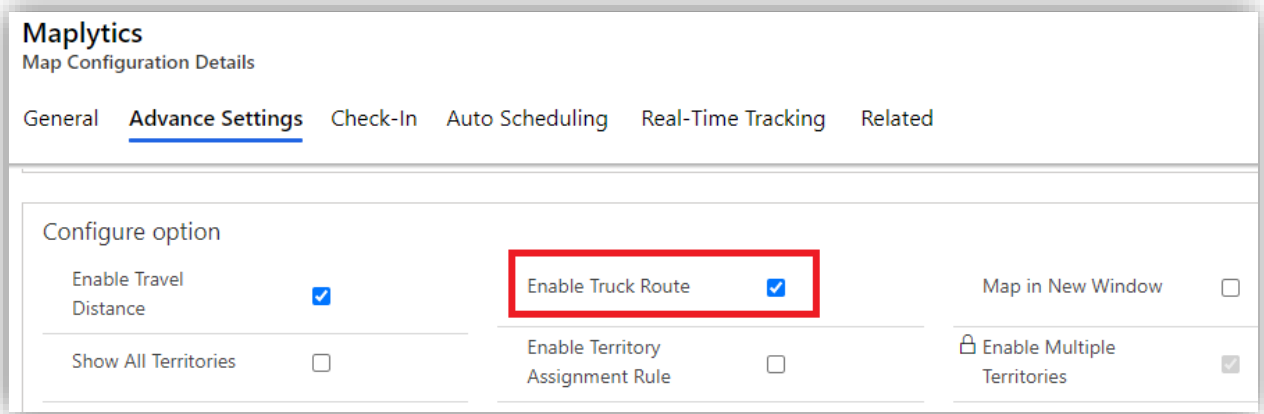
Update the license: Go to Maplytics App > Settings > License registration > Click on Activate.
Configure: Go to Maplytics App > Settings > License registration > Configure Tab > Configure. Here the Asset data will be configured to the users Dynamics CRM.



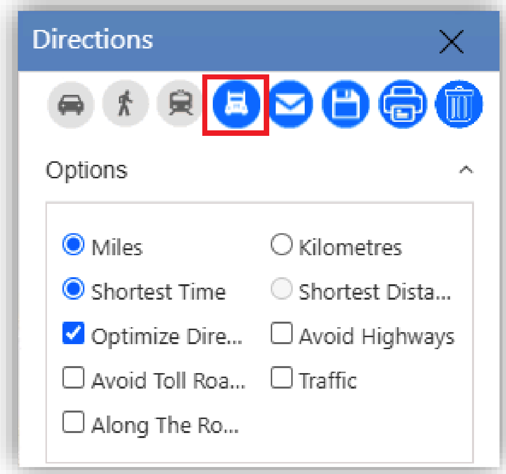
Assets data configuration will create some sample records for Trucks which user can select while using the feature of Truck routing. User can click on the 'New' button to create new records of Assets. They can also edit and save changes to the configured Assets.



After the sample records for trucks have been configured, user can enable the truck routing. To enable truck routing, go to Maplytics App > Settings > Maplytics Configuration Details > Default Configuration Detail record (with no user) > Advanced Settings > Enable Truck Route.



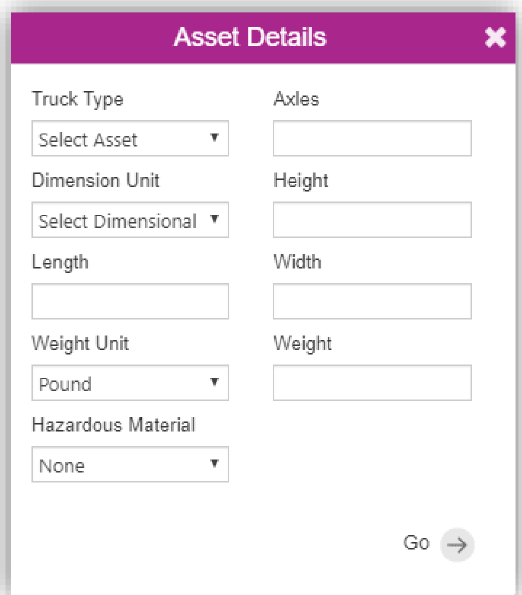
User can choose the truck icon on the Direction card to plot the route for a truck. On the selection of the truck icon a window will pop up to enter the Asset details.
Within the Asset Details, user can either select one of the sample truck types or select the custom option to enter their own details and then click on 'Go' to plot the route.



> ***Note: Optimization of the route with the Shortest Distance will not be available when Truck is selected as the mode of transport.***

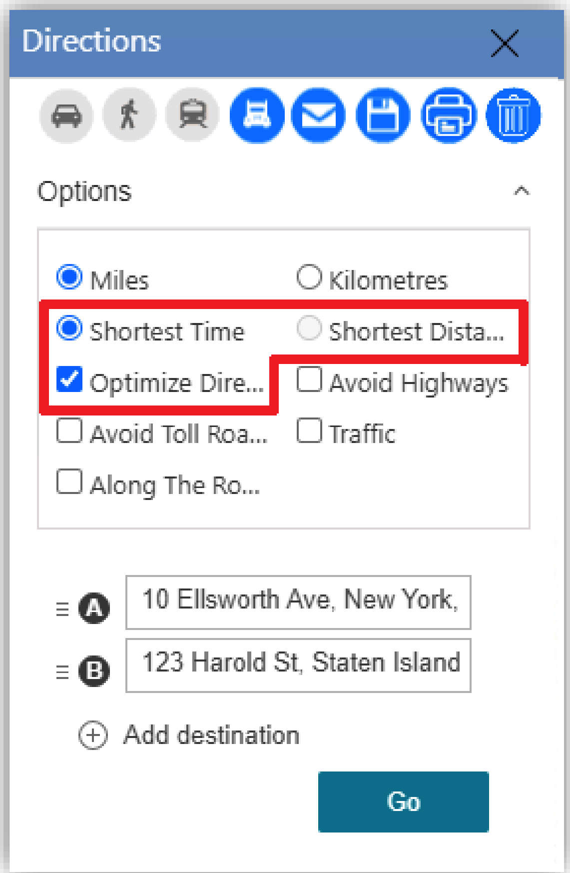
The Asset Details will be as follows:

1. ***Asset type:*** The asset for which the route has to be plotted. It can be selected from the following list of configured sample records. User can also select 'custom' to enter their own details.
    - Trailer 1
    - Trailer 2
    - Trailer 3
    - Trailer 4
    - Trailer 5
    - Trailer 6
    - Custom



2. ***Axles:*** The number of axles.
3. ***Dimension Unit:*** The unit of measurement of width, height, length. Can be one of the following values:
    - Meter
    - Feet
4. ***Height:*** The height of the vehicle in the specified dimension units.
5. ***Length:*** The length of the vehicle in the specified dimension units.
6. ***Width:*** The width of the vehicle in the specified dimension units.
7. ***Weight Unit:*** The unit of measurement of weight. Can be one of the following values.
8. ***Weight:*** The weight of the vehicle in the specified weight units.
9. ***Hazardous Materials:*** List of one or more hazardous materials for which the vehicle is transporting. Possible values are:
    - Combustible
    - Corrosive
    - Explosive
    - Flammable

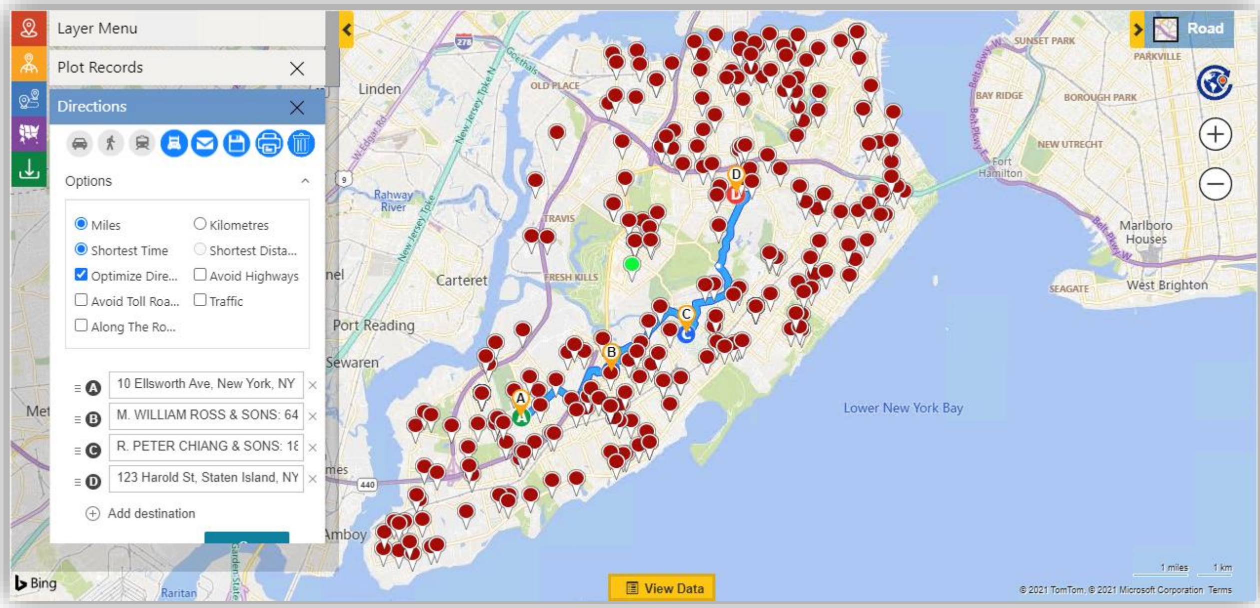
- Flammable Solid
- Gas
- Goods Harmful to Water
- Organic
- Other
- Poison
- Poisonous Inhalation
- Radioactive
- None



Optimize Direction

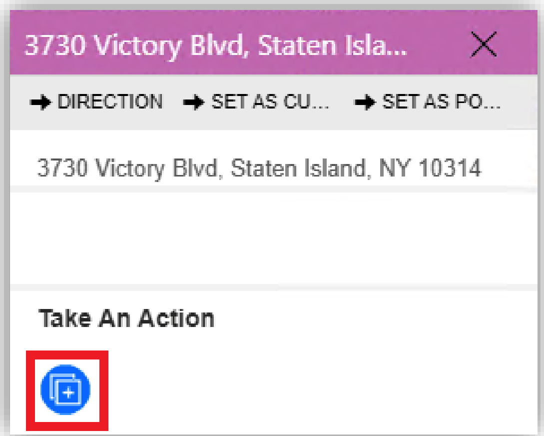
This can be selected from the Options. This option will provide the users with the optimized route direction between their waypoints keeping Origin & Destination as fixed waypoints based on Shortest Time or Shortest Distance as per the selection.

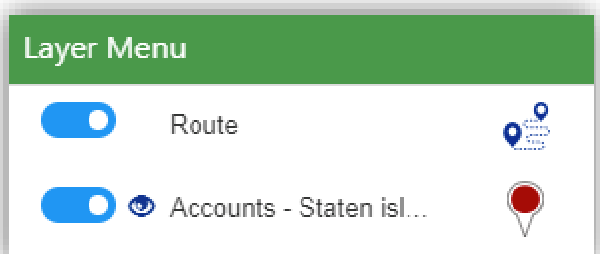
Once the user clicks on 'Go' the route will be plotted and the directions will be available on the Directions Card.



User can view all the details regarding the pushpins on the route in the view data grid in the tab named as entity_Route. for example: Contact_Route. Each waypoint on the route will be represented by a pushpin. User can hover or click on any pushpin to view the details of the waypoint. If the waypoints are records saved within Dynamics CRM, it will open the tooltip card on its click showing the respective data configured for tooltip card.

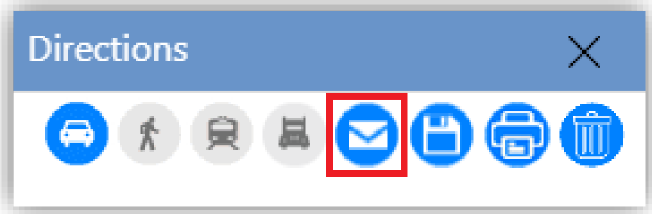
If the waypoint is just a location, on a click it will open a tooltip card showing its address and an icon which can be used to create a record for the location. This includes the Default origin and destination pushpin as well.





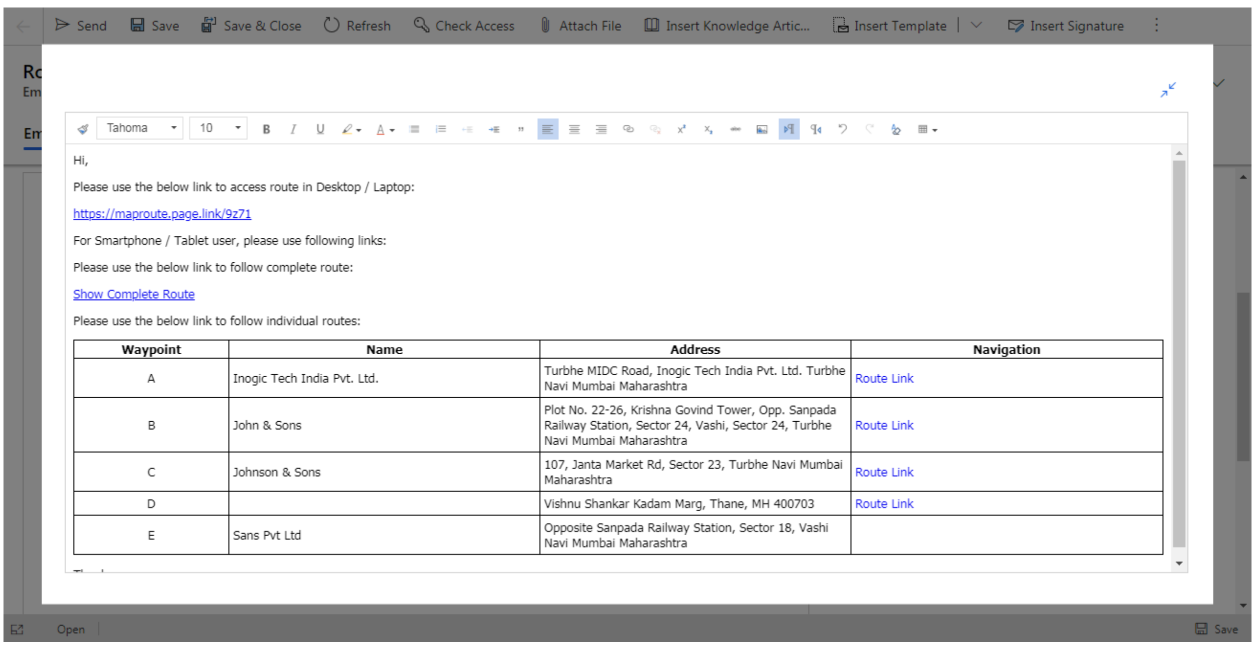
User can also choose to show or hide the layer of route from the layer card.

Send Route email:



Maplytics also helps the user to send the route details in an email using 'Send route email' button. This will automatically fetch all the details of the route like the account details, waypoints, links etc. in the mail.

Users can click on 'Show Complete Route' to see the entire route with all the waypoints or use the individual 'Route link' to see the routes between two waypoints. The user will be redirected to their preferred navigation app, Google, Waze, or Apple Maps, to visualize the route on the map based on the app selected in their Map Configuration Detail Record



Hi,

Please use the below link to access route in Desktop / Laptop:

https://maproute.page.link/9z71

For Smartphone / Tablet user, please use following links:

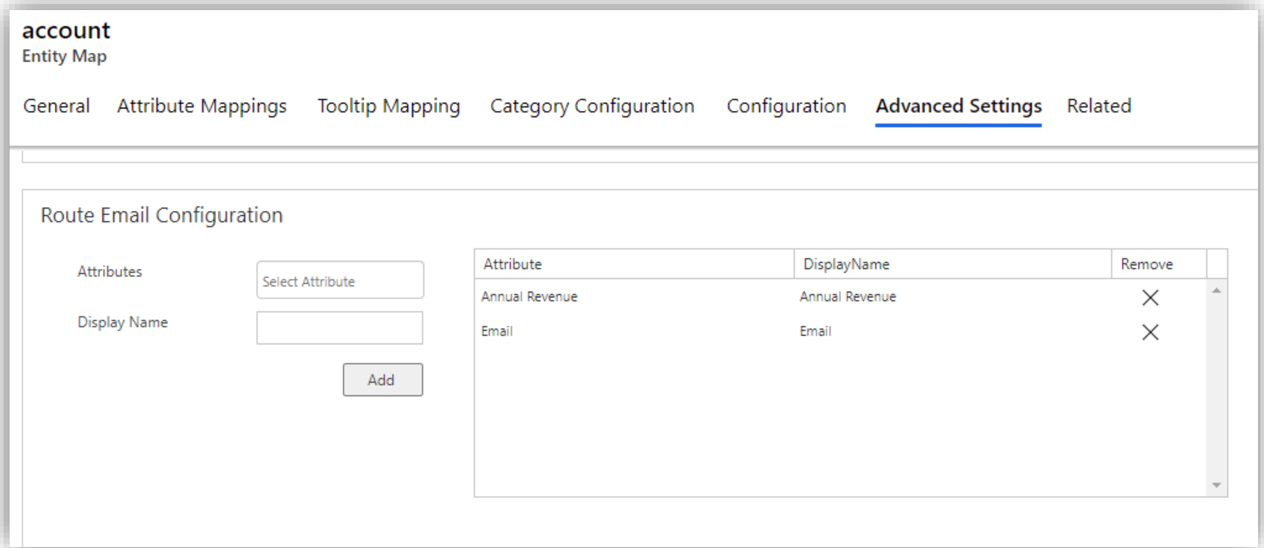
Please use the below link to follow complete route:

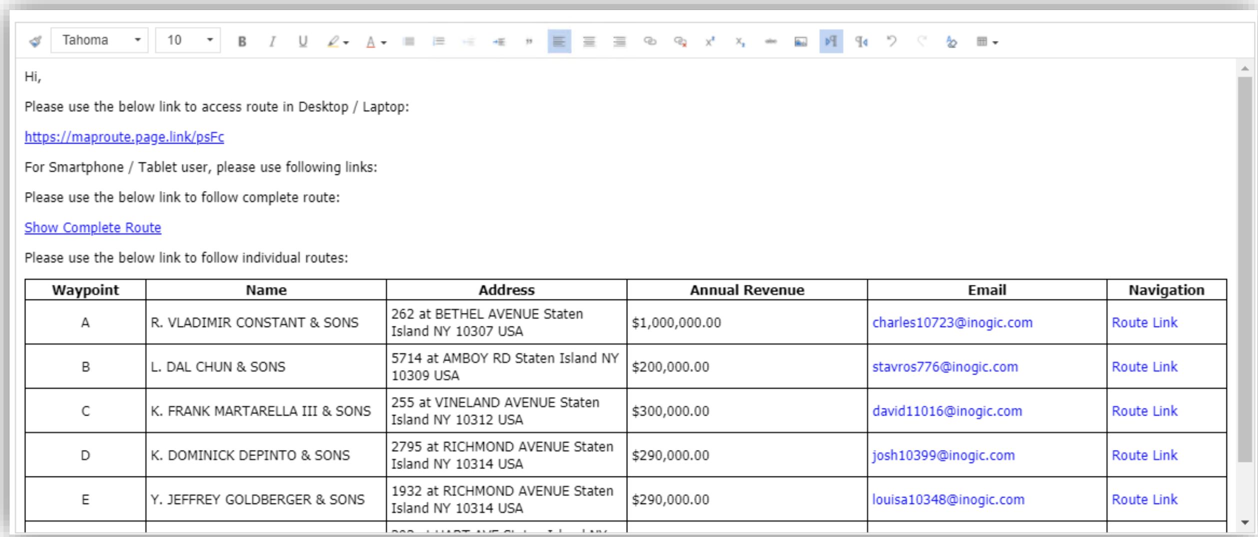
Show Complete Route

Please use the below link to follow individual routes:

Waypoint	Name	Address	Navigation
A	Inogic Tech India Pvt. Ltd.	Turbhe MIDC Road, Inogic Tech India Pvt. Ltd. Turbhe Navi Mumbai Maharashtra	Route Link
B	John & Sons	Plot No. 22-26, Krishna Govind Tower, Opp. Sanpada Railway Station, Sector 24, Vashi, Sector 24, Turbhe Navi Mumbai Maharashtra	Route Link
C	Johnson & Sons	107, Janta Market Rd, Sector 23, Turbhe Navi Mumbai Maharashtra	Route Link
D		Vishnu Shankar Kadam Marg, Thane, MH 400703	Route Link
E	Sans Pvt Ltd	Opposite Sanpada Railway Station, Sector 18, Vashi Navi Mumbai Maharashtra	

Maplytics admin or System admin can add four more columns to the existing route table to view more details on the same. To do this, they can ***go to Maplytics App > Settings > Entity maps > Entity map of respective entity > Advanced Settings > Route Email Configuration > Attributes > Select Attributes > Add.***





Hi,

Please use the below link to access route in Desktop / Laptop:

https://maproute.page.link/psFc

For Smartphone / Tablet user, please use following links:

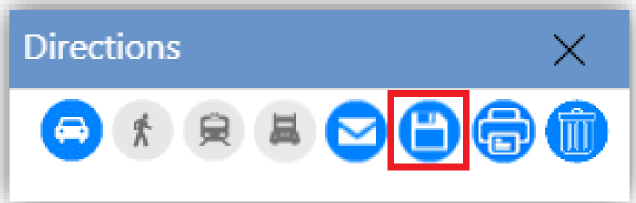
Please use the below link to follow complete route:

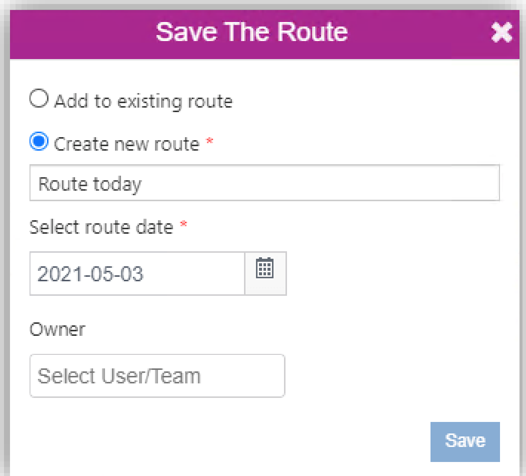
Show Complete Route

Please use the below link to follow individual routes:

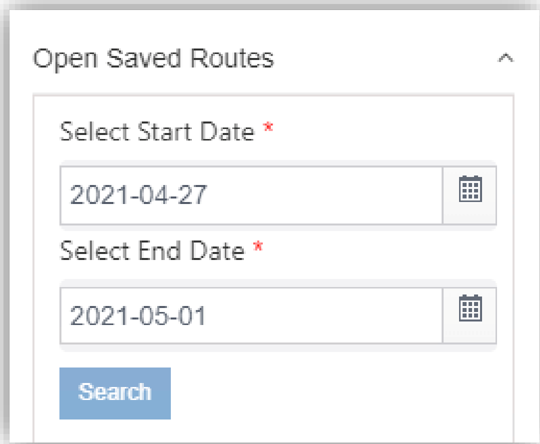
Waypoint	Name	Address	Annual Revenue	Email	Navigation
A	R. VLADIMIR CONSTANT & SONS	262 at BETHEL AVENUE Staten Island NY 10307 USA	$1,000,000.00	charles10723@inogic.com	Route Link
B	L. DAL CHUN & SONS	5714 at AMBOY RD Staten Island NY 10309 USA	$200,000.00	stavros776@inogic.com	Route Link
C	K. FRANK MARTARELLA III & SONS	255 at VINELAND AVENUE Staten Island NY 10312 USA	$300,000.00	david11016@inogic.com	Route Link
D	K. DOMINICK DEPINTO & SONS	2795 at RICHMOND AVENUE Staten Island NY 10314 USA	$290,000.00	josh10399@inogic.com	Route Link
E	Y. JEFFREY GOLDBERGER & SONS	1932 at RICHMOND AVENUE Staten Island NY 10314 USA	$290,000.00	louisa10348@inogic.com	Route Link

<u>Save Route:</u>

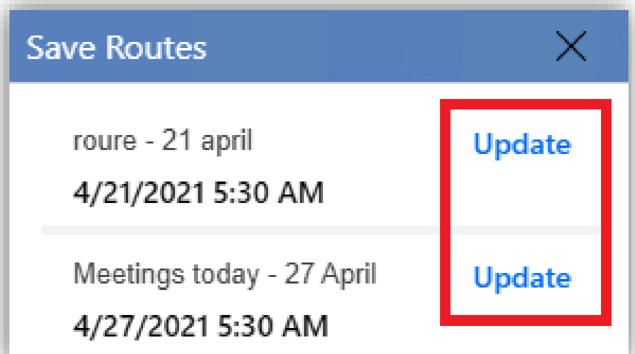




Users can also save their route plotted. The route record will also save the information like number of waypoints, total distance and time for the route. User can add the route to an existing route or save the route with a name & owner as a new route.

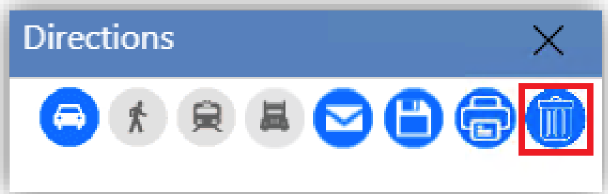


User can also update any route using the 'Update' button. User can search for routes existing in the required duration using the option of 'Open Saved Routes' and click on the 'Update' button for the required route.



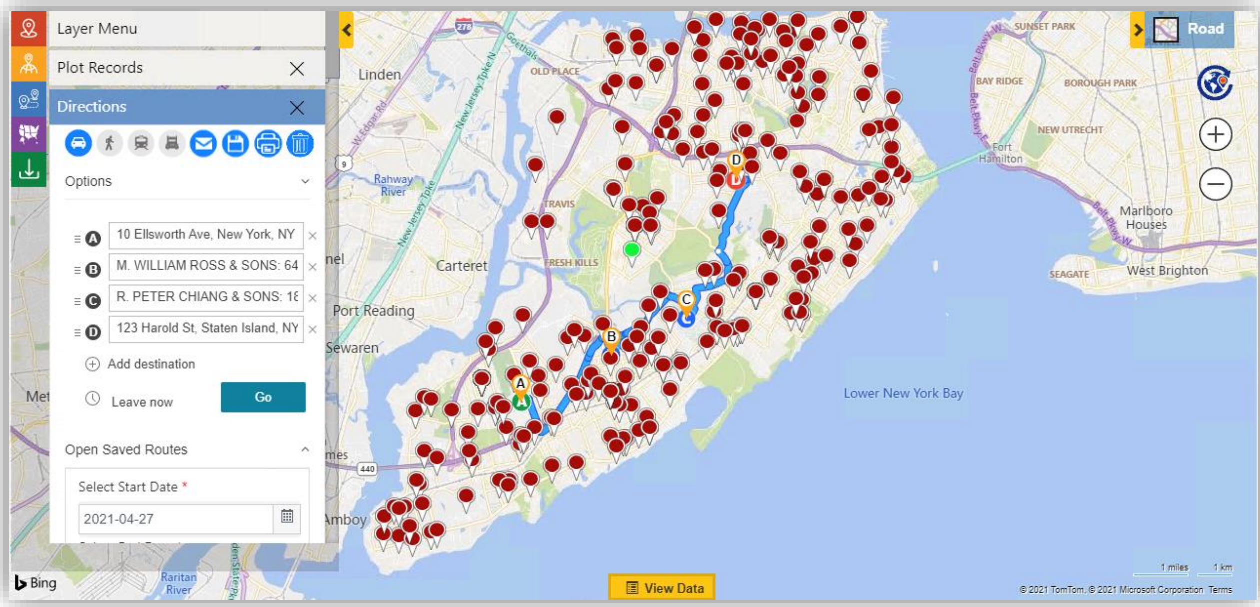
Clear Route:

The user can use the ***Clear Route*** button to clear the route from the map. This will just clear the route and directions card will still be opened for further use.



Unified view for Route and Records

While user plots the data and then creates a route, both the plotted data and the route will stay on the map for an easy Route Management. This makes it easy for the user to add more waypoints to the route and also update the route with the added waypoints.

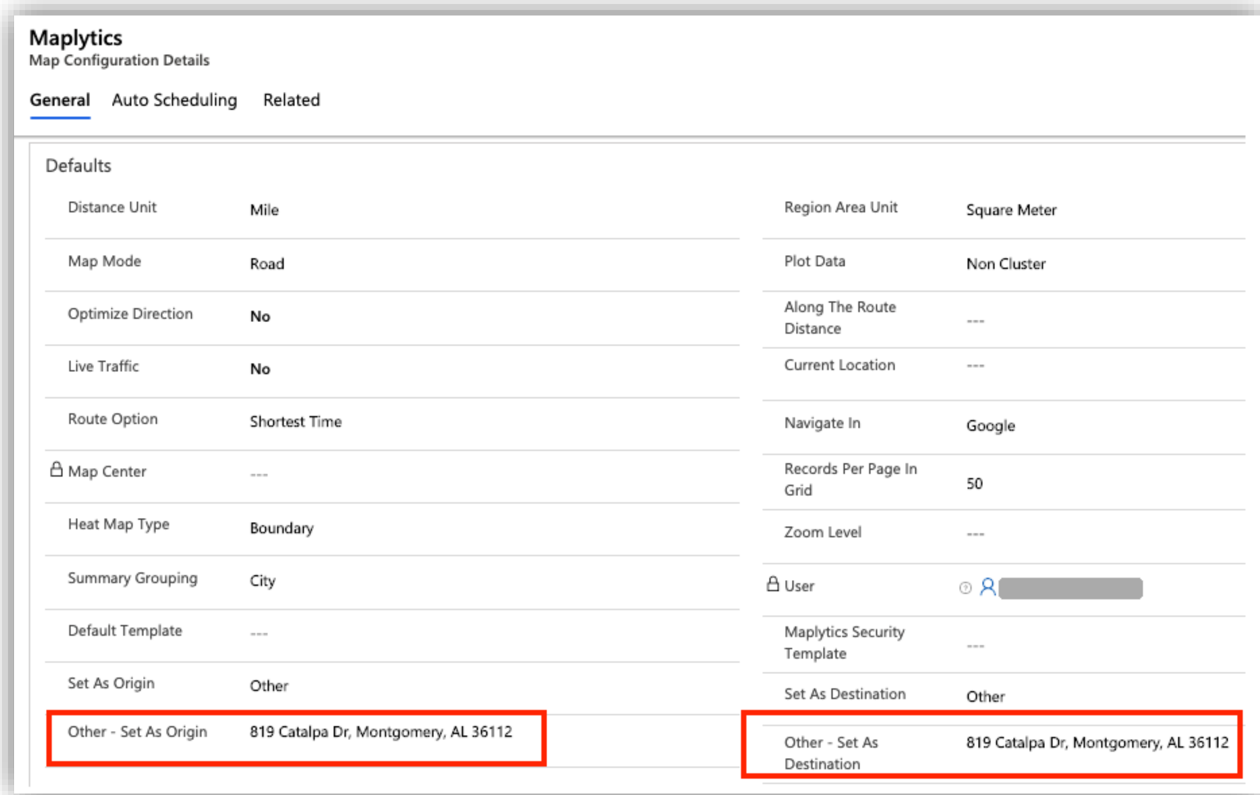


Note: The route will remain on the map unless the user clicks on the 'Clear Route' button or closes the Directions Card

Default Origin and Destination

User can set default origin and destination for Route management.

Go to Settings > Maplytics > Maplytics Configuration Details > Record of the user



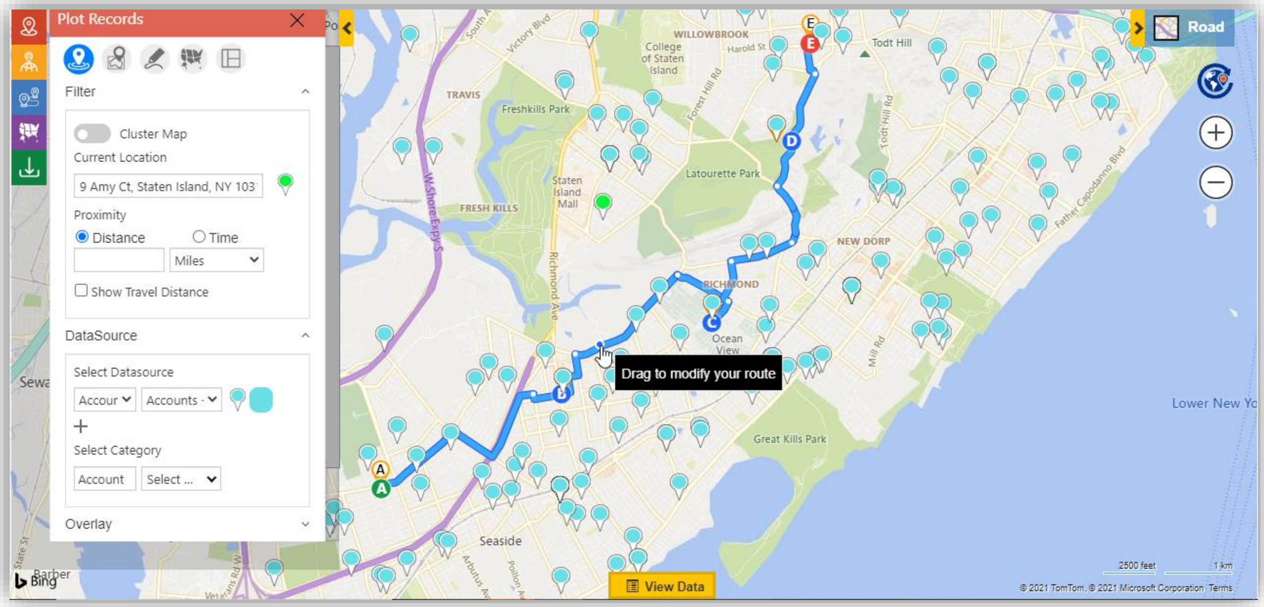
There are six options to select:

- **User Mailing Address** - Reads address from User mailing address
- **User Other Address** - Reads address from User other address
- **Business unit Bill to Address** - Reads address from logged in user's Business units bill to address
- **Business unit Ship to Address** - Reads address from logged in user's Business units ship to address
- **None** - If user do not want to set default origin/destination
- **Other**: It will have its own multiline textbox associated where user can enter their own address

Note: If a user uses the "Plot route" button to plot a "Route" activity record on the Detail map, the Default origin/destination will not be set in the Direction card

Snap waypoint

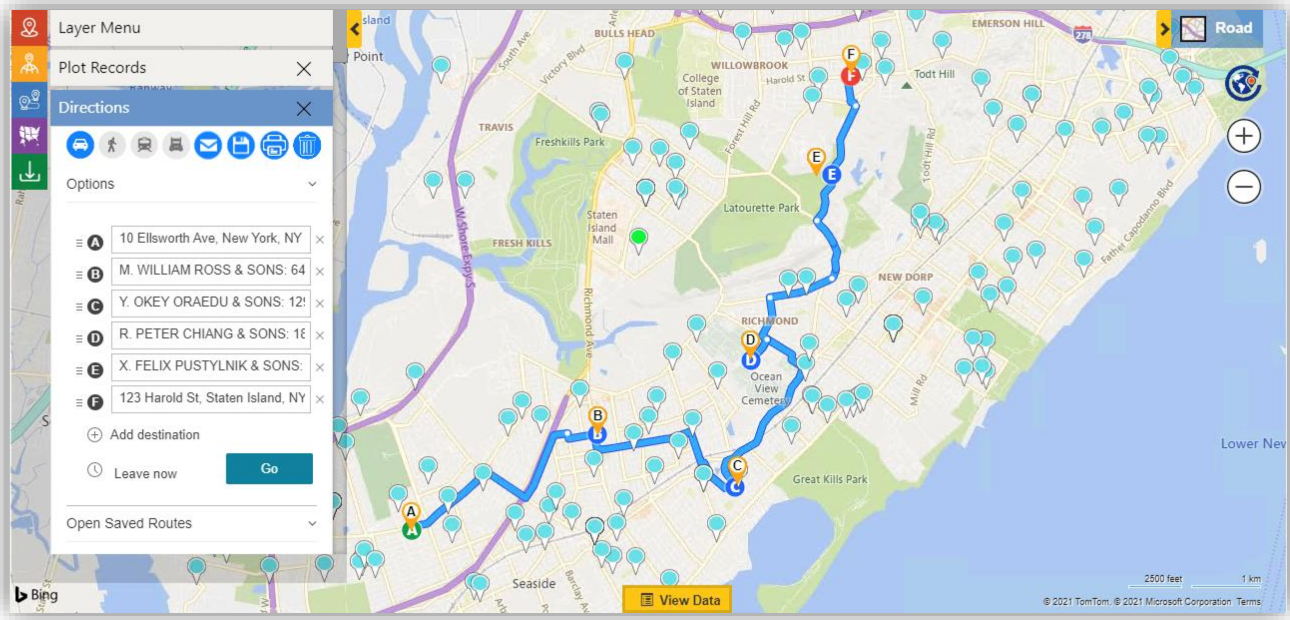
This helps the user to edit a plotted route just by dragging the route to the required point on the map.



Drag to a location: User can drag a point on the route to a required location on the map. This will add the location as a waypoint at the dragged point in the route. This will also update the Directions card with the newly added waypoint.

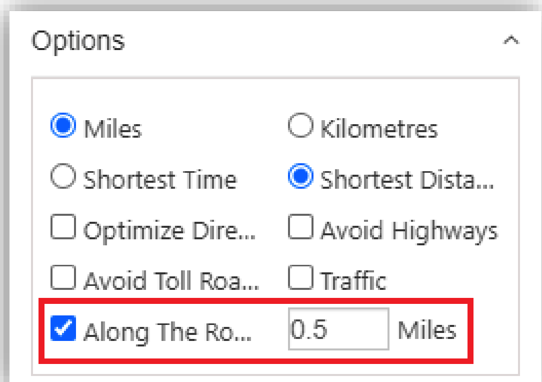
Drag to a pushpin: User can also drag a point on the route to a pushpin plotted on the map. This will detect the record and add the record's location at the dragged point in the route. This will also update the Directions card with the newly added waypoint.

Note: The option of snapping waypoints is not available for a route create for trucks.

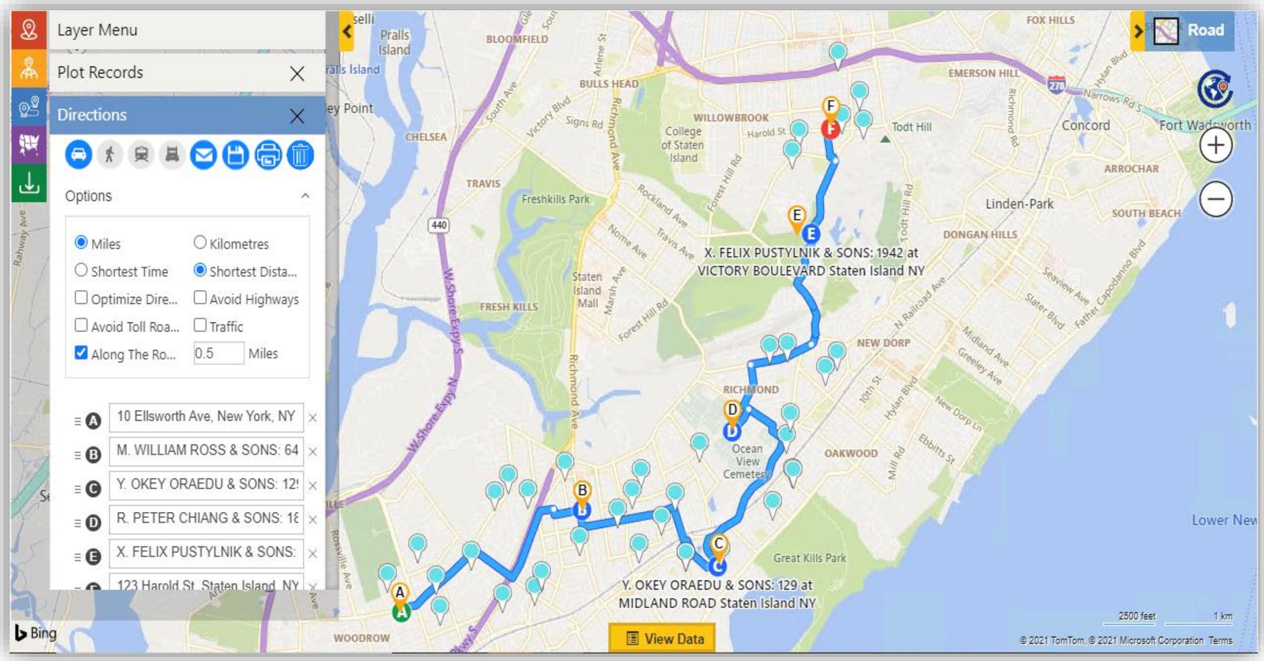


Along the Route

This feature provides the user the ability to search the records that fall in the defined proximity along the route. The default value for Along the Route search can be configured in the Maplytics Configuration record. This will find all the records with the defined search parameter and that falls in the entered proximity along the route.



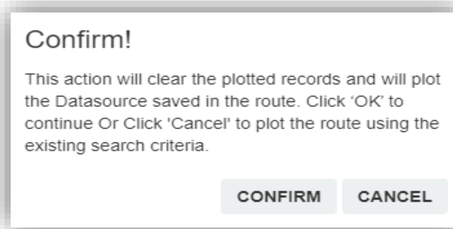
Note: The user can add the value between 0 – 25. The user can also add decimal values with a scale of 2 for the radius.



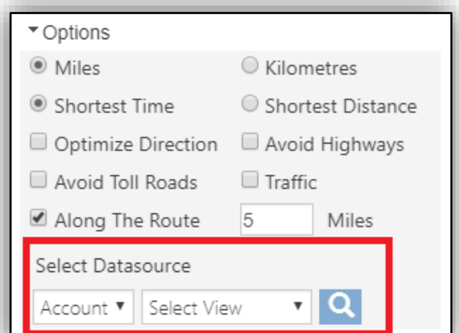
The Along the route records is also saved when the user saves the route. However, if the user has selected multiple Datasources on the Plot Card, only the first Entity and View combination in the Select Datasource will be saved for along the route search in the saved route.

If the user has plotted data on the map and opens a saved route that has along the route parameter saved as well:

- The user can either click on 'Confirm' to clear the plotted records and search along the route records with the Datasource saved in the route.
- Or, the user can click on 'Cancel' to search along the route records with the existing plotted data, ignoring the Datasource saved in the route.



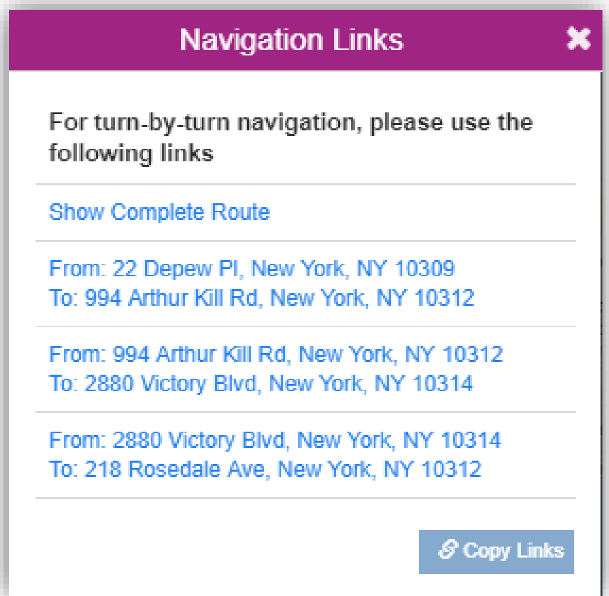
If the user opens the Directions card directly without plotting the data or opens a saved route without the along the route parameter saved, they have the option to select the Datasource for the Along the route search directly on the Directions Card.

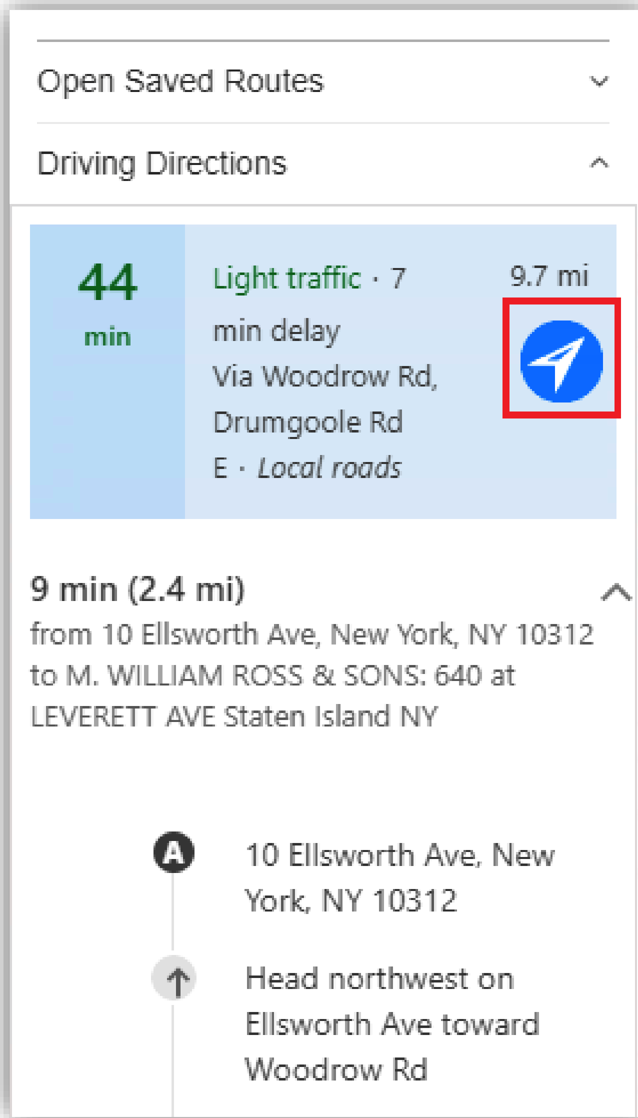


Route Redirect and Copy Route Links

After plotting the route, user can use the 'Redirect' button to open the 'Navigation Links' popup on the browser as well as the Dynamics 365 App for Phones and Tablets.

The user can click on individual links for route navigation from point A – B, B – C, and so on. User can also select the application within the User Configuration record to navigate the route. Refer the section of 'Maplytics Configuration Details (Personalization)' in the installation manual to select the application. These links will redirect the route to the app selected in the configuration.





Redirect with Google Maps

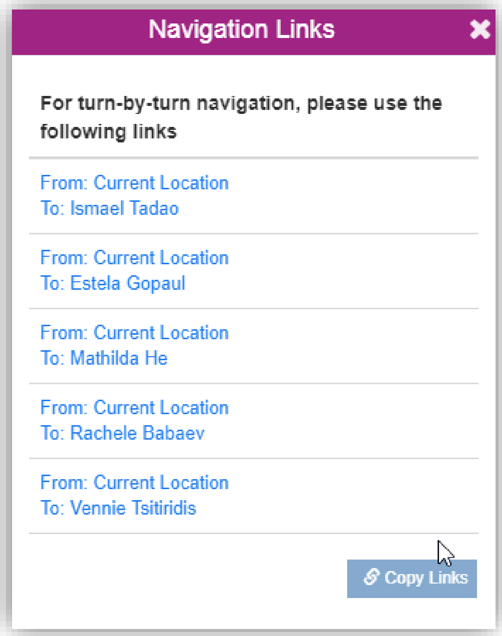
User can view the turn-by-turn navigations on Google Maps site on desktop and Google Maps App on Phones and Tablets. User can also choose to view the complete route.

> ***Note:***
> - ***The maximum waypoints to show the complete route is 10 waypoints.***
> - ***By Default, the navigation will be redirected to Google Maps.***

Redirect with Waze

User can view the turn-by-turn navigations on Waze site on desktop and Waze App on Phones and Tablets. This will show the navigation links from current location to the waypoints.

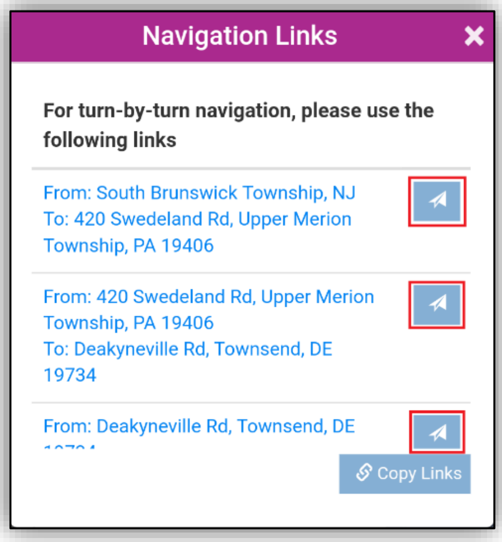
> ***Note: The checkpoints should be under 3000 miles from the current location to view routes on Waze.***



Redirect with Apple Maps

User can view the turn-by-turn navigations on Apple Maps on desktop and Apple Maps on iPhones and iPads. This will show the navigation links from current location to the waypoints.

Redirection on mobiles: User can click on the route navigation buttons to redirect to the Google maps/Waze/ Apple Maps. The user can also use the 'Copy Links' button to copy the links to send them as an email or save it into a note.

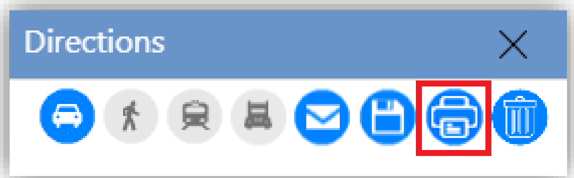


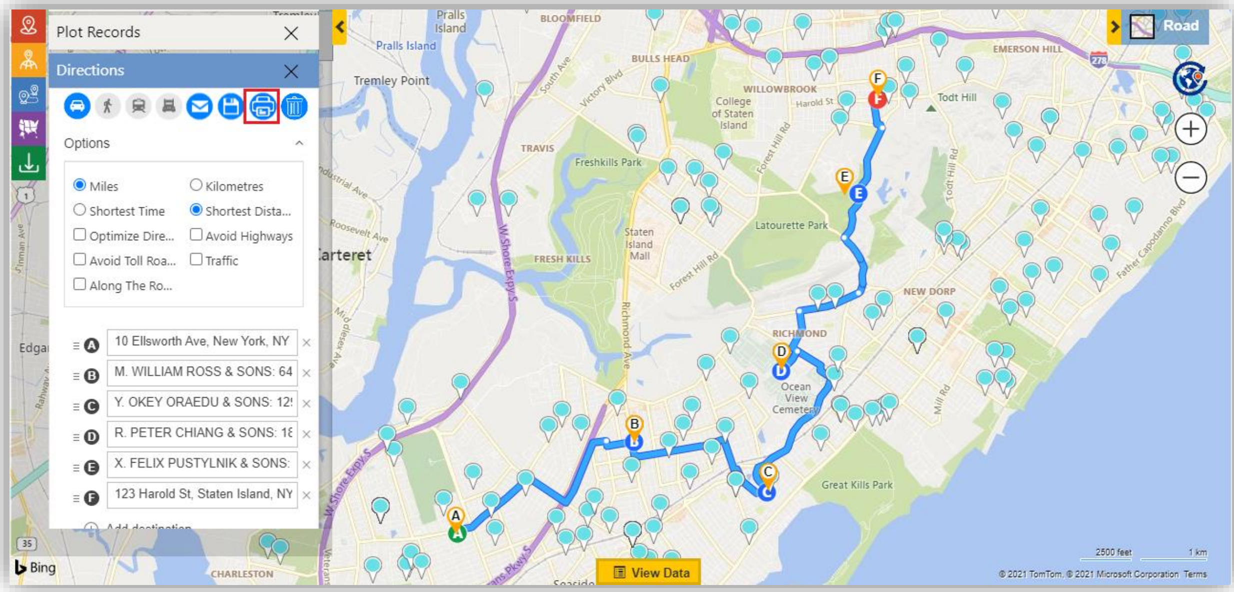
Note:

- ***By default, the links will be redirected in Google Maps.***
- ***The links redirect on the Dynamics 365 App for Phones and Tablet works with Dynamics 365 v9.x***
- ***For other devices and Dynamics 365 v8.2, users can use the 'Copy Links' button.***

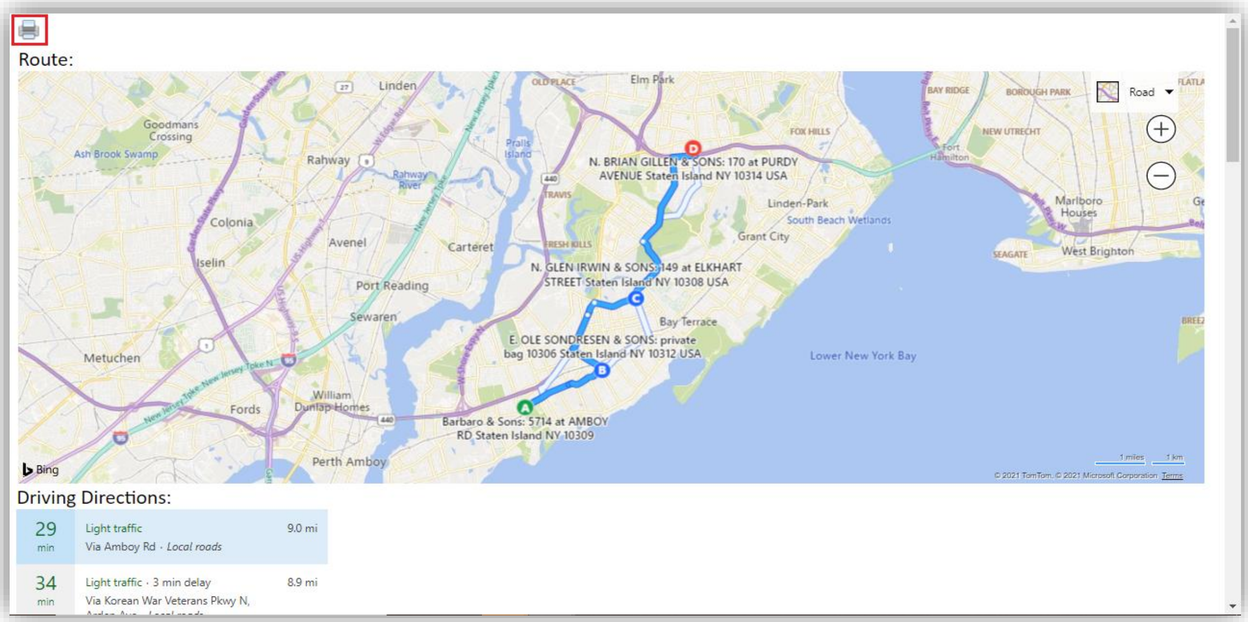
Print Route

User can print a Route as well as the adjoining Map. User can plot a route on map, click on the 'Print Route' button to print the route. It will also print the Driving Directions as well.





Clicking on the 'Print Route' button will open a new window with the map and Route on the page, which can be seen in the below screenshot. Click on the ***Print Icon*** to print the map and route instructions.



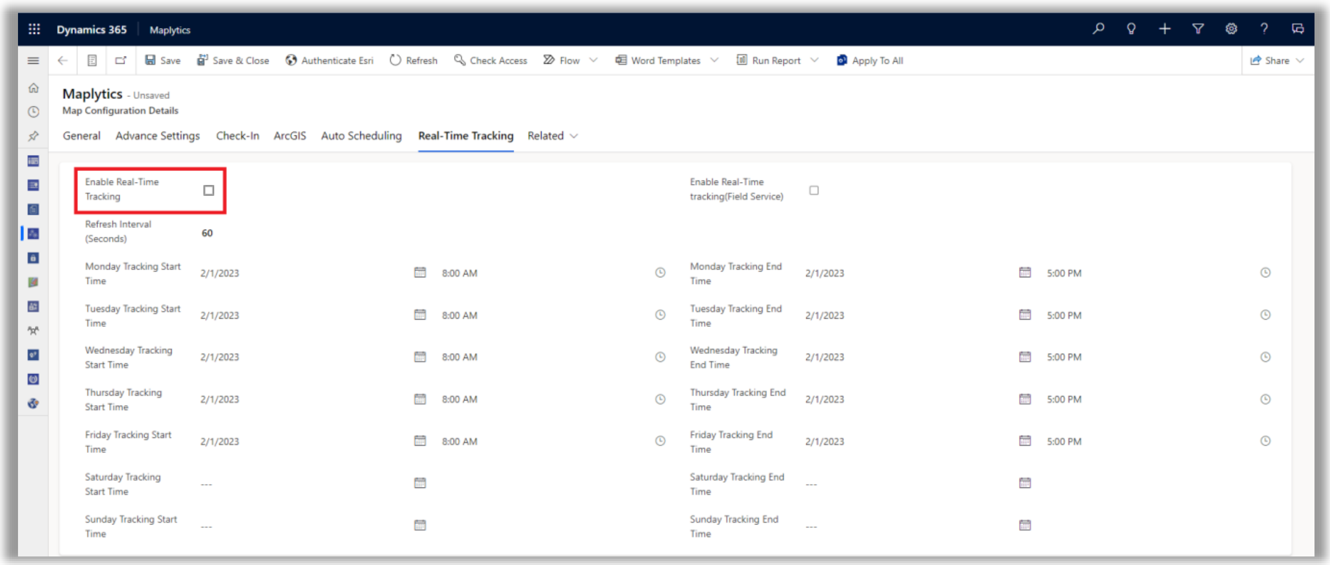
Note:

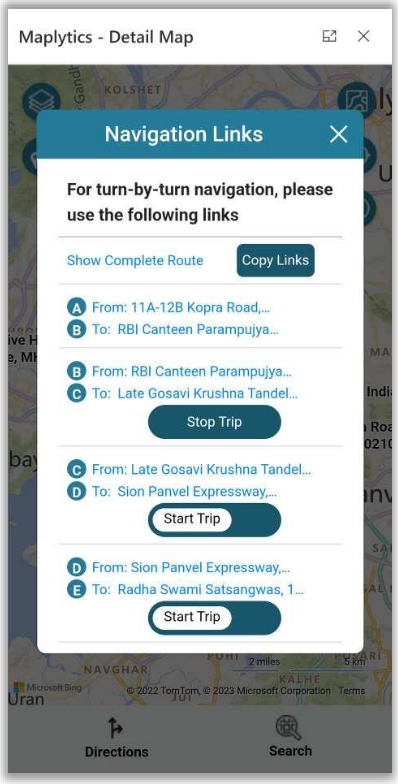
- ***Routing requires a minimum of two waypoints provided to create a route.***
- ***A4 size paper with landscape mode is recommended while printing.***

Proposed and Actual Route Tracking

With Route Tracking, an optimized route can be plotted for a field rep by the Manager. However, in certain situations, the actual route followed by the rep would be different from the plotted one. The rep could have taken an uncommon shortcut, he could have taken a different turn to avoid the highway traffic/accident sight, or may have rushed away in between to address a personal emergency. These actions would take him away from the plotted route and the same can be recorded.
The tracking of the actual route followed could help in analyzing the rep's productivity, the new shortcut if more optimized could be incorporated into the route for the next time, or could give insights about frequent congestion, accident-prone regions, etc.

<u>Enable Route Tracking</u>: User needs to enable the Real-Time tracking option for the route followed by the field user to be tracked.
Maplytics > Settings > Map Configuration Details > Real-Time Tracking

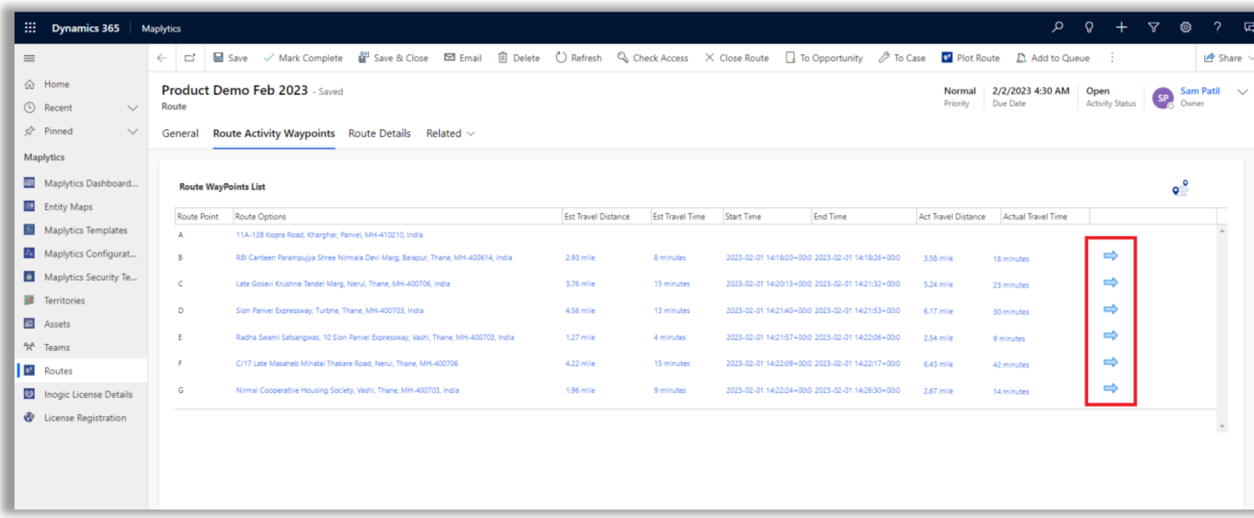




<u>Start Mobile Tracking</u>: Within the Maplytics Mobile App, the user can start the tracking for estimated and actual route tracking.

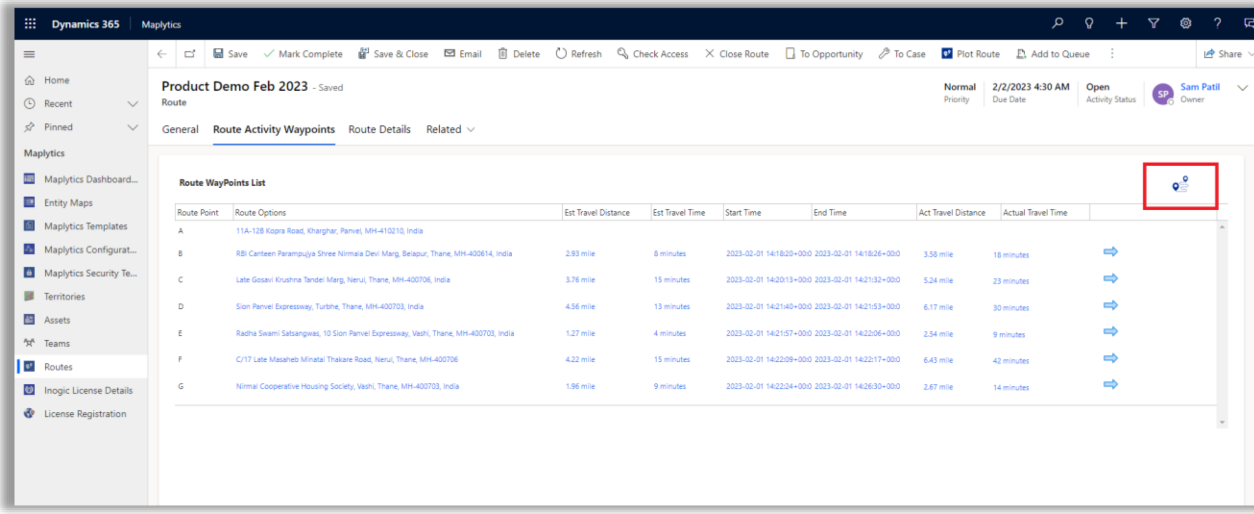
<u>View Tracked Route:</u> The user can view the route plotted and followed with a few configuration setup.

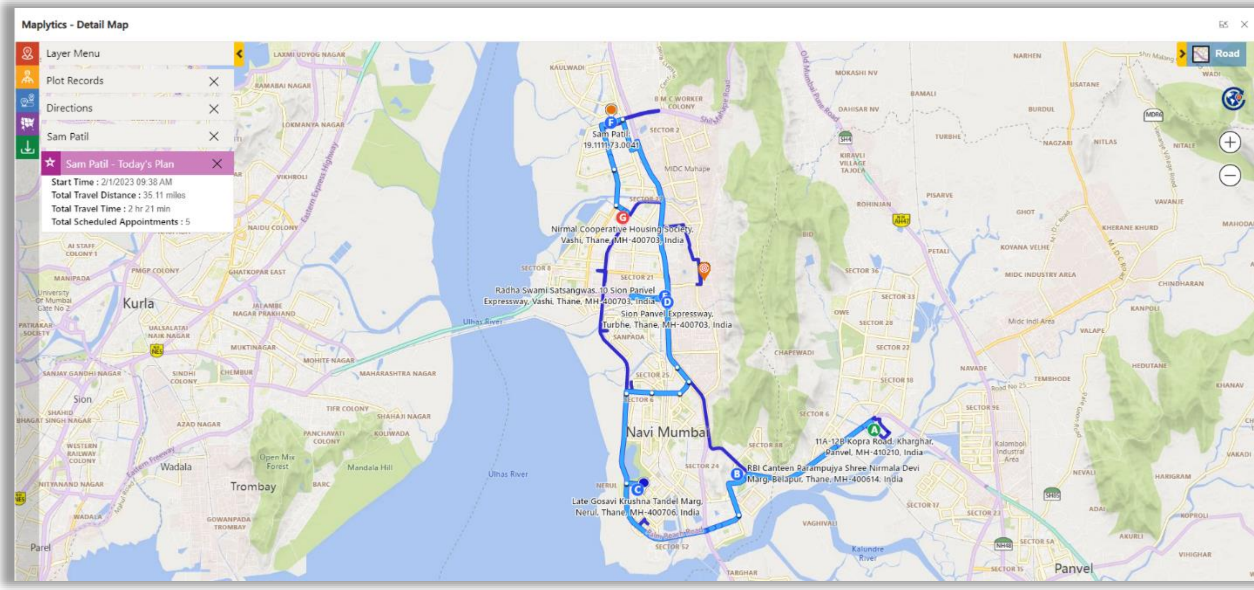
Maplytics > Settings > Routes > Route Entity > Route Activity Waypoints



Clicking on the Blue 'Navigate' Arrow opens up the Detail Map with the route for that particular travel.

Clicking the 'Show Full Route' button opens the Detail Map again with all the routes followed for all the waypoints for the Entity.

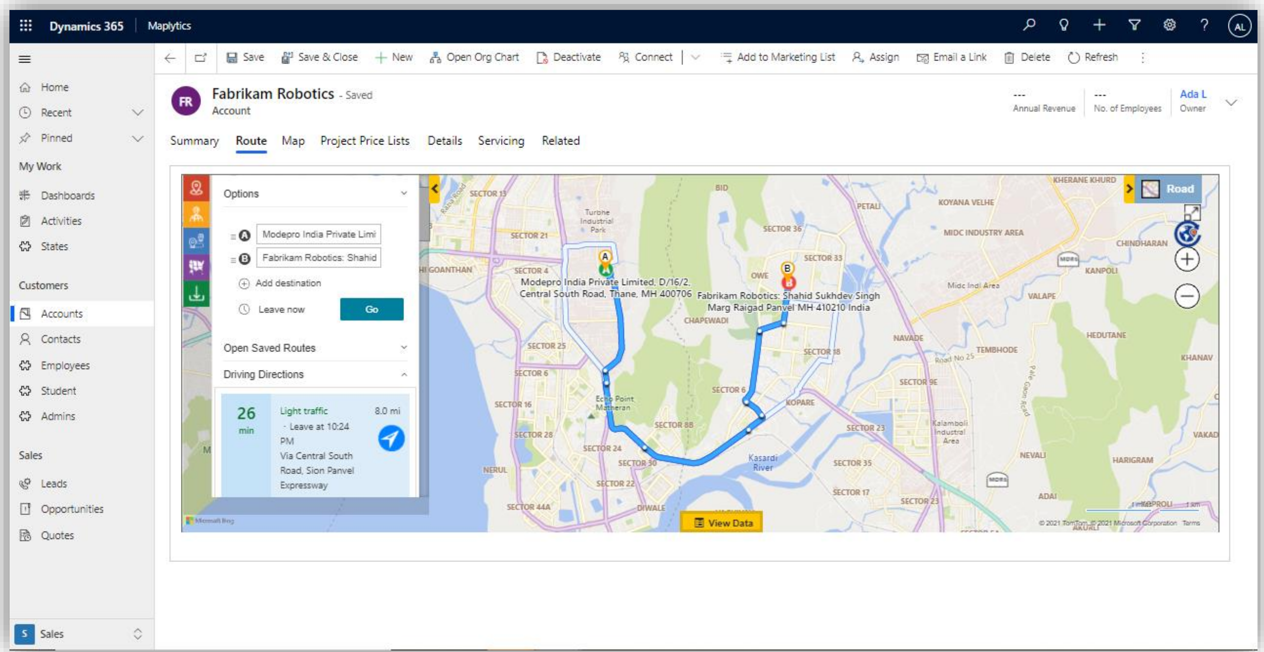

Dynamics 365 | Maplytics
Save | Mark Complete | Save & Close | Email | Delete | Refresh | Check Access | Close Route | To Opportunity | To Case | Plot Route | Add to Queue | Share
Home
Recent
Pinned
Maplytics
Maplytics Dashboard...
Entity Maps
Maplytics Templates
Maplytics Configurat...
Maplytics Security Te...
Territories
Assets
Teams
Routes
Inogic License Details
License Registration
Product Demo Feb 2023 - Saved
Route
Normal
Priority
2/2/2023 4:30 AM
Due Date
Open
Activity Status
Sam Patil
Owner
General | Route Activity Waypoints | Route Details | Related
Route WayPoints List
Route Point | Route Options | Est Travel Distance | Est Travel Time | Start Time | End Time | Act Travel Distance | Actual Travel Time
A | 11A-12B Kopra Road, Kharghar, Panvel, MH-410210, India
B | RBI Canteen Parampujya Shree Nirmala Devi Marg, Belapur, Thane, MH-400614, India | 2.93 mile | 8 minutes | 2023-02-01 14:18:20+00:0 | 2023-02-01 14:18:26+00:0 | 3.58 mile | 18 minutes
C | Late Gosavi Krushna Tandel Marg, Nerul, Thane, MH-400706, India | 3.76 mile | 15 minutes | 2023-02-01 14:20:13+00:0 | 2023-02-01 14:21:32+00:0 | 5.24 mile | 23 minutes
D | Sion Panvel Expressway, Turbhe, Thane, MH-400703, India | 4.56 mile | 13 minutes | 2023-02-01 14:21:40+00:0 | 2023-02-01 14:21:53+00:0 | 6.17 mile | 30 minutes
E | Radha Swami Satsangwas, 10 Sion Panvel Expressway, Vashi, Thane, MH-400703, India | 1.27 mile | 4 minutes | 2023-02-01 14:21:57+00:0 | 2023-02-01 14:22:06+00:0 | 2.54 mile | 9 minutes
F | C/17 Late Masaheb Minatai Thakare Road, Nerul, Thane, MH-400706 | 4.22 mile | 15 minutes | 2023-02-01 14:22:09+00:0 | 2023-02-01 14:22:17+00:0 | 6.43 mile | 42 minutes
G | Nirmal Cooperative Housing Society, Vashi, Thane, MH-400703, India | 1.96 mile | 9 minutes | 2023-02-01 14:22:24+00:0 | 2023-02-01 14:26:30+00:0 | 2.67 mile | 14 minutes


Maplytics - Detail Map
Layer Menu
Plot Records
Directions
Sam Patil
Sam Patil - Today's Plan
Start Time : 2/1/2023 09:38 AM
Total Travel Distance : 35.11 miles
Total Travel Time : 2 hr 21 min
Total Scheduled Appointments : 5
Road
Kurla
Navi Mumbai
Panvel
Trombay
Wadala
Sion
Nirmal Cooperative Housing Society, Vashi, Thane, MH-400703, India
Radha Swami Satsangwas, 10 Sion Panvel Expressway, Vashi, Thane, MH-400703, India
Sion Panvel Expressway, Turbhe, Thane, MH-400703, India
11A-12B Kopra Road, Kharghar, Panvel, MH-410210, India
RBI Canteen Parampujya Shree Nirmala Devi Marg, Belapur, Thane, MH-400614, India
Late Gosavi Krushna Tandel Marg, Nerul, Thane, MH-400706, India

Route to a record

Users can add the ‘Route to a Record’ tab to any entity to view the route plotted to a record’s location from their current location automatically. If user needs to meet any client, they can open the client’s record, go to this tab and view the route to reach the client’s location directly. Further, they can click on the Navigation button to navigate themselves with the turn-by-turn directions. They can also use the map to perform other Maplytics actions like Along the route, plotting more records etc.

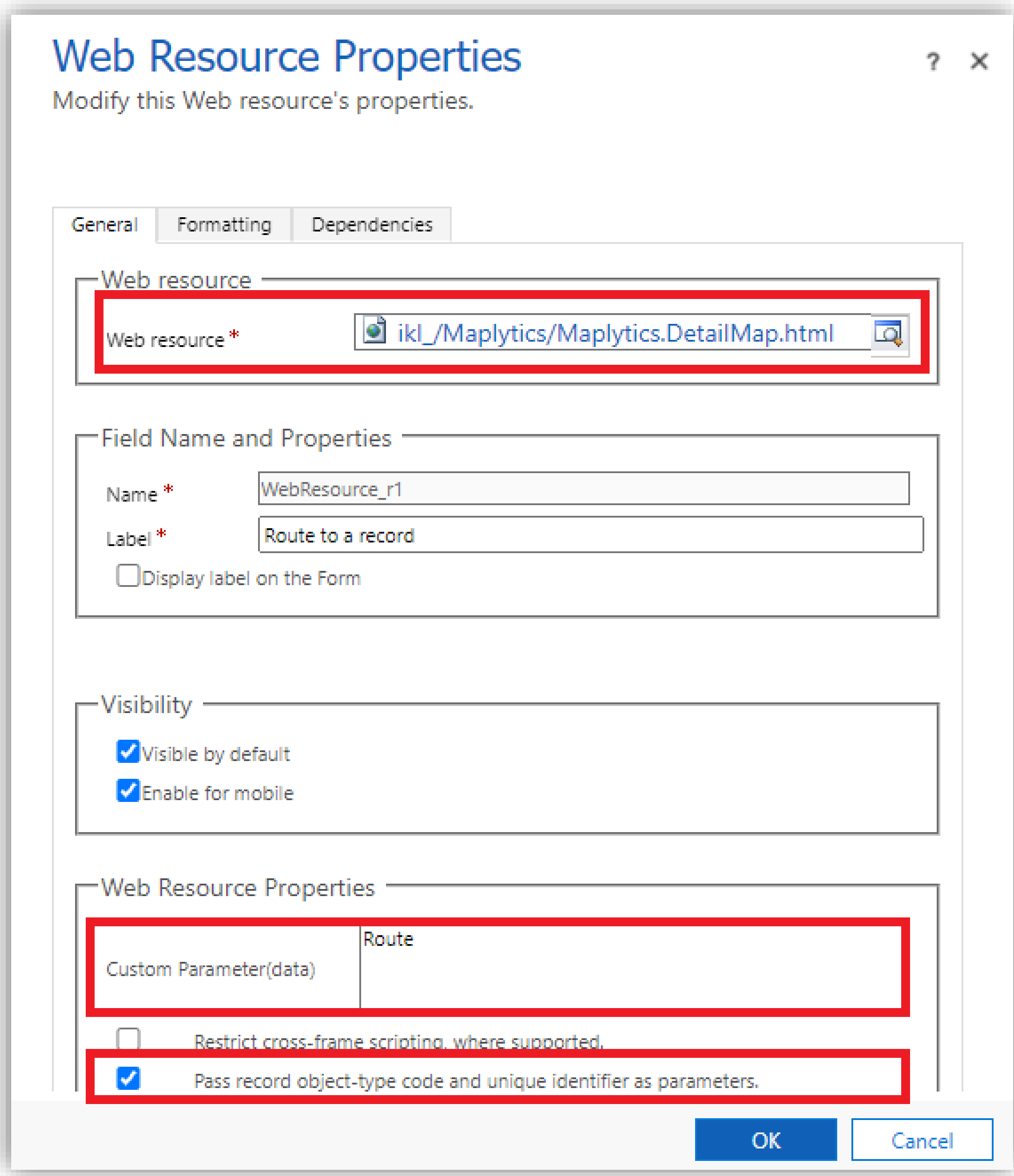
User's location will be represented by ‘A’ in map, while the record’s location will be denoted by ‘B’.



Steps to add ‘Route to a Record’ tab to an entity form:

Go to Settings > Advance Settings > Customize the system > Entities > Account > Main Form > Add a tab. Here we have taken Accounts form for an instance.

Now select the tab and click on Insert > Add Web Resource (ikl_/Maplytics/Maplytics.DetailMap.html) The recommended number of rows in formatting is minimum 10.


Web Resource Properties
Modify this Web resource's properties.
General
Formatting
Dependencies
Web resource
Web resource *
ikl_/Maplytics/Maplytics.DetailMap.html
Field Name and Properties
Name *
WebResource_r1
Label *
Route to a record
Display label on the Form
Visibility
Visible by default
Enable for mobile
Web Resource Properties
Custom Parameter(data)
Route
Restrict cross-frame scripting, where supported.
Pass record object-type code and unique identifier as parameters.
OK
Cancel

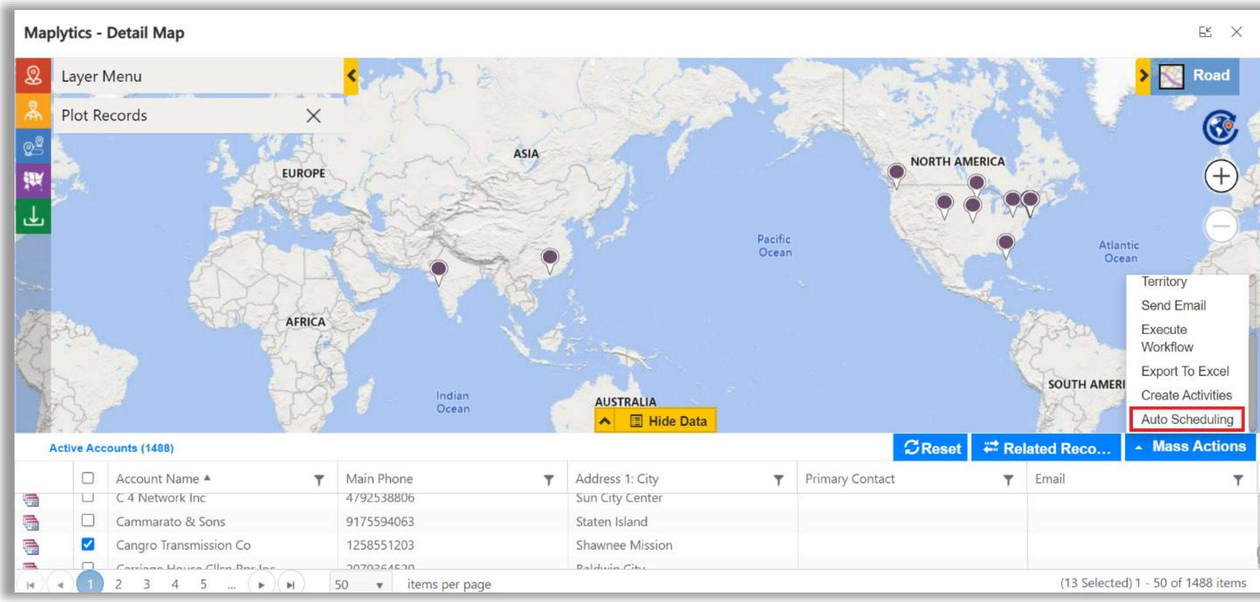
Auto Scheduling

Auto Scheduling helps users to create an optimized schedule to be followed on the field over a span of days by the concerned field professionals. The user can perform Auto scheduling on the required set of records (e.g., clients) to create Appointments and optimized routes, with the considerations of existing appointments, the preferred days of working, different meeting durations, availability of the selected users etc. This feature will help user to create appointments and optimized routes based on shortest time in order to provide an effective plan, hence saving the time and increasing the field productivity.

Users can contact at crm@inogic.com to get the access of the feature and they will be provided with a Maplytics license with Auto Scheduling enabled into it.

Note: The visibility of the option of 'Auto scheduling' into Mass Actions will be based on the Maplytics Security Template if any assigned to the user. Please refer to the section of 'Maplytics Security Template'.

To perform Auto Scheduling user can go to the Mass Actions within the View Data grid. They can plot the Entity records on the map that are needed to be visited and open the 'view data' grid at the bottom to check the number of records plotted on the map and deselect the records that are not required.

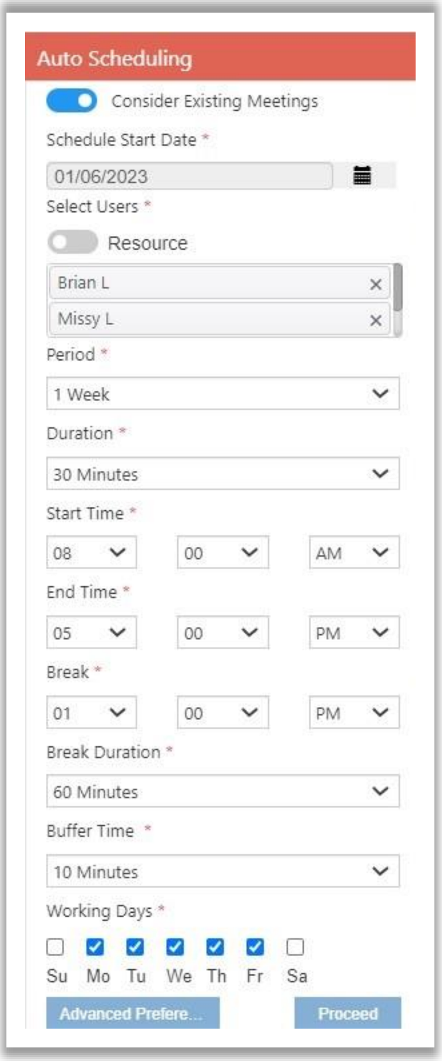


Note: Auto Scheduling can be performed on a maximum of 100 records plotted on the map

After plotting the required records to be scheduled for, user can *Go to* ***Mass actions > Auto scheduling.*** This will consider all the records that are plotted on the map and will proceed to the Auto Scheduling page.

Auto scheduling card

User can set the basic preferences as per the requirement so as to consider the same while creating a schedule. Users can also have these prefilled by setting default values for the preferences within their Configuration Detail Record. Please refer 'Configuration Detail Record' section Installation Manual to see configuration for Auto Scheduling.



<u>Consider Existing meetings</u>: Select this option to consider existing meetings saved in CRM assigned to the selected users.

<u>Select users</u>: Select the Maplytics user(s) to create Automated schedule for them. *A maximum of 10 users can be selected to create an automated schedule.*

<u>Period</u>: The number of days the schedule should be for. The meetings will be distributed among the number of days selected here. User can choose any one option from the following:

- 1 Day
- 2 Days
- 3 Days
- 4 Days
- 5 Days
- 1 Week
- 2 Weeks
- 3 Weeks
- 1 Month

<u>Duration</u>: The time frame required for each meeting. User can choose any one of the following options. User can also change duration for individual meetings in Advanced Preferences. User can further change the duration of individual meetings in the 'Advanced Preferences'.

- 1 Minute
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 20 Minutes
- 30 Minutes
- 45 Minutes
- 60 Minutes
- 75 Minutes
- 90 Minutes
- 120 Minutes

<u>Start Time</u>: Time to start the schedule of each day. User can enter the time in 12-hour format (hh:mm)

End Time: Time to end the schedule of each day. User can enter the time in 12-hour format (hh:mm)

Break Time: Starting time of Break for each day. User can enter the time in 12-hour format (hh:mm)

Break Duration: Duration of the break during each day. User can select any one of the following options:

- 0 Minutes
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 20 Minutes
- 30 Minutes
- 45 Minutes
- 60 Minutes
- 75 Minutes
- 90 Minutes
- 120 Minutes

Buffer time: User can add extra time to the schedule as buffer to be used in case of unforeseen situations to avoid changing the schedule.

