

CleanAtlantic

Tackling Marine Litter
in the Atlantic Area

Marine Litter LOC-app

Administrator Manual



Interreg
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**Clean
Atlantic**

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Administrator Manual

1. BACKGROUND

In the framework of CleanAtlantic project, the Technological Institute for the Marine Environment Monitoring of Galicia (INTECMAR) developed the mobile application *Marine Litter LOC-app* with the objective of facilitate and homogenize data collection of marine litter piled-up areas along the coast.

Marine Litter LOC-app allows geolocalize the zones of accumulation, their characteristics and dimensions, add pictures and comments, as well as collect specific information about the marine litter. *Marine Litter LOC-app* was created with the purpose of being used during managed monitoring sessions where a coordinator (with the profile of Administrator) must previously choose those sector that will be monitored and must assign each sector to whom will collect data (with the profile of User).

Marine Litter LOC-app has three help manuals and an annex:

- Installation Manual.
- Administrator Manual (content in this document).
- User Manual.
- Annex: Diagram of the data base.

2. ADMINISTRATOR FUNCTIONS

The application administrator is the privileged user to perform the following tasks:

1. User management.

Users of the *Marine Litter LOC-app* can be of two types:

- **ADMIN.** User with administrator privileges.
- **SURVEYOR.** User with surveyor privileges. You can only collect data on transects assigned by the administrator.

2. Management of transects.

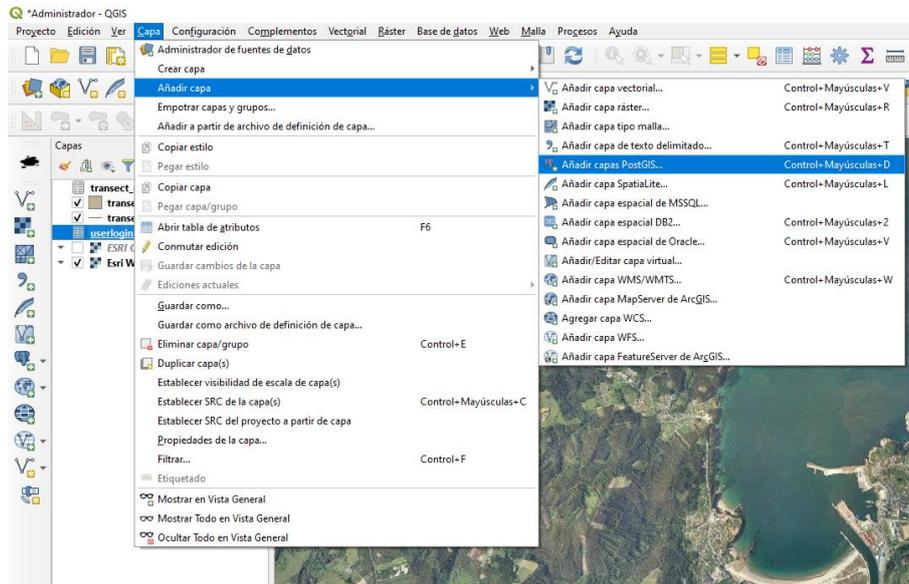
3. Assign the transect to each user.

To perform these tasks use a desktop application that connects to the database (section 3) or you can connect directly to the database (section 4). The use of QGIS is recommended because in addition to allowing database management, it allows graphical insertion of transects. For further information about the structure of the database see the Annex.

