# ActiveMap Mobile iOS user manual 6.10 on iOS

Activemap Computer Systems Design

Mar 23, 2023

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CHAPTER

ONE

# GENERAL INFORMATION

## 1.1 Application Information

ActiveMap Mobile is a part of the ActiveMap applied software suite for automated control of field employees, as well as performing works at service objects (hereinafter referred to as the System).

ActiveMap is an online system for organizing the interaction between field workers and the dispatcher (task coordinator). The system provide the ability to plan and manage the production work, as well as operational quality control of the field service.

Capabilities of ActiveMap:

- Flexible customization to meet the needs of the company.

ActiveMap can be adapted to any business process. A list of work types, stages and deadlines can be set up for each organization.

- Adding tasks and controlling their execution.

The system allows to add operational and planned tasks, including scheduled tasks on a given template.

- Object inventory.

ActiveMap helps carry out an inventory of objects: updating information on the status of existing objects, identifying nonexistent and creating new objects.

- Control of field employees.

The system helps to control employees with real-time tracking of the location, viewing the history of their movement and recording the execution of requests.

- Convenient and quick interaction between field employees and work coordinators.

ActiveMap speeds up the process of exchanging results between the field employee and the work coordinator. The coordinator can promptly update task information, which is immediately displayed to the field employee. The coordinator also can quickly return the job to the fieldworker for execution based on the results of the fieldwork.

- Using photo and video fixation materials and GLONASS/GPS data.

The system makes it possible to fix the fact of work fulfillment by means of photos, video recordings, location data. This gives the opportunity to avoid field inspection of executed orders.

- User rights configuration.

The system gives the possibility to configure user rights. Each user is assigned a certain role. The role of the system user affects access to the list of tasks, editing and management of these tasks. The roles are from simple users to the administrator of the entire system.

- Displaying service objects on a map.

ActiveMap allows to create tasks on the basis of service objects with automatic filling of coordinates and task fields.

- Creating electronic documents.

The system allows to create reports on the work with tasks and user activity based on the document form of the organization, as well as invoices issued by field employees.

More information about the comprehensive capabilities of the ActiveMap system can be found on the website of the Activemap Computer Systems Design company https://activemap.me/.

ActiveMap Mobile is a mobile application for the iOS operating system, which implements the client part of the task management module of the ActiveMap software suite. ActiveMap Mobile allows setting tasks and monitoring the status of their execution. The application helps to coordinate the work of office and field staff, which increases the efficiency of mobile workers.

ActiveMap Mobile capabilities (Fig. 1.1):

- **Real-time data collection.** Workers send photos and videos from event locations to the dispatcher. The files are geo-referenced and show where the footage was taken.
- **Tasks.** Mobile workers receive tasks through the app. The dispatcher sends tasks and monitors how they are performed. Quick assignment of tasks increases the productivity of mobile teams.
- **Interactive maps.** ActiveMap Mobile provides access to corporate maps. The application works with data layers. Layers are georeferenced data sets. Companies mark real estate objects, clients, communications and more on them. Everything that is outside the office and is of interest to the company is added with tags to the map.
- **Data Analysis**. ActiveMap Mobile allows to generate statistics and reports on the effectiveness of employees' work.

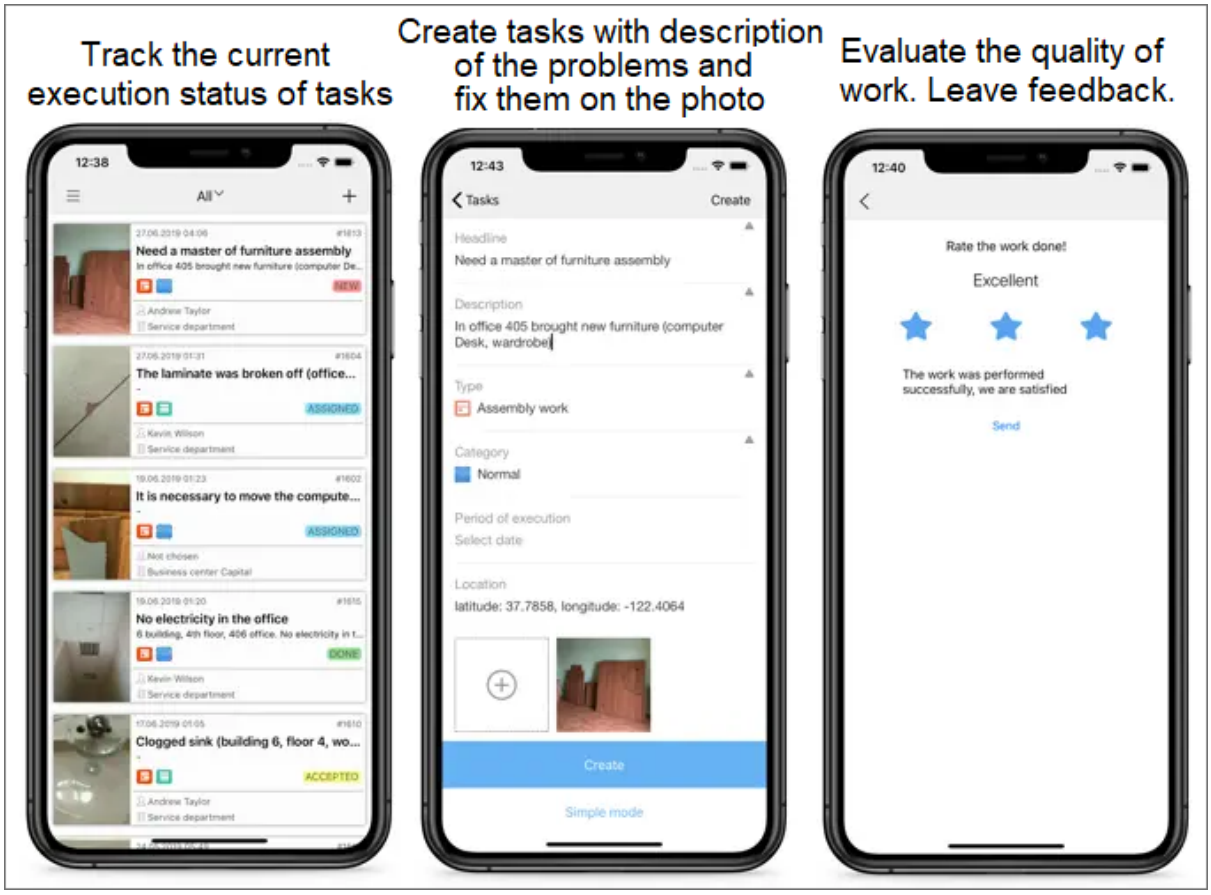


Fig. 1.1: ActiveMap Mobile capabilities

The ActiveMap Mobile application is designed to accomplish the following tasks:

- prompt receipt and execution of tasks with the necessary information specified (location, photo angles, deadline, work description, checklist, etc.);
- full functionality in offline mode[1];
- real-time task creation and assignment to employees;
- generation of reports to control the efficiency of employees' work;
- control of employee location and ability to track removal from the area of responsibility in real time;
- distribution of planned tasks among employees using schedules with the ability to make real-time changes;
- report generation.

[1] The application allows users to add and save tasks on the their mobile device without access to the Internet. Sending user tasks to the server and viewing the tasks registered on the server is possible only when the Internet is available.

## 1.2 Software and hardware requirements

The app is designed to work on mobile devices with iOS 15.0 and above, iPadOS 15.0 and above, iPod touch iOS 15.0 and above, macOS 12.0 and above and a Mac with an Apple M1 chip or newer. The following is required to work:

- mobile application ActiveMap Mobile,
- Internet connection[1],
- availability of a built-in camera,
- permission to access:
  - camera and media files of the device,
  - device location,
  - personal information (email address, user IDs, phone number),
  - files and documents,
  - application and performance information,
  - User device IDs.

The permissions for the ActiveMap Mobile application can be expanded after each update. More information about permissions can be found on the application page https://apps.apple.com/ae/app/activemap/id1663628805.

## 1.3 Installing the app

> **Attention:** If you have a link to ActiveMap Mobile from the administrator of your organization, you can directly access the application in App Store. After installation, the application opens and automatically logs in to the user account.

To install ActiveMap Mobile on iOS devices, open the App Store and use the app search form to find ActiveMap Mobile. After pressing "Install", the ActiveMap Mobile download process will start on the device (Fig. 1.2).

[1] The application allows users to add and save tasks on the their mobile device without access to the Internet. Sending user tasks to the server and viewing the tasks registered on the server is possible only when the Internet is available.

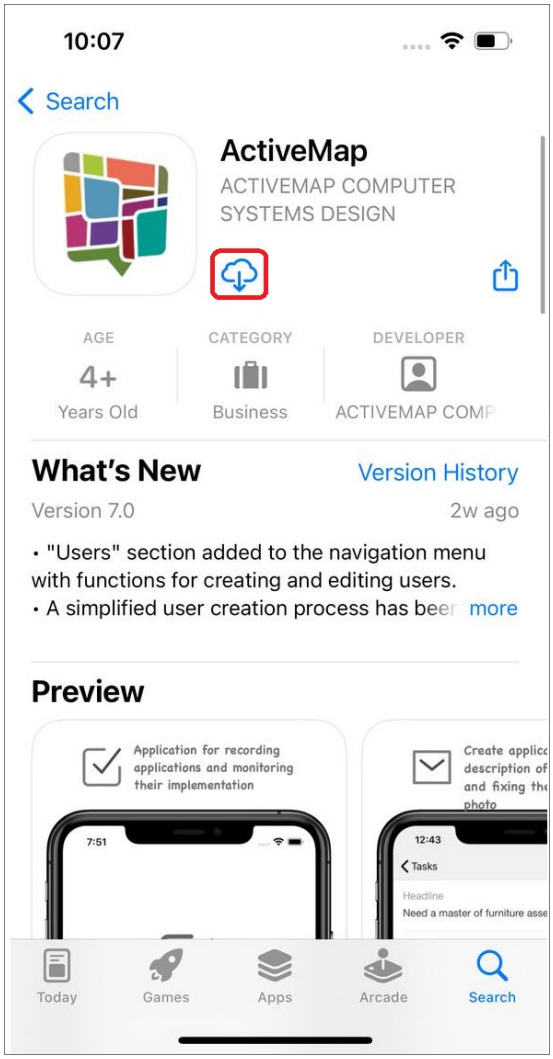


Fig. 1.2: Application in App Store

Once the download process is completed, the ActiveMap Mobile launch shortcut will appear on your device (Fig. 1.3).

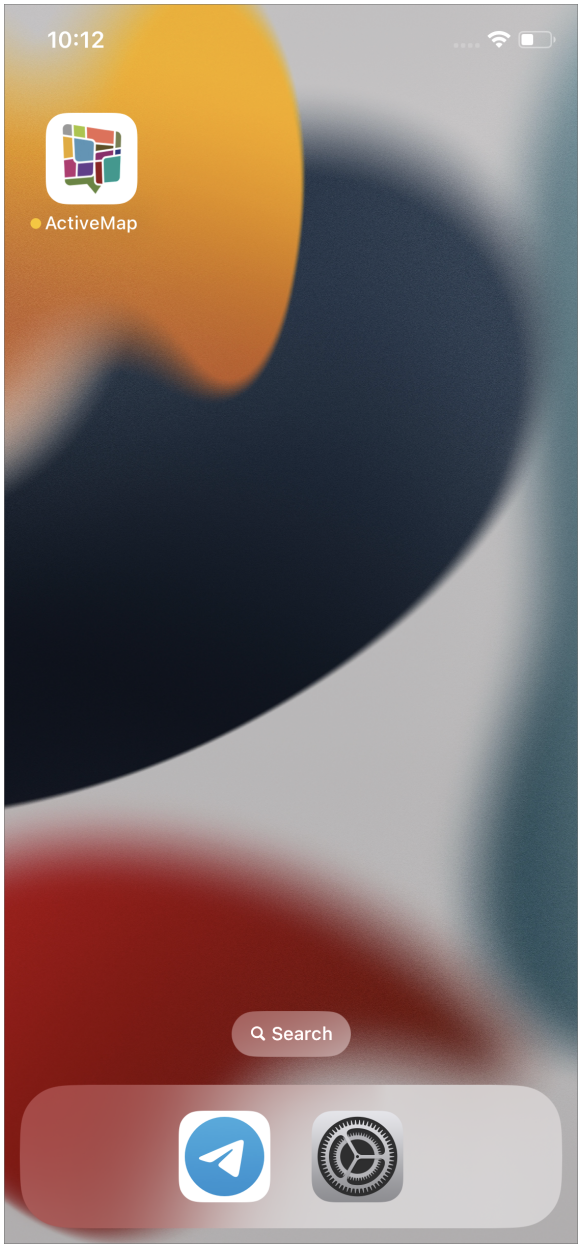


Fig. 1.3: ActiveMap Mobile shortcut on mobile device screen

CHAPTER

TWO

# WORKING IN THE APP

## 2.1 Authorization and account management

### 2.1.1 Registration in the app

Use the application shortcut to run ActiveMap Mobile. After launching, an information window will be displayed on the screen. Click “Get started for free” and follow the suggested steps to register in the app (Fig. 2.1).

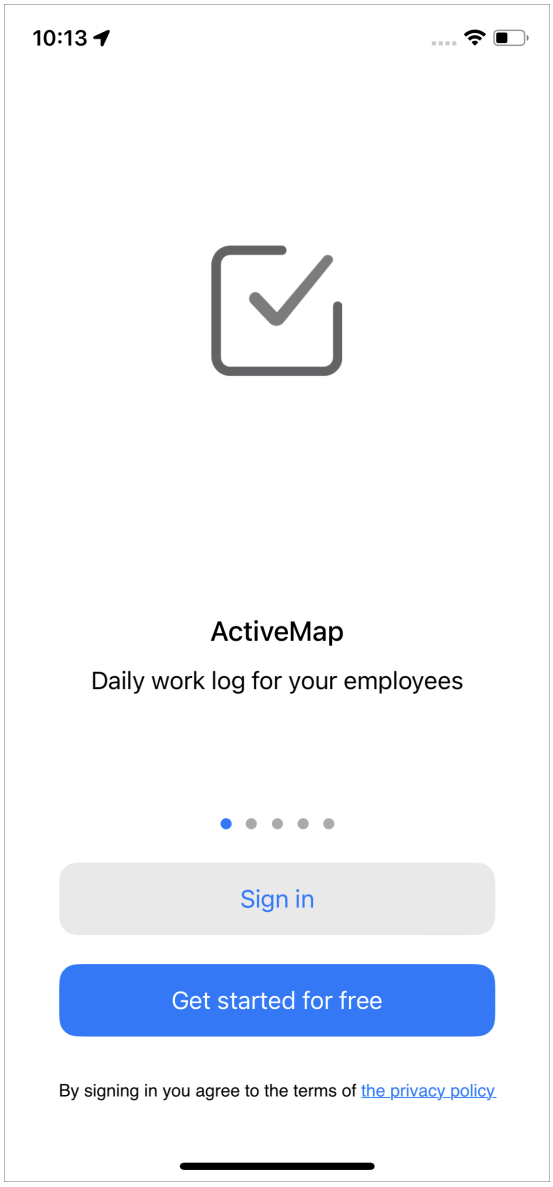


Fig. 2.1: Getting started window in ActiveMap Mobile

User registration in the application is the creation of an account or several accounts on a common server. After completing the registration, you have to follow the link received - the application will automatically authorize under the user account. When registering by phone number and following an invitation link, an account with the “Organization User” role is created .

In the start-up window, you can read the Activemap Computer Systems Design privacy policy. You can access it through the link https://app.activemap.me/policies-privacy-en/. Please read our privacy policy carefully to know what information we collect and how we use it.

### 2.1.2 Authorization

To add and view tasks, you need to log in to the ActiveMap Mobile application. Authorization is possible only for registered users. For more information on user registration in the app, see above.

| **Attention:** Unregistered users have no access to the System. |
|---|

If there is a link to ActiveMap Mobile, the application is automatically authorised under the user account after launching. Accept the invitation (Fig. 2.2) to get started:

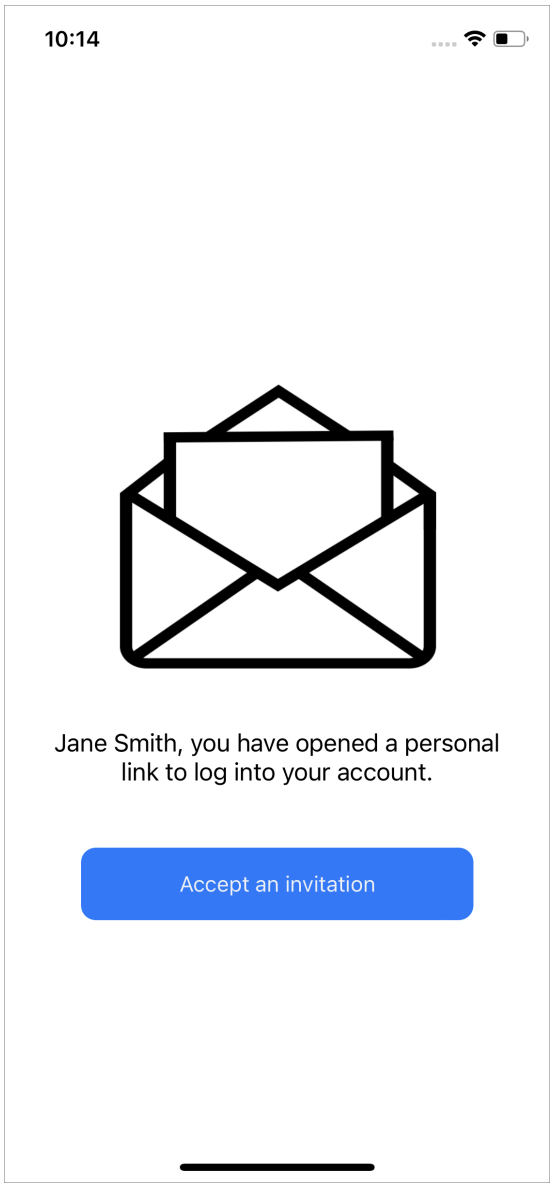


Fig. 2.2: User's personal link invitation

For standard authorization after starting the application, press "Sign in" and enter the server address in the opened window (Fig. 2.3), then press "Continue".

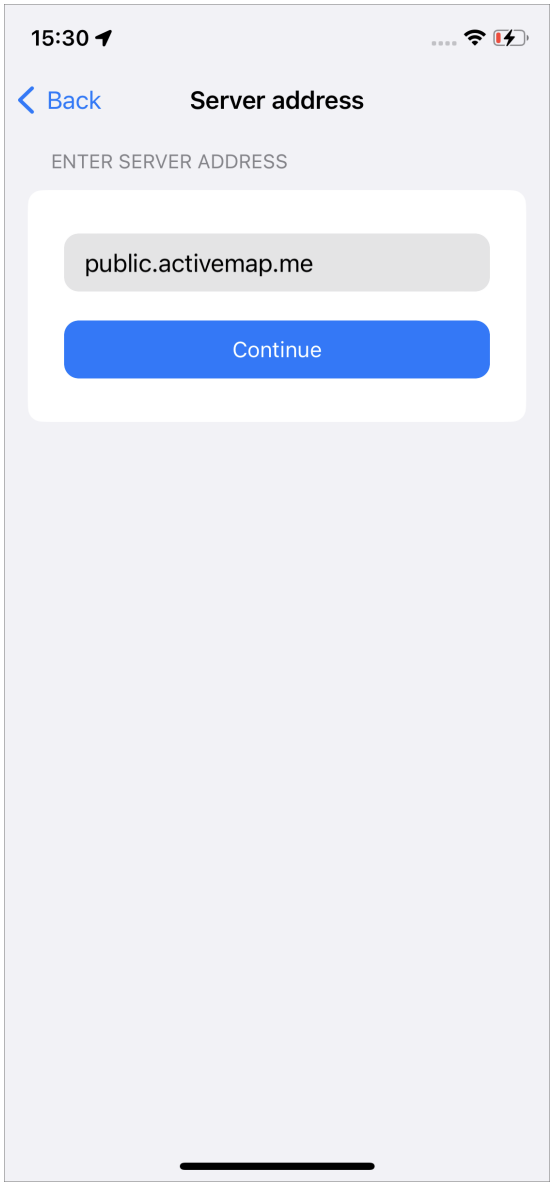


Fig. 2.3: Window for entering server address

In the next window enter login and password (Fig. 2.4), then press “Continue”.

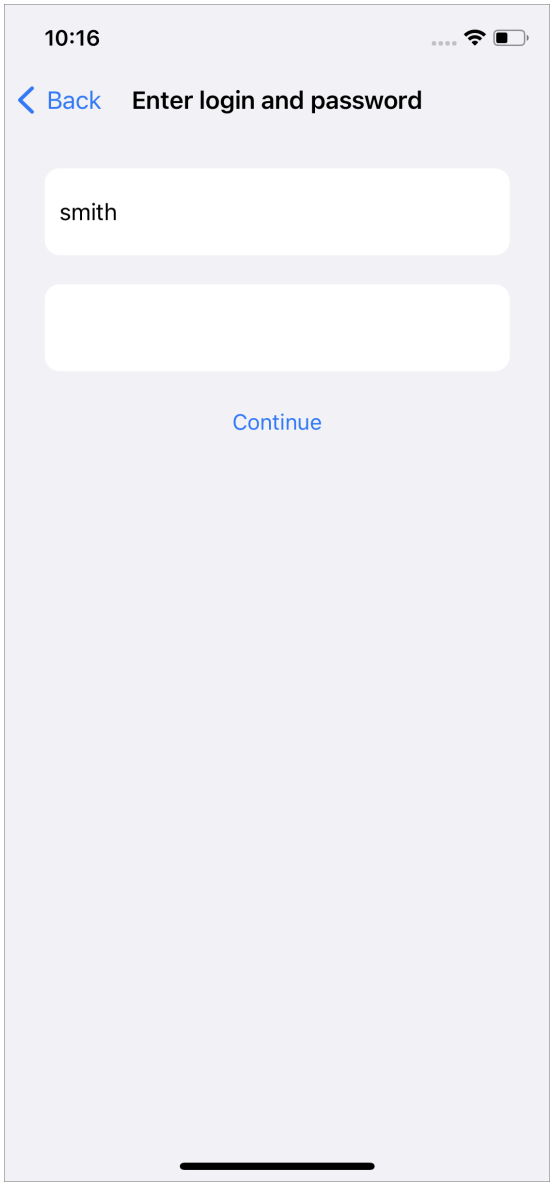


Fig. 2.4: Window for entering login and password

Fields “Server”, “Login” and “Password” are mandatory. If you try to login to ActiveMap Mobile without entering the above parameters, ActiveMap Mobile will display a message asking you to fill in the fields.

After authorization in ActiveMap Mobile a window with a list of tasks will open (Fig. 2.5).

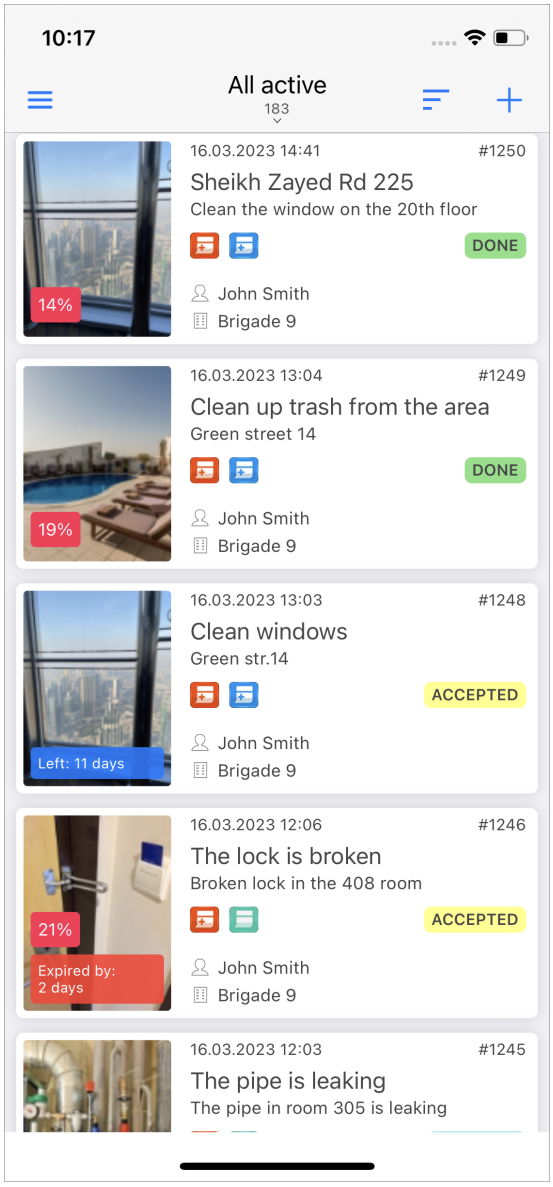


Fig. 2.5: Displaying of the task list

In order to work in ActiveMap Mobile under another account you have click on “Logout” (to log out of your current account). You will be taken to the “Authorization” window, where you can see the list of servers and all the added accounts. To authorize in ActiveMap Mobile with the saved accounts, just click on the desired one. Click “Delete” to remove an account (Fig. 2.6).

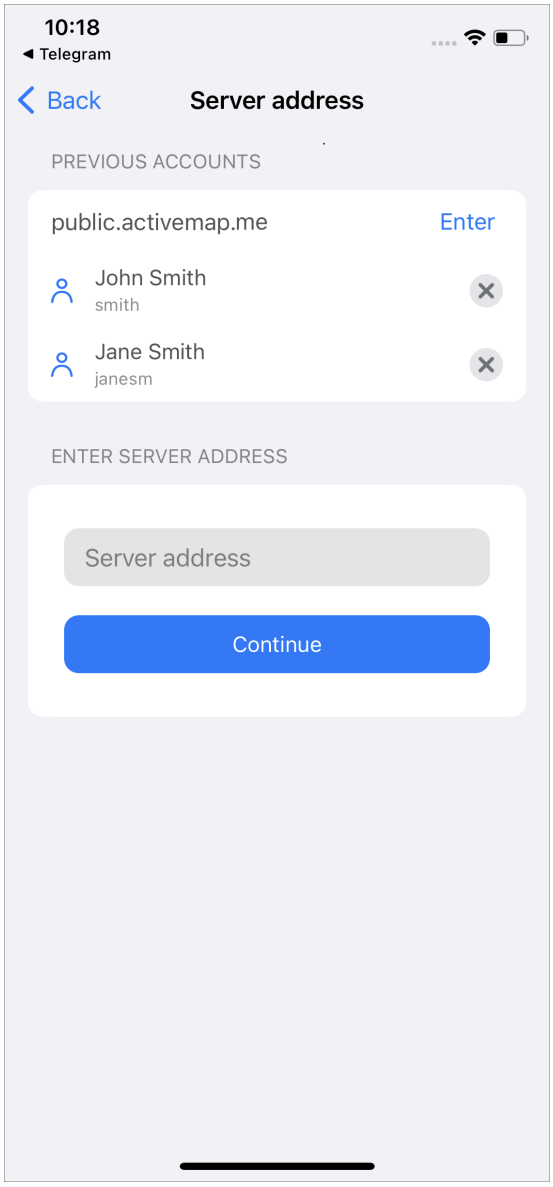


Fig. 2.6: List of saved accounts

### 2.1.3 Account management and roles in the system

To view user data, go to the navigation side menu by pressing  . The basic user data (Fig. 2.7) will be displayed at the top of the window:

- Full name;
- Organization;
- Server address;
- An indicator that shows the current status of the monitoring function.

The green color of the indicator means that the geolocation is enabled on the device and monitoring is enabled in the application. The red color of the indicator means that the geolocation is disabled on the device and monitoring is enabled in the application. The grey color of the indicator means that geolocation monitoring is disabled in the application, regardless of the geolocation settings on the device.

