

JMap Survey 7

User Manual



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Welcome to JMap Survey

JMap Survey is a mobile application that belongs to the family of JMap applications (JMap Pro, JMap Web, and JMap Survey). It is deployed on smartphones as well as iOS and Android tablets.


JMap Survey can be used to display the vector and raster data of a JMap project, to perform queries, and to edit vector data, either in offline or online mode. These features make it an ideal application for entering data on the field when performing work such as tree inventories, building and infrastructure inspections, or tracking the progress of subcontracted projects.

This manual is the user guide for JMap Survey.

Working With an iOS Device

Installing JMap Survey on iOS

To install JMap Survey on your iOS device:

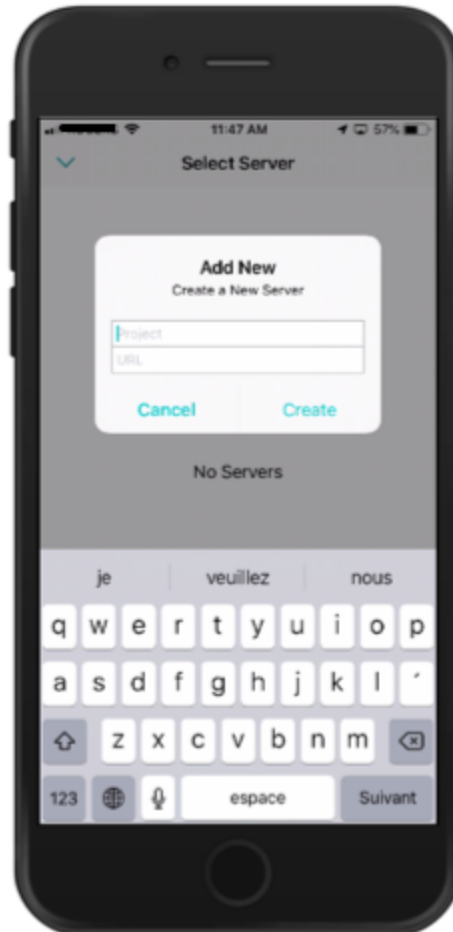
1. Download JMap Survey from the App Store by touching **Install**:
<https://itunes.apple.com/ca/app/jmap-survey/id1440073003?l=fr&mt=8>.
2. Touch the  icon to open JMap Survey. The application displays in English or in French, depending on the language selected in your mobile device.
3. Enable geolocation on your device. Your answer will be remembered.



Connecting to a JMap Project on iOS

JMap Survey directly connects to JMap projects. To set up the initial connection to a project:

1. In the login page, touch **Add Server**. The **Add New** window automatically opens, allowing you to create a connection to a project.

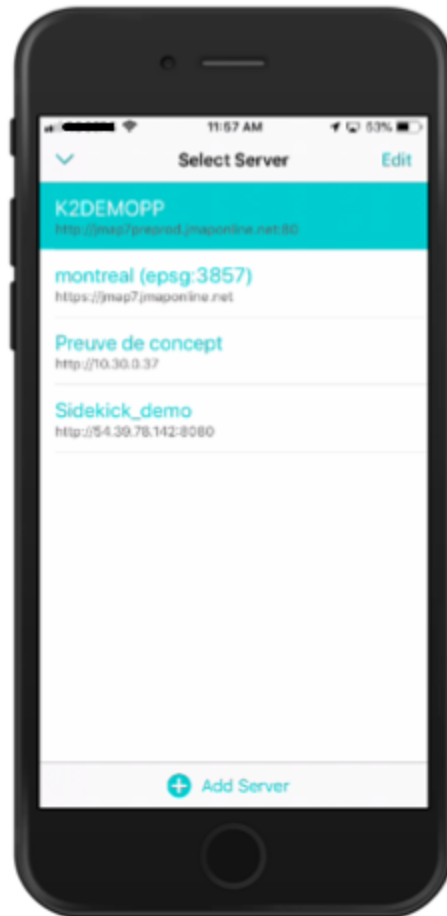


2. Enter the name of the project and the main URL of the JMap server. The project name and URL are not case sensitive. This information will be provided by your JMap administrator.
An example of a URL: <https://jmap7.jmaponline.net> (with port number if not 80, e.g. 8080)
An example of a project name: Montreal
3. Touch **Create**. Access to the project is configured, and the name of the project is now displayed in the login page.



You can connect to other projects from the **Select Server** screen. To do so:

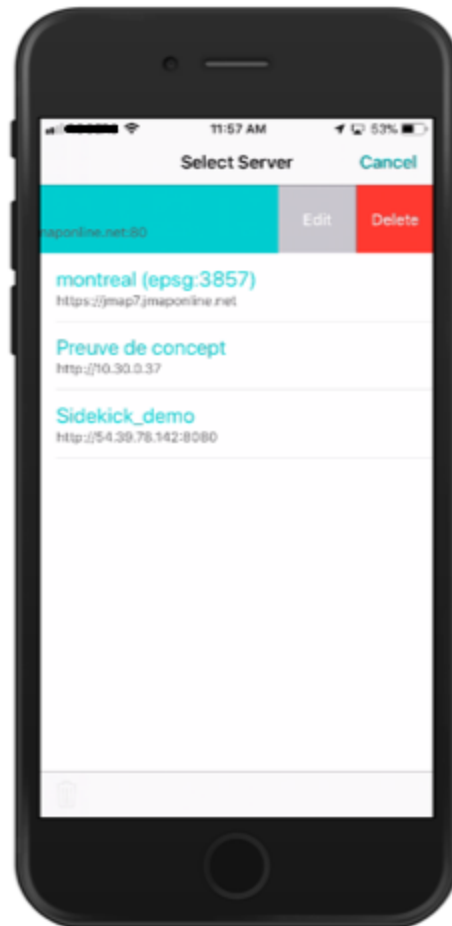
1. In the login page, touch the name of the project to access the **Select Server** screen.
2. Touch **+ Add Server** to open the **Add New** window and configure access to a new project.



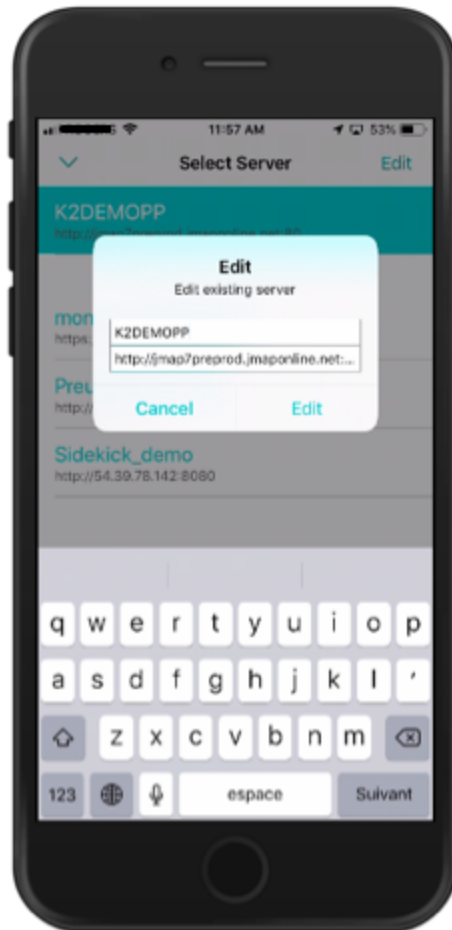
Modifying Connections to JMap Projects on iOS

You can modify or delete a project's connection information from the **Select Server** screen:

1. Touch the name of the project on the JMap Survey login page to access the **Select Server** screen.
2. Swipe left on a project to edit or delete it.