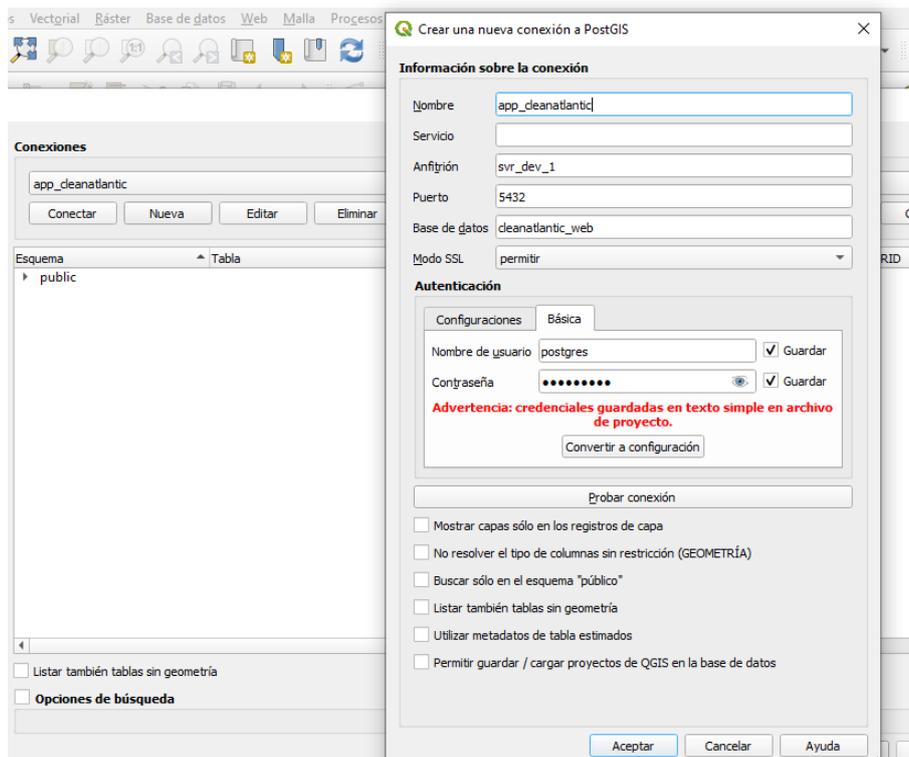
3. ADMINISTRATION OF THE APP USING QGIS (RECOMMENDED)

3.1. Database connection

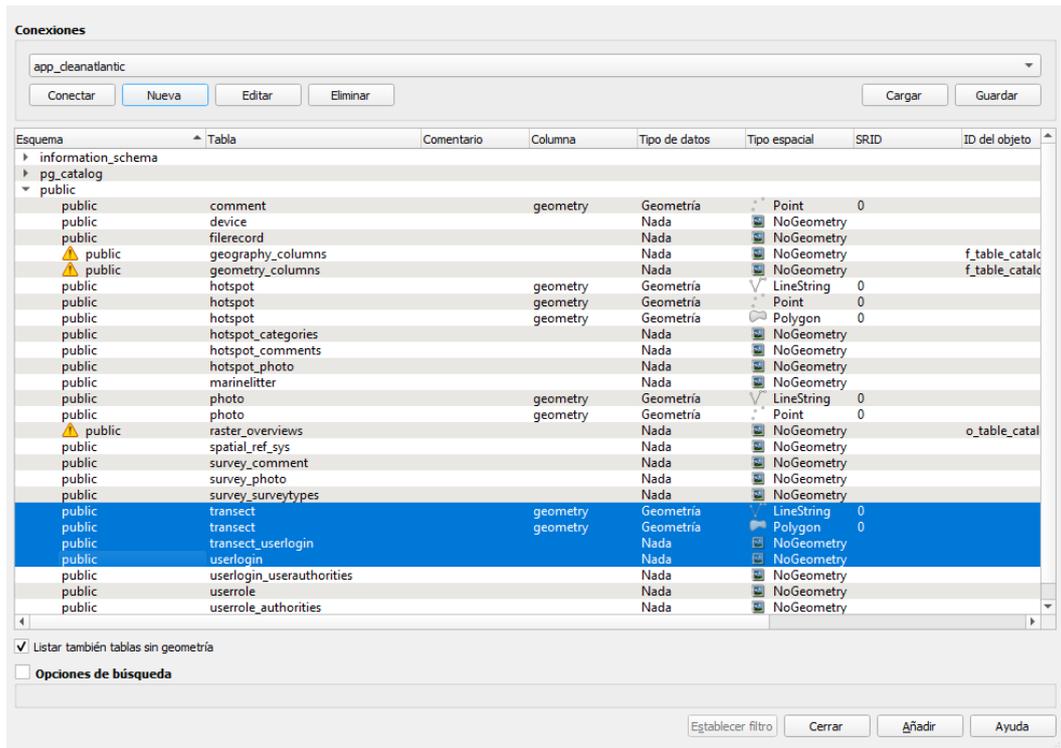
To connect to databases from QGIS, it can be done from the **Layer menu>>Add Layer >>Add PostGIS Layers**.



In the menu of the window that opens, choose the **New** option and fill in the following tab with the necessary data:



Once the connection has been created, click on the **Connect** button and once connected, check "**List also tables without geometry**" and display the list of layers.