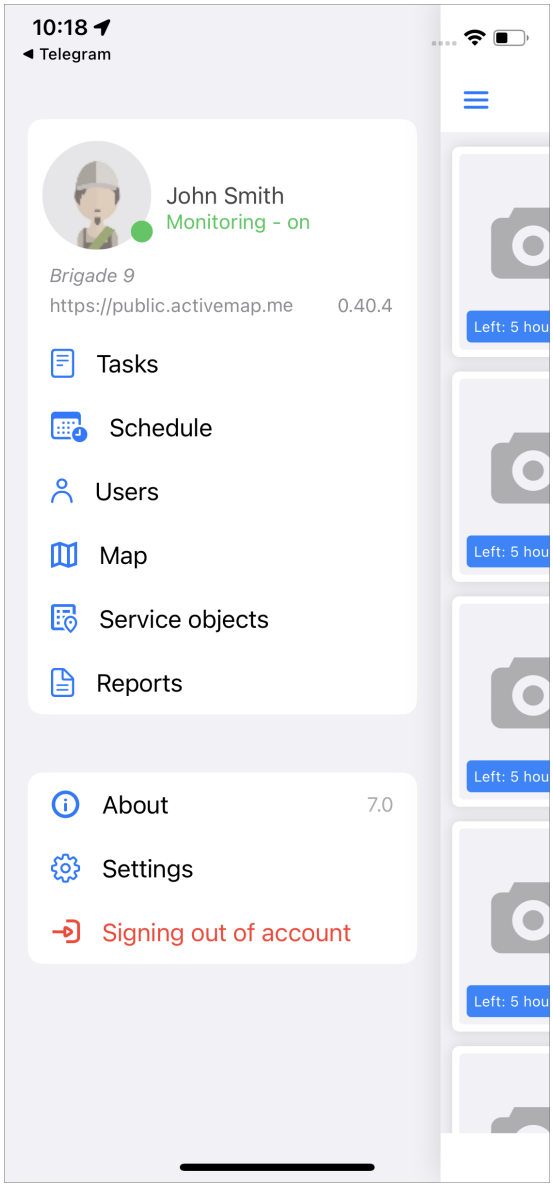


Fig. 2.7: Displaying basic user data

Clicking on the user's card will take you to "My Profile" section, where the user's data is displayed (Fig. 2.8):

- User photo;
- Full name;
- Phone number;
- Email;
- Login;

- Role in the system;
- Main organization;
- Additional organizations (if any);
- Personal link.

In this window you can also edit some of your user data by clicking on  .

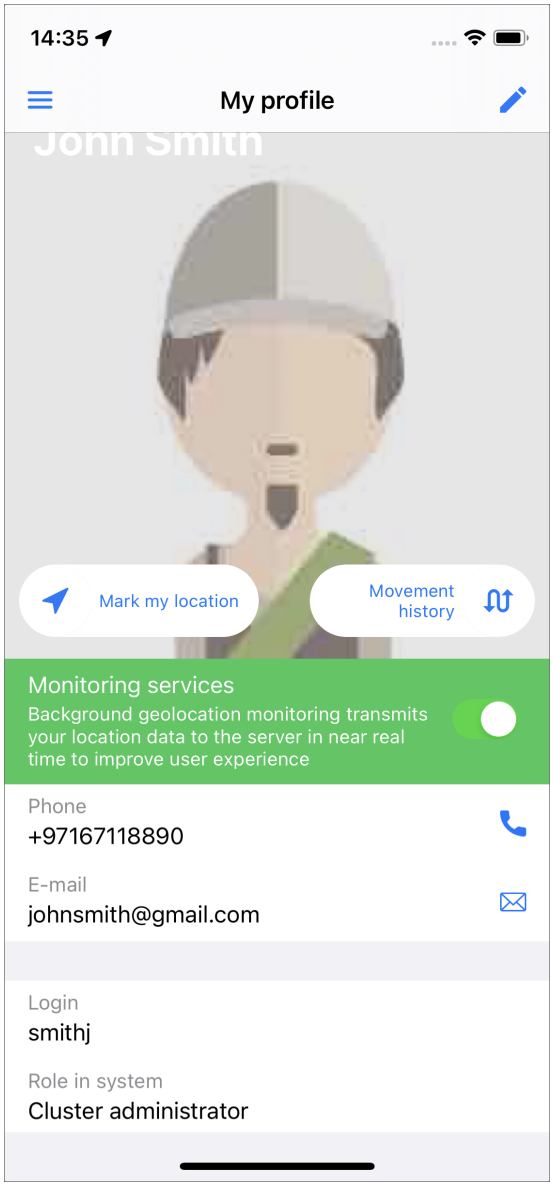


Fig. 2.8: Displaying user data

Part of the user data can be edited by clicking on  :

- Photograph,
- Login,
- Full name,

- Phone number;
- E-mail,
- Password,
- Main organization.

Press “Done” to save the changes. Some of the data in the profile in current session (login, role) will remain unchanged in the interface until the next authorisation.

You can also delete your account in the profile editing window. This option is not available by default, you have to activate it in ActiveMap settings. Once an account is deleted all its links to the created tasks will be lost. Even if you create a user with identical data, the connection will not be restored as it will be a new user for the system.

In the user card window you can enable or disable background monitoring of geolocation. Furthermore, in this section, you can refine your location using the “Mark my location” button. Clicking the button will open a map window showing the user’s location (Fig. 2.9).

To move the location mark to the actual location of the user, click  . If the user’s location has been successfully determined, the marker will turn green and a confirmation button  will appear in the window. Click it to save the coordinates and return to the user card window. If location detection is unsuccessful, the mark will be grey and a message will appear at the bottom of the window indicating that location services are waiting for a response. If there is a large error in determining the location, the mark will be red and a message will appear indicating that the permissible error has been exceeded.

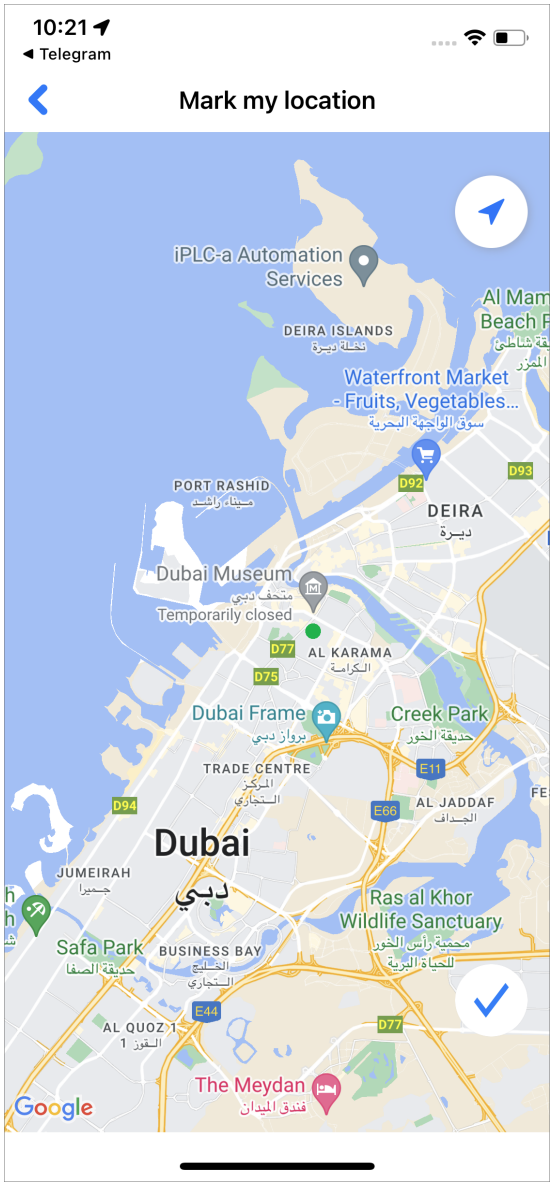


Fig. 2.9: User location

In “My Profile” section you can also view the user’s movement history. To do this, click on “Movement history”. A window with a map and a movement track will open (Fig. 2.10). At the top of the window there is a calendar for selecting the day for which you want to view the movements and a slider defining the time interval within which the movements will be displayed. At the bottom of the window there is a slider for highlighting individual track points as you move along it, indicating when the coordinates and address of that point were received.

To display user movement history as a list, press . The window will switch to list mode, showing the time, geopositioning events and user location addresses (Fig. 2.11).

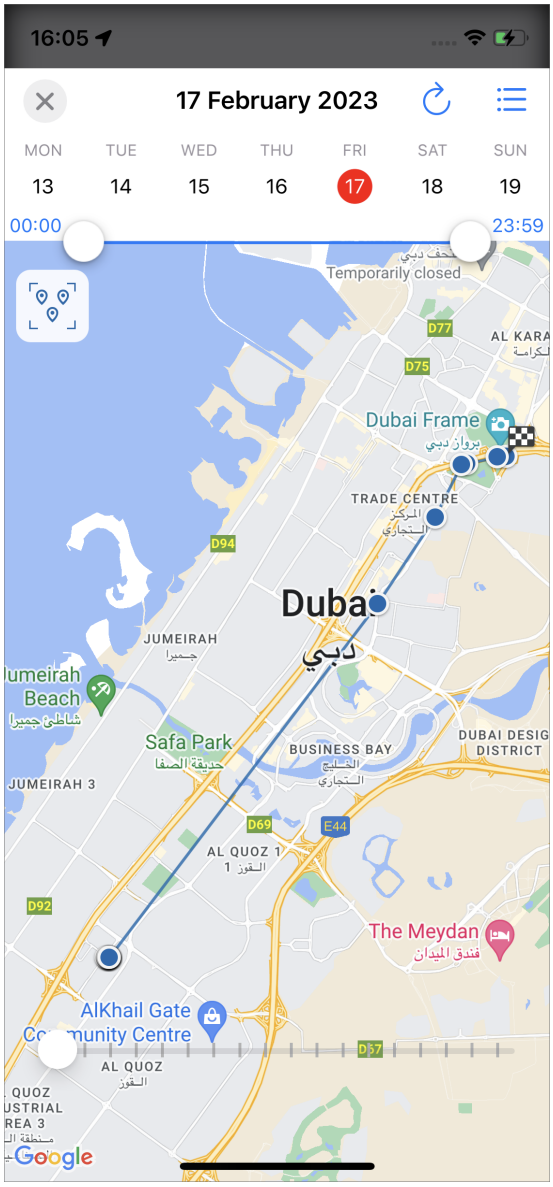


Fig. 2.10: Movement history displayed as a track

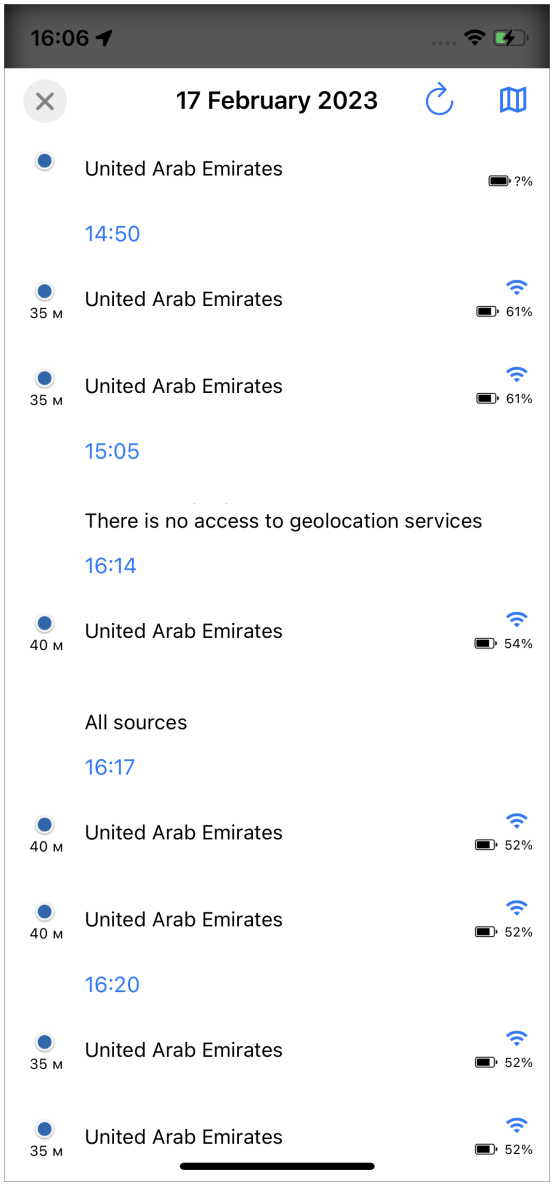


Fig. 2.11: Movement history displayed as a list

Roles are assigned by administrators when creating user accounts. They differ from each other in the set of actions they can perform in ActiveMap system components.

- **"Administrator"** creates users with any role, reference tables for tasks (types of work, stages, priorities, additional fields, stickers), distributes access rights to layers and reports.
- **"Cluster Administrator"** creates organizations in his cluster, users with the Cluster Administrator, Organization Administrator, Cluster Inspector, Organization Inspector and Organization User roles. Allows users to view and manage the tasks of other organizations in their cluster, to access layers and reports in their cluster.
- **Organization Administrator** creates users with the Organization Administrator, Organization Inspector, and Organization User roles. Allocates access rights to layers and reports to users in their organisation. Corrects tasks if necessary. Returns tasks for revision.

- **“Cluster Inspector”** checks, assigns and completes tasks within the cluster.
- **“Inspector of the organization”** checks, assigns and completes tasks within the department.
- **“Chief Inspector”** checks, assigns and completes all tasks.
- **“Organization User”** performs or creates tasks.
- **“Client”** creates tasks and does not see tasks created by other users of the organization.

All user roles can be configured to view, edit and manage layers. All roles can create and upload layers.

## 2.2 Application interface

### 2.2.1 Sidebar navigation

To open the sidebar navigation, press  in the upper left corner of the task management window. The side navigation menu consists of the following sections (Fig. 2.7):

- “My profile” - information about the account the user is logged in.
- “Tasks” - task management window opening.
- “Schedules” - creation of planned tasks according to a template. The section is available under administrative and inspector roles (*Working with schedules* (page 80));
- “Map” - displaying tasks, layers and user locations on a map.
- “Service Objects” - the list of service object layers.
- “Reports” - generating and viewing reports created in the ActiveMap web system. The section is available under the roles of administrators and inspectors (*Working with reports* (page 83));
- “About” - displaying information about the ActiveMap Mobile application.
- “Settings” - configuring ActiveMap Mobile application parameters.
- “Logout” - logging out from the user account.

### 2.2.2 Task management window

Task management window is designed to perform the following actions:

- view tasks created on the server,
- add new tasks and send them to the server,
- modify tasks and send changes to the server.

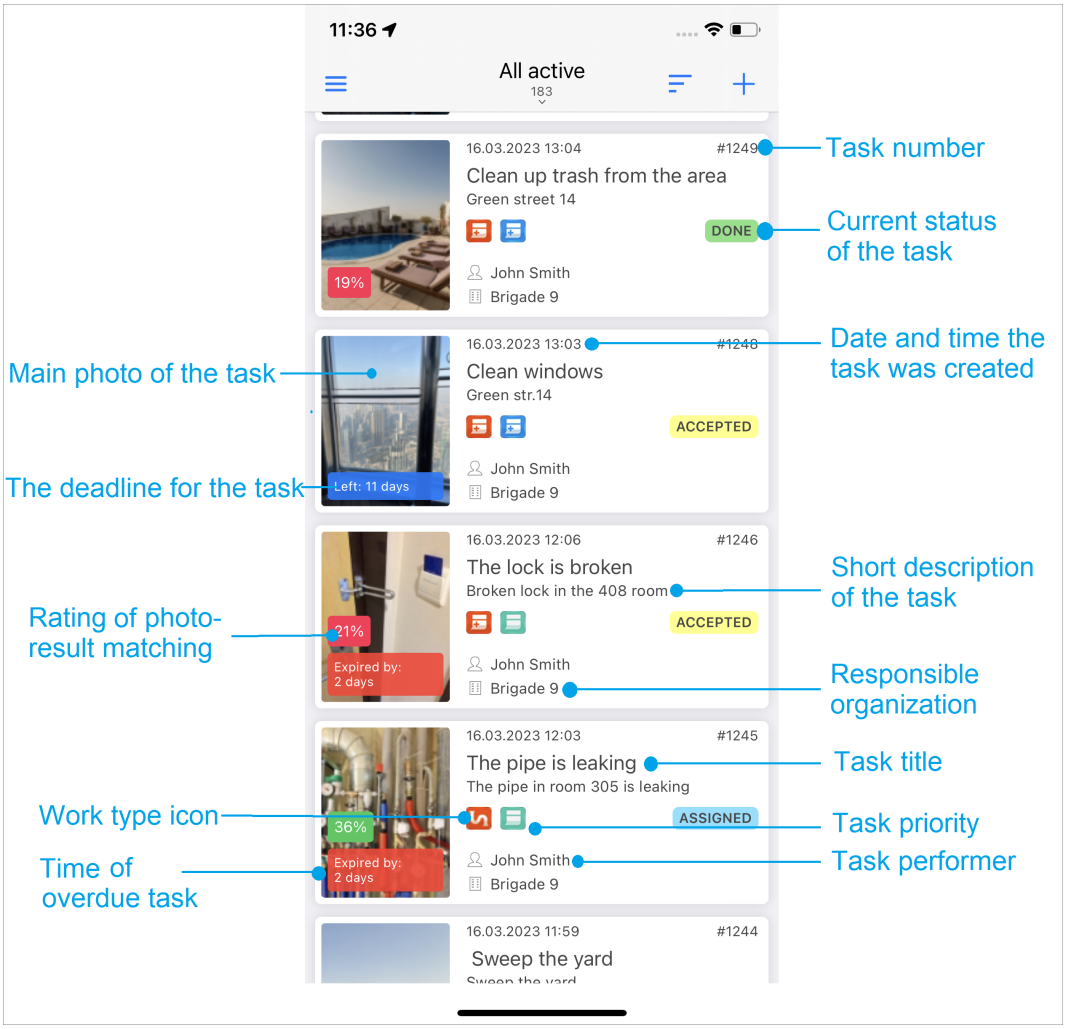


Fig. 2.12: List of tasks created on the server

The following buttons are located at the top of the task list window (Fig. 2.13):

1. Filter (Fig. 2.14),
2. Sort (Fig. 2.15),
3. Create task (Fig. 2.16).

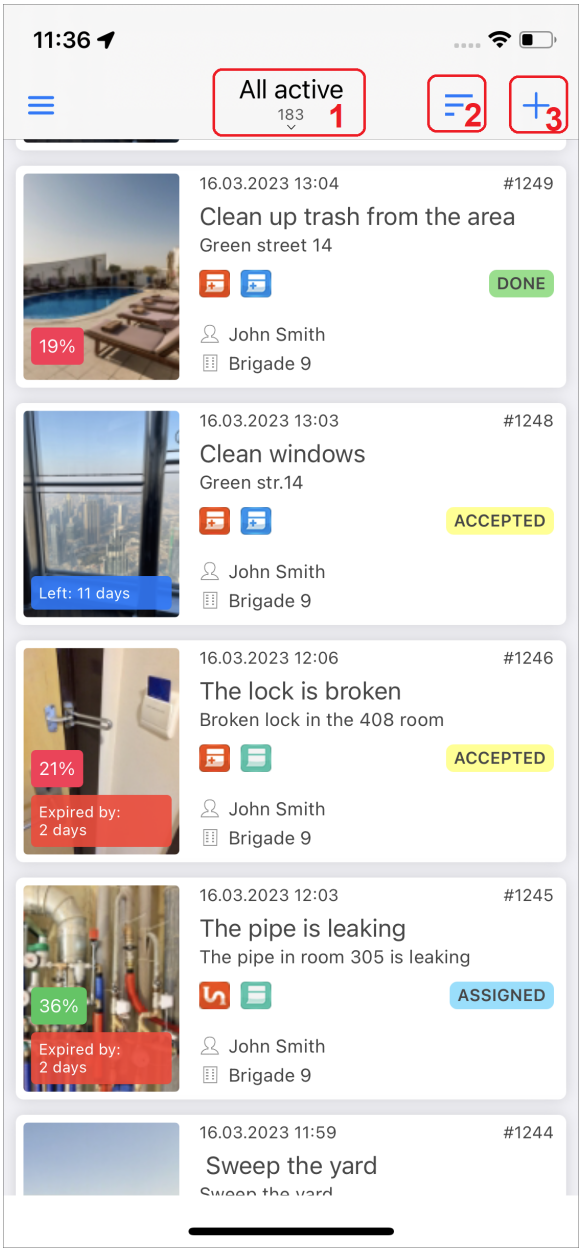


Fig. 2.13: Top panel of the task management window

### 2.2.3 Task list setup

Selecting the "Task list" section displays a list of all tasks created on the server and available for this user (Fig. 2.12). The ability to see and edit tasks is determined by the user's role in the system (*Account management and roles in the system* (page 13)).

By default, tasks in the list are arranged in descending order by date added. Each task contains the following information (Fig. 2.12):

- main task photo (if available);
- task number (ID);
- date and time the task was created;
- task title;

- task description;
- task stage/step (assigned, accepted, under control, etc.);
- work type icon;
- task priority icon;
- labels:
  - "Overdue" - for overdue tasks, indicating the number of days overdue;
  - "Remaining: number of days" - displays how many days are left to complete the task;
  - "Photo-result matching score" - displays the minimum percentage of similarity between the added photos and the sample photo.
- name of the organization the task is assigned to (or "Not assigned" for tasks not assigned to a specific organization);
- task performer (or "Not assigned" for the tasks that are not assigned to a certain performer).

The deadline for completing the assigned task depends on the type of work and is configured by the administrator through the web interface in the "Administration" section. You can customize the list of tasks using the quick filter (Fig. 2.14). To do this, click 

in the top of the task management window.

Quick filter:

- All - all tasks registered on the server and available to the user.
- All active - tasks in progress.
- Created by me - tasks created by the current user.
- Only expired - tasks that have passed their due date.
- Assigned to me - asks assigned to the current user.

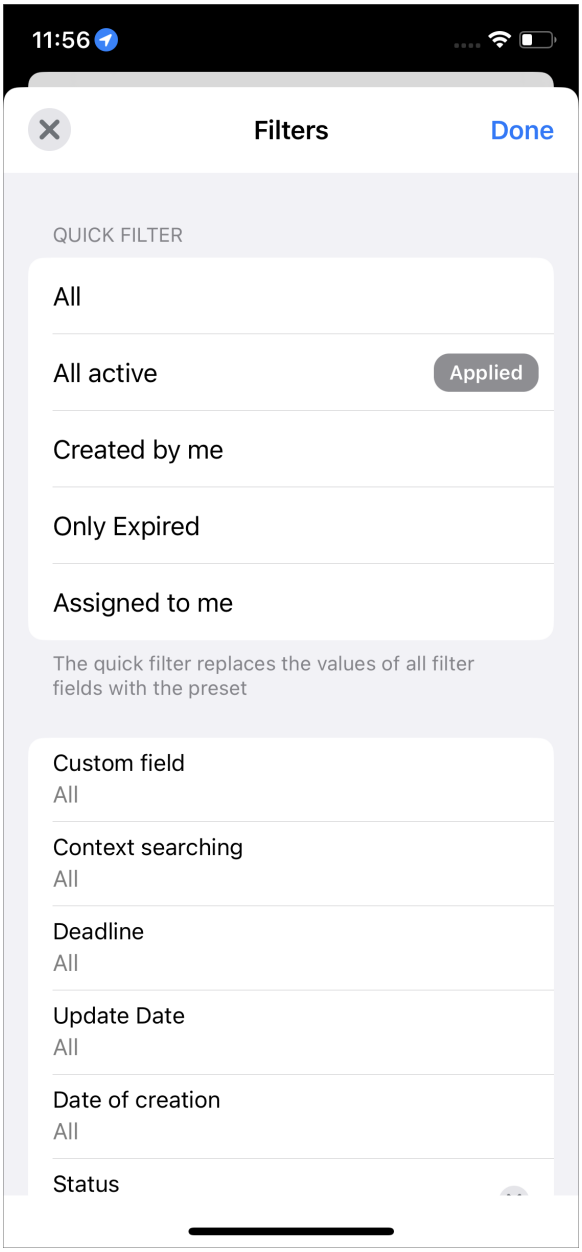


Fig. 2.14: Task filter window

The task list can be refreshed by swiping down.

Task lists in the same sections for users with different roles may differ (more information about roles can be found in the *Account management and roles in the system* (page 13) section). For an organization user in the "All" group, only the tasks assigned to him/her and the tasks he/she have created are included, while for an Organization administrator in this group, the tasks assigned to all employees of the organization are included. The number of tasks is indicated at the top of each task list window.

### 2.2.4 Task filter and advanced task sorting

Using the filter setup button 

you can perform customized task filtering (Fig. 2.14).

Custom filtering options include:

- Custom field (displays tasks filtered by additional field values);
- Contextual search (adds an additional substring search filter that looks for matches in the “Title”, “Description”, and “Task number” fields);
- Deadline;
- Update date;
- Creation date;
- Status (rejected, in progress, closed);
- Stage/step (assigned, accepted, done, etc.)[1];
- Priority (planned, emergency, additional, etc.);
- Work type;
- Author;
- Assigned organization;
- Assigned performer;
- Expiration date;
- Creating organization;
- Service objects;
- Template presence;
- Schedules.

Using the sort settings button  you can sort tasks by the following parameters (Fig. 2.15):

- Ascending;
- Descending;
- By sequence number;
- By title;
- By creation date;
- By update date;
- By deadline;
- By priority;

[1] reference tables can be changed according to individual customer requirements.

- By distance[2].

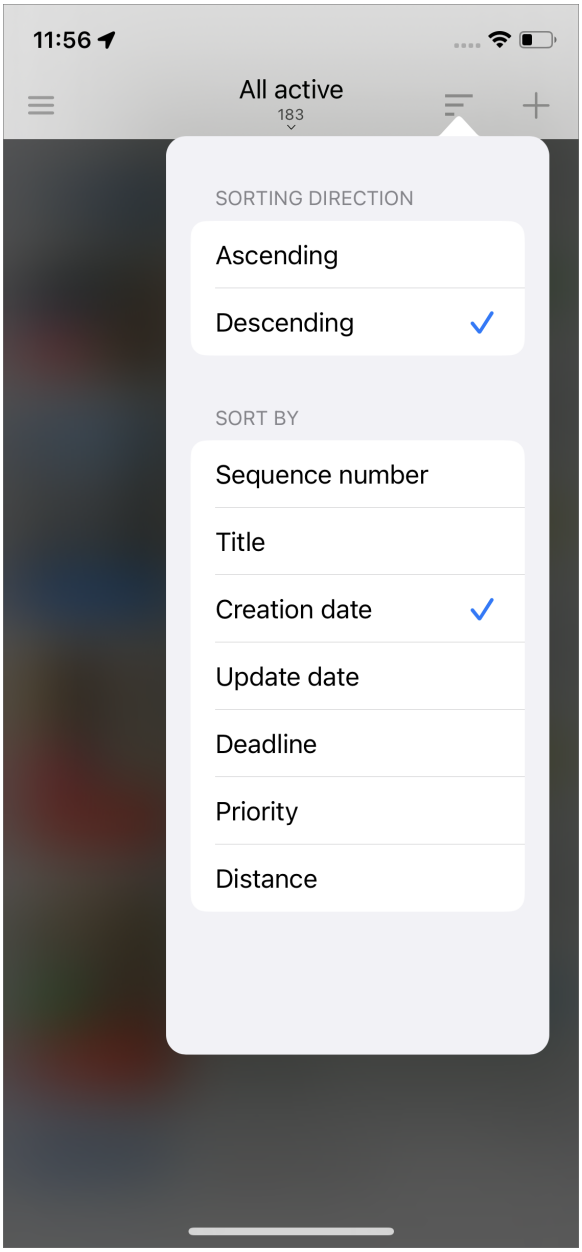


Fig. 2.15: Task sorting window

[2] in this case, it means the distance from the task location to the user. Active - when the user's geolocation monitoring is enabled. Inactive - when geolocation monitoring is disabled.

## 2.3 Creating tasks

### 2.3.1 New task window

The task adding window (Fig. 2.16) is used to create and send new tasks to the server.