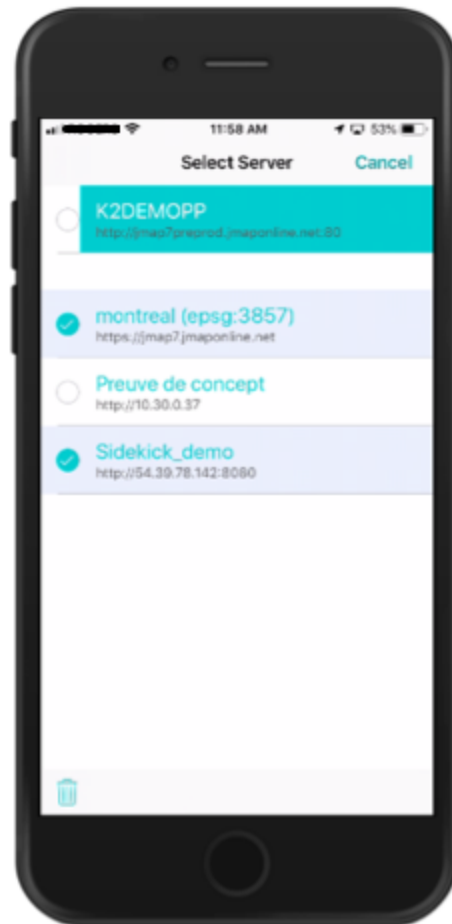




3. Touch **Edit** to open the **Edit** window, where you can edit the name of the project and/or server URL.



To delete the connection information of several projects at once:

1. In the **Select Server** screen, touch **Edit**.
2. Check the boxes of the projects you wish to delete.




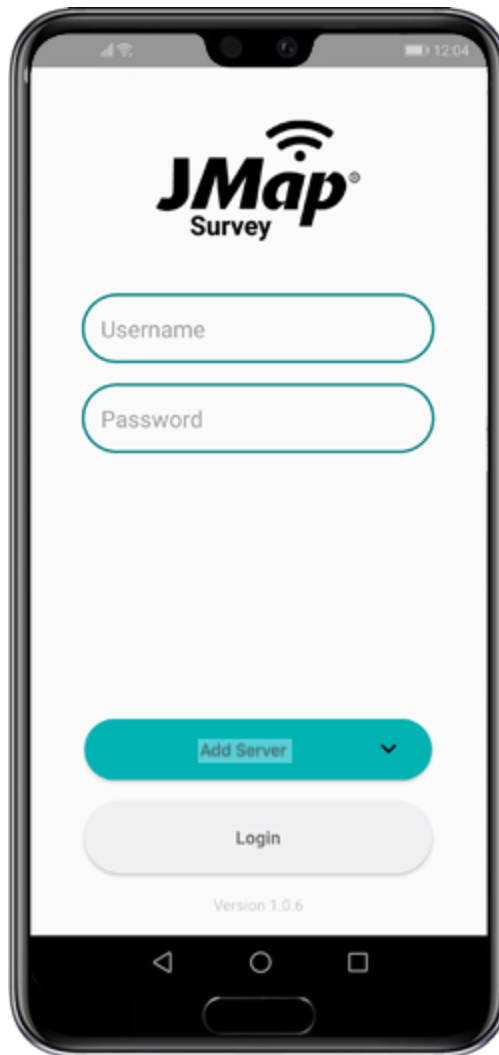
3. Touch the  icon to delete the projects or touch **Cancel** to return to the **Select Server** screen.
4. Touch  to return to the JMap Survey login page.
- 5.

Working With an Android Device

Installing JMap Survey on an Android Device

To install JMap Survey on your Android device:

1. Download JMap Survey from the Google Play Store by touching **Install**:
<https://play.google.com/store/apps/details?id=com.k2geospatial.jmap>.
2. Touch the  icon to open JMap Survey. The application displays in English or in French, depending on the language selected in your mobile device.



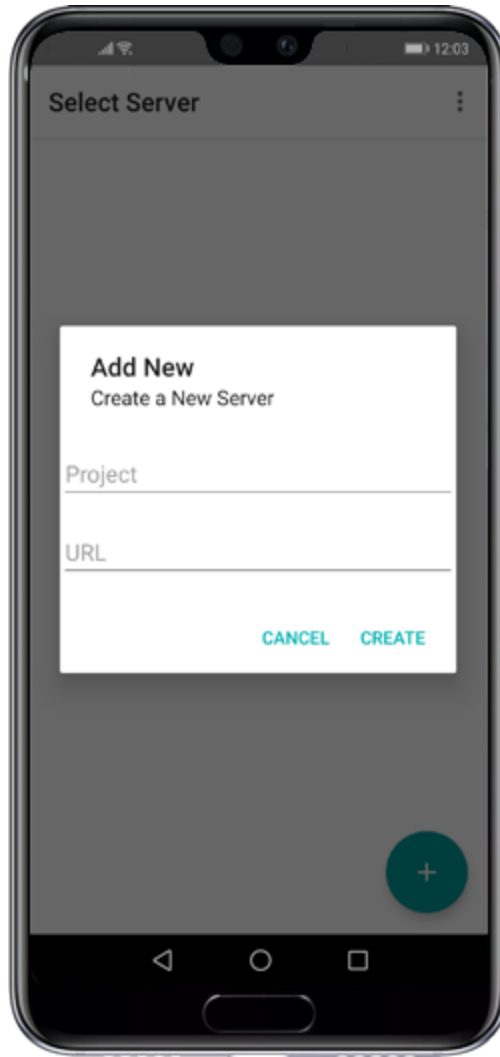
3. Authorize geolocation and access to the photos, camera, and files on your device. Your answer will be remembered.



Connecting to a JMap Project on an Android Device

To configure the initial connection to a project:

1. In the login page, touch **Add Server**. The **Add New** window automatically opens, allowing you to create a connection to a project.

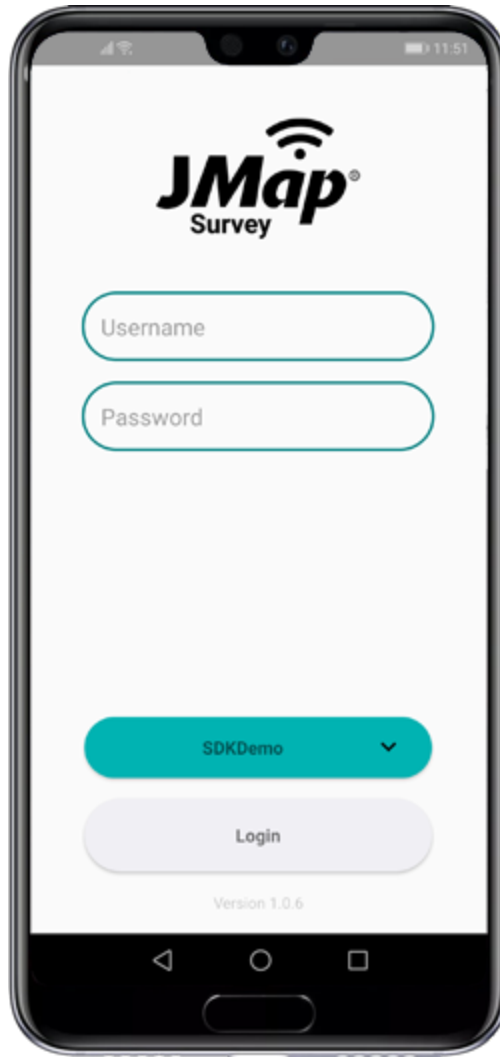


2. Enter the main URL of the JMap server and the name of the JMap project to which you want to connect. The project name and URL are not case sensitive. This information will be provided by your JMap administrator.