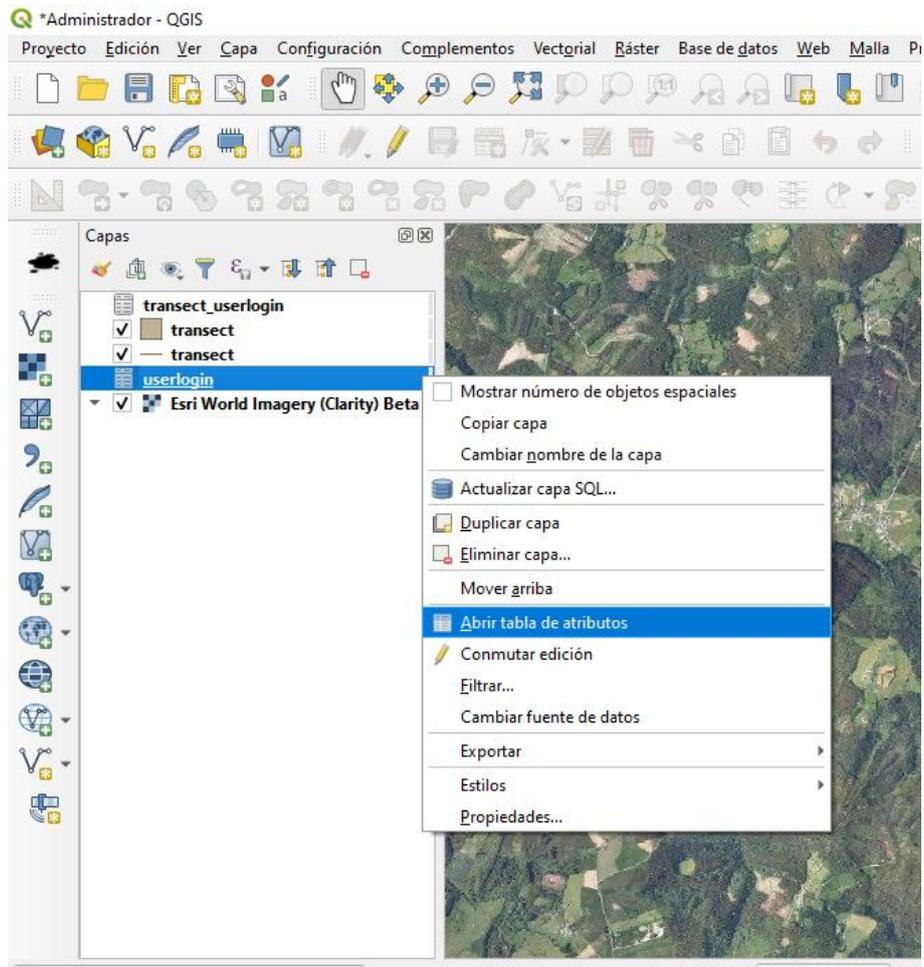
From this list, the following layers must be chosen:

- *transect* with *LineString* geometry.
- *transect* with *Polygon* geometry.
- *transect_userlogin*.
- *user_login*.

Moreover, a base layer can be added. In this example the satellite image was added to serve as the base layer.

3.2. User management

The *userlogin* layer is chosen in the **Layers Panel** and the context menu is displayed with the right mouse button. The **Attribute table** is selected to view the list of records.



By changing the **Form view**, in the lower right corner icon and switching to **Edit** mode by pressing the pencil in the upper left corner, a user can be added or modified.

userlogin :: Objetos totales: 17, Filtrados: 17, Seleccionados: 0

id: b37fb021681869650168188dbfe63400

activated:

activationkey: 12

code: NULL

createdtime: 2019-11-22 18:10:58

enabled:

expiredtime: NULL

fullname: Demo User

login: demo@cleanatlantic.eu

organization: NULL

userpassword: \$2a\$10\$j869yc9RKeRjIUeXbugx3uw.VgjkFa5jbrh00Mn9h.s.zwBbMMj80

resetdate: NULL

resetkey: NULL

usercomments: NULL

useremail: demo@cleanatlantic.eu

userrole: SURVEYOR

langkey: es

Mostrar todos los objetos espaciales

A description of them is shown in the next table:

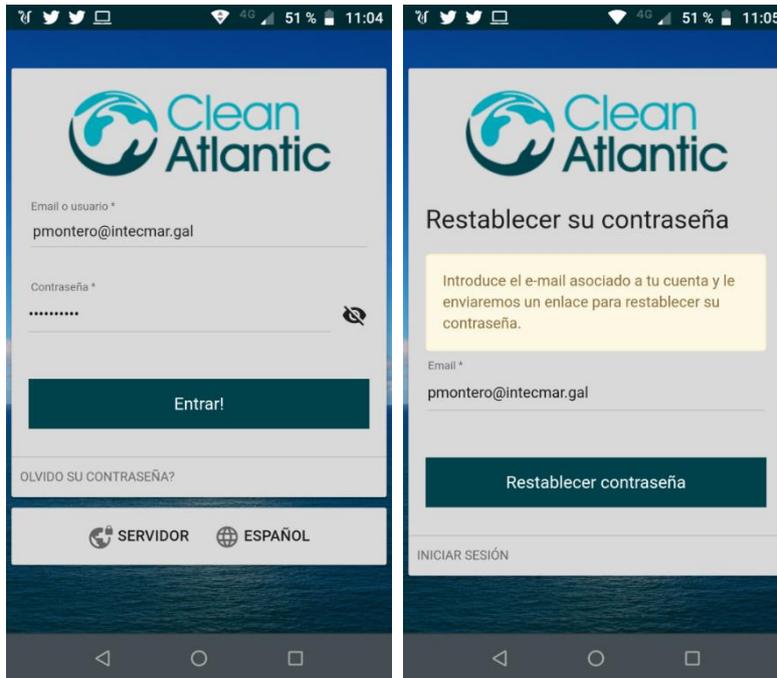
Nombre	Descripción	Ejemplo
id	Unique alphanumeric index	User_011p23
activated	User enabled, boolean	True
createdtime	Creation day and time	2019-11.22 18:10:18
enabled	User available, boolean	True
fullname	Username and surname, string	Juan Rodríguez
login	Login in the form of email	jrodriguez@mail.org
userpassword	Any value will be changed in the first session of the user	\$2\$10%qcd
usercomment	User feedback	Demo user
usermail	User email, it is recommended to be the login email	jrodriguez@mail.org
userrole	'ADMIN' or 'SURVEYOR'	SURVEYOR
langkey	Key for the language used: 'gl', 'es' or 'en'	gl

Pay attention to the dates, because they must be complied with the formats YYYY-MM-DD hh: mm: ss. Once the user is inserted, the changes are saved and the **Edit** mode is abandoned.

3.2.1. User's password change

The text string that is entered in the *userpassword* field does not correspond to the password that must be used and must be changed by the user when accessing the application.

Therefore, once the user has registered, he must change the password. To do this, you must open the mobile application, and choose to change your password.



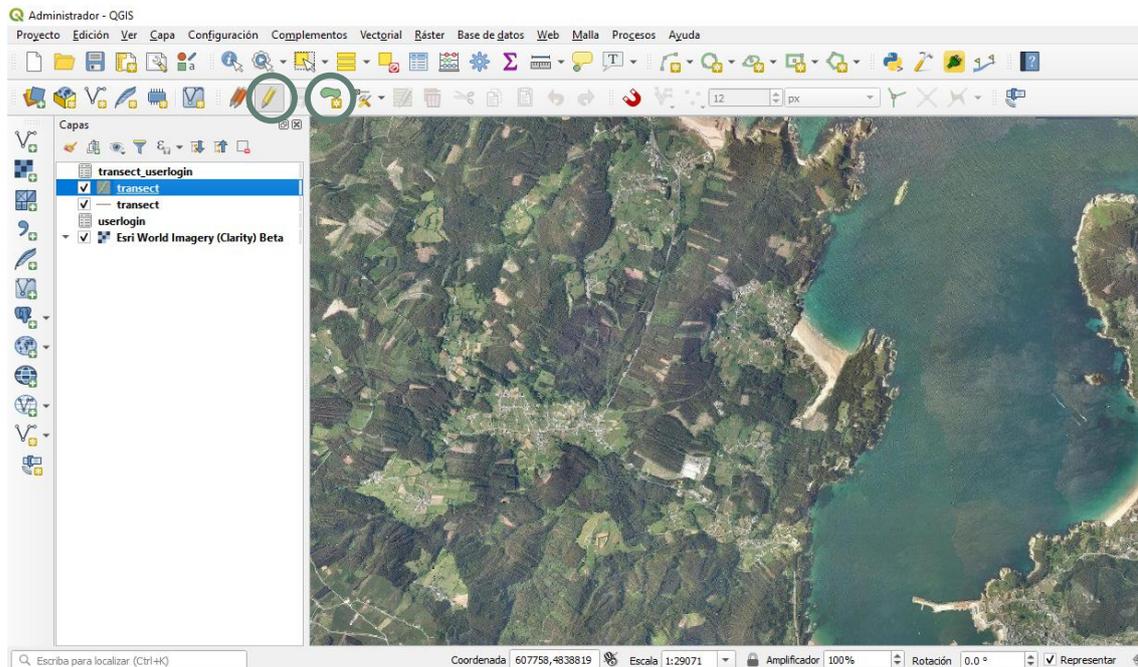
You will be prompted for an email address. Once the email is received, the user must enter the link page and change the password.



