



iPOI Configuration Guide

Application Setup & Customization

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Administrators

Security and Profile Settings

When iPOI is installed, the instructions ask you to apply profile settings to your Profiles.

Step 2. Choose security level

Step 2 of 3

Select security settings:

☐ Grant access to admins only

Users with your profile get full access (best for limited deployments)

☐ Grant access to all users

All internal custom profiles get full access

☒ Select security settings

User access set by profile (recommended for most packages)

Customize security

These security settings determine access to the custom objects and components installed in the package. It doesn't affect permissions for existing objects.



Standard profiles (including the Read-Only profile) don't receive access to any installed custom objects. Because permissions are not editable for standard profiles, you must clone your profile to grant access. [Tell me more!](#)

Action	Access Level	Description
Set All	No Access	No access to any features in this package.
Set All	Full Access	Full access to all features and fields in this package
Set All	iPOI Admin	
Set All	iPOI User	

Please select a level of access to the features in this package for each of your organization's custom profiles.

Profile	Access Level
System Administrator	Full Access (Your profile must have full access to the package)
Authenticated Website	No Access
High Volume Customer Portal	No Access
Standard Platform User	No Access
Custom: Marketing Profile	No Access
Custom: Sales Profile	No Access
Custom: Support Profile	No Access
Customer Portal Manager Custom	No Access
Customer Portal Manager Standard	No Access
Force.com - Free User	No Access
Gold Partner User	No Access
Standard User	No Access
Read Only	No Access
Solution Manager	No Access
Marketing User	No Access
Contract Manager	No Access
Silver Partner User	No Access

Previous

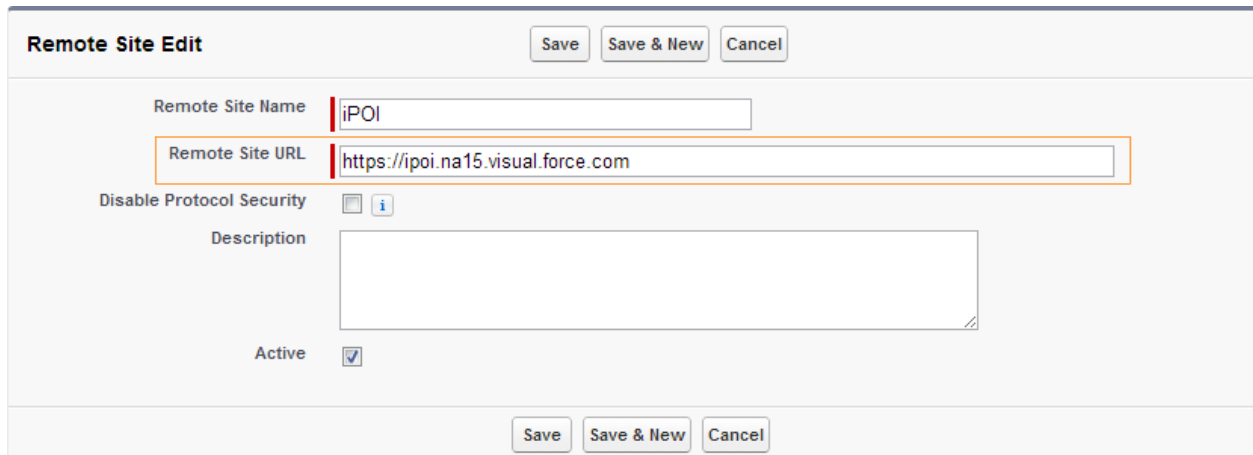
Next

Cancel

Configuring Remote Settings

iPOI uses Salesforce API to have access to metadata components. Before any Apex callout site must be registered in the Remote Site Settings page or the call will fail.

Register a new site at **Your Name | Setup | Security Controls | Remote Site Settings | New Remote Site**. Enter Salesforce organization domain name for the Remote Site URL.



The 'Remote Site Edit' form contains the following fields and controls:

- Remote Site Name:** Text input field with the value 'iPOI'.
- Remote Site URL:** Text input field with the value 'https://ipoi.na15.visual.force.com'.
- Disable Protocol Security:** A checkbox that is currently unchecked, with an information icon to its right.
- Description:** A large text area for providing details about the remote site.
- Active:** A checkbox that is currently checked.

At the top right and bottom right of the form are buttons for 'Save', 'Save & New', and 'Cancel'.