An example of a project name: Montreal

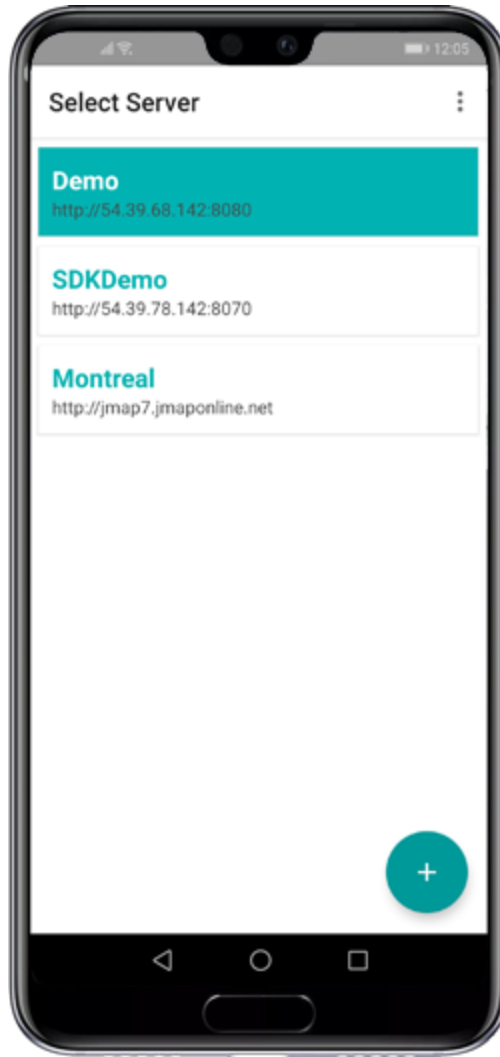
An example of a URL: <https://jmap7.jmaponline.net> (with port number if not 80, e.g. 8080)

3. Touch **Create**. Access to the project is configured, and the name of the project is now displayed in the login page.




You can connect to other projects from the **Select Server** screen. To do so:

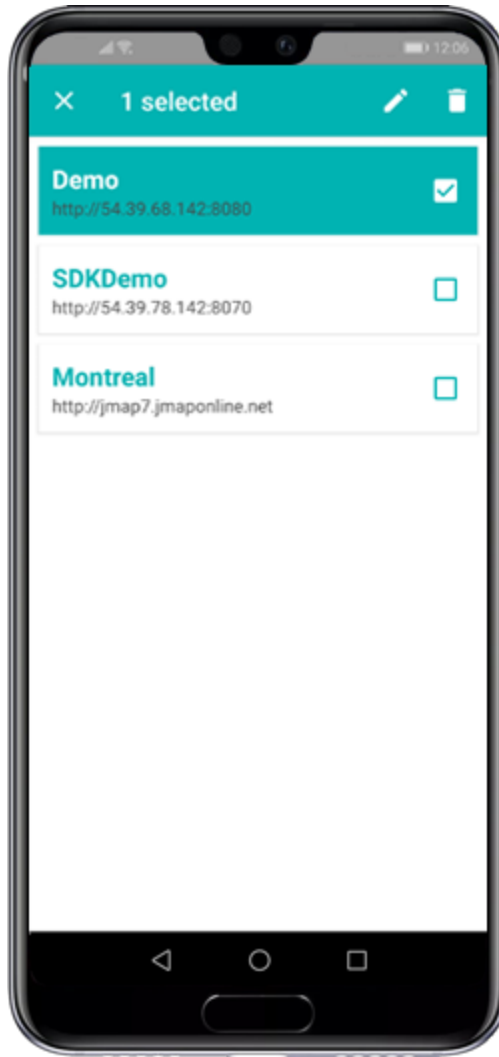
1. In the login page, touch the name of the project to access the **Select Server** screen.
2. Touch  to open the **Add New** window and configure access to a new project.




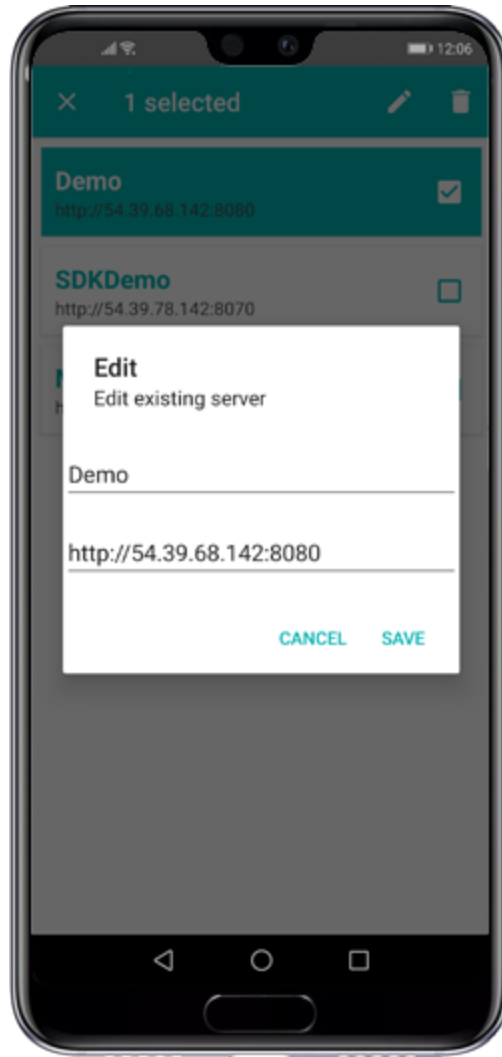
Modifying Connections to JMap Projects on an Android Device


You can modify or delete a project's connection information from the **Select Server** screen:

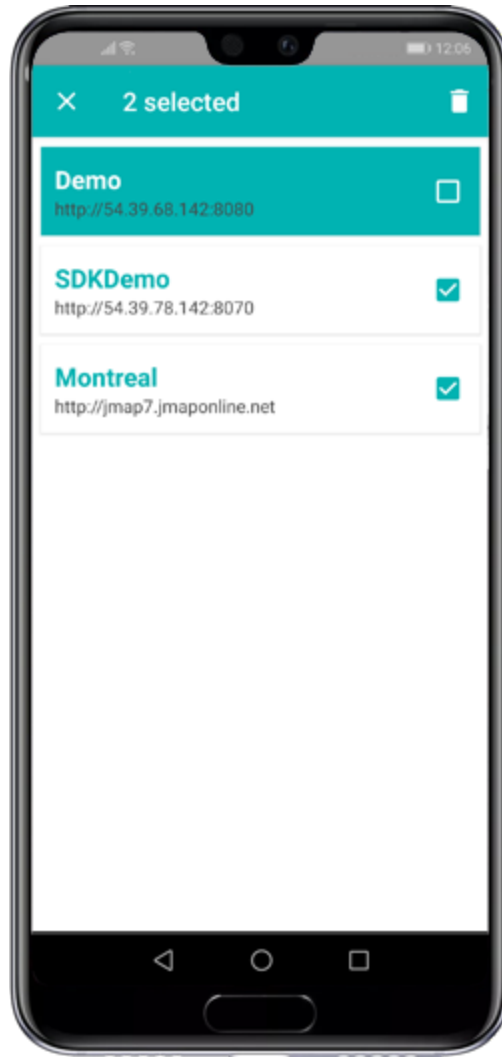
1. Touch the name of the project on the JMap Survey login page to access the **Select Server** screen.
2. Touch  to display the **Select items** function.
3. Select the project of your choice.



4. Touch  to open the **Edit** window, where you can edit the name of the project and/or server URL.



5. Touch  to delete the project.
6. Select several projects. Only the **Delete** function is available.



7. Touch the icon to delete the projects or touch  to cancel your selection and return to the **Select Server** page.

Logging In

Your JMap administrator will provide you with a username and password to log into JMap Survey.

In the login page:

1. Enter your **Username**.
2. Enter your **Password**. Passwords are case sensitive. On an Android device, your username and password can be saved.



