



LIQUIMECH[®]

Connect Desktop & Mobile App

V2.1.0

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Liquimech Connect Desktop App

The Liquimech Connect Desktop App is designed to give the user access to their devices and the devices' data in a user-friendly format, allowing the user to manage, view and save device data. The desktop app allows the user to manage who has access to the device information and their ability to edit, create, and delete information.

1. Launching the Liquimech Connect Desktop App

Upon launching the Liquimech Connect Desktop App, the user will be directed to the sign-in window. The sign-in window has three pages: the sign-in, the forgot password, and the sign-up.

1.1 Sign In Page

The sign-in page prompts the user to enter an email and password. If entered correctly, the user will be taken to the hub/home screen where all the Liquimech Connect desktop apps will be shown. Here, the user can enter sign-in details or switch to the sign-up or forgot password screen. The user can navigate by clicking the sign-up or reset password text to respectively open the sign-up and forgot password window.

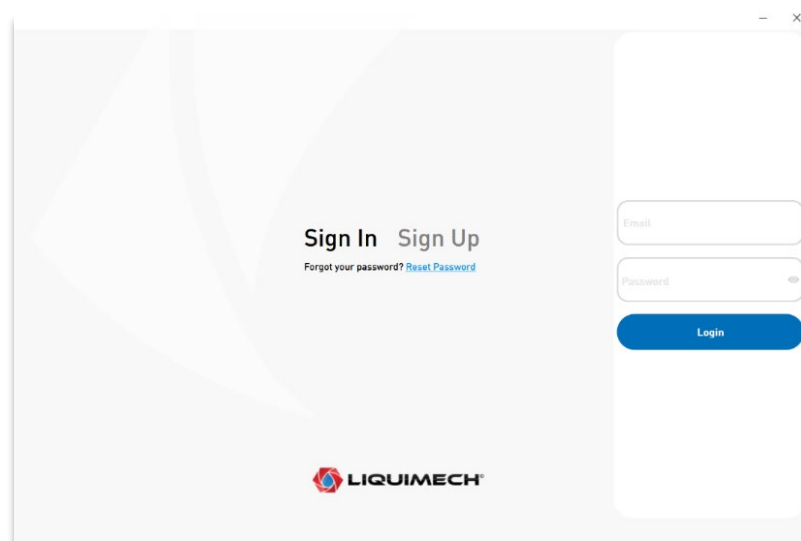


Figure 1: Sign in window, sign in page.

1.2 Forgot Password Page

The forgot password page will prompt the user to enter an email. If entered correctly the user will be sent an email to that email address to allow the user to enter a new password. The user can click the sign-in text to navigate back to the sign-in window.

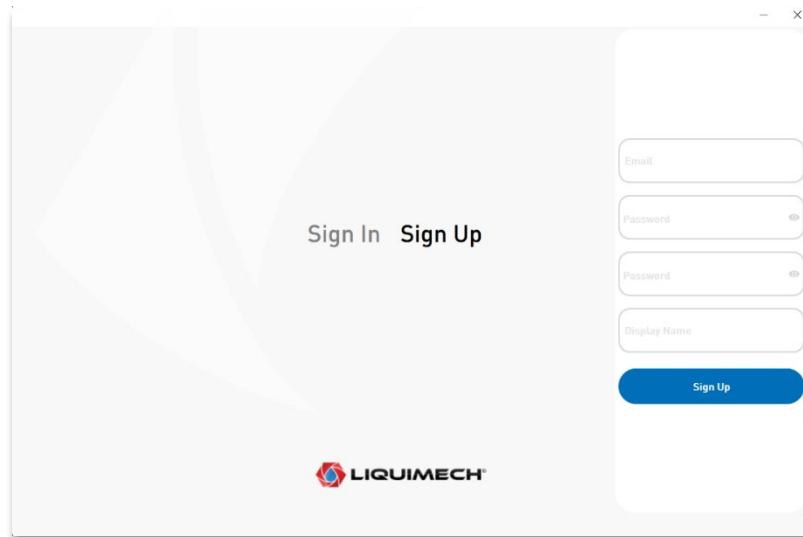


Figure 2: Sign in window, sign up page.

1.3 Sign Up Page

The sign-up page prompts the user to enter an email, a password, the same password again, and a display name. If all details are entered correctly, an account will be created, and a verification email will be sent to the email address. The user must click this verification link to activate the account. The user can click the sign-in text to navigate back to the sign-in window.

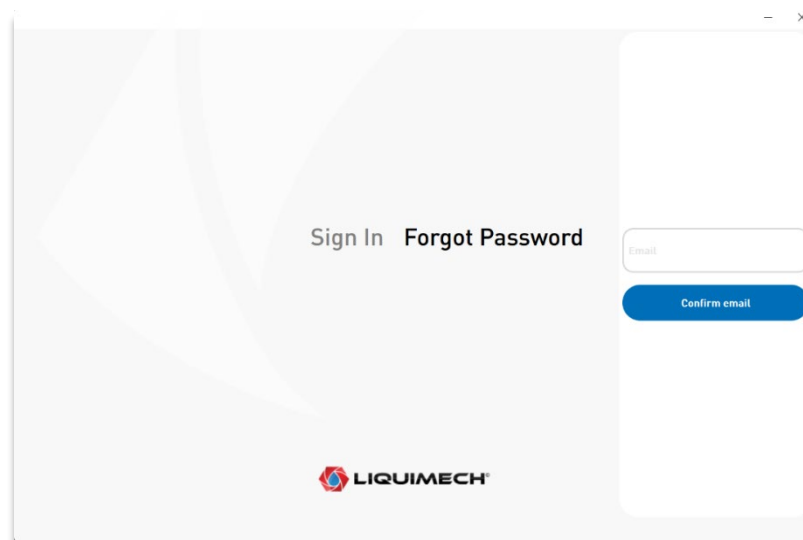


Figure 3: Sign in window, forgot password page.

1.4 Offline Functions (New)

The offline functionality enables users to transfer data between the application and a device, even when the device is not connected to the internet. There are two main methods for this transfer: importing and exporting. Importing allows users to retrieve data from the device, which is then saved to a file on their computer. This file serves as a backup and can later be uploaded to the application when the user regains internet access. On the other hand, exporting involves transferring data from the application to the device. To utilise this option, users must first create a desired device settings file containing the data to be transferred. The application then facilitates the transfer of this file to the device, ensuring it is readily available for use.

Regarding the transfer mediums, there are two options: USB and Wi-Fi. USB is the recommended method due to its faster speed, providing users with a more efficient data transfer experience. Alternatively, Wi-Fi serves as an option for users who prefer wireless connections, albeit with potentially slower transfer rates. The USB option will require the device key, which can be found on the FMS device page in the table by clicking the key icon, this will copy the key to your clipboard which can then be pasted.

When a site technician needs to use an offline feature, they can enter this device key provided by the device administrator to authenticate and proceed with the chosen offline features.

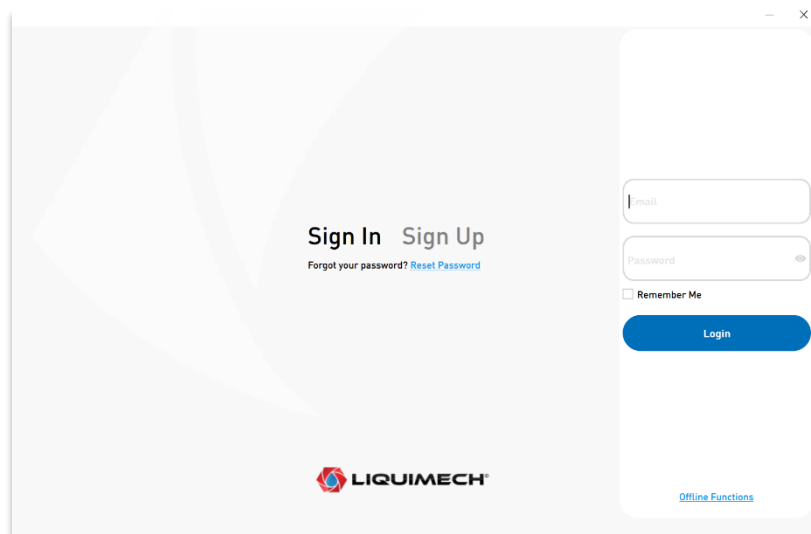


Figure 4: Sign-in screen, with new offline features.

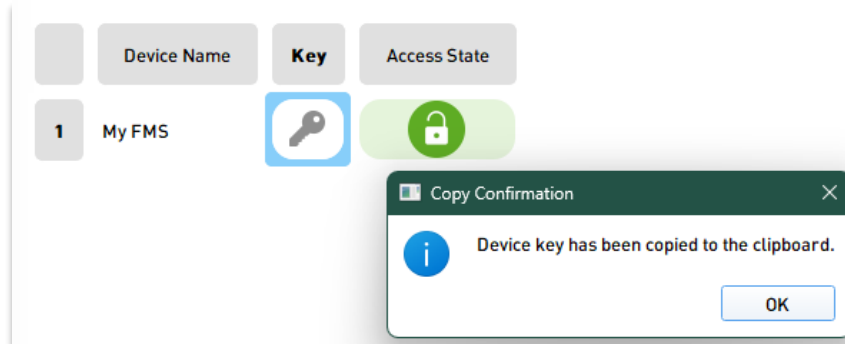


Figure 5: FMS window device page, copy key to clipboard.

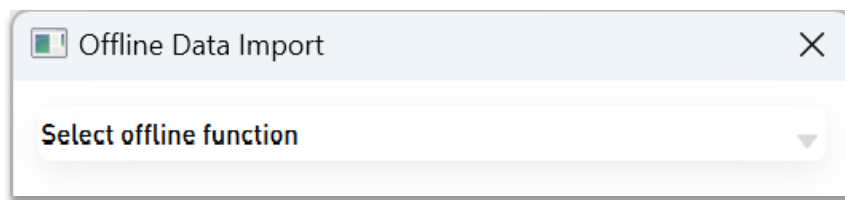


Figure 6: Offline Functions Dialog, select functionality import or export.