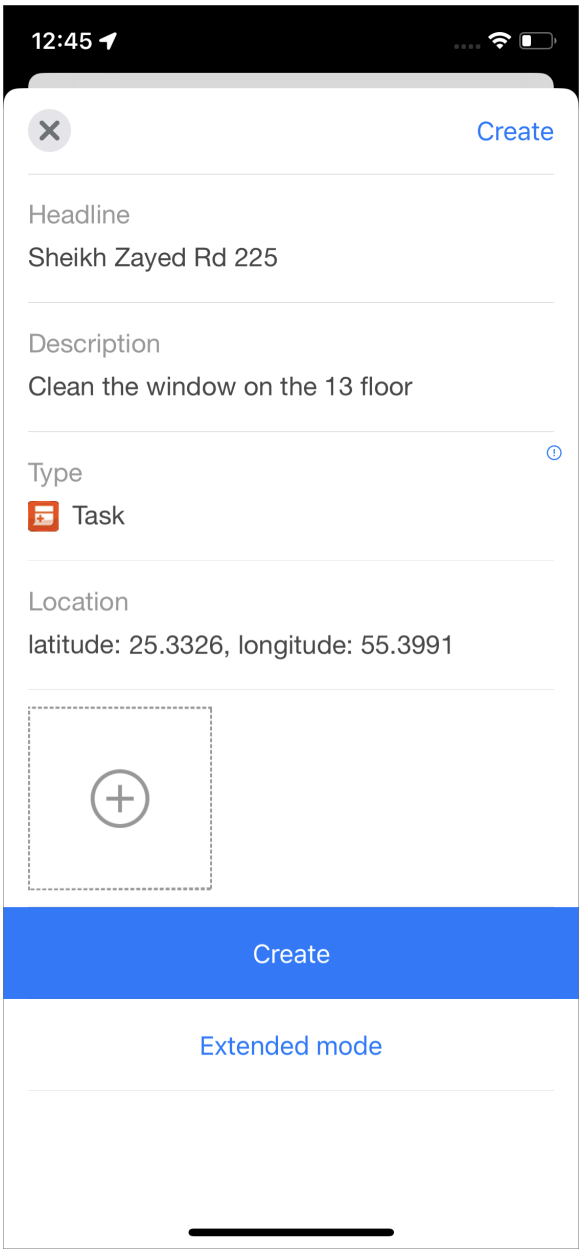


Fig. 2.16: Task creation window

In order to start adding a new task click  in the upper right corner of the task management window. In the opened window, click “Advanced mode” and fill in the title, description, select the work type and priority in the corresponding fields, fill in the custom attribute fields, if you have the appropriate rights, assign the organization and performer to complete the task (Fig. 2.17).

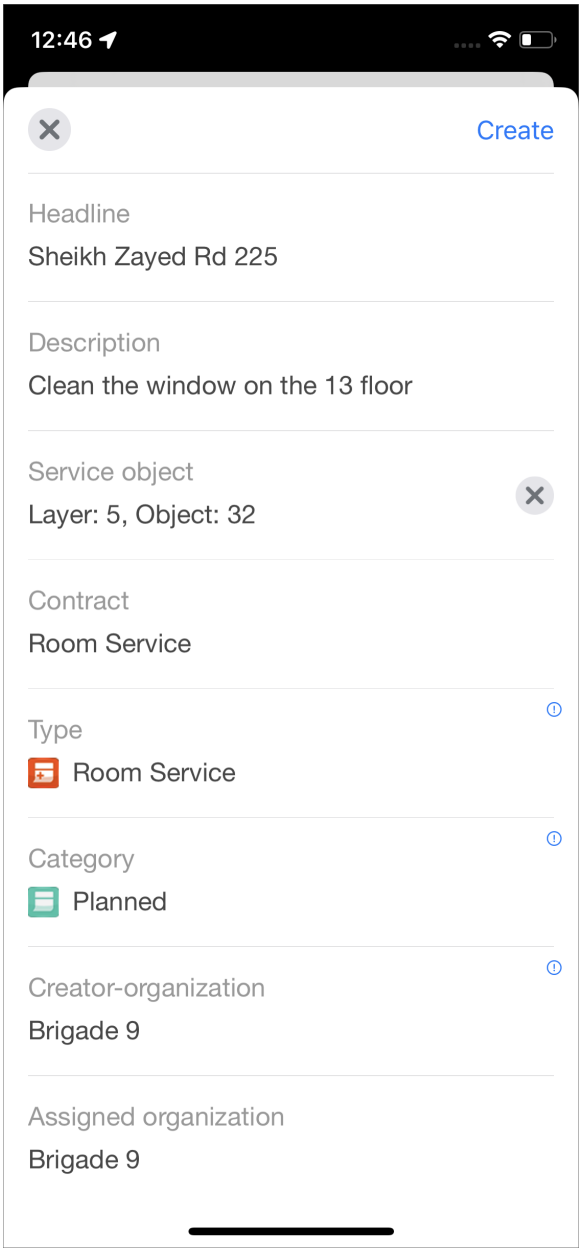


Fig. 2.17: Advanced mode in the task creation window

ActiveMap has a number of reference data:

- Organizations and users;
- Work types, work type groups, stages, priorities, custom fields;
- Settings, serviced objects, and more.

New values are entered into reference tables using the ActiveMap Web web component. To update reference tables in ActiveMap Mobile you need to restart the application. If you want to update the reference tables while creating a task, you have to end the creation of the task without saving the data and restart the application. The updated reference table will become available and you can start creating a task in ActiveMap Mobile again.

### 2.3.2 Linking a task to a service object

To link a task to a service object, select the "Service Object" field in the task creation window. The service object selection window (Fig. 2.18) will open.

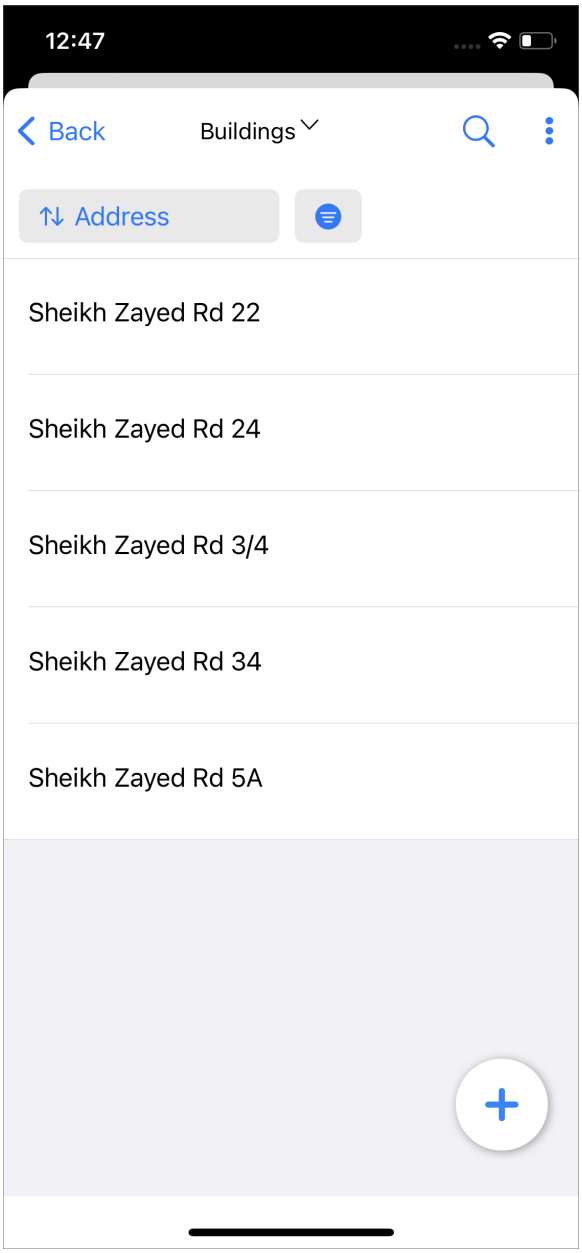


Fig. 2.18: Service object selection window

By default the list of the objects of the first service object layer is displayed in alphabetical order. To select the desired layer, click on the layer name at the top of the window. Layer selection window will open, showing a grouping of all available layers. To filter out non-service layers, toggle the "Service objects only" switch (Fig. 2.19).

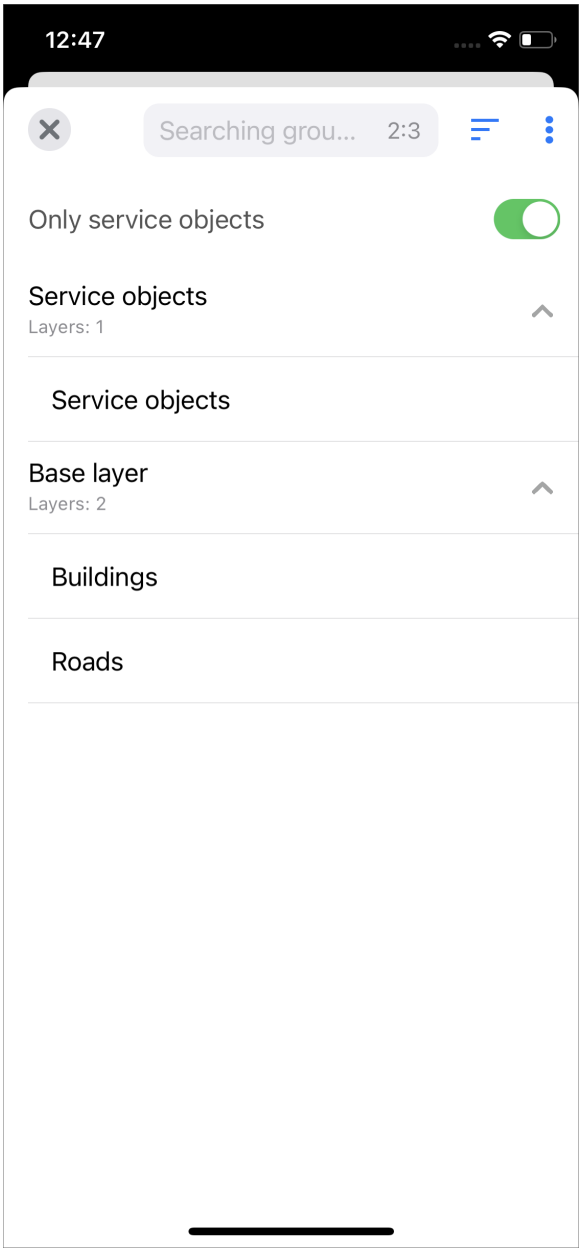


Fig. 2.19: Service layer selection window

After selecting the desired layer, the application will automatically switch to the service object selection window, where you have to select the desired object. After that, the name of the layer and the service object (Fig. 2.20) will be displayed in the “Service object” field.

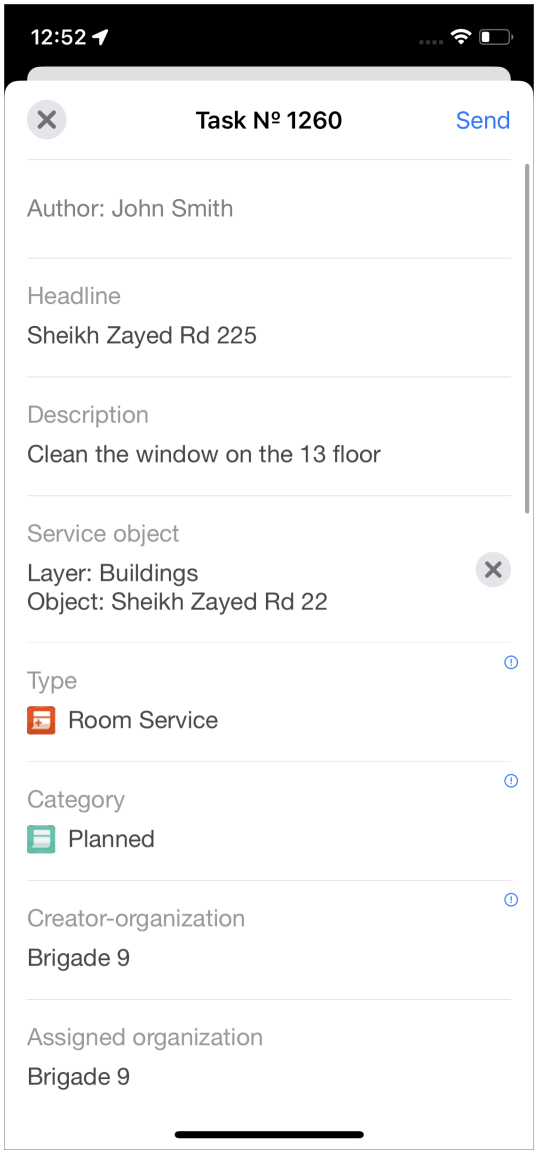


Fig. 2.20: Displaying service object in task

### 2.3.3 Attaching a contract

The list of contracts is created by the Administrator or Cluster administrator and is valid within the cluster. The Chief Inspector, Cluster Inspector, Assigned Organization Administrator and Inspector have the rights to view the contract. Users who see the task created by the contract will also receive minimal information (id, title). An operational task and a scheduled task can only be created within the same contract, two contracts cannot be added. But several tasks and schedules can be attached to one contract. When a contract is deleted, operational tasks created under it are saved (the name of the contract is displayed in the task), already created scheduled tasks are also retained, but the schedule itself is deleted.

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**Important:** When creating a task with a contract, it is necessary to select the service object and the type of work specified within the contract. Otherwise, a task creation error will occur.

---

To attach a contract, press “Select value” in the contracts block, find and mark the required contract (Fig. 2.21). Once the task has been sent to the server, you can no longer edit or delete the contract. When a contract is attached, the assigned organization will automatically be filled in (after sending the task to the server). If there are any discrepancies between the data entered and the contract when sending to the server, the application will generate an error, and the task will not be sent until all discrepancies are corrected. It may be necessary to correct not the task itself but the contract settings (service objects and work types specified in the contract).

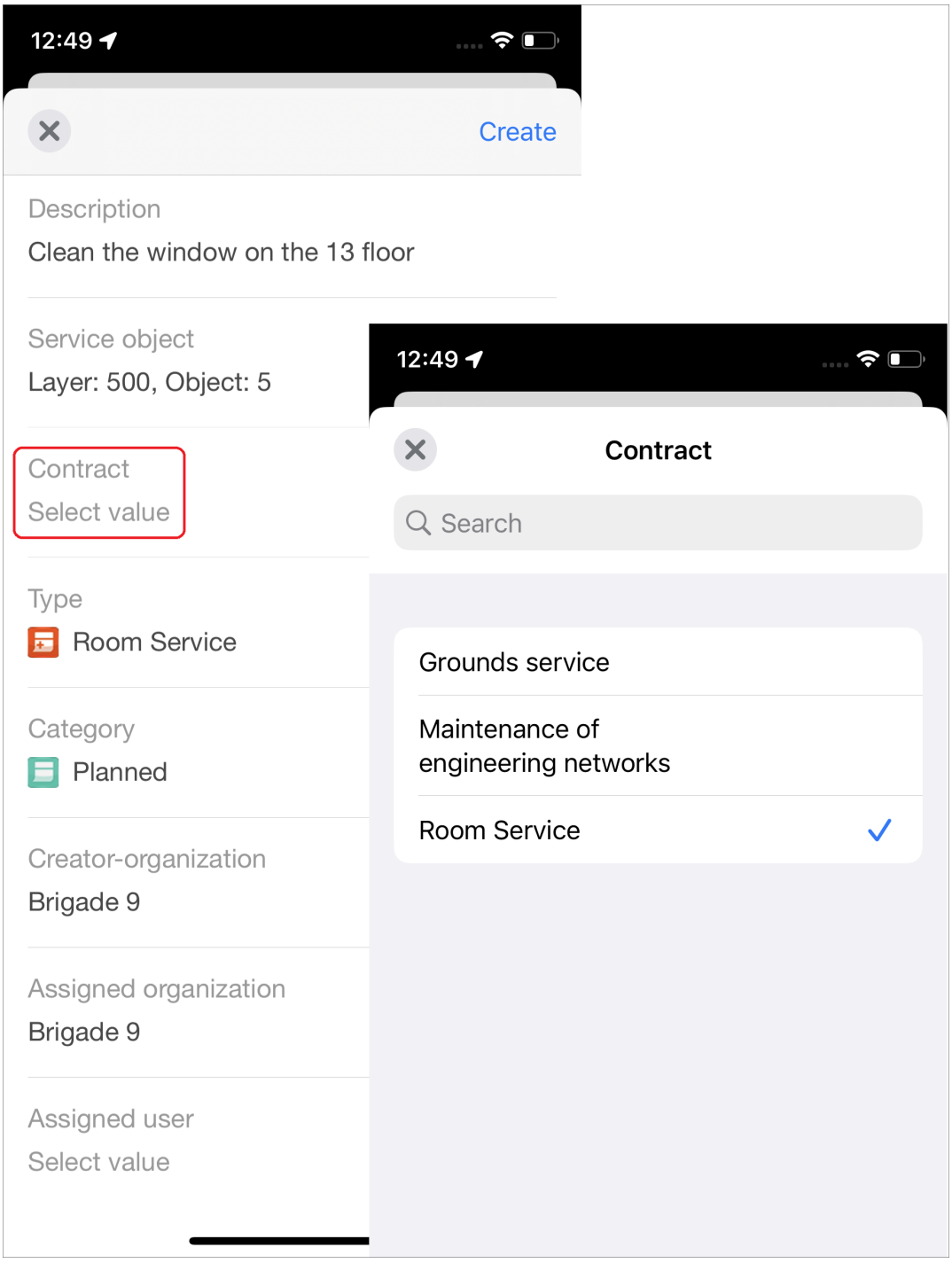



Fig. 2.21: Attaching a contract

### 2.3.4 Adding photos and other media files to a task

In the section for adding media files (Fig. 2.22, Fig. 2.23) you can attach/take a photo/video, record an audio recording, attach a file (documents in txt, rtf, docx, pdf, xlsx, pptx formats), invoice or signature. The "Open gallery" button allows you to attach a media file saved in the gallery of the user's device to the task. Depending on the user's role, access to the gallery can be disabled.

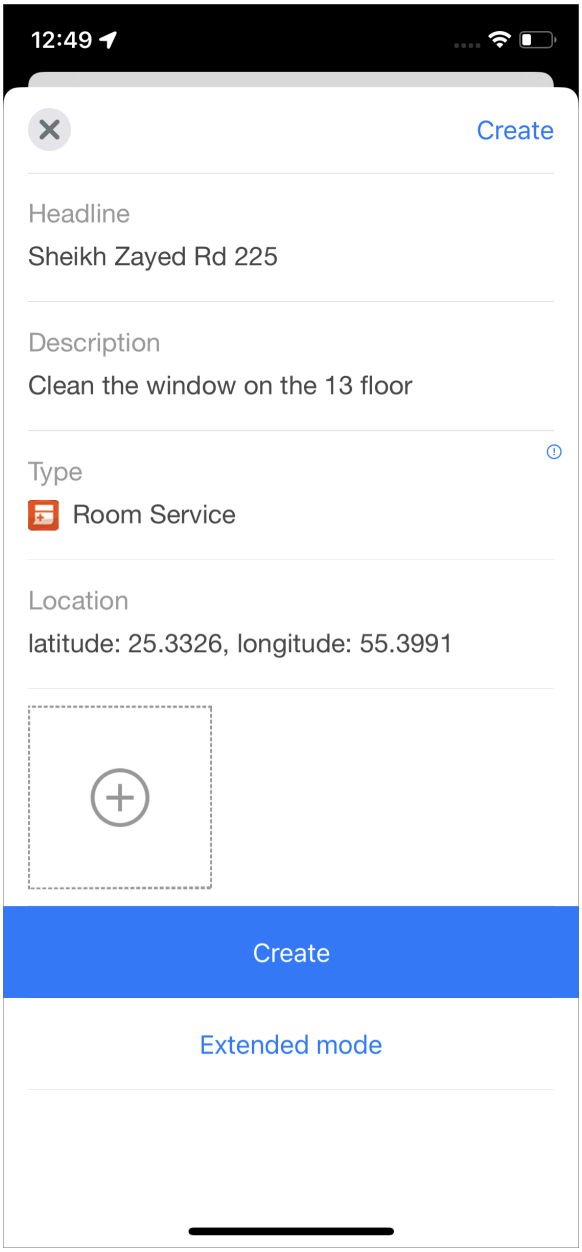



Fig. 2.22: Adding media files

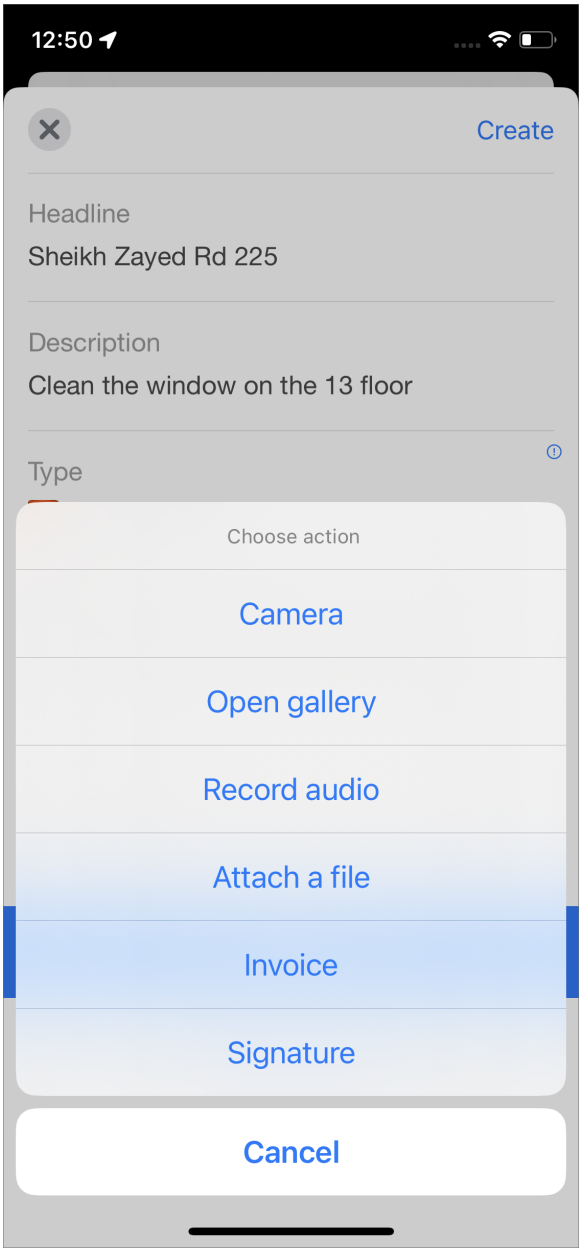



Fig. 2.23: File adding menu

When adding media files ActiveMap Mobile will request permission to access the photo (Fig. 2.24). If you select “Camera” as the attached file type, the user’s device will switch to the photo shooting mode. The next step is to take a photo image. When you press “Use Photo,” the taken photo will be processed and attached to the task.

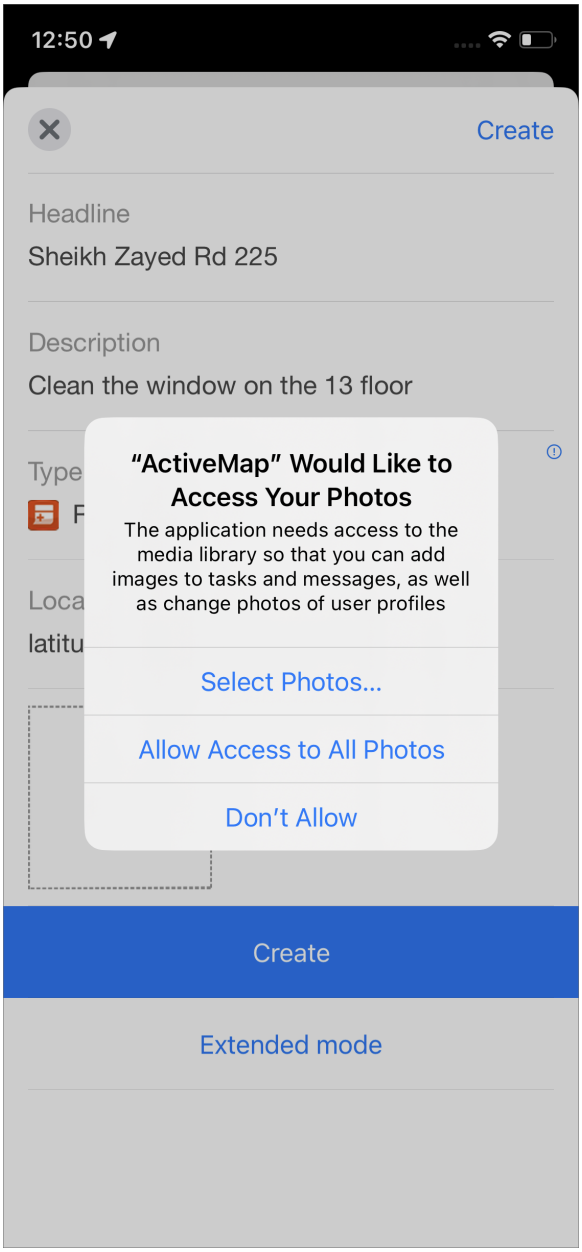



Fig. 2.24: Permission to access the photo

When adding media files ActiveMap Mobile will request permission to access the microphone (Fig. 2.25). If you select the attached file type "Audio Record" in the quick access bar, the user's device will switch to the sound recording mode. You need to make a recording and press "Done" to attach the recording to the task.

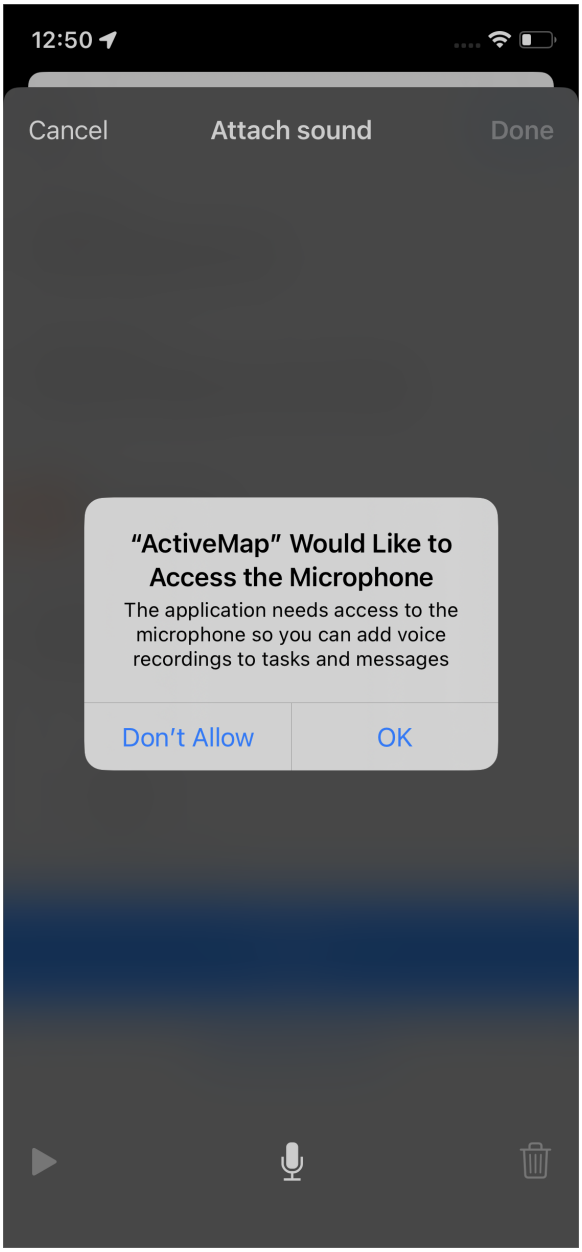



Fig. 2.25: Permission to access the microphone

When you select "Attach a file", files available for upload on the device will open. You need to find the one you need and upload it. To see all files attached to a task, you have to open any file and press  in the lower right corner. A list of all files attached to the task will open.

Adding an invoice is described in more detail in the *Invoice module* (page 87) section.

Selecting "Signature" will open the signature creation window (Fig. 2.26). There are editing tools in the top panel of the window:

- Clear all,
- Undo last action,
- Pencil colour button (opens colour selection panel and eraser),

- Done.

When you have finished creating the signature, press “Done” to return to the task. The signature will appear in the list of attached files.


Fig. 2.26: Creating a signature

### 2.3.5 Geolocation of tasks

In ActiveMap Mobile it is possible to geotag the task being added to the user's location (Fig. 2.27, Fig. 2.28).