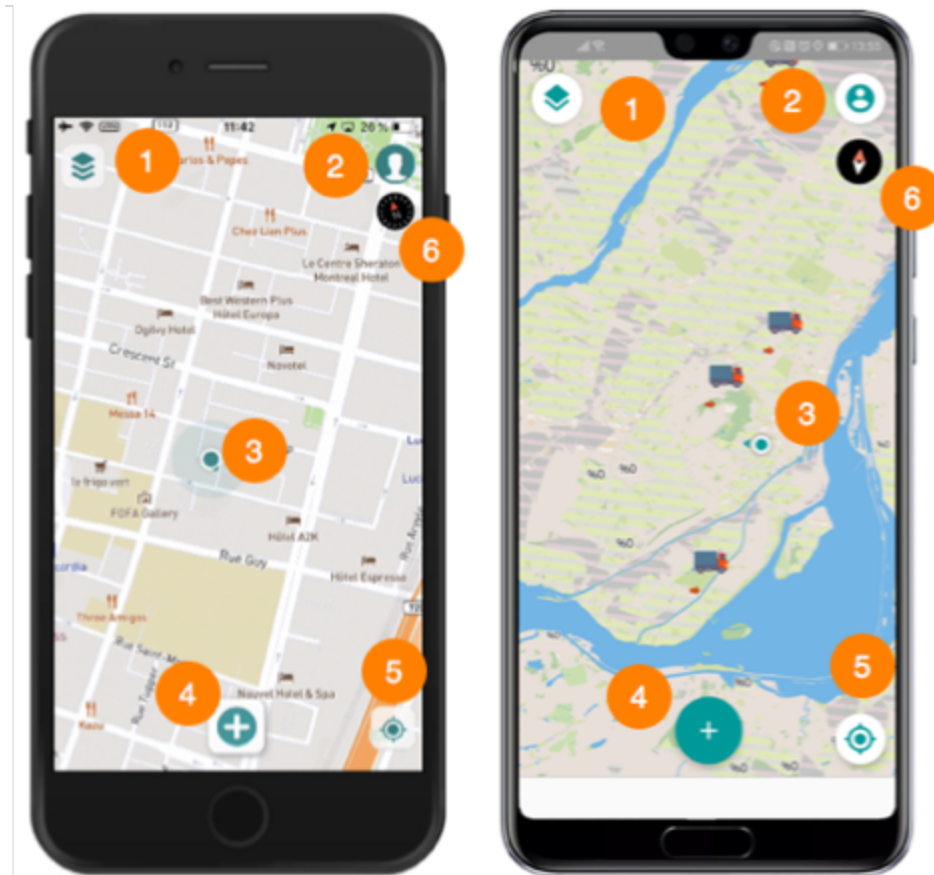
3. Select the project to which you want to connect. If you have configured connections to several projects, touch the list to open the **Select Server** screen and display the list of projects.



4. Select the project you wish to open.
5. Touch **Login** to open the project. The map displays.

The Graphical Interface

The graphical interface is streamlined and straightforward; all the space is dedicated to map-based data.



1 Layers

Touch to open the menu displaying the project's data layers.

2 Account

Touch to open this section, where you can configure offline mode or log out.

3 The location of your device is represented on the map.

4 Create an object

Touch to display the list of objects you are authorized to create (depending on the project's editable layers and their permissions).

5 Geolocation

Touch to centre your location (geographic coordinates of your mobile device) in the map.

- 6 The compass indicates the map rotation. Touch the compass to cancel the rotation.

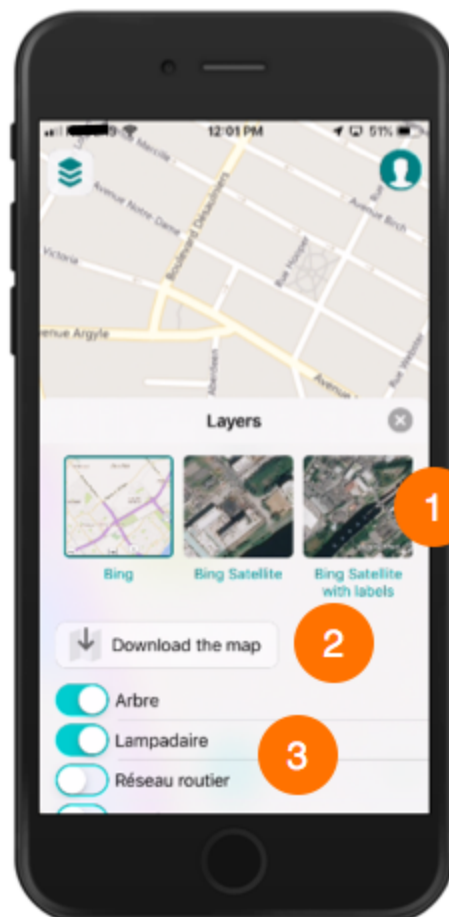
Displaying a Map

The data contained in the project is organized into layers. You can select the layers you wish to use as a base map and the layers you wish to display or hide. All of the selected layers will form the map displayed in the application.


JMap Survey displays the layers with their style. If the layer contains thematics, JMap Survey will display the thematic that is selected to be displayed by default when the project opens. The legend of the thematic is not displayed and you cannot change the thematic displayed.

In order to select the layers to be displayed:


1. Touch  to open the **Layers** menu.




1. Thumbnails of the base maps. Touch the thumbnail of your choice to display or hide it.

- 2 This tool allows you to download the map on your mobile device to work in offline mode. The section *Working in Offline Mode* offers more details on this topic.
 - 3 List of project layers that you can display or hide as needed.
2. Select the base map. You can only display one base map at a time.
 3. Use the toggle switches  to select the layers you wish to display or hide.



4. The arrow  indicates a group that contains several layers. Touch the arrow to display the layers and/or subgroups that make up the group. You must enable the buttons of each group in which the layer is found in order to display the layer. If you hide the group, none of the layers it contains will be displayed.

Certain layers can be configured to be displayed within a specific scale range. They may not appear at the current map scale. You can enlarge the map (zoom in) to display them.

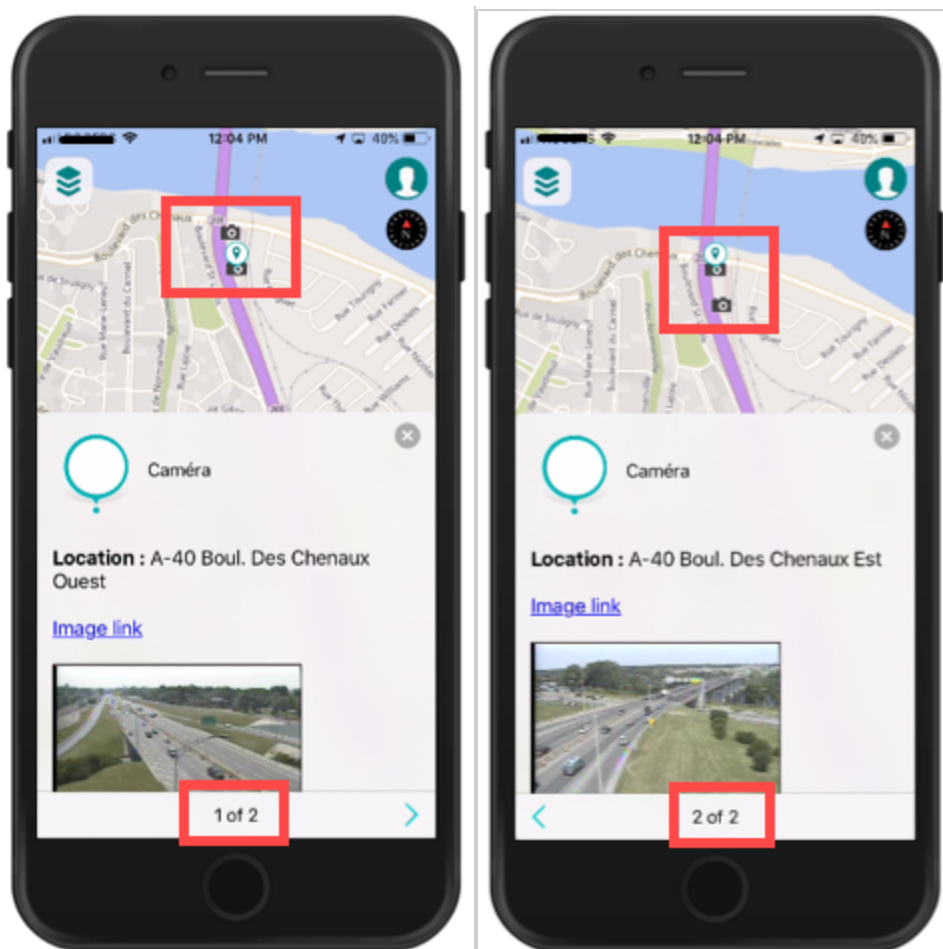
5. Touch  or touch the map to close the **Layers** menu.



