wMaps User Guide

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wMaps User Guide

Overview

Using wMaps, Sugar's integration to Microsoft Bing Maps, you can view any list of Sugar accounts, contacts, leads, targets, opportunities, or any other Sugar module plotted on a map. You can quickly see what accounts or leads are in closest proximity to each other and plot the results on a map or generate directions for a visit. The maps we generate are content-rich and incorporate details from your Sugar records directly on the maps.

This guide covers how users can engage with wMaps for SugarCRM after it has been installed and configured by an administrator. For more information on installing wMaps to your Sugar instance, please refer to the W-Systems Product Installation Guide. For information on configuring the package, please refer to the Administering wMaps section of this page.

Note: This guide pertains to the latest release of wMaps. If you are not using the latest version of wMaps, then you may not have access to some of the features listed on this page. Please refer to the W-Systems Supported Platforms page for more information on the latest package versions.

Features

- Search Sugar Records by Distance from Postal Code: You are holding an event and would like to invite all customers within 50 miles from the event location. With wMaps, you can filter the Accounts list view using a new Distance search option, and specify a distance from a postal code's center point. Save the result set to a Sugar target list for marketing purposes.
- Map Sugar Filtered Records: You want to see the distribution of customers or prospects in a specific territory. Sugar lets you create a filter in the Accounts module to list the customers in a specific territory. wMaps displays the result of that list as pushpins on a map.
- Map Current Records: You have a new prospect account and would like to get some geographic context and take a look at their office building. wMaps lets you generate a map that can be zoomed in all the way to the aerial photo detail of the building or location in question.
- Get Optimum Driving Directions: You plan to travel in your sales territory and want to set up the best sequence of account visits. From a filtered list in Sugar, select the specific accounts you want to visit. wMaps generates optimal directions and displays the directions on a map. The directions can be emailed to your phone to integrate with maps on your device.
- Show Closest Records: You are visiting a customer and would like to see a

list of the closest prospective customers or other customers so you can plan some additional stops. wMaps calculates the relative distance between the current record and all other records and then shows you the closest ones. From the list of closest records, you can place them on a map or generate optimum driving directions.

- Send to Mobile Device: You have generated a map or directions and want to send them to your own phone or a colleague's phone. Any wMap can be sent to your phone via email. In the top right of a map or directions screen, there will be a "Send via Email" button. Press this link to generate an email with a link to the map that can be opened on your phone.

Administering wMaps

The information in this section can only be completed by System Administrator users.

Configure Geocoding Fields

During the wMaps installation, a number of custom fields are created related to geocoding and wMaps functionality.

wmaps_balloon_c	wMaps Balloon	TextArea
gc_status_c	Geocoding status	DropDown
gc_latitude_c	Geocoding Latitude	Float
gc_longitude_c	Geocoding Longitude	Float
gc_status_detail_c	Geocoding status detail	TextField
gc_date_c	Geocoding date	Datetime
wmaps_pushpin_icon_c	wMaps Pushpin Icon	TextArea

- **Geocoding date** = date the record was geocoded
- **Geocoding Latitude** = Latitude that will be used in mapping
- **Geocoding Longitude** = Longitude that will be used in mapping
- **Geocoding Status** = this will show the status of the geocoding. Potential results include:
    - Exact
    - One or many address components empty
    - Invalid Address, server returned False
    - Invalid server response, not XML
    - Invalid address, server returned no location
    - Ambiguous address, multiple matches
- **Geocoding Status Detail** - additional details about geocoding status, such as one or more address fields contain empty values, more than one location returned for the address

- **wMaps Balloon** - by default the wMaps balloons include name, address, phone, assigned to user

For each of the modules that will use wMaps functionality, it is recommended to add geocoding fields to the module's Record View layout (such as latitude, longitude, and geocoding status), but it is not required. In the example below, we will walk through configuring these fields.

Adding Geocoding Fields to Modules

Each of the modules to be used by wMaps needs to have at least these two required fields added to its **Record View** layout:

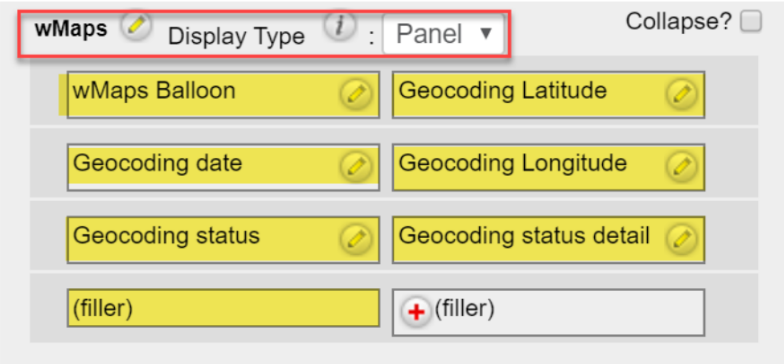
Name	Display Label	Type
gc_latitude_c	Geocoding Latitude	Float
gc_longitude_c	Geocoding Longitude	Float

In this example, we will walk through configuring these two required fields in Sugar's Contacts module (the configuration is the same for the other modules). Please note that in this example, the wMaps fields are being added to a "separate" tab named "wMaps" in the Record View layout. The choice is yours for placement of the wMaps fields.

Also note that in our example, we have some other fields from wMaps displayed. These other fields are "optional" for displaying and may be helpful but not required (i.e., wMaps Balloon, Geocoding status, Geocoding date, Geocoding status detail.).

To add a field to the layout, please follow these instructions:

1. Navigate to Admin > Studio.
2. From the tree view or the page view, click on the module named Contacts.
3. Click on "Layouts".
4. Click on "Record View".
5. Add a panel/tab (optional) or simply add the fields to an existing panel/tab. Please refer to the Studio documentation in Sugar's Administration Guide for full details on doing this. The following screenshot shows the configured wMaps tab added to the Record View layout of the Contacts module:



6. Click "Save & Deploy".
7. Open a record in the Record View of the Contacts module to verify the field layout was properly configured. If the wMaps Geocoder job ran already, the latitude and longitude fields should be populated. NOTE: It's highly suggested not to manually update the values in these fields unless you are sure the values being entered are accurate.
8. Once the layout has the two required fields, the configuration for the module is complete.

wMaps Geocoder (Scheduled Job)

The wMaps Geocoder is responsible for geocoding the records in your database. Geocoding is the process that inserts the latitude/longitude values related to your database record's physical addresses (e.g., contacts, accounts, etc.). The geocoding allows wMaps to find and filter records that will be displayed in lists and on maps.

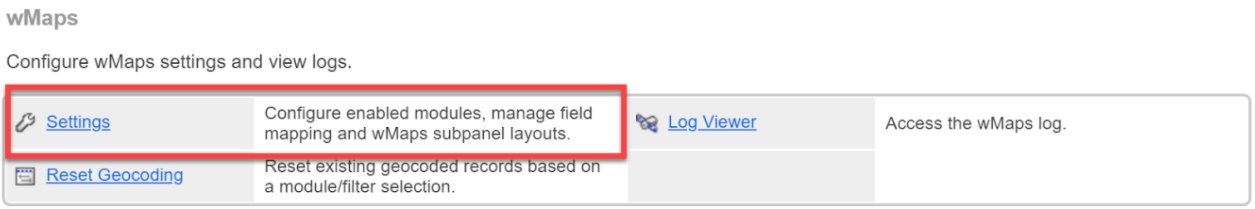
When wMaps was installed, a scheduled job named wMaps Geocoder was created in Sugar's Scheduler (Admin > Scheduler).

By default, the wMaps Geocoder job is scheduled to run on the 30 minute mark from 01:30 AM to 05:30 AM. During this time, the modules configured in the wMaps Geocoder Settings will be geocoded with latitude and longitude values. This will include new and modified records.

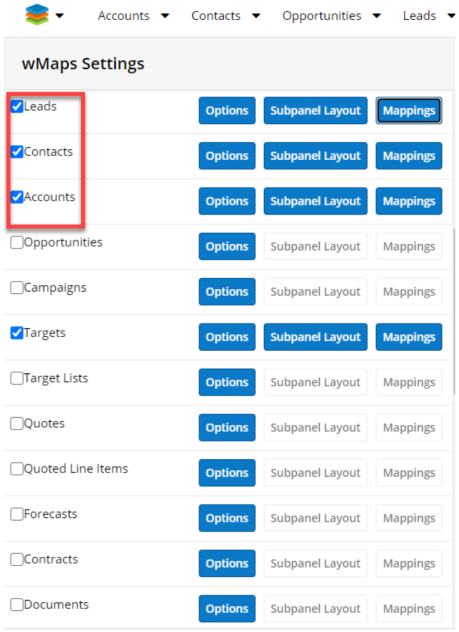
IMPORTANT: If you are using an instance of Sugar that does not have "Cron" running, the wMaps Geocoder job will not run as scheduled. Please refer to the Introduction to Cron Jobs article for more information.

wMaps Geocoder Settings

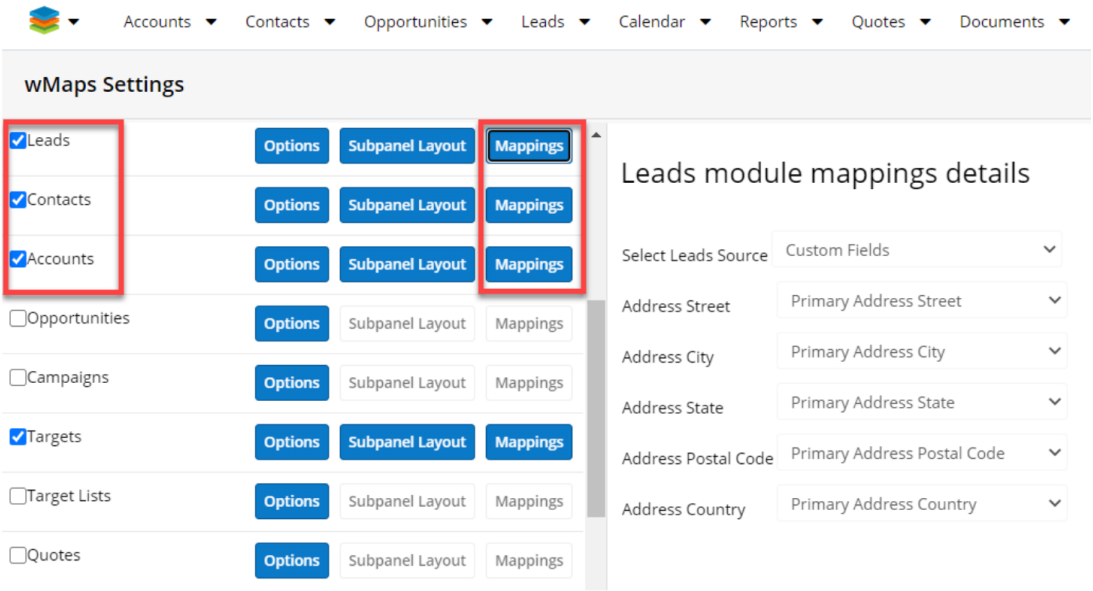
In Sugar, navigate to the Admin page and scroll down to locate the wMaps Settings section and then click the Settings link:



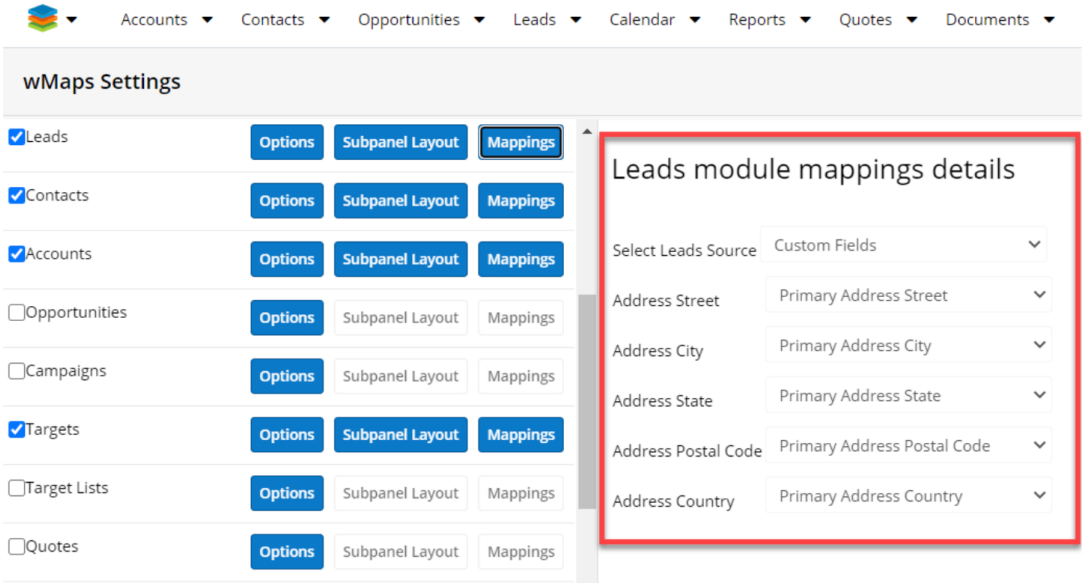
Initially, none of the modules will be selected for geocoding. Please tick the checkbox for the modules that will be used with wMaps:



Select the Mappings button for each select module to choose which fields should be used for determining latitude and longitude.



The field selection will appear in the pane on the right.