Import data from the device to your computer. This includes information such as transaction and tank levels. This function whether the USB or Wi-Fi option is used will write a file to your computer which will then need to be uploaded to the database once you have internet again. After importing from the device, a dialogue box will be shown, prompting the user where to save the log file.

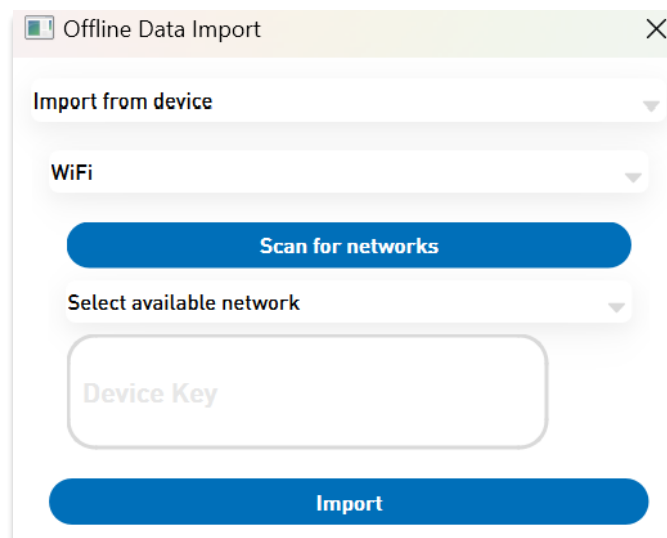


Figure 7: Offline Functions Dialog, functionality import and Wi-Fi.

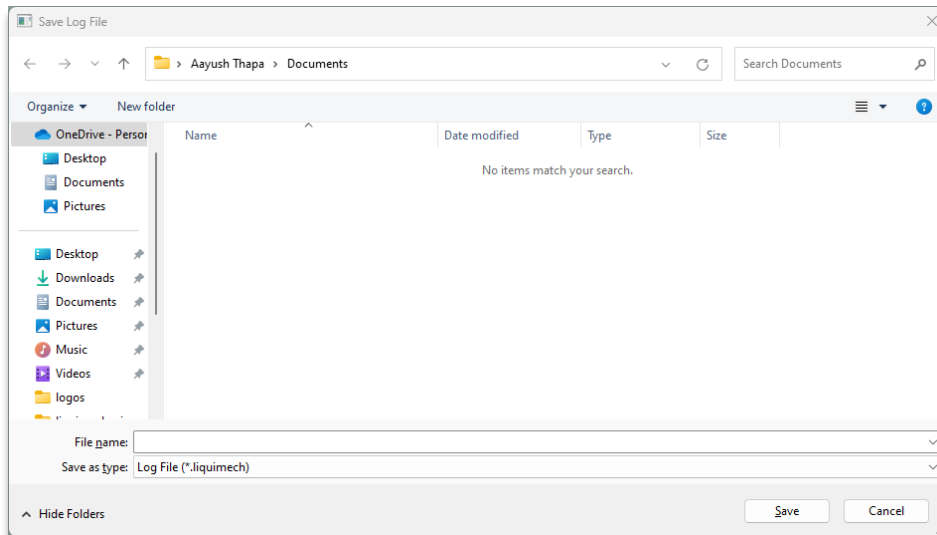


Figure 8: Offline Functions Dialog, save imported log file.

Exporting data from the computer to the device will include information such as the device's locked status and the vehicle's lock status. A dialogue box will be shown prompting the user to navigate to the location where the saved device settings file is located.

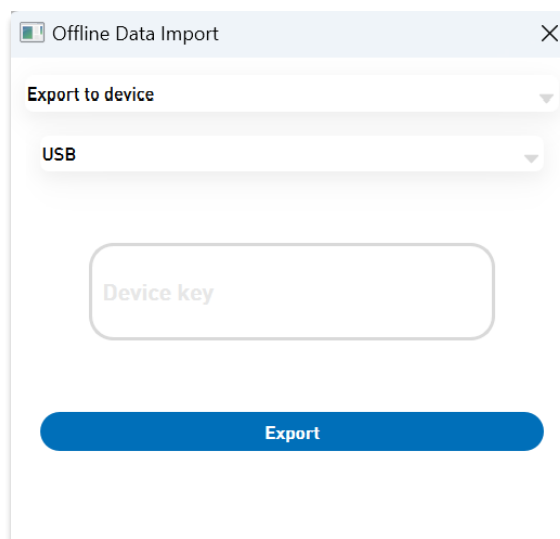


Figure 9: Offline Functions Dialog, functionality export and USB.

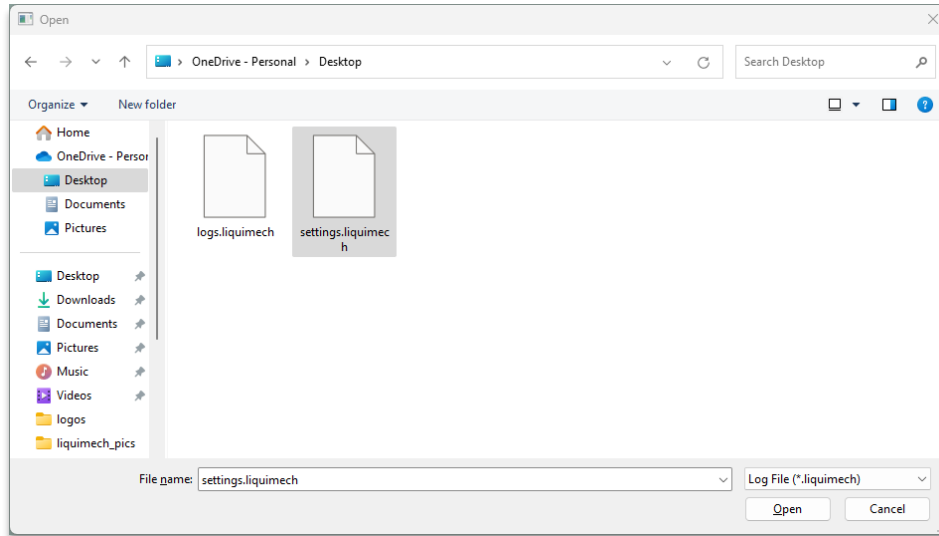


Figure 10: Offline Functions Dialog, select settings file dialog.

After device settings have been exported from the settings file to the FMS device, users will encounter the following dialogue box upon logging into the app. Selecting “Submit” will synchronise changes between the FMS and the Liquimech database.

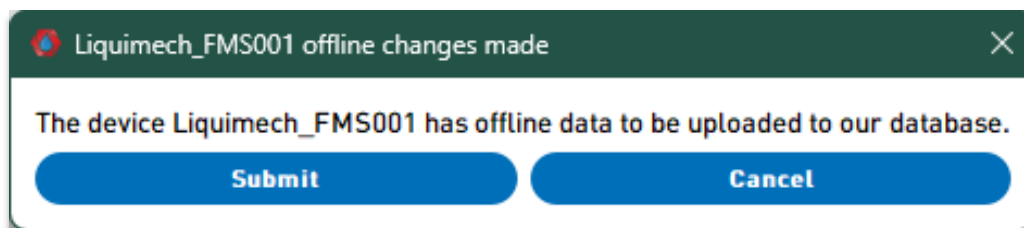


Figure 11: Offline Functions Dialog, prompt device settings synchronisation.

2. Liquimech Connect Desktop App Home Screen.

This screen will display all available desktop apps. Apps purchased by the user will be shown in colour, while unpurchased apps will be greyed out. To navigate to the page of an app that is in colour, click anywhere on its card. Otherwise, a dialogue will be opened to say the app needs to be purchased. The page features a top bar, which allows admin users or higher to manage access, change their display settings, save the contents of the table to an Excel or text document, and log out.

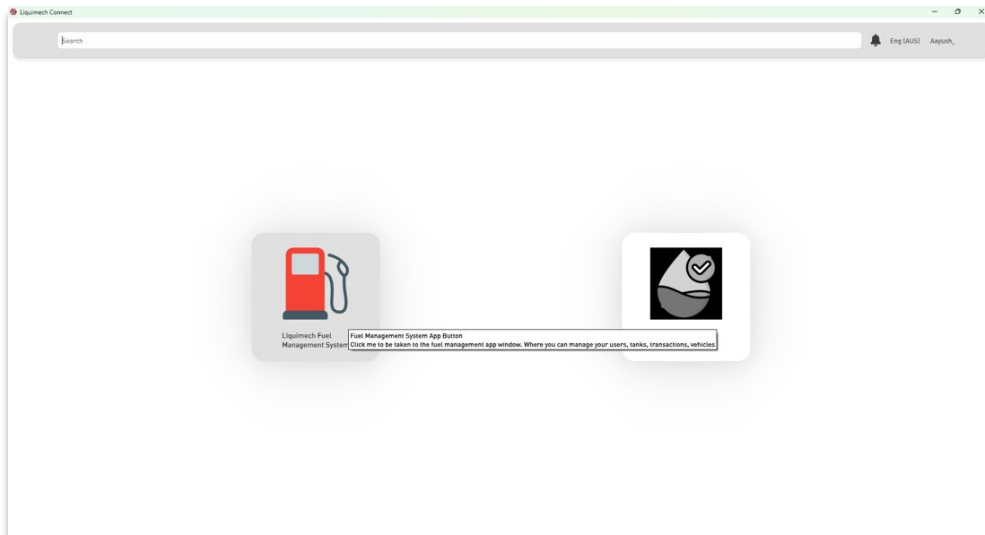


Figure 12: Home window, button hover over Liquimech Fuel Management System button.