Accessing Information Associated With an Object

Some layers have descriptive information associated with layer elements or objects. The information is displayed in interfaces called **mouseover bubbles**. In addition, if the **Documents** extension is found on the JMap server and you have the required permissions, a button in the mouseover bubble will allow you to access the documents associated with the object. You can open and view the documents directly on your mobile device.

To display the mouseover bubbles:

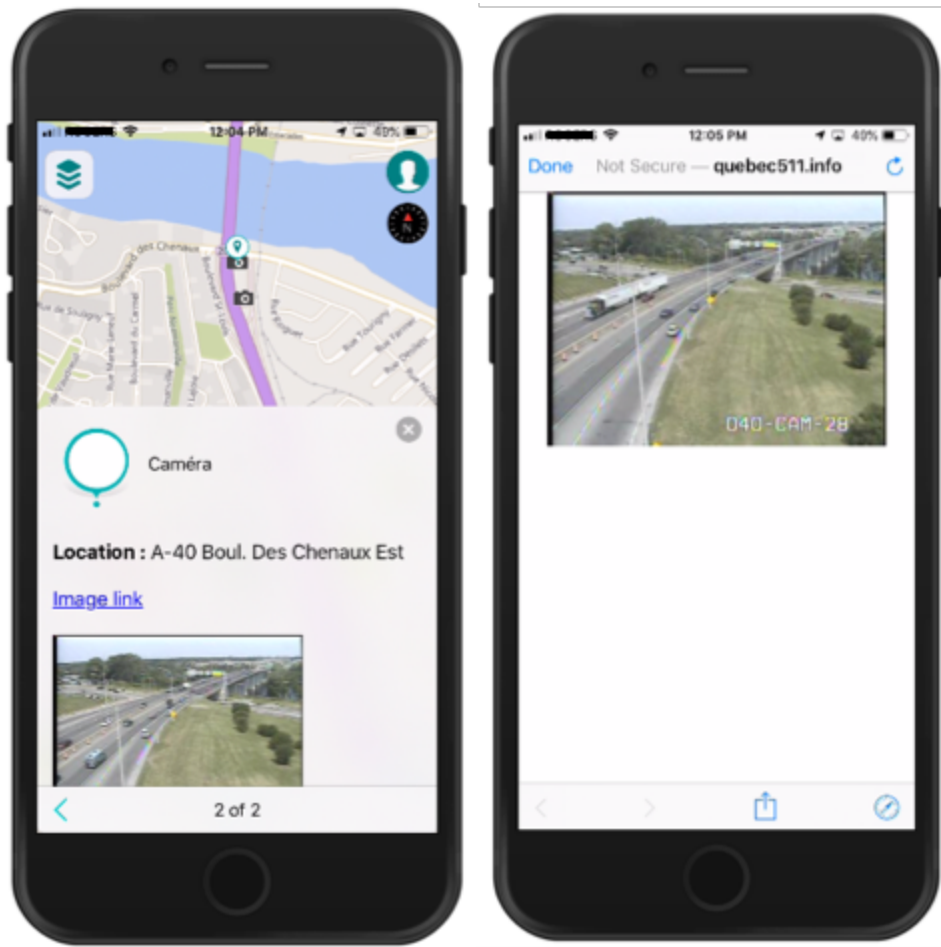
1. Touch a layer element whose mouseover bubble you wish to display. The mouseover bubble can contain descriptive data as well as hyperlinks to websites, photos or various documents.




Depending on the scale, when you display the mouseover bubble of an object you touch, you can view the mouseover bubbles of other objects found nearby using the  and  arrows. In the figure above, the mouseover bubble indicates that you can display the mouseover

bubble of a second camera located nearby. A marker on the map identifies the map object whose mouseover bubble is displayed.


2. Touch the hyperlink to open the photo, document or website.



The figure shows the website opened from the *Image link* hyperlink found in the mouseover bubbles of cameras. The mobile device's share extensions and some other functions are available to share or refresh the information.

3. Touch  to close the mouseover bubble.


To access documents associated with an object:

1. Open the mouseover bubble of the object whose associated documents you wish to access.
2. Touch the  icon to access the **Documents**. If the icon is not displayed, but you know that the **Documents** extension is installed on the server and you have permission to access it, it

means there are no documents associated with the object. If there are any documents, they will be displayed as thumbnails.

3. Touch a thumbnail to access a document. The corresponding application or web page (Google Drive, Word, Excel, etc.) will open to display the document. You can use the iOS or Android share extensions.





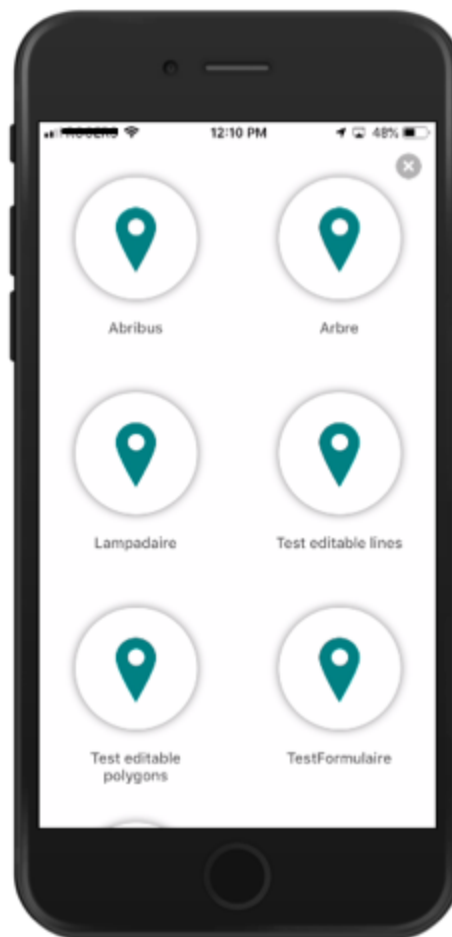
4. Touch **OK** to return to the mouseover bubble.
5. Touch  to close the mouseover bubble.

Creating Objects

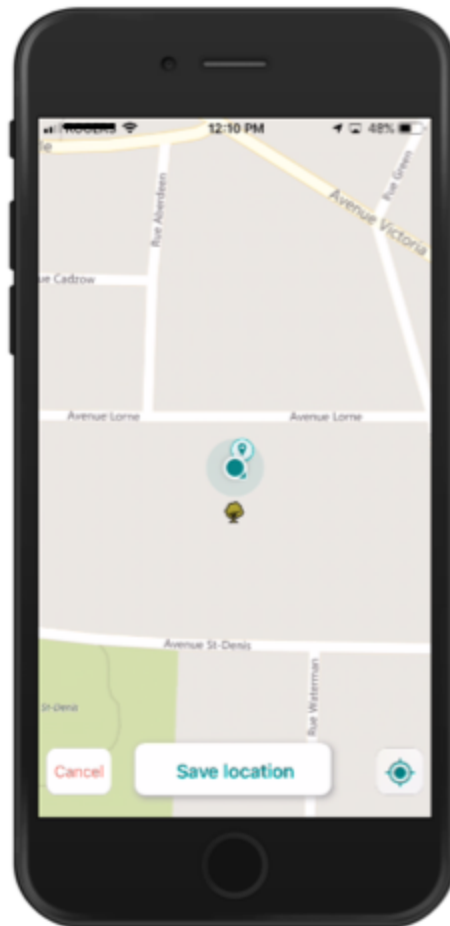
JMap Survey allows you to create objects, whether you are working online or offline.