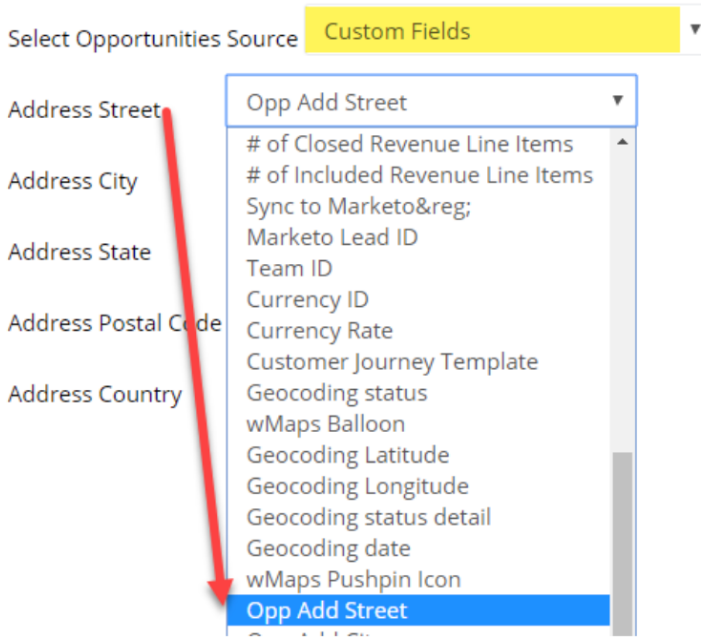
Perhaps you have Billing Address fields and Shipping Address fields. For use with mapping, you'd want to select whichever set of address fields contain a physical address, rather than a PO Box.

It is possible to select custom address fields or stock Sugar address fields. An example is shown below for the Opportunities module

- Select Opportunities Source as Custom Fields (this is the default option.) Select the appropriate custom field from the drop-down to set for each address field type (i.e., address, city, state, etc.). These are the fields that will be used for geocoding the opportunities.

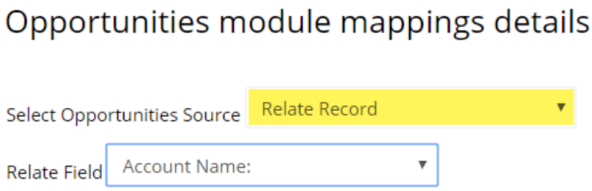
NOTE: These custom fields must first be created in the Opportunities module in order to be available for selection here (this is done using Sugar's Admin > Studio; see Sugar documentation for details as required).

In the following example, the custom fields in the Opportunity module (contained in the drop-down) are named "Opp Add Street", "Opp Add City", "Opp Add State", etc.) and mapped to the appropriate field:



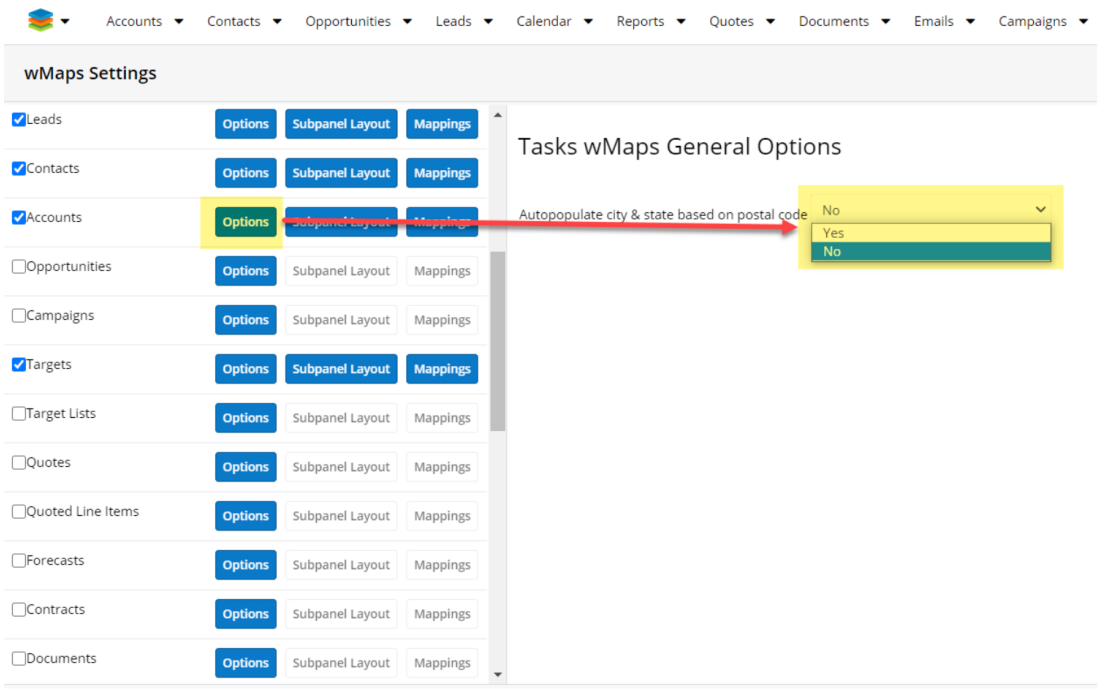
- With Relate Record selected, Opportunities will be geocoded based on the address that is associated with the Relate Field value selected from the drop-down for the accepted module types (Accounts, Contacts, Leads, Prospects, or Users).

For example, if a user selects "Account Name", the Opportunities will be geocoded using the address from the Account to which the opportunity is linked:



Prepopulate State and City Address Fields Based on Postal Code

State and City address fields can be populated automatically based on the ZIP Code entered in the field. To enable this go to Admin > wMaps Settings. Select the module(s) on which you want the fields to be populated and select Options:



This will open a new view on the right-side panel with the *Autopopulate city & state based on postal code* dropdown field. select Yes or No from the dropdown field to enable or disable this functionality and press save.

Go to any of the selected modules and for which you have enabled the auto-populate option. Create a new record and add a ZIP code in the address field. After saving the record, the City and State fields will be populated with data based on ZIP Code.

NOTE: After mapping fields for modules, run a Quick Repair and Rebuild.

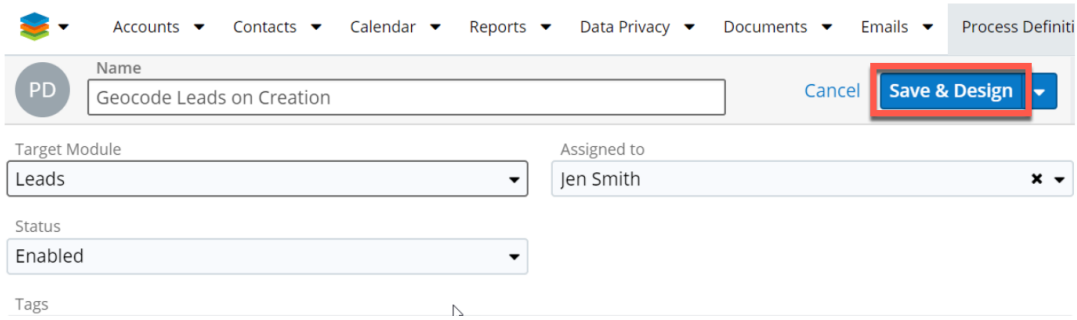
Geocoding Process Definition

The wMaps Geocoder Scheduled Job will geocode records with latitude and longitude during its active period. By default, this is nightly between 1:30 and 5:30 am. If there is a business need to have records geocoded at the time they are added or modified, this can be achieved by adding Process Definitions.

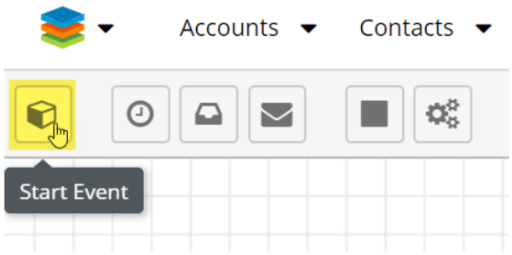
1. Navigate to the Process Definitions module in the navigation bar. Unless you work with this frequently, it will probably be on the extended menu. This is one of 4 components in Sugar's Business Process Management (SugarBPM) functionality. Access to most of these components is restricted to users with System Administrator, Module Administrator, and Module Developer roles.
2. To create a new Process Definition, use the Create button on the top right

of the list view, or select Create Process Definitions from the Process Definitions menu.

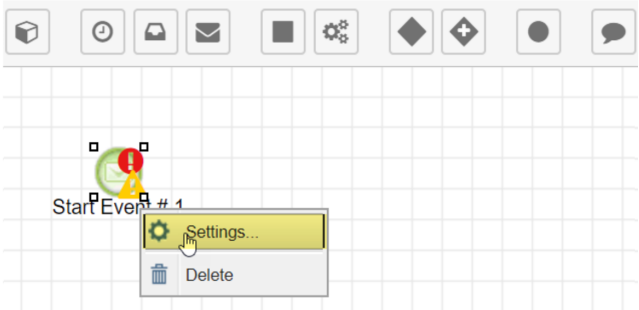
3. Enter a descriptive name for the process, such as Geocode Leads on Creation. Select the target module, as appropriate. For this example, we'll select Leads. Set the status to Enabled. Add tags, if desired. When all settings are completed, select Save and Design.



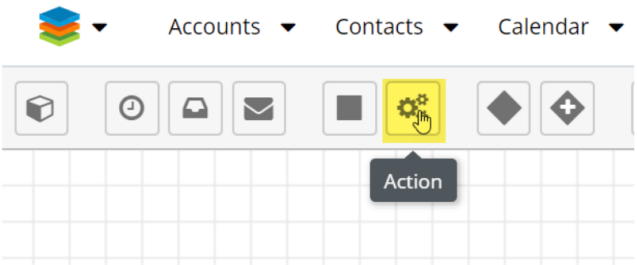
4. A new screen will open where you'll see the design canvas. Here we'll add the steps for this Process Definition. Hover the cursor over the first icon on the toolbar. This is the Start Event. Drag this icon onto the canvas using the mouse.



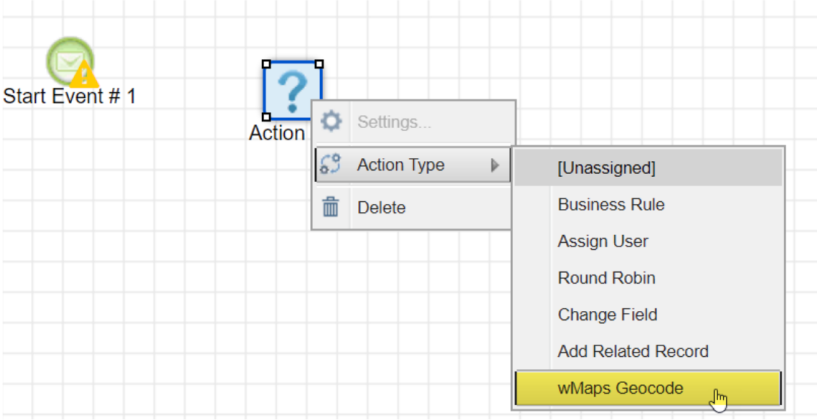
5. Once the Start Event appears on the design canvas, right-click on it and select Settings.



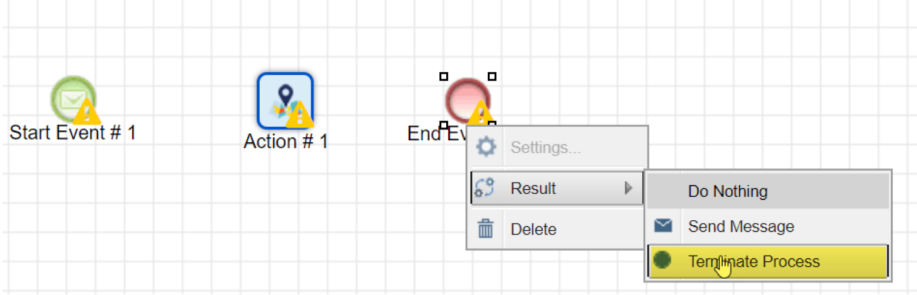
6. In this example, we're creating a process definition to geocode new records, so under Applies To select New Records Only. Do not set any criteria. Select Save.
7. Next, drag an Action from the toolbar onto the design canvas.



8. Once the Action is on the design canvas, right-click on it, and select Action Type. Select wMaps Geocode from the list. This will ensure that new Leads that are imported or entered manually into Sugar get geocoded.



9. Next, drag an End Event onto the design canvas, right-click on it, click on Result and select Terminate Process.



10. The final design step is to connect these three objects on the design canvas. Until they are joined, the sequence is not set. You might notice errors in the Element Errors pane on the right side of the design canvas. Clicking the Error button will open a new panel on the bottom of your canvas with the errors in the process definition. These errors will disappear from the list once the objects are connected.
    - Hover the mouse over the right edge of the Start Event until you see the cursor change to cross-hairs.
    - Drag the mouse to Action # 1.
    - Repeat this process to link Action # 1 to the End Event # 1. The finished definition will appear as shown below.
      Note: The steps can be optionally renamed by double-clicking on the name label. For example, double-clicking on Action # 1 will provide the option to update the step with a more descriptive name.

11. Process Definitions are usually automatically saved, but if you are working fast, you might get a warning that changes are not saved. The save icon on the toolbar can be used if in this event. If the icon is grayed out, then all changes have already been saved. Click the Save and Validate button on the design panel to save the process definition you just created.
12. Once the process is configured, click again on Process Definitions in the navigation menu. This will return you to the list of process definitions.
13. We'll repeat these steps to create a Process Definition to update modified/edited Leads. Create a new process definition and select Save & Design.
14. On viewing the design canvas, drag the 3 icons onto the palette for Start Event, Action, and End Event.
15. Configure each one as before, with one key difference. The Start Event will be configured so that it applies to 'Updated Records Only (All Updates - See Help Text).'

The rest of the steps are the same as in the first example.

Process definitions can be added for each additional module where wMaps will be used, such as Accounts, Contacts, Opportunities, or Prospects (Targets). However, if the nightly update when the wMaps Geocoder Scheduled jobs run is sufficient, Process Definitions are not needed.

For more information on Sugar's Process Definitions, please refer to the SugarBPM documentation.