- 0 Minute
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 20 Minutes
- 30 Minutes

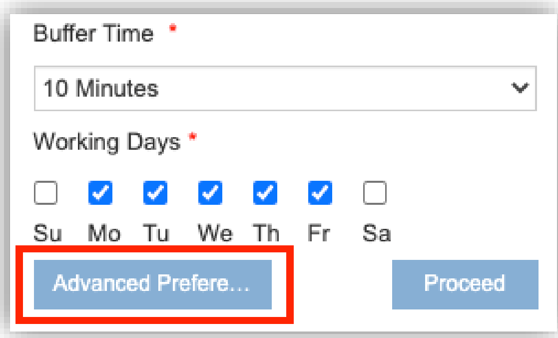
Working days: User can select the days for which the selected users will be working. The meetings will be distributed only within the working days selected here. User can select any day between Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. *At least one day should be selected.*

Note:

- ***If the logged-in user has set default values for the preferences in the respective Maplytics Configuration detail record, while opening the Auto scheduling section, the preferences will get prefilled with the same.***
- ***If the logged-in user selects any other single user, the preferences will get prefilled if there are default values set in the Maplytics Configuration detail record of the respective selected user.***
- ***If the logged-in user selects multiple users, the preferences will get prefilled if there are default values set in the Default Configuration detail record.***

Advanced Preferences

User can further click on 'Advanced preferences' within the Auto Scheduling card to select further preferences to be considered while creating an automated schedule.

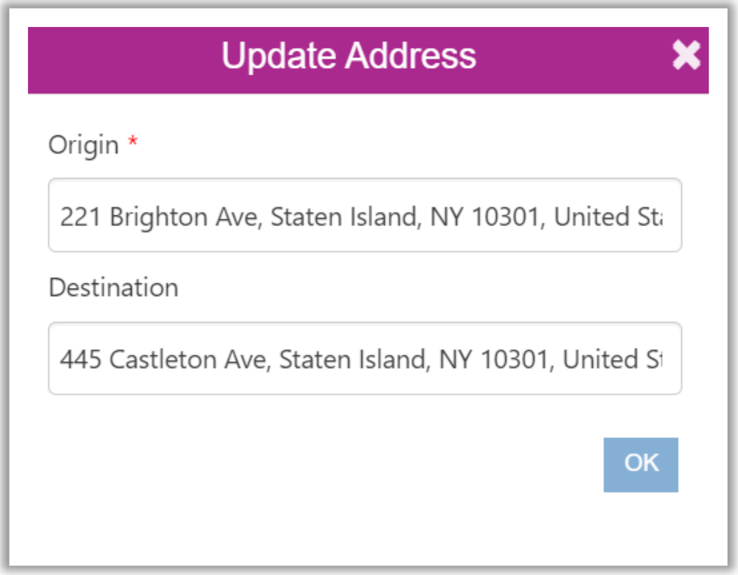


<u>Meetings Per Day</u>: User can select the average meetings that should be scheduled for a day. A minimum of 1 and a maximum of 20 meetings can be selected.

<u>Continuous Schedule</u>: Instead of starting the route from the origin every day, if the route should be started on the ending location of the previous day, user can set it as 'Yes'. For example: A user starts the first day from Brookwood in Alabama, USA to follow the route assigned and reaches Alexander city, Alabama which is the destination of the route for the day. Now, if the 'Continuous Schedule' is enabled, the user does not need to go all the way to Brookwood to start the route for the next day, instead the user can directly go to the first appointment scheduled for the second day, from Alexander City itself.

<u>Reschedule Existing Meetings</u>: If the option of 'Consider Existing Meetings' has been selected within the Auto scheduling card, then the option of enabling 'Reschedule Existing Meetings' will be available. User can select 'Yes' in order to reschedule existing meetings. This might change the respective owners as well to get the highest optimization. If the existing meetings are needed to be met at the set appointment time, the user should select 'No'.

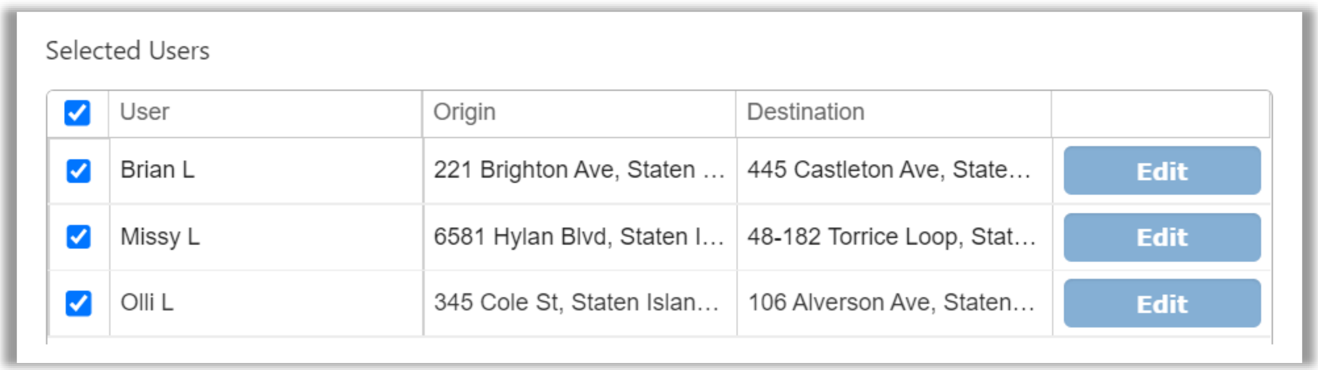
Note: If both Onsite and Offsite existing meetings have been considered, then, enabling reschedule existing meetings will make changes only to the Onsite meetings.



User Details

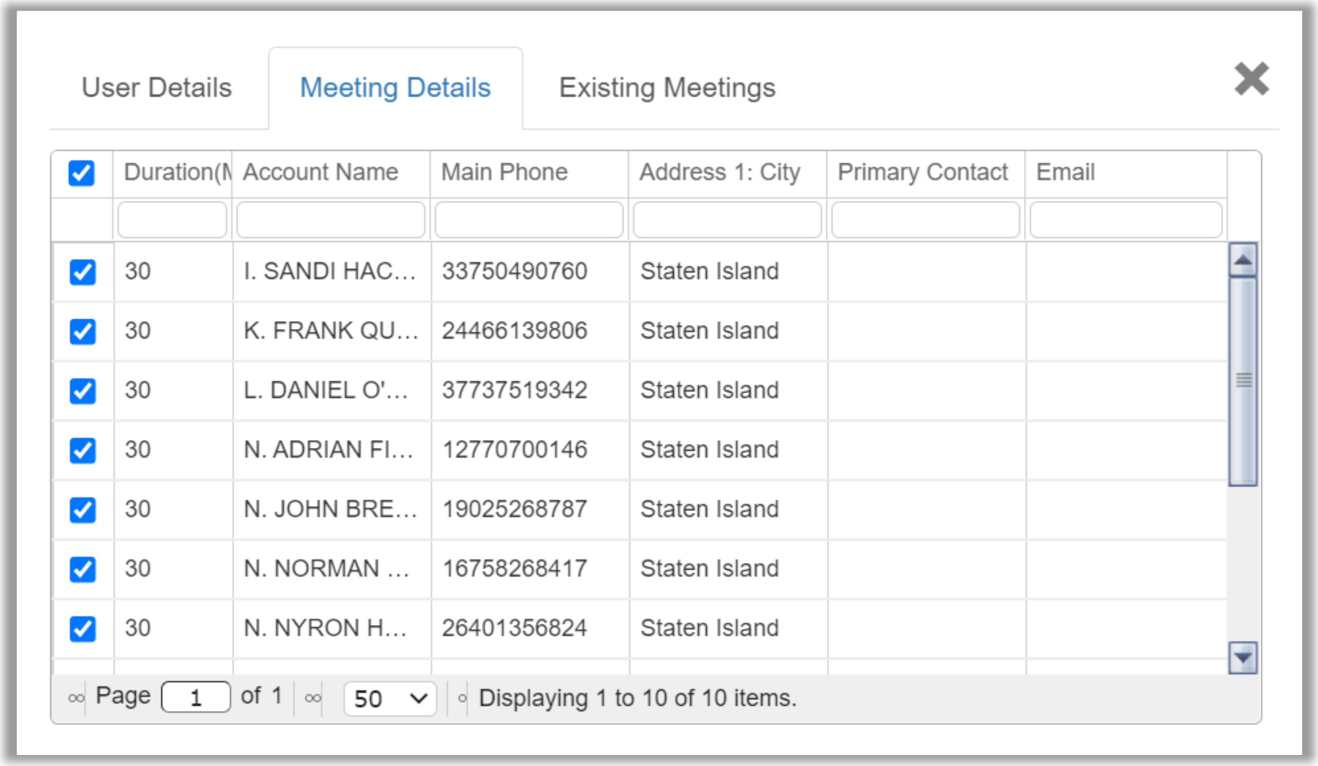
Selected users will be listed here along with the space provided for the Origin and Destination locations for the same. If the default locations for Origin and Destination are set in the default configuration details of the users, the same will be prefilled here. If not, then user can click on ‘Edit’ and enter the required locations for Origin and Destination for the respective users. *Location for Origin will be mandatory here.*

User can also uncheck any users in this list if they do not want to create an automated schedule for any user.

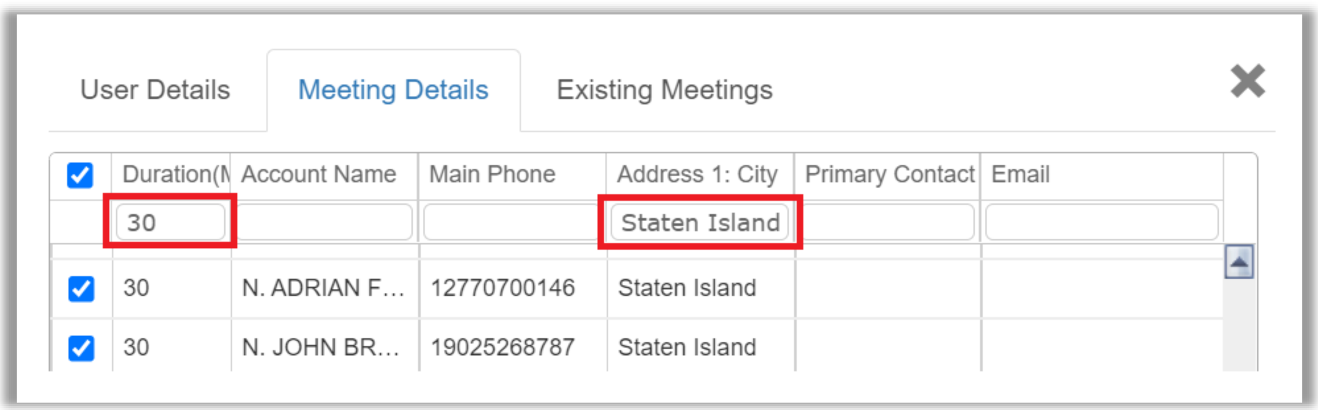


Meeting Details

The details of the records selected to create the schedule will be listed here. Users can also deselect any record if they do not want to add the record to be considered while creating the schedule.

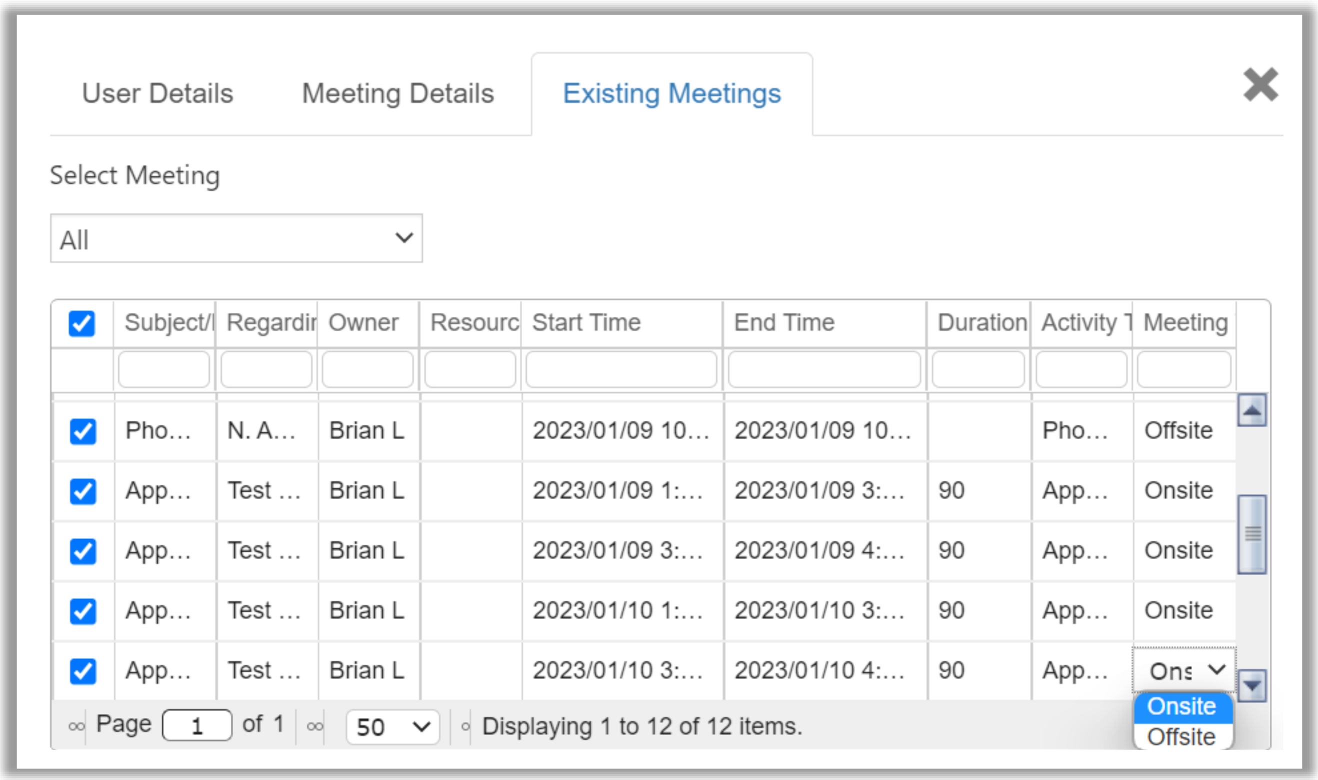


User can also click on the individual duration of meetings to change it for the respective meetings as well as enter a value in the blank space to filter the data based on the entered value. In the below screenshots the data has been filtered by meetings with the duration of 30 minutes and city Staten Island. User can filter the data for with the values for other columns as well.



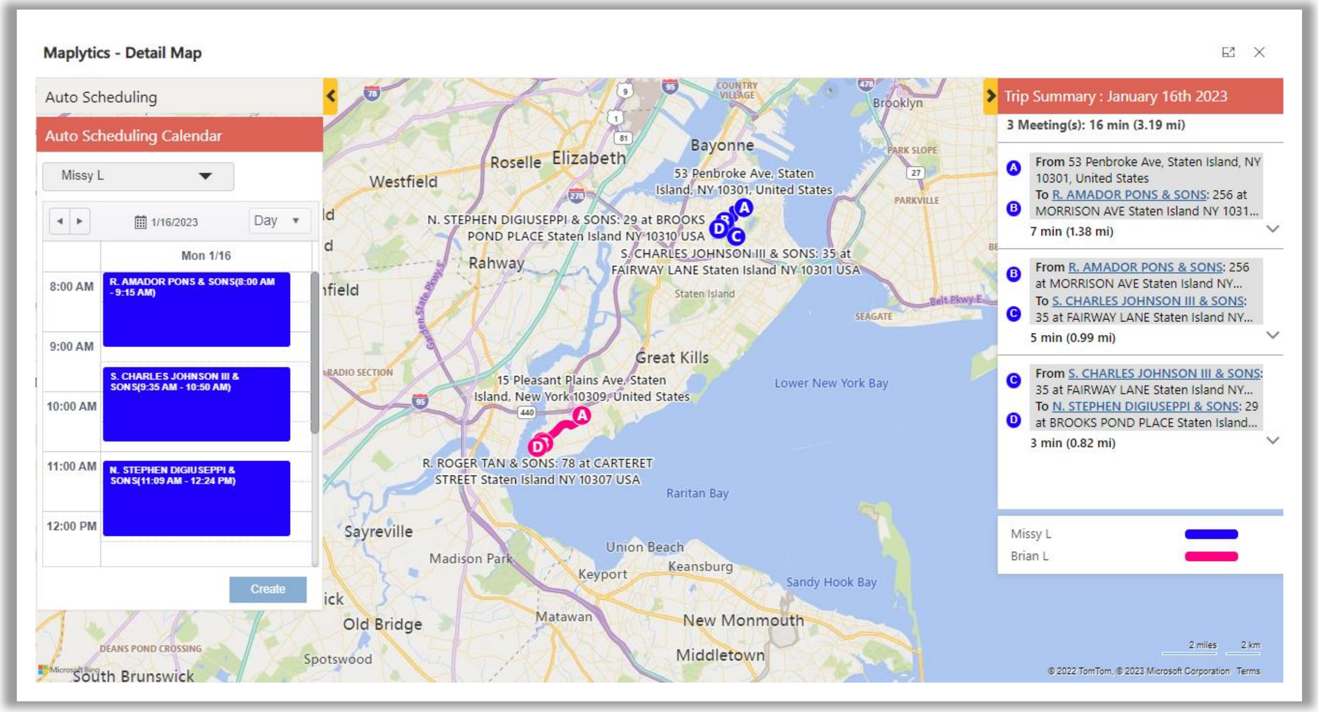
Existing meetings

If user has selected ‘Consider Existing Meetings’ in the Auto Scheduling card, the Appointments, Bookable resource bookings etc. saved in CRM owned by the selected users will be listed here. User can also change the Meeting type of Onsite meetings to Offsite. They can further deselect the listed meetings or Activities they do not want to consider and also filter the meetings based on specified values. User can choose one among the options under ‘Select Meeting’, i.e. All Meetings, Appointments, Service activities or Bookable resource bookings to view the same in the list below that. Admins can also select the Activities within the Default Configuration Detail records that are needed to be considered here while Considering Existing Meetings.



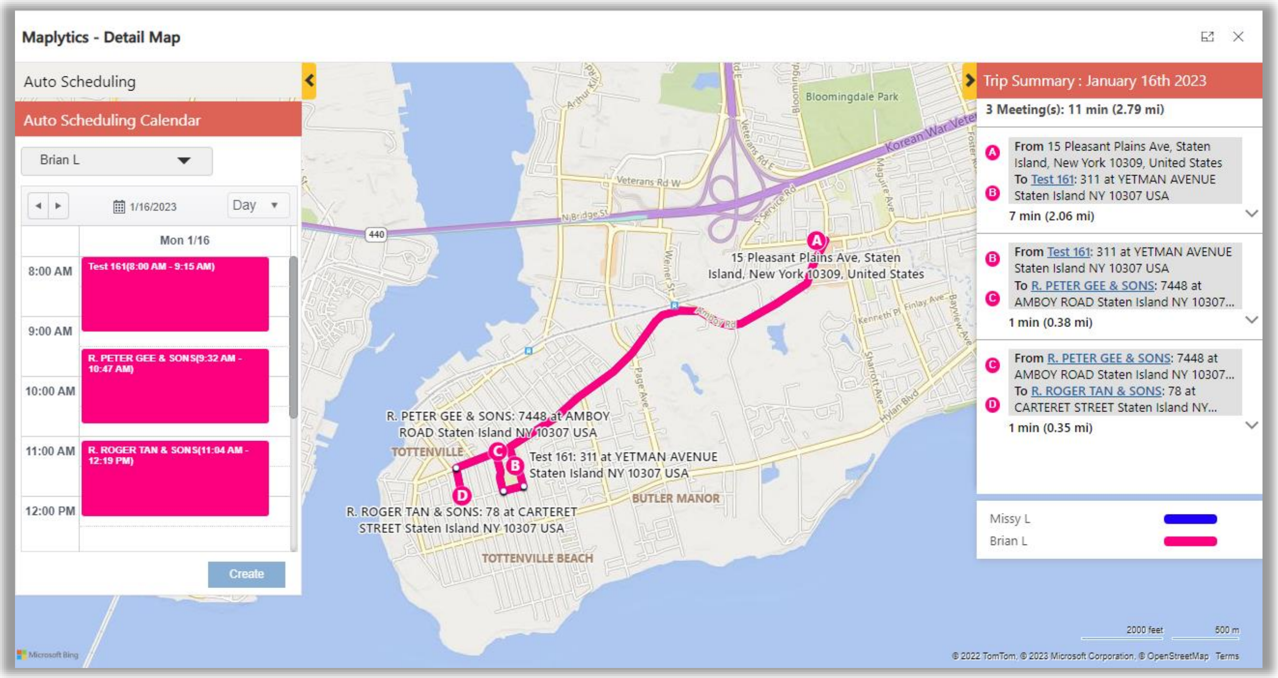
Once the User clicks on ‘Proceed’ a route based on user/resource selected will get planned and a schedule will be displayed on the calendar along with the plotted routes on map and a trip summary will get displayed for first day schedule.

Consider a field rep, Mark, representing a pharmaceutical brand utilizing the schedule for his business trip. An Auto-Scheduling Calendar along with a Trip Summary Panel and a map with the travel route on it makes understanding the planned schedule easier for him. The resource legend is maintained the same for the route, the meeting details, and the trip summary. This makes visualization quick, especially for the users on the go. Mark can also get a quick access to the navigation directions and be aware of his next destination, in advance. He has the knowledge of the total distance he would be traveling in a day or every day for a week and also the total time of this travel. Overall, Mark will be better equipped with a proper plan, directions, and be punctual for the meetings.

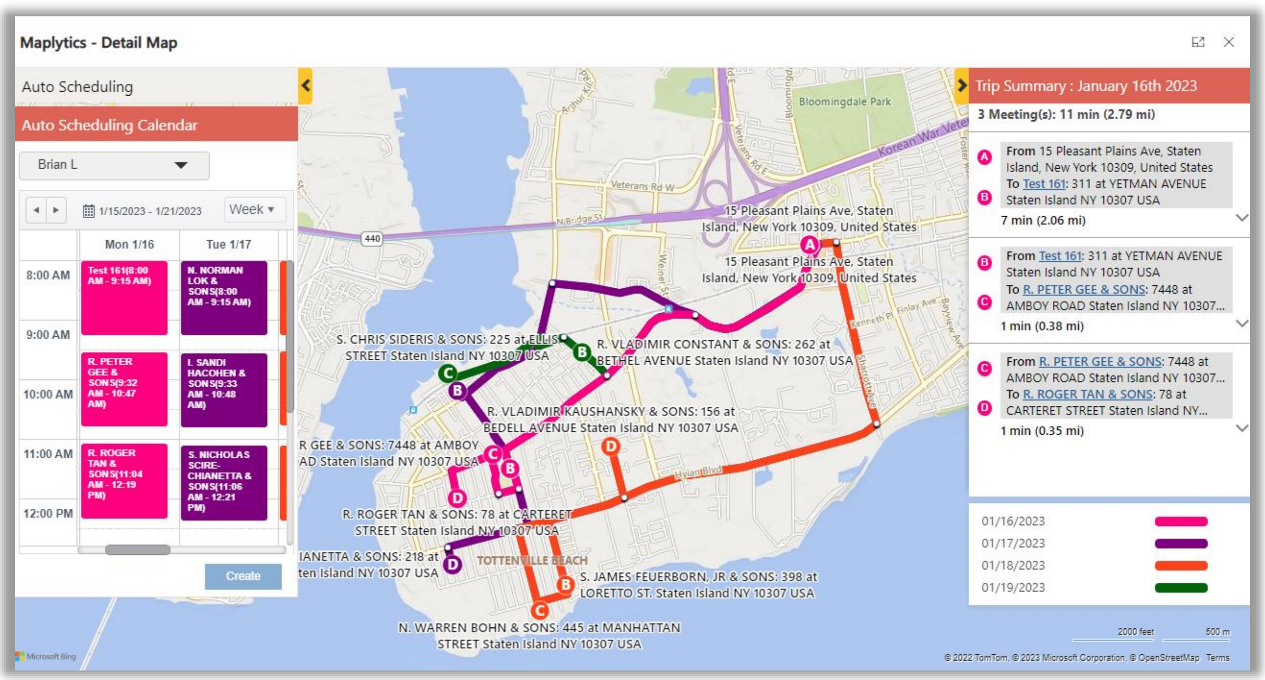


<u>Auto-Scheduling Calendar</u>-

The Auto-Scheduling Calendar on the left shows the schedule for the day/week of different users. Each individual user can be selected and an optimized schedule for them will be displayed. The meeting details as well as the allotted time slots can be viewed. The user can choose from the drop-down option available on the tool bar of the Calendar panel and view the schedule for day/week. An optimized route corresponding to the schedule in the calendar is plotted over the map. Every user is automatically assigned a specific route legend and the route is displayed in user specific colors for easy readability.

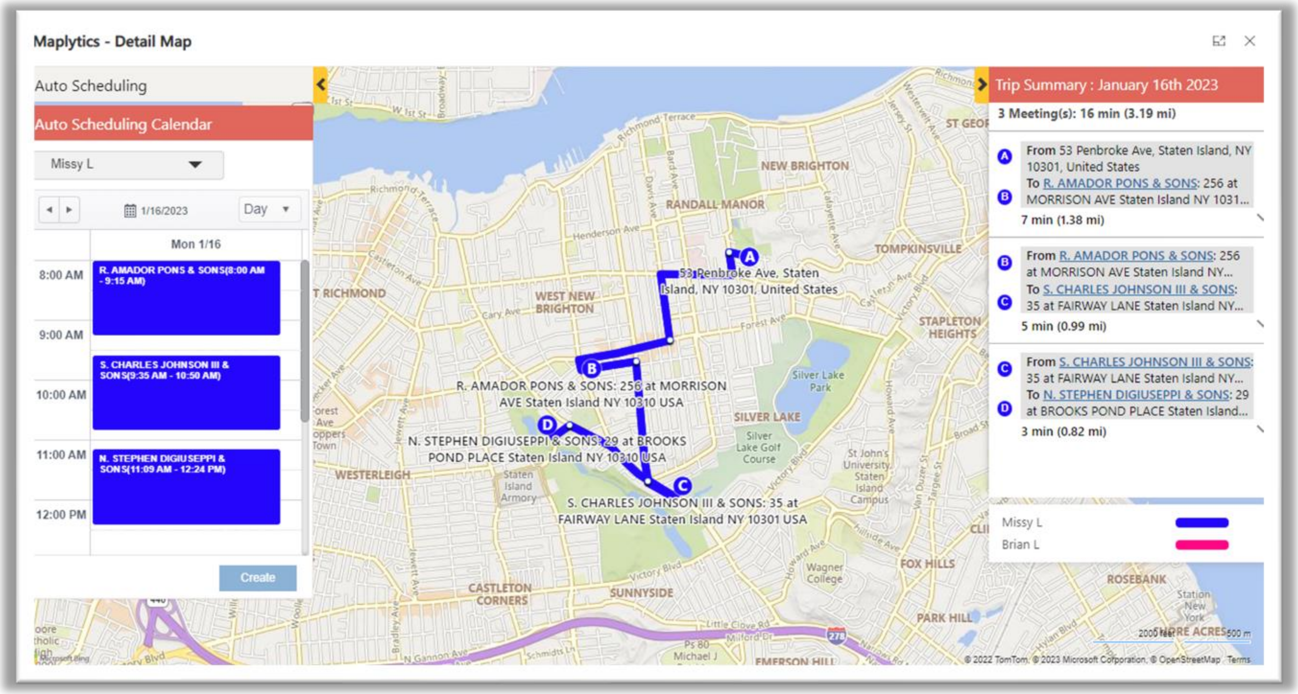


Though the map has routes plotted for all the users in the calendar, the route for the user currently selected is zoomed in the map view.



In case of display being selected for weeks, the scheduling calendar shows all the meetings and their timeslots for all the days of the week. The days with no meetings are blank. All the days of the week and the routes on the map follow the route legend. The optimized routes for all the meetings of the week can be seen on the map and the route legend aids in day-to-day differentiation.

Note: The default view of the meetings and the route is of the first user added to the list



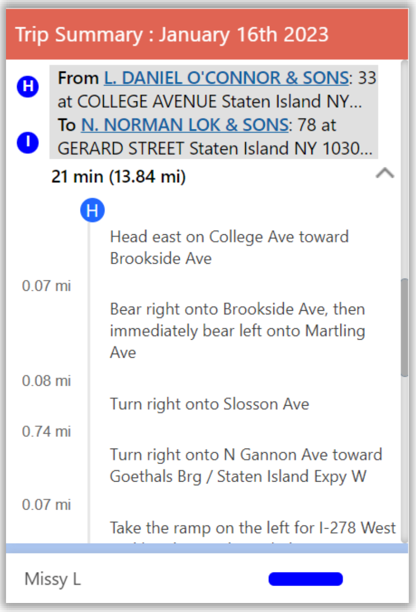
<u>Trip Summary-</u>

The Trip Summary panel on the right shows the scheduled meetings for the day for the selected user It includes information about the origin and destination. The destination is assigned to the record that is hosting the meeting.

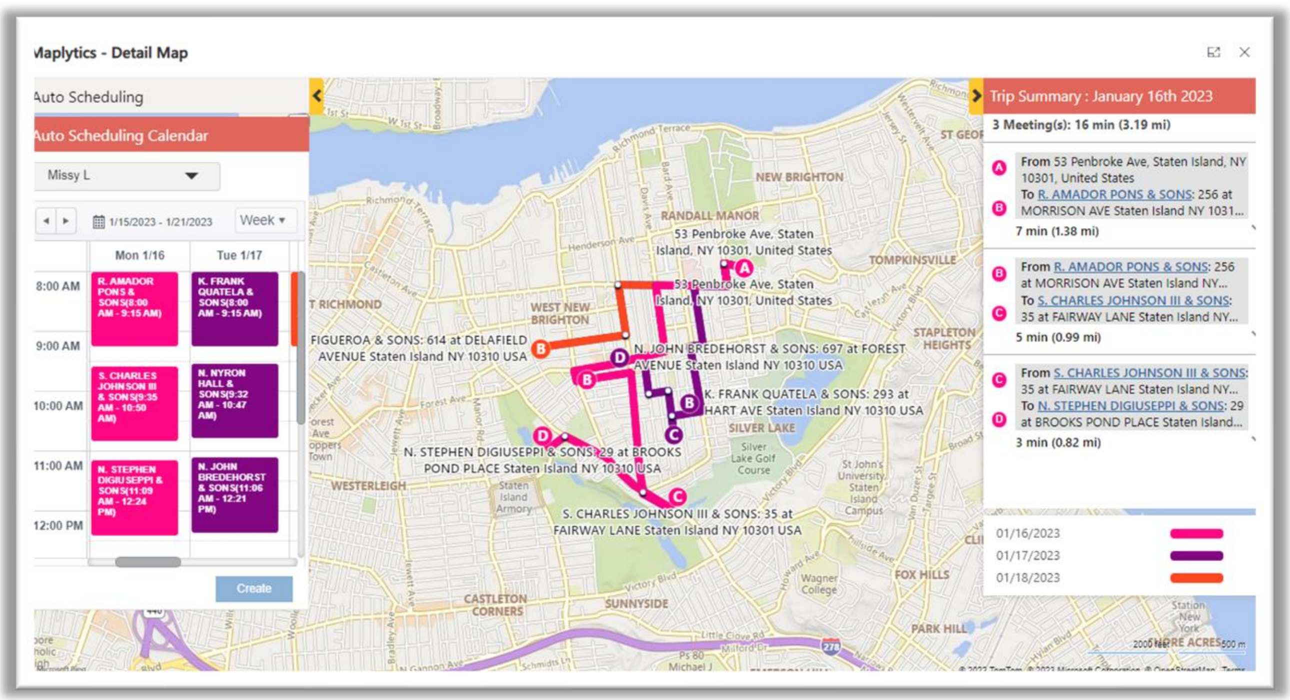
For instance, if the first meeting starting at 8 AM requires the user to start from his office, the office location (A) would become the origin and the meeting location (B) would be the destination. For the next meeting, the first meeting location (B) would then become the origin and the next meeting location (C) would be the destination. This pattern continues throughout for all the scheduled meetings.

The total number of meetings of the day, total time taken to travel to each of those meetings and all the meetings of the day, the total distance traveled for individual meetings and all the meetings scheduled is all shown on this panel.

The origin and the destination of the multiple meetings are denoted by alphabets which are referenced on the route map as well. In case of a day's view, the route legend at the bottom shows the color codes for different users.



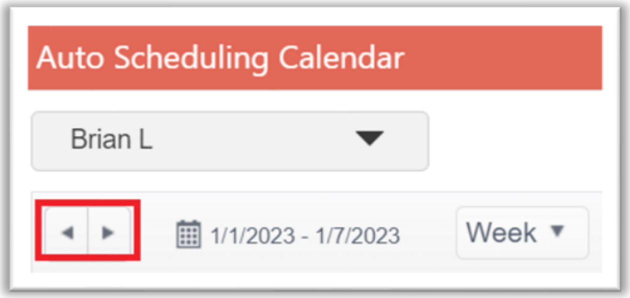
Turn-by-turn navigation directions can be seen when clicked on the down arrow below a meeting slot.



In case of display being selected for a week, the trip summary is displayed for the first scheduled day. The route legend for the next scheduled days of the week is shown at the bottom. When the user manually clicks on the next scheduled day of the week in the calendar, the corresponding trip summary of that scheduled day is seen with total travel time and distance for the selected user.

Note: A change in the Entity Map shall reflect a change in the Title Attribute given to the destination

Calendar Navigation Buttons



Users can use the Next- Previous calendar navigation buttons to view the schedule for the next day of the week for a user. The same buttons can be used to see the schedule for the next week in case the weekly schedule is being viewed.

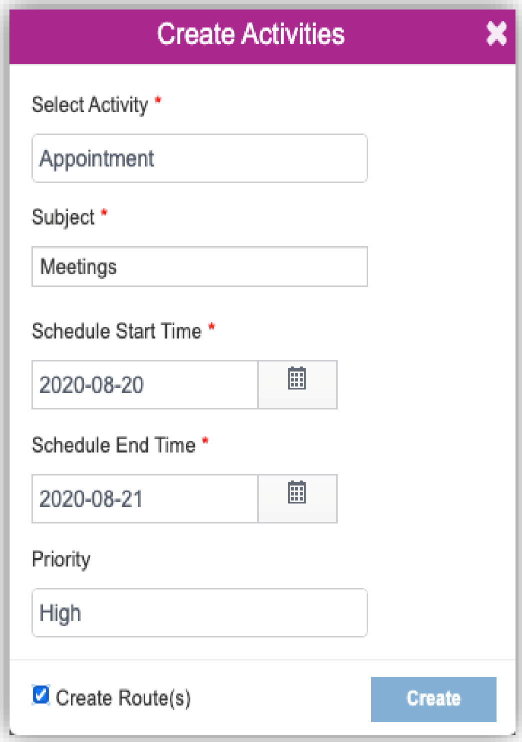
Users can scroll through the meetings of the day displayed in the Scheduling calendar with the scroll bar at the side. They can use the scroll bar at the bottom to scroll thought all the meetings of the week while viewing a weekly display.

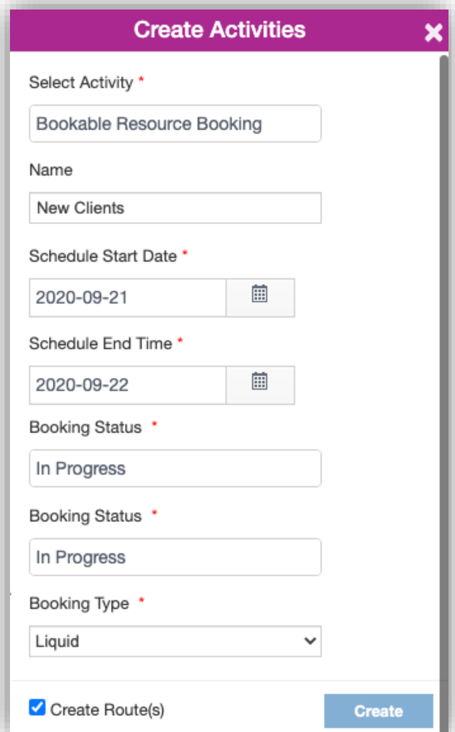
Create Activities

User can save the schedule as Routes and Activities in the Dynamics 365 using 'Create' button. The user can create the following activities:

- Appointments
- Service Activities
- Bookable Resource Bookings

User can also select the option of 'Create Route(s)' in order to save the planned routes into 'Route' Activity Entity.





Note: To make the option of Bookable resource booking visible, user needs to enable the OOB or any custom entity to create the bookable resource bookings.

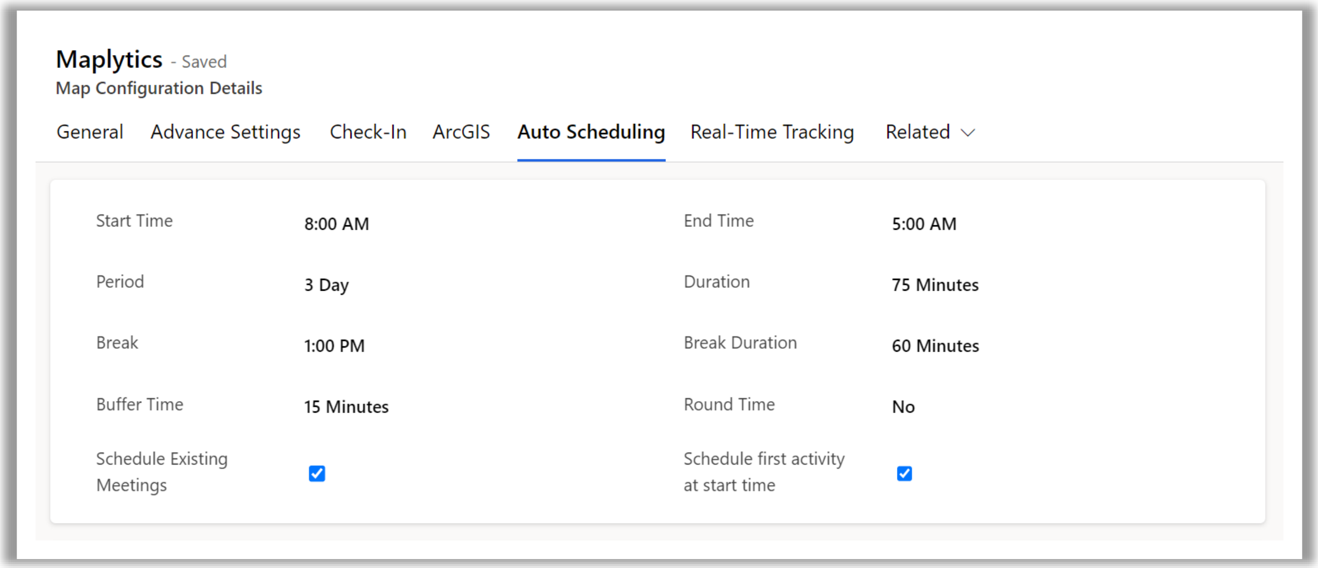
Go to Detail Map: Using this button, user can go back to the Detail map

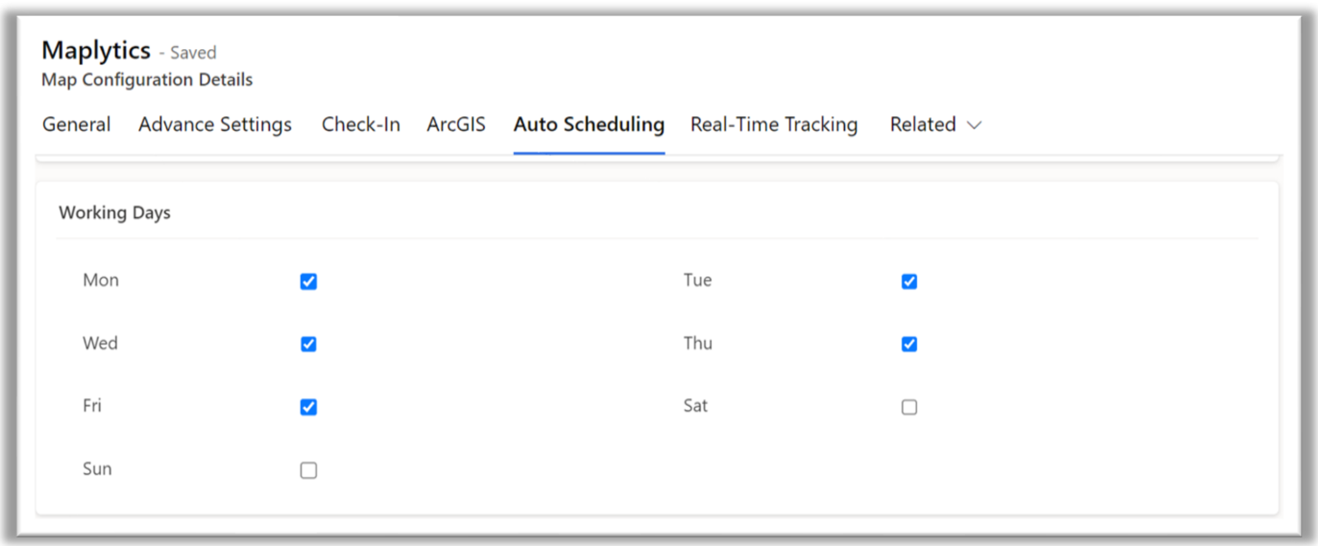
Note: All the scheduled data will be cleared, if 'Go to Detail Map' button will be used. To save the schedule created, user can use the option of 'Create activities'.

Configuration Details for Auto Scheduling

System admin and Maplytics admin can set the default settings for Auto Scheduling in the Default Maplytics Configuration Detail record. They can also set the start time as the default start time for the first activity as well as default values for other preferences for Auto Scheduling.

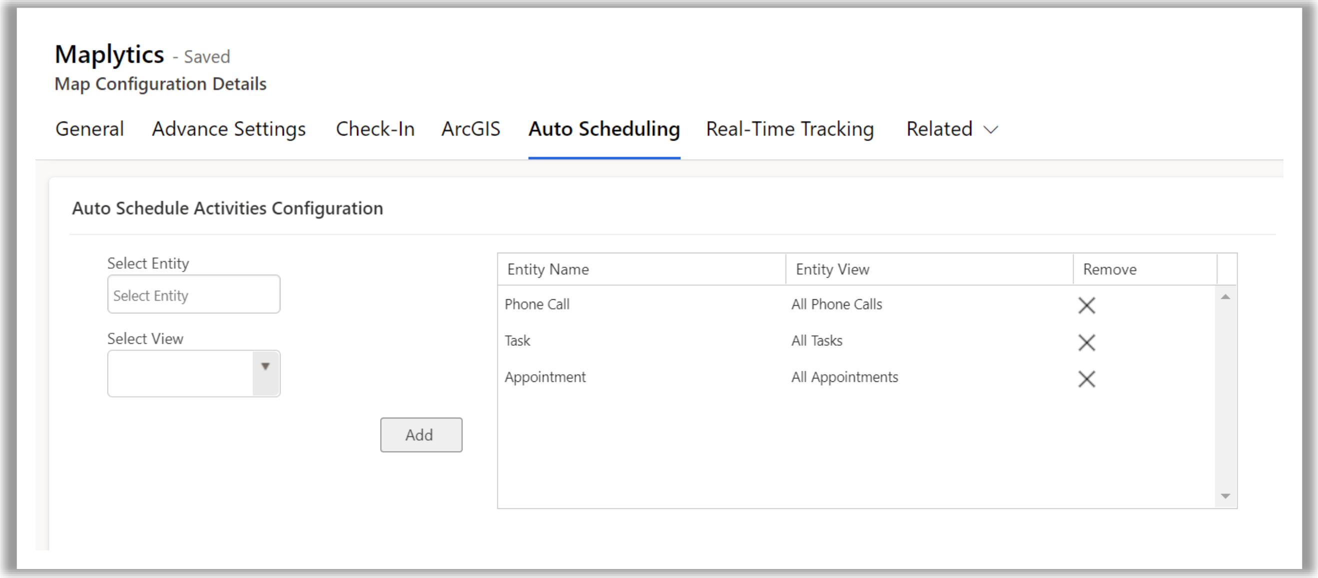
Go to Maplytics App > Settings > Maplytics Configuration Details > Default Configuration details record for the user > Auto Scheduling



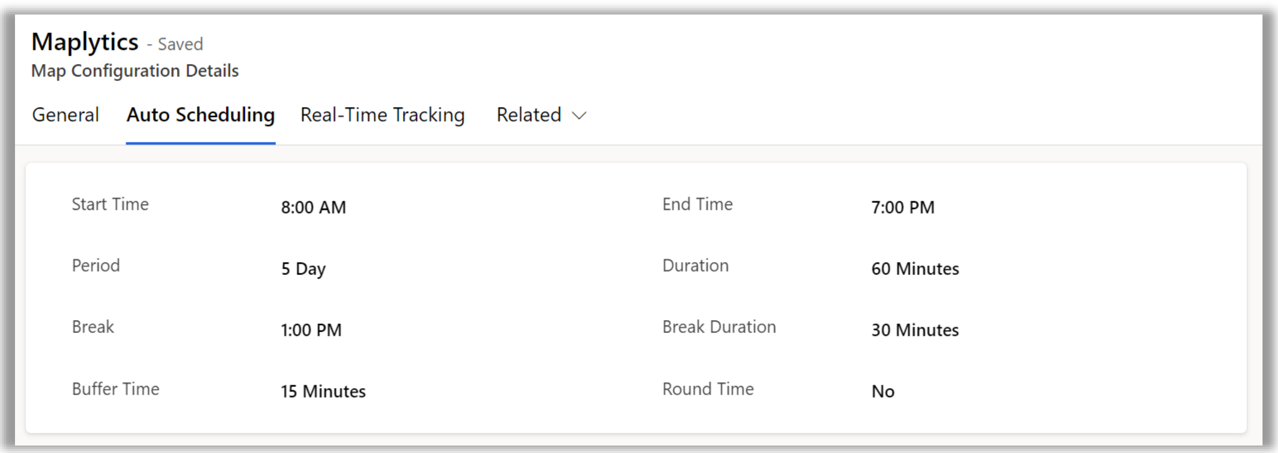


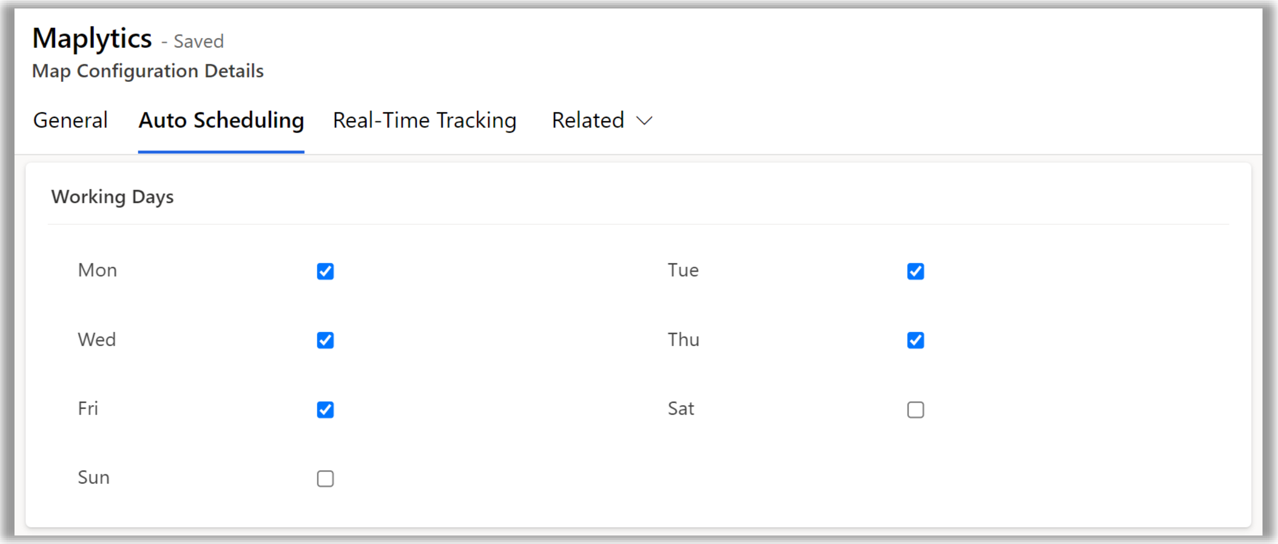
Admins can also select the Activities that are needed to be considered while Considering Existing Meetings in Auto Scheduling. If no Activities are selected here Auto Scheduling will consider all the Activities while

Considering Existing Meetings. If Admins have selected Activities here then only selected activities will be considered while Considering Existing Meetings in Auto Scheduling.



Users can also set the default settings for Auto Scheduling in their respective Maplytics Configuration Detail record. ***Go to Maplytics App > Settings > Maplytics Configuration Details > Configuration details record for the user > Auto Scheduling***





Note: Create Activities for Custom Entity:

- ***A custom entity should be linked to any OOB Entity into Entity Maps in order to Create Activities for the Entity***

Check-In/Check-Out

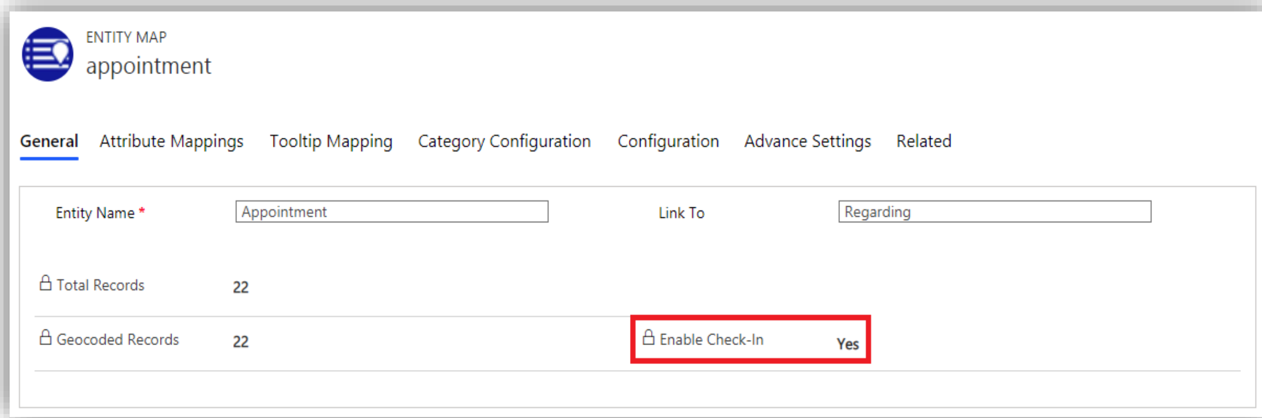
Check-In feature enables users (sales person/service person) to register their arrival and departure time for the meeting locations while navigating on field with the help of Check-In and Check-Out buttons. These buttons will help to tag the geo-coordinates of the location while a user is visiting a client. This will also help the management to track the activities of the field professionals as well as the time they have spent on every meeting.

Configuration

To get started with the feature of Check-In, the first step is to configure Maplytics. Configuration will create the Entity Map for the Check-In entity. Please refer to the section of '***Configure***' under the '***Initial Setup - Maplytics License Activation, Configuration for Entity Map, Dashboards and Census data***' within the Installation manual.

This feature can be enabled for any OOB or custom entity within their respective Entity Maps. To enable this, System Admin/Maplytics Admin can follow the steps mentioned below. The following screenshot shows the entity map of Appointment for an instance.

Go to Maplytics App > Settings > Entity Maps > Open Required Entity Map > General Tab > Enable Check-In > Set the value to 'Yes' & click on 'Save'.



Note:

- ***The default value for 'Enable Check-In' is set to 'No'.***
- ***User cannot undo this option, once selected and saved.***
- ***After enabling this feature, please wait for a while before using this.***

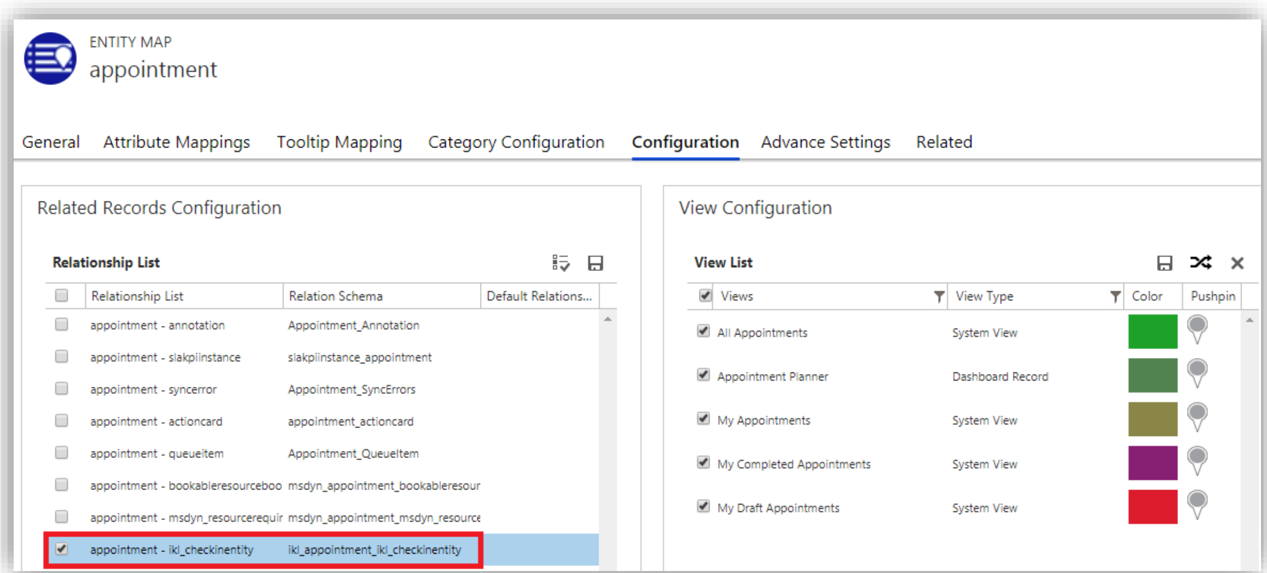
Related records for Check-In/Check-Out

User can use the feature of 'Plot Related Records' to view the related records (Appointments, Accounts, etc.) for Check-In/Check-Out records that are plotted records on the map. using. This will help the managers to understand for which record has the sales person/service person checked-in/out. To plot related records for Check-In/Check-Out, user needs to select the relationship. To select the relationships, admins can follow the steps mentioned below. We have provided the steps for Appointments for an instance.

Go to Maplytics App > Settings > Entity Maps > Required Entity Maps record > Configuration > Related Records Configuration > Relationship List > Select appointment - ikl_checkinentity

User can also refer to the section of 'Related Record Configuration' under the Entity Maps within the Installation manual for the same.

> ***Note: User needs to select the respective Relationship with Check-in for every entity within their respective entity maps for which they want to see the related Check-In/Check-Out records.***

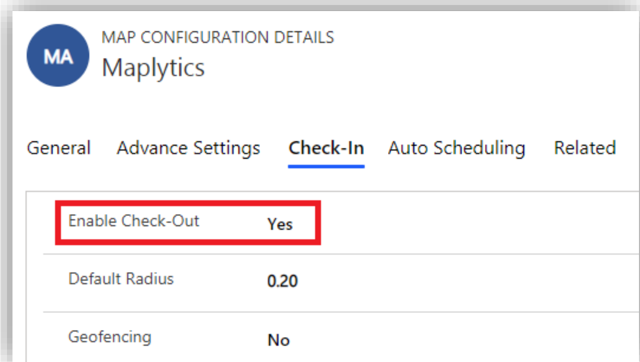


Check-Out

After enabling the feature, user can also enable the option of 'Check-Out'. This way the user can first click on the Check-In button while visiting the meeting and then can click on the Check-Out button while completing the meeting. Here, as the geo-coordinates for both the locations will be saved, it will also help the management to track the time spent on the meetings.

In order to enable Check- Out, System Admin/Maplytics Admin can follow the steps mentioned below:

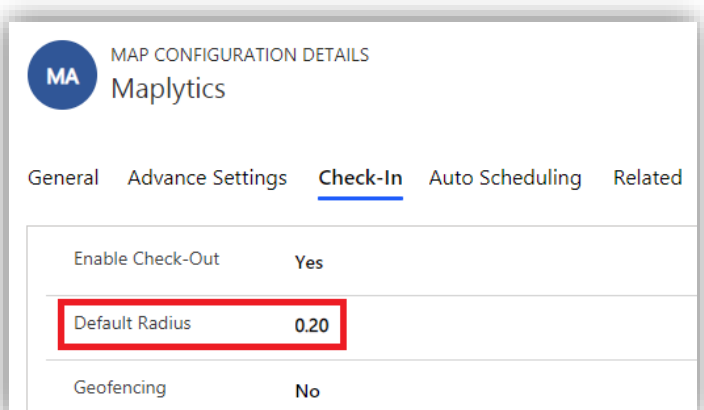
Go to Maplytics App > Settings > Map Configuration Details > Default Configuration Detail Record (the one with no user name) > Check-In tab > Set the value for Enable Check-Out to 'Yes' & click on 'Save'.



Note:
- ***The default value for 'Enable Check-Out' is set to 'No'.***
- ***User can anytime disable this option.***
- ***Check-Out option can only be enabled for entities for which the feature of Check-In has been enabled.***
- ***Check-Out can be enabled/disabled only at Organization level.***
- ***Check-Out button will only be available for the records for which the user has checked-in.***

Default Radius

It is the distance that the System admin/Maplytics admin can set to consider the accuracy of the Check-In/Check-Out records created by the field professionals. If the Check-In/Check-Out record do not lie within this radius then it will be considered as invalid record and will be shown with a pushpin with this Red Cross. For example:



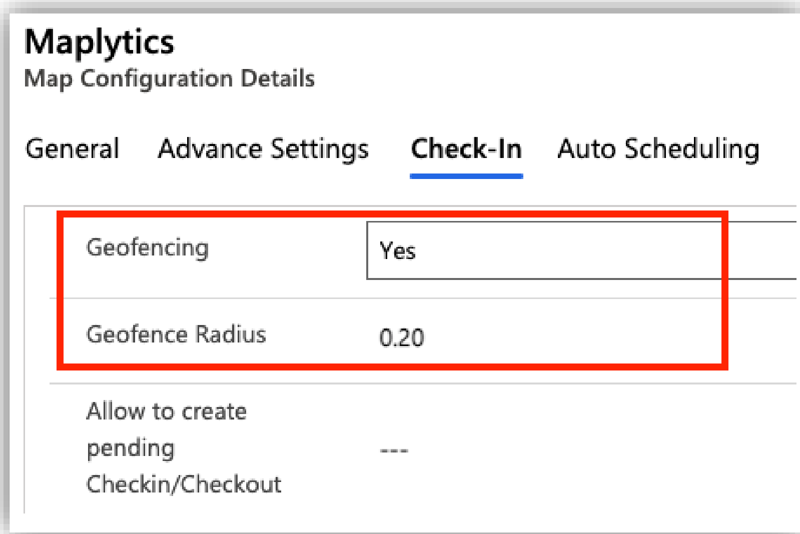
Note: By default, Geofence radius is 0.20 kilometers or miles depending on the unit set in User Configuration Detail record.

Geofencing

Geofencing is creating a virtual geographical boundary of a specified Geofence radius around a record. If Geofencing is enabled, user needs to be within this radius to successfully Check-In/Check-Out for a record. If the user is not within this radius, the user will not be able to Check-In/Check-Out and will be shown a message specifying that they need to be within 'n' Km/Mi of distance from the Check-In/Check-Out location. This will help the management to have only valid Check-In and Check-Out records done by the field professionals.

In order to enable Geofencing, System Admin/Maplytics Admin can follow the steps mentioned below:

Go to Settings > Map Configuration Details > Default Configuration Detail Record > Check-In tab > Geofencing > Set the value for Geofencing as 'Yes'



Geofence Radius

After enabling Geofencing, System Admin/Maplytics Admin can set the default value for Geofence radius, which will be considered while a user Checks-In, or Checks-Out.

Note:

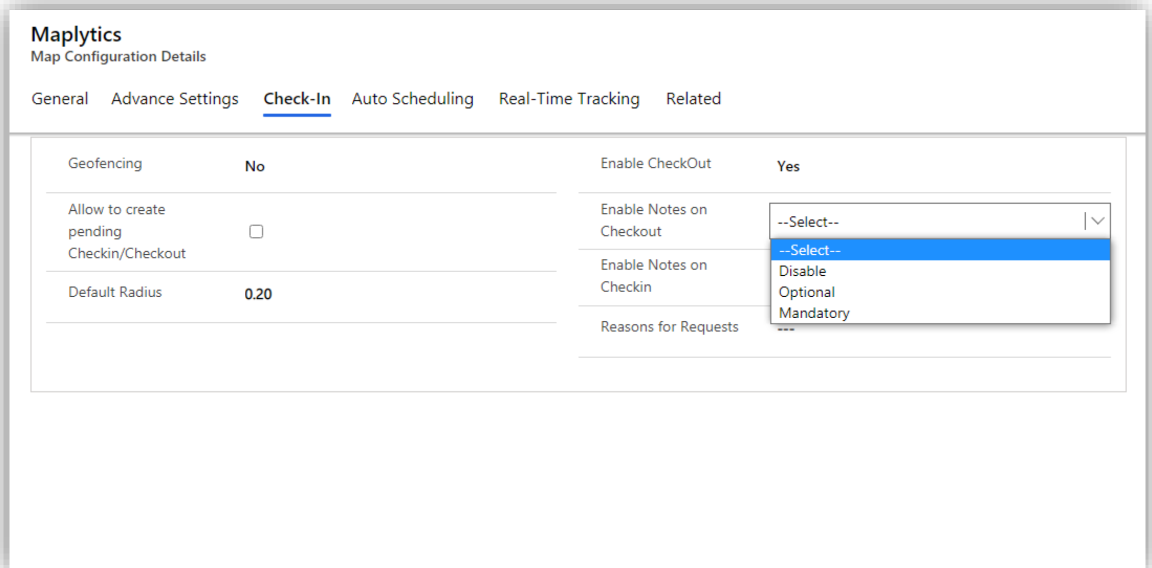
- ***By default, Geofencing is disabled in which case the user can Check-In/Check-out from any location.***
- ***By default, Geofence radius is 0.20 kilometers or miles depending on the unit set in User configuration Detail record.***

Enable Notes on Check-In and Check-out

Admins can enable this option to let the users add notes to the record for which they are checking in/out. To enable this option, ***go to Map Configuration Details > Default Configuration Detail Record > Check-In tab > Enable Notes on Check-In / Enable Notes on Check-Out***.

The admins will have three options to select:

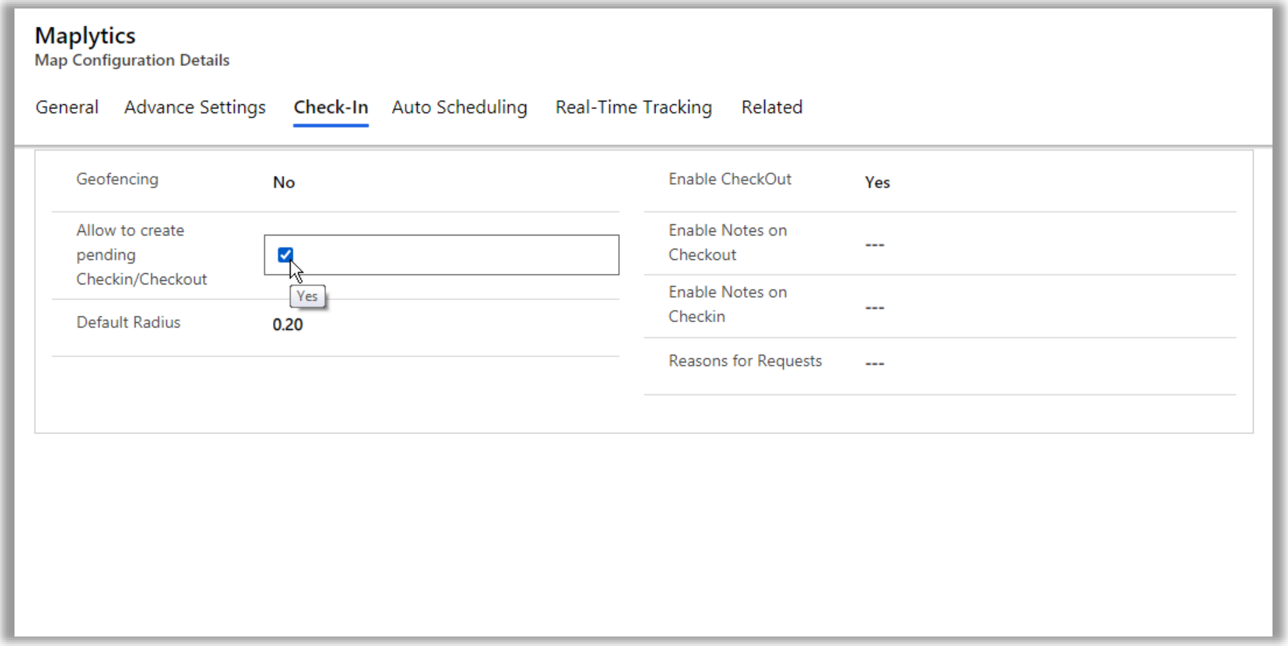
- **Disable:** This will disable the option to add notes while Checking-In or Checking-out.
- **Optional:** The user is shown the pop up for notes but they can check-in or check-out without adding the notes.
- **Mandatory:** It is necessary for the user to add notes while checking-in or checking-out.



Pending Check-In/Check-Out Requests

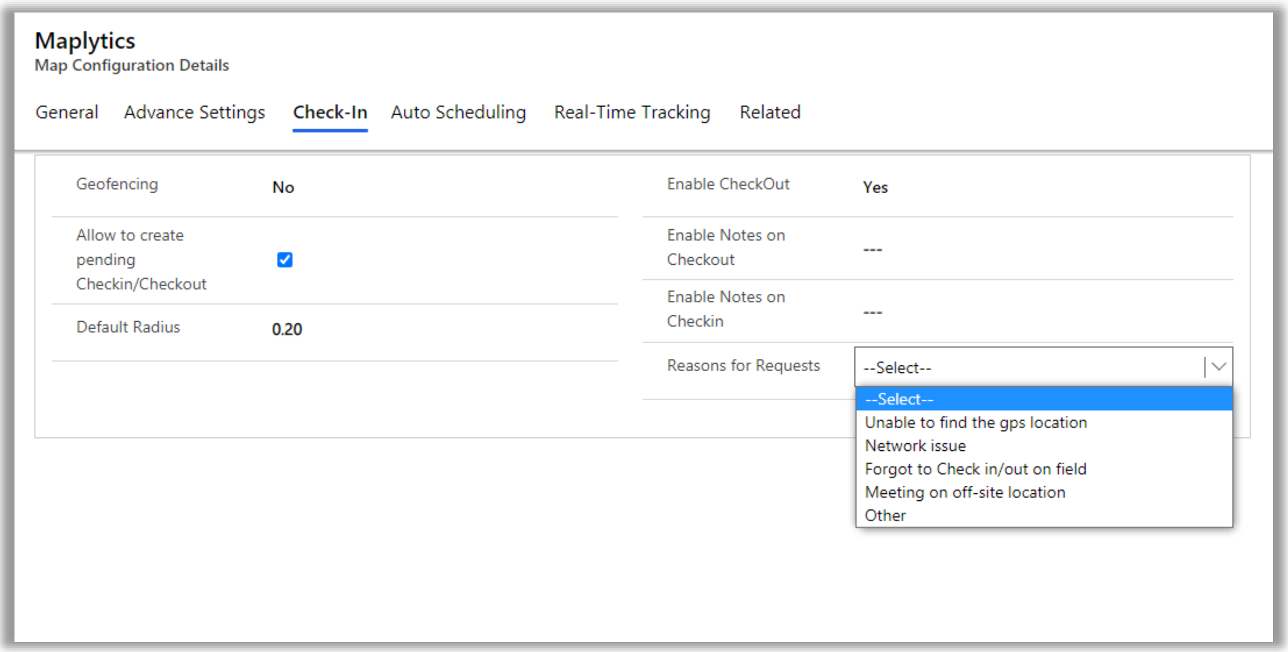
System Admins and Maplytics Admin can enable this option to allow the users to create the requests for Check-in/Check-out for meetings in the past. For example, if a user had an offsite meeting or missed to check-in/out for any meeting, they will be able to create requests for check-in/out for such meetings if this option is enabled.

To enable it, go to Map Configuration Details > Default Configuration Detail Record > Check-In> Create pending Check-In/Check-Out Requests > Select the checkbox



***Note**: Any user who would be inside the defined Default Radius/Geofence radius of a record will not be able to create pending check-in or check-out for the respective record.*

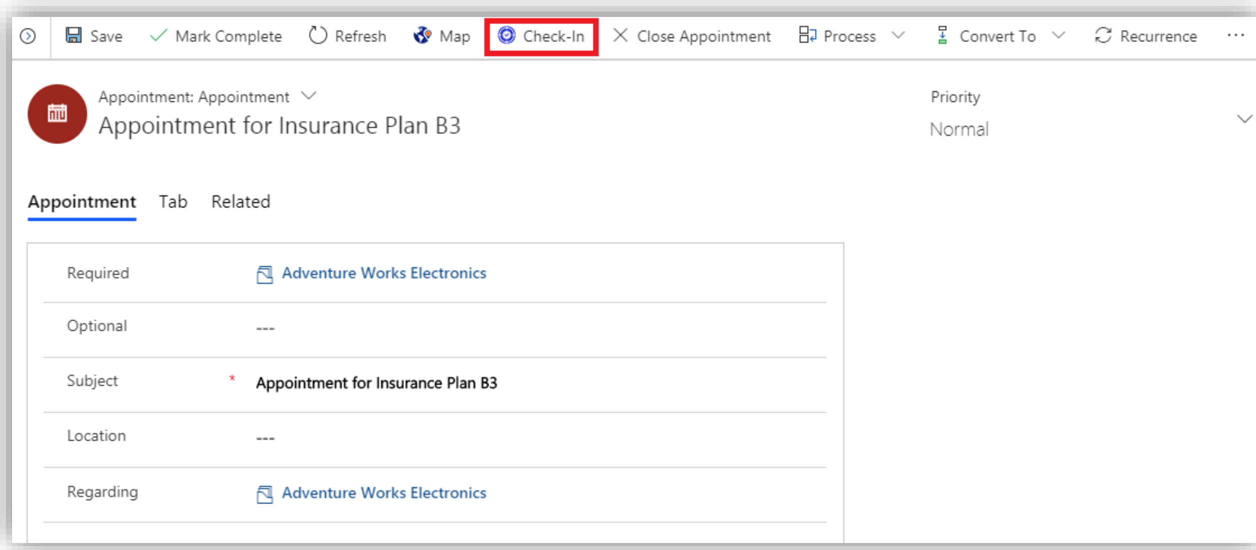
Once this option is enabled, the admins can also see the 'Reasons for Requests' which shows the list of acceptable reasons that are predefined. The users can select anyone while creating pending Check-In/Out records. The admins can also configure custom Request Reasons by going to Check-in Entity within CRM Customizations.

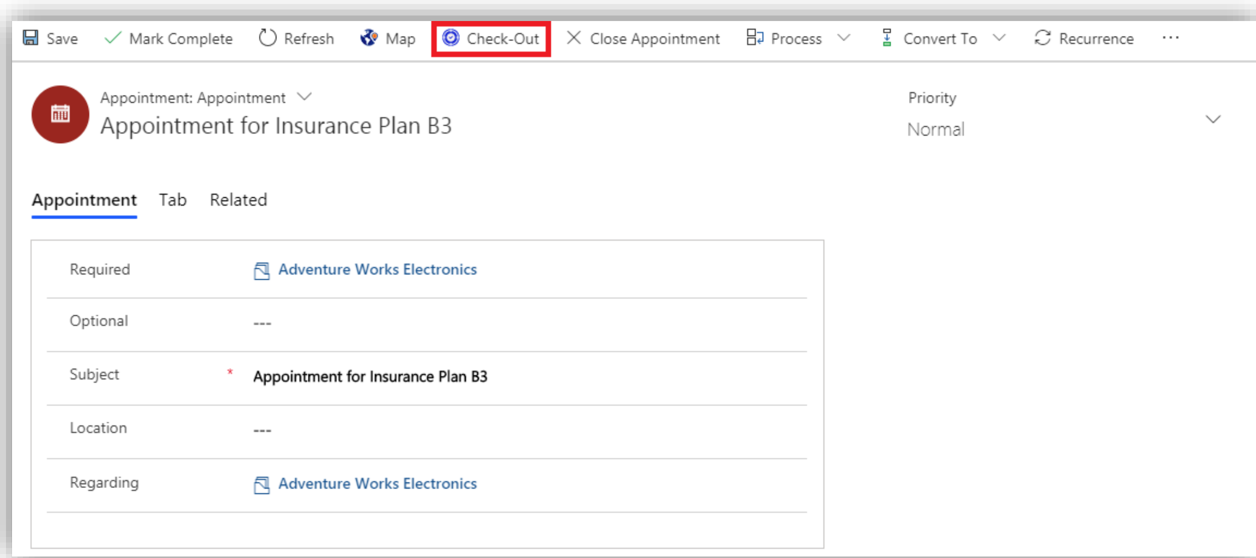


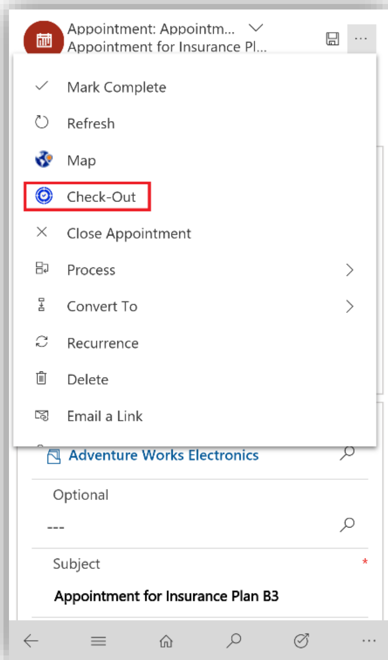
Creating Check-In/Check-Out records

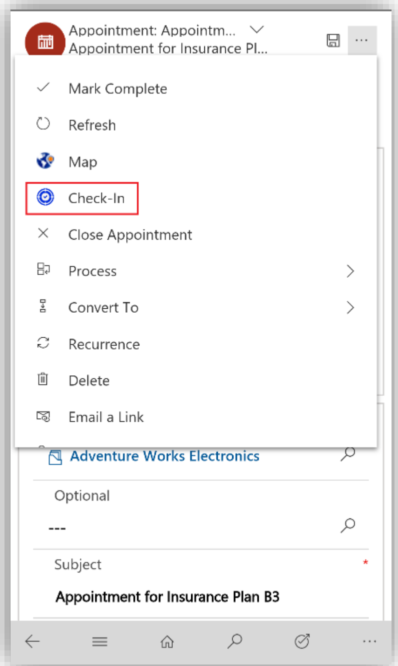
While navigating on field, user can Check-In and Check-Out for any record. This can be done in the following two ways:

- From Record Form: User can open the respective record (Appointments, Accounts etc.) and click on Check-In/Check-Out button on the ribbon.





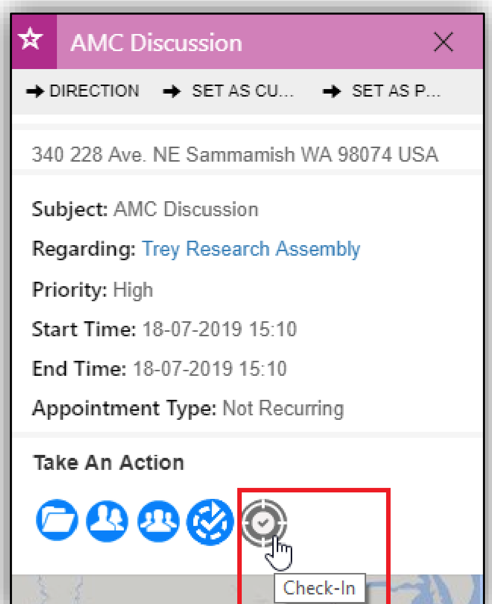


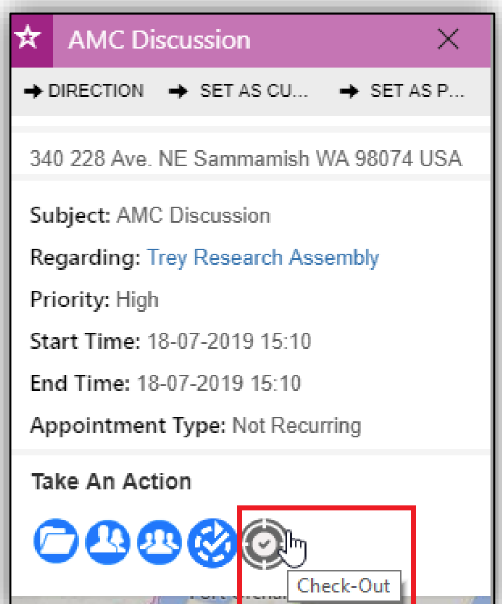


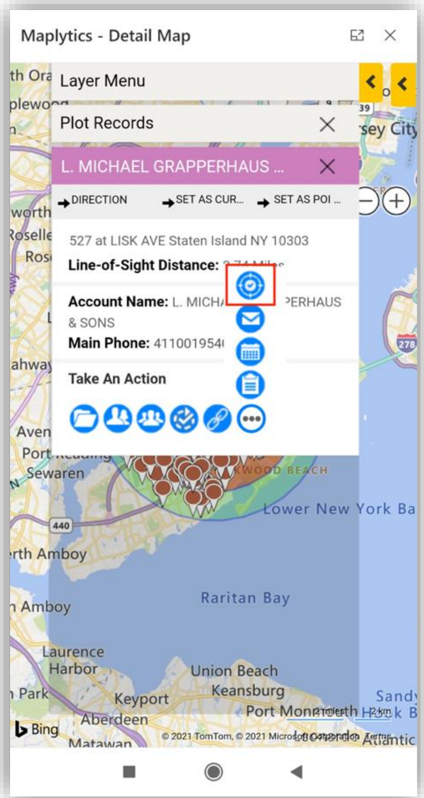
Note:

- ***User needs to allow to read the GPS location of the device in order to Check-In/Check-Out.***
- ***Once checked-in, user can click on the same button to check-out.***

- Through Detail Map: User can click on any plotted records (Appointments, Accounts etc.) to open the respective Tooltip Card and click on the button to Check-In/Check-Out.



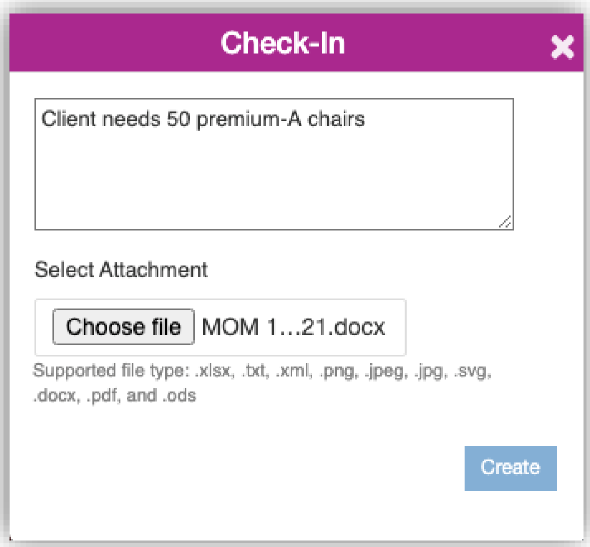




Note: Multiple Check-In/Check-Out records can be created for any record (Appointments, Accounts, etc.)

Adding Notes while checking-in/out

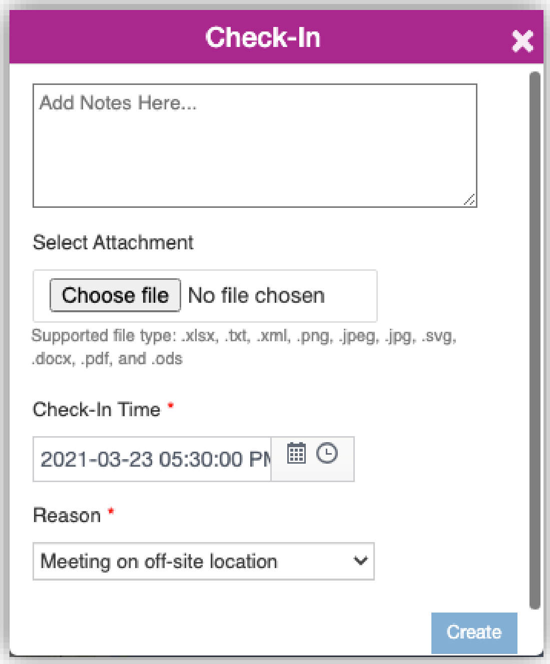
While a user registers a check-in/out, they can add some notes or attachment for the respective record. For example, if they want to add some notes related to the meeting they did, or any documents they need to attach regarding the requirements of the client, they can use this option to add the notes or attachment.

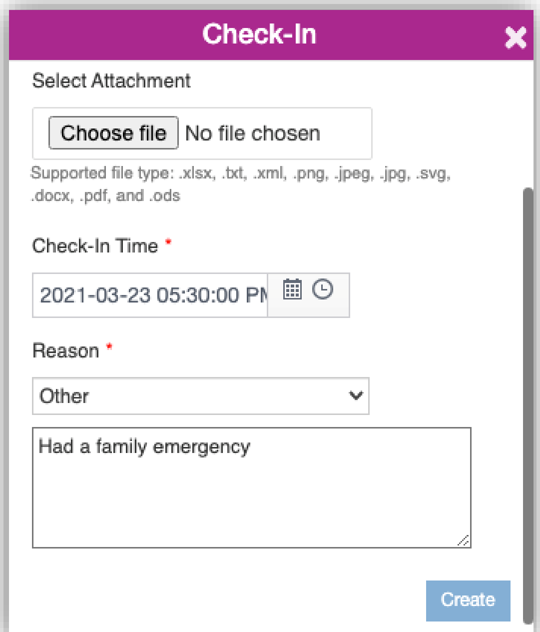


Users can further go to the respective record to see the notes and attachments within the timeline of the Activities. If a user is checking-in/out for an activity record like appointments or Bookable resource bookings and has added notes or attachments then in such cases the notes and attachments will be saved within the respective related record (for example, Account/work order) saved in the regarding field.

Creating Pending Check-In/Check-Out requests

If users want to check-in or check-out for a record for which the meeting/service has been done in the past but they missed to check-in/out at that time, because of an off-site meeting or let's say if they forgot to check-in/out, so they can create check-in/out requests for those records later sometime. They can select the reason why they missed and select the date & time of the meeting for which they missed to check-in/out and click on 'Create'. The requests will be pending for approval from managers. Unless the records have been approved by the manager, the records will not become active check-in/out records and will remain as pending check-in/our requests.