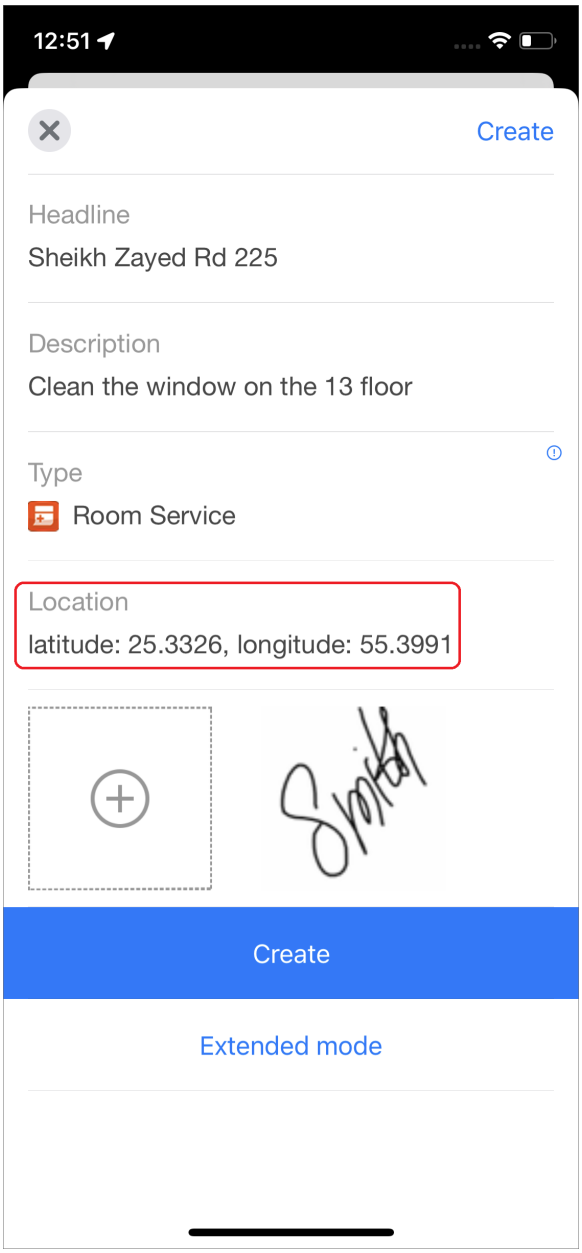



Fig. 2.27: Task location

To determine the user's location, it is necessary to allow ActiveMap Mobile to use the device's geolocation. Under good signal reception conditions, the user's location can be determined within a few meters after a few seconds. The location will be marked with a blue pin on the map. You can change the position of the pin by marking a different location by moving the map.

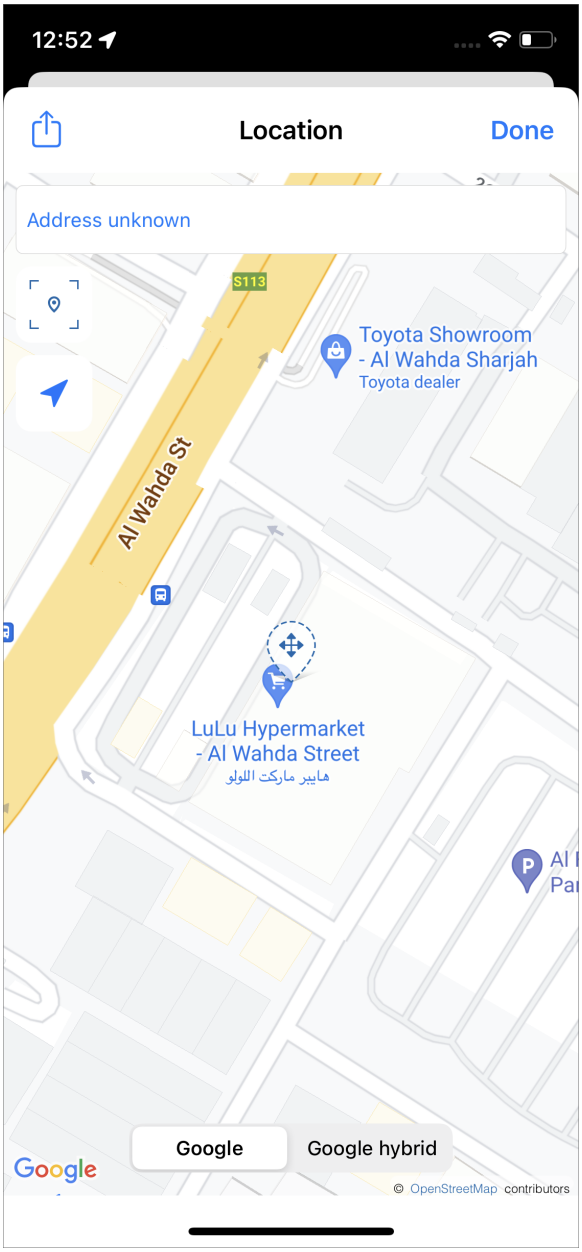



Fig. 2.28: Task location window

Furthermore, users can manually set the location of the task in this window by either entering an address in the appropriate field at the top of the window or by using a task location pin.

Click  to create a task location pin. The pin will be set at the user's location. To move the pin on the map, hold it down and move your finger to the desired location on the map and then release the pin. A list of addresses will appear, including the user's location and the address of the task location pin. Select the pin address to confirm the pin's placement. To return the pin to the user's location, select the user's address.

Buttons  and  allow users to navigate to the task location pin and the user's location, respectively.

Users can also choose the basemap by clicking the buttons with the basemaps' names at

the bottom of the window. Additionally, users can open the specified location in third-party applications by clicking  at the top of the window. A list of available applications will appear. The application selected from this list will open in the mode of building a route to specified point.

After setting the desired task location, click “Done” at the top of the window. After entering information on the task, attaching files and determining the location the task should be sent to the server by clicking “Submit”.

## 2.4 Editing and managing tasks

### 2.4.1 Task editing window

The ability to edit tasks created on the server is determined by the user’s role (*Account management and roles in the system* (page 13)). Most users can only edit certain task parameters (for example, change the stage of execution, add media files and comments). Fields that cannot be edited are marked with a lock symbol on the right. The right to edit a particular field can be configured by the roles using the organization’s permission grid.

To change the task’s title and description, edit the text in the corresponding fields. To delete media files attached to the task, hold the file of interest for a few seconds and click “Delete”. To add a new media file, click on the “+” and select the appropriate action (*Adding photos and other media files to a task* (page 33)).

To change the attached location, specify the new location on the map. Ways to specify a location are described in the *Creating tasks* (page 27) section.

To change the status, priority, type of work, stage of execution, assigned organization and executor, select other values from the corresponding lists.

To add a new comment to a task, go to ‘Comments’ (Fig. 2.29) at the bottom of the task, enter text in the input field and click ‘Send’ (Fig. 2.30). The comments sent to the server are added to the tasks without being checked by the server administrator.

If necessary, you can edit additional attribute fields (depending on the format of the field, enter other values, select values from the lists). To send the added task to the server, select the “Send” menu item.

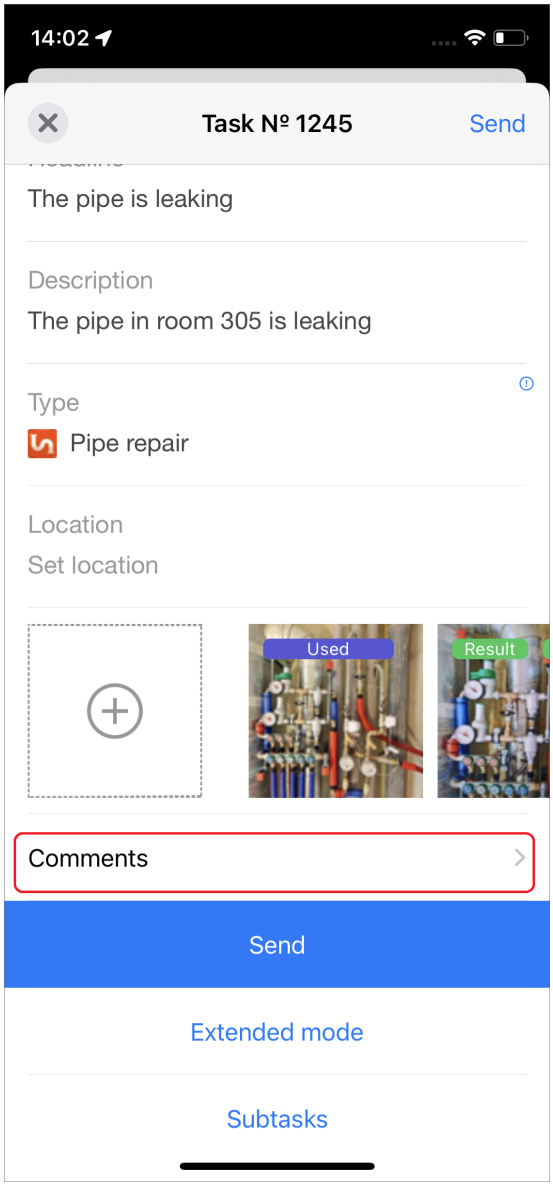



Fig. 2.29: Comments section


Fig. 2.30: Add comments

In order to delete a task, you need to go to the task list, tap the screen with your finger, hold for a few seconds, then click “Delete”. The ActiveMap Mobile application does not have reference tables auto-update feature. To update the reference tables, you need to restart the ActiveMap Mobile application.

### 2.4.2 Task stages

In the right part of the task list view you can see the stage of the task. For created and unprocessed tasks there is the “New” stage, for tasks that have already been processed by the administrator - the “Assigned” stage, for tasks accepted by the performer - the “Accepted” stage, for completed tasks - the “Executed” stage (Fig. 2.31). The stage refrence tables can be changed to suit individual requirements of the Client.

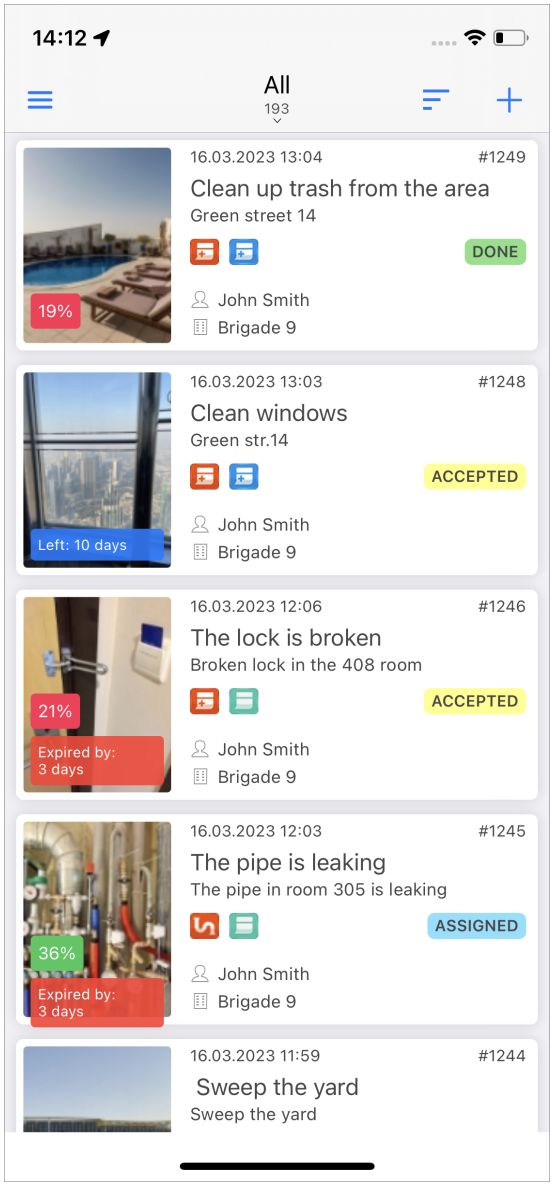



Fig. 2.31: Statuses and stages of tasks

### 2.4.3 Copying a task

If you want to create new tasks of the same type and need to enter the same data, you can use task copying. To do so, create one original task, fill in the required data and add media files.

Next, open the task, scroll down, click “Subtasks”, press + and choose what information to copy to the new task:

- Title;
- Task text;
- Priority;
- Work type;
- Service object;

- Location;
- Custom fields (all custom fields will be copied if you select this option);
- Media files (all media files will be copied if you select this option).

After selecting the data, press “Done” and a creation window will open with the information already filled in. If necessary, you can make changes and then send the new task to the server or leave it in the draft list. To view all tasks created from a single task, open that task, swipe down and press “Show subtasks”. A list of all tasks that were created by copying the initial task will be displayed (Fig. 2.32).

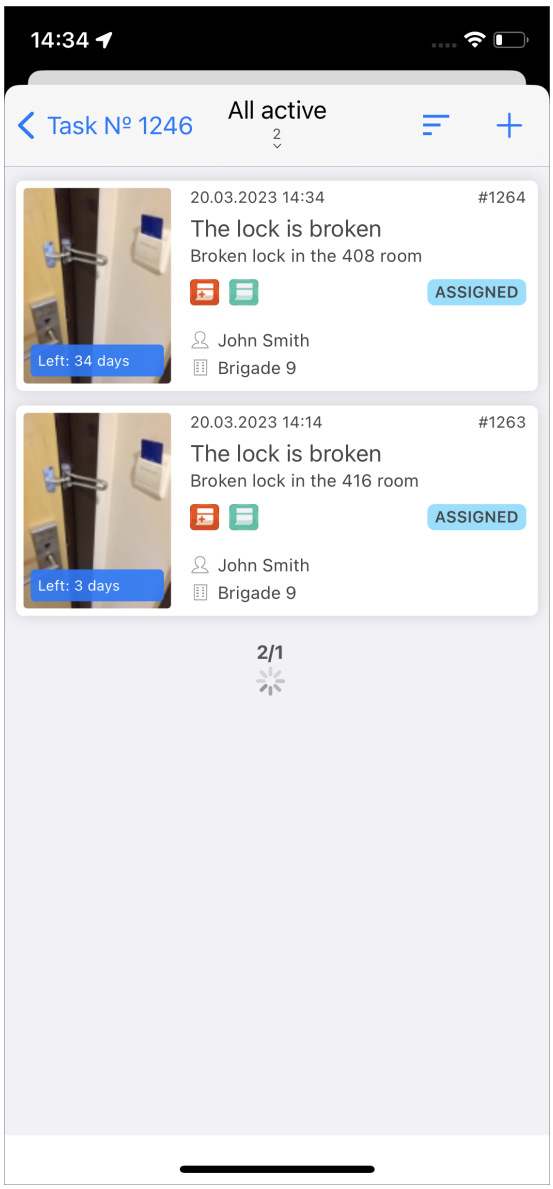



Fig. 2.32: Subtasks

**Note:** If the copied task uses a work type that belongs to a specific organization, it will be copied to the new task even if you don’t select the work type. If a work type is common for all organizations and you do not check the box for a work type when copying, the default

work type will be used in the subtask.

**Note:** When copying a task under the role of Administrator or Cluster Administrator, it is necessary to specify the creating organization. If copying is done under a user with a specific organization, then the creating organization is automatically copied to the subtask.

## 2.5 Working with service objects

In this section the user can manage service objects: view, create, edit and delete them as well as tasks linked to them and view linked tasks. In order to view service objects, go to the "Service objects" section of the navigation side menu (Fig. 2.33).

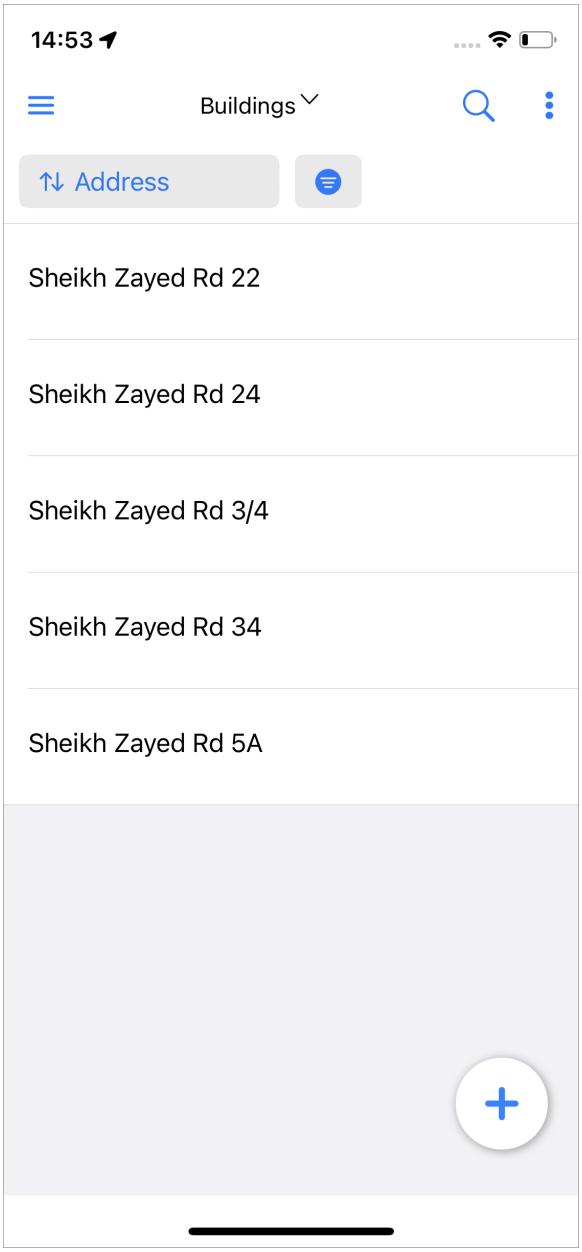



Fig. 2.33: Service objects window

In the opened window, you can select a layer whose objects will be displayed in the list. To do this, click on the row with the name of the currently active layer at the top of the window and select the desired layer from the drop-down list (Fig. 2.34).

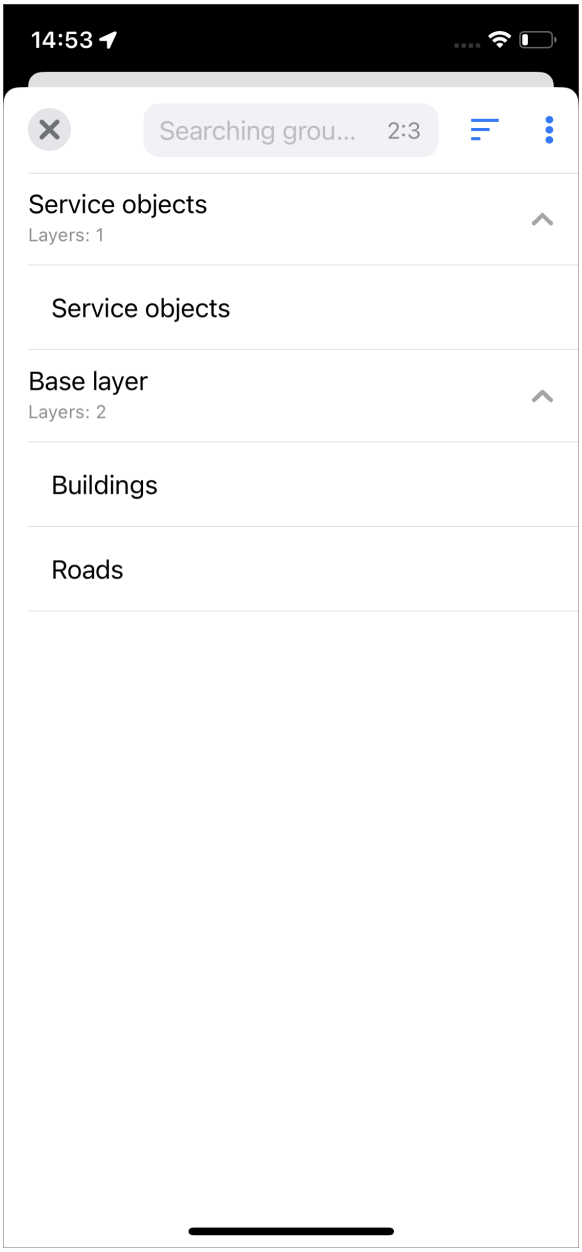



Fig. 2.34: Selecting a layer with service objects

The drop-down list for selecting the layer with service objects contains groups of service layers. Here are the layers marked by the administrator as service layers. The number of layers in each group is indicated on the line of each group. At the top of the window, there is a search box that allows to search for groups and layers by their names. In addition, to the right of the search box, there is a sorting button providing a choice of sorting parameters, by name and by layer number. This window has a menu , which contains the following items:

- Update the data,
- Expand groups,
- Collapse groups.

After selecting a layer by tapping, the application will automatically close the layer selection window and go to the window for displaying the list of objects of the selected layer. In this window, you can use the search bar to search for a service object. The objects are searched according to the attributes configured in the ActiveMap web system, regardless of the presence of the Internet. The application implements the search for service objects when geolocation is disabled. When pressing  a service object search window (Fig. 2.35) opens, where you can use the standard search string, as well as search using a QR code and an NFC tag. To search for a service object using a QR code, click “Scan QR code”, after which the application will open the built-in camera for scanning. At the same time, a QR code must be created in advance for a service object. To search for an object using an NFC tag, you need to bring the device to the object’s NFC tag.

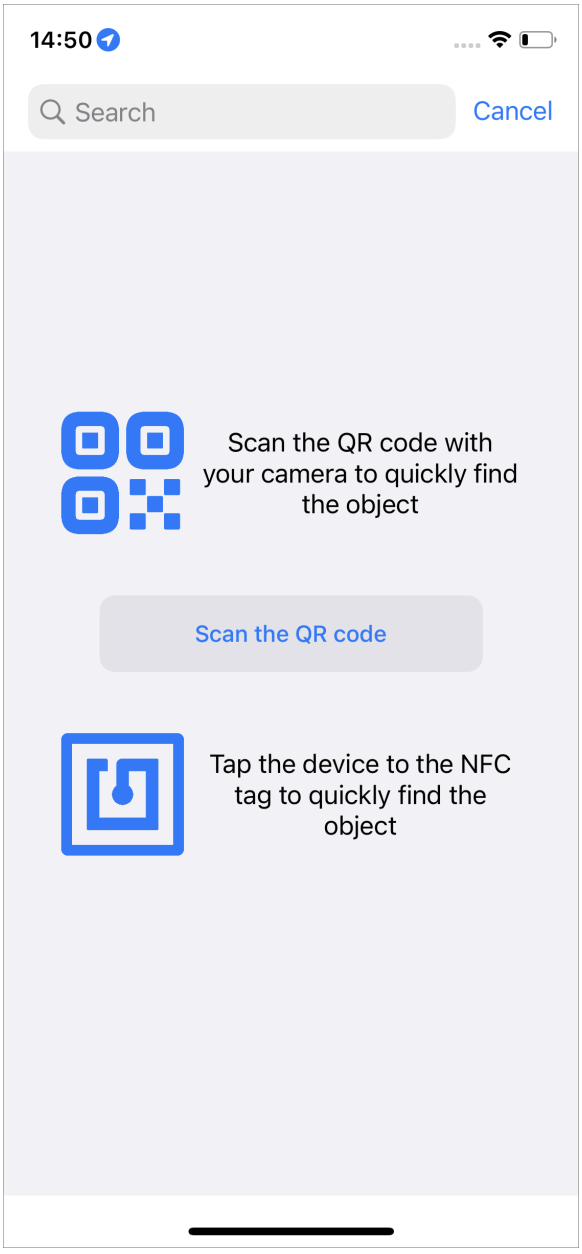



Fig. 2.35: Service objects search window

**Important:** When service objects are uploaded and there is an Internet connection, the search for objects will only be based on data in the internal storage until the user refreshes the uploaded data.

The service object list window menu (Fig. 2.36) is opened by clicking  .

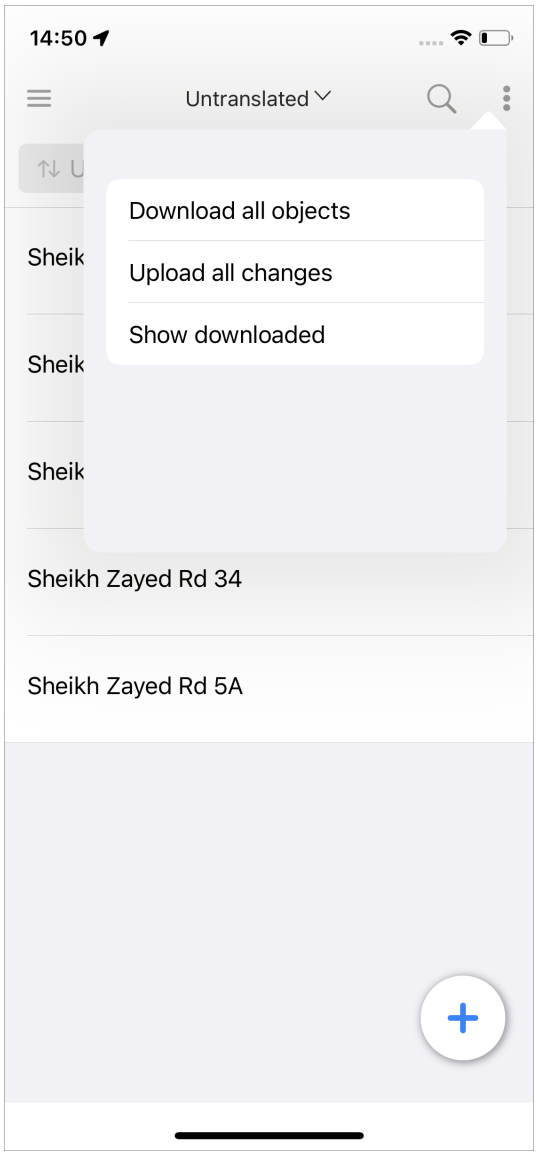



Fig. 2.36: Menu of the service objects window

“Download all objects” - load objects into device memory (cache). “Upload all changes” - send all changes at once to the server. “Show downloaded objects” - display the list of objects loaded into the cache. It is required to verify the loading of all objects necessary for the offline work.

Loading objects is needed to work with these objects offline: edit, add and delete service objects. After downloading the objects, the following message appears at the top of the service objects list (Fig. 2.37):

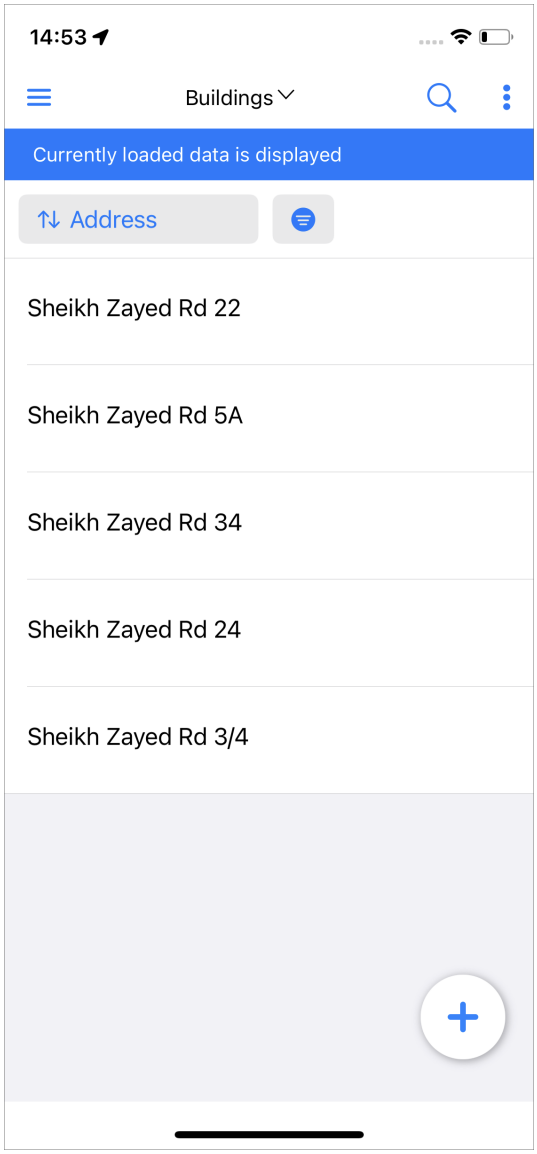



Fig. 2.37: Downloaded data message

If you are connected to the internet, after you have submitted the changes and data updates, this message will disappear and you will be able to continue working as normal until the cache is reloaded. To clear the cache, you need to log out of your user account. You can do this by selecting the side navigation menu item “Exit account”.

**Attention:** If service objects are downloaded, you will continue to work with the data stored in your phone’s cache at the time of download, even when the internet is available. To work with the current data you need to refresh it by swiping or selecting “Refresh data” from the menu of the list of service object layers. If the message “Downloaded data currently displayed” disappears, it means that the data is displayed online.

The sort and filter buttons (Fig. 2.38) are located at the top of the object list window. Sorting involves selecting parameters: attribute and direction.