To create an object:

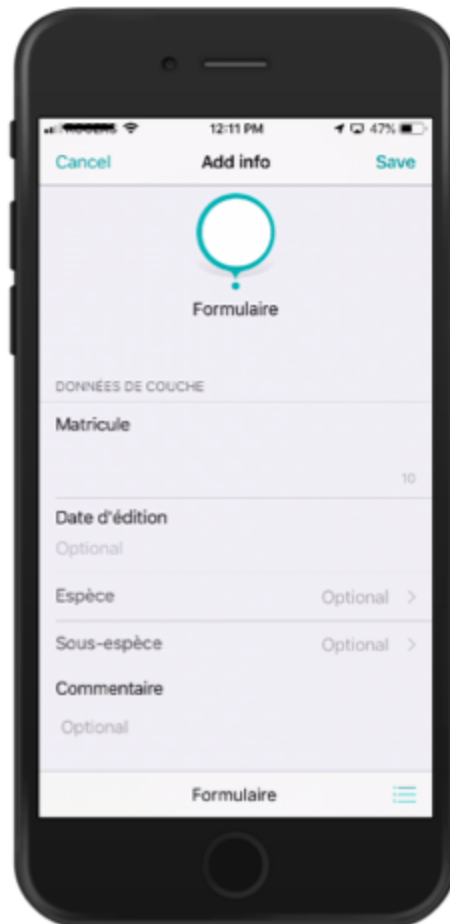
1. Touch  to view the types of objects that are available. Icons  with legends are displayed. The types of objects that are available depend on the editable layers in the project and on your editing permissions. JMap Survey displays the available object types for which you have editing permissions.




2. Select the type of object by touching its corresponding icon. The map displays to define the object's location.



3. If you are creating a point object, it will automatically be located at your current position. You can change the location of the object by touching the map; it will be placed on the point you touch. Touch  to bring the point object back to your current position.
4. If you are creating a polygon or line element, touch the map to position each point of the polygon or line on the map. A number will be assigned to each point.
5. Touch **Save location** to confirm the entry of your object, or touch **Cancel** to erase it. If you confirm the entry of the object, a form appears, inviting you to enter the object's attributes.




6. Enter the appropriate information in the form's fields. Some fields are required (you cannot save the form unless the field has a value) and others are optional; the latter are identified with the text *Optional*.



Fields where you must select one or more values from a list will contain an arrow . Touch the arrow to display the available values and make your selection.

Text fields indicate the maximum number of characters allowed for your text. The number changes as you enter your text, indicating the remaining characters available.

Numeric fields indicate the minimum and maximum values authorized. If you try and enter text, it will not be inserted.



Date fields display a calendar when you touch them.

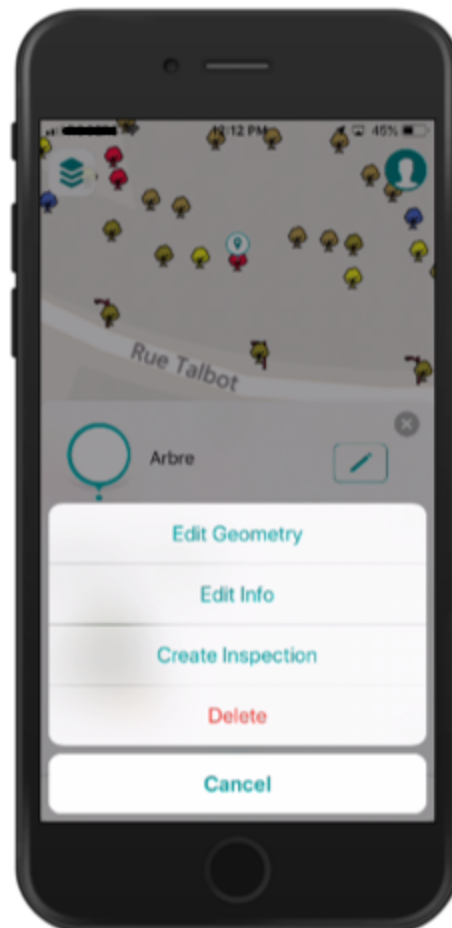
7. Touch  to add a photo to the form. Three options are available: **Take picture**, use a photo from the **Photo library** or **Cancel**.
8. Select **Take picture**. JMap Survey will ask permission to use your device's camera. This authorization will only be asked once, and your answer will be remembered.


9. Take a picture and validate it, or take another picture. The photo appears in the form.
10. Select **Photo library** to access your photo library and select one or more photos. The photos are added to the form.
11. Your form can contain subforms for entering data at different points in time or in different contexts. If relevant, touch the subforms field to access the subforms screen.
12. Touch  to add a subform. The subform will contain fields that are similar to those in the form.
13. Enter the relevant information and photos.
14. Touch **OK** to save the subform. The subform will close. The **Subforms** field indicates the number of subforms associated with the form. The number represents the subforms created by all of the project's users.
15. Touch **Save** to save the form's data or **Cancel** to delete the data.
16. Touch  to display the available forms for your type of object. Several forms can be available for each type of object.

Modifying Objects

When you have the required permissions, you can modify the objects of a project's editable layers. To do so, follow these steps:

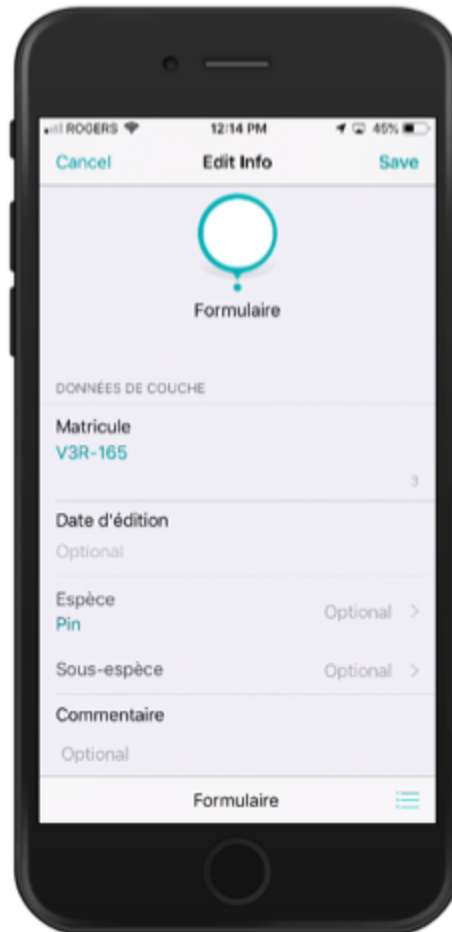
1. Touch  to display the project's layers.
2. Select the layer to modify in order to make sure it is visible on the map.
3. Touch the object to modify in order to display its mouseover bubble.
4. Touch  to open the editing interface.



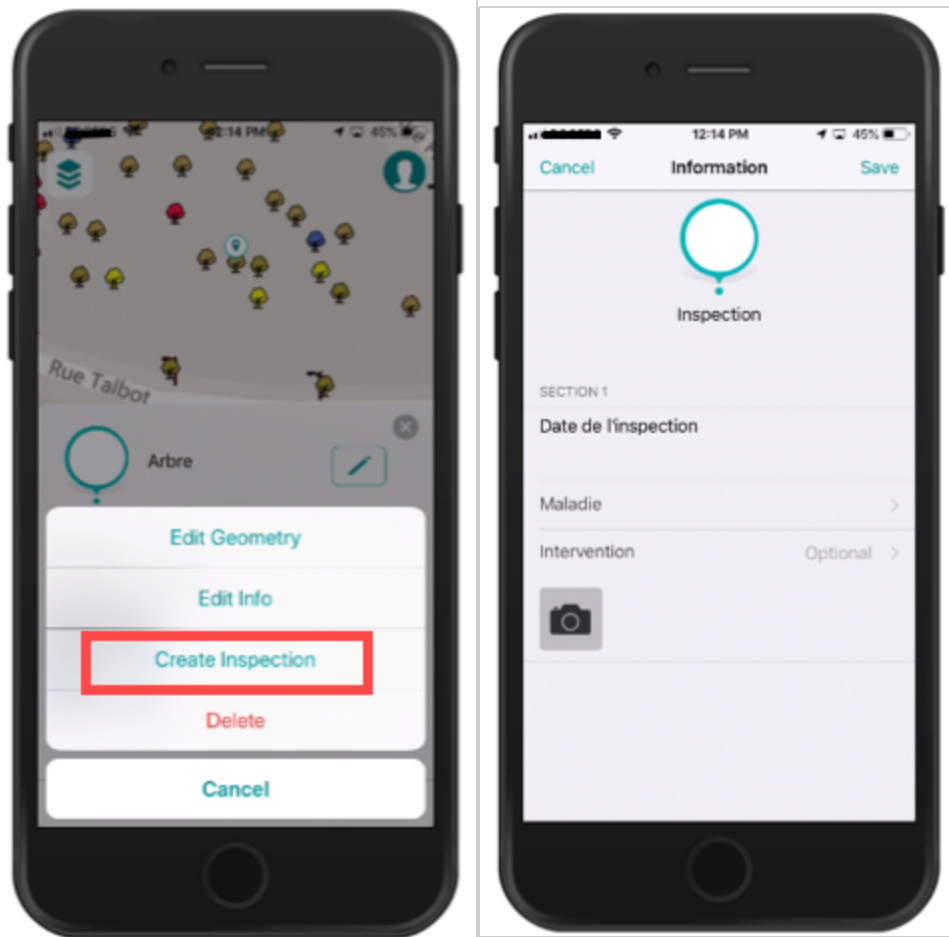
5. Select **Edit Position** to modify the geometry and/or position of the object.
6. If you are modifying a point object, touch the map to indicate its new location; a marker will indicate the chosen location. You can also touch  to bring the object to your current location.