User's Profile Address

One of the features in wMaps is to give a user directions to a location "from" the user's address that is stored in Sugar. To set this address, or to confirm that a user has their address already in Sugar, please do the following:

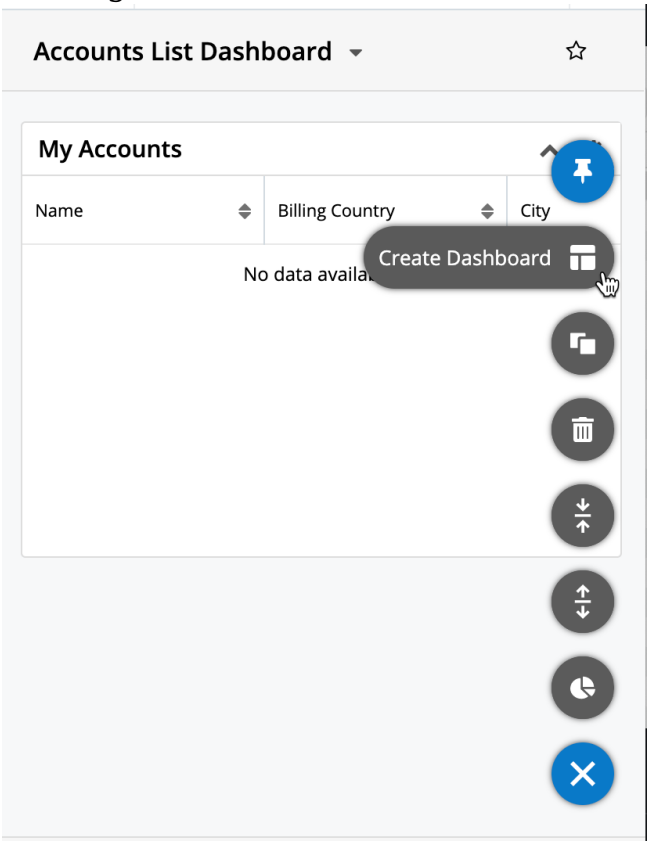
1. In Sugar, click: User's Menu > Profile.
2. Look in the Employee Information section. The user's address information needs to be populated here.
3. Click Edit and add/edit the address information as required.
4. Click Save to commit the changes.

Record View Dashlet

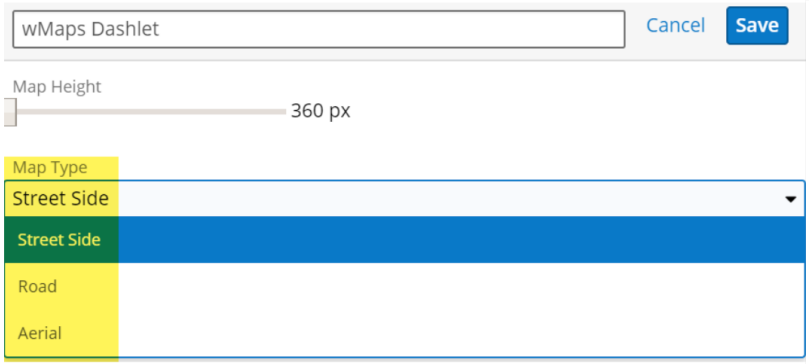
When wMaps is installed, it includes a dashlet that can be added to Record Views. Each user can add the dashlets to desired record views dashboards, or an administrator can create or update stock dashboards to include wMaps dashlets

and propagate to end-users. For more information on working with dashlets in Sugar, refer to the Dashboards and Dashlets documentation.

1. Navigate to a module that will be used with wMaps such as Leads, Contacts, Accounts, etc.
2. Click on the Create button or select the Create Dashboard option from the floating actions menu to add a new Dashboard.

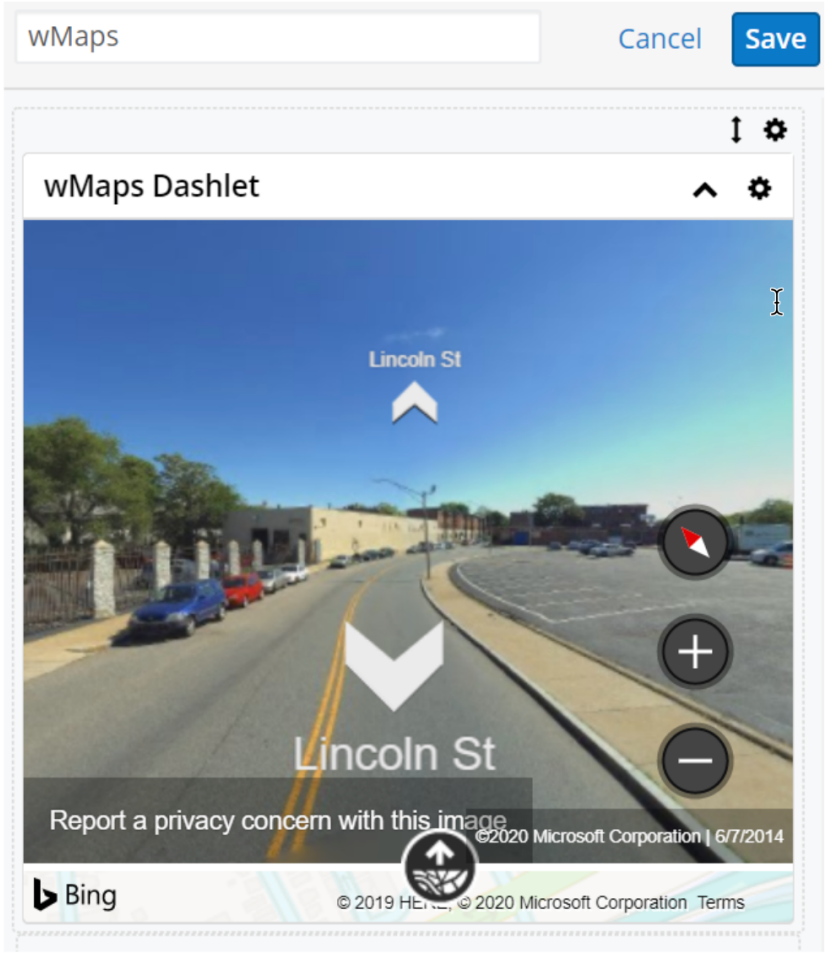


3. Give the dashboard a name and click on Add a Row.
4. Select Add a Sugar Dashlet.
5. Select the wMaps Dashlet.
6. Map type options include Street Side, Road, and Aerial. These can also be changed from within the dashlet configuration at a later time. Click on Save.

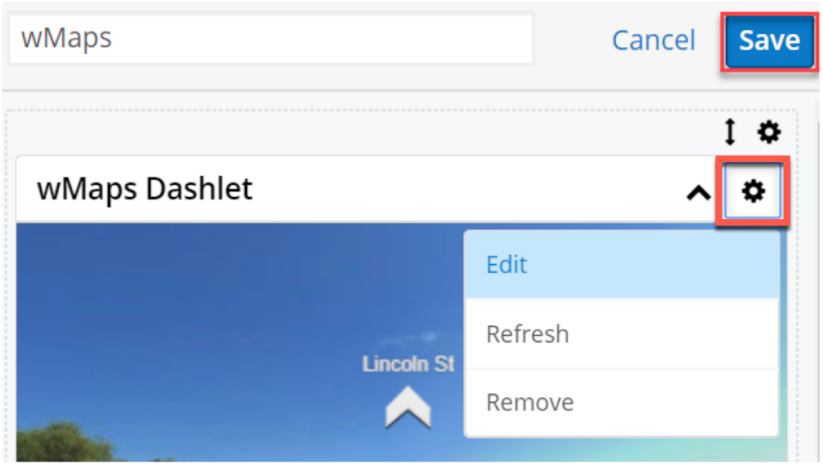


7. Click on Save again to save the dashlet.
8. When viewing geocoded records, the wMaps dashlet will show a Street

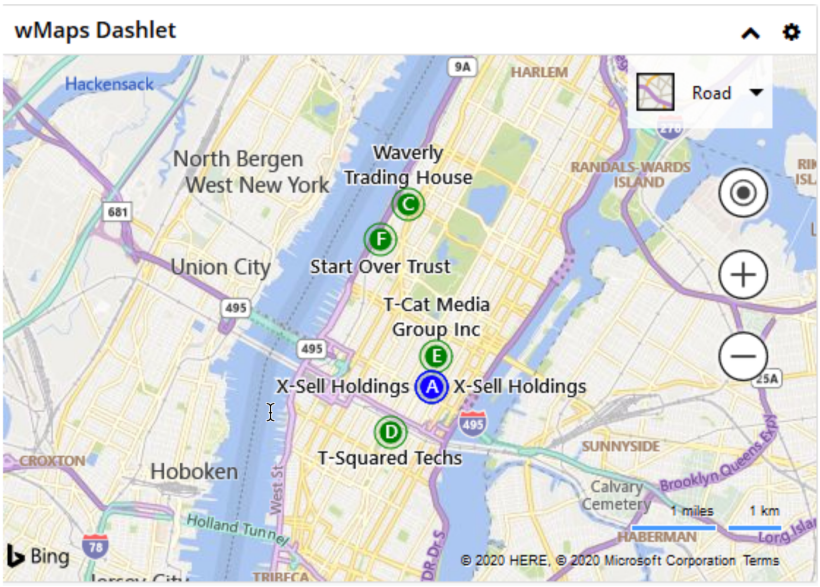
side, Road, or Aerial map, as selected.



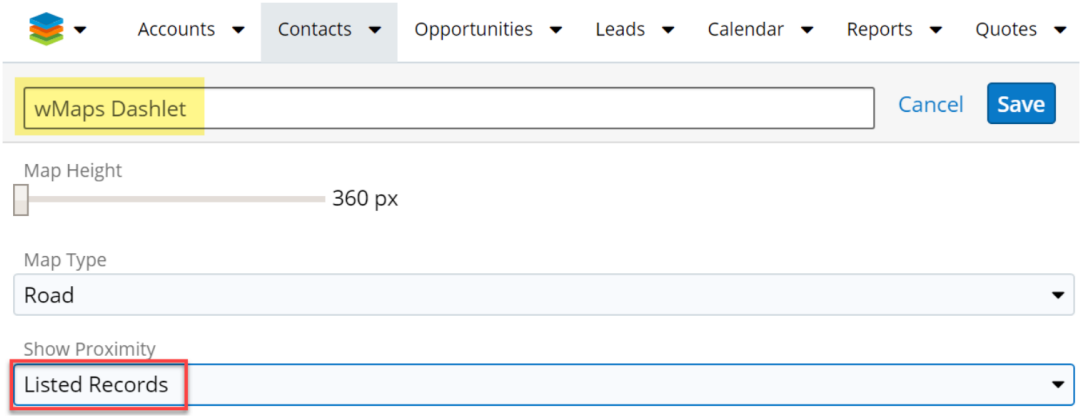
9. Select Edit to change the map type.



10. Change the map type as desired and select Save.



NOTE: Setting the Map Type option to Road will open a new dropdown field where users can choose to see all the nearby records listed in the wMaps subpanel, based on the selected radius.



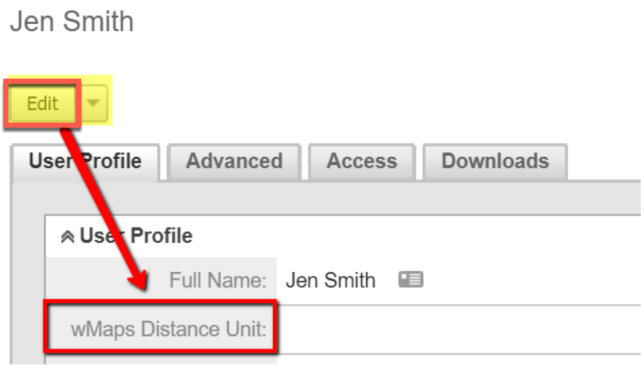
Select Measurement Unit

Users can choose between Kilometers and Miles to set up their preferred measurement unit. Users have three ways of setting up their preferred unit:

- Set unit type from User Profile
- Set unit type from the wMaps subpanel
- Set unit type from the Distance filter