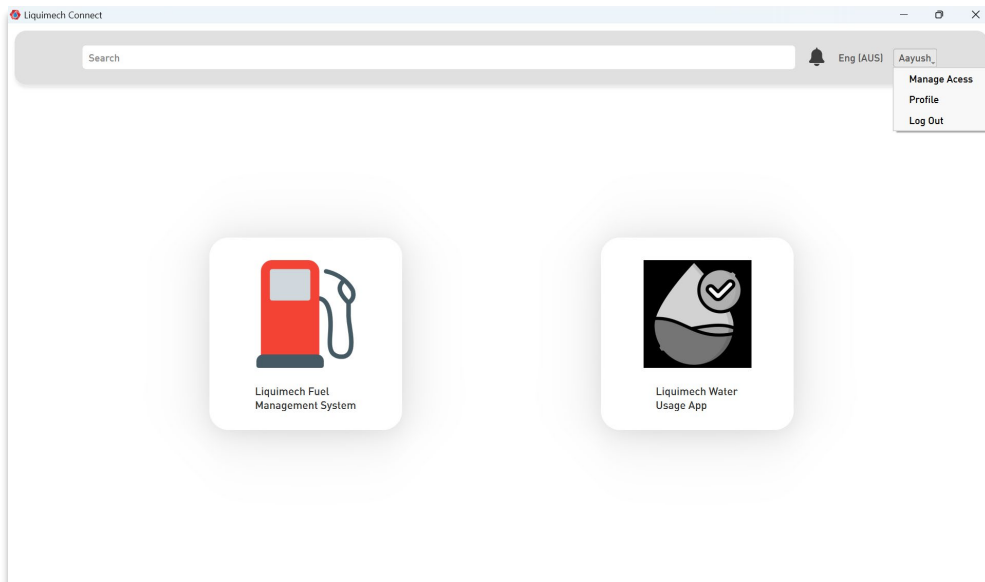


Figure 13: Home window, with top users drop down menu opened.

2.1 Top Bar

The top bar has up to four options where the user can manage access if an admin or higher, change their display, save contents of table to an Excel or text document, and log out.



Figure 14: Top bar, with navigation buttons.

2.1.1 Manage Access

The manage access dialogue is only available to admins or higher. It allows the user to control the other users with access to their company's information. Available controls are adding users, removing users, and changing users' access levels. To add a user to the company, enter an email then click the add button. If the user has a lower account level, then a drop-down menu will appear next to their name where you can change their account level.

Note: users cannot change the information of another user with a higher access level. For example, an admin cannot change an account level or delete a super admin. To delete a user, click the user's name, then the remove account button.

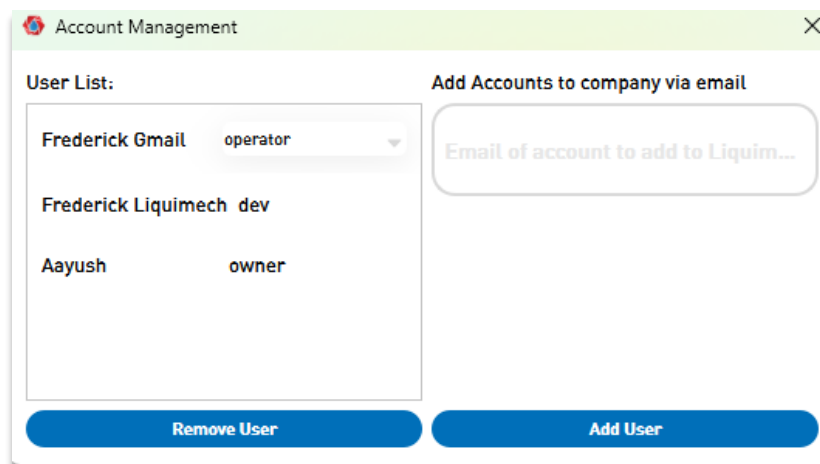


Figure 15: Account management dialog.

2.1.2 Profile

The profile dialogue displays the user's account information and allows the user to change their display name. Once edited, the submit and cancel buttons will appear.

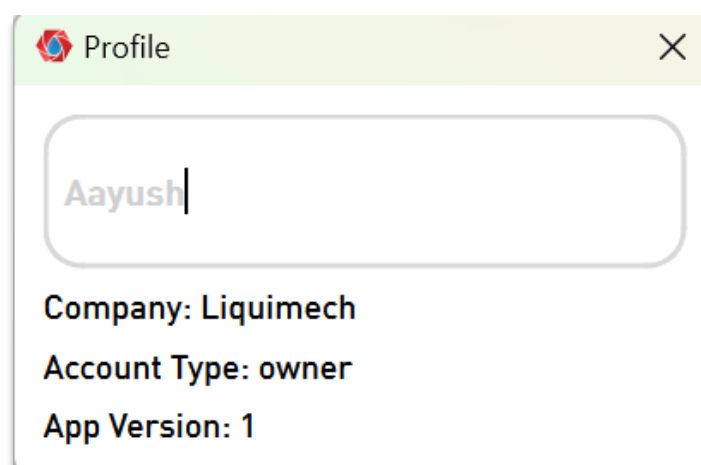


Figure 16: Profile dialogue.

2.1.3 Save Data

The save dialogue will check if there is a table with available data, then prompt the user to set the name of the file to be saved and choose the save file type, either Excel or text.

2.1.4 Log Out

The log-out dialogue will close all windows, log out the user, and then open the sign-in window.

2.1.5 Upload Data (New)

After saving the data on your computer, to upload it to the database, select the "Upload Data" option. Next, choose the file created by the "Import Data" option. This data will then be transferred and uploaded to the database. Once successfully uploaded, the file can be deleted at the user's discretion.

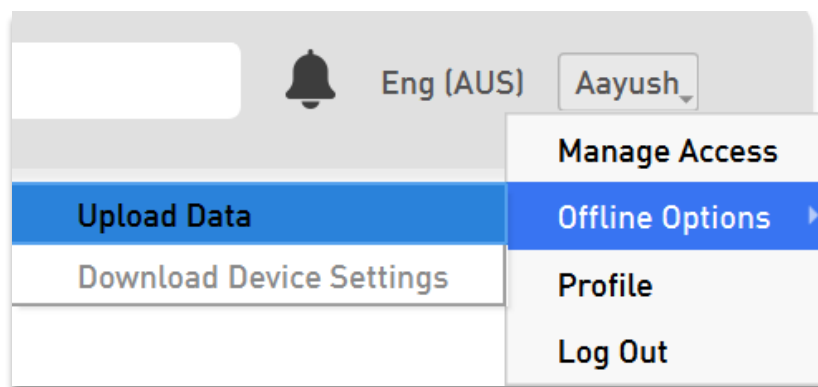


Figure 17: TopBar, with new offline features

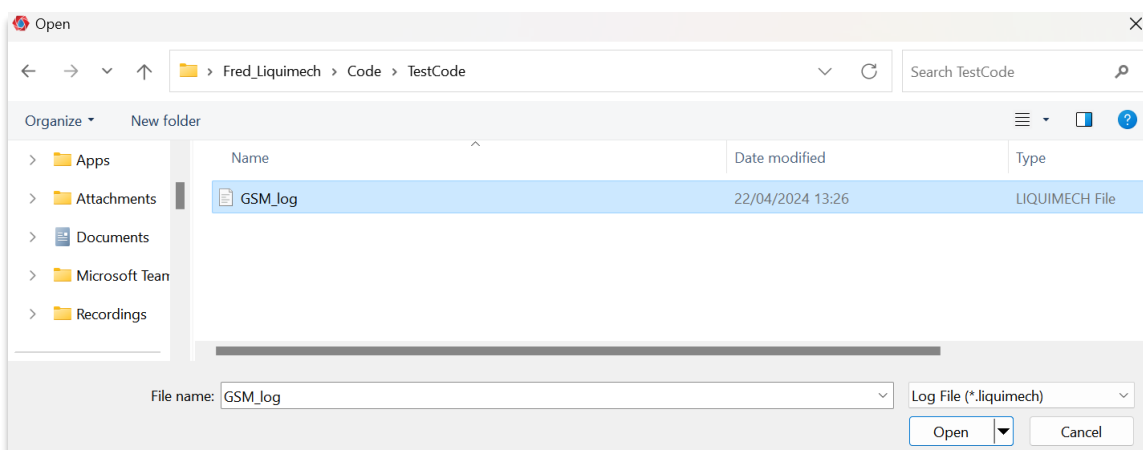


Figure 18: Save dialog, save FMS device data to file.

2.2 Windows Types

There are 3 screen types: windows, dialogues, and pages.

- 1) Window: Opens a new window with new information.
- 2) Page: Changes the information displayed but doesn't open a new window.
- 3) Dialogue: Opens a minimised window with the previous window being its parent and will inherit information from that window. The window cannot be accessed until this dialogue is closed.

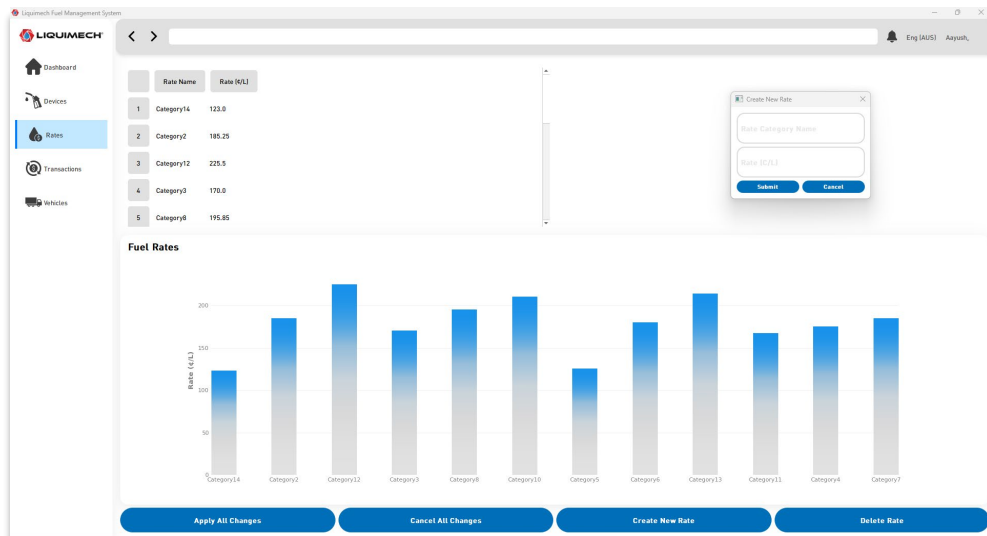


Figure 19: Fuel management system window, Rates page and create new dialogue opened.