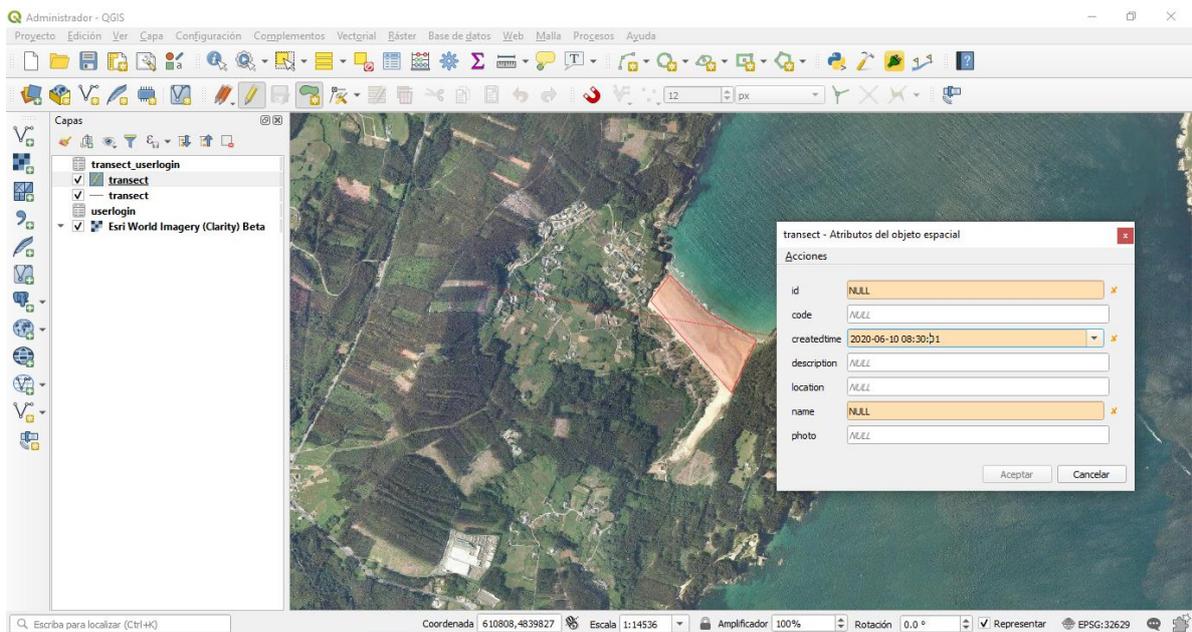
3.3. Transect management

In this case, the layers called *transect*, which is of two types, line and polygon, will be used. Depending on the object to be included, one or the other will be used.

One is chosen and having the **Scan** panel enabled, the **Edit** mode is chosen by clicking on the icon with the pencil. From here, you can add a transect with the **Add Polygon** icon.