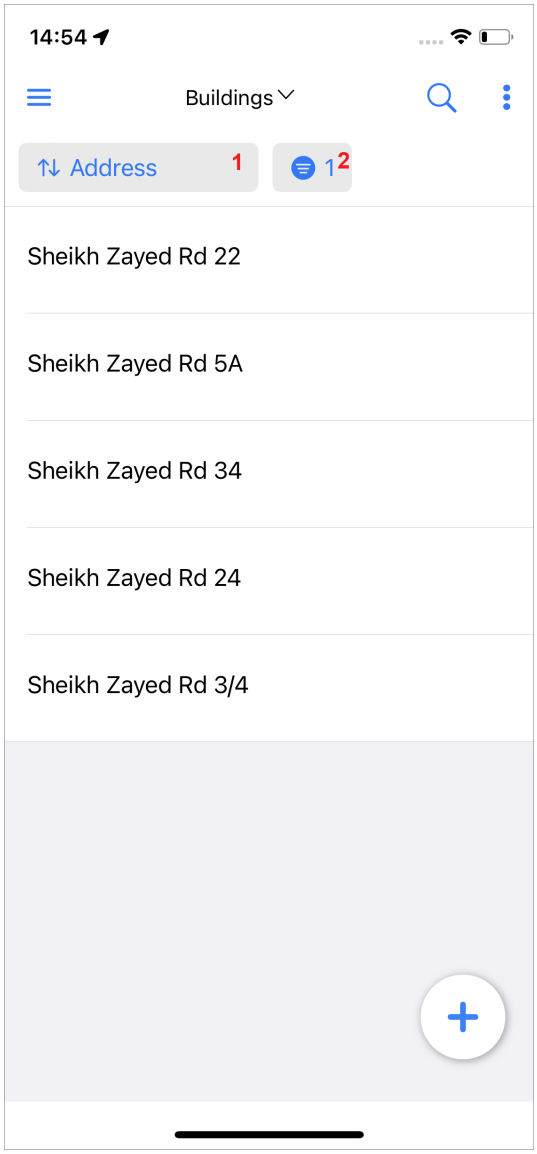



Fig. 2.38: Sorting (1) and filtering (2) of service objects

Filtering involves selecting an attribute to which the filter will be applied and entering the desired value (Fig. 2.39). It is possible to expand the filter with various combinations of conditions. When setting up a filter, select the required option:

- Entry - displays objects where the attribute values contain part of the strings entered by the user.
- Match - displays objects where the attribute's values fully match the user-entered strings.

Next, enter the attribute value for the filter and click "Done" to apply it, after which the filtered object list will be opened.

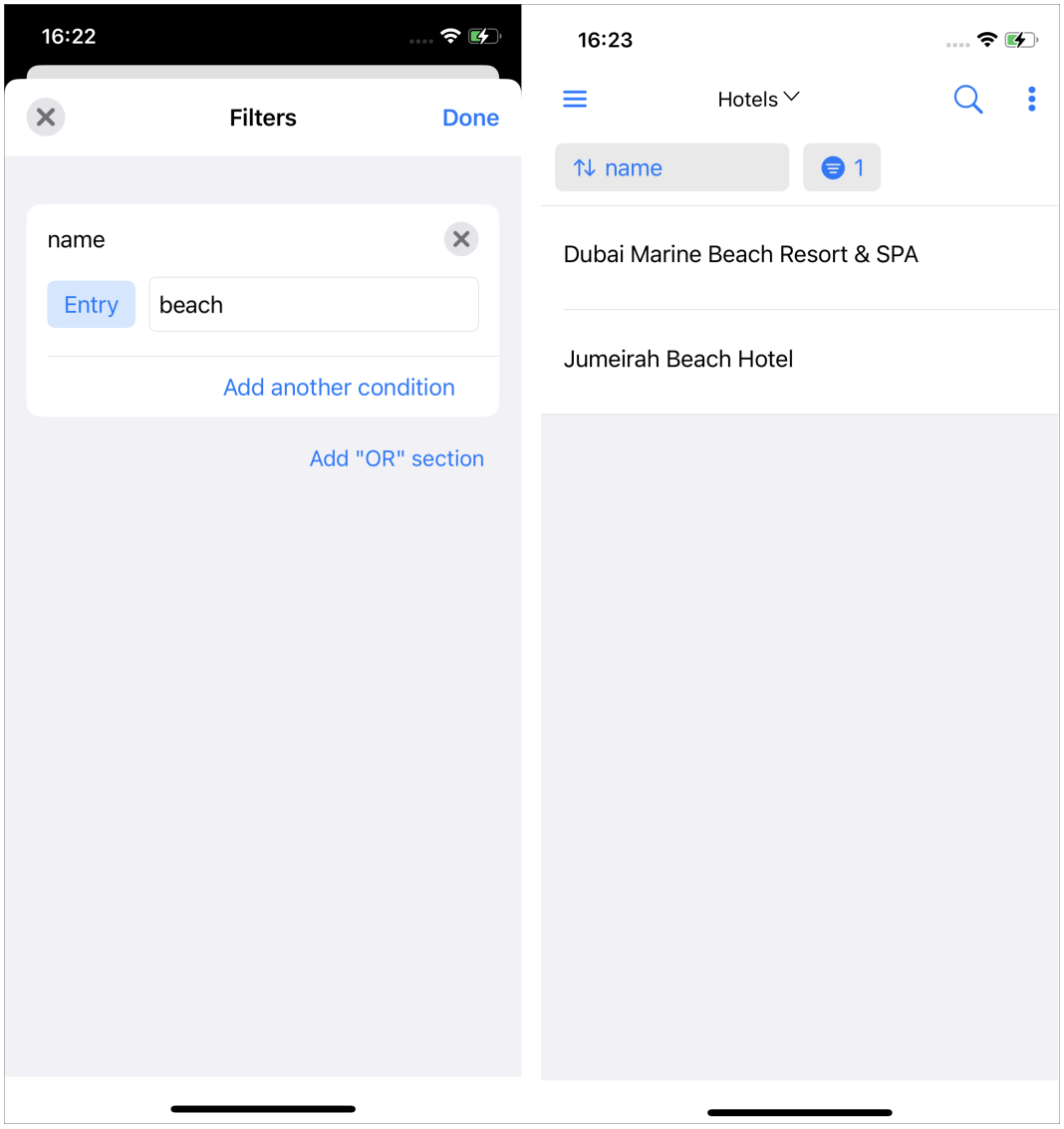



Fig. 2.39: Filling in the filter and the result of applying it

You can select the desired object by tapping it in the object list window. In the window that opens, the name of the object and the layer to which it belongs (Fig. 2.40) are shown. It also displays (if available) photos, links and attached files. In this window, you can fly to the object by clicking at the top of the window. A window with a map showing the object's label will open. To have up-to-date data in the repository for offline work, be sure to download the objects again and repeat the download as needed and update the layer of service objects.

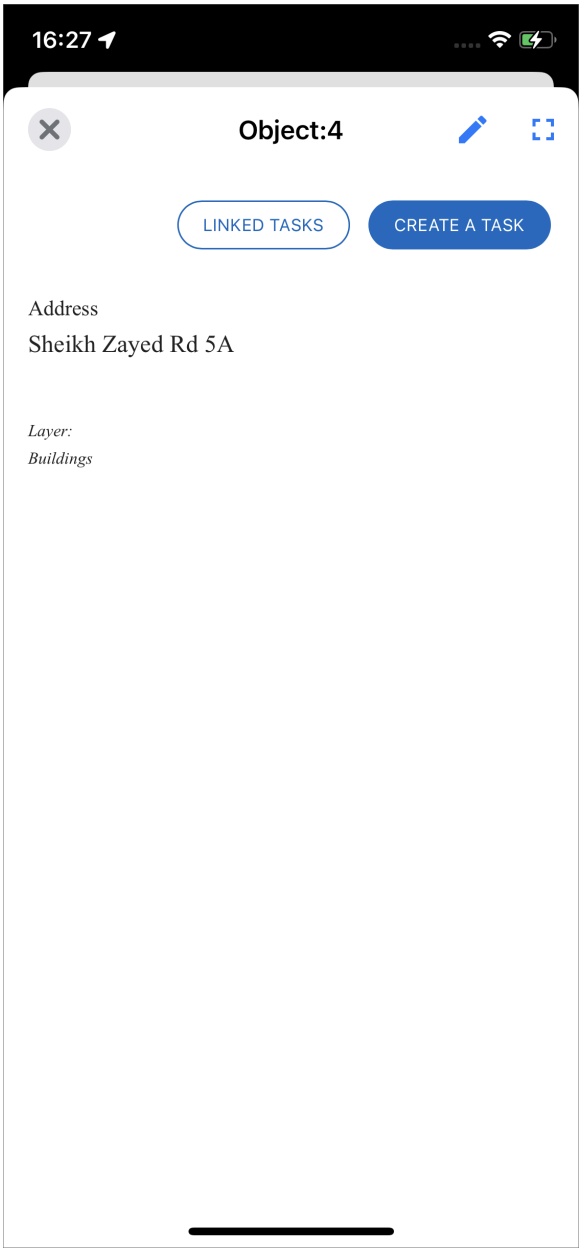



Fig. 2.40: Service object view window

In the object view window you can go to the editing of the service object by clicking  . Editing the service object is done similarly to editing a thematic layer object (Fig. 2.41, more details in *Editing layer objects* (page 67)).

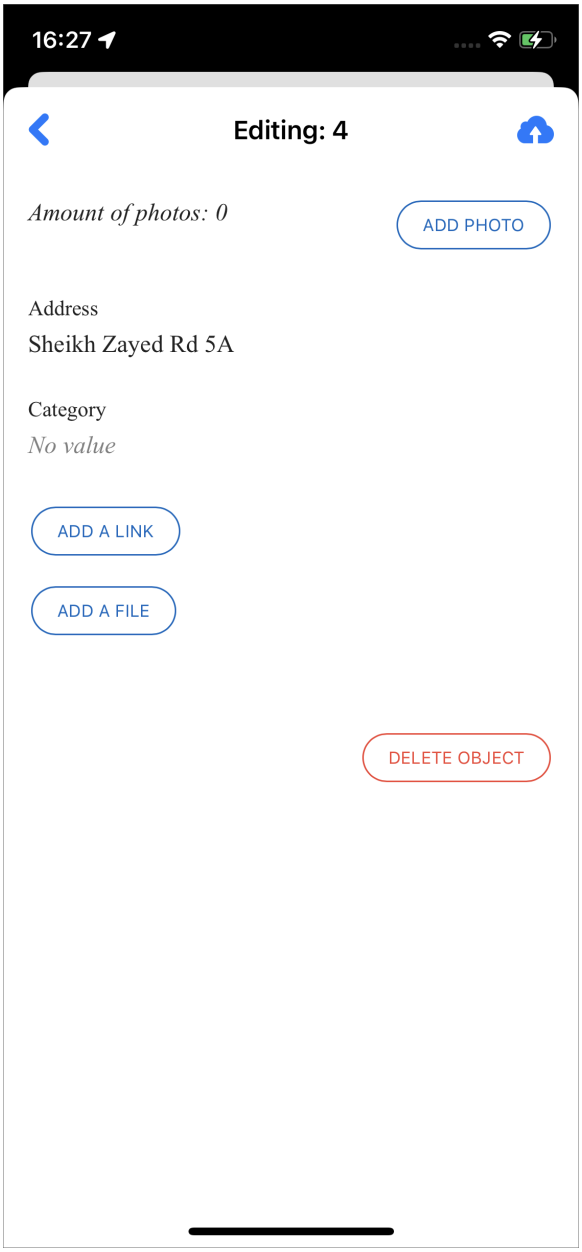



Fig. 2.41: Service object editing window

In the object view window you can view the tasks associated with the service object by clicking “Linked tasks”. The opened window is similar to the task view window (*Task management window* (page 20)) and you can use filters and sorting to search for the desired tasks.

You can also create a related task by clicking “Create Task”. A window similar to creating a task in the “Tasks” section will open, except that the “Service object” field will already be filled with information about this service object.

To create a service object, click + at the top of the service object list window. A new object creation window will open, similar to the thematic layer object editing window (Fig. 2.42, more details in *Editing layer objects* (page 67)). When you open the object creation window, the line with coordinates will contain the inscription “Waiting for geolocation services” and an animated signal search loader will be displayed to the right of the line. After

the user's location is established, the coordinates will appear in the line.

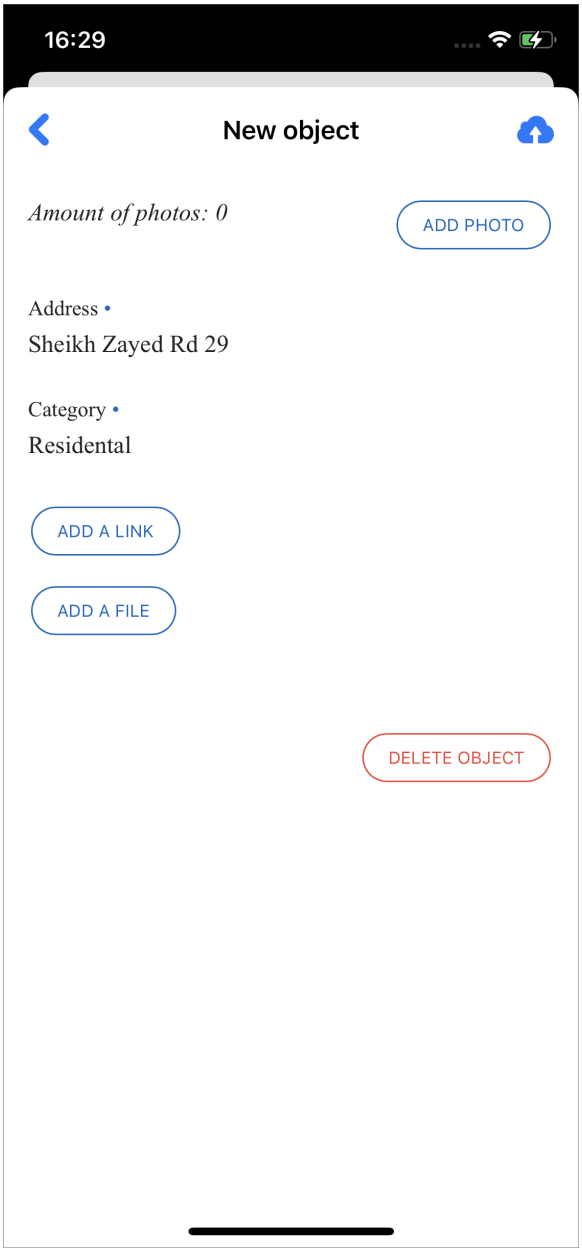



Fig. 2.42: New object window

To cancel creating a service object, click  in the upper left corner of the window, after which the system warning message about unsent changes will appear (Fig. 2.43).

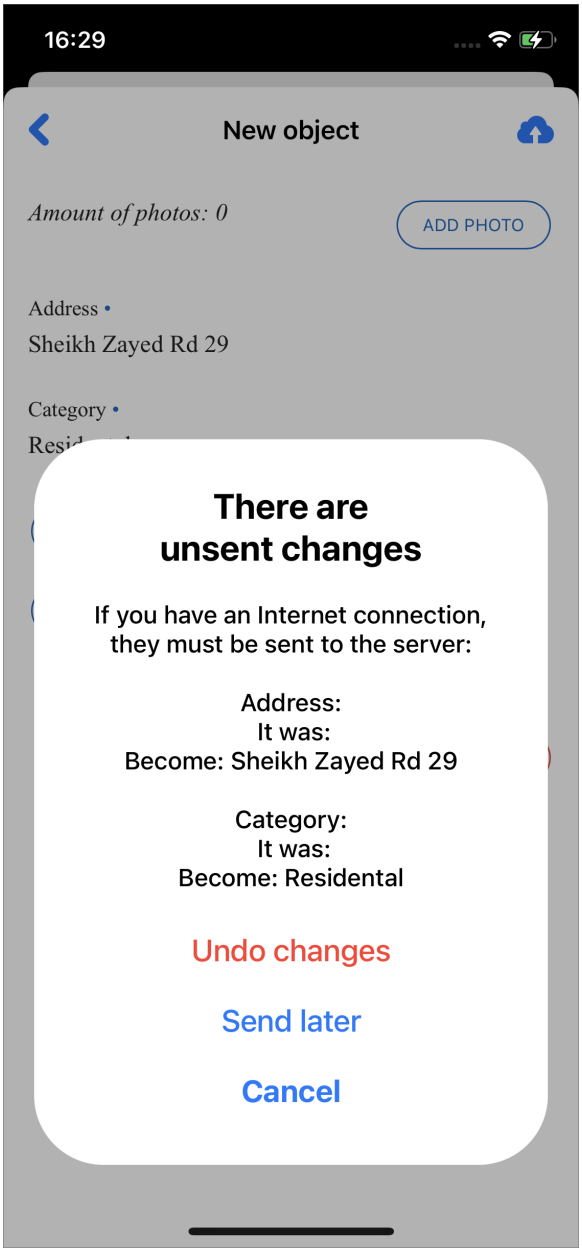



Fig. 2.43: System warning message about unsent changes

Selecting “Undo changes” will close the creation window without saving the changes. If you select “Send later”, the system will create a draft of the object (Fig. 2.44). If you select “Cancel”, the object creation window will become active again and you can continue adding information.

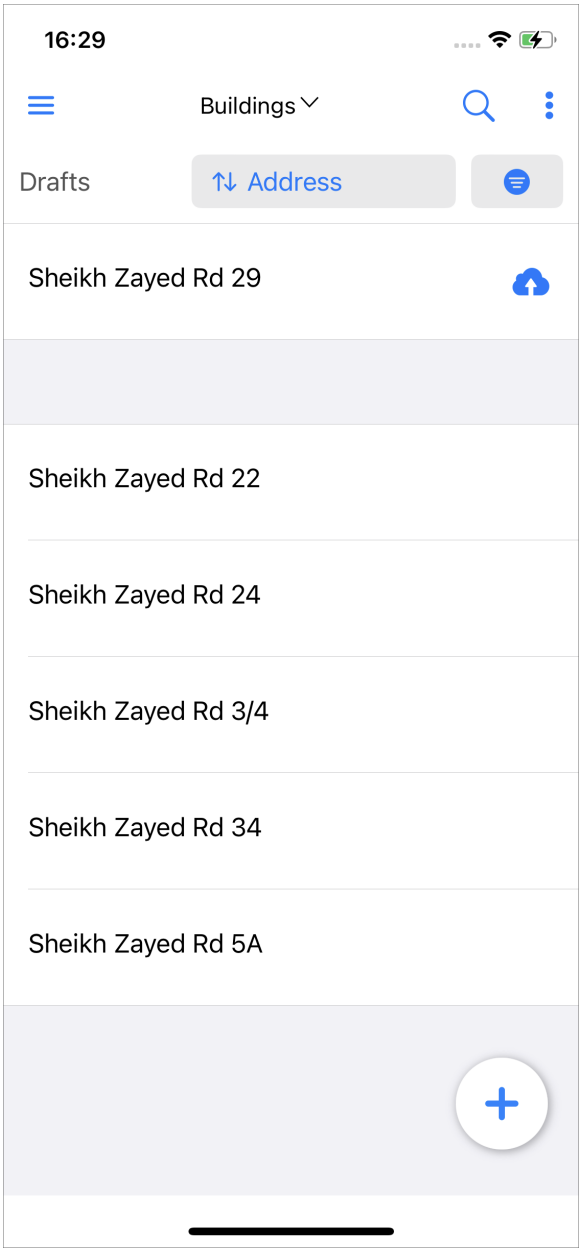



Fig. 2.44: Draft in the list of service objects

If you do not need to make changes to the draft and it is enough to send it to the server (for example, if the object was not sent to the server due to lack of Internet connection), you have to click , located in the draft object string. This will send it without having to open the object window.

If you need to make changes to the draft before sending it to the server, you have to open the object window by clicking on the object line. In the window that opens, fields with changes that were not sent to the server will be marked with a blue dot to the right of the field name. After making the necessary changes, you need to click , located at the top of the window.

To delete a draft, open the object window and click “Delete object” at the bottom of the window.

To delete a service object, open the object view window, click  at the top of the window, then click “Delete object” at the bottom of the opened object edit window.

If the user is working with a downloaded object, a message about the time of the last object download to the cache will appear in the service object view window (Fig. 2.45):

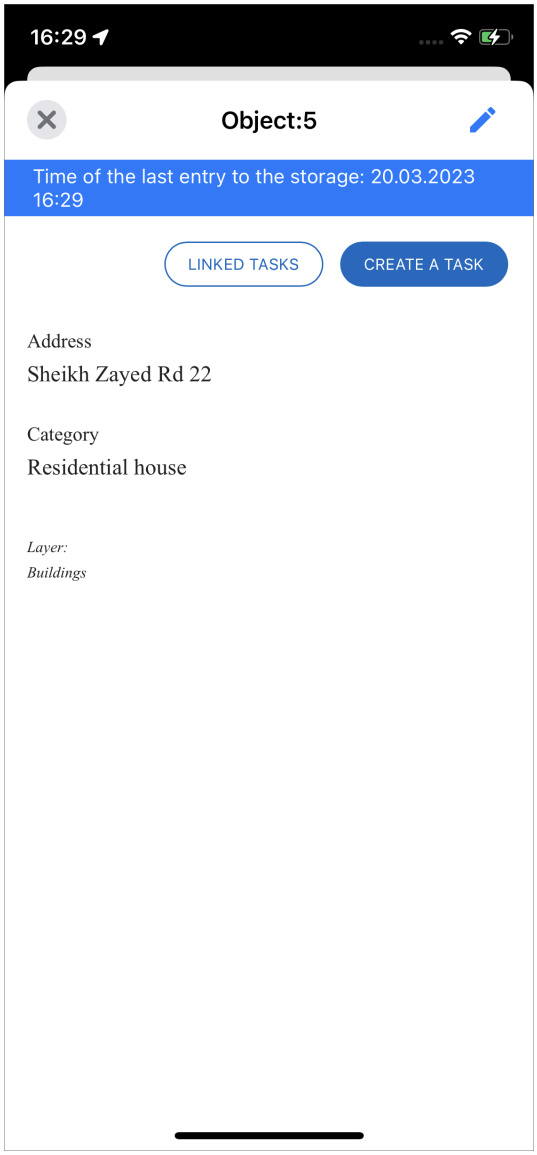



Fig. 2.45: Message about working with the loaded object

## 2.6 Working with the map

### 2.6.1 Managing Layers

#### Working with geospatial data and cartographic information

In addition to georeferencing of tasks, the application offers the following features for working with geospatial data:

- online visualization of geo-referenced data;
- search in the list of information layer objects;
- obtaining cartographic information (list of layers, objects, their attribute data and attached media files at a selected point on the map);
- viewing users' locations.

Selecting "Map" from the side menu of the task management window will take you to the "Map" window, which displays an electronic map of the world. You can change the map scale using the "pinch" and "spread" movements. To navigate the map, use the "drag" movement.

'My Location' button in the top right-hand corner of the Map window lets you fly over the map to your current location (if the location sources on your device have been set up correctly).

#### Viewing Layers

Clicking on "Manage Layers"  in the lower right part of the main Map window opens the map layers management window (Fig. 2.46).


Fig. 2.46: Layer management

The layer management window contains the following elements (Fig. 2.47):

- 1 - layer groups,
- 2 - layers,
- 3 - search box,
- 4 - setting the display of all or only included layers,
- 5 - sorting settings,
- 6 - window menu.

The number of layers is displayed under each layer group. Clicking on the group name displays the list of group layers.

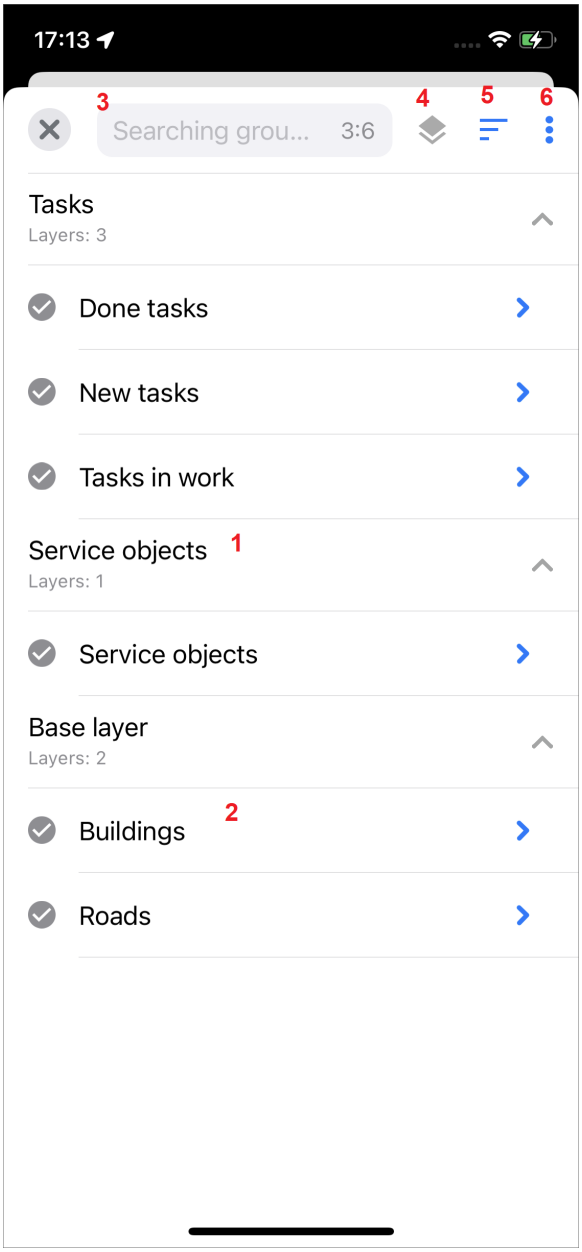



Fig. 2.47: Map layers management window

To search for a layer, simply enter the name or part of the name in the search box. In the list of layer groups, the number of layers satisfying the specified search conditions will be displayed at the bottom of each group name. In groups with non-zero found layers, clicking on the line with the group name will show a list of layers (Fig. 2.48).

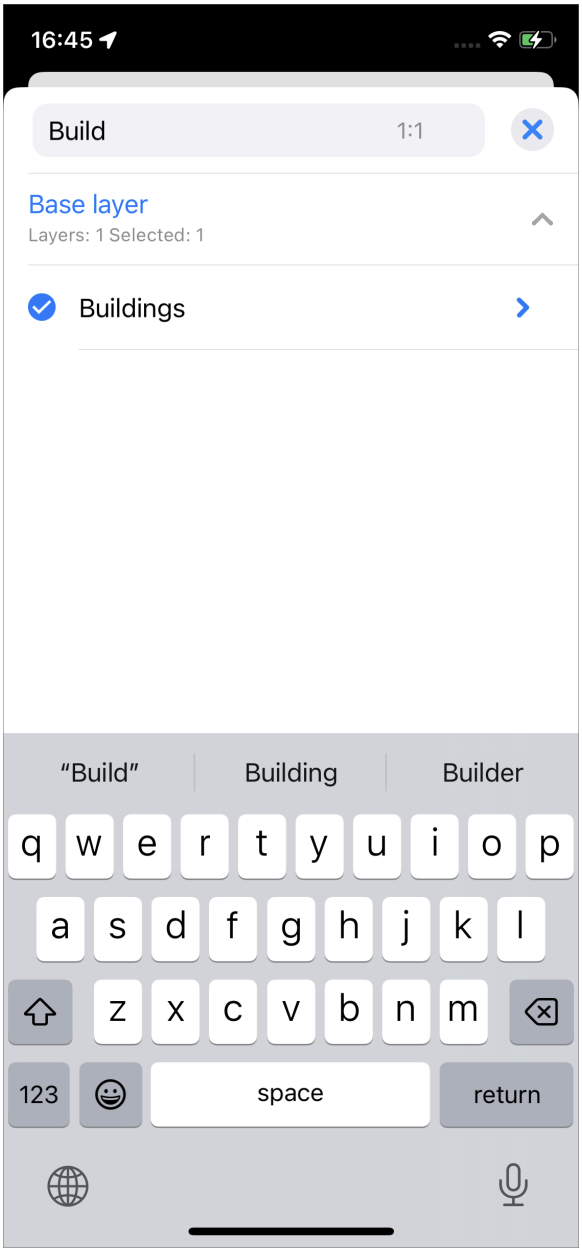



Fig. 2.48: Searching for a layer in the map layer management window

The row of each layer contains the following elements:

- name of the layer,
- layer visibility control field,
- arrow to go to the window of layer objects.

To display layer objects on the map, check the layer visibility control. The layer objects will be displayed on the map, but their visibility area and map scale will not change - they will be the same as they were before the layer's visibility was switched on. To navigate to the layer, go to the list of layer objects by clicking the arrow on the left side of the layer row, and then click  at the top of the window. This will display all the layer objects on the map, automatically selecting the map area and scale required to make all the objects in the selected layer visible.