The dialog box is titled 'Create New Rate' and has a close button (X) in the top right corner. It contains two input fields: 'Rate Category Name' and 'Rate (C/L)'. Below the input fields are two buttons: 'Submit' and 'Cancel'.

Figure 20: Create New Rate Dialog.

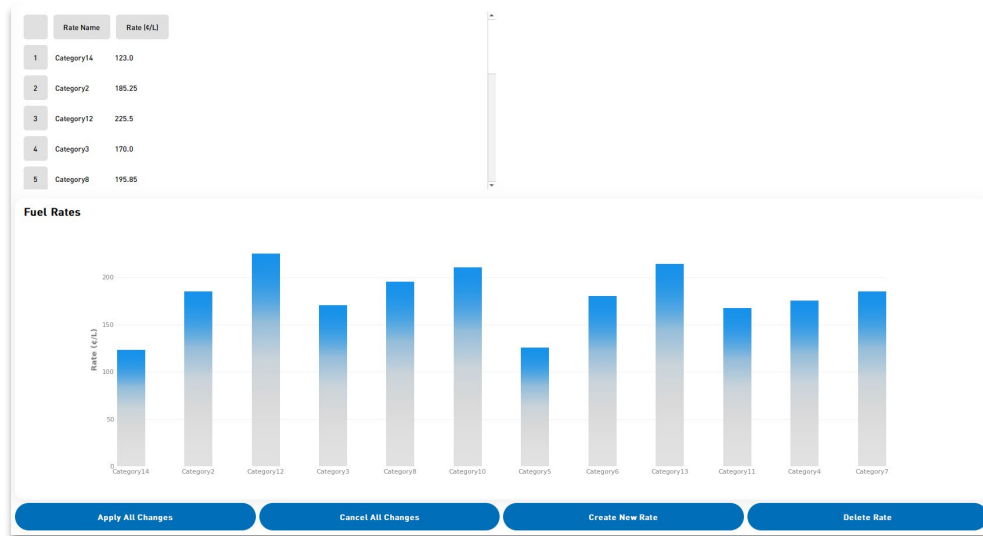


Figure 21: Rates page.

2.3 Account Levels

There are five account levels dev, owner, super admin, admin, and operator.

- 1) Dev: Only for Liquimech Desktop App management team.
- 2) Owner: The company owner max level of access can assign people to be super admins, admins, and operators. Can delete and create new rates and vehicles. Can edit devices, rates, and vehicles.
- 3) Super Admin: Can assign people to be admins and operators. Can delete and create new rates and vehicles. Can edit devices, rates, and vehicles.
- 4) Admin: Can assign people to operators. Can delete and create new rates and vehicles. Can edit devices, rates, and vehicles.
- 5) Operator: Cannot assign people to any access level. Is read only on all pages.

2.4 Liquimech Fuel Management System (FMS)

When the Fuel Management Systems (FMS) button is clicked on the home screen, this window will open. The available pages are dashboard, devices, rates, transactions, and vehicles. The FMS window will default to opening the dashboard page. To navigate to different pages within the FMS window click the icon or text of the page you wish to switch to on the side bar. When on the FMS window, the top bar will have two additional buttons: a left and right arrow. This will allow the user to go to the previous page and to go from the previous back page they were on before they used the left arrow.

2.4.1 FMS Topbar (New)

A new option is available when on the FMS screen, for saving the device settings.

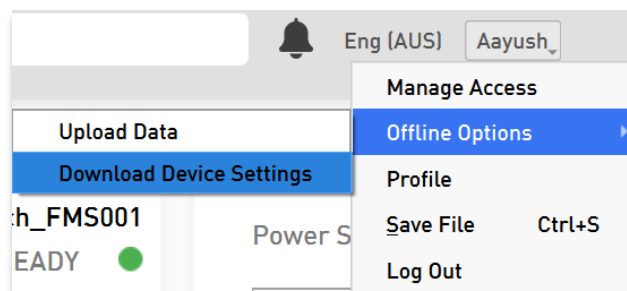


Figure 22: Topbar offline options, download device settings.

Users can adjust vehicle and device configurations as desired, including locking and unlocking vehicles and the device itself. Once the desired settings are configured, users can click "Save Settings" and close the file. It's important to note that these changes will not take effect immediately. Instead, they will only be applied once the settings are exported to the device. Additionally, the changes won't be visible in the application until the user regains internet access and is prompted to upload the device settings upon signing in.

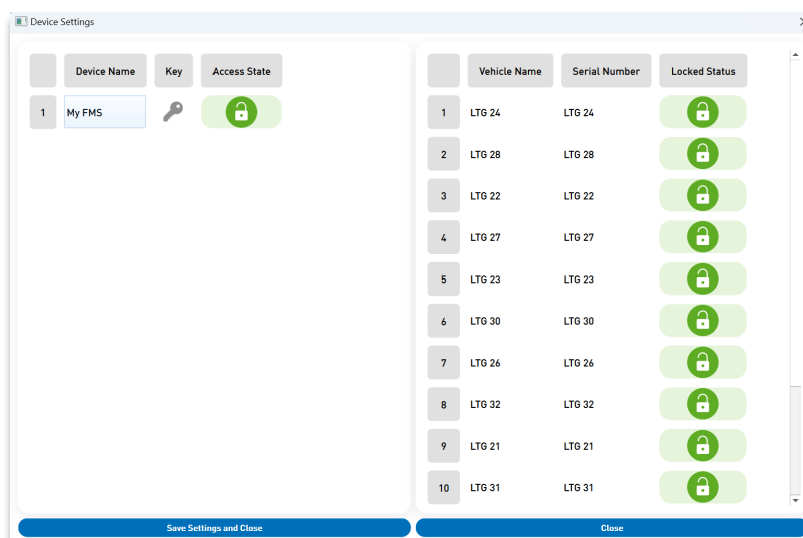


Figure 23: Devices settings download dialog.

2.4.2 FMS Sidebar

The FMS sidebar allows the user to navigate to the page which is clicked.

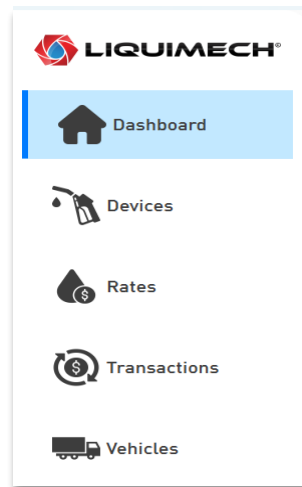


Figure 24: Sidebar with the dashboard as the current page.

2.4.3 FMS Dashboard Page

The Dashboard page will show 4 info cards, vehicles and device information will be shown on these. The first shows the current number of vehicles, the next displays the current tank level, then the generic device information and finally the power sources for the device. To navigate to the relevant page of the info card click the card. Three graphs will be shown: the transactions timeline, the usage of vehicles pie chart and usage of vehicles bar graph. The transaction timeline and usage of vehicles graphs information can be controlled by their drop-down boxes. The leftmost dropdown box is the vehicle information; the user can select all vehicles or a specific vehicle. The right box allows the user to change the timeframe of information to last year, last quarter, last month and last week.

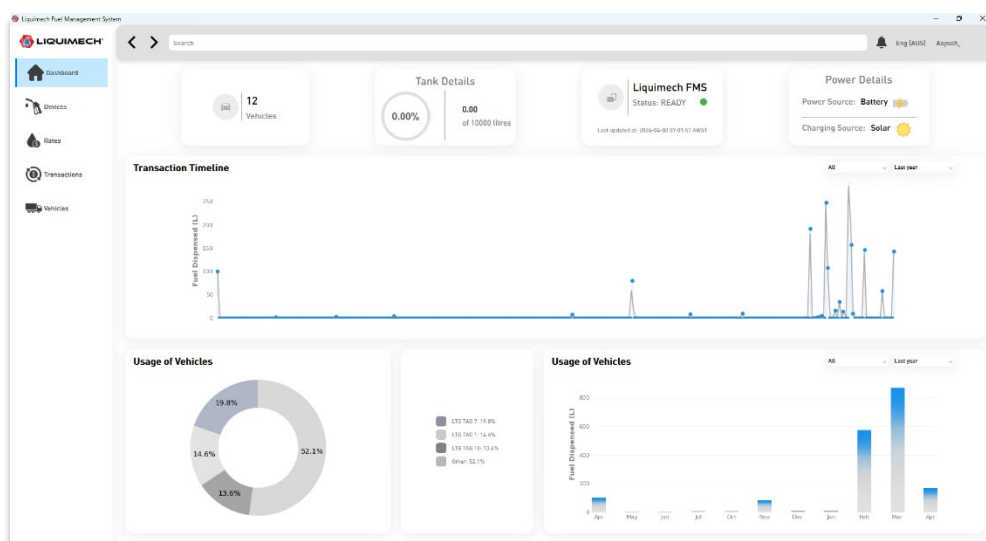


Figure 25: Fuel management system window, dashboard page.

2.4.4 FMS Device Page

The Devices page will show the table of devices and tank levels over a time graph. The table will show all the devices' names and access status. The device name is changeable by clicking it and entering the new name, then either clicking apply or the apply all changes button. The access status can be either green unlock, red locked or a grey loading sign. If the loading symbol is showing, then the account status cannot be changed. The account status can be changed by clicking either the locked or unlocked icon, and then applying the same as the name. If the user makes a change and does not want it to be applied, then the user should click the cancel or the cancel all changes button.



Figure 26: Fuel management system window, device page.

Account with appropriate access levels will also notice a key icon on the device table. This is used to copy the device key to the clipboard. This key must be used when interacting with the FMS module in offline mode.

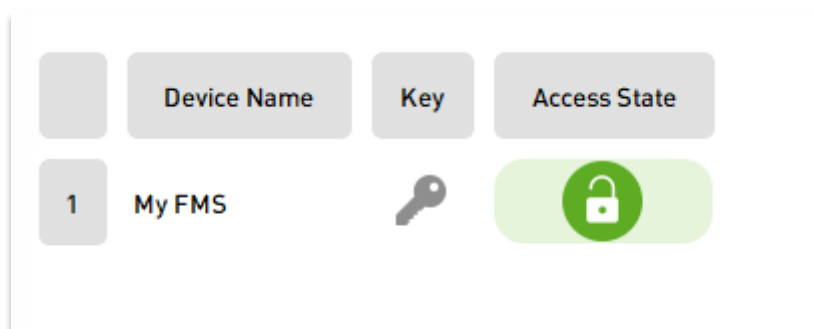


Figure 27: Fuel management system window, device page, key included.