Set Unit Type From User Profile

1. Go to your user profile and press the Edit button.

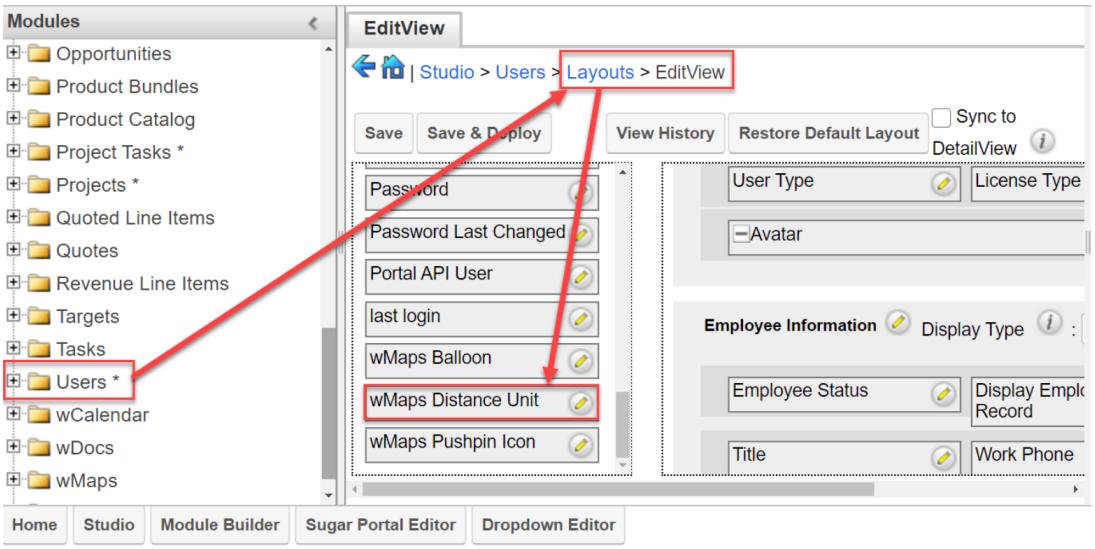


2. From the wMaps Distance Unit dropdown menu, select between miles and kilometers.
3. Save your changes.

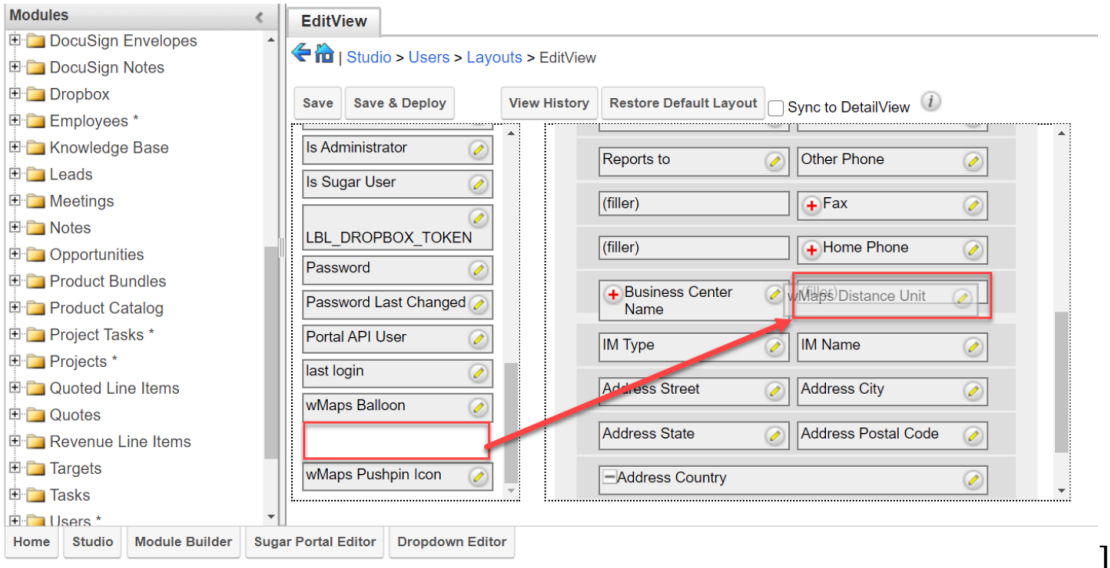
Now, all your distances in wMaps will be shown in the chosen metric system.

To be able to configure the distance measurement unit by using this method, you first have to go in Studio, on the Administration page to set up the wMaps Distance Unit field to be displayed in Edit View.

1. Go in Studio and select the Users Module available in the left side of the screen.
2. Navigate to the Layouts section and choose Edit View.



3. Drag and drop a filler field and then the wMaps Distance Unit field to the right side of your view.



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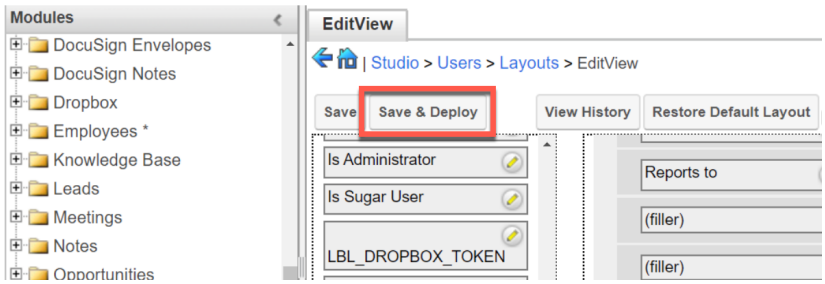
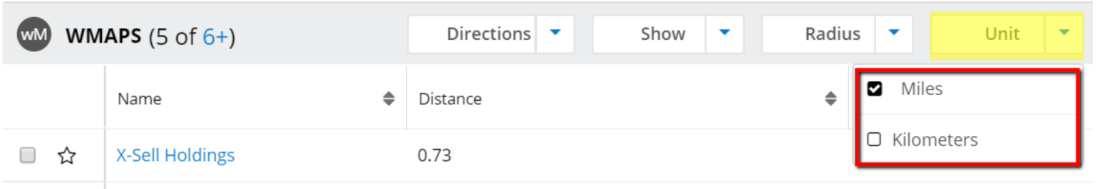
4. After you drag and drop your wMaps Distance Unit Field to the right side of your screen, click Save & Deploy.



Note: Only after configuring this field layout in the Studio Section, you will be able to Add Unit Type from User Profile.

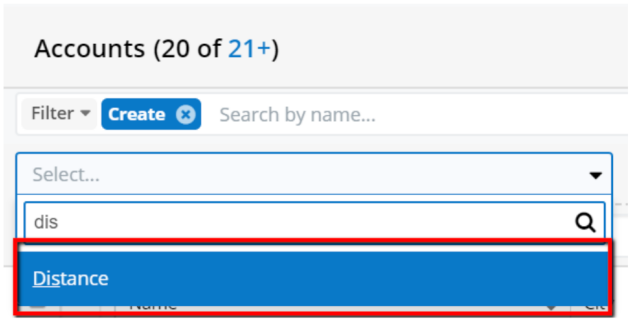
Set Unit Type From the wMaps Subpanel

This method is only applicable to geocoded records, in the wMaps subpanel in Record View. On the top of the wMaps subpanel in Record View, you have the Unit dropdown menu. Change your prefered unit from there.

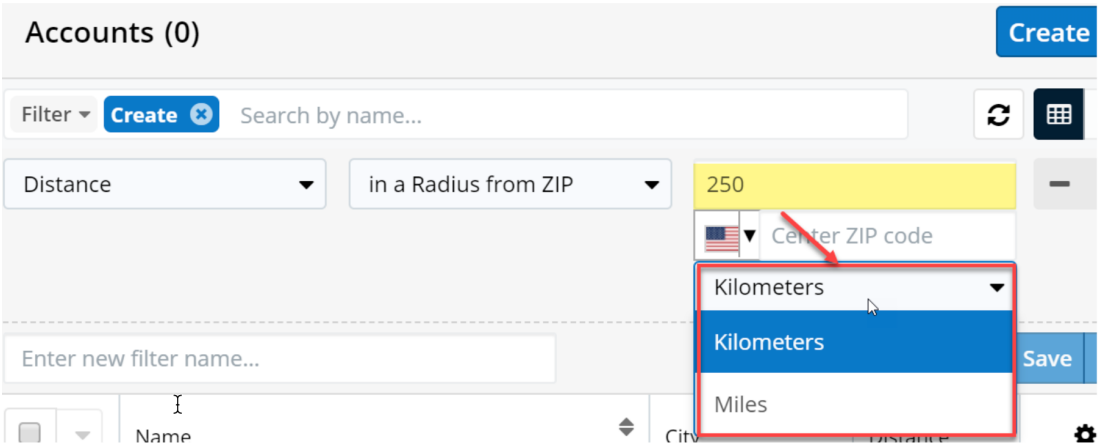


Set Unit Type From the Distance Filter

This method is applicable only for List View. Go to your module of choice and create a new "Distance" filter.



Next, set your filter to "in a Radius from ZIP". Then, select the unit you prefer from the dropdown menu on the right of the filter panel.



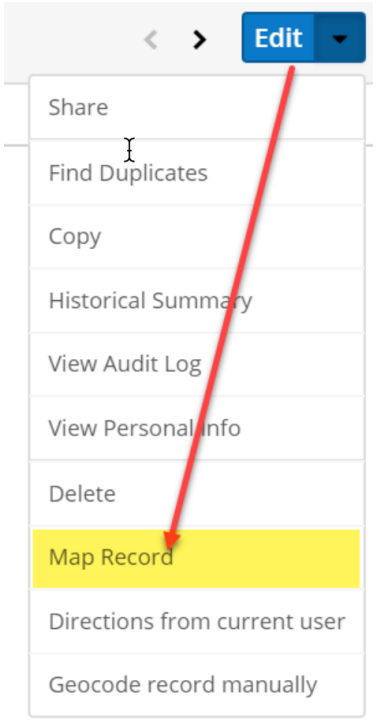
Usage

wMaps Current Records

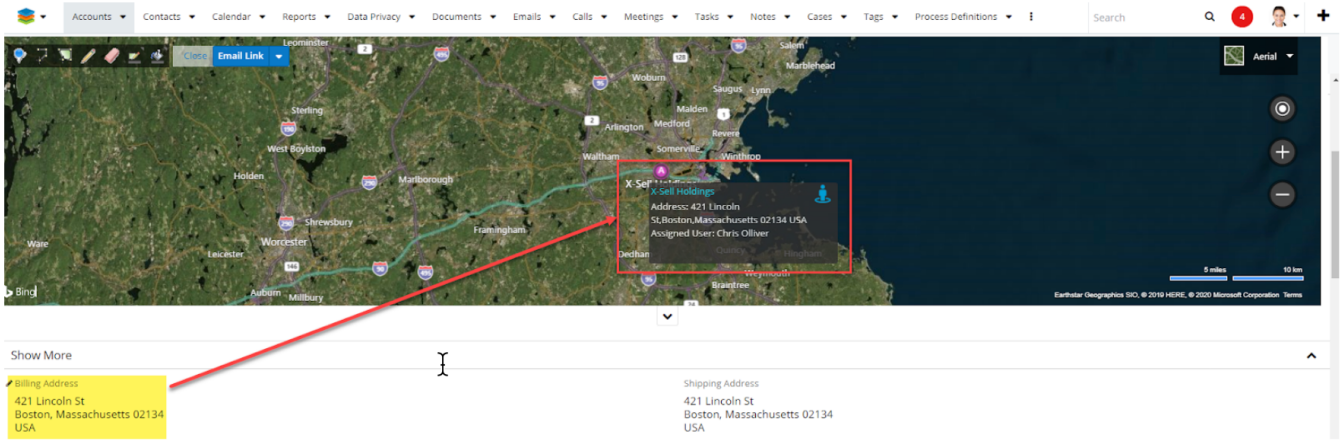
Getting a record to display on a map is easy with just a few clicks. In these instructions, a record from the "Contacts" module will be displayed on a map. wMaps will place a pin on the map containing a letter for the record. Hovering the mouse cursor over the map pin will display a balloon containing various details for the mapped record. The map itself can be zoomed in or out as necessary and there is control for the map's display type: Road, Auto, or Bird's eye.

Mapping a Current Record

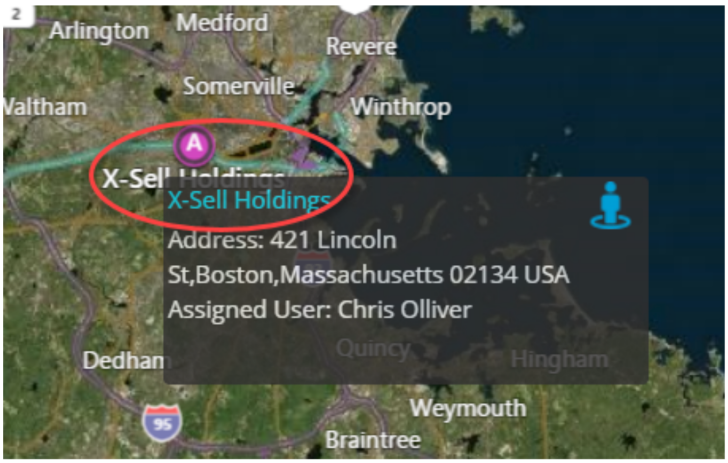
1. Open the appropriate module and select a record to be displayed in that module's Record View.
2. Open the Record View's Action menu and select Map Record:



wMaps will use the [geocoded](#) address from the record and display a pin on the map at the top of the page:

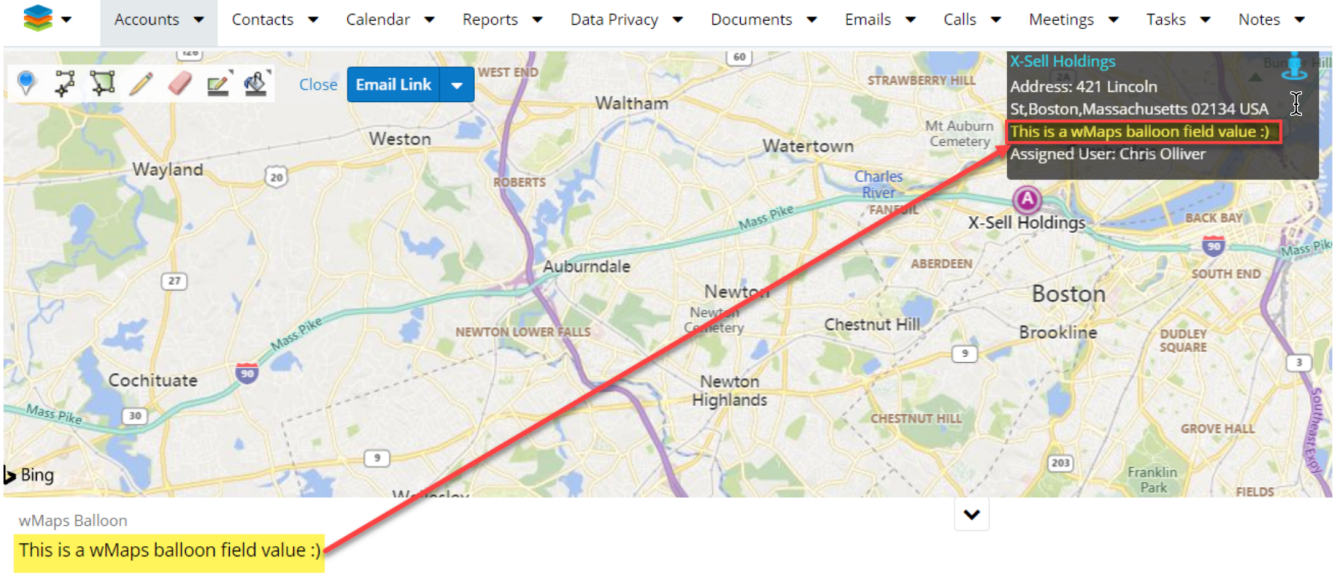


When the mouse cursor is placed over the pin, a [balloon](#) appears and displays details for the record:

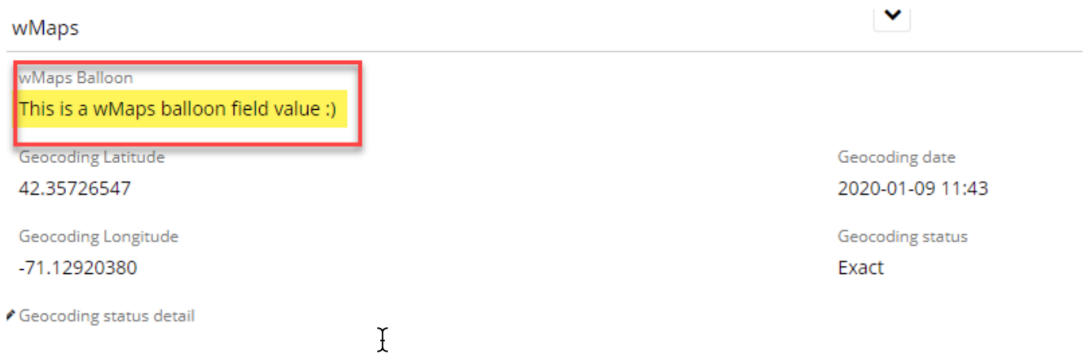


wMaps Balloon Field

In the following screenshot, there is a line of text not appearing in the previous screenshot (shown highlighted). This value is optionally stored in and displayed from the wMaps Balloon field.