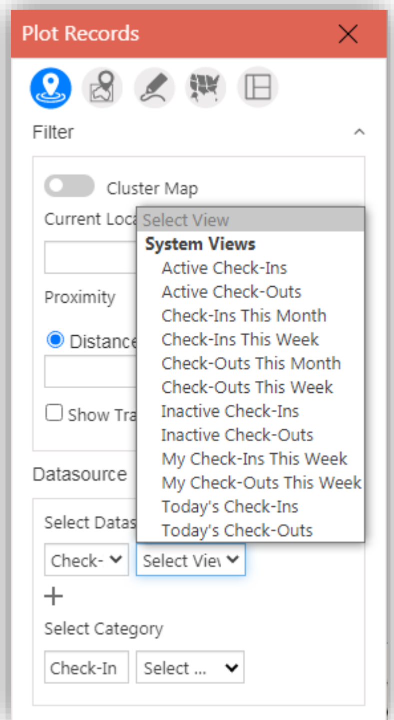


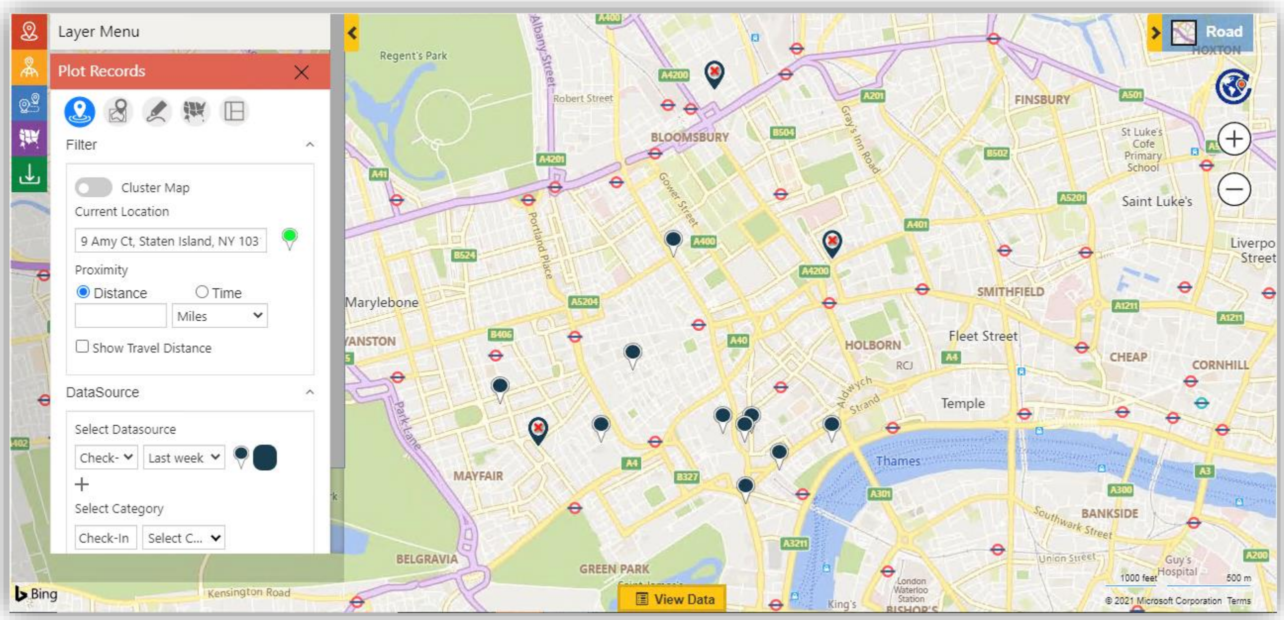


If the user wants to enter a reason which is not listed then the user can select the 'Other' option and enter their reason in the provided text box and click on Create. These check-in/out requests will be converted to an active check-in/out record only when the respective manager approves the reason for missing the check-in/out and hence approves it to be a valid check-in/out records.

Visualize Check-In/Check-Out records on Detail Map

The managers can visualize the activities of field professionals by plotting the Check-In/Check-Out records on the map just like any other entities with the help of the Plot Card. User can select 'Check-In' as the Datasource and select a required view to visualize the records from that view.





Analyze Check-In/Check-Out records

After plotting the records for Check-In and Check-Out, user can analyze the pushpins by distinguishing between the following two kinds of pushpins:

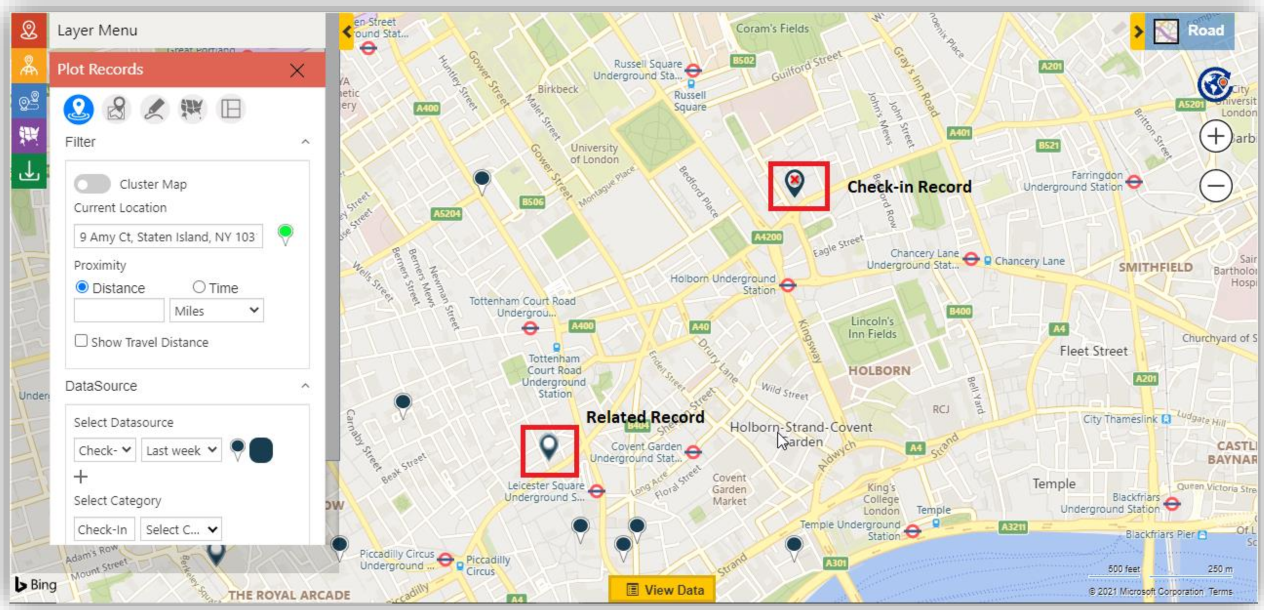
- Valid Check-In/Check-Out: When a user Checks-In/Checks-Out within the Default Radius or Geofence Radius, it is a valid record and will be represented by pushpin.
- Invalid Check-In/Check-Out: When a user Checks-In/Checks-Out outside the Default Radius it is represented by pushpin.

Visualizing Related Records

After plotting the records for Check-in, user can also choose to view the records (Appointments, Accounts etc.) against which the plotted check-ins and check-outs were created.

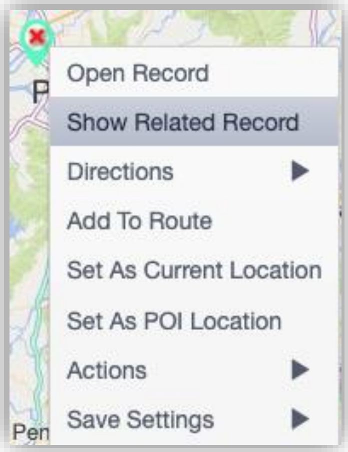
Visualizing Related Record (Appointments/Accounts, etc.) for Check-In/Check-Out records

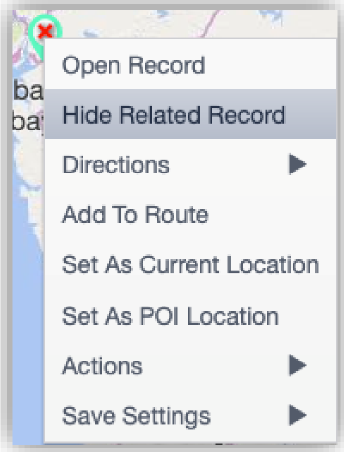
After selecting the relationship, user can choose to view the related record for any Check-in and Check-out record plotted on the map.



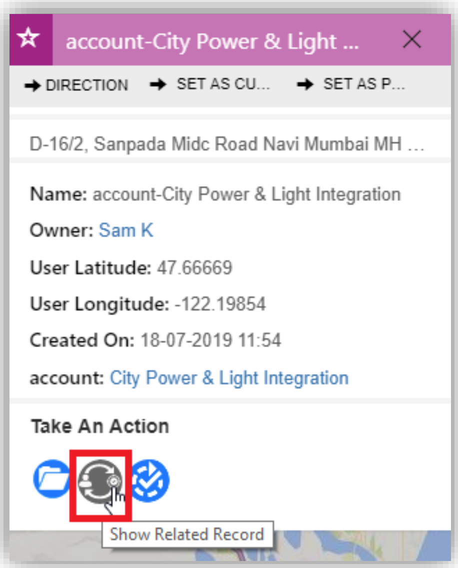
The related record can be visualized in the following two ways:

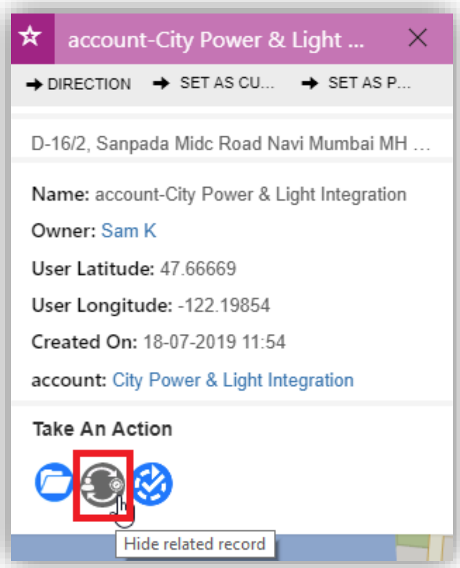
- By Contextual Menu: User can right click on any Check-In/Check-Out pushpin to open the 'Contextual menu' and click on 'Show Related Record'. This will plot the related record for the selected pushpin. To hide the related record, user can again right click on the same Check-In/Check-Out pushpin to open 'Contextual Menu' and click on 'Hide Related Record'.





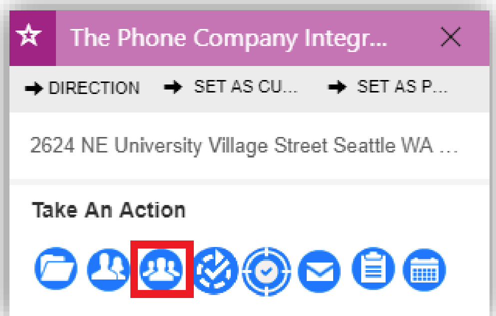
- By Tooltip Card: User can click on the Check-In/Check-Out pushpin to open the Tooltip Card and click on 'Show Related Record' from the 'Tooltip Card Actions'. To hide the related record, user can again click on same Check-In/Check-Out pushpin to open the Tooltip Card and click on 'Hide Related Record'.

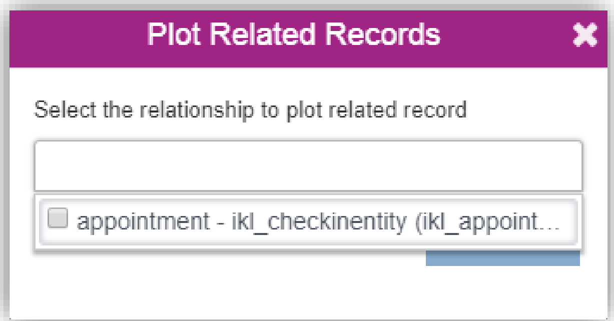


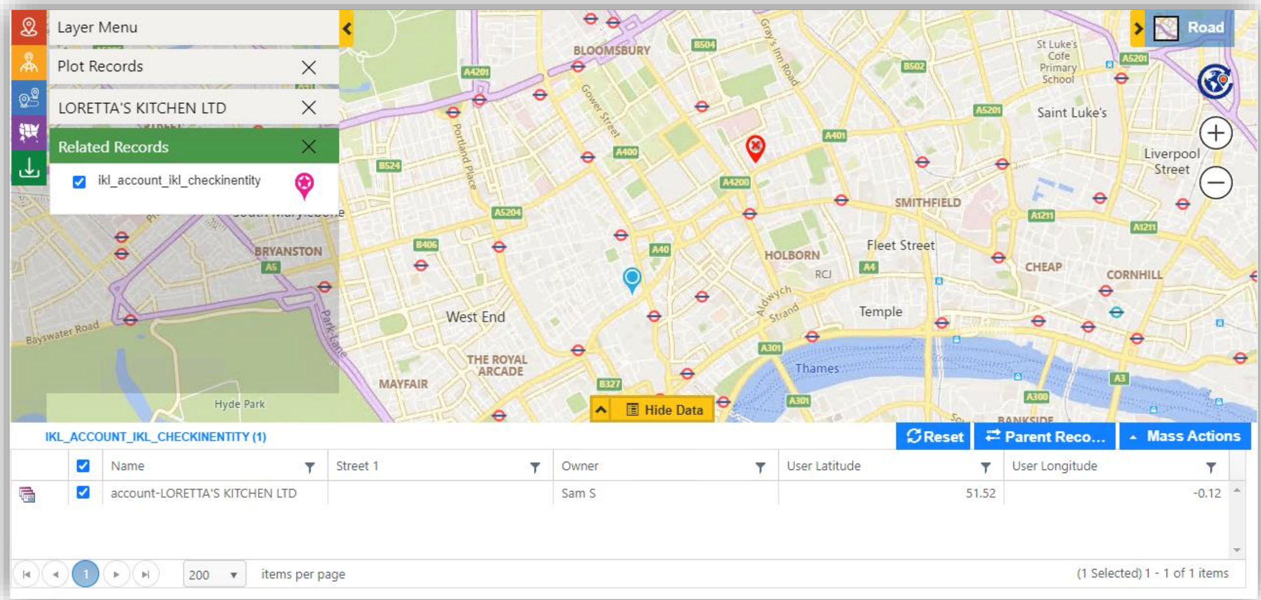


Visualizing related Check-in/Check-Out records for plotted records (Appointments, Accounts, etc.)

After selecting the relationship for the required entity within the entity map as suggested above, user can click on any plotted record to open the Tooltip card and click on 'Plot related record' to plot the related Check-In/Check-Out records.

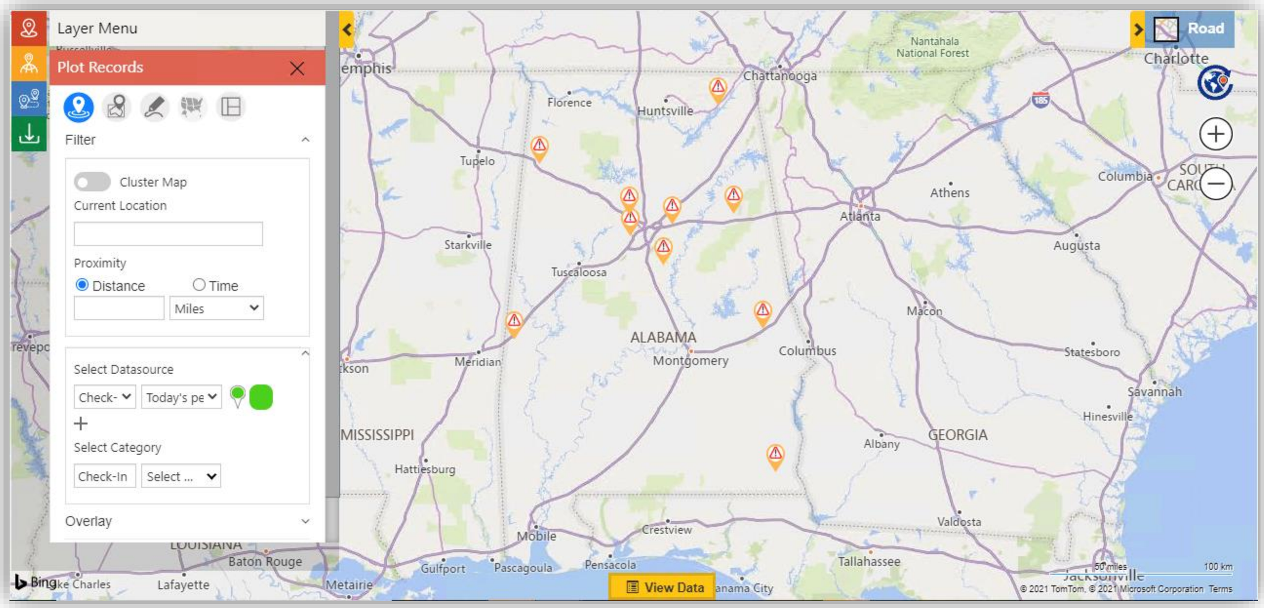






Visualize Pending Check-in/out requests

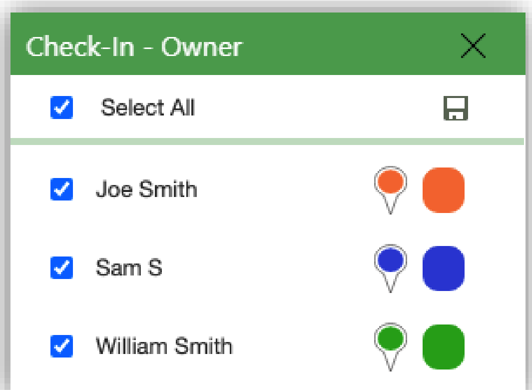
Managers can select the required view for the Check-in/out requests and plot the same on the map in order to visualize the pushpins.

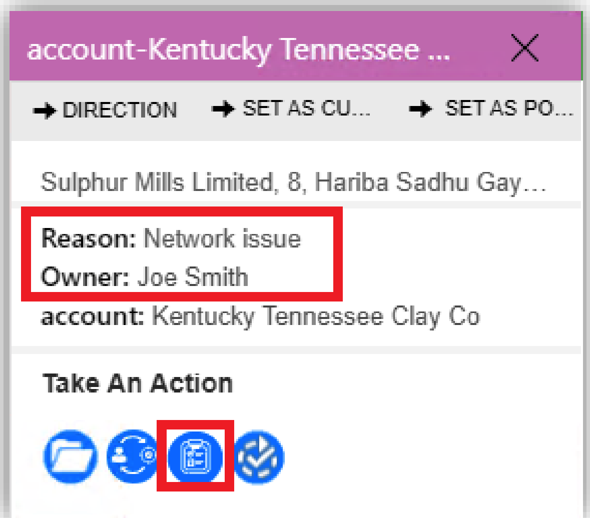


Approve/Reject pending Check-In/Check-Out records

Once the manager has plotted the pending check-in/out request records on the map as shown above, they can check the request records created by field team and approve or reject the records in order to accept it as an active check-in/out record or reject it.

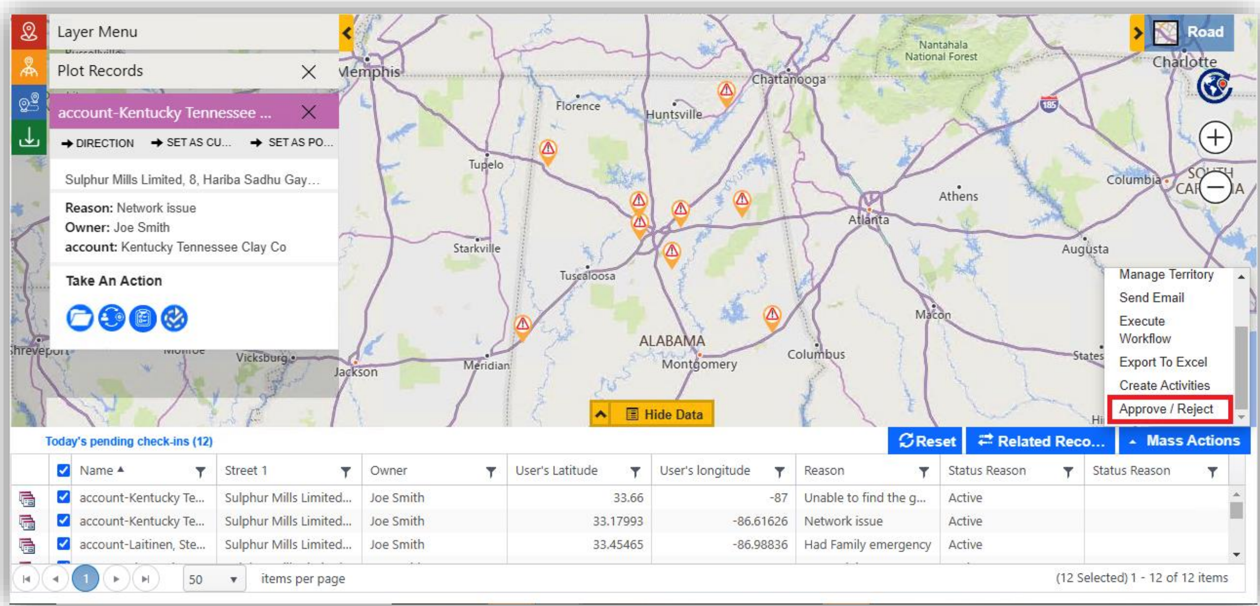
If manager needs to approve/reject the requests from a particular salesperson, they can also select 'Owner' within the 'Category' in the 'Plot Records' card to categorize the request records with Owners. Manager can further go to the category card to deselect the other owners so as to visualize only the records created by salesperson who reports to them.





Now, manager can click on a pushpin from the map and to the see the Approve/Reject button. Admins can also ***go to Maplytics App > Settings > Entity map > Check-in entity map > Tooltip Mappings > Add Request reason***. This will show the Reason for request on the tooltip card while a manager clicks on a pending check-in/out. After checking the reason, manager can decide and click on the button to open the window and select Approve or Reject and click on save.

Manager can also use the option of Approve/Reject from the Mass Actions to approve or reject all the pending check-in/out request records plotted on the map.

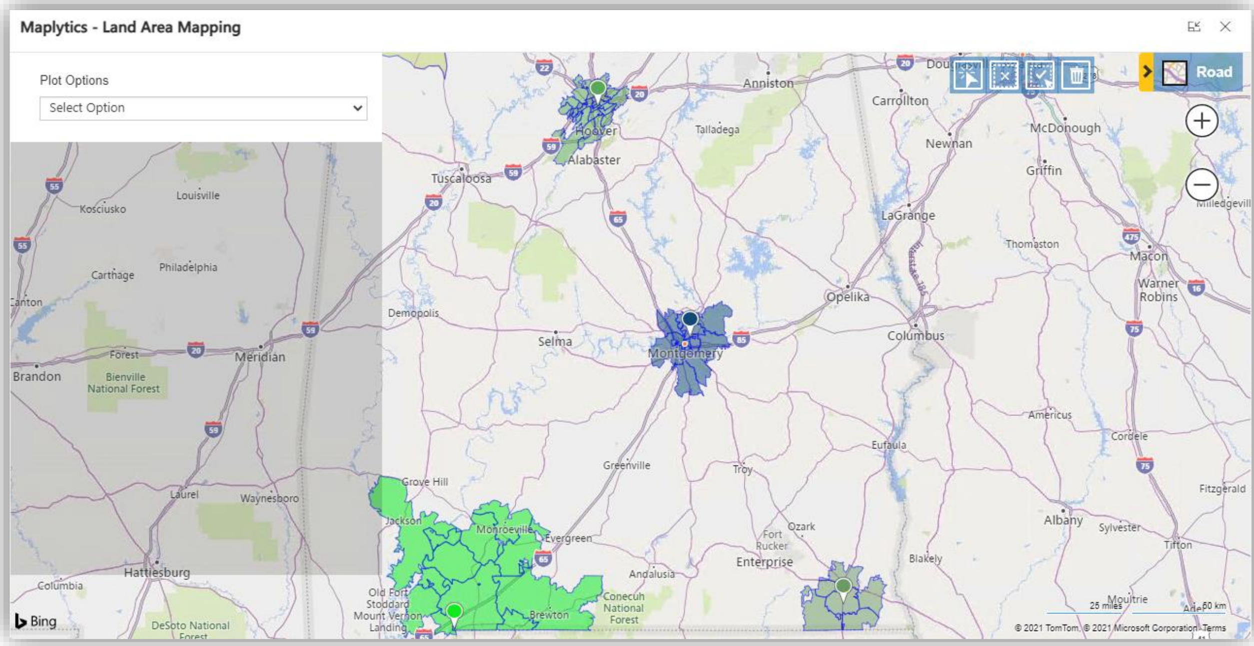


Note:

- ***Only the system Admin, Maplytics Admin, or the Manager of a user can approve or reject the respective pending check-in or check-out records.***
- ***Once the manger/admin approves/rejects a record, they cannot approve/reject the same record again.***

Land Area Mapping

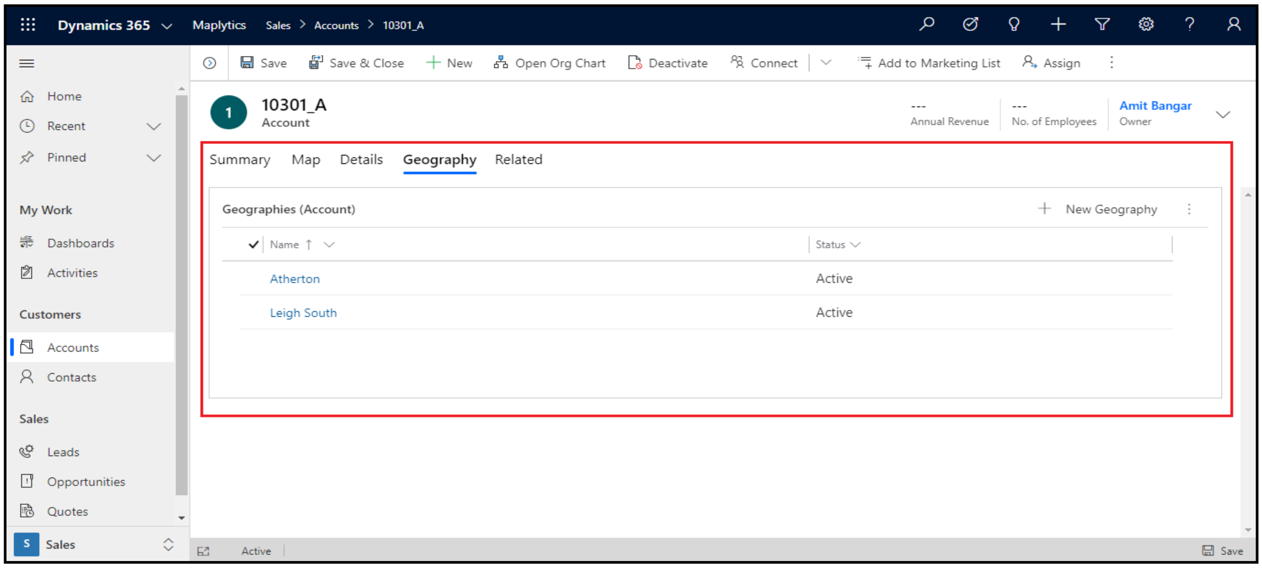
If users work with lands, real estates or farms etc. they can visualize their lands on map with this feature. Users will be able to assign land regions to the records and visualize them on the map to understand the coverage of area for each of the records using this feature.



Create and Assign land areas to entity records

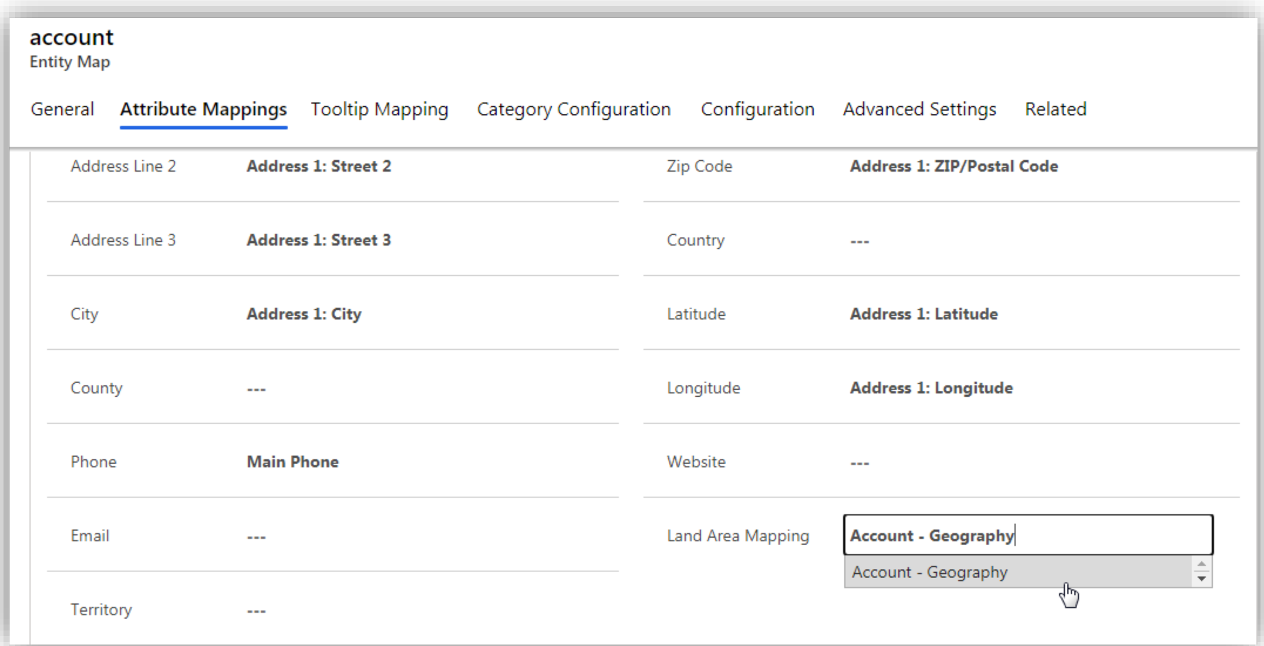
Create 1: N relationship with Geography entity

User first needs to assign the land regions (Geographies) to the records of the CRM entity for which the lands are to be visualized. For this, the user needs to create 1: N relationship between that entity and the Geography entity. For example, if the user wants to visualize the landscapes for Account records, so to create a 1: N relationship between the Accounts entity and the Geography entity. User can also add a grid on the Accounts form in order to see the list of landscapes that have been assigned to the record.



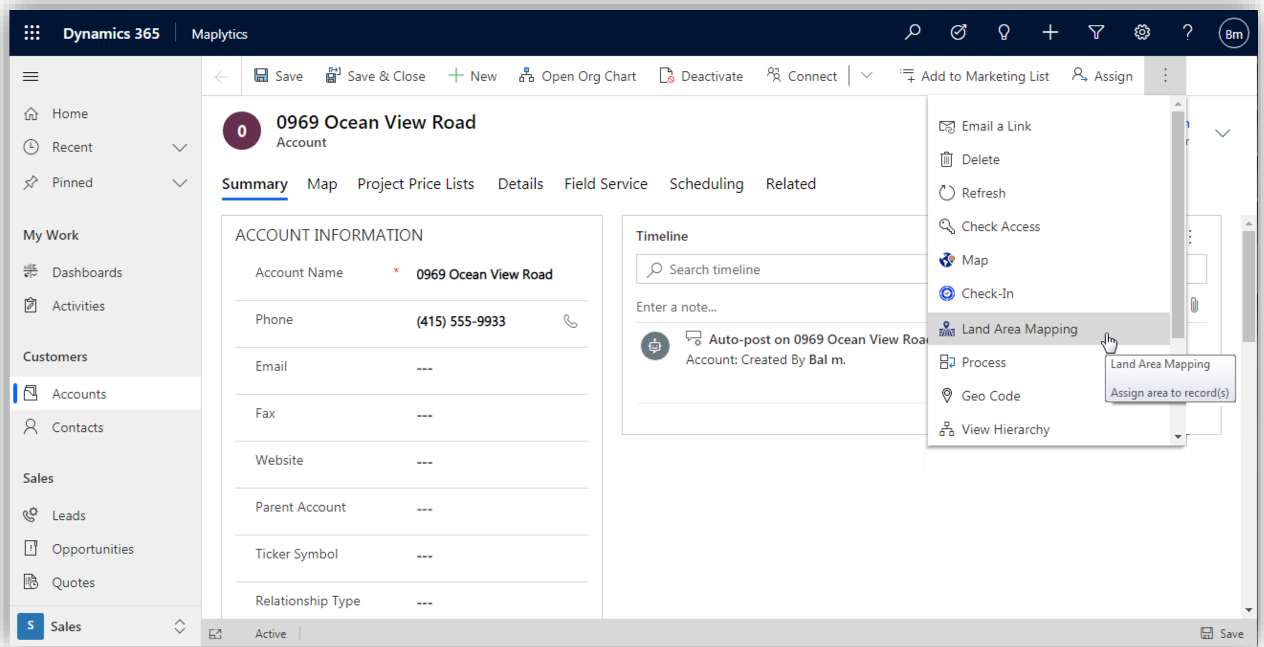
Attribute Mapping for Landscapes

Once the relationship is created, select the same in the respective Entity map. As per our example, the Maplytics admin or system admin needs to ***go to Maplytics App > Settings (Left bottom) > Entity Maps > Accounts Entity map > Attributes Mapping > Geography relationship > Select the 1: N relationship of Geography and Account.***

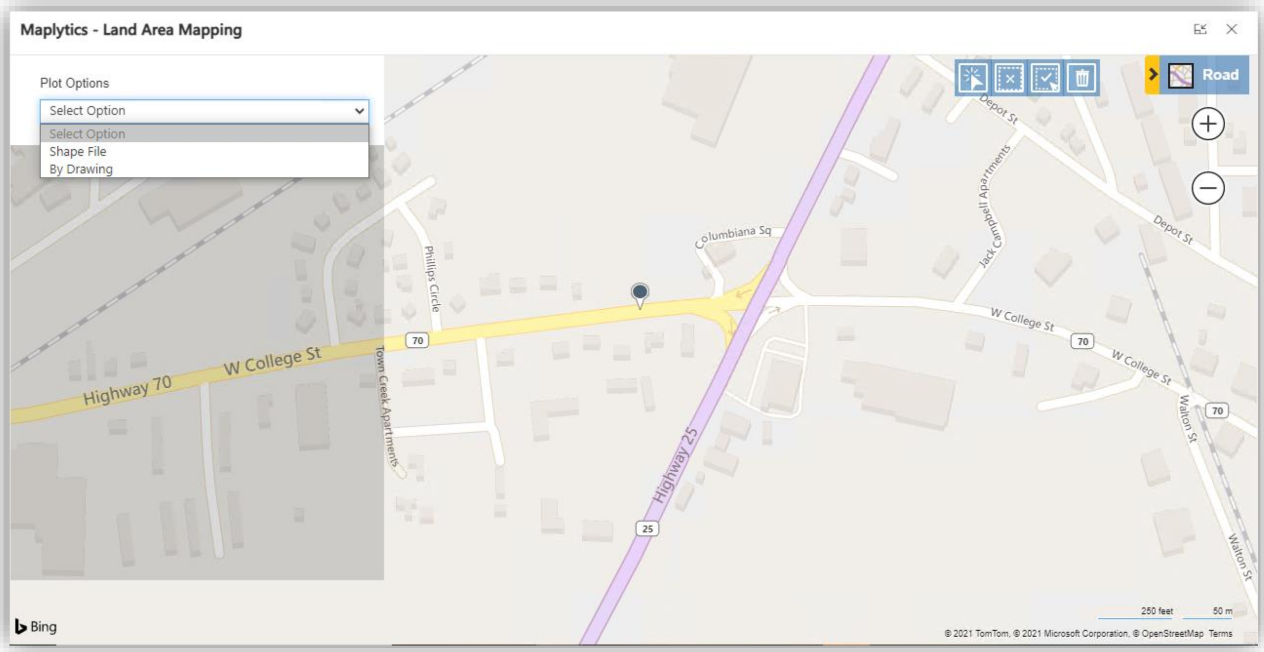


Assign lands to single record

In order to visualize the land of a record, user first needs to create the geography for the landscape and assign the geography to the respective record. To do this, ***open the required record and click on 'more commands' ⋮ to click on the button of 'Land Area Mapping'***.



After clicking on ***'Land Area Mapping'***, a new window will open as shown below where the user can upload Shape files or Excel files or draw shapes for the landscapes on the map.



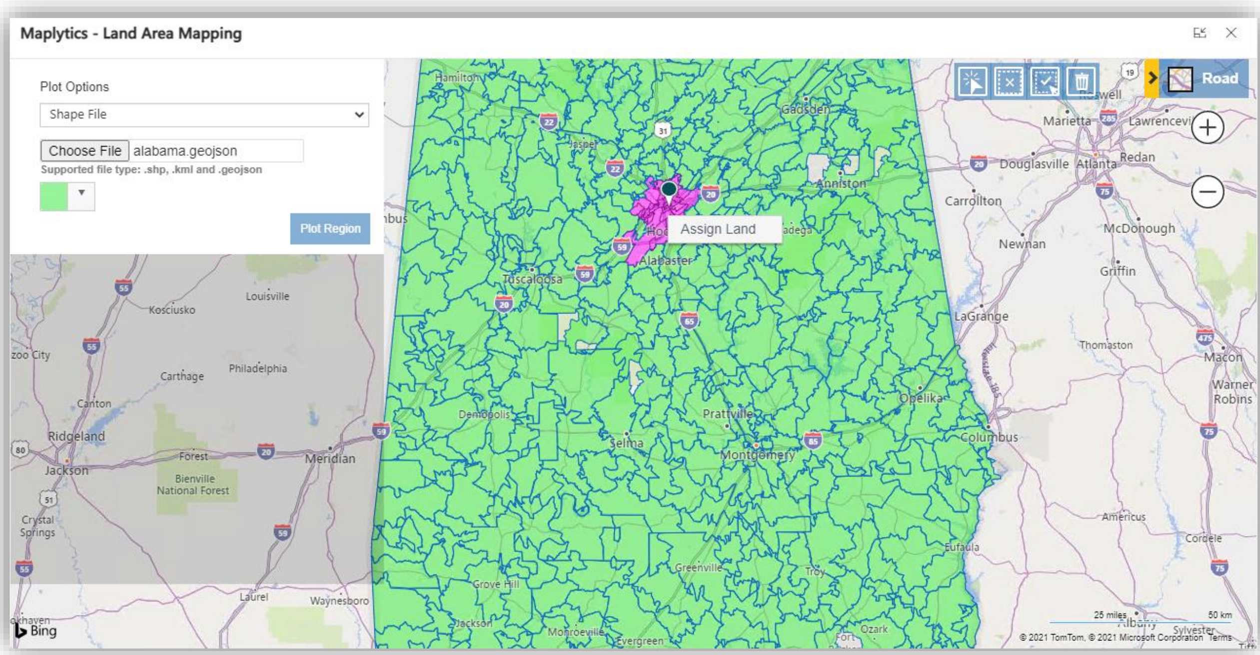
Plot Options

There will be two options that can be used to plot the landscapes on the map.

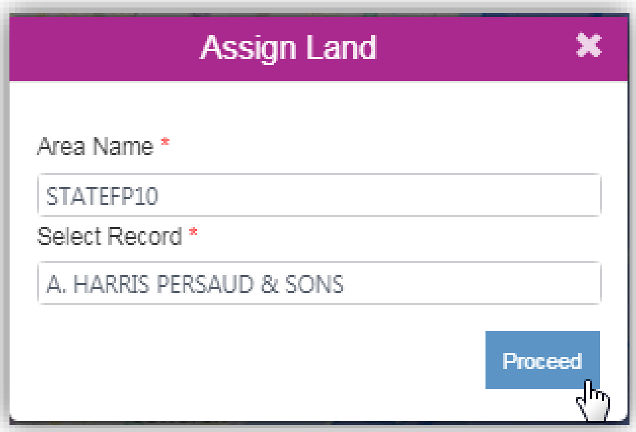
- Shape File
- By Drawing

Shape File

Users can select a shape file or an excel file to plot the respective lands on the map. The supported file formats are .shp, .kml, .geojson. Once the file is plotted on the map, user can use the selection tool at the right top corner to select, deselect, multi-select or delete the regions plotted on the map. Now user can select the required regions and right click to Assign Area.

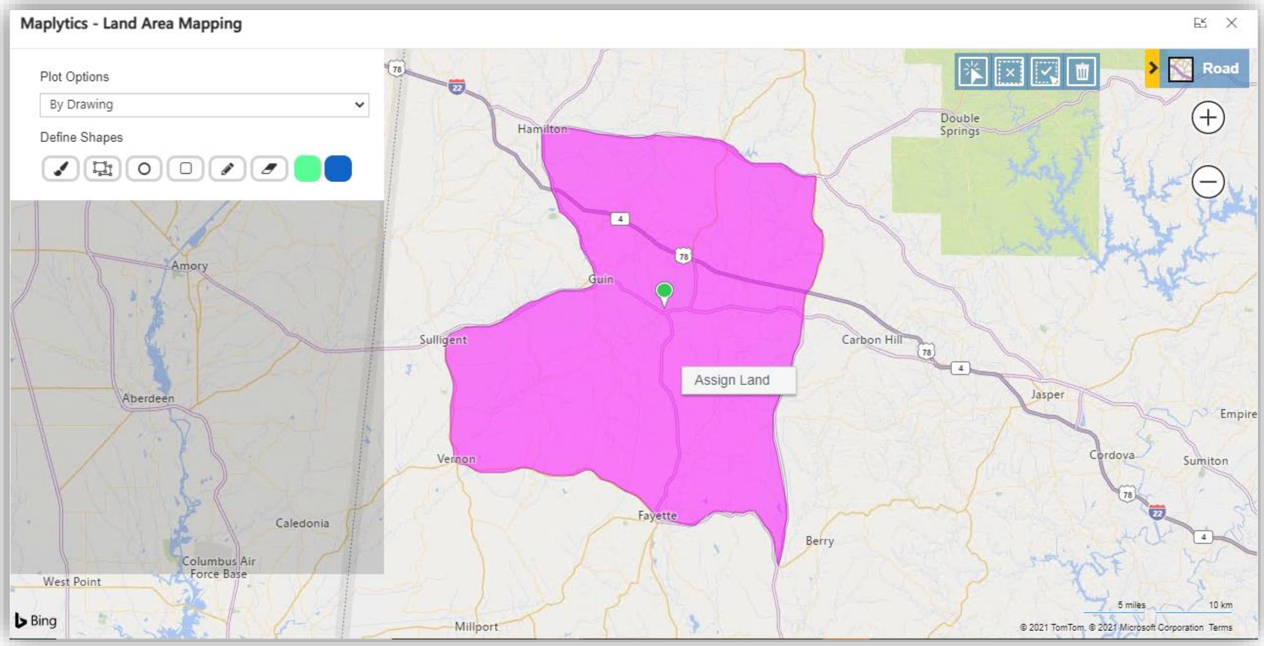


User can here select the name for the selected region and click on 'Proceed' to save it.

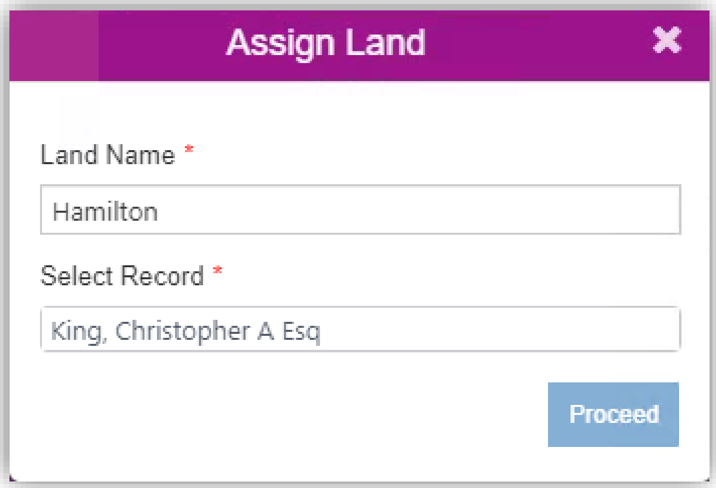


By Drawing

Users can also create geographies for the landscaping using the option of 'By Drawing'. They can use the drawing tool to draw the shapes for the required landscape on the map. Further, use the selection tool to select drawn shape(s) and right click to assign area.

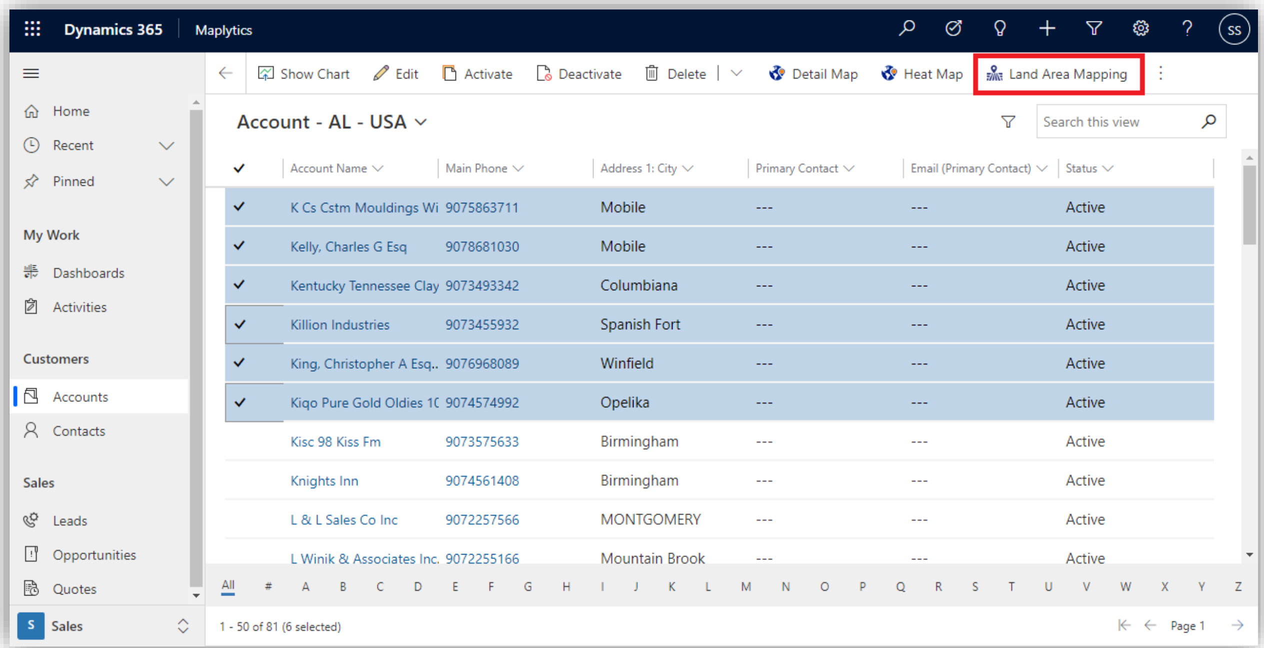


Enter the name of the geography and click on 'Proceed'. The color of the drawn shape changes after getting assigned to the record.



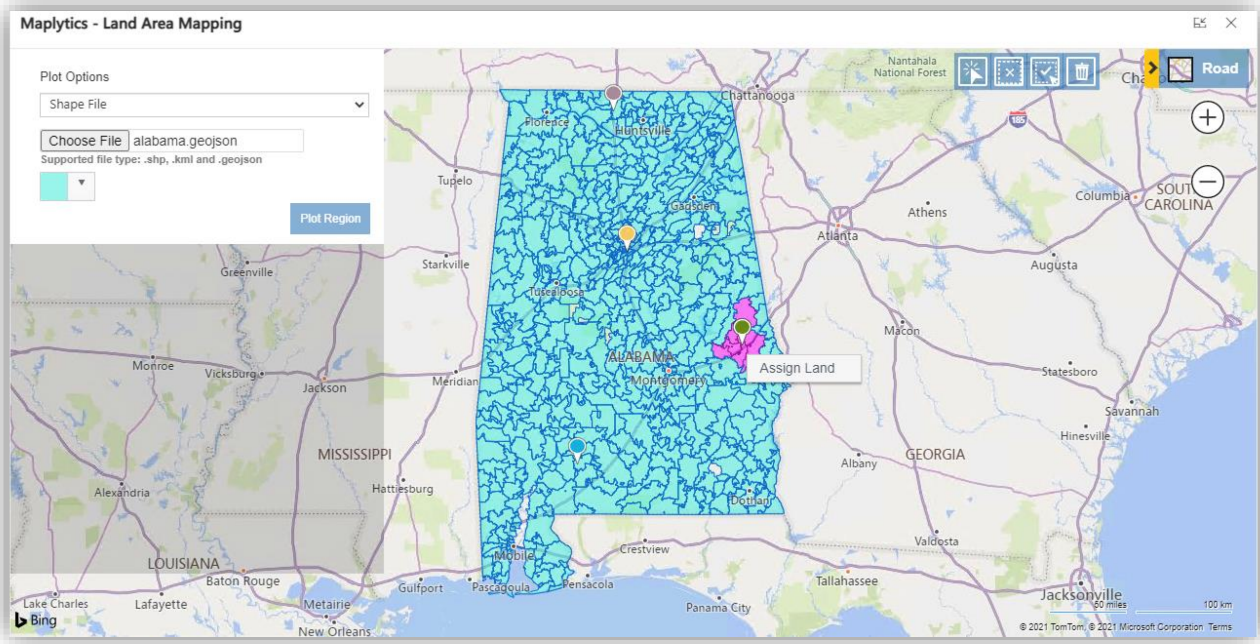
Assign lands to multiple records

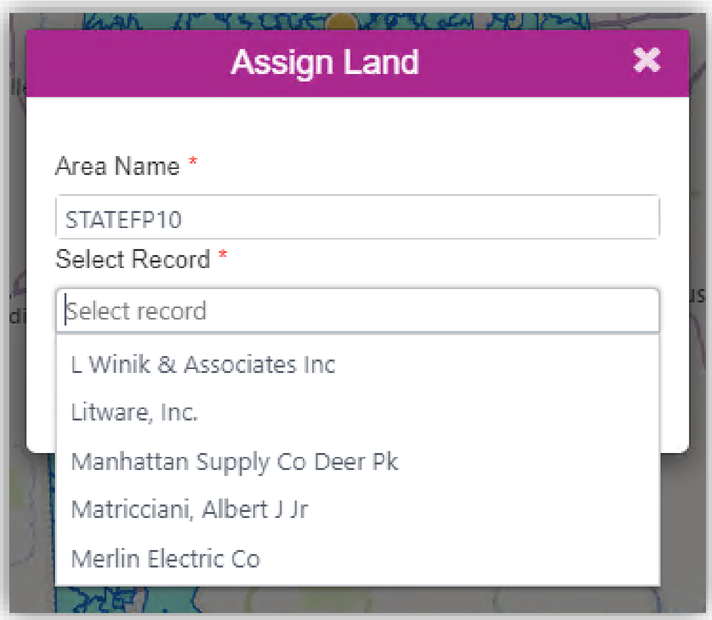
User can select multiple records from the home grid and assign lands to the selected records from the same map. After selecting required records, user can click on the 'Land Area Mapping' button.



After clicking on 'Land Area Mapping', a new window will open as shown below where the user can upload Shape files or Excel files or draw shapes for the landscapes on the map as mentioned in the section of 'Plot Options' above. Now just like mentioned in the sections, use the selection tool to select the required land on the map and right click to 'Assign Geographies'.

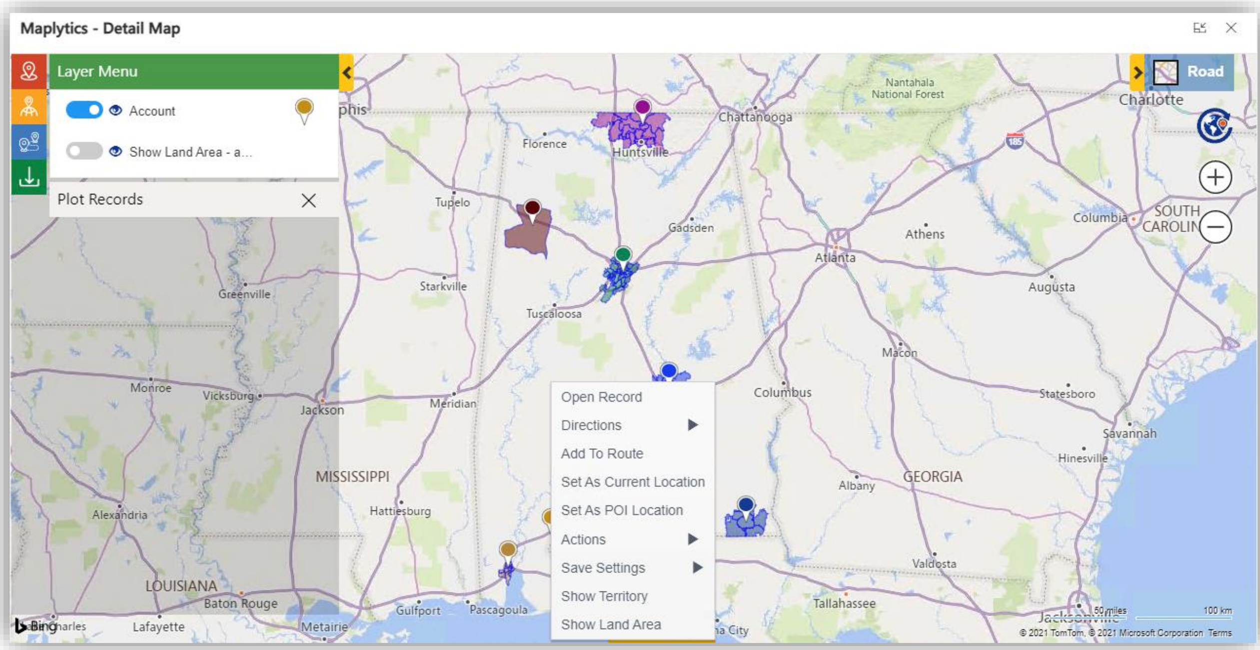
User can now select the area name if used a shape file or enter the area name if used the drawing tool and further select the record to which the respective land has to be assigned. This is how user can select the required region and assign it to all the records.


Maplytics - Land Area Mapping
Plot Options
Shape File
Choose File
alabama.geojson
Supported file type: .shp, .kml and .geojson
Plot Region
Road
Assign Land

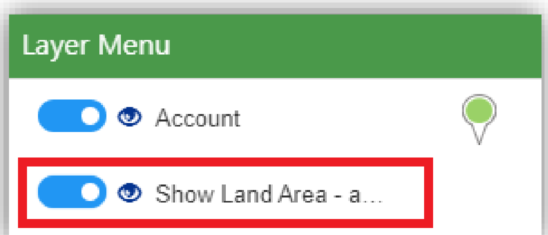

Assign Land
Area Name *
STATEFP10
Select Record *
Select record
L Winik & Associates Inc
Litware, Inc.
Manhattan Supply Co Deer Pk
Matricciani, Albert J Jr
Merlin Electric Co

Visualizing Assigned lands to the record

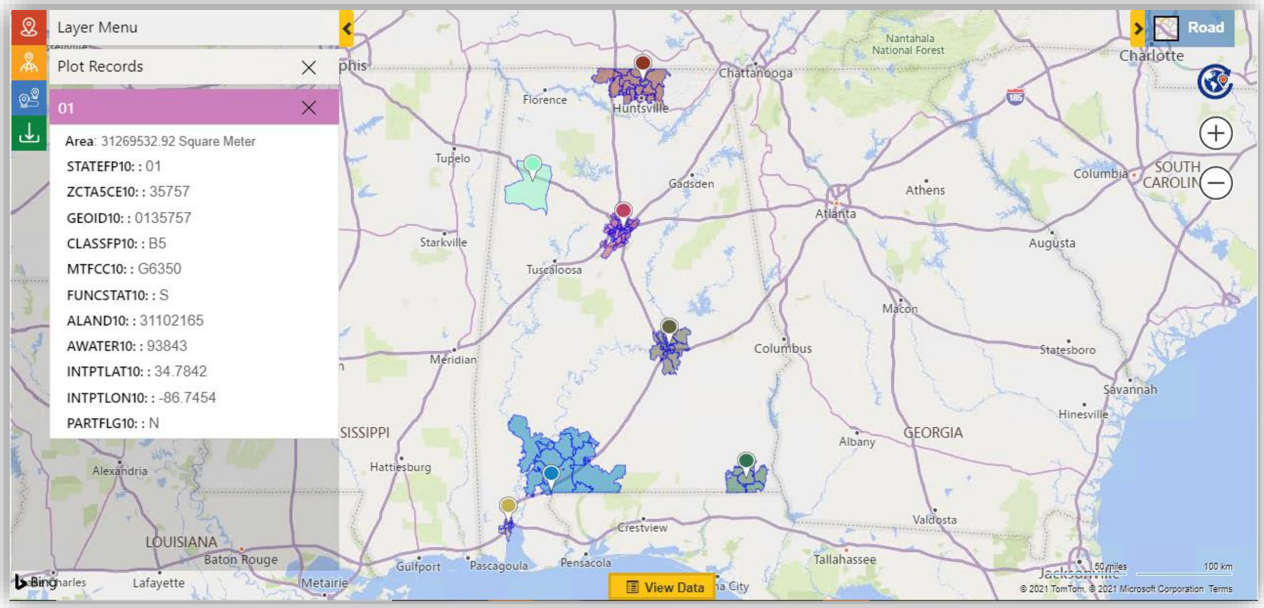
Users can select the entity in Datasource and the respective view in the 'Plot Records' card in Detail map to plot the record on the map as pushpins. While visualizing records on the Detail map, users can right click on any pushpin to open the Contextual menu and use the 'Show Land Area' button to plot the land that is assigned to the respective record.



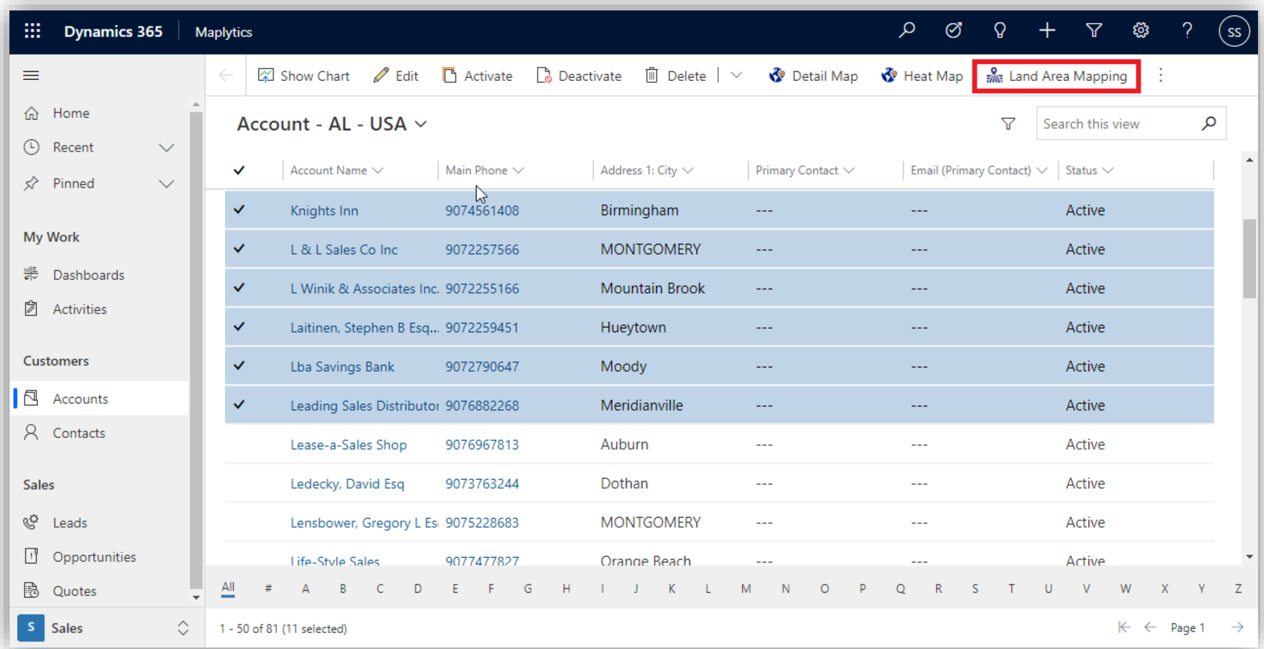
If the user wants to see all the lands that have been assigned to all the records that are plotted on the map, they can use the 'Show Land Area' toggle button on the Layer Menu to show/hide the same.



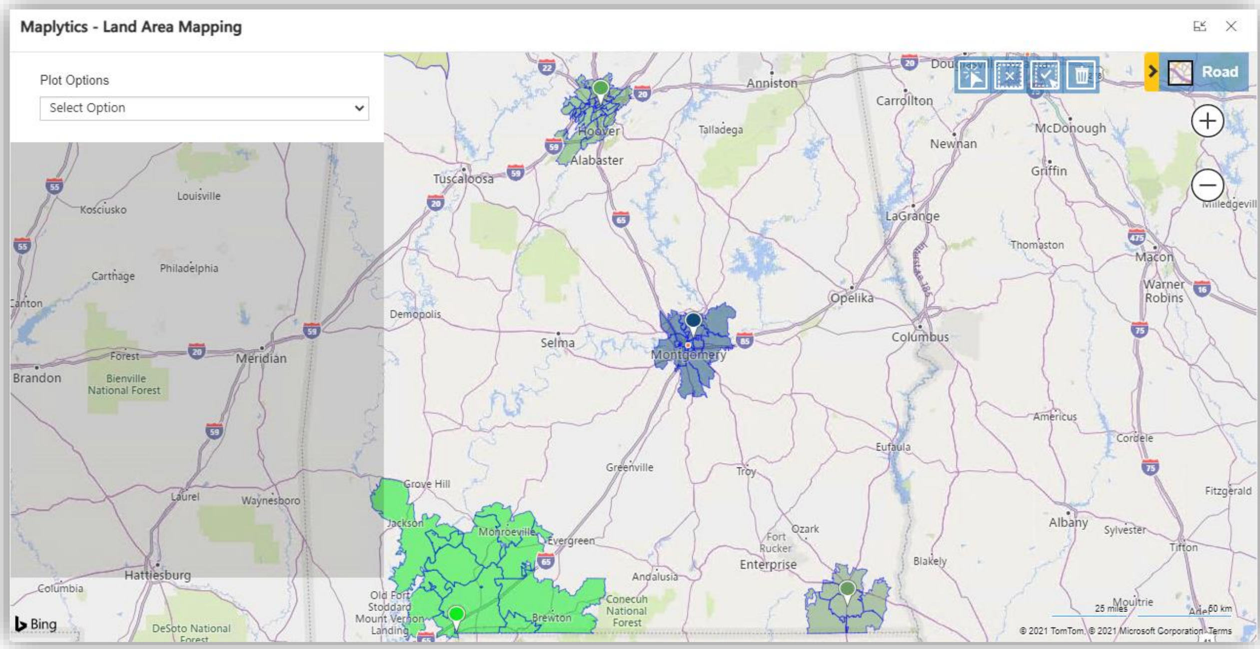
User can also click on any area plotted on the map to open the Summary card to view the metadata (information from the shape file) of the region.



User can also select records from the home grid and click on 'Land Area Mapping' button from the ribbon to view all the lands assigned to the records. They can further assign more lands to the required records as mentioned in the section of 'Assign lands to multiple record' above.

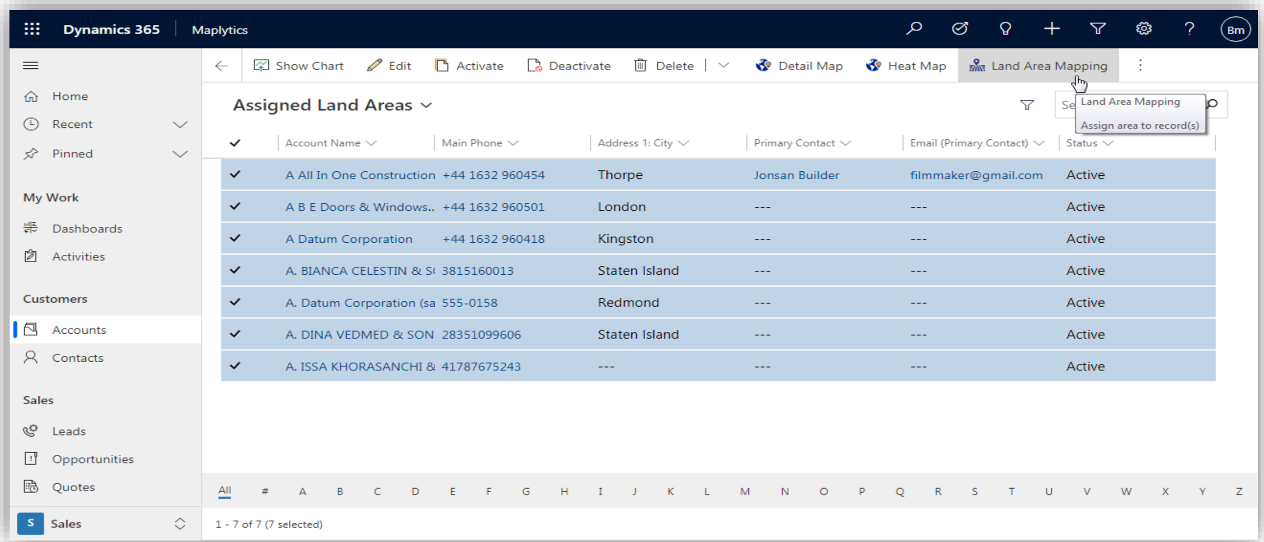


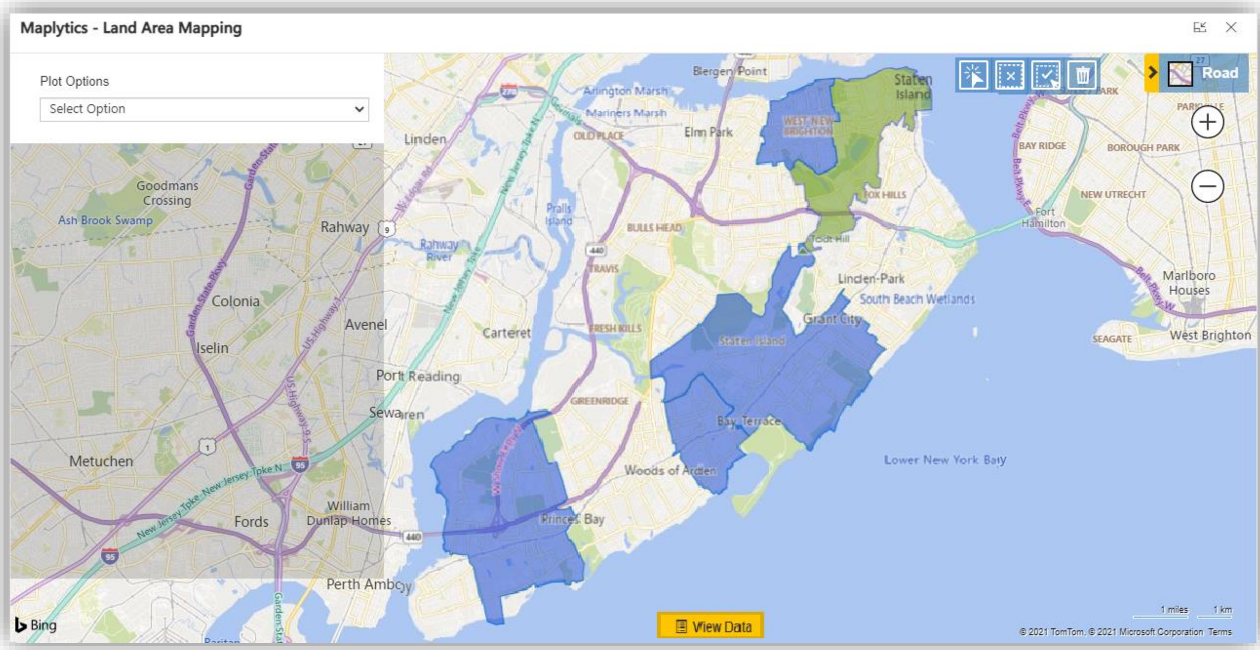
The below screenshot shows the lands assigned to the records selected from the Entity home grid.



Visualizing Assigned lands to the records having no geocoordinates

If the users are using an entity for landscapes which doesn't have its own address or are not geocoded, but have assigned lands to the records, they can still plot the lands assigned to the entity records. To do this select required record(s) from the entity dataset and click on 'Land Area Mapping' button from the Ribbon. This will open a window plotting all the lands that have been assigned to the records. User can further use the 'Plot Options' to plot lands on the map and assign them to the required records as mentioned in the section of the 'Plot Options' above.



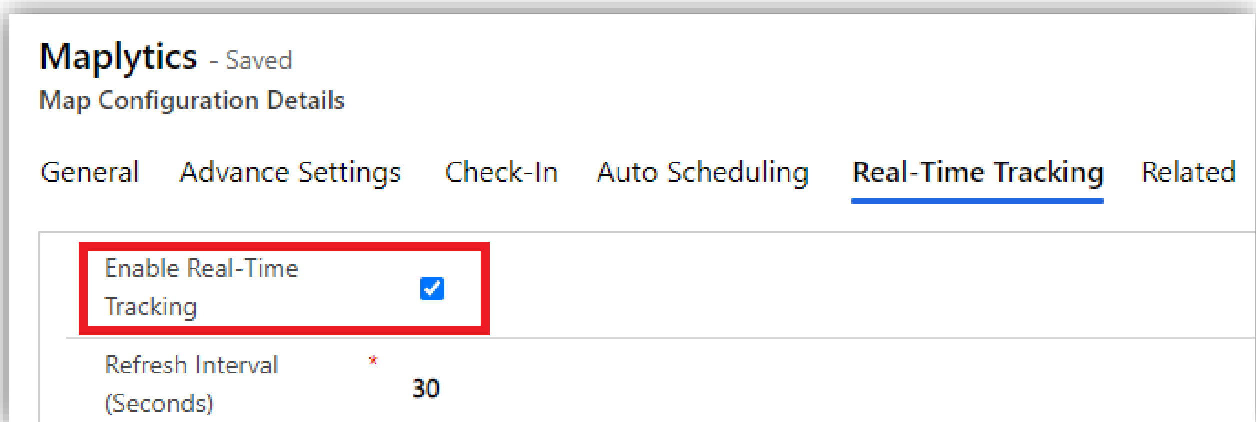


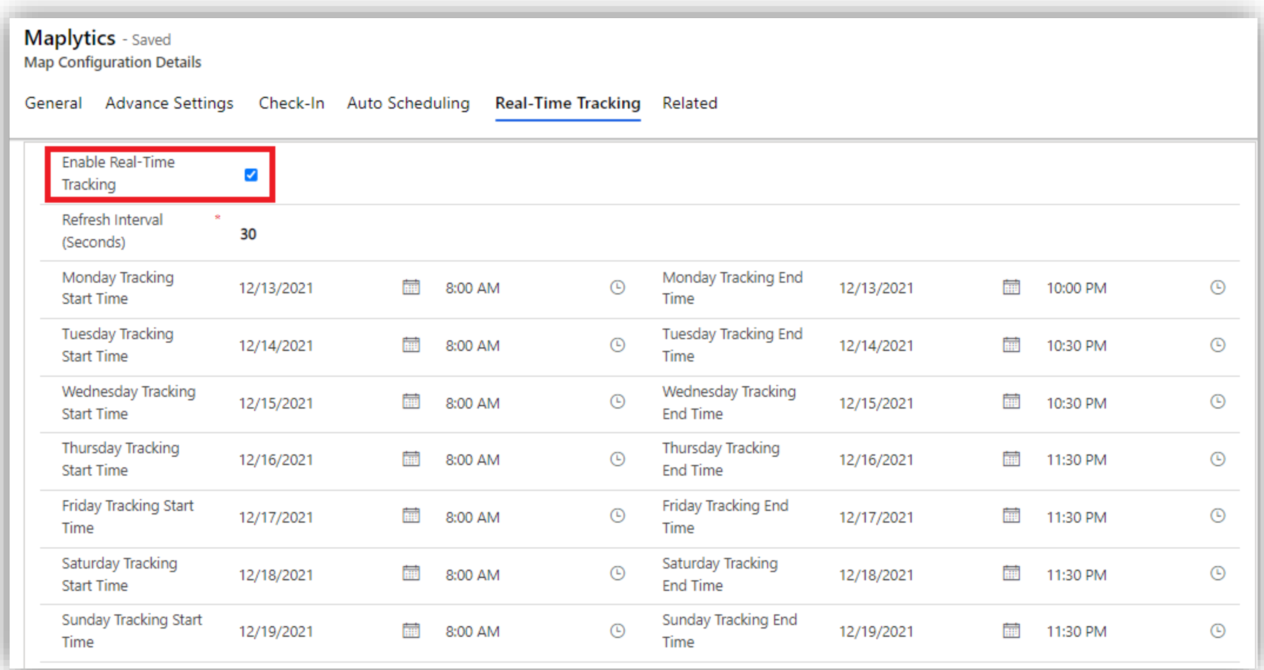
Real-Time Tracking

With Real-Time Tracking, sales reps, service reps and resources can be tracked within all modules of CRM in real time. This will help to view the routes that are being followed by reps/resources as well as the routes that had been followed by them in the past. The appointments/bookable resource bookings that have been assigned to the resources can also be seen with the help of this feature. This feature also works in the Dynamics CRM app, Dynamics CRM sales app and Field Service app.

Configuration

To enable this feature, go to Maplytics App > Settings > Map Configuration Details > Default Configuration details record (the one with no user) > Real-Time Tracking > Enable Real-Time Tracking > select the checkbox.



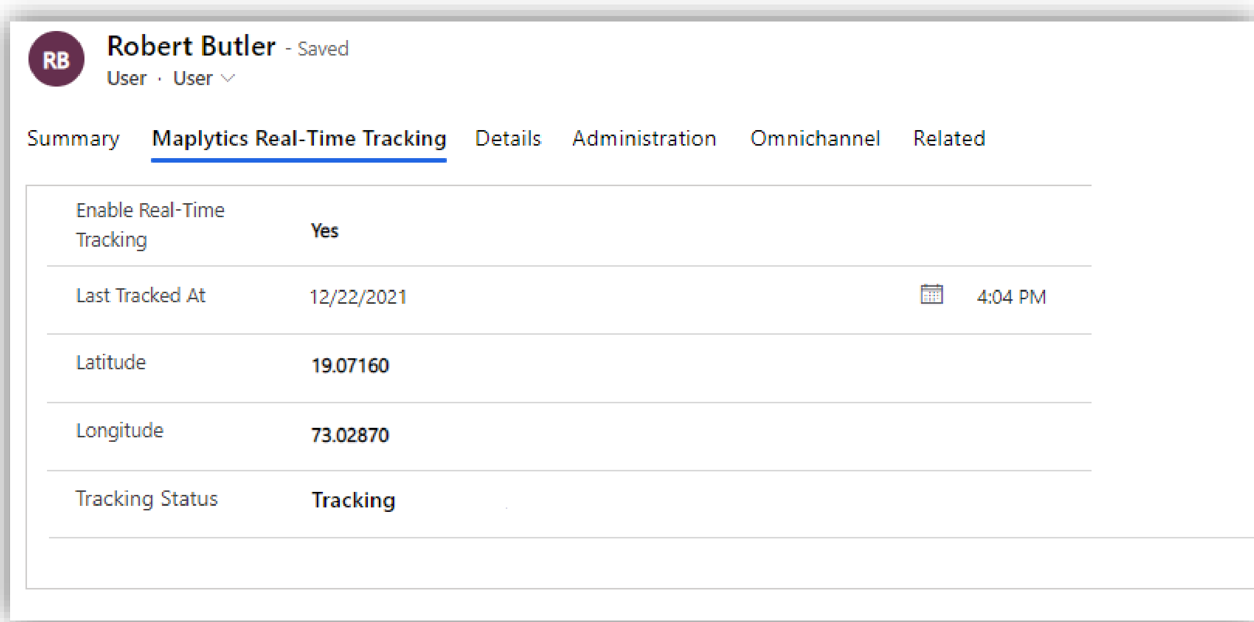


Refresh Interval: Admins can select the 'Refresh Interval' to decide the interval (in seconds) at which the location of the Resources/Sales reps will be tracked. For example, every 30 seconds.

Day and Time: Working days and the start & end timings can be selected from the list. Based on this selection the reps/resources will be tracked. If admins do not want the reps/resources to be tracked on any particular day, they can leave the timings blank to avoid tracking on those days. Admins can also go to the Maplytics Configuration Detail record of individual reps to set different required timings for tracking.

User Settings for CRM Modules other than Field service

Real-time tracking can be used to track the reps/resources that have been added to the Maplytics team as users. The admin needs to **go to the user's record > Maplytics Location Tracking > Enable the tracking** for the individual users and can view the other details.



Enable Location Tracking: Select "**Yes**" to track the respective user.

Last Tracked At: This will show the date and time when the respective user was last tracked at.

Latitude & Longitude: These will be the coordinates at which the user was last tracked.

Tracking Status: This will show the current status of tracking for the user. Based on three situations the status will be as follows:

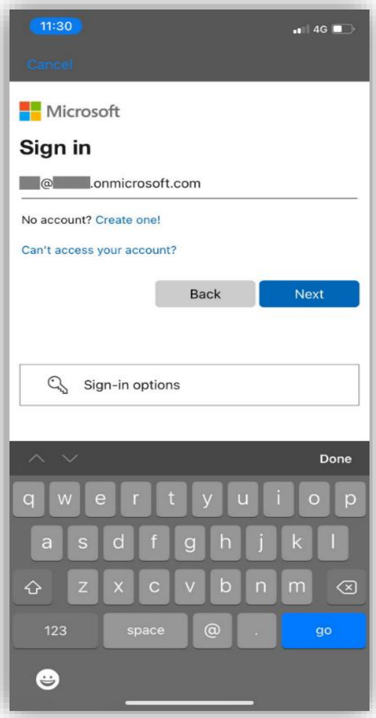
- Tracking - The user has enabled tracking in the Maplytics app and the tracking is on
- Tracking Stopped - Outside business hours – Tracking has stopped as current time is outside business hours.

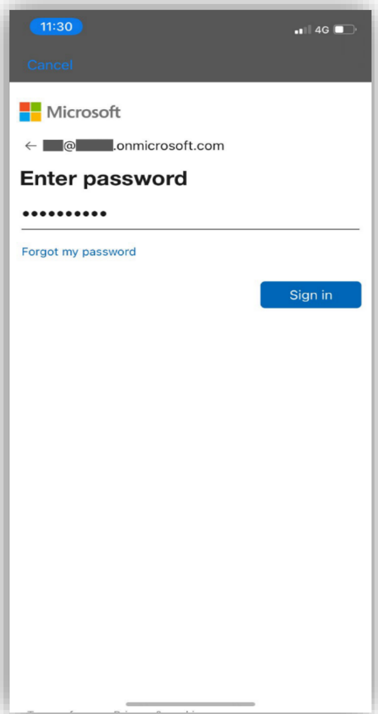
- Tracking Stopped - Tracking Disabled/ GPS Issue/ Location Service Issue – Tracking has stopped due to one of the three reasons:
    - The user has disabled tracking in the Maplytics app
    - GPS information is not available
    - There is issue with the location service.

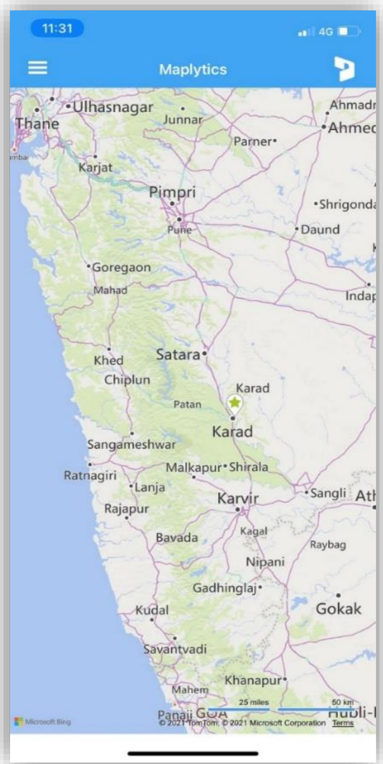
Maplytics Real-Time Tracking App for Sales and Other Modules

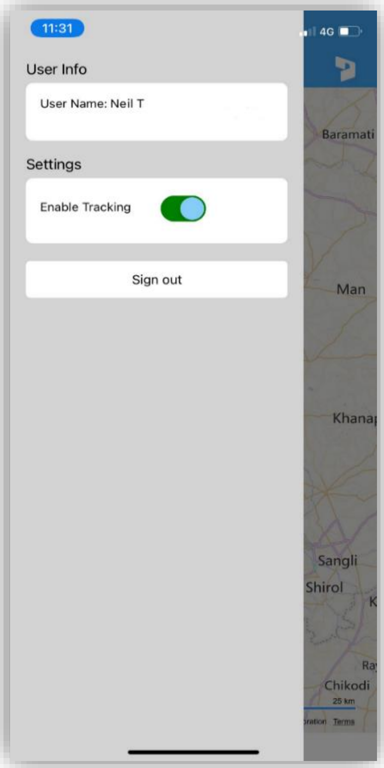
The Reps can download & install the Maplytics App and log in to their CRM credentials. The app is available on Playstore and Appstore for Android or iOS devices.

When the reps log in to the Maplytics App they can view their current location on map in the form of a pushpin. The pushpin will move on the map whenever the rep makes any movement. The rep can select the toggle button to start the tracking. Once they have finished their work they can use the toggle button to stop the tracking and log out from the app.


11:30
4G
Cancel
Microsoft
Sign in
[redacted]@[redacted].onmicrosoft.com
No account? Create one!
Can't access your account?
Back
Next
Sign-in options
Done
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
space
@
.
go


11:30
4G
Cancel
Microsoft
[redacted]@[redacted].onmicrosoft.com
Enter password
••••••••••
Forgot my password
Sign in


11:31
4G
Maplytics
Ulhasnagar
Thane
Junnar
Ahmed
Parner
Karjat
Pimpri
Shrigonda
Pune
Daund
Goregaon
Mahad
Indap
Khed
Satara
Chiplun
Karad
Patan
Karad
Sangameshwar
Ratnagiri
Malkapur
Shirala
Lanja
Karvir
Sangli
Rajapur
Kagal
Bavada
Raybag
Nipani
Gadhinglaj
Kudal
Gokak
Savantvadi
Khanapur
Mahem
Panaji
GOA

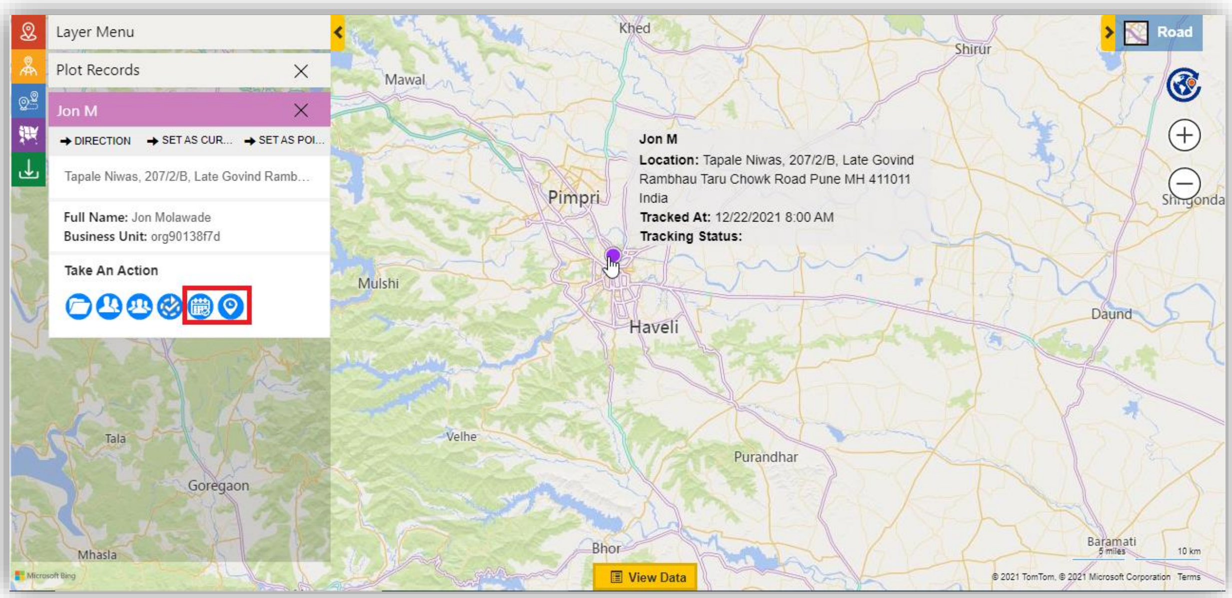

11:31
4G
User Info
User Name: Neil T
Settings
Enable Tracking
Sign out
Baramati
Man
Khana
Sangli
Shirol
Chikodi

Note:

- ***Users should be added to the Maplytics team in order to be tracked.***
- ***For field service, admin also need to enable 'Location tracking' within the Geolocation Settings of Dynamics 365 field service and select the timings, for example, every 1 minute to track the location of the Resources at every specified interval.***
- ***The users should be logged in to the Field Service app for tracking in Field Service CRM.***
- ***The users should be logged in to Maplytics app and the tracking option should be enabled for tracking in CRM with other Modules like Sales, Customer Service etc.***

Once the Real-Time Tracking has been enabled, users can ***go to the Detail map > Select Data source > select the Resource/User as the entity and the required view > click on Search***. Once the users/resources are plotted as pushpins on map, the resource location that is being tracked at every interval will be updated on the map. Users can click on the pushpins of the users/resources to open the tooltip card for that user/resource. Users can view the tracking information for only those Resources/Users that have been added to the Maplytics team and have Location tracking enabled in the User Settings. Users can click on the Users/Resources to view the tooltip card to find the two buttons for Real-time tracking, i.e., 'Today's plan' and 'Location History'.