### Viewing layer objects

To view information on layer objects, go to the layer object list window by clicking on the arrow in the right part of the layer line. In this window (Fig. 2.49), you can search for objects, fly to the layer on the map, sort and filter (works similarly to service objects, see details in *Working with service objects* (page 45)).

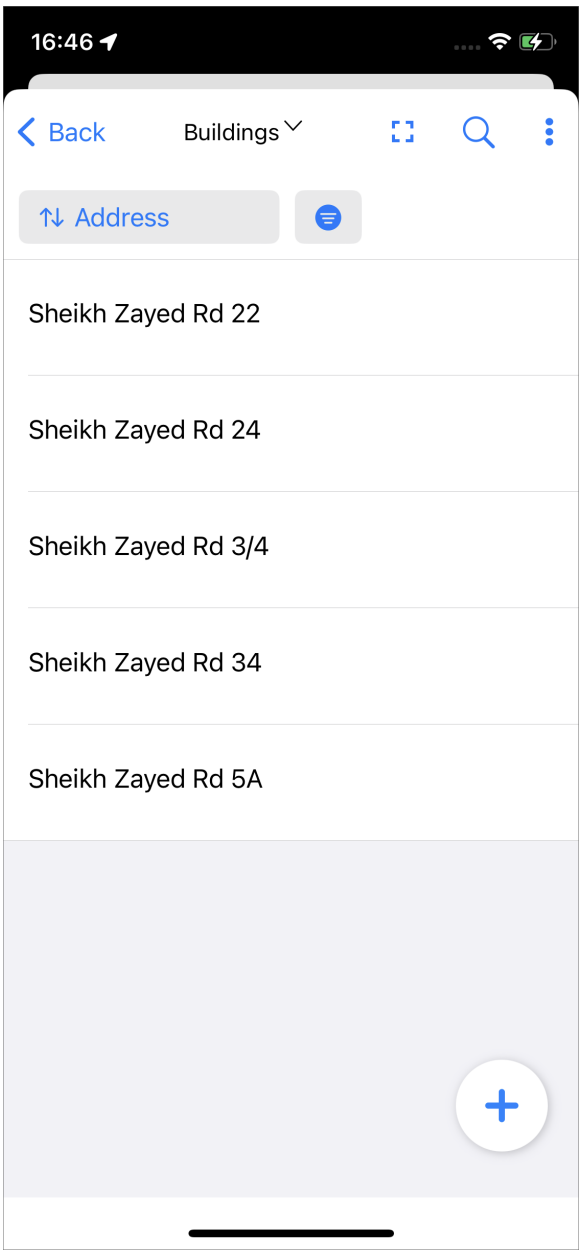



Fig. 2.49: Layer object list window

To view information about an object from the list, click on it. The "Object view" window will open, containing attribute information about the selected object. To obtain cartographic information (a list of layers, objects, their attribute data, and media files) at the selected point on the map, mark the point on the map by tapping it. The "Object view" window with a list of layers and objects that are in the designated point on the map will be displayed (Fig. 2.50). This window also contains information about the number of layer objects in the selected point. To obtain detailed attribute information about the object, select the object in

the list by tapping it. The “Object view” window containing attribute information about the selected object will open (Fig. 2.51).

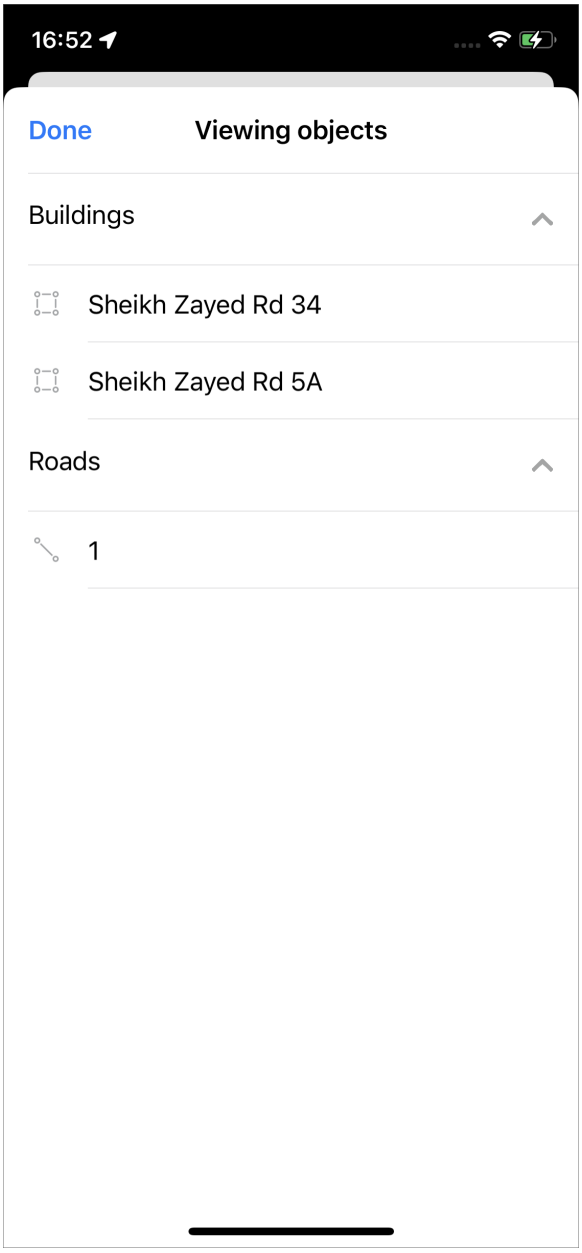



Fig. 2.50: Window of the list of objects at a selected point on the map

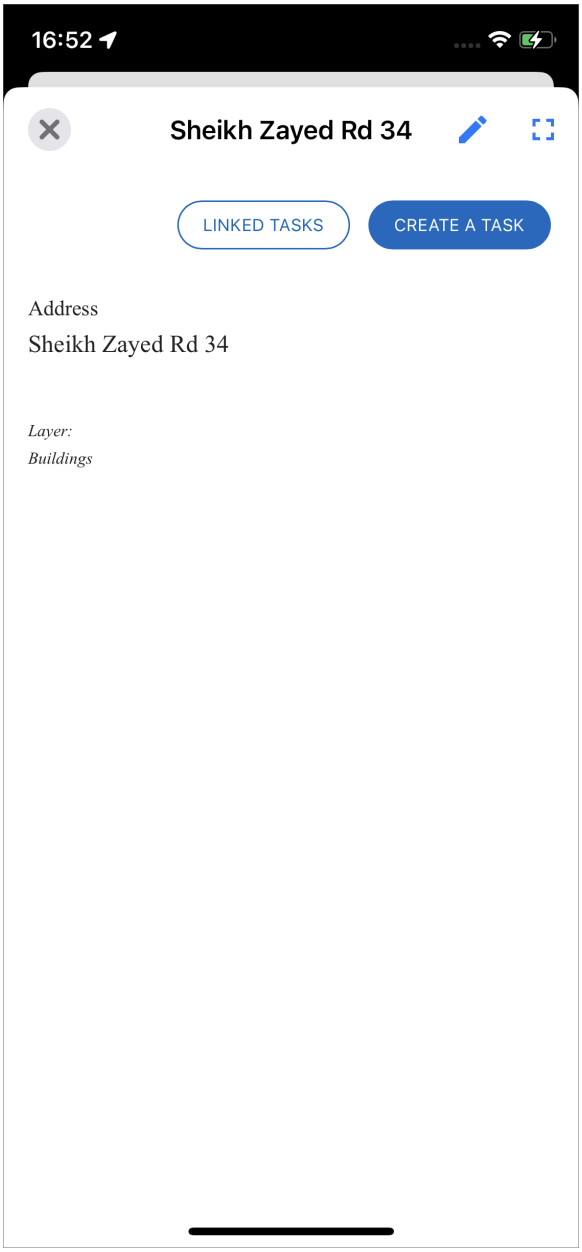



Fig. 2.51: Object view window

The following actions can be performed in the object view window:

- viewing information about the object;
- viewing tasks linked to the object;
- creating a related task;
- flying over the object on the map;
- editing the object.

Clicking on “Related tasks” opens a window similar to the task list window, which shows tasks associated with the object. You can sort and filter them, similar to the task list. To create an associated task, click on “Create a task”. A window similar to the task creation window will open, where you need to fill in the fields, attach media files and click “Create”.

Coordinates will be taken from the object connected to the task.

To fly to the object on the map, click  . The object location view window will open (Fig. 2.52). In this window you can zoom in and out with the “pinch” gesture (spread/pinch your fingers), go to the sidebar menu, fly to your location, and return to the object view window by clicking “Return to object.”


Fig. 2.52: Object location view window

### Editing layer objects

To edit an object, click on  in the object view window. The object edit window (Fig. 2.53) opens.

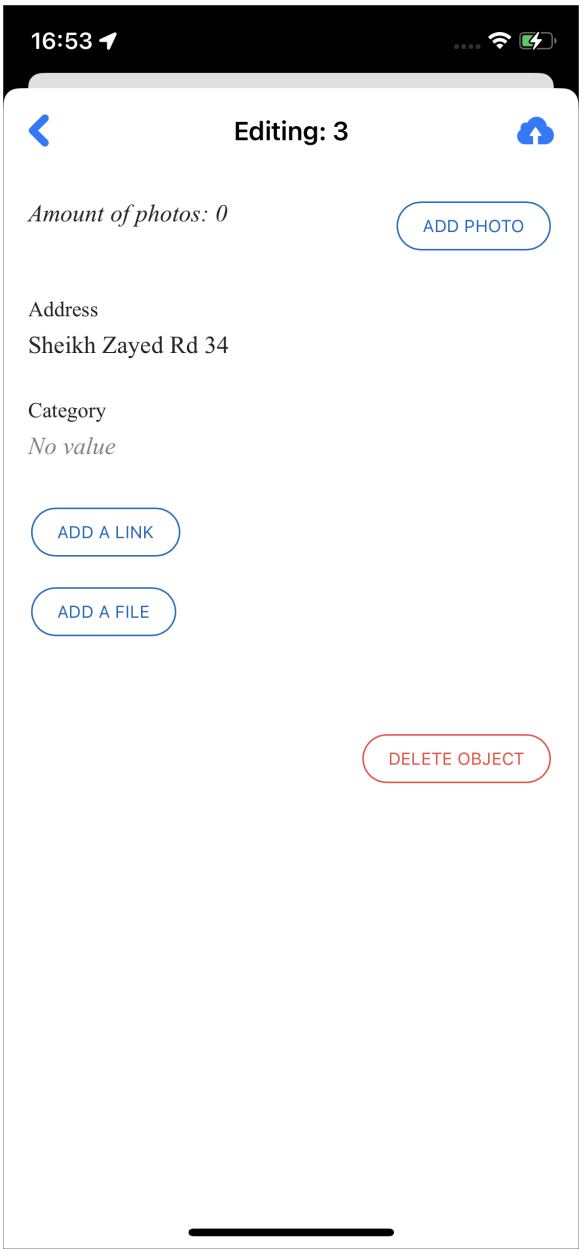
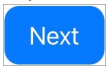



Fig. 2.53: Object editing window

In this window you can edit the information of the object by clicking on the relevant field. This will bring up the field editing window (Fig. 2.54). In this window you can correct or re-fill the field and move to the next field by pressing  without exiting the field editing mode or go back to the previous field by pressing  . When you have made all necessary changes, press “Done”. To exit the field editing mode without saving changes, press  .

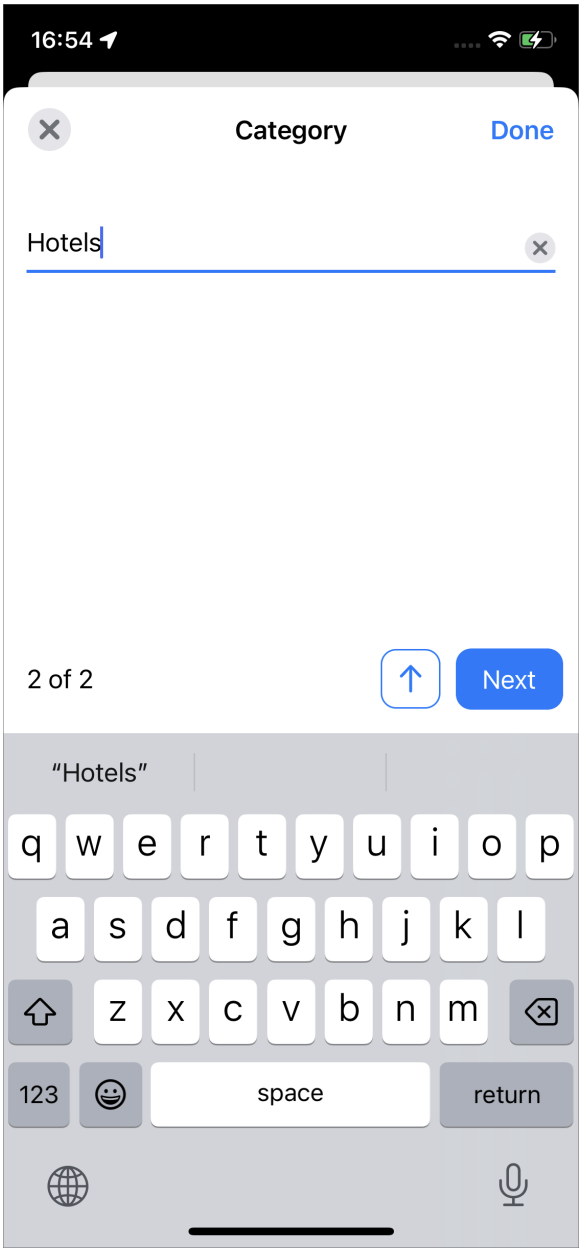



Fig. 2.54: Object field editing window

You can also add a photo in the object editing window. To do that, click on "Add photo" and a camera will open. Once you take the picture you should click "Use photo" or "Reshot". To delete the attached photo, press on its preview.

Clicking on "Add Link" opens a form where you have to enter the address of the link and fill in the "Description/Title" field (Fig. 2.55). Then click "Add link", after which the link will be displayed in the object viewing window under the name entered in the form. To delete a link, click to the right of its name in the object editing window.

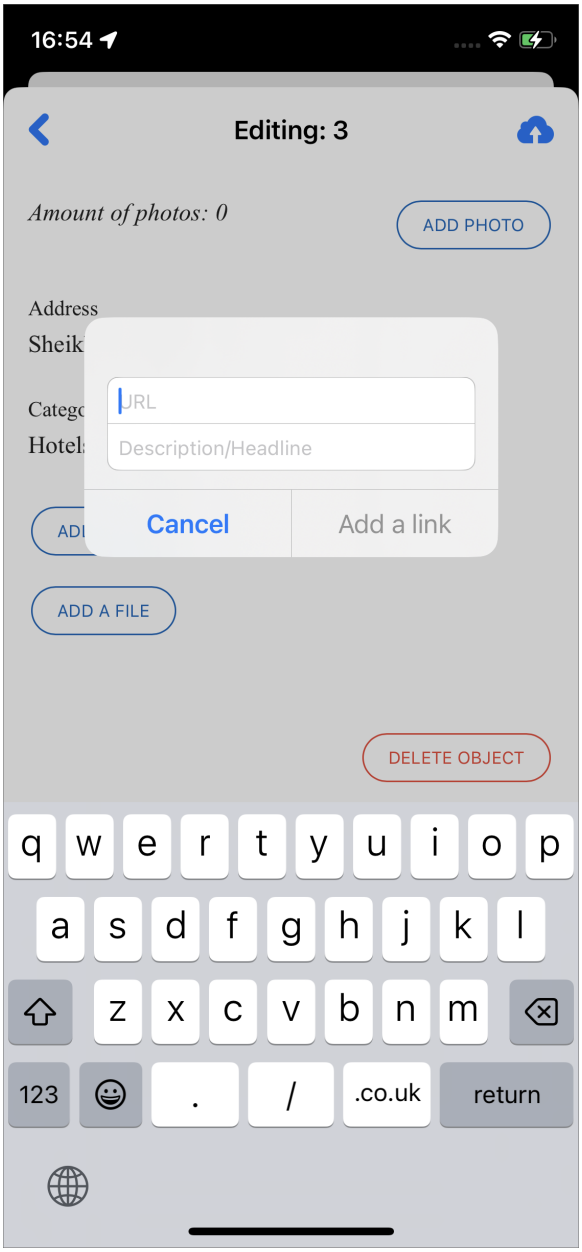



Fig. 2.55: Link adding form

Clicking on “Add a file” opens a window where you can select a document (Fig. 2.56). To attach a document to an object, just tap on it. The file manager will close itself and the attached document will be displayed in the object editing window. To delete a document, click to the right of its name.

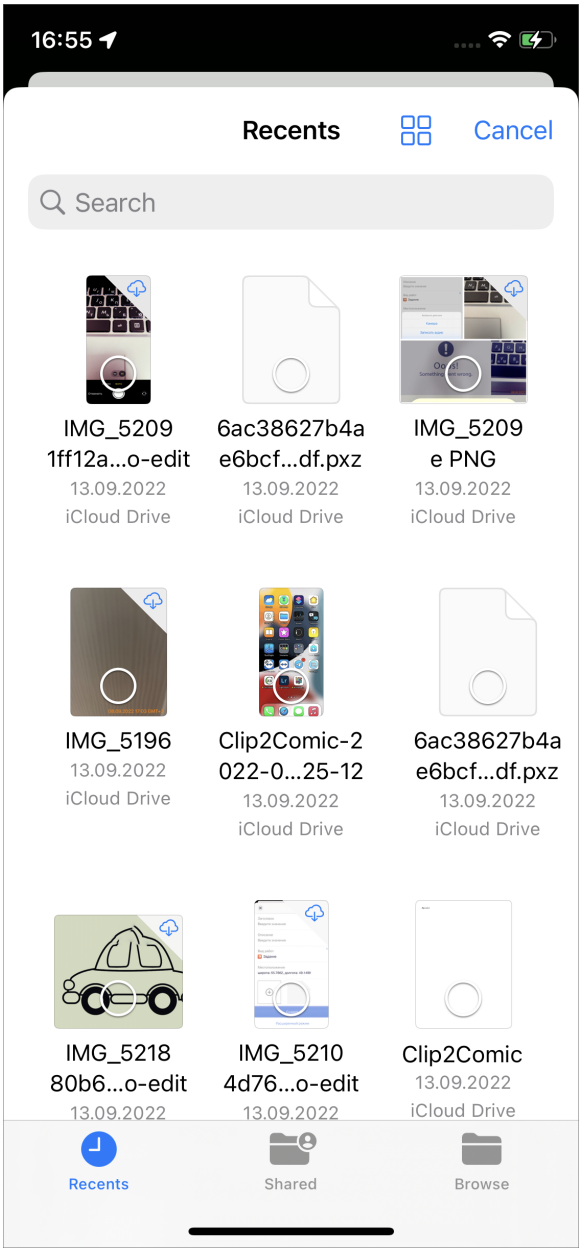



Fig. 2.56: Window for selecting the document to be attached to the object

After making all necessary changes in the object editing window, click  to synchronize the changes with the server. After a successful synchronization, the editing window will close and the object viewing window will be active.

### 2.6.2 User management

#### Viewing users and their movements

The map displays where employees are currently located, provided that the users have GPS monitoring enabled and access to the Internet. If user is offline or monitoring is disabled, the last known coordinates are displayed (Fig. 2.57). Viewing users is available to users with administrative roles (inspectors, administrators). Users with other roles can only track their own movements. This feature allows monitoring of employee movements in real time, viewing their movement history and obtaining the following information about a user: movement speed, battery level, time of last data transmission, distance, number of assigned tasks in progress, organization membership, system role, account data and connection status.

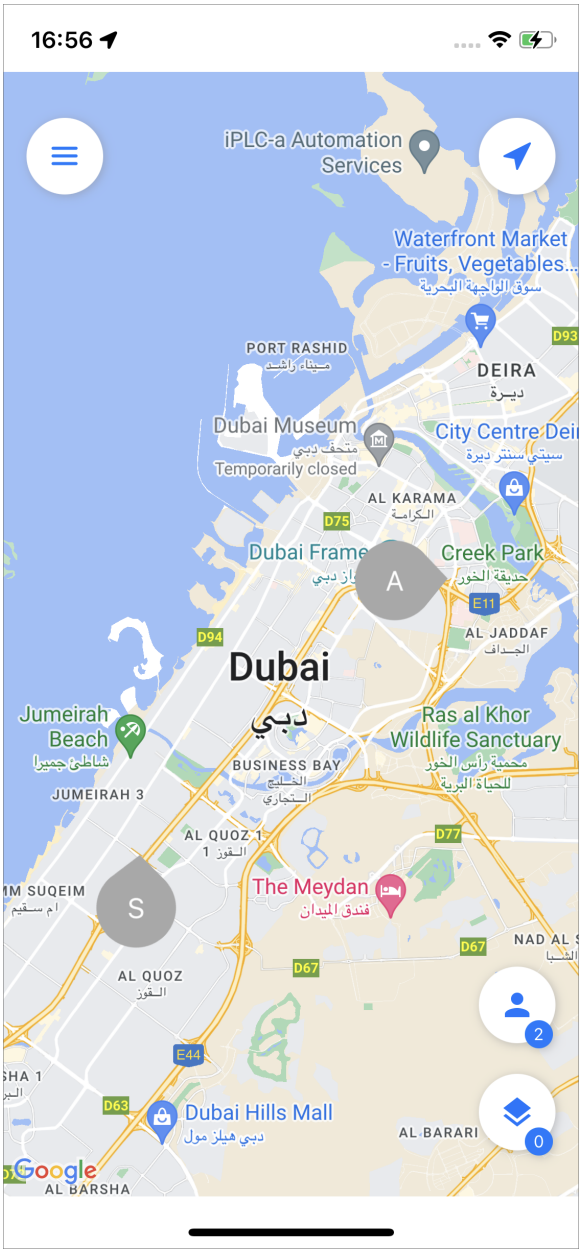



Fig. 2.57: User location map

User icons on the map change color depending on when the position data was last sent to

the server. Changing the activity intervals of the last transmitted data is done in the settings of the “Users” system layer in the ActiveMap Web web system. By default, the following intervals are set:

- green color - coordinates sent to the server less than 15 minutes ago,
- orange color - coordinates sent to the server less than 60 minutes ago,
- red color - coordinates sent to the server less than 24 hours ago,
- gray color - coordinates are missing for more than 24 hours.

To change the list of users on the map or to see the location of a specific employee, click on 

. The button also shows the total number of authorized users on the server. A list of users available for viewing under the current account and filtered by activity interval will open (Fig. 2.58). The following information is presented here:

- time elapsed since the last user activity,
- avatar colored according to activity intervals and battery level,
- login,
- organization, role and labels.

The toggle on the right allows hiding users on the map with the corresponding activity status. The same window also contains filtering/sorting tools. To return to the map, close the list of users with  .

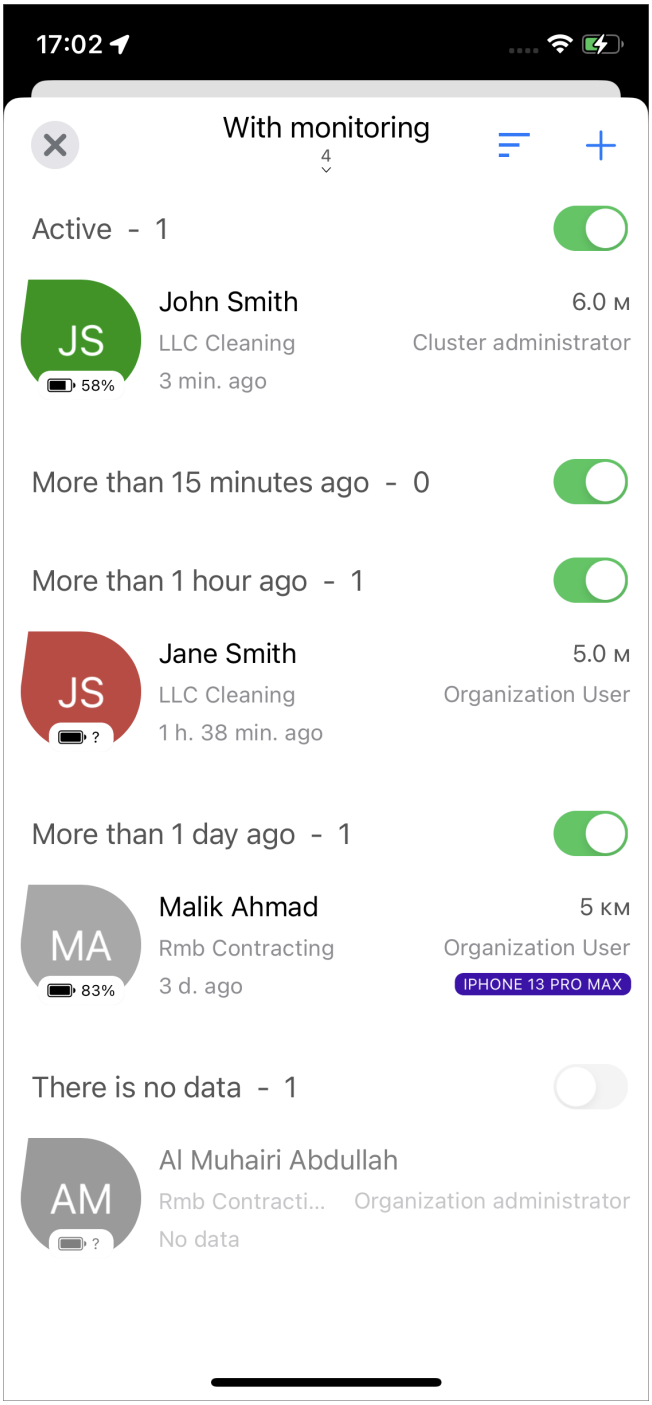



Fig. 2.58: List of users

The default sorting is by last activity time, but sorting by name and distance from the current location is also available.

Clicking on a filter opens a list of available filters (Fig. 2.59):

- User type (vehicle, person),
- User tag,
- Creator-Organization,
- Is in the organization,

- Role in the system,
- Users name,
- Users Login,
- User ID,
- Monitoring (with monitoring, without monitoring).

In addition, a quick filter is available, which replaces the values of all filter fields with preset values:

- All,
- With monitoring,
- Members of my organization.

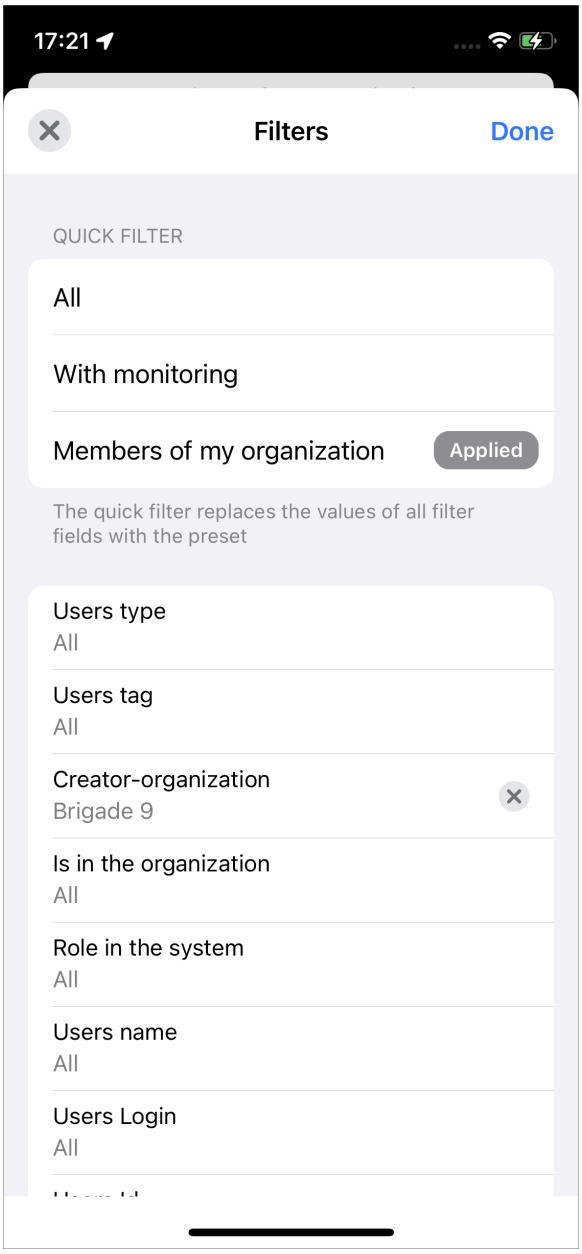



Fig. 2.59: User filter

Clicking on any entry in the list opens a user card with information about the user and his/her location on the map (Fig. 2.60). The user information window shows avatar, user type, login, battery level, movement speed, distance to the current user, role and organisation, labels and number of tasks in progress, and last authorisation time. From this window you can view the user's track if you click on the track icon in the upper right corner. The window for viewing user's movements is similar to the track window in the profile card (*Account management and roles in the system* (page 13)). Here you can also generate and send a link to invite the user to the app.