Profile Settings

There is a small amount of Profile setup to do simply to give users the ability to use iPOI in Salesforce.

Administrative Permissions

User must have the “API Enabled” permission to have access to metadata components via Salesforce API.



The 'Administrative Permissions' form displays a list of permissions with checkboxes and information icons:

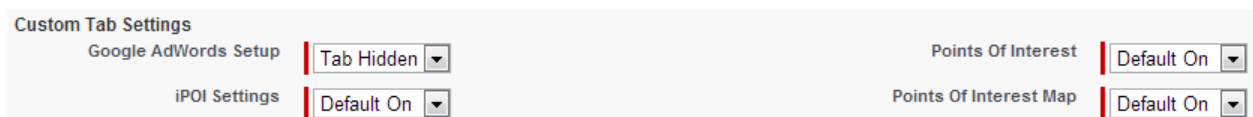
- API Enabled:** Checked (highlighted with an orange box).
- Author Apex:** Unchecked.
- Bulk API Hard Delete:** Unchecked.
- Manage Mobile Configurations:** Unchecked.
- Manage Package Licenses:** Unchecked.
- Manage Public Documents:** Unchecked.

Tab Access

Below are the recommended settings for Admins and End Users. It is up to you how you want to distribute the tabs.

As long as a tab is not hidden, it is accessible for a user in the Salesforce UI.

Admin access



The 'Custom Tab Settings' form shows settings for two tabs:

- Google AdWords Setup:** Set to 'Tab Hidden' via a dropdown menu.
- iPOI Settings:** Set to 'Default On' via a dropdown menu.
- Points Of Interest:** Set to 'Default On' via a dropdown menu.
- Points Of Interest Map:** Set to 'Default On' via a dropdown menu.

End User access

Custom Tab Settings	
Google AdWords Setup	Tab Hidden
iPOI Settings	Tab Hidden
Points Of Interest	Default On
Points Of Interest Map	Default On

Objects Access

Custom object and field access permissions controlled by “*Manage Points Of Interest*” and “*Use Points Of Interest*” permission sets. Although Push Topic standard object access permissions controlled via profile.

Admin access

Standard Object Permissions						
The permissions defined here control access at the object level. Access to individual records within that object type is controlled by the sharing model. Set access levels based on the functional requirements for the profile. For example, create different groups of permissions for individual contributors, managers, and administrators. How do I choose?						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Accounts	☒				☒	☒
Contacts	☒				☒	☒
Documents	☒	☒	☒	☒	☐	☐

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Ideas	☒	☒			☒	☒
Push Topics	☒	☒	☒	☒	☒	☒

End User access

Standard Object Permissions						
The permissions defined here control access at the object level. Access to individual records within that object type is controlled by the sharing model. Set access levels based on the functional requirements for the profile. For example, create different groups of permissions for individual contributors, managers, and administrators. How do I choose?						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Accounts	☒				☒	☒
Contacts	☒				☒	☒
Documents	☒	☒	☒	☒	☐	☐

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Ideas	☒	☒			☒	☒
Push Topics	☒	☐	☐	☐	☐	☐

Application Access

Salesforce organizes tabs into Applications. This makes iPOI available in the application list in the upper-right of the Salesforce UI. Provide users access to the iPOI application to make it easy for them to find the collection of tabs for the application.

Custom App Settings					
	Visible	Default		Visible	Default
Google AdWords	☐	☐	Platform	☒	☒
iPOI	☒	☐			

Edit User Permission Set Assignments

There are two permission sets available “*Manage Points Of Interest*” and “*Use Points Of Interest*”

Permission Set Assignments		Edit Assignments	Permission Set Assignments Help ?
Action	Permission Set Label	Date Assigned	
Del	Manage Points Of Interest	06/03/2013	

Permission Set Assignments		Edit Assignments	Permission Set Assignments Help ?
Action	Permission Set Label	Date Assigned	
Del	Use Points Of Interest	06/03/2013	