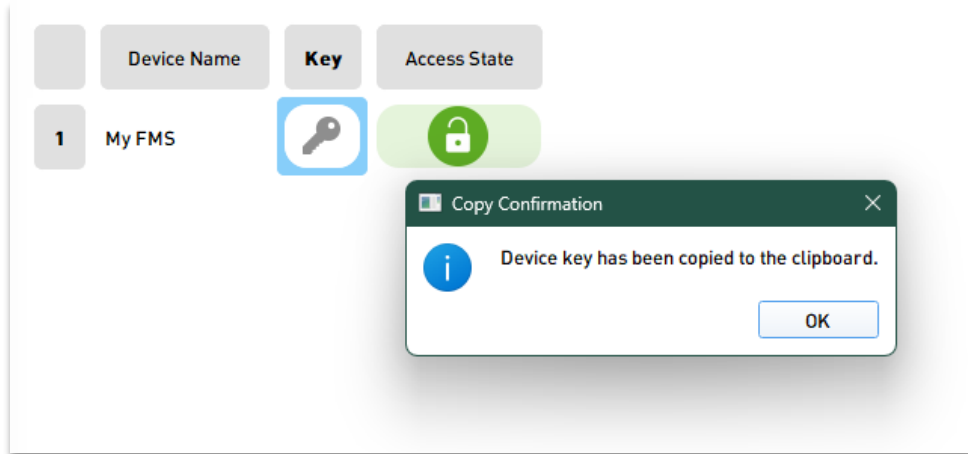


Figure 28: Fuel management system window, device page, key copied.

2.4.5 FMS Rates Page

The Rates page contains a table and rate graph. The rate table has two columns: rate name and rate. Both are editable. The rate screen also contains two buttons to create and delete rates. To create a new rate, click the button and fill in the required information for the name of the fuel and the rate. Then click submit to create the new rate or cancel to not create the new rate. To delete an existing rate, the user will first need to click the row of the rate they wish to delete, then click the delete rate. The delete rate will ask the user if they are sure, click submit to delete or cancel to not delete. Multiple rates can be deleted at a time by clicking two rows while holding down the control button on Windows.

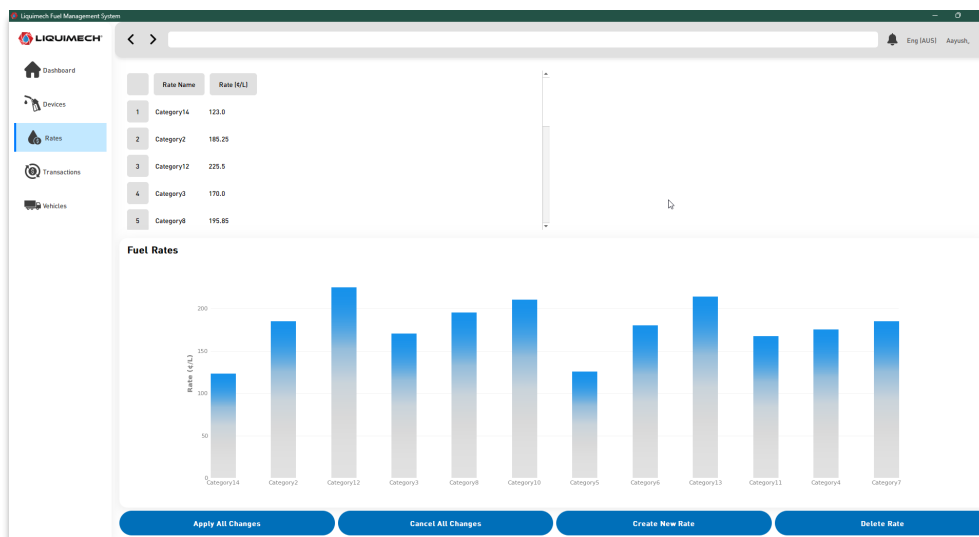


Figure 29: Fuel management system window, rates page.

2.4.6 FMS Transaction Page

The Transaction page contains a table, a transaction graph, and a process selected transaction button. The table is un-editable. The table and the graph display information can be changed based on the two drop-down menus for vehicles and different time ranges. The process selected transactions button is used by selecting row/rows on the table.

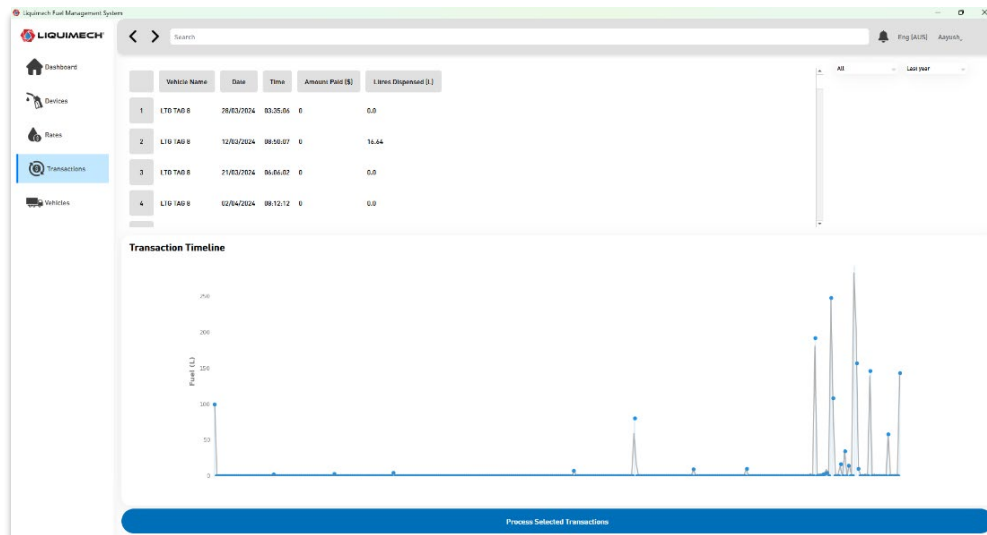


Figure 30: Fuel management system window, transaction page.

2.4.7 FMS Vehicle Page

The Vehicle page contains the vehicle table, create, and delete vehicle buttons. The vehicle table has four columns. Vehicle name is editable. Serial number is un-editable and set by the Liquimech team. The combo-box allows setting the rate category for the vehicle, which will be used to determine the rate charged to the vehicle when a process is completed. The locked status is editable. The user can create and delete vehicles. To create a new vehicle, enter the serial number on the tag to be assigned, the alias of the vehicle and the scanned ID. To delete a vehicle, click a row, then the delete vehicle button.

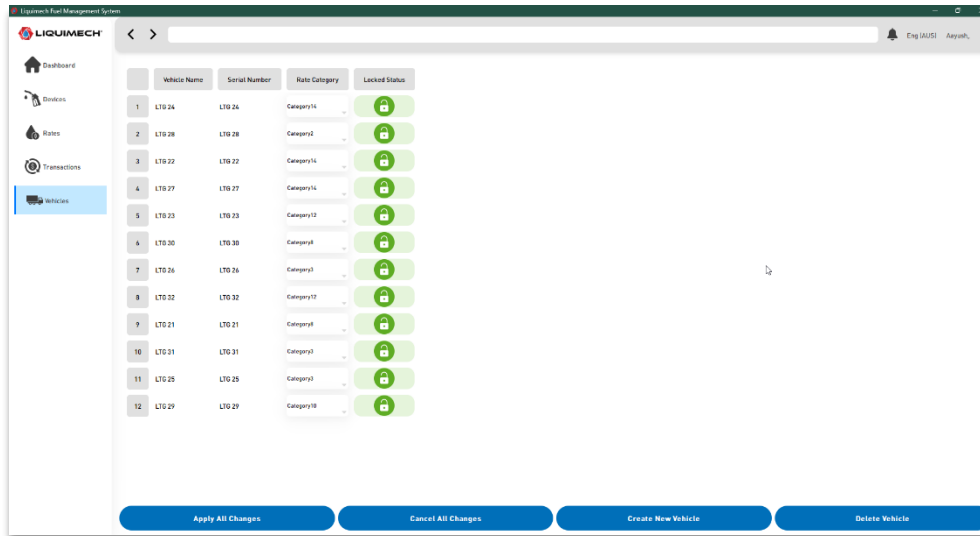


Figure 31: Fuel management system window, vehicles page.

2.4.8 FMS Tables

When edited, two new columns will appear on the right of the table: the apply and cancel columns. These buttons are specific for that on row; if clicked the one row will be changed and all of the others will be reset.

However, if you want to edit or cancel changes for multiple rows, the apply all and cancel buttons will appear at the bottom of the screens with editable tables.

	Vehicle Name	Serial Number	Locked Status
1	LTG TAG 1	LTG TAG 1	🔒
2	LTG TAG 6	LTG TAG 6	🔒
3	LTG TAG 7	LTG TAG 7	🔒
4	LTG TAG 9	LTG TAG 9	🔒
5	LTG TAG 11	LTG TAG 11	🔒

Figure 32: Vehicles table, un-edited. Apply and cancel columns are hidden.

	Vehicle Name	Serial Number	Locked Status	Apply	Cancel
1	LTG TAG 1	LTG TAG 1		Apply	Cancel
2	LTG TAG 6	LTG TAG 6			
3	LTG TAG 7	LTG TAG 7			
4	LTG TAG 9	LTG TAG 9			
5	LTG TAG 11	LTG TAG 11			

Figure 33: Vehicles table edited. Apply and cancel columns are visible.

2.4.9 FMS Drop Down Menus

It will contain all the available options. To change the display information of tables and/or graphs, please select the option. The reset selection

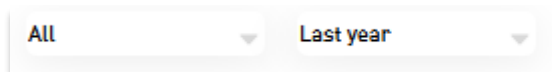


Figure 34: Vehicle and time frame drop-down, both unopened.