Note: To view the Users as an entity in the option for 'Select Datasource', an entity map for the entity 'Users' should be created.

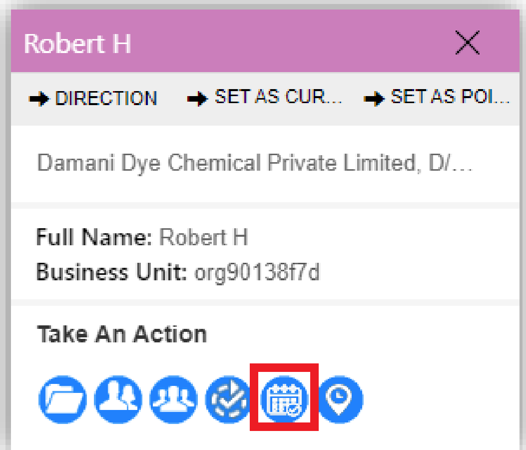


Today's Plan

'Today's Plan' button will allow the managers to view route assigned to the respective rep/resource to be followed today as well as the route that is being traveled by the respective rep/resource in real-time, and the appointments assigned to them for today. The route assigned to the rep/resource will be shown in **sky blue** color and the route that is being traveled by the rep/resource in real-time will be shown in **navy blue** color. As the rep/resource moves on the field, the pushpin for the rep/resource can also be seen as moving on the map.

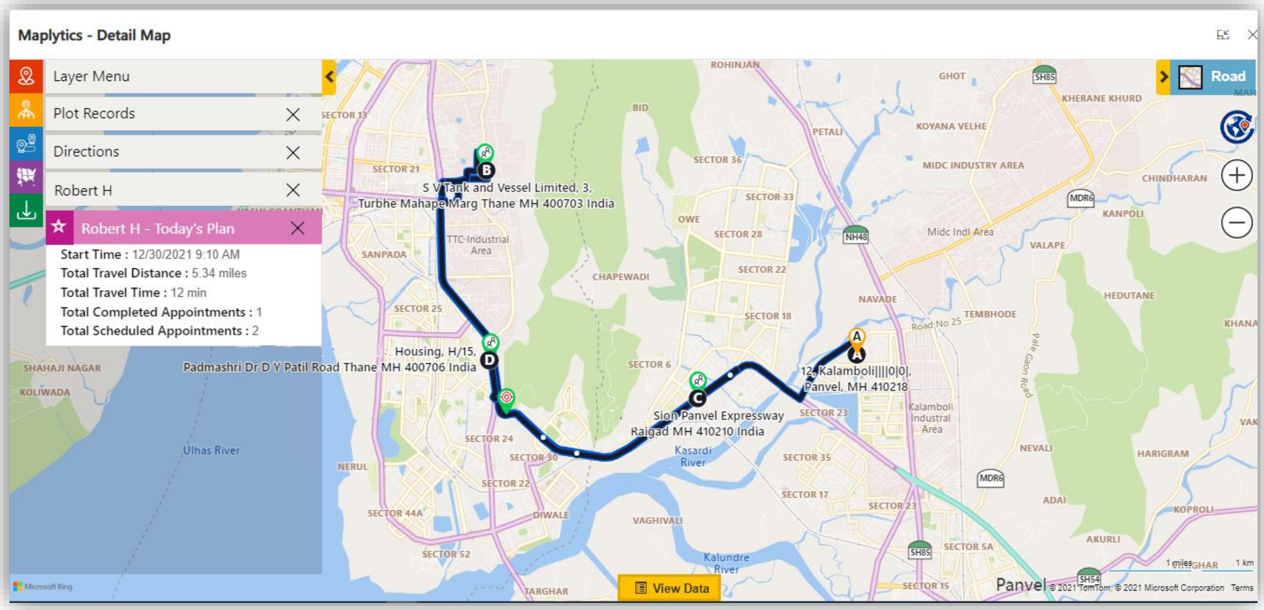
Sales and Other Modules

Clicking on the User's pushpin, its tooltip card opens up. User can also hover on the plotted user's pushpin to see further information about the rep. The below screenshot shows the information about the rep in the tooltip card for the rep 'Robert H'. Here user can click on the 'Today's plan' button to track Robert for today.

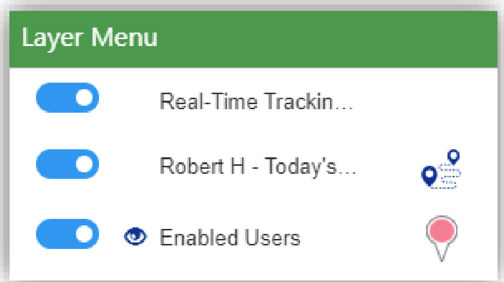


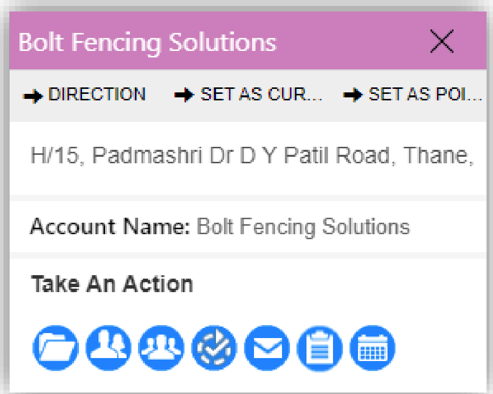
Users can view the following information of Appointment Timestamps on the Summary card opened up for the respective rep. They can also hover on the resource pushpin to see these details.

- Start Time
- End Time
- Total Travel Distance
- Total Travel time
- Total Appointments
- Total Completed Appointments
- Total Canceled Appointments
- Total InProgress Appointments
- Total Scheduled Appointments



User can go to the Layer Menu and use the toggle button to show/hide the route being tracked in the real-time and the route that was assigned to the resource.

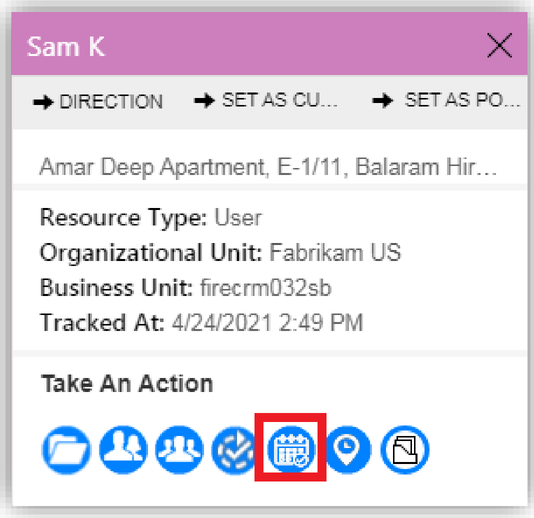




User can also click on the pushpins of the waypoints on the map to view the details of the respective Account/Contact.

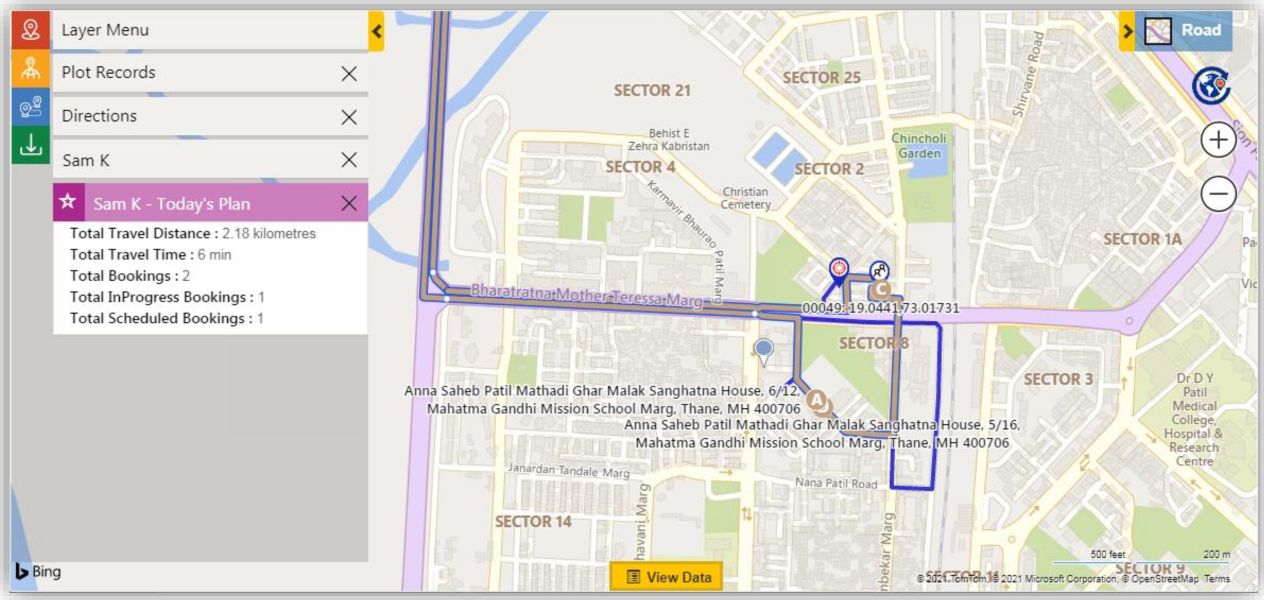
Field Service

Clicking on the Resource's pushpin, the tooltip card opens up. The below screenshot shows the Tooltip card of the Resource Sam K.

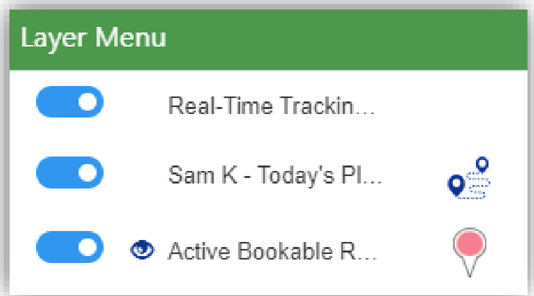


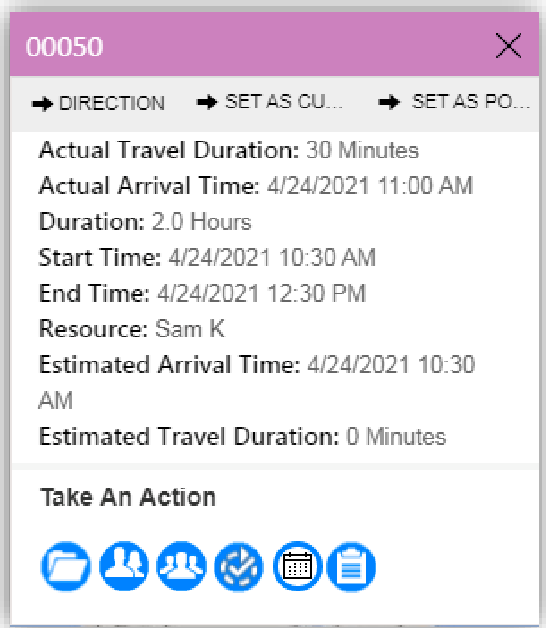
Users can view the following information of Booking Timestamps on the Summary card opened up for the respective resource. They can also hover on the resource pushpin to see these details.

- Total Travel Distance
- Total Travel time
- Total Bookings
- Total Completed Bookings
- Total Canceled Bookings
- Total InProgress Bookings
- Total Scheduled Bookings
- End Time
- Start Time



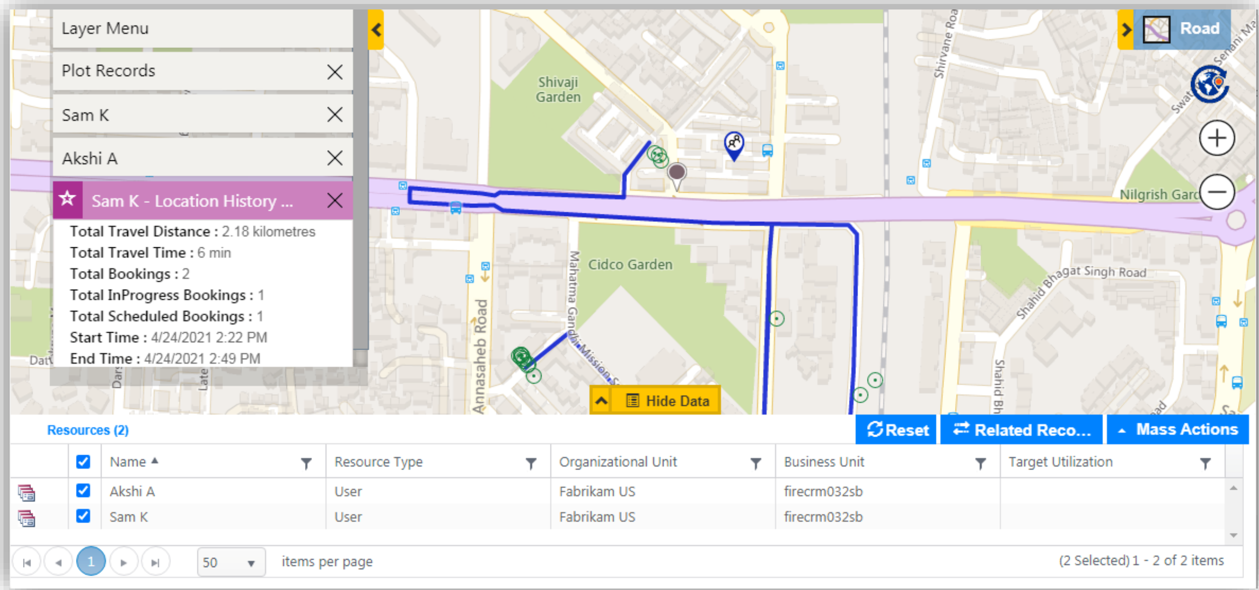
User can go to the Layer Menu and use the toggle button to show/hide the route being tracked in the real-time and the route that was assigned to the resource.





User can also click on the pushpins of the Bookable resource bookings plotted on the map to see information about that booking.

User can also click on 'View Data' button to view the details of the resources.

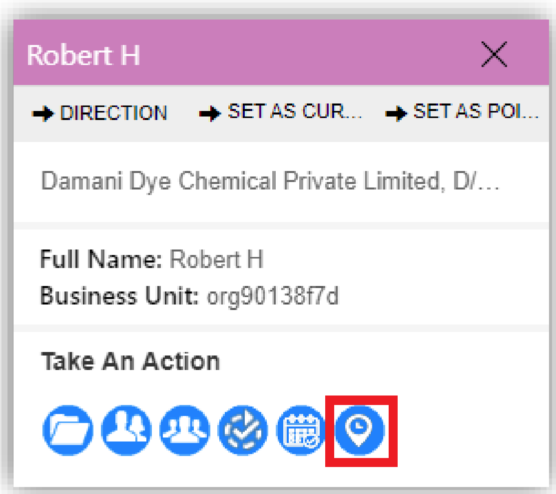


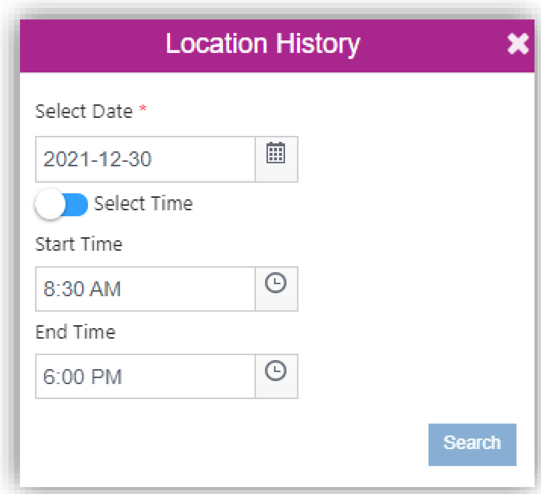
Location History

'Location History' button will allow the managers to view the routes that have been travelled by the reps/resources in the past. To do this, they can click on the 'Location History' button on the tooltip card, select the required date and click on search. Users can also select the time if they want to view the history between a specific duration on the selected date.

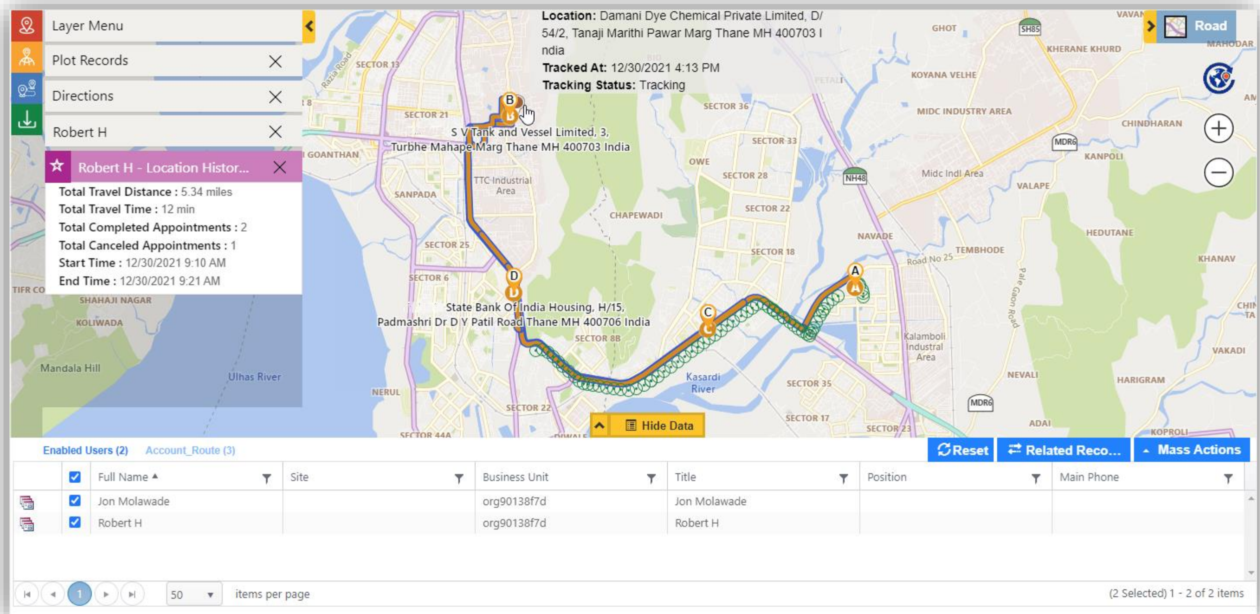
Sales and Other Modules

Clicking on the rep's pushpin opens up the tooltip card. The below screenshot shows the tooltip card for the Sales rep Robert H. Users can click on the highlighted button of Location History and select the date & time required and click on Search.

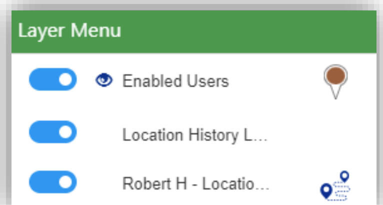


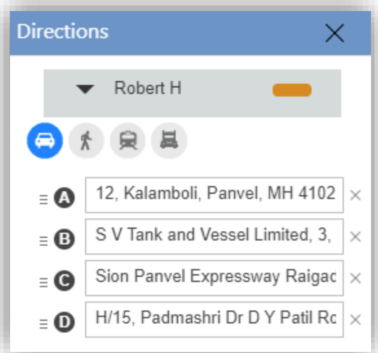


This will show the route assigned to the respective rep to follow on the selected date as well as the route that was actually travelled by the respective rep. Here we can see that Robert H is travelling the exact route that was assigned to him. Users can view the information of Appointment Timestamps on the Summary card opened up for the respective rep. They can also hover on the rep pushpin to see the details. User can also click on 'View Data' button to view the details of the reps.



User can go to the Layer Menu and use the toggle button to show/hide the route being tracked for the selected date and the route that was assigned to the rep.

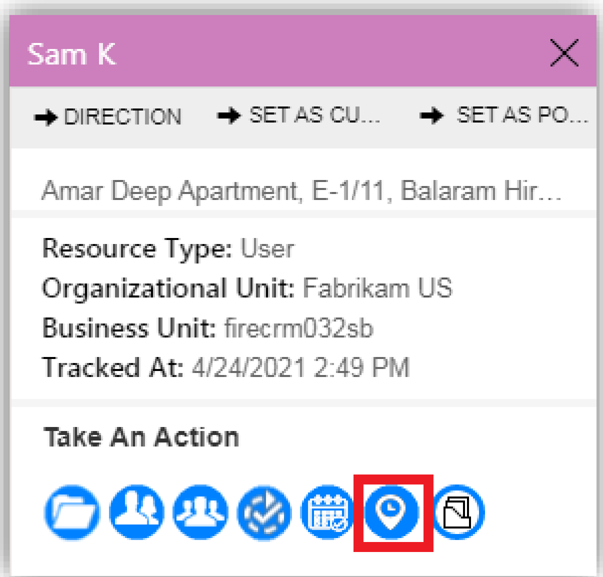


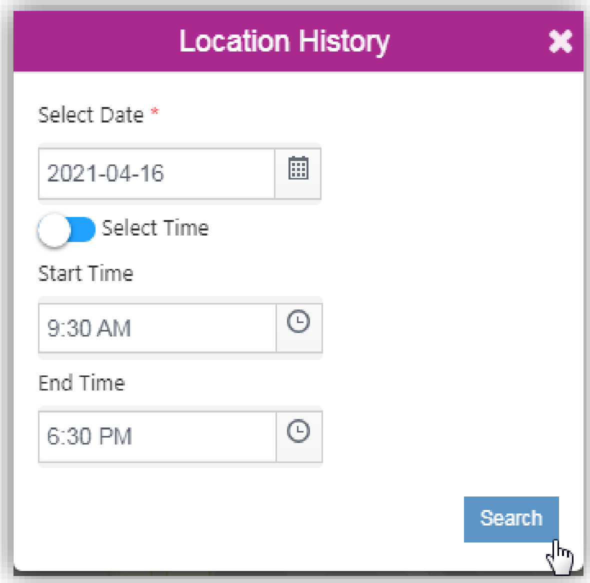


Users can go to the Direction card to select the reps required from the list there and click on Today's plan or Location history button to view the tracked information for the respective resource.

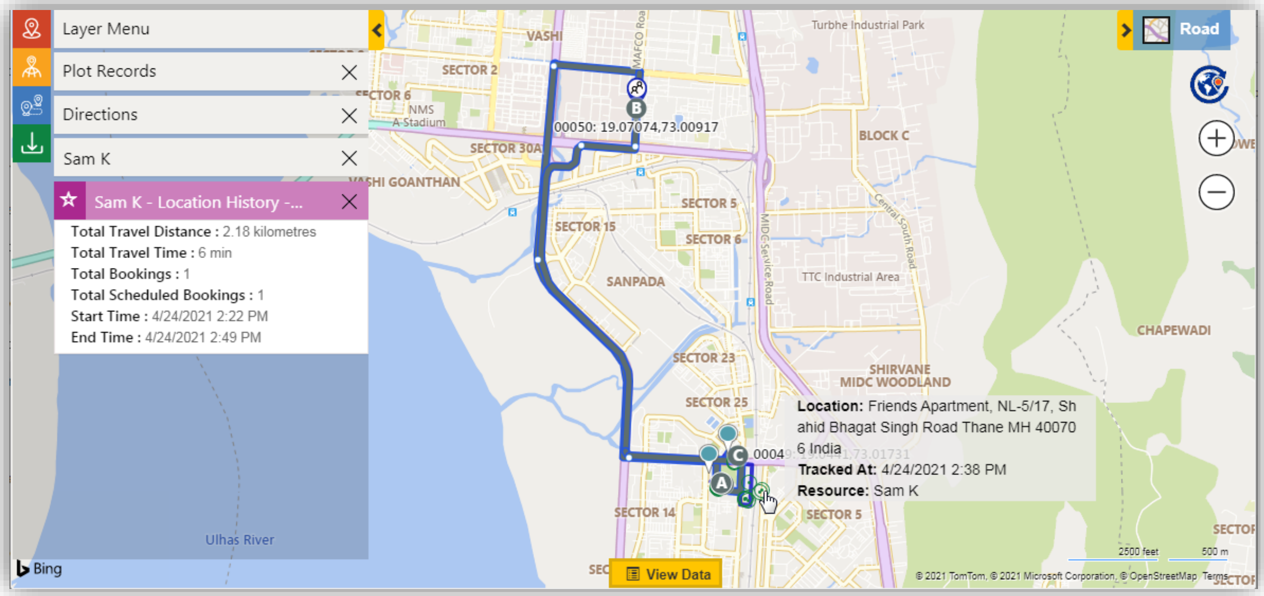
Field Service

Clicking on the resource pushpin opens up the tooltip card. The below screenshot shows the tooltip card for the resource Sam K. Users can click on the highlighted button of Location History and select the date & time required and click on Search.





This will show the route assigned to the respective resource to follow on the selected date as well as the route that was actually travelled by the respective resource. Here we can see that Sam K had travelled the exact route that was assigned to him. Users can view the information of Booking Timestamps on the Summary card opened up for the respective resource. They can also hover on the resource pushpin to see the details.

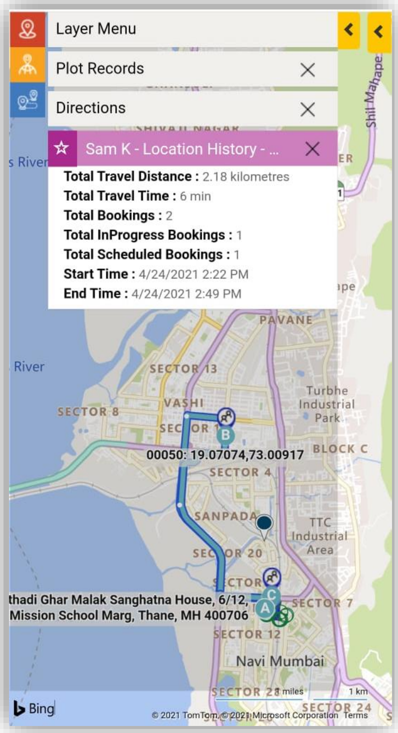


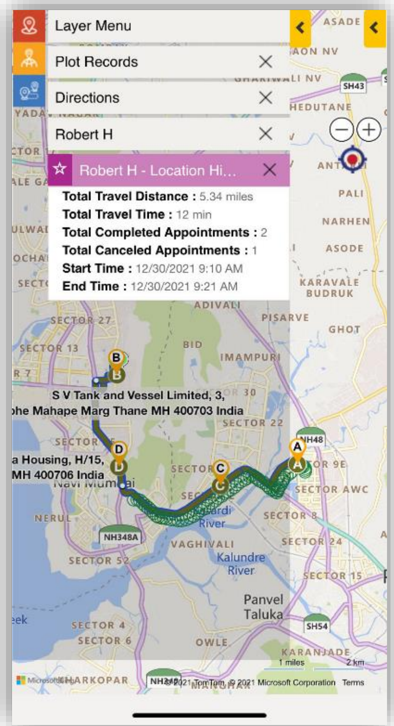
If users are visualizing the tracking information for multiple reps/resources or multiple days, each route will be plotted into different colors so as to be able to differentiate between individual routes. Further users can close the Summary card to remove the tracking information for the respective rep/resource from the map. Thus, users can track reps/resources in the following ways.

- Single rep/resource for multiple days
- Multiple reps/resources for single day
- Multiple reps/resources for multiple days

Real-Time Tracking in Mobile

Users can use Real-Time Tracking within the Field Service App/Dynamics CRM app/Dynamics CRM Sales App as well, just like the way explained above for desktop. Once they have plotted the reps/resources on the map, they can click on the pushpins to open the tooltip card and see the buttons for Location History and Today's Plan to view the travel history of the rep/resource for the required dates and time or the travel plan of the rep/resource for today respectively.





Maplytics API

Maplytics API allows users to retrieve geographical data from Maplytics maps to use it outside of CRM. If a user needs to show CRM data based on a Proximity search or from a specific region etc. on a portal or website, they can use Maplytics API to do the same. Maplytics API will be used to make API request to give the response as per user input like proximity, region etc. For example, if a user has a website that provides training for driving and they want to allow the visitors to find trainers nearby their location. If the trainers are stored in Dynamics CRM, then Maplytics API can be used to show the results of Maplytics Proximity search i.e., the trainers around a specified location on the website while a visitor searches for it.

Maplytics API will be provided with a transaction limit. The transaction count will be provided as per the user's requirement. The API transaction usage will be counted into three ways. Please contact Inogic at crm@inogic.com if interested into using Maplytics API.

- Daily
- Monthly
- Yearly

The transaction limit will be provided based on the required usage among the three mentioned above. Let's say, based on user's requirement, if they have been provided with daily transaction limit of 100 then the user will be allowed to make 100 API requests per day. If the user exceeds the limit for a day, then a message will be shown that will inform the user that they are not allowed to make any more API requests for today. Then the user will be able to make API requests the next day. It will work the similar way for the Monthly and Yearly usages.

Note: To execute API request you should have active Maplytics license.

List of APIs:

1. Proximity Search
2. Region Search
3. Territory Search
4. Template Search
5. Direction instruction
6. Get Timezone

API accepts following parameters. Based on the value passed in the parameter of the respective operation it will get the response. Also, Parameters are optional.

By Proximity

Suppose you want to search using proximity. For this, we have created the custom action with name **"Inogic.Maplytics.API.Proximity" (ikl_InogicMaplyticsAPIProximity)**.

Custom action accepts following parameters:

- **CurrentLocation**: Location for which you want to do the proximity search.
- **Proximity**: Provide the proximity radius. e.g., 3. If you want to do Concentric Proximity search, then specify multiple proximity radii separated by comma ','. For example, 5, 10, 15.
- **DistanceUnit**: Provide the radius unit. It can be either "mile or kilometer". If the unit is not specified then by default mile will be considered as the radius unit.
- **Records**: EntityCollection
- **Entity**: Provide the entity name. e.g. "Account"
- **ViewName**: Specify the view name. e.g., "My Active Accounts"

When user passes the required parameters and executes this action then it will return records collection.

Note: As custom action has 2 minutes timeout so maximum records that are processed is around 90K- 100K. If you have a view having records more than 100K then it may throw a timeout issue. So, make sure to enter the viewname of the view that has less then 100K records.

To execute proximity action using the C#, use the following code.

```
  //create request object
string requestName = "ikl_InogicMaplyticsAPIProximity";

                    //create request object
                    OrganizationRequest orgReq = new OrganizationRequest(requestName);
                    //for proximity
                    orgReq["CurrentLocation"] = "New York";
                    orgReq["Proximity"] = "10,25";
                    orgReq["DistanceUnit"] = "Mile";
                    //Entity & view
                    orgReq["Entity"] = "account";
                    orgReq["ViewName"] = "My Active Accounts";
                    OrganizationResponse response = service.Execute(orgReq);

                    EntityCollection recordsCollection =
(EntityCollection)response.Results["RecordsCollection"];
```

To execute the action using the javascript (web api) you can use following code.

```
function executeCustomAction() {
    try {

        var actionObj = {
            CurrentLocation: "New York",
            Proximity: "10,25",
            DistanceUnit: "Mile",
            Entity: "account",
            ViewName: "My Active Accounts",
```

```
        }

        // call this function to execute the action
       execute(actionObj, "ikl_InogicMaplyticsAPIProximity()", function (data) {

            alert("Success: " + data);

        }, function (error) {
            debugger;
            alert("Error: " + error.message);
        });

    } catch (e) {
        alert(e.message);
    }
}

function execute(req, reqName, successCallback, errorCallback) {

    //create AJAX request
    $.ajax({
        type: "POST",
        contentType: "application/json; charset=utf-8",
        datatype: "json",
        url: encodeURI(getWebAPIPath() + reqName),
        data: window.JSON.stringify(req),
        beforeSend: function (xhr) {
            //Specifying this header ensures that the results will be returned as JSON.
            xhr.setRequestHeader("Accept", "application/json");
            //xhr.setRequestHeader("Content-Type", "application/json; charset=utf-8");
            xhr.setRequestHeader("OData-MaxVersion", "4.0");
            xhr.setRequestHeader("OData-Version", "4.0");
        },
        success: function (data, textStatus, xhr) {
            //successCallback function
            if (data != null && data.value != undefined) {
                successCallback(data.value);
            } else {
                successCallback(data);
            }
        },
        error: function (xhr, textStatus, errorThrown) {
            errorCallback(Inogic.Maplytics.ApiLib.errorHandler(xhr));
        }
    });

}

function getWebAPIPath() {
    return Xrm.Page.context.getClientUrl() + "/api/data/v8.0/";
}
```

By Region

Suppose you want to search records within a specified region. For this, we have created the custom action with name **"Inogic.Maplytics.API.Region" (ikl_InogicMaplyticsAPIRegion)**. Custom action accepts the following parameters.

- **RegionType**: Provide the type of region based on which user wants to search. , i.e., City, State, County, Country, PostalCode, PostCode Sector, PostCode(Outward Code), PostalCode Areas "City/Postalcode/State". You need to provide any of the above.
- **Region**: Provide the region where you need to search. E.g., New York.
- **Entity**: Specify the entity name. e.g., "Account"
- **ViewName**: Specify the view name. e.g., "My active accounts"

When user passes the required parameters and executes this action then the action will return records collection.

To execute region action using the C#, use following code.

```
string requestName = "ikl_InogicMaplyticsAPIRegion";

                    //create request object
                    OrganizationRequest orgReq = new OrganizationRequest(requestName);

                    //for region
                    orgReq["RegionType"] = "city";
                    orgReq["Region"] = "New york";

                    //Entity & view
                    orgReq["Entity"] = "account";
                    orgReq["ViewName"] = "My Active Accounts";

                    OrganizationResponse response = service.Execute(orgReq);

                    EntityCollection recordsCollection =
(EntityCollection)response.Results["RecordsCollection"];
```

To execute the action using the javascript (web api) you can use following code.

```
var actionObj = {
             RegionType: "City",
             Region: "New York",
             Entity: "account",
             ViewName: "My Active Accounts",
         }

         // call this function to execute the action
         execute(actionObj, "ikl_InogicMaplyticsAPIRegion()", function (data) {

              alert("Success: " + data);

         }, function (error) {
             debugger;
             alert("Error: " + error.message);
         });
```

By Territory

Suppose you want to search records within specified territories. For this, we have created the custom action with name **"Inogic.Maplytics.API.Territory" (ikl_InogicMaplyticsAPITerritory)**.

Custom action accepts the following parameters.

- **Territories**: Specify the names of territories. E.g., "FL, NY".
- **Entity**: Specify the entity name. e.g., "Account"
- **ViewName**: Specify the view name. e.g., "My active accounts"

When user passed the required parameters and executes this action then the action will return the collection of records.

To execute region action using the C#, use following code.

```
string requestName = "ikl_InogicMaplyticsAPITerritory";

                    //create request object
                    OrganizationRequest orgReq = new OrganizationRequest(requestName);

                    //for Territories
                    orgReq["Territories"] = "NY";

                    //Entity & view
                    orgReq["Entity"] = "account";
                    orgReq["ViewName"] = "My Active Accounts";

                    OrganizationResponse response = service.Execute(orgReq);

                    EntityCollection recordsCollection =
(EntityCollection)response.Results["RecordsCollection"];
```

To execute the action using the javascript (web api) you can use following code.

```
//By territory
        var actionObj = {
            Territories: "NY",
            Entity: "account",
            ViewName: "My Active Accounts",
        }

        // call this function to execute the action
        execute(actionObj, "ikl_InogicMaplyticsAPITerritory()", function (data) {

            alert("Success: " + data);

        }, function (error) {
            debugger;
            alert("Error: " + error.message);
        });
```

By Template

If you want to search records based on Maplytics template then for this we have created the custom action with name **"Inogic.Maplytics.API.Template" (ikl_InogicMaplyticsAPITemplate)**.

Custom action accepts the following parameters.

Template: Specify the Template name. E.g., "Accounts with 10 miles".

When user passes the required parameters and executes this action then the action will return the collection of records.

To execute Template action using the C#, use following code.

```
string requestName = "ikl_InogicMaplyticsAPITemplate";

//create request object
OrganizationRequest orgReq = new OrganizationRequest(requestName);

orgReq["Template"] = "Accounts with 10 miles";

 //execute the request
OrganizationResponse response = service.Execute(orgReq);

EntityCollection recordsCollection =
(EntityCollection)response.Results["RecordsCollection"];
```

Get Time zone

To get the time zone of a region, when we pass address or latitude/longitude then it will return the time zone.

To execute time zone action using the C#, use following code.

```
string requestName = "ikl_InogicMaplyticsAPIGetTimeZone";

                //create request object
OrganizationRequest orgReq = new OrganizationRequest(requestName);

orgReq["TimezoneLocation"] = "new york";

                //execute the request
OrganizationResponse response = service.Execute(orgReq);

string TimeZone = "TimeZone: " + (string)response.Results["TimeZone"];


string TimeZoneAbbreviation = "TimeZoneAbbreviation: " +
(string)response.Results["TimeZoneAbbreviation"];
```

To execute the action using the javascript (web api) you can use following code.

```
var actionObj = {
            TimezoneLocation: "New york",
        }

        // call this function to execute the action
        execute(actionObj, "ikl_InogicMaplyticsAPIGetTimeZone()", function (data) {

            alert("Success: " + data);

        }, function (error) {
            debugger;
            alert("Error: " + error.message);
        });
```

PowerApps Component Framework

User can add custom controls on fields or grids within Dynamics CRM. These custom controls will help the user to view the respective records on the map on the record form or the entity grid without switching to any other screen. This will enhance the user experience while working with views and individual records. User can add the following custom controls:

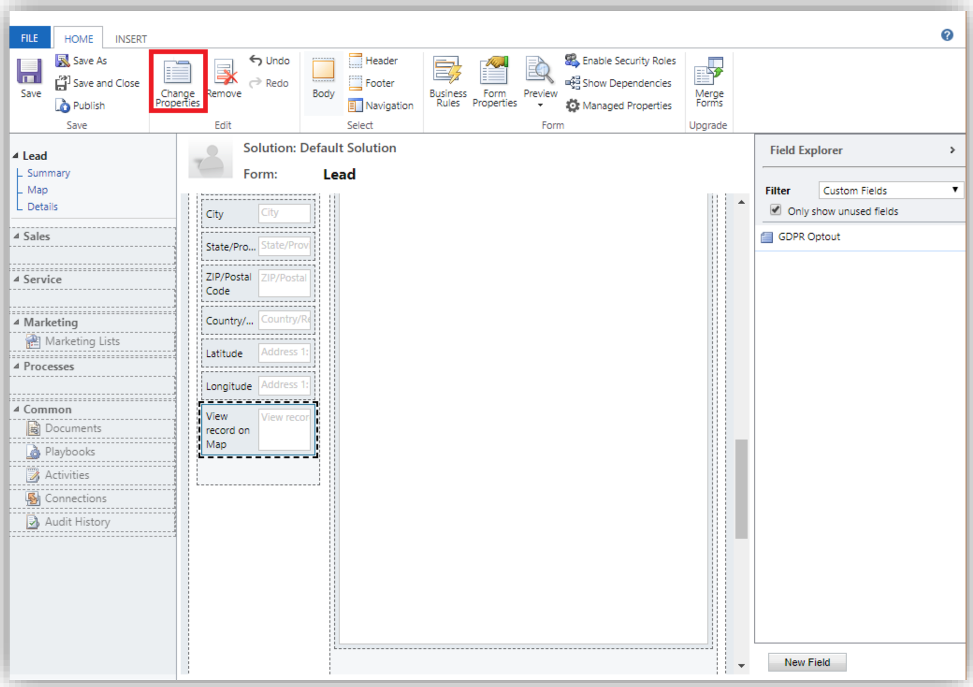
Map View Control for Record

User can add this control on any of the field with the Data type ‘Single Line of Text’ of the record to view the respective record plotted on the map. User can further view the Address and geo-coordinates on the hover of the pushpin.

Steps to Add control: To add the control to a field within a record form, user can follow the steps mentioned below:

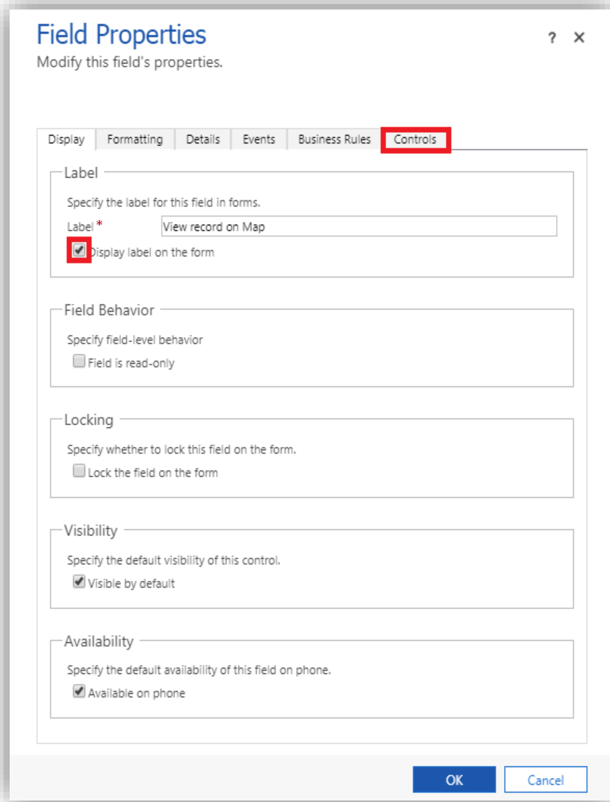
1. ***Go to Settings > Advanced Settings > Customizations > Customize the System > Components > Entities > Required Entity***

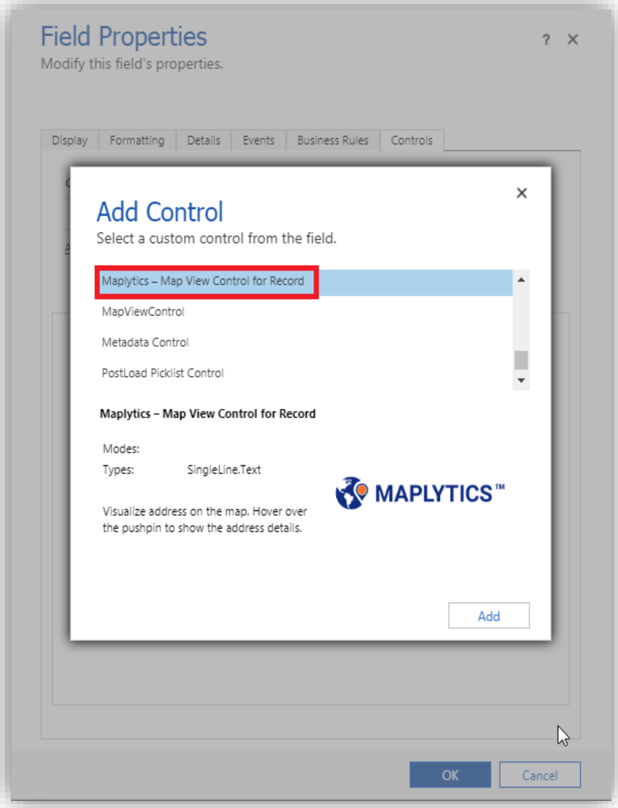
   Here, we have taken the Lead entity for an instance. ***Within Leads, go to Forms > Main Form > Select a field > Change Properties***



Note: The data type of the field on which user needs to add control should be ‘Single Line of Text’.

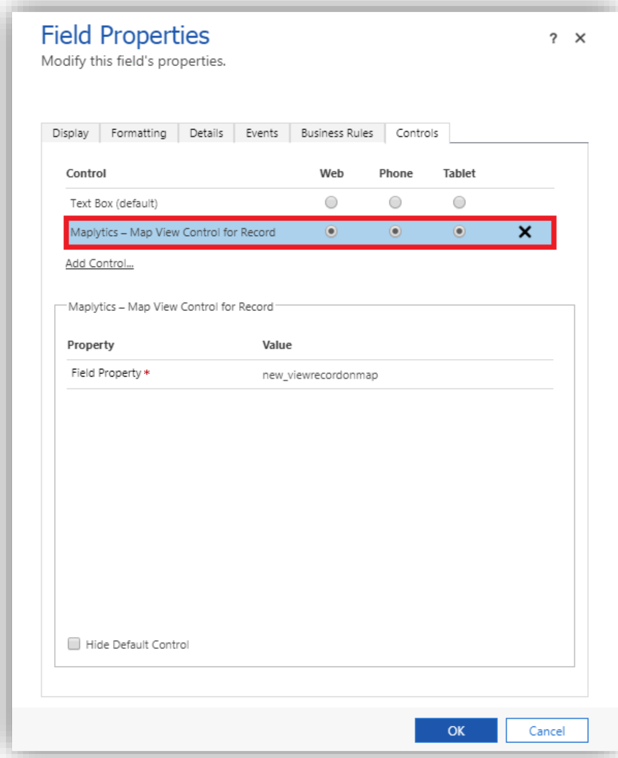
2. Go to Controls > Add Control > Select Map View Control for Record > Add



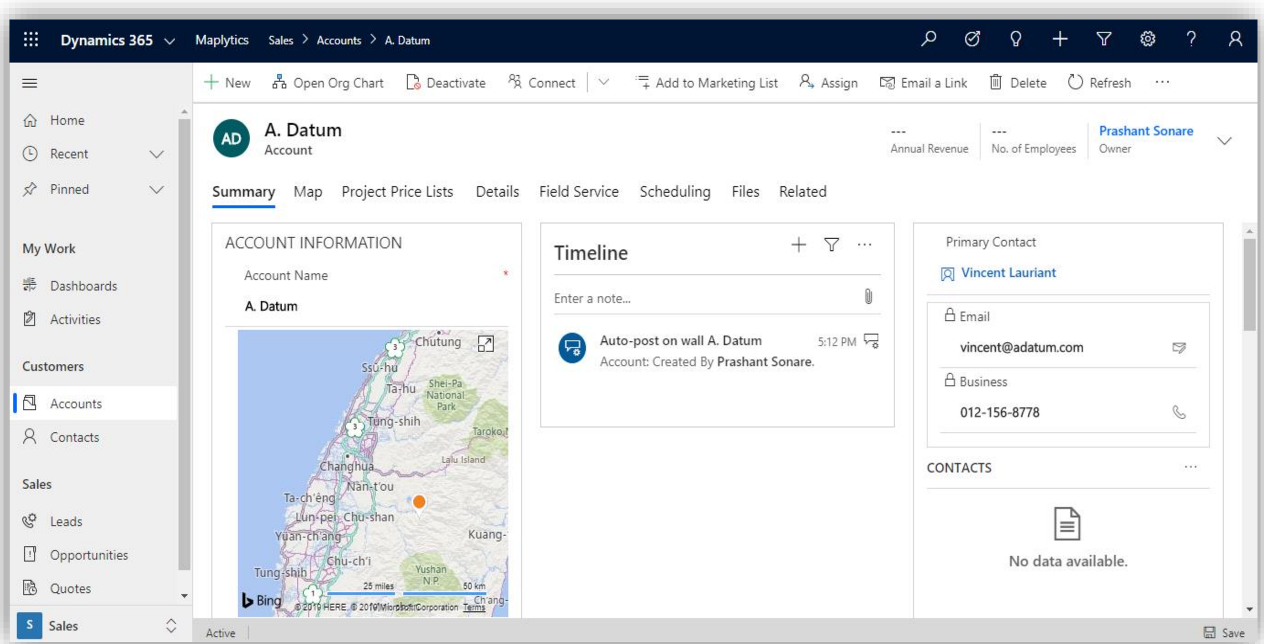


Note: Please uncheck the option of 'Display label' within the field properties for better visualization.

3. User can choose to allow the control on Web, Phone or Tablet. Click on ***'OK' > Save & Publish.***



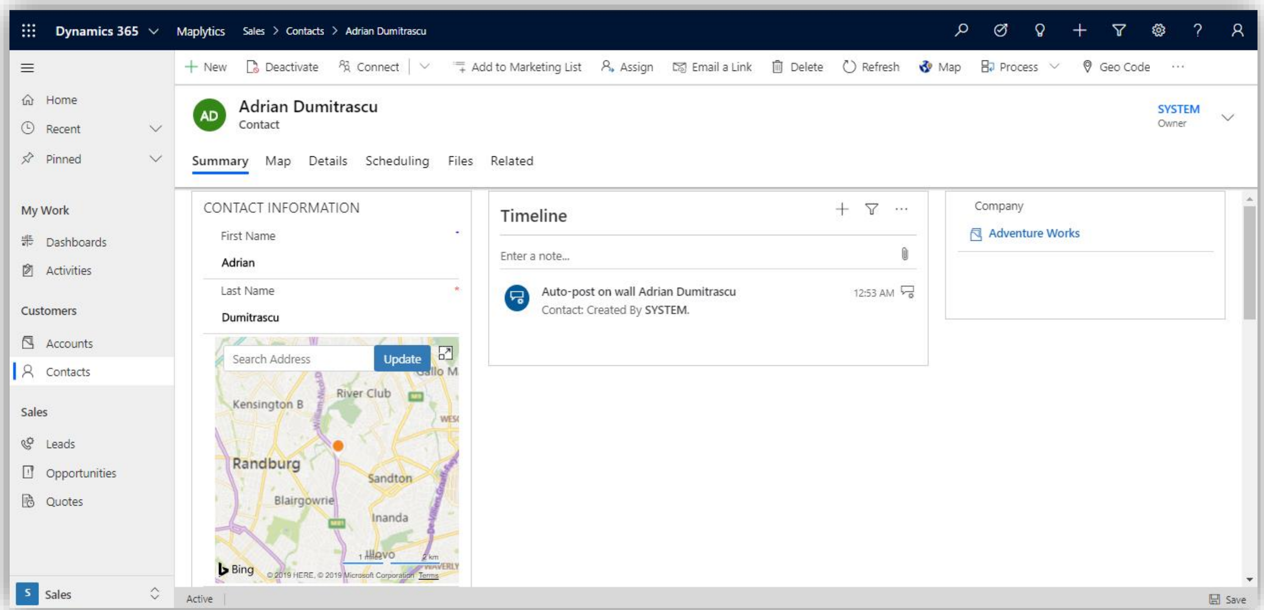
4. User can open any record of the entity to view this control added on the field.



Map Edit Control for Record

User can add this control on any of the field with the Data type 'Single Line of Text' of the record to view the respective record plotted on the map. User can hover on the pushpin to see the coordinates as well as the address of the pushpin. User can further drag the pushpin around and drop it on the required location to update the new Address and the geo-coordinates for the record. User can also type in the address in the space provided and click on the update button to update the Address and the geo-coordinates for the record. Before updating this, the user will be shown a message where user can also choose if they want to save address and the geo coordinates or only the geo coordinates.

Steps to Add control: To add the control to a field within a record form, user can follow the steps mentioned above while selecting 'Map Edit Control for Record' in the Step2. After adding the control user can open any record of the entity to view this control added on the field.



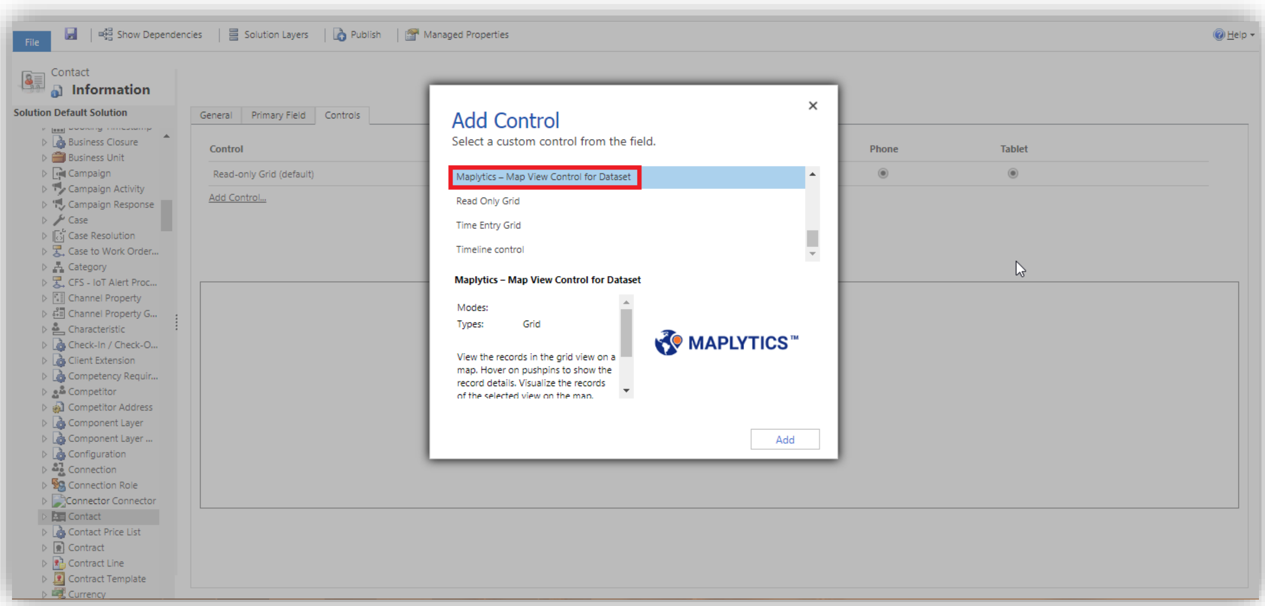
Map View Control for Dataset

User can add this control to any entity to visualize all of the records of the view or sub-grid on a map. User can further hover on the pushpins to view the information regarding the records. The information on the hover of the records is customizable. To add more information on hover, please refer to the section of Advanced Settings within the Entity maps in the Installation manual. User can also click on the pushpins to highlight them. Highlighting multiple pushpins can help the users to perform various actions from the ribbon on all the highlighted records at once. User can also right click on any pushpin to open the respective record.

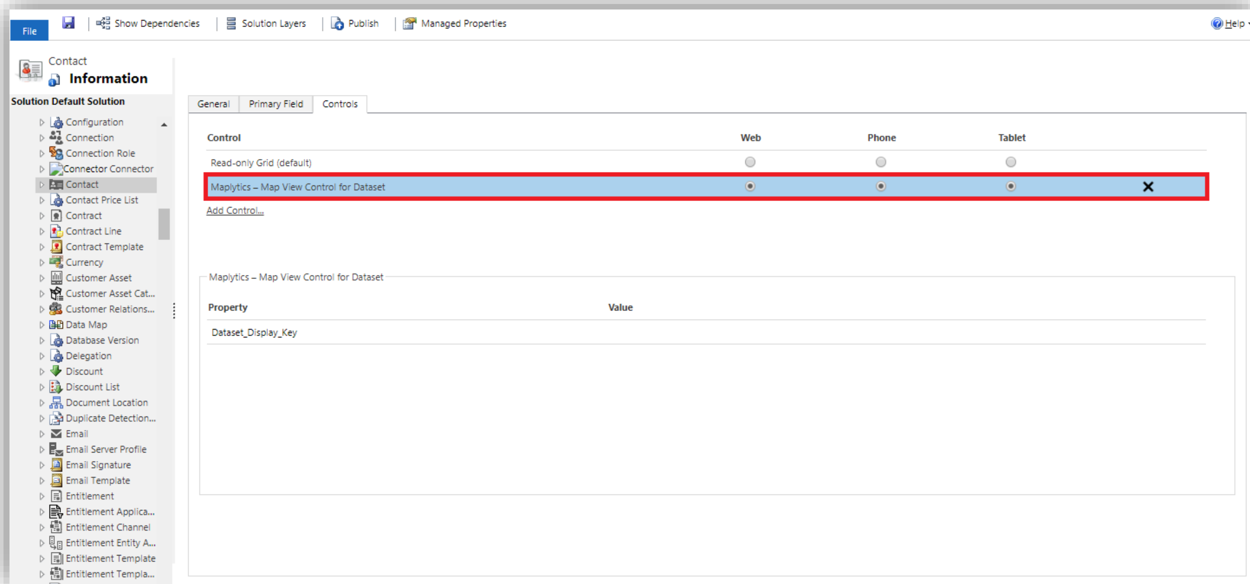
<u>Steps to Add control</u>: To add this control on an entity grid, user can follow the steps mentioned below:

1. ***Go to Settings > Advanced Settings > Customizations > Customize the System > Components > Entities > Required Entity***

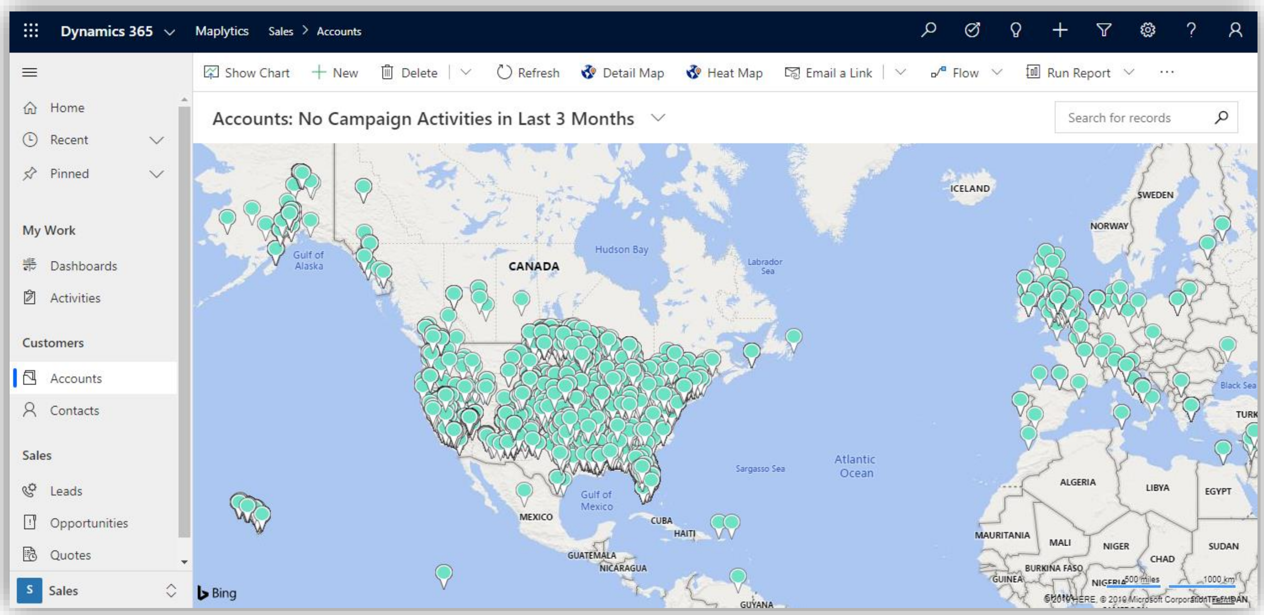
   Here, we have taken the Contact entity for an instance. ***Within Contacts, go to Controls > Add Control > Select Map View Control for Dataset > Add***



2. User can choose to allow the control on Web, Phone or Tablet. Click on Save > Publish.



3. User can open any view of the entity to view this control.

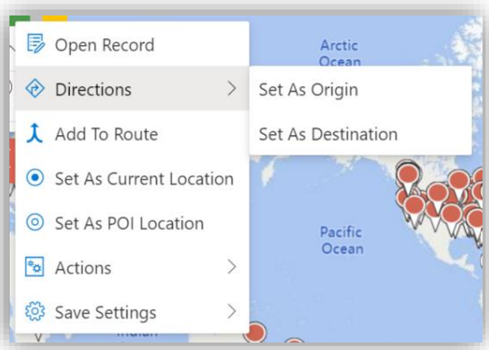


Detail Map Control for Dataset

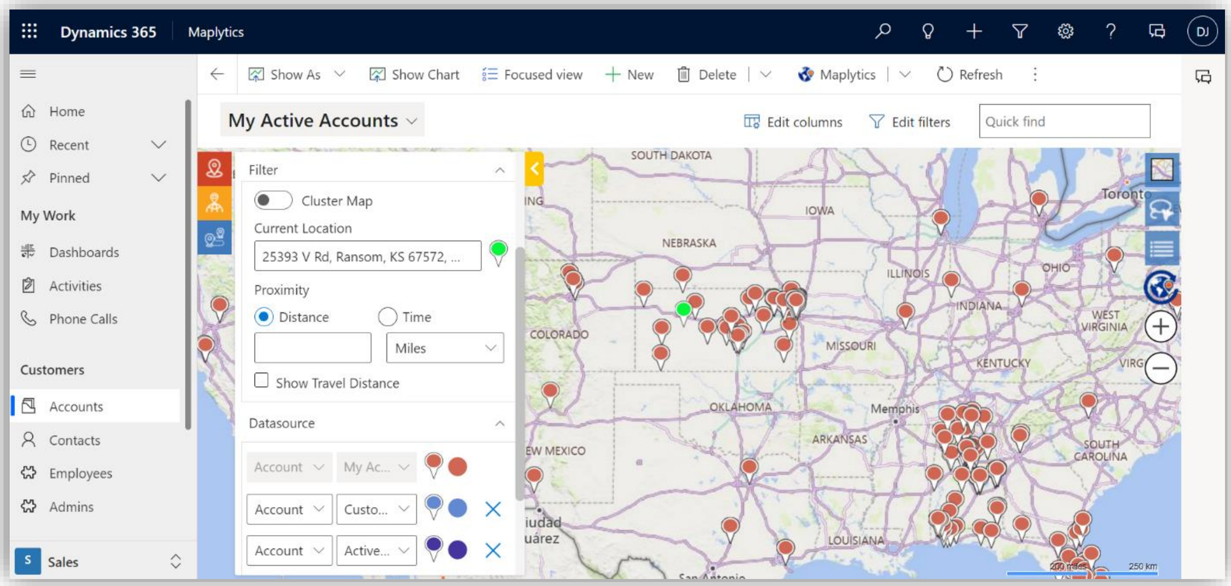
User can add this control to any entity dataset or dashboard to visualize all of the records of the view, sub-grid or dashboard on a map. User can also click on the pushpins to highlight them. Highlighting multiple pushpins can help the users to perform various actions from the ribbon on all the highlighted records at once. Detail Map Control provides the user with the freedom of using Maplytics features right from the page without switching to any other screens. User can also perform the following Maplytics features within the Detail map control. To know about these features in detail, please refer to the respective feature section in this manual.

Note: Visibility of Maplytics actions within the Detail map control will be dependent on the actions selected within the Security Template if any assigned to the logged-in user. Please refer to the Security Template section.

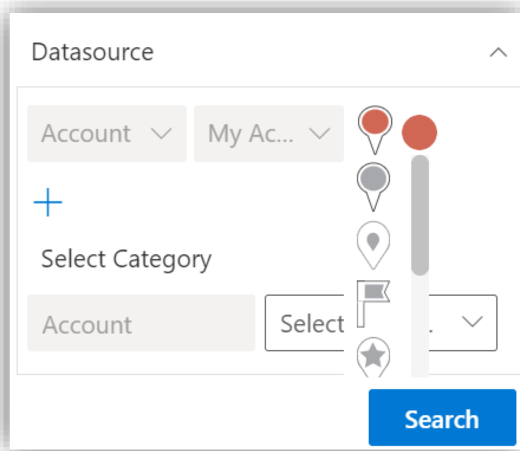
- Plot entity records – The records of the entity dataset on which this control has been added will be plotted on the map by default. They can hover on the pushpins to view the details regarding the pushpin and click on the pushpins to open the respective tooltip card. Users can use right-click to open the contextual menu which allows to take certain actions on the respective pushpin. They can open the record, set the respective record's location as origin, destination or a waypoint to a route. They can further set the record's location as current location, POI location or take actions like add tasks or Schedule Appointment based on the actions configured for the Tooltip card. With the Contextual Menu, user can use the option of 'Save Settings' to save the default locations for current location, Origin, Destination and the default Map Zoom Level & map centre.



- Plot multiple datasources - Other than the default data plotted on the map i.e. the Entity dataset on which the Detail map control has been added, user can also select two more Data sources and their respective active views to plot the same on the map. Thus, a maximum of three datasources can be visualized on map.



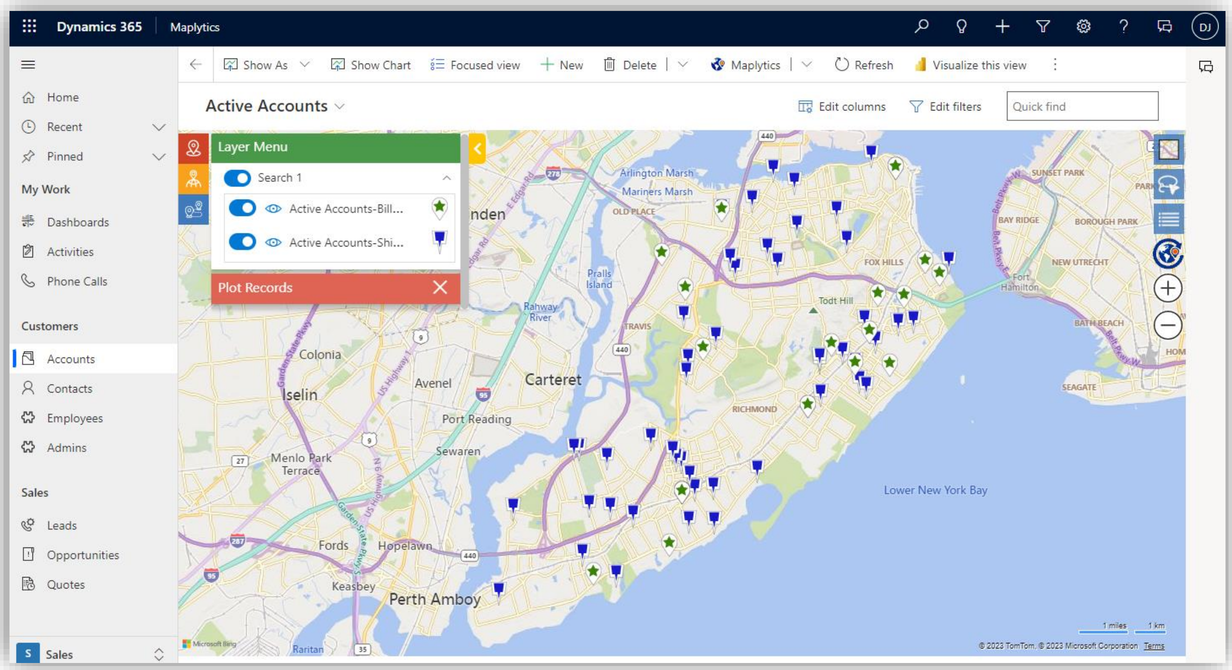
- Users can also select the required colors and the shape of the pushpins for the records of the view within the Datasource section in the Plot Records card. Once the color or pushpin is selected, it will instantly reflect on the map.



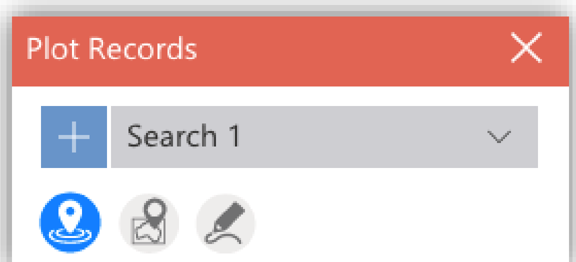
Note: By default, the color and shape of the pushpins will be plotted based on View configuration in the Entity map.

- Multi-Address Plotting – If users have multiple addresses saved for their entities then users can use the feature of Multi-address plotting to plot the records based on multiple addresses at once in the same map. This feature enhances the visualization experience of those records that have a presence in multiple cities or states etc. The required addresses once configured within the Entity map can be selected and plotted on the map.

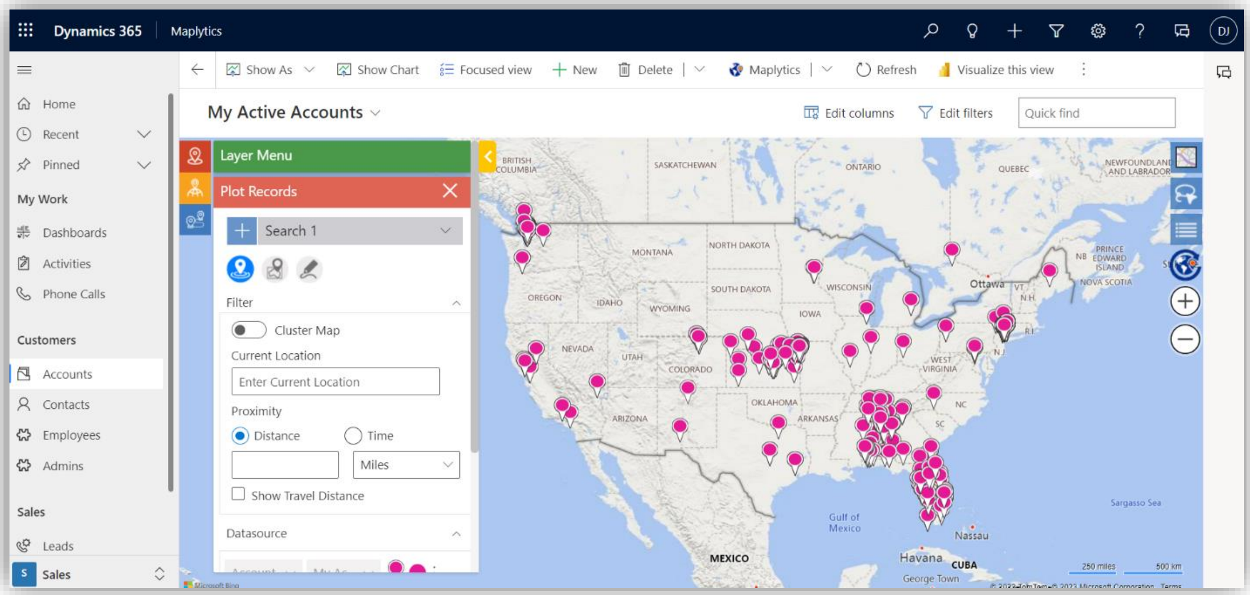
In the Plot Records Card, the user can click on the three ellipse and then click on the 'Select Address' button after selecting the Datasource & View and select the multiple addresses based on which the records need to be plotted and hit the search button. The respective addresses plotted on the map will also be listed in the layer menu which can be toggled to focus on the required data on the map.



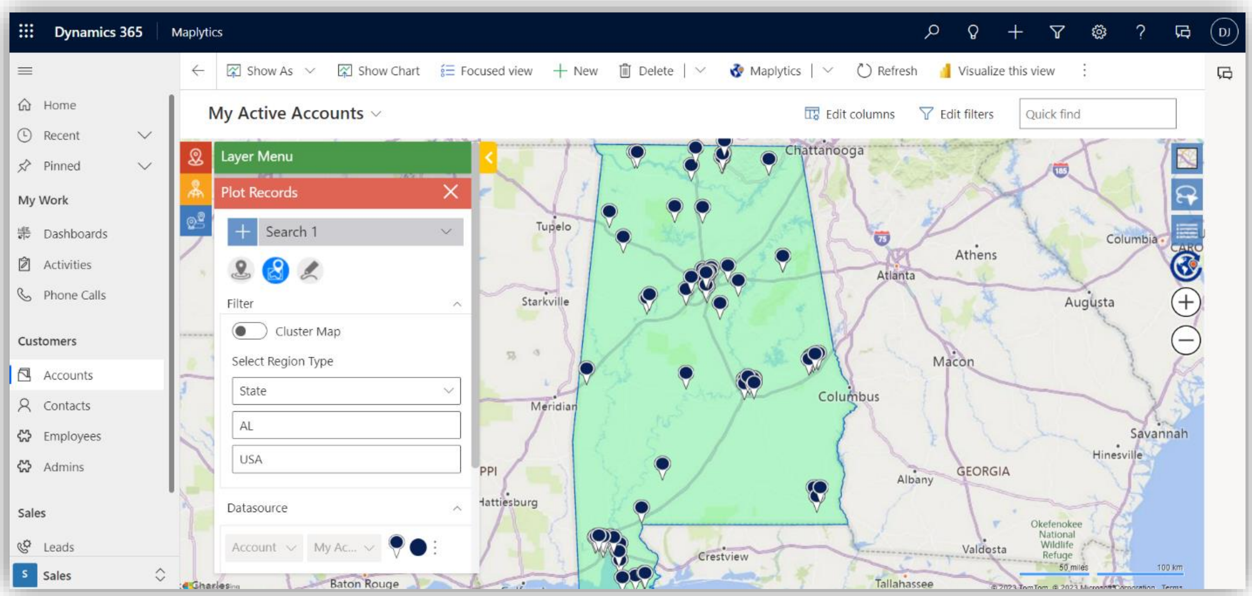
- Search Options – User can choose the search options By Location , By Region , or By Drawing to plot the data as per their requirement.



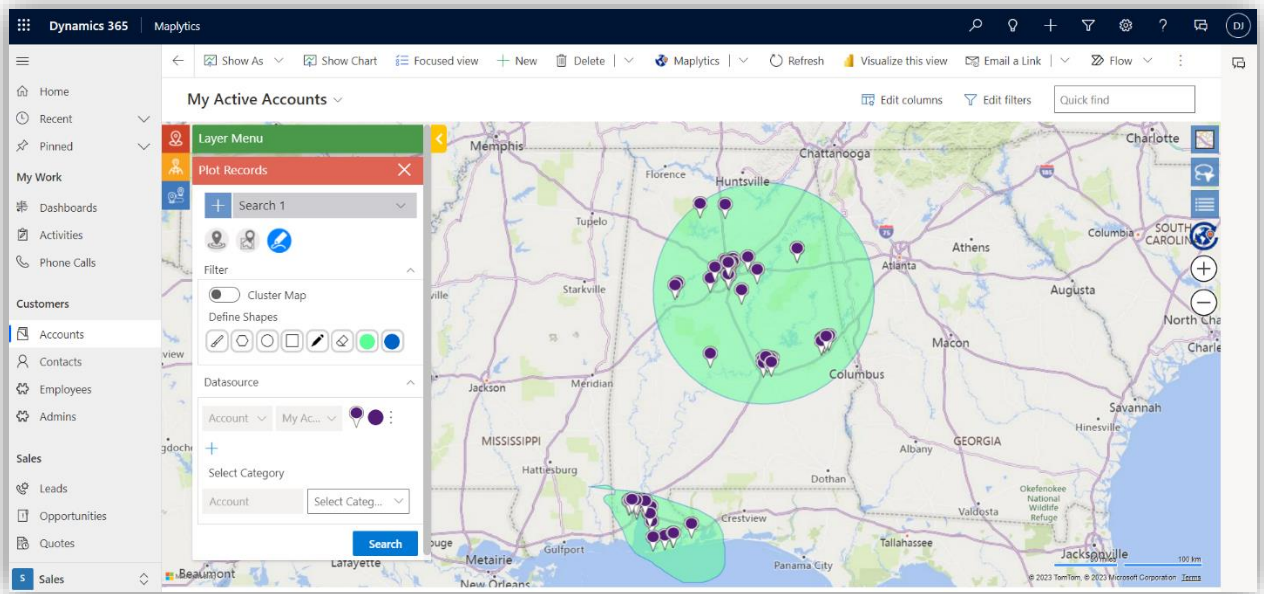
By Location: This search option will be selected by default. The following screenshot shows records of the default view My Active Accounts been plotted by location.



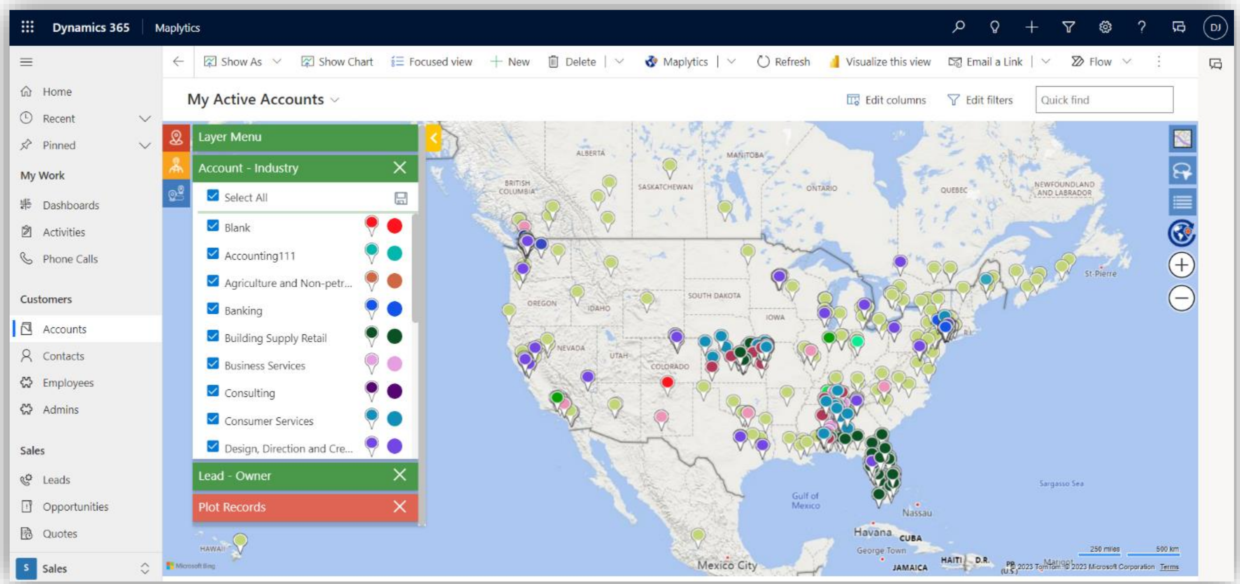
By Region: The below screenshot shows the active account records falling in Alabama, USA.



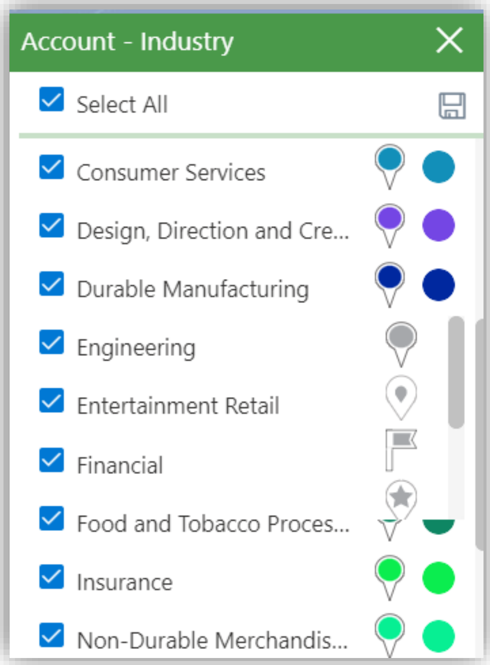
By Drawing: The below screenshot shows the accounts falling into the drawn shapes.



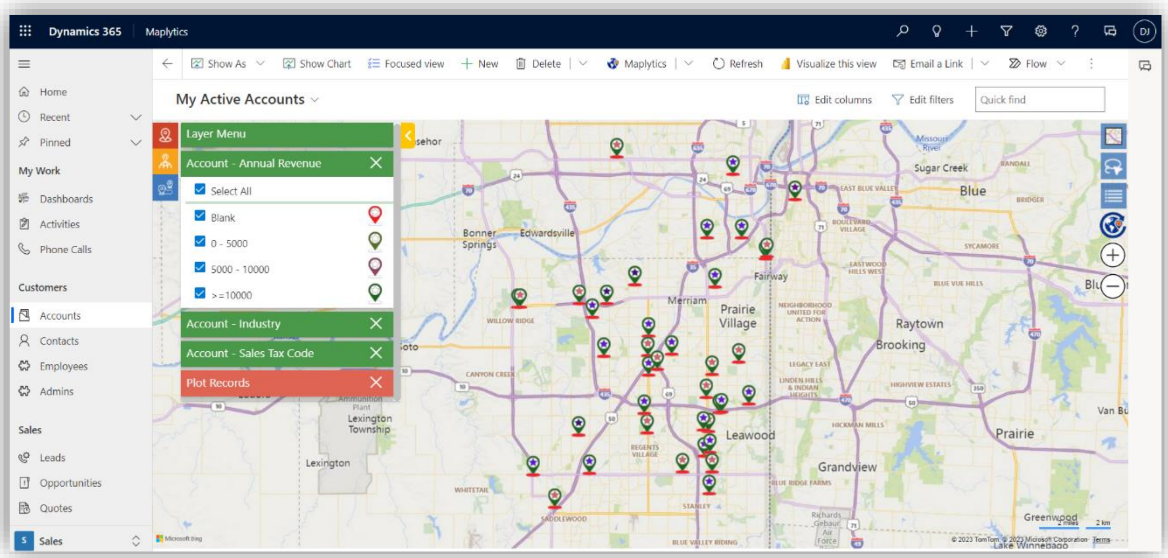
- Plot categorized data- User can also select an attribute for each data sources plotted on the map with the option of 'Select category' to categorize the data sources based on the selected respective attribute.



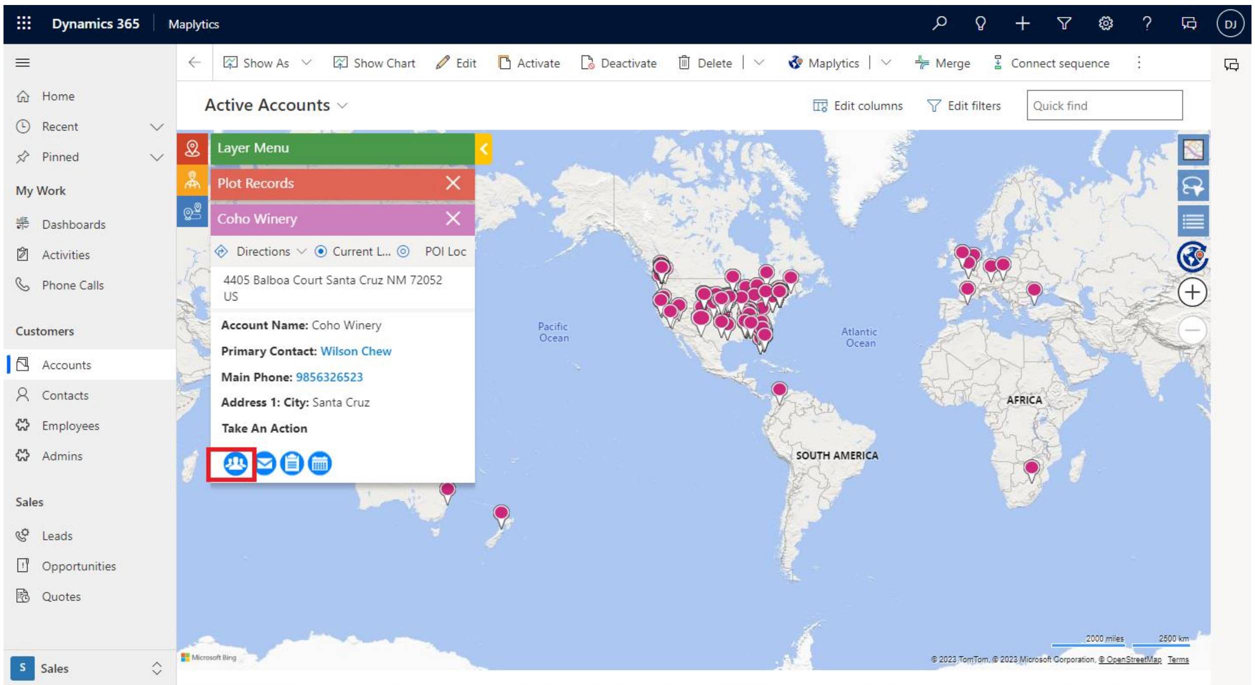
Users can also select the required colors and the shape of the pushpins for the respective category within the category card. Once the color or pushpin are selected, it will instantly reflect on the map.