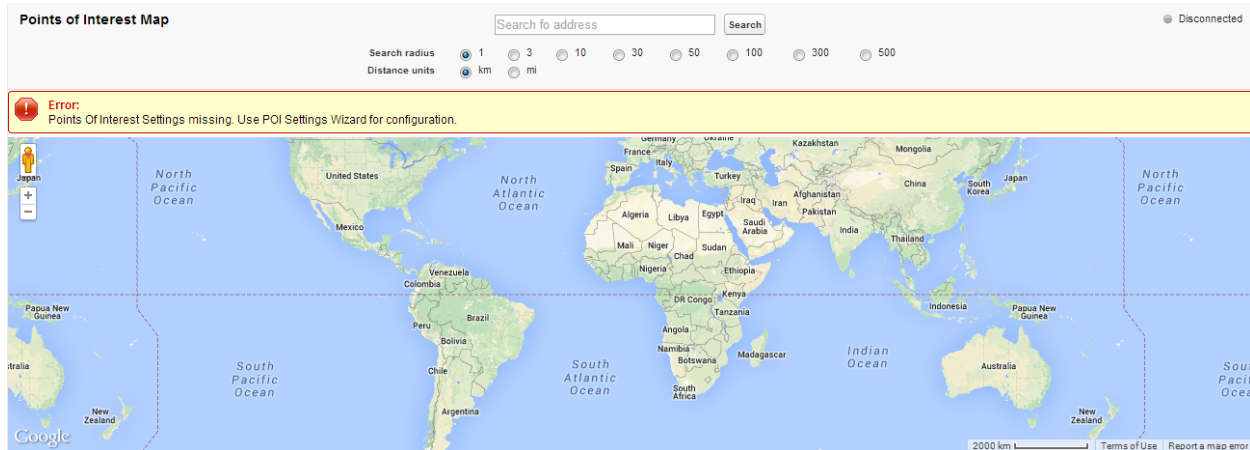
The following permissions are covered with the permission set:

- Objects: Grants access to iPOI objects.
- Fields: Grants access to iPOI object's fields.
- Apex Classes: Grants access to iPOI classes, allowing the application to be accessed.
- Visualforce Pages: Grants access to the numerous Visualforce pages iPOI has.



iPOI Settings Object Overview

The purpose of iPOI settings object is to hold application configuration and customization. To gain all application capabilities (real-time tracking, markers customization) settings object needs to be configured. User will be prompt if no configuration exists. Only one iPOI settings object can exist.



iPOI Settings Wizard

There is a custom screen to setup iPOI settings object.



iPOI Settings Wizard



Available Notify For Fields – Point Of Interest object custom fields will be available to pick for real-time notifications. Only fields of type: Text, Text Area, Email, Picklist, Multi-picklist, Number, Checkbox will be available to select.



Navigation buttons – Move fields between the columns.

C Selected Notify For Fields – There are notification fields selected by default. Those fields cannot be removed from the list. Although the list can be extended with the fields from **Available Notify For Fields** column.

D Remaining characters – Whenever **Selected Notify For Fields** list is extended with new field the amount of available characters decreases by the field API name length. The available characters amount increases if field was removed away from **Selected Notify For Fields** list.

E Enable Real-time Notifications – Enable or disable real-time notifications. Uncheck if there is no need in real-time notifications e.g. before data load to save Streaming API events.

F Google Maps API Endpoint – Google Maps API endpoint URL

G Google Maps Browser API Key – Google Maps API key used to call Google APIs. This key identifies your application for purposes of quota management.

H Google Maps Server API Key – Google Maps API key used to call Google APIs. This key identifies your application for purposes of quota management.

Note: All Maps API applications should load the Maps API using an API key. Using an API key enables you to monitor your application's Maps API usage, and ensures that Google can contact you about your application if necessary. If your application's Maps API usage exceeds the Usage Limits, you must load the Maps API using an API key in order to purchase additional quota.

J Location Report Interval In Minutes – Specify how often user's location is reported to the server.

iPOI Settings Details

When iPOI settings have been created detail view can be used to customize map markers appearance.

iPOI Settings
iPOISettings

iPOI Settings Detail Edit Delete

Name iPOISettings

Notify For Fields API Names

Enable Real-time Notifications ☒

Google Maps API Endpoint <https://maps.googleapis.com/maps/api>

Google Maps Browser API Key

Google Maps Server API Key

Location Report Interval In Minutes 5 Edit Delete

A Billing Address markers New Marker **B**

Action	Record Type	State	Icon
Edit Del	Billing Address C	Customer	office-building-purple.png E
Edit Del	Billing Address	Partner D	office-building-grey.png
Edit Del	Billing Address	Prospect	office-building-green.png

A Custom markers list – For each active record type there will be related list to be able to override standard Google Maps markers. If record type becomes inactive or gets removed the list will not show up. You may consider removing custom markers before deactivating or removing record type.