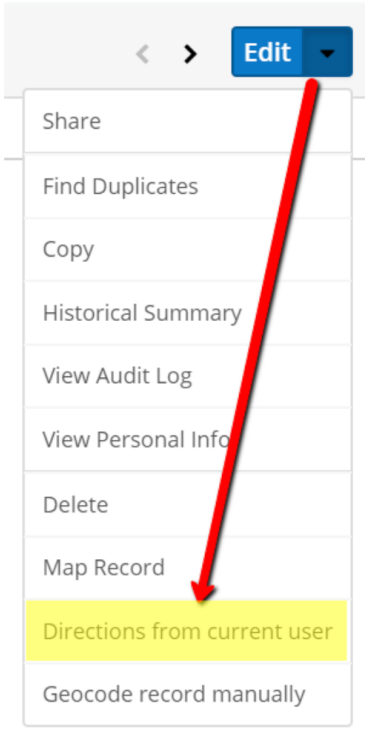
The wMaps Balloon field can be added to a module's layout so the value within that field displays in the map balloon as shown above:



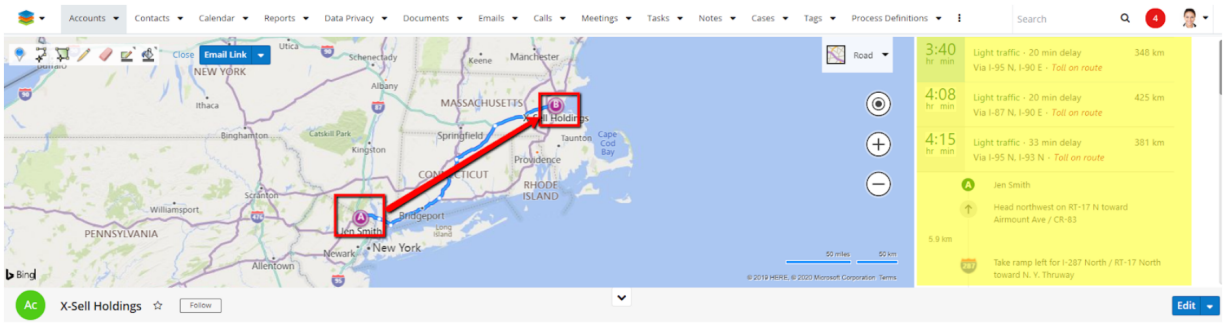
Directions From Current User

wMaps is able to get directions from the current user's address to the current record's address, displaying the pins on the map, and listing the step-by-step directions to the right of the map.

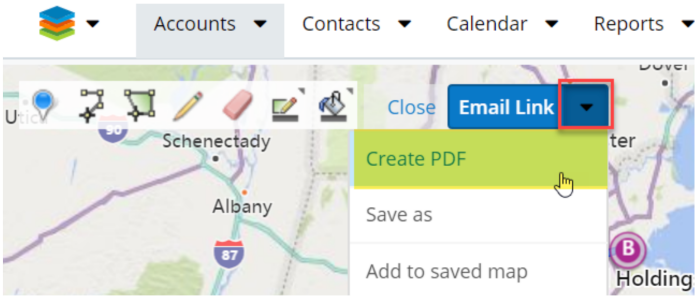
1. Open the appropriate module and select a record to be displayed in that module's Record View.
2. Open the Record View's Action menu and select Directions from current user:



3. After the pins are placed on the map ("A" and "B" in this example) and the route is highlighted on the map, the directions will appear to the right (shown highlighted).



4. Once the map is displayed a user can choose to save the map as a PDF document using a command from the Action menu. Open the Record View's Action menu and select Create PDF:



5. A Save As dialog will appear allowing the user to save the PDF to a folder of choice. After clicking Save in this dialog, the document will be created and saved in the location chosen; name the file as desired or accept the default file name given in the Save As dialog.
6. The saved PDF file can now be opened for review, emailed to someone, etc. Please note that the PDF file will include directions if they were retrieved with the map.

Directions Starting From This Record

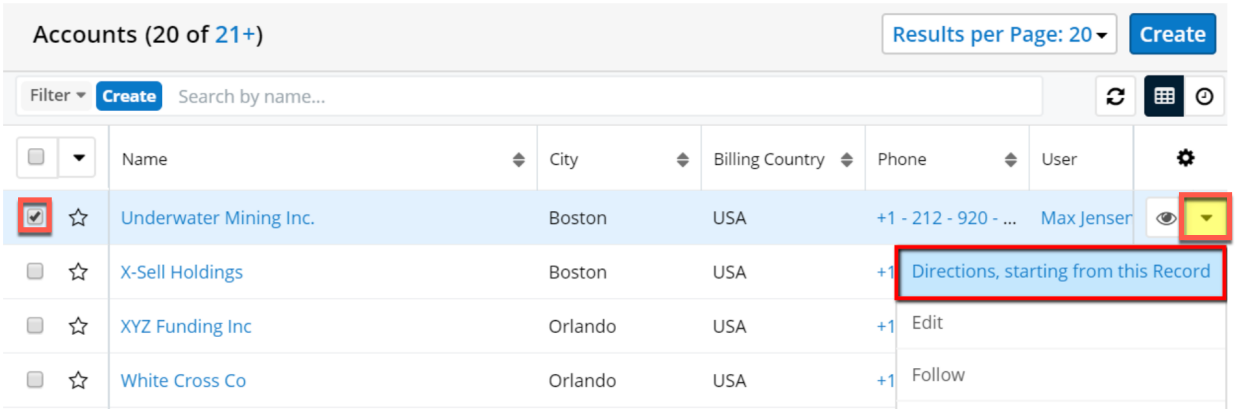
The wMaps package adds new buttons to the wMaps subpanel in Record View and List View. This button allows users to generate directions starting from the record they choose to use the "Directions, start from this record" function, on geocoded records. The button can be used in the following instances:

- In List View, as an Action button for each record line.
- In Record View, as Action buttons.
- In the wMaps Record View subpanel, from the Directions dropdown.
- In the wMaps subpanel, as an Action button for each record in the wMaps subpanel.

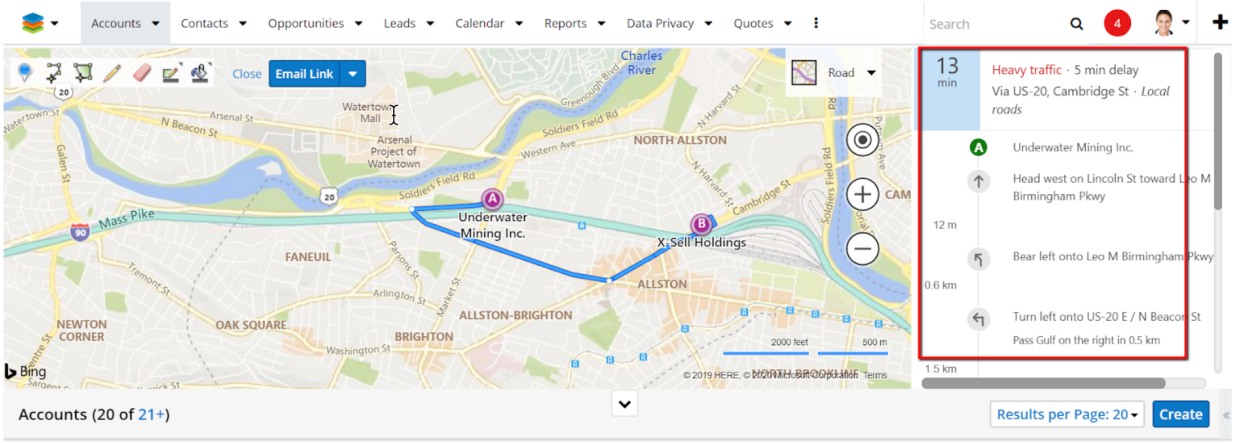
This function can be used with a maximum of 25 addresses. In case more than 25 records are selected, a warning message is displayed. to generate directions

starting from a specific geocoded record in List View, follow the steps below:

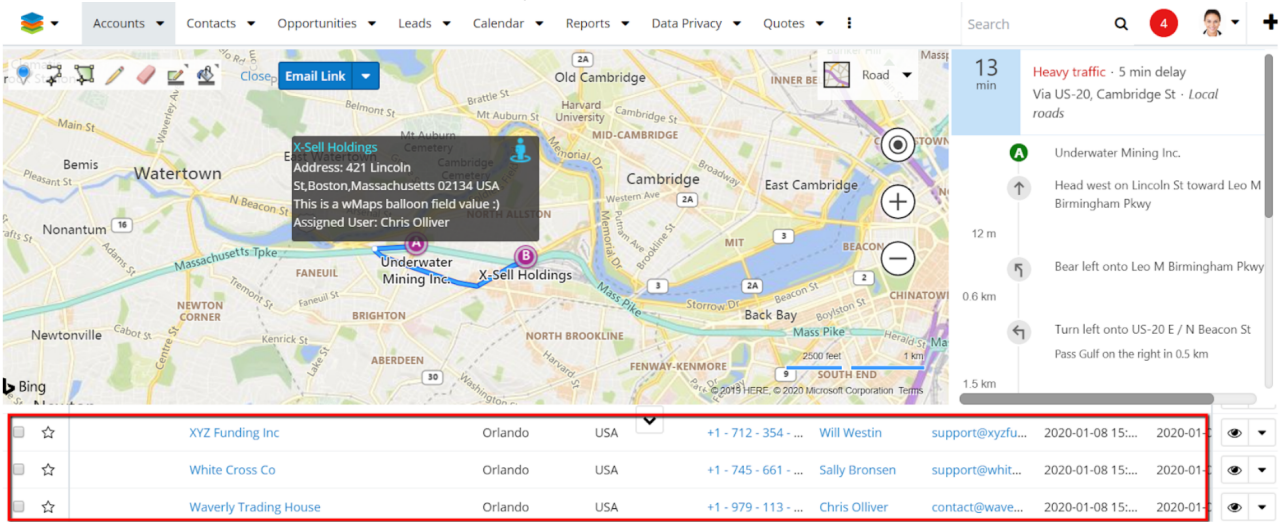
1. Go to your module of choice and select at least two records by ticking the checkbox next to it.
2. From the Action dropdown, select "Directions, starting from this Record".



3. A map with directions starting from the record from where you selected the "Directions, starting from this Record" function will appear as a drawer. On the right side of the map, directions from point A (the starting record) and B (the destination) will be generated as well.



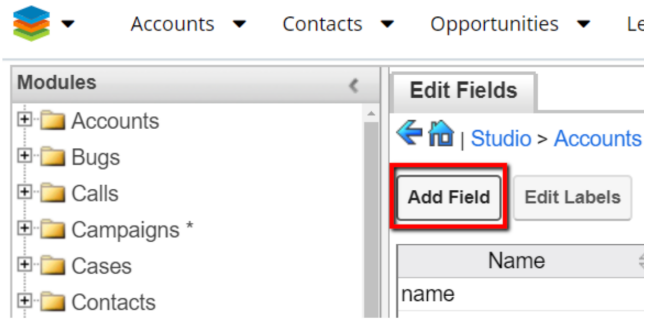
The List View will now be displayed beneath the map.