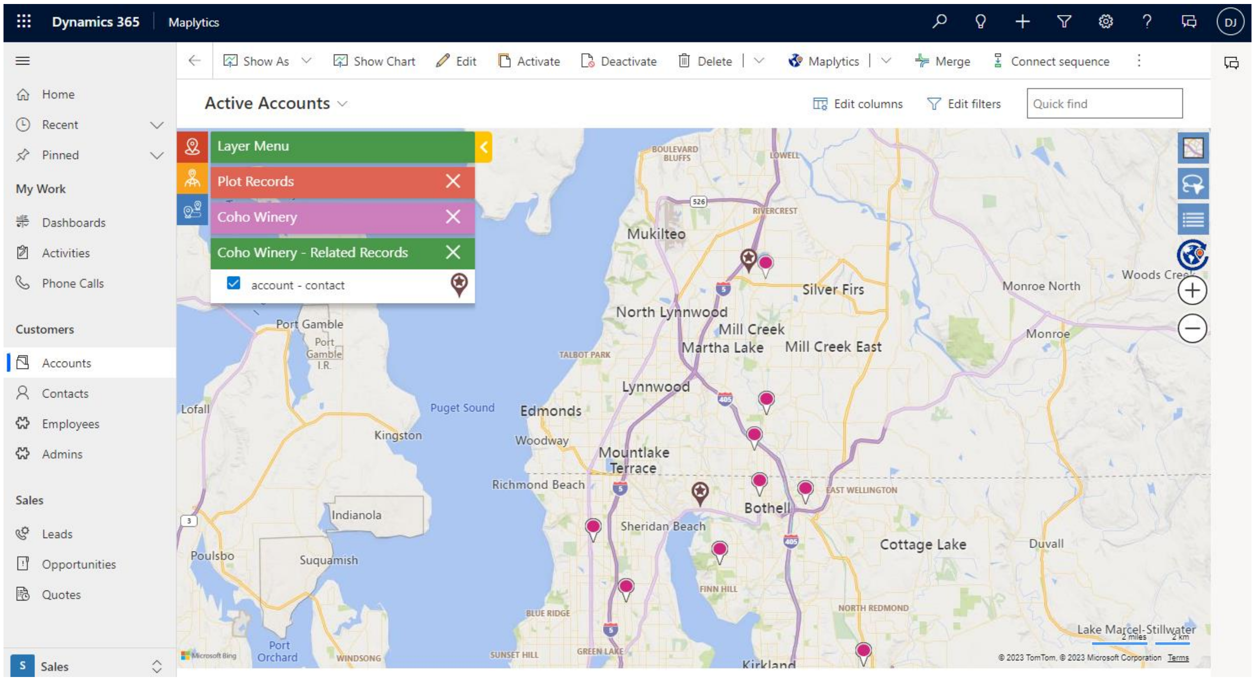


- Multiple-Category for single entity - User can also plot a single entity records categorized by multiple attributes. For e.g. Account records categorized by Open revenue, Originating lead, Owner. The user can choose an entity twice or thrice with two or three different views respectively and choose required attributes for the respective views to categorize the same entity with different attributes. User can select a maximum of three attributes to categorize a single entity.

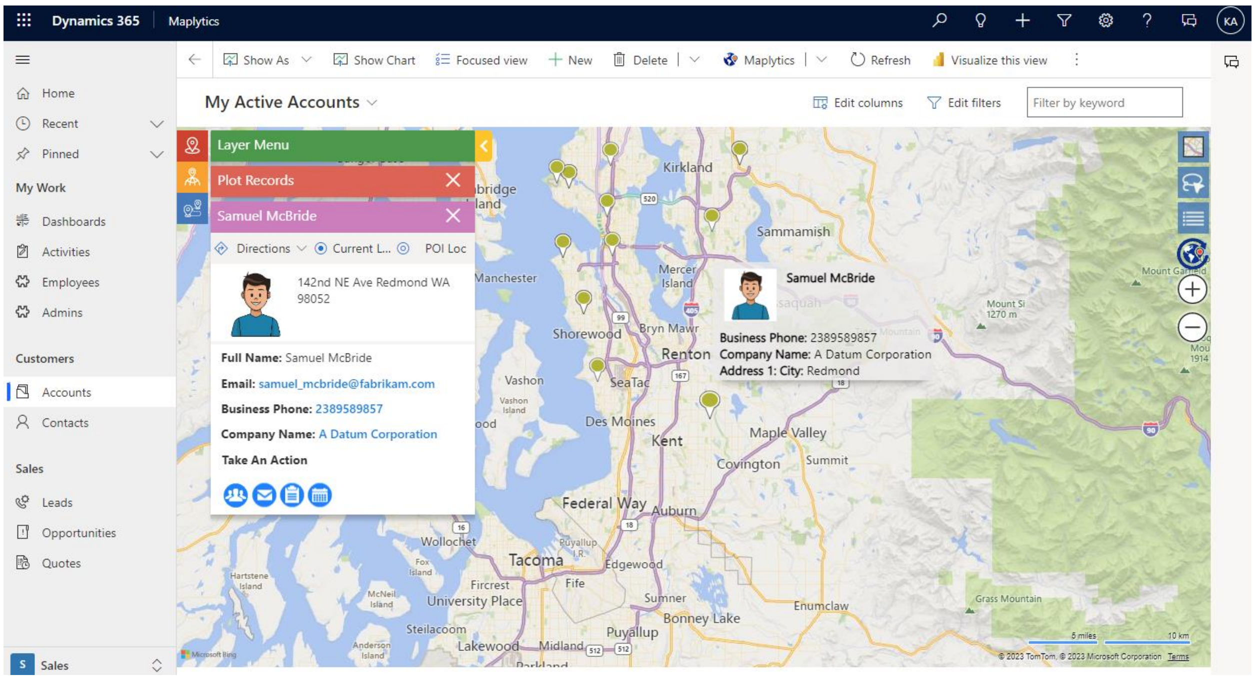


- Tooltip card: While users clicks on any record's pushpin, the pushpin will be highlighted and the tooltip card will open for the respective record. User can view more details of the record on the tooltip card. The tooltip card actions buttons will allow the user to perform required actions like Show related records, create tasks, create phone calls etc. on the selected record. The screenshot shows the use of the Tooltip card action button 'Plot related records' that plots related records based on the selected relationships for the respective record.

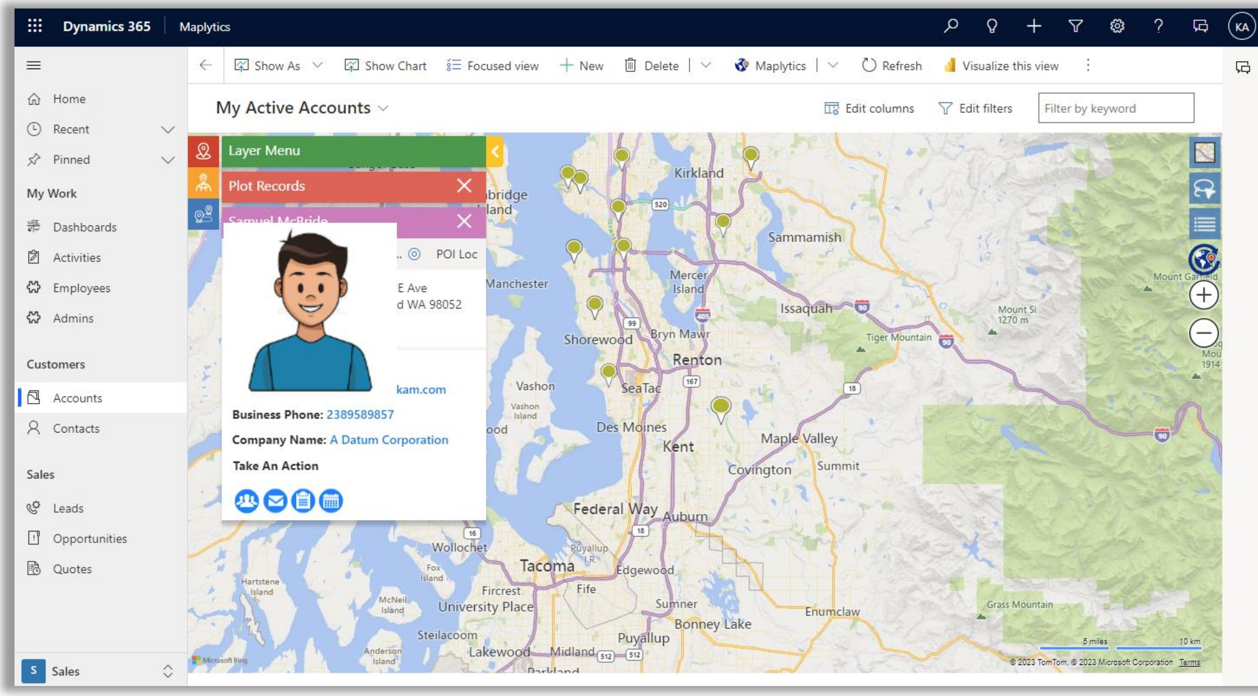



Dynamics 365
Maplytics
Show As
Show Chart
Edit
Activate
Deactivate
Delete
Maplytics
Merge
Connect sequence
Home
Recent
Pinned
My Work
Dashboards
Activities
Phone Calls
Customers
Accounts
Contacts
Employees
Admins
Sales
Leads
Opportunities
Quotes
Sales
Active Accounts
Edit columns
Edit filters
Quick find
Layer Menu
Plot Records
Coho Winery
Coho Winery - Related Records
account - contact

- Show Entity Image – If a record has an image saved within, while the user clicks on such record they will be able to see the image record on tooltip card. Moreover, the user can also hover on the image appearing in the tooltip card to zoom in on the image. User needs to select the 'Default Image' field in the field of 'Entity image' in Entity map to view the record image on hover and tooltip card. Please refer to the installation manual.



Users can also hover on pushpins plotted on the map to have a quick glance at its details as well as the image associated with the record.


Dynamics 365
Maplytics
Show As
Show Chart
Focused view
New
Delete
Maplytics
Refresh
Visualize this view
Home
Recent
Pinned
My Work
Dashboards
Activities
Employees
Admins
Customers
Accounts
Contacts
Sales
Leads
Opportunities
Quotes
Sales
My Active Accounts
Edit columns
Edit filters
Filter by keyword
Layer Menu
Plot Records
POI Loc
E Ave
d WA 98052
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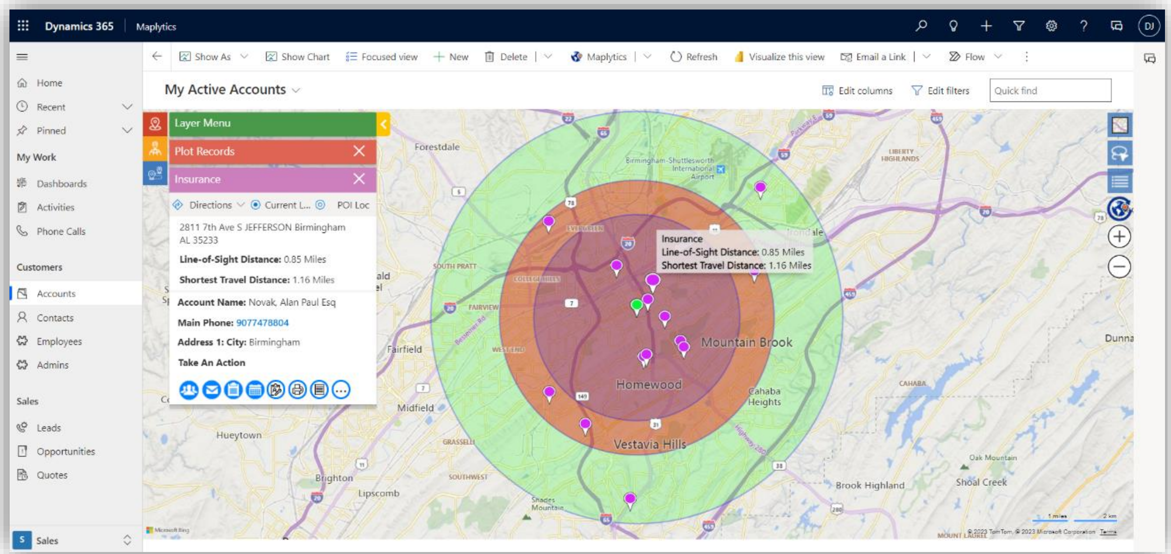
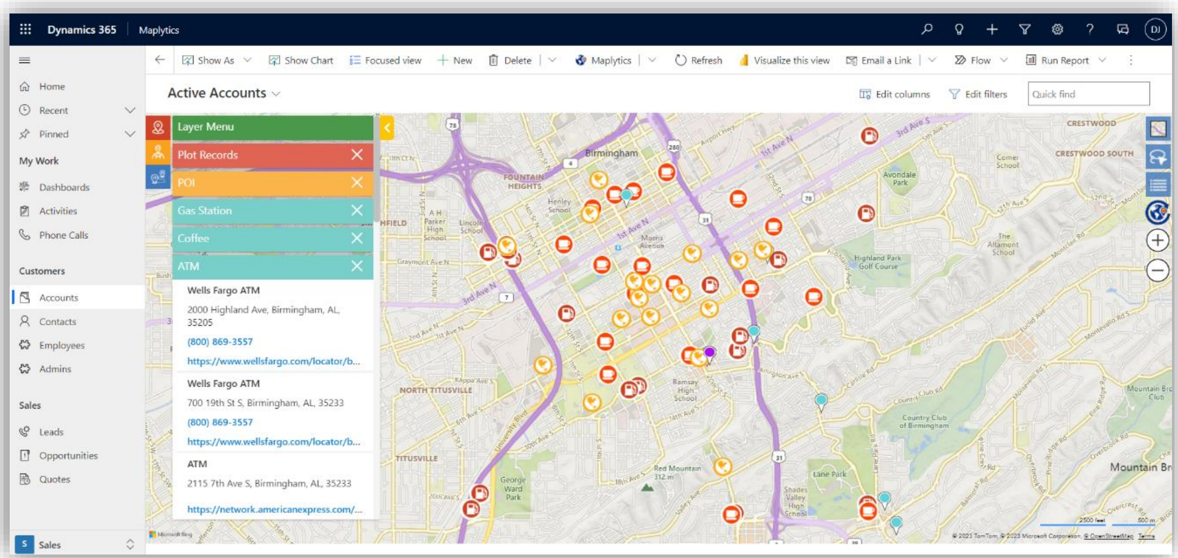
Business Phone: 2389589857
Company Name: A Datum Corporation
Take An Action
Kirkland
Sammamish
Manchester
Mercer Island
Issaquah
Shorewood
Bryn Mawr
Renton
Vashon
SeaTac
Des Moines
Kent
Maple Valley
Covington
Summit
Federal Way
Auburn
Tacoma
Edgewood
Fircrest
University Place
Fife
Sumner
Bonney Lake
Enumclaw
Steilacoom
Puyallup
Lakewood
Midland
Tiger Mountain
Grass Mountain

- Proximity search – User can set any location as the current location from the tooltip card or contextual menu with a right-click on any location on map. Once the user sets the current location, they can perform Concentric Proximity Search and can look for the Line-of-Sight Distance on the hover or the tooltip card for any record plotted within the proximity.

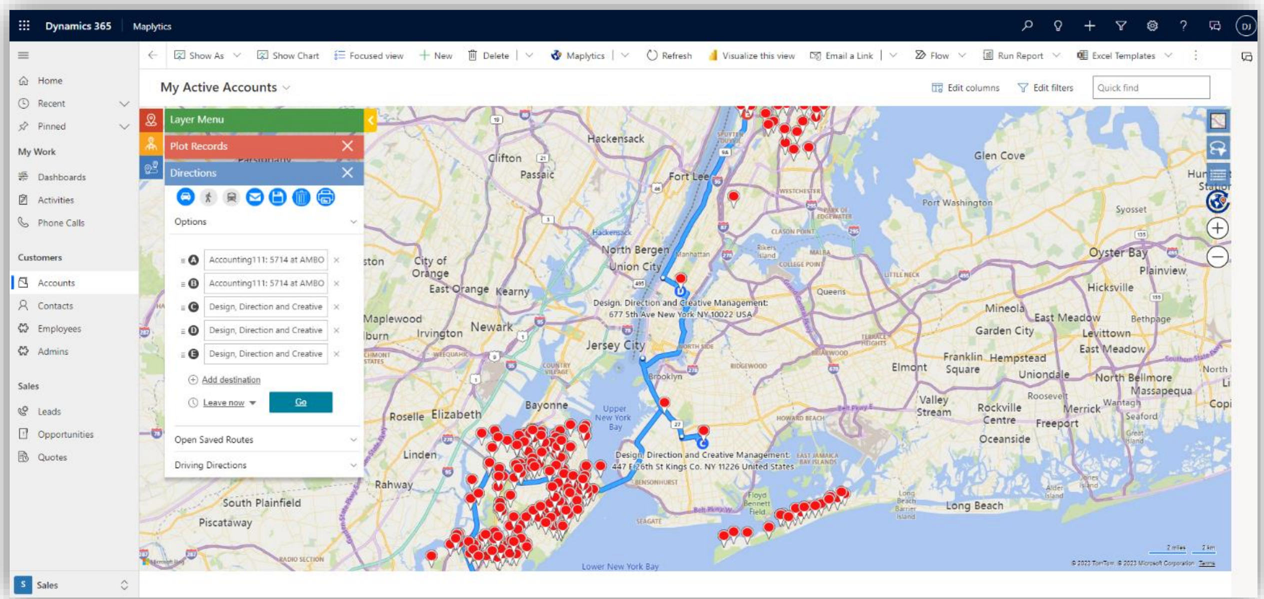


- POI locations – User can set any location as the POI location from the tooltip card or contextual menu with a right-click on any location. Once the user sets the POI location, they can use the POI card and view any geo-tagged Bing mapped locations by clicking on the icons available on the POI card or entering the keyword for the required location. For example, the below screenshot shows the POI locations plotted for Coffee places and Dentist.

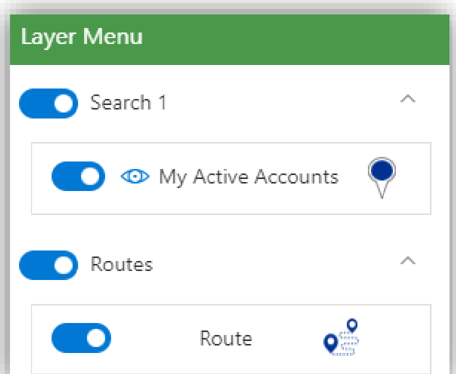


- <u>Route Optimization</u>– User can set any location as the origin, destination or a waypoint from the tooltip card or contextual menu by right clicking on a record or anywhere on the map and get the route created for the waypoints selected. User will get further options like selecting the unit for the distance, Optimize Route based on Shortest Time or Shortest Distance, avoiding highways or toll roads and see Traffic etc. within the direction card. Once the route is created, user can use the 'Save' button on the Directions card to save the route. They can use this button to it to add changes to an existing route or save it as a new route with a date and owner assigned. The saved route can later be plotted using the 'Open Saved Route' option by entering a date or range of date.

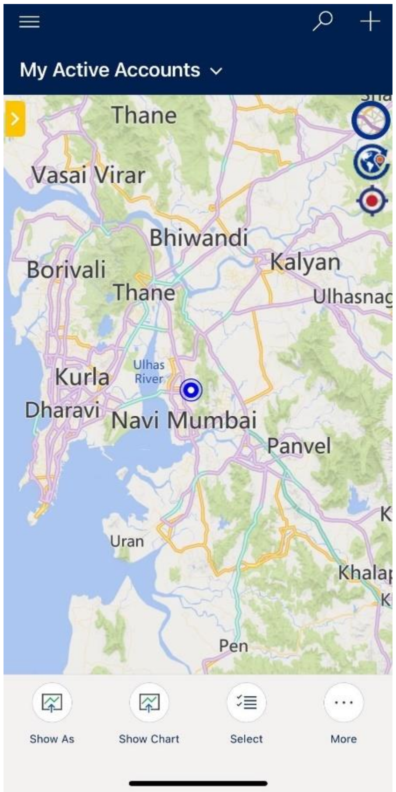
  User can also use the 'Open Navigation Links' button on the Direction card to view the turn-by-turn directions to navigate themselves for the route on Google Map, Waze App, or Apple Map based on the App Set in User Configured Detail record. User can also send the route as an email to any other user or clear the route with the options on the Direction card. User can also click on 'Print Route' to print a Route as well as the adjoining Map.



- <u>Layer Menu</u>- User can show/hide the layers of the plotted data on the map using the Layer menu to view only the data that is required.

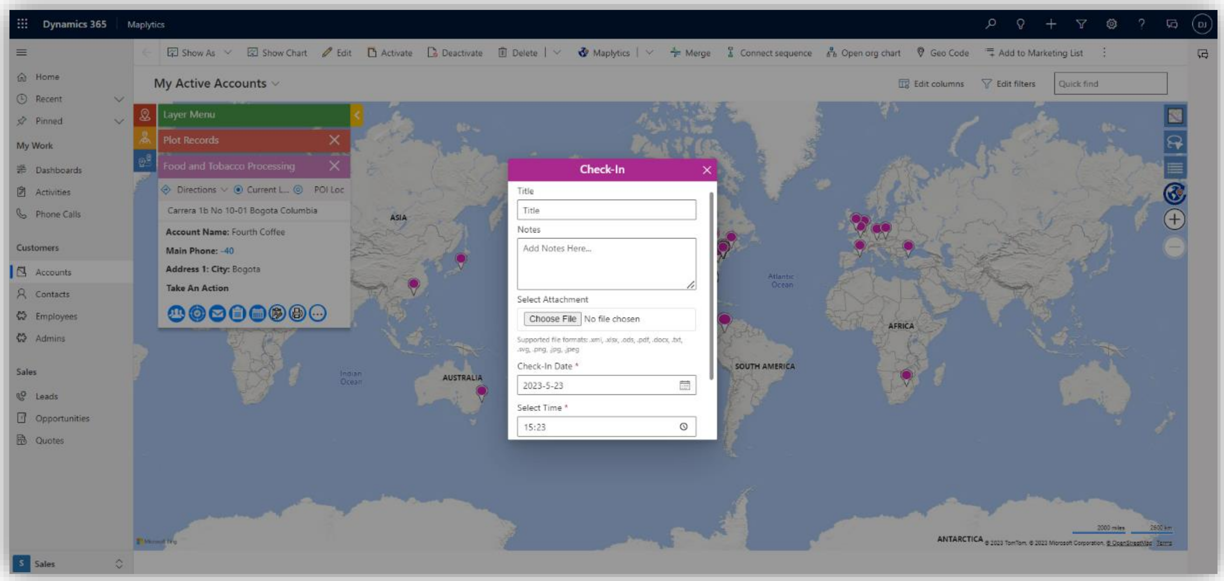


- Current location- While using Maplytics Detail Map Control on Mobile/Tablet, users can easily plot their current GPS location with the help of the 'Locate me' button thereby making it easier to perform Proximity search and relate the data plotted on the map in terms of their location.



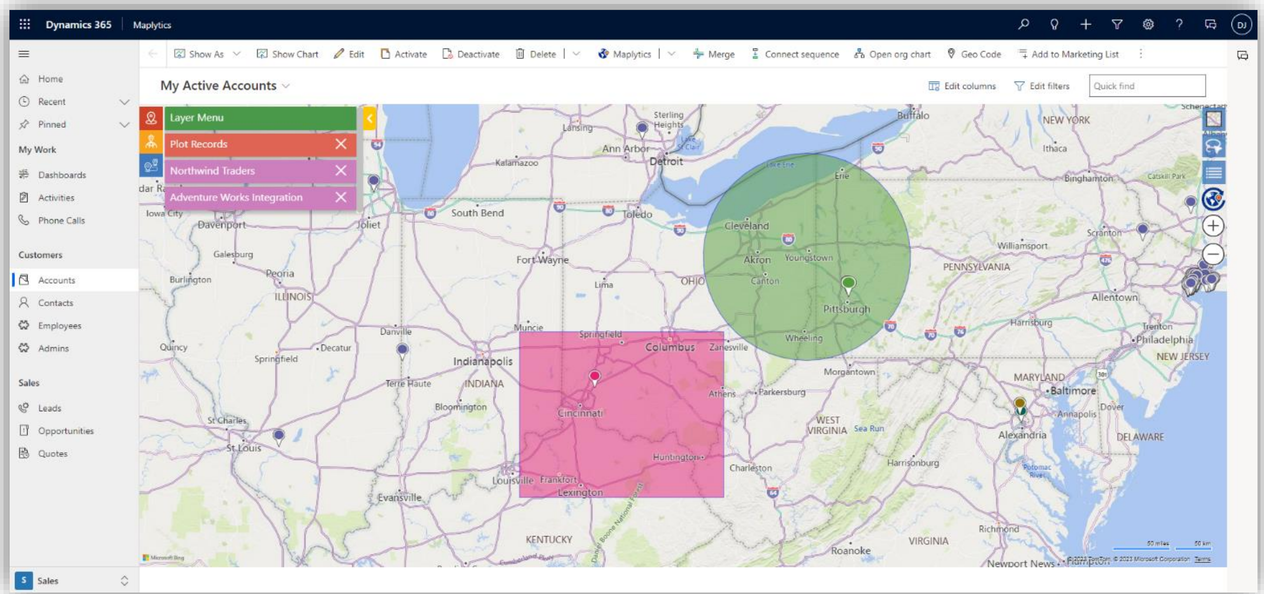
- Check in/out- Check-In feature enables users to register their arrival and departure time for the meetings while navigating on field with the help of Check-In and Check-Out buttons. User can click on any record's pushpin to open the Tooltip card and click on the Check-in button to register the arrival to the meeting location and click on the same button that gets converted to the Check-out button and register the meeting completion and departure from there. User can further add some notes for the respective records and also create pending check-in/out requests if they are outside the default radius.

  Once field team has check-in/out for respective meetings, their managers can plot the Check-in entity to plot the respective check-in/out records on the map and analyze pushpins are valid and which are invalid to track the performance of the field team. They can also plot the pending check-in/out requests and approve/reject the same.



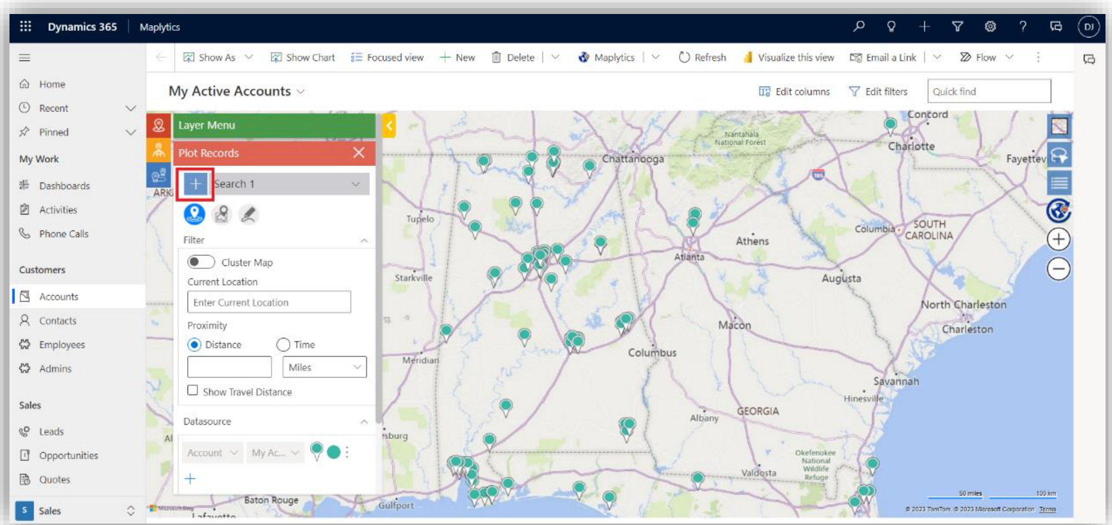
- Land Area Mapping – Organizations working with lands, real estates or farms etc. can visualize their lands/properties on map with this feature. Users will be able to assign land regions to the records and visualize them on the map to understand the coverage of area for each of the records using this feature.

  Lands can be assigned to the required records as mentioned in the section 'Land Area Mapping' in this manual. Once the lands are assigned, users can select the entity in Datasource and the respective view in the 'Plot Records' card in the map to plot the record on the map as pushpins. While visualizing records on the map, users can right-click on any pushpin to open the Contextual menu and use the 'Show Land Area' button to plot the land(s) that is assigned to the respective record. The user can also see all the lands that have been assigned to all the records that are plotted on the map, using the 'Show Land Area' toggle button on the Layer Menu and show/hide the same.

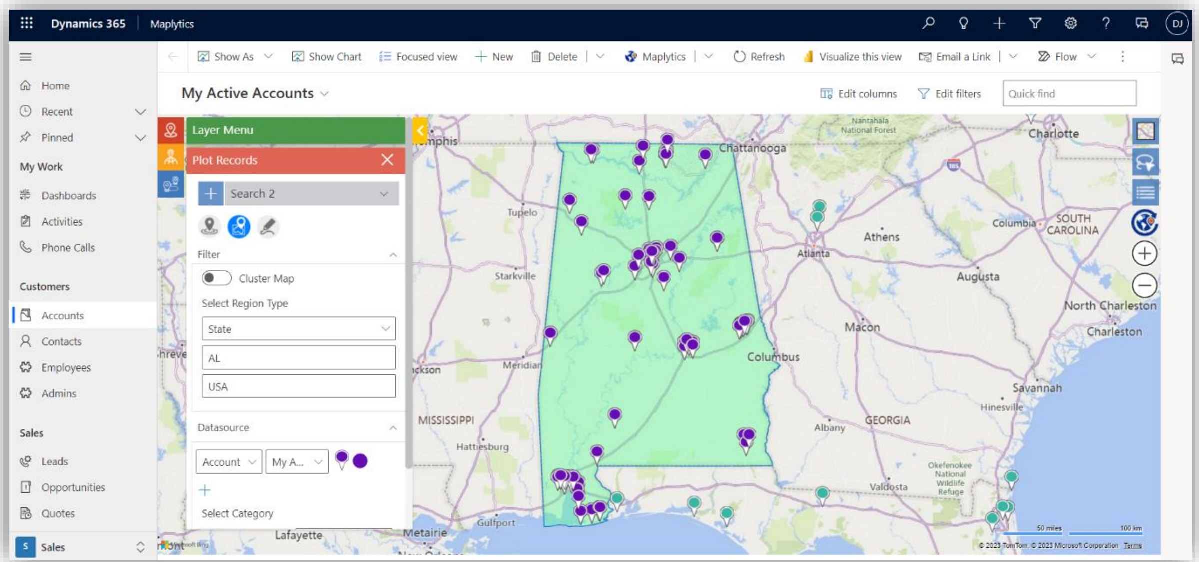


- Multi search layer - While users have so many search options and features to plot data on the map, they also have the capability to perform more than one search at a time to plot data on a map. For example, if the user needs to view the data with the search of By Region as well as By Drawing together on the same map, they will be able to do it with this ability of Multi search.

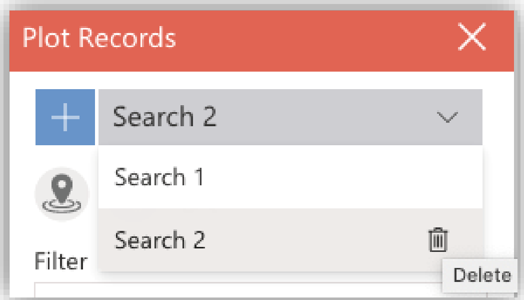
  In the Detail map control, the records from the respective view will be plotted by default. In the below screenshot, the map shows the default view of the Accounts plotted with pushpins in green color. To add more searches to the map, user can click on 'Add New Search'  to select the required search option and Data sources for the same.

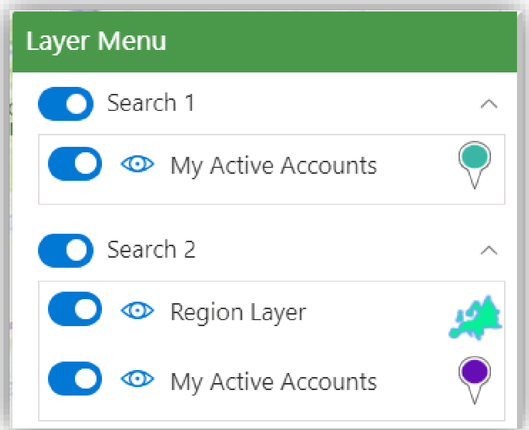


The below screenshot shows that the Search option 'By Region' is selected in the New search which becomes 'Search 2' after clicking on Search button. It is now showing all the records from Alabama, USA in pink color. However, as the default view was already plotted in green color pushpins, the records are still there as the part of Search 1. Since the views for both of the searches is the same i.e. the default view the pink pushpins of Search 2 are overlapping on the green pushpins of Search 1.



The number of multiple Searches is visible in Plot Records Card. User can also click on the 'Delete' to delete the respective search layer.

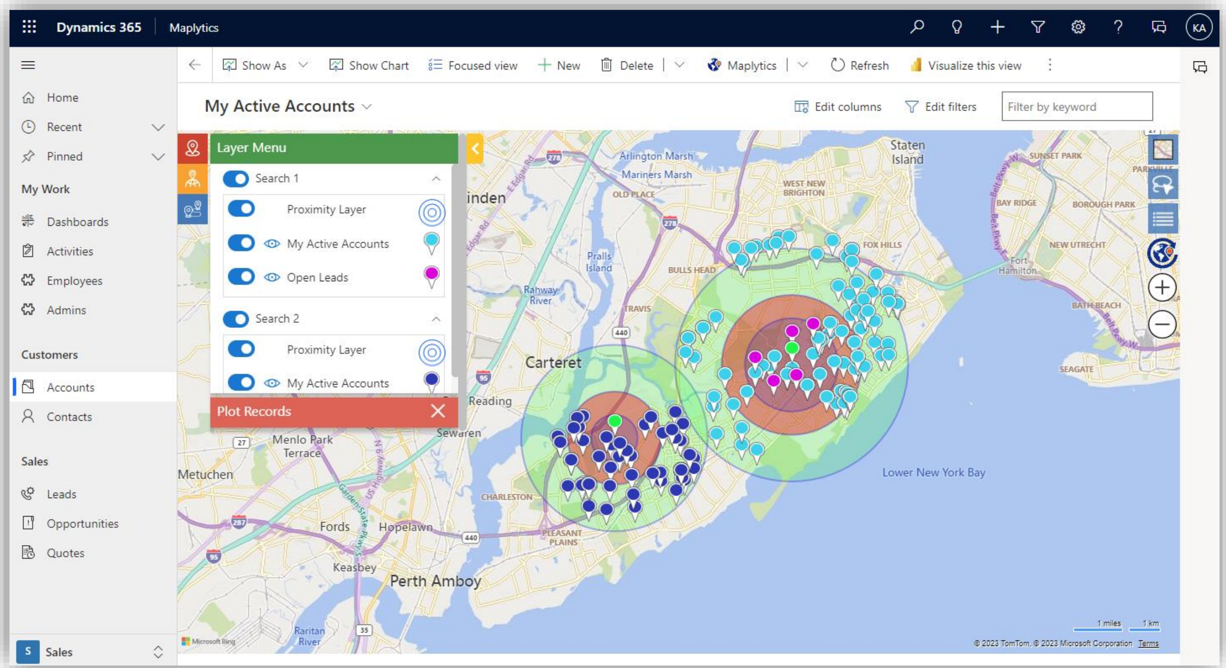




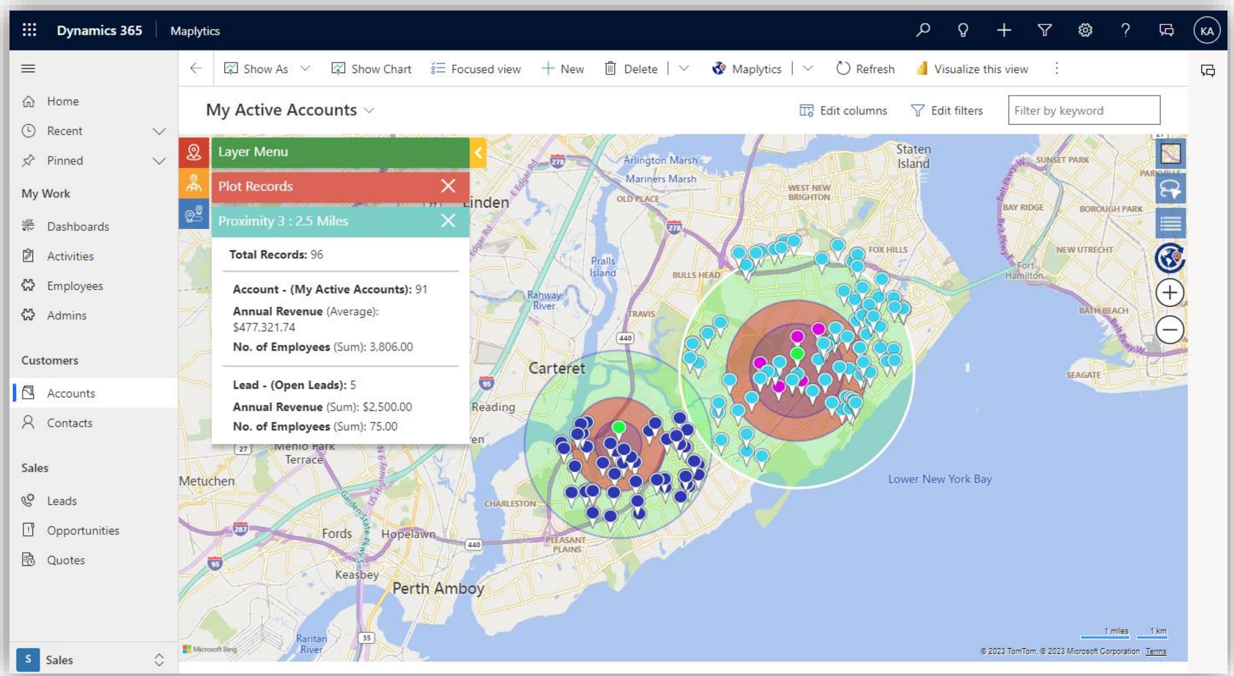
The 'Layer Menu" will show the layers based on the Searches performed. In this screenshot, it is showing the Search 1 that contains the default view plotted and the Search 2 with the records plotted from Alabama State using 'By region' option as mentioned above. User can use the toggle buttons to hide/show the Search layers or the layers within an individual Search. This will also help to view the pushpins that are overlapped by other pushpins in case the views selected in two searches are the same like in our example above.

Users can also use the ability of Multi Search layers to perform Proximity Search at different locations in the same map. The below screenshot shows Search 1 where the Proximity search is performed on My

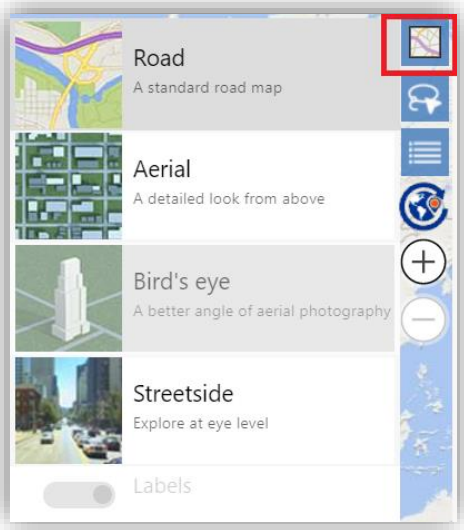
Active accounts that is the default view here & the All Contacts and Search 2 where the Proximity search is performed on My Active Accounts on a different location.



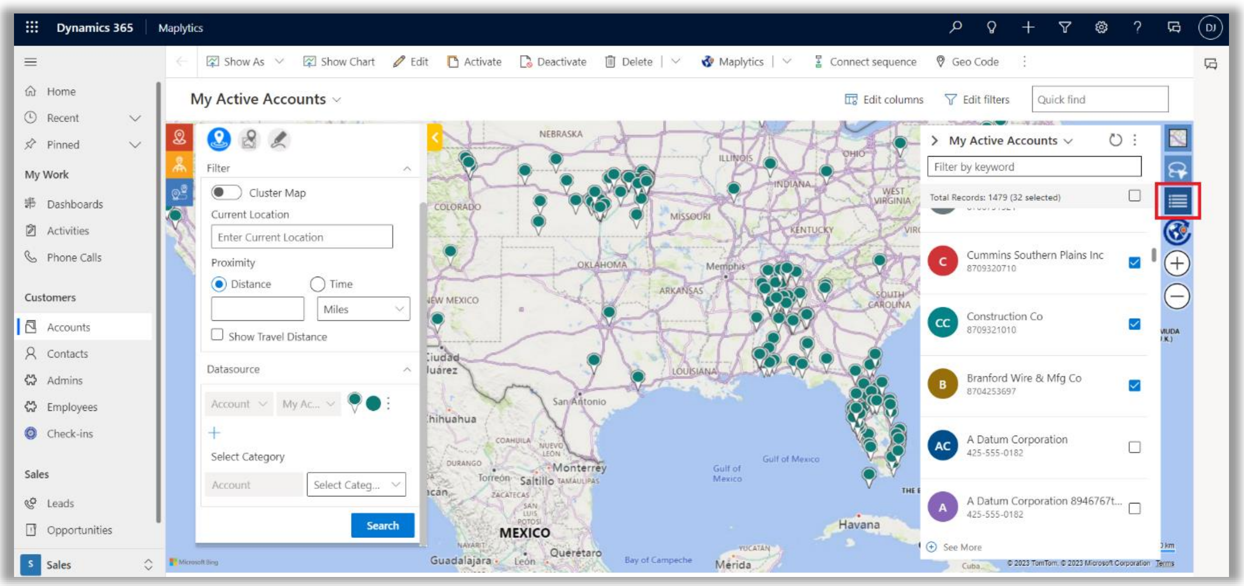
While clicking on the circles of the Proximity searches the Summary card information will be shown based on the pushpins belonging to the respective Proximity Searches.



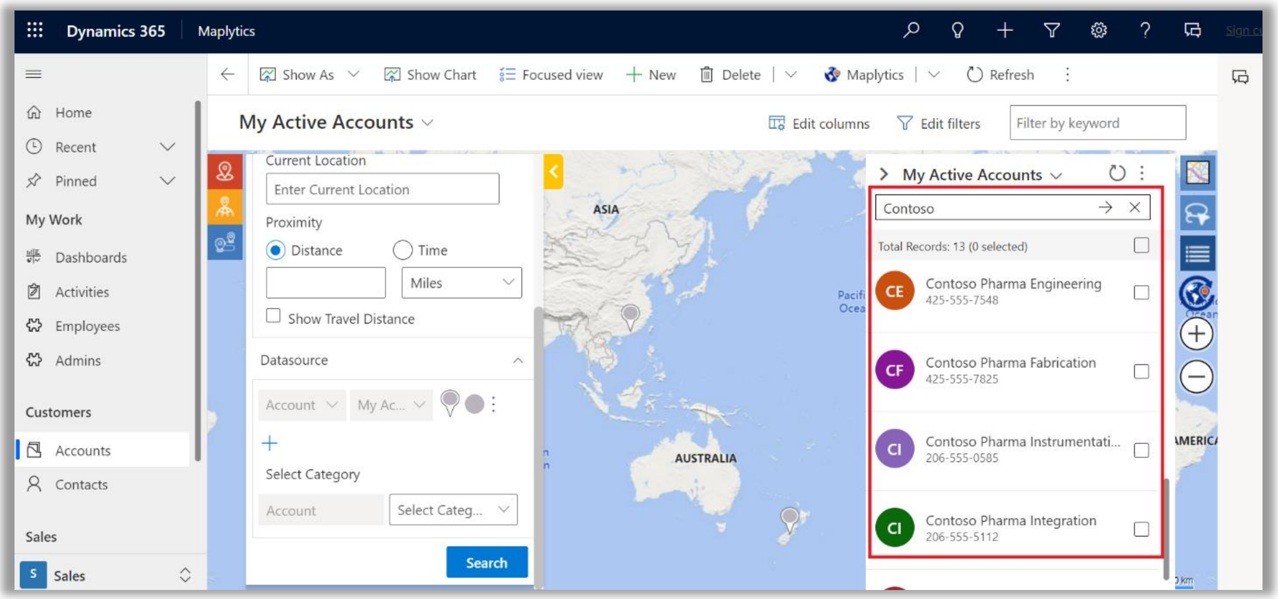
- Map mode and labels- Two map modes are available viz. Road and Aerial view. User can also select to view the labels of regions on the map.



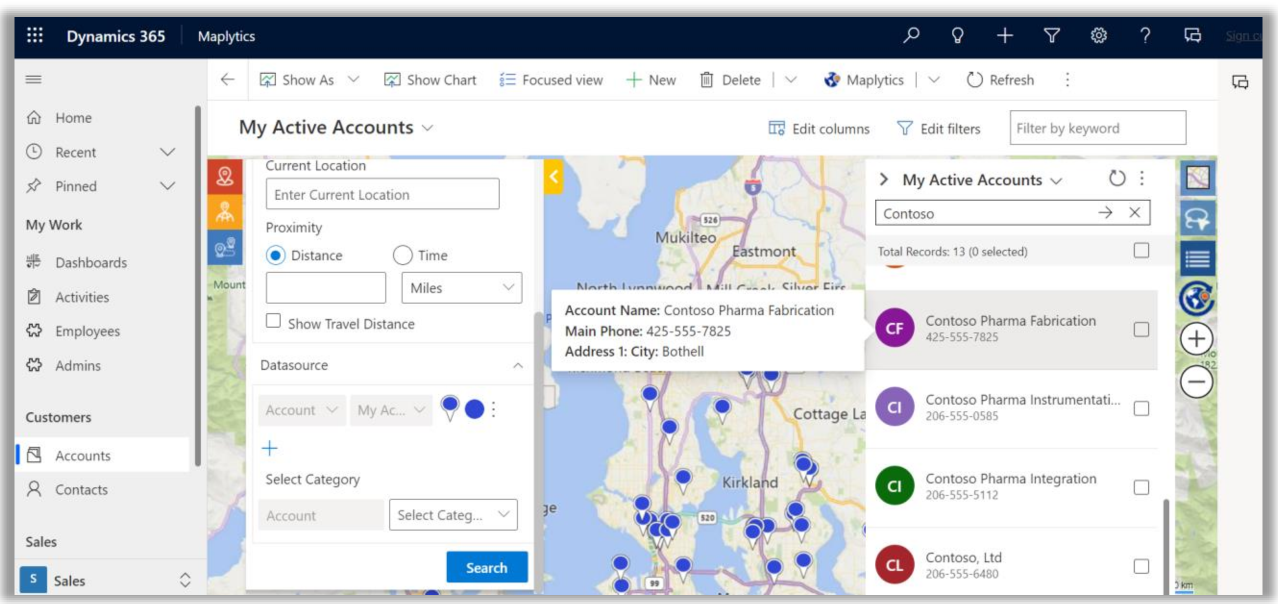
- Data Grid – All the records of the view are listed in the Data Grid. The check box against the records can be ticked to utilize the records for operations.



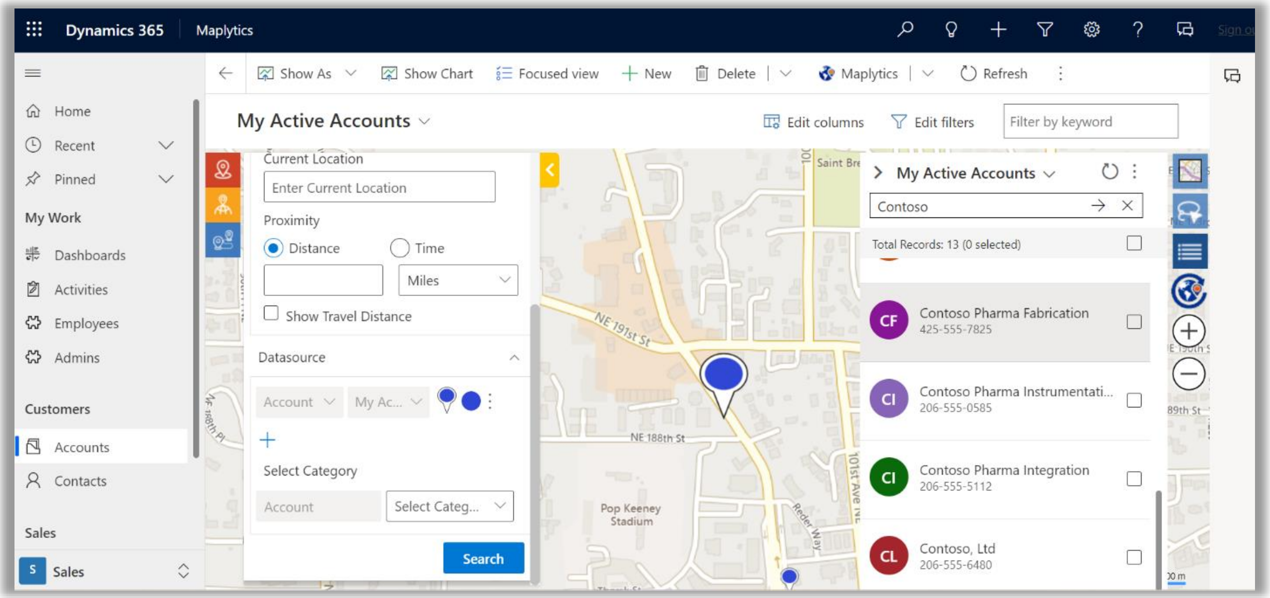
In case a particular record needs to be selected, it can be filtered out from all the records of the view by adding a suitable keyword



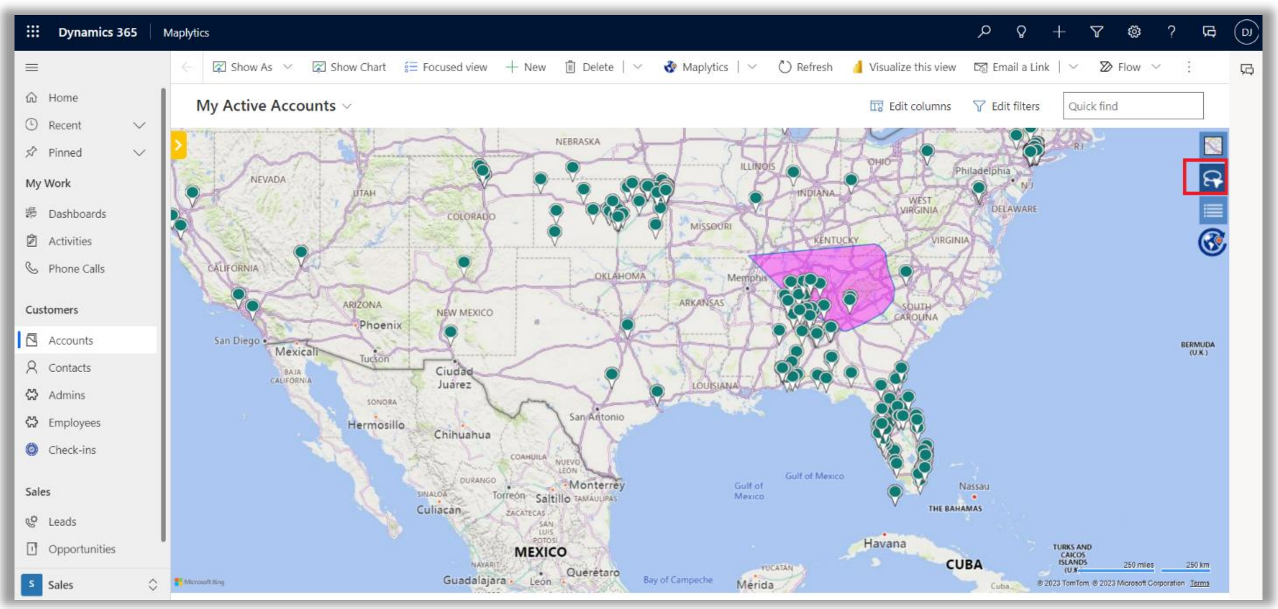
Hovering over the record image displays the details of the records. These details are configurable

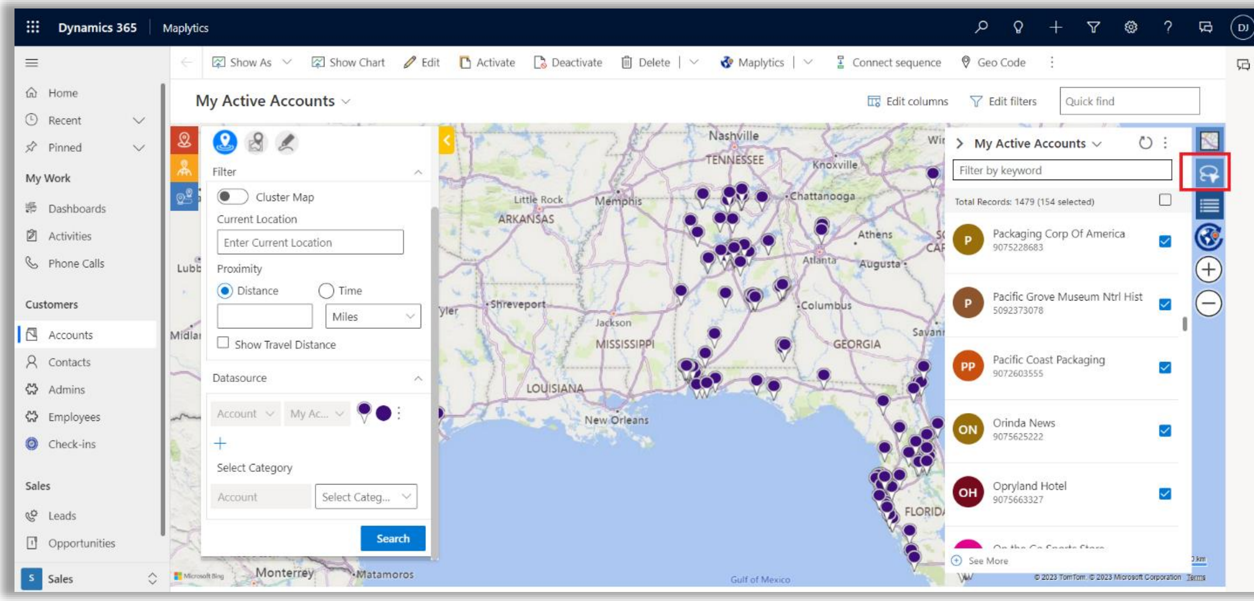


Clicking on the record row in the data grid zooms the map view to the area of the pushpin. The pushpin blinks a couple of times and rests

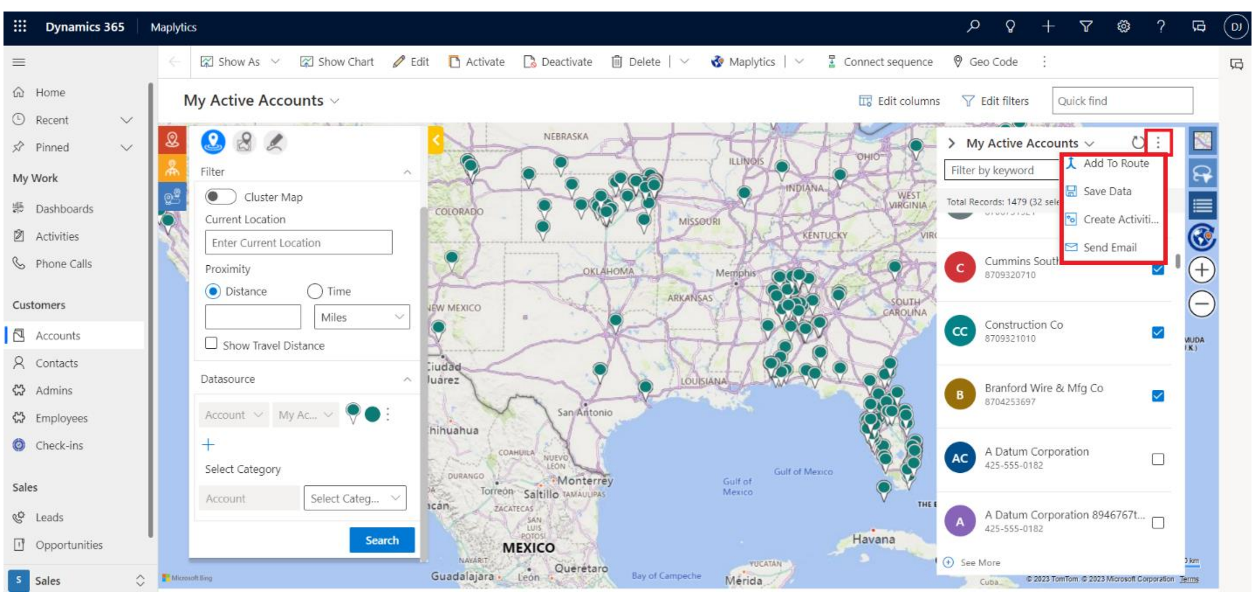


- Lasso Tool- The user can use this tool to select a bunch of records together at once. The records will get selected in the data grid and be available to perform multiple activities.





- <u>Mass Actions</u> – Mass Actions can be performed on the selected records. They could be added to a travel route, the selected data set could be saved, activities could be created for these records, mail could be mass sent to them.



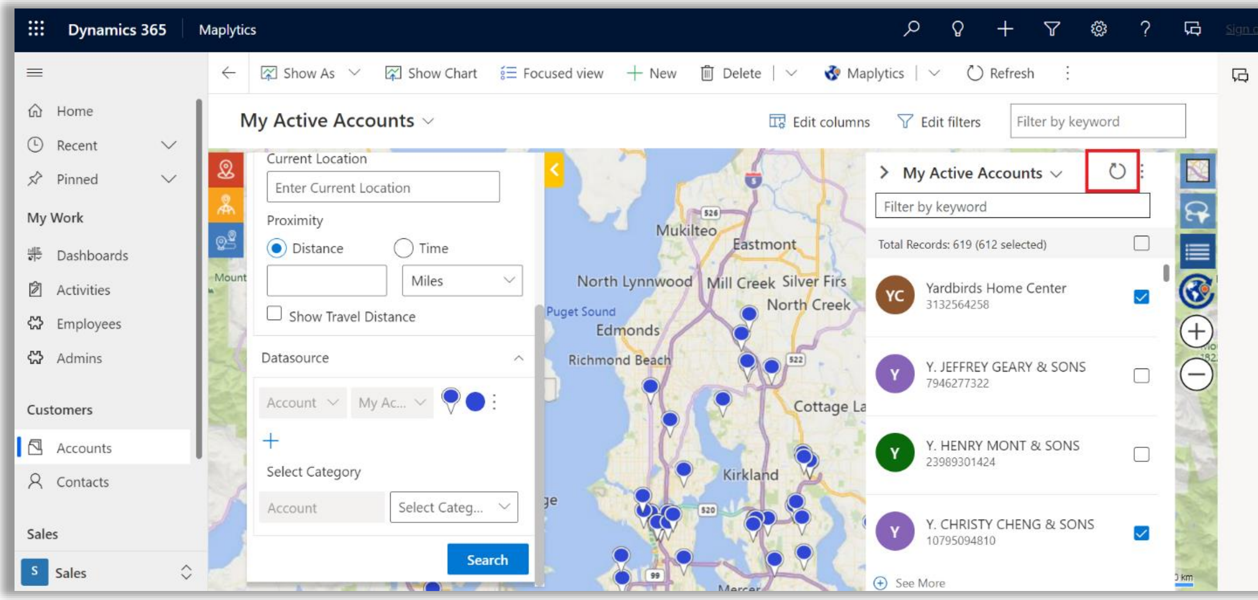
Add To Route: This option will add selected data points to the route. The user can add at max 25 data points to the route

Save Data: The selected records can be saved as static Marketing List or Personal View in Dynamics CRM

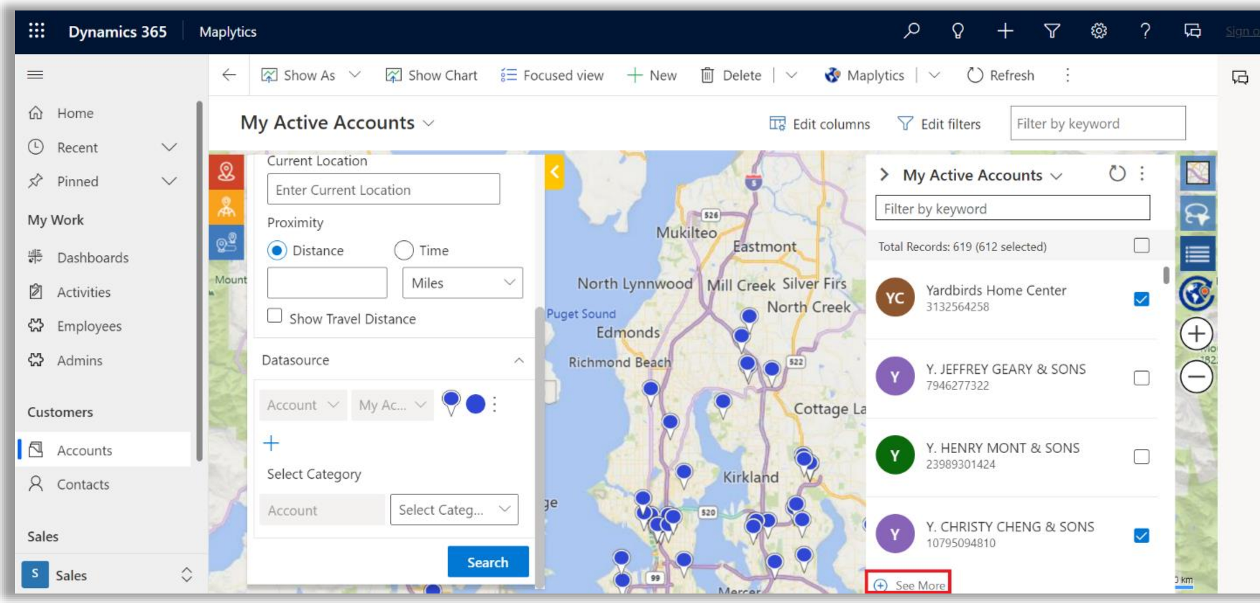
Create Activities: User can create activities for non-activity Entity records currently selected in "View Data grid." The user can define the Activity, Subject, Schedule Start date and Schedule end Time, Duration, Owner(User/Team) and Priority. The activities selected in respective Entity maps can be seen in the list of activities available to create using the button of "Create activities". By clicking this button below window will open and the activities will be created based on the inputs given in the window by the user.

Send Email: The user can send a mass email to the selected records. User can select any one the available email templates or a new email to write their own content. User can also choose to keep the recipient as To/Cc/Bcc in the email.

- Reset Button- This button resets records as per current search



- See More- The current view displays the CRM Records on the current page. To view more records, user can click on the See More option at the bottom.



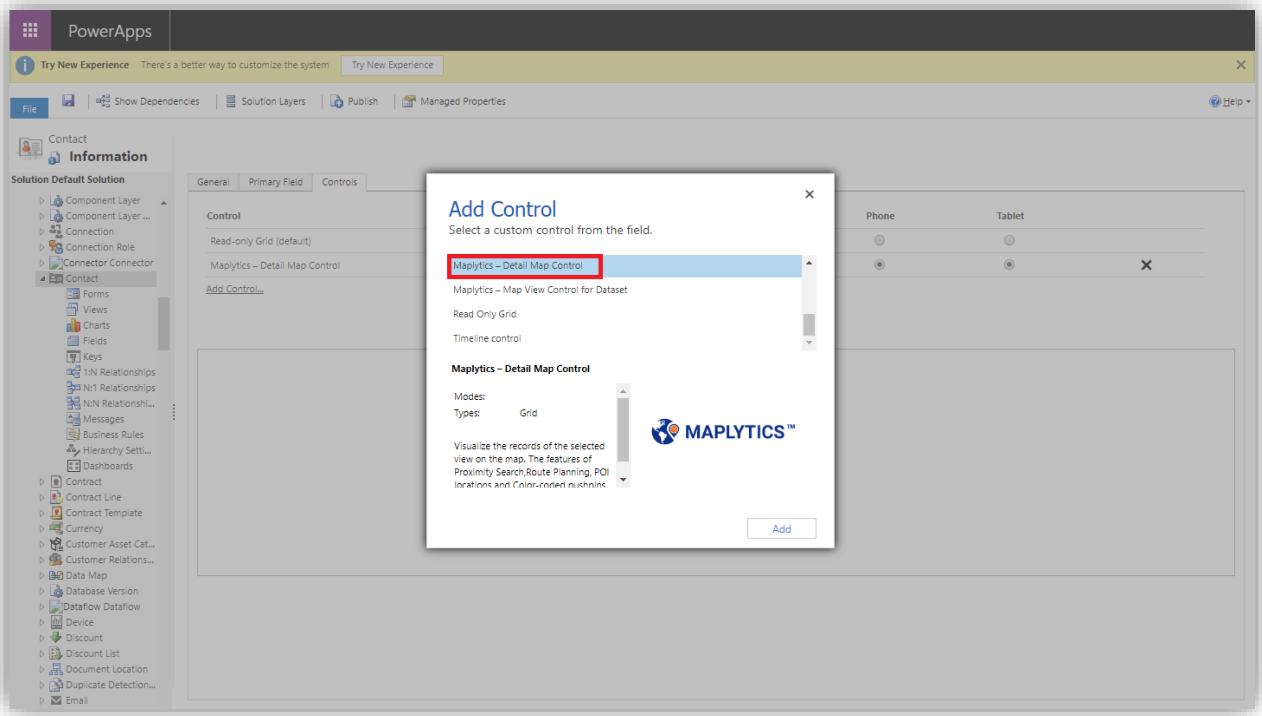
- Print Route- User can print a Route as well as the adjoining Map. User can plot a route on map, and use the button 'Print Route' to print the route.

Note: There are some limitations to some of the features mentioned above which will be available in our future releases.

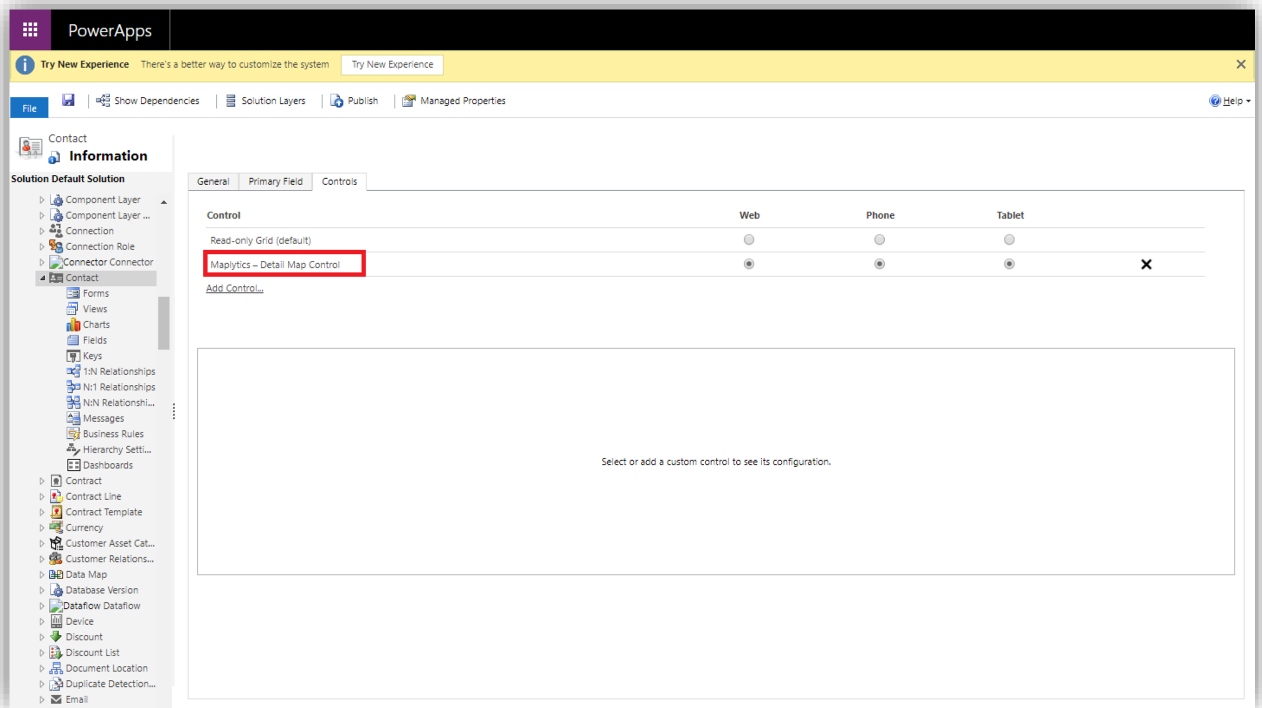
<u>Steps to Add control</u>: To add this control on an entity grid, user can follow the steps mentioned below:

1. ***Go to Settings > Advanced Settings > Customizations > Customize the System > Components > Entities > Required Entity***

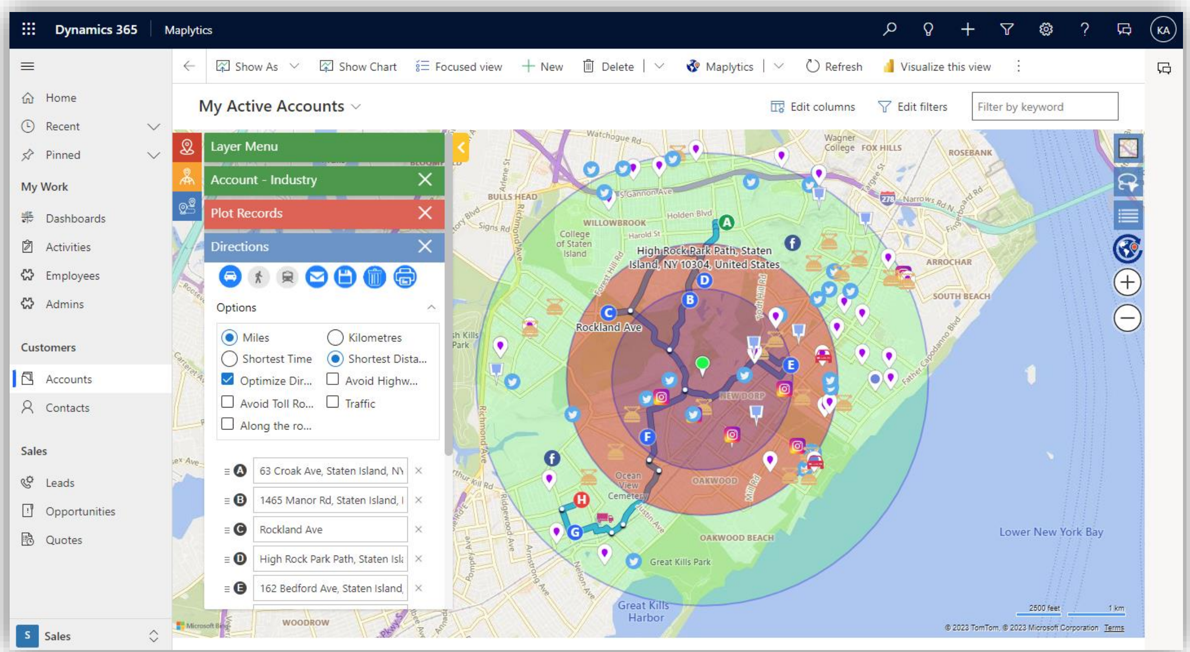
   Here, we have taken the Contact entity for an instance. ***Within Contacts, go to Controls > Add Control > Select Detail Map Control for Dataset > Add***



2. User can choose to allow the control on Web, Phone or Tablet. Click on Save > Publish.



3. User can open any view of the entity to view this control.



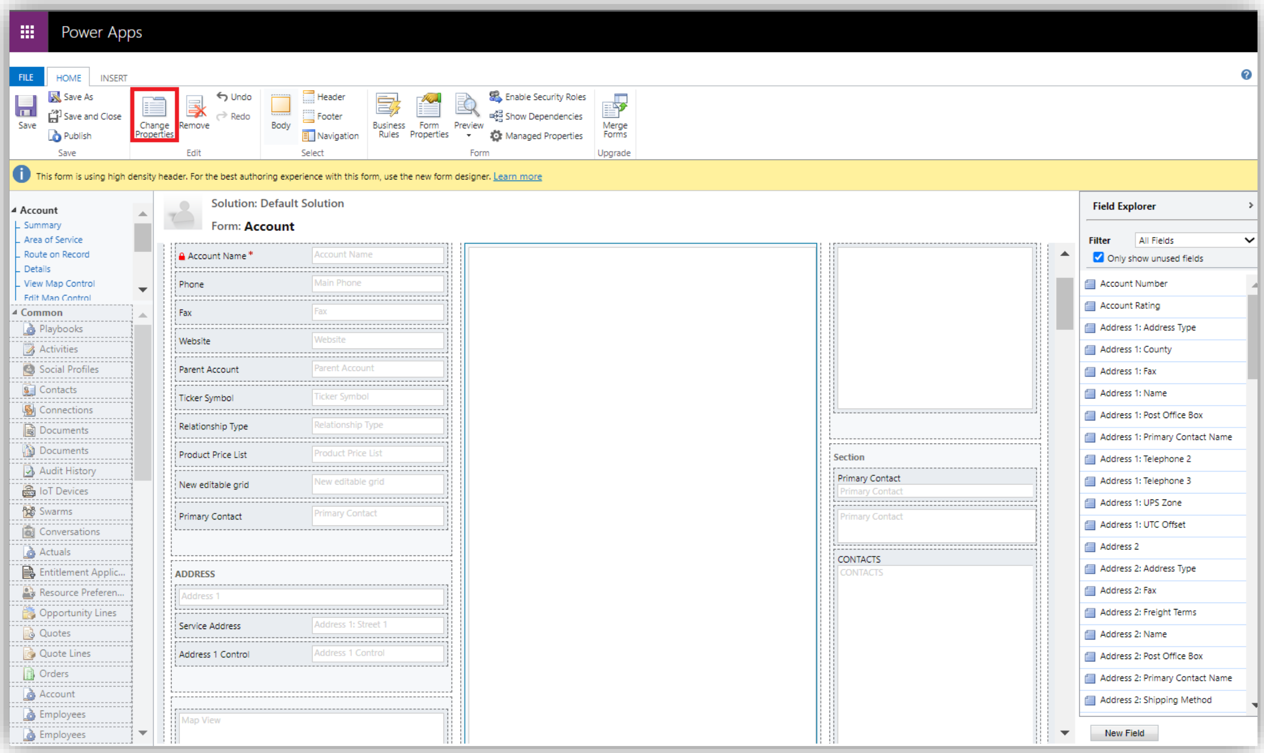
Address Autosuggest Control

Users can add this control on any of the fields with the Data type 'Single Line of Text' of the record to get auto suggestions of addresses while typing the respective field. User can select the required address and get that address auto-filled within the fields.

<u>Steps to Add control</u>: To add the control to a field within a record form, the user can follow the steps mentioned below:

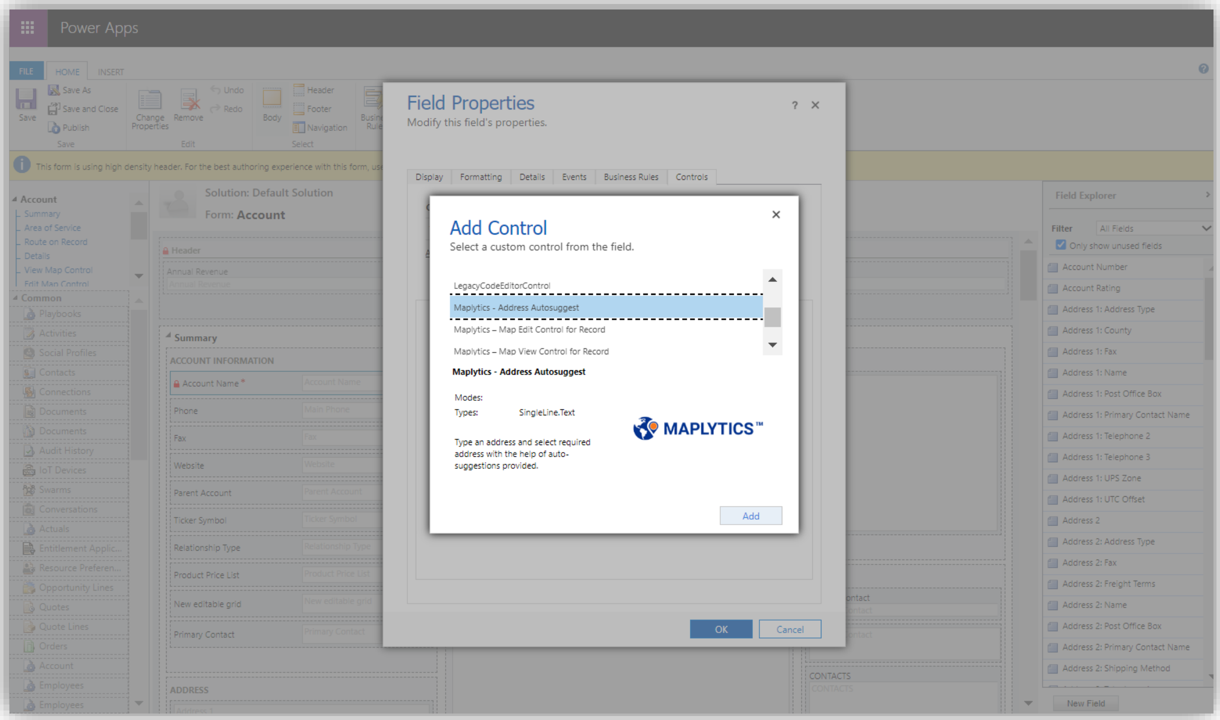
1. ***Go to Settings > Advanced Settings > Customizations > Customize the System > Components > Entities > Required Entity***

   Here, we have taken the Accounts entity for an instance. ***Within Accounts, go to Forms > Main Form > Select any field > Change Properties***

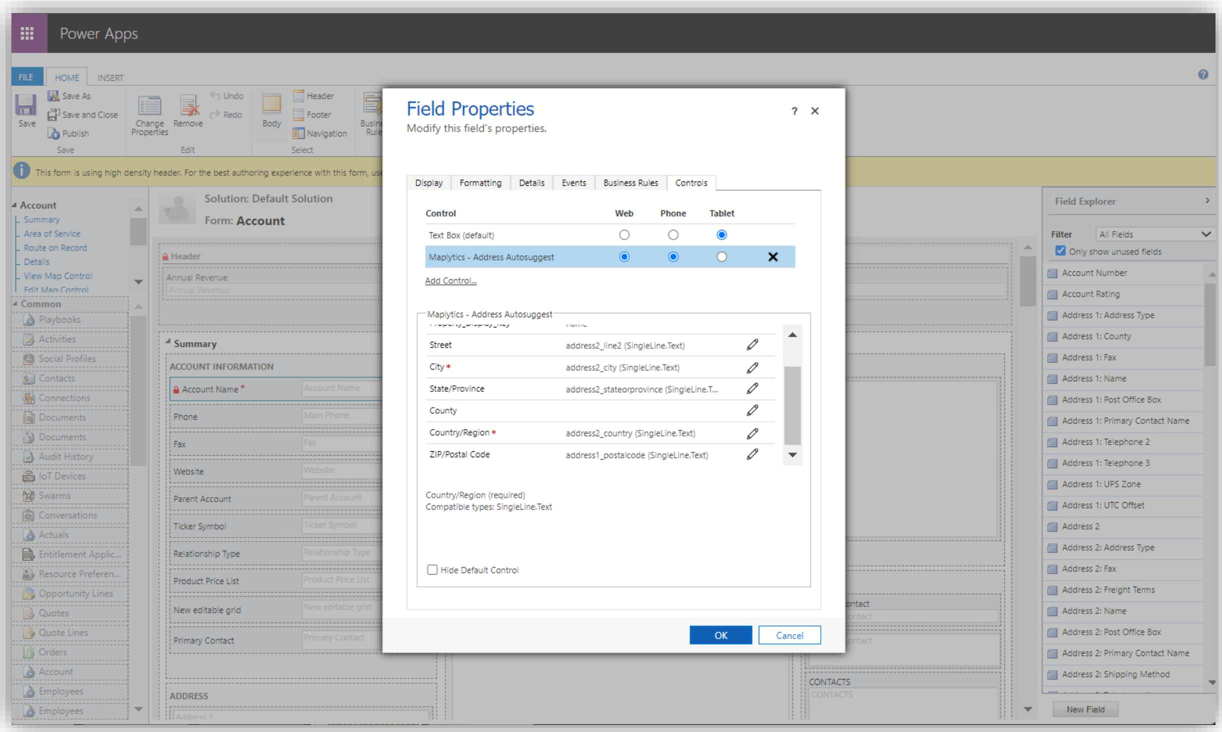


> ***Note: The data type of the field on which user needs to add control should be 'Single Line of Text'.***

2. ***Go to Controls > Add Control > Select 'Maplytics - Address Autosuggest > Add***

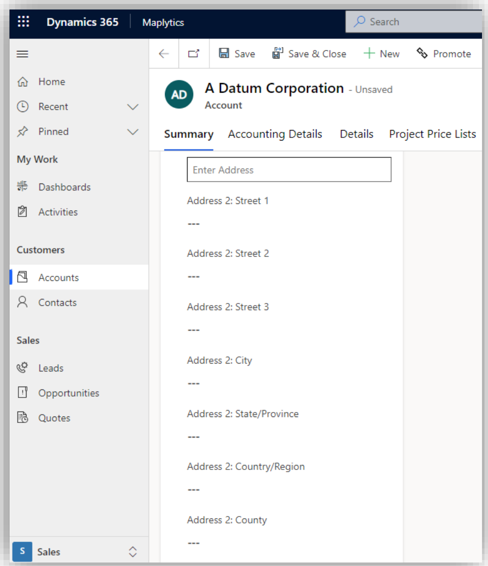


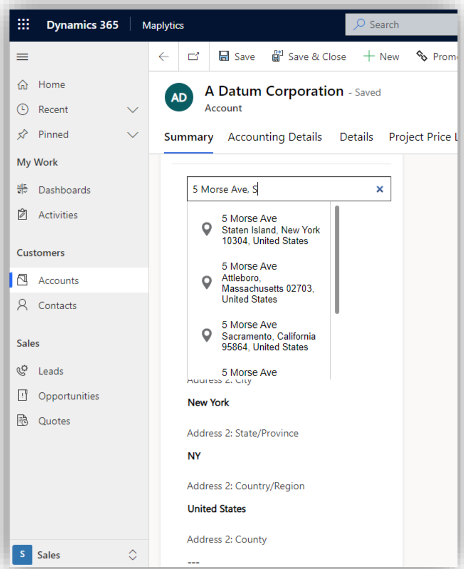
3. While adding the control, user needs to choose the required address fields. While user uses Auto suggest control, the respective addresses that are selected here will be auto filled. User can choose to allow the control on the Web, Phone, Tablet. Click on ***'OK' > Save & Publish.***



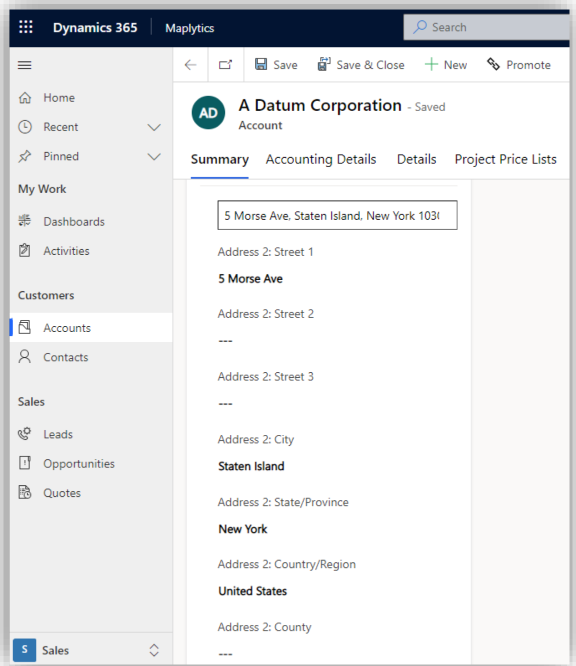
Note: *Please uncheck the option of 'Display label' within the field properties for better visualization.*

4. User can open any record of the entity to view this control added on the field. User needs to enter the address and based on the entered keywords, it will provide suggestions for addresses.