B New Marker – Button to create new custom marker.

C Record Type – Point of Interest object active record type name.

D State – Point Of Interest object state values by record type.

E Icon – Custom marker icon.

New Marker Screen Overview

New marker screen is available to add custom marker for specific record type/state values.

The screenshot shows the 'New Marker' screen. At the top, there is a 'Marker' icon and the title 'New Marker'. Below this is a form titled 'Marker New' with 'Save' and 'Cancel' buttons. The form has a section titled 'Information'. Inside this section, there are three fields: 'Record Type' with the value 'ATM' (annotated with A), 'State' with a dropdown menu showing 'Ok' (annotated with B), and 'File attachment' with a 'Choose File' button and the text 'No file chosen' (annotated with C). At the bottom of the form, there are 'Save' and 'Cancel' buttons.

A Record Type – Record type name.

B State – Point Of Interest object state values by record type.

C File attachment – Custom marker file.



iPOI Customization

iPOI application is highly customizable. Custom object that represents point on the map can be extended with number of fields depending on the needs. iPOI custom object has minimum number of fields out of the box. Only fields that are needed to make app work were provided with the package. There is a good reason for that - as client has a chance to add more fields specifically for the area of use.

Interaction With Salesforce Records

iPOI custom object can be extended with relation fields to point to standard (e.g. Accounts, Contacts etc.) or custom objects. In that case the standard/custom object record will have its own iPOI that can be shown on the map as specific marker.

This kind of customization can be well explained with following example.

For instance we would like to place Account branches on the map. Lets create Account record "Acme". This is going to be the "main" account.

Each Account record has "Parent Account" standard field. Lets use it to add branches for "Acme". As the result we have two more Account records (branches) named: "Acme SF Branch Office #1" and "Acme SF Branch Office #2" pointing to "Acme" Account.

Then add relation between iPOI custom object and Account standard object. Add new Record Type "Account branch" for iPOI custom object. Extend iPOI "State" field with some new values like "Prospect", "Customer", "Pending deal" and map those to newly created record type. Optionally custom markers can be added to give points unique appearance on the map.

Now each iPOI represents Account branch. Related account details can be reached from iPOI detail page by hovering over related Account name (mini page view) or navigating to related Account detail page for full information.

Moreover iPOI custom object can be extended with Formula fields to retrieve Account information directly to iPOI detail view. Those Formula fields can also be included to show up at marker detail window (the pop-up that shows up when marker is clicked) by including them into **Selected Notify For Fields** list at iPOI settings view.

Unfortunately Salesforce doesn't allow real-time notifications based on related object record changes. That means to have formula fields show real-time data at marker detail window very little custom development is needed (simple custom trigger on related object).

For the example above custom trigger code may look like:

```
trigger Account on Account (after update) {
    List<ipoi__Point_Of_Interest__c> relatedRecords = [Select Id, Account__c From
    ipoi__Point_Of_Interest__c Where Account__c IN :Trigger.newMap.keySet()];

    for(ipoi__Point_Of_Interest__c poi : relatedRecords) {
        Account acc = Trigger.newMap.get(poi.Account__c);
        poi.ipoi__Trigger__c = String.valueOf(acc.LastModifiedDate.getTime());
    }
    update relatedRecords;
}
```



Uninstall iPOI

Uninstalling iPOI is a simple process, but has a couple of prerequisites before completing successfully.

Remove User Permissions

Get the list of users which are using “*Manage Points Of Interest*” or “*Use Points Of Interest*” permission sets. Delete the associations between your users and our permission set.

Uninstall iPOI

Now that you have completed the prerequisite steps, you can complete uninstall. Go to Salesforce Setup and click on Installed Packages. Next to iPOI, click Uninstall. This will kick off the Uninstall sequence and should complete without problems as long as the prerequisites have been completed.



iPOI Mobile: Salesforce1

Installation and Configuration

iPOI is now available in Salesforce1 App. Refer to Salesforce1 App Installation and Administration Guides to get familiar with the app.

iPOI managed package includes mobile user profile: “iPOI Mobile User” as well as permission set: “Use Points Of Interest Mobile”. Set user profile and permission set to users who may need access to iPOI within Salesforce1.