Bing Map Record View Field

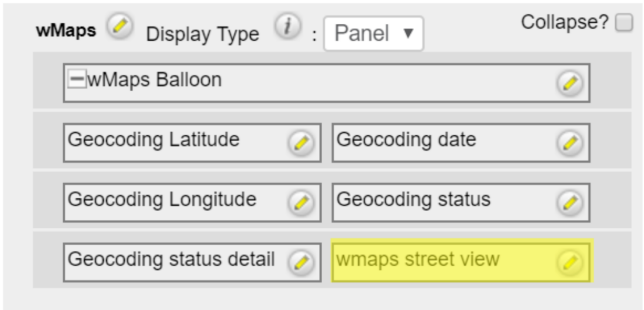
wMaps allows users to add a Bing Street View field where users can use the street, road, aerial view of a record in the Record View of the Accounts, Contacts, Leads, Opportunities modules. To set up the Bing Map Record View Field:

1. Navigate to Admin > Studio. Go to your module of choice (Accounts in our example) and click the Add Field button.



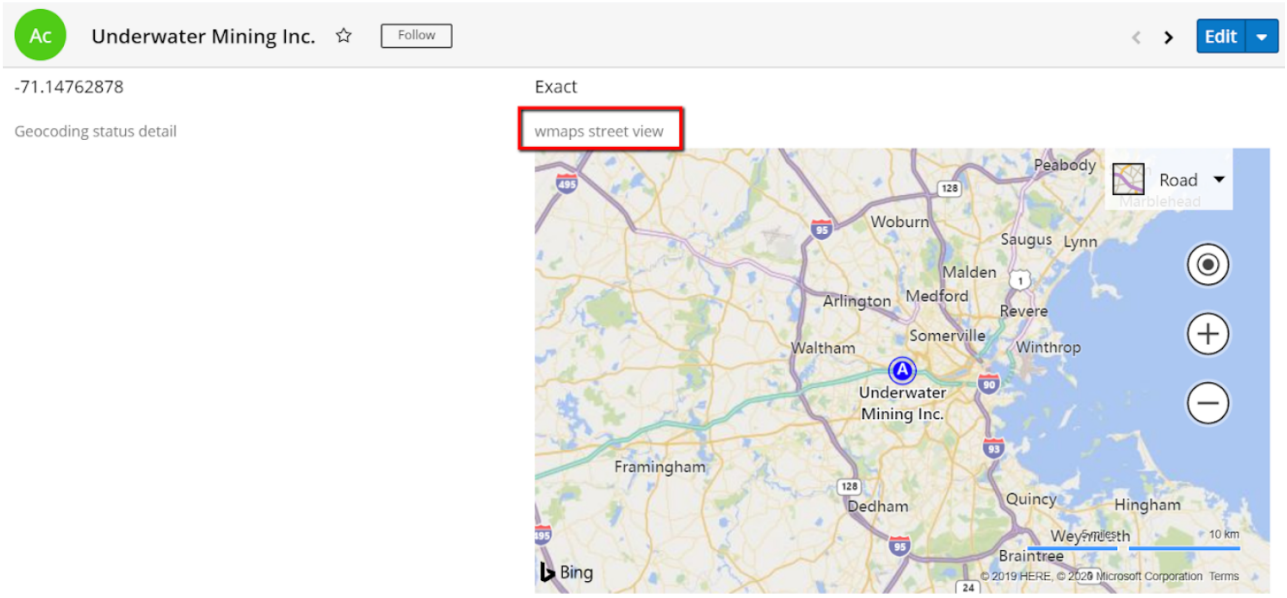
2. Change the Data Type from Text Field to wMaps Field.

3. Name your custom field "wmaps_street_view_c".
4. To make the custom field visible on your Account records, go back to Accounts in Studio and press the Layouts button.
5. On Record View, add a new row where to drag and drop the "wmaps street view" field.



6. Save & Deploy your changes.

If you go to Accounts on a record now, a wMap will appear for the record you selected.



Note: The Map Type is by default set to Streetside. In this case, it will show exclusively a streetside view. If users change the Map Type to Road or Aerial, a new Proximity dropdown appears. If you choose no proximity no other entries will be shown on the map. If proximity (proximity is set from wMaps record view subpanel) is set to listed records, it will display the record visible in the wMaps subpanel (just the ones listed; if the list is closed, it will show no entries.)

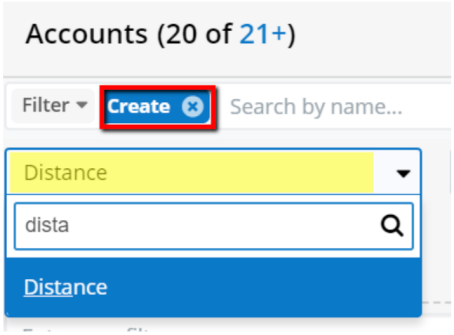
Search Sugar Records by Distance From Postal Code

The need to find a set of Sugar records based on distance from a specific ZIP/postal code is a popular search that can be performed using wMaps. The postal code specified will be the center point in the search and the radius from that postal code is designated to filter the accounts within the range.

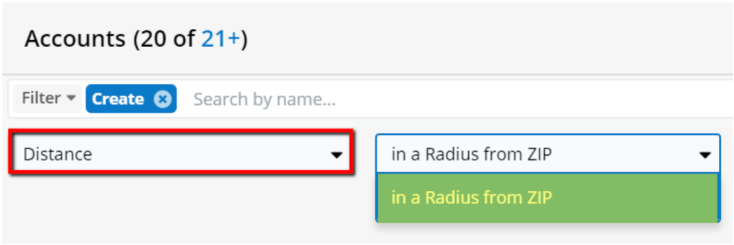
Here are the steps to filter accounts using the **Distance** search option.

Search for Accounts Using the Distance Search Option

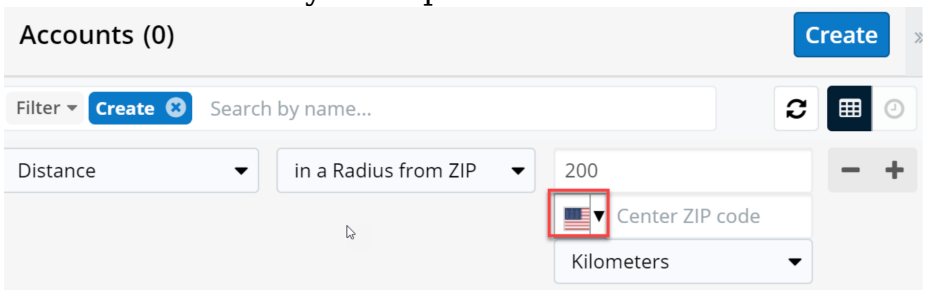
1. Start by opening the Accounts module's List View.
2. Click the Filter Create button to begin configuring a filter.
3. In the left-side drop-down, select Distance (as shown).



4. Then, in the center drop-down, select "in a Radius from ZIP":

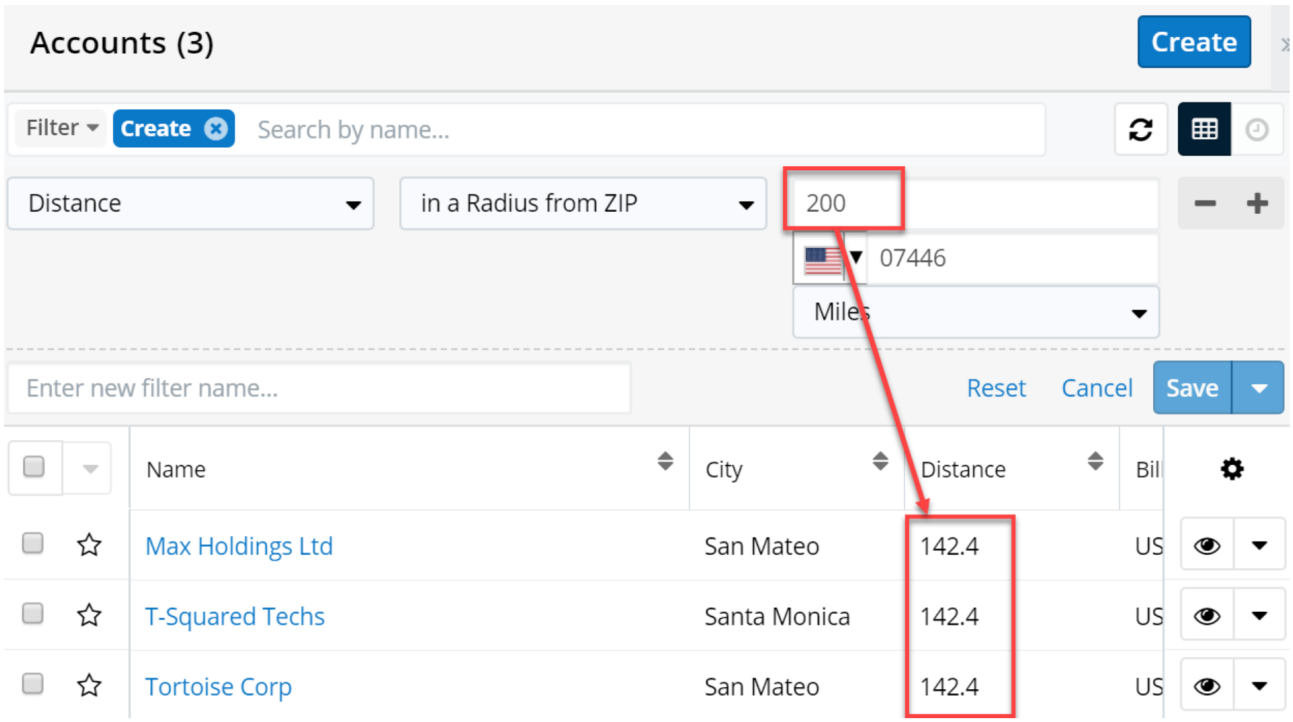


5. Now there will be two fields for entering the specific filtering values, "Radius" and "Center ZIP code". The ZIP code contains a Country Select option. Because many countries share zip codes, Sugar users can select from which country the zip code is used.

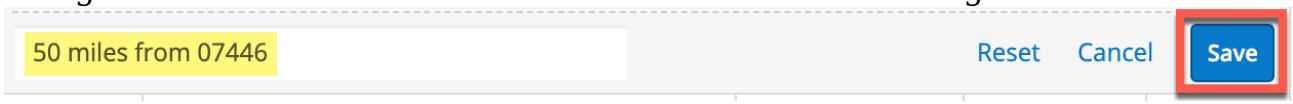


   - **Radius (0-250 Miles)** - This is the radius (in miles) that wMaps will use to locate records using the Center ZIP code entered as the starting point.
   - **Center ZIP code** - The starting location (country and postal code) for the radius to search "from" to locate records.
6. Enter the Radius value (between 0 and 250).
7. Select the desired country from the Country Select option.
   Note: By default, the Country Select option is set to US.
8. Enter a valid postal code and choose the Measurement Unit.

Example of values entered and search results ("200" mile radius with the origin/center of filter range using ZIP code "07446"):



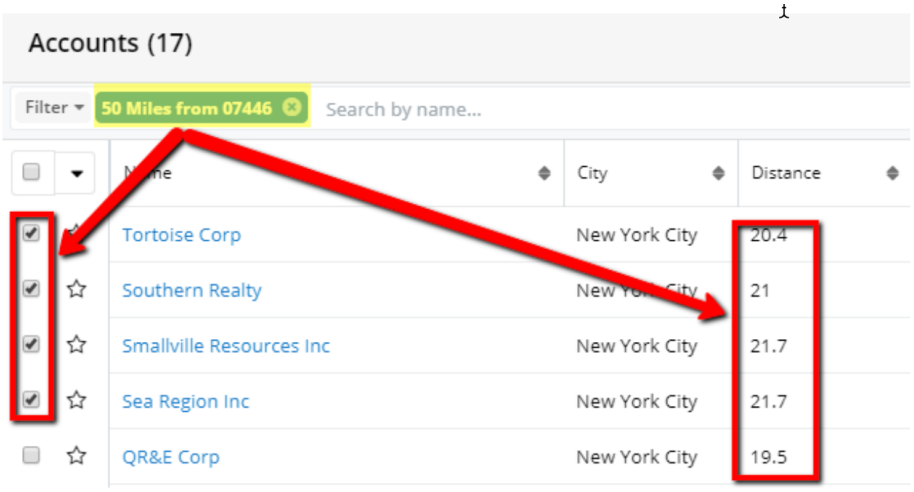
In Sugar, the filter can be saved to be used again in the future. Here the filter is being named "50 miles from 07446". Click Save to have Sugar store this:



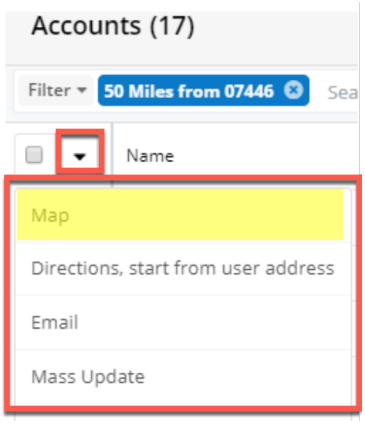
Map Sugar Filtered Records

After filtering records using a search, those results can be shown on a map with pushpins to display their distribution.

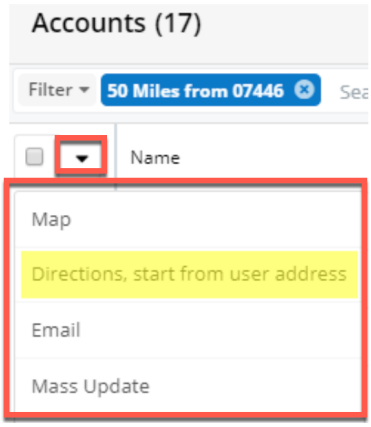
Records can be check-marked, as shown in the list below.



The selected records can be shown on a map. Select "Map" from the list Actions menu.



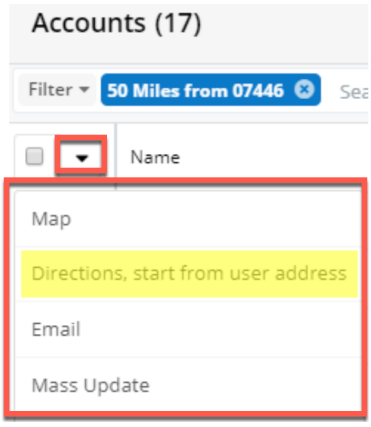
It is also possible to generate directions, starting from the Sugar User's address as entered in their Sugar User profile. Select Directions, start from User address.