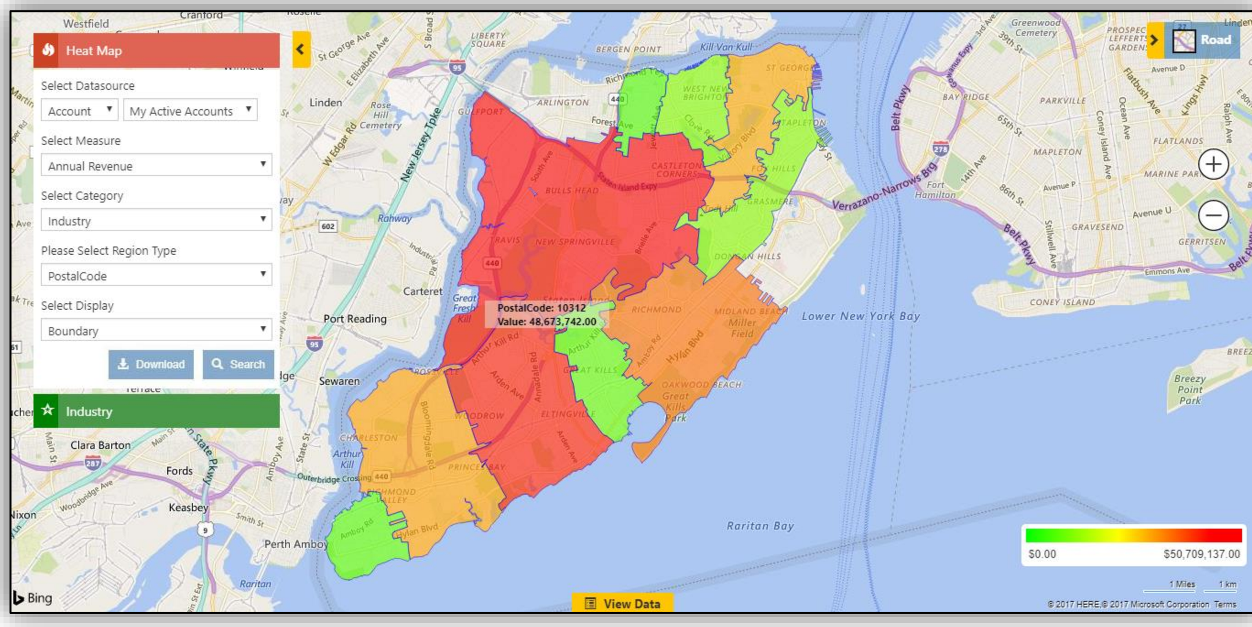


User can select the required address and it will get auto filled within the respective address fields.



Heat Map

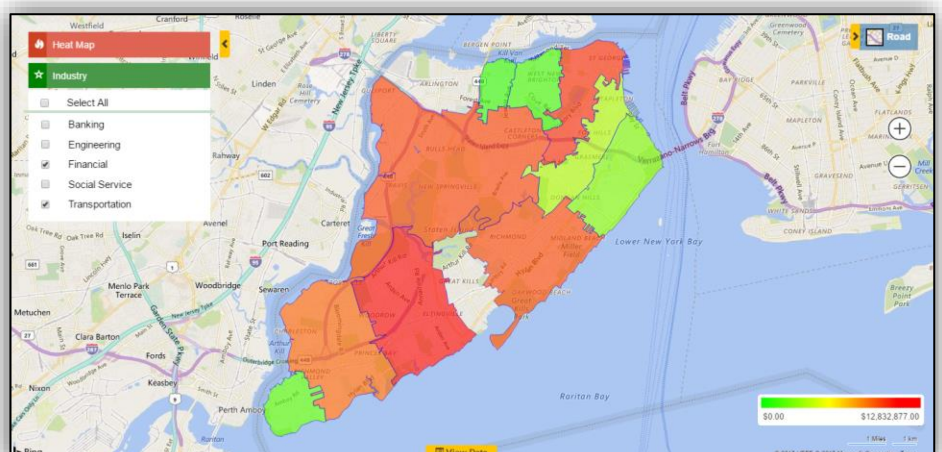
Clicking on the Heat Map command button will bring up the Heat Map Screen.



Select Datasource:
This option helps the user to choose the Entity and view combination to analyze the data.

Select Measure:
This helps the user to define the aggregation method to be used to color code the region. By default, it is based on number of records (i.e. 'By Count'). The user can change this to any other field attribute from the drop-down. Dropdown contains the list of all numeric and currency fields.

Select Category:
This option helps the user to filter data. The user can modify the search result using selection in the Category option.



Select Region Type:

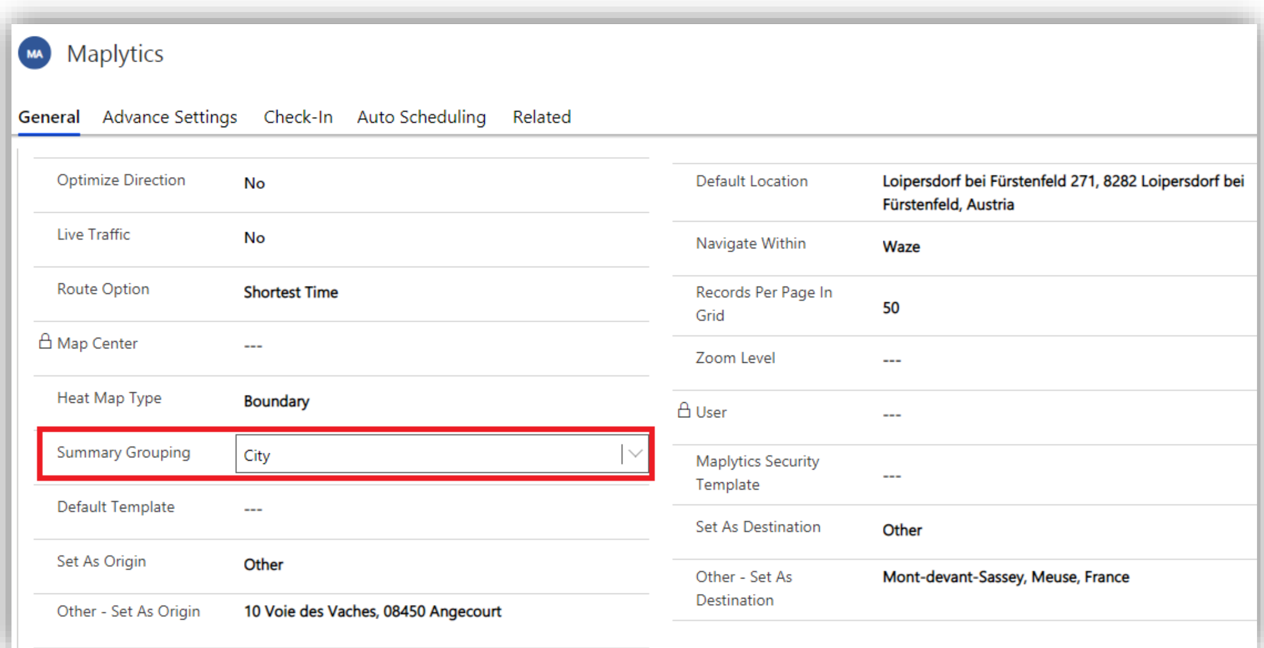
This option helps the user to define the geography level for aggregation. The user can choose any option from the drop-down:

- **City**
- **State**
- **County**
- **Country**
- **PostalCode:** The smallest postcode category, such as a zip code.
- **PostCode Sector**: The second '1' is called "Postcode Sector". Example: **CA1 1**
- **PostCode(Outward Code):** This is called Outward Code, the part of the postcode before the single space in the middle. Example: **CA1**
- **PostalCode Areas:** The next largest postcode category after Postcode1 that is created by aggregating Postcode1 areas.
- **Territory:** This option will use the Sales Territory defined in Dynamics CRM.

Note:

- ***The regions that were plotted using the option Post code Areas before will now be plotted by using the option of Post code sector.***
- ***The regions will be plotted as per the Bing maps.***

The default option is to summarize the addresses by City. You can find the default settings on the Maplytics Configuration record for the individual user as shown below:

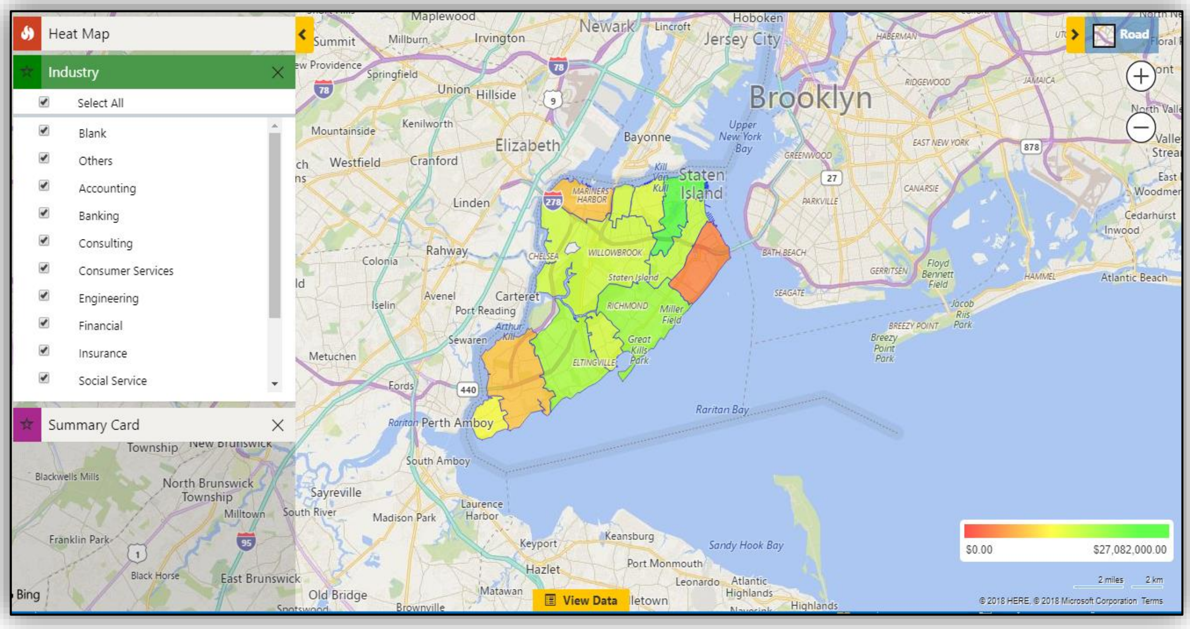


Select Display

There are four options available to analyze data on Heat Map. Default Heat map display can be selected using Maplytics Configuration Settings.

Boundary

This will create Heat Map on basis of selected region type like City, Postal Code, Country, State, Territory, etc.

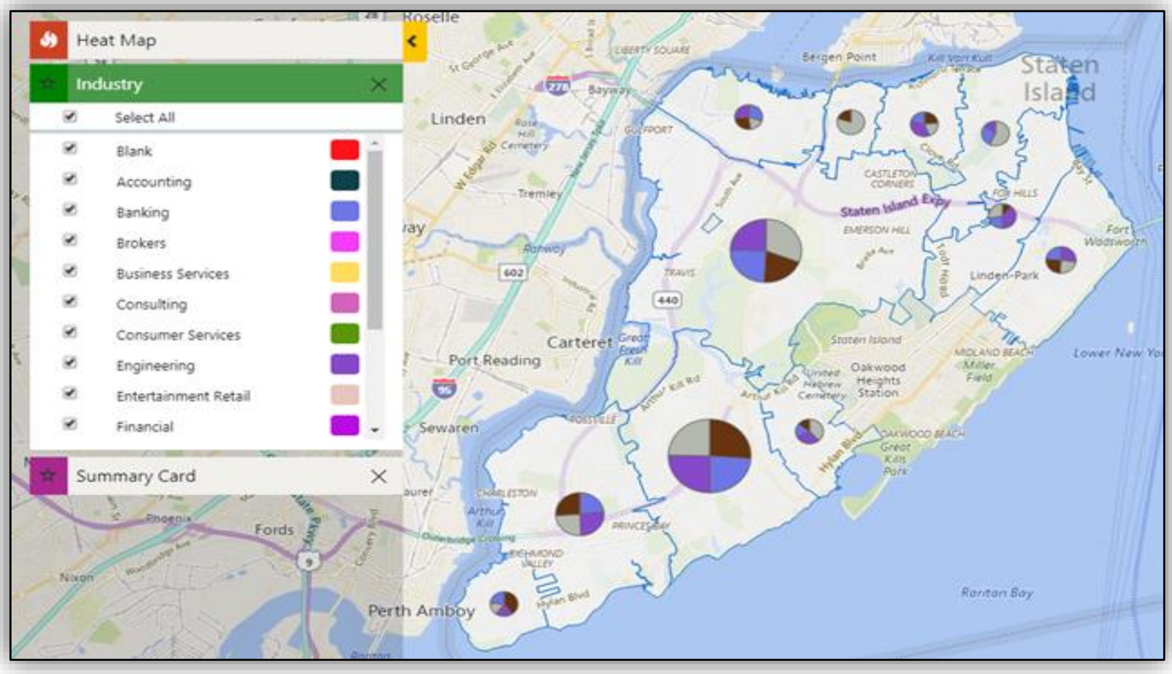


No Boundary

This option does not consider the region type. It simply creates a Heat Map by the density of the measure selected without geographical boundaries.

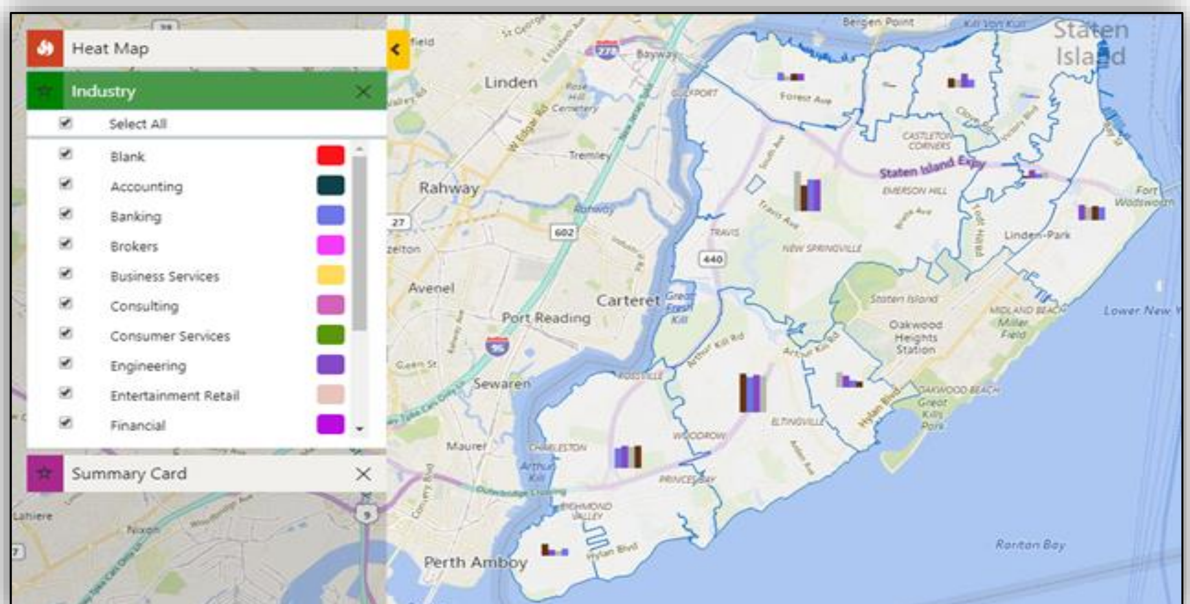
Pie chart

Users can view the data in the form of Pie charts based on the heat of the attribute selected in the Measure and Filter. Pie charts help the users to analyze the data on the basis of comparative data shown by the Pie charts on the map.

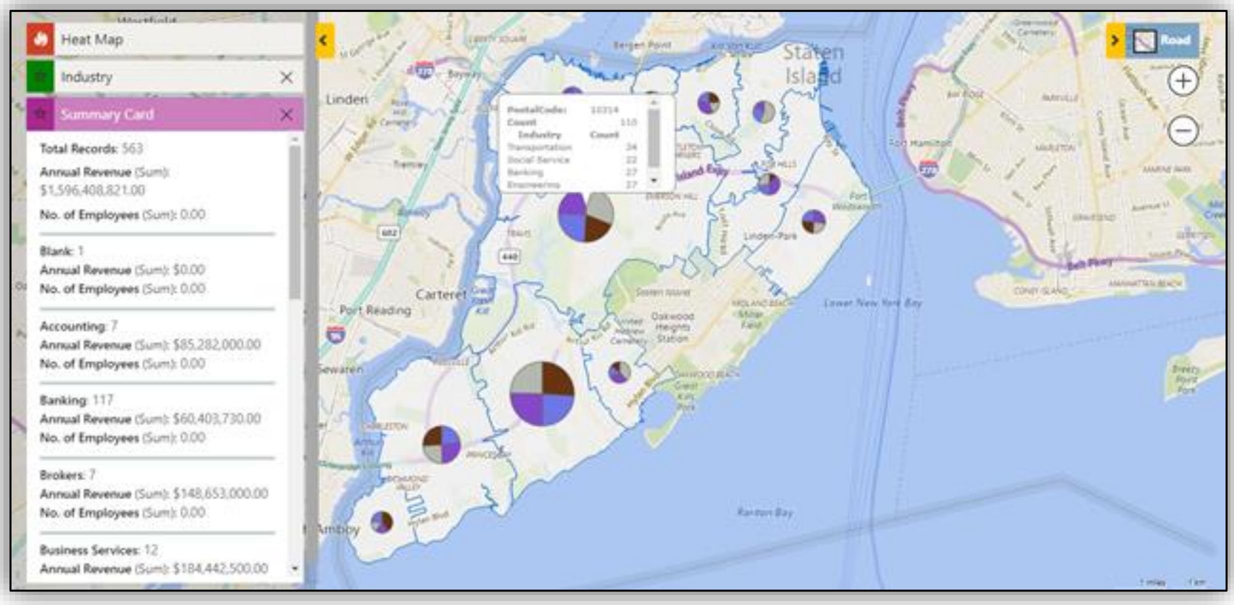


Column chart

Users can view the data in the form of column charts plotted on the basis of the heat of the attribute selected in the Measure and Filter. User can easily analyze the plotted data on the basis of the proportions shown by the respective columns.



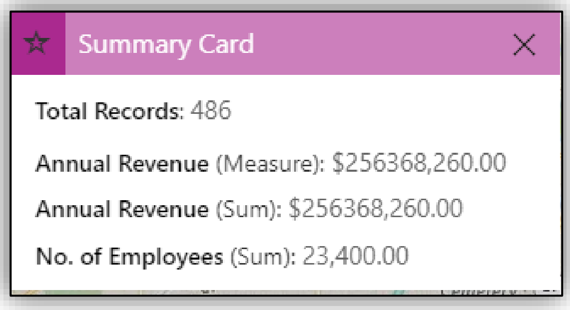
- <u>Hover</u>: On hover, it shows the details of that Boundary/Pie chart/Column chart
- <u>Summary Card</u>: The user can click on any Boundary/Pie chart/Column chart to get the summarized information of the same.

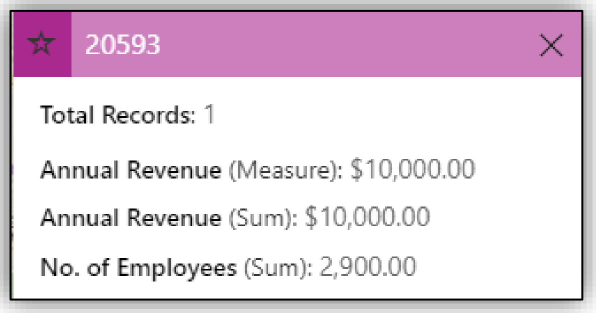


Note: If Pie chart/Column chart is selected as the Display type, the option of Territory under Region Type will not be available.

<u>Search</u>:
Clicking on the 'Search' button will plot the addresses of all the records that were selected in the view and has already been geocoded. Records that do not have their latitude/longitude updated in the record will be ignored and will not be plotted on the map.

<u>Summary card</u>:
Every time the users create a heat map visualization, a 'Summary Card' summarizing the aggregate information for the complete heat map will open up. This gives the users a brief summary of the heat map they created. The measure is also summarized by default.

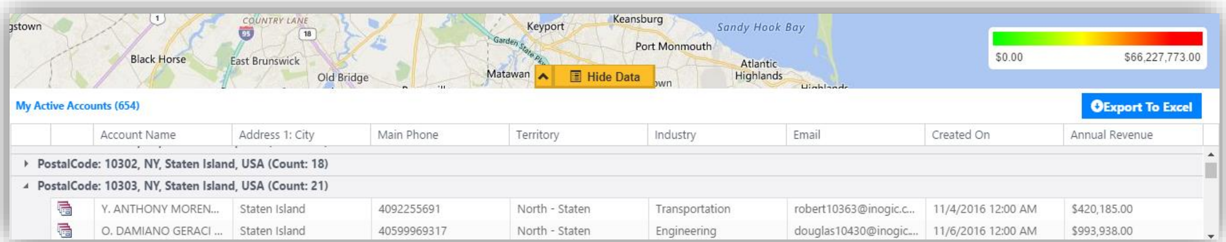




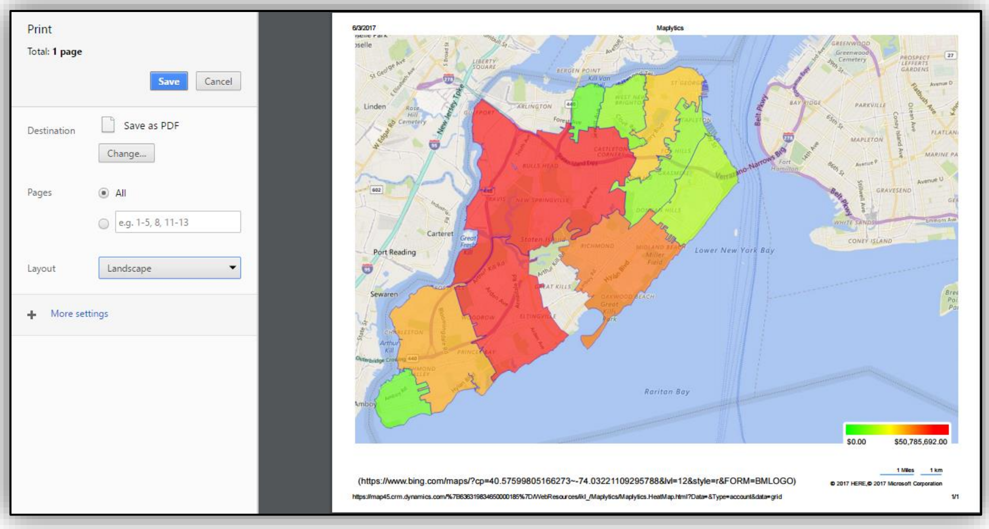
The user can also click on any region plotted on the map to open the summary card for that region. This will also filter the data of the region in the data grid. To differentiate between the summary cards, the individual summary cards have the region name/number as the title.

If the user has selected a field attribute in the 'Filter' dropdown, the summary card will further summarize the information for the selected category filter as well.

<u>Export to Excel:</u> The search results are listed by the grouping selected at the bottom of the screen and user can further export these data points using this button as shown below;



This functionality adhere to CRM security roles, if the user does not have permission to 'Export Data to Excel' in CRM, then he/she will not be able to export data from Maplytics.
Zoom Level of Heat Map uses personalized 'Zoom Level' setting for the logged in user. Also, the color scale for the Measure will be fetched from the defined 'Heat Map Measure Color Scale' in the Entity Category configuration on the Entity Map for that particular entity.
<u>Print</u>: Clicking on the print button will print the heat map, as shown in the screenshot below:



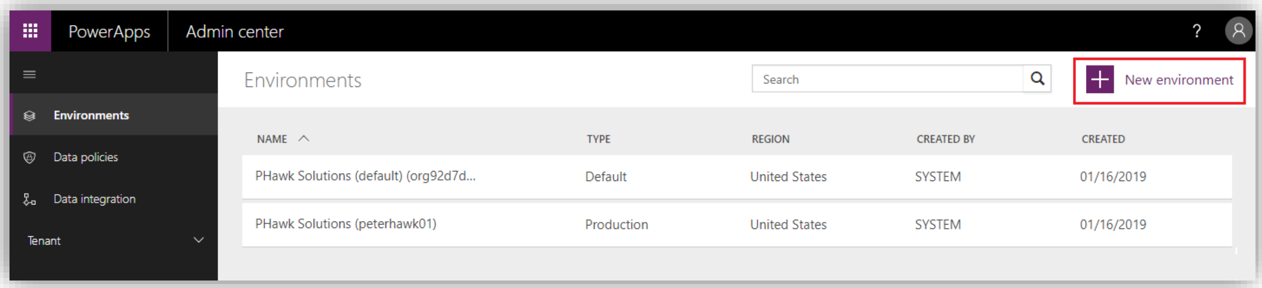
> ***Note: A4 size paper with landscape mode is recommended while printing.***

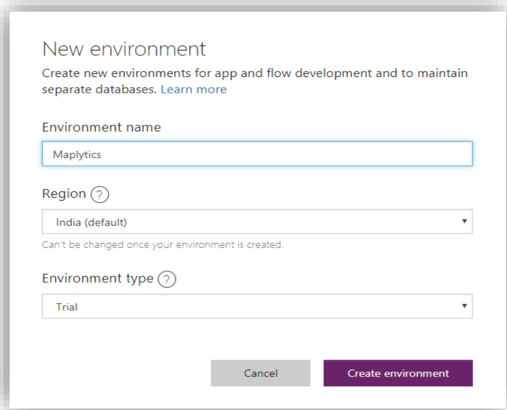
Support for CDS

If user does not have Dynamics CRM, they can still use Maplytics by subscribing for the PowerApps platform. This platform comes packaged with some base entities that includes Accounts and Contacts along with other platform entities to provide support for it security and other infrastructure.

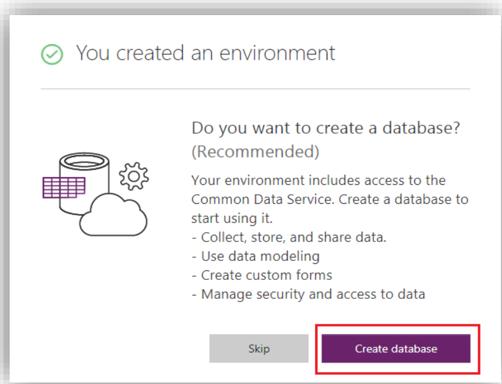
To use Maplytics within PowerApps, user can follow the steps mentioned below:

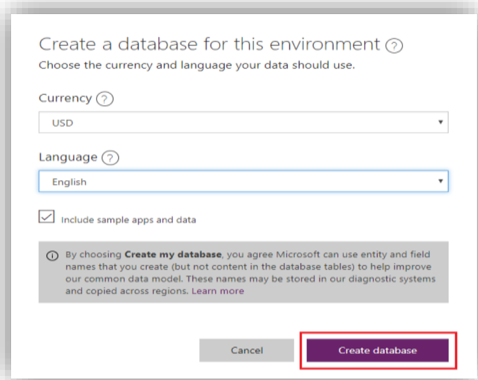
A. Go to admin.powerapps.com > log in using PowerApps credentials.
B. Click on 'New environment' > Enter the details > Create an environment



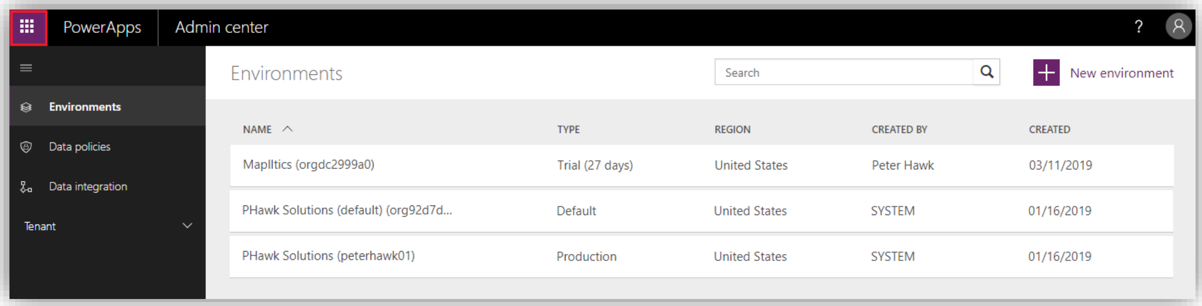


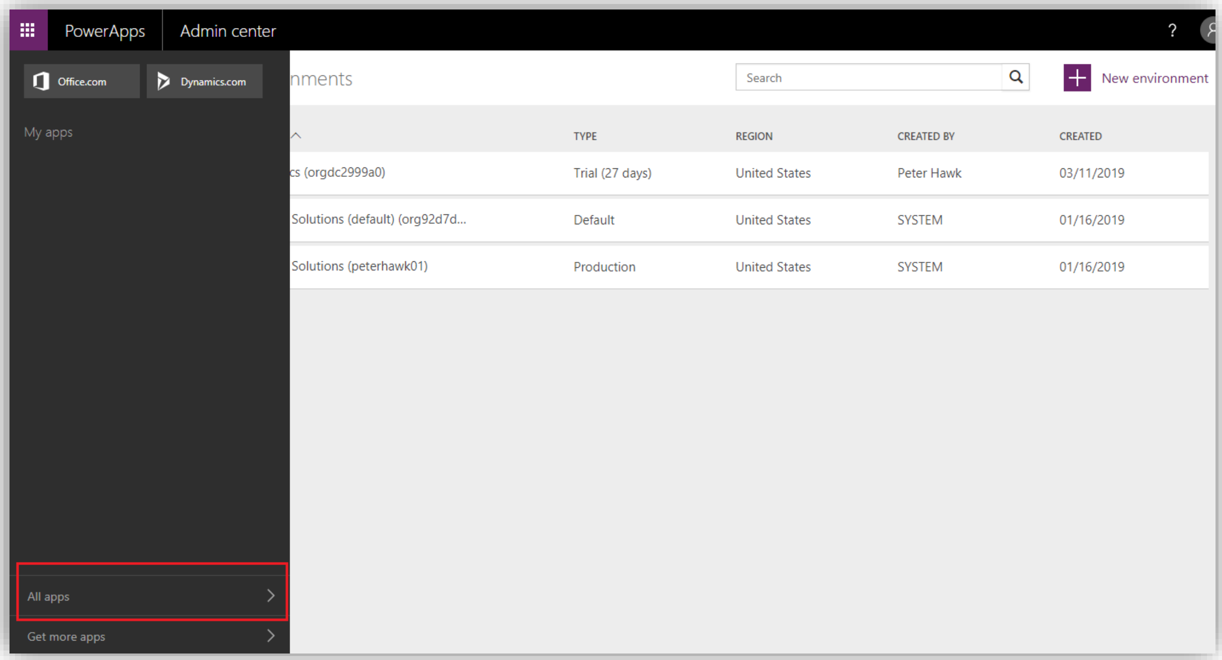
- Click on 'Create database' > Select the required details > Create database

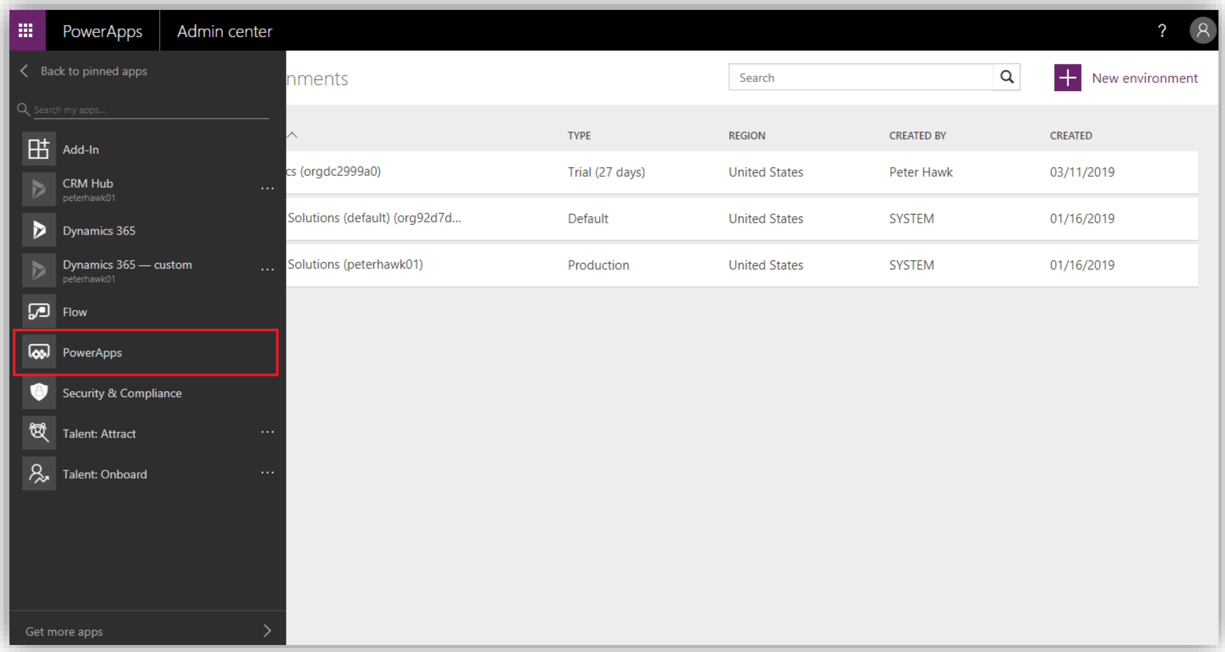




- Click on 'Navigate to other Applications' > All apps > Powerapps > Select required environment

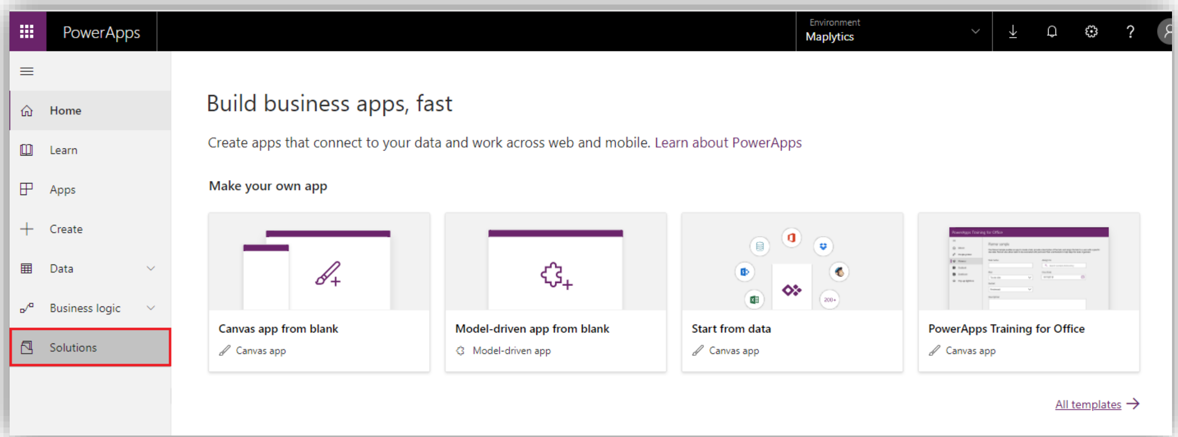

PowerApps
Admin center
Environments
Search
New environment
Environments
Data policies
Data integration
Tenant
NAME
TYPE
REGION
CREATED BY
CREATED
Mapltics (orgdc2999a0)
Trial (27 days)
United States
Peter Hawk
03/11/2019
PHawk Solutions (default) (org92d7d...
Default
United States
SYSTEM
01/16/2019
PHawk Solutions (peterhawk01)
Production
United States
SYSTEM
01/16/2019

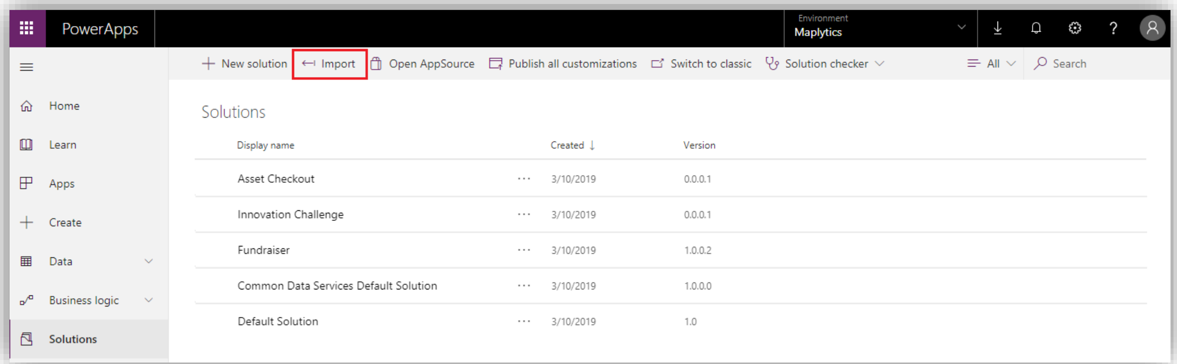

PowerApps
Admin center
Office.com
Dynamics.com
My apps
All apps
Get more apps
Search
New environment
TYPE
REGION
CREATED BY
CREATED



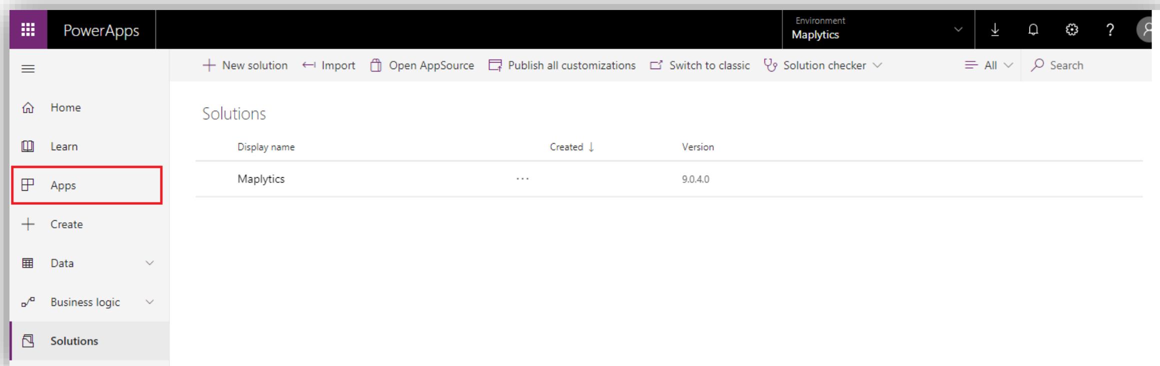
Import Maplytics solution

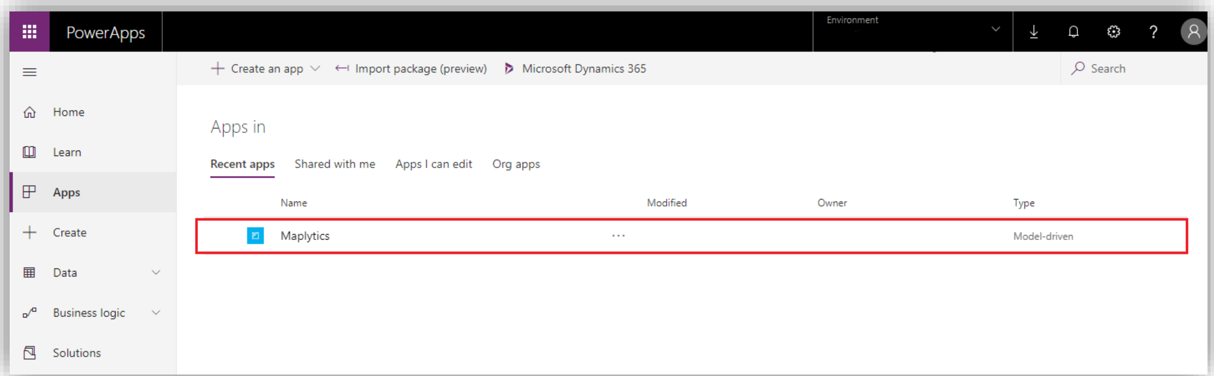
- Click on solutions at the left navigation pane > Import > Maplytics. This will create the Maplytics App.



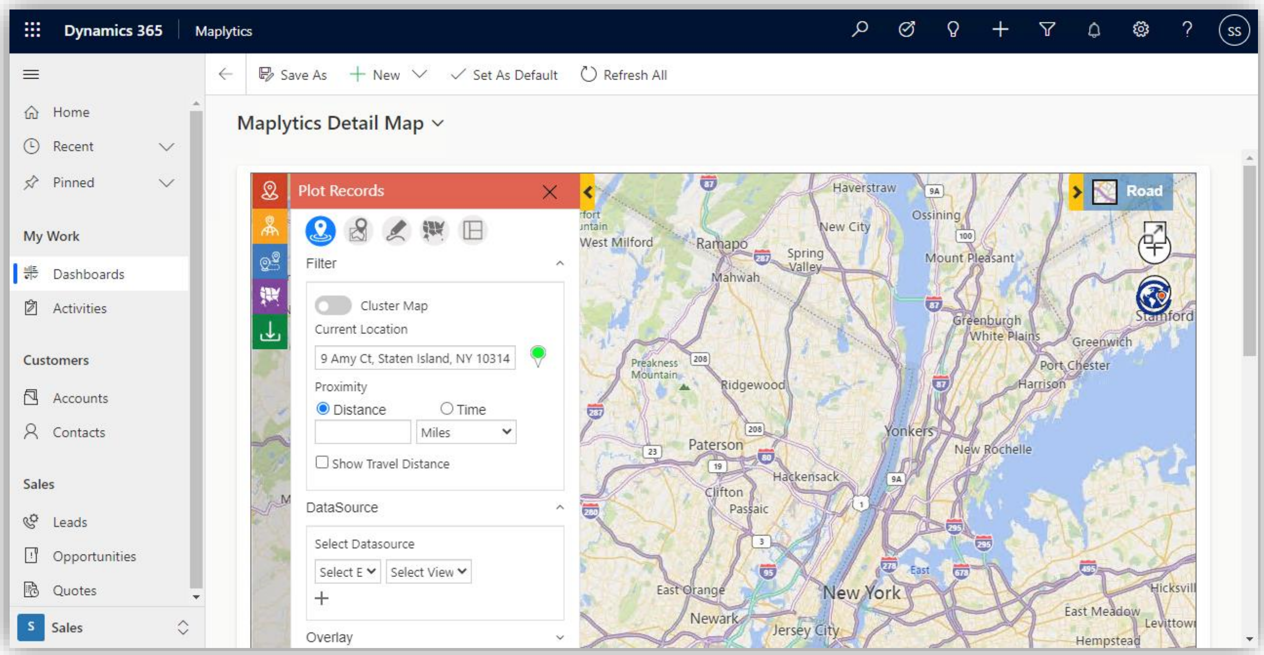


- To access the Maplytics App, click on Apps at the left navigation pane > Select Maplytics App.





Clicking on the Maplytics app, following Maplytics dashboard will open.



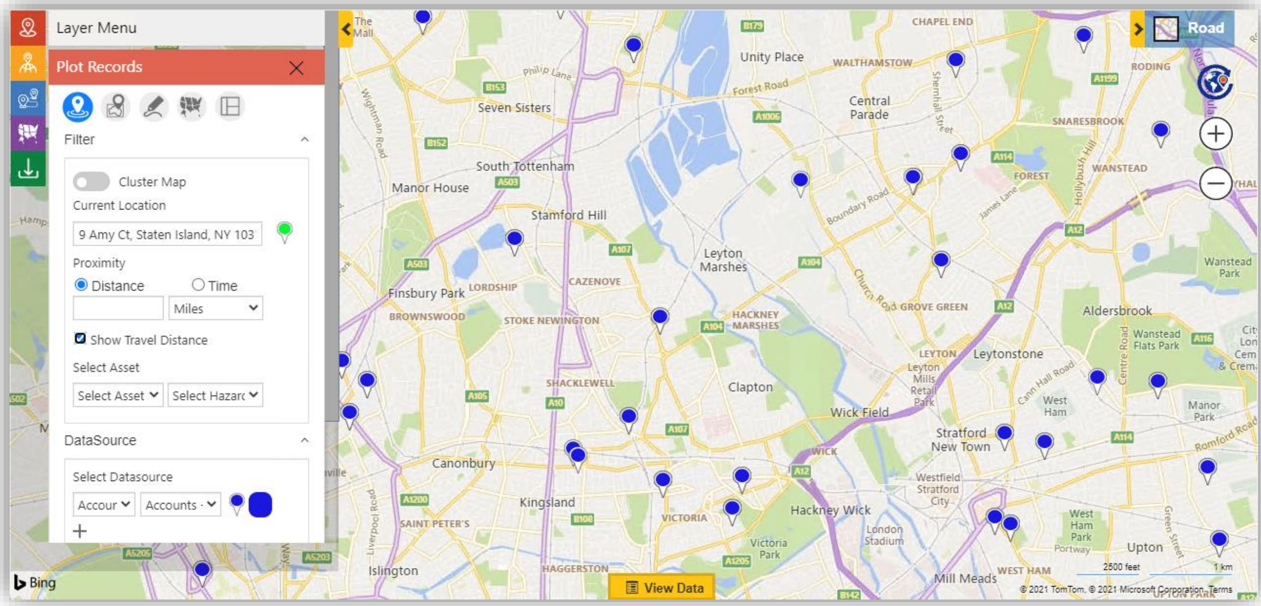
- ○ <u>Activate and configure Maplytics</u>
  To access the Maplytics user needs to Activate and Configure Maplytics to start the license and configure the basic Entity maps, Dashboards and Census data.
  - ▪ Go to Settings > License registration > Click on Activate
  - ▪ Go to Settings > License registration > Click on Configure
- ○ <u>Add users to Maplytics team</u>
  - ▪ Go to Settings > Teams > Maplytics team > Add users

Note:

1. ***Entities of leads, Cases, Opportunity, Invoices are not available in PowerApps***
2. ***Marketing lists are not available***
3. ***While configuring, four Entity maps will get created for Accounts, Contacts, Appointments and Customer Address***
4. ***Only three dashboards will get shipped on configuration***

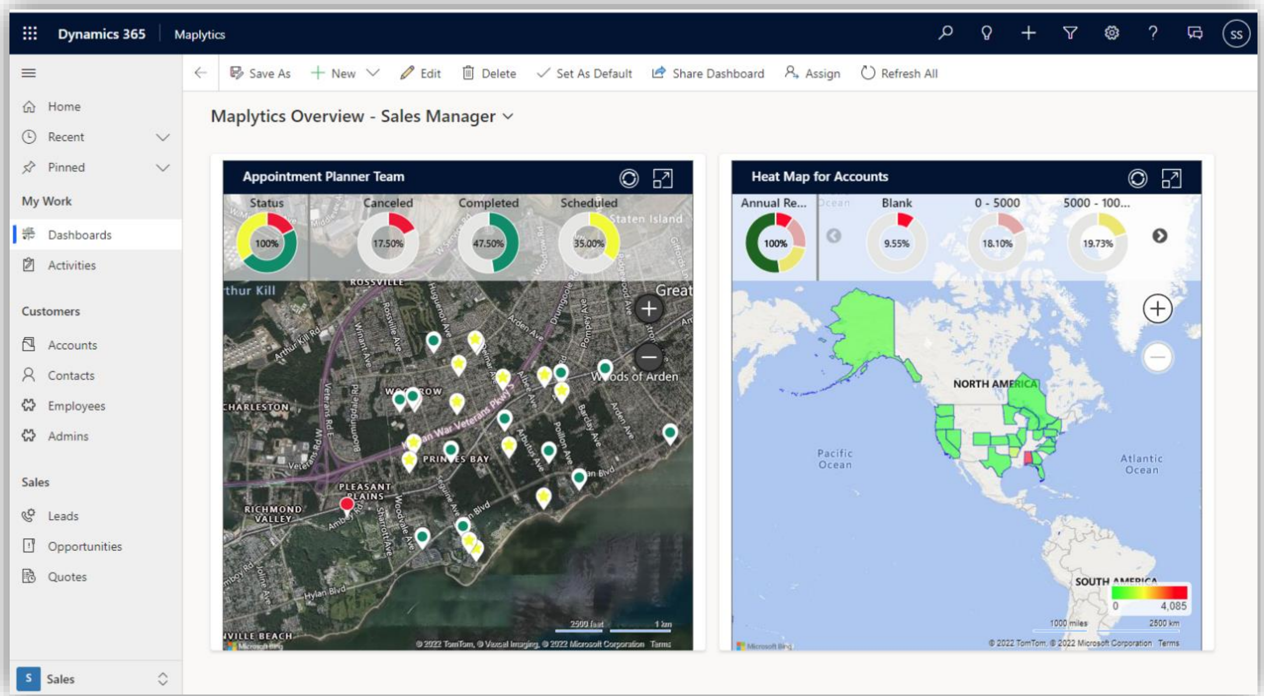
Access Maplytics in PowerApps

User can use the credentials of the environment to log in to PowerApps and select the Maplytics app to perform Maplytics features. Use the buttons ‘Details Map’ or the ‘Heat Map’ to open the respective maps.



Maplytics Dashboard

The users can define their Dashboard views for Maplytics and include them as web resources in standard Dynamics CRM Dashboards.

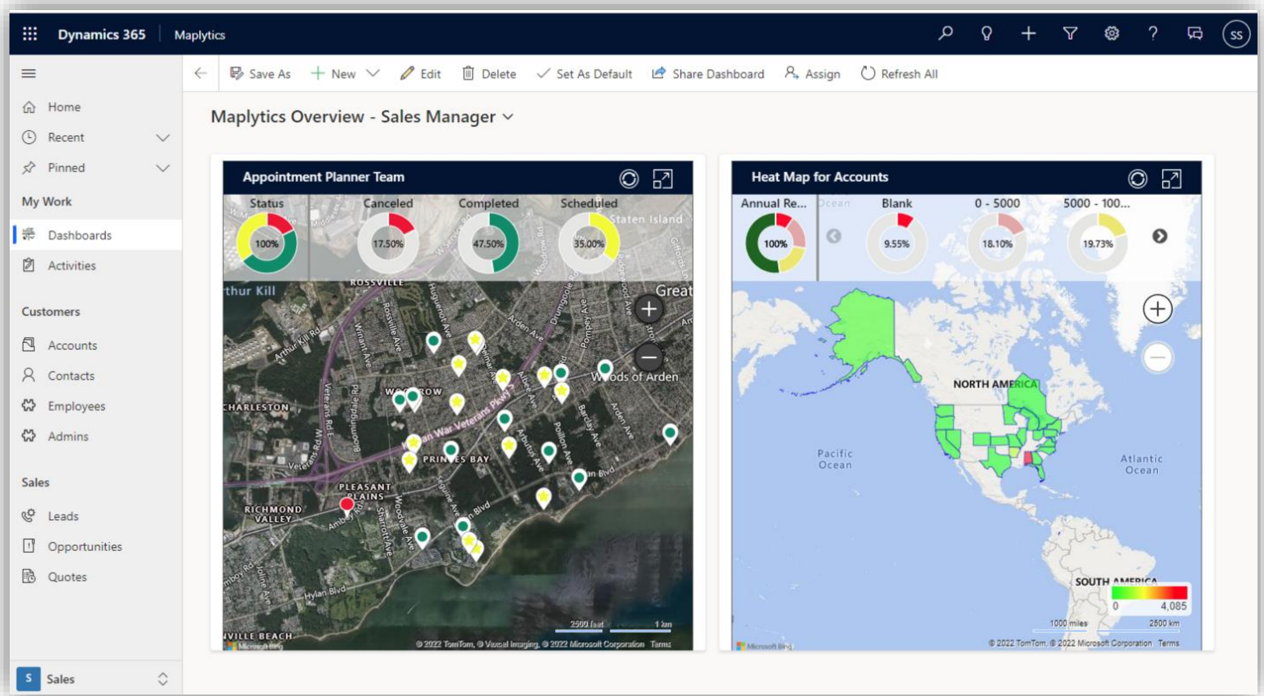


Maplytics ships with five pre-defined Dashboards for various Sales and Service Modules for different user roles. To set up more dashboards, please refer the 'Installation Manual'.

View Category donuts in dashboard

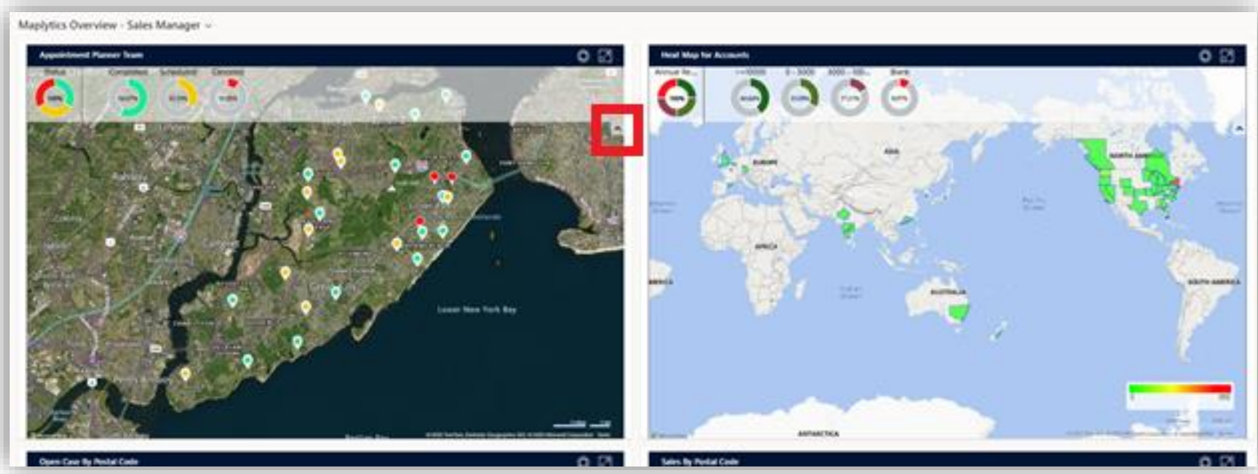
Users can view the categorized data in the form of donuts on the respective dashboards.

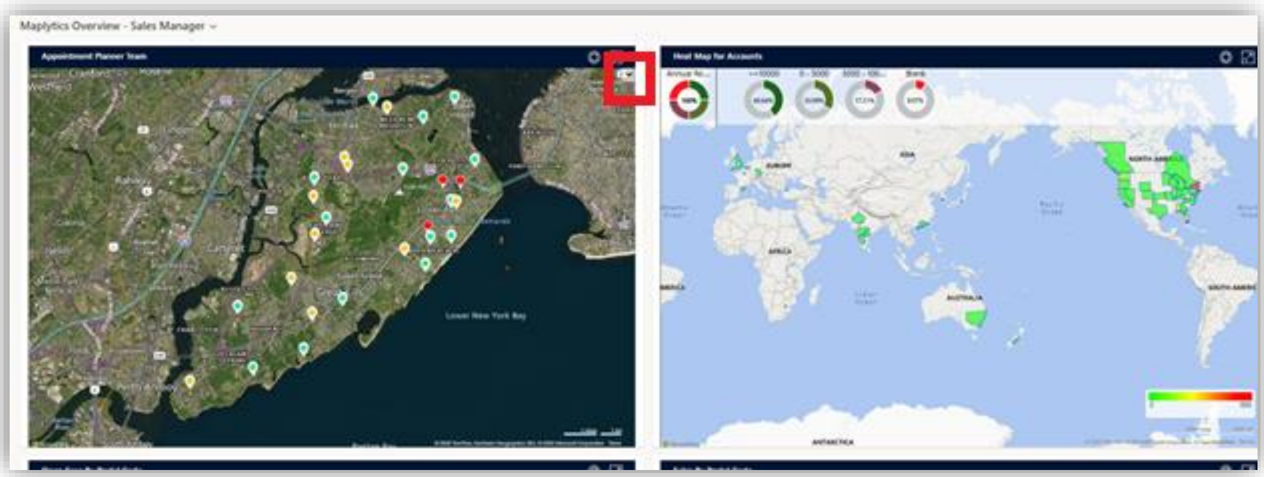
In the screenshot below, in the first dashboard, the appointments for the team are plotted which have been categorized based on the status of the appointments. The donuts are shown based on the percentage of the records falling into the each of the categories. For example, 17.50% of the total appointments were canceled, 47.50 % of the total appointments are completed and 35 % of the total appointments are scheduled. If the user hovers over the donut, they can see the exact count of records falling into each of the categories.
Similarly, the second dashboard shows the heat map for the Accounts based on the annual revenue. The donuts show that 18.10% of the total Accounts have Annual revenue ranging from 0 to 5000 and 19.73 % of the total Accounts have Annual revenue ranging from 5000 to 10000.



Hide Donut Panel

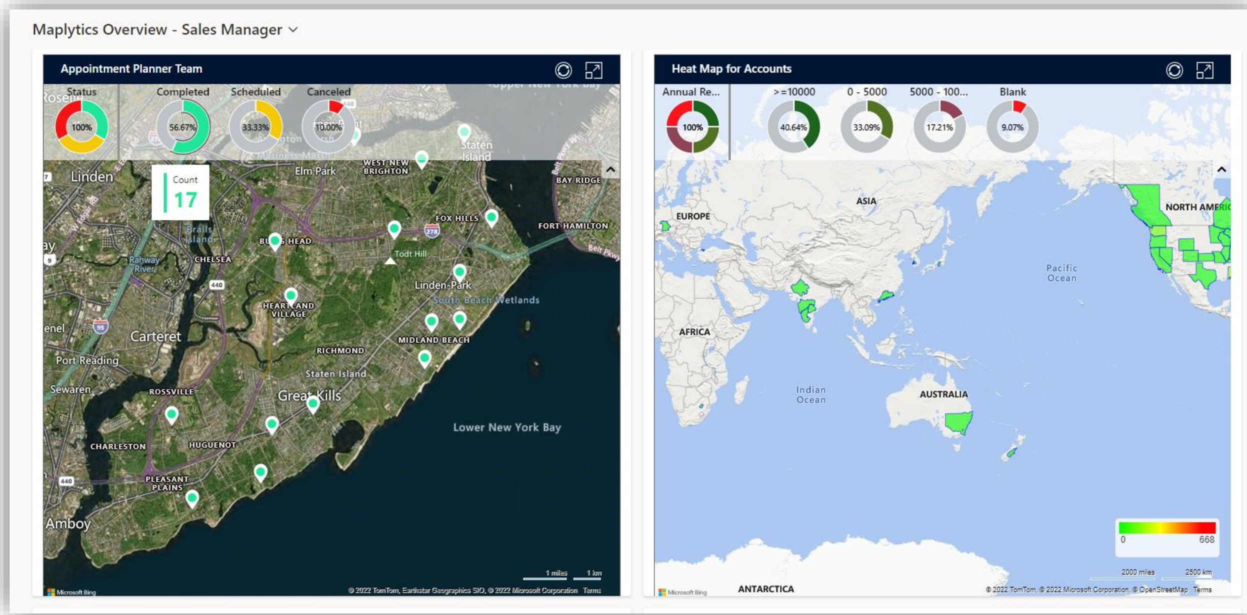
The Donut Panel can be hidden as per the User's requirement by clicking on the arrow at the extreme right of the Panel. The same can be clicked again to expand the hidden panel and put it on display.





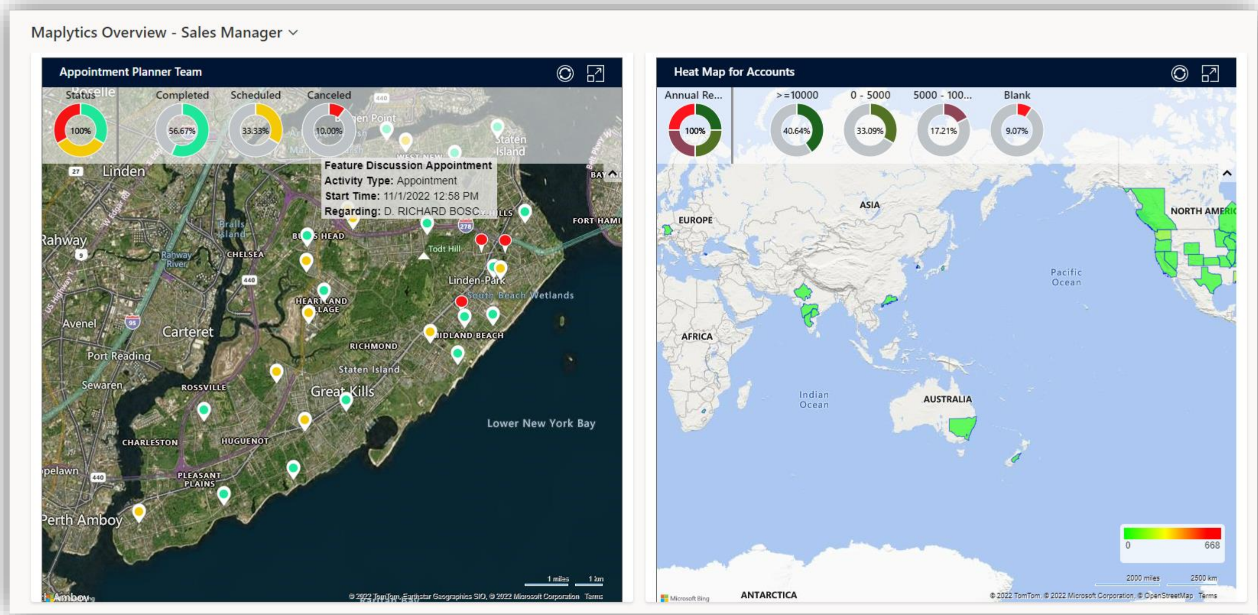
Filter records on Map using Donuts

The record pushpins displayed over the Map can be filtered out using the donuts. In the Dashboard below, when clicked on the Donut displaying the percentage of 'Completed' appointments, the pushpins on the map are filtered out to show only those Appointment records that belong to the 'Completed' Category. The rest belonging to Scheduled and Canceled are hidden. Similarly, when clicked on the 'Status' donut, the filter will be reset and record pushpins belonging to all categories of Appointments i.e. all appointments are displayed.

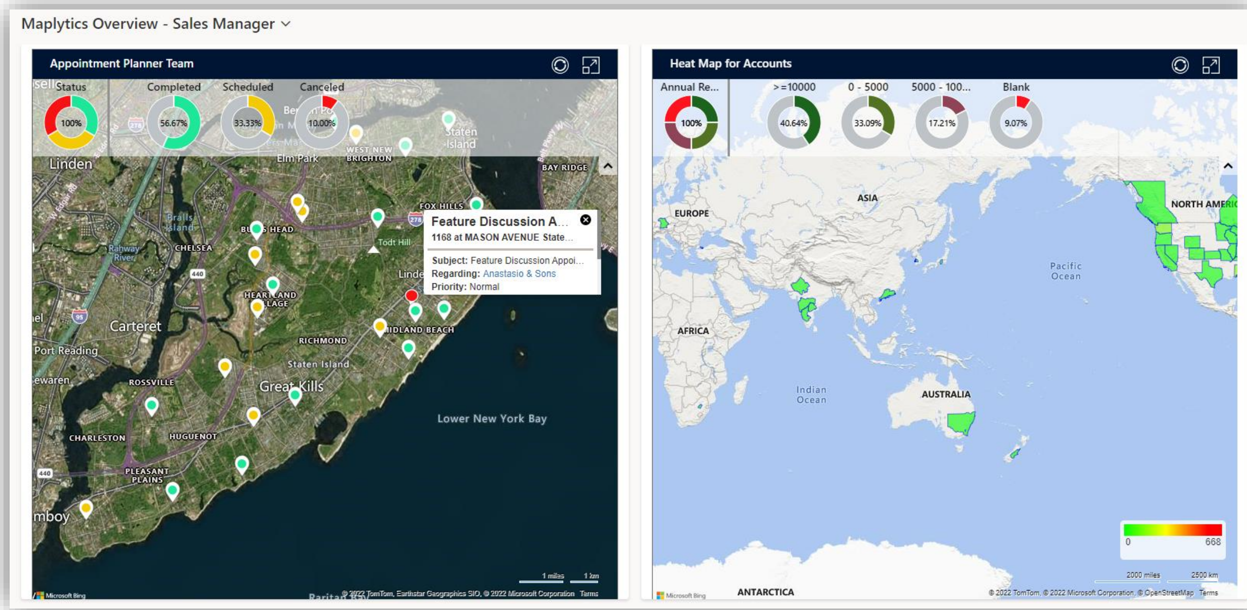


Hovering and Tooltip Card

When hovered over the record pushpins, the information about the respective record is displayed. The information shown here can be configured within the Advanced Settings within the respective dashboard record in the Maplytics Settings.

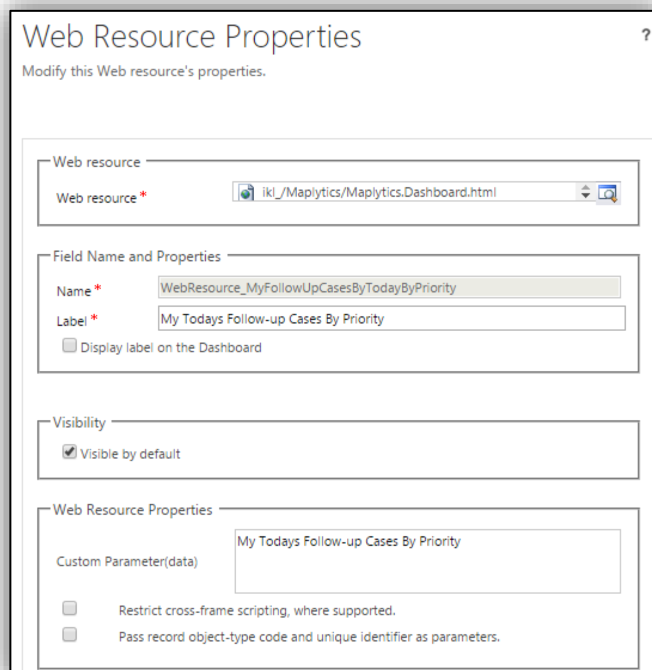


If the pushpin is clicked upon, a tool tip card is opened with the details of the respective record. The information shown on the Tooltip Card can be configured within the 'Tooltip Mapping' section of the respective dashboard in the Maplytics settings.



Steps to add Maplytics View to Dashboard

To include the Maplytics component in Dashboard, click on the new button and select to add Web Resource. Select ***'ikl_/Maplytics/Maplytics.Dashboard.html'*** web resource and set the name of the Dashboard record in the custom data parameter to be passed to the HTML web resource. The recommended number of rows in formatting is minimum 10.

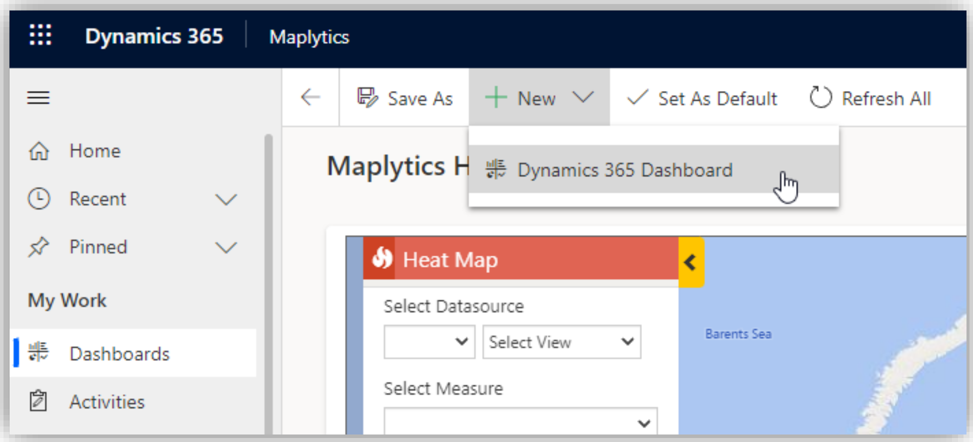


Create a route dashboard

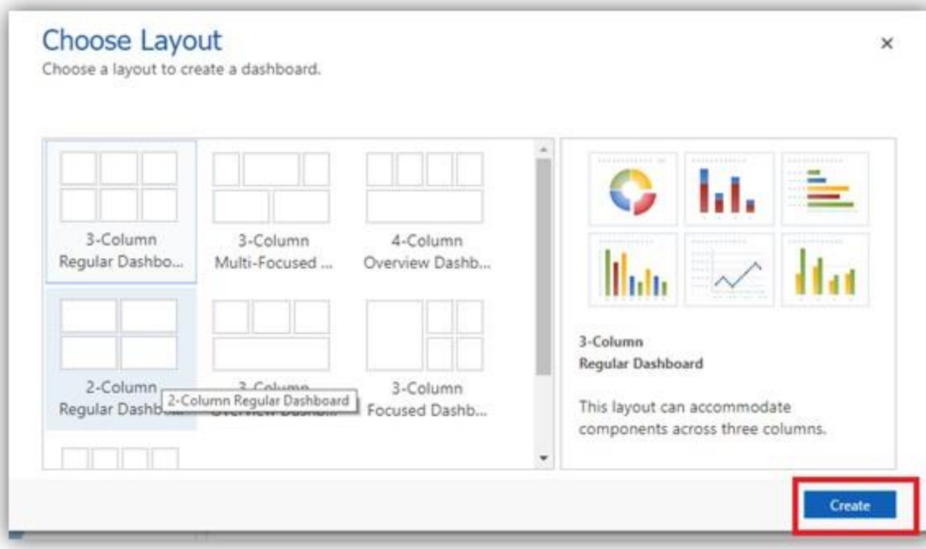
To plot route on a CRM dashboard follow the steps mentioned below:

1. User needs to include the Maplytics Detail Map component on the Dashboard. To do this click on the 'New' button in the section of dashboard and select 'Add Web Resource'. Select '***ikl_/Maplytics/Maplytics.DetailMap.html'*** web resource.

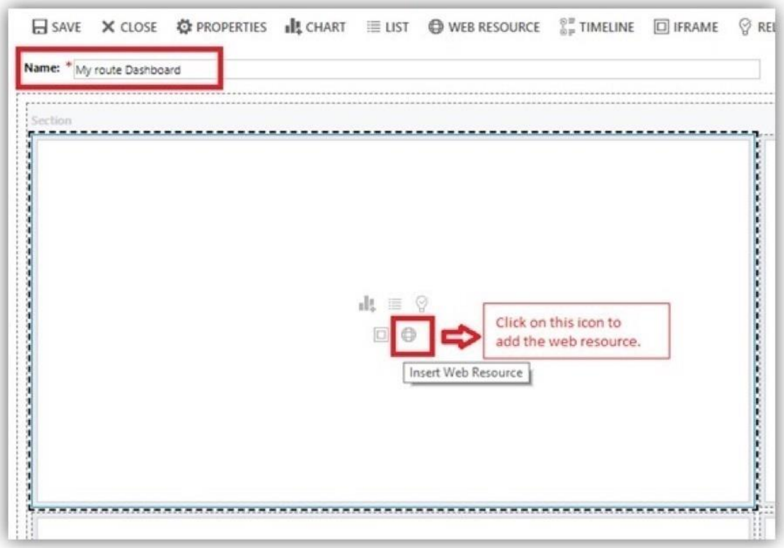
   Go to Sales > Dashboards > Click on "New" button



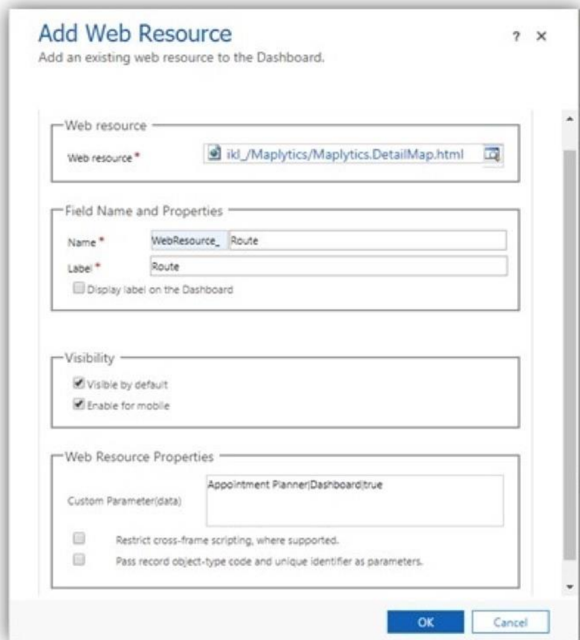
2. Choose any layout as shown below:



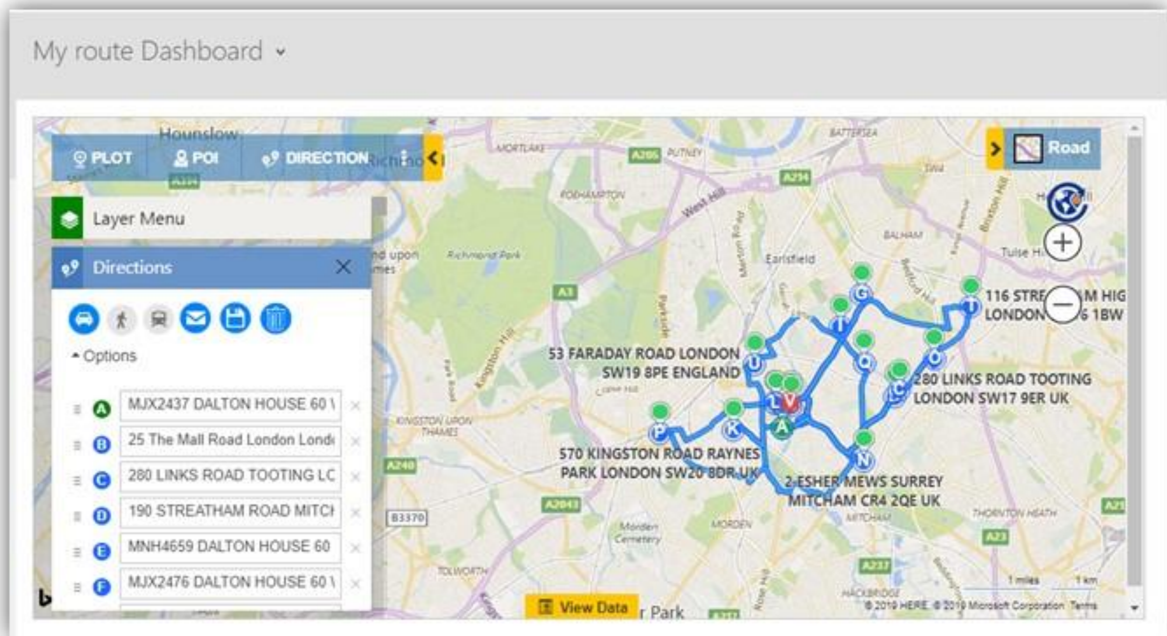
3. Provide the dashboard name and click on the web resource button to add the Detail map HTML web resource.



4. Add web resource :***'ikl_/Maplytics/Maplytics.DetailMap.html'*** web resource
5. Add a parameter in Custom Parameter (data) field as ***<Dashboard Name>||dashboard||true*** and click on 'OK'



6. After saving the dashboard and user can see the route plotted on the dashboard.



Note: Only 25 waypoints can be added into the route.

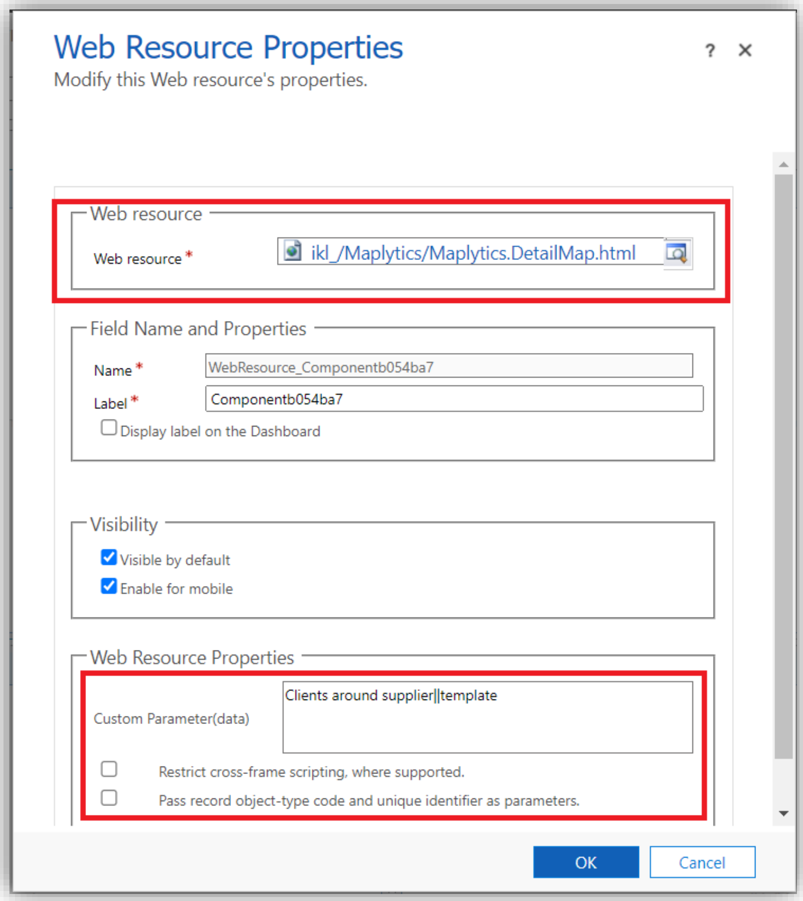
Add a template in dashboard

Users can add a template to a Dashboard to visualize resultant data of pre-set search criteria on the dashboard in one glance.

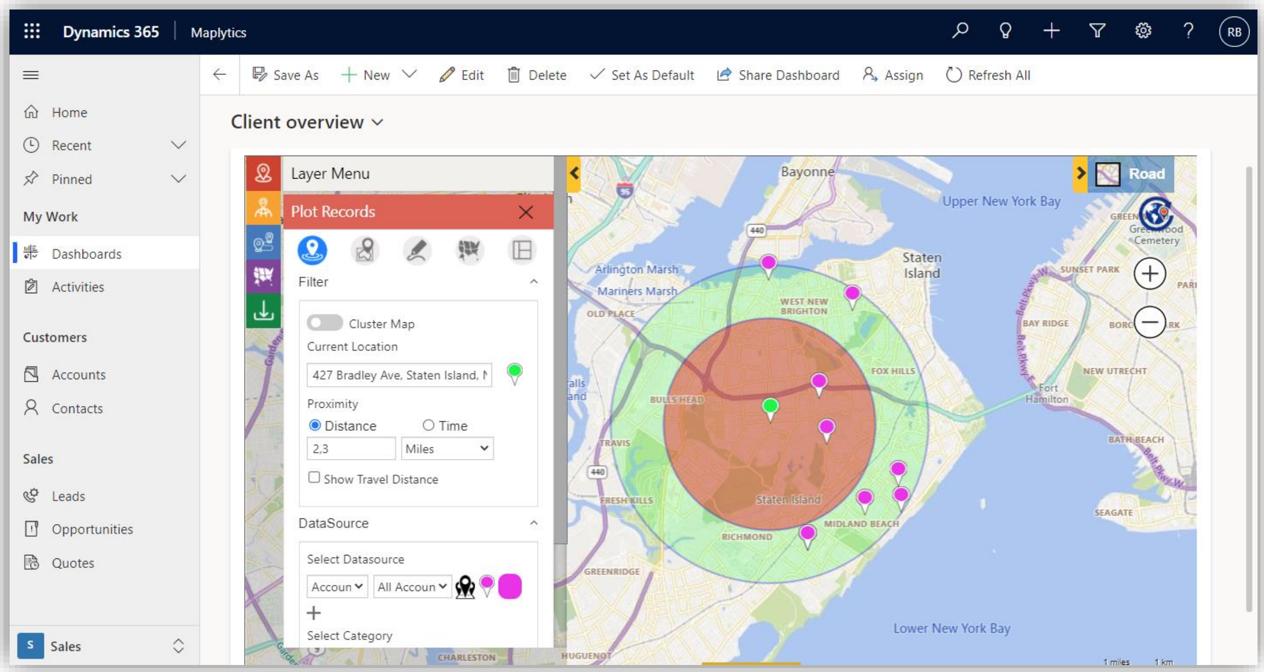
To do this, user can select the required criteria on the map and save it as a template using 'Save Template' button. Please refer to the Template section in this manual to know more about saving templates. After saving the template, user can add the template to the dashboard.

Steps to add template to dashboard

User can create a new Dashboard as explained in above topics and add the web resource *'**ikl_/Maplytics/Maplytics.DetailMap.html**'*. They also need to provide the custom parameter (data) having template name. For example, the template with the name "Clients around supplier" should be entered as – **Clients around supplier||template.** Click **Ok** then **Save**



Once the web resource is added, user can refresh and open the dashboard to view the saved template. Moreover, if a user wants they can add multiple templates to a CRM dashboard to view multiple data in a single dashboard.

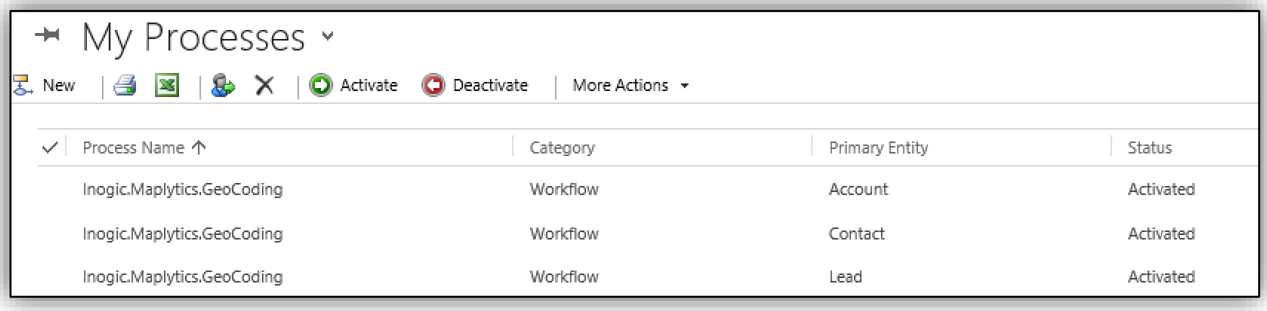

Dynamics 365
Maplytics
RB
Save As
New
Edit
Delete
Set As Default
Share Dashboard
Assign
Refresh All
Home
Recent
Pinned
My Work
Dashboards
Activities
Customers
Accounts
Contacts
Sales
Leads
Opportunities
Quotes
Sales
Client overview
Layer Menu
Plot Records
Filter
Cluster Map
Current Location
427 Bradley Ave, Staten Island, N
Proximity
Distance
Time
2.3
Miles
Show Travel Distance
DataSource
Select Datasource
Accoun
All Accoun
Select Category
Road
Bayonne
Upper New York Bay
Staten Island
Arlington Marsh
Mariners Marsh
Lower New York Bay

Workflows

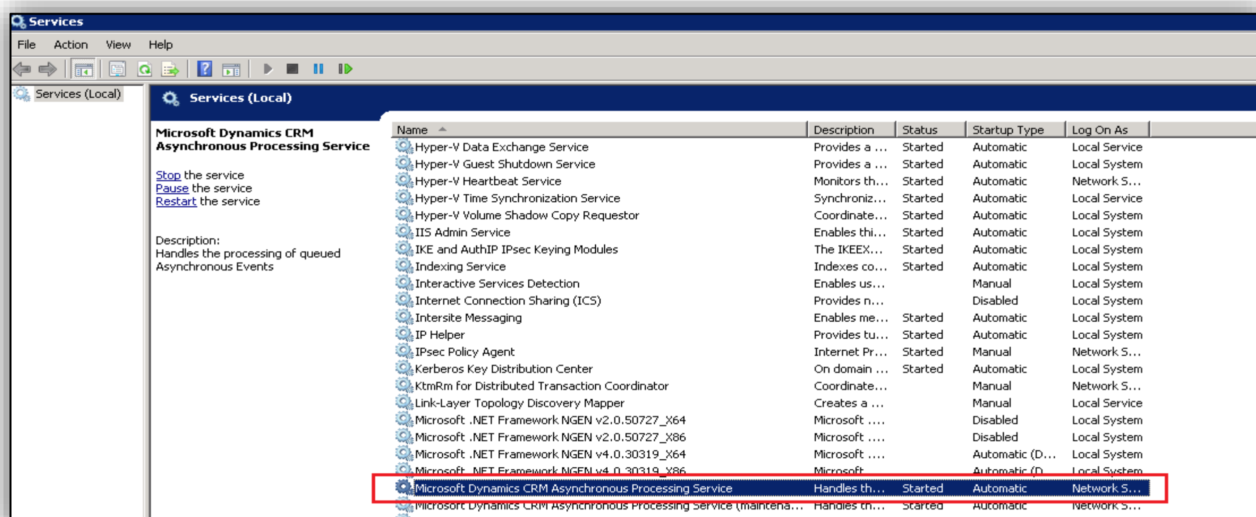
Maplytics ship the following workflows:

1. ***Geocoding workflows*** – This geocodes addresses of the records and provides the values for respective Latitude and Longitude.
2. ***Territory Assignment workflow*** – This assigns territories to CRM records on the basis of the addresses in the respective records.
3. ***Driving Instructions workflow*** – This automatically generates directions (in HTML and Plain text format) between two related entity records using their respective addresses.
4. ***Get Time zone workflow*** – This provides the time zone of the respective records in which they lie based on their addresses.