7. Touch **Save** to save the change or **Cancel** to disregard it.
8. Touch **Edit Info** to modify the attribute information. The form opens, allowing you to modify the editable fields and subforms.



- Shortcuts to the subforms will then be displayed in the editing interface. These shortcuts will allow you to directly access the subforms and fill them out. In the example below, an *Inspection* subform exists, and its shortcut is called **Create Inspection**. Touch **Create Inspection** to create a subform associated with the object's attributes form.



10. Touch **Save** to save the changes made in the form and subforms.
11. Touch **Delete** to eliminate the object. If you have the required permission, the object will be eliminated.


Working in Offline Mode

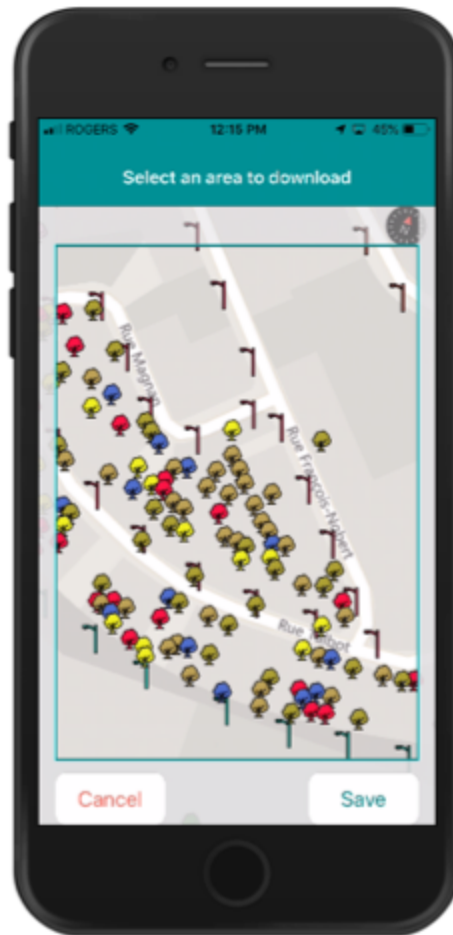
Working in offline mode is particularly useful when you want to create and edit objects in the field and no network connection is available. To work in offline mode, you must follow these steps:

1. Download the map for a given area.
2. Enable offline mode in JMap Survey (or Airplane mode on your device).
3. Enter data in the field.
4. When a network connection becomes available, disable offline mode (or Airplane mode on your device).
5. Synchronize the data (will be done automatically).

Downloading the map

When you want to use JMap Survey in offline mode, the first step is to download the map on your mobile device so it is available as a spatial reference. To do so:

1. Touch  to open the **Layers** menu.
2. Select the base map to display using the steps detailed in the Displaying a Map section.
3. Touch **Download the map**. A frame displays, allowing you to define the perimeter of the map.




4. Define the area and scale of the map you wish to download by dragging the map and using the zoom function.
5. Touch **Save** to save all of the map's elements in the device's memory. The data of all the raster and vector layers will be saved for the selected area.
6. Touch **Cancel** to cancel this action. You are returned to the map.

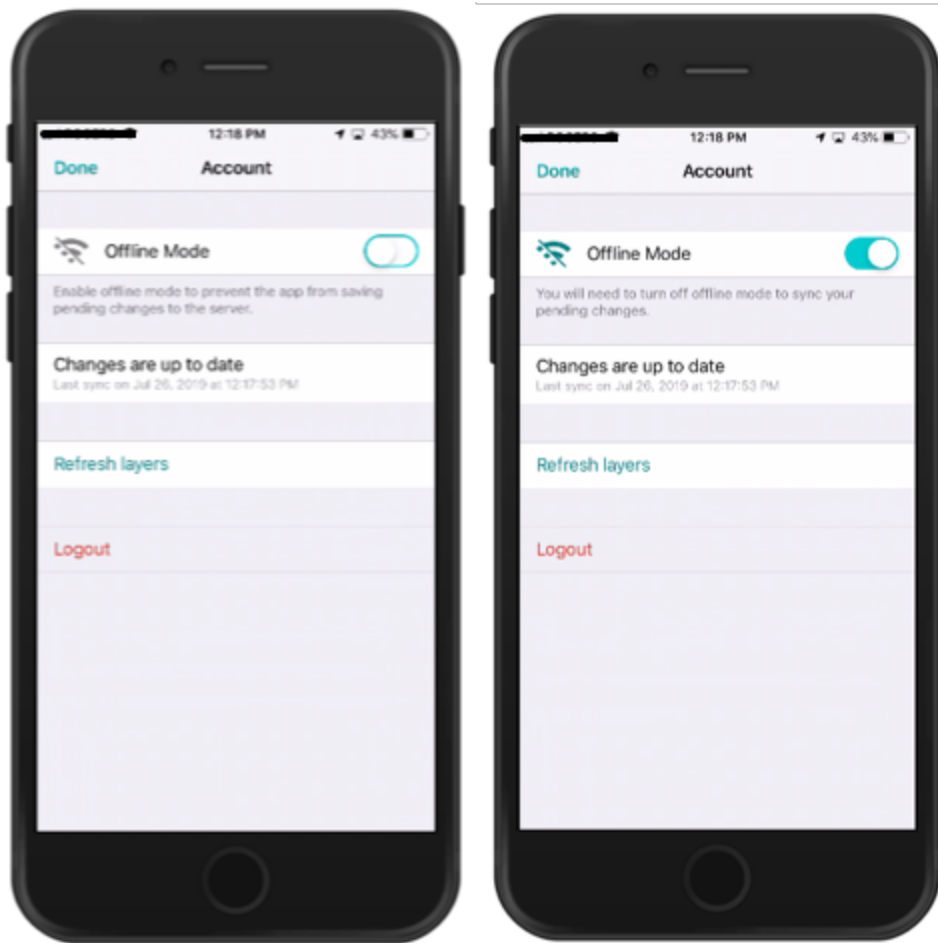
You must download the map each time you work in offline mode to make sure it is up-to-date, following its last synchronization.

Note: Depending on the extent of the area selected, the volume of data to save may be large and require a lot of time to be downloaded.