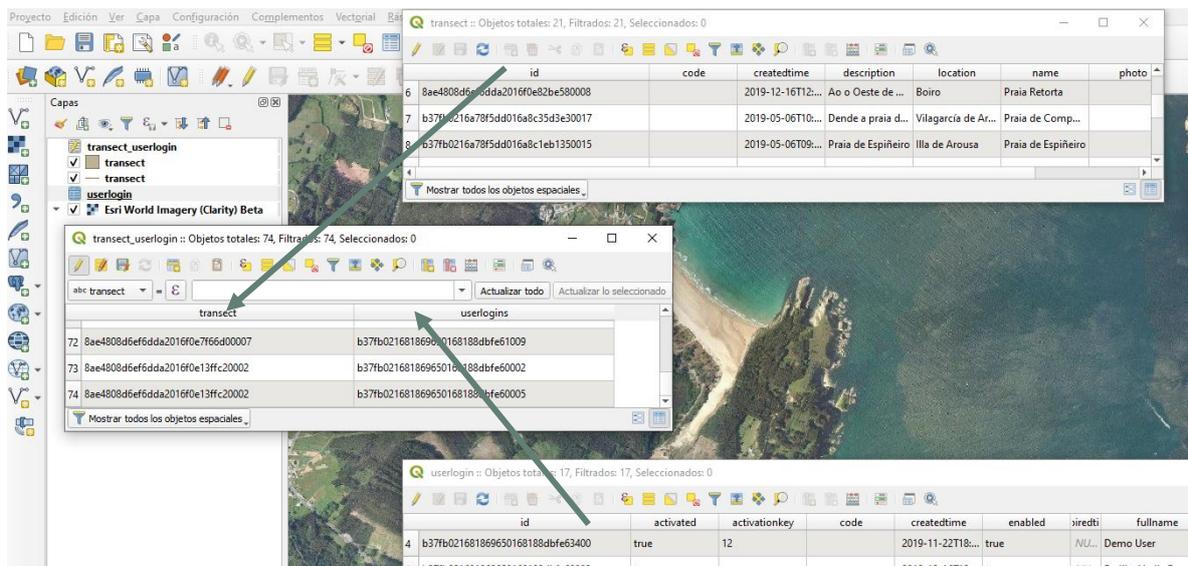
From here, you can draw the polygon with the shape of the desired transect by clicking to create a vertex and double-clicking to finish. Once completed, a form opens - add the fields. Amber fields are required.



Once filled in, you have to click OK, and the changes are saved and you can now exit **Edit** mode.

3.4. Assigning a transect to a user

Before assign a transect to a user, the user must be registered (see section 3.2) and the transect created (see section 3.3). Once these steps have been completed, to assign a transect to a user, the procedure consists of adding the *id* of the *transect* and *usrlogin* tables to the *transect_usrlogin* table. To do this, you can open your **Attribute Table** and copy each *id* in a new record of the *transect_login* table, which must be in **Edit** mode (pencil icon selected). Once added, the changes made in this table are saved, thus completing the assignment.



4. APP ADMINISTRATION USING SQL AND APPLICATION TOOLS

The following administration method is based on the direct query to the database through SQL language and the creation of transects and their assignment through the app itself, due to its ease of creating the transects.

The same steps as in section 3 will be followed, except the connection to the database, which will be made as a regular connection to a PostgreSQL database, either using the psql (<https://www.postgresql.org/docs/>) or a database manager such as pgAdmin (<https://www.pgadmin.org/>).

4.1. User management

Once connected to the Marine Litter LOC-app database with the necessary privileges to write, the following SQL statement creates a new user:

```
INSERT INTO userlogin(id, activated, createdtime, enabled, fullname, login, userpassword, usercomments, useremail, userrole, langkey) VALUES('userid_0001', true, NOW(), true, 'username userfamilyname', 'usermail@mail.org', '$2a$10$qDC', 'Demo User', 'usermail@mail.org', 'SURVEYOR', 'en')
```

The following table describes the fields used and the example values:

Name	Description	Example
id	Unique alphanumeric index	userid_0001
activated	User enabled, boolean	True
createdtime	Creation day and time	Función NOW()
enabled	User available, boolean	True
fullname	Username and surname, string	Juan Rodríguez
login	Login in the form of email.	jrodriguez@mail.org
userpassword	Any value will be changed in the first session of the user	\$2\$10%qcd
usercomment	User feedback	Demo user
usermail	User email, it is recommended to be the login email	jrodriguez@mail.org
userrole	'ADMIN' or 'SURVEYOR'	SURVEYOR
langkey	Key for the language used: 'gl', 'es' or 'en'	gl

As said before, the text string that is entered in the *userpassword* field does not correspond to the password that must be used and must be changed by the user when accessing the application.

Therefore, once the user has registered, they must change the password, following the steps in section 3.2.1.

4.2. Transect management

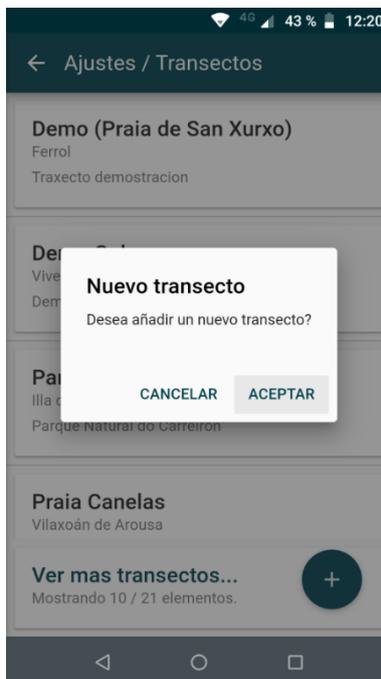
A user with the ADMIN profile can insert a new transect with the app. To do this, you must go in the app itself to the Settings section and access **Available Transects**.