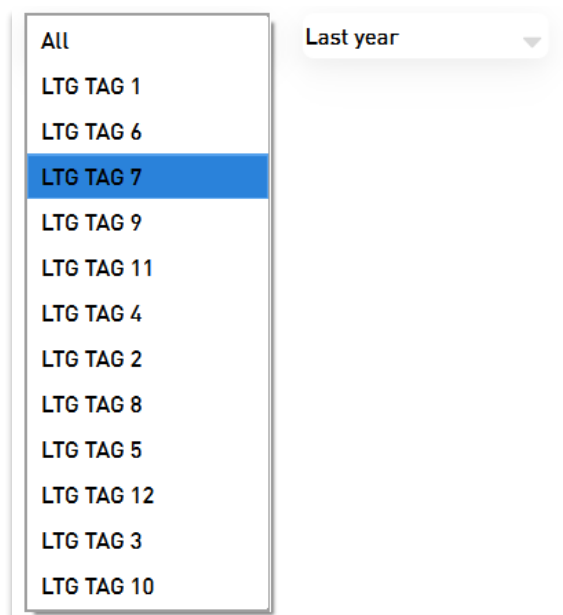


Figure 35: Vehicle and time frame drop downs, vehicle drop down opened.

2.4.10 FMS Notification

Displays and opens when a new message is received. Will display all notifications from all devices assigned to FMS and owned by the company.

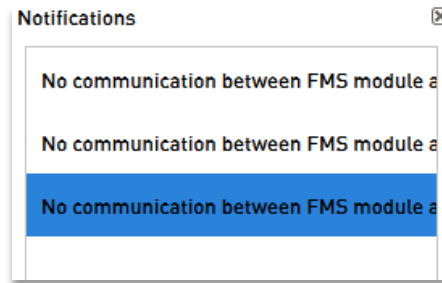


Figure 36: Notification dock, opened with example notifications.

3. Installing the Liquimech Connect Desktop App

Download the latest release of the Liquimech Connect installer. Then run the Liquimech Connect installer x.x.x. Then follow the installer prompts.

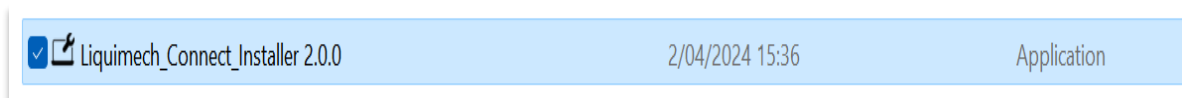


Figure 37: Liquimech Connect Installer example

4. Uninstalling the Liquimech Connect Desktop App

Go to settings, then click apps, then installed apps, search Liquimech Connect then click the three dots and click uninstall. Then follow the uninstaller prompts.

Liquimech Connect Mobile App

1. Calibrating the Fuel Tank

The tank can be calibrated through the Liquimech Connect Mobile App and can be downloaded for both iOS and Android.

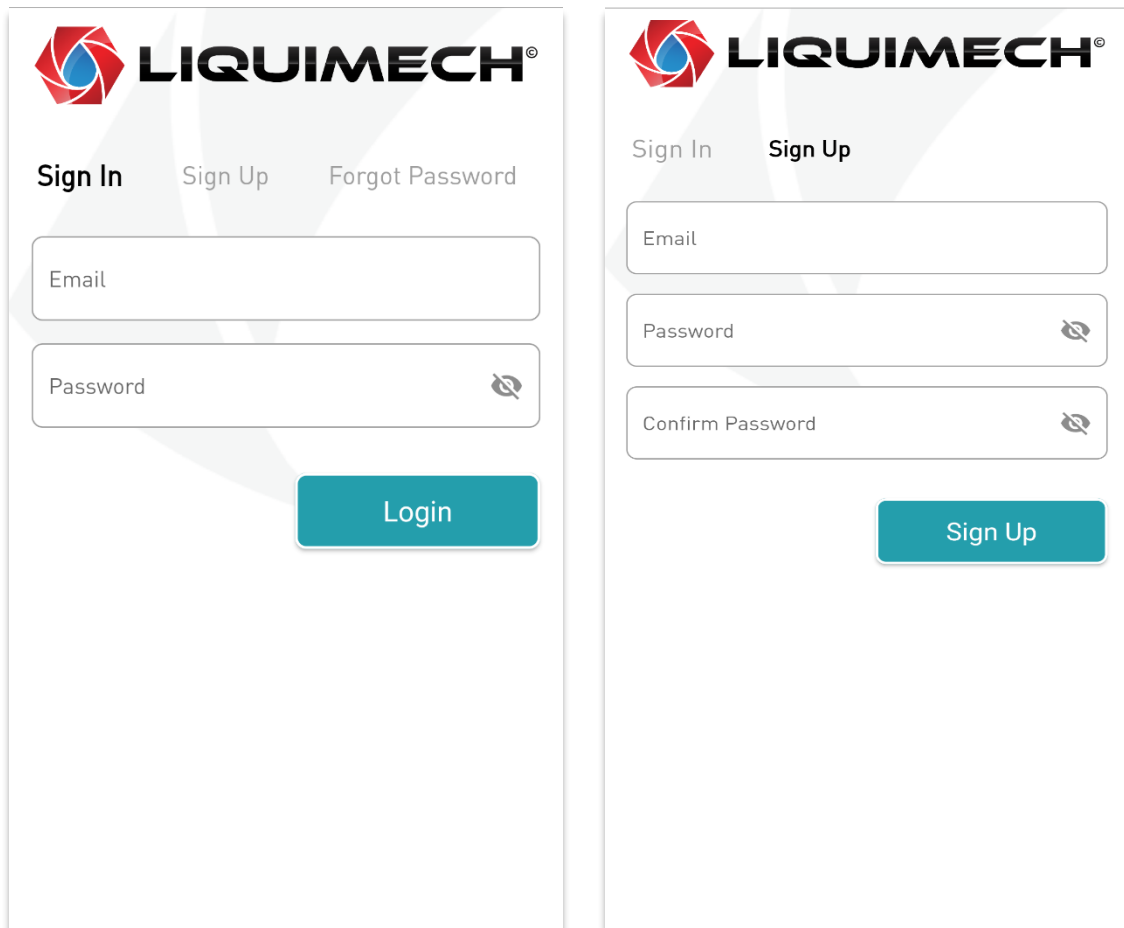


Figure 38: Liquimech Connect Mobile App, Sign-in and Sign-up screen.

To reset a password, click on the “Forgot Password?” link, and enter the email associated with your account.

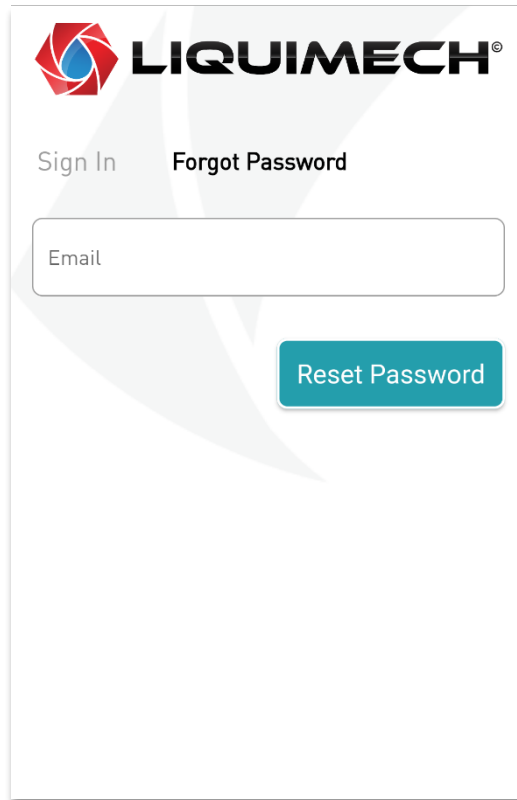


Figure 39: Liquimech Connect Mobile App, Forgot Password screen.

Opening the app for the first time prompts the users for Bluetooth and Wi-Fi connection permissions. This is required to connect to the FMS during calibration.