Enabling offline mode

In order to enable offline mode, you must start by downloading the map. To enable offline mode:

1. Touch  to access the **Account** screen.
2. Enable **Offline Mode**.

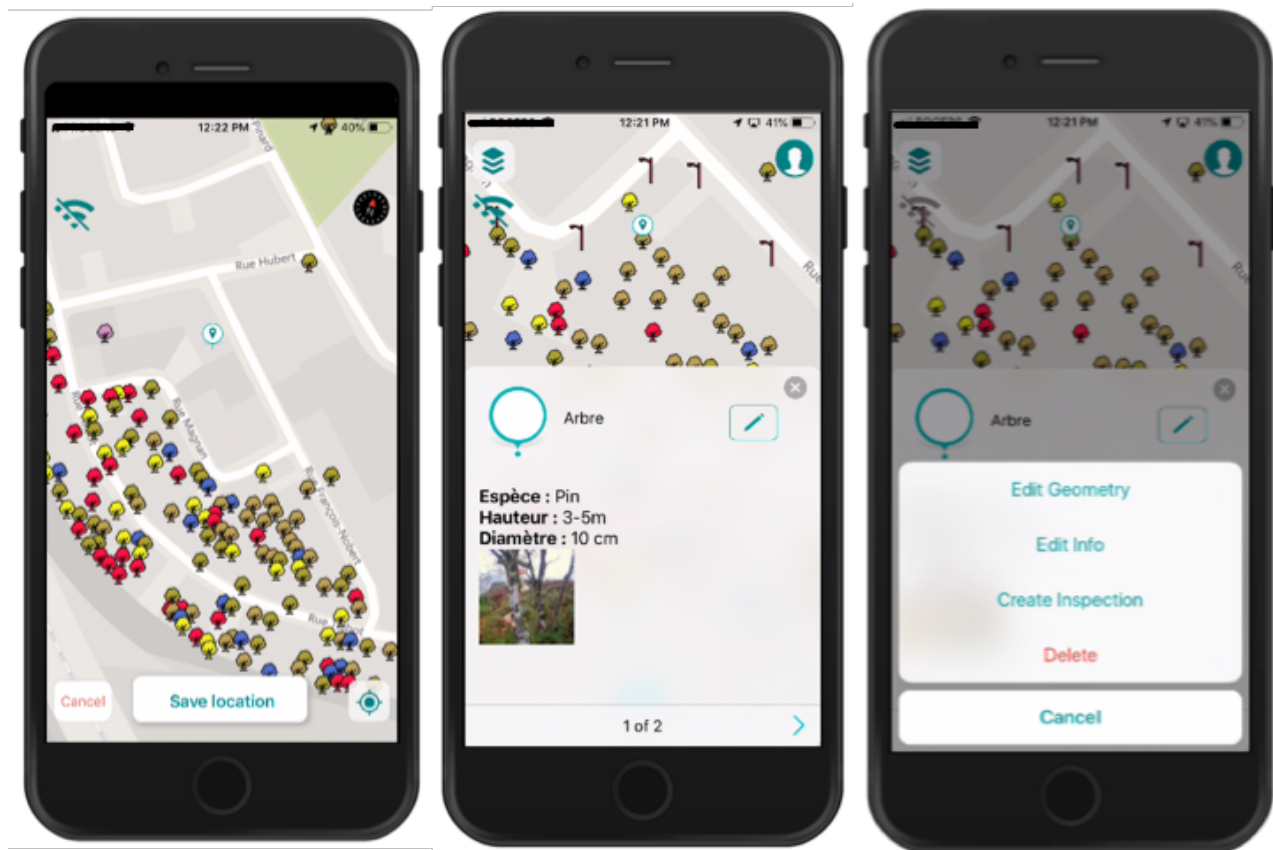


3. Touch **OK** to return to the map. The **Offline Mode** icon is displayed.



Creating or modifying objects in offline mode

You can create or modify objects on the map that you previously downloaded. The data will be saved in your mobile device.

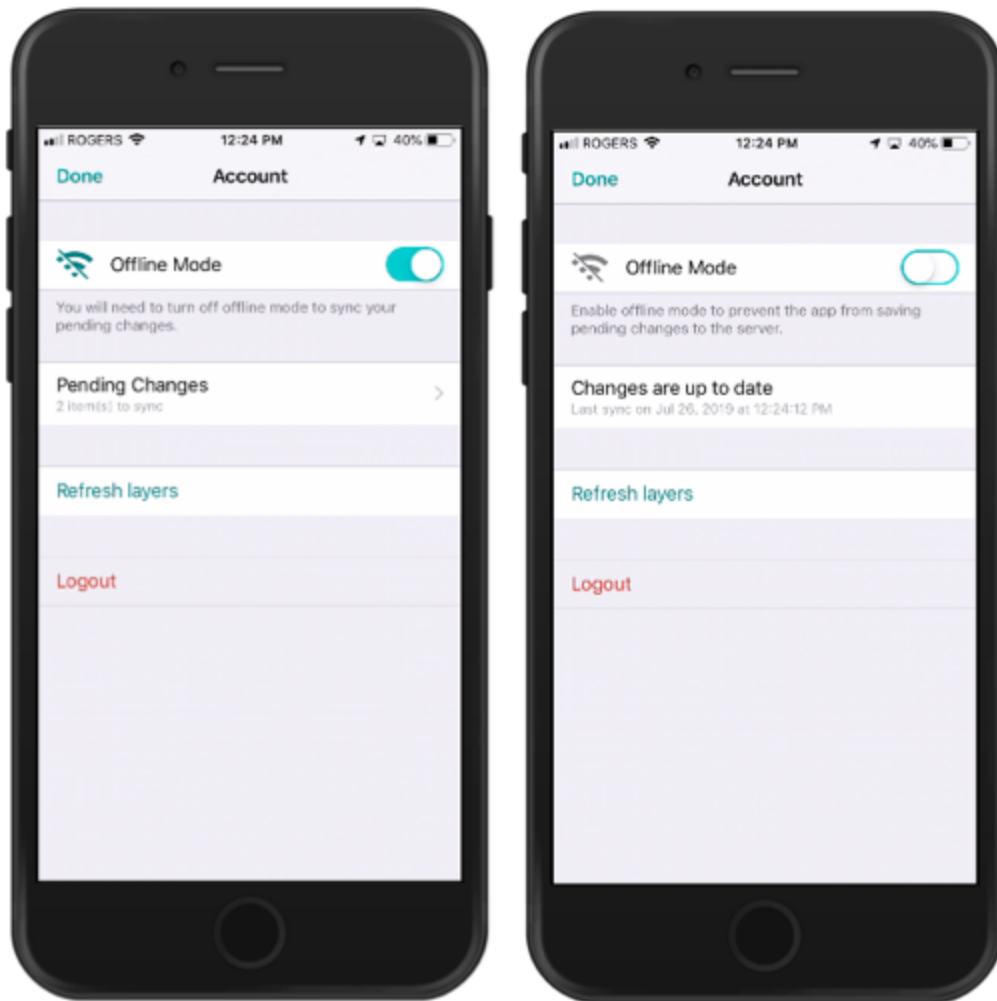


Synchronizing the data

Once your data has been collected in the field in offline mode, you must synchronize the data of your device with the data of the JMap server. To do so, follow these steps:

1. When a network connection becomes available, disable **Offline Mode** in the **Account** screen.
2. The changes you have made will be automatically synchronized.

Note: The project's layer data may have been updated or modified on the JMap server. By touching **Refresh layers**, JMap Survey will download all of the data once again to make sure it is up-to-date on your device. This option is not required to save the changes you made with JMap Survey, but you should use it from time to time.



3. Touch **OK** to return to the map.


Note: If you log out of JMap Survey before your data has been synchronized, the data you entered in offline mode will be lost. Two confirmations are required before the data is deleted.

Logging Out

It is not necessary to log out of JMap Survey, unless you have fully completed your work or you must give your mobile device to a colleague. When the application is in sleep mode or is deliberately closed, your session is not terminated, your data is maintained, and you can resume your work without any problem. JMap Survey may ask you to reenter your login info when you return to the application.

When you log out of the application, however, all of your data (downloaded maps and unsynchronized transactions) will be deleted. If you have transactions that are not synchronized, JMap Survey will ask you to confirm your choice before logging you out and deleting your data.

To log out of JMap Survey:

1. Touch  to access the **Account** screen.
2. Touch **Logout**. Your session is closed and you are brought back to the JMap Survey login page.