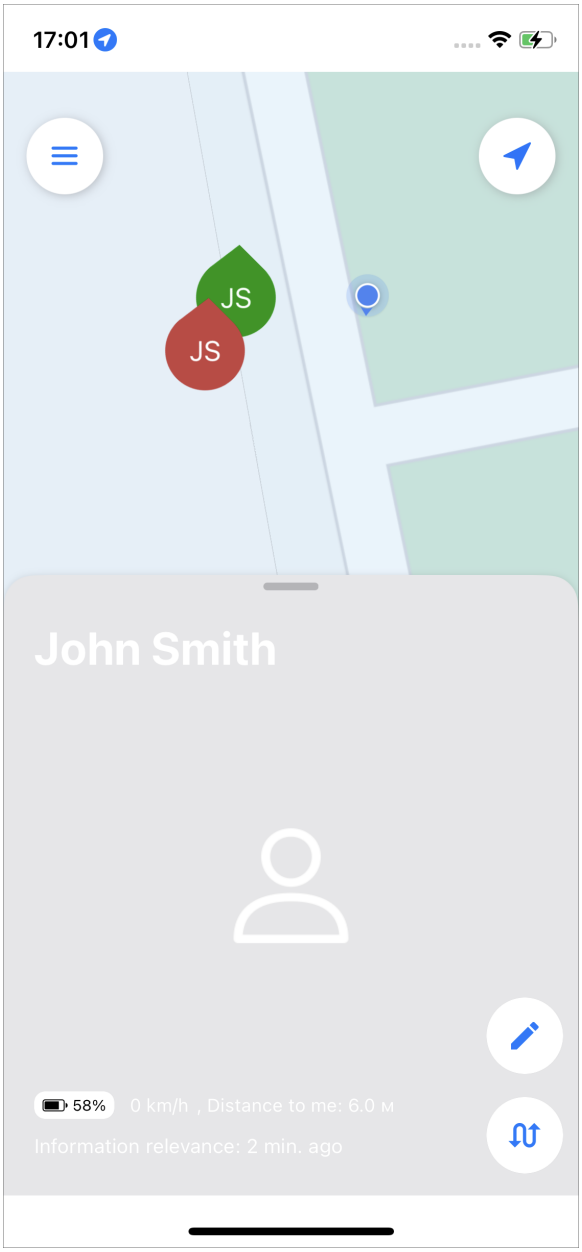



Fig. 2.60: User card

### Creating Users

To create new users, go to the navigation menu *Map* → *User management* and click on the button to create a new user (Fig. 2.61). This functionality is not available for all user roles.

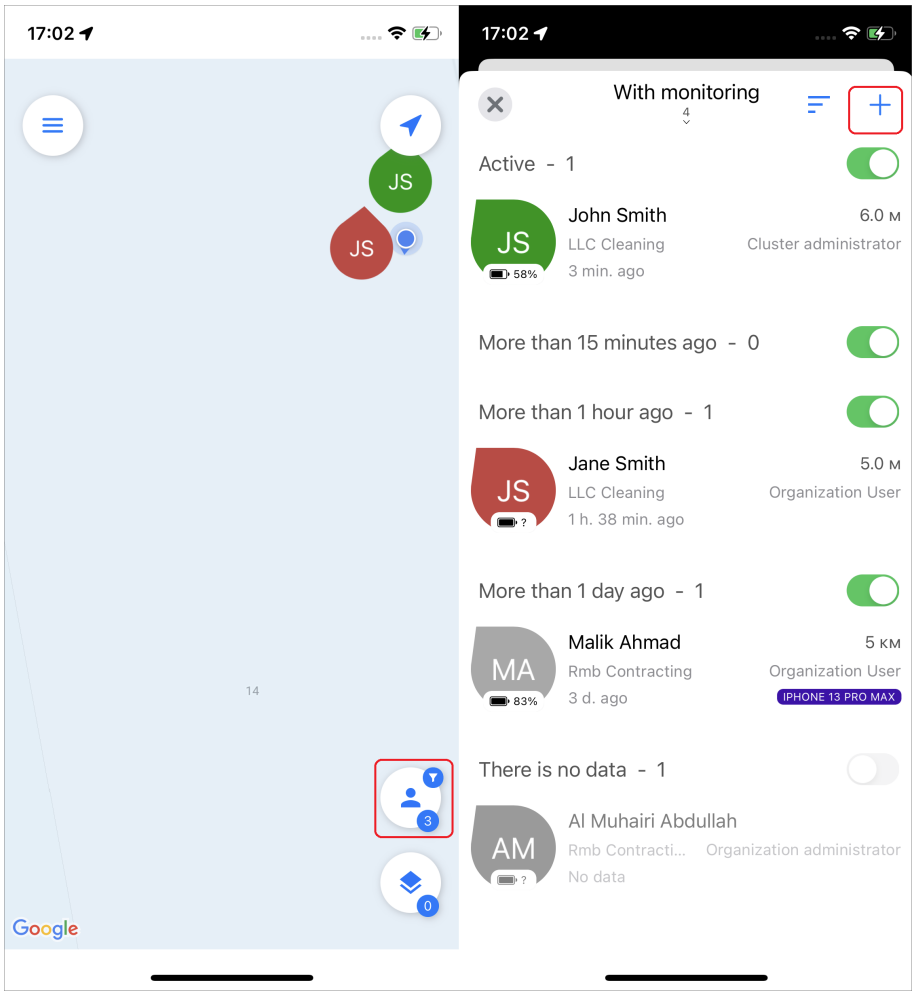



Fig. 2.61: Adding a new user

In the opened window fill in the data and click “Apply” (Fig. 2.62):

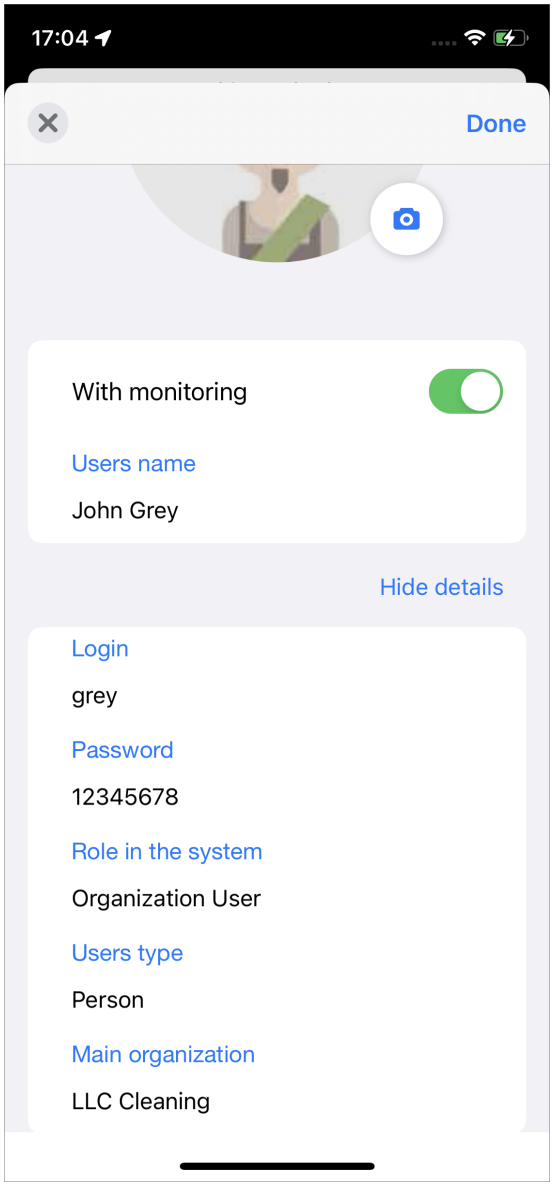



Fig. 2.62: Filling in information about a new user

A new user will appear in the system. To send a link to an employee, you have to go to his/her profile, generate a personal link and send it to the employee via any convenient messenger (Fig. 2.63). The link can be created for any registered user an unlimited number of times.

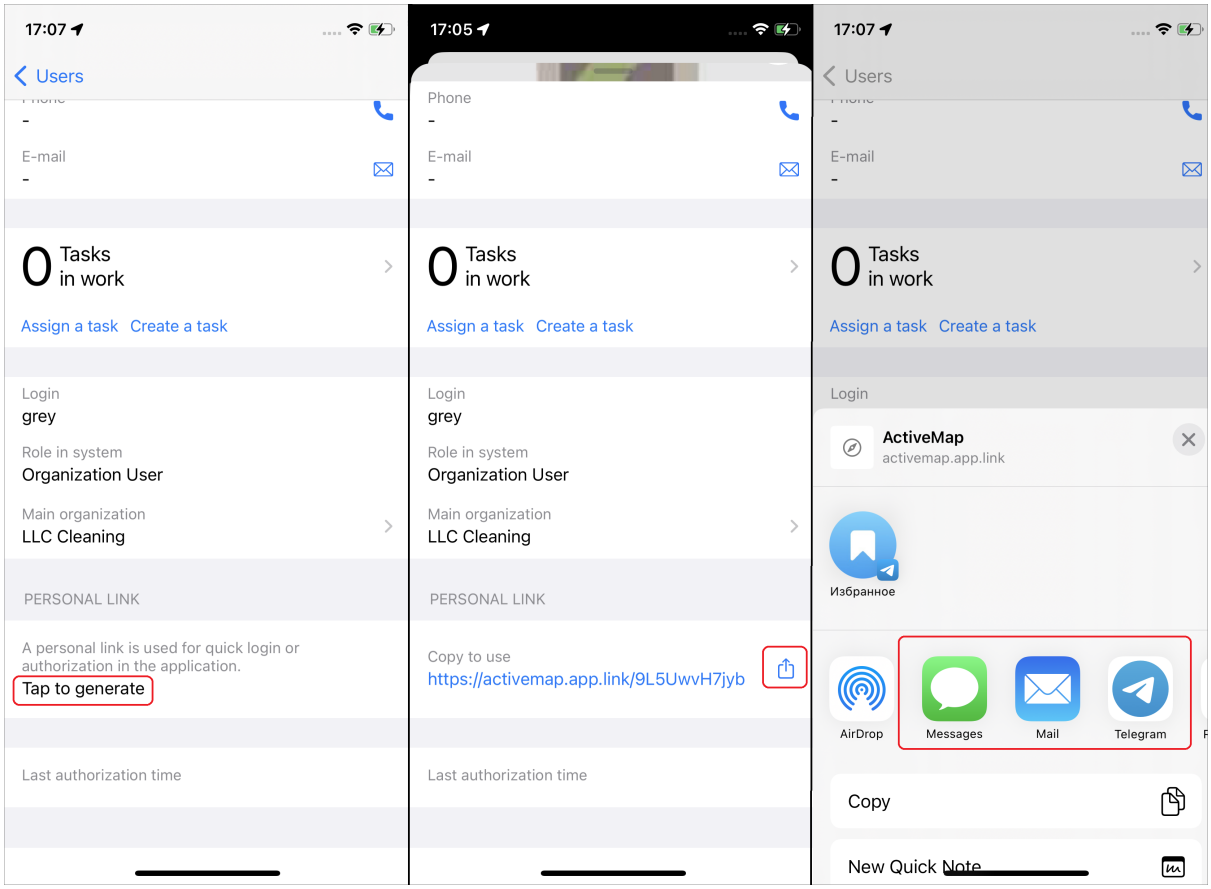



Fig. 2.63: Creating and sending a link for a new user

The user who received the link will open it and immediately authorize in the application if the application is installed on their device. If the application is not installed, then the link will open in the App Store and authorization will occur after installing the application.

---

**Tip:** If the new user does not appear in the user list, you need to change the user filter to "All". When a user is created, location monitoring is not turned on automatically. To see a new user on the map, you have to enable monitoring on ActiveMap Web.

---

### Managing user accounts

If you need to make changes to user profiles, you have to find the user in the navigation side menu *Map* → *Manage Users*  . Find the user by using the filter options. Click on the user, his/her account card will open. Next click on edit profile  , make changes and click "Apply". The profile of the current user can be accessed from the navigation side menu (*Account management and roles in the system* (page 13)).

The application provides functions for locking and deleting users. These functions are not available to all user roles. To lock a user, you need to find the user in the side navigation menu section *Map* → *Manage Users*  . Find the user using filter parameters. Click on

the user, his/her account card will open. Next, click on “Edit Profile” , scroll down, click “Lock” and confirm your action (Fig. 2.64). The user will disappear from the list of users in the application and will not be able to authorize in the application. The user can only be unlocked in ActiveMap Web.

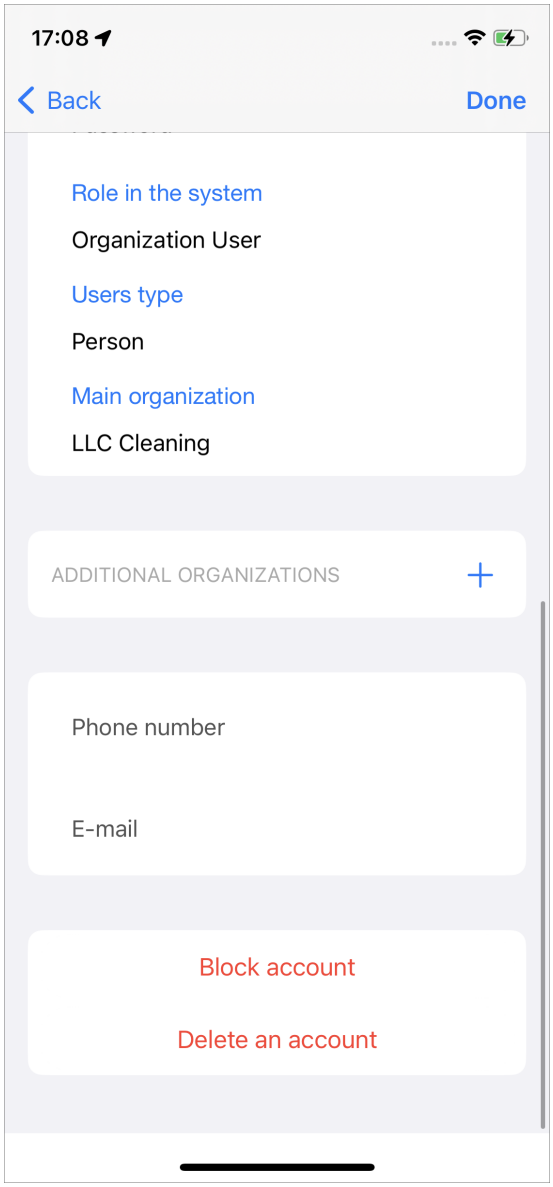



Fig. 2.64: Editing user’s profile

To delete a user, you have to find the user in the side navigation menu *Map* → *Manage Users* using the filter options. Click on the user, his/her account card will open. Next click on edit profile , scroll down, click “Delete” and confirm your action (Fig. 2.64).

## 2.7 Working with schedules

This section is available under administrative roles (all administrators and inspectors), which allow creating planned tasks.

If you select the “Schedules” section in the side navigation menu of the task management window, you will be taken to the created schedules. To create a new schedule, click on the “+” (Fig. 2.65) in the upper right corner. Enter the name and select the organization in the schedule creation window (Fig. 2.66).

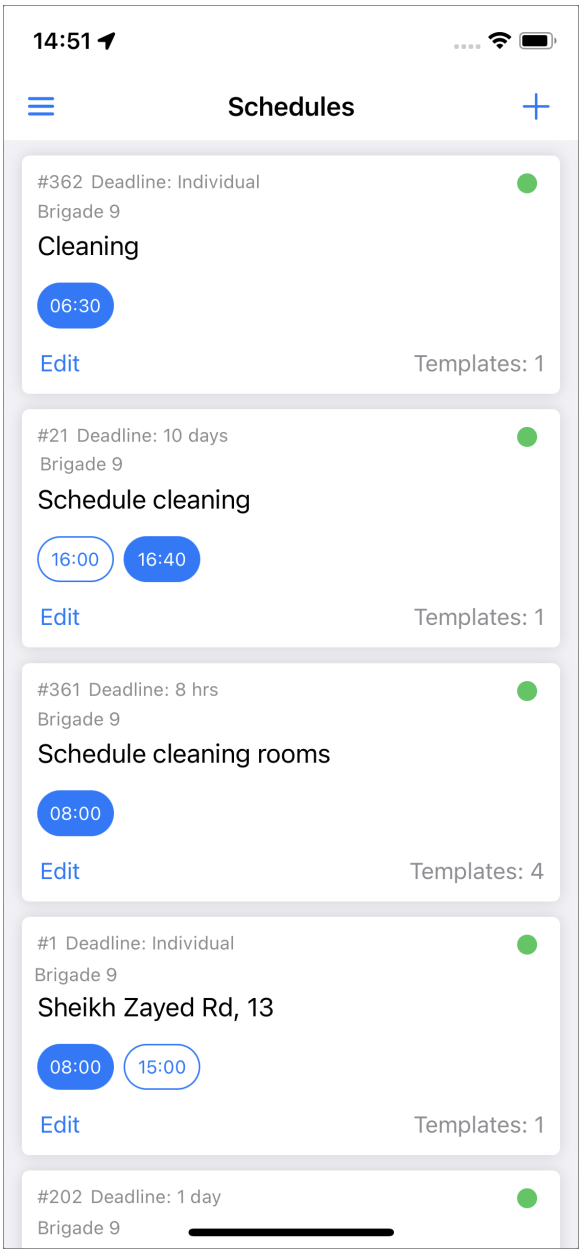



Fig. 2.65: Create new schedule

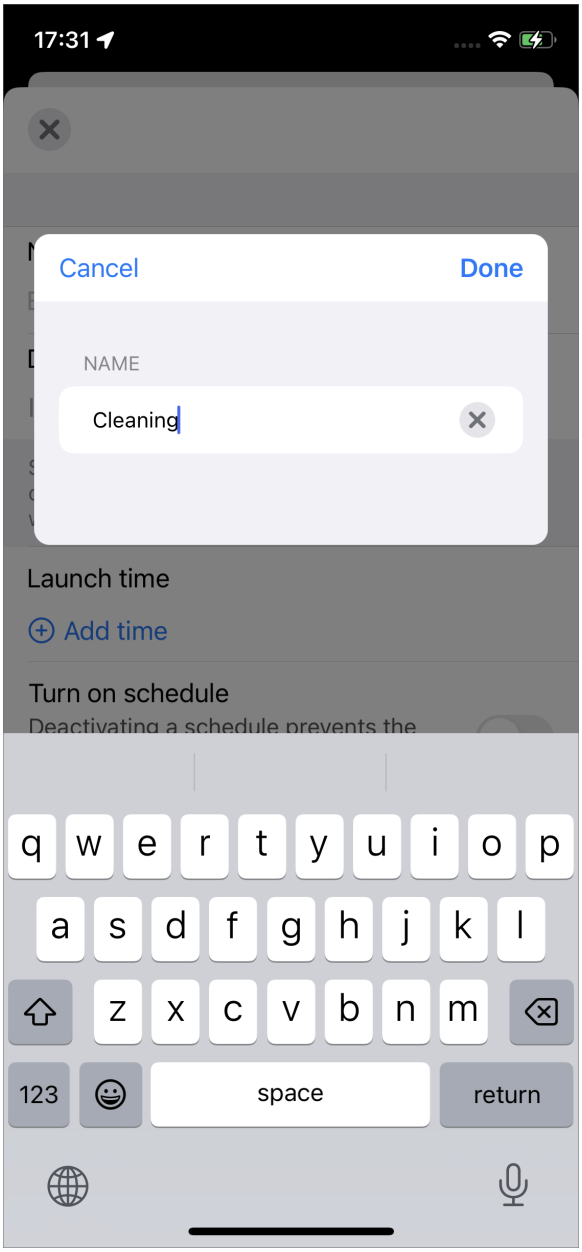



Fig. 2.66: Creating a schedule

In the editing window of both new and existing schedule, you can:

- create and attach a task template;
- set the deadline for tasks (Fig. 2.67);
- set the time and date for starting the schedule;
- deactivate and activate the schedule or delete it (Fig. 2.67).

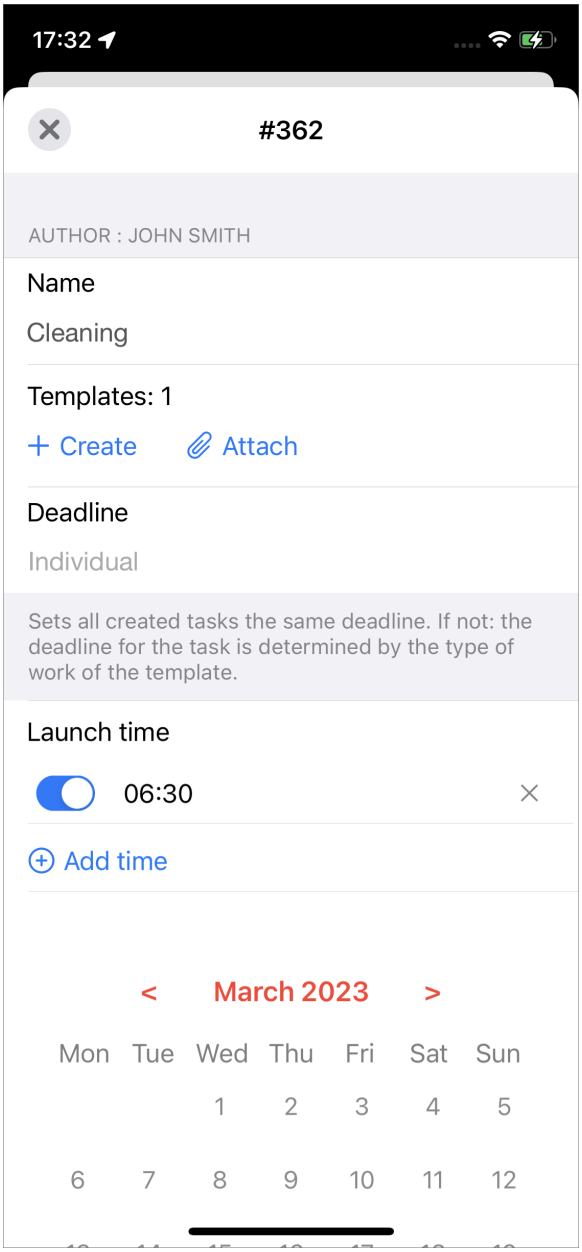



Fig. 2.67: Schedule card

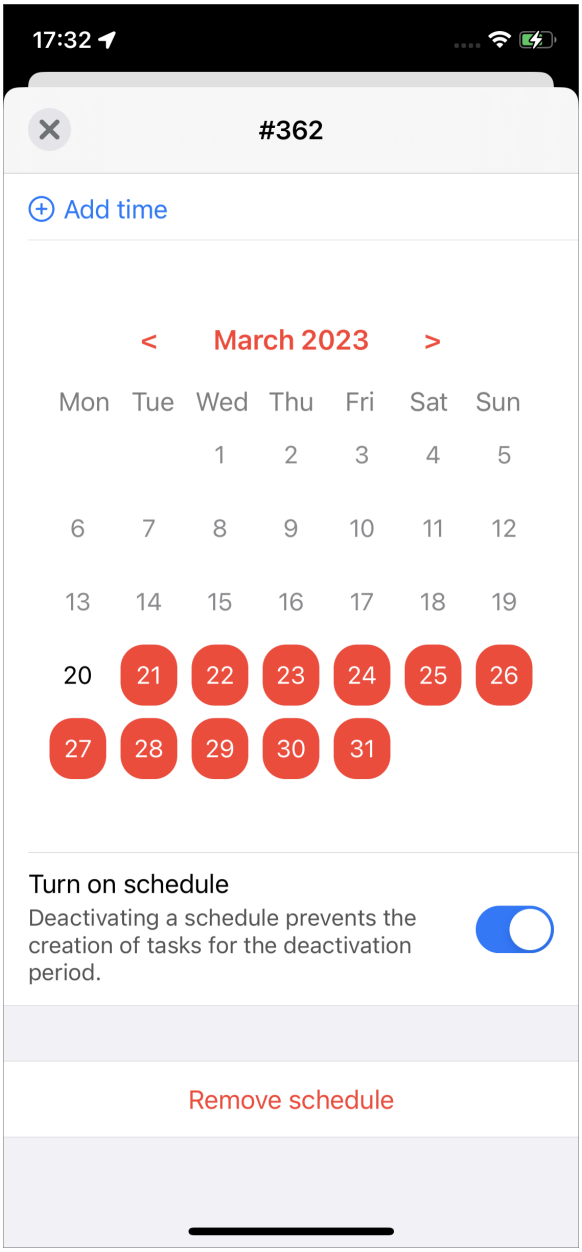



Fig. 2.68: Calendar and launch times

## 2.8 Working with reports

The application provides the ability to work with reports. To generate reports, select the "Reports" section from the navigation side menu. (Fig. 2.69).

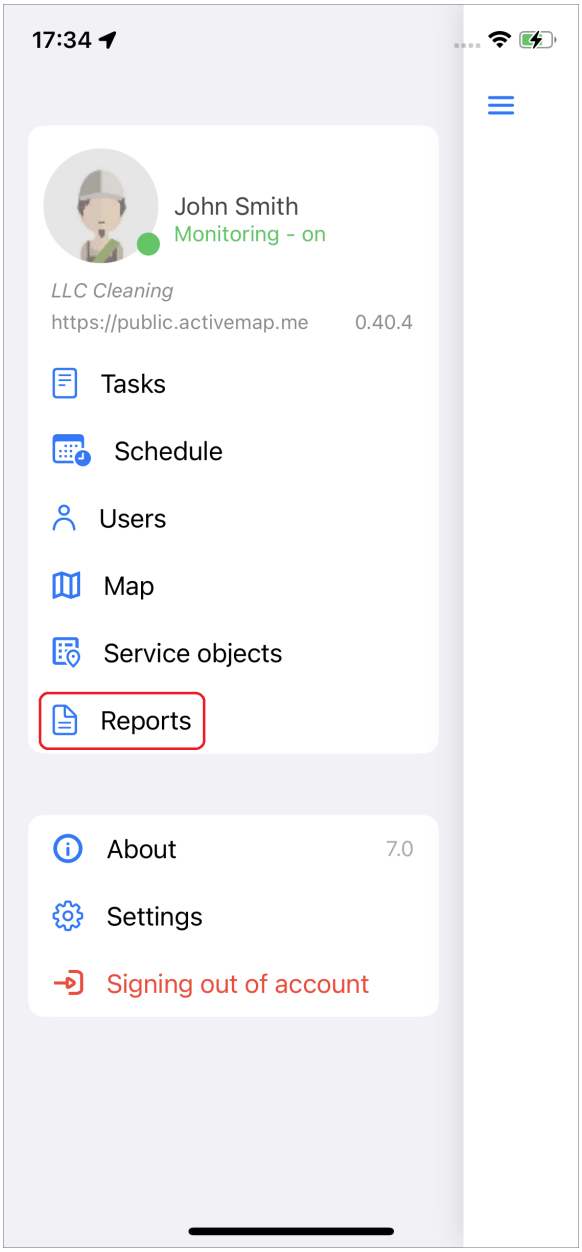



Fig. 2.69: Reports menu

The list of available reports will open (Fig. 2.70).