Track Current Location

When running on mobile device user can activate current location tracking. “Point Of Interest” custom object is extended with detail page button “Start Tracking”. The function will be activated when button is pressed. The button is added to “Point Of Interest Mobile User Layout”. Use “Page Layout Assignment” standard page to set layout for desired Profile / Record Type.

Only users with “Use Points Of Interest Mobile” permission set can use current location tracking functionality.

Remote Site Settings for Google Maps API

When user’s current location being tracked whenever coordinates are changed they will be stored to the server and reverse geocoding process will automatically kick in to reveal user’s current address. To have reverse geocoding succeed Google Maps API endpoint has to be added to Remote Site Settings.

Remote Site Detail

[Edit](#)[Delete](#)[Clone](#)

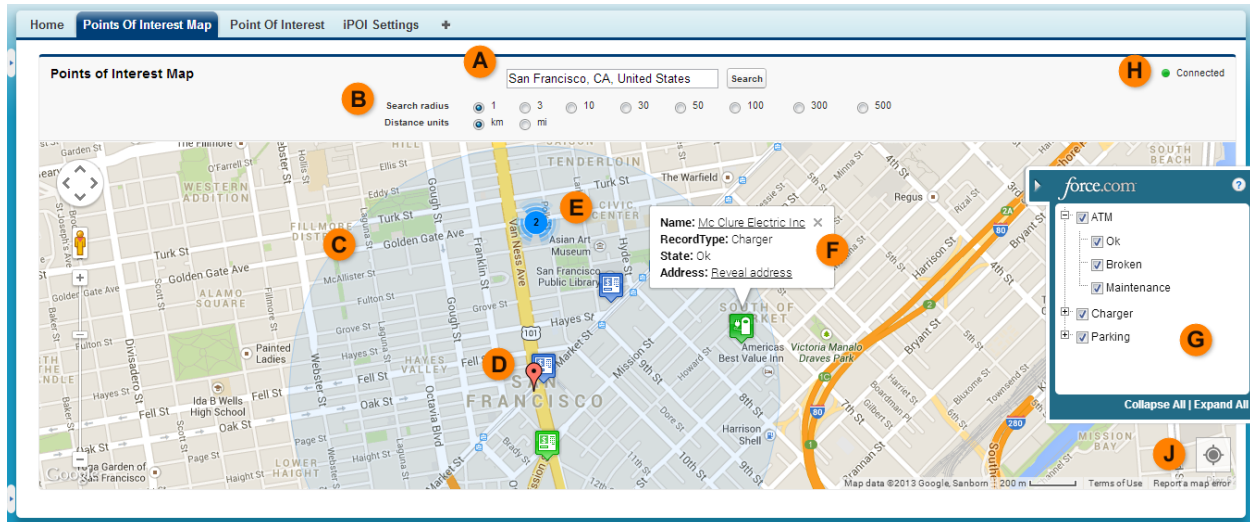
Remote Site Name	GeocodingAPI
Remote Site URL	https://maps.googleapis.com
Disable Protocol Security	☐
Description	
Active	☒
Created By	Admin User , 11/9/2014 10:34 AM

[Edit](#)[Delete](#)[Clone](#)

End Users

Map Page Overview

End-users use the map tab to map their data, and perform additional activities within the iPOI application. The image below outlines the major components of the page.



- A iPOI Search** – Search for specific address. Results will be displayed on the map.
- B Search Radius & Distance Units** – Control monitoring area.
- C Monitoring Circle** – Limits the search area.
- D Monitoring Center** – Center of the monitoring circle.
- E Markers Group** – When markers start to overlay each other they will be automatically grouped into group marker. Clicking on group marker will zoom in map to show markers inside.
- F Marker Details** – Mouse click on a marker reveals marker details popup. Popup contains notification field's values. If notification field has no value it will not be included in popup – this is the mechanism to control popup visible fields. For instance, some fields may be empty for specific record type to control popup layout. In this case only default mandatory fields are displayed. Address field is the dynamic field. Once address has been revealed it will immediately show up in marker info window and will be stored to the record.

G Filter – Top level filter options represent Point Of Interest active record types. Deep level filter options represent Point Of Interest states for specific record type.

H Connection State – There are three valid connection states: “*Connecting*”, “*Connected*” and “*Disconnected*”. If state is “*Connected*” user receives real-time updates. Otherwise application works in offline mode. In that case to get latest updates user has to manually search for address to force application to reload data.