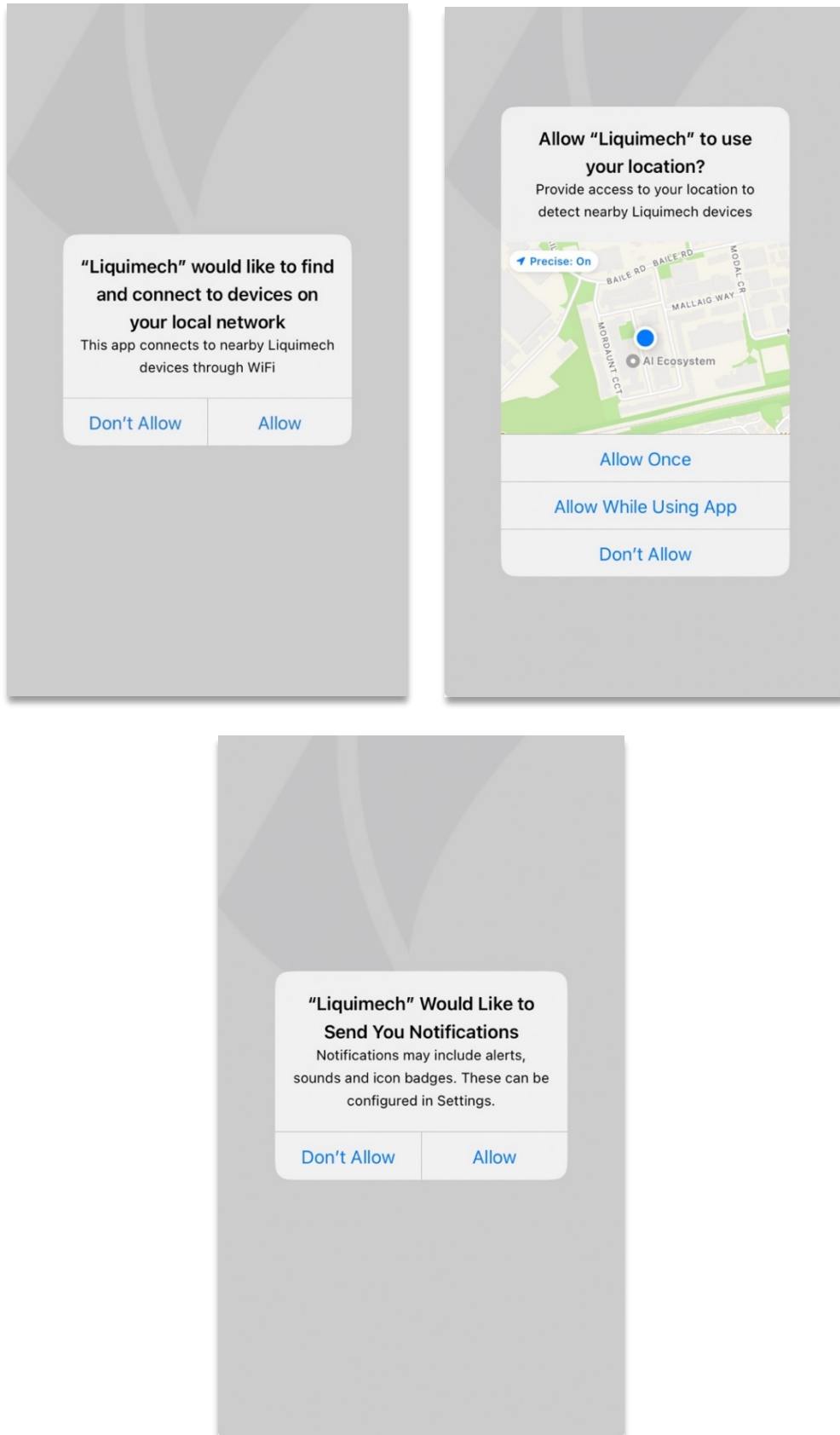


Figure 40: Liquimech Connect Mobile App, clockwise: Wi-Fi connection, location access and notification permissions.

2. Liquimech Connect Mobile App Screens

After creating an account and logging in, the user will land on the home page. Page navigation can be done by either using the navigation bar at the bottom or swiping towards either side of the screen. The main pages consist of:

- ❑ **Home:** Shows the main management services offered by the mobile app.
- ❑ **My Devices:** Shows the devices assigned to the user's account.
When signing up for the first time, it will be empty. For a user only concerned with managing the FMS, it will be empty.
- ❑ **Nearby Devices:** Allows the scanning of nearby Liquimech devices, such as an FMS module. The scanned devices can then be connected to for various purposes, such as calibrating tank level for FMS modules.
- ❑ **Settings:** Page with general information about the app.

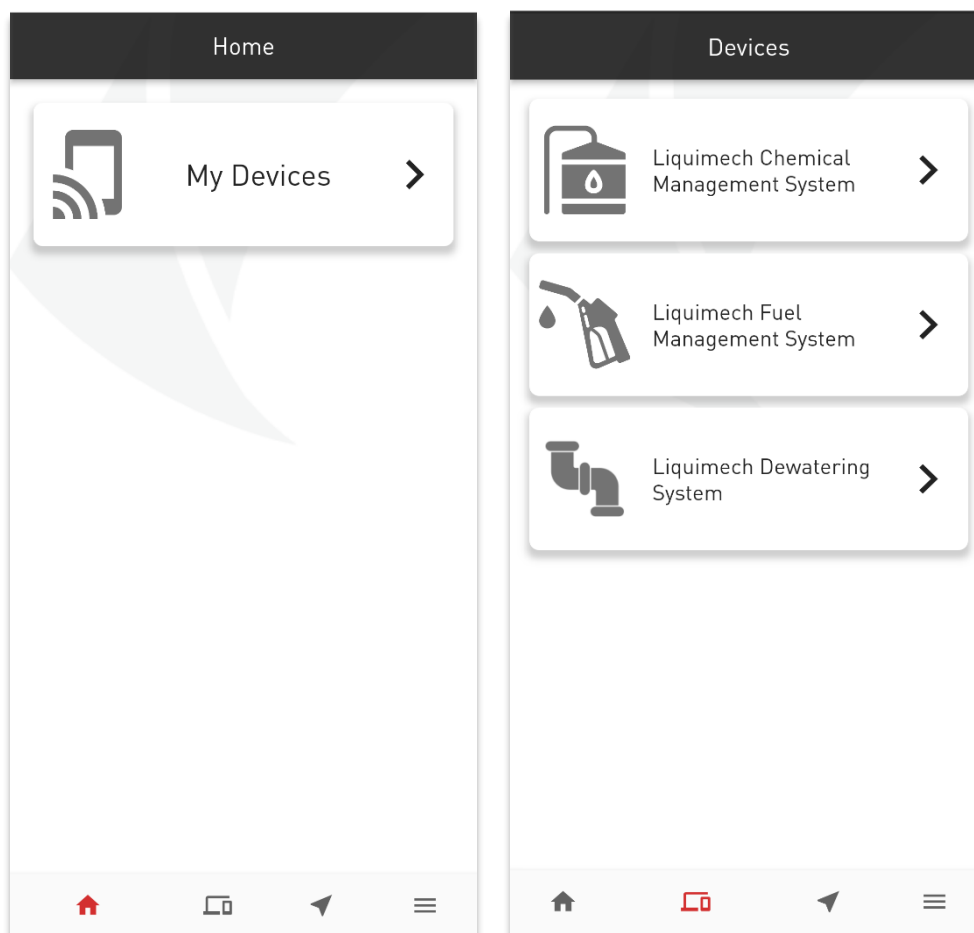


Figure 41: Liquimech Connect Mobile App, home page and user devices page.

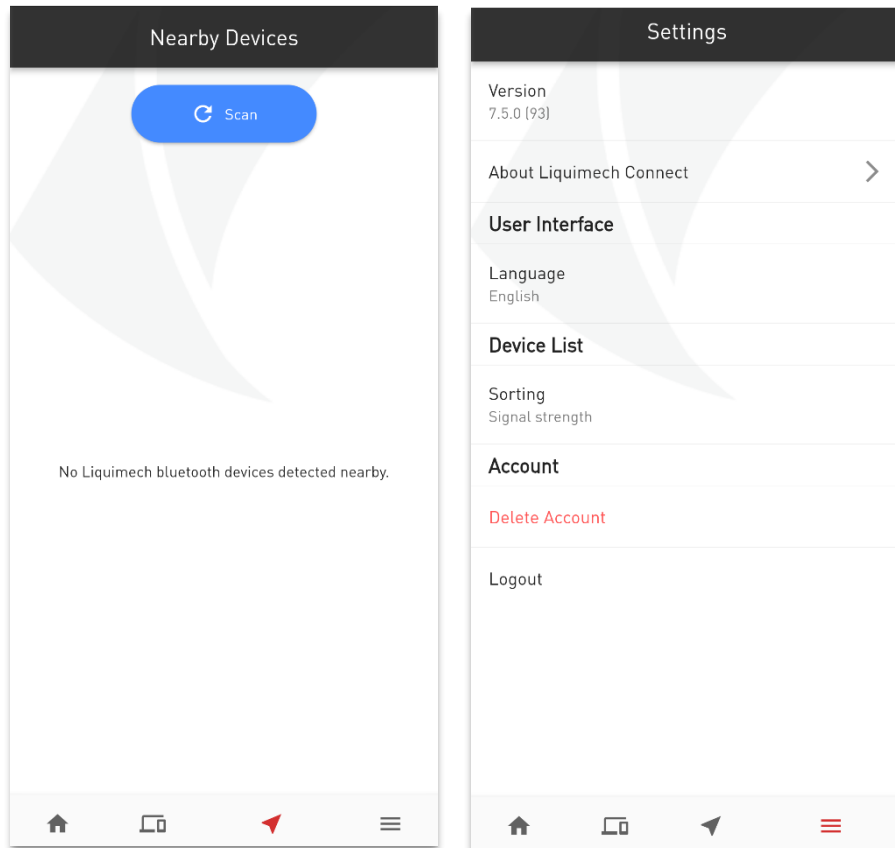


Figure 42: Liquimech Connect Mobile App, nearby devices, and settings page.

After filling the tank, the new tank level must be calibrated. Before calibrating, approach the main control panel on it and then click “Scan Nearby Devices”. After scanning, the screen will display the list of Liquimech devices nearby, which will include the FMS module.

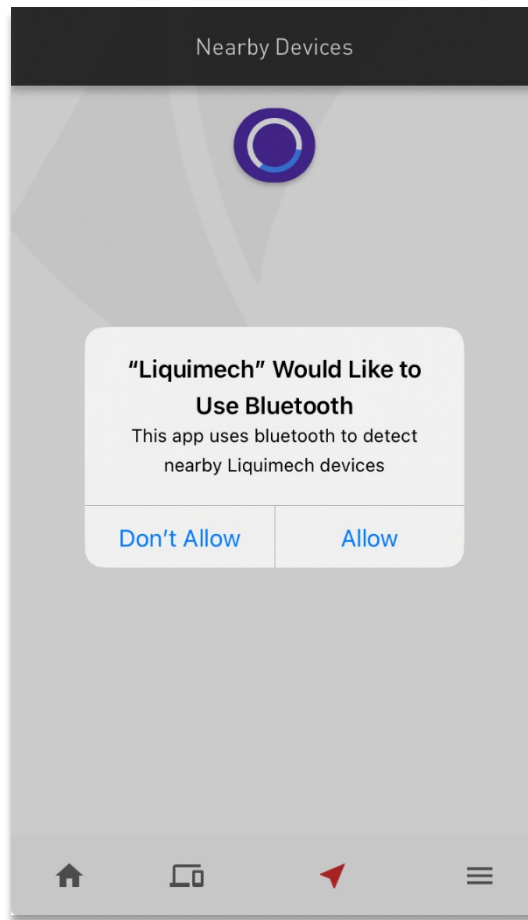


Figure 43: Liquimech Connect Mobile App: Bluetooth scanning permission.