Geocoding workflow is configured for Account, Lead, and Contact entities and Territory workflow for Account by default. The user can set up these workflows for custom entities also.

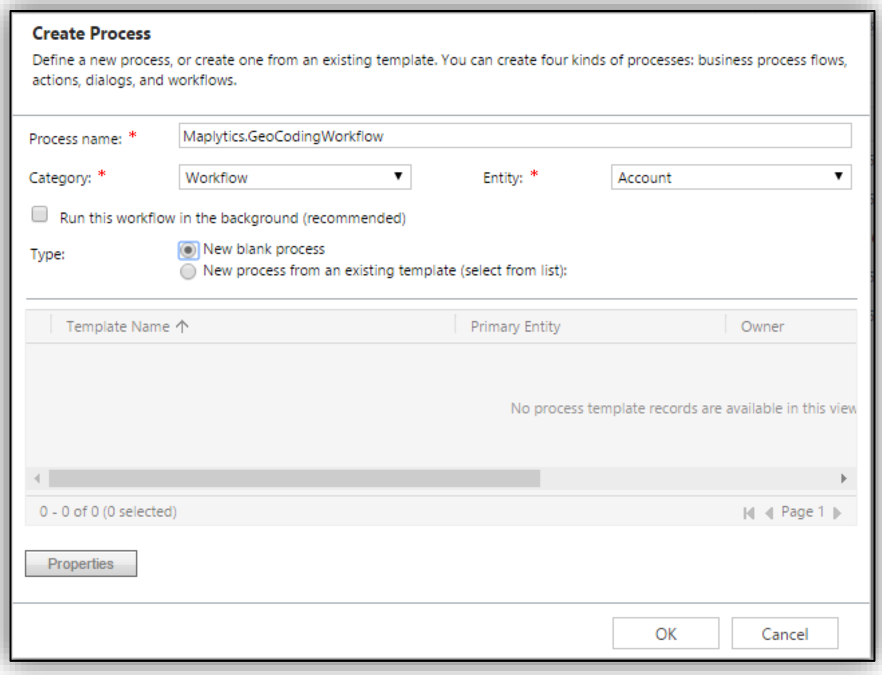


Note: To run the workflow, please make sure the Microsoft Dynamics CRM Asynchronous Processing service is running as shown in below screenshot.

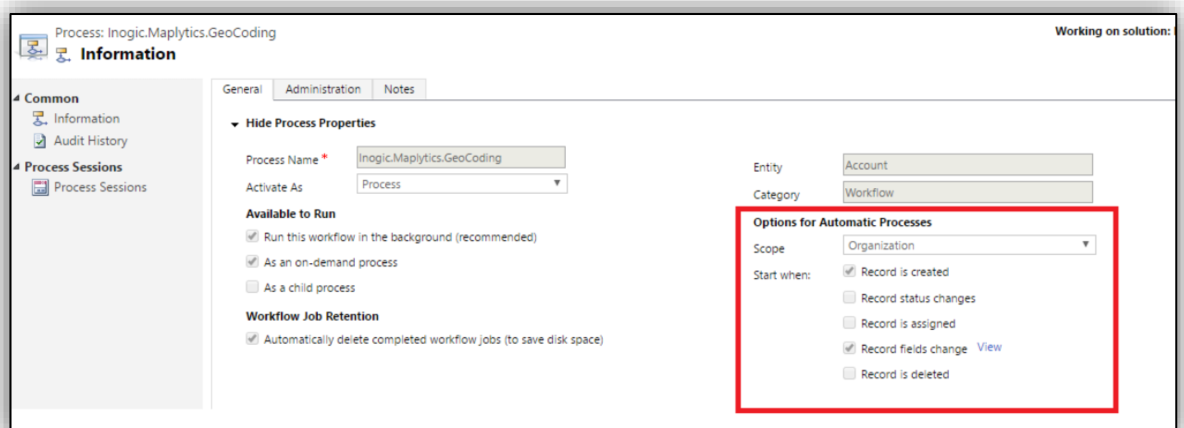


Configure Geocoding workflows for custom entities

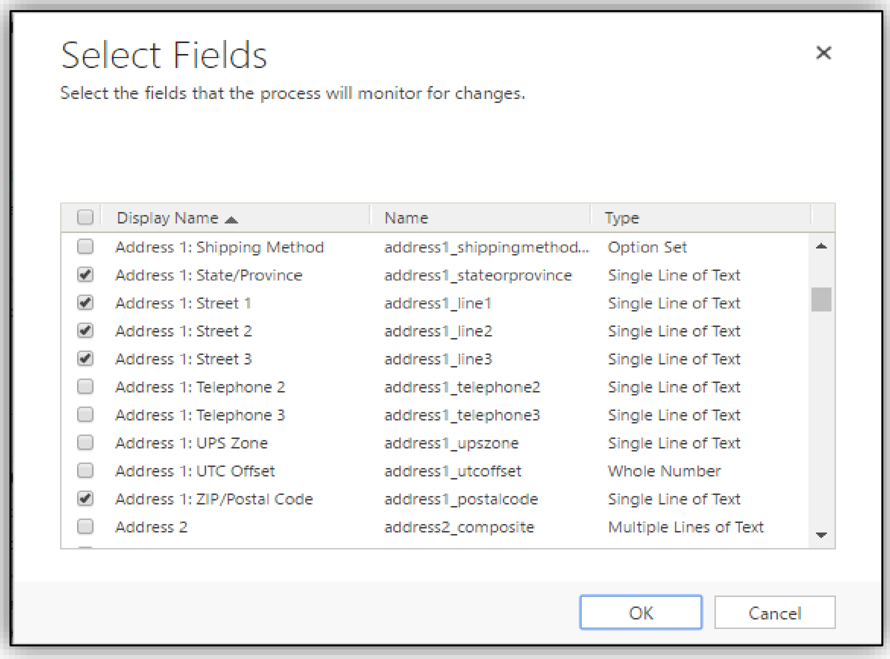
1. Go to ***Setting > Processes >*** Click on ***'New'*** to design a new Workflow Process.
2. Write Process name, choose ***'Workflow'*** under category section and select desired entity as shown below;



3. Select 'Organization' under 'Scope' dropdown. Select 'Record is created' and 'Record fields change' options as shown below:

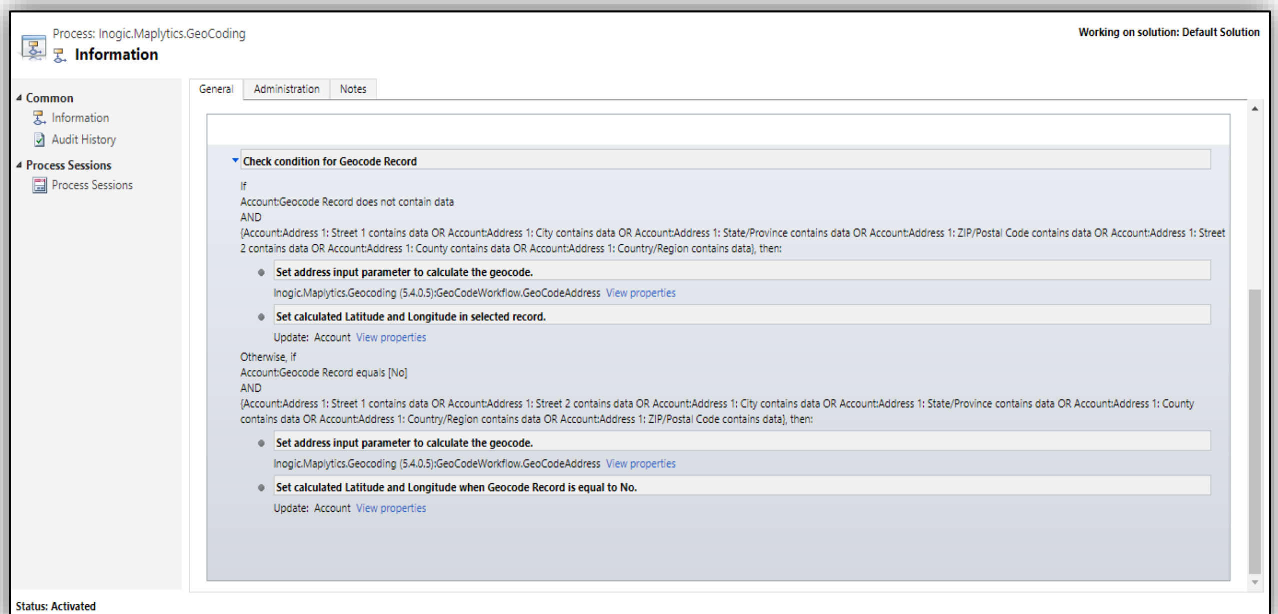


4. For the Record fields change option, select all of the address fields to ensure the address is geocoded when any of the address fields is changed as shown below;



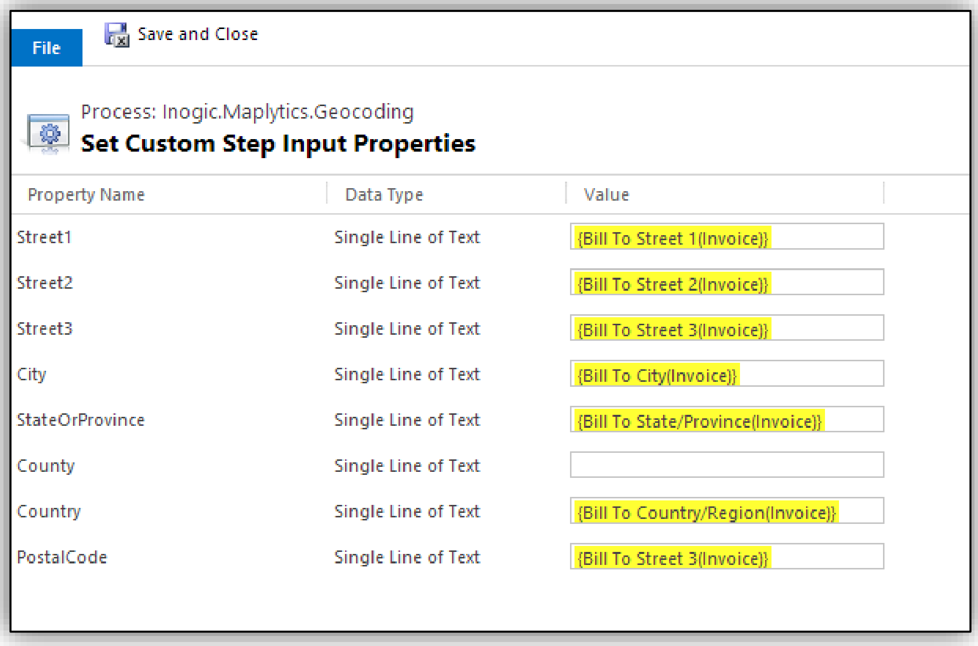
5. Select the ***Inogic.Maplytics.Geocoding*** workflow assembly from the Add step menu as shown below;

Note: Please don't select Latitude & Longitude field attribute here.

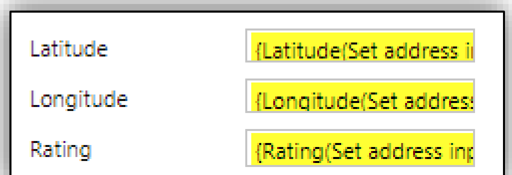


Note: For custom workflows, add an 'AND' condition, if the address fields are not blank as shown in the above screenshot. This will avoid the trigger of the workflow if the address fields do not have any value.

6. Click on ***'Set Properties'*** and set the address parameter as shown in below screenshot for the workflow assembly;

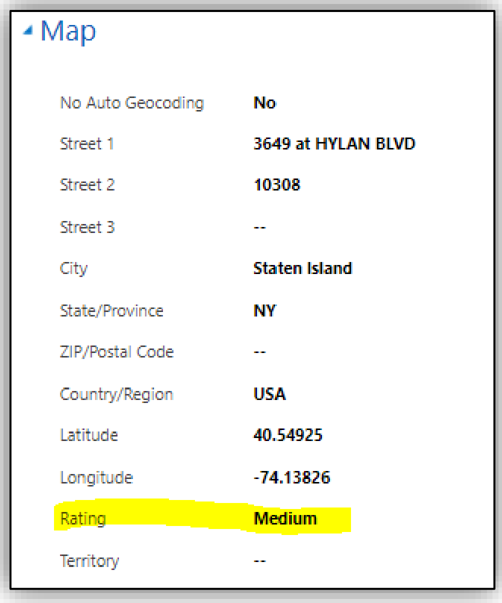


7. Choose 'Update Record' from 'Add Step' menu after selecting 'Set Properties' record and select same entity for which workflow is being created.
8. Click on 'Set Properties' of the new record and in the update window set the Latitude, Longitude and Rating to the output parameters returned by the workflow assembly as shown in the screenshot below;



Geocoding Confidence Rating:

User can also check the geocoding confidence rating provided by Bing Maps. A 'Rating' field can be added that shows the confidence rating as High, Medium or Low. The 'Rating' field is set in the workflow as shown in the above screenshot.

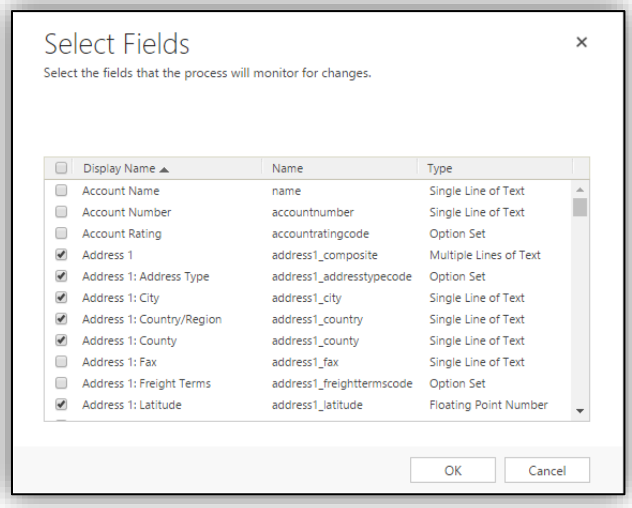


Note:

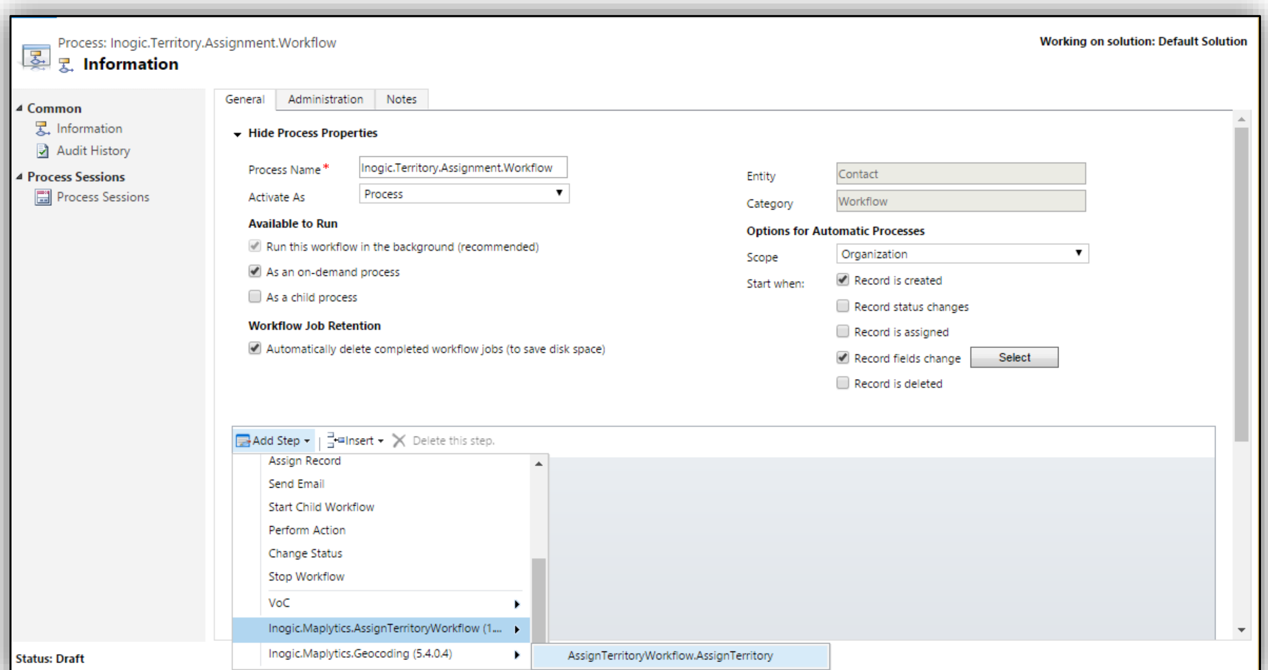
- ***Latitude and Longitude fields should of data type: 'Floating Point Number' with precision set to 5. Add minimum to maximum range of fields respectively Latitude (-90 to +90), Longitude (-180 to +180).***
- ***Geocoding Confidence Rating cannot be checked for Geocoding plugin***

Configure Territory Assignment workflow for custom entities

1. Follow the Steps 1 – 3 from configuring geocoding workflow for custom entities. This will help you create a new workflow.
2. For the Record fields change option, select all of the address fields to ensure the territory is changed when any of the address fields is changed as shown below;



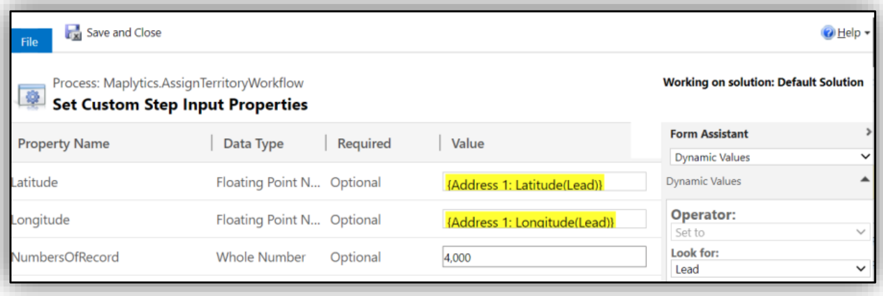
3. Click on ***'Add Steps'*** and add ***'AssignTerritoryWorkflow.AssignTerritory'*** assembly as shown below;

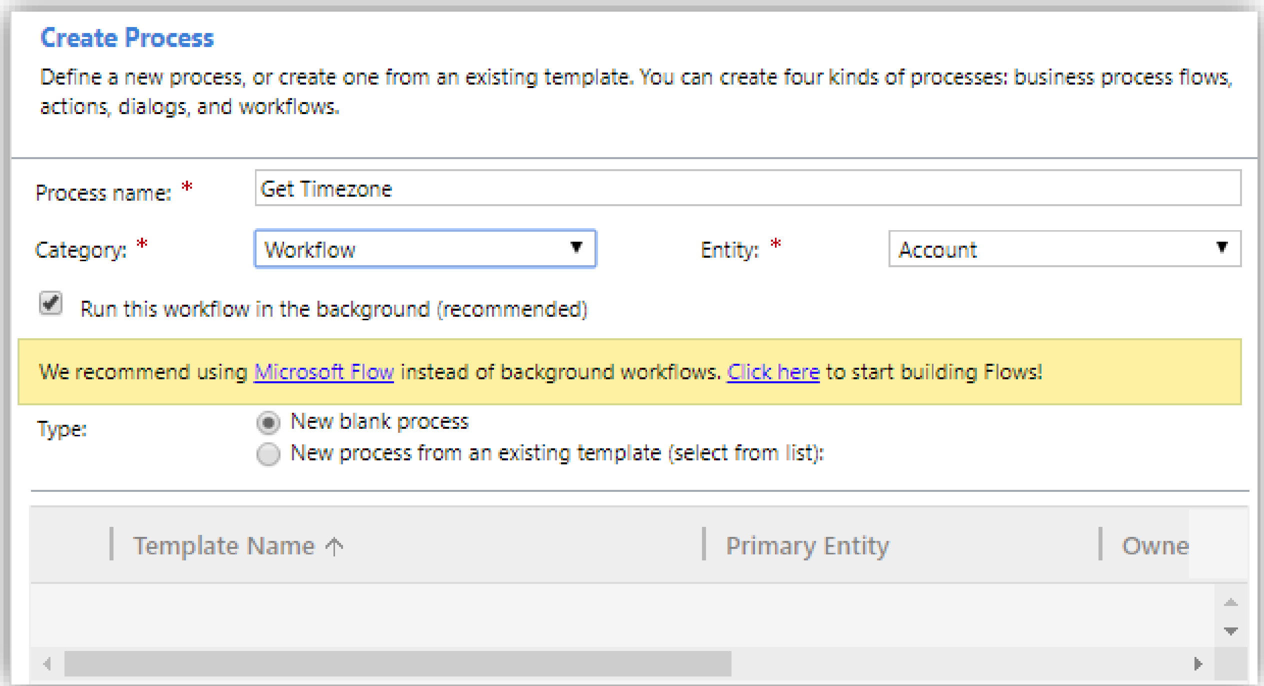


4. Click on ***'Set Properties'*** and set the address parameter as shown below and Save this. NumberOfRecords – Set the number of records to be fetched from the CRM at once

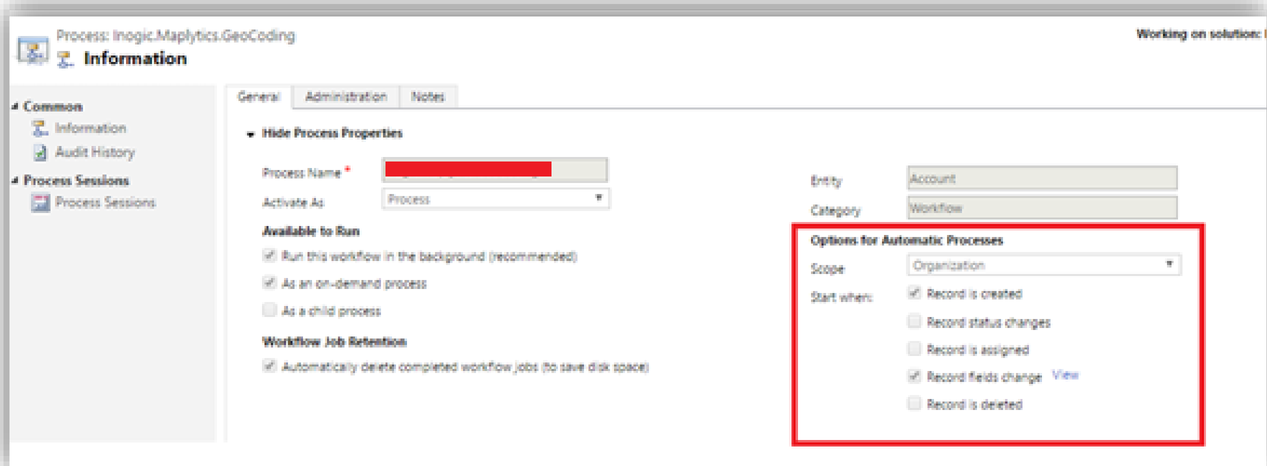
Configure Get Time Zone workflow

1. Go to Settings > Processes > Click on 'New' to design a new Workflow Process.
2. Write Process name, choose 'Workflow' under category section and select desired entity:

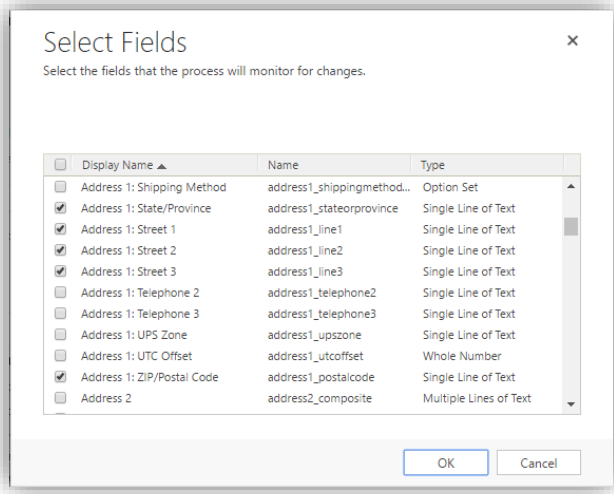




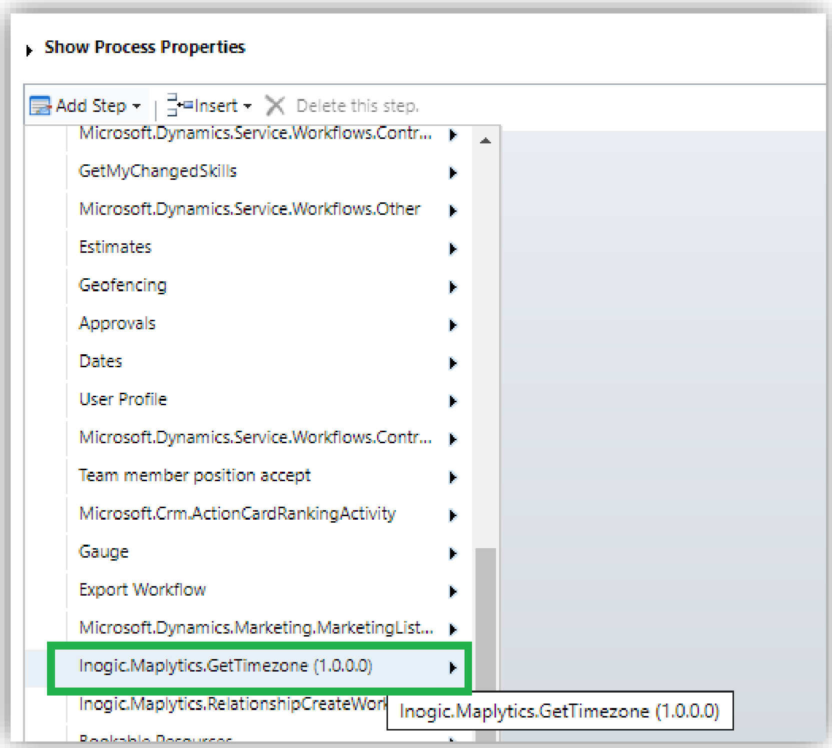
3. Select ‘Organization’ under ‘Scope’ dropdown. Select ‘Record is created’ and ‘Record fields change’ options.



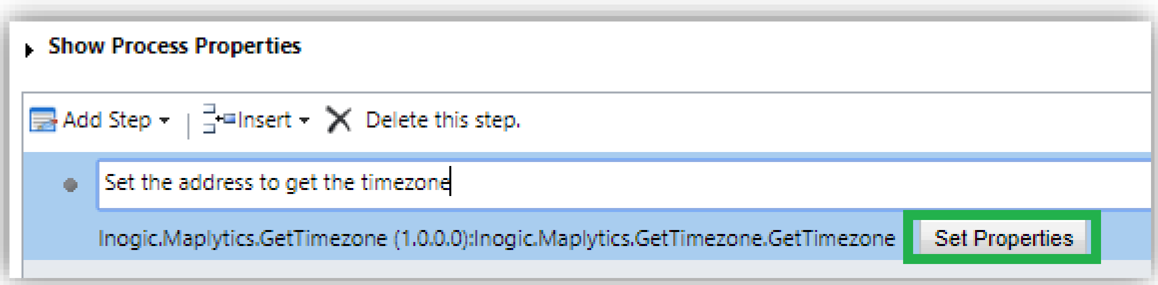
4. For the ‘Record fields Change’ option, select all of the address fields to ensure the address is retrieved when any of the address fields is changed.

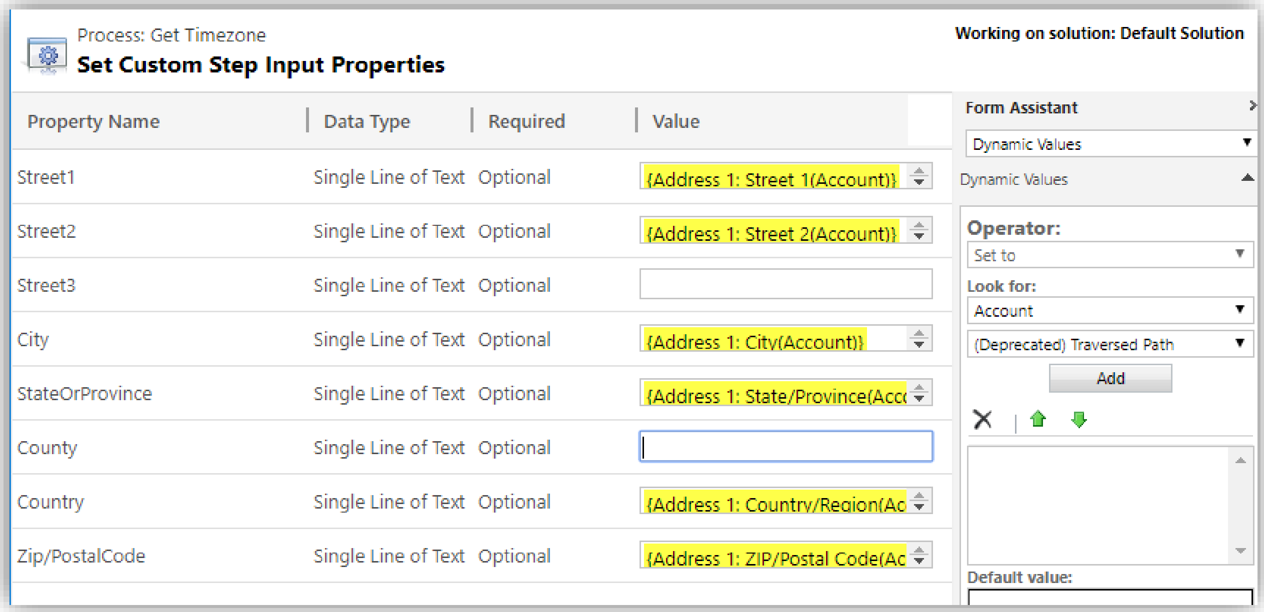


5. Select the ***Inogic.Maplytics.GetTimezone*** workflow assembly from the Add step menu.



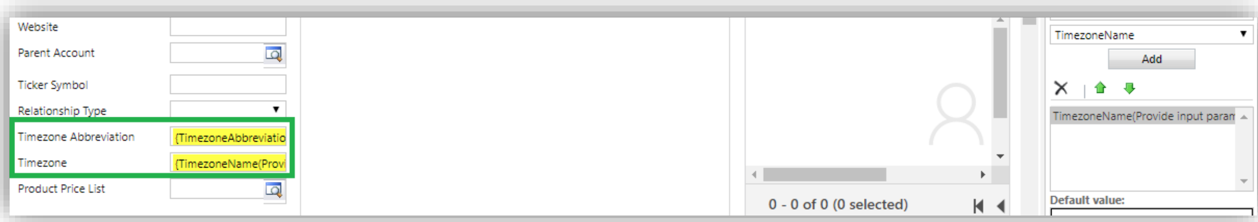
6. Click on ***'Set Properties'*** and set the address parameter as shown in below screenshot for the workflow assembly.



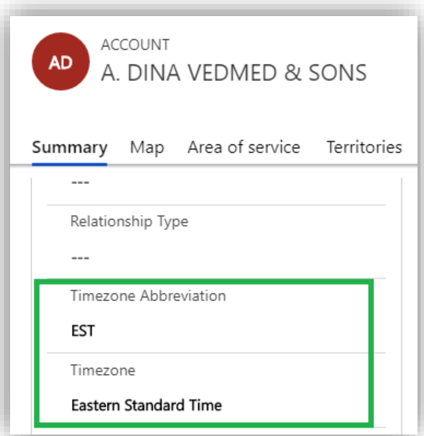


Here, user needs to specify the address fields on the basis of which user wants to get the time zone. After this user needs to set the time zone in field (string type). Please follow below steps for the same:

1. Choose 'Update Record' from 'Add Step' menu after selecting 'Set Properties' record and select same entity for which workflow is being created.
2. Click on 'Set Properties' of the new record and in the update window set the TimezoneName, TimezoneAbbreviation to the output parameters returned by the workflow assembly.

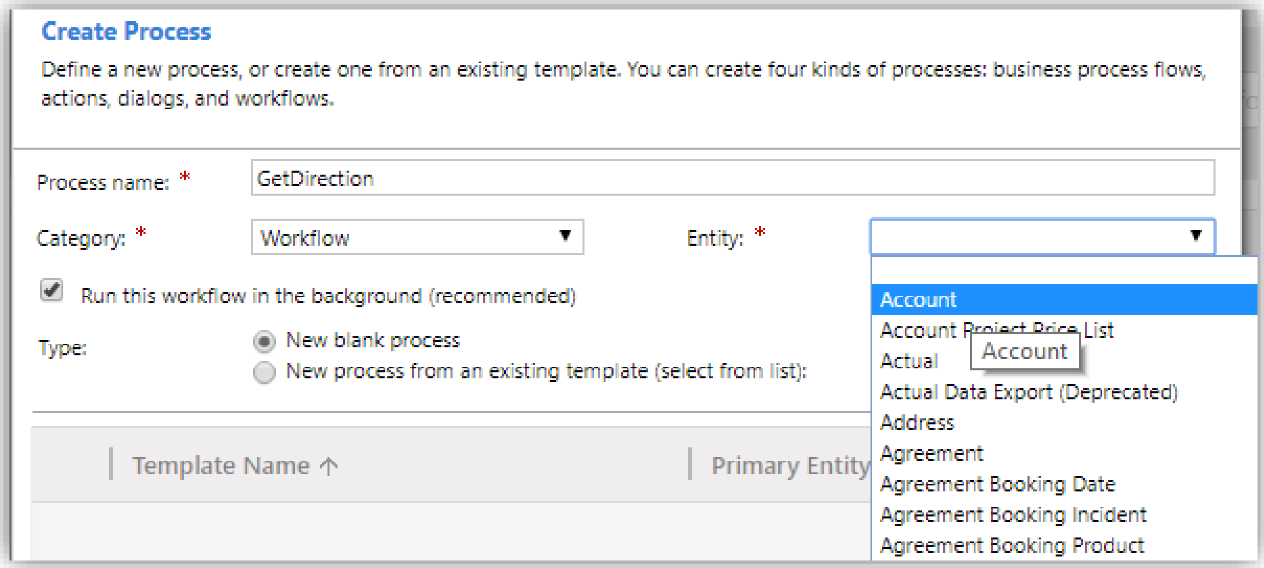


Once user finishes all the above steps and activates the workflow, user can run it on any record of the respective entity which has address data. This will provide set the time zone set for the record as shown below.

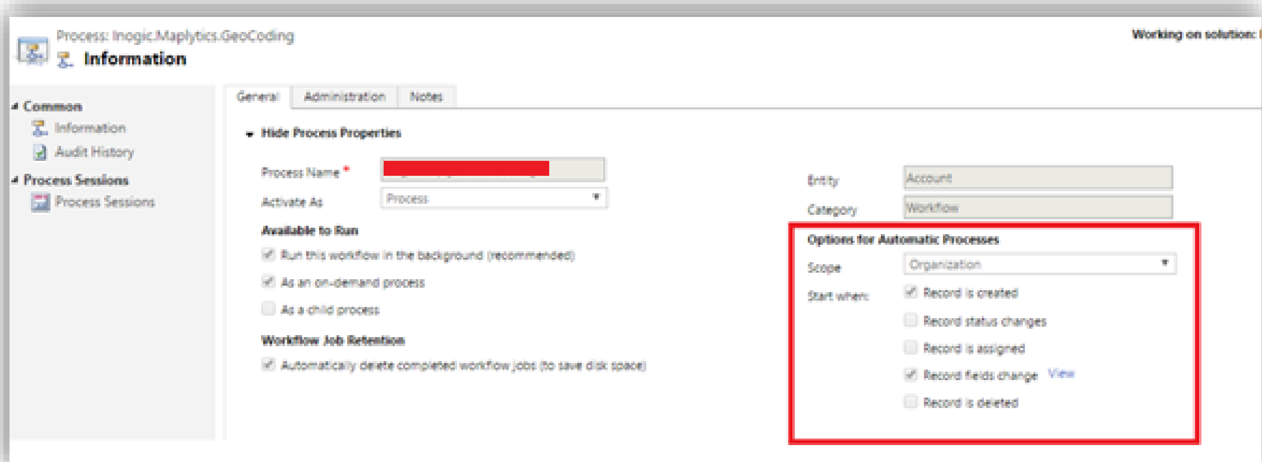


Configure Driving Instructions workflow

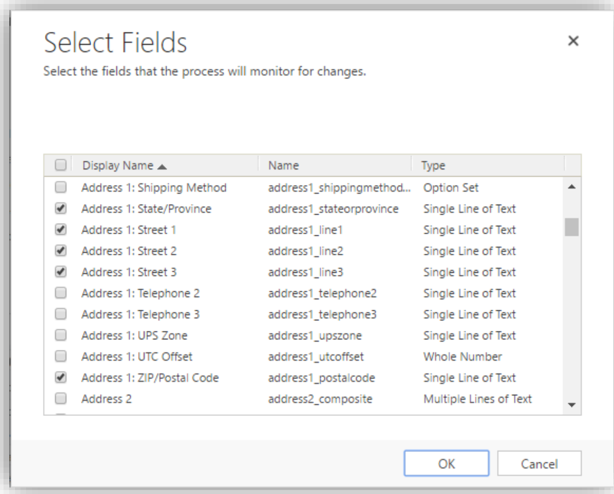
7. Go to Setting > Processes > Click on 'New' to design a new Workflow Process.
8. Write Process name, choose 'Workflow' under category section and select desired entity as shown below;



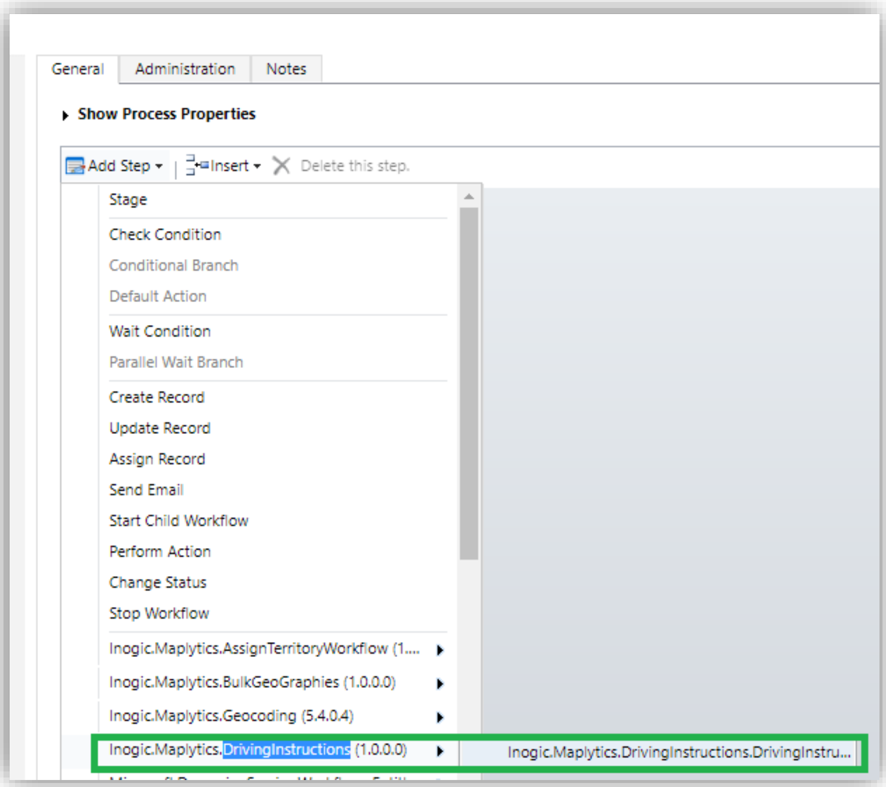
9. Select 'Organization' under 'Scope' dropdown. Select 'Record is created' and 'Record fields change' options as shown below;



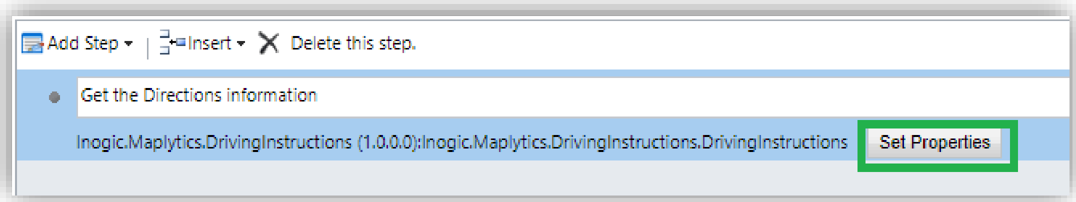
10. For the 'Record fields Change' option, select all of the address fields to ensure the address is retrieved when any of the address fields is changed as shown below;

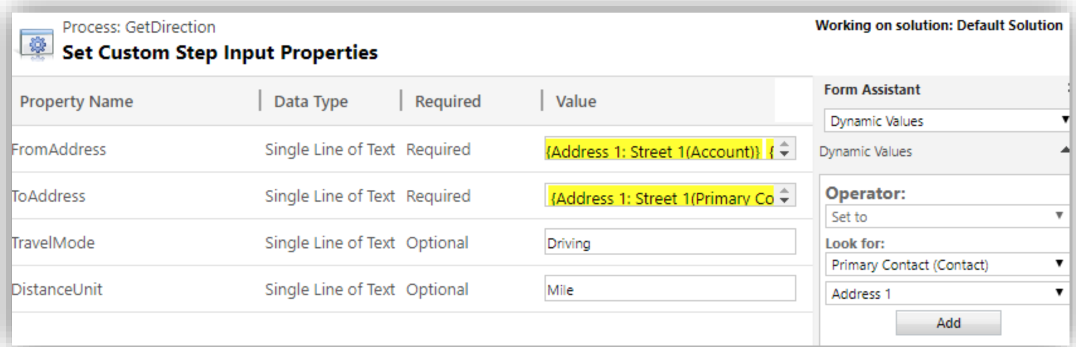


11. Select the ***Inogic.Maplytics.DrivingInstructions*** workflow assembly from the Add step menu as shown below;



12. Click on ***'Set Properties'*** and set the address parameter as shown in below screenshot for the workflow assembly;





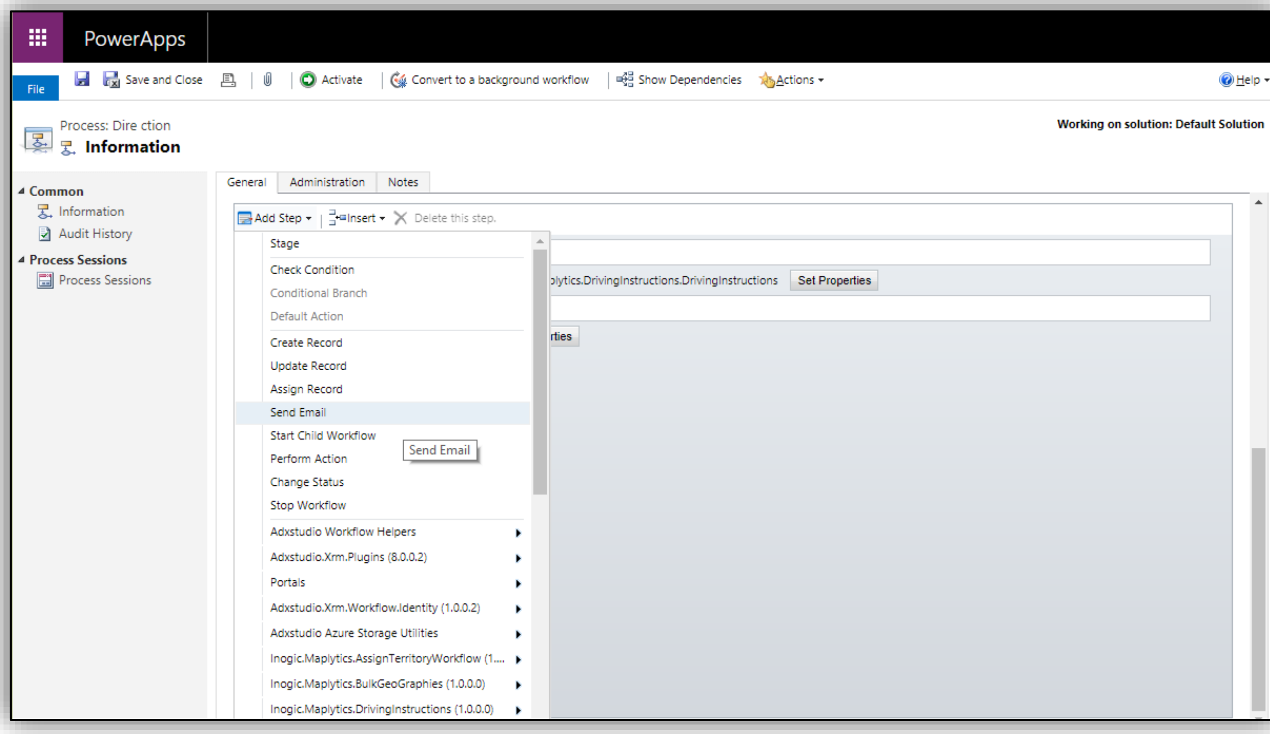
In **'FromAddress':** Select the address fields of the entity that you want the direction ***'From'***. Select the all address field i.e. Steet1, Street2, and City etc. and ensure sure you keep space between two fields. {Address 1: Street 1(Account)} {Address 1: Street 2(Account)} {Address 1: City(Account)} {Address 1: State/Province(Account)}

In **ToAddress:** Select the address fields of the entity that you want the directions ***'To'***. Select the all address field i.e. Steet1, Street2, and City etc. and ensure to keep space between two fields.

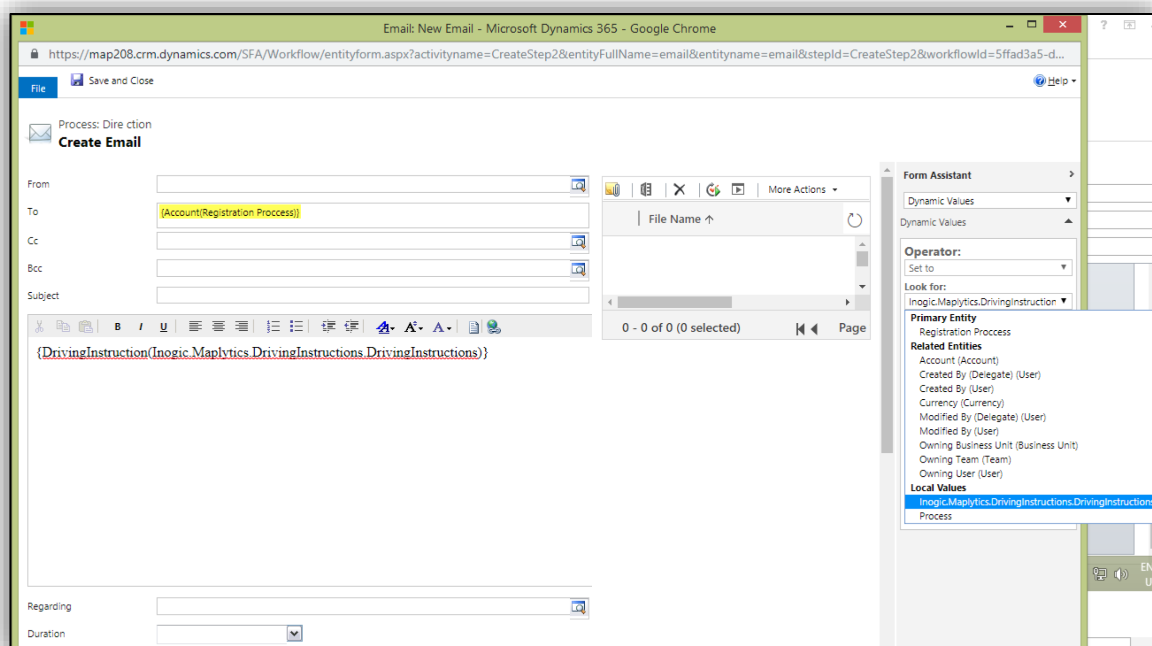
Travel Mode: Select the Travel mode. For example (Driving, Walking, Transit). If you do not specify the Travel mode then it will take Driving mode by default.

Distance Unit: Select the Distance unit**.** For example (Mile or mi, Kilometer or km). If you do not specify the unit then it will take Kilometer as default unit.

13. Click on add step -> Send Email -> Click on set property



Click on Email body -> Select Look for -> local value “inogic.Maplytics.DrivingInstructions. DrivingInstruction”



Select DrivingInstruction for plan text or DrivingInstructionHTML for html page. Click on save and close.

14. The driving instructions will be returned both in HTML and Plain Text format as an output parameter to this workflow. User can use either of them. For example we have used HTML formatted direction instruction in Email here.

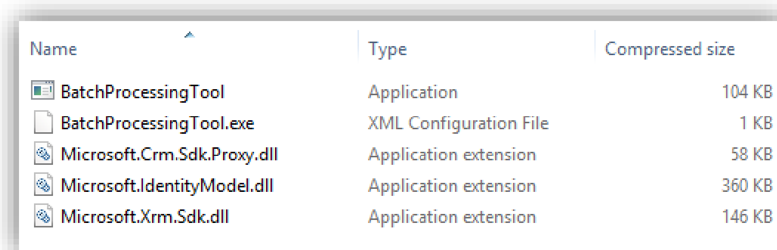
From Address: 1 NW 50th Ln Ocala FL 34482 USA	
To Address: 4350 US-98 Frostproof FL 33843 USA	
Total Travel Distance: 208.45 miles	
Total Travel Duration: 3 hrs 25 min	
Instruction	**Distance**
Depart NW 50th Ln toward NW 115th Ave	0.707
Turn right onto NW 115th Ave	0.613
Turn right onto NW Highway 464B / CR-464B	1.692
Keep straight onto NW 110th Ave	0.127
Turn right onto US-27 S / SR-500 S	11.539
Take ramp right for I-75 South toward Tampa	40.409
At exit 328, take ramp left for Florida's Turnpike South toward Orlando / Turnpike	30.912
At exit 289, take ramp right for US-27 toward Cleremont / Taveres	70.493
Turn left onto W Main St / CR-17	2.715
Turn right onto 10th St N	0.163
Road name changes to US-27 ALT / SR-17 / 10th St S	9.455
Turn left to stay on US-27 ALT / SR-17 / E Main St	18.945
At roundabout, take 2nd exit	16.91
Bear right onto McLeod Rd	0.353
Keep straight onto N Palm Ave	1.992
Turn left onto W 1st St	0.202
Arrive at Frostproof, FL	0

Maplytics Batch Processing Tool

The workflows for Geocoding and Territory Assignment designed can be used on a day-to-day basis for addresses that are changed or added occasionally. However, for bulk geocoding/territory assignment on data, we recommend using the Batch Processing tool. This tool ensures that the bulk geocoding on records is handled in single batch. While in the territory assignment, this tool helps to assign the respective territories to all the selected records based on their Latitude and Longitude values.

Note: To run this tool, the user needs to make sure that machine has Microsoft .net framework 4.0 and Maplytics installed in Dynamics CRM.

*To run the tool, Extract the Batch Processing tool .zip file and run the **BatchProcessingTool** application.*



Executing Batch Processing Tool

Connection Details:

Please enter the CRM details on this screen. The users have to enter the following details:

Deployment Type: The user can select either of the options given in below screenshot depending on their deployment.

Office365

Show Advanced: The user can select the Online Region and proceed to enter the 'Username' and the 'Password'

Organization: The organization list will be auto-populated with the organizations available in CRM on selecting the checkbox. Select the organization for which Maplytics is to be or already has been installed.

Username: Username of a valid CRM user. For example: mollyc@mollyc.onmicrosoft.com

Password: Password of CRM user

On-premises

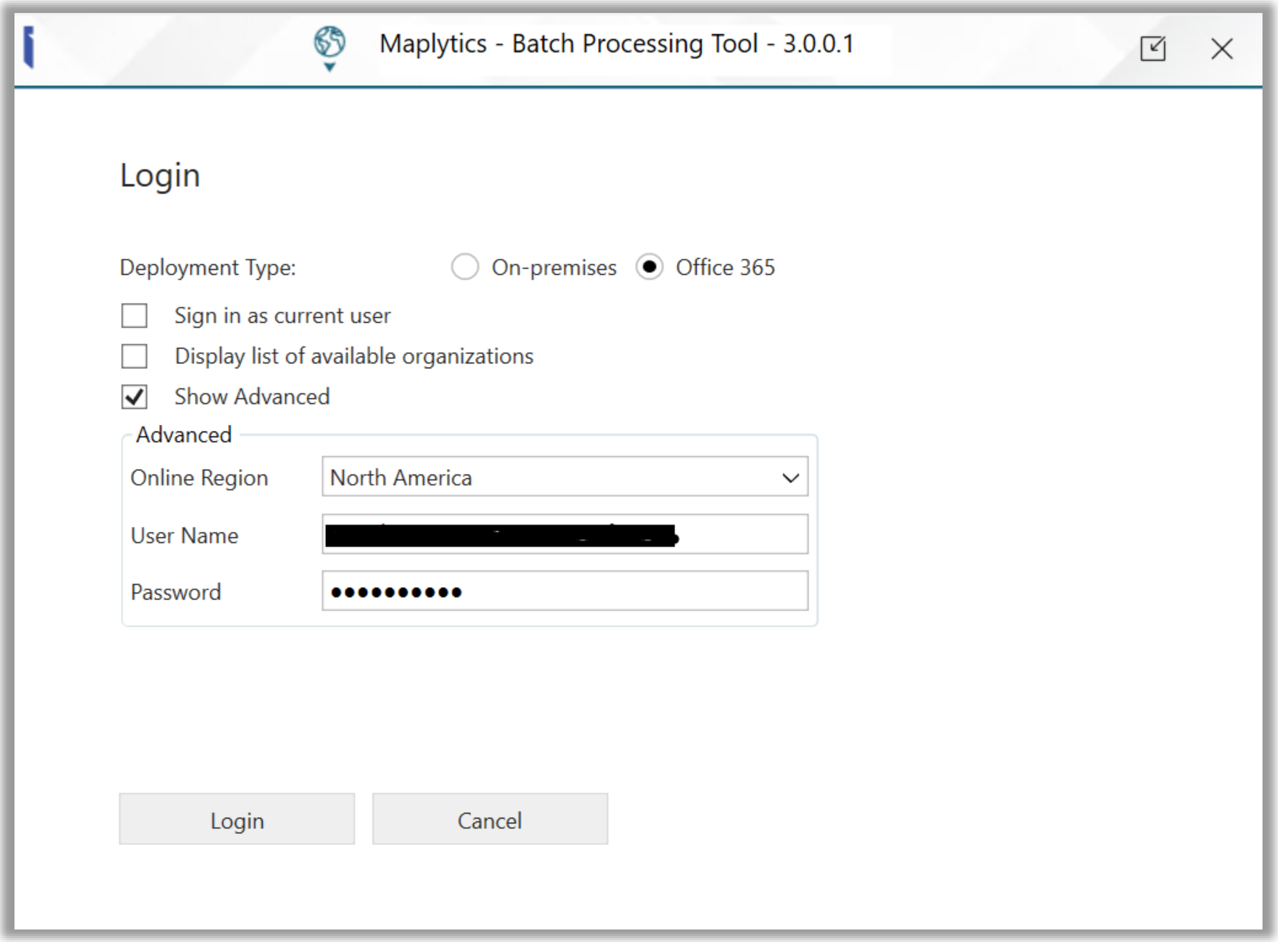
Server: Please enter the server url of CRM. For example, http://<servername>:<port> or https://<orgname>.crm.dynamics.com

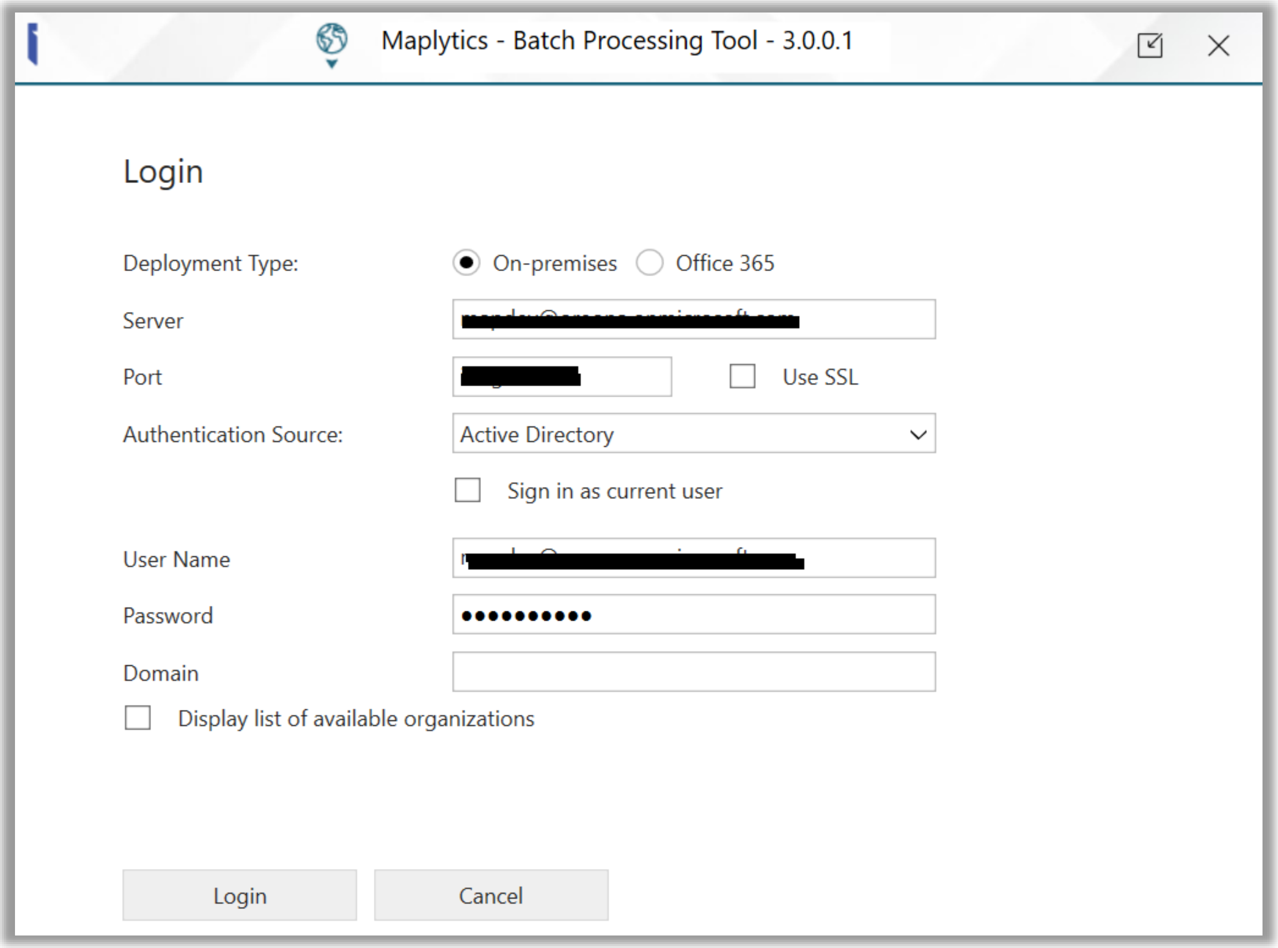
Organization:

When the user enters the server URL in case of ***On-Premises*** deployment model, the organization list will be auto-populated with the organizations available in CRM on selecting the checkbox. Select the organization for which Maplytics is to be or already has been installed.

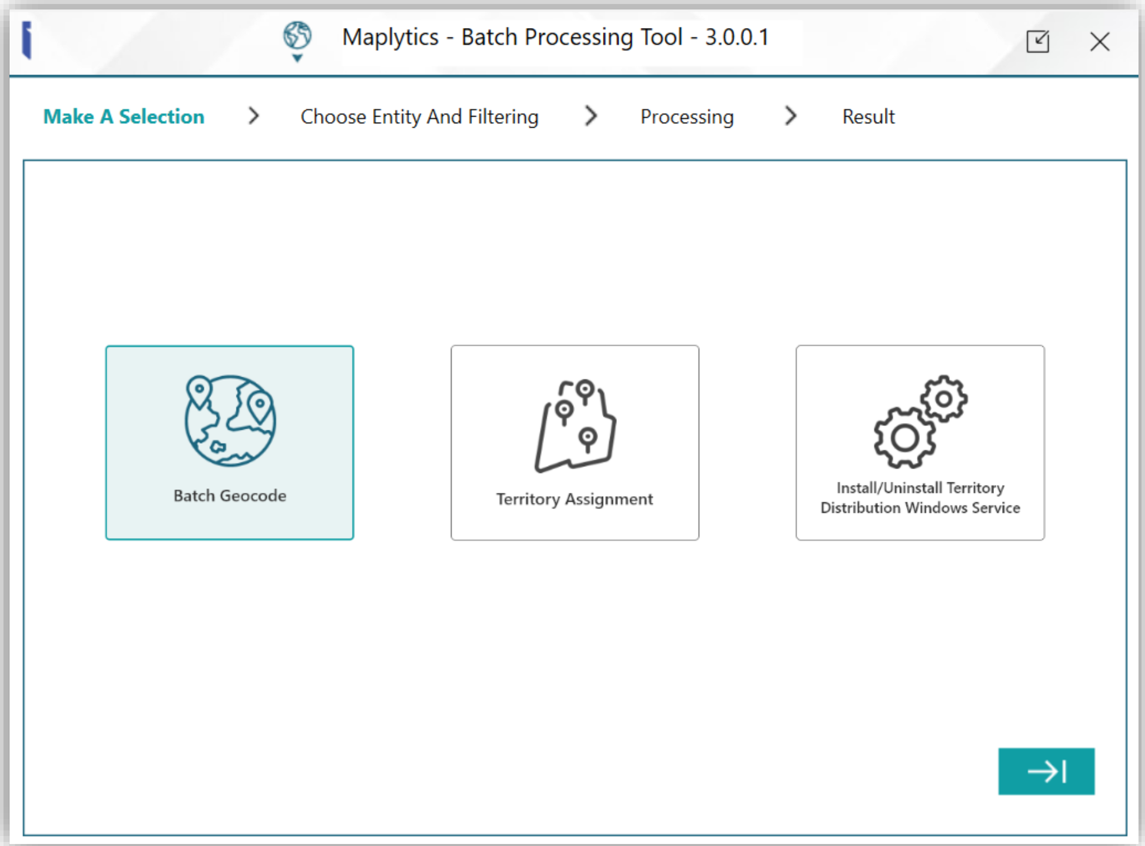
Username: Username of a valid CRM user. For example: mollyc@mollyc.onmicrosoft.com

Password: Password of CRM user


Maplytics - Batch Processing Tool - 3.0.0.1
Login
Deployment Type:
On-premises
Office 365
Sign in as current user
Display list of available organizations
Show Advanced
Advanced
Online Region
North America
User Name
[redacted]
Password
Login
Cancel



Make A Selection: Here, the user can make selection whether they would like to run this tool for Geocoding (Batch Geocode) or Territory Assignment. The third option is available for installing/ uninstalling Territory Distribution Windows Service. In this example, we have chosen Batch Geocode as shown below:



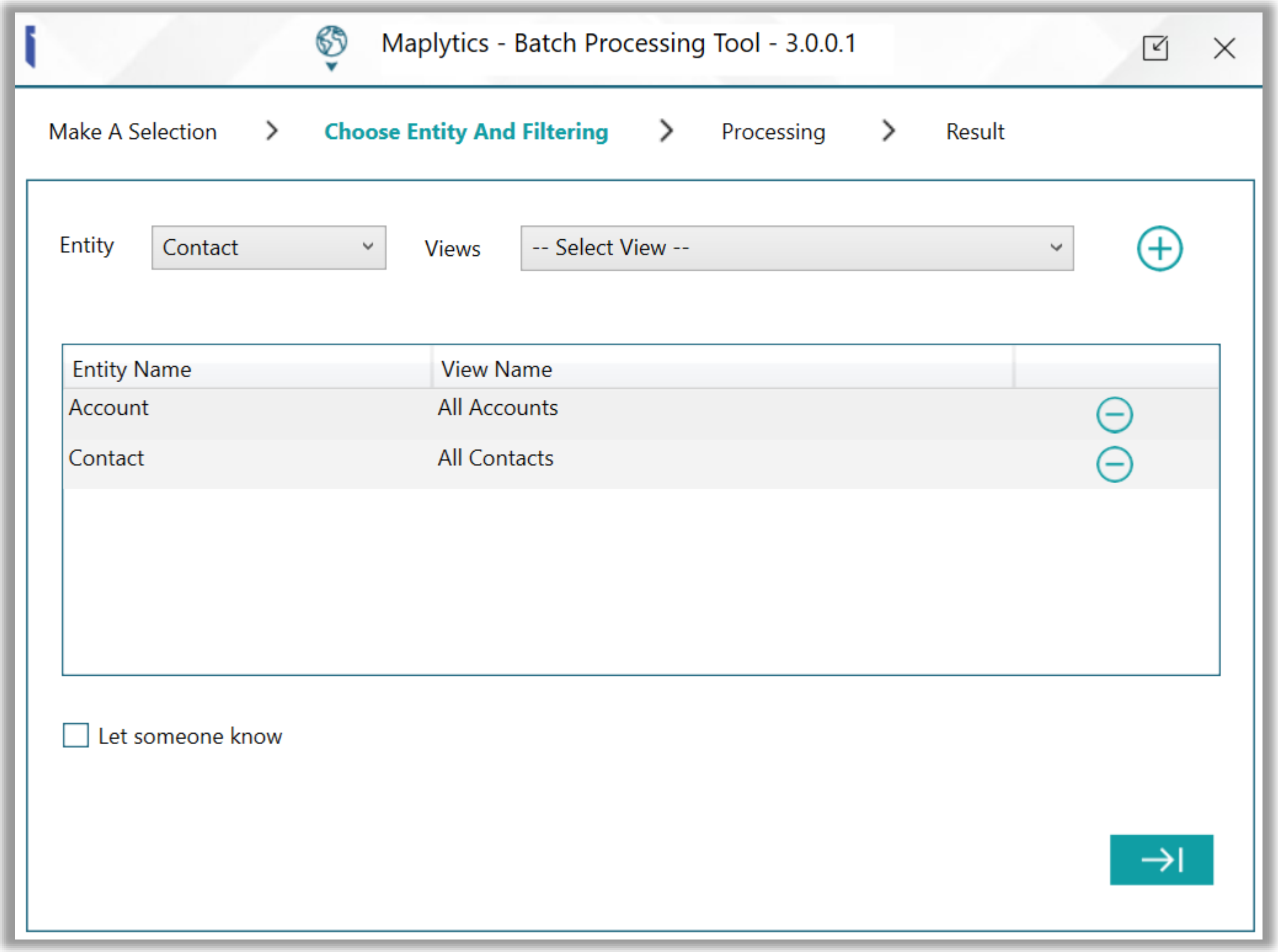
Choose Entity and Filtering:

Please find the details of the same below:

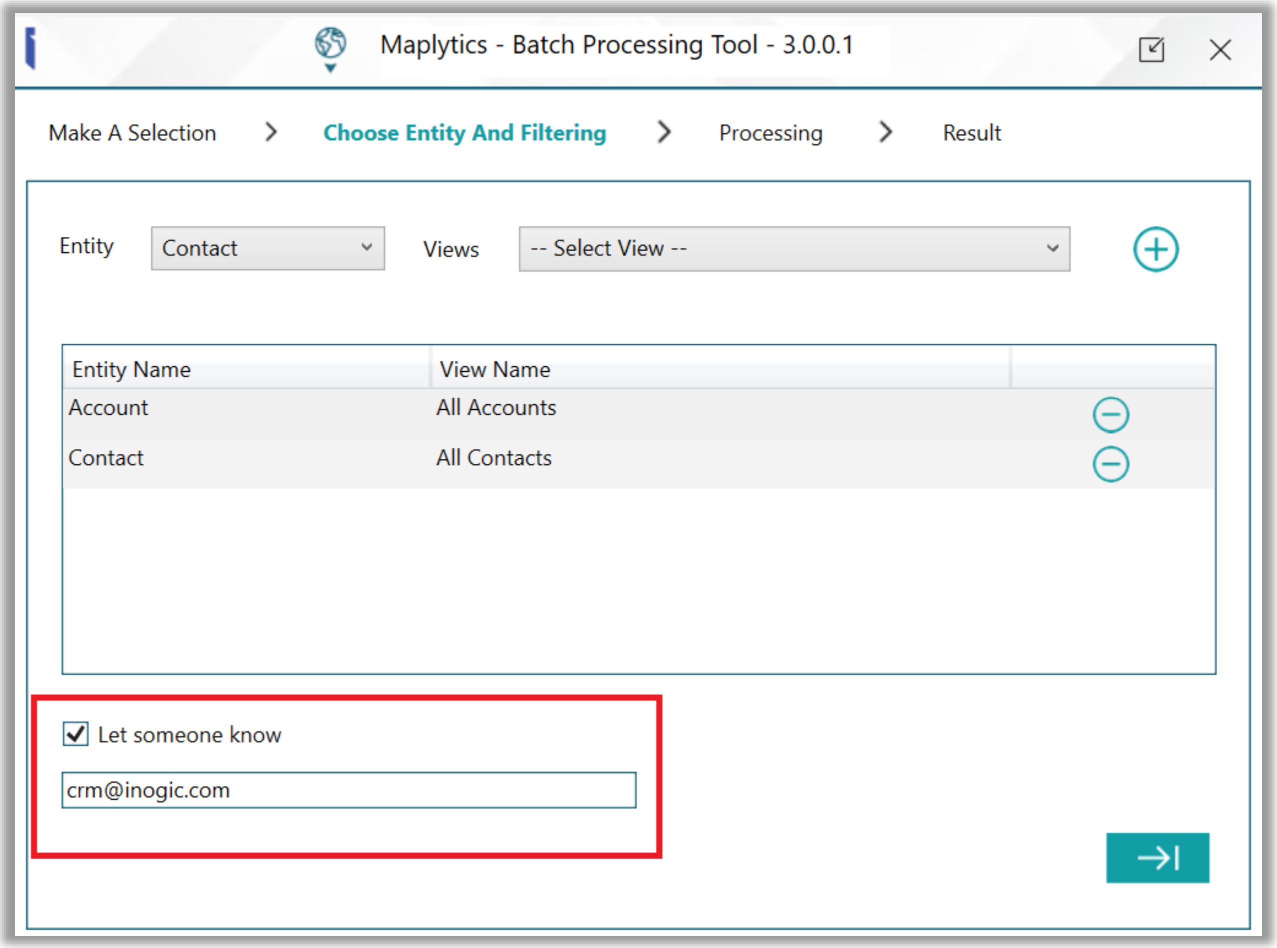
- **Entity**: Select the entities on which the user would like to run this tool.
- **Views**: Once the user selects the entity, all the views defined for this entity are populated in the list of views. Select the required view.

The plus sign can be clicked upon to add more entities and views. The check box at the bottom allows the records to be shared with the user, if required.

Non-Geo coded Records have a separate view 'Non Geocode' for Batch Geocoding for all the Entities. All the non-geo coded records of multiple entities can be processed together.

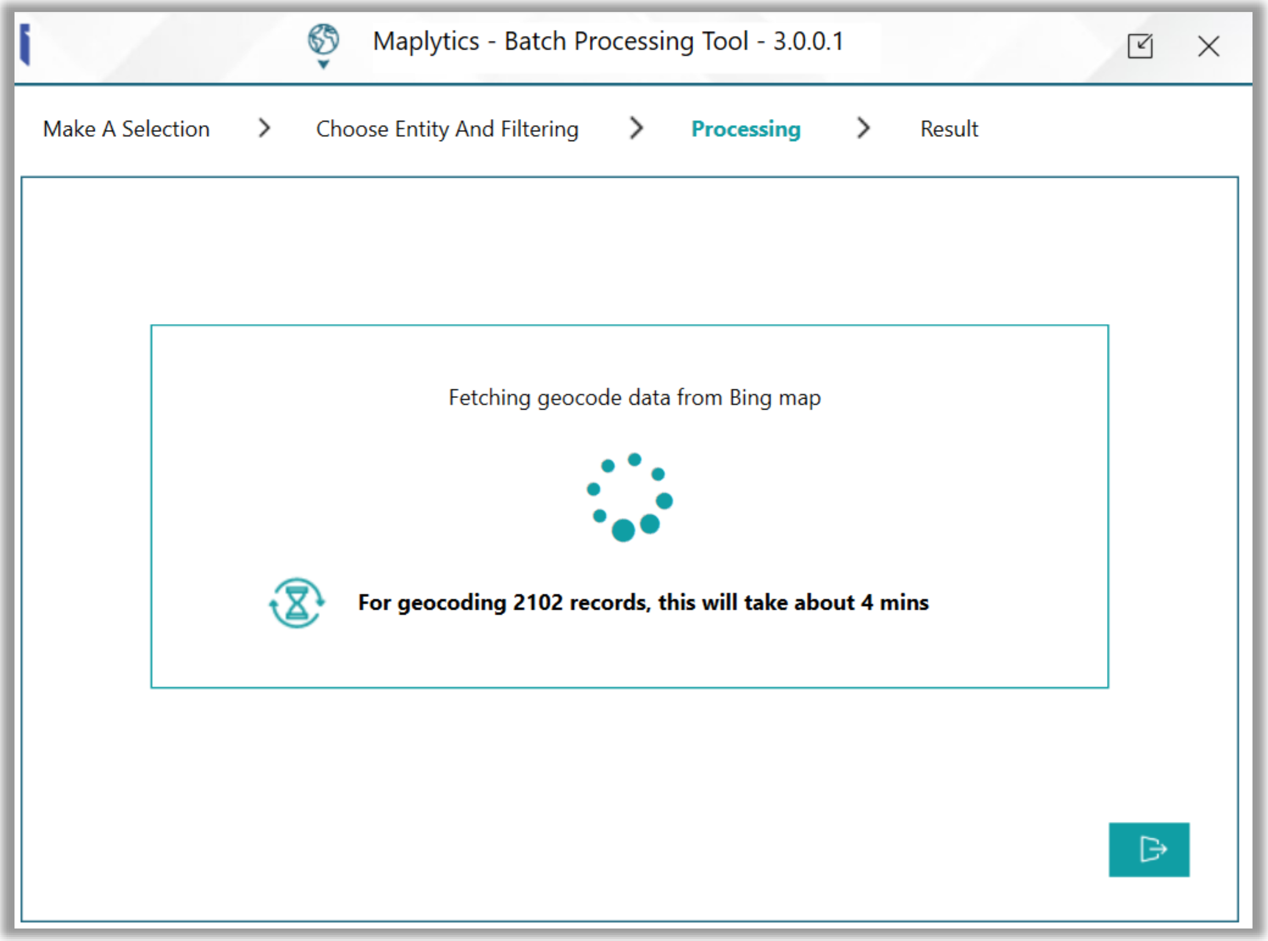


Users can enter the email address, if the they would like the job results to be mailed to them.



The user can go back to the previous stage while in the 'Make A Selection' and ' Choose Entity And Filtering' stages of the process. Returning from Processing and Result stage is not possible.

Processing :
In this section, the user can see the progress of the geocoding process. User can quit the process anytime by clicking on the option at the bottom.



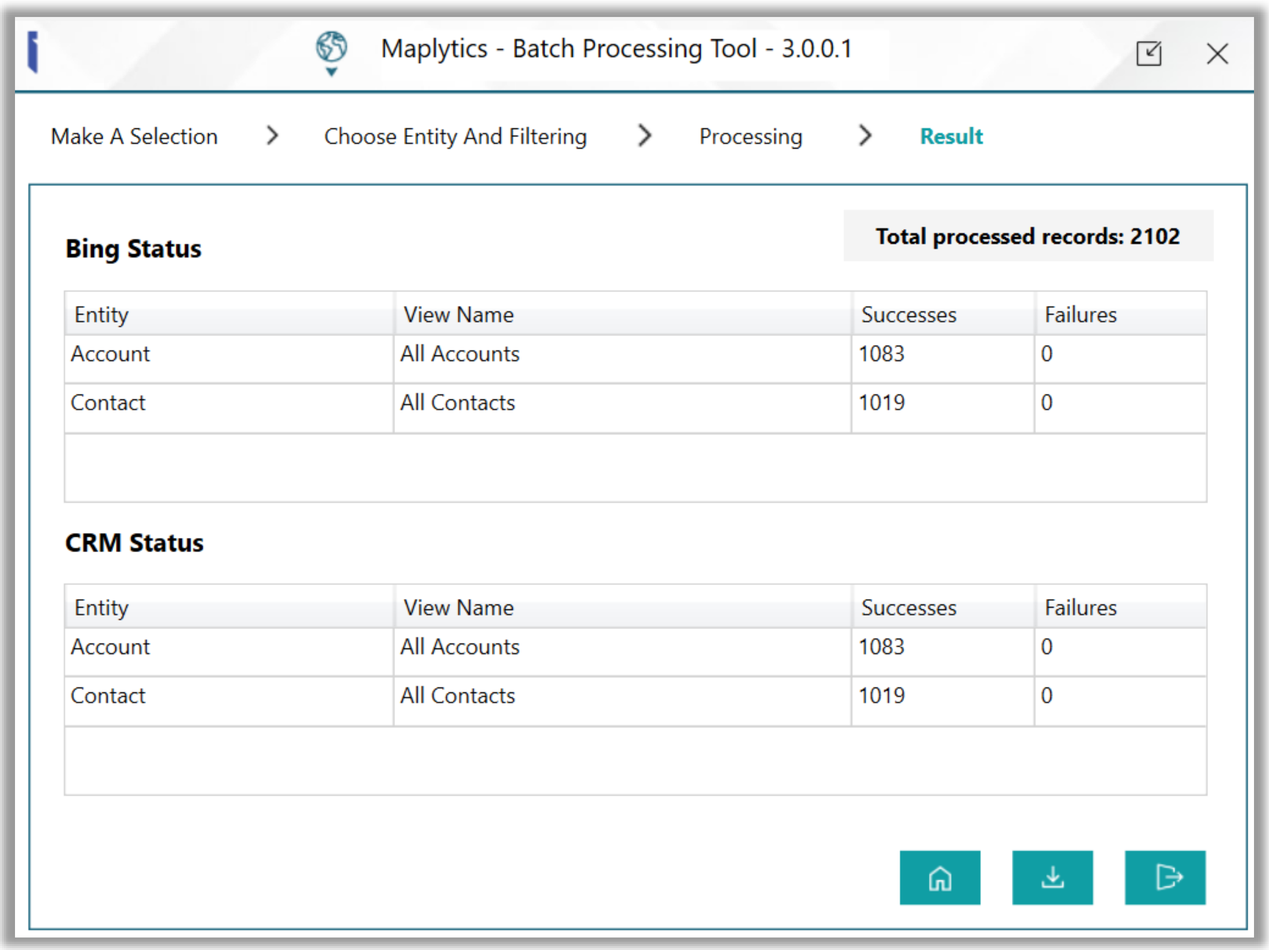
Note: The Batch Processing Tool takes time to process based on the number of records selected. Please do not close the window until this process is completed.

Record Summary:

Geocoding:
Bing Status: This shows the number of the records for which the geocoding from Bing maps was a success or a failure.
CRM Status: This shows the number of the records for which the updation of geocordinates (Latitude & Longitude) to the respective CRM records was a succes or a failure.

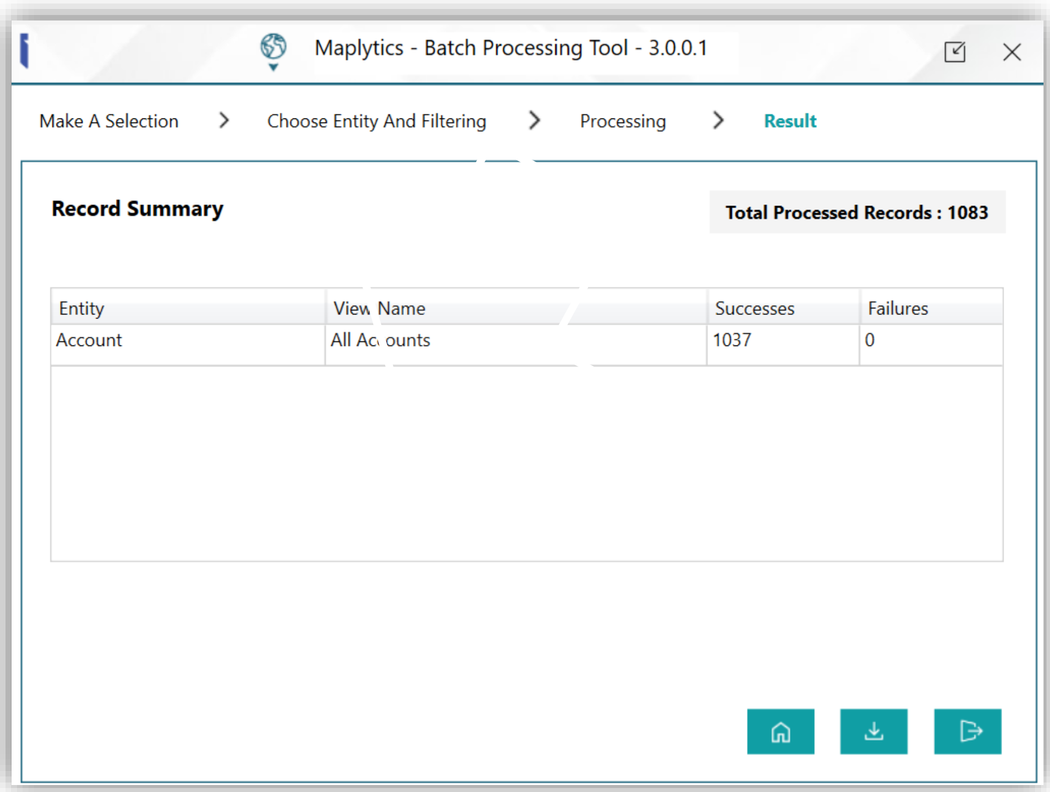
After completing the geocoding process, the user can download the results. The results will be downloaded in Excel format. User can check the columns of CRMDescription and BingDescription in the result to check the reason for failure of processes on the records.

With the options at the bottom, the user can return home, download the result in an Excel format, or exit the process.



Territory assignment:

CRM Status: This shows the number of the records for which the updation of Territories for the respective CRM records was a success or failure.