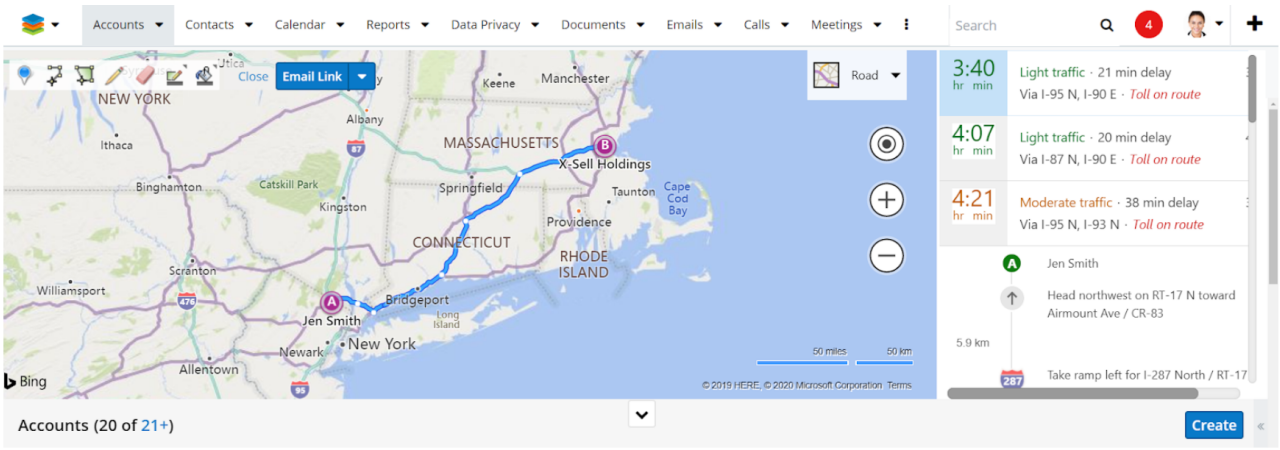
Generate Driving Directions

It is possible to generate driving directions to a single record, or multiple selected records. Checkmark the desired record(s) in the List View. This might be from a filtered list based on Distance.

Select Directions, start the user address from the List view Actions menu.



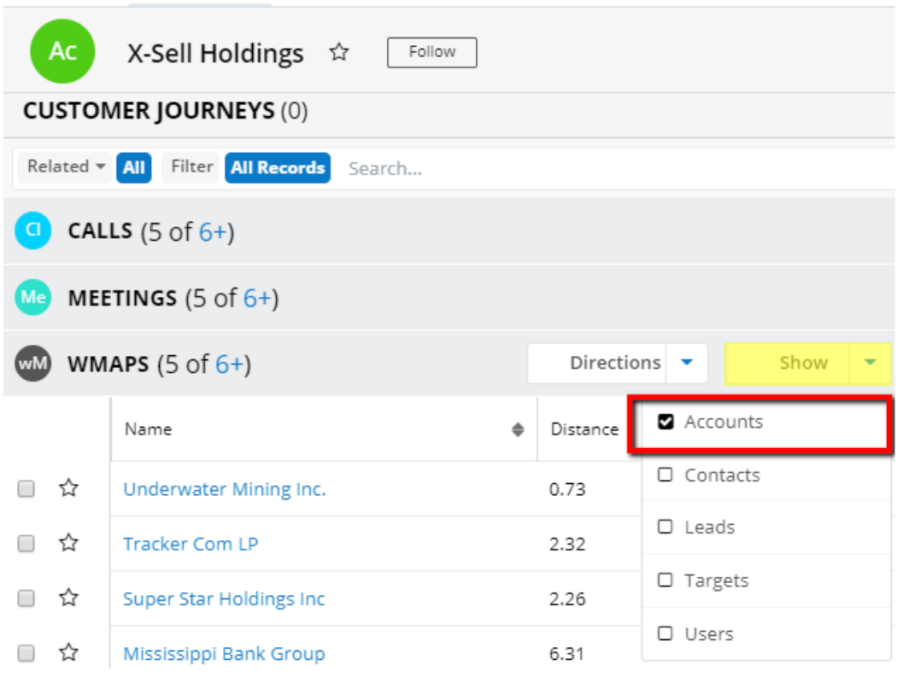
A map will be generated showing the route. The pane on the right will contain turn-by-turn directions from the address specified in the Sugar User profile.



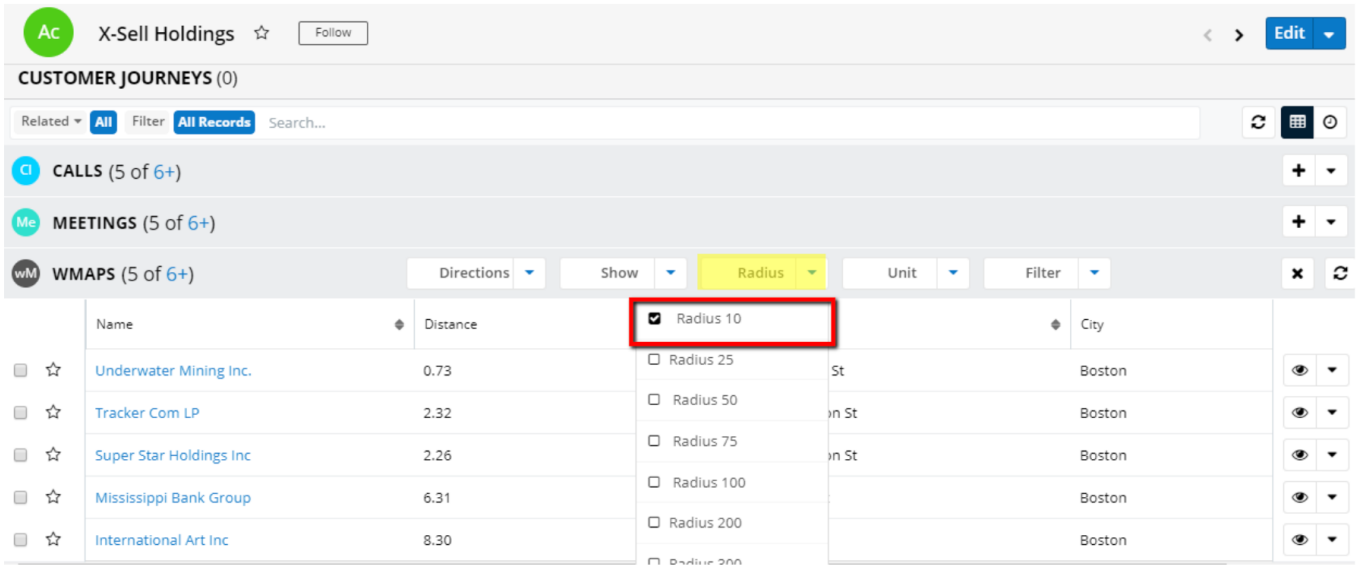
]

Show Closest Records

Perhaps you have a visit scheduled to a customer or prospect and wish to find nearby customers or prospects, in order to make good use of your time. Select the Account (or Lead etc) and open the wMaps subpanel. There are options to view Accounts, Contacts, Leads etc (based on which modules were selected in the wMaps Geocoder Settings.



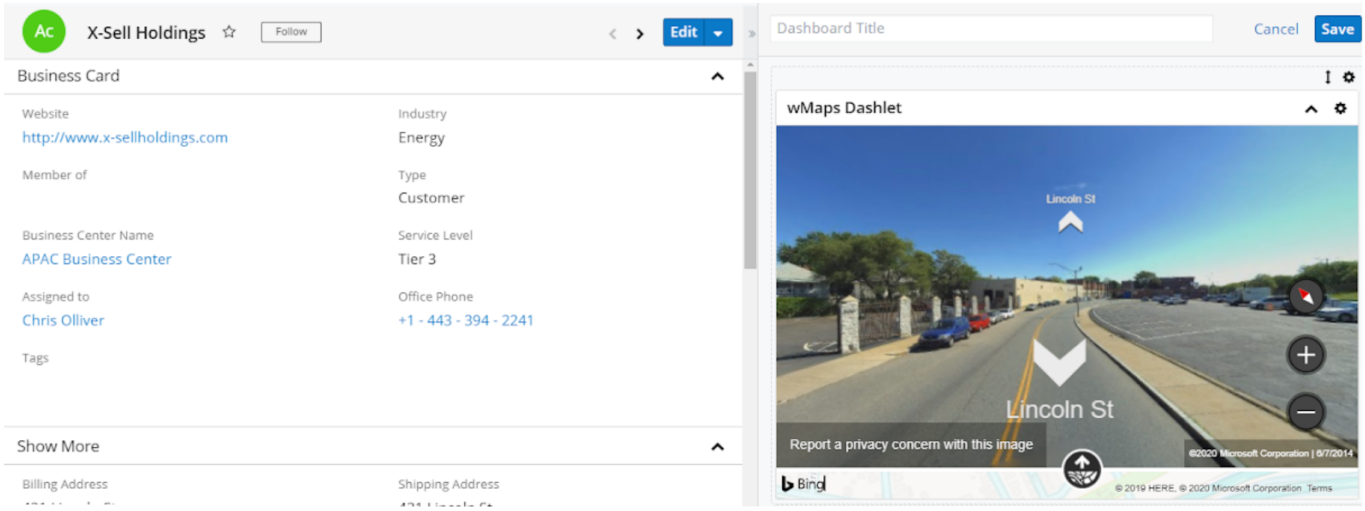
Select a radius to locate nearby records within a selected distance.



It is also possible to apply a filter.

Map and Street Side Dashlet

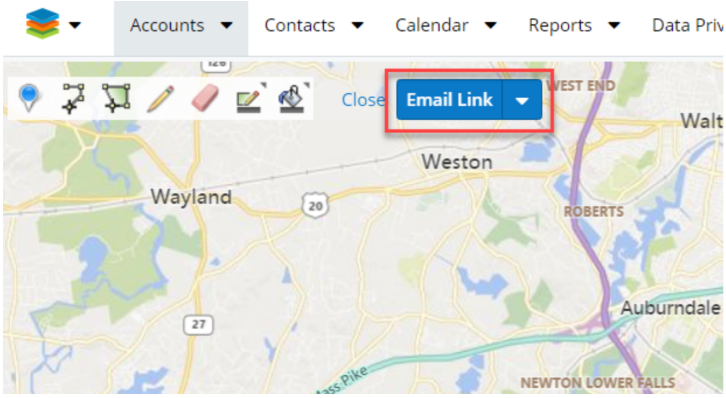
wMaps dashlets can be used to show Street Side, Road, and Aerial maps for geocoded records. See configuration topic on adding Record View Dashlets. Once added, the dashlets will display wMap information for geocoded records.



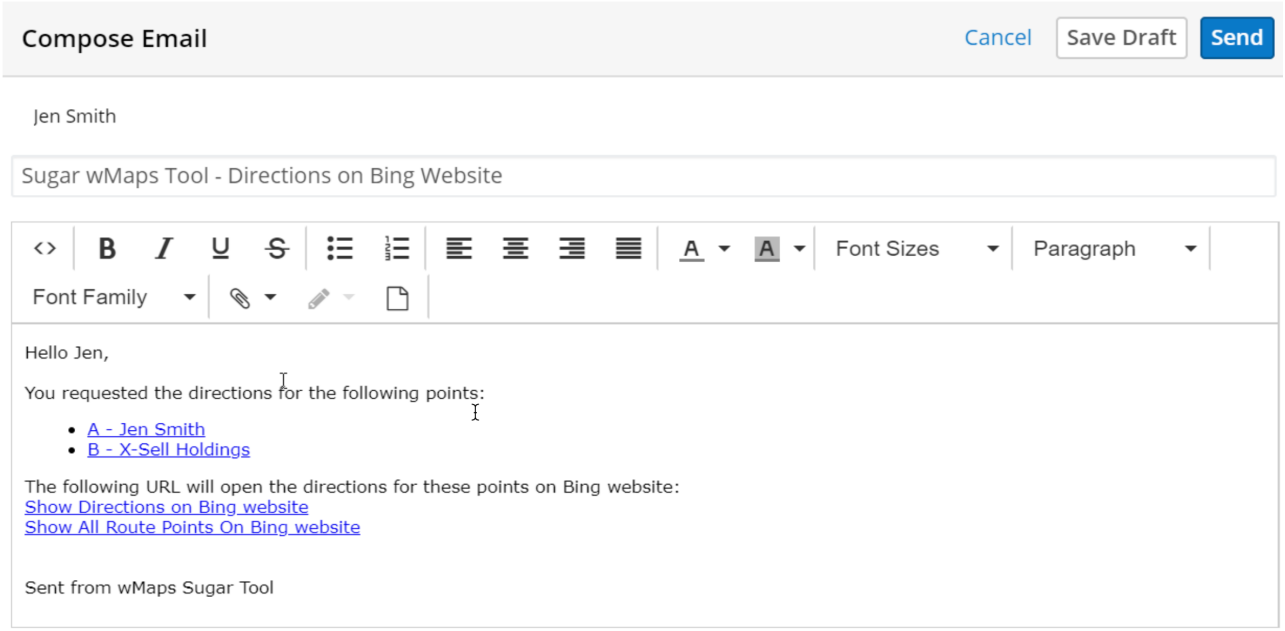
The displayed Map type can be [adjusted in the dashlet properties](#).

Send to Mobile Device

Use the "Email Link" button on a wMap to email the map and directions to yourself or a colleague.



An email will be generated as shown below. The map can then be used on a mobile device.