J Show My Location – With Show my location feature on Google Maps, you can quickly find places nearby. The first time you activate My Location, your browser may display a security message, asking you whether you want to share your location with Google Maps. If you deny this request, your exact location isn't shared with Google Maps and the My Location feature won't work. If you accept, your computer will try to determine your location.



Geocoding

Geocoding is the process of converting addresses (like "1600 Amphitheatre Parkway, Mountain View, CA") into geographic coordinates (like latitude 37.423021 and longitude -122.083739), which you can use to place markers or position the map.

Reverse geocoding is the process of converting geographic coordinates into a human-readable address.

iPOI supports both processes.

Geocode Single Record

When Point Of Interest record has geographic coordinates but no address “Geocode” button can be used to reveal human-readable address. In case Point Of Interest record has address but no geographic coordinates the same button can be used to reveal coordinates.

Point Of Interest
Citibank

Point Of Interest Detail

Name	Citibank
Coordinates	41.882116 -87.639957
Address	
Geocoding Status	N/A
Record Type	ATM
State	Ok

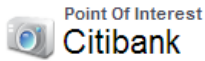
Buttons: Edit, Delete, Geocode

Callouts: A (Geocode button), B (Geocoding Status field), C (Address field)

A Geocode Button – The button to do geocoding/reverse-geocoding for the record.

B Geocoding Status – If for some reason geocoding/reverse-geocoding was unsuccessful the reason will be stored in this field. If no action was performed on the record **Geocoding Status** field value will be “N/A”.

C Geocoding Result Fields – When record is successfully geocoded (address is successfully retrieved) address will be stored into **Address** field. When record is successfully reverse-geocoded (coordinates are successfully retrieved) geographic coordinates will be stored into **Coordinates** field.



Point Of Interest Detail

[Edit](#) [Delete](#) [Geocode](#)

Name	Citibank
Coordinates	41.882116 -87.639957
Address	2-44 North Canal Street, Chicago, IL 60606, USA
Geocoding Status	
Record Type	ATM
State	Ok

[Edit](#) [Delete](#) [Geocode](#)

A

Geocode Button – Reveal address or geographic coordinates with *Geocode*” button.

B

Geocoding Status – When record was successfully geocoded/reverse-geocoded, geocoding status will be represented as a green checkbox meaning the process was successful.

C

Geocoding Result Fields – Geographic coordinates and address.

Mass Geocoding

For user convenience mass geocoding is available from the list view page.

 [All](#) | [Edit](#) | [Delete](#) | [Create New View](#) **A**

[New Point Of Interest](#) | [Change Owner](#) | [Geocode](#) 

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T

☐	Action	Name +	Address	Coordinates	Geocoding Status
☐	Edit Del	1st Community Bank	1855-1899 Southeast 3rd Street, Aledo, IL 61231, ...	41.19997 -90.729061	
☒	Edit Del	1st Financial Federal Credit Union		38.771423 -90.519554	N/A
☐	Edit Del	1st National Bank of Scotia	207 Mohawk Avenue, Scotia, NY 12302, USA	42.826637 -73.96469	
☒	Edit Del	1st National Community Bank		40.656834 -80.574052	N/A
☐	Edit Del	1st Source Bank	333 West Western Avenue, South Bend, IN 46601, ...	41.672403 -86.253951	
☐	Edit Del	1st Source Bank	371-399 South 3rd Street, Goshen, IN 46526, USA	41.582266 -85.834592	 B
☐	Edit Del	1st Source Bank	150-176 West Ewing Avenue, South Bend, IN 4661...	41.650176 -86.250519	
☐	Edit Del	1st Trust Bank		37.296243 -83.215476	N/A
☐	Edit Del	1st Trust Bank		37.252672 -83.198669	N/A
☐	Edit Del	21st Century Co-Op C-Store	75202 E Highway 92, Massena, IA 50853, USA		N/A
☒	Edit Del	23rd Street Market D	2219 Campus Street, Cedar Falls, IA 50613, USA		N/A
☒	Edit Del	24/7 Mini Mart	13 State Highway Y, Doniphan, MO 63935, USA		N/A
☐	Edit Del	24/7 Store		38.865832 -98.854299	N/A
☐	Edit Del	271 Express		33.143001 -94.968458	N/A
☐	Edit Del	281 Travel Center		44.406966 -98.475106	N/A

1-25 of 2000+ | **4 Selected** | [Previous](#) [Next](#)

A

Geocode Button – The button to do geocoding/reverse-geocoding for selected records.