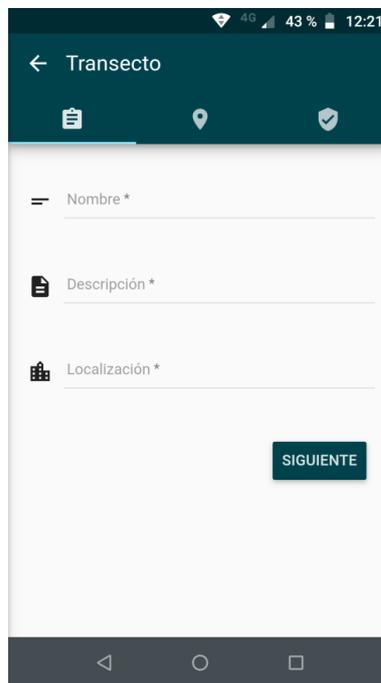
A + will appear at the bottom right of the screen.



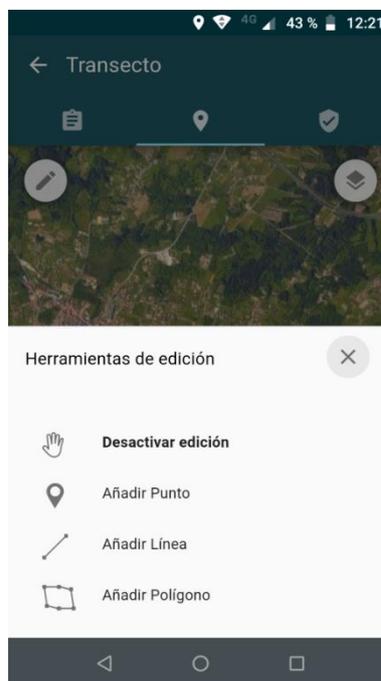
By clicking on it, the option to add a new transect appears:



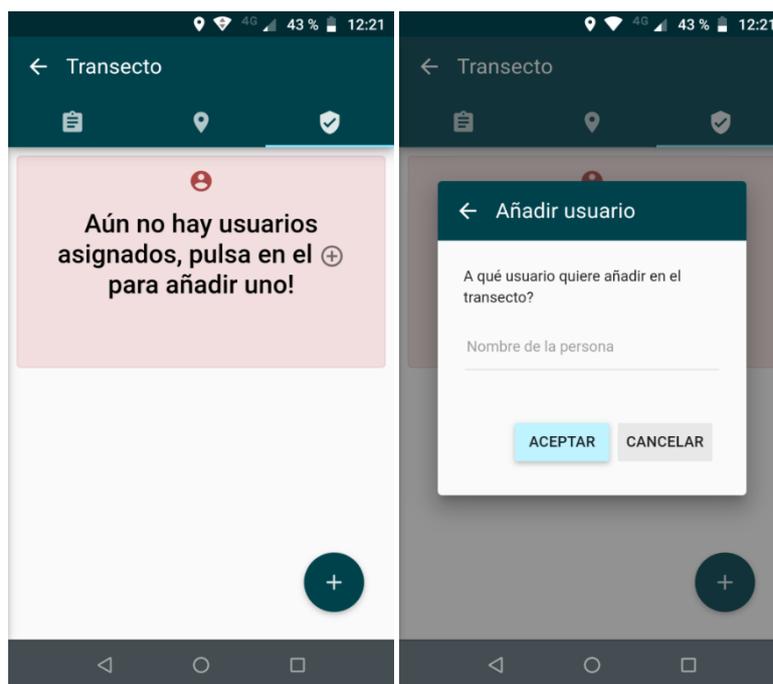
And once you press **Accept**, 3 tabs will appear, which can be accessed directly or through the **Next** button. In the first tab you must fill in mandatory fields: *Name*, *Description* and *Location* of the council:



The next tab is used to draw the transect, which can be a line or a polygon. To do this, it is necessary to press the pencil icon and choose the type of figure and draw it on the map.