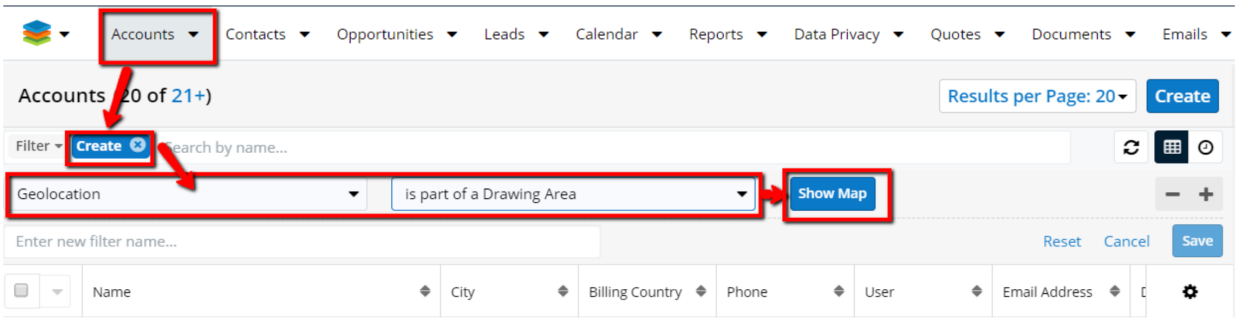


Filter List View Based on Drawing Polygons

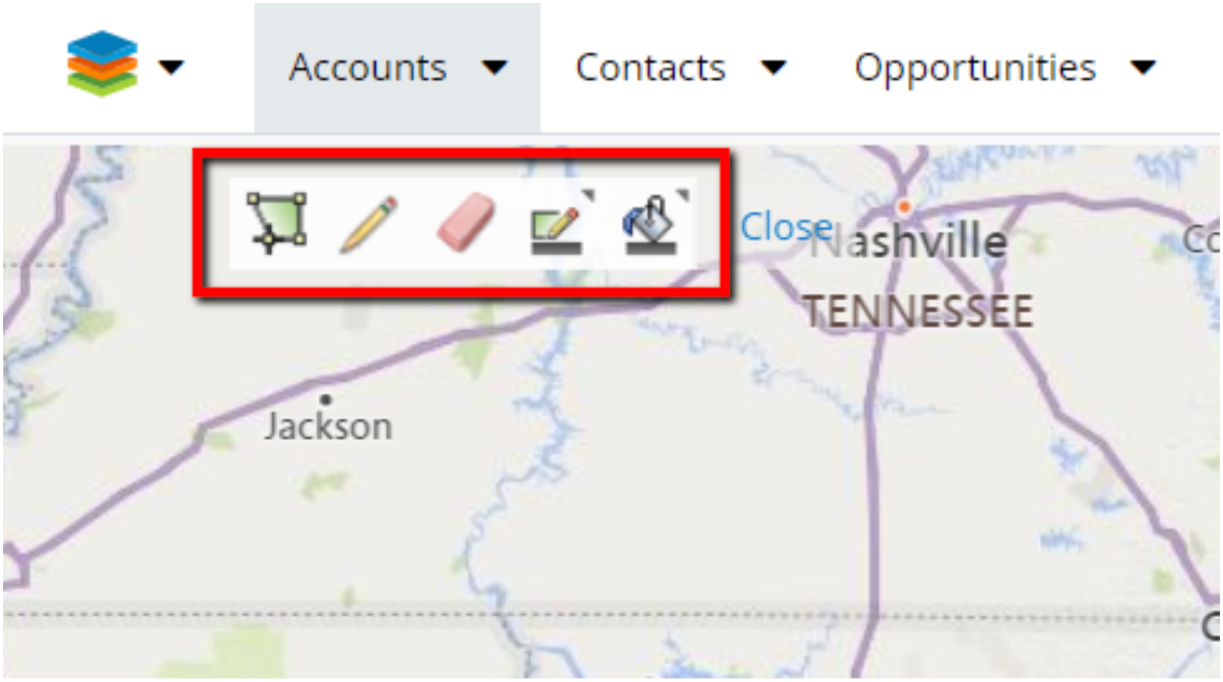
Users can create a filter that makes available a map in the List View of a desired module. The map allows polygon drawings and shows the geocoded locations of their records in the polygon area. To use this functionality, follow the steps below.

1. Go to the module of choice (Accounts, in our example) and click the Create button from the filter toolbar.

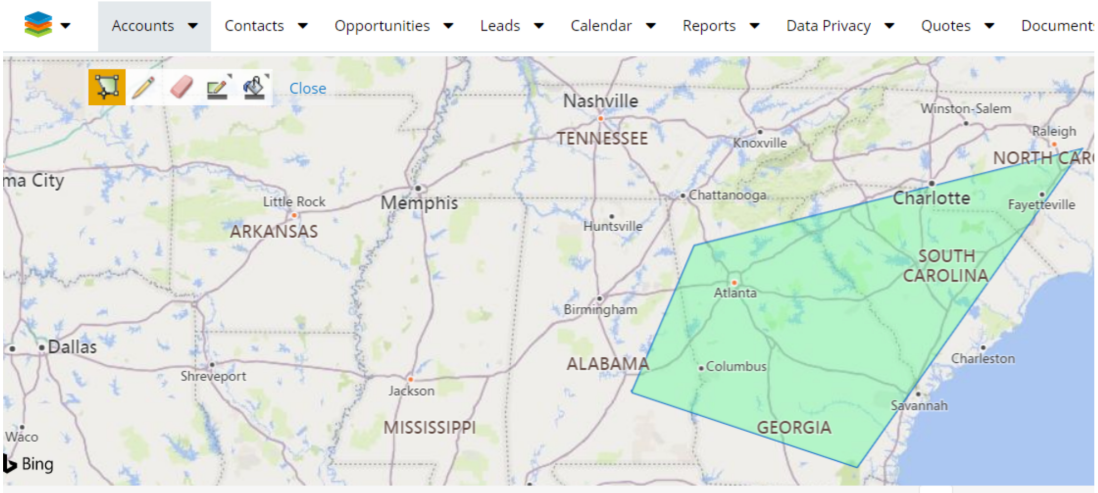
2. From the dropdown that opens, choose "Geolocation" as a filter.
3. Choose the "is part of a Drawing Area" from the second filter dropdown menu.



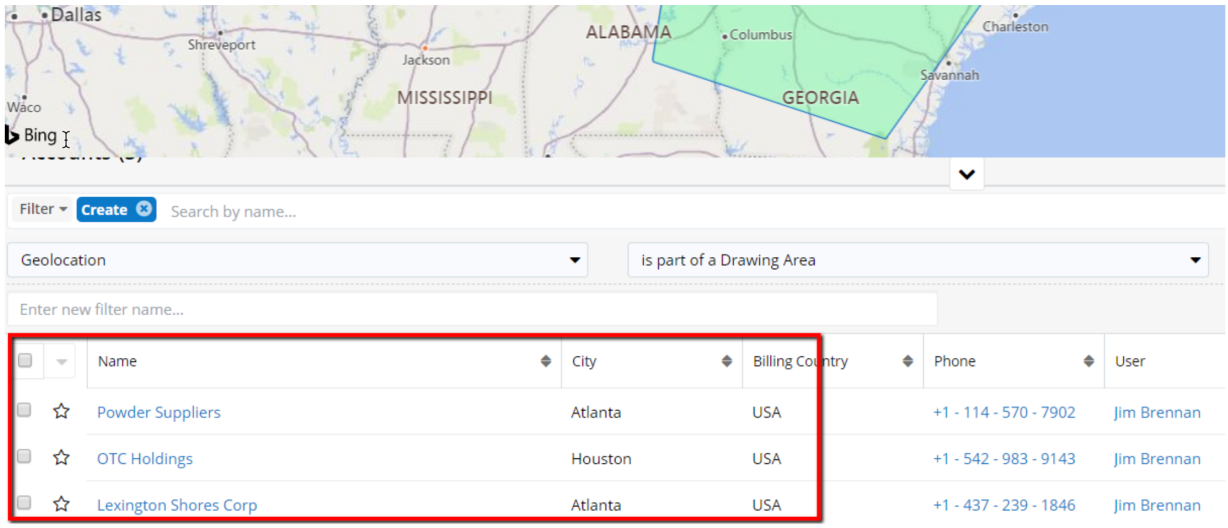
4. Press the Show Map button to generate the map.
5. Use the wMaps drawing tools to select the area of interest.



6. Select the area of interest on your map by drawing a polygon. Once you finish drawing, **press the escape key** on your keyboard.



7. All records geocoded in the selected area will be displayed beneath the generated map.

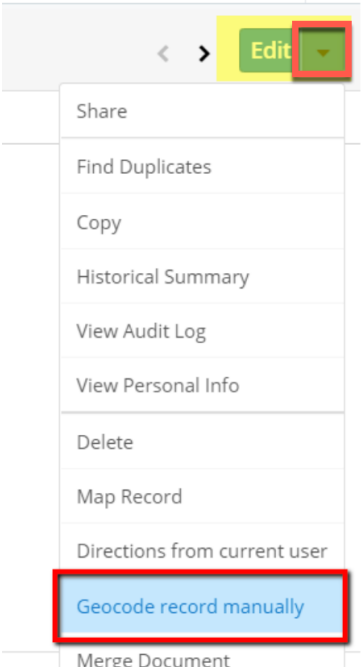


8. Name and Save the Filter for future users.

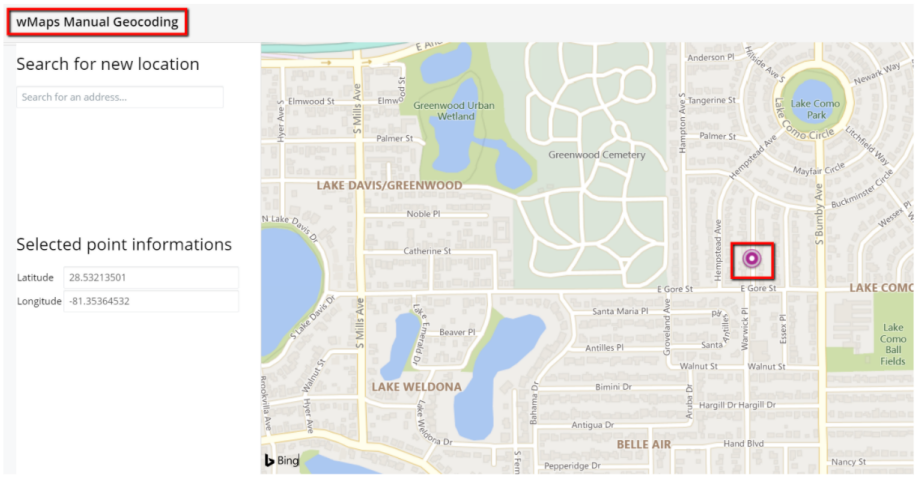
Geocode Record Manually

wMaps allows users to geocode records manually in Record View.

In Record View, click the Edit dropdown and select Geocode Record Manually.



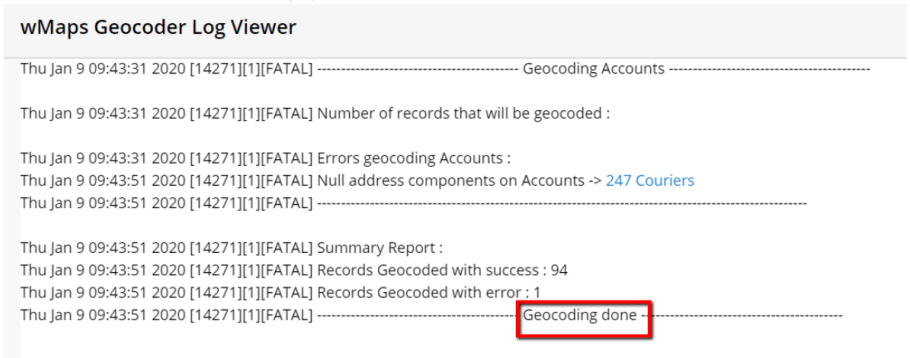
After selecting the function, a confirmation message appears. Once you confirm the manual geocoding action, a wMaps map drawer appears.



Note: If an entry has already a valid address, the geocode manually functionality doesn't change the address in the record view, just latitude and longitude attributed to the record.

wMaps Log Viewer

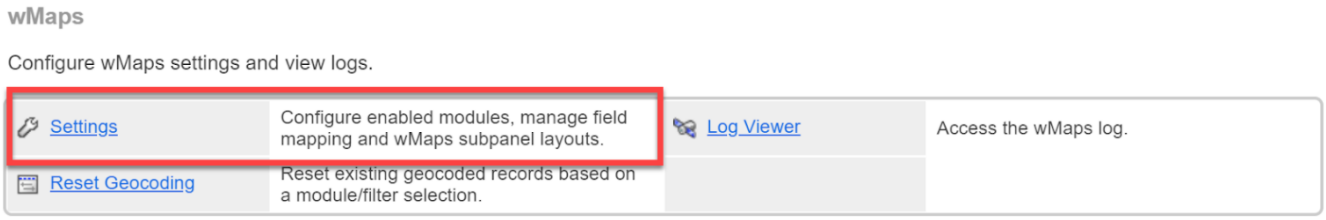
The wMaps Log Viewer is a function that can be accessed from the Administration page. It shows the console log for each Geocoding Schedule job performed. When a geocoding error occurs, it will display in a row an URL that can be opened to check the error in detail. This error row is specific for entries that don't have their coordinates entered properly. When an entry has coordinates entered correctly, and the Geocoding job is successful, it reads "**Geocoding done**".



In case errors occur during the Geocoding Scheduled Job, one of the following three are possible:

- Fatal (shows just Fatal errors);
- Error (shows Fatal type and Error type of errors);
- Debug (shows three types of errors).

All these error types can be configured by the user from the Administration page, by accessing the wMaps Settings link.



wMaps with wMobile for SugarCRM

wMaps integrates with wMobile for SugarCRM. For more information on using wMaps with wMobile for SugarCRM, refer to the wMobile for SugarCRM User Guide.

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