B

Geocoding Status – When record was successfully geocoded/reverse-geocoded, geocoding status will be represented as a green checkbox meaning the process was successful. If for some reason geocoding/reverse-geocoding was unsuccessful the reason will be stored in this field. If no action was performed on the record **Geocoding Status** field value will be “N/A”.

C

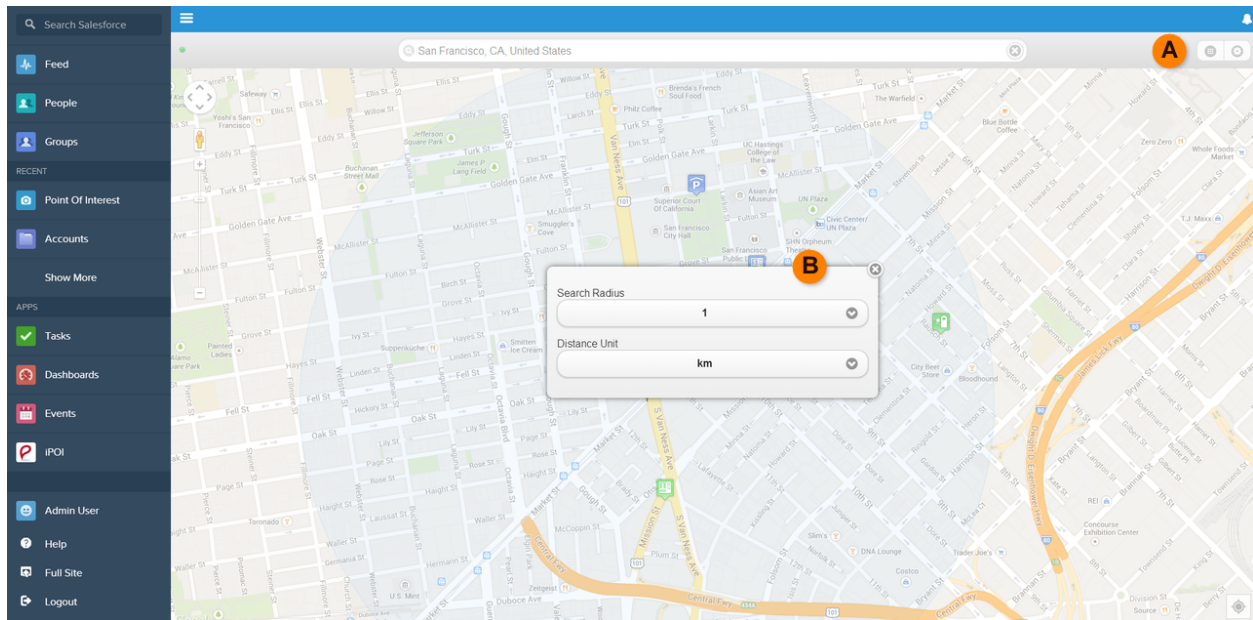
Coordinates – geographic coordinates used to place markers.

D

Address – human-readable address.

Search Options Pop-up

Gear button from buttons control group in the header opens search options pop-up to control monitoring area radius.