When scanning for the first time, the user will be prompted to allow for Bluetooth scanning permissions.

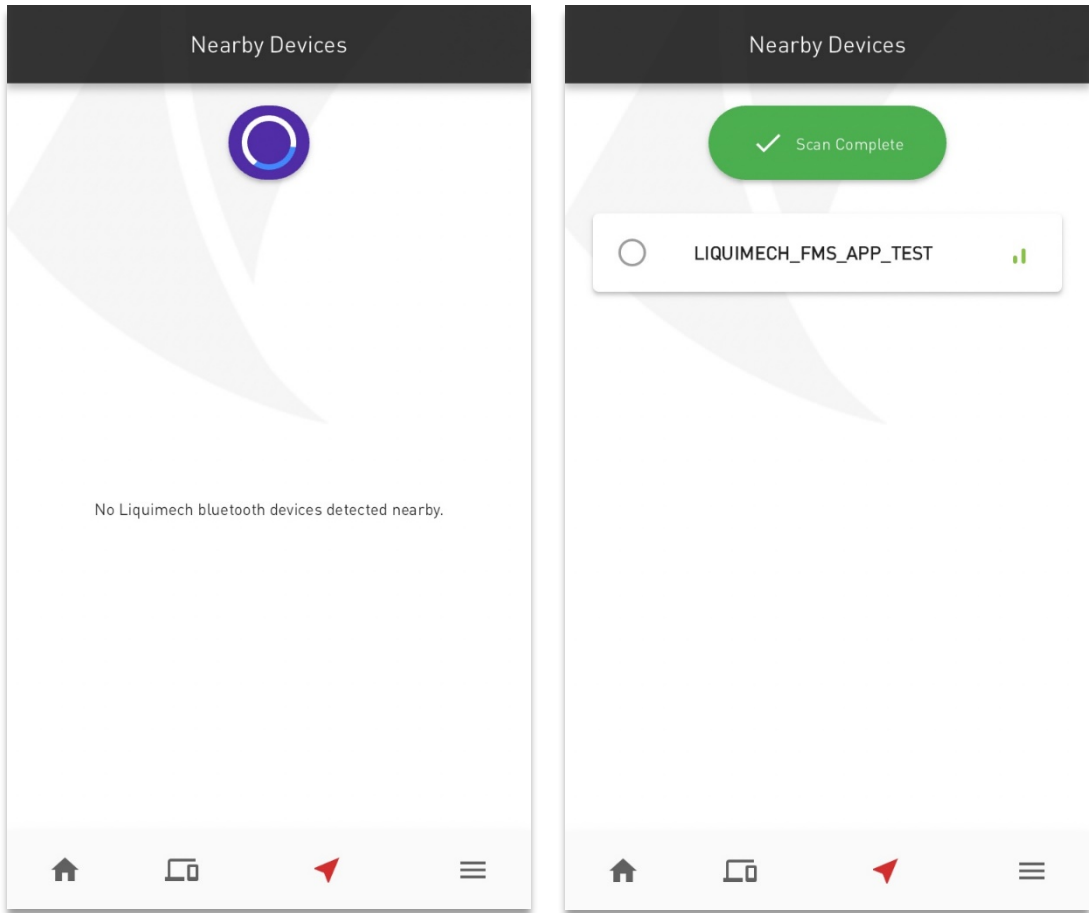


Figure 44: Liquimech Connect Mobile App: Showing nearby devices.

Click the FMS item to connect to it. If unable to connect, try restarting your phone.

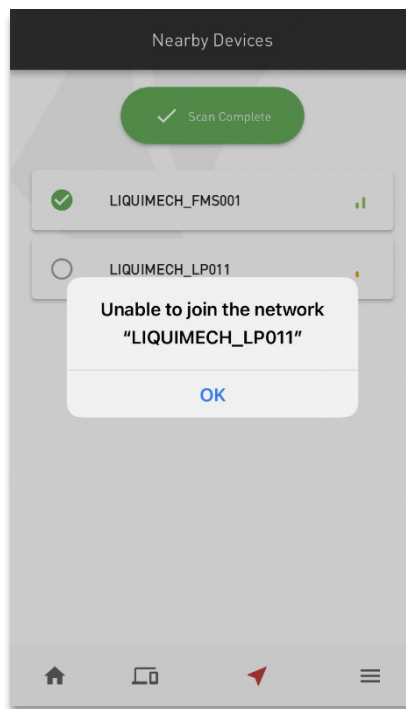


Figure 45: Liquimech Connect Mobile App: Unable to connect to selected device.

After the connection is successful, the user will be taken to a page to calibrate the new tank level. When the tank has been filled to the desired level, click the “Calibrate” button. This will set the maximum fuel level for this fill, allowing for alerts when the fuel levels change from this new value. The user can also click the info icon at the top right for a recap of the calibration steps.

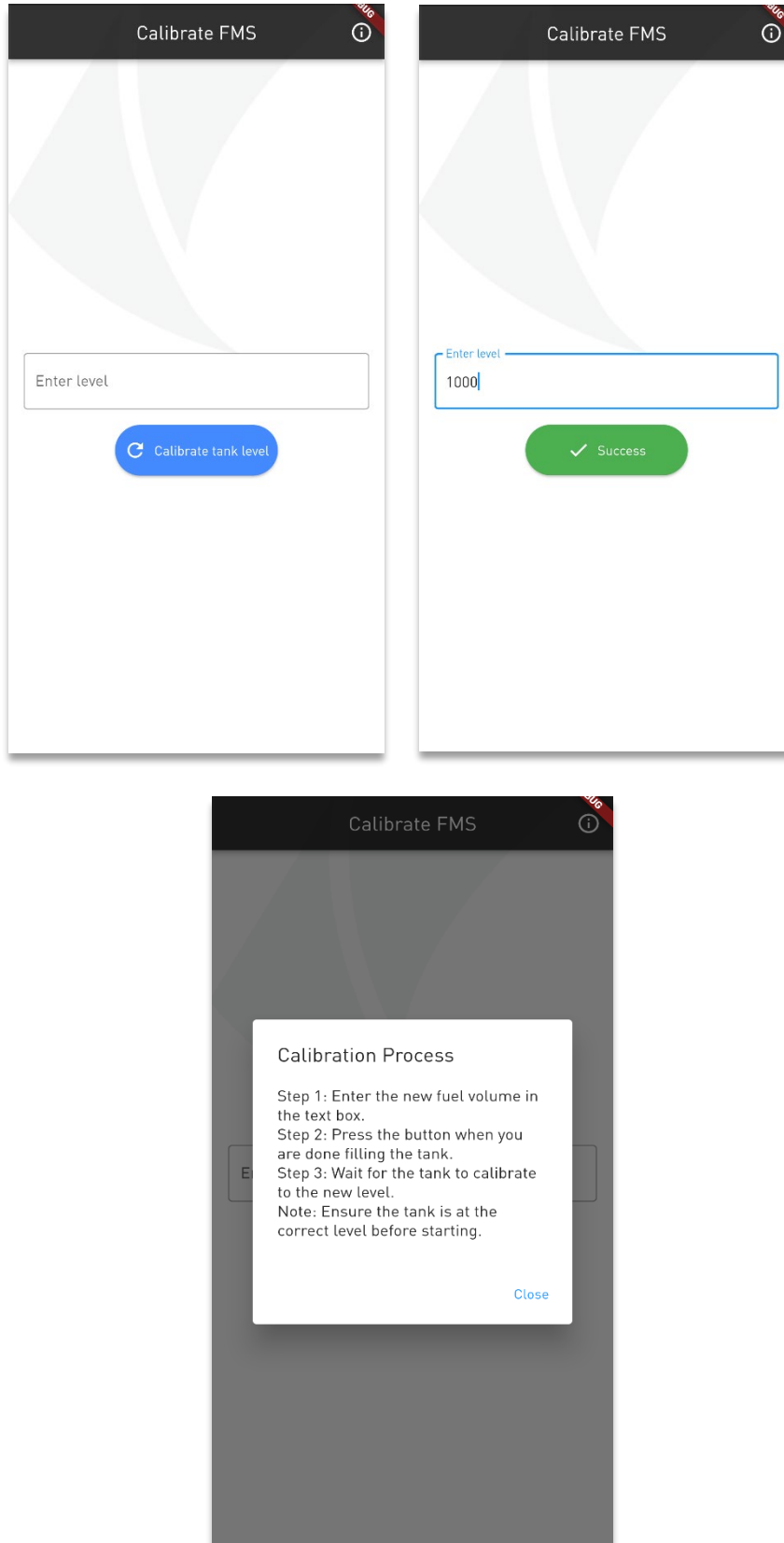


Figure 46: Liquimech Connect Mobile App, clockwise: Before calibration, after calibration, calibration information.

3. Logging Out

To log out of the mobile app, navigate to the settings page, and select “Logout”.

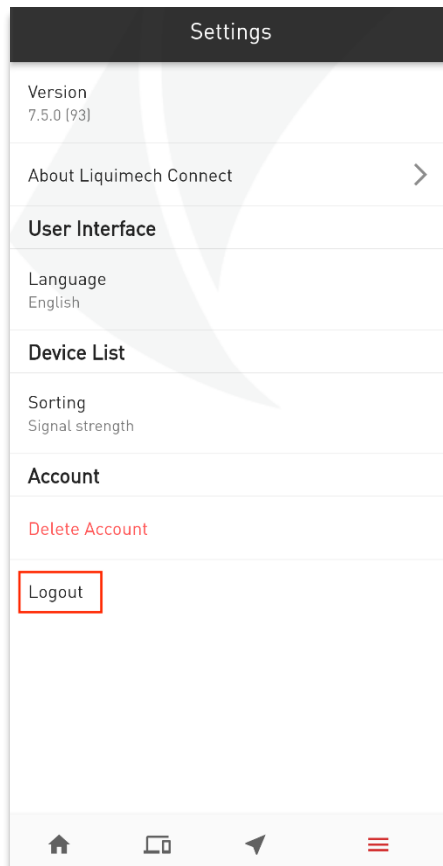


Figure 47: Liquimech Connect Mobile App: Settings page showing option to log out.



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