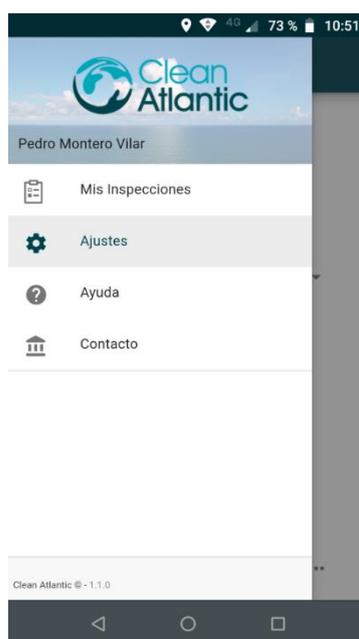
Once the transect is drawn, it is automatically saved. With the last tab a user can be assigned to that transect.



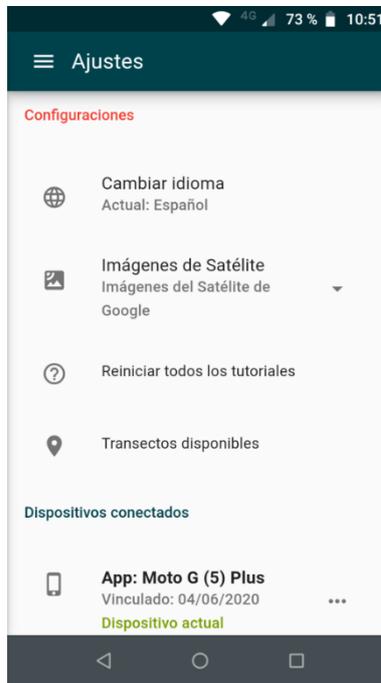
The assignment of a user to a transect can be done now or later, either with the method described in section 3.4 or using the app as described below.

4.3. Assignment of a transect to a user

If the user has the ADMIN profile, they can assign a transect to a user. To do this, choose **Settings** in the main menu.



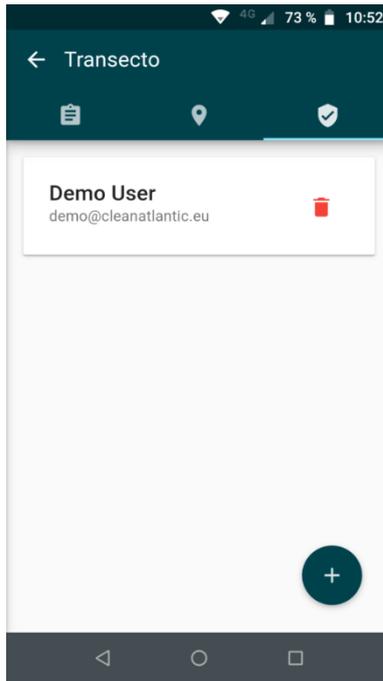
On the next screen, **Available transects**:



In the following menu, double-click on the transect to assign:



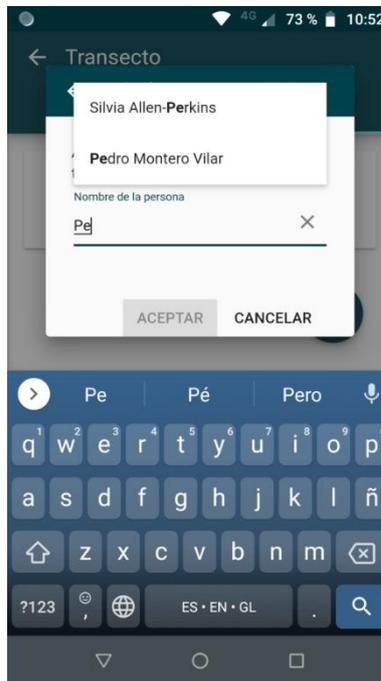
Once the transect has been chosen, go to the third tab and press the +.



The option **Add user** will appear:



When you start entering the name, the app will begin to list the different registered users with that combination of letters:



By choosing a user and clicking OK, this user is assigned to the transect. The same menu allows users to delete assignments to transects, by clicking on the Trash icon.

5. CONTACT INFORMATION

For further information, you can contact us through the following channels:

- **E-mail:** udac@intecmar.gal
- **Phone:** 986512320 Extensions 236/208
- **Web:** www.intecmar.gal; www.cleanatlantic.eu