Note:

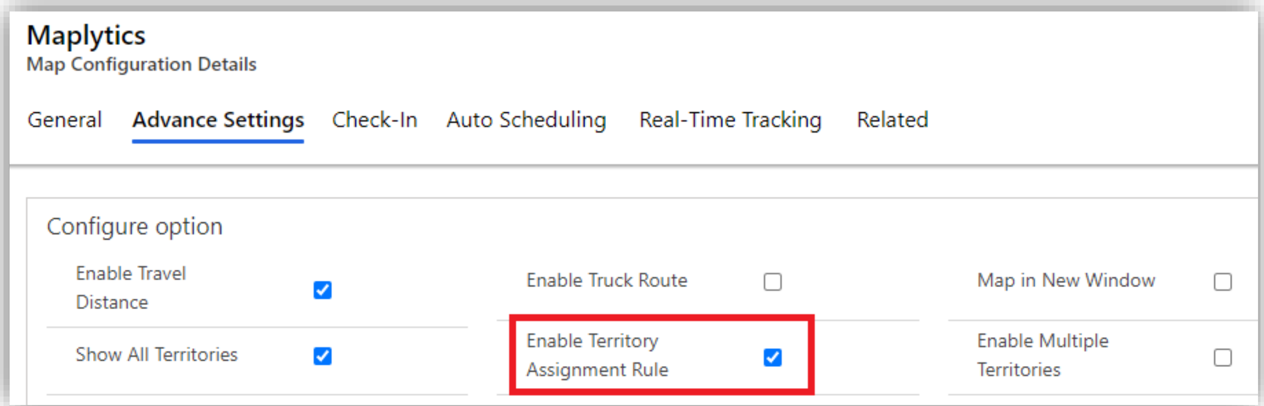
1. The Non Geocode records can be processed in a separate view for all the Entities
2. Non Geocode View is not applicable for Territory Assignment while running the Batch processing tool

Territory Assignment Rule

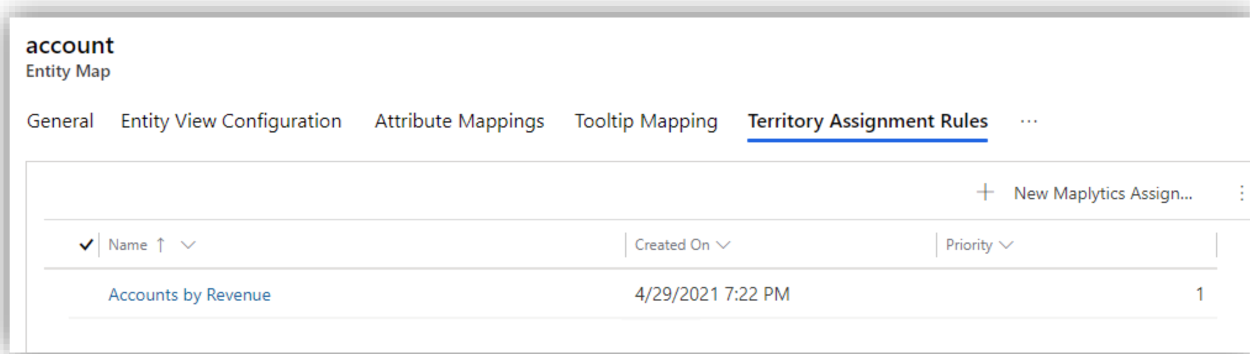
Users can use this feature to create rules for assigning territories or owner to the CRM records as per the requirement. With creating a rule user can set some conditions based on which the territories or the owners will be assigned to only those records which satisfy the conditions provided.

Enable Territory Assignment Rule

To enable the Territory Assignment Rule, ***go to Maplytics App > Settings> Map Configuration Details > Default Configuration Detail record (the one with no user)> Advance Settings > Enable Territory Assignment Rule*** and select the checkbox to enable using the feature. The feature will be disabled by default.



Once this feature is enabled, they will be able to see a new tab of Territory Assignment Rule in the Entity Maps. For an instance, the screenshot below shows the Entity map of Accounts.

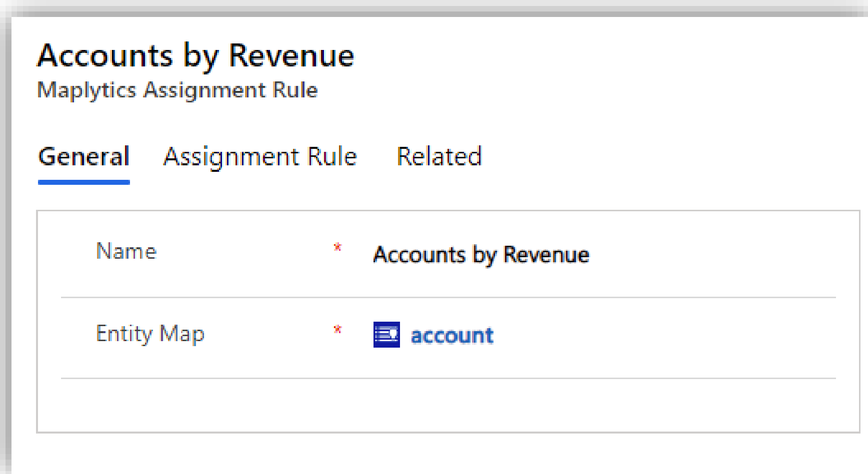


Creating Territory Assignment Rule

To create a new rule, click on **New**. The user will be able to see the window for a New Rule.

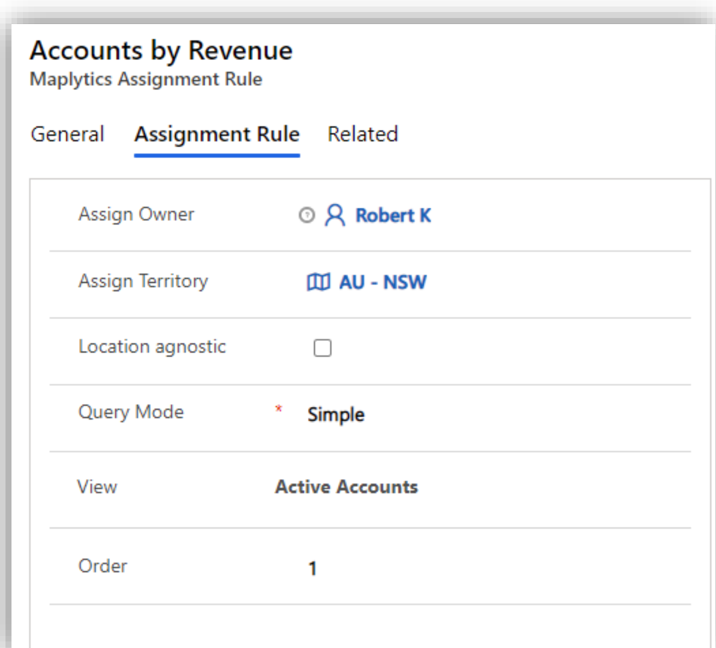
General

In the 'General' tab, user can enter the name for the rule and select the entity for which the rule is being created.



Assignment query

Here, the user can find the various options as explained below to set the conditions required within the rule:



Assign Owner: Select the user who should be assigned as the owner to the records.

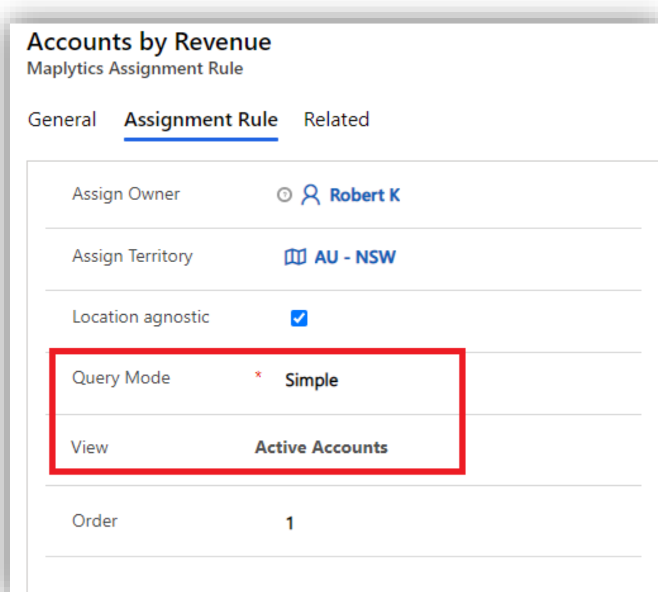
Assign Territory: Select territory which should be assigned to the records. If users want to assign only the owner to the records, they can leave this blank.

Location Agnostic: This option will be visible only when a territory is selected in the Assign Territory field. It will be deselected by default and will have an effect on the assignment of the territories and owners as explained below.

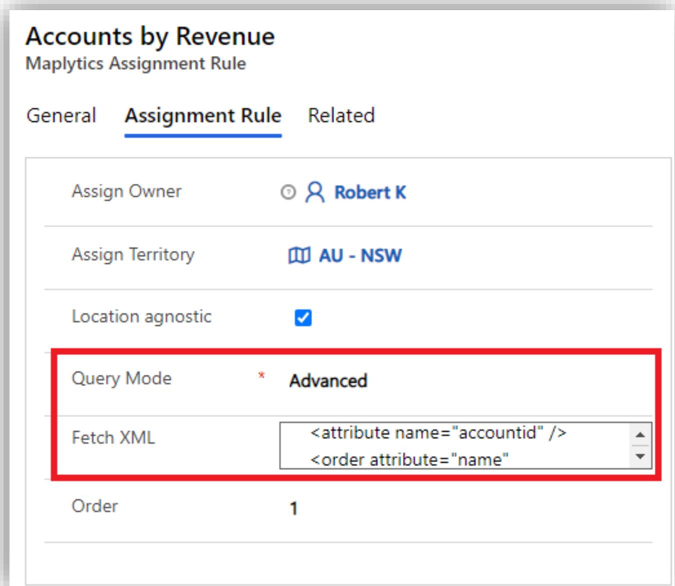
- Not selected - If the option of Location agnostic is not selected, the selected territory and the owner will be assigned to only those records which satisfy the query and also lie within that selected territory based on the respective latitude or longitude values of the records. For example, a territory for Staten Island has been selected and the condition in the query says, Accounts with Annual revenue greater than 100K USD, then Staten Island territory and the selected owner will be assigned to only those records which have annual revenue greater than 100K as well as they lie within Staten Island based on the latitude and longitude values of the records.
- Selected: If the option of Location agnostic is selected, then the selected territory and the owner will be assigned to all the records from the selected view that satisfy the query irrespective of the latitude and longitude values of the records. For example, a territory for Staten Island has been selected and the condition in the query says, Accounts with Annual revenue greater than 100K USD, then Staten Island territory and the selected owner will be assigned to all the Accounts from the selected view which have annual revenue greater than 100K, even if they lie outside the Staten island based on the latitude and longitude values of the records.

Query Mode: There are two Query Modes:

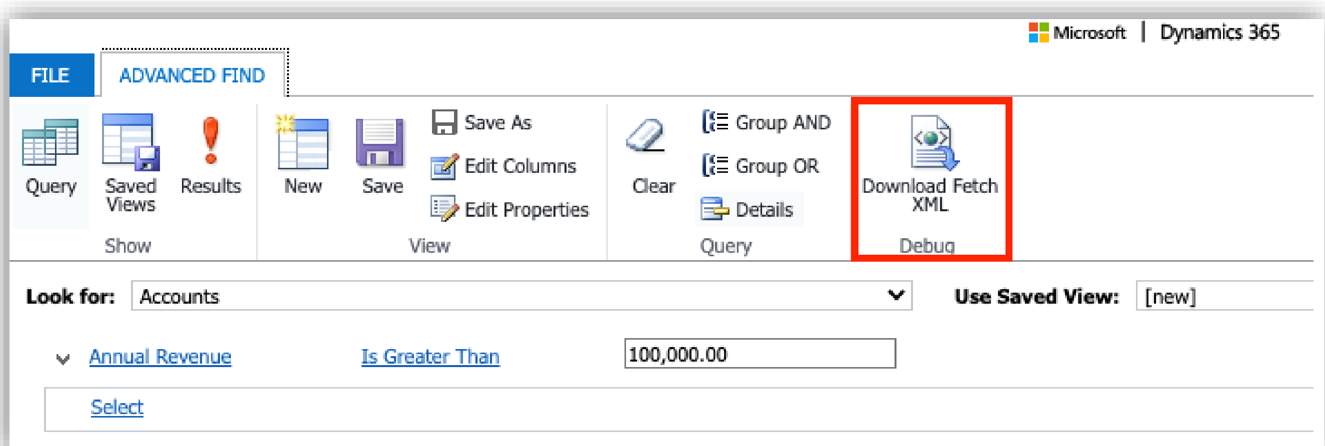
- Simple: If query mode is selected as Simple then it will show all the system views. User can select a System view to consider the respective records.



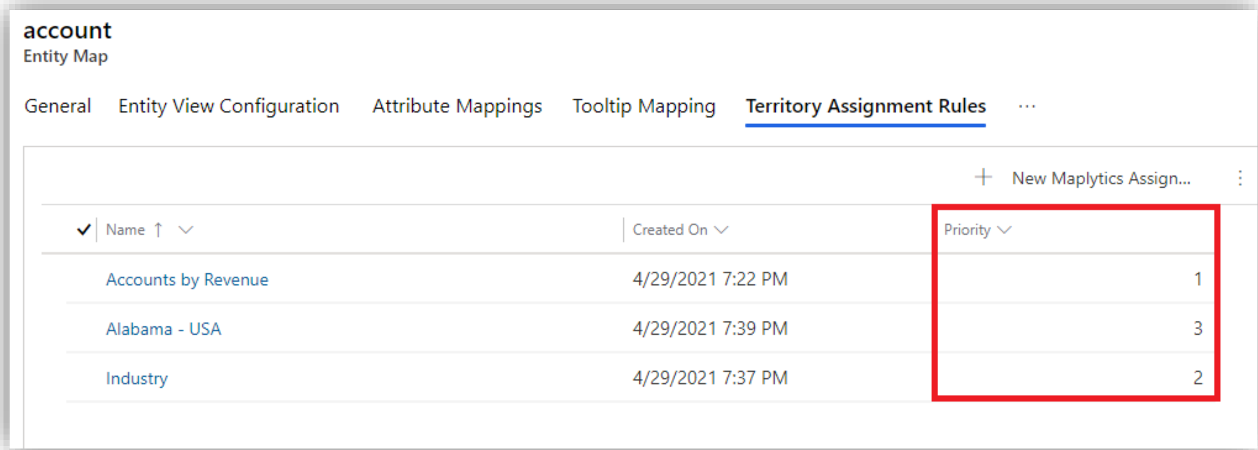
- Advanced: If query mode is selected as **Advanced**, the user can put the required Fetch xml in the field as shown in the below screenshot.



To create a Fetch XML query, go to Advanced find > Select the entity and the required filters > Download Fetch XML



Priority: If multiple Territory Assignment Rules are created and while assigning territories a record satisfies more than one rules then this field will decide the priority of the rules to be run and assigned among the list of rules. Where 1 is the highest priority and the priority keeps decreasing as we go to a higher number. Let's say three Territory Assignment rules are created with the priorities given as 1, 2 and 3. While assigning territories, if a record satisfies all the three rules, then first, it will check the priority of those three rules and 1 being the highest priority, the respective territory and the owner will be assigned to the record as per the Territory assignment rule with Priority 1.

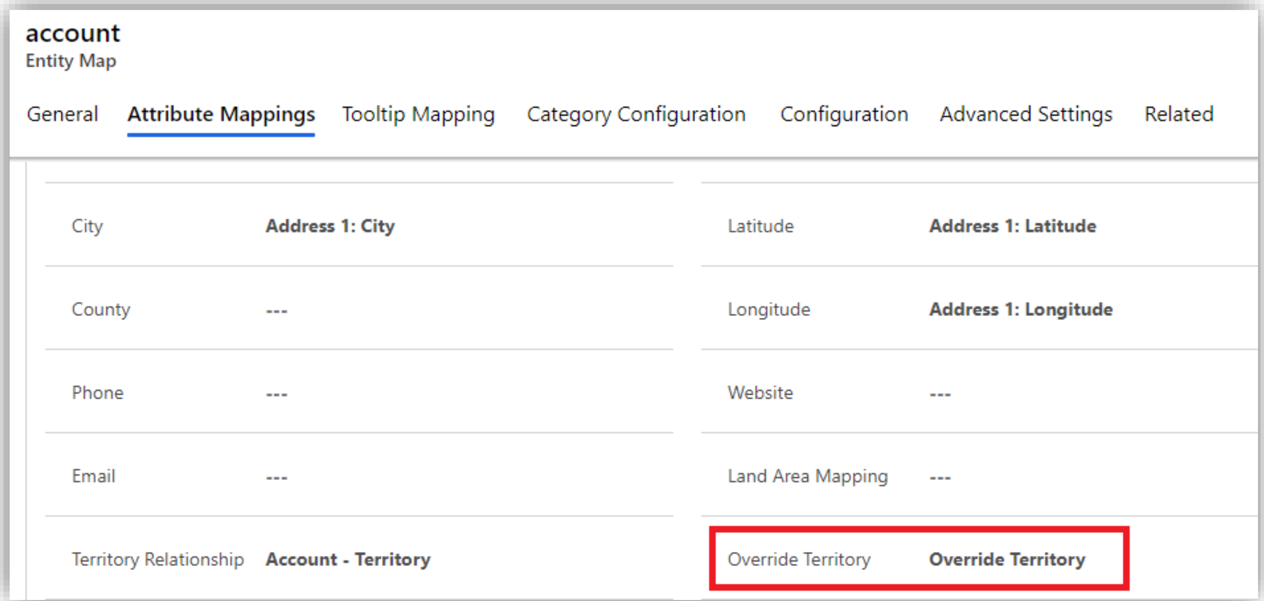


Override Existing Territory

The Maplytics admin or the System admin can use this feature for the respective entities to decide whether the existing territory(ies) will be overwritten or not while assigning territories to the records.

To use this, first create a field with data type 'Boolean' on required entity form for Override territory. Here users can set it to be 'Yes' or 'No'. By default, this field has already been created for Accounts, which can be added to the form. This option will be set as null by default.

Once the field is added to the required entity, Maplytics admin or System admin can ***go to Maplytics App > Settings > Entity map > Open entity map for required entity > Attribute Mappings > Override Territory > Select the field that was added on the entity form***.



Based on the value of the 'Override territory' field in the record, it will be decided whether the existing territory(ies) will be overwritten or not while assigning territories to the respective records.

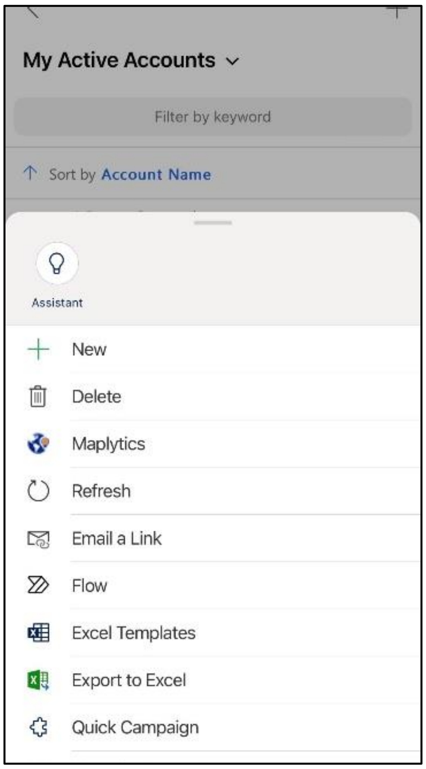
- If the Override territory field is set as 'Yes' then while assigning territories, if there are any territory(ies) already assigned to the respective records, then those will be overwritten and replaced by the new territory(ies) that are being assigned.
- If the Override territory field is set as 'No', then while assigning territories, if there are any territory(ies) already assigned to the respective records, then those will remain as it is and no new territories will be assigned.
- If Override territory field is set as 'No', then while assigning territories, if there is no territory is assigned to the respective records, then it will assign the new territory(ies).

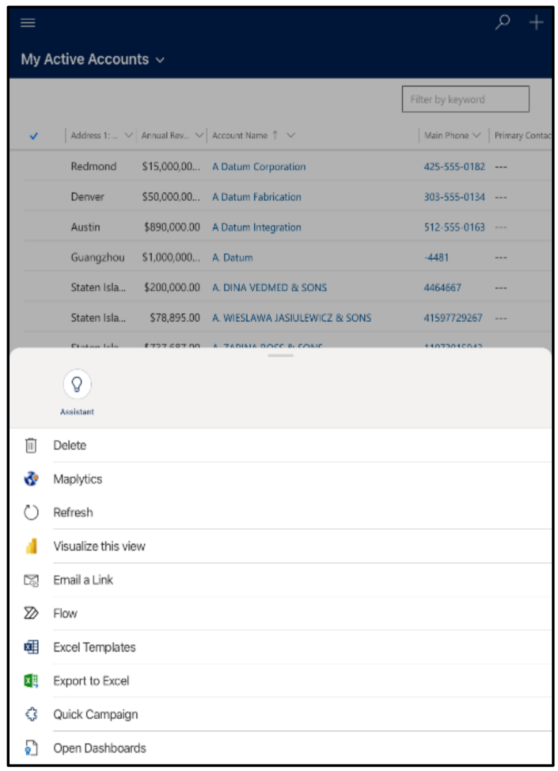
Maplytics – Tablet / Mobile

For Dynamics 365 v9.x, Maplytics can be accessed from mobile and tablets as well. Users can use the Dynamics 365 App for Phones and Tablets, Dynamics 365 Sales App or Dynamics 365 field service app to Access Maplytics into Mobiles and Tablets. Users can use the 'Detail Map' , 'Heat Map' and 'Map' buttons and the dashboards to access Maplytics into their devices.

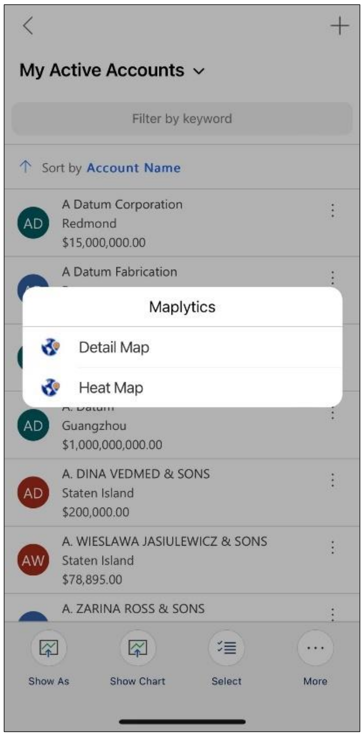
Mobile Tablet

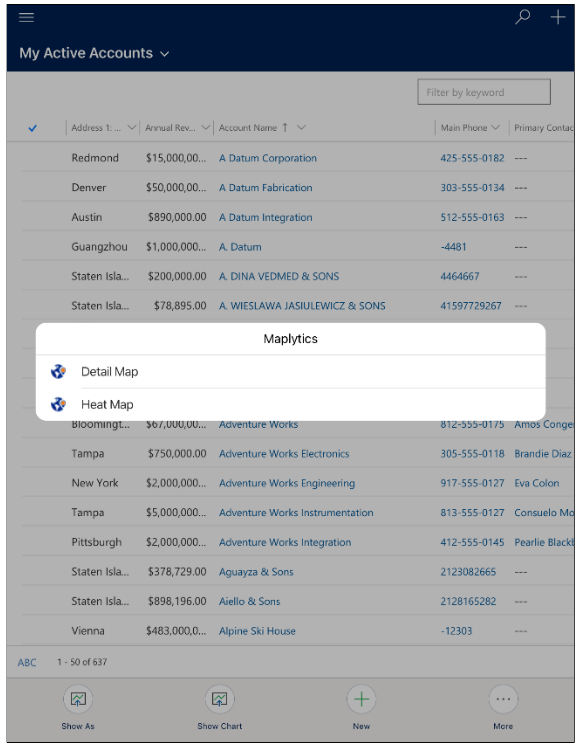
Clicking on the 'More' option within the Entity Menu slides up the following options.

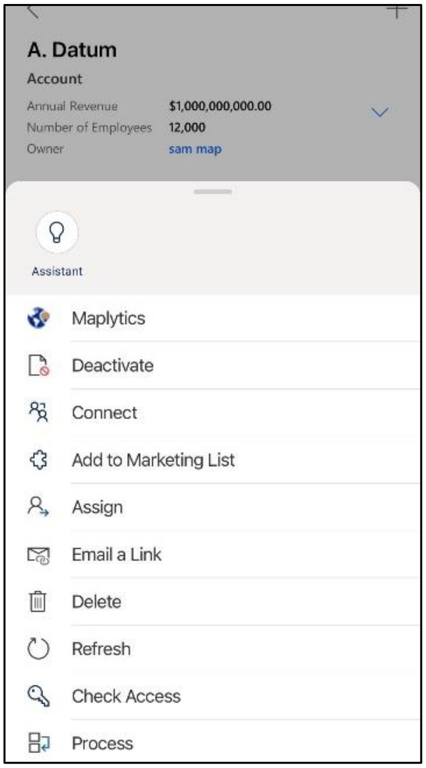


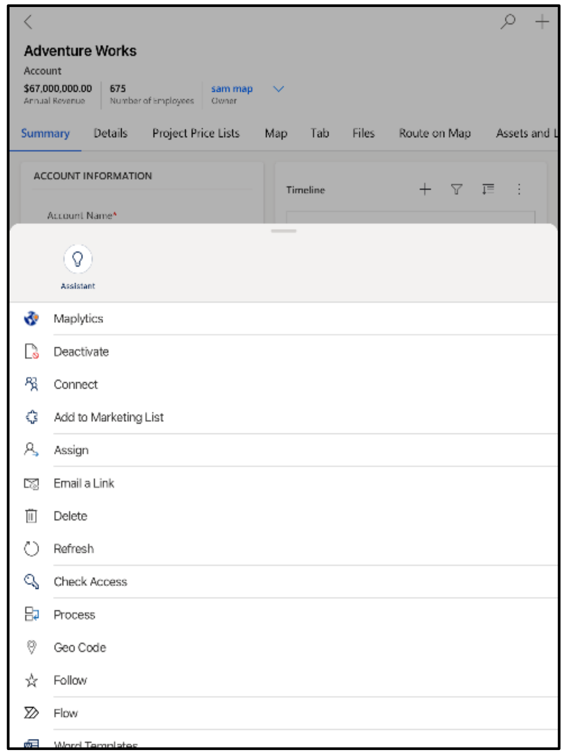


A click on the Maplytics menu above opens a modal window with an option for Detail Map and Heat Map

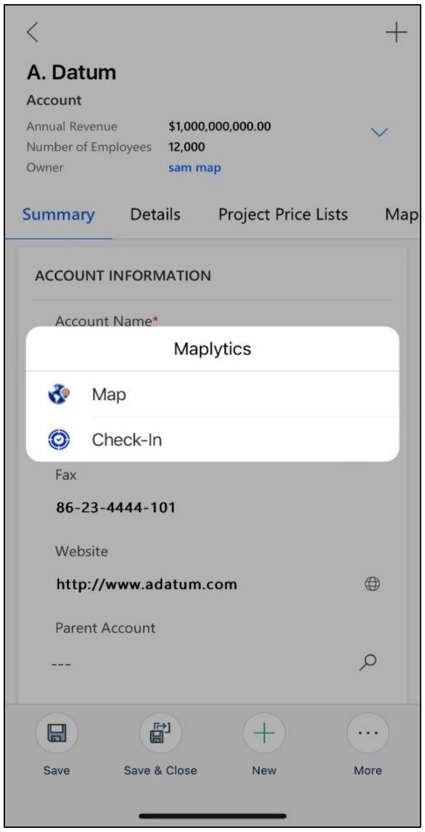

My Active Accounts
Filter by keyword
Sort by Account Name
A Datum Corporation
Redmond
$15,000,000.00
A Datum Fabrication
Maplytics
Detail Map
Heat Map
Guangzhou
$1,000,000,000.00
A. DINA VEDMED & SONS
Staten Island
$200,000.00
A. WIESLAWA JASIULEWICZ & SONS
Staten Island
$78,895.00
A. ZARINA ROSS & SONS
Show As
Show Chart
Select
More


My Active Accounts
Filter by keyword
Maplytics
Detail Map
Heat Map
Show As
Show Chart
New
More

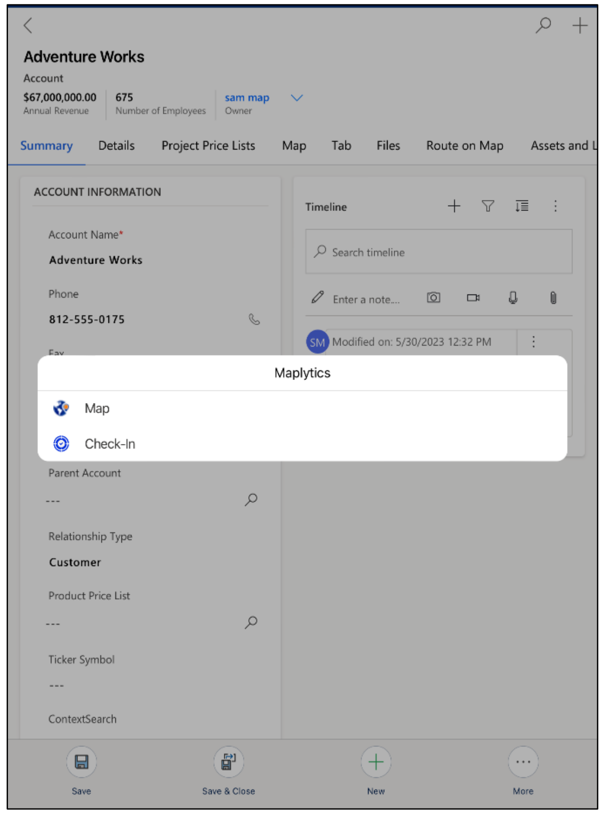




Within an individual account entity, a click on the Maplytics menu opens a modal window with an option for Map and Check-in


A. Datum
Account
Annual Revenue
$1,000,000,000.00
Number of Employees
12,000
Owner
sam map
Summary
Details
Project Price Lists
Map
ACCOUNT INFORMATION
Account Name*
Maplytics
Map
Check-In
Fax
86-23-4444-101
Website
http://www.adatum.com
Parent Account

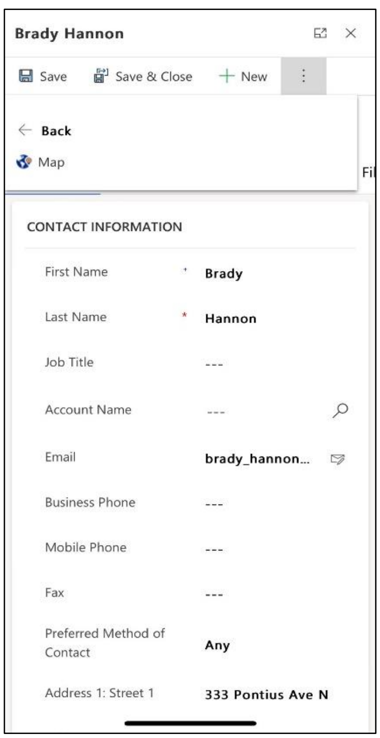
Save
Save & Close
New
More


Adventure Works
Account
$67,000,000.00
Annual Revenue
675
Number of Employees
sam map
Owner
Summary
Details
Project Price Lists
Map
Tab
Files
Route on Map
Assets and L
ACCOUNT INFORMATION
Account Name*
Adventure Works
Phone
812-555-0175
Timeline
Search timeline
Enter a note...
Modified on: 5/30/2023 12:32 PM
Maplytics
Map
Check-In
Parent Account

Relationship Type
Customer
Product Price List

Ticker Symbol

ContextSearch
Save
Save & Close
New
More


Brady Hannon
Save
Save & Close
New
Back
Map
CONTACT INFORMATION
First Name
Brady
Last Name
Hannon
Job Title

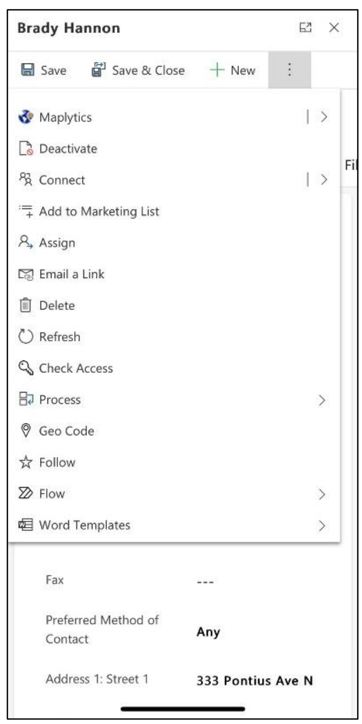
Account Name

Email
brady_hannon...
Business Phone

Mobile Phone

Fax

Preferred Method of Contact
Any
Address 1: Street 1
333 Pontius Ave N


Brady Hannon
Save
Save & Close
New
Maplytics
Deactivate
Connect
Add to Marketing List
Assign
Email a Link
Delete
Refresh
Check Access
Process
Geo Code
Follow
Flow
Word Templates
Fax

Preferred Method of Contact
Any
Address 1: Street 1
333 Pontius Ave N

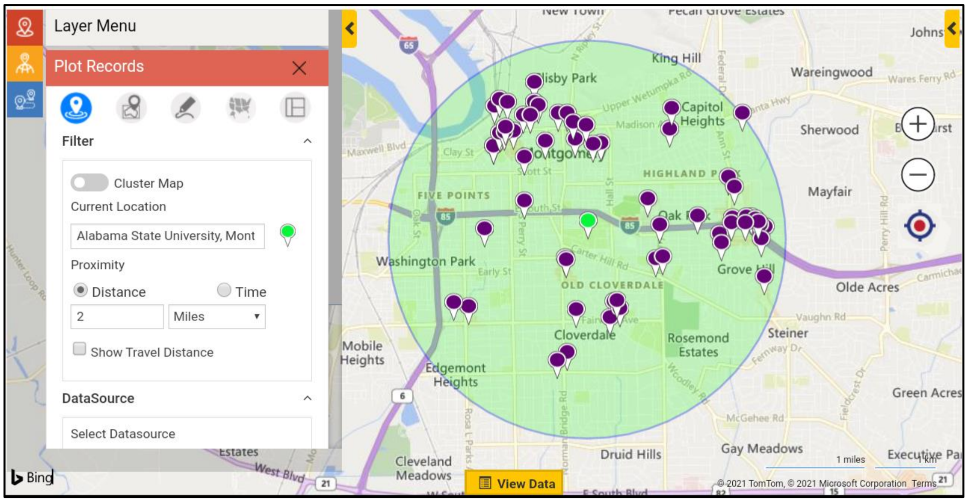
Detail Map

The Detail map consists of the following components. There are five ways to plot the data on Map, similar to the Detail Map on desktop:

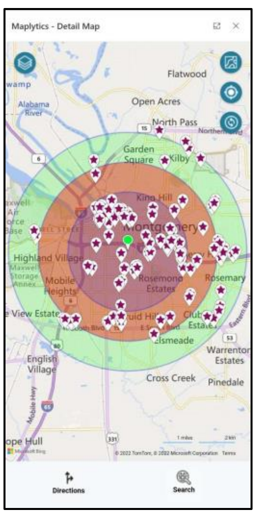
- By Location
- By Region
- By Drawing
- By Territory
- By Template

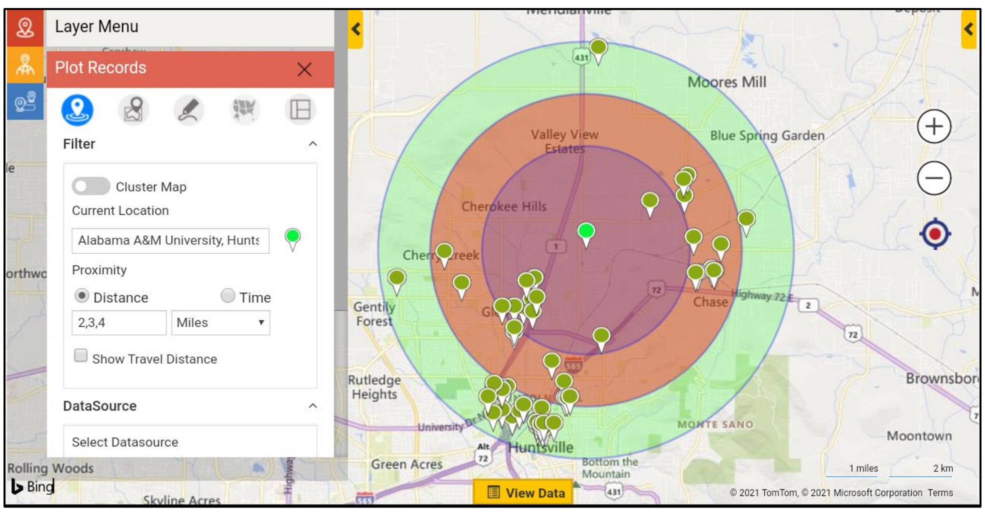
Proximity

Enter the radius for the proximity search. The Proximity can be provided in either Miles or Kilometers.



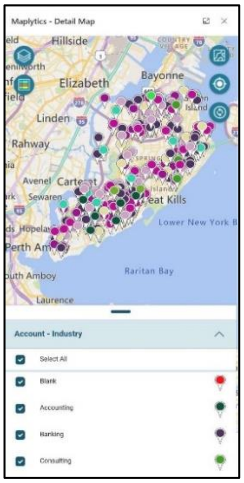
Concentric Proximity Search

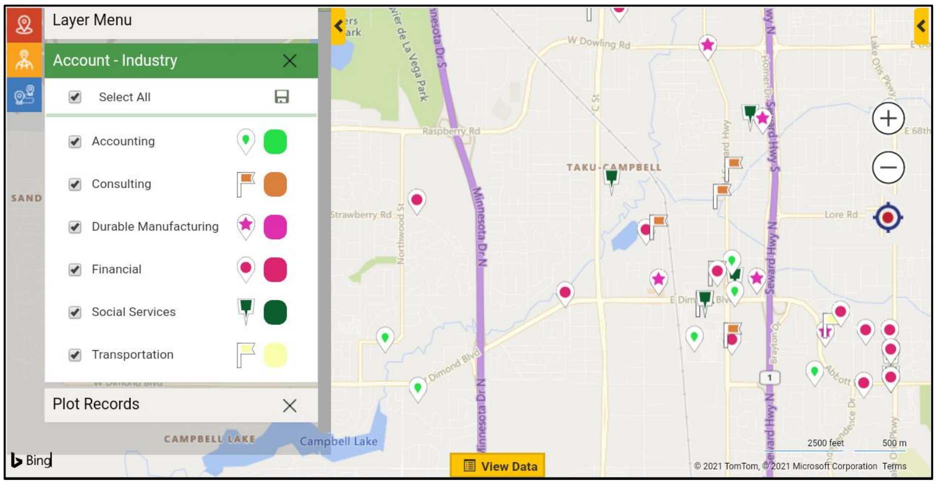




Category Filter

User can categorize the data on the basis of an attribute of the Entity



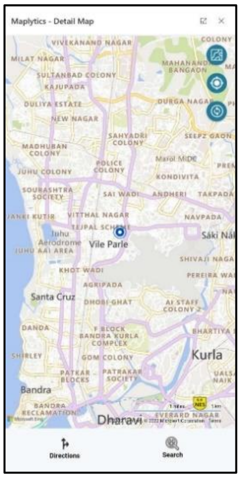


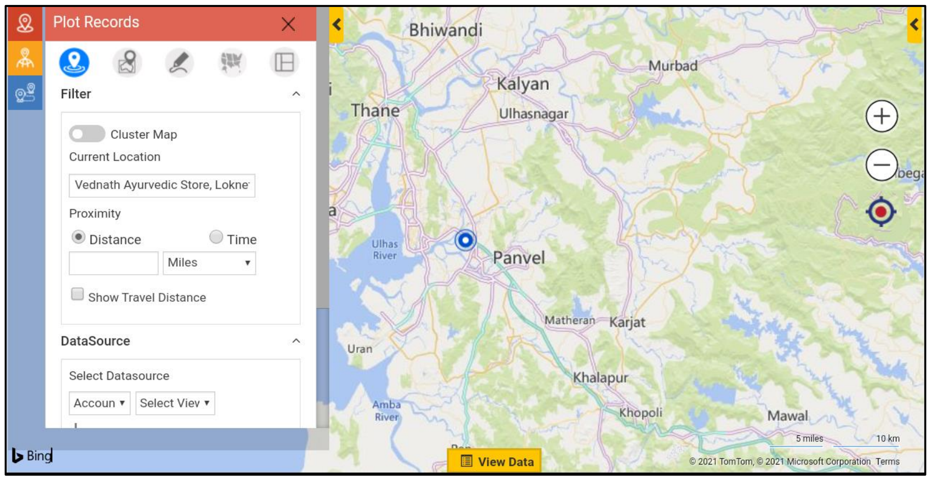
Current Location

This is used in combination with Proximity to specify the center point for the proximity search. By default, this field displays the address stored in the Maplytics Personalized record of the logged in user.

Set GPS Location as the current location

The user can also locate the GPS location of phone/tablet devices using  button.





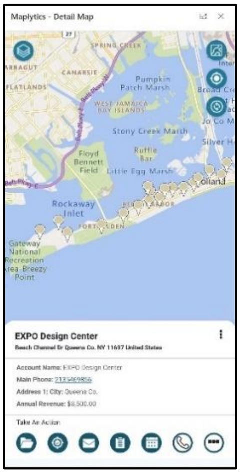
GPS location is represented by 'Blue' circle on the map. It will automatically update the user's current location, making it easier to perform proximity (Near-Me) searches.

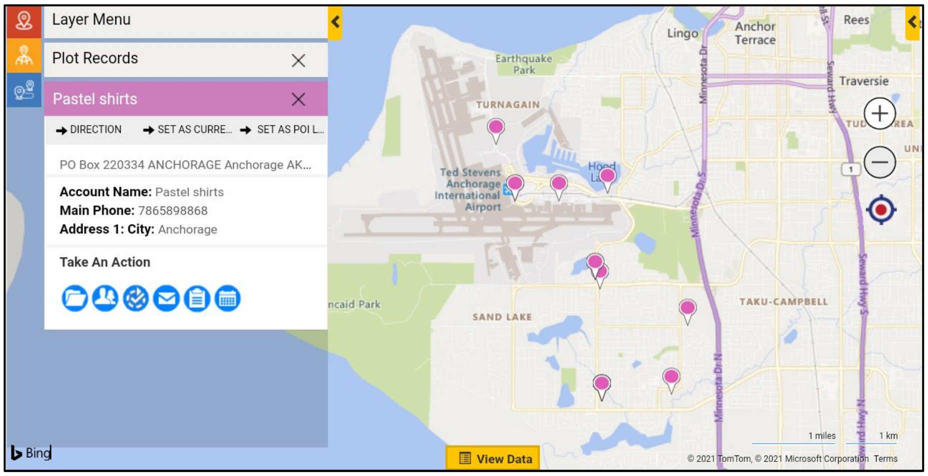
Note: Please ensure the following points for the GPS functionality to work:

- ***Provide 'Location' permission to Dynamics 365 App in phone / tablet device***
- ***GPS location is turned ON of respective devices***
- ***'User Content and Location' is tuned ON in Dynamics 365 App***

Tooltip Card

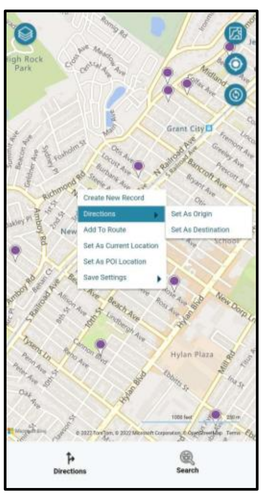
Every Pushpin will display the record name, address, as well as the contextual data defined in the tooltip section of the Maplytics Configuration when double clicked on the record. The user can open the record, check-in/out and perform other actions using the available quick actions button.

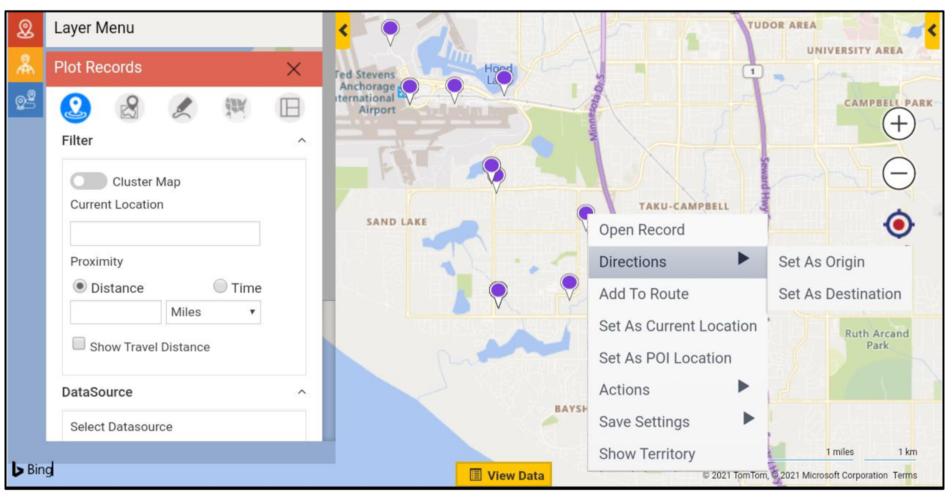




Contextual Menu

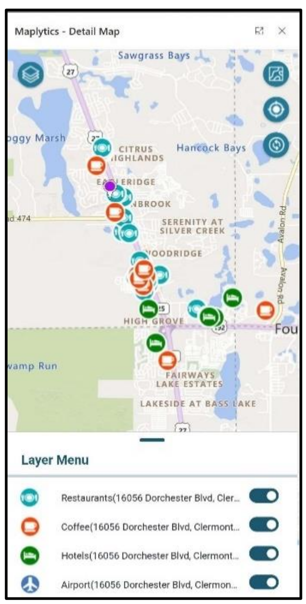
To get a contextual menu on the map, long press anywhere on the map. Pushpin Contextual menu provides the following additional options. These option provides commonly used features in Maplytics like Set as Current Location, Origin, and Adding to Route, etc.

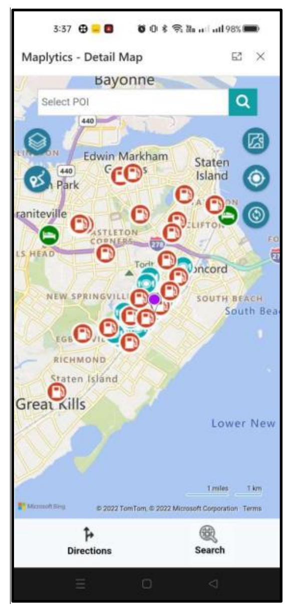




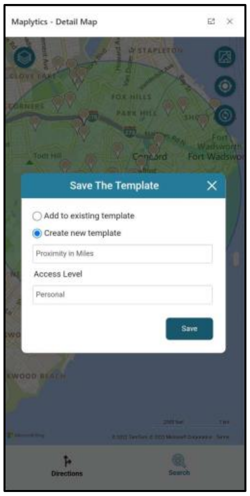
<u>Set As Origin:</u>
Selecting this option will set the address of the pushpin as the start location of the route.
<u>Set As Destination:</u>
Selecting this option will set the address of the pushpin as the end location of the route.
<u>Add to Route:</u>
This option will set the address of the pushpin as a middle waypoint of the selected route. For example, if the users already have Point A and Point B selected as their route, and click on the ***Add To Route*** option, then the Point B will become Point C, and the address of the selected pushpin will become the Point B of their route.
<u>Set As Current Location:</u>
This option is used to set the address of the pushpin as the current location, which can be used for proximity search. For example, if the user wants to plot all the leads that are within a radius of 100 miles from a particular record then the user can click on the ***Set As Current Location*** option to set the address as the current location and then the user can plot the records around this location.
This option also removes the additional step to type the current location manually for the proximity search.

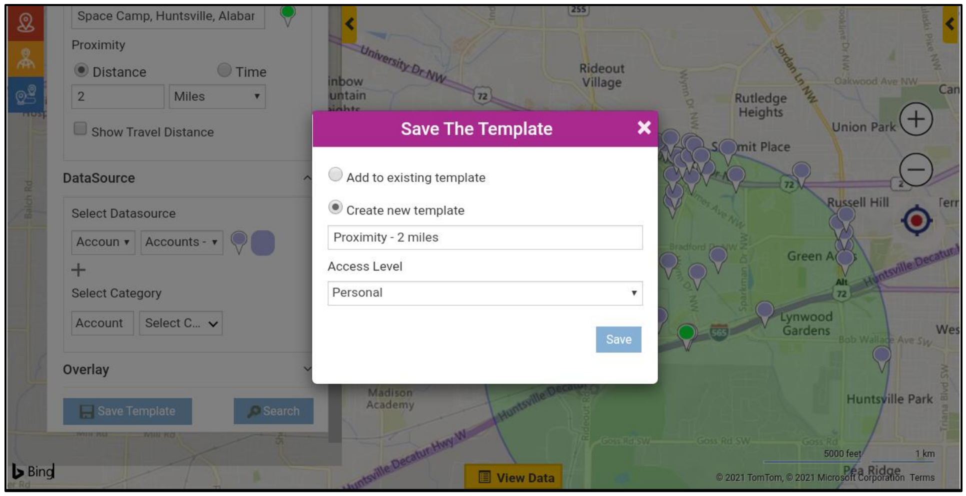
<u>Set As POI Location:</u>
This option helps the user to set the center point for the Point of Interest (POI) searches like ATMs, restaurants, Airports, etc. Once this location is set as the POI location, the user can search for different POI around this location. User can choose the icons or the locations from the list of 'others' or enter a keyword to search for the respective POI locations on the map.





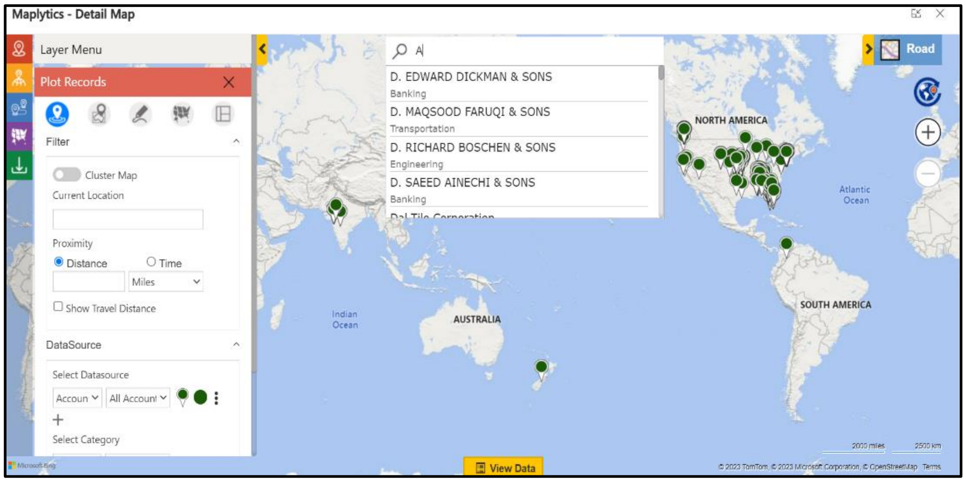
<u>Save Template:</u>
User can save the plotted search criteria as a template, so as to open the template directly instead of searching on the map again.


Maplytics - Detail Map
Save The Template
Add to existing template
Create new template
Proximity in Miles
Access Level
Personal
Save
Directions
Search

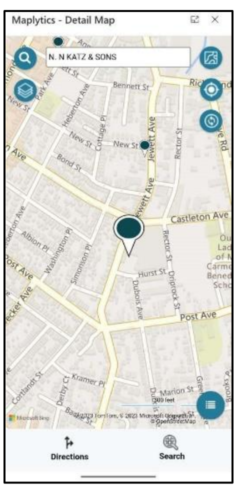

Space Camp, Huntsville, Alabar
Proximity
Distance
Time
2
Miles
Show Travel Distance
DataSource
Select Datasource
Accoun
Accounts -
Select Category
Account
Select C...
Overlay
Save Template
Search
Save The Template
Add to existing template
Create new template
Proximity - 2 miles
Access Level
Personal
Save
View Data
Bing
© 2021 TomTom, © 2021 Microsoft Corporation Terms

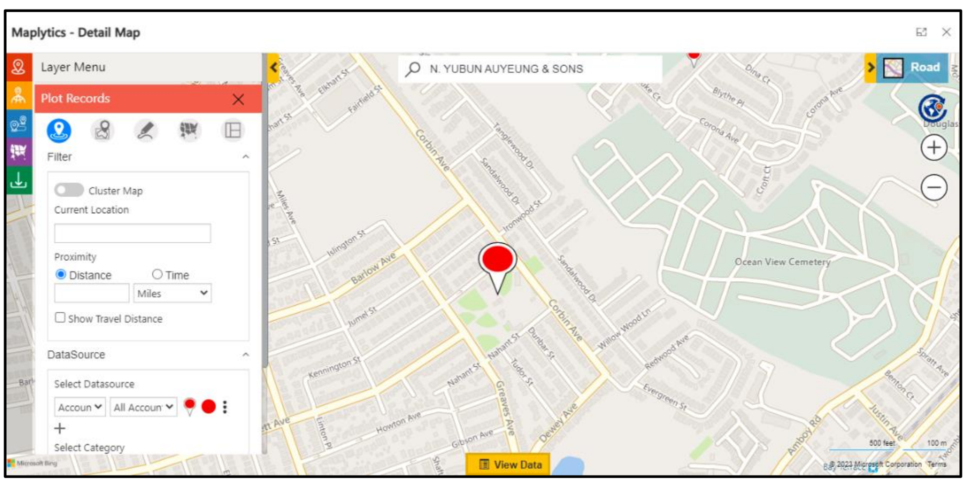
Search Record

After plotting of records, particular record can be searched by typing the primary attribute and getting prompts for records.



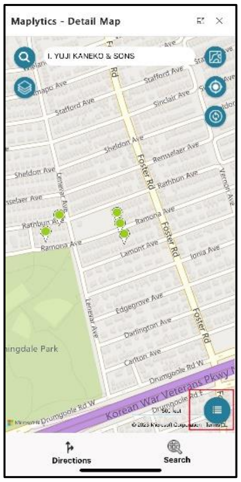
The selected record gets highlighted and zoomed. The zoom level gets set accordingly.

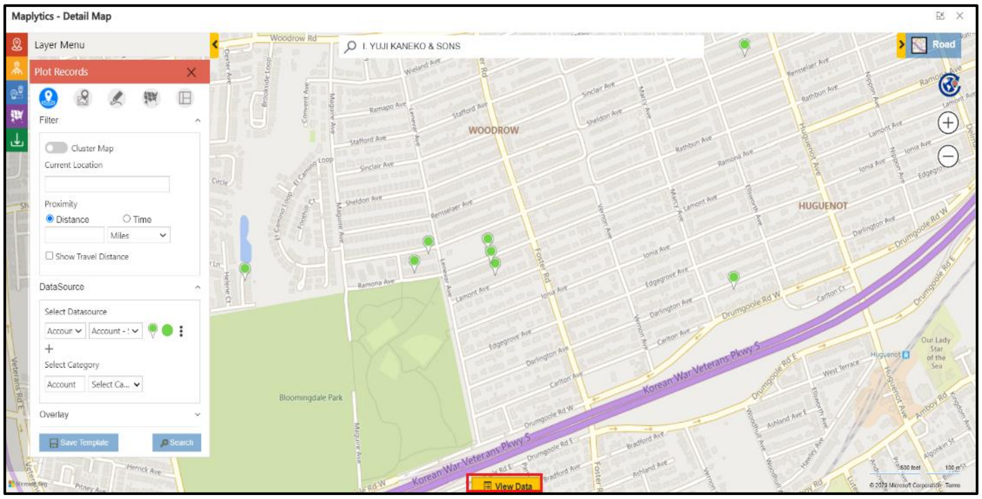


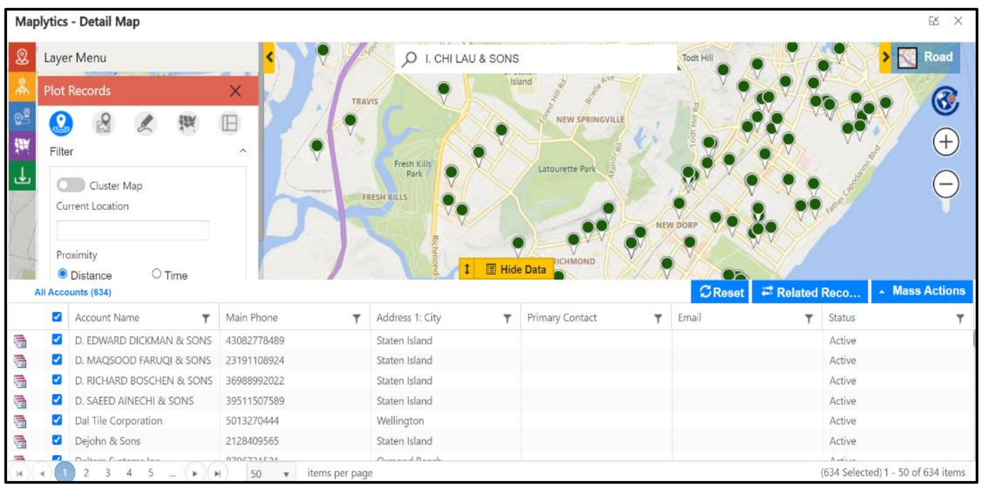


Data Grid

The plotted records are visible in the Data Grid at the bottom of the screen. They could be filtered out by adding appropriate keywords in the 'Filter by keyword' bar. Mass Actions can be performed on the selected records in the grid.

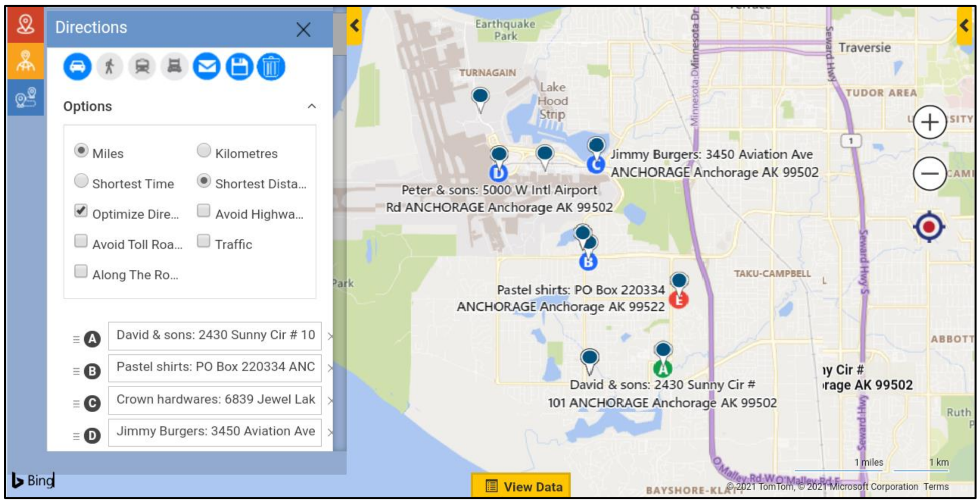




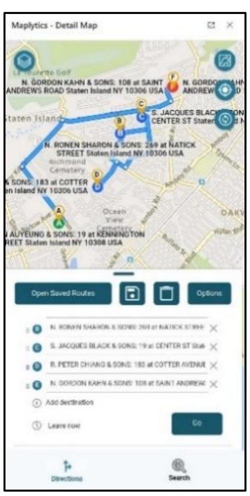


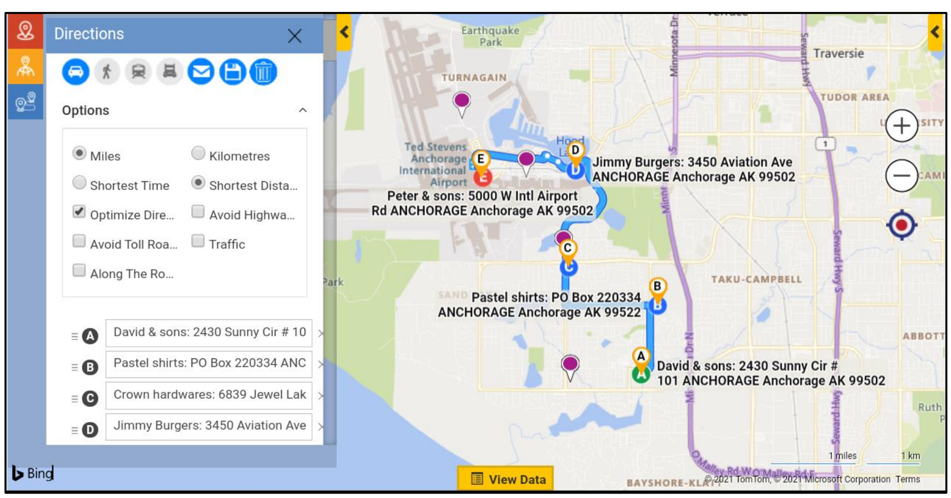
Routing – Tablet / Mobile

Another essential feature of Maplytics is Routing across multiple waypoints. Using the Contextual Menu options explained above, the users can add multiple waypoints to their journey. At given point in time, the users can add ***maximum 25 waypoints in direction.***



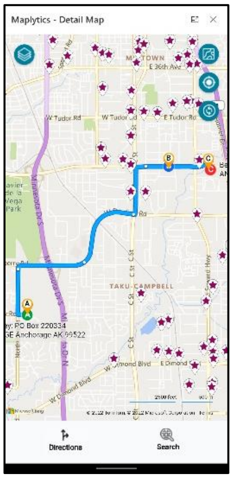
Once multiple waypoints have been added, click on ***Go*** button to bring up the Routing Screen shown below.

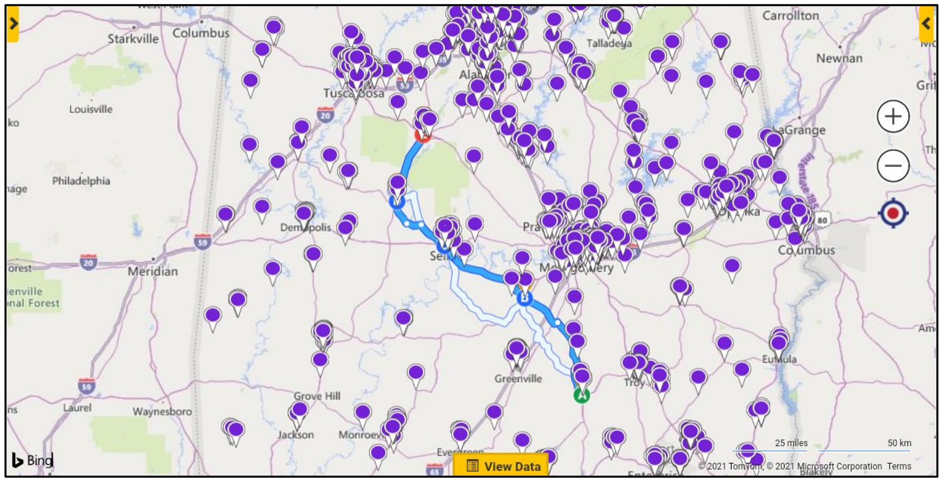




Unified View for Route and Records

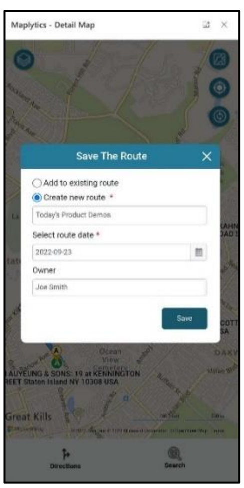
When the user plots the data and then creates a route, both the plotted data and the route will stay on the map. This makes it easy for the user to add more waypoints to the route without switching between Plot and Directions card. The route can be cleared using the 'Clear Route' button.

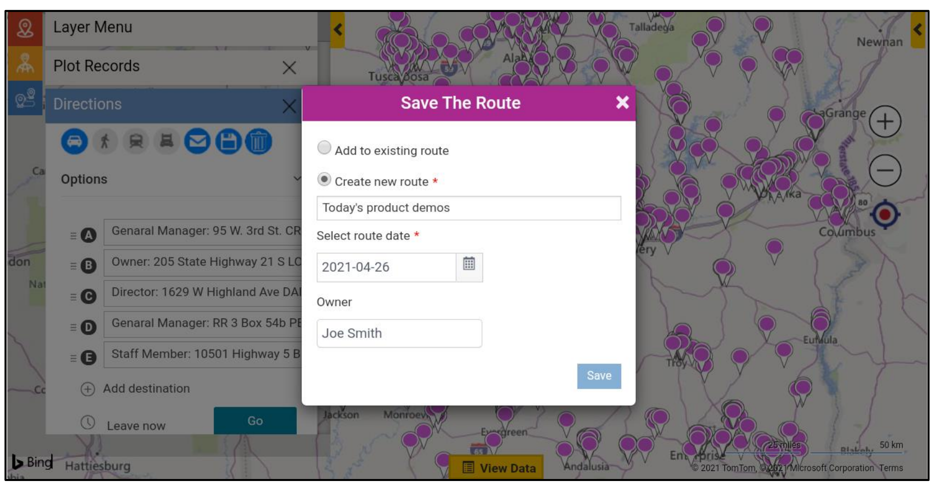


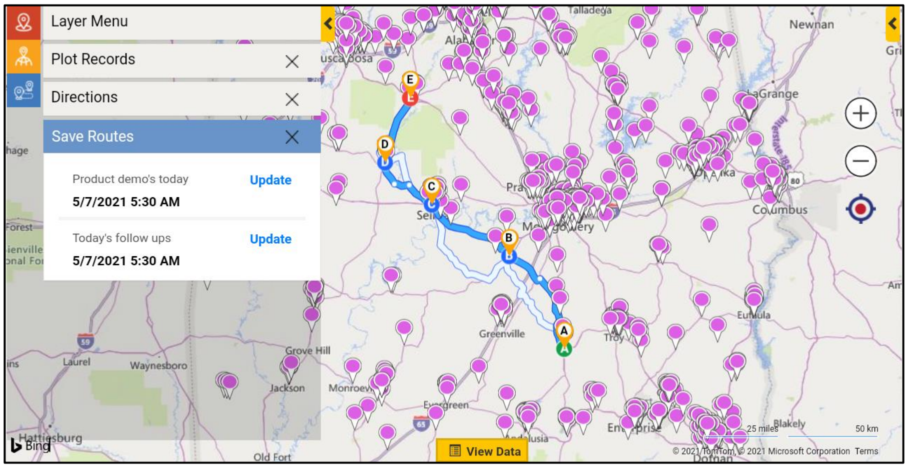


Save Route and Plot Saved Routes

Users can now save the route from the Dynamics 365 App for Phones and Tablets and later use the 'Open Saved Route' feature to plot the saved routes.

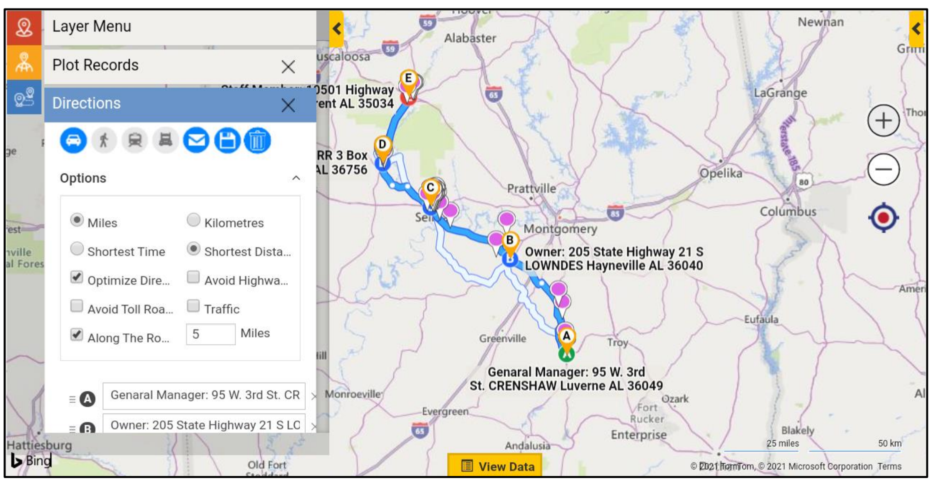






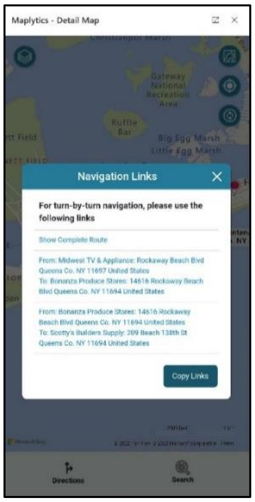
Along the Route Search

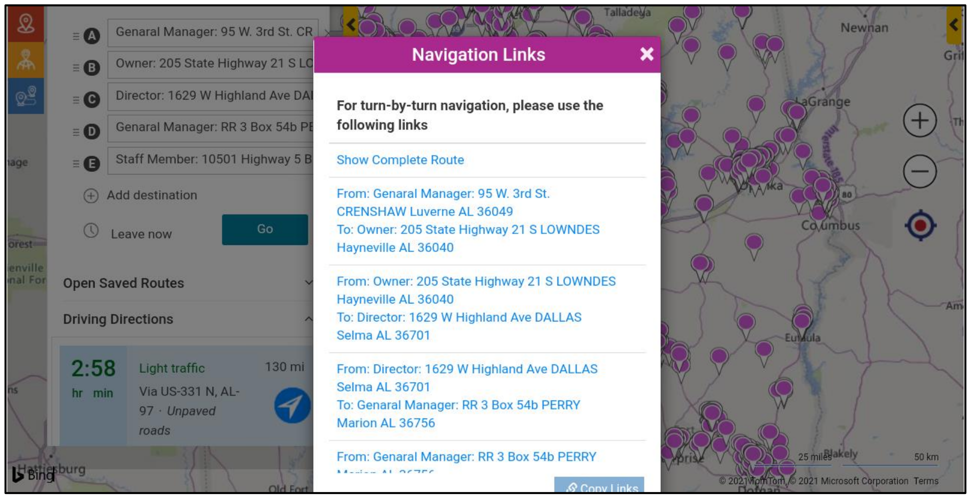
The user can also search the along the route records the same way as on the Browser.



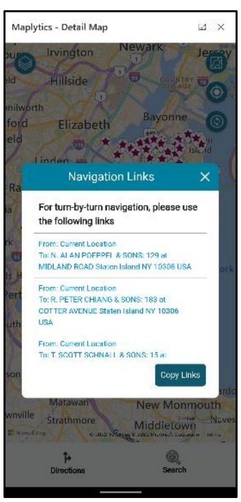
Route Redirect and Copy Navigation Links

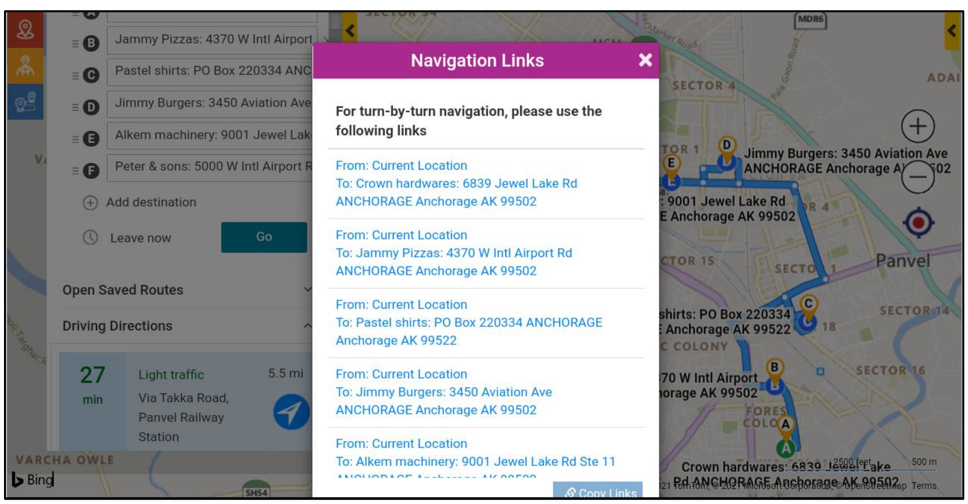
Redirect with Google Maps



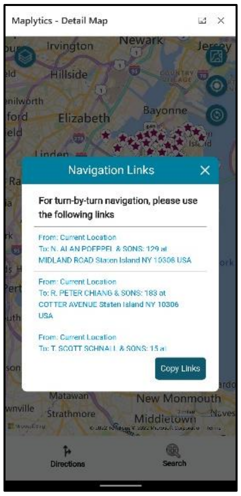


Redirect with Waze

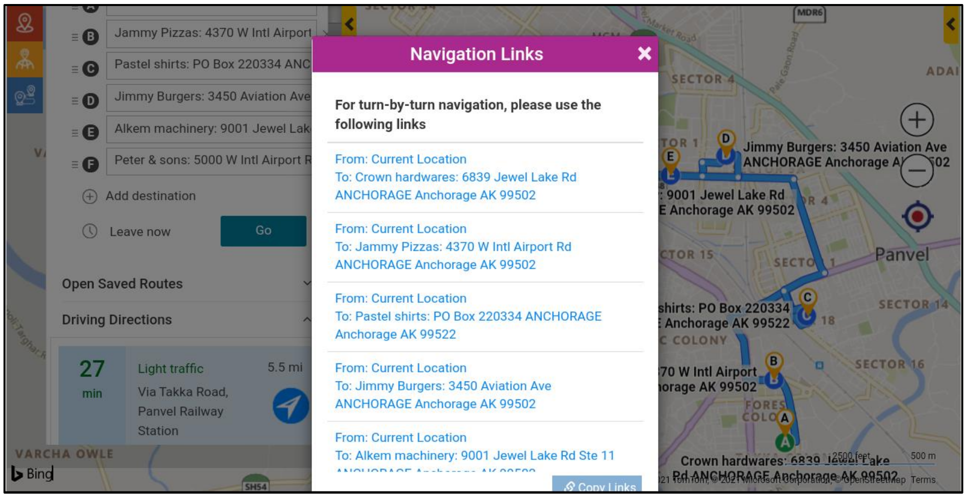




Redirect with Apple Maps



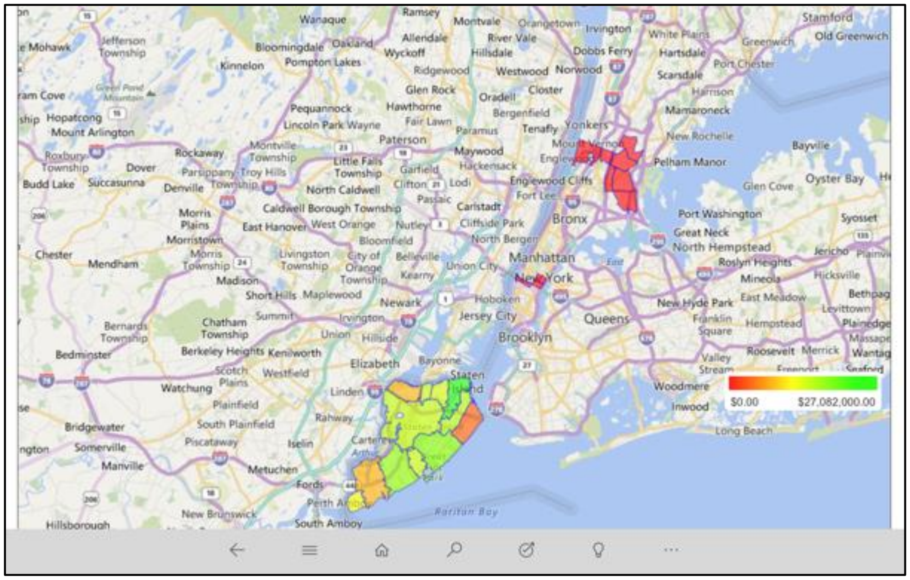
Maplytics - Detail Map
Navigation Links
For turn-by-turn navigation, please use the following links
Copy Links
Directions
Search



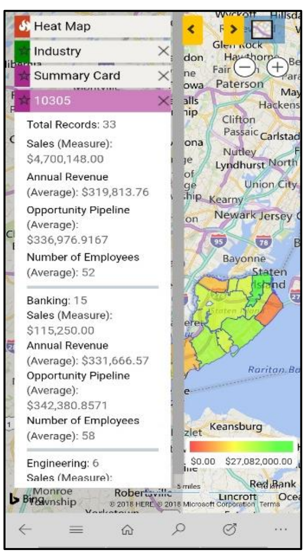
Jammy Pizzas: 4370 W Intl Airport
Pastel shirts: PO Box 220334 ANC
Jimmy Burgers: 3450 Aviation Ave
Alkem machinery: 9001 Jewel Lak
Peter & sons: 5000 W Intl Airport R
Add destination
Leave now
Go
Open Saved Routes
Driving Directions
27 min
Light traffic
5.5 mi
Via Takka Road, Panvel Railway Station
Navigation Links
For turn-by-turn navigation, please use the following links
From: Current Location
To: Crown hardwares: 6839 Jewel Lake Rd ANCHORAGE Anchorage AK 99502
From: Current Location
To: Jammy Pizzas: 4370 W Intl Airport Rd ANCHORAGE Anchorage AK 99502
From: Current Location
To: Pastel shirts: PO Box 220334 ANCHORAGE Anchorage AK 99522
From: Current Location
To: Jimmy Burgers: 3450 Aviation Ave ANCHORAGE Anchorage AK 99502
From: Current Location
To: Alkem machinery: 9001 Jewel Lake Rd Ste 11
Copy Links
Panvel
Bing

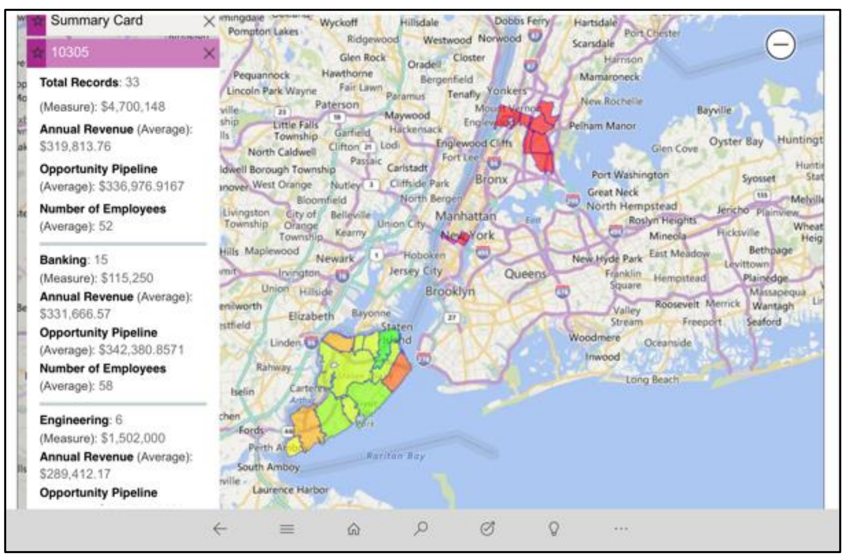
Heat Map – Tablet / Mobile

For Dynamics 365 v9.x, Maplytics can also from the Entity homepage and entity form using 'Heat Map'. When clicked on Heat Map button, it opens the heat map.

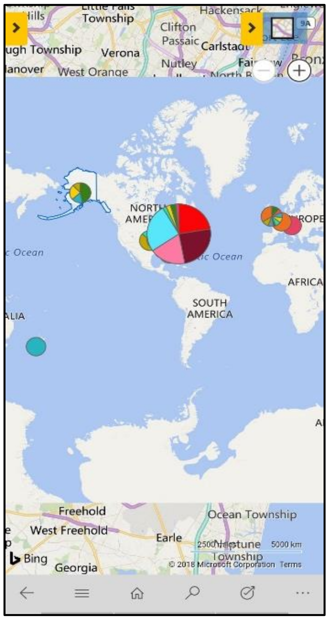


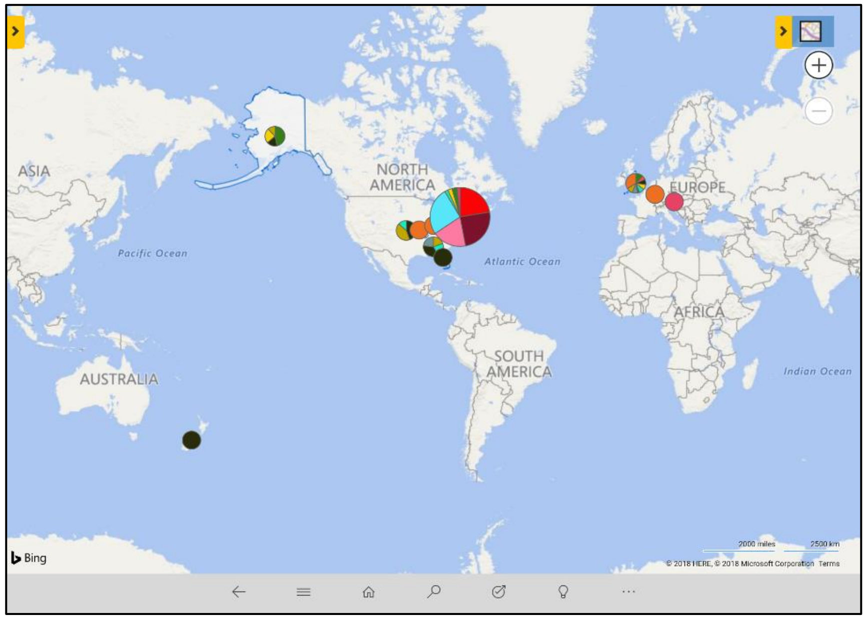
Summary card



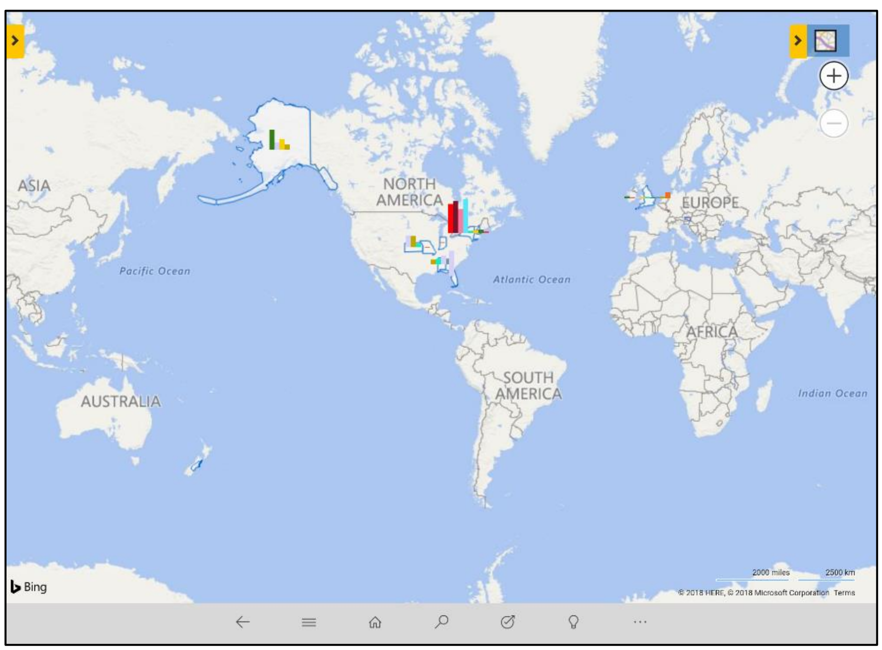


Pie chart in Heat Map



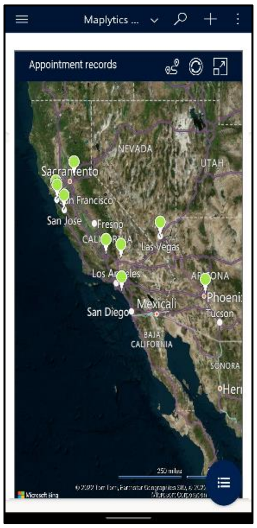


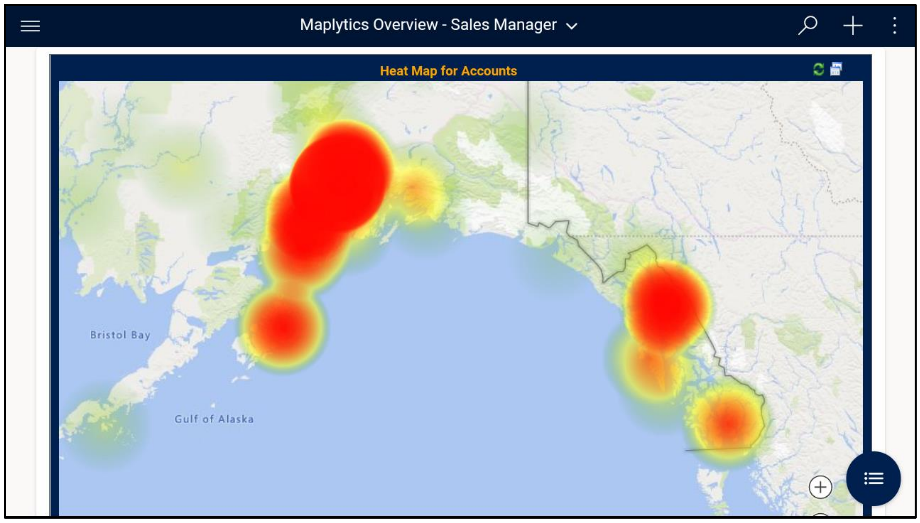
Column chart in Heat Map



Dashboards – Tablet / Mobile

The users can define their Dashboard views for Maplytics and include them as web resources in standard Dynamics CRM Dashboards. Maplytics ships with 6 pre-defined Dashboards for various Sales and Service Modules for different user roles.





Contact Us

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