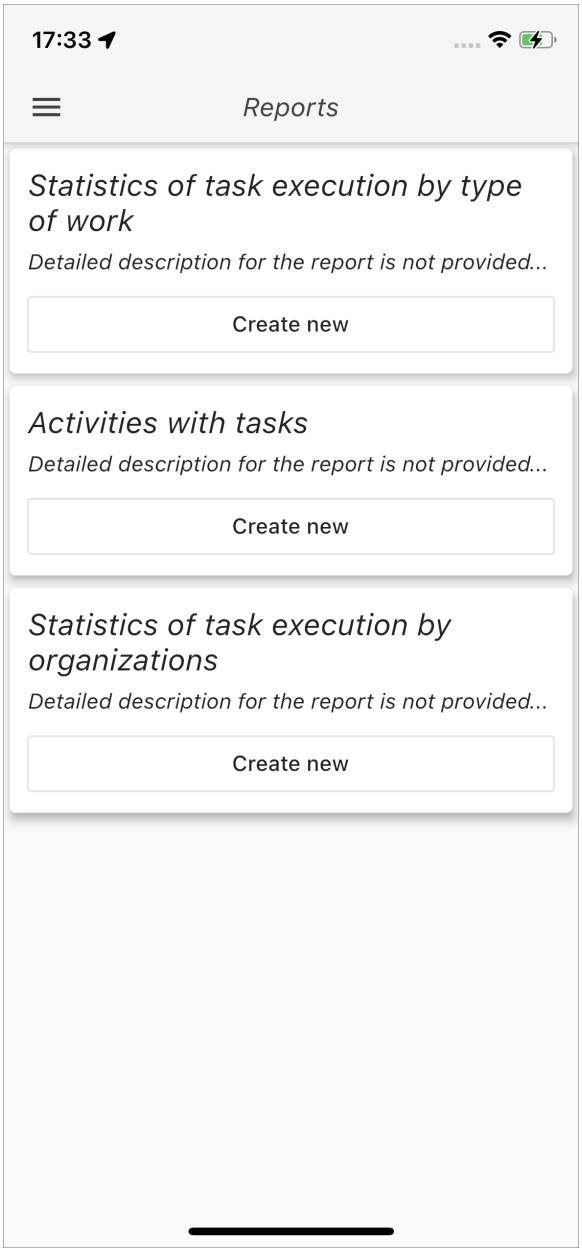



Fig. 2.70: Reports list

If you press “Create new”, you can set a time interval (start date and/or end date) and select the format of the generated file (PDF or XLSX) (Fig. 2.71).

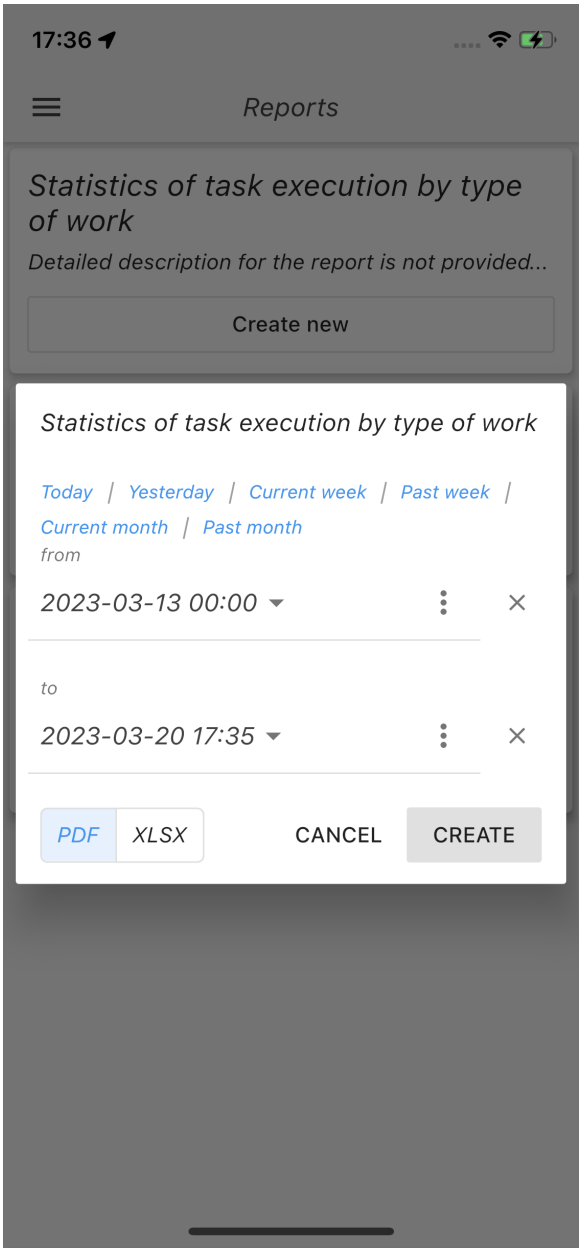



Fig. 2.71: Generate report

After setting the parameters, the relevant statistical report will be generated (Fig. 2.72).

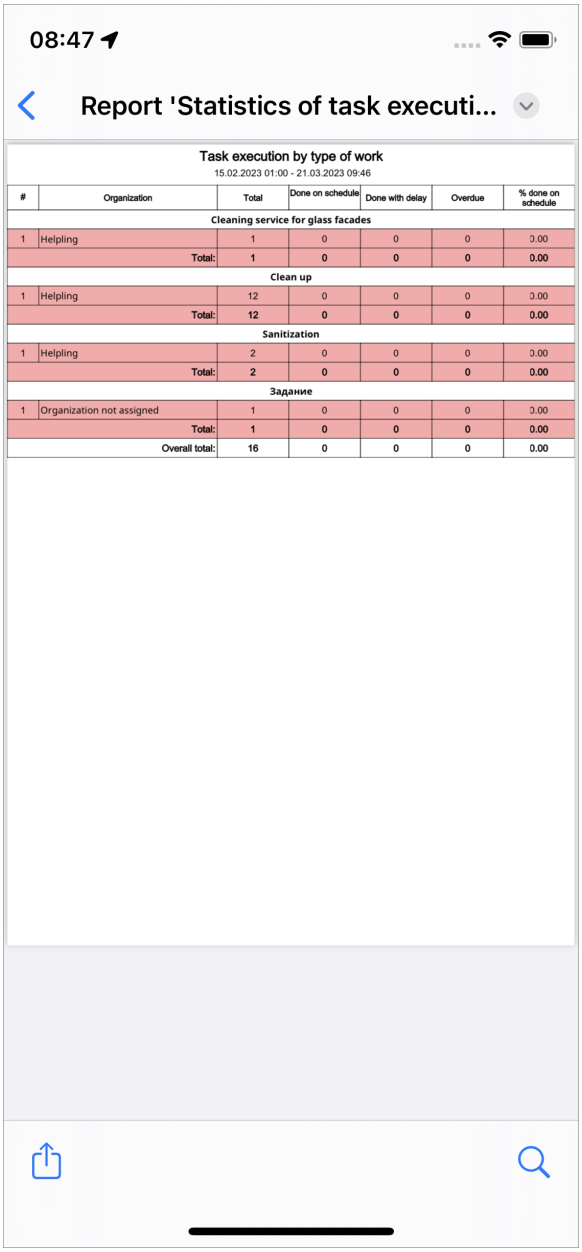



Fig. 2.72: Generated report

## 2.9 Invoice module

The **“Invoice”** module is used to calculate the cost of work online. This module requires customization based on the list of services and materials used by the organization.

To generate an invoice, it is necessary to enable the “Invoice” module in the settings of the mobile application ActiveMap Mobile in the web system ActiveMap Web. You have to fill in information about organizations - the customer and the performer (legal name, account details, logos, signatures, seals, and other necessary information for display on invoices). Then, all fields of the “Materials and Services” table should be filled in based on the data of the list of services and materials used by the organization. The “Materials and Services” table is filled in the desktop component of ActiveMap sytem. After filling in the table, you

can proceed to generate an invoice. To do this, click “Add Media” and select “Invoice” while creating or performing the task. The “Invoice” window will open (Fig. 2.73). You can add the entire list of required materials and services by pressing the “Add position” button, set the quantity of provided materials and services in the given units.

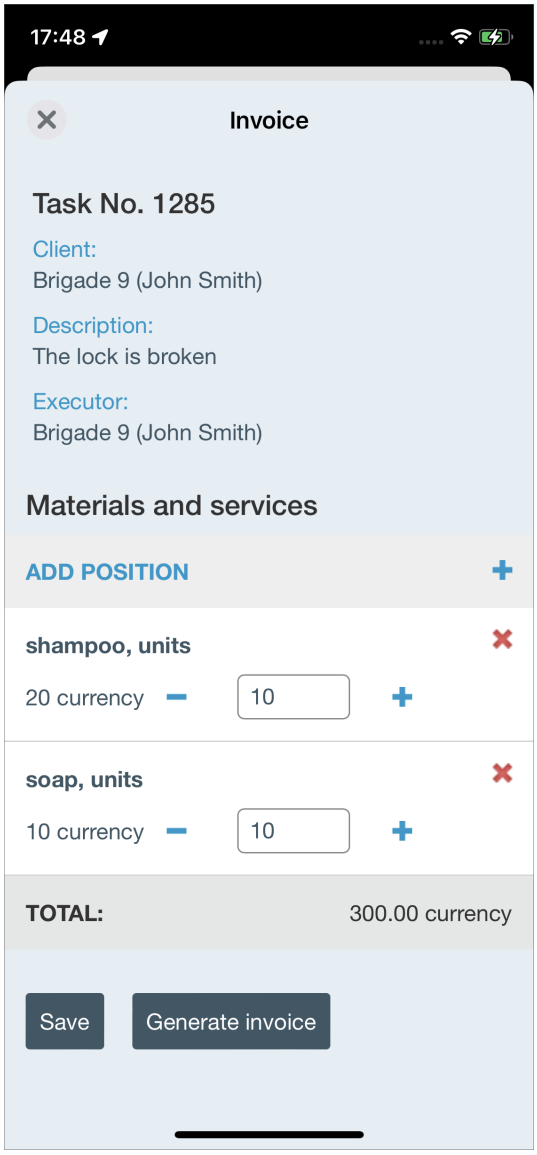



Fig. 2.73: Forming an invoice

In the materials and services selecting window, you can use the search, which will provide suitable results when you enter the text (Fig. 2.74). To add a material or service to the invoice you have to click on it.

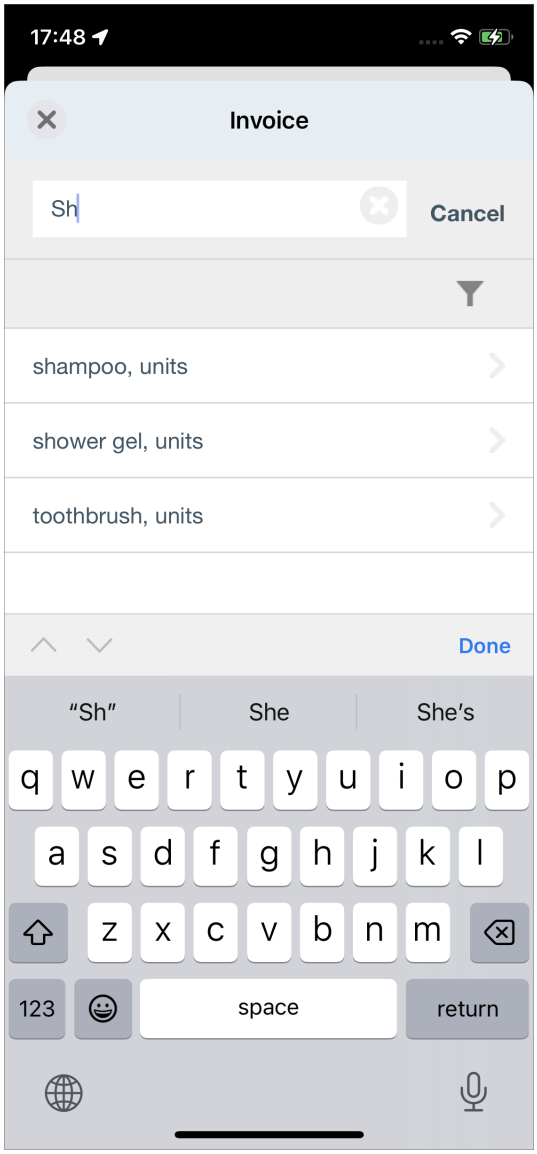



Fig. 2.74: Searching for materials and services

If the server is configured to use material and service groups, you can use the filter by clicking on  . On the left you will see a field for selecting material groups and services, click on it. A list of groups of materials and services will appear, select the desired one. After making your selection, click on the plus sign to the right of the selected group name and click "Apply". A filtered list will display, from which you should select the desired materials or services (Fig. 2.75).

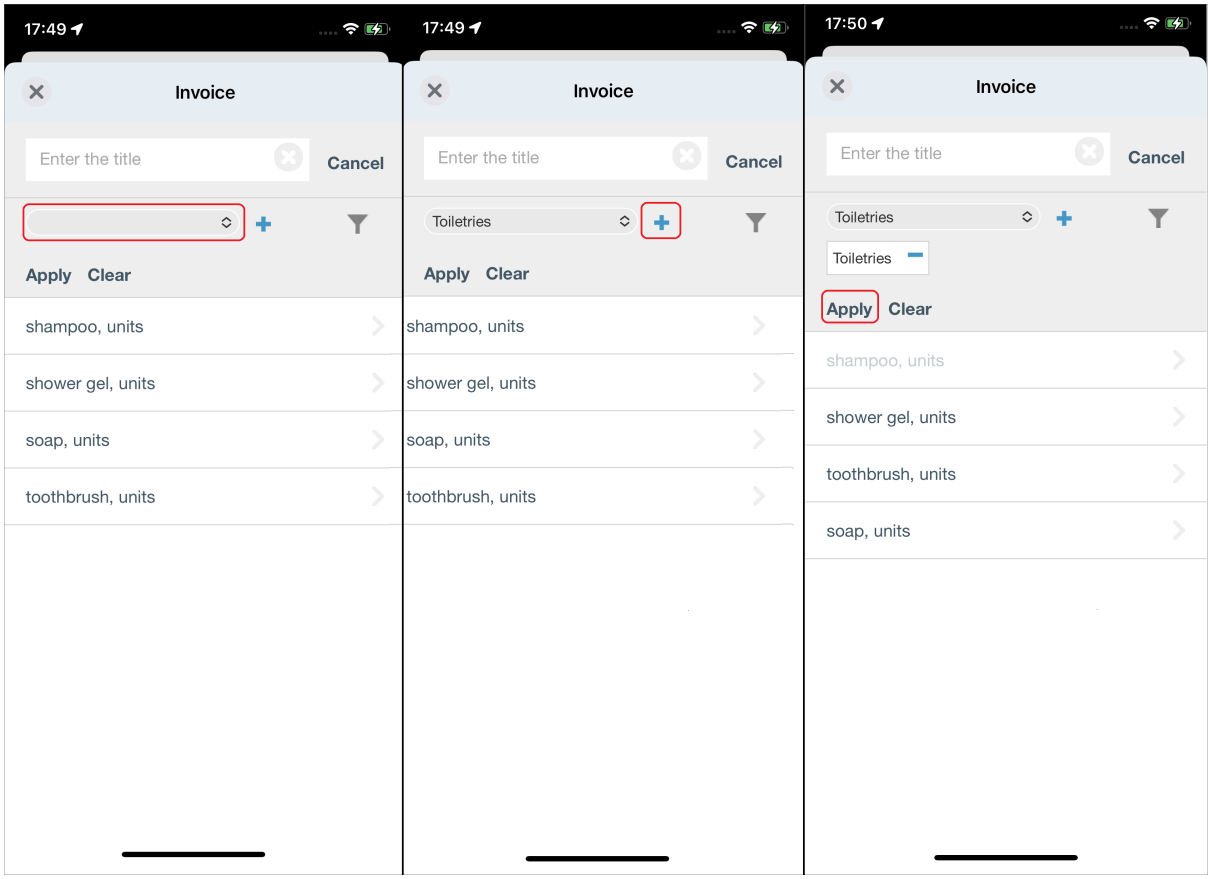
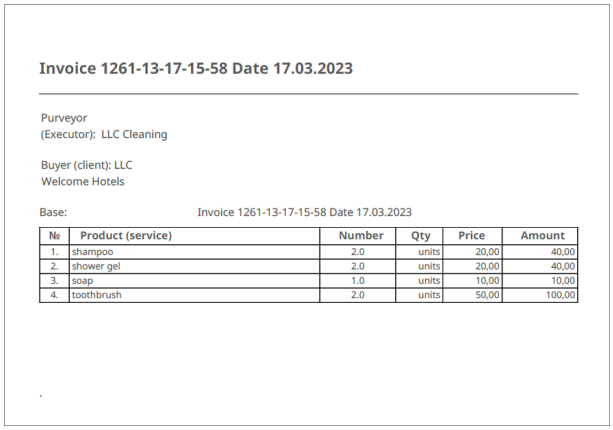



Fig. 2.75: Filter by material and service groups

To add other items to the invoice, repeat the above steps. To change the amount of materials and services, use the buttons to increase/decrease the quantity in the area of added materials and services. To remove an item from the invoice, click on the cross in the block with the item. After adding all items, start creating an invoice by clicking “Generate invoice”. Upon successful creation of the invoice, a message will appear: “The invoice has been created and attached to the task.” To return to creating/editing the task, click “Done”. You can save changes in the invoice. If there are unsaved changes in the calculations, the application will show a warning when exiting the “Invoice” window.

The invoice will be attached to the task in pdf format. Other users (with access to the task) will be able to see it immediately after it is generated (Fig. 2.76).



**Invoice 1261-13-17-15-58 Date 17.03.2023**

Purveyor
(Executor): LLC Cleaning

Buyer (client): LLC
Welcome Hotels

Base: Invoice 1261-13-17-15-58 Date 17.03.2023

| № | Product (service) | Number | Qty | Price | Amount |
|---|---|---|---|---|---|
| 1. | shampoo | 2.0 | units | 20,00 | 40,00 |
| 2. | shower gel | 2.0 | units | 20,00 | 40,00 |
| 3. | soap | 1.0 | units | 10,00 | 10,00 |
| 4. | toothbrush | 2.0 | units | 50,00 | 100,00 |

Fig. 2.76: Invoice

CHAPTER

THREE

# ABOUT ACTIVEMAP MOBILE

The “About ActiveMap Mobile” section of the side navigation menu displays information about ActiveMap Mobile with a brief description of the main functions. To view the history of changes, click on the “What’s new?” button (Fig. 3.1).

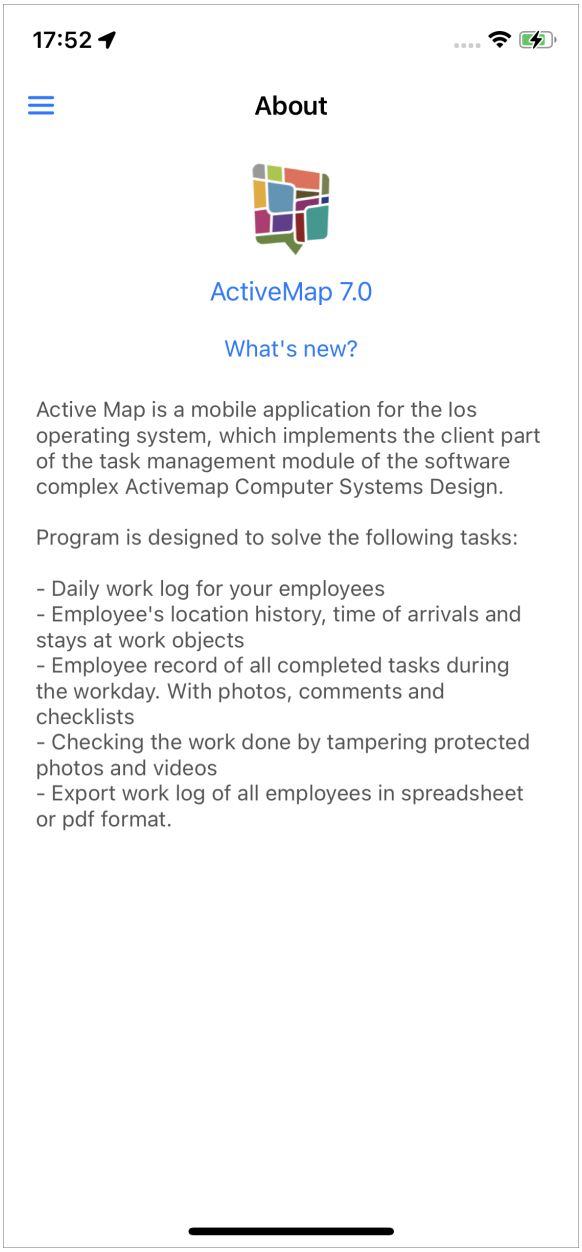



Fig. 3.1: Displaying information about ActiveMap Mobile

CHAPTER

FOUR

# SETTINGS

## 4.1 Application settings

To view and modify the settings, you have to go to the “Settings” section in the side navigation menu (Fig. 4.1).

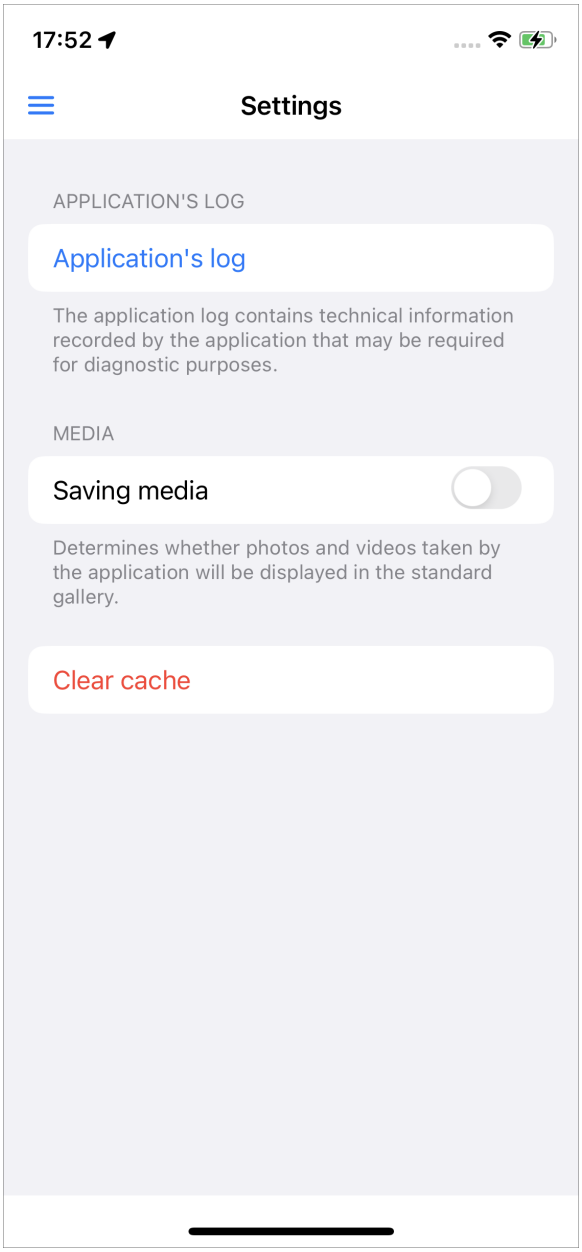



Fig. 4.1: Program settings

“Saving media” toggle switch allows to specify whether photos and videos taken by the application will be saved in the user’s device gallery.

“Application’s log” item allows to export the application log files containing technical information recorded by the device (it may be required for diagnostic purposes). To send the log file, click on “Export application log”. A window opens where you can select a convenient way to send the file or save it to the device.

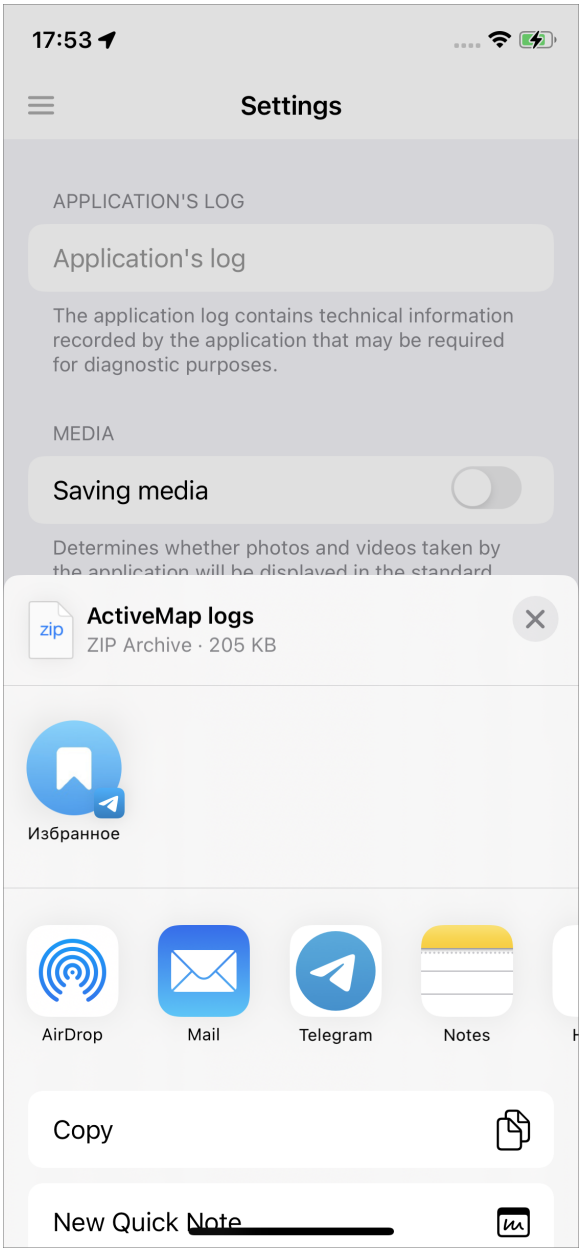



Fig. 4.2: Application log export window

“Clear cache” item deletes temporary files (including downloaded objects). When clearing is complete, the message “Cache is cleared!” will appear on the screen.

CHAPTER

FIVE

# GLOSSARY

**Applied software suite** is a set of interconnected programs designed to solve problems of a certain class of a particular subject area and interact with the user.

**Attribute data** are values describing features of objects. Attribute data types: integer, real, text, date, date and time, geometry.

**Basemap** is the dominant or underlying layer in a given map that provides geographical context to the map and other dataset layers above it. Users visualize tasks, service objects, and thematic layers above the basemap, as well as use it for navigation through a map and getting general information about the area of interest.

**Chief inspector** is an employee responsible for managing tasks in the System.

**Client Organization** is an association of users who make their requests via the mobile application, monitor their status, are capable of evaluating the work performed. User rights for operating the System are restricted.

**Cluster** is an association of several organizations for the purpose of enabling the in-process control of the performance of departments.

**Cluster administrator** is an employee whose job responsibilities include the cluster management as follows: control of organizations and users within his/her cluster, access right distribution to users within his/her cluster to layers and reports, and the task management within his/her cluster.

**Cluster inspector** is an employee responsible for managing tasks within his/her cluster.

**Clusterization** is the representation of raster layer objects located nearby by a single label on a map.

**Contract** is an entity for accounting and planning the task accomplishment by organizations under contractual obligations.

**Custom fields** are attribute fields which can be customized in the system versus features of a project underway, and be referenced to certain work items.

**Data table** is a structured database of same-type objects within the bank of spatial data.

**File label (sticker)** is a textual mark in a picture.

**Invitation (an invite link)** is a link containing information on the server address, login, and password of a user to simplify the process of authorization in the mobile application.

**Layer** is a visual representation of geographical data in the environment of any digital map.

**Layer group** is a set of layers grouped according to thematic or other specified criteria.

**LDAP (Lightweight Directory Access Protocol)** is an open, vendor-neutral, industry standard application protocol for accessing and maintaining distributed directory information services over an Internet Protocol (IP) network.

**Legend** is a set of symbols and explanations on a map.

**License** is a file containing information on the acceptable quantity of users, validity period, and allowing to link the server software of the System to the equipment.

**Organization administrator** is an employee whose job responsibilities include the management of his/her organization as follows: the creation of users, the provision of access to layers and reports within his/her company, and the task management within his/her company.

**Organization inspector** is an employee responsible for managing tasks within his/her company.

**Organization user** is an employee who uses the System to accomplish assigned tasks.

**Raster layer** represents data in the form of geographically-referenced images as well as fragments of raster images displayed in the same projection and prepared for each level of map detail.

**Reference table** is a systematic data table intended for facilitating users to handle attribute information on objects.

**Service objects** are layers containing objects of interest of the user organization due to their relation to business activity of the involved organization.

**Schedule** is a tool that enable to automatically create and assign template tasks at a certain time with a specified periodicity.

**The System administrator** is an employee responsible for configuring the System: managing clusters, organizations, users of all roles, reference tables for tasks (work types, stages, priorities, custom fields, stickers), as well as the distribution of access rights to layers and reports.

**Thematic layer** is a spatial data bank layer which objects are interrelated by the same topic.

**Timelapse-video** is a video file comprising a series of pictures took via a video camera during a long time period.

**User tags** is an entity allowing to group users against a specified attribute (e.g., the phone model).

**User type** is a user characteristic (a human being or a vehicle) to determine the user mapping settings versus the type selected.

**Vector image** is a representation of graphical objects and images based on the use of geometric primitives such as points, lines and polygons.

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