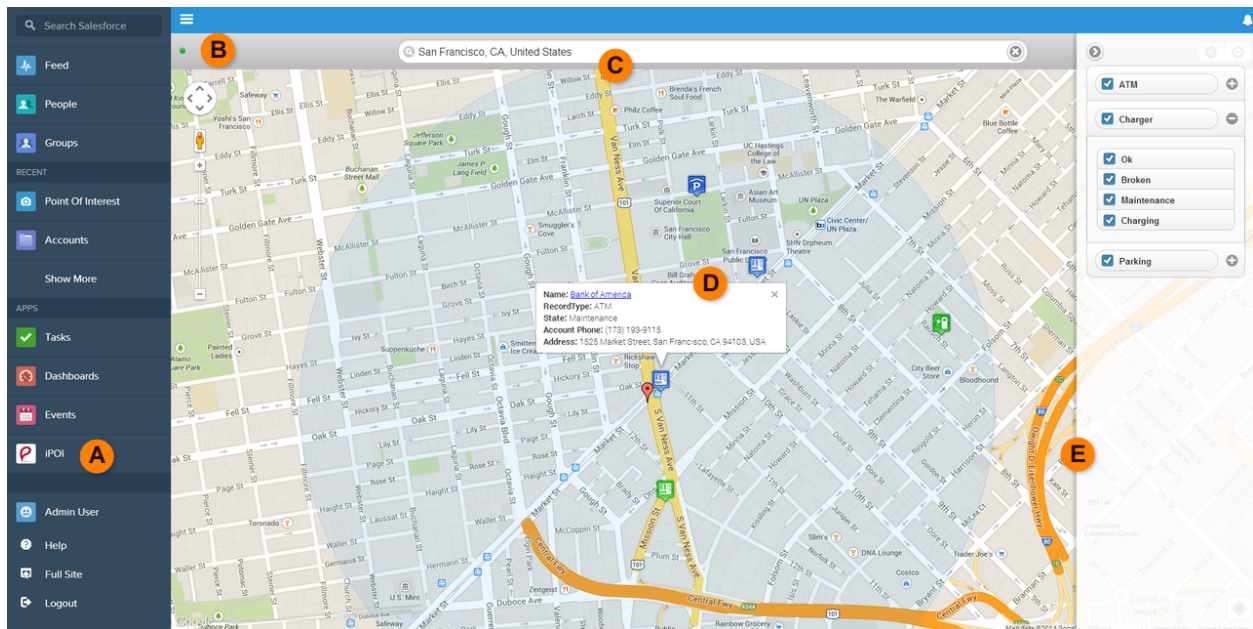


A **Filter & Search Options Buttons Group** – Buttons control group to open filter panel and search options pop-up.

B **Search Radius & Distance Units** – Control monitoring area.

Map Page Overview

Default landing page for iPOI mobile is the map view. The image below outlines the major components of the view.



A Salesforce1 Navigation – iPOI application can be reached from Salesforce1 navigation menu.

B Connection State – There are three valid connection states: “Connecting”, “Connected” and “Disconnected”. If state is “Connected” user receives real-time updates. Otherwise application works in offline mode. In that case to get latest updates user has to manually search for address to force application to reload data.

C iPOI Search – Search for specific address. Results will be displayed on the map.

D Marker Details – Touching a marker reveals marker details popup. Popup contains notification field’s values. If notification field has no value it will not be included in popup – this is the mechanism to control popup visible fields. For instance, some fields may be empty for specific record type to control popup layout. In this case only default mandatory fields are displayed.

Address field is the dynamic field. Once address has been revealed it will immediately show up in marker info window and will be stored to the record.

E Filter – Top level filter options represent Point Of Interest active record types. Deep level filter options represent Point Of Interest states for specific record type.

Detail and Edit Pages Overview

Standard Salesforce1 page is used to display record details. Record edit page is also standard Salesforce1 page.



 **Delivery Truck**

DETAILS

RELATED

Edit

Geocode

Start Tracking

Name

Delivery Truck

Coordinates

37.785224 -122.447026

Address

1-99 Euclid Avenue, San Francisco, CA 94118, USA

Geocoding Status



State

On Duty

Created By

[Administrator](#), 11/9/2014 12:27 PM

Last Modified By

[Administrator](#), 11/9/2014 12:28 PM

Record Type

Truck



Why application is in offline mode?

There are few possible reasons why application may be offline:

- **Enable Real-time Notifications** checkbox is not checked for iPOI settings.
- The logged-in user doesn't have "Read" permission on the PushTopic standard object to receive notifications.
- Streaming API limits exceeded. There are default limits intended for basic consumers of Streaming API. If the application exceeds these limits, or you there are scenarios where it needs to increase the number of clients per topic or the number of concurrent clients across all topics, please contact salesforce.com.



Why no real-time updates even when application is in online mode?

Pay attention when removing fields from Point Of Interest SObject after iPOI settings have been set up. If a field was selected as "Notify For Field" at iPOI settings wizard page and later on was removed from Point Of Interest SObject that may cause real-time functionality to ignore pushing real-time changes to the client due to missing field. If this is the case – go check iPOI settings.



iPOI Settings Wizard

If the field was included as "Notify For Field" but does not exist anymore the field will be moved to "Available Notify For Fields" section, the name of the field will be prepended with "Field missing : " and the field will be unavailable to select. To remove missing field from the settings simply hit save button, the settings will be updated and real-time functionality will start to push updates.